

Tuesday, March 02, 2010

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

REQUEST NUMBER: 10-2196

These Samples are on:

LANL Request Number: 10-2196

Per Agreement Number: 126310011

Project Cost Code: MR3A05629E00

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:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8082		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	
		1	RE36-10-7501	R	2/25/2010	
SW-846:8260B		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	
		1	RE36-10-7543	S	2/25/2010	
SW-846:8270C		1	RE36-10-7501	R	2/25/2010	
		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	
SW-846:8321A_MOD		1	RE36-10-7501	R	2/25/2010	
		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	

Thursday, March 04, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2196C

LOS ALAMOS

REQUEST NUMBER: 10-2196

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
RE36-10-7501	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7501	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7524	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7524	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7525	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7525	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7543	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

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7501

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/25/2010	MEDIA:	OBT3	Alh
TIME COLLECTED (HH:MM)		0910	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610623	↓	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	8260B	125 ML SEPTUM AMBER GLASS	Ice	✓	
1		8270C+NMED Exp	500 ML 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:

Brown sandy silt, roots, tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-29

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 23 dpm  
Beta/Gamma = 1746 dpm

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

73m 2/25/10

COLLECTED BY (PRINT)

T. McFarland

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

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7524

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)		1115		SUB-MEDIA: TUFF 1		NA	
PRS ID: 36-008		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: UNK		36-610591		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		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	12m 2/25/10 882+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: QC Sample of RE 36-10-7437

Brown loamy silts, roots

SAMPLE COMMENTS:

LOCATION DESC: 8-38

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 58 dpm

Beta/Gamma ≤ 1785 dpm

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

COLLECTED BY (PRINT)

Thmcfarland

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Branch	2/25/10	(Printed Name) Sherry 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: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7525

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	QBT3		H11h
TIME COLLECTED (HH:MM)		1345		SUB-MEDIA:	TUFF 1		N/A
PRS ID:	36-008		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK		36-610597	FIELD QC TYPE:	FD		
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		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	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 RE36-10-7449

Brown, moist, silty soil w/roots &amp; organics

SAMPLE COMMENTS:

N/A

LOCATION DESC: 8-40

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  29 dpm  
 Beta/Gamma  $\leq$  1790 dpm

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

COLLECTED BY (PRINT)

J. Branch

REVIEWED BY (PRINT)

L. Lopez

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: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7536

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)		1216		SUB-MEDIA:	OTHER		
PRS ID:	36-008	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	36-610592		FIELD QC TYPE:	ER		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:	NA		
FIELD MATRIX:	W			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	METALS+U-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	N	
1	normal	SW-846:6850	250 ML POLY	Ice	Y	
1	normal	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE 36-10-7440

SAMPLE COMMENTS:

LOCATION DESC: 8-39

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT) J. Branch

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

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7537

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	02/25/2010	MEDIA:	NA
TIME COLLECTED (HH:MM)	1300	SUB-MEDIA:	OTHER
PRS ID: 36-008	OK	SAMPLE TECH CODE:	DC
LOCATION ID: UNK	36-610596	FIELD QC TYPE:	ER
LOCATION TYPE: GENERIC	OK	FIELD PREP:	UF
TOP DEPTH: 0	↓	SAMPLE USAGE:	QC
BOTTOM DEPTH: 0	↓	SCREEN/PORT DESC:	NA
FIELD MATRIX: W	↓	EXCAVATED: YES/NO/NA	NA
COMPOSITE TYPE: NA	COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA	NA
BOREHOLE: YES/NO/NA	BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	METALS+U-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	N	
1	normal	SW-846:6850	250 ML POLY	Ice	Y	
1	normal	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE 36-10-7448

SAMPLE COMMENTS:

LOCATION DESC: 8-42

FIELD SCREENING/MEASUREMENT RESULTS:

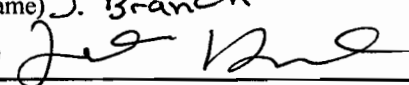
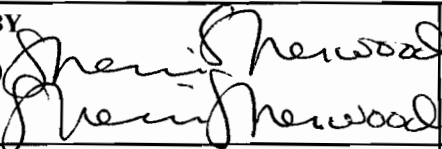
NA

COLLECTED BY (PRINT)

J. Branch

REVIEWED BY (PRINT)

L. Lopez

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 (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

EVENT NAME: 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7543

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)		1220		SUB-MEDIA:	OTHER		
PRS ID:	36-008	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	36-610596		FIELD QC TYPE:	FTB		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:	N/A		
FIELD MATRIX:	S			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	N/A			COMPOSITE TIME INTERVAL:	N/A		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	N/A		
				BOREHOLE DIRECTION:	N/A		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE36-10-7447

SAMPLE COMMENTS:

FTB

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

J. Branch

REVIEWED BY (PRINT) L. Lopez

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



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

ARS Sample Delivery Group: ARS2-10-00076  
Client Sample ID: RE36-10-7501  
Sample Collection Date: 02/25/10 09:10  
Sample Matrix: Soil/Solid

Request or PO Number:  
ARS Sample ID: ARS2-10-00076-021  
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	26.79	25.93	34.62	26.13		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	32.05	14.40	18.10	14.92		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.05	50.89	0.16	50.89		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	24.52	10.23	1.75	10.25		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	49.48	0.12	49.48		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	-0.14	-0.30	0.44	-0.30		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.25	0.61	0.22	0.61		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	0.83	0.54	0.55	0.54		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	0.94	0.79	0.57	0.79		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	3.99	3.16	1.37	3.28		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.38	0.35	0.13	0.35		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
NOTES: % Moisture: 3.10										

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: RE36-10-7524

Sample Collection Date: 02/25/10 11:15

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00076-022

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	33.53	27.34	33.18	27.65		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	41.72	15.27	17.07	16.10		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	0.04	0.18	0.15	0.18		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	25.94	9.99	1.58	10.01		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	0.00	-0.01	0.14	-0.01		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.86	0.43	0.09	0.43		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-152	-0.62	177.86	0.40	177.86		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.50	0.55	0.12	0.55		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	2.60	1.08	0.38	1.09		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	-0.04	-0.10	0.58	-0.10		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	4.99	4.40	1.81	4.54		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	-0.02	-0.23	0.11	-0.23		pCi/g	EOA 901.1M	2/27/2010	NP	N/A

NOTES: % Moisture: 2.04

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: RE36-10-7525

ARS Sample ID: ARS2-10-00076-023

Sample Collection Date: 02/25/10 13:45

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	25.35	23.30	27.35	23.50		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	61.13	18.10	18.99	19.59		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.05	47.51	0.15	47.51		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	23.89	9.75	1.64	9.75		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	-0.06	46.20	0.11	46.20		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.63	0.43	0.09	0.43		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-152	0.11	0.17	0.41	0.17		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.09	0.52	0.17	0.52		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-226	1.33	0.77	0.40	0.77		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	0.99	0.90	0.49	0.90		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	7.18	4.78	1.80	5.06		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.22	0.29	0.13	0.29		pCi/g	EOA 901.1M	2/27/2010	NP	N/A

NOTES: % Moisture: 2.90

*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

## DATA VALIDATION COVER SHEET

5114-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-2196 VALIDATION DATE: 05/07/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves 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 | PESTICIDES/POLYCHLORINATED BIPHENYLS         |

☒ OTHER (DESCRIBE): VOCs

## 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 CCV %D was >20% for trichlorofluoromethane. The associated sample results were NDs and, thus, were qualified UJ,V7c.
2. The bromofluorobenzene surrogate %R was > the laboratory UAL for sample RE36-10-7524 and -7425. The acetone result for sample -7524 was a detect and, thus, was qualified J+,V3b. The remaining associated sample results were NDs and, thus, were not qualified.
3. The MS/MSD RPDs for acetone, 4-isopropyltoluene and n-butylbenzene did not meet laboratory acceptance criteria. Since the analysis of an MS or MSD was not required for VOCs, no sample data were qualified as a result. It should be noted that the parent sample for the QC analyses was from another LANL RN, and trichlorotrifluoroethane was not represented in the MS/MSD analyses. No sample data were qualified as a result.

Reviewed by: Allison Felix Level: 1 Date: 5/7/10

VALIDATOR'S SIGNATURE:

A handwritten signature in black ink, appearing to read "Peter Steves".

Mr. Peter Steves


DATE: 05/07/10

Form 5114-1, Revision 0.0


LOS ALAMOS  
Environmental Restoration Project






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 type="checkbox"/>	<input checked="" 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				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. The sample result is $\leq 5X$ (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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. The sample result is $\leq 5X$ 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	
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Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input 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 ≥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 type="checkbox"/>	<input checked="" 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**

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514001	Date Received: 03/03/2010 08:50	%Moisture: 24
Client ID: RE36-10-7501	Client: LANL010	Project: LANL01004
Batch ID: 962525	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 16:09	Inst: VOA1.I	Dilution: 1
Prep Date: 03/08/2010 14:32	Analyst: GRB2	Purge Vol: 5 mL
Data File: 1b118.d	Allquot: 5 g	Final Volume: 5 mL
	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.32	ug/kg	0.447	1.32
74-87-3	Chloromethane	U	1.32	ug/kg	0.395	1.32
75-01-4	Vinyl chloride	U	1.32	ug/kg	0.395	1.32
74-83-9	Bromomethane	U	1.32	ug/kg	0.395	1.32
75-00-3	Chloroethane	U	1.32	ug/kg	0.395	1.32
75-69-4	Trichlorofluoromethane	U	1.32	ug/kg	0.395	1.32 UJ,V7c
67-64-1	Acetone		39.4	ug/kg	2.18	6.58
75-35-4	1,1-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
74-88-4	Iodomethane	U	6.58	ug/kg	2.11	6.58
75-09-2	Methylene chloride	U	6.58	ug/kg	2.63	6.58
75-15-0	Carbon disulfide	U	6.58	ug/kg	1.64	6.58
156-60-5	trans-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
75-34-3	1,1-Dichloroethane	U	1.32	ug/kg	0.395	1.32
78-93-3	2-Butanone	U	6.58	ug/kg	1.97	6.58
156-59-2	cis-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
594-20-7	2,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
67-66-3	Chloroform	U	1.32	ug/kg	0.395	1.32
74-97-5	Bromochloromethane	U	1.32	ug/kg	0.434	1.32
71-55-6	1,1,1-Trichloroethane	U	1.32	ug/kg	0.395	1.32
563-58-6	1,1-Dichloropropene	U	1.32	ug/kg	0.395	1.32
56-23-5	Carbon tetrachloride	U	1.32	ug/kg	0.395	1.32
107-06-2	1,2-Dichloroethane	U	1.32	ug/kg	0.395	1.32
71-43-2	Benzene	U	1.32	ug/kg	0.395	1.32
79-01-6	Trichloroethylene	U	1.32	ug/kg	0.434	1.32
78-87-5	1,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
75-27-4	Bromodichloromethane	U	1.32	ug/kg	0.395	1.32
74-95-3	Dibromomethane	U	1.32	ug/kg	0.395	1.32
108-10-1	4-Methyl-2-pentanone	U	6.58	ug/kg	1.64	6.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
108-88-3	Toluene		1.84	ug/kg	0.395	1.32
10061-02-6	trans-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
79-00-5	1,1,2-Trichloroethane	U	1.32	ug/kg	0.395	1.32
591-78-6	2-Hexanone	U	6.58	ug/kg	1.97	6.58
142-28-9	1,3-Dichloropropane	U	1.32	ug/kg	0.395	1.32
127-18-4	Tetrachloroethylene	U	1.32	ug/kg	0.395	1.32
124-48-1	Dibromochloromethane	U	1.32	ug/kg	0.395	1.32
106-93-4	1,2-Dibromoethane	U	1.32	ug/kg	0.395	1.32
108-90-7	Chlorobenzene	U	1.32	ug/kg	0.395	1.32

Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 2

SDG Number: 10-2196

Lab Sample ID: 248514001

Date Collected: 02/25/2010 12:00

Date Received: 03/03/2010 08:50

Matrix: R

%Moisture: 24

Client: LANL010

Project: LANL01004

Client ID: RE36-10-7501

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 962525

Inst: VOA1.I

Dilution: 1

Run Date: 03/08/2010 16:09

Analyst: GRB2

Purge Vol: 5 mL

Prep Date: 03/08/2010 14:32

Allquot: 5 g

Final Volume: 5 mL

Data File: 1b118.d

Column: RTX-Volatiles

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.32	ug/kg	0.395	1.32
179601-23-1	m,p-Xylenes	U	2.63	ug/kg	0.395	2.63
95-47-6	o-Xylene	U	1.32	ug/kg	0.395	1.32
100-42-5	Styrene	U	1.32	ug/kg	0.395	1.32
75-25-2	Bromoform	U	1.32	ug/kg	0.395	1.32
79-34-5	1,1,2,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
96-18-4	1,2,3-Trichloropropane	U	1.32	ug/kg	0.395	1.32
108-86-1	Bromobenzene	U	1.32	ug/kg	0.395	1.32
103-65-1	n-Propylbenzene	U	1.32	ug/kg	0.395	1.32
95-49-8	2-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-82-8	Isopropylbenzene	U	1.32	ug/kg	0.395	1.32
108-67-8	1,3,5-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
106-43-4	4-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-06-6	tert-Butylbenzene	U	1.32	ug/kg	0.395	1.32
95-63-6	1,2,4-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
135-98-8	sec-Butylbenzene	U	1.32	ug/kg	0.395	1.32
99-87-6	4-Isopropyltoluene	U	24.6	ug/kg	0.395	1.32
541-73-1	1,3-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
106-46-7	1,4-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
104-51-8	n-Butylbenzene	U	1.32	ug/kg	0.395	1.32
96-12-8	1,2-Dibromo-3-chloropropane	U	1.32	ug/kg	0.395	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.58	ug/kg	2.11	6.58
630-20-6	1,1,1,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
95-50-1	1,2-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
7785-70-8	1R-.alpha.-Pinene	18.08	142	ug/kg	97	NJ
79-92-5	Camphene	18.42	31.5	ug/kg	90	NJ
13466-78-9	3-Carene	19.12	442	ug/kg	95	NJ
554-61-0	Bicyclo[4.1.0]hept-2-ene, 3,7,7-trimethyl	19.21	8.31	ug/kg	96	NJ
138-86-3	Limonene	19.36	216	ug/kg	94	NJ
28634-89-1	Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-methyl	19.5	7.15	ug/kg	91	NJ
99-85-4	1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	19.67	8.13	ug/kg	96	NJ
586-62-9	Cyclohexene, 1-methyl-4-(1-methylethylid	20.09	34	ug/kg	97	NJ
7399-49-7	o-Isopropenyltoluene	20.32	7.57	ug/kg	97	NJ

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514002	Date Received: 03/03/2010 08:50	%Moisture: 16
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7524	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 16:40	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:34	Allquot: 5 g	Final Volume: 5 mL
Data File: 1b119.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.405	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.357	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.357	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.357	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.357	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.357	1.19 UJ,V7c
67-64-1	Acetone	J	2.39	ug/kg	1.98	5.95 J+,V3b
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
74-88-4	Iodomethane	U	5.95	ug/kg	1.91	5.95
75-09-2	Methylene chloride	U	5.95	ug/kg	2.38	5.95
75-15-0	Carbon disulfide	U	5.95	ug/kg	1.49	5.95
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.357	1.19
78-93-3	2-Butanone	U	5.95	ug/kg	1.79	5.95
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.357	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.393	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.357	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.357	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.357	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.357	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.357	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.393	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.357	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.357	1.19
108-10-1	4-Methyl-2-pentanone	U	5.95	ug/kg	1.49	5.95
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.357	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.357	1.19
591-78-6	2-Hexanone	U	5.95	ug/kg	1.79	5.95
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.357	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.357	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.357	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.357	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.357	1.19



Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 2

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514002	Date Received: 03/03/2010 08:50	%Moisture: 16
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7524	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 16:40	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:34	Allquot: 5 g	Final Volume: 5 mL
Data File: 1b119.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualfier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.357	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.357	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.357	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.357	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.357	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.357	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.357	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.357	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.357	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.357	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.357	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.357	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.357	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.357	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.95	ug/kg	1.91	5.95
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Hydrocarbon	4.75	12.8	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	16.38	42.2	ug/kg	98	NJ

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514003	Date Received: 03/03/2010 08:50	%Moisture: 20.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7525	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 17:11	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:36	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b120.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.426	1.25
74-87-3	Chloromethane	U	1.25	ug/kg	0.376	1.25
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.376	1.25
74-83-9	Bromomethane	U	1.25	ug/kg	0.376	1.25
75-00-3	Chloroethane	U	1.25	ug/kg	0.376	1.25
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.376	1.25 UJ,V7c
67-64-1	Acetone	U	6.26	ug/kg	2.08	6.26
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
74-88-4	Iodomethane	U	6.26	ug/kg	2.00	6.26
75-09-2	Methylene chloride	U	6.26	ug/kg	2.50	6.26
75-15-0	Carbon disulfide	U	6.26	ug/kg	1.57	6.26
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.376	1.25
78-93-3	2-Butanone	U	6.26	ug/kg	1.88	6.26
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
67-66-3	Chloroform	U	1.25	ug/kg	0.376	1.25
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.413	1.25
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.376	1.25
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.376	1.25
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.376	1.25
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.376	1.25
71-43-2	Benzene	U	1.25	ug/kg	0.376	1.25
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.413	1.25
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.376	1.25
74-95-3	Dibromomethane	U	1.25	ug/kg	0.376	1.25
108-10-1	4-Methyl-2-pentanone	U	6.26	ug/kg	1.57	6.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
108-88-3	Toluene	U	1.25	ug/kg	0.376	1.25
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.376	1.25
591-78-6	2-Hexanone	U	6.26	ug/kg	1.88	6.26
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.376	1.25
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.376	1.25
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.376	1.25
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.376	1.25
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.376	1.25

Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2196

Lab Sample ID: 248514003

Date Collected: 02/25/2010 12:00

Date Received: 03/03/2010 08:50

Matrix: R

%Moisture: 20.2

Client: LANL010

Project: LANL01004

Client ID: RE36-10-7525

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 962525

Inst: VOA1.I

Dilution: 1

Run Date: 03/08/2010 17:11

Analyst: GRB2

Purge Vol: 5 mL

Prep Date: 03/08/2010 14:36

Aliquot: 5 g

Final Volume: 5 mL

Data File: 1b120.d

Column: RTX-Volatiles

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.376	1.25
179601-23-1	m,p-Xylenes	U	2.50	ug/kg	0.376	2.50
95-47-6	o-Xylene	U	1.25	ug/kg	0.376	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.376	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.376	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.376	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.376	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.376	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.376	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.376	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.376	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.376	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.376	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.376	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.26	ug/kg	2.00	6.26
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Siloxane	19.96	9.71	ug/kg		J

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2196  
Lab Sample ID: 248514004

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

Matrix: S

Client ID: RE36-10-7543  
Batch ID: 962525  
Run Date: 03/08/2010 17:42  
Prep Date: 03/08/2010 14:38  
Data File: 1b121.d

Client: LANL010  
Method: SW846 8260B  
Inst: VOA1.I  
Analyst: GRB2  
Allquot: 5 g  
Column: RTX-Volatiles

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

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 UJ,V7c
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**

Page 2 of 2

SDG Number: 10-2196  
 Lab Sample ID: 248514004

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA1.I  
 Analyst: GRB2  
 Aliquot: 5 g  
 Column: RTX-Volatiles

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

Client ID: RE36-10-7543  
 Batch ID: 962525  
 Run Date: 03/08/2010 17:42  
 Prep Date: 03/08/2010 14:38  
 Data File: 1b121.d

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	Flt	Qual
	Unknown Siloxane	19.96	5.16	ug/kg		J

## DATA VALIDATION COVER SHEET

5115-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-2196 VALIDATION DATE: 05/07/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves 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): SVOCs

## 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. For the CCV associated with sample RE36-10-7501, the %Ds were >20% for bis(2-chloroethyl)ether; benzyl alcohol; bis(2-chloroisopropyl)ether; m,p-cresol; 2,4-dimethylphenol; 2-nitroaniline and 2,4-dinitrophenol. Also, for the CCV associated with the remaining samples, the %Ds were >20% for pyridine; aniline; bis(2-chloroethyl)ether; benzyl alcohol; bis(2-chloroisopropyl)ether and 2-methyl-4,6-dinitrophenol.
- The LCS %R was < the laboratory LAL but  $\geq 10\%$  for benzyl alcohol and 2,4-dimethylphenol. The associated sample results were NDs and, thus, were qualified UJ,V12a.
- The MS/MSD %Rs and/or RPDs for several compounds did not meet laboratory acceptance criteria. Since the analysis of an MS or MSD was not required for SVOCs, no sample data were qualified as a result. It should be noted that the parent sample for the QC analyses was from another LANL RN. No sample data were qualified as a result.


Reviewed by: Allison Felix Level: 1 Date: 5/7/10

VALIDATOR'S SIGNATURE:

 A handwritten signature of Peter Steves.
   
Mr. Peter Steves


DATE: 05/07/10

DATA VALIDATION COVER SHEET	
<b>5115-1</b>  <b>Data Validation Cover Sheet</b>	Records Use only   Los Alamos NATIONAL LABORATORY EST. 1943
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	
<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 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

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

SDG Number: 10-2196  
Lab Sample ID: 248514001

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: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-7501  
Batch ID: 963133  
Run Date: 03/21/2010 19:00  
Prep Date: 03/10/2010 12:14  
Data File: s6c2110.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	438	ug/kg	87.7	438
108-95-2	Phenol	U	438	ug/kg	87.7	438
95-57-8	2-Chlorophenol	U	438	ug/kg	87.7	438
106-46-7	1,4-Dichlorobenzene	U	438	ug/kg	87.7	438
621-64-7	N-Nitrosodipropylamine	U	438	ug/kg	87.7	438
59-50-7	4-Chloro-3-methylphenol	U	438	ug/kg	87.7	438
83-32-9	Acenaphthene	U	43.8	ug/kg	14.5	43.8
121-14-2	2,4-Dinitrotoluene	U	438	ug/kg	43.8	438
100-02-7	4-Nitrophenol	U	438	ug/kg	145	438
87-86-5	Pentachlorophenol	U	438	ug/kg	110	438
129-00-0	Pyrene	U	43.8	ug/kg	13.1	43.8
110-86-1	Pyridine	U	438	ug/kg	87.7	438 UJ,SV7c
62-53-3	Aniline	U	438	ug/kg	131	438
111-44-4	bis(2-Chloroethyl) ether	U	438	ug/kg	87.7	438 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	438	ug/kg	87.7	438
100-51-6	Benzyl alcohol	U	438	ug/kg	131	438 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	438	ug/kg	87.7	438
108-60-1	bis(2-Chloroisopropyl) ether	U	438	ug/kg	87.7	438 UJ,SV7c
95-48-7	o-Cresol	U	438	ug/kg	87.7	438
65794-96-9	m,p-Cresols	U	438	ug/kg	131	438 UJ,SV7c
67-72-1	Hexachloroethane	U	438	ug/kg	87.7	438
98-95-3	Nitrobenzene	U	438	ug/kg	87.7	438
78-59-1	Isophorone	U	438	ug/kg	87.7	438
88-75-5	2-Nitrophenol	U	438	ug/kg	87.7	438
105-67-9	2,4-Dimethylphenol	U	438	ug/kg	153	438 UJ,SV7c
111-91-1	bis(2-Chloroethoxy)methane	U	438	ug/kg	87.7	438
120-83-2	2,4-Dichlorophenol	U	438	ug/kg	87.7	438
65-85-0	Benzoic acid	U	877	ug/kg	219	877
91-20-3	Naphthalene	U	43.8	ug/kg	13.1	43.8
106-47-8	4-Chloroaniline	U	438	ug/kg	87.7	438
87-68-3	Hexachlorobutadiene	U	438	ug/kg	87.7	438
91-57-6	2-Methylnaphthalene	U	43.8	ug/kg	8.77	43.8
77-47-4	Hexachlorocyclopentadiene	U	438	ug/kg	87.7	438
88-06-2	2,4,6-Trichlorophenol	U	438	ug/kg	87.7	438
95-95-4	2,4,5-Trichlorophenol	U	438	ug/kg	87.7	438
91-58-7	2-Chloronaphthalene	U	43.8	ug/kg	14.5	43.8
88-74-4	2-Nitroaniline	U	438	ug/kg	87.7	438 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	438	ug/kg	87.7	438

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

SDG Number: 10-2196  
Lab Sample ID: 248514001

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: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	438	ug/kg	87.7	438
606-20-2	2,6-Dinitrotoluene	U	438	ug/kg	43.8	438
208-96-8	Acenaphthylene	U	43.8	ug/kg	13.1	43.8
51-28-5	2,4-Dinitrophenol	U	877	ug/kg	167	877 UJ,SV7c
132-64-9	Dibenzofuran	U	438	ug/kg	87.7	438
84-66-2	Diethylphthalate	U	438	ug/kg	87.7	438
86-73-7	Fluorene	U	43.8	ug/kg	13.1	43.8
7005-72-3	4-Chlorophenylphenylether	U	438	ug/kg	87.7	438
534-52-1	2-Methyl-4,6-dinitrophenol	U	438	ug/kg	87.7	438 UJ,SV7c
100-01-6	4-Nitroaniline	U	438	ug/kg	131	438
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	438	ug/kg	87.7	438
122-66-7	Azobenzene	U	438	ug/kg	87.7	438
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	438	ug/kg	87.7	438
118-74-1	Hexachlorobenzene	U	438	ug/kg	87.7	438
85-01-8	Phenanthrene	U	43.8	ug/kg	13.1	43.8
120-12-7	Anthracene	U	43.8	ug/kg	8.77	43.8
84-74-2	Di-n-butylphthalate	U	438	ug/kg	87.7	438
206-44-0	Fluoranthene	U	43.8	ug/kg	13.1	43.8
85-68-7	Butylbenzylphthalate	U	438	ug/kg	87.7	438
56-55-3	Benzo(a)anthracene	U	43.8	ug/kg	13.1	43.8
91-94-1	3,3'-Dichlorobenzidine	U	438	ug/kg	131	438
218-01-9	Chrysene	U	43.8	ug/kg	13.1	43.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	438	ug/kg	87.7	438
117-84-0	Di-n-octylphthalate	U	438	ug/kg	87.7	438
205-99-2	Benzo(b)fluoranthene	U	43.8	ug/kg	13.1	43.8
207-08-9	Benzo(k)fluoranthene	U	43.8	ug/kg	13.1	43.8
50-32-8	Benzo(a)pyrene	U	43.8	ug/kg	13.1	43.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.8	ug/kg	13.1	43.8
53-70-3	Dibenzo(a,h)anthracene	U	43.8	ug/kg	13.1	43.8
191-24-2	Benzo(ghi)perylene	U	43.8	ug/kg	13.1	43.8
120-82-1	1,2,4-Trichlorobenzene	U	438	ug/kg	87.7	438

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	7.99	287	ug/kg		J
112-80-1	Oleic Acid	8.12	688	ug/kg	99	NJ

Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2196  
Lab Sample ID: 248514001

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: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-7501  
Batch ID: 963133  
Run Date: 03/21/2010 19:00  
Prep Date: 03/10/2010 12:14  
Data File: s6c2110.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	8.66	222	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.94	202	ug/kg	98	NJ
	Unknown	9	392	ug/kg		J
	Unknown	9.12	313	ug/kg		J
	Unknown	9.22	585	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.3	895	ug/kg	96	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.42	262	ug/kg	95	NJ
	Unknown	9.59	239	ug/kg		J
	Unknown	9.61	204	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.66	295	ug/kg	90	NJ
	Unknown	9.71	183	ug/kg		J
	Unknown	9.91	287	ug/kg		J
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	10.35	628	ug/kg	87	NJ
62016-76-6	Nonadecane, 1-chloro-	10.63	997	ug/kg	86	NJ

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 3

SDG Number: 10-2196  
Lab Sample ID: 248514002

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: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-7524  
Batch ID: 963133  
Run Date: 03/23/2010 23:06  
Prep Date: 03/10/2010 12:14  
Data File: s6c2323.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1590	ug/kg	317	1590
108-95-2	Phenol	U	1590	ug/kg	317	1590
95-57-8	2-Chlorophenol	U	1590	ug/kg	317	1590
106-46-7	1,4-Dichlorobenzene	U	1590	ug/kg	317	1590
621-64-7	N-Nitrosodipropylamine	U	1590	ug/kg	317	1590
59-50-7	4-Chloro-3-methylphenol	U	1590	ug/kg	317	1590
83-32-9	Acenaphthene	U	159	ug/kg	52.3	159
121-14-2	2,4-Dinitrotoluene	U	1590	ug/kg	159	1590
100-02-7	4-Nitrophenol	U	1590	ug/kg	523	1590
87-86-5	Pentachlorophenol	U	1590	ug/kg	396	1590
129-00-0	Pyrene	J	60.3	ug/kg	47.6	159
110-86-1	Pyridine	U	1590	ug/kg	317	1590 UJ,SV7c
62-53-3	Aniline	U	1590	ug/kg	476	1590 UJ,SV7c
111-44-4	bis(2-Chloroethyl) ether	U	1590	ug/kg	317	1590 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	1590	ug/kg	317	1590
100-51-6	Benzyl alcohol	U	1590	ug/kg	476	1590 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	1590	ug/kg	317	1590
108-60-1	bis(2-Chloroisopropyl)ether	U	1590	ug/kg	317	1590 UJ,SV7c
95-48-7	o-Cresol	U	1590	ug/kg	317	1590
65794-96-9	m,p-Cresols	U	1590	ug/kg	476	1590
67-72-1	Hexachloroethane	U	1590	ug/kg	317	1590
98-95-3	Nitrobenzene	U	1590	ug/kg	317	1590
78-59-1	Isophorone	U	1590	ug/kg	317	1590
88-75-5	2-Nitrophenol	U	1590	ug/kg	317	1590
105-67-9	2,4-Dimethylphenol	U	1590	ug/kg	555	1590 UJ,SV12a
111-91-1	bis(2-Chloroethoxy)methane	U	1590	ug/kg	317	1590
120-83-2	2,4-Dichlorophenol	U	1590	ug/kg	317	1590
65-85-0	Benzoic acid	U	3170	ug/kg	793	3170
91-20-3	Naphthalene	U	159	ug/kg	47.6	159
106-47-8	4-Chloroaniline	U	1590	ug/kg	317	1590
87-68-3	Hexachlorobutadiene	U	1590	ug/kg	317	1590
91-57-6	2-Methylnaphthalene	U	159	ug/kg	31.7	159
77-47-4	Hexachlorocyclopentadiene	U	1590	ug/kg	317	1590
88-06-2	2,4,6-Trichlorophenol	U	1590	ug/kg	317	1590
95-95-4	2,4,5-Trichlorophenol	U	1590	ug/kg	317	1590
91-58-7	2-Chloronaphthalene	U	159	ug/kg	52.3	159
88-74-4	2-Nitroaniline	U	1590	ug/kg	317	1590
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	1590	ug/kg	317	1590

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 3

SDG Number: 10-2196  
Lab Sample ID: 248514002

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: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-7524  
Batch ID: 963133  
Run Date: 03/23/2010 23:06  
Prep Date: 03/10/2010 12:14  
Data File: s6c2323.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	1590	ug/kg	317	1590
606-20-2	2,6-Dinitrotoluene	U	1590	ug/kg	159	1590
208-96-8	Acenaphthylene	U	159	ug/kg	47.6	159
51-28-5	2,4-Dinitrophenol	U	3170	ug/kg	603	3170
132-64-9	Dibenzofuran	U	1590	ug/kg	317	1590
84-66-2	Diethylphthalate	U	1590	ug/kg	317	1590
86-73-7	Fluorene	U	159	ug/kg	47.6	159
7005-72-3	4-Chlorophenylphenylether	U	1590	ug/kg	317	1590
534-52-1	2-Methyl-4,6-dinitrophenol	U	1590	ug/kg	317	1590 UJ,SV7C
100-01-6	4-Nitroaniline	U	1590	ug/kg	476	1590
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1590	ug/kg	317	1590
122-66-7	Azobenzene	U	1590	ug/kg	317	1590
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1590	ug/kg	317	1590
118-74-1	Hexachlorobenzene	U	1590	ug/kg	317	1590
85-01-8	Phenanthrene	U	159	ug/kg	47.6	159
120-12-7	Anthracene	U	159	ug/kg	31.7	159
84-74-2	Di-n-butylphthalate	U	1590	ug/kg	317	1590
206-44-0	Fluoranthene	J	67.0	ug/kg	47.6	159
85-68-7	Butylbenzylphthalate	U	1590	ug/kg	317	1590
56-55-3	Benzo(a)anthracene	U	159	ug/kg	47.6	159
91-94-1	3,3'-Dichlorobenzidine	U	1590	ug/kg	476	1590
218-01-9	Chrysene	U	159	ug/kg	47.6	159
117-81-7	bis(2-Ethylhexyl)phthalate	U	1590	ug/kg	317	1590
117-84-0	Di-n-octylphthalate	U	1590	ug/kg	317	1590
205-99-2	Benzo(b)fluoranthene	J	57.2	ug/kg	47.6	159
207-08-9	Benzo(k)fluoranthene	U	159	ug/kg	47.6	159
50-32-8	Benzo(a)pyrene	U	159	ug/kg	47.6	159
193-39-5	Indeno(1,2,3-cd)pyrene	U	159	ug/kg	47.6	159
53-70-3	Dibenzo(a,h)anthracene	U	159	ug/kg	47.6	159
191-24-2	Benzo(ghi)perylene	U	159	ug/kg	47.6	159
120-82-1	1,2,4-Trichlorobenzene	U	1590	ug/kg	317	1590

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
56221-91-1	13-Tetradecen-1-ol acetate	10.6	924	ug/kg	96	NJ
112-95-8	Eicosane	11.8	671	ug/kg	96	NJ



Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2196  
Lab Sample ID: 248514002Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.04 g  
Column: J&W DB-5MSMatrix: R  
%Moisture: 16  
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	Qual
	Unknown	12.43	1490	ug/kg		J
	Unknown	12.46	906	ug/kg		J
	Unknown	12.62	2150	ug/kg		J
	Unknown	14.02	654	ug/kg		J

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2196  
Lab Sample ID: 248514003

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: 30.07 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 20.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-7525  
Batch ID: 963133  
Run Date: 03/23/2010 23:30  
Prep Date: 03/10/2010 12:14  
Data File: s6c2324.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1670	ug/kg	333	1670
108-95-2	Phenol	U	1670	ug/kg	333	1670
95-57-8	2-Chlorophenol	U	1670	ug/kg	333	1670
106-46-7	1,4-Dichlorobenzene	U	1670	ug/kg	333	1670
621-64-7	N-Nitrosodipropylamine	U	1670	ug/kg	333	1670
59-50-7	4-Chloro-3-methylphenol	U	1670	ug/kg	333	1670
83-32-9	Acenaphthene	U	167	ug/kg	55.0	167
121-14-2	2,4-Dinitrotoluene	U	1670	ug/kg	167	1670
100-02-7	4-Nitrophenol	U	1670	ug/kg	550	1670
87-86-5	Pentachlorophenol	U	1670	ug/kg	416	1670
129-00-0	Pyrene	U	167	ug/kg	50.0	167
110-86-1	Pyridine	U	1670	ug/kg	333	1670 UJ,SV7c
62-53-3	Aniline	U	1670	ug/kg	500	1670 UJ,SV7c
111-44-4	bis(2-Chloroethyl) ether	U	1670	ug/kg	333	1670 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	1670	ug/kg	333	1670
100-51-6	Benzyl alcohol	U	1670	ug/kg	500	1670 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	1670	ug/kg	333	1670
108-60-1	bis(2-Chloroisopropyl) ether	U	1670	ug/kg	333	1670 UJ,SV7c
95-48-7	o-Cresol	U	1670	ug/kg	333	1670
65794-96-9	m,p-Cresols	U	1670	ug/kg	500	1670
67-72-1	Hexachloroethane	U	1670	ug/kg	333	1670
98-95-3	Nitrobenzene	U	1670	ug/kg	333	1670
78-59-1	Isophorone	U	1670	ug/kg	333	1670
88-75-5	2-Nitrophenol	U	1670	ug/kg	333	1670
105-67-9	2,4-Dimethylphenol	U	1670	ug/kg	583	1670 UJ,SV12a
111-91-1	bis(2-Chloroethoxy)methane	U	1670	ug/kg	333	1670
120-83-2	2,4-Dichlorophenol	U	1670	ug/kg	333	1670
65-85-0	Benzoic acid	U	3330	ug/kg	833	3330
91-20-3	Naphthalene	U	167	ug/kg	50.0	167
106-47-8	4-Chloroaniline	U	1670	ug/kg	333	1670
87-68-3	Hexachlorobutadiene	U	1670	ug/kg	333	1670
91-57-6	2-Methylnaphthalene	U	167	ug/kg	33.3	167
77-47-4	Hexachlorocyclopentadiene	U	1670	ug/kg	333	1670
88-06-2	2,4,6-Trichlorophenol	U	1670	ug/kg	333	1670
95-95-4	2,4,5-Trichlorophenol	U	1670	ug/kg	333	1670
91-58-7	2-Chloronaphthalene	U	167	ug/kg	55.0	167
88-74-4	2-Nitroaniline	U	1670	ug/kg	333	1670
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	1670	ug/kg	333	1670

Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2196  
Lab Sample ID: 248514003

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: 30.07 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 20.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-7525  
Batch ID: 963133  
Run Date: 03/23/2010 23:30  
Prep Date: 03/10/2010 12:14  
Data File: s6c2324.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	1670	ug/kg	333	1670
208-96-8	2,6-Dinitrotoluene	U	1670	ug/kg	167	1670
51-28-5	Acenaphthylene	U	167	ug/kg	50.0	167
132-64-9	2,4-Dinitrophenol	U	3330	ug/kg	633	3330
84-66-2	Dibenzofuran	U	1670	ug/kg	333	1670
86-73-7	Diethylphthalate	U	1670	ug/kg	333	1670
7005-72-3	Fluorene	U	167	ug/kg	50.0	167
534-52-1	4-Chlorophenylphenylether	U	1670	ug/kg	333	1670
100-01-6	2-Methyl-4,6-dinitrophenol	U	1670	ug/kg	333	1670 UJ,SV7c
122-39-4	4-Nitroaniline	U	1670	ug/kg	500	1670
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	1670	ug/kg	333	1670
118-74-1	Azobenzene	U	1670	ug/kg	333	1670
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	1670	ug/kg	333	1670
84-74-2	Hexachlorobenzene	U	1670	ug/kg	333	1670
206-44-0	Phenanthrene	U	167	ug/kg	50.0	167
85-68-7	Anthracene	U	167	ug/kg	33.3	167
56-55-3	Di-n-butylphthalate	U	1670	ug/kg	333	1670
91-94-1	Fluoranthene	U	167	ug/kg	50.0	167
218-01-9	Butylbenzylphthalate	U	1670	ug/kg	333	1670
117-81-7	Benzo(a)anthracene	U	167	ug/kg	50.0	167
117-84-0	3,3'-Dichlorobenzidine	U	1670	ug/kg	500	1670
205-99-2	Chrysene	U	167	ug/kg	50.0	167
207-08-9	bis(2-Ethylhexyl)phthalate	U	1670	ug/kg	333	1670
50-32-8	Di-n-octylphthalate	U	1670	ug/kg	333	1670
193-39-5	Benzo(b)fluoranthene	U	167	ug/kg	50.0	167
53-70-3	Benzo(k)fluoranthene	U	167	ug/kg	50.0	167
191-24-2	Benzo(a)pyrene	U	167	ug/kg	50.0	167
120-82-1	Indeno(1,2,3-cd)pyrene	U	167	ug/kg	50.0	167
	Dibenzo(a,h)anthracene	U	167	ug/kg	50.0	167
	Benzo(ghi)perylene	U	167	ug/kg	50.0	167
	1,2,4-Trichlorobenzene	U	1670	ug/kg	333	1670

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
1058-61-3	Stigmast-4-en-3-one	8.84	1890	ug/kg	98	NJ
	Unknown	9.92	720	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary****SDG Number:** 10-2196  
**Lab Sample ID:** 248514003**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50**Matrix:** R  
**%Moisture:** 20.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009**Client ID:** RE36-10-7525  
**Batch ID:** 963133  
**Run Date:** 03/23/2010 23:30  
**Prep Date:** 03/10/2010 12:14  
**Data File:** s6c2324.d**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD6.I  
**Analyst:** NAG1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS**Dilution:** 4  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parname	Qualifler	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
559-74-0	Friedelan-3-one	10.35	5400	ug/kg	98	NJ
	Unknown	10.68	669	ug/kg		J

## DATA VALIDATION COVER SHEET

5122-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-2196 VALIDATION DATE: 05/07/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves 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 2,6-dinitrotoluene; 2-amino-4,6-dinitrotoluene and 4-amino-2,6-dinitrotoluene. The associated sample results were NDs and, thus, were qualified UJ,HE12a.
- The ICAL RRF for 2-amino-4,6-dinitrotoluene was <0.05 but  $\geq 0.01$ . The associated sample results were NDs and, thus, were qualified UJ,HE7b.
- The CCV %D was >20% with a positive bias for RDX. The associated sample results were NDs and, thus, were not qualified.
- The MS/MSD %Rs were > the laboratory UAL for TATB. The associated sample results were NDs and, thus, were not qualified. It should be noted that the parent sample for the QC analyses was from another LANL RN. No sample data were qualified as a result.
- It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported in the data package. Thus, the surrogate RT criteria could not be evaluated. No sample data were qualified as a result.

Reviewed by: Allison Felix Level: 1 Date: 5/7/10

DATA VALIDATION COVER SHEET	
5122-1	Records Use only
Data Validation Cover Sheet	
VALIDATOR'S SIGNATURE:  Mr. Peter Steves	
DATE: 05/07/10	
Form 5122-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project


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

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


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

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



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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The mass spectral documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE8a	R, HE8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, HE9	J-, HE9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The holding time was >2 times the applicable holding time requirement.	R, HE9a	J-, HE9a
<input 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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	36. The Contract Required Detection Limit Check Standard (CRI) sample did not pass method acceptance criteria.	UJ, R, HE16	J, HE16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	37. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, HE16c	R, HE16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, HE19	J, R, HE19
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	39. Duplicate, dilution, or reanalysis.	UJ, HE88	J, HE88

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7501

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514001

Sample Amount 2

Moisture: 24.0

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: EXP0415068.wiff

Date Analyzed: 16-APR-10 15:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene UJ,HE12a	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	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: RE36-10-7501

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514001

Sample Amount 2

Moisture: 24.0

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: EXS04090047.wiff

Date Analyzed: 09-APR-10 19:17

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7524

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514002

Sample Amount 2

Moisture: 16.0

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: EXP0415069.wiff

Date Analyzed: 16-APR-10 15:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene UJ,HE12a	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	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7524

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514002

Sample Amount 2

Moisture: 16.0

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: EXS04090048.wiff

Date Analyzed: 09-APR-10 19:33

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7525

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514003

Sample Amount 2

Moisture: 20.2

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: EXP0415070.wiff

Date Analyzed: 16-APR-10 15:58

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene UJ,HE12a	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	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: RE36-10-7525

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514003

Sample Amount 2

Moisture: 20.2

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: EXS04090049.wiff

Date Analyzed: 09-APR-10 19:48

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



## DATA VALIDATION COVER SHEET

5116-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-2196 VALIDATION DATE: 05/07/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves 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 decachlorobiphenyl surrogate %R was < the laboratory LAL on a single column for sample RE36-10-7425. The associated sample results were NDs and, thus, were not qualified.
- The MS/MSD %Rs and/or RPDs for aroclor 1016 and aroclor 1260 did not meet laboratory acceptance criteria. Since the analysis of an MS or MSD was not required for PCBs, no sample data were qualified as a result. It should be noted that the MS/MSD analyses were performed on a LANL parent sample from another RN. No sample data were qualified as a result.

Reviewed by: Allison Felix Level: 1 Date: 5/7/10

VALIDATOR'S SIGNATURE:

A handwritten signature of Peter Steves.

Mr. Peter Steves

DATE: 05/07/10

Form 5116-1, Revision 0.0

LOS ALAMOS

Environmental Restoration Project

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input checked="" type="checkbox"/>	<input 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: 10-2196  
Lab Sample ID: 248514002

Client ID: RE36-10-7524  
Batch ID: 967817  
Run Date: 03/23/2010 11:14  
Prep Date: 03/22/2010 21:20  
Data File: 016f1601.d  
016b1601.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: 30.18 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16  
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	3.95	ug/kg	1.31	3.95	1
11104-28-2	Aroclor-1221	U	3.95	ug/kg	1.31	3.95	1
11141-16-5	Aroclor-1232	U	3.95	ug/kg	1.31	3.95	1
53469-21-9	Aroclor-1242	U	3.95	ug/kg	1.31	3.95	1
12672-29-6	Aroclor-1248	U	3.95	ug/kg	1.31	3.95	1
11097-69-1	Aroclor-1254	P	9.60	ug/kg	1.31	3.95	1
11096-82-5	Aroclor-1260	P	5.40	ug/kg	1.31	3.95	1

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

SDG Number: 10-2196  
Lab Sample ID: 248514003

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: 30.03 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 20.2  
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	4.17	ug/kg	1.39	4.17	1
11104-28-2	Aroclor-1221	U	4.17	ug/kg	1.39	4.17	1
11141-16-5	Aroclor-1232	U	4.17	ug/kg	1.39	4.17	1
53469-21-9	Aroclor-1242	U	4.17	ug/kg	1.39	4.17	1
12672-29-6	Aroclor-1248	U	4.17	ug/kg	1.39	4.17	1
11097-69-1	Aroclor-1254	U	4.17	ug/kg	1.39	4.17	1
11096-82-5	Aroclor-1260	U	4.17	ug/kg	1.39	4.17	1

Thursday, March 04, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2196C

LOS ALAMOS

REQUEST NUMBER: 10-2196

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:

248514

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7501	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7501	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7524	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7524	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7525	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7525	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7543	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

ATTN: Valerie Davis

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

REQUEST NUMBER: 10-2196

These Samples are on:

LANL Request Number: 10-2196  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 3/2/2010

TURNAROUND/REPORT DUE: 4/1/2010

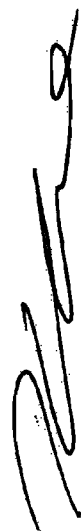
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	
	SW-846:8260B	1	RE36-10-7501	R	2/25/2010	
		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	
		1	RE36-10-7543	S	2/25/2010	
	SW-846:8270C	1	RE36-10-7501	R	2/25/2010	
		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	
	SW-846:8321A_MOD	1	RE36-10-7501	R	2/25/2010	
		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	



March 09, 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: 248514  
SDG: 10-2196

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: 10-2196  
Enclosures

**Los Alamos National Laboratory (72733-001-09)**  
**LANL ER Project**  
**Work Order #: 248514**  
**SDG: 10-2196**

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Quality Control Data.....	1038
Miscellaneous Data.....	1072

# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 248514  
SDG #: 10-2196**

**March 09, 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:

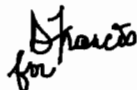
<u>Laboratory ID</u>	<u>Client ID</u>
248514001	RE36-10-7501
248514002	RE36-10-7524
248514003	RE36-10-7525
248514004	RE36-10-7543

**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.



Valerie Davis

Project Manager

**List of current GEL Certifications as of 09 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: 10-2196C

LOS ALAMOS  
NATIONAL LABORATORY

REQUEST NUMBER: 10-2196

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:

248514

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7501	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7501	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7524	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7524	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7525	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7525	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7543	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

ATTN: Valerie Davis

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

REQUEST NUMBER: 10-2196

These Samples are on:

LANL Request Number: 10-2196  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

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:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	
	SW-846:8260B	1	RE36-10-7501	R	2/25/2010	
		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	
		1	RE36-10-7543	S	2/25/2010	
	SW-846:8270C	1	RE36-10-7501	R	2/25/2010	
		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	
	SW-846:8321A_MOD	1	RE36-10-7501	R	2/25/2010	
		1	RE36-10-7524	R	2/25/2010	
		1	RE36-10-7525	R	2/25/2010	



Laboratories LLC

## SAMPLE RECEIPT &amp; REVIEW FORM

Client: LANL			SDG/ARCO/Work Order: 10-2196		
Received By: Greg Tyler			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    blue ice    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  
LOS ALAMOS, NM 87546  
UNITED STATES US

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

BILL SENDER

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

LOS ALAMOS, NM 87546  
UNITED STATES US

SHIP DATE: 02MAR10  
ACTWGT: 47.0 LB MAN  
CAD: 0014176/CAFE2450

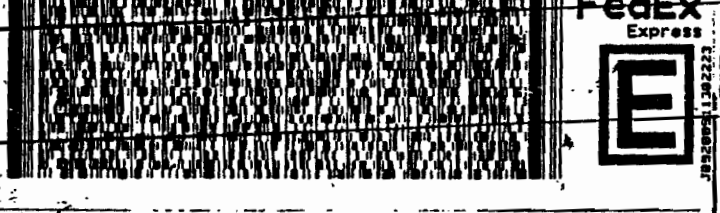
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VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 666-8171  
REF: 6B010AMR3A0532VA00

CHARLESTON SC 29407  
(843) 666-8171  
REF: 6B010AMR3A0532VA00



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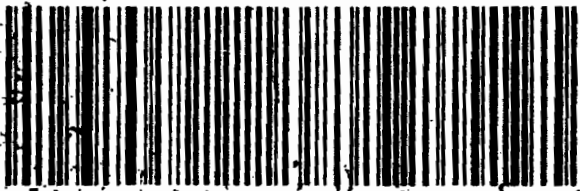
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HH MASTER HH  
PRIORITY OVERNIGHT

XX CHSA

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CHS

XX CHSA

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SC-US  
CHS



LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03  
LOS ALAMOS, NM 87546  
UNITED STATES US  
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

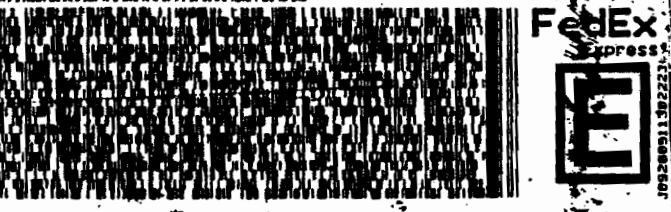
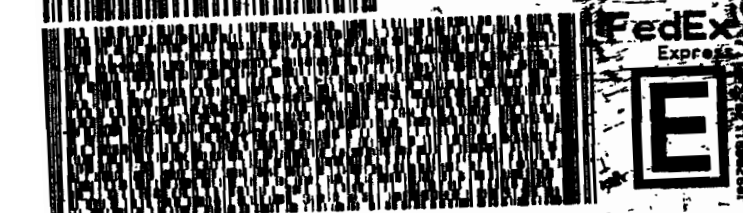
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UNITED STATES US  
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

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REF: 6B010AMR3A05529E00

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(843) 666-8171  
REF: 6B010AMR3A05529E00



1 of 3  
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HH MASTER HH  
PRIORITY OVERNIGHT

2 of 3  
WED - 03MAR A1  
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0201  
HH MASTER HH  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS

X CHSA

29407  
SC-US  
CHS



JOYLENE VALDEZ (505) 665-9968  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 02MAR10  
ACTMGT: 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

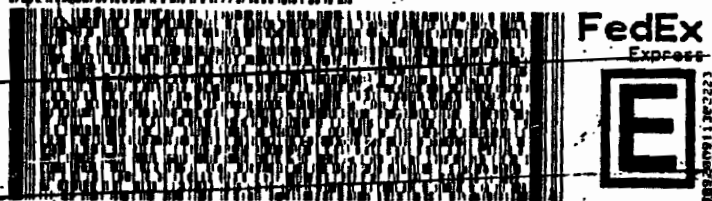
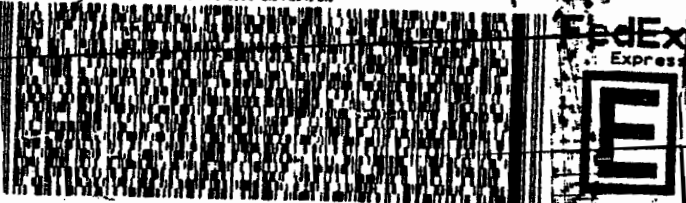
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TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

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(843) 556-8171  
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TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
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CHARLESTON SC 29407  
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REF: 6B010AMR3A0532VA00



3 of 3  
WED - 03MAR A1  
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XX CHSA  
29407  
SC-US  
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2 of 3  
WED - 03MAR A1  
PRIORITY OVERNIGHT  
NPS# 7209 7850 3050  
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XX CHSA  
29407  
SC-US  
CHS

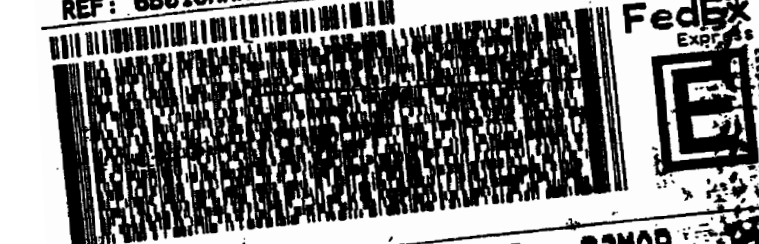


JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US  
BILL SENDER  
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

LOS ALAMOS, NM 87545  
UNITED STATES US  
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

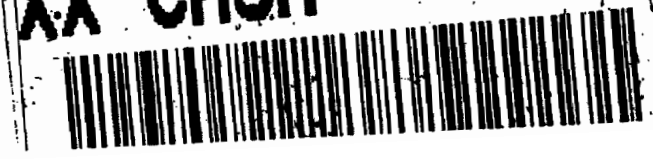
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(843) 556-8171  
REF: 6B010AMR3A05529E00

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



3 of 3  
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PRIORITY OVERNIGHT  
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XX CHSA  
29407  
SC-US  
CHS

2 of 3  
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PRIORITY OVERNIGHT  
NPS# 7209 7850 3131  
Matr# 7209 7850 3120 0201  
XX CHSA  
29407  
SC-US  
CHS



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/CAFE24

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

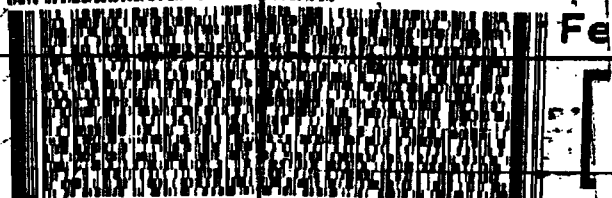
TO VALERIE DAVIS  
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2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

0014176/CAFE24



Fe

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

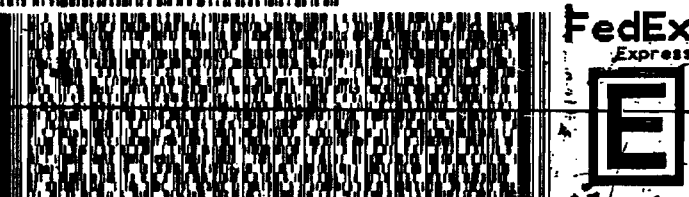
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GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

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WED - 03MAR

FedEx

TRK# 7209 7850 3061

WED - 03 MAR A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS



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

SHIP DATE: 02MAR10  
ACTWGT: 27.0 LB MAN  
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

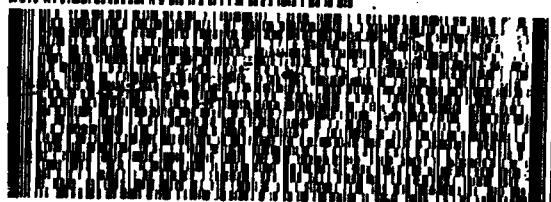
TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

0014176/CAFE24



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1 of 3

TRK# 7209 7850 3120

MM MASTER MM

WED - 03MAR A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS

Page 10 of 1095

1 of 2

TRK# 7209 7850 3072

MM MASTER MM

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

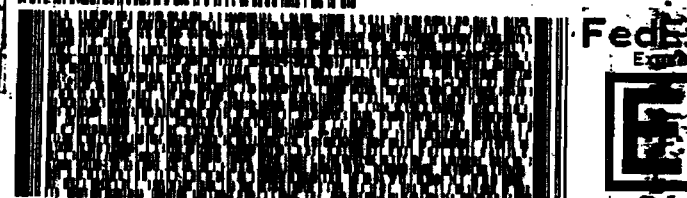
TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

0014176/CAFE24



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Express



3 of 3

TRK# 7209 7850 3110

MM MASTER MM

XX CHSA

29407  
SC-US  
CHS

WED - 03MAR A1  
PRIORITY OVERNIGHT



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

SHIP DATE: 02MAR10  
ACTWGT: 46.0 LB MAN  
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 6B010AMR3A05529E00

UNITED STATES MAIL PERMIT NO. 1000 CHARLESTON SC 29407



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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: 0014176/CAFE2450

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 6B010AMR3A0532VA00

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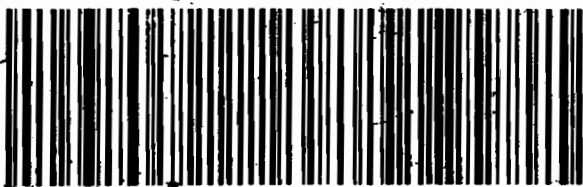


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PRIORITY OVERNIGHT

TRK# 7209 7850 3153  
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29407  
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CHS



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

LOS ALAMOS, NM 87545  
UNITED STATES US

ACTWGT: 46.0 LB MAN  
CAD: 0014176/CAFE2450

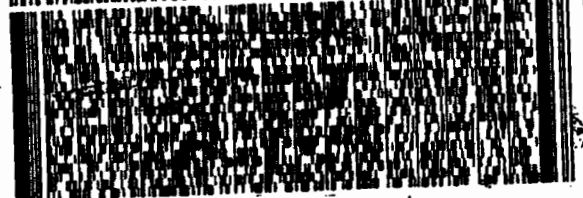
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3 of 3  
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1 of 3  
TRK# 7209 7850 3017  
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Matr# MASTER Matr#

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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**

**GC/MS Volatile Organics  
Los Alamos National Laboratory (LANL)  
SDG 10-2196**

**Method/Analysis Information**

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer  
Analytical Method: SW846 8260B  
Prep Method: SW846 5030  
Analytical Batch Number: 962525  
Prep Batch Number: 962521

**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>
248514001	RE36-10-7501
248514002	RE36-10-7524
248514003	RE36-10-7525
248514004	RE36-10-7543
1202064875	Method Blank (MB)
1202064878	Laboratory Control Sample (LCS)
1202064879	Laboratory Control Sample (LCS)
1202064876	248234005(RE11-10-1856) Post Spike (PS)
1202064877	248234005(RE11-10-1856) 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 248514 001, 002 and 003 in this SDG were analyzed on an "dry weight" basis. Samples 248514 004 in this SDG were 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 Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

**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.

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.

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.

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 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 MB analyzed with this SDG met the acceptance criteria.

##### **Surrogate Recoveries**

The surrogate recoveries, in the following samples, were above the acceptance limits. Sample re-analysis confirmed matrix interference: 248514002 (RE36-10-7524) and 248514003 (RE36-10-7525). See DER# 804679.

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

The LCS spike recoveries met the acceptance limits.

##### **QC Sample Designation**

Sample 248234005 (RE11-10-1856) was designated for spike analysis in this SDG.

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

The spike recoveries for this SDG were within the required acceptance limits.

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

The spike duplicate recoveries for this SDG were within the required acceptance limits.

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

The RPD between the matrix spike pair were not all within the acceptance limits. See DER# 804679.

**Internal Standard (ISTD) Acceptance**

In the following samples, internal standard responses were outside the required acceptance criteria. Sample reanalysis confirmed matrix interference: 248514002 (RE36-10-7524) and 248514003 (RE36-10-7525). See DER# 804679.

**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 samples in this SDG met the specified holding time.

**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**

The samples in this SDG were re-analyzed due to unacceptable recoveries in the initial analysis: 248514002 (RE36-10-7524) and 248514003 (RE36-10-7525).

**Miscellaneous Information****Electronic Package 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 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**

The following DER was generated for this SDG: 804679

**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 SDG.

**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>
VOA1.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	RTX-624	Restek, 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 of 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: 10-2196 GEL Work Order: 248514

**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:** Stacy Calloway

**Date:** 30 MAR 2010

**Title:** Data Validator

## Roadmap for LANL 10-2196 VOA

This roadmap was analyzed by rya01514 on 03-16-2010, 10:10.

This roadmap was reviewed by eh1 on 03-19-2010, 10:17.

This roadmap was packaged by lys00434 on 03-19-2010, 12:11.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/VOA1.i/030810v1/1b118.d	248514001	RE36-10-7501	08-MAR-2010	16:09	10-2196.sub	1	962525	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA1.i/030810v1/1b119.d	248514002	RE36-10-7524	08-MAR-2010	16:40	10-2196.sub	1	962525	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA1.i/030810v1/1b120.d	248514003	RE36-10-7525	08-MAR-2010	17:11	10-2196.sub	1	962525	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA1.i/030810v1/1b121.d	248514004	RE36-10-7543	08-MAR-2010	17:42	10-2196.sub	1	962525	<input type="text"/>

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/VOA1.i/030810v1/1b104LL.d	1202064878	LCS	lcs	08-MAR-2010	08:58	all.sub	1	962525	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA1.i/030810v1/1b106LL.d	1202064879	SLCS	lcs	08-MAR-2010	09:58	all.sub	1	962525	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA1.i/030810v1/1b108LL.d	1202064875	BLANK	mb	08-MAR-2010	10:59	all.sub	1	962525	<input type="text"/>

# Sample Data Summary

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514001	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 24
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-7501	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Batch ID:</b> 962525	<b>Inst:</b> VOA11	<b>Dilution:</b> 1
<b>Run Date:</b> 03/08/2010 16:09	<b>Analyst:</b> GRB2	<b>Purge Vol:</b> 5 mL
<b>Prep Date:</b> 03/08/2010 14:32	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
<b>Data File:</b> 1b118.d	<b>Column:</b> RTX-Volatiles	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.32	ug/kg	0.447	1.32
74-87-3	Chloromethane	U	1.32	ug/kg	0.395	1.32
75-01-4	Vinyl chloride	U	1.32	ug/kg	0.395	1.32
74-83-9	Bromomethane	U	1.32	ug/kg	0.395	1.32
75-00-3	Chloroethane	U	1.32	ug/kg	0.395	1.32
75-69-4	Trichlorofluoromethane	U	1.32	ug/kg	0.395	1.32
67-64-1	Acetone		39.4	ug/kg	2.18	6.58
75-35-4	1,1-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
74-88-4	Iodomethane	U	6.58	ug/kg	2.11	6.58
75-09-2	Methylene chloride	U	6.58	ug/kg	2.63	6.58
75-15-0	Carbon disulfide	U	6.58	ug/kg	1.64	6.58
156-60-5	trans-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
75-34-3	1,1-Dichloroethane	U	1.32	ug/kg	0.395	1.32
78-93-3	2-Butanone	U	6.58	ug/kg	1.97	6.58
156-59-2	cis-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
594-20-7	2,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
67-66-3	Chloroform	U	1.32	ug/kg	0.395	1.32
74-97-5	Bromochloromethane	U	1.32	ug/kg	0.434	1.32
71-55-6	1,1,1-Trichloroethane	U	1.32	ug/kg	0.395	1.32
563-58-6	1,1-Dichloropropene	U	1.32	ug/kg	0.395	1.32
56-23-5	Carbon tetrachloride	U	1.32	ug/kg	0.395	1.32
107-06-2	1,2-Dichloroethane	U	1.32	ug/kg	0.395	1.32
71-43-2	Benzene	U	1.32	ug/kg	0.395	1.32
79-01-6	Trichloroethylene	U	1.32	ug/kg	0.434	1.32
78-87-5	1,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
75-27-4	Bromodichloromethane	U	1.32	ug/kg	0.395	1.32
74-95-3	Dibromomethane	U	1.32	ug/kg	0.395	1.32
108-10-1	4-Methyl-2-pentanone	U	6.58	ug/kg	1.64	6.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
108-88-3	Toluene		1.84	ug/kg	0.395	1.32
10061-02-6	trans-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
79-00-5	1,1,2-Trichloroethane	U	1.32	ug/kg	0.395	1.32
591-78-6	2-Hexanone	U	6.58	ug/kg	1.97	6.58
142-28-9	1,3-Dichloropropane	U	1.32	ug/kg	0.395	1.32
127-18-4	Tetrachloroethylene	U	1.32	ug/kg	0.395	1.32
124-48-1	Dibromochloromethane	U	1.32	ug/kg	0.395	1.32
106-93-4	1,2-Dibromoethane	U	1.32	ug/kg	0.395	1.32
108-90-7	Chlorobenzene	U	1.32	ug/kg	0.395	1.32

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514001	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 24
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-7501	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Batch ID:</b> 962525	<b>Inst:</b> VOA1.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/08/2010 16:09	<b>Analyst:</b> GRB2	<b>Purge Vol:</b> 5 mL
<b>Prep Date:</b> 03/08/2010 14:32	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
<b>Data File:</b> 1b118.d	<b>Column:</b> RTX-Volatiles	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.32	ug/kg	0.395	1.32
179601-23-1	m,p-Xylenes	U	2.63	ug/kg	0.395	2.63
95-47-6	o-Xylene	U	1.32	ug/kg	0.395	1.32
100-42-5	Styrene	U	1.32	ug/kg	0.395	1.32
75-25-2	Bromoform	U	1.32	ug/kg	0.395	1.32
79-34-5	1,1,2,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
96-18-4	1,2,3-Trichloropropane	U	1.32	ug/kg	0.395	1.32
108-86-1	Bromobenzene	U	1.32	ug/kg	0.395	1.32
103-65-1	n-Propylbenzene	U	1.32	ug/kg	0.395	1.32
95-49-8	2-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-82-8	Isopropylbenzene	U	1.32	ug/kg	0.395	1.32
108-67-8	1,3,5-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
106-43-4	4-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-06-6	tert-Butylbenzene	U	1.32	ug/kg	0.395	1.32
95-63-6	1,2,4-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
135-98-8	sec-Butylbenzene	U	1.32	ug/kg	0.395	1.32
99-87-6	4-Isopropyltoluene		24.6	ug/kg	0.395	1.32
541-73-1	1,3-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
106-46-7	1,4-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
104-51-8	n-Butylbenzene	U	1.32	ug/kg	0.395	1.32
96-12-8	1,2-Dibromo-3-chloropropane	U	1.32	ug/kg	0.395	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.58	ug/kg	2.11	6.58
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
95-50-1	1,2-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	18.08	142	ug/kg	97	NJ
79-92-5	Camphene	18.42	31.5	ug/kg	90	NJ
13466-78-9	3-Carene	19.12	442	ug/kg	95	NJ
554-61-0	Bicyclo[4.1.0]hept-2-ene, 3,7,7-trimethy	19.21	8.31	ug/kg	96	NJ
138-86-3	Limonene	19.36	216	ug/kg	94	NJ
28634-89-1	Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m	19.5	7.15	ug/kg	91	NJ
99-85-4	1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	19.67	8.13	ug/kg	96	NJ
586-62-9	Cyclohexene, 1-methyl-4-(1-methylethylid	20.09	34	ug/kg	97	NJ
7399-49-7	o-Isopropenyltoluene	20.32	7.57	ug/kg	97	NJ

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514002	Date Received: 03/03/2010 08:50	%Moisture: 16
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7524	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 16:40	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:34	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b119.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.405	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.357	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.357	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.357	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.357	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.357	1.19
67-64-1	Acetone	J	2.39	ug/kg	1.98	5.95
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
74-88-4	Iodomethane	U	5.95	ug/kg	1.91	5.95
75-09-2	Methylene chloride	U	5.95	ug/kg	2.38	5.95
75-15-0	Carbon disulfide	U	5.95	ug/kg	1.49	5.95
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.357	1.19
78-93-3	2-Butanone	U	5.95	ug/kg	1.79	5.95
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.357	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.393	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.357	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.357	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.357	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.357	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.357	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.393	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.357	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.357	1.19
108-10-1	4-Methyl-2-pentanone	U	5.95	ug/kg	1.49	5.95
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.357	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.357	1.19
591-78-6	2-Hexanone	U	5.95	ug/kg	1.79	5.95
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.357	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.357	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.357	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.357	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.357	1.19

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514002	Date Received: 03/03/2010 08:50	%Moisture: 16
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7524	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 16:40	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:34	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b119.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.357	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.357	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.357	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.357	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.357	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.357	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.357	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.357	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.357	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.357	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.357	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.357	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.357	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.357	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.95	ug/kg	1.91	5.95
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	4.75	12.8	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	16.38	42.2	ug/kg	98	NJ

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514003	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 20.2
<b>Client ID:</b> RE36-10-7525	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 962525	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Run Date:</b> 03/08/2010 17:11	<b>Inst:</b> VOA1.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 03/08/2010 14:36	<b>Analyst:</b> GRB2	<b>Purge Vol:</b> 5 mL
<b>Data File:</b> 1b120.d	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
	<b>Column:</b> RTX-Volatiles	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.426	1.25
74-87-3	Chloromethane	U	1.25	ug/kg	0.376	1.25
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.376	1.25
74-83-9	Bromomethane	U	1.25	ug/kg	0.376	1.25
75-00-3	Chloroethane	U	1.25	ug/kg	0.376	1.25
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.376	1.25
67-64-1	Acetone	U	6.26	ug/kg	2.08	6.26
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
74-88-4	Iodomethane	U	6.26	ug/kg	2.00	6.26
75-09-2	Methylene chloride	U	6.26	ug/kg	2.50	6.26
75-15-0	Carbon disulfide	U	6.26	ug/kg	1.57	6.26
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.376	1.25
78-93-3	2-Butanone	U	6.26	ug/kg	1.88	6.26
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
67-66-3	Chloroform	U	1.25	ug/kg	0.376	1.25
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.413	1.25
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.376	1.25
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.376	1.25
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.376	1.25
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.376	1.25
71-43-2	Benzene	U	1.25	ug/kg	0.376	1.25
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.413	1.25
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.376	1.25
74-95-3	Dibromomethane	U	1.25	ug/kg	0.376	1.25
108-10-1	4-Methyl-2-pentanone	U	6.26	ug/kg	1.57	6.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
108-88-3	Toluene	U	1.25	ug/kg	0.376	1.25
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.376	1.25
591-78-6	2-Hexanone	U	6.26	ug/kg	1.88	6.26
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.376	1.25
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.376	1.25
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.376	1.25
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.376	1.25
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.376	1.25



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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514003	Date Received: 03/03/2010 08:50	%Moisture: 20.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7525	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 17:11	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:36	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b120.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.376	1.25
179601-23-1	m,p-Xylenes	U	2.50	ug/kg	0.376	2.50
95-47-6	o-Xylene	U	1.25	ug/kg	0.376	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.376	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.376	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.376	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.376	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.376	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.376	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.376	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.376	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.376	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.376	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.376	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.26	ug/kg	2.00	6.26
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.96	9.71	ug/kg		J

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: S
Lab Sample ID: 248514004	Date Received: 03/03/2010 08:50	
Client ID: RE36-10-7543	Client: LANL010	Project: LANL01004
Batch ID: 962525	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 17:42	Inst: VOA1I	Dilution: 1
Prep Date: 03/08/2010 14:38	Analyst: GRB2	Purge Vol: 5 mL
Data File: 1b121.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-Volatiles	Level: LOW

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: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: S
Lab Sample ID: 248514004	Date Received: 03/03/2010 08:50	
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7543	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 17:42	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:38	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b121.d	Column: RTX-Volatiles	Level: LOW

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
	<i>Trichlorotrifluoroethane</i>					
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
	Unknown Siloxane	19.96	5.16	ug/kg		J

# QC Summary

**Volatile**  
**Surrogate Recovery Report**

Page 1 of 1

**SDG Number: 10-2196****Matrix Type: SOLID****CAP Column (1) : RTX-Volatiles**

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202064878	LCS for batch 962521	113	100	104
1202064879	LCS for batch 962521	100	100	102
1202064875	MB for batch 962521	104	99	103
248514001	RE36-10-7501	116	101	115
248514002	RE36-10-7524	121	128	149 *
248514003	RE36-10-7525	120	113	131 *
248514004	RE36-10-7543	120	99	106

**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: 10-2196

Sample Type: Post Spike

Client ID: RE11-10-1856PS

Matrix: S

Lab Sample ID: 1202064876

%Moisture: 12.8

Instrument: VOA1.I

Analysis Date: 03/08/2010 18:12

Dilution: 1

Analyst: GRB2

Prep Batch ID: 962521

Purge Vol: 5 mL

Batch ID: 962525

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 33.6	67	39-148
74-87-3	PS Chloromethane	50.0	0.00	U 37.0	74	42-131
75-01-4	PS Vinyl chloride	50.0	0.00	U 37.9	76	50-127
74-83-9	PS Bromomethane	50.0	0.00	U 38.3	77	26-135
75-00-3	PS Chloroethane	50.0	0.00	U 38.6	77	54-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00	U 47.7	95	55-138
67-64-1	PS Acetone	250	0.00	U 197	79	20-144
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00	U 44.5	89	55-128
74-88-4	PS Iodomethane	250	0.00	U 194	77	47-132
75-09-2	PS Methylene chloride	50.0	0.00	U 41.1	82	56-123
75-15-0	PS Carbon disulfide	250	0.00	U 203	81	53-133
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00	U 39.3	79	57-119
75-34-3	PS 1,1-Dichloroethane	50.0	0.00	U 42.0	84	62-125
78-93-3	PS 2-Butanone	250	0.00	U 191	76	30-150
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00	U 39.4	79	60-124
594-20-7	PS 2,2-Dichloropropane	50.0	0.00	U 43.6	87	56-129
67-66-3	PS Chloroform	50.0	0.00	U 43.6	87	62-120
74-97-5	PS Bromochloromethane	50.0	0.00	U 40.5	81	51-135
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00	U 44.9	90	58-129
563-58-6	PS 1,1-Dichloropropene	50.0	0.00	U 42.8	86	59-126
56-23-5	PS Carbon tetrachloride	50.0	0.00	U 48.8	98	55-132
107-06-2	PS 1,2-Dichloroethane	50.0	0.00	U 47.7	95	54-121

Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

Sample Type: Post Spike

Client ID: RE11-10-1856PS

Matrix: S

Lab Sample ID: 1202064876

%Moisture: 12.8

Instrument: VOA1.I

Analysis Date: 03/08/2010 18:12

Dilution: 1

Analyst: GRB2

Prep Batch II 962521

Purge Vol: 5 mL

Batch ID: 962525

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	38.4	77 58-120
79-01-6	PS Trichloroethylene	50.0	0.00	U	43.1	86 54-130
78-87-5	PS 1,2-Dichloropropane	50.0	0.00	U	39.7	79 59-121
75-27-4	PS Bromodichloromethane	50.0	0.00	U	46.9	94 57-130
74-95-3	PS Dibromomethane	50.0	0.00	U	42.7	85 57-124
108-10-1	PS 4-Methyl-2-pentanone	250	0.00	U	209	84 40-137
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00	U	41.8	84 50-131
108-88-3	PS Toluene	50.0	0.00	U	38.1	76 54-119
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00	U	43.2	86 47-133
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00	U	39.3	79 60-130
591-78-6	PS 2-Hexanone	250	0.00	U	194	77 30-139
142-28-9	PS 1,3-Dichloropropane	50.0	0.00	U	40.3	81 59-125
127-18-4	PS Tetrachloroethylene	50.0	0.00	U	37.8	76 50-126
124-48-1	PS Dibromochloromethane	50.0	0.00	U	44.5	89 54-131
106-93-4	PS 1,2-Dibromoethane	50.0	0.00	U	41.4	83 55-127
108-90-7	PS Chlorobenzene	50.0	0.00	U	38.4	77 50-130
100-41-4	PS Ethylbenzene	50.0	0.00	U	39.8	80 50-121
179601-23-1	PS m,p-Xylenes	100	0.00	U	76.3	76 47-125
95-47-6	PS o-Xylene	50.0	0.00	U	39.3	79 51-127
100-42-5	PS Styrene	50.0	0.00	U	40.7	81 41-136
75-25-2	PS Bromoform	50.0	0.00	U	44.8	90 48-143
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00	U	38.3	77 52-129

## Volatile

Page 3 of 6

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

Sample Type: Post Spike

Client ID: RE11-10-1856PS

Matrix: S

Lab Sample ID: 1202064876

%Moisture: 12.8

Instrument: VOA1.I

Analysis Date: 03/08/2010 18:12

Dilution: 1

Analyst: GRB2

Pren Batch II 962521

Purge Vol: 5 mL

Batch ID: 962525

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 43.0	86	56-139
108-86-1	PS Bromobenzene	50.0	0.00	U 38.0	76	54-125
103-65-1	PS n-Propylbenzene	50.0	0.00	U 38.5	77	46-127
95-49-8	PS 2-Chlorotoluene	50.0	0.00	U 39.3	79	47-130
98-82-8	PS Isopropylbenzene	50.0	0.00	U 39.4	79	42-126
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00	U 39.5	79	44-132
106-43-4	PS 4-Chlorotoluene	50.0	0.00	U 38.0	76	46-127
98-06-6	PS tert-Butylbenzene	50.0	0.00	U 39.3	79	48-136
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00	U 38.4	77	42-132
135-98-8	PS sec-Butylbenzene	50.0	0.00	U 38.7	77	47-130
99-87-6	PS 4-Isopropyltoluene	50.0	0.00	U 38.2	76	36-142
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00	U 36.0	72	41-130
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00	U 36.0	72	41-126
104-51-8	PS n-Butylbenzene	50.0	0.00	U 36.9	74	37-136
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00	U 44.2	88	42-143
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00	U 43.7	87	58-127
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00	U 37.1	74	42-128



## Volatile

Page 4 of 6

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

Sample Type: Post Spike Duplicate

Client ID: RE11-10-1856PSD

Matrix: S

Lab Sample ID: 1202064877

%Moisture: 12.8

Instrument: VOA1.I

Analysis Date: 03/08/2010 18:43

Dilution: 1

Analyst: GRB2

Prep Batch II 962521

Purge Vol: 5 mL

Batch ID: 962525

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD Dichlorodifluoromethane	50.0	0.00	U 29.3	59	39-148	14	0-19
74-87-3	PSD Chloromethane	50.0	0.00	U 33.2	66	42-131	11	0-23
75-01-4	PSD Vinyl chloride	50.0	0.00	U 34.8	70	50-127	9	0-23
74-83-9	PSD Bromomethane	50.0	0.00	U 33.4	67	26-135	14	0-22
75-00-3	PSD Chloroethane	50.0	0.00	U 34.3	69	54-128	12	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00	U 41.1	82	55-138	15	0-21
67-64-1	PSD Acetone	250	0.00	U 154	62	20-144	25 *	0-22
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00	U 39.3	79	55-128	13	0-20
74-88-4	PSD Iodomethane	250	0.00	U 171	69	47-132	12	0-20
75-09-2	PSD Methylene chloride	50.0	0.00	U 35.5	71	56-123	15	0-20
75-15-0	PSD Carbon disulfide	250	0.00	U 181	72	53-133	11	0-22
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00	U 34.8	70	57-119	12	0-20
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00	U 37.1	74	62-125	13	0-20
78-93-3	PSD 2-Butanone	250	0.00	U 154	62	30-150	21	0-21
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00	U 34.9	70	60-124	12	0-20
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00	U 38.9	78	56-129	11	0-20
67-66-3	PSD Chloroform	50.0	0.00	U 37.7	75	62-120	15	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00	U 35.5	71	51-135	13	0-20
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00	U 39.0	78	58-129	14	0-20
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00	U 38.0	76	59-126	12	0-20
56-23-5	PSD Carbon tetrachloride	50.0	0.00	U 42.4	85	55-132	14	0-20
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00	U 40.5	81	54-121	16	0-20

## Volatile

Page 5 of 6

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

Sample Type: Post Spike Duplicate

Client ID: RE11-10-1856PSD

Matrix: S

Lab Sample ID: 1202064877

%Moisture: 12.8

Instrument: VOA1.I

Analysis Date: 03/08/2010 18:43

Dilution: 1

Analyst: GRB2

Prep Batch II 962521

Purge Vol: 5 mL

Batch ID: 962525

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD Benzene	50.0	0.00	U 33.8	68	58-120	13	0-20
79-01-6	PSD Trichloroethylene	50.0	0.00	U 37.6	75	54-130	14	0-23
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00	U 35.3	71	59-121	12	0-20
75-27-4	PSD Bromodichloromethane	50.0	0.00	U 40.1	80	57-130	16	0-20
74-95-3	PSD Dibromomethane	50.0	0.00	U 36.7	73	57-124	15	0-20
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00	U 175	70	40-137	18	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00	U 35.9	72	50-131	15	0-20
108-88-3	PSD Toluene	50.0	0.00	U 32.2	64	54-119	17	0-23
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00	U 36.3	73	47-133	17	0-24
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00	U 34.2	68	60-130	14	0-20
591-78-6	PSD 2-Hexanone	250	0.00	U 157	63	30-139	21	0-21
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00	U 34.3	69	59-125	16	0-20
127-18-4	PSD Tetrachloroethylene	50.0	0.00	U 32.2	64	50-126	16	0-20
124-48-1	PSD Dibromochloromethane	50.0	0.00	U 37.9	76	54-131	16	0-23
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00	U 34.3	69	55-127	19	0-23
108-90-7	PSD Chlorobenzene	50.0	0.00	U 32.4	65	50-130	17	0-24
100-41-4	PSD Ethylbenzene	50.0	0.00	U 32.8	66	50-121	19	0-24
179601-23-1	PSD m,p-Xylenes	100	0.00	U 63.0	63	47-125	19	0-25
95-47-6	PSD o-Xylene	50.0	0.00	U 32.1	64	51-127	20	0-24
100-42-5	PSD Styrene	50.0	0.00	U 33.0	66	41-136	21	0-24
75-25-2	PSD Bromoform	50.0	0.00	U 37.6	75	48-143	17	0-20
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00	U 32.4	65	52-129	17	0-20

## Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

Sample Type: Post Spike Duplicate

Client ID: RE11-10-1856PSD

Matrix: S

Lab Sample ID: 1202064877

%Moisture: 12.8

Instrument: VOA1.I

Analysis Date: 03/08/2010 18:43

Dilution: 1

Analyst: GRB2

Prep Batch II 962521

Purge Vol: 5 mL

Batch ID: 962525

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD 1,2,3-Trichloropropane	50.0	0.00	U 36.0	72	56-139	18	0-34
108-86-1	PSD Bromobenzene	50.0	0.00	U 30.8	62	54-125	21	0-22
103-65-1	PSD n-Propylbenzene	50.0	0.00	U 30.2	60	46-127	24	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U 31.0	62	47-130	24	0-24
98-82-8	PSD Isopropylbenzene	50.0	0.00	U 31.8	64	42-126	22	0-22
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U 30.8	62	44-132	25	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U 30.0	60	46-127	24	0-26
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U 31.5	63	48-136	22	0-24
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U 29.9	60	42-132	25	0-26
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U 29.8	60	47-130	26	0-27
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U 28.9	58	36-142	28 *	0-27
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U 28.3	57	41-130	24	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U 28.0	56	41-126	25	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U 26.4	53	37-136	33 *	0-29
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U 36.4	73	42-143	19	0-21
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U 36.5	73	58-127	18	0-20
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U 29.3	59	42-128	24	0-24

Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962521

Matrix: SOIL

Lab Sample ID: 1202064878

Instrument: VOA1.I

Analysis Date: 03/08/2010 08:58

Dilution: 1

Analyst: GRB2

Pren Batch II 962521

Purge Vol: 5 mL

Batch ID: 962525

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	35.6	71	52-151
74-87-3	LCS Chloromethane	50.0	0.0	41.2	82	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	41.3	83	66-130
74-83-9	LCS Bromomethane	50.0	0.0	43.0	86	70-126
75-00-3	LCS Chloroethane	50.0	0.0	44.4	89	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	50.3	101	73-143
67-64-1	LCS Acetone	250	0.0	205	82	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	47.3	95	71-129
74-88-4	LCS Iodomethane	250	0.0	221	89	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	46.9	94	64-121
75-15-0	LCS Carbon disulfide	250	0.0	238	95	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	46.6	93	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	46.9	94	73-120
78-93-3	LCS 2-Butanone	250	0.0	203	81	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	46.8	94	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	51.4	103	73-134
67-66-3	LCS Chloroform	50.0	0.0	48.1	96	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	46.0	92	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	50.1	100	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	49.9	100	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	52.2	104	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	48.9	98	65-120

Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962521

Matrix: SOIL

Lab Sample ID: 1202064878

Instrument: VOA1.I

Analysis Date: 03/08/2010 08:58

Dilution: 1

Analyst: GRB2

Prep Batch II 962521

Purge Vol: 5 mL

Batch ID: 962525

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	45.6	91	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	47.3	95	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	46.7	93	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	51.4	103	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	47.2	94	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	233	93	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	49.9	100	78-127
108-88-3	LCS Toluene	50.0	0.0	46.2	92	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	50.3	101	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	45.7	91	75-120
591-78-6	LCS 2-Hexanone	250	0.0	214	86	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	46.0	92	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	45.7	91	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	49.7	99	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	46.1	92	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	46.3	93	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	47.7	95	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	94.4	94	76-120
95-47-6	LCS o-Xylene	50.0	0.0	47.3	95	76-122
100-42-5	LCS Styrene	50.0	0.0	48.9	98	75-125
75-25-2	LCS Bromoform	50.0	0.0	50.9	102	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	46.8	94	72-122

## Volatile

Page 3 of 3

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962521

Matrix: SOIL

Lab Sample ID: 1202064878

Instrument: VOA1.I

Analysis Date: 03/08/2010 08:58

Dilution: 1

Analyst: GRB2

Prep Batch II 962521

Purge Vol: 5 mL

Batch ID: 962525

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	46.9	94	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	45.7	91	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	48.5	97	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	47.7	95	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	48.4	97	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	48.5	97	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	48.2	96	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	47.9	96	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	48.2	96	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	48.7	97	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	45.5	91	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	45.6	91	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	48.9	98	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	48.6	97	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	47.8	96	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	45.6	91	75-120

## Volatile

Page 1 of 1

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962521

Matrix: SOIL

Lab Sample ID: 1202064879

Instrument: VOA1.I

Analysis Date: 03/08/2010 09:58

Dilution: 1

Analyst: GRB2

Pren Batch ID: 962521

Purge Vol: 5 mL

Batch ID: 962525

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	267	107	67-140

## Method Blank Summary

Page 1 of 1

SDG Number:	10-2196	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 962521	Instrument ID:	VOA1.I	Data File:	1b108LL.d
Lab Sample ID:	1202064875	Prep Date:	03/08/2010 09:40	Analyzed:	03/08/10 10:59
Column:	RTX-Volatiles	Heated Purge:	Yes		

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 962521	1202064878	1b104LL.d	03/08/10	0858
02 LCS for batch 962521	1202064879	1b106LL.d	03/08/10	0958
03 RE36-10-7501	248514001	1b118.d	03/08/10	1609
04 RE36-10-7524	248514002	1b119.d	03/08/10	1640
05 RE36-10-7525	248514003	1b120.d	03/08/10	1711
06 RE36-10-7543	248514004	1b121.d	03/08/10	1742



## Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2196

Instrument ID: VOA1.I

Injection Date/Time: 04-MAR-10 16:41

Column Description: RTX-Volatiles

Lab File ID /030410v1/1a411.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	22.2
75	30.0 - 60.0% of mass 95	56.5
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.9
174	50.0 - 100.0% of mass 95	71.7
175	5.0 - 9.0% of mass 174	7.4
176	95.0 - 101.0% of mass 174	95.2
177	5.0 - 9.0% of mass 176	6.8

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
VSTD001	W1VM100304-06	1a412.d	04-MAR-10 17:28
VSTD002	W1VM100304-07	1a413.d	04-MAR-10 17:59
VSTD005	W1VM100304-08	1a414.d	04-MAR-10 18:29
VSTD010	W1VM100304-09	1a415.d	04-MAR-10 19:00
VSTD020	W1VM100304-10	1a416.d	04-MAR-10 19:31
VSTD050	W1VM100304-11	1a417.d	04-MAR-10 20:02
VSTD100	W1VM100304-12	1a418.d	04-MAR-10 20:32
VSTD0005	W1VM100304-13	1a420.d	04-MAR-10 21:35
VSTD005S	W1VM100304-16	1a423.d	04-MAR-10 23:06
VSTD010S	W1VM100304-17	1a424.d	04-MAR-10 23:37
VSTD025S	W1VM100304-18	1a425.d	05-MAR-10 00:08
VSTD050S	W1VM100304-19	1a426.d	05-MAR-10 00:39
VSTD100S	W1VM100304-20	1a427.d	05-MAR-10 01:10
VSTD250S	W1VM100304-21	1a428.d	05-MAR-10 01:41
VSTD500S	W1VM100304-22	1a429.d	05-MAR-10 02:12
SICV	W1VM100304-23	1a431.d	05-MAR-10 03:14

## Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2196

Instrument ID: VOA1.I

Injection Date/Time: 05-MAR-10 10:31

Column Description: RTX-Volatiles

Lab File ID /030410v1/1a502BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	57.9
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.8
174	50.0 - 100.0% of mass 95	72.8
175	5.0 - 9.0% of mass 174	7.4
176	95.0 - 101.0% of mass 174	97
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
LICV	W1VM100305-01	1a502.d	05-MAR-10 10:31

## Instrument Performance Check

## BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2196

Instrument ID: VOA1.1

Injection Date/Time: 08-MAR-10 07:57

Column Description: RTX-Volatiles

Lab File ID /030810v1/1b102BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	24.1
75	30.0 - 60.0% of mass 95	58.4
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.8
174	50.0 - 100.0% of mass 95	71.5
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.8
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
VSTD050	W1VM100308-01	1b102.d	08-MAR-10 07:57
LCS	1202064878	1b104LL.d	08-MAR-10 08:58
VSTD250S	W1VM100308-03	1b105.d	08-MAR-10 09:28
SLCS	1202064879	1b106LL.d	08-MAR-10 09:58
BLANK	1202064875	1b108LL.d	08-MAR-10 10:59
RE36-10-7501	248514001	1b118.d	08-MAR-10 16:09
RE36-10-7524	248514002	1b119.d	08-MAR-10 16:40
RE36-10-7525	248514003	1b120.d	08-MAR-10 17:11
RE36-10-7543	248514004	1b121.d	08-MAR-10 17:42

### Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2196

Instrument: VOA1.1

STD Analysis Time: 08-MAR-10 07:57

GC Column: RTX-Volatiles

Data File: 1b102.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT	Area	#	RT	Area	#	RT
12 Hour STD	938406		13.7	697814		17.2	387925		19.6
Upper Limit	1876812		14.2	1395628		17.7	775850		20.1
Lower Limit	469203		13.2	348907		16.7	193963		19.1
Sample ID									
BLK01LCS	994971		13.7	738093		17.2	403373		19.6
BLK01SLCS	1022372		13.7	757309		17.2	423618		19.6
BLK01	975533		13.7	713351		17.2	391928		19.6
RE36-10-7501	729699		13.7	522571		17.2	270492		19.6
RE36-10-7524	643421		13.7	343694	*	17.2	101047	*	19.6
RE36-10-7525	723628		13.7	454348		17.2	170895	*	19.6
RE36-10-7543	737884		13.7	555664		17.2	308857		19.6

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: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514001	Date Received: 03/03/2010 08:50	%Moisture: 24
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7501	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.1	Dilution: 1
Run Date: 03/08/2010 16:09	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:32	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b118.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.32	ug/kg	0.447	1.32
74-87-3	Chloromethane	U	1.32	ug/kg	0.395	1.32
75-01-4	Vinyl chloride	U	1.32	ug/kg	0.395	1.32
74-83-9	Bromomethane	U	1.32	ug/kg	0.395	1.32
75-00-3	Chloroethane	U	1.32	ug/kg	0.395	1.32
75-69-4	Trichlorofluoromethane	U	1.32	ug/kg	0.395	1.32
67-64-1	Acetone		39.4	ug/kg	2.18	6.58
75-35-4	1,1-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
74-88-4	Iodomethane	U	6.58	ug/kg	2.11	6.58
75-09-2	Methylene chloride	U	6.58	ug/kg	2.63	6.58
75-15-0	Carbon disulfide	U	6.58	ug/kg	1.64	6.58
156-60-5	trans-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
75-34-3	1,1-Dichloroethane	U	1.32	ug/kg	0.395	1.32
78-93-3	2-Butanone	U	6.58	ug/kg	1.97	6.58
156-59-2	cis-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
594-20-7	2,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
67-66-3	Chloroform	U	1.32	ug/kg	0.395	1.32
74-97-5	Bromochloromethane	U	1.32	ug/kg	0.434	1.32
71-55-6	1,1,1-Trichloroethane	U	1.32	ug/kg	0.395	1.32
563-58-6	1,1-Dichloropropene	U	1.32	ug/kg	0.395	1.32
56-23-5	Carbon tetrachloride	U	1.32	ug/kg	0.395	1.32
107-06-2	1,2-Dichloroethane	U	1.32	ug/kg	0.395	1.32
71-43-2	Benzene	U	1.32	ug/kg	0.395	1.32
79-01-6	Trichloroethylene	U	1.32	ug/kg	0.434	1.32
78-87-5	1,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
75-27-4	Bromodichloromethane	U	1.32	ug/kg	0.395	1.32
74-95-3	Dibromomethane	U	1.32	ug/kg	0.395	1.32
108-10-1	4-Methyl-2-pentanone	U	6.58	ug/kg	1.64	6.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
108-88-3	Toluene		1.84	ug/kg	0.395	1.32
10061-02-6	trans-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
79-00-5	1,1,2-Trichloroethane	U	1.32	ug/kg	0.395	1.32
591-78-6	2-Hexanone	U	6.58	ug/kg	1.97	6.58
142-28-9	1,3-Dichloropropane	U	1.32	ug/kg	0.395	1.32
127-18-4	Tetrachloroethylene	U	1.32	ug/kg	0.395	1.32
124-48-1	Dibromochloromethane	U	1.32	ug/kg	0.395	1.32
106-93-4	1,2-Dibromoethane	U	1.32	ug/kg	0.395	1.32
108-90-7	Chlorobenzene	U	1.32	ug/kg	0.395	1.32

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514001	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 24
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-7501	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Batch ID:</b> 962525	<b>Inst:</b> VOA1.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/08/2010 16:09	<b>Analyst:</b> GRB2	<b>Purge Vol:</b> 5 mL
<b>Prep Date:</b> 03/08/2010 14:32	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
<b>Data File:</b> 1b118.d	<b>Column:</b> RTX-Volatiles	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.32	ug/kg	0.395	1.32
179601-23-1	m,p-Xylenes	U	2.63	ug/kg	0.395	2.63
95-47-6	o-Xylene	U	1.32	ug/kg	0.395	1.32
100-42-5	Styrene	U	1.32	ug/kg	0.395	1.32
75-25-2	Bromoform	U	1.32	ug/kg	0.395	1.32
79-34-5	1,1,2,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
96-18-4	1,2,3-Trichloropropane	U	1.32	ug/kg	0.395	1.32
108-86-1	Bromobenzene	U	1.32	ug/kg	0.395	1.32
103-65-1	n-Propylbenzene	U	1.32	ug/kg	0.395	1.32
95-49-8	2-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-82-8	Isopropylbenzene	U	1.32	ug/kg	0.395	1.32
108-67-8	1,3,5-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
106-43-4	4-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-06-6	tert-Butylbenzene	U	1.32	ug/kg	0.395	1.32
95-63-6	1,2,4-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
135-98-8	sec-Butylbenzene	U	1.32	ug/kg	0.395	1.32
99-87-6	4-Isopropyltoluene		24.6	ug/kg	0.395	1.32
541-73-1	1,3-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
106-46-7	1,4-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
104-51-8	n-Butylbenzene	U	1.32	ug/kg	0.395	1.32
96-12-8	1,2-Dibromo-3-chloropropane	U	1.32	ug/kg	0.395	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.58	ug/kg	2.11	6.58
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
95-50-1	1,2-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	18.08	142	ug/kg	97	NJ
79-92-5	Camphene	18.42	31.5	ug/kg	90	NJ
13466-78-9	3-Carene	19.12	442	ug/kg	95	NJ
554-61-0	Bicyclo[4.1.0]hept-2-ene, 3,7,7-trimethy	19.21	8.31	ug/kg	96	NJ
138-86-3	Limonene	19.36	216	ug/kg	94	NJ
28634-89-1	Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m	19.5	7.15	ug/kg	91	NJ
99-85-4	1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	19.67	8.13	ug/kg	96	NJ
586-62-9	Cyclohexene, 1-methyl-4-(1-methylethylid	20.09	34	ug/kg	97	NJ
7399-49-7	o-Isopropenyltoluene	20.32	7.57	ug/kg	97	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b118.d  
 Lab Smp Id: 248514001 Client Smp ID: RE36-10-7501  
 Inj Date : 08-MAR-2010 16:09  
 Operator : GRB2 Inst ID: VOA1.i  
 Smp Info : |248514001|962525|1|VOAF|1|  
 Misc Info : LANL 5g N/A SOIL  
 Comment :  
 Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Meth Date : 19-Mar-2010 09:00 eh1 Quant Type: ISTD  
 Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
 Als bottle: 18  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-2196.sub  
 Target Version: 3.50  
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	23.99290	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.672	13.672	(1.000)	729699	50.0000	
* 76 Chlorobenzene-d5	117	17.147	17.147	(1.000)	522571	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.596	19.601	(1.000)	270492	50.0000	
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	413034	57.9709	76.3
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	887187	50.4777	66.4
\$ 87 Bromofluorobenzene	95	18.376	18.376	(0.938)	388540	57.2935	75.4
16 Acetone	43	9.239	9.239	(0.676)	129485	29.9544	39.4
66 Toluene	92	15.587	15.582	(0.909)	14073	1.39624	1.8
100 4-Isopropyltoluene	119	19.408	19.408	(0.990)	297459	18.6883	24.6



## ION RATIO REPORT

## VOA REPORT

Data file: 1b118.d

Report Date: 03/09/2010 06:41

Lab. ID: 248514001

SampleType: SAMPLE

Injection Date: 08-MAR-2010 16:09

Operator: GRB2

Instrument: VOA1.i

Sample Info: |248514001|962525|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A SOIL

Comment:

Method used: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2196

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
16	Acetone		CAS#: 67-64-1			
43	129485	9.24	9.24	80-120	100	( )
58	31507	9.24	9.24	0- 57	24	( )
-----						
51	1,2-Dichloroethane		CAS#: 107-06-2			
62	15865	13.67	13.43	80-120	100	(T)
64	2453	13.67	13.43	2- 62	15	(T)
-----						
64	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	10671	15.50	15.35	80-120	100	(T)
43	7038	15.50	15.35	236-296	66	(QT)
100	557092	15.50	15.35	0- 58	5220	(QT)
-----						
66	Toluene		CAS#: 108-88-3			
92	14073	15.59	15.58	80-120	100	( )
91	24539	15.58	15.58	140-200	174	( )
-----						
81	o-Xylene		CAS#: 95-47-6			
106	26282	18.08	17.77	80-120	100	(T)
91	452677	18.09	17.77	216-276	1722	(QT)
-----						
82	Styrene		CAS#: 100-42-5			
104	7692	18.08	17.79	80-120	100	(T)
78	57015	18.08	17.79	35- 95	741	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
84	Isopropylbenzene		CAS#: 98-82-8			
105	109205	18.09	18.11	80-120	100	( )
120	4829	18.09	18.12	0- 53	4	( )
-----						
89	n-Propylbenzene		CAS#: 103-65-1			
91	61384	18.42	18.55	80-120	100	(T)
120	351	18.43	18.55	0- 50	1	(T)
-----						
93	1,3,5-Trimethylbenzene		CAS#: 108-67-8			
105	11716	18.42	18.70	80-120	100	(T)
120	351	18.43	18.71	11- 71	3	(QT)
-----						
97	1,2,4-Trimethylbenzene		CAS#: 95-63-6			
105	354935	19.12	19.12	80-120	100	( )
120	19098	19.12	19.12	9- 69	5	(Q)
-----						
96	tert-Butylbenzene		CAS#: 98-06-6			
119	108312	19.12	19.06	80-120	100	( )
91	1341936	19.12	19.06	54-114	1239	(Q)
134	10461	19.12	19.06	0- 52	10	( )
-----						
99	sec-Butylbenzene		CAS#: 135-98-8			
105	7715	19.22	19.29	80-120	100	(T)
134	1937	19.21	19.29	0- 47	25	(T)
-----						
100	4-Isopropyltoluene		CAS#: 99-87-6			
119	297459	19.41	19.41	80-120	100	( )
134	72347	19.41	19.41	0- 54	24	( )
91	94040	19.41	19.41	1- 61	32	( )
-----						
105	n-Butylbenzene		CAS#: 104-51-8			
91	25028	19.67	19.85	80-120	100	(T)
92	9289	19.68	19.85	24- 84	37	(T)
134	1725	19.68	19.85	0- 52	7	(T)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/VOA1.i/030810v1/1b118.d  
Report Date: 19-Mar-2010 09:00

Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA1.i/030810v1/1b118.d  
Lab Smp Id: 248514001 Client Smp ID: RE36-10-7501  
Inj Date : 08-MAR-2010 16:09  
Operator : GRB2 Inst ID: VOA1.i  
Smp Info : |248514001|962525|1|VOAF|1|  
Misc Info : LANL 5g N/A SOIL  
Comment :  
Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
Meth Date : 19-Mar-2010 09:00 eh1 Quant Type: ISTD  
Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
Als bottle: 18  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2196.sub  
Target Version: 3.50  
Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	23.99290	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 76 Chlorobenzene-d5	17.147	1970482	50.000
* 102 1,4-Dichlorobenzene-d4	19.596	1889439	50.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL( ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
1R-.alpha.-Pinene					CAS #: 7785-70-8		
18.082	4247315	107.773490	142	97	NIST05.L	15188	76

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	=====	=====	=====	=====	=====	=====	=====
Camphene					CAS #: 79-92-5		
18.423	903805	23.9172642	31.5	90	NIST05.L	15152	102
3-Carene					CAS #: 13466-78-9		
19.118	12709056	336.318118	442	95	NIST05.L	15151	102
Bicyclo[4.1.0]hept-2-ene, 3,7,7-trimethy					CAS #: 554-61-0		
19.214	238792	6.31912761	8.3	96	NIST05.L	15317	102
Limonene					CAS #: 138-86-3		
19.357	6202461	164.134939	216	94	NIST05.L	15154	102
Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m					CAS #: 28634-89-1		
19.495	205341	5.43390806	7.1	91	NIST05.L	15374	102
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl					CAS #: 99-85-4		
19.675	233595	6.18158600	8.1	96	NIST05.L	15355	102
Cyclohexene, 1-methyl-4-(1-methylethylid					CAS #: 586-62-9		
20.089	977536	25.8684162	34.0	97	NIST05.L	15338	102
o-Isopropenyltoluene					CAS #: 7399-49-7		
20.324	217340	5.75143633	7.6	97	NIST05.L	13602	102

Data File: /chem/VD01.i/030810v1/1b118.d

Date: 08-MAR-2010 16:09

Client ID: RE36-10-7501

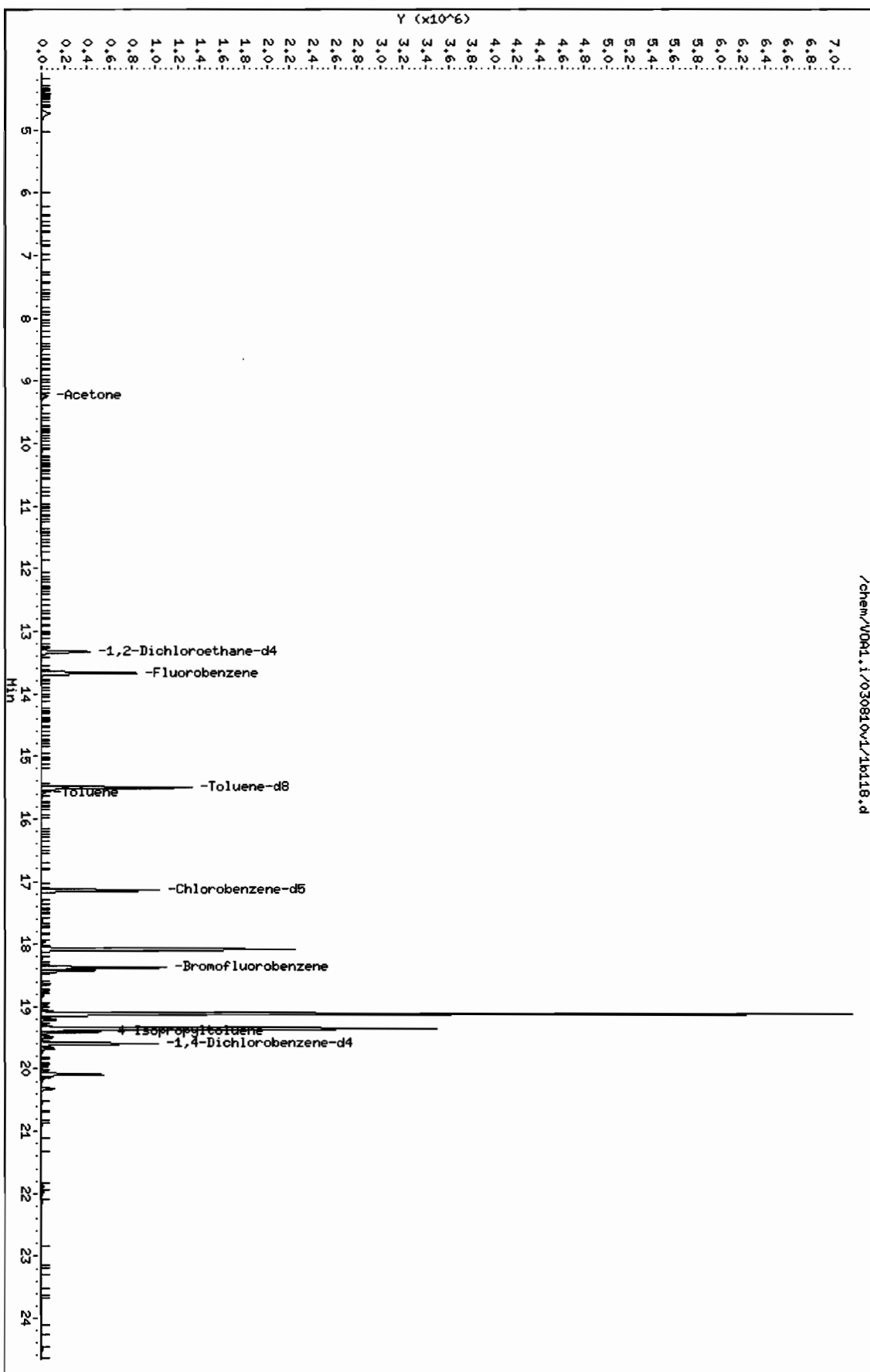
Sample Info: 1248514001|96252511|VD01.i

Column phase: RTX-Volatiles

Instrument: VD01.i

Operator: GKB2

Column diameter: 0.25



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: VOA1.i

Sample Info: 12485140011962525111VOAF111

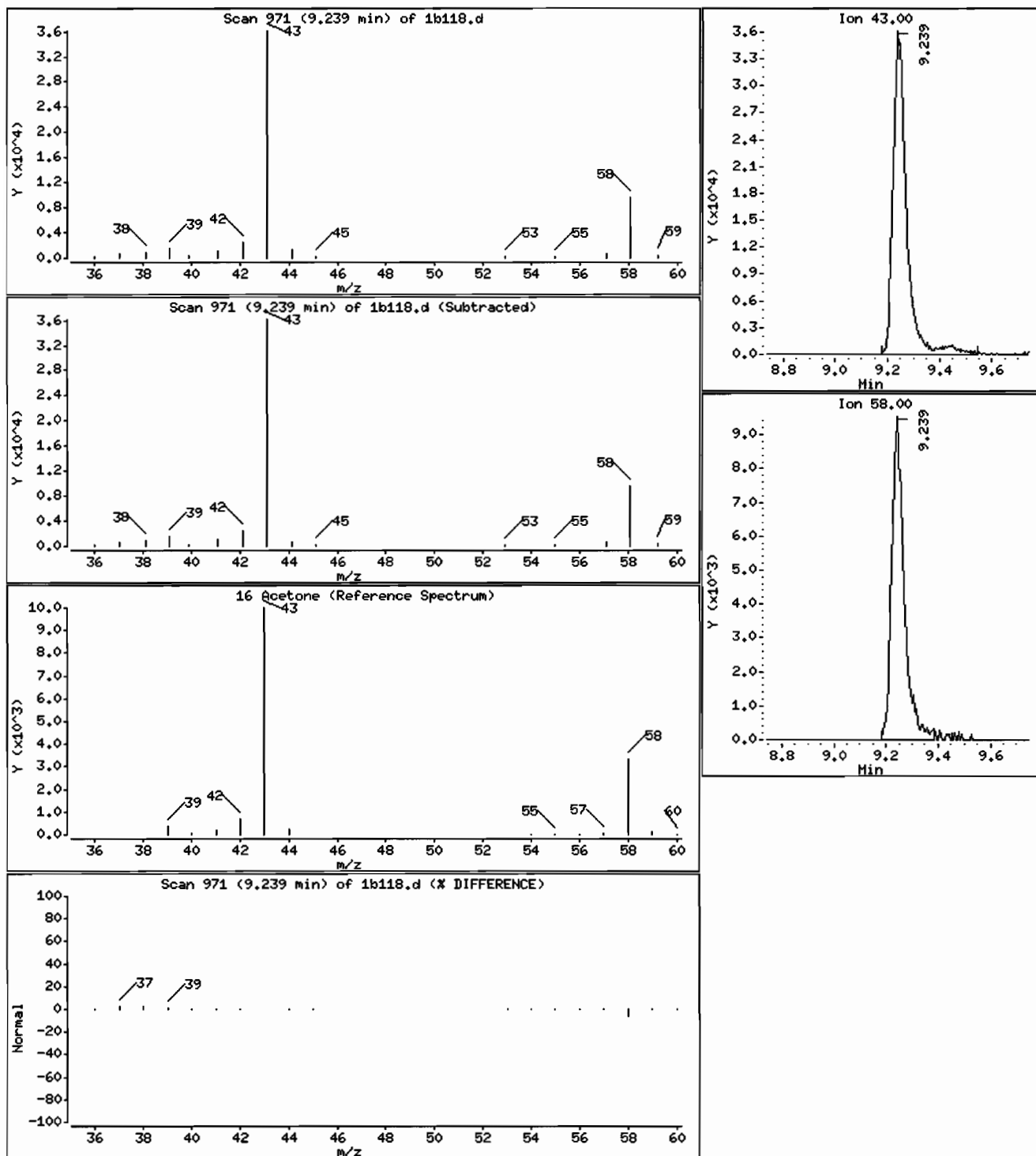
Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

16 Acetone

Concentration: 39.4 ug/Kg



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: VOA1.i

Sample Info: I2485140011962525111V0AF111

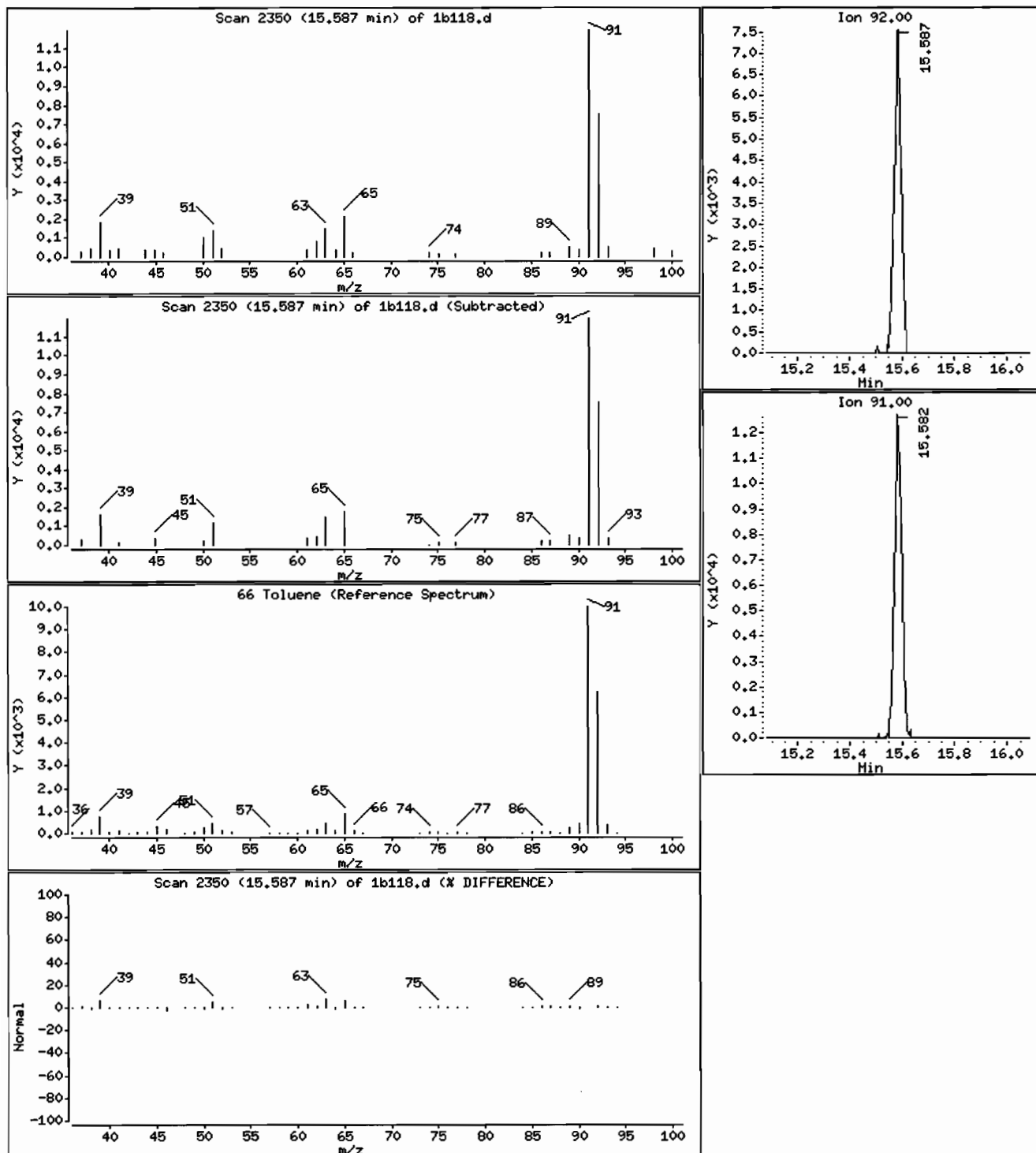
Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

66 Toluene

Concentration: 1.8 ug/Kg



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: VOA1.i

Sample Info: 12485140011962525111VOAF111

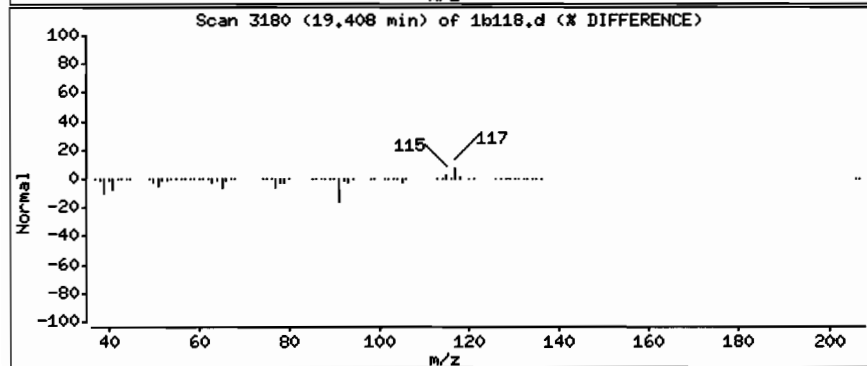
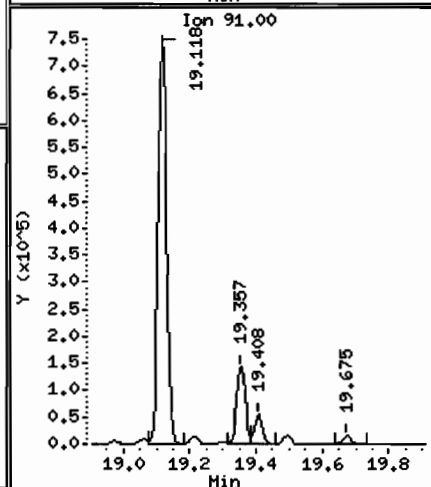
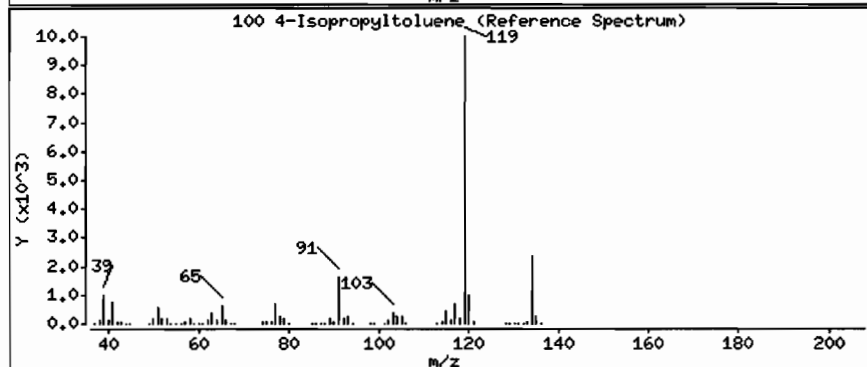
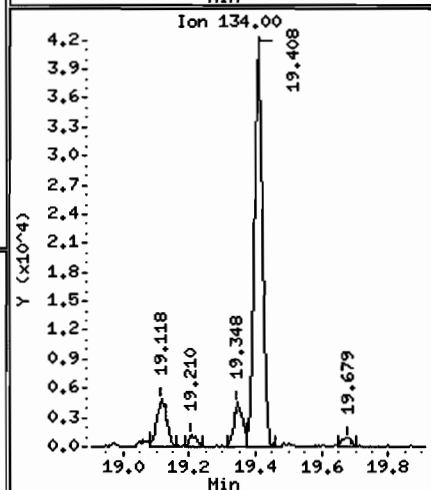
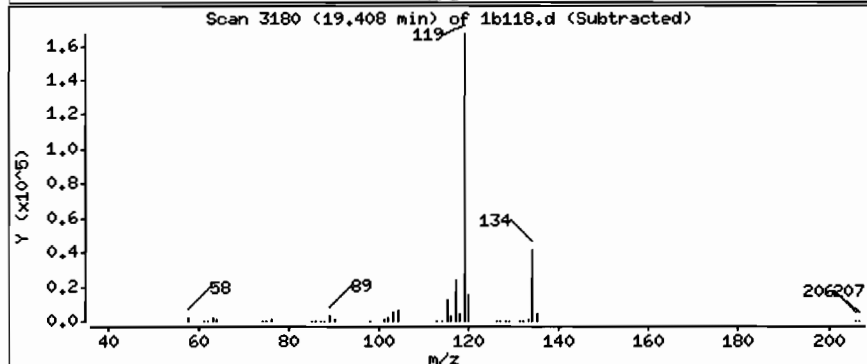
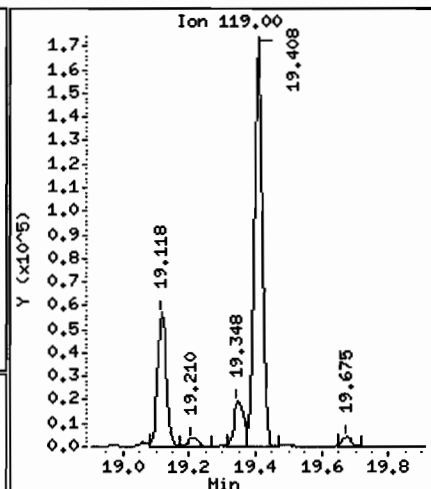
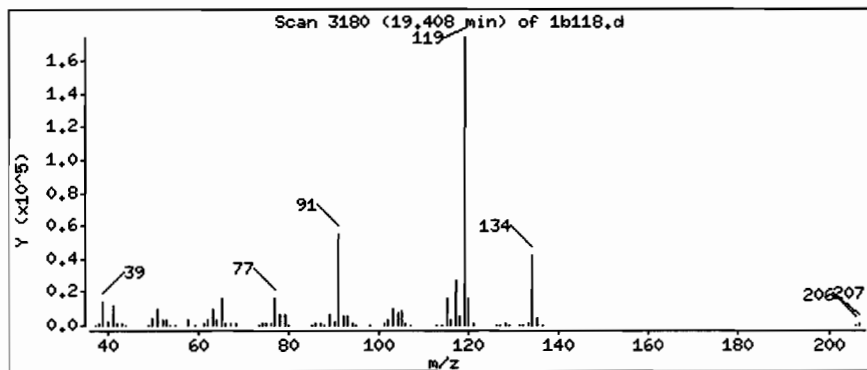
Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

100 4-Isopropyltoluene

Concentration: 24.6 ug/Kg





Data File: /chem/V0A1.i/030810v1/1b118.d

Page 1

Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: V0A1.i

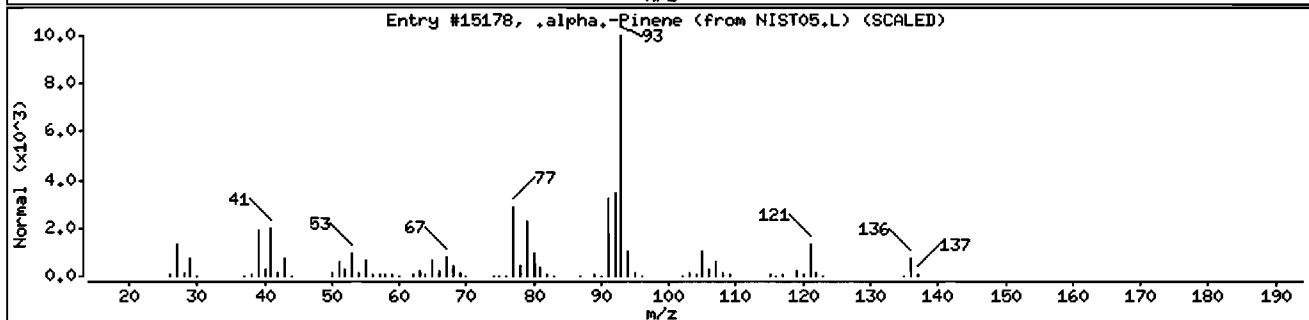
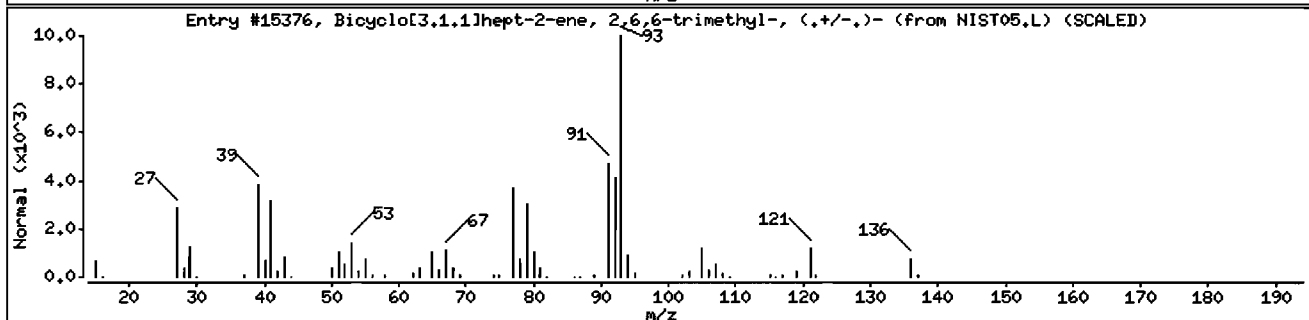
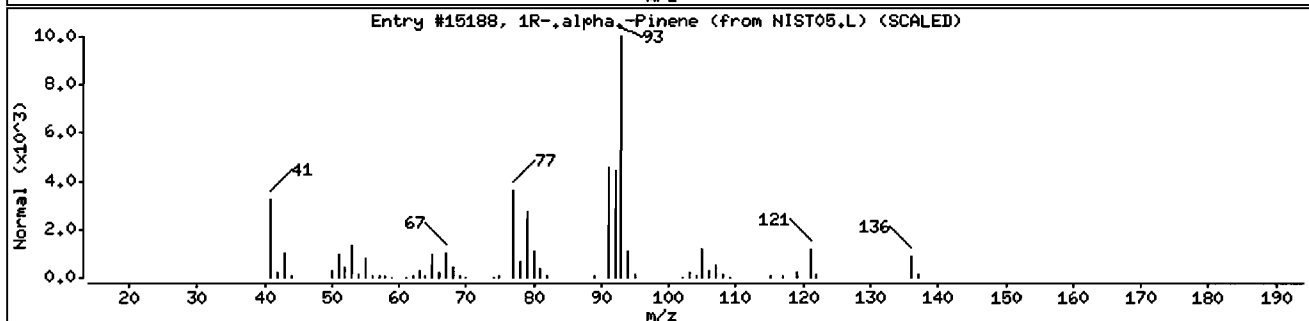
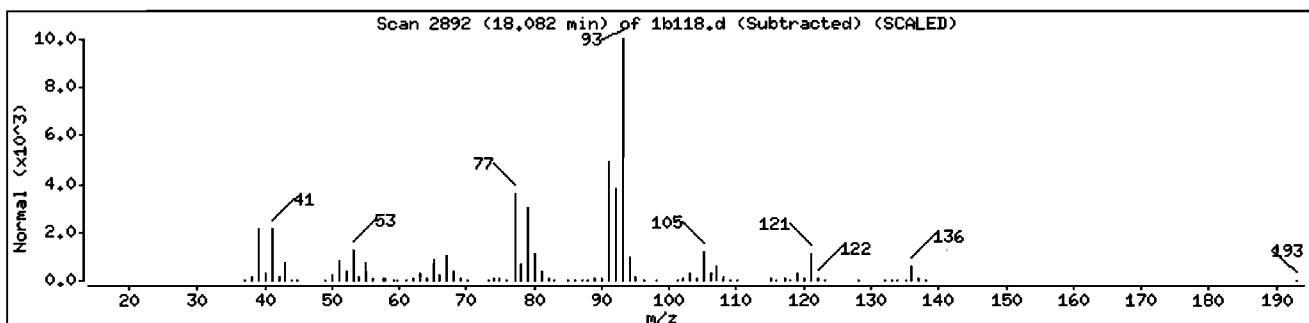
Sample Info: 12485140011962525111V0AF111

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-,alpha,-Pinene	2437-95-8	NIST05.L	15376	95	C10H16	136
,alpha,-Pinene	80-56-8	NIST05.L	15178	94	C10H16	136



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: V0A1.i

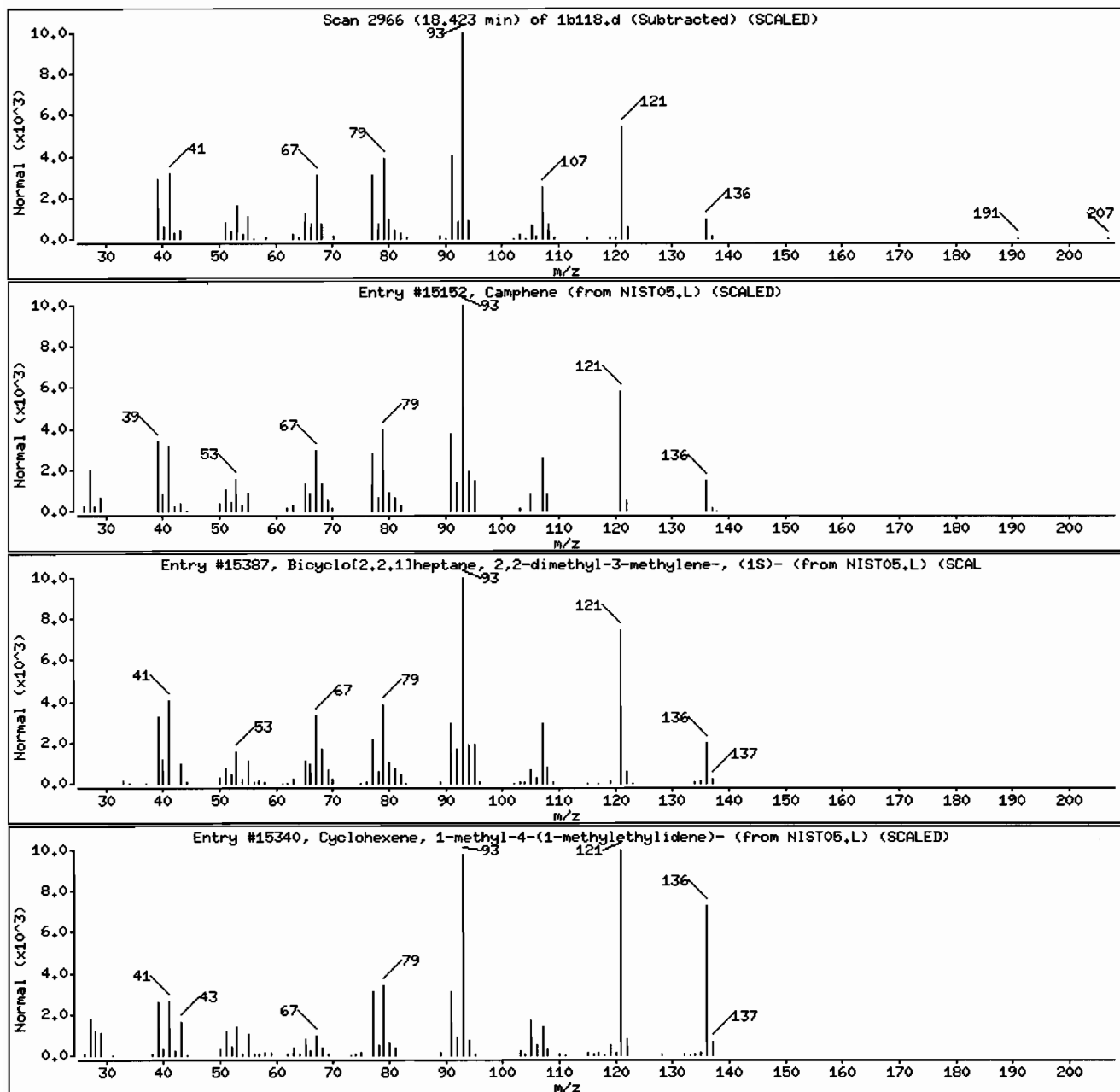
Sample Info: I248514001196252511V0AF111

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST05.L	15152	90	C10H16	136
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5794-04-7	NIST05.L	15387	87	C10H16	136
Cyclohexene, 1-methyl-4-(1-methylethylid	586-62-9	NIST05.L	15340	87	C10H16	136



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: VOA1.i

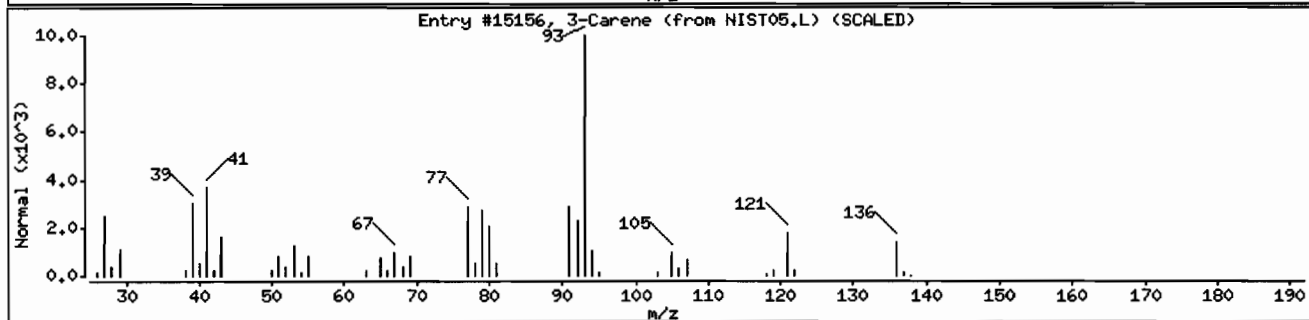
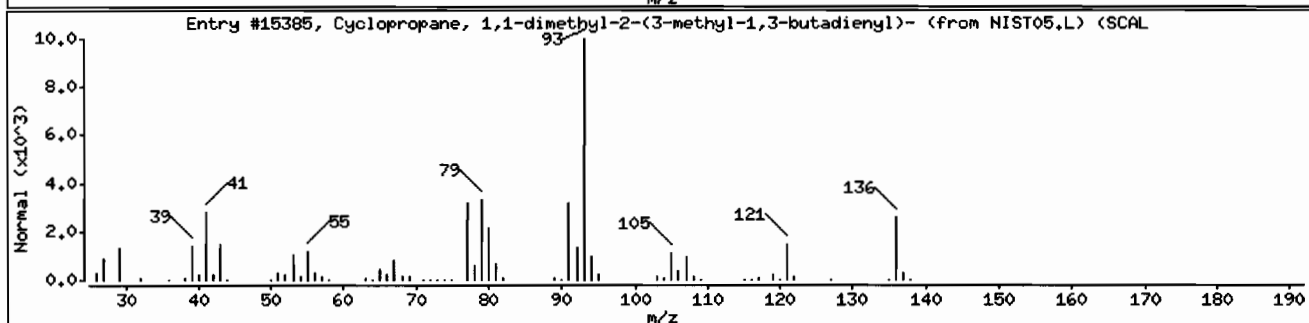
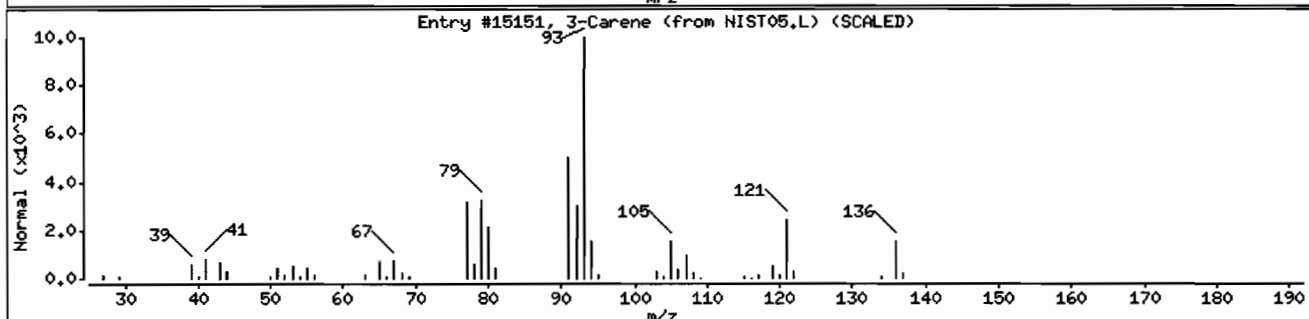
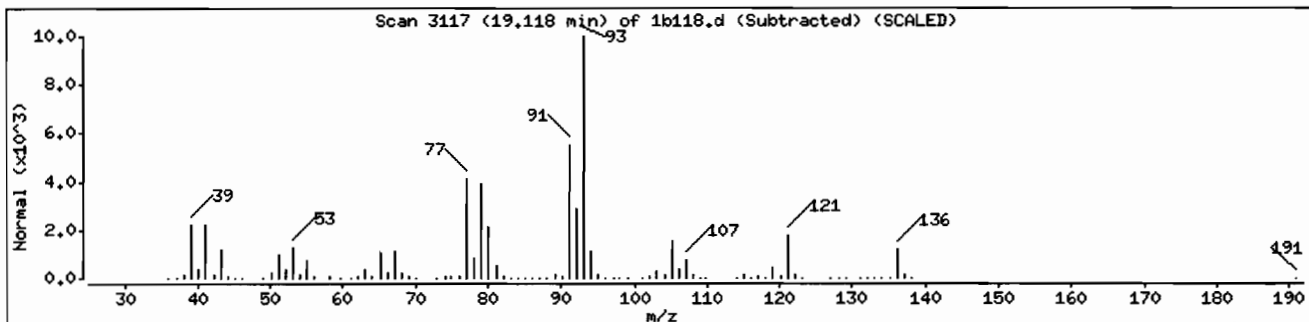
Sample Info: 1248514001|962525|1|VOAF111

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15151	95	C10H16	136
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1	68998-21-0	NIST05.L	15385	95	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	95	C10H16	136



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: V0A1.i

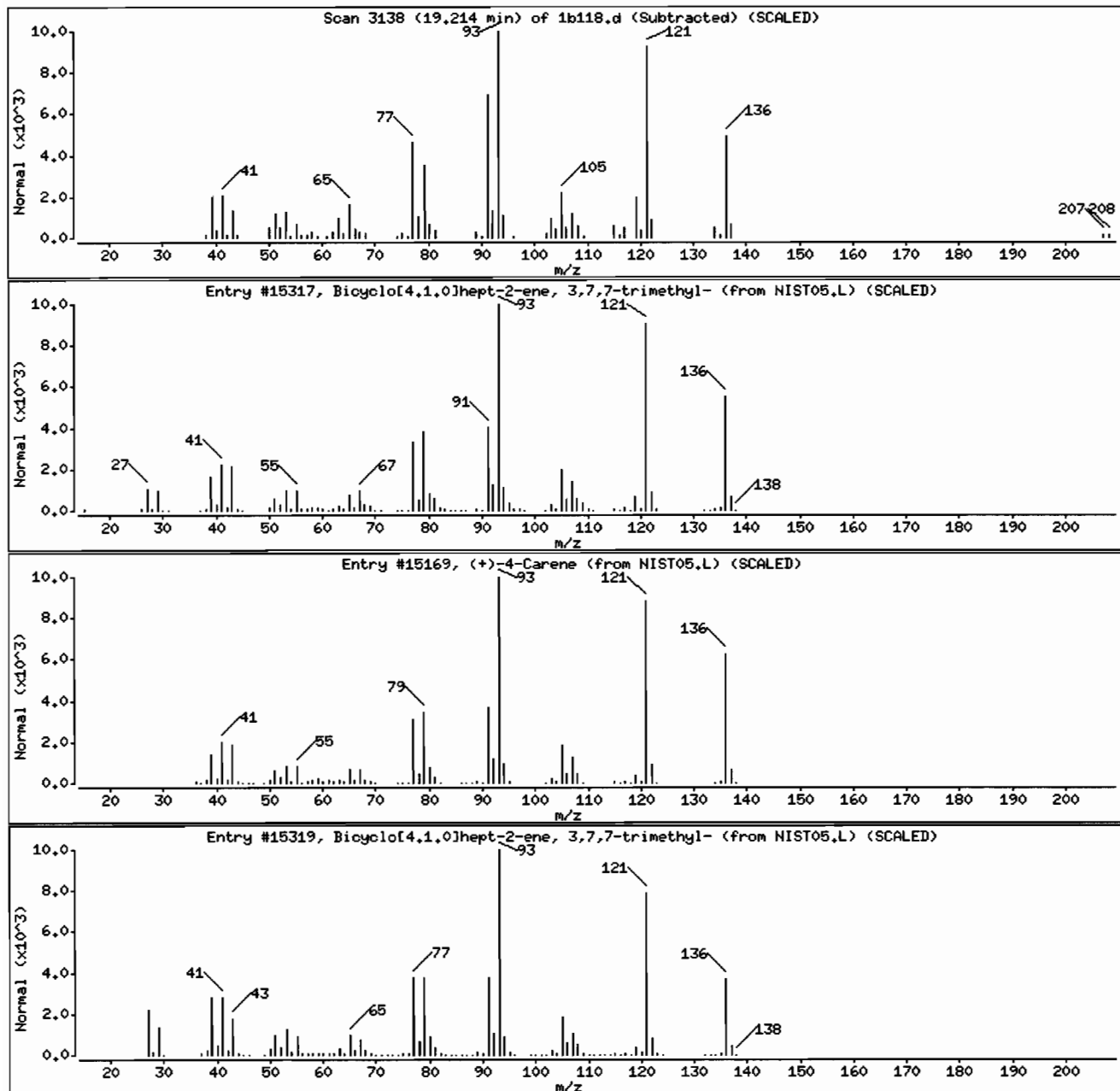
Sample Info: I248514001I96252511IIV0AFI1I

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.1.0]hept-2-ene, 3,7,7-trimethyl	554-61-0	NIST05.L	15317	96	C10H16	136
(+)-4-Carene	29050-33-7	NIST05.L	15169	96	C10H16	136
Bicyclo[4.1.0]hept-2-ene, 3,7,7-trimethyl	554-61-0	NIST05.L	15319	96	C10H16	136



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: VOA1.i

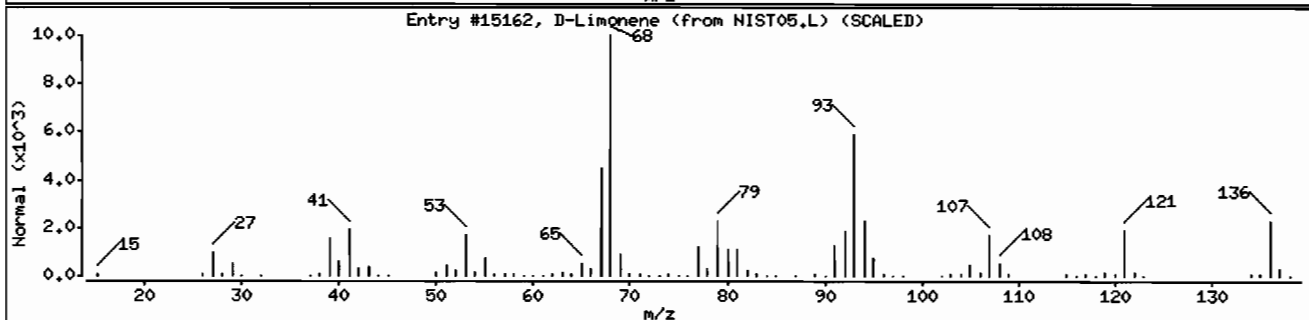
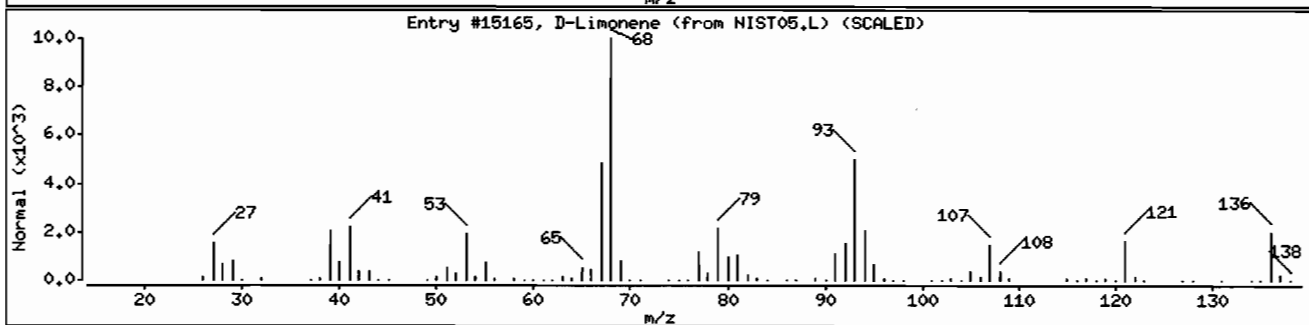
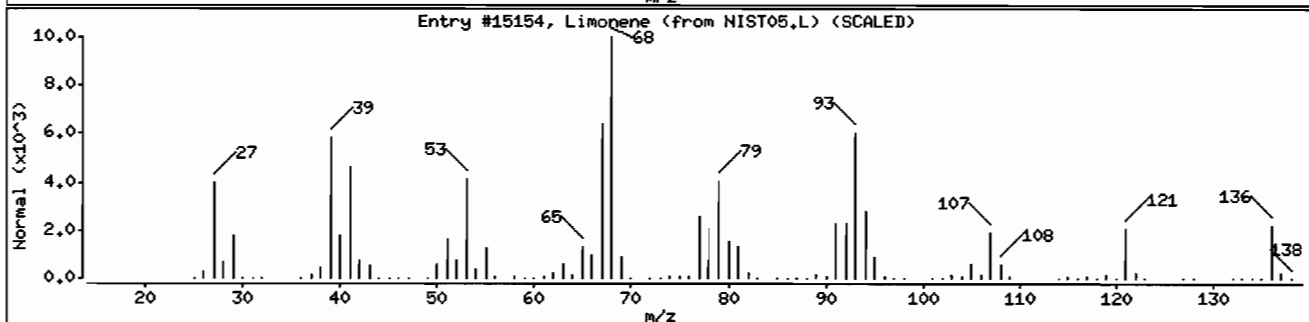
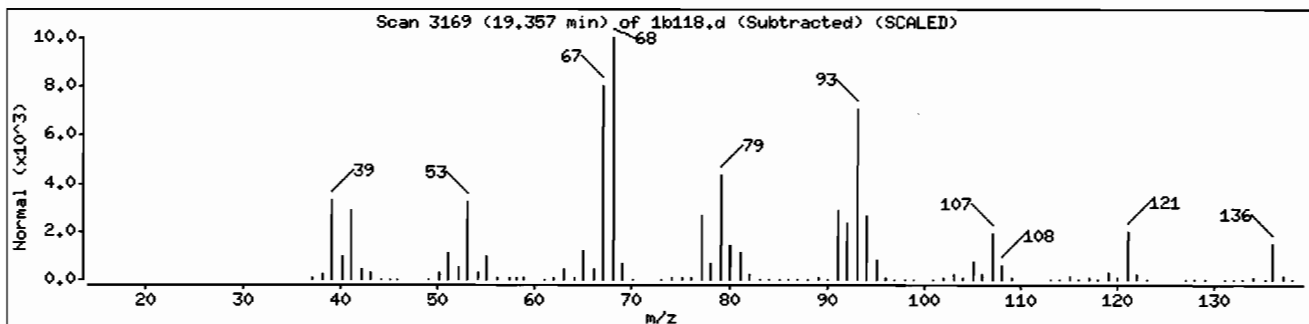
Sample Info: 1248514001196252511|VOAF11|

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Limonene	138-86-3	NIST05.L	15154	94	C <sub>10</sub> H <sub>16</sub>	136
D-Limonene	5989-27-5	NIST05.L	15165	93	C <sub>10</sub> H <sub>16</sub>	136
D-Limonene	5989-27-5	NIST05.L	15162	93	C <sub>10</sub> H <sub>16</sub>	136



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: VOA1.i

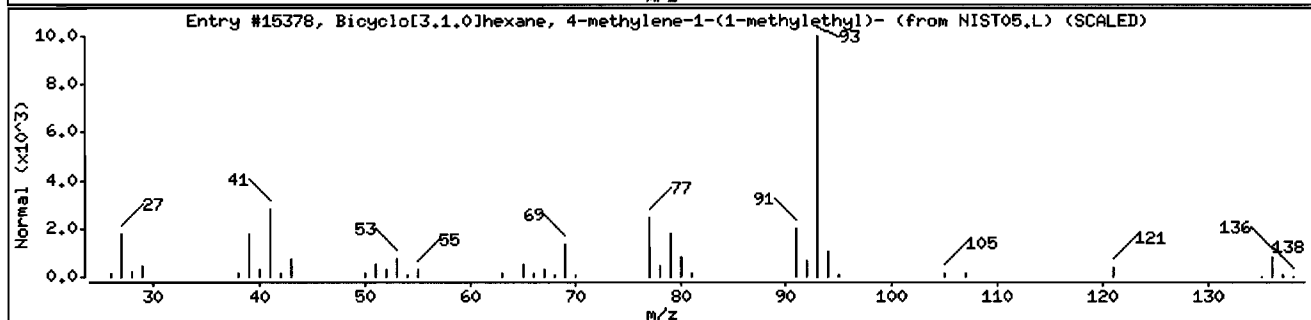
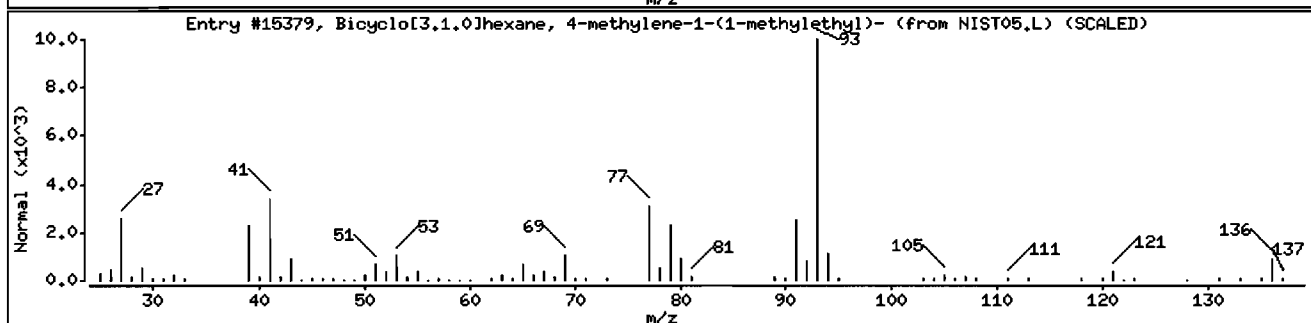
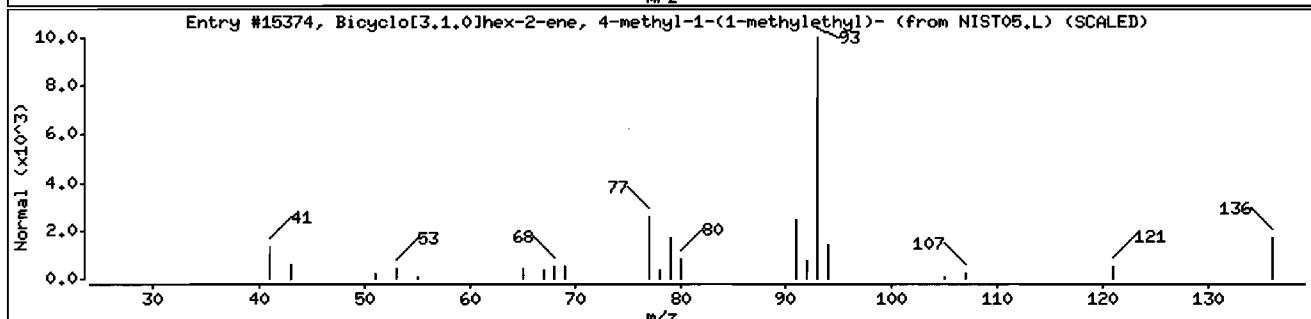
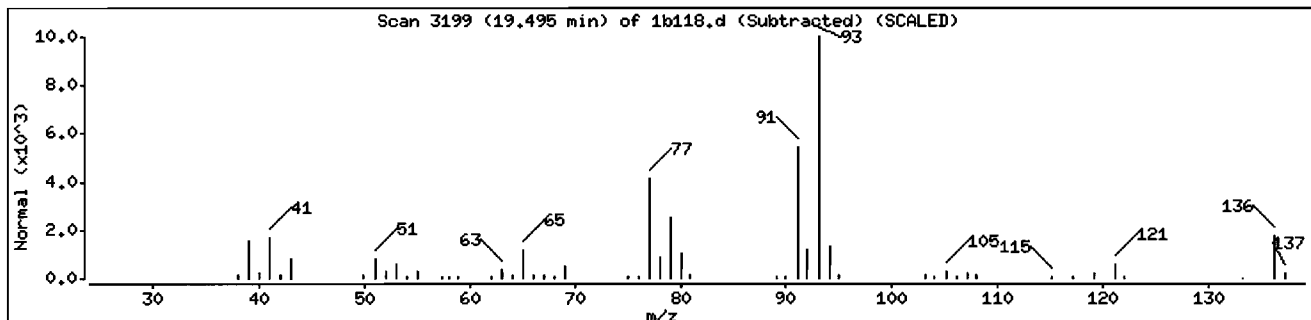
Sample Info: I24851400196252511|VOAF111

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m	28634-89-1	NIST05.L	15374	91	C10H16	136
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3387-41-5	NIST05.L	15379	87	C10H16	136
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3387-41-5	NIST05.L	15378	83	C10H16	136



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: V0A1.i

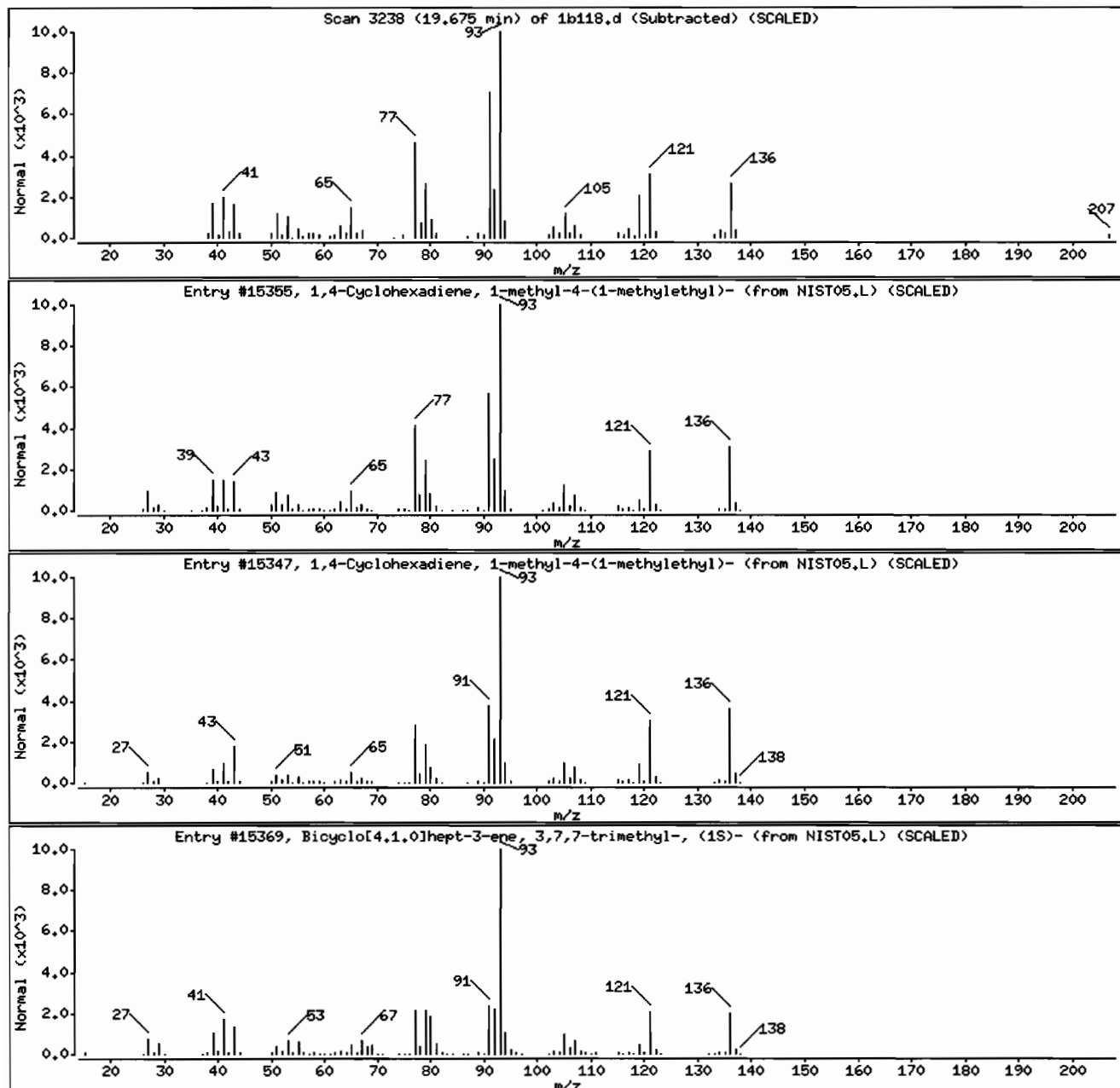
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Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	99-85-4	NIST05.L	15355	96	C10H16	136
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	99-85-4	NIST05.L	15347	90	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	498-15-7	NIST05.L	15369	81	C10H16	136



Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: VOA1.i

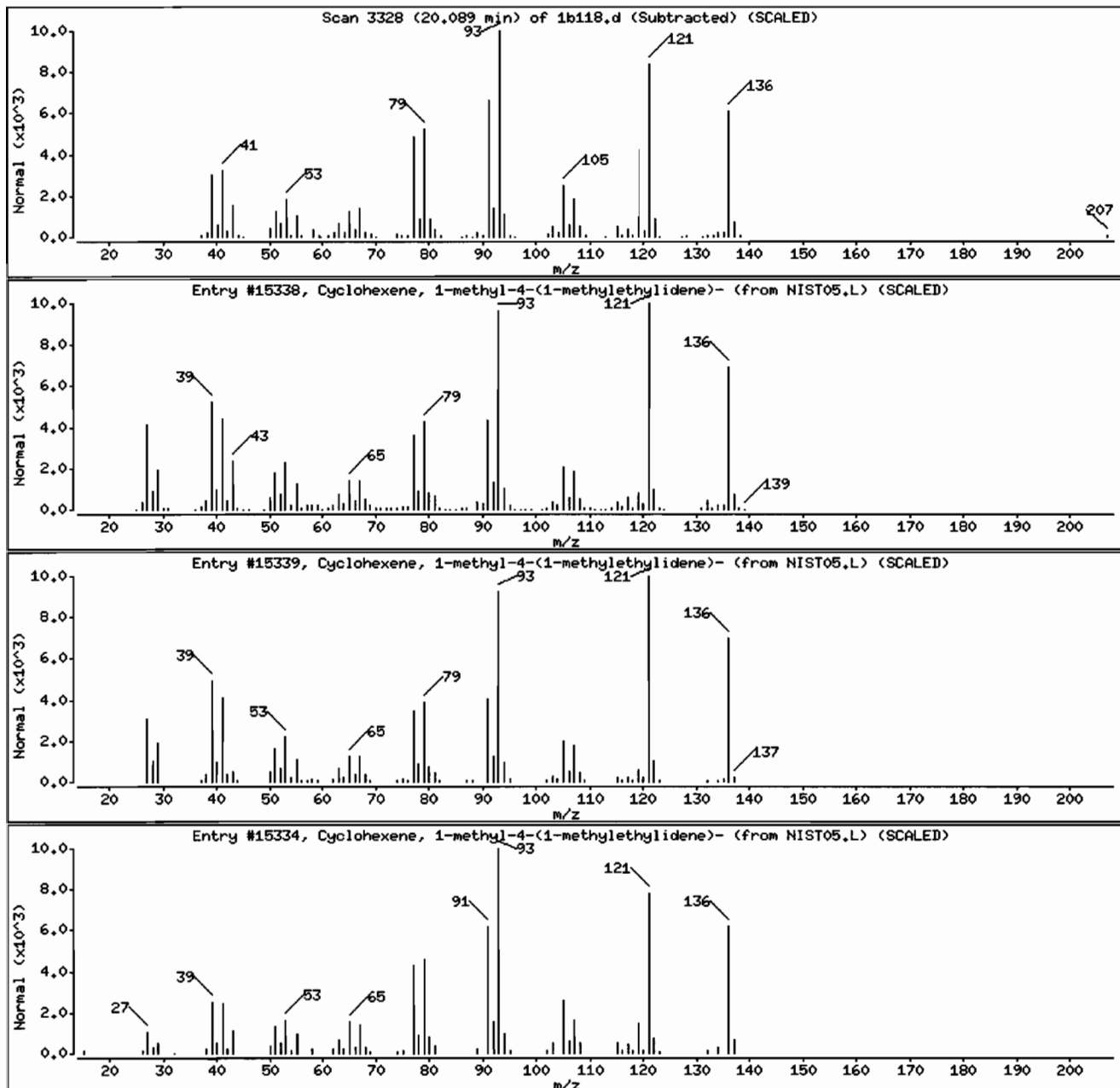
Sample Info: 1248514001196252511/VOAF111

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 1-methyl-4-(1-methylethylidene)	586-62-9	NIST05.L	15338	97	C10H16	136
Cyclohexene, 1-methyl-4-(1-methylethylidene)	586-62-9	NIST05.L	15339	97	C10H16	136
Cyclohexene, 1-methyl-4-(1-methylethylidene)	586-62-9	NIST05.L	15334	95	C10H16	136





Date : 08-MAR-2010 16:09

Client ID: RE36-10-7501

Instrument: VOA1.i

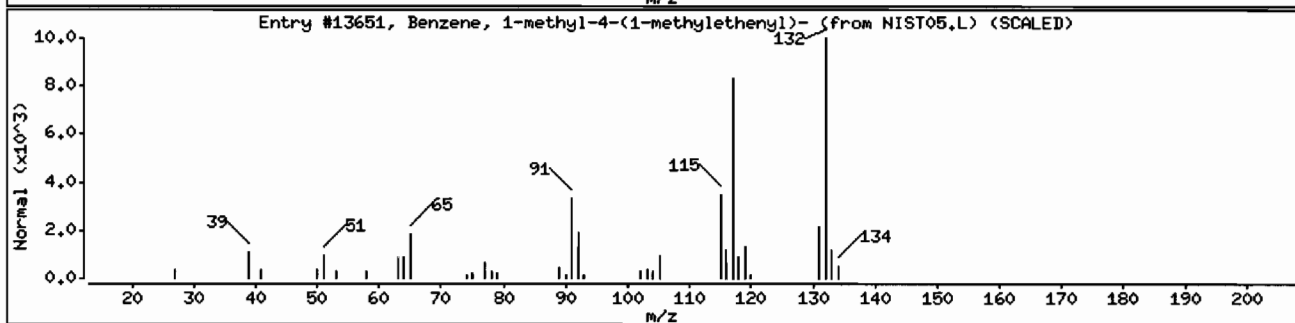
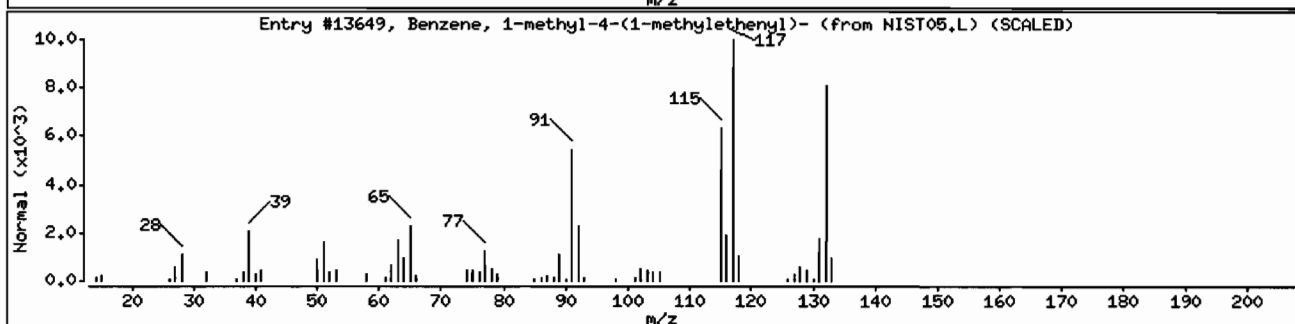
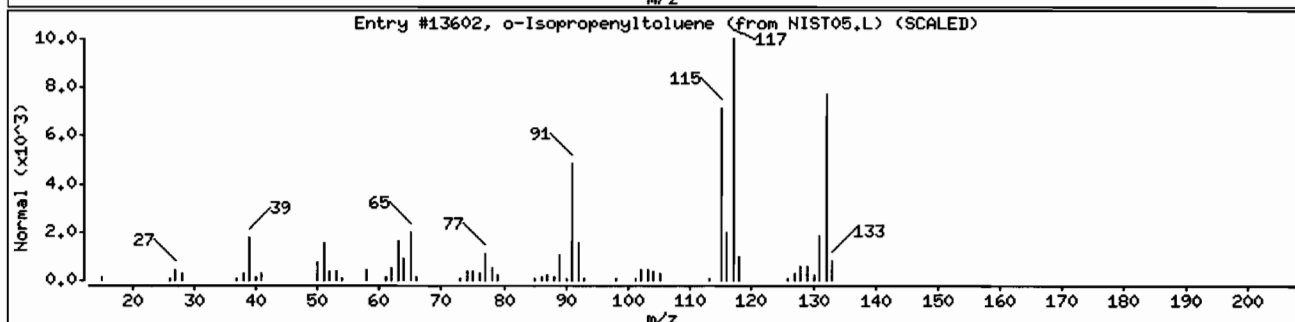
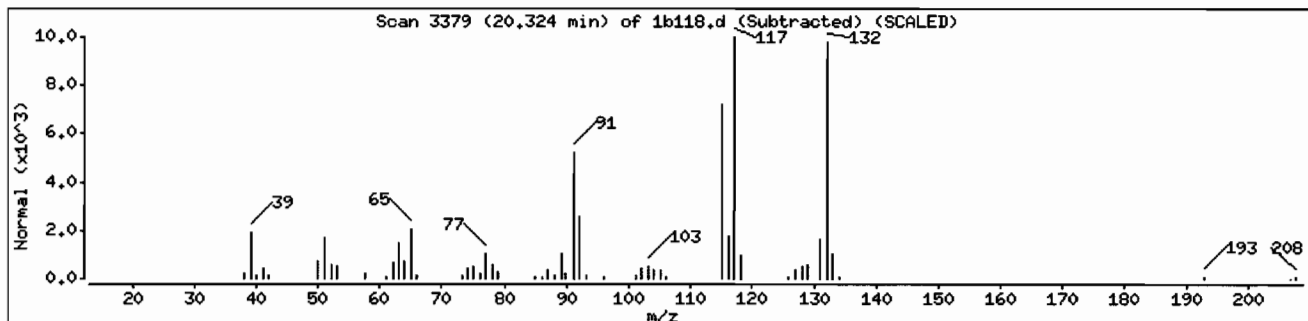
Sample Info: 1248514001|96252511|VOAF111

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
o-Isopropenyltoluene	7399-49-7	NIST05.L	13602	97	C10H12	132
Benzene, 1-methyl-4-(1-methylethenyl)-	1195-32-0	NIST05.L	13649	96	C10H12	132
Benzene, 1-methyl-4-(1-methylethenyl)-	1195-32-0	NIST05.L	13651	87	C10H12	132



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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514002	Date Received: 03/03/2010 08:50	%Moisture: 16
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7524	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 16:40	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:34	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b119.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.405	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.357	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.357	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.357	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.357	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.357	1.19
67-64-1	Acetone	J	2.39	ug/kg	1.98	5.95
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
74-88-4	Iodomethane	U	5.95	ug/kg	1.91	5.95
75-09-2	Methylene chloride	U	5.95	ug/kg	2.38	5.95
75-15-0	Carbon disulfide	U	5.95	ug/kg	1.49	5.95
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.357	1.19
78-93-3	2-Butanone	U	5.95	ug/kg	1.79	5.95
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.357	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.393	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.357	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.357	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.357	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.357	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.357	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.393	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.357	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.357	1.19
108-10-1	4-Methyl-2-pentanone	U	5.95	ug/kg	1.49	5.95
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.357	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.357	1.19
591-78-6	2-Hexanone	U	5.95	ug/kg	1.79	5.95
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.357	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.357	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.357	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.357	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.357	1.19

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514002	Date Received: 03/03/2010 08:50	%Moisture: 16
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7524	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1J	Dilution: 1
Run Date: 03/08/2010 16:40	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 14:34	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b119.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.357	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.357	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.357	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.357	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.357	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.357	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.357	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.357	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.357	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.357	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.357	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.357	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.357	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.357	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.95	ug/kg	1.91	5.95
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	4.75	12.8	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	16.38	42.2	ug/kg	98	NJ

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b119.d

Lab Smp Id: 248514002

Client Smp ID: RE36-10-7524

Inj Date : 08-MAR-2010 16:40

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |248514002|962525|1|VOAF|1|

Misc Info : LANL 5g N/A SOIL

Comment :

Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Meth Date : 19-Mar-2010 09:00 ehl

Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: 1a428.d

Als bottle: 19

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-2196.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.02250	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.668	13.672 (1.000)	643421	50.0000	
* 76 Chlorobenzene-d5	117	17.147	17.147 (1.000)	343694	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.596	19.601 (1.000)	101047	50.0000	
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327 (0.975)	379510	60.4082	71.9
\$ 65 Toluene-d8	98	15.504	15.504 (0.904)	737587	63.8074	76.0
\$ 87 Bromofluorobenzene	95	18.376	18.376 (0.938)	188378	74.3586	88.5 (R)
16 Acetone	43	9.249	9.239 (0.677)	7646	2.00597	2.4 (a)

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA1.i/030810v1/1b119.d  
Report Date: 19-Mar-2010 09:01

Page 2

#### QC Flag Legend

R - Spike/Surrogate failed recovery limits.

## ION RATIO REPORT

## VOA REPORT

Data file: 1b119.d

Report Date: 03/09/2010 06:42

Lab. ID: 248514002

SampleType: SAMPLE

Injection Date: 08-MAR-2010 16:40

Operator: GRB2

Instrument: VOA1.i

Sample Info: |248514002|962525|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A SOIL

Comment:

Method used: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2196

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
16	Acetone		CAS#: 67-64-1			
43	7646	9.25	9.24	80-120	100	( )
58	1738	9.26	9.24	0- 57	23	( )
-----						
51	1,2-Dichloroethane		CAS#: 107-06-2			
62	13734	13.67	13.43	80-120	100	(T)
64	2237	13.67	13.43	2- 62	16	(T)
-----						
54	Trichloroethylene		CAS#: 79-01-6			
95	57350	13.67	14.10	80-120	100	(T)
97	42355	13.67	14.10	35- 95	74	(T)
130	876	14.10	14.10	54-114	2	(Q)
-----						
64	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	8503	15.50	15.35	80-120	100	(T)
43	5898	15.50	15.35	236-296	69	(QT)
100	461490	15.50	15.35	0- 58	5427	(QT)
-----						
74	1,2-Dibromoethane		CAS#: 106-93-4			
107	29124	16.40	16.71	80-120	100	(T)
109	14269	16.38	16.71	64-124	49	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
 Data file : /chem/VOA1.i/030810v1/1b119.d  
 Lab Smp Id: 248514002 Client Smp ID: RE36-10-7524  
 Inj Date : 08-MAR-2010 16:40  
 Operator : GRB2 Inst ID: VOA1.i  
 Smp Info : |248514002|962525|1|VOAF|1|  
 Misc Info : LANL 5g N/A SOIL  
 Comment :  
 Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Meth Date : 19-Mar-2010 09:00 eh1 Quant Type: ISTD  
 Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
 Als bottle: 19  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-2196.sub  
 Target Version: 3.50  
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.02250	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 52 Fluorobenzene	13.668	1590113	50.000
* 76 Chlorobenzene-d5	17.147	1275773	50.000

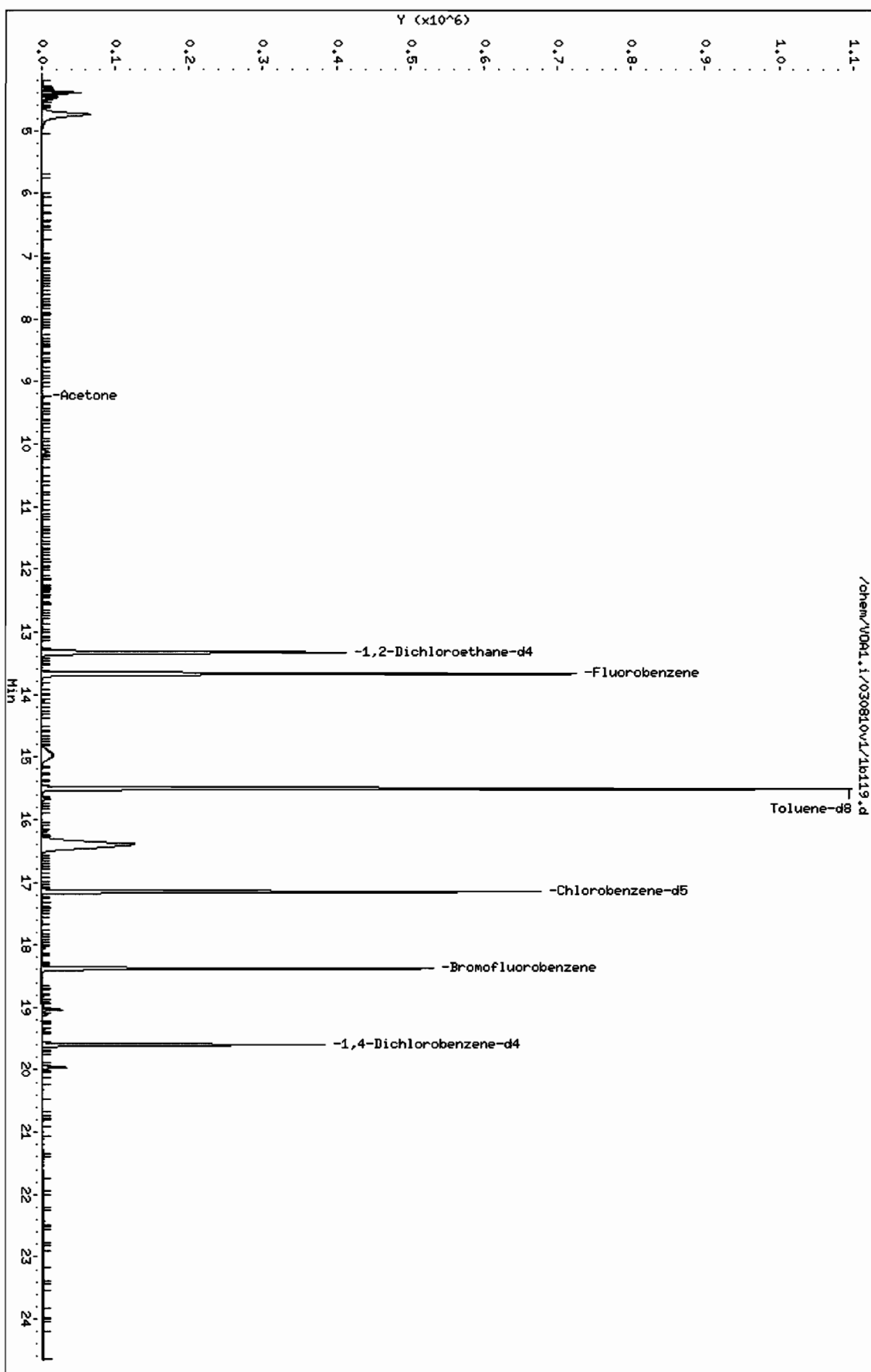
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RT	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY CPND #
=====	=====	=====	=====	=====	=====	=====
Unknown Hydrocarbon				CAS #:		
4.746	342929	10.7831591	12.8	0	0	52

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
1,4-Methanoazulene, decahydro-4,8,8-trim							
				CAS #: 475-20-7			
16.383	903799	35.4216399	42.2	98	NIST05.L	60023	76



Data File: /chem/V001.i/030810v1/1b119.d  
Date : 08-MAR-2010 16:40  
Client ID: RE36-10-7524  
Sample Info: 1248514002196252511V00AF111  
Column phase: RTX-Volatiles

Instrument: V001.i  
Operator: GRB2  
Column diameter: 0.25



Data File: /chem/VOA1.i/030810v1/1b119.d

Page 2

Date : 08-MAR-2010 16:40

Client ID: RE36-10-7524

Instrument: VOA1.i

Sample Info: I248514002I962525I1VOAFI1I

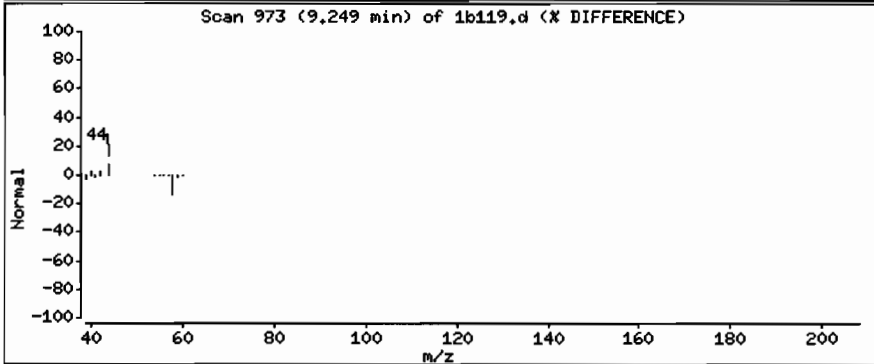
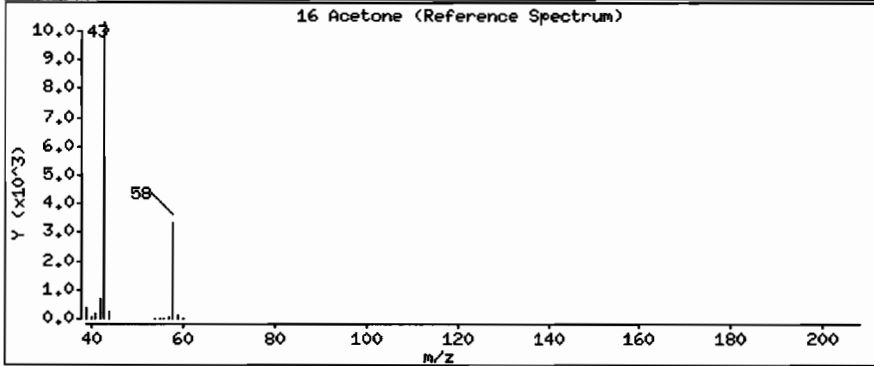
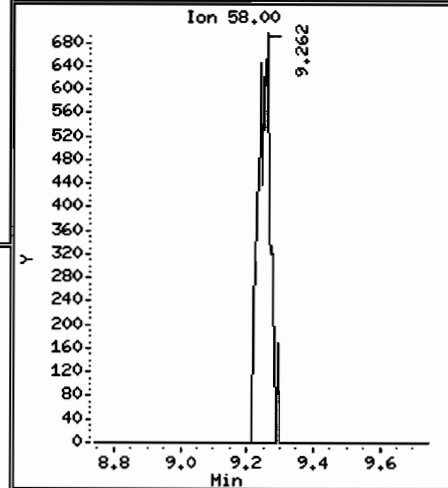
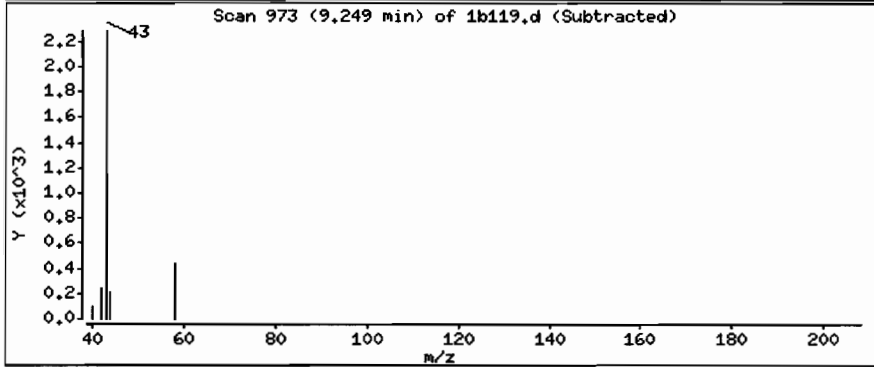
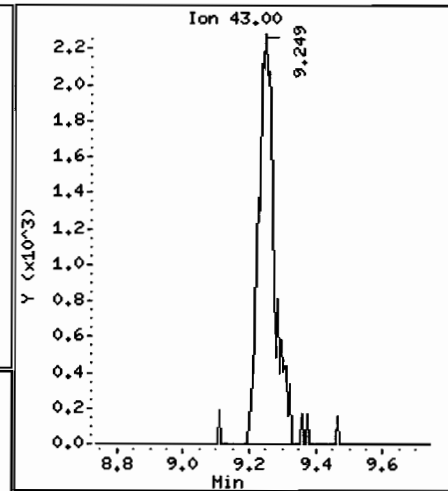
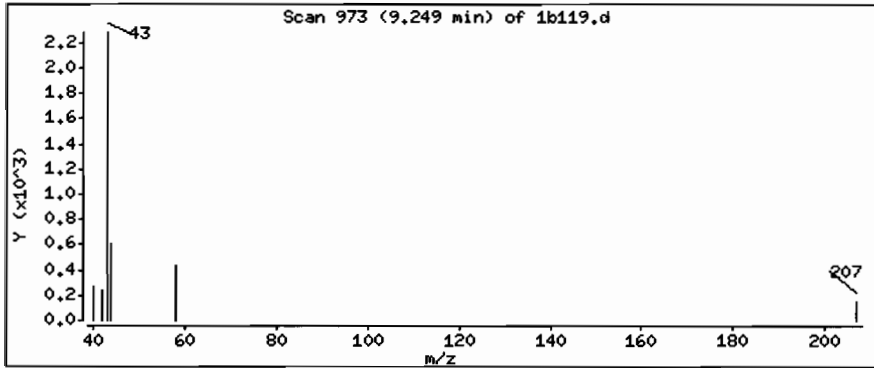
Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

16 Acetone

Concentration: 2.4 ug/Kg



Data File: /chem/VOA1.i/030810v1/1b119.d

Page 1

Date : 08-MAR-2010 16:40

Client ID: RE36-10-7524

Instrument: VOA1.i

Sample Info: 12485140021962525111VOAF111

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0,25

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

Weight

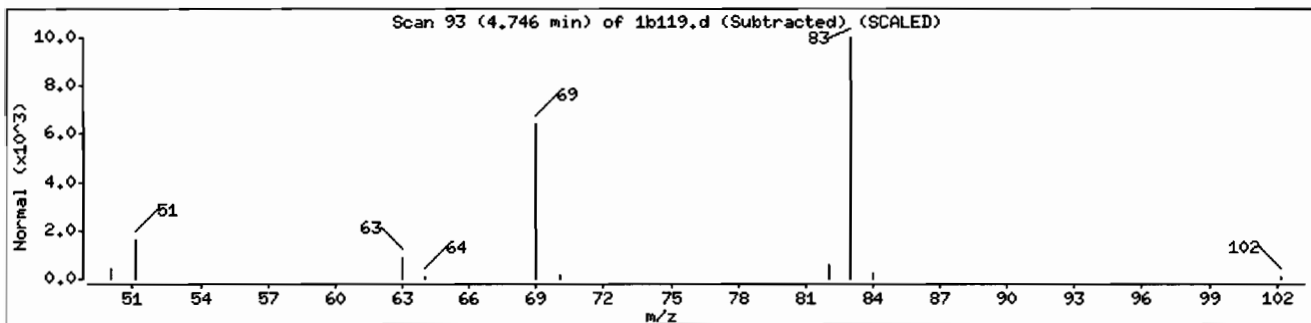
Unknown Hydrocarbon

Unknown

0

0

0



Date : 08-MAR-2010 16:40

Client ID: RE36-10-7524

Instrument: VOA1.i

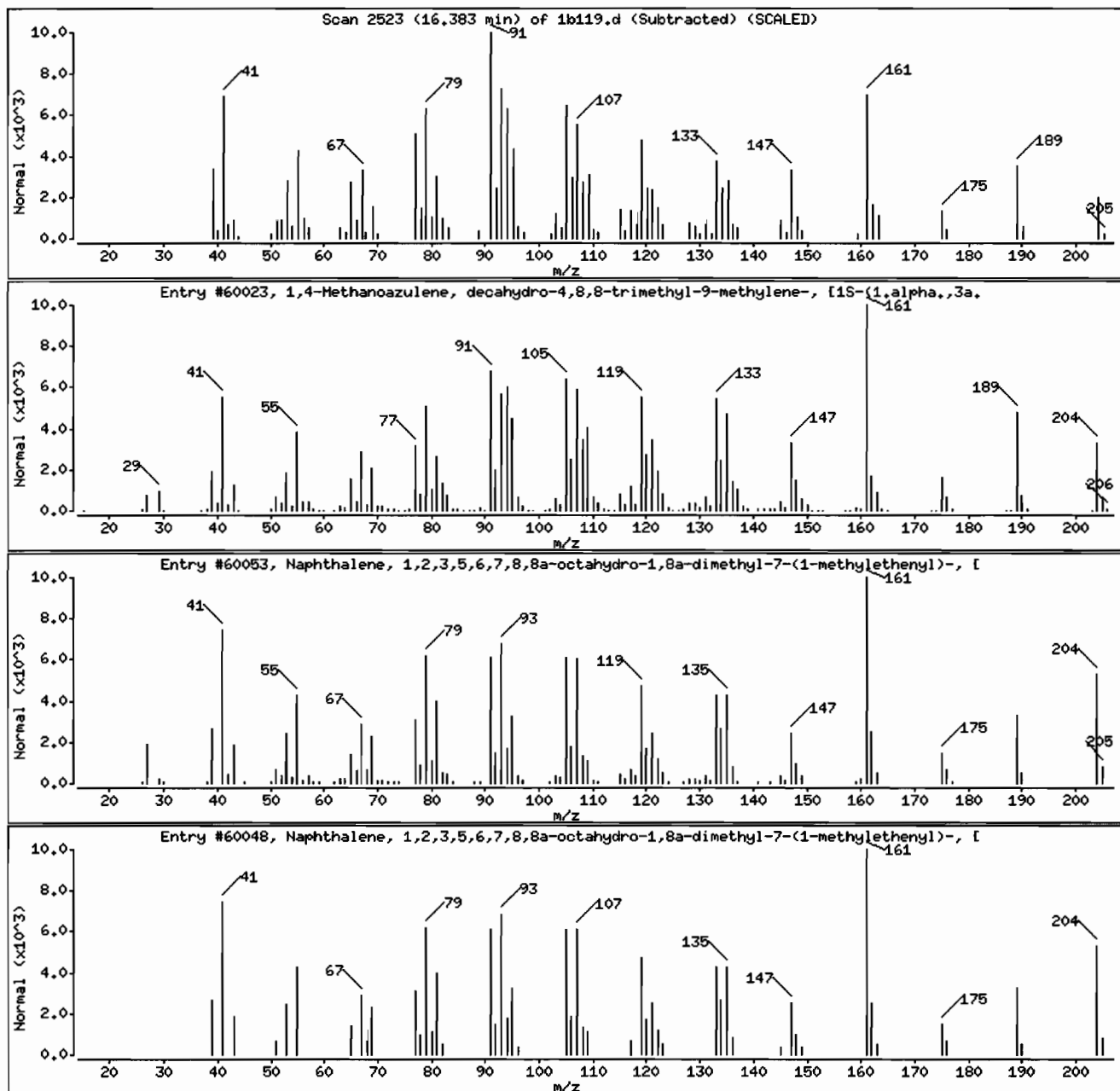
Sample Info: 1248514002196252511VOAF111

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60023	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	10219-75-7	NIST05.L	60053	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60048	98	C15H24	204



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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514003	Date Received: 03/03/2010 08:50	%Moisture: 20.2
Client ID: RE36-10-7525	Client: LANL010	Project: LANL01004
Batch ID: 962525	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 17:11	Inst: VOA1.1	Dilution: 1
Prep Date: 03/08/2010 14:36	Analyst: GRB2	Purge Vol: 5 mL
Data File: 1h120.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.426	1.25
74-87-3	Chloromethane	U	1.25	ug/kg	0.376	1.25
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.376	1.25
74-83-9	Bromomethane	U	1.25	ug/kg	0.376	1.25
75-00-3	Chloroethane	U	1.25	ug/kg	0.376	1.25
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.376	1.25
67-64-1	Acetone	U	6.26	ug/kg	2.08	6.26
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
74-88-4	Iodomethane	U	6.26	ug/kg	2.00	6.26
75-09-2	Methylene chloride	U	6.26	ug/kg	2.50	6.26
75-15-0	Carbon disulfide	U	6.26	ug/kg	1.57	6.26
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.376	1.25
78-93-3	2-Butanone	U	6.26	ug/kg	1.88	6.26
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
67-66-3	Chloroform	U	1.25	ug/kg	0.376	1.25
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.413	1.25
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.376	1.25
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.376	1.25
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.376	1.25
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.376	1.25
71-43-2	Benzene	U	1.25	ug/kg	0.376	1.25
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.413	1.25
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.376	1.25
74-95-3	Dibromomethane	U	1.25	ug/kg	0.376	1.25
108-10-1	4-Methyl-2-pentanone	U	6.26	ug/kg	1.57	6.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
108-88-3	Toluene	U	1.25	ug/kg	0.376	1.25
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.376	1.25
591-78-6	2-Hexanone	U	6.26	ug/kg	1.88	6.26
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.376	1.25
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.376	1.25
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.376	1.25
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.376	1.25
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.376	1.25

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514003	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 20.2
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-7525	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Batch ID:</b> 962525	<b>Inst:</b> VOA1.J	<b>Dilution:</b> 1
<b>Run Date:</b> 03/08/2010 17:11	<b>Analyst:</b> GRB2	<b>Purge Vol:</b> 5 mL
<b>Prep Date:</b> 03/08/2010 14:36	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
<b>Data File:</b> 1b120.d	<b>Column:</b> RTX-Volatiles	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.376	1.25
179601-23-1	m,p-Xylenes	U	2.50	ug/kg	0.376	2.50
95-47-6	o-Xylene	U	1.25	ug/kg	0.376	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.376	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.376	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.376	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.376	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.376	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.376	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.376	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.376	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.376	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.376	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.376	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.26	ug/kg	2.00	6.26
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.96	9.71	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b120.d  
Lab Smp Id: 248514003 Client Smp ID: RE36-10-7525  
Inj Date : 08-MAR-2010 17:11  
Operator : GRB2 Inst ID: VOA1.i  
Smp Info : |248514003|962525|1|VOAF|1|  
Misc Info : LANL 5g N/A SOIL  
Comment :  
Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
Meth Date : 19-Mar-2010 09:00 eh1 Quant Type: ISTD  
Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
Als bottle: 20  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2196.sub  
Target Version: 3.50  
Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	20.15380	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.672	13.672	(1.000)	723628	50.0000	
* 76 Chlorobenzene-d5	117	17.148	17.147	(1.000)	454348	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.596	19.601	(1.000)	170895	50.0000	
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	424252	60.0450	75.2
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	865762	56.6552	71.0
\$ 87 Bromofluorobenzene	95	18.377	18.376	(0.938)	280454	65.4571	82.0 (R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

## ION RATIO REPORT

## VOA REPORT

Data file: 1b120.d

Report Date: 03/09/2010 06:42

Lab. ID: 248514003

SampleType: SAMPLE

Injection Date: 08-MAR-2010 17:11

Operator: GRB2

Instrument: VOA1.i

Sample Info: |248514003|962525|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A SOIL

Comment:

Method used: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2196

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
51	1,2-Dichloroethane			CAS#: 107-06-2		
62	14973	13.67	13.43	80-120	100	(T)
64	2313	13.67	13.43	2- 62	15	(T)
-----						
54	Trichloroethylene			CAS#: 79-01-6		
95	62797	13.67	14.10	80-120	100	(T)
97	47198	13.67	14.10	35- 95	75	(T)
130	714	14.10	14.10	54-114	1	(Q)
-----						
64	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	9758	15.50	15.35	80-120	100	(T)
43	6281	15.50	15.35	236-296	64	(QT)
100	543998	15.50	15.35	0- 58	5574	(QT)

-----  
Q qualifier indicates ion failed ratio requirement



GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA1.i/030810v1/1b120.d  
Lab Smp Id: 248514003 Client Smp ID: RE36-10-7525  
Inj Date : 08-MAR-2010 17:11  
Operator : GRB2 Inst ID: VOA1.i  
Smp Info : |248514003|962525|1|VOAF|1|  
Misc Info : LANL 5g N/A SOIL  
Comment :  
Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
Meth Date : 19-Mar-2010 09:00 eh1 Quant Type: ISTD  
Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
Als bottle: 20  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2196.sub  
Target Version: 3.50  
Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	20.15380	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 102 1,4-Dichlorobenzene-d4	19.596	1199046	50.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	----	=====	=====	=====
Unknown Siloxane				CAS #:			
19.960	185987	7.75562443	9.7	0		0	102

Data File: /chem/V001.i/030810v1/1b120.d

Date : 08-MAR-2010 17:11

Client ID: RE36-10-7525

Sample Info: 1248514003196252511V00AF11

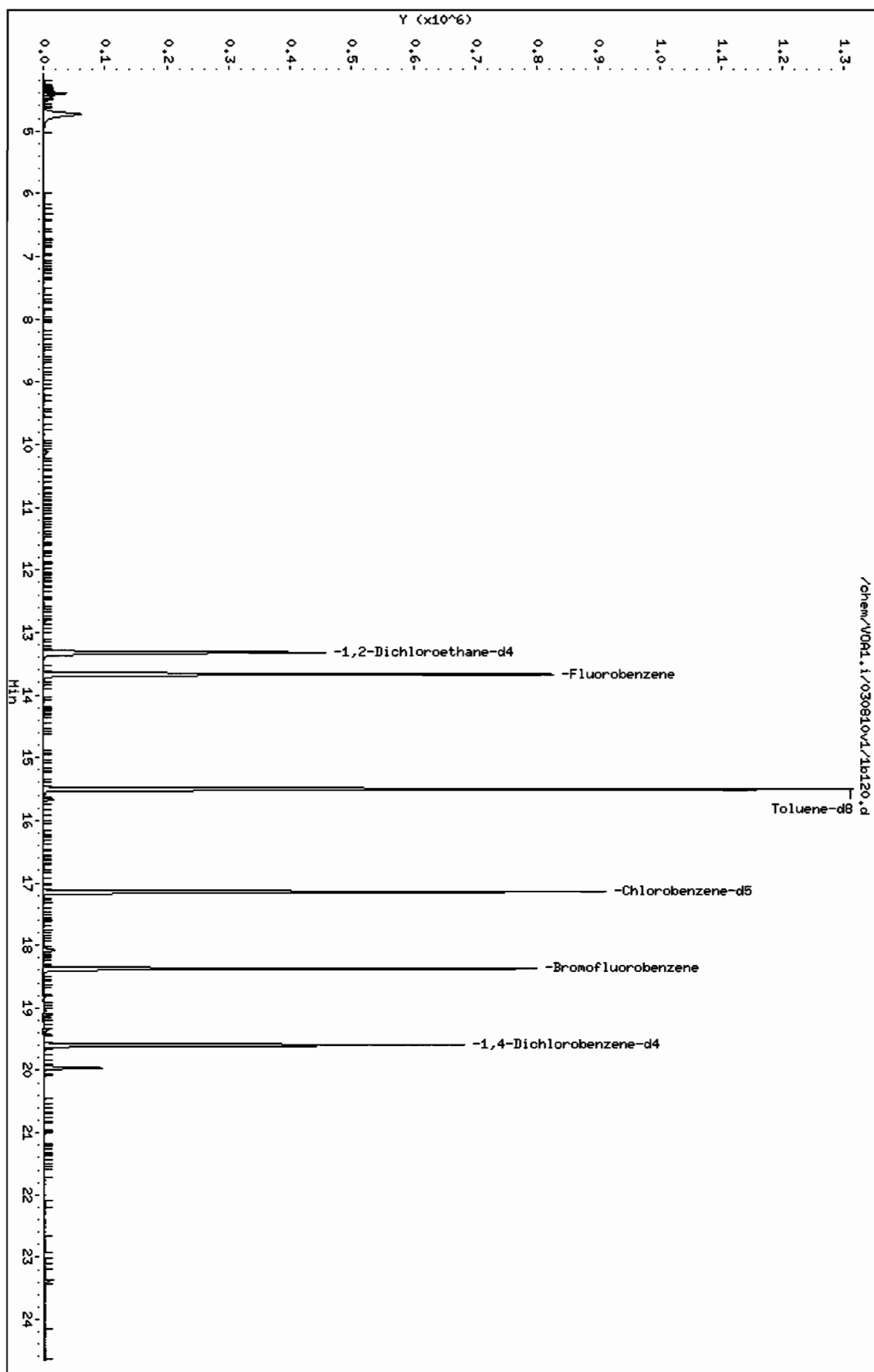
Page 1

Column phase: RTX-Volatiles

Instrument: V001.i

Operator: CRB2

Column diameter: 0.25



Date : 08-MAR-2010 17:11

Client ID: RE36-10-7525

Instrument: V0A1.i

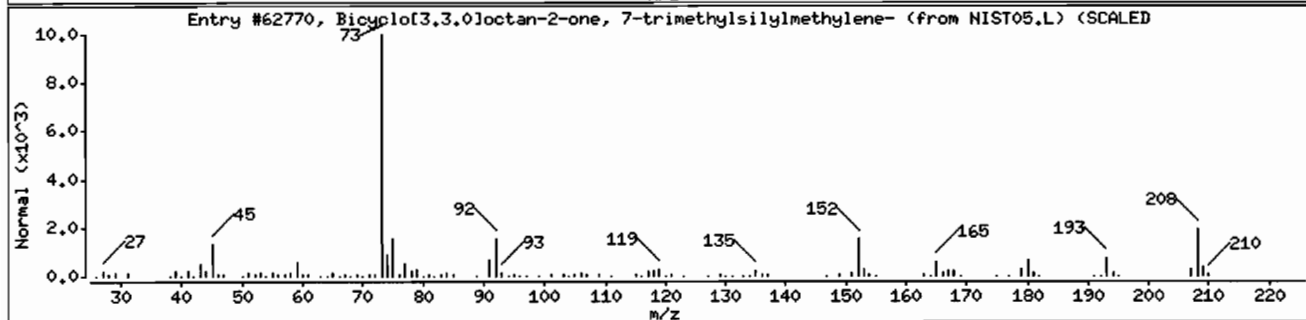
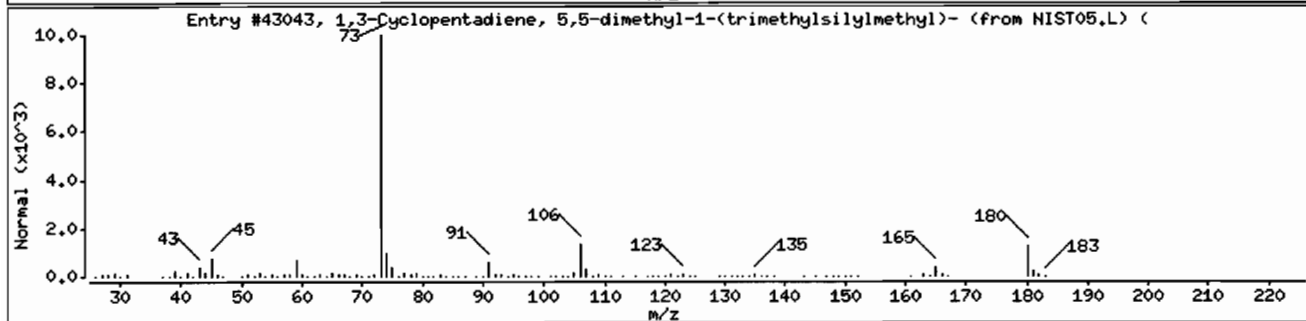
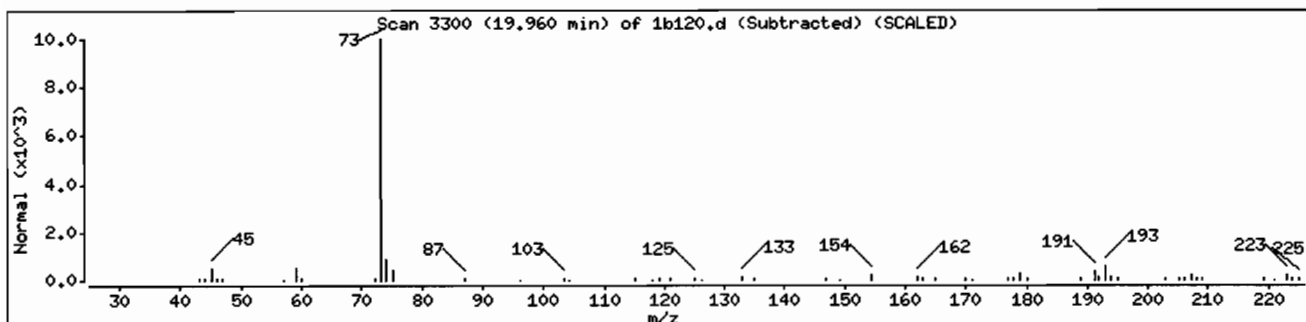
Sample Info: I248514003I962525I11V0AFI11

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
1,3-Cyclopentadiene, 5,5-dimethyl-1-(tri	1000163-65-0	NIST05.L	43043	28	C11H20Si	180
Bicyclo[3.3.0]octan-2-one, 7-trimethylsi	109613-14-1	NIST05.L	62770	25	C12H20OSi	208



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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> S
<b>Lab Sample ID:</b> 248514004	<b>Date Received:</b> 03/03/2010 08:50	
<b>Client ID:</b> RE36-10-7543	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 962525	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Run Date:</b> 03/08/2010 17:42	<b>Inst:</b> VOA1.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 03/08/2010 14:38	<b>Analyst:</b> GRB2	<b>Purge Vol:</b> 5 mL
<b>Data File:</b> 1b121.d	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
	<b>Column:</b> RTX-Volatiles	<b>Level:</b> LOW

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**

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> S
<b>Lab Sample ID:</b> 248514004	<b>Date Received:</b> 03/03/2010 08:50	
<b>Client ID:</b> RE36-10-7543	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 962525	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Run Date:</b> 03/08/2010 17:42	<b>Inst:</b> VOA1.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 03/08/2010 14:38	<b>Analyst:</b> GRB2	<b>Purge Vol:</b> 5 mL
<b>Data File:</b> 1b121.d	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
	<b>Column:</b> RTX-Volatiles	<b>Level:</b> LOW

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
	<i>Trichlorotrifluoroethane</i>					
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
	Unknown Siloxane	19.96	5.16	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b121.d

Lab Smp Id: 248514004

Client Smp ID: RE36-10-7543

Inj Date : 08-MAR-2010 17:42

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |248514004|962525|1|VOAF|1|

Misc Info : LANL 5g N/A SOIL

Comment :

Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Meth Date : 19-Mar-2010 09:00 eh1

Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: 1a428.d

Als bottle: 21

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-2196.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.672	13.672 (1.000)	737884	50.0000	
* 76 Chlorobenzene-d5	117	17.147	17.147 (1.000)	555664	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.596	19.601 (1.000)	308857	50.0000	
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327 (0.975)	432968	60.0946	60.1
\$ 65 Toluene-d8	98	15.504	15.504 (0.904)	928190	49.6655	49.7
\$ 87 Bromofluorobenzene	95	18.376	18.376 (0.938)	408467	52.7502	52.8

## ION RATIO REPORT

## VOA REPORT

Data file: 1b121.d  
Report Date: 03/09/2010 06:42  
Lab. ID: 248514004  
Injection Date: 08-MAR-2010 17:42  
Operator: GRB2  
Sample Info: |248514004|962525|1|VOAF|1|  
Miscellaneous Info: LANL 5g N/A SOIL  
Comment:  
Method used: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
Dilution Factor= 1.0  
Integrator: HP RTE  
Sample Matrix: SOIL

SampleType: SAMPLE

Instrument: VOA1.i

Compound Sublist: 10-2196

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
51	1,2-Dichloroethane			CAS#: 107-06-2		
62	15884	13.67	13.43	80-120	100	(T)
64	2426	13.67	13.43	2- 62	15	(T)
-----						
64	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	10548	15.50	15.35	80-120	100	(T)
43	6816	15.50	15.35	236-296	65	(QT)
100	589434	15.50	15.35	0- 58	5588	(QT)

-----  
Q qualifier indicates ion failed ratio requirement

Data File: /chem/VOA1.i/030810v1/1b121.d  
Report Date: 19-Mar-2010 09:01

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GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA1.i/030810v1/1b121.d  
Lab Smp Id: 248514004 Client Smp ID: RE36-10-7543  
Inj Date : 08-MAR-2010 17:42  
Operator : GRB2 Inst ID: VOA1.i  
Smp Info : |248514004|962525|1|VOAF|1|  
Misc Info : LANL 5g N/A SOIL  
Comment :  
Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
Meth Date : 19-Mar-2010 09:00 eh1 Quant Type: ISTD  
Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
Als bottle: 21  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2196.sub  
Target Version: 3.50  
Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 102 1,4-Dichlorobenzene-d4	19.596	2182162	50.000

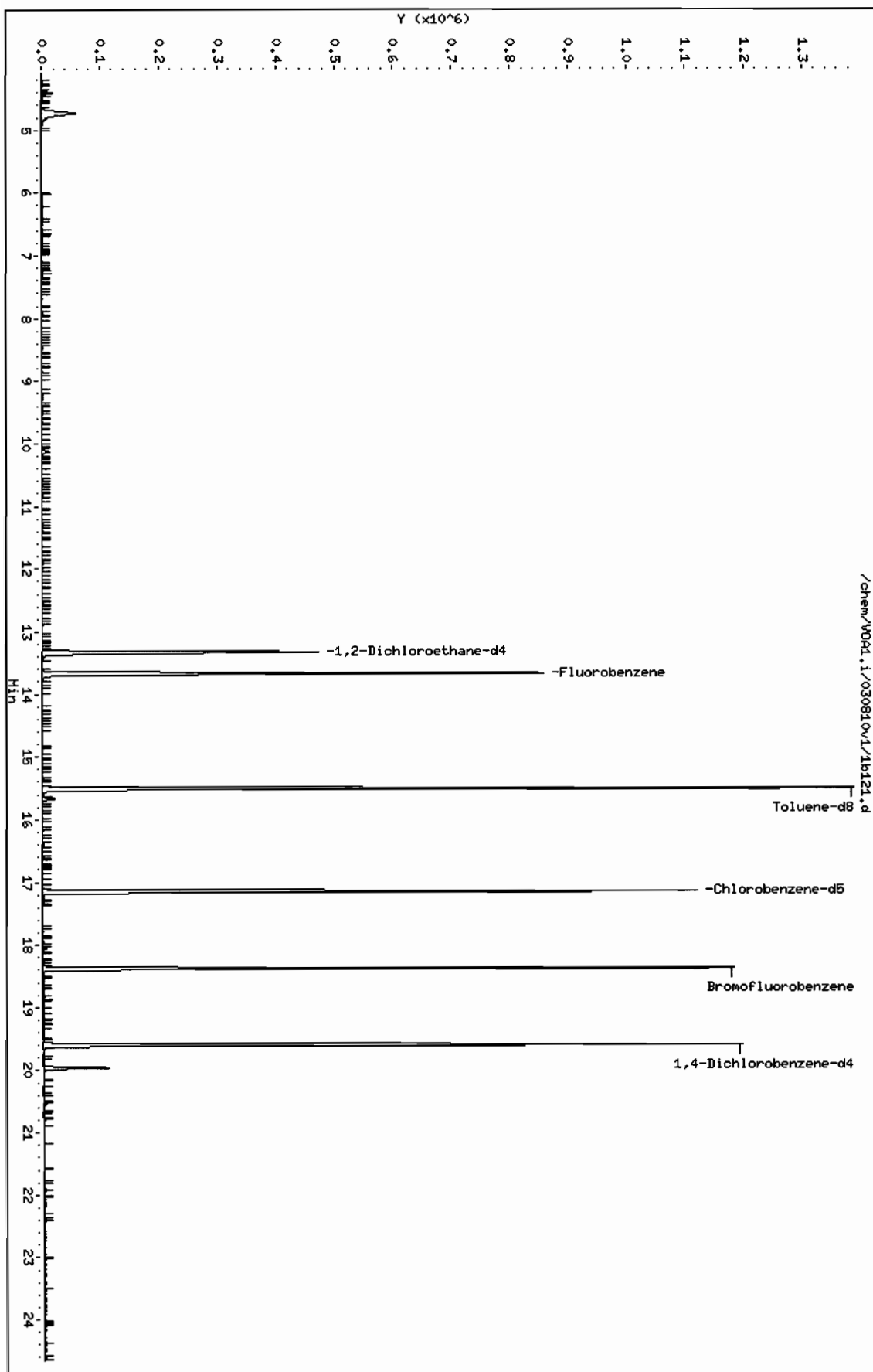
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

Unknown Siloxane				CAS #:			
19.960	225190	5.15978663	5.2	0		0	102



Data File: /chem/V001.i/030810v1/1b121.d  
Date : 08-MAR-2010 17:42  
Client ID: REC6-10-7543  
Sample Info: 1248514004196252511V001.i1  
Column phase: RTX-Volatiles

Instrument: V001.i  
Operator: GRB2  
Column diameter: 0.25



Data File: /chem/V0A1.i/030810v1/1b121.d

Page 1

Date : 08-MAR-2010 17:42

Client ID: RE36-10-7543

Instrument: V0A1.i

Sample Info: I248514004I96252511I\VOAF11I

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

Weight

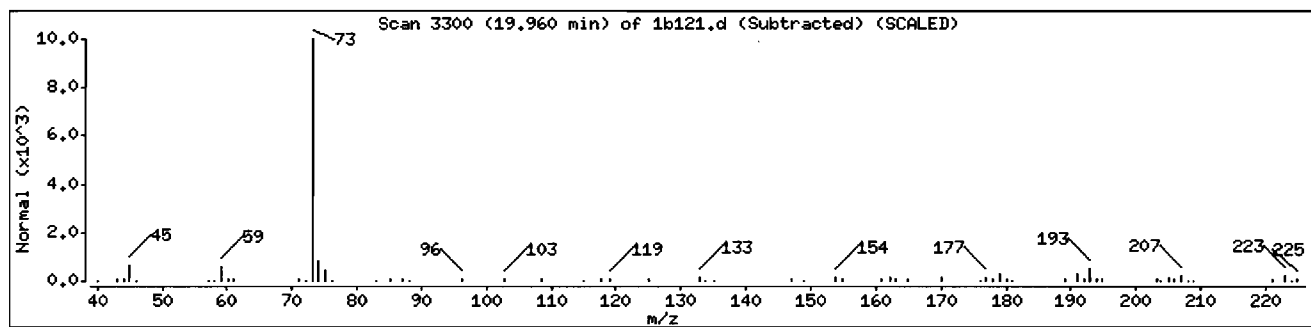
Unknown Siloxane

Unknown

0

0

0



# Standard Data

## 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
1,1,2,2-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

Report Date: 09-Mar-2010 06:52

### Calibration History

Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Start Cal Date: 04-MAR-2010 17:28

End Cal Date : 05-MAR-2010 02:12

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
04-MAR-2010 23:06	ICALsubS	/chem/VOA1.i/030410v1/1a423.d
04-MAR-2010 17:28	ICALsubL+	/chem/VOA1.i/030410v1/1a412.d
Cal Level: 2 , Cal Amount: 2.00000		
04-MAR-2010 23:37	ICALsubS	/chem/VOA1.i/030410v1/1a424.d
04-MAR-2010 17:59	ICALsubL+	/chem/VOA1.i/030410v1/1a413.d
Cal Level: 3 , Cal Amount: 5.00000		
05-MAR-2010 00:08	ICALsubS	/chem/VOA1.i/030410v1/1a425.d
04-MAR-2010 18:29	ICALsubL+	/chem/VOA1.i/030410v1/1a414.d
Cal Level: 4 , Cal Amount: 10.00000		
05-MAR-2010 00:39	ICALsubS	/chem/VOA1.i/030410v1/1a426.d
04-MAR-2010 19:00	ICALsubL+	/chem/VOA1.i/030410v1/1a415.d
Cal Level: 5 , Cal Amount: 20.00000		
05-MAR-2010 01:10	ICALsubS	/chem/VOA1.i/030410v1/1a427.d
04-MAR-2010 19:31	ICALsubL+	/chem/VOA1.i/030410v1/1a416.d
Cal Level: 6 , Cal Amount: 50.00000		
05-MAR-2010 01:41	ICALsubS	/chem/VOA1.i/030410v1/1a428.d
04-MAR-2010 20:02	ICALsubL+	/chem/VOA1.i/030410v1/1a417.d
Cal Level: 7 , Cal Amount: 100.00000		
05-MAR-2010 02:12	ICALsubS	/chem/VOA1.i/030410v1/1a429.d
04-MAR-2010 20:32	ICALsubL+	/chem/VOA1.i/030410v1/1a418.d
Cal Level: 8 , Cal Amount: 200.00000		
04-MAR-2010 21:35	BENZENE+	/chem/VOA1.i/030410v1/1a420.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 6

```
| Ccal Level: 6 , Ccal Amount: 50.0 |
+=====+
|08-MAR-2010 07:57 |CALsubL+          |/chem/VOA1.i/030810v1/1b102.d |
+-----+-----+-----+
| Ccal Level: 6 , Ccal Amount: 50.0 |
+=====+
|08-MAR-2010 09:28 |CALsubS+SS          |/chem/VOA1.i/030810v1/1b105.d |
+-----+-----+-----+
```

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

## Calibration File Names:

Level 1: /chem/VOA1.i/030410v1/1a423.d  
 Level 2: /chem/VOA1.i/030410v1/1a424.d  
 Level 3: /chem/VOA1.i/030410v1/1a425.d  
 Level 4: /chem/VOA1.i/030410v1/1a426.d  
 Level 5: /chem/VOA1.i/030410v1/1a427.d  
 Level 6: /chem/VOA1.i/030410v1/1a428.d  
 Level 7: /chem/VOA1.i/030410v1/1a429.d  
 Level 8: /chem/VOA1.i/030410v1/1a420.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
M 1 Xylenes (total)	0.75321	0.70295	0.67437	0.64934	0.66109	0.66867	AVRG		0.67887		5.62262
	0.64249	++++									
M 2 1,2-Dichloroethylene (total)	0.30334	0.30025	0.27886	0.26621	0.26744	0.26937					
	0.27255	++++					AVRG		0.27972		5.59995
M 3 1,3-Dichloropropylene	0.69166	0.64436	0.64939	0.67195	0.68534	0.69765					
	0.70488	++++					AVRG		0.67789		3.47866
4 Chlorotrifluoroethylene	7805	16787	47024	110497	268873	338249					
	476883	++++					LINR	0.06240	0.11129		0.99026
5 Dichlorodifluoromethane	0.27135	0.25757	0.29080	0.24806	0.24053	0.21915					
	0.23360	++++					AVRG		0.25158		9.56487



## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients ml	m2	SRSD or R^2
100	100	200									
Level 7	Level 8										
6 Chloromethane	0.49489	0.44914	0.44193	0.42489	0.42420	0.40637					
	0.41388	++++					AVRG		0.43647		6.81194
7 Vinyl chloride	0.40692	0.36796	0.35614	0.33153	0.31791	0.29484					
	0.29544	++++					AVRG		0.33868		12.11013
8 2-Chloro-1,1,1-trifluoroethane	0.28441	0.28440	0.28998	0.28904	0.30052	0.29948					
	0.30499	++++					AVRG		0.29326		2.83331
9 Bromomethane	0.21507	0.20535	0.20088	0.20376	0.19743	0.19252					
	0.18747	++++					AVRG		0.20035		4.50690
10 Chloroethane	0.22216	0.22108	0.22663	0.21982	0.21544	0.21349					
	0.20610	++++					AVRG		0.21782		3.09561
11 Trichlorofluoromethane	0.42098	0.47006	0.43077	0.42906	0.40992	0.41083					
	0.40666	++++					AVRG		0.42547		5.13087
12 Ethyl Ether	0.29749	0.27429	0.26617	0.28422	0.28683	0.27691					
	0.27342	++++					AVRG		0.27990		3.71030
13 Acrolein	0.05197	0.05349	0.05589	0.05663	0.06145	0.06074					
	0.06025	++++					AVRG		0.05720		6.50407
14 Trichlorotrifluoroethane	0.24812	0.24556	0.24345	0.23944	0.24235	0.23563					
	0.22530	++++					AVRG		0.23998		3.18126

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
	100	200									
	Level 7	Level 8									
15 1,1-Dichloroethylene	0.59051	0.56817	0.56621	0.52232	0.52017	0.53882					
	0.55068	++++				AVRG			0.55098		4.69138
16 Acetone	0.34831	0.29514	0.29382	0.28949	0.28780	0.27337					
	0.28547	++++				AVRG			0.29620		8.12358
17 Isopropyl Alcohol	0.02135	0.02088	0.02356	0.02326	0.01925	0.02447					
	0.02624	++++				AVRG			0.02272		10.43485
18 Iodomethane	0.44533	0.41971	0.42192	0.40151	0.38432	0.38700					
	0.39337	++++				AVRG			0.40759		5.46868
19 Carbon disulfide	0.97397	0.89862	0.85934	0.80937	0.70728	0.77734					
	0.82445	++++				AVRG			0.83577		10.28708
20 Allyl chloride	8507	17929	43809	99452	210254	591520					
	1225666	++++				LINR		0.15508	0.11299		0.99920
21 Methyl acetate	0.28095	0.26688	0.26567	0.27049	0.24559	0.24490					
	0.25595	++++				AVRG			0.26149		5.09450
22 Acetonitrile	0.05311	0.04242	0.04264	0.04213	0.04352	0.03875					
	0.04193	++++				AVRG			0.04350		10.33047
23 Methylene chloride	++++	24115	41759	72196	139372	335541					
	709352	++++				LINR		-0.01880	0.29499		0.99971

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	SRSD or R^2
	100	200									
	Level 7	Level 8									
24 tert-Butyl Alcohol	0.03450	0.03286	0.03710	0.03753	0.03121	0.03968	AVRG		0.03642		10.50706
	0.04208	++++									
25 tert-Butyl methyl ether	0.93371	1.08746	0.88131	0.89456	0.91498	0.87293	AVRG		0.92853		7.88164
	0.91476	++++									
26 trans-1,2-Dichloroethylene	0.29478	0.29262	0.26391	0.25636	0.25335	0.25891	AVRG		0.26935		6.37027
	0.26549	++++									
27 Acrylonitrile	0.10797	0.10596	0.11041	0.11289	0.11528	0.11298	AVRG		0.11119		2.93632
	0.11285	++++									
28 Isopropyl ether	1.09877	1.11233	1.10276	1.11762	1.16730	1.12032	AVRG		1.12852		2.84927
	1.18051	++++									
29 Vinyl acetate	0.63725	0.60486	0.62394	0.59395	0.60658	0.58731	AVRG		0.60100		4.51404
	0.55312	++++									
30 1,1-Dichloroethane	0.62513	0.63230	0.58982	0.55421	0.54772	0.55281	AVRG		0.57897		6.36993
	0.55078	++++									
31 2-Chloro-1,3-butadiene	0.41810	0.41746	0.43019	0.45620	0.47274	0.48150	AVRG		0.45317		7.01467
	0.49600	++++									
32 Ethyl tert-butyl ether	0.86453	0.86266	0.87110	0.90491	0.97011	0.95654	AVRG		0.92282		6.97391
	1.02989	++++									

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	MSD or R <sup>2</sup>
	100	200									
	Level 7	Level 8									
33 2,2-Dichloropropane	0.39694	0.39205	0.36929	0.34932	0.35176	0.36430	AVRG		0.36832		5.22710
	0.35457	++++									
34 Ethyl acetate	0.32902	0.29952	0.30825	0.30260	0.31733	0.30959	AVRG		0.30964		3.38693
	0.30120	++++									
35 2-Butanone	0.34555	0.30939	0.30921	0.30431	0.30884	0.29894	AVRG		0.31398		4.94376
	0.32163	++++									
36 cis-1,2-Dichloroethylene	0.31190	0.30788	0.29381	0.27606	0.28153	0.27982	AVRG				
	0.27961	++++							0.29009		5.05776
37 Propionitrile	0.04709	0.04309	0.04679	0.04442	0.04601	0.04646	AVRG		0.04574		3.17363
	0.04636	++++									
38 Tetrahydrofuran	0.26663	0.24683	0.26381	0.26054	0.25545	0.25212	AVRG		0.25622		3.00396
	0.24814	++++									
39 Bromochloromethane	0.13836	0.13142	0.12971	0.13156	0.13371	0.12617	AVRG		0.13153		2.88879
	0.12976	++++									
40 Methacrylonitrile	0.23771	0.23024	0.24233	0.24295	0.25151	0.24475	AVRG		0.24107		2.76048
	0.23800	++++									
41 Chloroform	0.64658	0.60478	0.56892	0.55129	0.55756	0.55736	AVRG		0.57778		6.10312
	0.55798	++++									

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1	2	5	10	20	50	Curve	b	Coefficients ml	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	200									
	Level 7	Level 8									
42 Cyclohexane	0.60530	0.60739	0.56143	0.52600	0.49687	0.53693					
	0.52530	++++				AVRG		0.55132			7.64201
43 1,1,1-Trichloroethane	0.45718	0.45635	0.43251	0.40820	0.41251	0.42806					
	0.41223	++++				AVRG		0.42958			4.78840
44 Carbon tetrachloride	0.42399	0.42089	0.40940	0.39794	0.39811	0.41779					
	0.40835	++++				AVRG		0.41092			2.54998
45 1,1-Dichloropropene	0.44544	0.45160	0.42126	0.39213	0.39119	0.40990					
	0.40530	++++				AVRG		0.41669			5.79289
46 Isobutyl alcohol	0.01181	0.01064	0.01226	0.01201	0.01008	0.01304					
	0.01267	++++				AVRG		0.01179			9.05259
47 Benzene	1.28998	1.15477	1.12632	1.08296	1.06740	1.09512					
	1.08491	1.25413				AVRG		1.14445			7.33590
49 Methyl tert-amyl ether	0.63334	0.62456	0.66931	0.68471	0.75377	0.75941					
	0.82305	++++				AVRG		0.70688			10.41836
50 Cyclohexene	0.46264	0.44813	0.43312	0.40701	0.39320	0.42308					
	0.41399	++++				AVRG		0.42588			5.64859
51 1,2-Dichloroethane	0.55999	0.52493	0.51731	0.50725	0.50443	0.49881					
	0.49879	++++				AVRG		0.51593			4.20091

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1 m2	%RSD or R^2
	100	200								
	Level 7	Level 8								
53 n-Butyl alcohol	0.01024	0.00907	0.01003	0.01050	0.00888	0.01107	AVRG	0.01014		8.92075
	0.01122	++++								
54 Trichloroethylene	0.33004	0.30974	0.28603	0.28383	0.28464	0.28975	AVRG	0.29541		6.03769
	0.28384	++++								
55 Methylcyclohexane	0.49476	0.48703	0.47480	0.43861	0.43922	0.47464	AVRG	0.46690		4.73137
	0.45928	++++								
56 Methyl methacrylate	0.17389	0.17599	0.18085	0.18308	0.19483	0.19527	AVRG	0.18476		4.66850
	0.18940	++++								
57 1,2-Dichloropropane	0.33825	0.33087	0.31503	0.30131	0.30696	0.30490	AVRG	0.31486		4.51981
	0.30672	++++								
58 1,4-Dioxane	0.00268	0.00257	0.00273	0.00275	0.00275	0.00281	AVRG	0.00273		3.01538
	0.00281	++++								
59 Dibromomethane	0.19447	0.19393	0.18299	0.18510	0.18747	0.18297	AVRG	0.18749		2.58103
	0.18551	++++								
60 Bromodichloromethane	0.40950	0.42240	0.42513	0.42497	0.43872	0.44091	AVRG	0.42946		2.90391
	0.44459	++++								
61 2-Chloroethylvinyl ether	1534	4339	11215	24575	56621	++++	AVRG	0.02560		0.99683
	++++	++++					LINR			

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1	2	5	10	20	50	Curve	b	Coefficients ml	m2	%RSD or R^2
62 2-Nitropropane	8355 1201622	16281 ++++	47508	98345	220270	600056	LINR	0.11599	0.11103		0.99976
63 cis-1,3-Dichloropropylene	0.50349 0.51996	0.47474 ++++	0.48488	0.49293	0.50736	0.51026	AVRG		0.49909		3.14746
64 4-Methyl-2-pentanone	0.19874 0.20758	0.19036 ++++	0.19606	0.19827	0.19870	0.19602	AVRG		0.19796		2.60039
66 Toluene	1.08029 0.90883	1.03835 ++++	0.96419	0.91516	0.91512	0.92876	AVRG		0.96439		7.09762
67 Ethyl methacrylate	0.44077 0.49563	0.44538 ++++	0.48183	0.48992	0.51785	0.51126	AVRG		0.48324		6.21958
68 trans-1,3-Dichloropropylene	0.68217 0.70410	0.63777 ++++	0.62991	0.66476	0.68131	0.70164	AVRG		0.67167		4.33804
69 1,1,2-Trichloroethane	0.32465 0.28928	0.30578 ++++	0.29078	0.29279	0.29162	0.29080	AVRG		0.29796		4.37271
70 Tetrachloroethylene	0.37602 0.27926	0.33298 ++++	0.30537	0.28451	0.28138	0.29671	AVRG		0.30803		11.45604
71 2-Hexanone	0.57174 0.57858	0.52453 ++++	0.54122	0.54512	0.55785	0.54679	AVRG		0.55226		3.36783

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	200									
	Level 7	Level 8									
72 1,3-Dichloropropane	0.71966	0.64917	0.62966	0.63963	0.62910	0.61431	AVRG		0.64273		5.59769
	0.61756	++++									
73 Dibromochloromethane	0.39057	0.38477	0.37507	0.38697	0.40149	0.40885	AVRG				
	0.41437	++++							0.39459		3.57493
74 1,2-Dibromoethane	0.38525	0.33966	0.34493	0.34795	0.35126	0.34244	AVRG		0.35160		4.37512
	0.34972	++++									
75 1-Chlorohexane	0.30784	0.32105	0.32102	0.32615	0.34149	0.33470	AVRG		0.33035		5.14370
	0.36021	++++									
77 Chlorobenzene	1.14795	1.07647	1.01136	0.98151	0.98002	0.98572	AVRG		1.01868		6.83721
	0.94770	++++									
78 Ethylbenzene	2.14544	2.02011	1.89606	1.84090	1.85339	1.90287	AVRG		1.92669		6.01325
	1.82809	++++									
79 1,1,1,2-Tetrachloroethane	0.37405	0.37314	0.35996	0.36122	0.36918	0.37374	AVRG		0.36870		1.59367
	0.36962	++++									
80 m,p-Xylenes	0.76855	0.70366	0.68029	0.65351	0.66267	0.67323	AVRG		0.68306		6.27525
	0.63949	++++									
81 o-Xylene	0.72253	0.70153	0.66252	0.64099	0.65795	0.65954	AVRG		0.67051		4.46036
	0.64848	++++									



## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
	100	200									
	Level 7	Level 8									
82 Styrene	1.09275	1.08435	1.09948	1.10852	1.13194	1.16948					
	1.15197	++++					AVRG		1.11978		2.86591
83 Bromoform	0.41943	0.40765	0.45884	0.45833	0.49134	0.51077					
	0.51981	++++					AVRG		0.46660		9.26892
84 Isopropylbenzene	3.65457	3.53232	3.40485	3.23822	3.27088	3.42401					
	3.26911	++++					AVRG		3.39914		4.53997
85 cis-1,4-Dichloro-2-butene	0.27086	0.26576	0.29675	0.30266	0.32236	0.32519					
	0.32415	++++					AVRG		0.30111		8.30060
86 Cyclohexanone	0.02452	0.02257	0.02302	0.02274	0.02518	0.02556					
	0.02720	++++					AVRG		0.02440		7.06404
88 1,1,2,2-Tetrachloroethane	0.88305	0.84554	0.81587	0.83545	0.83718	0.85101					
	0.85147	++++					AVRG		0.84565		2.42526
89 n-Propylbenzene	4.52756	4.31461	4.08942	3.96800	4.00981	4.21309					
	3.98618	++++					AVRG		4.15838		4.97130
90 trans-1,4-Dichloro-2-butene	0.26047	0.24350	0.27777	0.28729	0.29324	0.30480					
	0.30069	++++					AVRG		0.28111		7.92934
91 Bromobenzene	0.87561	0.84315	0.83031	0.80039	0.79985	0.78449					
	0.77364	++++					AVRG		0.81535		4.41751

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	200									
	Level 7	Level 8									
92 1,2,3-Trichloropropane	0.25374	0.25157	0.23407	0.24149	0.24048	0.23469	AVRG		0.24143		3.42436
	0.23399	++++									
93 1,3,5-Trimethylbenzene	3.15016	3.03866	2.92163	2.83430	2.90902	3.03029	AVRG		2.96733		3.69365
	2.88725	++++									
94 2-Chlorotoluene	3.40116	3.10077	2.99009	2.85022	2.90368	2.95741	AVRG		3.00922		6.41193
	2.86121	++++									
95 4-Chlorotoluene	2.96916	2.82351	2.72455	2.60839	2.62990	2.69119	AVRG		2.72697		4.73307
	2.64207	++++									
96 tert-Butylbenzene	2.56799	2.45028	2.36355	2.27069	2.29279	2.43004	AVRG		2.38074		4.56046
	2.28987	++++									
97 1,2,4-Trimethylbenzene	3.38891	3.11898	3.06635	2.94444	2.98604	3.11129	AVRG		3.08424		4.89034
	2.97368	++++									
98 Pentachloroethane	12149	15882	38181	66725	133523	507783	LINR	0.27833	0.24667		0.99429
	1078303	++++									
99 sec-Butylbenzene	4.10342	3.88387	3.73084	3.55024	3.66314	3.89266	AVRG		3.77742		5.10627
	3.61775	++++									
100 4-Isopropyltoluene	3.12249	3.00522	2.91403	2.83082	2.81896	3.04721	AVRG		2.94220		4.00251
	2.85667	++++									

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /Chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1 m2	%RSD or R^2
	100	200								
	Level 7	Level 8								
101 1,3-Dichlorobenzene	1.84867	1.68002	1.57918	1.49323	1.50639	1.51963				
	1.47490	++++					AVRG		1.58600	8.52066
103 1,4-Dichlorobenzene	1.84911	1.65010	1.60437	1.53722	1.53074	1.53576				
	1.47931	++++					AVRG		1.59809	7.74803
104 Benzyl chloride	1.12801	1.11484	1.29183	1.31709	1.38449	1.40406				
	1.37657	++++					AVRG		1.28813	9.35175
105 n-Butylbenzene	3.44185	3.23539	3.12630	2.97997	3.06171	3.30417				
	3.08924	++++					AVRG		3.17694	5.01186
106 1,2-Dichlorobenzene	1.69129	1.57033	1.50223	1.45431	1.47131	1.47889				
	1.43580	++++					AVRG		1.51488	5.87152
107 bis(2-Chloroisopropyl)ether	0.42927	0.40771	0.45797	0.44748	0.46047	0.46175				
	0.45692	++++					AVRG		0.44594	4.54779
108 1,2-Dibromo-3-chloropropane	0.14634	0.16047	0.16196	0.16379	0.17248	0.17743				
	0.18378	++++					AVRG		0.16661	7.45078
109 1,2,4-Trichlorobenzene	1.41272	1.18723	1.16596	1.09928	1.12657	1.12407				
	1.09072	++++					AVRG		1.17236	9.50296
110 Hexachlorobutadiene	0.81557	0.75828	0.69142	0.67610	0.68594	0.71859				
	0.67069	++++					AVRG		0.71666	7.39638

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
 End Cal Date : 05-MAR-2010 02:12  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Cal Date : 09-Mar-2010 06:50 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1 m2	RSD or R^2
	100	200								
	Level 7	Level 8								
111 Naphthalene	3.32209	2.52371	2.47904	2.48696	2.57602	2.54628				
	2.53867	++++				AVRG		2.63897		11.48579
112 1,2,3-Trichlorobenzene	1.34666	1.04210	1.03215	1.03675	1.03134	1.00392				
	0.97889	++++				AVRG		1.06740		11.72478
\$ 48 1,2-Dichloroethane-d4	0.45047	0.46081	0.45790	0.48374	0.48927	0.51337				
	0.56187	++++				AVRG		0.48820		8.00985
\$ 65 Toluene-d8	1.70210	1.65586	1.65755	1.73908	1.67205	1.67342				
	1.67162	++++				AVRG		1.68167		1.75445
\$ 87 Bromofluorobenzene	1.23838	1.23601	1.23055	1.28837	1.26074	1.26956				
	1.25131	++++				AVRG		1.25356		1.65830

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2010 17:28  
End Cal Date : 05-MAR-2010 02:12  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
Cal Date : 09-Mar-2010 06:50 dav01267

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 05-MAR-2010 03:14  
Lab File ID: 1a431.d Init. Cal. Date(s): 04-MAR-2010 05-MAR-2010  
Analysis Type: WATER Init. Cal. Times: 17:28 02:12  
Lab Sample ID: W1VM100304-23 Quant Type: ISTD  
Method: /chem/VOA1.i/030410v1/VOA1-8260ox-030410.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	176	150	0.12854	0.010	17.57577	30.00000	Linear
8 2-Chloro-1,1,1-trifluoroeth	0.29326	0.29918	0.29918	0.010	2.01988	30.00000	Averaged
13 Acrolein	0.05720	0.05786	0.05786	0.001	1.15202	30.00000	Averaged
14 Trichlorotrifluoroethane	0.23998	0.22387	0.22387	0.030	-6.71094	30.00000	Averaged
17 Isopropyl Alcohol	0.02272	0.02425	0.02425	0.000	6.77030	40.00000	Averaged
20 Allyl chloride	261	250	0.11450	0.010	4.44100	30.00000	Linear
24 tert-Butyl Alcohol	0.03642	0.03861	0.03861	0.010	6.01112	40.00000	Averaged
27 Acrylonitrile	0.11119	0.11685	0.11685	0.010	5.09258	30.00000	Averaged
28 Isopropyl ether	1.12852	1.11236	1.11236	0.010	-1.43125	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.45317	0.53602	0.53602	0.010	18.28132	30.00000	Averaged
32 Ethyl tert-butyl ether	0.92282	0.94254	0.94254	0.010	2.13673	30.00000	Averaged
37 Propionitrile	0.04574	0.04595	0.04595	0.010	0.44555	30.00000	Averaged
34 Ethyl acetate	0.30964	0.29007	0.29007	0.010	-6.32210	40.00000	Averaged
40 Methacrylonitrile	0.24107	0.24743	0.24743	0.010	2.63790	30.00000	Averaged
38 Tetrahydrofuran	0.25622	0.25409	0.25409	0.010	-0.83235	30.00000	Averaged
46 Isobutyl alcohol	0.01179	0.01194	0.01194	0.001	1.26309	40.00000	Averaged
49 Methyl tert-amyl ether	0.70688	0.74158	0.74158	0.010	4.90840	30.00000	Averaged
56 Methyl methacrylate	0.18476	0.19653	0.19653	0.010	6.37074	30.00000	Averaged
67 Ethyl methacrylate	0.48324	0.52431	0.52431	0.010	8.49938	30.00000	Averaged
75 1-Chlorohexane	0.33035	0.32814	0.32814	0.000	-0.66768	30.00000	Averaged
58 1,4-Dioxane	0.00273	0.00267	0.00267	0.001	-2.06096	40.00000	Averaged
62 2-Nitropropane	248	250	0.10744	0.000	-0.91469	30.00000	Linear
85 cis-1,4-Dichloro-2-butene	0.30111	0.34413	0.34413	0.010	14.29028	30.00000	Averaged
86 Cyclohexanone	0.02440	0.01830	0.01830	0.010	-24.97856	40.00000	Averaged
90 trans-1,4-Dichloro-2-butene	0.28111	0.32198	0.32198	0.010	14.53904	30.00000	Averaged
98 Pentachloroethane	254	250	0.23651	0.010	1.45004	30.00000	Linear
104 Benzyl chloride	1.28813	1.28543	1.28543	0.010	-0.20940	30.00000	Averaged
107 bis(2-Chloroisopropyl)ether	0.44594	0.46332	0.46332	0.010	3.89777	30.00000	Averaged
48 1,2-Dichloroethane-d4	0.48820	0.45554	0.45554	0.010	-6.69163	30.00000	Averaged
65 Toluene-d8	1.68167	1.70100	1.70100	0.010	1.14955	30.00000	Averaged
87 Bromofluorobenzene	1.25356	1.23878	1.23878	0.010	-1.17885	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i                      Injection Date: 05-MAR-2010 03:14  
Lab File ID: 1a431.d                      Init. Cal. Date(s): 04-MAR-2010    05-MAR-2010  
Analysis Type: WATER                      Init. Cal. Times:    17:28                      02:12  
Lab Sample ID: W1VM100304-23 Quant Type: ISTD  
Method: /chem/VOA1.i/030410v1/VOA1-8260ox-030410.m

Average %D / Drift Results.	
=====	
Calculated Average %D/Drift =	5.83118
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030410v1/1a431.d

Lab Smp Id: W1VM100304-23

Client Smp ID: VSTD250S

Inj Date : 05-MAR-2010 03:14

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |W1VM100304-23|S-ICV|1|VOAF|1|

Misc Info : GEL 5mL N/A UVM100304-08A/UVM100125-08E

Comment :

Method : /chem/VOA1.i/030410v1/VOA1-8260ox-030410.m

Meth Date : 05-Mar-2010 11:12 dav01267

Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: 1a428.d

Als bottle: 31

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubS+SS.sub

Target Version: 3.50

Concentration Formula: Amt \* DF \* (Uf/Vo) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT ( ug/l)	ON-COL ( ug/l)
4 Chlorotrifluoroethylene	116	4.875	4.875	(0.357)	422849	150.000	176
8 2-Chloro-1,1,1-trifluoroethane	118	6.275	6.275	(0.459)	984214	150.000	153
13 Acrolein	56	8.940	8.940	(0.654)	317253	250.000	253
14 Trichlorotrifluoroethane	101	8.963	8.963	(0.656)	1227444	250.000	233
17 Isopropyl Alcohol	45	9.437	9.437	(0.690)	1329758	2500.00	2670
20 Allyl chloride	76	9.838	9.838	(0.720)	627804	250.000	261
24 tert-Butyl Alcohol	59	10.183	10.183	(0.745)	2117018	2500.00	2650
27 Acrylonitrile	53	10.662	10.662	(0.780)	640684	250.000	263
28 Isopropyl ether	45	11.182	11.182	(0.818)	1219773	50.0000	49.3
31 2-Chloro-1,3-butadiene	53	11.385	11.385	(0.833)	587773	50.0000	59.1
32 Ethyl tert-butyl ether	59	11.744	11.744	(0.859)	1033549	50.0000	51.1
37 Propionitrile	54	12.393	12.393	(0.906)	251923	250.000	251
34 Ethyl acetate	43	12.153	12.153	(0.889)	1590381	250.000	234
40 Methacrylonitrile	41	12.549	12.549	(0.918)	1356599	250.000	256
38 Tetrahydrofuran	42	12.531	12.531	(0.639)	564841	250.000	248
46 Isobutyl alcohol	41	13.097	13.097	(0.958)	654432	2500.00	2530



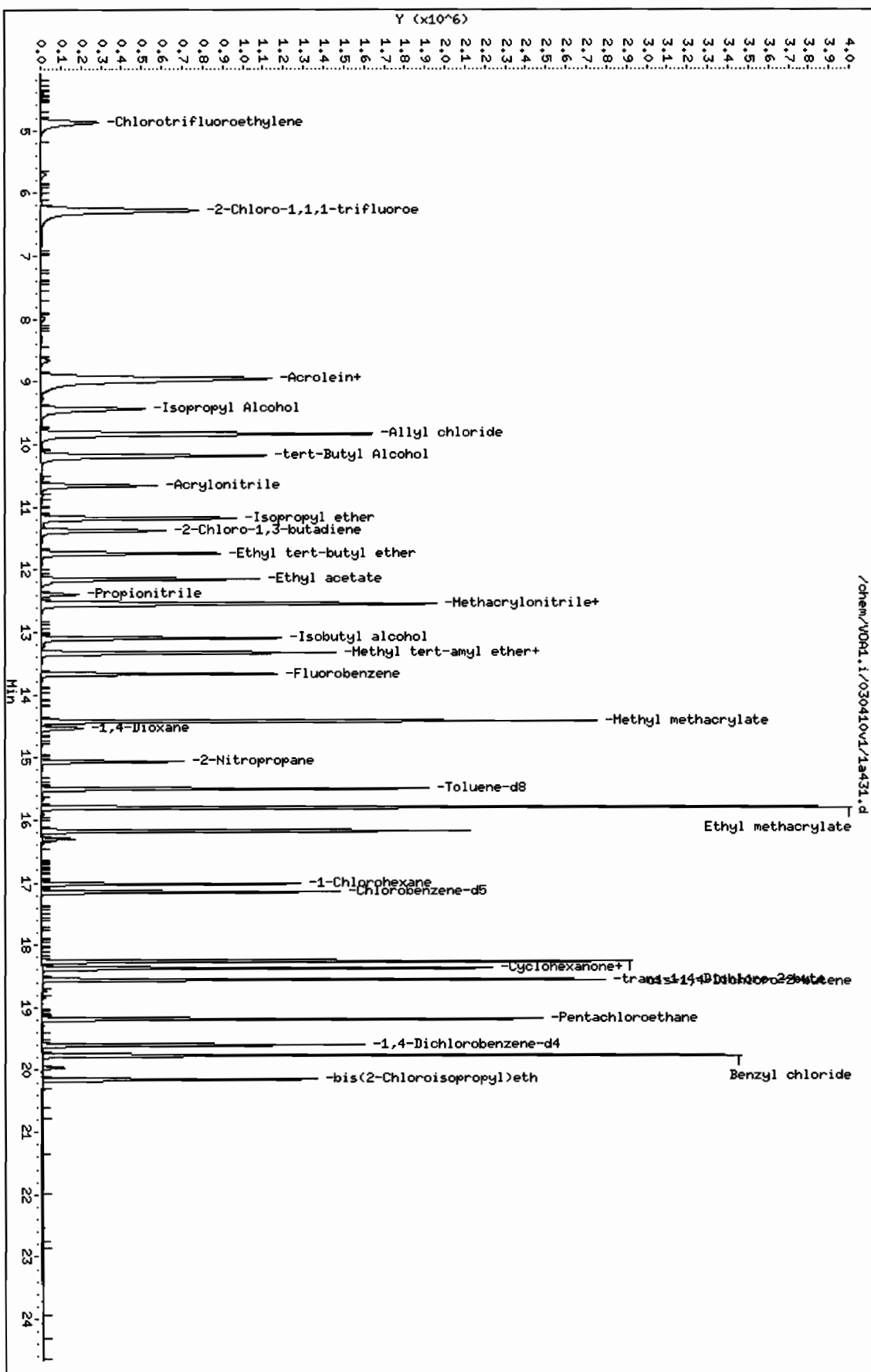
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
=====	=====	==	=====	=====	=====	=====	=====
49 Methyl tert-amyl ether	73	13.336	13.336	(0.975)	813183	50.0000	52.4
56 Methyl methacrylate	69	14.427	14.427	(1.055)	1077534	250.000	266
67 Ethyl methacrylate	69	15.799	15.799	(0.921)	2089094	250.000	271
75 1-Chlorohexane	55	17.019	17.019	(1.245)	359829	50.0000	49.7
58 1,4-Dioxane	88	14.538	14.538	(1.063)	146478	2500.00	2450
62 2-Nitropropane	43	15.067	15.067	(1.102)	589084	250.000	248
85 cis-1,4-Dichloro-2-butene	53	18.266	18.266	(0.932)	765022	250.000	286
86 Cyclohexanone	55	18.377	18.377	(1.072)	364656	1250.00	938
90 trans-1,4-Dichloro-2-butene	53	18.556	18.556	(0.947)	715772	250.000	286
98 Pentachloroethane	167	19.187	19.187	(0.979)	525774	250.000	254 (A)
104 Benzyl chloride	91	19.762	19.762	(1.008)	2857558	250.000	249
107 bis(2-Chloroisopropyl)ether	45	20.153	20.153	(1.028)	1029978	250.000	260
* 52 Fluorobenzene	96	13.672	13.668	(1.000)	1096559	50.0000	
* 76 Chlorobenzene-d5	117	17.148	17.148	(1.000)	796894	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.601	19.601	(1.000)	444607	50.0000	
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	499522	50.0000	46.6
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	1355516	50.0000	50.6
\$ 87 Bromofluorobenzene	95	18.377	18.377	(0.938)	550772	50.0000	49.4

#### QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/V001.i/030410v1/1a431.d  
 Date: 05-MAR-2010 03:14  
 Client ID: VSTD2505  
 Sample Info: 141VH100304-231S-1CV111V04F111  
 Purge Volume: 5.0  
 Column phase: RTX-Volatiles

Instrument: V001.1  
 Operator: GRB2  
 Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 05-MAR-2010 10:31  
Lab File ID: 1a502.d Init. Cal. Date(s): 04-MAR-2010 05-MAR-2010  
Analysis Type: WATER Init. Cal. Times: 17:28 02:12  
Lab Sample ID: W1VM100305-01 Quant Type: ISTD  
Method: /chem/VOA1.i/030410v1/VOA1-8260ox-030410.m

COMPOUND	RRF / AMOUNT	RF50	CCAL	MIN	MAX	CURVE TYPE
			RRF50	RRF %D / %DRIFT	%D / %DRIFT	
1 Xylenes (total)	0.67887	0.70270	0.70270	0.050	3.50958	Averaged
2 1,2-Dichloroethylene (total)	0.27972	0.29253	0.29253	0.050	4.58161	Averaged
3 1,3-Dichloropropylene	0.67789	0.73948	0.73948	0.050	9.08598	Averaged
5 Dichlorodifluoromethane	0.25158	0.28147	0.28147	0.050	11.88053	Averaged
6 Chloromethane	0.43647	0.44111	0.44111	0.100	1.06208	Averaged spcc
7 Vinyl chloride	0.33868	0.35060	0.35060	0.050	3.51988	Averaged ccc
9 Bromomethane	0.20035	0.21019	0.21019	0.050	4.91190	Averaged
10 Chloroethane	0.21782	0.22685	0.22685	0.050	4.14710	Averaged
11 Trichlorofluoromethane	0.42547	0.47389	0.47389	0.050	11.38080	Averaged
12 Ethyl Ether	0.27990	0.29643	0.29643	0.010	5.90323	Averaged
16 Acetone	0.29620	0.26818	0.26818	0.000	-9.46030	Averaged
22 Acetonitrile	0.04350	0.04236	0.04236	0.010	-2.62705	Averaged
15 1,1-Dichloroethylene	0.55098	0.58968	0.58968	0.050	7.02346	Averaged ccc
21 Methyl acetate	0.26149	0.25709	0.25709	0.010	-1.68238	Averaged
18 Iodomethane	0.40759	0.41313	0.41313	0.050	1.35752	Averaged
23 Methylene chloride	52.61887	50.00000	0.31598	0.000	5.23774	Linear
19 Carbon disulfide	0.83577	0.92684	0.92684	0.050	10.89737	Averaged
25 tert-Butyl methyl ether	0.92853	0.95444	0.95444	0.050	2.79026	Averaged
26 trans-1,2-Dichloroethylene	0.26935	0.28551	0.28551	0.050	6.00229	Averaged
29 Vinyl acetate	0.60100	0.73912	0.73912	0.010	22.98050	Averaged
30 1,1-Dichloroethane	0.57897	0.60129	0.60129	0.100	3.85597	Averaged spcc
35 2-Butanone	0.31398	0.28165	0.28165	0.030	-10.29650	Averaged
36 cis-1,2-Dichloroethylene	0.29009	0.29955	0.29955	0.050	3.26249	Averaged
33 2,2-Dichloropropane	0.36832	0.40745	0.40745	0.050	10.62596	Averaged
41 Chloroform	0.57778	0.60477	0.60477	0.010	4.67163	Averaged ccc
39 Bromochloromethane	0.13153	0.13791	0.13791	0.010	4.85169	Averaged
43 1,1,1-Trichloroethane	0.42958	0.46035	0.46035	0.010	7.16254	Averaged
42 Cyclohexane	0.55132	0.59714	0.59714	0.010	8.31206	Averaged
45 1,1-Dichloropropene	0.41669	0.45350	0.45350	0.010	8.83380	Averaged
53 n-Butyl alcohol	0.01014	0.01140	0.01140	0.001	12.38769	Averaged
44 Carbon tetrachloride	0.41092	0.45961	0.45961	0.010	11.84942	Averaged
48 1,2-Dichloroethane-d4	0.48820	0.54295	0.54295	0.010	11.21406	Averaged
51 1,2-Dichloroethane	0.51593	0.55085	0.55085	0.010	6.76938	Averaged
47 Benzene	1.14445	1.16427	1.16427	0.010	1.73166	Averaged
50 Cyclohexene	0.42588	0.45113	0.45113	0.010	5.92886	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 05-MAR-2010 10:31  
Lab File ID: 1a502.d Init. Cal. Date(s): 04-MAR-2010 05-MAR-2010  
Analysis Type: WATER Init. Cal. Times: 17:28 02:12  
Lab Sample ID: W1VM100305-01 Quant Type: ISTD  
Method: /chem/VOA1.i/030410v1/VOA1-8260ox-030410.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
54 Trichloroethylene	0.29541	0.30343	0.30343	0.010	2.71395	30.00000	Averaged
57 1,2-Dichloropropane	0.31486	0.32789	0.32789	0.010	4.13811	20.00000	Averaged ccc
55 Methylcyclohexane	0.46690	0.50670	0.50670	0.010	8.52348	30.00000	Averaged
60 Bromodichloromethane	0.42946	0.47700	0.47700	0.010	11.07011	30.00000	Averaged
59 Dibromomethane	0.18749	0.19313	0.19313	0.010	3.00557	30.00000	Averaged
61 2-Chloroethylvinyl ether	303	250	0.03059	0.000	21.20753	30.00000	Linear
64 4-Methyl-2-pentanone	0.19796	0.20254	0.20254	0.010	2.31048	40.00000	Averaged
63 cis-1,3-Dichloropropylene	0.49909	0.55038	0.55038	0.010	10.27752	30.00000	Averaged
65 Toluene-d8	1.68167	1.69864	1.69864	0.010	1.00920	30.00000	Averaged
66 Toluene	0.96439	0.98216	0.98216	0.010	1.84342	20.00000	Averaged ccc
68 trans-1,3-Dichloropropylene	0.67167	0.74386	0.74386	0.010	10.74782	30.00000	Averaged
69 1,1,2-Trichloroethane	0.29796	0.30083	0.30083	0.010	0.96395	30.00000	Averaged
71 2-Hexanone	0.55226	0.51037	0.51037	0.010	-7.58551	40.00000	Averaged
72 1,3-Dichloropropane	0.64273	0.65261	0.65261	0.010	1.53845	30.00000	Averaged
70 Tetrachloroethylene	0.30803	0.31428	0.31428	0.010	2.02844	30.00000	Averaged
73 Dibromochloromethane	0.39459	0.42408	0.42408	0.010	7.47363	30.00000	Averaged
74 1,2-Dibromoethane	0.35160	0.36245	0.36245	0.010	3.08438	30.00000	Averaged
77 Chlorobenzene	1.01868	1.05248	1.05248	0.300	3.31789	30.00000	Averaged spcc
79 1,1,1,2-Tetrachloroethane	0.36870	0.39424	0.39424	0.010	6.92719	30.00000	Averaged
78 Ethylbenzene	1.92669	1.99643	1.99643	0.010	3.61924	20.00000	Averaged ccc
80 m,p-Xylenes	0.68306	0.70413	0.70413	0.010	3.08515	30.00000	Averaged
81 o-Xylene	0.67051	0.69984	0.69984	0.010	4.37431	30.00000	Averaged
82 Styrene	1.11978	1.22440	1.22440	0.010	9.34244	30.00000	Averaged
83 Bromoform	0.46660	0.52379	0.52379	0.100	12.25768	30.00000	Averaged spcc
84 Isopropylbenzene	3.39914	3.56476	3.56476	0.010	4.87255	30.00000	Averaged
88 1,1,2,2-Tetrachloroethane	0.84565	0.87401	0.87401	0.300	3.35316	30.00000	Averaged spcc
87 Bromofluorobenzene	1.25356	1.28252	1.28252	0.010	2.31038	30.00000	Averaged
92 1,2,3-Trichloropropane	0.24143	0.24442	0.24442	0.010	1.23888	30.00000	Averaged
91 Bromobenzene	0.81535	0.83587	0.83587	0.010	2.51718	30.00000	Averaged
89 n-Propylbenzene	4.15838	4.37662	4.37662	0.010	5.24800	30.00000	Averaged
94 2-Chlorotoluene	3.00922	3.13432	3.13432	0.010	4.15715	30.00000	Averaged
93 1,3,5-Trimethylbenzene	2.96733	3.15153	3.15153	0.010	6.20738	30.00000	Averaged
95 4-Chlorotoluene	2.72697	2.87524	2.87524	0.010	5.43717	30.00000	Averaged
96 tert-Butylbenzene	2.38074	2.48278	2.48278	0.010	4.28576	30.00000	Averaged
97 1,2,4-Trimethylbenzene	3.08424	3.23504	3.23504	0.010	4.88953	30.00000	Averaged
99 sec-Butylbenzene	3.77742	3.96034	3.96034	0.010	4.84263	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 05-MAR-2010 10:31  
Lab File ID: 1a502.d Init. Cal. Date(s): 04-MAR-2010 05-MAR-2010  
Analysis Type: WATER Init. Cal. Times: 17:28 02:12  
Lab Sample ID: W1VM100305-01 Quant Type: ISTD  
Method: /chem/VOA1.i/030410v1/VOA1-8260ox-030410.m

COMPOUND	RRF / AMOUNT	RF50	CCAL	MIN	MAX	CURVE TYPE
			RRF50	RRF	%D / %DRIFT	%D / %DRIFT
100 4-Isopropyltoluene	2.94220	3.12737	3.12737	0.010	6.29344	30.00000
101 1,3-Dichlorobenzene	1.58600	1.61043	1.61043	0.010	1.54014	30.00000
103 1,4-Dichlorobenzene	1.59809	1.62423	1.62423	0.010	1.63593	30.00000
105 n-Butylbenzene	3.17694	3.41120	3.41120	0.010	7.37353	30.00000
106 1,2-Dichlorobenzene	1.51488	1.54066	1.54066	0.010	1.70191	30.00000
108 1,2-Dibromo-3-chloropropane	0.16661	0.18123	0.18123	0.010	8.77975	30.00000
109 1,2,4-Trichlorobenzene	1.17236	1.22250	1.22250	0.010	4.27675	30.00000
110 Hexachlorobutadiene	0.71666	0.74291	0.74291	0.010	3.66327	30.00000
111 Naphthalene	2.63897	2.62914	2.62914	0.010	-0.37230	30.00000
112 1,2,3-Trichlorobenzene	1.06740	1.10036	1.10036	0.010	3.08807	30.00000

Average %D / Drift Results.

Calculated Average %D/Drift = 5.83118

Maximum Average %D/Drift = 20.00000

\* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030410v1/1a502.d

Lab Smp Id: W1VM100305-01

Client Smp ID: VSTD050

Inj Date : 05-MAR-2010 10:31

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |W1VM100305-01|ICV/CCV/LCS|1|VOAF|1|

Misc Info : GEL 5mL N/A UVM100220-01D/IVM100304-01

Comment :

Method : /chem/VOA1.i/030410v1/VOA1-8260ox-030410.m

Meth Date : 05-Mar-2010 11:12 dav01267 Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: 1a428.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubL+.sub

Target Version: 3.50

Concentration Formula: Amt \* DF \* (Uf/Vo) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable

Local Compound Variable

		QUANT SIG				AMOUNTS	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)
							ON-COL ( ug/l)
M 1 Xylenes (total)	106					1696711	150.000
M 2 1,2-Dichloroethylene (total)	96					628940	100.000
M 3 1,3-Dichloropropylene	75					1190353	100.000
5 Dichlorodifluoromethane	85	4.976	4.976	(0.364)		302577	50.0000
6 Chloromethane	50	5.528	5.528	(0.404)		474188	50.0000
7 Vinyl chloride	62	5.901	5.901	(0.432)		376890	50.0000
9 Bromomethane	96	6.929	6.929	(0.507)		225958	50.0000
10 Chloroethane	64	7.201	7.201	(0.527)		243865	50.0000
11 Trichlorofluoromethane	101	7.813	7.813	(0.572)		509427	50.0000
12 Ethyl Ether	59	8.457	8.457	(0.619)		318658	50.0000
16 Acetone	43	9.240	9.240	(0.676)		1441449	250.000
22 Acetonitrile	41	9.962	9.962	(0.729)		1138311	1250.00
15 1,1-Dichloroethylene	61	9.065	9.065	(0.663)		633902	50.0000
21 Methyl acetate	43	9.820	9.820	(0.718)		1381847	250.000
18 Iodomethane	142	9.451	9.451	(0.692)		2220549	250.000
23 Methylene chloride	84	10.123	10.123	(0.741)		339679	50.0000

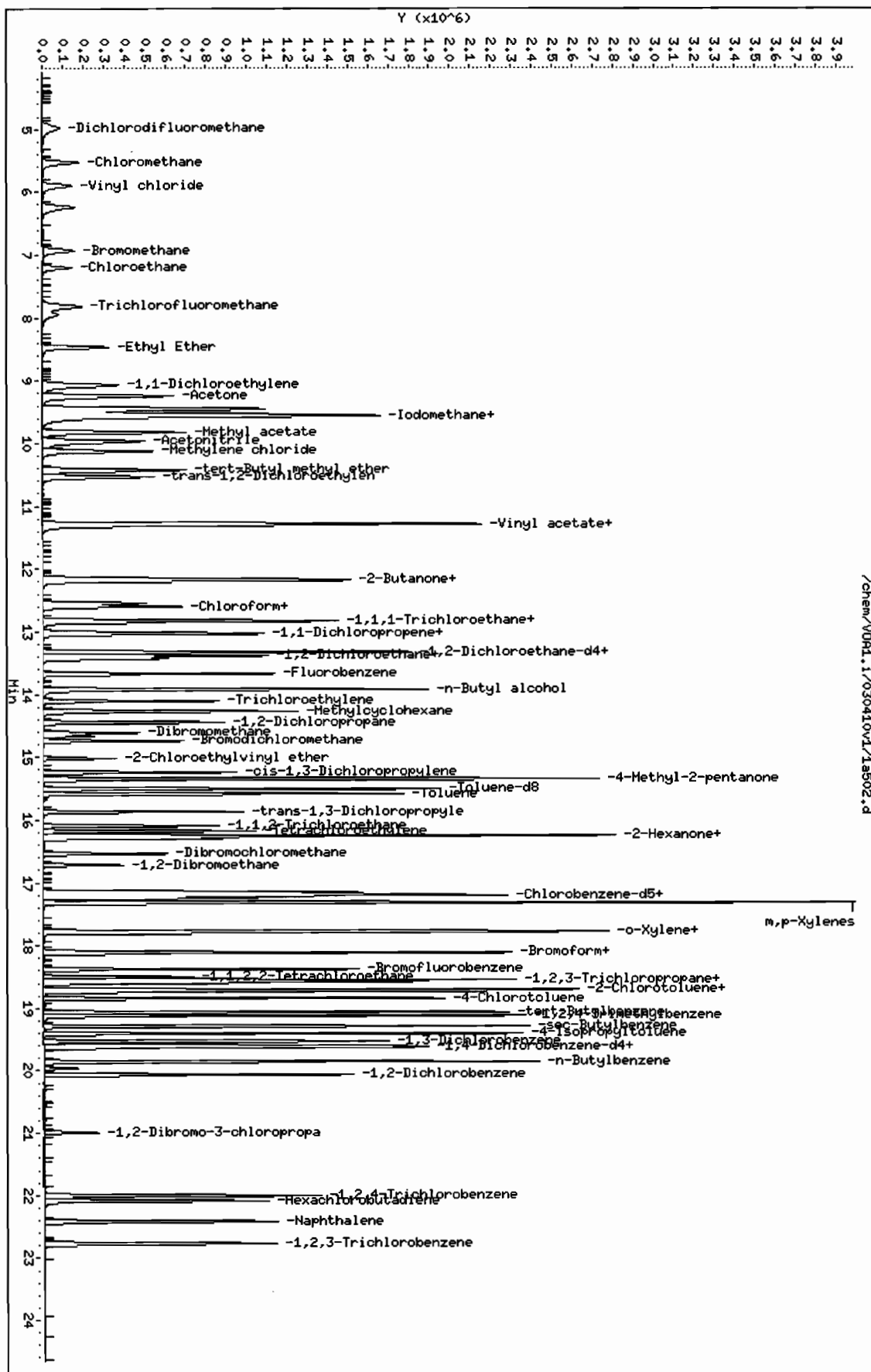
Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT ( ug/l)	ON-COL ( ug/l)
=====	=====	==	=====	=====	=====	=====	=====
19 Carbon disulfide	76	9.553	9.553	(0.699)	4981747	250.000	277
25 tert-Butyl methyl ether	73	10.423	10.423	(0.763)	1026015	50.0000	51.4
26 trans-1,2-Dichloroethylene	96	10.533	10.533	(0.771)	306926	50.0000	53.0
29 Vinyl acetate	43	11.279	11.279	(0.825)	3972726	250.000	307
30 1,1-Dichloroethane	63	11.306	11.306	(0.827)	646385	50.0000	51.9
35 2-Butanone	43	12.172	12.172	(0.891)	1513863	250.000	224
36 cis-1,2-Dichloroethylene	96	12.190	12.190	(0.892)	322014	50.0000	51.6
33 2,2-Dichloropropane	77	12.149	12.149	(0.889)	438011	50.0000	55.3
41 Chloroform	83	12.600	12.600	(0.922)	650126	50.0000	52.3
39 Bromochloromethane	128	12.545	12.545	(0.918)	148250	50.0000	52.4
43 1,1,1-Trichloroethane	97	12.835	12.835	(0.939)	494870	50.0000	53.6
42 Cyclohexane	56	12.825	12.825	(0.938)	641925	50.0000	54.2
45 1,1-Dichloropropene	75	13.037	13.037	(0.954)	487506	50.0000	54.4
53 n-Butyl alcohol	56	13.916	13.916	(1.018)	1225614	5000.00	5620
44 Carbon tetrachloride	117	13.010	13.010	(0.952)	494082	50.0000	55.9
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	583670	50.0000	55.6
51 1,2-Dichloroethane	62	13.428	13.428	(0.982)	592164	50.0000	53.4
47 Benzene	78	13.318	13.318	(0.974)	1251578	50.0000	50.9
50 Cyclohexene	54	13.382	13.382	(0.979)	484963	50.0000	53.0
* 52 Fluorobenzene	96	13.668	13.668	(1.000)	1074993	50.0000	
54 Trichloroethylene	95	14.105	14.105	(1.032)	326181	50.0000	51.4
57 1,2-Dichloropropane	63	14.446	14.446	(1.057)	352482	50.0000	52.1
55 Methylcyclohexane	83	14.266	14.266	(1.044)	544700	50.0000	54.3
60 Dibromodichloromethane	83	14.740	14.740	(1.078)	512774	50.0000	55.5
59 Dibromomethane	93	14.611	14.611	(1.069)	207611	50.0000	51.5
61 2-Chloroethylvinyl ether	63	15.017	15.017	(1.099)	164440	250.000	303
64 4-Methyl-2-pentanone	58	15.343	15.343	(0.895)	815059	250.000	256
63 cis-1,3-Dichloropropylene	75	15.242	15.242	(1.115)	591657	50.0000	55.1
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	1367158	50.0000	50.5
66 Toluene	92	15.583	15.583	(0.909)	790500	50.0000	50.9
68 trans-1,3-Dichloropropylene	75	15.868	15.868	(0.925)	598696	50.0000	55.4
69 1,1,2-Trichloroethane	83	16.094	16.094	(0.939)	242124	50.0000	50.5
71 2-Hexanone	43	16.255	16.255	(0.948)	2053864	250.000	231
72 1,3-Dichloropropane	76	16.296	16.296	(0.950)	525260	50.0000	50.8
70 Tetrachloroethylene	164	16.176	16.176	(0.943)	252952	50.0000	51.0
73 Dibromochloromethane	129	16.535	16.535	(0.964)	341319	50.0000	53.7
74 1,2-Dibromoethane	107	16.715	16.715	(0.975)	291718	50.0000	51.5
* 76 Chlorobenzene-d5	117	17.148	17.148	(1.000)	804855	50.0000	
77 Chlorobenzene	112	17.180	17.180	(1.002)	847090	50.0000	51.6
79 1,1,1,2-Tetrachloroethane	131	17.249	17.249	(1.006)	317308	50.0000	53.5
78 Ethylbenzene	91	17.208	17.208	(1.003)	1606834	50.0000	51.8
80 m,p-Xylenes	106	17.323	17.323	(1.010)	1133444	100.000	103
81 o-Xylene	106	17.769	17.769	(1.036)	563267	50.0000	52.2
82 Styrene	104	17.792	17.792	(1.038)	985464	50.0000	54.7
83 Bromoform	173	18.096	18.096	(0.923)	232402	50.0000	56.1
84 Isopropylbenzene	105	18.114	18.114	(0.924)	1581663	50.0000	52.4
88 1,1,2,2-Tetrachloroethane	83	18.496	18.496	(0.944)	387792	50.0000	51.7

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
=====	=====	==	=====	=====	=====	=====	=====
\$ 87 Bromofluorobenzene	95	18.377	18.377	(0.938)	569048	50.0000	51.2
92 1,2,3-Trichloropropane	110	18.593	18.593	(0.949)	108449	50.0000	50.6
91 Bromobenzene	156	18.579	18.579	(0.948)	370872	50.0000	51.2
89 n-Propylbenzene	91	18.547	18.547	(0.946)	1941878	50.0000	52.6
94 2-Chlorotoluene	91	18.731	18.731	(0.956)	1390679	50.0000	52.1
93 1,3,5-Trimethylbenzene	105	18.704	18.704	(0.954)	1398313	50.0000	53.1
95 4-Chlorotoluene	91	18.842	18.842	(0.961)	1275725	50.0000	52.7
96 tert-Butylbenzene	119	19.063	19.063	(0.973)	1101593	50.0000	52.1
97 1,2,4-Trimethylbenzene	105	19.122	19.122	(0.976)	1435370	50.0000	52.4
99 sec-Butylbenzene	105	19.288	19.288	(0.984)	1757181	50.0000	52.4
100 4-Isopropyltoluene	119	19.408	19.408	(0.990)	1387594	50.0000	53.1
101 1,3-Dichlorobenzene	146	19.532	19.532	(0.996)	714537	50.0000	50.8
* 102 1,4-Dichlorobenzene-d4	152	19.601	19.601	(1.000)	443694	50.0000	
103 1,4-Dichlorobenzene	146	19.624	19.624	(1.001)	720661	50.0000	50.8
105 n-Butylbenzene	91	19.854	19.854	(1.013)	1513528	50.0000	53.7
106 1,2-Dichlorobenzene	146	20.066	20.066	(1.024)	683582	50.0000	50.8
108 1,2-Dibromo-3-chloropropane	157	20.987	20.987	(1.071)	80412	50.0000	54.4
109 1,2,4-Trichlorobenzene	180	22.009	22.009	(1.123)	542417	50.0000	52.1
110 Hexachlorobutadiene	225	22.091	22.091	(1.127)	329624	50.0000	51.8
111 Naphthalene	128	22.418	22.418	(1.144)	1166534	50.0000	49.8
112 1,2,3-Trichlorobenzene	180	22.773	22.773	(1.162)	488224	50.0000	51.5



Data File: /chem/V0041.i/030410v1/1a502.d  
 Date : 05-MAR-2010 10:31  
 Client ID: VSTD050  
 Sample Info: 144VH100305-01.ICV/CCV/LCS11.V00AF111  
 Purge Volume: 5.0  
 Column phase: RTX-Volatiles

Instrument: V0041.i  
 Operator: GRB2  
 Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 08-MAR-2010 07:57  
Lab File ID: 1b102.d Init. Cal. Date(s): 04-MAR-2010 05-MAR-2010  
Analysis Type: WATER Init. Cal. Times: 17:28 02:12  
Lab Sample ID: W1VM100308-01 Quant Type: ISTD  
Method: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Xylenes (total)	0.67887	0.71754	0.71754	0.050	5.69625	30.00000	Averaged
2 1,2-Dichloroethylene (total)	0.27972	0.28345	0.28345	0.050	1.33578	30.00000	Averaged
3 1,3-Dichloropropylene	0.67789	0.75728	0.75728	0.050	11.71154	30.00000	Averaged
5 Dichlorodifluoromethane	0.25158	0.29173	0.29173	0.050	15.95789	30.00000	Averaged
6 Chloromethane	0.43647	0.50071	0.50071	0.100	14.71814	30.00000	Averaged spcc
7 Vinyl chloride	0.33868	0.37337	0.37337	0.050	10.24298	20.00000	Averaged ccc
9 Bromomethane	0.20035	0.21308	0.21308	0.050	6.35323	30.00000	Averaged
10 Chloroethane	0.21782	0.23959	0.23959	0.050	9.99541	30.00000	Averaged
11 Trichlorofluoromethane	0.42547	0.52347	0.52347	0.050	23.03409	30.00000	Averaged
12 Ethyl Ether	0.27990	0.30677	0.30677	0.010	9.59776	30.00000	Averaged
16 Acetone	0.29620	0.29949	0.29949	0.000	1.10962	40.00000	Averaged
22 Acetonitrile	0.04350	0.04120	0.04120	0.010	-5.29302	30.00000	Averaged
15 1,1-Dichloroethylene	0.55098	0.58916	0.58916	0.050	6.92901	20.00000	Averaged ccc
21 Methyl acetate	0.26149	0.25540	0.25540	0.010	-2.33024	40.00000	Averaged
18 Iodomethane	0.40759	0.39655	0.39655	0.050	-2.71079	30.00000	Averaged
23 Methylene chloride	49.89398	50.00000	0.29991	0.000	-0.21205	30.00000	Linear
19 Carbon disulfide	0.83577	0.80146	0.80146	0.050	-4.10517	30.00000	Averaged
25 tert-Butyl methyl ether	0.92853	0.93120	0.93120	0.050	0.28732	30.00000	Averaged
26 trans-1,2-Dichloroethylene	0.26935	0.27299	0.27299	0.050	1.35220	30.00000	Averaged
29 Vinyl acetate	0.60100	0.71788	0.71788	0.010	19.44652	40.00000	Averaged
30 1,1-Dichloroethane	0.57897	0.60117	0.60117	0.100	3.83567	30.00000	Averaged spcc
35 2-Butanone	0.31398	0.32136	0.32136	0.030	2.35201	40.00000	Averaged
36 cis-1,2-Dichloroethylene	0.29009	0.29392	0.29392	0.050	1.32052	30.00000	Averaged
33 2,2-Dichloropropane	0.36832	0.41842	0.41842	0.050	13.60197	30.00000	Averaged
41 Chloroform	0.57778	0.62255	0.62255	0.010	7.74766	20.00000	Averaged ccc
39 Bromochloromethane	0.13153	0.13239	0.13239	0.010	0.65273	30.00000	Averaged
43 1,1,1-Trichloroethane	0.42958	0.48150	0.48150	0.010	12.08750	30.00000	Averaged
42 Cyclohexane	0.55132	0.57537	0.57537	0.010	4.36220	30.00000	Averaged
45 1,1-Dichloropropene	0.41669	0.44304	0.44304	0.010	6.32365	30.00000	Averaged
53 n-Butyl alcohol	0.01014	0.01063	0.01063	0.001	4.78716	40.00000	Averaged
44 Carbon tetrachloride	0.41092	0.48073	0.48073	0.010	16.98731	30.00000	Averaged
48 1,2-Dichloroethane-d4	0.48820	0.58100	0.58100	0.010	19.00790	30.00000	Averaged
51 1,2-Dichloroethane	0.51593	0.57167	0.57167	0.010	10.80480	30.00000	Averaged
47 Benzene	1.14445	1.13668	1.13668	0.010	-0.67890	30.00000	Averaged
50 Cyclohexene	0.42588	0.46494	0.46494	0.010	9.17036	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 08-MAR-2010 07:57  
Lab File ID: 1b102.d Init. Cal. Date(s): 04-MAR-2010 05-MAR-2010  
Analysis Type: WATER Init. Cal. Times: 17:28 02:12  
Lab Sample ID: W1VM100308-01 Quant Type: ISTD  
Method: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
54 Trichloroethylene	0.29541	0.31205	0.31205	0.010	5.63446	30.00000	Averaged
57 1,2-Dichloropropane	0.31486	0.32619	0.32619	0.010	3.59858	20.00000	Averaged ccc
55 Methylcyclohexane	0.46690	0.49526	0.49526	0.010	6.07356	30.00000	Averaged
60 Bromodichloromethane	0.42946	0.49740	0.49740	0.010	15.82046	30.00000	Averaged
59 Dibromomethane	0.18749	0.19419	0.19419	0.010	3.57265	30.00000	Averaged
61 2-Chloroethylvinyl ether	348	250	0.03521	0.000	39.26051	30.00000	Linear <-
64 4-Methyl-2-pentanone	0.19796	0.20814	0.20814	0.010	5.14123	40.00000	Averaged
63 cis-1,3-Dichloropropylene	0.49909	0.55463	0.55463	0.010	11.12904	30.00000	Averaged
65 Toluene-d8	1.68167	1.72939	1.72939	0.010	2.83768	30.00000	Averaged
66 Toluene	0.96439	0.97887	0.97887	0.010	1.50148	20.00000	Averaged ccc
68 trans-1,3-Dichloropropylene	0.67167	0.76870	0.76870	0.010	14.44744	30.00000	Averaged
69 1,1,2-Trichloroethane	0.29796	0.30148	0.30148	0.010	1.18330	30.00000	Averaged
71 2-Hexanone	0.55226	0.60678	0.60678	0.010	9.87234	40.00000	Averaged
72 1,3-Dichloropropane	0.64273	0.64866	0.64866	0.010	0.92318	30.00000	Averaged
70 Tetrachloroethylene	0.30803	0.31499	0.31499	0.010	2.25786	30.00000	Averaged
73 Dibromochloromethane	0.39459	0.45031	0.45031	0.010	14.12176	30.00000	Averaged
74 1,2-Dibromoethane	0.35160	0.36176	0.36176	0.010	2.88907	30.00000	Averaged
77 Chlorobenzene	1.01868	1.04916	1.04916	0.300	2.99250	30.00000	Averaged spcc
79 1,1,1,2-Tetrachloroethane	0.36870	0.41919	0.41919	0.010	13.69404	30.00000	Averaged
78 Ethylbenzene	1.92669	2.08570	2.08570	0.010	8.25254	20.00000	Averaged ccc
80 m,p-Xylenes	0.68306	0.71911	0.71911	0.010	5.27802	30.00000	Averaged
81 o-Xylene	0.67051	0.71441	0.71441	0.010	6.54838	30.00000	Averaged
82 Styrene	1.11978	1.25477	1.25477	0.010	12.05435	30.00000	Averaged
83 Bromoform	0.46660	0.54302	0.54302	0.100	16.37979	30.00000	Averaged spcc
84 Isopropylbenzene	3.39914	3.67552	3.67552	0.010	8.13114	30.00000	Averaged
88 1,1,2,2-Tetrachloroethane	0.84565	0.88025	0.88025	0.300	4.09102	30.00000	Averaged spcc
87 Bromofluorobenzene	1.25356	1.31723	1.31723	0.010	5.07932	30.00000	Averaged
92 1,2,3-Trichloropropane	0.24143	0.24838	0.24838	0.010	2.87914	30.00000	Averaged
91 Bromobenzene	0.81535	0.83736	0.83736	0.010	2.69955	30.00000	Averaged
89 n-Propylbenzene	4.15838	4.53219	4.53219	0.010	8.98930	30.00000	Averaged
94 2-Chlorotoluene	3.00922	3.21333	3.21333	0.010	6.78274	30.00000	Averaged
93 1,3,5-Trimethylbenzene	2.96733	3.27285	3.27285	0.010	10.29602	30.00000	Averaged
95 4-Chlorotoluene	2.72697	2.94393	2.94393	0.010	7.95632	30.00000	Averaged
96 tert-Butylbenzene	2.38074	2.60227	2.60227	0.010	9.30486	30.00000	Averaged
97 1,2,4-Trimethylbenzene	3.08424	3.32570	3.32570	0.010	7.82890	30.00000	Averaged
99 sec-Butylbenzene	3.77742	4.11364	4.11364	0.010	8.90079	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 08-MAR-2010 07:57  
 Lab File ID: 1b102.d Init. Cal. Date(s): 04-MAR-2010 05-MAR-2010  
 Analysis Type: WATER Init. Cal. Times: 17:28 02:12  
 Lab Sample ID: W1VM100308-01 Quant Type: ISTD  
 Method: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	MAX %D / %DRIFT	CURVE TYPE
100 4-Isopropyltoluene	2.94220	3.22672	3.22672	0.010	9.67040	Averaged
101 1,3-Dichlorobenzene	1.58600	1.62920	1.62920	0.010	2.72371	Averaged
103 1,4-Dichlorobenzene	1.59809	1.65697	1.65697	0.010	3.68447	Averaged
105 n-Butylbenzene	3.17694	3.55284	3.55284	0.010	11.83193	Averaged
106 1,2-Dichlorobenzene	1.51488	1.57215	1.57215	0.010	3.78068	Averaged
108 1,2-Dibromo-3-chloropropane	0.16661	0.17757	0.17757	0.010	6.58293	Averaged
109 1,2,4-Trichlorobenzene	1.17236	1.20388	1.20388	0.010	2.68826	Averaged
110 Hexachlorobutadiene	0.71666	0.77372	0.77372	0.010	7.96323	Averaged
111 Naphthalene	2.63897	2.52722	2.52722	0.010	-4.23434	Averaged
112 1,2,3-Trichlorobenzene	1.06740	1.05069	1.05069	0.010	-1.56594	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.52183

Maximun Average %D/Drift = 20.00000

\* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b102.d

Lab Smp Id: W1VM100308-01

Client Smp ID: VSTD050

Inj Date : 08-MAR-2010 07:57

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |W1VM100308-01|BFB/CCV|1|VOAF|1|

Misc Info : GEL 5mL N/A UVM100106-07D/UVM100222-07B

Comment :

Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Meth Date : 19-Mar-2010 09:00 eh1

Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: 1a428.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubL+.sub

Target Version: 3.50

Processing Host: prdsvr07

Concentration Formula: Amt \* DF \* (Uf/Vo) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable

Local Compound Variable

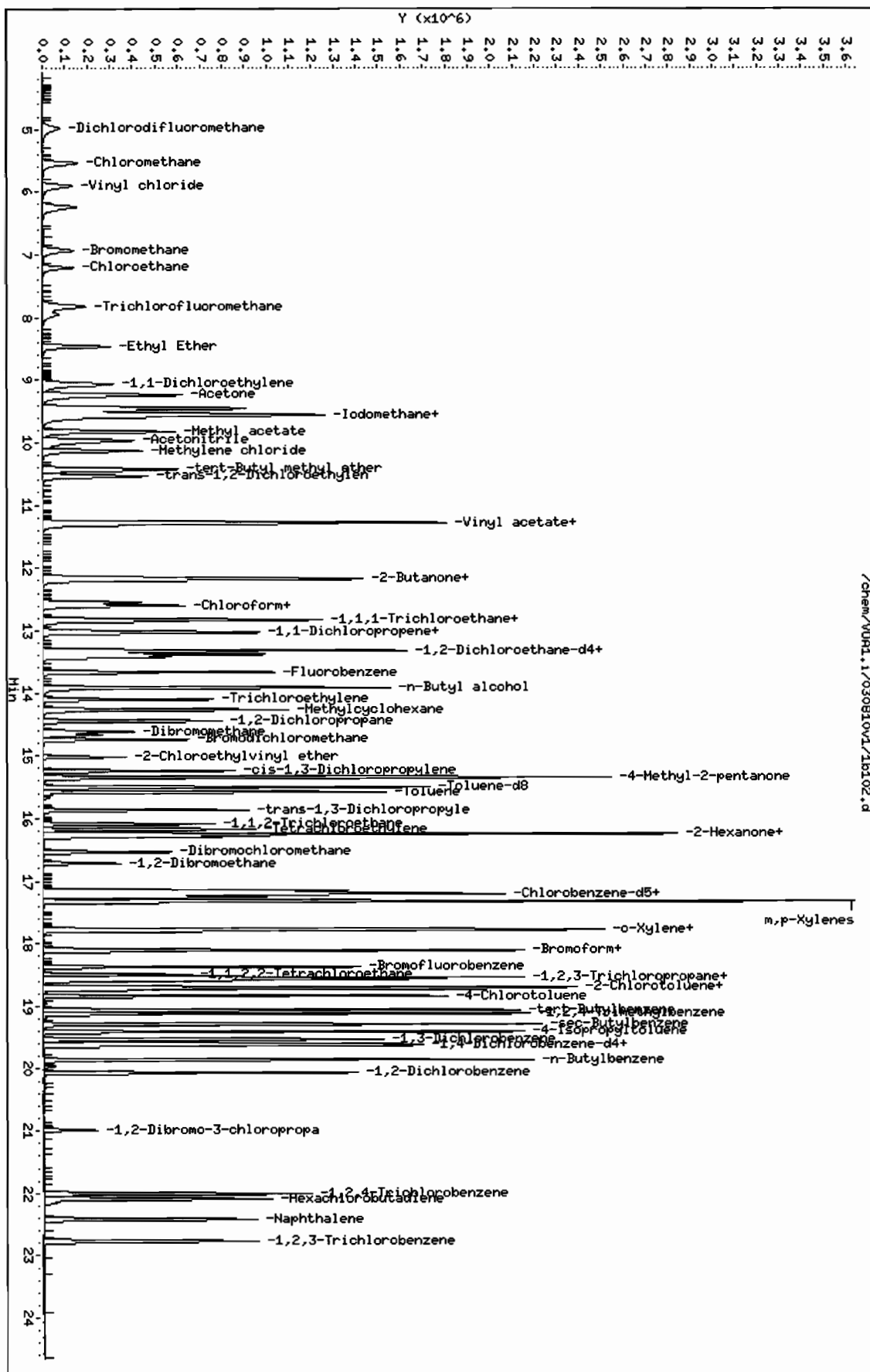
						AMOUNTS	
						CAL-AMT	ON-COL
						( ug/l)	( ug/l)
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		
=====	=====	==	=====	=====	=====	=====	=====
M 1 Xylenes (total)	106				1502135	150.000	158
M 2 1,2-Dichloroethylene (total)	96				531988	100.000	101
M 3 1,3-Dichloropropylene	75				1056883	100.000	113
5 Dichlorodifluoromethane	85	4.983	4.983	(0.364)	273758	50.0000	58.0
6 Chloromethane	50	5.535	5.535	(0.405)	469872	50.0000	57.4
7 Vinyl chloride	62	5.908	5.908	(0.432)	350370	50.0000	55.1
9 Bromomethane	96	6.938	6.938	(0.507)	199958	50.0000	53.2
10 Chloroethane	64	7.205	7.205	(0.527)	224834	50.0000	55.0
11 Trichlorofluoromethane	101	7.822	7.822	(0.572)	491227	50.0000	61.5
12 Ethyl Ether	59	8.466	8.466	(0.619)	287874	50.0000	54.8
16 Acetone	43	9.239	9.239	(0.676)	1405199	250.000	253
22 Acetonitrile	41	9.967	9.967	(0.729)	966473	1250.00	1180
15 1,1-Dichloroethylene	61	9.069	9.069	(0.663)	552871	50.0000	53.5
21 Methyl acetate	43	9.819	9.819	(0.718)	1198323	250.000	244
18 Iodomethane	142	9.456	9.456	(0.692)	1860605	250.000	243

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT ( ug/l)	ON-COL ( ug/l)
=====	=====	==	=====	=====	=====	=====
23 Methylene chloride	84	10.128	10.128 (0.741)	281434	50.0000	49.9
19 Carbon disulfide	76	9.557	9.557 (0.699)	3760458	250.000	240
25 tert-Butyl methyl ether	73	10.427	10.427 (0.763)	873842	50.0000	50.1
26 trans-1,2-Dichloroethylene	96	10.533	10.533 (0.770)	256175	50.0000	50.7
29 Vinyl acetate	43	11.283	11.283 (0.825)	3368302	250.000	299
30 1,1-Dichloroethane	63	11.306	11.306 (0.827)	564146	50.0000	51.9
35 2-Butanone	43	12.172	12.172 (0.890)	1507852	250.000	256
36 cis-1,2-Dichloroethylene	96	12.190	12.190 (0.892)	275813	50.0000	50.7
33 2,2-Dichloropropane	77	12.149	12.149 (0.889)	392644	50.0000	56.8
41 Chloroform	83	12.600	12.600 (0.922)	584200	50.0000	53.9
39 Bromochloromethane	128	12.549	12.549 (0.918)	124231	50.0000	50.3
43 1,1,1-Trichloroethane	97	12.834	12.834 (0.939)	451846	50.0000	56.0
42 Cyclohexane	56	12.825	12.825 (0.938)	539928	50.0000	52.2
45 1,1-Dichloropropene	75	13.037	13.037 (0.954)	415749	50.0000	53.2
53 n-Butyl alcohol	56	13.921	13.921 (1.018)	997535	5000.00	5240
44 Carbon tetrachloride	117	13.014	13.014 (0.952)	451117	50.0000	58.5
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327 (0.975)	545216	50.0000	59.5
51 1,2-Dichloroethane	62	13.428	13.428 (0.982)	536462	50.0000	55.4
47 Benzene	78	13.322	13.322 (0.974)	1066666	50.0000	49.7
50 Cyclohexene	54	13.382	13.382 (0.979)	436299	50.0000	54.6
* 52 Fluorobenzene	96	13.672	13.672 (1.000)	938406	50.0000	
54 Trichloroethylene	95	14.105	14.105 (1.032)	292833	50.0000	52.8
57 1,2-Dichloropropane	63	14.450	14.450 (1.057)	306102	50.0000	51.8
55 Methylcyclohexane	83	14.271	14.271 (1.044)	464757	50.0000	53.0
60 Dibromodichloromethane	83	14.740	14.740 (1.078)	466766	50.0000	57.9
59 Dibromomethane	93	14.611	14.611 (1.069)	182230	50.0000	51.8
61 2-Chloroethylvinyl ether	63	15.021	15.021 (1.099)	165227	250.000	348
64 4-Methyl-2-pentanone	58	15.348	15.348 (0.895)	726213	250.000	263
63 cis-1,3-Dichloropropylene	75	15.246	15.246 (1.115)	520470	50.0000	55.6
\$ 65 Toluene-d8	98	15.504	15.504 (0.904)	1206791	50.0000	51.4
66 Toluene	92	15.582	15.582 (0.909)	683067	50.0000	50.8
68 trans-1,3-Dichloropropylene	75	15.868	15.868 (0.925)	536413	50.0000	57.2
69 1,1,2-Trichloroethane	83	16.089	16.089 (0.938)	210379	50.0000	50.6
71 2-Hexanone	43	16.254	16.254 (0.948)	2117103	250.000	275
72 1,3-Dichloropropane	76	16.296	16.296 (0.950)	452644	50.0000	50.5
70 Tetrachloroethylene	164	16.181	16.181 (0.944)	219804	50.0000	51.1
73 Dibromochloromethane	129	16.535	16.535 (0.964)	314231	50.0000	57.1
74 1,2-Dibromoethane	107	16.715	16.715 (0.975)	252442	50.0000	51.4
* 76 Chlorobenzene-d5	117	17.147	17.147 (1.000)	697814	50.0000	
77 Chlorobenzene	112	17.180	17.180 (1.002)	732119	50.0000	51.5
79 1,1,1,2-Tetrachloroethane	131	17.249	17.249 (1.006)	292518	50.0000	56.8
78 Ethylbenzene	91	17.207	17.207 (1.003)	1455428	50.0000	54.1
80 m,p-Xylenes	106	17.322	17.322 (1.010)	1003607	100.000	105
81 o-Xylene	106	17.773	17.773 (1.036)	498528	50.0000	53.3
82 Styrene	104	17.792	17.792 (1.038)	875594	50.0000	56.0
83 Bromoform	173	18.096	18.096 (0.923)	210652	50.0000	58.2
84 Isopropylbenzene	105	18.114	18.114 (0.924)	1425828	50.0000	54.1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
=====	=====	==	=====	=====	=====	=====	=====
88 1,1,2,2-Tetrachloroethane	83	18.496	18.496	(0.944)	341470	50.0000	52.0
\$ 87 Bromofluorobenzene	95	18.376	18.376	(0.938)	510988	50.0000	52.5
92 1,2,3-Trichloropropane	110	18.593	18.593	(0.949)	96354	50.0000	51.4
91 Bromobenzene	156	18.579	18.579	(0.948)	324833	50.0000	51.3
89 n-Propylbenzene	91	18.547	18.547	(0.946)	1758151	50.0000	54.5
94 2-Chlorotoluene	91	18.731	18.731	(0.956)	1246531	50.0000	53.4
93 1,3,5-Trimethylbenzene	105	18.703	18.703	(0.954)	1269620	50.0000	55.1
95 4-Chlorotoluene	91	18.841	18.841	(0.961)	1142025	50.0000	54.0
96 tert-Butylbenzene	119	19.062	19.062	(0.973)	1009485	50.0000	54.6
97 1,2,4-Trimethylbenzene	105	19.122	19.122	(0.976)	1290123	50.0000	53.9
99 sec-Butylbenzene	105	19.288	19.288	(0.984)	1595783	50.0000	54.4
100 4-Isopropyltoluene	119	19.408	19.408	(0.990)	1251727	50.0000	54.8
101 1,3-Dichlorobenzene	146	19.532	19.532	(0.996)	632007	50.0000	51.4
* 102 1,4-Dichlorobenzene-d4	152	19.601	19.601	(1.000)	387925	50.0000	
103 1,4-Dichlorobenzene	146	19.628	19.628	(1.001)	642779	50.0000	51.8
105 n-Butylbenzene	91	19.854	19.854	(1.013)	1378235	50.0000	55.9
106 1,2-Dichlorobenzene	146	20.066	20.066	(1.024)	609877	50.0000	51.9
108 1,2-Dibromo-3-chloropropane	157	20.991	20.991	(1.071)	68885	50.0000	53.3
109 1,2,4-Trichlorobenzene	180	22.008	22.008	(1.123)	467015	50.0000	51.3
110 Hexachlorobutadiene	225	22.091	22.091	(1.127)	300147	50.0000	54.0
111 Naphthalene	128	22.418	22.418	(1.144)	980373	50.0000	47.9
112 1,2,3-Trichlorobenzene	180	22.772	22.772	(1.162)	407587	50.0000	49.2

Data File: /chem/V004.i/030810v1/1b102.d  
 Date : 08-MAR-2010 07:57  
 Client ID: VSTD050  
 Sample Info: 141W100308-01.BFB/CCV11.V004111  
 Purge Volume: 5.0  
 Column phase: RTX-Volatiles

Instrument: V004.1  
 Operator: CRB2  
 Column diameter: 0.25





GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 08-MAR-2010 09:28  
Lab File ID: 1b105.d Init. Cal. Date(s): 04-MAR-2010 05-MAR-2010  
Analysis Type: WATER Init. Cal. Times: 17:28 02:12  
Lab Sample ID: W1VM100308-03 Quant Type: ISTD  
Method: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Chlorotrifluoroethylene	181	150	0.13176	0.010	20.47032	30.00000	Linear
8 2-Chloro-1,1,1-trifluoroeth	0.29326	0.31551	0.31551	0.010	7.58612	30.00000	Averaged
13 Acrolein	0.05720	0.06690	0.06690	0.001	16.95469	30.00000	Averaged
14 Trichlorotrifluoroethane	0.23998	0.24875	0.24875	0.030	3.65779	30.00000	Averaged
17 Isopropyl Alcohol	0.02272	0.02569	0.02569	0.000	13.07319	40.00000	Averaged
20 Allyl chloride	282	250	0.12395	0.010	12.80048	30.00000	Linear
24 tert-Butyl Alcohol	0.03642	0.04174	0.04174	0.010	14.58896	40.00000	Averaged
27 Acrylonitrile	0.11119	0.12141	0.12141	0.010	9.19196	30.00000	Averaged
28 Isopropyl ether	1.12852	1.19666	1.19666	0.010	6.03860	30.00000	Averaged
31 2-Chloro-1,3-butadiene	0.45317	0.59614	0.59614	0.010	31.54802	30.00000	Averaged <-
32 Ethyl tert-butyl ether	0.92282	1.04612	1.04612	0.010	13.36140	30.00000	Averaged
37 Propionitrile	0.04574	0.04785	0.04785	0.010	4.59572	30.00000	Averaged
34 Ethyl acetate	0.30964	0.31084	0.31084	0.010	0.38729	40.00000	Averaged
40 Methacrylonitrile	0.24107	0.26577	0.26577	0.010	10.24475	30.00000	Averaged
38 Tetrahydrofuran	0.25622	0.26541	0.26541	0.010	3.58656	30.00000	Averaged
46 Isobutyl alcohol	0.01179	0.01303	0.01303	0.001	10.52812	40.00000	Averaged
49 Methyl tert-amyl ether	0.70688	0.81966	0.81966	0.010	15.95450	30.00000	Averaged
56 Methyl methacrylate	0.18476	0.20464	0.20464	0.010	10.76275	30.00000	Averaged
67 Ethyl methacrylate	0.48324	0.54809	0.54809	0.010	13.42031	30.00000	Averaged
75 1-Chlorohexane	0.33035	0.36905	0.36905	0.000	11.71362	30.00000	Averaged
58 1,4-Dioxane	0.00273	0.00265	0.00265	0.001	-2.77226	40.00000	Averaged
62 2-Nitropropane	277	250	0.12037	0.000	10.72660	30.00000	Linear
85 cis-1,4-Dichloro-2-butene	0.30111	0.39316	0.39316	0.010	30.57104	30.00000	Averaged <-
86 Cyclohexanone	0.02440	0.01910	0.01910	0.010	-21.73576	40.00000	Averaged
90 trans-1,4-Dichloro-2-butene	0.28111	0.37209	0.37209	0.010	32.36370	30.00000	Averaged <-
98 Pentachloroethane	451	250	0.43080	0.010	80.21419	30.00000	Linear <-
104 Benzyl chloride	1.28813	1.86663	1.86663	0.010	44.90992	30.00000	Averaged <-
107 bis(2-Chloroisopropyl)ether	0.44594	0.48356	0.48356	0.010	8.43599	30.00000	Averaged
\$ 48 1,2-Dichloroethane-d4	0.48820	0.48815	0.48815	0.010	-0.01150	30.00000	Averaged
\$ 65 Toluene-d8	1.68167	1.70983	1.70983	0.010	1.67452	30.00000	Averaged
\$ 87 Bromofluorobenzene	1.25356	1.29678	1.29678	0.010	3.44733	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i                      Injection Date: 08-MAR-2010 09:28  
Lab File ID: 1b105.d                      Init. Cal. Date(s): 04-MAR-2010 05-MAR-2010  
Analysis Type: WATER                      Init. Cal. Times: 17:28 02:12  
Lab Sample ID: W1VM100308-03 Quant Type: ISTD  
Method: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Average %D / Drift Results.	
=====	
Calculated Average %D/Drift =	15.07509
Maximum Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b105.d

Lab Smp Id: W1VM100308-03

Client Smp ID: VSTD250S

Inj Date : 08-MAR-2010 09:28

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |W1VM100308-03|SHORT/SLCS|1|VOAF|1|

Misc Info : GEL 5mL N/A UVM100304-08A/UVM100125-08E

Comment :

Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Meth Date : 19-Mar-2010 09:00 eh1

Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: 1a428.d

Als bottle: 5

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubS+SS.sub

Target Version: 3.50

Processing Host: prdsvr07

Concentration Formula: Amt \* DF \* (Uf/Vo) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT ( ug/l)	ON-COL ( ug/l)
4 Chlorotrifluoroethylene	116	4.875	4.875 (0.357)	390180	150.000	181
8 2-Chloro-1,1,1-trifluoroethane	118	6.280	6.280 (0.459)	934309	150.000	161
13 Acrolein	56	8.940	8.940 (0.654)	330201	250.000	292
14 Trichlorotrifluoroethane	101	8.959	8.959 (0.655)	1227729	250.000	259
17 Isopropyl Alcohol	45	9.437	9.437 (0.690)	1267685	2500.00	2830
20 Allyl chloride	76	9.833	9.833 (0.719)	611755	250.000	282
24 tert-Butyl Alcohol	59	10.183	10.183 (0.745)	2059897	2500.00	2860
27 Acrylonitrile	53	10.657	10.657 (0.779)	599228	250.000	273
28 Isopropyl ether	45	11.182	11.182 (0.818)	1181227	50.0000	53.0
31 2-Chloro-1,3-butadiene	53	11.380	11.380 (0.832)	588447	50.0000	65.8
32 Ethyl tert-butyl ether	59	11.739	11.739 (0.859)	1032628	50.0000	56.7
37 Propionitrile	54	12.393	12.393 (0.906)	236146	250.000	261
34 Ethyl acetate	43	12.149	12.149 (0.889)	1534166	250.000	251
40 Methacrylonitrile	41	12.549	12.549 (0.918)	1311690	250.000	276
38 Tetrahydrofuran	42	12.526	12.526 (0.639)	536613	250.000	259

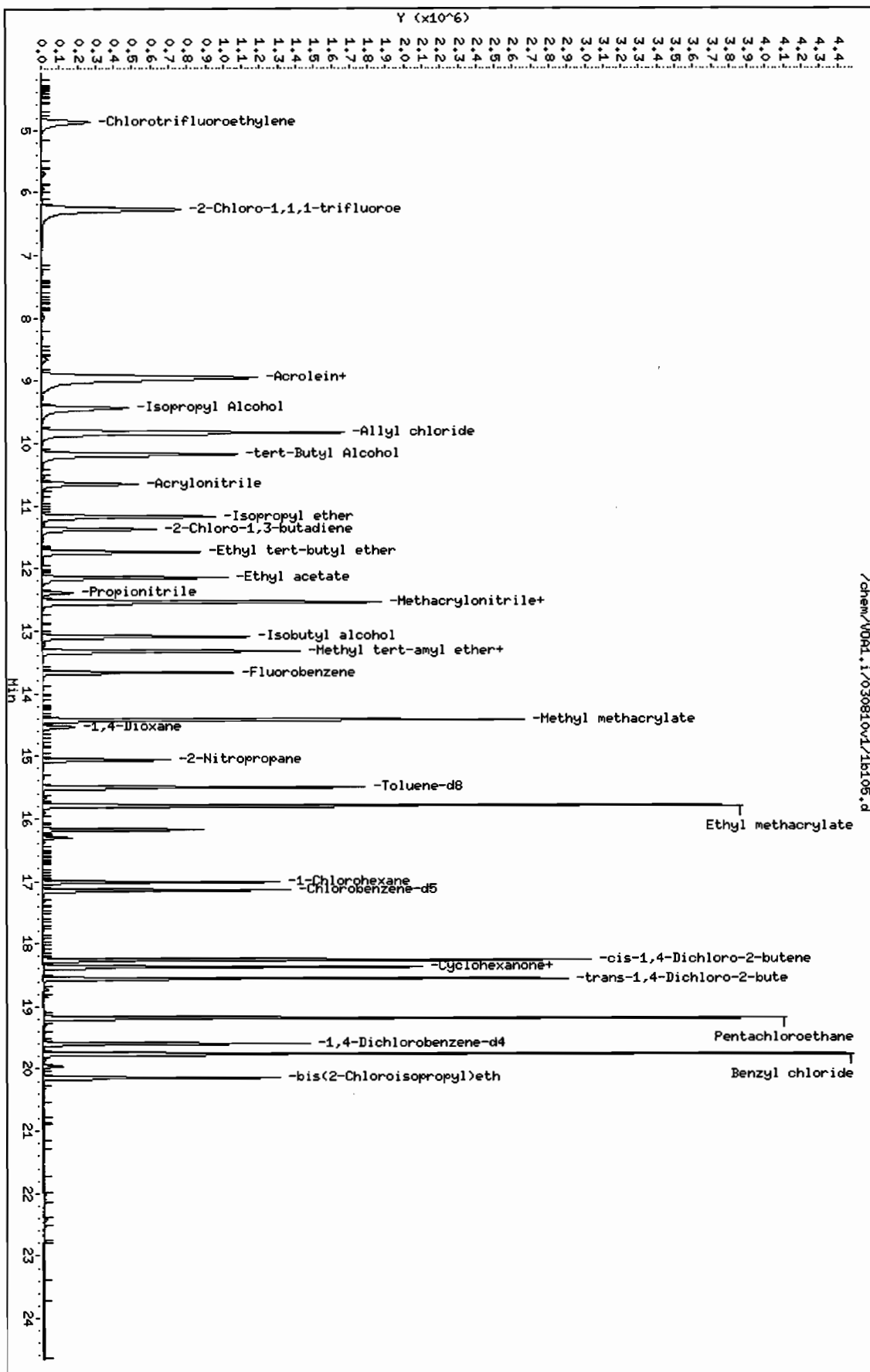
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
=====	=====	==	=====	=====	=====	=====	=====
46 Isobutyl alcohol	41	13.097	13.097	(0.958)	643007	2500.00	2760
49 Methyl tert-amyl ether	73	13.336	13.336	(0.975)	809087	50.0000	58.0
56 Methyl methacrylate	69	14.427	14.427	(1.055)	1010025	250.000	277
67 Ethyl methacrylate	69	15.799	15.799	(0.921)	1995027	250.000	284
75 1-Chlorohexane	55	17.019	17.019	(1.245)	364285	50.0000	55.8
58 1,4-Dioxane	88	14.533	14.533	(1.063)	130899	2500.00	2430
62 2-Nitropropane	43	15.067	15.067	(1.102)	594077	250.000	277
85 cis-1,4-Dichloro-2-butene	53	18.261	18.261	(0.932)	794901	250.000	326
86 Cyclohexanone	55	18.372	18.372	(1.071)	347527	1250.00	978
90 trans-1,4-Dichloro-2-butene	53	18.556	18.556	(0.947)	752301	250.000	331
98 Pentachloroethane	167	19.187	19.187	(0.979)	871003	250.000	450 (A)
104 Benzyl chloride	91	19.762	19.762	(1.008)	3774028	250.000	362
107 bis(2-Chloroisopropyl)ether	45	20.149	20.149	(1.028)	977680	250.000	271
* 52 Fluorobenzene	96	13.672	13.672	(1.000)	987101	50.0000	
* 76 Chlorobenzene-d5	117	17.148	17.148	(1.000)	727994	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.601	19.601	(1.000)	404369	50.0000	
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	481852	50.0000	50.0
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	1244744	50.0000	50.8
\$ 87 Bromofluorobenzene	95	18.377	18.377	(0.938)	524376	50.0000	51.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/V0041.i/030810v1/1b105.d  
 Date : 08-MAR-2010 09:28  
 Client ID: VSTD2505  
 Sample Info: 141VH100308-031SHORT/SILCS111V04F111  
 Purge Volume: 5.0  
 Column phase: RTX-volatiles

Instrument: V0041.i  
 Operator: GRB2  
 Column diameter: 0.25



# QC Data

Data File: /chem/V0A1.i/030410v1/1a411.d

Page 1

Date : 04-MAR-2010 16:41

Client ID: BFB01

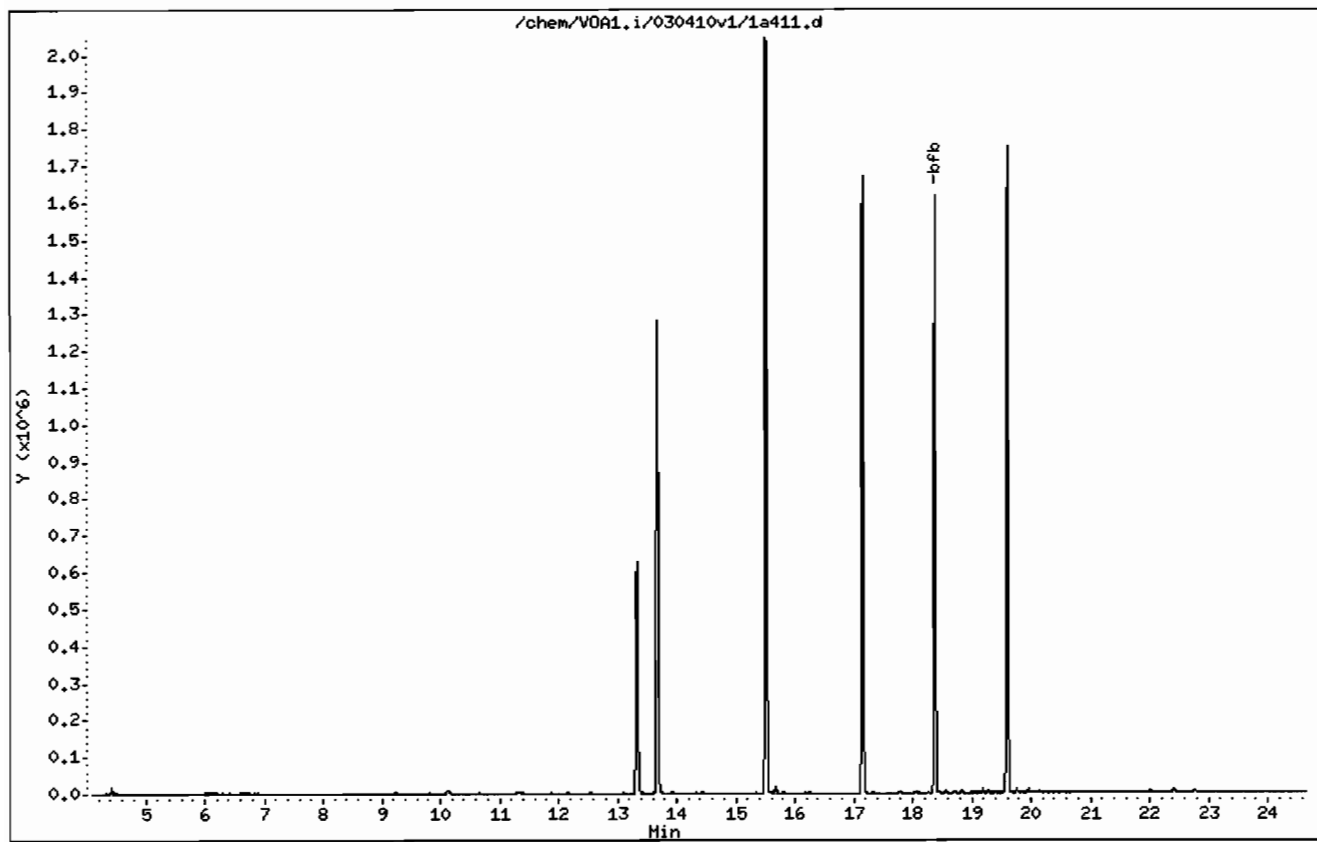
Instrument: V0A1.i

Sample Info: IUVH100203-02|BFB01|1|V0AF11|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25



Date : 04-MAR-2010 16:41

Client ID: BFB01

Instrument: VOA1.i

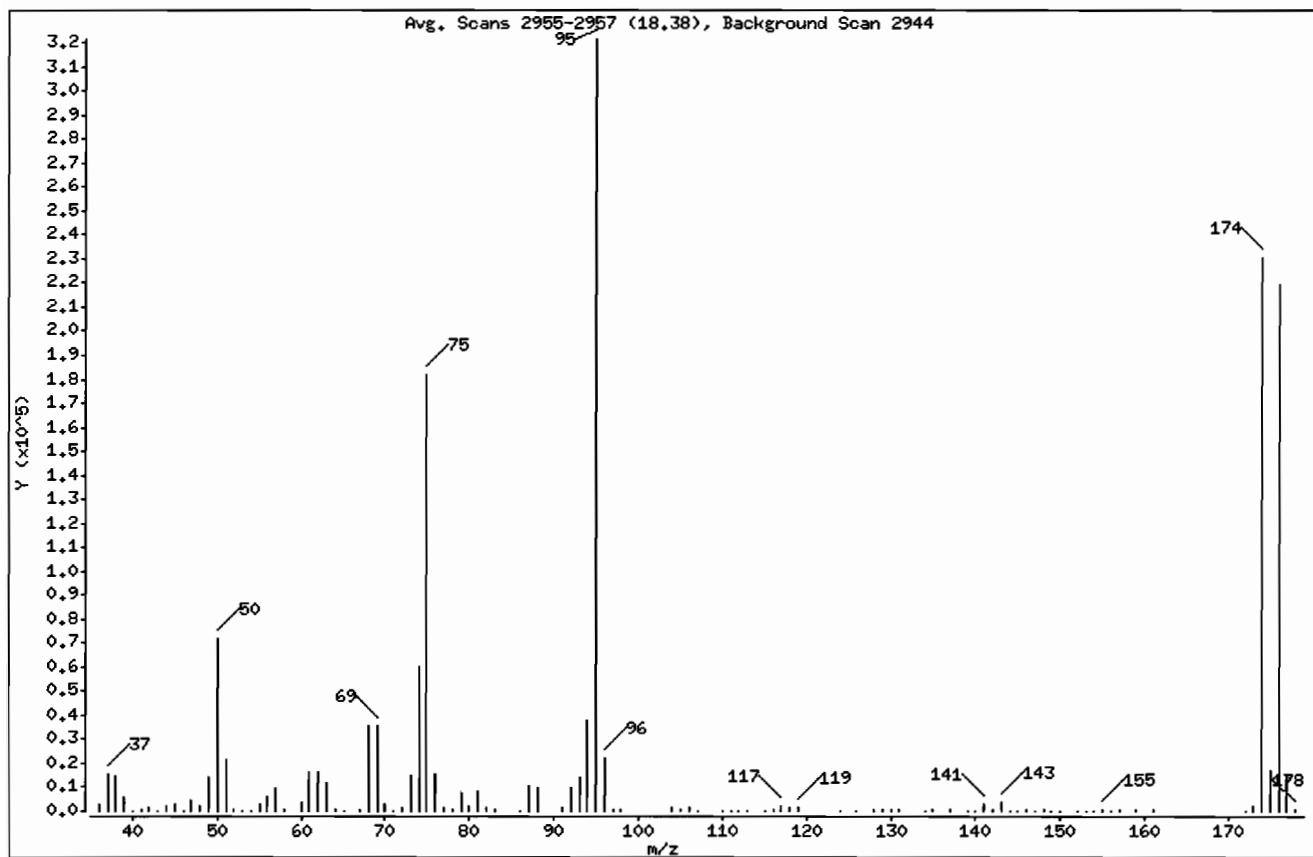
Sample Info: IUVH100203-02|BFB01|1|VOAF11|

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.19
75	30.00 - 60.00% of mass 95	56.54
96	5.00 - 9.00% of mass 95	6.82
173	Less than 2.00% of mass 174	0.62 ( 0.86)
174	50.00 - 100.00% of mass 95	71.68
175	5.00 - 9.00% of mass 174	5.29 ( 7.37)
176	95.00 - 101.00% of mass 174	68.26 ( 95.22)
177	5.00 - 9.00% of mass 176	4.67 ( 6.84)



Date : 04-MAR-2010 16:41

Client ID: BFB01

Instrument: V0A1.i

Sample Info: IUVM100203-02IBFB0111V0AF111

Operator: RXM4

Column phase: RTX-Volatiles

Column diameter: 0,25

Data File: 1a411.d

Spectrum: Avg. Scans 2955-2957 (18,38), Background Scan 2944

Location of Maximum: 95,00

Number of points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36,00	3252	64,00	1002	96,00	21928	141,00	3275
37,00	15572	65,00	151	97,00	684	142,00	452
38,00	14638	67,00	722	98,00	764	143,00	3350
39,00	6262	68,00	35600	104,00	1360	144,00	197
40,00	321	69,00	35720	105,00	511	145,00	327
41,00	477	70,00	2977	106,00	1216	146,00	439
42,00	1424	71,00	60	107,00	263	147,00	330
43,00	352	72,00	1701	110,00	109	148,00	888
44,00	1931	73,00	15015	111,00	277	149,00	183
45,00	2969	74,00	60064	112,00	125	150,00	338
46,00	158	75,00	181824	113,00	185	152,00	207
47,00	4691	76,00	15418	115,00	327	153,00	238
48,00	1850	77,00	1617	116,00	1071	154,00	133
49,00	13884	78,00	1067	117,00	1864	155,00	781
50,00	71368	79,00	7566	118,00	1148	156,00	51
51,00	21760	80,00	2438	119,00	1609	157,00	626
52,00	955	81,00	8436	124,00	161	159,00	370
53,00	76	82,00	1645	126,00	67	161,00	414
54,00	259	83,00	381	128,00	1053	172,00	188
55,00	2630	86,00	361	129,00	495	173,00	1978
56,00	5595	87,00	9988	130,00	1095	174,00	230528
57,00	9504	88,00	9653	131,00	434	175,00	17000
58,00	429	91,00	1151	134,00	69	176,00	219520
60,00	3442	92,00	9649	135,00	445	177,00	15017
61,00	16203	93,00	13946	137,00	440	178,00	465
62,00	16166	94,00	37880	139,00	135		
63,00	11877	95,00	321600	140,00	236		

Data File: /chem/VOA1.i/030410v1/1a502BFB.d

Page 1

Date : 05-MAR-2010 10:31

Client ID: BFB01

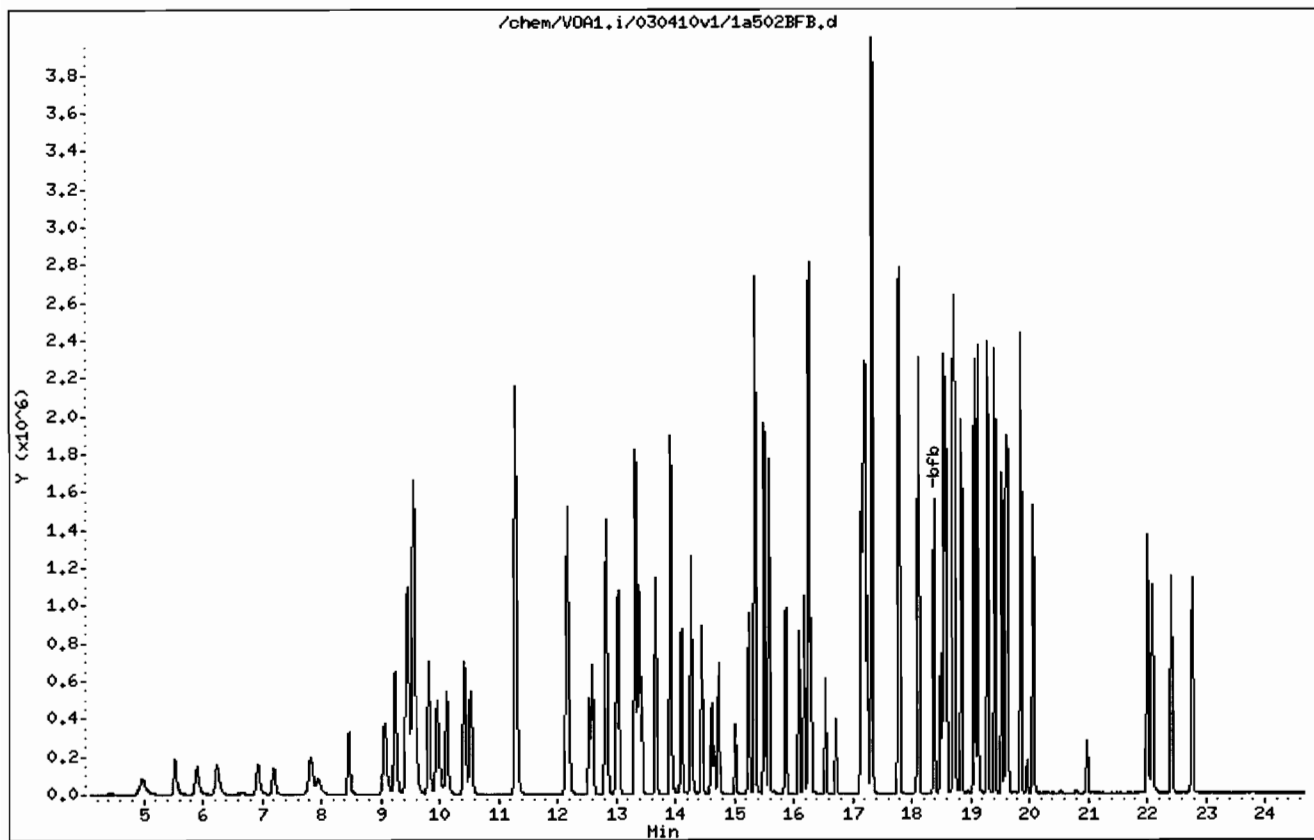
Instrument: VOA1.i

Sample Info: IW1VM100305-01|BFB/ICV/CCV/LCS11|VOAF11|

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25



Date : 05-MAR-2010 10:31

Client ID: BFB01

Instrument: VOA1.i

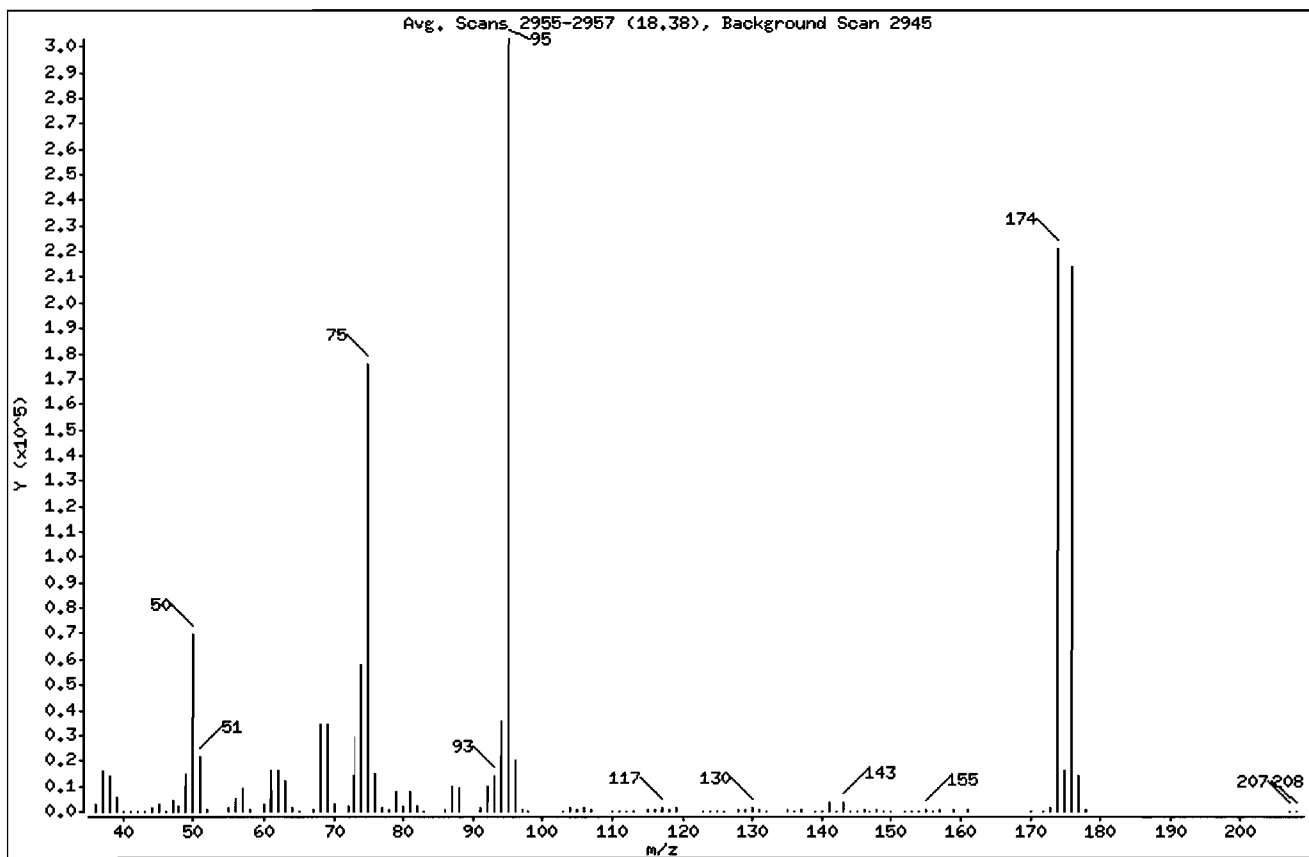
Sample Info: IW1VM100305-01|BFB/ICV/CCV/LCSI1|VOAF11

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.94
75	30.00 - 60.00% of mass 95	57.86
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.57 ( 0.79)
174	50.00 - 100.00% of mass 95	72.77
175	5.00 - 9.00% of mass 174	5.40 ( 7.42)
176	95.00 - 101.00% of mass 174	70.57 ( 96.98)
177	5.00 - 9.00% of mass 176	4.69 ( 6.65)

Date : 05-MAR-2010 10:31

Client ID: BFB01

Instrument: V001.i

Sample Info: IM1VM100305-011BFB/ICV/CCV/LCS11/V001.i

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1a502BFB.d

Spectrum: Avg. Scans 2955-2957 (18.38), Background Scan 2945

Location of Maximum: 95.00

Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2700	68.00	34160	105.00	576	143.00	3184
37.00	15903	69.00	34136	106.00	1250	144.00	226
38.00	13600	70.00	2594	107.00	391	145.00	331
39.00	5678	72.00	1760	110.00	184	146.00	429
40.00	18	73.00	14242	111.00	283	147.00	194
41.00	234	74.00	57680	112.00	86	148.00	598
42.00	316	75.00	175296	113.00	241	149.00	175
43.00	234	76.00	14596	115.00	370	150.00	288
44.00	1370	77.00	1460	116.00	973	152.00	186
45.00	2758	78.00	926	117.00	1708	153.00	151
46.00	201	79.00	7638	118.00	1043	154.00	115
47.00	3992	80.00	2309	119.00	1382	155.00	816
48.00	1892	81.00	7551	123.00	67	156.00	53
49.00	14691	82.00	1743	124.00	227	157.00	590
50.00	69512	83.00	212	125.00	75	159.00	435
51.00	21264	86.00	435	126.00	68	161.00	403
52.00	822	87.00	9645	128.00	909	170.00	55
55.00	1295	88.00	8766	129.00	455	172.00	217
56.00	5028	91.00	1143	130.00	1098	173.00	1733
57.00	8837	92.00	9719	131.00	473	174.00	220480
58.00	414	93.00	14084	132.00	53	175.00	16349
60.00	3066	94.00	35688	135.00	616	176.00	213824
61.00	16228	95.00	302976	136.00	73	177.00	14224
62.00	16261	96.00	20248	137.00	501	178.00	490
63.00	11722	97.00	594	139.00	112	207.00	66
64.00	1188	98.00	122	140.00	119	208.00	70
65.00	151	103.00	115	141.00	3164		
67.00	865	104.00	1261	142.00	316		

Data File: /chem/VOA1.i/030810v1/1b102BFB.d

Page 1

Date : 08-MAR-2010 07:57

Client ID: BFB01

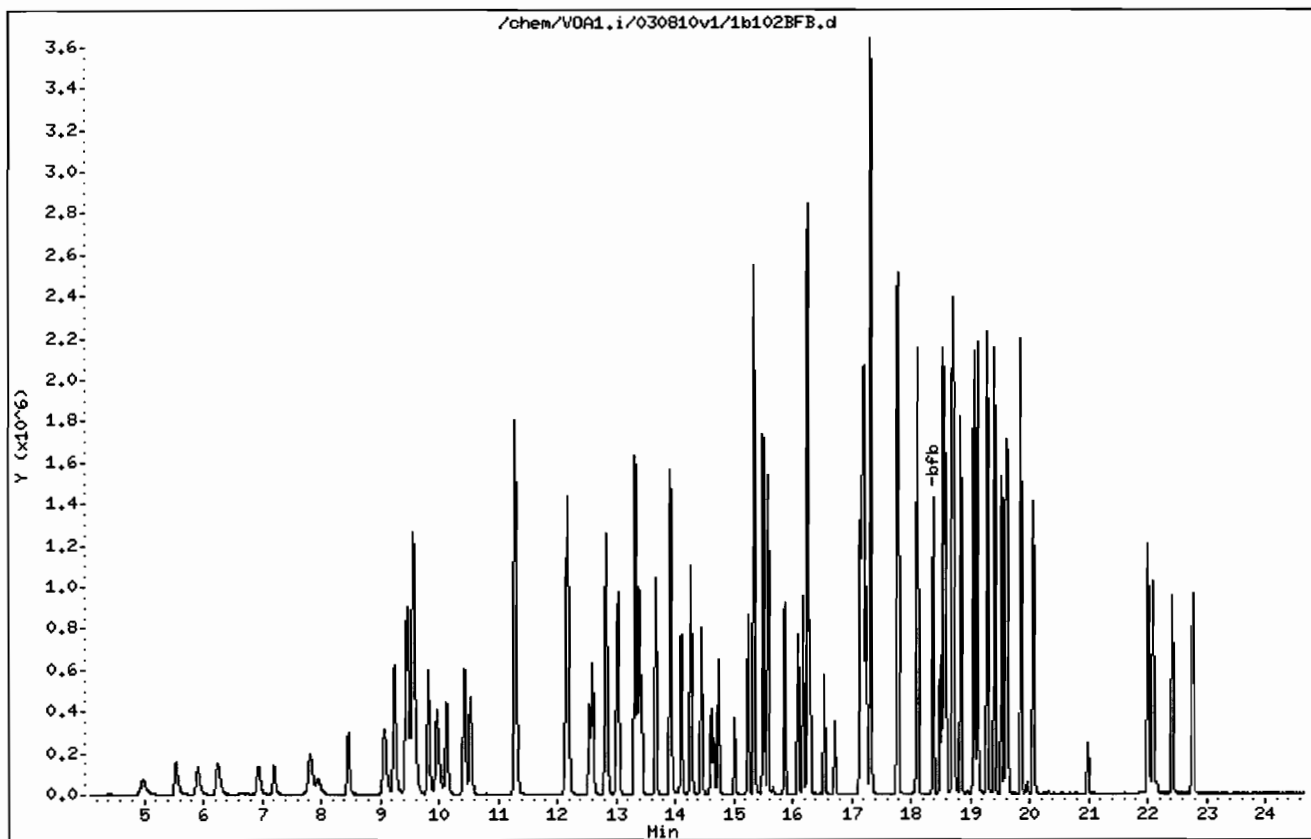
Instrument: VOA1.i

Sample Info: IW1VM100308-01/BFB/CCV11/VOAF11

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25



Date : 08-MAR-2010 07:57

Client ID: BFB01

Instrument: VOA1.i

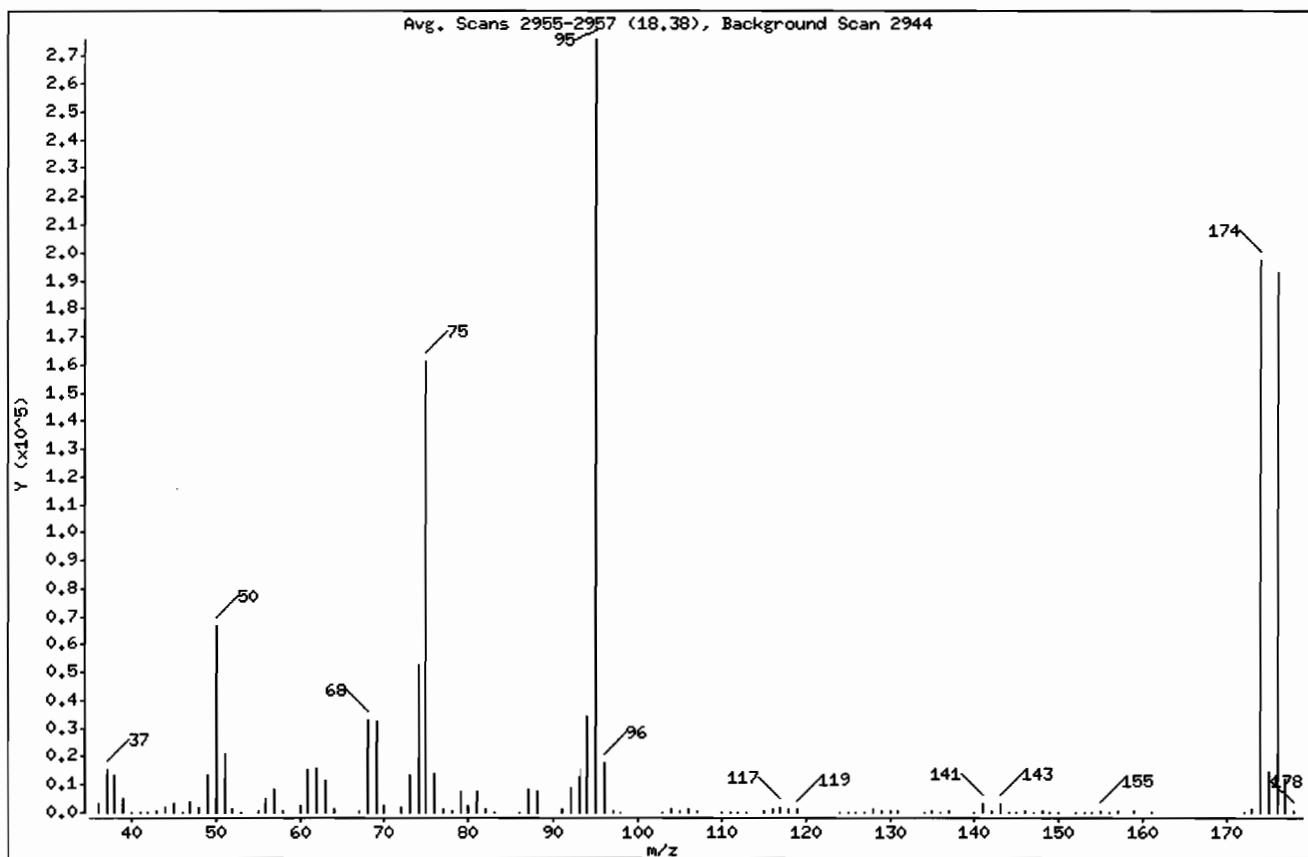
Sample Info: 1W1VH100308-011BFB/CCV111VOAF111

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	24.12
75	30.00 - 60.00% of mass 95	58.42
96	5.00 - 9.00% of mass 95	6.42
173	Less than 2.00% of mass 174	0.56 ( 0.78)
174	50.00 - 100.00% of mass 95	71.54
175	5.00 - 9.00% of mass 174	5.18 ( 7.23)
176	95.00 - 101.00% of mass 174	69.94 ( 97.76)
177	5.00 - 9.00% of mass 176	4.44 ( 6.34)

Date : 08-MAR-2010 07:57

Client ID: BFB01

Instrument: V0A1.i

Sample Info: IW1VH100308-01/BFB/CCV11/V0AF11

Operator: GRB2

Column phase: RTX-Volatiles

Column diameter: 0.25

Data File: 1b102BFB.d

Spectrum: Avg. Scans 2955-2957 (18.38), Background Scan 2944

Location of Maximum: 95.00

Number of points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2886	67.00	845	103.00	219	141.00	3114
37.00	15353	68.00	32720	104.00	1308	142.00	345
38.00	13531	69.00	32608	105.00	566	143.00	2975
39.00	5376	70.00	2594	106.00	973	144.00	125
40.00	125	72.00	1592	107.00	331	145.00	305
41.00	169	73.00	13490	110.00	77	146.00	380
42.00	133	74.00	52424	111.00	268	147.00	168
43.00	318	75.00	161216	112.00	146	148.00	601
44.00	1758	76.00	14096	113.00	73	149.00	133
45.00	2882	77.00	1494	115.00	368	150.00	252
46.00	91	78.00	869	116.00	1022	152.00	151
47.00	3733	79.00	7815	117.00	1674	153.00	128
48.00	2183	80.00	2348	118.00	1067	154.00	72
49.00	13455	81.00	7403	119.00	1546	155.00	648
50.00	66576	82.00	1556	124.00	70	156.00	114
51.00	20968	83.00	209	125.00	61	157.00	560
52.00	1003	86.00	95	126.00	157	159.00	429
53.00	52	87.00	8201	127.00	68	161.00	290
55.00	914	88.00	7772	128.00	969	172.00	59
56.00	5013	91.00	986	129.00	539	173.00	1533
57.00	8528	92.00	8969	130.00	951	174.00	197440
58.00	431	93.00	12829	131.00	387	175.00	14283
60.00	2631	94.00	34288	134.00	50	176.00	193024
61.00	15210	95.00	275968	135.00	559	177.00	12247
62.00	15649	96.00	17720	136.00	62	178.00	362
63.00	11448	97.00	557	137.00	510		
64.00	1142	98.00	73	140.00	180		

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

SDG Number: 10-2196		Matrix: SOIL	
Lab Sample ID: 1202064875			
Client Sample: QC for batch 962521	Client: LANL010	Project: QC	
Client ID: MB for batch 962521	Method: SW846 8260B	SOP Ref: GL-OA-E-038	
Batch ID: 962525	Inst: VOA11	Dilution: 1	
Run Date: 03/08/2010 10:59	Analyst: GRB2	Purge Vol: 5 mL	
Prep Date: 03/08/2010 09:40	Aliquot: 5 g	Final Volume: 5 mL	
Data File: 1b108LL.d	Column: RTX-Volatiles	Level: LOW	

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: 10-2196  
 Lab Sample ID: 1202064875  
 Client Sample: QC for batch 962521  
 Client ID: MB for batch 962521  
 Batch ID: 962525  
 Run Date: 03/08/2010 10:59  
 Prep Date: 03/08/2010 09:40  
 Data File: 1b108LL.d

Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA1.I  
 Analyst: GRB2  
 Aliquot: 5 g  
 Column: RTX-Volatiles

Matrix: SOIL  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

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		

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b108LL.d  
 Lab Smp Id: 1202064875 Client Smp ID: BLANK  
 Inj Date : 08-MAR-2010 10:59  
 Operator : GRB2 Inst ID: VOA1.i  
 Smp Info : |1202064875|962525|1|VOAF|1|  
 Misc Info : GEL 5g N/A RINSE  
 Comment :  
 Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Meth Date : 19-Mar-2010 09:00 eh1 Quant Type: ISTD  
 Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
 Als bottle: 8 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50  
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	493738		51.8349	51.8
* 52 Fluorobenzene	96	13.672	13.672	(1.000)	975533		50.0000	
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	1189861		49.5933	49.6
* 76 Chlorobenzene-d5	117	17.148	17.147	(1.000)	713351		50.0000	
\$ 87 Bromofluorobenzene	95	18.377	18.376	(0.938)	505595		51.4542	51.4
* 102 1,4-Dichlorobenzene-d4	152	19.601	19.601	(1.000)	391928		50.0000	

Data File: /chem/VOA1.i/030810v1/1b108LL.d  
Report Date: 19-Mar-2010 09:00

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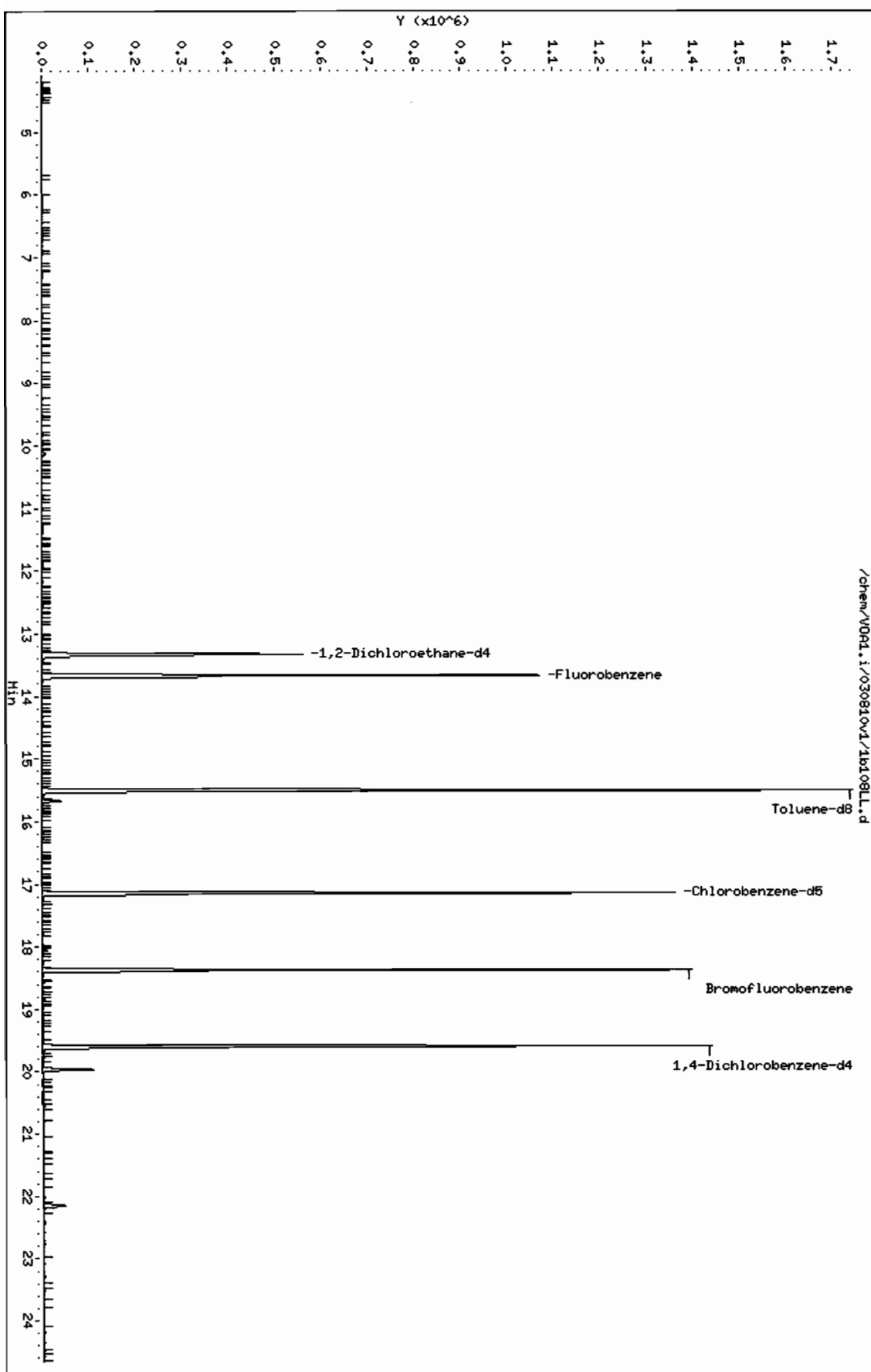
VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b108LL.d  
Lab Smp Id: 1202064875 Client Smp ID: BLANK  
Inj Date : 08-MAR-2010 10:59  
Operator : GRB2 Inst ID: VOA1.i  
Smp Info : |1202064875|962525|1|VOAF|1|  
Misc Info : GEL 5g N/A RINSE  
Comment :  
Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
Meth Date : 19-Mar-2010 09:00 eh1 Quant Type: ISTD  
Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
Als bottle: 8 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/V001.i/030810v1/1b108LL.d  
Date : 08-MAR-2010 10:59  
Client ID: BLANK  
Sample Info: 11202064875196252511V00AF11  
Column phase: RTX-Volatiles

Instrument: V001.i  
Operator: GRB2  
Column diameter: 0.25



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

SDG Number: 10-2196		Matrix: SOIL
Lab Sample ID: 1202064878		
Client Sample: QC for batch 962521	Client: LANL010	Project: QC
Client ID: LCS for batch 962521	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 08:58	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 08:30	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b104LL.d	Column: RTX-Volatiles	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		35.6	ug/kg	0.340	1.00
74-87-3	Chloromethane		41.2	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		41.3	ug/kg	0.300	1.00
74-83-9	Bromomethane		43.0	ug/kg	0.300	1.00
75-00-3	Chloroethane		44.4	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		50.3	ug/kg	0.300	1.00
67-64-1	Acetone		205	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		47.3	ug/kg	0.300	1.00
74-88-4	Iodomethane		221	ug/kg	1.60	5.00
75-09-2	Methylene chloride		46.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		238	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		46.6	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		46.9	ug/kg	0.300	1.00
78-93-3	2-Butanone		203	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		46.8	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		51.4	ug/kg	0.300	1.00
67-66-3	Chloroform		48.1	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		46.0	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		50.1	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		49.9	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		52.2	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		48.9	ug/kg	0.300	1.00
71-43-2	Benzene		45.6	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		47.3	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		46.7	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		51.4	ug/kg	0.300	1.00
74-95-3	Dibromomethane		47.2	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		233	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		49.9	ug/kg	0.300	1.00
108-88-3	Toluene		46.2	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		50.3	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		45.7	ug/kg	0.300	1.00
591-78-6	2-Hexanone		214	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		46.0	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		45.7	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		49.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		46.1	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		46.3	ug/kg	0.300	1.00

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

SDG Number: 10-2196  
 Lab Sample ID: 1202064878  
 Client Sample: QC for batch 962521  
 Client ID: LCS for batch 962521  
 Batch ID: 962525  
 Run Date: 03/08/2010 08:58  
 Prep Date: 03/08/2010 08:30  
 Data File: 1b104LL.d

Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA1J  
 Analyst: GRB2  
 Aliquot: 5 g  
 Column: RTX-Volatiles

Matrix: SOIL  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		47.7	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		94.4	ug/kg	0.300	2.00
95-47-6	o-Xylene		47.3	ug/kg	0.300	1.00
100-42-5	Styrene		48.9	ug/kg	0.300	1.00
75-25-2	Bromoform		50.9	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		46.8	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		46.9	ug/kg	0.300	1.00
108-86-1	Bromobenzene		45.7	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		48.5	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		47.7	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		48.4	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		48.5	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		48.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		48.2	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		47.9	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		48.2	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		48.7	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		45.5	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		45.6	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		48.9	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		48.6	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		47.8	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		45.6	ug/kg	0.300	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b104LL.d

Lab Smp Id: 1202064878

Client Smp ID: LCS

Inj Date : 08-MAR-2010 08:58

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |1202064878|962525|1|VOAF|1|

Misc Info : GEL 5g N/A UVM100220-01D/IVM100307-01

Comment :

Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Meth Date : 19-Mar-2010 09:00 ehl

Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: 1a428.d

Als bottle: 4

QC Sample: LCS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

		QUANT SIG				CONCENTRATIONS	
Compounds		MASS	RT	EXP RT REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)		106			1419633	141.661	142
M 2 1,2-Dichloroethylene (total)		96			520243	93.4558	93.4
M 3 1,3-Dichloropropylene		75			994140	100.183	100
5 Dichlorodifluoromethane		85	4.990	4.983 (0.365)	178143	35.5838	35.6
6 Chloromethane		50	5.535	5.535 (0.405)	357800	41.1949	41.2
7 Vinyl chloride		62	5.908	5.908 (0.432)	278242	41.2855	41.3
9 Bromomethane		96	6.929	6.938 (0.507)	171251	42.9532	43.0
10 Chloroethane		64	7.205	7.205 (0.527)	192542	44.4210	44.4
11 Trichlorofluoromethane		101	7.822	7.822 (0.572)	426023	50.3184	50.3
12 Ethyl Ether		59	8.466	8.466 (0.619)	262049	47.0470	47.0
15 1,1-Dichloroethylene		61	9.065	9.069 (0.663)	518434	47.2841	47.3
16 Acetone		43	9.244	9.239 (0.676)	1205590	204.538	204

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
18 Iodomethane	142	9.456	9.456	(0.692)	1795517	221.371	221
19 Carbon disulfide	76	9.557	9.557	(0.699)	3953206	237.697	238
21 Methyl acetate	43	9.824	9.819	(0.719)	1184390	227.615	228
22 Acetonitrile	41	9.967	9.967	(0.729)	996110	1150.77	1150
23 Methylene chloride	84	10.128	10.128	(0.741)	280655	46.8713	46.9
25 tert-Butyl methyl ether	73	10.427	10.427	(0.763)	857441	46.4053	46.4
26 trans-1,2-Dichloroethylene	96	10.533	10.533	(0.770)	249815	46.6085	46.6
29 Vinyl acetate	43	11.283	11.283	(0.825)	3273384	273.703	274
30 1,1-Dichloroethane	63	11.311	11.306	(0.827)	540773	46.9375	46.9
33 2,2-Dichloropropane	77	12.149	12.149	(0.889)	376907	51.4247	51.4
35 2-Butanone	43	12.172	12.172	(0.890)	1271193	203.456	203
36 cis-1,2-Dichloroethylene	96	12.190	12.190	(0.892)	270428	46.8473	46.8
39 Bromochloromethane	128	12.549	12.549	(0.918)	120377	45.9928	46.0
41 Chloroform	83	12.600	12.600	(0.922)	552742	48.0750	48.1
42 Cyclohexane	56	12.830	12.825	(0.938)	536501	48.9022	48.9
43 1,1,1-Trichloroethane	97	12.835	12.834	(0.939)	428629	50.1417	50.1
44 Carbon tetrachloride	117	13.014	13.014	(0.952)	427055	52.2256	52.2
45 1,1-Dichloropropene	75	13.042	13.037	(0.954)	413871	49.9130	49.9
47 Benzene	78	13.323	13.322	(0.974)	1038543	45.6024	45.6
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	549867	56.5998	56.6
50 Cyclohexene	54	13.387	13.382	(0.979)	415202	48.9926	49.0
51 1,2-Dichloroethane	62	13.428	13.428	(0.982)	502053	48.9012	48.9
* 52 Fluorobenzene	96	13.672	13.672	(1.000)	994971	50.0000	
53 n-Butyl alcohol	56	13.921	13.921	(1.018)	1028141	5093.11	5090
54 Trichloroethylene	95	14.105	14.105	(1.032)	278292	47.3409	47.3
55 Methylcyclohexane	83	14.271	14.271	(1.044)	461121	49.6302	49.6
57 1,2-Dichloropropane	63	14.446	14.450	(1.057)	292568	46.6944	46.7
59 Dibromomethane	93	14.611	14.611	(1.069)	175950	47.1590	47.2
60 Bromodichloromethane	83	14.740	14.740	(1.078)	438906	51.3580	51.4
61 2-Chloroethylvinyl ether	63	15.021	15.021	(1.099)	174269	346.350	346 (AR)
63 cis-1,3-Dichloropropylene	75	15.247	15.246	(1.115)	495824	49.9240	49.9
64 4-Methyl-2-pentanone	58	15.348	15.348	(0.895)	681953	233.363	233
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	1243354	50.0857	50.1
66 Toluene	92	15.583	15.582	(0.909)	658145	46.2306	46.2
68 trans-1,3-Dichloropropylene	75	15.868	15.868	(0.925)	498316	50.2586	50.2
69 1,1,2-Trichloroethane	83	16.094	16.089	(0.939)	201225	45.7496	45.7
70 Tetrachloroethylene	164	16.176	16.181	(0.943)	208027	45.7488	45.7
71 2-Hexanone	43	16.255	16.254	(0.948)	1746397	214.219	214
72 1,3-Dichloropropane	76	16.296	16.296	(0.950)	436164	45.9709	46.0
73 Dibromochloromethane	129	16.540	16.535	(0.965)	289610	49.7201	49.7
74 1,2-Dibromoethane	107	16.720	16.715	(0.975)	239149	46.0760	46.1
* 76 Chlorobenzene-d5	117	17.148	17.147	(1.000)	738093	50.0000	
77 Chlorobenzene	112	17.180	17.180	(1.002)	696160	46.2947	46.3
78 Ethylbenzene	91	17.207	17.207	(1.003)	1355769	47.6685	47.7
79 1,1,1,2-Tetrachloroethane	131	17.249	17.249	(1.006)	260307	47.8266	47.8
80 m,p-Xylenes	106	17.323	17.322	(1.010)	951490	94.3641	94.4
81 o-Xylene	106	17.774	17.773	(1.036)	468143	47.2971	47.3



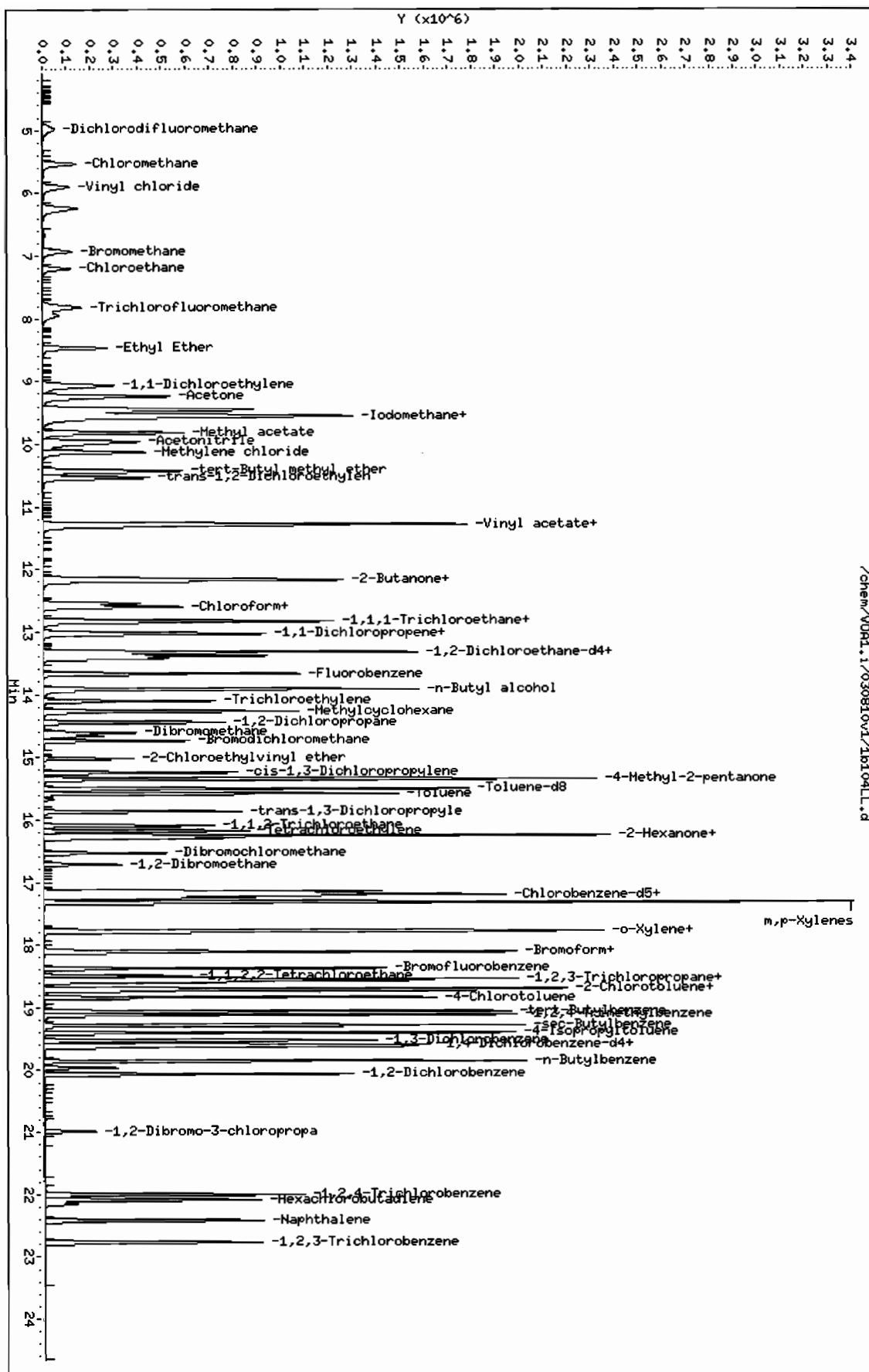
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
82 Styrene	104	17.792	17.792	(1.038)	809143	48.9497	48.9
83 Bromoform	173	18.096	18.096	(0.923)	191648	50.9128	50.9
84 Isopropylbenzene	105	18.114	18.114	(0.924)	1326796	48.3837	48.4
\$ 87 Bromofluorobenzene	95	18.377	18.376	(0.938)	527666	52.1767	52.2
88 1,1,2,2-Tetrachloroethane	83	18.496	18.496	(0.944)	319568	46.8419	46.8
89 n-Propylbenzene	91	18.547	18.547	(0.946)	1627812	48.5225	48.5
91 Bromobenzene	156	18.579	18.579	(0.948)	300838	45.7354	45.7
92 1,2,3-Trichloropropane	110	18.593	18.593	(0.949)	91259	46.8537	46.8
93 1,3,5-Trimethylbenzene	105	18.703	18.703	(0.954)	1161349	48.5132	48.5
94 2-Chlorotoluene	91	18.731	18.731	(0.956)	1157885	47.6952	47.7
95 4-Chlorotoluene	91	18.842	18.841	(0.961)	1062678	48.3042	48.3
96 tert-Butylbenzene	119	19.063	19.062	(0.973)	926515	48.2395	48.2
97 1,2,4-Trimethylbenzene	105	19.122	19.122	(0.976)	1192935	47.9437	47.9
99 sec-Butylbenzene	105	19.288	19.288	(0.984)	1467489	48.1552	48.2
100 4-Isopropyltoluene	119	19.408	19.408	(0.990)	1157016	48.7450	48.7
101 1,3-Dichlorobenzene	146	19.532	19.532	(0.997)	581853	45.4750	45.5
* 102 1,4-Dichlorobenzene-d4	152	19.596	19.601	(1.000)	403373	50.0000	
103 1,4-Dichlorobenzene	146	19.624	19.628	(1.001)	587902	45.6003	45.6
105 n-Butylbenzene	91	19.854	19.854	(1.013)	1252535	48.8701	48.9
106 1,2-Dichlorobenzene	146	20.066	20.066	(1.024)	557775	45.6399	45.6
108 1,2-Dibromo-3-chloropropane	157	20.991	20.991	(1.071)	65307	48.5885	48.6
109 1,2,4-Trichlorobenzene	180	22.008	22.008	(1.123)	427372	45.1863	45.2
110 Hexachlorobutadiene	225	22.091	22.091	(1.127)	269091	46.5427	46.5
111 Naphthalene	128	22.418	22.418	(1.144)	932371	43.7944	43.8
112 1,2,3-Trichlorobenzene	180	22.773	22.772	(1.162)	387520	45.0018	45.0

#### QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- R - Spike/Surrogate failed recovery limits.

Data File: /chem/V0041.i/030810v1/1b104LL.d  
 Date : 08-MAR-2010 09:58  
 Client ID: LCS  
 Sample Info: 11202064878196252511V0041.i  
 Column phase: RTX-Volatiles

Instrument: V0041.i  
 Operator: GRB2  
 Column diameter: 0.25



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

SDG Number: 10-2196		Matrix: SOIL
Lab Sample ID: 1202064879		
Client Sample: QC for batch 962521	Client: LANL010	Project: QC
Client ID: LCS for batch 962521	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962525	Inst: VOA1.I	Dilution: 1
Run Date: 03/08/2010 09:58	Analyst: GRB2	Purge Vol: 5 mL
Prep Date: 03/08/2010 09:37	Aliquot: 5 g	Final Volume: 5 mL
Data File: 1b106LL.d	Column: RTX-Volatiles	Level: LOW

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: 10-2196  
 Lab Sample ID: 1202064879  
 Client Sample: QC for batch 962521  
 Client ID: LCS for batch 962521  
 Batch ID: 962525  
 Run Date: 03/08/2010 09:58  
 Prep Date: 03/08/2010 09:37  
 Data File: 1b106LL.d

Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA1.I  
 Analyst: GRB2  
 Aliquot: 5 g  
 Column: RTX-Volatiles

Matrix: SOIL  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

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		267	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

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b106LL.d

Lab Smp Id: 1202064879

Client Smp ID: SLCS

Inj Date : 08-MAR-2010 09:58

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |1202064879|962525|1|VOAF|1|

Misc Info : GEL 5g N/A UVM100304-08A/UVM100125-08E

Comment :

Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Meth Date : 19-Mar-2010 09:00 eh1

Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: la428.d

Als bottle: 6

QC Sample: LCS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
4 Chlorotrifluoroethylene	116	4.875	4.875 (0.357)	425274	190.000	190
8 2-Chloro-1,1,1-trifluoroethane	118	6.280	6.280 (0.459)	993422	165.670	166
13 Acrolein	56	8.940	8.940 (0.654)	348588	298.019	298
14 Trichlorotrifluoroethane	101	8.959	8.959 (0.655)	1307935	266.550	266
17 Isopropyl Alcohol	45	9.438	9.437 (0.690)	1362127	2932.64	2930
20 Allyl chloride	76	9.838	9.833 (0.720)	649187	288.742	289
24 tert-Butyl Alcohol	59	10.188	10.183 (0.745)	2222942	2984.82	2980
27 Acrylonitrile	53	10.657	10.657 (0.779)	643579	283.070	283
28 Isopropyl ether	45	11.182	11.182 (0.818)	1219232	52.8372	52.8
31 2-Chloro-1,3-butadiene	53	11.380	11.380 (0.832)	626252	67.5848	67.6
32 Ethyl tert-butyl ether	59	11.744	11.739 (0.859)	1082492	57.3679	57.4
34 Ethyl acetate	43	12.153	12.149 (0.889)	1631025	257.608	258

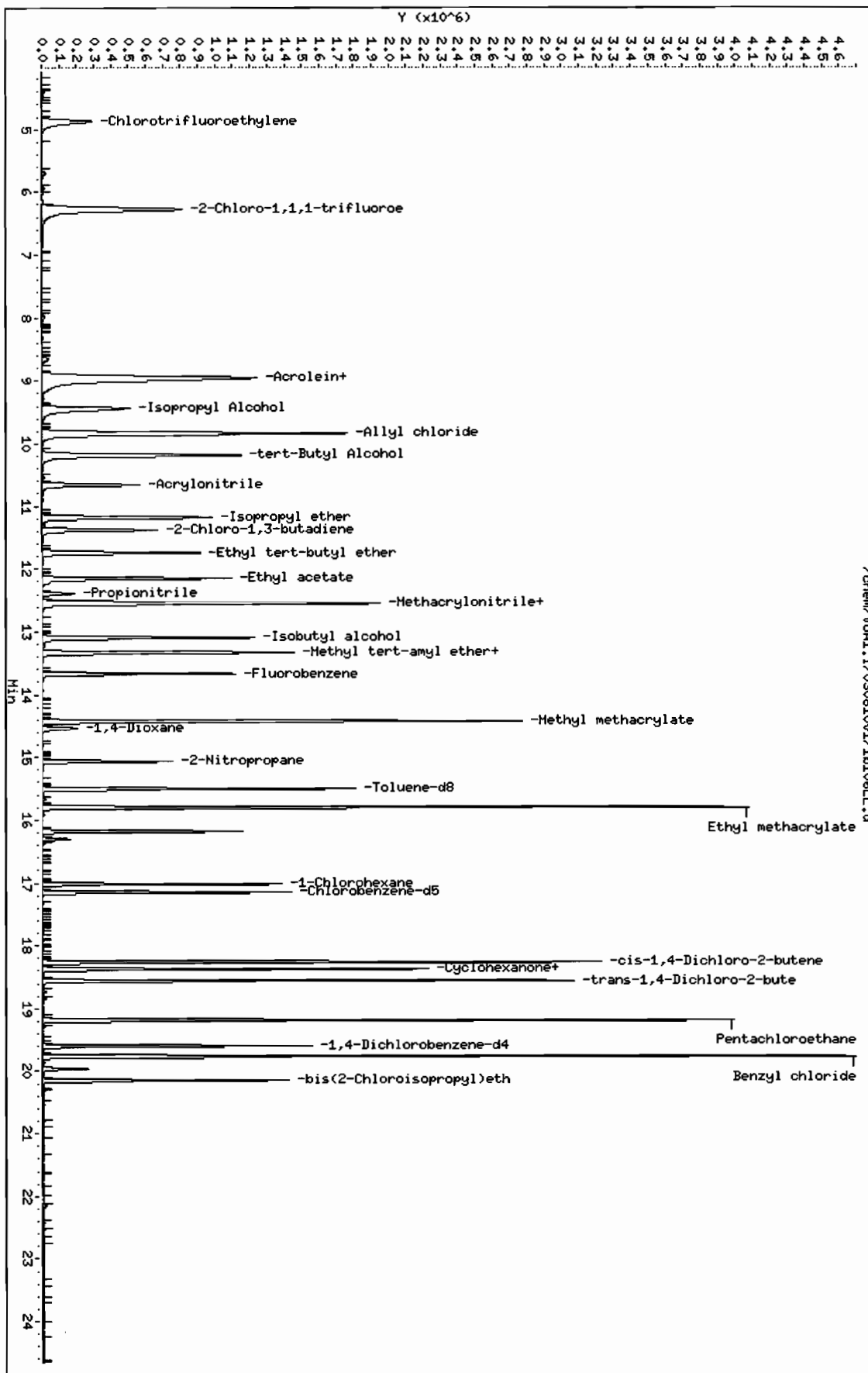
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
37 Propionitrile	54	12.393	12.393	(0.906)	253542	271.067	271
38 Tetrahydrofuran	42	12.531	12.526	(0.639)	563897	259.768	260
40 Methacrylonitrile	41	12.549	12.549	(0.918)	1384086	280.791	281
46 Isobutyl alcohol	41	13.097	13.097	(0.958)	684620	2840.53	2840
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	497947	49.8818	49.9
49 Methyl tert-amyl ether	73	13.336	13.336	(0.975)	848064	58.6737	58.7
* 52 Fluorobenzene	96	13.672	13.672	(1.000)	1022372	50.0000	
56 Methyl methacrylate	69	14.427	14.427	(1.055)	1066224	282.230	282
58 1,4-Dioxane	88	14.533	14.533	(1.063)	144526	2591.15	2590
62 2-Nitropropane	43	15.067	15.067	(1.102)	626310	281.664	282
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	1271032	49.9015	49.9
67 Ethyl methacrylate	69	15.799	15.799	(0.921)	2103821	287.439	287
75 1-Chlorohexane	55	17.019	17.019	(1.245)	385099	57.0112	57.0
* 76 Chlorobenzene-d5	117	17.148	17.147	(1.000)	757309	50.0000	
85 cis-1,4-Dichloro-2-butene	53	18.262	18.261	(0.932)	842542	330.270	330
86 Cyclohexanone	55	18.372	18.372	(1.071)	382083	1033.94	1030
\$ 87 Bromofluorobenzene	95	18.377	18.376	(0.938)	540087	50.8527	50.8
90 trans-1,4-Dichloro-2-butene	53	18.556	18.556	(0.947)	797862	335.003	335
98 Pentachloroethane	167	19.187	19.187	(0.979)	845657	418.568	418 (R)
* 102 1,4-Dichlorobenzene-d4	152	19.596	19.601	(1.000)	423618	50.0000	
104 Benzyl chloride	91	19.762	19.762	(1.008)	3939515	360.977	361 (R)
107 bis(2-Chloroisopropyl)ether	45	20.149	20.149	(1.028)	1068239	282.741	283

# QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/V001.i/030810v1/1b106LL.d  
 Date: 08-MAR-2010 09:58  
 Client ID: SLCS  
 Sample Info: 14202064879196252511V001.11  
 Column phase: RTX-Volatiles

Instrument: V001.i  
 Operator: GRB2  
 Column diameter: 0.25



# Miscellaneous Data



# Prep Logbook

## Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

**Batch ID:** 962521      Verified by: \_\_\_\_\_      Type: \_\_\_\_\_      Sample Id: \_\_\_\_\_      Description: \_\_\_\_\_      Serial Number: \_\_\_\_\_      Spike Amount: \_\_\_\_\_      Spike Units: \_\_\_\_\_  
**Analyst:** Ryan Dushak  
**Method:** SW846 5030  
**Lab SOP:** GL-OA-E-038 REV# 14  
**Instrument:** Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
248234001	05-MAR-2010 17:43:00	Soil	5	5	1	
248234002	05-MAR-2010 17:44:00	Soil	5	5	1	
248234003	05-MAR-2010 17:45:00	Soil	5	5	1	
248234004	05-MAR-2010 17:46:00	Soil	5	5	1	
248234005	05-MAR-2010 17:47:00	Soil	5	5	1	
1202064876 PS (248234005)	05-MAR-2010 17:48:00	Soil	5	5	1	
1202064877 PSD (248234005)	05-MAR-2010 17:49:00	Soil	5	5	1	
248234006	05-MAR-2010 17:50:00	Soil	5	5	1	
248234008	05-MAR-2010 17:52:00	Misc Solid	5	5	1	
248234009	05-MAR-2010 17:53:00	Misc Solid	5	5	1	
1202064878 LCS	08-MAR-2010 08:30:00	Soil	5	5	1	
1202064879 LCS	08-MAR-2010 09:37:00	Soil	5	5	1	
1202064875 MB	08-MAR-2010 09:40:00	Soil	5	5	1	
248514001	08-MAR-2010 14:32:00	Soil	5	5	1	
248514002	08-MAR-2010 14:34:00	Soil	5	5	1	
248514003	08-MAR-2010 14:36:00	Soil	5	5	1	
248514004	08-MAR-2010 14:38:00	Misc Solid	5	5	1	
1202065882 LCS	09-MAR-2010 07:28:00	Soil	5	5	1	
1202065883 LCS	09-MAR-2010 07:29:00	Soil	5	5	1	
1202065881 MB	09-MAR-2010 07:30:00	Soil	5	5	1	
248234007	09-MAR-2010 09:50:00	Soil	5	5	1	
Reagent/Solvent Lot ID	Description	Amount	Comments:			

# GEL Laboratories, LLC

Revision: 11/22/04

Date: 3/4/2010

Method 8260B/624

Operator: RXD1

REVIEWED BY:

DATE:

Daily Instrument Readings:

Multiplier Voltage: 1471

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 2

## CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/4/2010

Daily Standard

Purge Amount

(See pg. 30, 31, 32 for ICAL Std. Sci. lds)

Solution ICV	W1VM100305-01	IS	UVM1000214-01	Long ICV	W1VM100305-01	SS	UVM1000203-02	SHORT ICV	W1VM100304-23	BFB	UVM1000203-02
NaHSO4 lot #	N/A	1	1	1	1	1	1	5+5	1	1	1
CI test lot #	84515	1	1	1	1	1	1	1	1	1	1

Sequence Number: 030410V1

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)	Acceptable OX	Comments
4 Mar 2010 08:55		1A401.D	UVM100114-02	GEL	RINSE	5mL	1	N/A	1	w	RXD1	N/A	X	
4 Mar 2010 09:26		1A402.D	W1VM100304-01	GEL	CCV	5mL	1	N/A	2	w	RXD1	N/A	X	UVM100220-01C/I/V/M100301-01 1,2DCE-d4 S.S. high
4 Mar 2010 10:53		1A403.D	W1VM100304-02	GEL	CCV	5mL	1	N/A	2	w	RXD1	N/A	X	UVM100220-01C/I/V/M100304-01 Surr Still high
4 Mar 2010 12:09		1A404.D	12020---	GEL	BLANK	5mL	1	N/A	4	w	RXD1	N/A	X	RINSE
4 Mar 2010 12:40		1A405.D	12020---	GEL	BLANK	5mL	1	N/A	5	w	RXD1	N/A	X	RINSE
4 Mar 2010 13:55		1A406.D	12020---	GEL	BLANK	5mL	1	N/A	6	w	RXD1	N/A	X	RINSE Adjusting EM voltage
4 Mar 2010 14:26		1A407.D	12020---	GEL	BLANK	5mL	1	N/A	7	w	RXD1	N/A	X	RINSE
4 Mar 2010 15:08		1A408.D	W1VM100304-03	GEL	CCV	5mL	1	N/A	8	w	RXD1	N/A	X	UVM100106-07D/UVM100222-07A
4 Mar 2010 15:39		1A409.D	W1VM100304-04	GEL	LCS	5mL	1	N/A	9	s	RXD1	N/A	X	UVM100220-01C/I/V/M100304-01
4 Mar 2010 16:10		1A410.D	W1VM100304-05	GEL	SHORT	5g	1	N/A	10	w	RXD1	N/A	X	UVM100215-08A
4 Mar 2010 16:41		1A411.D	UVM100203-02	GEL	BFB01	5mL	1	N/A	11	w	RXD1	N/A	O	
4 Mar 2010 17:28		1A412.D	W1VM100304-06	GEL	VSTD001	5mL	1	N/A	12	w	RXD1	N/A	O	UVM100106-02D/UVM100222-02A
4 Mar 2010 17:59		1A413.D	W1VM100304-07	GEL	VSTD002	5mL	1	N/A	13	w	RXD1	N/A	O	UVM100106-03D/UVM100222-03A
4 Mar 2010 18:29		1A414.D	W1VM100304-08	GEL	VSTD005	5mL	1	N/A	14	w	RXD1	N/A	O	UVM100106-04D/UVM100222-04A
4 Mar 2010 19:00		1A415.D	W1VM100304-09	GEL	VSTD010	5mL	1	N/A	15	w	RXD1	N/A	O	UVM100106-05D/UVM100222-05A
4 Mar 2010 19:31		1A416.D	W1VM100304-10	GEL	VSTD020	5mL	1	N/A	16	w	RXD1	N/A	O	UVM100106-08D/UVM100222-06A
4 Mar 2010 20:02		1A417.D	W1VM100304-11	GEL	VSTD050	5mL	1	N/A	17	w	RXD1	N/A	O	UVM100106-07D/UVM100222-07A
4 Mar 2010 20:32		1A418.D	W1VM100304-12	GEL	VSTD100	5mL	1	N/A	18	w	RXD1	N/A	O	UVM100106-08D/UVM100222-08A
4 Mar 2010 21:04		1A419.D	12020---	GEL	BLANK	5mL	1	N/A	19	w	RXD1	N/A	X	RINSE
4 Mar 2010 21:35		1A420.D	W1VM100304-13	GEL	VSTD005	5mL	1	N/A	20	w	RXD1	N/A	O	UVM100106-01D/UVM100222-01A
4 Mar 2010 22:05		1A421.D	W1VM100304-14	GEL	ICV	5mL	1	N/A	21	w	RXD1	N/A	X	UVM100220-01C/I/V/M100304-01 See 7A502
4 Mar 2010 22:36		1A422.D	W1VM100304-15	GEL	ICV	5mL	1	N/A	22	w	RXD1	N/A	X	UVM100126-02E/I/V/M100304-01 See 7A502
4 Mar 2010 23:06		1A423.D	W1VM100304-16	GEL	VSTD005S	5mL	1	N/A	23	w	RXD1	N/A	O	UVM100304-01/UVM100227-01A
4 Mar 2010 23:37		1A424.D	W1VM100304-17	GEL	VSTD010S	5mL	1	N/A	24	w	RXD1	N/A	O	UVM100304-02/UVM100227-02A
5 Mar 2010 00:08		1A425.D	W1VM100304-18	GEL	VSTD025S	5mL	1	N/A	25	w	RXD1	N/A	O	UVM100304-03/UVM100227-03A
5 Mar 2010 00:39		1A426.D	W1VM100304-19	GEL	VSTD050S	5mL	1	N/A	26	w	RXD1	N/A	O	UVM100304-04/UVM100227-04A

Date: 3/4/2010

## ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Method 8260B/624 Operator: RXD1

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

Daily Instrument Readings:

Multiplier Voltage: 1471

HARDWARE CONFIGURATION &amp; METHOD CONDITIONS SUMMARY No# 2

## CALIBRATION &amp; CC INFORMATION:

Initial Calibration Date: 3/4/2010

(See pg. 30, 31, 32 for ICAI Std. Sci. Ids)

NaHSO4 lot #

N/A

CI test lot #

84515

Sequence Number: 030410V1

Daily Standard Volume Added for Purge (ul)

Solution ID#	Long ICV	W1VM100305-01	IS	SS	SHORT ICV	BFB	Smpl	CCV	MS/ LCS	BFB
			1	1	1	1			5+5	
			1	1	1	1			1	
									5+5	
										1

Purge Amount

5	Water Purge Vol: ML
N/A	Soil Purge Wt.: G
N/A	Mid level ext. MeOH Vol: ul
N/A	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)	Acceptable O/X	Comments
5 Mar 2010 01:10	1A427.D		W1VM100304-20	GEL	VSTD100S	5mL	1	N/A	27	w	RXD1	N/A	O	UVM100304-05/UVM100227-05A
5 Mar 2010 01:41	1A428.D		W1VM100304-21	GEL	VSTD250S	5mL	1	N/A	28	w	RXD1	N/A	O	UVM100304-06/UVM100227-06A
5 Mar 2010 02:12	1A429.D		W1VM100304-22	GEL	VSTD500S	5mL	1	N/A	29	w	RXD1	N/A	O	UVM100304-07/UVM100227-07A
5 Mar 2010 02:43	1A430.D		12020---	GEL	BLANK	5mL	1	N/A	30	w	RXD1	N/A	X	RINSE
5 Mar 2010 03:14	1A431.D		W1VM100304-23	GEL	SICV	5mL	1	N/A	31	w	RXD1	N/A	O	UVM100304-08A/UVM100125-08E
5 Mar 2010 03:44	1A432.D		W1VM100304-24	GEL	SICV	5mL	1	N/A	32	w	RXD1	N/A	X	UVM100215-08A/UVM100125-08E Not needed
5 Mar 2010 04:15	1A433.D		12020---	GEL	BLANK	5mL	1	N/A	33	w	RXD1	N/A	X	RINSE

Date: 3/5/2010

Method 8260B/624 Operator: AXO1

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

Daily Instrument Readings:

Multiplier Voltage: 1471

HARDWARE CONFIGURATION &amp; METHOD CONDITIONS SUMMARY No# 2

## CALIBRATION &amp; CC INFORMATION:

Initial Calibration Date: 3/4/2010

(See pg. 14,15 for ICAL Std. Sci. Ids)

NaHSO4 lot #

N/A

Ci test lot #

84515

Sequence Number: 030510v1

Purge Amount

5	Water Purge Vol:ML
N/A	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Daily Standard

Volume Added for Purge (ul)

Blk/

Smpl

CCV

LCS

BFB

Solution ID#	W1VM100305-01	5+5	1	1	1
IS	UVM100217-01	1	1	1	1
SS	UVM100203-02	1	1	1	1
LCS/MS	W1VM100305-01/02			5+5	
BFB	UVM100203-02				1
SHORT	W1VM100305-03/04	5+5	5+5		

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)	Acceptable O/X	Comments
5 Mar 2010	10:00	1A501.D	UVM100203-02	GEL	RINSE	5mL	1	N/A	1	W	AXO1	N/A	X	BFB ok but see 1A502
5 Mar 2010	10:31	1A502.D	W1VM100305-01	GEL	BFB/CVCCV/LCS	5mL	1	N/A	2	W	AXO1	N/A	O	UVM100220-01D/IVM100304-01
5 Mar 2010	11:02	1A503.D	W1VM100305-02	GEL	LCS	5g	1	N/A	3	S	AXO1	N/A	O	UVM100220-01D/IVM100304-01
5 Mar 2010	11:32	1A504.D	W1VM100305-03	GEL	SHORT/SLCS	5mL	1	N/A	4	W	AXO1	N/A	O	UVM100304-08A/IVM100125-08E
5 Mar 2010	12:03	1A505.D	W1VM100305-04	GEL	SLCS	5g	1	N/A	5	S	AXO1	N/A	O	UVM100304-08A/IVM100125-08E
5 Mar 2010	12:35	1A506.D	12020---	GEL	BLANK	5g	1	N/A	6	S	AXO1	N/A	O	RINSE
5 Mar 2010	13:06	1A507.D	12020---	GEL	BLANK	5mL	1	N/A	7	W	AXO1	N/A	O	RINSE
5 Mar 2010	13:38	1A508.D	247920001	LANL	961771	5g	1	N/A	8	S	AXO1	N/A	O	
5 Mar 2010	14:10	1A509.D	247886001	WASP	961784	5mL	1	pH2	9	W	AXO1	N	O	
5 Mar 2010	14:43	1A510.D	247920002	LANL	961771	5g	1	N/A	10	S	AXO1	N/A	O	
5 Mar 2010	15:15	1A511.D	247973001	LANL	961771	5g	1	N/A	11	S	AXO1	N/A	O	
5 Mar 2010	15:46	1A512.D	247973002	LANL	961771	5g	1	N/A	12	S	AXO1	N/A	O	
5 Mar 2010	16:17	1A513.D	247973003	LANL	961771	5g	1	N/A	13	S	AXO1	N/A	O	
5 Mar 2010	16:48	1A514.D	247973004	LANL	961771	5g	1	N/A	14	S	AXO1	N/A	O	
5 Mar 2010	17:19	1A515.D	247973005	LANL	961771	5g	1	N/A	15	S	AXO1	N/A	O	
5 Mar 2010	17:50	1A516.D	247973006	LANL	961771	5g	1	N/A	16	S	AXO1	N/A	O	
5 Mar 2010	18:20	1A517.D	247973007	LANL	961771	5g	1	N/A	17	S	AXO1	N/A	O	
5 Mar 2010	18:51	1A518.D	247973008	LANL	961771	5g	1	N/A	18	S	AXO1	N/A	O	
5 Mar 2010	19:21	1A519.D	248130001	LANL	961771	5g	1	N/A	19	S	AXO1	N/A	O	
5 Mar 2010	19:52	1A520.D	248130002	LANL	961771	5g	1	N/A	20	S	AXO1	N/A	O	
5 Mar 2010	20:22	1A521.D	248130003	LANL	961771	5g	1	N/A	21	S	AXO1	N/A	O	
5 Mar 2010	20:53	1A522.D	248130004	LANL	961771	5g	1	N/A	22	S	AXO1	N/A	O	
5 Mar 2010	21:23	1A523.D	248130005	LANL	961771	5g	1	N/A	23	S	AXO1	N/A	O	
5 Mar 2010	21:54	1A524.D	1202062920	LANL	961771	5g	1	N/A	24	S	AXO1	N/A	O	MS 248130005
5 Mar 2010	22:24	1A525.D	1202062921	LANL	961771	5g	1	N/A	25	S	AXO1	N/A	O	MSD 248130005

## CALIBRATION &amp; CC INFORMATION:

Initial Calibration Date: 3/4/2010

(See pg. 14 for ICAI Std. Sci. Ids)

NaHSO4 lot #

N/A

Cl test lot #

84515

Sequence Number: 030810V1

Purge Amount

5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Daily Standard	Solution ID#	Volume Added for Purge (ul)	MS/Blk/Smpl	CCV	LCS	BFB
CCV	W1VM100308-01	5+5				
IS	UVM100217-01	1	1	1	1	
SS	UVM100203-02	1	1	1	1	
LCS/MS	W1VM100308-02/03				5+5	
BFB	UVM100203-02					1
SHORT	W1VM100308-04/05	5+5	5+5	5+5		

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)	Acceptable O/X	Comments
8 Mar 2010	07:26	1B101.D	UVM100114-02	GEL	BFB01	5mL	1	N/A	1	w	AXO1	N/A	X	BFB
8 Mar 2010	07:57	1B102.D	W1VM100308-01	GEL	BFB/CCV	5mL	1	N/A	2	w	AXO1	N/A	O	UVM100106-07D/UVM100222-07B
8 Mar 2010	08:27	1B103.D	W1VM100308-02	GEL	LCS	5mL	1	N/A	3	w	AXO1	N/A	X	UVM100220-01D/UVM100307-01 Not Required
8 Mar 2010	08:58	1B104.D	W1VM100308-03	GEL	LCS	5g	1	N/A	4	s	AXO1	N/A	O	UVM100220-01D/UVM100307-01
8 Mar 2010	09:28	1B105.D	W1VM100308-04	GEL	SHORT/SLCS	5mL	1	N/A	5	w	AXO1	N/A	O	UVM100304-08A/UVM100125-08E
8 Mar 2010	09:58	1B106.D	W1VM100308-05	GEL	SLCS	5g	1	N/A	6	s	AXO1	N/A	O	UVM100304-08A/UVM100125-08E
8 Mar 2010	10:29	1B107.D	12020----	GEL	BLANK	5mL	1	N/A	7	w	AXO1	N/A	X	RINSE Not Required
8 Mar 2010	10:59	1B108.D	12020----	GEL	BLANK	5g	1	N/A	8	s	AXO1	N/A	O	RINSE
8 Mar 2010	11:30	1B109.D	248234001	LANL	962525	5g	1	N/A	9	s	AXO1	N/A	O	SOIL
8 Mar 2010	12:01	1B110.D	248234002	LANL	962525	5g	1	N/A	10	s	AXO1	N/A	O	SOIL
8 Mar 2010	12:32	1B111.D	248234003	LANL	962525	5g	1	N/A	11	s	AXO1	N/A	O	SOIL
8 Mar 2010	13:03	1B112.D	248234004	LANL	962525	5g	1	N/A	12	s	AXO1	N/A	O	SOIL
8 Mar 2010	13:34	1B113.D	248234005	LANL	962525	5g	1	N/A	13	s	AXO1	N/A	O	SOIL
8 Mar 2010	14:05	1B114.D	248234006	LANL	962525	5g	1	N/A	14	s	AXO1	N/A	O	SOIL
8 Mar 2010	14:36	1B115.D	248234007	LANL	962525	5g	1	N/A	15	s	AXO1	N/A	X	SOIL IS FAILURE SEE 1C209
8 Mar 2010	15:07	1B116.D	248234008	LANL	962525	5g	1	N/A	16	s	AXO1	N/A	O	SOIL
8 Mar 2010	15:38	1B117.D	248234009	LANL	962525	5g	1	N/A	17	s	AXO1	N/A	O	SOIL
8 Mar 2010	16:09	1B118.D	248514001	LANL	962525	5g	1	N/A	18	s	AXO1	N/A	O	SOIL
8 Mar 2010	16:40	1B119.D	248514002	LANL	962525	5g	1	N/A	19	s	AXO1	N/A	O	SOIL IS+SS FAILURE SEE 1C210
8 Mar 2010	17:11	1B120.D	248514003	LANL	962525	5g	1	N/A	20	s	AXO1	N/A	O	SOIL IS+SS FAILURE SEE 1C211
8 Mar 2010	17:42	1B121.D	248514004	LANL	962525	5g	1	N/A	21	s	AXO1	N/A	O	SOIL
8 Mar 2010	18:12	1B122.D	1202064876	LANL	962525	5g	1	N/A	22	s	AXO1	N/A	O	SOIL MS 248234005
8 Mar 2010	18:43	1B123.D	1202064877	LANL	962525	5g	1	N/A	23	s	AXO1	N/A	O	SOIL MSD 248234005
8 Mar 2010	19:13	1B124.D	12020----	GEL	BLANK	5g	1	N/A	24	s	AXO1	N/A	X	RINSE

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 16-MAR-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> VOA GC/MS	<b>Test / Method:</b> SW846 8260B	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 962525	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 248234(10-2131),248514(10-2196)			
<b>Application Issues:</b> Failed Recovery for Surrogate or Tracer Failed RPD for MS/MSD, or PS/PSD Other			
<b>Specification and Requirements Exception Description:</b>		<b>DER Disposition:</b>	
<p>1. Multiple compounds did not have acceptable calculated RPD's for the MS/MSD.</p> <p>2. The following samples did not pass surrogate recoveries:</p> <p>248514002 Bromofluorobenzene Actual 148.72 Limit 65.00 - 130.00%</p> <p>248514003 Bromofluorobenzene Actual 130.91 Limit 65.00 - 130.00%</p> <p>3. The following samples did not have acceptable internal standard responses:</p> <p>248514002 Chlorobenzene-d5 Actual -50.75 Limit -50 - +100 1,4-Dichlorobenzene Actual -73.95 Limit -50 - +100</p> <p>248514003 1,4-Dichlorobenzene Actual -55.95 Limit -50 - +100</p>		<p>1. The RPD values were not all within the acceptance limits. The MS/MSD pair passed recoveries for all analytes. The results are reported.</p> <p>2-3. The samples were re-analyzed and confirmed the results. It is believed matrix interference has been demonstrated.</p>	

**Originator's Name:**

Ryan Dushak

16-MAR-10

**Data Validator/Group Leader:**

Erin Haubert

19-MAR-10

Data File: /chem/VOA1.i/030810v1/1b113.d  
 Report Date: 19-Mar-2010 08:12

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GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b113.d  
 Lab Smp Id: 248234005 Client Smp ID: RE11-10-1856  
 Inj Date : 08-MAR-2010 13:34  
 Operator : GRB2 Inst ID: VOA1.i  
 Smp Info : |248234005|962525|1|VOAF|1|  
 Misc Info : LANL 5g N/A SOIL  
 Comment :  
 Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
 Meth Date : 19-Mar-2010 08:11 eh1 Quant Type: ISTD  
 Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
 Als bottle: 13  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-2131.sub  
 Target Version: 3.50  
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.81580	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.672	13.672	(1.000)	786262	50.0000		
* 76 Chlorobenzene-d5	117	17.148	17.147	(1.000)	583387	50.0000		
* 102 1,4-Dichlorobenzene-d4	152	19.596	19.601	(1.000)	328519	50.0000		
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	445102	57.9776	66.5	
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	973003	49.5892	56.9	
\$ 87 Bromofluorobenzene	95	18.377	18.376	(0.938)	422843	51.3385	58.9	

## ION RATIO REPORT

## VOA REPORT

Data file: 1b113.d

Report Date: 03/09/2010 06:41

Lab. ID: 248234005

SampleType: SAMPLE

Injection Date: 08-MAR-2010 13:34

Operator: GRB2

Instrument: VOA1.i

Sample Info: |248234005|962525|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A SOIL

Comment:

Method used: /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2131

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
51	1,2-Dichloroethane			CAS#: 107-06-2		
62	16511	13.67	13.43	80-120	100	(T)
64	2731	13.67	13.43	2- 62	17	(T)
-----						
64	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	10925	15.51	15.35	80-120	100	(T)
43	6622	15.51	15.35	236-296	61	(QT)
100	614573	15.50	15.35	0- 58	5625	(QT)

-----  
Q qualifier indicates ion failed ratio requirement



Data File: /chem/VOA1.i/030810v1/1b113.d  
Report Date: 19-Mar-2010 08:12

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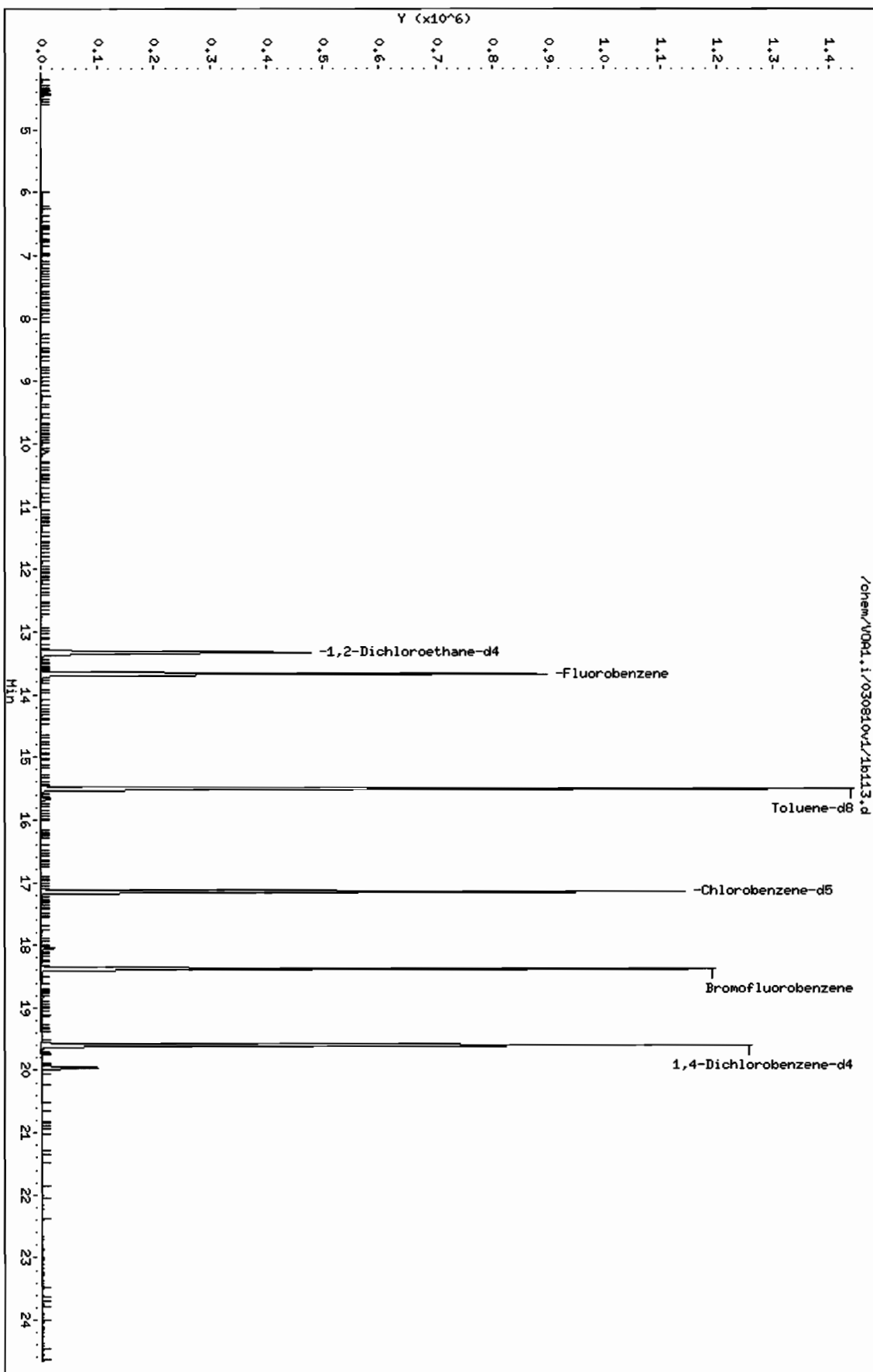
GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA1.i/030810v1/1b113.d  
Lab Smp Id: 248234005 Client Smp ID: RE11-10-1856  
Inj Date : 08-MAR-2010 13:34  
Operator : GRB2 Inst ID: VOA1.i  
Smp Info : |248234005|962525|1|VOAF|1|  
Misc Info : LANL 5g N/A SOIL  
Comment :  
Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m  
Meth Date : 19-Mar-2010 08:11 eh1 Quant Type: ISTD  
Cal Date : 05-MAR-2010 01:41 Cal File: 1a428.d  
Als bottle: 13  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2131.sub  
Target Version: 3.50  
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/V001.i/030810v1/1b113.d  
Date : 08-MAR-2010 13:34  
Client ID: RE11-10-1856  
Sample Info: 1248234005196252511\VOAF\11  
Column phase: RTX-Volatiles

Instrument: V001.i  
Operator: GRB2  
Column diameter: 0.25



GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b122.d

Lab Smp Id: 1202064876

Client Smp ID: RE11-10-1856MS

Inj Date : 08-MAR-2010 18:12

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |1202064876|962525|1|VOAF|1|

Misc Info : LANL 5g N/A SOIL MS 248234005

Comment :

Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Meth Date : 19-Mar-2010 08:11 eh1

Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: la428.d

Als bottle: 22

QC Sample: MS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-2131.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.81580	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.672	13.672	(1.000)	738884	50.0000	
* 76 Chlorobenzene-d5	117	17.148	17.147	(1.000)	558946	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.596	19.601	(1.000)	319288	50.0000	
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327	(0.975)	462851	64.1554	73.6
\$ 65 Toluene-d8	98	15.504	15.504	(0.904)	949099	50.4861	57.9
\$ 87 Bromofluorobenzene	95	18.377	18.376	(0.938)	411014	51.3450	58.9
5 Dichlorodifluoromethane	85	4.976	4.983	(0.364)	125051	33.6361	38.6
6 Chloromethane	50	5.521	5.535	(0.404)	238700	37.0075	42.4
7 Vinyl chloride	62	5.901	5.908	(0.432)	189777	37.9186	43.5
9 Bromomethane	96	6.924	6.938	(0.506)	113444	38.3158	43.9
10 Chloroethane	64	7.196	7.205	(0.526)	124207	38.5872	44.2
11 Trichlorofluoromethane	101	7.817	7.822	(0.572)	299827	47.6868	54.7

Compounds	QUANT SIG			REL RT	RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT			ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
16 Acetone	43	9.240	9.239	(0.676)	863058	197.174	226
15 1,1-Dichloroethylene	61	9.074	9.069	(0.664)	362594	44.5325	51.1
103 1,4-Dichlorobenzene	146	19.624	19.628	(1.001)	366933	35.9562	41.2
18 Iodomethane	142	9.451	9.456	(0.691)	1166116	193.601	222
23 Methylene chloride	84	10.119	10.128	(0.740)	183199	41.0857	47.1
19 Carbon disulfide	76	9.553	9.557	(0.699)	2508250	203.086	233
26 trans-1,2-Dichloroethylene	96	10.533	10.533	(0.770)	156377	39.2875	45.1
30 1,1-Dichloroethane	63	11.311	11.306	(0.827)	359672	42.0384	48.2
35 2-Butanone	43	12.172	12.172	(0.890)	884410	190.610	219
36 cis-1,2-Dichloroethylene	96	12.190	12.190	(0.892)	168731	39.3606	45.1
101 1,3-Dichlorobenzene	146	19.527	19.532	(0.996)	364148	35.9552	41.2
33 2,2-Dichloropropane	77	12.149	12.149	(0.889)	237131	43.5672	50.0
41 Chloroform	83	12.600	12.600	(0.922)	372503	43.6275	50.0
106 1,2-Dichlorobenzene	146	20.066	20.066	(1.024)	358674	37.0774	42.5
39 Bromochloromethane	128	12.549	12.549	(0.918)	78664	40.4721	46.4
43 1,1,1-Trichloroethane	97	12.835	12.834	(0.939)	284765	44.8578	51.4
45 1,1-Dichloropropene	75	13.037	13.037	(0.954)	263370	42.7710	49.0
44 Carbon tetrachloride	117	13.009	13.014	(0.952)	296587	48.8412	56.0
51 1,2-Dichloroethane	62	13.428	13.428	(0.982)	363527	47.6805	54.7
47 Benzene	78	13.322	13.322	(0.974)	649718	38.4169	44.1
54 Trichloroethylene	95	14.105	14.105	(1.032)	188353	43.1462	49.5
57 1,2-Dichloropropane	63	14.446	14.450	(1.057)	184795	39.7157	45.6
60 Bromodichloromethane	83	14.740	14.740	(1.078)	297555	46.8854	53.8
59 Dibromomethane	93	14.616	14.611	(1.069)	118358	42.7176	49.0
64 4-Methyl-2-pentanone	58	15.348	15.348	(0.895)	462369	208.933	240
63 cis-1,3-Dichloropropylene	75	15.247	15.246	(1.115)	308306	41.8021	47.9
66 Toluene	92	15.583	15.582	(0.909)	410744	38.0996	43.7
68 trans-1,3-Dichloropropylene	75	15.868	15.868	(0.925)	324603	43.2314	49.6
69 1,1,2-Trichloroethane	83	16.094	16.089	(0.939)	130808	39.2718	45.0
71 2-Hexanone	43	16.255	16.254	(0.948)	1194716	193.518	222
72 1,3-Dichloropropane	76	16.296	16.296	(0.950)	289864	40.3430	46.3
70 Tetrachloroethylene	164	16.181	16.181	(0.944)	130265	37.8293	43.4
73 Dibromochloromethane	129	16.540	16.535	(0.965)	196289	44.4995	51.0
74 1,2-Dibromoethane	107	16.715	16.715	(0.975)	162564	41.3592	47.4
77 Chlorobenzene	112	17.180	17.180	(1.002)	437229	38.3948	44.0
79 1,1,1,2-Tetrachloroethane	131	17.249	17.249	(1.006)	180106	43.6971	50.1
78 Ethylbenzene	91	17.207	17.207	(1.003)	856707	39.7759	45.6
80 m,p-Xylenes	106	17.323	17.322	(1.010)	582861	76.3324	87.6
81 o-Xylene	106	17.774	17.773	(1.036)	294428	39.2804	45.0
82 Styrene	104	17.792	17.792	(1.038)	509365	40.6907	46.7
83 Bromoform	173	18.096	18.096	(0.923)	133431	44.7820	51.4
88 1,1,2,2-Tetrachloroethane	83	18.496	18.496	(0.944)	206716	38.2798	43.9
92 1,2,3-Trichloropropane	110	18.593	18.593	(0.949)	66239	42.9642	49.3(Q)
91 Bromobenzene	156	18.579	18.579	(0.948)	198109	38.0494	43.6
89 n-Propylbenzene	91	18.547	18.547	(0.946)	1022688	38.5129	44.2
94 2-Chlorotoluene	91	18.731	18.731	(0.956)	755368	39.3090	45.1
84 Isopropylbenzene	105	18.114	18.114	(0.924)	856016	39.4367	45.2

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						( ug/l)	(ug/Kg)	
=====	=====	==	=====	=====	=====	=====	=====	
93 1,3,5-Trimethylbenzene	105	18.703	18.703	(0.954)	747974	39.4737	45.3	
95 4-Chlorotoluene	91	18.842	18.841	(0.961)	662026	38.0174	43.6	
96 tert-Butylbenzene	119	19.062	19.062	(0.973)	597198	39.2820	45.0	
97 1,2,4-Trimethylbenzene	105	19.122	19.122	(0.976)	756785	38.4248	44.1	
99 sec-Butylbenzene	105	19.288	19.288	(0.984)	934356	38.7351	44.4	
100 4-Isopropyltoluene	119	19.408	19.408	(0.990)	717232	38.1746	43.8	
105 n-Butylbenzene	91	19.854	19.854	(1.013)	747990	36.8700	42.3	
108 1,2-Dibromo-3-chloropropane	157	20.991	20.991	(1.071)	47000	44.1770	50.7	

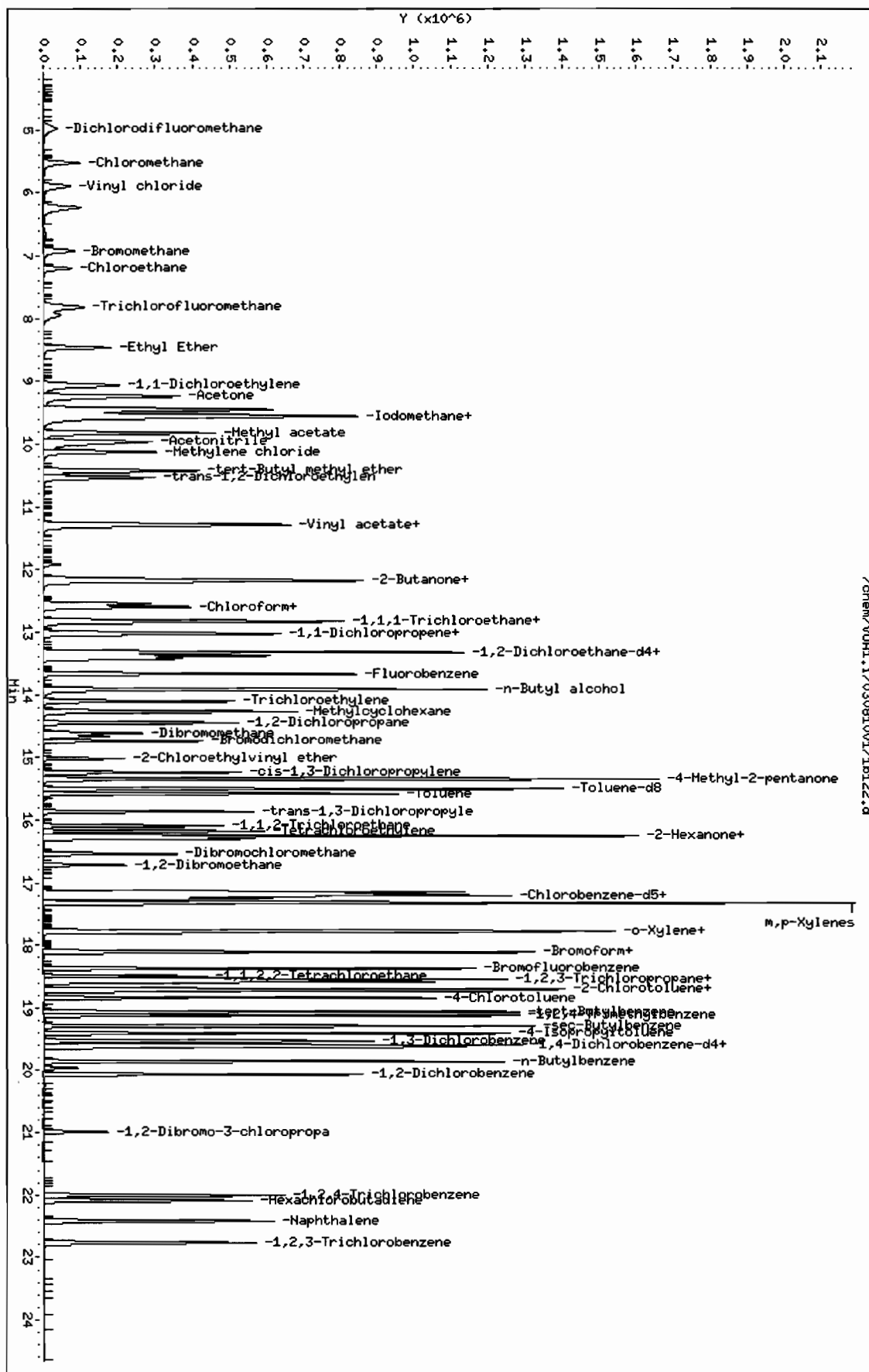
# QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/V001.i/030810v1/1b122.d  
 Date: 08-MAR-2010 18:12  
 Client ID: RE11-10-185645  
 Sample Info: 11202064876196252511V001.i

Column Phase: RTX-Volatiles

Instrument: V001.i  
 Operator: CRB2  
 Column diameter: 0.25



GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/030810v1/1b123.d

Lab Smp Id: 1202064877

Client Smp ID: RE11-10-1856MSD

Inj Date : 08-MAR-2010 18:43

Operator : GRB2

Inst ID: VOA1.i

Smp Info : |1202064877|962525|1|VOAF|1|

Misc Info : LANL 5g N/A SOIL MSD 248234005

Comment :

Method : /chem/VOA1.i/030810v1/VOA1-8260ox-030410.m

Meth Date : 19-Mar-2010 08:11 eh1

Quant Type: ISTD

Cal Date : 05-MAR-2010 01:41

Cal File: 1a428.d

Als bottle: 23

QC Sample: MSD

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-2131.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.81580	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 52 Fluorobenzene	96	13.672	13.672 (1.000)	830623	50.0000	
* 76 Chlorobenzene-d5	117	17.148	17.147 (1.000)	632292	50.0000	
* 102 1,4-Dichlorobenzene-d4	152	19.596	19.601 (1.000)	357435	50.0000	
\$ 48 1,2-Dichloroethane-d4	65	13.327	13.327 (0.975)	515271	63.5331	72.9
\$ 65 Toluene-d8	98	15.509	15.504 (0.904)	1046284	49.1996	56.4
\$ 87 Bromofluorobenzene	95	18.377	18.376 (0.938)	467029	52.1160	59.8
5 Dichlorodifluoromethane	85	4.990	4.983 (0.365)	122653	29.3473	33.7
6 Chloromethane	50	5.528	5.535 (0.404)	240484	33.1662	38.0
7 Vinyl chloride	62	5.901	5.908 (0.432)	195904	34.8196	39.9
9 Bromomethane	96	6.920	6.938 (0.506)	111321	33.4461	38.4
10 Chloroethane	64	7.205	7.205 (0.527)	123991	34.2657	39.3
11 Trichlorofluoromethane	101	7.822	7.822 (0.572)	290457	41.0943	47.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
16 Acetone	43	9.240	9.239	(0.676)	758151	154.077	177
15 1,1-Dichloroethylene	61	9.069	9.069	(0.663)	359348	39.2594	45.0
103 1,4-Dichlorobenzene	146	19.629	19.628	(1.002)	319629	27.9781	32.1
18 Iodomethane	142	9.451	9.456	(0.691)	1161053	171.470	197
23 Methylene chloride	84	10.128	10.128	(0.741)	178512	35.4877	40.7
19 Carbon disulfide	76	9.557	9.557	(0.699)	2515265	181.161	208
26 trans-1,2-Dichloroethylene	96	10.533	10.533	(0.770)	155708	34.7988	39.9
30 1,1-Dichloroethane	63	11.311	11.306	(0.827)	356820	37.0989	42.6
35 2-Butanone	43	12.172	12.172	(0.890)	802440	153.843	176
36 cis-1,2-Dichloroethylene	96	12.190	12.190	(0.892)	168107	34.8839	40.0
101 1,3-Dichlorobenzene	146	19.532	19.532	(0.997)	320585	28.2757	32.4
33 2,2-Dichloropropane	77	12.149	12.149	(0.889)	237777	38.8610	44.6
41 Chloroform	83	12.604	12.600	(0.922)	361642	37.6775	43.2
106 1,2-Dichlorobenzene	146	20.066	20.066	(1.024)	317233	29.2936	33.6
39 Bromochloromethane	128	12.549	12.549	(0.918)	77484	35.4621	40.7
43 1,1,1-Trichloroethane	97	12.834	12.834	(0.939)	278440	39.0171	44.8
45 1,1-Dichloropropene	75	13.042	13.037	(0.954)	262907	37.9802	43.6
44 Carbon tetrachloride	117	13.009	13.014	(0.952)	289274	42.3756	48.6
51 1,2-Dichloroethane	62	13.428	13.428	(0.982)	347415	40.5345	46.5
47 Benzene	78	13.322	13.322	(0.974)	642788	33.8094	38.8
54 Trichloroethylene	95	14.105	14.105	(1.032)	184546	37.6051	43.1
57 1,2-Dichloropropane	63	14.450	14.450	(1.057)	184833	35.3365	40.5
60 Bromodichloromethane	83	14.740	14.740	(1.078)	285850	40.0665	46.0
59 Dibromomethane	93	14.611	14.611	(1.069)	114157	36.6509	42.0
64 4-Methyl-2-pentanone	58	15.348	15.348	(0.895)	438478	175.154	201
63 cis-1,3-Dichloropropylene	75	15.242	15.246	(1.115)	297442	35.8749	41.1
66 Toluene	92	15.582	15.582	(0.909)	393290	32.2488	37.0
68 trans-1,3-Dichloropropylene	75	15.868	15.868	(0.925)	308602	36.3327	41.7
69 1,1,2-Trichloroethane	83	16.093	16.089	(0.939)	128761	34.1730	39.2
71 2-Hexanone	43	16.255	16.254	(0.948)	1096867	157.059	180
72 1,3-Dichloropropane	76	16.296	16.296	(0.950)	278855	34.3087	39.4
70 Tetrachloroethylene	164	16.181	16.181	(0.944)	125281	32.1616	36.9
73 Dibromochloromethane	129	16.540	16.535	(0.965)	189029	37.8826	43.4
74 1,2-Dibromoethane	107	16.715	16.715	(0.975)	152671	34.3365	39.4
77 Chlorobenzene	112	17.180	17.180	(1.002)	417937	32.4434	37.2
79 1,1,1,2-Tetrachloroethane	131	17.249	17.249	(1.006)	170103	36.4829	41.8
78 Ethylbenzene	91	17.207	17.207	(1.003)	800065	32.8371	37.7
80 m,p-Xylenes	106	17.322	17.322	(1.010)	544610	63.0495	72.3
81 o-Xylene	106	17.774	17.773	(1.036)	271799	32.0551	36.8
82 Styrene	104	17.792	17.792	(1.038)	466783	32.9635	37.8
83 Bromoform	173	18.096	18.096	(0.923)	125408	37.5974	43.1
88 1,1,2,2-Tetrachloroethane	83	18.496	18.496	(0.944)	195872	32.4007	37.2
92 1,2,3-Trichloropropane	110	18.593	18.593	(0.949)	62193	36.0346	41.3 (Q)
91 Bromobenzene	156	18.579	18.579	(0.948)	179382	30.7757	35.3
89 n-Propylbenzene	91	18.547	18.547	(0.946)	896331	30.1520	34.6
94 2-Chlorotoluene	91	18.731	18.731	(0.956)	667013	31.0065	35.6
84 Isopropylbenzene	105	18.114	18.114	(0.924)	771971	31.7691	36.4



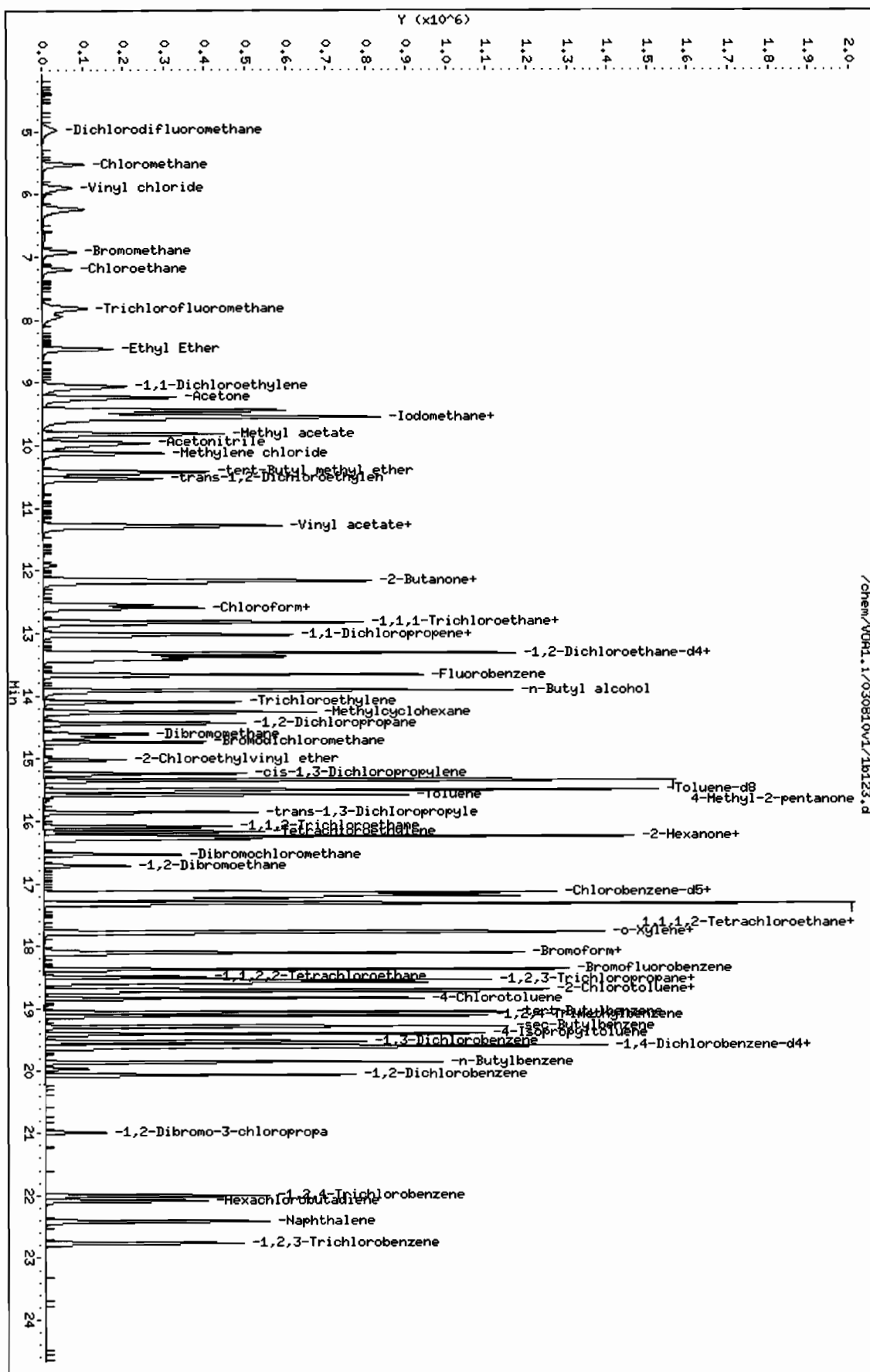
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
93 1,3,5-Trimethylbenzene	105	18.703	18.703	(0.954)	653409	30.8029	35.3
95 4-Chlorotoluene	91	18.841	18.841	(0.961)	585394	30.0290	34.4
96 tert-Butylbenzene	119	19.062	19.062	(0.973)	535513	31.4652	36.1
97 1,2,4-Trimethylbenzene	105	19.122	19.122	(0.976)	658906	29.8847	34.3
99 sec-Butylbenzene	105	19.288	19.288	(0.984)	805100	29.8145	34.2
100 4-Isopropyltoluene	119	19.408	19.408	(0.990)	607286	28.8731	33.1
105 n-Butylbenzene	91	19.854	19.854	(1.013)	600097	26.4232	30.3
108 1,2-Dibromo-3-chloropropane	157	20.991	20.991	(1.071)	43316	36.3691	41.7

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/V091.1/030810v1/1b123.d  
 Date : 08-MAR-2010 18:43  
 Client ID: RE11-10-1856MSD  
 Sample Info: 1120206487196252511V091.11  
 Column phase: RTX-Volatiles

Instrument: V091.1  
 Operator: CRB2  
 Column diameter: 0.25



# **GC/MS Semivolatile Analysis**

**Semi-Volatile Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-2196**

**Method/Analysis Information**

**Procedure:** Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry

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>
248514001	RE36-10-7501
248514002	RE36-10-7524
248514003	RE36-10-7525
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 248514002 (RE36-10-7524) and 248514003 (RE36-10-7525) 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: Wan Buehary Date: 3-30-10



## Roadmap for LANL 10-2196 SVOA

This roadmap was analyzed by llo00884 on 03-25-2010, 20:00.

This roadmap was reviewed by bar00895 on 03-29-2010, 08:32.

Sample

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<input checked="" type="checkbox"/>	N	/chem/MSD6.i/s032110.b/s6c2111.d	248514002	21-MAR-2010	19:24	10-2196.sub	RE36-10-7524	1	963133	DUSE fail istd-rr 4x
<input checked="" type="checkbox"/>	N	/chem/MSD6.i/s032110.b/s6c2112.d	248514003	21-MAR-2010	19:48	10-2196.sub	RE36-10-7525	1	963133	DUSE fail istd-rr 4x
<input type="checkbox"/>	N	/chem/MSD6.i/s032310.b/s6c2323.d	248514002	23-MAR-2010	23:06	10-2196.sub	RE36-10-7524	4	963133	USE; RR OF S6C2111
<input type="checkbox"/>	N	/chem/MSD6.i/s032310.b/s6c2324.d	248514003	23-MAR-2010	23:30	10-2196.sub	RE36-10-7525	4	963133	USE; RR OF S6C2112

QC Sample

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD6.i/s032110.b/s6c2108.d	1202066181	mb	21-MAR-2010	18:13	10-2196.sub	SBLK01	1	963133	
<input type="checkbox"/>	N	/chem/MSD6.i/s032110.b/s6c2109.d	1202066182	lcs	21-MAR-2010	18:37	10-2196.sub	SBLK01LCS	1	963133	<5% fail

# Sample Data Summary

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514001	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 24
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-7501	<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 19:00	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 03/10/2010 12:14	<b>Aliquot:</b> 30.02 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s6c2110.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	438	ug/kg	87.7	438
108-95-2	Phenol	U	438	ug/kg	87.7	438
95-57-8	2-Chlorophenol	U	438	ug/kg	87.7	438
106-46-7	1,4-Dichlorobenzene	U	438	ug/kg	87.7	438
621-64-7	N-Nitrosodipropylamine	U	438	ug/kg	87.7	438
59-50-7	4-Chloro-3-methylphenol	U	438	ug/kg	87.7	438
83-32-9	Acenaphthene	U	43.8	ug/kg	14.5	43.8
121-14-2	2,4-Dinitrotoluene	U	438	ug/kg	43.8	438
100-02-7	4-Nitrophenol	U	438	ug/kg	145	438
87-86-5	Pentachlorophenol	U	438	ug/kg	110	438
129-00-0	Pyrene	U	43.8	ug/kg	13.1	43.8
110-86-1	Pyridine	U	438	ug/kg	87.7	438
62-53-3	Aniline	U	438	ug/kg	131	438
111-44-4	bis(2-Chloroethyl) ether	U	438	ug/kg	87.7	438
541-73-1	1,3-Dichlorobenzene	U	438	ug/kg	87.7	438
100-51-6	Benzyl alcohol	U	438	ug/kg	131	438
95-50-1	1,2-Dichlorobenzene	U	438	ug/kg	87.7	438
108-60-1	bis(2-Chloroisopropyl)ether	U	438	ug/kg	87.7	438
95-48-7	o-Cresol	U	438	ug/kg	87.7	438
65794-96-9	m,p-Cresols	U	438	ug/kg	131	438
67-72-1	Hexachloroethane	U	438	ug/kg	87.7	438
98-95-3	Nitrobenzene	U	438	ug/kg	87.7	438
78-59-1	Isophorone	U	438	ug/kg	87.7	438
88-75-5	2-Nitrophenol	U	438	ug/kg	87.7	438
105-67-9	2,4-Dimethylphenol	U	438	ug/kg	153	438
111-91-1	bis(2-Chloroethoxy)methane	U	438	ug/kg	87.7	438
120-83-2	2,4-Dichlorophenol	U	438	ug/kg	87.7	438
65-85-0	Benzoic acid	U	877	ug/kg	219	877
91-20-3	Naphthalene	U	43.8	ug/kg	13.1	43.8
106-47-8	4-Chloroaniline	U	438	ug/kg	87.7	438
87-68-3	Hexachlorobutadiene	U	438	ug/kg	87.7	438
91-57-6	2-Methylnaphthalene	U	43.8	ug/kg	8.77	43.8
77-47-4	Hexachlorocyclopentadiene	U	438	ug/kg	87.7	438
88-06-2	2,4,6-Trichlorophenol	U	438	ug/kg	87.7	438
95-95-4	2,4,5-Trichlorophenol	U	438	ug/kg	87.7	438
91-58-7	2-Chloronaphthalene	U	43.8	ug/kg	14.5	43.8
88-74-4	2-Nitroaniline	U	438	ug/kg	87.7	438
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	438	ug/kg	87.7	438

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514001	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 24
<b>Client ID:</b> RE36-10-7501	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 963133	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 03/21/2010 19:00	<b>Inst:</b> MSD6.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 03/10/2010 12:14	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s6c2110.d	<b>Aliquot:</b> 30.02 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	438	ug/kg	87.7	438
606-20-2	2,6-Dinitrotoluene	U	438	ug/kg	43.8	438
208-96-8	Acenaphthylene	U	43.8	ug/kg	13.1	43.8
51-28-5	2,4-Dinitrophenol	U	877	ug/kg	167	877
132-64-9	Dibenzofuran	U	438	ug/kg	87.7	438
84-66-2	Diethylphthalate	U	438	ug/kg	87.7	438
86-73-7	Fluorene	U	43.8	ug/kg	13.1	43.8
7005-72-3	4-Chlorophenylphenylether	U	438	ug/kg	87.7	438
534-52-1	2-Methyl-4,6-dinitrophenol	U	438	ug/kg	87.7	438
100-01-6	4-Nitroaniline	U	438	ug/kg	131	438
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	438	ug/kg	87.7	438
122-66-7	Azobenzene	U	438	ug/kg	87.7	438
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	438	ug/kg	87.7	438
118-74-1	Hexachlorobenzene	U	438	ug/kg	87.7	438
85-01-8	Phenanthrene	U	43.8	ug/kg	13.1	43.8
120-12-7	Anthracene	U	43.8	ug/kg	8.77	43.8
84-74-2	Di-n-butylphthalate	U	438	ug/kg	87.7	438
206-44-0	Fluoranthene	U	43.8	ug/kg	13.1	43.8
85-68-7	Butylbenzylphthalate	U	438	ug/kg	87.7	438
56-55-3	Benzo(a)anthracene	U	43.8	ug/kg	13.1	43.8
91-94-1	3,3'-Dichlorobenzidine	U	438	ug/kg	131	438
218-01-9	Chrysene	U	43.8	ug/kg	13.1	43.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	438	ug/kg	87.7	438
117-84-0	Di-n-octylphthalate	U	438	ug/kg	87.7	438
205-99-2	Benzo(b)fluoranthene	U	43.8	ug/kg	13.1	43.8
207-08-9	Benzo(k)fluoranthene	U	43.8	ug/kg	13.1	43.8
50-32-8	Benzo(a)pyrene	U	43.8	ug/kg	13.1	43.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.8	ug/kg	13.1	43.8
53-70-3	Dibenzo(a,h)anthracene	U	43.8	ug/kg	13.1	43.8
191-24-2	Benzo(ghi)perylene	U	43.8	ug/kg	13.1	43.8
120-82-1	1,2,4-Trichlorobenzene	U	438	ug/kg	87.7	438

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	7.99	287	ug/kg		J
112-80-1	Oleic Acid	8.12	688	ug/kg	99	NJ

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514001	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 24
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-7501	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 963133	<b>Inst:</b> MSD6J	<b>Dilution:</b> 1
<b>Run Date:</b> 03/21/2010 19:00	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 03/10/2010 12:14	<b>Aliquot:</b> 30.02 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s6c2110.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.66	222	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.94	202	ug/kg	98	NJ
	Unknown	9	392	ug/kg		J
	Unknown	9.12	313	ug/kg		J
	Unknown	9.22	585	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.3	895	ug/kg	96	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.42	262	ug/kg	95	NJ
	Unknown	9.59	239	ug/kg		J
	Unknown	9.61	204	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.66	295	ug/kg	90	NJ
	Unknown	9.71	183	ug/kg		J
	Unknown	9.91	287	ug/kg		J
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	10.35	628	ug/kg	87	NJ
62016-76-6	Nonadecane, 1-chloro-	10.63	997	ug/kg	86	NJ

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514002	Date Received: 03/03/2010 08:50	%Moisture: 16
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7524	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.1	Dilution: 4
Run Date: 03/23/2010 23:06	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.04 g	Final Volume: 1 mL
Data File: s6c2323.d	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1590	ug/kg	317	1590
108-95-2	Phenol	U	1590	ug/kg	317	1590
95-57-8	2-Chlorophenol	U	1590	ug/kg	317	1590
106-46-7	1,4-Dichlorobenzene	U	1590	ug/kg	317	1590
621-64-7	N-Nitrosodipropylamine	U	1590	ug/kg	317	1590
59-50-7	4-Chloro-3-methylphenol	U	1590	ug/kg	317	1590
83-32-9	Acenaphthene	U	159	ug/kg	52.3	159
121-14-2	2,4-Dinitrotoluene	U	1590	ug/kg	159	1590
100-02-7	4-Nitrophenol	U	1590	ug/kg	523	1590
87-86-5	Pentachlorophenol	U	1590	ug/kg	396	1590
129-00-0	Pyrene	J	60.3	ug/kg	47.6	159
110-86-1	Pyridine	U	1590	ug/kg	317	1590
62-53-3	Aniline	U	1590	ug/kg	476	1590
111-44-4	bis(2-Chloroethyl) ether	U	1590	ug/kg	317	1590
541-73-1	1,3-Dichlorobenzene	U	1590	ug/kg	317	1590
100-51-6	Benzyl alcohol	U	1590	ug/kg	476	1590
95-50-1	1,2-Dichlorobenzene	U	1590	ug/kg	317	1590
108-60-1	bis(2-Chloroisopropyl)ether	U	1590	ug/kg	317	1590
95-48-7	o-Cresol	U	1590	ug/kg	317	1590
65794-96-9	m,p-Cresols	U	1590	ug/kg	476	1590
67-72-1	Hexachloroethane	U	1590	ug/kg	317	1590
98-95-3	Nitrobenzene	U	1590	ug/kg	317	1590
78-59-1	Isophorone	U	1590	ug/kg	317	1590
88-75-5	2-Nitrophenol	U	1590	ug/kg	317	1590
105-67-9	2,4-Dimethylphenol	U	1590	ug/kg	555	1590
111-91-1	bis(2-Chloroethoxy)methane	U	1590	ug/kg	317	1590
120-83-2	2,4-Dichlorophenol	U	1590	ug/kg	317	1590
65-85-0	Benzoic acid	U	3170	ug/kg	793	3170
91-20-3	Naphthalene	U	159	ug/kg	47.6	159
106-47-8	4-Chloroaniline	U	1590	ug/kg	317	1590
87-68-3	Hexachlorobutadiene	U	1590	ug/kg	317	1590
91-57-6	2-Methylnaphthalene	U	159	ug/kg	31.7	159
77-47-4	Hexachlorocyclopentadiene	U	1590	ug/kg	317	1590
88-06-2	2,4,6-Trichlorophenol	U	1590	ug/kg	317	1590
95-95-4	2,4,5-Trichlorophenol	U	1590	ug/kg	317	1590
91-58-7	2-Chloronaphthalene	U	159	ug/kg	52.3	159
88-74-4	2-Nitroaniline	U	1590	ug/kg	317	1590
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	1590	ug/kg	317	1590

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514002	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 16
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-7524	<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> 4
<b>Run Date:</b> 03/23/2010 23:06	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 03/10/2010 12:14	<b>Aliquot:</b> 30.04 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s6c2323.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	1590	ug/kg	317	1590
606-20-2	2,6-Dinitrotoluene	U	1590	ug/kg	159	1590
208-96-8	Acenaphthylene	U	159	ug/kg	47.6	159
51-28-5	2,4-Dinitrophenol	U	3170	ug/kg	603	3170
132-64-9	Dibenzofuran	U	1590	ug/kg	317	1590
84-66-2	Diethylphthalate	U	1590	ug/kg	317	1590
86-73-7	Fluorene	U	159	ug/kg	47.6	159
7005-72-3	4-Chlorophenylphenylether	U	1590	ug/kg	317	1590
534-52-1	2-Methyl-4,6-dinitrophenol	U	1590	ug/kg	317	1590
100-01-6	4-Nitroaniline	U	1590	ug/kg	476	1590
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	1590	ug/kg	317	1590
122-66-7	Azobenzene	U	1590	ug/kg	317	1590
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	1590	ug/kg	317	1590
118-74-1	Hexachlorobenzene	U	1590	ug/kg	317	1590
85-01-8	Phenanthrene	U	159	ug/kg	47.6	159
120-12-7	Anthracene	U	159	ug/kg	31.7	159
84-74-2	Di-n-butylphthalate	U	1590	ug/kg	317	1590
206-44-0	Fluoranthene	J	67.0	ug/kg	47.6	159
85-68-7	Butylbenzylphthalate	U	1590	ug/kg	317	1590
56-55-3	Benzo(a)anthracene	U	159	ug/kg	47.6	159
91-94-1	3,3'-Dichlorobenzidine	U	1590	ug/kg	476	1590
218-01-9	Chrysene	U	159	ug/kg	47.6	159
117-81-7	bis(2-Ethylhexyl)phthalate	U	1590	ug/kg	317	1590
117-84-0	Di-n-octylphthalate	U	1590	ug/kg	317	1590
205-99-2	Benzo(b)fluoranthene	J	57.2	ug/kg	47.6	159
207-08-9	Benzo(k)fluoranthene	U	159	ug/kg	47.6	159
50-32-8	Benzo(a)pyrene	U	159	ug/kg	47.6	159
193-39-5	Indeno(1,2,3-cd)pyrene	U	159	ug/kg	47.6	159
53-70-3	Dibenzo(a,h)anthracene	U	159	ug/kg	47.6	159
191-24-2	Benzo(ghi)perylene	U	159	ug/kg	47.6	159
120-82-1	1,2,4-Trichlorobenzene	U	1590	ug/kg	317	1590

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
56221-91-1	13-Tetradecen-1-ol acetate	10.6	924	ug/kg	96	NJ
112-95-8	Eicosane	11.8	671	ug/kg	96	NJ

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

SDG Number: 10-2196  
Lab Sample ID: 248514002

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: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-7524  
Batch ID: 963133  
Run Date: 03/23/2010 23:06  
Prep Date: 03/10/2010 12:14  
Data File: s6c2323.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
	Unknown		12.43	1490	ug/kg		J
	Unknown		12.46	906	ug/kg		J
	Unknown		12.62	2150	ug/kg		J
	Unknown		14.02	654	ug/kg		J



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

SDG Number: 10-2196  
Lab Sample ID: 248514003

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: 30.07 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 20.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-7525  
Batch ID: 963133  
Run Date: 03/23/2010 23:30  
Prep Date: 03/10/2010 12:14  
Data File: s6c2324.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1670	ug/kg	333	1670
108-95-2	Phenol	U	1670	ug/kg	333	1670
95-57-8	2-Chlorophenol	U	1670	ug/kg	333	1670
106-46-7	1,4-Dichlorobenzene	U	1670	ug/kg	333	1670
621-64-7	N-Nitrosodipropylamine	U	1670	ug/kg	333	1670
59-50-7	4-Chloro-3-methylphenol	U	1670	ug/kg	333	1670
83-32-9	Acenaphthene	U	167	ug/kg	55.0	167
121-14-2	2,4-Dinitrotoluene	U	1670	ug/kg	167	1670
100-02-7	4-Nitrophenol	U	1670	ug/kg	550	1670
87-86-5	Pentachlorophenol	U	1670	ug/kg	416	1670
129-00-0	Pyrene	U	167	ug/kg	50.0	167
110-86-1	Pyridine	U	1670	ug/kg	333	1670
62-53-3	Aniline	U	1670	ug/kg	500	1670
111-44-4	bis(2-Chloroethyl) ether	U	1670	ug/kg	333	1670
541-73-1	1,3-Dichlorobenzene	U	1670	ug/kg	333	1670
100-51-6	Benzyl alcohol	U	1670	ug/kg	500	1670
95-50-1	1,2-Dichlorobenzene	U	1670	ug/kg	333	1670
108-60-1	bis(2-Chloroisopropyl) ether	U	1670	ug/kg	333	1670
95-48-7	o-Cresol	U	1670	ug/kg	333	1670
65794-96-9	m,p-Cresols	U	1670	ug/kg	500	1670
67-72-1	Hexachloroethane	U	1670	ug/kg	333	1670
98-95-3	Nitrobenzene	U	1670	ug/kg	333	1670
78-59-1	Isophorone	U	1670	ug/kg	333	1670
88-75-5	2-Nitrophenol	U	1670	ug/kg	333	1670
105-67-9	2,4-Dimethylphenol	U	1670	ug/kg	583	1670
111-91-1	bis(2-Chloroethoxy)methane	U	1670	ug/kg	333	1670
120-83-2	2,4-Dichlorophenol	U	1670	ug/kg	333	1670
65-85-0	Benzoic acid	U	3330	ug/kg	833	3330
91-20-3	Naphthalene	U	167	ug/kg	50.0	167
106-47-8	4-Chloroaniline	U	1670	ug/kg	333	1670
87-68-3	Hexachlorobutadiene	U	1670	ug/kg	333	1670
91-57-6	2-Methylnaphthalene	U	167	ug/kg	33.3	167
77-47-4	Hexachlorocyclopentadiene	U	1670	ug/kg	333	1670
88-06-2	2,4,6-Trichlorophenol	U	1670	ug/kg	333	1670
95-95-4	2,4,5-Trichlorophenol	U	1670	ug/kg	333	1670
91-58-7	2-Chloronaphthalene	U	167	ug/kg	55.0	167
88-74-4	2-Nitroaniline	U	1670	ug/kg	333	1670
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	1670	ug/kg	333	1670

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514003	Date Received: 03/03/2010 08:50	% Moisture: 20.2
Client ID: RE36-10-7525	Client: LANL010	Project: LANL01004
Batch ID: 963133	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/23/2010 23:30	Inst: MSD6.I	Dilution: 4
Prep Date: 03/10/2010 12:14	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6c2324.d	Aliquot: 30.07 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	1670	ug/kg	333	1670
606-20-2	2,6-Dinitrotoluene	U	1670	ug/kg	167	1670
208-96-8	Acenaphthylene	U	167	ug/kg	50.0	167
51-28-5	2,4-Dinitrophenol	U	3330	ug/kg	633	3330
132-64-9	Dibenzofuran	U	1670	ug/kg	333	1670
84-66-2	Diethylphthalate	U	1670	ug/kg	333	1670
86-73-7	Fluorene	U	167	ug/kg	50.0	167
7005-72-3	4-Chlorophenylphenylether	U	1670	ug/kg	333	1670
534-52-1	2-Methyl-4,6-dinitrophenol	U	1670	ug/kg	333	1670
100-01-6	4-Nitroaniline	U	1670	ug/kg	500	1670
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	1670	ug/kg	333	1670
122-66-7	Azobenzene	U	1670	ug/kg	333	1670
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	1670	ug/kg	333	1670
118-74-1	Hexachlorobenzene	U	1670	ug/kg	333	1670
85-01-8	Phenanthrene	U	167	ug/kg	50.0	167
120-12-7	Anthracene	U	167	ug/kg	33.3	167
84-74-2	Di-n-butylphthalate	U	1670	ug/kg	333	1670
206-44-0	Fluoranthene	U	167	ug/kg	50.0	167
85-68-7	Butylbenzylphthalate	U	1670	ug/kg	333	1670
56-55-3	Benzo(a)anthracene	U	167	ug/kg	50.0	167
91-94-1	3,3'-Dichlorobenzidine	U	1670	ug/kg	500	1670
218-01-9	Chrysene	U	167	ug/kg	50.0	167
117-81-7	bis(2-Ethylhexyl)phthalate	U	1670	ug/kg	333	1670
117-84-0	Di-n-octylphthalate	U	1670	ug/kg	333	1670
205-99-2	Benzo(b)fluoranthene	U	167	ug/kg	50.0	167
207-08-9	Benzo(k)fluoranthene	U	167	ug/kg	50.0	167
50-32-8	Benzo(a)pyrene	U	167	ug/kg	50.0	167
193-39-5	Indeno(1,2,3-cd)pyrene	U	167	ug/kg	50.0	167
53-70-3	Dibenzo(a,h)anthracene	U	167	ug/kg	50.0	167
191-24-2	Benzo(ghi)perylene	U	167	ug/kg	50.0	167
120-82-1	1,2,4-Trichlorobenzene	U	1670	ug/kg	333	1670

**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	1890	ug/kg	98	NJ
	Unknown	9.92	720	ug/kg		J

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514003	Date Received: 03/03/2010 08:50	% Moisture: 20.2
Client ID: RE36-10-7525	Client: LANL010	Project: LANL01004
Batch ID: 963133	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/23/2010 23:30	Inst: MSD6.I	Dilution: 4
Prep Date: 03/10/2010 12:14	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6c2324.d	Aliquot: 30.07 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary				Estimated		
CAS No.	Tentatively Identified Compound (TIC)		RT	Units	Fit	Qual
559-74-0	Friedelan-3-one		10.35	5400	ug/kg	98
	Unknown		10.68	669	ug/kg	J

# QC Summary

Semi-Volatile  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-2196

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
248514001	RE36-10-7501	43	44	37	48	60	62
248514002	RE36-10-7524	53 D	53 D	51 D	66 D	59 D	75 D
248514003	RE36-10-7525	60 D	60 D	56 D	74 D	76 D	78 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

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

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
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

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

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
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: 10-2196

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
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

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

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

Page 1 of 8

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

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

Page 2 of 8

SDG Number: 10-2196

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 <i>o</i> -Nitroaniline	1900	0.00 U	580	31 *	33-106
99-09-2	MS 3-Nitroaniline <i>m</i> -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: 10-2196

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</i> -Nitroaniline	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: 10-2196

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  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

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: 10-2196

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 <i>o</i> -Nitroaniline	1900	0.00 U	634	33	33-106	9	0-30
99-09-2	MSD 3-Nitroaniline <i>m</i> -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

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

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
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-Nitroaniline</i>	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-Diphenylhydrazine</i>	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: 10-2196

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	Parname	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:	10-2196	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 RE36-10-7501	248514001	s6c2110.d	03/21/10	1900
05 RE36-10-7524	248514002	s6c2323.d	03/23/10	2306
06 RE36-10-7525	248514003	s6c2324.d	03/23/10	2330

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2196

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: 10-2196

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: 10-2196

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
RE36-10-7501	248514001	s6c2110.d	21-MAR-10 19:00

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2196

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
RE36-10-7524	248514002	s6c2323.d	23-MAR-10 23:06
RE36-10-7525	248514003	s6c2324.d	23-MAR-10 23:30

### Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2196

Instrument: MSD6.1

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	#			
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
RE36-10-7501	295647		3.83		1047934		4.69		668068		5.94		1126470		7.09		933342		9.49		757024		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: 10-2196

Instrument: MSD6.I

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	#				
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																								
RE36-10-7524	323319		3.95		1164784		4.82		721949		6.06		1211933		7.23		956836		9.64		687730		11.3	
RE36-10-7525	357389		3.95		1268217		4.82		774077		6.06		1343000		7.23		1193438		9.64		949371		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: 10-2196  
Lab Sample ID: 248514001

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: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24  
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	438	ug/kg	87.7	438
108-95-2	Phenol	U	438	ug/kg	87.7	438
95-57-8	2-Chlorophenol	U	438	ug/kg	87.7	438
106-46-7	1,4-Dichlorobenzene	U	438	ug/kg	87.7	438
621-64-7	N-Nitrosodipropylamine	U	438	ug/kg	87.7	438
59-50-7	4-Chloro-3-methylphenol	U	438	ug/kg	87.7	438
83-32-9	Acenaphthene	U	43.8	ug/kg	14.5	43.8
121-14-2	2,4-Dinitrotoluene	U	438	ug/kg	43.8	438
100-02-7	4-Nitrophenol	U	438	ug/kg	145	438
87-86-5	Pentachlorophenol	U	438	ug/kg	110	438
129-00-0	Pyrene	U	43.8	ug/kg	13.1	43.8
110-86-1	Pyridine	U	438	ug/kg	87.7	438
62-53-3	Aniline	U	438	ug/kg	131	438
111-44-4	bis(2-Chloroethyl) ether	U	438	ug/kg	87.7	438
541-73-1	1,3-Dichlorobenzene	U	438	ug/kg	87.7	438
100-51-6	Benzyl alcohol	U	438	ug/kg	131	438
95-50-1	1,2-Dichlorobenzene	U	438	ug/kg	87.7	438
108-60-1	bis(2-Chloroisopropyl)ether	U	438	ug/kg	87.7	438
95-48-7	o-Cresol	U	438	ug/kg	87.7	438
65794-96-9	m,p-Cresols	U	438	ug/kg	131	438
67-72-1	Hexachloroethane	U	438	ug/kg	87.7	438
98-95-3	Nitrobenzene	U	438	ug/kg	87.7	438
78-59-1	Isophorone	U	438	ug/kg	87.7	438
88-75-5	2-Nitrophenol	U	438	ug/kg	87.7	438
105-67-9	2,4-Dimethylphenol	U	438	ug/kg	153	438
111-91-1	bis(2-Chloroethoxy)methane	U	438	ug/kg	87.7	438
120-83-2	2,4-Dichlorophenol	U	438	ug/kg	87.7	438
65-85-0	Benzoic acid	U	877	ug/kg	219	877
91-20-3	Naphthalene	U	43.8	ug/kg	13.1	43.8
106-47-8	4-Chloroaniline	U	438	ug/kg	87.7	438
87-68-3	Hexachlorobutadiene	U	438	ug/kg	87.7	438
91-57-6	2-Methylnaphthalene	U	43.8	ug/kg	8.77	43.8
77-47-4	Hexachlorocyclopentadiene	U	438	ug/kg	87.7	438
88-06-2	2,4,6-Trichlorophenol	U	438	ug/kg	87.7	438
95-95-4	2,4,5-Trichlorophenol	U	438	ug/kg	87.7	438
91-58-7	2-Chloronaphthalene	U	43.8	ug/kg	14.5	43.8
88-74-4	2-Nitroaniline	U	438	ug/kg	87.7	438
99-09-2	<i>o</i> -Nitroaniline	U	438	ug/kg	87.7	438
	3-Nitroaniline					

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

SDG Number: 10-2196	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248514001	Date Received: 03/03/2010 08:50	%Moisture: 24
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7501	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 1
Run Date: 03/21/2010 19:00	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s6c2110.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	438	ug/kg	87.7	438
606-20-2	2,6-Dinitrotoluene	U	438	ug/kg	43.8	438
208-96-8	Acenaphthylene	U	43.8	ug/kg	13.1	43.8
51-28-5	2,4-Dinitrophenol	U	877	ug/kg	167	877
132-64-9	Dibenzofuran	U	438	ug/kg	87.7	438
84-66-2	Diethylphthalate	U	438	ug/kg	87.7	438
86-73-7	Fluorene	U	43.8	ug/kg	13.1	43.8
7005-72-3	4-Chlorophenylphenylether	U	438	ug/kg	87.7	438
534-52-1	2-Methyl-4,6-dinitrophenol	U	438	ug/kg	87.7	438
100-01-6	4-Nitroaniline	U	438	ug/kg	131	438
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	438	ug/kg	87.7	438
122-66-7	Azobenzene	U	438	ug/kg	87.7	438
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	438	ug/kg	87.7	438
118-74-1	Hexachlorobenzene	U	438	ug/kg	87.7	438
85-01-8	Phenanthrene	U	43.8	ug/kg	13.1	43.8
120-12-7	Anthracene	U	43.8	ug/kg	8.77	43.8
84-74-2	Di-n-butylphthalate	U	438	ug/kg	87.7	438
206-44-0	Fluoranthene	U	43.8	ug/kg	13.1	43.8
85-68-7	Butylbenzylphthalate	U	438	ug/kg	87.7	438
56-55-3	Benzo(a)anthracene	U	43.8	ug/kg	13.1	43.8
91-94-1	3,3'-Dichlorobenzidine	U	438	ug/kg	131	438
218-01-9	Chrysene	U	43.8	ug/kg	13.1	43.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	438	ug/kg	87.7	438
117-84-0	Di-n-octylphthalate	U	438	ug/kg	87.7	438
205-99-2	Benzo(b)fluoranthene	U	43.8	ug/kg	13.1	43.8
207-08-9	Benzo(k)fluoranthene	U	43.8	ug/kg	13.1	43.8
50-32-8	Benzo(a)pyrene	U	43.8	ug/kg	13.1	43.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.8	ug/kg	13.1	43.8
53-70-3	Dibenzo(a,h)anthracene	U	43.8	ug/kg	13.1	43.8
191-24-2	Benzo(ghi)perylene	U	43.8	ug/kg	13.1	43.8
120-82-1	1,2,4-Trichlorobenzene	U	438	ug/kg	87.7	438

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	7.99	287	ug/kg		J
112-80-1	Oleic Acid	8.12	688	ug/kg	99	NJ

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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514001	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 24
<b>Client ID:</b> RE36-10-7501	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 963133	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 03/21/2010 19:00	<b>Inst:</b> MSD6.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 03/10/2010 12:14	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s6c2110.d	<b>Aliquot:</b> 30.02 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

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

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown	8.66	222	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.94	202	ug/kg	98	NJ
	Unknown	9	392	ug/kg		J
	Unknown	9.12	313	ug/kg		J
	Unknown	9.22	585	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.3	895	ug/kg	96	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.42	262	ug/kg	95	NJ
	Unknown	9.59	239	ug/kg		J
	Unknown	9.61	204	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.66	295	ug/kg	90	NJ
	Unknown	9.71	183	ug/kg		J
	Unknown	9.91	287	ug/kg		J
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	10.35	628	ug/kg	87	NJ
62016-76-6	Nonadecane, 1-chloro-	10.63	997	ug/kg	86	NJ

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2110.d  
Lab Smp Id: 248514001 Client Smp ID: RE36-10-7501  
Inj Date : 21-MAR-2010 19:00  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248514001|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 : 22-Mar-2010 16:50 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 7  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2196.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	30.02000	weight of sample
M	23.99290	% 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	3.828	3.822	(1.000)	295647		40.0000	
* 29 Naphthalene-d8	136	4.687	4.687	(1.000)	1047934		40.0000	
* 46 Acenaphthene-d10	164	5.940	5.934	(1.000)	668068		40.0000	
* 67 Phenanthrene-d10	188	7.093	7.093	(1.000)	1126470		40.0000	
* 91 Chrysene-d12	240	9.492	9.486	(1.000)	933342		40.0000	
* 98 Perylene-d12	264	11.086	11.075	(1.000)	757024		40.0000	
\$ 3 2-Fluorophenol	112	3.016	3.005	(0.788)	350991		42.7064	1870
\$ 5 Phenol-d5	99	3.540	3.534	(0.925)	456547		43.6804	1910
\$ 20 Nitrobenzene-d5	82	4.187	4.181	(0.893)	183506		18.3184	803
\$ 39 2-Fluorobiphenyl	172	5.428	5.422	(0.914)	415803		24.1237	1060
\$ 60 2,4,6-Tribromophenol	329	6.528	6.522	(1.099)	111877		59.6775	2620
\$ 81 p-Terphenyl-d14	244	8.469	8.463	(0.892)	501866		30.8569	1350

## ION RATIO REPORT

## SV REPORT

Data file: s6c2110.d

Report Date: 03/22/2010 20:23

Lab. ID: 248514001

SampleType: SAMPLE

Injection Date: 21-MAR-2010 19:00

Operator: nagl

Instrument: MSD6.i

Sample Info: |248514001|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: 10-2196

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	22884	3.54	3.60	80-120	100	(T)
93	5174	3.50	3.60	402-462	23	(QT)
-----						
6	Phenol		CAS#: 108-95-2			
94	38084	3.40	3.55	80-120	100	(T)
66	7492	3.40	3.55	15- 75	20	(T)
65	28808	3.40	3.55	3- 63	76	(QT)
-----						
7	bis(2-Chloroethyl) ether		CAS#: 111-44-4			
63	17003	3.79	3.62	80-120	100	(T)
93	586536	3.79	3.60	248-308	3449	(QT)
95	9668	3.79	3.62	11- 71	57	(T)
-----						
15	o-Cresol		CAS#: 95-48-7			
107	15467	3.88	3.94	80-120	100	( )
108	5136	3.88	3.94	86-146	33	(Q)
77	22334	3.88	3.94	22- 82	144	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	28094	4.19	4.06	80-120	100	(T)
42	19172	4.19	4.06	40-100	68	(T)
-----						
18	m,p-Cresols		CAS#: 65794-96-9			
107	44884	3.79	4.04	80-120	100	(T)
108	10600	3.79	4.04	67-127	24	(QT)
77	214730	3.79	4.04	5- 65	478	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
21 Nitrobenzene			CAS#:	98-95-3		
77	22334	3.88	4.20	80-120	100	(T)
65	9438	3.88	4.20	0- 45	42	(T)
123	553	3.79	4.20	16- 76	2	(QT)
-----						
22 Isophorone			CAS#:	78-59-1		
82	183506	4.19	4.35	80-120	100	(T)
138	5636	4.69	4.35	0- 50	3	(T)
-----						
25 bis(2-Chloroethoxy)methane			CAS#:	111-91-1		
93	20540	4.16	4.47	80-120	100	(T)
123	771	4.42	4.47	0- 48	4	( )
95	739	4.16	4.47	3- 63	4	(T)
-----						
40 2-Chloronaphthalene			CAS#:	91-58-7		
162	44273	5.67	5.53	80-120	100	(T)
164	2571	5.67	5.53	4- 64	6	(T)
127	2795	5.67	5.53	8- 68	6	(QT)
-----						
42 o-Nitroaniline			CAS#:	88-74-4		
65	48176	5.67	5.59	80-120	100	(T)
92	58175	5.67	5.59	38- 98	121	(QT)
138	4584	5.67	5.59	80-140	10	(QT)
-----						
43 Dimethylphthalate			CAS#:	131-11-3		
163	121700	5.94	5.70	80-120	100	(T)
164	667147	5.94	5.70	0- 41	548	(QT)
-----						
45 Acenaphthylene			CAS#:	208-96-8		
152	23123	5.43	5.83	80-120	100	(T)
151	21886	5.43	5.83	0- 50	95	(QT)
153	7513	5.43	5.83	0- 44	32	(T)
-----						
48 2,4-Dinitrophenol			CAS#:	51-28-5		
184	116	5.96	5.96	80-120	100	( )
154	2364	5.94	5.96	718-778	2029	(Q)
-----						
50 2,4-Dinitrotoluene			CAS#:	121-14-2		
165	89138	5.94	6.05	80-120	100	(T)
89	1163	5.94	6.05	39- 99	1	(QT)
63	1151	5.93	6.05	20- 80	1	(QT)
-----						
53 Fluorene			CAS#:	86-73-7		
166	6529	6.53	6.34	80-120	100	(T)
165	7065	6.53	6.34	60-120	108	(T)
167	2328	6.53	6.34	0- 44	36	(T)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	386	6.53	6.36	80-120	100	(T)
105	594	6.53	6.36	9- 69	154	(QT)
51	1292	6.53	6.35	28- 88	335	(QT)
-----						
85	Butylbenzylphthalate			CAS#: 85-68-7		
149	181986	9.20	8.89	80-120	100	(T)
91	163836	9.20	8.89	39- 99	90	(T)
206	2829	9.23	8.89	0- 54	2	(T)
-----						
93	bis(2-Ethylhexyl)phthalate			CAS#: 117-81-7		
149	181986	9.20	9.42	80-120	100	(T)
167	17311	9.20	9.42	3- 63	10	(T)
-----						
Q qualifier indicates ion failed ratio requirement						



GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2110.d  
Lab Smp Id: 248514001 Client Smp ID: RE36-10-7501  
Inj Date : 21-MAR-2010 19:00  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248514001|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 : 22-Mar-2010 16:50 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 7  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2196.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	30.02000	weight of sample
M	23.99290	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 67 Phenanthrene-d10	7.093	2762855	40.000
* 91 Chrysene-d12	9.492	11039209	40.000
* 98 Perylene-d12	11.086	2009876	40.000

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

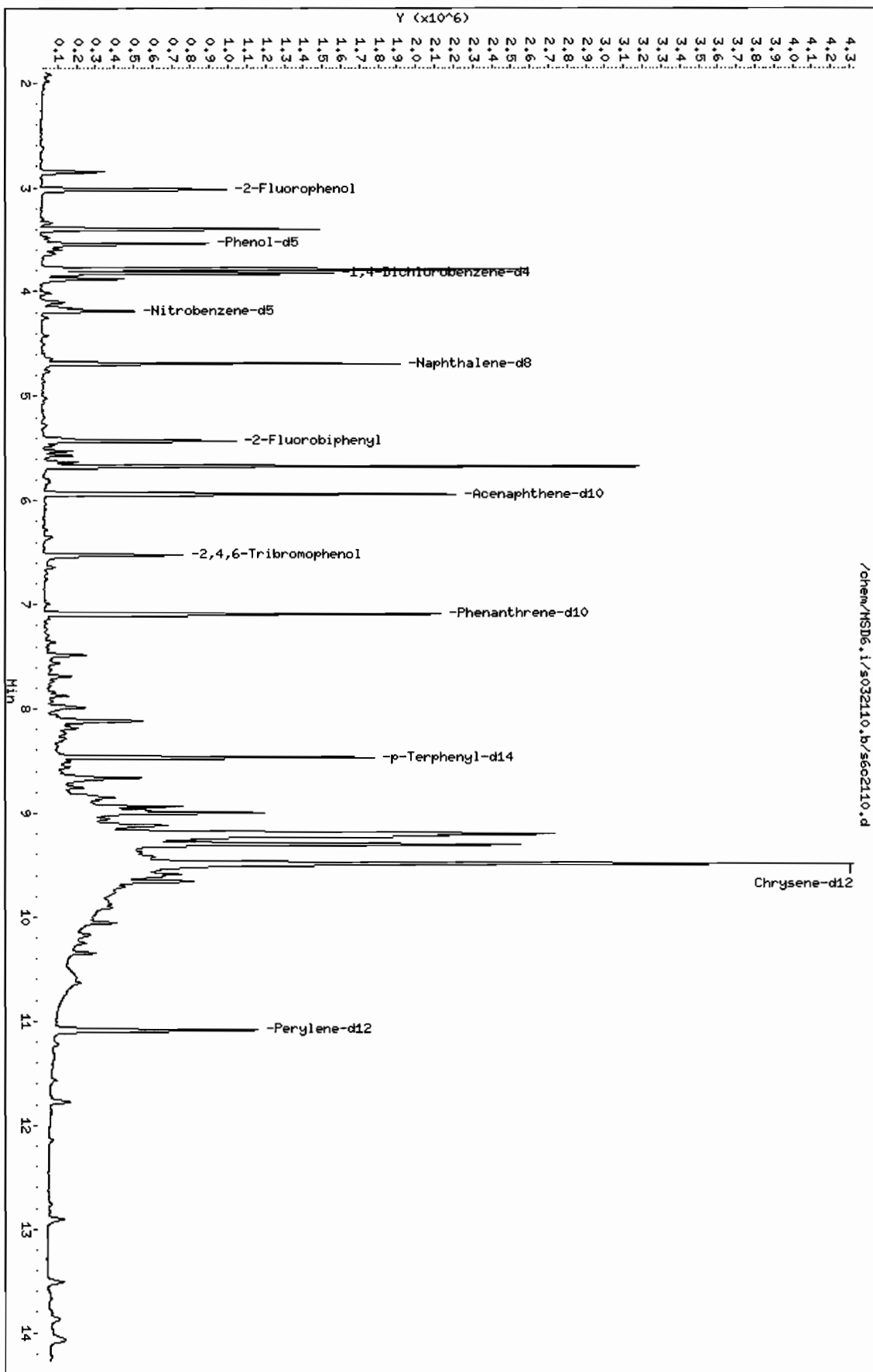
RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
7.987	452265	6.54779281	287	0		0	67
Oleic Acid					CAS #: 112-80-1		
8.122	1083977	15.6935790	688	99	NIST05.L	113353	67
Unknown					CAS #:		
8.663	1396033	5.05845349	222	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.939	1271077	4.60568160	202	98	NIST05.L	133618	91
Unknown					CAS #:		
8.998	2468785	8.94551525	392	0		0	91
Unknown					CAS #:		
9.116	1970538	7.14014125	313	0		0	91
Unknown					CAS #:		
9.222	3686601	13.3582070	585	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 5155-70-4		
9.304	5638991	20.4325888	895	96	NIST05.L	125035	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
9.416	1646955	5.96765504	262	95	NIST05.L	125037	91
Unknown					CAS #:		
9.586	1506666	5.45932596	239	0		0	91
Unknown					CAS #:		
9.610	1284128	4.65296972	204	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 471-77-2		
9.657	1856648	6.72746833	295	90	NIST05.L	126183	91
Unknown					CAS #:		
9.710	1152403	4.17567059	183	0		0	91
Unknown					CAS #:		
9.910	1809997	6.55842863	287	0		0	91
2,6,10,14,18,22-Tetracosahexaene, 2,6,10					CAS #: 111-02-4		
10.345	719753	14.3243145	628	87	NIST05.L	173571	98

RT	CONCENTRATIONS			QUANT			CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	
10.633	1143192	22.7514899	997	86	NIST05.L	126107	98

Nonadecane, 1-chloro- CAS #: 62016-76-6

Data File: /chem/MSD6.i/s032110.b/sec2110.d  
Date : 21-MAR-2010 19:00  
Client ID: RE36-10-7501  
Sample Info: 124851400196313311SVH11LNL  
Volume Injected (uL): 0.5  
Column phase: 364 DB-SHS

Instrument: MSD6.i  
Operator: nag1  
Column diameter: 0.20



Date: 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 124851400196313311SVMI11LANL

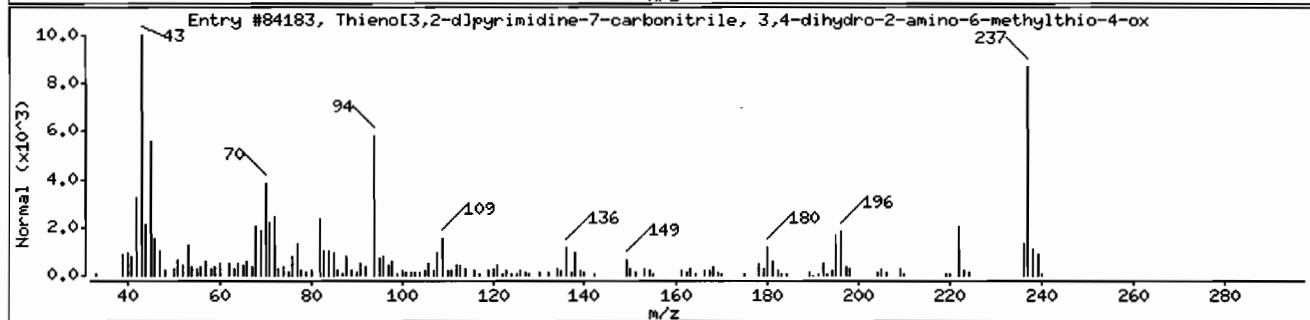
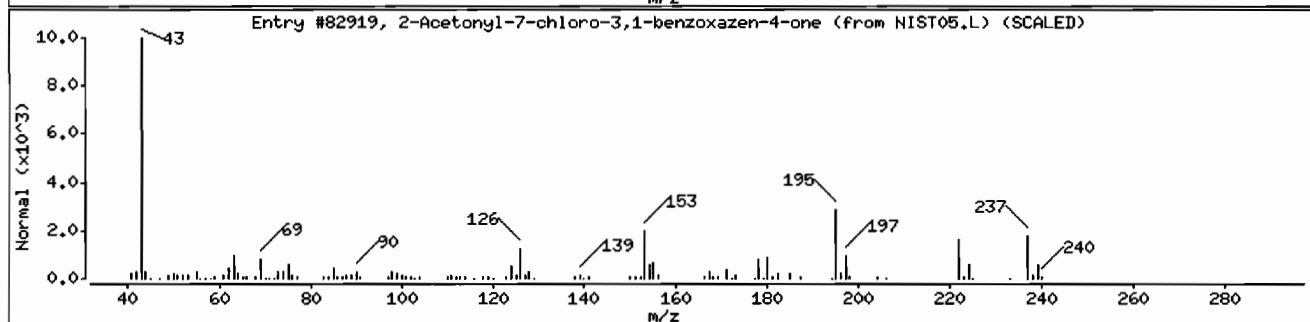
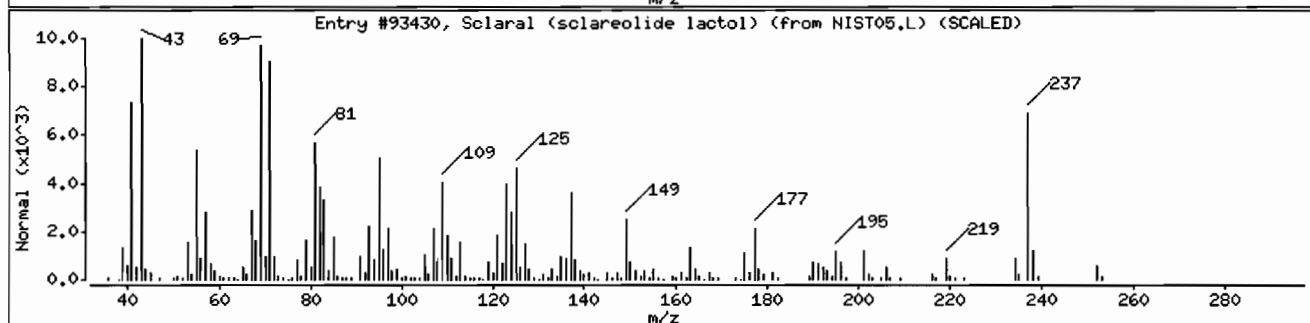
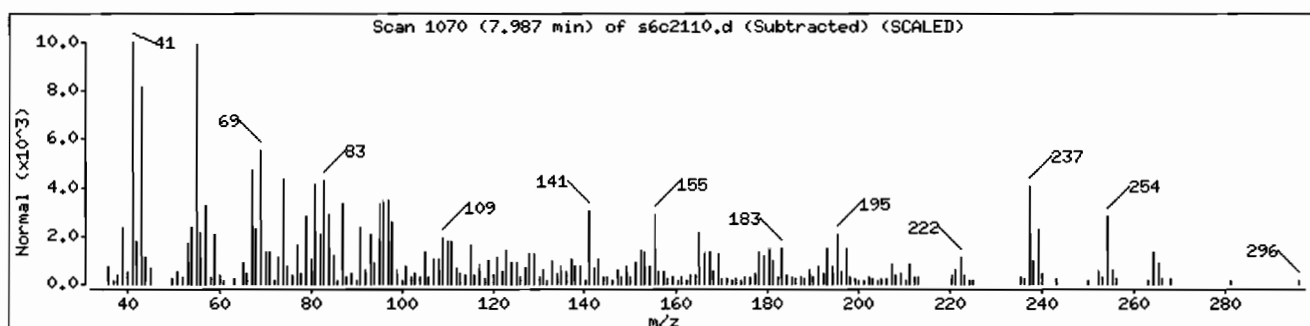
Volume Injected (uL): 0.5

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						
Scarlal (scloreolide lactol)	52811-62-8	NIST05.L	93430	25	C16H28O2	252
2-Acetyl-7-chloro-3,1-benzoxazin-4-one	25628-02-8	NIST05.L	82919	25	C11H8ClNO3	237
Thieno[3,2-d]pyrimidine-7-carbonitrile,	1000265-28-5	NIST05.L	84183	22	C8H6N4OS2	238



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 124851400196313311SVH111LANL

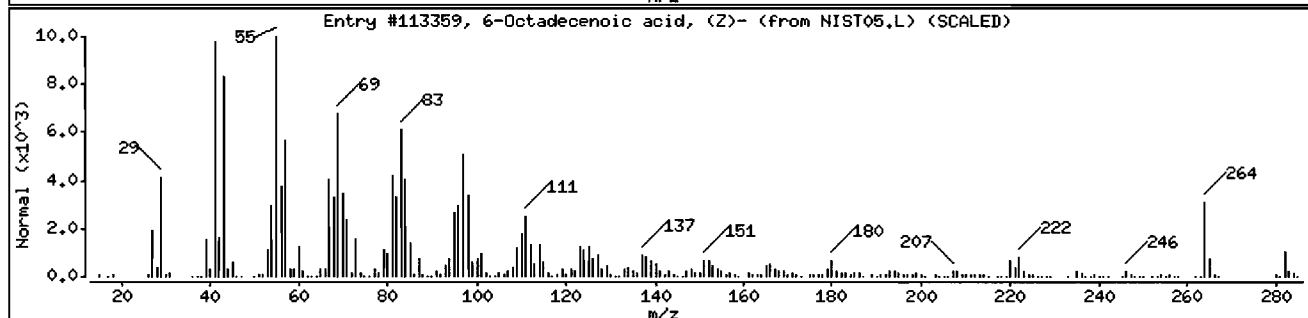
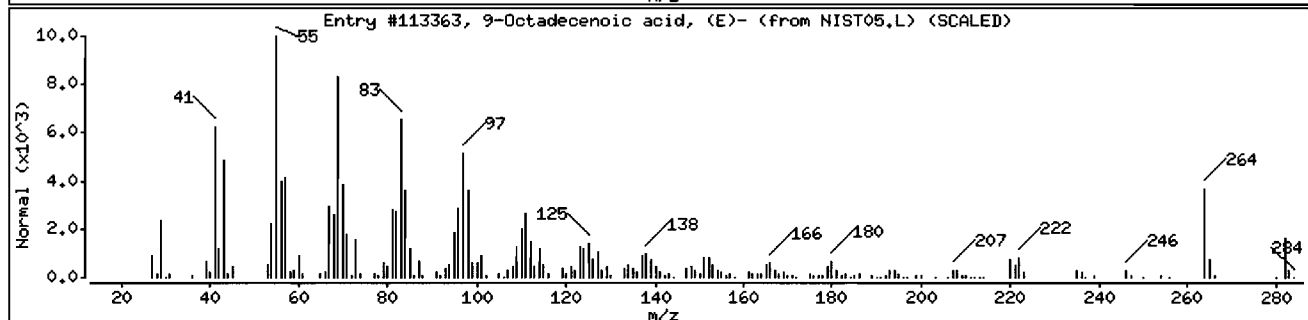
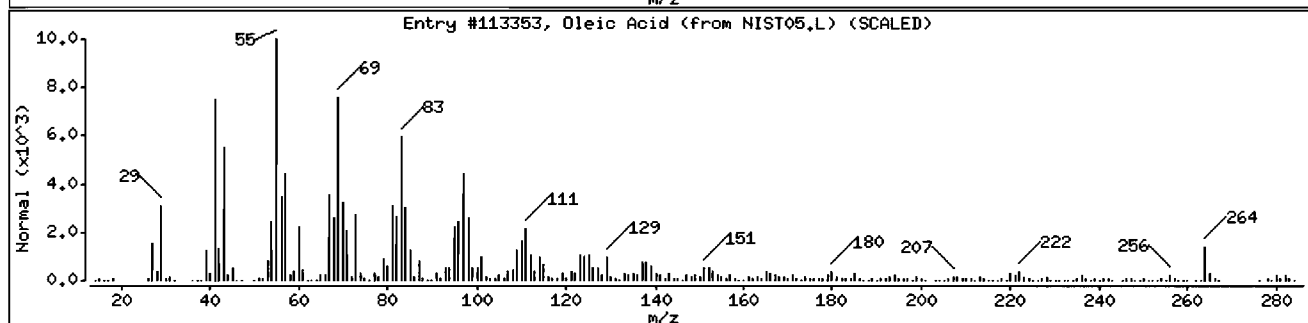
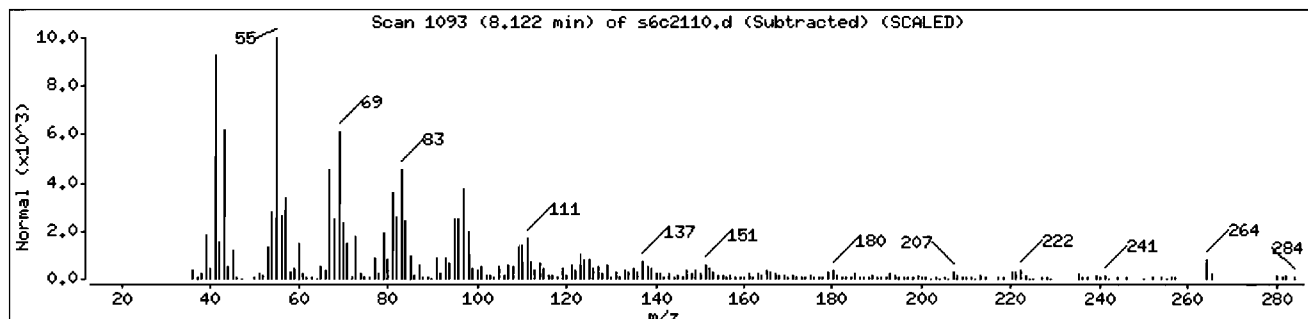
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Oleic Acid	112-80-1	NIST05.L	113353	99	C18H34O2	282
9-Octadecenoic acid, (E)-	112-79-8	NIST05.L	113363	97	C18H34O2	282
6-Octadecenoic acid, (Z)-	593-39-5	NIST05.L	113359	92	C18H34O2	282



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 1248514001|963133|1|SVH11|LANL

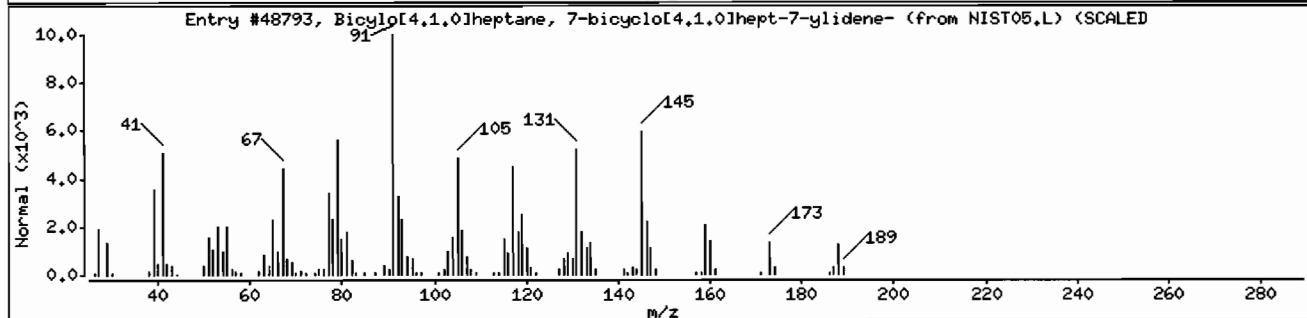
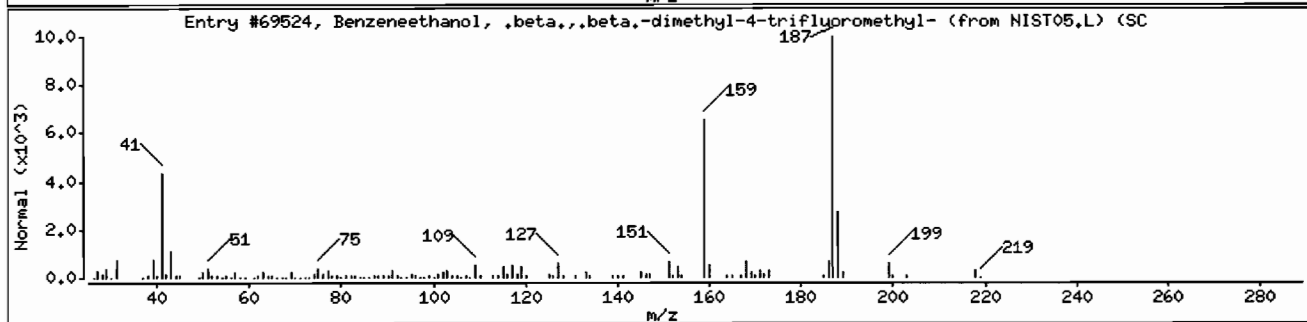
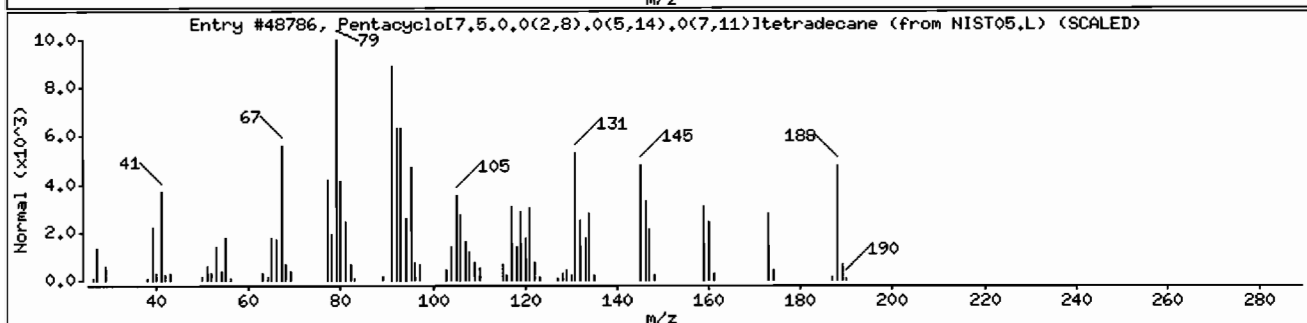
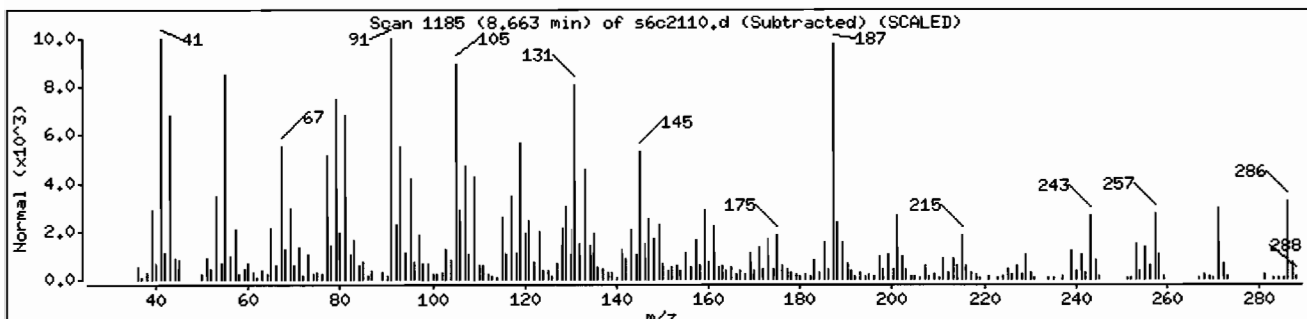
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pentacyclo[7.5.0.0(2,8).0(5,14).0(7,11)]	79772-15-9	NIST05.L	48786	25	C14H20	188
Benzeneethanol, .beta.,.beta.-dimethyl-4	32445-90-2	NIST05.L	69524	22	C11H13F3O	218
Bicyclo[4.1.0]heptane, 7-bicyclo[4.1.0]he	1000152-39-9	NIST05.L	48793	18	C14H20	188



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 1248514001196313311SVH11ILANL

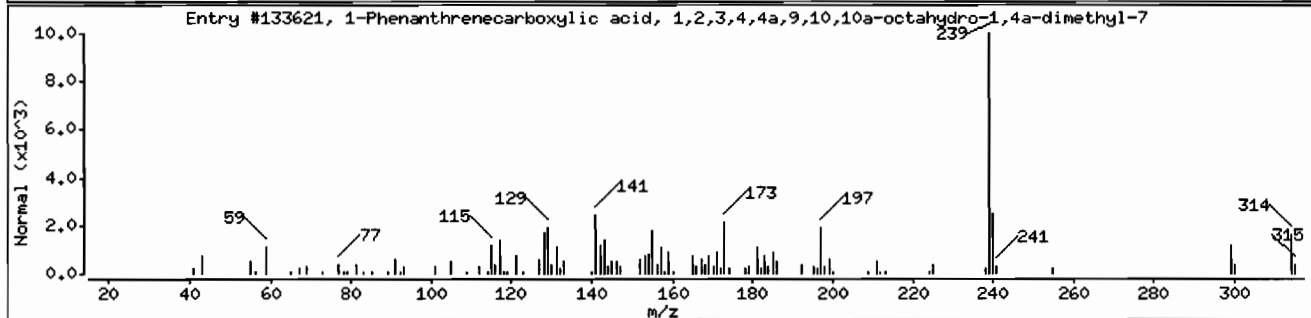
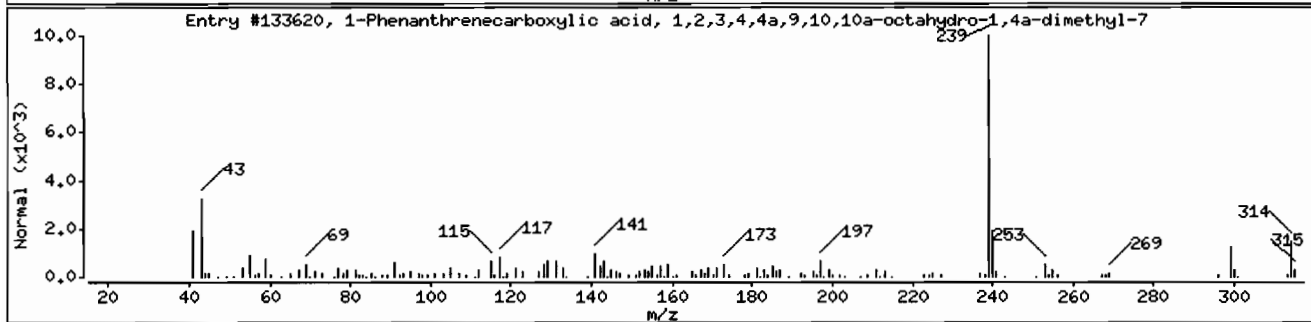
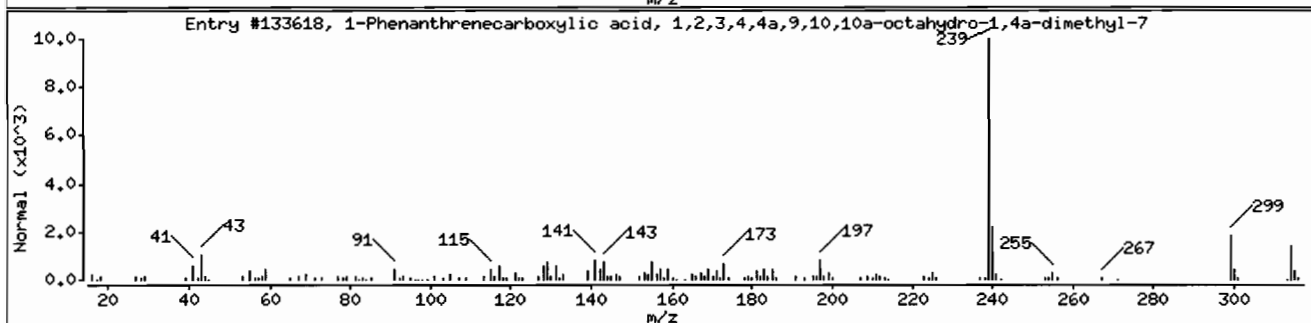
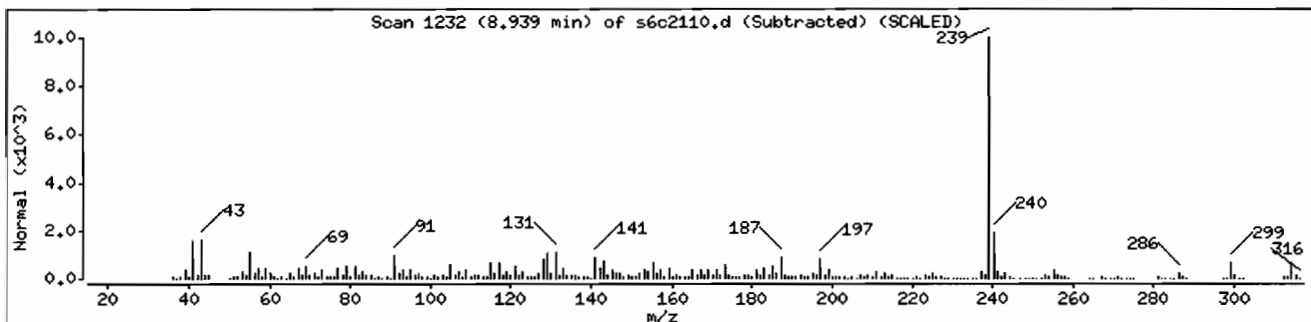
Volume Injected (uL): 0.5

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	133620	94	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	93	C21H30O2	314





Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 1248514001196313311SVH111LANL

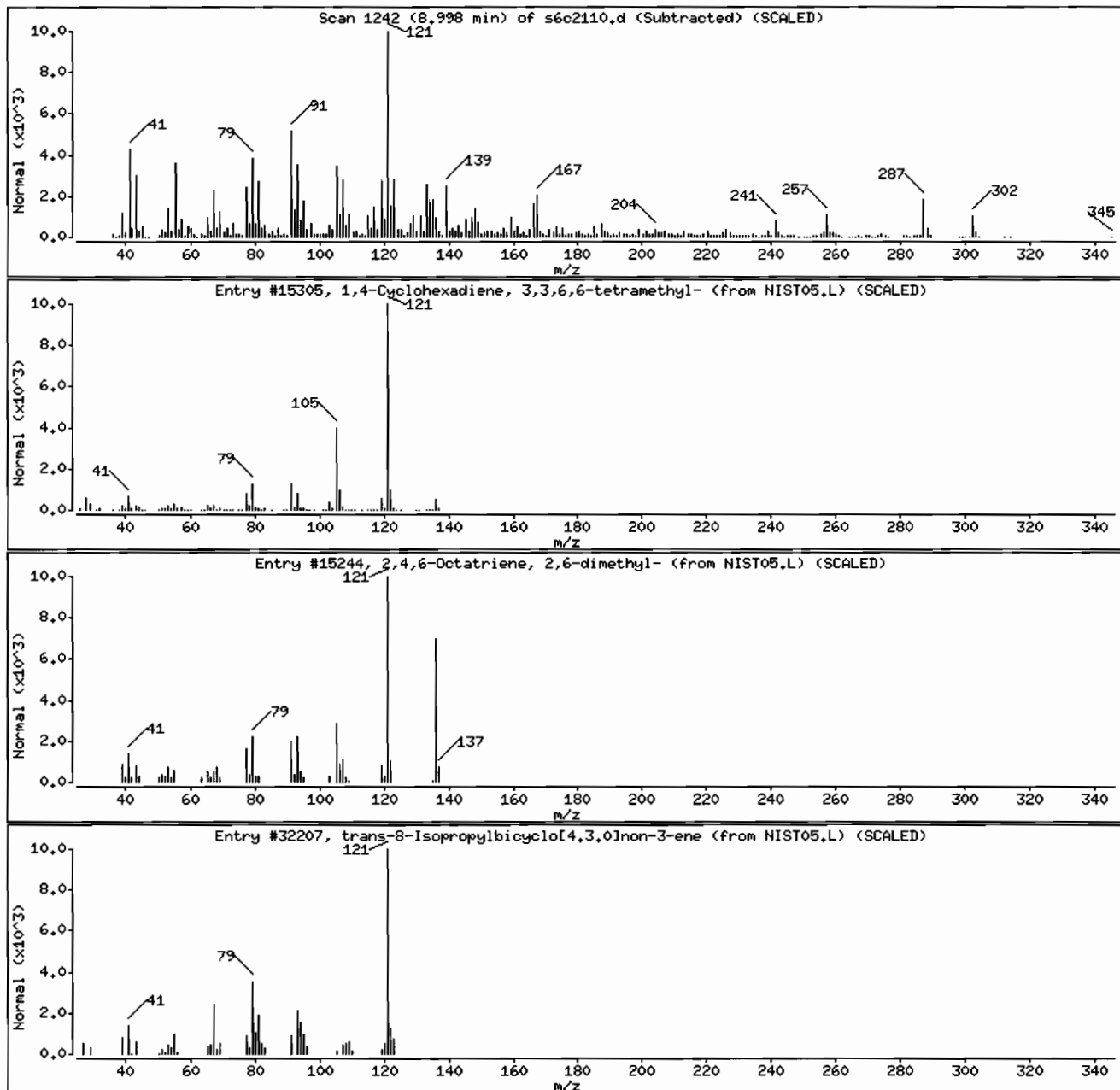
Volume Injected (uL): 0.5

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-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	46	C10H16	136
2,4,6-Octatriene, 2,6-dimethyl-	673-84-7	NIST05.L	15244	45	C10H16	136
trans-8-Isopropylbicyclo[4.3.0]non-3-ene	1000145-85-2	NIST05.L	32207	43	C12H20	164



Date: 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 1248514001196313311SVMI1ILANL

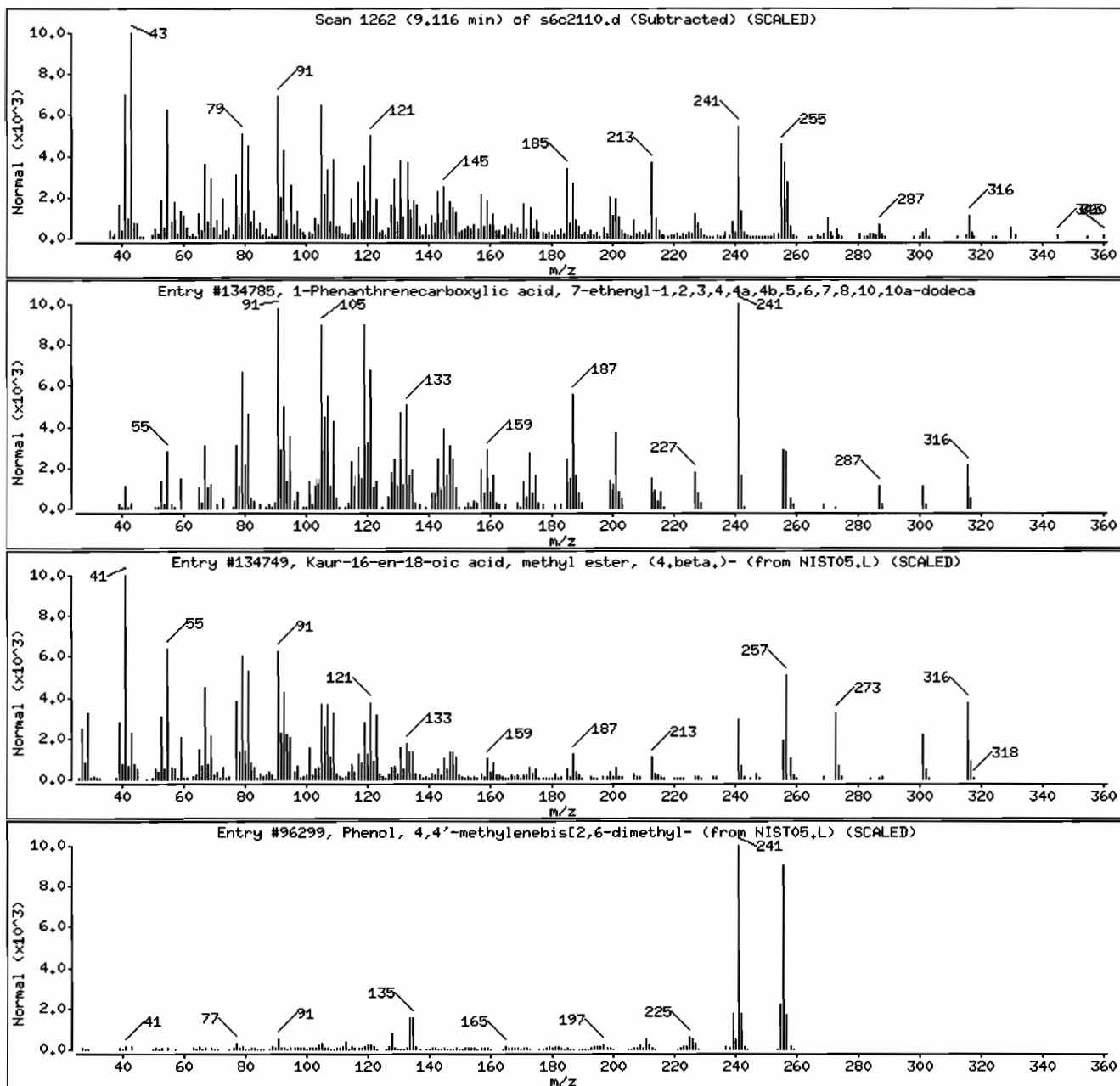
Volume Injected (uL): 0.5

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-Phenanthrenecarboxylic acid, 7-ethenyl	1686-62-0	NIST05.L	134785	55	C21H32O2	316
Kaur-16-en-18-oic acid, methyl ester, (4	5524-25-4	NIST05.L	134749	35	C21H32O2	316
Phenol, 4,4'-methylenebis[2,6-dimethyl-	5384-21-4	NIST05.L	96299	35	C17H20O2	256



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: HSD6.i

Sample Info: I248514001196313311SVHI11LANL

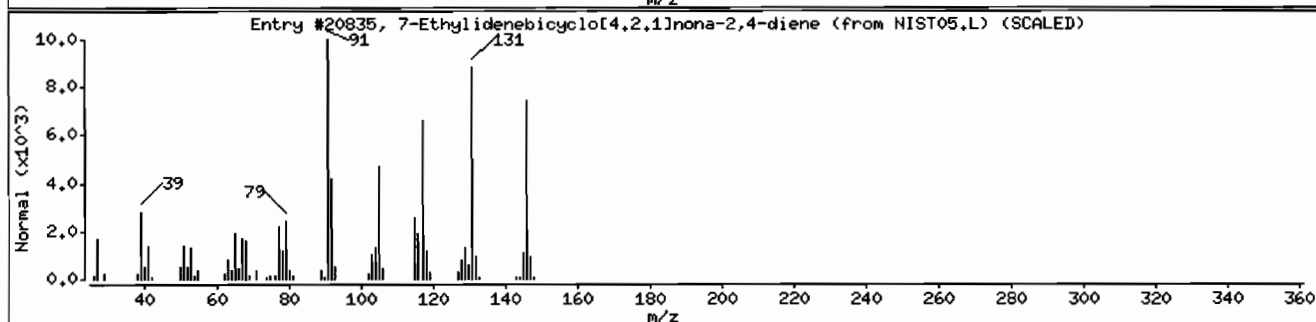
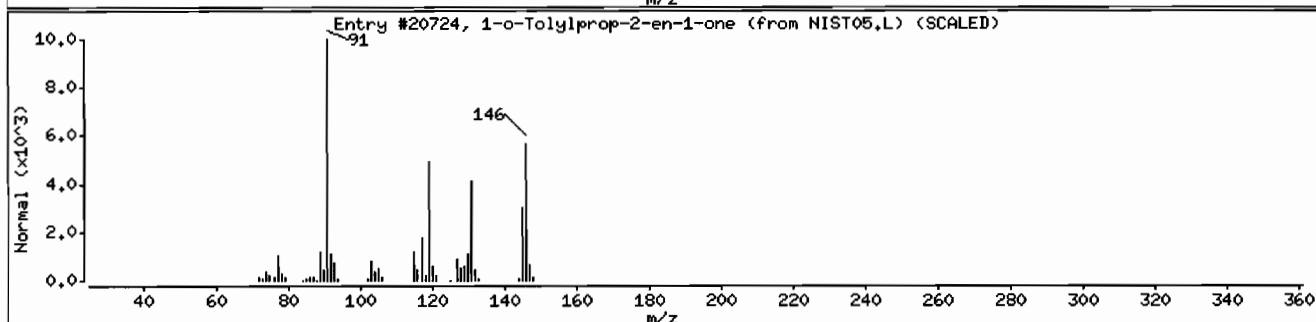
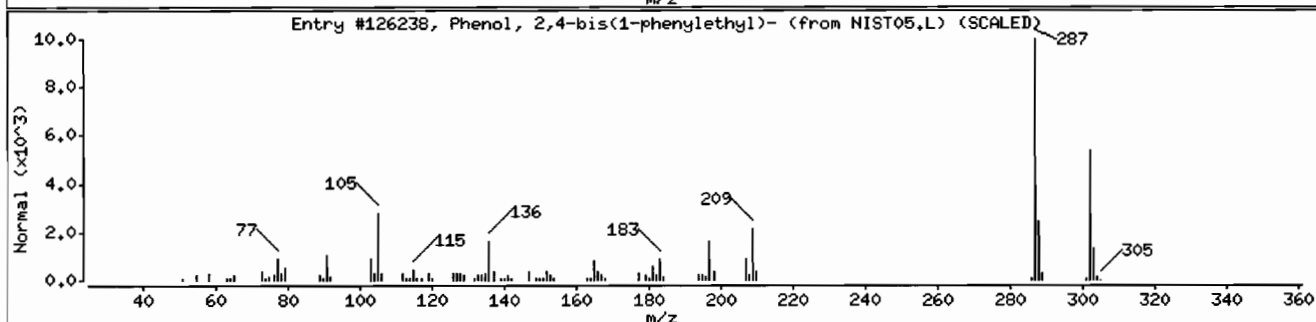
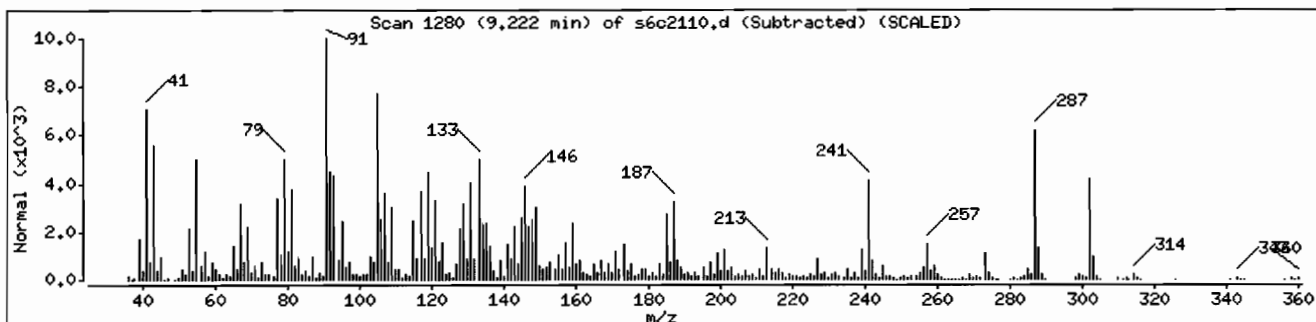
Volume Injected (uL): 0.5

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, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	62	C22H22O	302
1-o-Tolylprop-2-en-1-one	39627-60-6	NIST05.L	20724	30	C10H10O	146
7-Ethylidenebicyclo[4.2.1]nona-2,4-diene	94400-10-9	NIST05.L	20835	30	C11H14	146



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: I248514001/96313311/SVM11/LANL

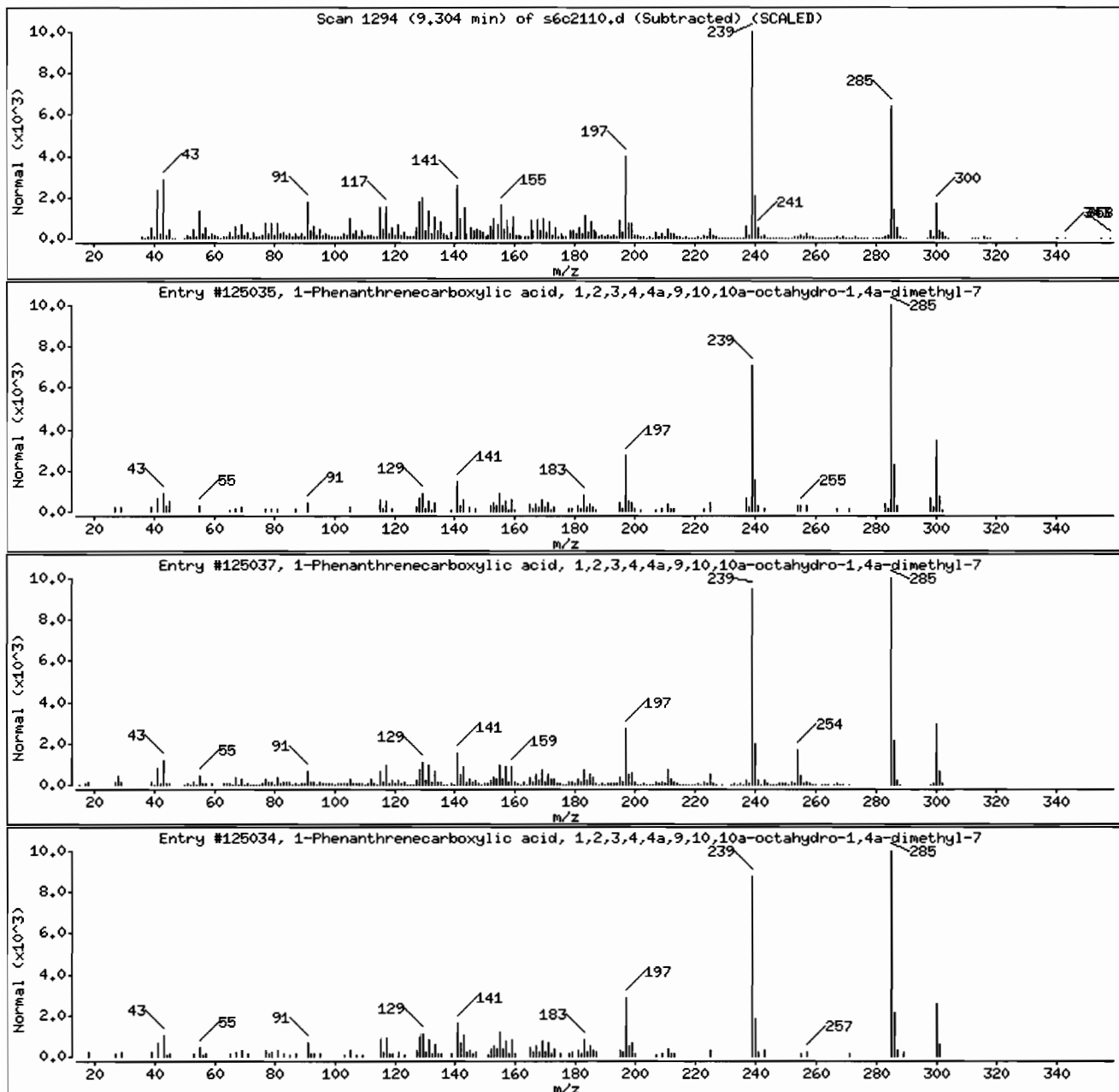
Volume Injected (uL): 0.5

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-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	96	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	94	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	91	C20H28O2	300



Date: 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: HSD6.i

Sample Info: 124851400196313311SVH11ILANL

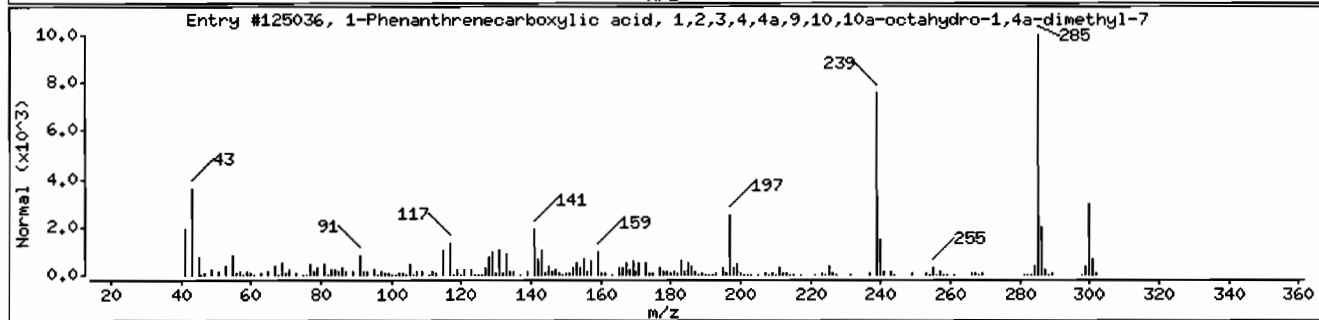
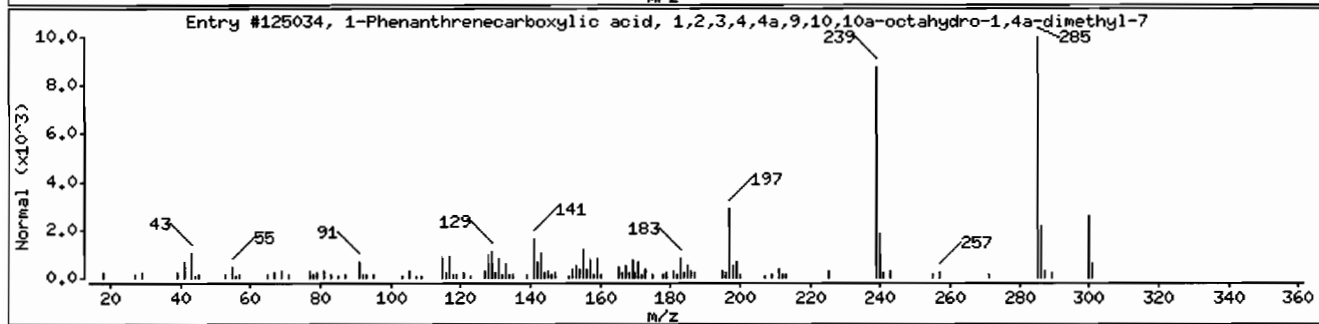
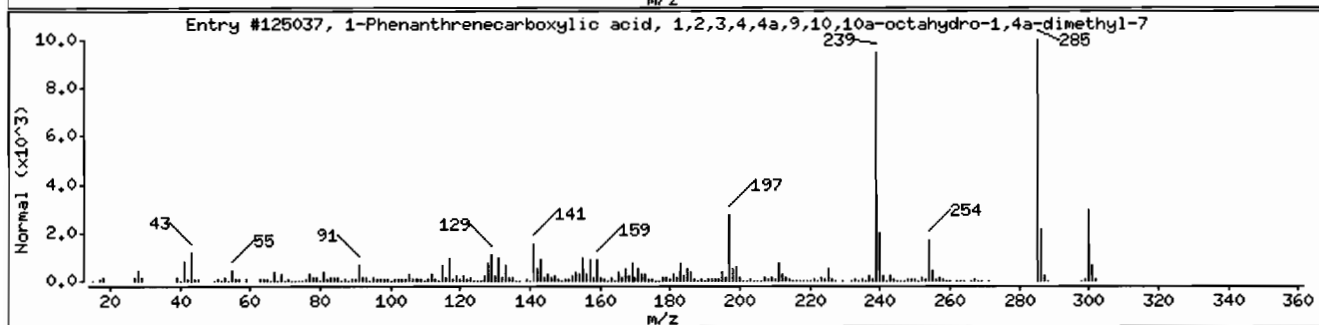
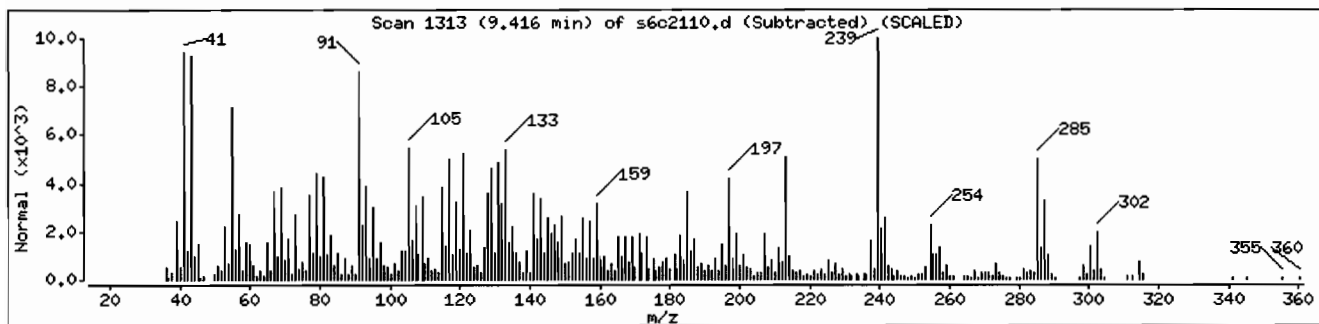
Volume Injected (uL): 0.5

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	125037	95	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	87	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	64	C20H28O2	300



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 124851400196313311SVMI1ILANL

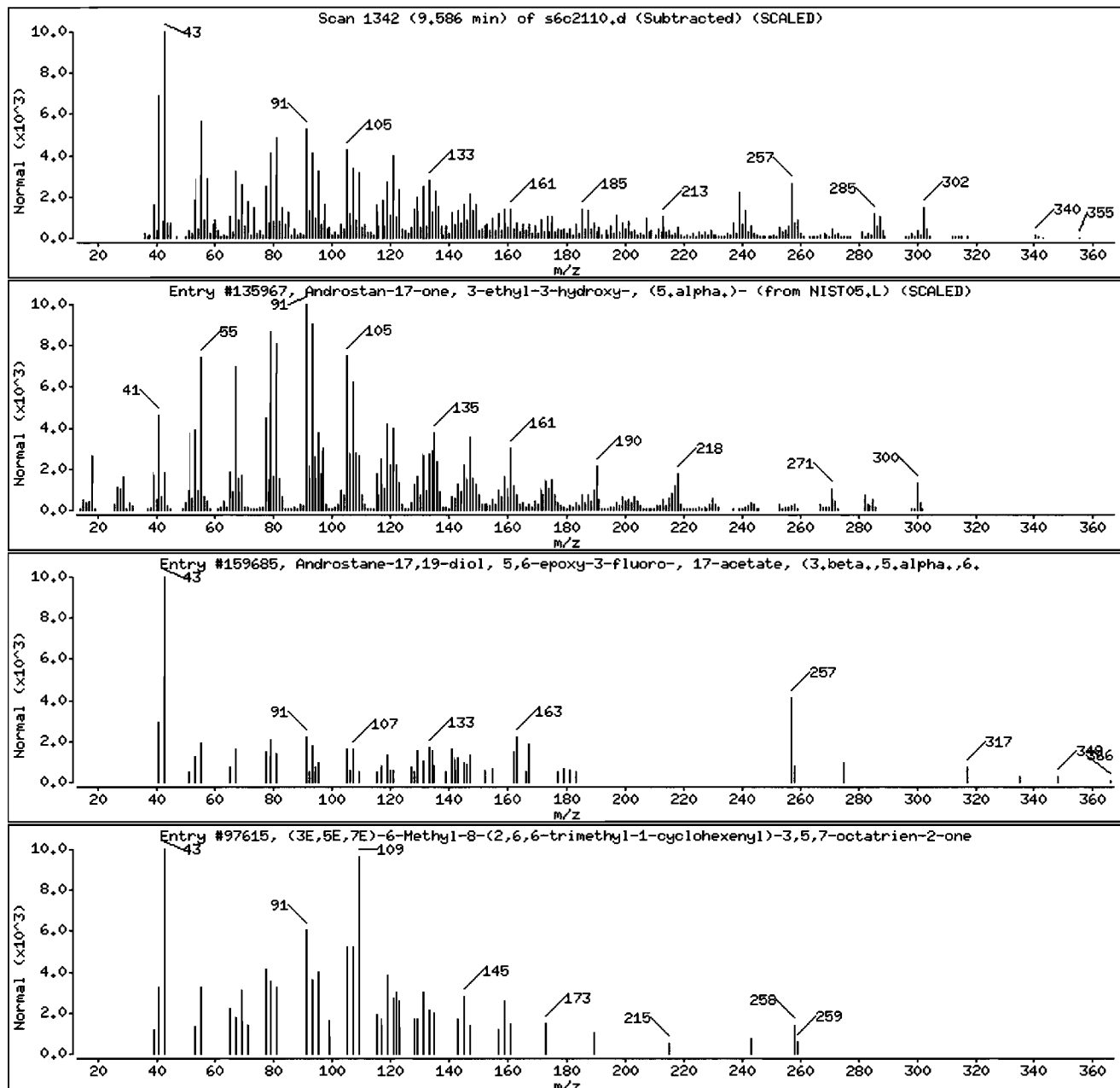
Volume Injected (uL): 0.5

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						
Androstan-17-one, 3-ethyl-3-hydroxy-, (5	57344-99-7	NIST05.L	135967	35	C21H34O2	318
Androstane-17,19-diol, 5,6-epoxy-3-fluor	40242-94-2	NIST05.L	159685	32	C21H31FO4	366
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	25	C18H26O	258



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 1248514001/96313311/ISVH11/LANL

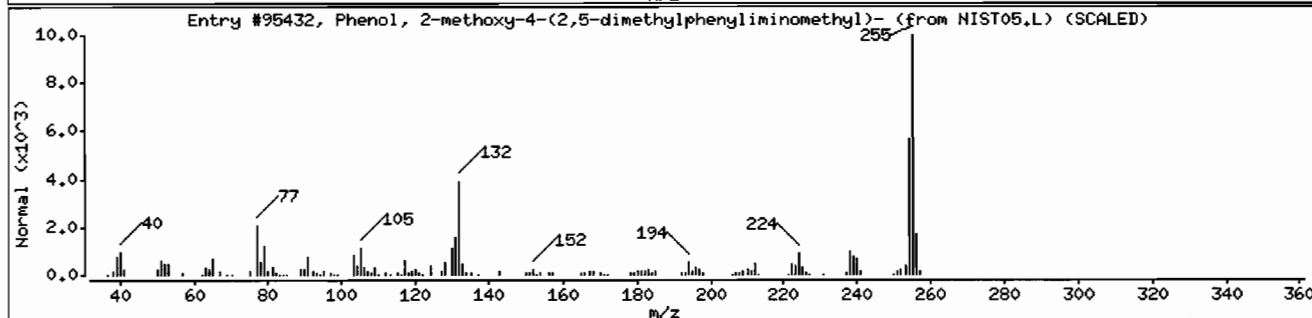
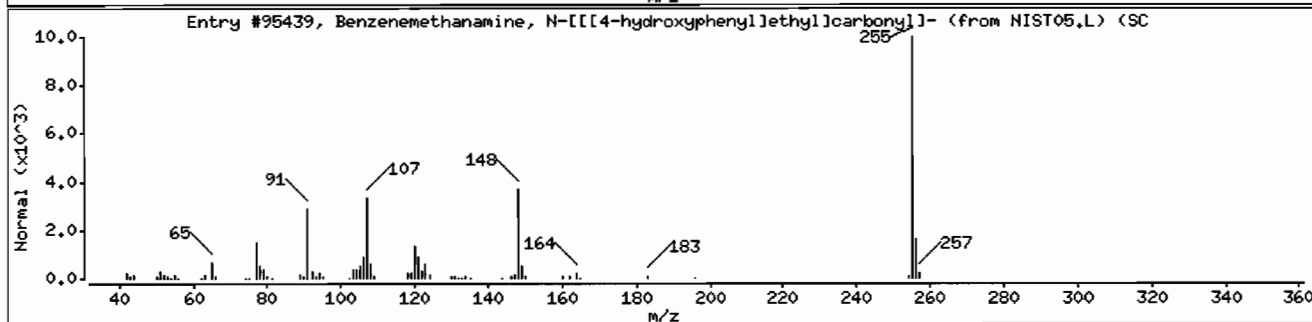
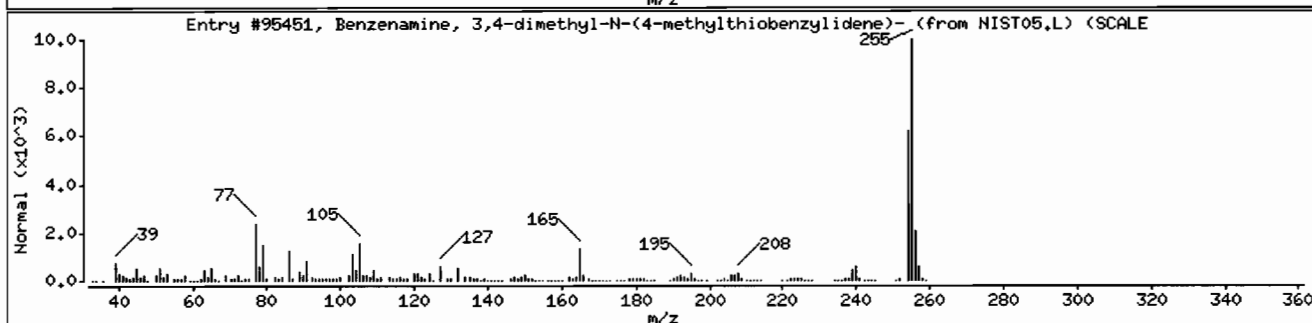
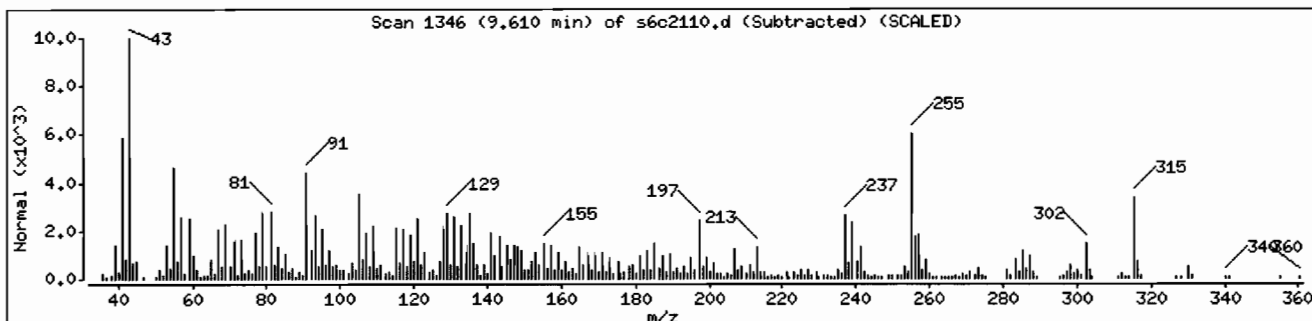
Volume Injected (uL): 0.5

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						
Benzenamine, 3,4-dimethyl-N-(4-methylthi	315670-90-7	NIST05.L	95451	25	C16H17NS	255
Benzenemethanamine, N-[[[4-hydroxyphenyl	74454-78-7	NIST05.L	95439	11	C16H17NO2	255
Phenol, 2-methoxy-4-(2,5-dimethylphenyli	75241-31-5	NIST05.L	95432	11	C16H17NO2	255



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: I248514001196313311SVH111LANL

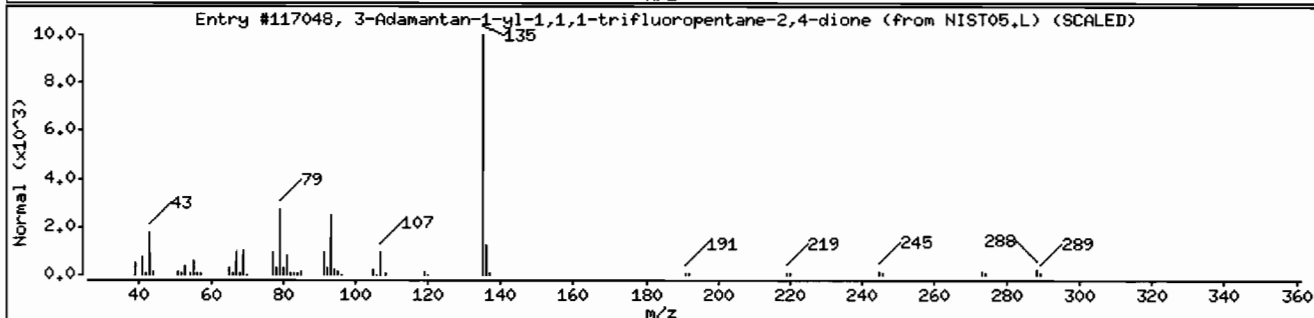
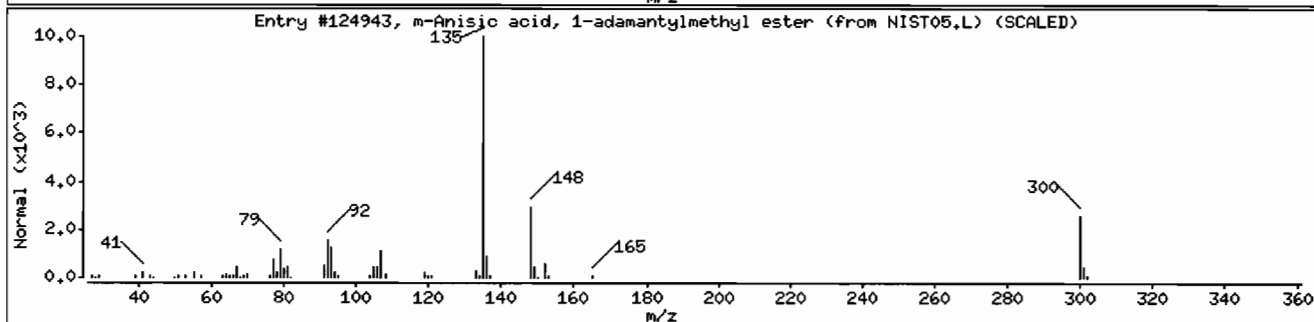
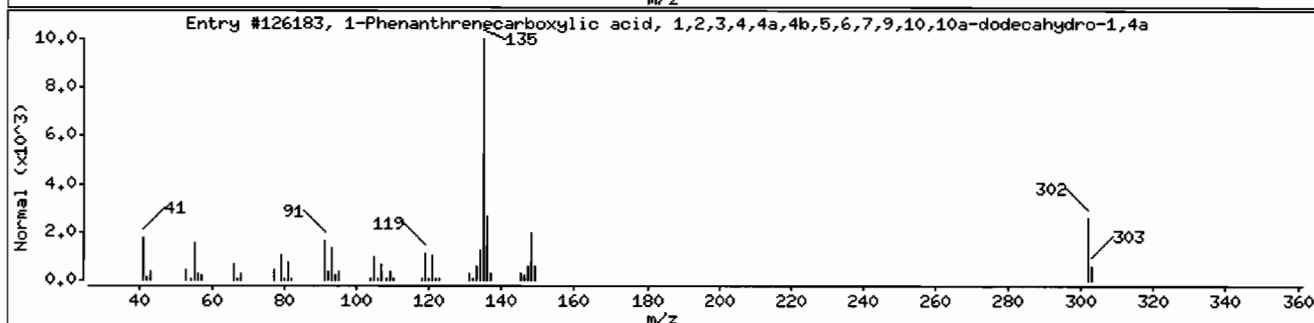
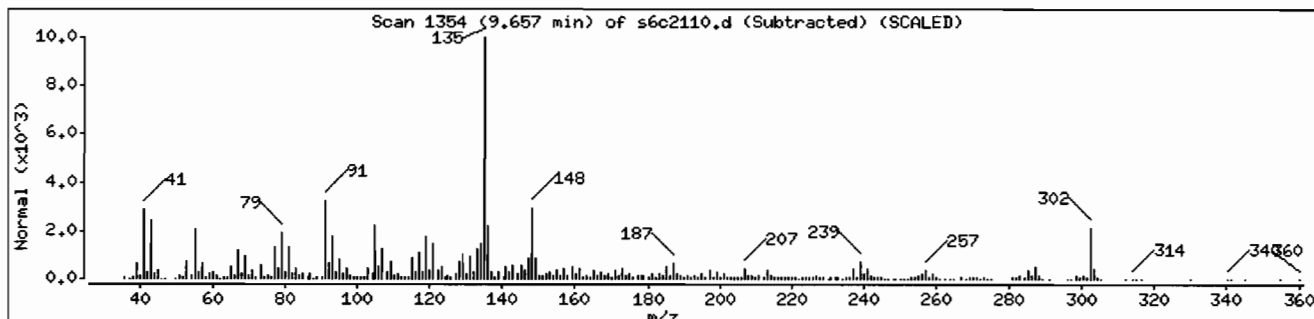
Volume Injected (uL): 0.5

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	471-77-2	NIST05.L	126183	90	C20H30O2	302
m-Anisic acid, 1-adamantylmethyl ester	1000292-25-3	NIST05.L	124943	49	C19H24O3	300
3-Adamantan-1-yl-1,1,1-trifluoropentane-	1000311-44-8	NIST05.L	117048	46	C15H19F3O2	288





Date: 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 124851400196313311SVH111LANL

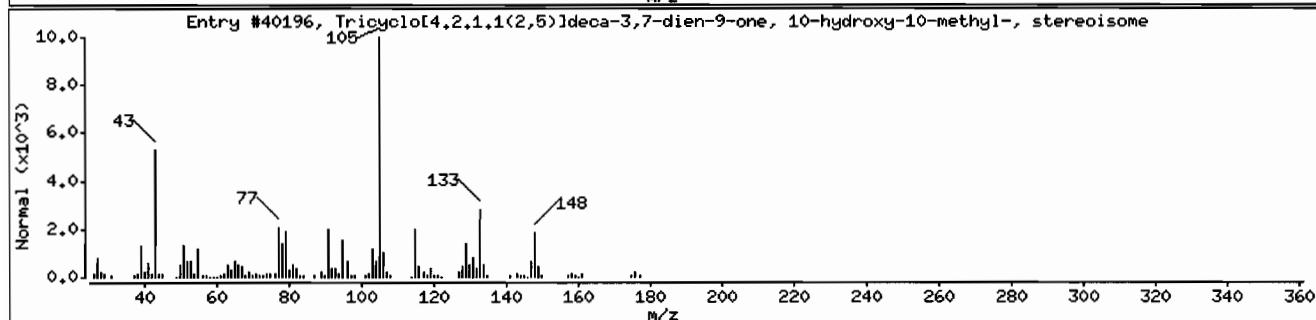
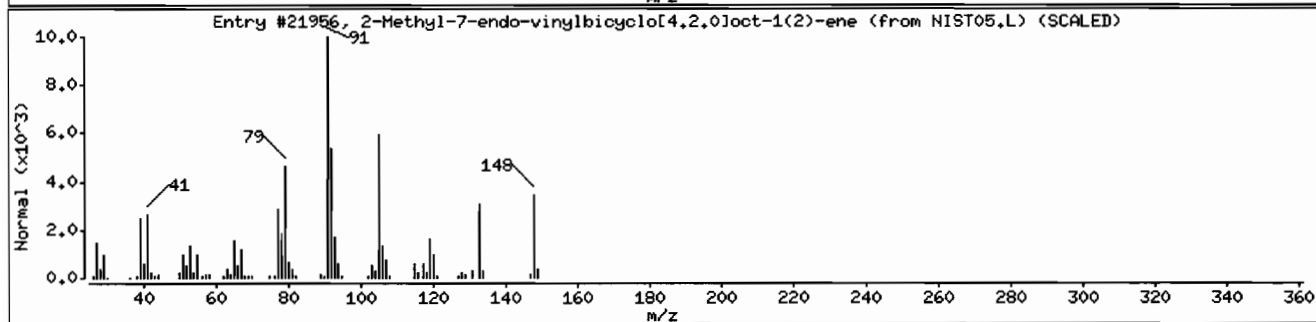
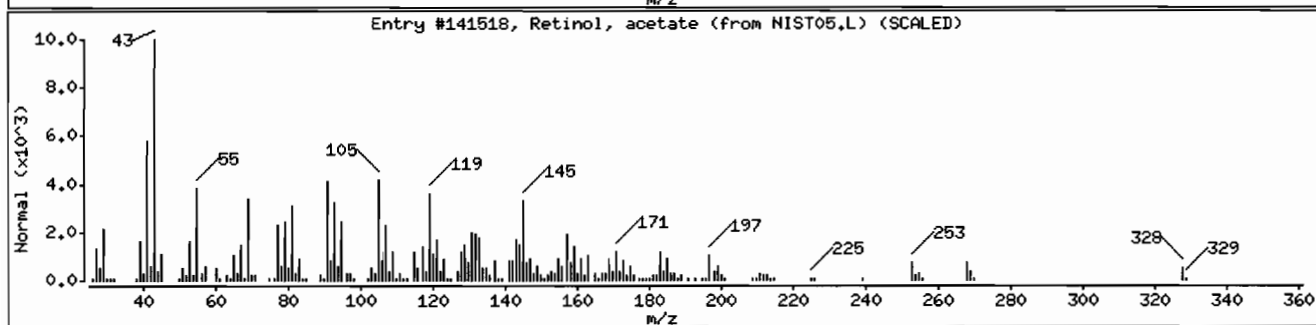
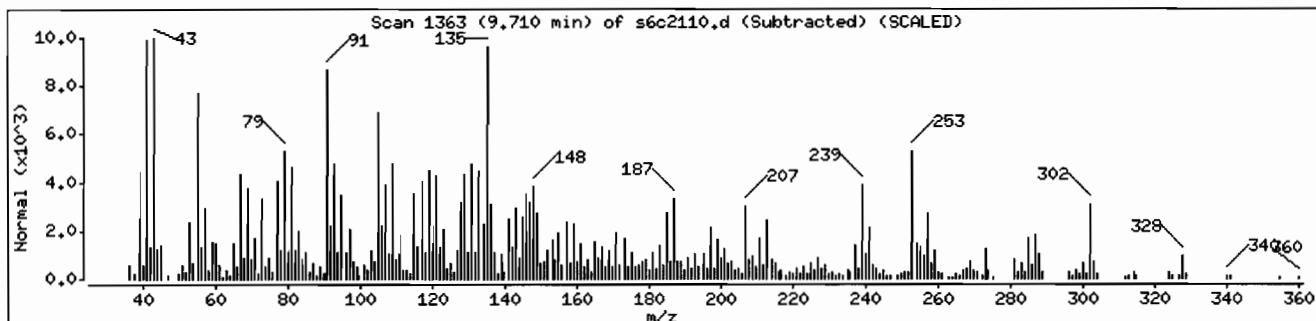
Volume Injected (uL): 0.5

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						
Retinol, acetate	127-47-9	NIST05.L	141518	55	C22H32O2	328
2-Methyl-7-endo-vinylbicyclo[4.2.0]oct-1	1000200-99-1	NIST05.L	21956	25	C11H16	148
Tricyclo[4.2.1.1(2,5)]deca-3,7-dien-9-one	70220-88-1	NIST05.L	40196	25	C11H16O2	176



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 1248514001196313311SVMI11LANL

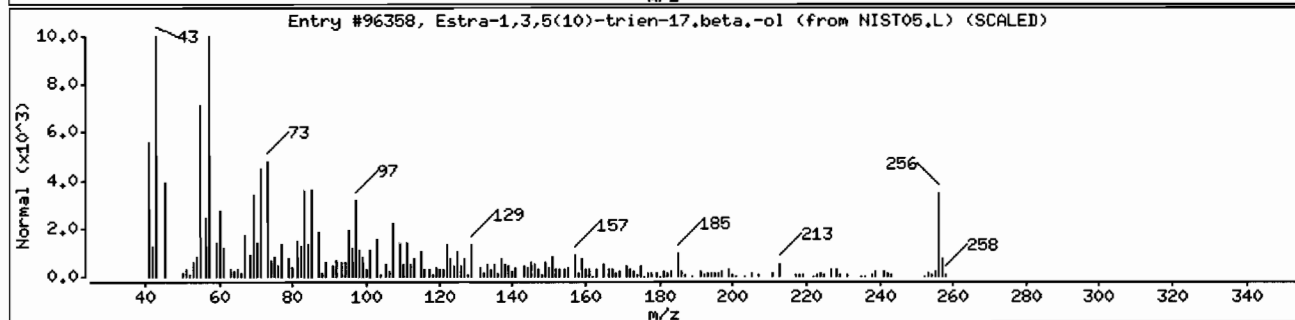
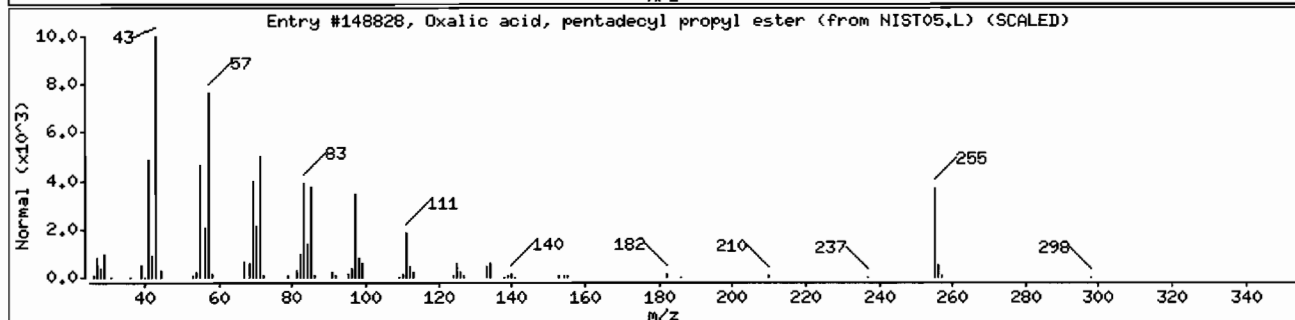
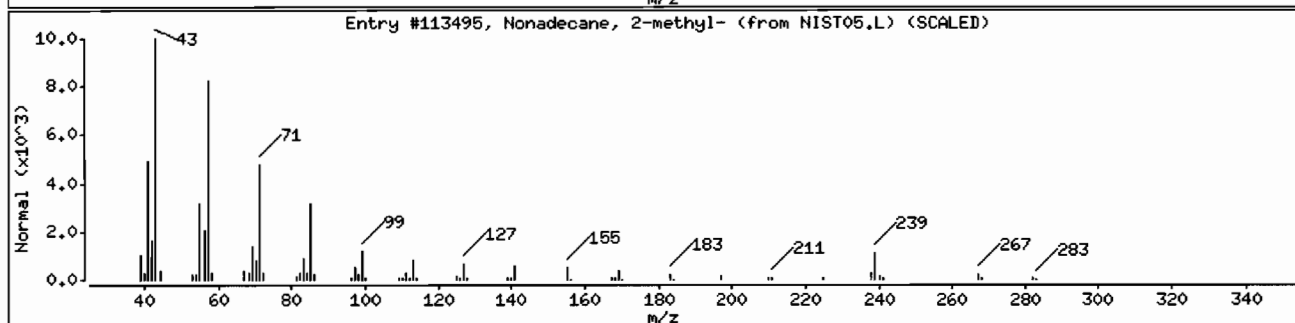
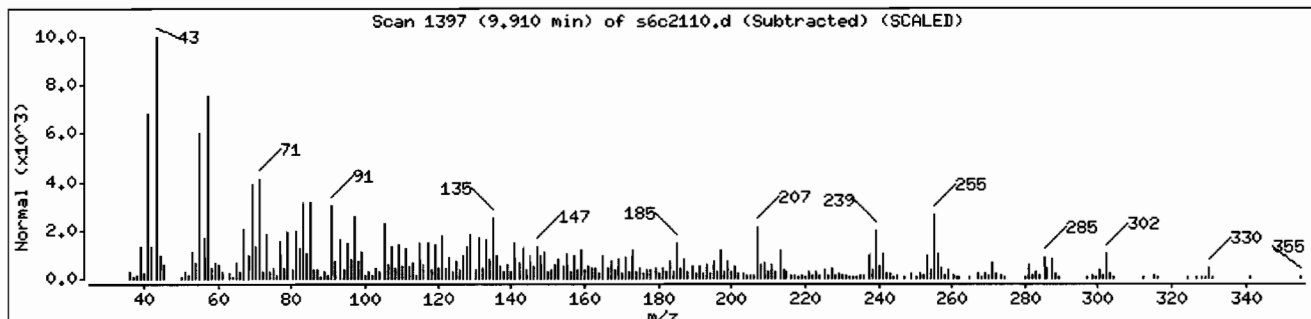
Volume Injected (uL): 0.5

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	60	C20H42	282
Oxalic acid, pentadecyl propyl ester	1000309-26-8	NIST05.L	148828	49	C20H38O4	342
Estra-1,3,5(10)-trien-17,β-ol	2529-64-8	NIST05.L	96358	42	C18H24O	256



Date: 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: MSD6.i

Sample Info: 1248514001196313311SVH11ILANL

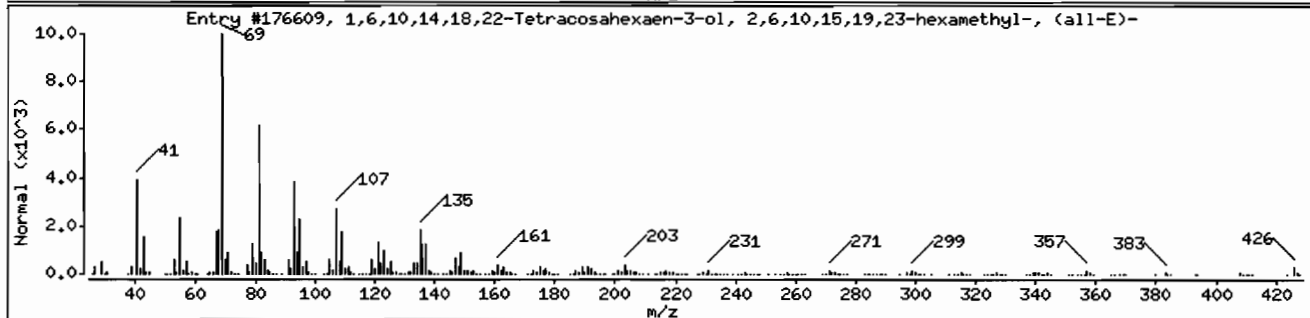
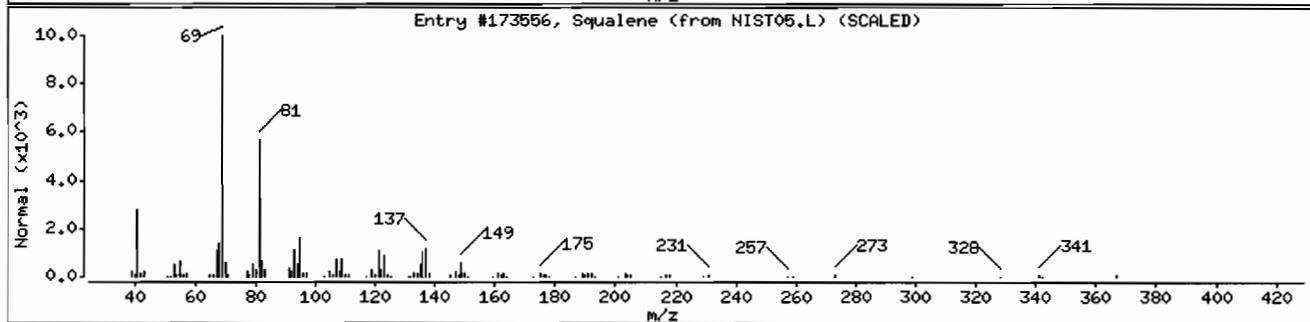
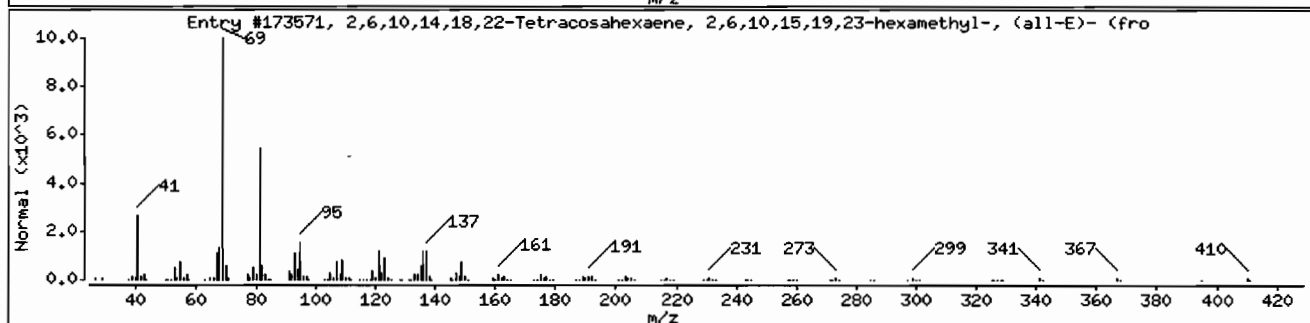
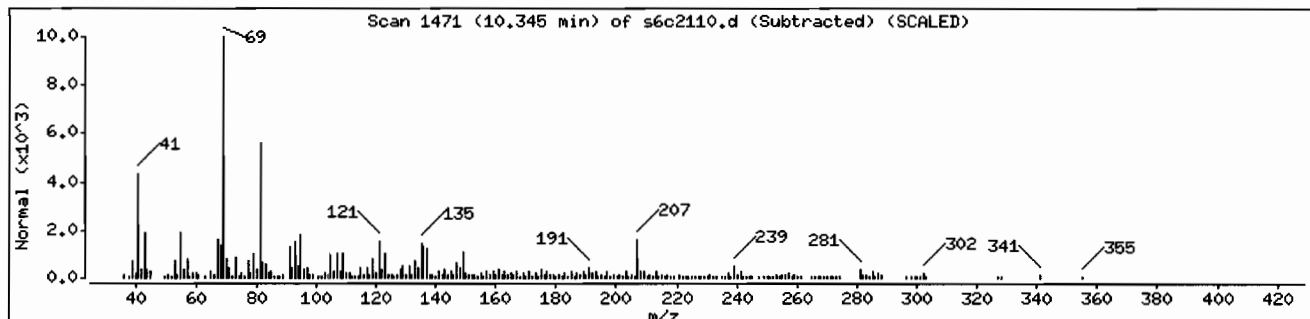
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173571	87	C30H50	410
Squalene	7683-64-9	NIST05.L	173556	87	C30H50	410
1,6,10,14,18,22-Tetracosahexaen-3-ol, 2,	54159-46-5	NIST05.L	176609	80	C30H50O	426



Date : 21-MAR-2010 19:00

Client ID: RE36-10-7501

Instrument: HSD6.i

Sample Info: I248514001196313311ISVM11ILANL

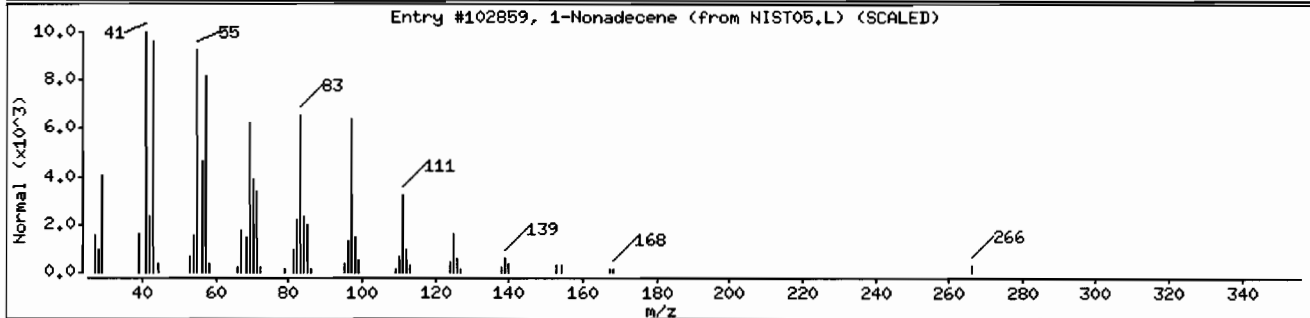
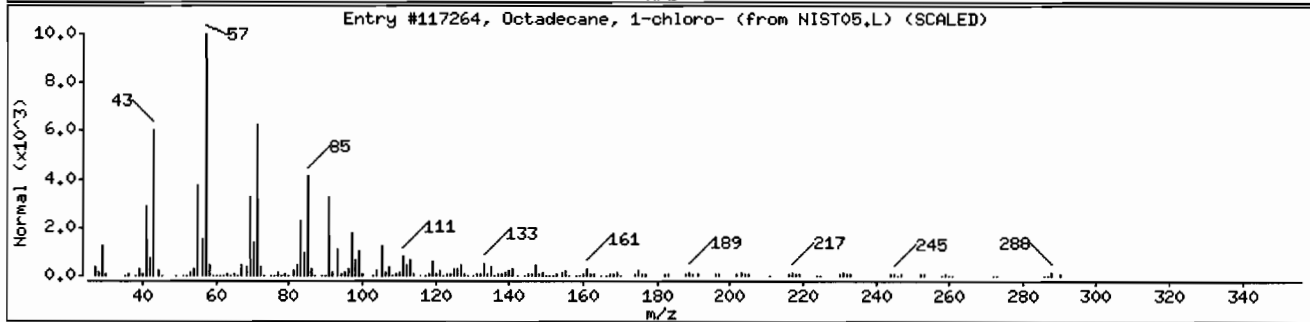
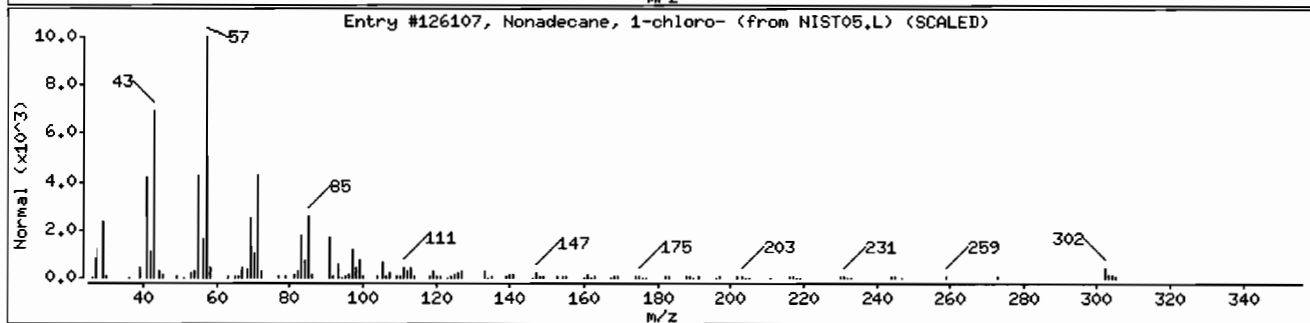
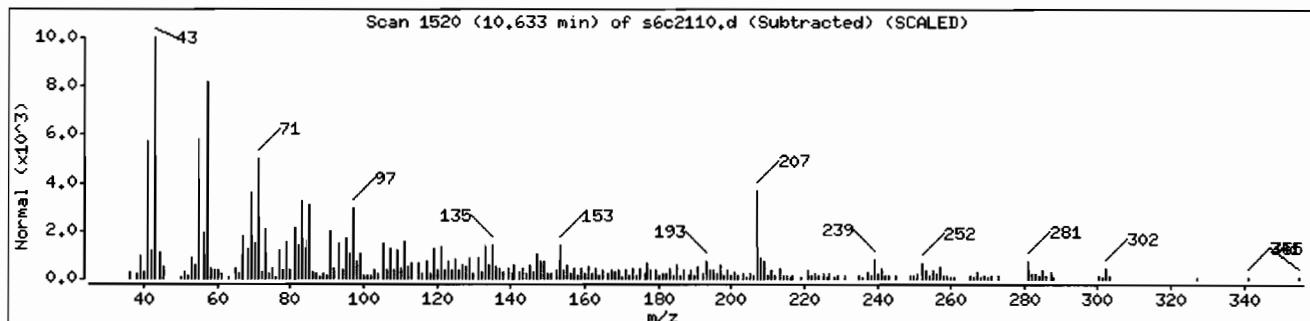
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	86	C19H39Cl	302
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	83	C18H37Cl	288
1-Nonadecene	18435-45-5	NIST05.L	102859	59	C19H38	266



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

SDG Number: 10-2196  
Lab Sample ID: 248514002

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: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16  
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	1590	ug/kg	317	1590
108-95-2	Phenol	U	1590	ug/kg	317	1590
95-57-8	2-Chlorophenol	U	1590	ug/kg	317	1590
106-46-7	1,4-Dichlorobenzene	U	1590	ug/kg	317	1590
621-64-7	N-Nitrosodipropylamine	U	1590	ug/kg	317	1590
59-50-7	4-Chloro-3-methylphenol	U	1590	ug/kg	317	1590
83-32-9	Acenaphthene	U	159	ug/kg	52.3	159
121-14-2	2,4-Dinitrotoluene	U	1590	ug/kg	159	1590
100-02-7	4-Nitrophenol	U	1590	ug/kg	523	1590
87-86-5	Pentachlorophenol	U	1590	ug/kg	396	1590
129-00-0	Pyrene	J	60.3	ug/kg	47.6	159
110-86-1	Pyridine	U	1590	ug/kg	317	1590
62-53-3	Aniline	U	1590	ug/kg	476	1590
111-44-4	bis(2-Chloroethyl) ether	U	1590	ug/kg	317	1590
541-73-1	1,3-Dichlorobenzene	U	1590	ug/kg	317	1590
100-51-6	Benzyl alcohol	U	1590	ug/kg	476	1590
95-50-1	1,2-Dichlorobenzene	U	1590	ug/kg	317	1590
108-60-1	bis(2-Chloroisopropyl)ether	U	1590	ug/kg	317	1590
95-48-7	o-Cresol	U	1590	ug/kg	317	1590
65794-96-9	m,p-Cresols	U	1590	ug/kg	476	1590
67-72-1	Hexachloroethane	U	1590	ug/kg	317	1590
98-95-3	Nitrobenzene	U	1590	ug/kg	317	1590
78-59-1	Isophorone	U	1590	ug/kg	317	1590
88-75-5	2-Nitrophenol	U	1590	ug/kg	317	1590
105-67-9	2,4-Dimethylphenol	U	1590	ug/kg	555	1590
111-91-1	bis(2-Chloroethoxy)methane	U	1590	ug/kg	317	1590
120-83-2	2,4-Dichlorophenol	U	1590	ug/kg	317	1590
65-85-0	Benzoic acid	U	3170	ug/kg	793	3170
91-20-3	Naphthalene	U	159	ug/kg	47.6	159
106-47-8	4-Chloroaniline	U	1590	ug/kg	317	1590
87-68-3	Hexachlorobutadiene	U	1590	ug/kg	317	1590
91-57-6	2-Methylnaphthalene	U	159	ug/kg	31.7	159
77-47-4	Hexachlorocyclopentadiene	U	1590	ug/kg	317	1590
88-06-2	2,4,6-Trichlorophenol	U	1590	ug/kg	317	1590
95-95-4	2,4,5-Trichlorophenol	U	1590	ug/kg	317	1590
91-58-7	2-Chloronaphthalene	U	159	ug/kg	52.3	159
88-74-4	2-Nitroaniline	U	1590	ug/kg	317	1590
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	1590	ug/kg	317	1590

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2196  
Lab Sample ID: 248514002

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: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16  
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-Nitroaniline</i>						
131-11-3	Dimethylphthalate	U	1590	ug/kg	317	1590
606-20-2	2,6-Dinitrotoluene	U	1590	ug/kg	159	1590
208-96-8	Acenaphthylene	U	159	ug/kg	47.6	159
51-28-5	2,4-Dinitrophenol	U	3170	ug/kg	603	3170
132-64-9	Dibenzofuran	U	1590	ug/kg	317	1590
84-66-2	Diethylphthalate	U	1590	ug/kg	317	1590
86-73-7	Fluorene	U	159	ug/kg	47.6	159
7005-72-3	4-Chlorophenylphenylether	U	1590	ug/kg	317	1590
534-52-1	2-Methyl-4,6-dinitrophenol	U	1590	ug/kg	317	1590
100-01-6	4-Nitroaniline	U	1590	ug/kg	476	1590
<i>p-Nitroaniline</i>						
122-39-4	Diphenylamine	U	1590	ug/kg	317	1590
122-66-7	Azobenzene	U	1590	ug/kg	317	1590
<i>1,2-Diphenylhydrazine</i>						
101-55-3	4-Bromophenylphenylether	U	1590	ug/kg	317	1590
118-74-1	Hexachlorobenzene	U	1590	ug/kg	317	1590
85-01-8	Phenanthrene	U	159	ug/kg	47.6	159
120-12-7	Anthracene	U	159	ug/kg	31.7	159
84-74-2	Di-n-butylphthalate	U	1590	ug/kg	317	1590
206-44-0	Fluoranthene	J	67.0	ug/kg	47.6	159
85-68-7	Butylbenzylphthalate	U	1590	ug/kg	317	1590
56-55-3	Benzo(a)anthracene	U	159	ug/kg	47.6	159
91-94-1	3,3'-Dichlorobenzidine	U	1590	ug/kg	476	1590
218-01-9	Chrysene	U	159	ug/kg	47.6	159
117-81-7	bis(2-Ethylhexyl)phthalate	U	1590	ug/kg	317	1590
117-84-0	Di-n-octylphthalate	U	1590	ug/kg	317	1590
205-99-2	Benzo(b)fluoranthene	J	57.2	ug/kg	47.6	159
207-08-9	Benzo(k)fluoranthene	U	159	ug/kg	47.6	159
50-32-8	Benzo(a)pyrene	U	159	ug/kg	47.6	159
193-39-5	Indeno(1,2,3-cd)pyrene	U	159	ug/kg	47.6	159
53-70-3	Dibenzo(a,h)anthracene	U	159	ug/kg	47.6	159
191-24-2	Benzo(ghi)perylene	U	159	ug/kg	47.6	159
120-82-1	1,2,4-Trichlorobenzene	U	1590	ug/kg	317	1590

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
56221-91-1	13-Tetradecen-1-ol acetate	10.6	924	ug/kg	96	NJ
112-95-8	Eicosane	11.8	671	ug/kg	96	NJ

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 3 of 3

SDG Number: 10-2196  
Lab Sample ID: 248514002

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: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16  
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
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## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	12.43	1490	ug/kg		J
	Unknown	12.46	906	ug/kg		J
	Unknown	12.62	2150	ug/kg		J
	Unknown	14.02	654	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2323.d  
 Lab Smp Id: 248514002 Client Smp ID: RE36-10-7524  
 Inj Date : 23-MAR-2010 23:06  
 Operator : nagl Inst ID: MSD6.i  
 Smp Info : |248514002|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: 18  
 Dil Factor: 4.00000  
 Integrator: HP RTE Compound Sublist: 10-2196.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	30.04000	weight of sample
M	16.02250	% 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)	323319	40.0000	
* 29 Naphthalene-d8	136	4.816	4.804	(1.000)	1164784	40.0000	
* 46 Acenaphthene-d10	164	6.063	6.057	(1.000)	721949	40.0000	
* 67 Phenanthrene-d10	188	7.234	7.228	(1.000)	1211933	40.0000	
* 91 Chrysene-d12	240	9.639	9.628	(1.000)	956836	40.0000	
* 98 Perylene-d12	264	11.316	11.298	(1.000)	687730	40.0000	
\$ 3 2-Fluorophenol	112	3.140	3.128	(0.795)	118431	13.1766	2090
\$ 5 Phenol-d5	99	3.663	3.657	(0.927)	152202	13.3157	2110
\$ 20 Nitrobenzene-d5	82	4.310	4.304	(0.895)	71211	6.39548	1010
\$ 39 2-Fluorobiphenyl	172	5.551	5.546	(0.916)	153309	8.23071	1300
\$ 60 2,4,6-Tribromophenol	329	6.663	6.651	(1.099)	29756	14.6879	2330
\$ 81 p-Terphenyl-d14	244	8.610	8.604	(0.893)	156619	9.39317	1490



Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	====	==	=====	=====	=====	=====	=====
79 Pyrene	202	8.510	8.498	(0.883)	11096	0.38041	60.3 (a)
76 Fluoranthene	202	8.292	8.287	(1.146)	12657	0.42264	67.0 (a)
95 Benzo(b)fluoranthene	252	10.798	10.786	(0.954)	6739	0.36044	57.2 (a)

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s6c2323.d

Report Date: 03/24/2010 09:31

Lab. ID: 248514002

SampleType: SAMPLE

Injection Date: 23-MAR-2010 23:06

Operator: nagl

Instrument: MSD6.i

Sample Info: |248514002|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: 10-2196

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22	Isophorone		CAS#: 78-59-1			
82	71211	4.31	4.47	80-120	100	(T)
138	6636	4.82	4.47	0- 48	9	(T)
-----						
40	2-Chloronaphthalene		CAS#: 91-58-7			
162	669310	6.06	5.66	80-120	100	(T)
164	721949	6.06	5.66	3- 63	108	(QT)
127	756	6.07	5.66	7- 67	0	(QT)
-----						
43	Dimethylphthalate		CAS#: 131-11-3			
163	129865	6.07	5.82	80-120	100	(T)
164	721949	6.06	5.82	0- 41	556	(QT)
-----						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	94274	6.06	6.17	80-120	100	(T)
89	998	6.07	6.17	38- 98	1	(QT)
63	1323	6.06	6.17	18- 78	1	(QT)
-----						
55	2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1			
198	619	6.73	6.48	80-120	100	(T)
105	321	6.69	6.48	10- 70	52	(T)
51	298	6.77	6.48	27- 87	48	(T)
-----						
69	Anthracene		CAS#: 120-12-7			
178	7137	7.25	7.29	80-120	100	( )
179	1937	7.25	7.29	0- 46	27	( )
176	1152	7.25	7.29	0- 49	16	( )
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
76 Fluoranthene		CAS#: 206-44-0				
202	12657	8.29	8.29	80-120	100	( )
203	2243	8.29	8.29	0- 48	18	( )
101	1882	8.29	8.29	0- 42	15	( )

-----						
79 Pyrene		CAS#: 129-00-0				
202	11096	8.51	8.50	80-120	100	( )
200	2385	8.51	8.50	0- 51	22	( )
101	1732	8.51	8.50	0- 44	16	( )

-----						
95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	6739	10.80	10.79	80-120	100	( )
253	1244	10.80	10.79	0- 52	18	( )
125	1762	10.79	10.79	0- 40	26	( )

-----						
96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	6739	10.80	10.82	80-120	100	( )
253	1244	10.80	10.82	0- 52	18	( )
125	1762	10.79	10.82	0- 42	26	( )

-----

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2323.d  
Lab Smp Id: 248514002 Client Smp ID: RE36-10-7524  
Inj Date : 23-MAR-2010 23:06  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |248514002|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: 18  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2196.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	30.04000	weight of sample
M	16.02250	% moisture

Cpnd Variable Local Compound Variable

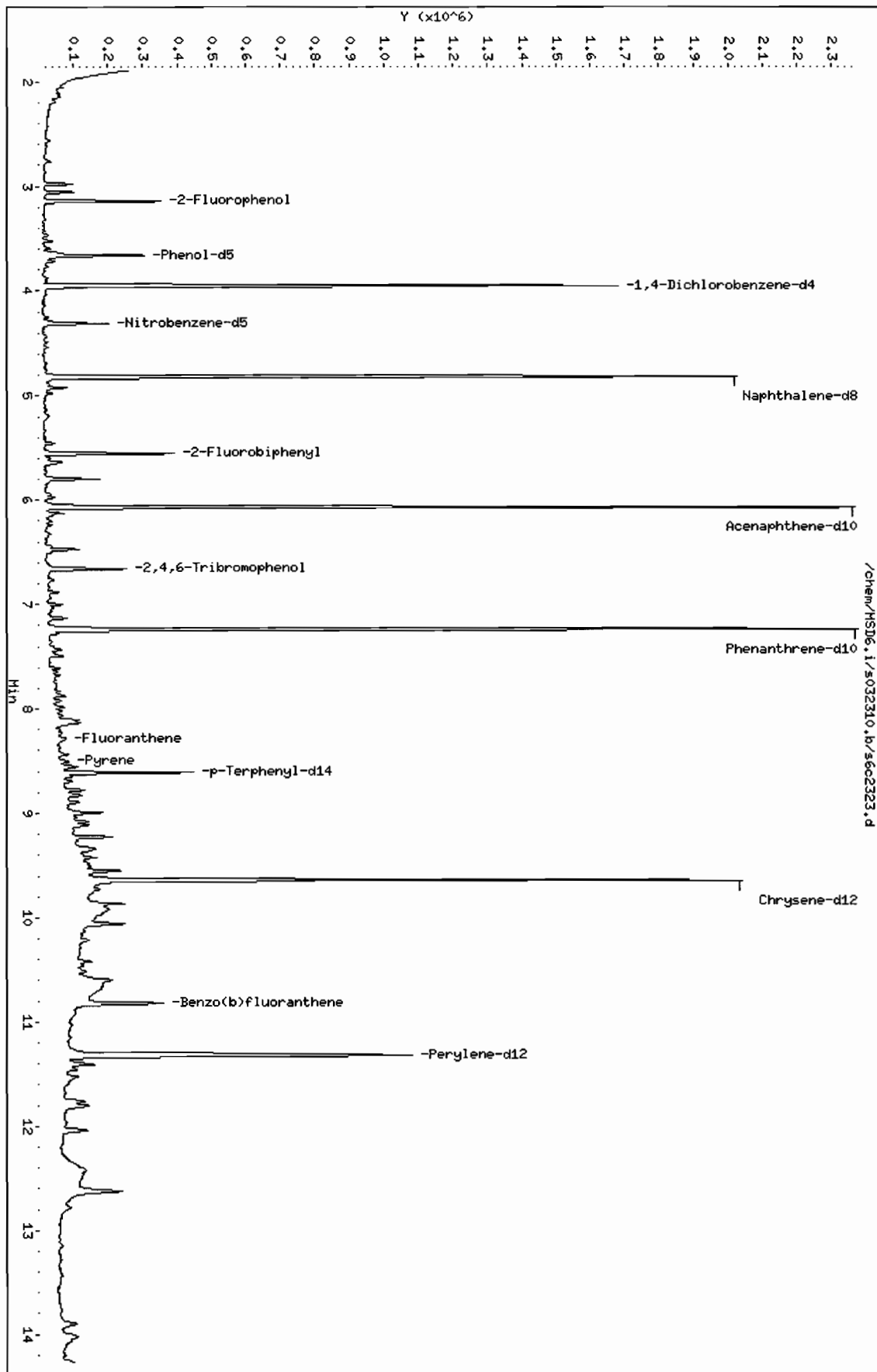
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 98 Perylene-d12	11.316	1854039	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
13-Tetradecen-1-ol acetate					CAS #: 56221-91-1		
10.598	270160	5.82856893	924	96	NIST05.L	94752	98
Eicosane					CAS #: 112-95-8		
11.804	196029	4.22922369	670	96	NIST05.L	113492	98

RT	CONCENTRATIONS				QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
12.427	435366	9.39281008	1490	0		0	98
Unknown				CAS #:			
12.457	264754	5.71194882	906	0		0	98
Unknown				CAS #:			
12.622	629066	13.5718037	2150	0		0	98
Unknown				CAS #:			
14.021	191230	4.12568848	654	0		0	98

Data File: /chem/MSD6.1/5032310.b/5602323.d  
Date : 23-MAR-2010 23:06  
Client ID: RE36-10-7524  
Sample Info: 12485140021963133141SVH11.LANL  
Volume Injected (uL): 0.5  
Column phase: 304 DB-SHS

Instrument: MSD6.1  
Operator: nag1  
Column diameter: 0.20



Date : 23-MAR-2010 23:06

Client ID: RE36-10-7524

Instrument: MSD6.i

Sample Info: 12485140021963133141SVH11ILANL

Volume Injected (uL): 0.5

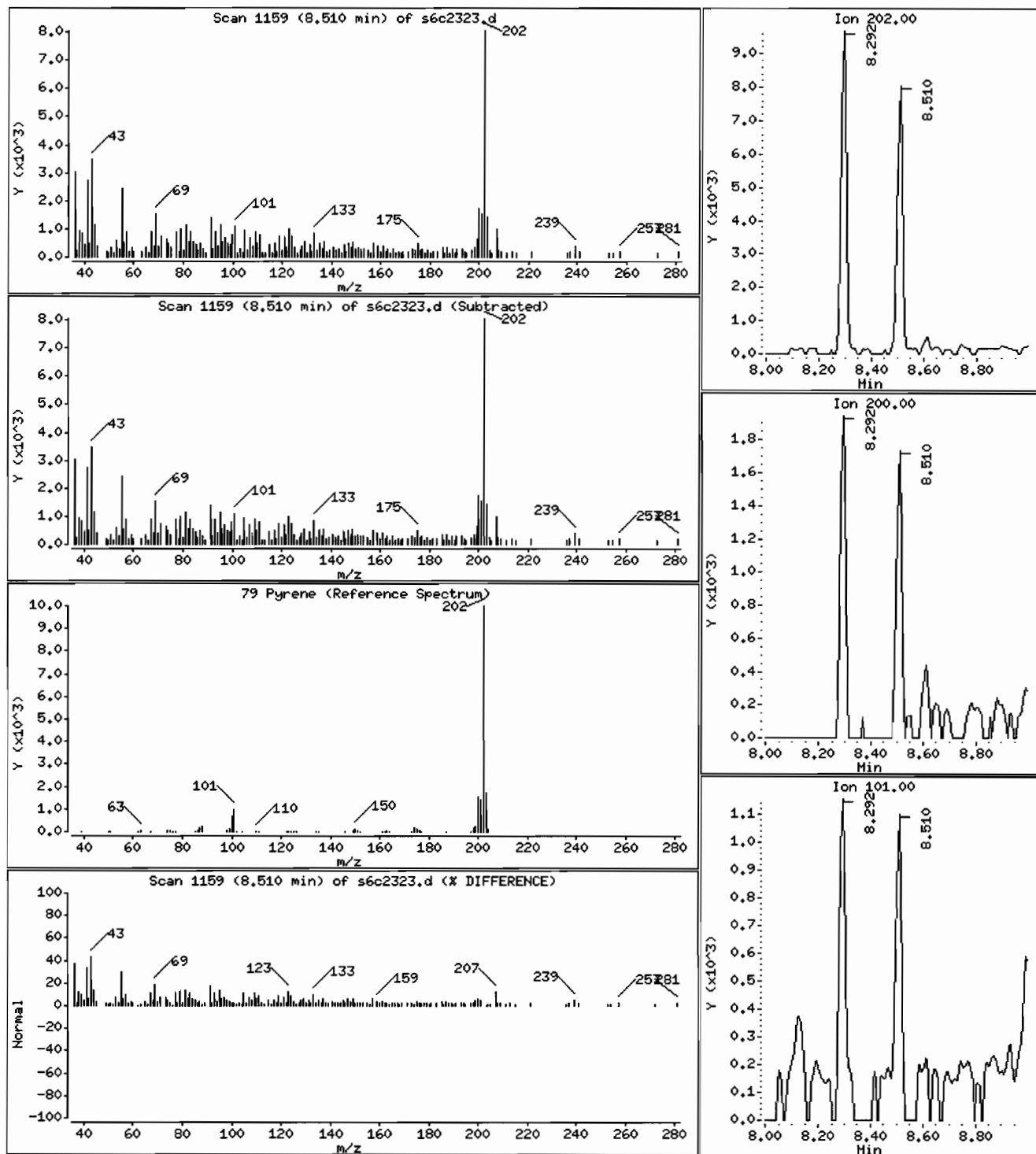
Operator: nag1

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

Column diameter: 0.20

79 Pyrene

Concentration: 60.3 ug/Kg



Date: 23-MAR-2010 23:06

Client ID: RE36-10-7524

Instrument: MSD6.i

Sample Info: 12485140021963133141SVMI11LANL

Volume Injected (uL): 0.5

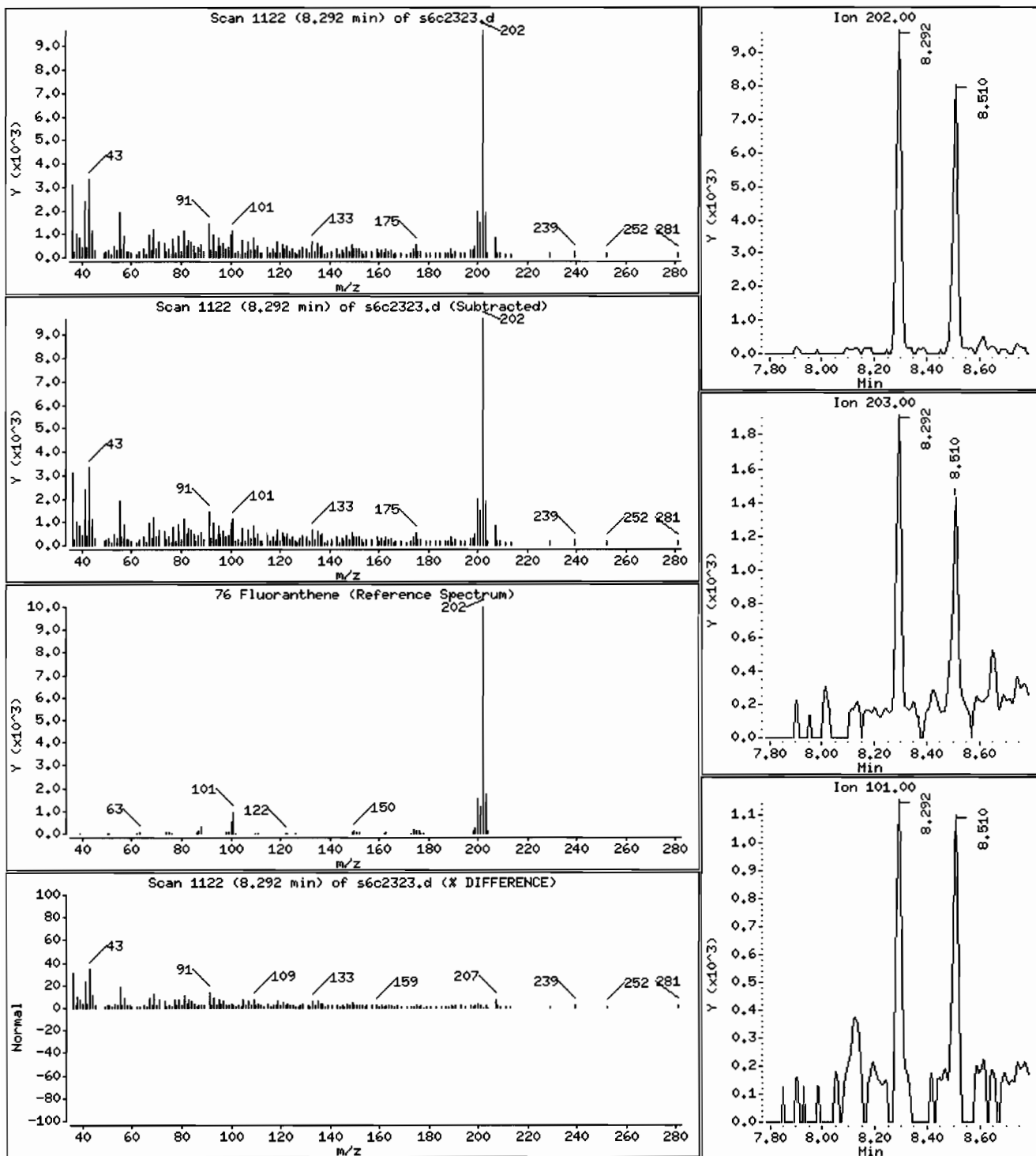
Operator: nag1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 67.0 ug/Kg





Date : 23-MAR-2010 23:06

Client ID: RE36-10-7524

Instrument: MSD6.i

Sample Info: I2485140021963133141SVMI1ILANL

Volume Injected (uL): 0.5

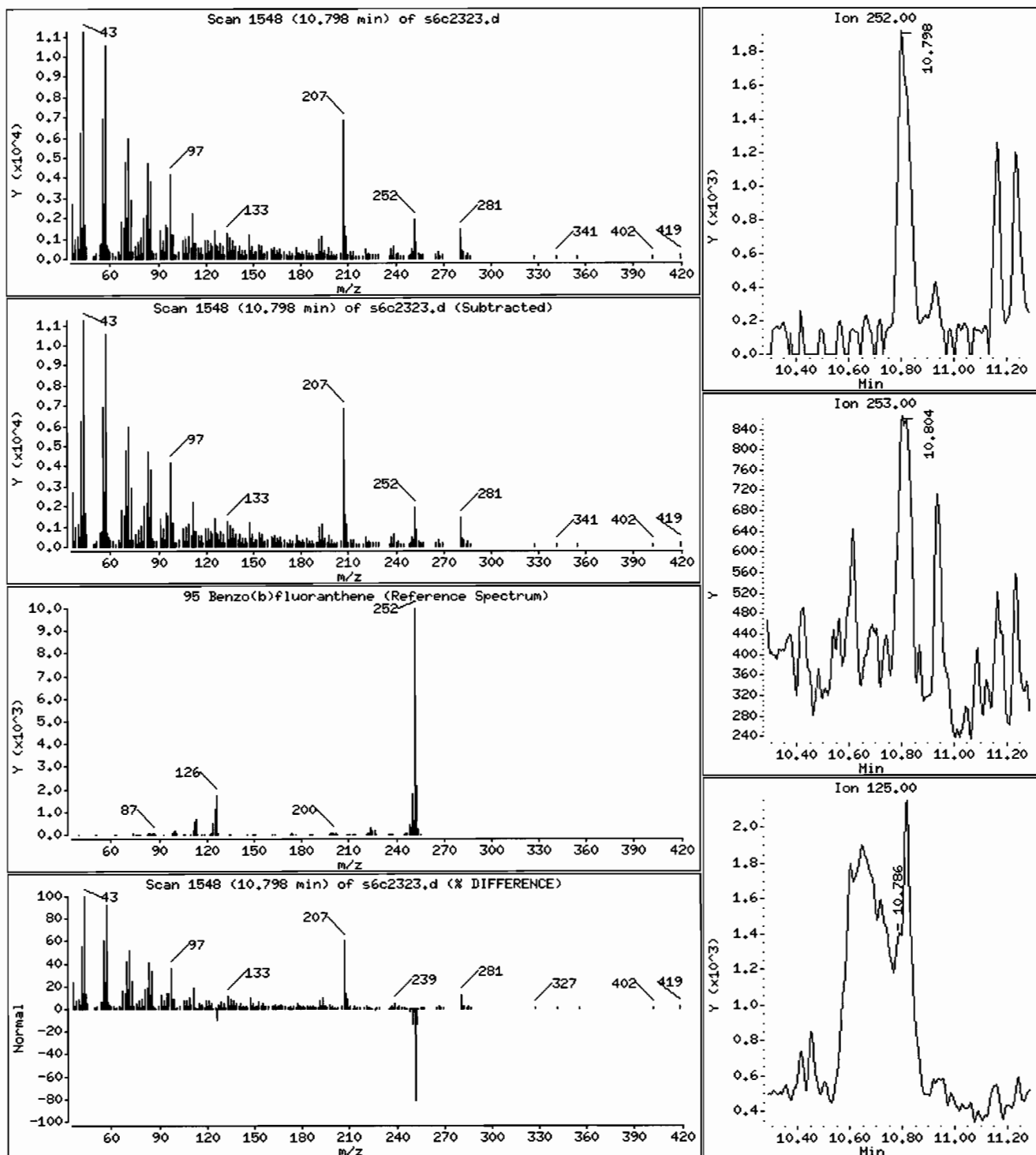
Operator: nag1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 57.2 ug/Kg



Date : 23-MAR-2010 23:06

Client ID: RE36-10-7524

Instrument: MSD6.i

Sample Info: I2485140021963133141SVMI11LANL

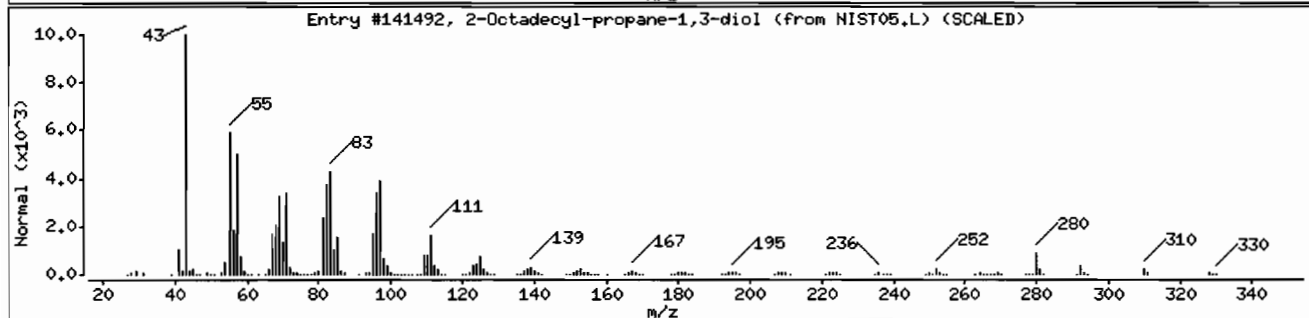
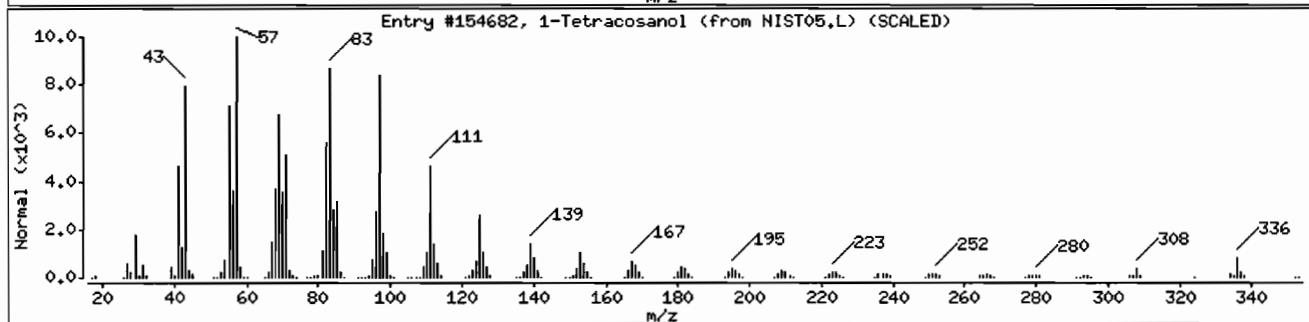
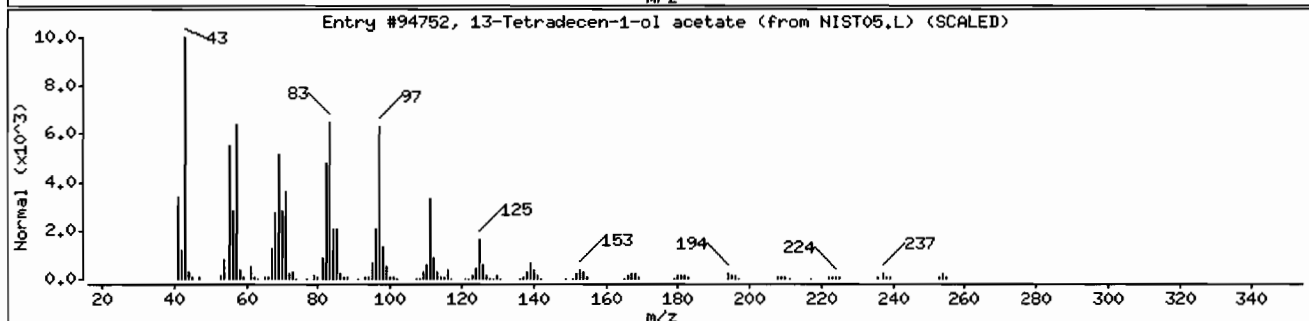
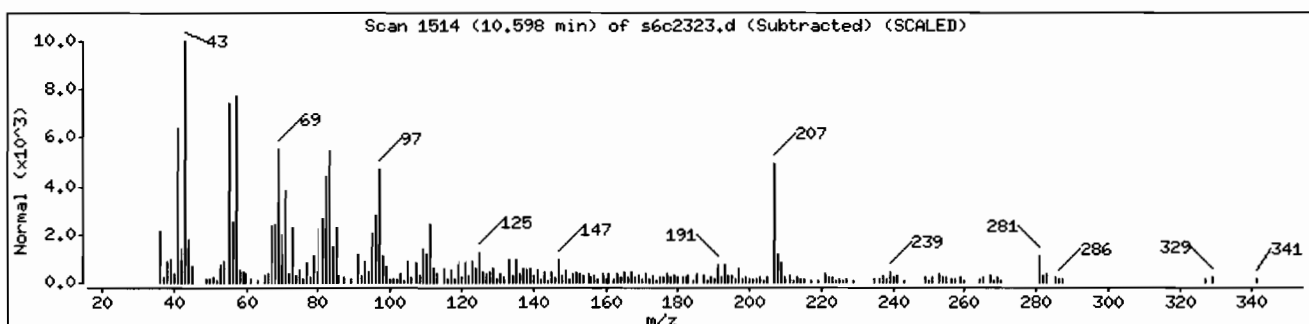
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	96	C16H30O2	254
1-Tetracosanol	506-51-4	NIST05.L	154682	64	C24H50O	354
2-Octadecyl-propane-1,3-diol	5337-61-1	NIST05.L	141492	62	C21H44O2	328



Date : 23-MAR-2010 23:06

Client ID: RE36-10-7524

Instrument: MSD6.i

Sample Info: 12485140021963133141SVM11ILANL

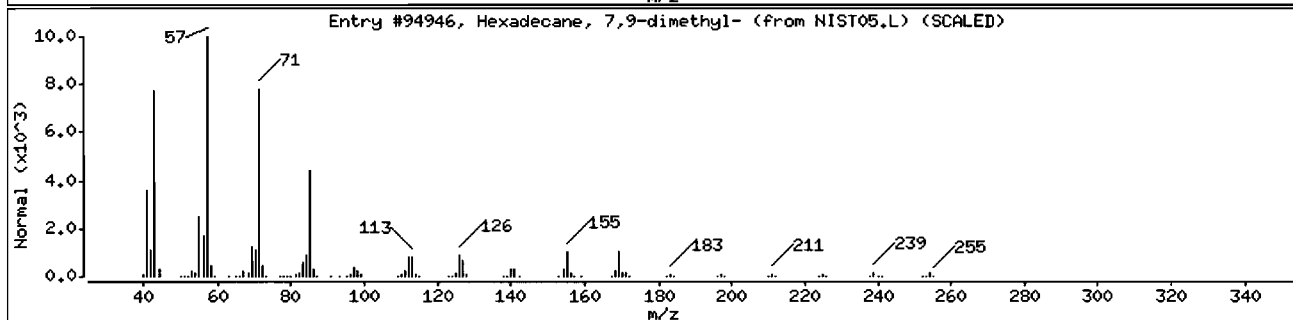
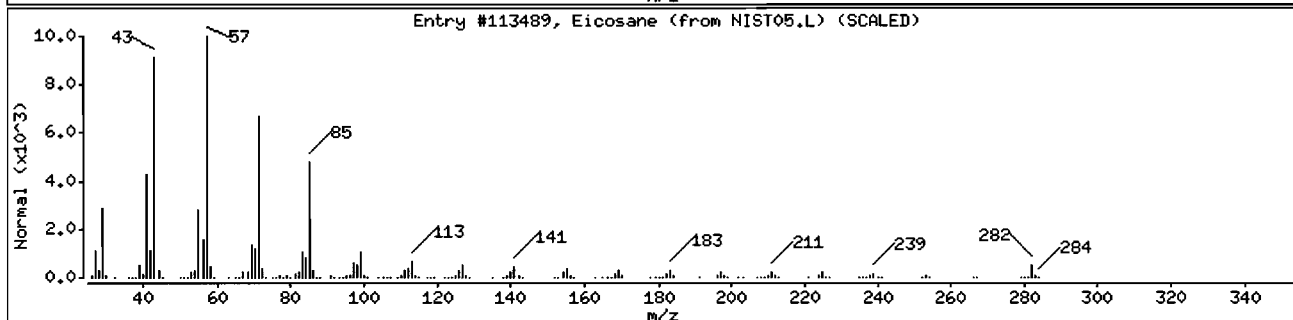
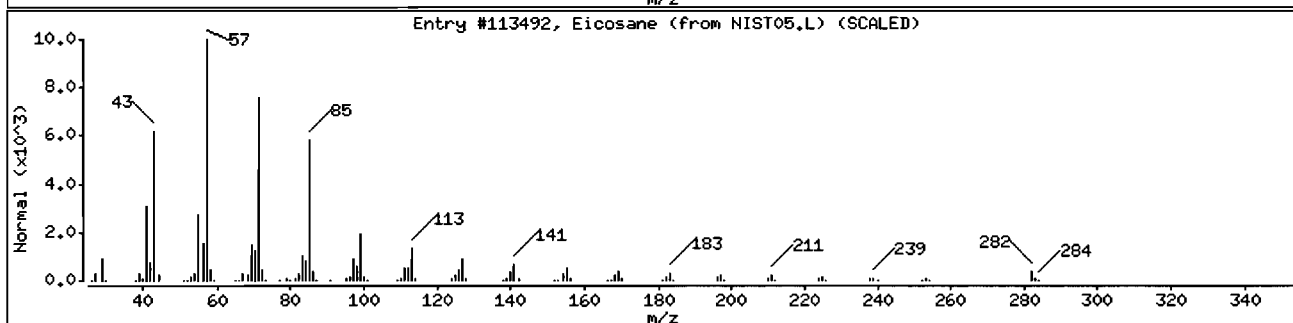
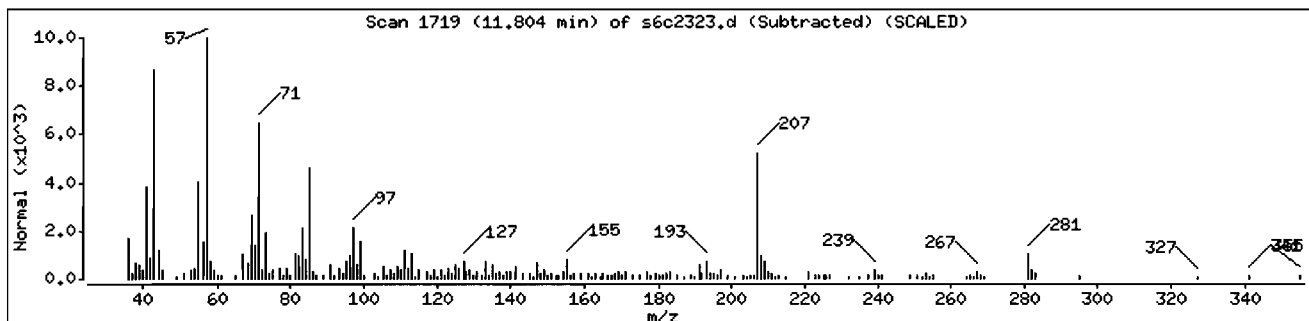
Volume Injected (uL): 0.5

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	C <sub>20</sub> H <sub>42</sub>	282
Eicosane	112-95-8	NIST05.L	113489	95	C <sub>20</sub> H <sub>42</sub>	282
Hexadecane, 7,9-dimethyl-	21164-95-4	NIST05.L	94946	66	C <sub>18</sub> H <sub>38</sub>	254



Date: 23-MAR-2010 23:06

Client ID: RE36-10-7524

Instrument: MSD6.i

Sample Info: 12485140021963133141SVH111LANL

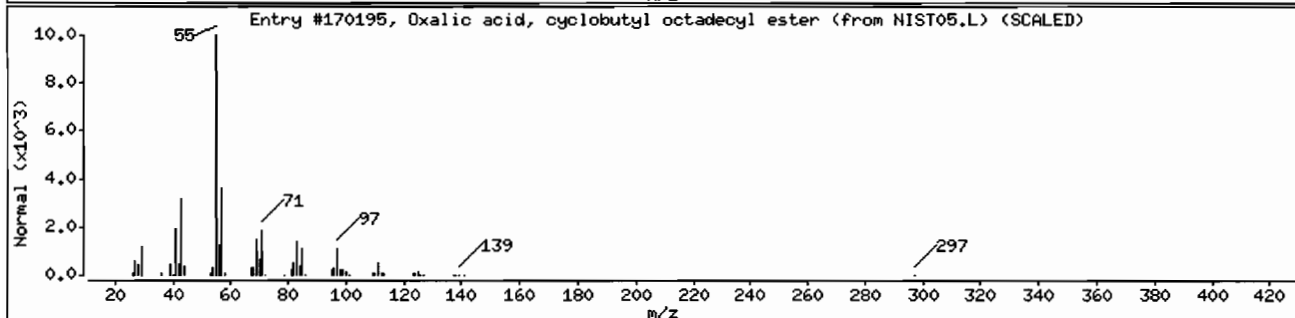
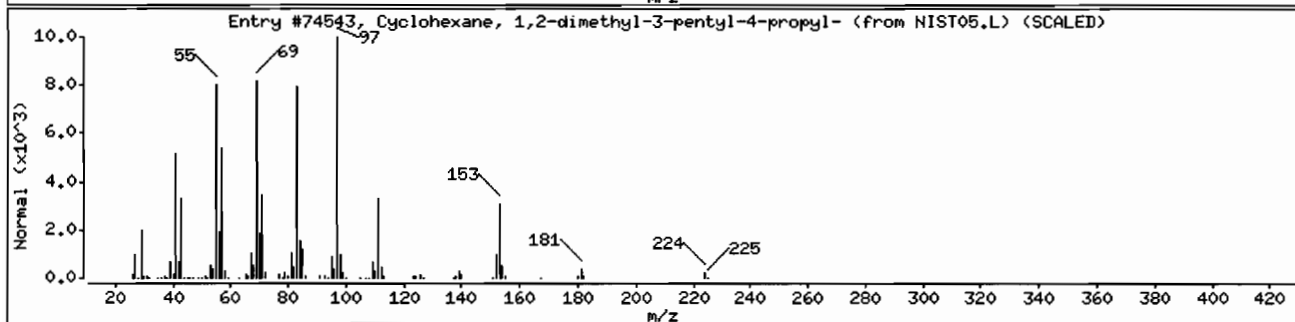
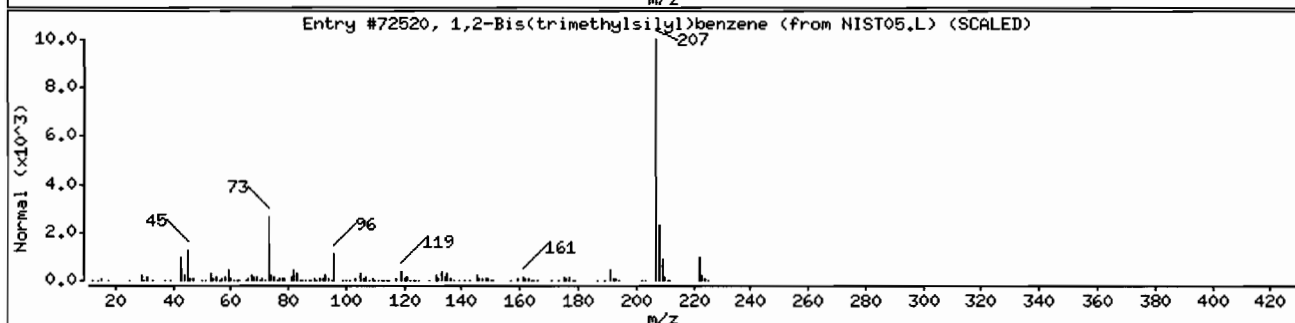
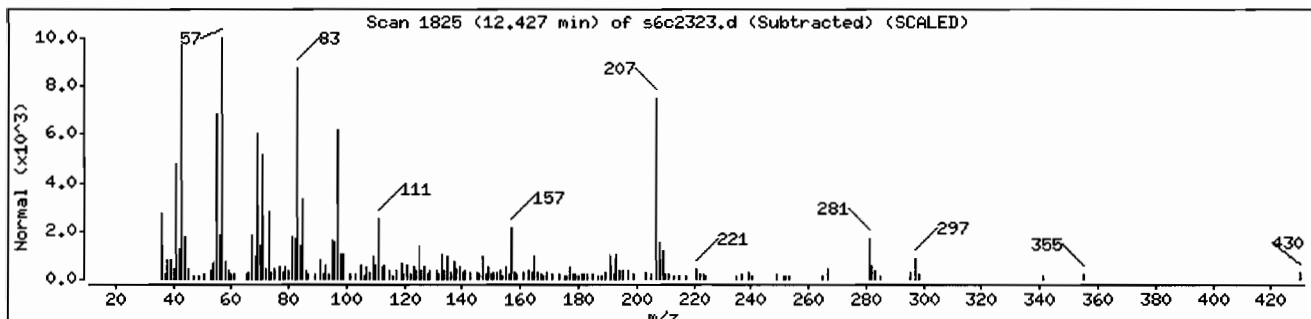
Volume Injected (uL): 0.5

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-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	38	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222
Cyclohexane, 1,2-dimethyl-3-pentyl-4-pro	62376-17-4	NIST05.L	74543	35	C <sub>16</sub> H <sub>32</sub>	224
Oxalic acid, cyclobutyl octadecyl ester	1000309-70-8	NIST05.L	170195	30	C <sub>24</sub> H <sub>44</sub> O <sub>4</sub>	396



Date : 23-MAR-2010 23:06

Client ID: RE36-10-7524

Instrument: MSD6.i

Sample Info: I2485140021963133141SVMI11ILANL

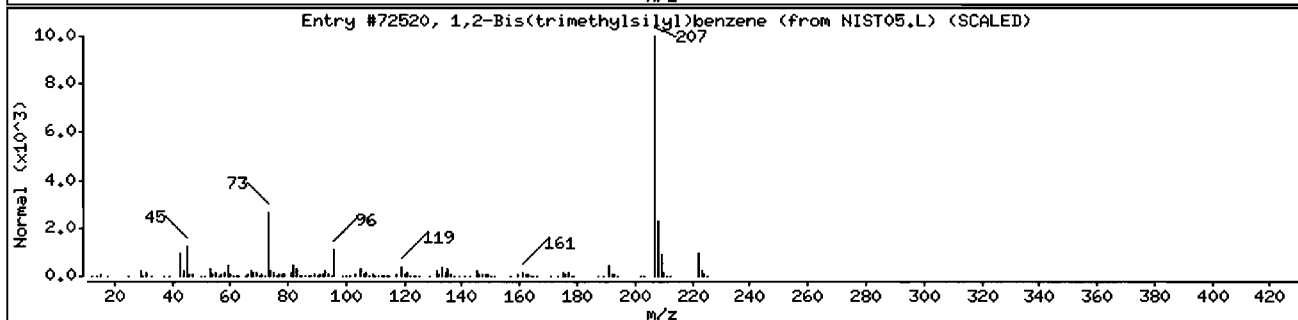
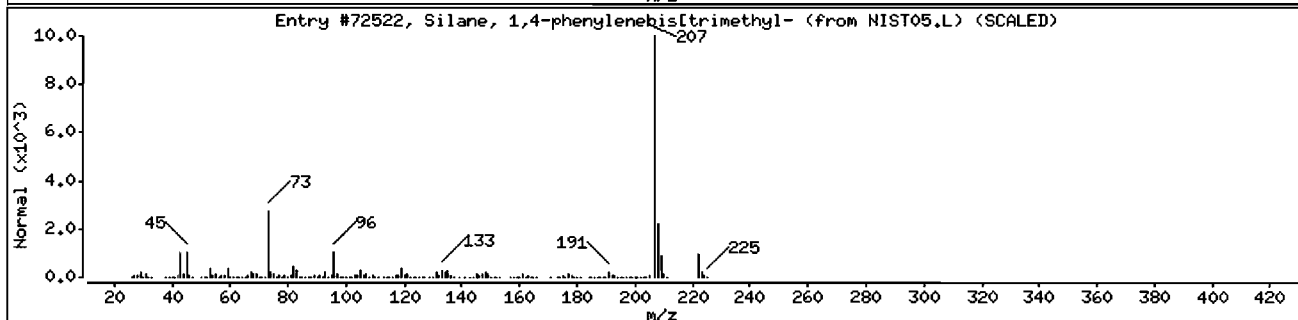
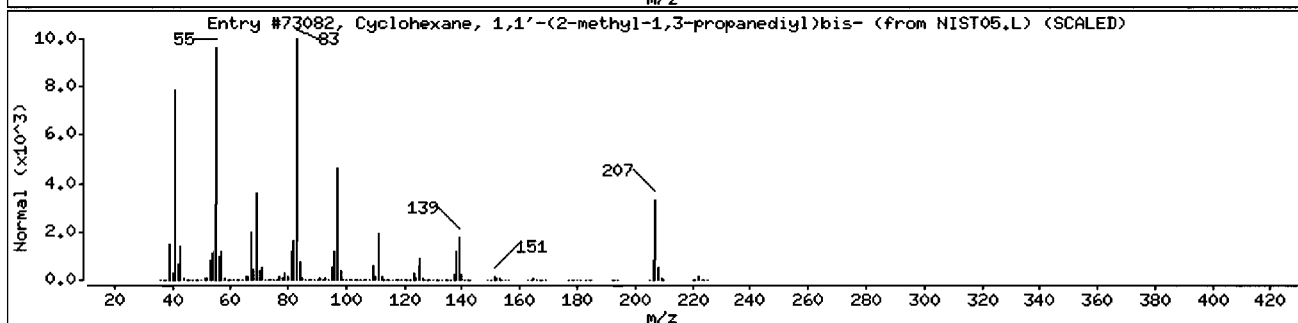
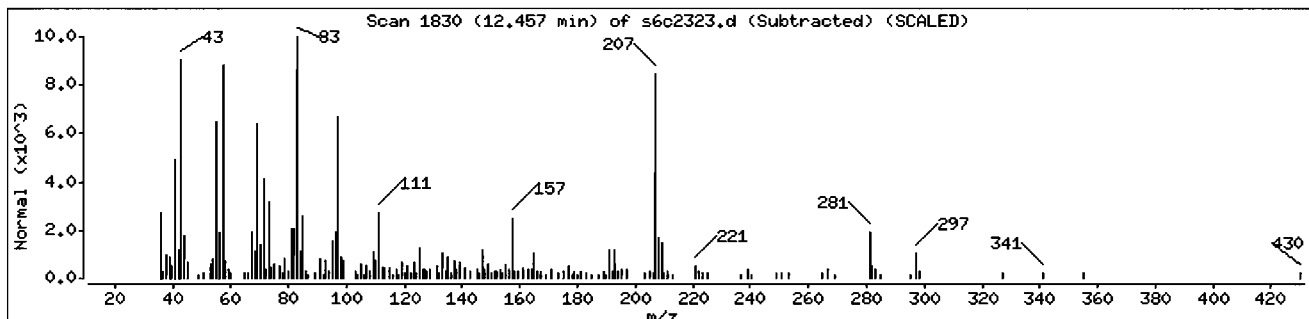
Volume Injected (uL): 0.5

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-propanediyl)bis-	2883-08-1	NIST05.L	73082	50	C <sub>16</sub> H <sub>30</sub>	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	38	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	38	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222



Date : 23-MAR-2010 23:06

Client ID: RE36-10-7524

Instrument: MSD6.i

Sample Info: 1248514002196313141SVH111LANL

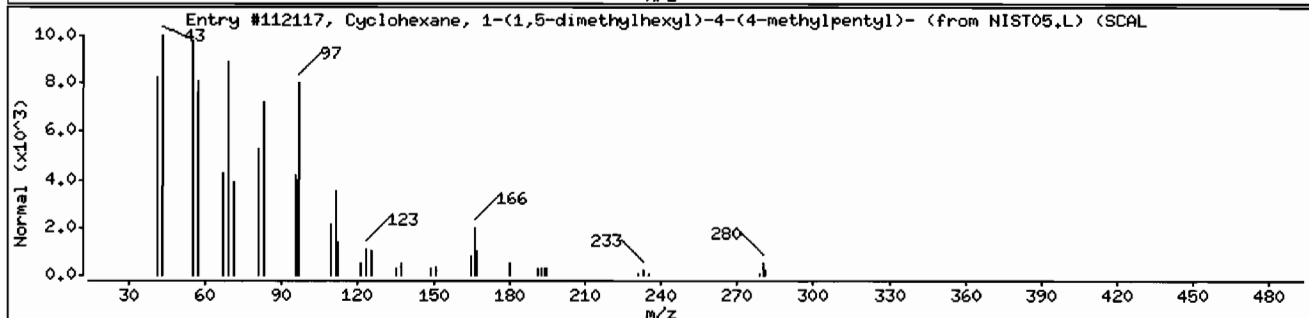
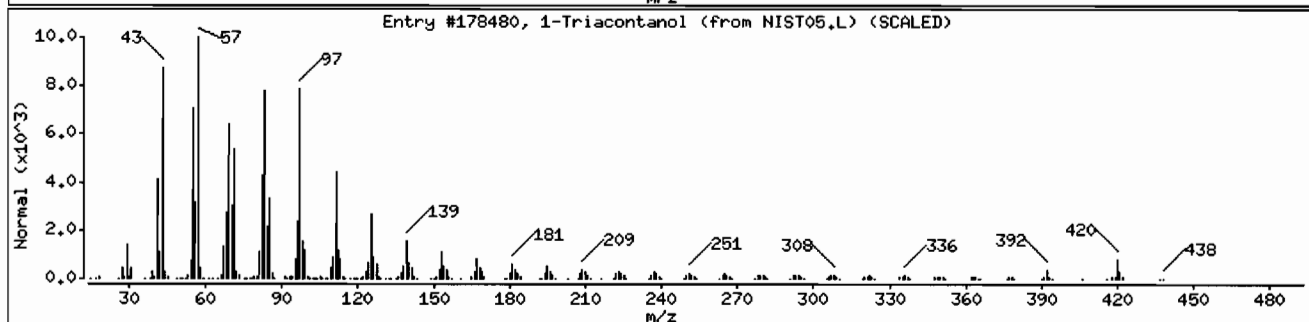
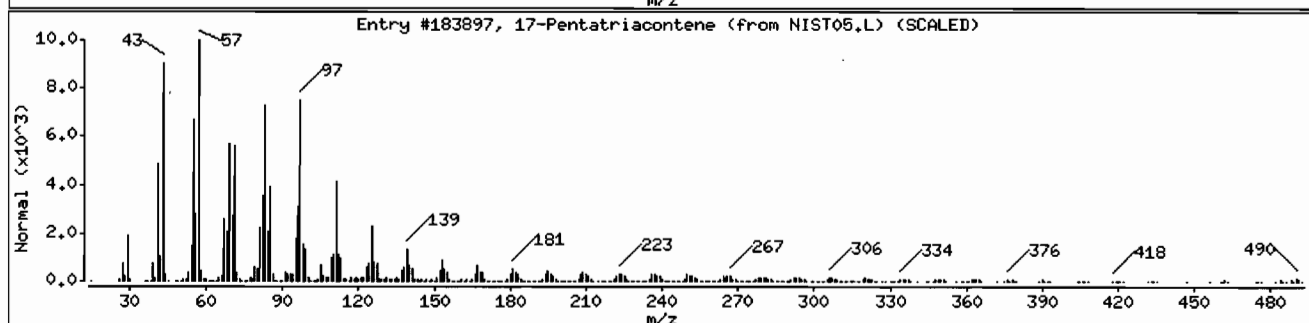
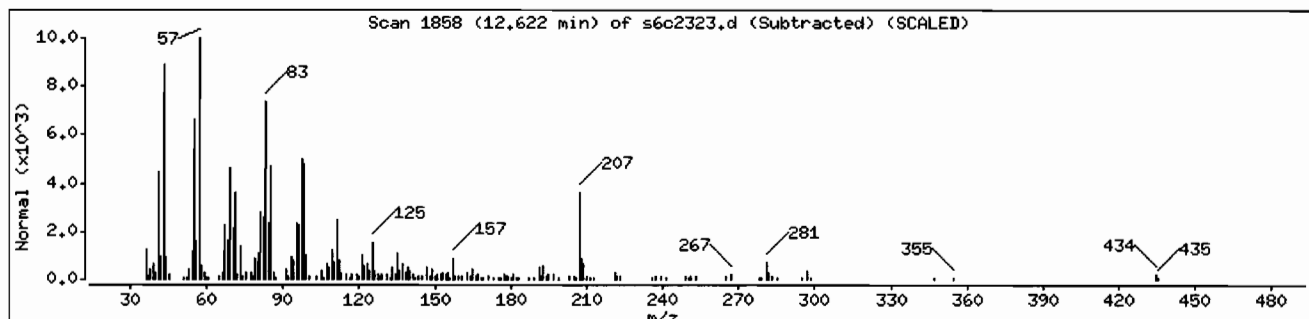
Volume Injected (uL): 0.5

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						
17-Pentatriacontene	6971-40-0	NIST05.L	183897	49	C <sub>35</sub> H <sub>70</sub>	491
1-Triacontanol	593-50-0	NIST05.L	178480	38	C <sub>30</sub> H <sub>62</sub> O	438
Cyclohexane, 1-(1,5-dimethylhexyl)-4-(4-	56009-20-2	NIST05.L	112117	38	C <sub>20</sub> H <sub>40</sub>	280



Date : 23-MAR-2010 23:06

Client ID: RE36-10-7524

Instrument: MSD6.i

Sample Info: I2485140021963133141SVMI1ILANL

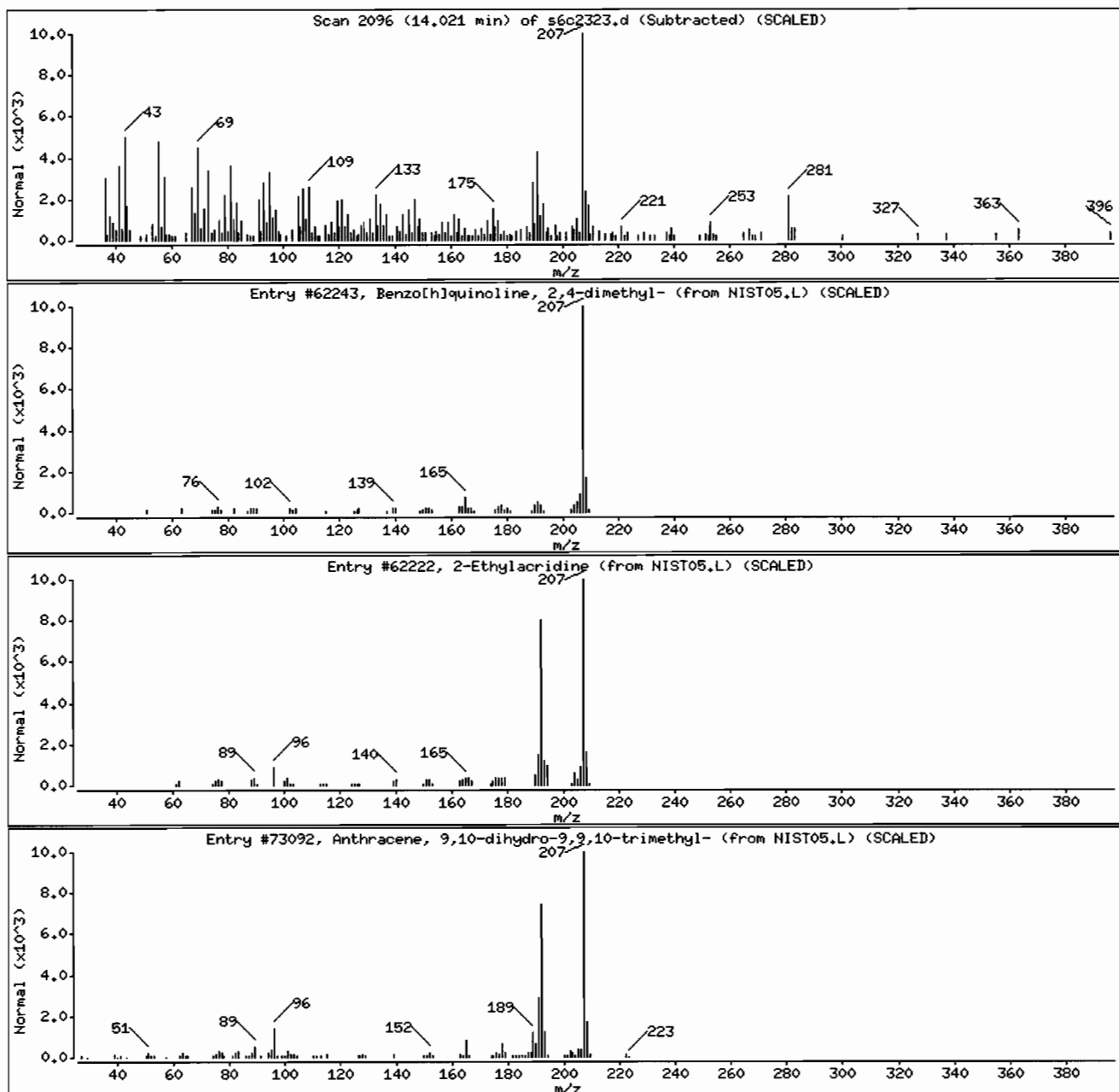
Volume Injected (uL): 0.5

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	35	C15H13N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	30	C15H13N	207
Anthracene, 9,10-dihydro-9,9,10-trimethy	14923-29-6	NIST05.L	73092	30	C17H18	222



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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514003	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 20.2
<b>Client ID:</b> RE36-10-7525	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 963133	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 03/23/2010 23:30	<b>Inst:</b> MSD6.I	<b>Dilution:</b> 4
<b>Prep Date:</b> 03/10/2010 12:14	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s6c2324.d	<b>Aliquot:</b> 30.07 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1670	ug/kg	333	1670
108-95-2	Phenol	U	1670	ug/kg	333	1670
95-57-8	2-Chlorophenol	U	1670	ug/kg	333	1670
106-46-7	1,4-Dichlorobenzene	U	1670	ug/kg	333	1670
621-64-7	N-Nitrosodipropylamine	U	1670	ug/kg	333	1670
59-50-7	4-Chloro-3-methylphenol	U	1670	ug/kg	333	1670
83-32-9	Acenaphthene	U	167	ug/kg	55.0	167
121-14-2	2,4-Dinitrotoluene	U	1670	ug/kg	167	1670
100-02-7	4-Nitrophenol	U	1670	ug/kg	550	1670
87-86-5	Pentachlorophenol	U	1670	ug/kg	416	1670
129-00-0	Pyrene	U	167	ug/kg	50.0	167
110-86-1	Pyridine	U	1670	ug/kg	333	1670
62-53-3	Aniline	U	1670	ug/kg	500	1670
111-44-4	bis(2-Chloroethyl) ether	U	1670	ug/kg	333	1670
541-73-1	1,3-Dichlorobenzene	U	1670	ug/kg	333	1670
100-51-6	Benzyl alcohol	U	1670	ug/kg	500	1670
95-50-1	1,2-Dichlorobenzene	U	1670	ug/kg	333	1670
108-60-1	bis(2-Chloroisopropyl)ether	U	1670	ug/kg	333	1670
95-48-7	o-Cresol	U	1670	ug/kg	333	1670
65794-96-9	m,p-Cresols	U	1670	ug/kg	500	1670
67-72-1	Hexachloroethane	U	1670	ug/kg	333	1670
98-95-3	Nitrobenzene	U	1670	ug/kg	333	1670
78-59-1	Isophorone	U	1670	ug/kg	333	1670
88-75-5	2-Nitrophenol	U	1670	ug/kg	333	1670
105-67-9	2,4-Dimethylphenol	U	1670	ug/kg	583	1670
111-91-1	bis(2-Chloroethoxy)methane	U	1670	ug/kg	333	1670
120-83-2	2,4-Dichlorophenol	U	1670	ug/kg	333	1670
65-85-0	Benzoic acid	U	3330	ug/kg	833	3330
91-20-3	Naphthalene	U	167	ug/kg	50.0	167
106-47-8	4-Chloroaniline	U	1670	ug/kg	333	1670
87-68-3	Hexachlorobutadiene	U	1670	ug/kg	333	1670
91-57-6	2-Methylnaphthalene	U	167	ug/kg	33.3	167
77-47-4	Hexachlorocyclopentadiene	U	1670	ug/kg	333	1670
88-06-2	2,4,6-Trichlorophenol	U	1670	ug/kg	333	1670
95-95-4	2,4,5-Trichlorophenol	U	1670	ug/kg	333	1670
91-58-7	2-Chloronaphthalene	U	167	ug/kg	55.0	167
88-74-4	2-Nitroaniline	U	1670	ug/kg	333	1670
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	1670	ug/kg	333	1670



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

<b>SDG Number:</b> 10-2196	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248514003	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 20.2
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-7525	<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> 4
<b>Run Date:</b> 03/23/2010 23:30	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 03/10/2010 12:14	<b>Aliquot:</b> 30.07 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s6c2324.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	1670	ug/kg	333	1670
606-20-2	2,6-Dinitrotoluene	U	1670	ug/kg	167	1670
208-96-8	Acenaphthylene	U	167	ug/kg	50.0	167
51-28-5	2,4-Dinitrophenol	U	3330	ug/kg	633	3330
132-64-9	Dibenzofuran	U	1670	ug/kg	333	1670
84-66-2	Diethylphthalate	U	1670	ug/kg	333	1670
86-73-7	Fluorene	U	167	ug/kg	50.0	167
7005-72-3	4-Chlorophenylphenylether	U	1670	ug/kg	333	1670
534-52-1	2-Methyl-4,6-dinitrophenol	U	1670	ug/kg	333	1670
100-01-6	4-Nitroaniline	U	1670	ug/kg	500	1670
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1670	ug/kg	333	1670
122-66-7	Azobenzene	U	1670	ug/kg	333	1670
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1670	ug/kg	333	1670
118-74-1	Hexachlorobenzene	U	1670	ug/kg	333	1670
85-01-8	Phenanthrene	U	167	ug/kg	50.0	167
120-12-7	Anthracene	U	167	ug/kg	33.3	167
84-74-2	Di-n-butylphthalate	U	1670	ug/kg	333	1670
206-44-0	Fluoranthene	U	167	ug/kg	50.0	167
85-68-7	Butylbenzylphthalate	U	1670	ug/kg	333	1670
56-55-3	Benzo(a)anthracene	U	167	ug/kg	50.0	167
91-94-1	3,3'-Dichlorobenzidine	U	1670	ug/kg	500	1670
218-01-9	Chrysene	U	167	ug/kg	50.0	167
117-81-7	bis(2-Ethylhexyl)phthalate	U	1670	ug/kg	333	1670
117-84-0	Di-n-octylphthalate	U	1670	ug/kg	333	1670
205-99-2	Benzo(b)fluoranthene	U	167	ug/kg	50.0	167
207-08-9	Benzo(k)fluoranthene	U	167	ug/kg	50.0	167
50-32-8	Benzo(a)pyrene	U	167	ug/kg	50.0	167
193-39-5	Indeno(1,2,3-cd)pyrene	U	167	ug/kg	50.0	167
53-70-3	Dibenzo(a,h)anthracene	U	167	ug/kg	50.0	167
191-24-2	Benzo(ghi)perylene	U	167	ug/kg	50.0	167
120-82-1	1,2,4-Trichlorobenzene	U	1670	ug/kg	333	1670

**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	1890	ug/kg	98	NJ
	Unknown	9.92	720	ug/kg		J

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

SDG Number: 10-2196  
Lab Sample ID: 248514003

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: 30.07 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 20.2  
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
559-74-0	Friedelan-3-one		10.35	5400	ug/kg	98	NJ
	Unknown		10.68	669	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2324.d  
 Lab Smp Id: 248514003 Client Smp ID: RE36-10-7525  
 Inj Date : 23-MAR-2010 23:30  
 Operator : nagl Inst ID: MSD6.i  
 Smp Info : |248514003|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: 19  
 Dil Factor: 4.00000  
 Integrator: HP RTE Compound Sublist: 10-2196.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	30.07000	weight of sample
M	20.15380	% 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	3.952	3.946	(1.000)	357389		40.0000	
* 29 Naphthalene-d8	136	4.816	4.804	(1.000)	1268217		40.0000	
* 46 Acenaphthene-d10	164	6.063	6.057	(1.000)	774077		40.0000	
* 67 Phenanthrene-d10	188	7.234	7.228	(1.000)	1343000		40.0000	
* 91 Chrysene-d12	240	9.639	9.628	(1.000)	1193438		40.0000	
* 98 Perylene-d12	264	11.322	11.298	(1.000)	949371		40.0000	
\$ 3 2-Fluorophenol	112	3.140	3.128	(0.795)	149634		15.0612	2510
\$ 5 Phenol-d5	99	3.663	3.657	(0.927)	190756		15.0977	2520
\$ 20 Nitrobenzene-d5	82	4.310	4.304	(0.895)	85354		7.04047	1170
\$ 39 2-Fluorobiphenyl	172	5.551	5.546	(0.916)	184302		9.22831	1540
\$ 60 2,4,6-Tribromophenol	329	6.663	6.651	(1.099)	41018		18.8834	3140
\$ 81 p-Terphenyl-d14	244	8.610	8.604	(0.893)	203899		9.80439	1630

## ION RATIO REPORT

## SV REPORT

Data file: s6c2324.d

Report Date: 03/24/2010 09:31

Lab. ID: 248514003

SampleType: SAMPLE

Injection Date: 23-MAR-2010 23:30

Operator: nag1

Instrument: MSD6.i

Sample Info: |248514003|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: 10-2196

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22	Isophorone		CAS#: 78-59-1			
82	85354	4.31	4.47	80-120	100	(T)
138	6824	4.82	4.47	0- 48	8	(T)
-----						
40	2-Chloronaphthalene		CAS#: 91-58-7			
162	725224	6.06	5.66	80-120	100	(T)
164	774077	6.06	5.66	3- 63	107	(QT)
127	651	5.55	5.66	7- 67	0	(QT)
-----						
43	Dimethylphthalate		CAS#: 131-11-3			
163	140743	6.07	5.82	80-120	100	(T)
164	774077	6.06	5.82	0- 41	550	(QT)
-----						
45	Acenaphthylene		CAS#: 208-96-8			
152	9484	5.55	5.96	80-120	100	(T)
151	9269	5.55	5.96	0- 50	98	(QT)
153	2861	5.55	5.96	0- 44	30	(T)
-----						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	101610	6.06	6.17	80-120	100	(T)
89	1169	6.06	6.17	38- 98	1	(QT)
63	1119	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/s6c2324.d  
 Lab Smp Id: 248514003 Client Smp ID: RE36-10-7525  
 Inj Date : 23-MAR-2010 23:30  
 Operator : nag1 Inst ID: MSD6.i  
 Smp Info : |248514003|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: 19  
 Dil Factor: 4.00000  
 Integrator: HP RTE Compound Sublist: 10-2196.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	30.07000	weight of sample
M	20.15380	% moisture

Cpnd Variable Local Compound Variable

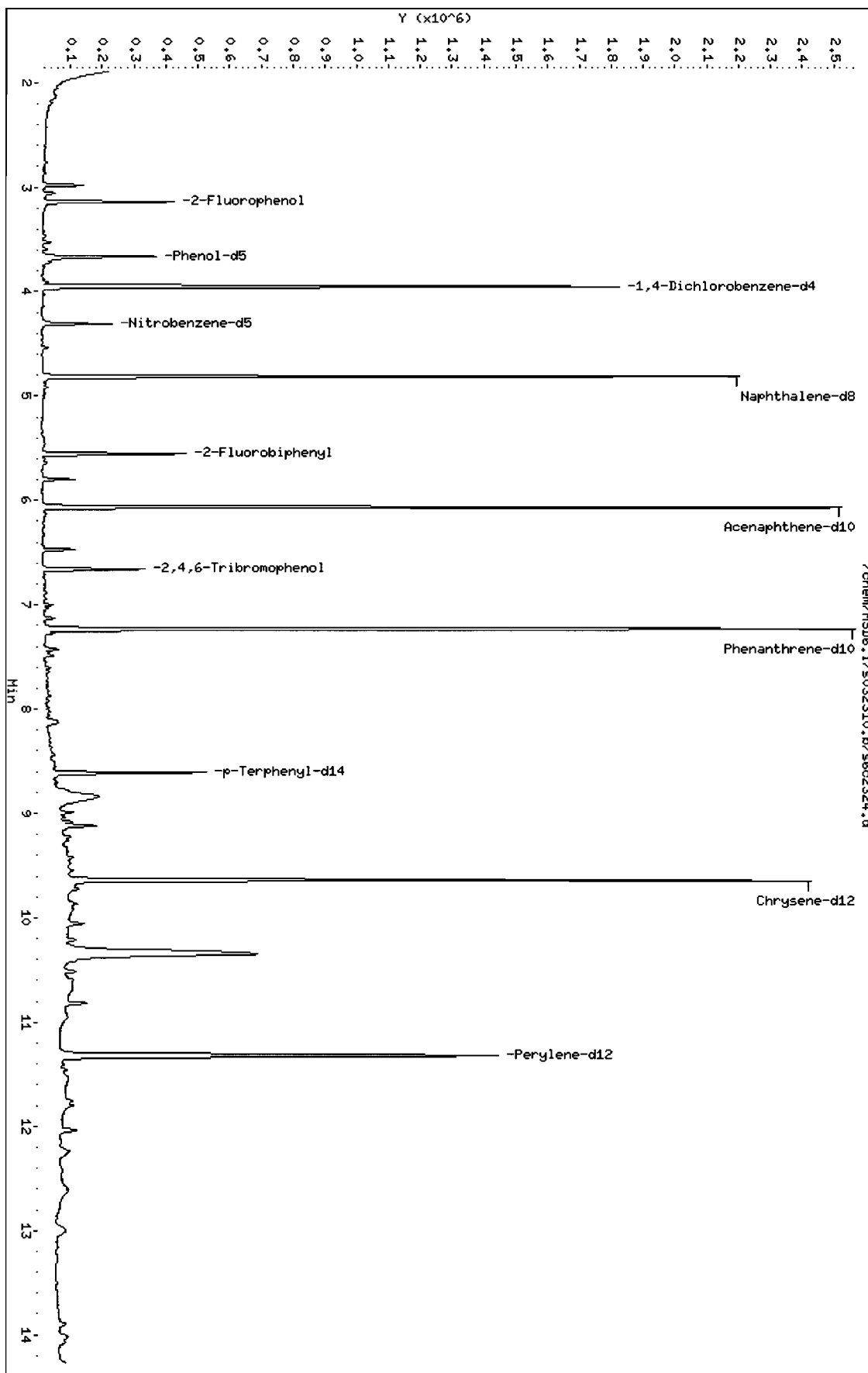
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 91 Chrysene-d12	9.639	3574470	40.000
* 98 Perylene-d12	11.322	2595202	40.000

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	1011877	11.3233734	1890	98	NIST05.L	173936	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
9.922	386381	4.32378768	720	0		0	91
Friedelan-3-one				CAS #: 559-74-0			
10.345	2896757	32.4160655	5400	98	NIST05.L	176566	91
Unknown				CAS #:			
10.681	260709	4.01832812	669	0		0	98

Data File: /chem/HSD6.i/s032310.b/s6c2324.d  
Date : 23-MAR-2010 23:30  
Client ID: RE36-10-7525  
Sample Info: 12485140031963133141SVH11L9NL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-SMS

Instrument: HSD6.i  
Operator: nag1  
Column diameter: 0.20



Date: 23-MAR-2010 23:30

Client ID: RE36-10-7525

Instrument: MSD6.i

Sample Info: 12485140031963133141SVH111LANL

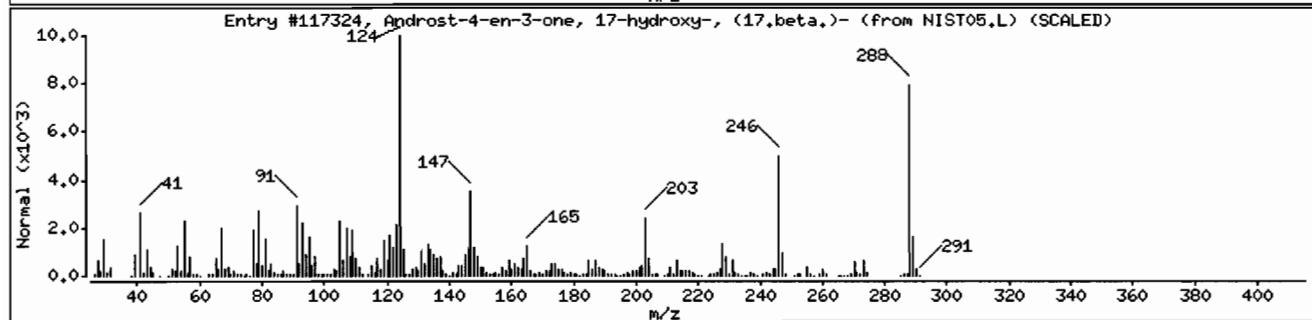
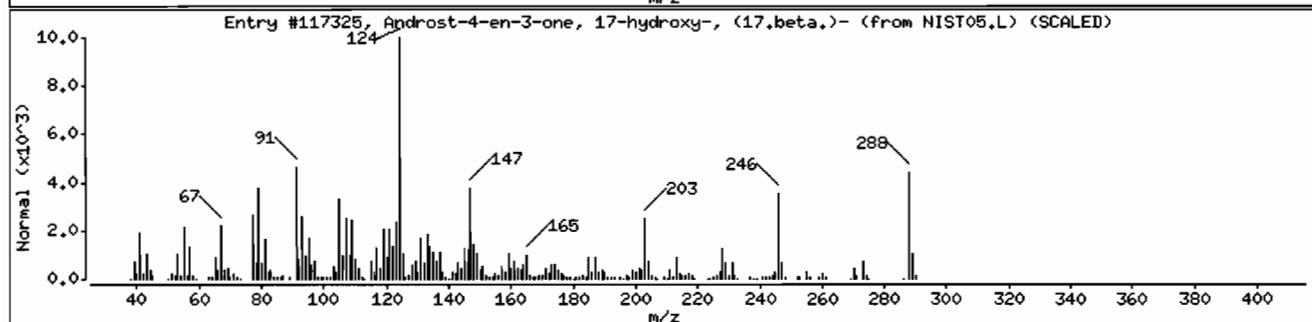
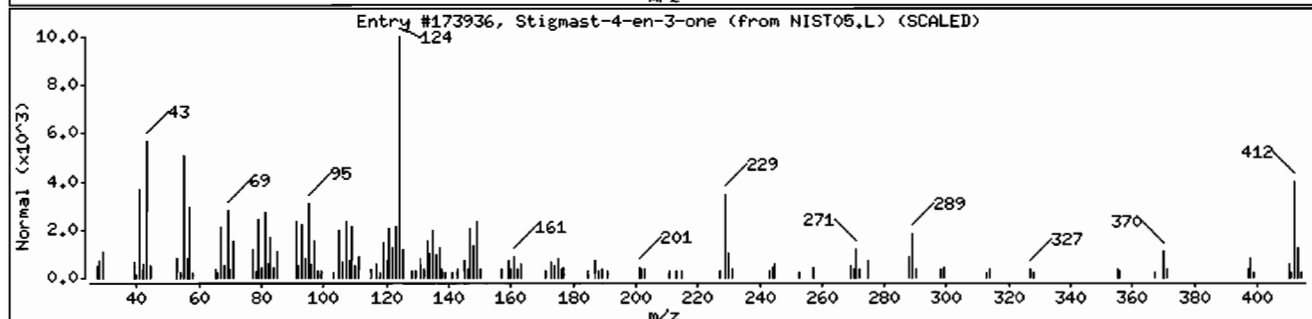
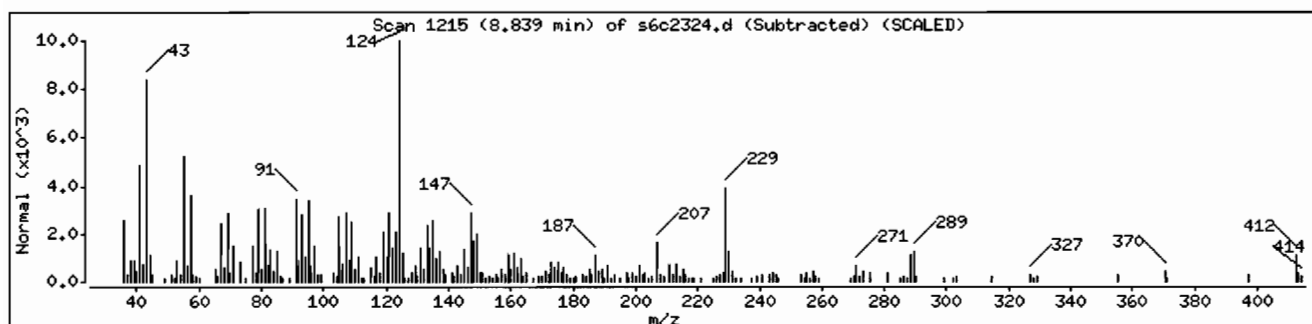
Volume Injected (uL): 0.5

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	98	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17 $\beta$ )	58-22-0	NIST05.L	117325	70	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17 $\beta$ )	58-22-0	NIST05.L	117324	45	C19H28O2	288





Date : 23-MAR-2010 23:30

Client ID: RE36-10-7525

Instrument: MSD6.i

Sample Info: I2485140031963133141SVH11ILANL

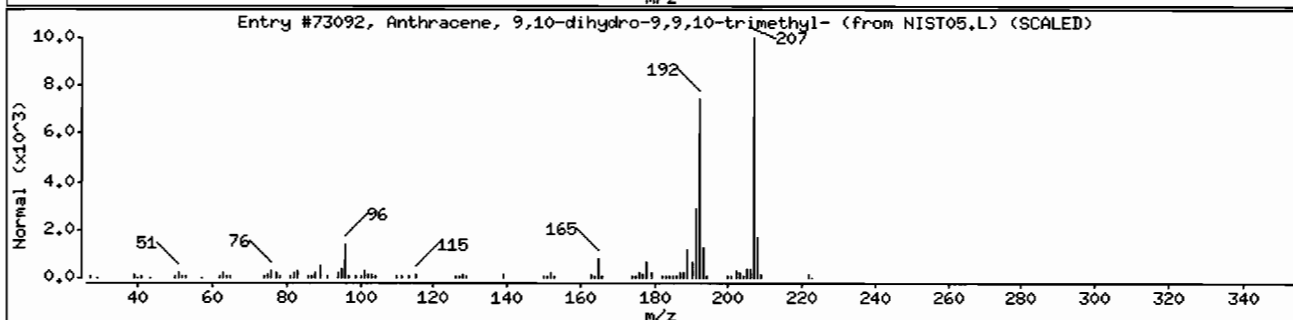
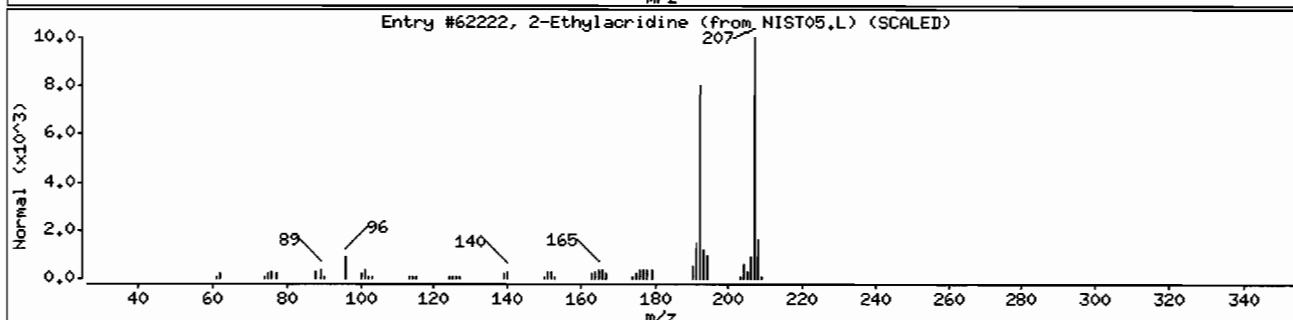
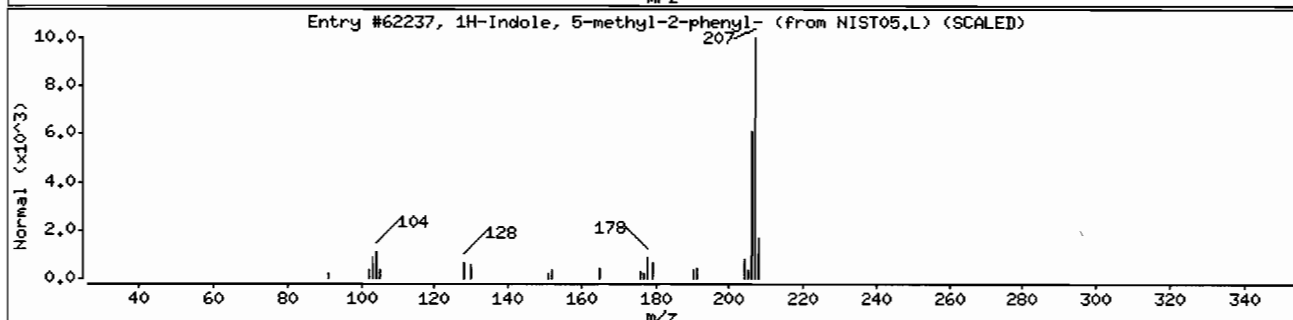
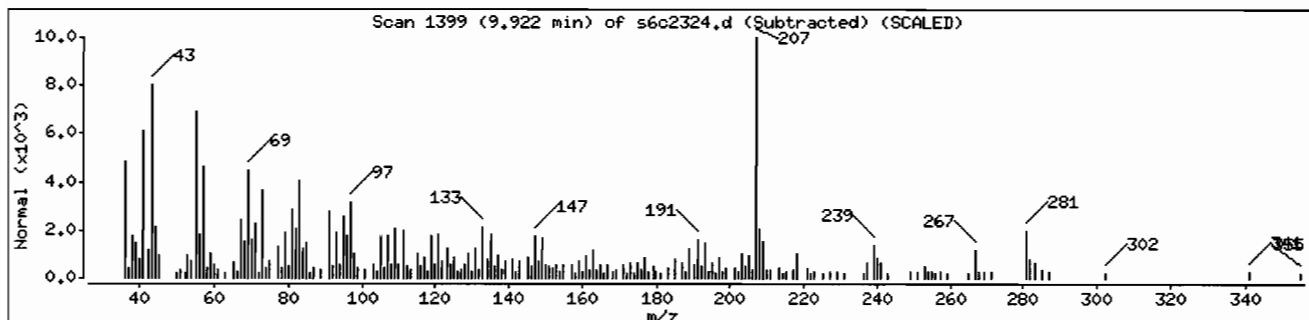
Volume Injected (uL): 0.5

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						
1H-Indole, 5-methyl-2-phenyl-	13228-36-9	NIST05.L	62237	35	C <sub>15</sub> H <sub>13</sub> N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	35	C <sub>15</sub> H <sub>13</sub> N	207
Anthracene, 9,10-dihydro-9,9,10-trimethy	14923-29-6	NIST05.L	73092	30	C <sub>17</sub> H <sub>18</sub>	222



Date: 23-MAR-2010 23:30

Client ID: RE36-10-7525

Instrument: MSD6.i

Sample Info: 12485140031963133141SVH111LANL

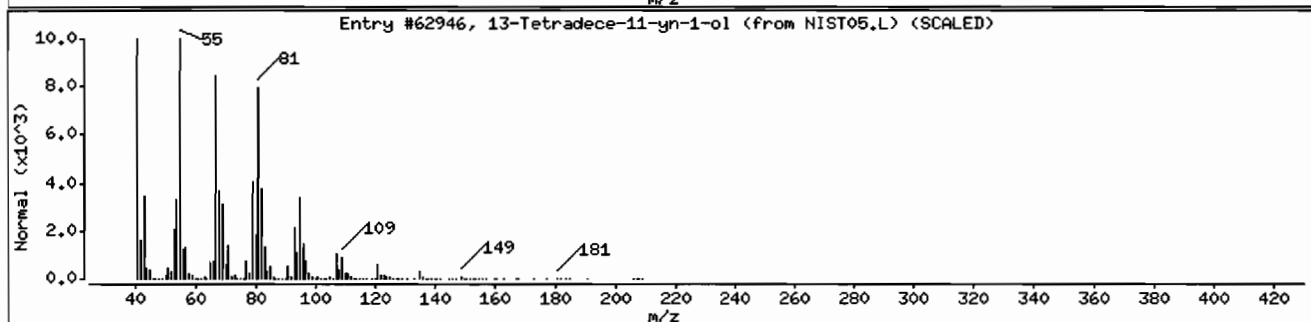
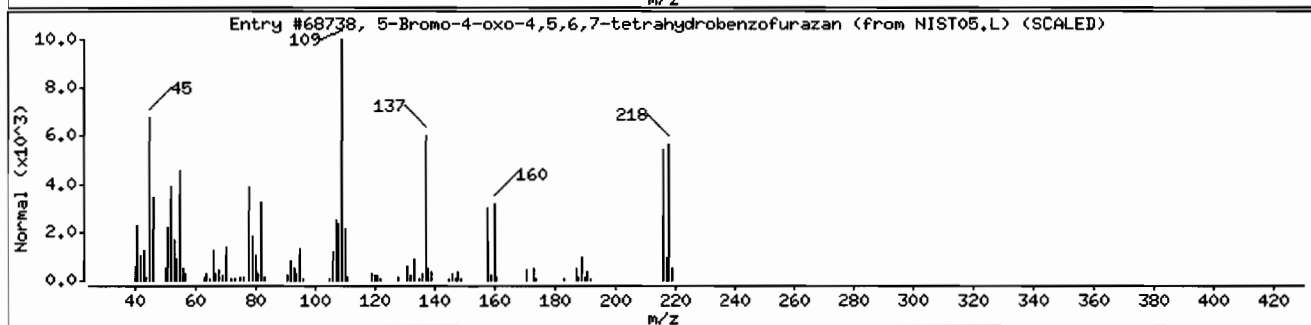
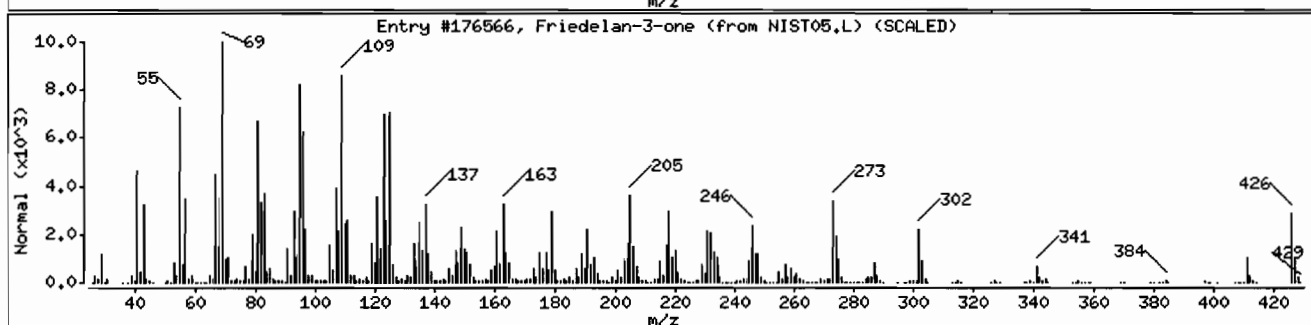
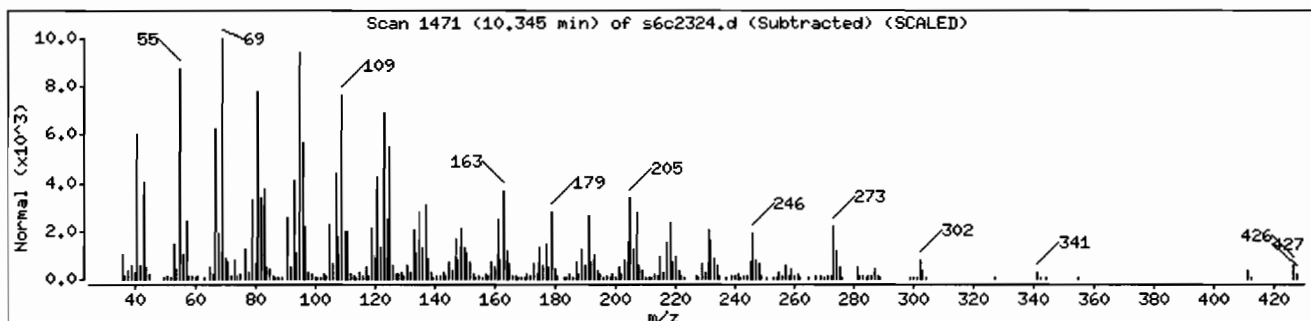
Volume Injected (uL): 0.5

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	98	C30H50O	426
5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	300574-36-1	NIST05.L	68738	59	C6H5BrN2O2	216
13-Tetradecene-11-yn-1-ol	1000131-00-4	NIST05.L	62946	58	C14H24O	208



Date : 23-MAR-2010 23:30

Client ID: RE36-10-7525

Instrument: MSD6.i

Sample Info: I2485140031963133141SVH11ILANL

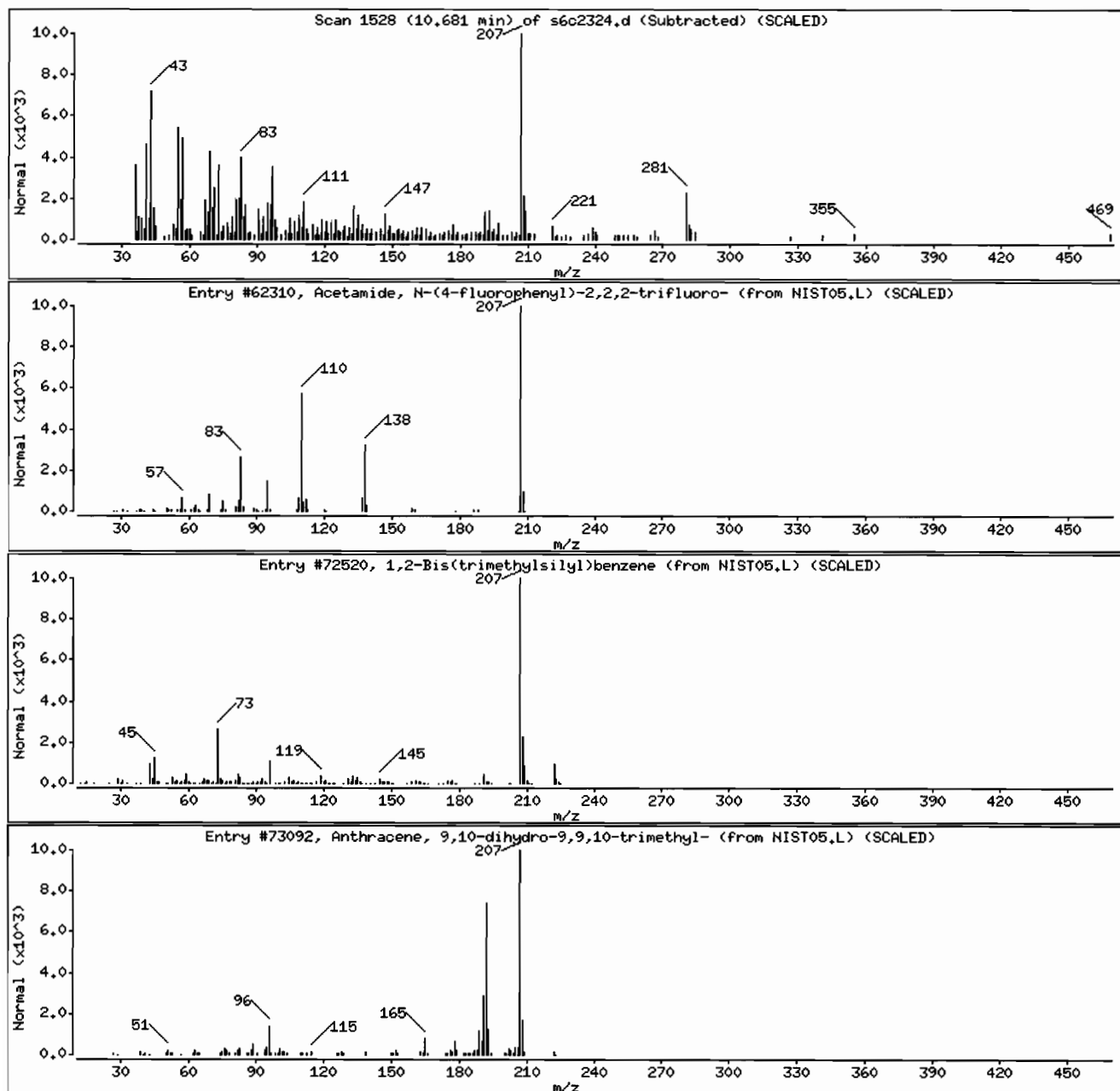
Volume Injected (uL): 0.5

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						
Acetamide, N-(4-fluorophenyl)-2,2,2-trif	1000307-30-8	NIST05.L	62310	46	C8H5F4NO	207
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	43	C12H22Si2	222
Anthracene, 9,10-dihydro-9,9,10-trimethy	14923-29-6	NIST05.L	73092	41	C17H18	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	
Safrole	10	20	40	50	80	100	120	
1,2,4,5-Tetrachlorobenzene	10	20	40	50	80	100	120	
Isosafrole	10	20	40	50	80	100	120	
1,4-Naphthoquinone	10	20	40	50	80	100	120	
Pentachlorobenzene	10	20	40	50	80	100	120	
1-Naphthylamine	10	20	40	50	80	100	120	
2-Naphthylamine	10	20	40	50	80	100	120	
5-Nitro-o-toluidine	10	20	40	50	80	100	120	
1,3,5-Trinitrobenzene	10	20	40	50	80	100	120	
Phenacetin	10	20	40	50	80	100	120	
Diallate	10	20	40	50	80	100	120	
cis-Diallate	1.5	3	6	7.5	12	15	18	
trans-Diallate	8.5	17	34	42	68	85	102	
4-Aminobiphenyl	10	20	40	50	80	100	120	

Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepon	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/s6c1617.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		
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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
Ccal Level: 4 , Ccal Amount: 40.0		
21-MAR-2010 16:55	MEGA	/chem/MSD6.i/s032110.b/s6c2105.d
Ccal Level: 4 , Ccal Amount: 40.0		
21-MAR-2010 09:45	MEGA	/chem/MSD6.i/s032110.b/s6c2103.d
Ccal Level: 4 , Ccal Amount: 40.0		
21-MAR-2010 09:12	MEGA	/chem/MSD6.i/s032110.b/s6c2102.d

## GEL Laboratories LLC

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 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	10	20	40	50	80	Curve	b	Coefficients	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

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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
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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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
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	AVRG		0.25299		0.99406
25 bis(2-Chloroethoxy)methane	++++ 0.32172	0.43560 0.30463	0.42444	0.37400	0.37627	0.33980	WLNLR AVRG	-0.14975	0.36806		13.49875

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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
	100	120								
	Level 7	Level 8								
26 2,4-Dichlorophenol	++++	0.28833	0.28887	0.25784	0.26048	0.23660				
	0.22233	0.21321					AVRG	0.25252		11.88589
27 Benzoic acid	++++	++++	0.15188	0.16162	0.20350	0.20115				
	0.19885	0.20819					AVRG	0.18753		12.92549
28 1,2,4-Trichlorobenzene	++++	0.33900	0.33884	0.29761	0.29991	0.26567				
	0.24757	0.23474					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	++++	0.33608	0.33453	0.29084	0.29286	0.26114				
	0.24448	0.23009					AVRG	0.28429		14.63166
31 4-Chloroaniline	++++	0.47746	0.49291	0.44934	0.45825	0.40866				
	0.38534	0.36929					AVRG	0.43446		10.86864
189 Caprolactam	++++	0.10378	0.10570	0.09999	0.09912	0.09284				
	0.09092	0.09292					AVRG	0.09790		5.90407
32 Hexachlorobutadiene	++++	0.11925	0.18969	0.16950	0.16919	0.15167				
	0.14051	0.13534					AVRG	0.16407		13.75956
33 4-Chloro-3-methylphenol	++++	0.32043	0.30822	0.27683	0.28548	0.25715				
	0.24213	0.23028					AVRG	0.27436		12.15912

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.72925 ++++	0.65481 ++++	0.63621	0.55294	0.56663	0.49402			0.60564		13.89123
35 1-Methylnaphthalene	0.70436 ++++	0.66500 ++++	0.61927	0.53454	0.53753	0.47391			0.58910		14.96497
36 Hexachlorocyclopentadiene	++++ 0.18872	0.25218 ++++	0.24426	0.26357	0.23616	0.19125			0.22936		13.87544
208 1,1'-Biphenyl	++++ 0.96643	1.34441 0.94136	1.27102	1.12196	1.11758	1.01987			1.11180		13.65187
205 2,3-Dichloroaniline	++++ 0.45417	0.61240 0.44760	0.60292	0.54053	0.53714	0.47736			0.52459		12.87597
37 2,4,6-Trichlorophenol	++++ 0.28219	0.38108 0.30558	0.37793	0.32193	0.36706	0.30741			0.33474		11.93741
38 2,4,5-Trichlorophenol	++++ 0.34748	0.37129 0.30293	0.37911	0.38732	0.34179	0.35266			0.35465		8.00704
40 2-Chloronaphthalene	1.19201 0.80529	1.10470 0.79483	1.08122	0.97966	0.96619	0.86532			0.97365		14.96311
42 o-Nitroaniline	++++ 0.31294	0.36102 0.31605	0.36661	0.34980	0.35607	0.33160			0.34201		6.37491



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Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	WRSD or R <sup>2</sup>
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	AVRG		0.14548		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 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	SRSD or R^2
	100 Level 7	120 Level 8									
52 4-Nitrophenol	++++ 0.18356	0.20176 0.18929	0.19292 0.19939	0.19251 0.18710	0.19939 0.18710	0.18710 0.18710	AVRG AVRG	0.19236	0.19236	3.37304	
53 Fluorene	1.38576 0.91808	1.24024 ++++	1.19555 ++++	1.05553 0.97044	1.05905 0.97044	0.97044 0.97044	AVRG AVRG	1.11781	1.11781	14.68974	
54 4-Chlorophenylphenylether	++++ 0.46826	0.61669 0.46745	0.60649 0.55132	0.55132 0.54613	0.54613 0.49714	0.49714 0.49714	AVRG AVRG	0.53621	0.53621	11.44943	
55 2-Methyl-4,6-dinitrophenol	++++ 377022	19709 458868	42715 133111	183242 300925	183242 300925	300925 300925	LINR	0.11116	0.10470	0.99841	
56 p-Nitroaniline	++++ 0.20310	0.18685 0.21295	0.19668 0.58488	0.22186 0.51490	0.22558 0.52719	0.21140 0.49057	AVRG AVRG	0.20835	0.20835	6.60344	
133 Diphenylamine	++++ 0.45816	0.59755 0.45986	0.58488 0.80943	0.51490 0.71643	0.52719 0.71366	0.49057 0.64914	AVRG AVRG	0.51902	0.51902	10.72829	
58 1,2-Diphenylhydrazine	++++ 0.59712	0.81379 0.58414	0.80943 1.31745	0.71643 1.19079	0.71366 1.17530	0.64914 1.07632	AVRG AVRG	0.69767	0.69767	13.33528	
59 Tributylphosphate	++++ 0.98767	1.48756 ++++	1.31745 ++++	1.19079 0.17251	1.17530 0.17518	1.07632 0.16699	AVRG AVRG	1.20585	1.20585	14.71177	
61 4-Bromophenylphenylether	++++ 0.15758	0.18913 0.16024	0.19414 0.16024	0.17251 0.16699	0.17518 0.16699	0.16699 0.16699	AVRG AVRG	0.17368	0.17368	7.95612	

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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 m1	m2	%RSD or R^2
63 Hexachlorobenzene	++++ 0.15325	0.17986 0.15146	0.18314 0.15146	0.16397 0.16397	0.16914 0.16914	0.16087 0.16087	AVRG		0.16595		7.37947
207 Atrazine	++++ ++++	0.05303 ++++	0.05040 0.05040	0.04601 0.04601	0.04433 0.04433	0.03650 0.03650	AVRG		0.04606		13.80997
65 Pentachlorophenol	++++ 0.09437	0.08594 0.09548	0.09329 0.09329	0.09347 0.09347	0.09827 0.09827	0.09698 0.09698	AVRG		0.09397		4.23639
206 n-Octadecane	++++ ++++	0.53452 ++++	0.53921 0.53921	0.46736 0.46736	0.45674 0.45674	0.40532 0.40532	AVRG		0.48063		11.74926
68 Phenanthrene	1.18955 ++++	1.04058 ++++	1.01586 1.01586	0.88259 0.88259	0.91454 0.91454	0.80483 0.80483	AVRG		0.97466		14.00439
69 Anthracene	1.17774 ++++	1.06636 ++++	1.01144 1.01144	0.91703 0.91703	0.90561 0.90561	0.81316 0.81316	AVRG		0.98189		13.26811
72 Di-n-butylphthalate	++++ ++++	1.28361 ++++	1.29174 1.29174	1.09885 1.09885	1.06066 1.06066	0.94298 0.94298	AVRG		1.13557		13.23540
76 Fluoranthene	1.20011 0.79997	1.09187 ++++	1.06525 0.45200	0.96204 0.39954	0.95592 0.40216	0.84379 0.42655	AVRG		0.98842		14.28401
77 Benzidine	++++ 0.43042	0.40621 0.42719	0.45200 0.45200	0.39954 0.39954	0.40216 0.40216	0.42655 0.42655	AVRG		0.42058		4.50256

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Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
79 Pyrene	1.35186	1.32429	1.37915	1.14942	1.19852	1.19422					
	1.08124	1.07630					AVRG		1.21938		9.78236
85 Butylbenzylphthalate	++++	0.60942	0.68418	0.57419	0.59563	0.59071					
	0.53615	0.53958					AVRG		0.58998		8.46660
89 Benzo(a)anthracene	1.23844	1.07586	1.08943	0.99635	1.02654	0.99275					
	0.98276	0.95356					AVRG		1.04446		8.71633
90 3,3'-Dichlorobenzidine	++++	0.28634	0.34000	0.31737	0.30439	0.29332					
	0.28534	0.28530					AVRG		0.30172		6.84952
92 Chrysene	1.21905	1.11052	1.09284	0.99293	1.00791	0.89389					
	0.83298	0.83097					AVRG		0.99764		14.00287
93 bis(2-Ethylhexyl)phthalate	++++	0.87792	0.94166	0.75843	0.78894	0.76390					
	0.69996	0.68939					AVRG		0.78860		11.64783
94 Di-n-octylphthalate	++++	1.50498	1.84996	1.38120	1.53446	1.53965					
	1.35710	1.54699					AVRG		1.53062		10.51568
95 Benzo(b)fluoranthene	1.06453	1.04231	1.18249	1.05565	1.10684	1.12171					
	1.04658	1.07946					AVRG		1.08744		4.38133
96 Benzo(k)fluoranthene	1.13857	1.15145	1.13298	1.00215	1.05846	0.96843					
	0.91790	0.97630					AVRG		1.04328		8.61578

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R <sup>2</sup>
97 Benzo(a)pyrene	0.91272 0.87668	0.95091 0.87161	0.96305 0.87161	0.93841 0.87161	0.94477 0.87161	0.90966 0.87161	AVRG	0.92098	3.70068		
99 Indeno(1,2,3-cd)pyrene	0.82214 0.81655	0.91774 0.75359	0.83742 0.75359	0.89629 0.75359	0.86445 0.75359	0.85264 0.75359	AVRG	0.84510	6.01764		
100 Dibenzo(a,h)anthracene	0.65413 0.65411	0.74504 0.60951	0.67287 0.60951	0.73440 0.60951	0.69759 0.60951	0.67777 0.60951	AVRG	0.68068	6.53700		
101 Benzo(ghi)perylene	0.72104 0.68866	0.79945 0.62705	0.72249 0.62705	0.76566 0.62705	0.71838 0.62705	0.73009 0.62705	AVRG	0.72160	7.04885		
102 1,4-Dioxane	++++ 0.31161	0.40364 0.30837	0.39108 0.20768	0.35833 0.19444	0.36073 0.19248	0.32452 0.17684	AVRG	0.35119	10.77795		
103 Methyl methacrylate	++++ 0.16911	0.21508 0.17292	0.20768 0.90271	0.19444 0.84859	0.19248 0.85171	0.17684 0.77200	AVRG	0.18979	9.29691		
104 Ethyl methacrylate	++++ 0.73535	0.94302 0.73626	0.90271 1.35879	0.84859 1.23892	0.85171 1.24366	0.77200 1.11707	AVRG	0.82709	9.86302		
105 2-Picoline	++++ 1.05418	1.41751 1.05943	1.35879 0.57876	1.23892 0.54352	1.24366 0.54304	1.11707 0.51432	AVRG	1.21280	11.79135		
106 N-Nitrosomethylethylamine	++++ 0.50151	0.58418 0.50138	0.57876 0.50138	0.54352 0.50138	0.54304 0.50138	0.51432 0.50138	AVRG	0.53810	6.38520		

## GEL Laboratories LLC

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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	%RSD or R <sup>2</sup>
	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	++++ 0.55158	0.64507 0.54936	0.64908	0.61336	0.60691	0.56546	AVRG		0.59726		7.07556
108 N-Nitrosodiethylamine	++++ 0.50185	0.60002 0.50111	0.59792	0.54460	0.55515	0.50996	AVRG		0.54437		7.84567
109 Ethyl Methanesulfonate	++++ 0.67400	0.77937 0.67651	0.78398	0.73252	0.74517	0.68922	AVRG		0.72583		6.44394
110 Pentachloroethane	++++ 0.30477	0.36537 0.30069	0.35868	0.33978	0.34412	0.31859	AVRG		0.33314		7.67816
111 N-Nitrosopyrrolidine	++++ 0.52363	0.65147 0.52349	0.65118	0.60564	0.59568	0.54014	AVRG		0.58446		9.60255
113 N-Nitrosomorpholine	++++ 0.60862	0.77690 0.59644	0.75720	0.69860	0.69697	0.63076	AVRG		0.68078		10.46970
114 o-Toluidine	++++ 1.51078	2.05374 1.51005	1.96418	1.78212	1.74117	1.58116	AVRG		1.73474		12.47332
115 N-Nitrosopiperidine	++++ 0.14357	0.16517 0.14183	0.16671	0.15400	0.15626	0.14779	AVRG		0.15362		6.43146
116 a,a-Dimethylphenethylamine	++++ 0.84727	0.84998 0.81794	0.91437	0.90226	0.91158	0.87133	AVRG		0.87353		4.25275

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m1	m2	RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						or R^2
	100	120										
	Level 7	Level 8										
117 Triethylphosphorothioate	++++	0.16227	0.15179	0.14508	0.14517	0.13799				0.14270		8.68942
	0.13034	0.12625					AVRG					
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	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
126 m-Dinitrobenzene	++++ 0.17688	0.19457 0.17754	0.20451 0.19900	0.19900 0.20530	0.20530 0.18435	0.18435 AVRG	AVRG		0.19174		6.33347
127 Pentachlorobenzene	++++ 0.33716	0.43110 0.33489	0.41421 0.37919	0.37919 0.37551	0.37551 0.35401	0.35401 AVRG	AVRG		0.37515		9.84443
128 1-Naphthylamine	++++ 0.80481	1.01413 0.80092	1.02551 0.91517	0.91517 0.89074	0.89074 0.84391	0.84391 AVRG	AVRG		0.89931		10.26327
129 2-Naphthylamine	++++ 0.81714	1.06923 0.82229	1.09028 0.96961	0.96961 0.93134	0.93134 0.88633	0.88633 AVRG	AVRG		0.94089		11.64761
130 2,3,4,6-Tetrachlorophenol	++++ 0.26048	0.28320 0.26802	0.29838 0.27851	0.27851 0.29220	0.29220 0.26438	0.26438 AVRG	AVRG		0.27788		5.16598
131 5-Nitro-o-toluidine	++++ 0.28937	0.30371 0.29520	0.33910 0.30524	0.30524 0.30826	0.30826 0.30565	0.30565 AVRG	AVRG		0.30665		5.15108
132 Thionazin	++++ 0.15141	0.18517 0.14819	0.17934 0.16941	0.16941 0.16728	0.16728 0.15846	0.15846 AVRG	AVRG		0.16561		8.34122
134 Sulfotepp	++++ 0.07503	0.08460 0.07583	0.08173 0.08195	0.08195 0.08009	0.08009 0.07824	0.07824 AVRG	AVRG		0.07964		4.35673
135 Phorate	++++ 0.35382	0.45146 0.34151	0.42713 0.42213	0.42213 0.39953	0.39953 0.37573	0.37573 AVRG	AVRG		0.39590		10.25989



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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	RSD or R^2
	100	120									
	Level 7	Level 8									
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	AVRG		0.12393		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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 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	%RSD or R^2
145 Methyl parathion	++++ 0.20697	0.23174 0.20133	0.22766	0.22643	0.22704	0.21420	AVRG		0.21934		5.38336
146 4-Nitroquinoline-1-oxide	++++ 0.02090	0.03620 0.01975	0.04258	0.03229	0.02624	0.02359	AVRG		0.02879		29.56738
147 Methapyrilene	++++ 0.37265	0.50709 0.36578	0.51231	0.47429	0.44273	0.38752	AVRG		0.43748		14.35658
148 Isodrin	++++ 0.09732	0.12789 0.09486	0.12550	0.11252	0.11113	0.10270	AVRG		0.11028		11.76979
149 Aramite	++++ 0.04334	0.04987 0.04247	0.05241	0.05098	0.04801	0.04511	AVRG		0.04746		8.18427
150 Kepone	++++ 0.07353	0.08033 0.07232	0.08350	0.07854	0.07324	0.07530	AVRG		0.07668		5.48032
151 p-(Dimethylamino)azobenzene	++++ 0.28883	0.35661 0.27624	0.32327	0.31849	0.32153	0.28722	AVRG		0.31031		8.98103
152 Chlorobenzilate	++++ 0.27932	0.34601 0.26590	0.29739	0.29945	0.30335	0.27160	AVRG		0.29472		9.12242
153 3,3'-Dimethylbenzidine	++++ 0.56416	0.63324 0.54908	0.65171	0.60049	0.59103	0.56476	AVRG		0.59350		6.40934

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 Cal Date : 22-Mar-2010 16:37 jen00986

Compound	1	10	20	40	50	80	Curve	b	Coefficients	m2	RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1		or R^2
	100	120									
	Level 7	Level 8									
154 Pamphur	++++	0.44294	0.43580	0.46237	0.43998	0.43138	AVRG		0.43121		5.16049
	0.41231	0.39369									
155 2-Acetylaminofluorene	++++	0.28561	0.37666	0.36505	0.36381	0.34665	AVRG		0.34851		8.50665
	0.35179	0.35001									
157 7,12Dimethylbenz(a)anthracene	++++	0.51449	0.49379	0.48383	0.50239	0.49617	AVRG		0.48545		5.00153
	0.46390	0.44355									
158 3-Methylcholanthrene	++++	0.35367	0.42677	0.41143	0.40554	0.40467	AVRG		0.40010		5.65129
	0.39610	0.40256									
26 Phthalic anhydride	++++	27295	87036	200557	277210	460400	LINR	0.03349	0.14624		0.99669
	556029	682236									
173 Carbazole	1.01509	0.74843	0.72374	0.75388	0.76522	0.69273	AVRG		0.76672		14.99112
	0.66795	++++									
174 Hexachlorophene	++++	0.04741	0.06158	++++	0.06384	0.06162	AVRG		0.05878		11.13226
	0.05947	++++									
179 Dibenzo(a,e)pyrene	++++	0.36049	0.28249	0.34513	0.30393	0.34223	AVRG		0.32071		9.10777
	0.31678	0.29389									
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 ml	m2	RSD or R^2
	100	120									
	Level 7	Level 8									
184 p-Benzquinone	++++ 0.22851	0.20897 0.25291	0.35254 0.22912	0.17686 0.22912	0.22912	0.25164 AVRG	AVRG		0.24293		22.61358<-
191 Parathion	++++ 0.05714	0.06141 0.05627	0.06185	0.06208	0.06168	0.05986 AVRG	AVRG		0.06004		3.99838
192 Methoxychlor	++++ 0.60574	0.71007 0.57499	0.76187	0.67557	0.67506	0.65556 AVRG	AVRG		0.66555		9.36899
210 m-Toluidine	++++ 1.82362	1.67718 ++++	1.91596	1.79952	2.07052	1.85391 AVRG	AVRG		1.85679		7.05627
211 p-Toluidine	++++ 1.16108	1.47044 ++++	1.37288	1.42100	1.28519	1.31427 AVRG	AVRG		1.33748		8.21058
212 Cis Diallate	++++ 0.27521	0.29467 0.27193	0.31145	0.29067	0.29841	0.28191 AVRG	AVRG		0.28918		4.80566
213 Trans Diallate	++++ 0.25994	0.34024 0.25578	0.32722	0.29518	0.29375	0.27539 AVRG	AVRG		0.29250		10.98494
214 1,4-Dinitrobenzene	++++ 0.25743	0.27003 0.25119	0.28077	0.27490	0.28781	0.26587 AVRG	AVRG		0.26971		4.75195
215 2-Ethoxyethanol	++++ 0.66248	0.75153 0.66748	0.75427	0.72199	0.73882	0.68817 AVRG	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 m1	m2	RSD or R^2
	100	120									
	Level 7	Level 8									
216 Methylenebis(2-chloroaniline)	++++	0.146701	0.144448	0.160811	0.163671	0.162471					
	0.163531	0.157341					AVRG		0.157001		5.164941
229 2,2'-Dichlorobenzil	++++	0.755191	0.724381	0.637461	0.670201	++++					
	0.608431	0.584231					AVRG		0.663321		10.035221
230 4-Chlorothiobanisole	++++	0.258581	0.258401	0.259921	0.269791	++++					
	0.248461	0.243891					AVRG		0.256511		3.572091
231 4-Chlorothiophenol	++++	203801	1137991	3193511	4193701	++++					
	9245421	11900621					LINR	0.199631	0.216351		0.999201
232 bis(p-Chlorophenyl)sulfone	++++	0.429931	0.418121	0.364851	0.381961	++++					
	0.358211	0.342081					AVRG		0.382521		9.096271
233 bis(p-Chlorophenyl)disulfide	++++	0.188671	0.163611	0.142471	0.157711	++++					
	0.139161	0.134461					AVRG		0.154351		13.093971
234 Diphenyl disulfide	++++	0.252531	0.237111	0.223921	0.227701	++++					
	0.209851	0.206211					AVRG		0.226221		7.621901
235 Diphenyl sulfide	++++	0.817941	0.801711	0.752201	0.729221	++++					
	0.670011	0.658561					AVRG		0.738271		8.915541
236 Phenyl sulfone	++++	0.475521	0.460961	0.437371	0.436171	++++					
	0.403741	0.400171					AVRG		0.435651		6.894651

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Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
237 Hydroxymethyl phthalimide	++++	38588	80856	126016	157606	++++					
	292598	364853					LINR	-0.21210	0.09455		0.99652
238 Phthalic acid	++++	19671	59106	176058	250394	++++					
	603096	++++					LINR	0.26696	0.14514		0.99255
239 Thiophenol	++++	62327	207465	508832	672604	++++					
	1367181	1721186					LINR	0.09119	1.06115		0.99838
240 bis (Chloromethyl) ether	++++	0.97516	0.91313	0.87686	0.87662	++++					
	0.80538	0.76021					AVRG		0.86789		8.80685
241 Octachlorostyrene	++++	0.05974	0.05913	0.05893	0.06005	++++					
	0.05689	0.05659					AVRG		0.05855		2.50376
M 225 Trichlorophenols	++++	0.37618	0.37852	0.35462	0.35443	0.33004					
	0.31483	0.30425					AVRG		0.34470		8.43399
M 226 Tetrachlorophenols	++++	0.28320	0.29838	0.27851	0.29220	0.26438					
	0.26048	0.26802					AVRG		0.27788		5.16598
M 227 Benzo (b, k) fluoranthene	1.10155	1.09688	1.15773	1.02890	1.08265	1.04507					
	0.98224	1.02788					AVRG		1.06536		5.16433
M 228 TTO Sum Semivolatiles	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+00		0.000e+00

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m1	m2	1RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	100	120										
	Level 7	Level 8										
\$ 3 2-Fluorophenol	++++	1.17799	1.21081	1.12585	1.16530	1.06488						
	1.02412	1.01478					AVRG		1.11196			7.01882
\$ 5 Phenol-d5	++++	1.53055	1.52276	1.42264	1.44854	1.34995						
	1.31463	1.30976					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	++++	0.43556	0.43337	0.38834	0.39802	0.36088						
	0.33590	0.32456					AVRG		0.38237			11.53560
\$ 39 2-Fluorobiphenyl	++++	1.22526	1.18747	1.05919	1.04982	0.94356						
	0.89495	0.86381					AVRG		1.03201			13.55845
\$ 60 2,4,6-Tribromophenol	++++	0.11014	0.11537	0.11089	0.11508	0.11113						
	0.10877	0.11433					AVRG		0.11225			2.35114
\$ 81 p-Terphenyl-d14	++++	0.73264	0.77308	0.65971	0.68870	0.71170						
	0.64309	0.67033					AVRG		0.69704			6.50888

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

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response



GEL Laboratories LLC

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

## GEL Laboratories LLC

## 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

GEL Laboratories LLC

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

GEL Laboratories LLC

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 : nag1 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: hpclp1

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			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	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					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	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

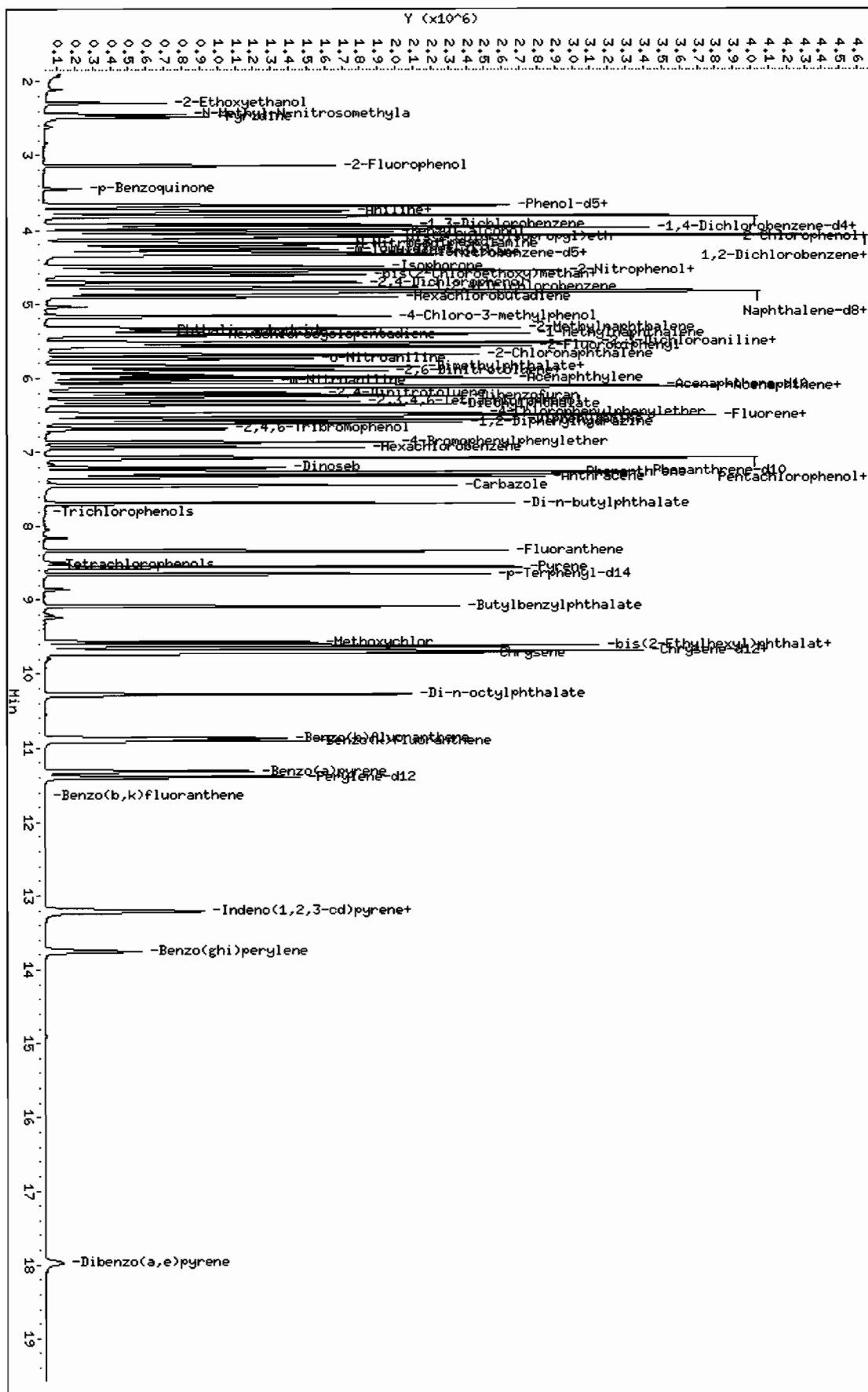
#### QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/HSD6.i/s031610.b/s6c1612.d  
 Date : 16-MAR-2010 13:40  
 Client ID: MEGAICV  
 Sample Info: ILMN100309-09.11040 PPH11SVH11.MEGAICV  
 Column phase: J&W DB-5MS

/chem/HSD6.i/s031610.b/s6c1612.d

Instrument: HSD6.i  
 Operator: nag1  
 Column diameter: 0.20



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 Diallate	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: 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
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 : nagl 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	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(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 Diallyl		86	6.787	6.787	(0.932)	378872	40.0000	38.4
212 Cis Diallyl		86	6.863	6.863	(0.943)	85109	6.00000	7.4
213 Trans Diallyl		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-l-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/HSD6.i/s031610.b/s6c1635.d

Date : 17-MAR-2010 00:41

Client ID: APICV

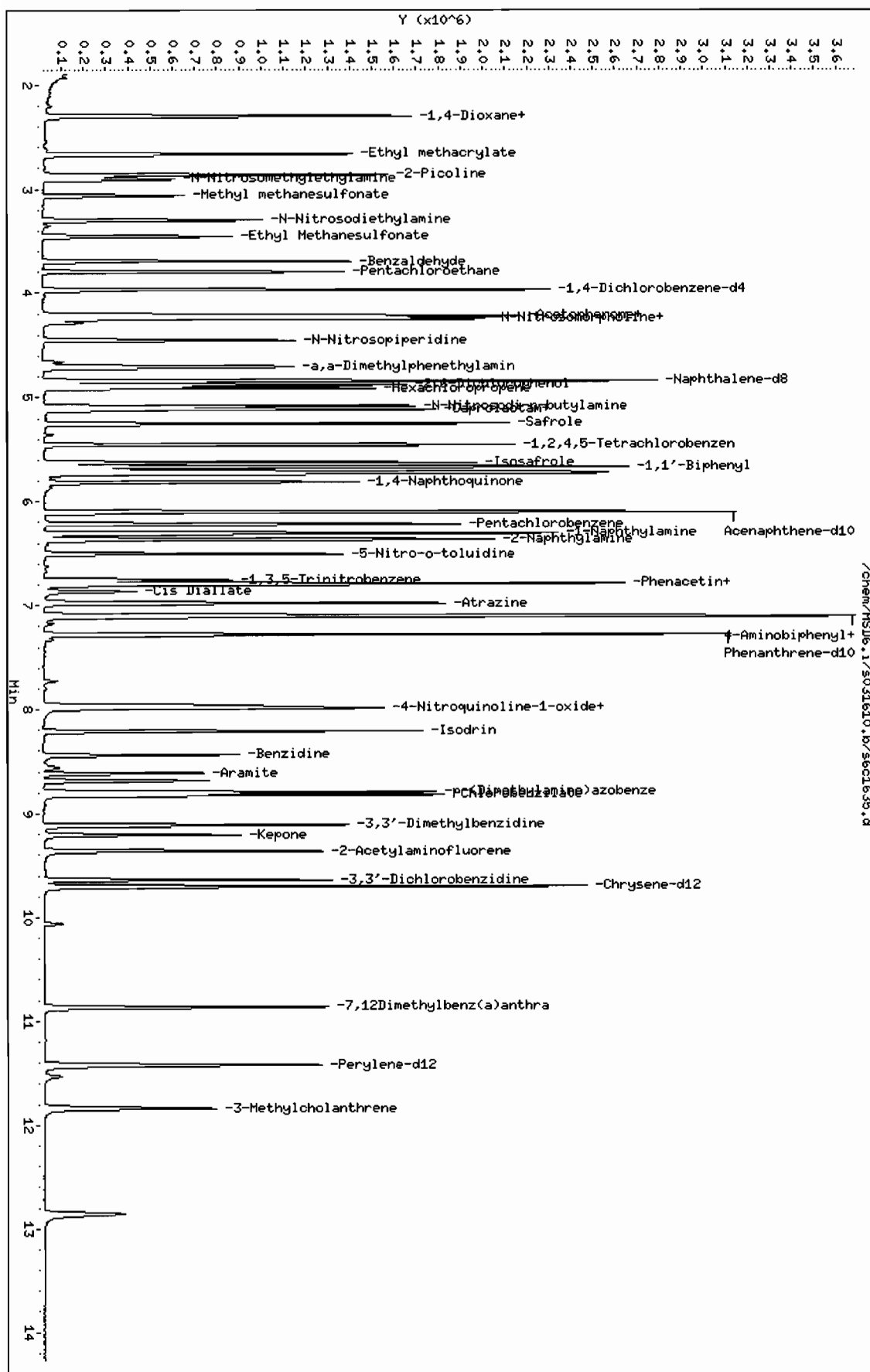
Sample Info: IABN100312-08.1140 PPH111SVH11APICV

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: 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 RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.53062	1.27015	1.27015	0.001	-17.01758	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	1.08744	1.04326	1.04326	0.000	-4.06318	60.00000	Averaged
96 Benzo(k)fluoranthene	1.04328	0.99113	0.99113	0.000	-4.99890	60.00000	Averaged
97 Benzo(a)pyrene	0.92098	0.88547	0.88547	0.001	-3.85532	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.84510	0.78027	0.78027	0.000	-7.67189	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.68068	0.64000	0.64000	0.000	-5.97574	60.00000	Averaged
101 Benzo(ghi)perylene	0.72160	0.64543	0.64543	0.000	-10.55585	60.00000	Averaged
126 m-Dinitrobenzene	0.19174	0.18013	0.18013	0.000	-6.05534	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.27788	0.25389	0.25389	0.000	-8.63324	60.00000	Averaged
143 Dinoseb	47.77820	40.00000	0.16360	0.000	19.44549	60.00000	Linear
173 Carbazole	0.76672	0.70459	0.70459	0.000	-8.10367	60.00000	Averaged
184 p-Benzoquinone	0.24293	0.18226	0.18226	0.000	-24.97665	60.00000	Averaged
192 Methoxychlor	0.66555	0.66828	0.66828	0.000	0.41083	60.00000	Averaged
211 p-Toluidine	1.33748	1.22738	1.22738	0.000	-8.23170	60.00000	Averaged
210 m-Toluidine	1.85679	1.31370	1.31370	0.000	-29.24888	60.00000	Averaged
215 2-Ethoxyethanol	0.71211	0.50810	0.50810	0.000	-28.64825	60.00000	Averaged
179 Dibenzo(a,e)pyrene	0.32071	0.28713	0.28713	0.000	-10.46797	60.00000	Averaged
26 Phthalic anhydride	22.21587	40.00000	0.07632	0.000	-44.46033	60.00000	Linear
214 1,4-Dinitrobenzene	0.26971	0.21240	0.21240	0.000	-21.25093	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.15700	0.10365	0.10365	0.000	-33.98100	60.00000	Averaged
M 225 Trichlorophenols	0.34470	0.35048	0.35048	0.000	1.67856	60.00000	Averaged
M 226 Tetrachlorophenols	0.27788	0.25389	0.25389	0.000	-8.63324	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	1.06536	1.01719	1.01719	0.000	-4.52134	60.00000	Averaged

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 : nagl 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 (ng/ul)	ON-COL (ng/ul)
*****	=====	==	=====	=====	=====	=====	=====
* 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

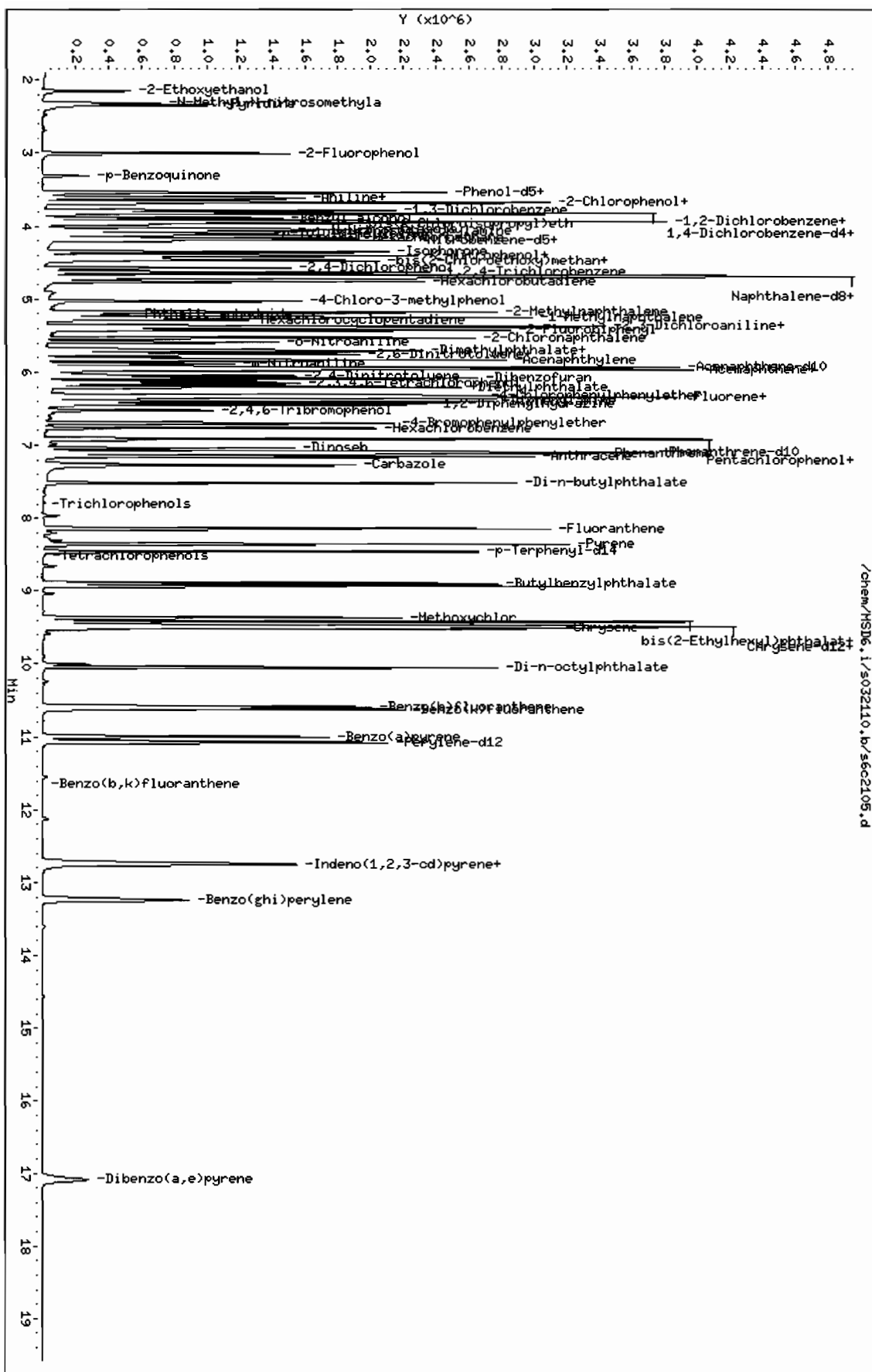
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	8.357	8.357	(0.881)	1877873	40.0000	36.2
85 Butylbenzylphthalate	149	8.892	8.892	(0.937)	869058	40.0000	34.6
89 Benzo(a)anthracene	228	9.475	9.475	(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/sec2105.d  
 Date : 21-MAR-2010 16:55  
 Client ID: MEGACVS  
 Sample Info: IABN100309-05.3140 PPH111SVH11MEGACVS  
 Column phase: J&M DB-SHS

Instrument: MSD6.1  
 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 Saffrole	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 Isosaffrole	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		MIN		MAX	CURVE TYPE
	RRF	AMOUNT		RRF40		RRF	%D / %DRIFT	%D / %DRIFT	
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

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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 : 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/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: hpc1p1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/u1)	ON-COL (ng/u1)
* 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

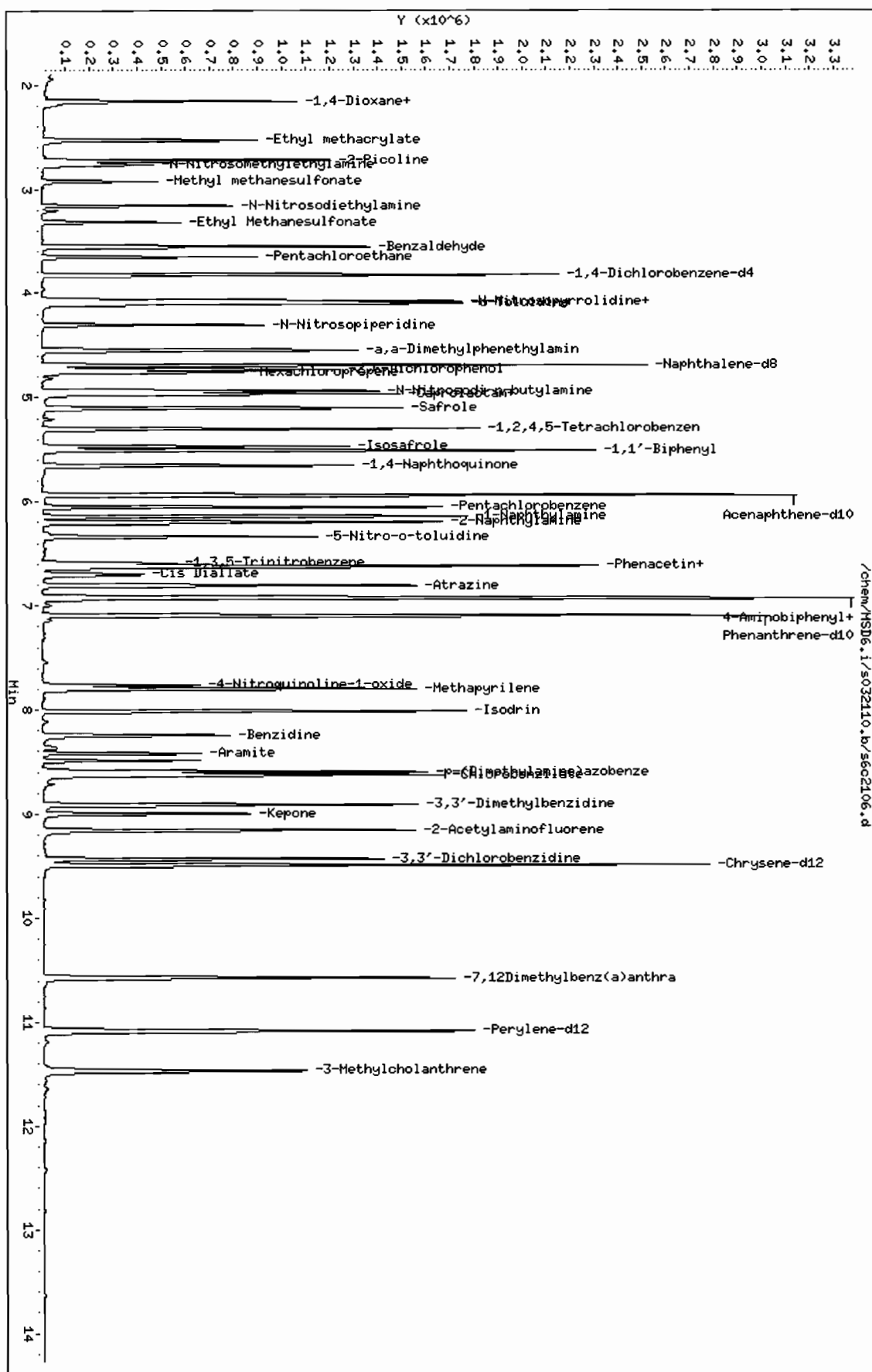
Compounds	QUANT SIG			EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS	RT					CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	4.551	4.551 (0.970)			987678	40.0000	31.9
118 2,6-Dichlorophenol	162	4.734	4.734 (1.009)			322848	40.0000	37.1
119 Hexachloropropene	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/MSD6.i/s032110.b/s6c2106.d  
 Date : 21-MAR-2010 17:25  
 Client ID: APCVS  
 Sample Info: IABN100312-03.3140 PPH111SVH11APCVS  
 Column phase: J&W DB-5MS

Instrument: MSD6.1  
 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 Benidine	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 Safrrole	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

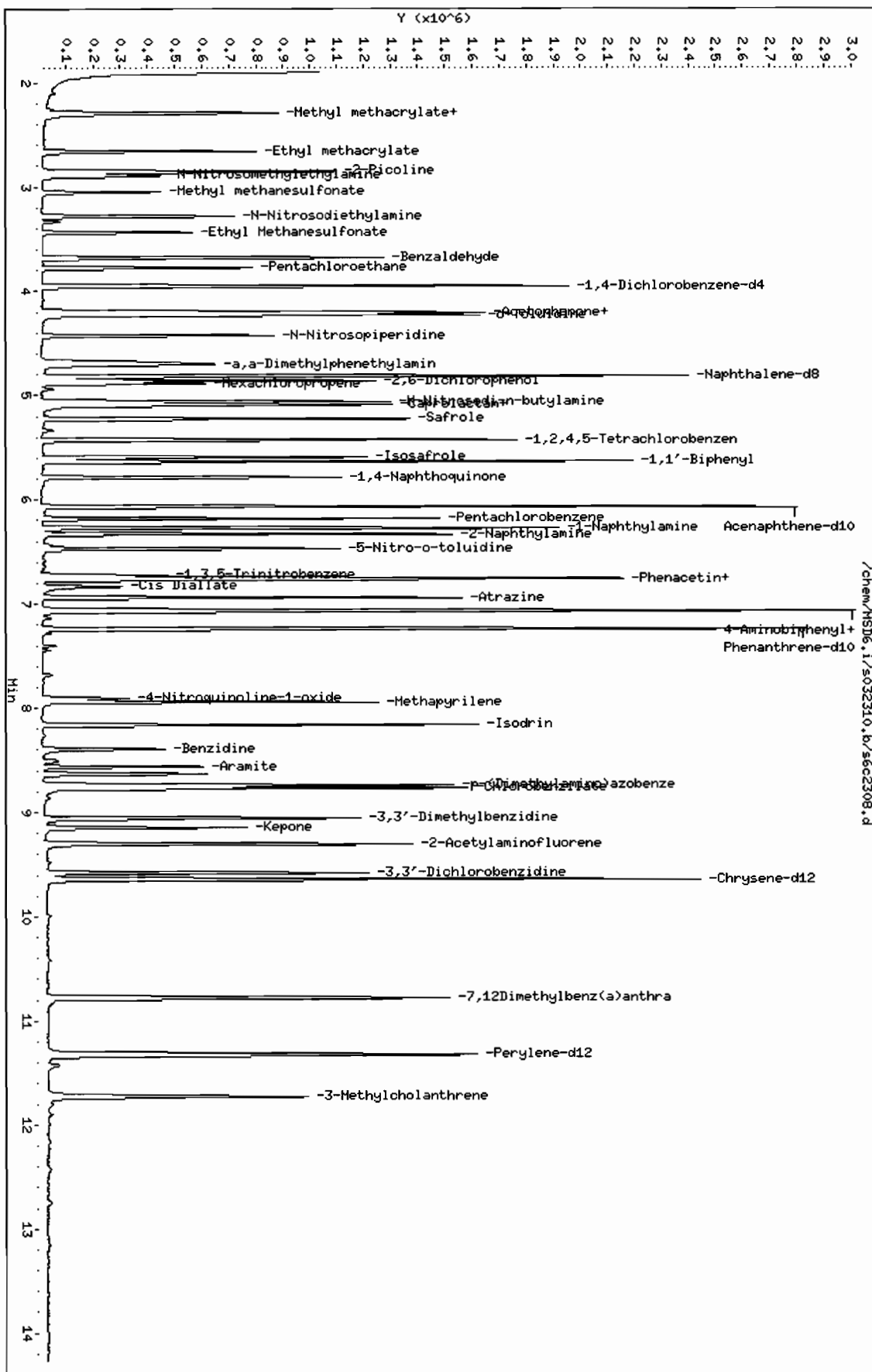
Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	4.704	4.704 (0.977)	967828	40.0000	33.2 (H)
118 2,6-Dichlorophenol	162	4.857	4.857 (1.009)	303682	40.0000	37.1
119 Hexachloropropene	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: 14BN100312-03,3140 PPH11SVH11APCVS  
 Column phase: 364 DB-SMS

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-Benzoquinone	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 Methylenabis(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 : nagl 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

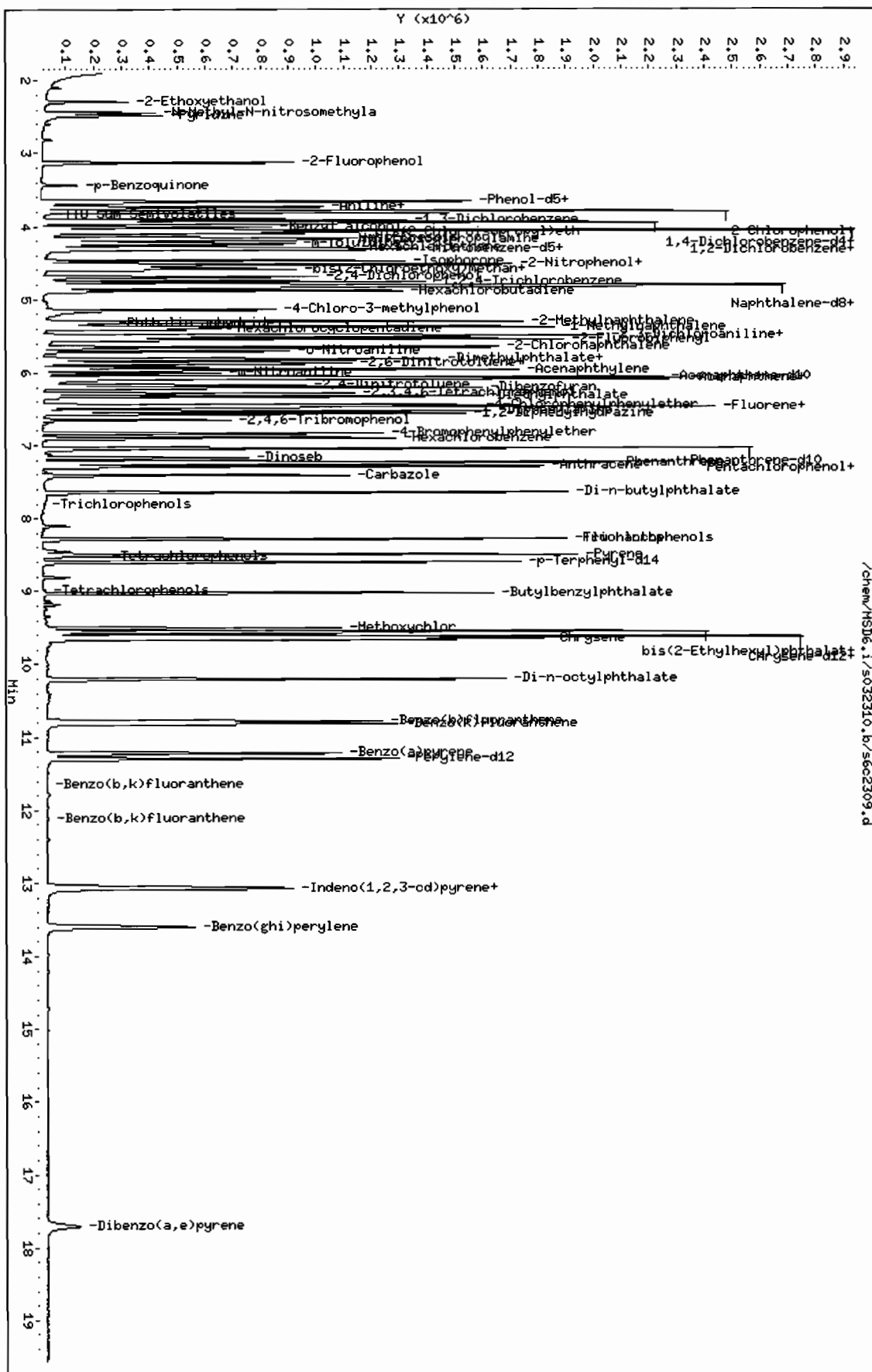
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	4.181	4.181	(1.060)	249316	40.0000	33.5
19 Hexachloroethane	117	4.287	4.287	(1.086)	145661	40.0000	35.5
21 Nitrobenzene	77	4.316	4.316	(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.

Instrument: MSD6.i  
Operator: nag1  
Column diameter: 0.20



# QC Data

Data File: /chem/HSD6,i/s031610,b/s6c1601.d

Page 1

Date : 16-MAR-2010 08:42

Client ID: DFTPP

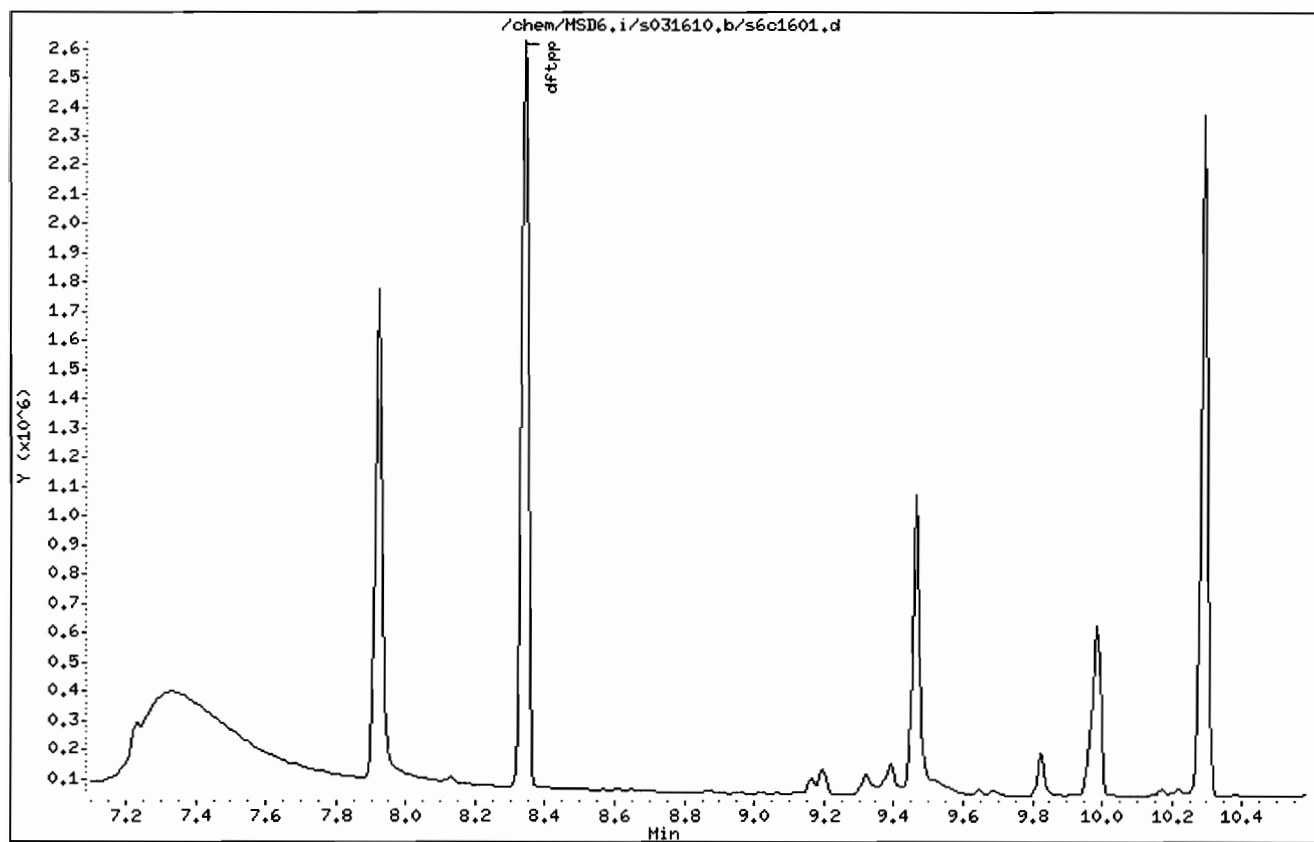
Instrument: HSD6,i

Sample Info: IWBH100306-01,2|DFTPP|1|SVMF|1|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 16-MAR-2010 08:42

Client ID: DFTPP

Instrument: HSD6.i

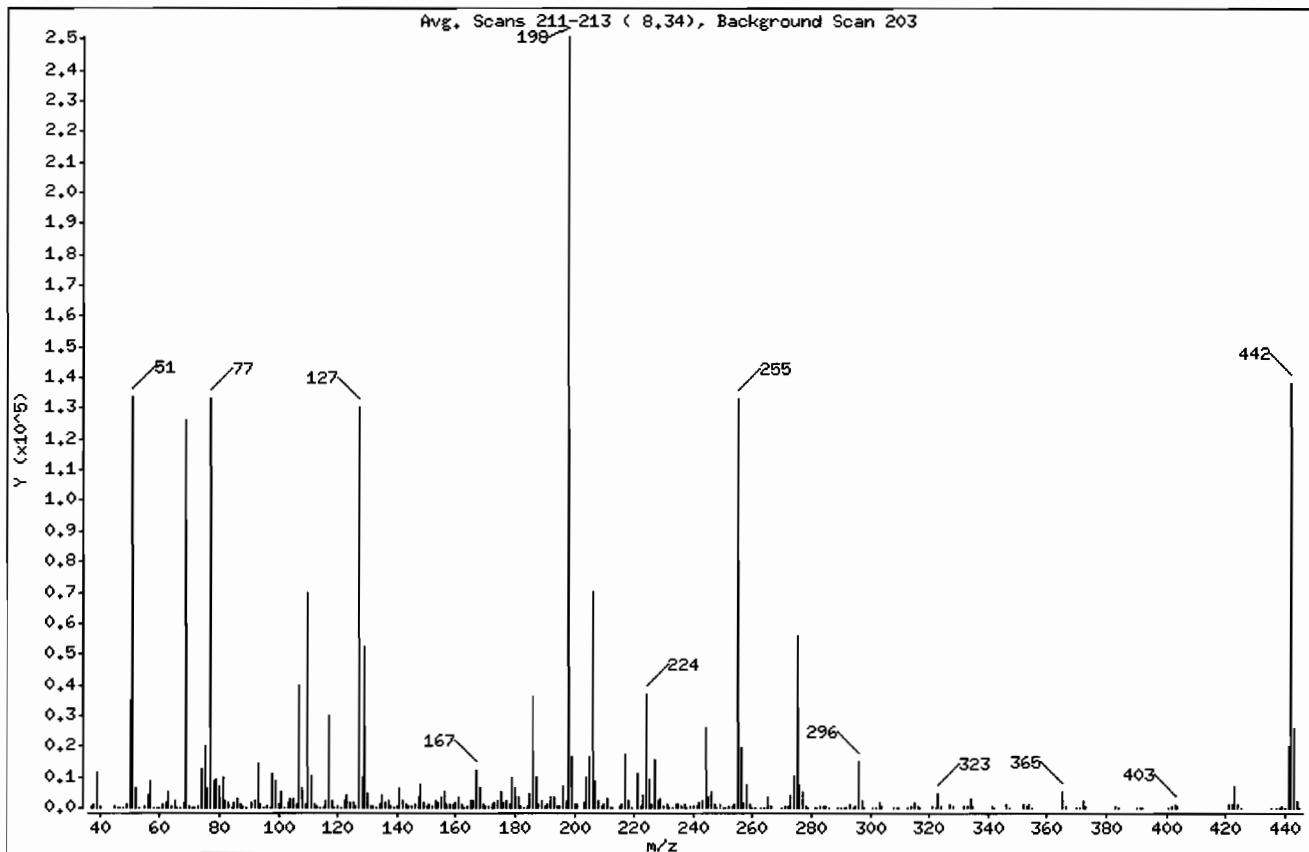
Sample Info: IWBH100306-01,2IDFTPP11SVHF11IDFTPP

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	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: IWBNI00306-01,2IDFTPP11ISVMF11IDFTPP

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
-----							
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: IWBNI00306-01,2IDFTPP11SVMF11IDFTPP

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: IWBNI00306-01.2IDFTPP11SVHF11IDFTPP

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
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/MSD6.i/s031610.b/s6c1613.d

Page 1

Date : 16-MAR-2010 16:06

Client ID: DFTPP

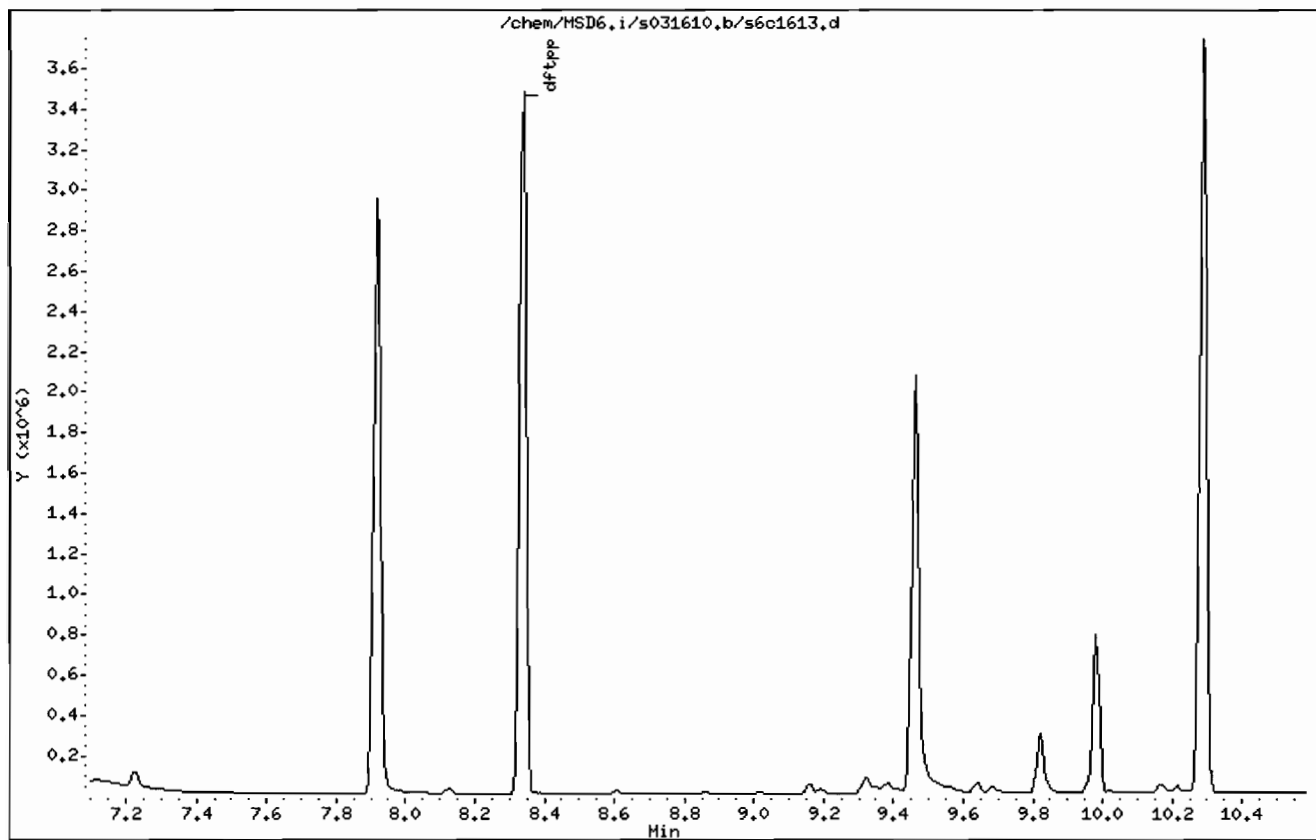
Instrument: MSD6.i

Sample Info: IWBNI00306-01.2IDFTPP11ISVMF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 16-MAR-2010 16:06

Client ID: DFTPP

Instrument: MSD6.i

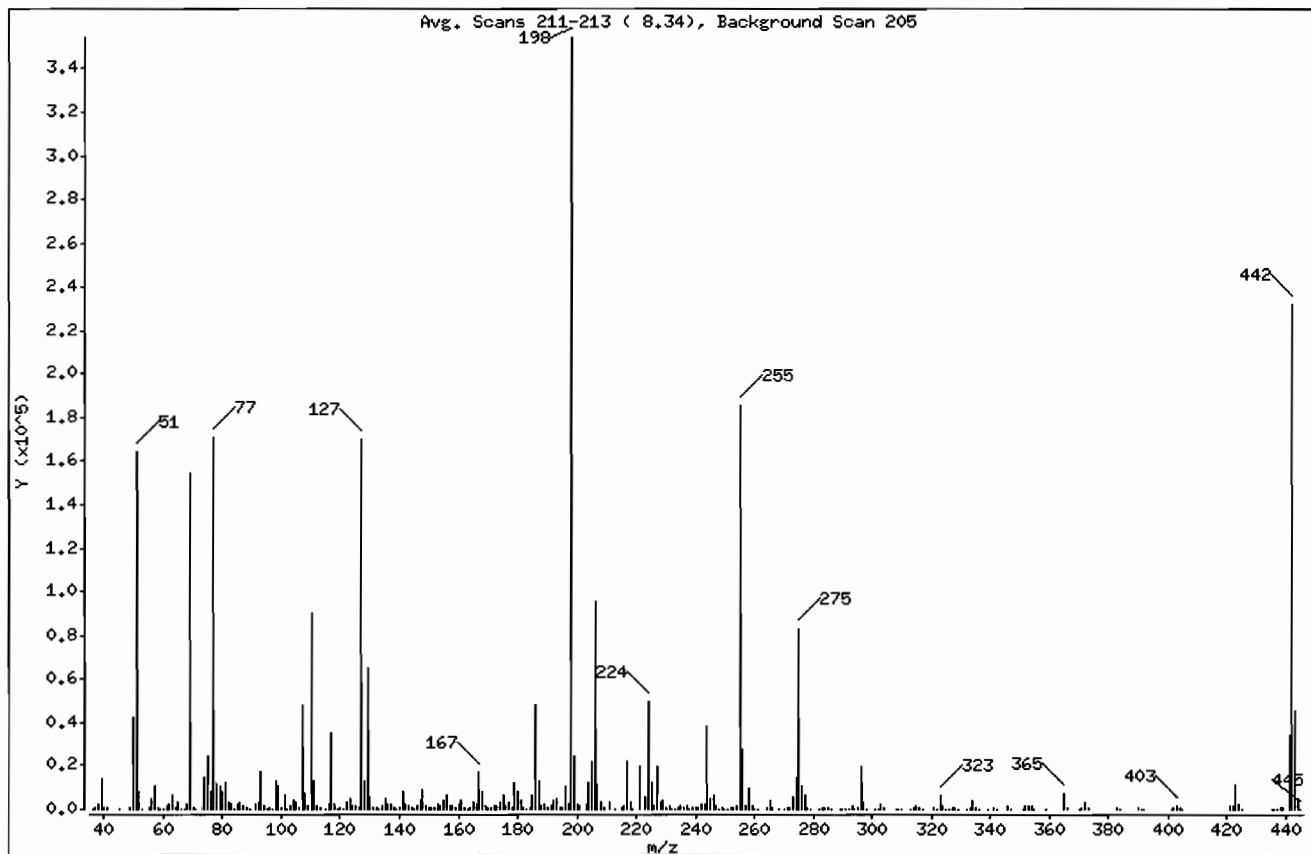
Sample Info: IWM100306-01,2IDFTPP11ISVHF11IDFTPP

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: IWBNI00306-01,2IDFTPP1ISVMF1IDFTPP

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: MSD6.i

Sample Info: IMBN100306-01,2IDFTPP11SVMF11IDFTPP

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: IWBNI00306-01.2IDFTPP11ISVMF11IDFTPP

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

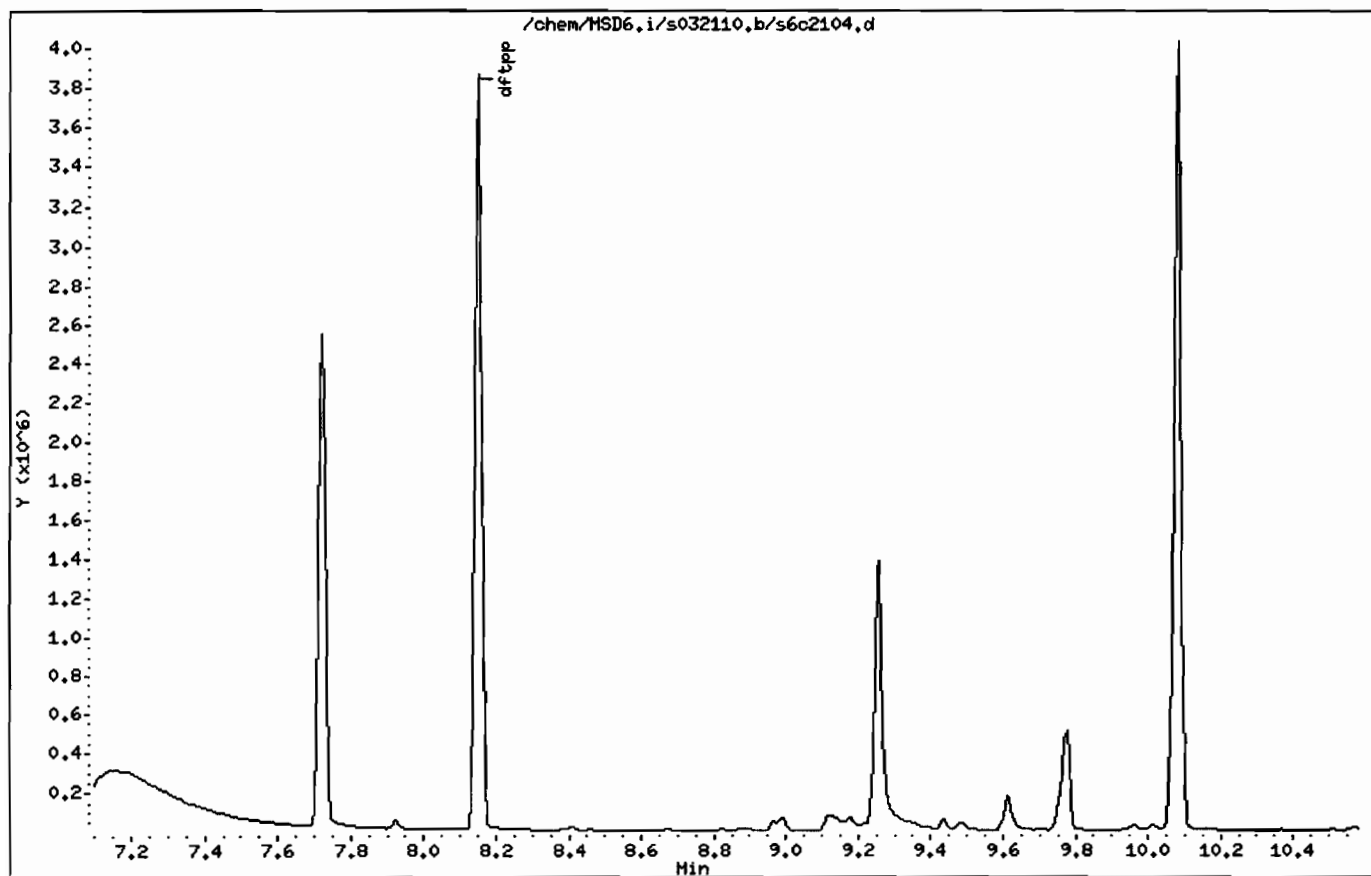
Instrument: MSD6.i

Sample Info: IWBH100306-01.21DFTPP111SVHF111DFTPP

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

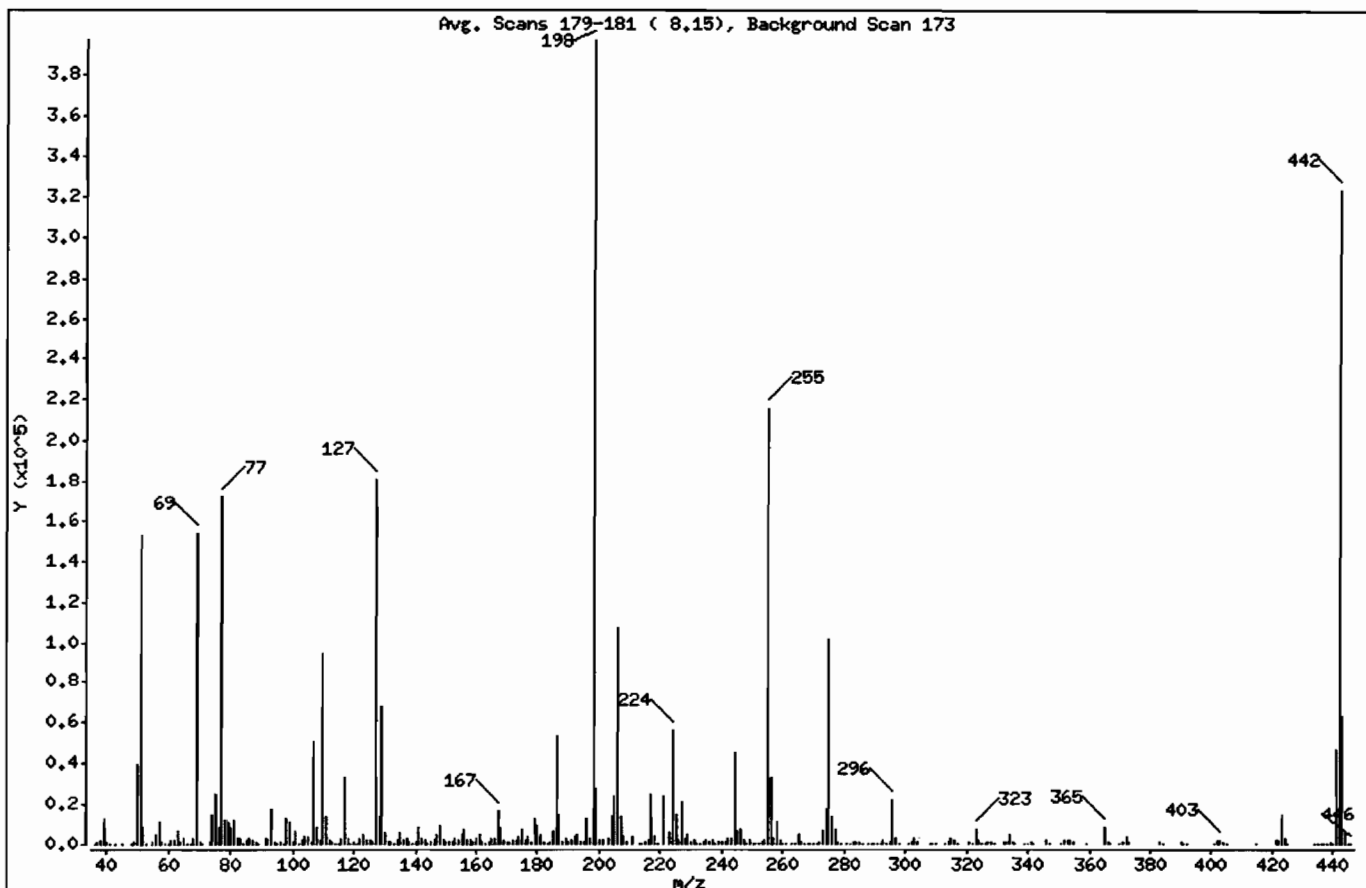
Sample Info: IWBNI00306-01.2IDFTPP11ISVMF11IDFTPP

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

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Date : 21-MAR-2010 16:41

Client ID: DFTPP

Instrument: HSD6.i

Sample Info: IWBH100306-01.2IDFTPP11SVMF11IDFTPP

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
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: IWBNI00306-01.2\DFTPP\1\SVMF\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
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	4631	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/HSD6.i/s032110.b/s6c2104.d

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Date : 21-MAR-2010 16:41

Client ID: DFTPP

Instrument: HSD6.i

Sample Info: IWBNI00306-01.2IDFTPP11SVHF11IDFTPP

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/MSD6.i/s032310.b/s6c2306.d

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Date : 23-MAR-2010 16:10

Client ID: DFTPP

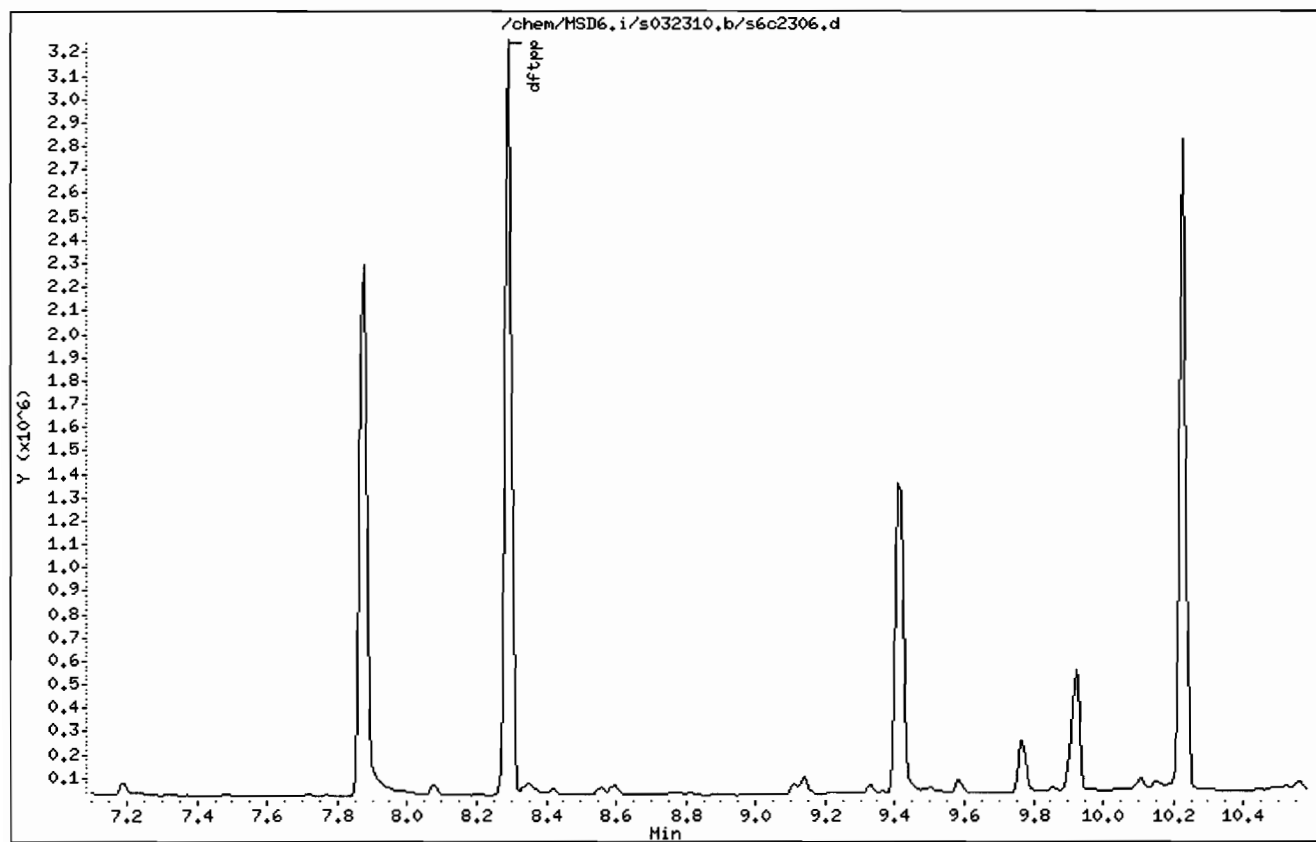
Instrument: MSD6.i

Sample Info: IWBNI00306-01.21DFTPP11SVMF111DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 23-MAR-2010 16:10

Client ID: DFTPP

Instrument: MSD6.i

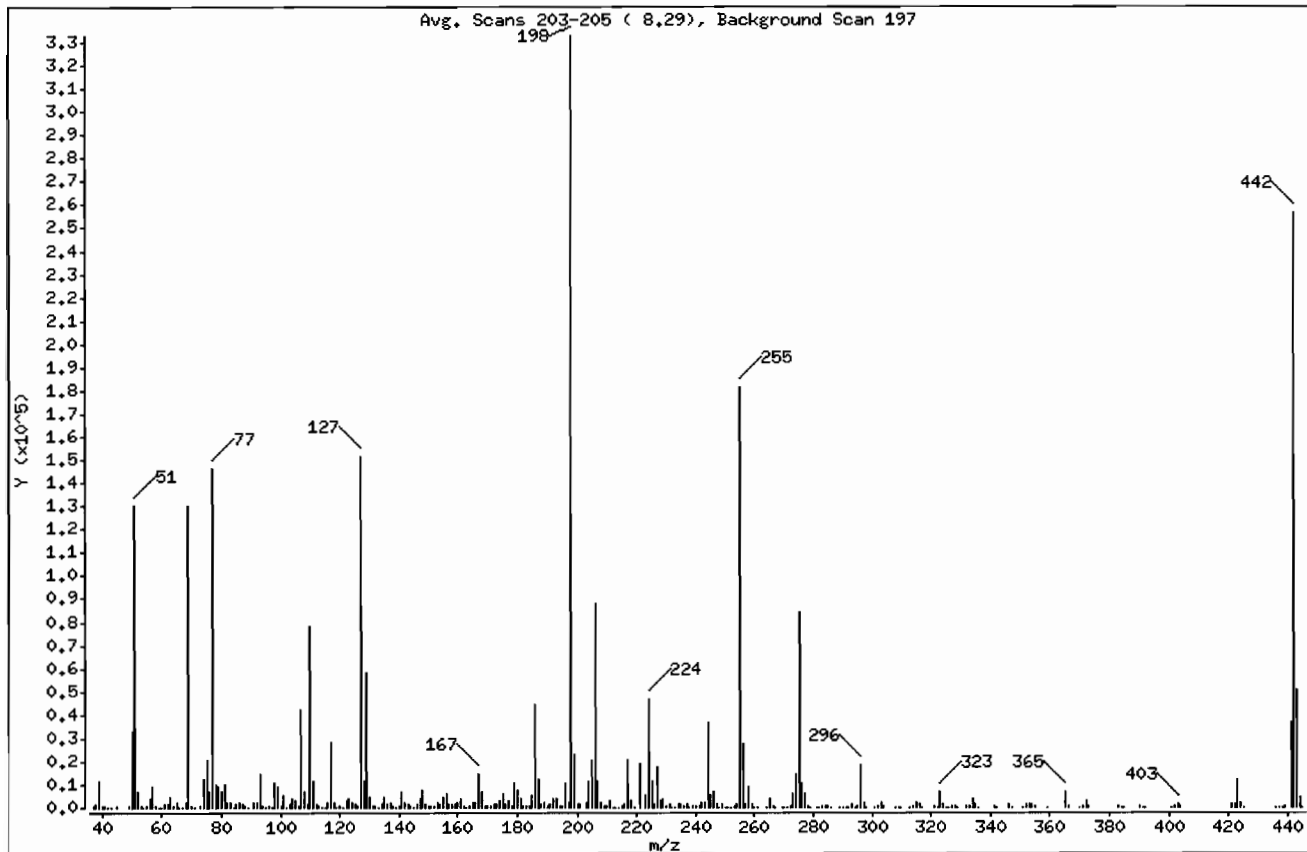
Sample Info: IWBNI00306-01,21DFTPP11SVMF111DFTPP

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: DFTTP

Instrument: HSD6.i

Sample Info: IWBNI00306-01.2IDFTTP|1ISVMF|1IDFTTP

Operator: nag1

Column phase: Phenomenex ZB-5HS

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: MSD6.i

Sample Info: IWBNI00306-01.21DFTPP11SVMF111DFTPP

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
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: HSD6.i

Sample Info: IWBNI00306-01,2IDFTPP11SVHF11IDFTPP

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: 10-2196		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
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	<i>o</i> -Nitroaniline	U	333	ug/kg	66.7	333
	3-Nitroaniline					

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

SDG Number: 10-2196		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: MSD6J	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.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: 10-2196.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)
* 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

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2108.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: 10-2196.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

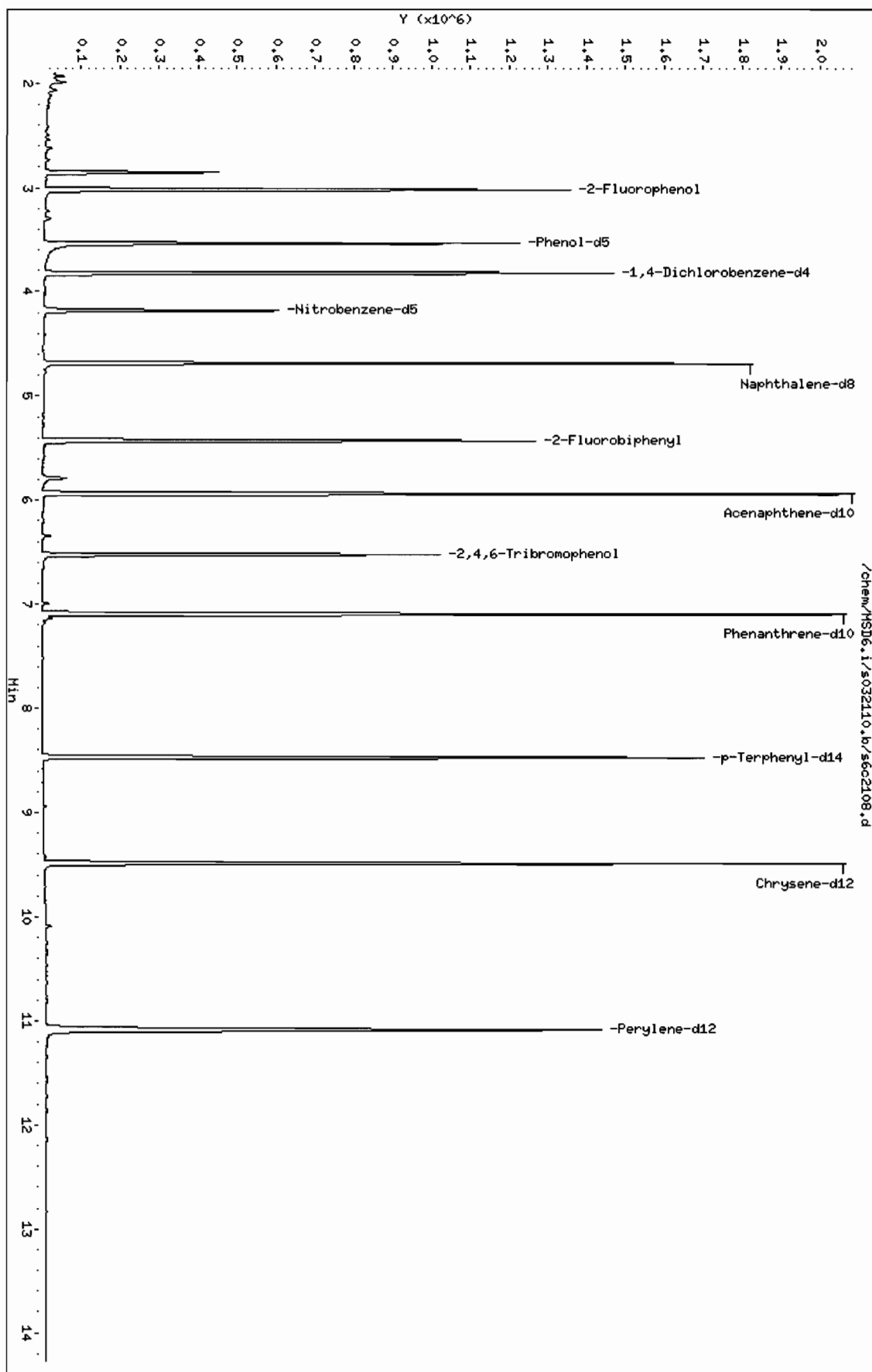
Cpnd Variable Local Compound Variable

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/HSD6.i/s032110.b/s6c2108.d  
Date : 21-Mar-2010 18:13  
Client ID: SBLK01  
Sample Info: 11202061811963133111SWH11HB  
Volume Injected (uL): 0.5  
Column Phase: J&W DB-SMS

Instrument: HSD6.i  
Operator: nag1  
Column diameter: 0.20



Date : 21-MAR-2010 18:13

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: I1202066181f96313311SVH11MB

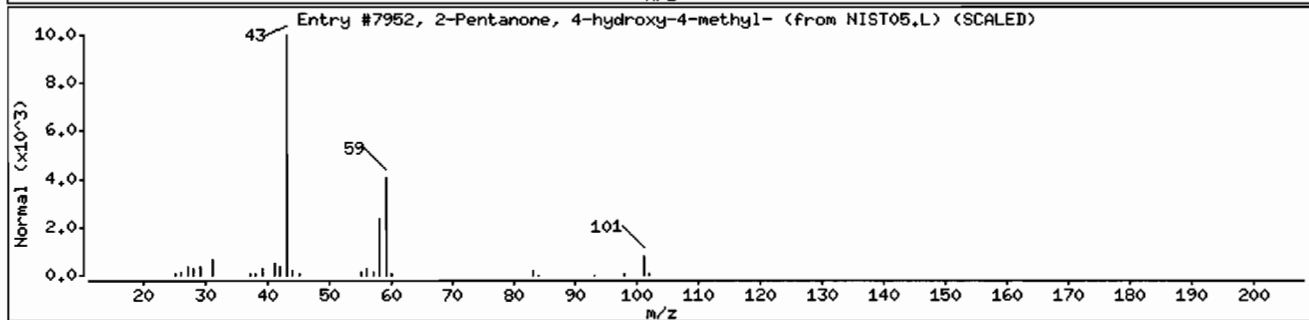
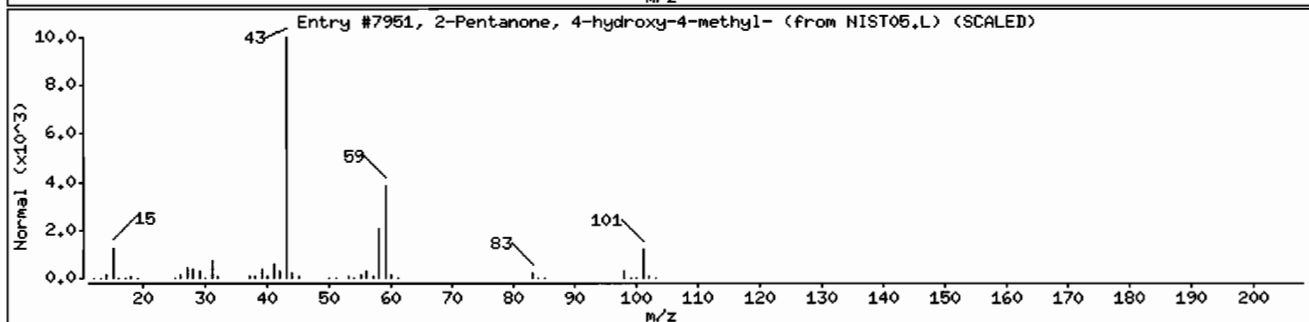
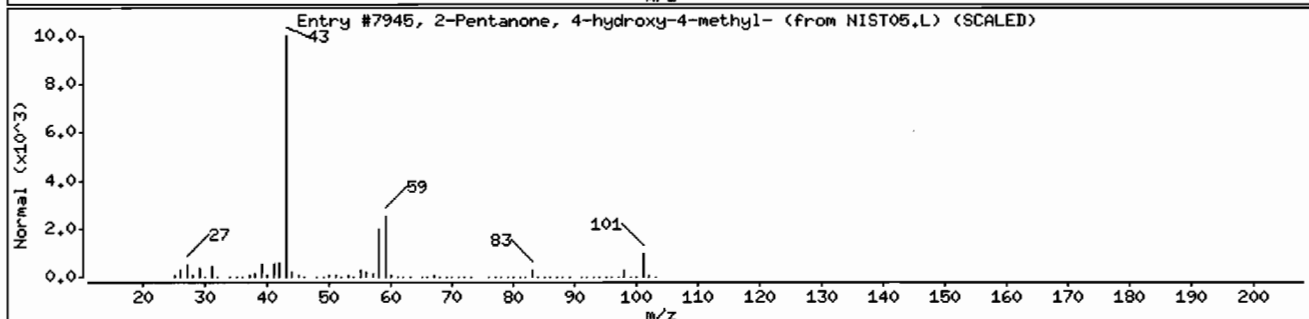
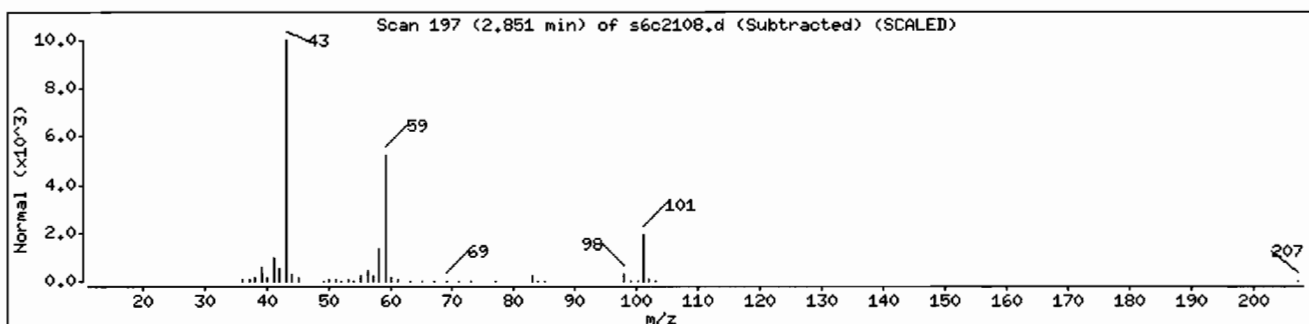
Volume Injected (uL): 0.5

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**

<b>SDG Number:</b> 10-2196		<b>Matrix:</b> SOIL
<b>Lab Sample ID:</b> 1202066182		
<b>Client Sample:</b> QC for batch 963130	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> LCS for batch 963130	<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 18:37	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 03/10/2010 12:14	<b>Aliquot:</b> 30 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s6c2109-1.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		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
	o-Nitroaniline					
99-09-2	3-Nitroaniline		754	ug/kg	66.7	333



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

SDG Number: 10-2196		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&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
	<i>1,2</i> -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.d  
Lab Smp Id: 1202066182 Client Smp ID: SBLK01LCS  
Inj Date : 21-MAR-2010 18:37  
Operator : nagl 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: 10-2196.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL (ng/ul) (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	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	50.3808	1680
\$ 5 Phenol-d5	99	3.540	3.534	(0.925)	468715	46.5330	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	69.0837	2300
\$ 81 p-Terphenyl-d14	244	8.469	8.463	(0.892)	583801	33.3213	1110

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.551	3.546	(0.928)	243396	23.8703	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	26.7382	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	28.3984	947
52 4-Nitrophenol	139	5.981	5.975	(1.007)	60952	19.7639	659
65 Pentachlorophenol	266	6.922	6.916	(0.975)	88305	33.8490	1130
79 Pyrene	202	8.363	8.357	(0.881)	893714	29.1590	972
2 Pyridine	79	2.363	2.340	(0.617)	160394	20.3735	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	23.9274	798
18 m,p-Cresols	107	4.040	4.040	(1.055)	249200	27.3552	912
19 Hexachloroethane	117	4.169	4.163	(1.089)	85986	22.4519	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	13.2139	440 (QR)
25 bis(2-Chloroethoxy) methane	93	4.475	4.469	(0.955)	232458	24.1130	804
26 2,4-Dichlorophenol	162	4.581	4.569	(0.977)	177406	26.8225	894
27 Benzoic acid	105	4.457	4.463	(0.951)	259019	52.7335	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	30.4812	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	22.8804	763
37 2,4,6-Trichlorophenol	196	5.375	5.369	(0.905)	151851	28.2947	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	22.6216	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	29.6985	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	28.1218	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	32.9476	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	28.9345	964

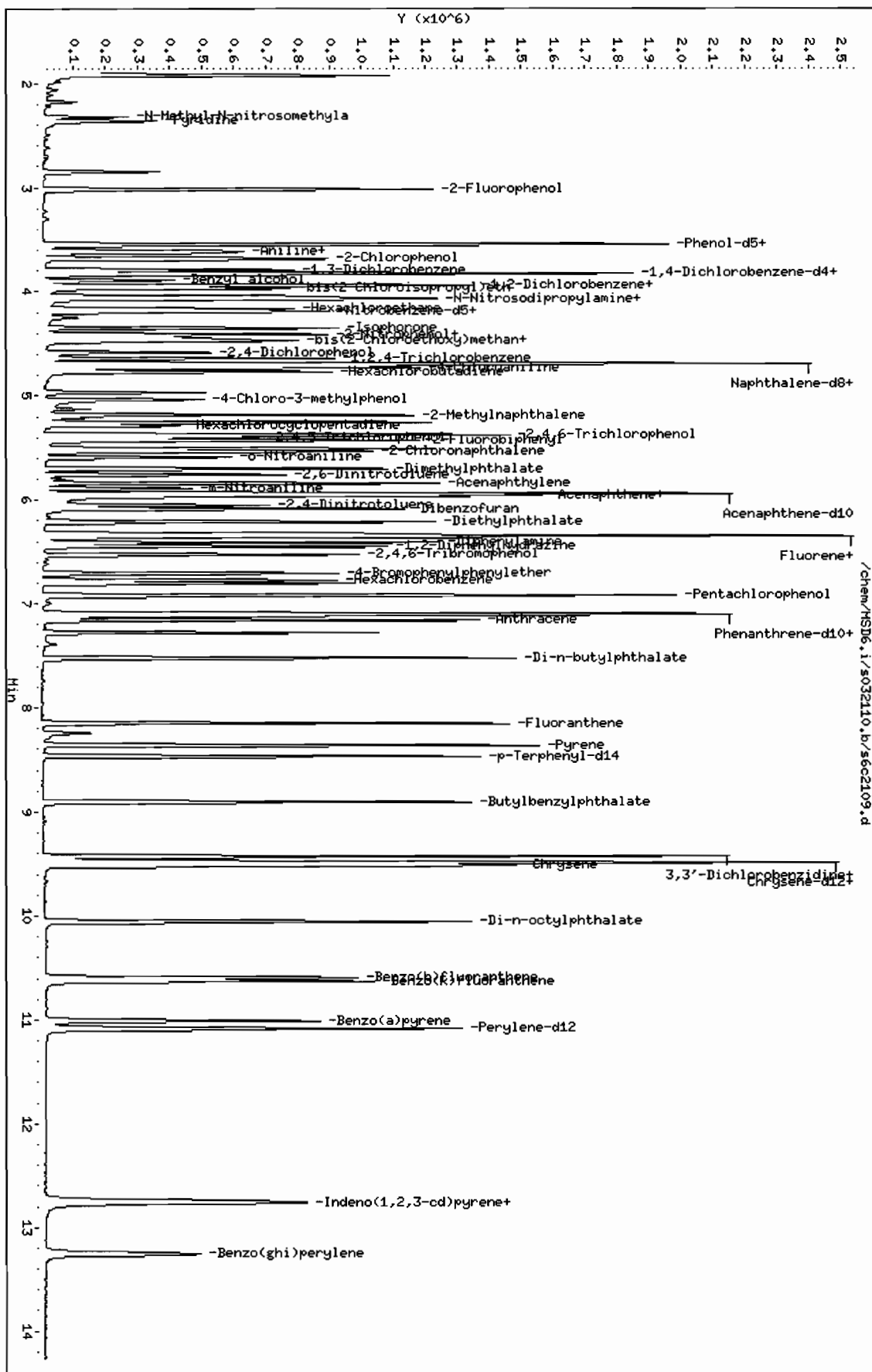
Compounds	QUANT SIG	CONCENTRATIONS					
		ON-COLUMN	FINAL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.339	6.340	(1.067)	90974	27.2350	908
133 Diphenylamine	169	6.410	6.404	(0.903)	421472	29.2503	975
58 1,2-Diphenylhydrazine	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	34.1833	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	28.3101	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/s032110.b/sec2109.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	UE100302-14	1	mL	Verified By: RWH
LCS	1202066182	BENZIDINE LCS	UE100302-22	1	mL	Final Solvent: CH2Cl2
MS	1202066183	BNA LCS w/o Benzidine 50ppm	UE100302-14	1	mL	
MS	1202066183	BENZIDINE LCS	UE100302-22	1	mL	
MSD	1202066184	BNA LCS w/o Benzidine 50ppm	UE100302-14	1	mL	
MSD	1202066184	BENZIDINE LCS	UE100302-22	1	mL	
SURR	All	BNA for all Surrogate	UE100301-10	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 &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/s031610.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6c1601-D.d	WBN100306-01.2	nag1	16-MAR-2010 08:42	DFTPP	s031610	1.0	DFTPP	MEGA
s6c1601.d	WBN100306-01.2	nag1	16-MAR-2010 08:42	DFTPP	s031610	1.0	DFTPP	MEGA
s6c1602.d	INSTBLK	nag1	16-MAR-2010 08:55		s031610	1.0		
s6c1603.d	WBN100309-08	nag1	16-MAR-2010 09:18	001 PPM	s031610	1.0	MEGA001	
s6c1604-RQ.d	WBN100309-07	nag1	16-MAR-2010 09:47	010 PPM	s031610	1.0	MEGA010	
s6c1604.d	WBN100309-07	nag1	16-MAR-2010 09:47	010 PPM	s031610	1.0	MEGA010	
s6c1605.d	WBN100309-06	nag1	16-MAR-2010 10:17	020 PPM	s031610	1.0	MEGA020	
s6c1606.d	WBN100309-05.1	nag1	16-MAR-2010 10:48	040 PPM	s031610	1.0	MEGA040	
s6c1607.d	WBN100309-04	nag1	16-MAR-2010 11:18	050 PPM	s031610	1.0	MEGA050	
s6c1608.d	WBN100309-03	nag1	16-MAR-2010 11:48	080 PPM	s031610	1.0	MEGA080	
s6c1609.d	WBN100309-02	nag1	16-MAR-2010 12:18	100 PPM	s031610	1.0	MEGA100	
s6c1610.d	WBN100309-01	nag1	16-MAR-2010 12:48	120 PPM	s031610	1.0	MEGA120	
s6c1611.d	INSTBLK	nag1	16-MAR-2010 13:16		s031610	1.0		
s6c1612-BOE.d	WBN100309-09.1	nag1	16-MAR-2010 13:40	040 PPM	s031610	1.0	MEGA1CV	
s6c1612-D.d	WBN100309-09.1	nag1	16-MAR-2010 13:40	040 PPM	s031610	1.0	MEGA1CV	
s6c1612.d	WBN100309-09.1	nag1	16-MAR-2010 13:40	040 PPM	s031610	1.0	MEGA1CV	
s6c1613-D.d	WBN100306-01.2	nag1	16-MAR-2010 16:06	DFTPP	s031610	1.0	DFTPP	AP/PEST/HEX
s6c1613.d	WBN100306-01.2	nag1	16-MAR-2010 16:06	DFTPP	s031610	1.0	DFTPP	AP/PEST/HEX
s6c1614.d	INSTBLK	nag1	16-MAR-2010 16:19		s031610	1.0		



s6c1615.d	WBN100312-01	nag1	16-MAR-2010 16:42	10 PPM	s031610		1.0 AP010	
s6c1616.d	WBN100312-02	nag1	16-MAR-2010 17:06	20 PPM	s031610		1.0 AP020	
s6c1617.d	WBN100312-03.1	nag1	16-MAR-2010 17:30	40 PPM	s031610		1.0 AP040	
s6c1618.d	WBN100312-04	nag1	16-MAR-2010 17:53	50 PPM	s031610		1.0 AP050	
s6c1619.d	WBN100312-05	nag1	16-MAR-2010 18:16	80 PPM	s031610		1.0 AP080	
s6c1620.d	WBN100312-06	nag1	16-MAR-2010 18:40	100 PPM	s031610		1.0 AP100	
s6c1621.d	WBN100312-07	nag1	16-MAR-2010 19:04	120 PPM	s031610		1.0 AP120	
s6c1622.d	WBN100304-25	nag1	16-MAR-2010 19:27	10 PPM	s031610		1.0 PEST010	
s6c1623.d	WBN100304-24	nag1	16-MAR-2010 19:51	20 PPM	s031610		1.0 PEST020	
s6c1624.d	WBN100304-23.1	nag1	16-MAR-2010 20:16	40 PPM	s031610		1.0 PEST040	
s6c1625.d	WBN100304-22	nag1	16-MAR-2010 20:39	50 PPM	s031610		1.0 PEST050	
s6c1626.d	WBN100304-21	nag1	16-MAR-2010 21:04	80 PPM	s031610		1.0 PEST080	
s6c1627.d	WBN100304-20	nag1	16-MAR-2010 21:29	100 PPM	s031610		1.0 PEST100	
s6c1628.d	WBN100304-19	nag1	16-MAR-2010 21:52	120 PPM	s031610		1.0 PEST120	
s6c1629.d	WBN100304-16	nag1	16-MAR-2010 22:16	500 PPM	s031610		1.0 HEX500	
s6c1630.d	WBN100304-15	nag1	16-MAR-2010 22:40	1000 PPM s031610		1.0 HEX1000		
s6c1631.d	WBN100304-14	nag1	16-MAR-2010 23:05	1250 PPM s031610		1.0 HEX1250		
s6c1632.d	WBN100304-15	nag1	16-MAR-2010 23:30	1500 PPM s031610		1.0 HEX1500		
s6c1633.d	WBN100304-16	nag1	16-MAR-2010 23:53	1750 PPM s031610		1.0 HEX1750		
s6c1634.d	UBN100304-16	nag1	17-MAR-2010 00:17	2000 PPM s031610		1.0 HEX2000		
s6c1635-D.d	WBN100312-08.1	nag1	17-MAR-2010 00:41	40 PPM	s031710		1.0 APICV	
s6c1635.d	WBN100312-08.1	nag1	17-MAR-2010 00:41	40 PPM	s031710		1.0 APICV	
s6c1636-D.d	WBN100304-26.1	nag1	17-MAR-2010 01:05	40 PPM	s031710		1.0 PESTICV	
s6c1636.d	WBN100304-26.1	nag1	17-MAR-2010 01:05	40 PPM	s031710		1.0 PESTICV	
s6c1637-D.d	WBN100304-14	nag1	17-MAR-2010 01:30	1250 PPM s031710		1.0 HEX1250		
s6c1637.d	WBN100304-14	nag1	17-MAR-2010 01:30	1250 PPM s031710		1.0 HEX1250		
s6c1638-D.d	WBN100306-01.2	nag1	17-MAR-2010 01:55	DFTPP	s031610		1.0 DFTPP	NEV

Is6c1638.d	WBNI00306-01.2	Inag1	17-MAR-2010 01:55	DFTPP	s031610	1.0	DFTPP	NEV	
Is6c1639.d	INSTBLK	Inag1	17-MAR-2010 02:08		s031610	1.0			
Is6c1640.d	WBNI00127-01	Inag1	17-MAR-2010 02:32	10 PPM	s031610	1.0	NEV010		
Is6c1641.d	WBNI00127-02	Inag1	17-MAR-2010 02:55	20 PPM	s031610	1.0	NEV020		
Is6c1642.d	WBNI00127-03	Inag1	17-MAR-2010 03:19	40 PPM	s031610	1.0	NEV040		
Is6c1643.d	WBNI00127-04	Inag1	17-MAR-2010 03:42	50 PPM	s031610	1.0	NEV050		
Is6c1644.d	WBNI00127-05	Inag1	17-MAR-2010 04:05	80 PPM	s031610	1.0	NEV080		
Is6c1645.d	WBNI00127-06	Inag1	17-MAR-2010 04:28	100 PPM	s031610	1.0	NEV100		
Is6c1646.d	WBNI00127-07	Inag1	17-MAR-2010 04:51	120 PPM	s031610	1.0	NEV120		
Is6c1647.d	WBNI00127-03	Inag1	17-MAR-2010 05:14	40 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: nagl REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1239699-D  
Multiplier Voltage: 1576 Env 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/s032110.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6c2101.d	WBN100306-01.2	nag1	21-MAR-2010 08:53	DFTPP	s032110	1.0	DFTPP	DOSE
s6c2102.d	WBN100309-05.3	nag1	21-MAR-2010 09:12	40 PPM	s032110	1.0	MEGACVS	DOSE
s6c2103.d	WBN100309-05.3	nag1	21-MAR-2010 09:45	40 PPM	s032110	1.0	MEGACVS	DOSE
s6c2104.d	WBN100306-01.2	nag1	21-MAR-2010 16:41	DFTPP	s032110	1.0	DFTPP	
s6c2105.d	WBN100309-05.3	nag1	21-MAR-2010 16:55	40 PPM	s032110	1.0	MEGACVS	pass 534666
s6c2106.d	WBN100312-03.3	nag1	21-MAR-2010 17:25	40 PPM	s032110	1.0	APCVS	
s6c2107.d	WBN100304-26.3	nag1	21-MAR-2010 17:49	40 PPM	s032110	1.0	PESTCVS	
s6c2108-1.d	1202066181	nag1	21-MAR-2010 18:13	963133	10-2198	1.0	MB	
s6c2108-2.d	1202066181	nag1	21-MAR-2010 18:13	963133	10-2199	1.0	MB	
s6c2108-3.d	1202066181	nag1	21-MAR-2010 18:13	963133	10-2302	1.0	MB	
s6c2108.d	1202066181	nag1	21-MAR-2010 18:13	963133	10-2196	1.0	MB	
s6c2109-1.d	1202066182	nag1	21-MAR-2010 18:37	963133	10-2198	1.0	LCS	<5% fail
s6c2109-2.d	1202066182	nag1	21-MAR-2010 18:37	963133	10-2199	1.0	LCS	<5% fail
s6c2109-3.d	1202066182	nag1	21-MAR-2010 18:37	963133	10-2302	1.0	LCS	<5% fail
s6c2109.d	1202066182	nag1	21-MAR-2010 18:37	963133	10-2196	1.0	LCS	<5% fail
s6c2110.d	248514001	nag1	21-MAR-2010 19:00	963133	10-2196	1.0	LANL	
s6c2111.d	248514002	nag1	21-MAR-2010 19:24	963133	10-2196	1.0	LANL	DOSE fail istd-rr 4x
s6c2112.d	248514003	nag1	21-MAR-2010 19:48	963133	10-2196	1.0	LANL	DOSE fail istd-rr 4x
s6c2113.d	248517001	nag1	21-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	DUSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2115.d	248519002	nag1	21-MAR-2010 20:58	963133	10-2199	1.0 LANL	DUSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2116.d	248519003	nag1	21-MAR-2010 21:22	963133	10-2199	1.0 LANL	DUSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2117.d	248519004	nag1	21-MAR-2010 21:46	963133	10-2199	1.0 LANL	DUSE 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	DUSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2120.d	248519007	nag1	21-MAR-2010 22:57	963133	10-2199	1.0 LANL	DUSE 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	DUSE 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	DUSE-fail istd s6c2318	
+	+	+	+	+	+	+	+	+
s6c2129.d	248842005	nag1	22-MAR-2010 02:29	965425	10-2302	1.0 LANL	DUSE-rr of s6c2026-still fail surr-RX	
+	+	+	+	+	+	+	+	+
s6c2130.d	248842006	nag1	22-MAR-2010 02:53	965425	10-2302	1.0 LANL	DUSE-rr of s6c2027-still fail surr-RX	
+	+	+	+	+	+	+	+	+
s6c2131.d	248842007	nag1	22-MAR-2010 03:17	965425	10-2302	10.0 LANL	DUSE-fail istd s6c2319	
+	+	+	+	+	+	+	+	+
s6c2132.d	248842008	nag1	22-MAR-2010 03:40	965425	10-2302	10.0 LANL	DUSE-fail istd s6c2320	
+	+	+	+	+	+	+	+	+
s6c2133.d	248842009	nag1	22-MAR-2010 04:03	965425	10-2302	10.0 LANL	DUSE-fail istd s6c2321	
+	+	+	+	+	+	+	+	+
s6c2134.d	248842010	nag1	22-MAR-2010 04:27	965425	10-2302	10.0 LANL	DUSE- fail istd s6c2322	
+	+	+	+	+	+	+	+	+

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD6

DATE: 03/23/2010 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: WBN100319-01  
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/s032310.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
Is6c2301.d	WBN100306-01.2	Inag1	23-MAR-2010 13:49	DFTPP	s032310	1.0	DFTPP	IDUSE
Is6c2302.d	WBN100309-05.3	Inag1	23-MAR-2010 14:02	140 PPM	s032310	1.0	MEGACVS	IDUSE
Is6c2303.d	WBN100312-03.3	Inag1	23-MAR-2010 14:34	140 PPM	s032310	1.0	APCVS	IDUSE
Is6c2304.d	WBN100304-26.3	Inag1	23-MAR-2010 14:59	140 PPM	s032310	1.0	PESTCVS	IDUSE; MAINTENANCE
Is6c2305.d	WBN100306-01.2	Inag1	23-MAR-2010 15:53	DFTPP	s032310	1.0	DFTPP	IDUSE
Is6c2306.d	WBN100306-01.2	Inag1	23-MAR-2010 16:10	DFTPP	s032310	1.0	DFTPP	IDUSE
Is6c2307.d	WBN100309-05.3	Inag1	23-MAR-2010 16:23	140 PPM	s032310	1.0	MEGACVS	IDUSE
Is6c2308.d	WBN100312-03.3	Inag1	23-MAR-2010 17:02	140 PPM	s032310	1.0	APCVS	IDUSE
Is6c2309.d	WBN100309-05.3	Inag1	23-MAR-2010 17:25	140 PPM	s032310	1.0	MEGACVS	IDUSE; 304917
Is6c2310.d	INST BLK	Inag1	23-MAR-2010 17:57	-----	s032310	1.0	INST BLK	IDB
Is6c2311.d	1202069973	Inag1	23-MAR-2010 18:20	964843	249222	1.0	MB	IDUSE
Is6c2312.d	1202069974	Inag1	23-MAR-2010 18:45	964843	249222	1.0	LCS	IDUSE
Is6c2313.d	1202069975	Inag1	23-MAR-2010 19:09	964843	249222	1.0	LCS	MEASURE VOLUME/SPIKES HIGH???
Is6c2314.d	249222001	Inag1	23-MAR-2010 19:33	964843	249222	1.0	GEEL	IDUSE
Is6c2315.d	249222002	Inag1	23-MAR-2010 19:57	964843	249222	1.0	GEEL	IDUSE
Is6c2316.d	249222004	Inag1	23-MAR-2010 20:20	964843	249222	1.0	GEEL	IDUSE; SURR LOW; CONSUMED
Is6c2317.d	249222005	Inag1	23-MAR-2010 20:44	964843	249222	1.0	GEEL	IDUSE; SURR LOW; CONSUMED
Is6c2318.d	248842004	Inag1	23-MAR-2010 21:08	965425	10-2302	10.0	LANL	IDUSE; RR OF S6C2128
Is6c2319.d	248842007	Inag1	23-MAR-2010 21:32	965425	10-2302	10.0	LANL	IDUSE; RR OF S6C2131

s6c2320.d	248842008	nag1	23-MAR-2010 21:55	965425	10-2302		10.0 LANL	USE; RR OF S6C2132	
s6c2321.d	248842009	nag1	23-MAR-2010 22:19	965425	10-2302		10.0 LANL	USE; RR OF S6C2133	
s6c2322.d	248842010	nag1	23-MAR-2010 22:42	965425	10-2302		10.0 LANL	USE; RR OF S6C2134	
s6c2323.d	248514002	nag1	23-MAR-2010 23:06	963133	10-2196		4.0 LANL	USE; RR OF S6C2111	
s6c2324.d	248514003	nag1	23-MAR-2010 23:30	963133	10-2196		4.0 LANL	USE; RR OF S6C2112	
s6c2325.d	248519001	nag1	23-MAR-2010 23:53	963133	10-2199		4.0 LANL	USE; RR OF S6C2114	
s6c2326.d	248519002	nag1	24-MAR-2010 00:17	963133	10-2199		4.0 LANL	USE; RR OF S6C2115	
s6c2327.d	248519003	nag1	24-MAR-2010 00:40	963133	10-2199		4.0 LANL	USE; RR OF S6C2116	
s6c2328.d	248519004	nag1	24-MAR-2010 01:03	963133	10-2199		4.0 LANL	USE; RR OF S6C2117	
s6c2329.d	248519006	nag1	24-MAR-2010 01:26	963133	10-2199		4.0 LANL	USE; RR OF S6C2119	
s6c2330.d	248519007	nag1	24-MAR-2010 01:50	963133	10-2199		4.0 LANL	USE; RR OF S6C2120	
s6c2331.d	248519010	nag1	24-MAR-2010 02:12	963133	10-2199		4.0 LANL	USE; RR OF S6C2123	
s6c2332.d	248519011	nag1	24-MAR-2010 02:35	963133	10-2199		4.0 LANL	USE; RR OF S6C2124	
s6c2333.d	249222004	nag1	24-MAR-2010 02:57	964843	249222		1.0 GEEL	DUSE; SURR STILL LOW	
s6c2334.d	249222005	nag1	24-MAR-2010 03:20	964843	249222		1.0 GEEL	DUSE; 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> SEMIOVA 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>	
<p>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.</p> <p>2. The LCS(1202066182) recovered 2,4-Dimethylphenol at 26% (limits are 32%-112%) and Benzyl alcohol at 26% (limits are 27%-108%).</p> <p>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.</p> <p>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.</p>		<p>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.</p> <p>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).</p> <p>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).</p> <p>4. The RPD failures were attributed to matrix interference and the data were reported.</p>	

**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 : nag1 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: 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	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	3.828	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				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
=====	=====	==	=====	=====	=====	(ng/ul)	(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

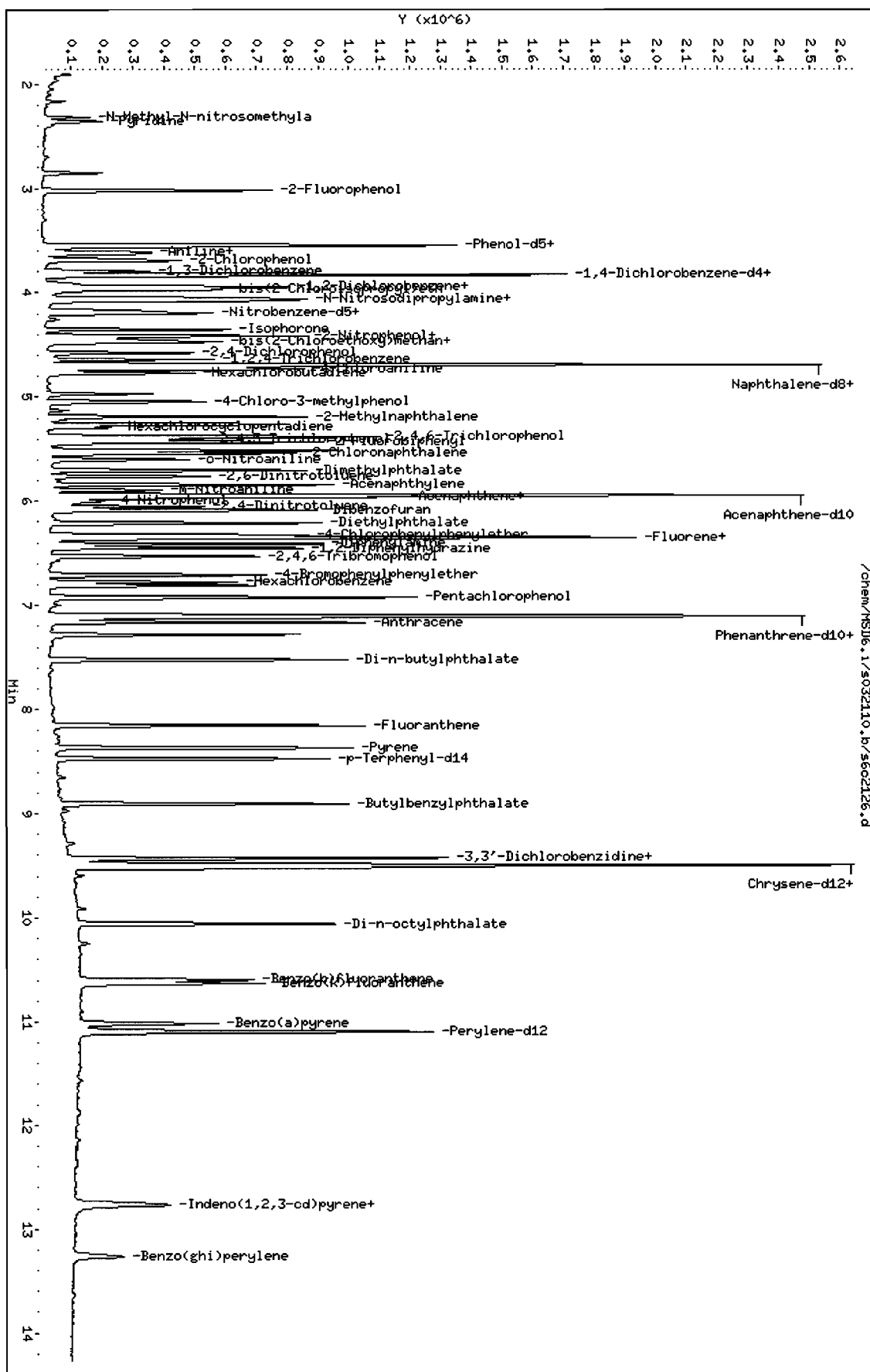
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
133 Diphenylamine	169	6.416	6.404	(0.904)	312538	18.6616	710
58 1,2-Diphenylhydrazine	77	6.451	6.440	(0.909)	385441	17.1213	651
61 4-Bromophenylphenylether	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/MSD6.1/s032110.b/s602126.d  
 Date : 22-MAR-2010 01:18  
 Client ID: REC6-10-846MS  
 Sample Info: 1120206183196313311SVH11HS  
 Volume Injected (uL): 0.5  
 Column Phase: J&W DB-SHS

Instrument: MSD6.1  
 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: Amt \* DF \* Uf \*Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	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 FINAL (ng/ul) (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

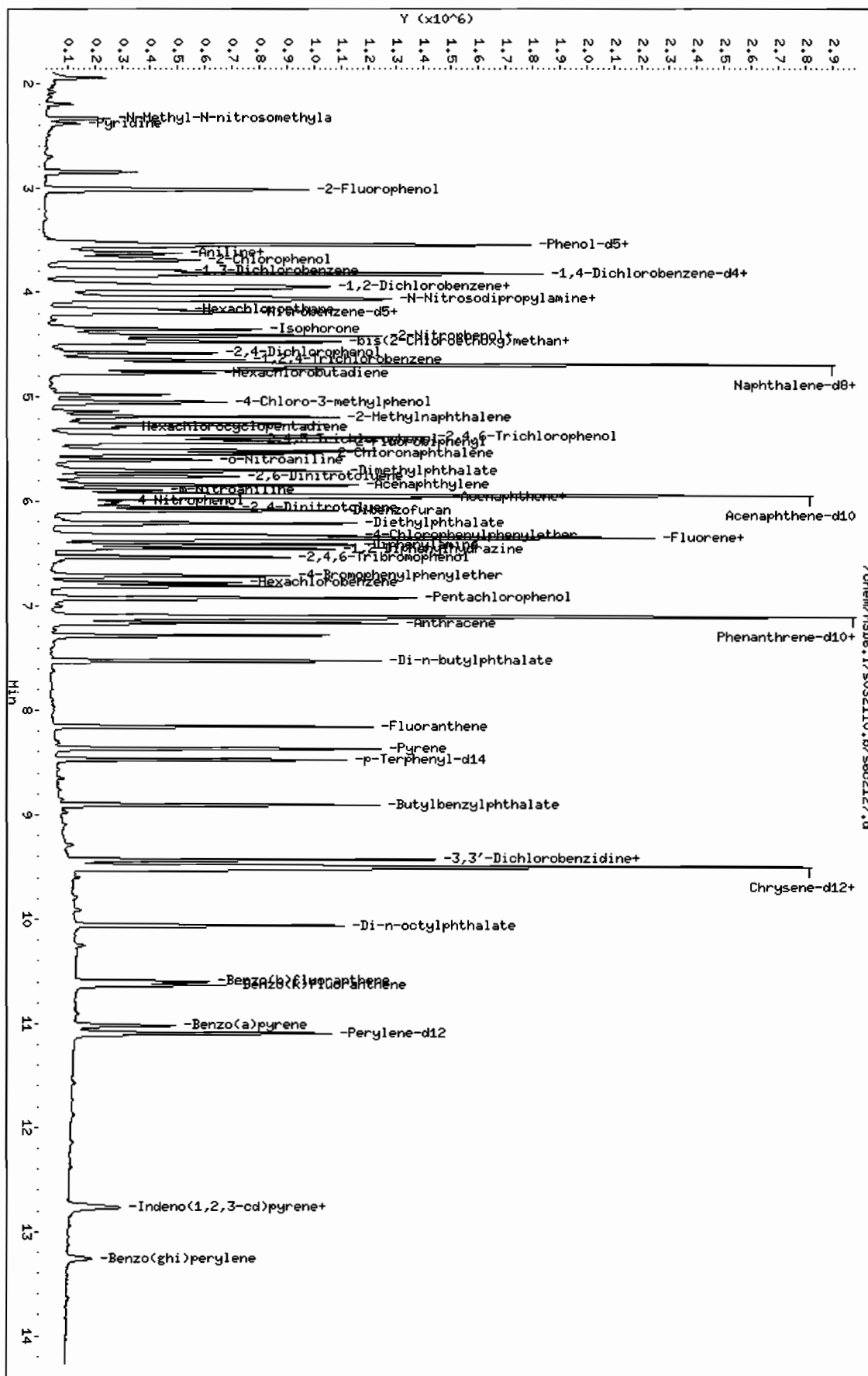
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
133 Diphenylamine	169	6.416	6.404	(0.903)	385462	18.6968	711
58 1,2-Diphenylhydrazine	77	6.451	6.440	(0.908)	492994	17.7893	676
61 4-Bromophenylphenylether	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/HSD6.1/s032110.b/s602127.d  
 Date: 22-MAR-2010 01:42  
 Client ID: RES6-10-846MSD  
 Sample Info: 11202066184196313311SVH11MSD  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-SMS

Instrument: HSD6.1  
 Operator: nag1  
 Column diameter: 0.20



# LC/MS/MS EXPLOSIVES ANALYSIS



**LC/MS/MS Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-2196**

**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>
248514001	RE36-10-7501
248514002	RE36-10-7524
248514003	RE36-10-7525
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**

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

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

**Sample Dilutions**

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

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

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

## Secondary Analyte Analysis

### Calibration Information

#### **Initial Calibration**

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

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

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

#### **Calibration Blank Requirements**

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

#### **CRI Requirements**

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

### Quality Control (QC) Information

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

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

#### **Surrogate Recoveries**

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

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

The LCS spike recoveries were within the established acceptance limits.

#### **QC Sample Designation**

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 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.

### **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 M. Mauer Date: 04/30/10

# SAMPLE DATA SUMMARY

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7501

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514001

Sample Amount 2

Moisture: 24.0

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: EXP0415068.wiff

Date Analyzed: 16-APR-10 15:06

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7501

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514001

Sample Amount 2

Moisture: 24.0

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: EXS04090047.wiff

Date Analyzed: 09-APR-10 19:17

Units: ug/kg

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

\*Concentration =

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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7524

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514002

Sample Amount 2

Moisture: 16.0

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: EXP0415069.wiff

Date Analyzed: 16-APR-10 15:32

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7524

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514002

Sample Amount 2

Moisture: 16.0

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: EXS04090048.wiff

Date Analyzed: 09-APR-10 19:33

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7525

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514003

Sample Amount 2

Moisture: 20.2

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: EXP0415070.wiff

Date Analyzed: 16-APR-10 15:58

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7525

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514003

Sample Amount 2

Moisture: 20.2

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: EXS04090049.wiff

Date Analyzed: 09-APR-10 19:48

Units: ug/kg

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

\*Concentration =

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

# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
248514001	RE36-10-7501	109	70 - 144	
248514001	RE36-10-7501	106	70 - 144	
248514002	RE36-10-7524	92	70 - 144	
248514002	RE36-10-7524	103	70 - 144	
248514003	RE36-10-7525	82.8	70 - 144	
248514003	RE36-10-7525	104	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) 10-2196

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
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
1,3,5-Trinitrobenzene	5000	3530	70.6								69 - 126
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) 10-2196

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
2,4-Diamino-6-nitrotoluene	5000	4790	95.8					52 - 114
2,6-Diamino-4-nitrotoluene	5000	5090	102					64 - 122
3,5-Dinitroaniline	5000	4980	99.6					70 - 127
tris(o-cresyl) phosphate	5000	4920	98.4					84 - 119
TATB	5000	4710	94.2					28 - 162

# 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) 10-2196

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
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
2,4-Dinitrotoluene	5000	0	5500	110	5010	100	9.32	30	86 - 135
2,6-Dinitrotoluene	5000	13.4	4930	98.3	4920	98.1	.203	30	90 - 118
2-Amino-4,6-dinitrotoluene	5000	0	5360	107	5350	107	.187	30	85 - 137
4-Amino-2,6-dinitrotoluene	5000	0	5710	114	5680	114	.527	30	72 - 143
HMX	5000	0	4820	96.4	5020	100	4.07	30	51 - 144
Nitrobenzene	5000	0	4510	90.2	4660	93.2	3.27	30	70 - 122
PETN	5000	0	5400	108	5020	100	7.29	30	60 - 140
RDX	5000	0	5880	118	4980	99.6	16.6	30	59 - 152
Tetryl	5000	0	5010	100	4160	83.2	18.5	30	36 - 124
m-Dinitrobenzene	5000	2.76	5350	107	4930	98.5	8.17	30	85 - 118
m-Nitrotoluene	5000	0	4210	84.2	4500	90	6.66	30	70 - 120
o-Nitrotoluene	5000	0	4710	94.2	4680	93.6	.639	30	69 - 123
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) 10-2196

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
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
TATB	5000	0	8040	161 *	7080	142	12.7	30	29 - 155

#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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 15-APR-10 10:07

GEL Data File: EXP0415001.wiff

Instrument ID: LCMSMS

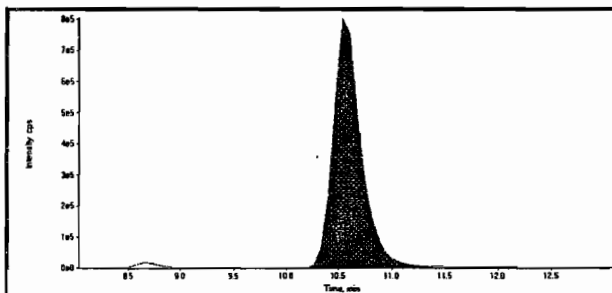
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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

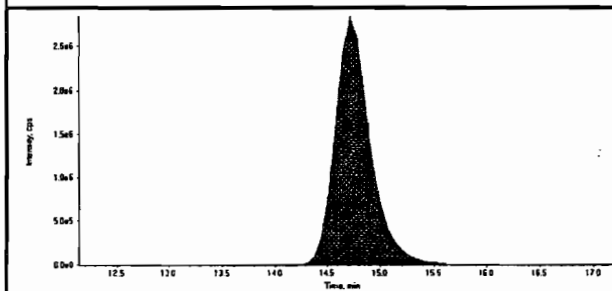
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

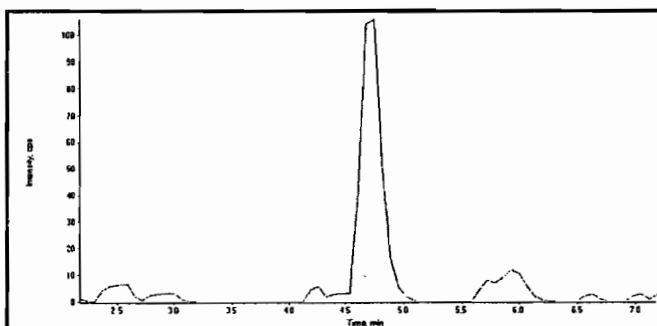
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Sample Name	XIBLK01	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



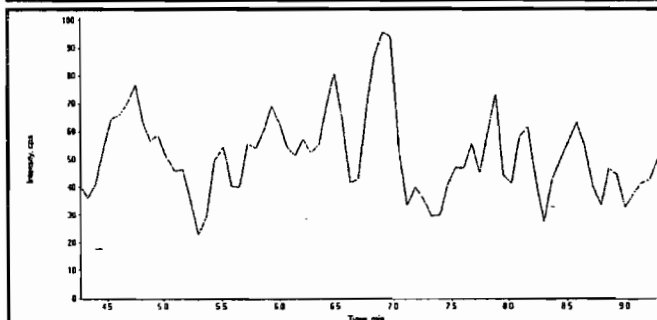
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	14900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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

*LER*  
*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>	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

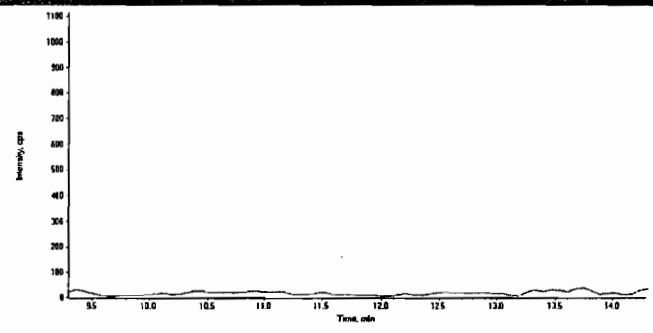
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

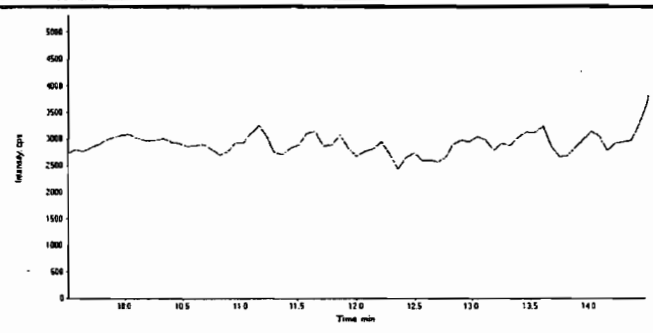
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LCMSMS#3

<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

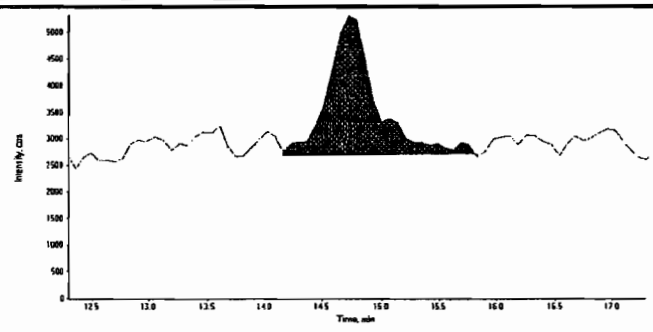
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

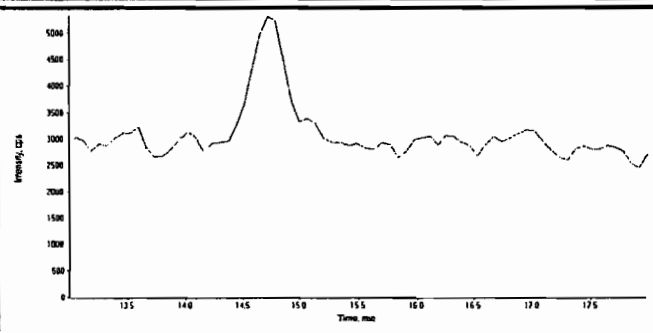
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<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

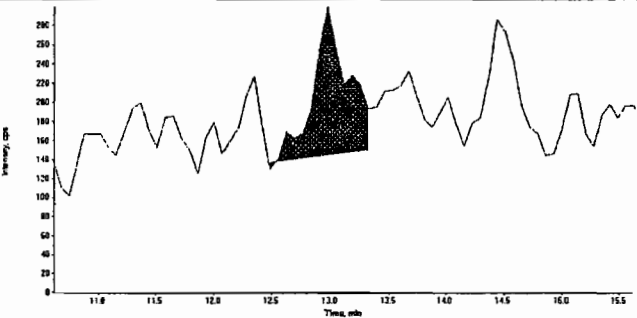
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.5
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

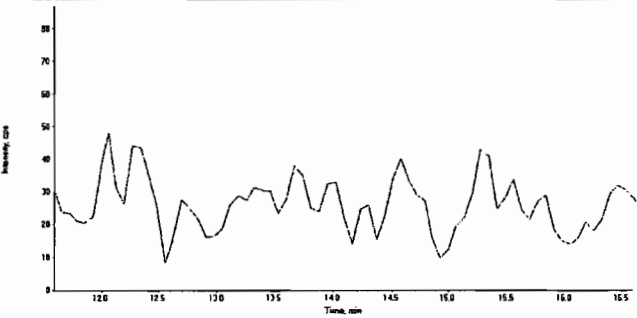
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LCMSMS#3

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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

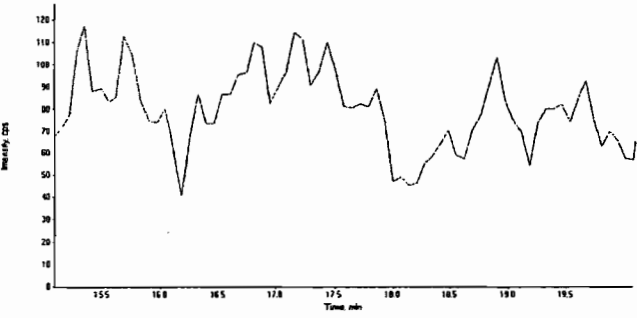
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.0
	Area Counts:	3.16e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

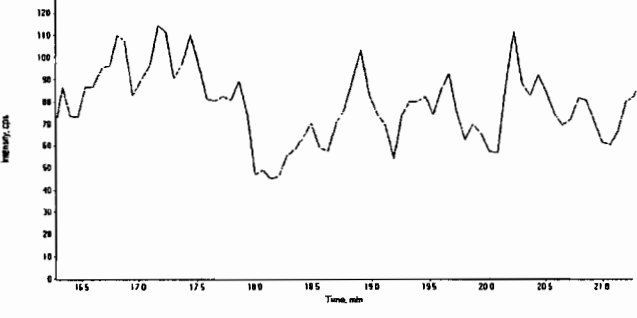
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<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

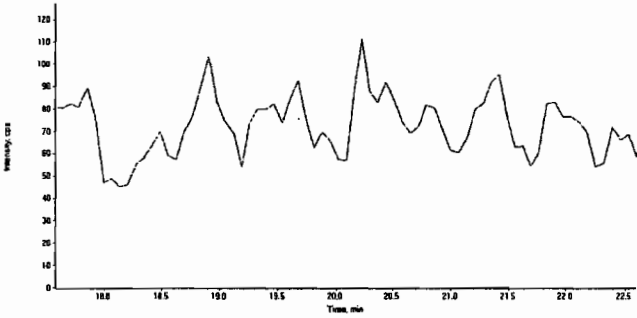
  

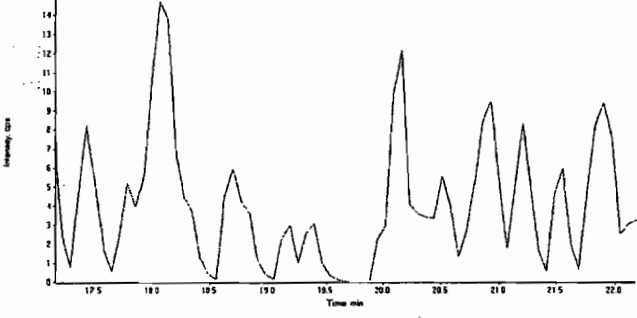
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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:	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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 15-APR-10 10:33

GEL Data File: EXP0415002.wiff

Instrument ID: LCMSMS

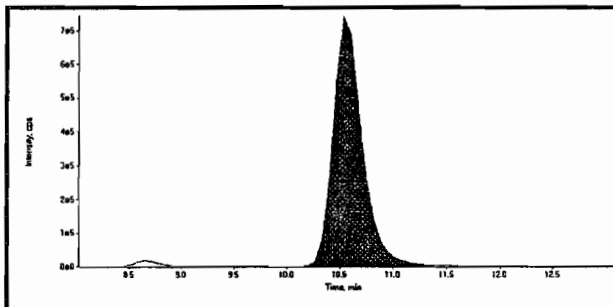
Column: Phenomenex Ultracarb 5u ODS(20)

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

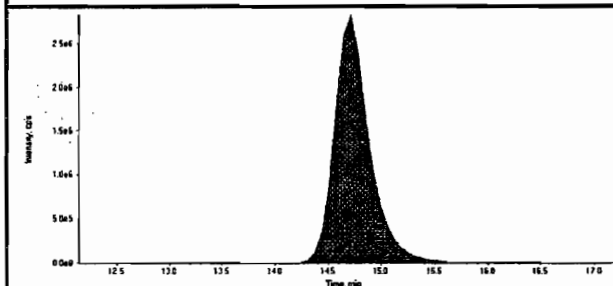
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



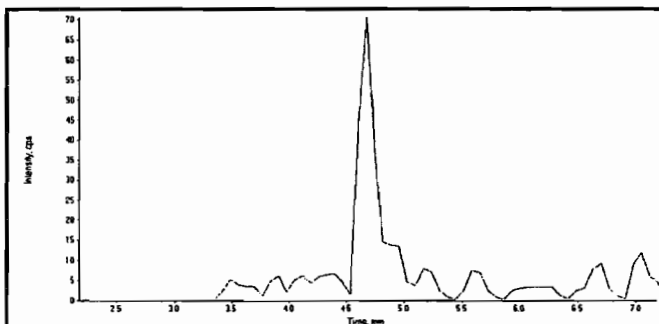
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	14400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

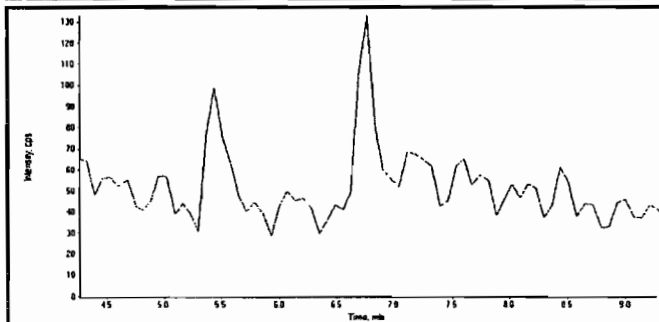


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	65600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

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

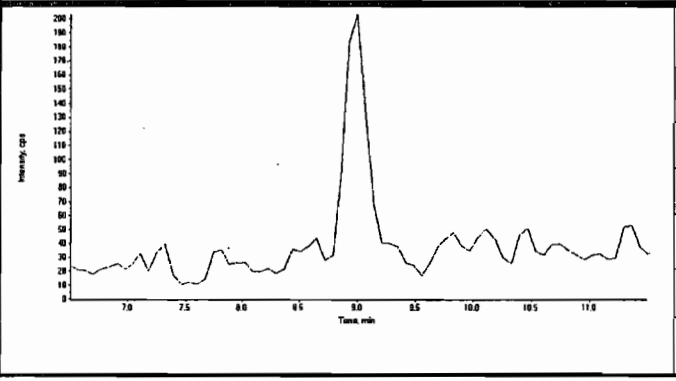
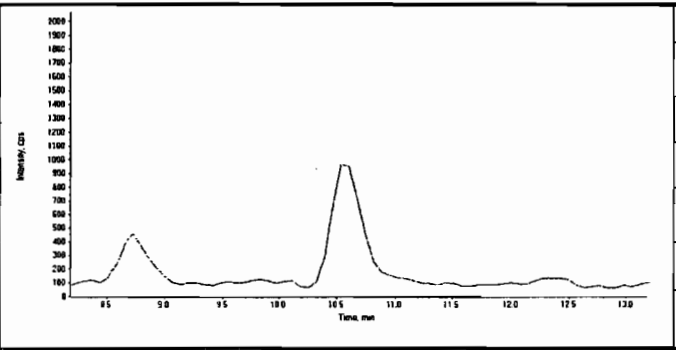
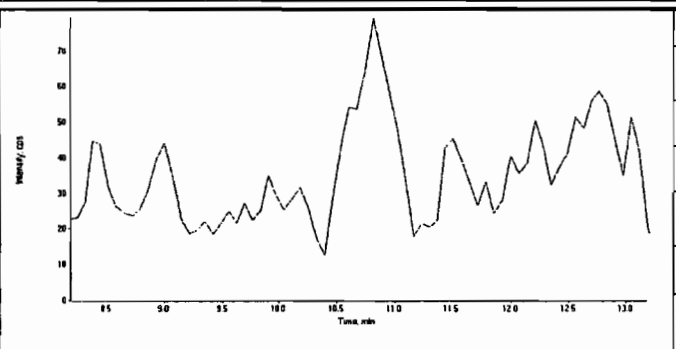
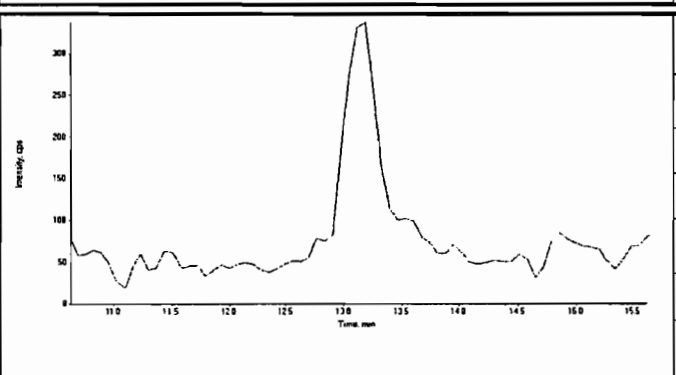


Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten signatures and dates:*  
HMC 8/12/10  
JER 8/23/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

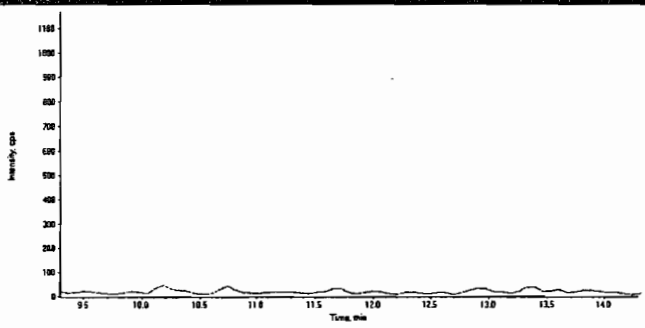
<b>Data File</b> EXP0415002.wiff <b>Sample Name</b> XIBLK01 <b>Batch Dilution Analyst</b>  1 LER <b>Procedure Code</b> LCMSEXP_B	<b>Acquisition Date</b> 4/15/2010 10:33:25 AM <b>Acquisition Method</b> 8321.dam <b>Result Table</b> 041510.rdb <b>Sample Type</b> Unknown														
	<table border="1"> <tr> <td><b>Compound Name:</b></td><td>135-Trinitrobenzene (213.0/182.8 amu)</td></tr> <tr> <td>Expected RT:</td><td>9.00</td></tr> <tr> <td>Actual RT:</td><td>0.00</td></tr> <tr> <td>Area Counts:</td><td>0.00e+000</td></tr> <tr> <td>Manual Modification</td><td>No</td></tr> <tr> <td>Amount:</td><td>N/A (ng/mL)</td></tr> <tr> <td>% Accuracy:</td><td>N/A</td></tr> </table>	<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>	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														
	<table border="1"> <tr> <td><b>Compound Name:</b></td><td>13-Dinitrobenzene (168.0/137.9 amu)</td></tr> <tr> <td>Expected RT:</td><td>10.7</td></tr> <tr> <td>Actual RT:</td><td>0.00</td></tr> <tr> <td>Area Counts:</td><td>0.00e+000</td></tr> <tr> <td>Manual Modification</td><td>No</td></tr> <tr> <td>Amount:</td><td>N/A (ng/mL)</td></tr> <tr> <td>% Accuracy:</td><td>N/A</td></tr> </table>	<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>	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														
	<table border="1"> <tr> <td><b>Compound Name:</b></td><td>Tetryl (241.0/180.8 amu)</td></tr> <tr> <td>Expected RT:</td><td>10.7</td></tr> <tr> <td>Actual RT:</td><td>0.00</td></tr> <tr> <td>Area Counts:</td><td>0.00e+000</td></tr> <tr> <td>Manual Modification</td><td>No</td></tr> <tr> <td>Amount:</td><td>N/A (ng/mL)</td></tr> <tr> <td>% Accuracy:</td><td>N/A</td></tr> </table>	<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>	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														
	<table border="1"> <tr> <td><b>Compound Name:</b></td><td>246-Trinitrotoluene (227.1/209.8 amu)</td></tr> <tr> <td>Expected RT:</td><td>13.1</td></tr> <tr> <td>Actual RT:</td><td>0.00</td></tr> <tr> <td>Area Counts:</td><td>0.00e+000</td></tr> <tr> <td>Manual Modification</td><td>No</td></tr> <tr> <td>Amount:</td><td>N/A (ng/mL)</td></tr> <tr> <td>% Accuracy:</td><td>N/A</td></tr> </table>	<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
<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

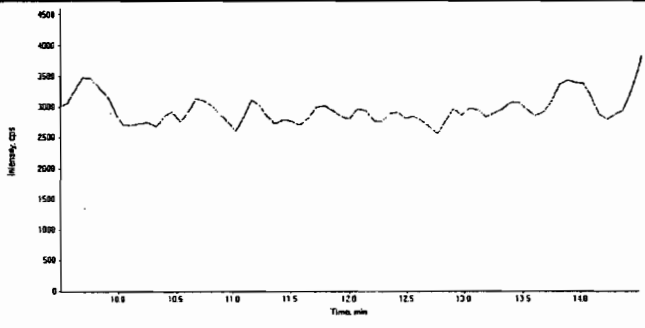
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

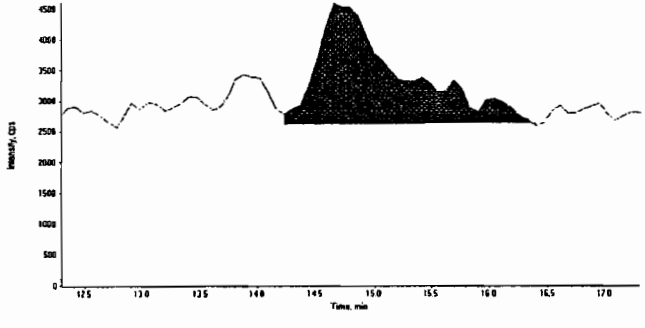
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

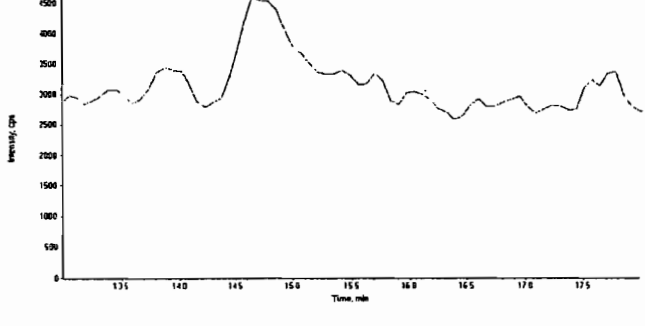
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<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)
	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>	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>	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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 09-APR-10 07:14

GEL Data File: EXS04090001.wiff

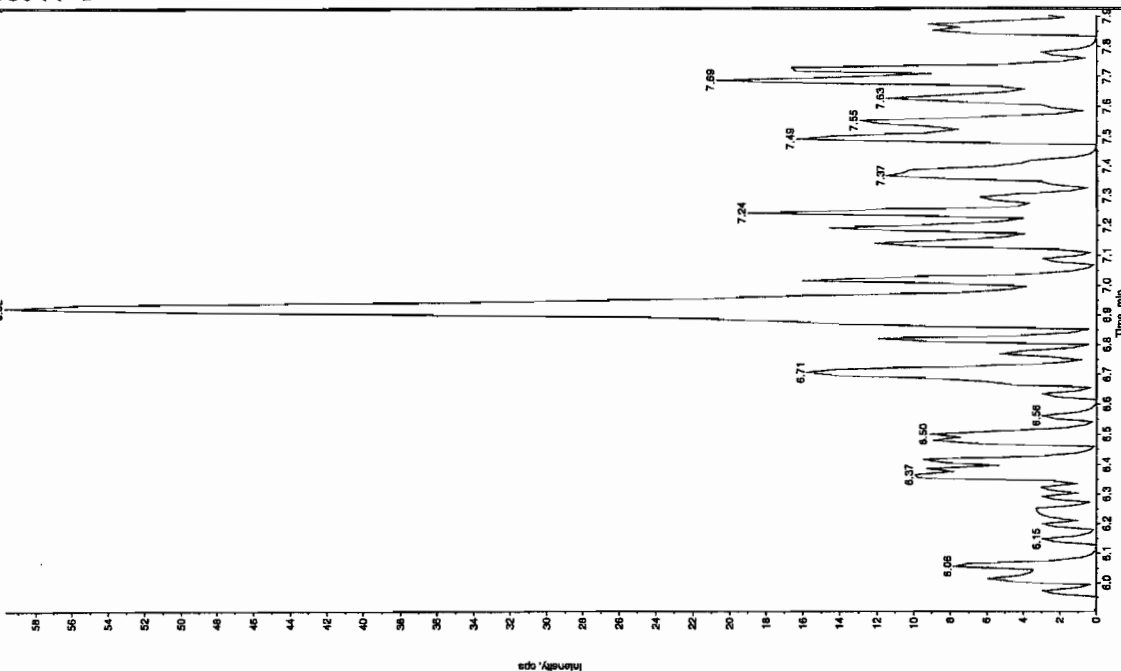
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

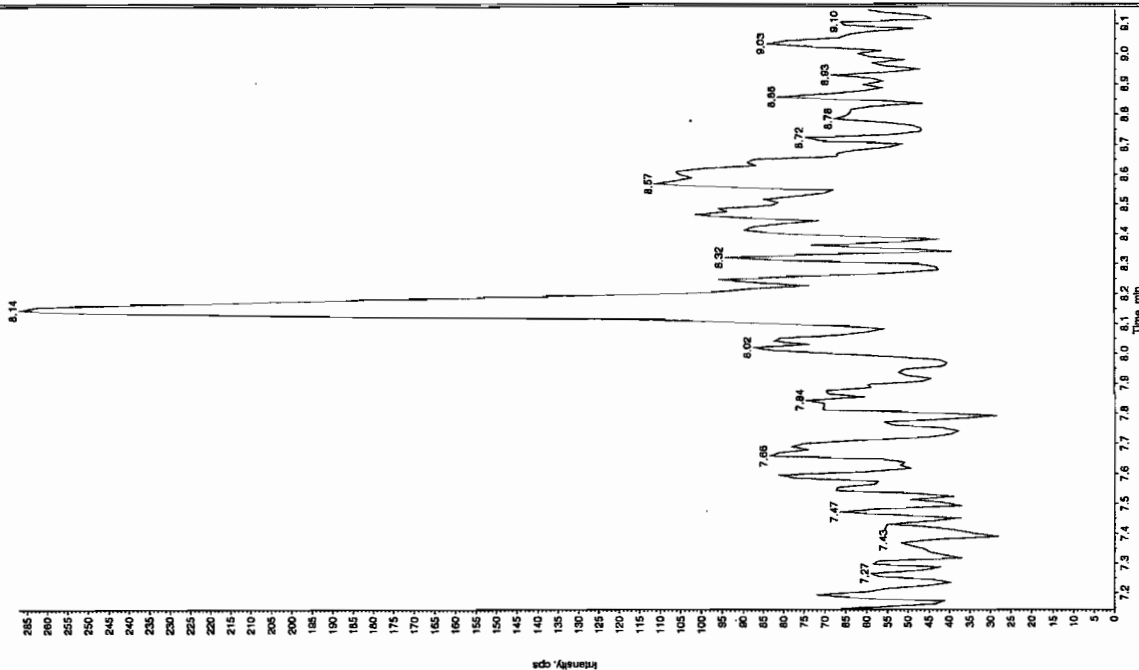
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.08
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 4/12/10

Sample Name: "XIBLXG1" Sample ID: "11111" File: "EXS04090001.wif"  
 Peak Name: "TATB" Mass(es): "257.2/204.8 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



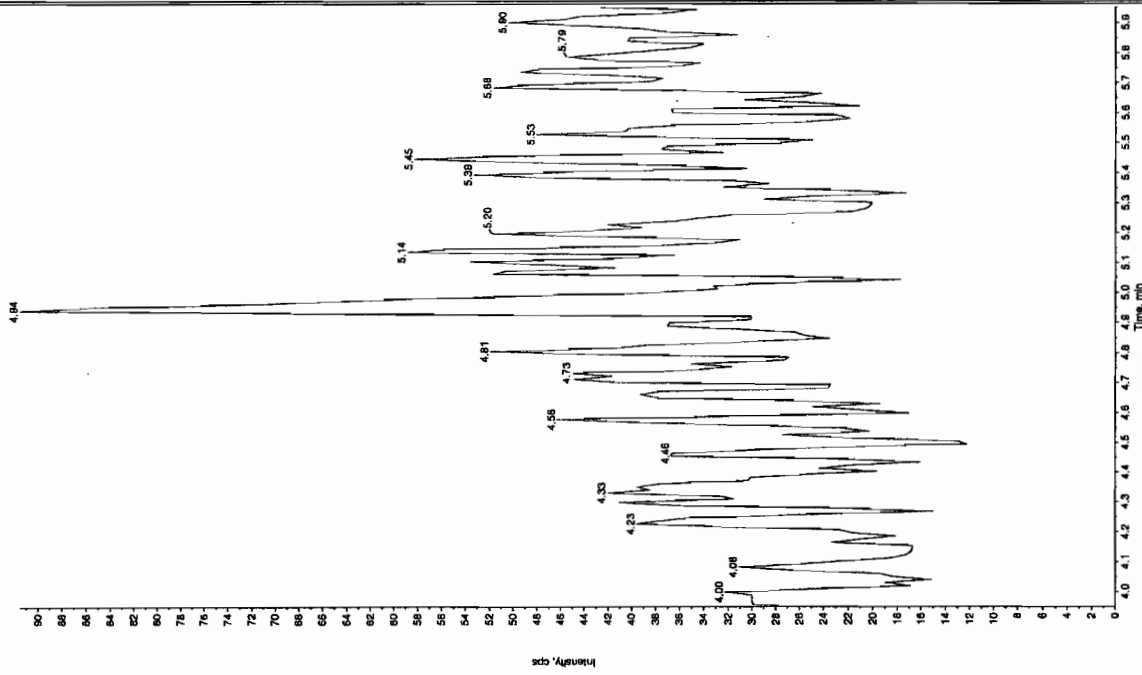
Sample Name: "XIBLXG1" Sample ID: "11111" File: "EXS04090001.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:14:41 AM  
 Modified: No



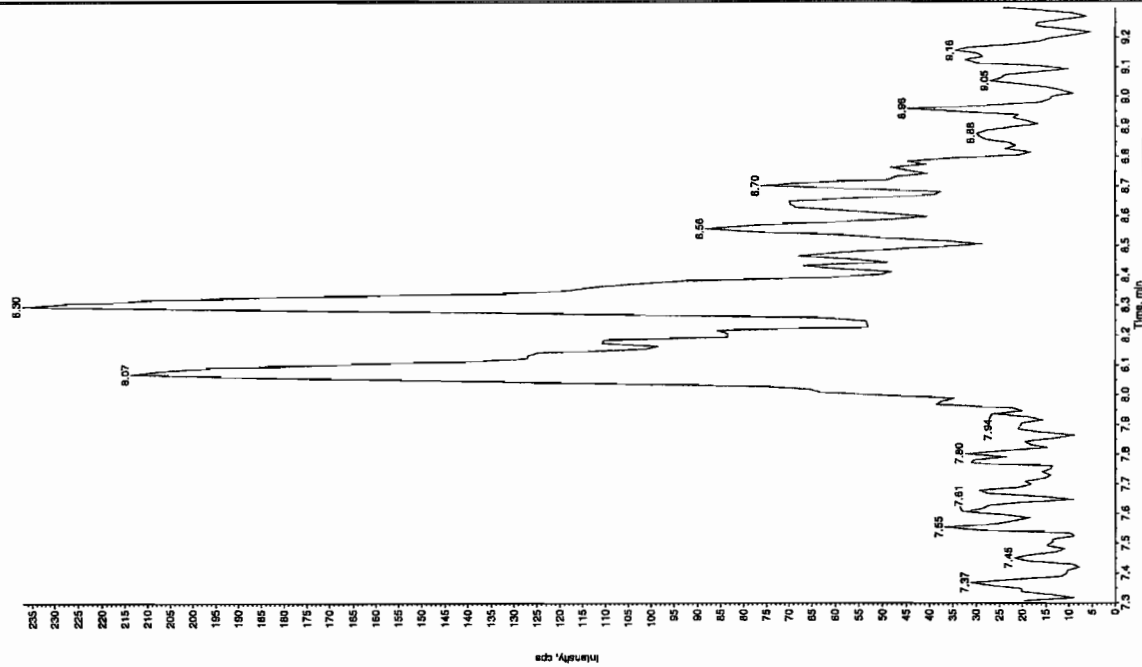
See 4/12/10



Sample Name: "XIBLK01" Sample ID: "111ER" File: "EXS04090001.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0745.0 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: 7:14:41 AM  
 Modified: No



Sample Name: "XIBLK01" Sample ID: "111ER" File: "EXS04090001.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 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: 7:14:41 AM  
 Modified: No



Sample Name: "XIBLK01" Sample ID: "11LER" File: "EXS04090001.wif"

Peak Name: "tris(2-oresyl) phosphate" Mass(es): "388.191.0 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 4/9/2010

Acq. Date: 7:14:41 AM

Acq. Time: 7:14:41 AM

Modified: No

Proc. Algorithm: IntelliQuan - TOA

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

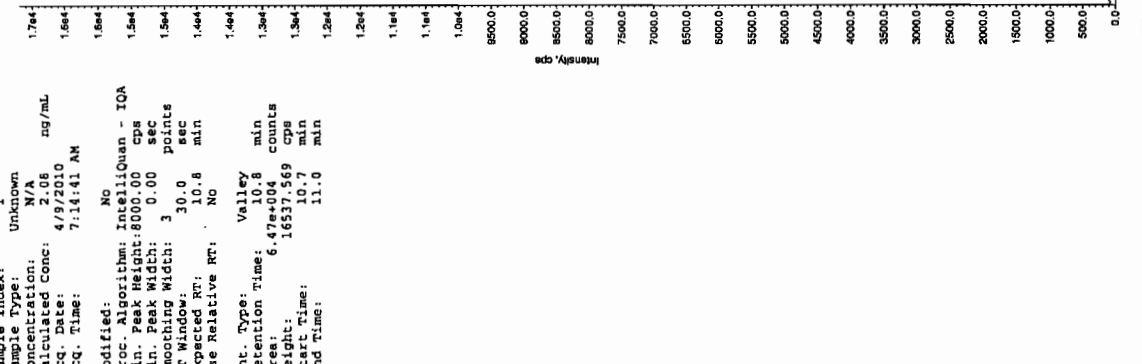
Retention Time: 10.8 min

Area: 6.47e+004 counts

Height: 16537.569 cps

Start Time: 10.7 min

End Time: 11.0 min



Sample Name: "XIBLK01" 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

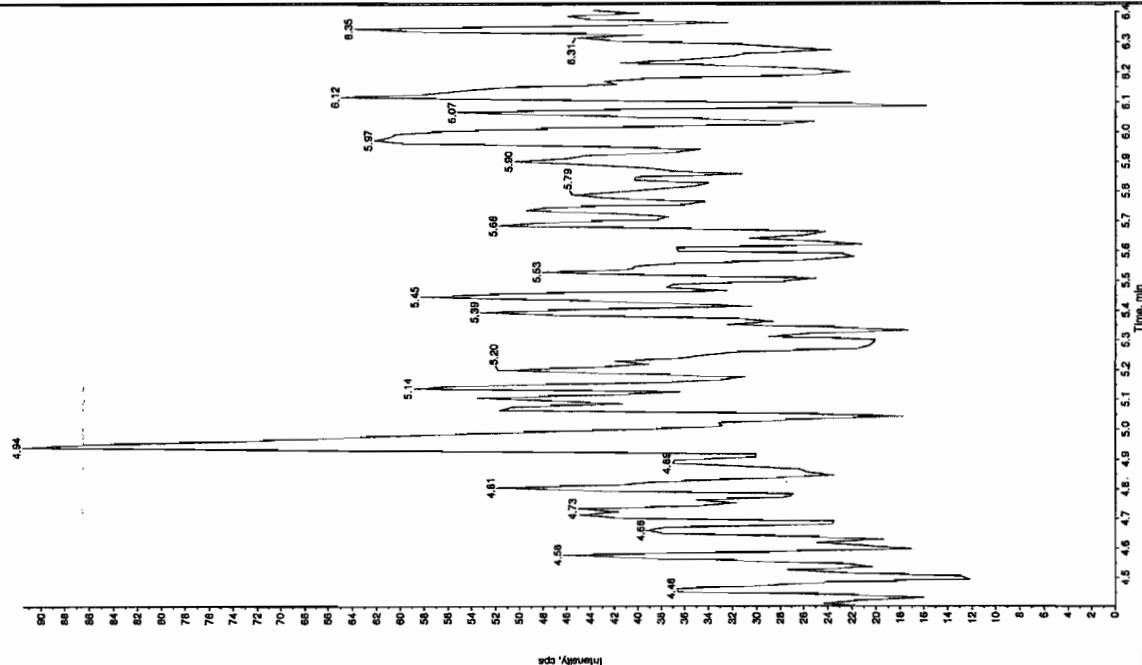
Concentration: N/A ng/mL

Calculated Conc: 4/9/2010

Acq. Date: 7:14:41 AM

Acq. Time: 7:14:41 AM

Modified: No



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 09-APR-10 07:30

GEL Data File: EXS04090002.wiff

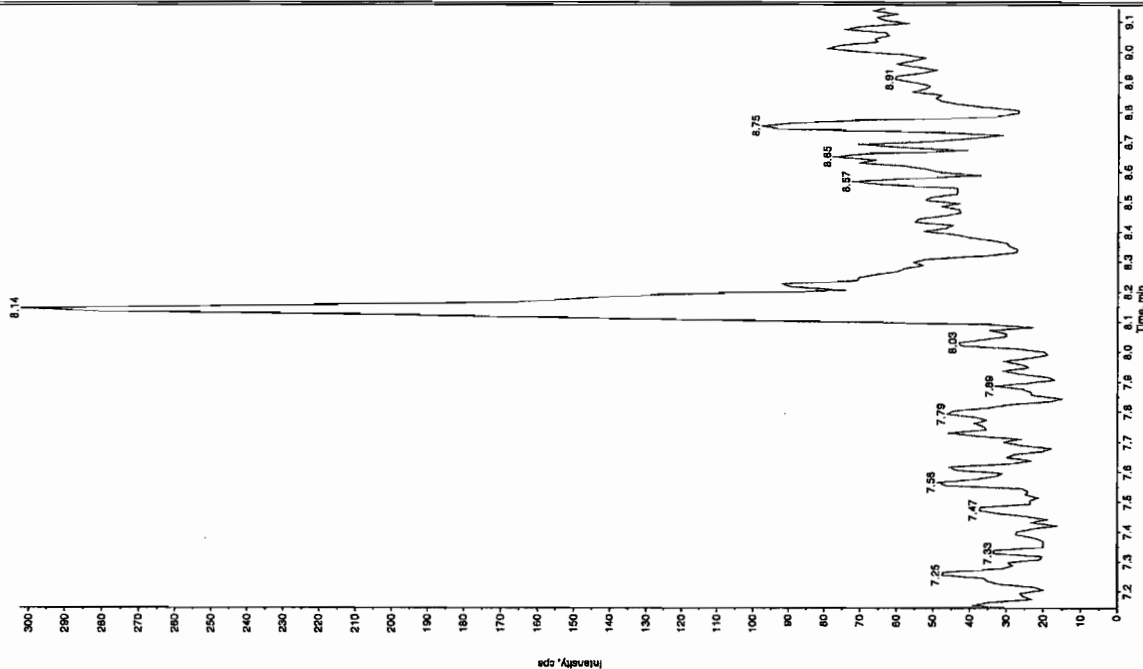
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

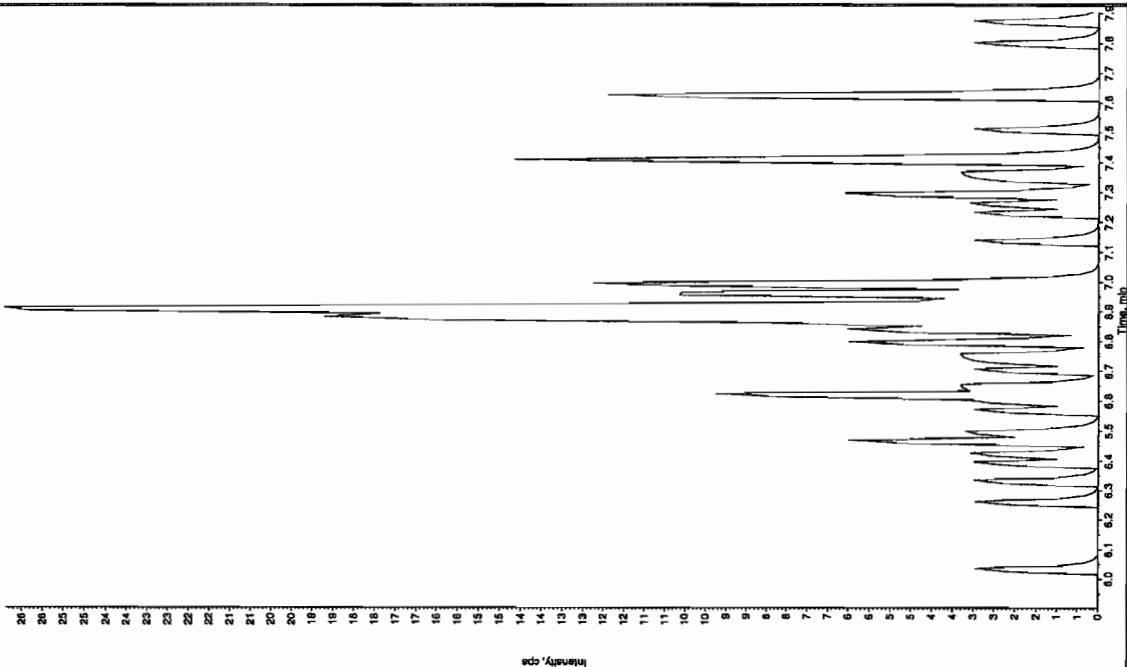
Compound	True	Found (ug/L)
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.56
TATB	0	0

Jan 4/12/10

Sample Name: "XIBLK01" Sample ID: "111ER" File: "EXS04080002.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: 4/9/2010  
 Acq. Time: 7:30:29 AM  
 Modified: No



Sample Name: "XIBLK01" Sample ID: "111ER" File: "EXS04080002.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: 7:30:29 AM  
 Modified: No

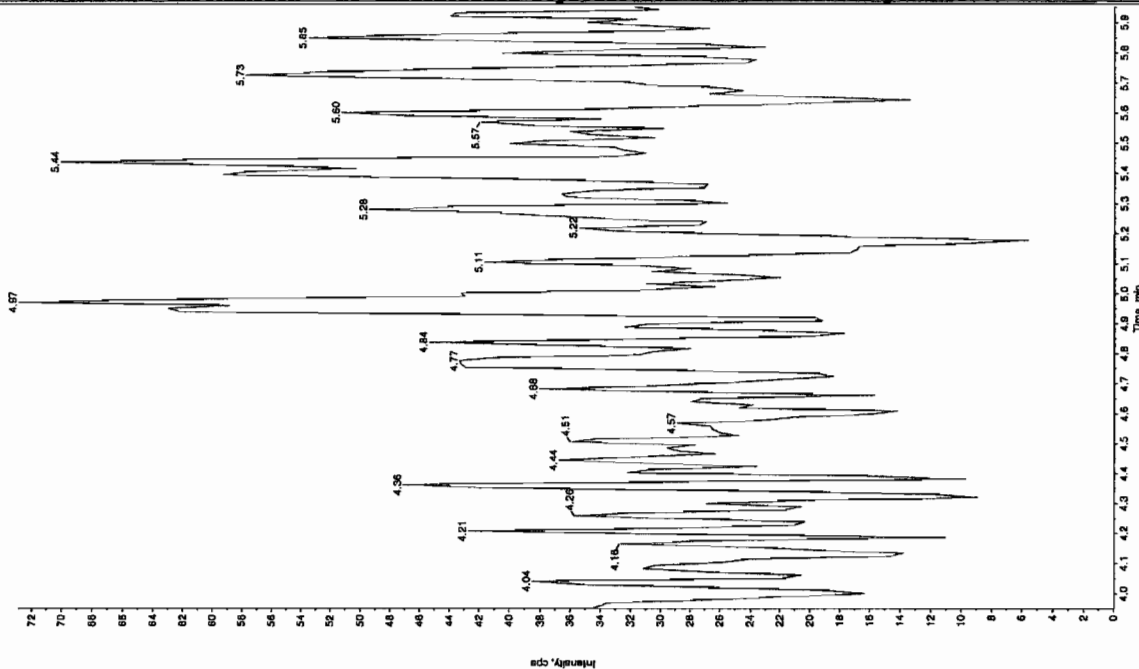


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Jan 4/12/10

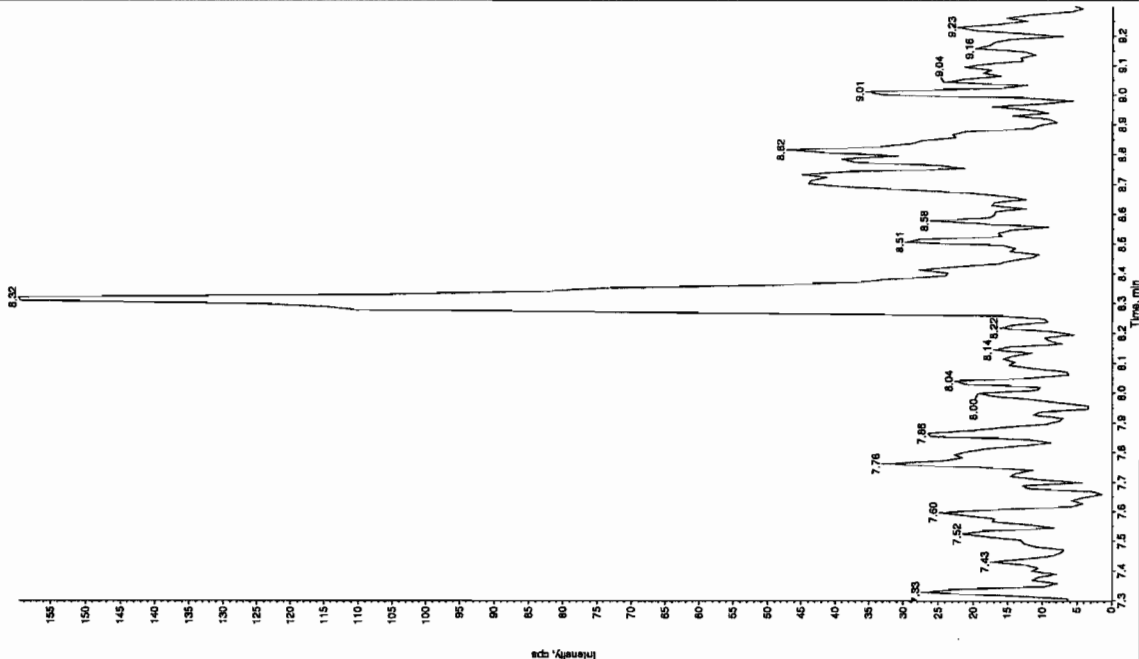
Sample Name: "XBLK01" Sample ID: "11LER" File: "EXS04090002.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Recd. Date: 4/9/2010  
 Acq. Time: 7:30:29 AM  
 Modified: NO



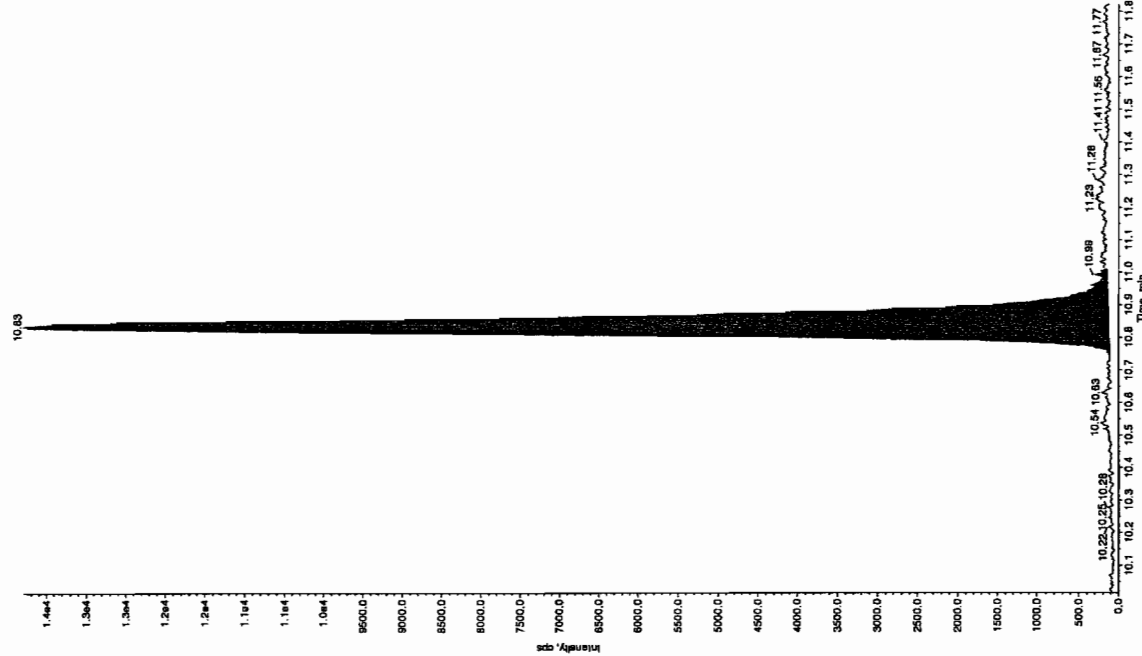
Sample Name: "XBLK01" Sample ID: "11LER" File: "EXS04090002.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Recd. Date: 4/9/2010  
 Acq. Time: 7:30:29 AM  
 Modified: NO



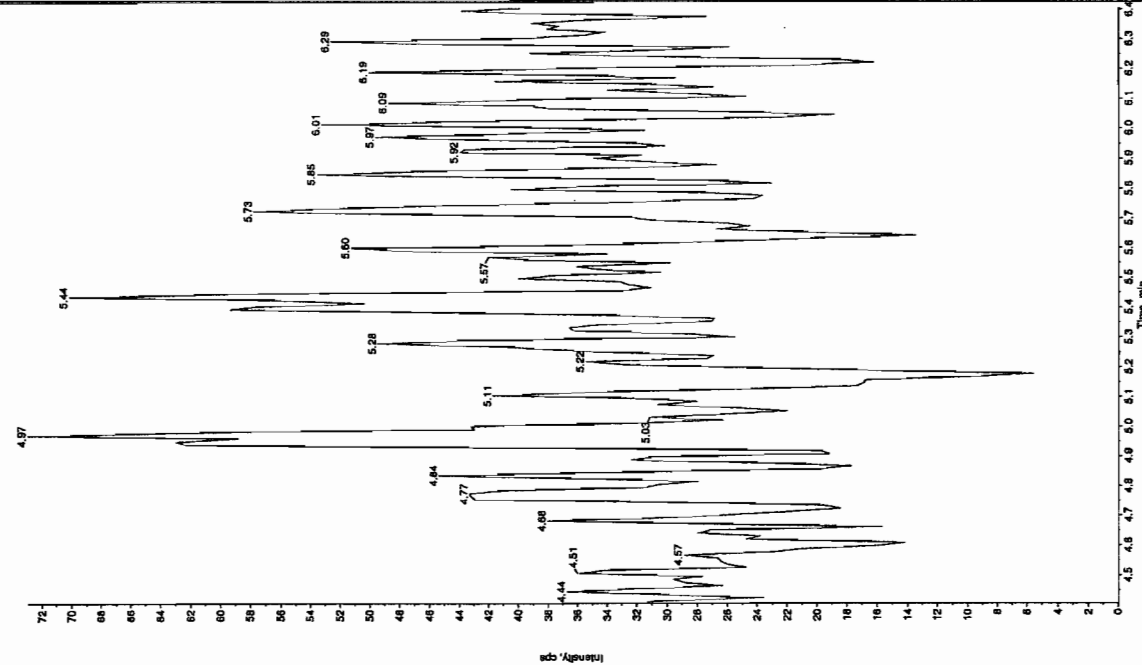
Sample Name: "XIBLK01" Sample ID: "11LER" File: "EX04080002.wif"  
 Peak Name: "tris(2-ethyl phosphite)" Mass(es): "366.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 1.56 ng/mL  
 Calculated Conc: 1.56 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:30:29 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.0 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: "XIBLK01" Sample ID: "11LER" File: "EX04080002.wif"  
 Peak Name: "24-Dinitro-6-nitrotoluenes" Mass(es): "168.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: N/A  
 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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 15-APR-10 13:35

GEL Data File: EXP0415009.wiff

Instrument ID: LCMSMS

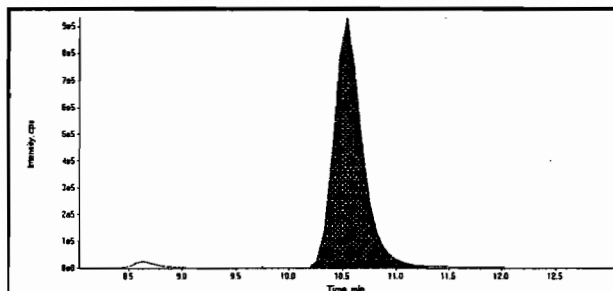
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
2,6-Dinitrotoluene	0	0

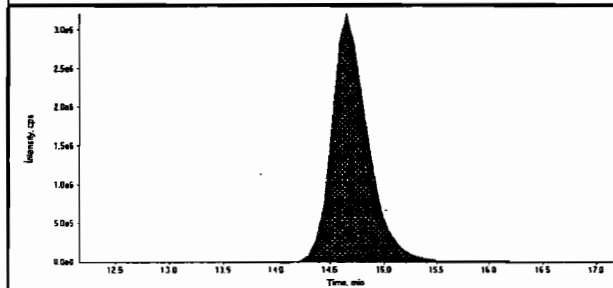
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

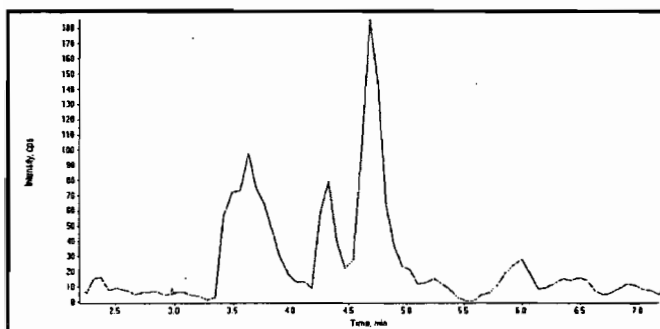
Data File	EXP0415009.wiff	Acquisition Date	4/15/2010 1:35:02 PM
Sample Name	XIBLK02	Acquisition Method	8321.dam
Batch/Dilution/Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



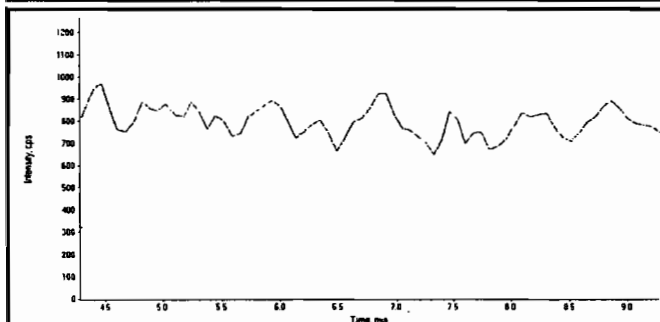
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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

*Handwritten signatures and dates:*  
 HMC 04/23/10  
 JER 4/23/10

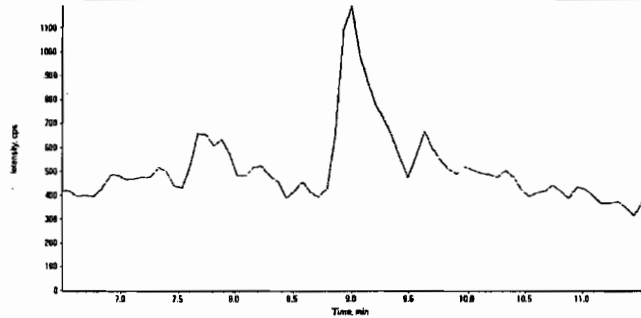


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

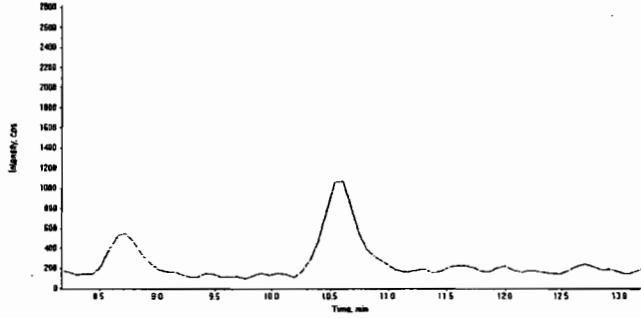
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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

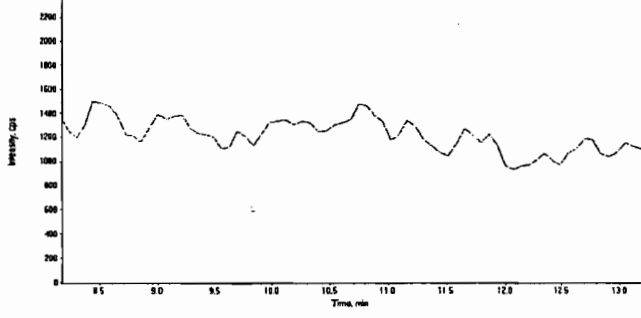
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

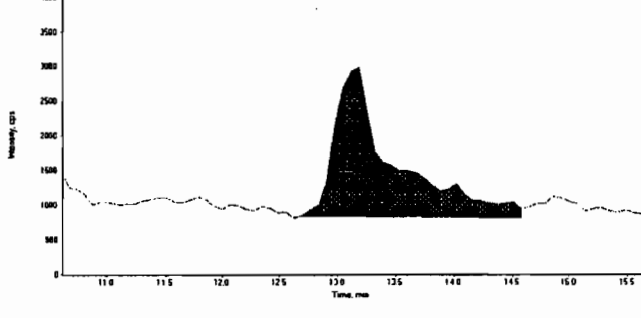
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<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

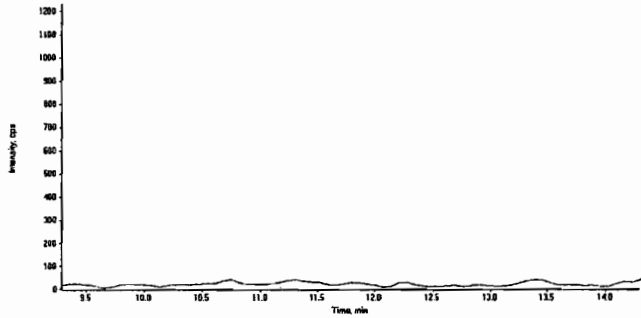
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	7.76e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

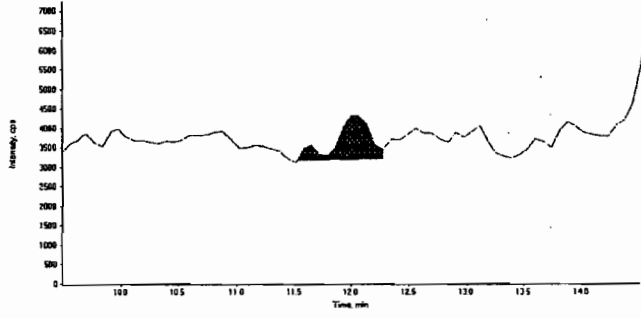
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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

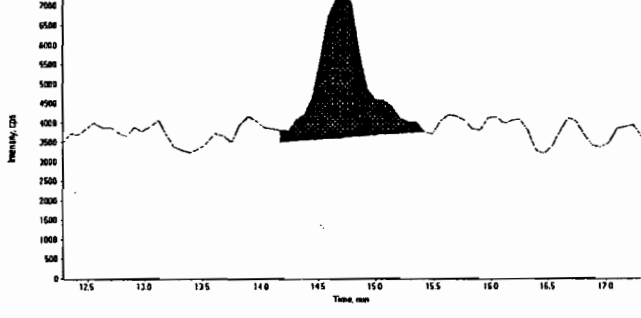
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

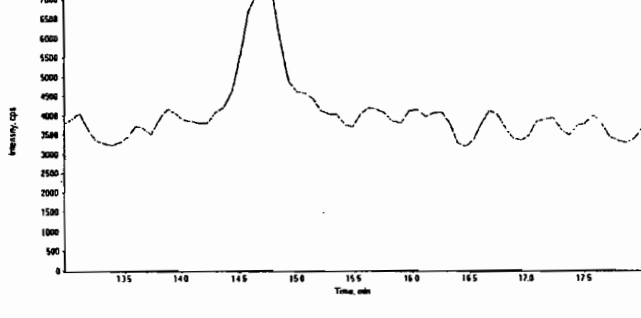
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	12.0
	<b>Area Counts:</b>	2.48e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<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>	1.08e+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>	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-26-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-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

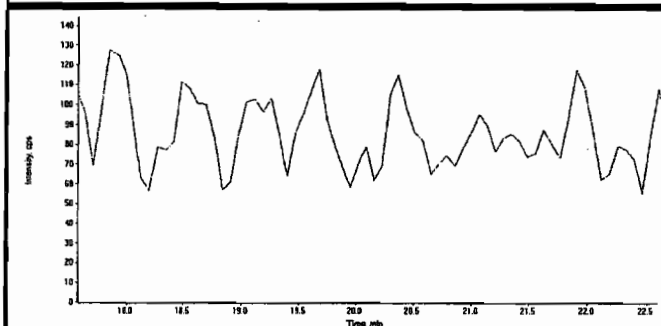
  

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

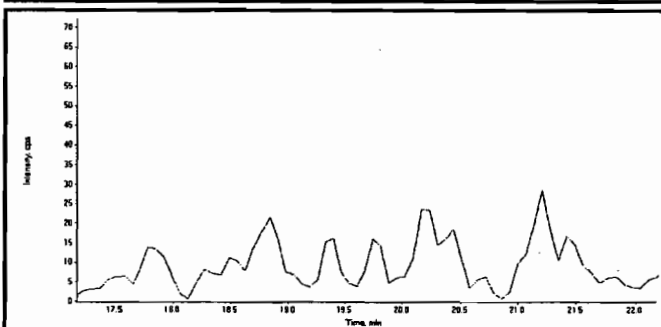
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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:	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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 15-APR-10 14:27

GEL Data File: EXP0415011.wiff

Instrument ID: LCMSMS

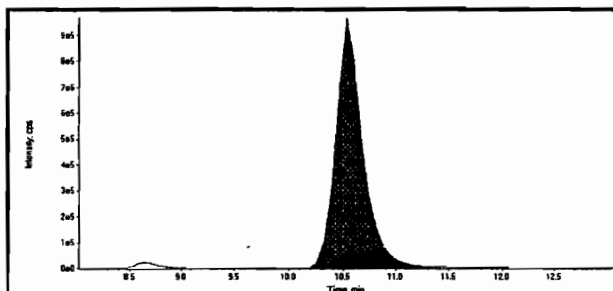
Column: Phenomenex Ultracarb 5u ODS(20)

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

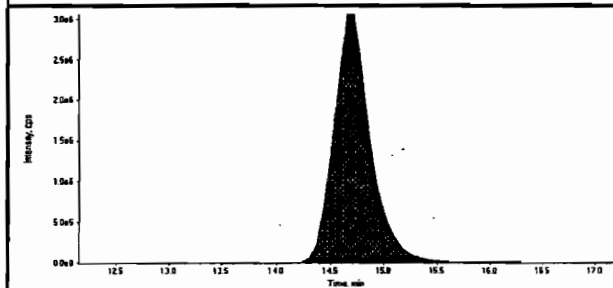
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321 A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

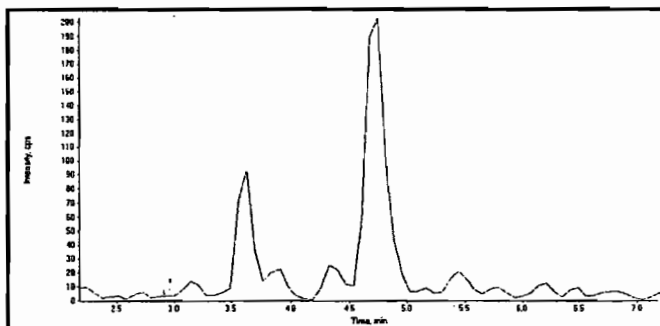
Data File	EXP0415011.wiff	Acquisition Date	4/15/2010 2:27:07 PM
Sample Name	XIBLK03	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



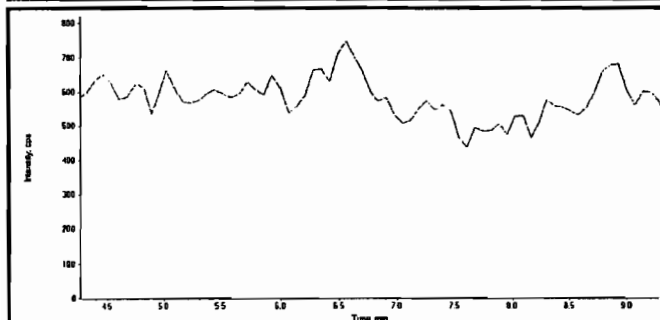
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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 4/23/10

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>	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)
	Expected RT:	9.00
	Actual RT:	9.00
	Area Counts:	1.86e+004
	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:	2.36e+004
	Manual Modification	No
	Amount:	4.37 (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:	13.1
	Area Counts:	5.58e+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>	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)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	1.23e+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

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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 15-APR-10 16:10

GEL Data File: EXP0415015.wiff

Instrument ID: LCMSMS

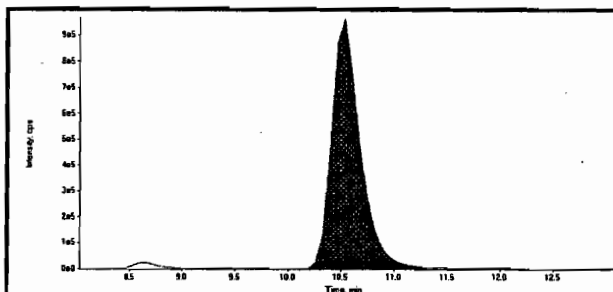
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
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

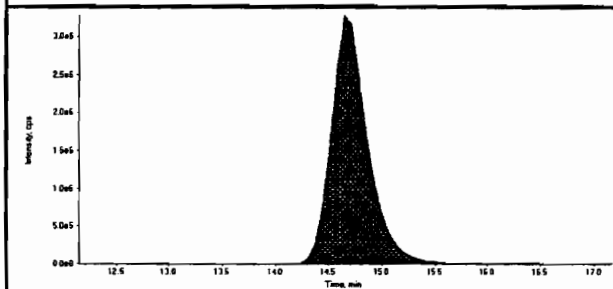
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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



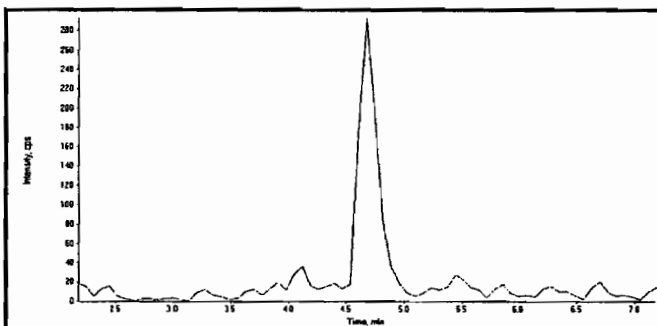
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

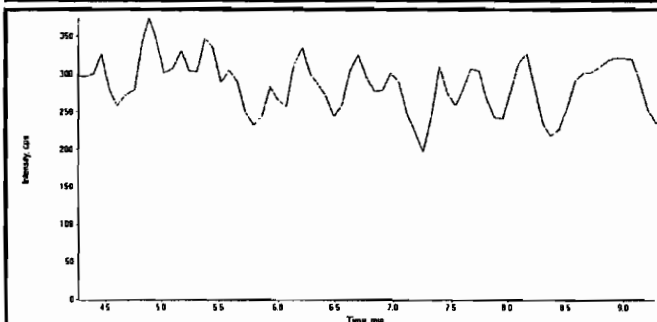


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	79300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

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

*Handwritten:*  
Hmy 04/23/10  
Lar 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>	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

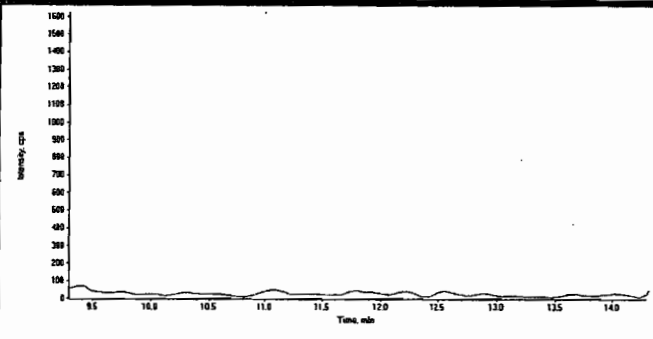
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	2.79e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

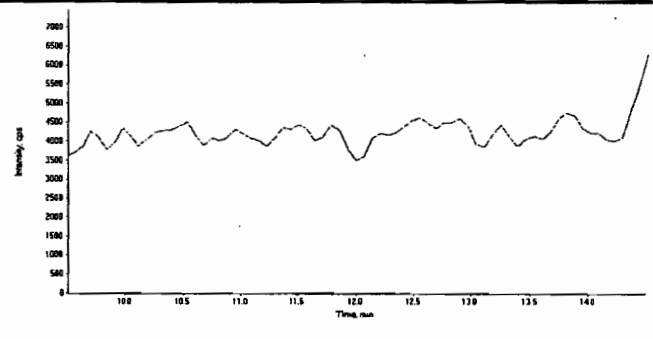
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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

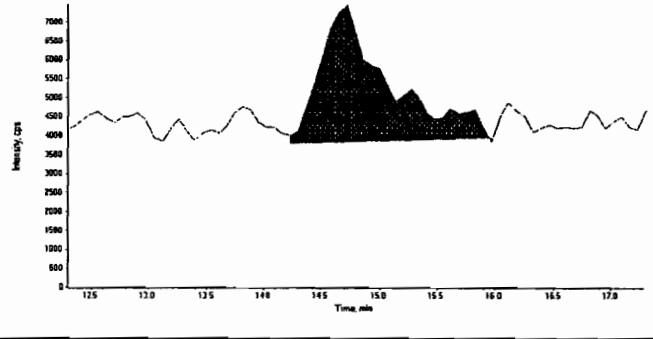
  

	Compound Name:	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

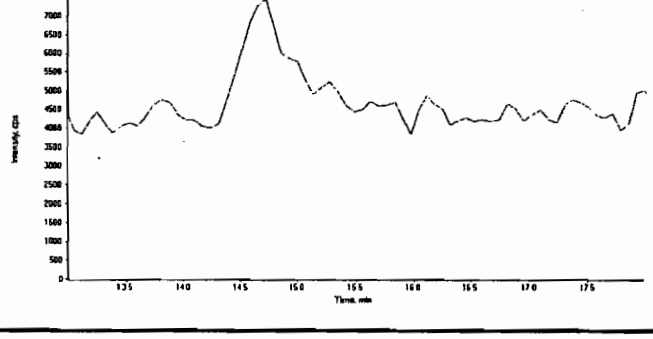
  

	Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.7
	Area Counts:	1.49e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

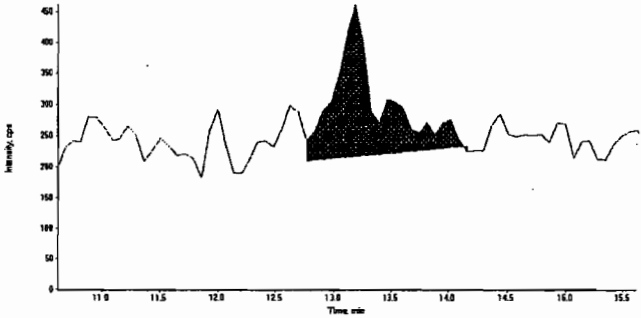
	Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

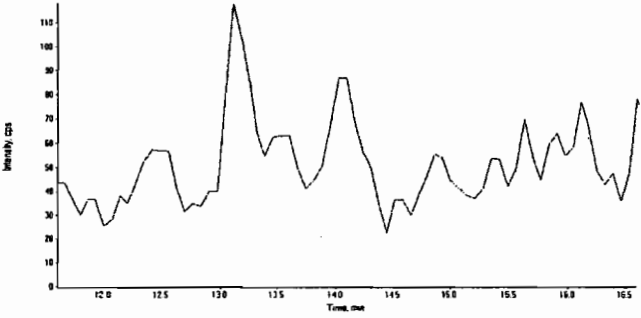
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

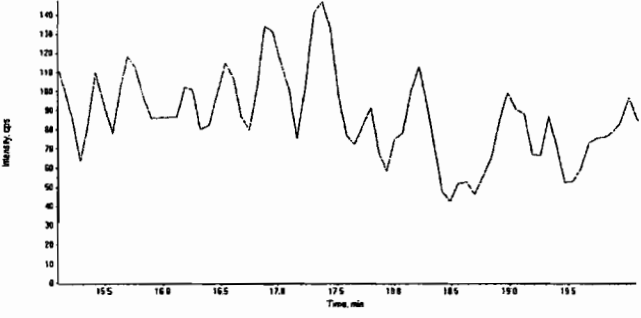
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	6.69e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

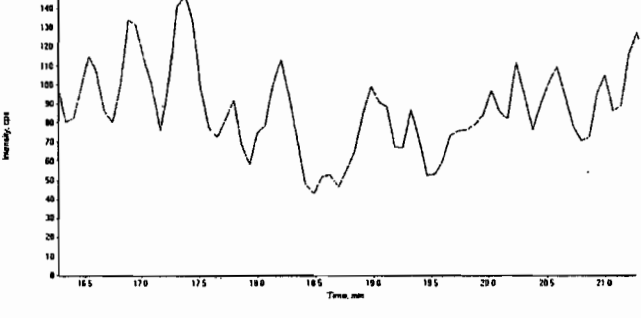
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<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

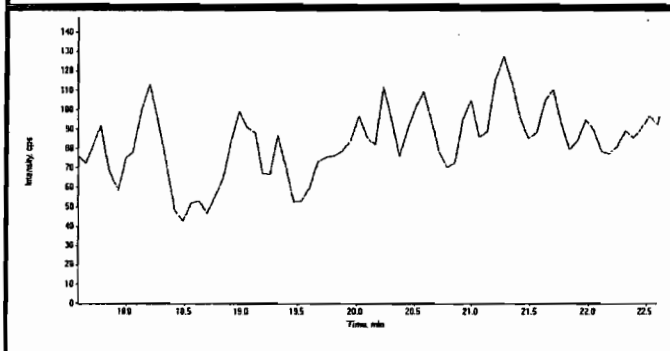
  

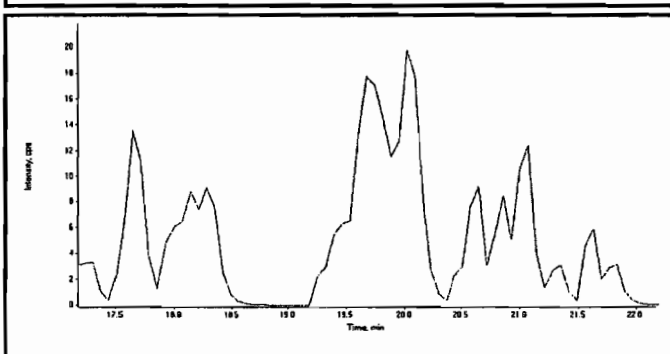
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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:	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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 15-APR-10 17:02

GEL Data File: EXP0415017.wiff

Instrument ID: LCMSMS

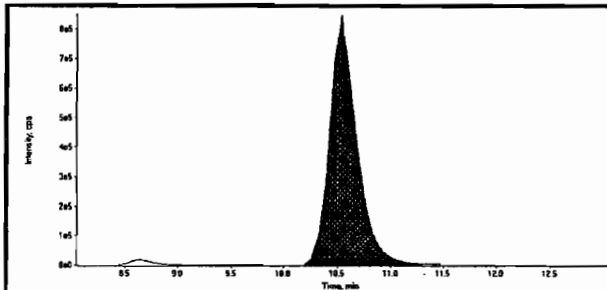
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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

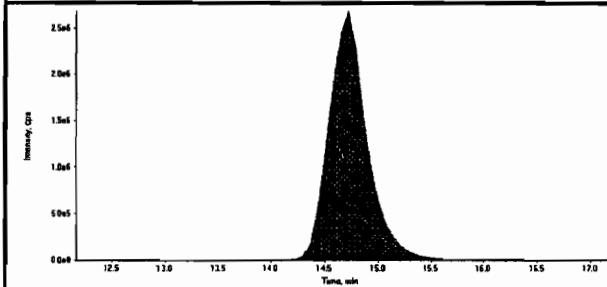
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



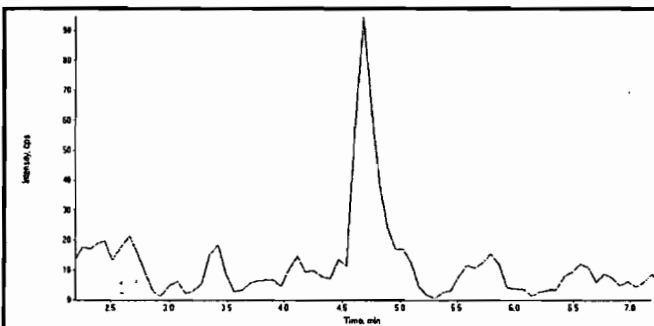
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	15200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

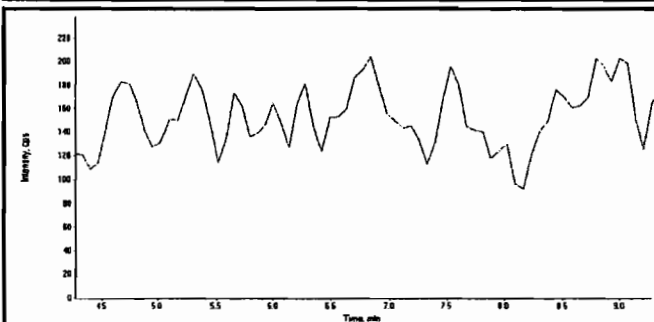


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	66500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

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

*Handwritten signature: HMX 04/23/10 Lar 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>	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

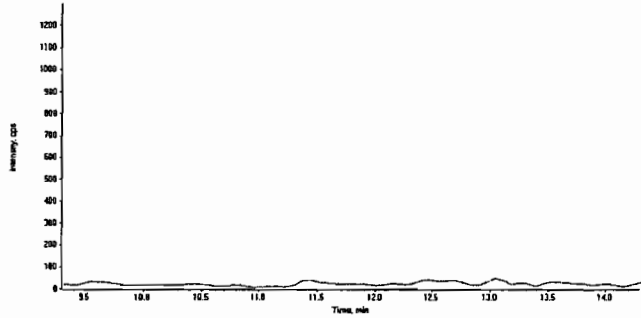
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

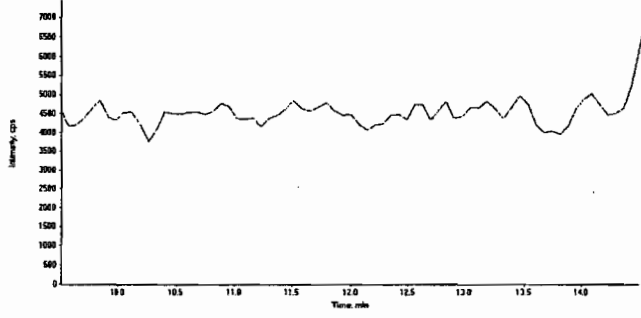
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LCMSMS#3

<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

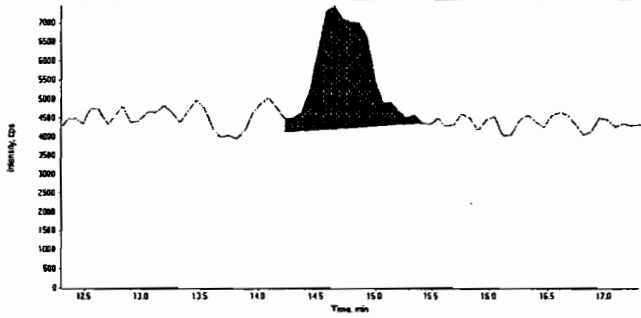
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

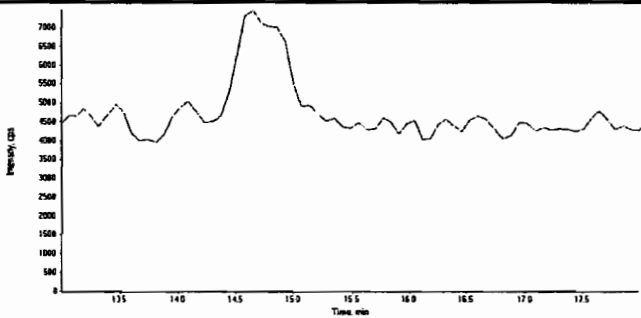
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.6
	Area Counts:	1.04e+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>	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 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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 15-APR-10 17:54

GEL Data File: EXP0415019.wiff

Instrument ID: LCMSMS

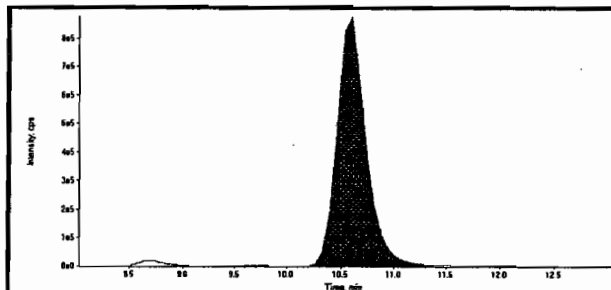
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
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

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

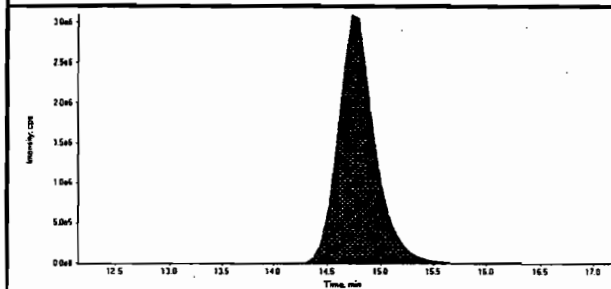
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



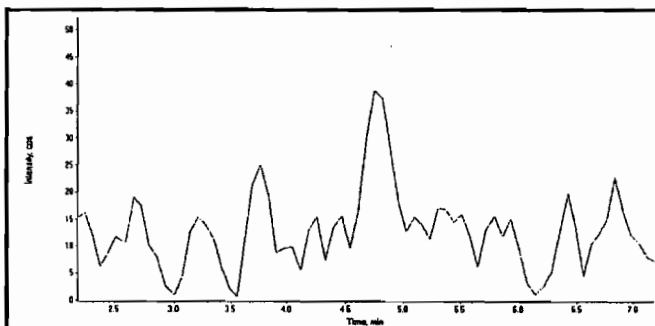
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	16700000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

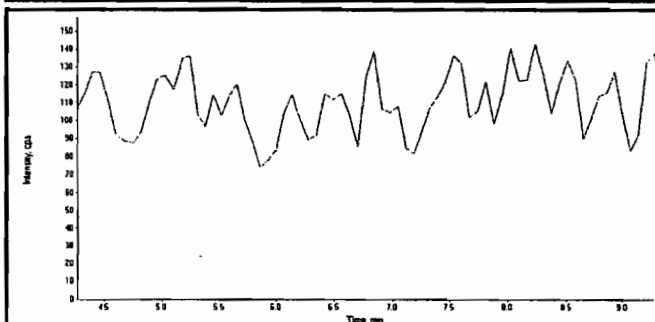


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	75000000.00
Manual Modification	No
Amount:	500.00(ng/mL)

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



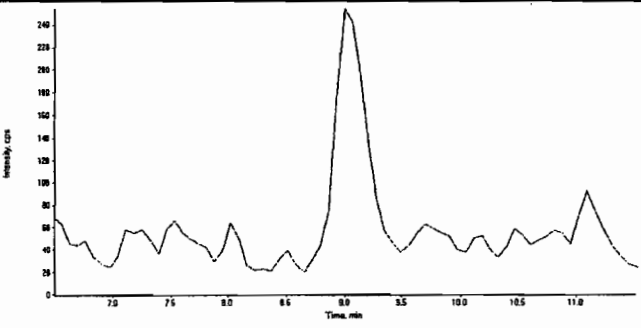
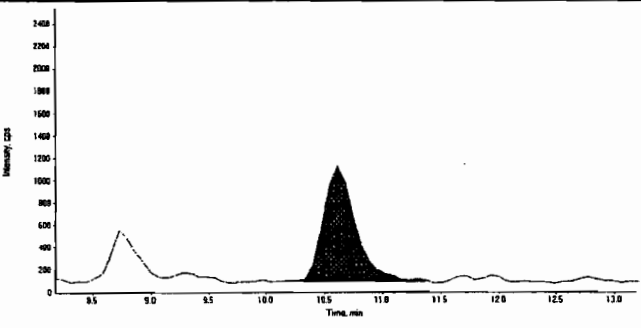
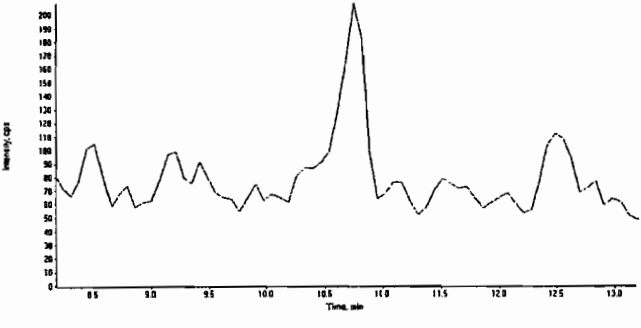
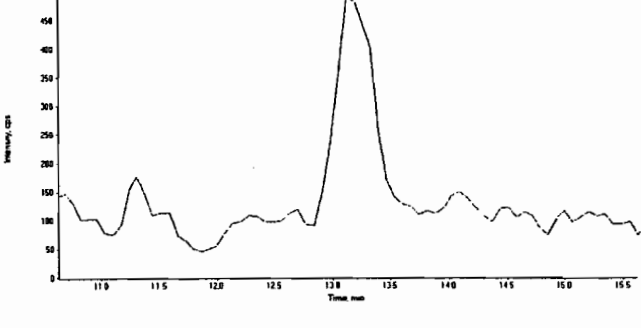
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten signature:* Hmx 04/23/10 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

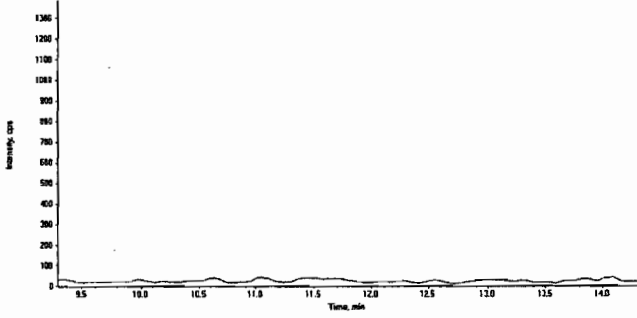
<b>Data File</b> EXP0415019.wiff <b>Sample Name</b> XIBLK06 <b>Batch Dilution Analyst</b>  1 LER <b>Procedure Code</b> LCMSEXP_B		<b>Acquisition Date</b> 4/15/2010 5:54:33 PM <b>Acquisition Method</b> 8321.dam <b>Result Table</b> 041510.rdb <b>Sample Type</b> Unknown	
		<b>Compound Name:</b>	135-Trinitrobenzene (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

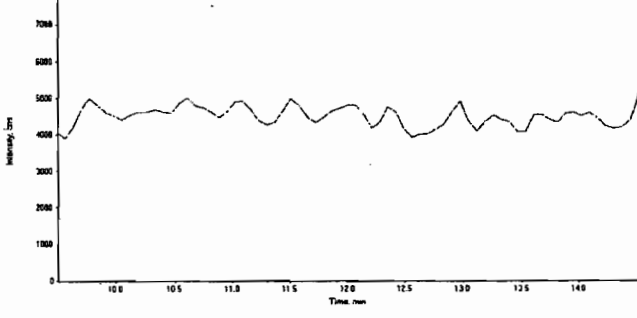
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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

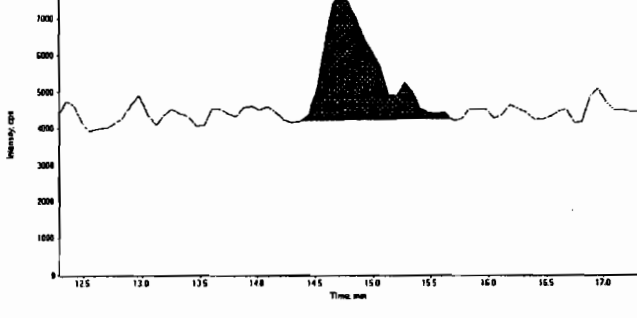
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

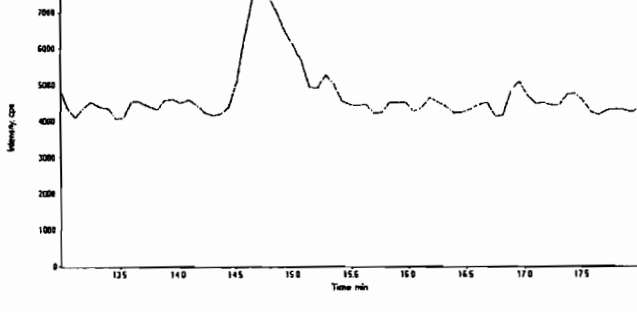
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<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)
	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

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:	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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 15-APR-10 18:46

GEL Data File: EXP0415021.wiff

Instrument ID: LCMSMS

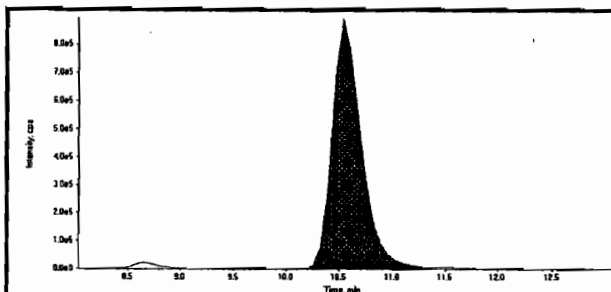
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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

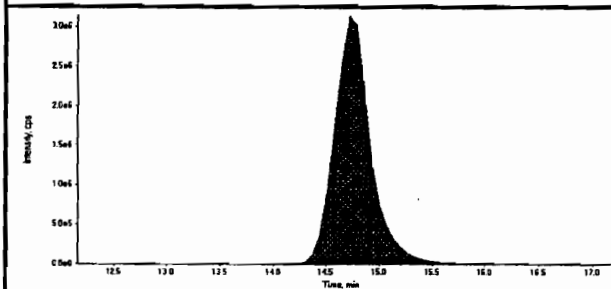
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

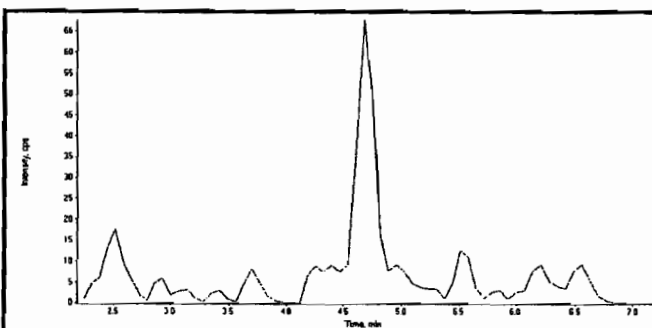
Data File	EXP0415021.wiff	Acquisition Date	4/15/2010 6:46:25 PM
Sample Name	XIBLK07	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



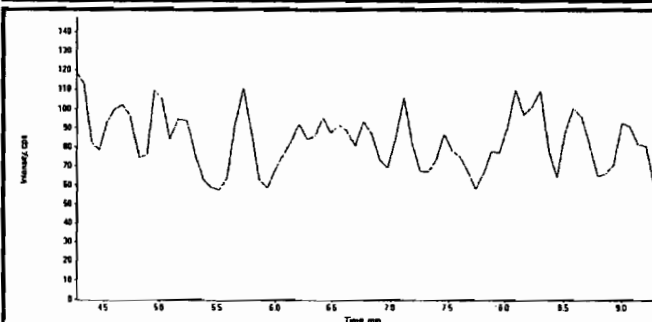
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17100000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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:	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 signature:* Hinc 04/23/10  
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)
	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

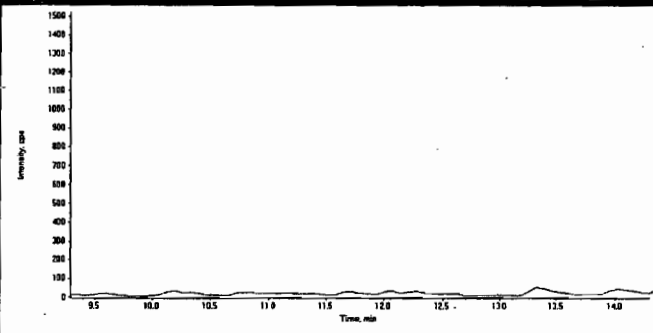
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

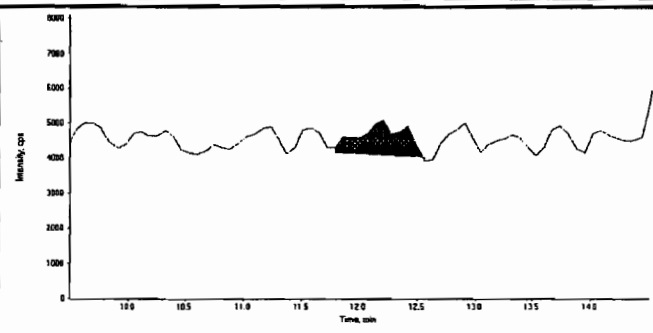
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

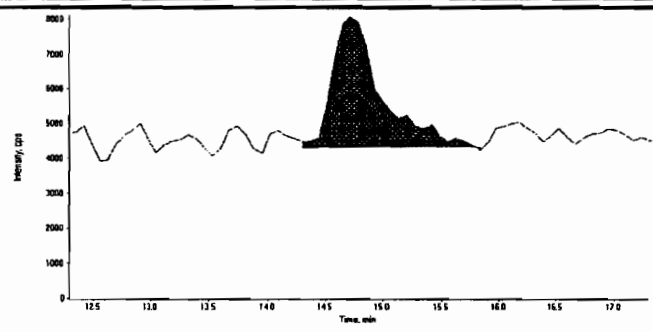
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

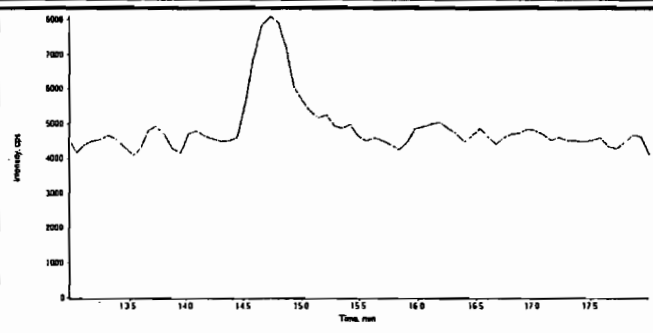
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	12.2
	<b>Area Counts:</b>	2.76e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<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

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>	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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 15-APR-10 20:04

GEL Data File: EXP0415024.wiff

Instrument ID: LCMSMS

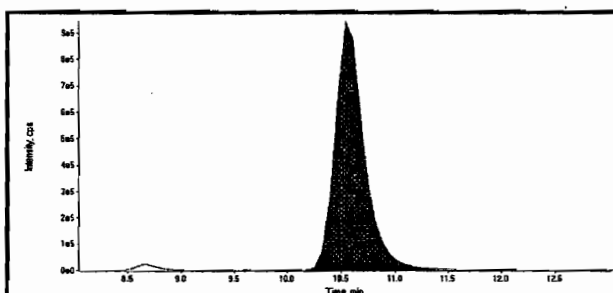
Column: Phenomenex Ultracarb 5u ODS(20)

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

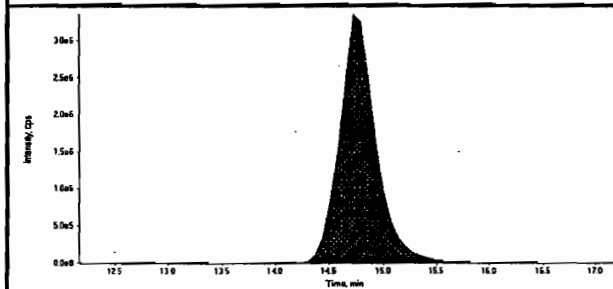
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



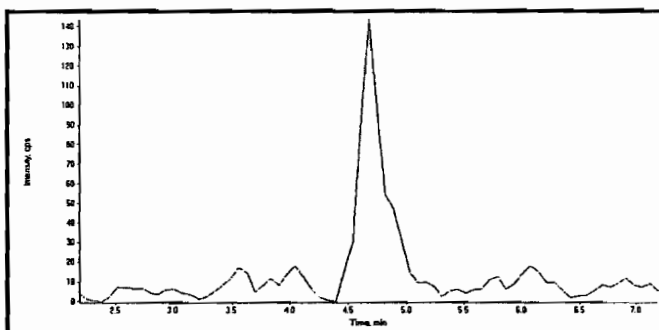
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

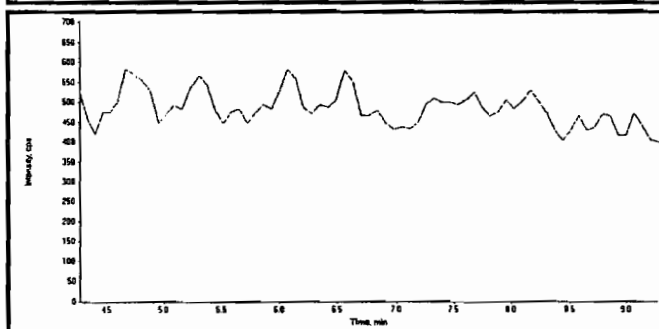


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	78900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

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

*Handwritten signature and date: 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>	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>	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:	2.58e+004
	Manual Modification	No
	Amount:	4.38 (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

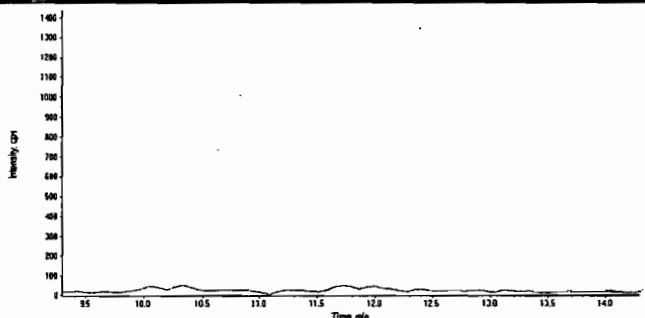
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.92e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

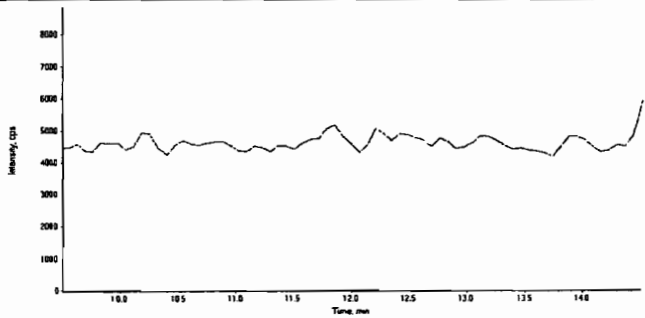
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LCMSMS#3

<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

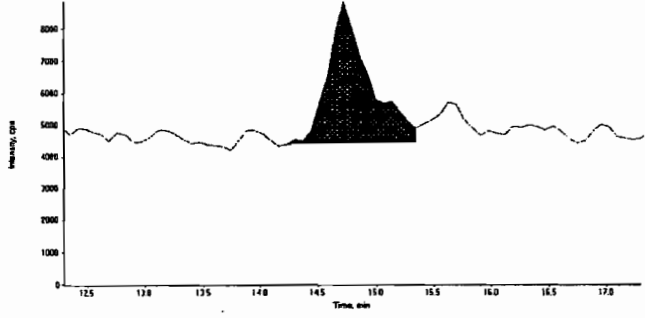
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

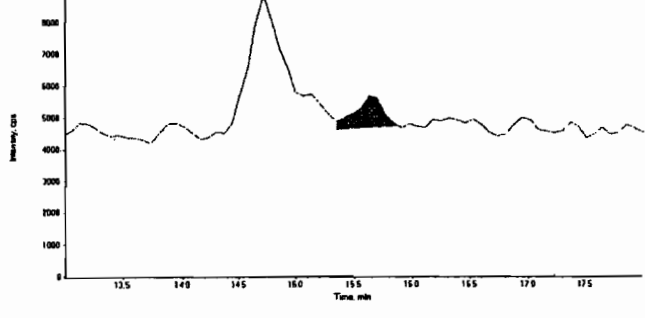
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<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>	1.12e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

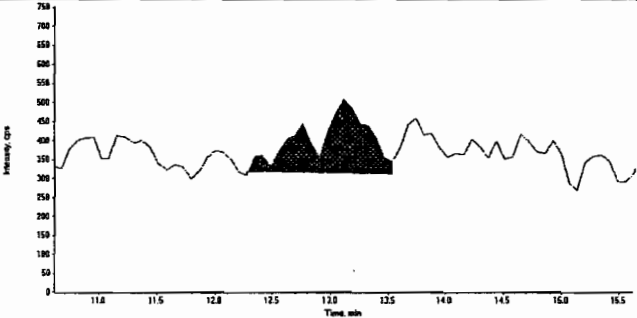
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.5
	<b>Actual RT:</b>	15.6
	<b>Area Counts:</b>	1.80e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

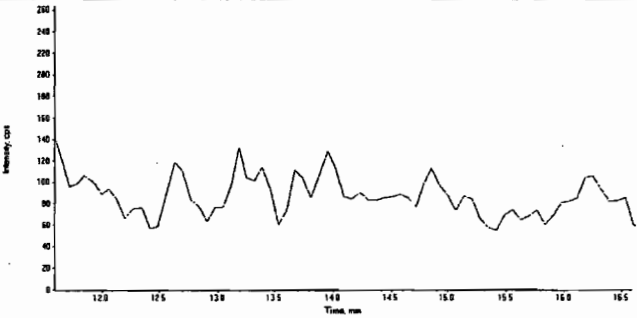
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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

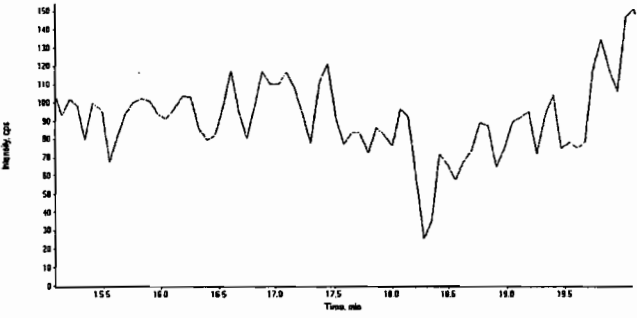
  

	Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	6.87e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

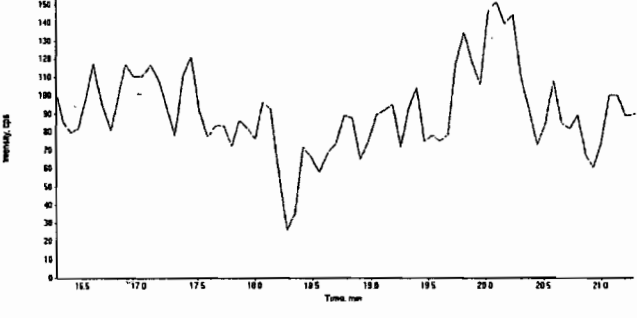
  

	Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	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

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:	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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 15-APR-10 23:05

GEL Data File: EXP0415031.wiff

Instrument ID: LCMSMS

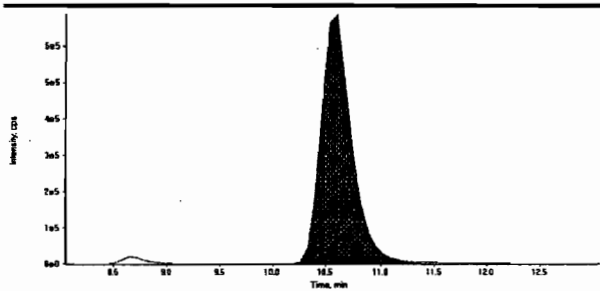
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0

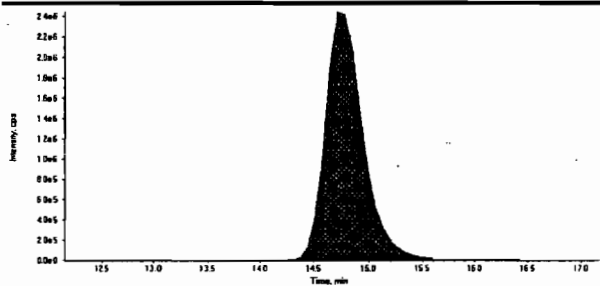
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

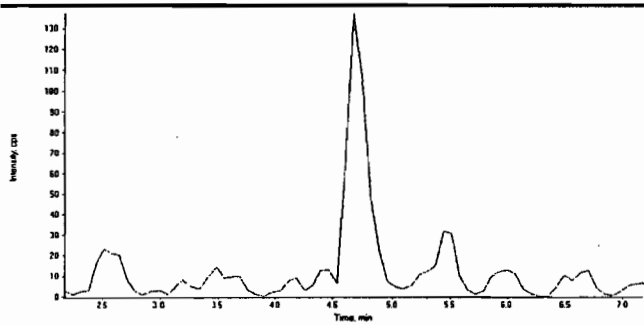
Data File	EXP0415031.wiff	Acquisition Date	4/15/2010 11:05:36 PM
Sample Name	XIBLK09	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



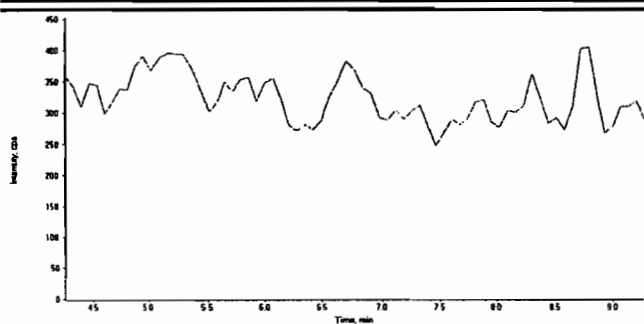
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	13600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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



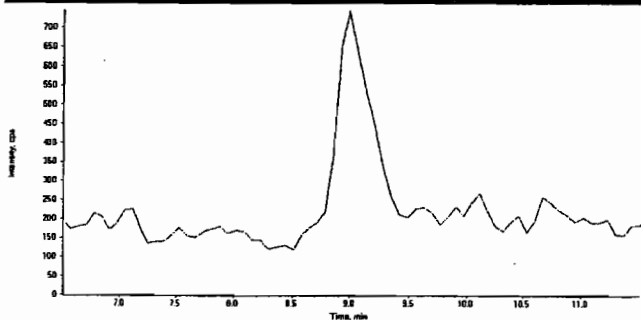
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:*  
Done 4/23/10  
Jax 4/23/10

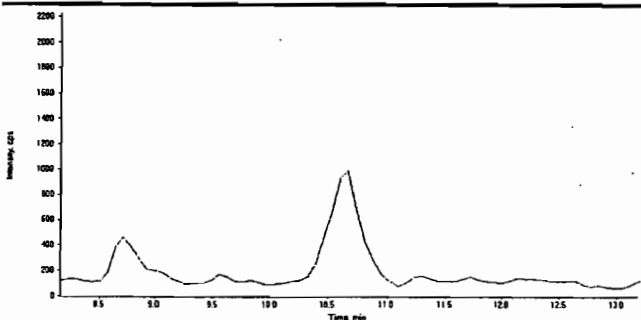
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
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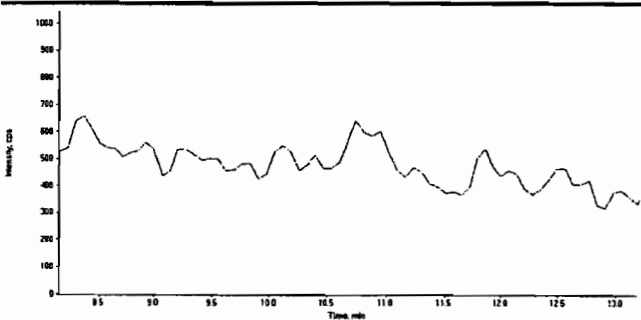
Data File	EXP0415031.wiff	Acquisition Date	4/15/2010 11:05:36 PM
Sample Name	XIBLK09	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



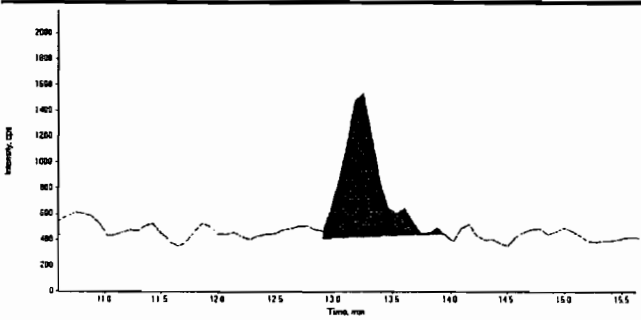
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.00
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



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



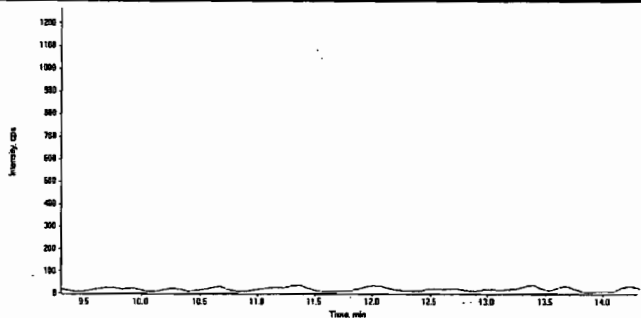
Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.1
Actual RT:	13.3
Area Counts:	2.37e+004
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

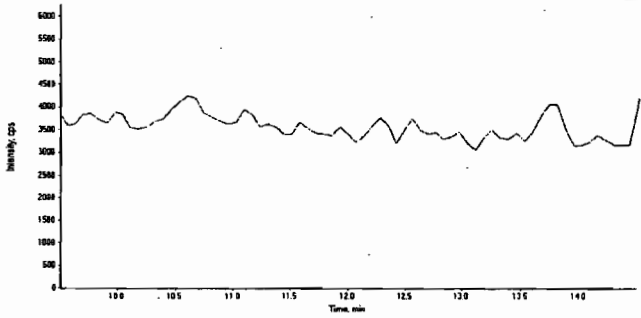
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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

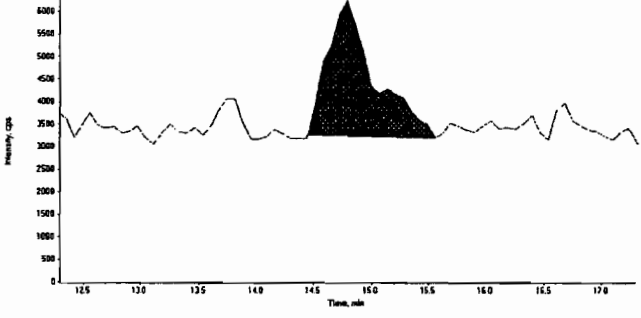
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

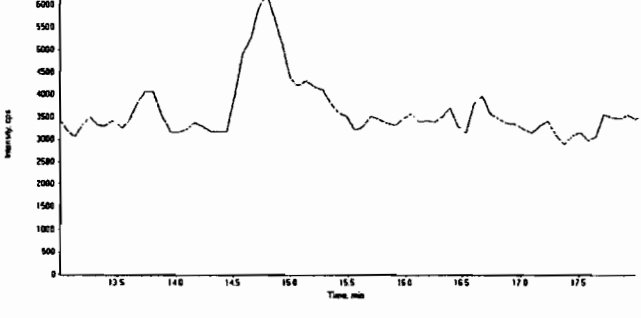
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<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

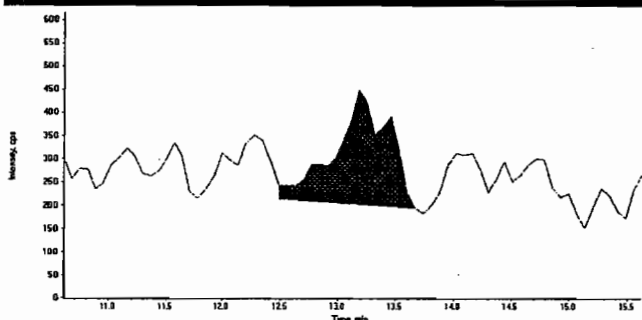
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

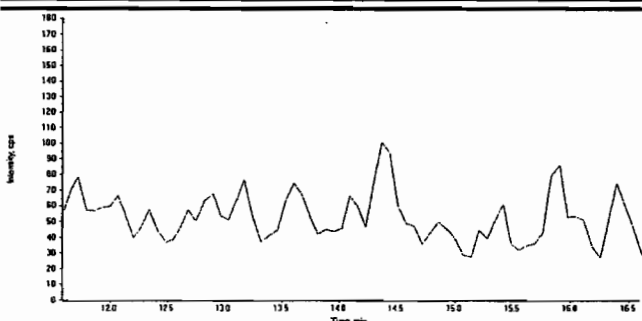
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

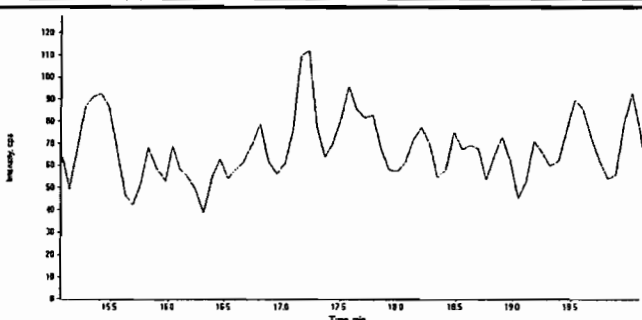
Data File	EXP0415031.wiff	Acquisition Date	4/15/2010 11:05:36 PM
Sample Name	XIBLK09	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



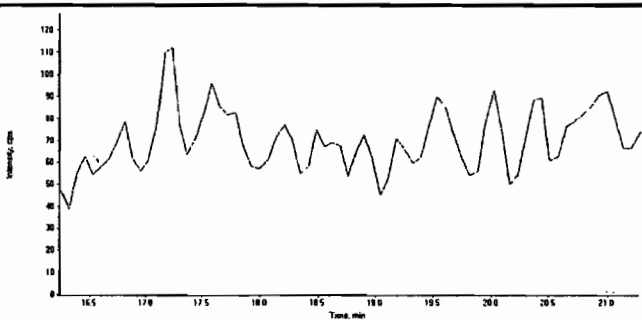
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.1
Actual RT:	13.2
Area Counts:	8.08e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



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

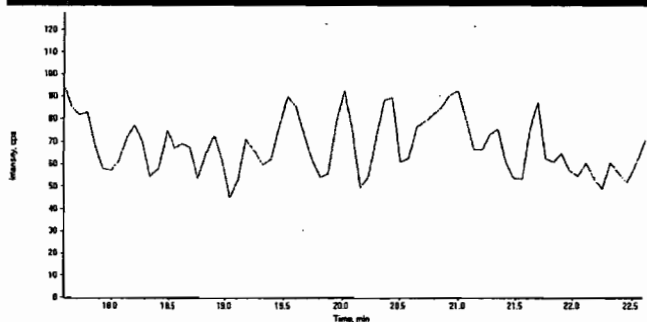


Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

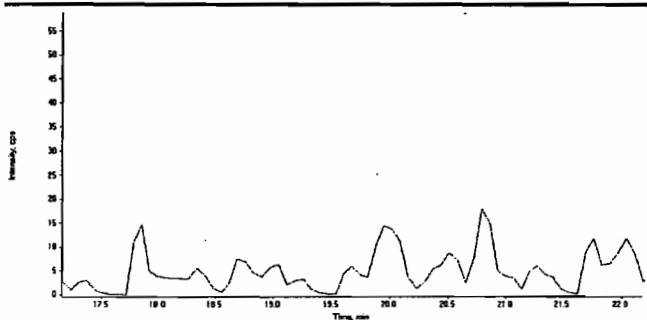
GEL Laboratories, LLC  
 GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
 LCMSMS#3

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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 16-APR-10 04:43

GEL Data File: EXP0415044.wiff

Instrument ID: LCMSMS

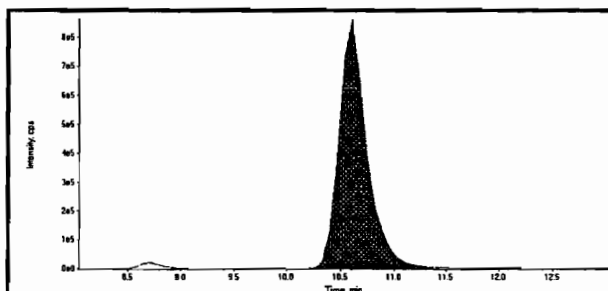
Column: Phenomenex Ultracarb 5u ODS(20)

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

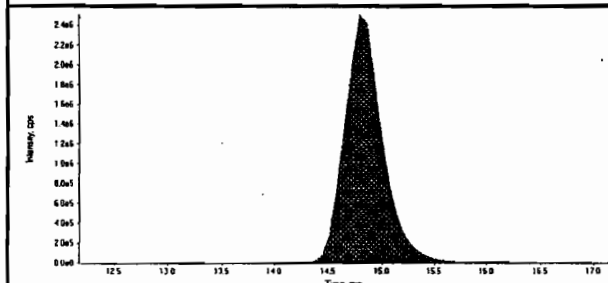
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

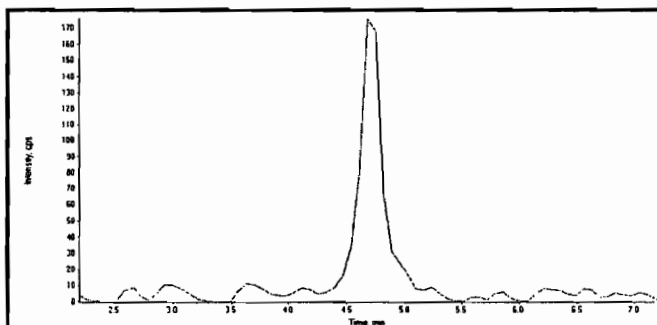
Data File	EXP0415044.wiff	Acquisition Date	4/16/2010 4:43:22 AM
Sample Name	XIBLK10	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



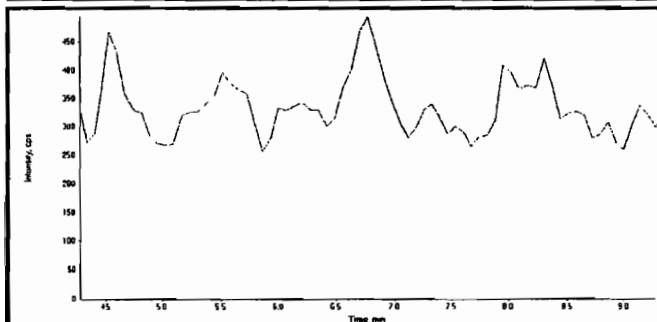
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	15700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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:*  
HMX 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>	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)
	<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>	2.46e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.40 (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

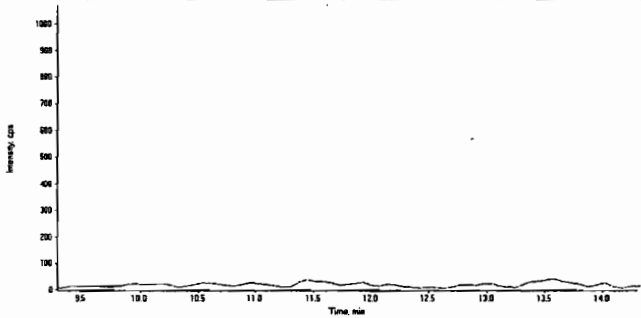
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	3.19e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

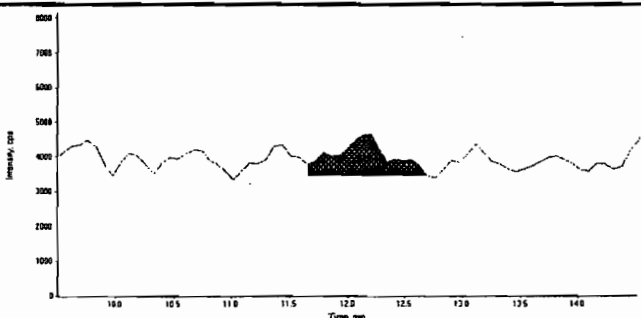
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

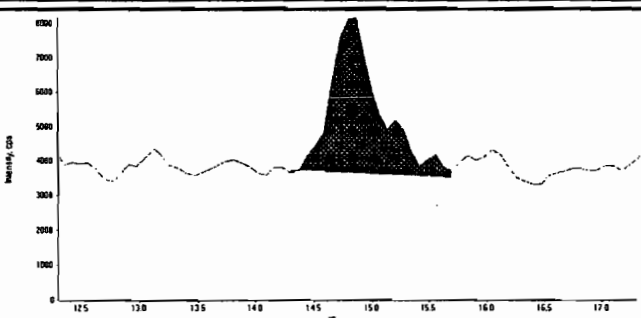
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

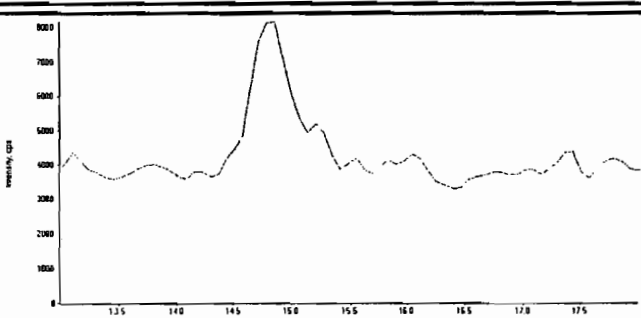
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.2
	Area Counts:	4.12e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<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

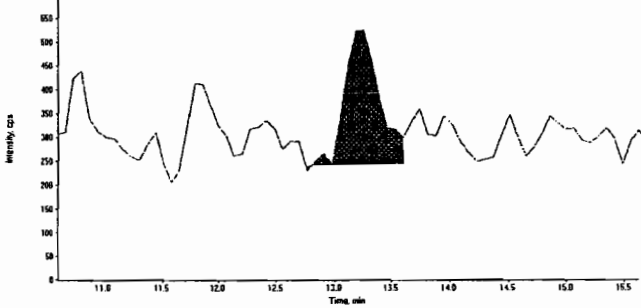
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

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

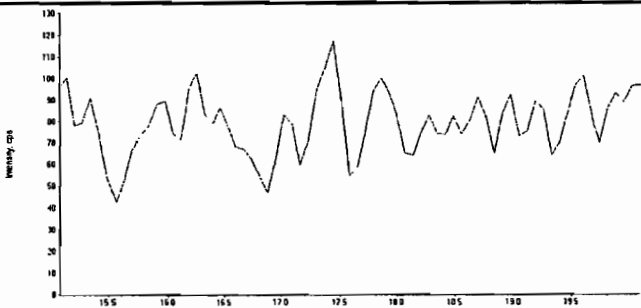
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.3
	Area Counts:	6.06e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

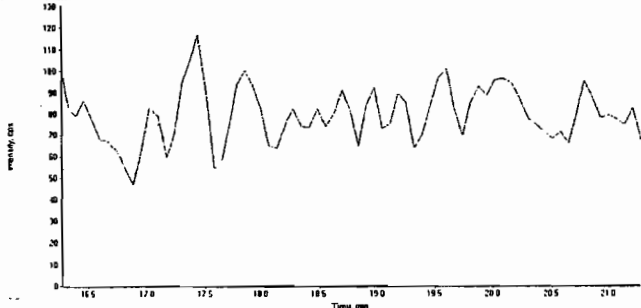
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 16-APR-10 10:20

GEL Data File: EXP0415057.wiff

Instrument ID: LCMSMS

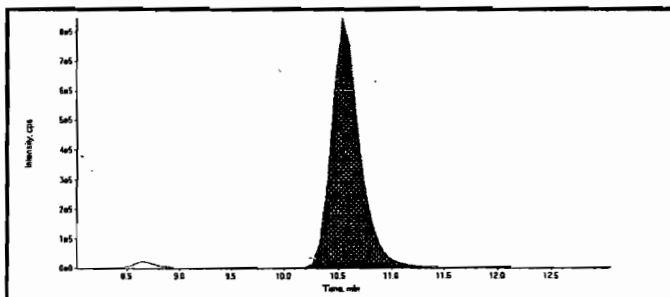
Column: Phenomenex Ultracarb 5u ODS(20)

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

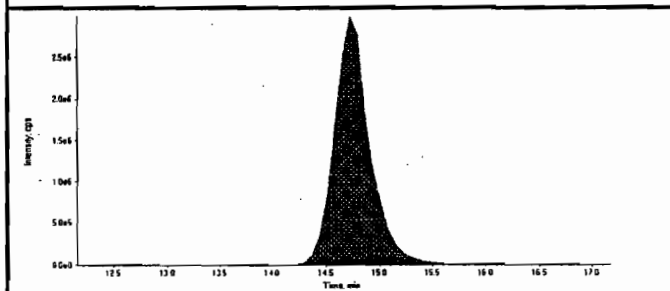
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

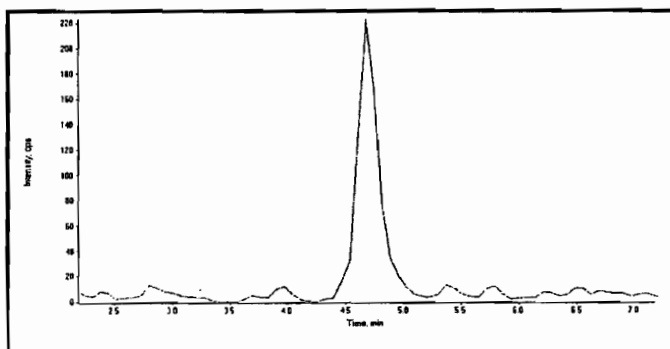
Data File	EXP0415057.wiff	Acquisition Date	4/16/2010 10:20:56 AM
Sample Name	XIBLK11	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



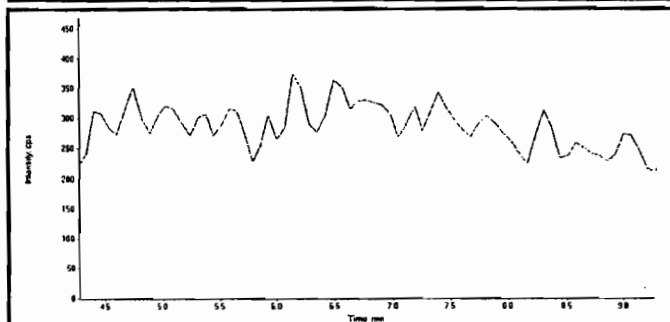
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	15800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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

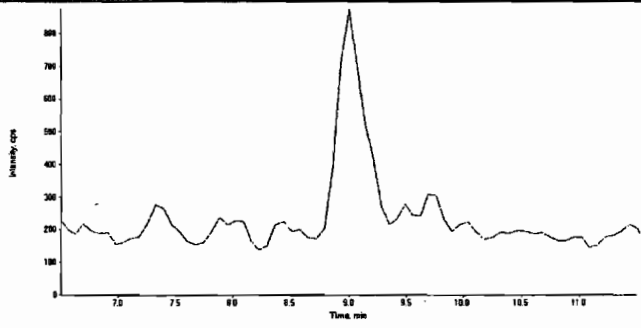
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4/16/2010  
4/23/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

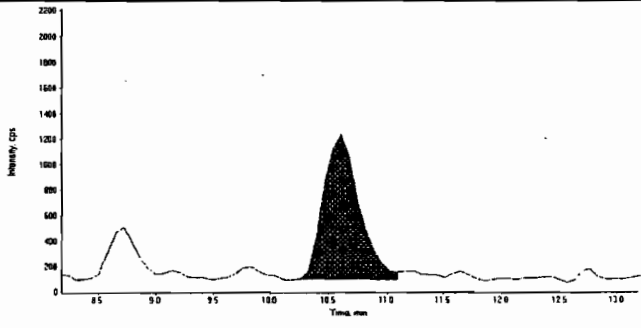
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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

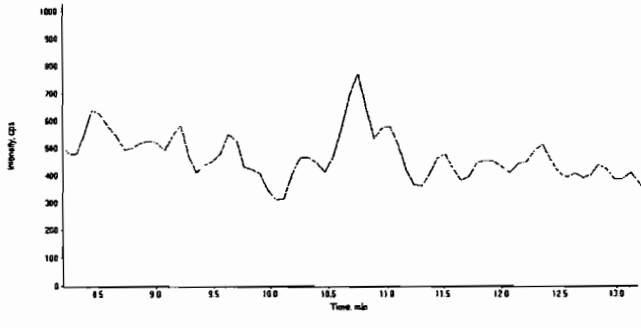
  

	Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

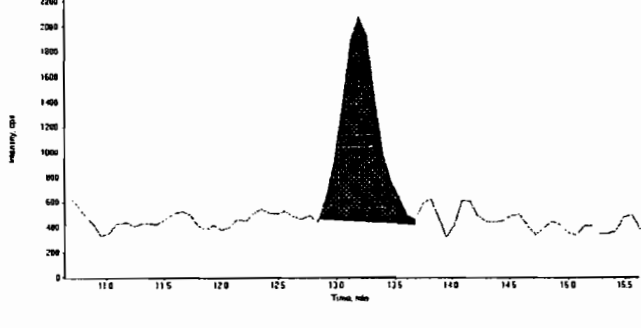
  

	Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.6
	Area Counts:	2.47e+004
	Manual Modification	No
	Amount:	4.40 (ng/mL)
	% Accuracy:	N/A

	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:	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

<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>	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:	5.00e+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:	14.6
	Area Counts:	1.53e+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:	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

<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>	4-Amino-2,6-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	3.37e+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

<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)
	<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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 16-APR-10 13:23

GEL Data File: EXP0415064.wiff

Instrument ID: LCMSMS

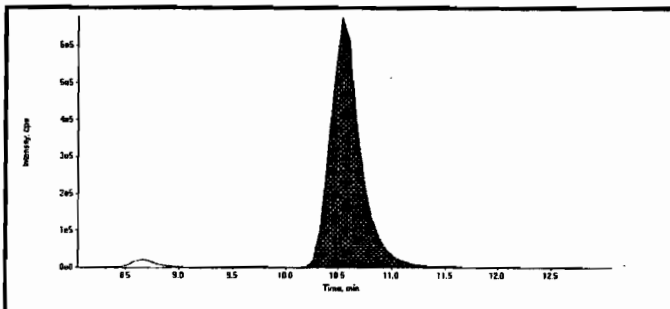
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	4.41
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0

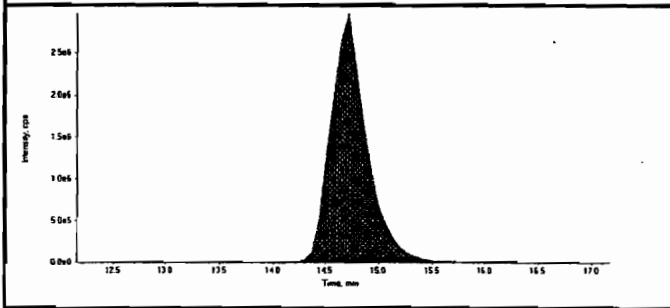
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

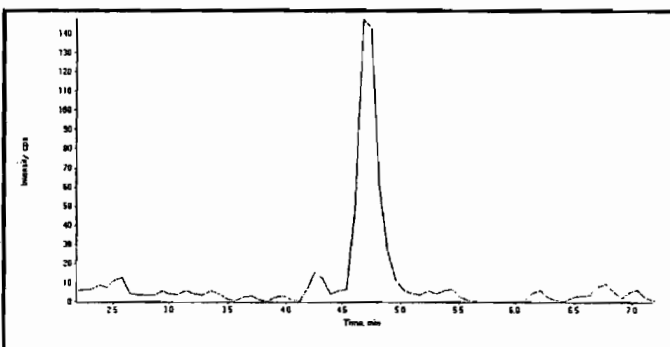
Data File	EXP0415064.wiff	Acquisition Date	4/16/2010 1:23:06 PM
Sample Name	XIBLK12	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

	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)

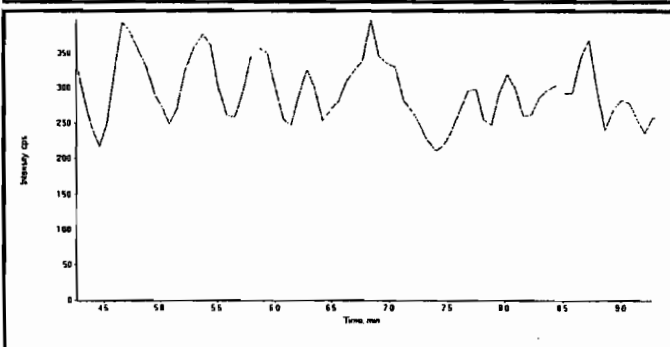
Please refer to Form 8 for a list of Internal Standard Recoveries

	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

*4/16/2010  
Jen  
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>	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)
	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:	2.21e+004
	Manual Modification	No
	Amount:	4.41 (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

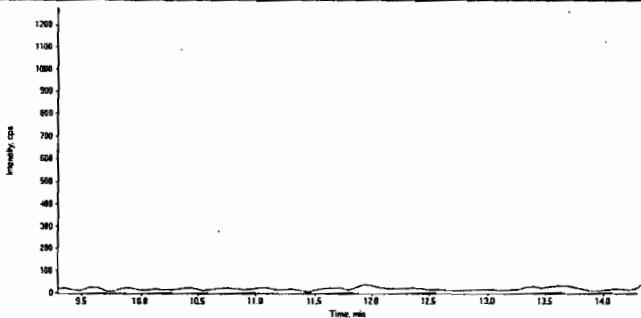
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	3.14e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

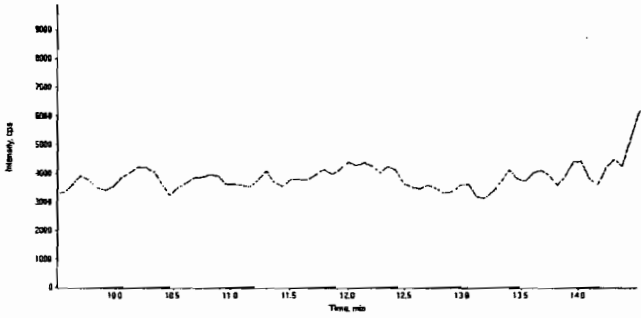
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LCMSMS#3

<b>Data File</b>	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

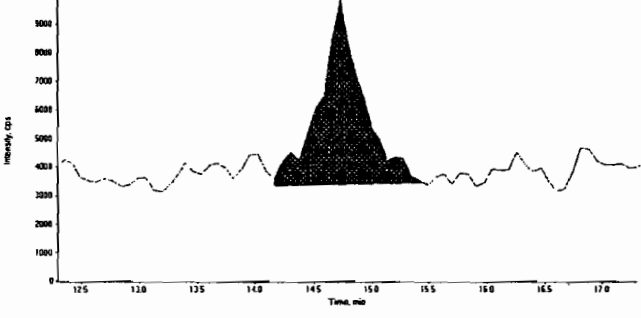
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

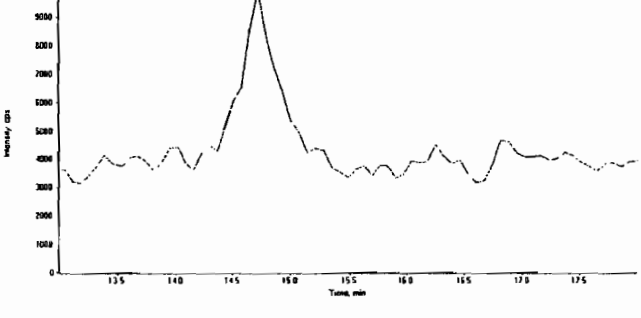
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<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)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	6.78e+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

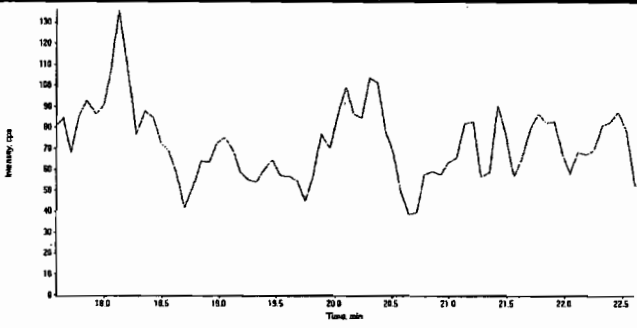
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

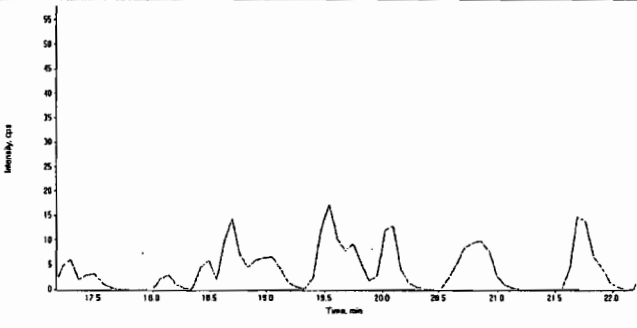
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 16--APR--10 19:00

GEL Data File: EXP0415077.wiff

Instrument ID: LCMSMS

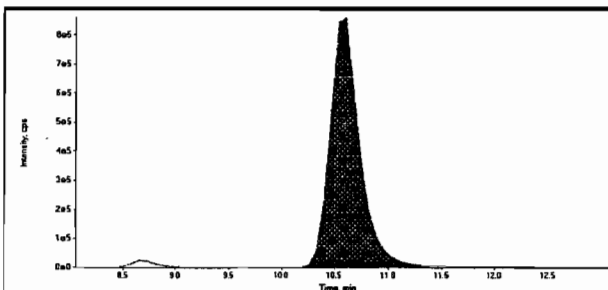
Column: Phenomenex Ultracarb 5u ODS(20)

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

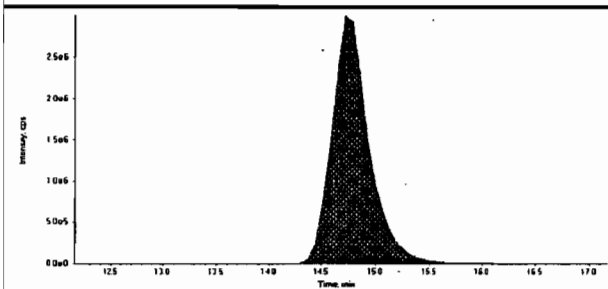
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



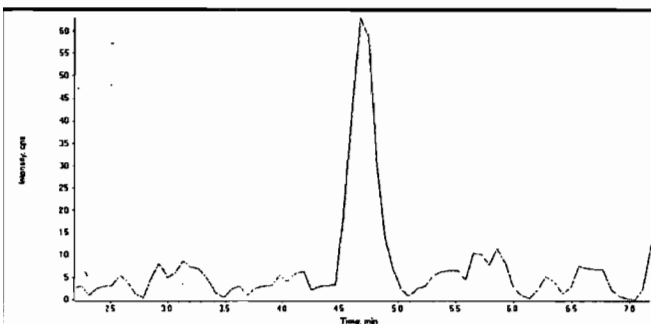
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	16700000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

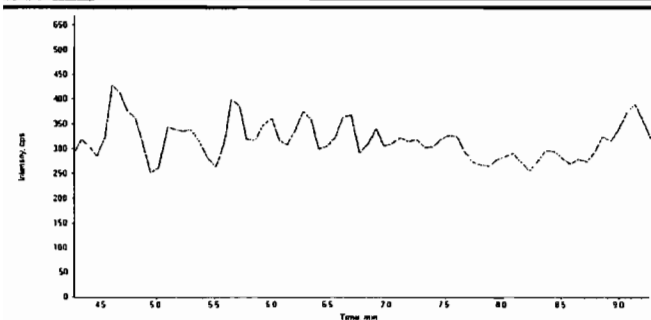


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	72500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

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



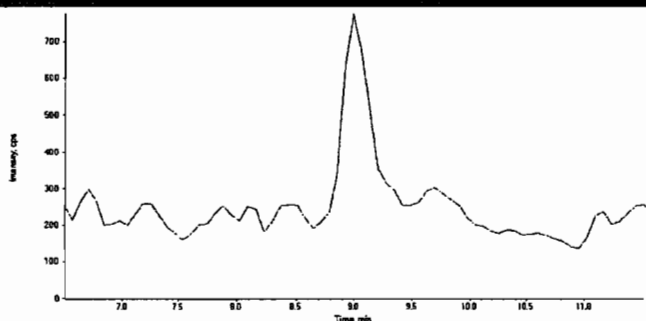
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:* 4/23/10  
HMX 04/23/10

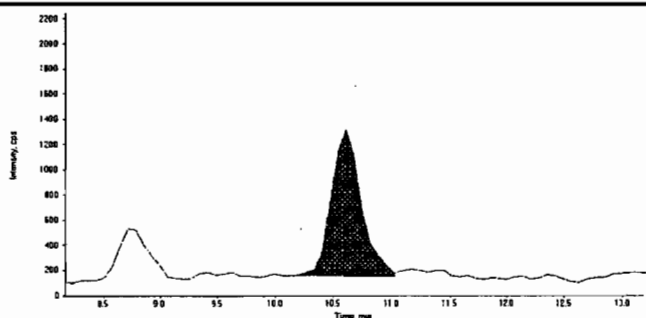
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

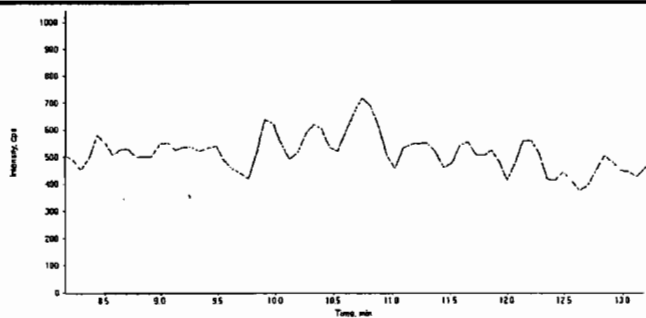
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Sample Name	XIBLK13	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



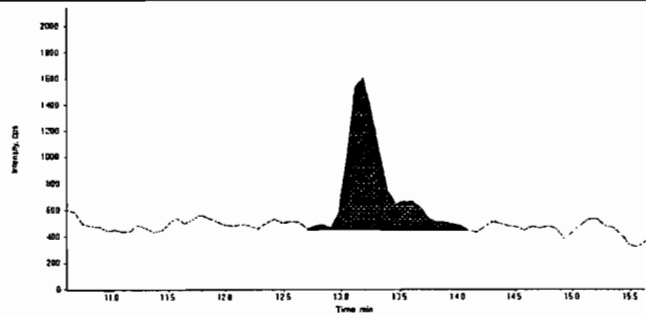
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.00
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.7
Actual RT:	10.6
Area Counts:	2.14e+004
Manual Modification	No
Amount:	4.36 (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



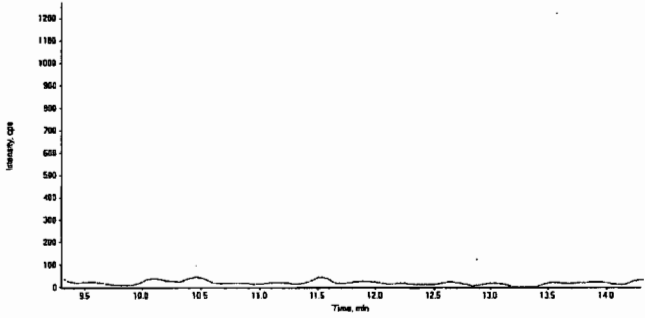
Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.1
Actual RT:	13.2
Area Counts:	2.55e+004
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

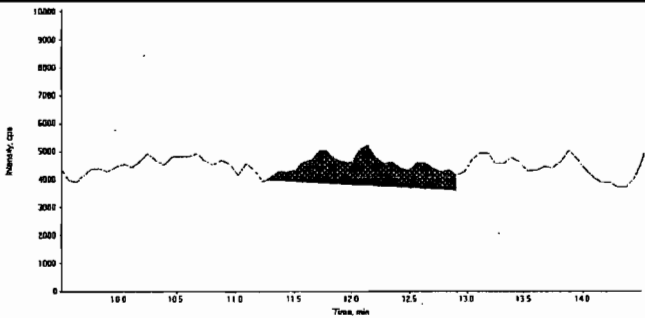
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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

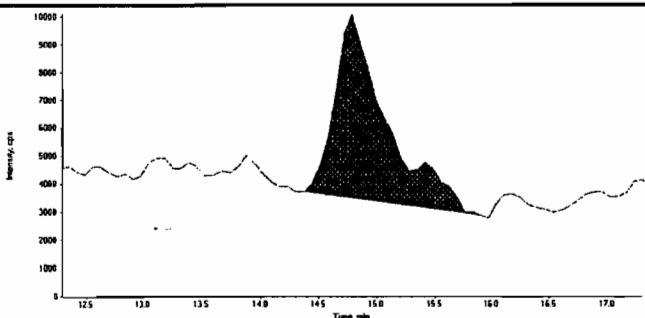
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

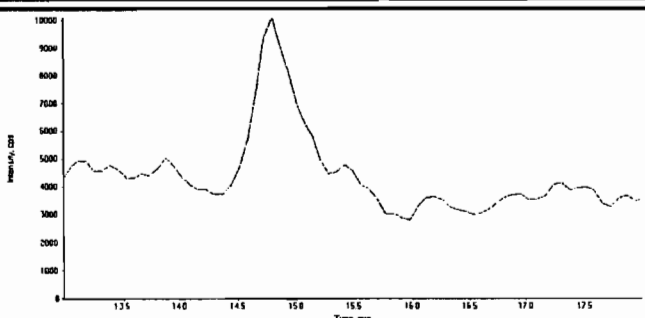
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	8.06e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<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

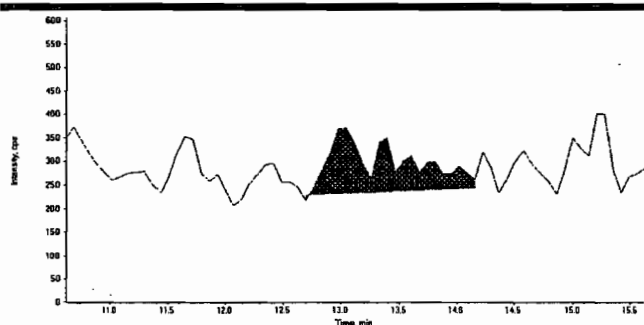
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

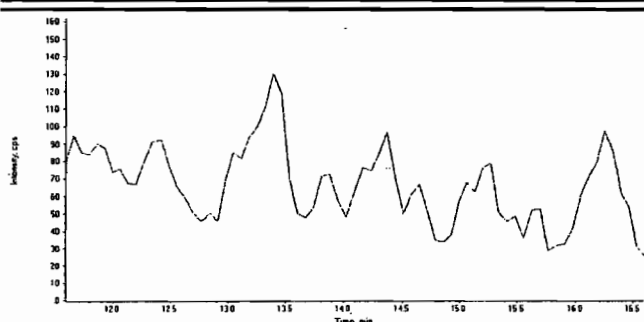
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

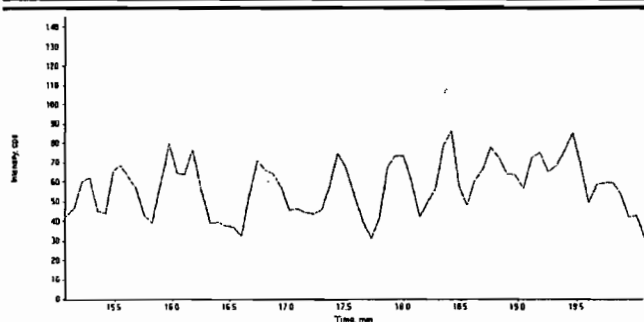
Data File	EXP0415077.wiff	Acquisition Date	4/16/2010 7:00:54 PM
Sample Name	XIBLK13	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



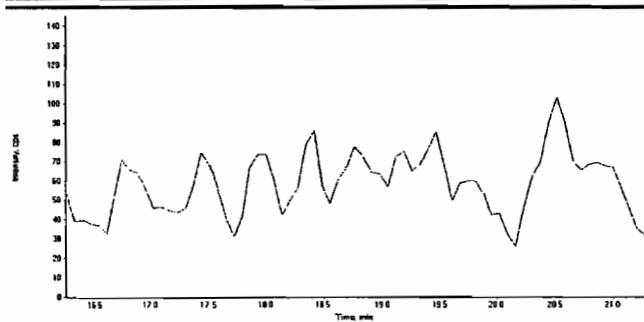
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.1
Actual RT:	13.0
Area Counts:	5.60e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



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

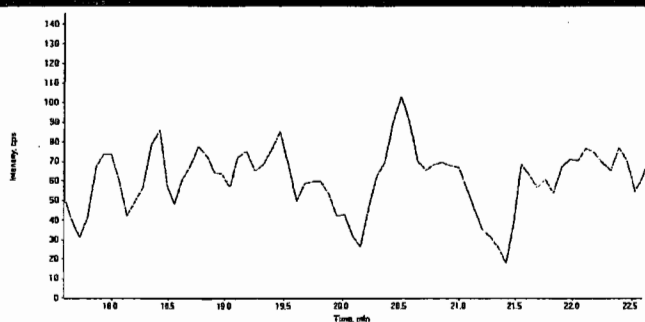


Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

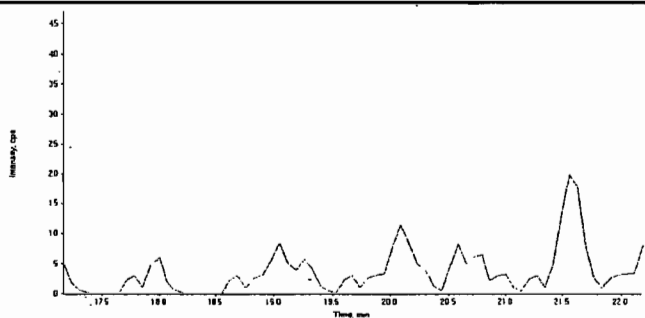
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 09-APR-10 09:36

GEL Data File: EXS04090010.wiff

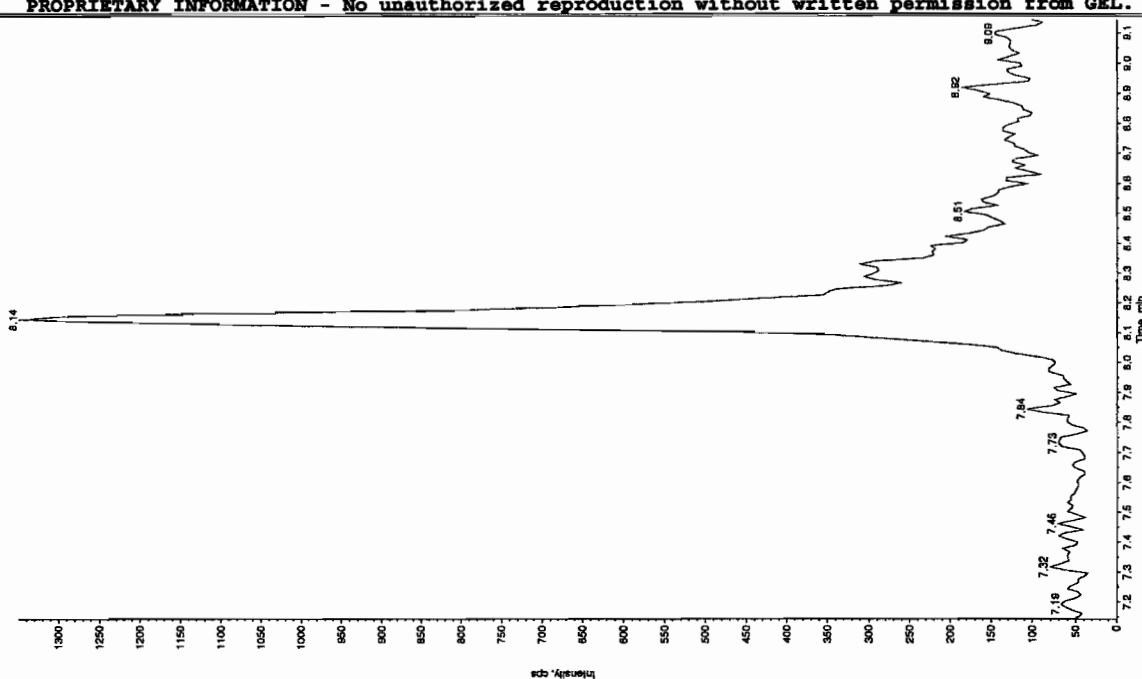
Instrument ID: LCMSMS

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

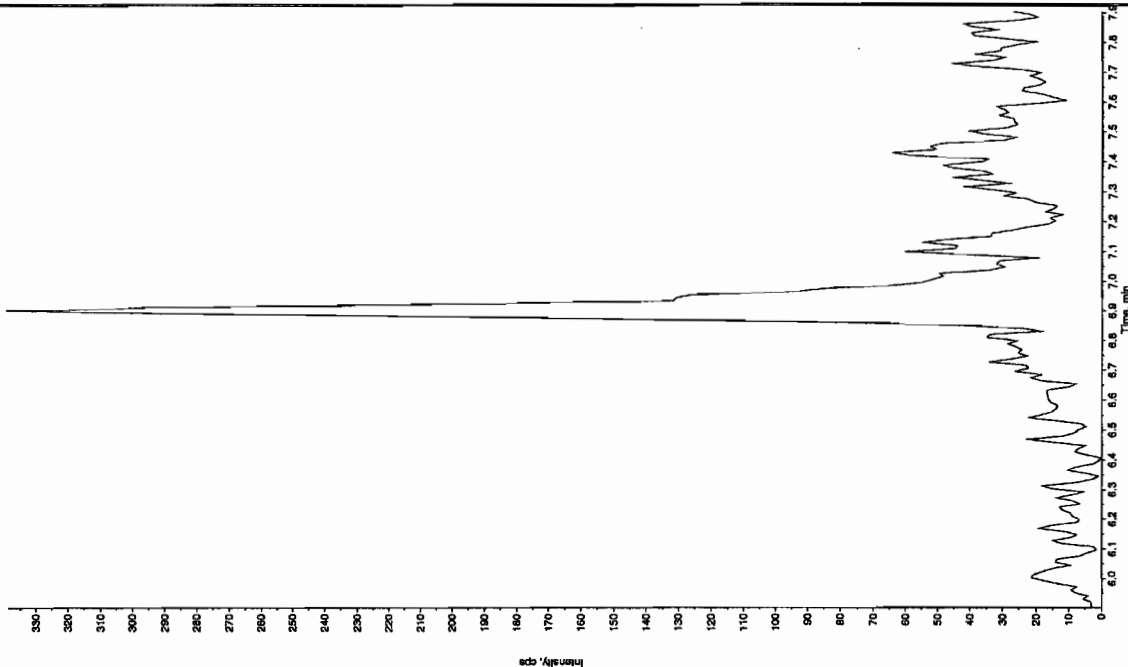
See 4/12/10

Sample Name: "XIBLK02" Sample ID: "HILR" File: "EXS04090010.wif"  
 Peak Name: "3S-Dinitroanthracene" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 AM  
 Modified: No



Amc-04/12/10

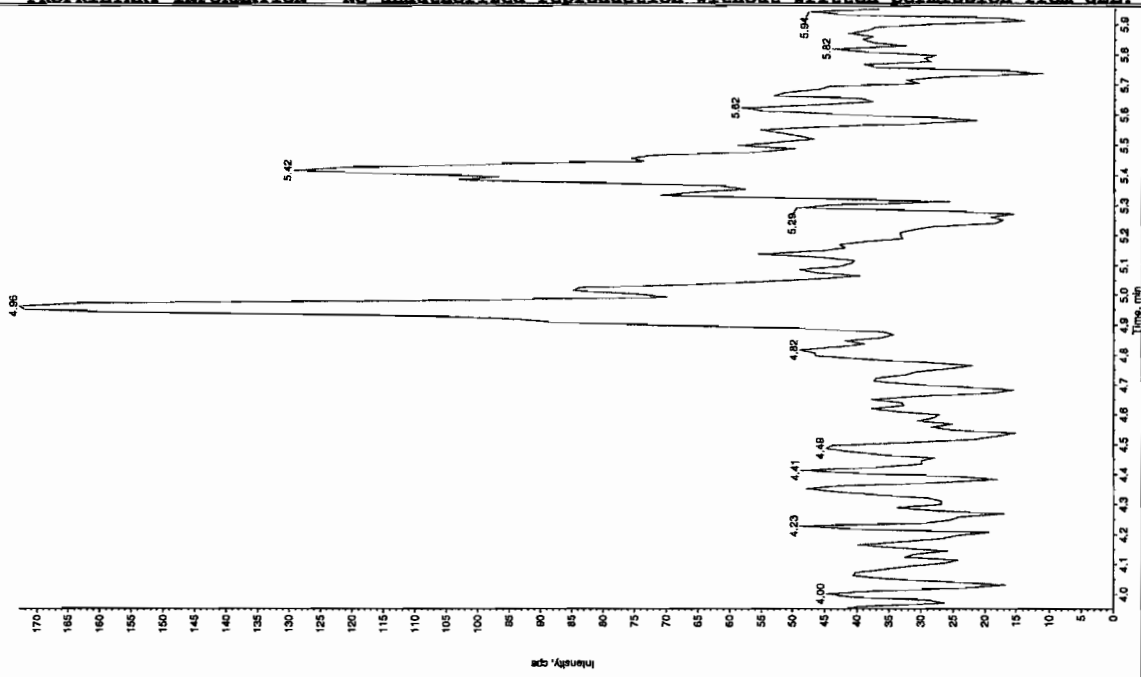
Sample Name: "XIBLK02" Sample ID: "HILR" File: "EXS04090010.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 AM  
 Modified: No





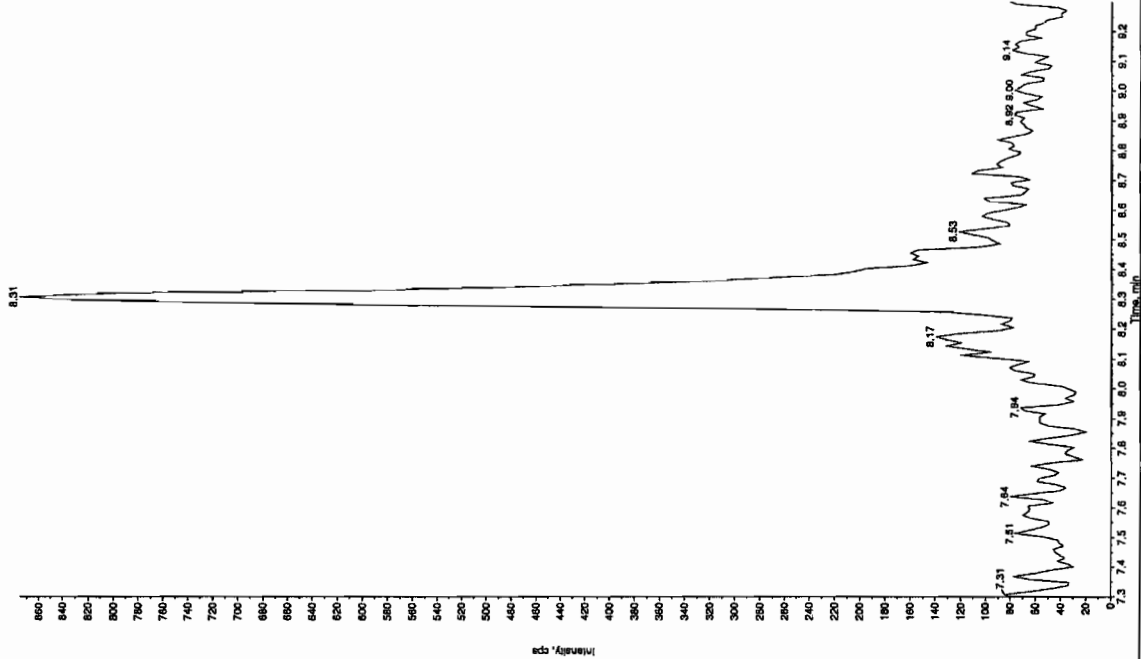
Sample Name: "XIBLX02" Sample ID: "111LER" File: "EXS04090010.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 AM  
 Modified: No



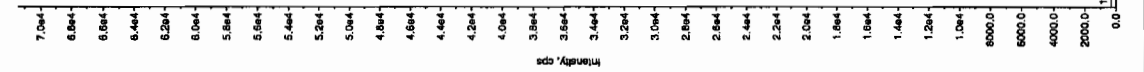
Sample Name: "XIBLX02" Sample ID: "111LER" File: "EXS04090010.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 AM  
 Modified: No



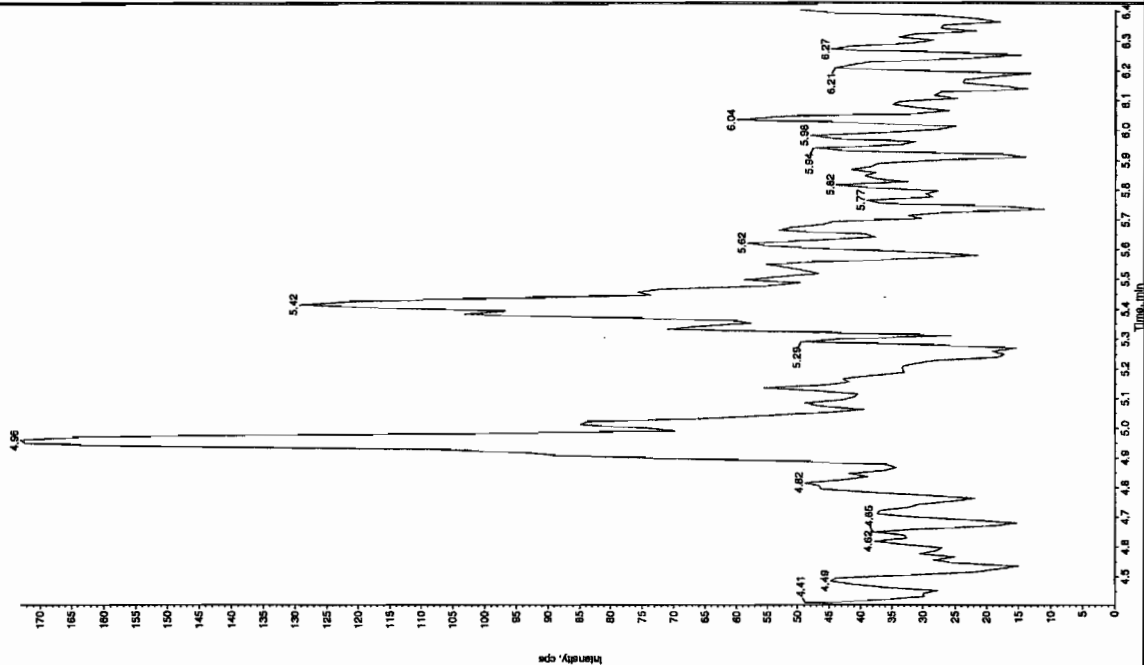
Sample Name: "XIBLK02" Sample ID: "JILER" File: "EXS04090010.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1791.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 13.0  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 2.90e+005 counts  
 Height: 70893.965 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "XIBLK02" Sample ID: "JILER" File: "EXS04090010.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 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 AM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 09-APR-10 10:07

GEL Data File: EXS04090012.wiff

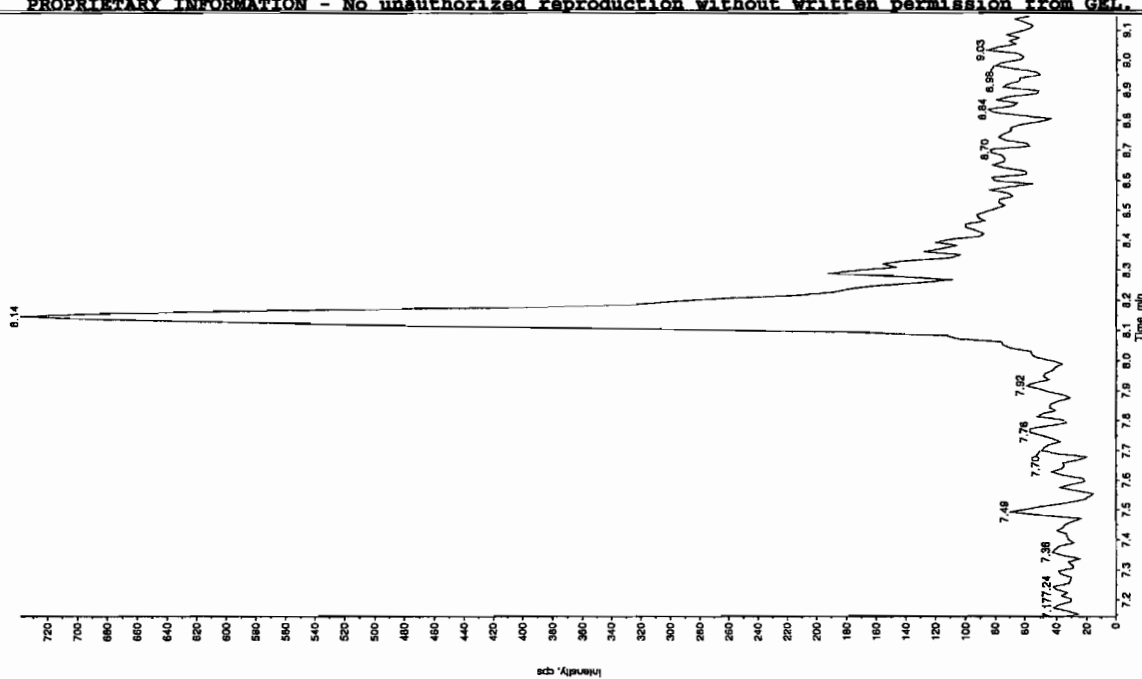
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

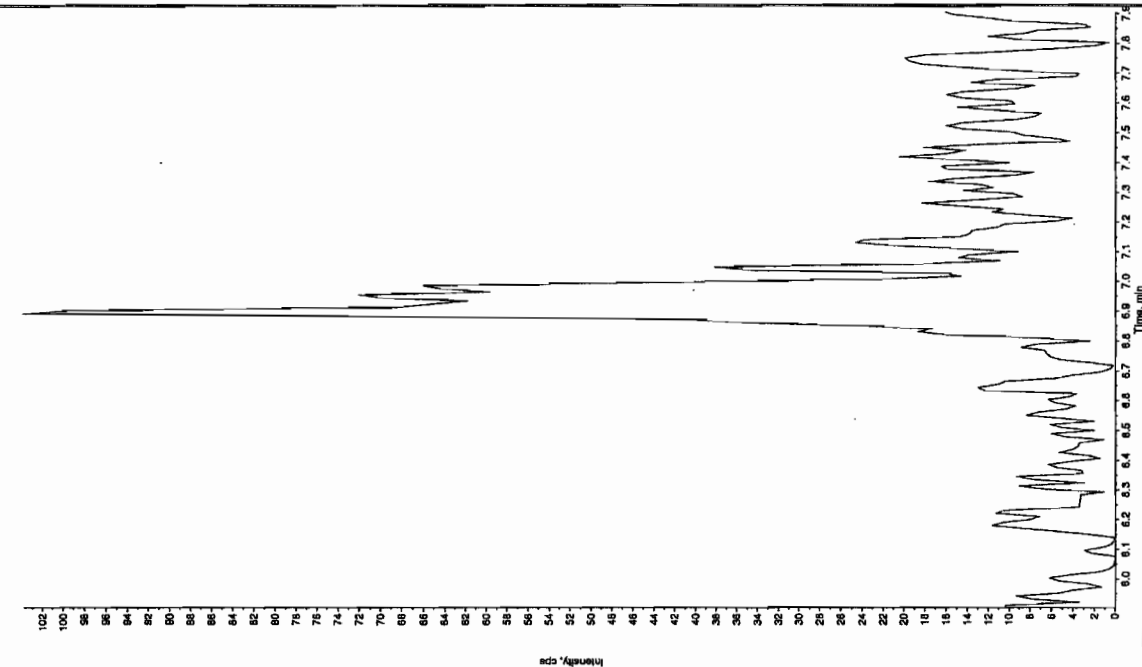
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	7.48
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Scan 4/12/10

Sample Name: "XBLK03" Sample ID: "111LER" File: "EXS04090012.wif"  
Peak Name: "35-Dinitroaniline" Mass(es): "1182.046.0 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: 10:07:35 AM  
Modified: No



Sample Name: "XBLK03" Sample ID: "111LER" File: "EXS04090012.wif"  
Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
Comment: "LCMSEXP\_B" Annotation: ""  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A ng/mL  
Calculated Conc: 0.00  
Acq. Date: 4/9/2010  
Acq. Time: 10:07:35 AM  
Modified: No



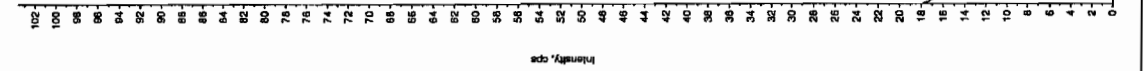
Scan 4/12/10

Sample Name: "XIBLK03" Sample ID: "11LER" File: "EXS04090012.wif"  
 Peak Name: "26-Dimino-4-nitrotoluene" Mass(es): "165.046.0 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: 10:07:35 AM  
 Modified: No

Intensity, cps



Sample Name: "XIBLK03" Sample ID: "11LER" File: "EXS04090012.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

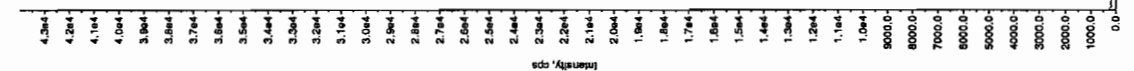
Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:07:35 AM  
 Modified: No

Intensity, cps



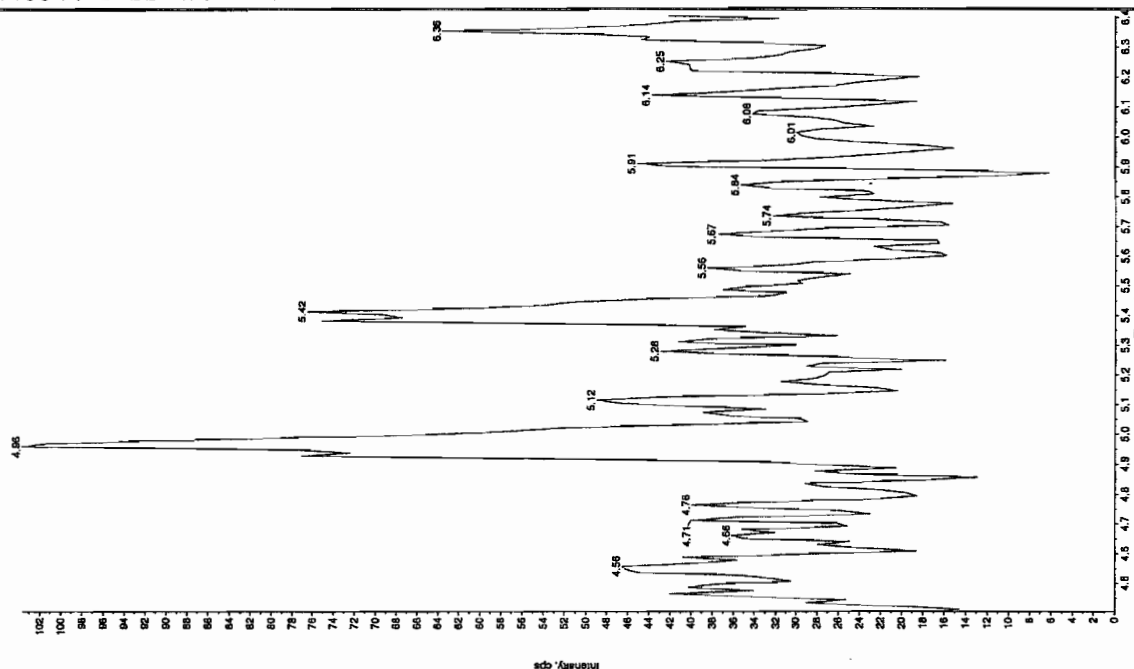
Sample Name: "XIBLK03" Sample ID: "111ER" File: "EX504090012.wif"  
 Peak Name: "111(er) (c-resyl) phosphate" Mass(es): "365.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 4/9/2010  
 Acq. Date: 10:07:35 AM  
 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: 1.75e+005 counts  
 Height: 43686.192 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "XIBLK03" Sample ID: "111ER" File: "EX504090012.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 ng/mL  
 Calculated Conc: 4/9/2010  
 Acq. Date: 10:07:35 AM  
 Acq. Time: 10:07:35 AM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2196

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)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.56
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Ren 4/12/10

Sample Name: "XIBLK04" Sample ID: "111ER" File: "EXS04090025.wif"

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

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

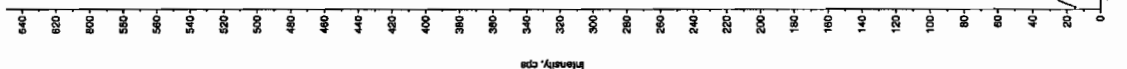
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 4/9/2010

Acq. Time: 1:31:51 PM

Modified: No



Ren 04/12/10

Sample Name: "XIBLK04" Sample ID: "111ER" File: "EXS04090025.wif"

Peak Name: "1ATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

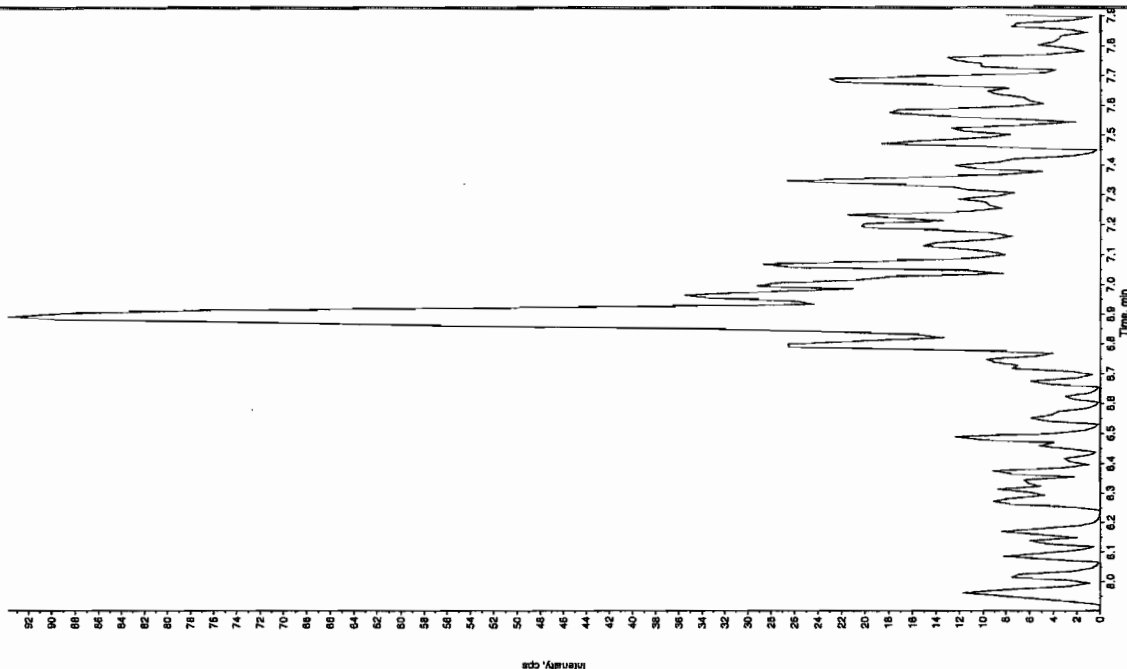
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 4/9/2010

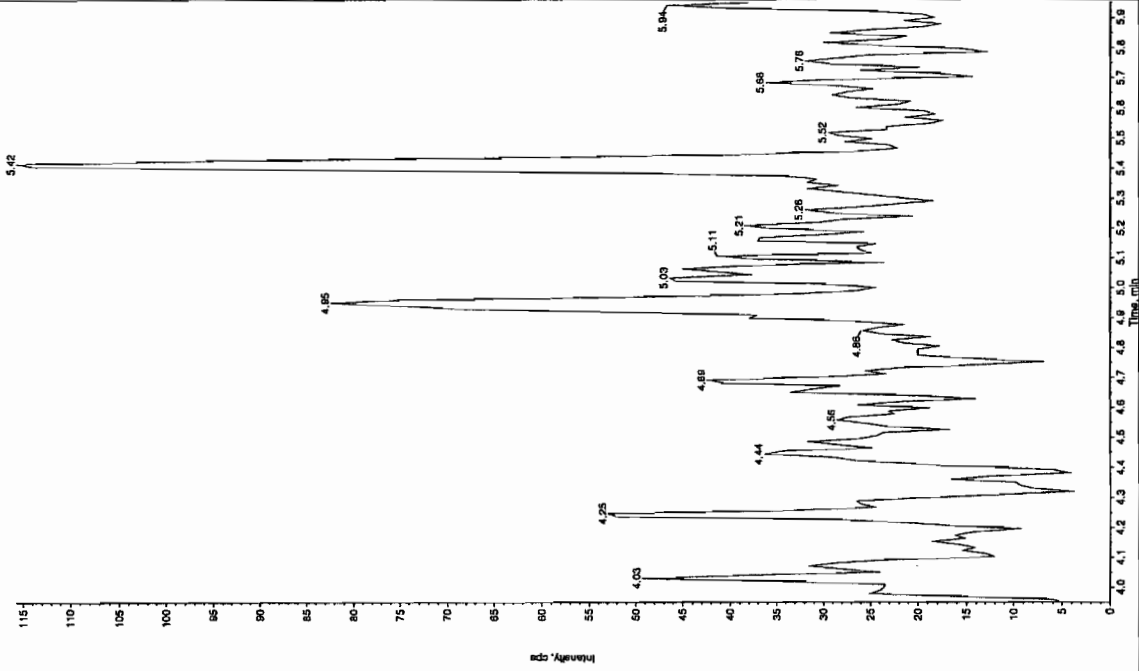
Acq. Time: 1:31:51 PM

Modified: No

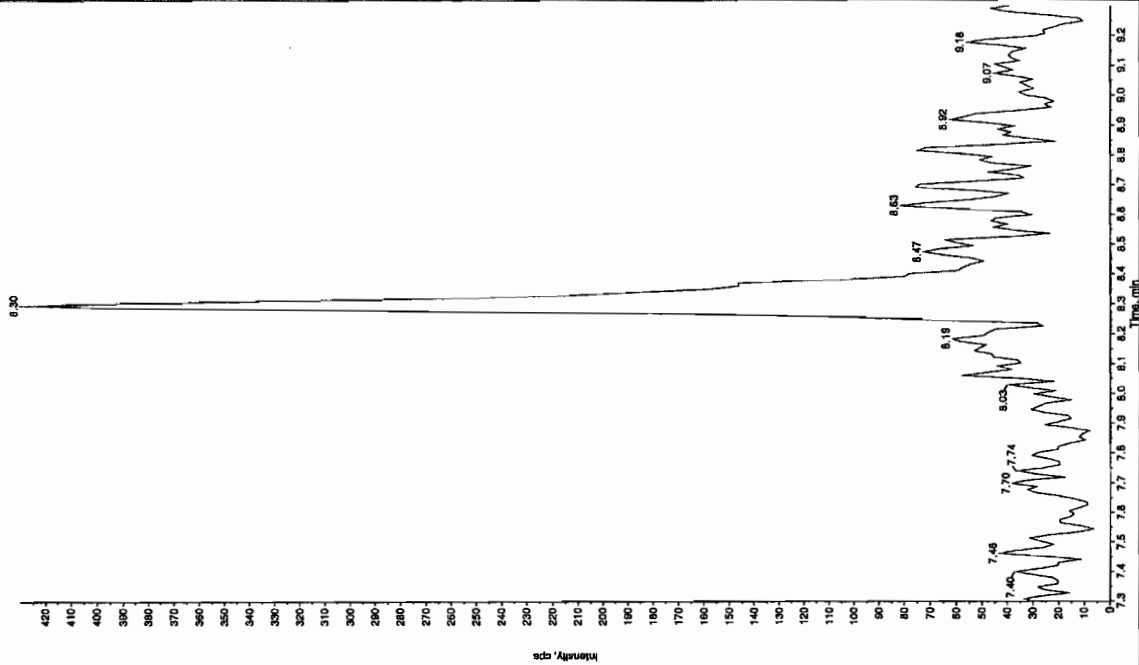




Sample Name: "XIBLK04" Sample ID: "11LER" File: "EXS04080025.wif"  
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 1:31:51 PM  
 Modified: NO



Sample Name: "XIBLK04" Sample ID: "11LER" File: "EXS04080025.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 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 1:31:51 PM  
 Modified: NO



Sample Name: "XIBUK04" Sample ID: "JILLER" File: "EXS04090025.wif"

Peak Name: "tris(cresyl) phosphate" Mass(es): "360.191.0 amu"

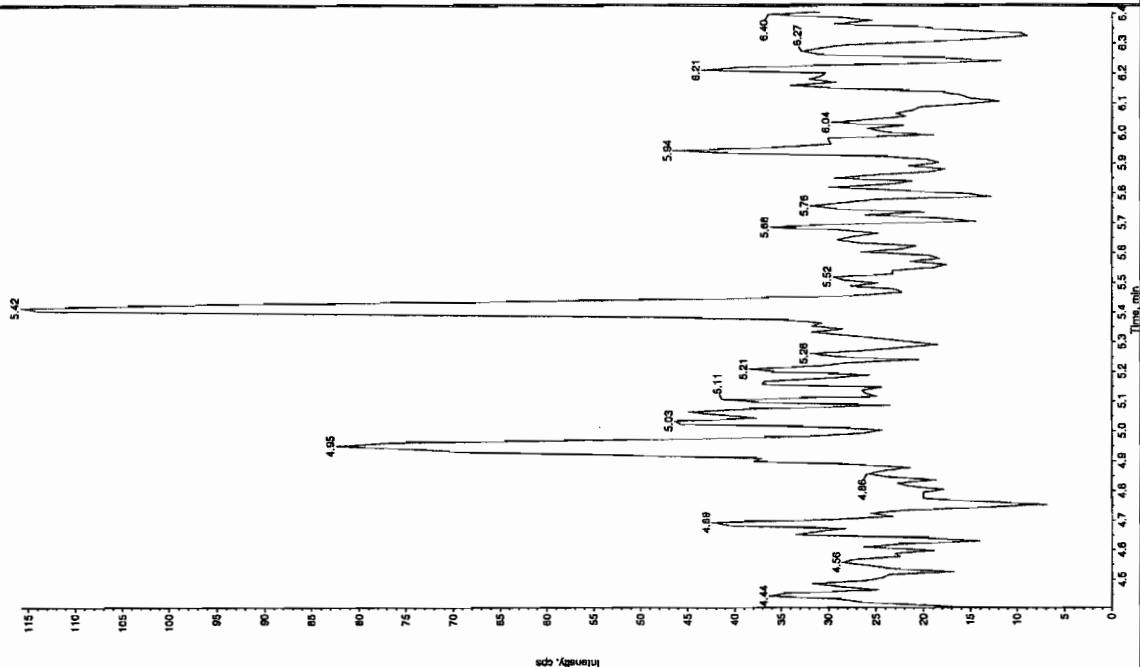
Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 4.9/2010  
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



Sample Name: "XIBUK04" Sample ID: "JILLER" File: "EXS04090025.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  
Acq. Date: 4/9/2010  
Acq. Time: 1:31:51 PM

Modified: No

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 09-APR-10 16:56

GEL Data File: EXS04090038.wiff

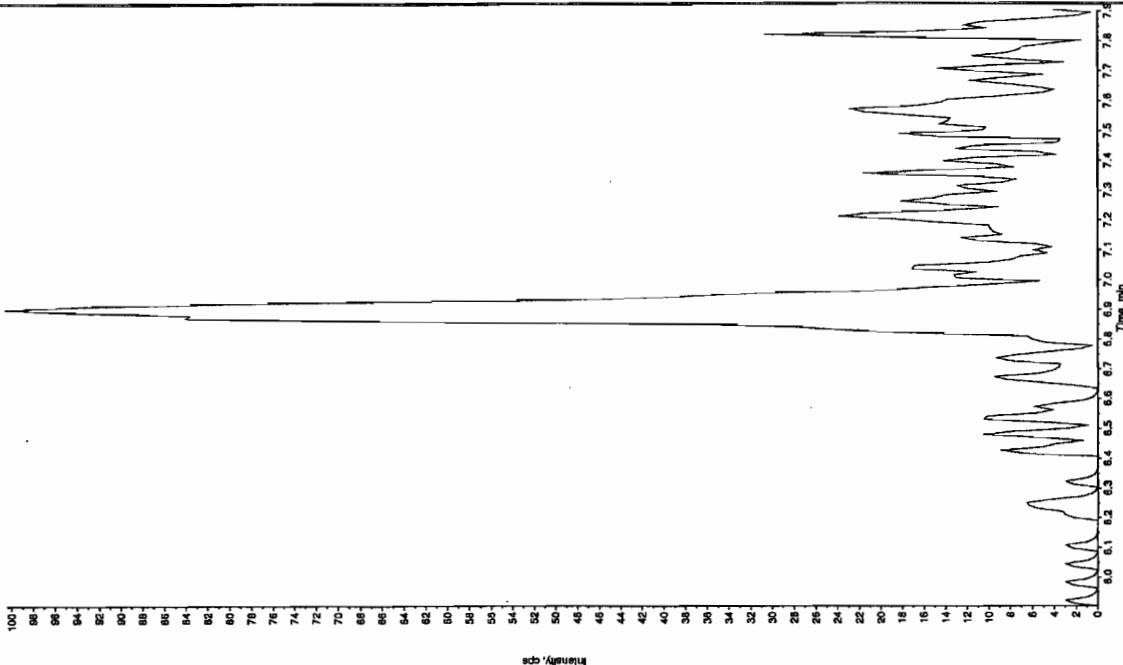
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

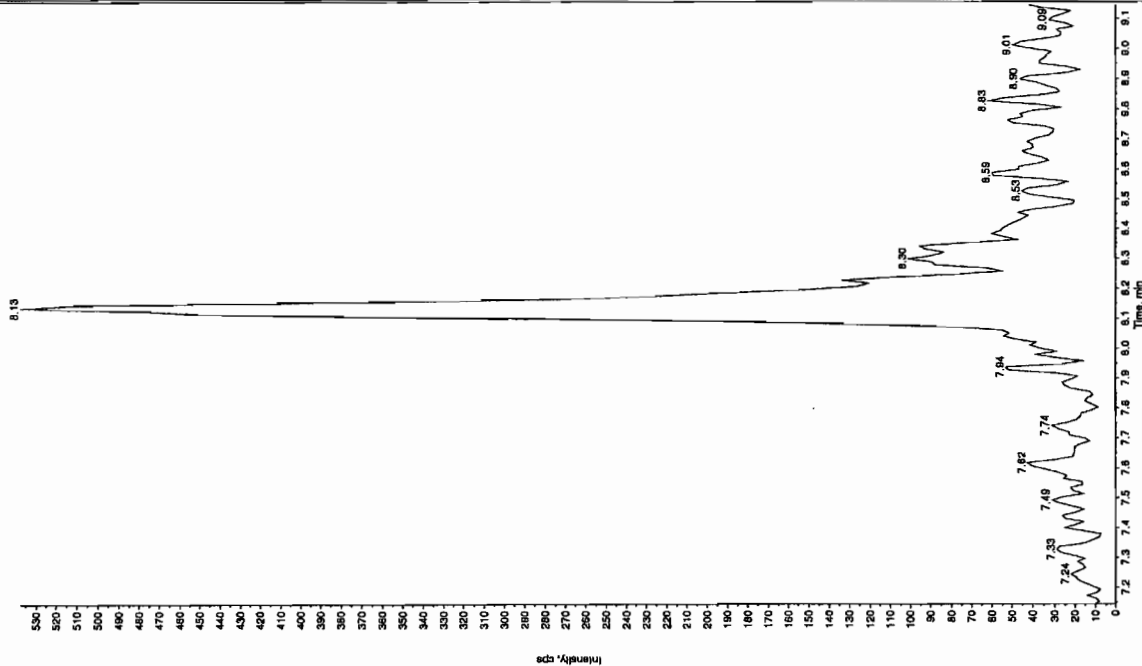
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.81
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

San 4/12/10

Sample Name: "XIBLK05" Sample ID: "JILER" File: "EX504080038.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

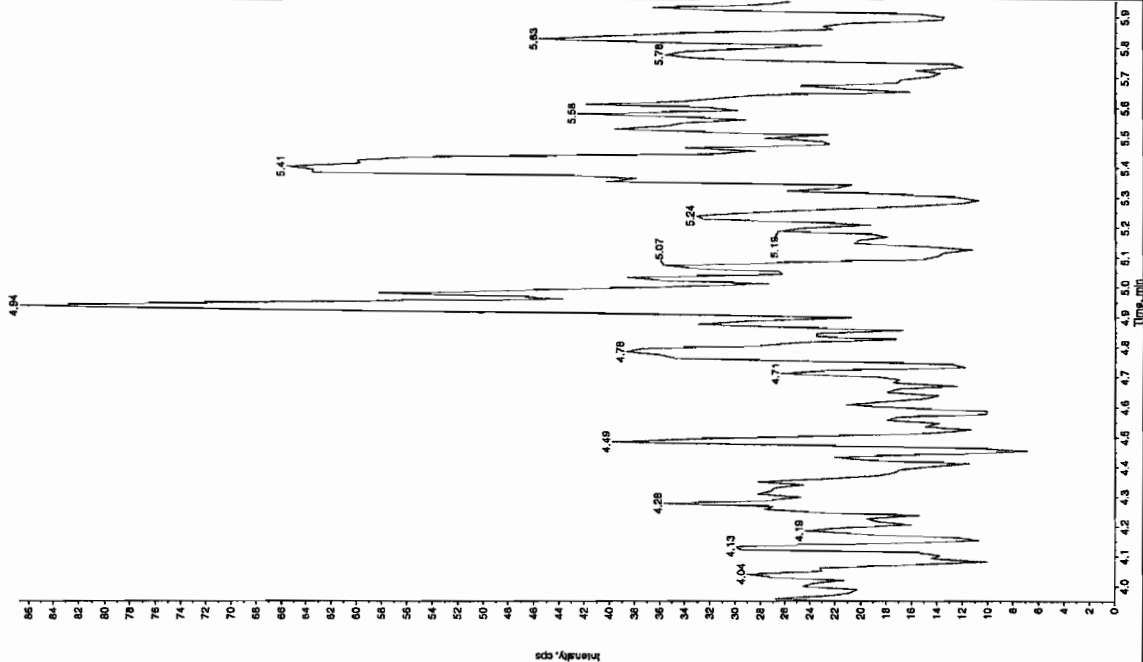


Sample Name: "XIBLK05" Sample ID: "JILER" File: "EX504080038.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 4:56:00 PM  
 Modified: No



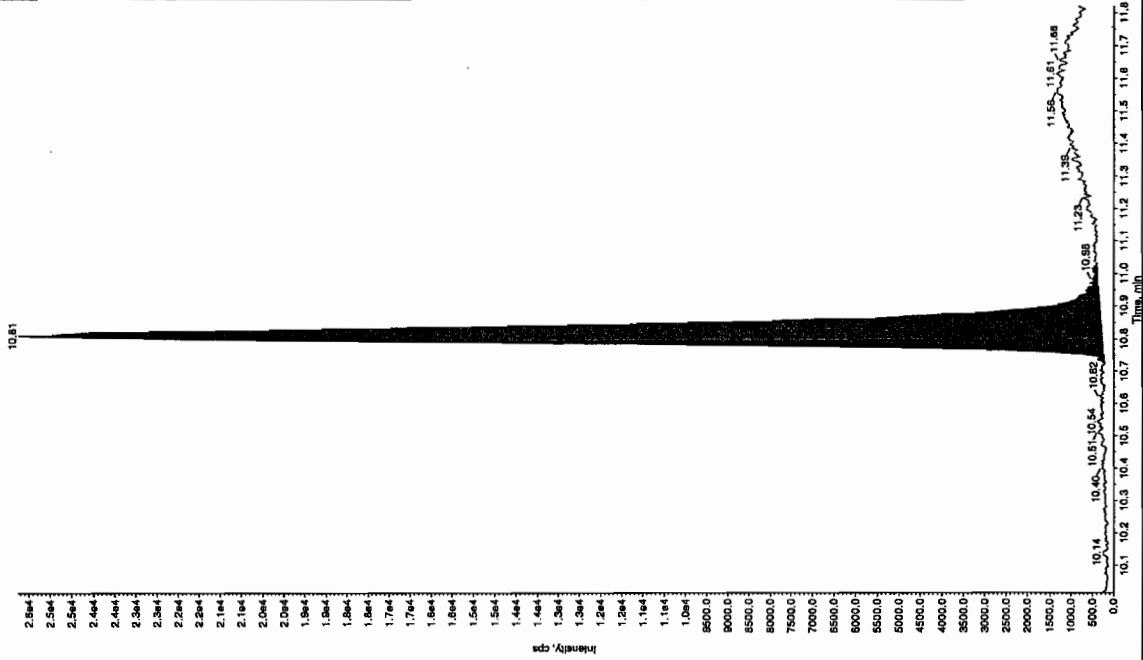
San 4/12/10

Sample Name: "XIBLK05" Sample ID: "1111" File: "EXSD0400038.wif"  
 Peak Name: "25-Diamino-4-nitrobenzene" Mass(es): "165.046.0 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



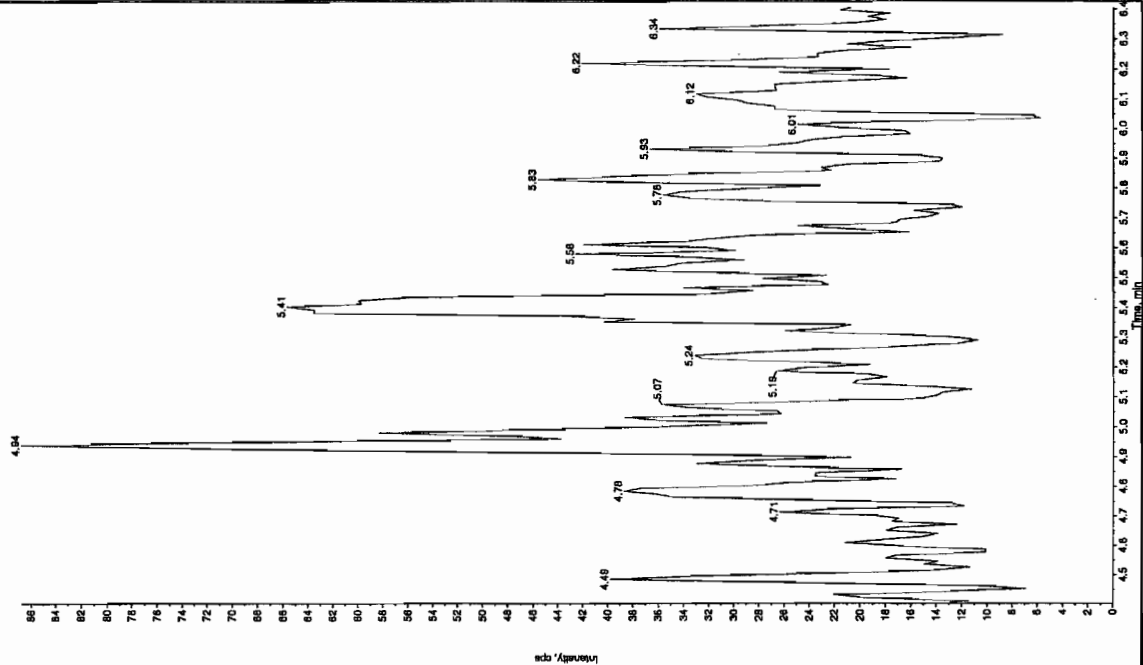
Sample Name: "XIBLK05" Sample ID: "11LER" File: "EXS04090038.wif"  
 Peak Name: "tris(c-oresy) phosphite" Mass(es): "359.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 3.81 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 4:56:00 PM  
 Modified: No  
 Proc. Algorithm: InternalQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 3.00 points  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 1.00e+005 counts  
 Height: 25470.665 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



Sample Name: "XIBLK05" Sample ID: "11LER" File: "EXS04090038.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: 4/9/2010  
 Acq. Time: 4:56:00 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 09-APR-10 18:30

GEL Data File: EXS04090044.wiff

Instrument ID: LCMSMS

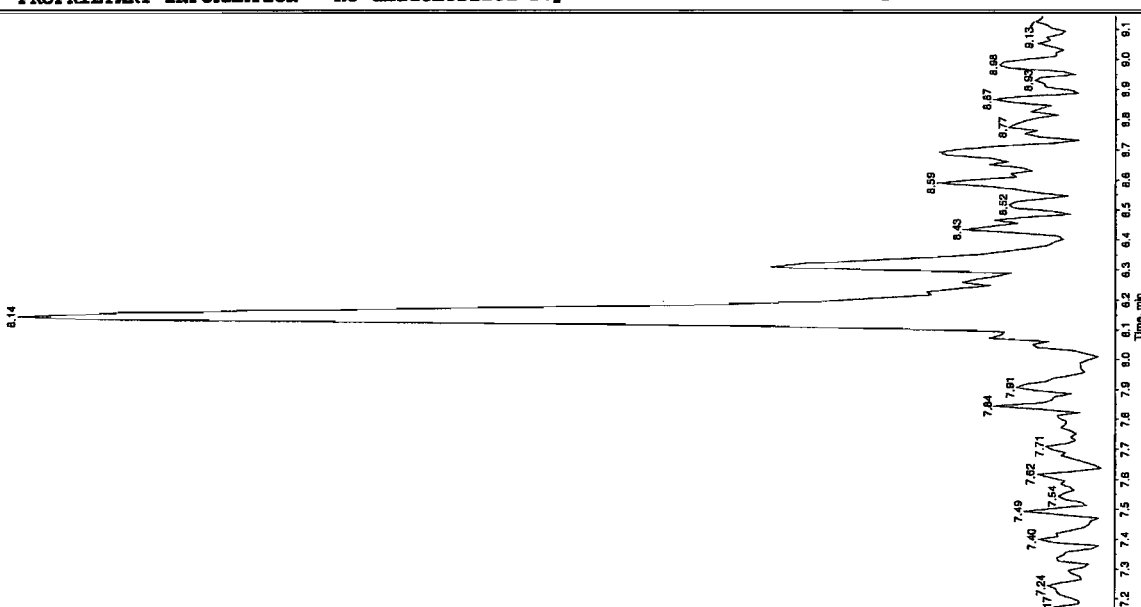
Column: Phenomenex Ultracarb 5u ODS(20)

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

Car 4/12/10

Sample Name: "XBLK08" Sample ID: "11LER" File: "EXS04090044.wif"  
 Peak Name: "35-Chlorocinnil" 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: 6:30:16 PM  
 Modified: No

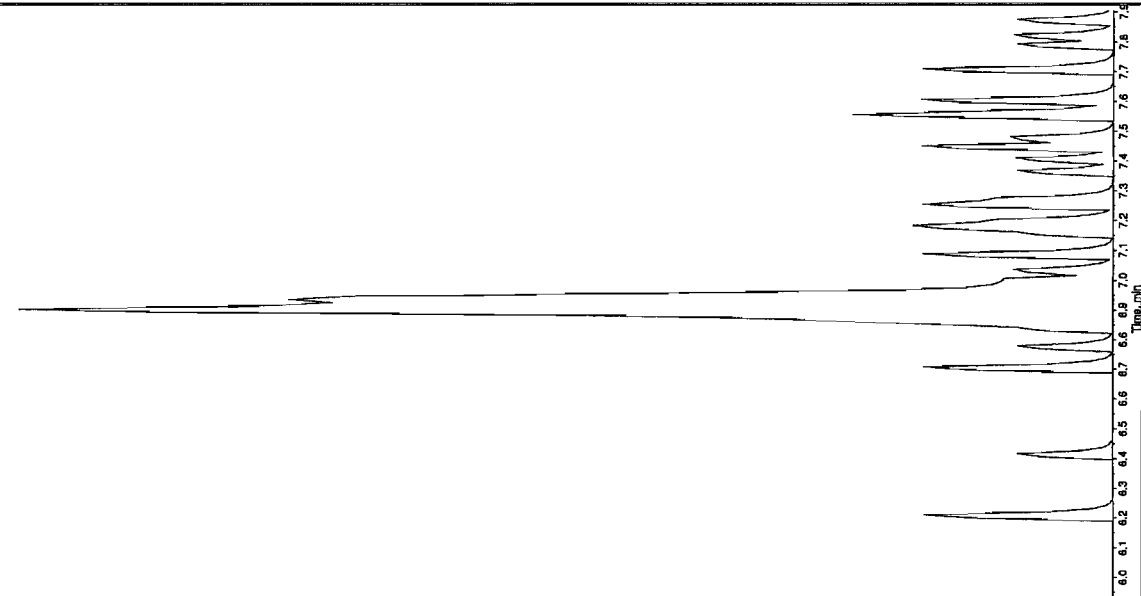
Intensity, cps



AMU 04/12/10

Sample Name: "XBLK08" Sample ID: "11LER" File: "EXS04090044.wif"  
 Peak Name: "TATB" Mass(es): "287.2204.9 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: 6:30:16 PM  
 Modified: No

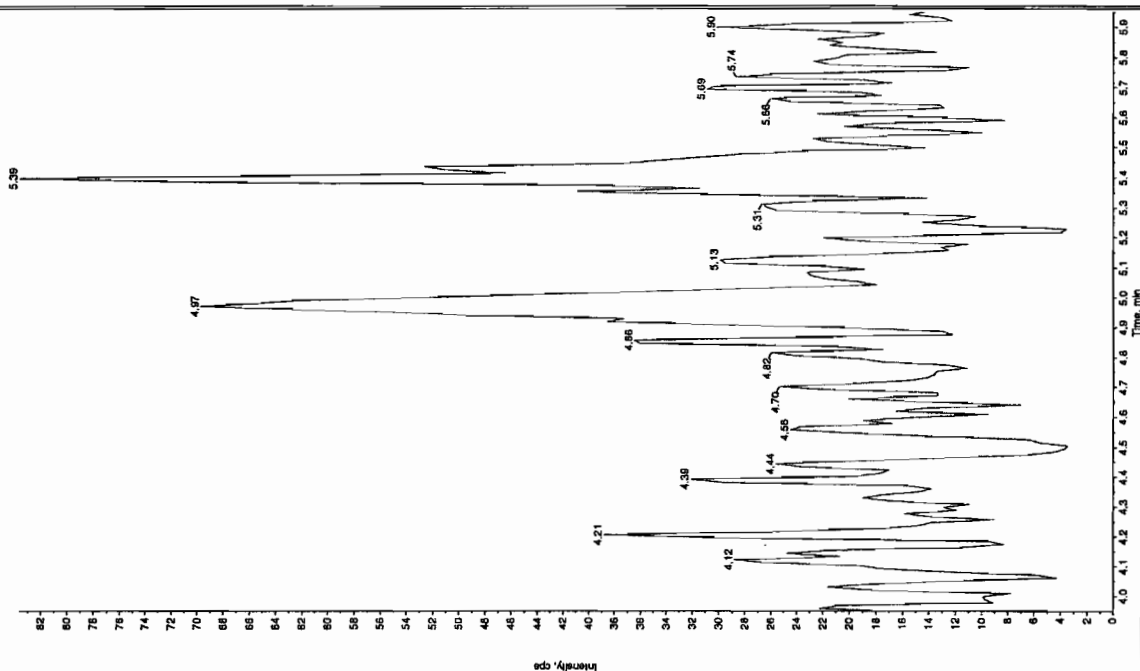
Intensity, cps





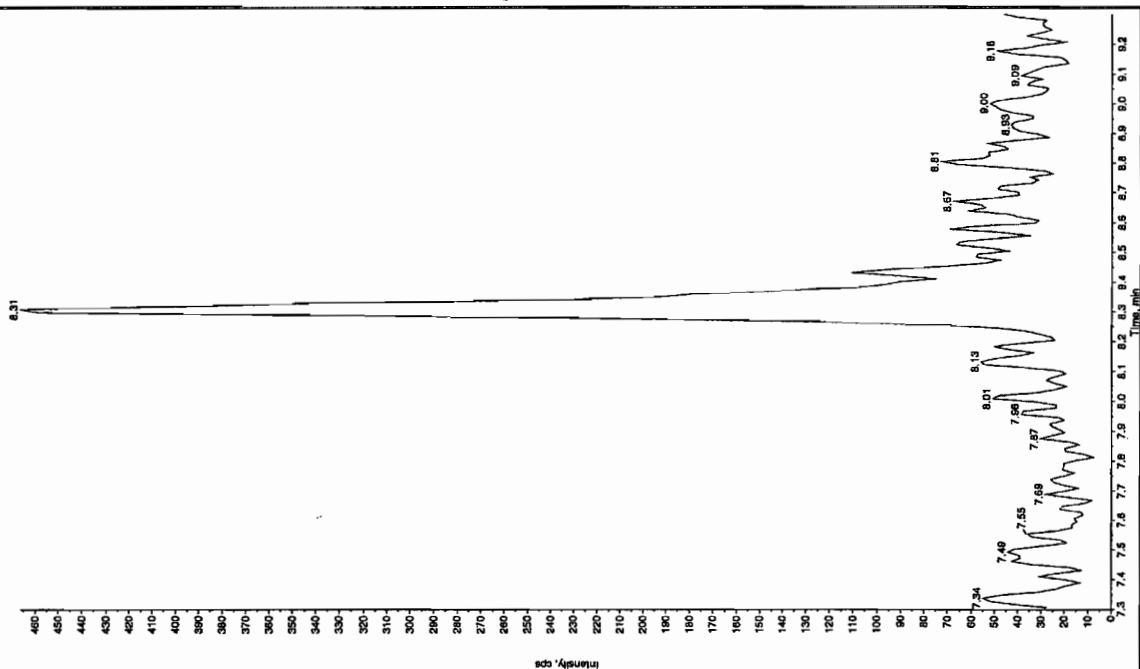
Sample Name: 'XIBLK08' Sample ID: '11LER' File: 'EXSG080044.wif'  
 Peak Name: '26-Diamino-4-nitrochlorine' Mass(es): '160.046.0 amu'  
 Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 4/9/2010  
 Acq. Date: 6:30:16 PM  
 Modified: No



Sample Name: 'XIBLK08' Sample ID: '11LER' File: 'EXSG080044.wif'  
 Peak Name: '34-Dinitrochlorine' Mass(es): '162.1751.9 amu'  
 Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 4/9/2010  
 Acq. Date: 6:30:16 PM  
 Modified: No

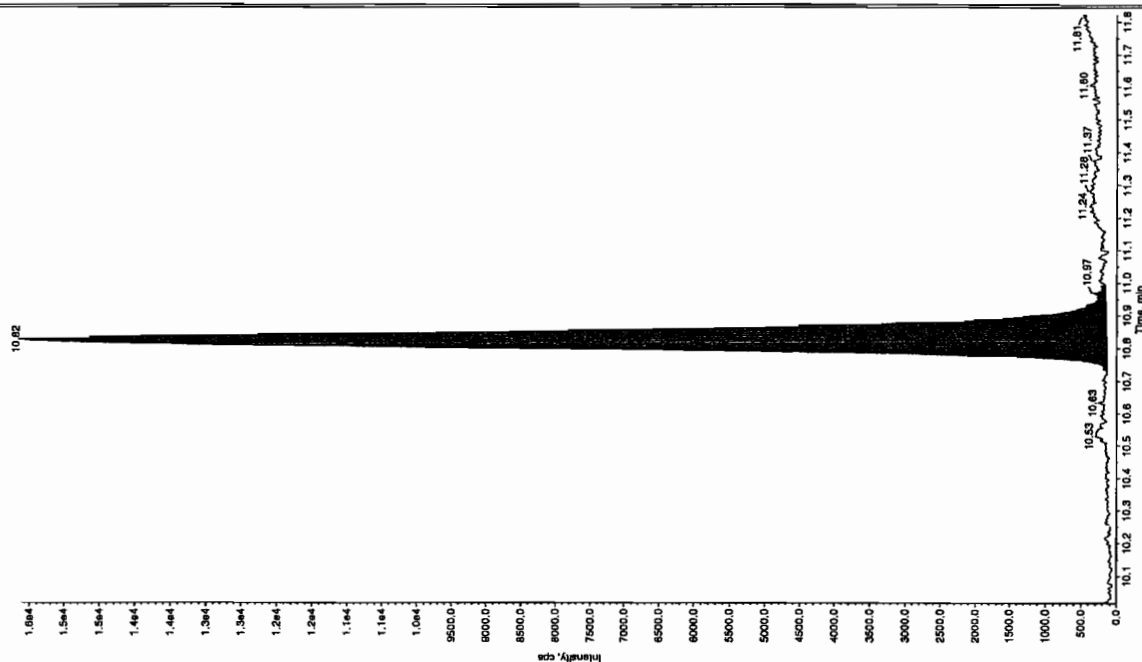


Sample Name: 'XIBLK06' Sample ID: 'JILPER' File: 'EXS04090044.wif'

Peak Name: 'tris(4-cresyl) phosphate' Mass(es): '369.1/91.0 amu'

Comment: 'LCMS-EXP\_B1' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1.88 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:30:16 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  
 Height: 6.06e+004 counts  
 Start Time: 10.7 min  
 End Time: 11.0 min

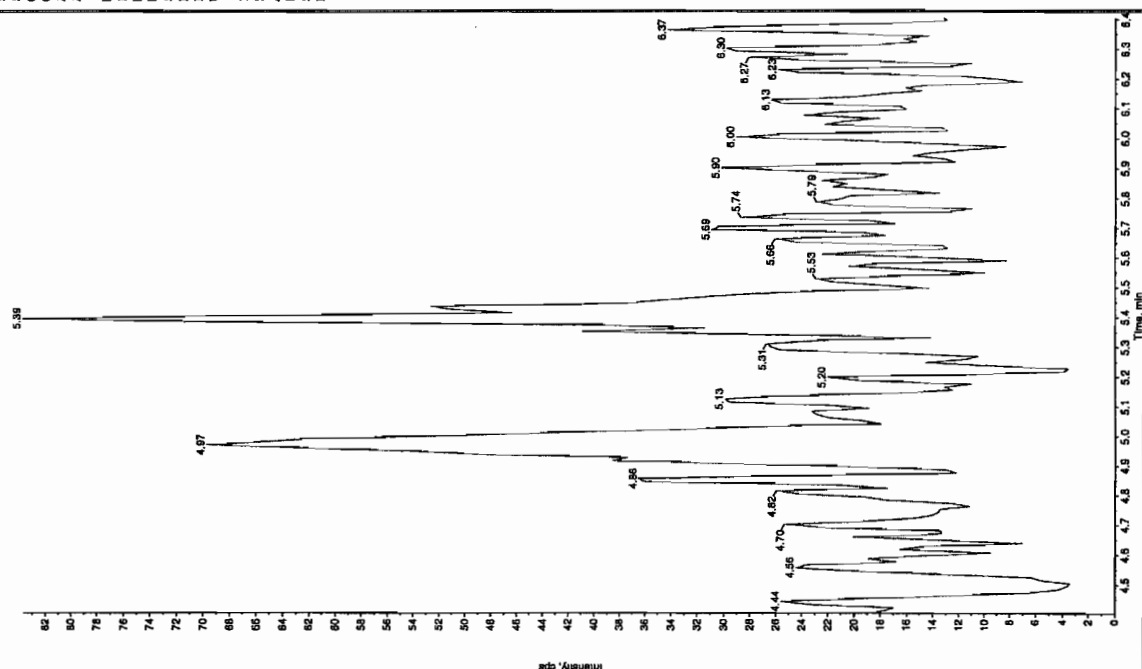


Sample Name: 'XIBLK06' Sample ID: 'JILPER' File: 'EXS04090044.wif'

Peak Name: '2,4-Dibromobenzonitrile' Mass(es): '186.0/46.0 amu'

Comment: 'LCMS-EXP\_B1' 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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2196

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 09-APR-10 20:20

GEL Data File: EXS04090051.wiff

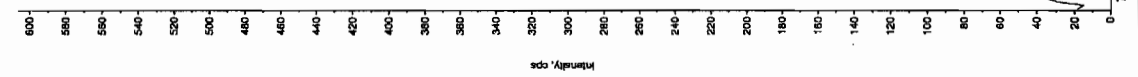
Instrument ID: LCMSMS

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

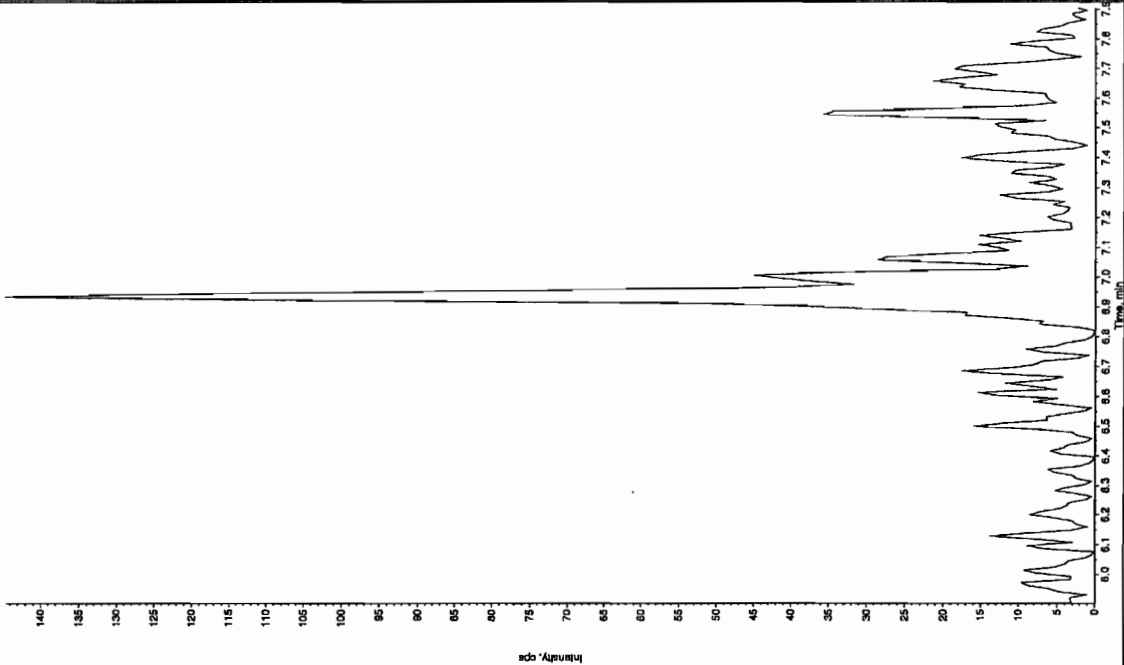
See 4/12/10

Sample Name: "XIBLK07" Sample ID: "111ER" File: "EXS04090051.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentrated: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:20:11 PM  
 Modified: No



See 04/12/10

Sample Name: "XIBLK07" Sample ID: "111ER" File: "EXS04090051.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentrated: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:20:11 PM  
 Modified: No



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

Sample Name: "XIBLX07" Sample ID: "111LER" File: "EXS04050051.wiff"  
 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: 8:20:11 PM  
 Modified: No

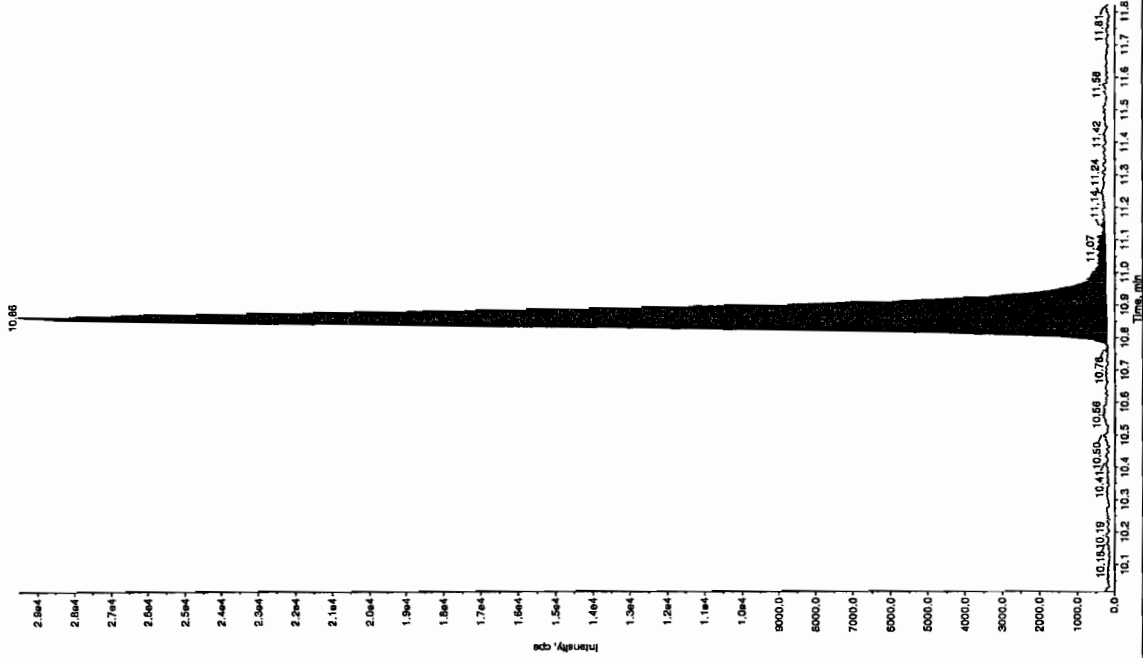
Intensity, cps

Time, min

4.96 5.44 5.61 5.66 5.80 5.87 5.95 6.01 6.04 6.07 6.10 6.13 6.16 6.19 6.22 6.25 6.28 6.31 6.34 6.37 6.40 6.43 6.46 6.49 6.52 6.55 6.58 6.61 6.64 6.67 6.70 6.73 6.76 6.79 6.82 6.85 6.88 6.91 6.94 6.97 7.00 7.03 7.06 7.09 7.12 7.15 7.18 7.21 7.24 7.27 7.30 7.33 7.36 7.39 7.42 7.45 7.48 7.51 7.54 7.57 7.60 7.63 7.66 7.69 7.72 7.75 7.78 7.81 7.84 7.87 7.90 7.93 7.96 7.99 8.02 8.05 8.08 8.11 8.14 8.17 8.20 8.23 8.26 8.29 8.32 8.35 8.38 8.41 8.44 8.47 8.50 8.53 8.56 8.59 8.62 8.65 8.68 8.71 8.74 8.77 8.80 8.83 8.86 8.89 8.92 8.95 8.98 9.01 9.04 9.07 9.10 9.13 9.16 9.19 9.22 9.25 9.28 9.31 9.34 9.37 9.40 9.43 9.46 9.49 9.52 9.55 9.58 9.61 9.64 9.67 9.70 9.73 9.76 9.79 9.82 9.85 9.88 9.91 9.94 9.97 10.00 10.03 10.06 10.09 10.12 10.15 10.18 10.21 10.24 10.27 10.30 10.33 10.36 10.39 10.42 10.45 10.48 10.51 10.54 10.57 10.60 10.63 10.66 10.69 10.72 10.75 10.78 10.81 10.84 10.87 10.90 10.93 10.96 10.99 11.02 11.05 11.08 11.11 11.14 11.17 11.20 11.23 11.26 11.29 11.32 11.35 11.38 11.41 11.44 11.47 11.50 11.53 11.56 11.59 11.62 11.65 11.68 11.71 11.74 11.77 11.80 11.83 11.86 11.89 11.92 11.95 11.98 12.01 12.04 12.07 12.10 12.13 12.16 12.19 12.22 12.25 12.28 12.31 12.34 12.37 12.40 12.43 12.46 12.49 12.52 12.55 12.58 12.61 12.64 12.67 12.70 12.73 12.76 12.79 12.82 12.85 12.88 12.91 12.94 12.97 13.00 13.03 13.06 13.09 13.12 13.15 13.18 13.21 13.24 13.27 13.30 13.33 13.36 13.39 13.42 13.45 13.48 13.51 13.54 13.57 13.60 13.63 13.66 13.69 13.72 13.75 13.78 13.81 13.84 13.87 13.90 13.93 13.96 13.99 14.02 14.05 14.08 14.11 14.14 14.17 14.20 14.23 14.26 14.29 14.32 14.35 14.38 14.41 14.44 14.47 14.50 14.53 14.56 14.59 14.62 14.65 14.68 14.71 14.74 14.77 14.80 14.83 14.86 14.89 14.92 14.95 14.98 15.01 15.04 15.07 15.10 15.13 15.16 15.19 15.22 15.25 15.28 15.31 15.34 15.37 15.40 15.43 15.46 15.49 15.52 15.55 15.58 15.61 15.64 15.67 15.70 15.73 15.76 15.79 15.82 15.85 15.88 15.91 15.94 15.97 16.00 16.03 16.06 16.09 16.12 16.15 16.18 16.21 16.24 16.27 16.30 16.33 16.36 16.39 16.42 16.45 16.48 16.51 16.54 16.57 16.60 16.63 16.66 16.69 16.72 16.75 16.78 16.81 16.84 16.87 16.90 16.93 16.96 16.99 17.02 17.05 17.08 17.11 17.14 17.17 17.20 17.23 17.26 17.29 17.32 17.35 17.38 17.41 17.44 17.47 17.50 17.53 17.56 17.59 17.62 17.65 17.68 17.71 17.74 17.77 17.80 17.83 17.86 17.89 17.92 17.95 17.98 18.01 18.04 18.07 18.10 18.13 18.16 18.19 18.22 18.25 18.28 18.31 18.34 18.37 18.40 18.43 18.46 18.49 18.52 18.55 18.58 18.61 18.64 18.67 18.70 18.73 18.76 18.79 18.82 18.85 18.88 18.91 18.94 18.97 19.00 19.03 19.06 19.09 19.12 19.15 19.18 19.21 19.24 19.27 19.30 19.33 19.36 19.39 19.42 19.45 19.48 19.51 19.54 19.57 19.60 19.63 19.66 19.69 19.72 19.75 19.78 19.81 19.84 19.87 19.90 19.93 19.96 19.99 20.02 20.05 20.08 20.11 20.14 20.17 20.20 20.23 20.26 20.29 20.32 20.35 20.38 20.41 20.44 20.47 20.50 20.53 20.56 20.59 20.62 20.65 20.68 20.71 20.74 20.77 20.80 20.83 20.86 20.89 20.92 20.95 20.98 21.01 21.04 21.07 21.10 21.13 21.16 21.19 21.22 21.25 21.28 21.31 21.34 21.37 21.40 21.43 21.46 21.49 21.52 21.55 21.58 21.61 21.64 21.67 21.70 21.73 21.76 21.79 21.82 21.85 21.88 21.91 21.94 21.97 22.00 22.03 22.06 22.09 22.12 22.15 22.18 22.21 22.24 22.27 22.30 22.33 22.36 22.39 22.42 22.45 22.48 22.51 22.54 22.57 22.60 22.63 22.66 22.69 22.72 22.75 22.78 22.81 22.84 22.87 22.90 22.93 22.96 22.99 23.02 23.05 23.08 23.11 23.14 23.17 23.20 23.23 23.26 23.29 23.32 23.35 23.38 23.41 23.44 23.47 23.50 23.53 23.56 23.59 23.62 23.65 23.68 23.71 23.74 23.77 23.80 23.83 23.86 23.89 23.92 23.95 23.98 24.01 24.04 24.07 24.10 24.13 24.16 24.19 24.22 24.25 24.28 24.31 24.34 24.37 24.40 24.43 24.46 24.49 24.52 24.55 24.58 24.61 24.64 24.67 24.70 24.73 24.76 24.79 24.82 24.85 24.88 24.91 24.94 24.97 25.00 25.03 25.06 25.09 25.12 25.15 25.18 25.21 25.24 25.27 25.30 25.33 25.36 25.39 25.42 25.45 25.48 25.51 25.54 25.57 25.60 25.63 25.66 25.69 25.72 25.75 25.78 25.81 25.84 25.87 25.90 25.93 25.96 25.99 26.02 26.05 26.08 26.11 26.14 26.17 26.20 26.23 26.26 26.29 26.32 26.35 26.38 26.41 26.44 26.47 26.50 26.53 26.56 26.59 26.62 26.65 26.68 26.71 26.74 26.77 26.80 26.83 26.86 26.89 26.92 26.95 26.98 27.01 27.04 27.07 27.10 27.13 27.16 27.19 27.22 27.25 27.28 27.31 27.34 27.37 27.40 27.43 27.46 27.49 27.52 27.55 27.58 27.61 27.64 27.67 27.70 27.73 27.76 27.79 27.82 27.85 27.88 27.91 27.94 27.97 28.00 28.03 28.06 28.09 28.12 28.15 28.18 28.21 28.24 28.27 28.30 28.33 28.36 28.39 28.42 28.45 28.48 28.51 28.54 28.57 28.60 28.63 28.66 28.69 28.72 28.75 28.78 28.81 28.84 28.87 28.90 28.93 28.96 28.99 29.02 29.05 29.08 29.11 29.14 29.17 29.20 29.23 29.26 29.29 29.32 29.35 29.38 29.41 29.44 29.47 29.50 29.53 29.56 29.59 29.62 29.65 29.68 29.71 29.74 29.77 29.80 29.83 29.86 29.89 29.92 29.95 29.98 30.01 30.04 30.07 30.10 30.13 30.16 30.19 30.22 30.25 30.28 30.31 30.34 30.37 30.40 30.43 30.46 30.49 30.52 30.55 30.58 30.61 30.64 30.67 30.70 30.73 30.76 30.79 30.82 30.85 30.88 30.91 30.94 30.97 31.00 31.03 31.06 31.09 31.12 31.15 31.18 31.21 31.24 31.27 31.30 31.33 31.36 31.39 31.42 31.45 31.48 31.51 31.54 31.57 31.60 31.63 31.66 31.69 31.72 31.75 31.78 31.81 31.84 31.87 31.90 31.93 31.96 31.99 32.02 32.05 32.08 32.11 32.14 32.17 32.20 32.23 32.26 32.29 32.32 32.35 32.38 32.41 32.44 32.47 32.50 32.53 32.56 32.59 32.62 32.65 32.68 32.71 32.74 32.77 32.80 32.83 32.86 32.89 32.92 32.95 32.98 33.01 33.04 33.07 33.10 33.13 33.16 33.19 33.22 33.25 33.28 33.31 33.34 33.37 33.40 33.43 33.46 33.49 33.52 33.55 33.58 33.61 33.64 33.67 33.70 33.73 33.76 33.79 33.82 33.85 33.88 33.91 33.94 33.97 34.00 34.03 34.06 34.09 34.12 34.15 34.18 34.21 34.24 34.27 34.30 34.33 34.36 34.39 34.42 34.45 34.48 34.51 34.54 34.57 34.60 34.63 34.66 34.69 34.72 34.75 34.78 34.81 34.84 34.87 34.90 34.93 34.96 34.99 35.02 35.05 35.08 35.11 35.14 35.17 35.20 35.23 35.26 35.29 35.32 35.35 35.38 35.41 35.44 35.47 35.50 35.53 35.56 35.59 35.62 35.65 35.68 35.71 35.74 35.77 35.80 35.83 35.86 35.89 35.92 35.95 35.98 36.01 36.04 36.07 36.10 36.13 36.16 36.19 36.22 36.25 36.28 36.31 36.34 36.37 36.40 36.43 36.46 36.49 36.52 36.55 36.58 36.61 36.64 36.67 36.70 36.73 36.76 36.79 36.82 36.85 36.88 36.91 36.94 36.97 37.00 37.03 37.06 37.09 37.12 37.15 37.18 37.21 37.24 37.27 37.30 37.33 37.36 37.39 37.42 37.45 37.48 37.51 37.54 37.57 37.60 37.63 37.66 37.69 37.72 37.75 37.78 37.81 37.84 37.87 37.90 37.93 37.96 37.99 38.02 38.05 38.08 38.11 38.14 38.17 38.20 38.23 38.26 38.29 38.32 38.35 38.38 38.41 38.44 38.47 38.50 38.53 38.56 38.59 38.62 38.65 38.68 38.71 38.74 38.77 38.80 38.83 38.86 38.89 38.92 38.95 38.98 39.01 39.04 39.07 39.10 39.13 39.16 39.19 39.22 39.25 39.28 39.31 39.34 39.37 39.40 39.43 39.46 39.49 39.52 39.55 39.58 39.61 39.64 39.67 39.70 39.73 39.76 39.79 39.82 39.85 39.88 39.91 39.94 39.97 40.00 40.03 40.06 40.09 40.12 40.15 40.18 40.21 40.24 40.27 40.30 40.33 40.36 40.39 40.42 40.45 40.48 40.51 40.54 40.57 40.60 40.63 40.66 40.69 40.72 40.75 40.78 40.81 40.84 40.87 40.90 40.93 40.96 40.99 41.02 41.05 41.08 41.11 41.14 41.17 41.20 41.23 41.26 41.29 41.32 41.35 41.38 41.41 41.44 41.47 41.50 41.53 41.56 41.59 41.62 41.65 41.68 41.71 41.74 41.77 41.80 41.83 41.86 41.89 41.92 41.95 41.98 42.01 42.04 42.07 42.10 42.13 42.16 42.19 42.22 42.25 42.28 42.31 42.34 42.37 42.40 42.43 42.46 42.49 42.52 42.55 42.58 42.61 42.64 42.67 42.70 42.73 42.76 42.79 42.82 42.85 42.88 42.91 42.94 42.97 43.00 43.03 43.06 43.09 43.12 43.15 43.18 43.21 43.24 43.27 43.30 43.33 43.36 43.39 43.42 43.45 43.48 43.51 43.54 43.57 43.60 43.63 43.66 43.69 43.72 43.75 43.78 43.81 43.84 43.87 43.90 43.93 43.96 43.99 44.02 44.05 44.08 44.11 44.14 44.17 44.20 44.23 44.26 44.29 44.32 44.35 44.38 44.41 44.44 44.47 44.50 44.53 44.56 44.59 44.62 44.65 44.68 44.71 44.74 44.77 44.80 44.83 44.86 44.89 44.92 44.95 44.98 45.01 45.04 45.07 45.10 45.13 45.16 45.19 45.22 45.25 45.28 45.31 45.34 45.37 45.40 45.43 45.46 45.49 45.52 45.55 45.58 45.61 45.64 45.67 45.70 45.73 45.76 45.79 45.82 45.85 45.88 45.91 45.94 45.97 46.00 46.03 46.06 46.09 46.12 46.15 46.18 46.21 46.24 46.27 46.30 46.33 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56.32 56.35 56.38 56.41 56.44 56.47 56.50 56.53 56.56 56.59 56.62 56.65 56.68 56.71 56.74 56.77 56.80 56.83 56.86 56.89 56.92 56.95 56.98 57.01 57.04 57.07 57.10 57.13 57.16 57.19 57.22 57.25 57.28 57.31 57.34 57.37 57.40 57.43 57.46 57.49 57.52 57.55 57.58 57.61 57.64 57.67 57.70 57.73 57.76 57.79 57.82 57.85 57.88 57.91 57.94 57.97 58.00 58.03 58.06 58.09 58.12 58.15 58.18 58.21 58.24 58.27 58.30 58.33 58.36 58.39 58.42 58.45 58.48 58.51 58.54 58.57 58.60 58.63 58.66 58.69 58.72 58.75 58.78 58.81 58.84 58.87 58.90 58.93 58.96 58.99 59.02 59.05 59.08 59.11 59.14 59.17 59.20 59.23 59.26 59.29 59.32 59.35 59.38 59.41 59.44 59.47 59.50 59.53 59.56 59.59 59.62 59.65 59.68 59.71 59.74 59.77 59.80 59.83 59.86 59.89 59.92 59.95 59.98 60.01 60.04 60.07 60.10 60.13 60.16 60.19 60.22 60.25 60.28 60.31 60.34 60.37 60.40 60.43 60.46 60.49 60.52 60.55 60.58 60.61 60.64 60.67 60.70 60.73 60.76 60.79 60.82 60.85 60.88 60.91 60.94 60.97 61.00 61.03 61.06 61.09 61.12 61.15 61.18 61.21 61.24 61.27 61.30 61.33 61.36 61.39 61.42 61.45 61.48 61.51 61.54 61.57 61.60 61.63 61.66 61.69 61.72 61.75 61.78 61.81 61.84 61.87 61.90 61.93 61.96 61.99 62.02 62.05 62.08 62.11 62.14 62.17 62.20 62.23 62.26 62.29 62.32 62.35 62.38 62.41 62.44 62.47 62.50 62.53 62.56 62.59 62.62 62.65 62.68 62.71 62.74 62.77 62.80 62.83 62.86 62.89 62.92 62.95 62.98 63.01 63.04 63.07 63.10 63.13 63.16 63.19 63.22 63.25 63.28 63.31 63.34 63.37 63.40 63.43 63.46 63.49 63.52 63.55 63.58 63.61 63.64 63.67 63.70 63.73 63.76 63.79 63.82 63.85 63.88 63.91 63.94 63.97 64.00 64.03 64.06 64.09 64.12 64.15 64.18 64.21 64.24 64.27 64.30 64.33 64.36 64.39 64.42 64.45 64.48 64.51 64.54 64.57 64.60 64.63 64.66 64.69 64.72 64.75 64.78 64.81 64.84 64.87 64.90 64.93 64.96 64.99 65.02 65.05 65.08 65.11 65.14 65.17 65.20 65.23 65.26 65.29 65.32 65.35 65.38 65.41 65.44 65.47 65.50 65.53 65.56 65.59 65.62 65.65 65.68 65.71 65.74 65.77 65.80 65.83 65.86 65.89 65.92 65.95 65.98 66.01 66.04 66.07 66.10 66.13 66.16 66.19 66.22 66.25 66.28 66.31 66.34 66.37 6

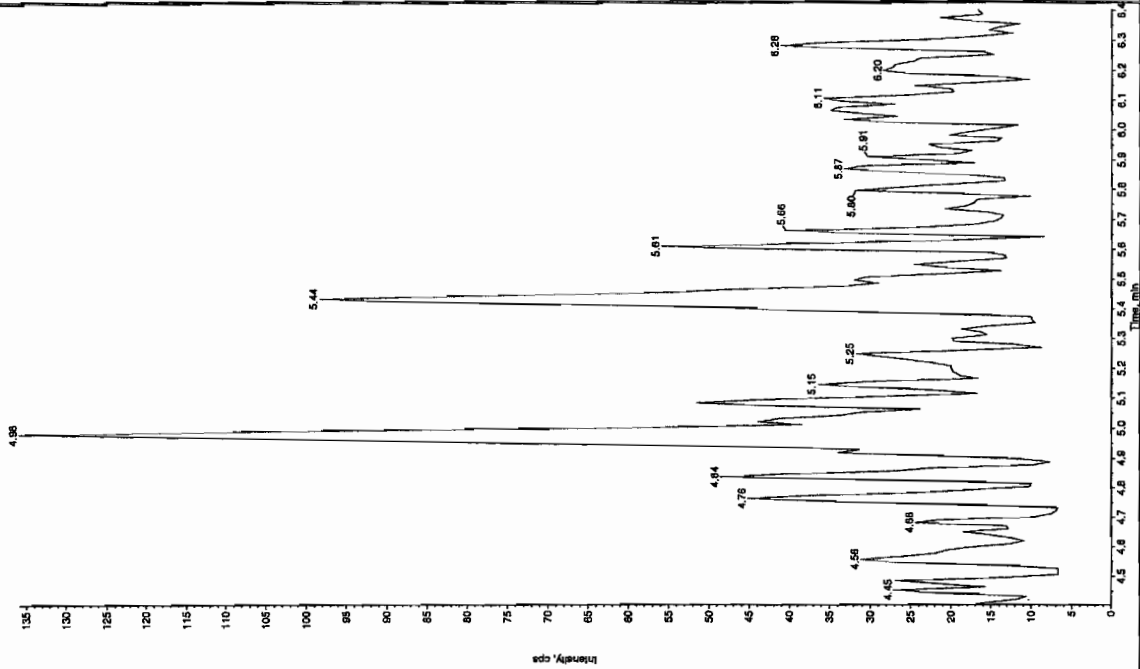
Sample Name: "XIBLK07" Sample ID: "JULER" File: "EX504090051.wif"  
 Peak Name: "116 (o-cresyl) phosphate" Mass(es): "355.1/51.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 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: 10.8 min  
 Height: 1.19e+005 counts  
 Start Time: 10.8 min  
 End Time: 11.2 min



Sample Name: "XIBLK07" Sample ID: "JULER" File: "EX504090051.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: 4.71 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:20:11 PM  
 Modified: No



Nairb.ref

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

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
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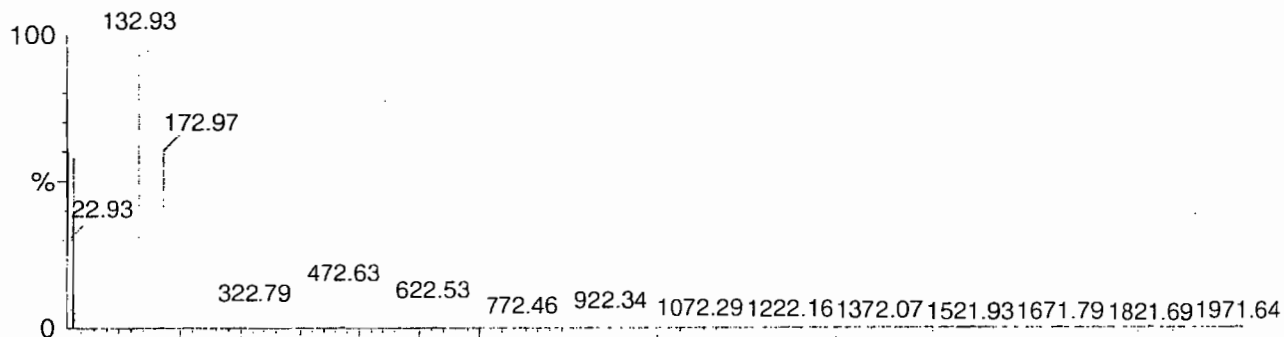
Calibration Report - MS1 Static

Page 1 of 1

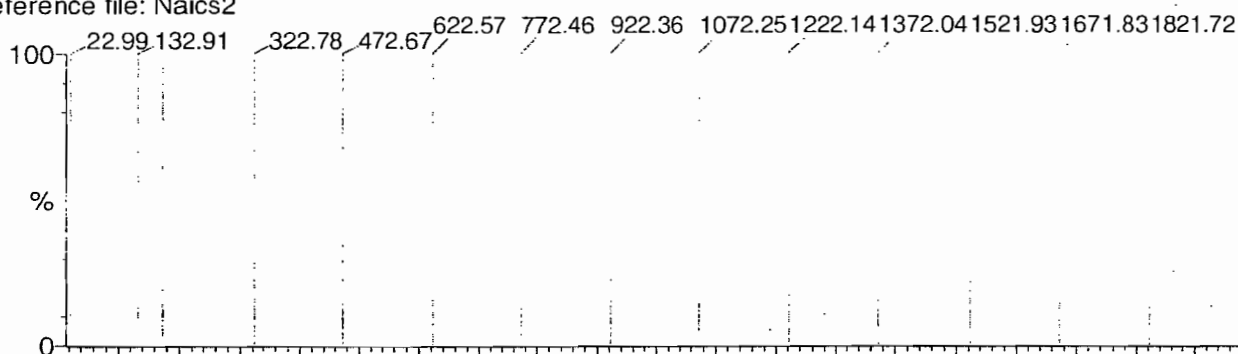
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

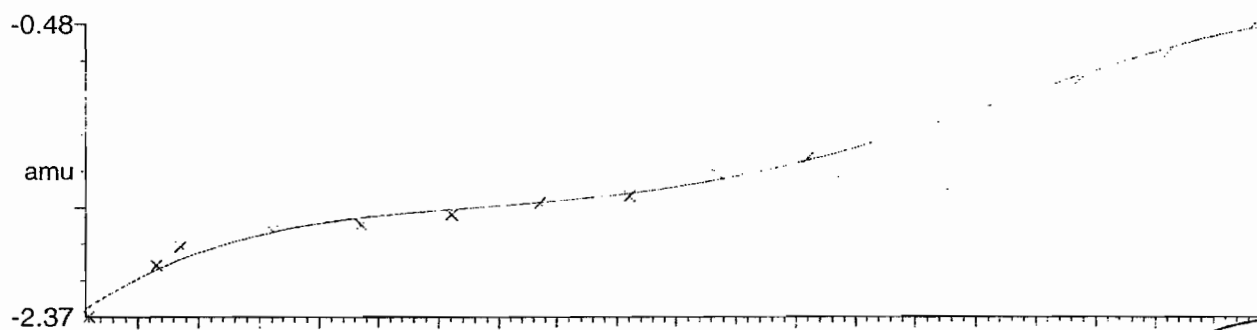
15 matches of 15 tested references



Reference file: Naics2

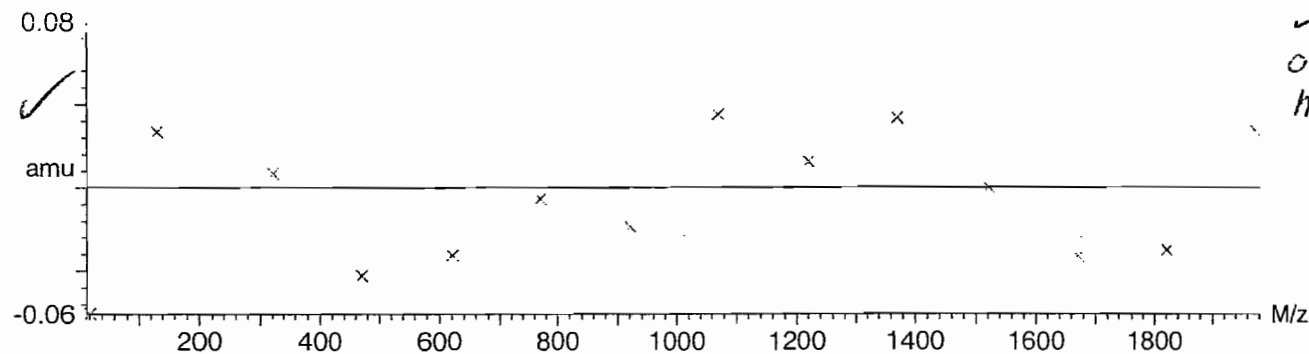


Mass difference (Raw - Ref mass)



Residuals

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





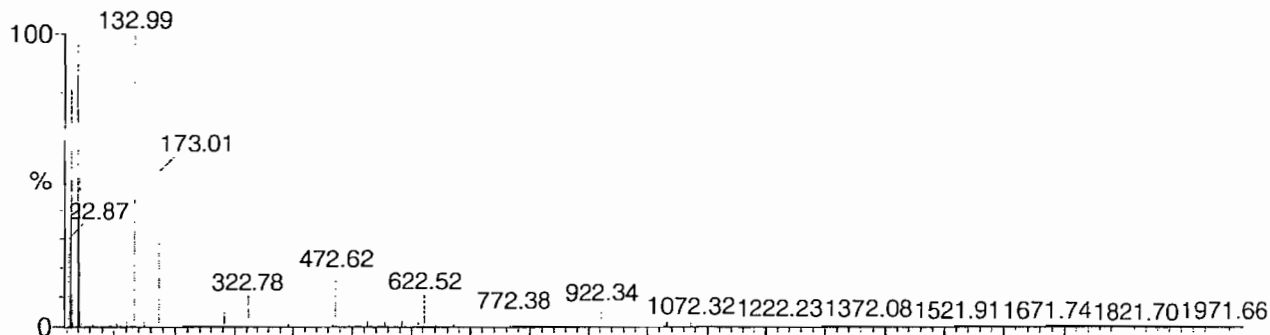
Calibration Report - MS1 Scanning

Page 1 of 1

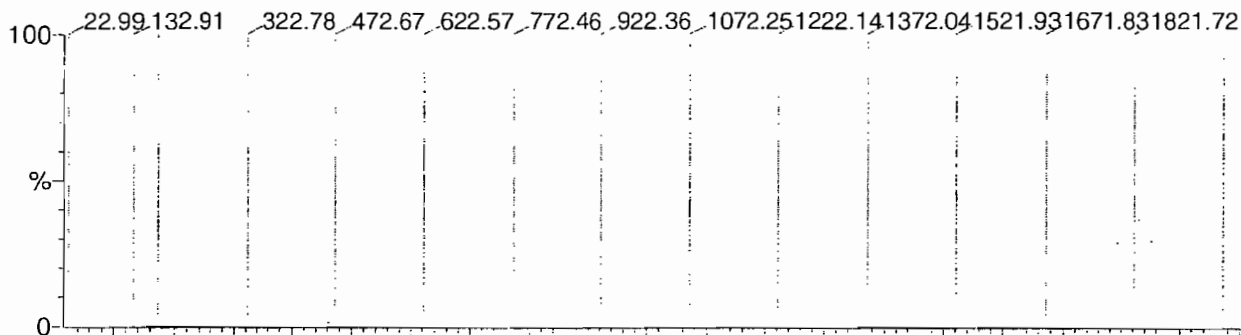
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

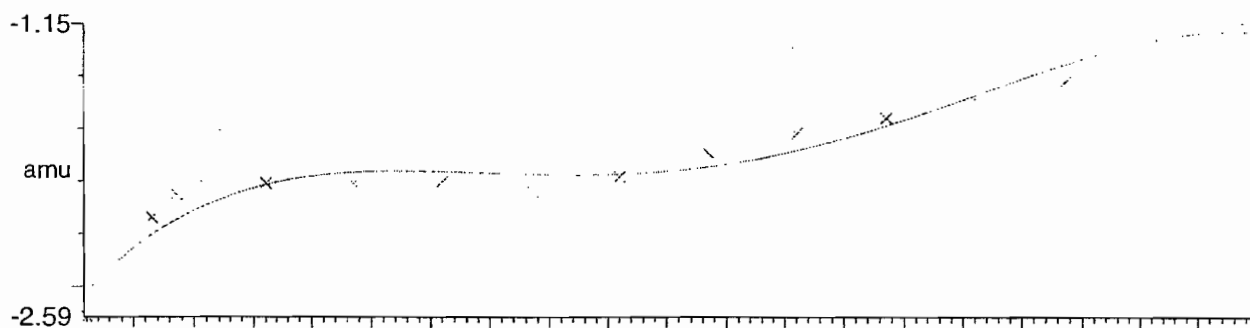
15 matches of 15 tested references



Reference file: Naics2

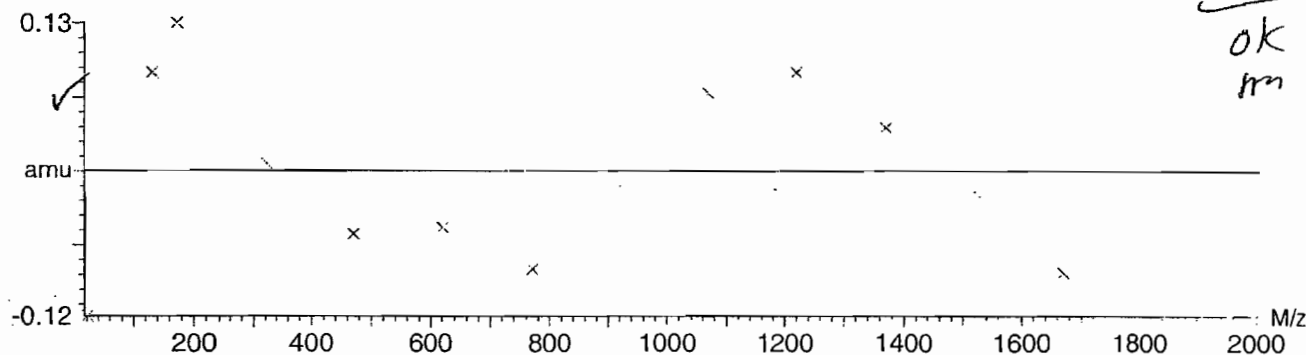


Mass difference (Raw - Ref mass)



Residuals

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



ok  
m

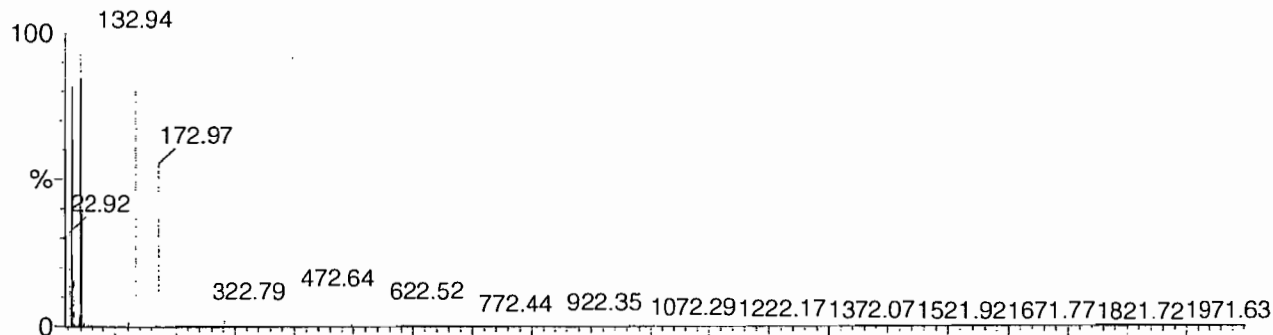
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

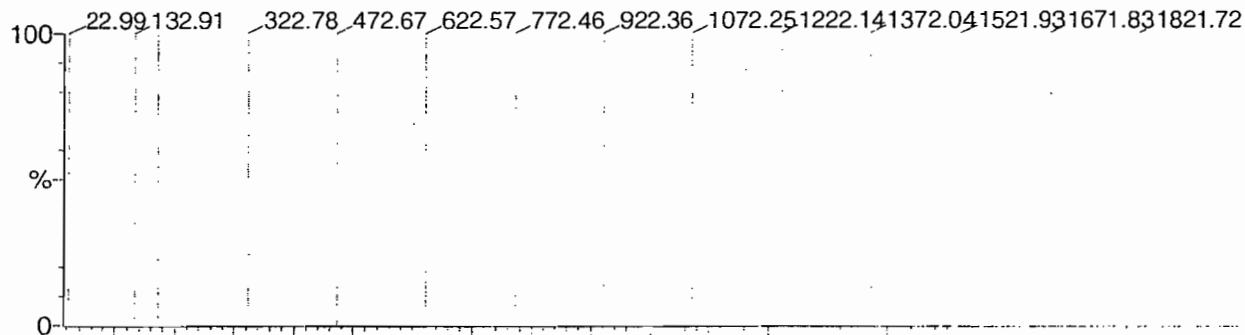
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

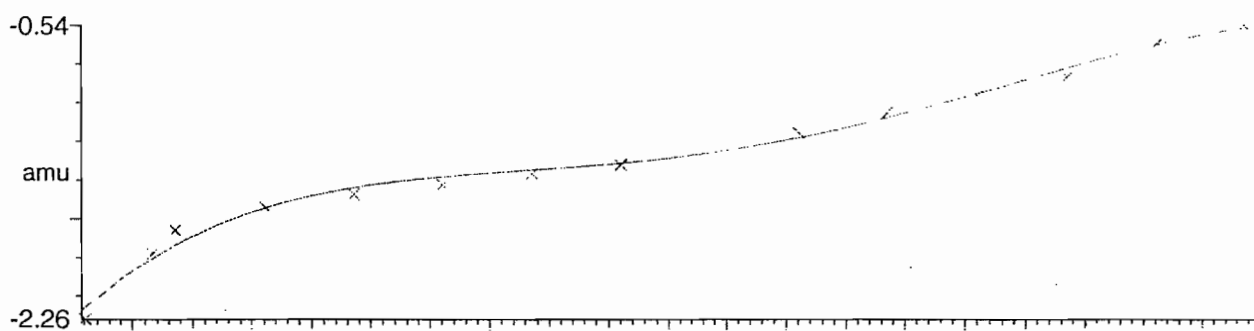
15 matches of 15 tested references



Reference file: Naics2

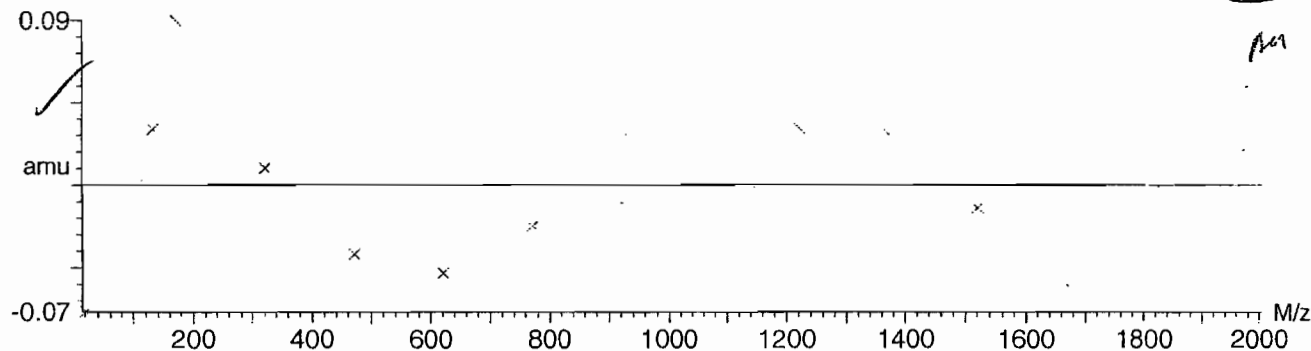


Mass difference (Raw - Ref mass)



Residuals

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



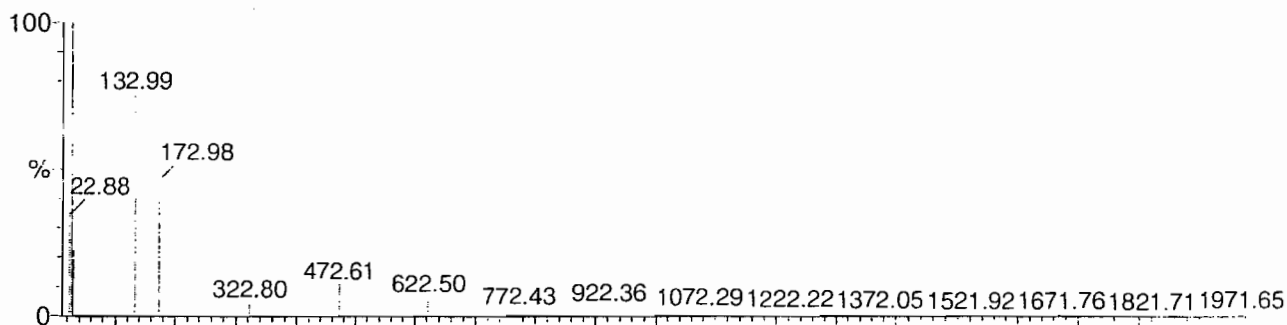
Calibration Report - MS2 Static

Page 1 of 1

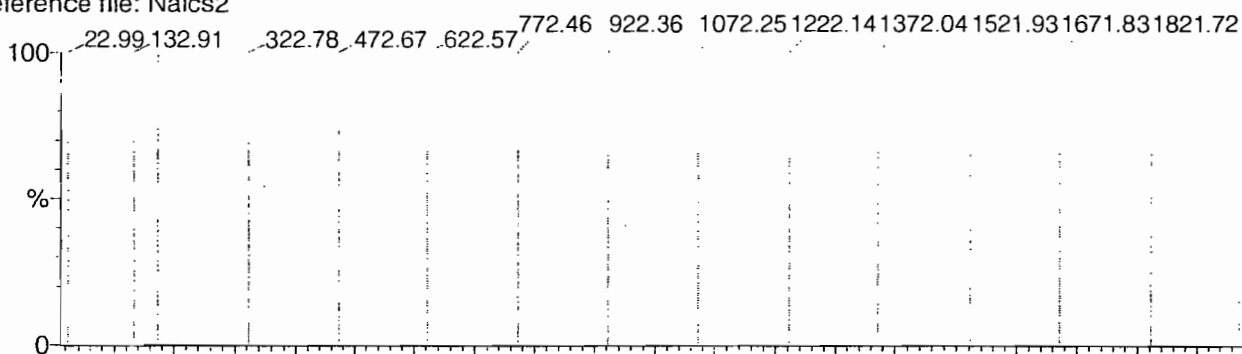
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

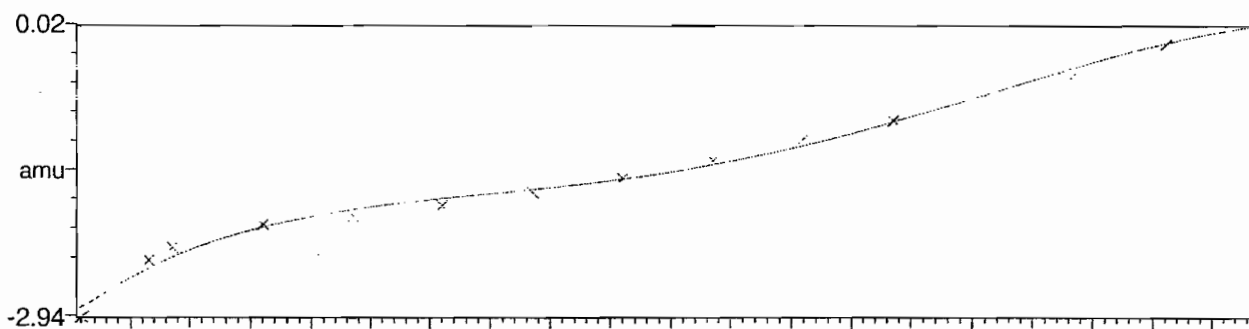
15 matches of 15 tested references



Reference file: Naics2

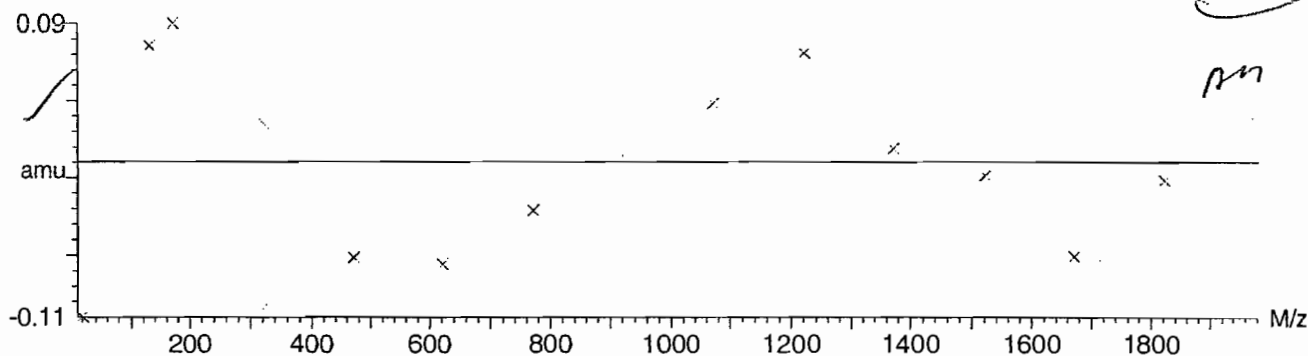


Mass difference (Raw - Ref mass)



Residuals

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



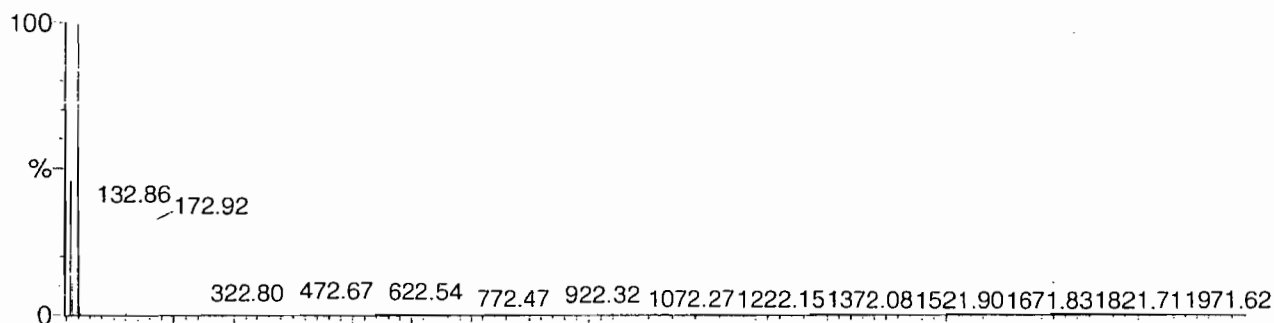
Calibration Report - MS2 Scanning

Page 1 of 1

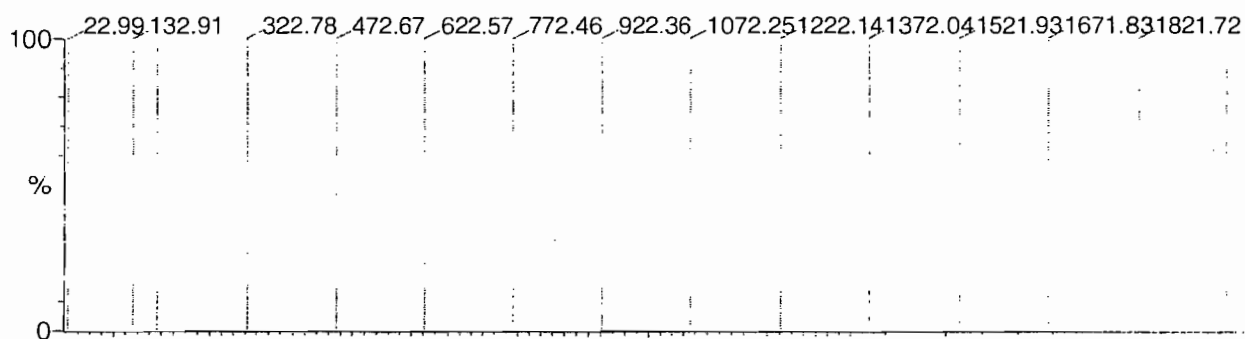
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

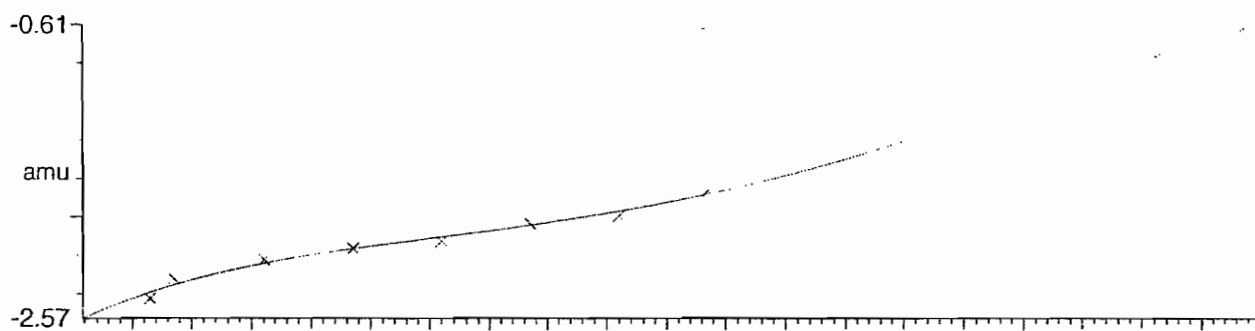
14 matches of 15 tested references



Reference file: Naics2

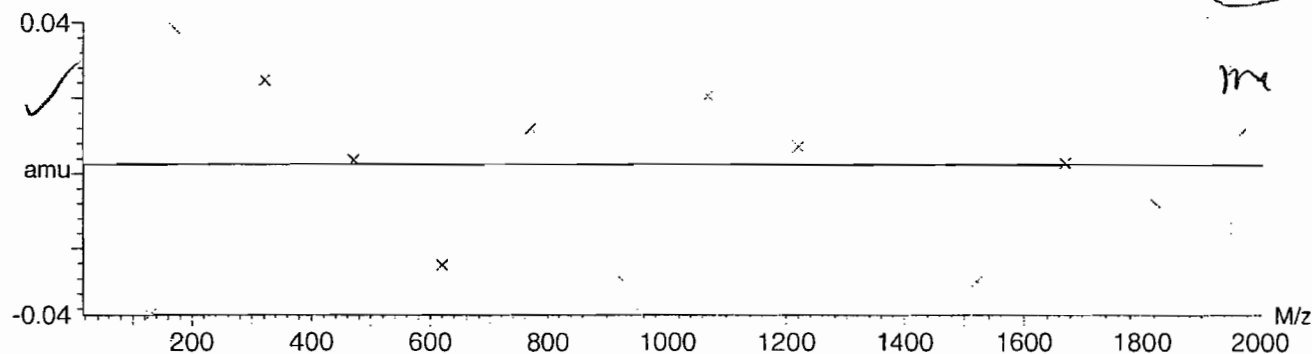


Mass difference (Raw - Ref mass)



Residuals

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



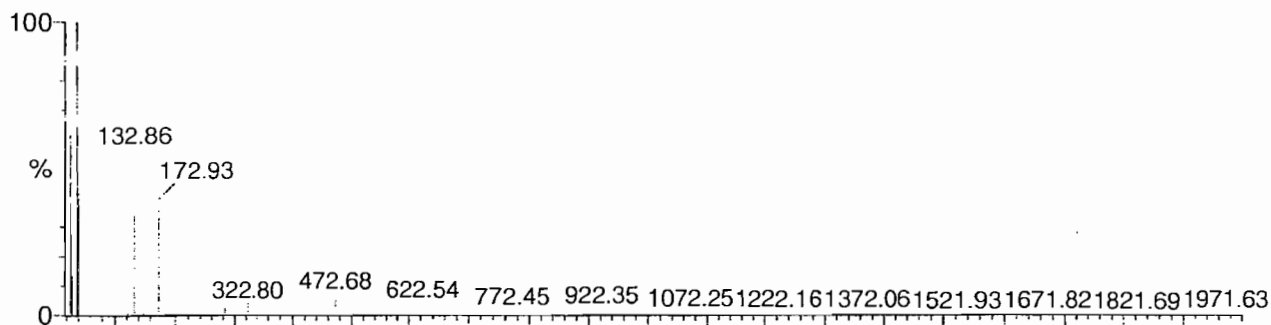
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

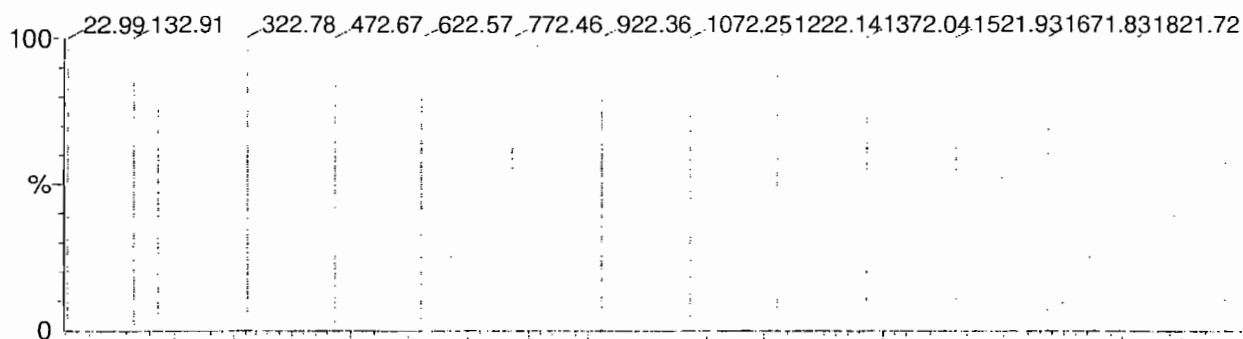
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

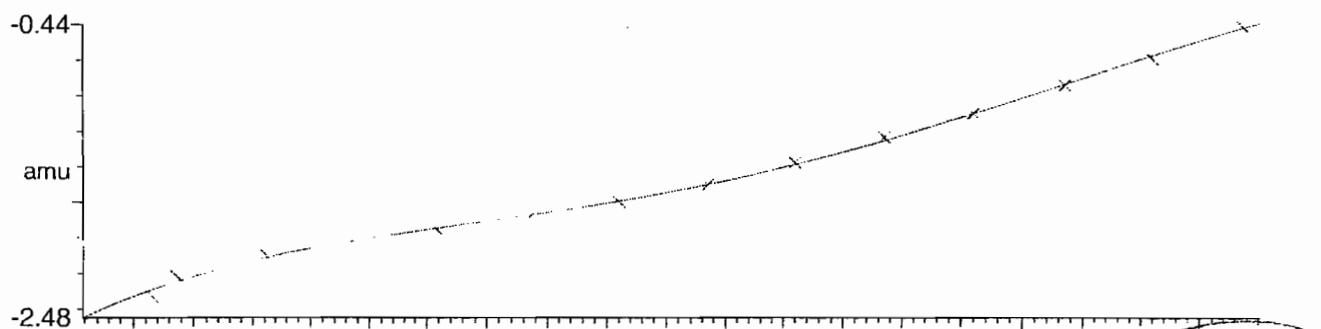
14 matches of 15 tested references



Reference file: Naics2

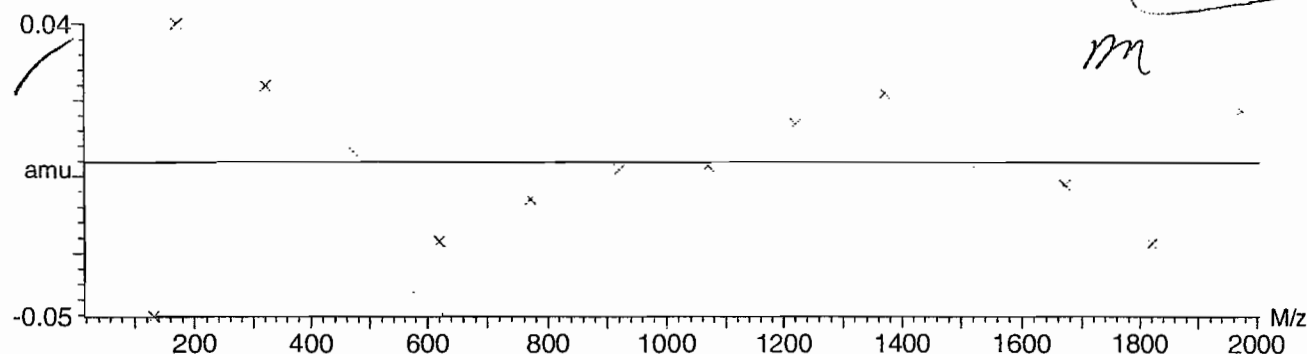


Mass difference (Raw - Ref mass)



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): 10-2196

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
RE36-10-7501	16-apr-10 15:06	EXP0415068.w	17700000	10.5	74900000	14.6
RE36-10-7524	16-apr-10 15:32	EXP0415069.w	16900000	10.5	81000000	14.7
RE36-10-7525	16-apr-10 15:58	EXP0415070.w	17200000	10.5	82500000	14.7

IS1 (DNB) = 1,3-Dinitrobenzene-d4

IS2 (DNT) = 2,6-Dinitrotoluene-d2

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: RE36-10-7501

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514001

Sample Amount 2

Moisture: 24.0

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: EXP0415068.wiff

Date Analyzed: 16-APR-10 15:06

Units: ug/kg

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

\*Concentration =

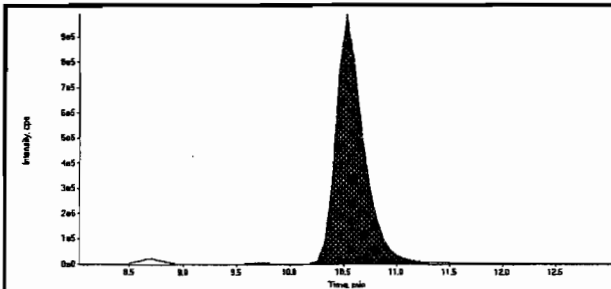
Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor



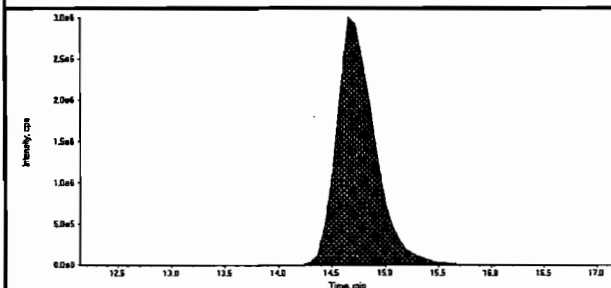
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

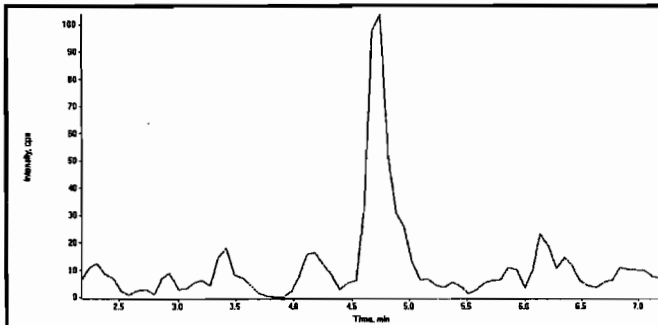
Data File	EXP0415068.wiff	Acquisition Date	4/16/2010 3:06:58 PM
Sample Name	248514001	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



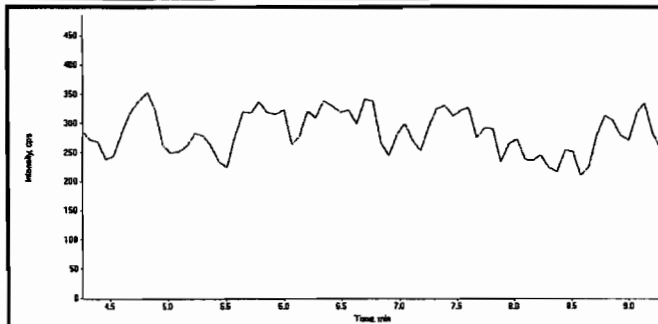
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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

*for 4/23/10 HMX 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>	EXP0415068.wiff	<b>Acquisition Date</b>	4/16/2010 3:06:58 PM
<b>Sample Name</b>	248514001	<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>	2.48e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.38 (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

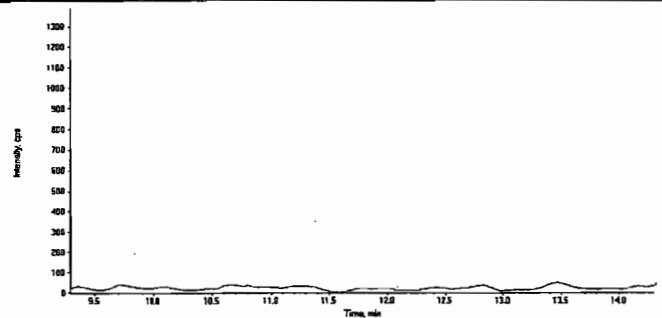
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

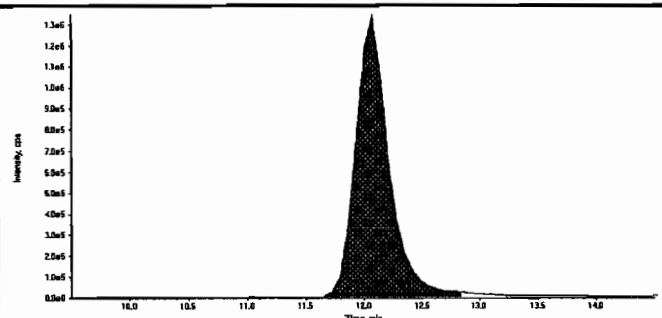
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415068.wiff	<b>Acquisition Date</b>	4/16/2010 3:06:58 PM
<b>Sample Name</b>	248514001	<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

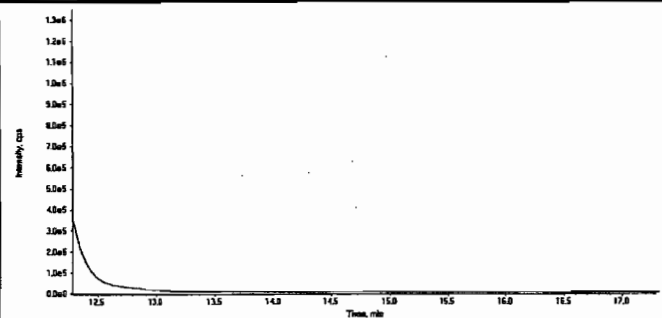
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

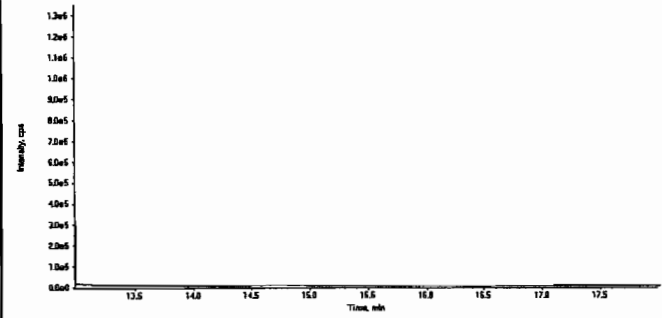
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	12.1
	<b>Area Counts:</b>	2.69e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	273. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<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>	2.00e+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>	EXP0415068.wiff	<b>Acquisition Date</b>	4/16/2010 3:06:58 PM
<b>Sample Name</b>	248514001	<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)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	8.47e+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	EXP0415068.wiff	Acquisition Date	4/16/2010 3:06:58 PM
Sample Name	248514001	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7501

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514001

Sample Amount 2

Moisture: 24.0

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: EXS04090047.wiff

Date Analyzed: 09-APR-10 19:17

Units: ug/kg

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

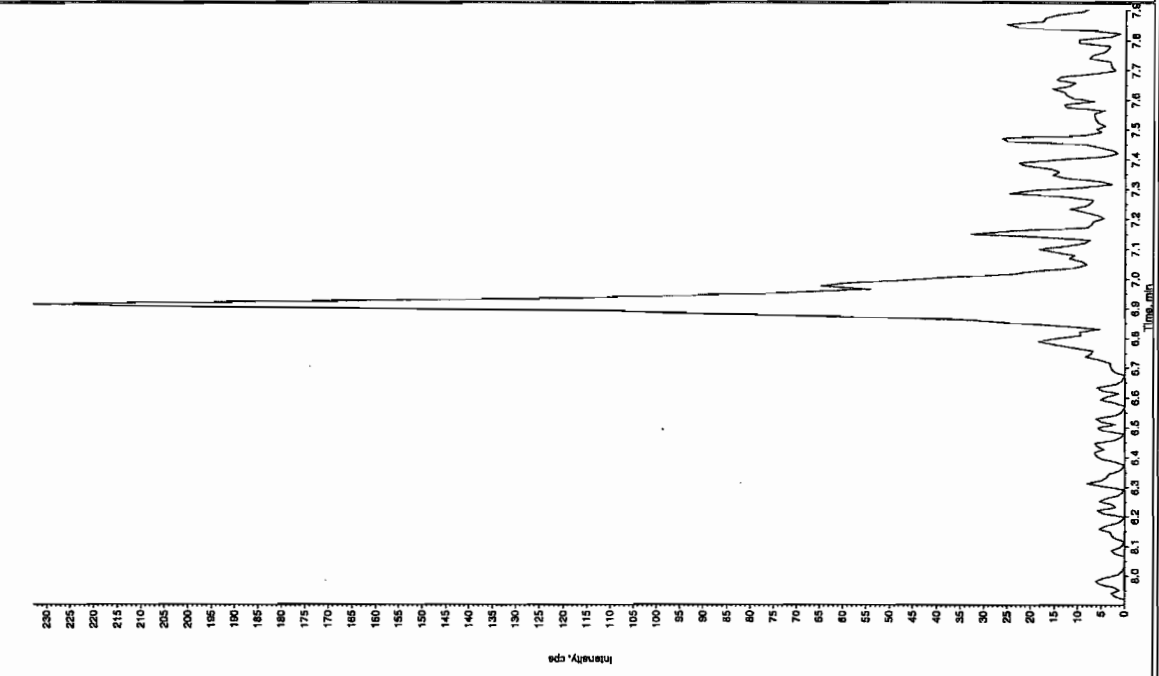
\*Concentration =

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

Dec 4/12/10

Sample Name: "248514001" Sample ID: "96103321" File: "EXS04060047.wiff"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"  
 Comment: "LCX63212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:17:21 PM  
 Modified: No



Dec 4/12/10

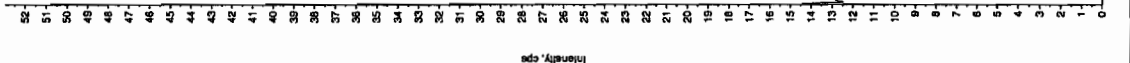
Sample Name: "248514001" Sample ID: "96103321" File: "EXS04060047.wiff"  
 Peak Name: "7-ATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCX63212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:17:21 PM  
 Modified: No



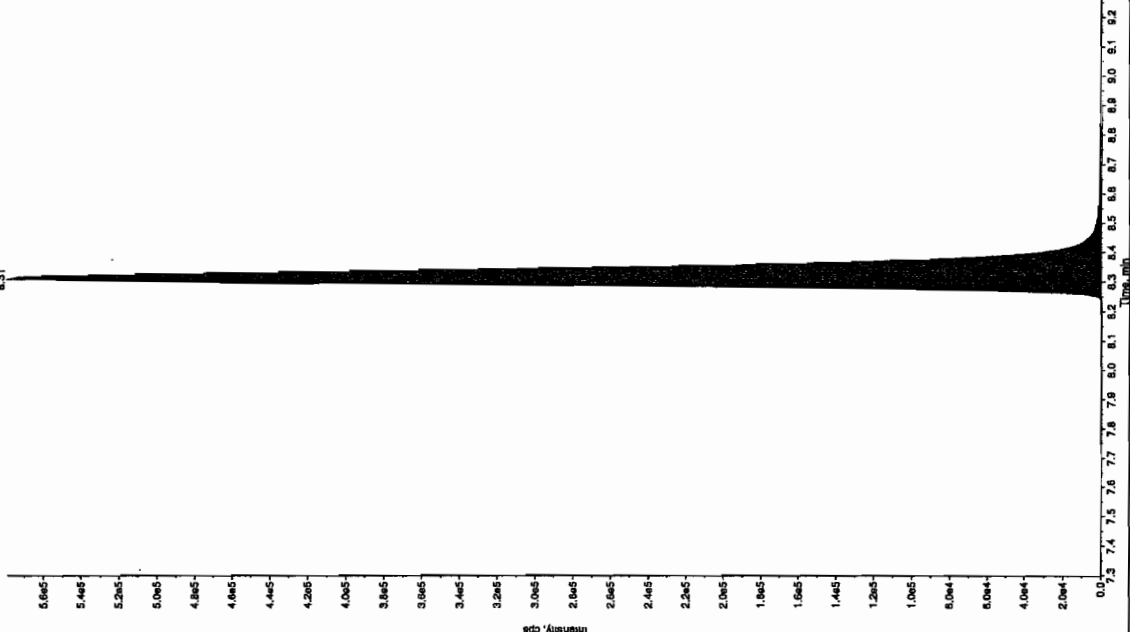
Sample Name: '248514001' Sample ID: '9610332121.ERP' File: 'EXS04050047.wiff'  
 Peak Name: '26-Diamino-4-nitrothiophene' Mass(es): '166.046.0 amu'  
 Comment: 'LCX632125' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:17:21 PM  
 Modified: No



Sample Name: '248514001' Sample ID: '9610332121.ERP' File: 'EXS04050047.wiff'  
 Peak Name: '34-Dinitrothiophene' Mass(es): '182.1151.9 amu'  
 Comment: 'LCX632125' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 264. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:17:21 PM  
 Modified: No  
 Peak: 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  
 Observed RT: 8.31 min  
 Type: Valley  
 Retention Time: 8.31 min  
 Area: 2.36e+004 counts  
 Height: 578892.019 cps  
 Start Time: 8.15 min  
 End Time: 8.70 min



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



Sample Name: "248514001" Sample ID: "96103321LER" File: "EXS04090047.wif"

Peak Name: "tris(c-cisay) phosphate" Mass(es): "385.1/91.0 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 2.89 ng/mL

Acq. Date: 4/9/2010

Acq. Time: 7:17:21 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 8000.00 cps

Min. Peak Width: 3.00 sec

Smoothing Width: 3.00 points

Ext. Window: 30.0 sec

Expected RT: 10.8 min

Use Relative RT: No

Int. Type: Valley

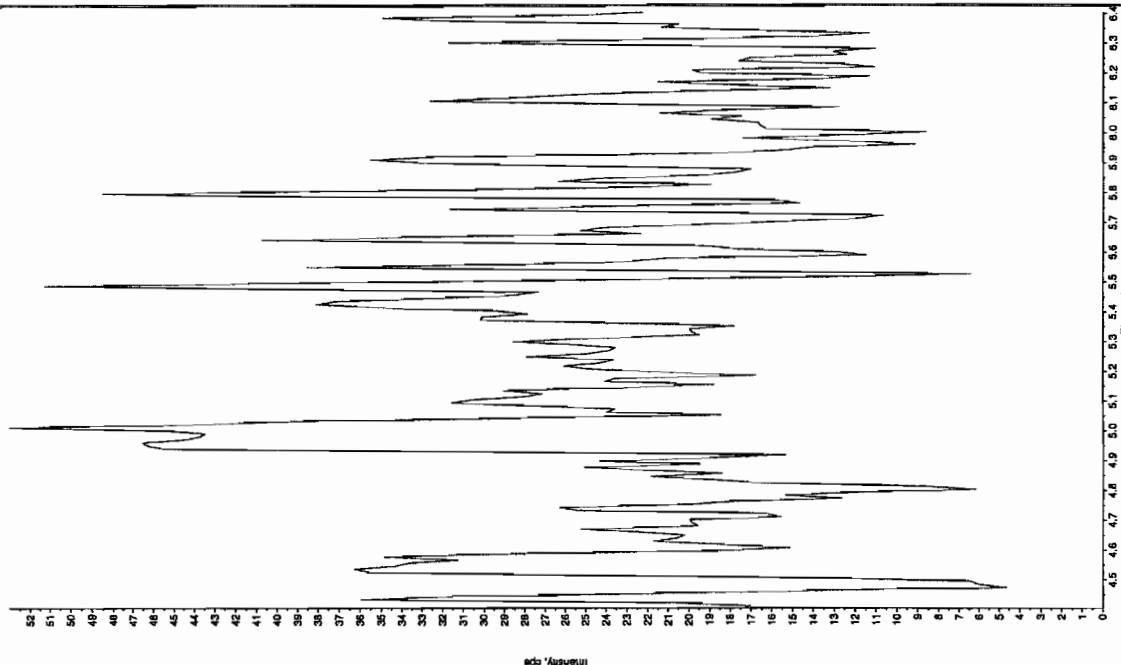
Retention Time: 10.8 min

Area: 8.15e+004 counts

Height: 20110.550 cps

Start Time: 10.7 min

End Time: 11.1 min



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7524

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514002

Sample Amount 2

Moisture: 16.0

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: EXP0415069.wiff

Date Analyzed: 16-APR-10 15:32

Units: ug/kg

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

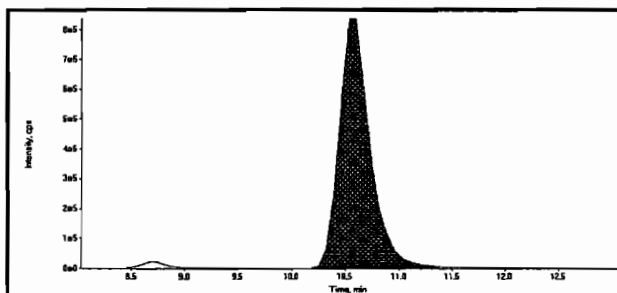
\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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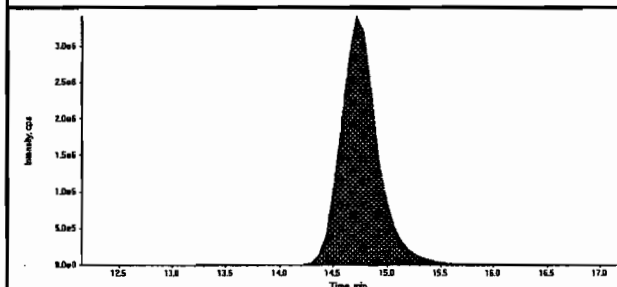
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

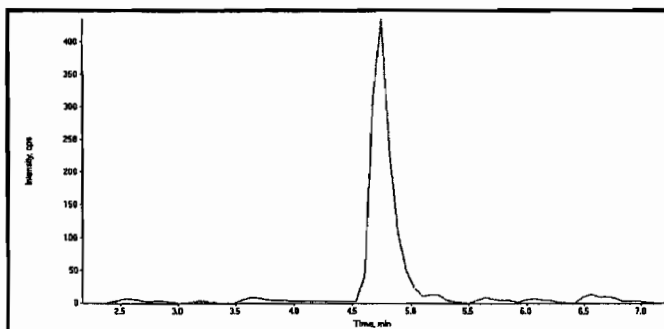
Data File	EXP0415069.wiff	Acquisition Date	4/16/2010 3:32:56 PM
Sample Name	248514002	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



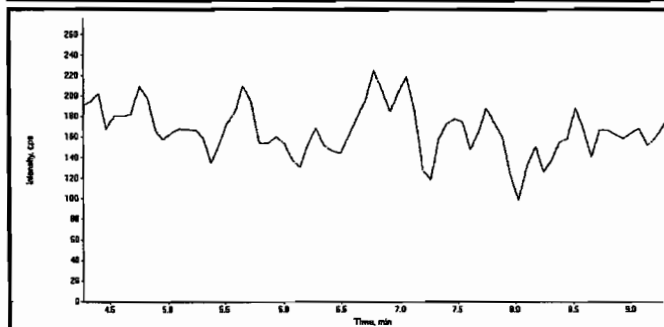
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	16900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	81000000.00
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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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>	EXP0415069.wiff	<b>Acquisition Date</b>	4/16/2010 3:32:56 PM
<b>Sample Name</b>	248514002	<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>	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

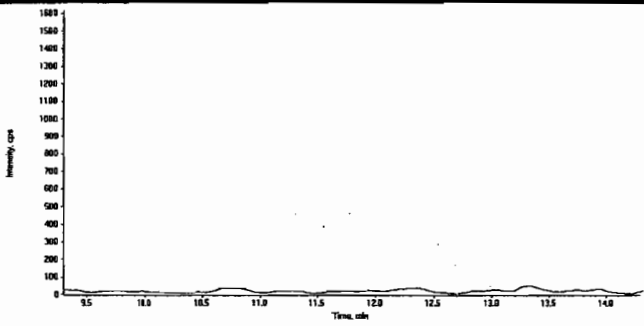
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

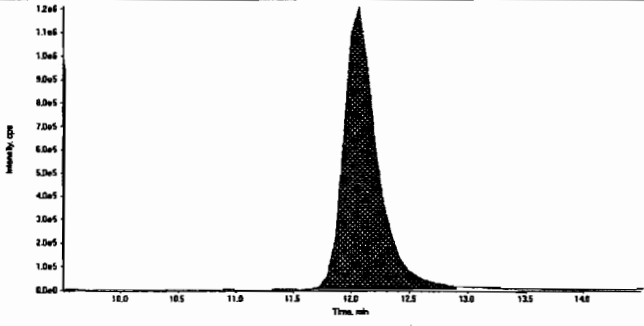
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415069.wiff	<b>Acquisition Date</b>	4/16/2010 3:32:56 PM
<b>Sample Name</b>	248514002	<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

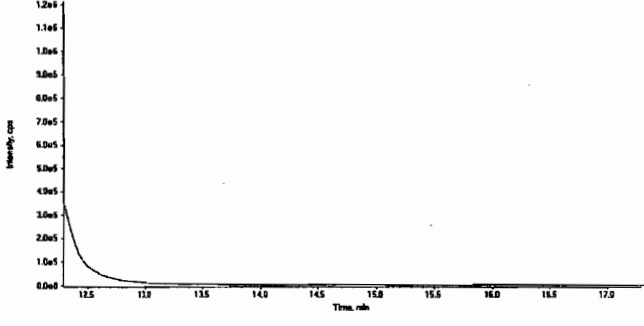
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

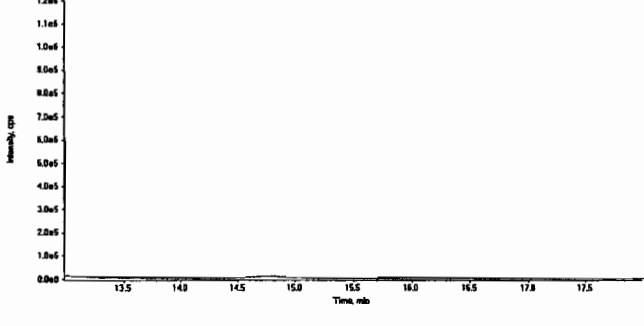
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	2.45e+007
	Manual Modification	No
	Amount:	230. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.8
	Area Counts:	2.41e+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>	EXP0415069.wiff	<b>Acquisition Date</b>	4/16/2010 3:32:56 PM
<b>Sample Name</b>	248514002	<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:	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:	14.1
	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

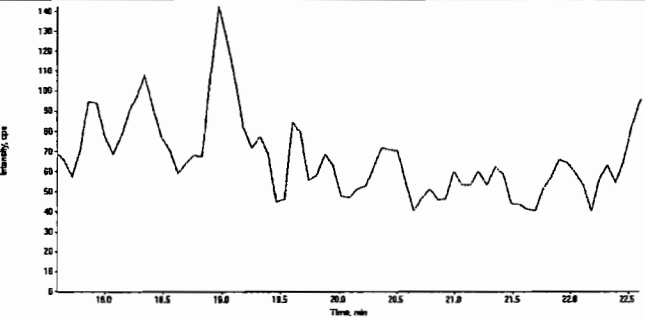
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

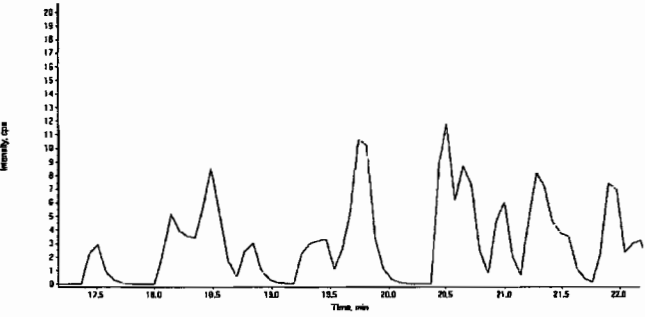
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LCMSMS#3

<b>Data File</b>	EXP0415069.wiff	<b>Acquisition Date</b>	4/16/2010 3:32:56 PM
<b>Sample Name</b>	248514002	<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>	PETNI (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: RE36-10-7524

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514002

Sample Amount 2

Moisture: 16.0

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: EXS04090048.wiff

Date Analyzed: 09-APR-10 19:33

Units: ug/kg

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

\*Concentration =

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



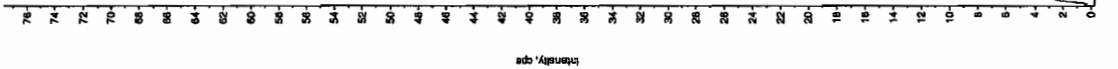
See 4/12/10

Sample Name: "24851402" Sample ID: "961033121.ER" File: "EXS04090048.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:33:03 PM  
 Modified: No

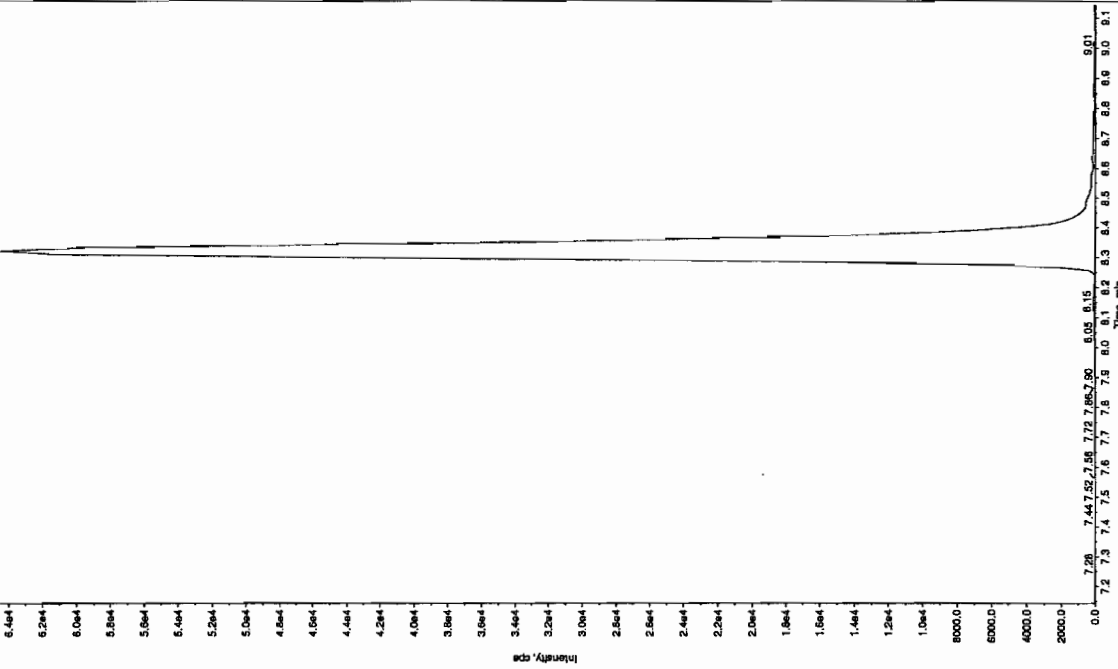


Sample Name: "24851402" Sample ID: "961033121.ER" File: "EXS04090048.wif"

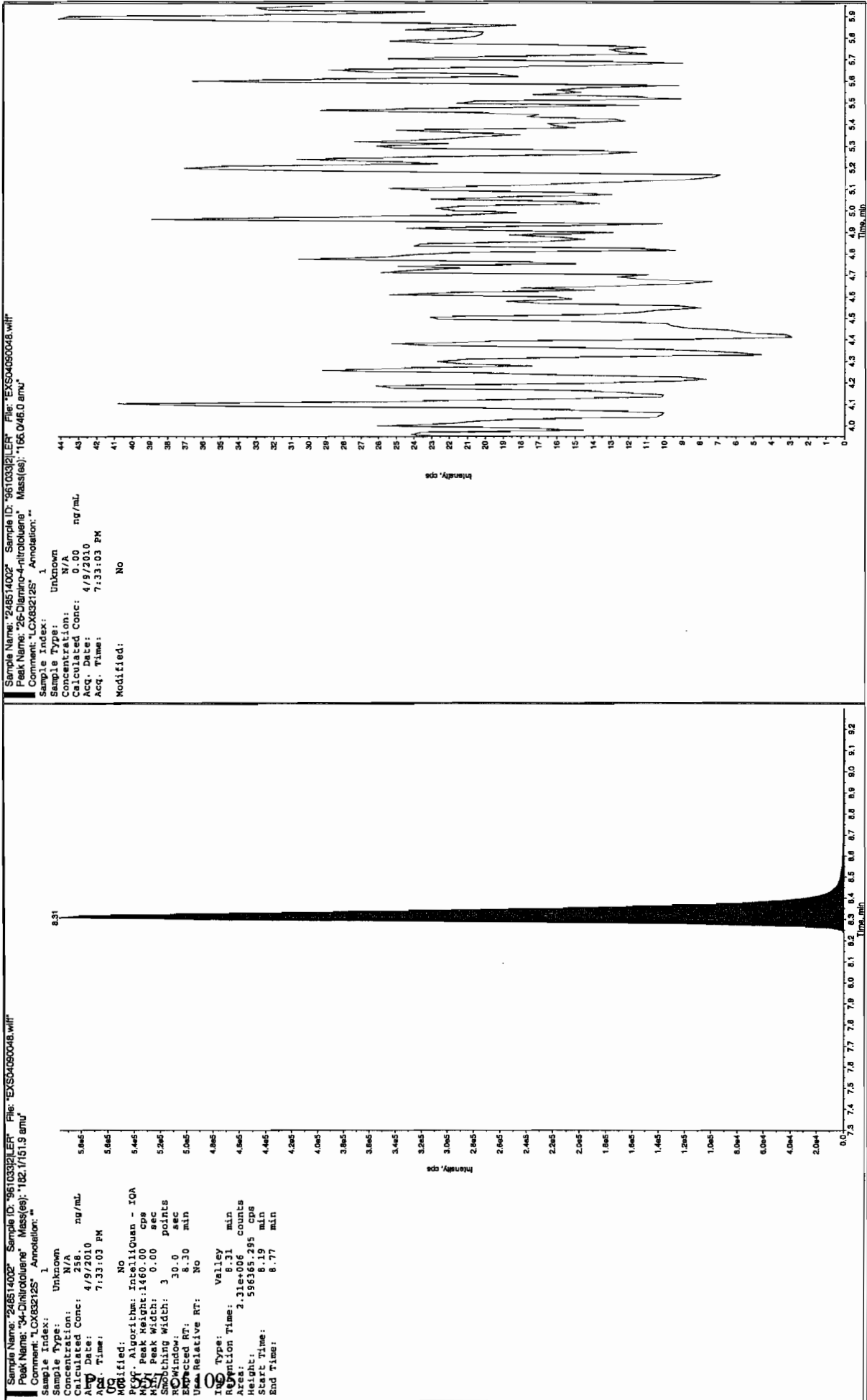
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/166.0 amu"

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: 7:33:03 PM  
 Modified: No

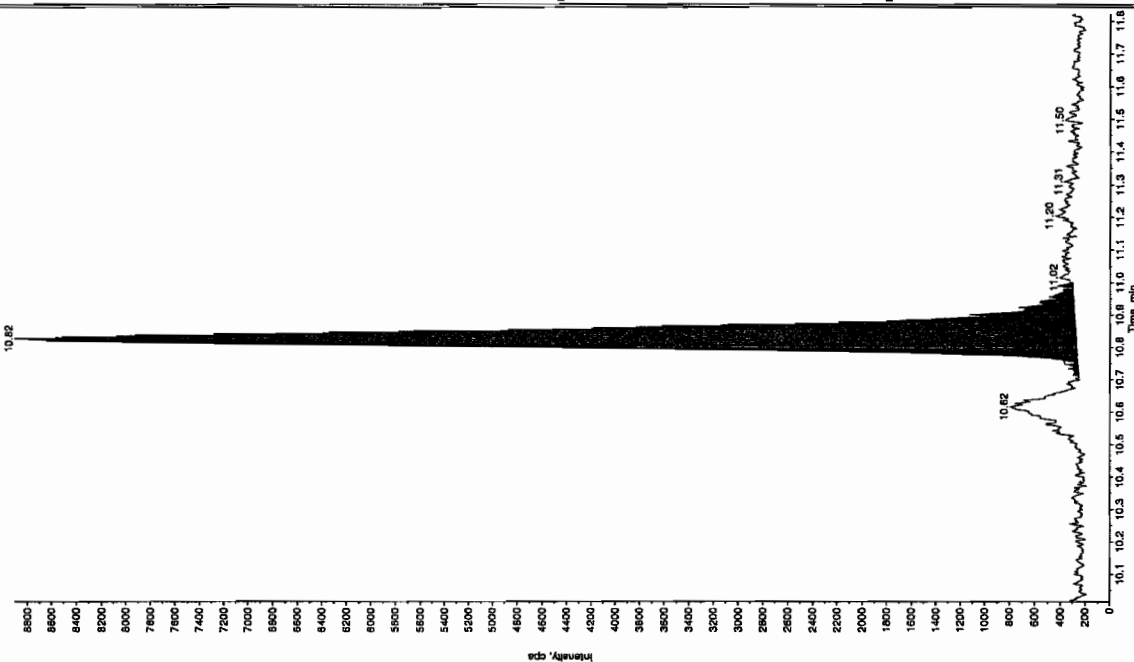
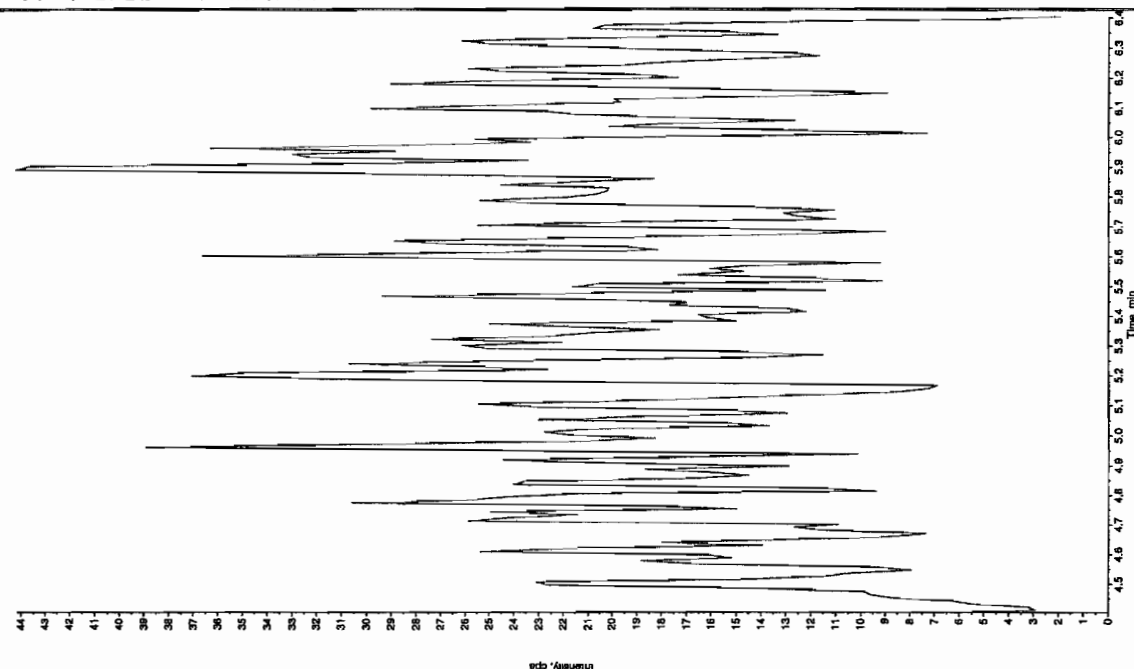


See 4/12/10



Sample Name: "248514002" Sample ID: "96103321LER" File: "EXS04090048.wif"  
 Peak Name: "1166.046.0 amu" Mass(es): "1166.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.636 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:33:03 PM  
 Modified: No  
 Processing 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: 3.50e+004 counts  
 Height: 8629.660 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7525

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514003

Sample Amount 2

Moisture: 20.2

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: EXP0415070.wiff

Date Analyzed: 16-APR-10 15:58

Units: ug/kg

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

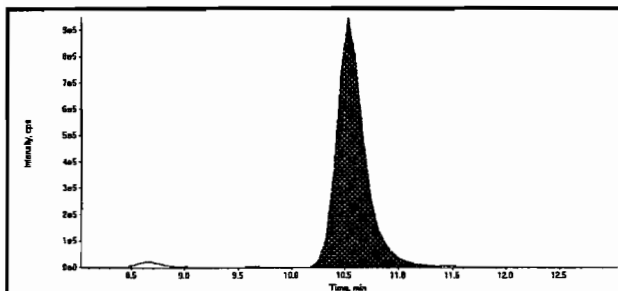
\*Concentration =

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

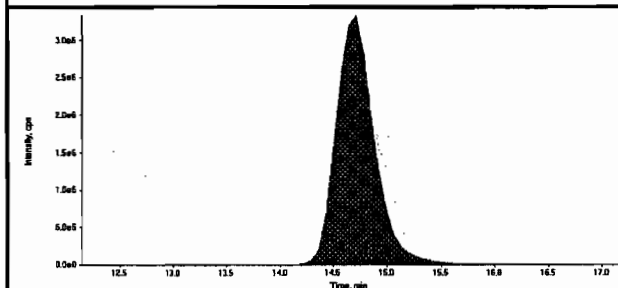
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

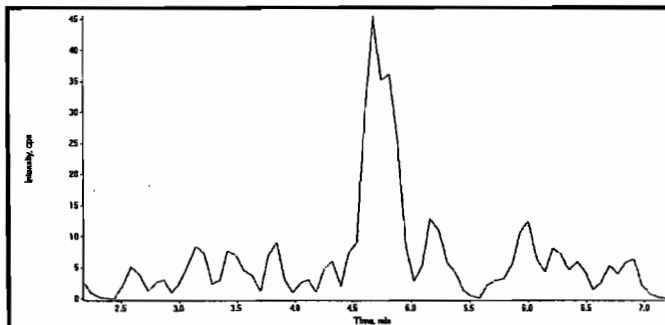
Data File	EXP0415070.wiff	Acquisition Date	4/16/2010 3:58:54 PM
Sample Name	248514003	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



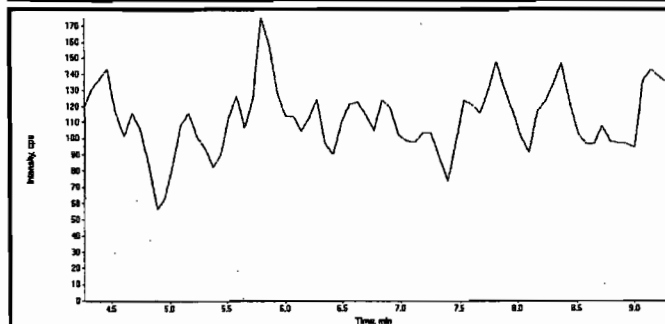
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	82500000.00
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

*LER*  
4/23/10

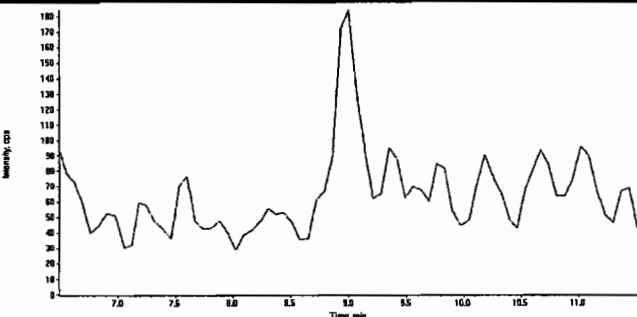
*AMM*  
04/23/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

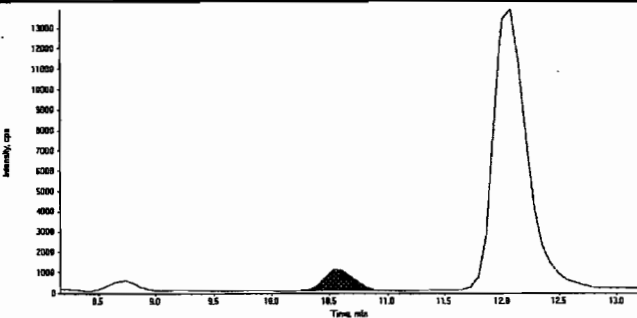
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415070.wiff	<b>Acquisition Date</b>	4/16/2010 3:58:54 PM
<b>Sample Name</b>	248514003	<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

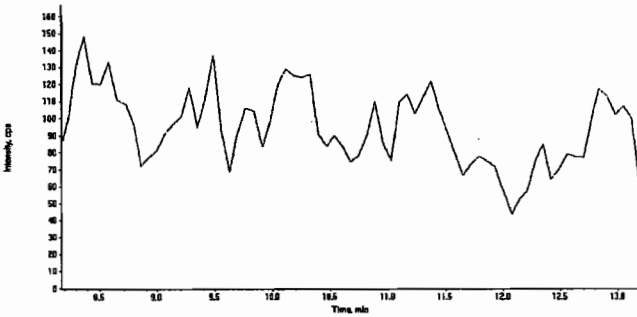
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

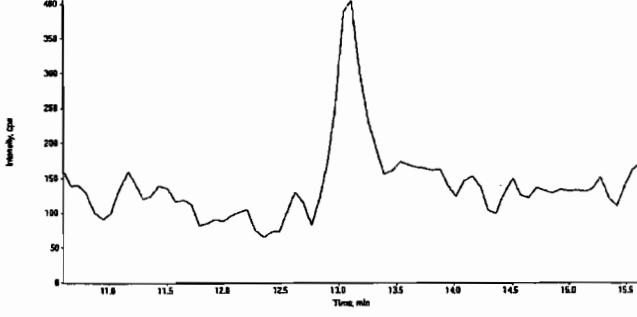
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.5
	<b>Area Counts:</b>	2.01e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.34 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<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>	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

Sample Name: 240314003 Sample ID: 240314003 File: E:\2004\15070.wif

Peak Name: 34-dinitrophenol Mass(es): 182.046.0 amu

Comment: LCMS321.S Amplitude: =

Sample Type: Unknown

Concentration: 1.0468

Acq. Date: 4/16/2010

Acq. Time: 3:58:54 PM

Modified: No

Method: Algorithm: IntellQuan - 10A

Peak Width: 10.00 cps

Peak Width: 3.00 points

Window: 60.0 sec

Expected RT: 12.0 min

Observed RT: 12.0 min

Peak Type: Valley

Resolution Time: 12.0 min

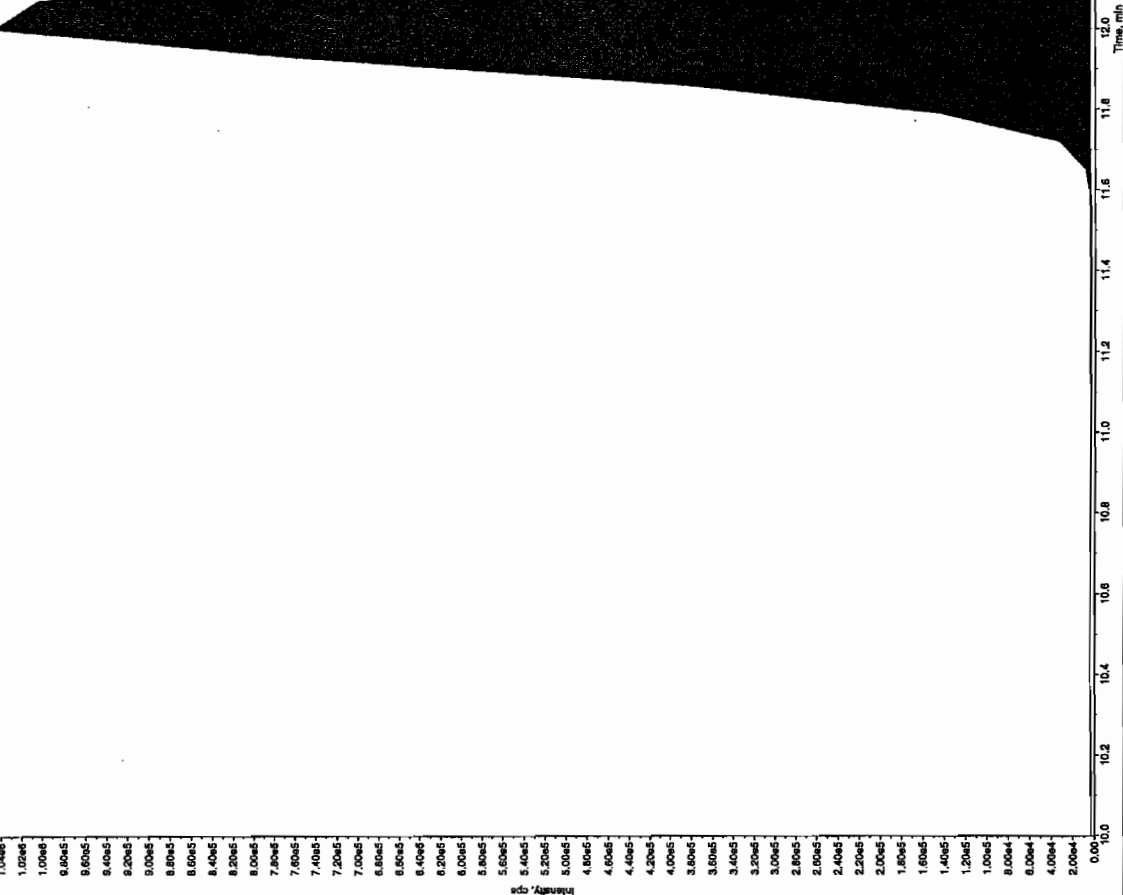
Resolution: 2.39e+006 cps

Resolution: 1.01e+006 cps

Resolution: 11.4 min

Resolution: 13.3 min

12.02



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Dec 4/23/10

Sample Name: 245514003 Sample ID: 96103381ER File: EXP0415070.wif

Peak Name: 34-dinitrobenzene Mass(es): 162.046.0 amu

Concentration: 10.000 ug/mL

Sample Index: 1

Sample Type: Unknown

Concentration: 10.000 ug/mL

Calculated Conc: 10.000 ug/mL

Acq. Time: 4/14/2010 3:58:54 PM

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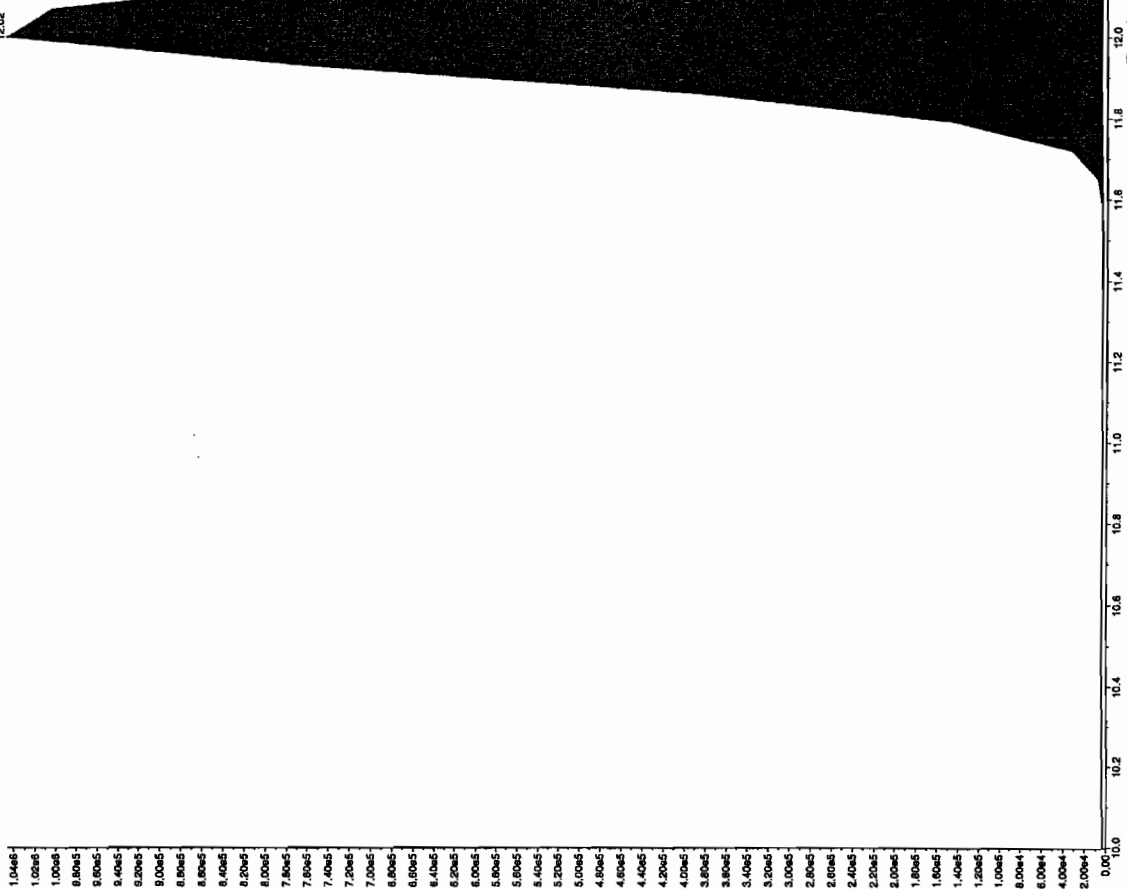
Acq. Time: 4/14/2010 3:58:54 PM

Acq. Time: 4/14/2010 3:58:54 PM

Acq. Time: 4/14/2010 3:58:54 PM

Acq. Time: 4/14/2010 3:58:54 PM

12.02



Time, min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

1095

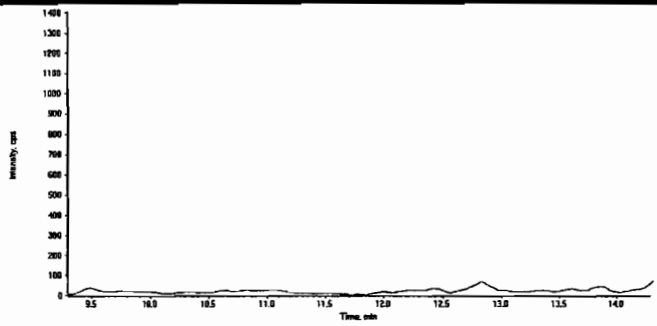


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

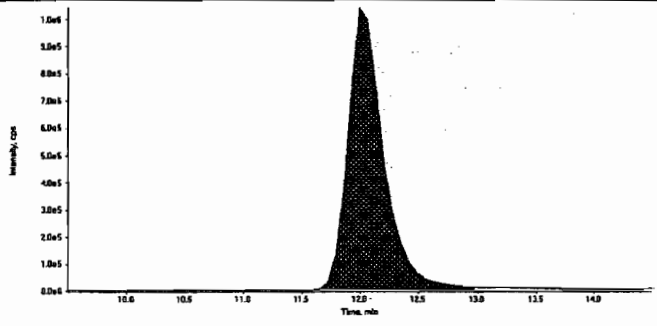
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415070.wiff	<b>Acquisition Date</b>	4/16/2010 3:58:54 PM
<b>Sample Name</b>	248514003	<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

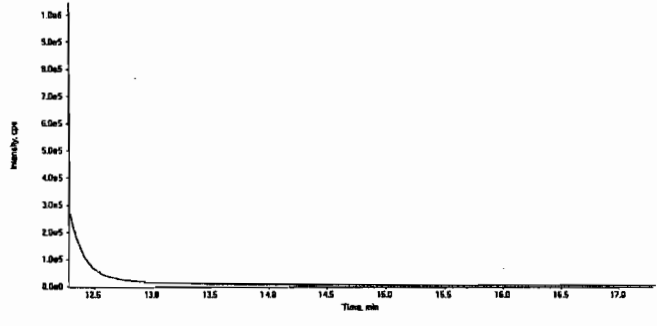
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

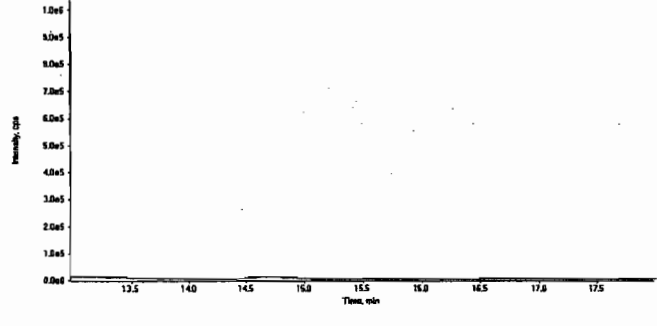
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	12.0
	<b>Area Counts:</b>	2.25e+007
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	207. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<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>	2.03e+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>	EXP0415070.wiff	<b>Acquisition Date</b>	4/16/2010 3:58:54 PM
<b>Sample Name</b>	248514003	<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:	13.3
	Area Counts:	4.94e+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

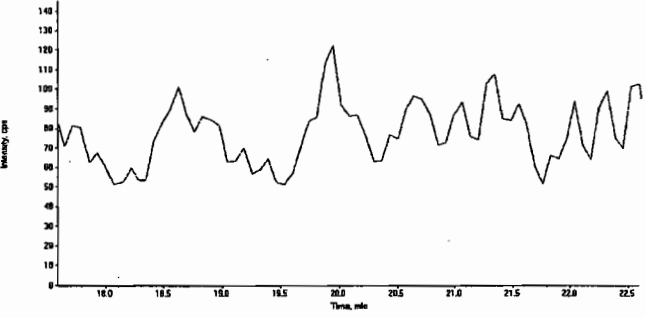
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

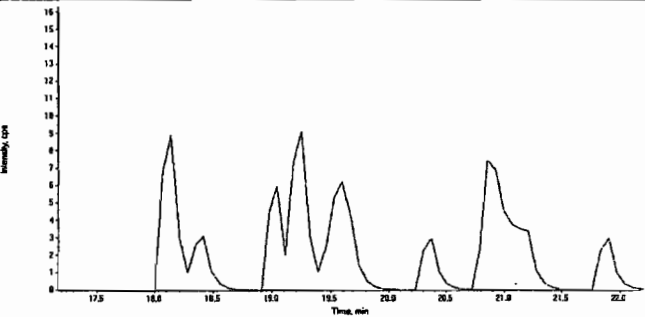
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415070.wiff	<b>Acquisition Date</b>	4/16/2010 3:58:54 PM
<b>Sample Name</b>	248514003	<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: RE36-10-7525

Lab Code: GEL

GEL Job No (SDG) 10-2196

Matrix: SOIL

GEL Sample ID: 248514003

Sample Amount 2

Moisture: 20.2

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: EXS04090049.wiff

Date Analyzed: 09-APR-10 19:48

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

2010/12/04

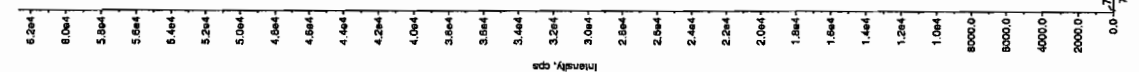
Sample Name: "248514003" Sample ID: "961033121.ER" File: "EXS04090049.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:48:46 PM  
 Modified: No

Intensity, cps



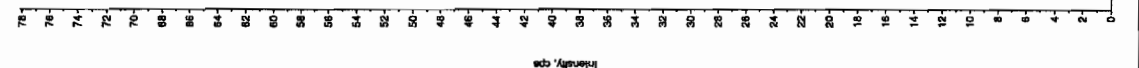
Sample Name: "248514003" Sample ID: "961033121.ER" File: "EXS04090049.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:48:46 PM  
 Modified: No

Intensity, cps



2010/12/04

Sample Name: 24851403 Sample ID: 96103321 LER File: EXS04090049.wif  
 Peak Name: 25-Diamino-4-nitrotoluene Mass(es): 166.0/46.0 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1

Sample Type: Unknown

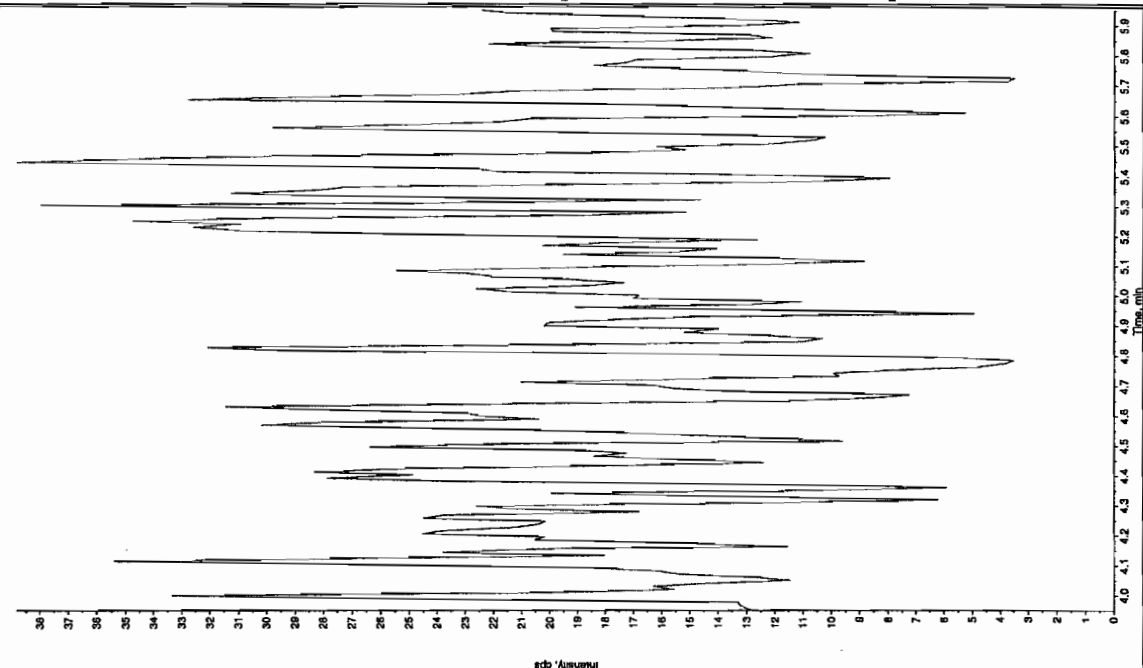
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 4/9/2010

Acq. Time: 7:48:46 PM

Modified: No



Sample Name: 24851403 Sample ID: 96103321 LER File: EXS04090049.wif  
 Peak Name: 94-Dinitrotoluene Mass(es): 182.1/151.9 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 261.0 ng/mL

Acq. Date: 4/9/2010

Acq. Time: 7:48:46 PM

Modified: No

PTC. Algorithm: IntelliQuan - IOA

MG Peak Height: 1450.00 cps

MG Peak Width: 0.00 sec

Spotting Width: 30.0 points

Window: 30.0 sec

Expected RT: 8.30 min

Used Relative RT: No

IN Type: Valley

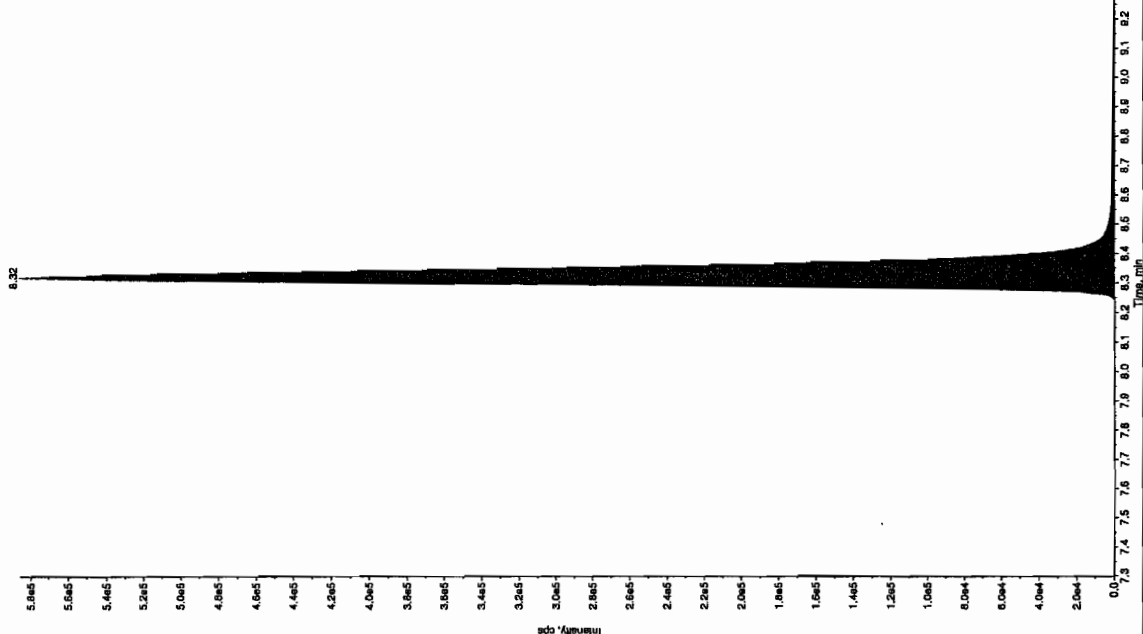
Retention Time: 8.32 min

Area: 2.13e+006 counts

Height: 585656.896 cps

Start Time: 8.32 min

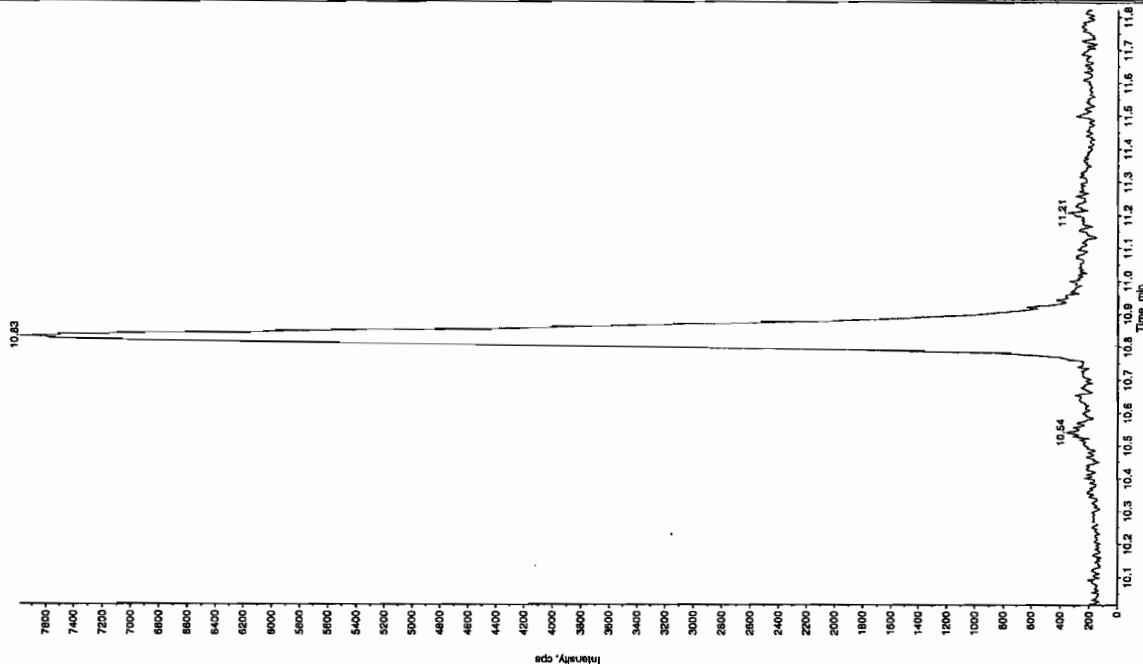
End Time: 8.71 min



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

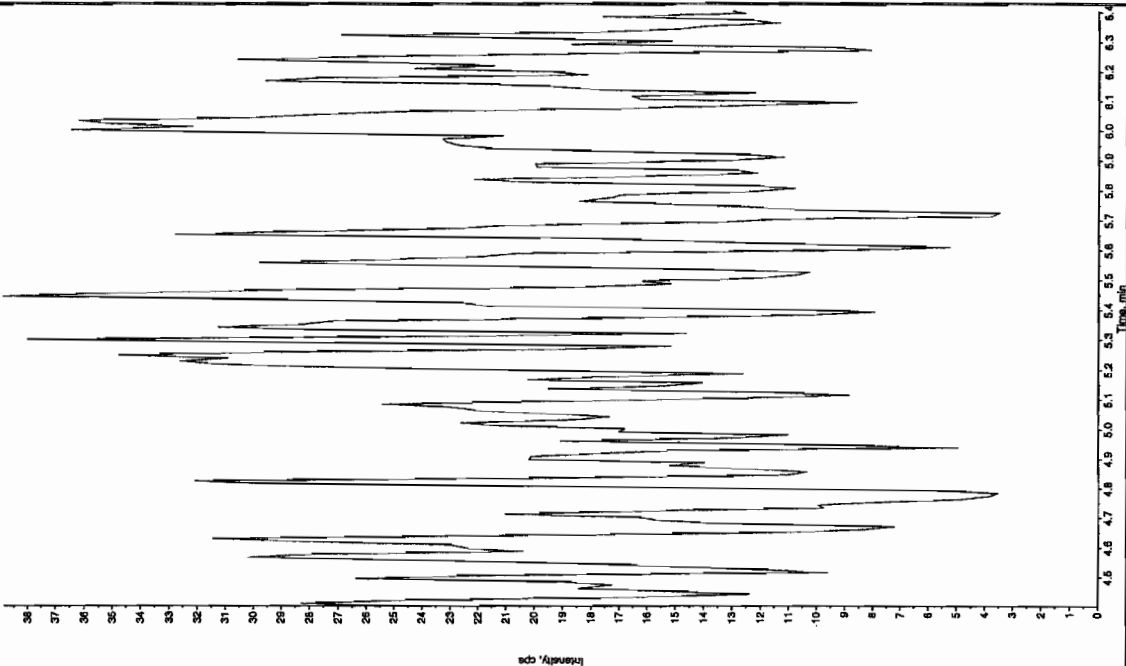
Sample Name: "248514003" Sample ID: "96103321LEF" File: "EXS04060049.wiff"  
 Peak Name: "bis(o-cresyl) phosphata" Mass(es): "369.1/91.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:48:46 PM  
 Modified: No



Sample Name: "248514003" Sample ID: "96103321LEF" File: "EXS04060049.wiff"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "156.0/46.0 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: 7:48:46 PM  
 Modified: No



# STANDARDS DATA



SW846 8321A Modified-Explosives  
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
<b>Primary Analytes</b>								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MNX	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	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: 10-2196

Lab Code: GEL

Run Date: 09-APR-10 15-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:									
Data File:	EXP0415003.wi	EXP0415004.wi	EXP0415005.wi	EXP0415006.wi	EXP0415007.wi	EXP0415008.wi			
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: 10-2196

Lab Code: GEL

Run Date: 09-APR-10 15-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: 10-2196

Lab Code: GEL

Run Date: 09-APR-10 15-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			

Page 1

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*Handwritten:* 04/23/10

041510ICAL

a1 3.2  
a2 -0.41  
Correlation coefficient 0.9996  
Use Area  
  
Peak Name: Tetra1  
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			

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					



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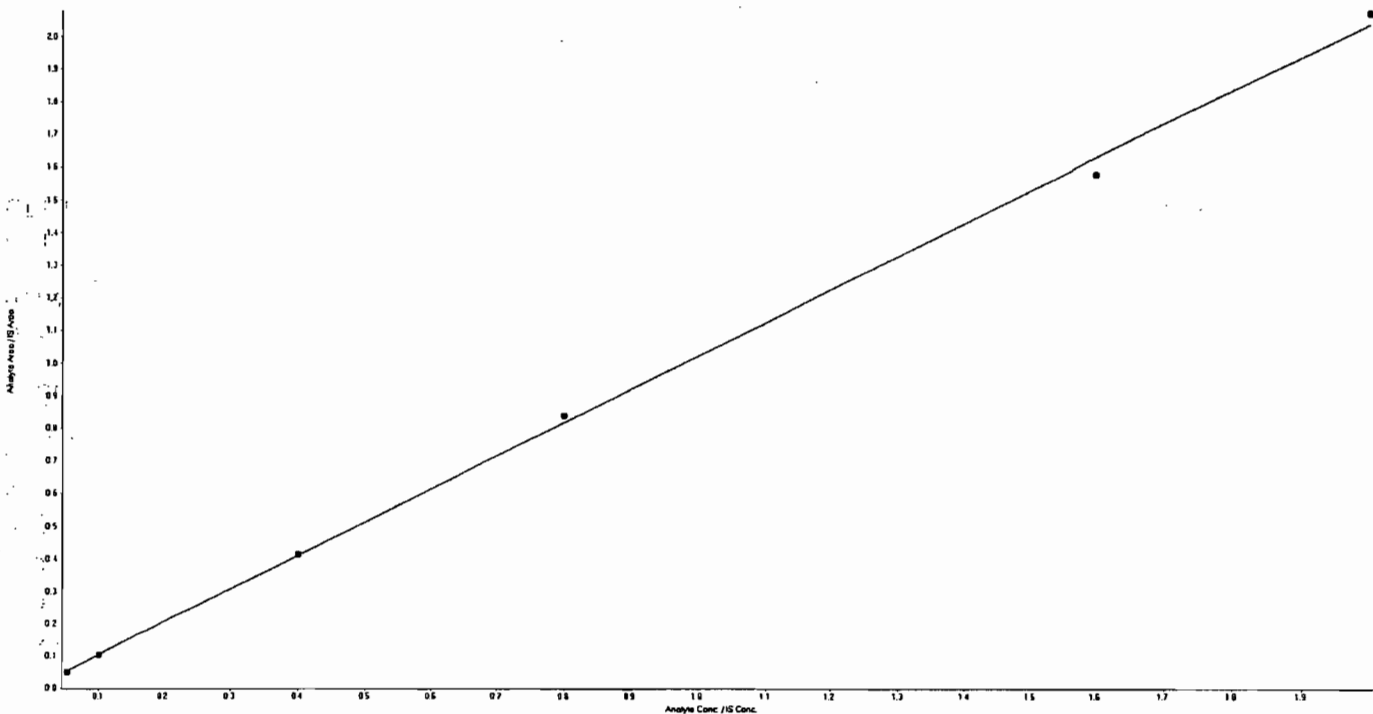
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LCMSMS#3

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



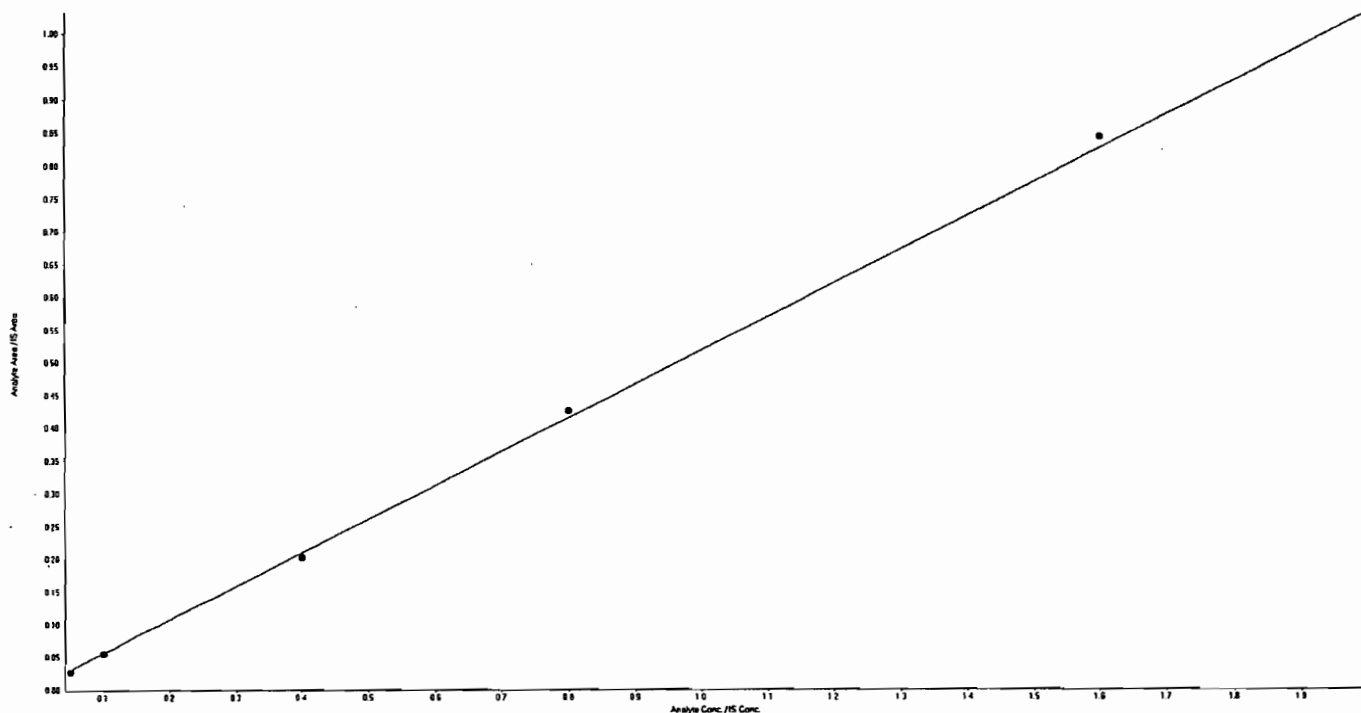
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Analyte Name: RDX

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



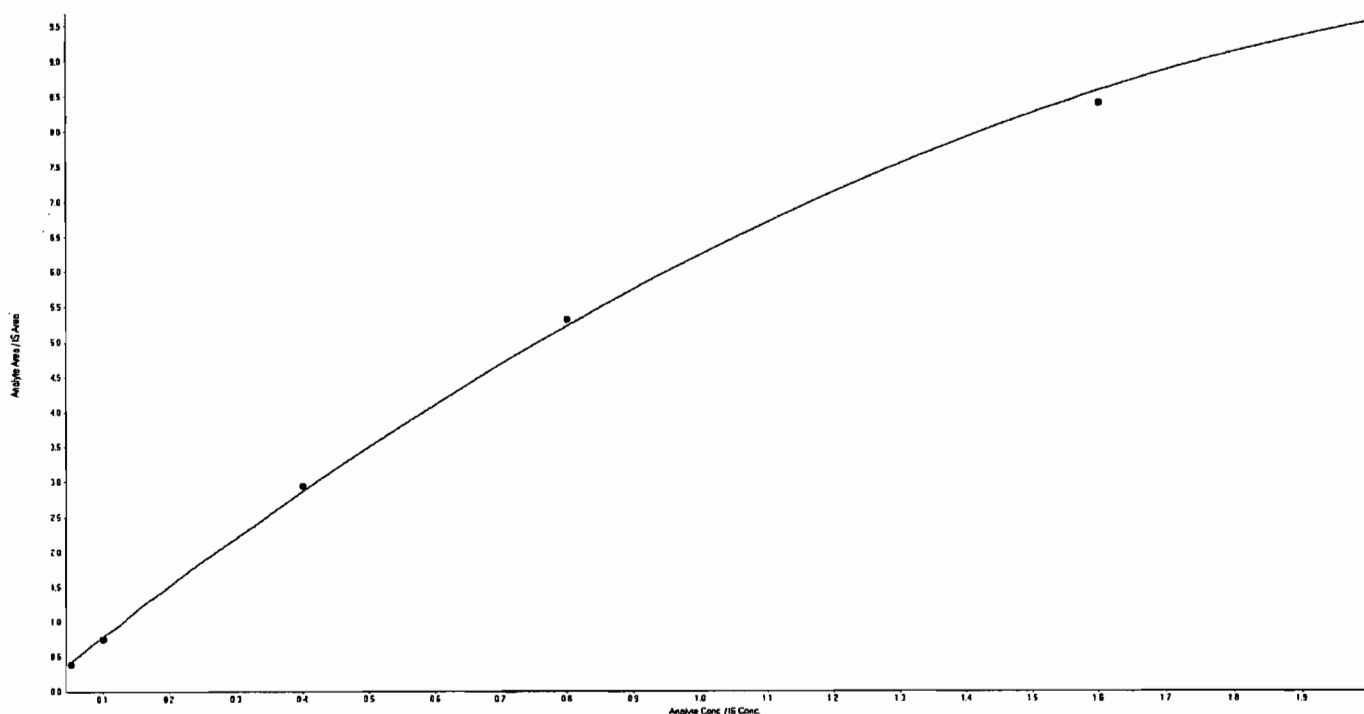
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Analyte Name: 135-Trinitrobenzene

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



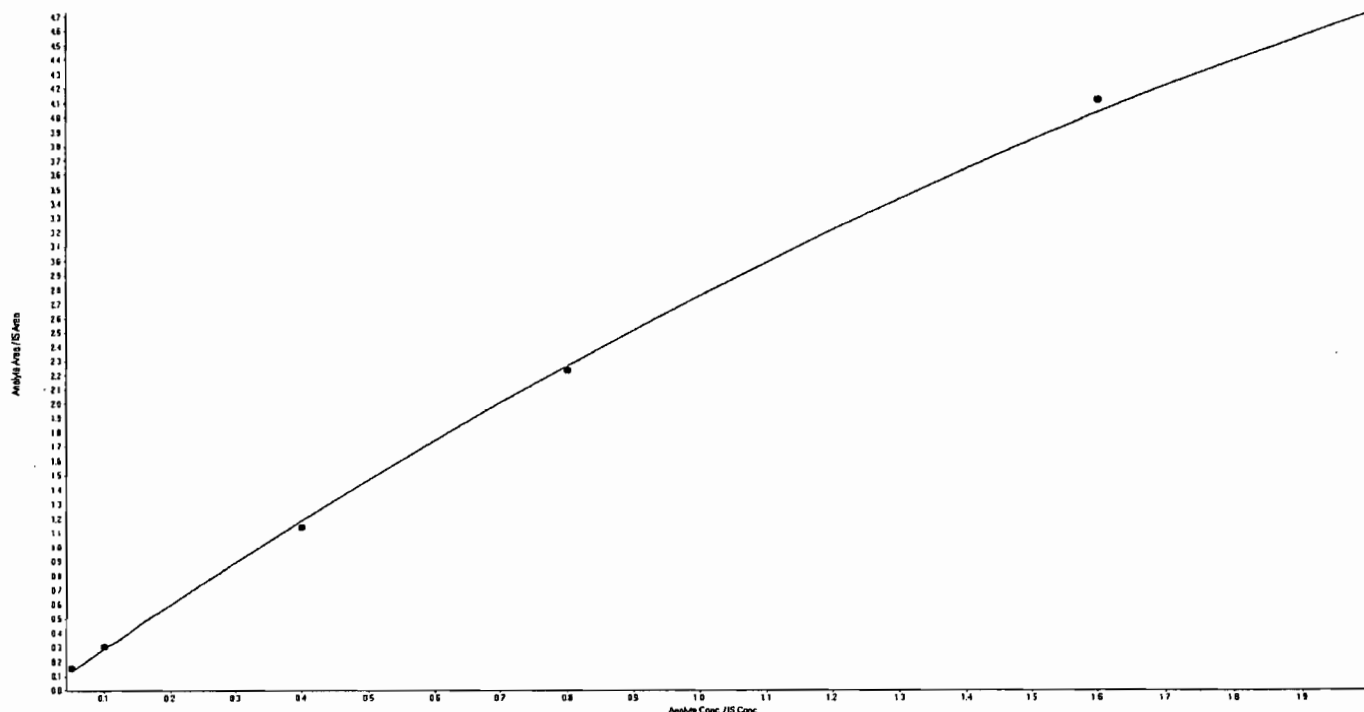
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Analyte Name: 13-Dinitrobenzene

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



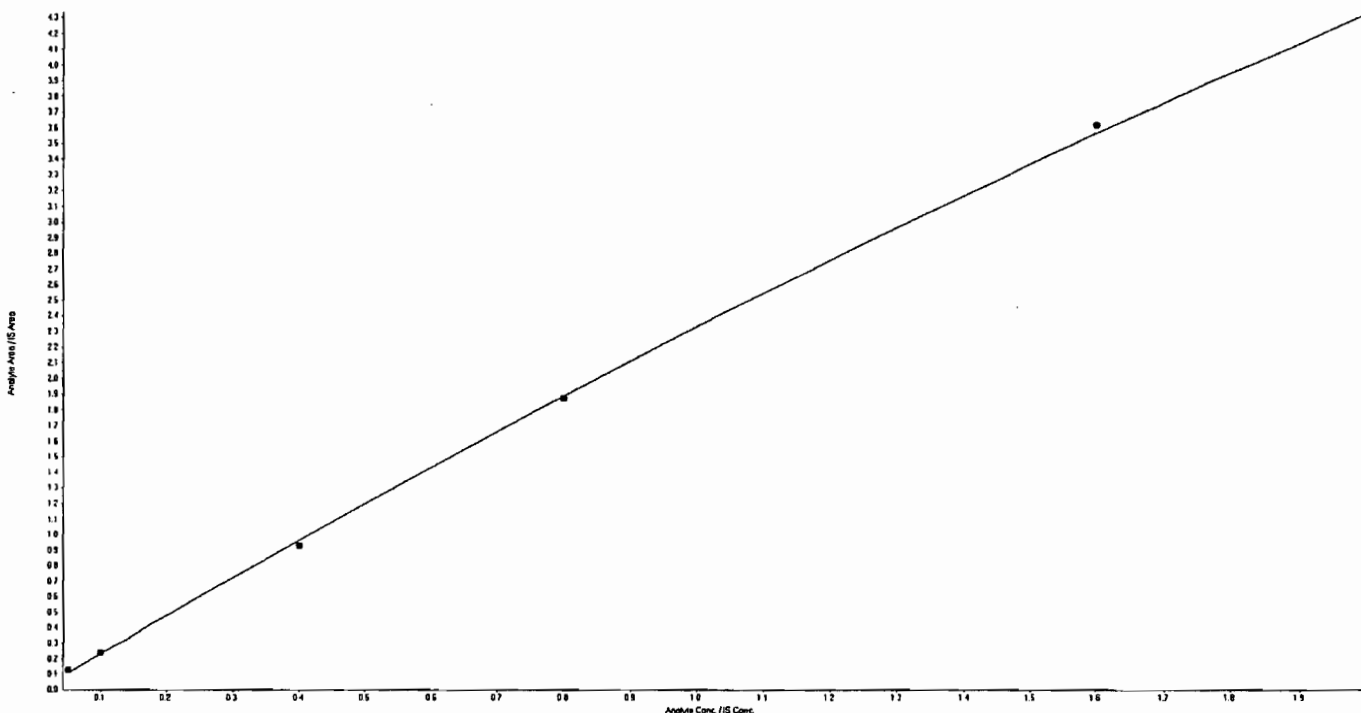
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Analyte Name: Tetryl

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



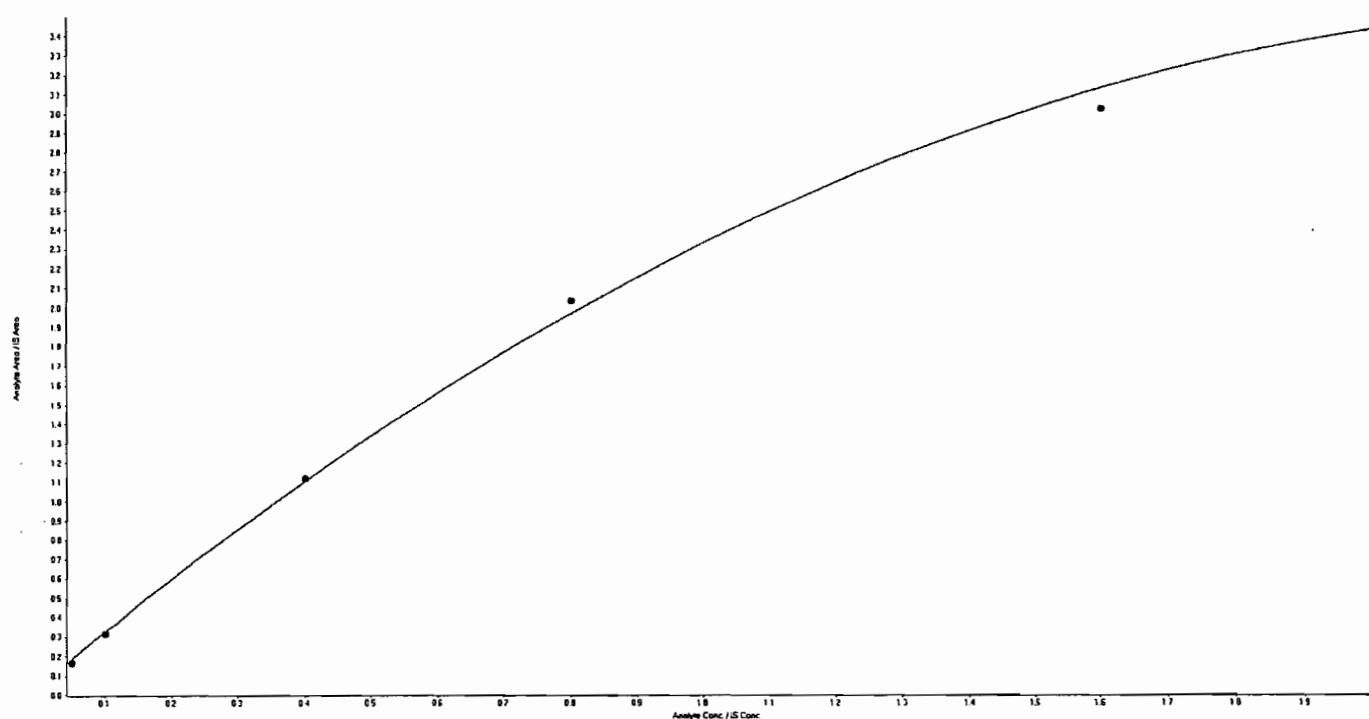
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Analyte Name: 246-Trinitrotoluene

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



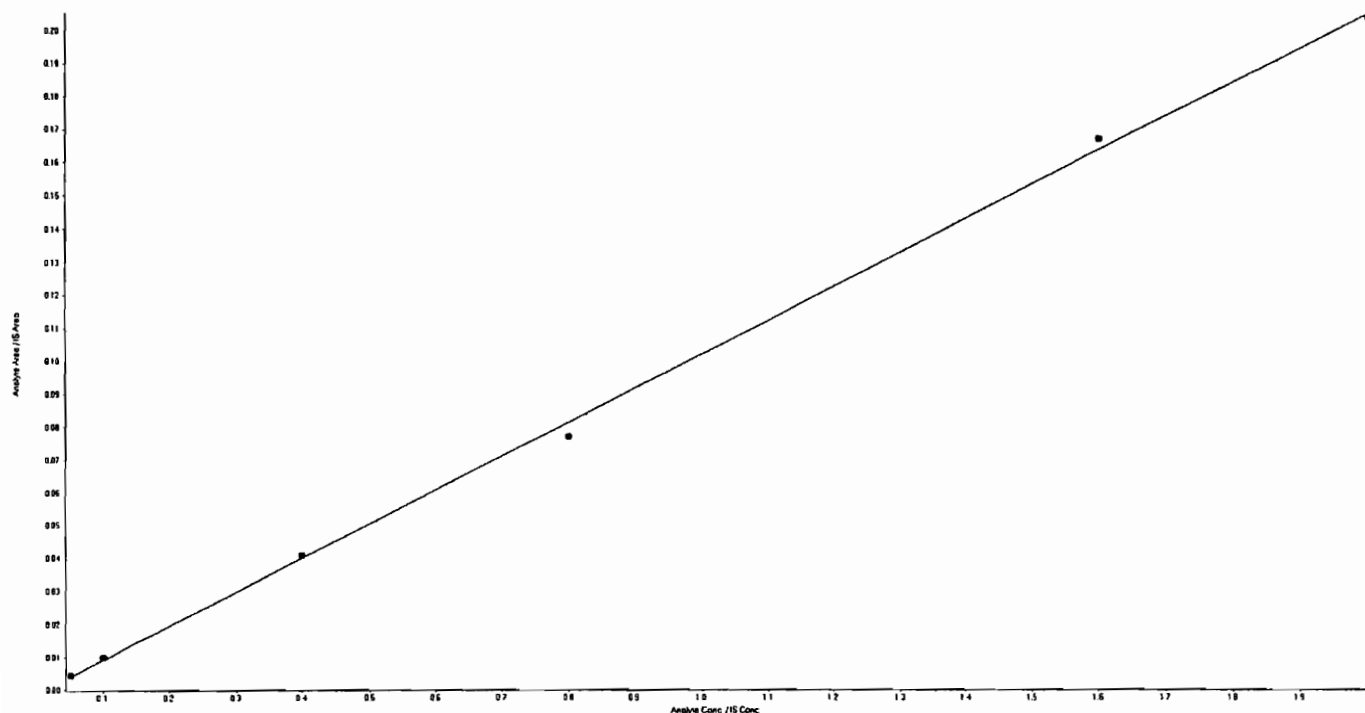
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Analyte Name: Nitrobenzene

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



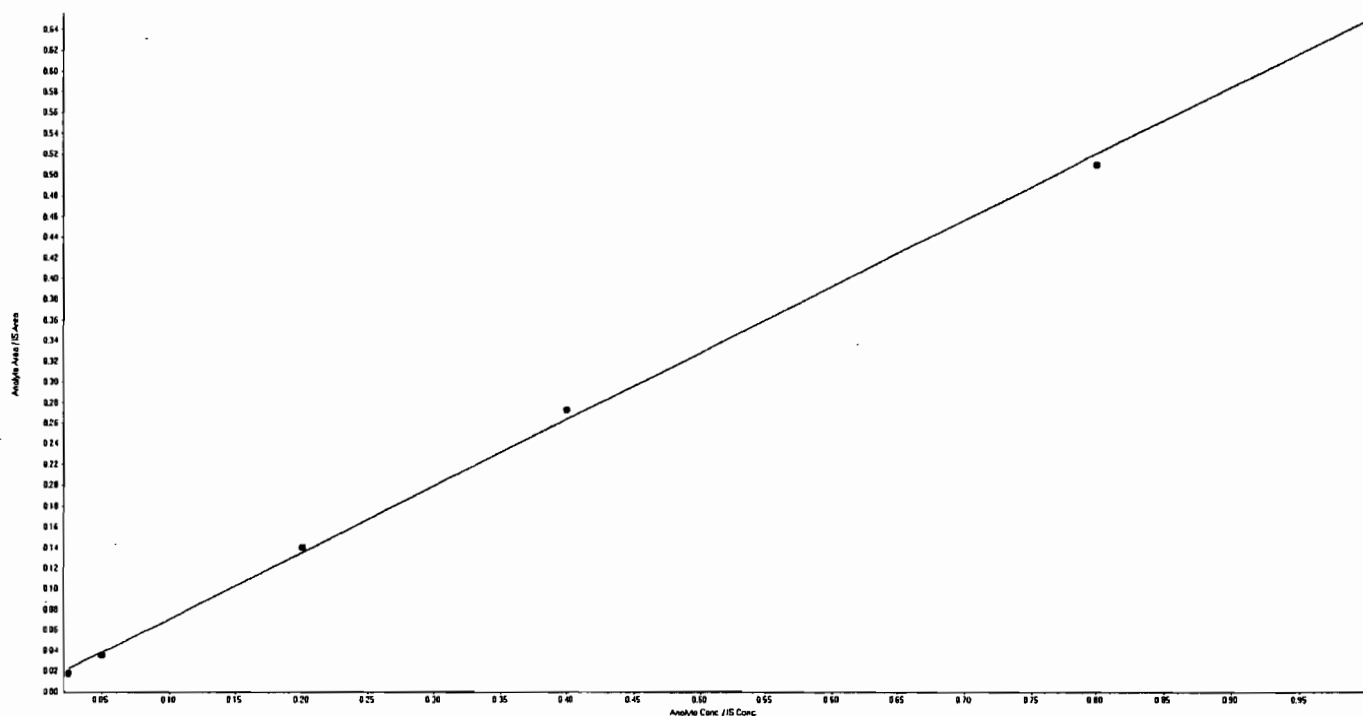
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Analyte Name: 34-dinitrotoluene

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





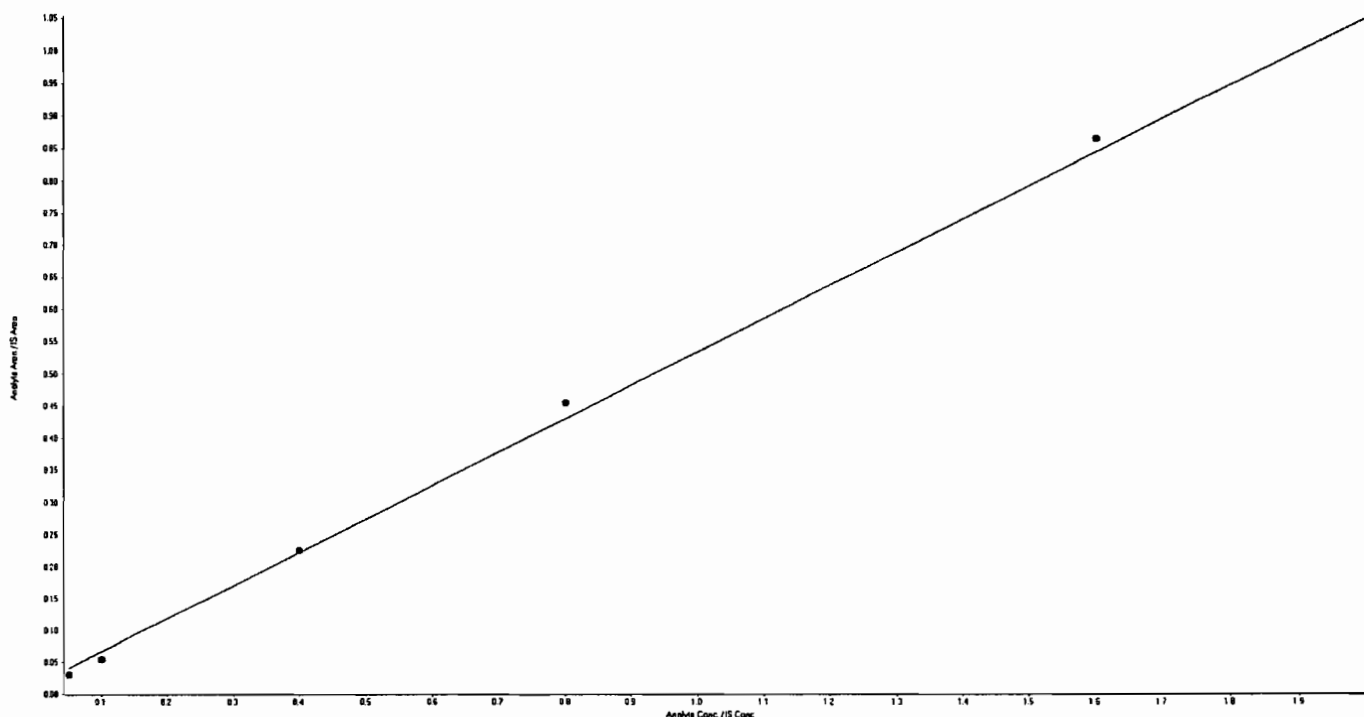
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Analyte Name: 26-dinitrotoluene

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



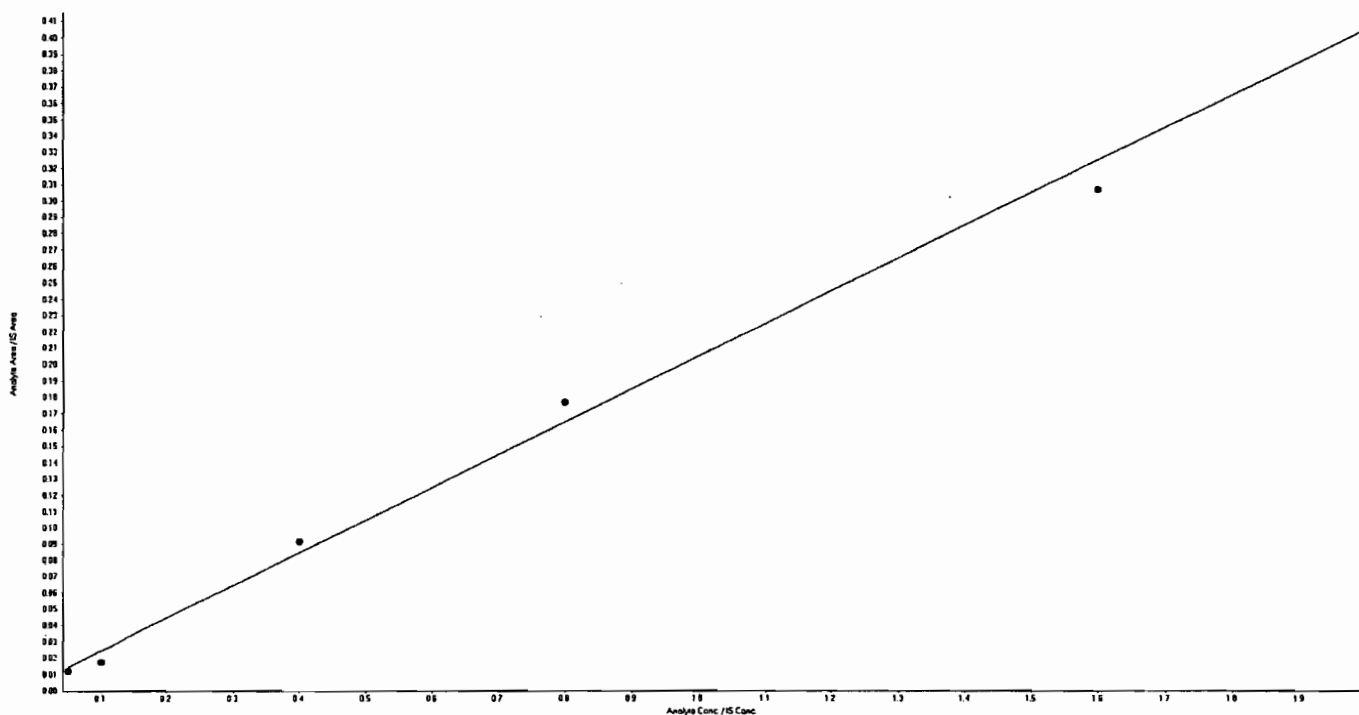
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Analyte Name: 24-dinitrotoluene

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



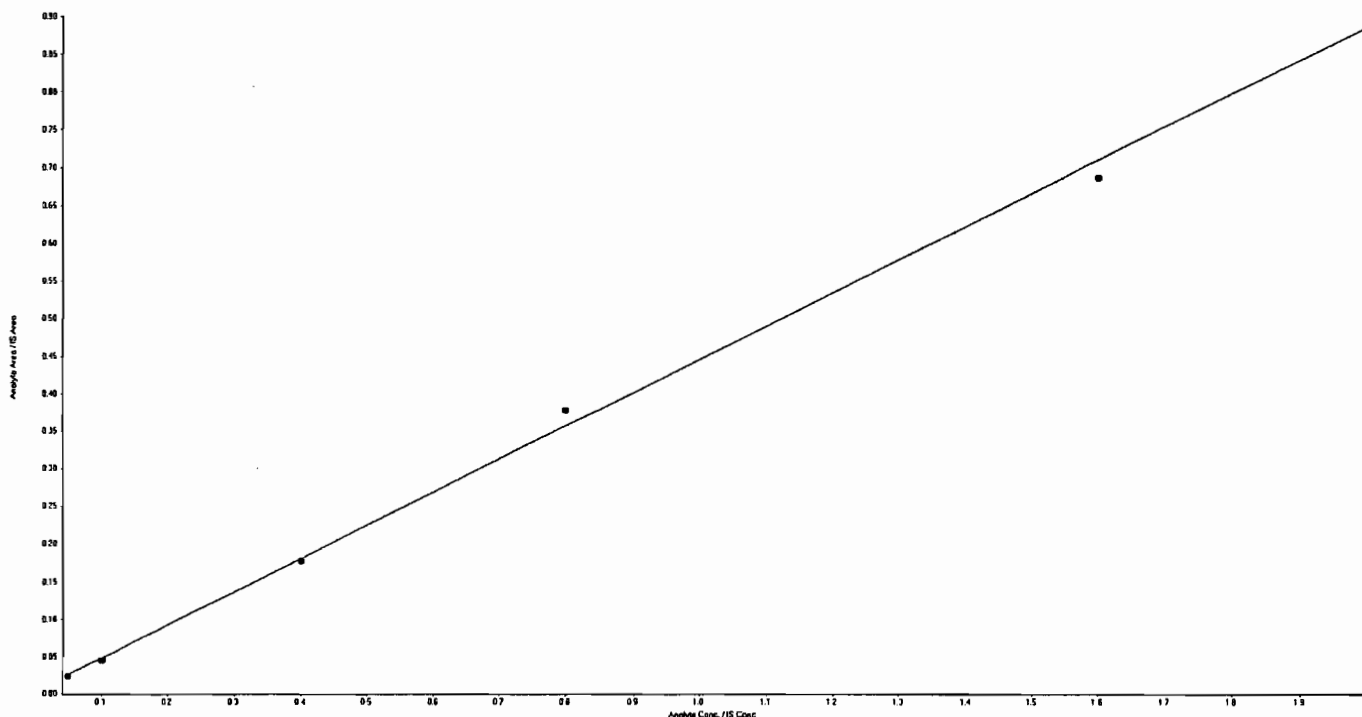
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LCMSMS#3

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



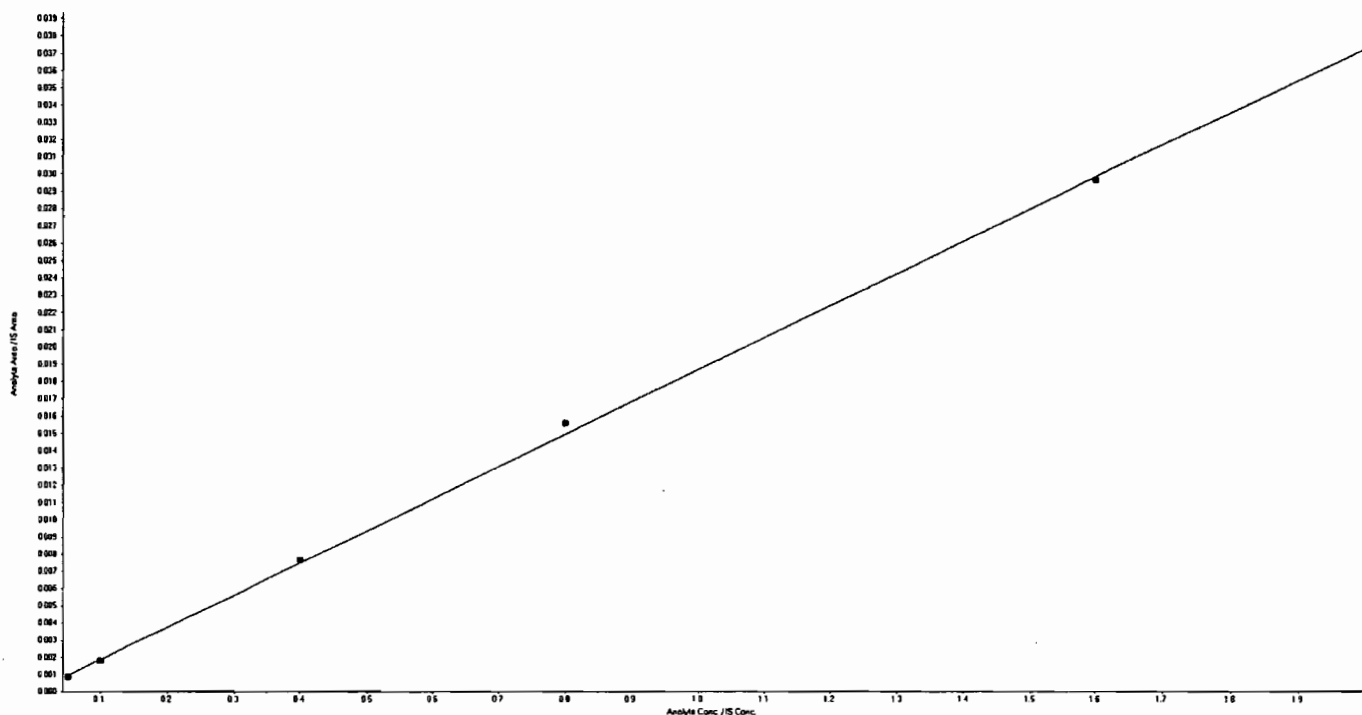
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LCMSMS#3

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



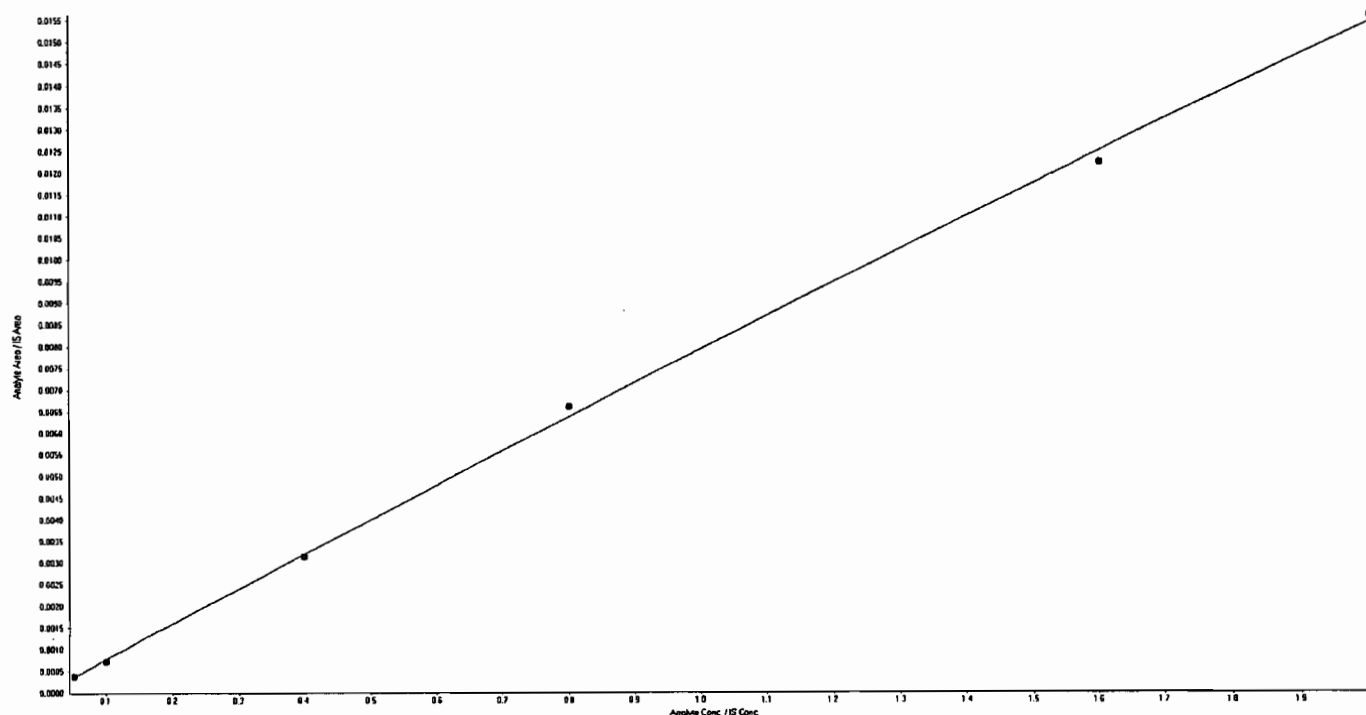
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LCMSMS#3

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



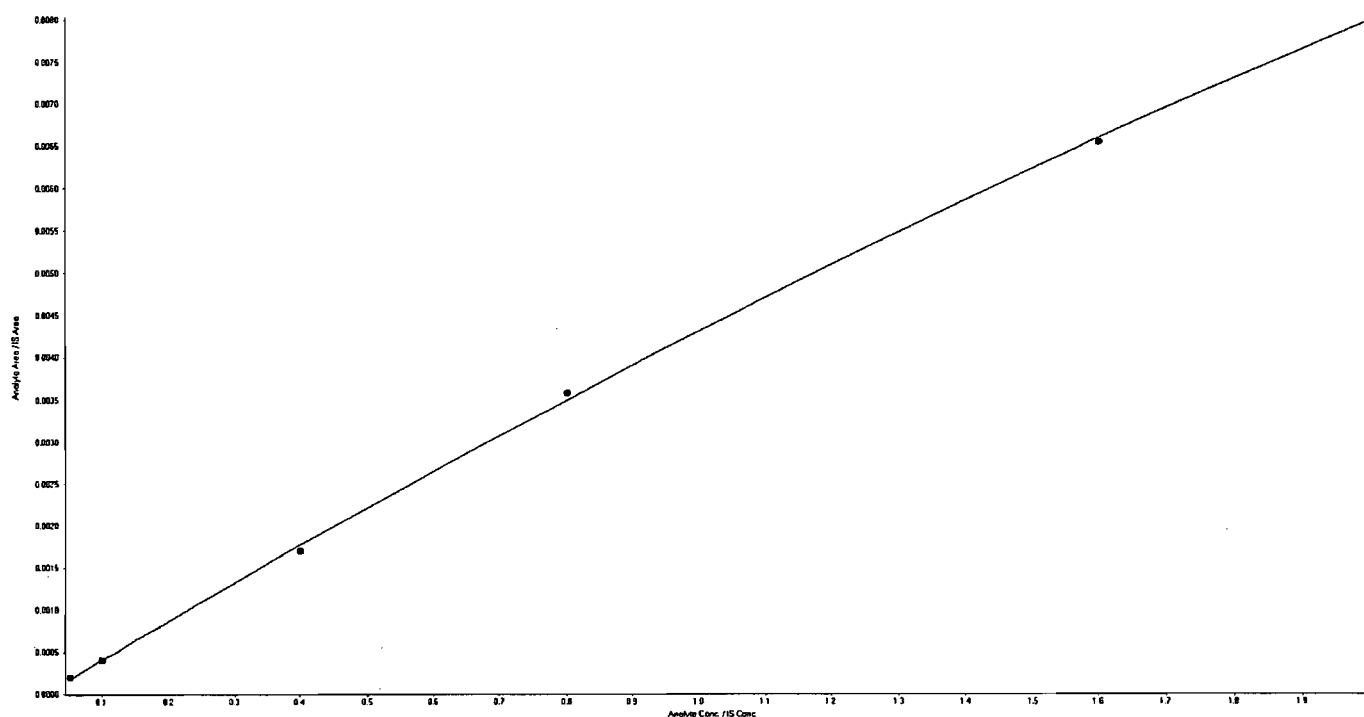
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Analyte Name: 4-Nitrotoluene

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



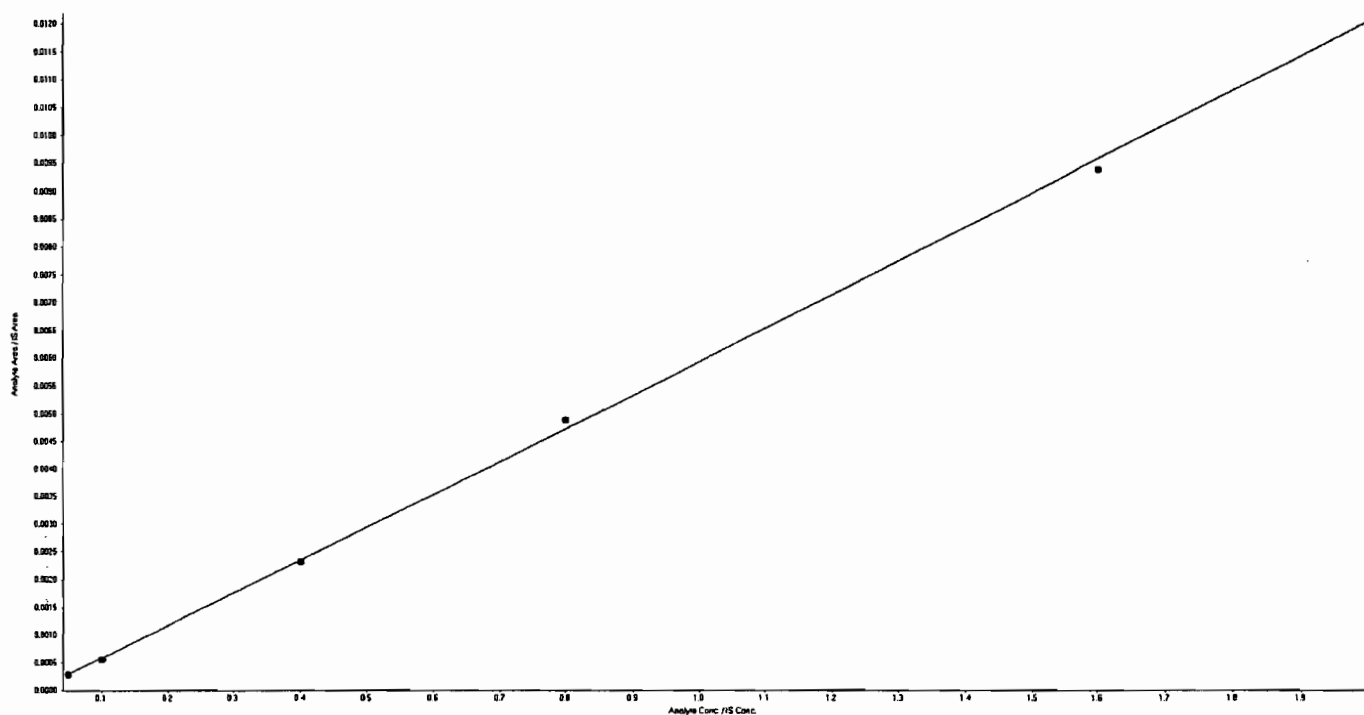
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Analyte Name: 3-Nitrotoluene

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



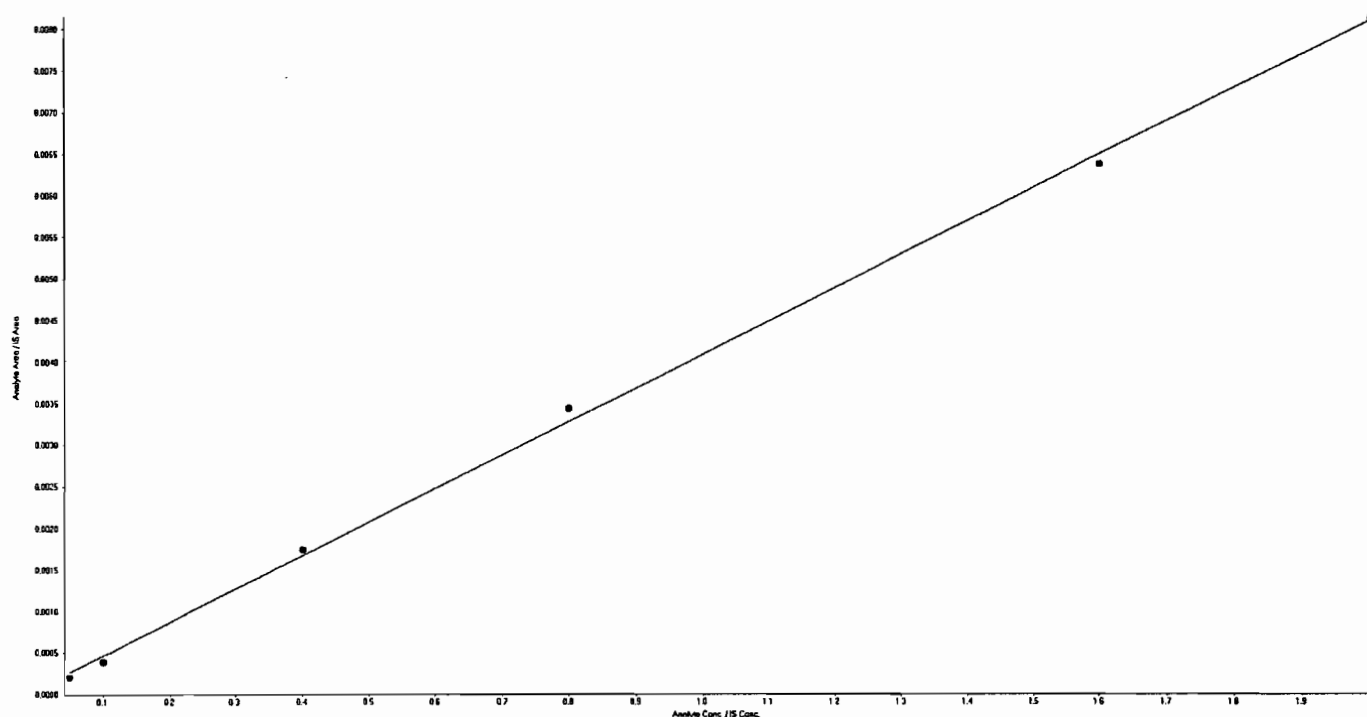
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LCMSMS#3

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





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GEL SOP GL-OA-E-056, Method 8321A-Modified

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LCMSMS#3

# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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%

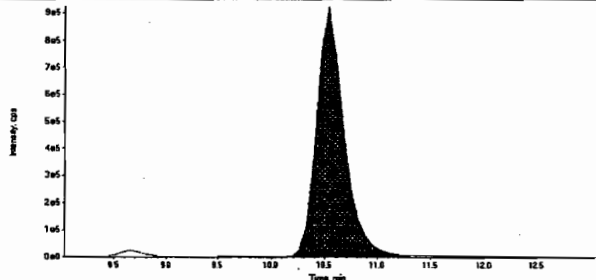
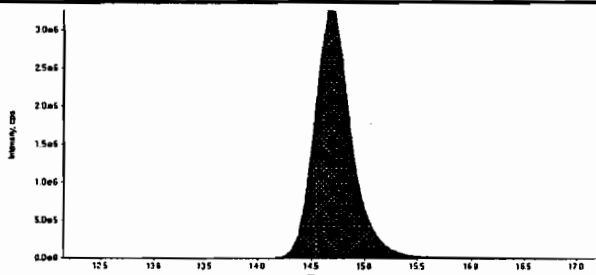
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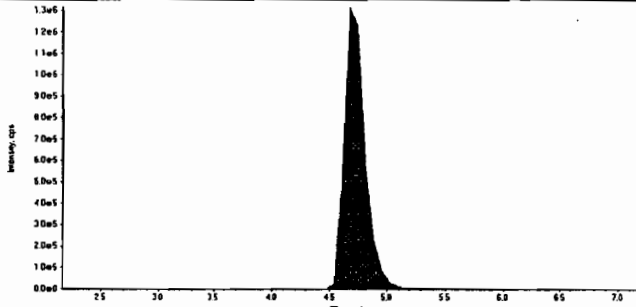
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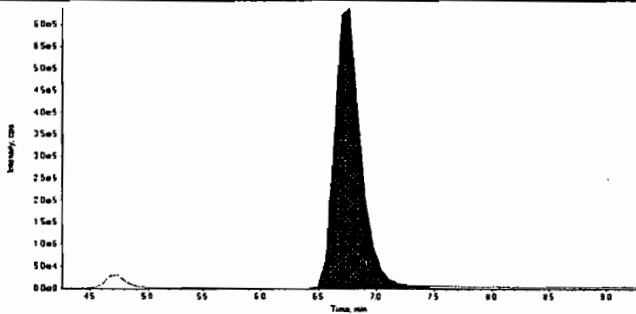
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GEL SOP GL-OA-E-056, Method 8321A-Modified

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

	<b>Compound Name:</b>	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		
	<b>Compound Name:</b>	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		

	<b>Compound Name:</b>	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

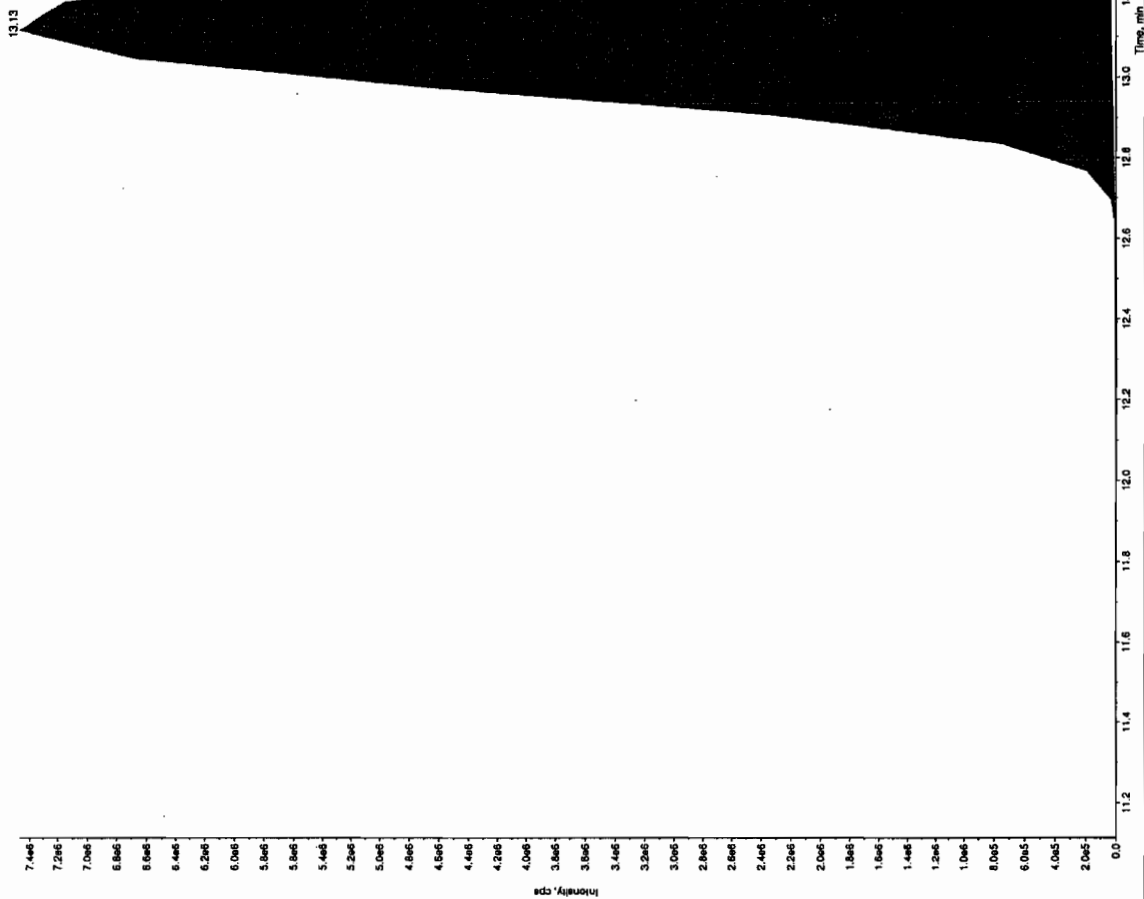
	<b>Compound Name:</b>	RDX (267.0/46.1 amu)
	Expected RT:	6.77
	Actual RT:	6.77
	Area Counts:	1.03e+007
	Manual Modification	No
	Amount:	589. (ng/mL)
	% Accuracy:	98.20

*Handwritten signature and date:*  
4/23/10



after Scan 4/23/10

Sample Name: "VXX100415-561V" Sample ID: "TILEP" File: "EXP0415010.wif"  
 Peak Name: "7467Tritolopene" Mass(es): "227.17209.8 amu"  
 Concentration: "600.000" ng/mL  
 Sample Type: "QC"  
 Calculated Conc: "4/15/2010" ng/mL  
 Acq. Time: "2:01:01 PM"  
 Modified: "Yes"  
 Exp. Time: "13.1" min  
 Use as RT: "No"  
 Manual: "Manual"  
 Retention Time: "13.1" min  
 Area: "2.01e+008" counts  
 Height: "7.46e+006" cps  
 Width: "2.26" min  
 End Time: "14.7" 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>	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)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.00
	<b>Area Counts:</b>	1.18e+008
	<b>Manual Modification</b>	No
	<b>Amount:</b>	577. (ng/mL)
	<b>% Accuracy:</b>	96.20

	<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>	5.39e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	591. (ng/mL)
	<b>% Accuracy:</b>	98.60

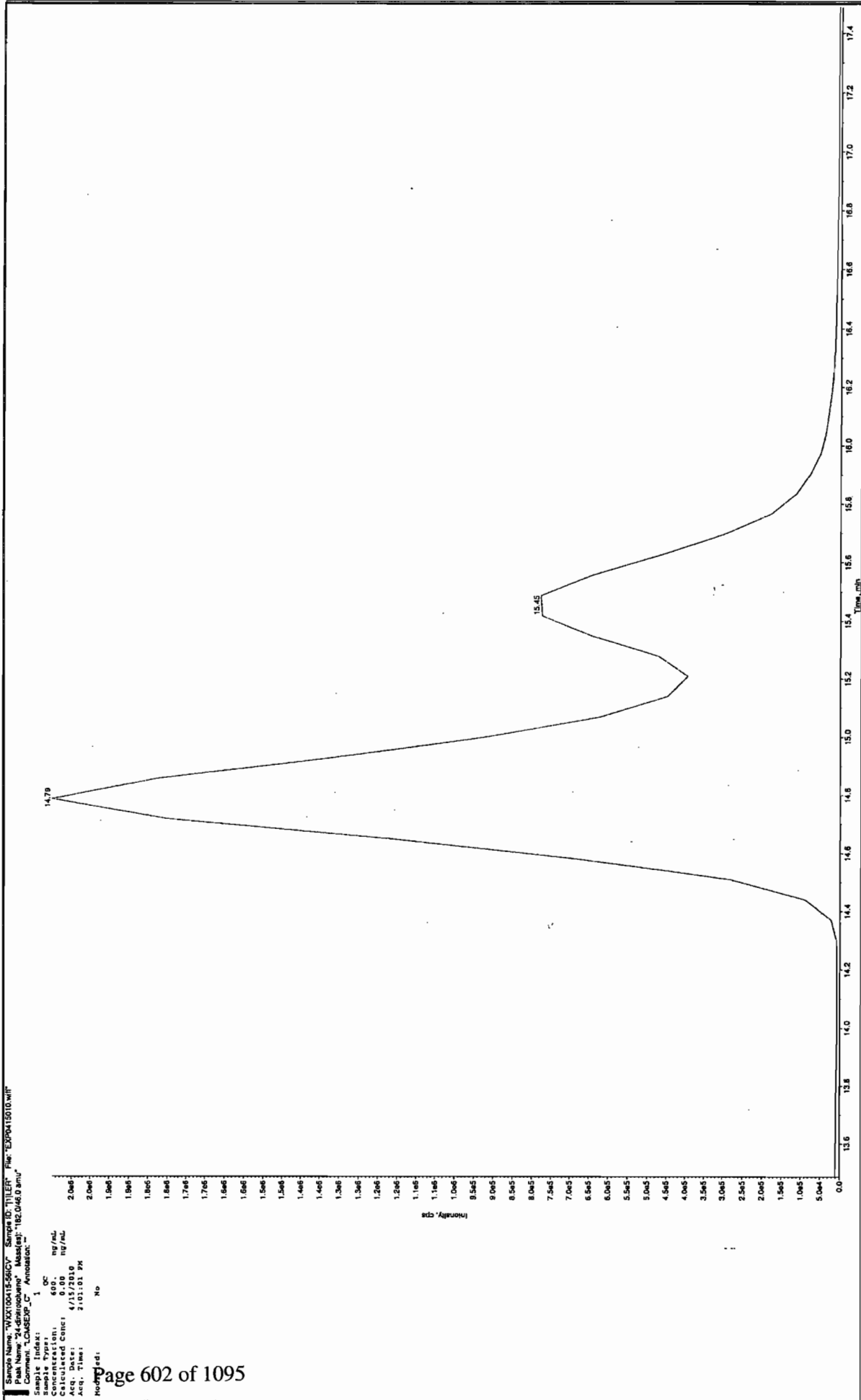
  

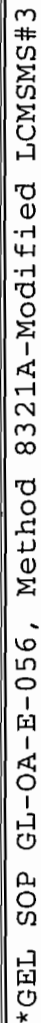
	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	4.57e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	585. (ng/mL)
	<b>% Accuracy:</b>	97.50

	<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>	2.01e+008
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	546. (ng/mL)
	<b>% Accuracy:</b>	91.00

Before 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>	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)
	Expected RT:	11.8
	Actual RT:	11.8
	Area Counts:	2.16e+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:	12.0
	Area Counts:	3.11e+007
	Manual Modification	No
	Amount:	294. (ng/mL)
	% Accuracy:	98.00

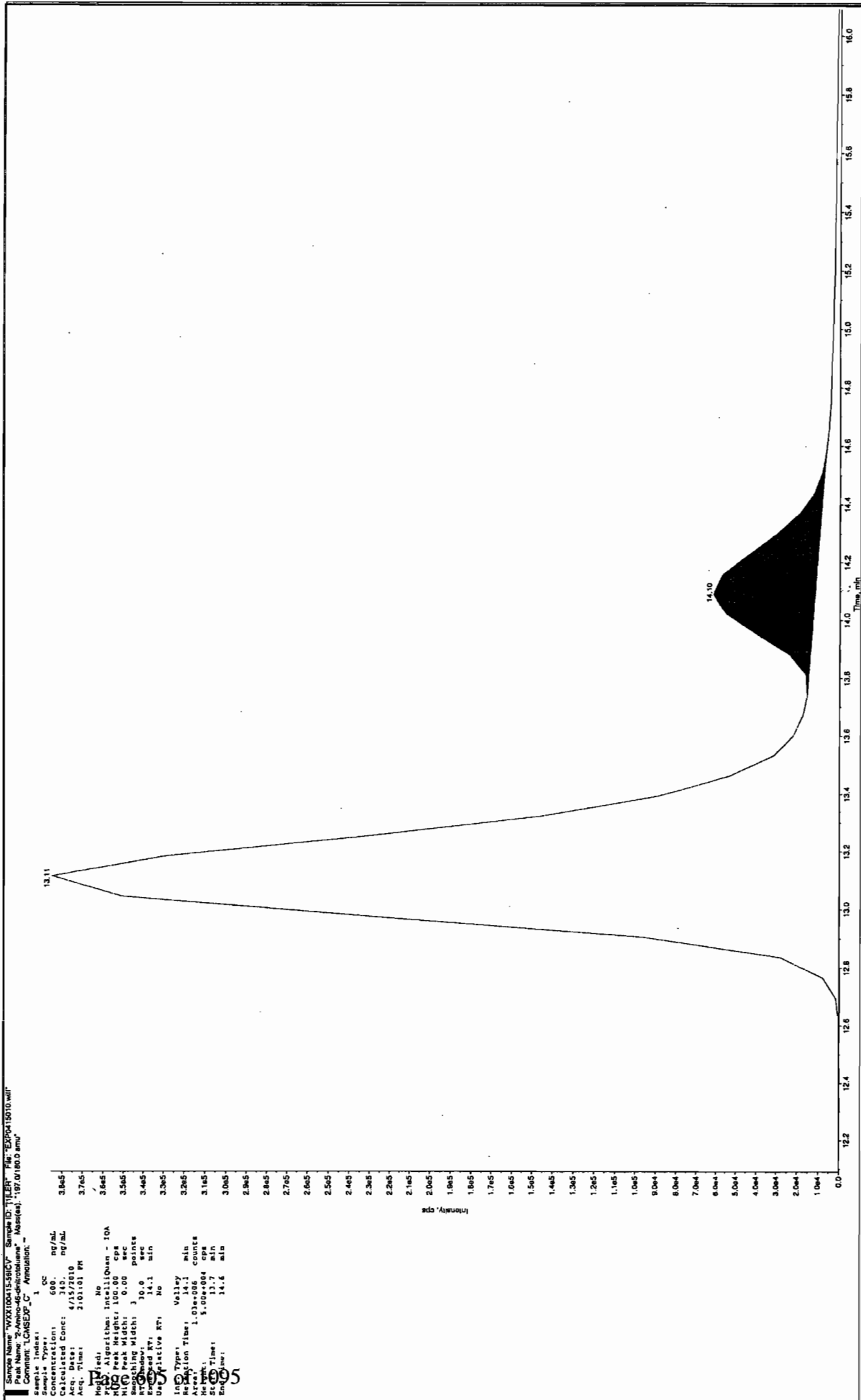
  

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.8
	Area Counts:	4.76e+007
	Manual Modification	No
	Amount:	553. (ng/mL)
	% Accuracy:	92.10

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.94e+007
	Manual Modification	Yes
	Amount:	585. (ng/mL)
	% Accuracy:	97.50

Before Jan 4/23/10



Sample Name: "WAX100415-581C" Sample ID: "111111" File: "EXP0415010.wml"  
 Peak Name: "2-Amino-46-dinitrobenzene" Mass(es): "197.0180.0 amu"  
 Comment: "LCMSD-C" Acquisition: "197.0180.0 amu"

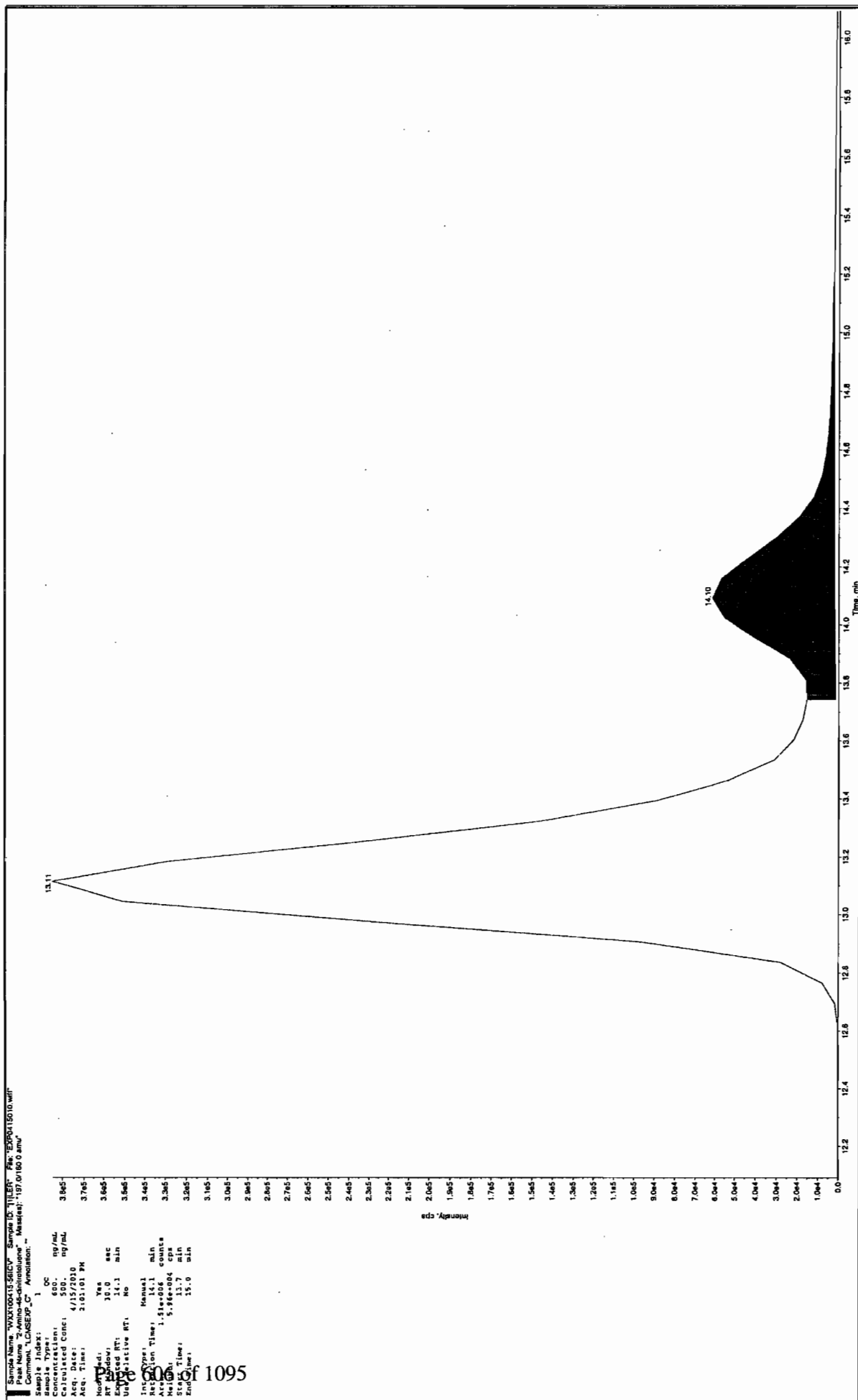
Sample Type: 1 OC  
 Concentration: 600. ng/mL  
 Calculated Conc: 210. ng/mL  
 Peak Area: 4.73E+05  
 Area: 2.01E+01  
 Ret. Time: 2.01E+01 min

Peak Data:  
 Peak #1: 13.11 min  
 Peak #2: 14.10 min  
 Peak Width: 0.00 sec  
 Peak Area: 4.73E+05  
 Peak Height: 3.6e5 cps  
 Peak Width: 0.00 sec  
 Peak Area: 4.73E+05  
 Peak Height: 3.6e5 cps

Integration Data:  
 Integration Type: Valley  
 Integration Time: 1.03e+00 sec  
 Area: 4.73E+05  
 Height: 3.6e5  
 Start Time: 13.7 min  
 End Time: 14.6 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/00



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

Sample Name: "WV100415.DIC" Sample ID: "WV100415.DIC" File: "EXP0115010.wif"

Peak Name: "2-Amino-48-chlorobutane" Mass(es): "197.0/180.0 amu"

Comment: "LCMSMS\_C" Annotation: --

Sample Index: 1

Concentration: 600.00 ng/mL

Acq. Date: 4/15/2010

Acq. Time: 3:01:01 PM

Method: Yes

RT: 10.0 sec

Injection Volume: 10.0 µL

Injection Rate: 10.0 µL/min

Injection Temperature: 10.0 °C

Injection Pressure: 1.0e+004 cps

Start Time: 13.7 min

End Time: 15.0 min

Integration: Manual

Integration Time: 14.1 min

Integration Rate: 1.0e+004 cps

Integration Pressure: 1.0e+004 cps

Integration Temperature: 13.7 min

Integration Pressure: 15.0 min

Integration Rate: 1.0e+004 cps

Integration Pressure: 1.0e+004 cps

Integration Temperature: 13.7 min

Integration Pressure: 15.0 min

Integration Rate: 1.0e+004 cps

Integration Pressure: 1.0e+004 cps

Integration Temperature: 13.7 min

Integration Pressure: 15.0 min

Integration Rate: 1.0e+004 cps

Integration Pressure: 1.0e+004 cps

Integration Temperature: 13.7 min

Integration Pressure: 15.0 min

Integration Rate: 1.0e+004 cps

Integration Pressure: 1.0e+004 cps

Integration Temperature: 13.7 min

Integration Pressure: 15.0 min

Integration Rate: 1.0e+004 cps

Integration Pressure: 1.0e+004 cps

Integration Temperature: 13.7 min

Integration Pressure: 15.0 min

Integration Rate: 1.0e+004 cps

Integration Pressure: 1.0e+004 cps

Integration Temperature: 13.7 min

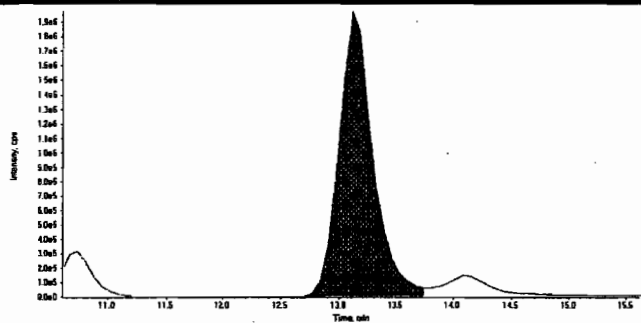
Integration Pressure: 15.0 min

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

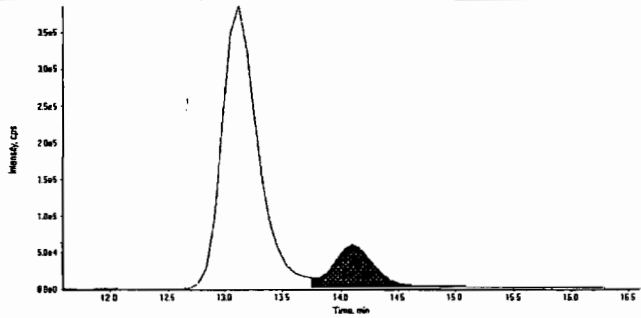
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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

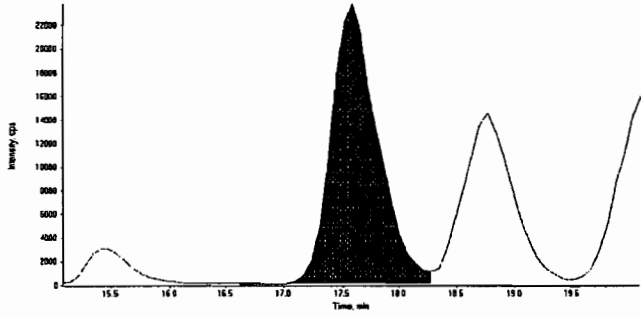
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	4.14e+007
	Manual Modification	No
	Amount:	575. (ng/mL)
	% Accuracy:	95.80

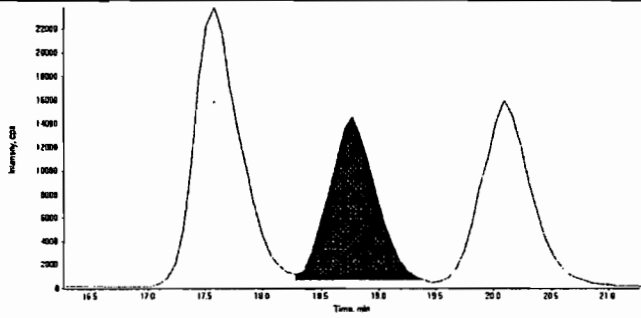
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.1
	Area Counts:	1.51e+006
	Manual Modification	Yes
	Amount:	500. (ng/mL)
	% Accuracy:	83.30

	<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

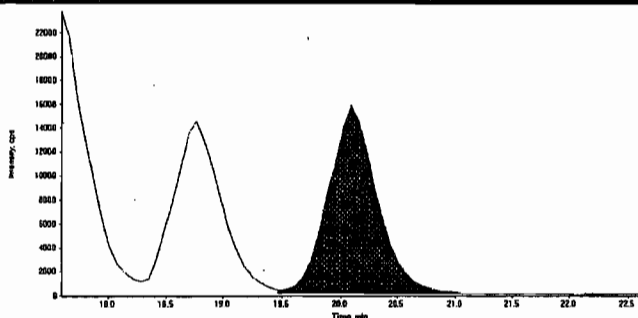
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.8
	Area Counts:	3.94e+005
	Manual Modification	No
	Amount:	570. (ng/mL)
	% Accuracy:	95.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

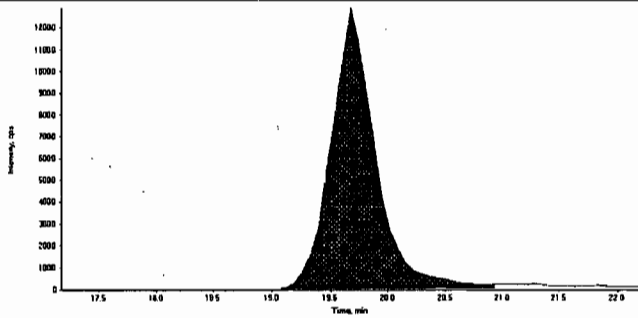
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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:	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*

AVERAGE

✓ 93.0	ICV Limits 85-115%
	CRI Limits 70-130%
	CCV Limits 85-115%
No single analyte > +/- 60%	

*Handwritten: OK 4/22/10*

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2196

Lab Code: GEL

Run Date: 09-APR-10 15-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

Page 1

*See 4/12/10*

*done 04/12/10*



040910ICAL

Fit Quadratic Weighting None Iterate No

a0 -2.45e+004  
a1 2.38e+003  
a2 -0.179

Correlation coefficient 0.9997  
Use Area

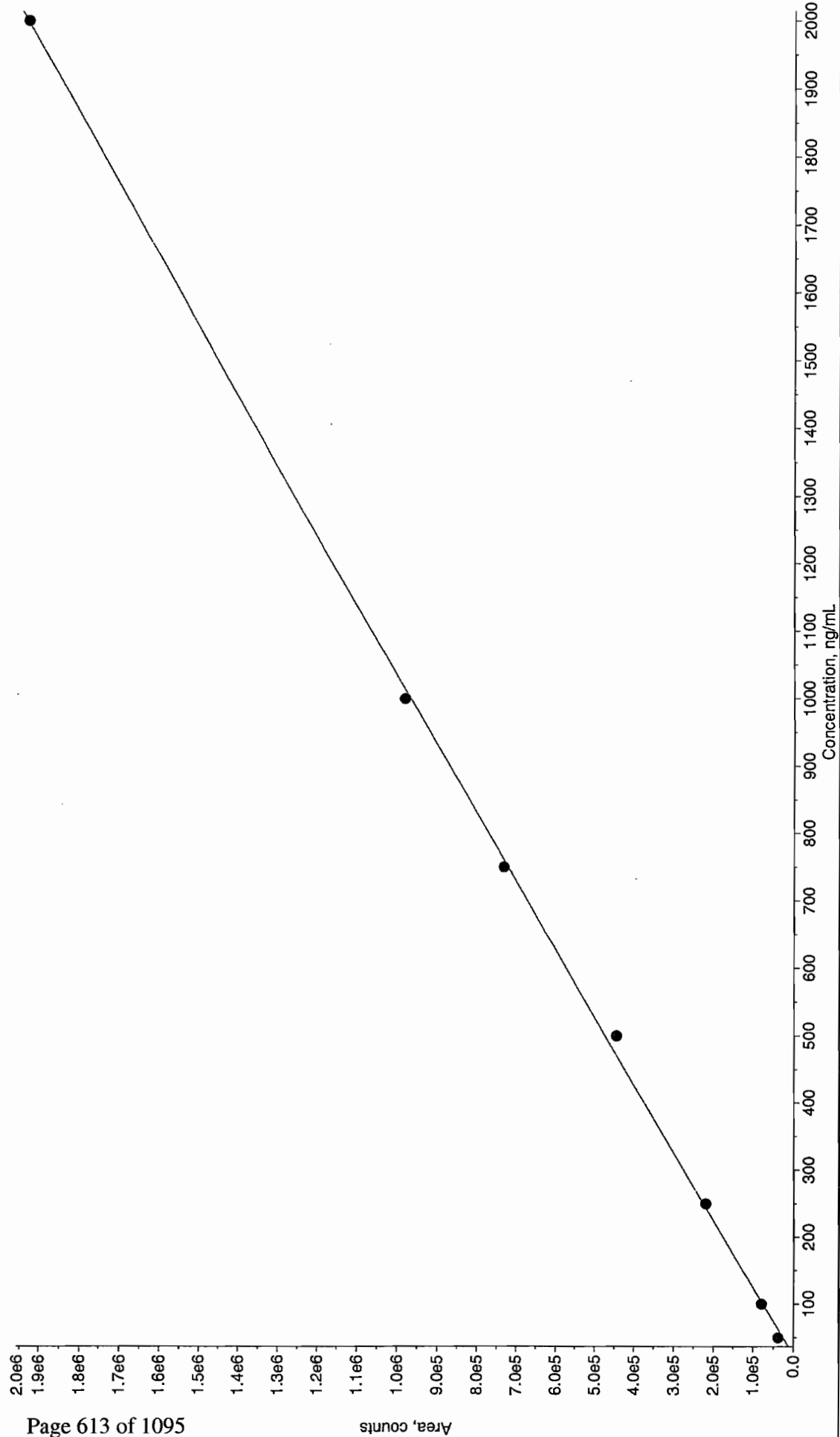
Peak Name: tris(o-cresyl) phosphate  
No Internal Standard  
Q1/Q3 Masses: 369.15/91.00 amu

Fit Quadratic Weighting None Iterate No

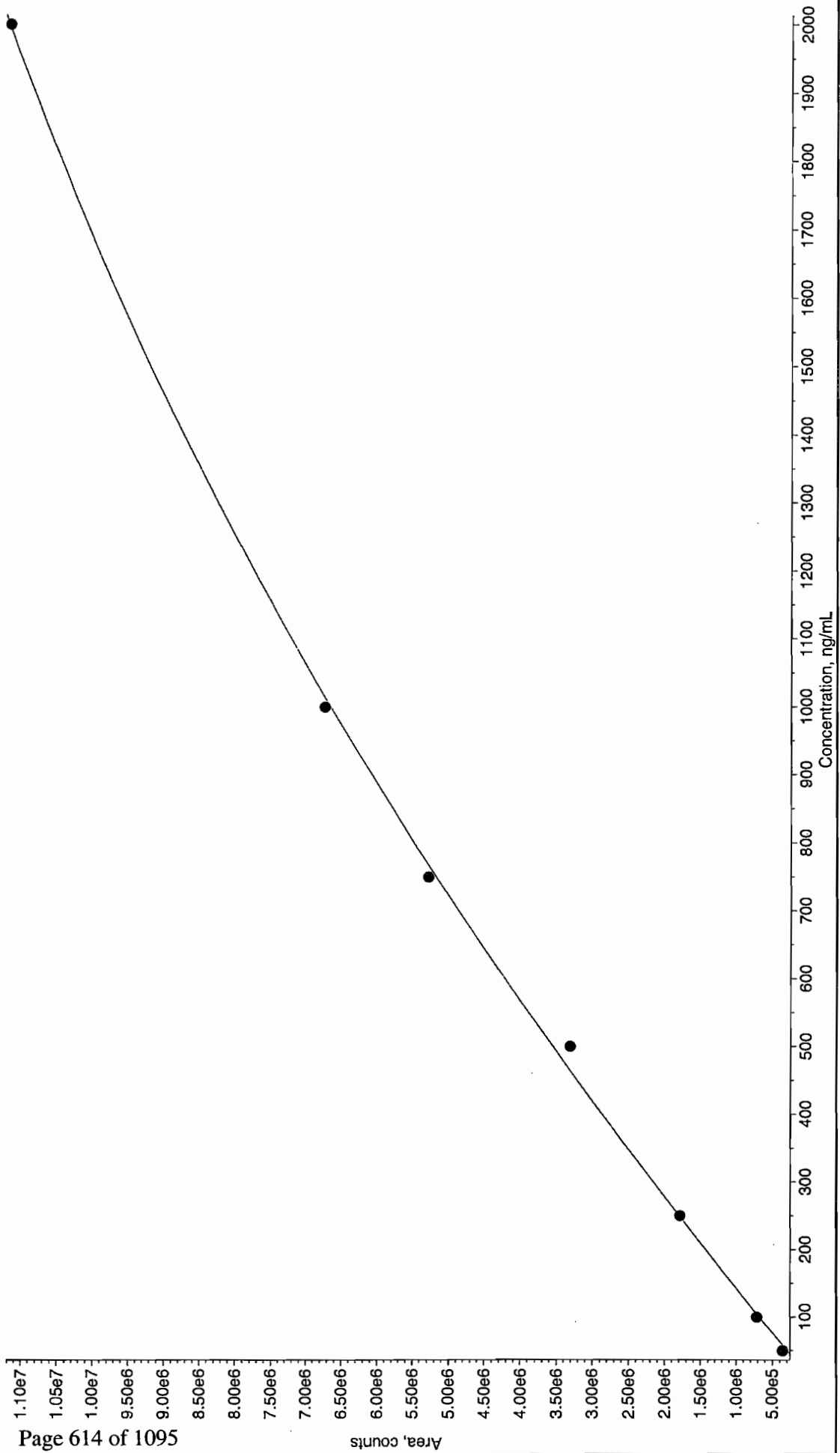
a0 2.19e+004  
a1 2.06e+004  
a2 -3.12

Correlation coefficient 1.0000  
Use Area

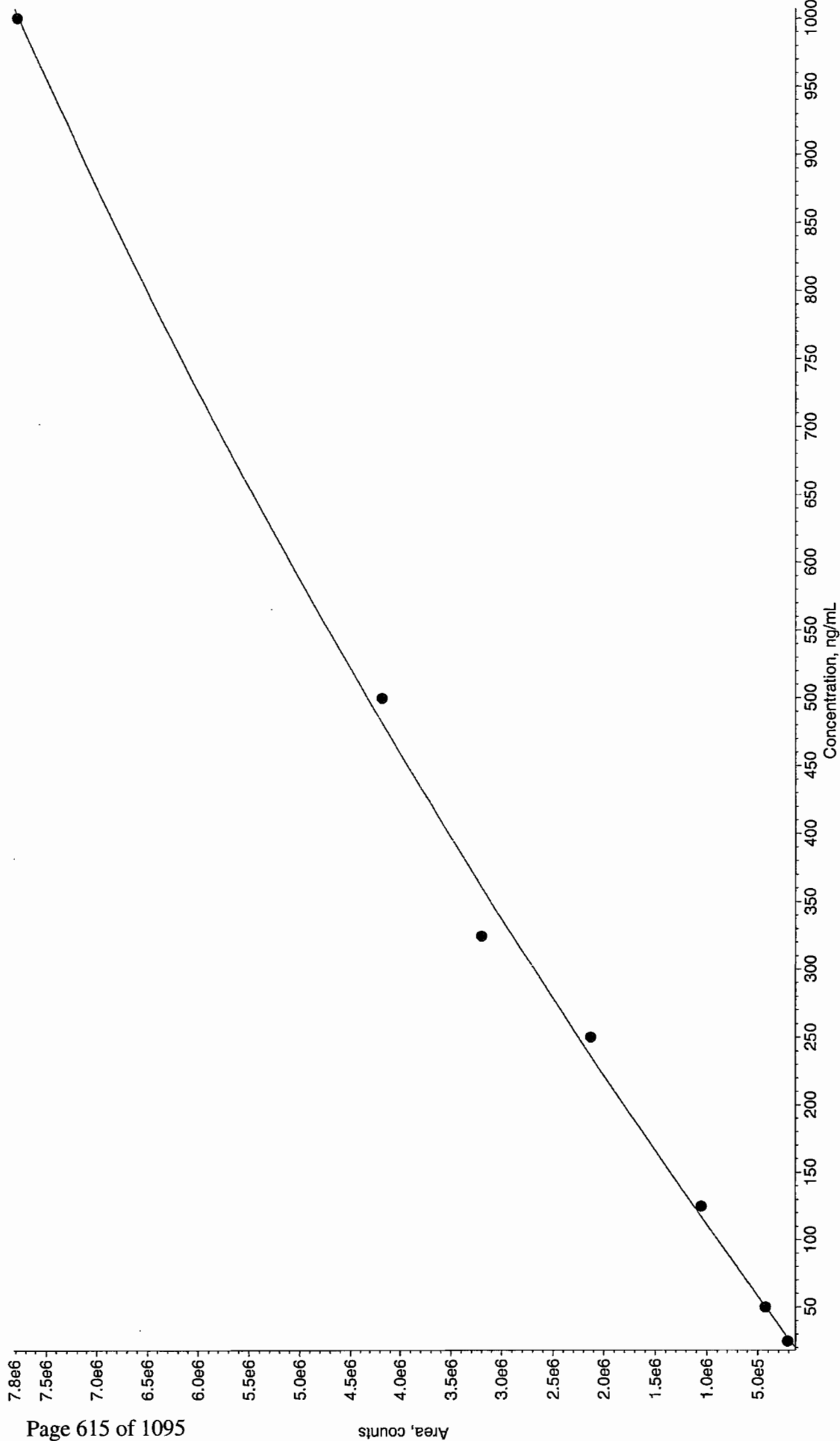
040910.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.0139 x^2 + 1e+003 x + -2.4e+004$  ( $r = 0.9997$ )



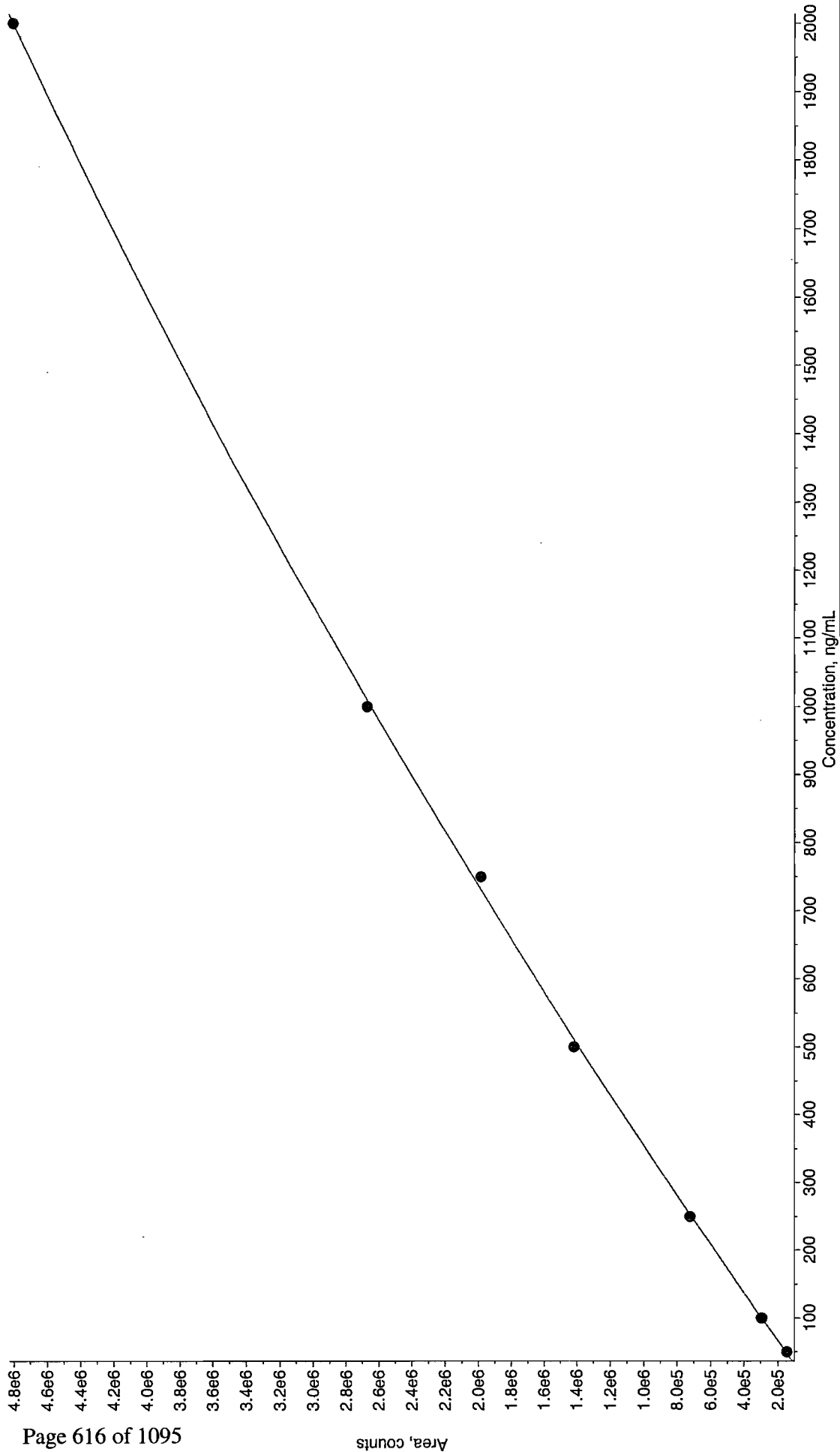
■ 040910.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -1.11 x^2 + 7.83e+003 x + -9.31e+004$  ( $r = 0.9995$ )



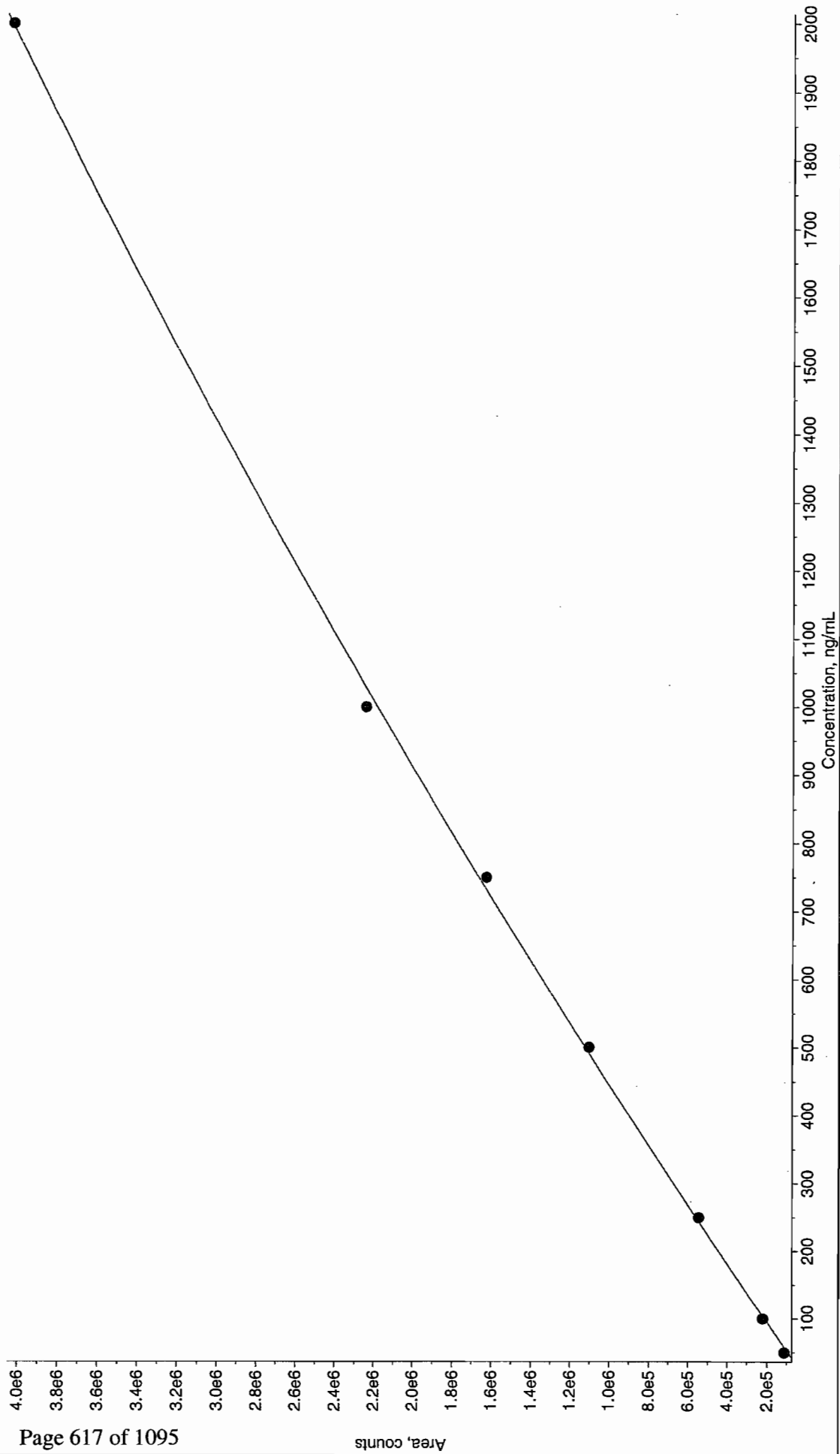
040910.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -1.85 x^2 + 9.64e+003 x + -5.29e+004$  ( $r = 0.9984$ )



040910.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.237 x^2 + 2.86e+003 x + 1.16e+004$  ( $r = 0.9999$ )

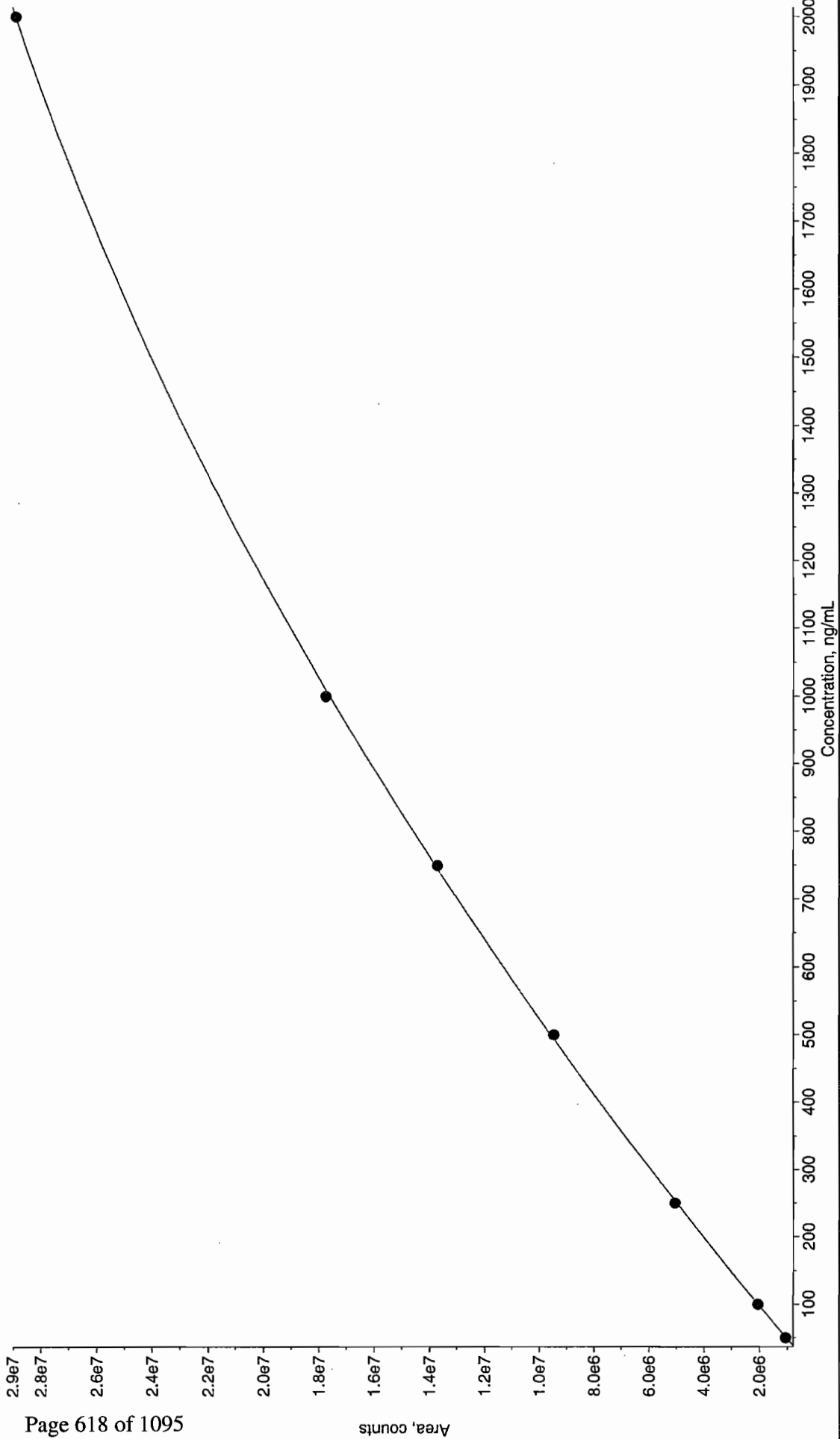


040910.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.179 x^2 + 2.38e+003 x + -2.45e+004$  ( $r = 0.9997$ )



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

040910.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -3.12 \times 10^{-4} x^2 + 2.06 \times 10^{-4} x + 2.19 \times 10^4$  ( $r = 1.0000$ )



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

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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



Jan 4/12/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from CEM

Sample Name: "WXX100409-26(CV" Sample ID: "H1ER" File: "EXS04090011.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: 482. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 9:51:53 AM

Modified: No

Proc. Algorithm: IntAllQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 3.00 sec

Smoothing Width: 3.00 points

RT Window: 30.0 sec

Expected RT: 6.90 min

Use Relative RT: No

Int. Type: Valley

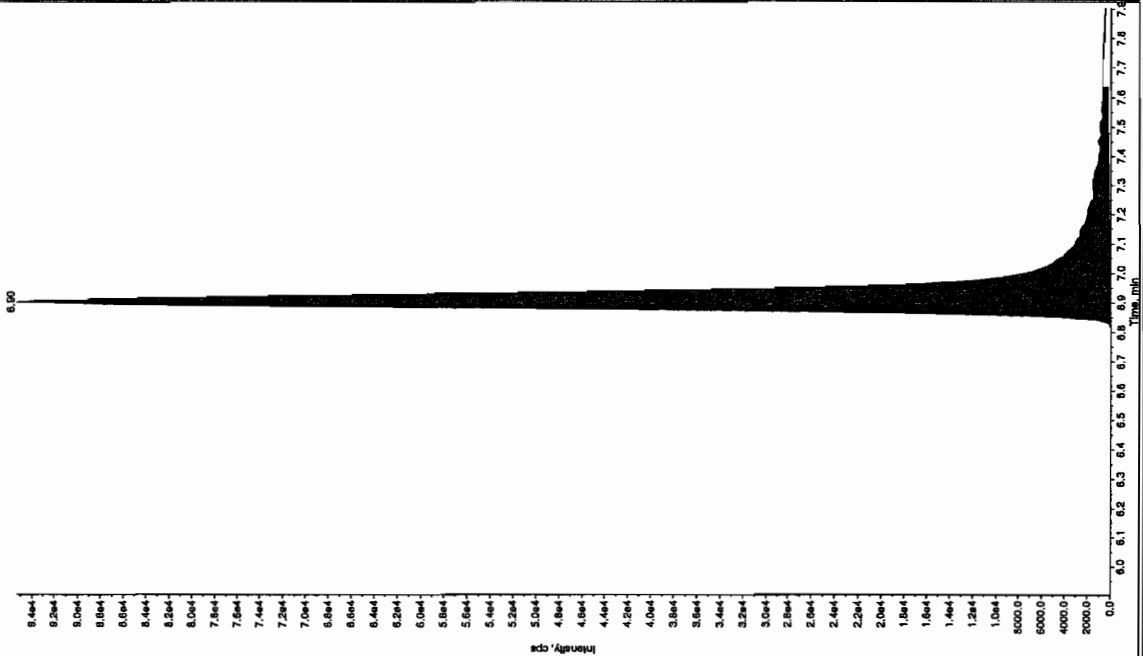
Retention Time: 6.90 min

Area: 4.55e+005 counts

Height: 95236.343 cps

Start Time: 6.81 min

End Time: 7.64 min



Sample Name: "WXX100409-26(CV" Sample ID: "H1ER" File: "EXS04090011.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: 456. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 9:51:53 AM

Modified: No

Proc. Algorithm: IntAllQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 3.00 sec

Smoothing Width: 3.00 points

RT Window: 15.0 sec

Expected RT: 8.14 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 8.14 min

Area: 3.24e+006 counts

Height: 779844.666 cps

Start Time: 8.03 min

End Time: 8.26 min

Jan 4/12/10

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

Sample Name: "WXX100409-28ICV" Sample ID: "11LER" File: "EXS04090011.wif"

Peak Name: "28-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 477. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 9:51:53 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 450.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 30.0 points

Run Window: 30.0 sec

Expected RT: 4.95 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 4.95 min

Area: 1.32e+006 counts

Height: 311597.504 cps

Start Time: 4.85 min

End Time: 5.23 min

4.95

5.40

Intensity, cps

Time, min

Sample Name: "WXX100409-28ICV" Sample ID: "11LER" File: "EXS04090011.wif"

Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1

Sample Type: QC

Concentration: 250. ng/mL

Calculated Conc: 230. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 9:51:53 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 1460.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 30.0 points

Run Window: 30.0 sec

Expected RT: 8.30 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 8.30 min

Area: 2.07e+006 counts

Height: 531213.501 cps

Start Time: 8.23 min

End Time: 8.67 min

8.30

8.13

Intensity, cps

Time, min

Sample Name: WXX100409-26ICV Sample ID: 111ER File: EXS04090011.wif

Peak Name: bis(ocresyl) phosphine Mass(es): 369.191.0 amu

Comment: LCMSEXP\_C1 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: 0.00 sec

Smoother Width: 3 points

RT Window: 30.0 sec

Expected RT: 10.6 min

Use Relative RT: No

Int. Type: Valley

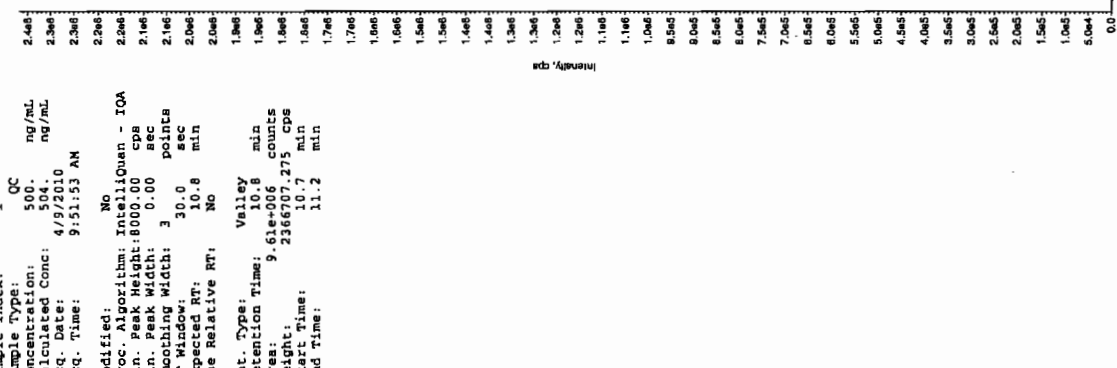
Retention Time: 10.8 min

Area: 9.61e+006 counts

Height: 2366707.275 cps

Start Time: 10.7 min

End Time: 11.2 min



Sample Name: WXX100409-26ICV Sample ID: 111ER File: EXS04090011.wif

Peak Name: 24-Diamino-5-nitroindole Mass(es): 166.046.0 amu

Comment: LCMSEXP\_C1 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: 0.00 sec

Smoother Width: 3 points

RT Window: 30.0 sec

Expected RT: 5.40 min

Use Relative RT: No

Int. Type: Valley

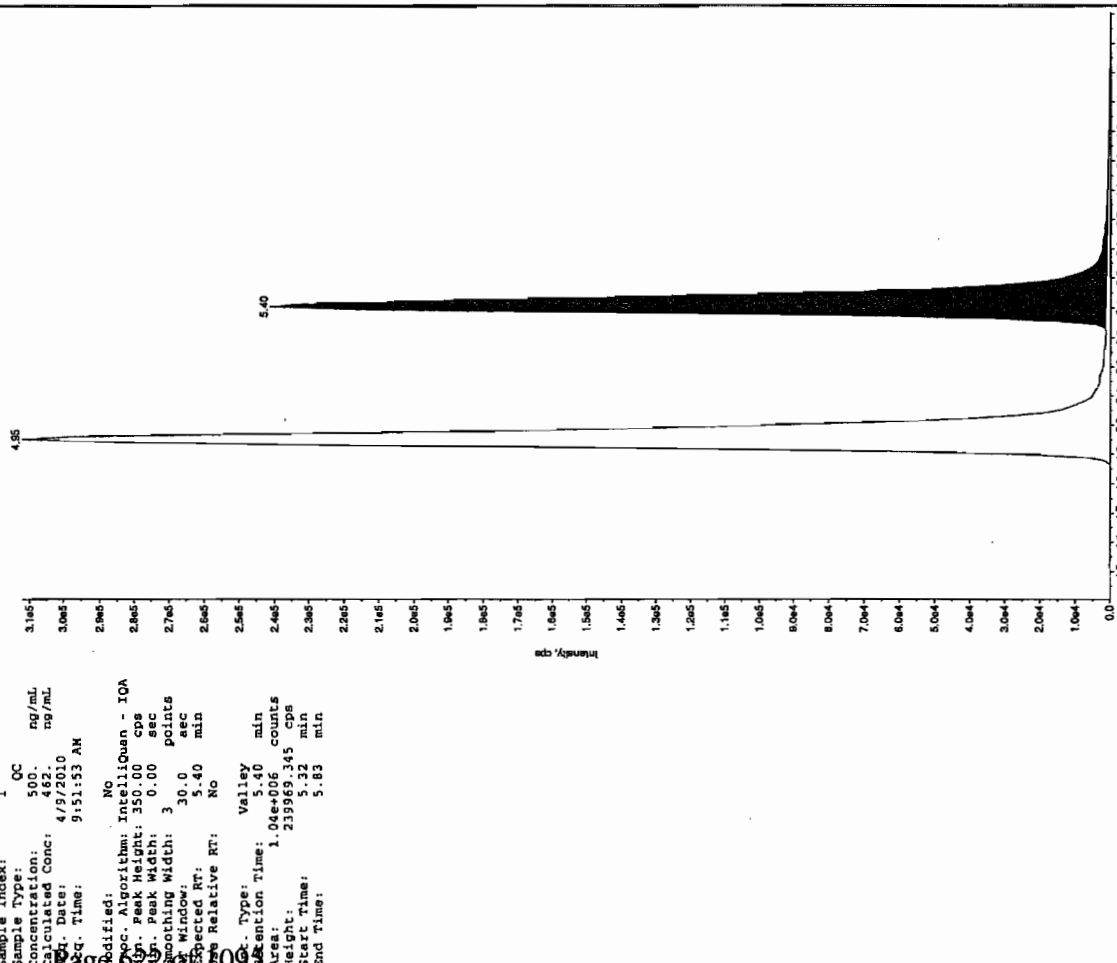
Retention Time: 5.40 min

Area: 1.04e+006 counts

Height: 239969.345 cps

Start Time: 5.32 min

End Time: 5.83 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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%

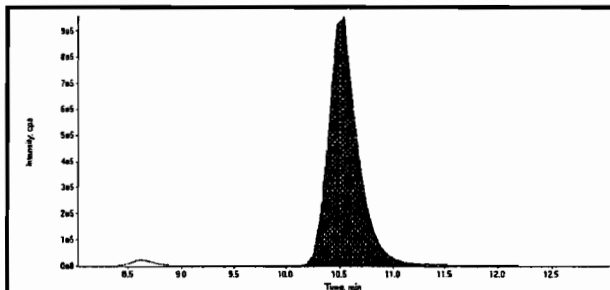
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

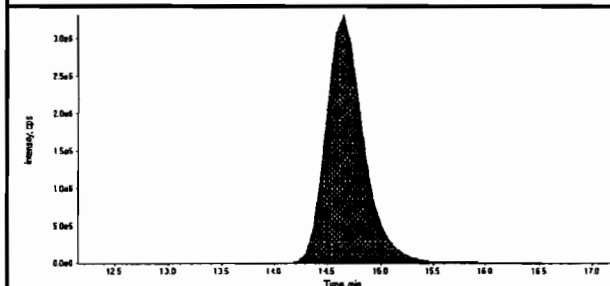
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



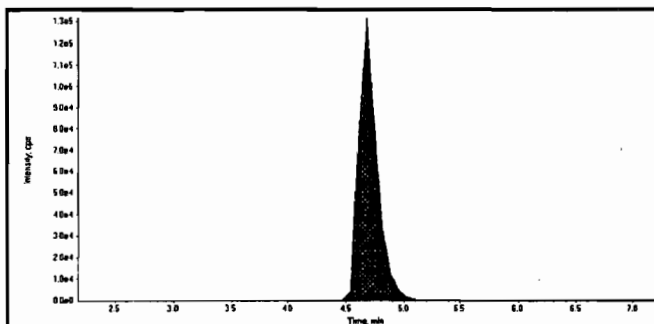
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

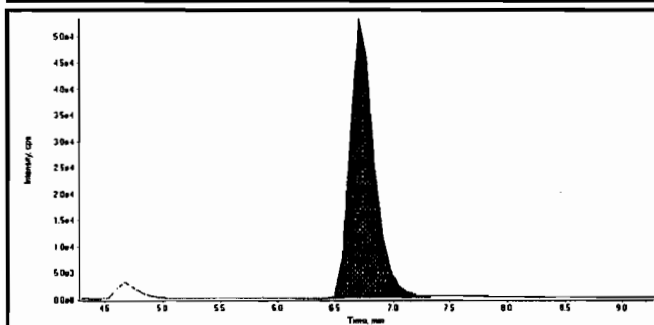


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	81400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

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 signatures and dates:*  
HMC 4/23/10  
Lan 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>	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>	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

	<b>Compound Name:</b>	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

	<b>Compound Name:</b>	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

	<b>Compound Name:</b>	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

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:	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

	Compound Name:	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

	Compound Name:	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

	Compound Name:	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-2,6-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	2.89e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	35.7 (ng/mL)
	<b>% Accuracy:</b>	89.30

	<b>Compound Name:</b>	2-Amino-4,6-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	14.1
	<b>Area Counts:</b>	1.03e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	33.9 (ng/mL)
	<b>% Accuracy:</b>	84.60

	<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>	5.17e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	41.4 (ng/mL)
	<b>% Accuracy:</b>	104.00

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	18.7
	<b>Area Counts:</b>	2.66e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	40.9 (ng/mL)
	<b>% Accuracy:</b>	102.00

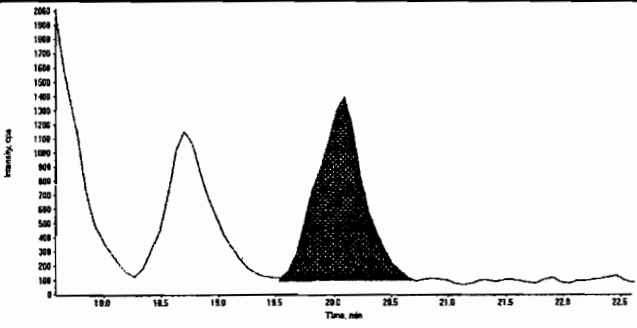


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

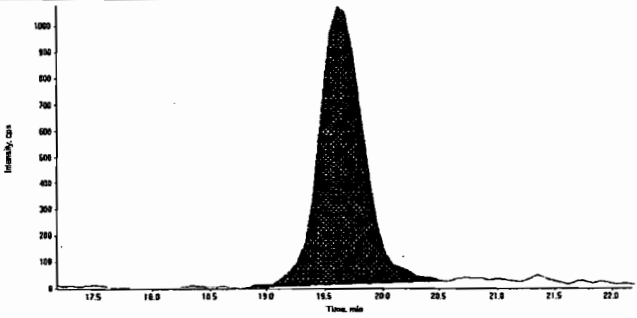
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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): 10-2196

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%

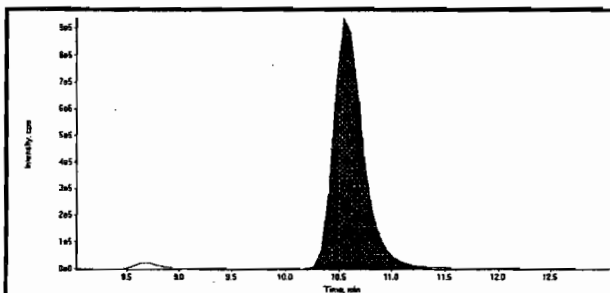
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

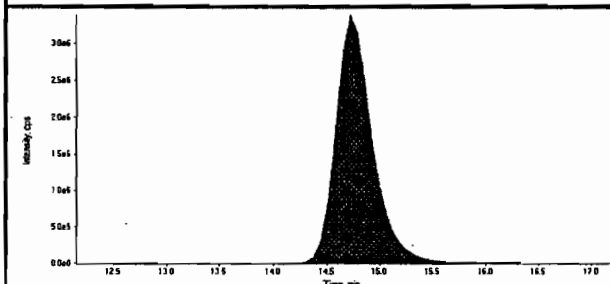
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



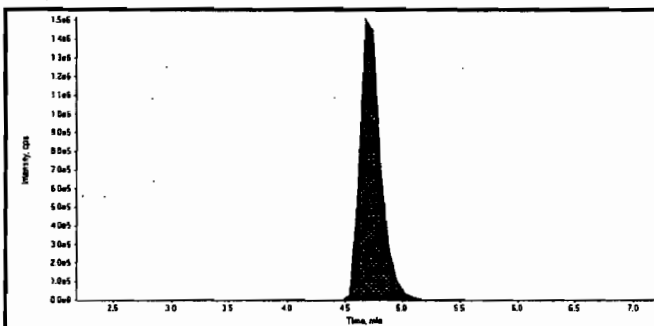
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

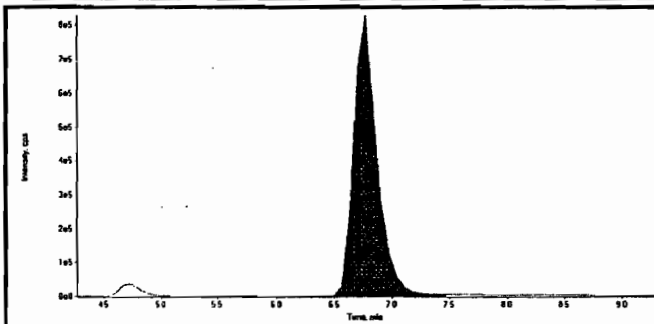


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	82900000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

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

*4/15/10*

*4/23/10*



after run 4/23/10

Sample Name: "WXX100415-560V" Sample ID: "TILLER" File: "EXP015023.wif"

Peak Name: "246-7 Nitrofluorene" Mass(es): "227.1209.8 amu"

Comment: "LCMS-EXP\_C" Annotation: "1"

Sample Index: 1

Sample Type: QC

Concentration: 600 ng/mL

Calculated Conc: 545 ng/mL

Acq. Date: 4/19/2010

Acq. Time: 11:18:28 PM

Method: Yes

Injection Volume: 30.0 µL

Injection Rate: 1.1 min

Unit Relative RT: No

ICD Type: Manual

ICD Version: 1.1

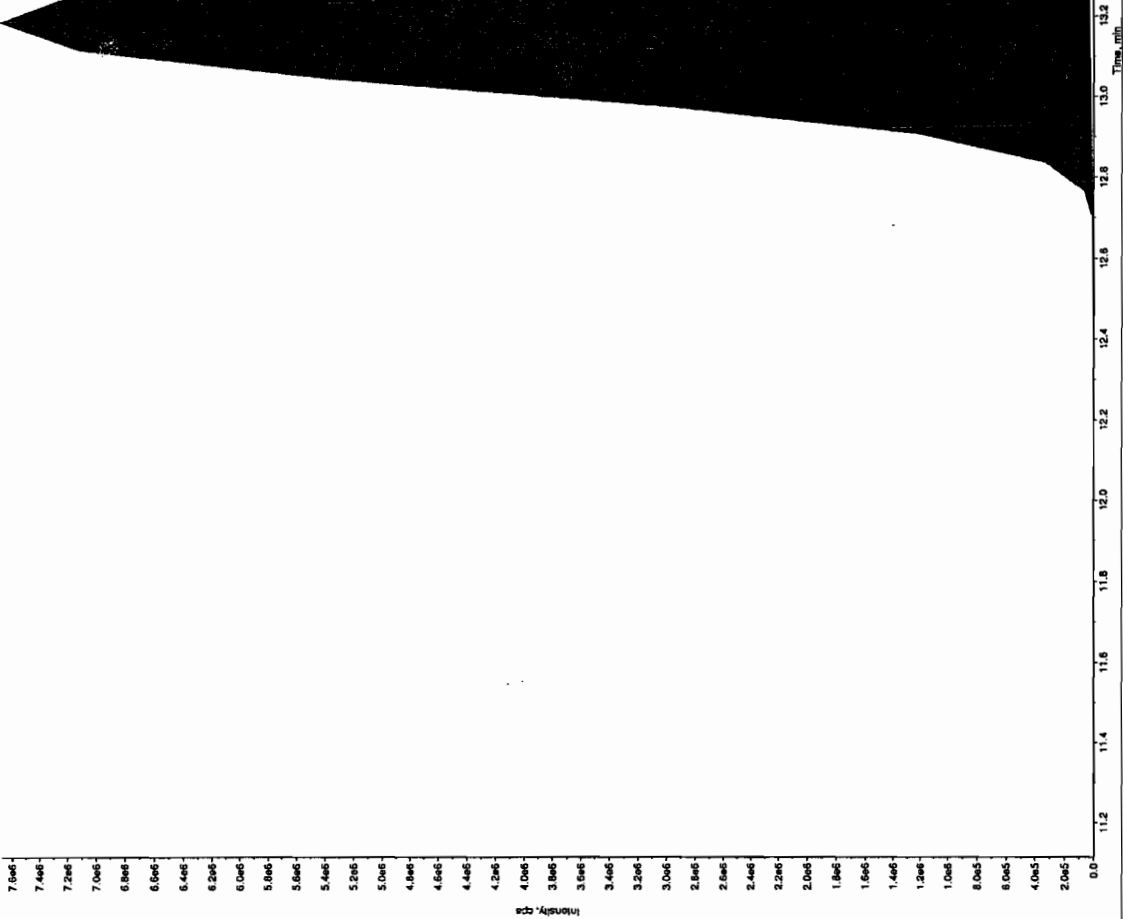
ICD Location: 3.06e+008 counts

Height: 7.65e+006 cps

Start Time: 12.5 min

End Time: 14.9 min

13.10



Peak 6601095

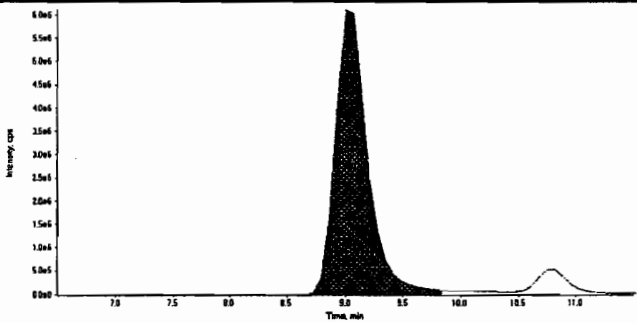
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

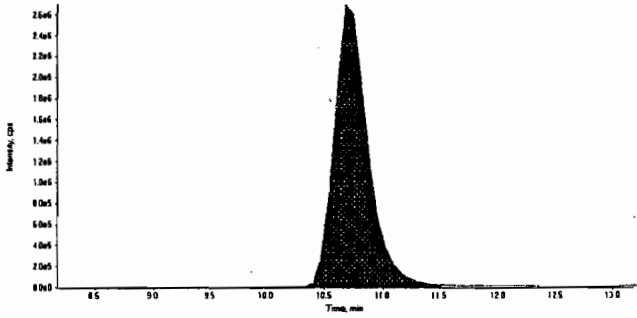
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

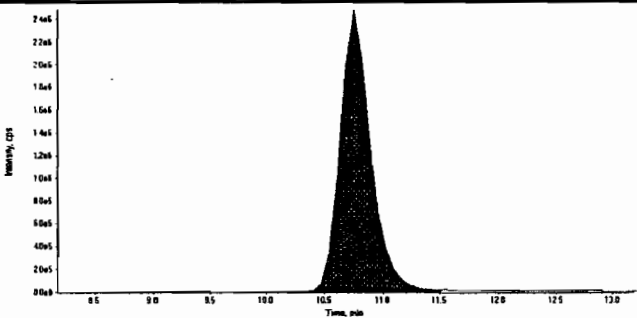
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.00
	Area Counts:	1.20e+008
	Manual Modification	No
	Amount:	525. (ng/mL)
	% Accuracy:	87.40

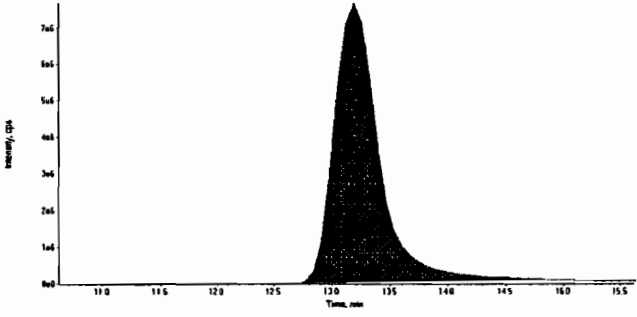
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	5.50e+007
	Manual Modification	No
	Amount:	543. (ng/mL)
	% Accuracy:	90.60

	<b>Compound Name:</b>	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

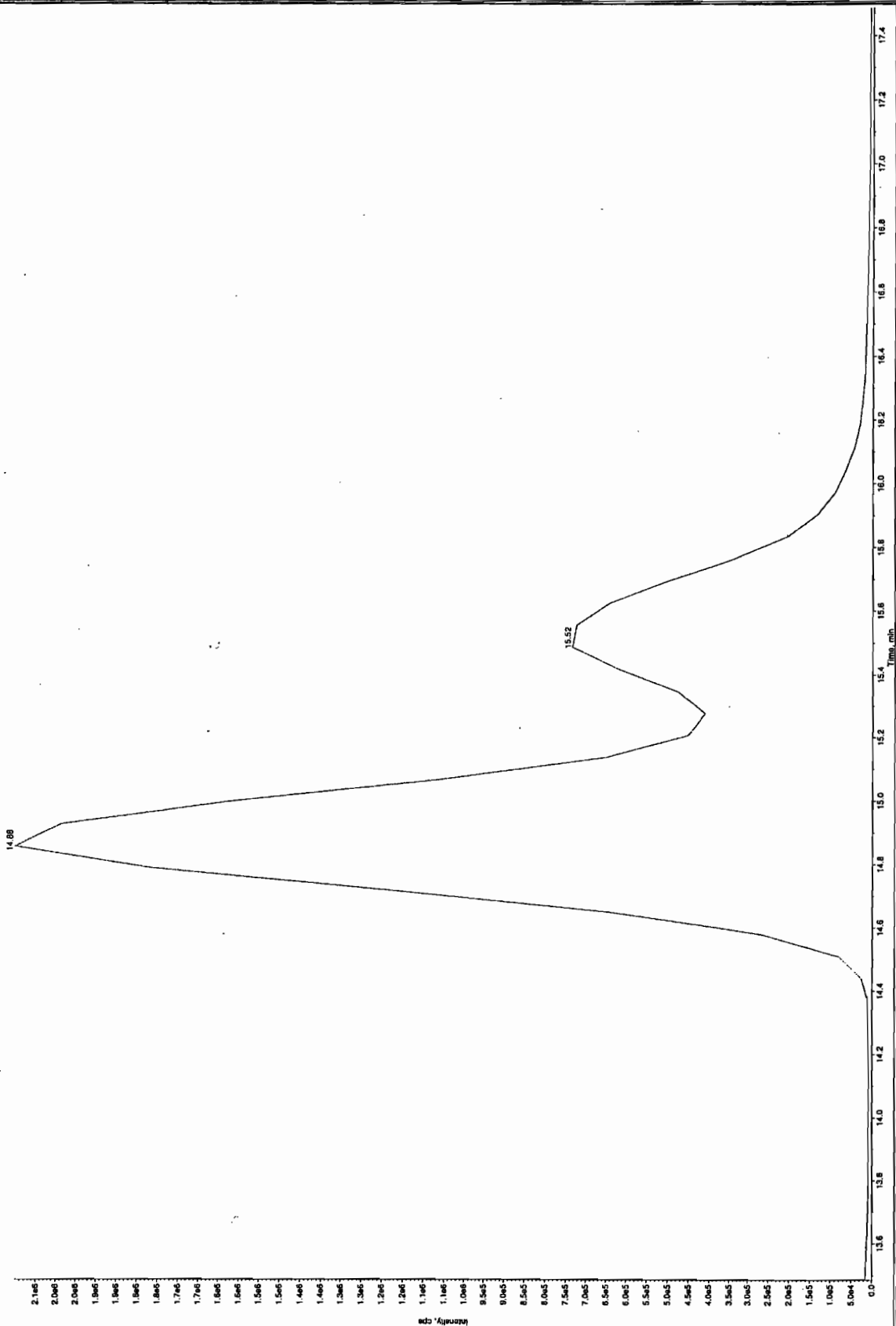
  

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.06e+008
	Manual Modification	Yes
	Amount:	545. (ng/mL)
	% Accuracy:	90.80

Before Jan 4/23/10

Sample Name: W01000155007 Sample ID: W11157 File: E00415023.wif  
 Project: "W01000155007" Method: 162.046.0.ms  
 Comment: "LCMS-EXP\_C" Acquisition: 1

Sample Index: 1  
 Sample Type: QC  
 Concentration: 600 ng/mL  
 Acquisition Date: 4/15/2010  
 Acq. Date: 7/18/2010  
 Acq. Time: 7:18:20 PM  
 Acquired: No







\*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>	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

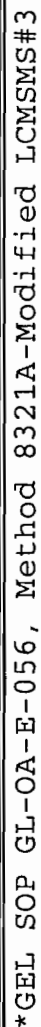
	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	3.16e+007
	Manual Modification	No
	Amount:	291. (ng/mL)
	% Accuracy:	97.10

	<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



after Jan 4/23/10

Sample Name: WXX100415-58CCY Sample ID: 111587 File: E580415023.wrf  
 Acquisition: 4/15/2010 7:28:20 PM  
 Component: LCMSSEM\_C7 Annotation: -

Sample Index: 1

Sample Type: QC

Concentration: 600.0 ng/mL

Calculated Conc: 593.0 ng/mL

Acq. Date: 4/15/2010

Acq. Time: 7:28:20 PM

Method: Yes

Window: 30.0 sec

Expected RT: 14.1 min

Use Relative RT: No

RT: 14.22

Injection Type: Manual

Injection Time: 14.2 min

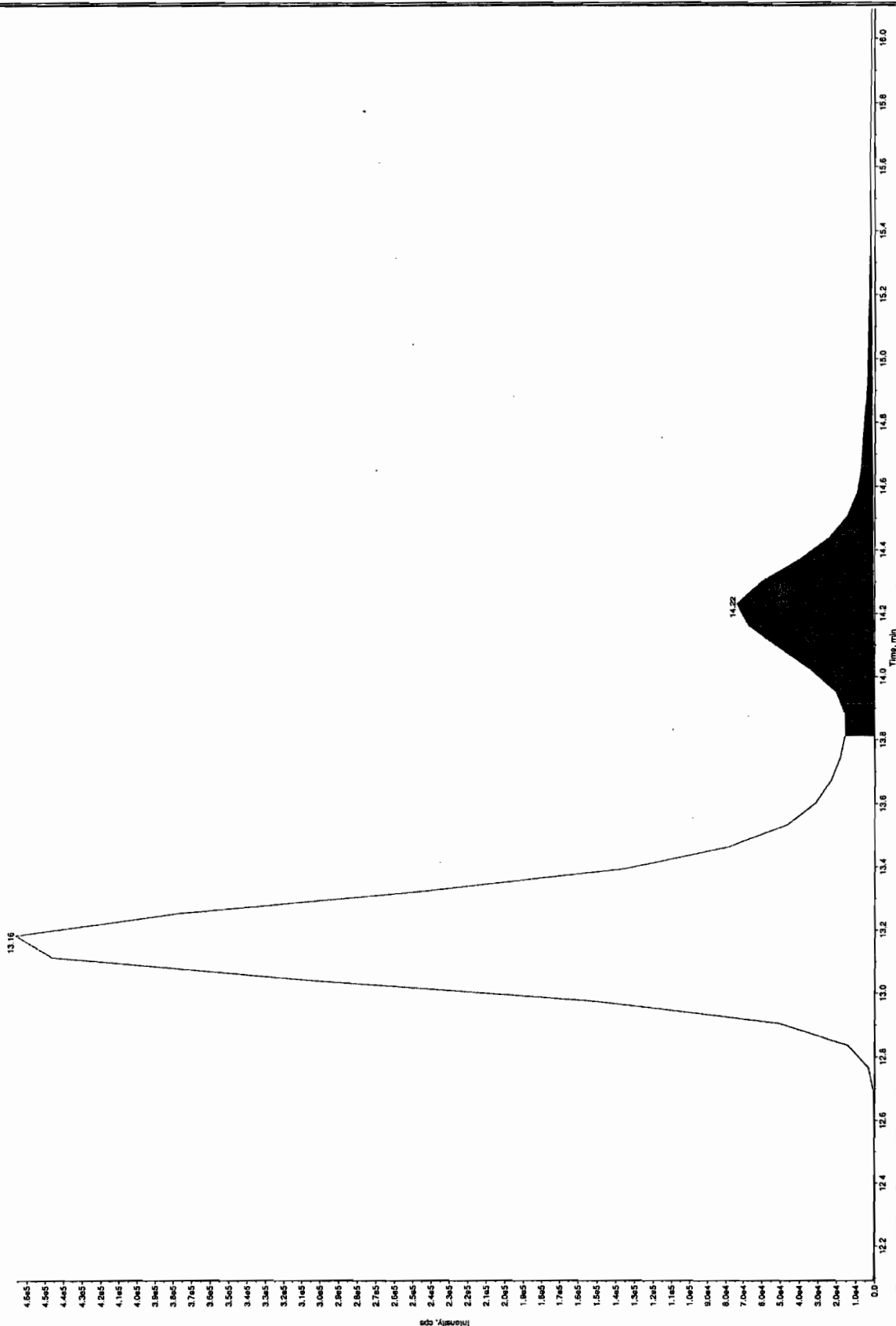
Acquisition Time: 14.2 min

Counts: 1.94e+005

Area: 1.27e+004

Start Time: 13.8 min

Stop Time: 15.5 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>	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-2,6-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	4.73e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	640. (ng/mL)
	<b>% Accuracy:</b>	107.00

	<b>Compound Name:</b>	2-Amino-4,6-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	14.2
	<b>Area Counts:</b>	1.84e+006
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	593. (ng/mL)
	<b>% Accuracy:</b>	98.80

	<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>	7.76e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	592. (ng/mL)
	<b>% Accuracy:</b>	98.70

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	18.8
	<b>Area Counts:</b>	4.42e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	629. (ng/mL)
	<b>% Accuracy:</b>	105.00

Before Jan 4/23/10

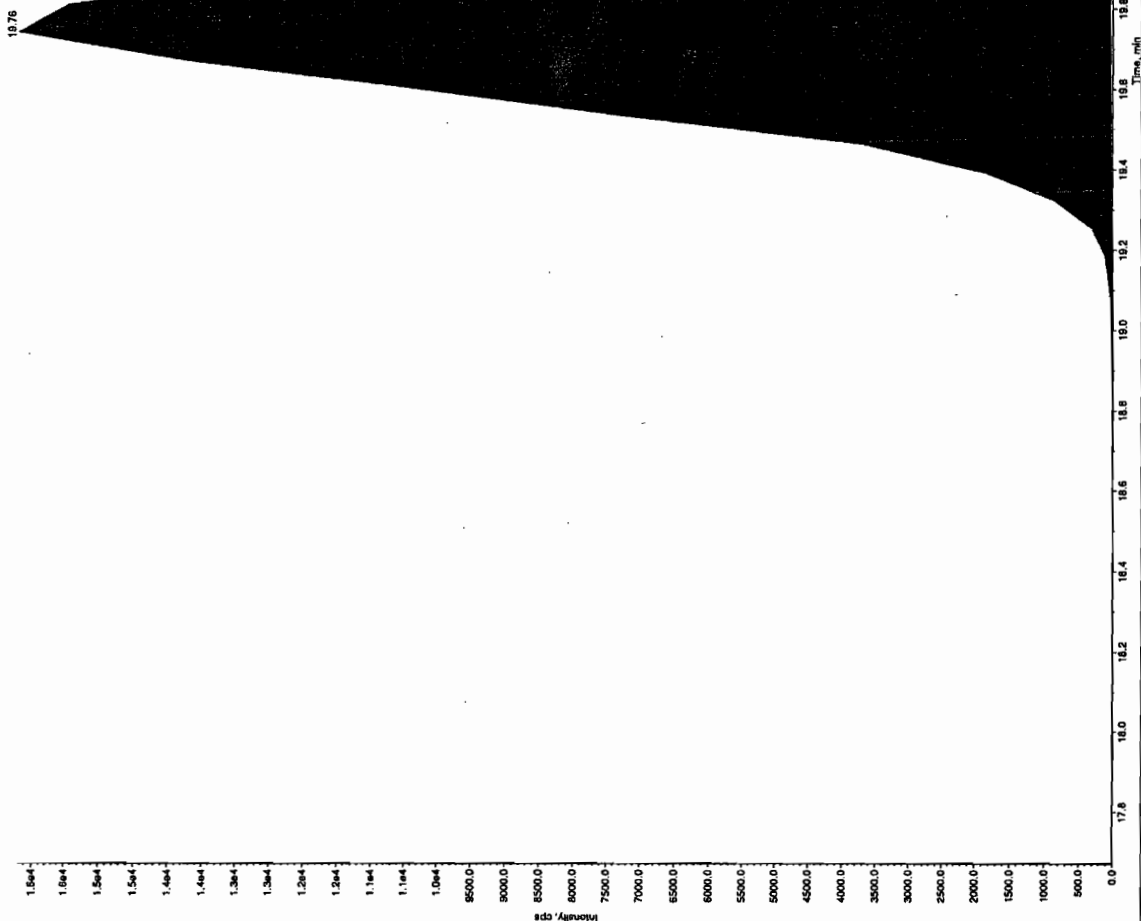
Sample Name: 8321A-E-05667 Sample ID: TILER File: E000415623.wif  
 Peak Name: TETRA Molar Weight: 281.1822 g/mol  
 Comment: LCMSXP\_C Annotation: -

Sample Index: 1

Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 595 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 7:18:20 PM

Method: No  
 Peak: Algorithm: IntelliQuan - IOL  
 Peak Height: 100.00 cps  
 Peak Width: 0.00 sec  
 Peak Width: 60.0 sec  
 Peak Width: 19.7 min  
 Peak Width: 1.464 min

Peak Type: Valley  
 Retention Time: 19.7 min  
 Area: 4.68e-005 counts  
 Height: 1.61e-004 cps  
 Width: 1.464 min  
 Width: 22.7 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after run 4/23/10

Sample Name: "WAX100415-5620" Sample ID: "THER" File: "EXP0415023.wif"

Peak Name: "PETN" Mass(es): "361.162.0 amu"

Comment: "LCMS-EXP-C" Annotation: ""

Sample Type: "1" QC

Concentration: "600" ng/mL

Calculated Conc: "4.157210" ng/mL

Acq. Time: "7:31:20 PM"

Yes

Yes

60.0 sec

19.7 min

Yes

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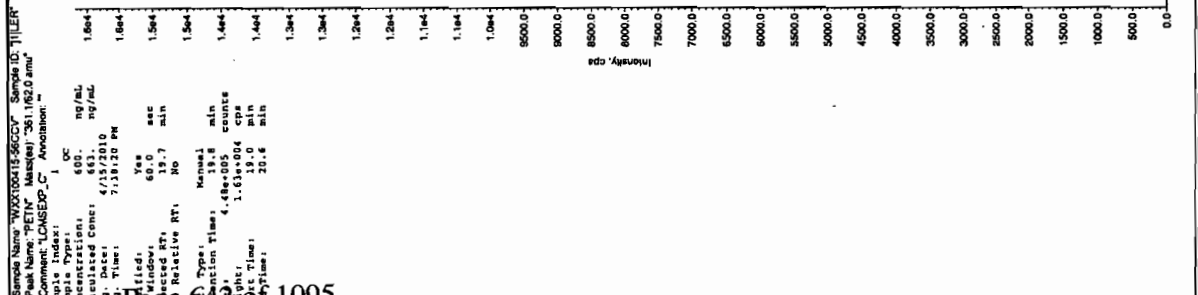
19.7 min

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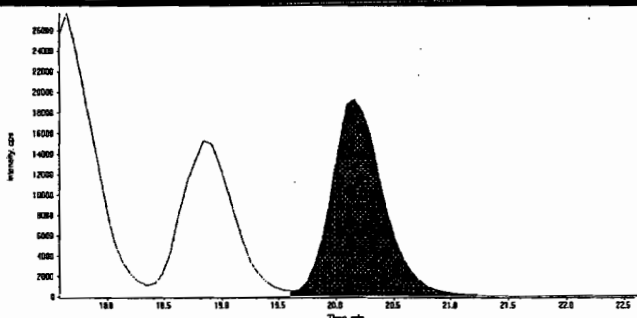
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

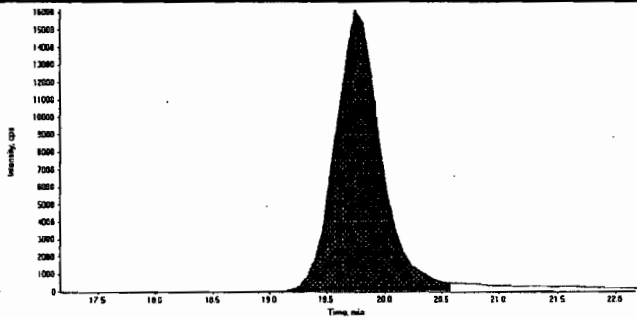
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.2
	<b>Area Counts:</b>	6.05e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	613. (ng/mL)
	<b>% Accuracy:</b>	102.00

	<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>	4.48e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	663. (ng/mL)
	<b>% Accuracy:</b>	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 *km 04/23/10*

AVERAGE

✓ 97.4	ICV Limits 85-115%
	CRI Limits 70-130%
	CCV Limits 85-115%
No single analyte > +/- 60%	

*Las*  
*4/22/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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%

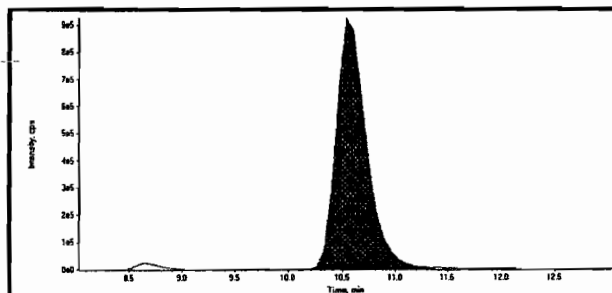
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

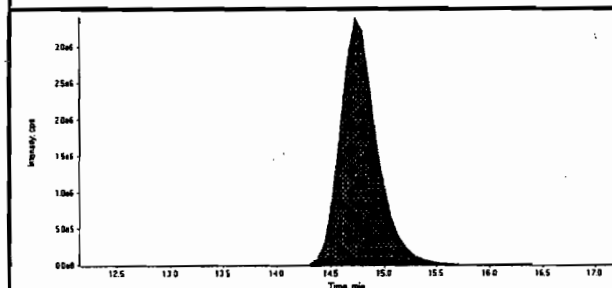
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

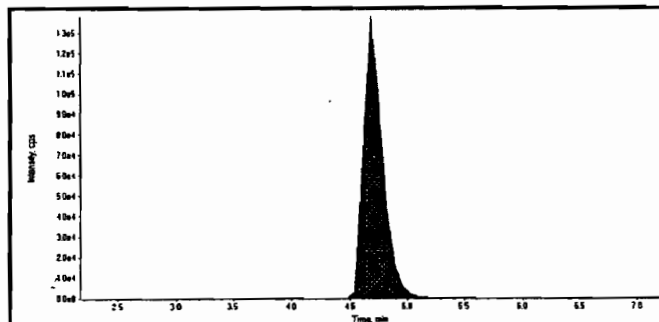
Data File	EXP0415025.wiff	Acquisition Date	4/15/2010 8:30:11 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



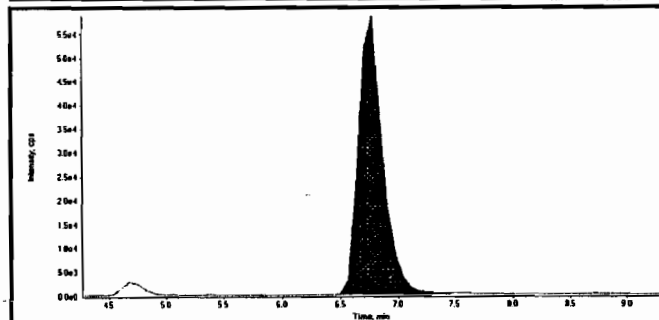
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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

*Handwritten:* Hmw 04/27/10

*Handwritten:* 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)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.00
	<b>Area Counts:</b>	1.14e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	38.5 (ng/mL)
	<b>% Accuracy:</b>	96.20

	<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>	4.32e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	41.3 (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>	3.25e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	38.9 (ng/mL)
	<b>% Accuracy:</b>	97.30

	<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>	2.15e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	37.9 (ng/mL)
	<b>% Accuracy:</b>	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)
	Expected RT:	11.8
	Actual RT:	11.8
	Area Counts:	1.49e+005
	Manual Modification	No
	Amount:	44.6 (ng/mL)
	% Accuracy:	112.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	2.31e+006
	Manual Modification	No
	Amount:	16.9 (ng/mL)
	% Accuracy:	84.50

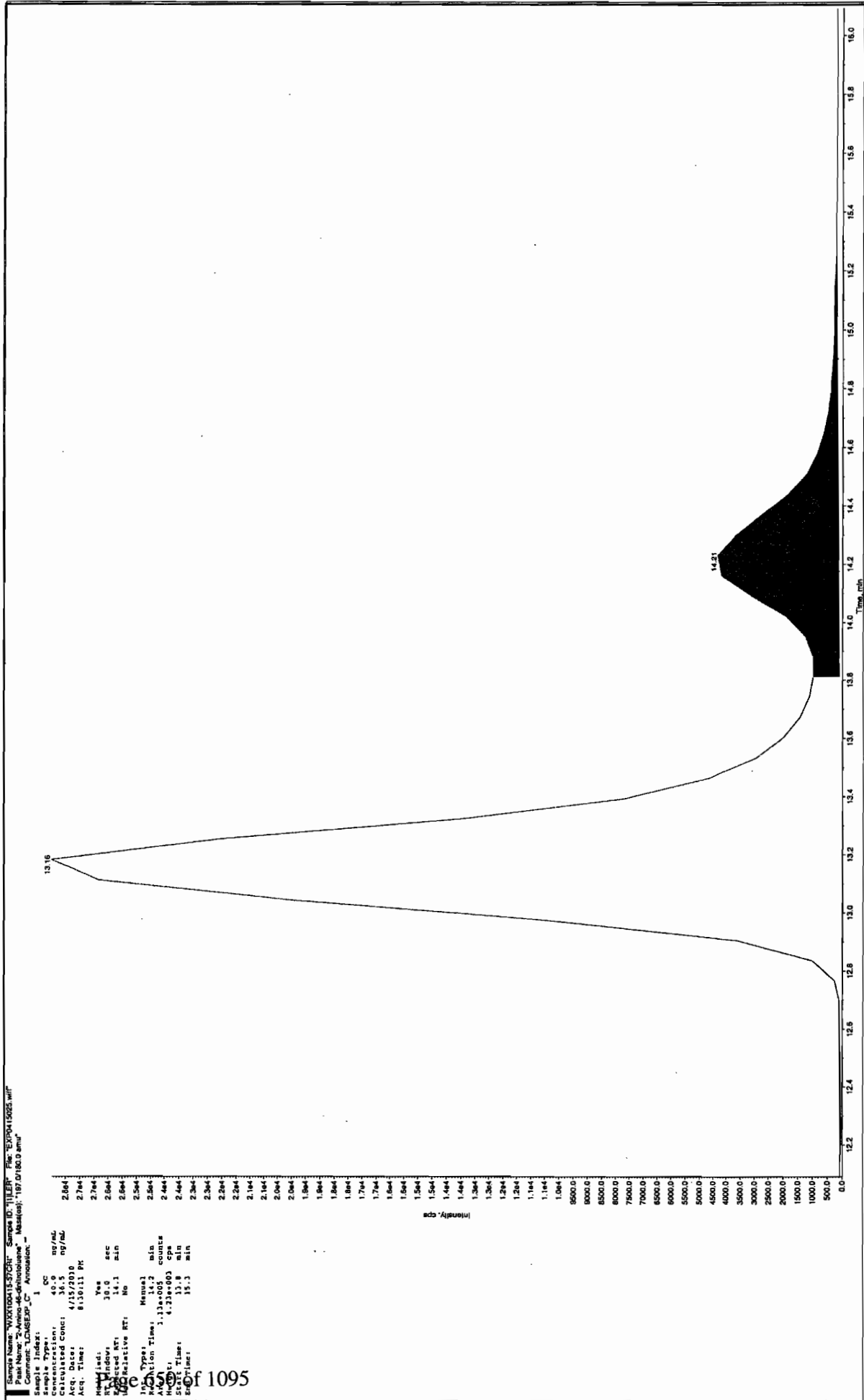
	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	3.79e+006
	Manual Modification	No
	Amount:	29.9 (ng/mL)
	% Accuracy:	74.60

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.6
	Area Counts:	1.51e+006
	Manual Modification	No
	Amount:	34.4 (ng/mL)
	% Accuracy:	86.10



after Jan 4/23/10



Sample Name: WXYZ100115-27201- Sample ID: 111111- File: E:\Data\15025.mlf  
 Peak Name: 2-Amino-46-dihydroquinoline- Mass(es): 187.0(180.0 amu)  
 Comment: "LCMS-EXP\_C" Annotation: -

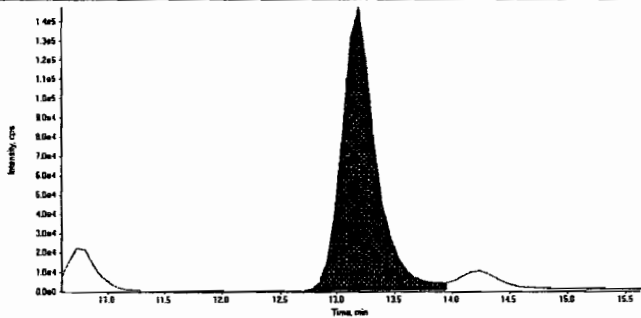
Sample Index: 1  
 Concentration: 40.0 ng/mL  
 Calculated Conc: 36.5 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 8:30:11 PM  
 Method: Yes  
 Inj. Volume: 10.0 µL  
 Inj. Speed: 14.1 min  
 Inj. Pressure: 2.604  
 Inj. Temperature: 2.504  
 Inj. Type: Manual  
 Reaction Time: 14.2 min  
 Reaction Temperature: 13.0°C  
 Method: 1.13e+003 cps  
 Start Time: 13.8 min  
 End Time: 15.3 min

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

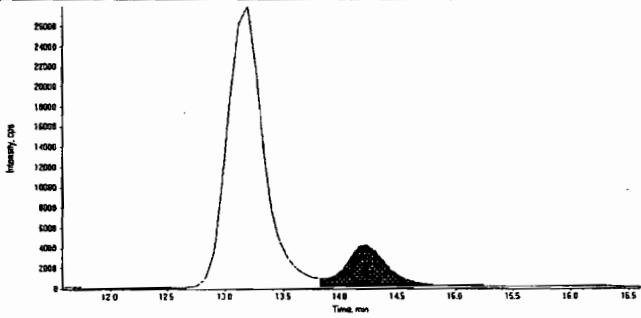
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

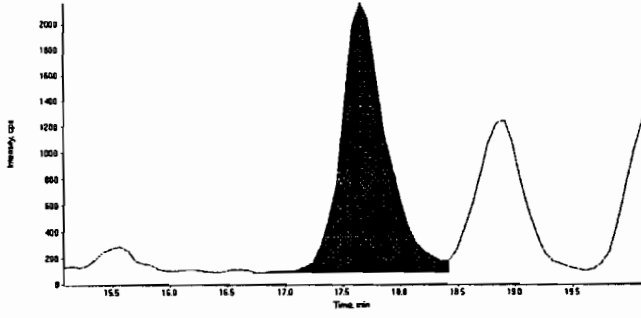
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	3.10e+006
	Manual Modification	No
	Amount:	38.1 (ng/mL)
	% Accuracy:	95.20

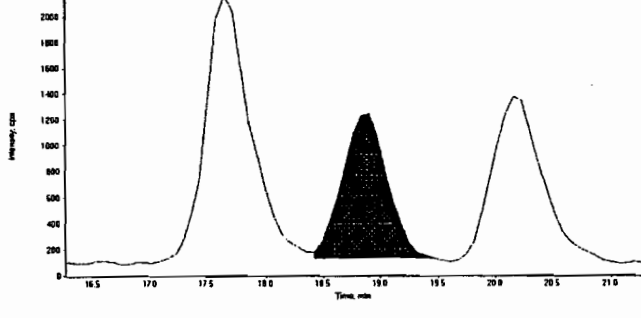
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	1.13e+005
	Manual Modification	Yes
	Amount:	36.5 (ng/mL)
	% Accuracy:	91.30

	<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

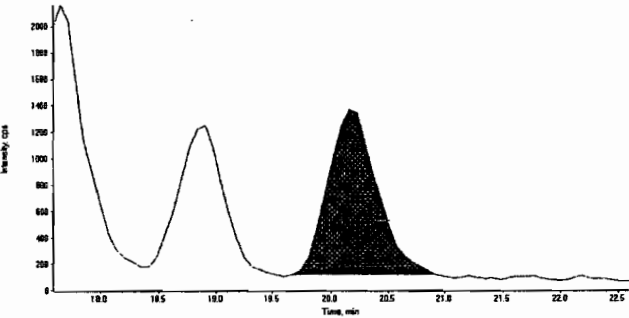


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

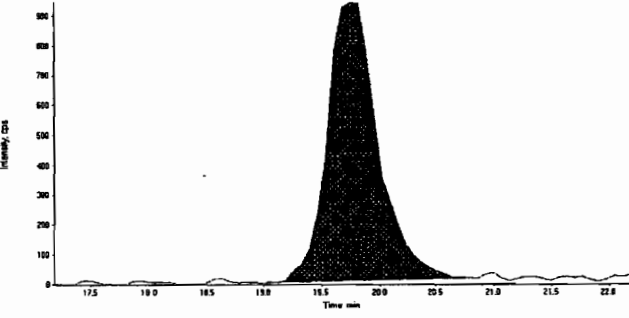
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.2
	<b>Area Counts:</b>	3.76e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	38.5 (ng/mL)
	<b>% Accuracy:</b>	96.30

	<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>	2.91e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	36.0 (ng/mL)
	<b>% Accuracy:</b>	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 *Hum 04/23/10*

AVERAGE

✓ 97.1	ICV Limits 85-115%
	CRI Limits 70-130%
	CCV Limits 85-115%
No single analyte > +/- 60%	

*Jar 4/22/10*

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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%

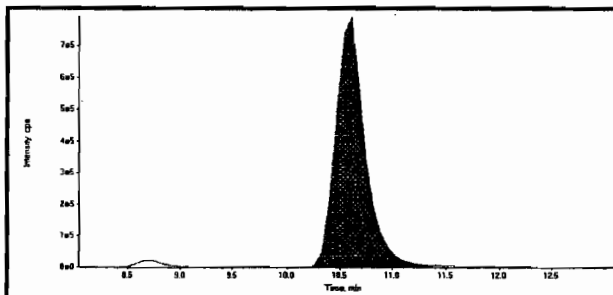
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

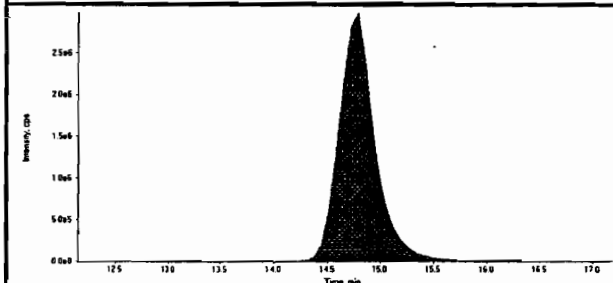
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



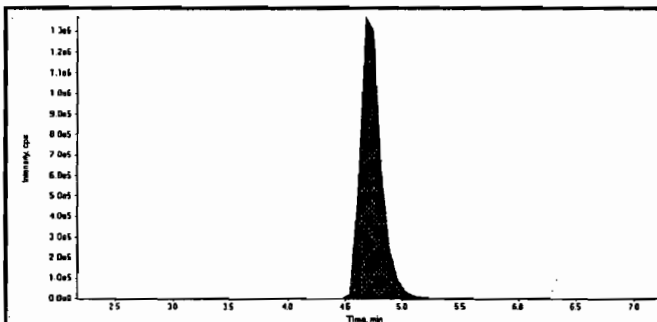
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	15500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

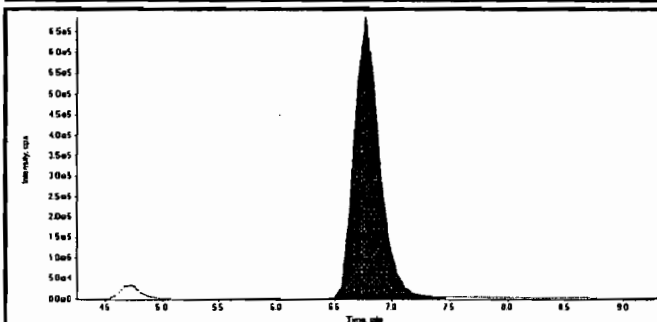


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	71300000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



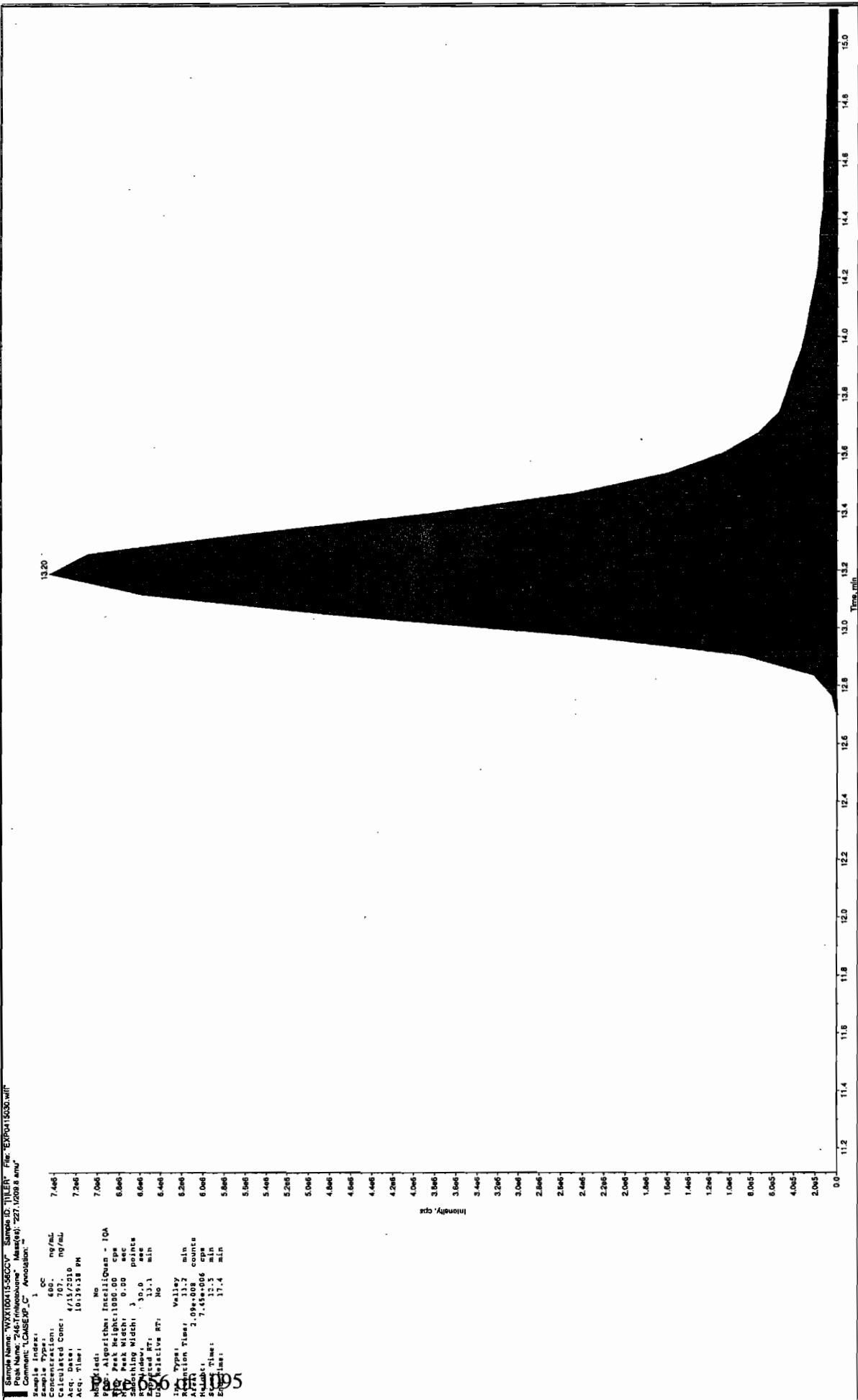
Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.79e+007
Manual Modification	No
Amount:	563. (ng/mL)
% Accuracy:	93.80



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

*hmc 04/23/10*

*LER 4/23/10*

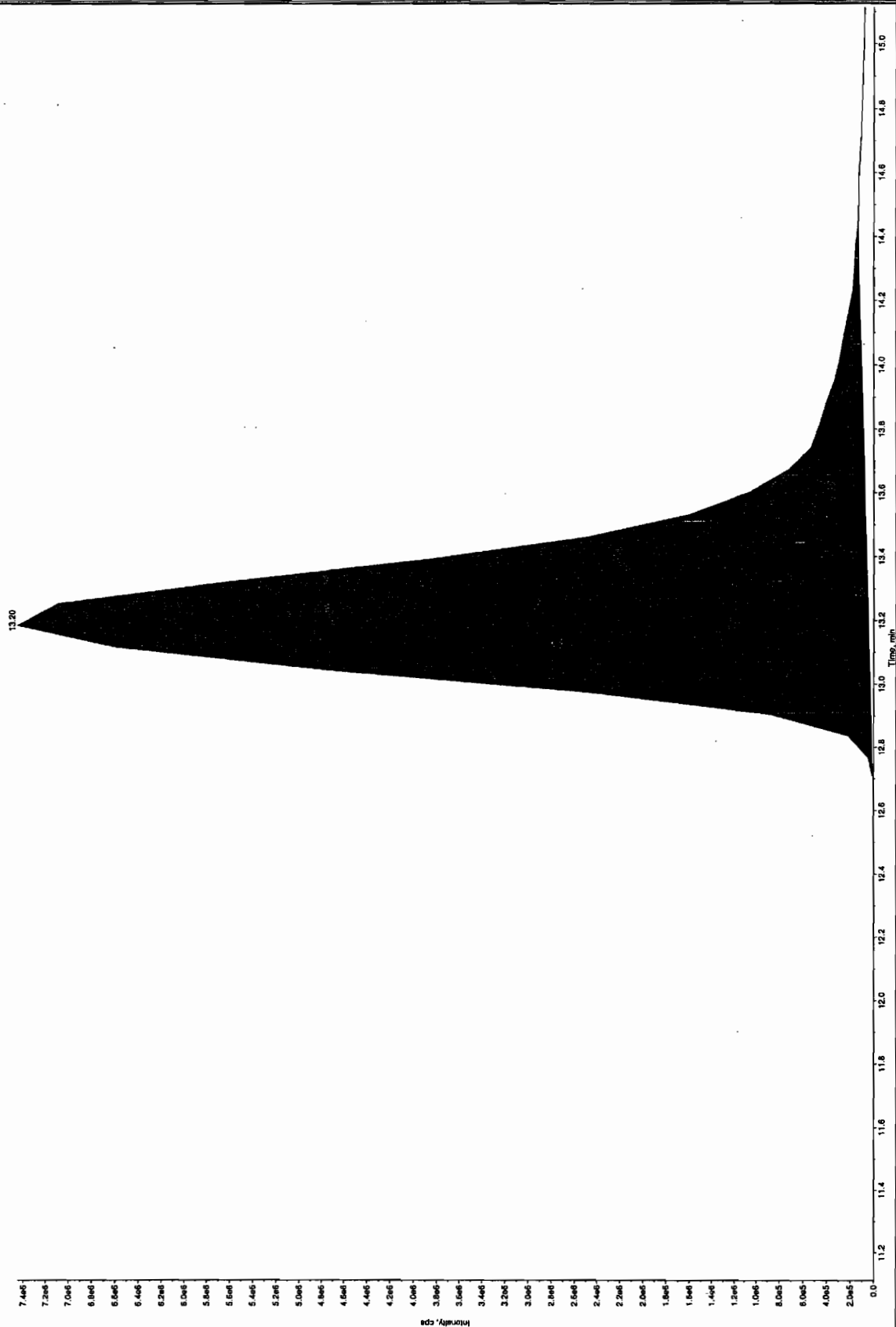


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after den 4/23/10

Sample Name: "VIA100415-SEC01" Sample ID: "TILER" File: "EXP015030.wif"  
 Peak Name: "2467 Intimipolene" Mass(es): "221.12038 amu"

Concentration: 600. ng/mL  
 Calculated Conc: 4.737200 ng/mL  
 Assay Time: 10.35138 PM  
 Yes  
 30.0 sec  
 13.1 min  
 No  
 Manual  
 13.2 min  
 1.93e+008 counts  
 7.43e+006 cps  
 12.8 min  
 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)
	Expected RT:	9.00
	Actual RT:	9.07
	Area Counts:	1.16e+008
	Manual Modification	No
	Amount:	635. (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:	5.13e+007
	Manual Modification	No
	Amount:	618. (ng/mL)
	% Accuracy:	103.00

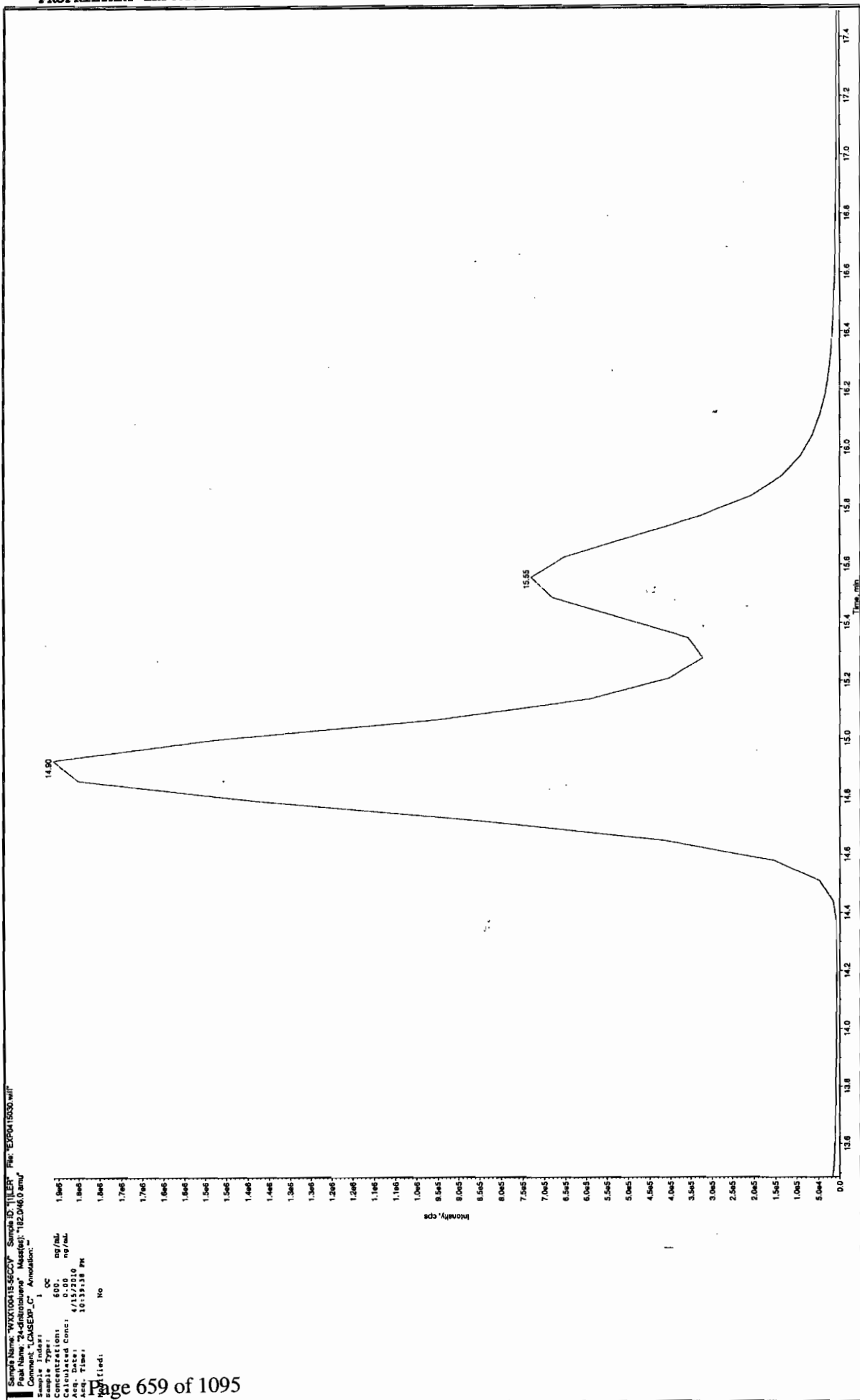
  

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	4.60e+007
	Manual Modification	No
	Amount:	647. (ng/mL)
	% Accuracy:	108.00

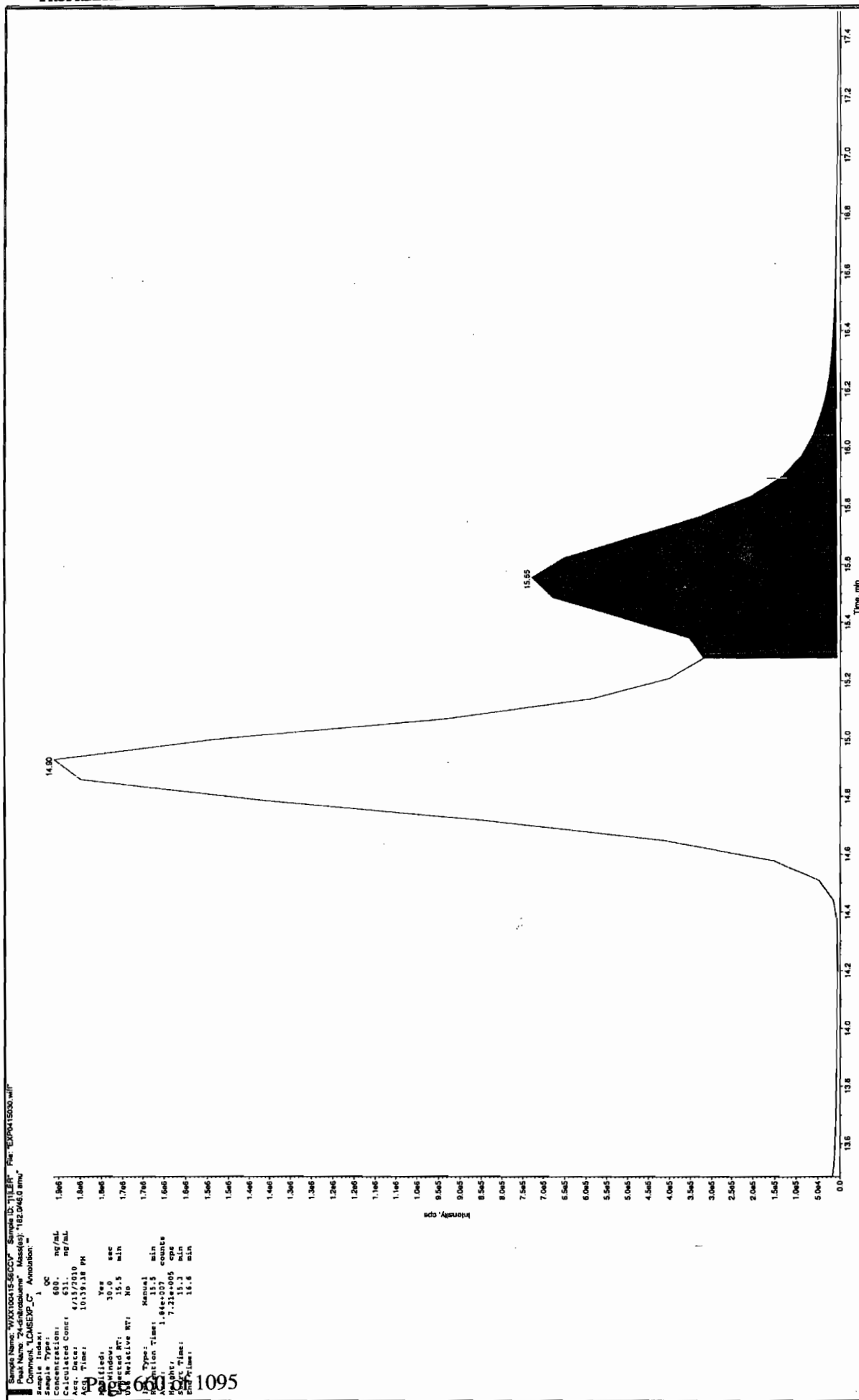
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	1.93e+008
	Manual Modification	Yes
	Amount:	620. (ng/mL)
	% Accuracy:	103.00

Before Run 4/23/10





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>	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

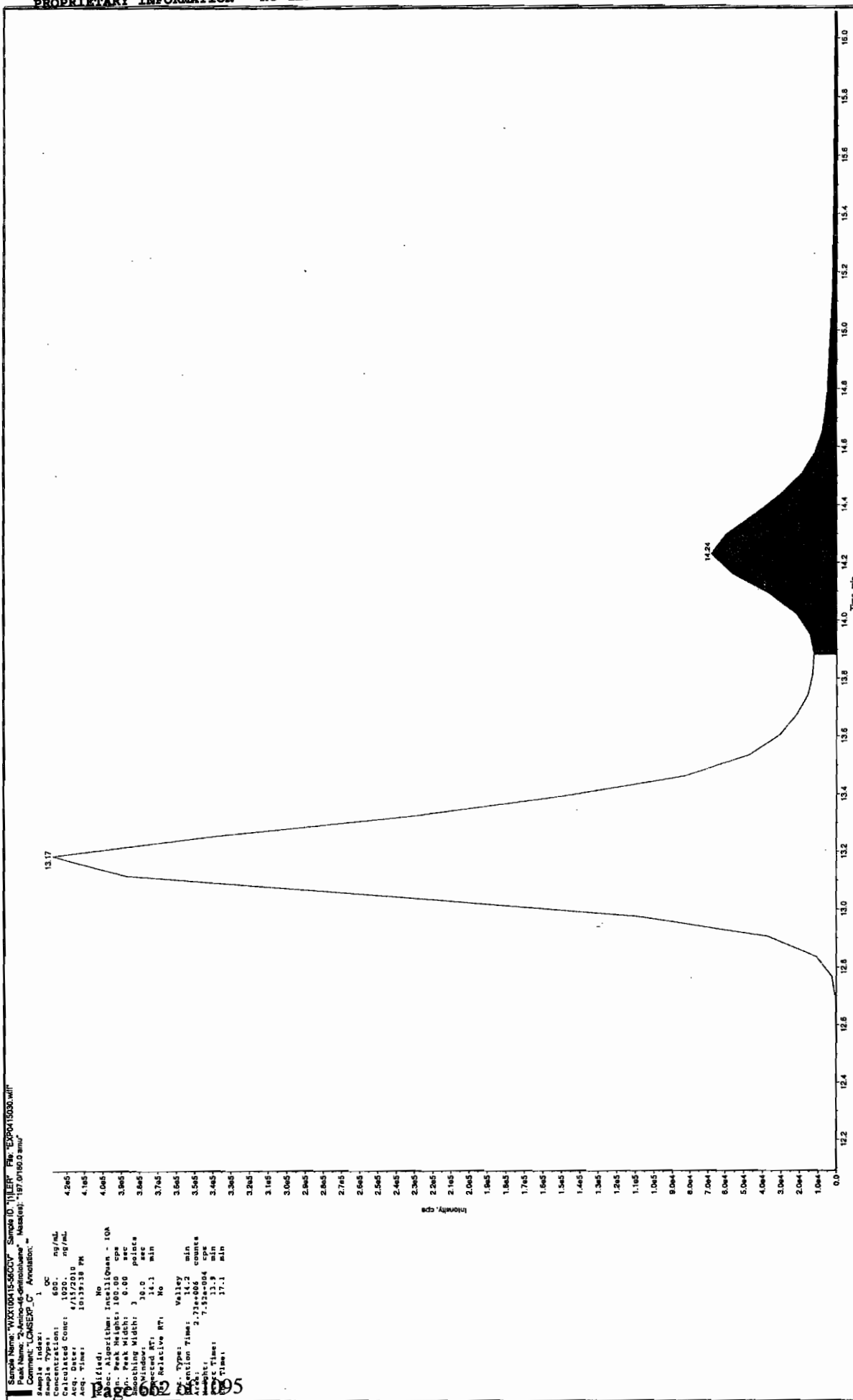
  

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	4.23e+007
	Manual Modification	No
	Amount:	558. (ng/mL)
	% Accuracy:	93.00

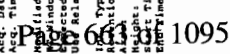
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.84e+007
	Manual Modification	Yes
	Amount:	631. (ng/mL)
	% Accuracy:	105.00

Before Jan 4/23/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



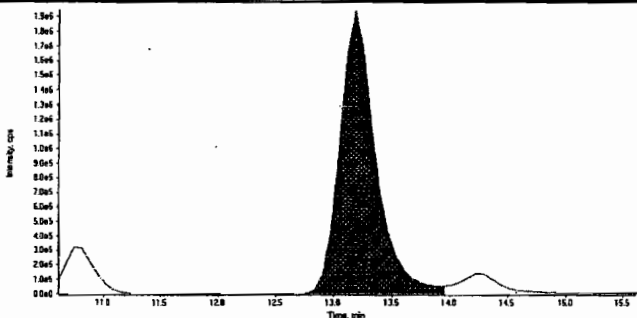
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

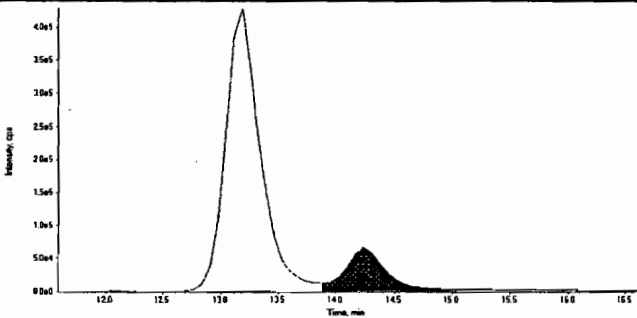
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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

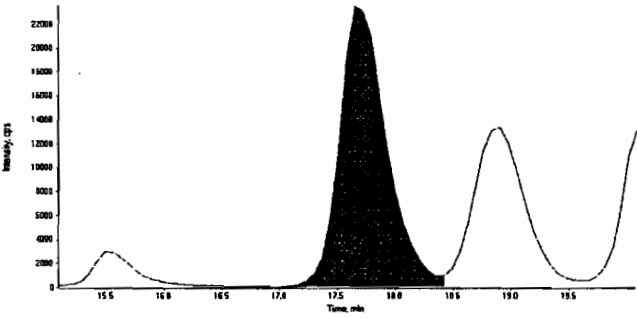
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	4.19e+007
	Manual Modification	No
	Amount:	660. (ng/mL)
	% Accuracy:	110.00

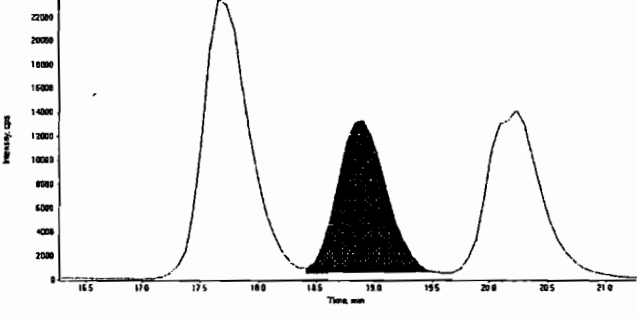
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	1.62e+006
	Manual Modification	Yes
	Amount:	607. (ng/mL)
	% Accuracy:	101.00

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.6
	Area Counts:	6.60e+005
	Manual Modification	No
	Amount:	586. (ng/mL)
	% Accuracy:	97.60

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.9
	Area Counts:	3.74e+005
	Manual Modification	No
	Amount:	618. (ng/mL)
	% Accuracy:	103.00

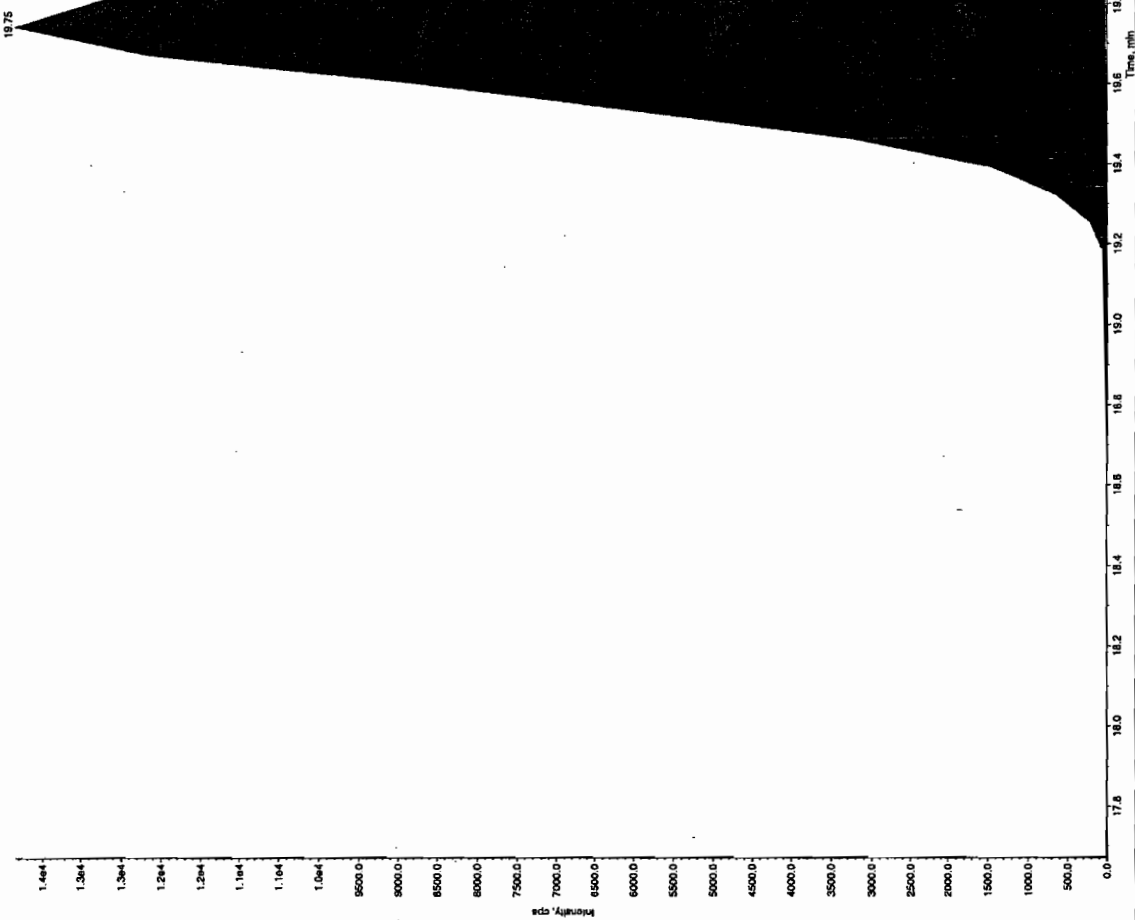
Bufo dar 4/23/00

Sample Name: "WVY100415-SEC01" Sample ID: "HLEP" File: "EXP0415030.wif"

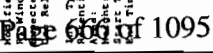
Peak Name: "PEIN" Mass(es): "361.182.0 amu"

Comment: "LONEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: 600  
 Concentration: 738.0 ng/mL  
 Calculated Conc: 738.0 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 10:19:18 PM  
 Method: No  
 Spec. Algorithm: InceillQuan - 10A  
 Peak Height: 100.00 cps  
 Peak Width: 1.00 points  
 Retention Time: 18.7 min  
 Window: 60.0 sec  
 Selected RT: 18.7 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 18.7 min  
 Area: 4.26e+006 counts  
 Peak Width: 1.18e+004  
 Peak Time: 18.9 min  
 Peak Time: 22.7 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



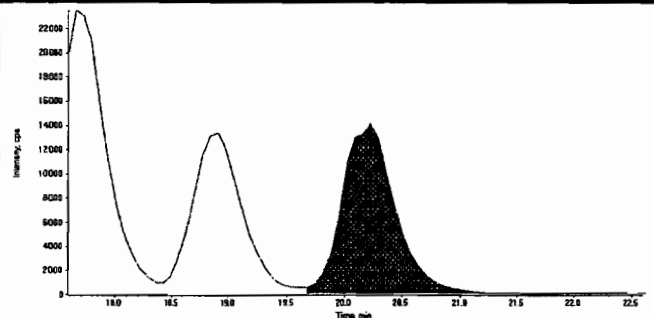
\*GEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

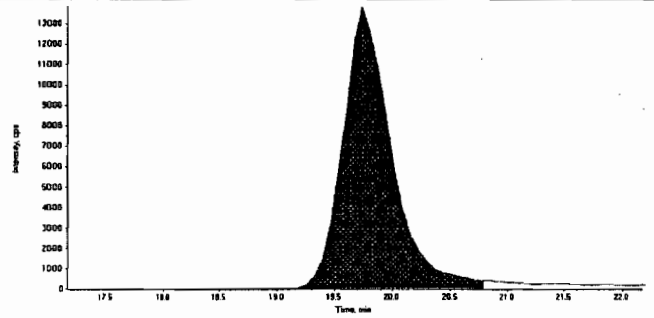
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

*Handwritten: HMM 04/22/10*

AVERAGE

✓ 102.8

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Handwritten signature: Jan 4/22/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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%

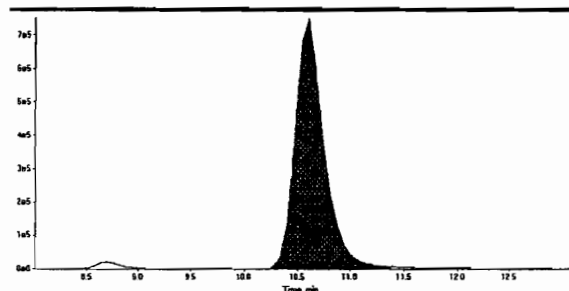
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

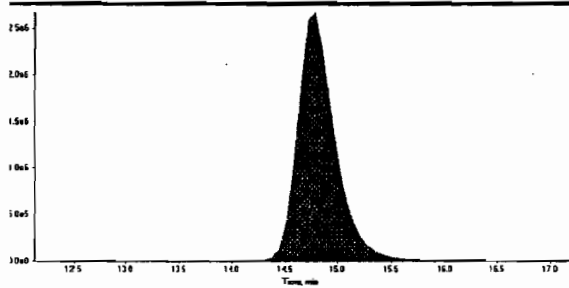
EL Laboratories, LLC  
 EL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
 LCMSMS#3

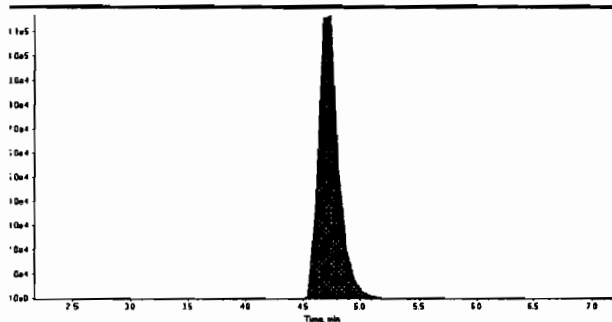
File	EXP0415032.wiff	Acquisition Date	4/15/2010 11:31:31 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



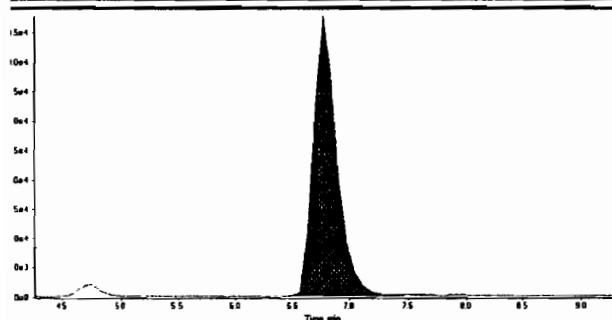
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	14800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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



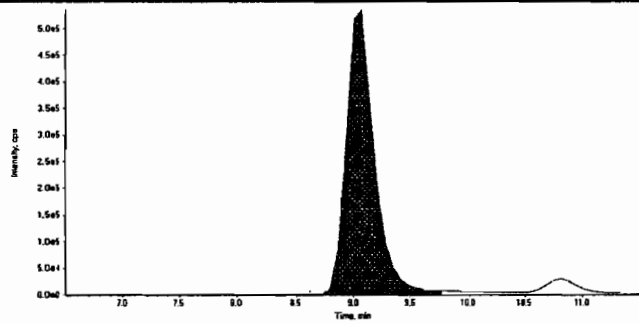
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	7.00e+005
Manual Modification	No
Amount:	41.6 (ng/mL)
% Accuracy:	104.00

*Handwritten signatures and dates:*  
 04/23/10  
 4/23/10

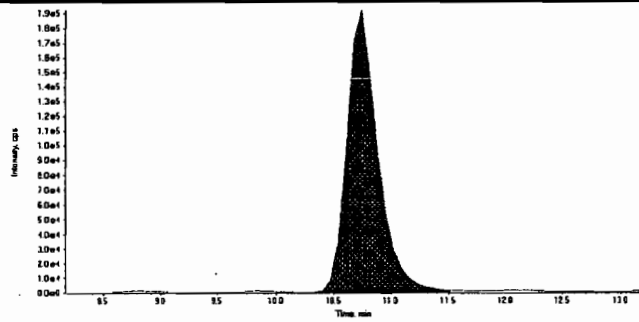
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

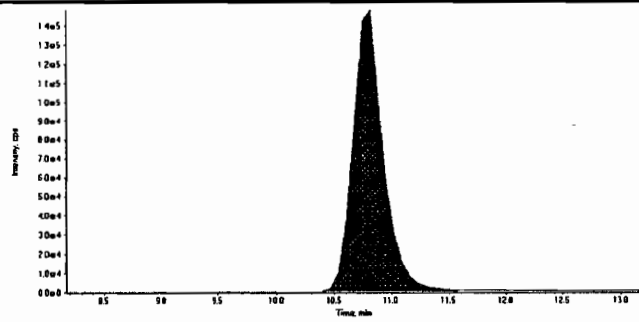
Data File	EXP0415032.wiff	Acquisition Date	4/15/2010 11:31:31 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



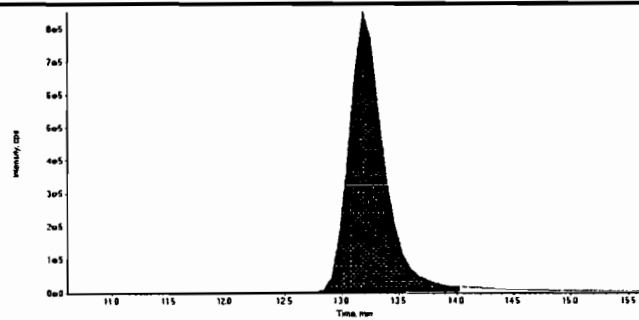
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.00
Actual RT:	9.07
Area Counts:	9.42e+006
Manual Modification	No
Amount:	40.0 (ng/mL)
% Accuracy:	100.00



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: WXYZ10015-57017 Sample ID: J111111 File: EXP0015332.mff

Peak Name: "Lactobacillus" Mass(es): 182.044.0 amu

Comment: "Lactobacillus" Annotation: "

Sample Index: 1

Sample Type: GC

Sample Volume: 40.0 uL

Sample Concentration: 9.27 ng/mL

Acq. Date: 4/15/2010

Acq. Time: 11:31:31 PM

Modified: No

Proc. Algorithm: IntelliQwen - IOA

Min. Peak Height: 100.00 cps

Min. Peak Width: 0.00 min

Smoothing Width: 3 points

Integration Window: 30.0 sec

Integration RT: 15.5 min

Integration RT: No

Integration RT: Valley

Integration Time: 15.6 min

Integration Time: 15.6 min

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Integration Time: 15.6 min

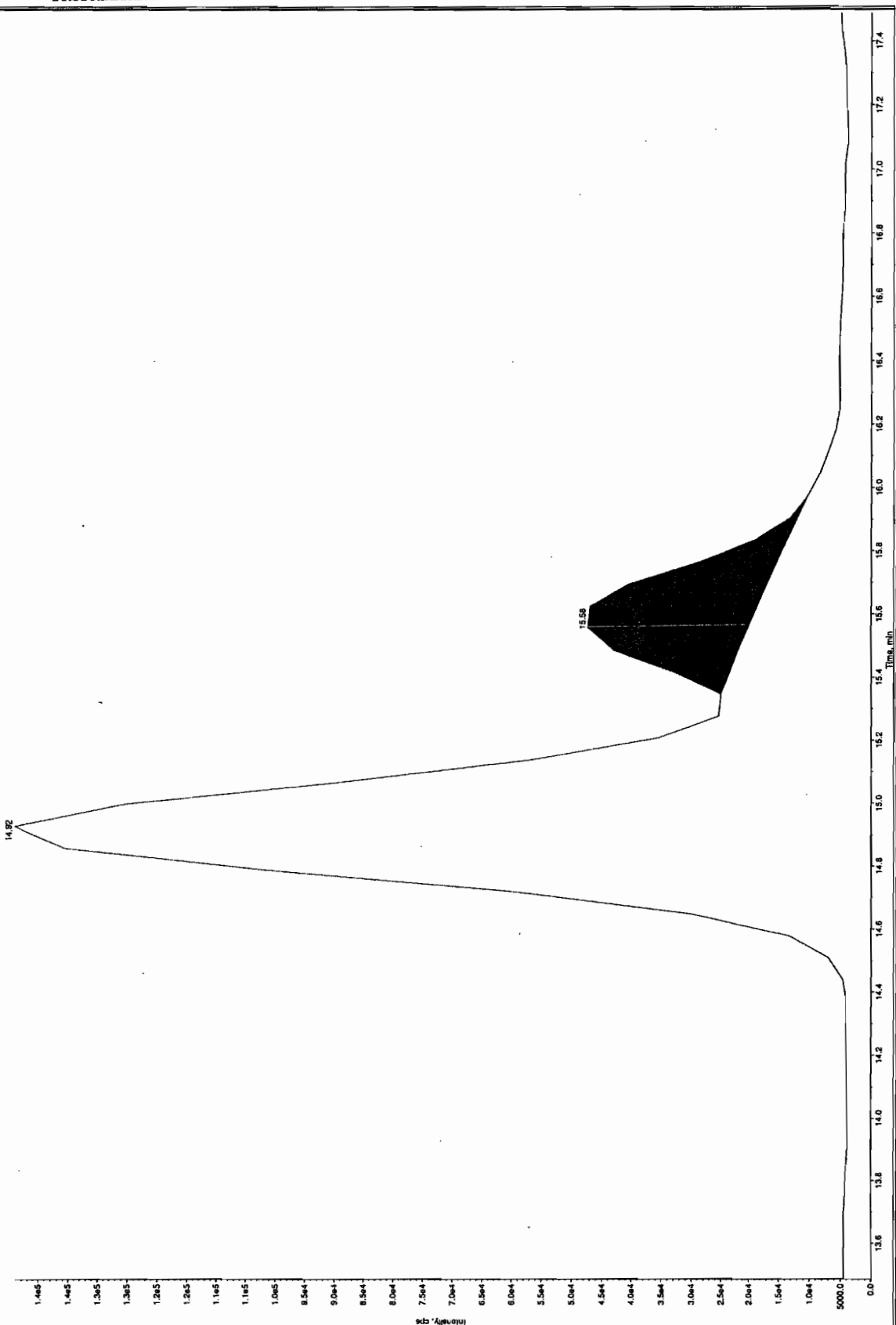
Integration Time: 15.6 min

Integration Time: 15.6 min

Integration Time: 15.6 min

Integration Time: 15.6 min

Integration Time: 15.6 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after for 4/23/10

Sample Name: "WXX100415-37CH" Sample ID: "HILER" File: "EXP015032.wif"

Peak Name: "24-dinitrofluorene" Mass(es): "162.046.0 amu"

Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1 QC

Sample Type: 1 QC

Concentration: 40.0 ng/mL

Calculated Conc: 38.6 ng/mL

Acq. Date: 4/23/2010

Acq. Time: 11:13:11 PM

Modified: Yes

RT Min/Max: 3.0 sec

RT Min/Max: 15.5 min

Use Relative RT: No

Use Relative RT: No

Use Relative RT: No

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Use Relative RT: No

14.92

15.68

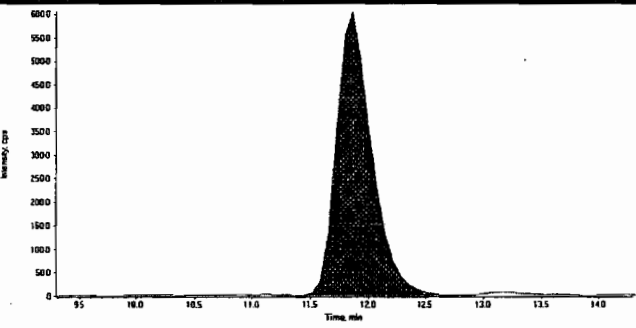
Time, min

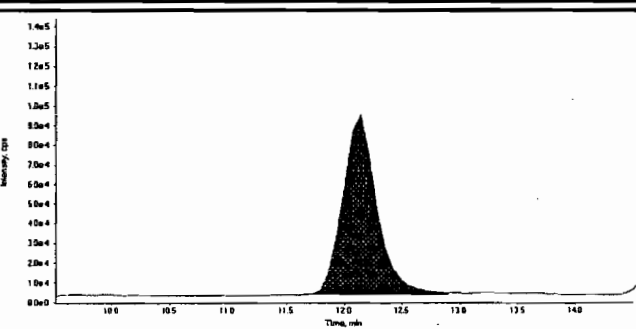
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

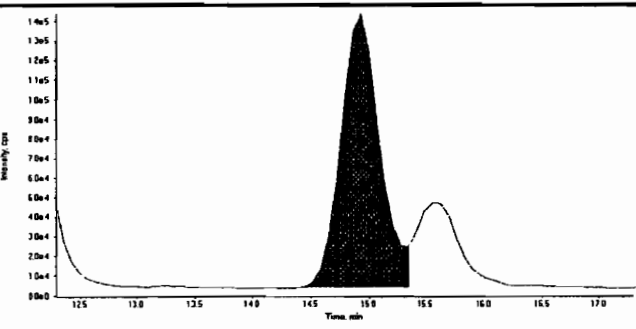
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

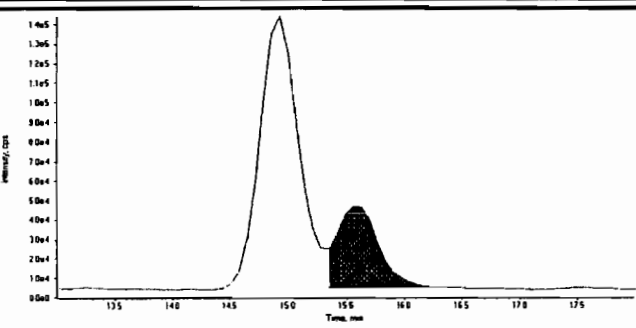
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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:	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

	Compound Name:	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

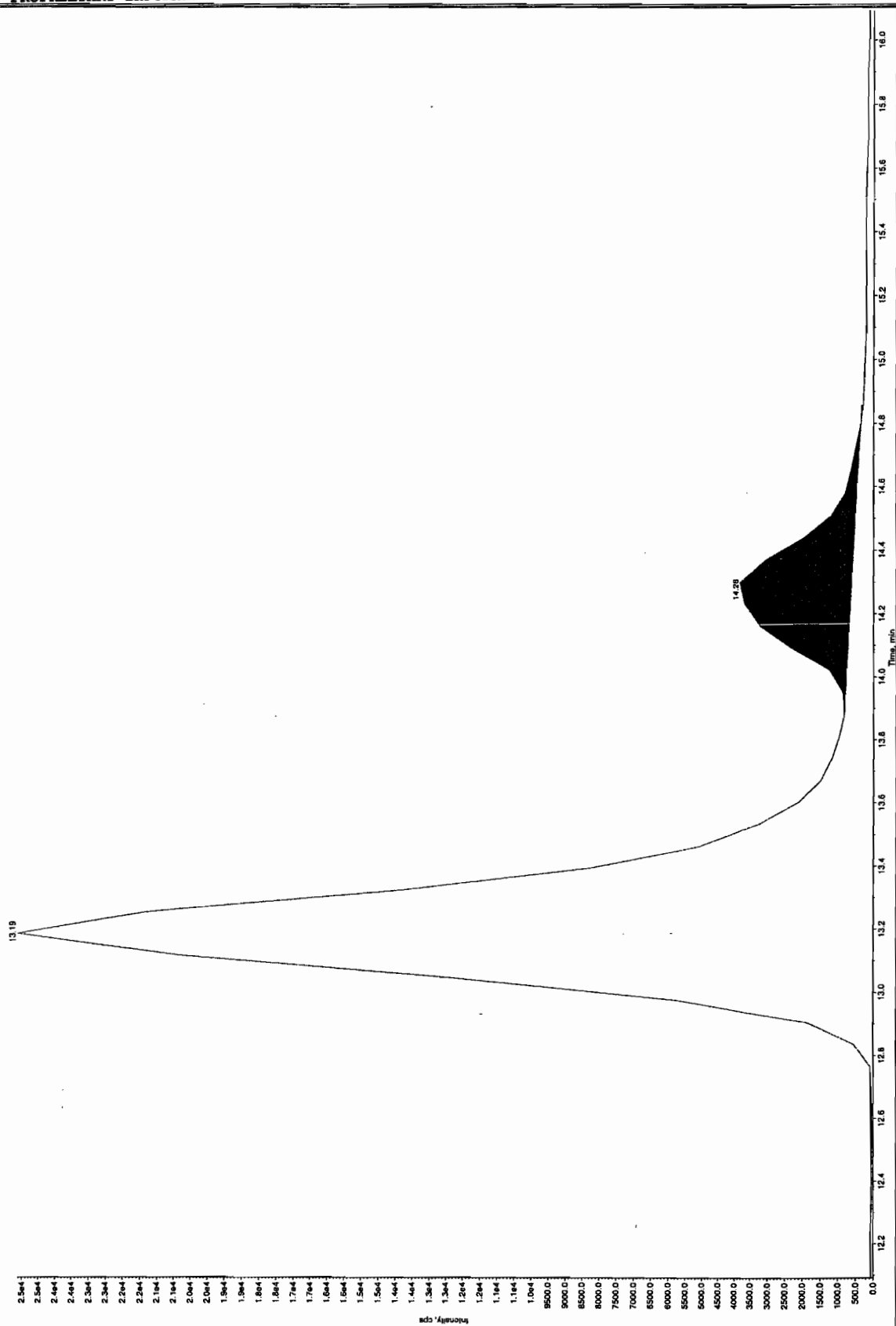
	Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	3.32e+006
	Manual Modification	No
	Amount:	33.6 (ng/mL)
	% Accuracy:	84.00

	Compound Name:	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: "WXX100415-57C8" Sample ID: "TILER" File: "E00415032.wif"  
 Peak Name: "2-Methoxy-4-nitrophenol" Mass(es): "197.07160.0 amu"

Sample Index: 1  
 Sample Type: QC  
 Concentration: 40.0 ng/mL  
 Date Acquired: 4/15/2010  
 Acq. Date: 11/11/11 PM  
 Acq. Time: 2:44  
 Peak(s): 1  
 Gen. Algorithm: IntelliQuan - IQA  
 Ret. Time: 14.3 min  
 Peak Height: 100.00 cps  
 Peak Width: 3.00 sec  
 Window Width: 30.0 sec  
 Selected RT: 14.3 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 14.3 min  
 Height: 6.78e+004 counts  
 Width: 3.20e+003 cps  
 Area: 1.19e+006 cps  
 Area Time: 14.9 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

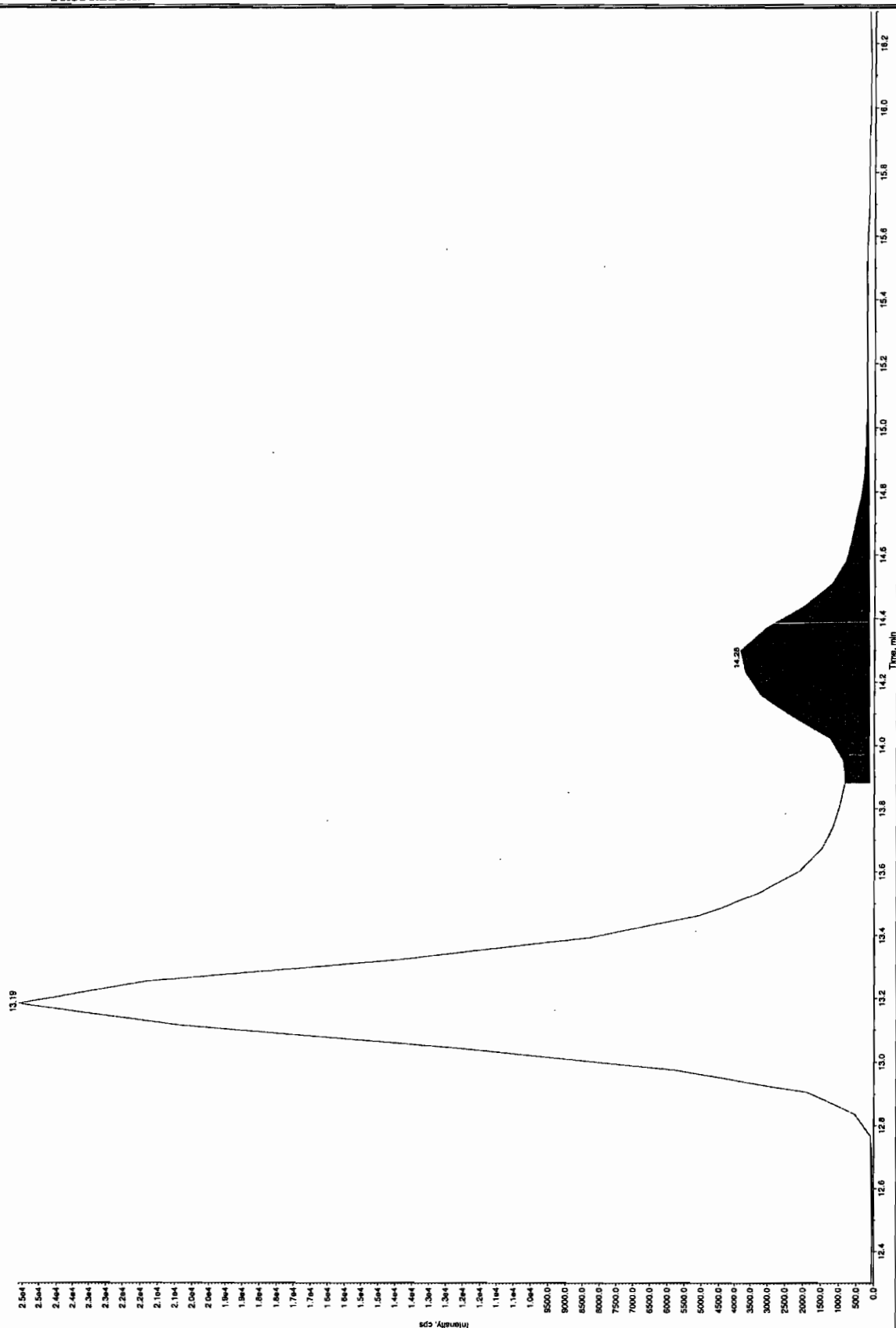


after Jan 4/23/10

Sample Name: WXYZ10015-57087 Sample ID: 111111 File: EXP041502.wif

Comment: LCMSEXP\_C Annotation: -

Sample Index: 1  
 Sample Type: QC  
 Concentration: 40.0 ng/mL  
 Acquisition: 37.9 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 11:21:31 PM  
 Method: Yes  
 Expected RT: 30.0 sec  
 RT Window: 14.3 min  
 Delay Relative RT: No  
 Delay: 2.304  
 Delay Type: Manual  
 Retention Time: 14.3 min  
 Delay: 9.47500000  
 Delay: 2.284  
 Delay: 3.11100000  
 Delay: 13.9 min  
 Delay: 15.1 min



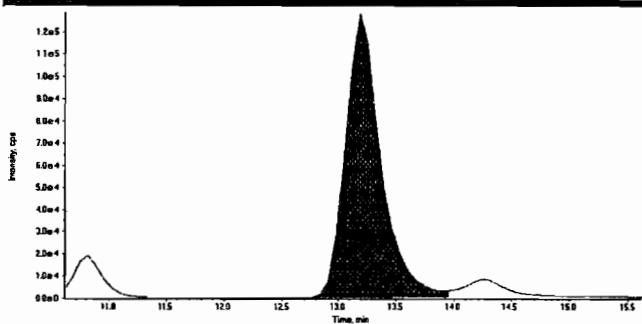
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

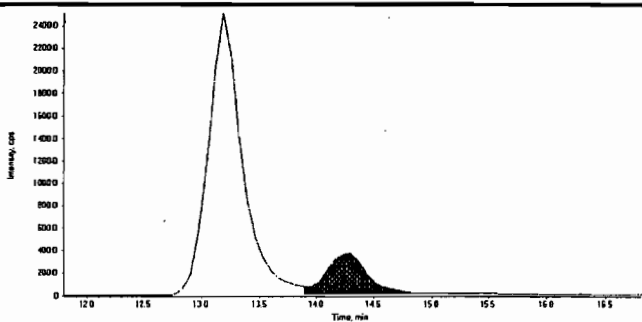
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File EXP0415032.wiff  
Sample Name WXX100415-57CRI  
Batch|Dilution|Analyst |1|LER  
Procedure Code LCMSEXP\_C

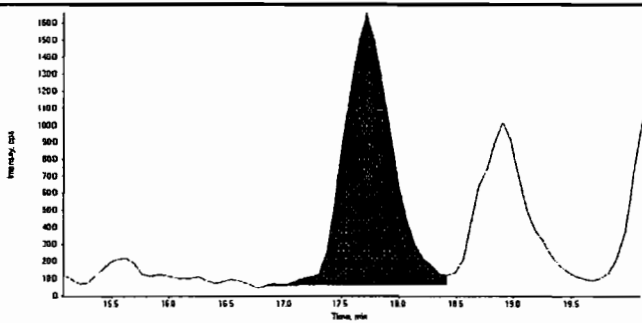
Acquisition Date 4/15/2010 11:31:31 PM  
Acquisition Method 8321.dam  
Result Table 041510.rdb  
Sample Type Quality Control



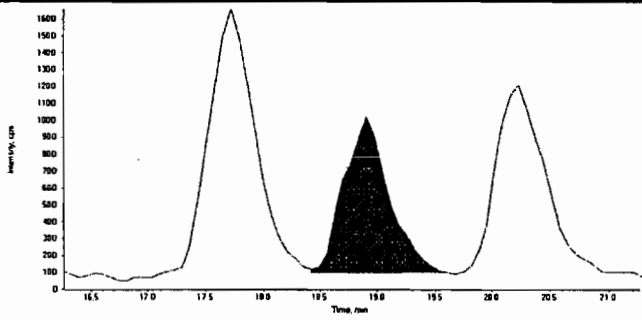
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.1
Actual RT:	13.2
Area Counts:	2.78e+006
Manual Modification	No
Amount:	42.6 (ng/mL)
% Accuracy:	107.00



Compound Name:	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

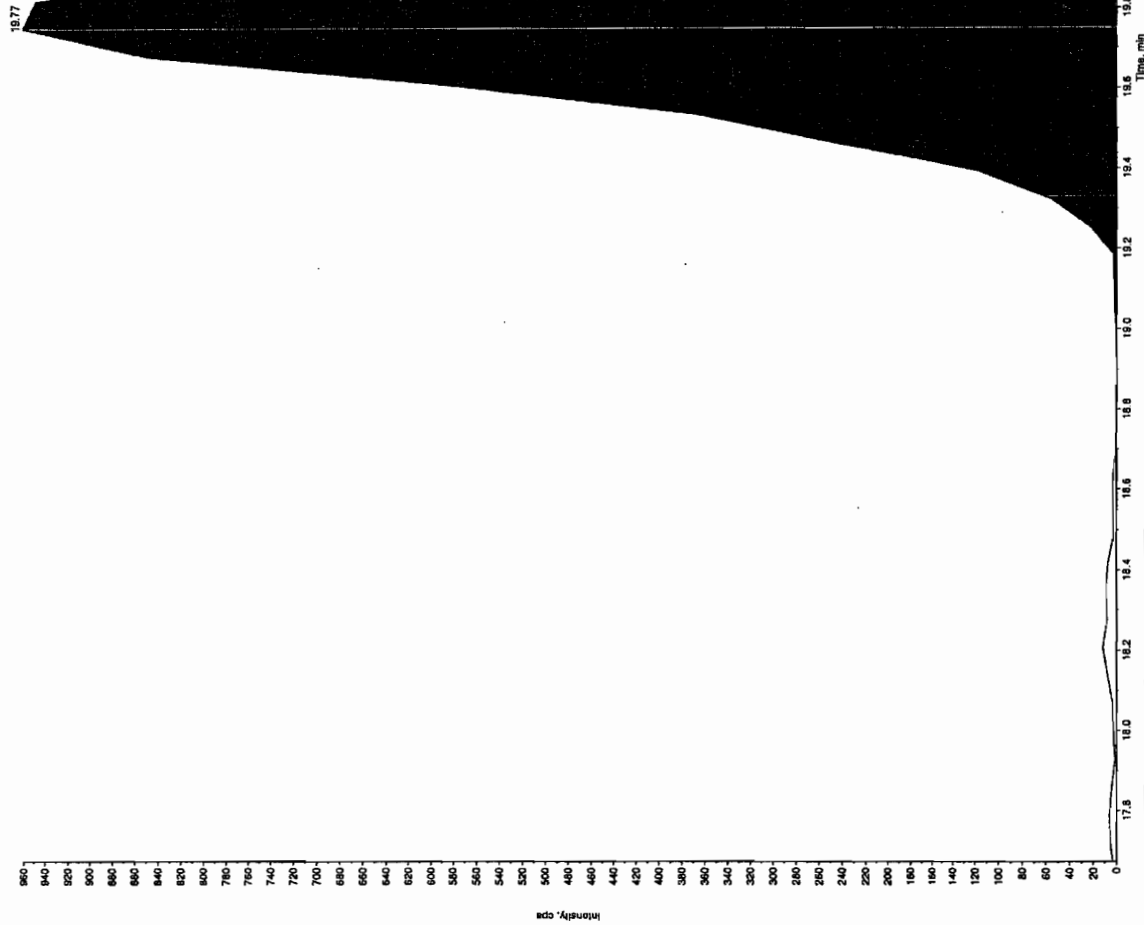


Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	17.6
Actual RT:	17.7
Area Counts:	4.60e+004
Manual Modification	No
Amount:	44.7 (ng/mL)
% Accuracy:	112.00



Compound Name:	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

18.77



Sample Name: 8321A-E-056, Sample ID: 8321A-E-056, File: 8321A-E-056.wif  
 Acquisition: 4/15/2010 11:31:11 PM, Method: LC/MS/MS, Annotation: 1

Sample Index: 1  
 Sample Type: QC  
 Concentration: 48.6 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 11:31:11 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - LGA  
 Min Peak Height: 100.00 cps  
 Min Peak Width: 3.00 points  
 Min Peak Area: 60.0 sec  
 Selected RT: 18.7 min  
 Unselected RT: No  
 Ion Type: Valley  
 Retention Time: 18.7 min  
 Abundance: 3.03e+004 counts  
 Acquisition Time: 18.0 min  
 End Time: 21.5 min

095

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

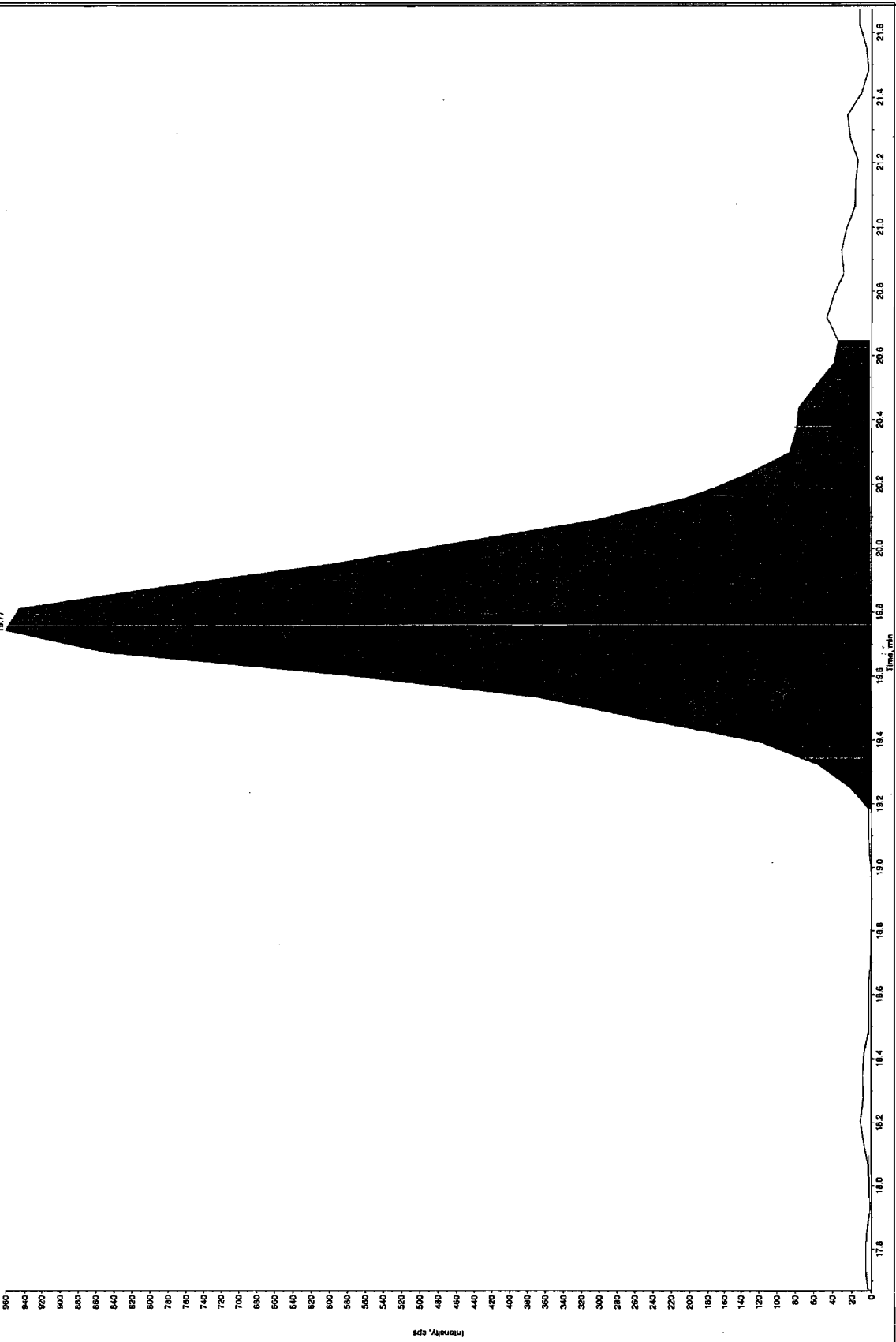
Before Jan 4/23/00

after Jan 4/23/10

Sample Name: "VXX100415-57GR" Sample ID: "VILIER" File: "EXP0415032.wif"

Task Name: "VXX100415-57GR" Sample ID: "VILIER" File: "EXP0415032.wif"

Sample Index: 1  
 Sample Type: QC  
 Concentration: 40.0 ng/mL  
 Calculated Conc: 47.5/2010 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 11:31:31 PM  
 Method: Yes  
 Modified: 60.0 sec  
 Expected RT: 19.7 min  
 Used: No  
 Injection Type: Manual  
 Injection Time: 19.8 min  
 Acquisition Time: 2.32e+004 counts  
 Acquisition Rate: 9.68e+002 cps  
 Acquisition Time: 19.8 min  
 Acquisition Rate: 10.6 min



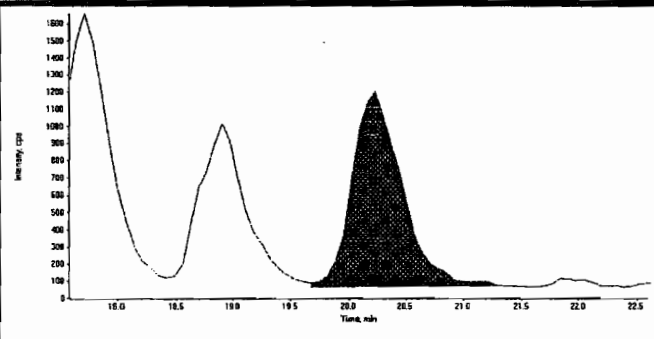
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

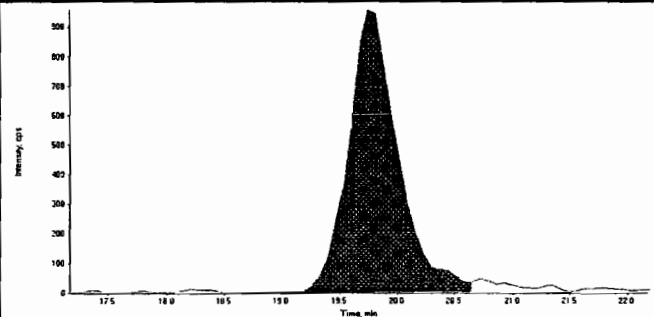
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.2
	<b>Area Counts:</b>	3.52e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	44.7 (ng/mL)
	<b>% Accuracy:</b>	112.00

	<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>	2.92e+004
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	46.6 (ng/mL)
	<b>% Accuracy:</b>	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 04/23/10*

AVERAGE

✓ 103.5

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*See  
4/20/10*

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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%

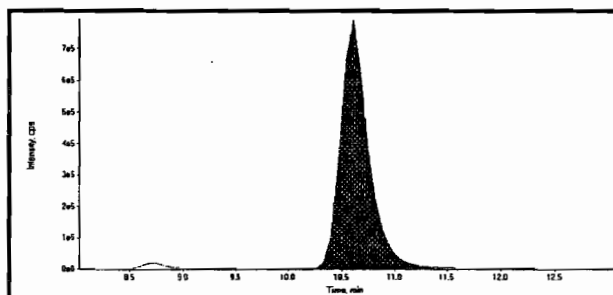
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

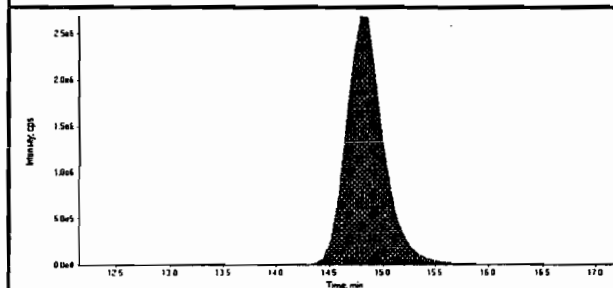
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



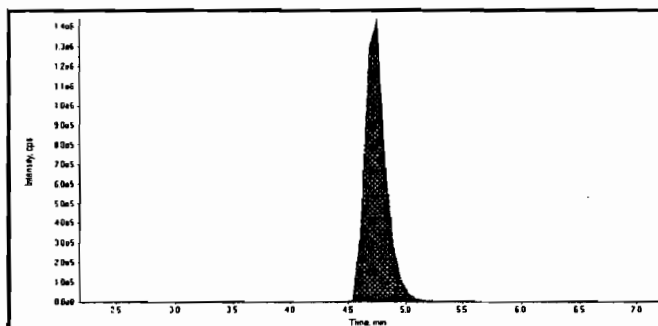
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	14500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

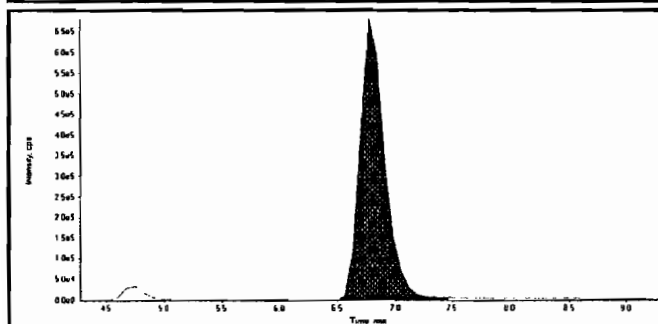


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	66000000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

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 4/23/10

*Handwritten:* Lar 4/23/10

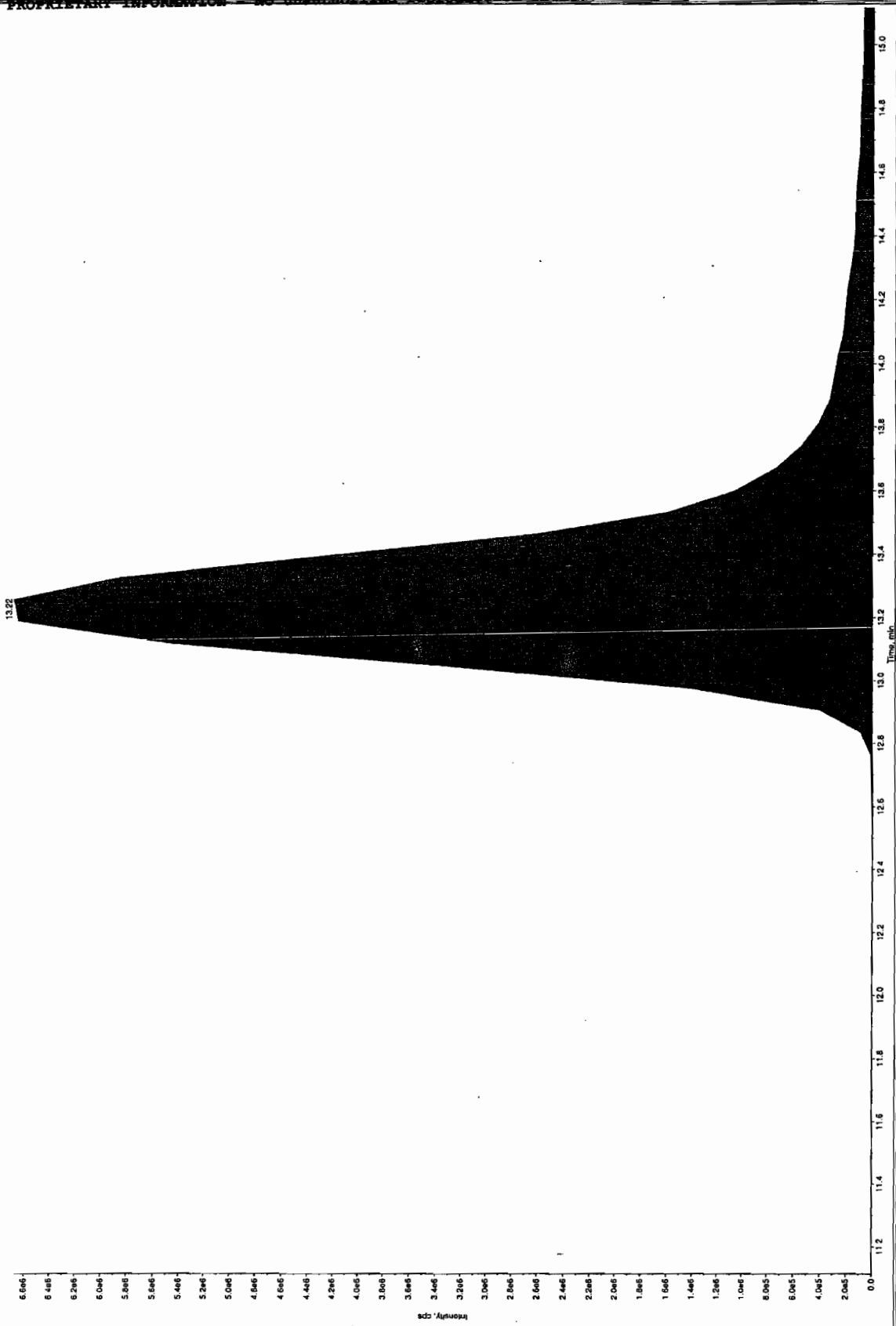


Before Jan 4/23/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WVX00015.BC" Sample ID: "JUL18" File: "EXP0015003.wi"  
 Peak Name: "246-Tributylamine" Mass(es): "227.1208 8 amu"  
 Comment: "LCMS-EXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: 500 ng/mL  
 Concentration: 577.1 ng/mL  
 Calculated Conc: 577.1 ng/mL  
 Acq. Date: 4/16/2010  
 Acq. Time: 6:17:22 AM  
 Modified: No  
 Proc. Algorithm: IntellQuan - IQA  
 Min. Peak Height: 1000.00 cps  
 Min. Peak Width: 0.05 sec  
 Min. Peak Area: 10.00 sec  
 Min. Window: 10.0 sec  
 Corrected RT: 12.1 min  
 Age Relative RT: No  
 Inc. Type: Valley  
 Retention Time: 12.1 min  
 Area: 1.89e+008 counts  
 Height: 6.87e+006 cps  
 Width: 10.0 sec  
 Time: 12.1 min



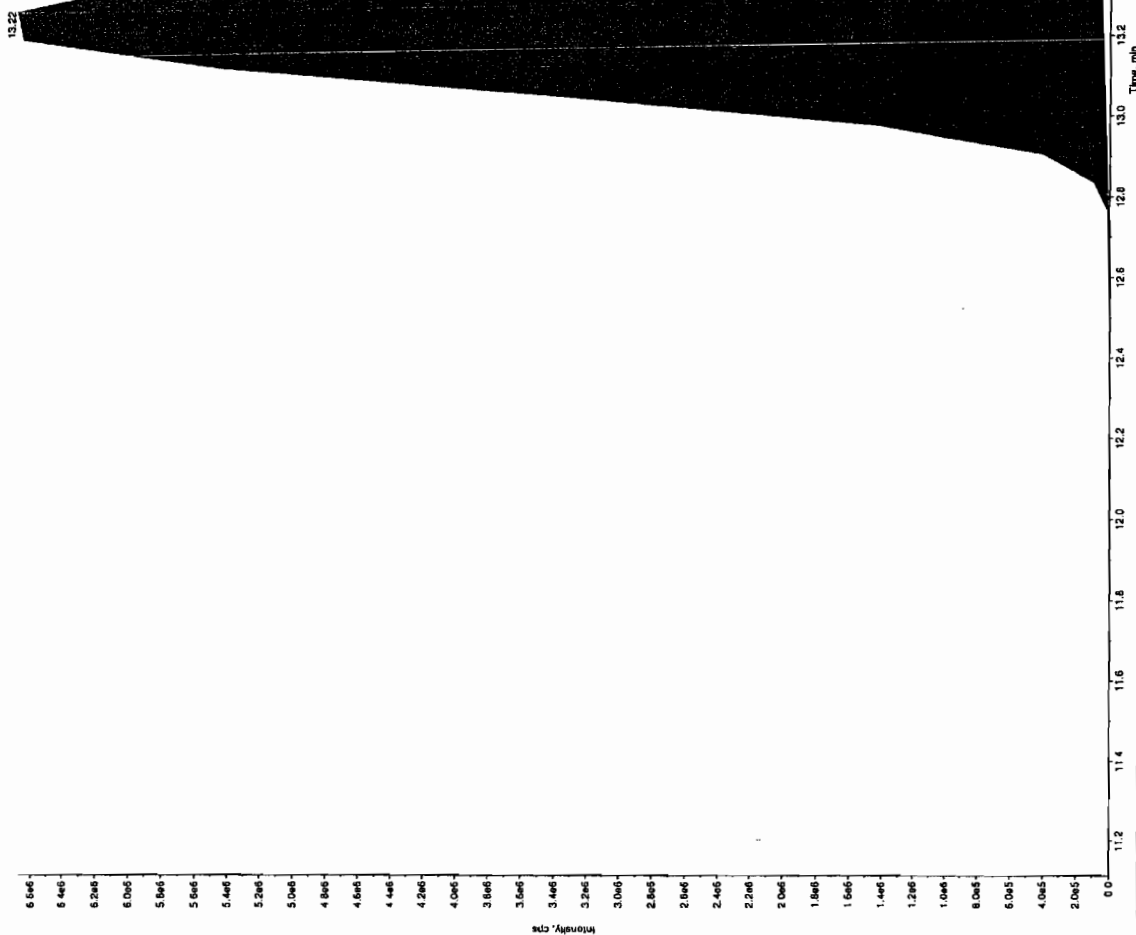
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10

Sample Name: WXX100415-SECCV Sample ID: TILER File: EXP015043.wif  
 Peak Name: 2465 (molecular mass) Mass(es): 227.12258 amu

Sample Index: 1 Acquisition: 6465  
 Sample Type: DC Concentration: 600 ng/mL  
 Acquisition Date: 4/16/2010 ng/mL  
 Acquisition Time: 4:17:22 AM  
 Acquisition Time: 6465  
 Acquisition Time: 6248  
 Acquisition Time: 6005  
 Acquisition Time: 5965  
 Acquisition Time: 5665  
 Acquisition Time: 5465  
 Acquisition Time: 5265  
 Acquisition Time: 5065  
 Acquisition Time: 4865  
 Acquisition Time: 4665  
 Acquisition Time: 4465  
 Acquisition Time: 4265  
 Acquisition Time: 4065  
 Acquisition Time: 3865  
 Acquisition Time: 3665  
 Acquisition Time: 3465  
 Acquisition Time: 3265  
 Acquisition Time: 3065  
 Acquisition Time: 2865  
 Acquisition Time: 2665  
 Acquisition Time: 2465  
 Acquisition Time: 2265  
 Acquisition Time: 2065  
 Acquisition Time: 1865  
 Acquisition Time: 1665  
 Acquisition Time: 1465  
 Acquisition Time: 1265  
 Acquisition Time: 1065  
 Acquisition Time: 8065  
 Acquisition Time: 6065  
 Acquisition Time: 4065  
 Acquisition Time: 2065

Sample Index: 1 Acquisition: 6465  
 Sample Type: DC Concentration: 600 ng/mL  
 Acquisition Date: 4/16/2010 ng/mL  
 Acquisition Time: 4:17:22 AM  
 Acquisition Time: 6465  
 Acquisition Time: 6248  
 Acquisition Time: 6005  
 Acquisition Time: 5965  
 Acquisition Time: 5665  
 Acquisition Time: 5465  
 Acquisition Time: 5265  
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 Acquisition Time: 3065  
 Acquisition Time: 2865  
 Acquisition Time: 2665  
 Acquisition Time: 2465  
 Acquisition Time: 2265  
 Acquisition Time: 2065  
 Acquisition Time: 1865  
 Acquisition Time: 1665  
 Acquisition Time: 1465  
 Acquisition Time: 1265  
 Acquisition Time: 1065  
 Acquisition Time: 8065  
 Acquisition Time: 6065  
 Acquisition Time: 4065  
 Acquisition Time: 2065



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)
	Expected RT:	9.00
	Actual RT:	9.07
	Area Counts:	1.10e+008
	Manual Modification	No
	Amount:	653. (ng/mL)
	% Accuracy:	109.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	4.60e+007
	Manual Modification	No
	Amount:	588. (ng/mL)
	% Accuracy:	98.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.8
	Area Counts:	4.25e+007
	Manual Modification	No
	Amount:	640. (ng/mL)
	% Accuracy:	107.00

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	1.73e+008
	Manual Modification	Yes
	Amount:	588. (ng/mL)
	% Accuracy:	98.00

Before Jan 4/23/10

Sample Name: "WXX100415-5625" Sample ID: "11187" File: "E00415043.wif"

Peak Name: "24-Undecolene" Mass(es): "162.046.0 amu"

Comment: "LCMSXP\_C" Annotation: "

Sample Index: 1

Sample Name: "WXX100415-5625"

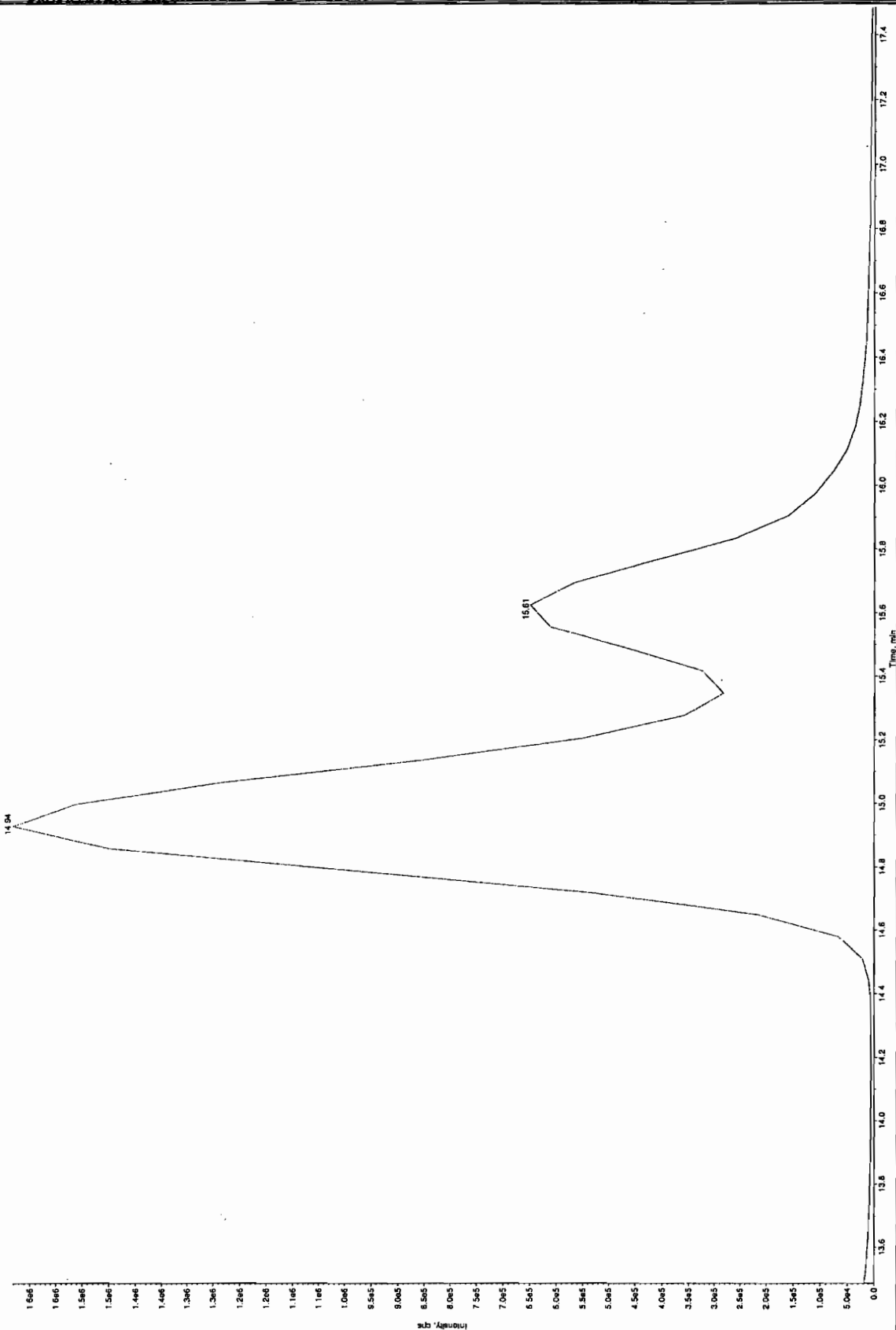
Concentration: 600 ng/mL

Calculated Conc: 0.00 ng/mL

Acq. Date: 4/15/2010

Acq. Time: 4:17:22 AM

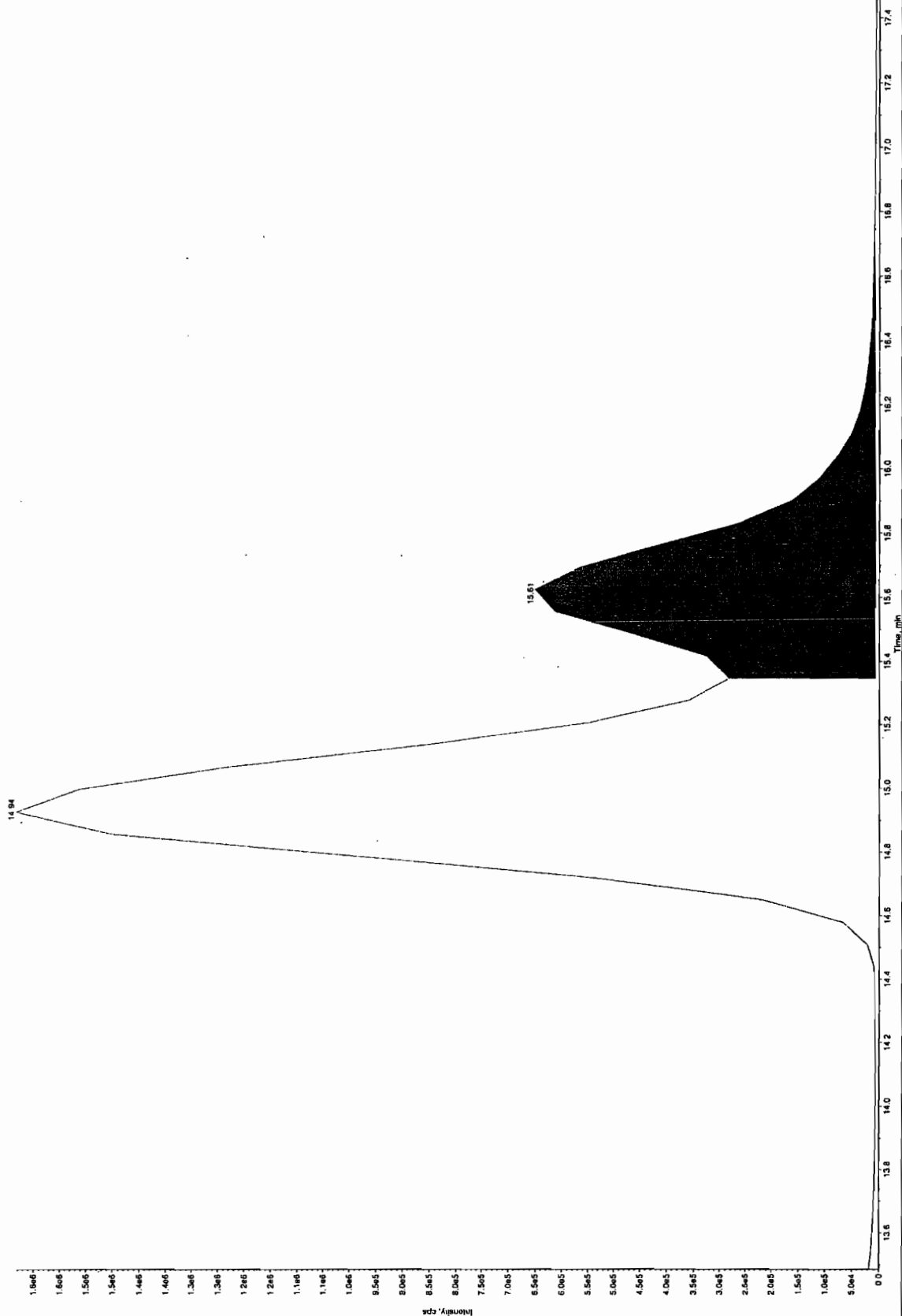
Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

Sample Name: "WXX100415-56CCV" Sample ID: "11LEA" File: "EXP0415043.wiff"  
Peak Name: "2,4-dinitrofluorene" Mass(es): "182.0/46.0 amu"

Comment: "LOUSEXP_C"	Anelation
Sample Type:	1 CC
Concentration:	600 ng/mL
Calculated Conc:	1.52E+010 ng/mL
1646	
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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	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:	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

	Compound Name:	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

	Compound Name:	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

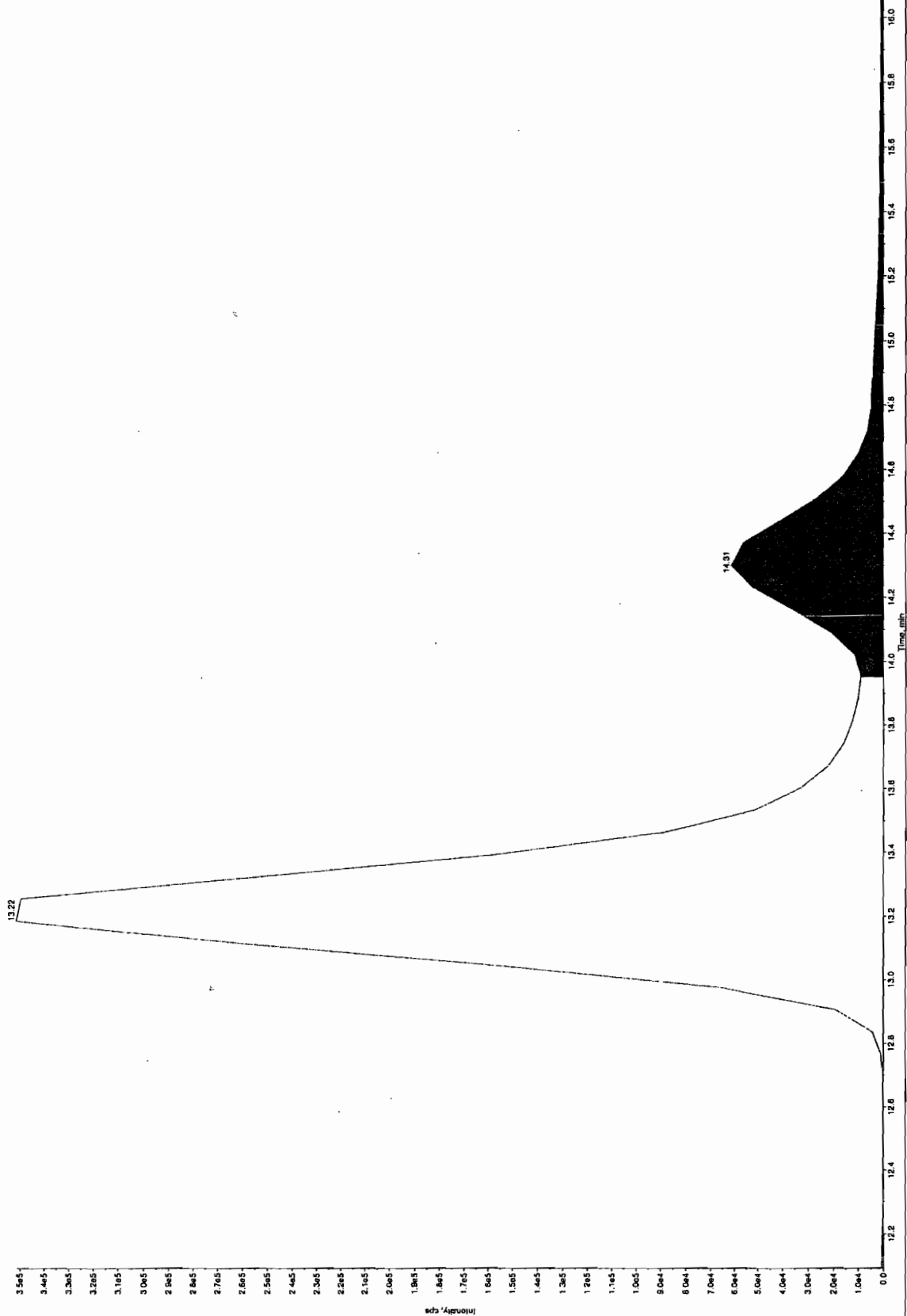
	Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.6
	Area Counts:	1.60e+007
	Manual Modification	Yes
	Amount:	592. (ng/mL)
	% Accuracy:	98.60

Before Scan 412310

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Sample Name: WXX100115-5600V Sample ID: TILER File: EXP0415043.wil  
Peak Name: 2-Methoxy-4-nitrophenol - Mass(es): 197.01800 amu  
Scan: 412310

Sample Index: 3545  
Sample Type: CC  
Concentration: 600 ng/mL  
Acquired Date: 4/16/2010  
Acquired Time: 4:17:32 AM  
Acq. Time: 4:17:32 AM  
Modified: VEG  
Scan: 412310  
Scan Type: Valley  
Scan Height: 100.00 cps  
Scan Width: 3.00 sec  
Scan Depth: 30.0 pixels  
Scan Area: 14.3 min  
Scan Relative RT: 30  
Scan Type: Valley  
Scan Height: 100.00 cps  
Scan Width: 3.00 sec  
Scan Depth: 30.0 pixels  
Scan Area: 14.3 min  
Scan Relative RT: 30



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10

Sample Name: WAX100415600V Sample ID: TULEN File: EXP0415043.MIF

Peak Name: 2-Amino-46-shiroboline Mass(es): 197.0 (190.0 amu)

Comment: LCMSEXP\_C Annotation: 1

Sample Index: 1 QC 3505

Concentration: 600 ng/mL

Calculated Conc: 601 ng/mL

Acq. Date: 4/16/2010

Acq. Time: 4:17:22 AM

Modified: Yes

Retention Time: 14.3 min

Expected RT: 14.3 min

Relative RT: No

Ac. Type: Manual

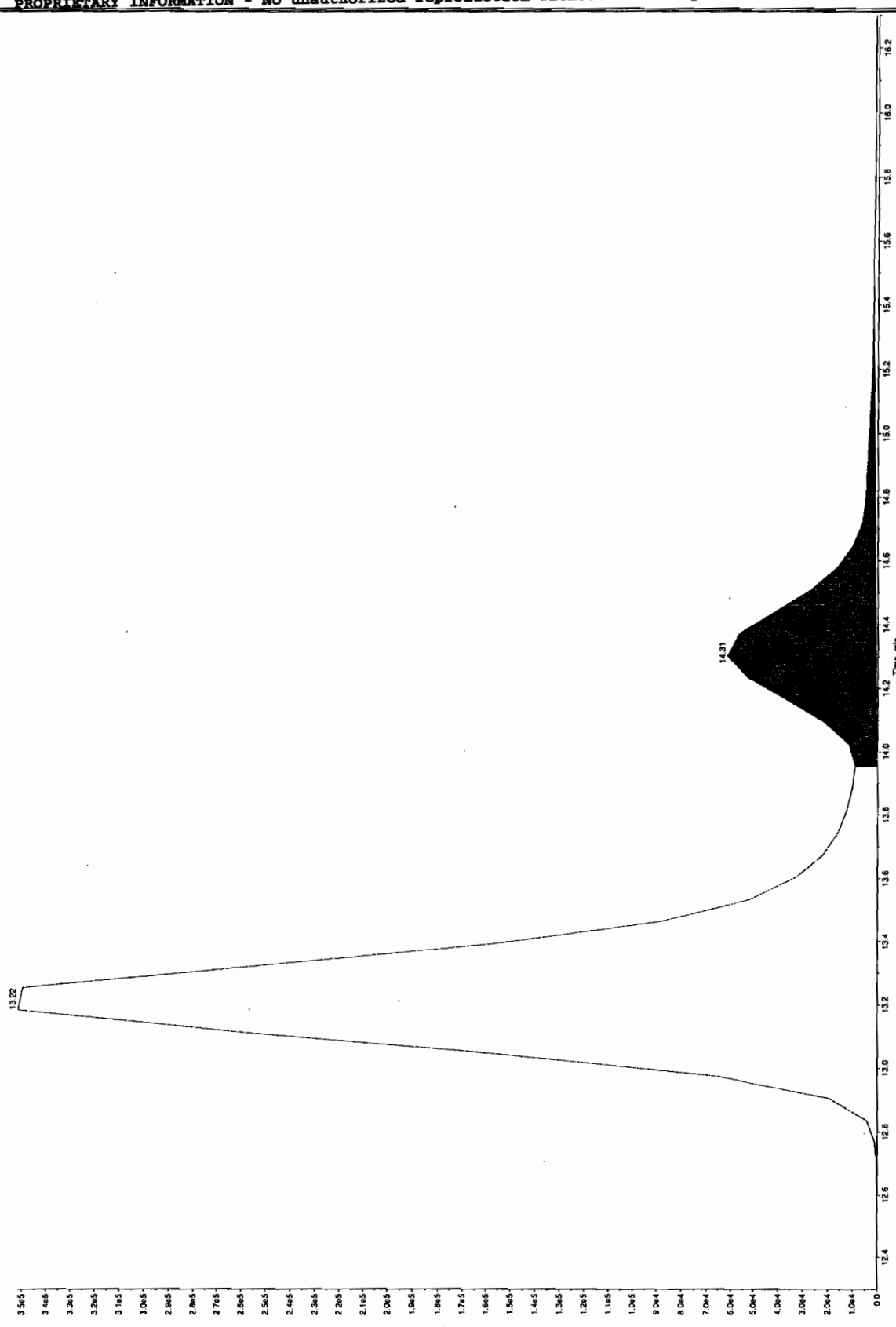
Injection Time: 14.3 min

Height: 1.45e+004 cps

Start Time: 6.10e+004 min

End Time: 14.0 min

Run Time: 15.5 min



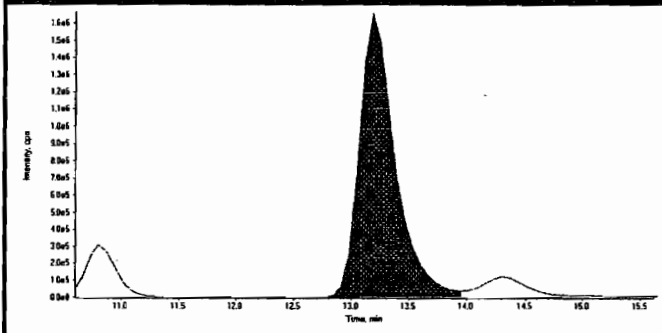


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

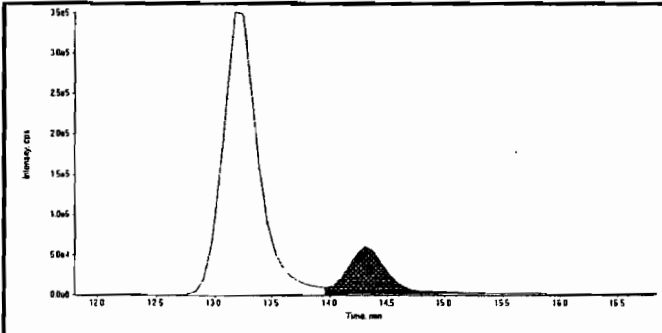
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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

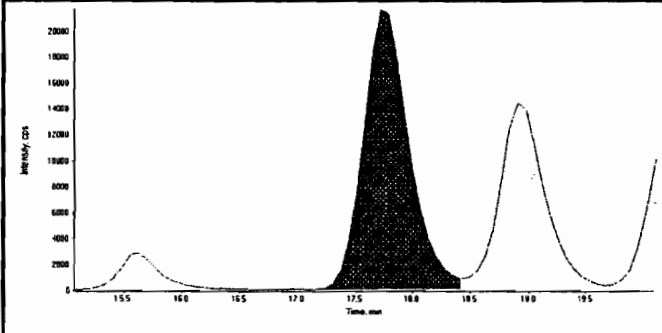
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	3.67e+007
	Manual Modification	No
	Amount:	624. (ng/mL)
	% Accuracy:	104.00

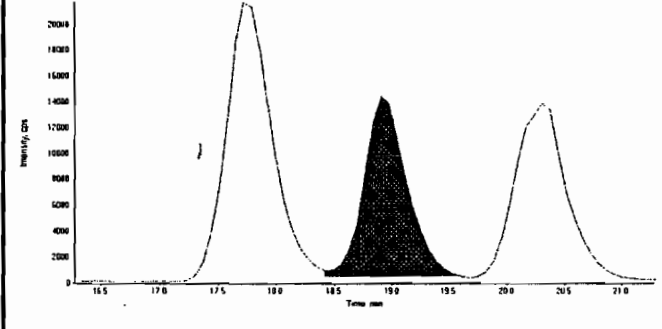
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	14.3
	Area Counts:	1.49e+006
	Manual Modification	Yes
	Amount:	602. (ng/mL)
	% Accuracy:	100.00

	<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 Jan 4/23/00

Sample Name: WATKINS15560P, Sample ID: TILER, File: EXP015043.wif

Peak Name: "PEIN" Massed: "551.052.0 Amu"

Comment: "CASEP\_C\_1"

Sample Index:

Sample Type: GC

Concentration: 500 ng/mL

Acq. Date: 4/16/2010

Acq. Time: 6:17:22 AM

Peak:

Peak Name: "PEIN"

Peak Height: 100.00 cps

Peak Width: 0.00 sec

Peak Area: 1.264

Peak Window: 60.0 sec

Peak RT: 19.7 min

Peak Relative RT: No

Peak Type: Valley

Peak Retention Time: 19.8 min

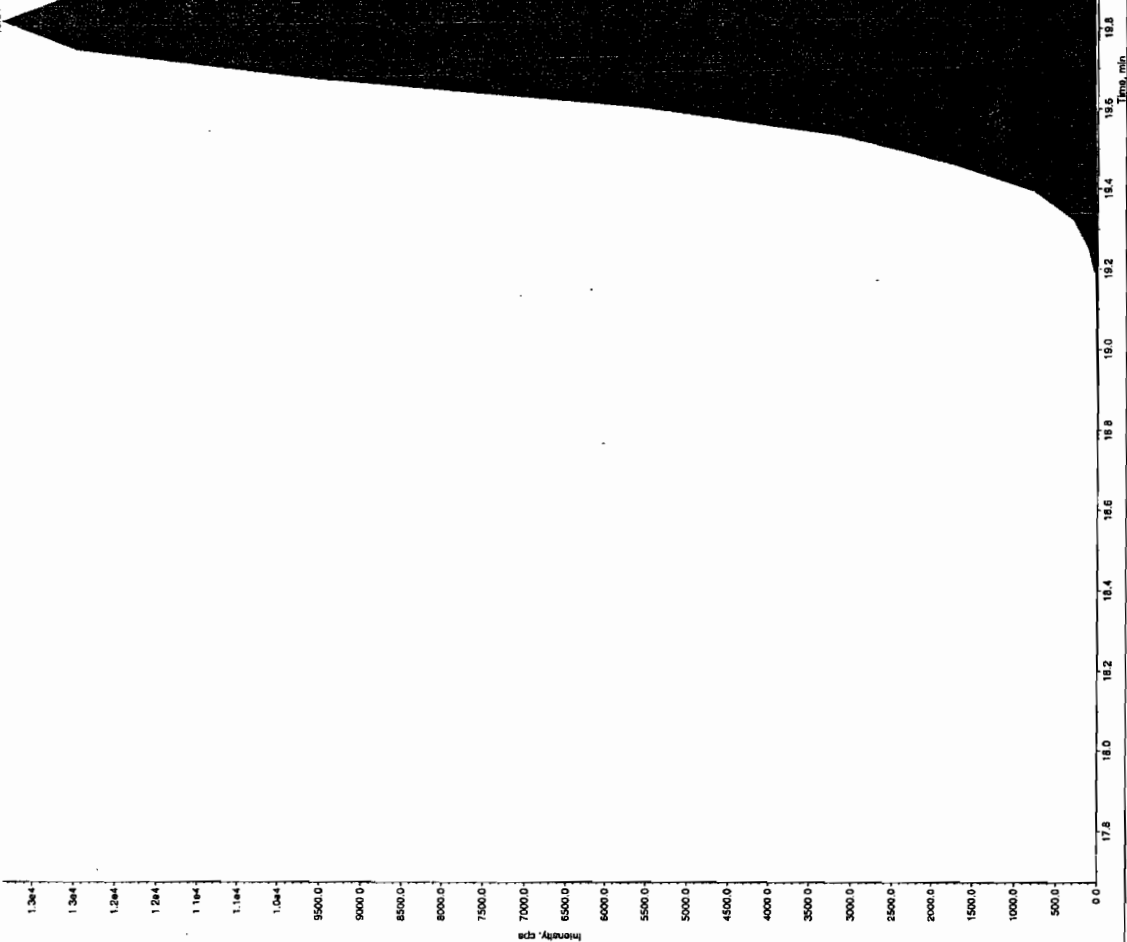
Peak Abundance: 1.164

Peak Width: 1.131 min

Peak Area: 1.164

Peak Window: 21.6 min

19.81



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after scan 4/23/10

Sample Name: "WAX100415-562CV" Sample ID: "111ER" File: "EXP0415043.wif"

Comment: "LCMSXP\_C" Annotation: "

Sample Type: "1" CC

Concentration: 600. ng/mL

Calculated Conc: 756. ng/mL

Acq. Date: 4/16/2010

Acq. Time: 4:11:22 PM

Sample ID: 1384

Modified: Yes

Q1 Window: 60.0 sec

Q2 Window: 19.7 min

Q3 Window: 19.7 min

Q4 Window: 19.7 min

Q5 Window: 19.7 min

Q6 Window: 19.7 min

Q7 Window: 19.7 min

Q8 Window: 19.7 min

Q9 Window: 19.7 min

Q10 Window: 19.7 min

Q11 Window: 19.7 min

Q12 Window: 19.7 min

Q13 Window: 19.7 min

Q14 Window: 19.7 min

Q15 Window: 19.7 min

Q16 Window: 19.7 min

Q17 Window: 19.7 min

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Q64 Window: 19.7 min

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Q66 Window: 19.7 min

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Q69 Window: 19.7 min

Q70 Window: 19.7 min

Q71 Window: 19.7 min

Q72 Window: 19.7 min

Q73 Window: 19.7 min

Q74 Window: 19.7 min

Q75 Window: 19.7 min

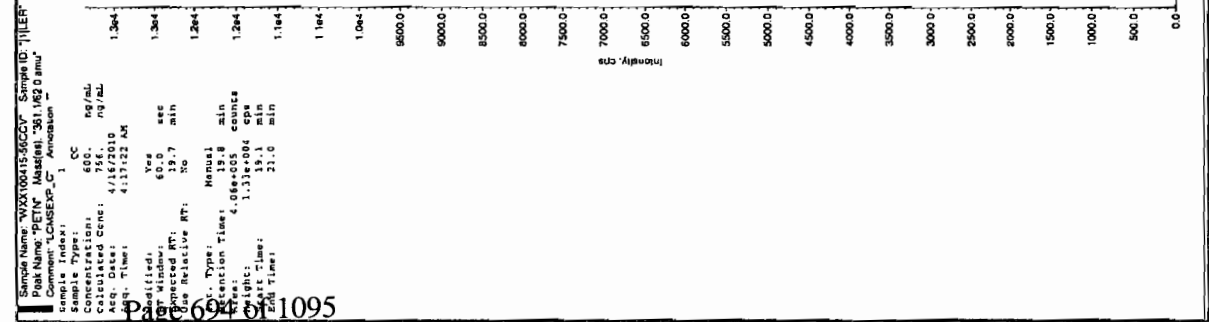
Q76 Window: 19.7 min

Q77 Window: 19.7 min

Q78 Window: 19.7 min

Q79 Window: 19.7 min

Q80 Window: 19.7 min



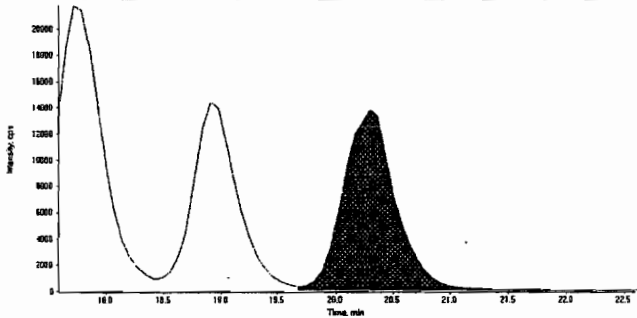
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

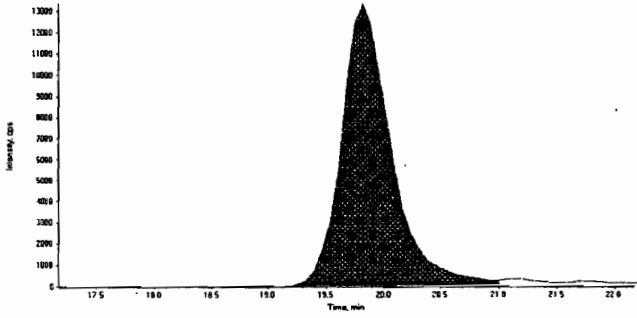
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.3
	<b>Area Counts:</b>	4.46e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	568. (ng/mL)
	<b>% Accuracy:</b>	94.70

	<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>	4.06e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	756. (ng/mL)
	<b>% Accuracy:</b>	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

*thru 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): 10-2196

Lab Code: GEL

GEL Sample ID: WXXCR1

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%

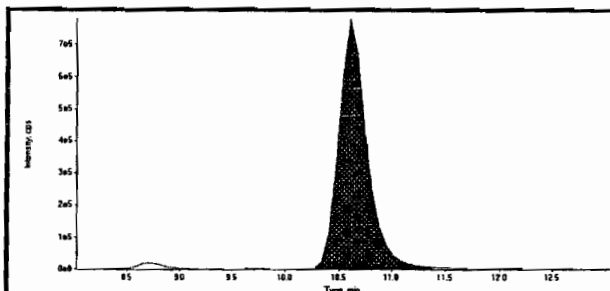
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

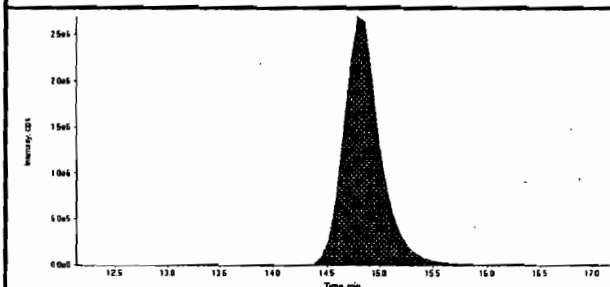
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

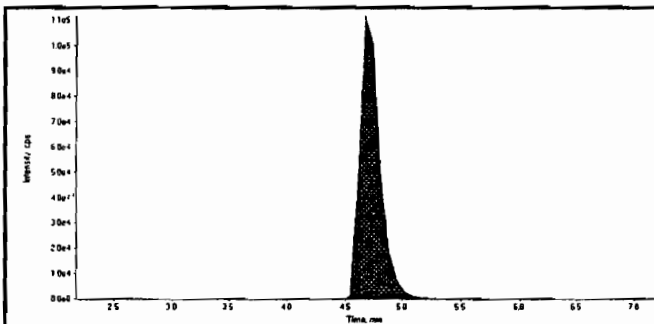
Data File	EXP0415045.wiff	Acquisition Date	4/16/2010 5:09:20 AM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



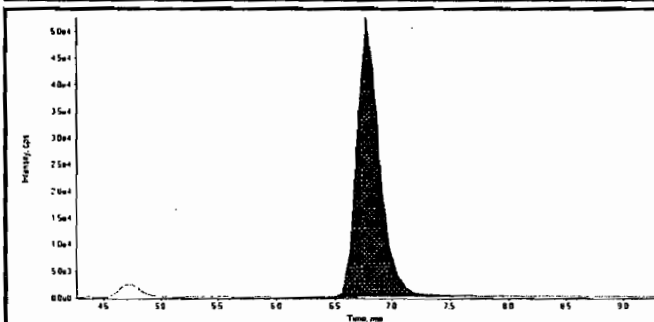
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	14700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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

*chmc  
04/23/10  
Lar  
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



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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>	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

Before Jan 4/23/10

Sample Name: "WAX100415.57GR" Sample ID: "HLRT" File: "EXP0415045.WIT"

Comment: "LCMSXP\_C" Annotation: "Mass(es): 107 0/100.0 amu"

Sample Type: 1 OC

Concentration: 40.0 ng/mL

Acq. Date: 1/28/2010

Acq. Time: 5:08:25 PM

Int. Type: Valley

Int. Algorithm: IntelliQuan - 10A

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

Int. Retention: 14.3 min

Int. Relative RT: No

Int. Type: Valley

Int. Resolution: 1.00

Int. Peak Width: 0.00 sec

Int. Window: 30.0 sec

12.20

14.30

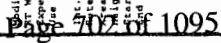
Time, min

12.2 12.4 12.6 12.8 13.0 13.2 13.4 13.6 13.8 14.0 14.2 14.4 14.6 14.8 15.0 15.2 15.4 15.6 15.8 16.0

Intensity, cps

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10



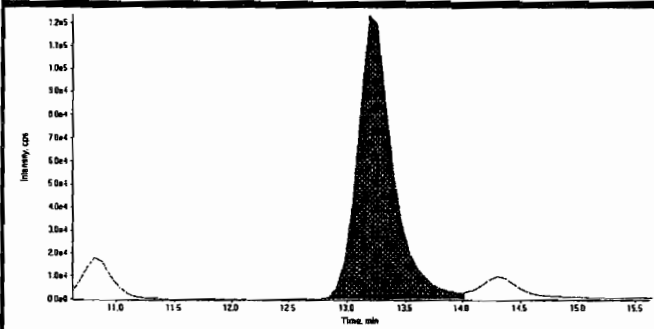
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

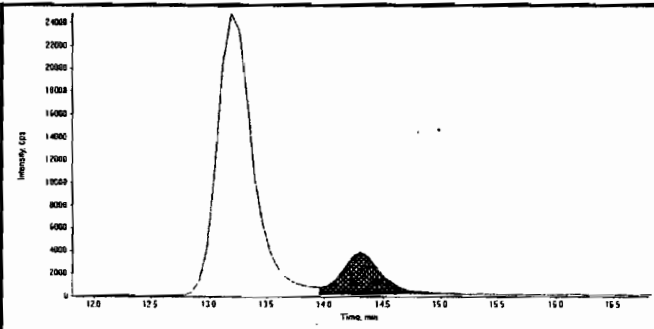
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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

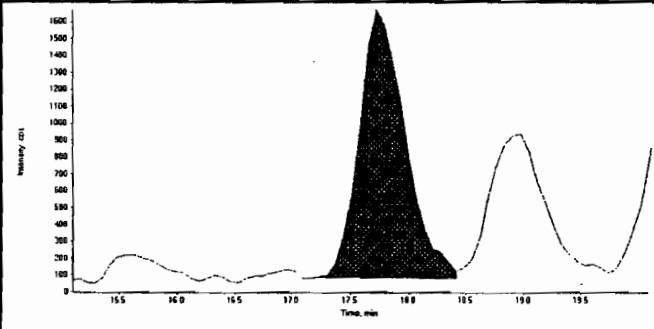
  

	Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.65e+006
	Manual Modification	No
	Amount:	41.4 (ng/mL)
	% Accuracy:	104.00

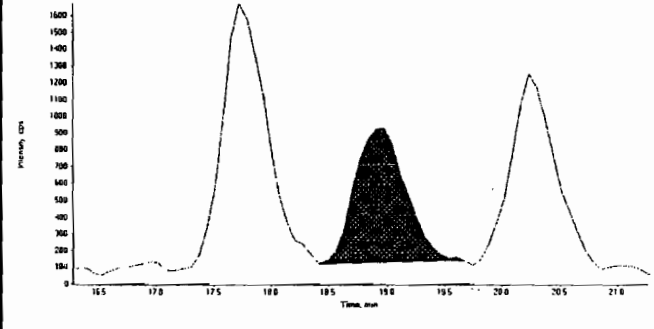
  

	Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	14.3
	Area Counts:	9.45e+004
	Manual Modification	Yes
	Amount:	38.6 (ng/mL)
	% Accuracy:	96.60

	Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.7
	Area Counts:	4.42e+004
	Manual Modification	No
	Amount:	43.9 (ng/mL)
	% Accuracy:	110.00

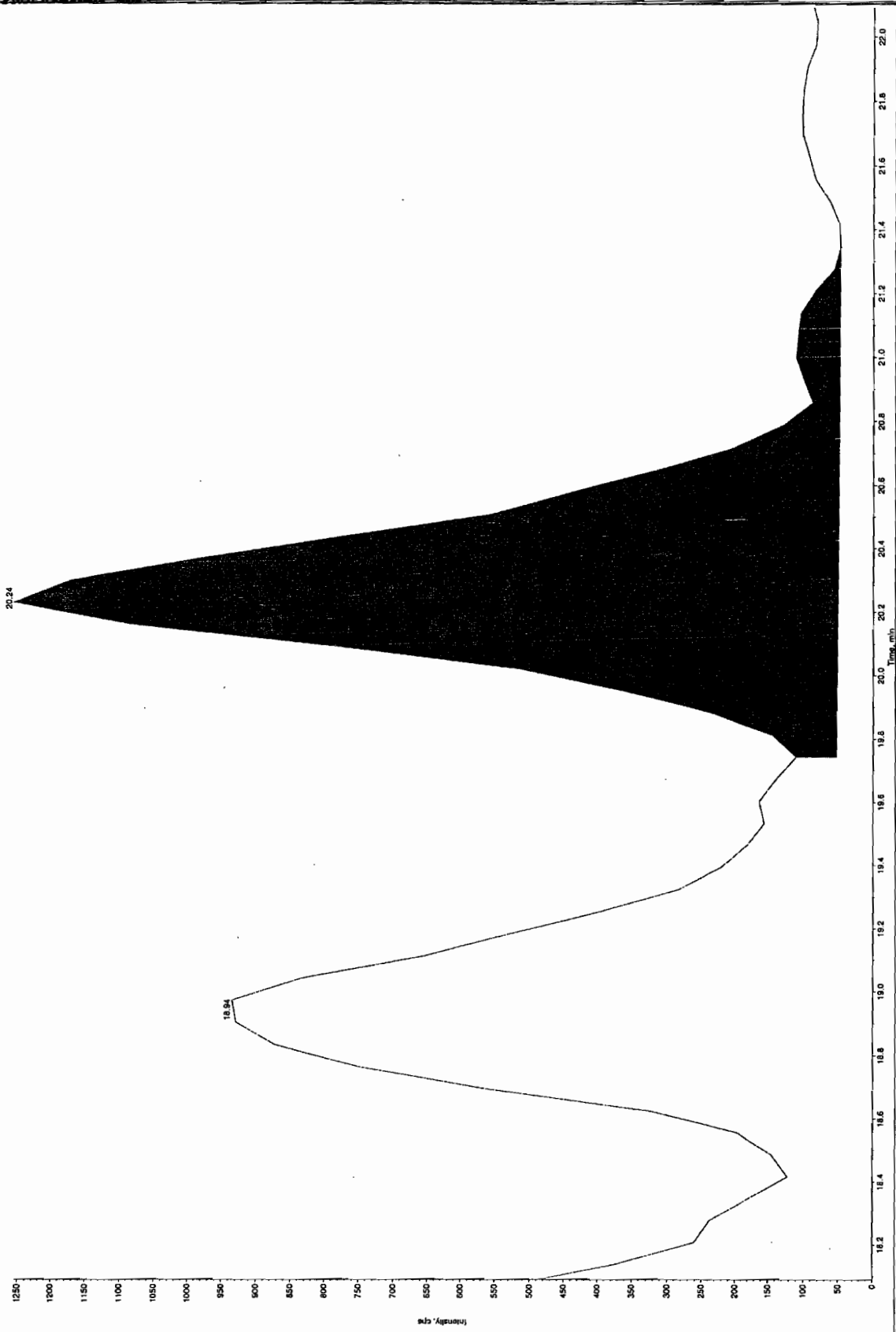
	Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	19.0
	Area Counts:	2.49e+004
	Manual Modification	No
	Amount:	46.7 (ng/mL)
	% Accuracy:	117.00

Before Jan 4/23/10

Sample Name: "WAX100415-570R" Sample ID: "TULEF" File: "EXP0415045.rtf"  
 Peak Name: "Cholesterol" Masses: 137.046.0 amu  
 Compound: "CHOLESTEROL" Analysis:

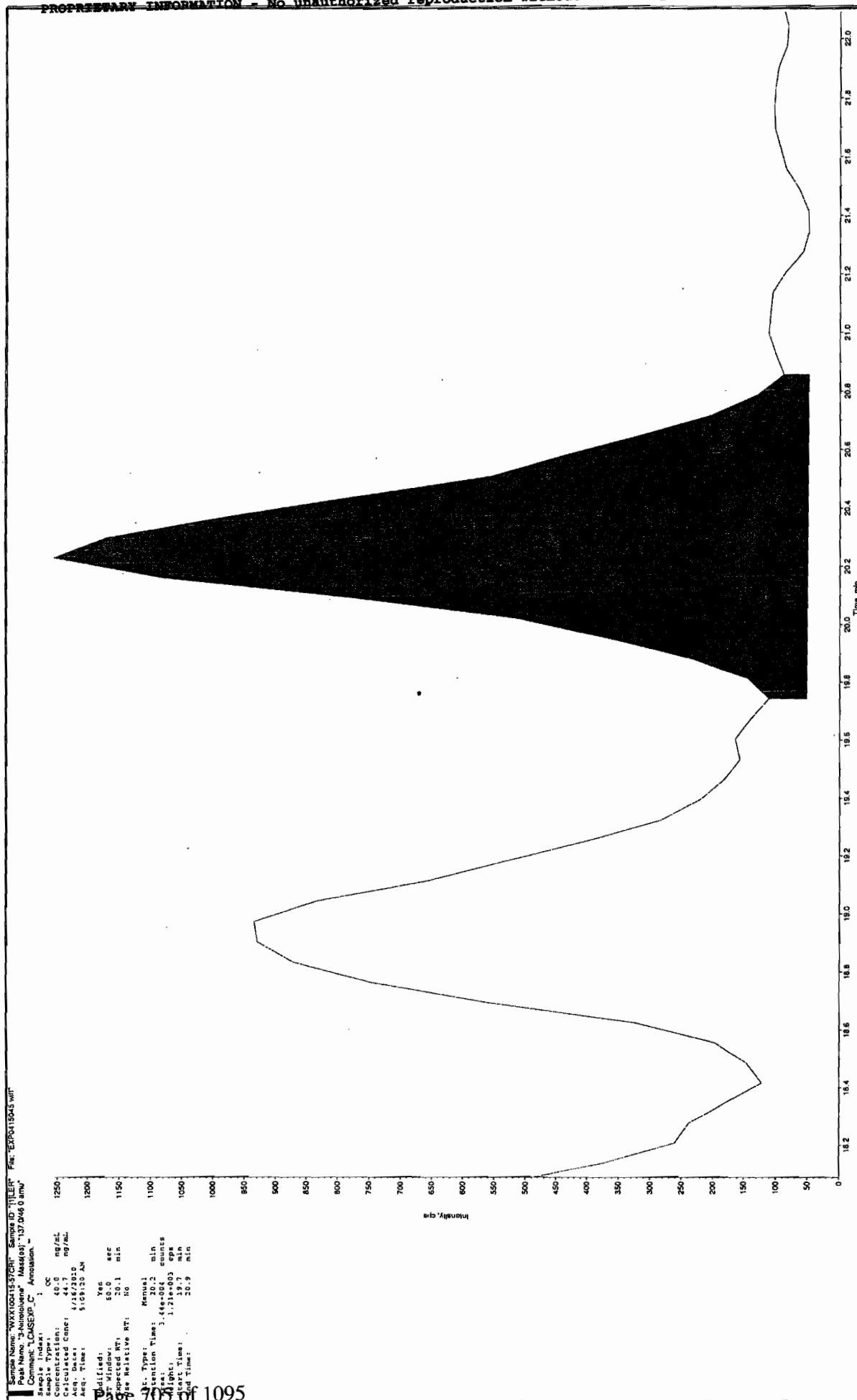
Sample Index: 1  
 Sample Type: QC  
 Concentration: 49.0 ng/mL  
 Calculated Conc: 4/14/2010 ng/mL  
 Acq. Time: 5:03:20 AM

Peak Data:  
 No. 104  
 Peak Name: Cholesterol  
 Peak Height: 100.00 cps  
 Ret. Time: 18.04 min  
 Peak Width: 0.08 sec  
 Peak Area: 1.30e+004 counts  
 Peak Weight: 1.30e+004 cps  
 Peak Time: 18.04 min  
 Peak Time: 21.3 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10



Sample Name: WAX10015-57CHP Sample ID: 11111111 File: EXP0415045.MIT

Peak Name: "5-Nitrofluorene" Mass(es): 137.046 0 amu

Comment: "LCMS-2010 C" Annotation: "

Sample Type: 1 OC

Concentration: 40.0 ng/mL

Calculated Center: 4.118010 ng/mL

Acq. Time: 5:05:20 AM

Acq. Time: 12:00

Validated: Yes

Expected RT: 20.1 min

Observed RT: 20.1 min

Relative RT: No

RT: 20.2 min

Retention Time: 20.2 min

Area: 3.44e+004 counts

Height: 1.21e+003 cps

Start Time: 19.7 min

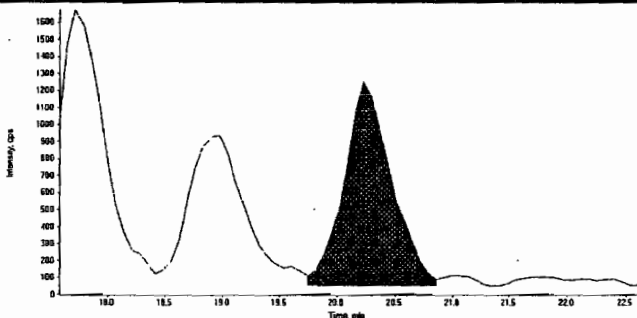
End Time: 20.9 min

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

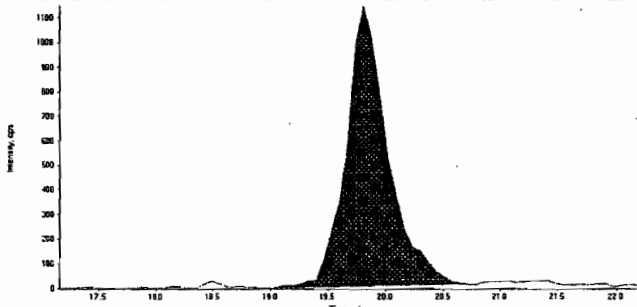
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.2
	<b>Area Counts:</b>	3.44e+004
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	44.7 (ng/mL)
	<b>% Accuracy:</b>	112.00

	<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>	2.90e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	47.4 (ng/mL)
	<b>% Accuracy:</b>	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

*hmm 04/23/10*

AVERAGE

✓ 104.6

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*for 4/22/10*



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0415056.wiff

Analysis Date: 16-APR-10 09:54

LCMSMS ID: 1189

Column ID: JSphere 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%

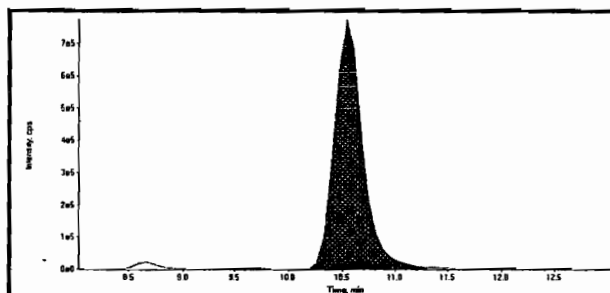
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

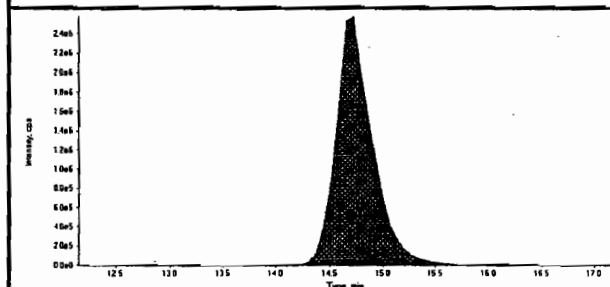
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

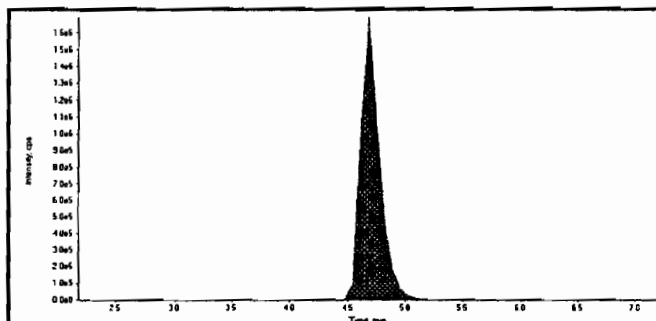
Data File	EXP0415056.wiff	Acquisition Date	4/16/2010 9:54:54 AM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



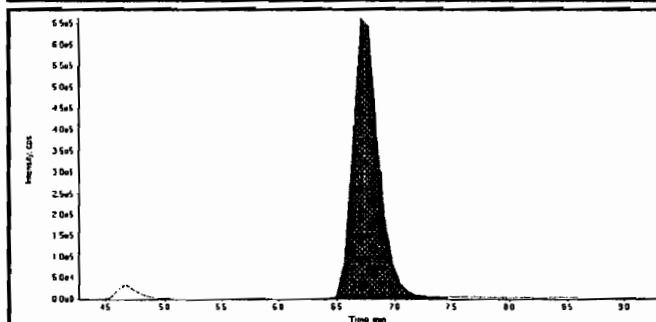
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	14500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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

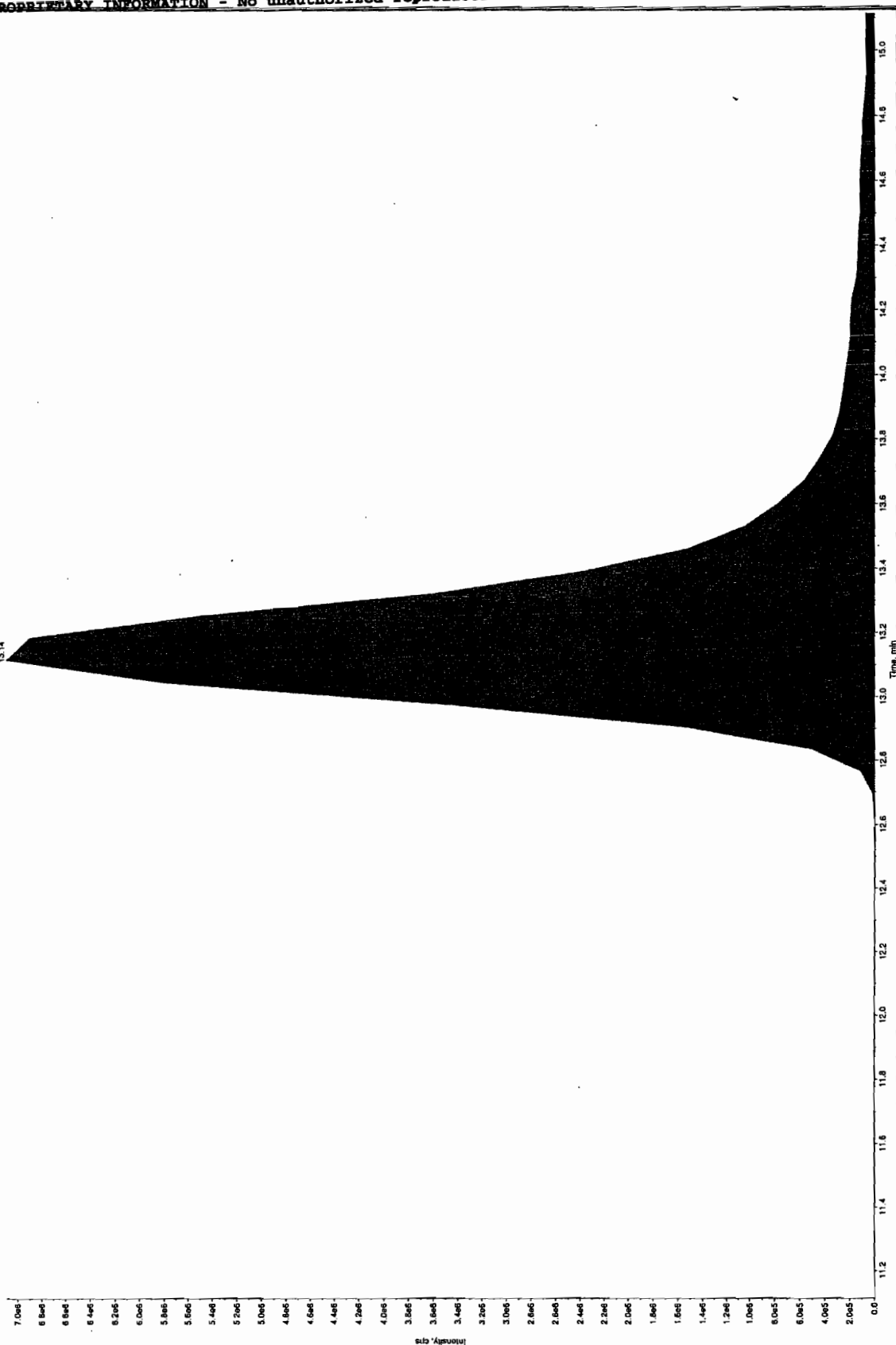
*Handwritten:*  
HMX 04/23/10  
RDX 4/23/10

Before Jan 4/28/10

Sample Name: WXX100412-5600V Sample ID: TILER File: EXP041556.wif  
 Peak Name: 246Trinitrofluorene Mass(es): 227.1209.9 amu  
 Comment: LOUSEW\_C\_Annodation

Sample Type: 1 QC  
 Concentration: 600. ng/mL  
 Calculated Conc: 718. ng/mL  
 Acq. Date: 4/17/2009  
 Acq. Time: 21:15:14 AK  
 Modified: Yellow - 10A  
 Bin. Peak Height: 1000.00 cps  
 Bin. Peak Width: 0.00 sec  
 Smoothing Width: 3.00 points  
 Window: 30.0 sec  
 Window RT: 11.1 min  
 Relative RT: No  
 Spec. Type: Valley  
 Acquisition Time: 1.87e+008 counts  
 Height: 7.09e+006 cps  
 Retention Time: 12.5 min  
 Elution Time: 11.4 min

1314



\*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>	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)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.00
	<b>Area Counts:</b>	1.08e+008
	<b>Manual Modification</b>	No
	<b>Amount:</b>	636. (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>	4.41e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	560. (ng/mL)
	<b>% Accuracy:</b>	93.40

	<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>	4.45e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	674. (ng/mL)
	<b>% Accuracy:</b>	112.00

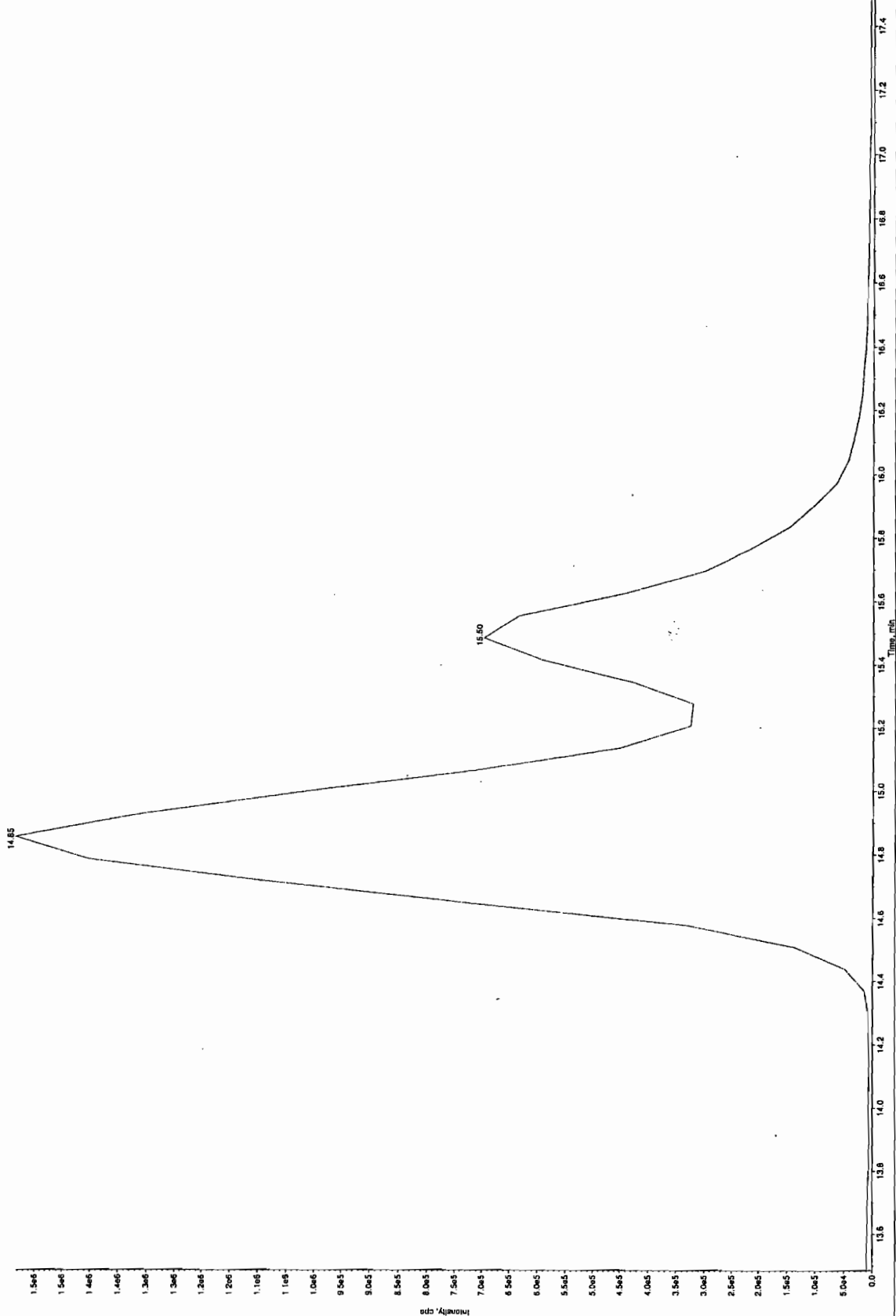
  

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	1.68e+008
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	617. (ng/mL)
	<b>% Accuracy:</b>	103.00

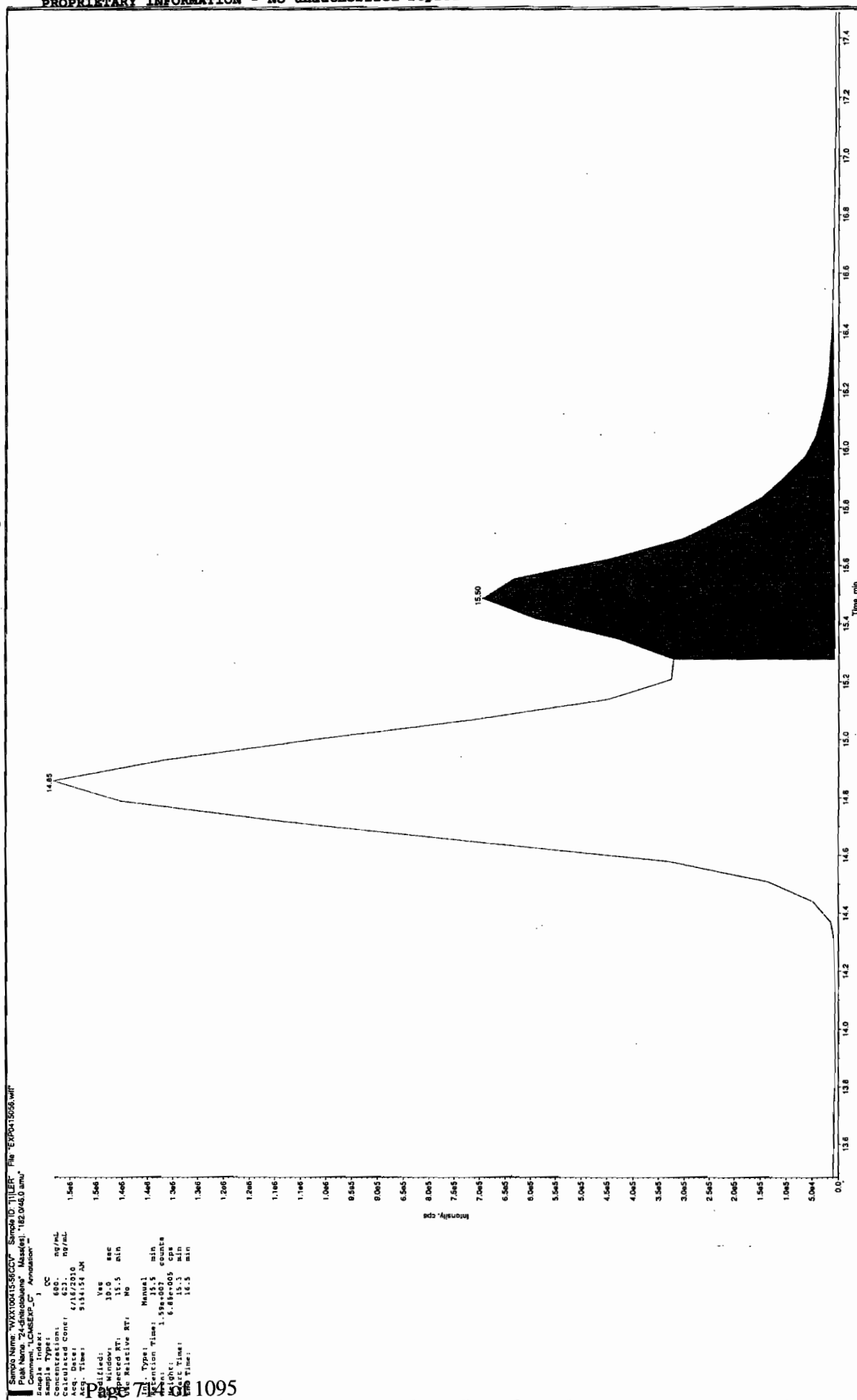
Before Jan 4/23/10

Sample Name: "WXY100115-SECOP" Sample ID: "115EP" File: "E:\P0415058.wif"  
 Peak Name: "Acetaminophen" Mass(es): "182.048 0 amu"  
 Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: GC  
 Concentration: 600 ng/mL  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/16/2010  
 Acq. Time: 5:34:54 AM  
 Modified: No



after Day 4/23/10



Sample Name: WAX10041356CCV Sample ID: TILER File: E:\P0415056.wif  
 Peak Name: 24-dinitrotoluene Mass(es): 162.048.0 amu  
 Comment: LCMS-EXP-07 Annotation: 1 CC

Concentration: 650. ng/mL  
 Calculated Conc: 4/18/2010 ng/mL  
 Acq. Time: 9:14:15 AM  
 Inj. Volume: 1.000 µL  
 Inj. Speed: 10 µL/sec  
 Inj. Pressure: 15.5 min  
 Inj. Temp: 140°C  
 Inj. Relative RT: No  
 Type: Manual  
 Acquisition Time: 15.5 min  
 Count: 1.59e+007 counts  
 Rate: 6.88e+005 cps  
 Error: 1.2 min  
 RT: 15.5 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>	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

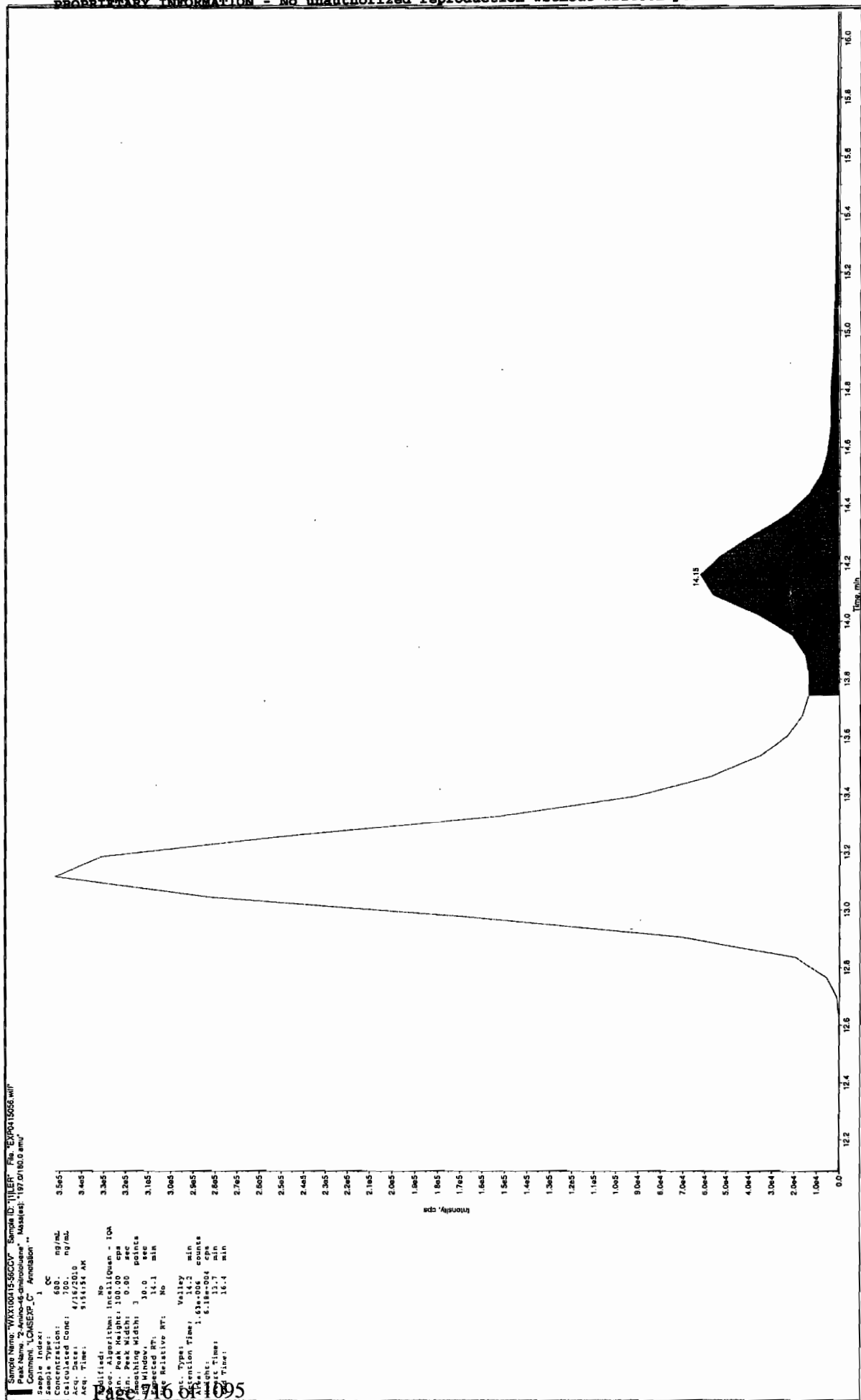
	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	3.90e+007
	Manual Modification	No
	Amount:	588. (ng/mL)
	% Accuracy:	98.10

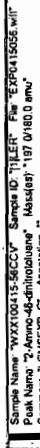
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.59e+007
	Manual Modification	Yes
	Amount:	623. (ng/mL)
	% Accuracy:	104.00



Before Jan 4/23/10.



\*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: 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

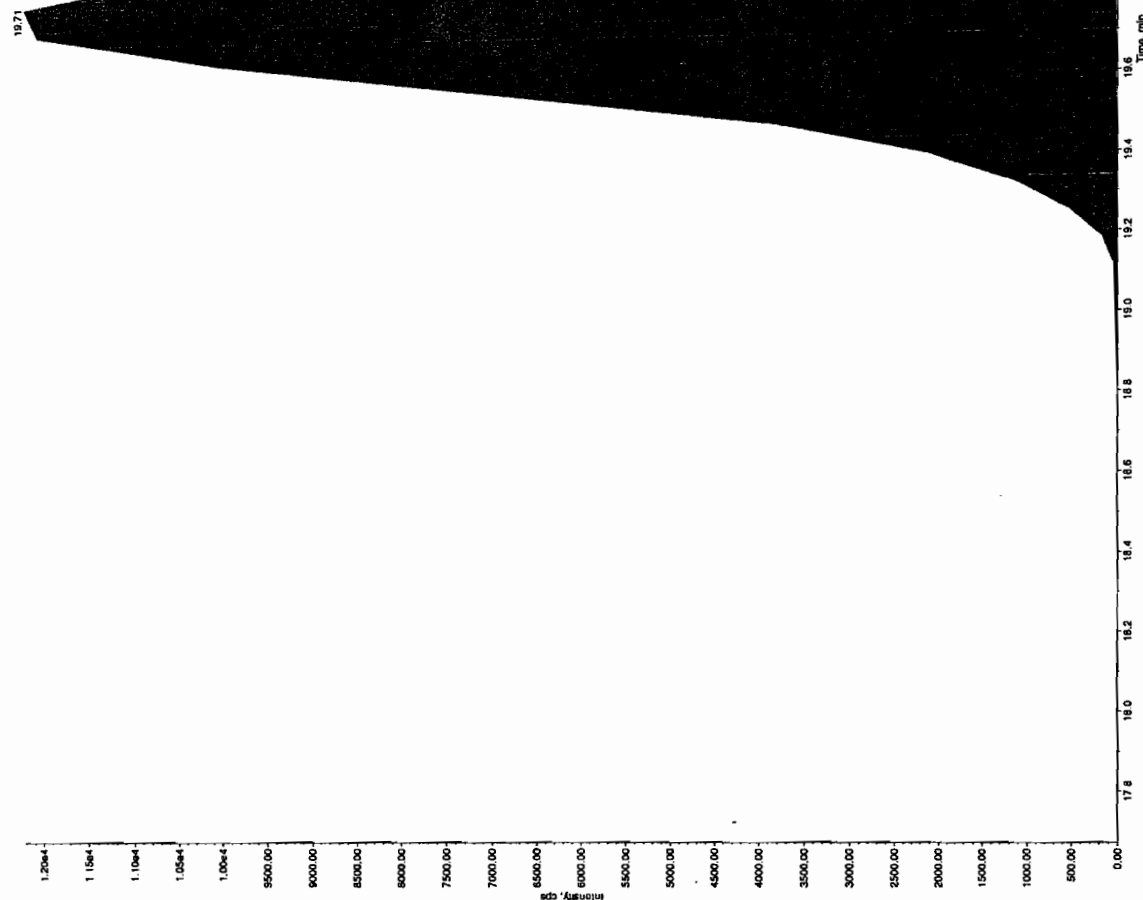
Before Jan 4/20/10

Sample Name: WAX100115-562CV Sample ID: 111517 File: E:\P0415056.wif

Peak Name: PETN Mass(es): 351.102.0 amu

Comment: LCMSEXP.C Annotation: ~

Sample Type: 1 OC  
 Concentration: 600. ng/mL  
 Calculated Conc: 747. ng/mL  
 Acq. Rate: 47110.0  
 Acq. Time: 915.154 AN  
 Modif: No  
 Proc. Algorithm: InCallOvar - 10A  
 Det. Type: Valley  
 Acquisition Time: 3.78e+005  
 Height: 1.22e+004  
 Width: 18.8  
 Window: 60.0  
 Smoothing Width: 3  
 Acquisition Time: 3.78e+005  
 Acquisition Time: 32.8

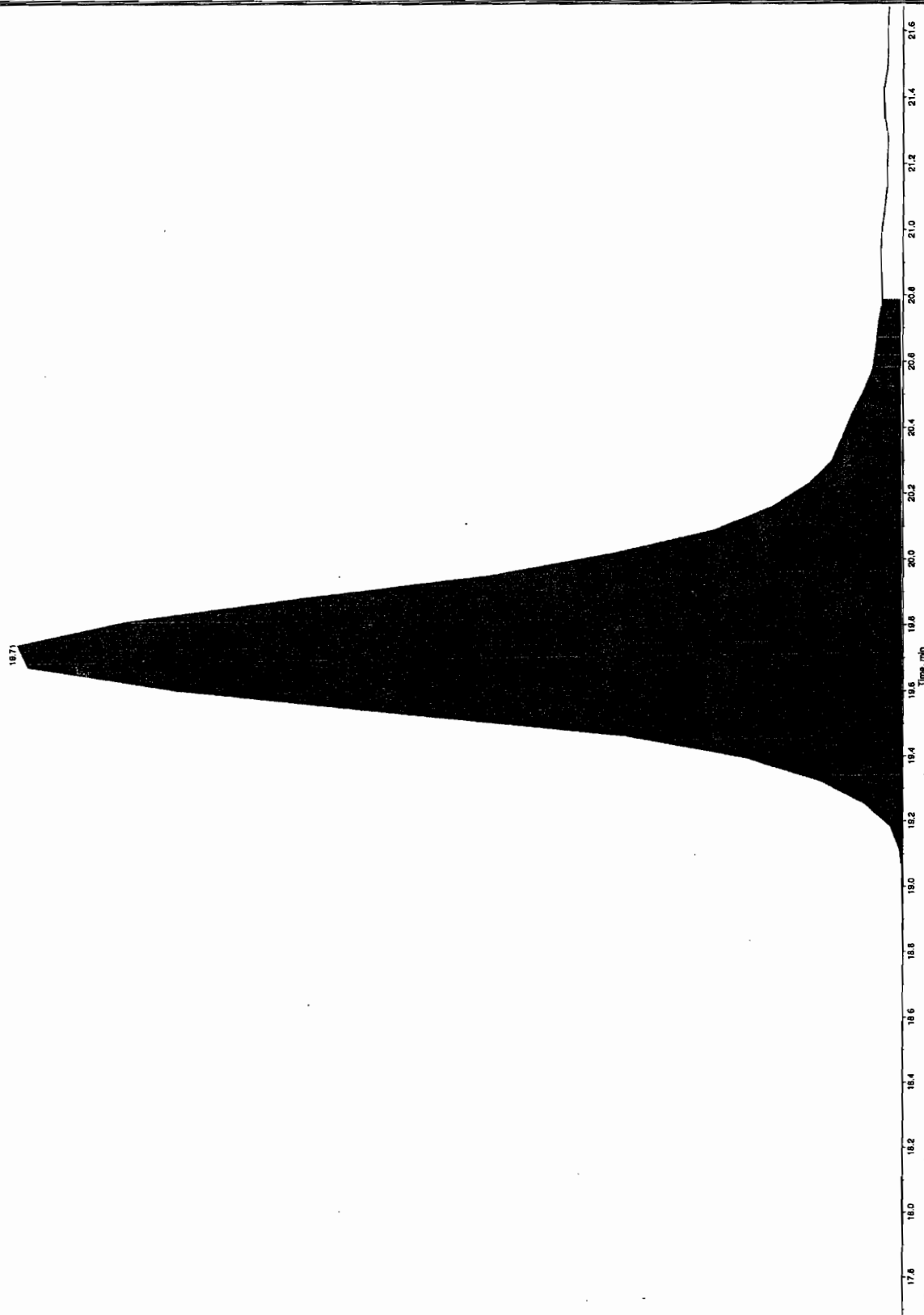


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Run 4/23/10

Sample Name: WAX100115-56207 Sample ID: T11ER File: EXP0415056.wif  
 Comment: LCMSDEP\_C Annotation: -

Sample Type: 1 QC  
 Concentration: 600. ng/mL  
 Calculated Conc: 4.1612010 ng/mL  
 Acquisition Time: 9:51:14 AM  
 ASX Time: 1:54  
 Yrs: 00  
 Mths: 00  
 Ds: 19  
 Hrs: 19  
 Min: 19  
 Sec: 19  
 Type: Manual  
 Run Time: 19.7 min  
 Inj. Volume: 1.00 µL  
 Inj. Pressure: 1.23e+004 cpe  
 Inj. Time: 19.8 min  
 Inj. Flow: 20.0 µL/min



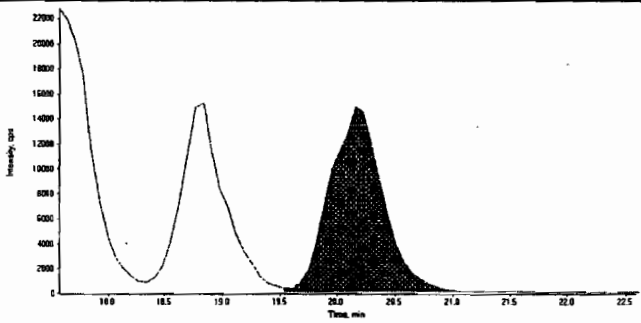
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

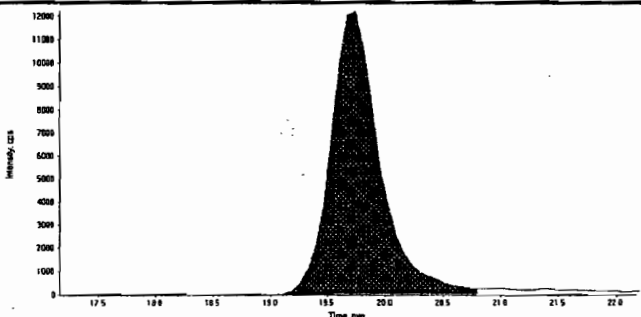
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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

*Handwritten: 4/16/10*

AVERAGE

106.7

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): 10-2196

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

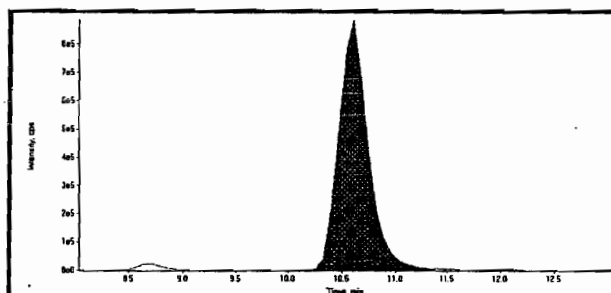
\* Value outside of Recovery Limits



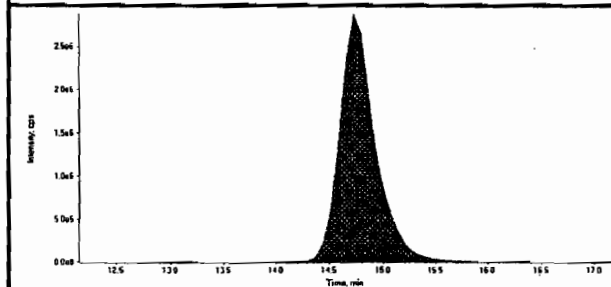
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

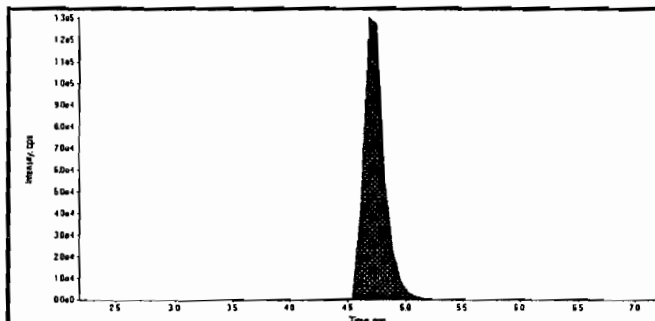
Data File	EXP0415058.wiff	Acquisition Date	4/16/2010 10:46:59 AM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



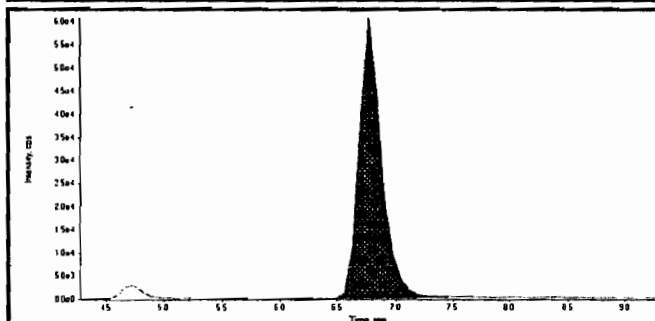
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	16900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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  
Jax 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	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:	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.00
	Area Counts:	9.81e+006
	Manual Modification	No
	Amount:	36.0 (ng/mL)
	% Accuracy:	90.00

	Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	4.08e+006
	Manual Modification	No
	Amount:	42.3 (ng/mL)
	% Accuracy:	106.00

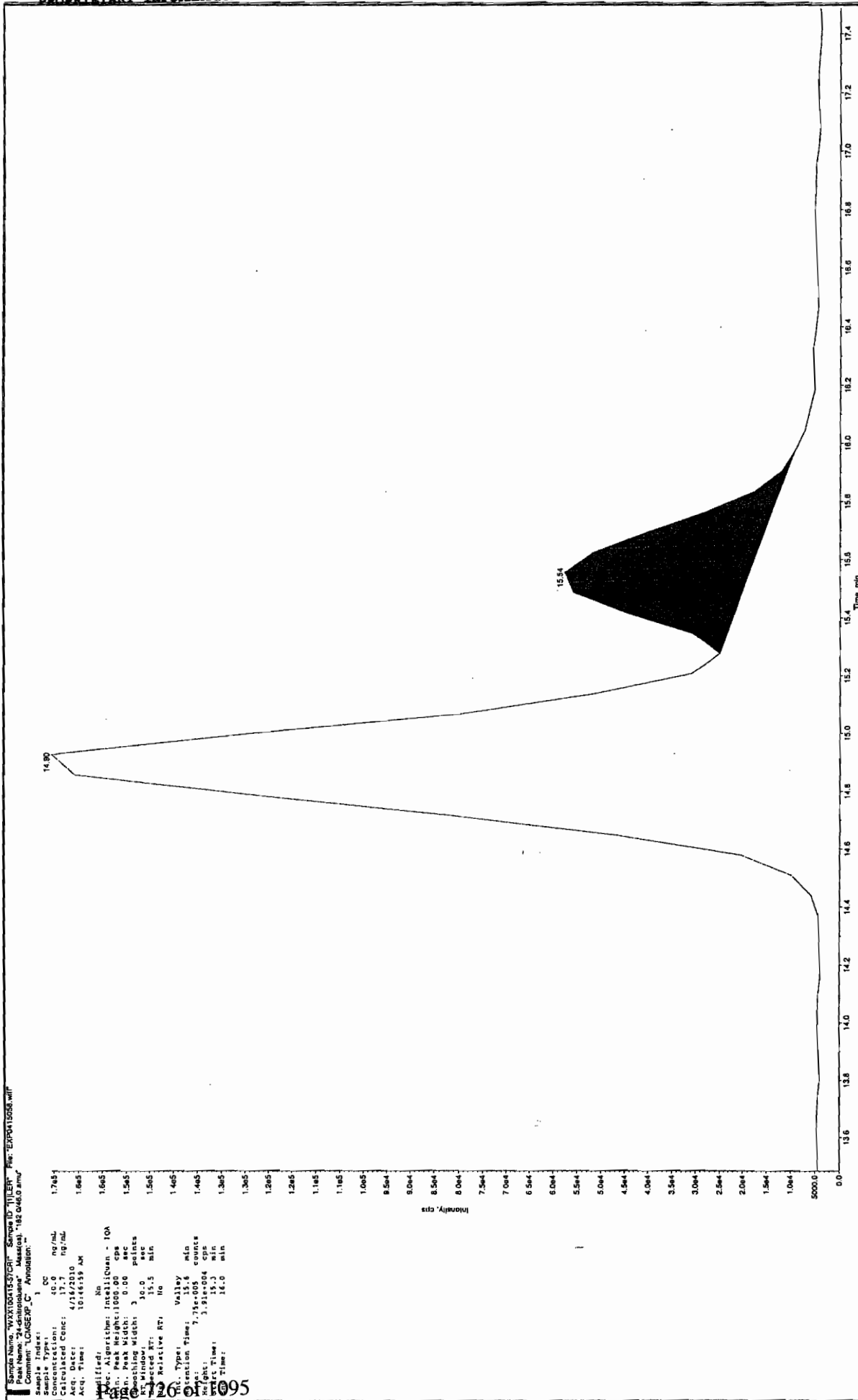
  

	Compound Name:	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	3.11e+006
	Manual Modification	No
	Amount:	40.4 (ng/mL)
	% Accuracy:	101.00

	Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	1.91e+007
	Manual Modification	No
	Amount:	42.2 (ng/mL)
	% Accuracy:	106.00

Before Jan 4/23/10



Sample Name: "WVX10015-01" Sample ID: "1111" File: "EXP015058.wif"

Peak Name: "24-dinitrophenol" Mass(es): "142.0410 amu"

Comment: "LONISERP\_C" Annotation: "

Sample Index: 1 QC

Concentration: 40.0 ng/mL

Calculated Conc: 17.7 ng/mL

Acq. Date: 4/16/2010

Acq. Time: 10:46:39 AM

Modified: No

Proc. Algorithm: Intelligent - IQA

Ch. Peak Height: 1000.00 cps

Ch. Peak Width: 0.06 points

Ch. Peak Area: 1.56

Ch. Peak Width: 10.0 sec

Ch. Peak Area: 1.56

Ch. Peak Width: 15.5 min

Ch. Peak Area: 1.46

Ch. Peak Width: 15.6 min

Ch. Peak Area: 1.46

Ch. Peak Width: 15.3 min

Ch. Peak Area: 1.30

Ch. Peak Width: 16.0 min

Ch. Peak Area: 1.30

Ch. Peak Width: 1.30

Ch. Peak Area: 1.20

Ch. Peak Width: 1.20

Ch. Peak Area: 1.20

Ch. Peak Width: 1.10

Ch. Peak Area: 1.10

Ch. Peak Width: 1.10

Ch. Peak Area: 1.00

Ch. Peak Width: 0.90

Ch. Peak Area: 0.90

Ch. Peak Width: 0.80

Ch. Peak Area: 0.80

Ch. Peak Width: 0.70

Ch. Peak Area: 0.70

Ch. Peak Width: 0.60

Ch. Peak Area: 0.60

Ch. Peak Width: 0.50

Ch. Peak Area: 0.50

Ch. Peak Width: 0.40

Ch. Peak Area: 0.40

Ch. Peak Width: 0.30

Ch. Peak Area: 0.30

Ch. Peak Width: 0.20

Ch. Peak Area: 0.20

Ch. Peak Width: 0.10

Ch. Peak Area: 0.10

Ch. Peak Width: 0.05

Ch. Peak Area: 0.05

Ch. Peak Width: 0.01

Ch. Peak Area: 0.01

Ch. Peak Width: 0.00

Ch. Peak Area: 0.00

Ch. Peak Width: 0.00

Ch. Peak Area: 0.00

Ch. Peak Width: 0.00

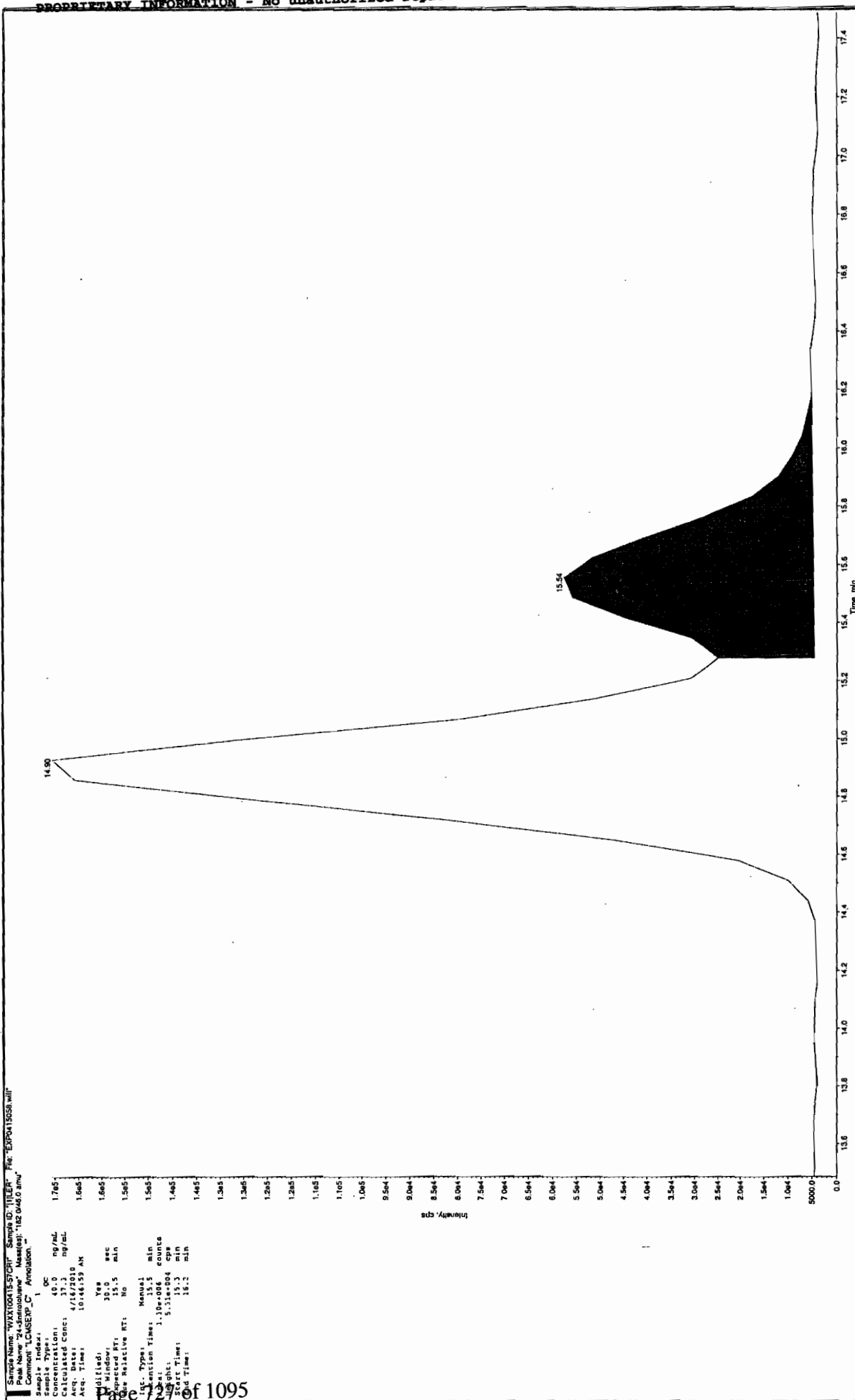
Ch. Peak Area: 0.00

Ch. Peak Width: 0.00

010095

\*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>	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 Jan 4/23/10

Sample Name: "WXX100413-57CR" Sample ID: "TILET" File: "EXP0415038.wif"

Peak Name: "2-Amino-46-dibenzodioxene" Mass(es): "197.0180.0 amu"

Concentration: 40.0 ng/mL

Sample Type: 1 OC

Calculated Conc: 4716.7203 ng/mL

Acq. Time: 10.16159 AM

2.484

2.484

2.384

2.384

2.384

2.284

2.284

2.284

2.184

2.184

2.084

2.084

1.984

1.984

1.884

1.884

1.784

1.784

1.684

1.684

1.584

1.584

1.484

1.484

1.384

1.384

1.284

1.284

1.184

1.184

1.084

1.084

9500.0

9000.0

8500.0

8000.0

7500.0

7000.0

6500.0

6000.0

5500.0

5000.0

4500.0

4000.0

3500.0

3000.0

2500.0

2000.0

1500.0

1000.0

500.0

0.0

Intensity, cps

13.19

14.20

Time, min

12.2

12.4

12.6

12.8

13.0

13.2

13.4

13.6

13.8

14.0

14.2

14.4

14.6

14.8

15.0

15.2

15.4

15.6

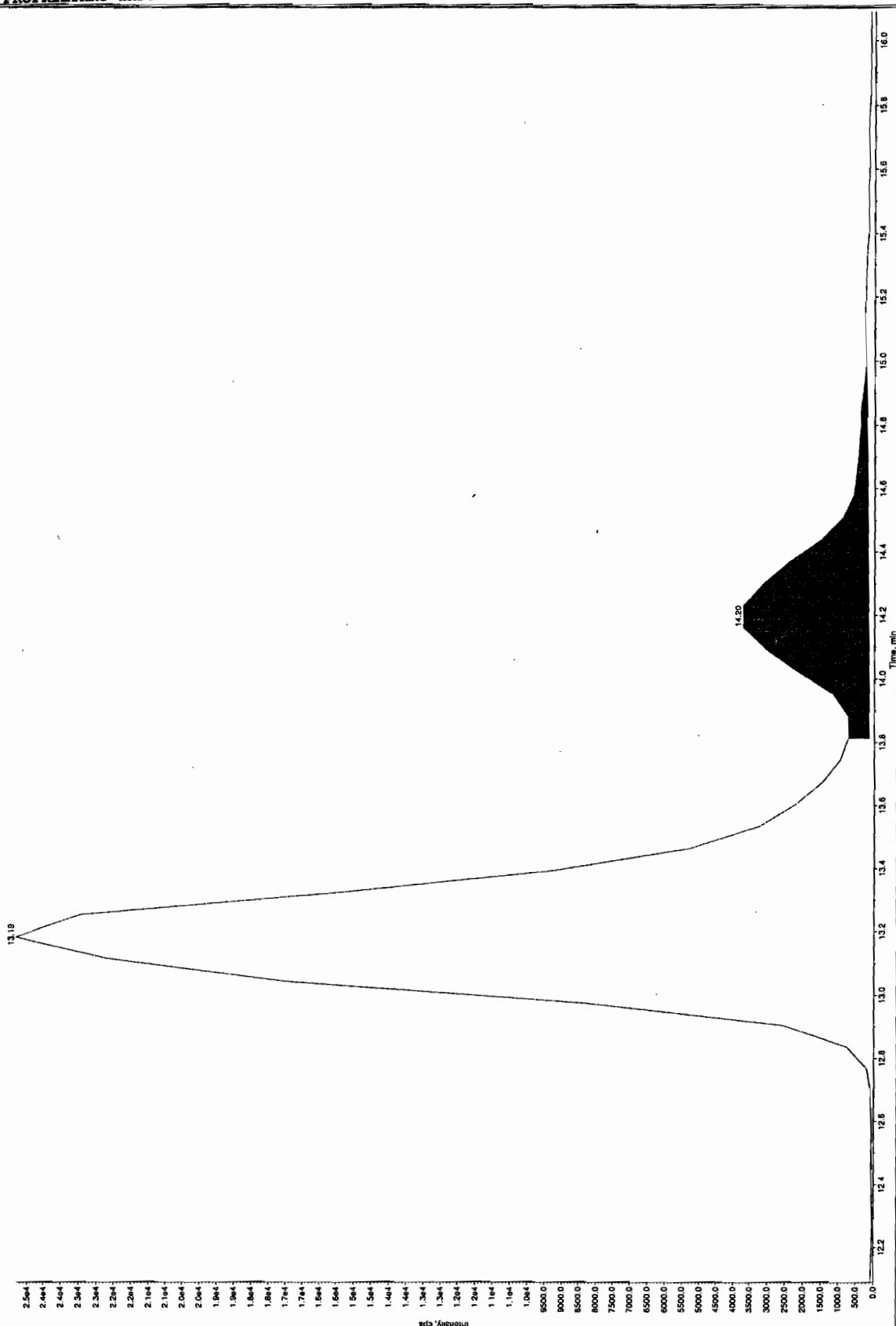
15.8

16.0

after Jan 11/10

Sample Name: "WXX10015-57CR" Sample ID: "HLER" File: "E00415038.wif"  
 Peak Name: "Peak 1" Retention Time: 13.19 min  
 Peak Name: "Peak 2" Retention Time: 14.20 min

Sample Index:  
 Sample Type: OC  
 Concentration: 10.0 ng/mL  
 Acquisition Date: 4/14/2010  
 Acquisition Time: 10:46:59 AM  
 AQC: Date: 4/14/2010  
 AQC: Time: 10:46:59 AM  
 File:  
 Method: Yes  
 Window: 30.0 sec  
 Expected RT: 14.1 min  
 Retention Time: 14.2 min  
 Type: Manual  
 Acquisition Time: 14.2 min  
 Integration: 9.36e-004 counts  
 Height: 3.59e-002 cps  
 Area: 1.1e-001 cps  
 Time: 15.0 min

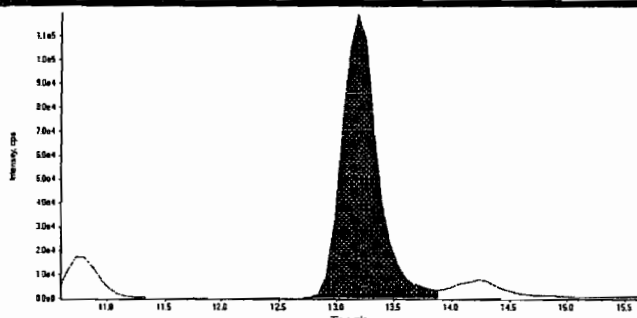


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

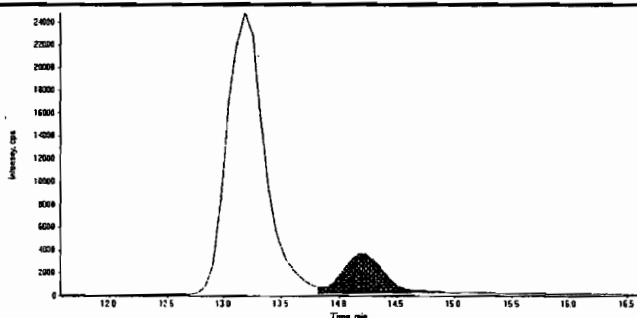
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

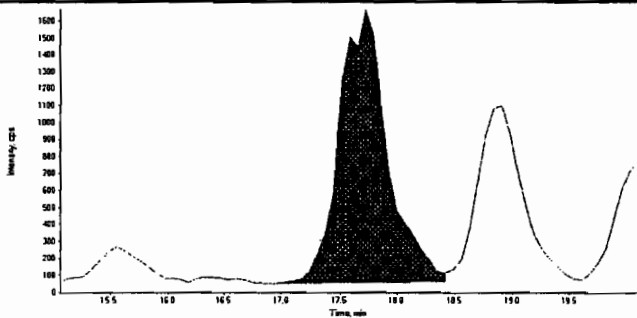
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.62e+006
	Manual Modification	No
	Amount:	39.7 (ng/mL)
	% Accuracy:	99.40

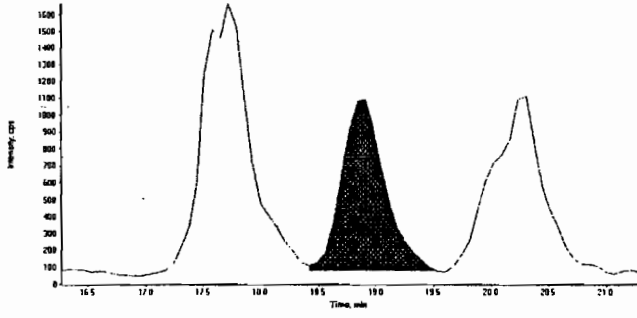
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	9.36e+004
	Manual Modification	Yes
	Amount:	37.3 (ng/mL)
	% Accuracy:	93.40

	<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

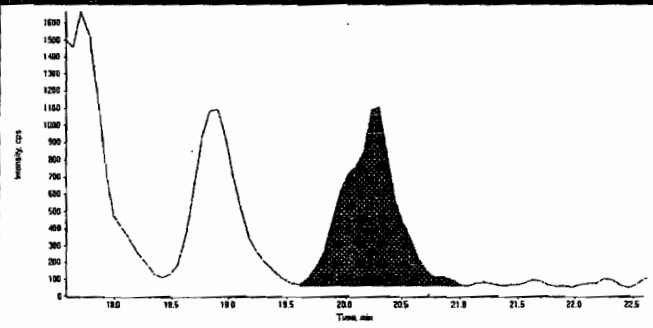


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

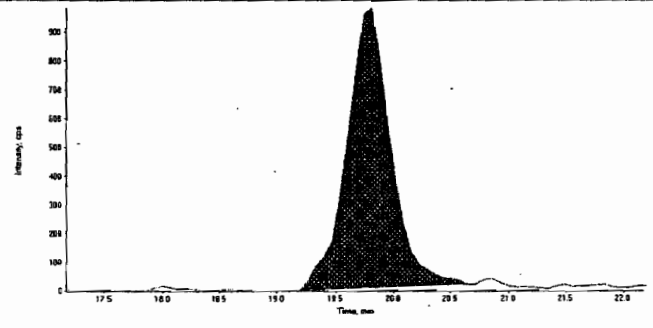
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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>	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

*hmm 04/23/10*

AVERAGE

✓ 105.2

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*See 4/23/10*

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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%

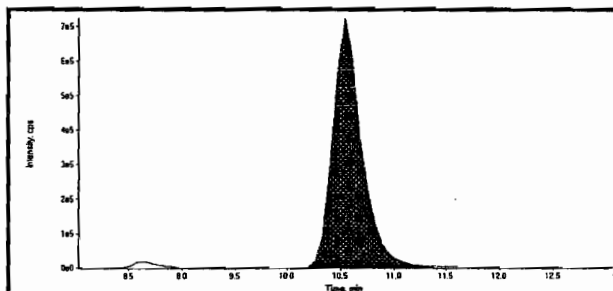
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

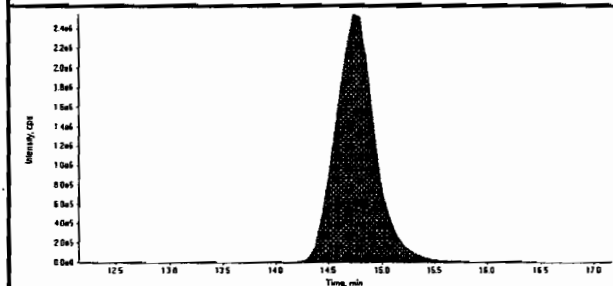
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



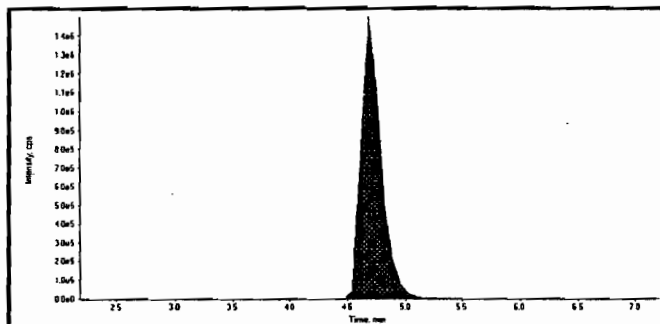
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	13700000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

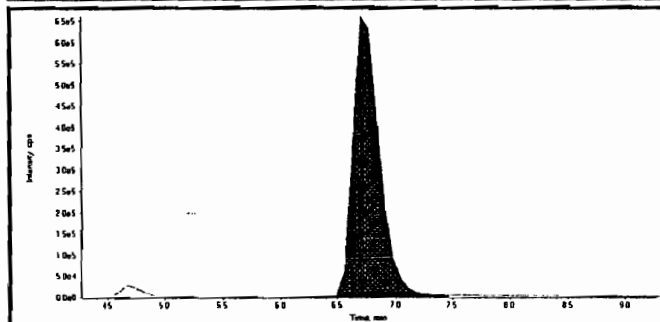


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	66000000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

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

*LER*  
4/23/10

*Hme*  
04/23/10

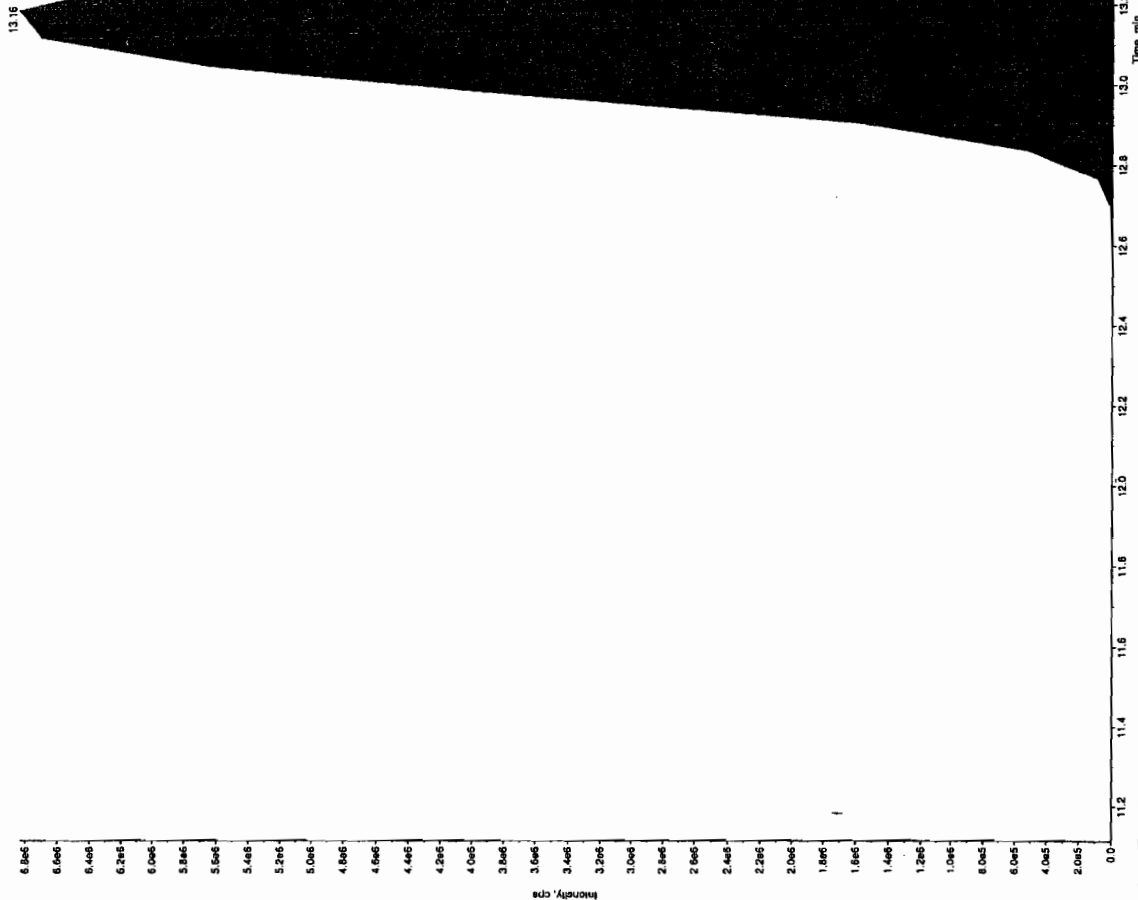
Byron Jan 4/23/10

Sample Name: WAX100415-SEC01 Sample ID: T11ER File: EXP0415053.wif  
 Peak Name: 2467Tritinobuene Measured: 227.17209.8 amu  
 Comment: LCMSMS\_C\_Kinobase

Sample Type: 1 OC  
 Concentration: 490. ng/mL  
 Calculated Conc: 718. ng/mL  
 Peak Width: 471.18  
 Acq. Time: 12.57107 PM

Modified: No  
 Peak Height: 100.00 cps  
 Peak Width: 0.00 sec  
 Baseline Width: 3.00 points  
 Baseline Level: 30.0  
 Relative RT: 13.1 min

Peak Type: Valley  
 Acquisition Time: 11.2 min  
 Weight: 1.96e+008 counts  
 Weight: 6.83e+006 cps  
 Peak Time: 12.5 min  
 Peak Time: 12.3 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

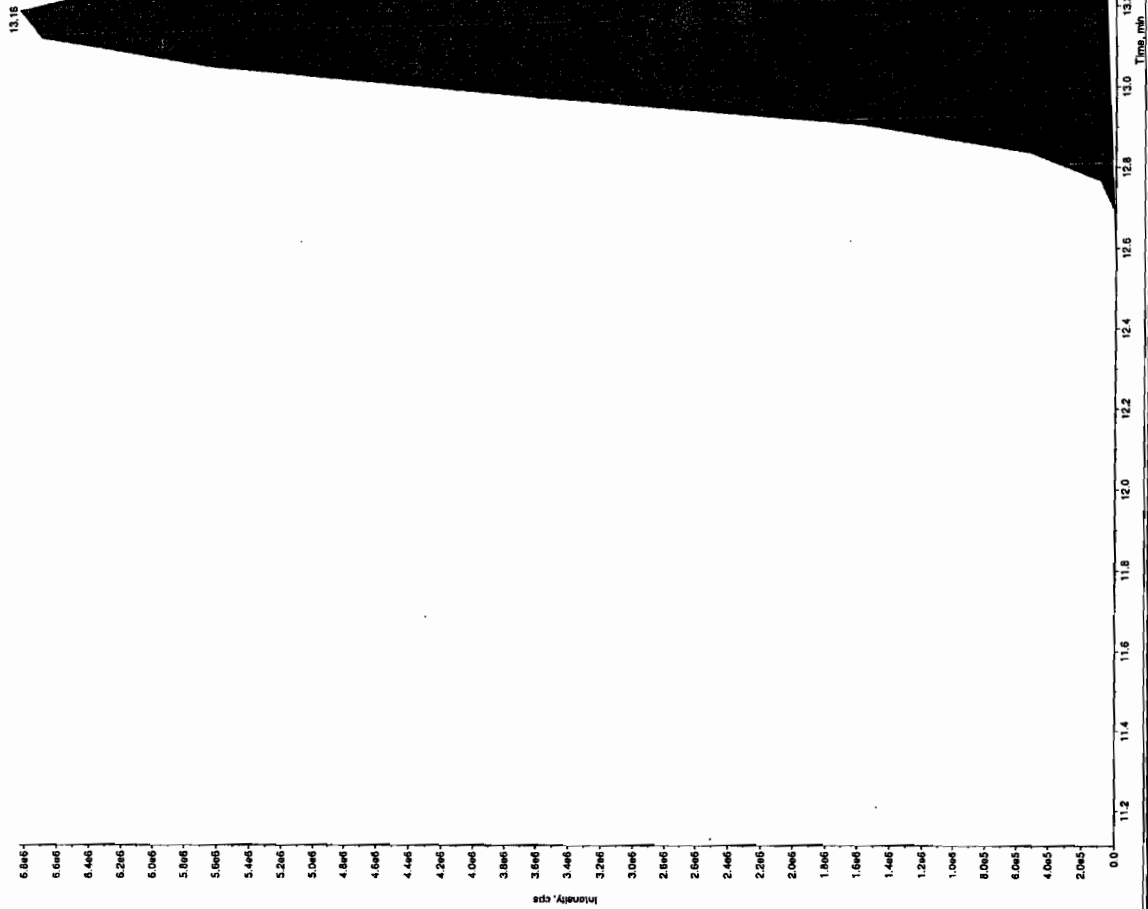
after Jan 4/23/10

Sample Name: "WXX100115-560V" Sample ID: "TILER" File: "EXP015063.wif"  
 Peak Name: "246-Triethanolamine" Mass(es): "227.12018 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Concentration: 600. ng/mL  
 Acq. Date: 4/18/2010  
 Acq. Time: 12:17:07 PM  
 Inj. Volume: 10.0 µL  
 Inj. Speed: 10.0 µL/min  
 Inj. Pressure: 10.0 psi  
 Inj. Temperature: 10.0 °C  
 Inj. Relative RT: No

Inj. Type: Manual  
 Inj. Function Time: 81.000 min  
 Inj. Volume: 10.0 µL  
 Inj. Speed: 10.0 µL/min  
 Inj. Pressure: 10.0 psi  
 Inj. Temperature: 10.0 °C  
 Inj. Relative RT: No

Integration Time: 12.0 min  
 Start Time: 12.0 min  
 End 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>	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)
	Expected RT:	11.8
	Actual RT:	11.9
	Area Counts:	1.62e+006
	Manual Modification	No
	Amount:	579. (ng/mL)
	% Accuracy:	96.50

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	2.08e+007
	Manual Modification	No
	Amount:	239. (ng/mL)
	% Accuracy:	79.80

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	4.49e+007
	Manual Modification	No
	Amount:	642. (ng/mL)
	% Accuracy:	107.00

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.65e+007
	Manual Modification	No
	Amount:	610. (ng/mL)
	% Accuracy:	102.00

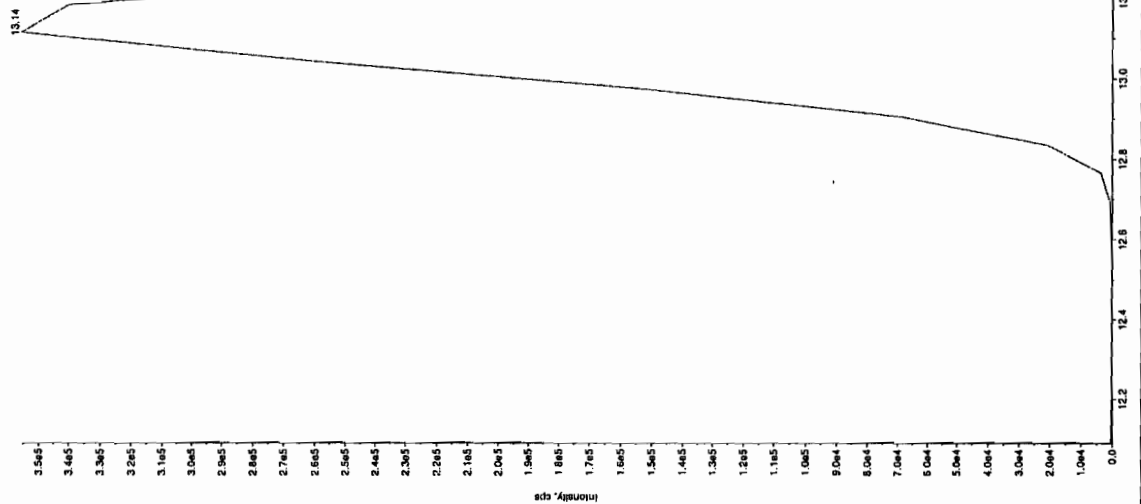


Before Jan 4/23/10

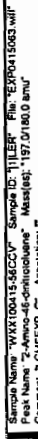
Sample Name: "WVX10015-5620" Sample ID: "1111" File: "EXP015053.wif"  
 Peak Name: "Z-oxido-46-dimethoxy" Mass(es): "197.01/180.0 amu"

Comment: "LCMS-EXP\_C" Annotation -  
 Sample Index: 1  
 Sample Type: QC  
 Calculated Conc: 445. ng/mL  
 Acq. Date: 4/26/2010  
 Acq. Time: 12:57:07 PM

Processing:  
 Method: No  
 Peak Height: 100.00 cps  
 Peak Width: 3.00 points  
 Search Width: 30.0 sec  
 Window: 14.1 min  
 Selected RT: 14.1 min  
 Relative RT: No  
 Ret. Type: Valley  
 Retention Time: 14.1 min  
 Peak Height: 1.10e+004 cps  
 Peak Width: 3.60e+004 cps  
 Peak Area: 11.7 min  
 Peak Time: 14.7 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

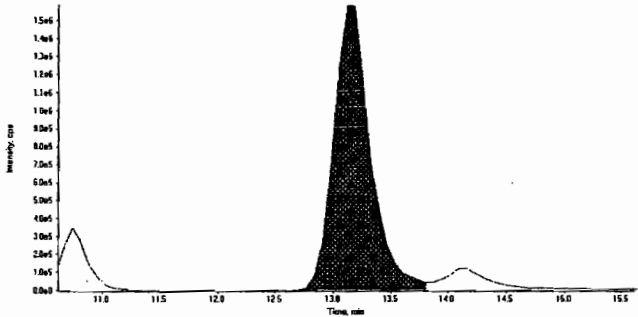


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

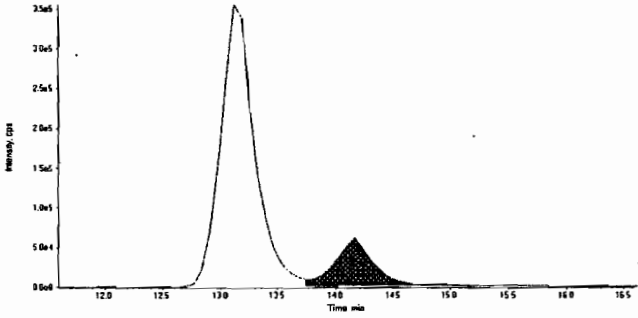
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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

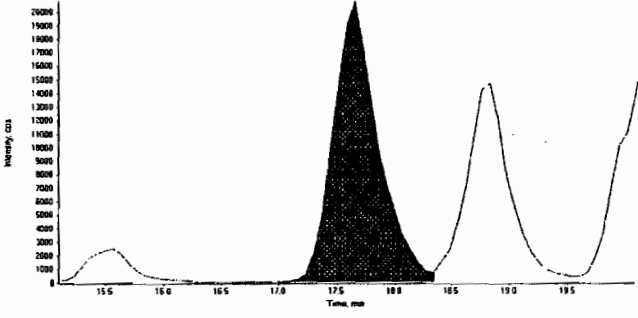
  

	Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	3.56e+007
	Manual Modification	No
	Amount:	605. (ng/mL)
	% Accuracy:	101.00

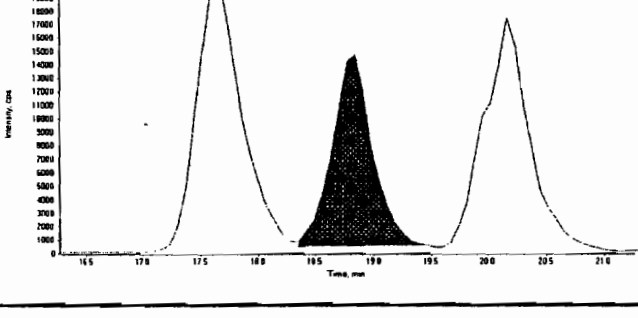
  

	Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	1.43e+006
	Manual Modification	Yes
	Amount:	580. (ng/mL)
	% Accuracy:	96.60

	Compound Name:	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

	Compound Name:	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: "WXX100415-5600" Sample ID: "TILER" File: "EXP041503.wif"

Peak Name: "PETN" Mass(es): "361.162.0 amu"

Sample Index: "1" Amount: "1.504"

Sample Type: "QC"

Concentration: "600. ng/mL"

Acq. Date: "4/18/2010"

Acq. Time: "12:57:07 PM"

Method: "No"

Algorithm: "InertialQuen - 10A"

Peak Height: "150.00 cps"

Peak Width: "0.00 sec"

Sampling Width: "1.00 pps"

Decoded RT: "19.7 min"

Relative RT: "1.304"

Type: "Valley"

Retention Time: "19.7 min"

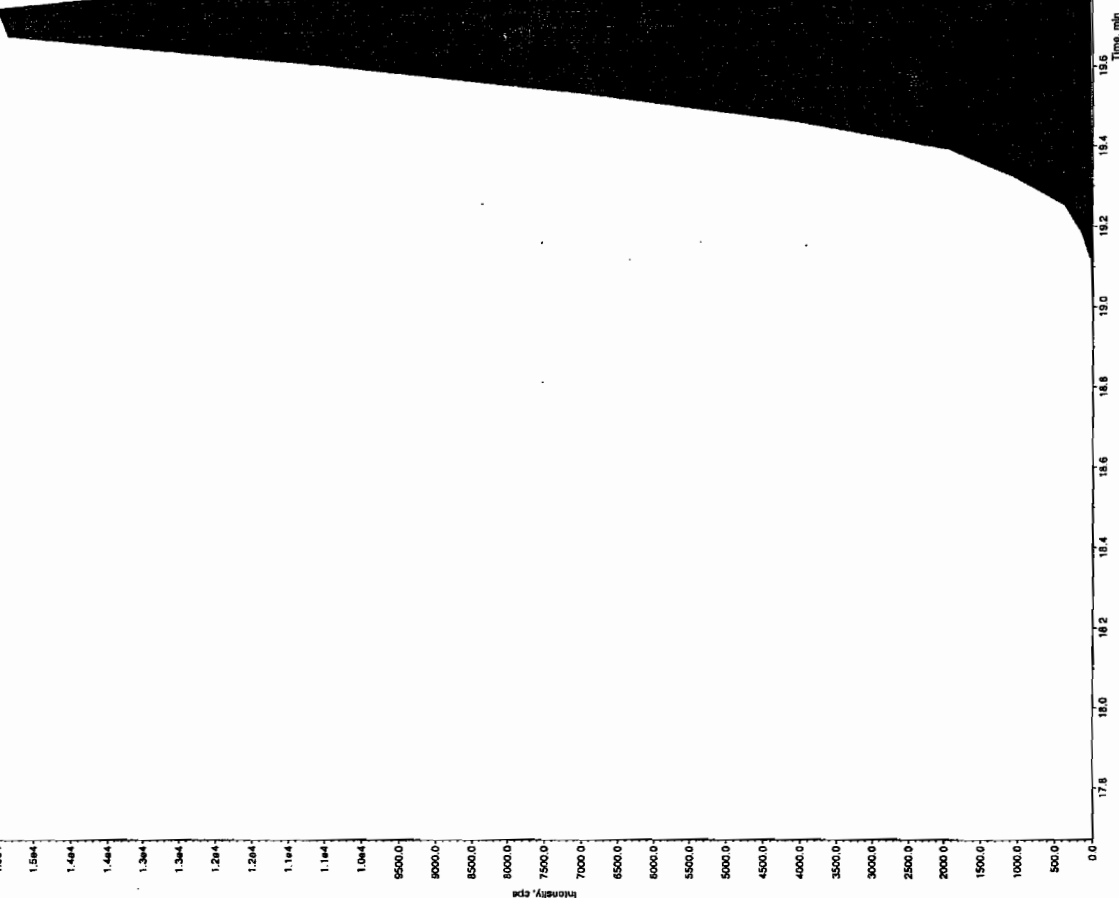
Area: "3.91e-005 counts"

Height: "1.50e-004 cps"

Width: "1.50e-004 min"

Area Time: "21.5 min"

1871



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10

Sample Name: 744015003 Sample ID: 744015003 File: 744015003.mf

Peak Name: TETM Method: 26.102 0 sec

Comment: LCMSXP\_C Acquisition: -

Sample Index: 1

Sample Type: QC

Concentration: 60.0 mg/mL

Calculated Conc: 710.0 mg/mL

Acq. Date: 4/16/2010

Acq. Time: 12:57:07 PM

Modified: Yes

Integration: 60.0 sec

Expected RT: 19.7 min

Use Relative RT: No

Int. Type: Manual

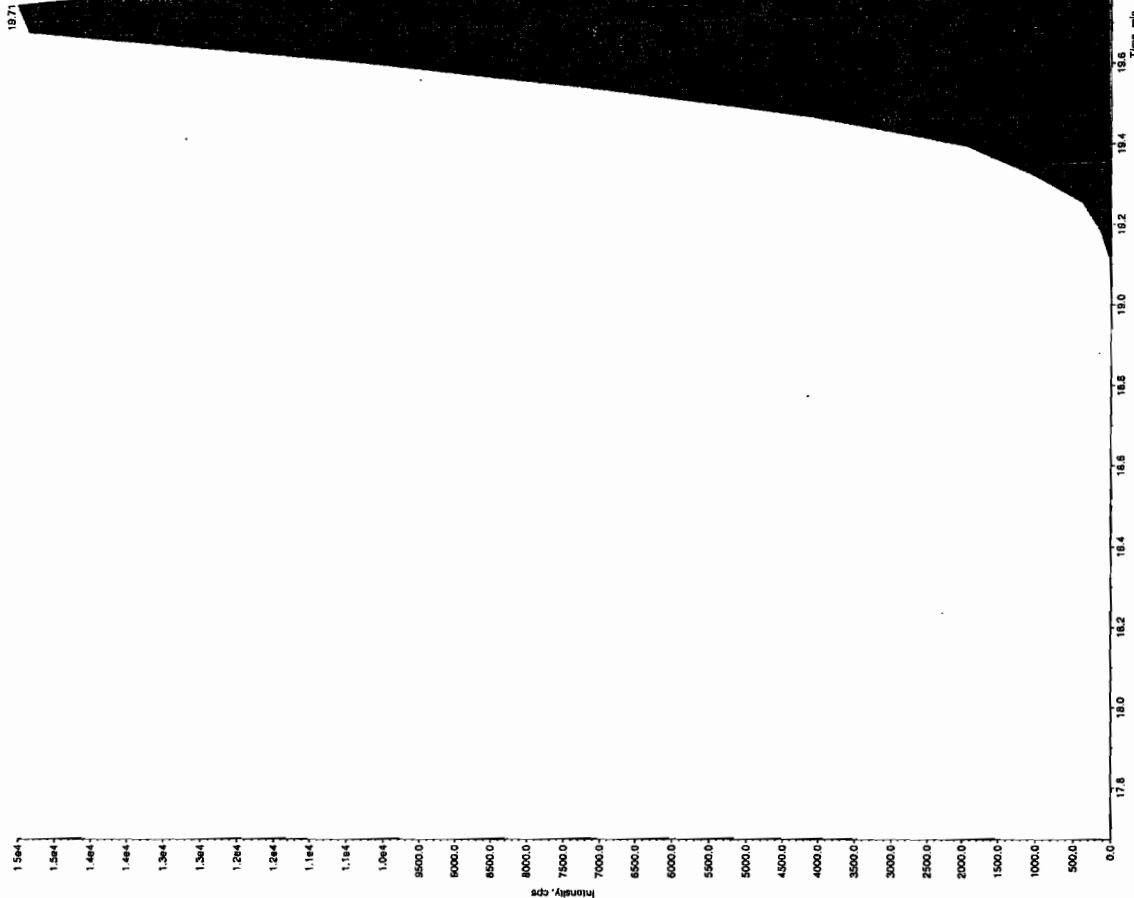
Retention Time: 19.7 min

Area: 3.82e+004 counts

Height: 1.15e+004 cps

Start Time: 19.0 min

End Time: 20.6 min

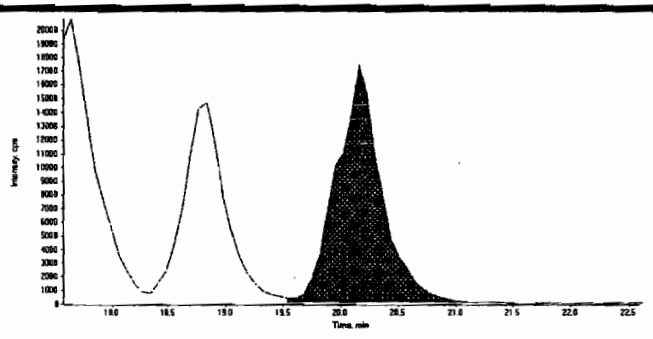


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

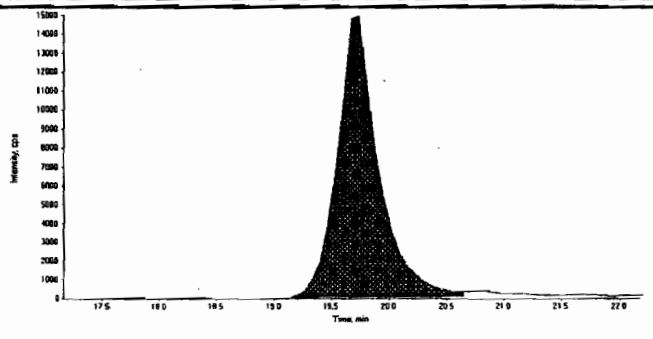
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LCMSMS#3

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:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	20.2
	Area Counts:	4.76e+005
	Manual Modification	No
	Amount:	606. (ng/mL)
	% Accuracy:	101.00

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	19.7
	Area Counts:	3.82e+005
	Manual Modification	Yes
	Amount:	710. (ng/mL)
	% Accuracy:	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 04/23/10*

AVERAGE

101.9

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): 10-2196

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

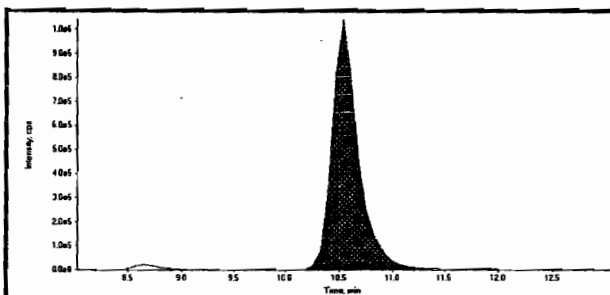
\* Value outside of Recovery Limits



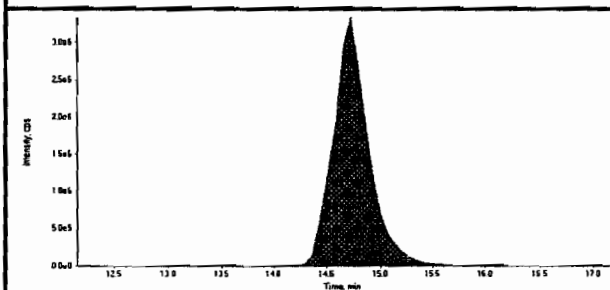
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

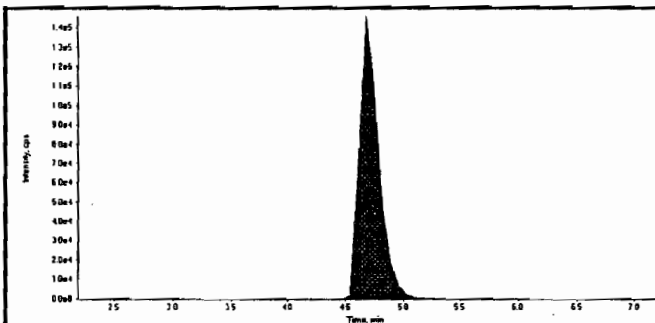
Data File	EXP0415065.wiff	Acquisition Date	4/16/2010 1:49:00 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



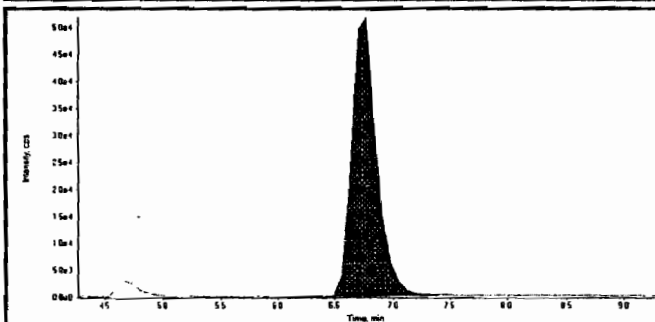
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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:* 4/23/10 Hmx 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

Sample Name: 8321A-E-056, Sample ID: 8321A-E-056, File: 8321A-E-056.wif

Sample Index: 1

Sample Type: 1000

Sample Concentration: 15.8 ng/ml

Acq. Date: 4/16/2010

Acq. Time: 1:49:00 PM

File: 8321A-E-056

Proc. Algorithm: IntelliQuan - IQA

Peak Height: 1000.00 cps

Peak Width: 0.00 sec

Peak Area: 1000.00 cps

Peak Window: 60.0 sec

Detected RT: 12.0 min

Relative RT: No

Peak Type: Valley

Integration Time: 12.0 min

Area: 2.02e+006 counts

Height: 1.04e+005 cps

Width: 11.0 min

Time: 11.0 min

1201

1045

1045

10005

88004

98004

84004

92004

90004

88004

85004

84004

82004

80004

58004

56004

54004

52004

50004

48004

46004

44004

42004

40004

38004

36004

34004

32004

30004

28004

26004

24004

22004

20004

18004

16004

14004

12004

10004

8000.00

6000.00

4000.00

2000.00

0.00

Intensity, cps

Time, min

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

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Oker 4/23/10

Sample Name: "WAX10015-5701" Sample ID: "TLER" File: "EXP0415065.vul"

Peak Name: "2,4-dichlorophenol" Mass(es): "182.046.0 amu"

Comment: "LCMSXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: CC  
 Concentration: 20.0 ng/mL  
 Calculated Conc: 15.1 ng/mL  
 Acq. Date: 4/14/2010  
 Acq. Time: 1:49:00 PM

Injection Volume: 10.0 µL  
 Inj. Temp: 100.0 °C  
 Inj. Time: 12.0 min  
 Inj. Pressure: 10.0 bar

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

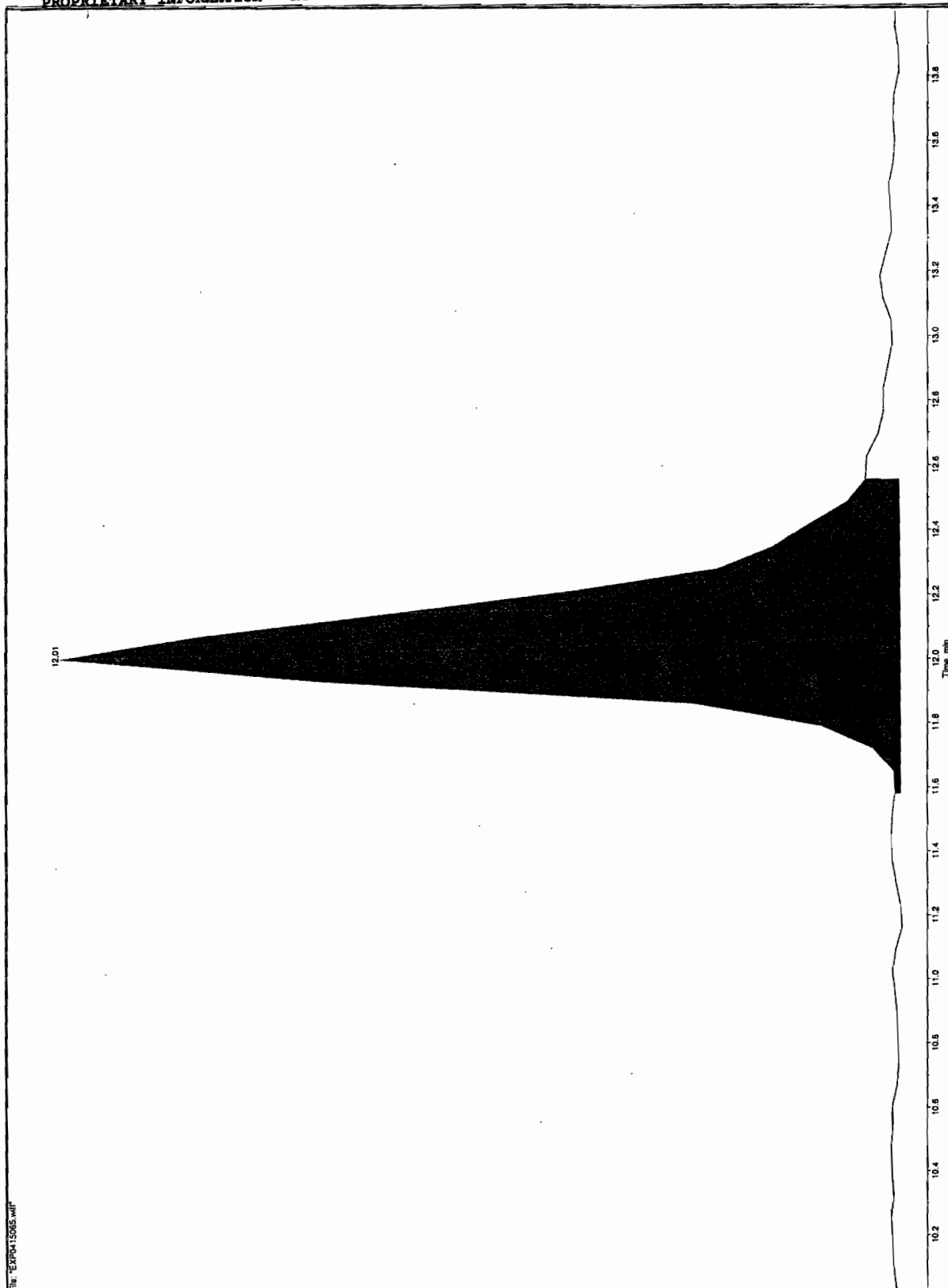
Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min

Acq. Type: Manual  
 Acquisition Time: 1.95e+006 counts  
 Inj. Temp: 1.05e+003 cps  
 Inj. Time: 11.6 min  
 Inj. Pressure: 12.6 min



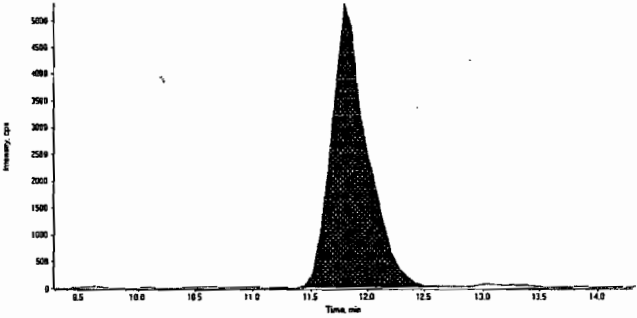
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

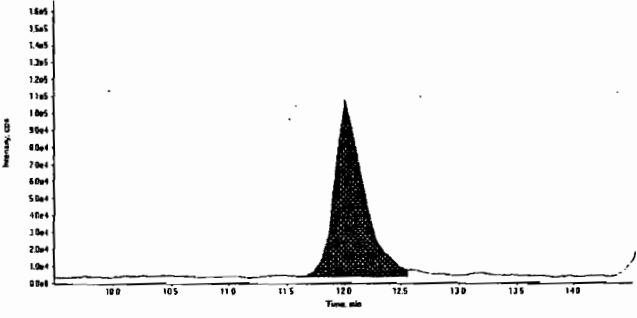
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

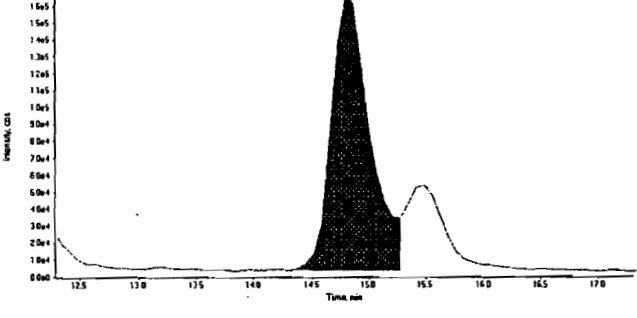
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.8
	Area Counts:	1.18e+005
	Manual Modification	No
	Amount:	37.4 (ng/mL)
	% Accuracy:	93.40

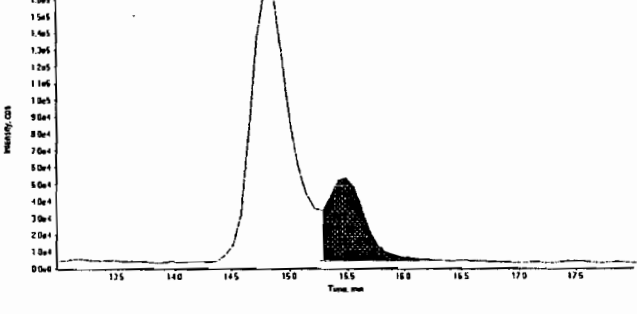
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.0
	Area Counts:	1.95e+006
	Manual Modification	Yes
	Amount:	15.1 (ng/mL)
	% Accuracy:	75.30

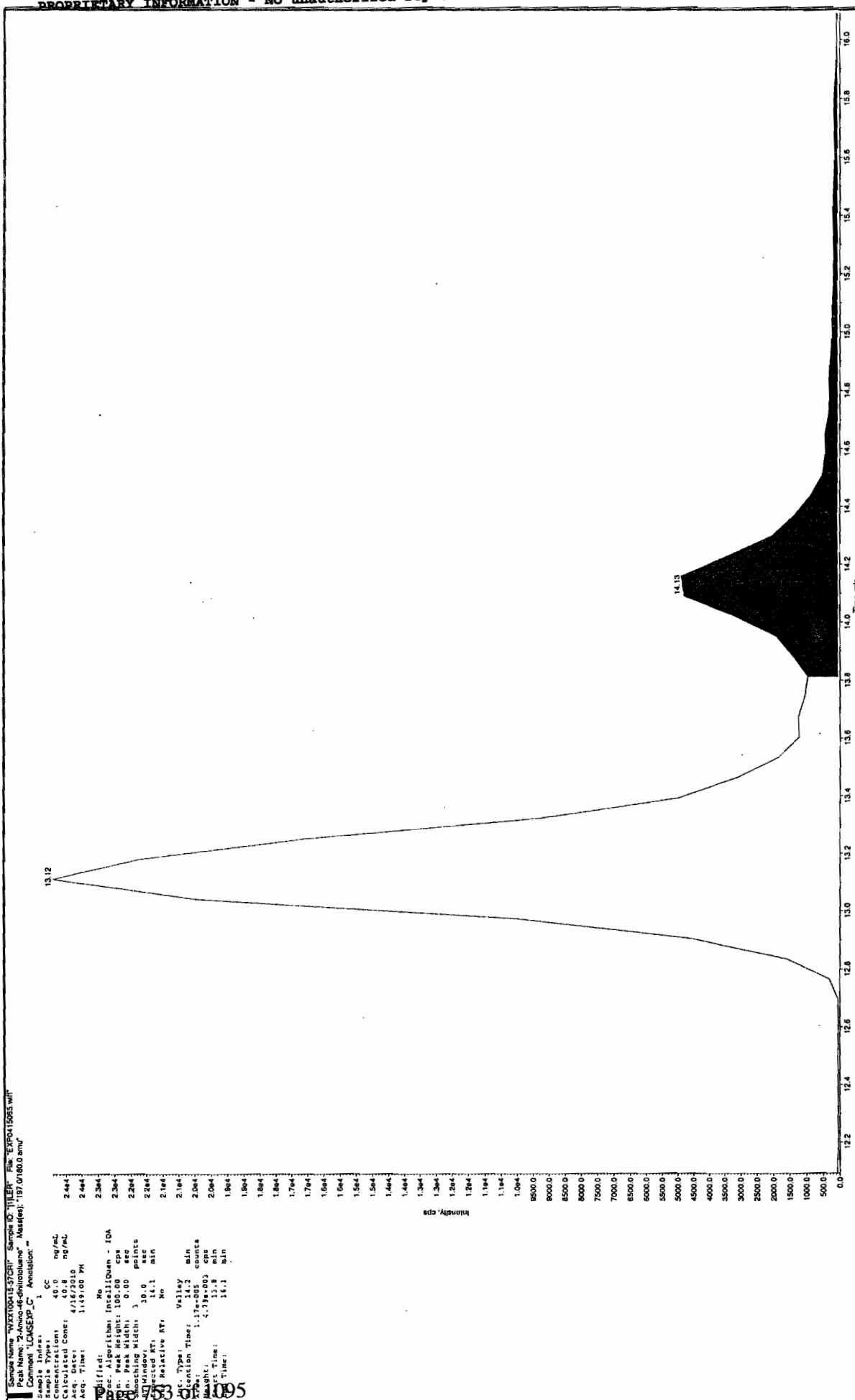
  

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.8
	Area Counts:	3.94e+006
	Manual Modification	No
	Amount:	35.4 (ng/mL)
	% Accuracy:	88.60

	<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 SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after den 4/23/10

Sample Name: "WV100115-1001" Sample ID: "WV100115-1001" File: "WV100115-1001.w" Path: "C:\Program Files\Agilent\ChemStation\MSDCHEM\157.D\1000 Smr"

Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1

Sample Type: OC

Concentration: 40.0 ng/mL

Concentration: 30.0 ng/mL

Acq. Date: 4/16/2010

Acq. Time: 1:45:00 PM

Acq. Time: 2:44:00 PM

Acq. Time: 2:34:00 PM

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Acq. Time: 2:34:00 PM

13.12

14.13

Time, min

Intensity, cps

Page 154 of 1095

\*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>	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

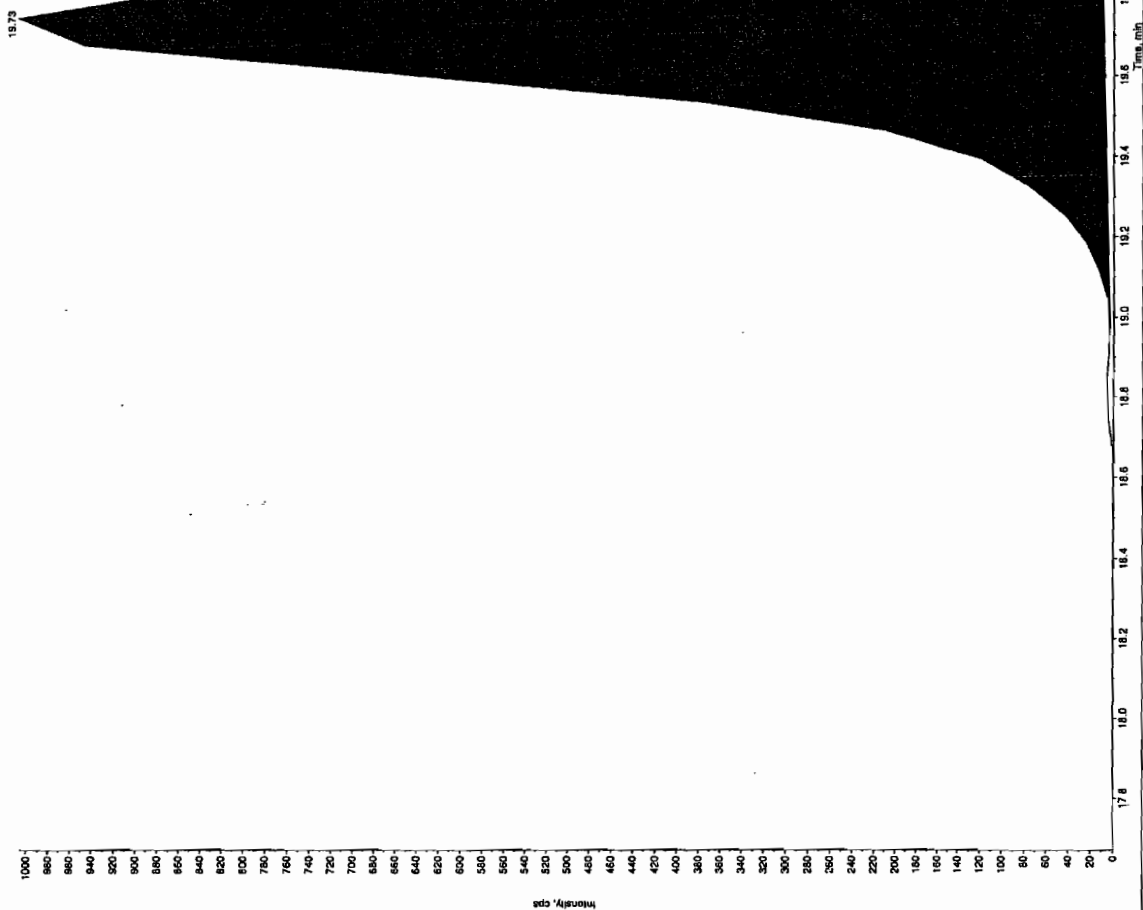
Sample Name: "XXX100415-57C" Sample ID: "TILER" File: "EXP415055.wif"

Peak Name: "TETN" Mass(es): "361.162.0 amu"

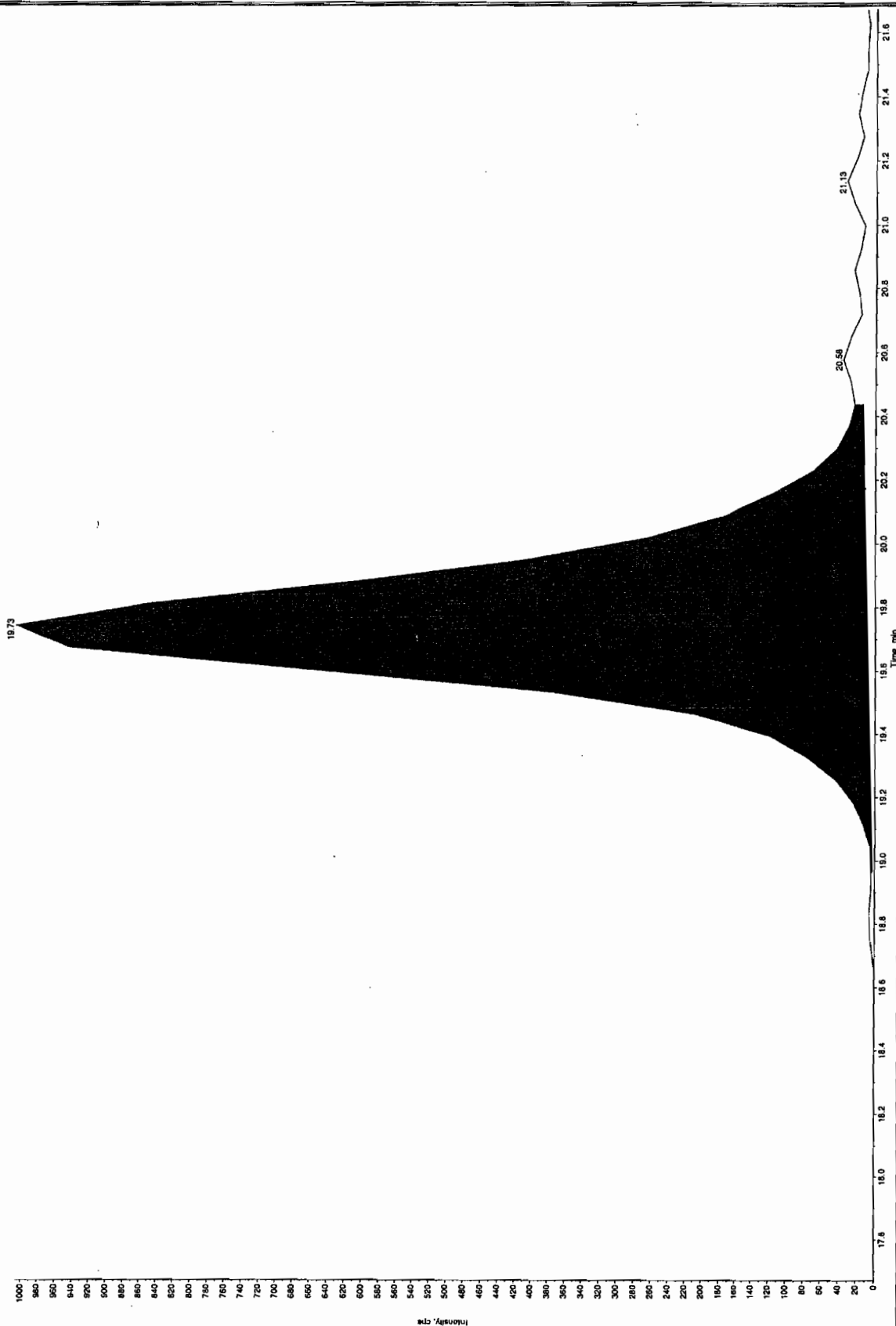
Comment: "LOUSEN\_C" Annotation:  
 Sample Type: 1 QC  
 Concentration: 10.0 ng/mL  
 Calculated Conc: 4/15/2010  
 Acq. Time: 1:49:00 PM

Modified:  
 Name: "TETN" Inset: "Quan - 10A"  
 Origin: Peak Height: 100.00 cps  
 Baseline: Peak Width: 0.00 sec  
 Counting Width: 1.00 points  
 Counting Rate: 100.00 cps  
 Retention Time: 19.73 min  
 Relative RT: No

Valley:  
 Type: Valley  
 Retention Time: 19.73 min  
 Height: 2.47e+004 counts  
 Width: 9.97e+002 cps  
 Counting Rate: 100.00 cps  
 Counting Time: 20.17 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



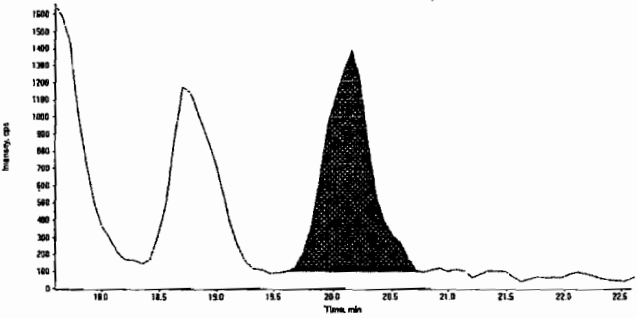
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

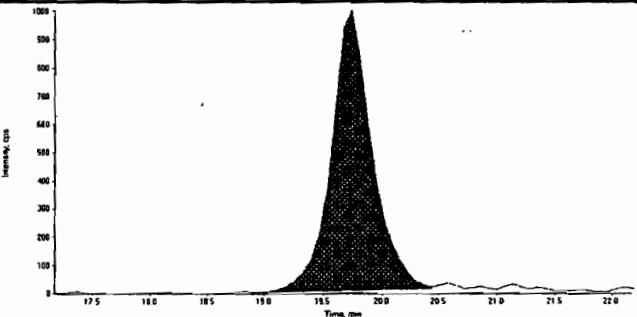
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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:	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

	Compound Name:	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

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*For*  
*4/27/10*

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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%

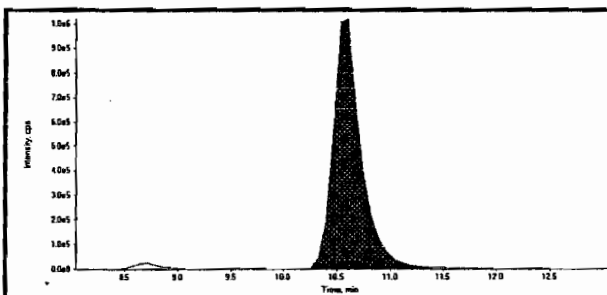
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

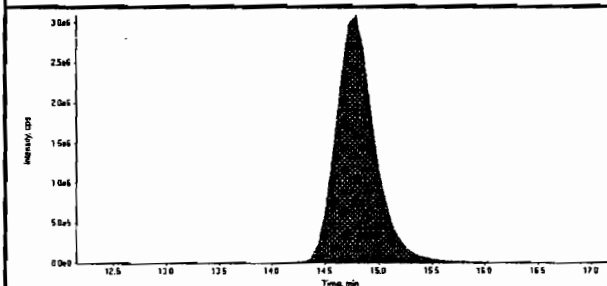
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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



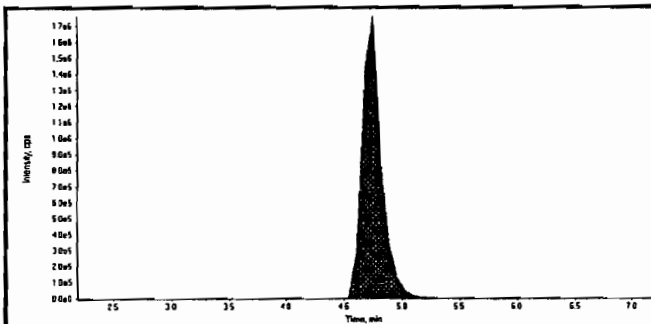
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	18600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

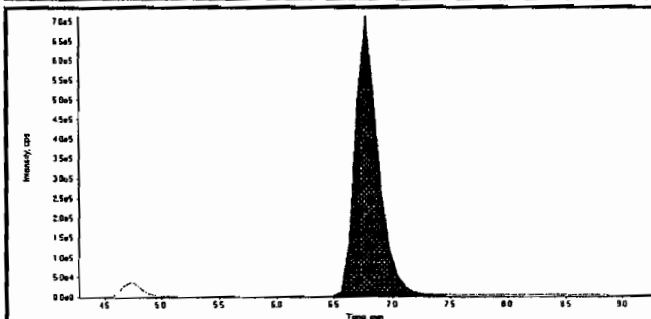


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	77800000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

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

4/16/2010

4/16/2010

Before Jan 4/23/10

Sample Name: WXT1004115-56207 Sample ID: T11ER File: EXP015078.wif

Peak Name: 248-Tetrilololane Mass(es): 227.1209.8 amu

Comment: LCMS-EXP-C Annotation: -

Sample Index: 1

Sample Type: QC

Calculated Conc: 600 ng/mL

Acq. Date: 4/16/2010

Acq. Time: 4:34:58 PM

Method: No

Modified: No

Integrator: IntelliQuan - 10A

Peak Width: 100.0 cps

Sampling Width: 3.000 points

Filter: 30.0 sec

Filter Index: 13.1 min

Record RT: 13.1 min

Relative RT: No

Type: Valley

Retention Time: 13.2 min

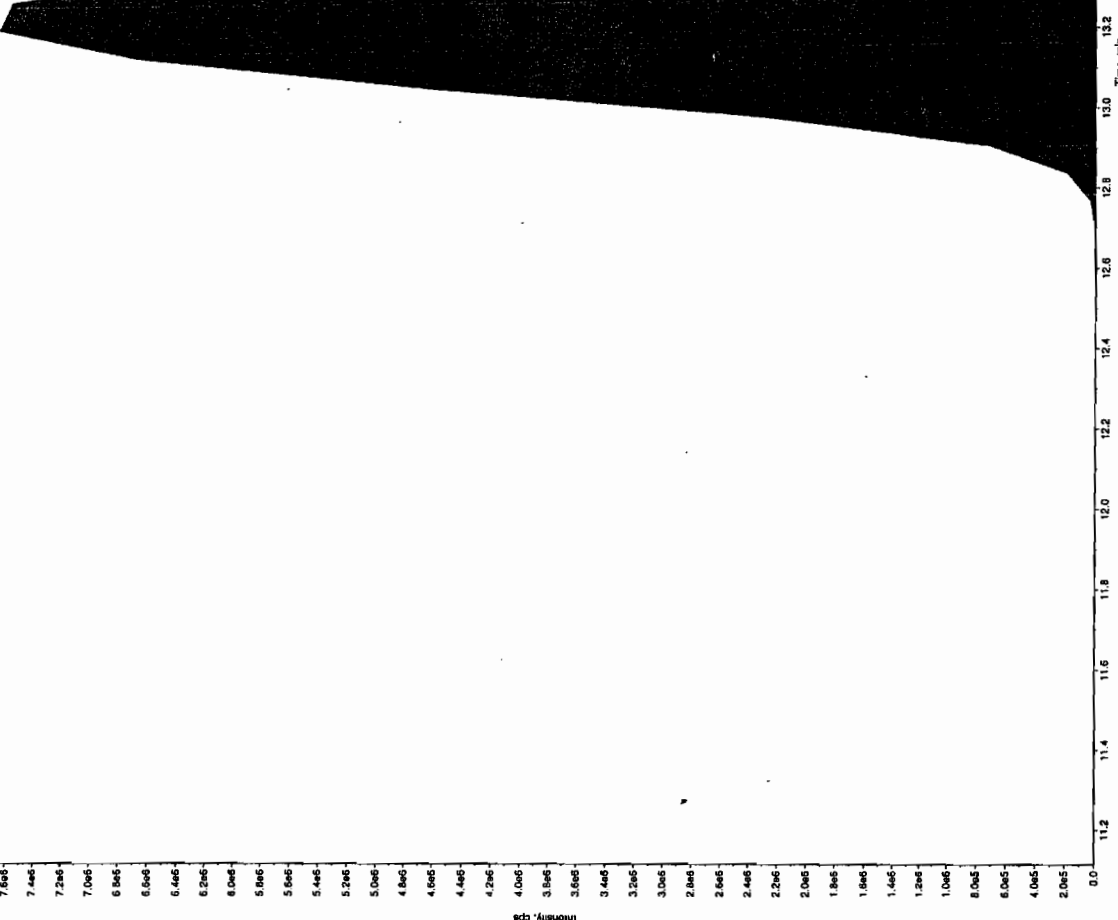
Height: 3.12e+006 counts

Area: 7.16e+006

Start Time: 12.5 min

End Time: 13.5 min

1321



\*GEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#3



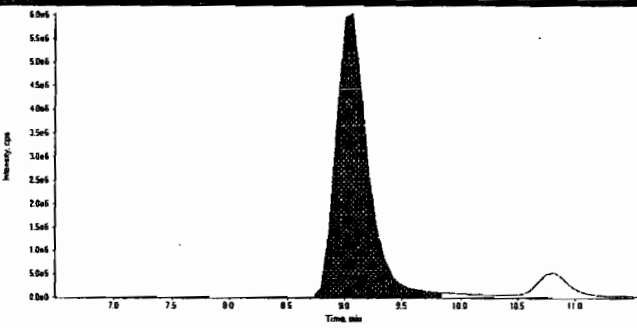


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

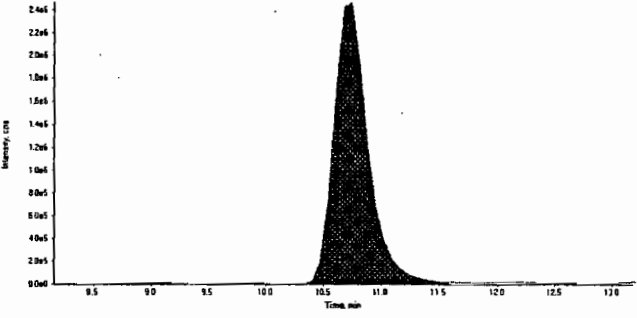
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	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

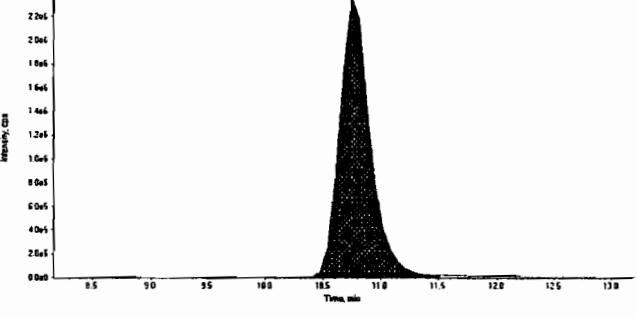
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.07
	Area Counts:	1.20e+008
	Manual Modification	No
	Amount:	522. (ng/mL)
	% Accuracy:	86.90

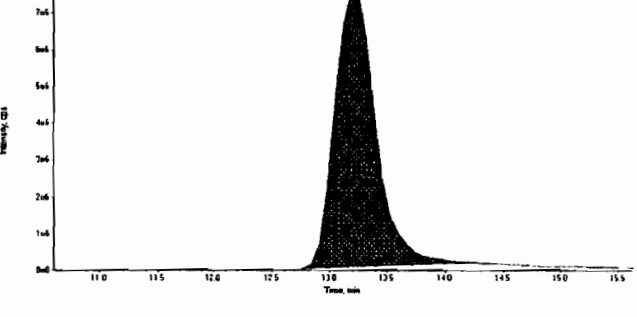
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	5.18e+007
	Manual Modification	No
	Amount:	506. (ng/mL)
	% Accuracy:	84.40

	<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

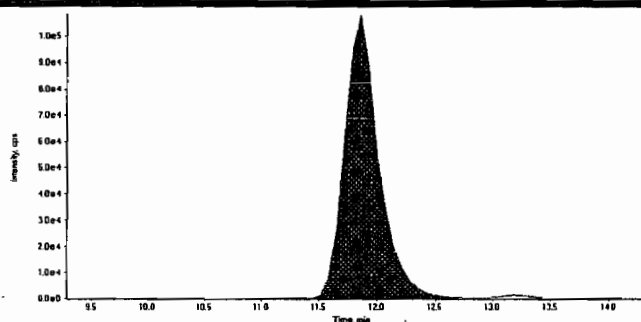
  

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	1.92e+008
	Manual Modification	Yes
	Amount:	541. (ng/mL)
	% Accuracy:	90.20

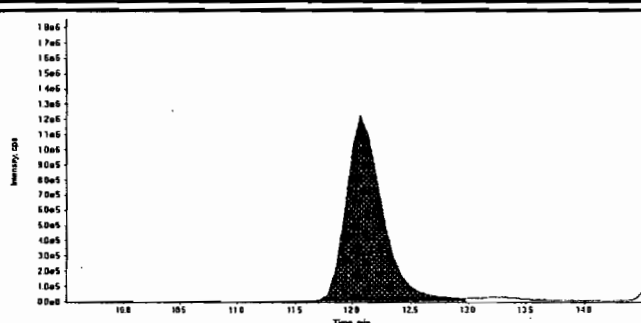
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

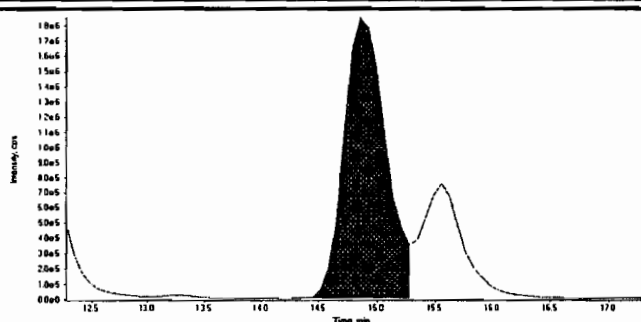
Data File	EXP0415076.wiff	Acquisition Date	4/16/2010 6:34:58 PM
Sample Name	WXX100416-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



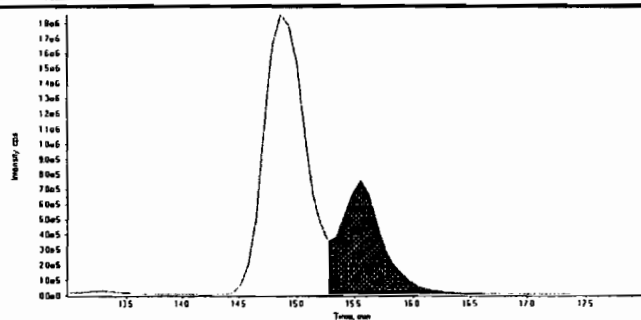
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	11.8
Actual RT:	11.9
Area Counts:	2.22e+006
Manual Modification	No
Amount:	584. (ng/mL)
% Accuracy:	97.40



Compound Name:	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



Compound Name:	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

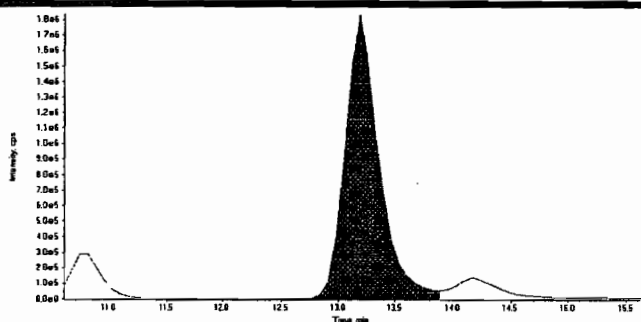


Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.5
Actual RT:	15.6
Area Counts:	1.98e+007
Manual Modification	No
Amount:	623. (ng/mL)
% Accuracy:	104.00

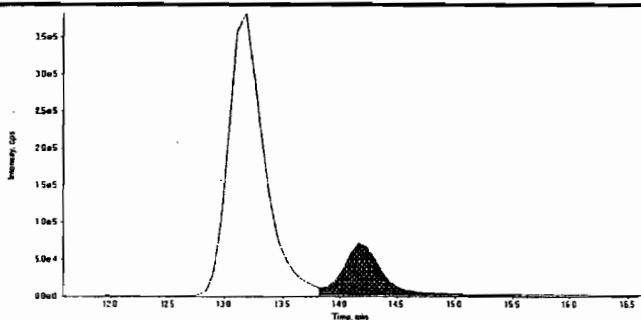
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

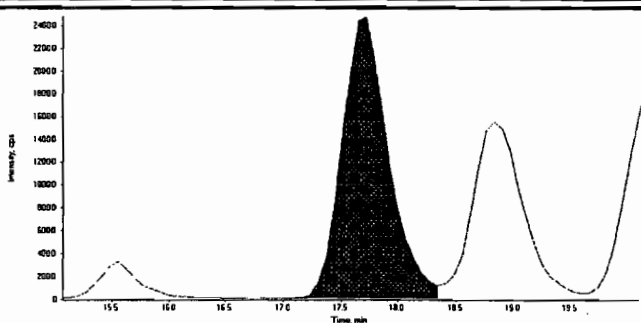
Data File	EXP0415076.wiff	Acquisition Date	4/16/2010 6:34:58 PM
Sample Name	WXX100416-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



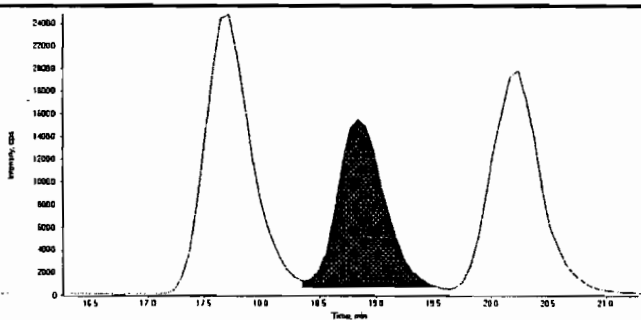
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.1
Actual RT:	13.2
Area Counts:	3.84e+007
Manual Modification	No
Amount:	554. (ng/mL)
% Accuracy:	92.40



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

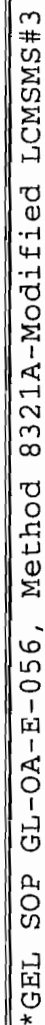


Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	17.6
Actual RT:	17.7
Area Counts:	7.07e+005
Manual Modification	No
Amount:	575. (ng/mL)
% Accuracy:	95.80



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

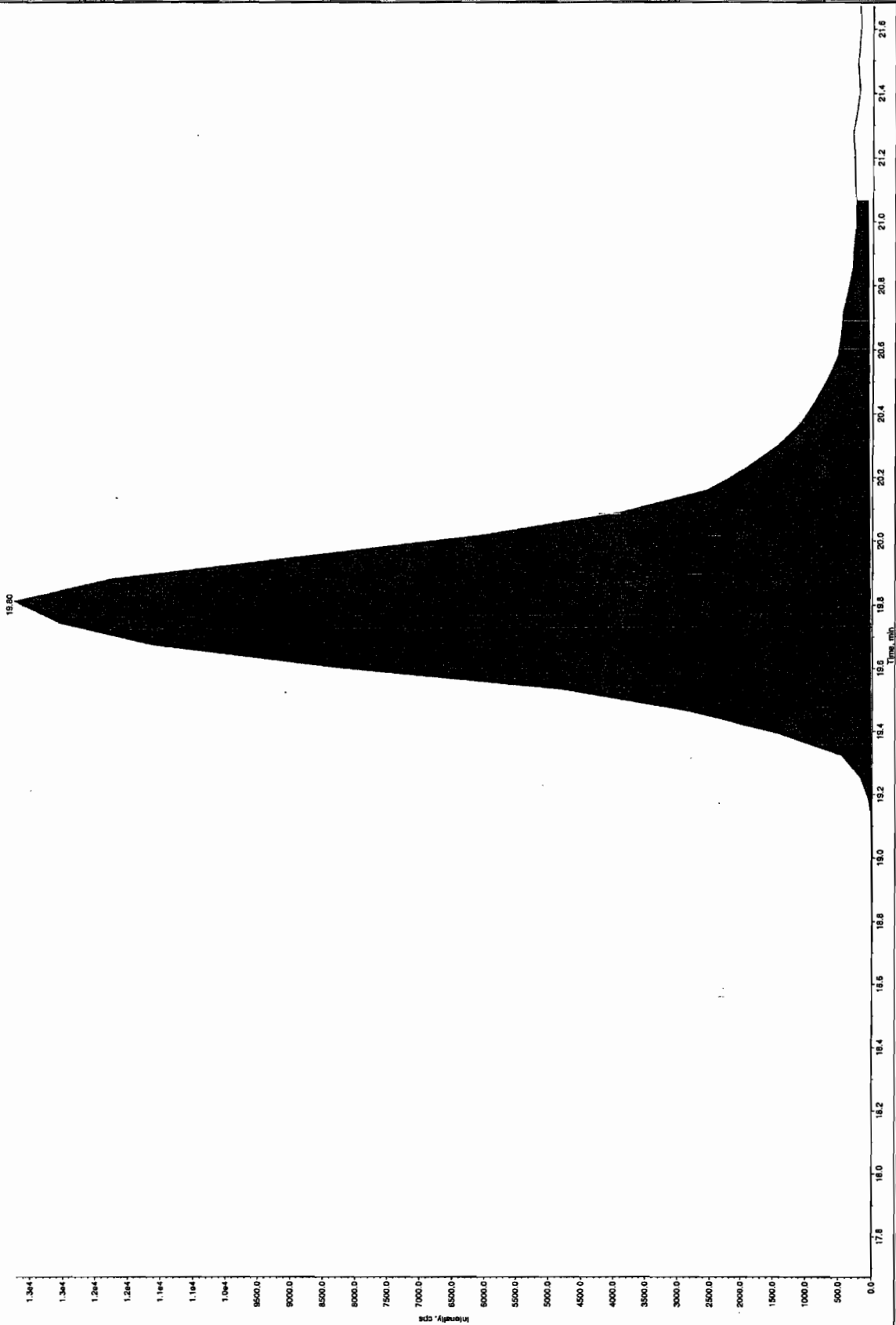


after den 4/23/10

Sample Name: 8321A-E-056; Sample ID: 8321A-E-056; File: E:\8321A-E-056.wif

Print Name: 8321A-E-056; Method: 8321A-E-056; Common: LCMSMS\_C; Annotation: 1

Sample Index: 1  
 Sample Type: QC  
 Sample Date: 4/16/2010  
 Acq. Date: 4/16/2010  
 Acq. Time: 6:24:58 PM  
 Modified: Yes  
 RT Window: 60.0 sec  
 Expected RT: 19.7 min  
 Unexplained RT: No  
 Inj. Type: Manual  
 Inj. Volume: 10.0 µl  
 Inj. Time: 19.8 min  
 Acquisition Time: 4.00-20.00 min  
 Start Time: 19.7 min  
 Stop Time: 21.1 min  
 End Time: 21.1 min



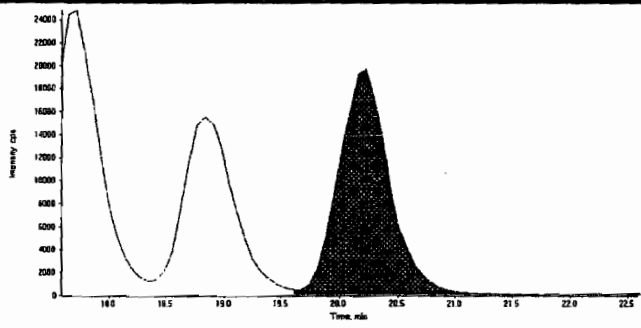
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

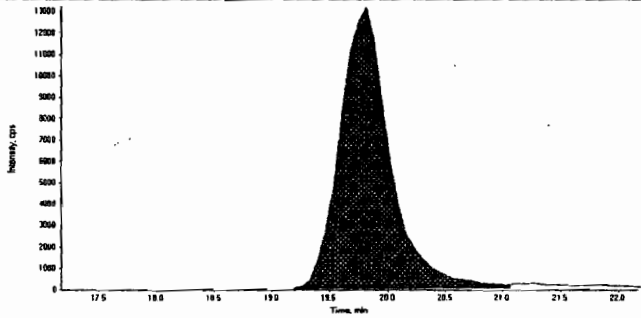
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<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>	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

	<b>Compound Name:</b>	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%	

*Jan 4/16/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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

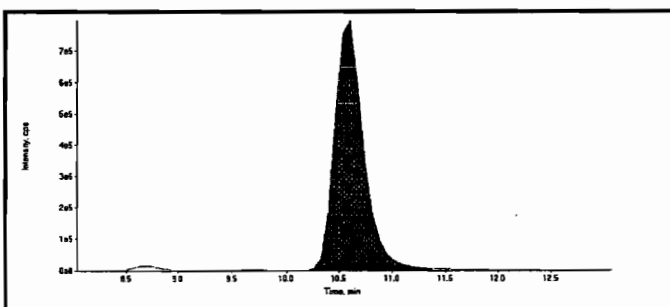
\* Value outside of Recovery Limits



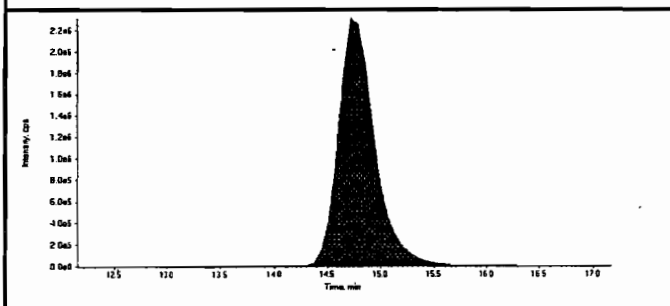
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

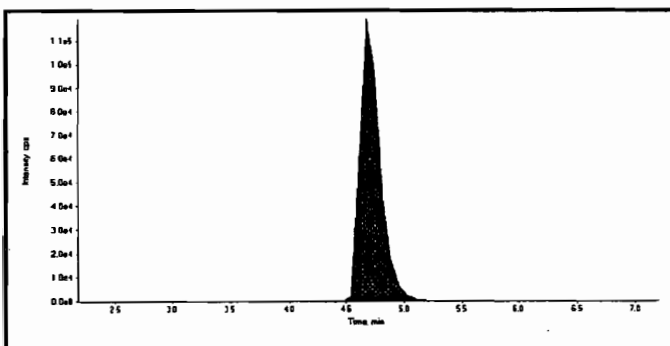
Data File	EXP0415078.wiff	Acquisition Date	4/16/2010 7:26:48 PM
Sample Name	WXX100416-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	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)

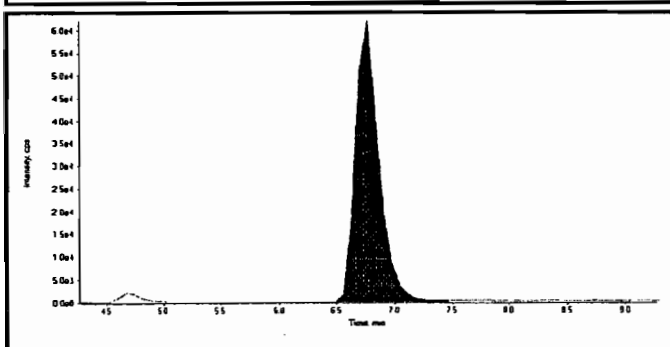
Please refer to Form 8 for a list of Internal Standard Recoveries

	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:*  
HMX 04/23/10  
RDX 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-26-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-46-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

Sample Name: "WXX100415-17CH" Sample ID: "111ER" File: "EXP015078.wif"

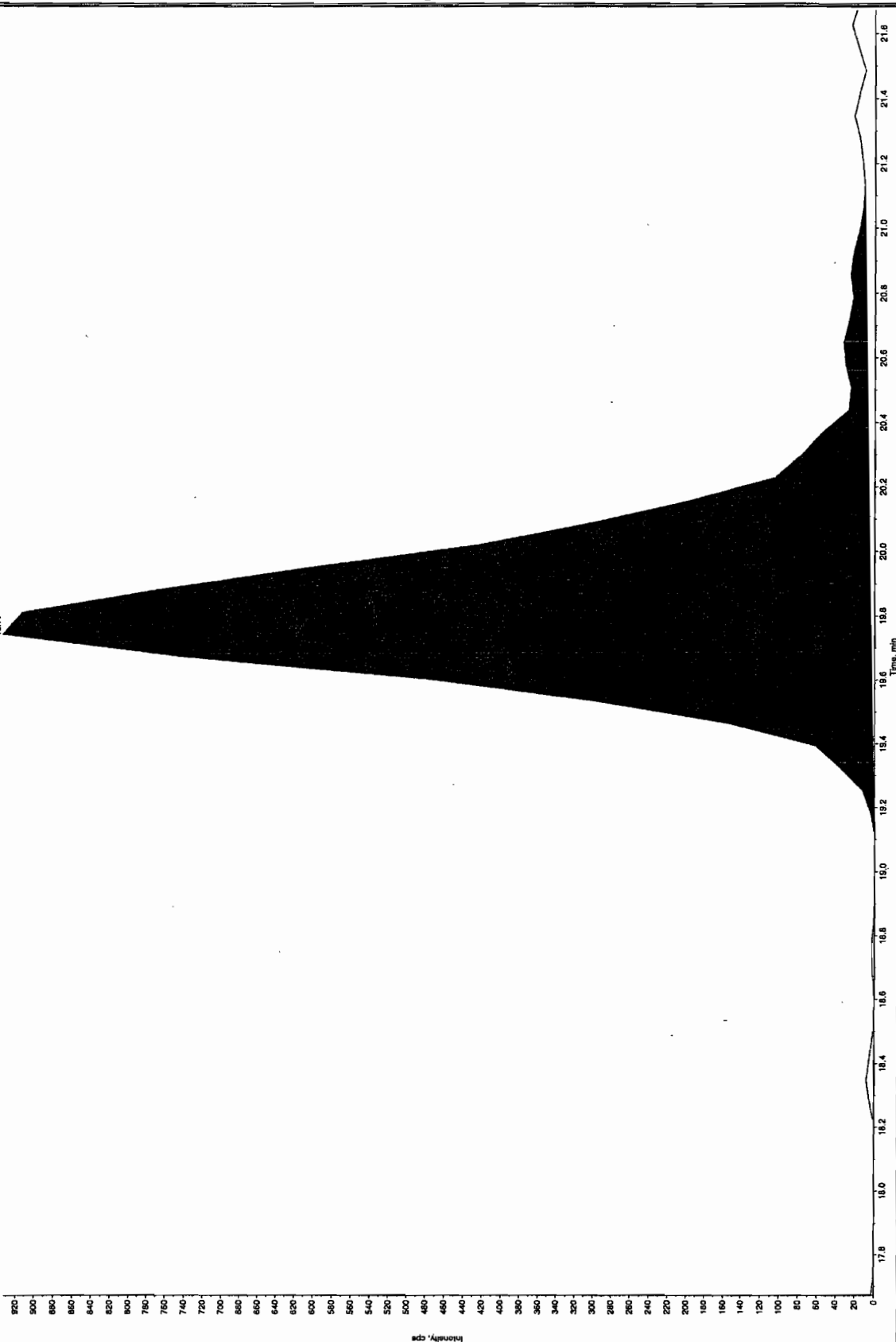
Peak Name: "PE1M" Masses: "361.16220 amu"

Sample Index: 1

Sample Type: CC  
Concentration: 40.0 ng/mL  
Injection Volume: 10.0 µL  
Acq. Date: 4/18/2010  
Acq. Time: 7:26:48 PM

Qualified: No  
Min. Peak Height: 100.00 cps  
Min. Peak Width: 0.00 sec  
Min. Peak Area: 100.00 points  
Min. Peak RT: 19.7 min  
Relative RT: No  
Min. Peak Type: Valley  
Min. Peak Time: 19.7 min  
Min. Peak Height: 1.61e-004 counts  
Min. Peak Area: 5.30e-002 cps  
Min. Peak RT: 19.7 min  
Min. Peak Time: 19.7 min

18.77



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10

Sample Name: "WXX100415-57GR" Sample ID: "TILR" File: "EXP0415078.wif"

Peak Name: "PETN" Masses: "361.1022.0 amu"

Concentration: "CASEX-C" Acquisition: "QC"

Sample Type: "QC"

Concentration: 40.0 ng/mL

Acquisition Date: 4/18/2010

Acquisition Time: 7:26:48 PM

Acquisition Time: 7:26:48 PM

Acquisition Time: 7:26:48 PM

Acquisition Time: 7:26:48 PM

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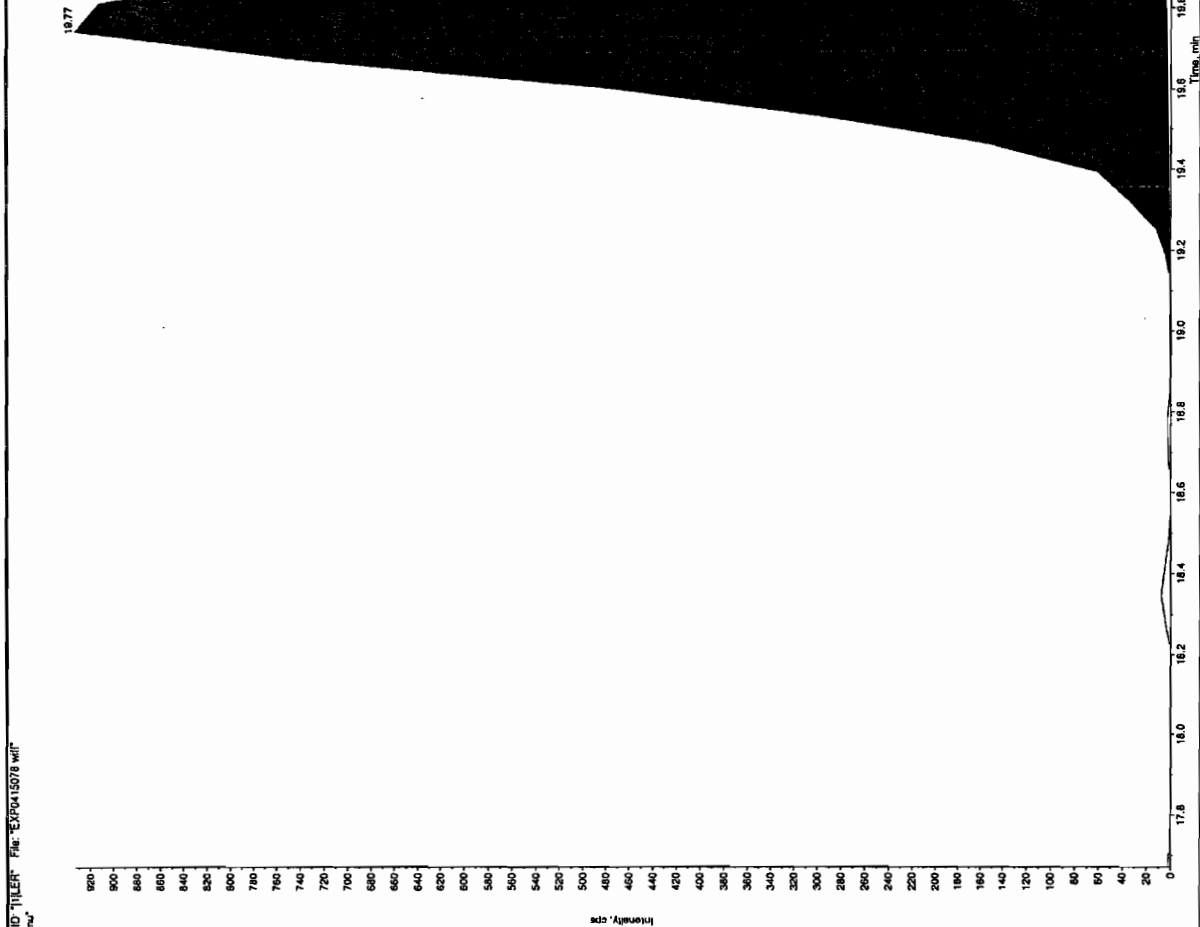
Acquisition Time: 7:26:48 PM

Acquisition Time: 7:26:48 PM

Acquisition Time: 7:26:48 PM

Acquisition Time: 7:26:48 PM

Acquisition Time: 7:26:48 PM



\*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>	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>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.2
	<b>Area Counts:</b>	2.93e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	44.8 (ng/mL)
	<b>% Accuracy:</b>	112.00

	<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>	2.56e+004
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	49.4 (ng/mL)
	<b>% Accuracy:</b>	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

*Ammonium*

AVERAGE

✓ 101.9

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Lan*  
*4/20/10*



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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

Sample Name: "WXX100409-27CR1" Sample ID: "H1LER" File: "EXS04090013.wif"

Peak Name: "TATB" Mass(es): "257.22049 amu"

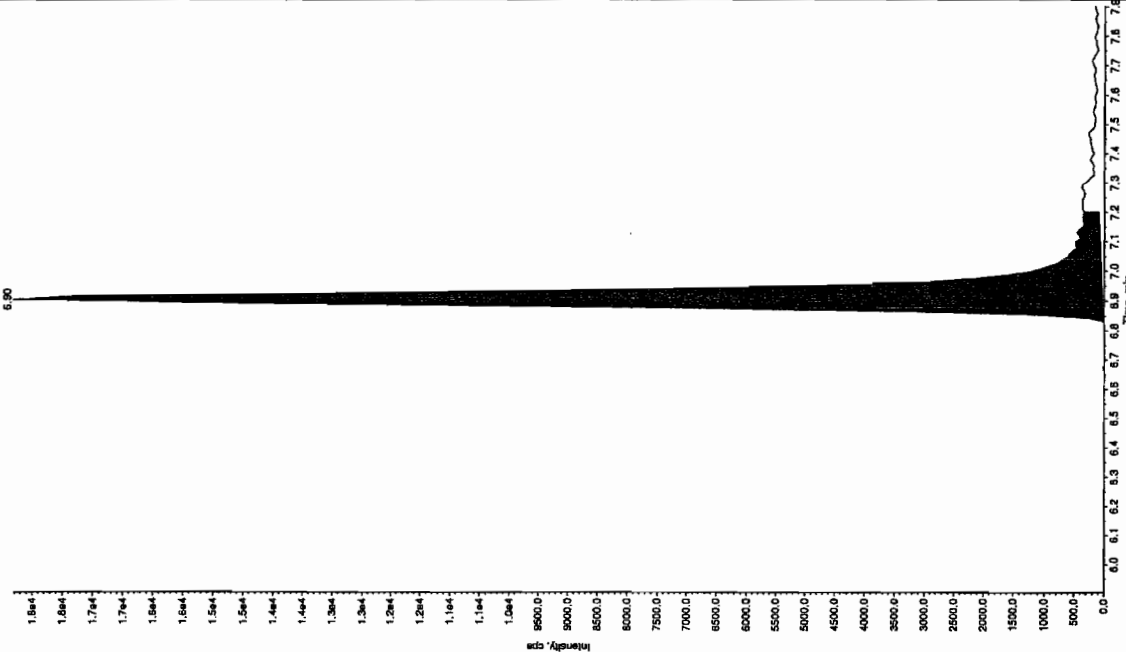
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 102. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 10:23:17 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: 6.90 min  
Area: 7.77e+004 counts  
Height: 18280.220 cps  
Start Time: 6.82 min  
End Time: 7.20 min



Sample Name: "WXX100409-27CR1" Sample ID: "H1LER" File: "EXS04090013.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0460 amu"

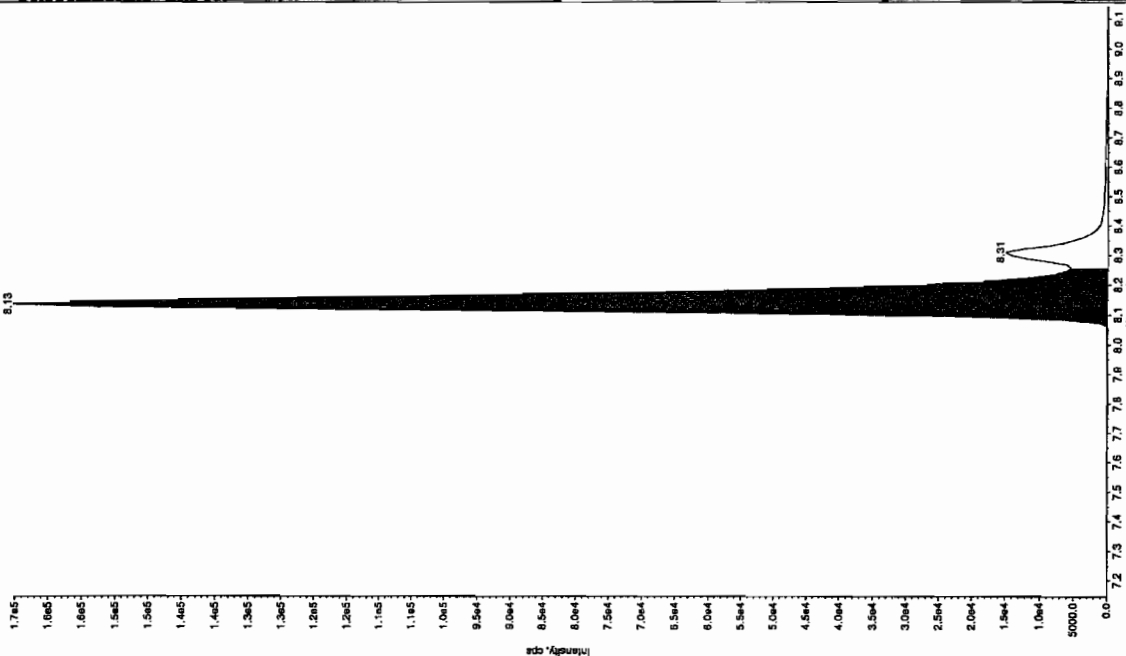
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 102. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 10:23:17 AM

Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.14 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.13 min  
Area: 6.91e+005 counts  
Height: 165135.025 cps  
Start Time: 8.03 min  
End Time: 8.26 min



Jan 4/12/10

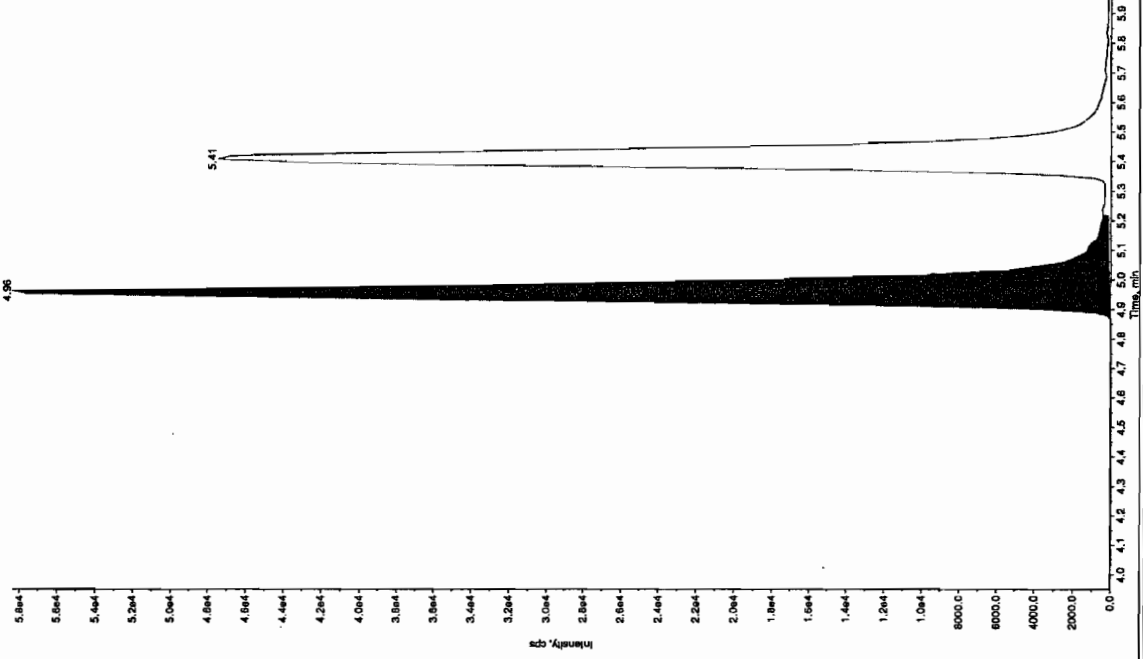
Sample Name: "WXX100409-27CH1" Sample ID: "11LEP" File: "EXS04090013.wif"  
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/181.9 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: OC  
Concentration: 50.0 ng/mL  
Calculated Conc: 49.0 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 10:23:17 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: 8.30 min  
Area: 4.15e+005 counts  
Height: 109477.501 cps  
Start Time: 8.23 min  
End Time: 8.40 min



Sample Name: "WXX100409-27CH1" Sample ID: "11LEP" File: "EXS04090013.wif"  
Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "186.0/185.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: OC  
Concentration: 100.0 ng/mL  
Calculated Conc: 83.7 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 10:23:17 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: 4.96 min  
Area: 2.49e+005 counts  
Height: 58330.366 cps  
Start Time: 4.93 min  
End Time: 5.22 min



Sample Name: "WXX100409-27C1" Sample ID: "111ER" File: "EXS04090013.wif"

Peak Name: "119(o-cresyl) phosphate" Mass(es): "369/191.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1

Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 4/9/2010 ng/mL  
Acq. Date: 10/23/17 AM  
Acq. Time: 10:23:17 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

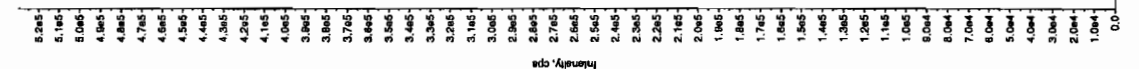
Retention Time: 10.8 min

Area: 2.13e+006 counts

Height: 529692.078 cps

Start Time: 10.7 min

End Time: 11.2 min



Sample Name: "WXX100409-27C1" Sample ID: "111ER" File: "EXS04090013.wif"

Peak Name: "24-Diamino-5-nitrothiophene" Mass(es): "166/046.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1

Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 4/9/2010 ng/mL  
Acq. Date: 10/23/17 AM  
Acq. Time: 10:23:17 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

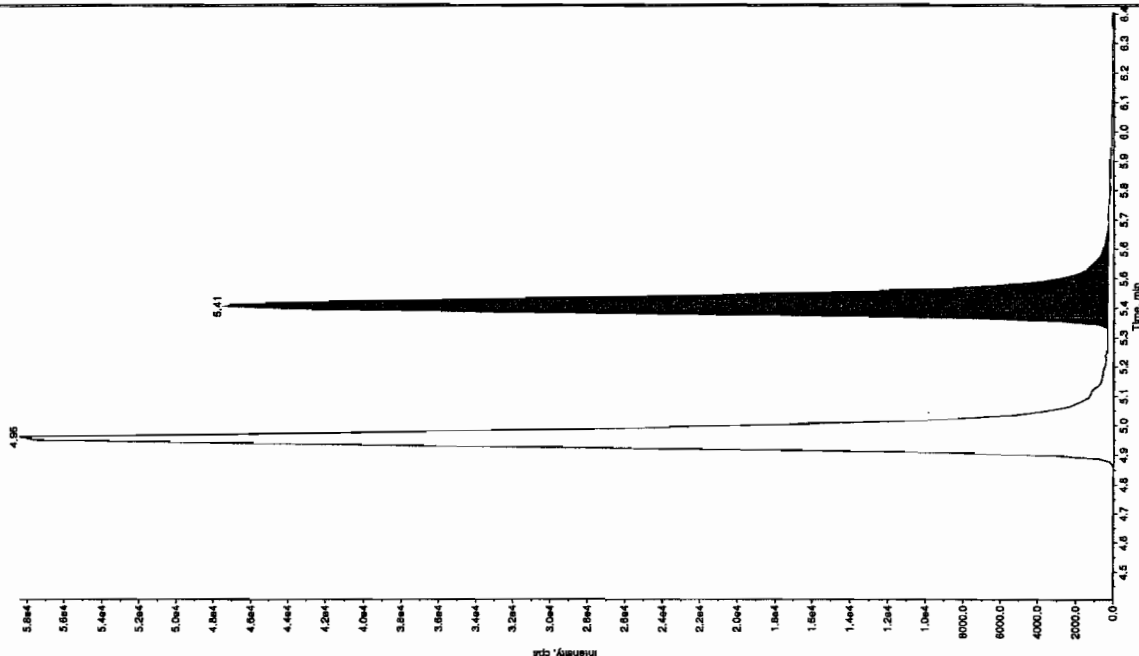
Retention Time: 5.41 min

Area: 2.07e+005 counts

Height: 47109.501 cps

Start Time: 5.31 min

End Time: 5.66 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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%

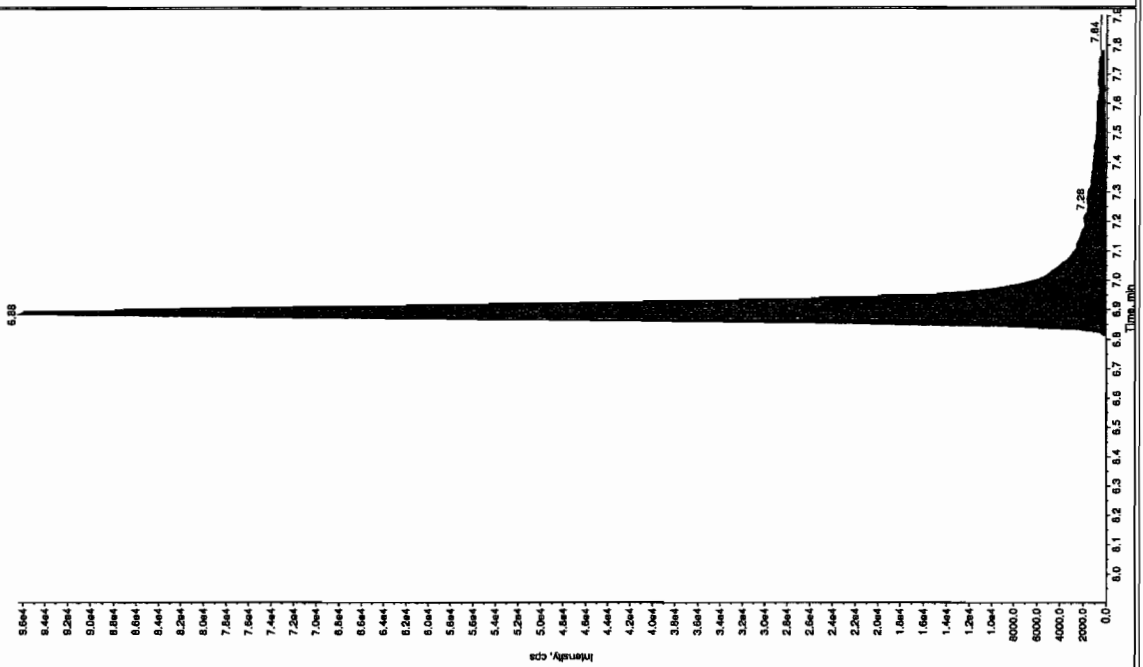
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

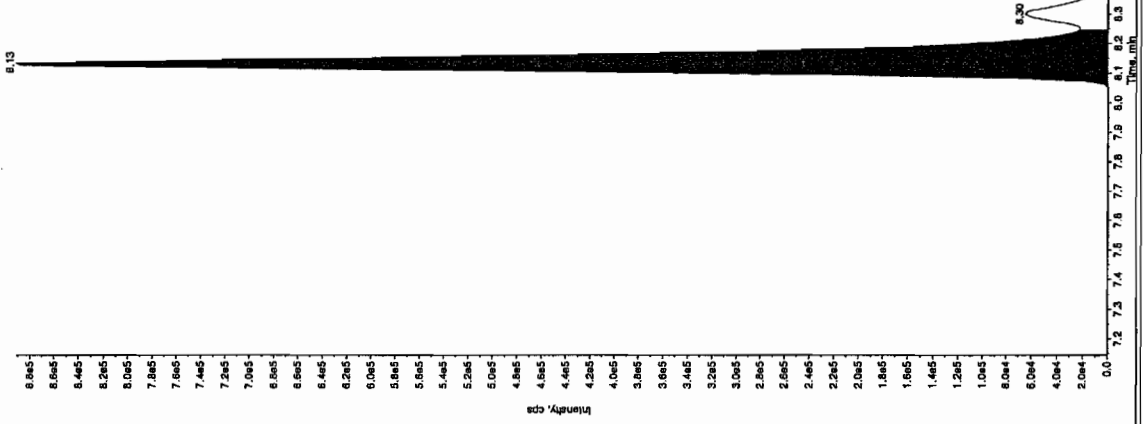
Jan 4/12/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GE.

Sample Name: 'WXX100405-26CCV' Sample ID: 'H1LER' File: 'EXS04090024.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: 500. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 1:16:09 PM  
Modified: No  
Proc. Algorithm: InCelliQuan - IOA  
Exp. Peak Height: 2500.00 cps  
Min. Peak Width: 30.0 points  
Smoothing Width: 30.0 sec  
RT Window: 6.90 min  
Expected RT: 6.90 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 6.88 min  
Area: 4.80e+005 counts  
Height: 96336.830 cps  
Start Time: 6.79 min  
End Time: 7.78 min



Sample Name: 'WXX100405-26CCV' Sample ID: 'H1LER' File: 'EXS04090024.wif'  
Peak Name: '35-Dinitroaniline' Mass(es): '182.0/146.0 amu'  
Comment: 'LCMSEXP\_C' Annotation: ''  
Sample Index: 1  
Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 500. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 1:16:09 PM  
Modified: No  
Proc. Algorithm: InCelliQuan - IOA  
Exp. Peak Height: 2000.00 cps  
Min. Peak Width: 30.0 points  
Smoothing Width: 30.0 sec  
RT Window: 8.14 min  
Expected RT: 8.14 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 8.13 min  
Area: 3.54e+006 counts  
Height: 890738.464 cps  
Start Time: 8.04 min  
End Time: 8.25 min



Am-04/12/10

Sample Name: "WXX100409-280CV" Sample ID: "11LER" File: "EXS04090024.wif"  
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 250. ng/mL

Calculated Conc: 232. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 1:16:09 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 1460.00 cps

Min. Peak Width: 3.00 sec

Smoothing Width: 30.0 points

RT Window: 30.0 sec

Expected RT: 8.30 min

Use Relative RT: No

Int. Type: Valley

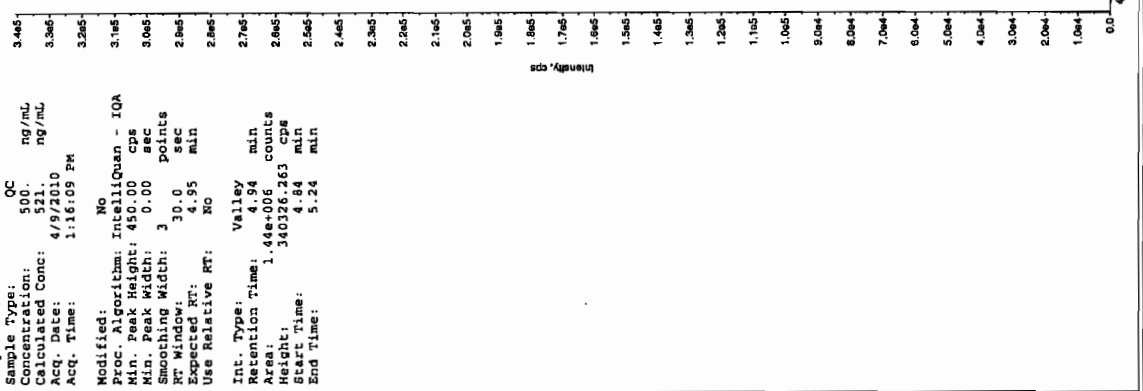
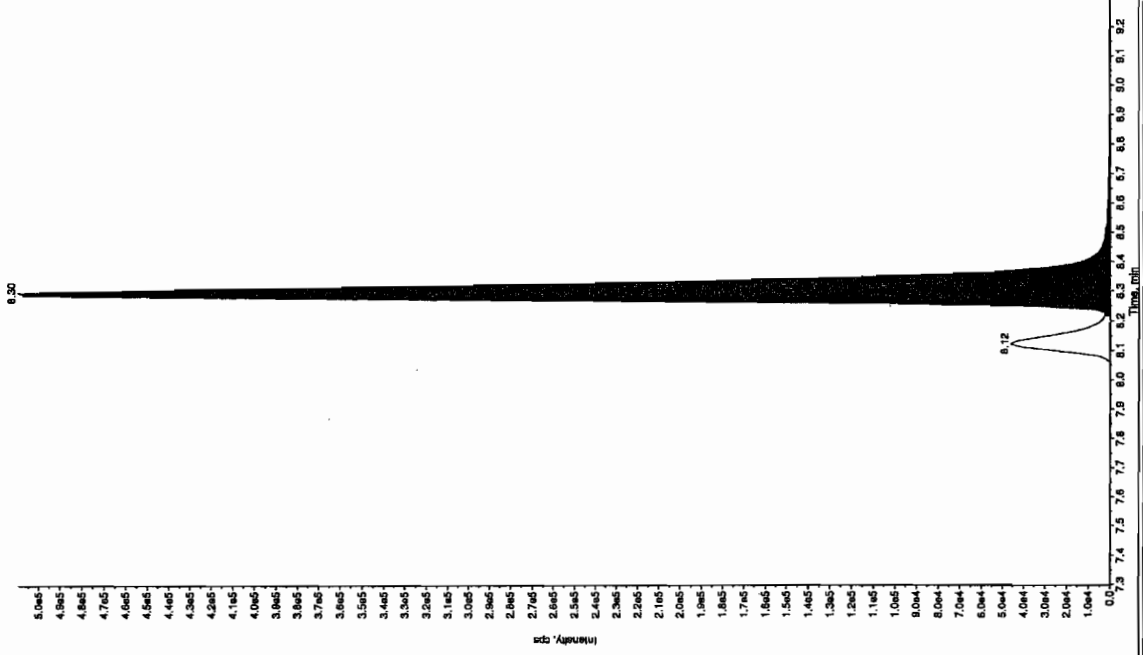
Retention Time: 8.30 min

Area: 2.08e+006 counts

Height: 509094.191 cps

Start Time: 8.22 min

End Time: 8.77 min



Sample Name: "WXX100409-280CV" Sample ID: "JLIER" File: "EX804080024.wif"  
 Peak Name: "24-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: 4/9/2010  
 Acq. Date: 4/9/2010  
 Acq. Time: 11:16:09 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.40 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 5.39 min  
 Area: 1.10e+006 counts  
 Height: 251205.597 cps  
 Start Time: 5.31 min  
 End Time: 5.51 min

4.24

3.4e5

3.3e5

3.2e5

3.1e5

3.0e5

2.9e5

2.8e5

2.7e5

2.6e5

2.5e5

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

5.39

3.4e5

3.3e5

3.2e5

3.1e5

3.0e5

2.9e5

2.8e5

2.7e5

2.6e5

2.5e5

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

10.82

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

10.82

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

5.0e4

10.82

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

5.0e4

10.82

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

5.0e4

10.82

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

5.0e4

10.82

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

5.0e4

10.82

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

5.0e4

10.82

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

5.0e4

10.82

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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

GLA 4/12/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

Sample Name: "WXX100409-27CR" Sample ID: "11LER" File: "EXS04080028.wif"

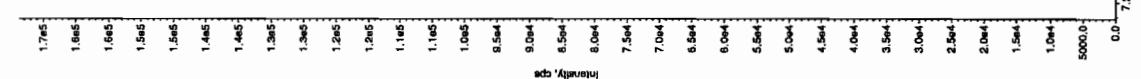
Peak Name: "35-Dinitrobenzyl" Mass(es): "182.0460 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
Sample Type: QC  
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 - IQA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.14 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.12 min  
Area: 6.99e+005 counts  
Height: 16667.943 cps  
Start Time: 8.03 min  
End Time: 8.25 min



Sample Name: "WXX100409-27CR" Sample ID: "11LER" File: "EXS04080028.wif"

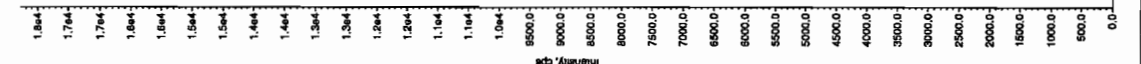
Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 103. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 1:47:34 PM

Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 6.90 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 6.89 min  
Area: 8.20e+004 counts  
Height: 17771.448 cps  
Start Time: 6.80 min  
End Time: 7.55 min



4/12/10

Sample Name: "WXX100409-27ORI" Sample ID: "11LER" File: "EXS04090026.wif"

Peak Name: "26-Dimino-4-nitroliana" Mass(es): "166.046.0 amu"

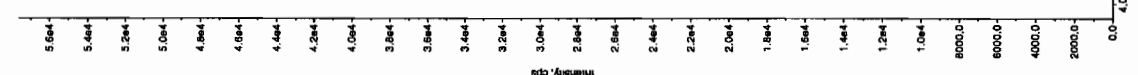
Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1

Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 64.4 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+005 counts  
Height: 57584.732 cps  
Start Time: 4.82 min  
End Time: 5.24 min



Sample Name: "WXX100409-27ORI" Sample ID: "11LER" File: "EXS04090026.wif"

Peak Name: "34-Dinitroliana" Mass(es): "182.171.9 amu"

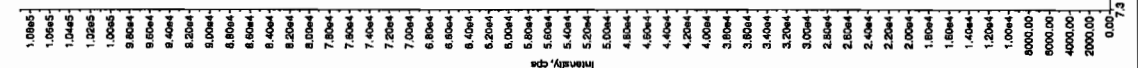
Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1

Sample Type: QC  
Concentration: 50.0 ng/mL  
Calculated Conc: 30.1 ng/mL  
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: 108659.401 cps  
Start Time: 8.22 min  
End Time: 8.56 min



Sample Name: "WXX100409-27ORI" Sample ID: "11LER" File: "EXS04090026.wif"

Peak Name: "tris(o-cresyl) phosphite" Mass(es): "369.1/91.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1

Sample Type: QC

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 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

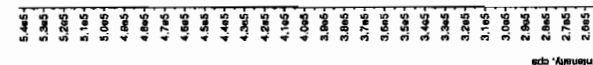
Retention Time: 10.8 min

Area: 2.11e+006 counts

Height: 542095.947 cps

Start Time: 10.7 min

End Time: 11.1 min



Sample Name: "WXX100409-27ORI" Sample ID: "11LER" File: "EXS04090026.wif"

Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "156.0/46.0 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: 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

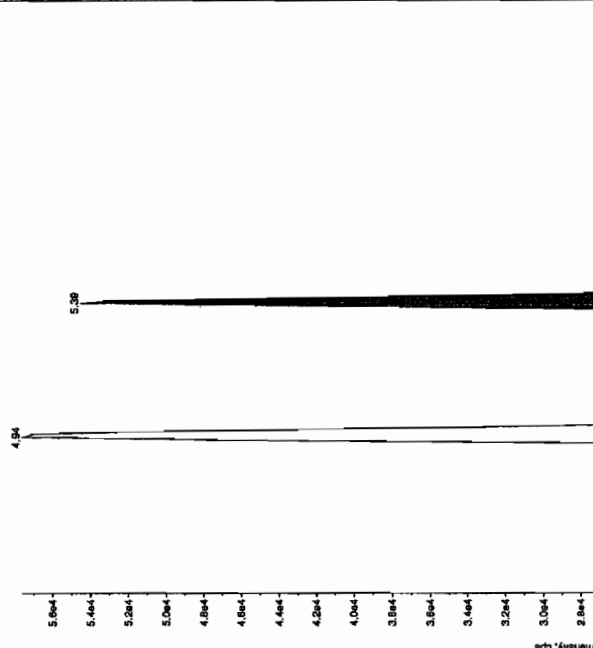
Retention Time: 5.39 min

Area: 2.15e+005 counts

Height: 54232.807 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): 10-2196

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04090037.wiff

Analysis Date: 09-APR-10 16:40

LCMSMS ID: 1358

Column ID: Sphere 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

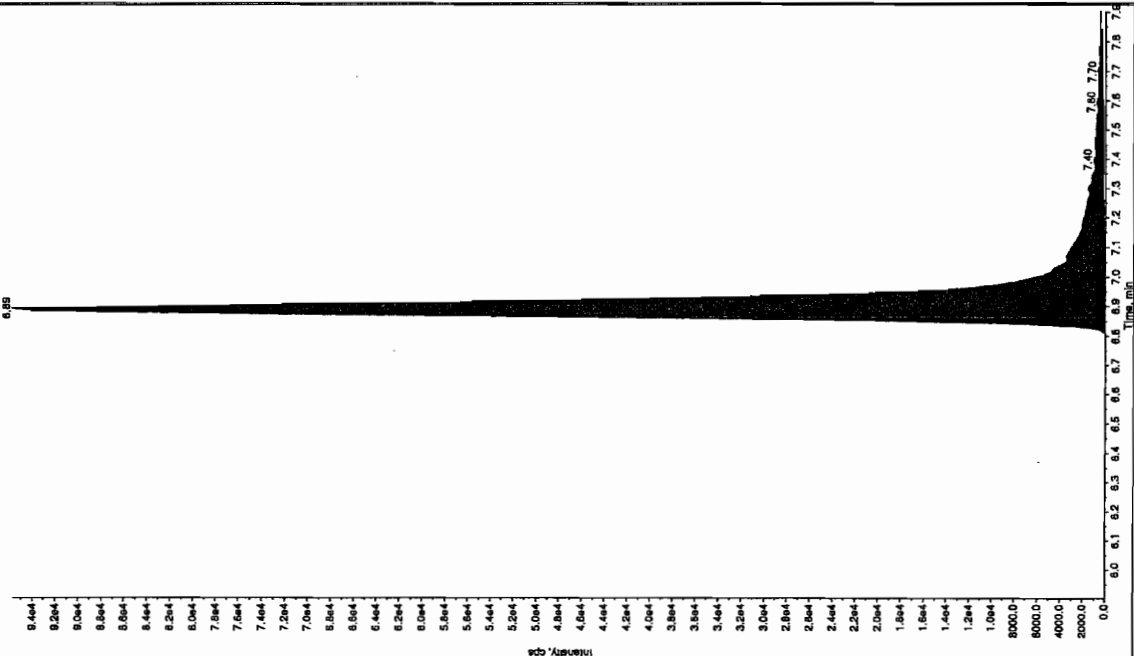
See 4/12/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

Sample Name: WXX10008-26CCV Sample ID: H1LER File: EXS04090037.wif  
Peak Name: TATB Mass(es): 257.2204.9 amu  
Comment: LCMSEXP\_C Annotation: "

Sample Index: 1

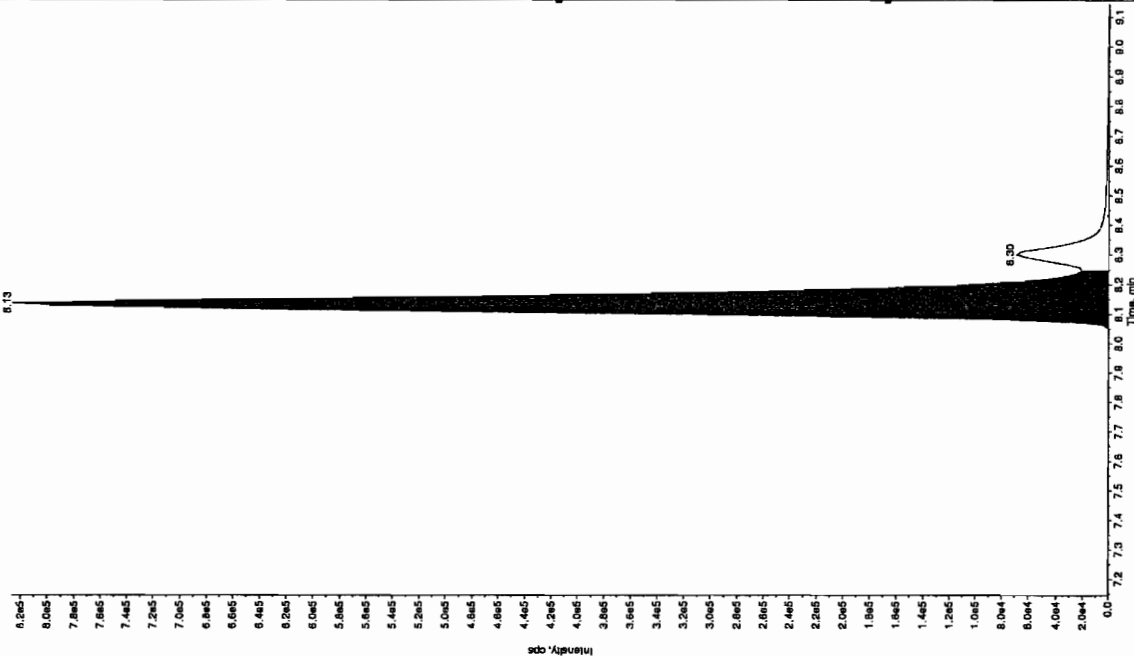
Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 4/9/2010  
Acq. Date: 4:40:18 PM  
Acq. Time: 4:40:18 PM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 6.90 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 6.89 min  
Area: 4.63e+005 counts  
Height: 95650.513 cps  
Start Time: 6.79 min  
End Time: 7.84 min



Sample Name: WXX10009-26CCV Sample ID: H1LER File: EXS04090037.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: 4/9/2010  
Acq. Date: 4:40:18 PM  
Acq. Time: 4:40:18 PM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.14 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

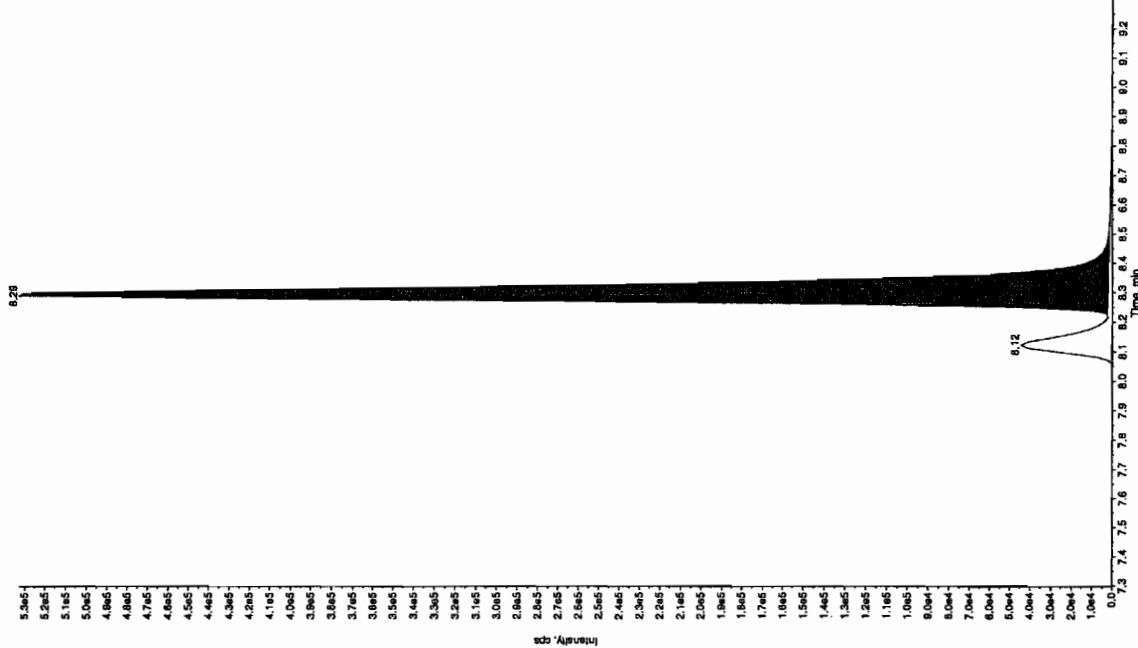


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

See 4/12/10

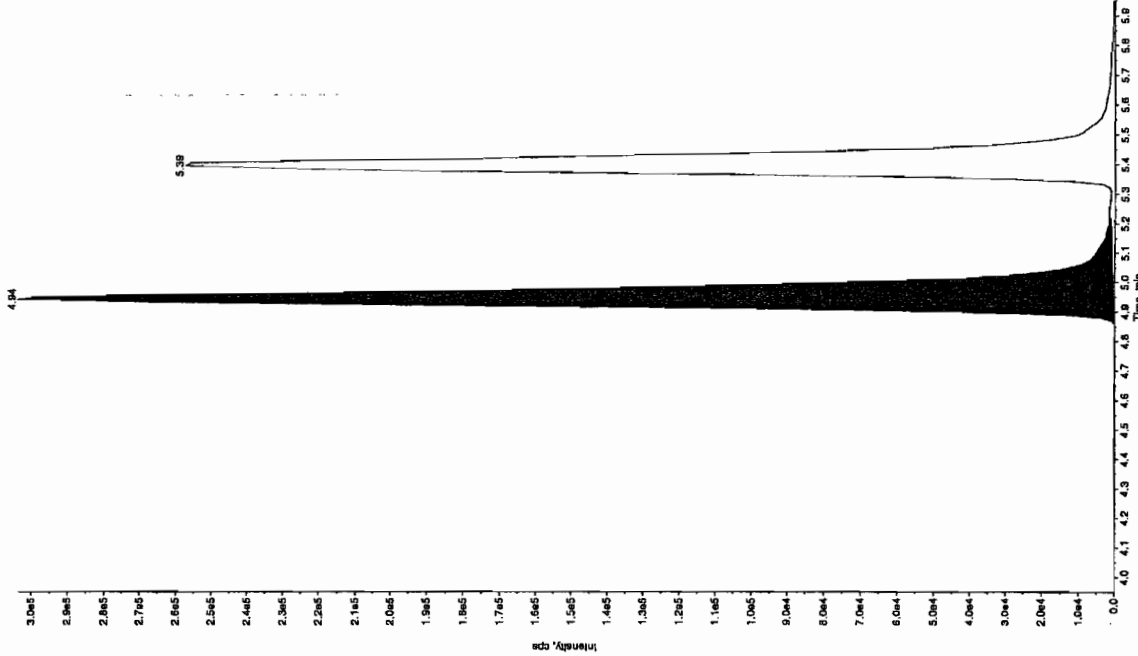
Sample Name: "WXX100409-26CCV" Sample ID: "11LER" File: "EXS04090037.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 234. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 4:40:18 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: 2.10e+006 counts  
 Height: 530511.414 cps  
 Start Time: 8.22 min  
 End Time: 8.39 min



Sample Name: "WXX100409-26CCV" Sample ID: "11LER" File: "EXS04090037.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 479.2010 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 4:40:18 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: 1.32e+006 counts  
 Height: 303445.587 cps  
 Start Time: 4.93 min  
 End Time: 5.22 min







7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

Lab Code: GEL

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

Sample Name: "WXX100408-27CRI" Sample ID: "J1LER" File: "EXS04080039.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

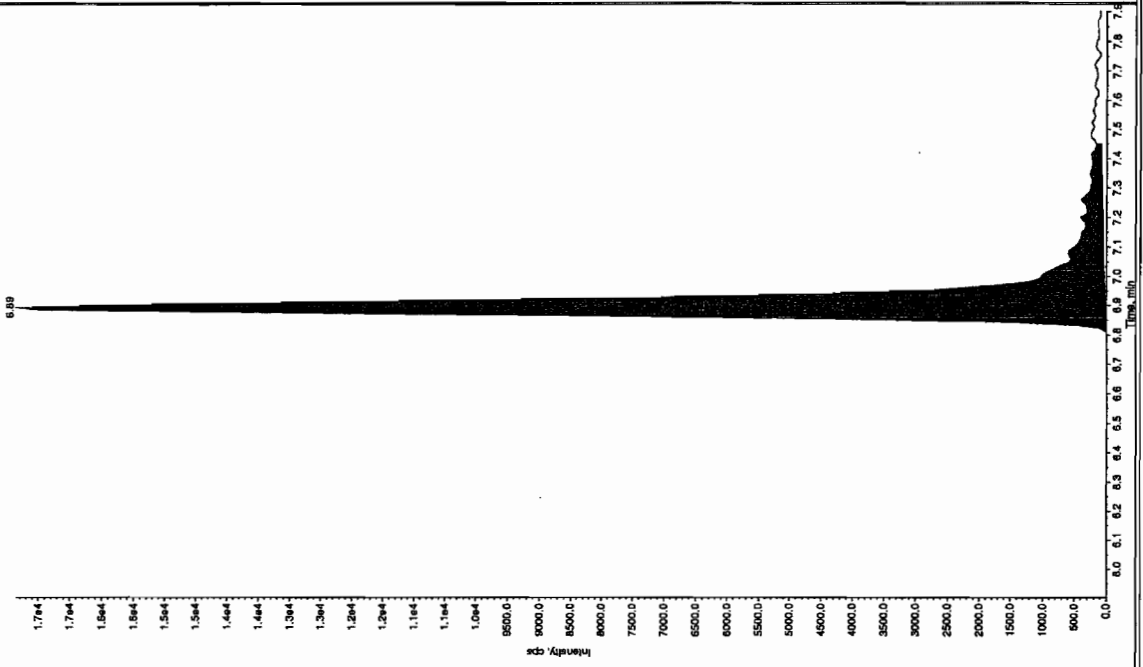
Sample Index: 1

Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 105. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 5:11:42 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 3.00 points  
Smoothing Width: 30.0 sec  
RT Window: 6.90 min  
Expected RT: 6.90 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 6.89 min  
Area: 8.09e+004 counts  
Height: 17349.758 cps  
Start Time: 6.79 min  
End Time: 7.45 min



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

Sample Name: "WXX100408-27CRI" Sample ID: "J1LER" File: "EXS04080039.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

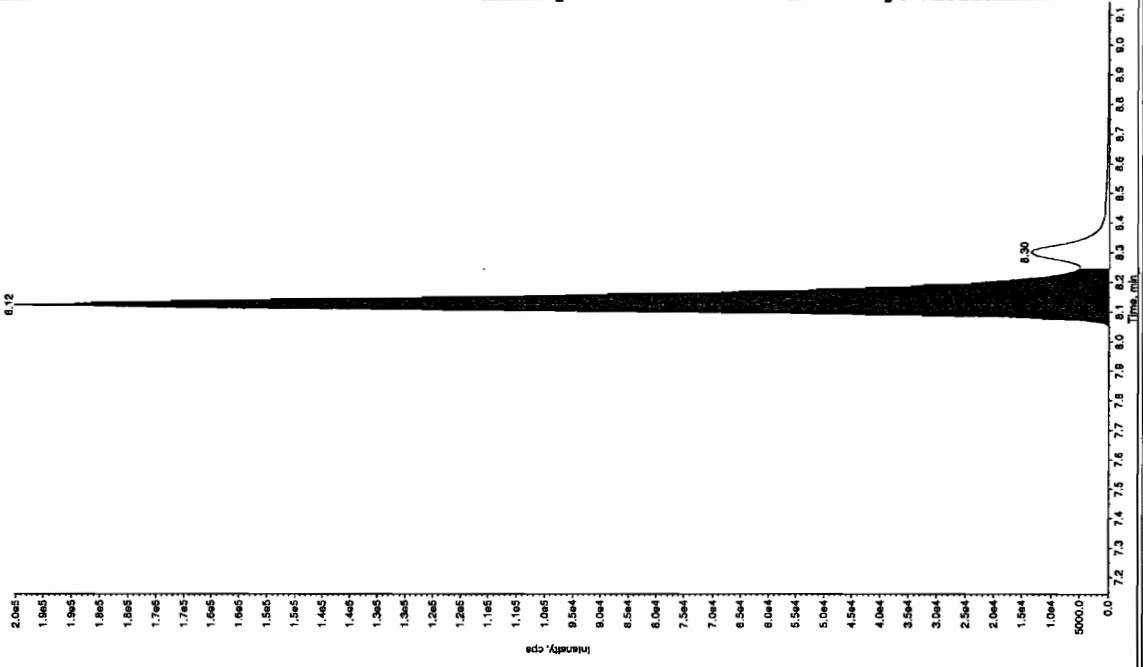
Sample Index: 1

Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 108. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 5:11:42 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 3.00 points  
Smoothing Width: 15.0 sec  
RT Window: 8.14 min  
Expected RT: 8.14 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.12 min  
Area: 7.43e+005 counts  
Height: 195114.578 cps  
Start Time: 8.04 min  
End Time: 8.25 min



San 4/12/10

Sample Name: "WXX100409-27CH" Sample ID: "11LER" File: "EXS04090039.wif"

Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "186.046.0 amu"

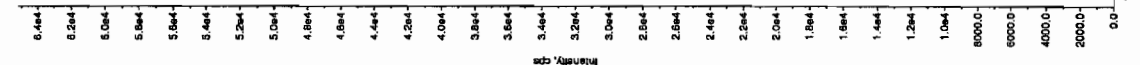
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: OC  
Concentration: 100 ng/mL  
Conc. Used: 93.3 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 5:11:42 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: 4.94 min  
Area: 2.76e+005 counts  
Height: 6513.627 cps  
Start Time: 4.85 min  
End Time: 5.24 min



Sample Name: "WXX100409-27CH" Sample ID: "11LER" File: "EXS04090039.wif"

Peak Name: "34-Dinitrotoluene" Mass(es): "182.151.9 amu"

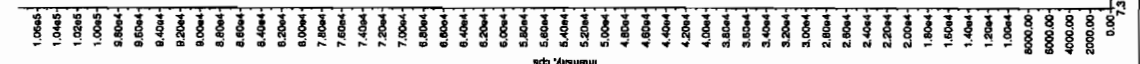
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: OC  
Concentration: 50 ng/mL  
Conc. Used: 49.5 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 5:11:42 PM

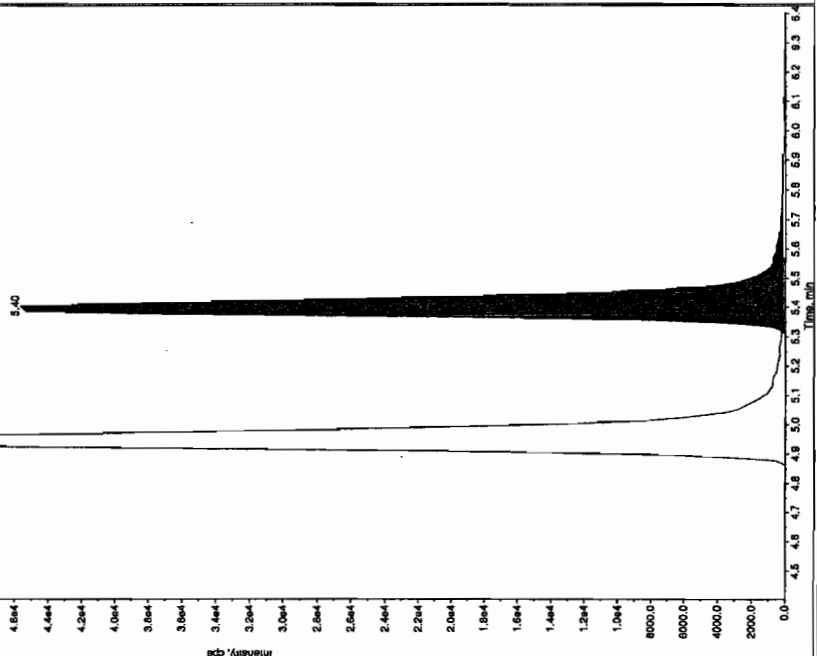
Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 1460.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 8.30 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.29 min  
Area: 4.19e+005 counts  
Height: 107415.909 cps  
Start Time: 8.22 min  
End Time: 8.37 min



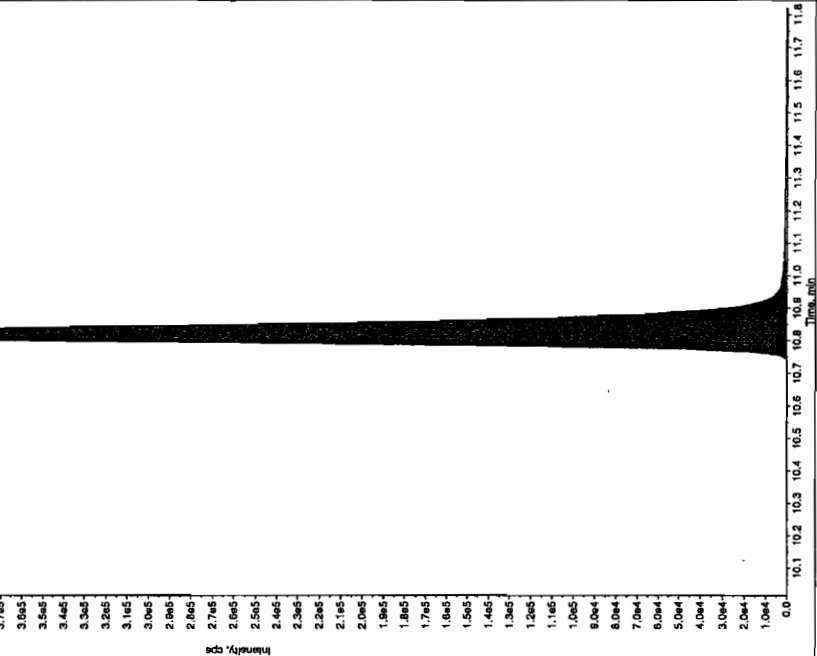
Sample Name: "WXX100409-27CRL" Sample ID: "11LER" File: "EXS04090039.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

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 - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 3.00 points  
 Smoothing 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: 2.12e+005 counts  
 Height: 45472.290 cps  
 Start Time: 5.31 min  
 End Time: 5.62 min



Sample Name: "WXX100409-27CRL" Sample ID: "11LER" File: "EXS04090039.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "389.191.0 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 - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 3.00 points  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 2.08e+006 counts  
 Height: 515762.024 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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

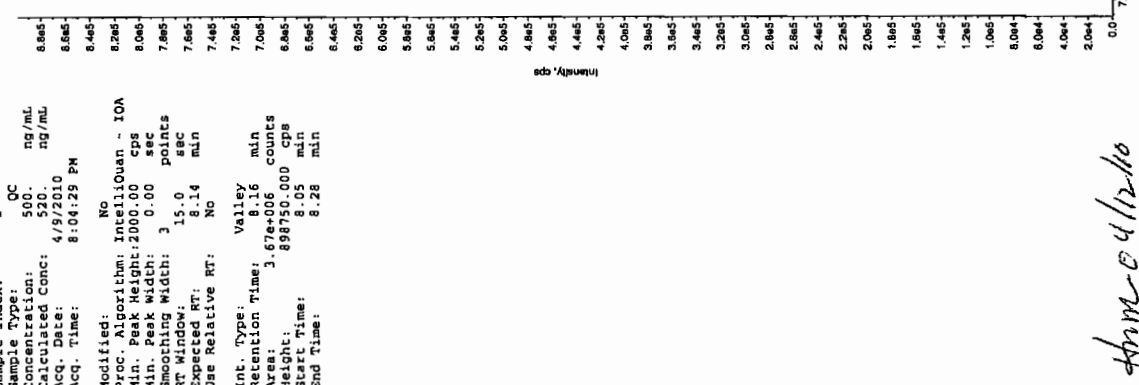
Jan 4/12/10

Sample Name: "WXX100409-260CV" Sample ID: "111LER" File: "EXS04090050.wif"

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

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 520. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:04:29 PM  
 Modified: NO  
 Proc. Algorithm: IntelliQuan - ION  
 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: 8.16 min  
 Area: 3.67e+006 counts  
 Height: 898750.000 cps  
 Start Time: 8.05 min  
 End Time: 8.28 min

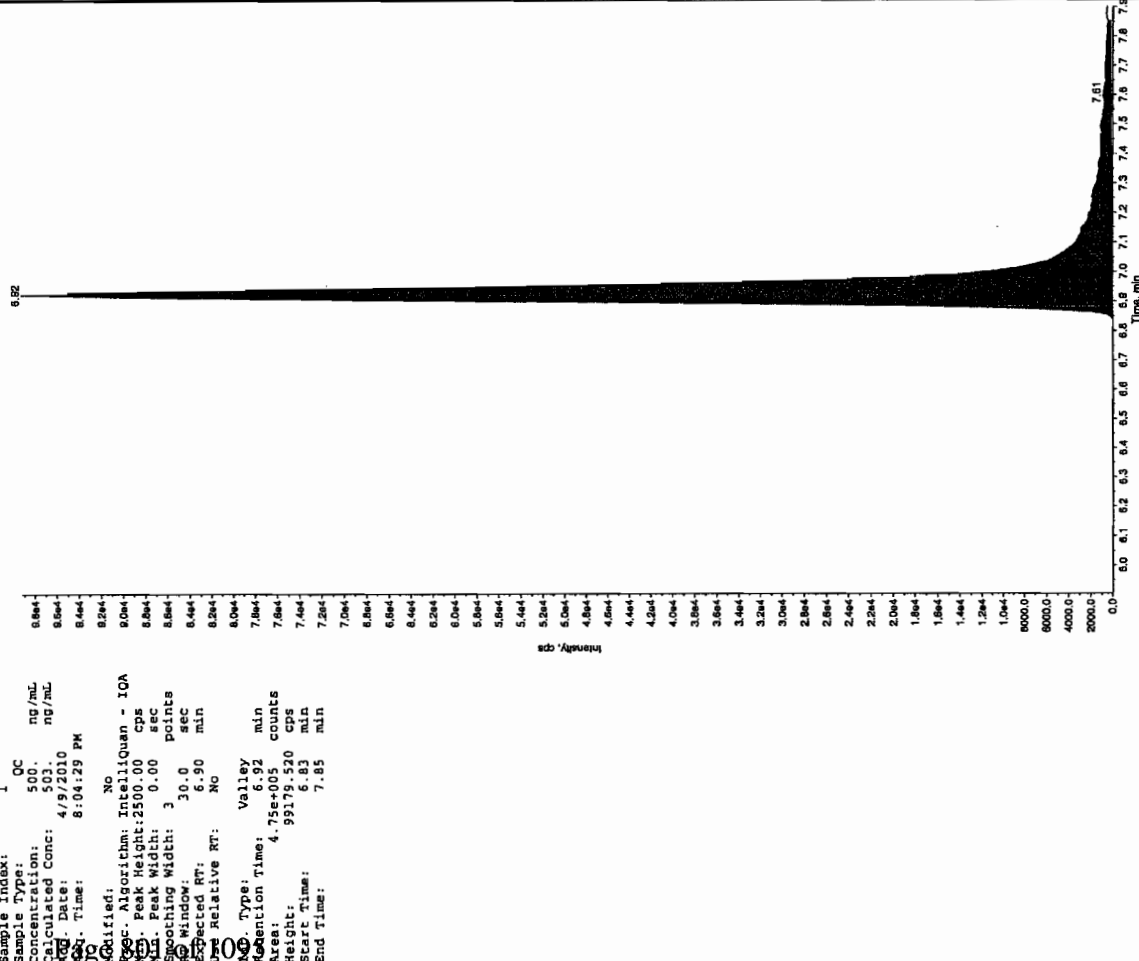


Sample Name: "WXX100409-260CV" Sample ID: "111LER" File: "EXS04090050.wif"

Peak Name: "TATB" Mass(es): "257.2024.9 amu"

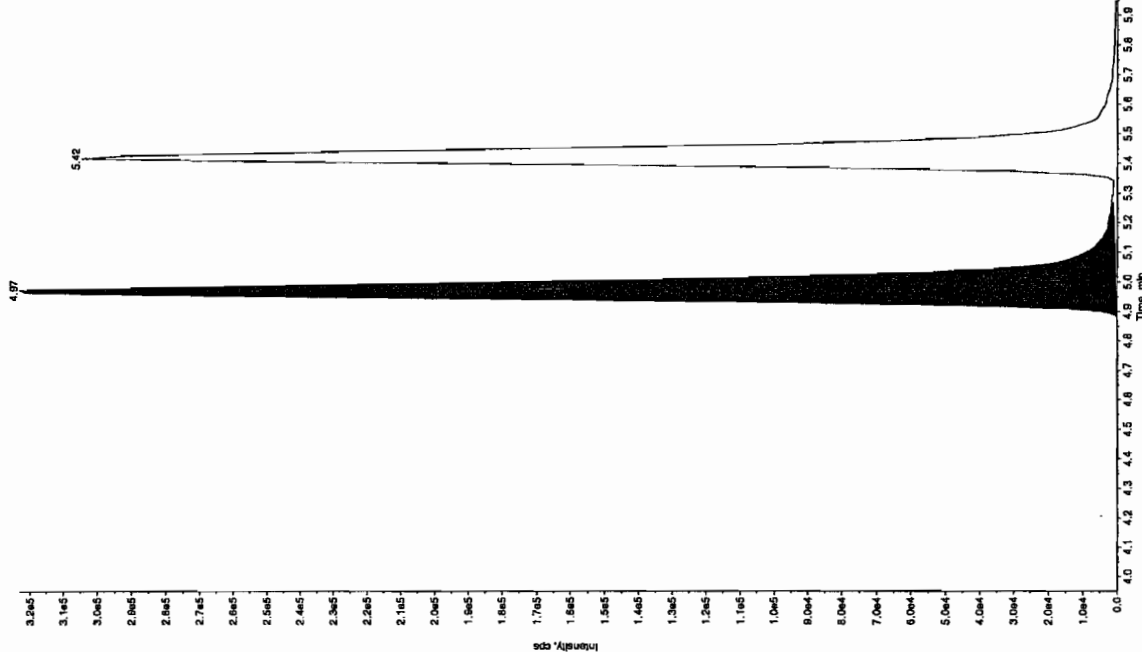
Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 503. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:04:29 PM  
 Modified: NO  
 Proc. Algorithm: IntelliQuan - ION  
 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: 6.92 min  
 Area: 4.75e+005 counts  
 Height: 99179.520 cps  
 Start Time: 6.83 min  
 End Time: 7.85 min



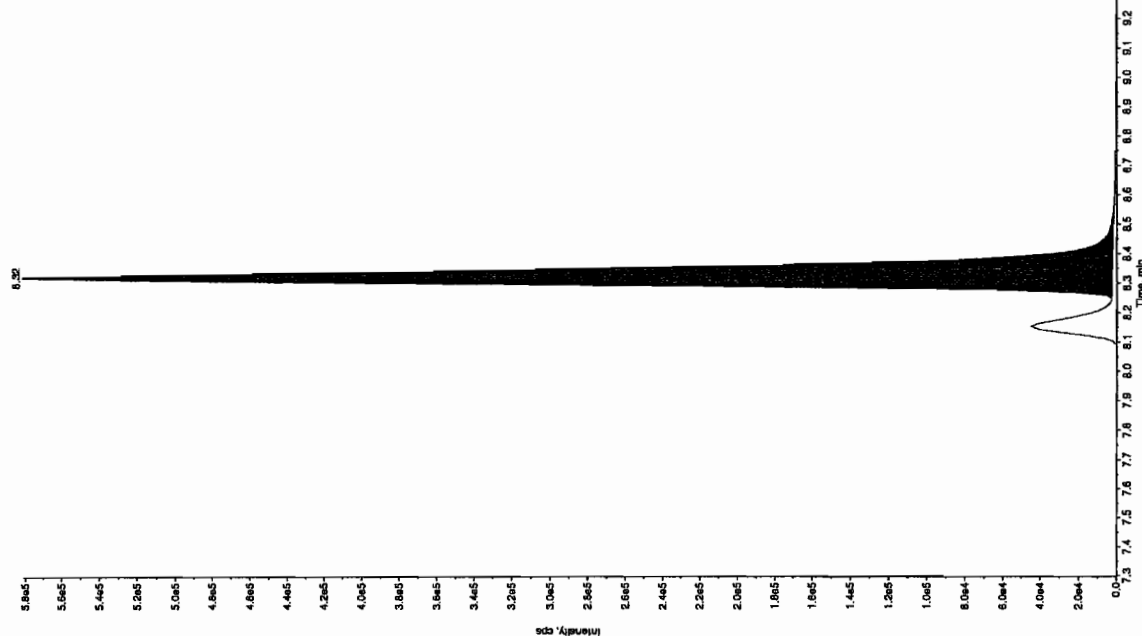
Sample Name: "WXX100409-2600V" Sample ID: "1111ER" File: "EXS04080050.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "186.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 500 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: 32283.928 cps  
 Start Time: 4.87 min  
 End Time: 5.27 min



Sample Name: "WXX100409-2600V" Sample ID: "1111ER" File: "EXS04080050.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250 ng/mL  
 Calculated Conc: 242 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:04:29 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: 8.32 min  
 Area: 2.17e+006 counts  
 Height: 57884.971 cps  
 Start Time: 8.25 min  
 End Time: 8.67 min



Sample Name: "WXX100409-26CCV" Sample ID: "11LER" File: "EXS0409050.wif"

Peak Name: "160(cresyl) phosphate" Mass(es): "369.191.0 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: OC

Concentration: 500. ng/mL

Calculated Conc: 507. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 8:04:29 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

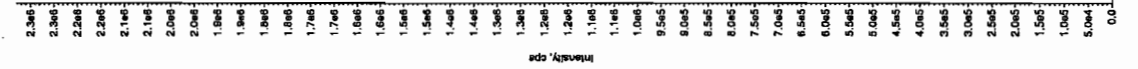
Retention Time: 10.9 min

Area: 9.68e+008 counts

Height: 232283 cps

Start Time: 10.8 min

End Time: 11.3 min



Sample Name: "WXX100409-26CCV" Sample ID: "11LER" File: "EXS0409050.wif"

Peak Name: "24-Dinitro-5-nitrofluorene" Mass(es): "166.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: OC

Concentration: 500. ng/mL

Calculated Conc: 555. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 8:04:29 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 350.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 5.40 min

Use Relative RT: No

Int. Type: Valley

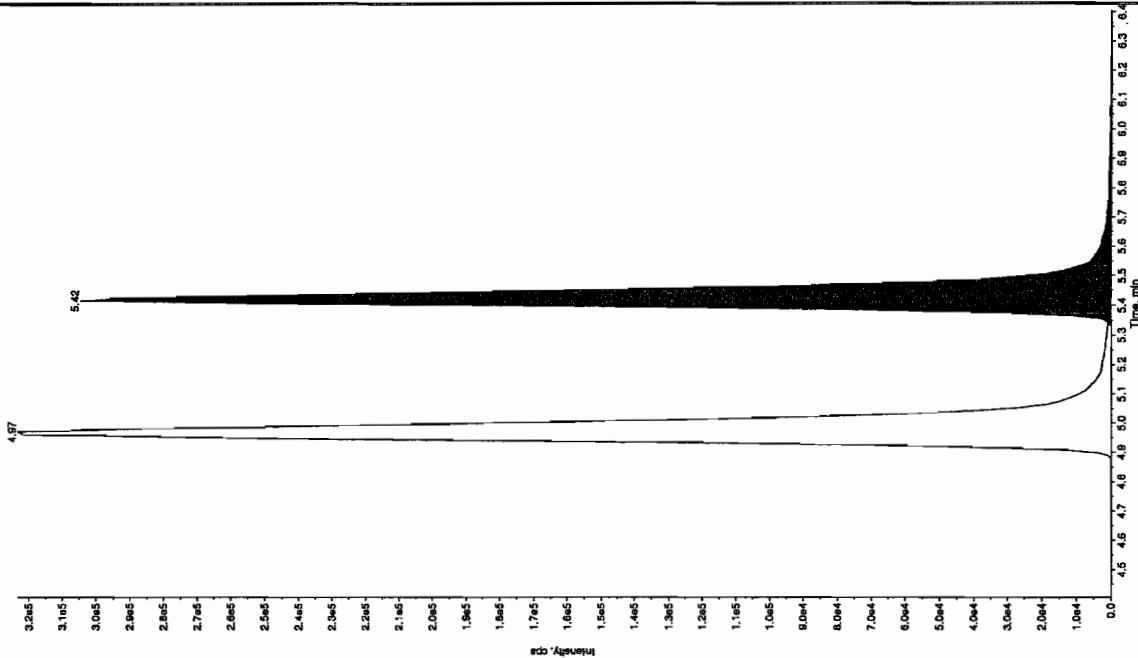
Retention Time: 5.42 min

Area: 1.26e+006 counts

Height: 304161.041 cps

Start Time: 5.33 min

End Time: 6.04 min



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



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2196

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

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100409-27CRL" Sample ID: "11LER" File: "EXS04080052.wif"

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

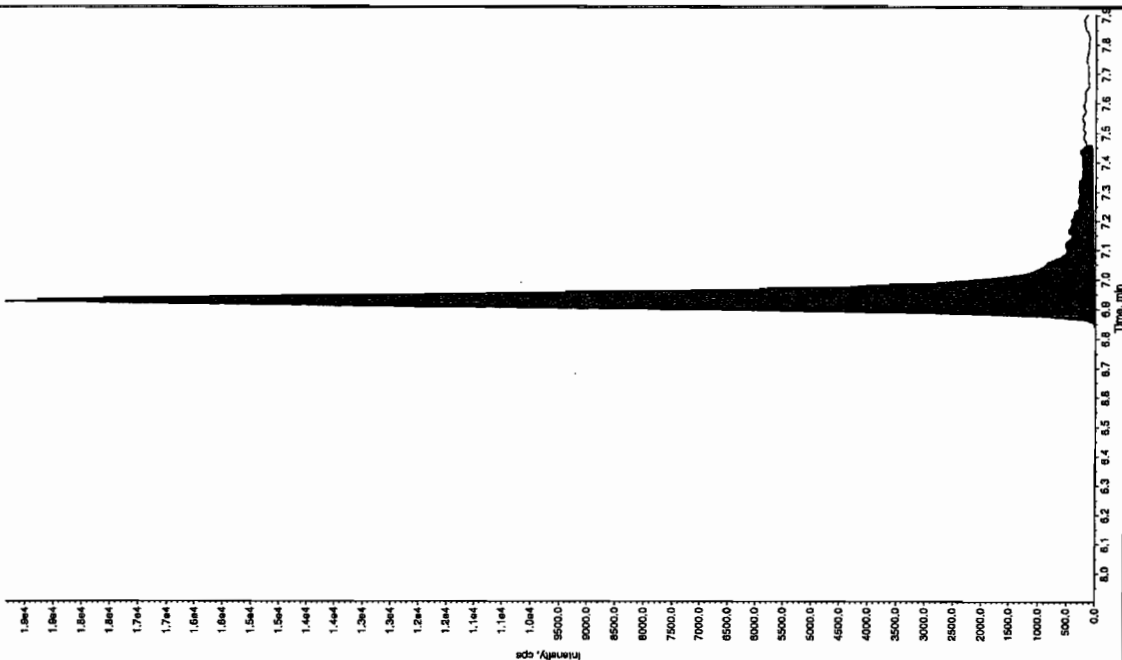
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 109. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 8:35:34 PM

Modified: No  
Proc. Algorithm: Int+1/Quan - IOA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 3.000 points  
Smoothing Width: 3.000 points  
RT Window: 30.0 sec  
Expected RT: 6.90 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 6.92 min  
Area: 8.47e+004 counts  
Height: 19329.411 cps  
Start Time: 6.82 min  
End Time: 7.46 min



Sample Name: "WXX100409-27CRL" Sample ID: "11LER" File: "EXS04080052.wif"

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

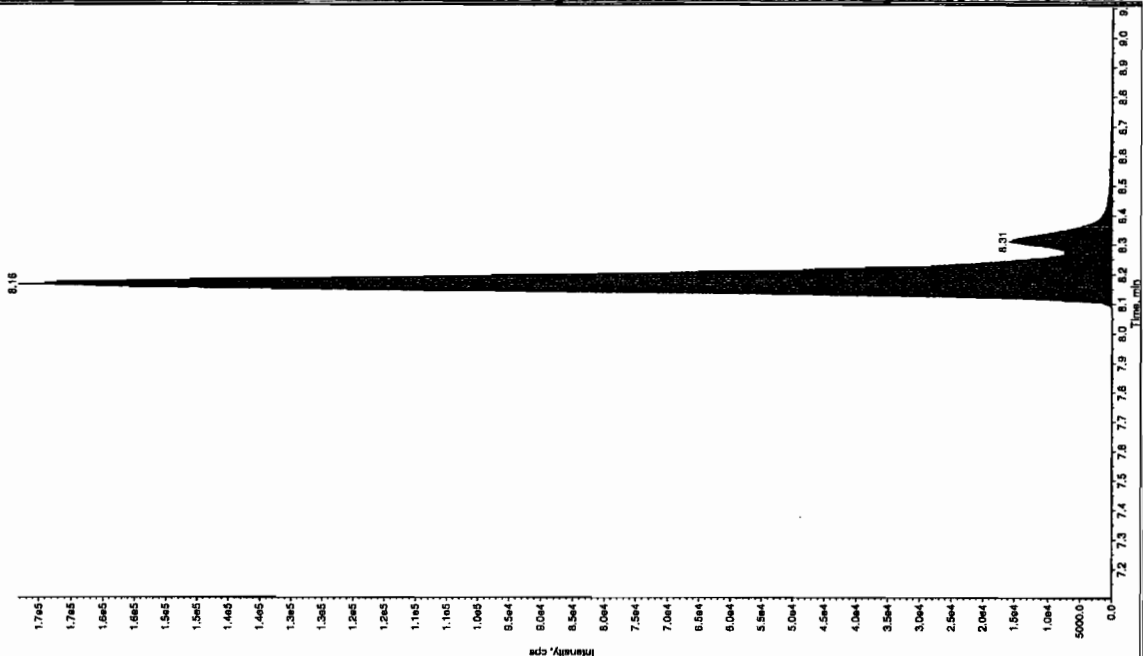
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 113. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 8:35:34 PM

Modified: Yes  
Proc. Algorithm: Int+1/Quan - IOA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 3.000 sec  
Smoothing Width: 3.000 points  
RT Window: 15.0 sec  
Expected RT: 8.10 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.16 min  
Area: 7.91e+005 counts  
Height: 173280.121 cps  
Start Time: 8.05 min  
End Time: 8.88 min



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

ARM-04/12/10

After Jan 4/12/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

Sample Name: "WXX100409-27CR" Sample ID: "J1LER" File: "EXS040900652.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0460 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 105. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 8:35:54 PM

Modified: Yes

RT Window: 15.0 sec

Expected RT: 8.10 min

Use Relative RT: No

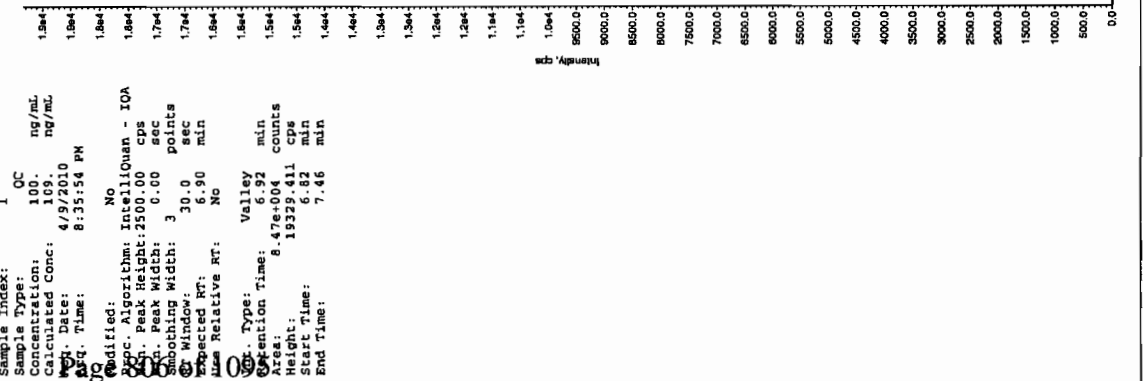
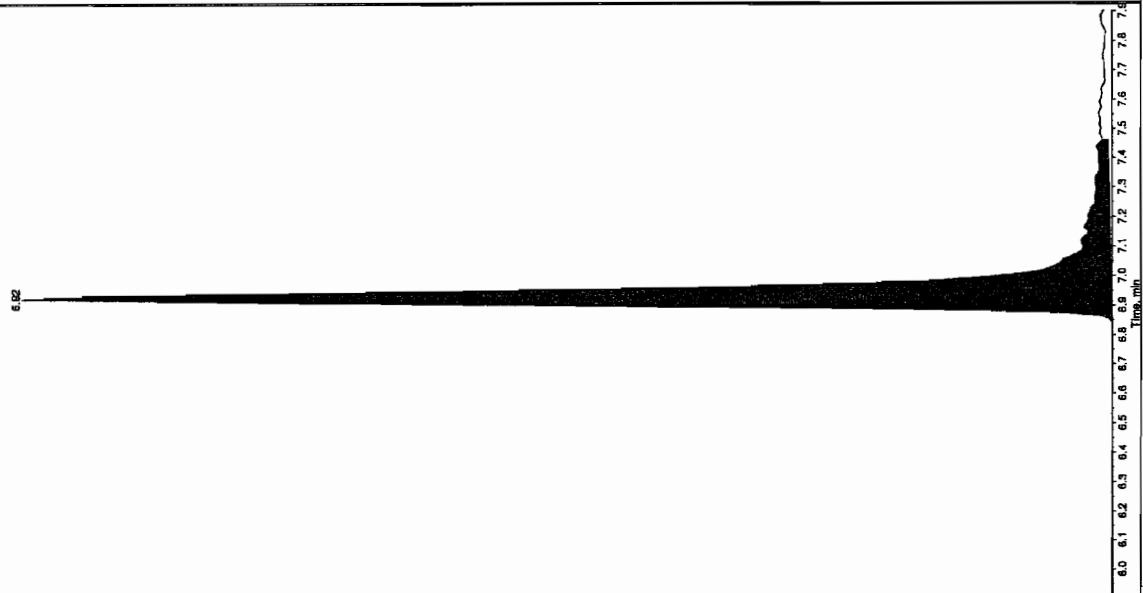
Int. Type: Manual

Retention Time: 8.17 min

Height: 173757.588 cps

Start Time: 8.07 min

End Time: 8.28 min



Sample Name: "WXX100409-27CR" Sample ID: "J1LER" File: "EXS040900652.wif"

Peak Name: "TATB" Mass(es): "237.22049 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 109. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 8:35:54 PM

Modified: No

RT Window: 30.0 sec

Expected RT: 6.90 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 6.82 min

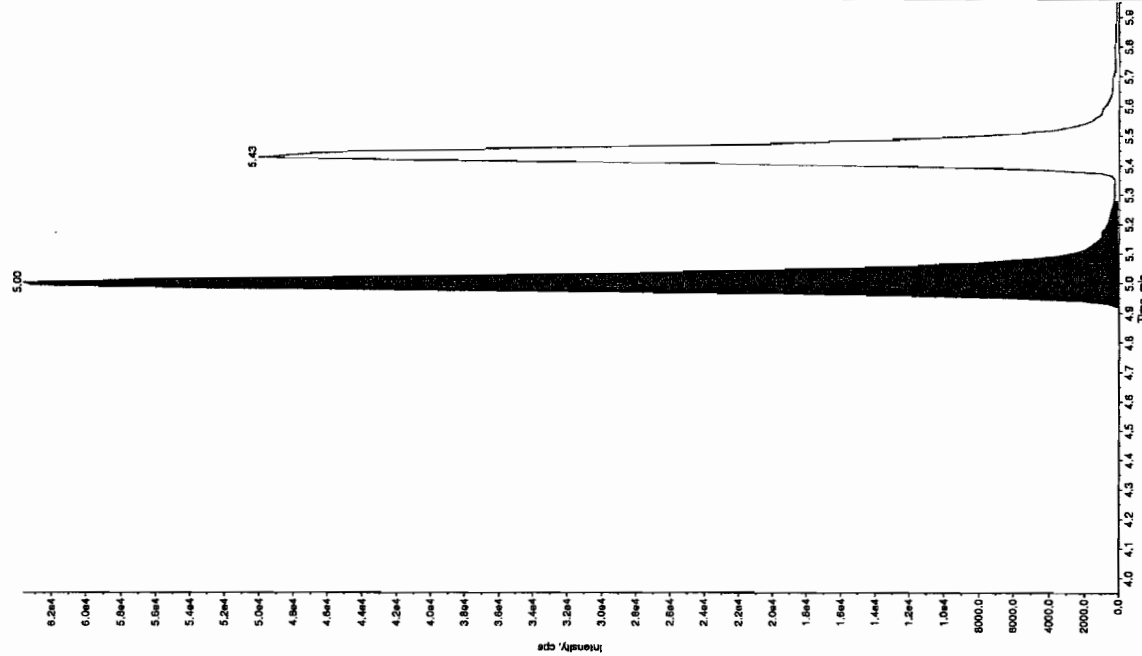
Height: 19379.411 cps

Start Time: 6.82 min

End Time: 7.46 min

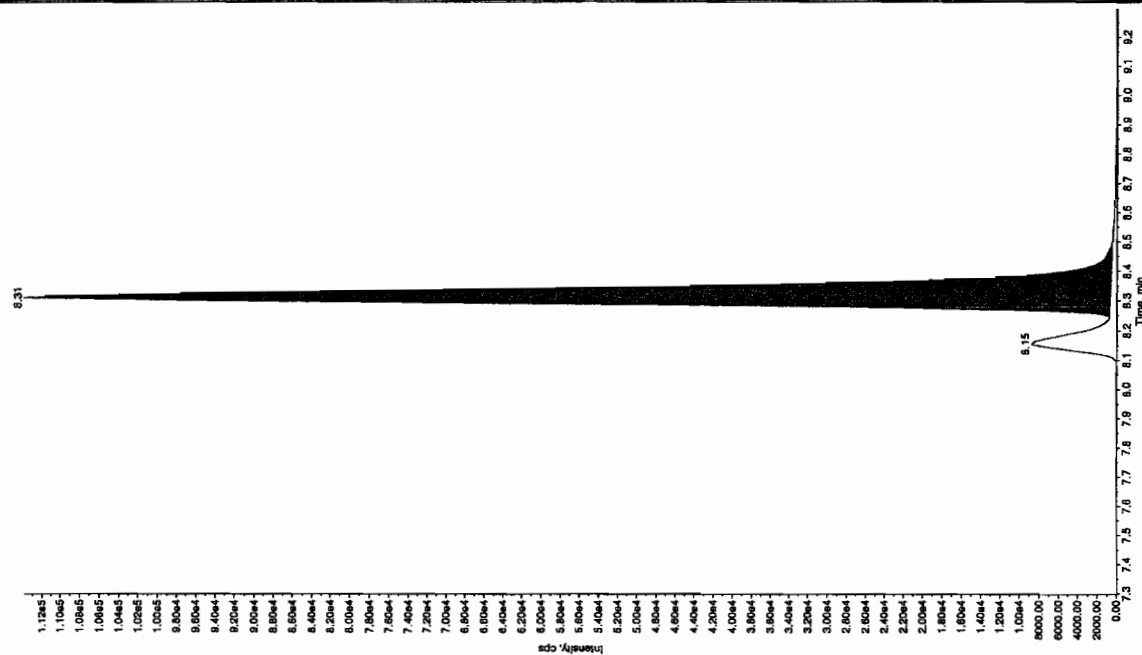
Sample Name: "WXX100409-270R" Sample ID: "11LEP" File: "EXS04090052.wif"  
 Peak Name: "26-Diamino-4-entriolane" Mass(es): "166.045.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

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 - 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: 5.00 min  
 Peak Height: 2.80e+005 counts  
 Peak Area: 63629.604 cps  
 Start Time: 4.90 min  
 End Time: 5.28 min



Sample Name: "WXX100409-270R" Sample ID: "11LEP" File: "EXS04090052.wif"  
 Peak Name: "34-Dihydro-4-entriolane" Mass(es): "182.1151.8 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 - 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: 8.25 min  
 Peak Height: 4.27e+005 counts  
 Peak Area: 113157.799 cps  
 Start Time: 8.25 min  
 End Time: 8.56 min



Sample Name: "WXX100409-270R" Sample ID: "H1LEF" File: "EXS04090052.wif"

Peak Name: "bis(2-ethyl) phosphate" Mass(es): "365.191.0 amu"

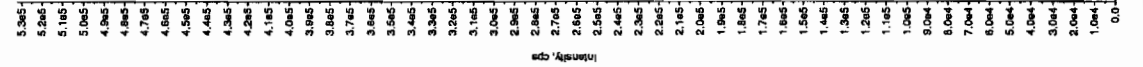
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC

Sample Type: 100. ng/mL  
Concentration: 102. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 8:35:54 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: 531803.162 counts  
Height: 10.7 min  
Start Time: 11.2 min  
End Time:



Sample Name: "WXX100409-270R" Sample ID: "H1LEF" File: "EXS04090052.wif"

Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "156.046.0 amu"

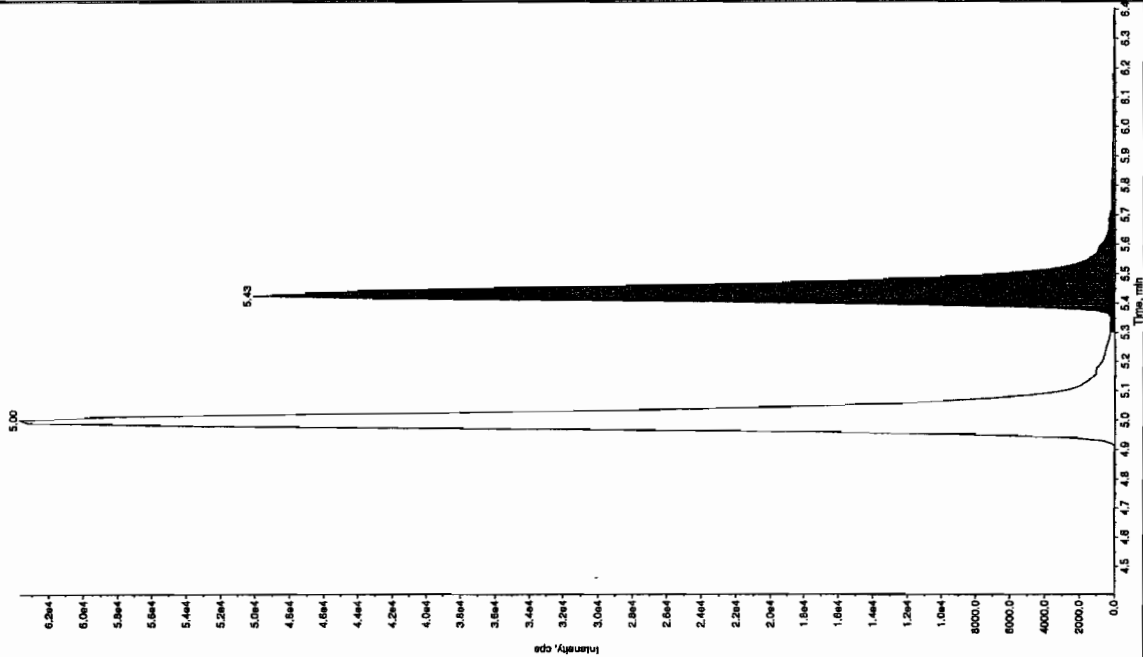
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC

Sample Type: 100. ng/mL  
Concentration: 101. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 8:35:54 PM

Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 350.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 5.40 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 5.43 min  
Area: 49977.051 counts  
Height: 5.35 min  
Start Time: 5.98 min  
End Time:



# 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) 10-2196

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

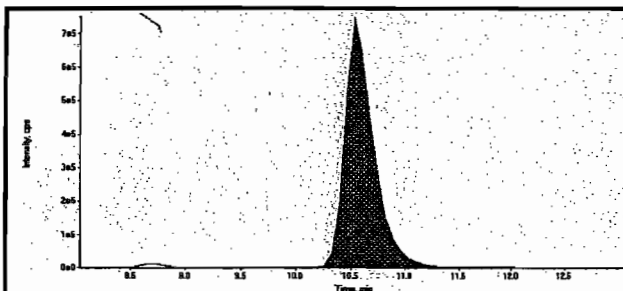
\*Concentration =

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

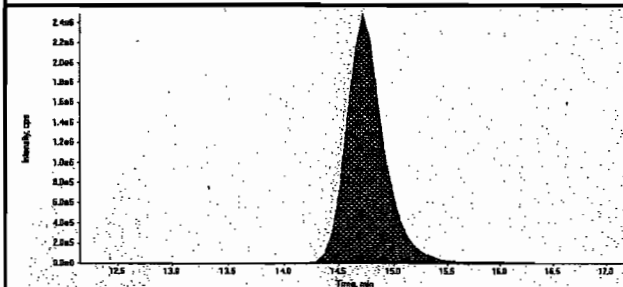
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

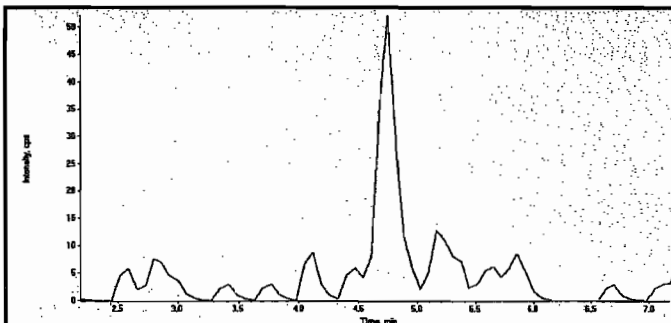
Data File	EXP0415066.wiff	Acquisition Date	4/16/2010 2:15:06 PM
Sample Name	1202061319	Acquisition Method	8321.dam
Batch/Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



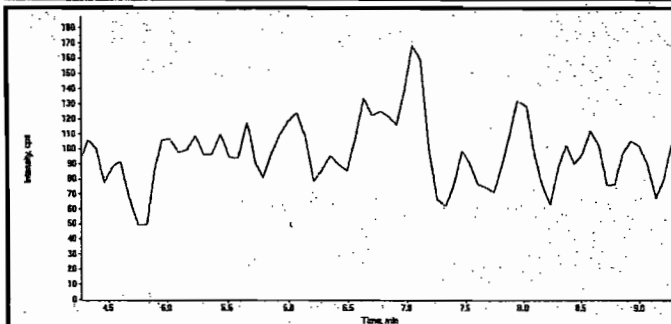
Compound Name	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	13900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name	26-Dinitrobenzene-d8 (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

*Ann*  
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

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:	135-Tinitrobenzene (218.0/182.8 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

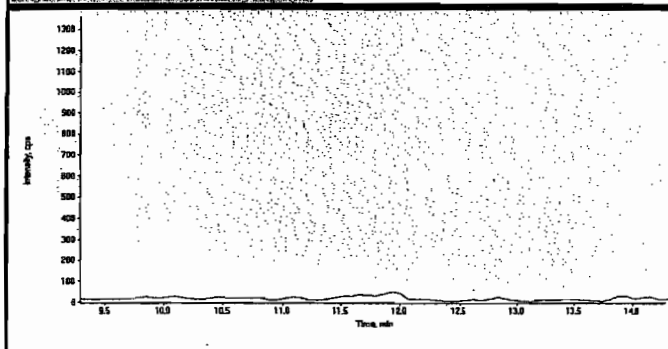
  

	Compound Name:	246-Tinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification:	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

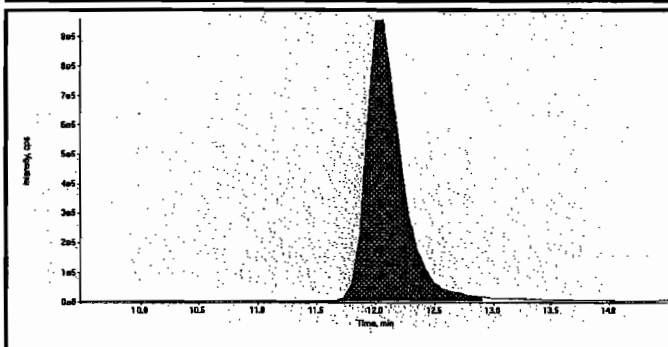
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

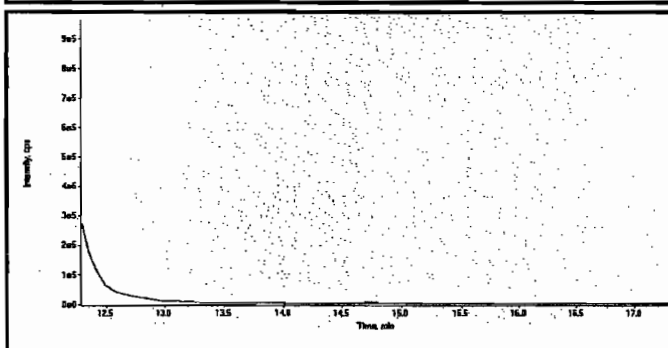
Data File	EXP0415066.wiff	Acquisition Date	4/16/2010 2:15:06 PM
Sample Name	1202061319	Acquisition Method	8321.dam
Batch/Dilution/Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



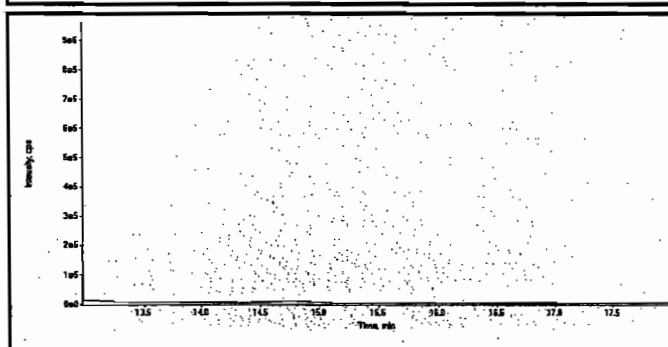
Compound Name	Nitrobenzene (123.0/46.0 amu)
Expected RT:	11.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name	3,4-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



Compound Name	2,6-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



Compound Name	2,4-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

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	4-Amino-2,6-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

	Compound Name	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

	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

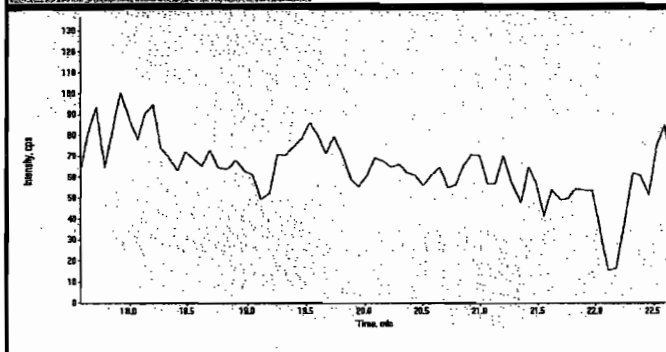
  

	Compound Name	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

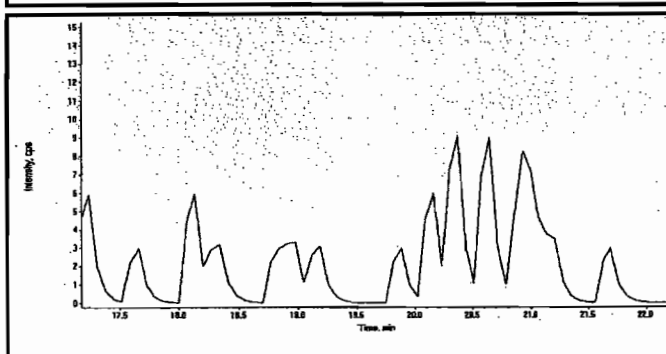
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

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	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	1-Nitro-2-fluorobenzene (96.1/62.0 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: MB for batch 961016

Lab Code: GEL

GEL Job No (SDG) 10-2196

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

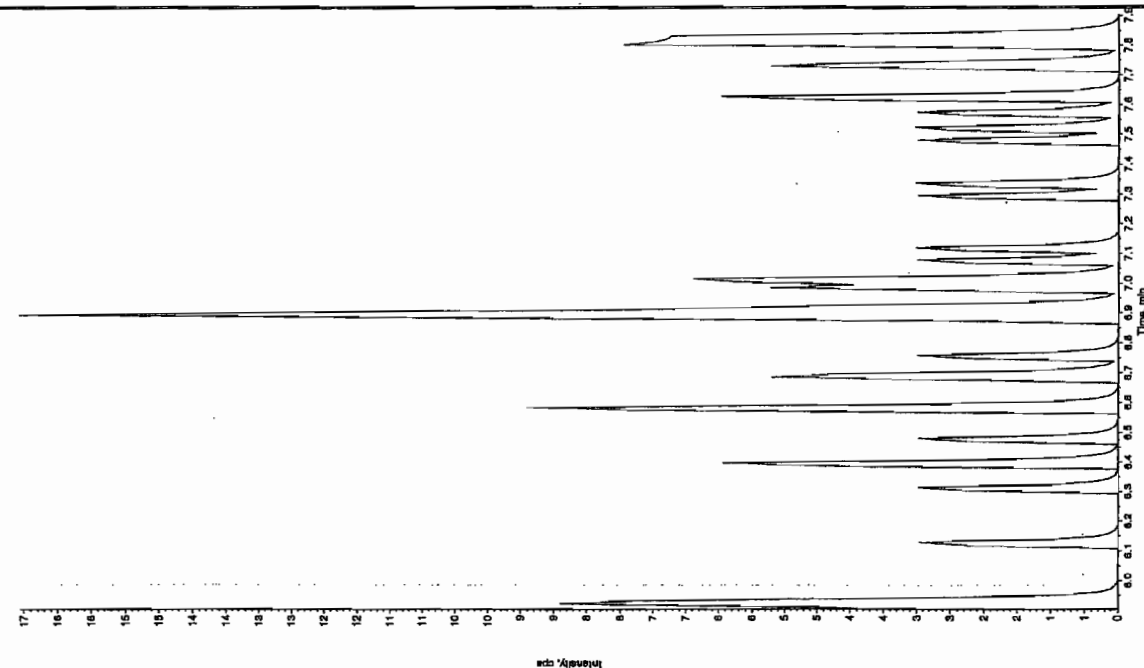
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GSK

Sample Name: "1202061319" Sample ID: "96103321" File: "EXS04080045.wif"

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

Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 6:45:58 PM  
Modified: No



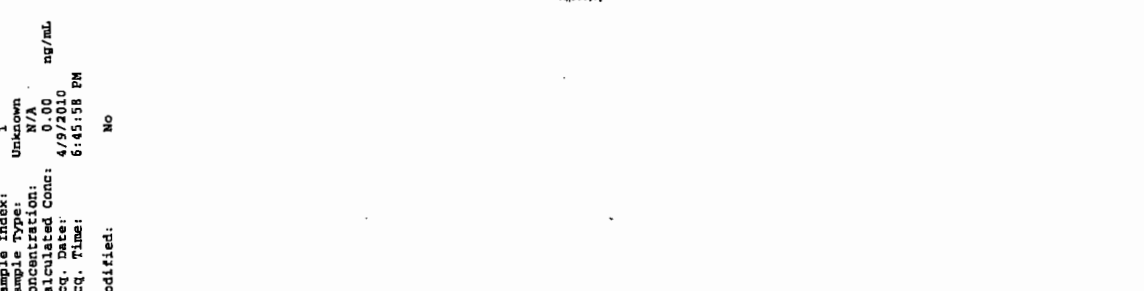
Run 4/12/10

Sample Name: "1202061319" Sample ID: "96103321" File: "EXS04080045.wif"

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

Comment: "LCX83212S" Annotation: ""

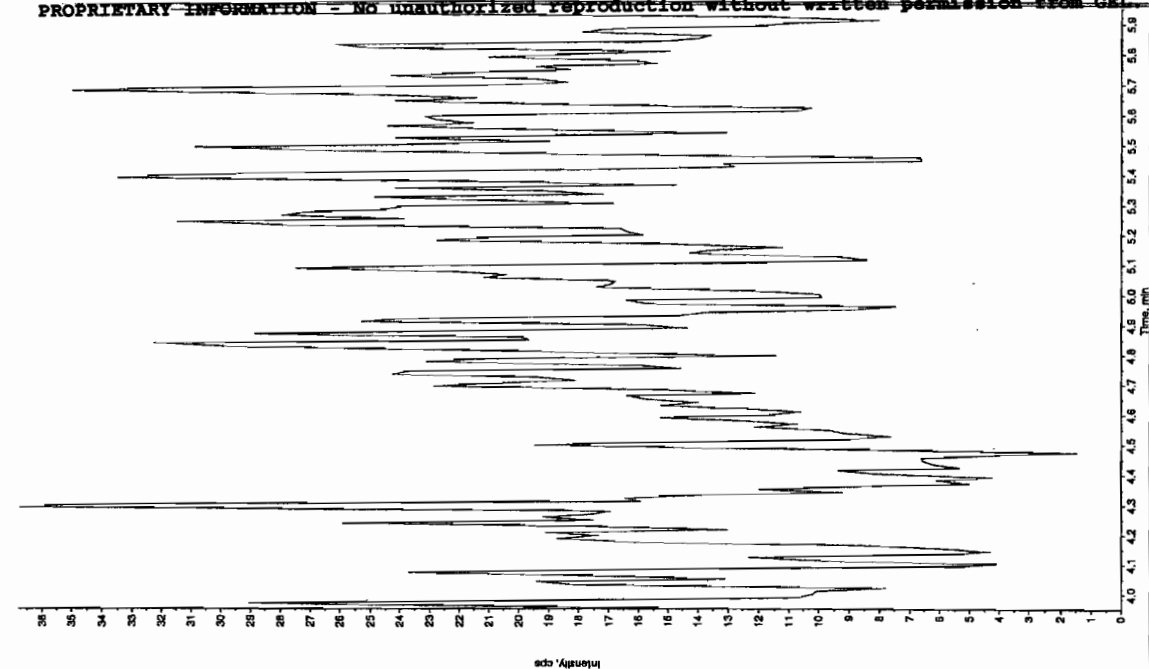
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 6:45:58 PM  
Modified: No



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

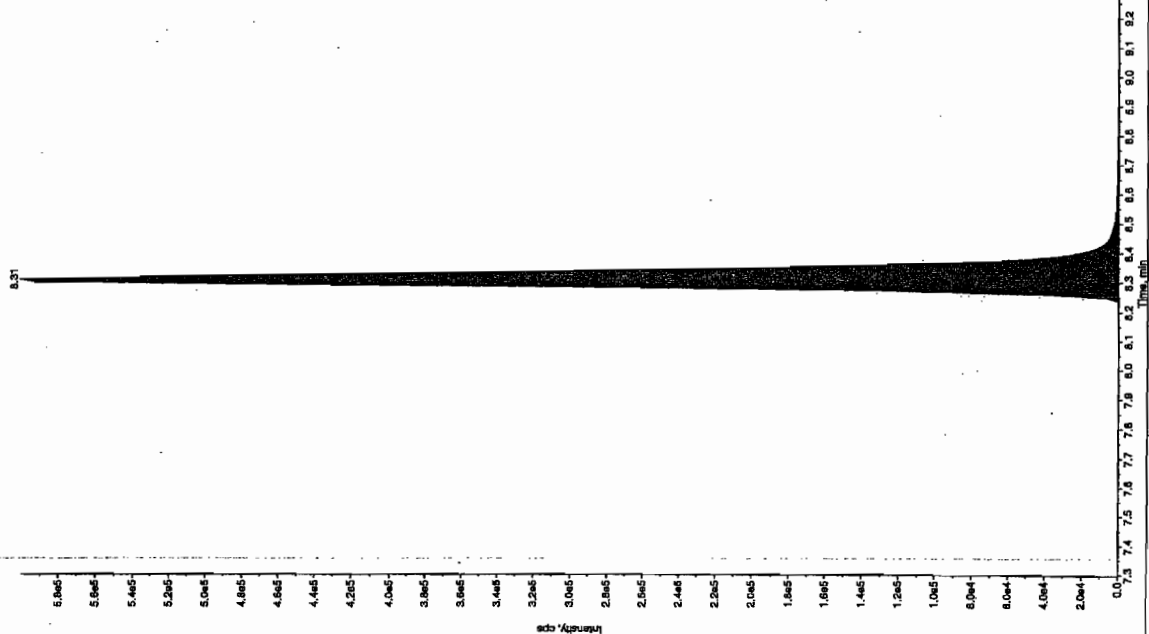
Sample Name: "1202061319" Sample ID: "9610332125" File: "EX504080045.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17151.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:45:58 PM  
 Modified: No



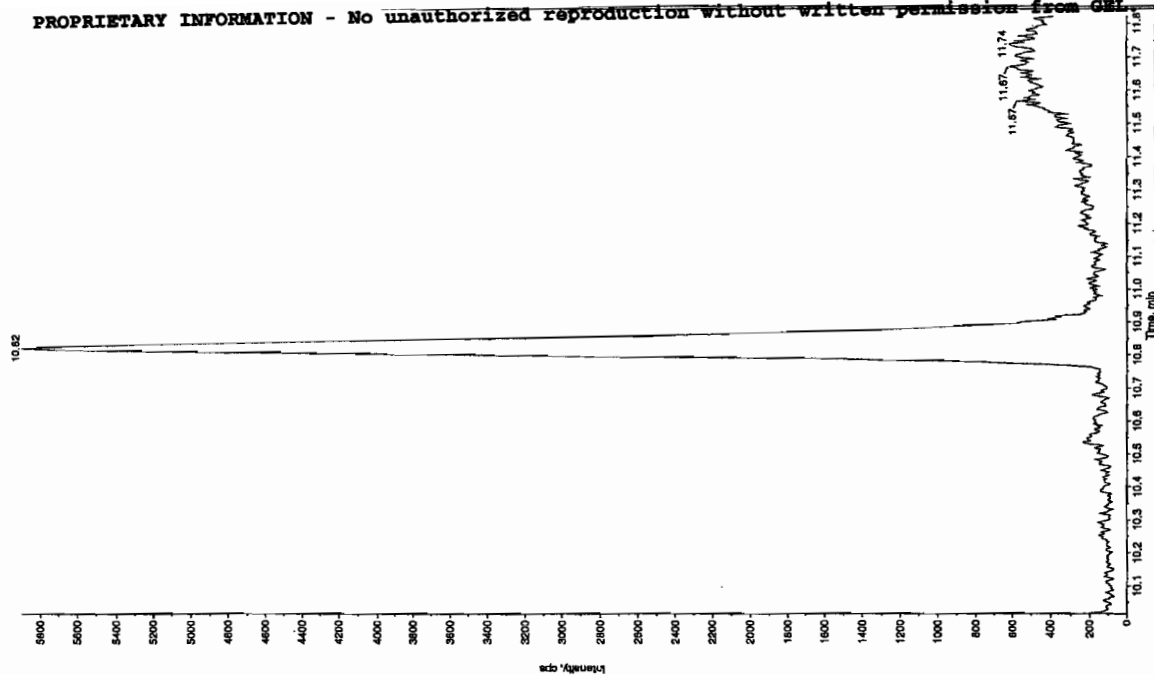
Sample Name: "1202061319" Sample ID: "9610332125" File: "EX504080045.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17151.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:45:58 PM  
 Modified: No  
 Proc. Algorithm: Interpolated - IQA  
 Min. Peak Width: 1.60 sec  
 Max. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Der Window: 30.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.31 min  
 Area: 2.41e+006 counts  
 Height: 599680.359 cps  
 Start Time: 8.21 min  
 End Time: 8.63 min



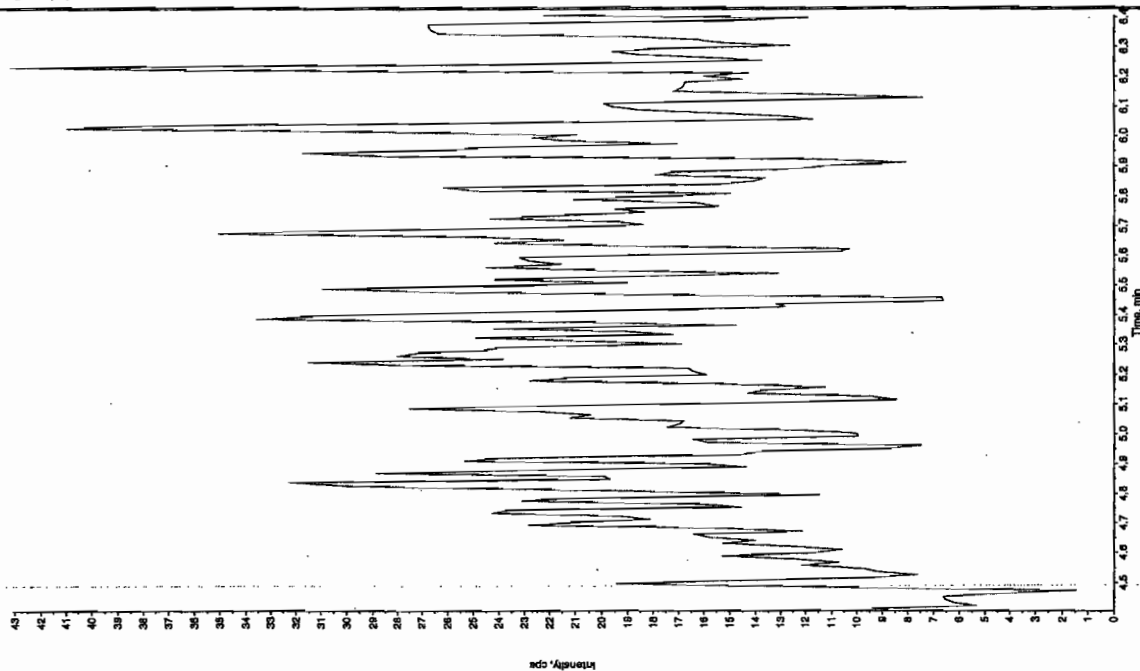
Sample Name: "1202061319" Sample ID: "961033212" File: "EXS04090046.wif"  
 Peak Name: "tris(cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:45:58 PM  
 Modified: NO



Sample Name: "1202061319" Sample ID: "961033212" File: "EXS04090045.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "156.0/46.0 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: 6:45:58 PM  
 Modified: NO



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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 961016

Lab Code: GEL

GEL Job No (SDG) 10-2196

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	

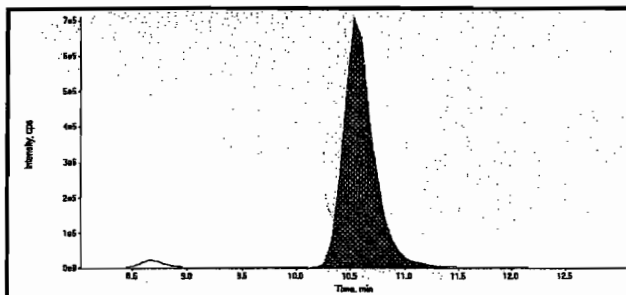
\*Concentration =

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

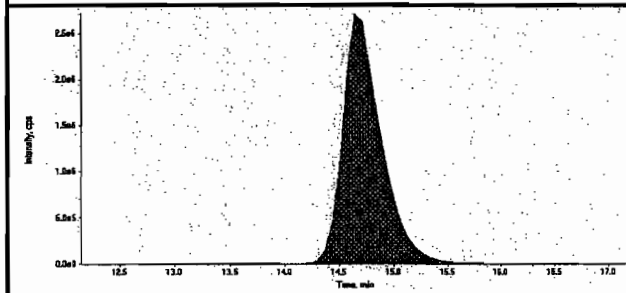
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

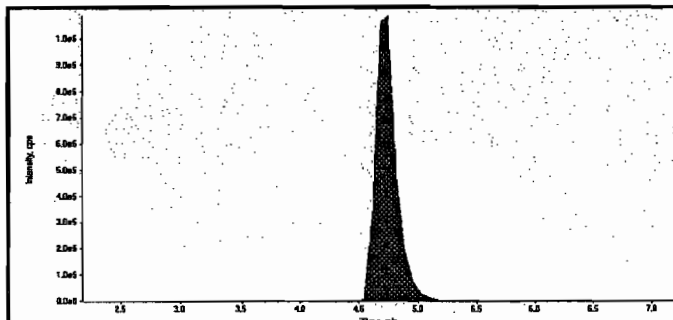
Data File	EXP0415067.wiff	Acquisition Date	4/16/2010 2:41:01 PM
Sample Name	1202061320	Acquisition Method	8321.dam
Batch Dilution Analysis	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



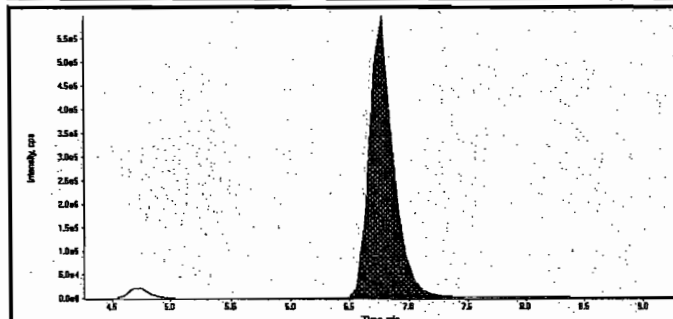
Compound Name	13-Dinitrobenzene-d4 (172.1461 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	13600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name	26-Dinitrochlorobenzene-d3 (185.0456 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 (34.12460 amu)
Expected RT:	4.67
Actual RT:	4.74
Area Counts:	1.39e+007
Manual Modification	No
Amount:	499. (ng/mL)
% Accuracy:	N/A

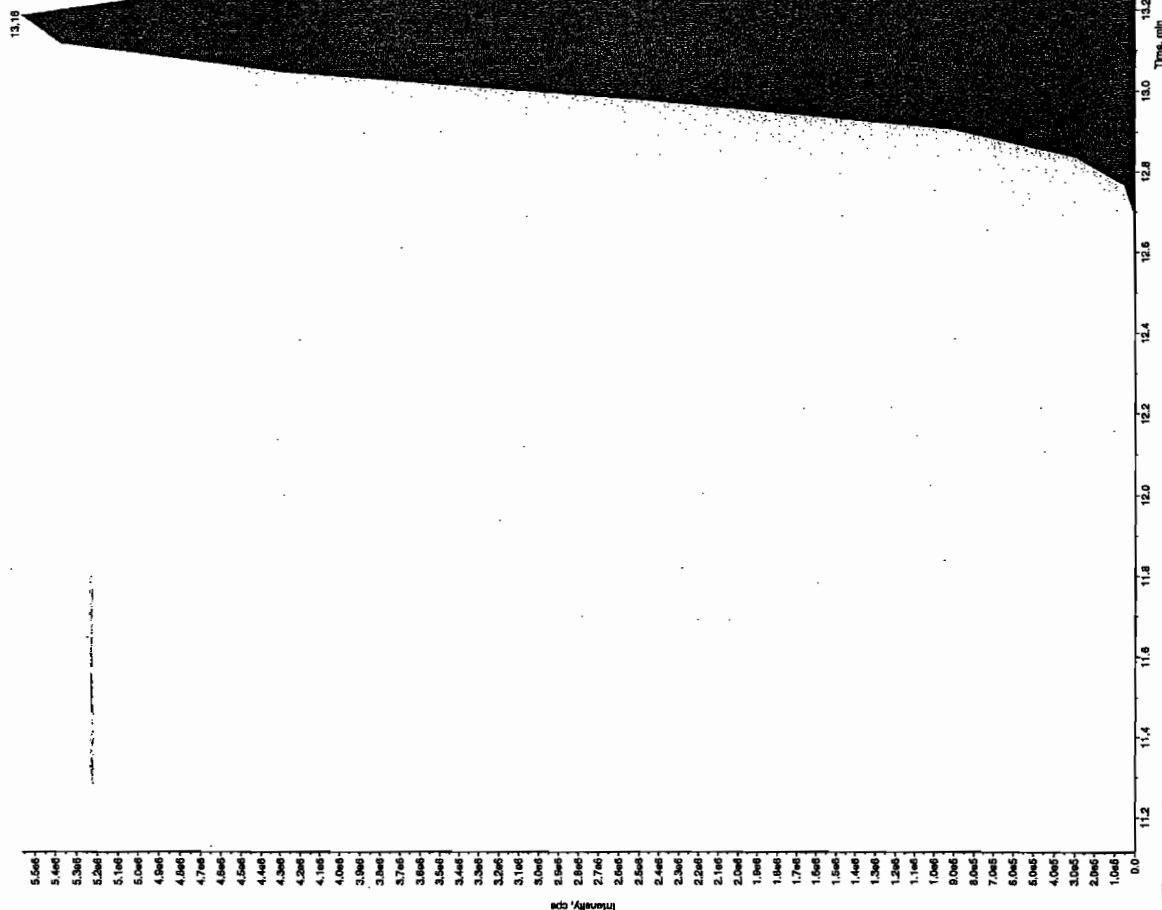


Compound Name	RDX (267.0461 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	8.58e+006
Manual Modification	No
Amount:	611. (ng/mL)
% Accuracy:	N/A

*San*  
4/23/10

*thm*  
04/23/10

Before 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	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	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

	Compound Name	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

	Compound Name	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

	Compound Name	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

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	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

	Compound Name	3,4-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

	Compound Name	2,6-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

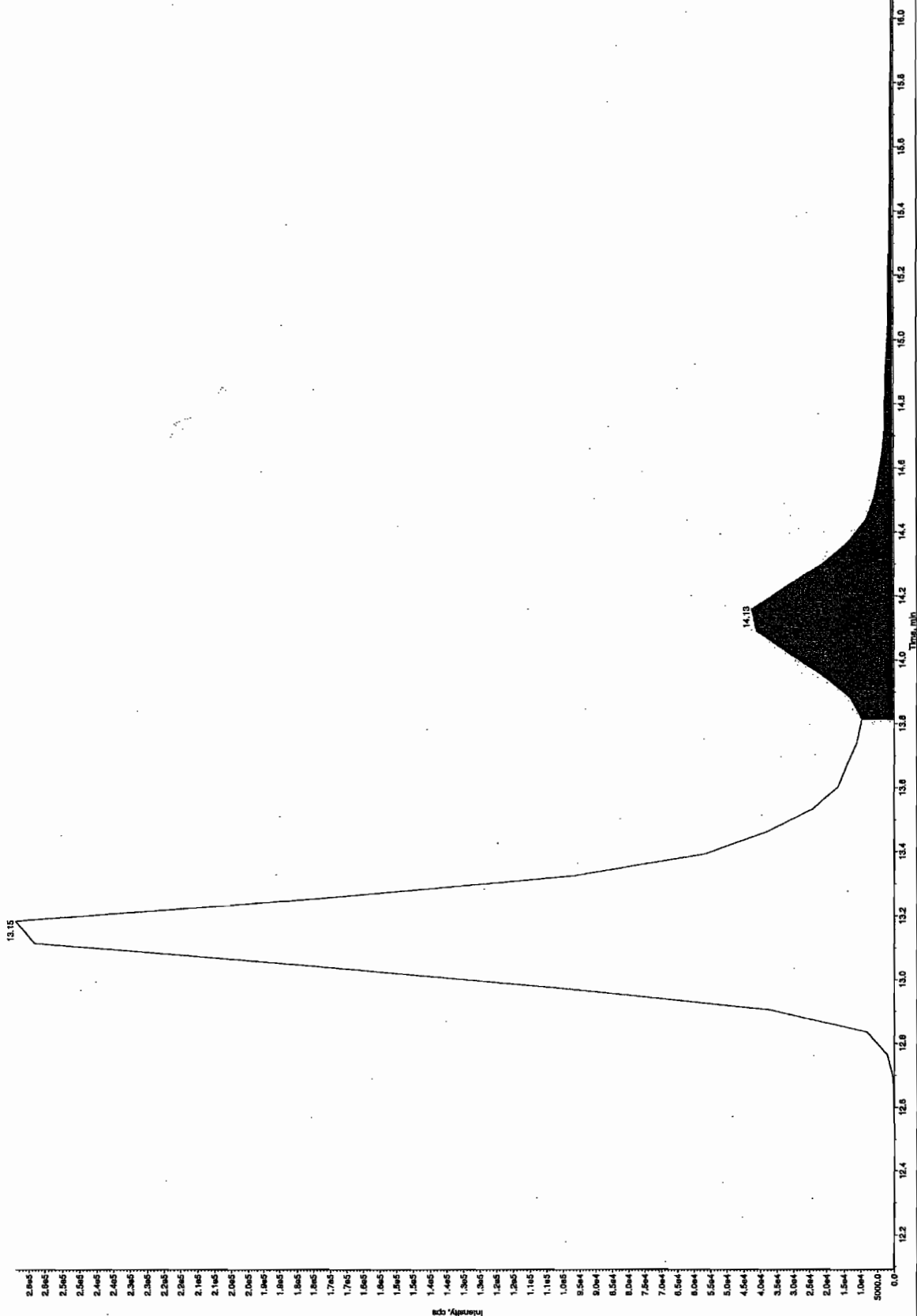
  

	Compound Name	2,4-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.32e+007
	Manual Modification	No
	Amount:	477. (ng/mL)
	% Accuracy:	N/A

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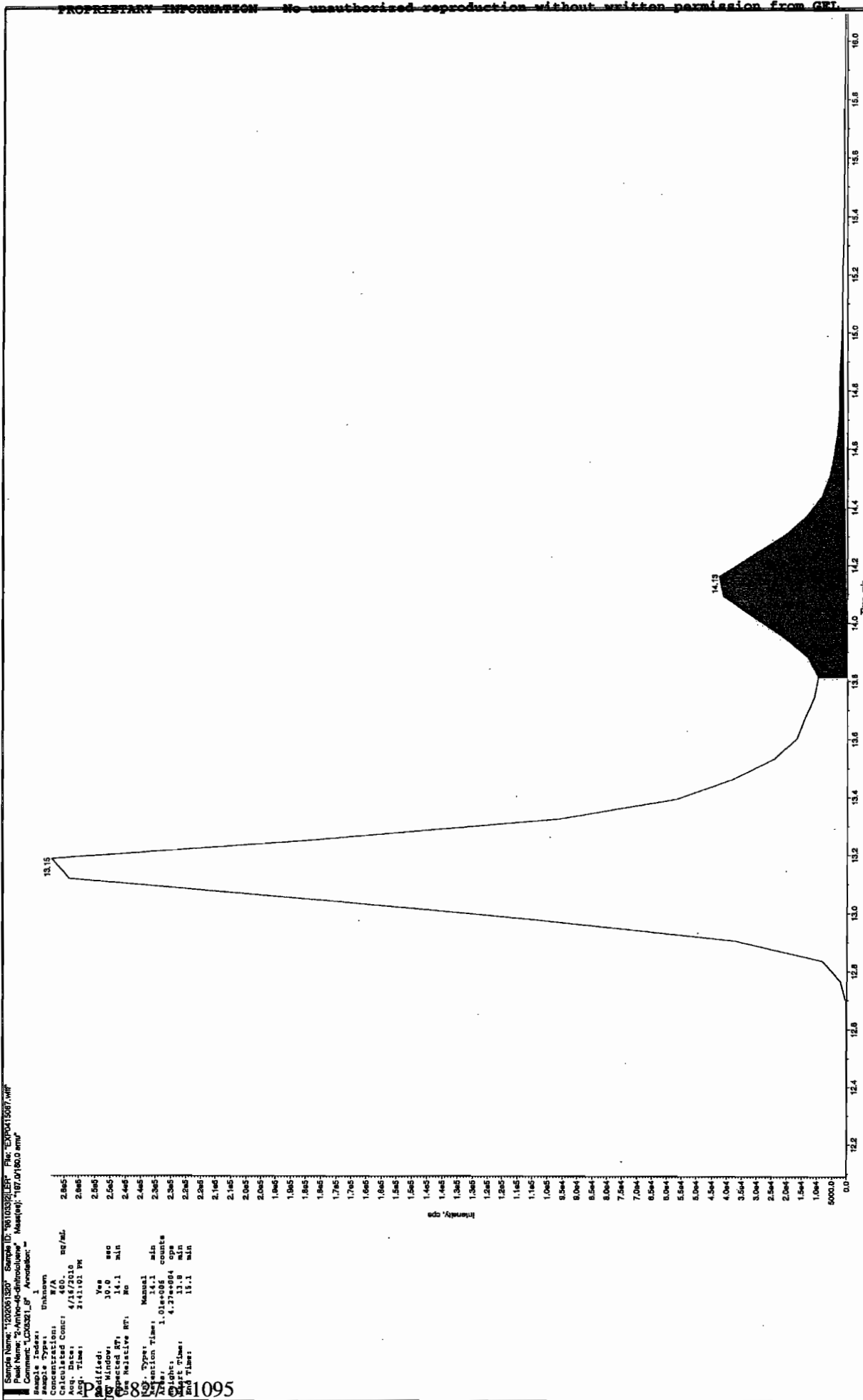


2.8e5  
2.8e5  
2.5e5  
2.5e5  
2.4e5  
2.4e5  
2.3e5  
2.3e5  
2.2e5  
2.2e5  
2.1e5  
2.1e5



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

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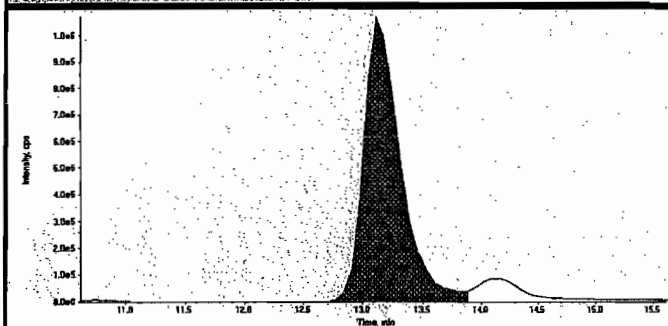
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



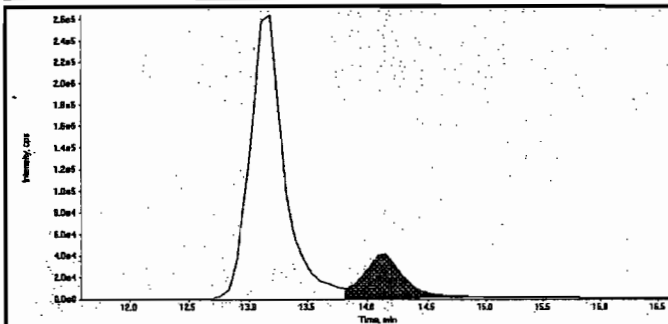
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

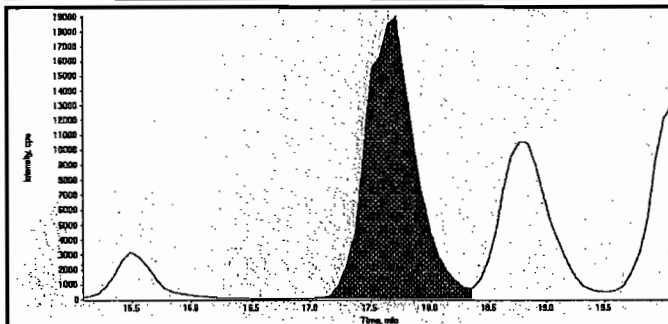
Data File	EXP0415067.wiff	Acquisition Date	4/16/2010 2:41:01 PM
Sample Name	1202061320	Acquisition Method	8321.dam
Batch/Dilution/Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



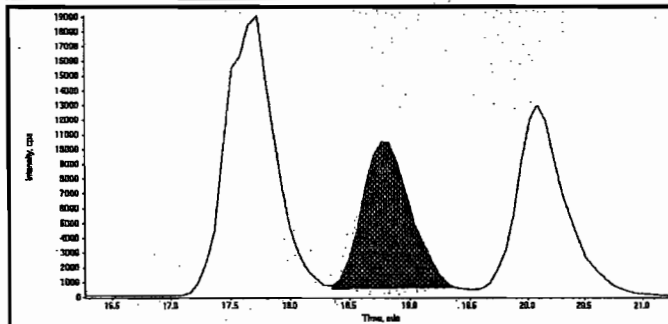
Compound Name	4-Amino-2,6-dinitrotoluene (197.0/187.0 amu)
Expected RT:	13.1
Actual RT:	13.1
Area Counts:	2.36e+007
Manual Modification	No
Amount:	392. (ng/mL)
% Accuracy:	N/A



Compound Name	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

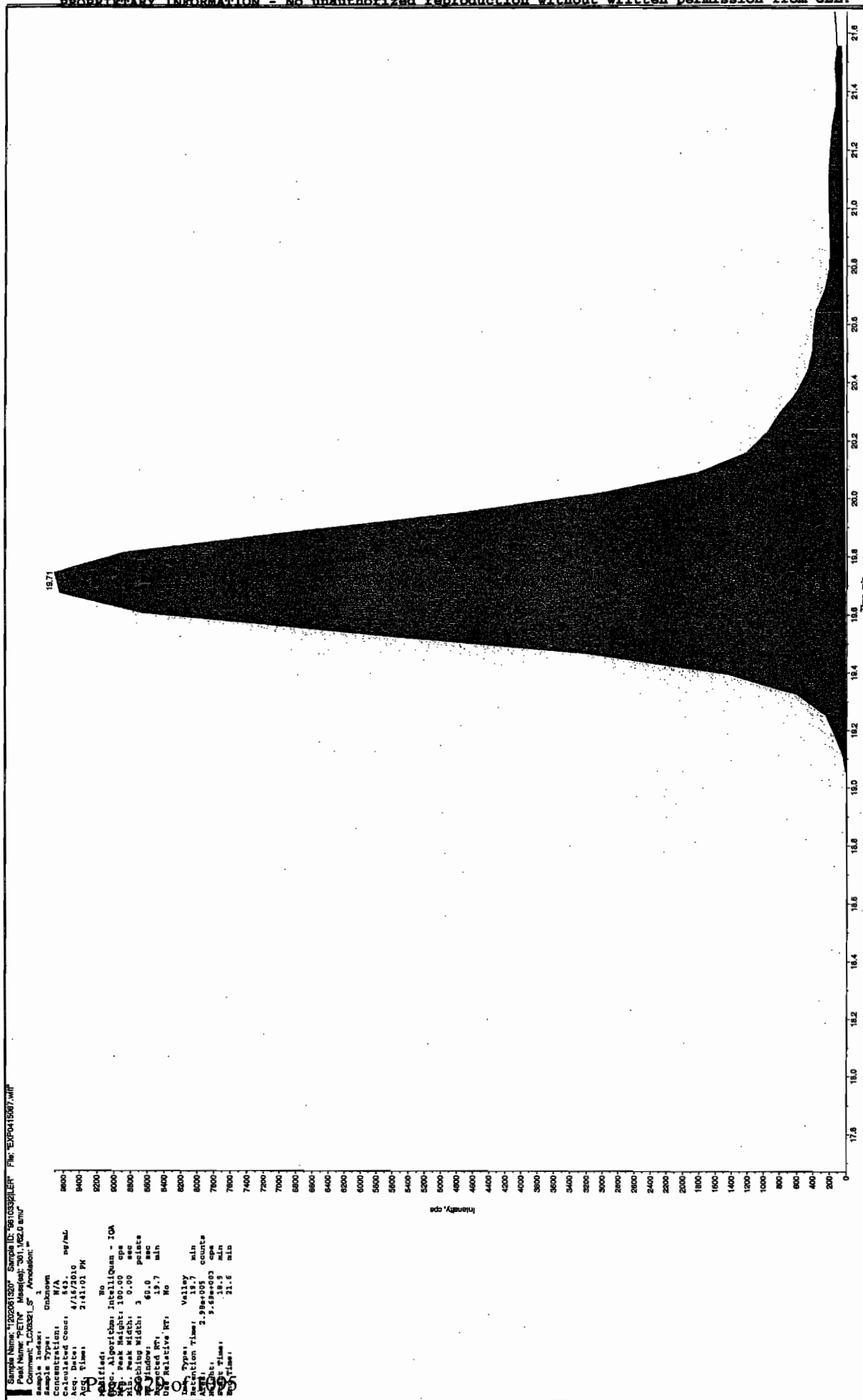


Compound Name	2-Nitrotoluene (137.0/146.0 amu)
Expected RT:	17.6
Actual RT:	17.7
Area Counts:	5.51e+005
Manual Modification	No
Amount:	517. (ng/mL)
% Accuracy:	N/A



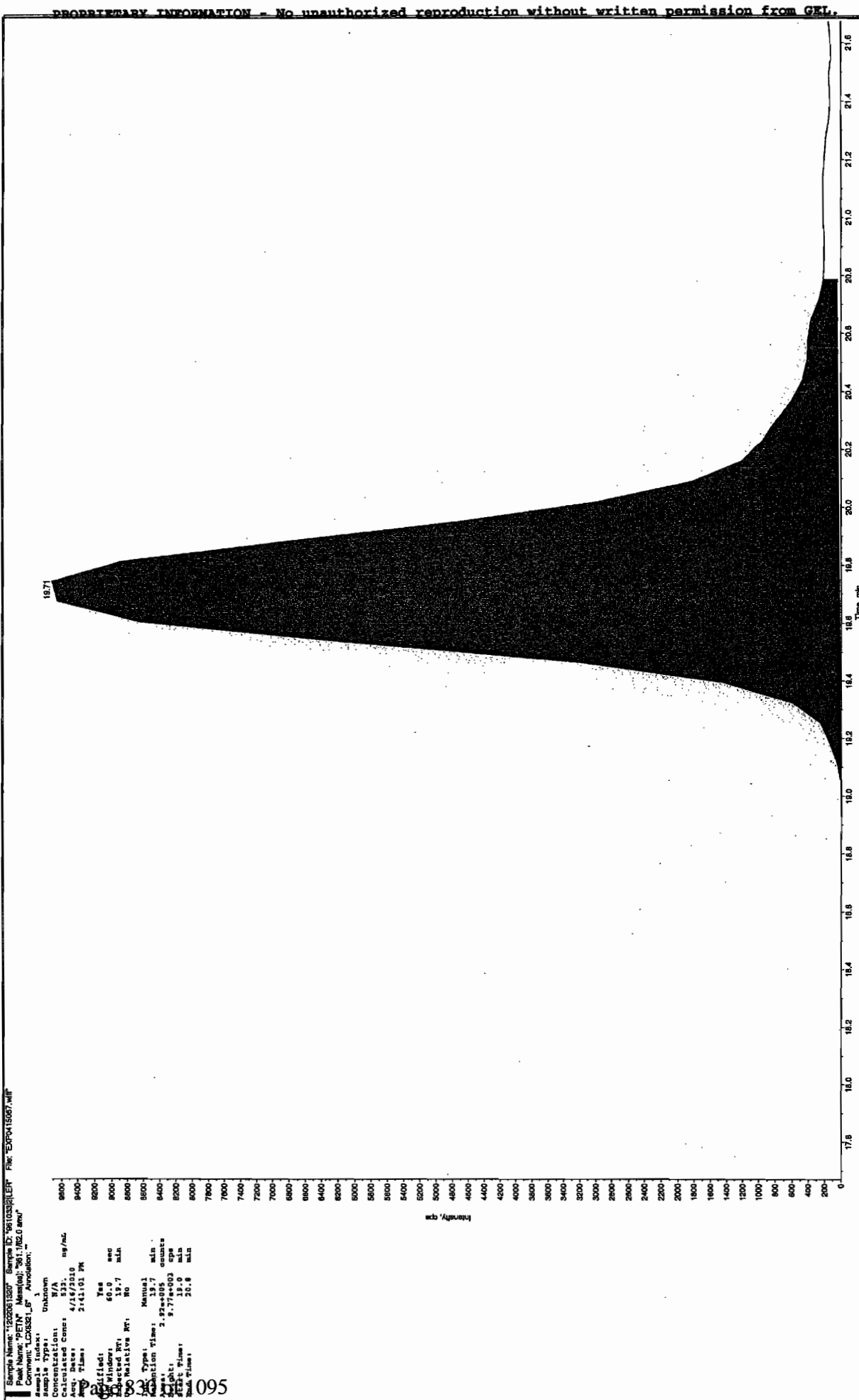
Compound Name	4-Nitrotoluene (137.0/146.0 amu)
Expected RT:	18.8
Actual RT:	18.8
Area Counts:	2.86e+005
Manual Modification	No
Amount:	492. (ng/mL)
% Accuracy:	N/A

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after Jan 4/23/10

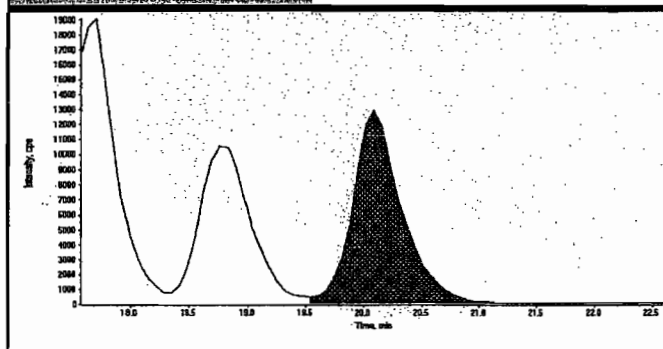


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

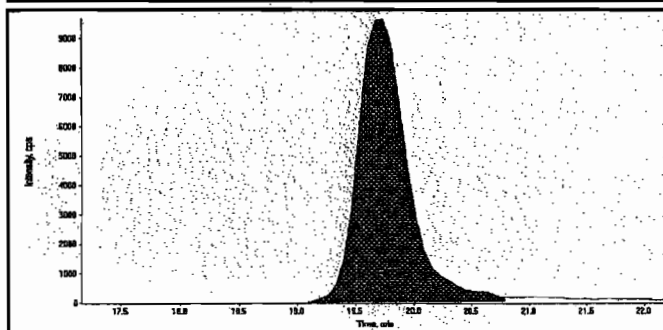
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	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	3-Nitrofluorene (187.0460 amu)
Expected RT:	20.1
Actual RT:	20.1
Area Counts:	3.89e+005
Manual Modification	No
Amount:	488. (ng/mL)
% Accuracy:	N/A



Compound Name	PF-1N (361.1620 amu)
Expected RT:	19.7
Actual RT:	19.7
Area Counts:	2.92e+005
Manual Modification	Yes
Amount:	532. (ng/mL)
% Accuracy:	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) 10-2196

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 =

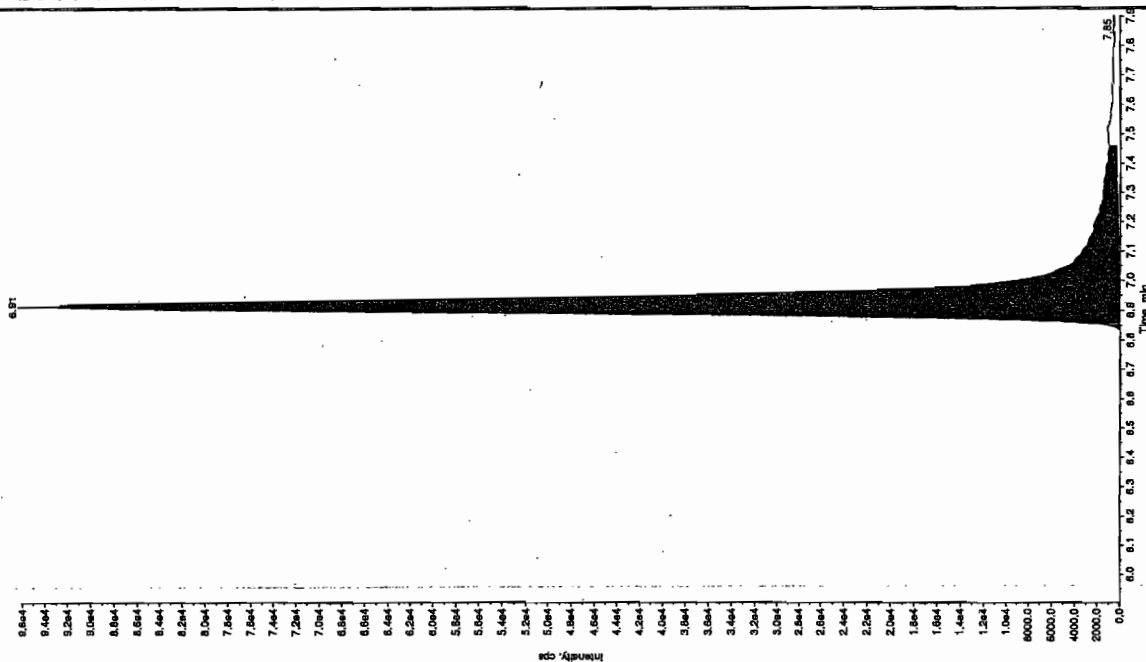
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Run 4/12/10

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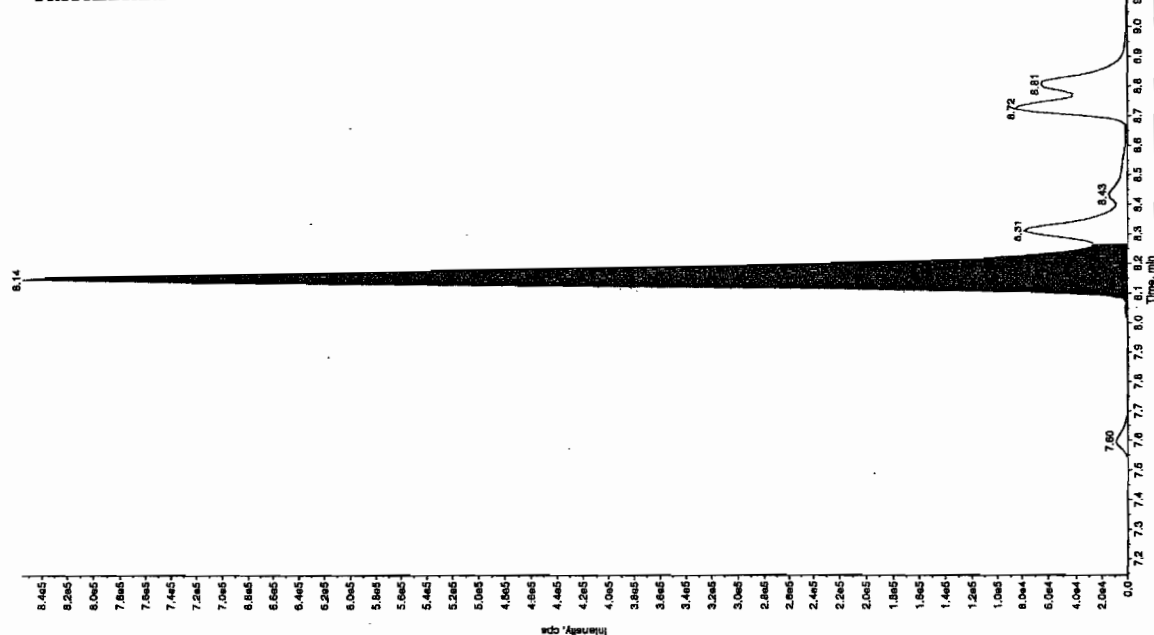
Sample Name: "122061320" Sample ID: "96103312L" File: "EXS04080046.wif"  
Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: 471. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 7:01:40 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: 8.90 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 6.91 min  
Area: 4.43e+005 counts  
Height: 96080.475 cps  
Start Time: 6.82 min  
End Time: 7.46 min



Sample Name: "122061320" Sample ID: "96103312L" File: "EXS04080046.wif"  
Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: 498. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 7:01:40 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: 8.14 min  
Area: 3.53e+006 counts  
Height: 853757.263 cps  
Start Time: 7.99 min  
End Time: 8.27 min



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

Sample Name: "1202051320" Sample ID: "961031320" File: "EXS04090046.wif"

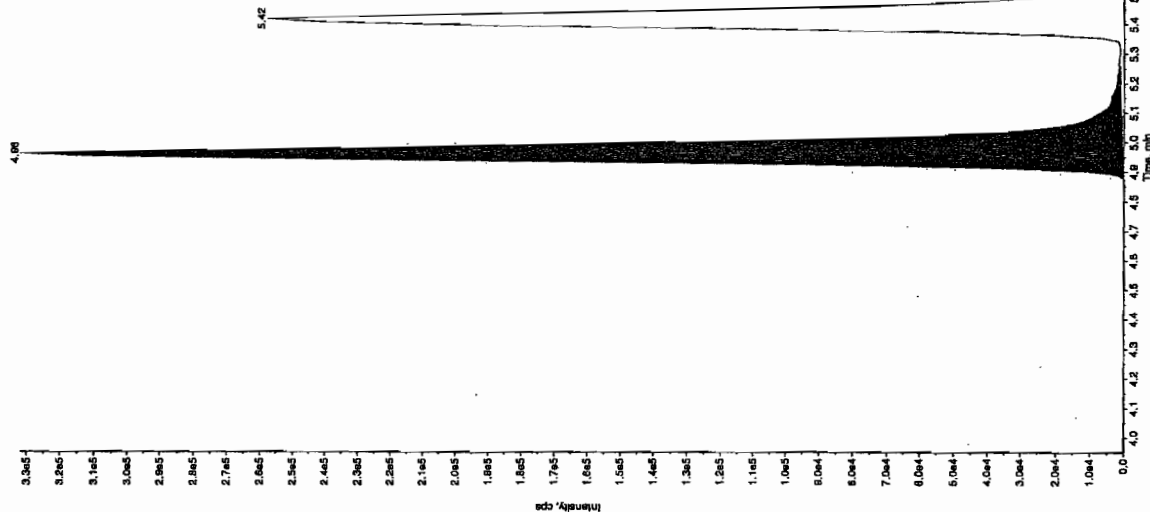
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "156.046.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 509. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 7:01:40 PM

Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 450.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 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: "1202051320" Sample ID: "961031320" File: "EXS04090046.wif"

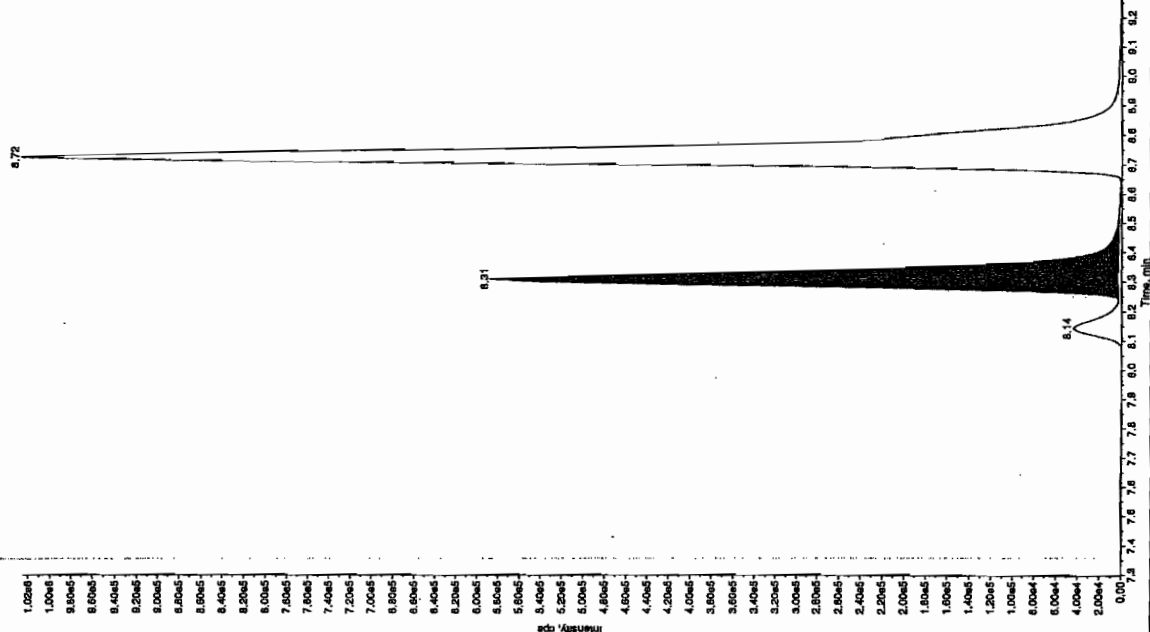
Peak Name: "3,4-Dinitrotoluene" Mass(es): "182.151.9 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 248. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 7:01:40 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: 2.22e+006 counts  
Height: 385509.846 cps  
Start Time: 8.24 min  
End Time: 8.55 min



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

Sample Name: "1202061320" Sample ID: "96103312" File: "EX04090046.wif"

Peak Name: "1,4-Diamino-5-nitrofluorene" Mass(es): "369.1/91.0 amu"

Comment: "LCX632125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 492. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 7:01:40 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 1800.00 cps

Min. Peak Width: 3.00 sec

Smoothing Width: 30.0 points

RT Window: 30.0 sec

Expected RT: 10.8 min

Use Relative RT: No

Int. Type: Valley

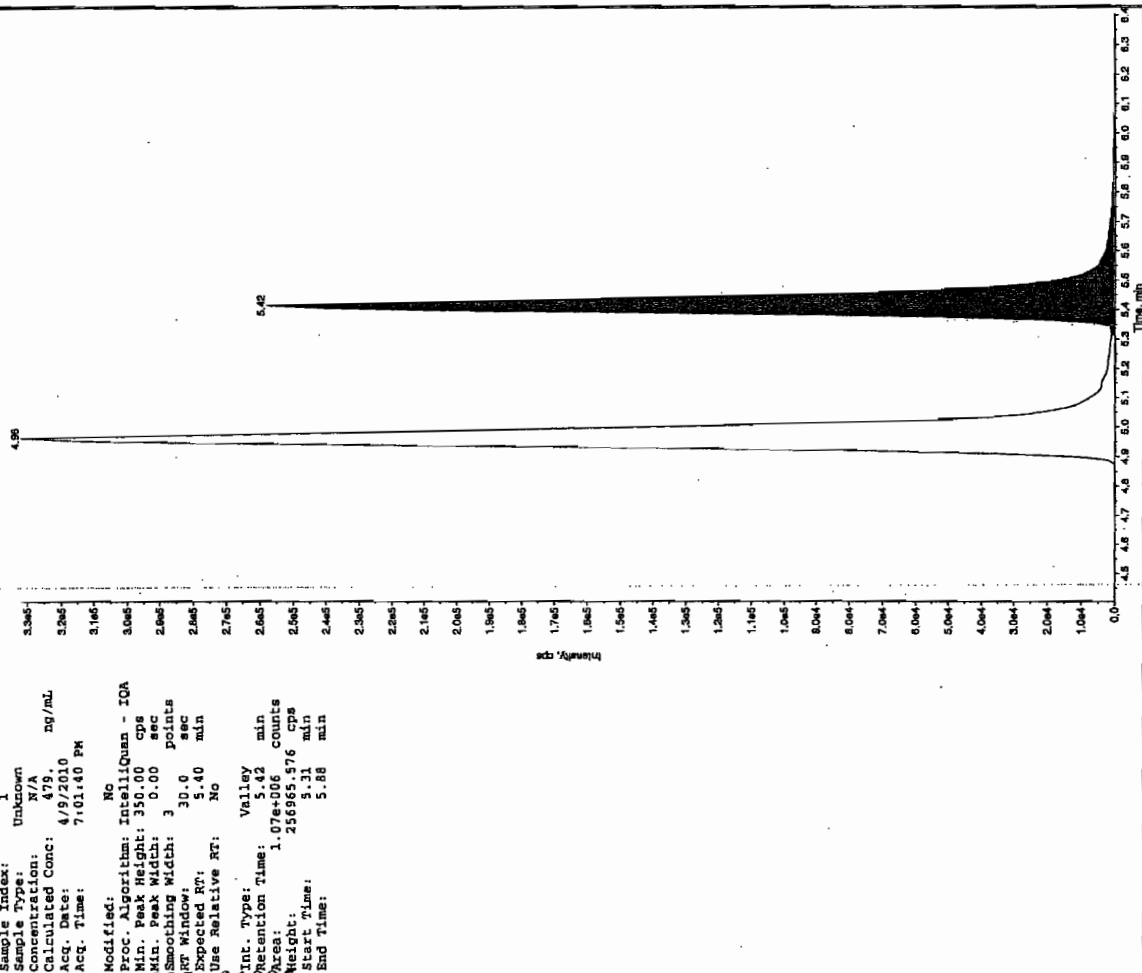
Retention Time: 10.9 min

Area: 9.41e+006 counts

Height: 2288896.973 cps

Start Time: 10.8 min

End Time: 11.2 min



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



# MISCELLANEOUS DATA

# Prep Logbook

## Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 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	UXC100223-02.03	1	mL	
MS	1202061321	8321 Explosives LCS	DXC100225-03	.1	mL	
MS	1202061321	8321 LANL Explosives Mix 10mg/L	UXC100223-02.03	1	mL	
MSD	1202061322	8321 Explosives LCS	DXC100225-03	.1	mL	
MSD	1202061322	8321 LANL Explosives Mix 10mg/L	UXC100223-02.03	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DXP100309-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS#3

Date: 4/15/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 041510  
 Initial Calibration Date: 041510  
 Method: 8321A-Modified  
 Int. Std.: UXX100324-02.3  
 Mobile Phase Lot#: 1301905, 1297752  
 Standard-Samp Reagent Lot#: 1293274, 1299881

Reviewed BY: *ham*  
 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
EXP0415032.wiff	WXXCRI	LER	4/15/2010 23:31			1	USE
EXP0415033.wiff	1202061204	LER	4/15/2010 23:57	960986	10-2193	2	LANL
EXP0415034.wiff	1202061205	LER	4/16/2010 0:23	960986	10-2193	2	LANL
EXP0415035.wiff	248506001	LER	4/16/2010 0:49	960986	10-2193	2	LANL
EXP0415036.wiff	1202061206	LER	4/16/2010 1:15	960986	10-2193	2	LANL
EXP0415037.wiff	1202061207	LER	4/16/2010 1:41	960986	10-2193	2	LANL
EXP0415038.wiff	248506002	LER	4/16/2010 2:07	960986	10-2193	2	LANL
EXP0415039.wiff	248506003	LER	4/16/2010 2:33	960986	10-2193	2	LANL
EXP0415040.wiff	248506004	LER	4/16/2010 2:59	960986	10-2193	2	LANL
EXP0415041.wiff	248506005	LER	4/16/2010 3:25	960986	10-2193	2	LANL
EXP0415042.wiff	248506006	LER	4/16/2010 3:51	960986	10-2193	2	LANL
EXP0415043.wiff	WXXCVC	LER	4/16/2010 4:17			1	USE
EXP0415044.wiff	XIBLK10	LER	4/16/2010 4:43			1	USE
EXP0415045.wiff	WXXCRI	LER	4/16/2010 5:09			1	USE
EXP0415046.wiff	248506007	LER	4/16/2010 5:35	960986	10-2193	2	LANL
EXP0415047.wiff	248506008	LER	4/16/2010 6:01	960986	10-2193	2	LANL
EXP0415048.wiff	248506009	LER	4/16/2010 6:27	960986	10-2193	2	LANL
EXP0415049.wiff	248506010	LER	4/16/2010 6:53	960986	10-2193	2	LANL
EXP0415050.wiff	248506011	LER	4/16/2010 7:19	960986	10-2193	2	LANL
EXP0415051.wiff	248506012	LER	4/16/2010 7:45	960986	10-2193	2	LANL
EXP0415052.wiff	248506013	LER	4/16/2010 8:11	960986	10-2193	2	LANL
EXP0415053.wiff	248506014	LER	4/16/2010 8:37	960986	10-2193	2	LANL
EXP0415054.wiff	248506015	LER	4/16/2010 9:02	960986	10-2193	2	LANL
EXP0415055.wiff	248506016	LER	4/16/2010 9:28	960986	10-2193	2	LANL
EXP0415056.wiff	WXXCVC	LER	4/16/2010 9:54			1	USE
EXP0415057.wiff	XIBLK11	LER	4/16/2010 10:20			1	USE
EXP0415058.wiff	WXXCRI	LER	4/16/2010 10:46			1	USE
EXP0415059.wiff	248506017	LER	4/16/2010 11:13	960986	10-2193	2	LANL
EXP0415060.wiff	248506018	LER	4/16/2010 11:39	960986	10-2193	2	LANL
EXP0415061.wiff	248506019	LER	4/16/2010 12:05	960986	10-2193	2	LANL
EXP0415062.wiff	248506020	LER	4/16/2010 12:31	960986	10-2193	2	LANL
EXP0415063.wiff	WXXCVC	LER	4/16/2010 12:57			1	USE
EXP0415064.wiff	XIBLK12	LER	4/16/2010 13:23			1	USE
EXP0415065.wiff	WXXCRI	LER	4/16/2010 13:49			1	USE
EXP0415066.wiff	1202061319	LER	4/16/2010 14:15	961033	VARIOUS	2	LANL
EXP0415067.wiff	1202061320	LER	4/16/2010 14:41	961033	VARIOUS	2	LANL

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: LCMSMS4

Date: 04/09/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 040910exs  
 Initial Calibration Date: 040910

Method: 8321A-Modified  
 Int. Std.: N/A  
 Mobile Phase Lot#: 1269686, 1293224  
 Standard-Samp Reagent Lot#: 1292884, 1284736

Reviewed By: *Ann*  
 Date: *4/12/10*  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100409-26

2°

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	I
EXS04090011.wiff	WXXICV	LER	4/9/2010 9:51			1		USE	B
EXS04090012.wiff	XIBLK03	LER	4/9/2010 10:07			1		USE	C
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
EXS04090025.wiff	XIBLK04	LER	4/9/2010 13:31			1		USE	B
EXS04090026.wiff	WXXCRI	LER	4/9/2010 13:47			1		USE	C
EXS04090027.wiff	248506007	LER	4/9/2010 14:03	960986	10-2193	2	LANL	USE	S
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
EXS04090030.wiff	248506010	LER	4/9/2010 14:50	960986	10-2193	2	LANL	USE	S

EXS04090031.wiff	248506011	LER	4/9/2010 15:06	960986	10-2193	2	LANL	USE	S
EXS04090032.wiff	248506012	LER	4/9/2010 15:21	960986	10-2193	2	LANL	USE	S
EXS04090033.wiff	248506013	LER	4/9/2010 15:37	960986	10-2193	2	LANL	USE	S
EXS04090034.wiff	248506014	LER	4/9/2010 15:53	960986	10-2193	2	LANL	USE	S
EXS04090035.wiff	248506015	LER	4/9/2010 16:08	960986	10-2193	2	LANL	USE	S
EXS04090036.wiff	248506016	LER	4/9/2010 16:24	960986	10-2193	2	LANL	USE	S
EXS04090037.wiff	WXXCCV	LER	4/9/2010 16:40			1		USE	C
EXS04090038.wiff	XIBLK05	LER	4/9/2010 16:56			1		USE	B
EXS04090039.wiff	WXXCRI	LER	4/9/2010 17:11			1		USE	C
EXS04090040.wiff	248506017	LER	4/9/2010 17:27	960986	10-2193	2	LANL	USE	S
EXS04090041.wiff	248506018	LER	4/9/2010 17:43	960986	10-2193	2	LANL	USE	S
EXS04090042.wiff	248506019	LER	4/9/2010 17:58	960986	10-2193	2	LANL	USE	S
EXS04090043.wiff	248506020	LER	4/9/2010 18:14	960986	10-2193	2	LANL	USE	S
EXS04090044.wiff	XIBLK06	LER	4/9/2010 18:30			1		USE	B
EXS04090045.wiff	1202061319	LER	4/9/2010 18:45	961033	VARIOUS	2	LANL	USE	S
EXS04090046.wiff	1202061320	LER	4/9/2010 19:01	961033	VARIOUS	2	LANL	USE	S
EXS04090047.wiff	248514001	LER	4/9/2010 19:17	961033	10-2196	2	LANL	USE	S
EXS04090048.wiff	248514002	LER	4/9/2010 19:33	961033	10-2196	2	LANL	USE	S
EXS04090049.wiff	248514003	LER	4/9/2010 19:48	961033	10-2196	2	LANL	USE	S
EXS04090050.wiff	WXXCCV	LER	4/9/2010 20:04			1		USE	C
EXS04090051.wiff	XIBLK07	LER	4/9/2010 20:20			1		USE	B
EXS04090052.wiff	WXXCRI	LER	4/9/2010 20:35			1		USE	C
EXS04090053.wiff	248517001	LER	4/9/2010 20:51	961033	10-2198	2	LANL	USE	S
EXS04090054.wiff	248519001	LER	4/9/2010 21:07	961033	10-2199	2	LANL	USE	S
EXS04090055.wiff	248519002	LER	4/9/2010 21:23	961033	10-2199	2	LANL	USE	S
EXS04090056.wiff	248519003	LER	4/9/2010 21:38	961033	10-2199	2	LANL	USE	S
EXS04090057.wiff	248519004	LER	4/9/2010 21:54	961033	10-2199	2	LANL	USE	S
EXS04090058.wiff	248519005	LER	4/9/2010 22:10	961033	10-2199	2	LANL	USE	S
EXS04090059.wiff	248519006	LER	4/9/2010 22:25	961033	10-2199	2	LANL	USE	S
EXS04090060.wiff	248519007	LER	4/9/2010 22:41	961033	10-2199	2	LANL	USE	S
EXS04090061.wiff	248519008	LER	4/9/2010 22:57	961033	10-2199	2	LANL	USE	S
EXS04090062.wiff	248519009	LER	4/9/2010 23:12	961033	10-2199	2	LANL	USE	S
EXS04090063.wiff	WXXCCV	LER	4/9/2010 23:28			1		USE	C
EXS04090064.wiff	XIBLK08	LER	4/9/2010 23:44			1		USE	B
EXS04090065.wiff	WXXCRI	LER	4/10/2010 0:00			1		USE	C
EXS04090066.wiff	248519010	LER	4/10/2010 0:15	961033	10-2199	2	LANL	USE	S
EXS04090067.wiff	248519011	LER	4/10/2010 0:31	961033	10-2199	2	LANL	USE	S

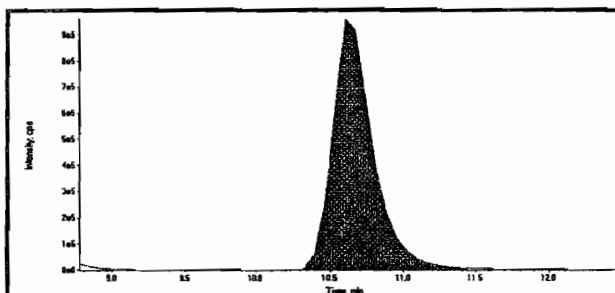


EXS04090068.wiff	248526001	LER	4/10/2010 0:47	961033	10-2202	2	LANL	USE	S
EXS04090069.wiff	1202061321	LER	4/10/2010 1:02	961033	10-2202	2	LANL	USE	S
EXS04090070.wiff	1202061322	LER	4/10/2010 1:18	961033	10-2202	2	LANL	USE	S
EXS04090071.wiff	WXXCCV	LER	4/10/2010 1:34			1		USE	C
EXS04090072.wiff	XIBLK09	LER	4/10/2010 1:49			1		USE	B
EXS04090073.wiff	WXXCRI	LER	4/10/2010 2:05			1		USE	C

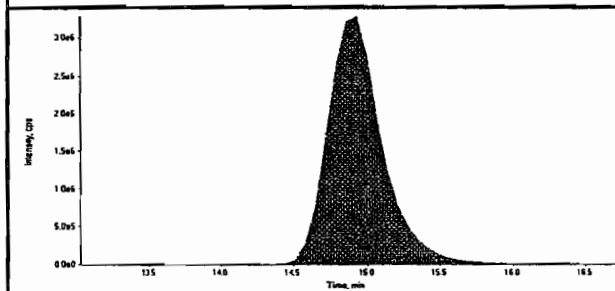
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

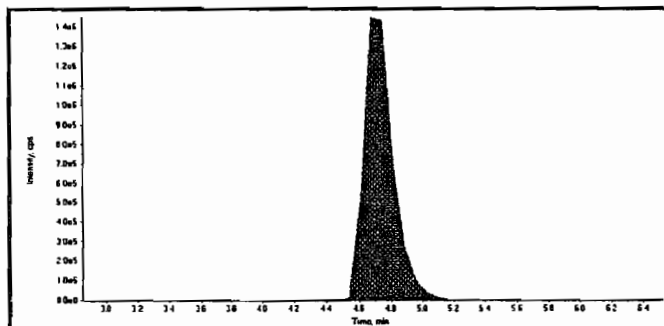
Data File	EXP0420021.wiff	Acquisition Date	4/20/2010 10:57:42 PM
Sample Name	1202061321	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



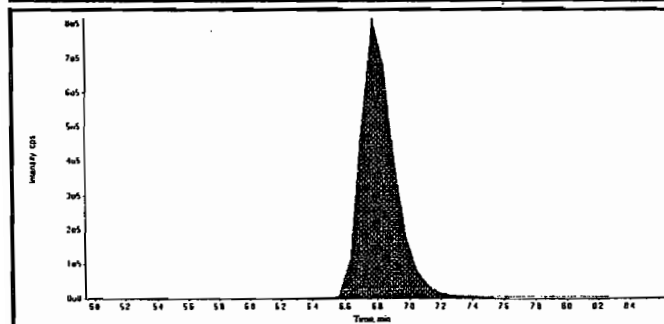
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	18400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



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	



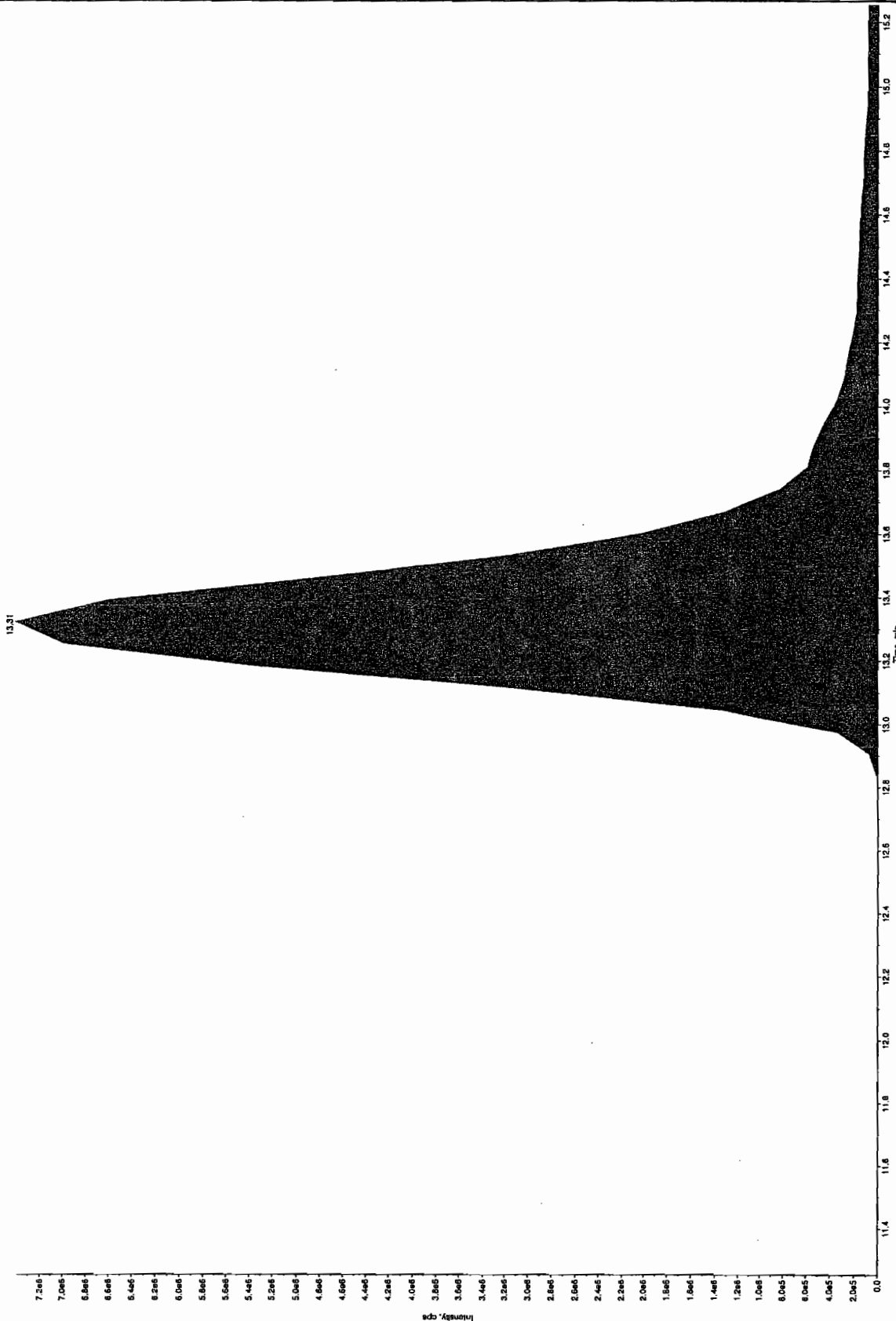
Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.91e+007
Manual Modification	No
Amount:	482. (ng/mL)
% Accuracy:	N/A



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* *Amw 04/29/10*

Before Dec 4/28/60



\*GEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#3

after Dec 4/28/10

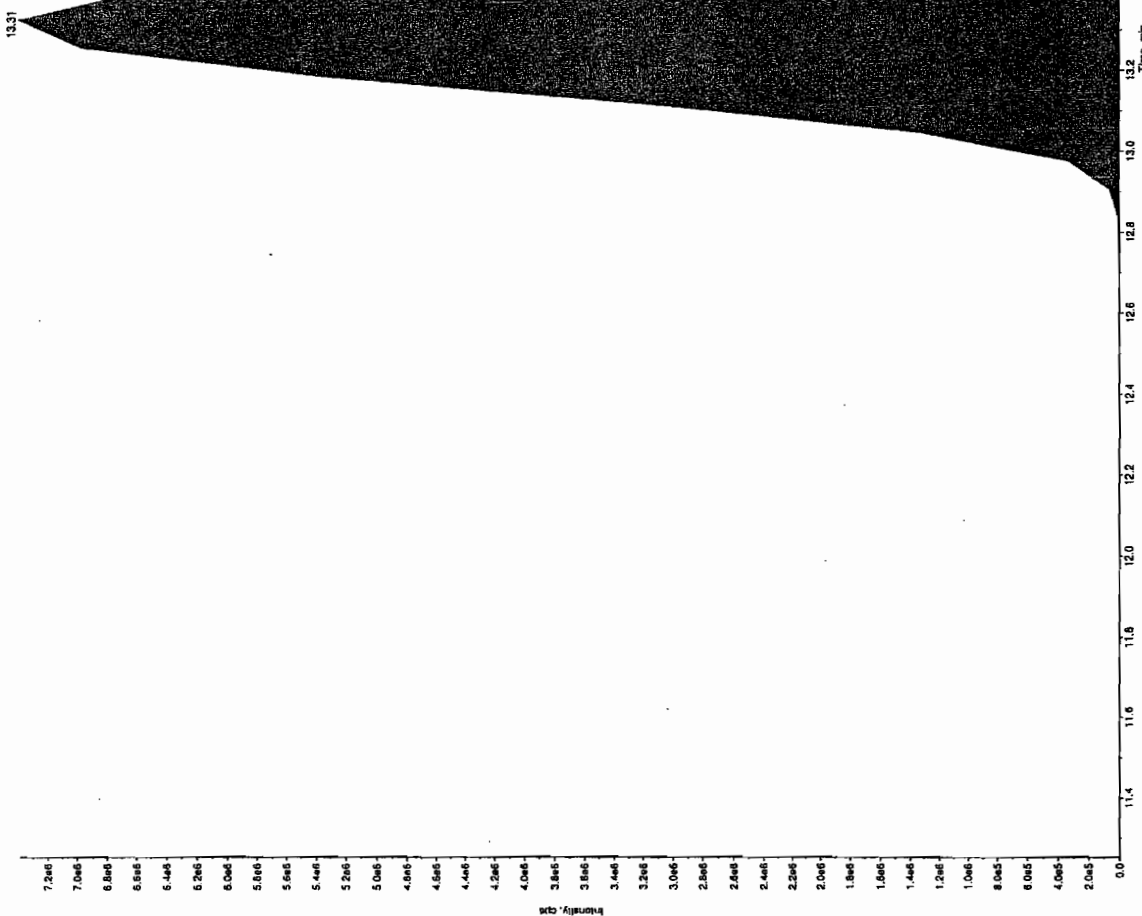
Sample Name: 1202051221 Sample ID: 9410332121 File: E:\PQ20021.wif  
Peak Name: "246-Triethanolamine" Mass(es): 227.1209.8 amu  
Common: "LCMS331\_S" Annotation: --

Sample Index: 1  
Sample Name: Unknown  
Concentration: N/A  
Calculated Conc: 519. ng/mL  
Acq. Date: 4/29/2010  
Acq. Time: 10:57:42 PM

Method: Yes  
Acq. Rate: 60.0 sec  
Acq. Time: 11.3 min  
Acq. Volume: 6.888

Injection: Yes  
Injection Volume: 11.3 µL  
Injection Rate: 1.400+008 cps  
Start Time: 12.8 min  
End Time: 14.1 min

Type: Manual  
Injection Time: 11.3 min  
Injection Volume: 11.3 µL  
Injection Rate: 1.400+008 cps  
Start Time: 12.8 min  
End Time: 14.1 min



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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>	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)
	Expected RT:	9.07
	Actual RT:	9.07
	Area Counts:	1.12e+008
	Manual Modification	No
	Amount:	552. (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:	5.08e+007
	Manual Modification	No
	Amount:	535. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.8
	Actual RT:	10.8
	Area Counts:	3.84e+007
	Manual Modification	No
	Amount:	501. (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:	1.93e+008
	Manual Modification	Yes
	Amount:	519. (ng/mL)
	% Accuracy:	N/A

Before Jan 4/28/10

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

Sample Name: "1202081321" Sample ID: "961033021" File: "EXP042021.wif"

Peak Name: "24-Glutathione" Mass(es): "162.048.0 amu"

Comment: "LC8321.S" Acquisition:

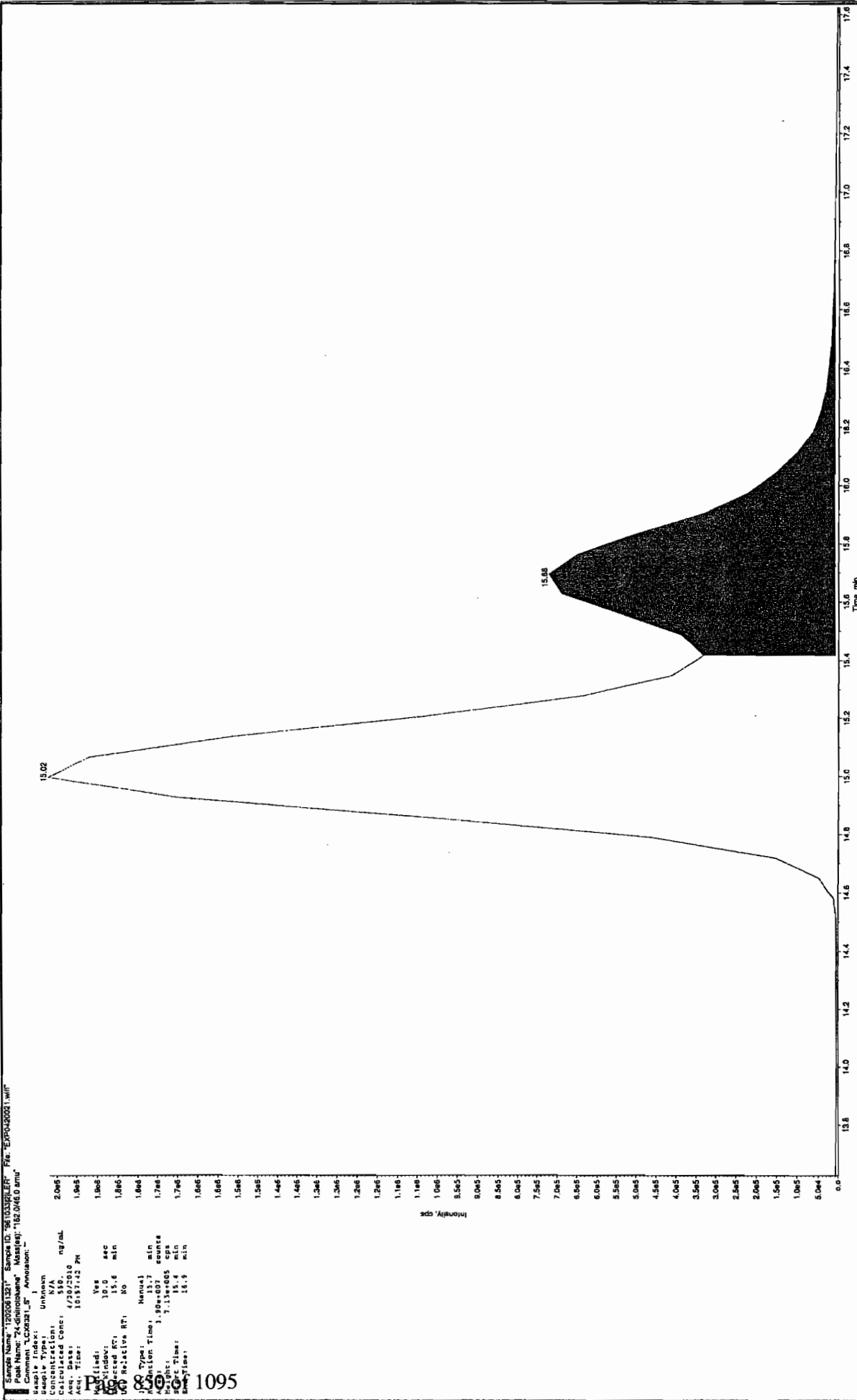
15.02

15.88

Time, 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>	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)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	11.9
	<b>Area Counts:</b>	1.85e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	451. (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>	2.68e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	237. (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>	15.0
	<b>Area Counts:</b>	4.61e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	493. (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>	15.7
	<b>Area Counts:</b>	1.90e+007
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	550. (ng/mL)
	<b>% Accuracy:</b>	N/A



Before Dec 4/2x/10

Sample Name: 1202041321 Sample ID: 95103321ER File: E:\PC\00021\er

Compound: LCX4391\_51 Acquisition: 197 0160.0 amu

Sample Type: Unknown

Concentration: 37A

Calculated Conc: 4/25/2010

Acq. Time: 10:57:42 PM

4.263

4.165

4.065

3.965

3.865

3.765

3.665

3.565

3.465

3.365

3.265

3.165

3.065

2.965

2.865

2.765

2.665

2.565

2.465

2.365

2.265

2.165

2.065

1.965

1.865

1.765

1.665

1.565

1.465

1.365

1.265

1.165

1.065

8.0e-4

8.0e-4

7.0e-4

6.0e-4

5.0e-4

4.0e-4

3.0e-4

2.0e-4

1.0e-4

0.0

Intensity, cps

13.27

14.35

Time, min

16.2

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

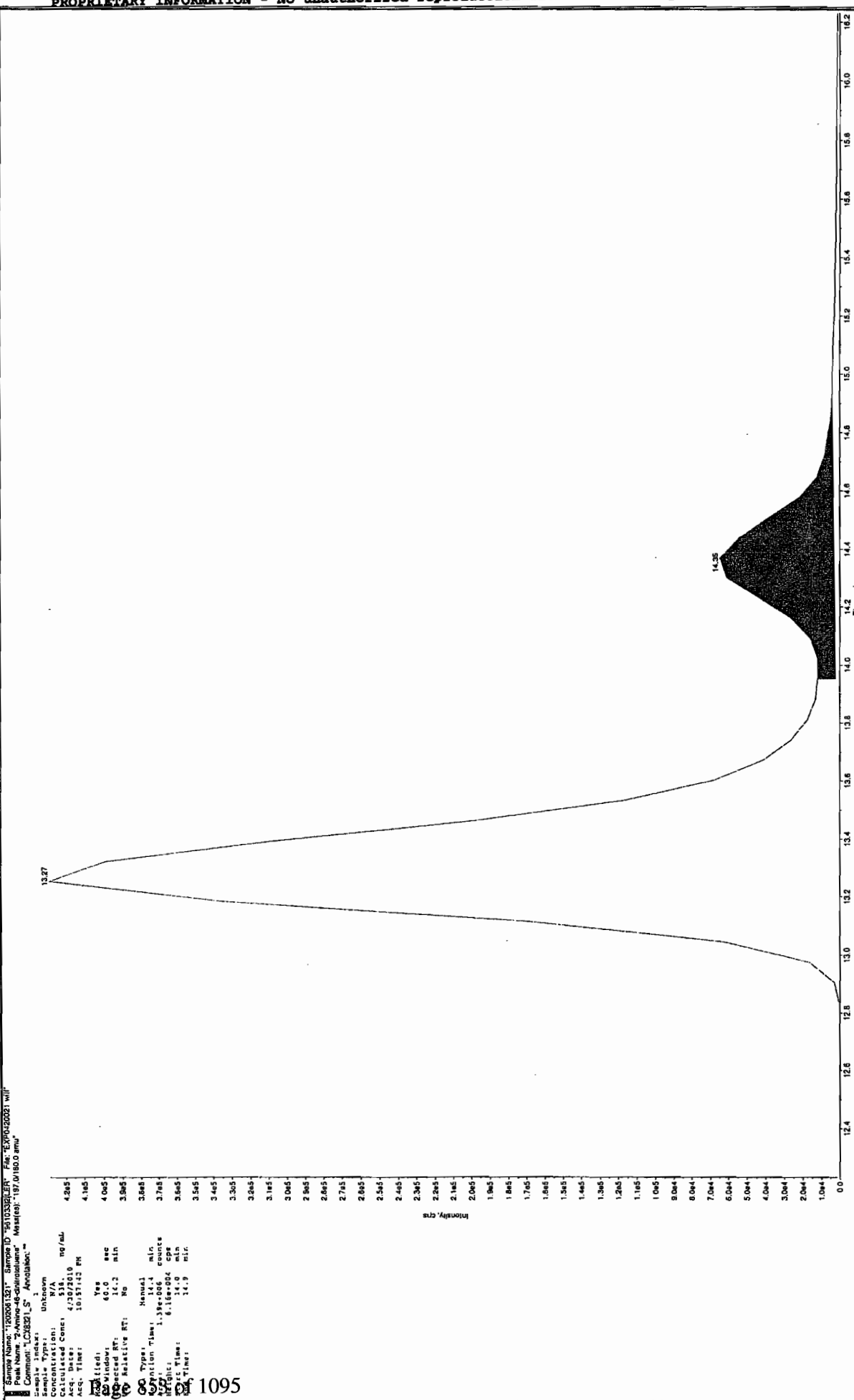
13.0

12.8

12.6

12.4

\*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>	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

	<b>Compound Name:</b>	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

	<b>Compound Name:</b>	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

	<b>Compound Name:</b>	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 8/4/91/10

Sample Name: 1202061021 Sample ID: 361030421LEN File: E20400021.wif

Peak Name: ETR Mass(46) 361.0420amu

Retention Time: 10.57142 min

Concentration: 1.444

Sample Type: Unknown

Concentration: 1.444

Acq. Date: 4/20/2010

Acq. Time: 10:57:42 PM

Method: No

Operator: Algorithm: InCallQuan - 10A

Min. Peak Height: 100.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3.00 points

Baseline: 60.0 cps

Selected RT: 10.57 min

Det. Relative RT: No

Type: Valley

Retention Time: 10.57 min

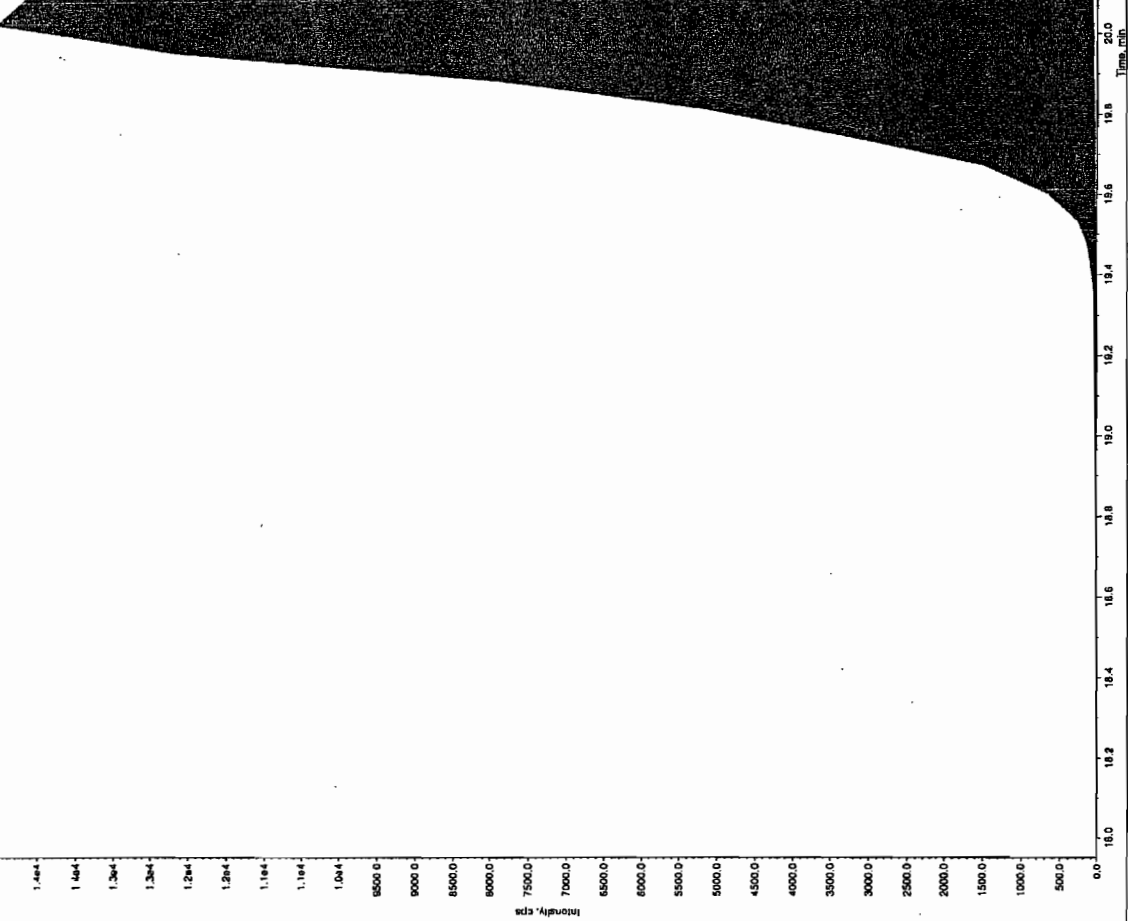
Area: 4.72e+005 counts

Height: 1.45e+004 cps

Width: 22.6 min

22.6 min

20.04



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

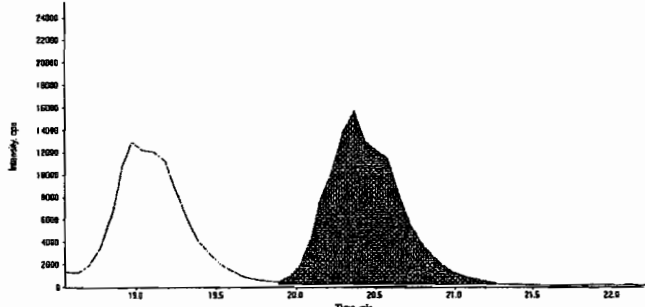


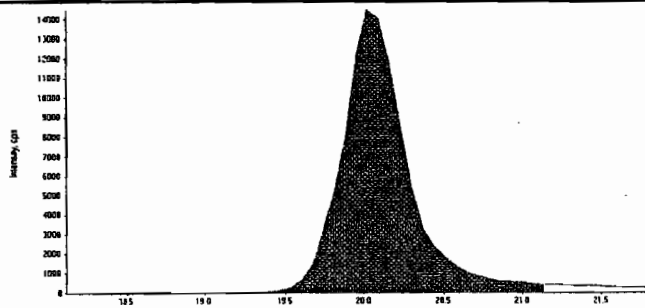
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 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

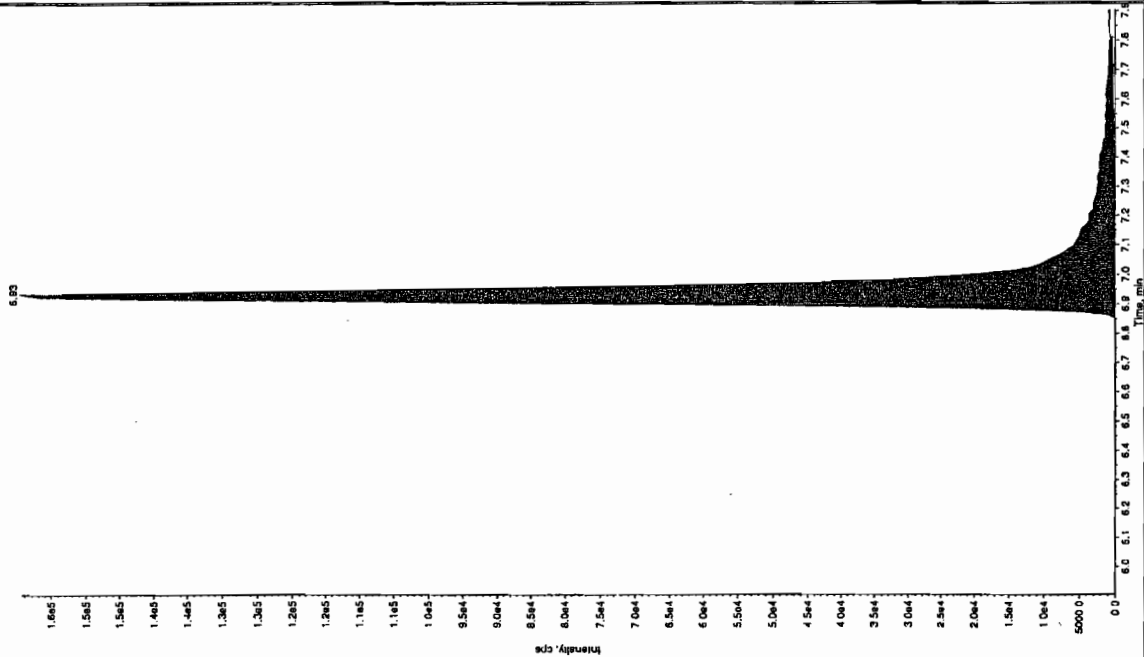
	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	20.0
	Actual RT:	20.0
	Area Counts:	4.13e+005
	Manual Modification	Yes
	Amount:	540. (ng/mL)
	% Accuracy:	N/A

Before Scan 4/12/10

Sample Name: "1202061321" Sample ID: "96103321" File: "EXS04090068.wif"  
 Peak Name: "TATB" Mass(es): 257.2204.9 amu  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 804 ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:02:51 AM  
 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: 6.90 min  
 Use Relative RT: No

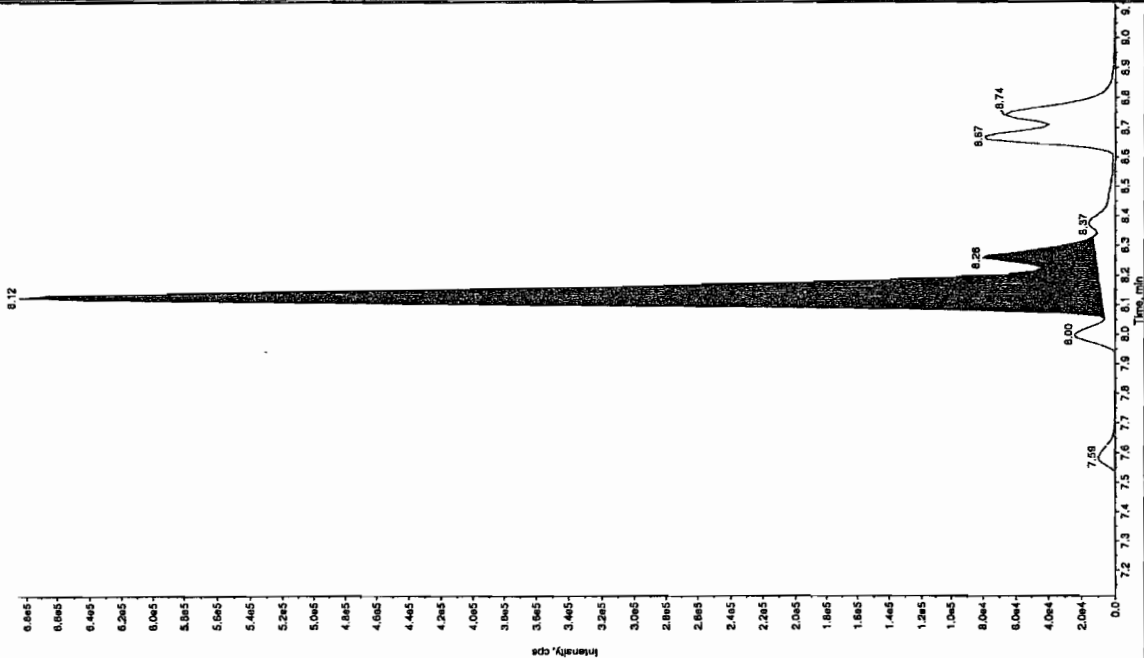
Int. Type: Valley  
 Retention Time: 6.93 min  
 Area: 7.16e+005 counts  
 Height: 13558.454 cps  
 Start Time: 6.81 min  
 End Time: 7.81 min



Sample Name: "1202061321" Sample ID: "96103321" File: "EXS04090068.wif"  
 Peak Name: "TATB" Mass(es): 257.2204.9 amu  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 427 ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:02:51 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: 8.11 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

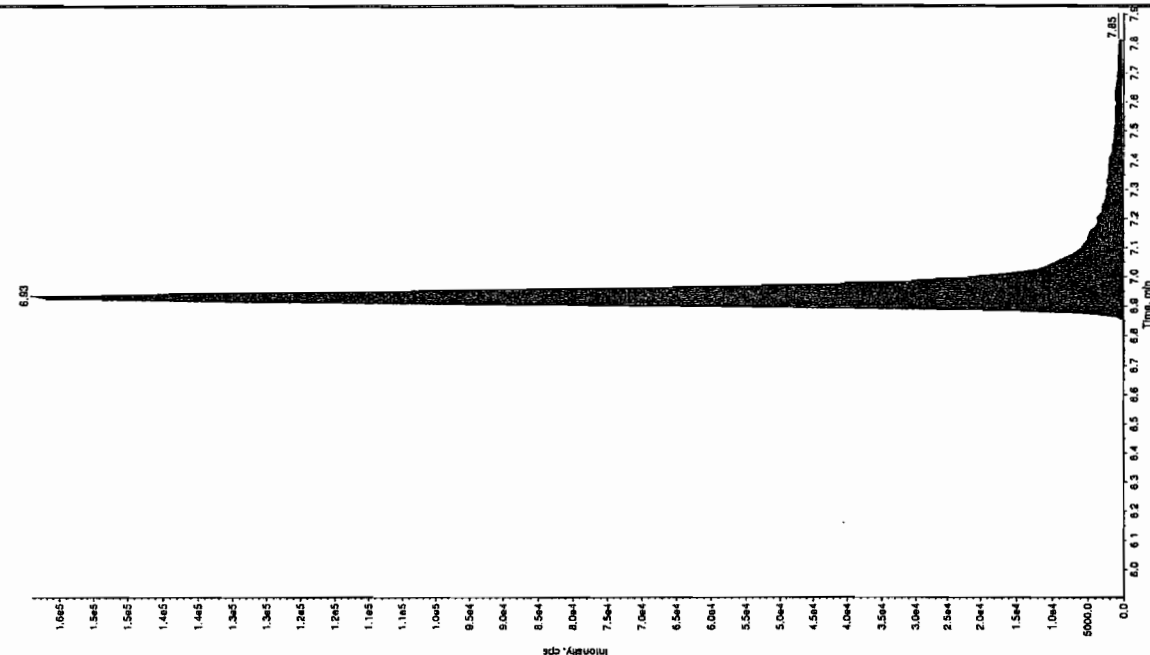


After 4/12/10

after 8/12/10

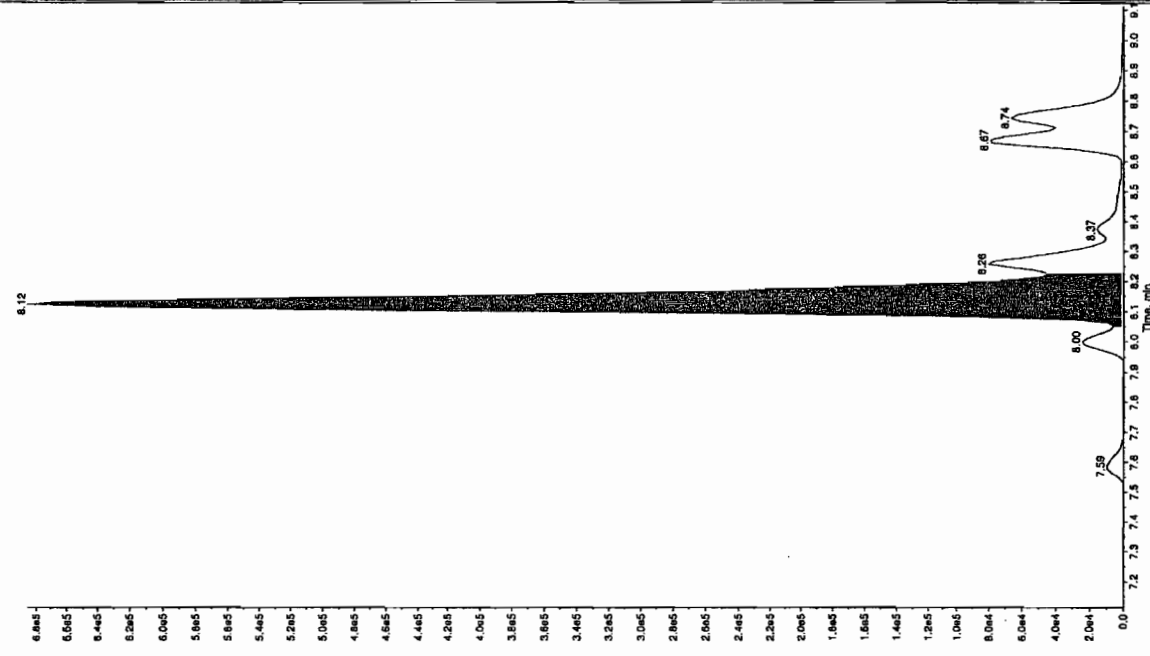
Sample Name: "1202061321" Sample ID: "961033121" File: "EXS04090669.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 804. ng/mL  
 Calculated Conc: 4/10/2010  
 Acq. Date: 1:02:51 AM  
 Acq. Time: 1:02:51 AM  
 Modified: No  
 RT Window: 30.0 sec  
 Expected RT: 8.11 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.13 min  
 Area: 2.89e+006 counts  
 Height: 68785.645 cps  
 Start Time: 8.05 min  
 End Time: 8.23 min



Sample Name: "1202061321" Sample ID: "961033121" File: "EXS04090669.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

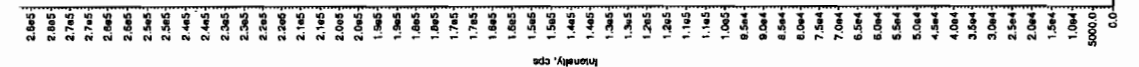
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 804. ng/mL  
 Calculated Conc: 4/10/2010  
 Acq. Date: 1:02:51 AM  
 Acq. Time: 1:02:51 AM  
 Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.11 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.13 min  
 Area: 2.89e+006 counts  
 Height: 68785.645 cps  
 Start Time: 8.05 min  
 End Time: 8.23 min





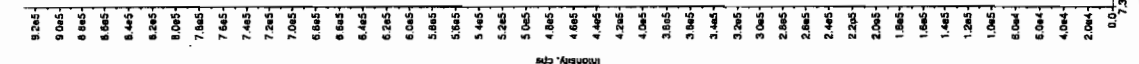
Sample Name: "1202061321" Sample ID: "961033121" File: "EXS04090089.wif"  
 Peak Name: "26-Diamino-4-nitrochlorine" Mass(es): "166.0/46.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 434. ng/mL  
 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  
 RT 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



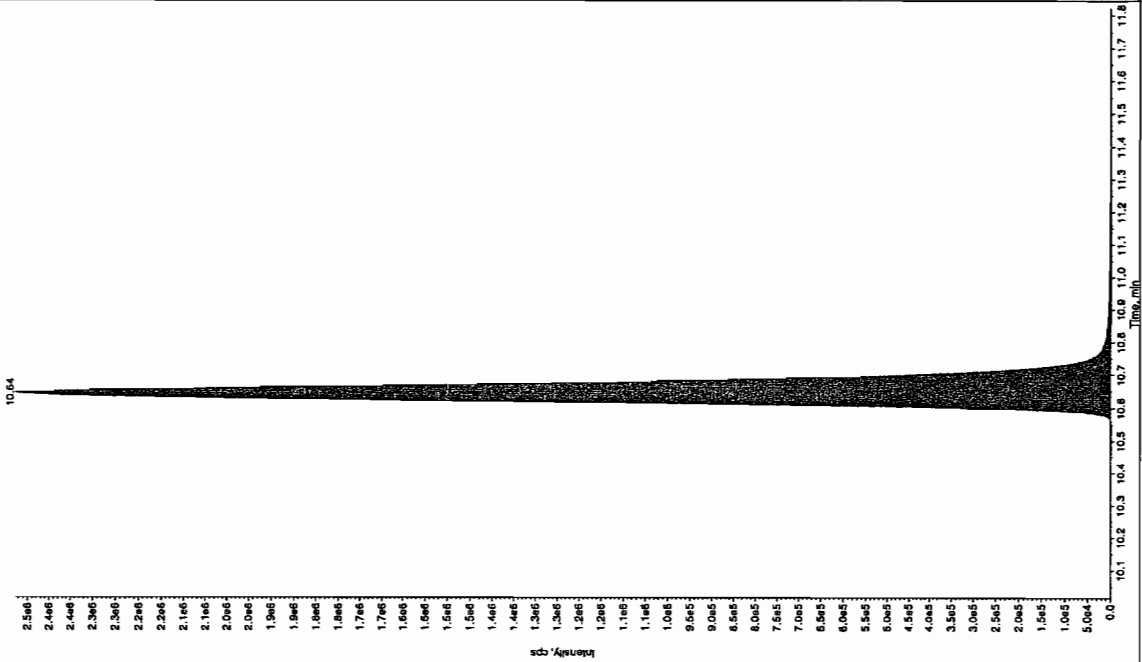
Sample Name: "1202061321" Sample ID: "961033121" File: "EXS04090089.wif"  
 Peak Name: "34-Dinitrochlorine" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 241. ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:02:51 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.26 min  
 Area: 2.16e+006 counts  
 Height: 385498.718 cps  
 Start Time: 8.20 min  
 End Time: 8.50 min



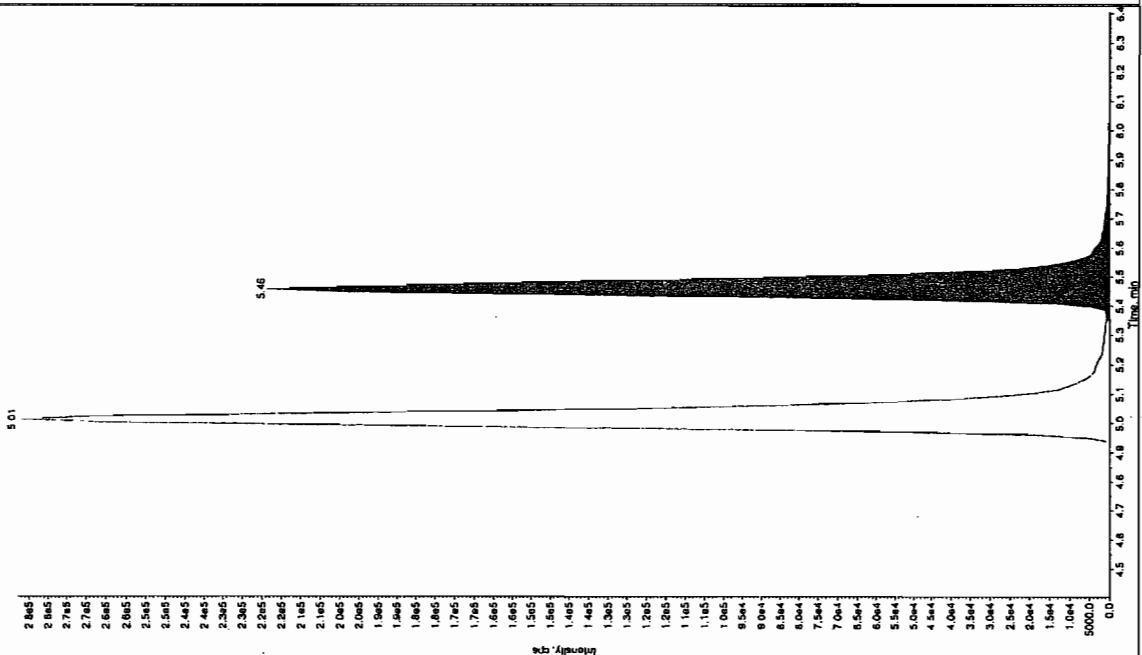
Sample Name: "1202061321" Sample ID: "96103321ER" File: "EXS04090069.wif"  
 Peak Name: "tri(o-cresyl) phosphate" Mass(es): "369 1/91.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 517. ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:02:31 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 SR 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: 247439.199 cps  
 Start Time: 10.5 min  
 End Time: 11.0 min



Sample Name: "1202061321" Sample ID: "96103321ER" File: "EXS04090069.wif"  
 Peak Name: "24-Diamino-6-nitrochlorane" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

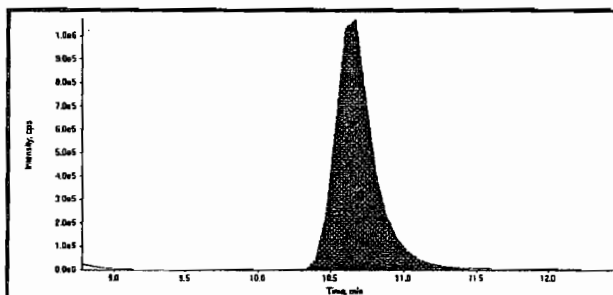
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 407. ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:02:51 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 SR Window: 30.0 sec  
 Expected RT: 5.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.46 min  
 Area: 9.15e+005 counts  
 Height: 218390.884 cps  
 Start Time: 5.35 min  
 End Time: 5.98 min



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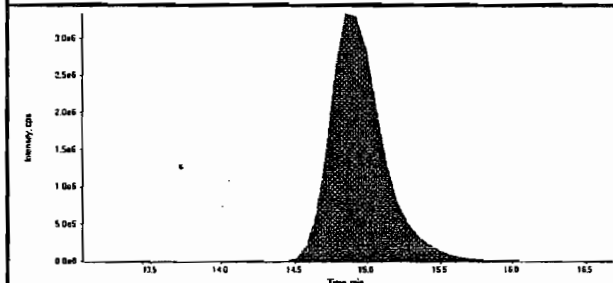
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

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



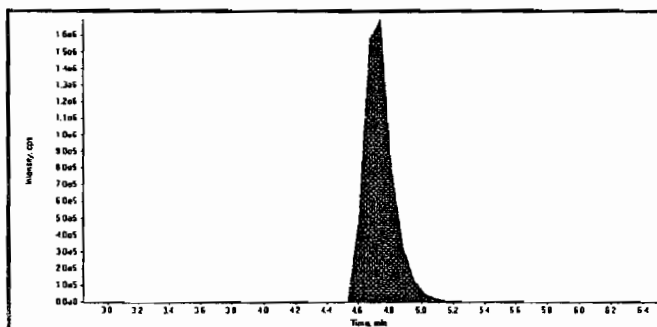
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.70
Area Counts:	19900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

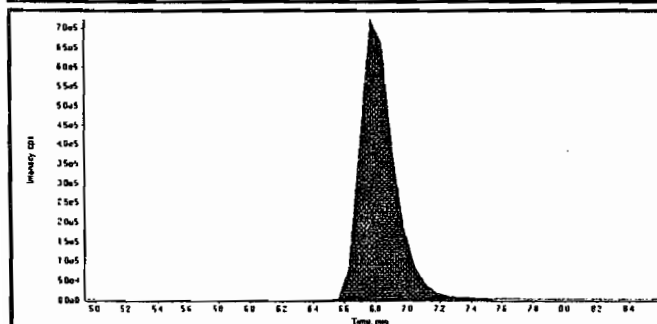


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	85300000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

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

*San 4/20/10*

*Hime 4/29/10*

Before Jan 4/28/10

Sample Name: 1200081322 - Sample ID: 96103391ER - File: EXP0400022.WIF

Comment: C00021\_05 - Analysis: 227.1203.8 amu

Sample Type: Unknown

Concentration: 7.0e5 ng/mL

Calculated Conc: 4.2012010

Acq. Time: 11:23:13 PM

Method: No

Peak Height: 1005.00 cps

Baseline Width: 0.00 sec

Peak Width: 10.0 points

Peak Area: 10.0

Peak RT: 13.3 min

Relative RT: No

Type: Valley

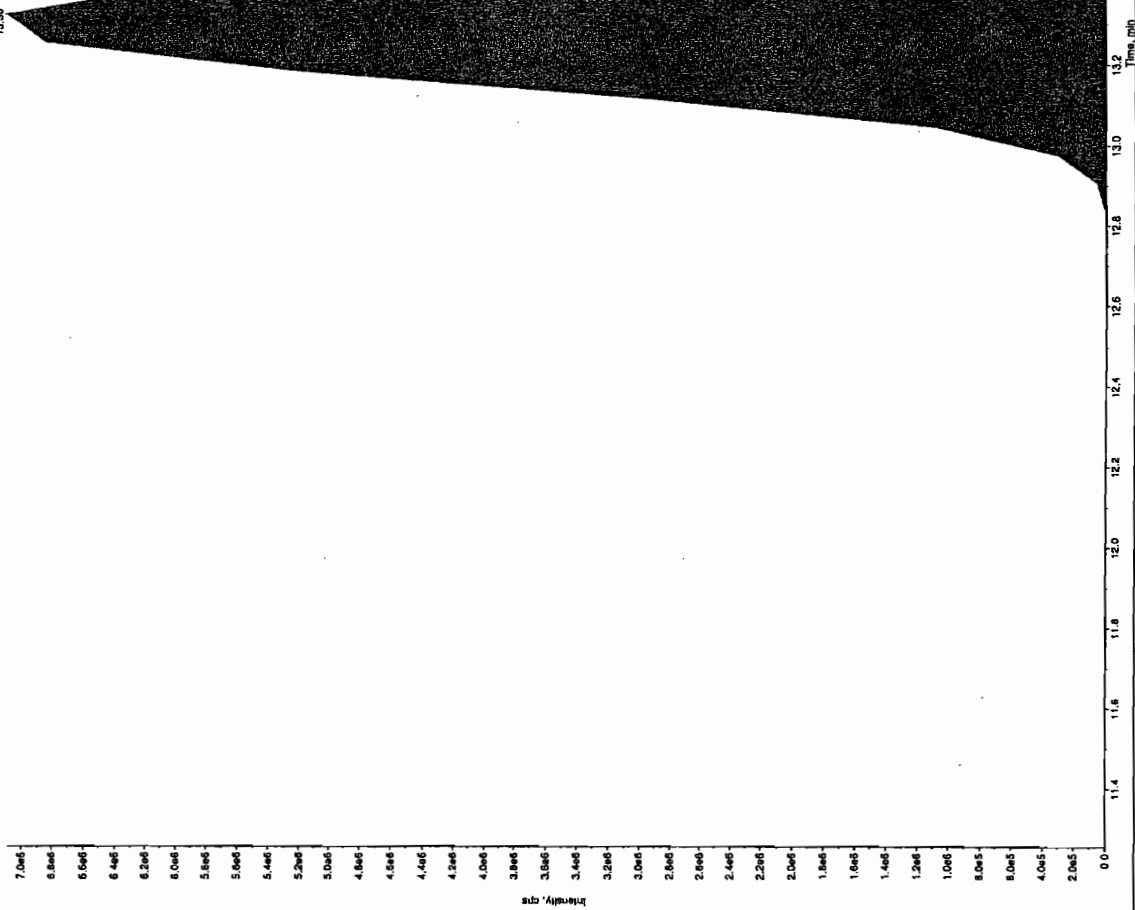
Retention Time: 13.3 min

Height: 1.00e+008 counts

Area: 1.00e+008 cps

Width: 11.7 min

13.30



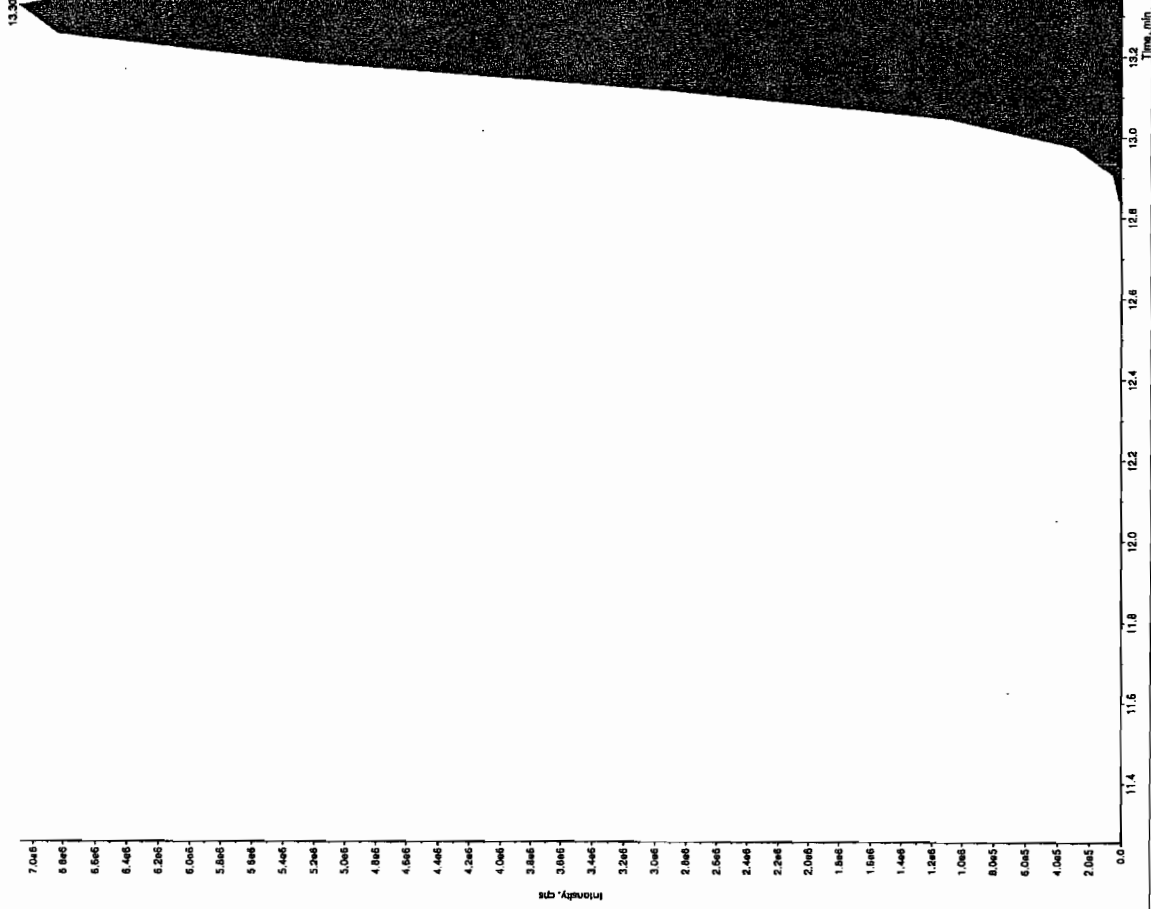
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after scan 4/28/10

Sample Name: 1202081322 Sample ID: 56 03301LER File: E3P2420022.will  
 Comment: "LC8321\_LS" Annotation: "227 1209.8 amu"

Concentration: 7.0e5  
 Calculated Conc: 491.1  
 Acq. Date: 4/28/2010  
 Acq. Time: 11:25:13 PM  
 Sample Type: Unknown  
 Modified: Yes  
 Re-window: 60.0 sec  
 Re-scale: 10.0 min  
 Up Relative RT: No  
 8.4e5

IO Type: Manual  
 Acquisition Time: 62e5  
 Delay Time: 1.0 min  
 HD: 7.14e+006 counts  
 HD RT: 13.8 min  
 Start Time: 12.8 min  
 Stop Time: 14.3 min  
 1095



\*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: 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

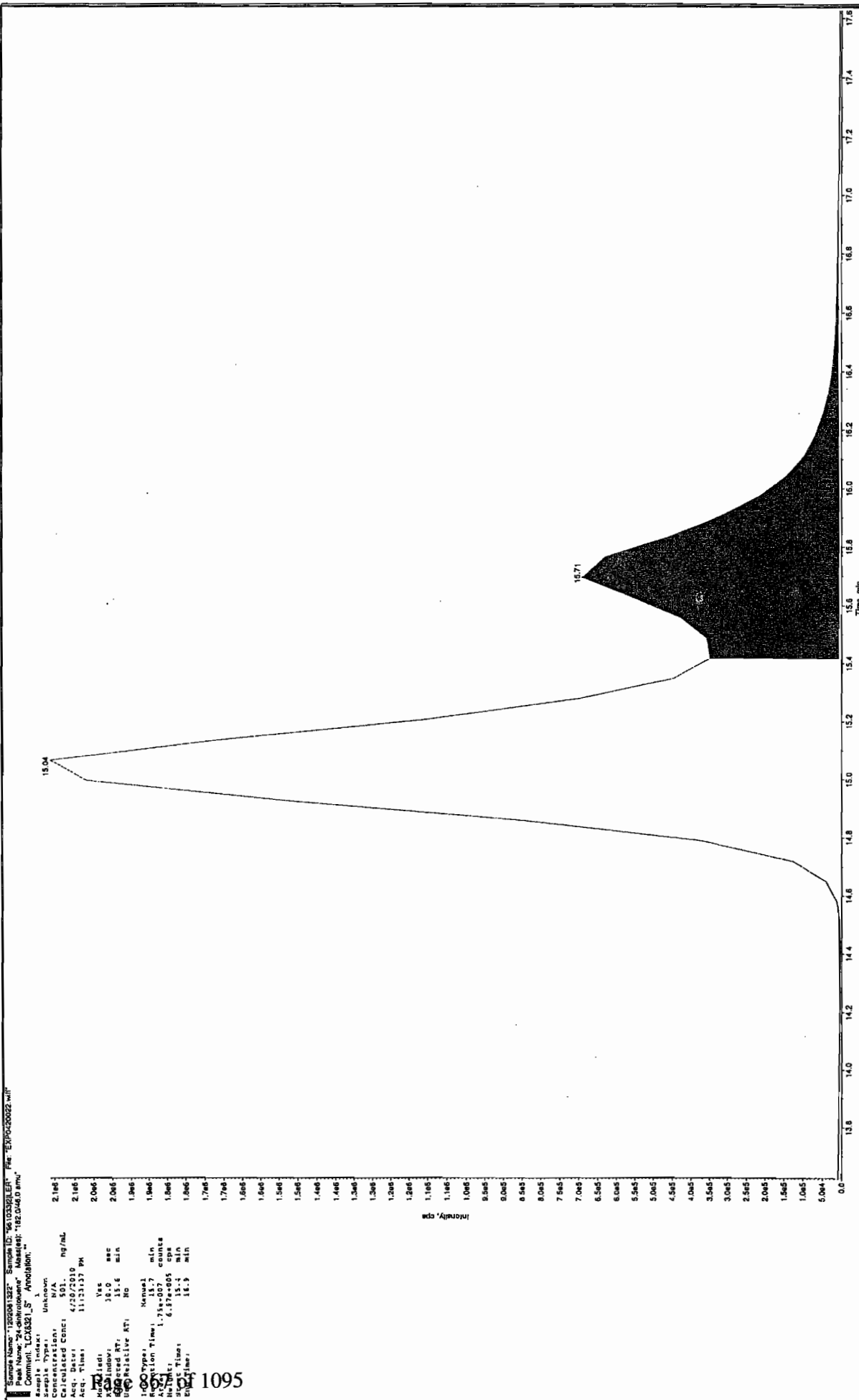
	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	10.9
	<b>Area Counts:</b>	3.44e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	416. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<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



after scan 4/28/10



Sample Name: 1202041327 Sample ID: 1033491.EP1 File: E:\PO-20022.mf  
 Peak Name: 24-dichloroethane Masses: 182.046.0 amu  
 Comment: LC63321\_S Annotation: "

Sample Index: 1  
 Sample Name: Unknown  
 Concentration: N/A  
 Acq. Date: 4/28/2010  
 Acq. Time: 11:33:37 PM  
 Method: Yes  
 X Window: 10.0 sec  
 Acquired RT: 15.6 min  
 User Relative RT: No  
 Inlet Type: Manual  
 Reaction Time: 15.7 min  
 Reaction Temp: 170.0 degrees  
 Inlet Temp: 1.71e+005 degrees  
 Start Time: 15.4 min  
 End Time: 16.9 min

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\*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: 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)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	11.9
	<b>Area Counts:</b>	2.07e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	466. (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>	2.94e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	256. (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>	15.1
	<b>Area Counts:</b>	4.67e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	492. (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>	15.7
	<b>Area Counts:</b>	1.75e+007
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	501. (ng/mL)
	<b>% Accuracy:</b>	N/A

Before Dec 4/28/10

Sample Name: "120506.132" Sample ID: "8103321.1" File: "EXP0420022.wif"

Peak Name: "2-Amino-4-dichlorobenzene" Mass(es): "197.0180 0 amu"

Comment: "LC8321.S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Calculated Conc: 1055. ng/mL

Acq. Date: 4/20/2010

Acq. Time: 11:21:37 PM

Method: No

Peak: Algorithm: InCellQuan - 10A

Peak Height: 1000.00 cps

Peak Width: 0.08 points

Peak Window: 60.0 sec

Expected RT: 14.2 min

Observed RT: No

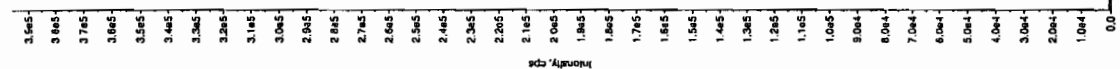
Retention Time: 14.35 min

Area: 1.76e+006 counts

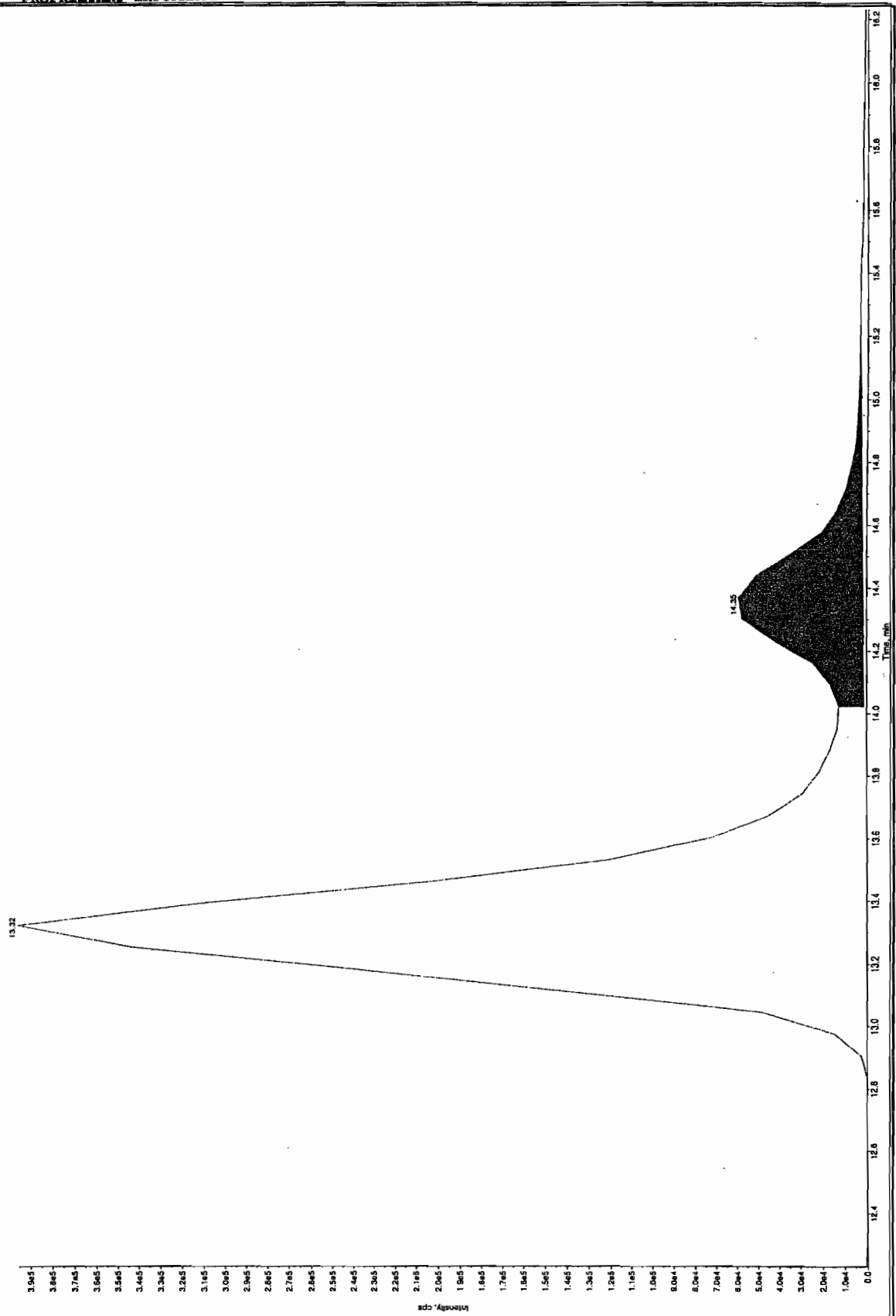
Height: 6.4e+004 cps

Width: 14.0 min

Area Time: 18.3 min



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\*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: 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-2,6-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	4.14e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	568. (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>	14.2
	<b>Actual RT:</b>	14.3
	<b>Area Counts:</b>	1.41e+006
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	535. (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>	17.9
	<b>Area Counts:</b>	7.36e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	468. (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>	19.0
	<b>Area Counts:</b>	3.77e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	464. (ng/mL)
	<b>% Accuracy:</b>	N/A



after dec-4/19/10

Sample Name: 1202041322 Sample ID: 9810331LEA File: E:\P0420022.MIT  
 Peak Name: PETM Mass(es): 361.162.0 amu  
 Comment: L00321\_5 - Acquisition: ...

Sample Type: Unknown  
 Concentration: 3/A  
 Calculated conc: 4.022010 ng/mL  
 Acq. Time: 11.221377 PK

Method: Yes  
 Acq. Time: 1.1584 sec  
 Acq. Time: 20.8 min

Acq. Time: 1.1084 sec  
 Acq. Time: 20.8 min

Acq. Time: 1.0584 sec  
 Acq. Time: 20.8 min

Acq. Time: 1.0084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.9584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.9084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.8584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.8084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.7584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.7084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.6584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.6084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.5584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.5084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.4584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.4084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.3584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.3084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.2584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.2084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.1584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.1084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0584 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0084 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

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Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

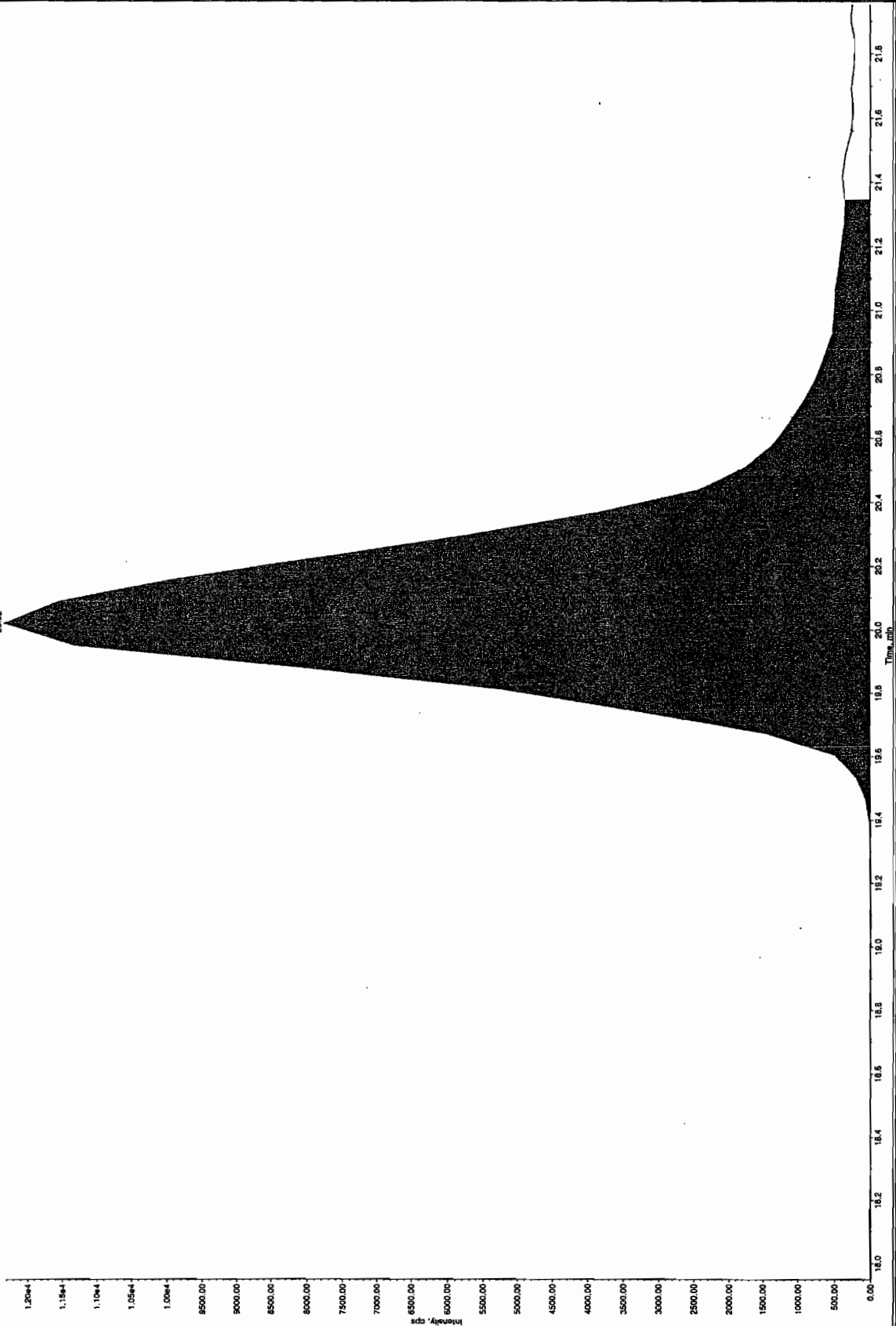
Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

Acq. Time: 0.0000 sec  
 Acq. Time: 20.8 min

20.02



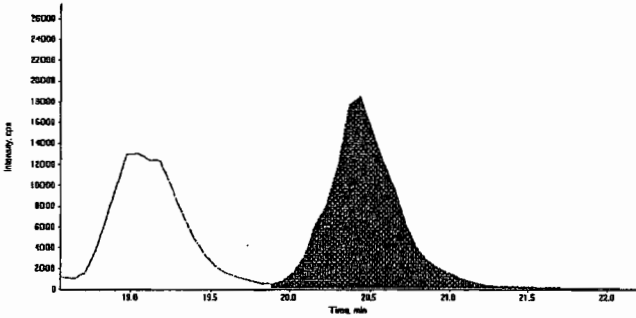
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

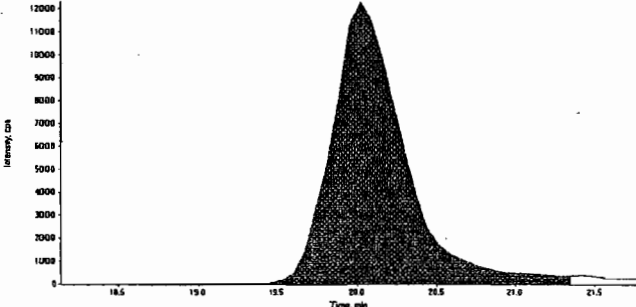
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<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

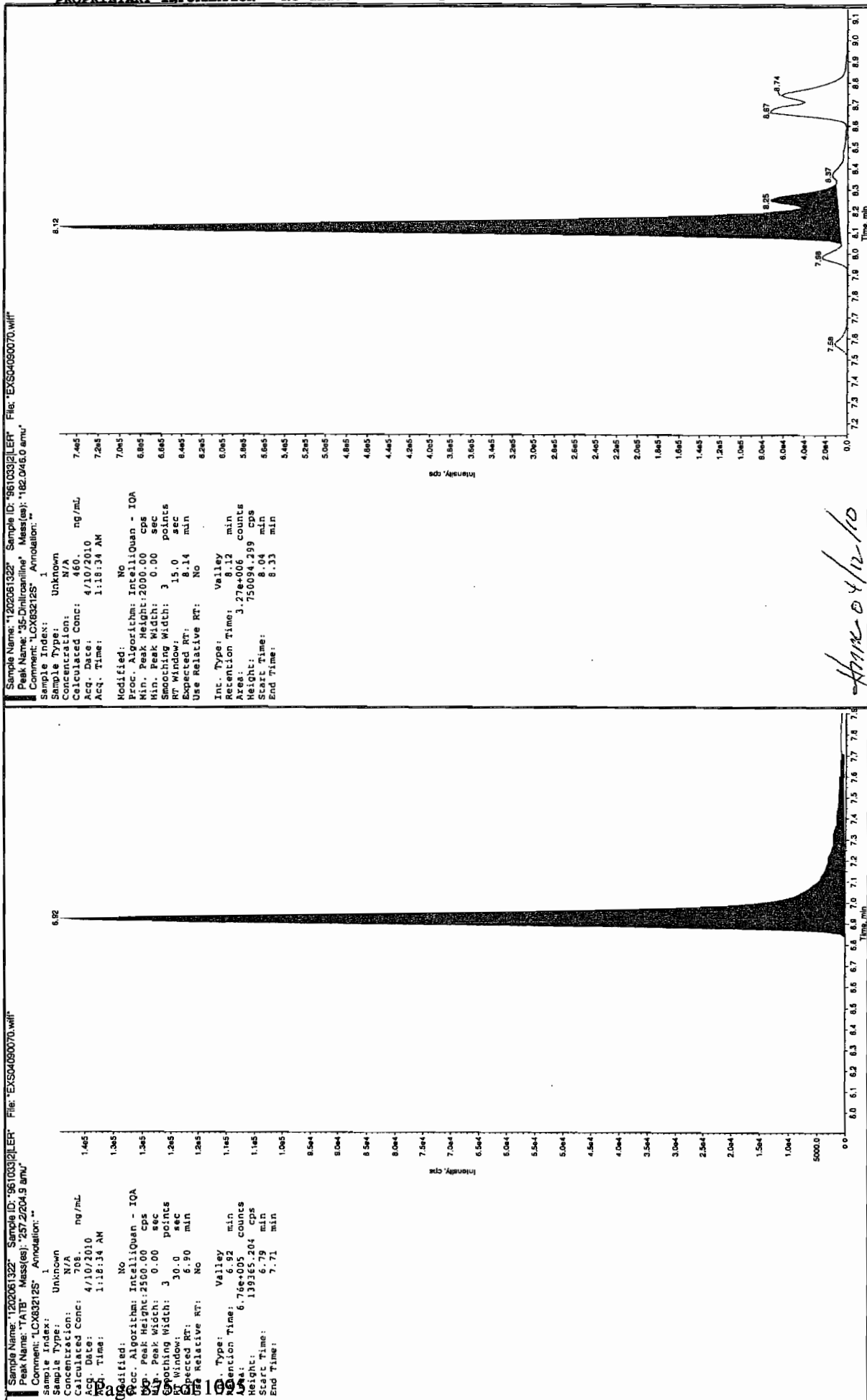
  

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	20.4
	<b>Area Counts:</b>	5.27e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	450. (ng/mL)
	<b>% Accuracy:</b>	N/A

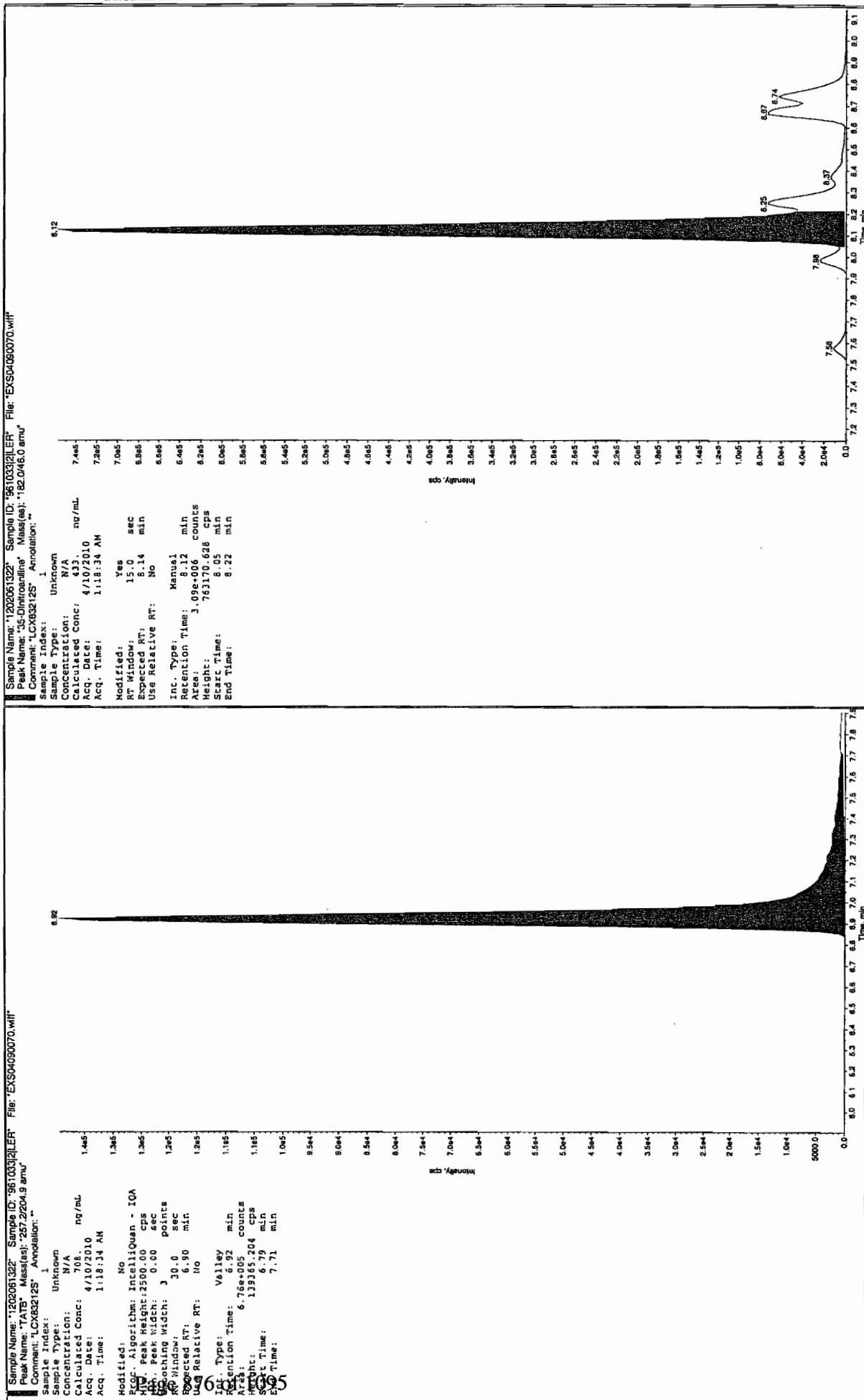
	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	20.0
	<b>Area Counts:</b>	3.89e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	502. (ng/mL)
	<b>% Accuracy:</b>	N/A

Before Jan 4/12/10



After Jan 4/12/10





Sample Name: "1202051322" Sample ID: "961033212" File: "EXS04060070.wif"

Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.9 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: 1:12:34 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 450.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 8.30 min

Use Relative RT: No

Int. Type: Valley

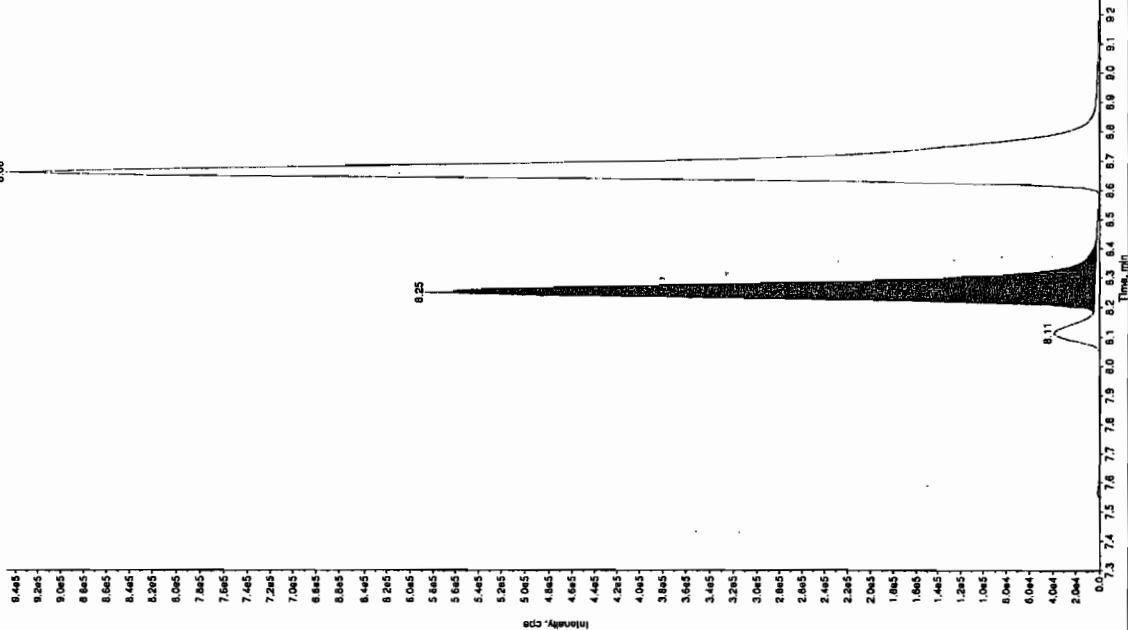
Retention Time: 8.25 min

Area: 2.16E+006 counts

Height: 582148.560 cps

Start Time: 8.18 min

End Time: 8.37 min



Sample Name: "1202051322" Sample ID: "961033212" File: "EXS04060070.wif"

Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "166.046.0 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 433.

Acq. Date: 4/10/2010

Acq. Time: 1:18:34 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

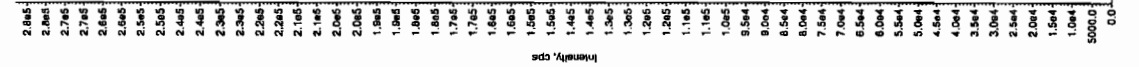
Retention Time: 5.02 min

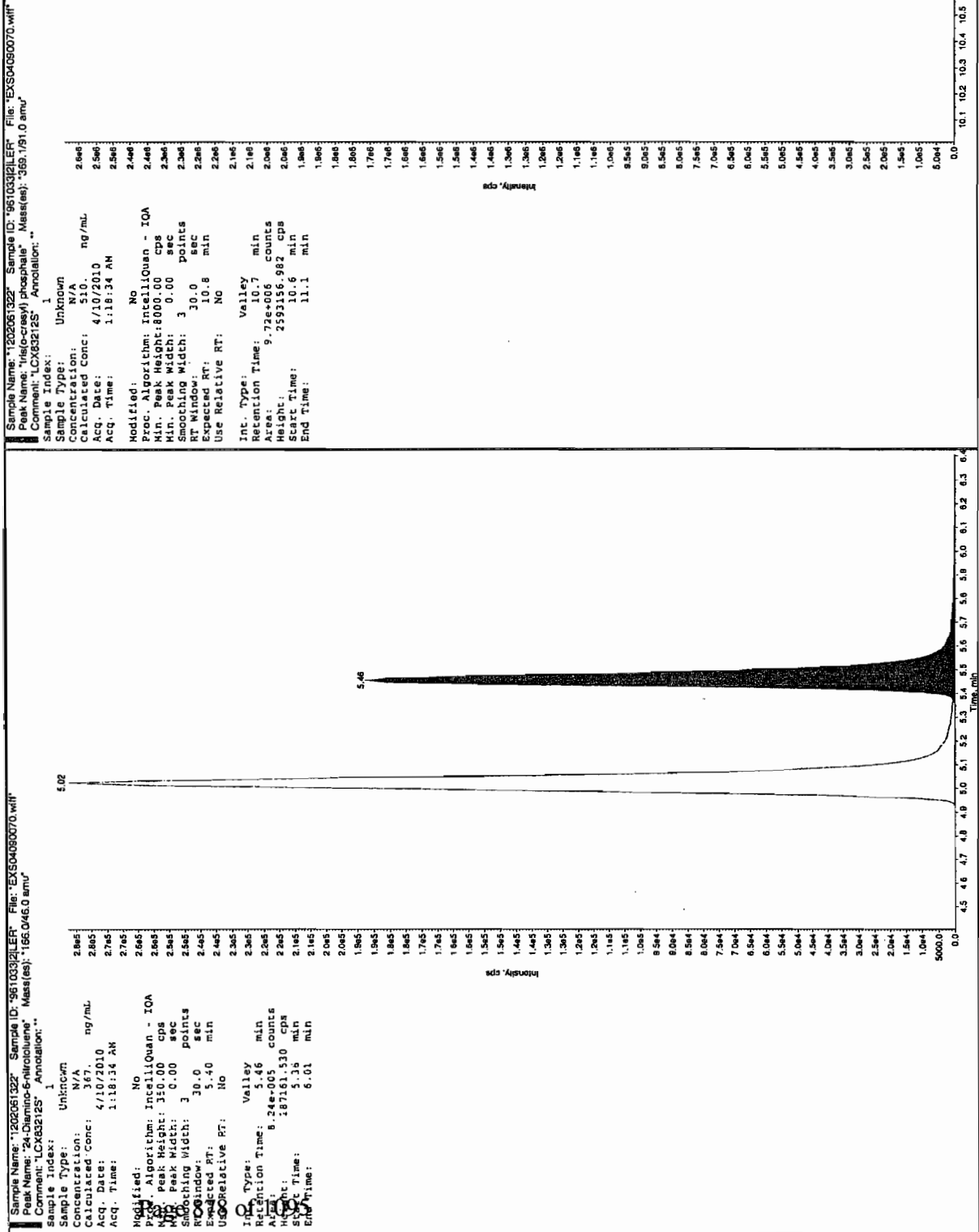
Area: 1.21E+006 counts

Height: 282724.579 cps

Start Time: 4.92 min

End Time: 5.30 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>			
<p>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).</p> <p>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.</p> <p>3. The MS(1202061321) did not meet acceptance criteria for the recovery of TATB at 161%. The limits are 29-155%.</p>		<p>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.</p> <p>2. The MS(1202061321) and MSD(1202061322) had passing recoveries for these analytes. The data are reported.</p> <p>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.</p>	

**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 10-2196**

**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>
248514003	RE36-10-7525
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)
248514002	RE36-10-7524
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 the five quantified peaks did not meet the acceptance criteria in 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 one of the standards bracketing the samples in this SDG; however, this had no adverse effects on the data as all other standards associated with this SDG met surrogate recovery acceptance criteria.

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

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

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

##### **Surrogate Recoveries**

Sample 248514003 (RE36-10-7525) did not meet the surrogate recovery acceptance criteria for Decachlorobiphenyl (DCB) on one column; however this had no adverse effects on the data as there was no detection of Aroclors on either of the columns in the sample. 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 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 967817. The LCS and LCSD analysis was performed to measure the precision and accuracy for this batch.

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

The MS recoveries were within the established acceptance limits.

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

The MSD recoveries were not within the established acceptance limits due to dilution and matrix interference.

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

The RPD between the MS and MSD did not meet the acceptance limits due to dilution and matrix interference..

#### **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**

Sample 248514002 (RE36-10-7524) was extracted and analyzed twice. The second analysis was 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 Integration**

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

##### **Additional Comments**

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the 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 VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.



**System Configuration**

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

<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: Jimmy Cao

Date: 3/30/10

## Roadmap for LANL 10-2196 PCB

This roadmap was analyzed by jen01212 on 03-24-2010, 09:55.

This roadmap was packaged by yml on 03-29-2010, 16:12.

This roadmap was validated by jim01140 on 03-30-2010, 08:48.

Front Sample Column

exclude	manual	datafile	smpid	samplertype	injdte	injtime	sublist	clientid	dilution	prepbachid	comment
<input checked="" type="checkbox"/>	N	/chem/ecd8a.i/031910.b/0330301.d	248514002	sample	19-MAR-2010	13:49	10-2196.sub	RE36-10-7524	1.00000	966420	DOSE: SENT FOR RE DUE TO LOW Ss: UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/0161601.d	248514002	sample	23-MAR-2010	11:14	10-2196.sub	RE36-10-7524	1.00000	967817	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM FAILURE
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/03403401.d	248514003	sample	19-MAR-2010	14:02	10-2196.sub	RE36-10-7525	1.00000	966420	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	samplertype	injdte	injtime	sublist	clientid	dilution	prepbachid	comment
<input checked="" type="checkbox"/>	N	/chem/ecd8a.i/031910.b/0330301.d	248514002	sample	19-MAR-2010	13:49	10-2196.sub	RE36-10-7524	1.00000	966420	DOSE: SENT FOR RE DUE TO LOW Ss: UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/0161601.d	248514002	sample	23-MAR-2010	11:14	10-2196.sub	RE36-10-7524	1.00000	967817	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM FAILURE
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/03403401.d	248514003	sample	19-MAR-2010	14:02	10-2196.sub	RE36-10-7525	1.00000	966420	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	samplertype	injdte	injtime	sublist	clientid	dilution	prepbachid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/026f2601-1.d	1202073937	mb	19-MAR-2010	12:23	10-2196.sub	PBLK01	1.00000	966420	
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/012f1201-1.d	1202077508	mb	23-MAR-2010	10:25	10-2196.sub	PBLK02	1.00000	967817	
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/027f2701-1.d	1202073938	lcs	19-MAR-2010	12:35	10-2196.sub	PBLK01LCS	1.00000	966420	
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/013f1301-1.d	1202077509	lcs	23-MAR-2010	10:37	10-2196.sub	PBLK02LCS	1.00000	967817	
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/014f1401-1.d	1202077510	lcsd	23-MAR-2010	10:50	10-2196.sub	PBLK02LCSD	1.00000	967817	

Back QC Sample Column

exclude	manual	datafile	smpid	samplertype	injdte	injtime	sublist	clientid	dilution	prepbachid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/026b2601-1.d	1202073937	mb	19-MAR-2010	12:23	10-2196.sub	PBLK01	1.00000	966420	
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/012b1201-1.d	1202077508	mb	23-MAR-2010	10:25	10-2196.sub	PBLK02	1.00000	967817	
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/027b2701-1.d	1202073938	lcs	19-MAR-2010	12:35	10-2196.sub	PBLK01LCS	1.00000	966420	
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/013b1301-1.d	1202077509	lcs	23-MAR-2010	10:37	10-2196.sub	PBLK02LCS	1.00000	967817	
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/014b1401-1.d	1202077510	lcsd	23-MAR-2010	10:50	10-2196.sub	PBLK02LCSD	1.00000	967817	

# SAMPLE DATA SUMMARY

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

SDG Number: 10-2196  
Lab Sample ID: 248514002

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: 30.18 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16  
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	3.95	ug/kg	1.31	3.95	1
11104-28-2	Aroclor-1221	U	3.95	ug/kg	1.31	3.95	1
11141-16-5	Aroclor-1232	U	3.95	ug/kg	1.31	3.95	1
53469-21-9	Aroclor-1242	U	3.95	ug/kg	1.31	3.95	1
12672-29-6	Aroclor-1248	U	3.95	ug/kg	1.31	3.95	1
11097-69-1	Aroclor-1254	P	9.60	ug/kg	1.31	3.95	1
11096-82-5	Aroclor-1260	P	5.40	ug/kg	1.31	3.95	1

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

**SDG Number:** 10-2196  
**Lab Sample ID:** 248514003

**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:** 20.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

**Client ID:** RE36-10-7525  
**Batch ID:** 966420  
**Run Date:** 03/19/2010 14:02  
**Prep Date:** 03/18/2010 10:57  
**Data File:** 034f3401.d  
034b3401.d

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

# QUALITY CONTROL SUMMARY

**PCB**  
**Surrogate Recovery Report**

Page 1 of 1

SDG Number: 10-2196

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
248514003	RE36-10-7525	33	35	25 *	32
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
248514002	RE36-10-7524	46	46	43	52

**Surrogate****Acceptance Limits**

4CMX = 4cmx

(32%-120%)

DCB = Decachlorobiphenyl

(30%-116%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted



PCB

Page 1 of 1

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2196

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

Pren Batch II 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  
Quality Control Summary  
Spike Recovery Report

Page 1 of 2

SDG Number: 10-2196

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: 10-2196

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

Pre Batch II 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	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

Sample Type: Matrix Spike

Client ID: RE36-10-8466MS

Matrix: R

Lab Sample ID:1202073939

%Moisture: 12.4

Instrument: ECD8A.I

Analysis Date: 03/19/2010 17:52

Dilution: 10

Analyst: JAOC

Prep Batch II 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	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 II 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	Acceptance RPD	Acceptance Limits
12674-11-2	MSD Aroclor-1016	38.0	0.00	U	0.00	0 *	23-119	200 *	0-28
11096-82-5	MSD Aroclor-1260	38.0	0.00	U	0.00	0 *	28-124	200 *	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-2196	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 966418	Instrument ID:	ECD8A.I_2	Data File:	026b2601-1.d
Lab Sample ID:	1202073937		ECD8A.I_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 RE36-10-7525	248514003	034f3401.d 034b3401.d	03/19/10	1402

## Method Blank Summary

Page 1 of 1

SDG Number:	10-2196	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 967813	Instrument ID:	ECD8AJ_2	Data File:	012b1201-1.d
Lab Sample ID:	1202077508		ECD8AJ_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 RE36-10-7524	248514002	016f1601.d 016b1601.d	03/23/10	1114

# SAMPLE DATA



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

SDG Number: 10-2196  
Lab Sample ID: 248514002

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: 30.18 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-7524  
Batch ID: 967817  
Run Date: 03/23/2010 11:14  
Prep Date: 03/22/2010 21:20  
Data File: 016f1601.d  
016b1601.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.95	ug/kg	1.31	3.95	1
11104-28-2	Aroclor-1221	U	3.95	ug/kg	1.31	3.95	1
11141-16-5	Aroclor-1232	U	3.95	ug/kg	1.31	3.95	1
53469-21-9	Aroclor-1242	U	3.95	ug/kg	1.31	3.95	1
12672-29-6	Aroclor-1248	U	3.95	ug/kg	1.31	3.95	1
11097-69-1	Aroclor-1254	P	9.60	ug/kg	1.31	3.95	1
11096-82-5	Aroclor-1260	P	5.40	ug/kg	1.31	3.95	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/032310.b/016f1601.d  
Lab Smp Id: 248514002 Client Smp ID: RE36-10-7524  
Inj Date : 23-MAR-2010 11:14  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248514002|1|  
Misc Info : |ECD82P\_1S|967817|SVA|LANL|SOIL|RE36-10-7524|||  
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: 16  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2196.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	30.18000	Weight of sample extracted (g)
M	16.02250	% 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	11450400	91.6315	3.6	80.00- 120.00	100.00 (M)
CAS #: 2051-24-3							
6.237	6.240	-0.003	7144719	86.7593	3.4	80.00- 120.00	100.00 (M)
CAS #: 11097-69-1							
3.830	3.830	0.000	367357	84.7624	3.3	80.00- 120.00	100.00 (M)
4.018	4.017	0.001	561438	97.3614	3.8	114.64- 154.64	152.83
4.224	4.213	0.011	1794589	402.507	15.9	84.93- 124.93	488.51
4.298	4.300	-0.002	722403	96.0446	3.8	156.79- 196.79	196.65
4.479	4.496	-0.017	3106313	540.303	21.3	114.19- 154.19	1004.42
Average of Peak Concentrations =					9.6		

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5				
4.428	4.429	-0.001	1568824	266.351	10.5	80.00- 120.00	100.00 (M)
4.623	4.625	-0.002	1132828	133.348	5.3	127.89- 167.89	72.21
4.898	4.900	-0.002	290928	57.4245	2.3	67.46- 107.46	18.54
5.065	5.072	-0.007	680876	127.768	5.0	74.45- 114.45	43.40
5.481	5.483	-0.002	532088	94.3254	3.7	83.28- 123.28	33.92
Average of Peak Concentrations =					5.4		

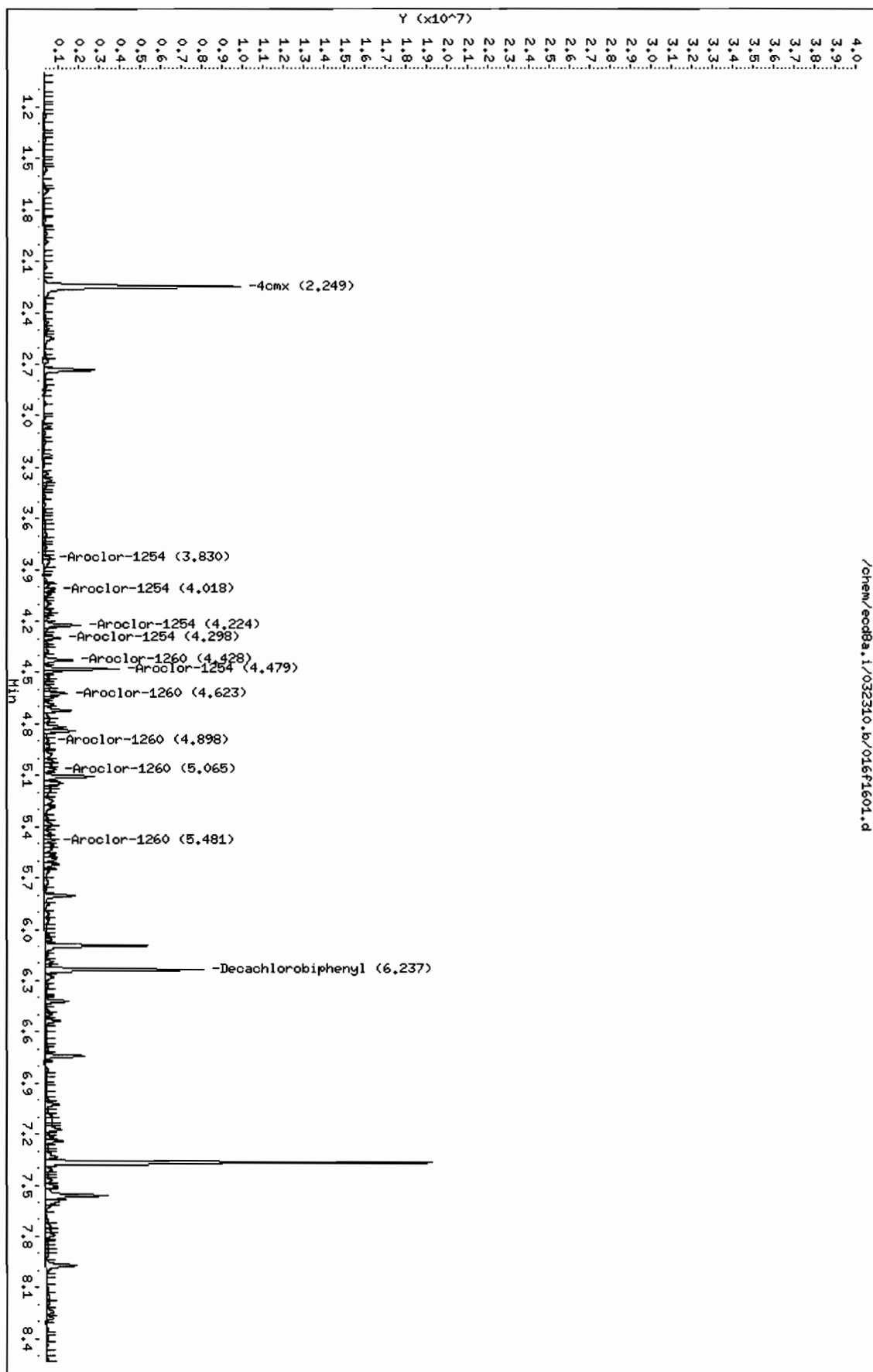
QC Flag Legend

M - Compound response manually integrated.

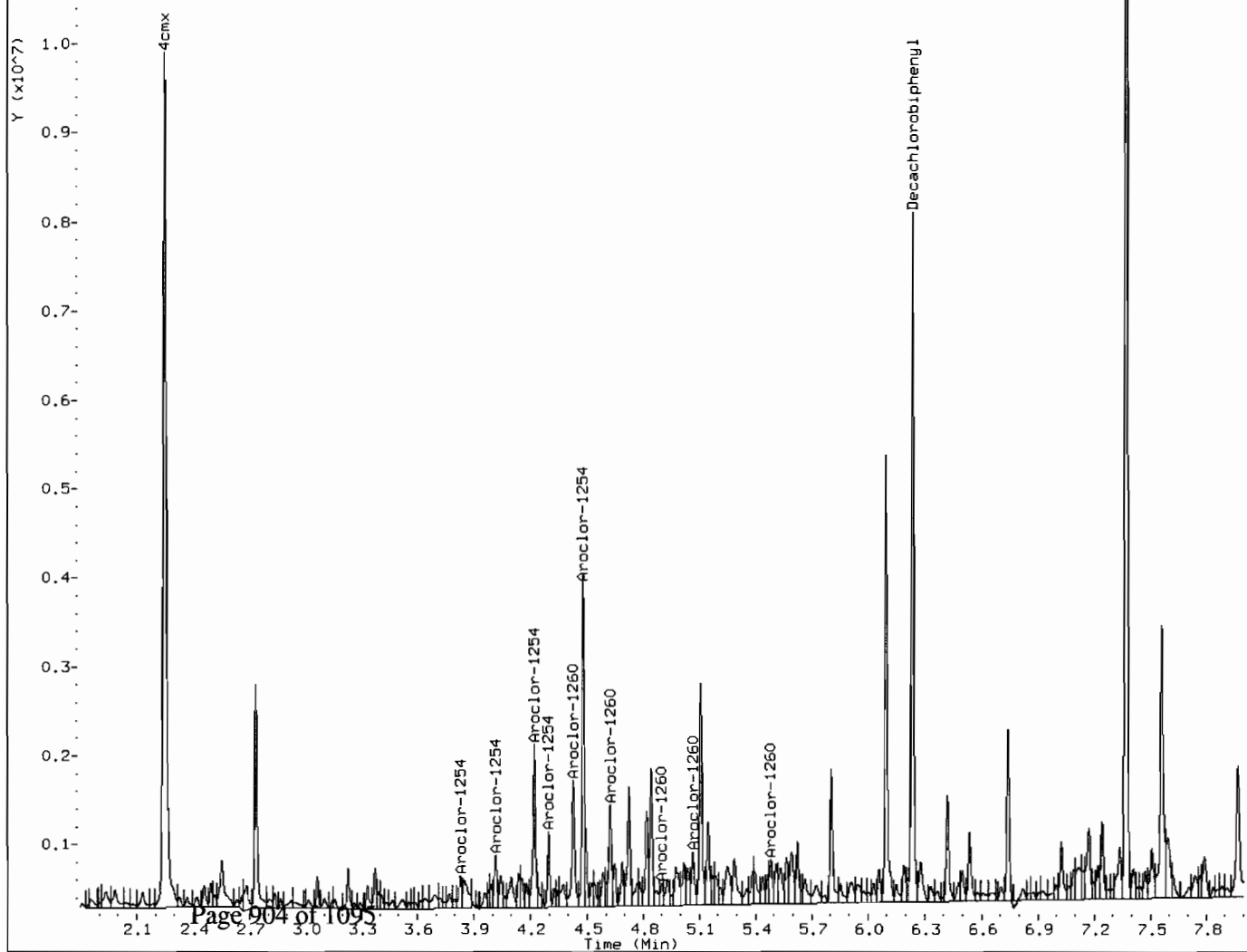
Data File: /chem/ecod8a.i/032310.b/016f1601.d  
Date : 23-MAR-2010 11:14  
Client ID: RE36-10-7524  
Sample Info: 1248514002/11  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecod8a.i  
Operator: JHOC  
Column diameter: 0.25

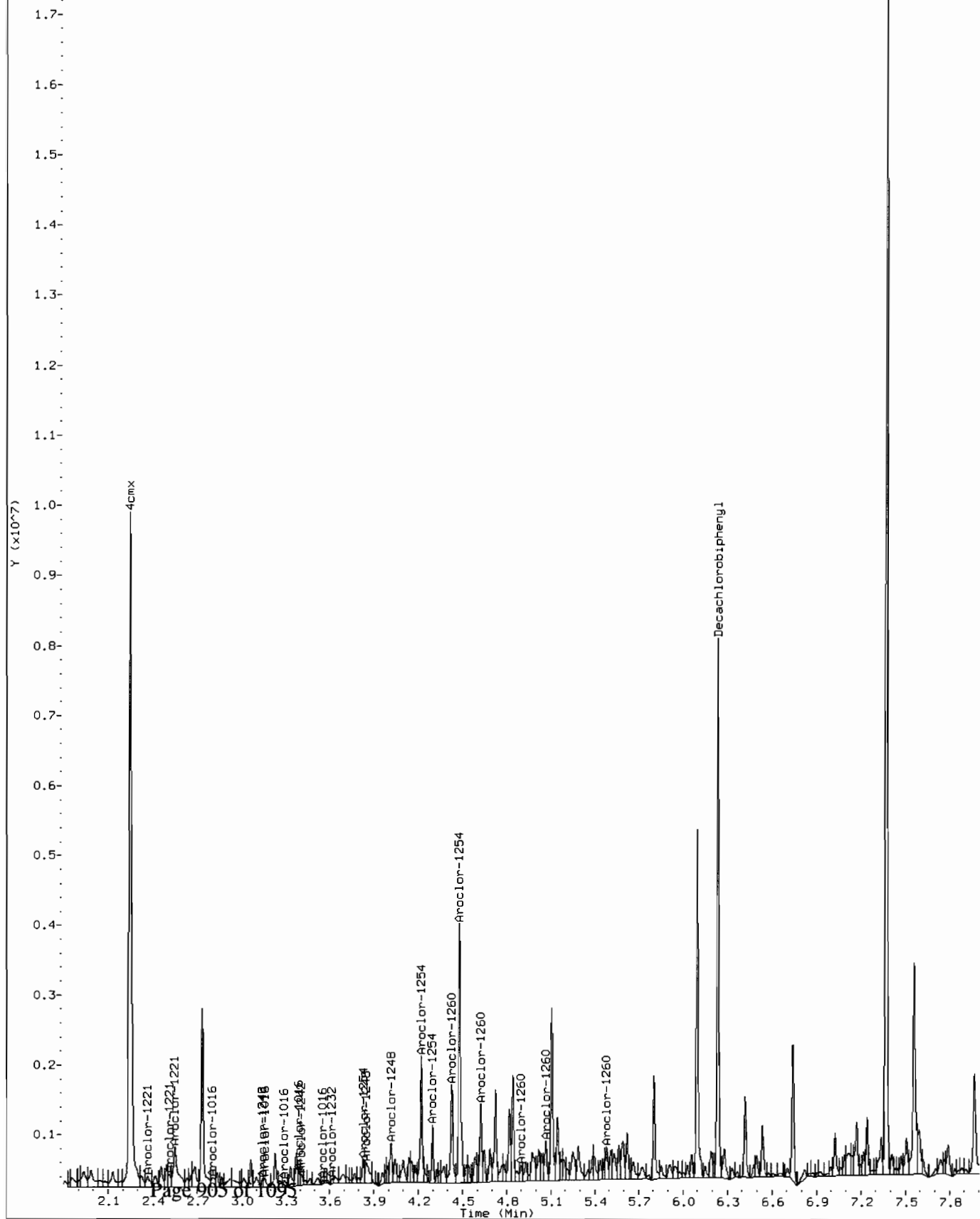
Page 1



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/032310.b/016f1601.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 11:14  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-7524



Client Sample ID: RE36-10-7524



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/016b1601.d

Lab Smp Id: 248514002

Client Smp ID: RE36-10-7524

Inj Date : 23-MAR-2010 11:14

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |248514002|1|

Misc Info : |ECD82P\_1S|967817|SVA|LANL|SOIL|RE36-10-7524|1|

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: 16

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2196.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	30.18000	Weight of sample extracted (g)
M	16.02250	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
<hr/>								
\$ 11 4cmx					CAS #: 877-09-8			
2.477	2.476	0.001	7704182	92.1750	3.6	80.00-	120.00	100.00 (M)
<hr/>								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.823	6.824	-0.001	6110755	103.131	4.1	80.00-	120.00	100.00 (M)
<hr/>								
6 Aroclor-1254					CAS #: 11097-69-1			
4.301	4.301	0.000	298333	95.7220	3.8	80.00-	120.00	100.00 (M)
4.440	4.440	0.000	337118	96.9248	3.8	91.97-	131.97	113.00
4.768	4.769	-0.001	515892	106.765	4.2	138.62-	178.62	172.92
4.931	4.931	0.000	339354	97.1233	3.8	93.56-	133.56	113.75
5.058	5.057	0.001	558214	253.538	10.0	51.06-	91.06	187.11
Average of Peak Concentrations =					5.1			
<hr/>								

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
-----	-----	-----	-----	-----	-----	-----	-----
7 Aroclor-1260				CAS #: 11096-82-5			
4.907	4.907	0.000	293190	74.4419	2.9	80.00- 120.00	100.00 (aM)
5.058	5.056	0.002	558214	118.004	4.6	102.06- 142.06	190.39
5.373	5.373	0.000	194308	54.1753	2.1	71.87- 111.87	66.27
5.579	5.580	-0.001	264802	71.3322	2.8	75.74- 115.74	90.32
6.013	6.011	0.002	386402	66.1496	2.6	133.68- 173.68	131.79
Average of Peak Concentrations =					3.0		

QC Flag Legend

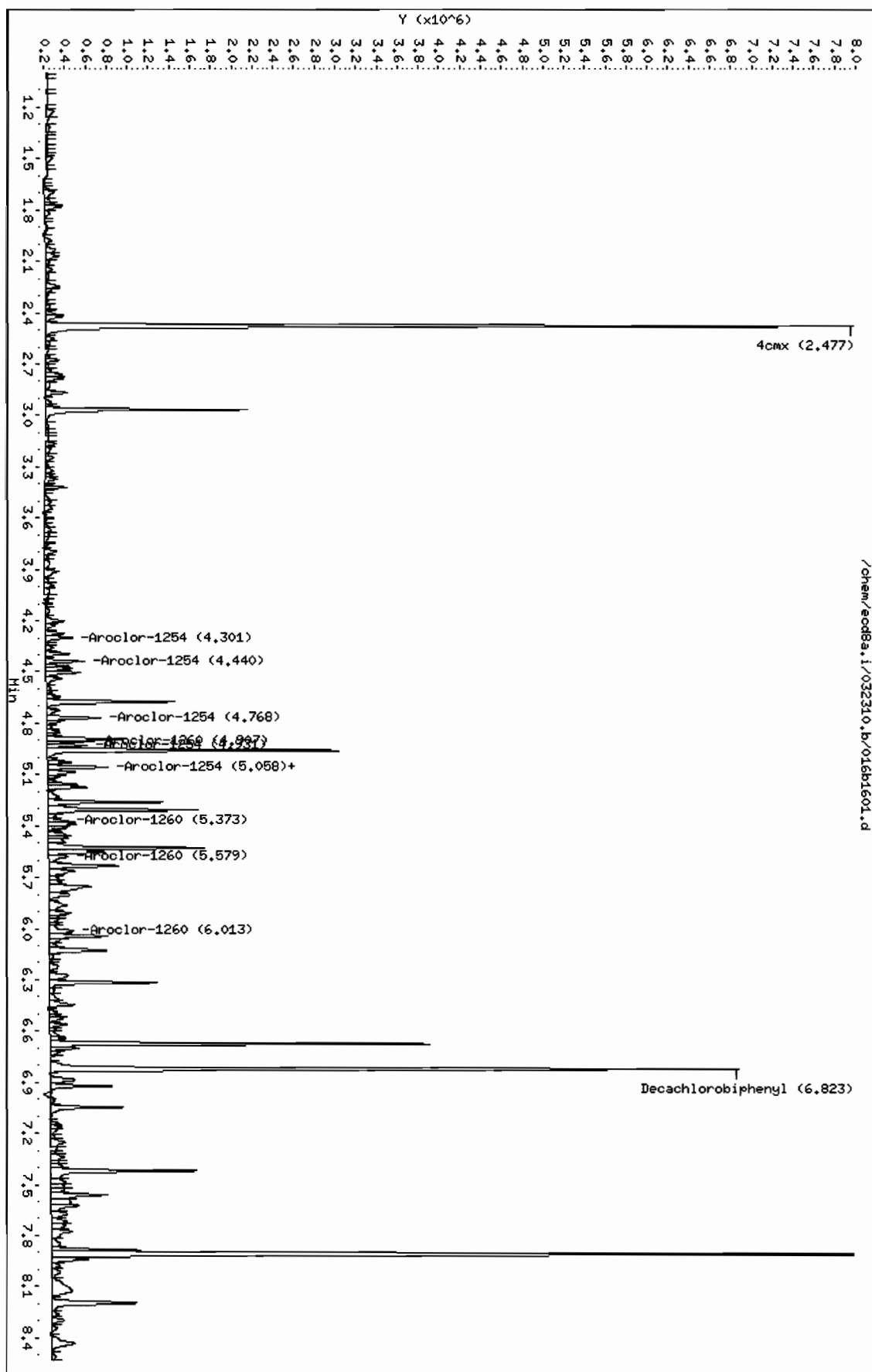
- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation (BLOQ).
- M - Compound response manually integrated.



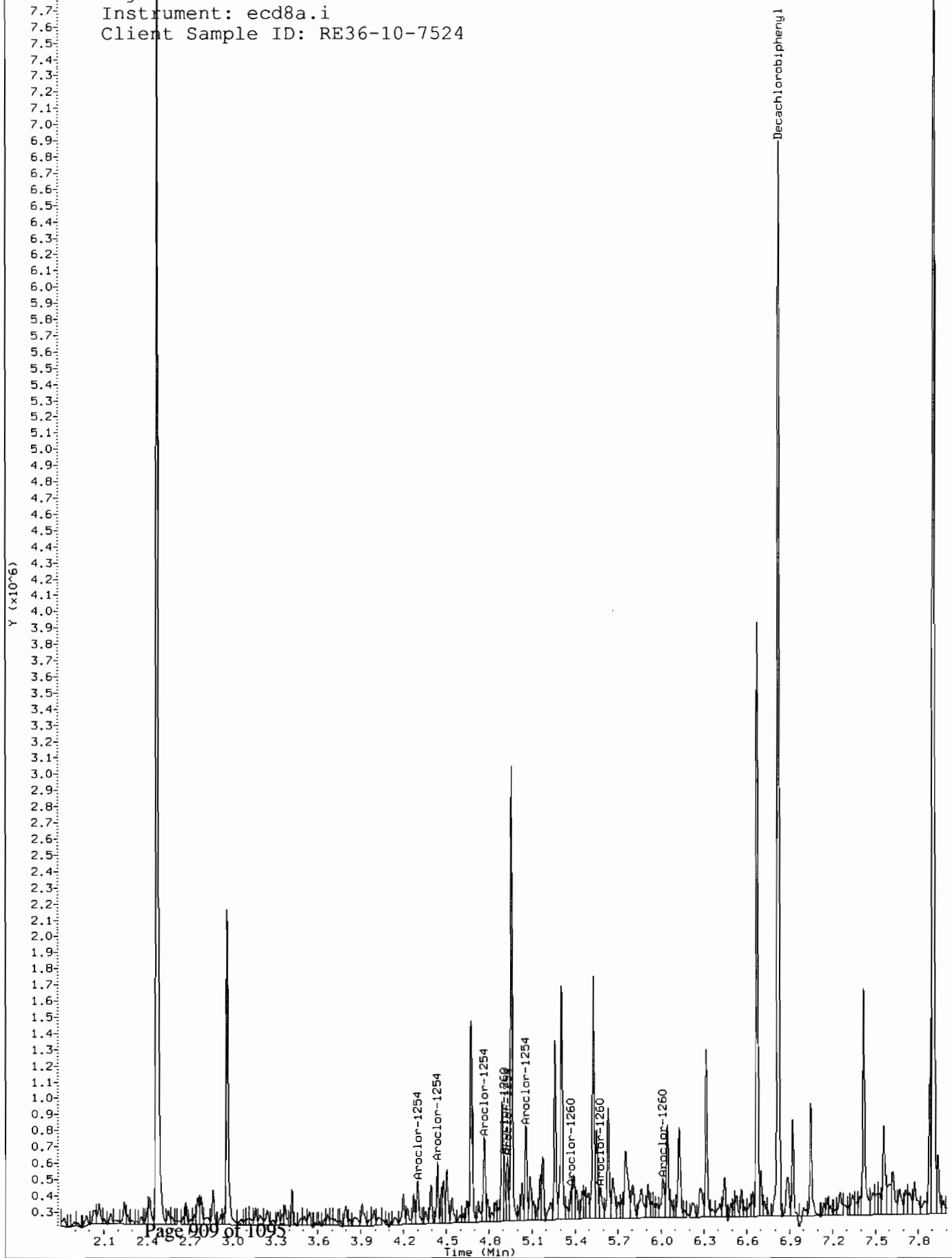
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Date : 23-MAR-2010 11:14  
Client ID: RE36-10-7524  
Sample Info: 124851400211  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecod8a.i  
Operator: JMO  
Column diameter: 0.25

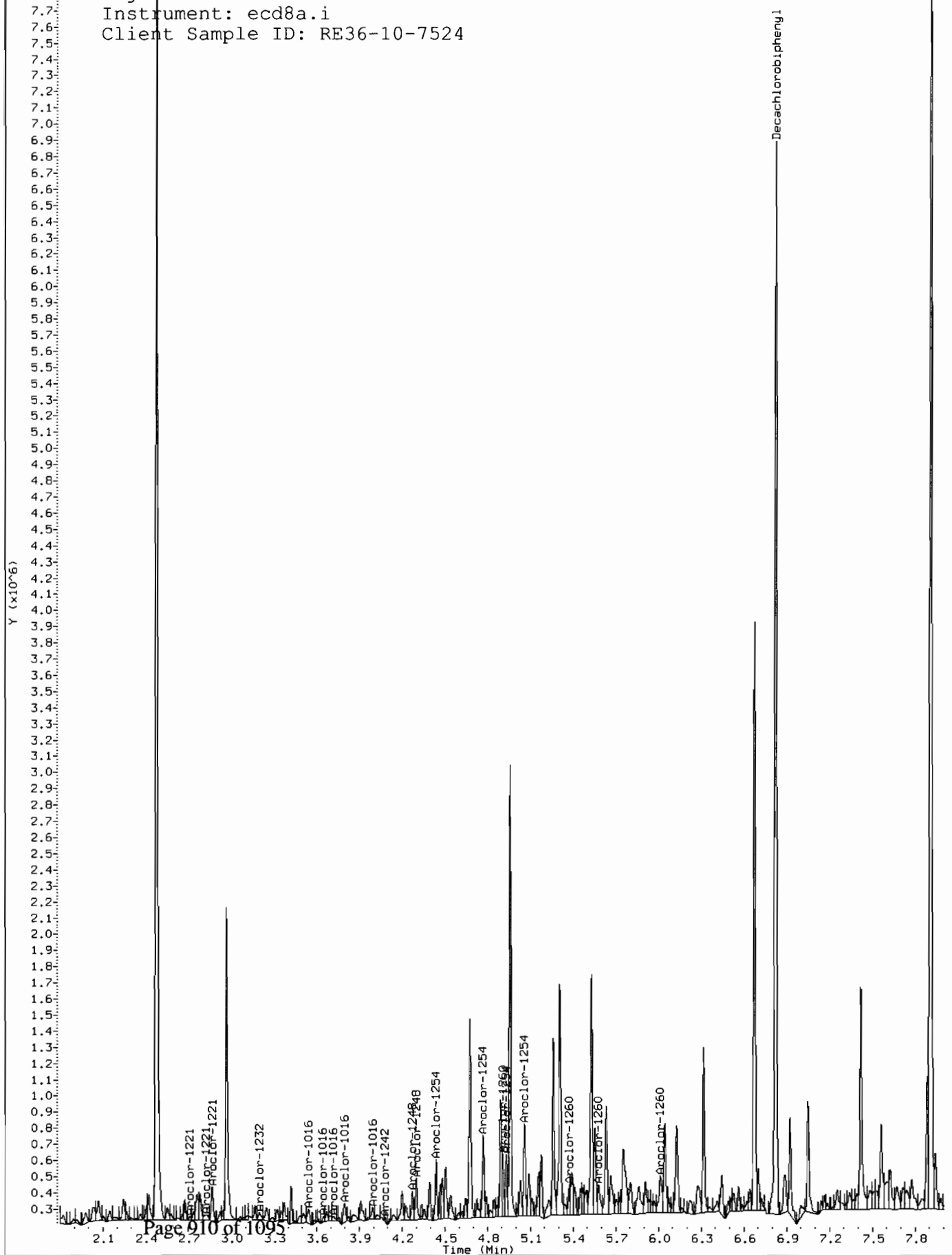
Page 1



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/032310.b/016b1601.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 11:14  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-7524



Comment: Before manual integration  
Data File: /chem/ecd8a.i/032310.b/orig-016b1601.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 11:14  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-7524



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

SDG Number: 10-2196  
Lab Sample ID: 248514003

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: 20.2  
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	4.17	ug/kg	1.39	4.17	1
11104-28-2	Aroclor-1221	U	4.17	ug/kg	1.39	4.17	1
11141-16-5	Aroclor-1232	U	4.17	ug/kg	1.39	4.17	1
53469-21-9	Aroclor-1242	U	4.17	ug/kg	1.39	4.17	1
12672-29-6	Aroclor-1248	U	4.17	ug/kg	1.39	4.17	1
11097-69-1	Aroclor-1254	U	4.17	ug/kg	1.39	4.17	1
11096-82-5	Aroclor-1260	U	4.17	ug/kg	1.39	4.17	1

Data File: /chem/ecd8a.i/031910.b/034f3401.d  
Report Date: 22-Mar-2010 13:19

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/034f3401.d  
Lab Smp Id: 248514003 Client Smp ID: RE36-10-7525  
Inj Date : 19-MAR-2010 14:02  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248514003|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-7525|||  
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: 34  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2196.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	20.15380	% Moisture

Cpnd Variable Local Compound Variable

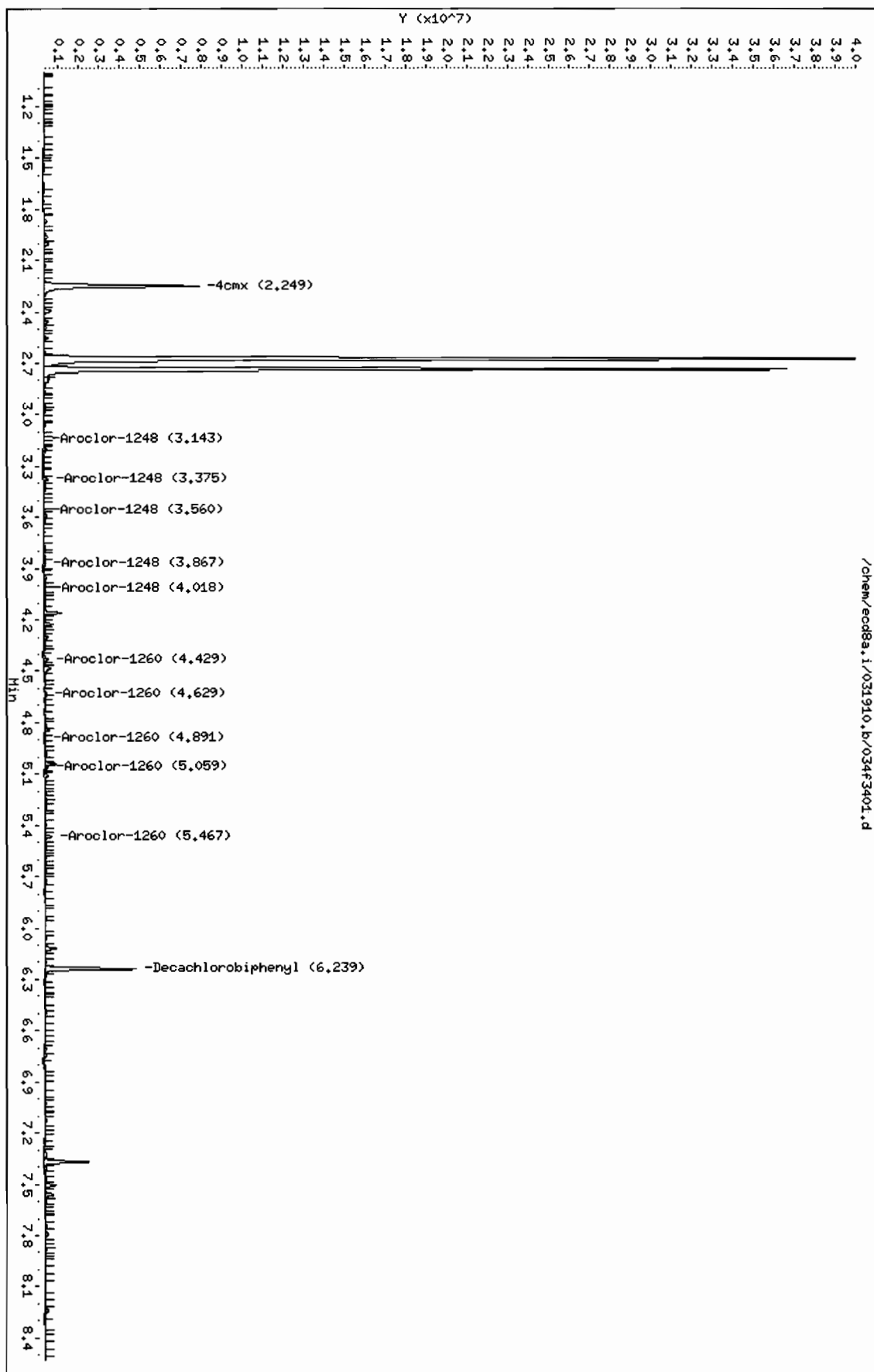
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
2.249	2.248	0.001	8274051 66.2129	2.8	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
6.239	6.239	0.000	4139210 50.2630	2.1	80.00- 120.00	100.00 (R)
-----						

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd8a.i/031910.b/034f3401.d  
Date : 19-MAR-2010 14:02  
Client ID: REC6-10-7525  
Sample Info: 1248514003111  
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/034b3401.d  
Lab Smp Id: 248514003 Client Smp ID: RE36-10-7525  
Inj Date : 19-MAR-2010 14:02  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248514003|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-7525|||  
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: 34  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2196.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	30.03000	Weight of sample extracted (g)
M	20.15380	% Moisture

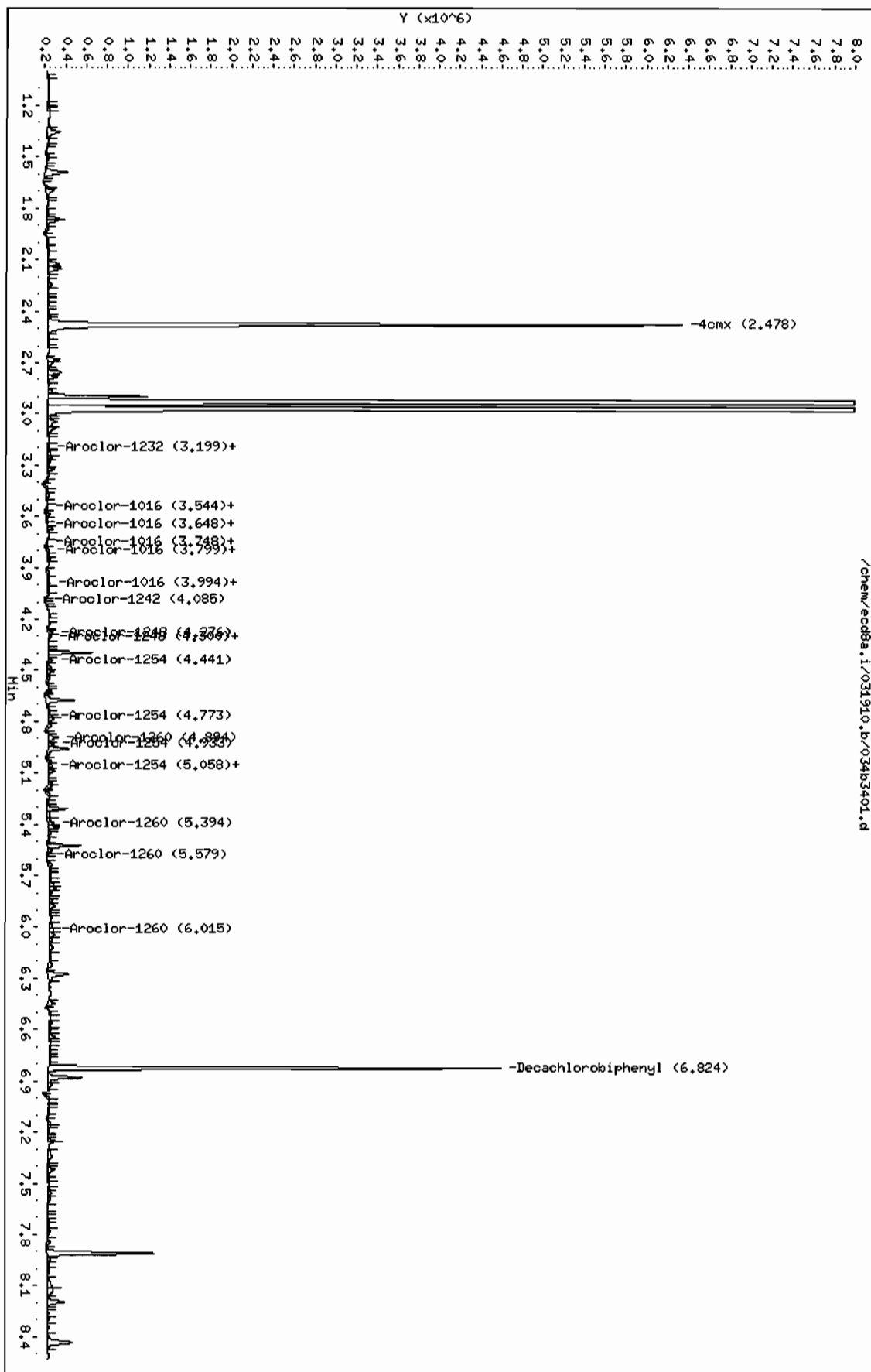
Cpnd Variable Local Compound Variable

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	5811279 69.5278	2.9	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
6.824	6.824	0.000	3818943 64.4520	2.7	80.00- 120.00	100.00	
-----							

Data File: /chem/ecd8a.i/031910.b/034b3401.d  
Date: 19-MAR-2010 14:02  
Client ID: RE36-10-7525  
Sample Info: 1248514003111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JMO  
Column diameter: 0.25

Page 1





# 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
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 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
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
M 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
		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
		4.624	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
9 Aroclor-1268		5.507	5.477-5.537	1.632e+04
		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
M 10 Aroclor-Total		1.000	0.980-1.020	
\$ 11 4cmx		2.248	2.218-2.278	1.250e+05
\$ 12 Decachlorobiphenyl		6.240	6.210-6.270	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/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

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
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

	100.000	250.000	500.000	1000.000	4000.000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
=====							
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

	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

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.: 10-2196  
 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.: 10-2196  
 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.: 10-2196  
 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.: 10-2196  
 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.: 10-2196  
 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.: 10-2196  
 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	<-

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.: 10-2196  
 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.: 10-2196  
 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

<-

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.: 10-2196  
 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.: 10-2196  
 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.: 10-2196  
 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.: 10-2196  
 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.: 10-2196  
 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.: 10-2196  
 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/ecod8a.i/031910.b/002f0201.d

Date: 19-MAR-2010 06:39

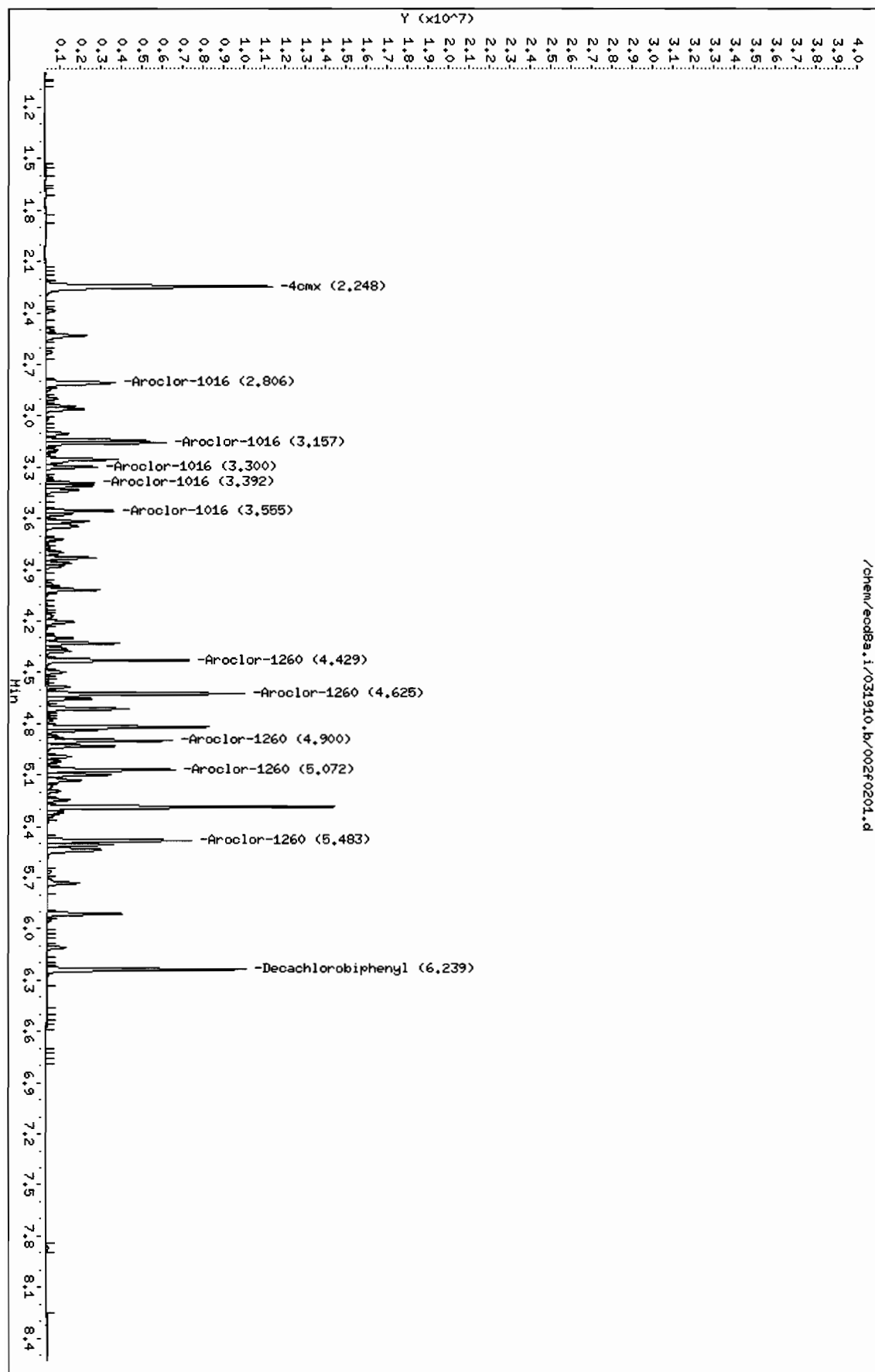
Client ID: AR16001

Sample Info: IARR100224-60 01

Instrument: ecod8a.i

Column phase: CLP1

Operator: JHOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/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

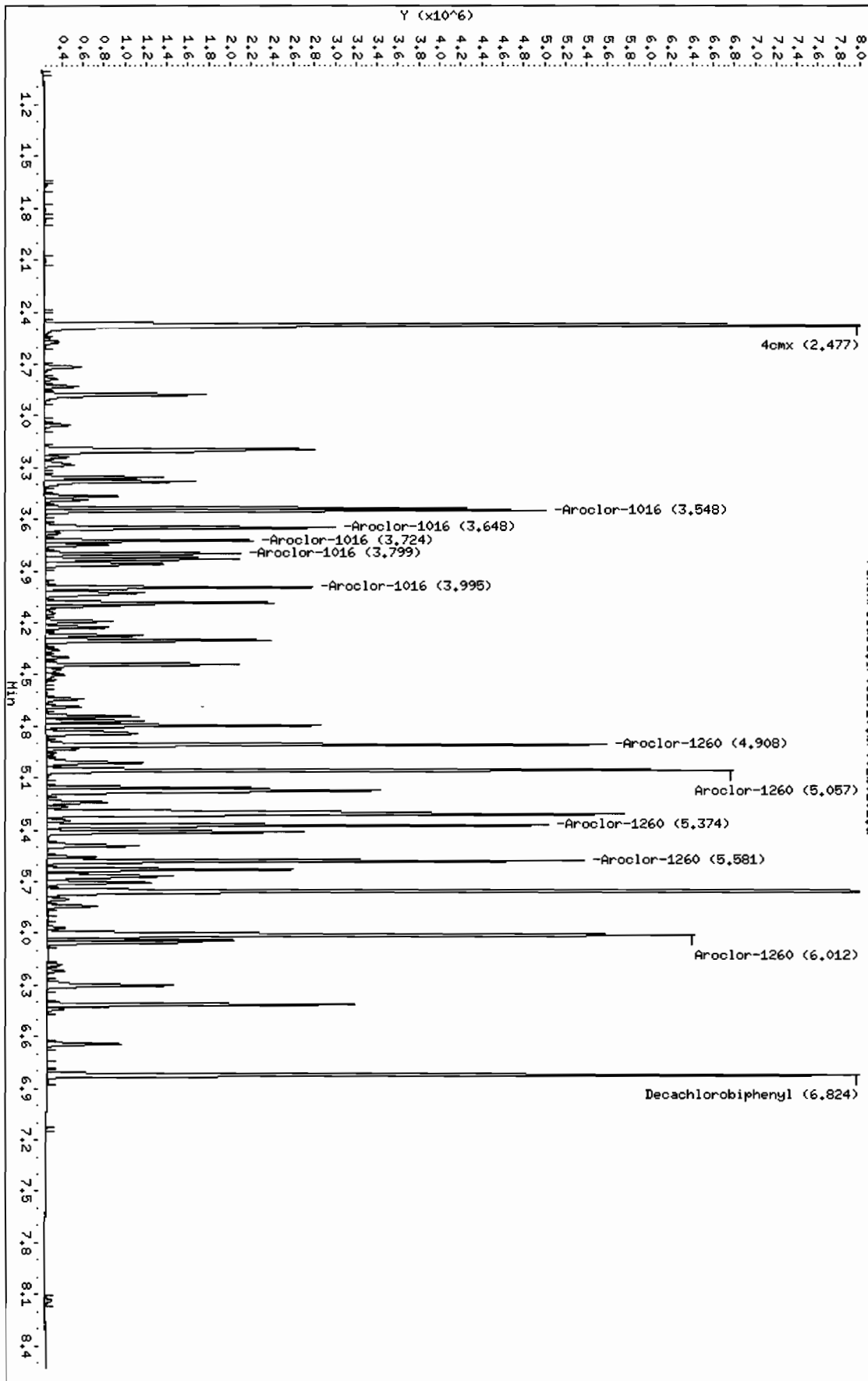
Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE		RATIO
<hr/>								
\$ 11 4cmx					CAS #: 877-09-8			
2.477	2.477	0.000	9146433	100.000	109	80.00-	120.00	100.00
<hr/>								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.824	6.824	0.000	6621629	100.000	112	80.00-	120.00	100.00
<hr/>								
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			
<hr/>								
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/ecd8a.i/031910.b/00200201.d  
Date: 19-MAR-2010 06:39  
Client ID: AR166001  
Sample Info: IMA100224-60 01  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAO  
Column diameter: 0.25



Data File: /chem/ecd8a.i/031910.b/003f0301.d  
Report Date: 19-Mar-2010 09:24

Page 1

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

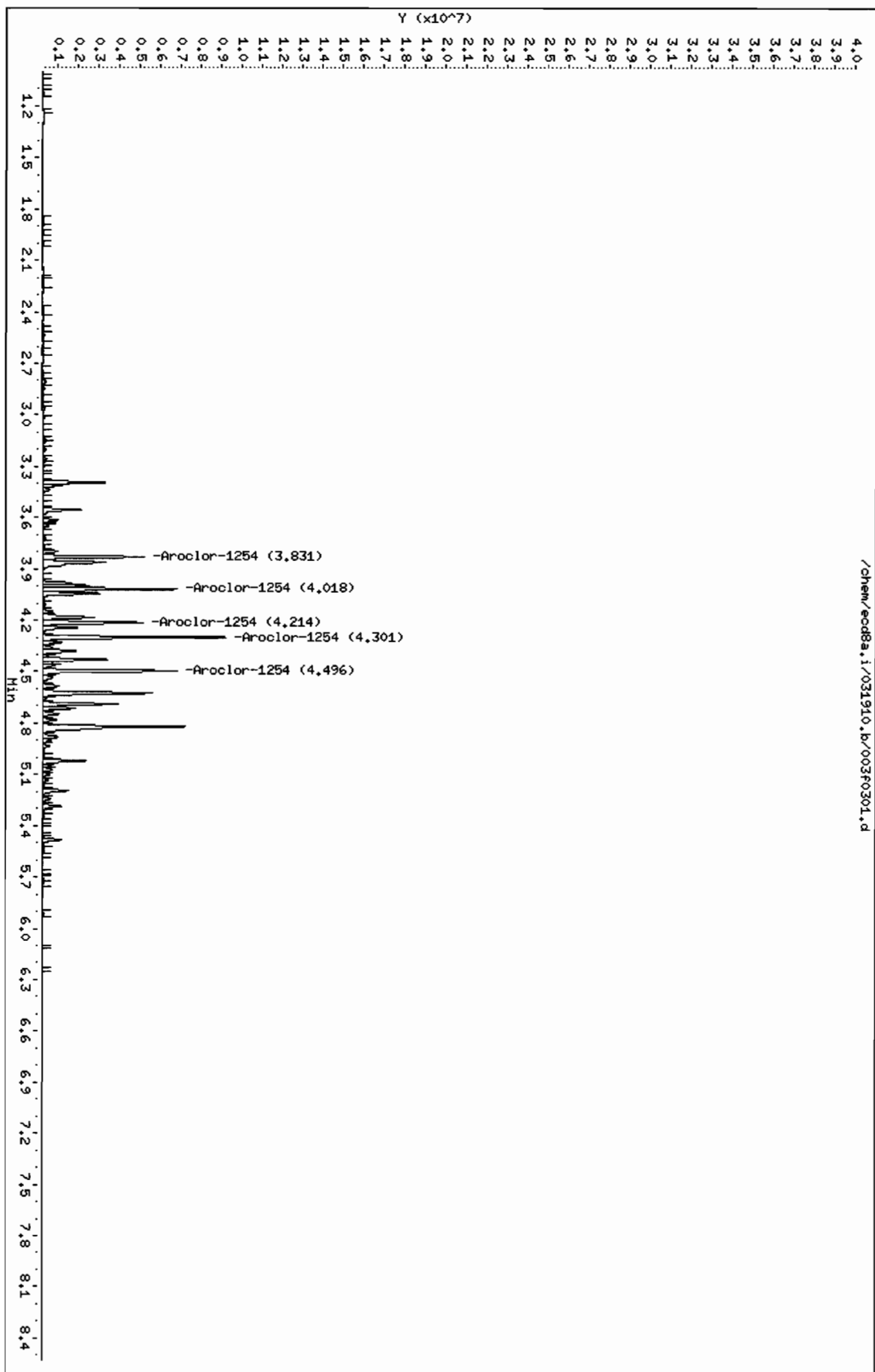
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254			CAS #: 11097-69-1			
3.831	3.831	0.000	4222327 1000.00	974	80.00- 120.00	100.00
4.018	4.018	0.000	5675120 1000.00	984	114.41- 154.41	134.41
4.214	4.214	0.000	4397426 1000.00	986	84.15- 124.15	104.15
4.301	4.301	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

Page 1

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/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/ecod8a.i/031910.b/003b0301.d

Date : 19-MAR-2010 06:51

Client ID: AR125401

Sample Info: 1MAR100201-54

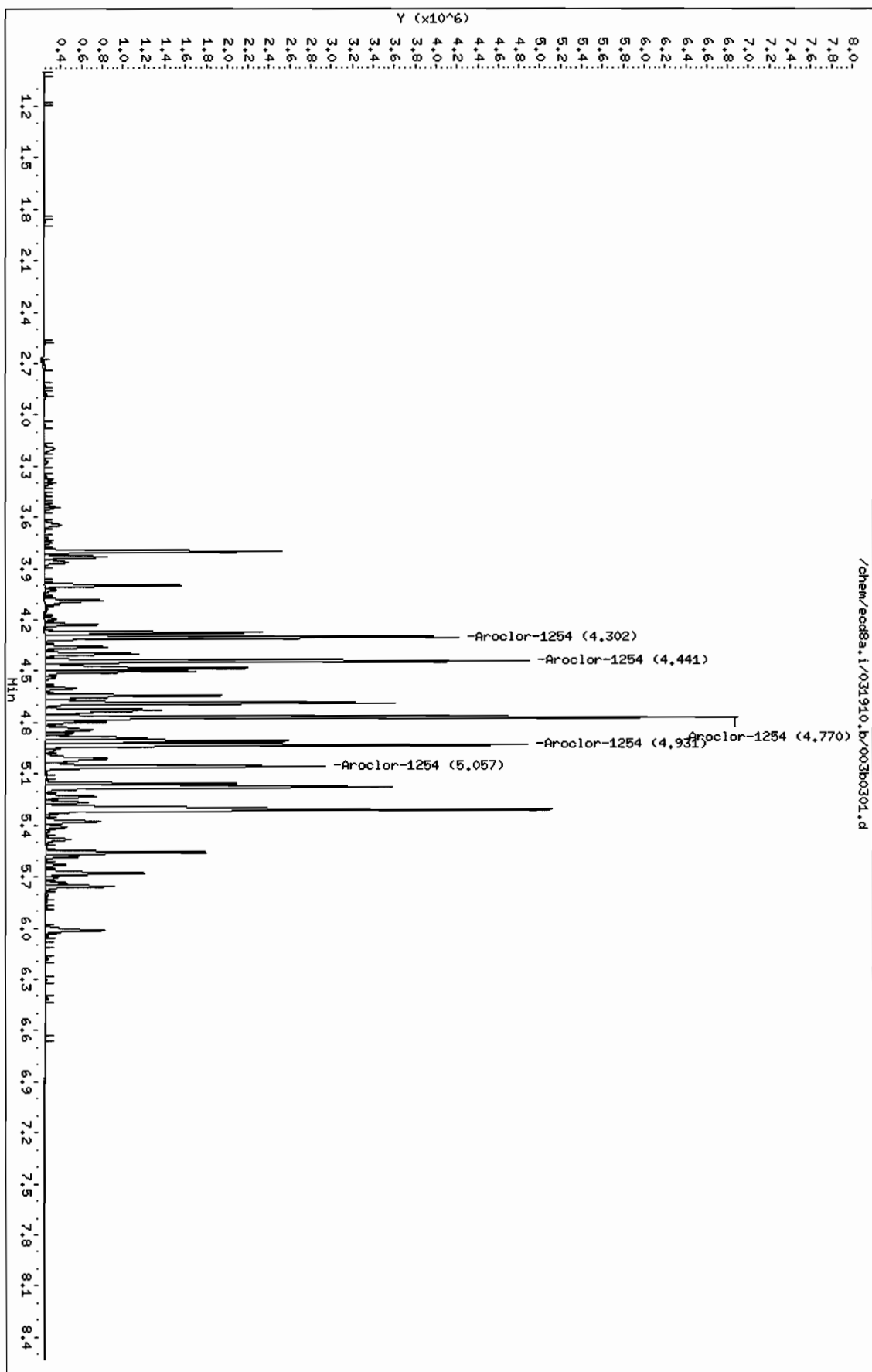
Page 1

Instrument: ecod8a.i

Operator: JHOC

Column diameter: 0.25

Column phase: CLP2



Data File: /chem/ecd8a.i/031910.b/005f0501.d  
Report Date: 19-Mar-2010 09:24

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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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

5 Aroclor-1248			CAS #: 12672-29-6			
3.143	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: 11MAR091217-48

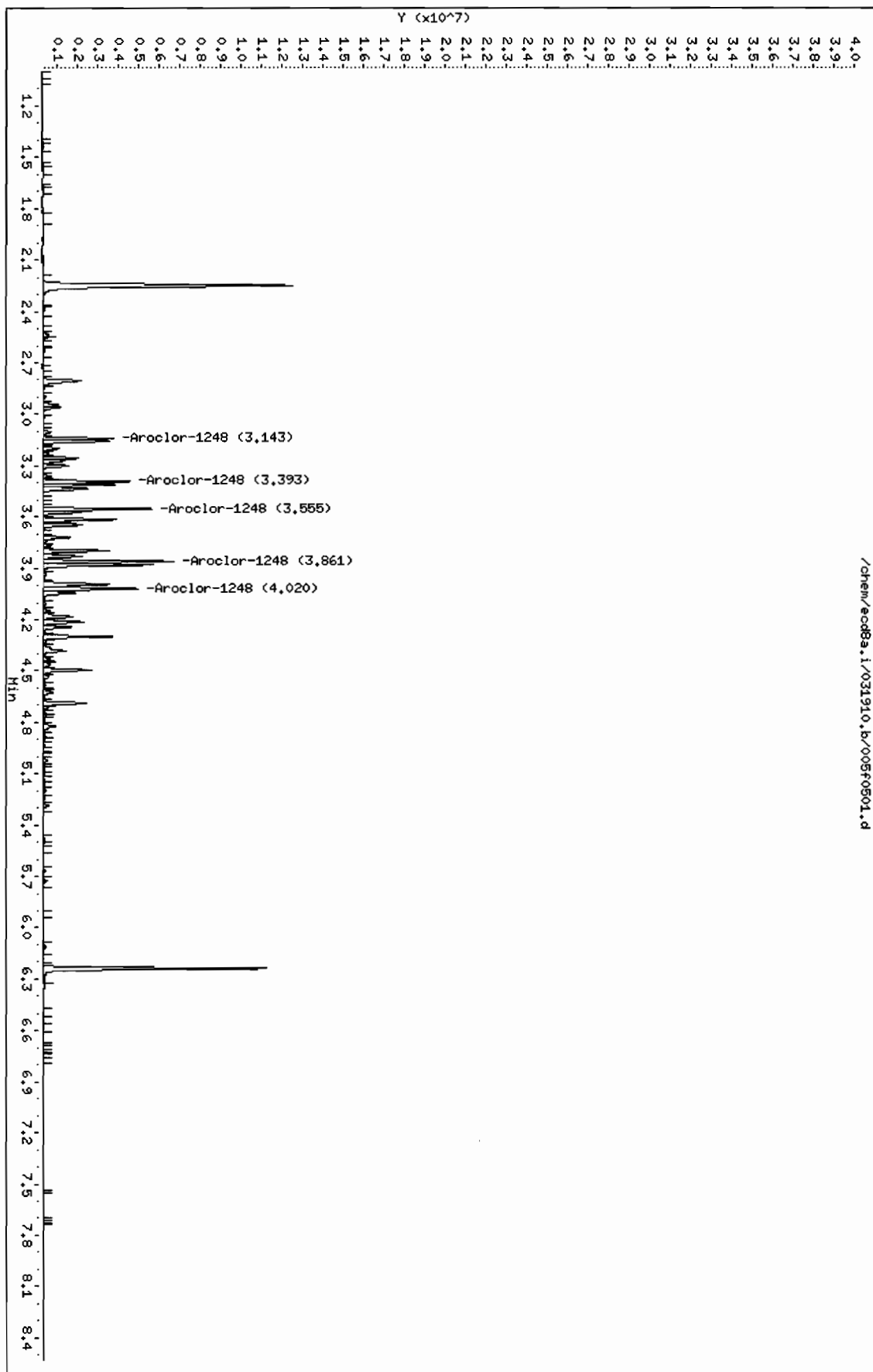
Column phase: CLP1

Instrument: ecdb8a.i

Operator: JHOC

Column diameter: 0.25

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Data File: /chem/ecd8a.i/031910.b/005b0501.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/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

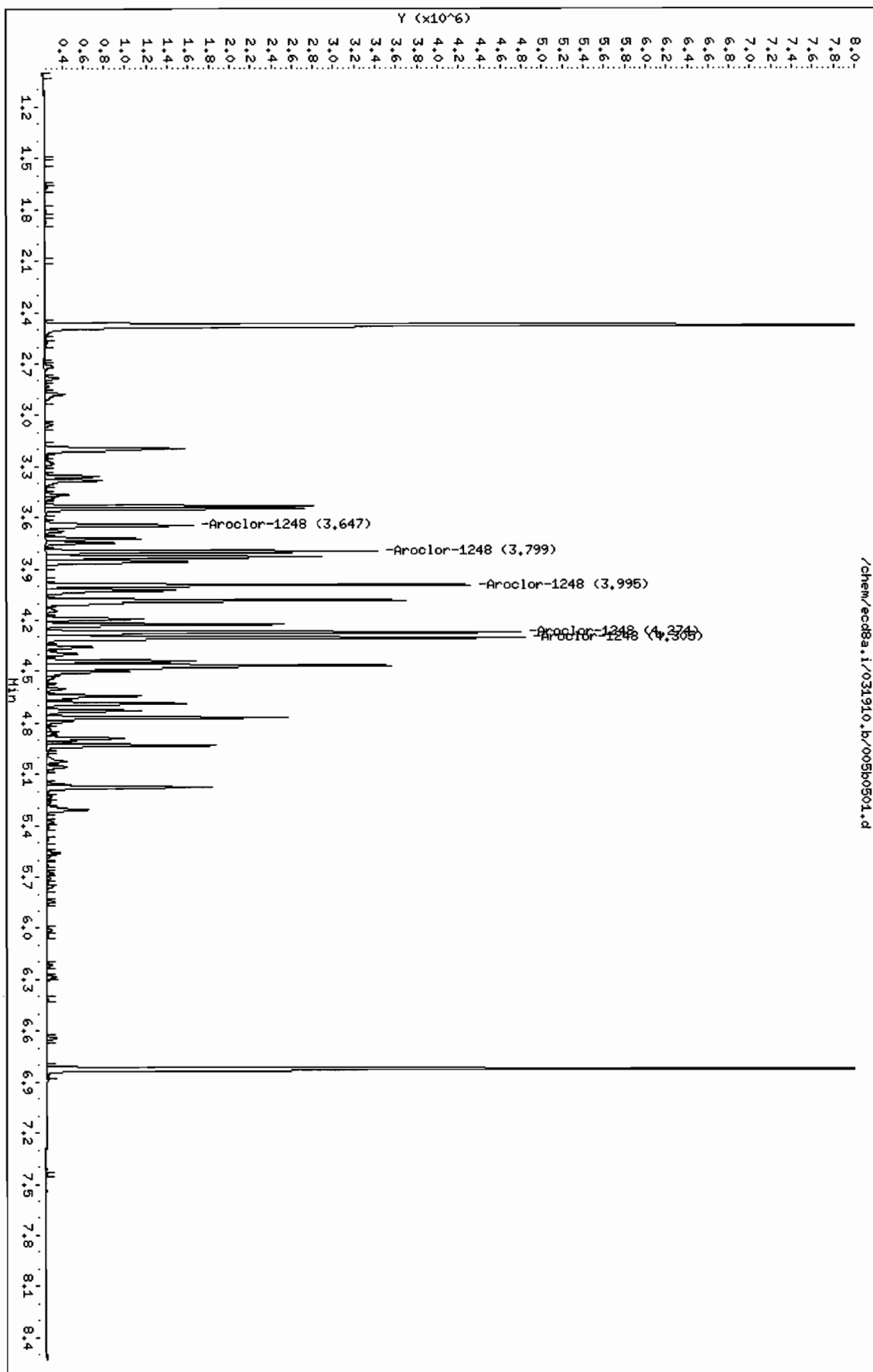
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6	
3.647	3.647	0.000	1420732 1000.00	1070	80.00- 120.00	100.00
3.799	3.799	0.000	2480367 1000.00	1100	154.58- 194.58	174.58
3.995	3.995	0.000	3136554 1000.00	1120	200.77- 240.77	220.77
4.274	4.274	0.000	3630907 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: IMR091217-48

Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JAOC  
Column diameter: 0.25



Data File: /chem/ecd8a.i/031910.b/006f0601.d  
Report Date: 19-Mar-2010 09:24

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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 RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3 Aroclor-1232 CAS #: 11141-16-5						
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/ecdb8a.i/031910.b/006f0601.d

Date: 19-MAR-2010 07:28

Client ID: AR123201

Sample Info: IWR100104-32

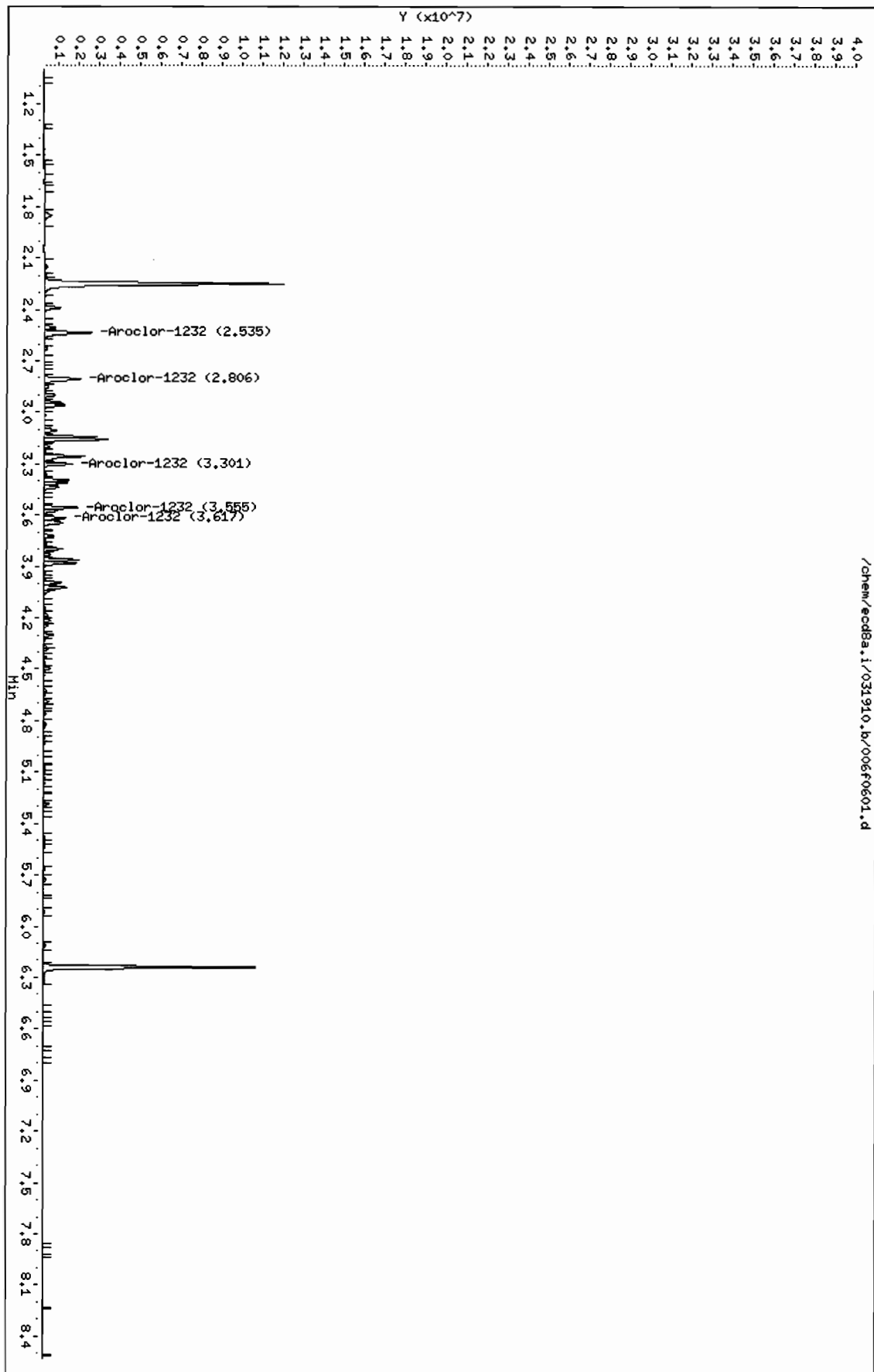
Column phase: CLP1

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/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/ecd8a.i/031910.b/0060601.d

Date: 19-MAR-2010 07:28

Client ID: AR123201

Sample Info: IWR100104-32

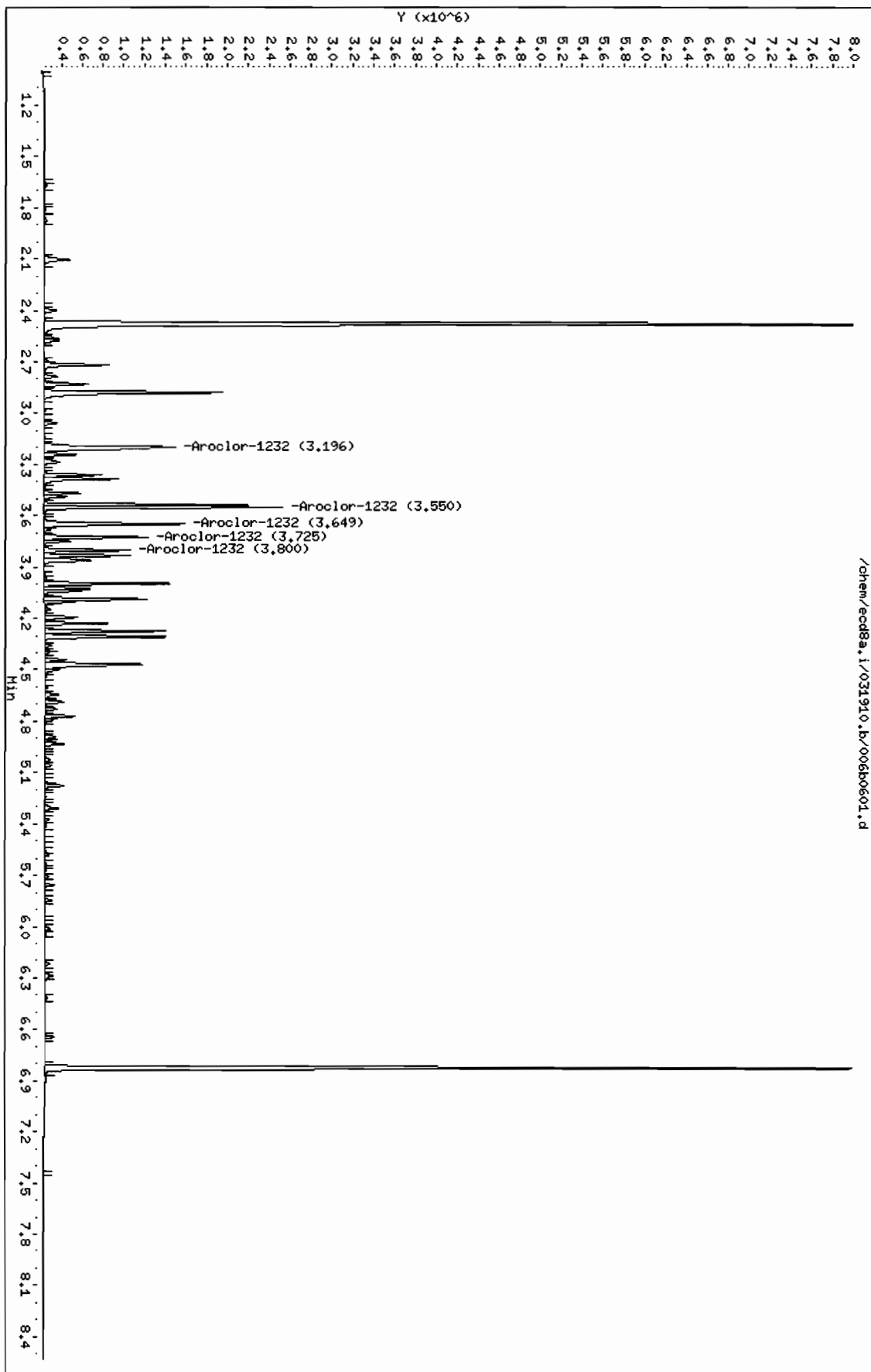
Column phase: CLP2

Instrument: ecd8a.i

Operator: JHOC

Column diameter: 0.25

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Data File: /chem/ecd8a.i/031910.b/007f0701.d  
Report Date: 19-Mar-2010 09:24

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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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

4 Aroclor-1242

CAS #: 53469-21-9

2.806	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/ecdb8a.i/031910.b/007f0701.d

Date : 19-MAR-2010 07:41

Client ID: AR124201

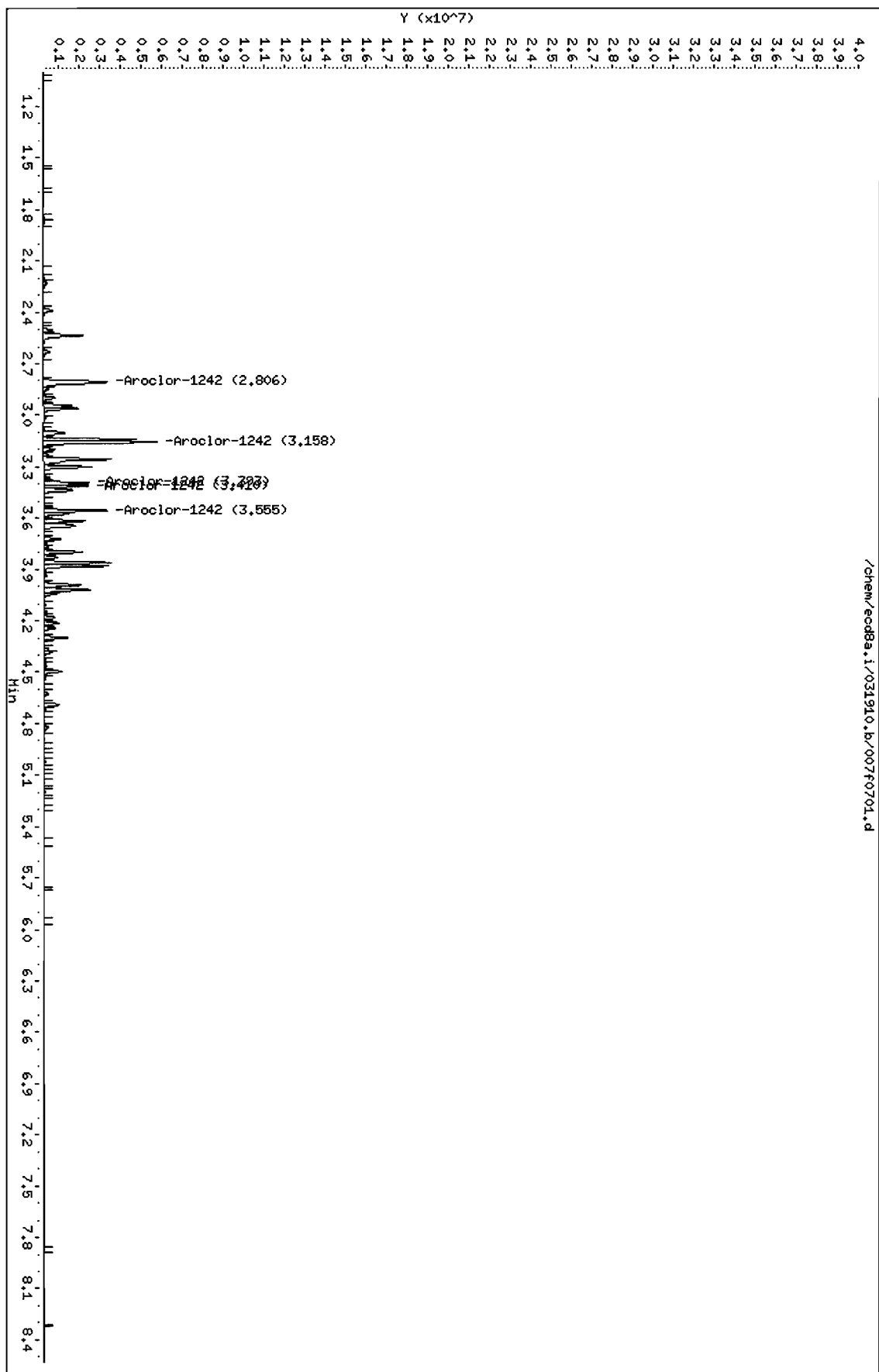
Sample Info: 14MR091217-42

Instrument: ecdb8a.i

Column phase: CLP1

Operator: JAOC

Column diameter: 0.25



Data File: /chem/ecd8a.i/031910.b/007b0701.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/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

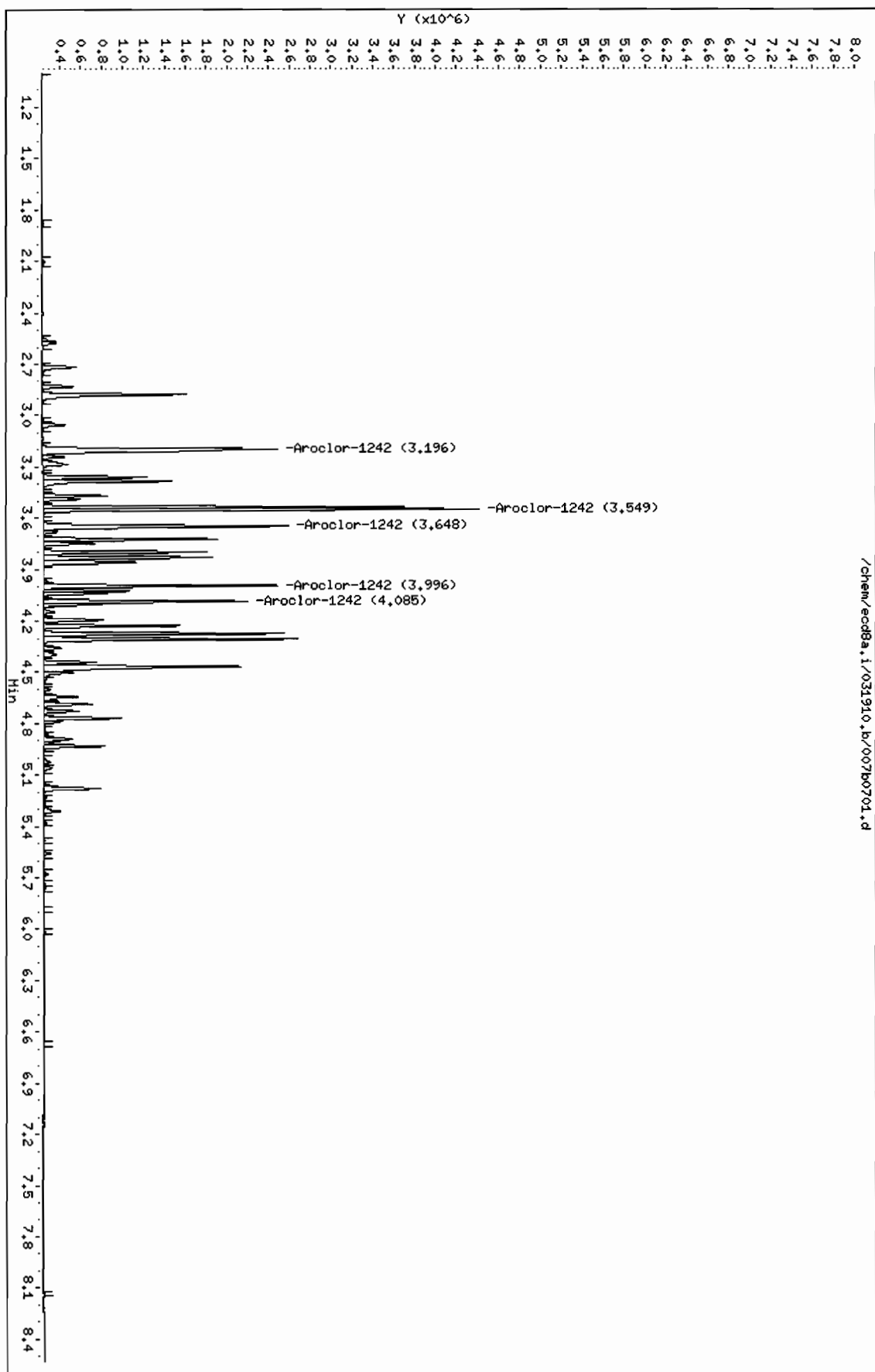
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
4	Aroclor-1242				CAS #: 53469-21-9	
3.196	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/ecdb8a.i/031910.b/007b0701.d  
Date: 19-MAR-2010 07:41  
Client ID: AR124201  
Sample Info: 1MAR091217-42  
Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JAOC  
Column diameter: 0.25

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Data File: /chem/ecd8a.i/031910.b/008f0801.d  
Report Date: 19-Mar-2010 09:24

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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

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.389	2.389	0.000	1552354 1000.00	990	80.00- 120.00	100.00
2.504	2.504	0.000	928114 1000.00	1010	39.79- 79.79	59.79
2.535	2.535	0.000	3519121 1000.00	985	206.70- 246.70	226.70
Average of Peak Amounts =				996		

Data File: /chem/ecd8a.i/031910.b/008f0801.d

Date : 19-MAR-2010 07:53

Client ID: AR122101

Sample Info: 11MAR100104-21

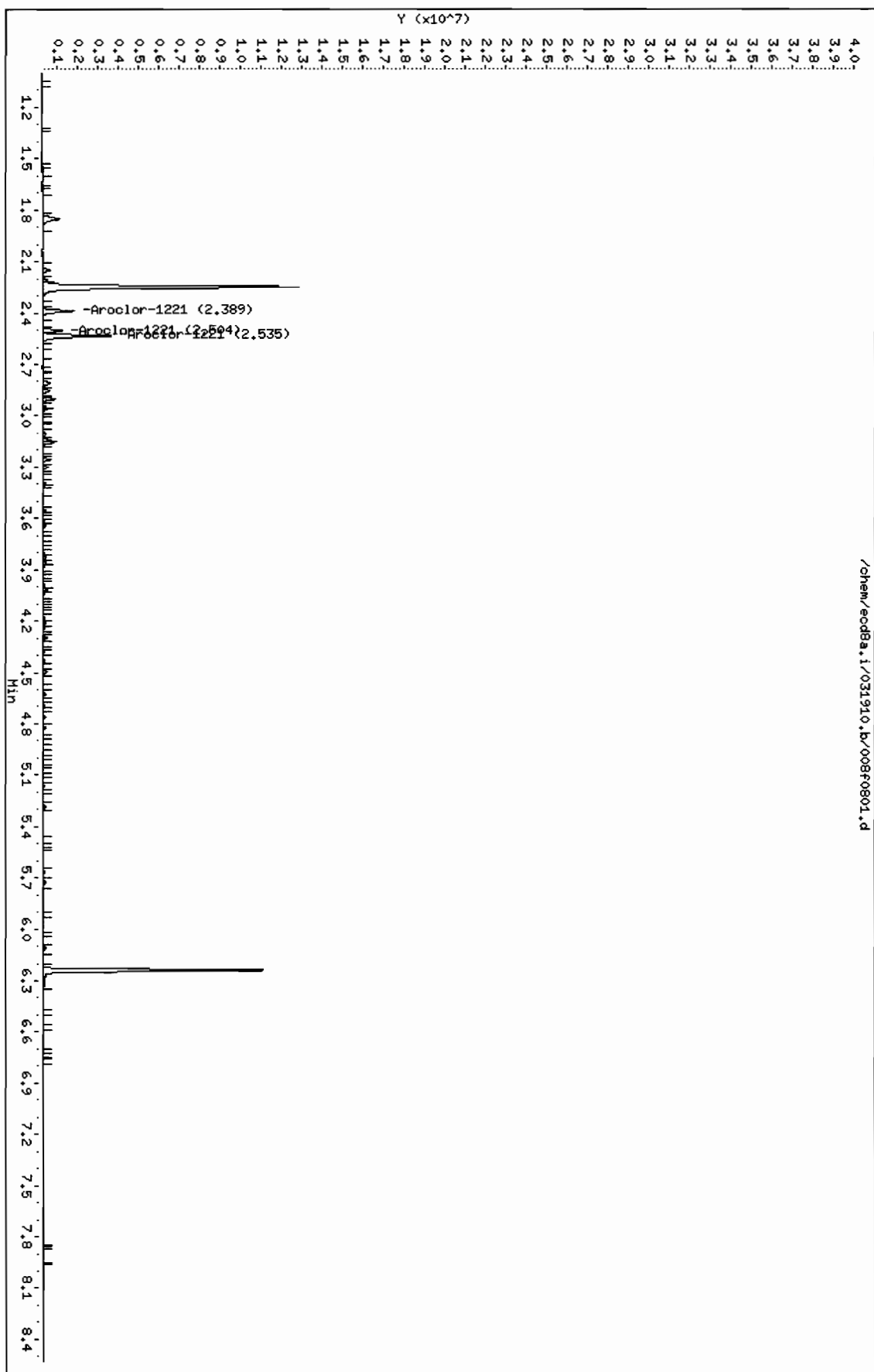
Column phase: CLP1

Instrument: ecd8a.i

Operator: JHOC

Column diameter: 0.25

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Data File: /chem/ecd8a.i/031910.b/008b0801.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/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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

2 Aroclor-1221			CAS #: 11104-28-2			
2.718	2.718	0.000	1062381	1000.00	1120 80.00- 120.00	100.00
2.831	2.831	0.000	641378	1000.00	1080 40.37- 80.37	60.37
2.878	2.878	0.000	2339109	1000.00	1070 200.18- 240.18	220.18

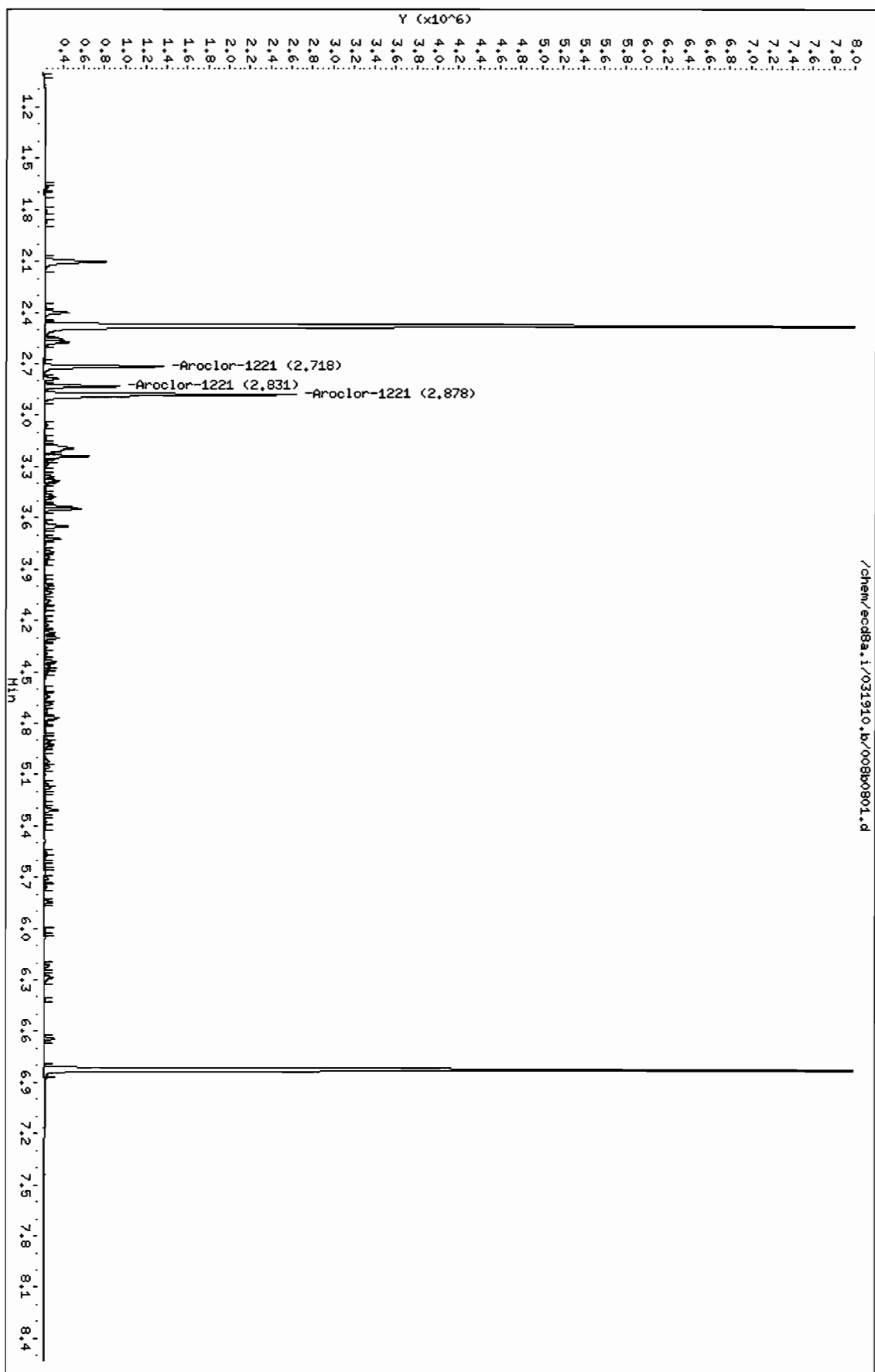
Average of Peak Amounts = 1.09e+03

Data File: /chem/ecdb8a.i/031910.b/008b0801.d  
Date : 19-MAR-2010 07:53  
Client ID: AR122101  
Sample Info: IMRR100104-21

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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/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

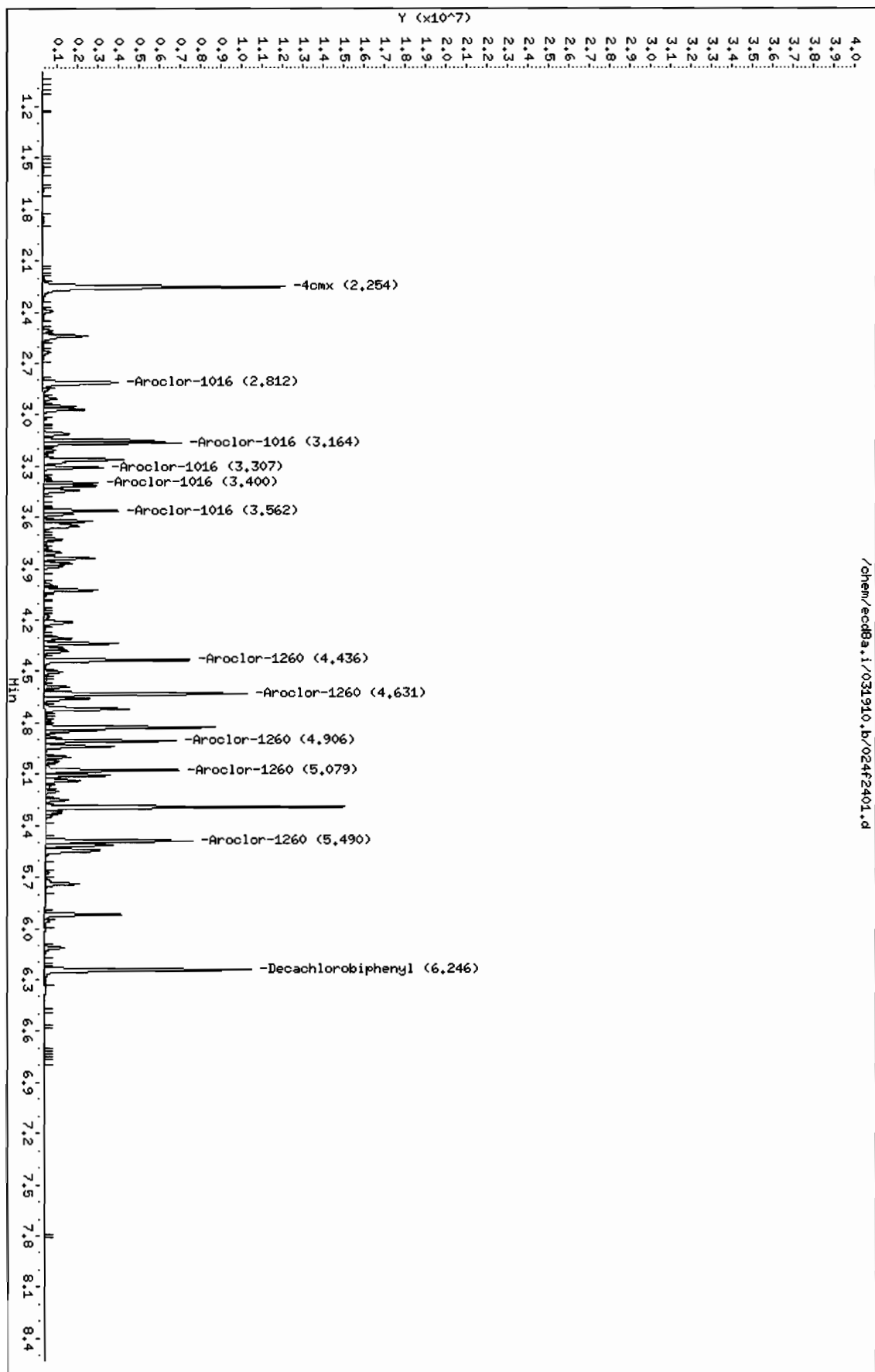
AMOUNTS

				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: IWR100319-60  
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/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

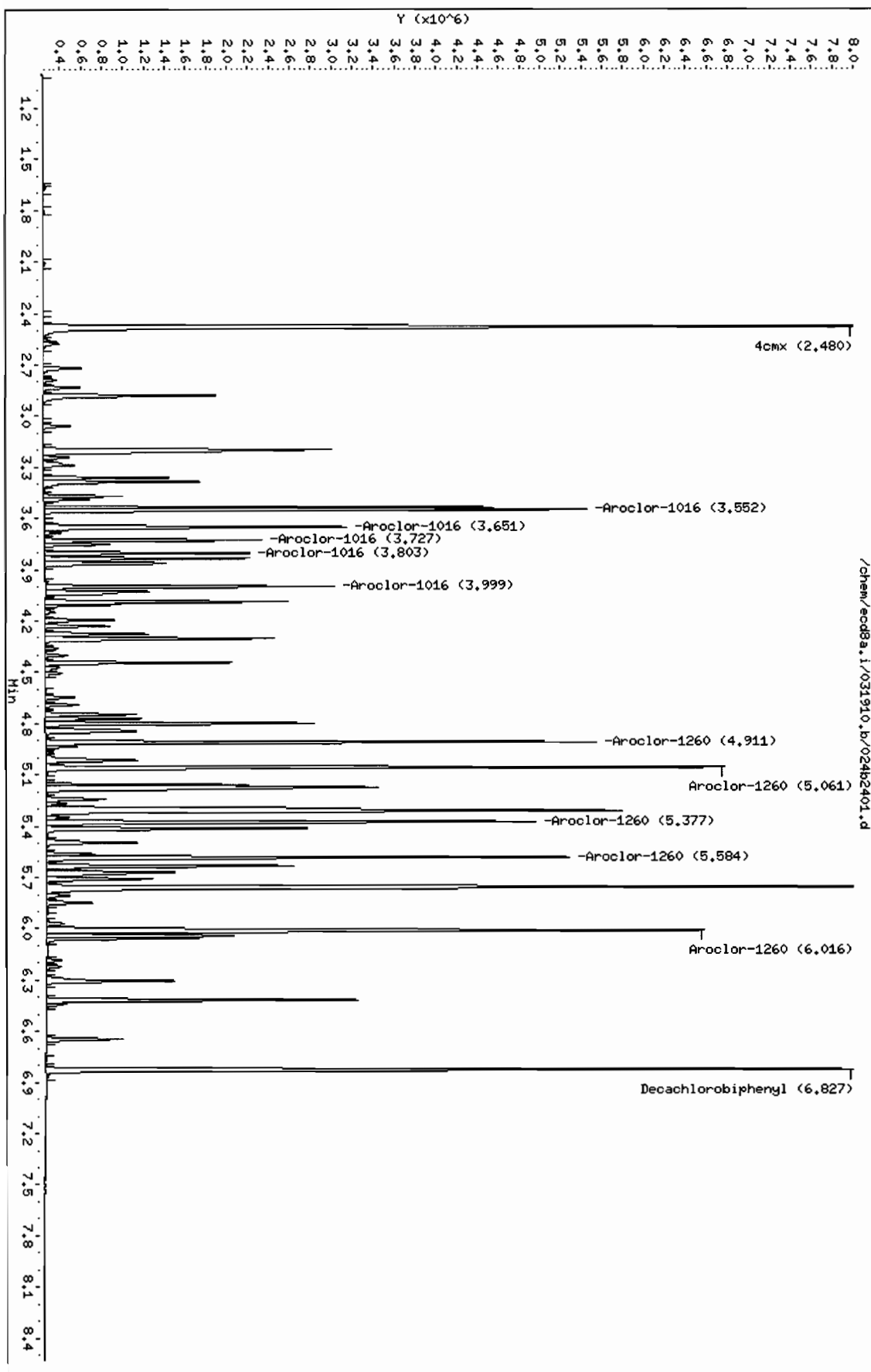
			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO	
<hr/>							
\$ 11 4cmx				CAS #: 877-09-8			
2.480	2.477	0.003	8866340 100.000	106	80.00- 120.00	100.00	
<hr/>							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.827	6.824	0.003	6887114 100.000	116	80.00- 120.00	100.00	
<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/ecd8a.i/031910.b/024b2401.d  
Date: 19-MAR-2010 11:57  
Client ID: AR166006  
Sample Info: IWR100319-60

Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
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/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

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx						
				CAS #: 877-09-8		
2.248	2.248	0.000	12971487 100.000	104	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl						
				CAS #: 2051-24-3		
6.237	6.239	-0.002	8977502 100.000	109	80.00- 120.00	100.00
-----						
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		
-----						
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/ecd8a.i/031910.b/036f3601.d  
Date : 19-MAR-2010 14:30

Client ID: AR166007

Sample Info: IWR100319-60 07

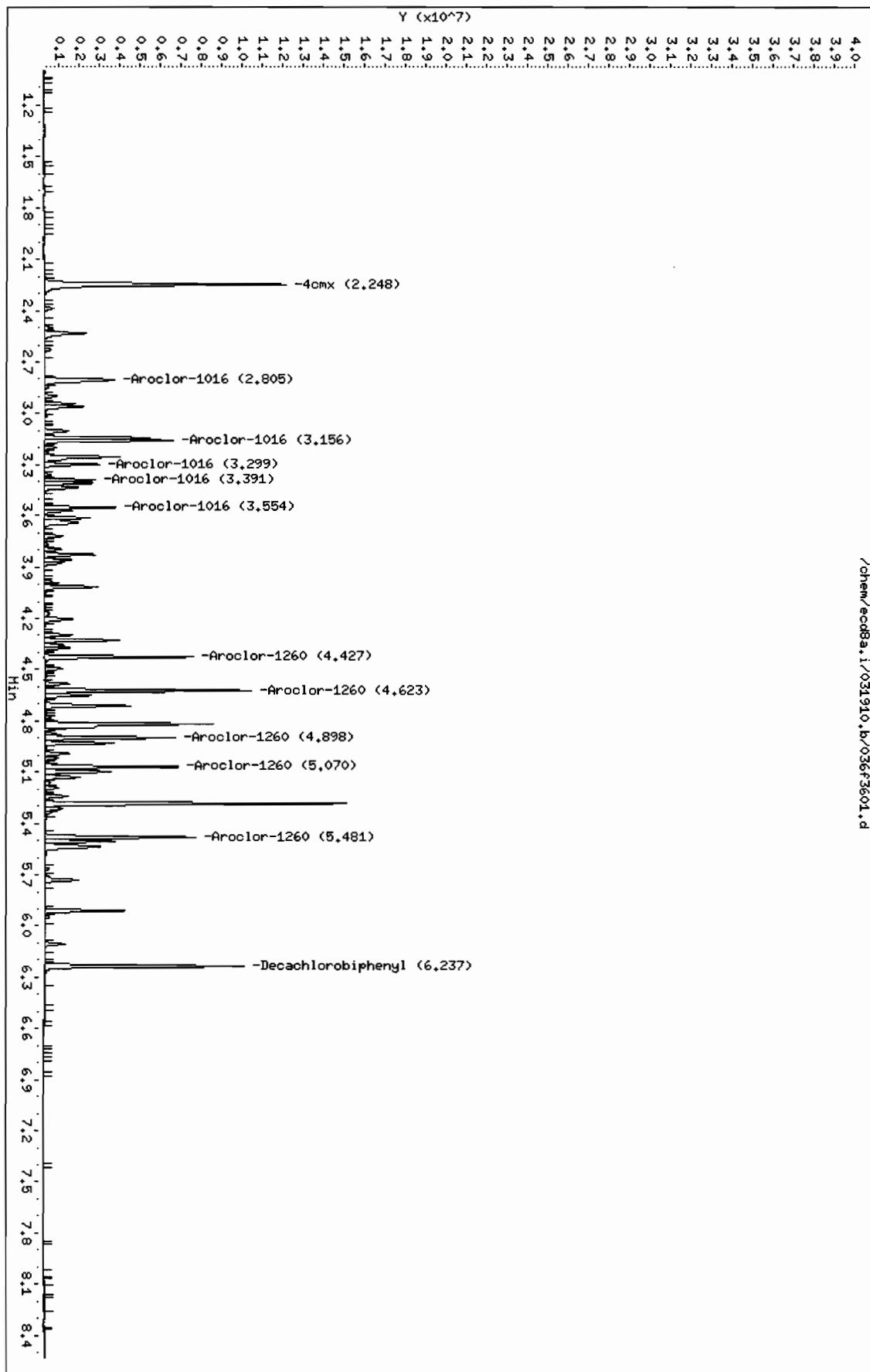
Column phase: CLP1

Instrument: ecd8a.i

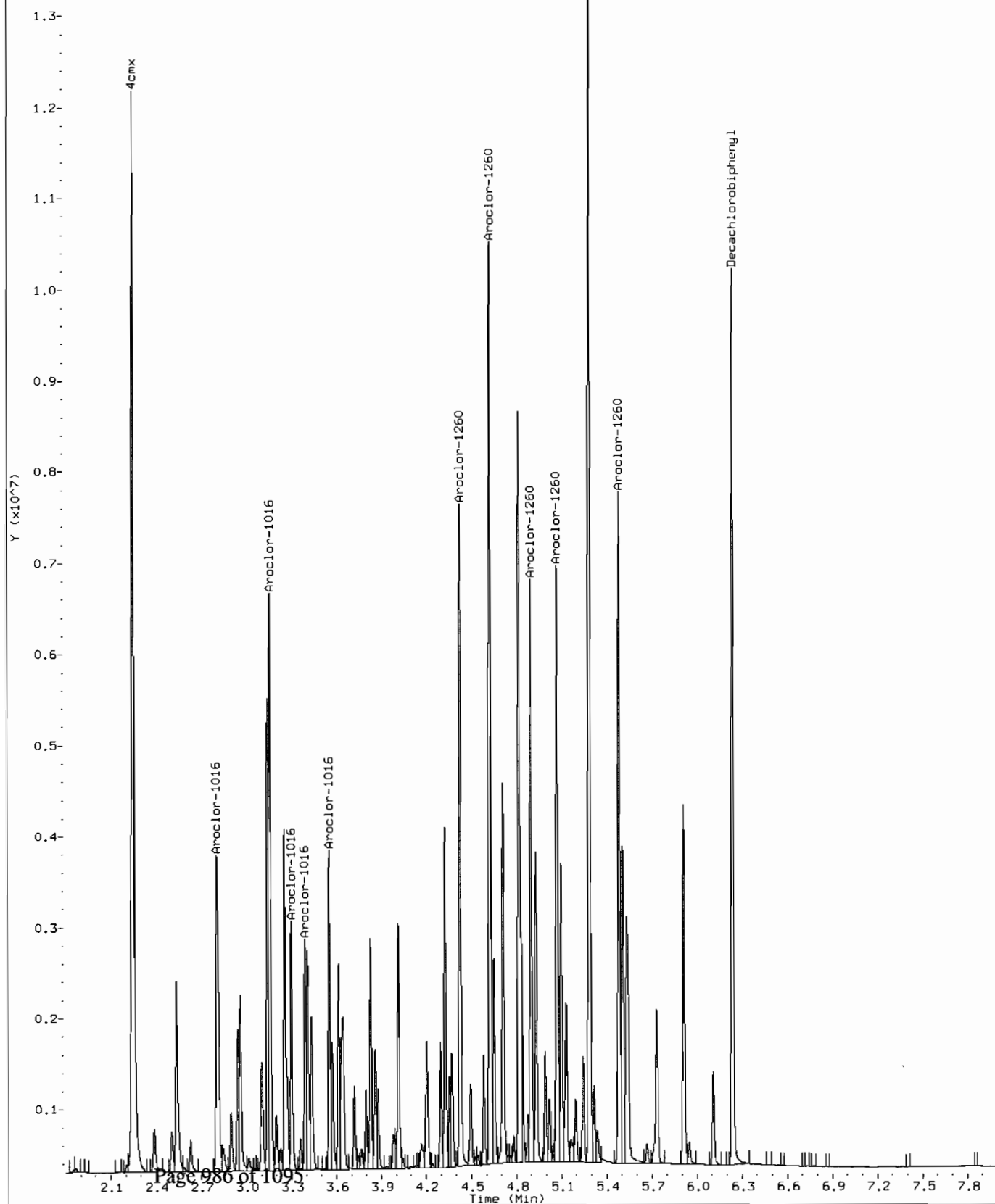
Operator: JAOC

Column diameter: 0.25

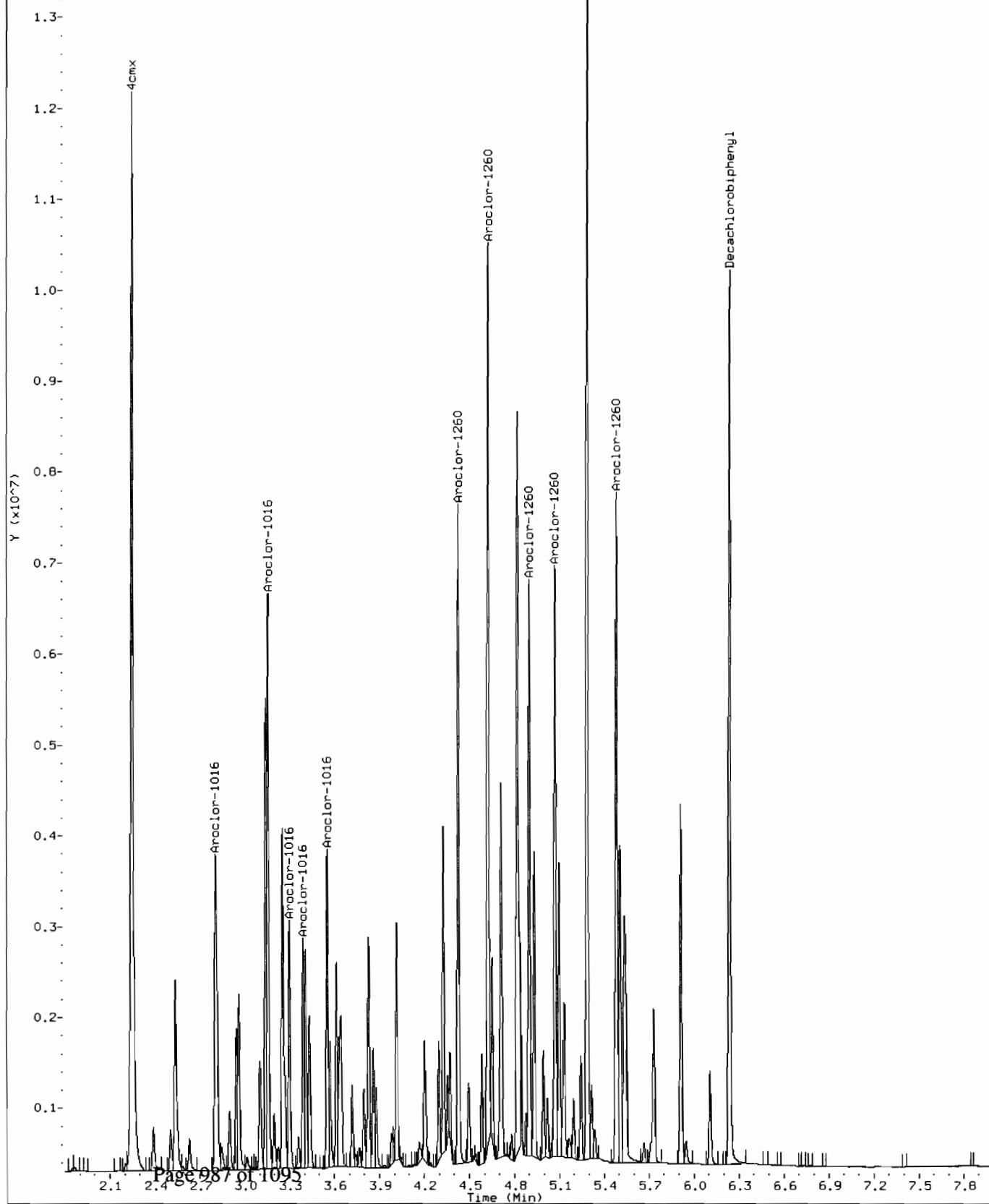
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Comment: Manually Integrated  
Data File: /chem/ecd8a.i/031910.b/036f3601.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 14:30  
Instrument: ecd8a.i  
Client Sample ID: AR166007



Comment: Before manual integration  
Data File: /chem/ecd8a.i/031910.b/orid-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

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#### QC Flag Legend

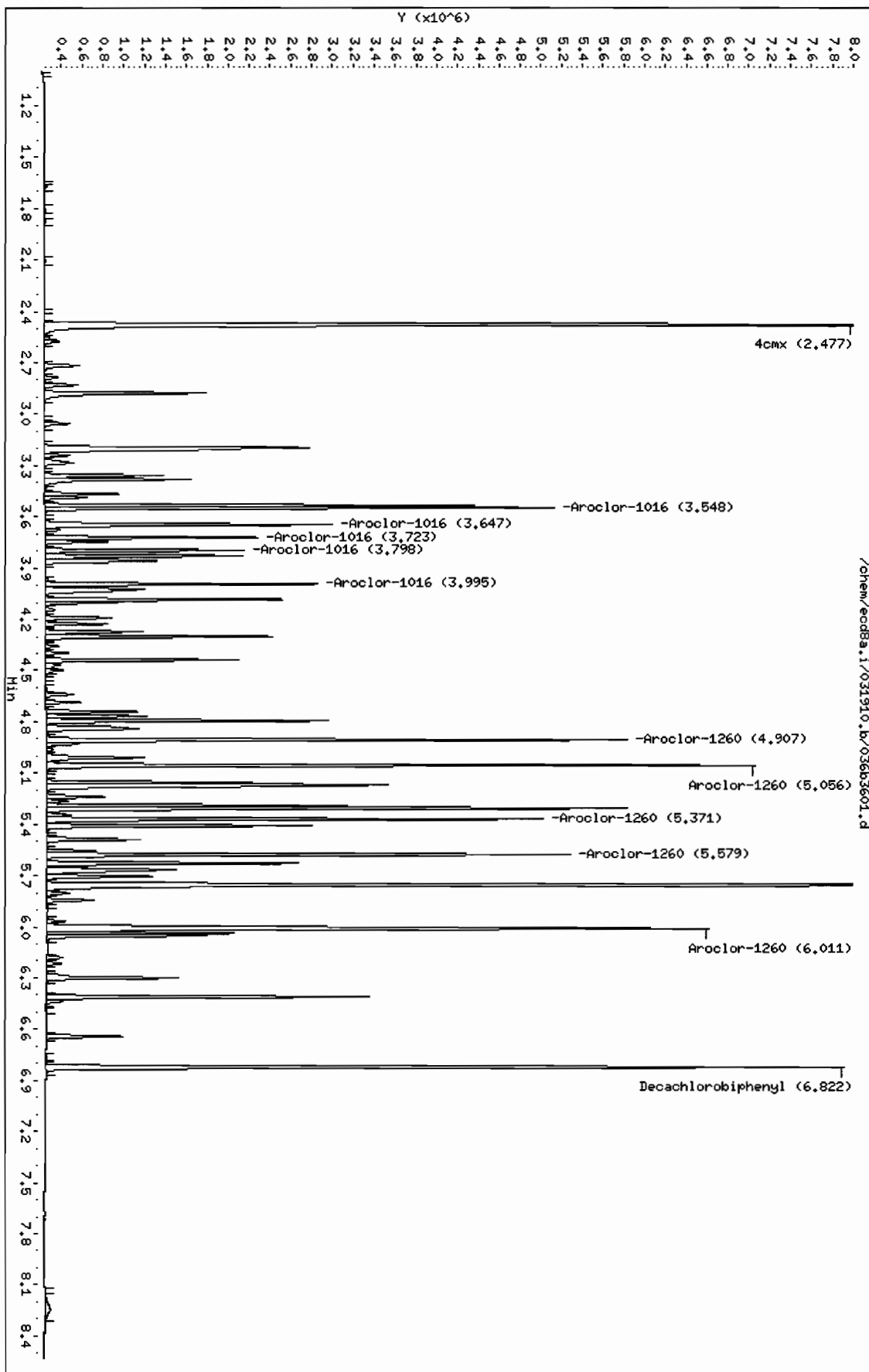
M - Compound response manually integrated.

Data File: /chem/ecod8a.i/031910.b/036b3601.d  
Date : 19-MAR-2010 14:30  
Client ID: AR16007  
Sample Info: IWR100319-60 07

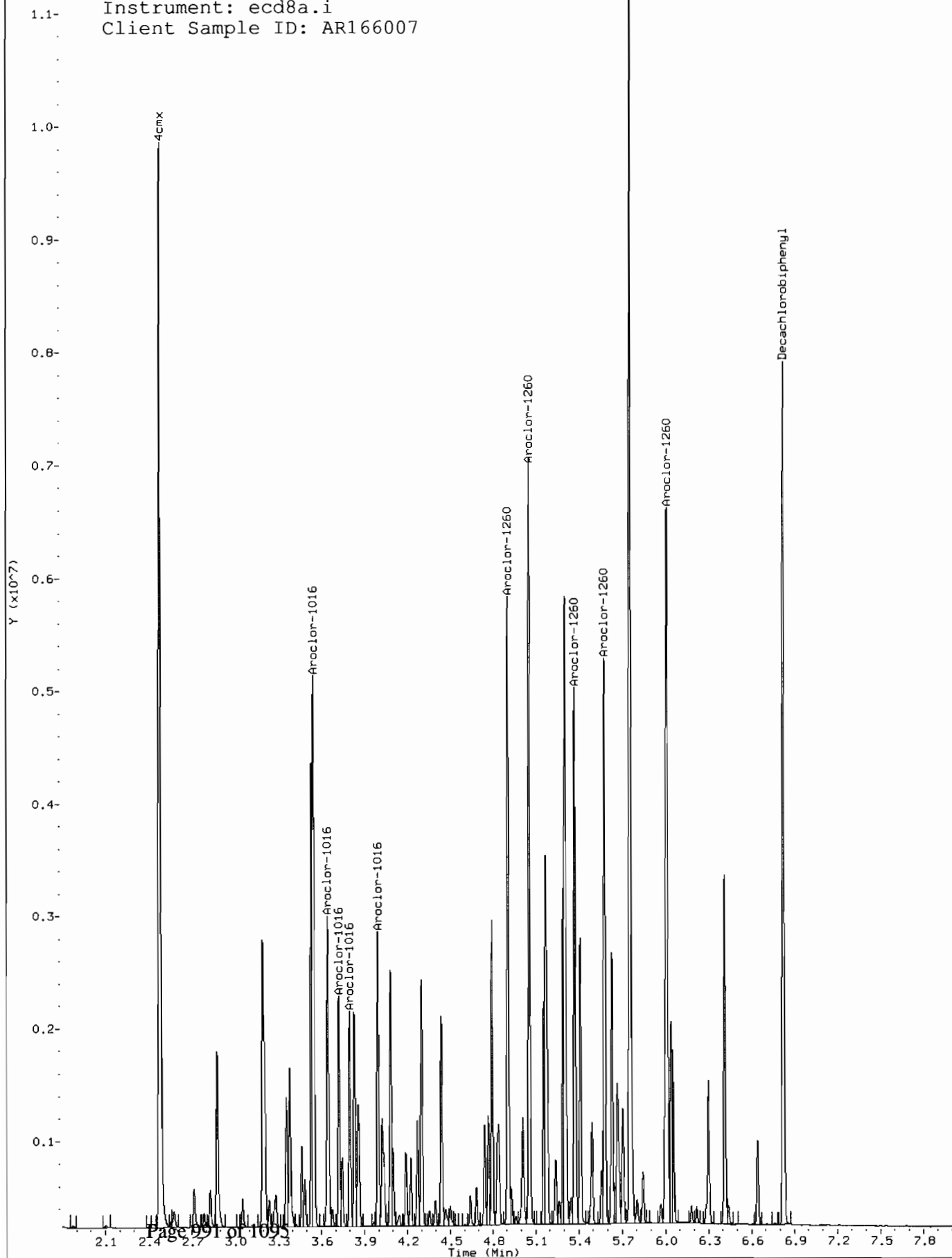
Column phase: CLP2

Instrument: ecod8a.i  
Operator: JHOC  
Column diameter: 0.25

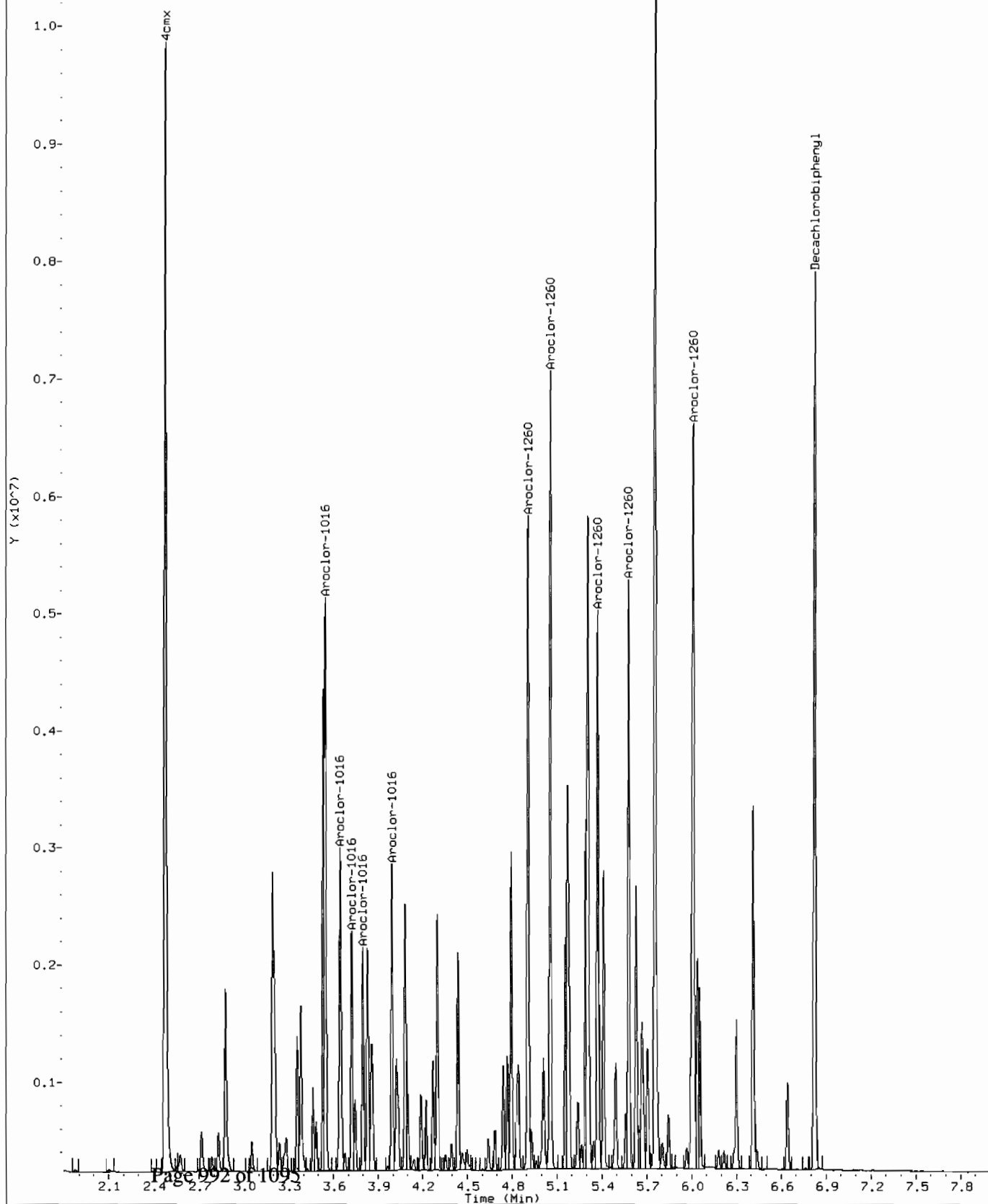
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Comment: Manually Integrated  
Data File: /chem/ecd8a.i/031910.b/036b3601.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 14:30  
Instrument: ecd8a.i  
Client Sample ID: AR166007



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/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

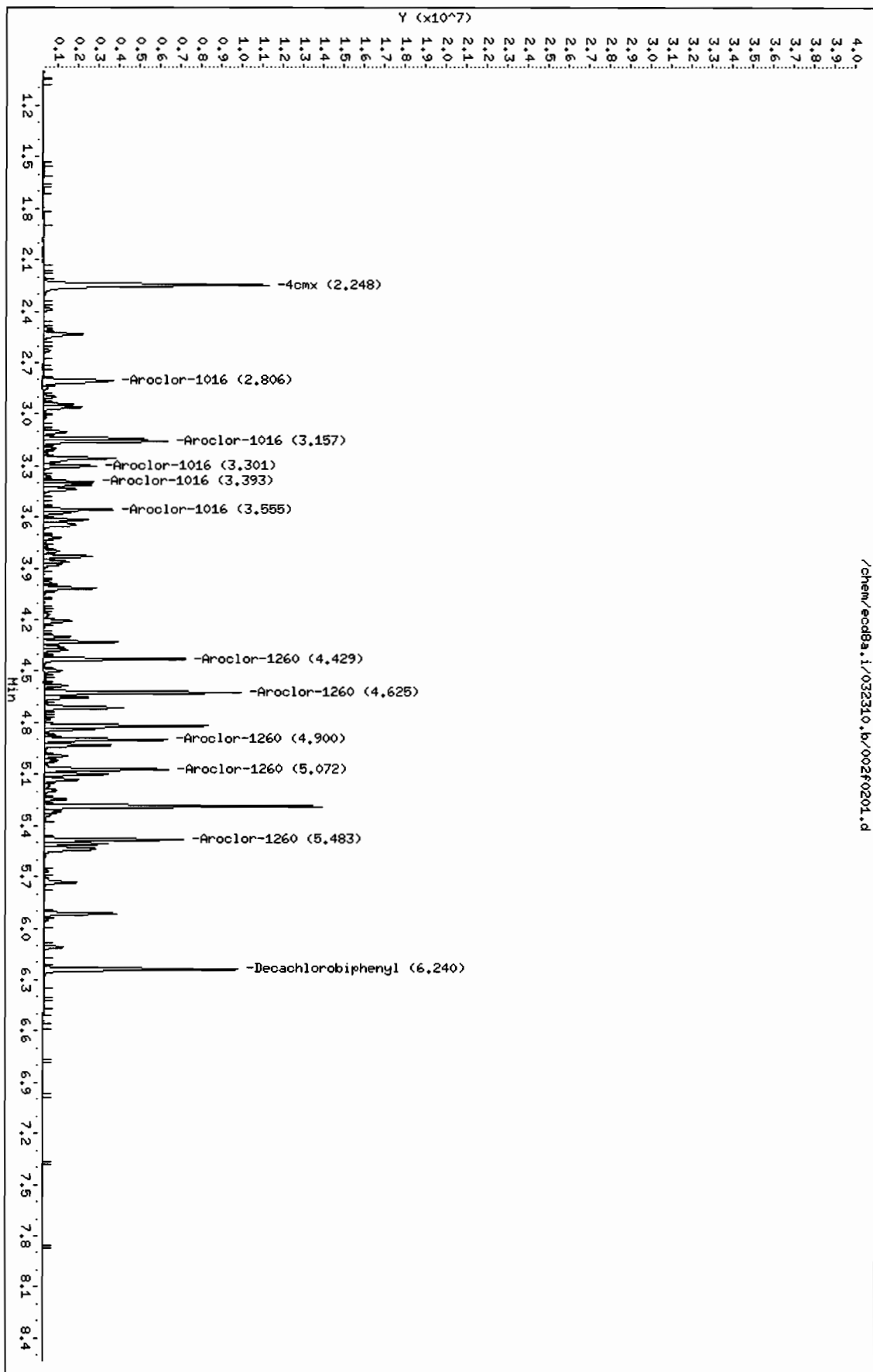
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
\$ 11 4cmx				CAS #: 877-09-8		
2.248	2.248	0.000	12843209 100.000	103	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.240	6.240	0.000	8659509 100.000	105	80.00- 120.00	100.00
-----						
1 Aroclor-1016				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		
-----						
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	73.08- 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		
-----						

QC Flag Legend

M - Compound response manually integrated.

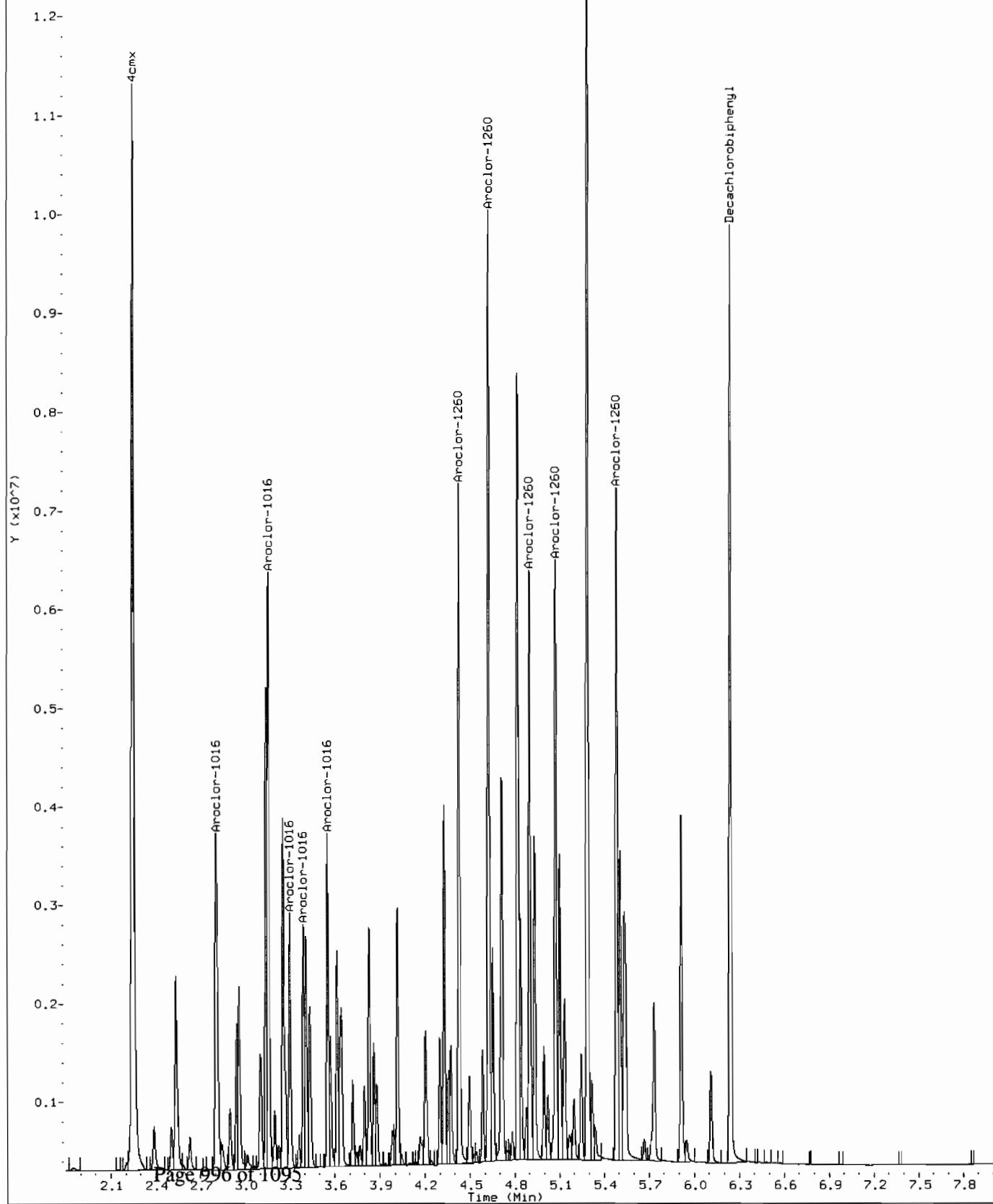
Data File: /chem/ecod8a.i/032310.b/002f0201.d  
Date : 23-MAR-2010 08:22  
Client ID: AR166001  
Sample Info: IWR100224-60 01  
Column phase: CLP1

Instrument: ecod8a.i  
Operator: JADC  
Column diameter: 0.25

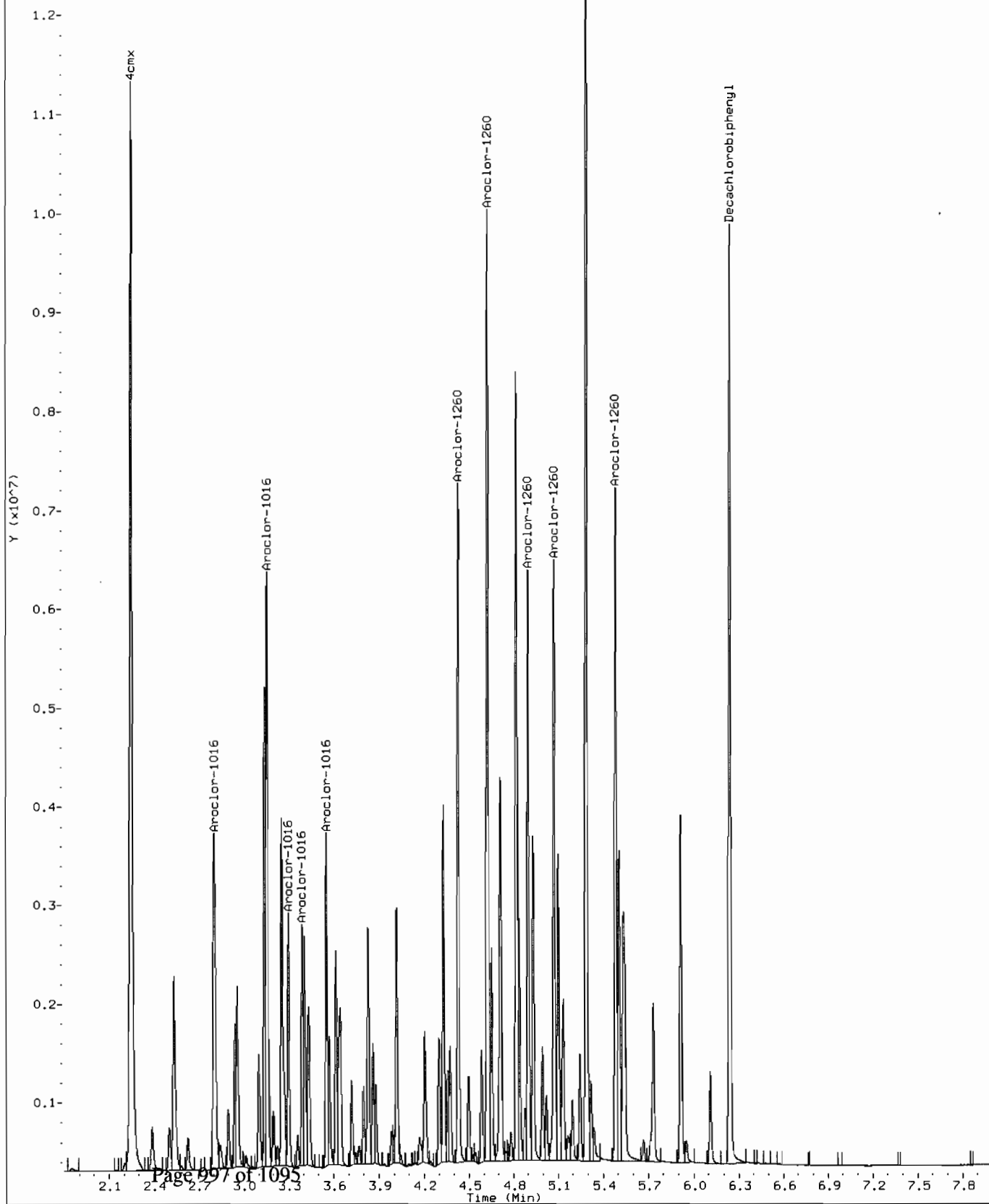




Comment: Manually Integrated  
Data File: /chem/ecd8a.i/032310.b/002#0201.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 08:22  
Instrument: ecd8a.i  
Client Sample ID: AR166001



1.4- 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  
1.3- 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

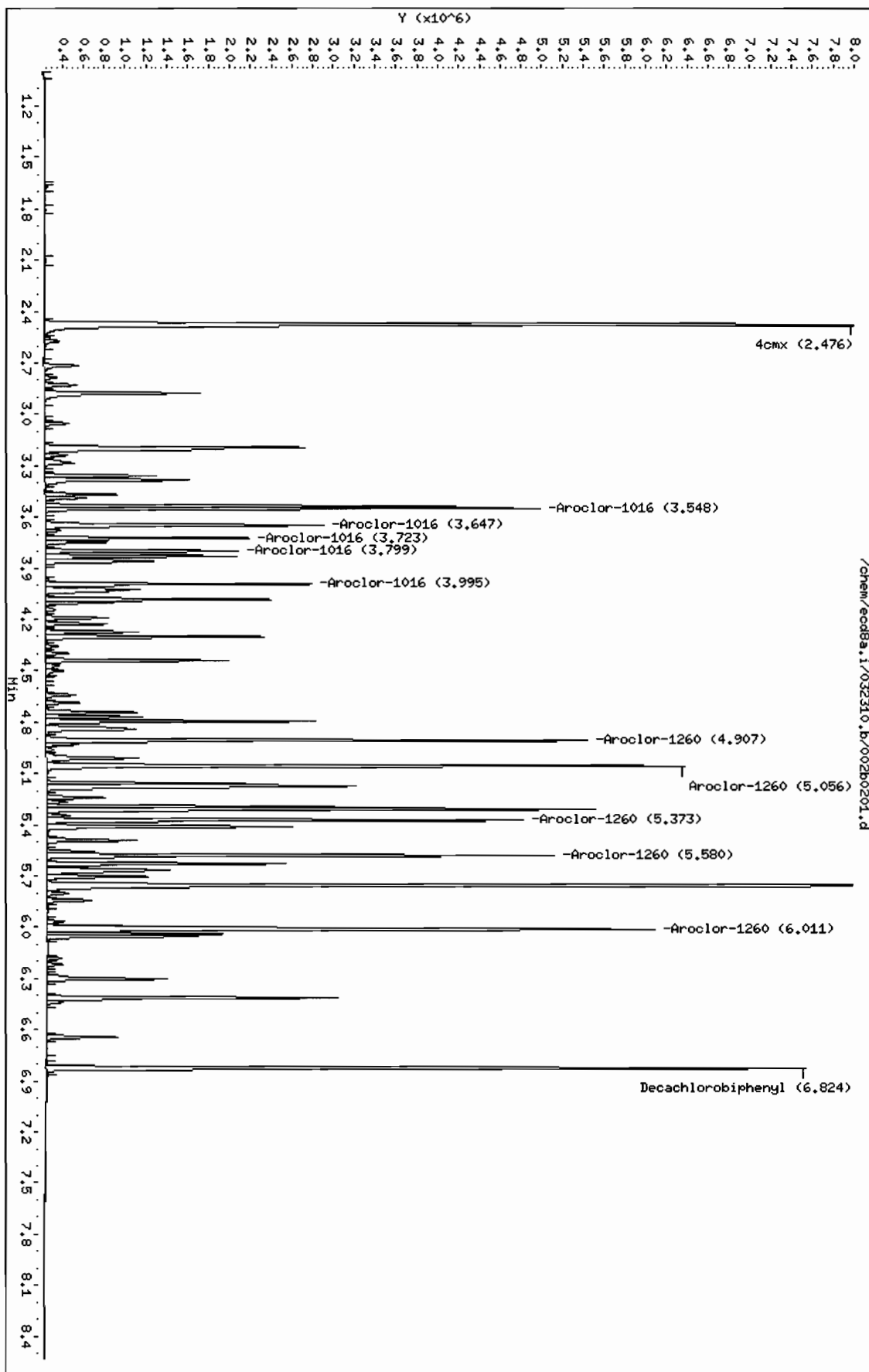
			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO
---	-----	-----	-----	-----	-----	-----	-----
\$ 11 4cmx					CAS #: 877-09-8		
2.476	2.476	0.000	9000761	100.000	108	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.824	6.824	0.000	6441774	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: AR16001  
Sample Info: IARR100224-60 01

Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JADC  
Column diameter: 0.25

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Data File: /chem/ecd8a.i/032310.b/003f0301.d  
Report Date: 23-Mar-2010 13:16

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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/eod8a.i/032310.b/003f0301.d

Date : 23-MAR-2010 08:34

Client ID: AR125401

Sample Info: IMR100219-54

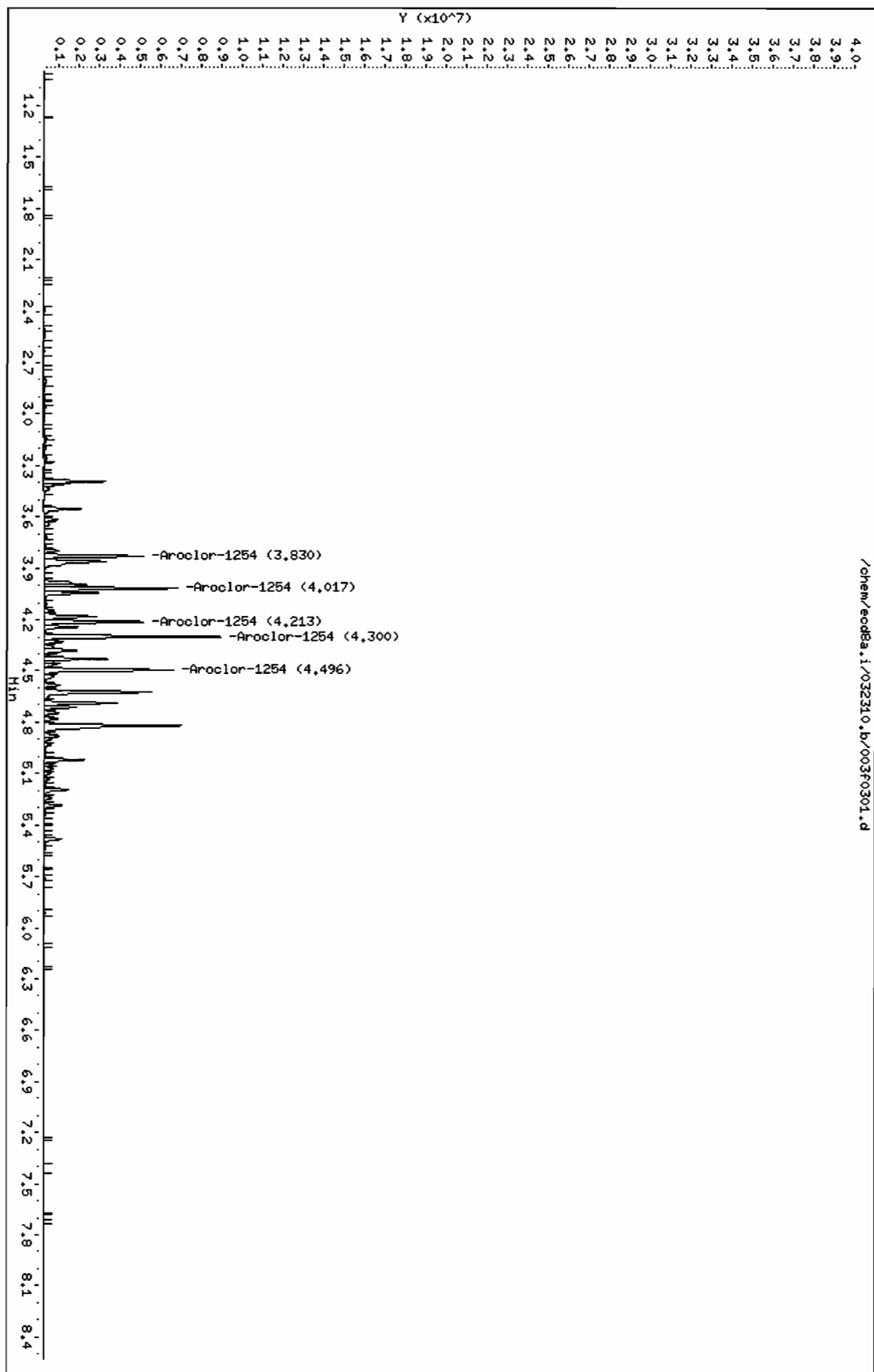
Column phase: CLP1

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Instrument: eod8a.i

Operator: JHOC

Column diameter: 0.25



Data File: /chem/ecd8a.i/032310.b/003b0301.d  
Report Date: 23-Mar-2010 13:16

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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

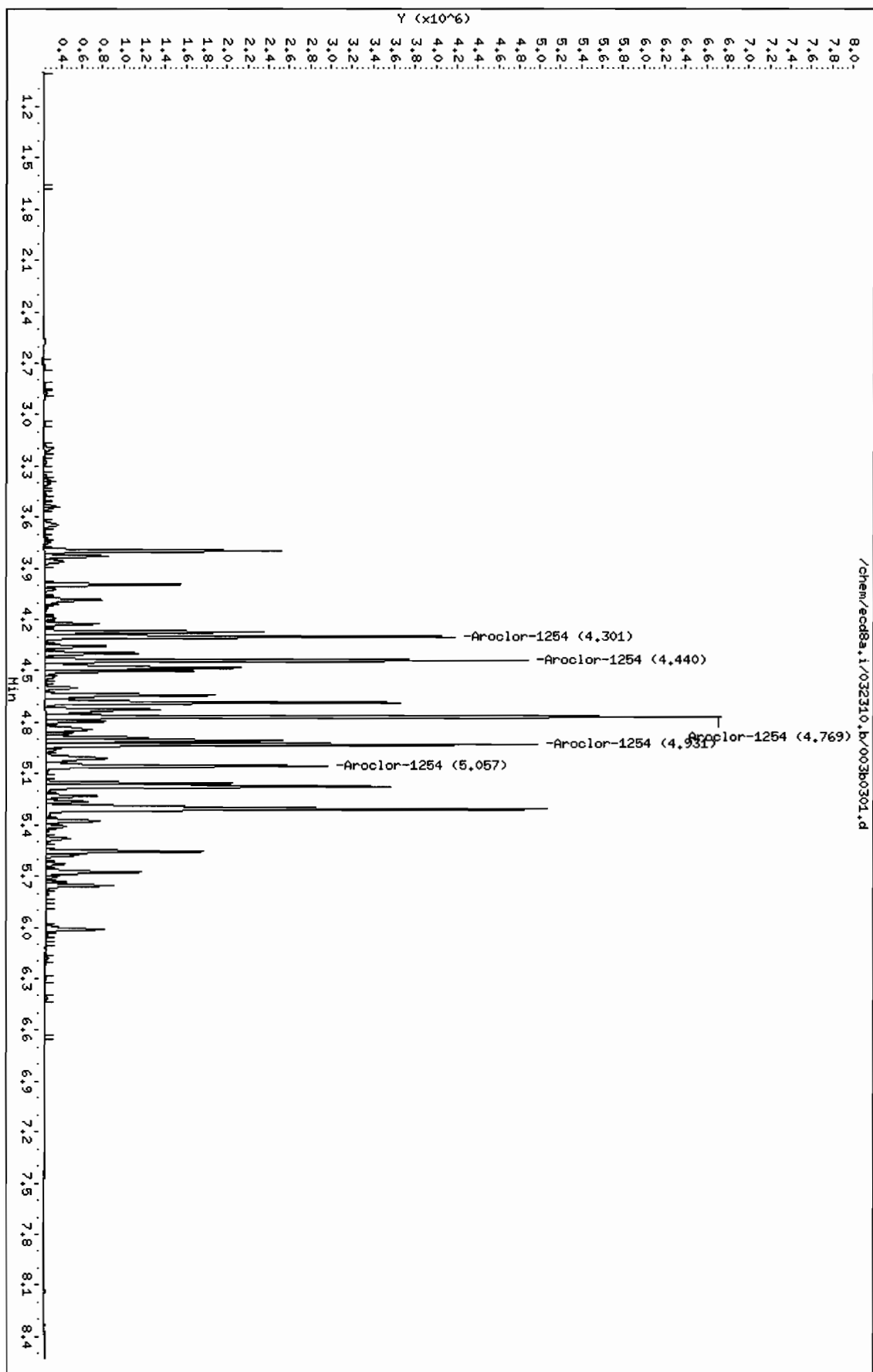
Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( 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/ecod8a.i/032310.b/003b0301.d  
Date : 23-MAR-2010 08:34  
Client ID: AR125401  
Sample Info: 1MAR100219-54  
Column phase: CLP2

Instrument: ecod8a.i  
Operator: JAOC  
Column diameter: 0.25





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 RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
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: 1MAR091217-42

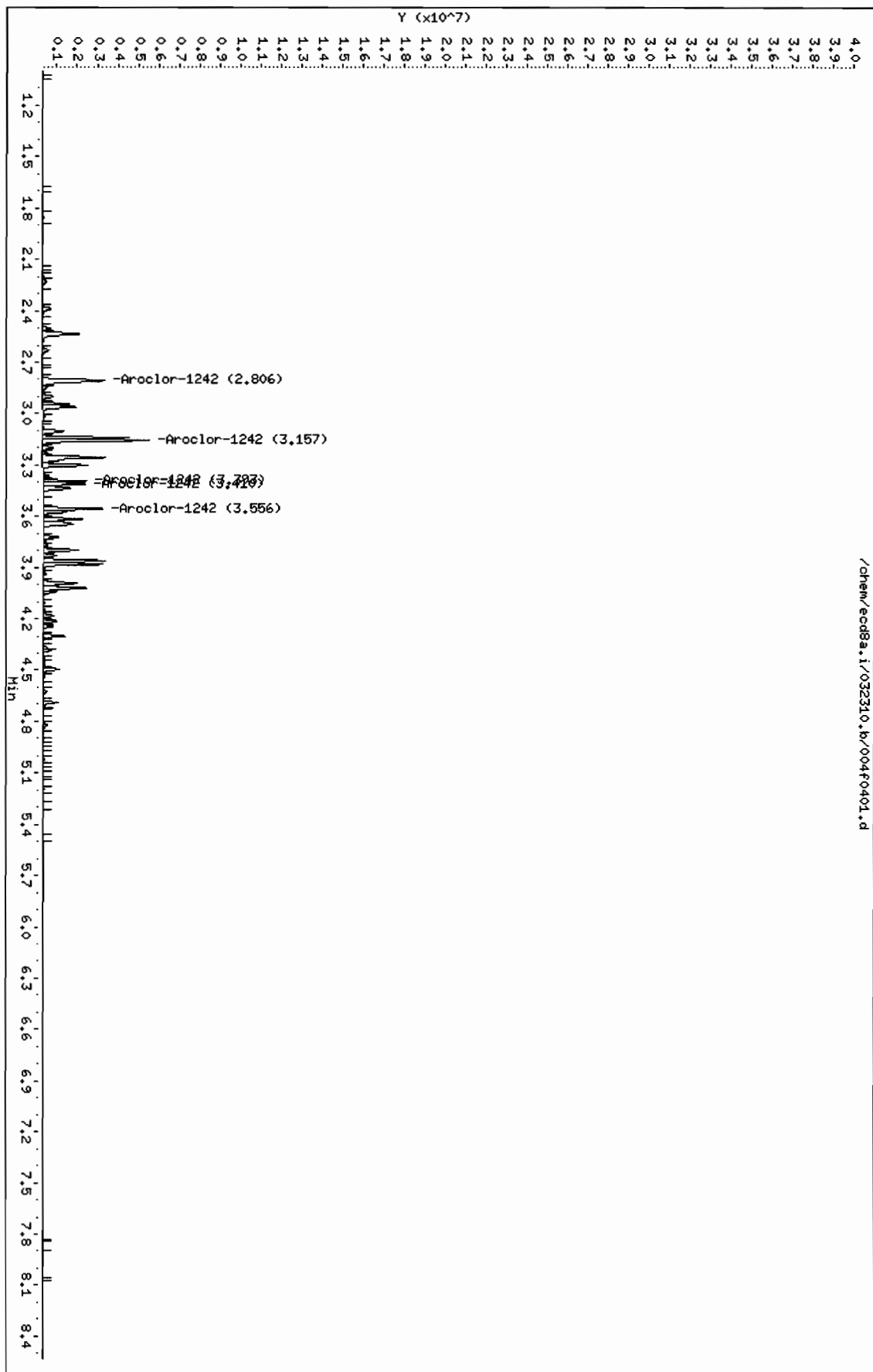
Column phase: CLP1

Instrument: ecdb8a.i

Operator: JHOC

Column diameter: 0.25

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Data File: /chem/ecd8a.i/032310.b/004b0401.d  
Report Date: 23-Mar-2010 13:16

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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 RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
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/ecob8a.i/032310.b/004b0401.d

Date : 23-MAR-2010 08:46

Client ID: AR124201

Sample Info: ILMR091217-42

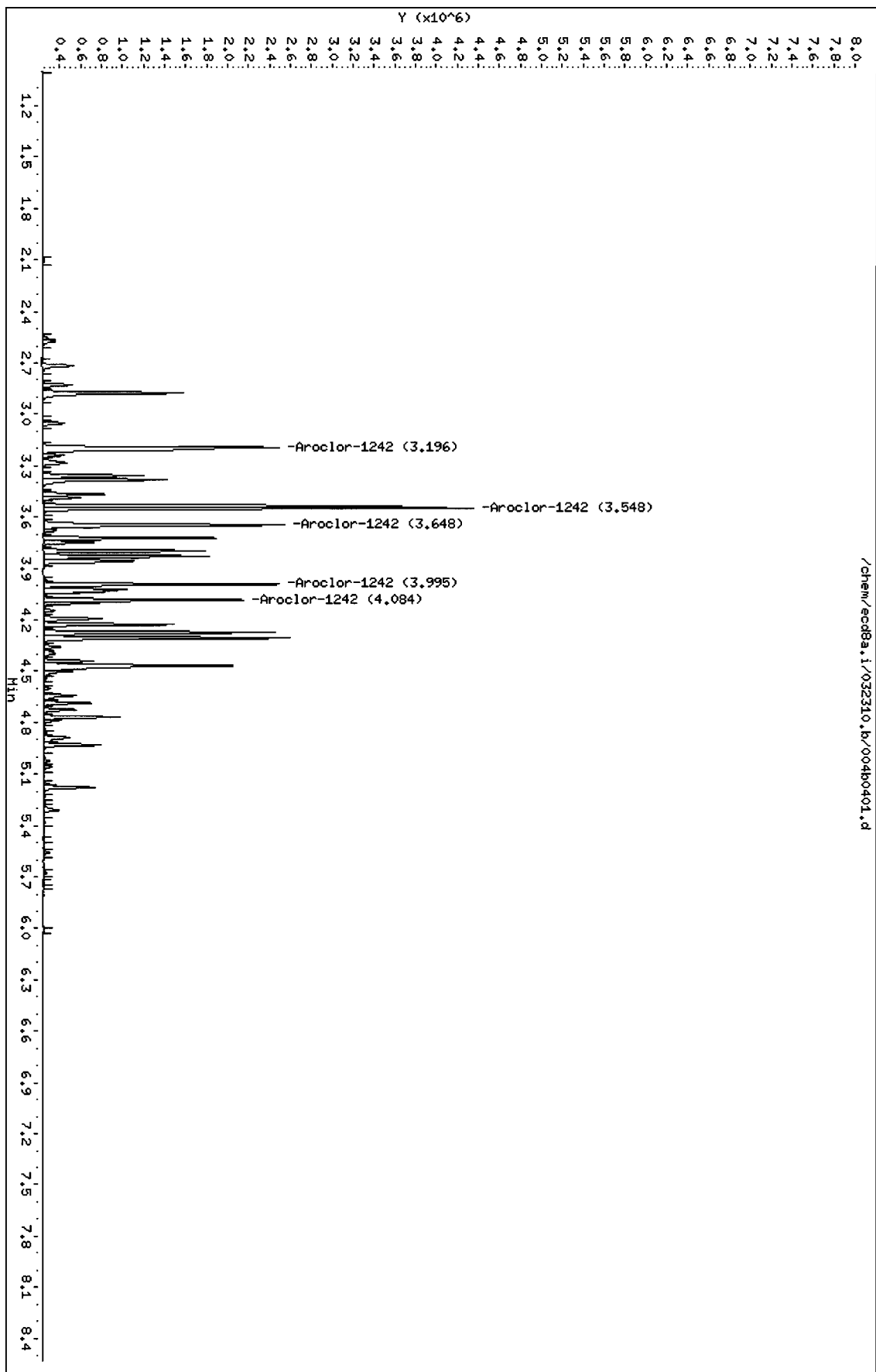
Page 1

Instrument: ecob8a.i

Column Phase: CLP2

Operator: JADC

Column diameter: 0.25



Data File: /chem/ecd8a.i/032310.b/005f0501.d  
Report Date: 23-Mar-2010 13:17

Page 1

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 RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
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/ecod8a.i/032310.b/005f0501.d

Date : 23-MAR-2010 08:59

Client ID: AR124801

Sample Info: 14MR100223-48

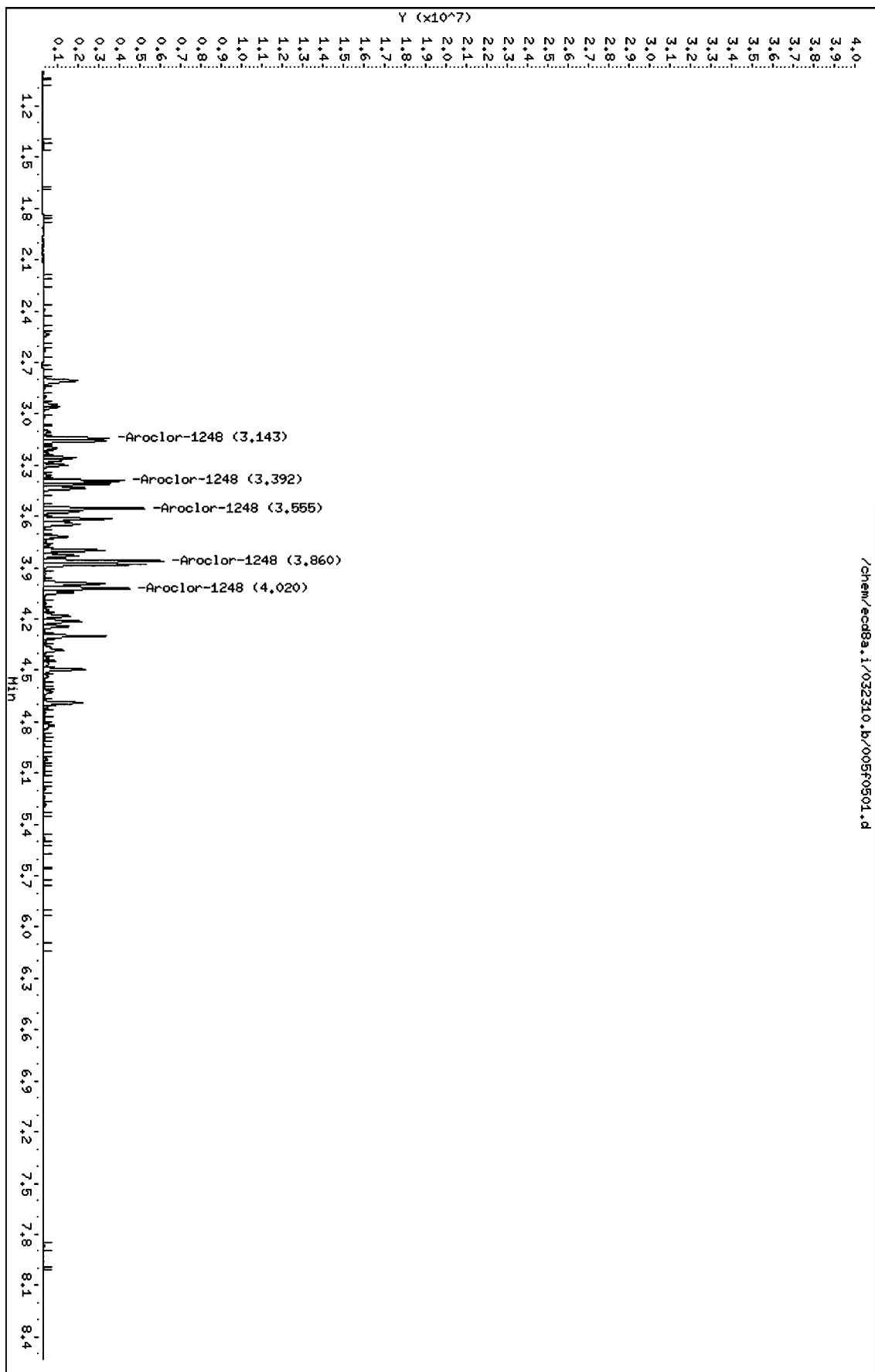
Page 1

Instrument: ecod8a.i

Column Phase: CLP1

Operator: JAOC

Column diameter: 0.25



Data File: /chem/ecd8a.i/032310.b/005b0501.d  
Report Date: 23-Mar-2010 13:17

Page 1

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

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6	
3.646	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/ecdb8a.i/032310.b/005b0501.d

Date : 23-MAR-2010 08:59

Client ID: ARL24801

Sample Info: IMR100223-48

Page 1

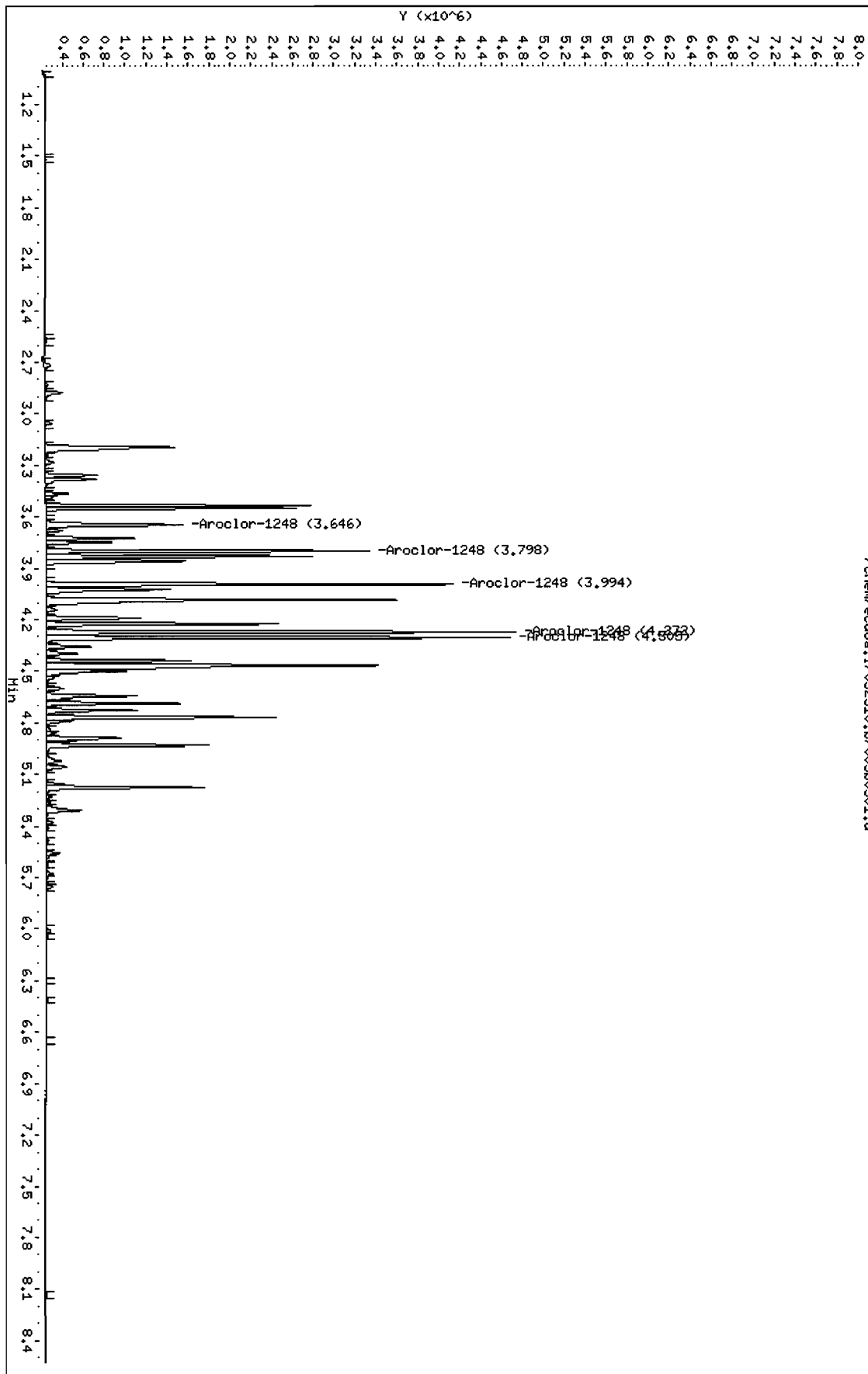
Instrument: ecdb8a.i

Operator: JAOC

Column diameter: 0.25

Column phase: CLP2

/chem/ecdb8a.i/032310.b/005b0501.d





Data File: /chem/ecd8a.i/032310.b/006f0601.d  
Report Date: 23-Mar-2010 13:17

Page 1

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: AR123201

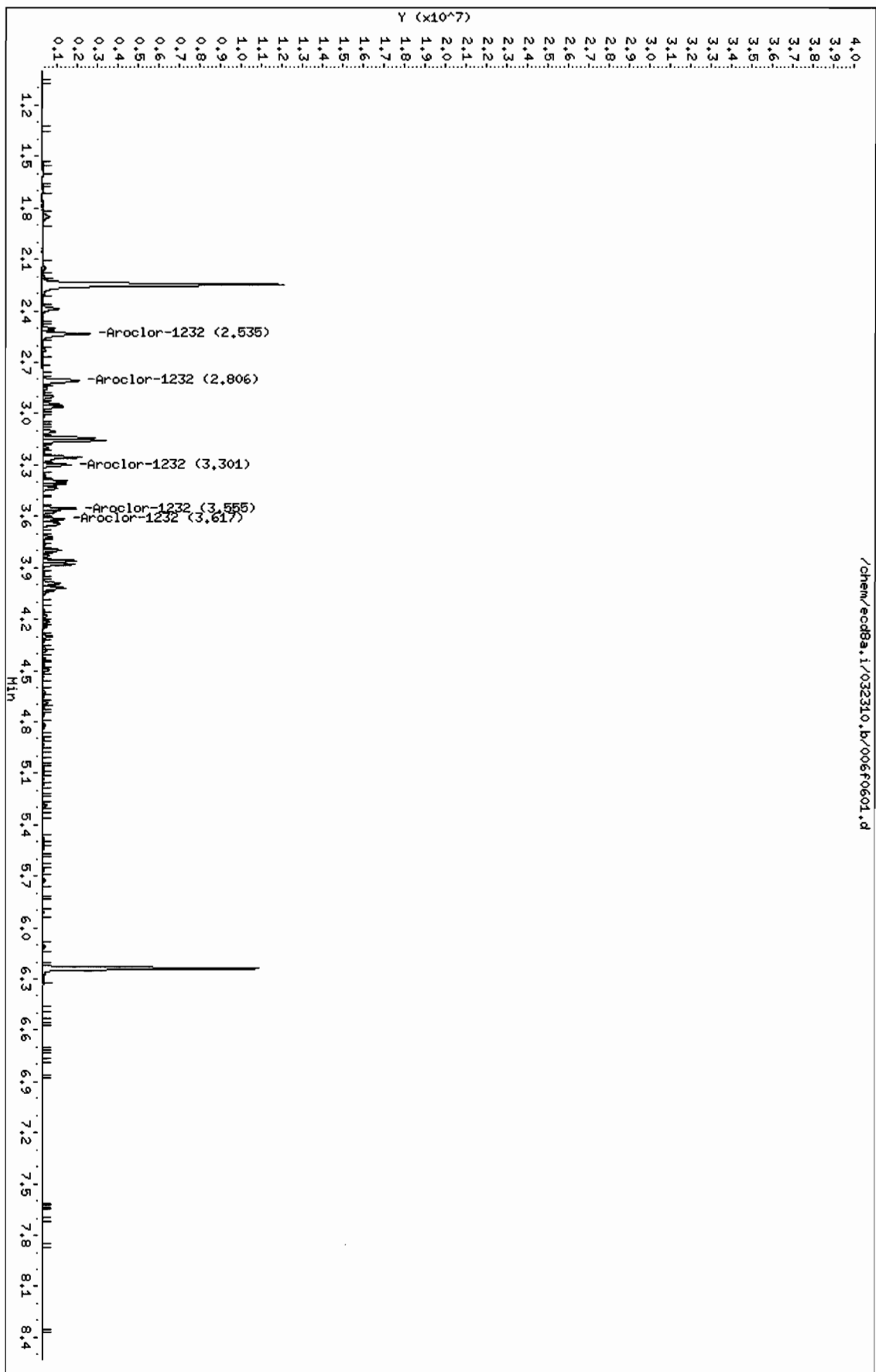
Sample Info: IMRR100104-32

Column phase: CLP1

Instrument: ecod8a.i

Operator: JHDC

Column diameter: 0.25



Data File: /chem/ecd8a.i/032310.b/006b0601.d  
Report Date: 23-Mar-2010 13:17

Page 1

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

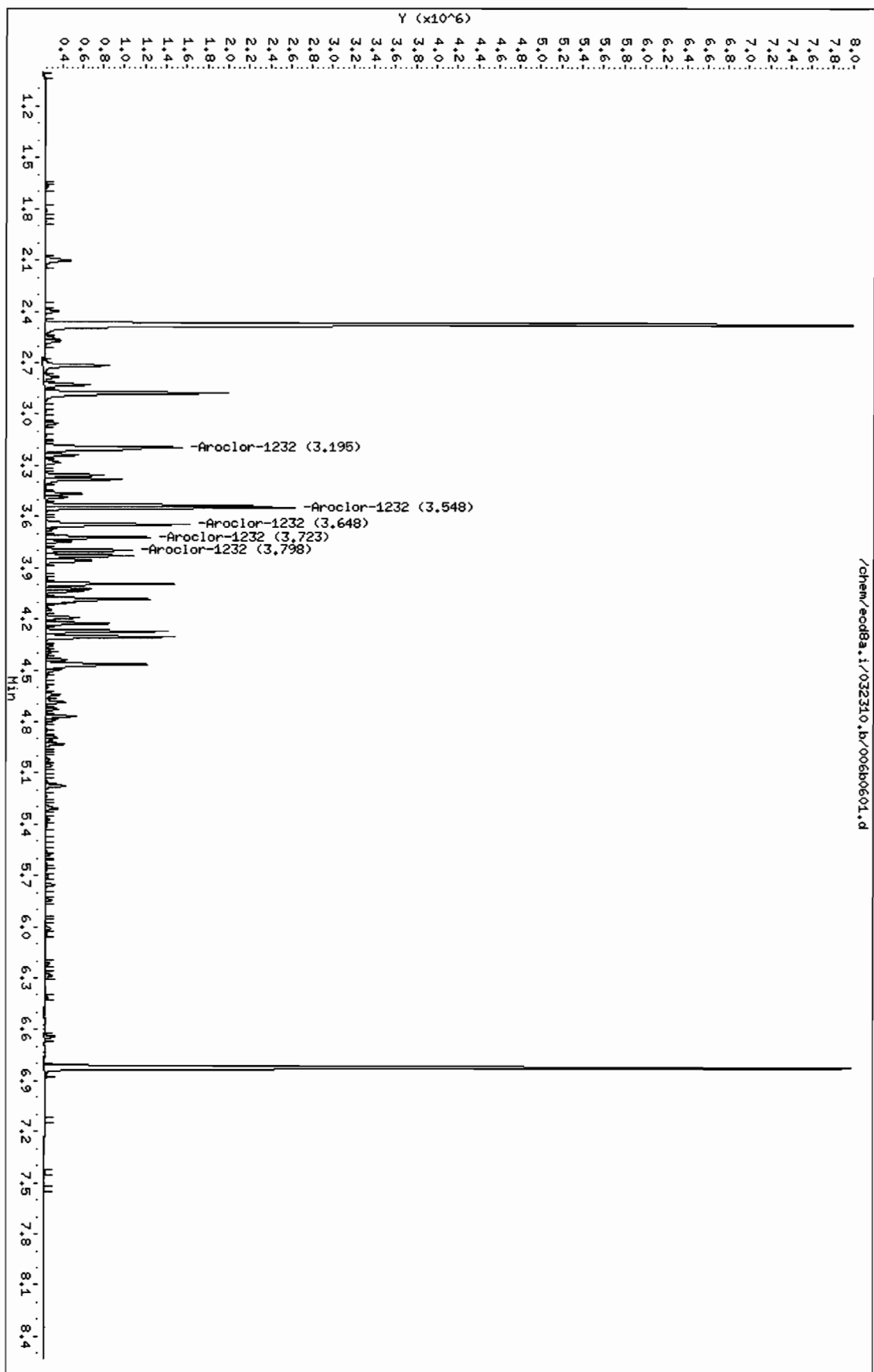
Average of Peak Amounts = 1.11e+03

Data File: /chem/ecod8a.i/032310.b/006b0601.d  
Date : 23-MAR-2010 09:11  
Client ID: AR123201  
Sample Info: 1MAR100104-32

Column phase: CLP2

Instrument: ecod8a.i  
Operator: JHOC  
Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/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

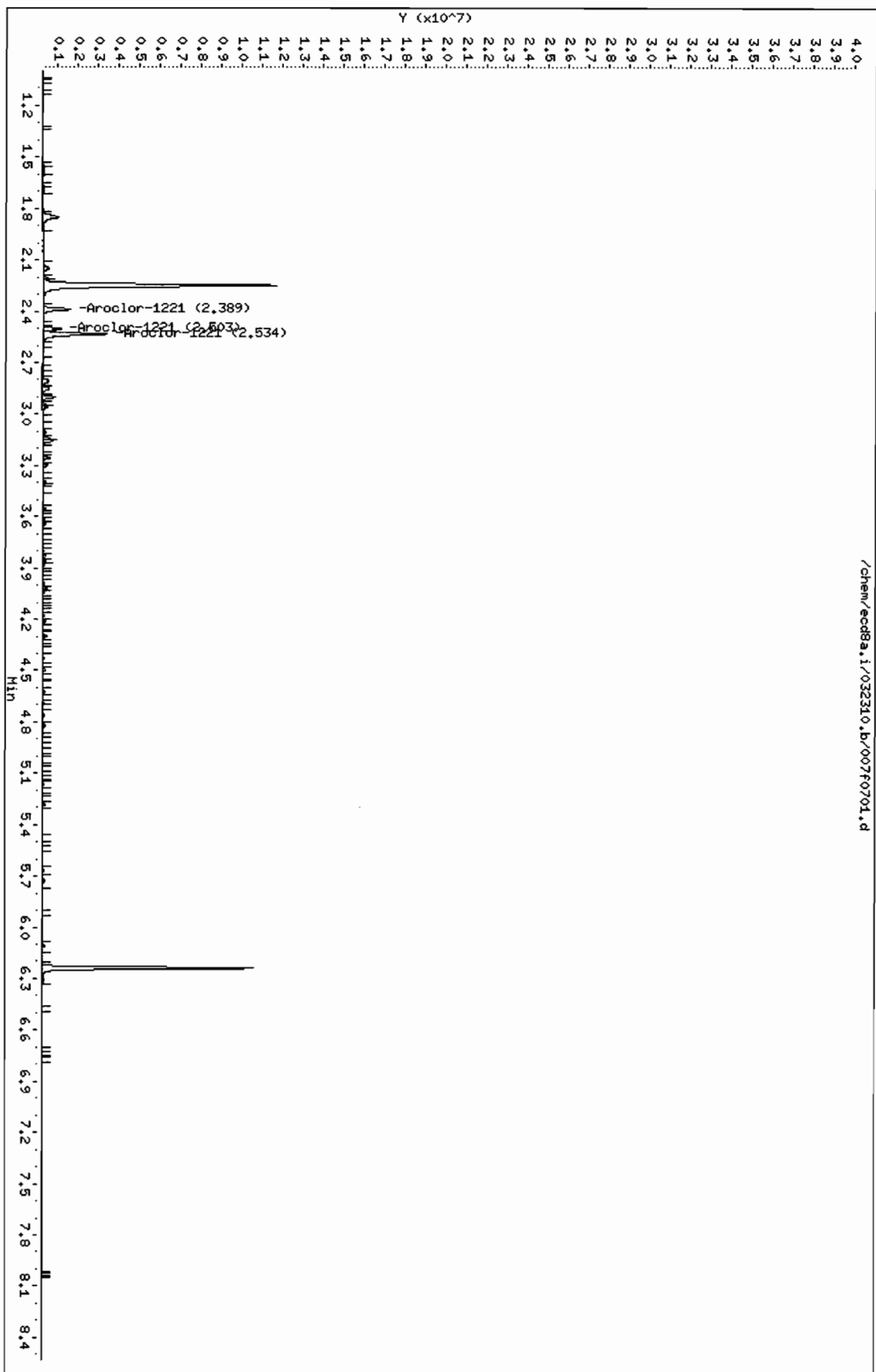
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221						
2.389	2.389	0.000	1570477 1000.00	1000	80.00- 120.00	100.00
2.503	2.503	0.000	909439 1000.00	993	37.91- 77.91	57.91
2.534	2.534	0.000	3510933 1000.00	982	203.56- 243.56	223.56
Average of Peak Amounts =				993		

Data File: /chem/ecd8a.i/032310.b/007f0701.d  
Date : 23-MAR-2010 09:23  
Client ID: AR122101  
Sample Info: IMR100104-21

Page 1

Column phase: CLP1

Instrument: ecd8a.i  
Operator: JnDC  
Column diameter: 0.25



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 CAS #: 11104-28-2						
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/ecod8a.i/032310.b/007b0701.d

Date : 23-MAR-2010 09:23

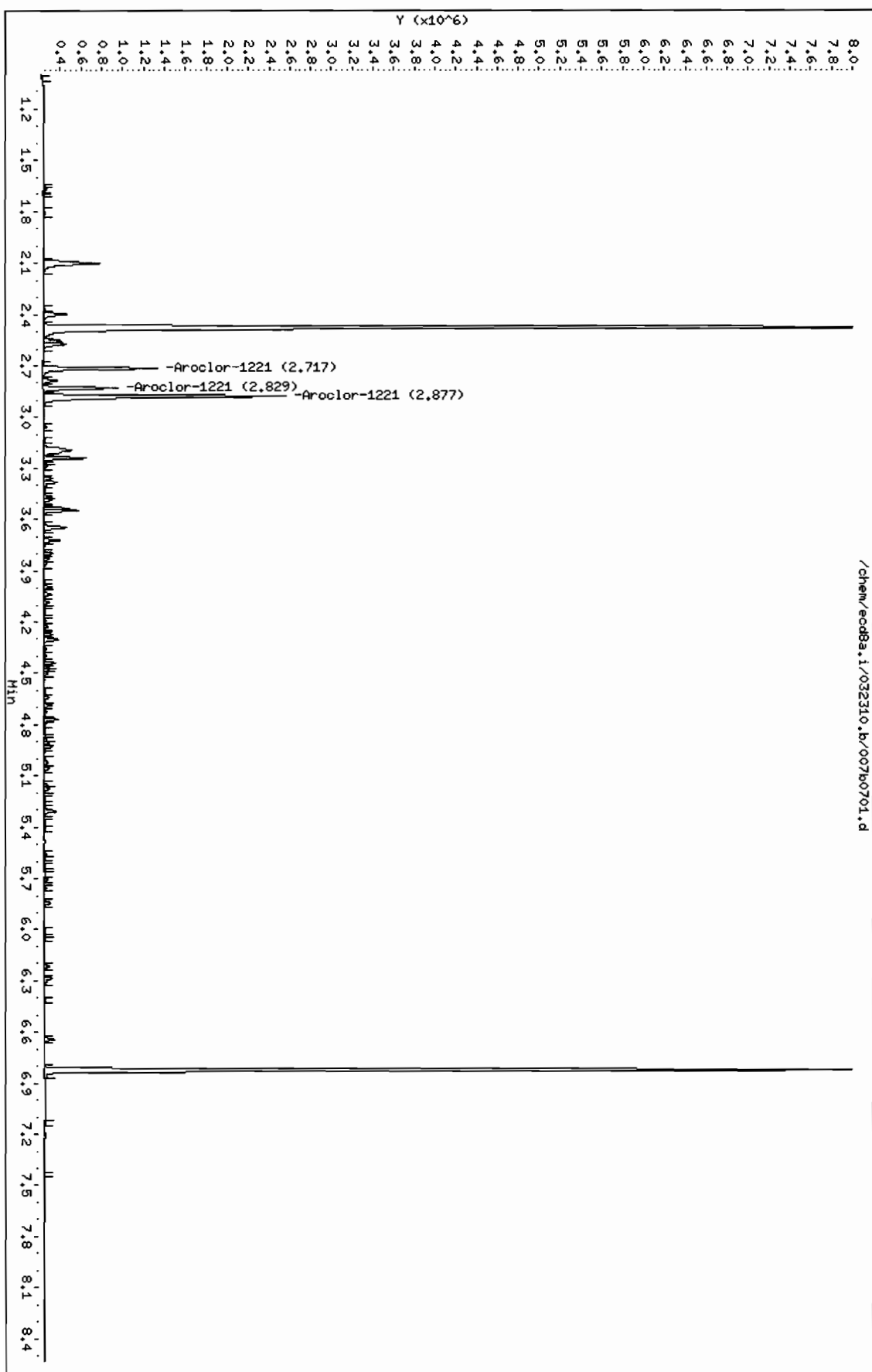
Client ID: AR122101

Sample Info: 1MAR100104-21

Instrument: ecod8a.i

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/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

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( 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: MR166002

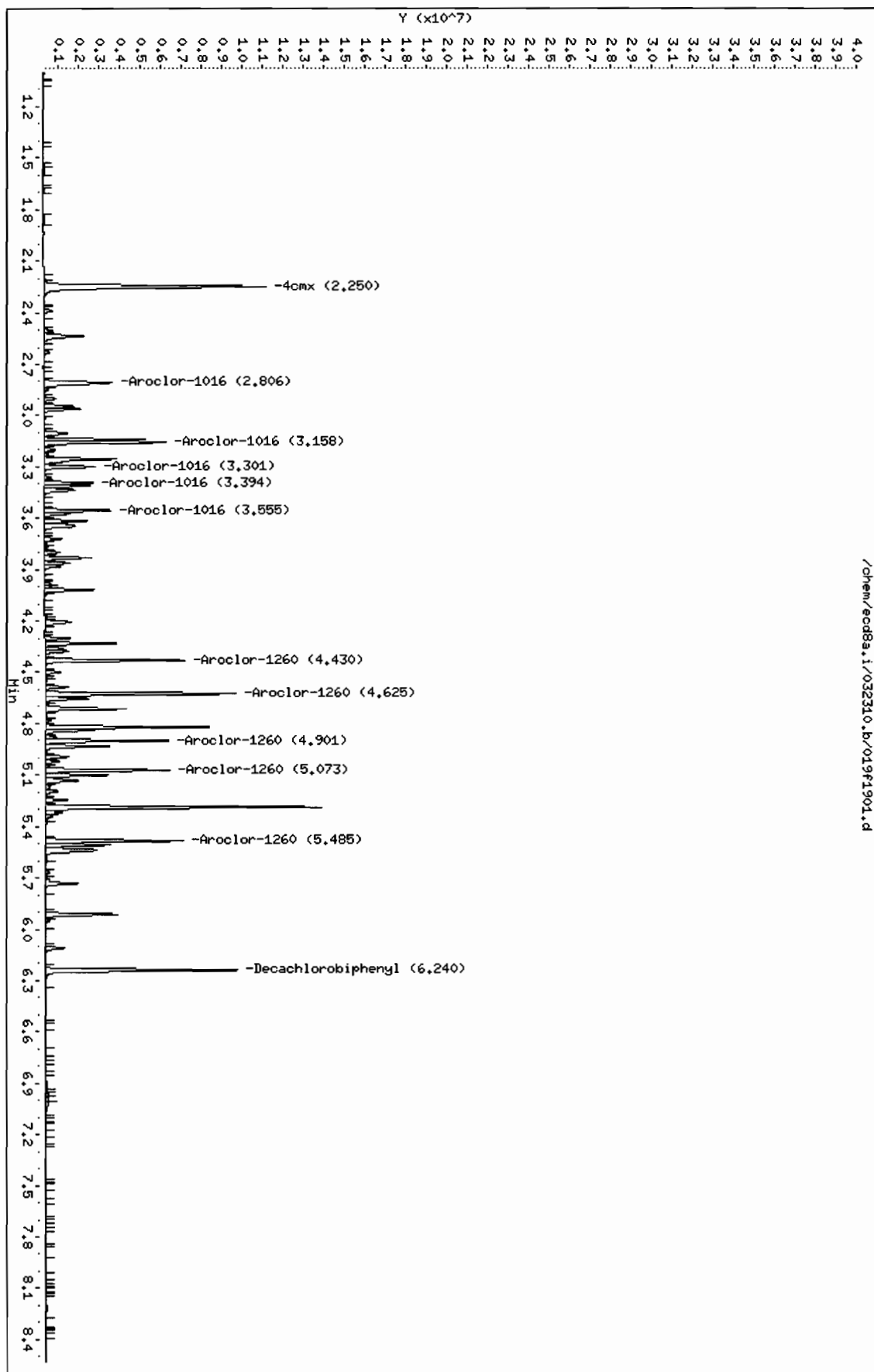
Sample Info: IMR100224-60 02

Instrument: ecdb8a.i

Page 1

Column phase: CLP1

Operator: JADC  
Column diameter: 0.25



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

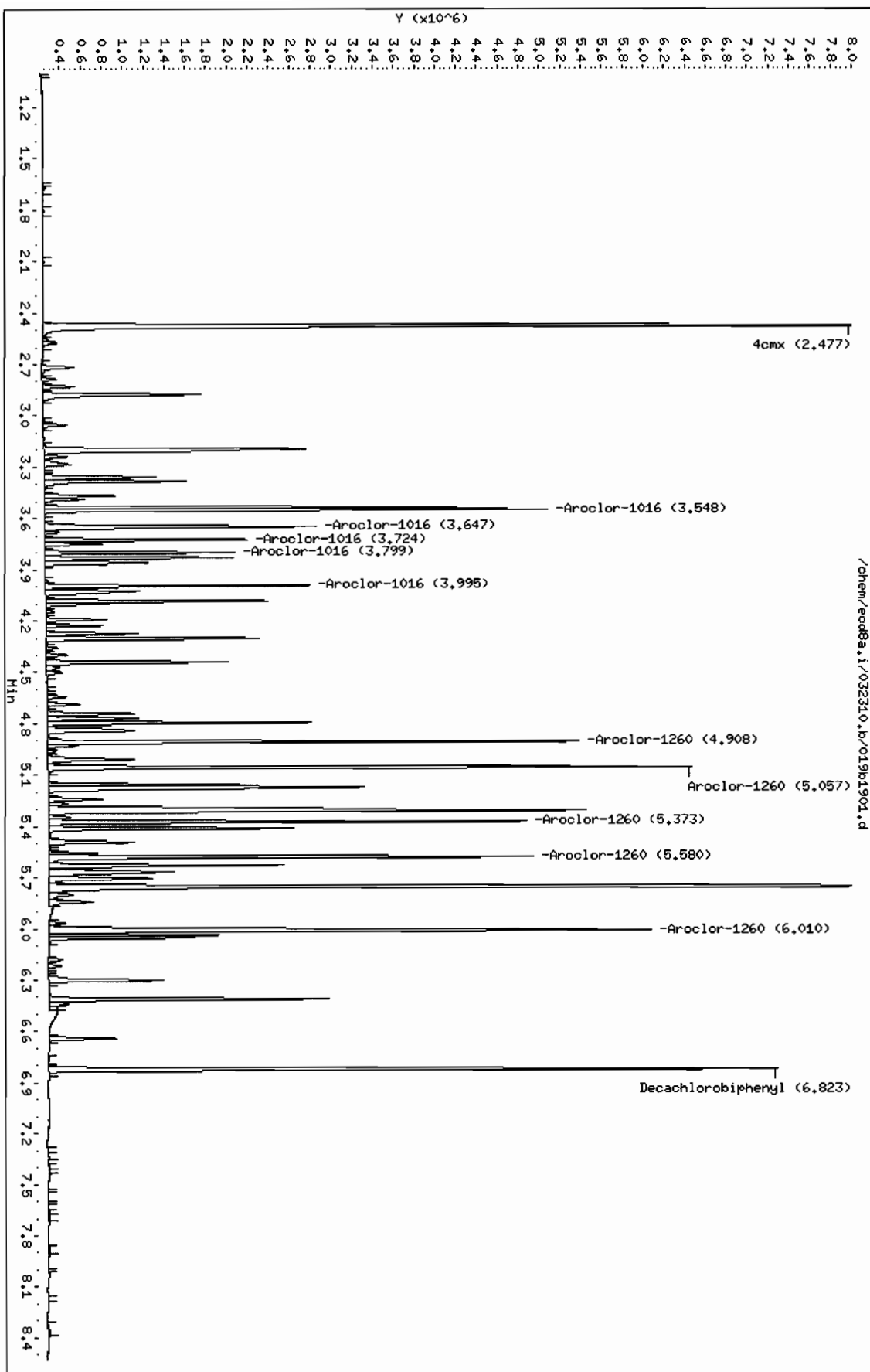
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
-----	-----	-----	-----	-----	-----	-----
\$ 11 4cmx						
2.477	2.476	0.001	8952772 100.000	107	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl						
6.823	6.824	-0.001	6111338 100.000	103	80.00- 120.00	100.00
-----						
1 Aroclor-1016						
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						
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: 146R100224-60 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.: 10-2196

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.: 10-2196

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.: 10-2196

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

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.: 10-2196

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

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.: 10-2196

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	
02	AR166001	WAR100224-60	03/19/10	0639	
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	
13	ZZZZZ	ZZZZZ	03/19/10	0855	
14	ZZZZZ	ZZZZZ	03/19/10	0907	
15	AR166002	WAR100224-60	03/19/10	0920	
16	PIBLK03	WAR100219-99	03/19/10	0932	
17	AR166003	WAR100224-60	03/19/10	0954	
18	PIBLK04	WAR100219-99	03/19/10	1007	
19	ZZZZZ	ZZZZZ	03/19/10	1019	
20	ZZZZZ	ZZZZZ	03/19/10	1036	
21	AR166004	WAR100224-60	03/19/10	1052	
22	PIBLK05	WAR100219-99	03/19/10	1121	
23	AR166005	WAR100224-60	03/19/10	1133	
24	AR166006	WAR100319-60	03/19/10	1157	
25	PIBLK06	WAR100219-99	03/19/10	1210	
26	PBLK01	1202073937	03/19/10	1223	
27	PBLK01LCS	1202073938	03/19/10	1235	
28	ZZZZZ	ZZZZZ	03/19/10	1247	
29	ZZZZZ	ZZZZZ	03/19/10	1300	
30	ZZZZZ	ZZZZZ	03/19/10	1312	
31	ZZZZZ	ZZZZZ	03/19/10	1324	
32	ZZZZZ	ZZZZZ	03/19/10	1337	

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.: 10-2196

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	ZZZZZ	ZZZZZ	03/19/10	1349	2.25	6.24	
02	RE36-10-7525	248514003	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	ZZZZZ	ZZZZZ	03/19/10	1455	2.25	6.24	
07	ZZZZZ	ZZZZZ	03/19/10	1508	2.25	6.24	
08	ZZZZZ	ZZZZZ	03/19/10	1520	2.25	6.24	
09	ZZZZZ	ZZZZZ	03/19/10	1532	2.25	6.24	
10	ZZZZZ	ZZZZZ	03/19/10	1545	2.25	6.24	
11	ZZZZZ	ZZZZZ	03/19/10	1557	2.25	6.24	
12	ZZZZZ	ZZZZZ	03/19/10	1609	2.25	6.24	
13	ZZZZZ	ZZZZZ	03/19/10	1622	2.25	6.24	
14	ZZZZZ	ZZZZZ	03/19/10	1634	2.25	6.24	
15	ZZZZZ	ZZZZZ	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	ZZZZZ	ZZZZZ	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.: 10-2196

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.: 10-2196

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	ZZZZZ	ZZZZZ	03/19/10	1349	2.48		6.82
02	RE36-10-7525	248514003	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	ZZZZZ	ZZZZZ	03/19/10	1455	2.48		6.82
07	ZZZZZ	ZZZZZ	03/19/10	1508	2.48		6.82
08	ZZZZZ	ZZZZZ	03/19/10	1520	2.48		6.82
09	ZZZZZ	ZZZZZ	03/19/10	1532	2.48		6.82
10	ZZZZZ	ZZZZZ	03/19/10	1545	2.48		6.82
11	ZZZZZ	ZZZZZ	03/19/10	1557	2.48		6.82
12	ZZZZZ	ZZZZZ	03/19/10	1609	2.48		6.82
13	ZZZZZ	ZZZZZ	03/19/10	1622	2.48		6.82
14	ZZZZZ	ZZZZZ	03/19/10	1634	2.48		6.82
15	ZZZZZ	ZZZZZ	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	ZZZZZ	ZZZZZ	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.: 10-2196

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	
02	AR166001	WAR100224-60	03/23/10	0822	
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	RE36-10-7524	248514002	03/23/10	1114	2.25 6.24
17	ZZZZZ	ZZZZZ	03/23/10	1127	2.25 6.24
18	ZZZZZ	ZZZZZ	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 (+/- 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.: 10-2196

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	RE36-10-7524	248514002	03/23/10	1114	2.48	6.82
17	ZZZZZ	ZZZZZ	03/23/10	1127	2.48	6.82
18	ZZZZZ	ZZZZZ	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

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## Identification Summary

Page 1 of 1

SDG Number: 10-2196  
 Lab Sample ID: 1202073938

Client ID: LCS for batch 966418

Data File: 027f2701.d  
 Inst: ECD8A.I\_1  
 Column: CLP1  
 Analyzed: 19-MAR-10 12:35

Data File: 027b2701.d  
 Inst: ECD8A.I\_2  
 Column: CLP2  
 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: 10-2196

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: 10-2196  
 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
Aroclor-1016							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		
Aroclor-1260							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: 10-2196

Client ID: RE36-10-7524

Lab Sample ID: 248514002

Data File: 016f1601.d

Data File: 016b1601.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 23-MAR-10 11:14

Analyzed: 23-MAR-10 11:14

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							61
Column 1	1	3.83	3.8 – 3.86	3.34		ug/kg	
	2	4.02	3.99 – 4.05	3.84		ug/kg	
	3	4.22	4.18 – 4.24	15.9		ug/kg	
	4	4.3	4.27 – 4.33	3.79		ug/kg	
	5	4.48	4.47 – 4.53	21.3		ug/kg	
					9.63		
Column 2	1	4.3	4.27 – 4.33	3.78		ug/kg	
	2	4.44	4.41 – 4.47	3.82		ug/kg	
	3	4.77	4.74 – 4.8	4.21		ug/kg	
	4	4.93	4.9 – 4.96	3.83		ug/kg	
	5	5.06	5.03 – 5.09	10		ug/kg	
					5.13		
Aroclor-1260							55.5
Column 1	1	4.43	4.4 – 4.46	10.5		ug/kg	
	2	4.62	4.59 – 4.65	5.26		ug/kg	
	3	4.9	4.87 – 4.93	2.27		ug/kg	
	4	5.07	5.04 – 5.1	5.04		ug/kg	
	5	5.48	5.45 – 5.51	3.72		ug/kg	
					5.36		
Column 2	1	4.91	4.88 – 4.94	2.94		ug/kg	
	2	5.06	5.03 – 5.09	4.66		ug/kg	
	3	5.37	5.34 – 5.4	2.14		ug/kg	
	4	5.58	5.55 – 5.61	2.81		ug/kg	
	5	6.01	5.98 – 6.04	2.61		ug/kg	
					3.03		

# QUALITY CONTROL DATA

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

Page 1 of 1

SDG Number: 10-2196

Matrix: SOIL

Lab Sample ID: 1202073937

Client Sample: QC for batch 966418

Client: LANL010

Project: QC

Client ID: MB for batch 966418

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 966420

Inst: ECD8A.I

Dilution: 1

Run Date: 03/19/2010 12:23

Analyst: JAOC

Inj. Vol: 1 uL

Prep Date: 03/18/2010 10:57

Aliquot: 30 g

Final Volume: 1 mL

Data File: 026f2601-1.d

Column: 1 CLP1

Level: LOW

026b2601-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/026f2601-1.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: 10-2196.sub

Target Version: 3.50                          Sample Matrix: Soil

Processing Host: hpclpl

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

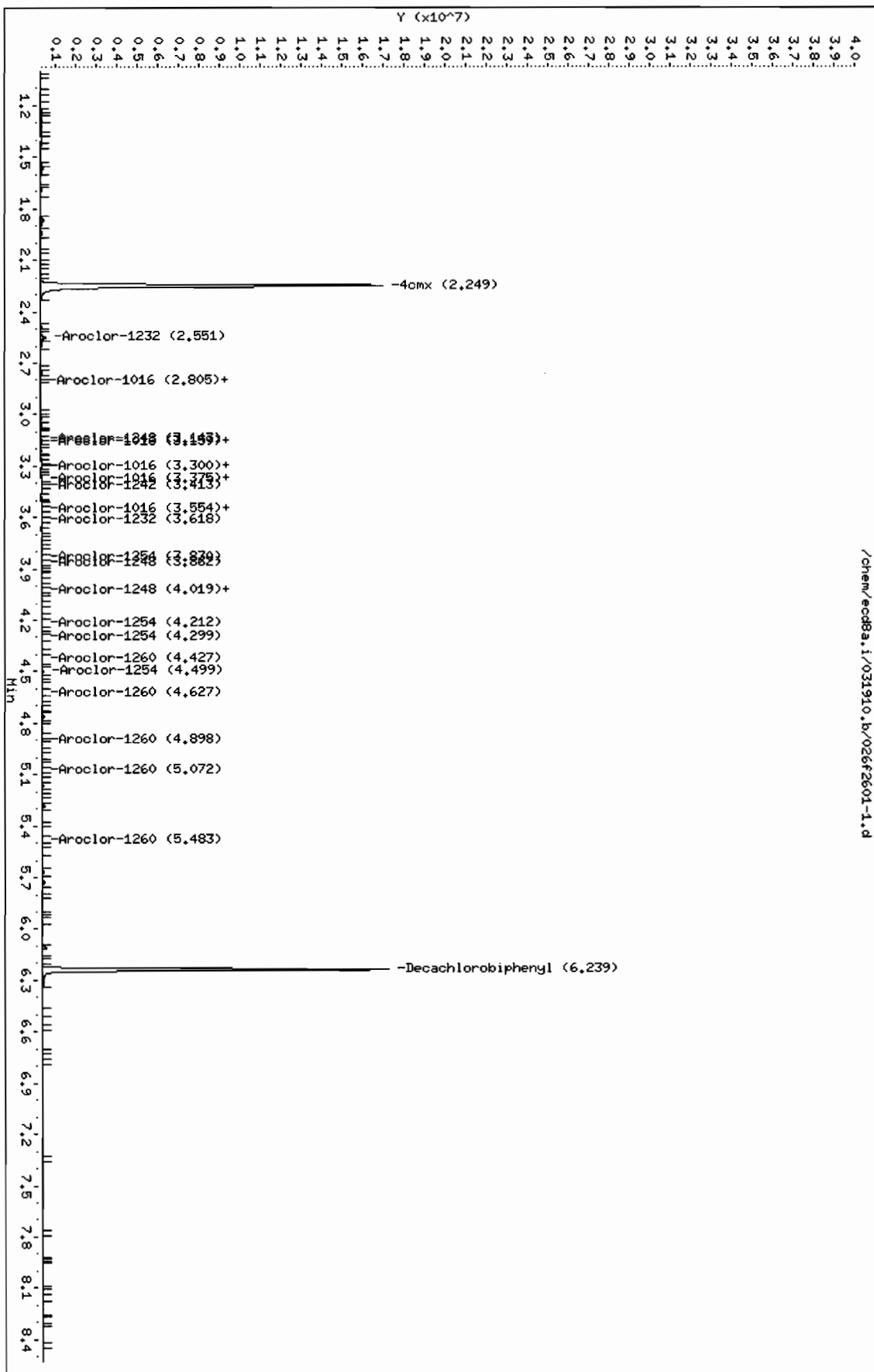
Cpnd Variable

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		
2.249	2.248	0.001	17709306 141.718	4.7	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.239	6.239	0.000	15414750 187.183	6.2	80.00- 120.00	100.00
-----						

Data File: /chem/ecdb8a.i/031910.b/026f2601-1.d  
 Date : 19-MAR-2010 12:23  
 Client ID: PBLK01  
 Sample Info: 1420207393711  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: ecdb8a.i  
 Operator: JADC  
 Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/026b2601-1.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: 10-2196.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

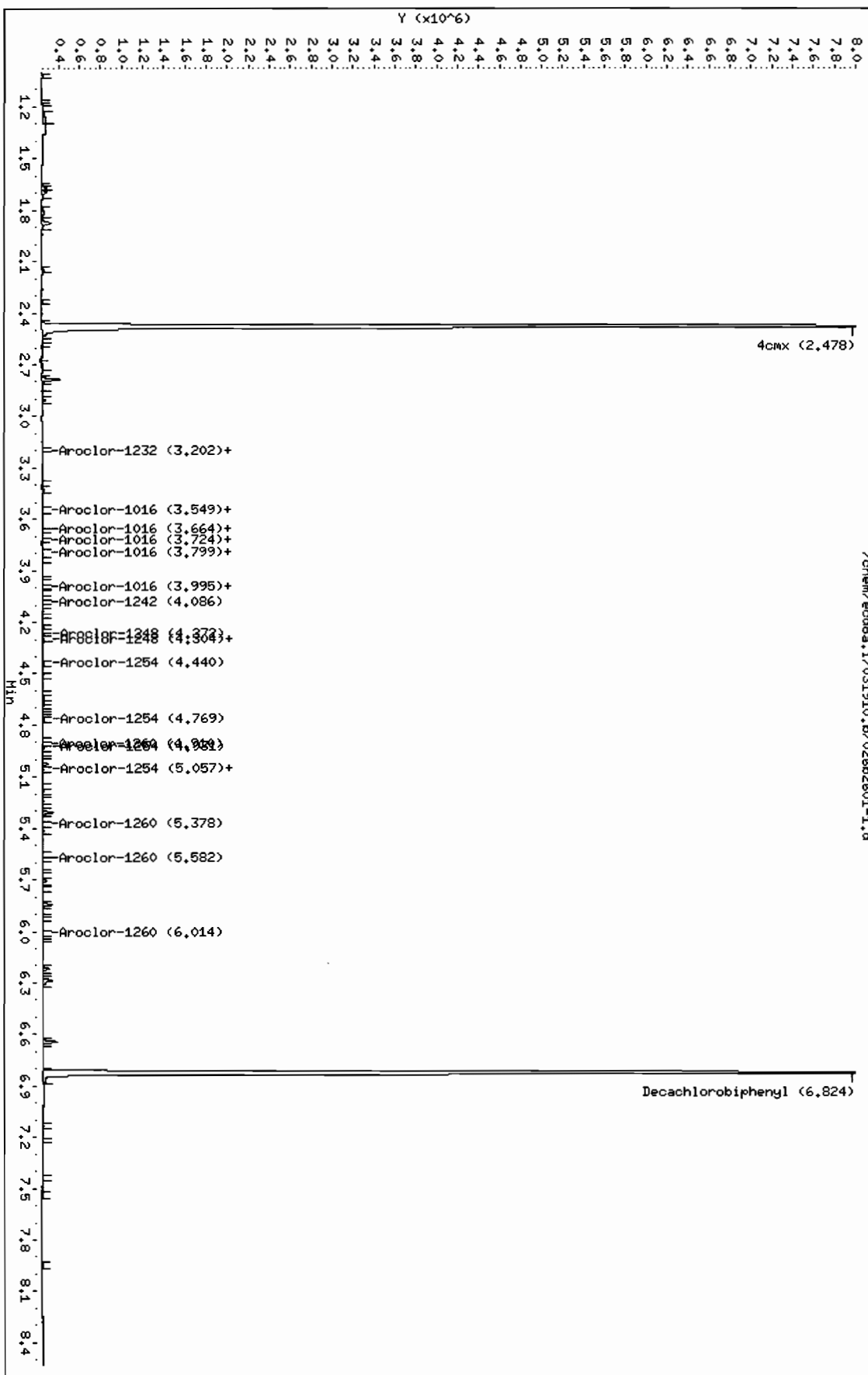
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
2.478	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/ecob8a.i/031910.b/02662601-1.d  
Date: 19-MAR-2010 12:23  
Client ID: PBLK01  
Sample Info: 1420207393711  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecob8a.i  
Operator: JROC  
Column diameter: 0.25

Page 1





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

Page 1 of 1

<b>SDG Number:</b> 10-2196 <b>Lab Sample ID:</b> 1202077508 <b>Client Sample:</b> QC for batch 967813 <b>Client ID:</b> MB for batch 967813 <b>Batch ID:</b> 967817 <b>Run Date:</b> 03/23/2010 10:25 <b>Prep Date:</b> 03/22/2010 21:20 <b>Data File:</b> 012f1201-1.d 012b1201-1.d	<b>Client:</b> LANL010 <b>Method:</b> SW846 8082 <b>Inst:</b> ECD8A.I <b>Analyst:</b> JAOC <b>Aliquot:</b> 30 g <b>Column:</b> 1 CLP1 2 CLP2	<b>Matrix:</b> SOIL  <b>Project:</b> QC <b>SOP Ref:</b> GL-OA-E-040 <b>Dilution:</b> 1 <b>Inj. Vol:</b> 1 uL <b>Final Volume:</b> 1 mL <b>Level:</b> 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/012f1201-1.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: 10-2196.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

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

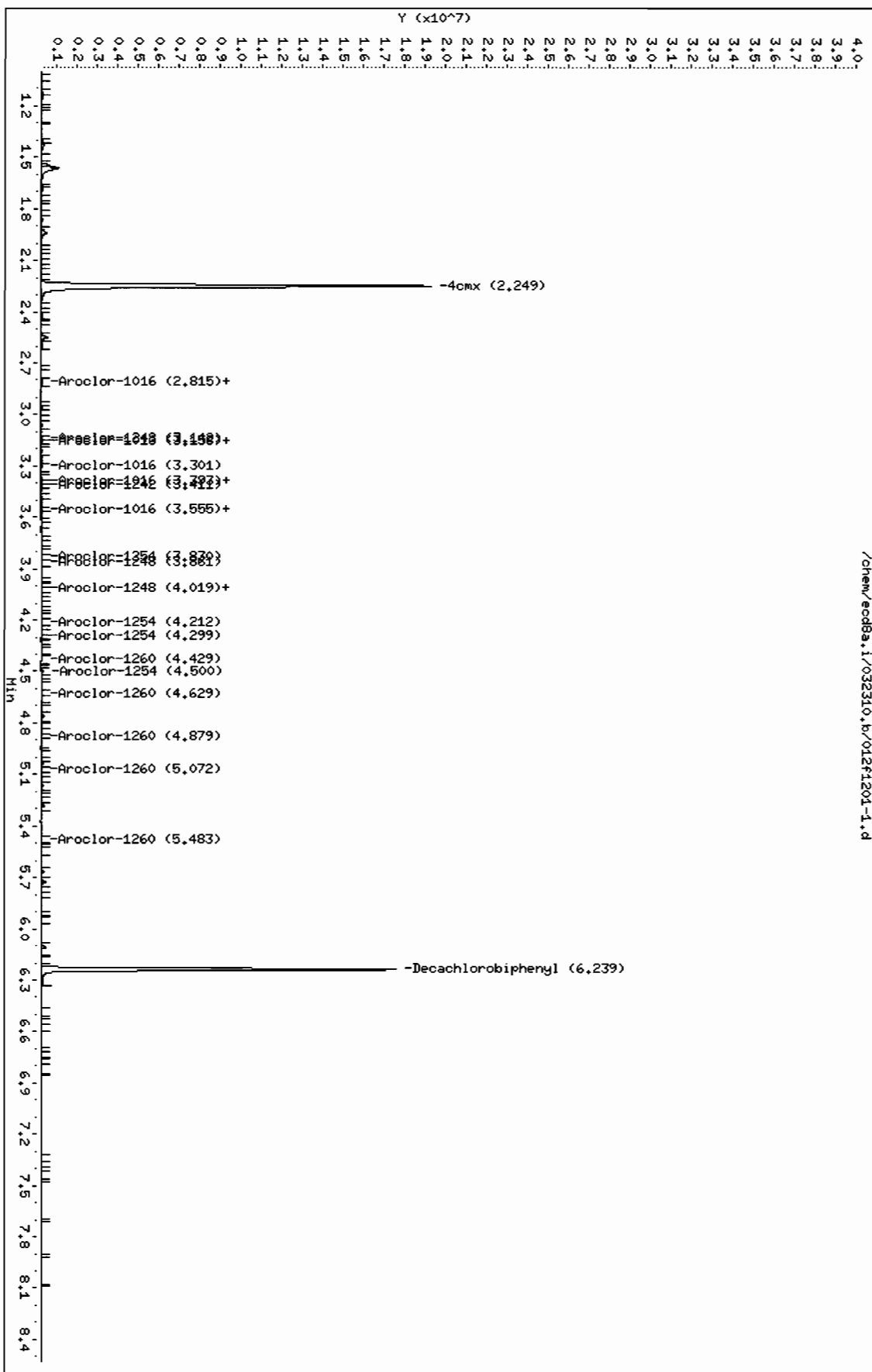
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

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		
2.249	2.248	0.001	21594346 172.808	5.8	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.239	6.240	-0.001	16163230 196.272	6.5	80.00- 120.00	100.00
-----						

Data File: /chem/ecdb8a.i/032310.b/012f1201-1.d  
 Date : 23-MAR-2010 10:25  
 Client ID: PBLK02  
 Sample Info: 1120207750811  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: ecdb8a.i  
 Operator: JADC  
 Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/012b1201-1.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: 10-2196.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

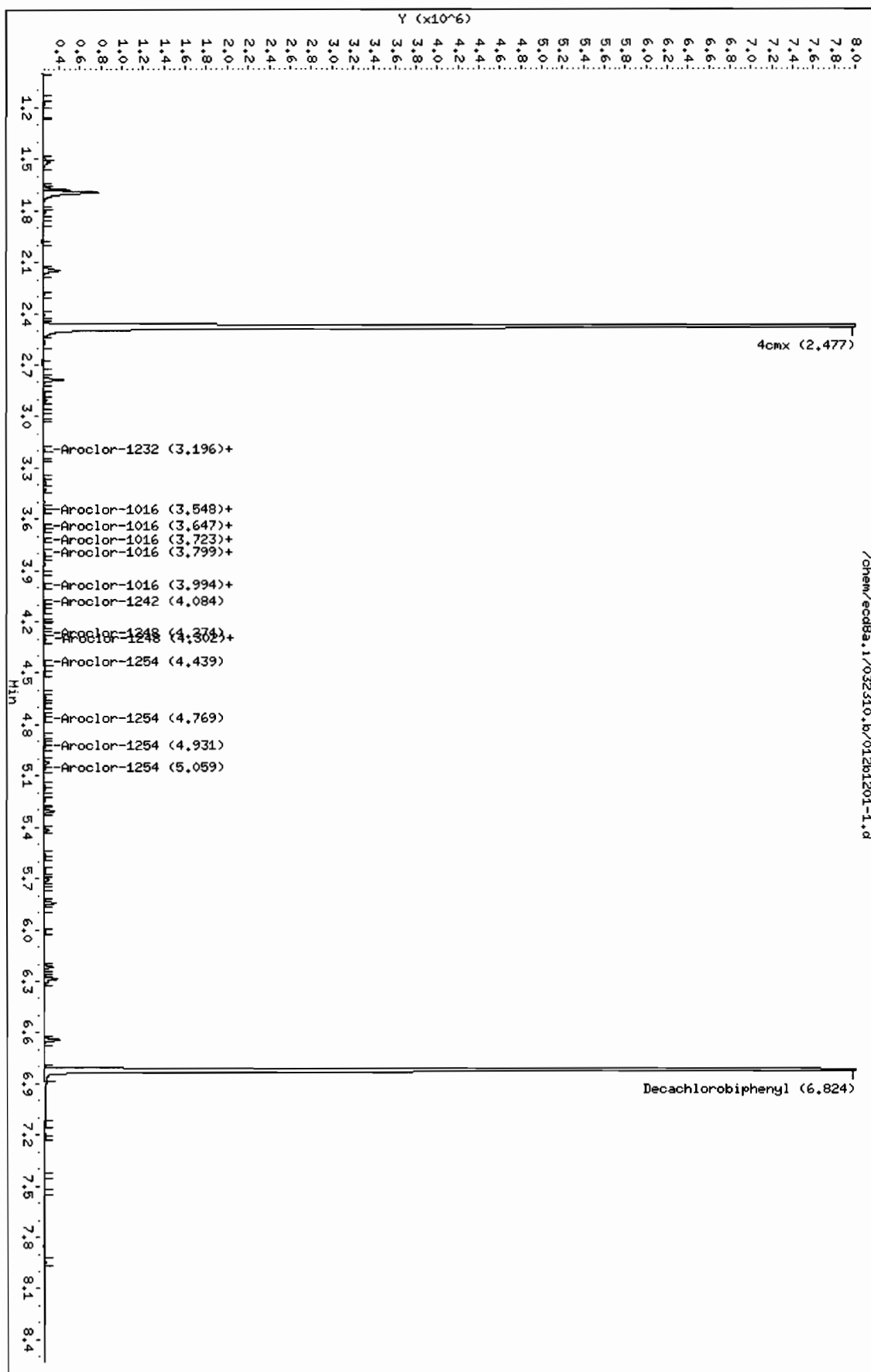
Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO		
11	2.477	2.476	0.001	15550026 186.045	6.2 80.00- 120.00	100.00		
-----								
\$ 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/ecdb8a.i/032310.b/012b1201-1.d  
Date : 23-MAR-2010 10:25  
Client ID: PBLK02  
Sample Info: 1120207750811  
Volume Injected (ul): 1.0  
Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JHOC  
Column diameter: 0.25

Page 1



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

Page 1 of 1

SDG Number: 10-2196

Matrix: SOIL

Lab Sample ID: 1202073938

Client Sample: QC for batch 966418

Client: LANL010

Project: QC

Client ID: LCS for batch 966418

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 966420

Inst: ECD8A.J

Dilution: 1

Run Date: 03/19/2010 12:35

Analyst: JAOC

Inj. Vol: 1 uL

Prep Date: 03/18/2010 10:57

Aliquot: 30 g

Final Volume: 1 mL

Data File: 027f2701-1.d

Column: 1 CLP1

Level: LOW

027b2701-1.d

2 CLP2

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

Report Date: 22-Mar-2010 13:52

## GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/027f2701-1.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: 10-2196.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		
2.249	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			

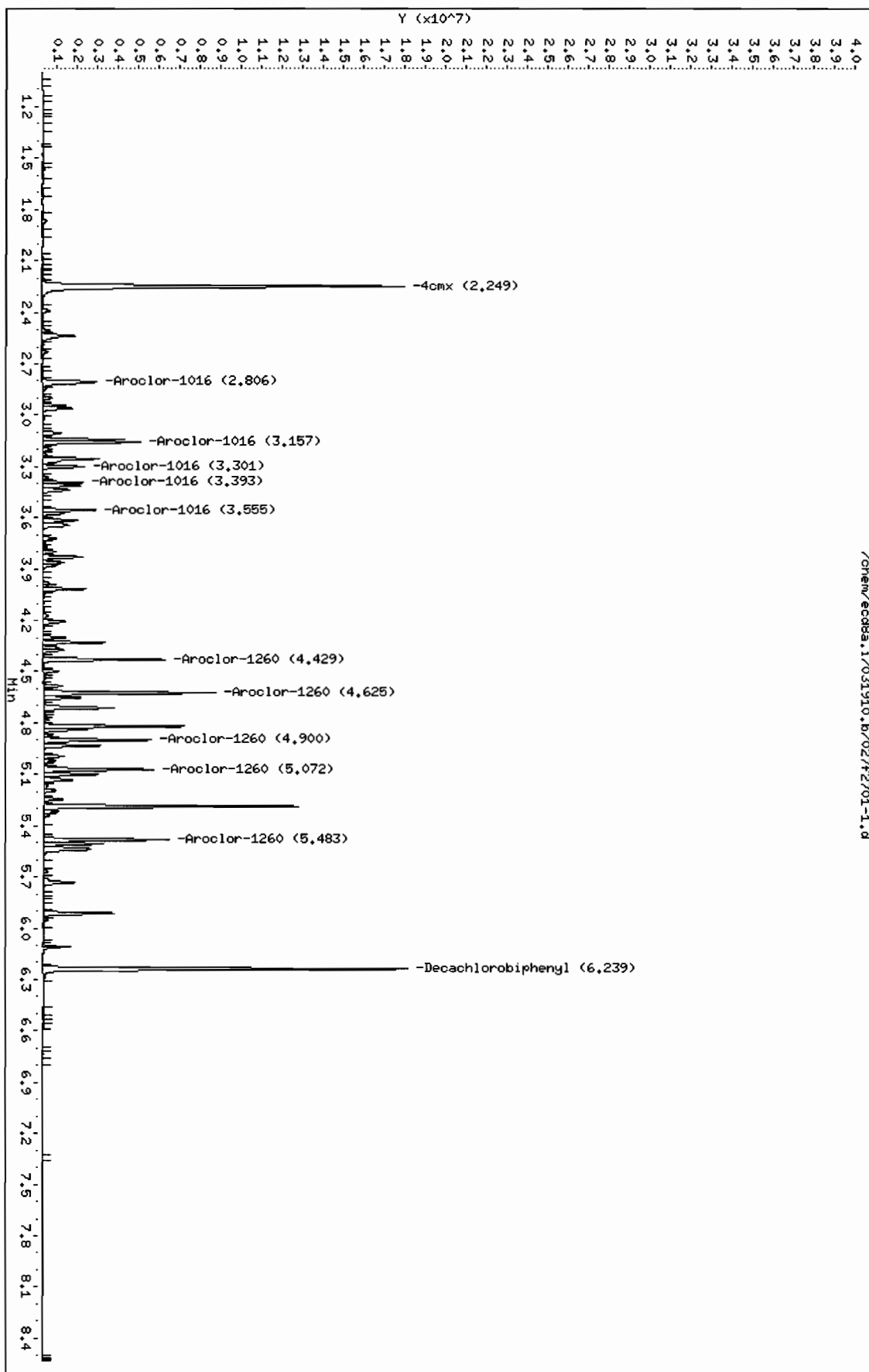
#### QC Flag Legend

M - Compound response manually integrated.

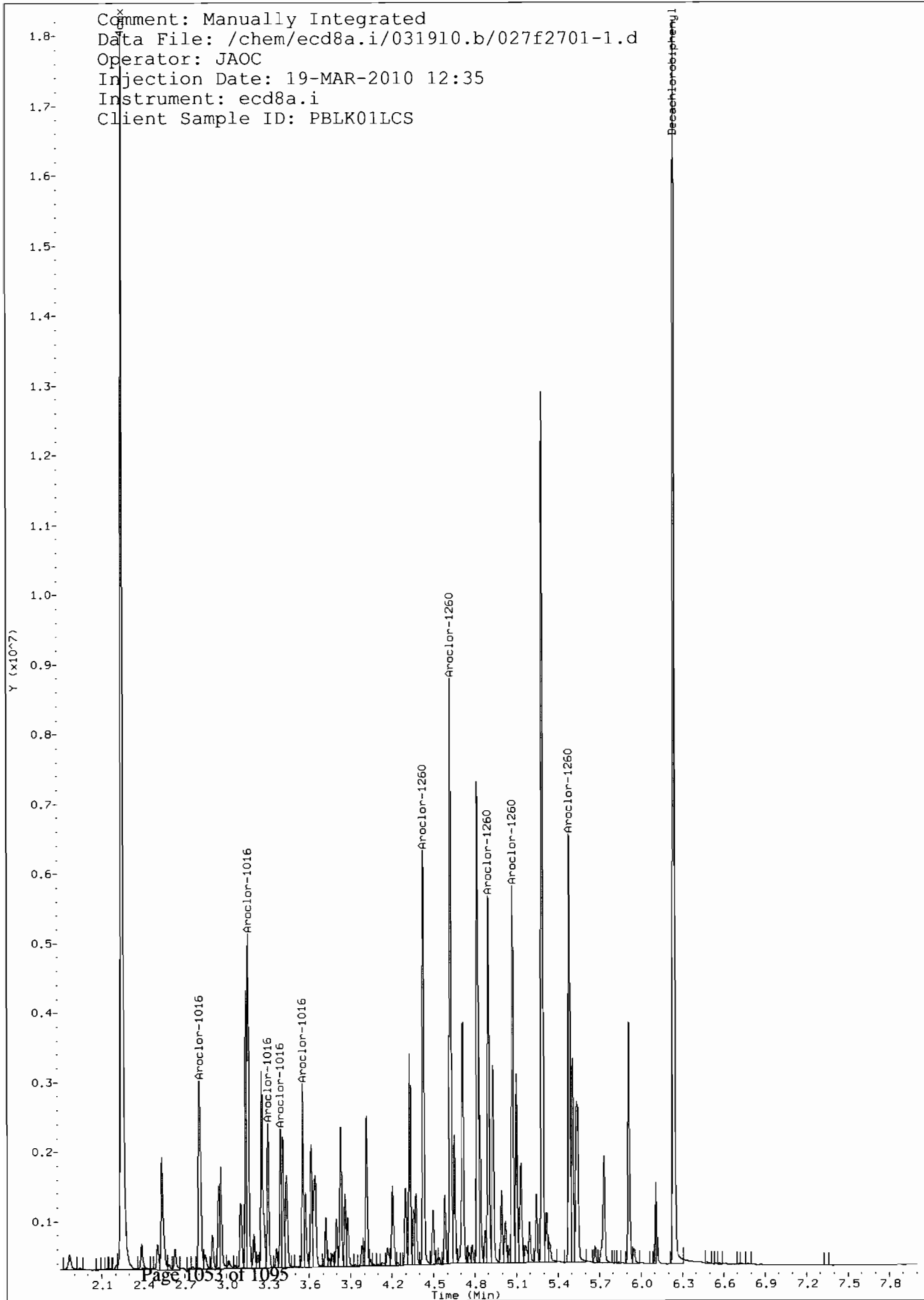


Data File: /chem/ecdb8a.i/031910.b/027f2701-1.d  
Date : 19-MAR-2010 12:35  
Client ID: PBLK01LCS  
Sample Info: 1120207393811  
Volume Injected (uL): 1.0  
Column phase: CLP1

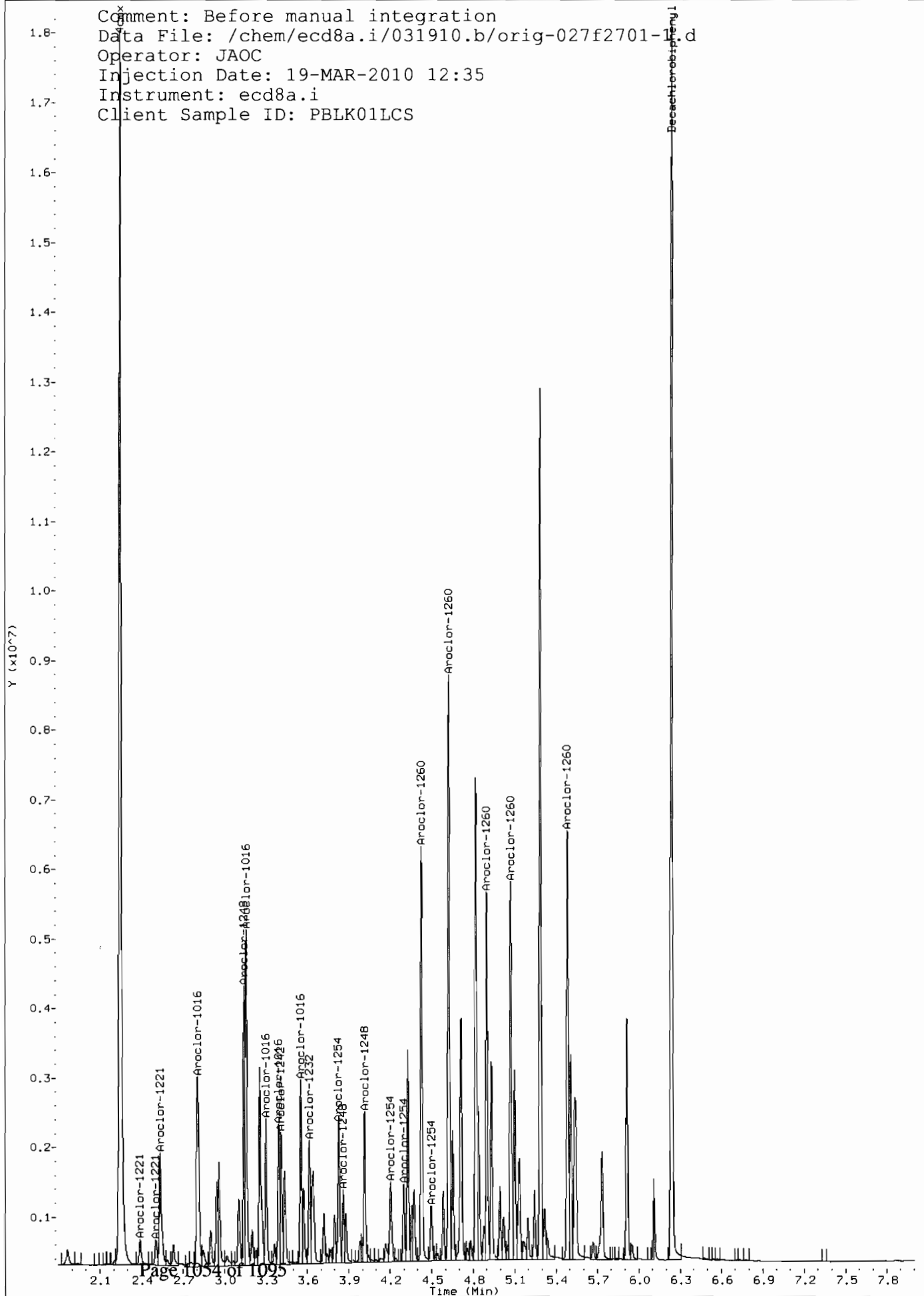
Instrument: ecdb8a.i  
Operator: JAOO  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/031910.b/027f2701-1.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 12:35  
Instrument: ecd8a.i  
Client Sample ID: PBLK01LCS



Comment: Before manual integration  
Data File: /chem/ecd8a.i/031910.b/orig-027f2701-1.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 12:35  
Instrument: ecd8a.i  
Client Sample ID: PBLK01LCS



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/031910.b/027b2701-1.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: 10-2196.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclpl

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

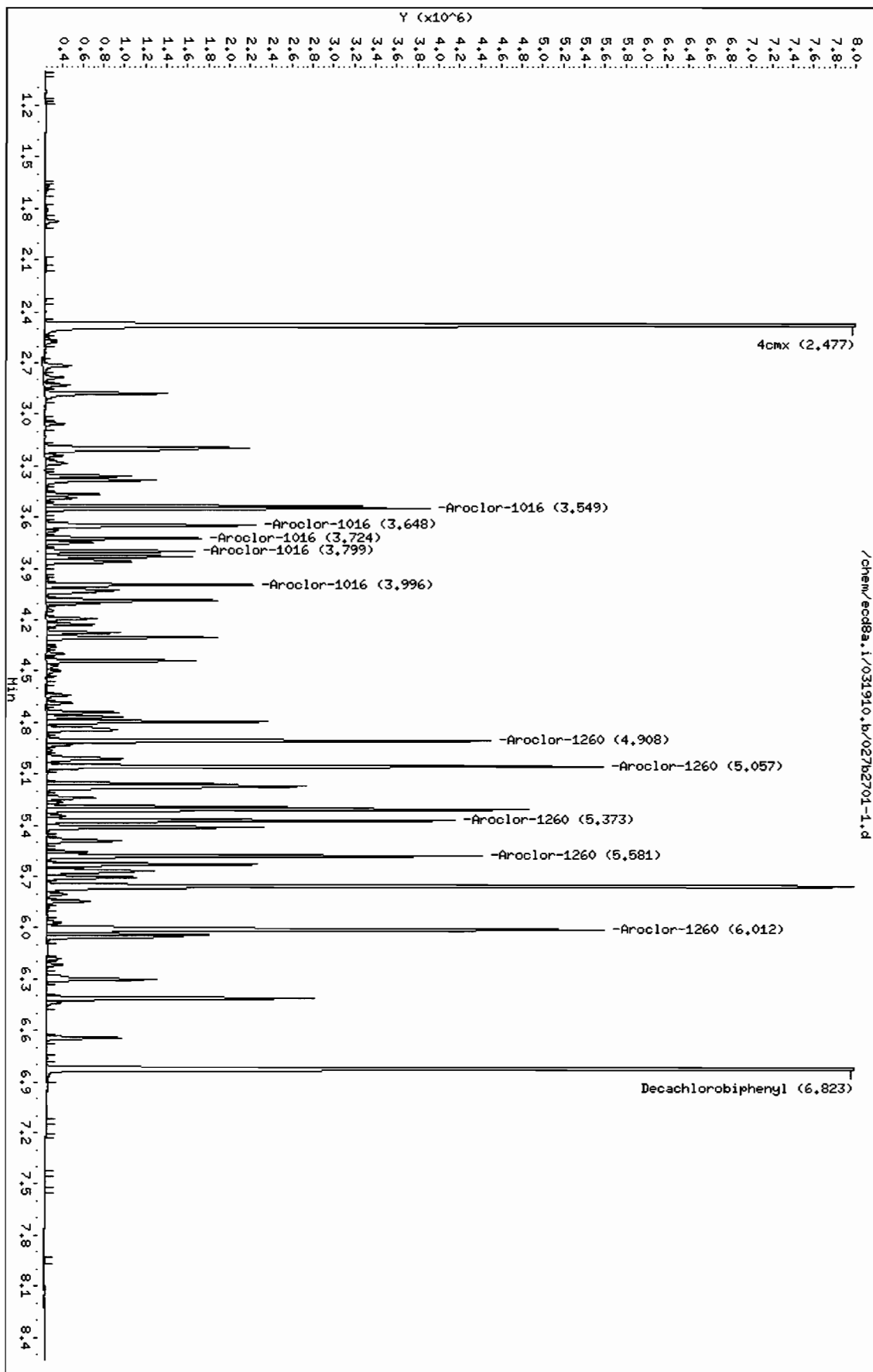
CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8				
2.477	2.477	0.000	13425786	160.630	5.4	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3				
6.823	6.824	-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/ecdb8a.i/031910.b/027b2701-1.d  
Date: 19-MAR-2010 12:35  
Client ID: PBLK01LCS  
Sample Info: 1120207393811  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JADC  
Column diameter: 0.25

Page 1



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

Page 1 of 1

SDG Number: 10-2196

Matrix: SOIL

Lab Sample ID: 1202077509

Client Sample: QC for batch 967813

Client: LANL010

Project: QC

Client ID: LCS 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 10:37

Analyst: JAOC

Inj. Vol: 1 uL

Prep Date: 03/22/2010 21:20

Aliquot: 30 g

Final Volume: 1 mL

Data File: 013f1301-1.d

Column: 1 CLP1

Level: LOW

013b1301-1.d

2 CLP2

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

Report Date: 24-Mar-2010 09:17

## GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/013f1301-1.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-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: 10-2196.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

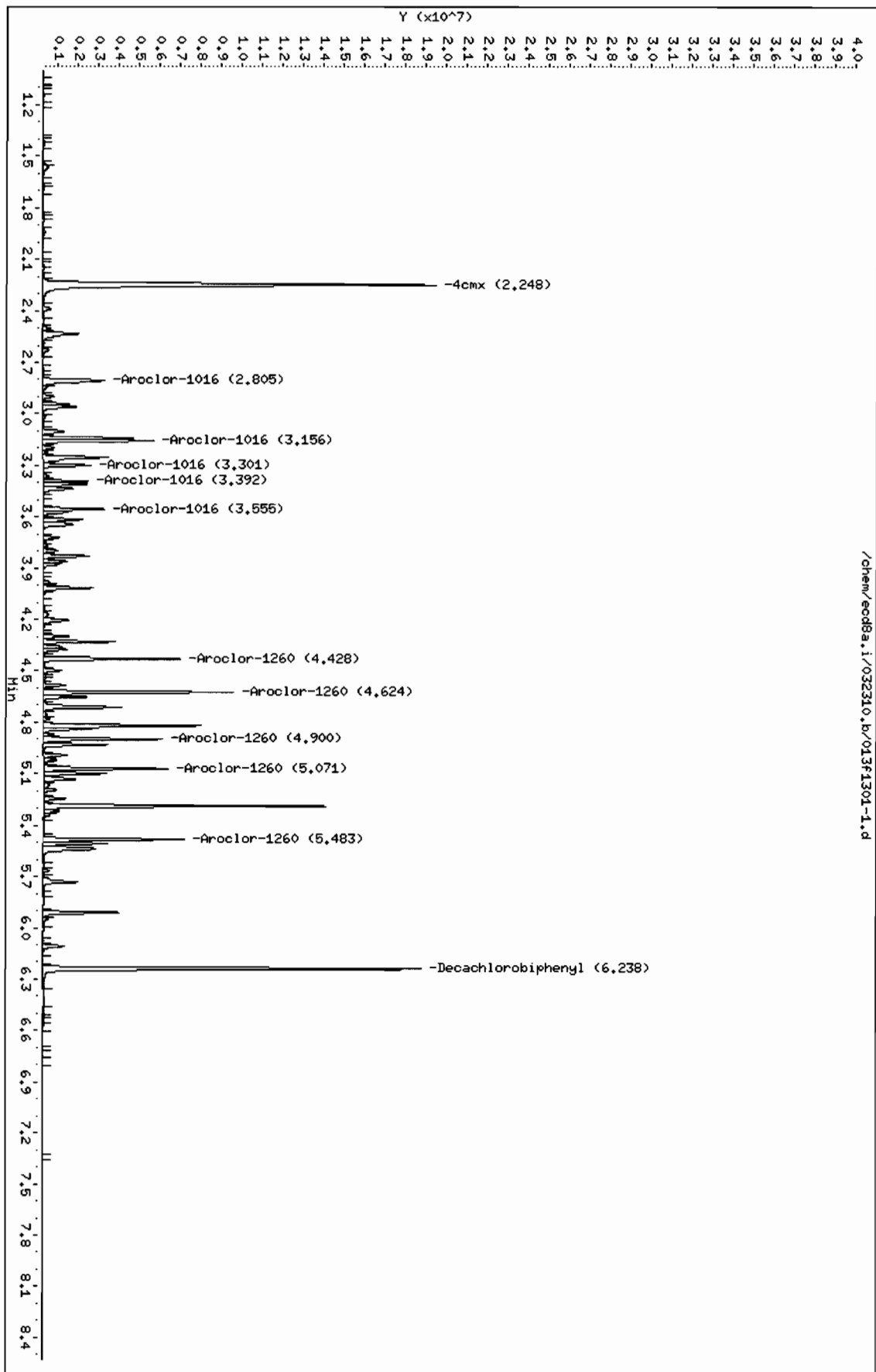
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
2.248	2.248	0.000	22512097	180.152	6.0	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
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/ecdb8a.i/032310.b/013f1301-1.d  
Date : 23-MAR-2010 10:37  
Client ID: PBLK02LCS  
Sample Info: 1120207750911  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JAOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/013b1301-1.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: 10-2196.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

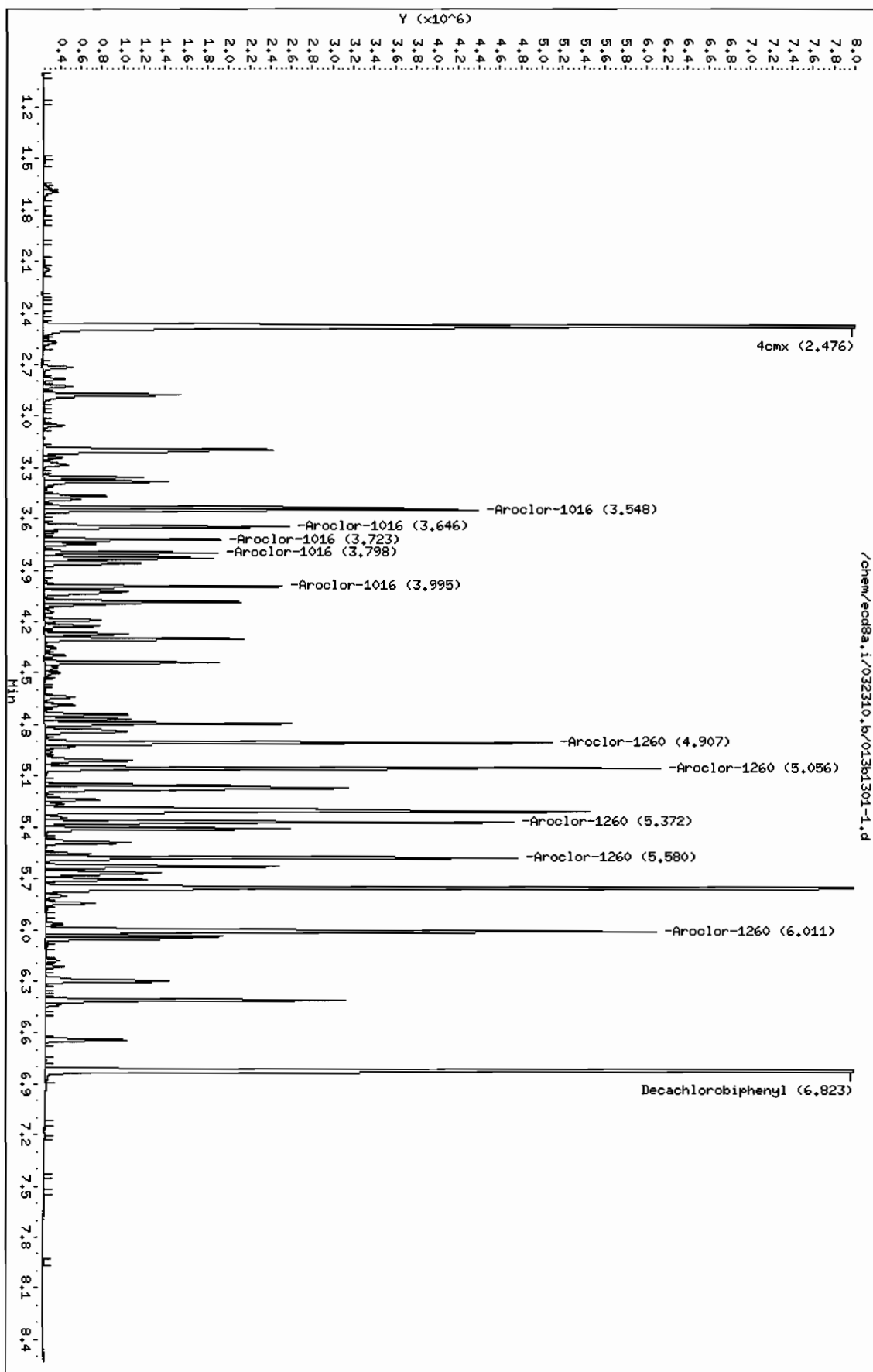
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
-----						
\$ 11 4cmx					CAS #: 877-09-8	
2.476	2.476	0.000	16082714	192.418	6.4 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.823	6.824	-0.001	13094728	220.999	7.4 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/013b1301-1.d  
Date : 23-MAR-2010 10:37  
Client ID: PBLK02LCS  
Sample Info: 112020750911  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JHOC  
Column diameter: 0.25

Page 1



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

Page 1 of 1

SDG Number: 10-2196

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

Report Date: 24-Mar-2010 09:17

## GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/014f1401-1.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: 10-2196.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		
2.249	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

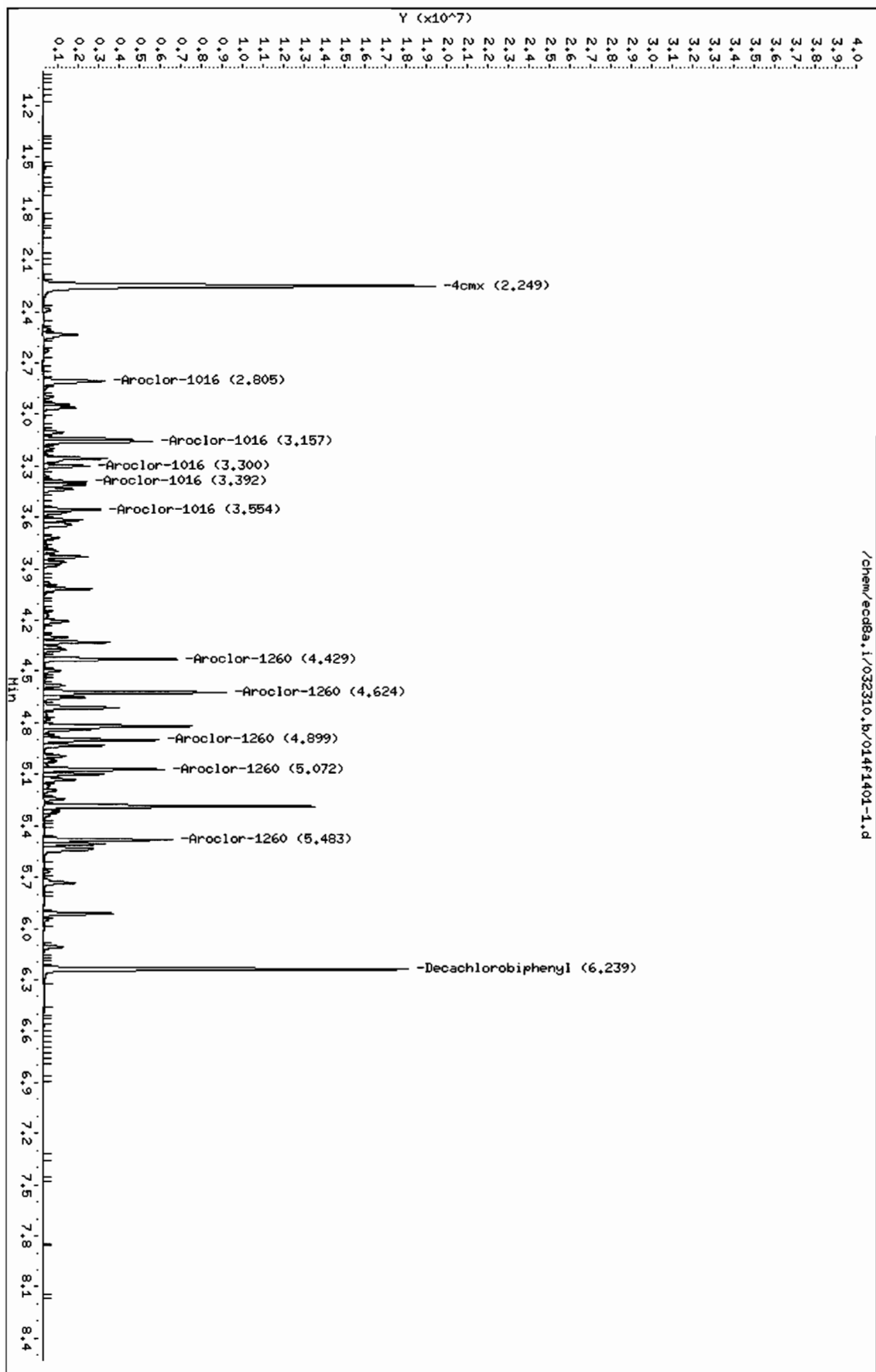
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
3.554	3.555	-0.001	2460631	799.180	26.6	47.49-	87.49	65.32	
Average of Peak Concentrations =					27.1				
-----									
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/ecob8a.i/032310.b/014f1401-1.d  
Date: 23-MAR-2010 10:50  
Client ID: PBLK02LCSD  
Sample Info: 1120207751011  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecob8a.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/032310.b/014b1401-1.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: 10-2196.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclpl

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

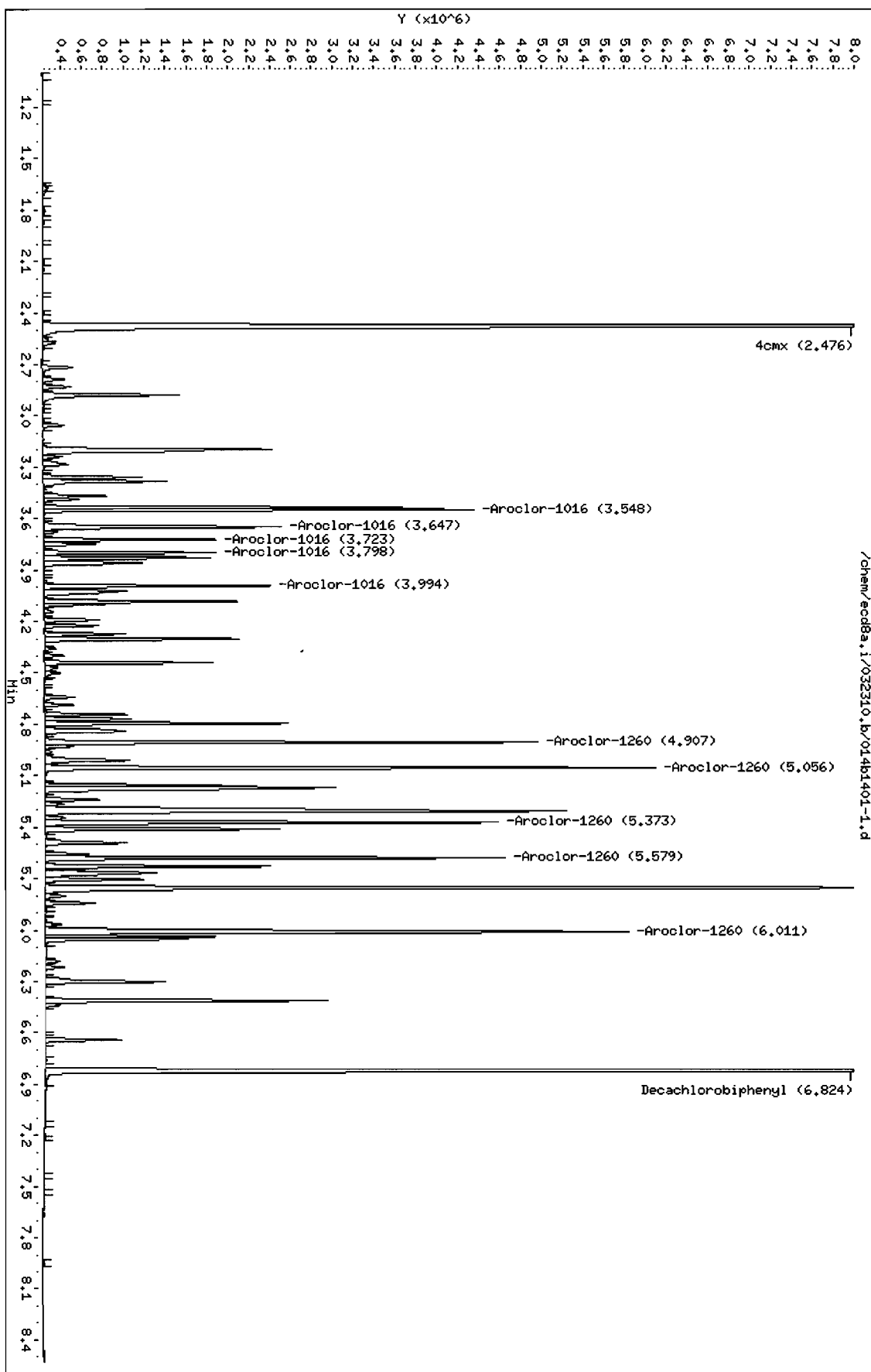
CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
-----							
\$ 11 4cmx					CAS #: 877-09-8		
2.476	2.476	0.000	16091636	192.525	6.4	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 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/ecdb8a.i/032310.b/014b1401-1.d  
Date : 23-MAR-2010 10:50  
Client ID: PRLK02LCSD  
Sample Info: 1120207751011  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JAOC  
Column diameter: 0.25

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# MISCELLANEOUS DATA

## GEL ORGANIC RUN LOG

INSTRUMENT 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 & 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	1.0		CLEAN
002f0201.d	WAR100225-60 01	JAOC	09-MAR-2010 08:11		030910	1.0		DUSE
003f0301.d	WAR100201-54	JAOC	09-MAR-2010 08:24		030910	1.0		DUSE
004f0401.d	WAR091217-42	JAOC	09-MAR-2010 08:36		030910	1.0		PASSES BOTH COLUMNS
005f0501.d	WAR091217-48	JAOC	09-MAR-2010 08:48		030910	1.0		DUSE
006f0601.d	WAR100309-60 01	JAOC	09-MAR-2010 09:08		030910	1.0		PASSES BOTH COLUMNS
007f0701.d	WAR100309-05 54	JAOC	09-MAR-2010 09:27		030910	1.0		1254 LEVEL 1
008f0801.d	WAR100309-06 54	JAOC	09-MAR-2010 09:39		030910	1.0		1254 LEVEL 2
009f0901.d	WAR100309-07 54	JAOC	09-MAR-2010 09:51		030910	1.0		1254 LEVEL 3
010f1001.d	WAR100309-08 54	JAOC	09-MAR-2010 10:04		030910	1.0		1254 LEVEL 4
011f1101.d	WAR100219-02 54	JAOC	09-MAR-2010 10:16		030910	1.0		1254 LEVEL 5
012f1201.d	WAR100201-54	JAOC	09-MAR-2010 10:29		030910	1.0		PASSES BOTH COLUMNS
013f1301.d	WAR100309-09 48	JAOC	09-MAR-2010 10:41		030910	1.0		1248 LEVEL 1
014f1401.d	WAR100309-10 48	JAOC	09-MAR-2010 10:53		030910	1.0		1248 LEVEL 2
015f1501.d	WAR100309-11 48	JAOC	09-MAR-2010 11:05		030910	1.0		1248 LEVEL 3

Instrument Batch: /chem/ecd8a.i/030910.b

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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	1.0		1248 LEVEL 4
017f1701.d	WAR100211-01 48	JAOC	09-MAR-2010 11:30		030910	1.0		1248 LEVEL 5

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
018f1801.d	WAR091217-48	JAC	09-MAR-2010 11:43		030910		1.0		PASSES BOTH COLUMNS
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
019f1901.d	WAR100104-32	JAC	09-MAR-2010 11:55		030910		1.0		PATTERN ONLY
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
020f2001.d	WAR100104-21	JAC	09-MAR-2010 12:07		030910		1.0		PATTERN ONLY
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
021f2101.d	WAR100104-62	JAC	09-MAR-2010 12:20		030910		1.0		PATTERN ONLY
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
022f2201.d	WAR100107-68	JAC	09-MAR-2010 12:32		030910		1.0		PATTERN ONLY
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
023f2301.d	WAR091219-DDT	JAC	09-MAR-2010 12:44		030910		1.0		DDT
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
024f2401.d	WAR100219-99 02	JAC	09-MAR-2010 12:57		030910		1.0		CLEAN
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
025f2501.d	248545006	JAC	09-MAR-2010 13:09	961905	10-2213		1.0 LANL		UPLOAD BOTH, USE HIGHER
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
026f2601.d	WAR100309-60 02	JAC	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: JAOC 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/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	JAOC	18-MAR-2010 06:13		031810	1.0		CLEAN
002f0201.d	WAR100317-01 60	JAOC	18-MAR-2010 06:25		031810	1.0		1660 LEVEL 1
003f0301.d	WAR100317-02 60	JAOC	18-MAR-2010 06:38		031810	1.0		1660 LEVEL 2
004f0401.d	WAR100317-03 60	JAOC	18-MAR-2010 06:50		031810	1.0		1660 LEVEL 3
005f0501.d	WAR100317-04 60	JAOC	18-MAR-2010 07:02		031810	1.0		1660 LEVEL 4
006f0601.d	WAR100317-01 60	JAOC	18-MAR-2010 07:15		031810	1.0		1660 LEVEL 5
007f0701.d	WAR100224-60 01	JAOC	18-MAR-2010 07:27		031810	1.0		PASSES BOTH COLUMNS
008f0801.d	WAR100201-54	JAOC	18-MAR-2010 07:39		031810	1.0		PASSES BOTH COLUMNS
009f0901.d	WAR091217-42	JAOC	18-MAR-2010 07:52		031810	1.0		PASSES BOTH COLUMNS
010f1001.d	WAR091217-48	JAOC	18-MAR-2010 08:04		031810	1.0		PASSES BOTH COLUMNS
011f1101.d	WAR100104-32	JAOC	18-MAR-2010 08:17		031810	1.0		PATTERN ONLY
012f1201.d	WAR100104-21	JAOC	18-MAR-2010 08:29		031810	1.0		PATTERN ONLY
013f1301.d	WAR100104-62	JAOC	18-MAR-2010 08:41		031810	1.0		PATTERN ONLY
014f1401.d	WAR100107-68	JAOC	18-MAR-2010 08:54		031810	1.0		PATTERN ONLY
015f1501.d	WAR091219-DDT	JAOC	18-MAR-2010 09:06		031810	1.0		DDT

Instrument Batch: /chem/ecd8a.i/031810.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR100219-99 02	JAOC	18-MAR-2010 09:19		031810	1.0		CLEAN
017f1701.d	11202073907	JAOC	18-MAR-2010 09:31	1966402	110033	1.0	QC A	UPLOAD BOTH, USE HIGHER



018f1801.d	1202073908	JAC	18-MAR-2010 09:43	966402	10033	1.0	QC A	UPLOAD BOTH, USE HIGHER
019f1901.d	1202073909	JAC	18-MAR-2010 09:55	966402	10033	1.0	QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	1248554001	JAC	18-MAR-2010 10:08	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
021f2101.d	1248554002	JAC	18-MAR-2010 10:20	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
022f2201.d	1248554003	JAC	18-MAR-2010 10:33	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
023f2301.d	1248554004	JAC	18-MAR-2010 10:45	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
024f2401.d	1248554005	JAC	18-MAR-2010 10:57	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
025f2501.d	1248554006	JAC	18-MAR-2010 11:10	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
026f2601.d	1248554007	JAC	18-MAR-2010 11:22	966402	10033	5.0	WSRS	UPLOAD BOTH, USE HIGHER
027f2701.d	WAR100224-60 02	JAC	18-MAR-2010 11:39		031810	1.0		PASSES BOTH COLUMNS
028f2801.d	WAR100219-99 03	JAC	18-MAR-2010 11:51		031810	1.0		CLEAN
029f2901.d	1248554008	JAC	18-MAR-2010 12:03	966402	10033	5.0	WSRS	UPLOAD BOTH, USE HIGHER
030f3001.d	1248554009	JAC	18-MAR-2010 12:16	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
031f3101.d	1248554010	JAC	18-MAR-2010 12:28	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
032f3201.d	1248554011	JAC	18-MAR-2010 12:40	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
033f3301.d	1248554012	JAC	18-MAR-2010 12:53	966402	10033	1.0	WSRS	DUSE, 5X RERUN END SEQUENCE
034f3401.d	1248554013	JAC	18-MAR-2010 13:05	966402	10033	1.0	WSRS	DUSE, AFTER OVERRANGE RERUN END SEQUENCE
035f3501.d	1248554014	JAC	18-MAR-2010 13:17	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd8a.i/031810.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1248554015	JAC	18-MAR-2010 13:30	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
037f3701.d	1248554016	JAC	18-MAR-2010 13:42	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
038f3801.d	1248554017	JAC	18-MAR-2010 13:54	966402	10033	1.0	WSRS	UPLOAD BOTH, USE HIGHER
039f3901.d	WAR100224-60 03	JAC	18-MAR-2010 14:11		031810	1.0		PASSES BOTH COLUMNS
040f4001.d	WAR100219-99 04	JAC	18-MAR-2010 14:23		031810	1.0		CLEAN
041f4101.d	1248554018	JAC	18-MAR-2010 14:36	966402	10033	1.0	WSRS	DUSE, 5X RERUN 031910

1042f4201.d	248554019	JAOC	18-MAR-2010 14:48	966402	10033	1.0 WSRS	DUSE, AFTER OVERRANGE	RERUN 031910
1043f4301.d	248554020	JAOC	18-MAR-2010 15:01	966402	10033	1.0 WSRS	UPLOAD BOTH, USE HIGHER	
1044f4401.d	248554012	JAOC	18-MAR-2010 15:13	966402	10033	5.0 WSRS	UPLOAD BOTH, USE HIGHER	
1045f4501.d	248554013	JAOC	18-MAR-2010 15:25	966402	10033	1.0 WSRS	UPLOAD BOTH, USE HIGHER	
1046f4601.d	WAR100224-60 04	JAOC	18-MAR-2010 15:38		031810	1.0	PASSES BOTH COLUMNS	
1047f4701.d	WAR100219-99 05	JAOC	18-MAR-2010 15:50		031810	1.0	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-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/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	966402	10033	5.0lWSRS		DUSE, CHECK OVER 20%
014f1401.d	248554019	JAOC	19-MAR-2010 09:07	966402	10033	1.0lWSRS		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

Page: 1

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	1.01	CLEAN
019f1901.d	248554018	JAO	19-MAR-2010 10:19	966402	10033	5.01WSRS	UPLOAD BOTH, USE HIGHER
020f2001.d	248554019	JAO	19-MAR-2010 10:36	966402	10033	1.01WSRS	UPLOAD BOTH, USE HIGHER
021f2101.d	WAR100224-60 04	JAO	19-MAR-2010 10:52		031910	1.01	PASSES ALL PEAKS 20%
022f2201.d	WAR100219-99 05	JAO	19-MAR-2010 11:21		031910	1.01	CLEAN
023f2301.d	WAR100224-60	JAO	19-MAR-2010 11:33		031910	1.01	DUSE
024f2401.d	WAR100319-60	JAO	19-MAR-2010 11:57		031910	1.01	PASSES AVG 15%
025f2501.d	WAR100219-99 06	JAO	19-MAR-2010 12:10		031910	1.01	CLEAN
026f2601.d	1202073937	JAO	19-MAR-2010 12:23	966420	110-2168	1.01QC A	UPLOAD BOTH, USE HIGHER
027f2701.d	1202073938	JAO	19-MAR-2010 12:35	966420	110-2168	1.01QC A	UPLOAD BOTH, USE HIGHER
028f2801.d	248394001	JAO	19-MAR-2010 12:47	966420	110-2168	1.01LANL	UPLOAD BOTH, USE HIGHER
029f2901.d	248394002	JAO	19-MAR-2010 13:00	966420	110-2168	1.01LANL	UPLOAD BOTH, USE HIGHER
030f3001.d	248394003	JAO	19-MAR-2010 13:12	966420	110-2168	1.01LANL	UPLOAD BOTH, USE HIGHER
031f3101.d	248394004	JAO	19-MAR-2010 13:24	966420	110-2168	1.01LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	248394006	JAO	19-MAR-2010 13:37	966420	110-2168	1.01LANL	DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER
033f3301.d	248514002	JAO	19-MAR-2010 13:49	966420	110-2196	1.01LANL	DUSE: SENT FOR RE DUE TO LOW \$s: UPLOAD BOTH, USE HIGHER
034f3401.d	248514003	JAO	19-MAR-2010 14:02	966420	110-2196	1.01LANL	UPLOAD BOTH, USE HIGHER
035f3501.d	248517001	JAO	19-MAR-2010 14:14	966420	110-2198	1.01LANL	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	1.01		PASSES AVG 15%
037f3701.d	WAR100219-99 08	JAO	19-MAR-2010 14:43		031910	1.01		CLEAN
038f3801.d	248519001	JAO	19-MAR-2010 14:55	966420	110-2199	1.01LANL		UPLOAD BOTH, USE HIGHER
039f3901.d	248519002	JAO	19-MAR-2010 15:08	966420	110-2199	1.01LANL		DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER
040f4001.d	248519003	JAO	19-MAR-2010 15:20	966420	110-2199	1.01LANL		UPLOAD BOTH, USE HIGHER
041f4101.d	248519004	JAO	19-MAR-2010 15:32	966420	110-2199	1.01LANL		DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER

042f4201.d  248519005	JAO	19-MAR-2010 15:45	966420	10-2199		1.0 LANL		UPLOAD BOTH, USE HIGHER	+
043f4301.d  248519006	JAO	19-MAR-2010 15:57	966420	10-2199		1.0 LANL		UPLOAD BOTH, USE HIGHER	+
044f4401.d  248519007	JAO	19-MAR-2010 16:09	966420	10-2199		1.0 LANL		UPLOAD BOTH, USE HIGHER	+
045f4501.d  248519008	JAO	19-MAR-2010 16:22	966420	10-2199		1.0 LANL		UPLOAD BOTH, USE HIGHER	+
046f4601.d  248519009	JAO	19-MAR-2010 16:34	966420	10-2199		1.0 LANL		UPLOAD BOTH, USE HIGHER	+
047f4701.d  248519010	JAO	19-MAR-2010 16:46	966420	10-2199		1.0 LANL		UPLOAD BOTH, USE HIGHER	+
048f4801.d  WAR100319-60 08	JAO	19-MAR-2010 17:03		031910		1.0		PASSES AVG 15%	+
049f4901.d  WAR100219-99 09	JAO	19-MAR-2010 17:15		031910		1.0		CLEAN	+
050f5001.d  248519011	JAO	19-MAR-2010 17:28	966420	10-2199		1.0 LANL		UPLOAD BOTH, USE HIGHER	+
051f5101.d  248526001	JAO	19-MAR-2010 17:40	966420	10-2202		10.0 LANL		UPLOAD BOTH, USE HIGHER	+
052f5201.d  1202073939	JAO	19-MAR-2010 17:52	966420	10-2202		10.0 QC A		UPLOAD BOTH, USE HIGHER	+
053f5301.d  1202073940	JAO	19-MAR-2010 18:05	966420	10-2202		10.0 QC A		UPLOAD BOTH, USE HIGHER	+
054f5401.d  WAR100319-60 09	JAO	19-MAR-2010 18:21		031910		1.0		PASSES BOTH COLUMNS	+
055f5501.d  WAR100219-99 10	JAO	19-MAR-2010 18:34		031910		1.0		CLEAN	+

## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD8

DATE: 03/24/2010

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-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	JAOC	23-MAR-2010 08:09		032310	1.0	CLEAN	
002f0201.d	WAR100224-60 01	JAOC	23-MAR-2010 08:22		032310	1.0	PASSES BOTH COLUMNS	
003f0301.d	WAR100219-54	JAOC	23-MAR-2010 08:34		032310	1.0	PASSES BOTH COLUMNS	
004f0401.d	WAR091217-42	JAOC	23-MAR-2010 08:46		032310	1.0	PASSES BOTH COLUMNS	
005f0501.d	WAR100223-48	JAOC	23-MAR-2010 08:59		032310	1.0	PASSES BOTH COLUMNS	
006f0601.d	WAR100104-32	JAOC	23-MAR-2010 09:11		032310	1.0	PATTERN ONLY	
007f0701.d	WAR100104-21	JAOC	23-MAR-2010 09:23		032310	1.0	PATTERN ONLY	
008f0801.d	WAR100104-62	JAOC	23-MAR-2010 09:36		032310	1.0	PATTERN ONLY	
009f0901.d	WAR100107-68	JAOC	23-MAR-2010 09:48		032310	1.0	PATTERN ONLY	
010f1001.d	WAR091219-DDT	JAOC	23-MAR-2010 10:00		032310	1.0	DDT	
011f1101.d	WAR100219-99 02	JAOC	23-MAR-2010 10:13		032310	1.0	CLEAN	
012f1201.d	1202077508	JAOC	23-MAR-2010 10:25	967817	10-2168	1.0	QC A	UPLOAD BOTH, USE HIGHER
013f1301.d	1202077509	JAOC	23-MAR-2010 10:37	967817	10-2168	1.0	QC A	UPLOAD BOTH, USE HIGHER
014f1401.d	1202077510	JAOC	23-MAR-2010 10:50	967817	10-2168	1.0	QC A	UPLOAD BOTH, USE HIGHER
015f1501.d	1248394006	JAOC	23-MAR-2010 11:02	967817	10-2168	1.0	LANL	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM SFAIURE

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	JAOC	23-MAR-2010 11:14	967817	10-2196	1.0	LANL	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM SFAIURE
017f1701.d	1248519002	JAOC	23-MAR-2010 11:27	967817	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM SFAIURE

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1018f1801.d	1248519004	JROC	23-MAR-2010 11:43	1967817	110-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM FAILURE
1019f1901.d	1248519004	JROC	23-MAR-2010 11:43	1967817	110-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM FAILURE
1019f1901.d	1248519004	JROC	23-MAR-2010 12:01	1967817	1032310	1.0	LANL	PASSES BOTH COLUMNS
1020f2001.d	1248519004	JROC	23-MAR-2010 12:14	1967817	1032310	1.0	LANL	CLEAN
1021f2101.d	1248519004	JROC	23-MAR-2010 12:26	1967824	110-2412	1.0	QC A	UPLOAD BOTH, USE HIGHER
1022f2201.d	1248519004	JROC	23-MAR-2010 12:38	1967824	110-2412	1.0	QC A	UPLOAD BOTH, USE HIGHER
1023f2301.d	1248519004	JROC	23-MAR-2010 12:51	1967824	110-2412	10.0	LANL	UPLOAD BOTH, USE HIGHER
1024f2401.d	1248519004	JROC	23-MAR-2010 13:03	1967824	110-2412	5.0	LANL	UPLOAD BOTH, USE HIGHER
1025f2501.d	1248519004	JROC	23-MAR-2010 13:15	1967824	110-2412	1.0	LANL	UPLOAD BOTH, USE HIGHER
1026f2601.d	1248519004	JROC	23-MAR-2010 13:28	1967824	110-2412	1.0	LANL	UPLOAD BOTH, USE HIGHER
1027f2701.d	1248519004	JROC	23-MAR-2010 13:40	1967824	110-2412	5.0	LANL	UPLOAD BOTH, USE HIGHER
1028f2801.d	1248519004	JROC	23-MAR-2010 13:52	1967824	110-2412	10.0	LANL	UPLOAD BOTH, USE HIGHER
1029f2901.d	1248519004	JROC	23-MAR-2010 14:05	1967824	110-2430	5.0	LANL	UPLOAD BOTH, USE HIGHER
1030f3001.d	1248519004	JROC	23-MAR-2010 14:21	1967824	110-2430	5.0	LANL	UPLOAD BOTH, USE HIGHER
1031f3101.d	1248519004	JROC	23-MAR-2010 14:38	1967824	1032310	1.0	LANL	PASSES BOTH COLUMNS
1032f3201.d	1248519004	JROC	23-MAR-2010 14:50	1967824	1032310	1.0	LANL	CLEAN
1033f3301.d	1248519004	JROC	23-MAR-2010 15:03	1967824	110-2430	5.0	LANL	UPLOAD BOTH, USE HIGHER
1034f3401.d	1248519004	JROC	23-MAR-2010 15:15	1967824	110-2430	5.0	LANL	UPLOAD BOTH, USE HIGHER
1035f3501.d	1248519004	JROC	23-MAR-2010 15:27	1967824	110-2436	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd8a.i/032310.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	1248519004	JROC	23-MAR-2010 15:40	1967824	110-2436	1.0	QC A	UPLOAD BOTH, USE HIGHER
1037f3701.d	1248519004	JROC	23-MAR-2010 15:52	1967824	110-2436	1.0	QC A	UPLOAD BOTH, USE HIGHER
1038f3801.d	1248519004	JROC	23-MAR-2010 16:04	1967824	110-2436	5.0	LANL	UPLOAD BOTH, USE HIGHER
1039f3901.d	1248519004	JROC	23-MAR-2010 16:17	1967824	110-2436	5.0	LANL	UPLOAD BOTH, USE HIGHER
1040f4001.d	1248519004	JROC	23-MAR-2010 16:29	1967824	110-2436	5.0	LANL	UPLOAD BOTH, USE HIGHER
1041f4101.d	1248519004	JROC	23-MAR-2010 16:42	1967824	110-2436	5.0	LANL	UPLOAD BOTH, USE HIGHER





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			

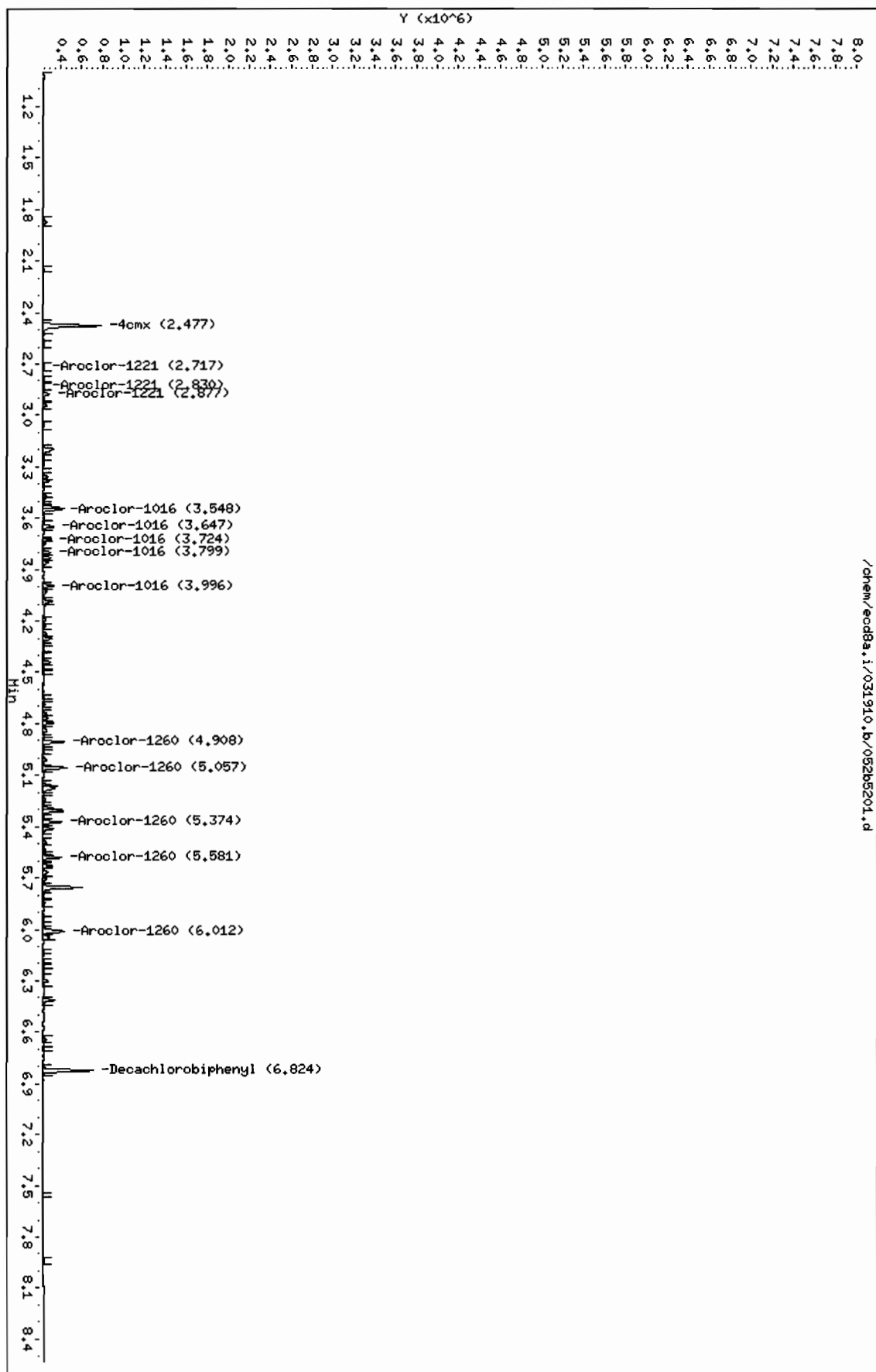
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
7 Aroclor-1260					CAS #: 11096-82-5			
4.908	4.908	0.000	179585	45.5972	17.3	80.00- 120.00	100.00 (aM)	
5.057	5.057	0.000	197222	41.6918	15.9	101.80- 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/ecdb8a.i/031910.b/052b5201.d  
Date: 19-MAR-2010 17:52  
Client ID: RE36-10-8466HS  
Sample Info: 112020/39391101  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JAO  
Column diameter: 0.25



Data File: /chem/ecd8a.i/031910.b/052f5201.d  
 Report Date: 22-Mar-2010 13:29

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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	52.8421	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		

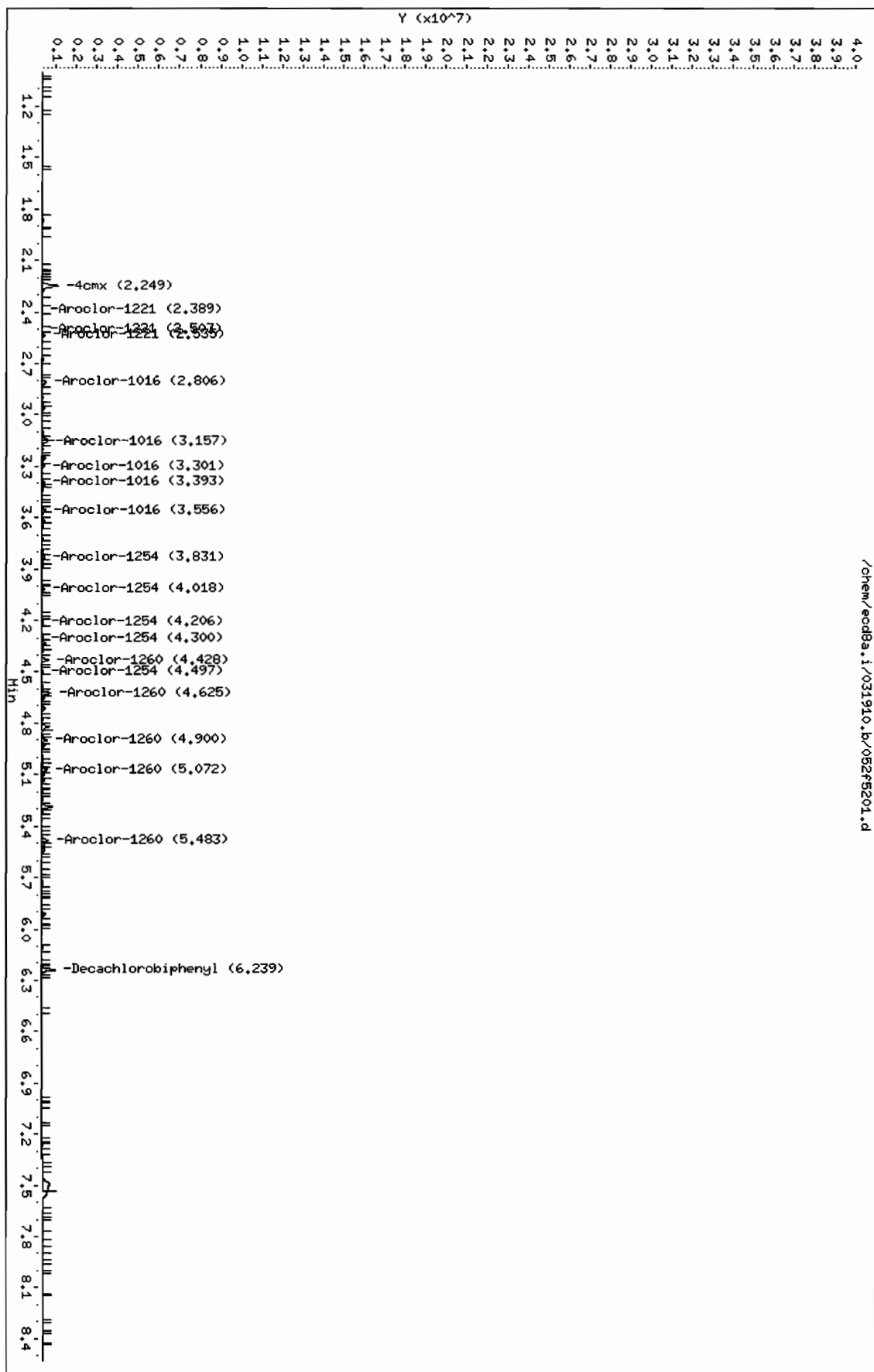
CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE RATIO
==	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5			
4.428	4.429	-0.001	281357	47.7681	18.2 80.00- 120.00	100.00 (a)
4.625	4.625	0.000	398648	46.9258	17.8 126.91- 166.91	141.69
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/ecdb8a.i/031910.b/052f5201.d  
 Date : 19-MAR-2010 17:52  
 Client ID: RE36-10-846MS  
 Sample Info: 112020739391101  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: ecdb8a.i  
 Operator: JAOC  
 Column diameter: 0.25



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: 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

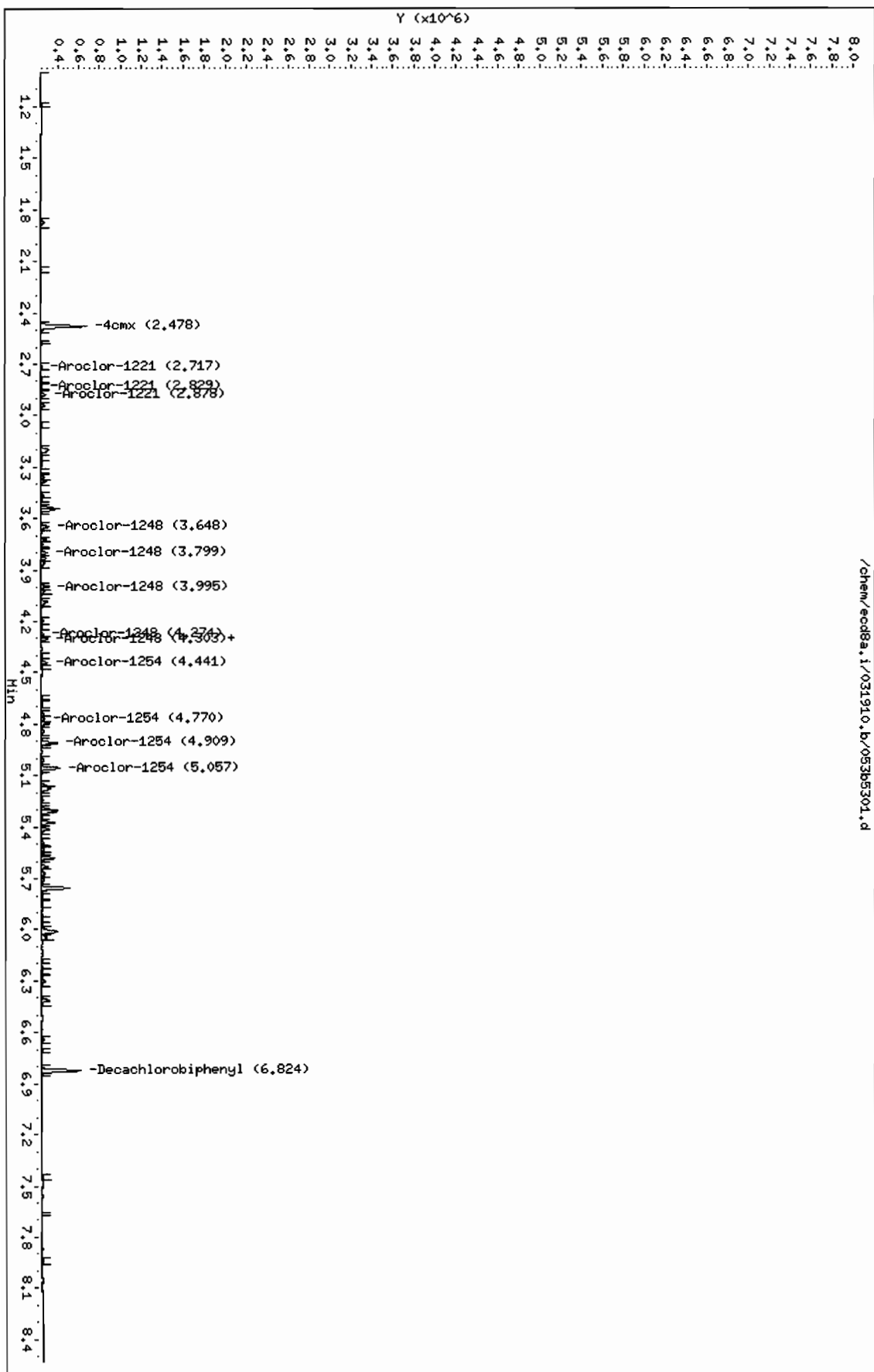
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.478	2.477	0.001	429232 5.13545	2.0	80.00- 120.00	100.00 (RM)
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
6.824	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: RE36-10-846MSD  
 Sample Info: 112020739401101  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecdb8a.i  
 Operator: JHDC  
 Column diameter: 0.25





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

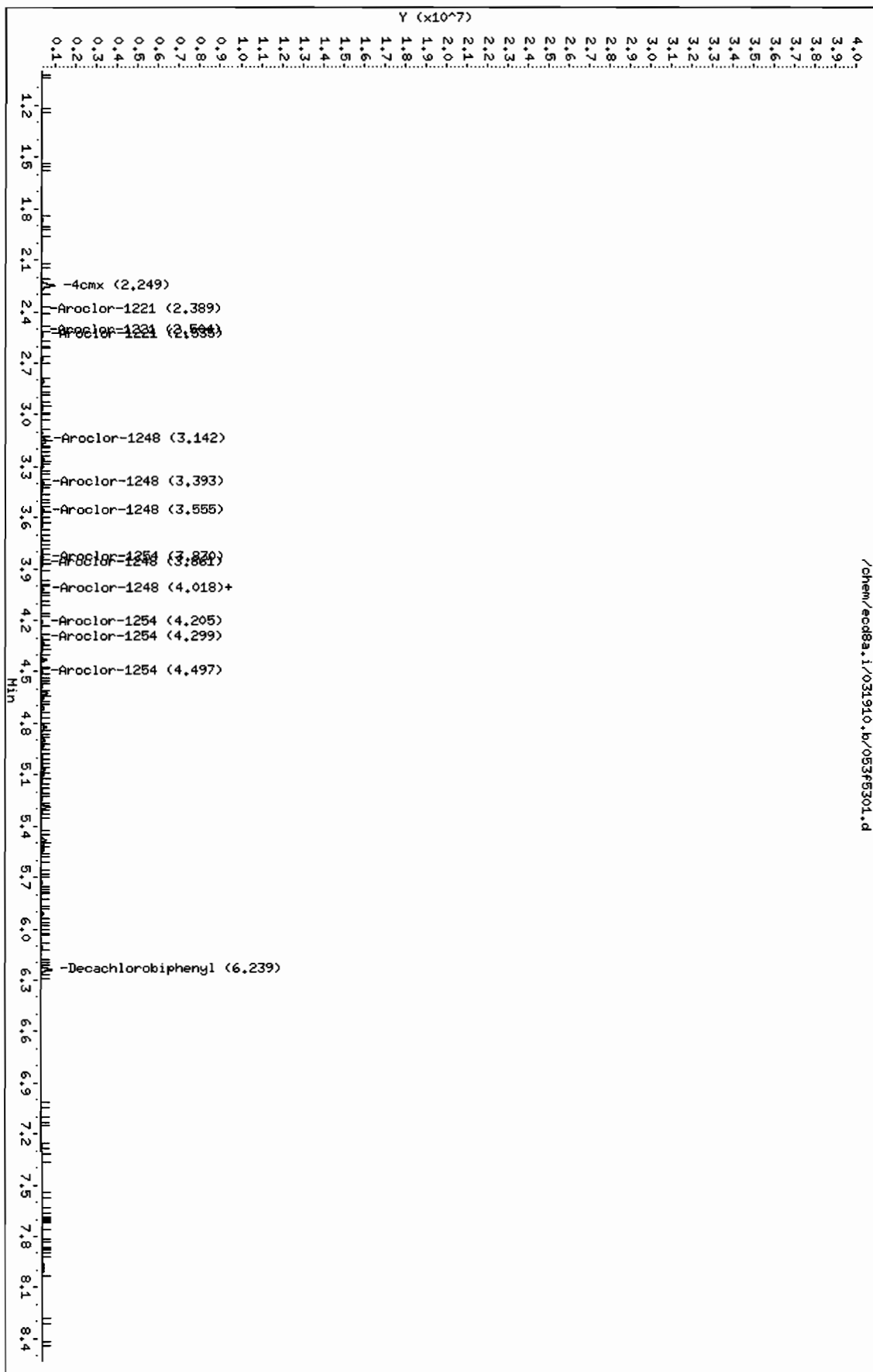
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
2.249	2.248	0.001	727827 5.82441	2.2	80.00- 120.00	100.00 (RM)
-----						
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
6.239	6.239	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: RE36-10-8466HSD  
Sample Info: 112020739401101  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JAOC  
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	1	8	1	0.03333
1202073938 LCS	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	1	8	1	0.03333
248394001	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	1	8	1	0.03332
248394002	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	1	8	1	0.03332
248394003	18-MAR-2010 10:57:00	30.04	H2SO4/KMnI	1	1	8	1	0.03329
248394004	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	1	8	1	0.03333
248394006	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	1	8	1	0.03333
248514002	18-MAR-2010 10:57:00	30.08	H2SO4/KMnI	1	1	8	1	0.03324
248514003	18-MAR-2010 10:57:00	30.03	H2SO4/KMnI	1	1	8	1	0.0333
248517001	18-MAR-2010 10:57:00	30.02	H2SO4/KMnI	1	1	8	1	0.03331
248519001	18-MAR-2010 10:57:00	30.09	H2SO4/KMnI	1	1	8	1	0.03323
248519002	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	1	8	1	0.03333
248519003	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	1	8	1	0.03333
248519004	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	1	8	1	0.03332
248519005	18-MAR-2010 10:57:00	30.03	H2SO4/KMnI	1	1	8	1	0.0333
248519006	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	1	8	1	0.03332
248519007	18-MAR-2010 10:57:00	30.05	H2SO4/KMnI	1	1	8	1	0.03328
248519008	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	1	8	1	0.03333
248519009	18-MAR-2010 10:57:00	30.09	H2SO4/KMnI	1	1	8	1	0.03323
248519010	18-MAR-2010 10:57:00	30.02	H2SO4/KMnI	1	1	8	1	0.03331
248519011	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	1	8	1	0.03332
248526001	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	1	8	1	0.03332
1202073939 MS (248526001)	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	1	8	1	0.03333
1202073940 MSD (248526001)	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	1	8	1	0.03333

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202073938	PCB Laboratory Control	WEI00311-07	1	mL	Clean up Date: 03/18/2010
MS	1202073939	PCB Laboratory Control	WEI00311-07	1	mL	Clean up Initials: RWH
MSD	1202073940	PCB Laboratory Control	WEI00311-07	1	mL	Verified By: JAM
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UEI00310-16	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 Schwemin  
**Method:** SW846 3550B      **Lab SOP:** GL-OA-E-010 REV# 18  
**Instrument:** Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Clean/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			