Friday, February 05, 2010

REQUEST NUMBER: 10-1623

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-1623

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples

according to the schedule indicated:

SHIP DATE: 2/5/2010

TURNAROUND/REPORT DUE: 3/7/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8383	S	2/3/2010	
	SW-846:8270C	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	

Friday, February 05, 2010 REQUEST NUMBER: 10-1623

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:8321A_MOD	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	

Final Page of REQUEST NUMBER 10-1623

Friday, February 05, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1623

LOS ALAMOS

NATIONAL LABORATORY

REQUEST NUMBER: 10-1623

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/7/2010

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8383	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-8361	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8361	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8362	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8362	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8359	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8359	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8358	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8358	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8360	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8360	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
Printed Name	Signature	2/5/10	1400	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: 2507 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8358 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/03/2010	MEDIA:	QBT3	[redacted]
TIME COLLECTED (HH:MM)		1407	SUB-MEDIA:	TUFF 1	[redacted]
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610849	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.8	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	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	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	METALS+U-GEL	125 ML POLY	Ice	Y	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sand, Tuff fragments, few pine needles

FTB : RE15-10-8383

SAMPLE COMMENTS: NA

LOCATION DESC: 9c-11 drainage

FIELD SCREENING/MEASUREMENT RESULTS: HE negative

Alpha = 27 dpm
Beta/Gamma = 2100 dpm

PID Ambient Reading 0.0 / 1.0 ppm

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** R Saavedra

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/3/10	(Printed Name) [redacted]	2/3/10
(Signature) [signature]	1400	(Signature) [signature]	1400
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8359 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED (MM/DD/YYYY):		02/03/2010	MEDIA:	OBT3	Alb
TIME COLLECTED (HH:MM)		11:12	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610849	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

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	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	METALS+U-GEL	125 ML POLY	Ice	Y	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sand, tuff fragments

SAMPLE COMMENTS: NA

LOCATION DESC: 9c-11 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 11 dpm
Beta/Gamma ≤ 1945 dpm

PID Ambient Reading 0.0 / 0.3 ppm

COLLECTED BY (PRINT) TL McFarland **REVIEWED BY (PRINT)** R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	2/3/10 1400	(Printed Name) Nicole Martin	2/5/10 1400
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8360 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/03/2010	MEDIA:	QBT3	SED
TIME COLLECTED (HH:MM)		1123	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610850		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.4	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	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	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sand, tuff fragments

SAMPLE COMMENTS: NA

LOCATION DESC: 9c-12

FIELD SCREENING/MEASUREMENT RESULTS: HE neg

Alpha ≤ 22 dpm
Beta/Gamma ≤ 2310 dpm

PID Ambient Reading 0.0 / 0.0 ppm

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/3/10	(Printed Name)	2/3/10
(Signature)	1400	(Signature)	1400
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8361 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/03/2010	MEDIA:	QBT3	SED
TIME COLLECTED (HH:MM)		1133	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610850	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	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	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	METALS+U-GEL	125 ML POLY	Ice	Y	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: moist brown silty sand and clay, roots

SAMPLE COMMENTS: NA

LOCATION DESC: 9c-12

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 33 dpm
Beta/Gamma ≤ 2030 dpm

PID Ambient Reading 0.0 / 0.3 ppm

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	1400	(Printed Name)	2:00
(Signature)	2/3/10	(Signature)	2/3/10
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8362 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/03/2010	MEDIA:	QBT3	SED
TIME COLLECTED (HH:MM)		1150	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610851	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.7	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	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	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sand

SAMPLE COMMENTS: NA

LOCATION DESC: 9c-13

FIELD SCREENING/MEASUREMENT RESULTS: HE neg

Alpha ≤ 33 dpm
Beta/Gamma ≤ 2020 dpm

PID Ambient Reading 0.0 / 0.0 ppm

COLLECTED BY (PRINT) TLMcFarlan **REVIEWED BY (PRINT)** R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/3/10	(Printed Name)	2/3/10
(Signature)	1400	(Signature)	2:0
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8383 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/03/2010	MEDIA:	FILL	ok
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	SOIL	
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	15-610849	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NM

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
tjm 2/3/10 1 2	Normal	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE15-10-8358

SAMPLE COMMENTS:

FTB

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT) TL MCFarland **REVIEWED BY (PRINT)** R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	2/3/10	(Printed Name)	2/3/10
(Signature)	1400	(Signature)	2:10
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Rad Screening Data Release Form

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

RE15-10- 8358
8359
8360
8361
8362

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

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

RE15-10-8383

Reason: FTB

Print Last Name McFarland Signature _____ Date 2/3/10

Rad Screening Data Release Form

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

RE15-10- 8358
8359
8360
8361
8362

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

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

RE15-10-8383

Reason: FTB

Print Last Name McFarland Signature [signature] Date 2/3/10

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9524

ARS Sample Delivery Group: ARS2-10-00048
Client Sample ID: RE15-10-8358
Sample Collection Date: 02/03/10 11:07
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00048-001
Date Received: 02/04/10 00:00
Report Date: 02/05/10 13:53

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	87.60	42.46	32.50	43.80		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	73.39	19.36	18.18	21.34		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	21.58	6.68	1.19	6.71		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CO-60	0.00	7.82	0.08	7.82		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.09	0.08	0.06	0.08		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	0.00	0.02	0.05	0.02		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.54	0.50	0.09	0.51		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	0.61	0.32	0.13	0.32		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-226	1.50	0.66	0.21	0.65		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	1.30	0.61	0.28	0.62		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	5.36	3.42	1.18	3.63		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	0.01	0.08	0.05	0.08		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 1.64

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

ARS AMERICAN RADIATION SERVICES, INC.

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

ARS Sample Delivery Group: ARS2-10-00048
Client Sample ID: RE15-10-8359
Sample Collection Date: 02/03/10 11:12
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00048-002
Date Received: 02/04/10 00:00
Report Date: 02/05/10 13:53

Analysis Description	Analysis Results	Analysis Error +/- 2 σ	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/ Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	93.49	42.56	33.18	44.08		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	75.01	19.73	18.33	21.77		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.02	0.05	0.11	0.05		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	28.70	9.22	1.71	9.26		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CO-60	0.00	11.17	0.11	11.17		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.12	0.12	0.08	0.12		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	-0.01	34.69	0.08	34.69		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.48	0.48	0.13	0.48		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	1.18	0.49	0.16	0.49		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-228	0.69	0.44	0.41	0.44		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	1.01	0.83	0.33	0.83		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	1.46	2.79	1.35	2.81		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	0.01	0.05	0.06	0.05		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 0.67

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

AMERICAN RADIATION SERVICES, INC.
133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00048
Client Sample ID: RE15-10-8360
Sample Collection Date: 02/03/10 11:23
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00048-003
Date Received: 02/04/10 00:00
Report Date: 02/05/10 13:53

Analysis Description	Analysis Results	Analysis Error +/- 1 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	101.17	44.48	29.97	48.17		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	77.21	20.99	18.85	23.02		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	8.52	4.21	2.59	4.21		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CO-60	0.00	10.07	0.10	10.07		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.10	0.13	0.09	0.13		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	0.11	0.13	0.06	0.13		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.25	0.32	0.12	0.32		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	0.79	0.40	0.15	0.40		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-226	1.85	0.73	0.27	0.73		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	0.82	0.49	0.29	0.49		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	2.26	2.88	1.28	2.93		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	0.04	0.12	0.06	0.12		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 2.86

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

AMERICAN RADIATION SERVICES, INC.

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

ARS Sample Delivery Group:	ARS2-10-00048	**Request or PO Number:**	
Client Sample ID:	RE15-10-8361	**ARS Sample ID:**	ARS2-10-00048-004
Sample Collection Date:	02/03/10 11:33	**Date Received:**	02/04/10 00:00
Sample Matrix:	Soil/Solid	**Report Date:**	02/05/10 13:53

Analysis Description	Analysis Results	Analysis Error +/- 2 σ	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	140.05	51.04	31.64	53.84		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	84.56	21.14	18.11	23.54		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	1.52	5.37	3.04	5.37		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CO-60	0.00	11.21	0.11	11.21		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.11	0.10	0.08	0.10		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	0.46	0.29	0.07	0.29		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.00	11.66	0.13	11.66		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	1.22	0.49	0.15	0.49		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-228	2.67	0.99	0.30	1.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	1.59	1.23	0.41	1.23		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	4.01	3.80	1.87	3.91		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	0.04	0.17	0.10	0.17		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 1.83

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

AMERICAN RADIATION SERVICES, INC.

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

ARS Sample Delivery Group: ARS2-10-00048
Client Sample ID: RE15-10-8362
Sample Collection Date: 02/03/10 11:50
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00048-005
Date Received: 02/04/10 00:00
Report Date: 02/05/10 13:53

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	82.67	41.33	32.80	42.55		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	66.92	18.73	18.18	20.44		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	26.15	8.51	1.59	8.55		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CO 60	0.00	10.43	0.11	10.43		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	0.27	0.21	0.07	0.21		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.15	0.30	0.14	0.30		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	0.60	0.36	0.14	0.36		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-226	0.41	0.27	0.11	0.27		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	0.25	0.61	0.46	0.61		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	3.48	3.27	1.30	3.36		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	0.20	0.24	0.10	0.24		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 1.98

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

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-1623 VALIDATION DATE: 3/31/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories, LLC

VALIDATOR: Charissa Lewis ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	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. In the FTB, sample RE15-10-8383, associated with samples -8358 and -8359, acetone was detected. The acetone result for sample -8359 was a detect ≤10X the FTB concentration and, thus, was qualified U,V4d. The acetone result for sample -8358 was an ND and, thus, was not qualified.
2. For the CCV associated with all samples *except* -8361, the %Ds were >20% for dichlorodifluoromethane, trichlorofluoromethane and carbon tetrachloride. For the CCV associated with sample -8361, the %D was >20% for trichlorotrifluoroethane. The associated sample results were NDs and, thus, were qualified UJ,V7c.
3. For the LCS associated with sample -8361, the %R was > the laboratory UAL for trichlorotrifluoroethane. The associated sample result was an ND and, thus, was not qualified.
4. It should be noted that the MS/MSD was not spiked with trichlorotrifluoroethane. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 4/1/10

VALIDATOR'S SIGNATURE: Charissa Lewis DATE: 3/31/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes (Check One)	No (Check One)	N/A (Check One)		Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	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	
5114-2 **Volatile Organic Compound (VOC) Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	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
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	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
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	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
☐	☐	☒	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
☐	☐	☒	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

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	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
☒	☐	☐	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	
5114-2 **Volatile Organic Compound (VOC) Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	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
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	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
☐	☒	☐	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:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:14**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x620.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.407	1.20	UJ,V7c
74-87-3	Chloromethane	U	1.20	ug/kg	0.359	1.20	
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.359	1.20	
74-83-9	Bromomethane	U	1.20	ug/kg	0.359	1.20	
75-00-3	Chloroethane	U	1.20	ug/kg	0.359	1.20	
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.359	1.20	UJ,V7c
67-64-1	Acetone	U	5.99	ug/kg	1.99	5.99	
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.359	1.20	
74-88-4	Iodomethane	U	5.99	ug/kg	1.92	5.99	
75-09-2	Methylene chloride	U	5.99	ug/kg	2.39	5.99	
75-15-0	Carbon disulfide	U	5.99	ug/kg	1.50	5.99	
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20	
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.359	1.20	
78-93-3	2-Butanone	U	5.99	ug/kg	1.80	5.99	
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20	
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20	
67-66-3	Chloroform	U	1.20	ug/kg	0.359	1.20	
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.395	1.20	
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.359	1.20	
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.359	1.20	
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.359	1.20	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.359	1.20	
71-43-2	Benzene	U	1.20	ug/kg	0.359	1.20	
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.395	1.20	
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20	
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.359	1.20	
74-95-3	Dibromomethane	U	1.20	ug/kg	0.359	1.20	
108-10-1	4-Methyl-2-pentanone	U	5.99	ug/kg	1.50	5.99	
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20	
108-88-3	Toluene	U	1.20	ug/kg	0.359	1.20	
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20	
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.359	1.20	
591-78-6	2-Hexanone	U	5.99	ug/kg	1.80	5.99	
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.359	1.20	
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.359	1.20	
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.359	1.20	
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.359	1.20	
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.359	1.20	

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:14**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x620.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.359	1.20
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.359	2.39
95-47-6	o-Xylene	U	1.20	ug/kg	0.359	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.359	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.359	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.359	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.359	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.359	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.359	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.359	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.359	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.359	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.359	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.359	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.99	ug/kg	1.92	5.99
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	6.24	ug/kg		J

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x619.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07	UJ,V7c
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07	
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07	UJ,V7c
67-64-1	Acetone	J	3.52	ug/kg	1.78	5.37	U,V4d
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
74-88-4	Iodomethane	U	5.37	ug/kg	1.72	5.37	
75-09-2	Methylene chloride	U	5.37	ug/kg	2.15	5.37	
75-15-0	Carbon disulfide	U	5.37	ug/kg	1.34	5.37	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
78-93-3	2-Butanone	U	5.37	ug/kg	1.61	5.37	
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.354	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07	
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.354	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.37	ug/kg	1.34	5.37	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
108-88-3	Toluene	J	0.328	ug/kg	0.322	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07	
591-78-6	2-Hexanone	U	5.37	ug/kg	1.61	5.37	
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07	

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x619.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.37	ug/kg	1.72	5.37
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.82	24.3	ug/kg	90	NJ

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:17**	**Allquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x621.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.38	ug/kg	0.468	1.38	UJ,V7c
74-87-3	Chloromethane	U	1.38	ug/kg	0.413	1.38	
75-01-4	Vinyl chloride	U	1.38	ug/kg	0.413	1.38	
74-83-9	Bromomethane	U	1.38	ug/kg	0.413	1.38	
75-00-3	Chloroethane	U	1.38	ug/kg	0.413	1.38	
75-69-4	Trichlorofluoromethane	U	1.38	ug/kg	0.413	1.38	UJ,V7c
67-64-1	Acetone	U	6.89	ug/kg	2.29	6.89	
75-35-4	1,1-Dichloroethylene	U	1.38	ug/kg	0.413	1.38	
74-88-4	Iodomethane	U	6.89	ug/kg	2.20	6.89	
75-09-2	Methylene chloride	U	6.89	ug/kg	2.76	6.89	
75-15-0	Carbon disulfide	U	6.89	ug/kg	1.72	6.89	
156-60-5	trans-1,2-Dichloroethylene	U	1.38	ug/kg	0.413	1.38	
75-34-3	1,1-Dichloroethane	U	1.38	ug/kg	0.413	1.38	
78-93-3	2-Butanone	U	6.89	ug/kg	2.07	6.89	
156-59-2	cis-1,2-Dichloroethylene	U	1.38	ug/kg	0.413	1.38	
594-20-7	2,2-Dichloropropane	U	1.38	ug/kg	0.413	1.38	
67-66-3	Chloroform	U	1.38	ug/kg	0.413	1.38	
74-97-5	Bromochloromethane	U	1.38	ug/kg	0.455	1.38	
71-55-6	1,1,1-Trichloroethane	U	1.38	ug/kg	0.413	1.38	
563-58-6	1,1-Dichloropropene	U	1.38	ug/kg	0.413	1.38	
56-23-5	Carbon tetrachloride	U	1.38	ug/kg	0.413	1.38	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.38	ug/kg	0.413	1.38	
71-43-2	Benzene	U	1.38	ug/kg	0.413	1.38	
79-01-6	Trichloroethylene	U	1.38	ug/kg	0.455	1.38	
78-87-5	1,2-Dichloropropane	U	1.38	ug/kg	0.413	1.38	
75-27-4	Bromodichloromethane	U	1.38	ug/kg	0.413	1.38	
74-95-3	Dibromomethane	U	1.38	ug/kg	0.413	1.38	
108-10-1	4-Methyl-2-pentanone	U	6.89	ug/kg	1.72	6.89	
10061-01-5	cis-1,3-Dichloropropylene	U	1.38	ug/kg	0.413	1.38	
108-88-3	Toluene	U	1.38	ug/kg	0.413	1.38	
10061-02-6	trans-1,3-Dichloropropylene	U	1.38	ug/kg	0.413	1.38	
79-00-5	1,1,2-Trichloroethane	U	1.38	ug/kg	0.413	1.38	
591-78-6	2-Hexanone	U	6.89	ug/kg	2.07	6.89	
142-28-9	1,3-Dichloropropane	U	1.38	ug/kg	0.413	1.38	
127-18-4	Tetrachloroethylene	U	1.38	ug/kg	0.413	1.38	
124-48-1	Dibromochloromethane	U	1.38	ug/kg	0.413	1.38	
106-93-4	1,2-Dibromoethane	U	1.38	ug/kg	0.413	1.38	
108-90-7	Chlorobenzene	U	1.38	ug/kg	0.413	1.38	

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x621.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.38	ug/kg	0.413	1.38
179601-23-1	m,p-Xylenes	U	2.76	ug/kg	0.413	2.76
95-47-6	o-Xylene	U	1.38	ug/kg	0.413	1.38
100-42-5	Styrene	U	1.38	ug/kg	0.413	1.38
75-25-2	Bromoform	U	1.38	ug/kg	0.413	1.38
79-34-5	1,1,2,2-Tetrachloroethane	U	1.38	ug/kg	0.413	1.38
96-18-4	1,2,3-Trichloropropane	U	1.38	ug/kg	0.413	1.38
108-86-1	Bromobenzene	U	1.38	ug/kg	0.413	1.38
103-65-1	n-Propylbenzene	U	1.38	ug/kg	0.413	1.38
95-49-8	2-Chlorotoluene	U	1.38	ug/kg	0.413	1.38
98-82-8	Isopropylbenzene	U	1.38	ug/kg	0.413	1.38
108-67-8	1,3,5-Trimethylbenzene	U	1.38	ug/kg	0.413	1.38
106-43-4	4-Chlorotoluene	U	1.38	ug/kg	0.413	1.38
98-06-6	tert-Butylbenzene	U	1.38	ug/kg	0.413	1.38
95-63-6	1,2,4-Trimethylbenzene	U	1.38	ug/kg	0.413	1.38
135-98-8	sec-Butylbenzene	U	1.38	ug/kg	0.413	1.38
99-87-6	4-Isopropyltoluene	U	1.38	ug/kg	0.413	1.38
541-73-1	1,3-Dichlorobenzene	U	1.38	ug/kg	0.413	1.38
106-46-7	1,4-Dichlorobenzene	U	1.38	ug/kg	0.413	1.38
104-51-8	n-Butylbenzene	U	1.38	ug/kg	0.413	1.38
96-12-8	1,2-Dibromo-3-chloropropane	U	1.38	ug/kg	0.413	1.38
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.89	ug/kg	2.20	6.89
630-20-6	1,1,1,2-Tetrachloroethane	U	1.38	ug/kg	0.413	1.38
95-50-1	1,2-Dichlorobenzene	U	1.38	ug/kg	0.413	1.38

Tentatively Identified Compound Summary

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

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 22:13**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 21:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y109.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.22	ug/kg	0.415	1.22
74-87-3	Chloromethane	U	1.22	ug/kg	0.366	1.22
75-01-4	Vinyl chloride	U	1.22	ug/kg	0.366	1.22
74-83-9	Bromomethane	U	1.22	ug/kg	0.366	1.22
75-00-3	Chloroethane	U	1.22	ug/kg	0.366	1.22
75-69-4	Trichlorofluoromethane	U	1.22	ug/kg	0.366	1.22
67-64-1	Acetone	U	6.10	ug/kg	2.03	6.10
75-35-4	1,1-Dichloroethylene	U	1.22	ug/kg	0.366	1.22
74-88-4	Iodomethane	U	6.10	ug/kg	1.95	6.10
75-09-2	Methylene chloride	U	6.10	ug/kg	2.44	6.10
75-15-0	Carbon disulfide	U	6.10	ug/kg	1.53	6.10
156-60-5	trans-1,2-Dichloroethylene	U	1.22	ug/kg	0.366	1.22
75-34-3	1,1-Dichloroethane	U	1.22	ug/kg	0.366	1.22
78-93-3	2-Butanone	U	6.10	ug/kg	1.83	6.10
156-59-2	cis-1,2-Dichloroethylene	U	1.22	ug/kg	0.366	1.22
594-20-7	2,2-Dichloropropane	U	1.22	ug/kg	0.366	1.22
67-66-3	Chloroform	U	1.22	ug/kg	0.366	1.22
74-97-5	Bromochloromethane	U	1.22	ug/kg	0.403	1.22
71-55-6	1,1,1-Trichloroethane	U	1.22	ug/kg	0.366	1.22
563-58-6	1,1-Dichloropropene	U	1.22	ug/kg	0.366	1.22
56-23-5	Carbon tetrachloride	U	1.22	ug/kg	0.366	1.22
107-06-2	1,2-Dichloroethane	U	1.22	ug/kg	0.366	1.22
71-43-2	Benzene	U	1.22	ug/kg	0.366	1.22
79-01-6	Trichloroethylene	U	1.22	ug/kg	0.403	1.22
78-87-5	1,2-Dichloropropane	U	1.22	ug/kg	0.366	1.22
75-27-4	Bromodichloromethane	U	1.22	ug/kg	0.366	1.22
74-95-3	Dibromomethane	U	1.22	ug/kg	0.366	1.22
108-10-1	4-Methyl-2-pentanone	U	6.10	ug/kg	1.53	6.10
10061-01-5	cis-1,3-Dichloropropylene	U	1.22	ug/kg	0.366	1.22
108-88-3	Toluene	J	0.393	ug/kg	0.366	1.22
10061-02-6	trans-1,3-Dichloropropylene	U	1.22	ug/kg	0.366	1.22
79-00-5	1,1,2-Trichloroethane	U	1.22	ug/kg	0.366	1.22
591-78-6	2-Hexanone	U	6.10	ug/kg	1.83	6.10
142-28-9	1,3-Dichloropropane	U	1.22	ug/kg	0.366	1.22
127-18-4	Tetrachloroethylene	U	1.22	ug/kg	0.366	1.22
124-48-1	Dibromochloromethane	U	1.22	ug/kg	0.366	1.22
106-93-4	1,2-Dibromoethane	U	1.22	ug/kg	0.366	1.22
108-90-7	Chlorobenzene	U	1.22	ug/kg	0.366	1.22

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 22:13**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 21:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y109.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.22	ug/kg	0.366	1.22	
179601-23-1	m,p-Xylenes	U	2.44	ug/kg	0.366	2.44	
95-47-6	o-Xylene	U	1.22	ug/kg	0.366	1.22	
100-42-5	Styrene	U	1.22	ug/kg	0.366	1.22	
75-25-2	Bromoform	U	1.22	ug/kg	0.366	1.22	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.22	ug/kg	0.366	1.22	
96-18-4	1,2,3-Trichloropropane	U	1.22	ug/kg	0.366	1.22	
108-86-1	Bromobenzene	U	1.22	ug/kg	0.366	1.22	
103-65-1	n-Propylbenzene	U	1.22	ug/kg	0.366	1.22	
95-49-8	2-Chlorotoluene	U	1.22	ug/kg	0.366	1.22	
98-82-8	Isopropylbenzene	U	1.22	ug/kg	0.366	1.22	
108-67-8	1,3,5-Trimethylbenzene	U	1.22	ug/kg	0.366	1.22	
106-43-4	4-Chlorotoluene	U	1.22	ug/kg	0.366	1.22	
98-06-6	tert-Butylbenzene	U	1.22	ug/kg	0.366	1.22	
95-63-6	1,2,4-Trimethylbenzene	U	1.22	ug/kg	0.366	1.22	
135-98-8	sec-Butylbenzene	U	1.22	ug/kg	0.366	1.22	
99-87-6	4-Isopropyltoluene	U	1.22	ug/kg	0.366	1.22	
541-73-1	1,3-Dichlorobenzene	U	1.22	ug/kg	0.366	1.22	
106-46-7	1,4-Dichlorobenzene	U	1.22	ug/kg	0.366	1.22	
104-51-8	n-Butylbenzene	U	1.22	ug/kg	0.366	1.22	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.22	ug/kg	0.366	1.22	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.10	ug/kg	1.95	6.10	UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.22	ug/kg	0.366	1.22	
95-50-1	1,2-Dichlorobenzene	U	1.22	ug/kg	0.366	1.22	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	14.1	ug/kg	90	NJ

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x618.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.33	ug/kg	0.454	1.33	UJ,V7c
74-87-3	Chloromethane	U	1.33	ug/kg	0.400	1.33	
75-01-4	Vinyl chloride	U	1.33	ug/kg	0.400	1.33	
74-83-9	Bromomethane	U	1.33	ug/kg	0.400	1.33	
75-00-3	Chloroethane	U	1.33	ug/kg	0.400	1.33	
75-69-4	Trichlorofluoromethane	U	1.33	ug/kg	0.400	1.33	UJ,V7c
67-64-1	Acetone		52.7	ug/kg	2.21	6.67	
75-35-4	1,1-Dichloroethylene	U	1.33	ug/kg	0.400	1.33	
74-88-4	Iodomethane	U	6.67	ug/kg	2.13	6.67	
75-09-2	Methylene chloride	U	6.67	ug/kg	2.67	6.67	
75-15-0	Carbon disulfide	U	6.67	ug/kg	1.67	6.67	
156-60-5	trans-1,2-Dichloroethylene	U	1.33	ug/kg	0.400	1.33	
75-34-3	1,1-Dichloroethane	U	1.33	ug/kg	0.400	1.33	
78-93-3	2-Butanone	U	6.67	ug/kg	2.00	6.67	
156-59-2	cis-1,2-Dichloroethylene	U	1.33	ug/kg	0.400	1.33	
594-20-7	2,2-Dichloropropane	U	1.33	ug/kg	0.400	1.33	
67-66-3	Chloroform	U	1.33	ug/kg	0.400	1.33	
74-97-5	Bromochloromethane	U	1.33	ug/kg	0.440	1.33	
71-55-6	1,1,1-Trichloroethane	U	1.33	ug/kg	0.400	1.33	
563-58-6	1,1-Dichloropropene	U	1.33	ug/kg	0.400	1.33	
56-23-5	Carbon tetrachloride	U	1.33	ug/kg	0.400	1.33	UJ,V7c
107-06-2	1,2-Dichloroethane	U	1.33	ug/kg	0.400	1.33	
71-43-2	Benzene	U	1.33	ug/kg	0.400	1.33	
79-01-6	Trichloroethylene	U	1.33	ug/kg	0.440	1.33	
78-87-5	1,2-Dichloropropane	U	1.33	ug/kg	0.400	1.33	
75-27-4	Bromodichloromethane	U	1.33	ug/kg	0.400	1.33	
74-95-3	Dibromomethane	U	1.33	ug/kg	0.400	1.33	
108-10-1	4-Methyl-2-pentanone	U	6.67	ug/kg	1.67	6.67	
10061-01-5	cis-1,3-Dichloropropylene	U	1.33	ug/kg	0.400	1.33	
108-88-3	Toluene		12.2	ug/kg	0.400	1.33	
10061-02-6	trans-1,3-Dichloropropylene	U	1.33	ug/kg	0.400	1.33	
79-00-5	1,1,2-Trichloroethane	U	1.33	ug/kg	0.400	1.33	
591-78-6	2-Hexanone	U	6.67	ug/kg	2.00	6.67	
142-28-9	1,3-Dichloropropane	U	1.33	ug/kg	0.400	1.33	
127-18-4	Tetrachloroethylene	U	1.33	ug/kg	0.400	1.33	
124-48-1	Dibromochloromethane	U	1.33	ug/kg	0.400	1.33	
106-93-4	1,2-Dibromoethane	U	1.33	ug/kg	0.400	1.33	
108-90-7	Chlorobenzene	U	1.33	ug/kg	0.400	1.33	

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x618.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.33	ug/kg	0.400	1.33
179601-23-1	m,p-Xylenes	J	0.572	ug/kg	0.400	2.67
95-47-6	o-Xylene	U	1.33	ug/kg	0.400	1.33
100-42-5	Styrene	U	1.33	ug/kg	0.400	1.33
75-25-2	Bromoform	U	1.33	ug/kg	0.400	1.33
79-34-5	1,1,2,2-Tetrachloroethane	U	1.33	ug/kg	0.400	1.33
96-18-4	1,2,3-Trichloropropane	U	1.33	ug/kg	0.400	1.33
108-86-1	Bromobenzene	U	1.33	ug/kg	0.400	1.33
103-65-1	n-Propylbenzene	U	1.33	ug/kg	0.400	1.33
95-49-8	2-Chlorotoluene	U	1.33	ug/kg	0.400	1.33
98-82-8	Isopropylbenzene	U	1.33	ug/kg	0.400	1.33
108-67-8	1,3,5-Trimethylbenzene	U	1.33	ug/kg	0.400	1.33
106-43-4	4-Chlorotoluene	U	1.33	ug/kg	0.400	1.33
98-06-6	tert-Butylbenzene	U	1.33	ug/kg	0.400	1.33
95-63-6	1,2,4-Trimethylbenzene	J	0.490	ug/kg	0.400	1.33
135-98-8	sec-Butylbenzene	U	1.33	ug/kg	0.400	1.33
99-87-6	4-Isopropyltoluene		4.28	ug/kg	0.400	1.33
541-73-1	1,3-Dichlorobenzene	U	1.33	ug/kg	0.400	1.33
106-46-7	1,4-Dichlorobenzene	U	1.33	ug/kg	0.400	1.33
104-51-8	n-Butylbenzene	U	1.33	ug/kg	0.400	1.33
96-12-8	1,2-Dibromo-3-chloropropane	U	1.33	ug/kg	0.400	1.33
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.67	ug/kg	2.13	6.67
630-20-6	1,1,1,2-Tetrachloroethane	U	1.33	ug/kg	0.400	1.33
95-50-1	1,2-Dichlorobenzene	U	1.33	ug/kg	0.400	1.33

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	4.5	7.73	ug/kg		J
64-17-5	Ethyl alcohol	6.76	27.8	ug/kg	83	NJ
7785-70-8	1R-.alpha.-Pinene	14.79	190	ug/kg	96	NJ
79-92-5	Camphene	15.11	7.9	ug/kg	97	NJ
123-35-3	.beta.-Myrcene	15.3	7.01	ug/kg	91	NJ
535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	15.41	18.5	ug/kg	94	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	15.5	41.5	ug/kg	97	NJ
13466-78-9	3-Carene	15.8	194	ug/kg	96	NJ
1120-21-4	Undecane	16.47	9.65	ug/kg	97	NJ
	Unknown Siloxane	16.78	10.1	ug/kg		J

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x618.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Substituted Benzene	16.95	6.76	ug/kg		J

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**S**
Lab Sample ID:	**246442001**	**Date Received:**	**02/06/2010 09:15**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8383**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 15:46**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x608.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	UJ,V7c
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	J	1.98	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	UJ,V7c
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	

CLL
3/31/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**S**
Lab Sample ID:	**246442001**	**Date Received:**	**02/06/2010 09:15**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8383**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 15:46**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x608.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-Trifluoroetha *Trichlorotrifluoroethane*	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)	Estimated RT	Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/kg		

CLL
3/31/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST.1943

Section I.

REQUEST NUMBER: 10-1623 VALIDATION DATE: 4/1/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories, LLC

VALIDATOR: Charissa Lewis ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	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. For the ICV associated with all samples, the %Ds were >20% for pyridine and 2-methyl-4,6-dinitrophenol. For the CCV associated with sample RE15-10-8359, the %Ds were >20% for bis(2-chloroethyl)ether; bis(2-chloroisopropyl)ether and N-nitrosodipropylamine. The associated sample results were NDs and, thus, were qualified UJ,SV7c.

Reviewed by: ETM Level: 1 Date: 4/1/10

VALIDATOR'S SIGNATURE: Charissa Lewis DATE: 4/1/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes (Check One)	No (Check One)	N/A (Check One)		Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	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 contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	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
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	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
☐	☐	☒	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	
5115-2 **Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	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
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	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
☐	☒	☐	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☒	☐	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
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	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
☐	☒	☐	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:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2024.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	397	ug/kg	79.4	397	
108-95-2	Phenol	U	397	ug/kg	79.4	397	
95-57-8	2-Chlorophenol	U	397	ug/kg	79.4	397	
106-46-7	1,4-Dichlorobenzene	U	397	ug/kg	79.4	397	
621-64-7	N-Nitrosodipropylamine	U	397	ug/kg	79.4	397	
59-50-7	4-Chloro-3-methylphenol	U	397	ug/kg	79.4	397	
83-32-9	Acenaphthene	U	39.7	ug/kg	13.1	39.7	
121-14-2	2,4-Dinitrotoluene	U	397	ug/kg	39.7	397	
100-02-7	4-Nitrophenol	U	397	ug/kg	131	397	
87-86-5	Pentachlorophenol	U	397	ug/kg	99.3	397	
129-00-0	Pyrene	U	39.7	ug/kg	11.9	39.7	
110-86-1	Pyridine	U	397	ug/kg	79.4	397	UJ,SV7c
62-53-3	Aniline	U	397	ug/kg	119	397	
111-44-4	bis(2-Chloroethyl) ether	U	397	ug/kg	79.4	397	
541-73-1	1,3-Dichlorobenzene	U	397	ug/kg	79.4	397	
100-51-6	Benzyl alcohol	U	397	ug/kg	119	397	
95-50-1	1,2-Dichlorobenzene	U	397	ug/kg	79.4	397	
108-60-1	bis(2-Chloroisopropyl)ether	U	397	ug/kg	79.4	397	
95-48-7	o-Cresol	U	397	ug/kg	79.4	397	
65794-96-9	m,p-Cresols	U	397	ug/kg	119	397	
67-72-1	Hexachloroethane	U	397	ug/kg	79.4	397	
98-95-3	Nitrobenzene	U	397	ug/kg	79.4	397	
78-59-1	Isophorone	U	397	ug/kg	79.4	397	
88-75-5	2-Nitrophenol	U	397	ug/kg	79.4	397	
105-67-9	2,4-Dimethylphenol	U	397	ug/kg	139	397	
111-91-1	bis(2-Chloroethoxy)methane	U	397	ug/kg	79.4	397	
120-83-2	2,4-Dichlorophenol	U	397	ug/kg	79.4	397	
65-85-0	Benzoic acid	U	794	ug/kg	199	794	
91-20-3	Naphthalene	U	39.7	ug/kg	11.9	39.7	
106-47-8	4-Chloroaniline	U	397	ug/kg	79.4	397	
87-68-3	Hexachlorobutadiene	U	397	ug/kg	79.4	397	
91-57-6	2-Methylnaphthalene	U	39.7	ug/kg	7.94	39.7	
77-47-4	Hexachlorocyclopentadiene	U	397	ug/kg	79.4	397	
88-06-2	2,4,6-Trichlorophenol	U	397	ug/kg	79.4	397	
95-95-4	2,4,5-Trichlorophenol	U	397	ug/kg	79.4	397	
91-58-7	2-Chloronaphthalene	U	39.7	ug/kg	13.1	39.7	
88-74-4	2-Nitroaniline	U	397	ug/kg	79.4	397	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	397	ug/kg	79.4	397	

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2024.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	397	ug/kg	79.4	397	
606-20-2	2,6-Dinitrotoluene	U	397	ug/kg	39.7	397	
208-96-8	Acenaphthylene	U	39.7	ug/kg	11.9	39.7	
51-28-5	2,4-Dinitrophenol	U	794	ug/kg	151	794	
132-64-9	Dibenzofuran	U	397	ug/kg	79.4	397	
84-66-2	Diethylphthalate	U	397	ug/kg	79.4	397	
86-73-7	Fluorene	U	39.7	ug/kg	11.9	39.7	
7005-72-3	4-Chlorophenylphenylether	U	397	ug/kg	79.4	397	
534-52-1	2-Methyl-4,6-dinitrophenol	U	397	ug/kg	79.4	397	UJ,SV7c
100-01-6	4-Nitroaniline	U	397	ug/kg	119	397	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	397	ug/kg	79.4	397	
122-66-7	Azobenzene	U	397	ug/kg	79.4	397	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	397	ug/kg	79.4	397	
118-74-1	Hexachlorobenzene	U	397	ug/kg	79.4	397	
85-01-8	Phenanthrene	U	39.7	ug/kg	11.9	39.7	
120-12-7	Anthracene	U	39.7	ug/kg	7.94	39.7	
84-74-2	Di-n-butylphthalate	U	397	ug/kg	79.4	397	
206-44-0	Fluoranthene	U	39.7	ug/kg	11.9	39.7	
85-68-7	Butylbenzylphthalate	U	397	ug/kg	79.4	397	
56-55-3	Benzo(a)anthracene	U	39.7	ug/kg	11.9	39.7	
91-94-1	3,3'-Dichlorobenzidine	U	397	ug/kg	119	397	
218-01-9	Chrysene	U	39.7	ug/kg	11.9	39.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	397	ug/kg	79.4	397	
117-84-0	Di-n-octylphthalate	U	397	ug/kg	79.4	397	
205-99-2	Benzo(b)fluoranthene	U	39.7	ug/kg	11.9	39.7	
207-08-9	Benzo(k)fluoranthene	U	39.7	ug/kg	11.9	39.7	
50-32-8	Benzo(a)pyrene	U	39.7	ug/kg	11.9	39.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.7	ug/kg	11.9	39.7	
53-70-3	Dibenzo(a,h)anthracene	U	39.7	ug/kg	11.9	39.7	
191-24-2	Benzo(ghi)perylene	U	39.7	ug/kg	11.9	39.7	
120-82-1	1,2,4-Trichlorobenzene	U	397	ug/kg	79.4	397	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.1	327	ug/kg		J
	Unknown Aldol Condensate	2.97	399	ug/kg		J

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2024.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.6	164	ug/kg		J
	Unknown	10.35	237	ug/kg		J
	Unknown	10.85	182	ug/kg		J
	Unknown	12.16	242	ug/kg		J
	Unknown	13.97	198	ug/kg		J
	Unknown	14.07	261	ug/kg		J
20475-86-9	Urs-12-en-24-oic acid, 3-oxo-, methyl es	14.5	374	ug/kg	99	NJ

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/21/2010 12:24**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2108.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	357	ug/kg	71.4	357	
108-95-2	Phenol	U	357	ug/kg	71.4	357	
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357	
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357	
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357	UJ,SV7c
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357	
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7	
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357	
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357	
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357	
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7	
110-86-1	Pyridine	U	357	ug/kg	71.4	357	UJ,SV7c
62-53-3	Aniline	U	357	ug/kg	107	357	
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357	UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357	
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357	
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357	
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357	UJ,SV7c
95-48-7	o-Cresol	U	357	ug/kg	71.4	357	
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357	
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357	
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357	
78-59-1	Isophorone	U	357	ug/kg	71.4	357	
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357	
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357	
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357	
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357	
65-85-0	Benzoic acid	U	714	ug/kg	178	714	
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7	
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357	
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357	
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7	
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357	
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357	
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357	
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7	
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	357	ug/kg	71.4	357	

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/21/2010 12:24**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2108.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	357	ug/kg	71.4	357	
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357	
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7	
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714	
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357	
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357	
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7	
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357	
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357	UJ,SV7c
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357	
122-66-7	Azobenzene	U	357	ug/kg	71.4	357	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357	
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357	
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7	
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7	
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.4	357	
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7	
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357	
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7	
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357	
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357	
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357	
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7	
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7	
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7	
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7	
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7	
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.05	798	ug/kg		J
	Unknown Aldol Condensate	2.93	457	ug/kg		J

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/21/2010 12:24**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2108.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.75	219	ug/kg	99	NJ
	Unknown	12.07	213	ug/kg		J

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2025.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	457	ug/kg	91.5	457	
108-95-2	Phenol	U	457	ug/kg	91.5	457	
95-57-8	2-Chlorophenol	U	457	ug/kg	91.5	457	
106-46-7	1,4-Dichlorobenzene	U	457	ug/kg	91.5	457	
621-64-7	N-Nitrosodipropylamine	U	457	ug/kg	91.5	457	
59-50-7	4-Chloro-3-methylphenol	U	457	ug/kg	91.5	457	
83-32-9	Acenaphthene	U	45.7	ug/kg	15.1	45.7	
121-14-2	2,4-Dinitrotoluene	U	457	ug/kg	45.7	457	
100-02-7	4-Nitrophenol	U	457	ug/kg	151	457	
87-86-5	Pentachlorophenol	U	457	ug/kg	114	457	
129-00-0	Pyrene	U	45.7	ug/kg	13.7	45.7	
110-86-1	Pyridine	U	457	ug/kg	91.5	457	UJ,SV7c
62-53-3	Aniline	U	457	ug/kg	137	457	
111-44-4	bis(2-Chloroethyl) ether	U	457	ug/kg	91.5	457	
541-73-1	1,3-Dichlorobenzene	U	457	ug/kg	91.5	457	
100-51-6	Benzyl alcohol	U	457	ug/kg	137	457	
95-50-1	1,2-Dichlorobenzene	U	457	ug/kg	91.5	457	
108-60-1	bis(2-Chloroisopropyl)ether	U	457	ug/kg	91.5	457	
95-48-7	o-Cresol	U	457	ug/kg	91.5	457	
65794-96-9	m,p-Cresols	U	457	ug/kg	137	457	
67-72-1	Hexachloroethane	U	457	ug/kg	91.5	457	
98-95-3	Nitrobenzene	U	457	ug/kg	91.5	457	
78-59-1	Isophorone	U	457	ug/kg	91.5	457	
88-75-5	2-Nitrophenol	U	457	ug/kg	91.5	457	
105-67-9	2,4-Dimethylphenol	U	457	ug/kg	160	457	
111-91-1	bis(2-Chloroethoxy)methane	U	457	ug/kg	91.5	457	
120-83-2	2,4-Dichlorophenol	U	457	ug/kg	91.5	457	
65-85-0	Benzoic acid	U	915	ug/kg	229	915	
91-20-3	Naphthalene	U	45.7	ug/kg	13.7	45.7	
106-47-8	4-Chloroaniline	U	457	ug/kg	91.5	457	
87-68-3	Hexachlorobutadiene	U	457	ug/kg	91.5	457	
91-57-6	2-Methylnaphthalene	U	45.7	ug/kg	9.15	45.7	
77-47-4	Hexachlorocyclopentadiene	U	457	ug/kg	91.5	457	
88-06-2	2,4,6-Trichlorophenol	U	457	ug/kg	91.5	457	
95-95-4	2,4,5-Trichlorophenol	U	457	ug/kg	91.5	457	
91-58-7	2-Chloronaphthalene	U	45.7	ug/kg	15.1	45.7	
88-74-4	2-Nitroaniline	U	457	ug/kg	91.5	457	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	457	ug/kg	91.5	457	

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2025.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	457	ug/kg	91.5	457	
606-20-2	2,6-Dinitrotoluene	U	457	ug/kg	45.7	457	
208-96-8	Acenaphthylene	U	45.7	ug/kg	13.7	45.7	
51-28-5	2,4-Dinitrophenol	U	915	ug/kg	174	915	
132-64-9	Dibenzofuran	U	457	ug/kg	91.5	457	
84-66-2	Diethylphthalate	U	457	ug/kg	91.5	457	
86-73-7	Fluorene	U	45.7	ug/kg	13.7	45.7	
7005-72-3	4-Chlorophenylphenylether	U	457	ug/kg	91.5	457	
534-52-1	2-Methyl-4,6-dinitrophenol	U	457	ug/kg	91.5	457	UJ,SV7c
100-01-6	4-Nitroaniline	U	457	ug/kg	137	457	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	457	ug/kg	91.5	457	
122-66-7	Azobenzene	U	457	ug/kg	91.5	457	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	457	ug/kg	91.5	457	
118-74-1	Hexachlorobenzene	U	457	ug/kg	91.5	457	
85-01-8	Phenanthrene	U	45.7	ug/kg	13.7	45.7	
120-12-7	Anthracene	U	45.7	ug/kg	9.15	45.7	
84-74-2	Di-n-butylphthalate	U	457	ug/kg	91.5	457	
206-44-0	Fluoranthene	U	45.7	ug/kg	13.7	45.7	
85-68-7	Butylbenzylphthalate	U	457	ug/kg	91.5	457	
56-55-3	Benzo(a)anthracene	U	45.7	ug/kg	13.7	45.7	
91-94-1	3,3'-Dichlorobenzidine	U	457	ug/kg	137	457	
218-01-9	Chrysene	U	45.7	ug/kg	13.7	45.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	457	ug/kg	91.5	457	
117-84-0	Di-n-octylphthalate	U	457	ug/kg	91.5	457	
205-99-2	Benzo(b)fluoranthene	U	45.7	ug/kg	13.7	45.7	
207-08-9	Benzo(k)fluoranthene	U	45.7	ug/kg	13.7	45.7	
50-32-8	Benzo(a)pyrene	U	45.7	ug/kg	13.7	45.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.7	ug/kg	13.7	45.7	
53-70-3	Dibenzo(a,h)anthracene	U	45.7	ug/kg	13.7	45.7	
191-24-2	Benzo(ghi)perylene	U	45.7	ug/kg	13.7	45.7	
120-82-1	1,2,4-Trichlorobenzene	U	457	ug/kg	91.5	457	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.96	326	ug/kg		J
	Unknown	8.03	267	ug/kg		J

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2025.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	9.6	201	ug/kg		J
	Unknown	10.35	285	ug/kg		J

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:20**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2019.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	405	ug/kg	81.0	405	
108-95-2	Phenol	U	405	ug/kg	81.0	405	
95-57-8	2-Chlorophenol	U	405	ug/kg	81.0	405	
106-46-7	1,4-Dichlorobenzene	U	405	ug/kg	81.0	405	
621-64-7	N-Nitrosodipropylamine	U	405	ug/kg	81.0	405	
59-50-7	4-Chloro-3-methylphenol	U	405	ug/kg	81.0	405	
83-32-9	Acenaphthene	U	40.5	ug/kg	13.4	40.5	
121-14-2	2,4-Dinitrotoluene	U	405	ug/kg	40.5	405	
100-02-7	4-Nitrophenol	U	405	ug/kg	134	405	
87-86-5	Pentachlorophenol	U	405	ug/kg	101	405	
129-00-0	Pyrene	U	40.5	ug/kg	12.1	40.5	
110-86-1	Pyridine	U	405	ug/kg	81.0	405	UJ,SV7c
62-53-3	Aniline	U	405	ug/kg	121	405	
111-44-4	bis(2-Chloroethyl) ether	U	405	ug/kg	81.0	405	
541-73-1	1,3-Dichlorobenzene	U	405	ug/kg	81.0	405	
100-51-6	Benzyl alcohol	U	405	ug/kg	121	405	
95-50-1	1,2-Dichlorobenzene	U	405	ug/kg	81.0	405	
108-60-1	bis(2-Chloroisopropyl)ether	U	405	ug/kg	81.0	405	
95-48-7	o-Cresol	U	405	ug/kg	81.0	405	
65794-96-9	m,p-Cresols	U	405	ug/kg	121	405	
67-72-1	Hexachloroethane	U	405	ug/kg	81.0	405	
98-95-3	Nitrobenzene	U	405	ug/kg	81.0	405	
78-59-1	Isophorone	U	405	ug/kg	81.0	405	
88-75-5	2-Nitrophenol	U	405	ug/kg	81.0	405	
105-67-9	2,4-Dimethylphenol	U	405	ug/kg	142	405	
111-91-1	bis(2-Chloroethoxy)methane	U	405	ug/kg	81.0	405	
120-83-2	2,4-Dichlorophenol	U	405	ug/kg	81.0	405	
65-85-0	Benzoic acid	U	810	ug/kg	202	810	
91-20-3	Naphthalene	U	40.5	ug/kg	12.1	40.5	
106-47-8	4-Chloroaniline	U	405	ug/kg	81.0	405	
87-68-3	Hexachlorobutadiene	U	405	ug/kg	81.0	405	
91-57-6	2-Methylnaphthalene	U	40.5	ug/kg	8.10	40.5	
77-47-4	Hexachlorocyclopentadiene	U	405	ug/kg	81.0	405	
88-06-2	2,4,6-Trichlorophenol	U	405	ug/kg	81.0	405	
95-95-4	2,4,5-Trichlorophenol	U	405	ug/kg	81.0	405	
91-58-7	2-Chloronaphthalene	U	40.5	ug/kg	13.4	40.5	
88-74-4	2-Nitroaniline	U	405	ug/kg	81.0	405	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	405	ug/kg	81.0	405	

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:20**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2019.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	405	ug/kg	81.0	405	
606-20-2	2,6-Dinitrotoluene	U	405	ug/kg	40.5	405	
208-96-8	Acenaphthylene	U	40.5	ug/kg	12.1	40.5	
51-28-5	2,4-Dinitrophenol	U	810	ug/kg	154	810	
132-64-9	Dibenzofuran	U	405	ug/kg	81.0	405	
84-66-2	Diethylphthalate	U	405	ug/kg	81.0	405	
86-73-7	Fluorene	U	40.5	ug/kg	12.1	40.5	
7005-72-3	4-Chlorophenylphenylether	U	405	ug/kg	81.0	405	
534-52-1	2-Methyl-4,6-dinitrophenol	U	405	ug/kg	81.0	405	UJ,SV7c
100-01-6	4-Nitroaniline	U	405	ug/kg	121	405	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	405	ug/kg	81.0	405	
122-66-7	Azobenzene	U	405	ug/kg	81.0	405	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	405	ug/kg	81.0	405	
118-74-1	Hexachlorobenzene	U	405	ug/kg	81.0	405	
85-01-8	Phenanthrene	U	40.5	ug/kg	12.1	40.5	
120-12-7	Anthracene	U	40.5	ug/kg	8.10	40.5	
84-74-2	Di-n-butylphthalate	U	405	ug/kg	81.0	405	
206-44-0	Fluoranthene	U	40.5	ug/kg	12.1	40.5	
85-68-7	Butylbenzylphthalate	U	405	ug/kg	81.0	405	
56-55-3	Benzo(a)anthracene	U	40.5	ug/kg	12.1	40.5	
91-94-1	3,3'-Dichlorobenzidine	U	405	ug/kg	121	405	
218-01-9	Chrysene	U	40.5	ug/kg	12.1	40.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	405	ug/kg	81.0	405	
117-84-0	Di-n-octylphthalate	U	405	ug/kg	81.0	405	
205-99-2	Benzo(b)fluoranthene	U	40.5	ug/kg	12.1	40.5	
207-08-9	Benzo(k)fluoranthene	U	40.5	ug/kg	12.1	40.5	
50-32-8	Benzo(a)pyrene	U	40.5	ug/kg	12.1	40.5	
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.5	ug/kg	12.1	40.5	
53-70-3	Dibenzo(a,h)anthracene	U	40.5	ug/kg	12.1	40.5	
191-24-2	Benzo(ghi)perylene	U	40.5	ug/kg	12.1	40.5	
120-82-1	1,2,4-Trichlorobenzene	U	405	ug/kg	81.0	405	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.1	422	ug/kg		J
	Unknown Aldol Condensate	2.97	492	ug/kg		J

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:20**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2019.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-26-4	1S-.alpha.-Pinene	3.5	331	ug/kg	96	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.89	507	ug/kg	97	NJ
	Unknown	8.2	276	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.26	831	ug/kg	95	NJ
	Unknown	8.45	183	ug/kg		J

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:28**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2022.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	444	ug/kg	88.8	444	
108-95-2	Phenol	U	444	ug/kg	88.8	444	
95-57-8	2-Chlorophenol	U	444	ug/kg	88.8	444	
106-46-7	1,4-Dichlorobenzene	U	444	ug/kg	88.8	444	
621-64-7	N-Nitrosodipropylamine	U	444	ug/kg	88.8	444	
59-50-7	4-Chloro-3-methylphenol	U	444	ug/kg	88.8	444	
83-32-9	Acenaphthene	U	44.4	ug/kg	14.7	44.4	
121-14-2	2,4-Dinitrotoluene	U	444	ug/kg	44.4	444	
100-02-7	4-Nitrophenol	U	444	ug/kg	147	444	
87-86-5	Pentachlorophenol	U	444	ug/kg	111	444	
129-00-0	Pyrene	U	44.4	ug/kg	13.3	44.4	
110-86-1	Pyridine	U	444	ug/kg	88.8	444	UJ,SV7c
62-53-3	Aniline	U	444	ug/kg	133	444	
111-44-4	bis(2-Chloroethyl) ether	U	444	ug/kg	88.8	444	
541-73-1	1,3-Dichlorobenzene	U	444	ug/kg	88.8	444	
100-51-6	Benzyl alcohol	U	444	ug/kg	133	444	
95-50-1	1,2-Dichlorobenzene	U	444	ug/kg	88.8	444	
108-60-1	bis(2-Chloroisopropyl)ether	U	444	ug/kg	88.8	444	
95-48-7	o-Cresol	U	444	ug/kg	88.8	444	
65794-96-9	m,p-Cresols	U	444	ug/kg	133	444	
67-72-1	Hexachloroethane	U	444	ug/kg	88.8	444	
98-95-3	Nitrobenzene	U	444	ug/kg	88.8	444	
78-59-1	Isophorone	U	444	ug/kg	88.8	444	
88-75-5	2-Nitrophenol	U	444	ug/kg	88.8	444	
105-67-9	2,4-Dimethylphenol	U	444	ug/kg	155	444	
111-91-1	bis(2-Chloroethoxy)methane	U	444	ug/kg	88.8	444	
120-83-2	2,4-Dichlorophenol	U	444	ug/kg	88.8	444	
65-85-0	Benzoic acid	U	888	ug/kg	222	888	
91-20-3	Naphthalene	U	44.4	ug/kg	13.3	44.4	
106-47-8	4-Chloroaniline	U	444	ug/kg	88.8	444	
87-68-3	Hexachlorobutadiene	U	444	ug/kg	88.8	444	
91-57-6	2-Methylnaphthalene	U	44.4	ug/kg	8.88	44.4	
77-47-4	Hexachlorocyclopentadiene	U	444	ug/kg	88.8	444	
88-06-2	2,4,6-Trichlorophenol	U	444	ug/kg	88.8	444	
95-95-4	2,4,5-Trichlorophenol	U	444	ug/kg	88.8	444	
91-58-7	2-Chloronaphthalene	U	44.4	ug/kg	14.7	44.4	
88-74-4	2-Nitroaniline	U	444	ug/kg	88.8	444	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	444	ug/kg	88.8	444	

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:28**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2022.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	444	ug/kg	88.8	444	
606-20-2	2,6-Dinitrotoluene	U	444	ug/kg	44.4	444	
208-96-8	Acenaphthylene	U	44.4	ug/kg	13.3	44.4	
51-28-5	2,4-Dinitrophenol	U	888	ug/kg	169	888	
132-64-9	Dibenzofuran	U	444	ug/kg	88.8	444	
84-66-2	Diethylphthalate	U	444	ug/kg	88.8	444	
86-73-7	Fluorene	U	44.4	ug/kg	13.3	44.4	
7005-72-3	4-Chlorophenylphenylether	U	444	ug/kg	88.8	444	
534-52-1	2-Methyl-4,6-dinitrophenol	U	444	ug/kg	88.8	444	UJ,SV7c
100-01-6	4-Nitroaniline	U	444	ug/kg	133	444	
	p-Nitroaniline						
122-39-4	Diphenylamine	U	444	ug/kg	88.8	444	
122-66-7	Azobenzene	U	444	ug/kg	88.8	444	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	444	ug/kg	88.8	444	
118-74-1	Hexachlorobenzene	U	444	ug/kg	88.8	444	
85-01-8	Phenanthrene	U	44.4	ug/kg	13.3	44.4	
120-12-7	Anthracene	U	44.4	ug/kg	8.88	44.4	
84-74-2	Di-n-butylphthalate	U	444	ug/kg	88.8	444	
206-44-0	Fluoranthene	U	44.4	ug/kg	13.3	44.4	
85-68-7	Butylbenzylphthalate	U	444	ug/kg	88.8	444	
56-55-3	Benzo(a)anthracene	U	44.4	ug/kg	13.3	44.4	
91-94-1	3,3'-Dichlorobenzidine	U	444	ug/kg	133	444	
218-01-9	Chrysene	U	44.4	ug/kg	13.3	44.4	
117-81-7	bis(2-Ethylhexyl)phthalate	J	105	ug/kg	88.8	444	
117-84-0	Di-n-octylphthalate	U	444	ug/kg	88.8	444	
205-99-2	Benzo(b)fluoranthene	U	44.4	ug/kg	13.3	44.4	
207-08-9	Benzo(k)fluoranthene	U	44.4	ug/kg	13.3	44.4	
50-32-8	Benzo(a)pyrene	U	44.4	ug/kg	13.3	44.4	
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.4	ug/kg	13.3	44.4	
53-70-3	Dibenzo(a,h)anthracene	U	44.4	ug/kg	13.3	44.4	
191-24-2	Benzo(ghi)perylene	U	44.4	ug/kg	13.3	44.4	
120-82-1	1,2,4-Trichlorobenzene	U	444	ug/kg	88.8	444	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.1	215	ug/kg		J
	Unknown Aldol Condensate	2.97	596	ug/kg		J

CLL
4/1/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-1623	**Date Collected:**	02/03/2010 12:00	**Matrix:**	R
Lab Sample ID:	246442003	**Date Received:**	02/06/2010 09:15	**%Moisture:**	25
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8362	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	951989	**Inst:**	MSD4.I	**Dilution:**	1
Run Date:	02/20/2010 18:28	**Analyst:**	JMB3	**Inj. Vol:**	.5 uL
Prep Date:	02/11/2010 22:25	**Aliquot:**	30.03 g	**Final Volume:**	1 mL
Data File:	s4b2022.d	**Column:**	J&W DB-5MS	**Level:**	LOW

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.75	245	ug/kg	97	NJ
13466-78-9	3-Carene	3.89	537	ug/kg	96	NJ
23986-74-5	1,6-Cyclodecadiene, 1-methyl-5-methylene	6.01	324	ug/kg	99	NJ
	Unknown	7.56	204	ug/kg		J
25269-17-4	Thunbergol	7.64	923	ug/kg	94	NJ
112-79-8	9-Octadecenoic acid, (E)-	7.71	419	ug/kg	95	NJ
	Unknown	7.75	292	ug/kg		J
	Unknown	7.91	283	ug/kg		J
	Unknown	8.16	328	ug/kg		J
	Unknown	8.21	260	ug/kg		J
	Unknown	8.49	1830	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.55	1020	ug/kg	96	NJ
	Unknown	8.65	534	ug/kg		J
	Unknown	8.67	591	ug/kg		J
	Unknown	8.78	668	ug/kg		J
	Unknown	8.93	387	ug/kg		J
	Unknown	9.04	741	ug/kg		J
1000099-24-3	(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	9.11	309	ug/kg	93	NJ
1000156-11-9	Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	9.2	2130	ug/kg	91	NJ
	Unknown	9.63	353	ug/kg		J
	Unknown	10.38	353	ug/kg		J
	Unknown	10.62	449	ug/kg		J
	Unknown	10.81	1790	ug/kg		J
83-46-5	.beta.-Sitosterol	12.86	978	ug/kg	99	NJ
1058-61-3	Stigmast-4-en-3-one	13.94	662	ug/kg	98	NJ

CLL
4/1/10

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-1623 VALIDATION DATE: 4/1/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories, LLC

VALIDATOR: Charissa Lewis ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☒ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. It should be noted that the 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.
2. The ICAL RRF was <0.05 but ≥0.01 for p-nitrotoluene. The associated sample results were NDs and, thus, were qualified UJ,HE7b.
3. For a CCV associated with all samples, the %Ds were >20% with positive bias for HMX and tetryl. For a CCV associated with samples RE15-10-8361 and -8362, the %Ds were >20% with positive bias for 2,4-diamino-6-nitrotoluene and 2,6-diamino-4-nitrotoluene. The associated sample results were NDs and, thus, were not qualified.
4. It should be noted that the MS/MSD analyses were performed on a parent sample from another LANL RN and the parent sample raw data were not included. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 4/1/10

VALIDATOR'S SIGNATURE: Charissa Lewis DATE: 4/1/10

LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST

5122-2

LC/MS/MS High Explosive Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The IS retention time has shifted by more than 30 seconds.	R, UJ, HE0	J, HE0
☐	☒	☐	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	7. The surrogate is <10%R. Follow the external laboratory limits.	R, HE3	J-, HE3
☐	☒	☐	8. The surrogate is < the Lower Acceptance Limit but ≥10% recovery. Follow the external laboratory limits.	UJ, HE3a	J-, HE3a
☐	☒	☐	9. The surrogate %R value is > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE3b
☐	☐	☒	10. At least one surrogate is > the Upper Acceptance Limit and one surrogate is < the Lower Acceptance Limit. Follow the external laboratory limits.	UJ, HE3c	J, HE3c

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

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	12. The sample result is ≤5 times the concentration of the related analyte in the method blank.	U, HE4	N/A
☐	☒	☐	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
☐	☐	☒	14. The sample result is ≤5 times the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, HE4d	N/A
☐	☒	☐	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
☐	☒	☐	16. The absence of sample carry-over must be determined and verified.	N/A	R, N, HE4f
☐	☒	☐	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
☐	☒	☐	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
☒	☐	☐	19. The affected analytes were analyzed with a RRF of <0.05 in the initial calibration and/or CCV.	UJ, R, HE7b	J, HE7b
☒	☐	☐	20. The ICV and/or CCV were recovered outside the method limits.	UJ, R, HE7c	J, HE7c
☐	☒	☐	21. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, HE7d	J, HE7d
☐	☒	☐	22. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, HE7f	R, HE7f

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

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	24. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, HE9	J-, HE9
☐	☒	☐	25. The holding time was >2 times the applicable holding time requirement.	R, HE9a	J-, HE9a
☐	☒	☐	26. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, HE12	J-, HE12
☐	☒	☐	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
☐	☒	☐	28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE12b
☐	☒	☐	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
☐	☒	☐	30. The MS/MSD percent recovery was <10%.	R, HE12d	R, HE12d
☐	☒	☐	31. The MS/MSD percent recovery was >10% but <70%.	UJ, HE12e	J, HE12e
☐	☒	☐	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
☐	☒	☐	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
☐	☐	☒	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
☐	☐	☒	35. The sample was diluted because target analytes were > the initial verification calibration.	UJ, HE15a	J, HE15a

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

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	**36. The Contract Required Detection Limit Check Standard (CRI) sample did not pass method acceptance criteria.**	**UJ, R, HE16**	**J, HE16**
☐	☐	☒	**37. The required CRI sample information is missing. Contact the SMO or external laboratory for information.**	**R, HE16c**	**R, HE16c**
☐	☒	☐	**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**
☐	☒	☐	**39. Duplicate, dilution, or reanalysis.**	**UJ, HE88**	**J, HE88**

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8361

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323042a

Date Analyzed: 24-MAR-10 05:18

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 UJ,HE7b	500	U

*Concentration =

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

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4/1/10

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8361

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03010148.wiff

Date Analyzed: 02-MAR-10 23:37

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 =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8362

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442003

Sample Amount 2

Moisture: 25.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323043a

Date Analyzed: 24-MAR-10 05:47

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 UJ,HE7b	500	U

*Concentration =

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

CLL
4/1/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Client Sample ID: RE15-10-8362

Lab Code: GEL
GEL Job No (SDG) 10-1623

Matrix: SOIL
GEL Sample ID: 246442003

Sample Amount 2
Moisture: 25.0

Amount Units g
Date Received: 06-FEB-10

Extraction Type Sonication
Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10
Date Extracted: 16-FEB-10

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS03010149.wiff
Date Analyzed: 02-MAR-10 23:53

Units: ug/kg

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

*Concentration =

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

CLL
4/1/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8359

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442004

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323044a

Date Analyzed: 24-MAR-10 06:17

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene UJ,HE7b	500	U

*Concentration =

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

CLL
4/1/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Client Sample ID: RE15-10-8359

Lab Code: GEL
GEL Job No (SDG) 10-1623

Matrix: SOIL
GEL Sample ID: 246442004

Sample Amount 2
Moisture: 6.8

Amount Units g
Date Received: 06-FEB-10

Extraction Type Sonication
Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10
Date Extracted: 16-FEB-10

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS03030014.wiff
Date Analyzed: 03-MAR-10 13:06

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 =

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

CLL
4/1/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8358

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442005

Sample Amount 2

Moisture: 16.5

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323045a

Date Analyzed: 24-MAR-10 06:46

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene UJ,HE7b	500	U

*Concentration =

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

CLL
4/1/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8358

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442005

Sample Amount 2

Moisture: 16.5

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03030015.wiff

Date Analyzed: 03-MAR-10 13:22

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 =

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

CLL
4/1/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8360

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442006

Sample Amount 2

Moisture: 27.4

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323046a

Date Analyzed: 24-MAR-10 07:15

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 UJ,HE7b	500	U

*Concentration =

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

CLL
4/1/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Client Sample ID: RE15-10-8360

Lab Code: GEL
GEL Job No (SDG) 10-1623

Matrix: SOIL
GEL Sample ID: 246442006

Sample Amount 2
Moisture: 27.4

Amount Units g
Date Received: 06-FEB-10

Extraction Type Sonication
Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10
Date Extracted: 16-FEB-10

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS03030016.wiff
Date Analyzed: 03-MAR-10 13:37

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 =

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

CLL
4/1/10

Friday, February 05, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1623

REQUEST NUMBER: 10-1623

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/7/2010

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS: 246442.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8383	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-8361	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8361	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8362	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8362	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8359	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8359	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8358	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8358	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8360	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8360	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
[illegible]	[illegible]	2/5/10	1400	Greg Tyler	Greg Tyler	2-6-10	0915
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

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

Printed Name Signature

Friday, February 05, 2010

REQUEST NUMBER: 10-1623

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-1623
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/5/2010
TURNAROUND/REPORT DUE: 3/7/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8383	S	2/3/2010	
	SW-846:8270C	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	

Friday, February 05, 2010

REQUEST NUMBER: 10-1623

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:8321A_MOD	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	

Final Page of REQUEST NUMBER 10-1623

GEL Laboratories LLC

a member of **The GEL Group** INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

February 12, 2010

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: 246442
SDG: 10-1623

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 06, 2010, and analyzed for Explosives by LCMSMS, 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,

for Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1623
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 246442
SDG: 10-1623

TABLE OF CONTENTS

Case Narrative.....1

Chain of Custody and Supporting Documentation..... 4

Data Review Qualifier Flag Definition Sheet..... 14

GC/MS Volatile Analysis.....16
- Sample Data Summary.....22
- QC Summary..... 36
- Sample Data..... 59
- Standard Data.....125
- QC Data..... 180
- Miscellaneous Data.....243

GC/MS Semivolatile Analysis.....251
- Sample Data Summary.....258
- QC Summary..... 274
- Sample Data..... 295
- Standard Data.....394
- QC Data..... 461
- Miscellaneous Data.....502

LC/MS/MS Explosives Analysis.....545
- Sample Data Summary.....551
- Quality Control Summary.....562
- Sample Data..... 690
- Standards Data..... 726
- Quality Control Data.....912
- Miscellaneous Data.....927

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 246442
SDG # : 10-1623

February 12, 2010

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 06, 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:

Laboratory ID	Client ID
246442001	RE15-10-8383
246442002	RE15-10-8361
246442003	RE15-10-8362
246442004	RE15-10-8359
246442005	RE15-10-8358
246442006	RE15-10-8360

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/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

Valerie Davis
Project Manager

List of current GEL Certifications as of 12 February 2010

State	Certification
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

Friday, February 05, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1623

LOS ALAMOS

NATIONAL LABORATORY

REQUEST NUMBER: 10-1623

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/7/2010

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS: 246442.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8383	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-8361	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8361	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8362	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8362	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8359	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8359	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8358	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8358	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8360	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8360	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
	2/5/10		1400	Greg Tyler		2-6-10	0915
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

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

Printed Name Signature

Friday, February 05, 2010

REQUEST NUMBER: 10-1623

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-1623
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/5/2010
TURNAROUND/REPORT DUE: 3/7/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8383	S	2/3/2010	
	SW-846:8270C	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	

Friday, February 05, 2010

REQUEST NUMBER: 10-1623

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:8321A_MOD	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	

Final Page of REQUEST NUMBER 10-1623

GEL | Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-1623**
Received By: Greg Tyler	**Date Received: 2/06/10**

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*: **80cpm**
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 **2- 6C 12,15C**
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: **No time on Chain of Custody.**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:
Fed Ex Tracking Numbers:

7209 7849 9293 2C	**7209 7849 9282 4C**	**7209 7849 9179 15C**
7209 7849 9271 3C	**7209 7849 9180 5C**	**7209 7849 9227 15C**
7209 7849 9308 3C	**7209 7849 9216 5C**	
7209 7849 9319 3C	**7209 7849 9205 5C**	
7209 7849 9260 3C	**7209 7849 9190 6C**	
7209 7849 9250 3C	**7209 7849 9238 6C**	
7209 7849 9249 4C	**7209 7849 9157 12C**	
7209 7849 9341 4C	**7209 7849 9146 12C**	

PM (or PMA) review: Initials VSD Date 2/8/10

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 05FEB10
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR200515BYD0

2

FedEx Express

2 of 2
MPS# 263 7209 7849 9293
Mstr# 7209 7849 9252 8201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

Part # 150148-434 NRIT V3 08/09

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 05FEB10
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2449

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3

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2 of 2
MPS# 8263 7209 7849 9271
Mstr# 7209 7849 9260 8201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

Part # 150148-434 NRIT V3 08/09

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2449

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3

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1 of 2
TRK# 8201 7209 7849 9308
MASTER

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 05FEB10
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR1A015AGWL0

3

FedEx Express

2 of 2
MPS# 8263 7209 7849 9319
Mstr# 7209 7849 9308 8201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: SNFA (505) 665-6966
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA60 BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 06FEB10
ACTWGT: 48.0 LB MAN.
CAD: 0014176/CAFE2449

BILL SENDER

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2040 SAVAGE RD

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3°

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1 of 2
TRK# 0201 7209 7849 9260

SATURDAY ### A1
PRIORITY OVERNIGHT

MASTER

29407
SC-US
CHS

XØ CHSA

Part # 158148-434 NRIT V3 09-09

ORIGIN ID: SNFA (505) 665-6966
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA60 BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 06FEB10
ACTWGT: 48.0 LB MAN.
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

3°

FedEx Express

3 of 3
MPS# 0263 7209 7849 9250

SATURDAY ### A1
PRIORITY OVERNIGHT

Matr# 7209 7849 9238 0201

29407
SC-US
CHS

XØ CHSA

Part # 158148-434 NRIT V3 09-09

ORIGIN ID: SNFA (505) 665-6966
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA60 BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 06FEB10
ACTWGT: 48.0 LB MAN.
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGWK0

4°

FedEx Express

2 of 3
MPS# 0263 7209 7849 9249

SATURDAY ### A1
PRIORITY OVERNIGHT

Matr# 7209 7849 9238 0201

29407
SC-US
CHS

XØ CHSA

ORIGIN ID: SNFA (505) 665-6966
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA60 BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 06FEB10
ACTWGT: 59.0 LB
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010MR1A015AGWK0

4°

FedEx Express

TRK# 0201 7209 7849 9341

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XØ CHSA

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

SHIP DATE: 05FEB10
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

4°

CHARLESTON SC 29407
(843) 566-0171
REF: 68010AMR2A0515BYD0

FedEx Express

SATURDAY ### A1

TRK# 0201 7209 7849 9282

PRIORITY OVERNIGHT

MASTER

XØ CHSA

29407
SC-US
CHS

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

SHIP DATE: 05FEB10
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

5°

CHARLESTON SC 29407
(843) 566-0171
REF: 68010AMR3A0532VA00

FedEx Express

2 of 3

SATURDAY ### A1

TRK# 0201 7209 7849 9180

PRIORITY OVERNIGHT

Matrix 7209 7849 9178 0201

XØ CHSA

29407
SC-US
CHS

Part # 158148-K34 NRIT V3 09-08

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

BILL SENDER

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2040 SAVAGE RD

5°

CHARLESTON SC 29407
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REF: 68010AMR3A0532VA00

FedEx Express

2 of 3

SATURDAY ### A1

7209 7849 9216

PRIORITY OVERNIGHT

trix 7209 7849 9205 0201

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SC-US
CHS

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

SHIP DATE: 05FEB10
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

5°

CHARLESTON SC 29407
(843) 566-0171
REF: 68010AMR3A0532VA00

FedEx Express

1 of 3

SATURDAY ### A1

TRK# 0201 7209 7849 9205

PRIORITY OVERNIGHT

MASTER

XØ CHSA

29407
SC-US
CHS

3 09-08

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 05FEB10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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2040 SAVAGE RD

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

6 of 6

FedEx Express

3 of 3
MPS# 0263 7209 7849 9190
Mstr# 7209 7849 9170 0201

SATURDAY
PRIORITY OVERNIGHT

A1

29407
SC-US
CHS

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Part # 158148-434 MAIT V3 09-09

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 05FEB10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AAREW0140T500

12 of 12

FedEx Express

3 of 3
MPS# 0263 7209 7849 9157
Mstr# 7209 7849 9135 0201

SATURDAY
PRIORITY OVERNIGHT

A1

29407
SC-US
CHS

XO CHSA

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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REF: 6B010AMR3A0552GE00

6 of 6

FedEx Express

1 of 3
TRK# 0201 7209 7849 9238
MASTER

SATURDAY
PRIORITY OVERNIGHT

A1

29407
SC-US
CHS

XO CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 05FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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REF: 6B010AAREW0140T500

12 of 12

FedEx Express

2 of 3
MPS# 0263 7209 7849 9146
Mstr# 7209 7849 9135 0201

SATURDAY
PRIORITY OVERNIGHT

A1

29407
SC-US
CHS

XO CHSA

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA-60 BLDG 1237 SPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 05FEB10
ACTWGT: 46.0 LB MAN
CAD: 8014176/CAFE2449

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REF: 6B010AMR3A0532VA00

15

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1 of 3
TRK# 0201 7709 7849 9179

SATURDAY ### A1
PRIORITY OVERNIGHT

MN MASTER MN

29407
SC-US
CHS

X0 CHSA

LOS ALAMOS, NM 87545
UNITED STATES US

VALERIE DAVIS
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2040 SAVAGE RD

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

15

FedEx Express

3 of 3
MPS# 0263 7709 7849 9227
Mstr# 7709 7849 9205 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or 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.

P.O. Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843.556.8171 F 843.766.1178 www.gel.com

GC/MS Volatile Analysis

GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-1623

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	952862
Prep Batch Number:	952861

Sample Analysis

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

Sample ID	Client ID
246442001	RE15-10-8383
246442002	RE15-10-8361
246442003	RE15-10-8362
246442004	RE15-10-8359
246442005	RE15-10-8358
246442006	RE15-10-8360
1202042304	Method Blank (MB)
1202042307	Laboratory Control Sample (LCS)
1202042308	Laboratory Control Sample (LCS)
1202052761	Method Blank (MB)
1202052762	Laboratory Control Sample (LCS)
1202052763	Laboratory Control Sample (LCS)
1202042305	246442002(RE15-10-8361) Post Spike (PS)
1202042306	246442002(RE15-10-8361) 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 246442 002, 003, 004, 005 and 006 in this SDG were analyzed on an "dry weight" basis. Samples 246442 001 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 MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS recoveries were within the acceptance limits, except Trichlorotrifluoroethane. The unacceptable recoveries were less than 5% of the requested analyte list. This satisfies the client criteria. The results are reported. See DER 795477.

QC Sample Designation
Sample 246442002 (RE15-10-8361) 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(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

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
Sample 246442002 (RE15-10-8361) was re-analyzed due to unacceptable recoveries in the initial analysis.

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
DER # 795477 was generated for this SDG.

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

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:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA4.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

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

GEL LABORATORIES LLC
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Certificate of Analysis Report
for

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

Client SDG: 10-1623 GEL Work Order: 246442

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: Erin Haubert **Name: Erin Haubert**

Date: 01 MAR 2010 **Title: Data Validator**

Roadmap for LANL 10-1623 VOA

This roadmap was analyzed by acj on 02-24-2010, 21:11.
This roadmap was reviewed by eh1 on 02-25-2010, 16:22.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/021310v4/4x608.d	246442001	RE15-10-8383	13-FEB-2010	15:46	10-1623.sub	1	952862	
■	N	/chem/VOA4.i/021310v4/4x617.d	246442002	RE15-10-8361	13-FEB-2010	19:52	10-1623.sub	1	952862	
☐	N	/chem/VOA4.i/021310v4/4x618.d	246442003	RE15-10-8362	13-FEB-2010	20:20	10-1623.sub	1	952862	
☐	N	/chem/VOA4.i/021310v4/4x619.d	246442004	RE15-10-8359	13-FEB-2010	20:47	10-1623.sub	1	952862	
☐	N	/chem/VOA4.i/021310v4/4x620.d	246442005	RE15-10-8358	13-FEB-2010	21:14	10-1623.sub	1	952862	
☐	N	/chem/VOA4.i/021310v4/4x621.d	246442006	RE15-10-8360	13-FEB-2010	21:41	10-1623.sub	1	952862	
☐	N	/chem/VOA4.i/021510v4/4y109.d	246442002	RE15-10-8361	15-FEB-2010	22:13	10-1623.sub	1	952862	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA4.i/021310v4/4x603LA.d	1202042307	LCS	lcs	13-FEB-2010	13:28	all.sub	1	952862	
☐	N	/chem/VOA4.i/021310v4/4x605SA.d	1202042308	LCS	lcs	13-FEB-2010	14:23	all.sub	1	952862	
☐	N	/chem/VOA4.i/021310v4/4x606BA.d	1202042304	BLANK	mb	13-FEB-2010	14:50	all.sub	1	952862	
☐	N	/chem/VOA4.i/021310v4/4x623.d	1202042305	RE15-10-8361MS	ms	13-FEB-2010	22:36	10-1623.sub	1	952862	
☐	N	/chem/VOA4.i/021310v4/4x624.d	1202042306	RE15-10-8361MSD	msd	13-FEB-2010	23:03	10-1623.sub	1	952862	
☐	N	/chem/VOA4.i/021510v4/4y103la.d	1202052762	LCS	lcs	15-FEB-2010	19:28	all.sub	1	952862	
☐	N	/chem/VOA4.i/021510v4/4y105sa.d	1202052763	LCS	lcs	15-FEB-2010	20:23	all.sub	1	952862	
☐	N	/chem/VOA4.i/021510v4/4y106ba.d	1202052761	BLANK	mb	15-FEB-2010	20:51	all.sub	1	952862	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:14**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x620.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.407	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.359	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.359	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.359	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.359	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.359	1.20
67-64-1	Acetone	U	5.99	ug/kg	1.99	5.99
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
74-88-4	Iodomethane	U	5.99	ug/kg	1.92	5.99
75-09-2	Methylene chloride	U	5.99	ug/kg	2.39	5.99
75-15-0	Carbon disulfide	U	5.99	ug/kg	1.50	5.99
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.359	1.20
78-93-3	2-Butanone	U	5.99	ug/kg	1.80	5.99
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.359	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.395	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.359	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.359	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.359	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.359	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.359	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.395	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.359	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.359	1.20
108-10-1	4-Methyl-2-pentanone	U	5.99	ug/kg	1.50	5.99
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.359	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.359	1.20
591-78-6	2-Hexanone	U	5.99	ug/kg	1.80	5.99
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.359	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.359	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.359	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.359	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.359	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:14**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x620.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.359	1.20
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.359	2.39
95-47-6	o-Xylene	U	1.20	ug/kg	0.359	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.359	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.359	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.359	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.359	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.359	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.359	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.359	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.359	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.359	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.359	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.359	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.99	ug/kg	1.92	5.99
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	6.24	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x619.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	J	3.52	ug/kg	1.78	5.37
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.37	ug/kg	1.72	5.37
75-09-2	Methylene chloride	U	5.37	ug/kg	2.15	5.37
75-15-0	Carbon disulfide	U	5.37	ug/kg	1.34	5.37
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.37	ug/kg	1.61	5.37
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.354	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.354	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.37	ug/kg	1.34	5.37
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	J	0.328	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	U	5.37	ug/kg	1.61	5.37
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x619.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.37	ug/kg	1.72	5.37
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.82	24.3	ug/kg	90	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x621.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.38	ug/kg	0.468	1.38
74-87-3	Chloromethane	U	1.38	ug/kg	0.413	1.38
75-01-4	Vinyl chloride	U	1.38	ug/kg	0.413	1.38
74-83-9	Bromomethane	U	1.38	ug/kg	0.413	1.38
75-00-3	Chloroethane	U	1.38	ug/kg	0.413	1.38
75-69-4	Trichlorofluoromethane	U	1.38	ug/kg	0.413	1.38
67-64-1	Acetone	U	6.89	ug/kg	2.29	6.89
75-35-4	1,1-Dichloroethylene	U	1.38	ug/kg	0.413	1.38
74-88-4	Iodomethane	U	6.89	ug/kg	2.20	6.89
75-09-2	Methylene chloride	U	6.89	ug/kg	2.76	6.89
75-15-0	Carbon disulfide	U	6.89	ug/kg	1.72	6.89
156-60-5	trans-1,2-Dichloroethylene	U	1.38	ug/kg	0.413	1.38
75-34-3	1,1-Dichloroethane	U	1.38	ug/kg	0.413	1.38
78-93-3	2-Butanone	U	6.89	ug/kg	2.07	6.89
156-59-2	cis-1,2-Dichloroethylene	U	1.38	ug/kg	0.413	1.38
594-20-7	2,2-Dichloropropane	U	1.38	ug/kg	0.413	1.38
67-66-3	Chloroform	U	1.38	ug/kg	0.413	1.38
74-97-5	Bromochloromethane	U	1.38	ug/kg	0.455	1.38
71-55-6	1,1,1-Trichloroethane	U	1.38	ug/kg	0.413	1.38
563-58-6	1,1-Dichloropropene	U	1.38	ug/kg	0.413	1.38
56-23-5	Carbon tetrachloride	U	1.38	ug/kg	0.413	1.38
107-06-2	1,2-Dichloroethane	U	1.38	ug/kg	0.413	1.38
71-43-2	Benzene	U	1.38	ug/kg	0.413	1.38
79-01-6	Trichloroethylene	U	1.38	ug/kg	0.455	1.38
78-87-5	1,2-Dichloropropane	U	1.38	ug/kg	0.413	1.38
75-27-4	Bromodichloromethane	U	1.38	ug/kg	0.413	1.38
74-95-3	Dibromomethane	U	1.38	ug/kg	0.413	1.38
108-10-1	4-Methyl-2-pentanone	U	6.89	ug/kg	1.72	6.89
10061-01-5	cis-1,3-Dichloropropylene	U	1.38	ug/kg	0.413	1.38
108-88-3	Toluene	U	1.38	ug/kg	0.413	1.38
10061-02-6	trans-1,3-Dichloropropylene	U	1.38	ug/kg	0.413	1.38
79-00-5	1,1,2-Trichloroethane	U	1.38	ug/kg	0.413	1.38
591-78-6	2-Hexanone	U	6.89	ug/kg	2.07	6.89
142-28-9	1,3-Dichloropropane	U	1.38	ug/kg	0.413	1.38
127-18-4	Tetrachloroethylene	U	1.38	ug/kg	0.413	1.38
124-48-1	Dibromochloromethane	U	1.38	ug/kg	0.413	1.38
106-93-4	1,2-Dibromoethane	U	1.38	ug/kg	0.413	1.38
108-90-7	Chlorobenzene	U	1.38	ug/kg	0.413	1.38

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x621.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.38	ug/kg	0.413	1.38
179601-23-1	m,p-Xylenes	U	2.76	ug/kg	0.413	2.76
95-47-6	o-Xylene	U	1.38	ug/kg	0.413	1.38
100-42-5	Styrene	U	1.38	ug/kg	0.413	1.38
75-25-2	Bromoform	U	1.38	ug/kg	0.413	1.38
79-34-5	1,1,2,2-Tetrachloroethane	U	1.38	ug/kg	0.413	1.38
96-18-4	1,2,3-Trichloropropane	U	1.38	ug/kg	0.413	1.38
108-86-1	Bromobenzene	U	1.38	ug/kg	0.413	1.38
103-65-1	n-Propylbenzene	U	1.38	ug/kg	0.413	1.38
95-49-8	2-Chlorotoluene	U	1.38	ug/kg	0.413	1.38
98-82-8	Isopropylbenzene	U	1.38	ug/kg	0.413	1.38
108-67-8	1,3,5-Trimethylbenzene	U	1.38	ug/kg	0.413	1.38
106-43-4	4-Chlorotoluene	U	1.38	ug/kg	0.413	1.38
98-06-6	tert-Butylbenzene	U	1.38	ug/kg	0.413	1.38
95-63-6	1,2,4-Trimethylbenzene	U	1.38	ug/kg	0.413	1.38
135-98-8	sec-Butylbenzene	U	1.38	ug/kg	0.413	1.38
99-87-6	4-Isopropyltoluene	U	1.38	ug/kg	0.413	1.38
541-73-1	1,3-Dichlorobenzene	U	1.38	ug/kg	0.413	1.38
106-46-7	1,4-Dichlorobenzene	U	1.38	ug/kg	0.413	1.38
104-51-8	n-Butylbenzene	U	1.38	ug/kg	0.413	1.38
96-12-8	1,2-Dibromo-3-chloropropane	U	1.38	ug/kg	0.413	1.38
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.89	ug/kg	2.20	6.89
630-20-6	1,1,1,2-Tetrachloroethane	U	1.38	ug/kg	0.413	1.38
95-50-1	1,2-Dichlorobenzene	U	1.38	ug/kg	0.413	1.38

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 22:13**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 21:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y109.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.22	ug/kg	0.415	1.22
74-87-3	Chloromethane	U	1.22	ug/kg	0.366	1.22
75-01-4	Vinyl chloride	U	1.22	ug/kg	0.366	1.22
74-83-9	Bromomethane	U	1.22	ug/kg	0.366	1.22
75-00-3	Chloroethane	U	1.22	ug/kg	0.366	1.22
75-69-4	Trichlorofluoromethane	U	1.22	ug/kg	0.366	1.22
67-64-1	Acetone	U	6.10	ug/kg	2.03	6.10
75-35-4	1,1-Dichloroethylene	U	1.22	ug/kg	0.366	1.22
74-88-4	Iodomethane	U	6.10	ug/kg	1.95	6.10
75-09-2	Methylene chloride	U	6.10	ug/kg	2.44	6.10
75-15-0	Carbon disulfide	U	6.10	ug/kg	1.53	6.10
156-60-5	trans-1,2-Dichloroethylene	U	1.22	ug/kg	0.366	1.22
75-34-3	1,1-Dichloroethane	U	1.22	ug/kg	0.366	1.22
78-93-3	2-Butanone	U	6.10	ug/kg	1.83	6.10
156-59-2	cis-1,2-Dichloroethylene	U	1.22	ug/kg	0.366	1.22
594-20-7	2,2-Dichloropropane	U	1.22	ug/kg	0.366	1.22
67-66-3	Chloroform	U	1.22	ug/kg	0.366	1.22
74-97-5	Bromochloromethane	U	1.22	ug/kg	0.403	1.22
71-55-6	1,1,1-Trichloroethane	U	1.22	ug/kg	0.366	1.22
563-58-6	1,1-Dichloropropene	U	1.22	ug/kg	0.366	1.22
56-23-5	Carbon tetrachloride	U	1.22	ug/kg	0.366	1.22
107-06-2	1,2-Dichloroethane	U	1.22	ug/kg	0.366	1.22
71-43-2	Benzene	U	1.22	ug/kg	0.366	1.22
79-01-6	Trichloroethylene	U	1.22	ug/kg	0.403	1.22
78-87-5	1,2-Dichloropropane	U	1.22	ug/kg	0.366	1.22
75-27-4	Bromodichloromethane	U	1.22	ug/kg	0.366	1.22
74-95-3	Dibromomethane	U	1.22	ug/kg	0.366	1.22
108-10-1	4-Methyl-2-pentanone	U	6.10	ug/kg	1.53	6.10
10061-01-5	cis-1,3-Dichloropropylene	U	1.22	ug/kg	0.366	1.22
108-88-3	Toluene	J	0.393	ug/kg	0.366	1.22
10061-02-6	trans-1,3-Dichloropropylene	U	1.22	ug/kg	0.366	1.22
79-00-5	1,1,2-Trichloroethane	U	1.22	ug/kg	0.366	1.22
591-78-6	2-Hexanone	U	6.10	ug/kg	1.83	6.10
142-28-9	1,3-Dichloropropane	U	1.22	ug/kg	0.366	1.22
127-18-4	Tetrachloroethylene	U	1.22	ug/kg	0.366	1.22
124-48-1	Dibromochloromethane	U	1.22	ug/kg	0.366	1.22
106-93-4	1,2-Dibromoethane	U	1.22	ug/kg	0.366	1.22
108-90-7	Chlorobenzene	U	1.22	ug/kg	0.366	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 22:13**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 21:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y109.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.22	ug/kg	0.366	1.22
179601-23-1	m,p-Xylenes	U	2.44	ug/kg	0.366	2.44
95-47-6	o-Xylene	U	1.22	ug/kg	0.366	1.22
100-42-5	Styrene	U	1.22	ug/kg	0.366	1.22
75-25-2	Bromoform	U	1.22	ug/kg	0.366	1.22
79-34-5	1,1,2,2-Tetrachloroethane	U	1.22	ug/kg	0.366	1.22
96-18-4	1,2,3-Trichloropropane	U	1.22	ug/kg	0.366	1.22
108-86-1	Bromobenzene	U	1.22	ug/kg	0.366	1.22
103-65-1	n-Propylbenzene	U	1.22	ug/kg	0.366	1.22
95-49-8	2-Chlorotoluene	U	1.22	ug/kg	0.366	1.22
98-82-8	Isopropylbenzene	U	1.22	ug/kg	0.366	1.22
108-67-8	1,3,5-Trimethylbenzene	U	1.22	ug/kg	0.366	1.22
106-43-4	4-Chlorotoluene	U	1.22	ug/kg	0.366	1.22
98-06-6	tert-Butylbenzene	U	1.22	ug/kg	0.366	1.22
95-63-6	1,2,4-Trimethylbenzene	U	1.22	ug/kg	0.366	1.22
135-98-8	sec-Butylbenzene	U	1.22	ug/kg	0.366	1.22
99-87-6	4-Isopropyltoluene	U	1.22	ug/kg	0.366	1.22
541-73-1	1,3-Dichlorobenzene	U	1.22	ug/kg	0.366	1.22
106-46-7	1,4-Dichlorobenzene	U	1.22	ug/kg	0.366	1.22
104-51-8	n-Butylbenzene	U	1.22	ug/kg	0.366	1.22
96-12-8	1,2-Dibromo-3-chloropropane	U	1.22	ug/kg	0.366	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.10	ug/kg	1.95	6.10
630-20-6	1,1,1,2-Tetrachloroethane	U	1.22	ug/kg	0.366	1.22
95-50-1	1,2-Dichlorobenzene	U	1.22	ug/kg	0.366	1.22

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	14.1	ug/kg	90	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x618.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.33	ug/kg	0.454	1.33
74-87-3	Chloromethane	U	1.33	ug/kg	0.400	1.33
75-01-4	Vinyl chloride	U	1.33	ug/kg	0.400	1.33
74-83-9	Bromomethane	U	1.33	ug/kg	0.400	1.33
75-00-3	Chloroethane	U	1.33	ug/kg	0.400	1.33
75-69-4	Trichlorofluoromethane	U	1.33	ug/kg	0.400	1.33
67-64-1	Acetone		52.7	ug/kg	2.21	6.67
75-35-4	1,1-Dichloroethylene	U	1.33	ug/kg	0.400	1.33
74-88-4	Iodomethane	U	6.67	ug/kg	2.13	6.67
75-09-2	Methylene chloride	U	6.67	ug/kg	2.67	6.67
75-15-0	Carbon disulfide	U	6.67	ug/kg	1.67	6.67
156-60-5	trans-1,2-Dichloroethylene	U	1.33	ug/kg	0.400	1.33
75-34-3	1,1-Dichloroethane	U	1.33	ug/kg	0.400	1.33
78-93-3	2-Butanone	U	6.67	ug/kg	2.00	6.67
156-59-2	cis-1,2-Dichloroethylene	U	1.33	ug/kg	0.400	1.33
594-20-7	2,2-Dichloropropane	U	1.33	ug/kg	0.400	1.33
67-66-3	Chloroform	U	1.33	ug/kg	0.400	1.33
74-97-5	Bromochloromethane	U	1.33	ug/kg	0.440	1.33
71-55-6	1,1,1-Trichloroethane	U	1.33	ug/kg	0.400	1.33
563-58-6	1,1-Dichloropropene	U	1.33	ug/kg	0.400	1.33
56-23-5	Carbon tetrachloride	U	1.33	ug/kg	0.400	1.33
107-06-2	1,2-Dichloroethane	U	1.33	ug/kg	0.400	1.33
71-43-2	Benzene	U	1.33	ug/kg	0.400	1.33
79-01-6	Trichloroethylene	U	1.33	ug/kg	0.440	1.33
78-87-5	1,2-Dichloropropane	U	1.33	ug/kg	0.400	1.33
75-27-4	Bromodichloromethane	U	1.33	ug/kg	0.400	1.33
74-95-3	Dibromomethane	U	1.33	ug/kg	0.400	1.33
108-10-1	4-Methyl-2-pentanone	U	6.67	ug/kg	1.67	6.67
10061-01-5	cis-1,3-Dichloropropylene	U	1.33	ug/kg	0.400	1.33
108-88-3	Toluene		12.2	ug/kg	0.400	1.33
10061-02-6	trans-1,3-Dichloropropylene	U	1.33	ug/kg	0.400	1.33
79-00-5	1,1,2-Trichloroethane	U	1.33	ug/kg	0.400	1.33
591-78-6	2-Hexanone	U	6.67	ug/kg	2.00	6.67
142-28-9	1,3-Dichloropropane	U	1.33	ug/kg	0.400	1.33
127-18-4	Tetrachloroethylene	U	1.33	ug/kg	0.400	1.33
124-48-1	Dibromochloromethane	U	1.33	ug/kg	0.400	1.33
106-93-4	1,2-Dibromoethane	U	1.33	ug/kg	0.400	1.33
108-90-7	Chlorobenzene	U	1.33	ug/kg	0.400	1.33

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x618.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.33	ug/kg	0.400	1.33
179601-23-1	m,p-Xylenes	J	0.572	ug/kg	0.400	2.67
95-47-6	o-Xylene	U	1.33	ug/kg	0.400	1.33
100-42-5	Styrene	U	1.33	ug/kg	0.400	1.33
75-25-2	Bromoform	U	1.33	ug/kg	0.400	1.33
79-34-5	1,1,2,2-Tetrachloroethane	U	1.33	ug/kg	0.400	1.33
96-18-4	1,2,3-Trichloropropane	U	1.33	ug/kg	0.400	1.33
108-86-1	Bromobenzene	U	1.33	ug/kg	0.400	1.33
103-65-1	n-Propylbenzene	U	1.33	ug/kg	0.400	1.33
95-49-8	2-Chlorotoluene	U	1.33	ug/kg	0.400	1.33
98-82-8	Isopropylbenzene	U	1.33	ug/kg	0.400	1.33
108-67-8	1,3,5-Trimethylbenzene	U	1.33	ug/kg	0.400	1.33
106-43-4	4-Chlorotoluene	U	1.33	ug/kg	0.400	1.33
98-06-6	tert-Butylbenzene	U	1.33	ug/kg	0.400	1.33
95-63-6	1,2,4-Trimethylbenzene	J	0.490	ug/kg	0.400	1.33
135-98-8	sec-Butylbenzene	U	1.33	ug/kg	0.400	1.33
99-87-6	4-Isopropyltoluene		4.28	ug/kg	0.400	1.33
541-73-1	1,3-Dichlorobenzene	U	1.33	ug/kg	0.400	1.33
106-46-7	1,4-Dichlorobenzene	U	1.33	ug/kg	0.400	1.33
104-51-8	n-Butylbenzene	U	1.33	ug/kg	0.400	1.33
96-12-8	1,2-Dibromo-3-chloropropane	U	1.33	ug/kg	0.400	1.33
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.67	ug/kg	2.13	6.67
630-20-6	1,1,1,2-Tetrachloroethane	U	1.33	ug/kg	0.400	1.33
95-50-1	1,2-Dichlorobenzene	U	1.33	ug/kg	0.400	1.33

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	7.73	ug/kg		J
64-17-5	Ethyl alcohol	6.76	27.8	ug/kg	83	NJ
7785-70-8	1R-.alpha.-Pinene	14.79	190	ug/kg	96	NJ
79-92-5	Camphene	15.11	7.9	ug/kg	97	NJ
123-35-3	.beta.-Myrcene	15.3	7.01	ug/kg	91	NJ
535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	15.41	18.5	ug/kg	94	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	15.5	41.5	ug/kg	97	NJ
13466-78-9	3-Carene	15.8	194	ug/kg	96	NJ
1120-21-4	Undecane	16.47	9.65	ug/kg	97	NJ
	Unknown Siloxane	16.78	10.1	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x618.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Substituted Benzene	16.95	6.76	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**S**
Lab Sample ID:	**246442001**	**Date Received:**	**02/06/2010 09:15**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8383**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 15:46**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x608.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	J	1.98	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:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**S**
Lab Sample ID:	**246442001**	**Date Received:**	**02/06/2010 09:15**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8383**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 15:46**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x608.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-Trifluoroetha *Trichlorotrifluoroethane*	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		

QC Summary

Surrogate Recovery Report

SDG Number: 10-1623

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202042307	LCS for batch 952861	95	85	101
1202042308	LCS for batch 952861	86	84	103
1202042304	MB for batch 952861	87	87	107
246442001	RE15-10-8383	86	87	110
246442003	RE15-10-8362	86	90	116
246442004	RE15-10-8359	88	86	115
246442005	RE15-10-8358	86	87	117
246442006	RE15-10-8360	85	88	112
1202042305	RE15-10-8361PS	91	90	115
1202042306	RE15-10-8361PSD	91	88	113
1202052762	LCS for batch 952861	83	80	99
1202052763	LCS for batch 952861	78	79	100
1202052761	MB for batch 952861	78	82	106
246442002	RE15-10-8361	78	89	124

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

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361PS
Lab Sample ID: 1202042305
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: R
%Moisture: 18
Analysis Date: 02/13/2010 22:36
Prep Batch ID: 952861
Batch ID: 952862
Dilution: 1

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	56.7	113	39-148
74-87-3	PS	Chloromethane	50.0	0.00	U	47.8	96	42-131
75-01-4	PS	Vinyl chloride	50.0	0.00	U	48.9	98	50-127
74-83-9	PS	Bromomethane	50.0	0.00	U	45.5	91	26-135
75-00-3	PS	Chloroethane	50.0	0.00	U	49.9	100	54-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	55.4	111	55-138
67-64-1	PS	Acetone	250	0.00	U	89.0	36	20-144
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	49.0	98	55-128
74-88-4	PS	Iodomethane	250	0.00	U	198	79	47-132
75-09-2	PS	Methylene chloride	50.0	0.00	U	49.0	98	56-123
75-15-0	PS	Carbon disulfide	250	0.00	U	239	96	53-133
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	47.7	95	57-119
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	48.6	97	62-125
78-93-3	PS	2-Butanone	250	0.00	U	114	46	30-150
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	47.5	95	60-124
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	49.1	98	56-129
67-66-3	PS	Chloroform	50.0	0.00	U	49.7	99	62-120
74-97-5	PS	Bromochloromethane	50.0	0.00	U	48.3	97	51-135
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	52.0	104	58-129
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	47.1	94	59-126
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	53.5	107	55-132
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	50.4	101	54-121

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361PS
Lab Sample ID: 1202042305
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: R
%Moisture: 18
Analysis Date: 02/13/2010 22:36
Prep Batch ID: 952861
Batch ID: 952862
Dilution: 1

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	43.7	87	58-120
79-01-6	PS	Trichloroethylene	50.0	0.00	U	44.8	90	54-130
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	46.0	92	59-121
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	49.9	100	57-130
74-95-3	PS	Dibromomethane	50.0	0.00	U	47.9	96	57-124
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	185	74	40-137
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	36.4	73	50-131
108-88-3	PS	Toluene	50.0	0.322	J	43.6	87	54-119
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	38.8	78	47-133
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	44.8	90	60-130
591-78-6	PS	2-Hexanone	250	0.00	U	78.9	32	30-139
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	45.1	90	59-125
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	43.3	87	50-126
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	48.5	97	54-131
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	42.4	85	55-127
108-90-7	PS	Chlorobenzene	50.0	0.00	U	41.5	83	50-130
100-41-4	PS	Ethylbenzene	50.0	0.00	U	43.3	87	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	42.9	86	51-127
100-42-5	PS	Styrene	50.0	0.00	U	38.4	77	41-136
75-25-2	PS	Bromoform	50.0	0.00	U	50.7	101	48-143
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	47.3	95	52-129

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361PS
Lab Sample ID: 1202042305
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: R
%Moisture: 18
Analysis Date: 02/13/2010 22:36
Prep Batch ID: 952861
Batch ID: 952862
Dilution: 1

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	46.4	93	56-139
108-86-1	PS	Bromobenzene	50.0	0.00	U	43.1	86	54-125
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	45.2	90	46-127
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	45.2	90	47-130
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	49.0	98	42-126
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	46.8	94	44-132
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	38.2	76	46-127
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	47.6	95	48-136
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	38.5	77	42-132
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	44.9	90	47-130
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	18.7	37	36-142
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	38.4	77	41-130
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	37.2	74	41-126
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	37.0	74	37-136
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	39.1	78	42-143
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	49.1	98	58-127
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	37.5	75	42-128

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361PSD
Lab Sample ID: 1202042306
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: R
%Moisture: 18
Analysis Date: 02/13/2010 23:03
Prep Batch ID: 952861
Batch ID: 952862
Dilution: 1

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	58.4	117	39-148	3	0-19
74-87-3	PSD	Chloromethane	50.0	0.00	U	49.1	98	42-131	3	0-23
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	50.5	101	50-127	3	0-23
74-83-9	PSD	Bromomethane	50.0	0.00	U	48.0	96	26-135	5	0-22
75-00-3	PSD	Chloroethane	50.0	0.00	U	52.7	105	54-128	5	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	56.2	112	55-138	1	0-21
67-64-1	PSD	Acetone	250	0.00	U	87.5	35	20-144	2	0-22
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	49.3	99	55-128	1	0-20
74-88-4	PSD	Iodomethane	250	0.00	U	211	84	47-132	7	0-20
75-09-2	PSD	Methylene chloride	50.0	0.00	U	50.5	101	56-123	3	0-20
75-15-0	PSD	Carbon disulfide	250	0.00	U	242	97	53-133	1	0-22
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	47.1	94	57-119	1	0-20
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	48.2	96	62-125	1	0-20
78-93-3	PSD	2-Butanone	250	0.00	U	114	46	30-150	0	0-21
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	47.2	94	60-124	1	0-20
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	49.2	98	56-129	0	0-20
67-66-3	PSD	Chloroform	50.0	0.00	U	49.2	98	62-120	1	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	48.5	97	51-135	0	0-20
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	51.6	103	58-129	1	0-20
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	46.4	93	59-126	1	0-20
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	52.7	105	55-132	2	0-20
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	50.2	100	54-121	0	0-20

Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-1623 **Sample Type:** Post Spike Duplicate

Client ID: RE15-10-8361PSD **Matrix:** R

Lab Sample ID: 1202042306 **%Moisture:** 18

Instrument: VOA4.I **Analysis Date:** 02/13/2010 23:03 **Dilution:** 1

Analyst: ACJ **Prep Batch ID:** 952861

Purge Vol: 5 mL **Batch ID:** 952862

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	43.3	87	58-120	1	0-20
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	43.6	87	54-130	3	0-23
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	45.7	91	59-121	1	0-20
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	49.2	98	57-130	1	0-20
74-95-3	PSD	Dibromomethane	50.0	0.00	U	47.6	95	57-124	0	0-20
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	189	76	40-137	2	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	35.8	72	50-131	2	0-20
108-88-3	PSD	Toluene	50.0	0.322	J	41.9	83	54-119	4	0-23
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	37.4	75	47-133	4	0-24
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	43.7	87	60-130	2	0-20
591-78-6	PSD	2-Hexanone	250	0.00	U	79.0	32	30-139	0	0-21
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	43.9	88	59-125	3	0-20
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	42.1	84	50-126	3	0-20
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	47.2	94	54-131	3	0-23
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	41.9	84	55-127	1	0-23
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	40.4	81	50-130	3	0-24
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	42.2	84	50-121	3	0-24
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	75.1	75	47-125	2	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	41.4	83	51-127	3	0-24
100-42-5	PSD	Styrene	50.0	0.00	U	37.4	75	41-136	3	0-24
75-25-2	PSD	Bromoform	50.0	0.00	U	50.0	100	48-143	1	0-20
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	45.0	90	52-129	5	0-20

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361PSD
Lab Sample ID: 1202042306
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: R
%Moisture: 18
Analysis Date: 02/13/2010 23:03
Dilution: 1
Prep Batch ID: 952861
Batch ID: 952862

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	45.6	91	56-139	2	0-34
108-86-1	PSD	Bromobenzene	50.0	0.00	U	42.0	84	54-125	3	0-22
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	43.0	86	46-127	5	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	42.3	85	47-130	7	0-24
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	46.8	94	42-126	5	0-22
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	44.2	88	44-132	6	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	36.5	73	46-127	5	0-26
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	46.1	92	48-136	3	0-24
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	37.1	74	42-132	4	0-26
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	42.8	86	47-130	5	0-27
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	18.9	38	36-142	1	0-27
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	36.3	73	41-130	6	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	34.8	70	41-126	7	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	35.1	70	37-136	5	0-29
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	36.2	72	42-143	8	0-21
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	48.5	97	58-127	1	0-20
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	35.0	70	42-128	7	0-24

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623 **Sample Type:** Laboratory Control Sample
Client ID: LCS for batch 952861 **Matrix:** SOIL
Lab Sample ID: 1202042307
Instrument: VOA4.I **Analysis Date:** 02/13/2010 13:28 **Dilution:** 1
Analyst: ACJ **Prep Batch ID:** 952861
Purge Vol: 5 mL **Batch ID:** 952862

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	68.0	136	52-151
74-87-3	LCS	Chloromethane	50.0	0.0	49.4	99	56-130
75-01-4	LCS	Vinyl chloride	50.0	0.0	54.4	109	66-130
74-83-9	LCS	Bromomethane	50.0	0.0	57.6	115	70-126
75-00-3	LCS	Chloroethane	50.0	0.0	57.9	116	67-129
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	65.6	131	73-143
67-64-1	LCS	Acetone	250	0.0	304	122	30-140
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	57.0	114	71-129
74-88-4	LCS	Iodomethane	250	0.0	275	110	72-125
75-09-2	LCS	Methylene chloride	50.0	0.0	52.7	105	64-121
75-15-0	LCS	Carbon disulfide	250	0.0	287	115	70-133
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	56.9	114	73-120
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	54.6	109	73-120
78-93-3	LCS	2-Butanone	250	0.0	296	119	32-145
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	55.0	110	74-124
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	63.3	127	73-134
67-66-3	LCS	Chloroform	50.0	0.0	55.8	112	74-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	54.9	110	73-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	61.8	124	74-132
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	59.3	119	79-128
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	65.3	131	75-135
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	56.5	113	65-120

Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-1623 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 952861 **Matrix:** SOIL

Lab Sample ID: 1202042307

Instrument: VOA4.I **Analysis Date:** 02/13/2010 13:28 **Dilution:** 1

Analyst: ACJ **Prep Batch ID:** 952861

Purge Vol: 5 mL **Batch ID:** 952862

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS	Benzene	50.0	0.0	51.6	103	74-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	56.0	112	77-124
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	53.1	106	73-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	57.1	114	75-128
74-95-3	LCS	Dibromomethane	50.0	0.0	55.3	111	75-120
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	261	104	63-133
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	55.5	111	78-127
108-88-3	LCS	Toluene	50.0	0.0	49.5	99	74-120
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	53.9	108	70-125
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	48.8	98	75-120
591-78-6	LCS	2-Hexanone	250	0.0	263	105	40-153
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	48.1	96	73-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	54.3	109	72-126
124-48-1	LCS	Dibromochloromethane	50.0	0.0	54.9	110	74-126
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	51.9	104	79-120
108-90-7	LCS	Chlorobenzene	50.0	0.0	51.1	102	76-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	51.5	103	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	104	104	76-120
95-47-6	LCS	o-Xylene	50.0	0.0	51.2	102	76-122
100-42-5	LCS	Styrene	50.0	0.0	54.0	108	75-125
75-25-2	LCS	Bromoform	50.0	0.0	55.1	110	68-135
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	46.6	93	72-122

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 952861
Matrix: SOIL
Lab Sample ID: 1202042307
Instrument: VOA4.I
Analysis Date: 02/13/2010 13:28
Dilution: 1
Analyst: ACJ
Prep Batch ID: 952861
Purge Vol: 5 mL
Batch ID: 952862

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	47.1	94	72-129
108-86-1	LCS	Bromobenzene	50.0	0.0	49.6	99	74-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	49.7	99	70-120
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	48.3	97	70-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	50.1	100	60-121
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	50.6	101	71-121
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	49.6	99	71-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	51.6	103	75-123
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	50.4	101	73-120
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	50.8	102	74-123
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	53.2	106	76-127
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	50.5	101	75-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	50.1	100	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	51.4	103	73-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	52.5	105	69-136
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	54.7	109	75-124
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	49.3	99	75-120

Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-1623 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 952861 **Matrix:** SOIL

Lab Sample ID: 1202042308

Instrument: VOA4.I **Analysis Date:** 02/13/2010 14:23 **Dilution:** 1

Analyst: ACJ **Prep Batch ID:** 952861

Purge Vol: 5 mL **Batch ID:** 952862

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	306	122	67-140

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 952861
Matrix: SOIL
Lab Sample ID: 1202052762
Instrument: VOA4.I
Analysis Date: 02/15/2010 19:28
Dilution: 1
Analyst: ACJ
Prep Batch ID 952861
Purge Vol: 5 mL
Batch ID: 952862

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	58.7	117	52-151
74-87-3	LCS	Chloromethane	50.0	0.0	45.8	92	56-130
75-01-4	LCS	Vinyl chloride	50.0	0.0	51.8	104	66-130
74-83-9	LCS	Bromomethane	50.0	0.0	53.6	107	70-126
75-00-3	LCS	Chloroethane	50.0	0.0	54.9	110	67-129
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	60.9	122	73-143
67-64-1	LCS	Acetone	250	0.0	275	110	30-140
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	52.3	105	71-129
74-88-4	LCS	Iodomethane	250	0.0	269	108	72-125
75-09-2	LCS	Methylene chloride	50.0	0.0	49.3	99	64-121
75-15-0	LCS	Carbon disulfide	250	0.0	266	106	70-133
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	52.8	106	73-120
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	51.3	103	73-120
78-93-3	LCS	2-Butanone	250	0.0	278	111	32-145
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	51.3	103	74-124
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	59.0	118	73-134
67-66-3	LCS	Chloroform	50.0	0.0	51.9	104	74-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	53.5	107	73-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	57.7	115	74-132
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	55.6	111	79-128
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	61.5	123	75-135
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	50.7	101	65-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 952861
Matrix: SOIL
Lab Sample ID: 1202052762
Instrument: VOA4.I
Analysis Date: 02/15/2010 19:28
Dilution: 1
Analyst: ACJ
Prep Batch ID 952861
Purge Vol: 5 mL
Batch ID: 952862

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	48.6	97	74-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	53.8	108	77-124
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	49.9	100	73-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	54.0	108	75-128
74-95-3	LCS	Dibromomethane	50.0	0.0	52.9	106	75-120
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	264	106	63-133
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	53.1	106	78-127
108-88-3	LCS	Toluene	50.0	0.0	46.5	93	74-120
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	51.0	102	70-125
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	46.8	94	75-120
591-78-6	LCS	2-Hexanone	250	0.0	255	102	40-153
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	44.9	90	73-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	53.0	106	72-126
124-48-1	LCS	Dibromochloromethane	50.0	0.0	55.3	111	74-126
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	50.8	102	79-120
108-90-7	LCS	Chlorobenzene	50.0	0.0	49.9	100	76-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	49.3	99	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	102	102	76-120
95-47-6	LCS	o-Xylene	50.0	0.0	50.4	101	76-122
100-42-5	LCS	Styrene	50.0	0.0	53.6	107	75-125
75-25-2	LCS	Bromoform	50.0	0.0	58.4	117	68-135
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	47.7	95	72-122

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 952861
Matrix: SOIL
Lab Sample ID: 1202052762
Instrument: VOA4.I
Analysis Date: 02/15/2010 19:28
Dilution: 1
Analyst: ACJ
Prep Batch ID: 952861
Purge Vol: 5 mL
Batch ID: 952862

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS	1,2,3-Trichloropropane	50.0	0.0	48.0	96	72-129
108-86-1	LCS	Bromobenzene	50.0	0.0	49.5	99	74-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	47.0	94	70-120
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	45.8	92	70-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	48.6	97	60-121
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	48.4	97	71-121
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	47.6	95	71-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	51.0	102	75-123
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	48.6	97	73-120
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	49.0	98	74-123
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	52.0	104	76-127
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	50.7	101	75-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	50.6	101	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	49.8	100	73-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	56.3	113	69-136
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	54.1	108	75-124
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	50.1	100	75-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 952861 **Matrix:** SOIL

Lab Sample ID: 1202052763

Instrument: VOA4.I **Analysis Date:** 02/15/2010 20:23 **Dilution:** 1

Analyst: ACJ **Prep Batch ID:** 952861

Purge Vol: 5 mL **Batch ID:** 952862

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	352	141 *	67-140

Method Blank Summary

SDG Number:	10-1623	**Client:**	LANL010	**Matrix:**	SOIL
Client ID:	MB for batch 952861	**Instrument ID:**	VOA4.I	**Data File:**	4x606BA.d
Lab Sample ID:	1202042304	**Prep Date:**	02/13/2010 12:30	**Analyzed:**	02/13/10 14:50
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 952861	1202042307	4x603LA.d	02/13/10	1328
02	LCS for batch 952861	1202042308	4x605SA.d	02/13/10	1423
03	RE15-10-8383	246442001	4x608.d	02/13/10	1546
04	RE15-10-8362	246442003	4x618.d	02/13/10	2020
05	RE15-10-8359	246442004	4x619.d	02/13/10	2047
06	RE15-10-8358	246442005	4x620.d	02/13/10	2114
07	RE15-10-8360	246442006	4x621.d	02/13/10	2141
08	RE15-10-8361PS	1202042305	4x623.d	02/13/10	2236
09	RE15-10-8361PSD	1202042306	4x624.d	02/13/10	2303

Method Blank Summary

SDG Number:	10-1623	**Client:**	LANL010	**Matrix:**	SOIL
Client ID:	MB for batch 952861	**Instrument ID:**	VOA4.I	**Data File:**	4y106ba.d
Lab Sample ID:	1202052761	**Prep Date:**	02/15/2010 18:30	**Analyzed:**	02/15/10 20:51
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 952861	1202052762	4y103la.d	02/15/10	1928
02	LCS for batch 952861	1202052763	4y105sa.d	02/15/10	2023
03	RE15-10-8361	246442002	4y109.d	02/15/10	2213

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-1623

Instrument ID: VOA4.I **Injection Date/Time:** 03-FEB-10 01:04

Column Description: DB-624 **Lab File ID** /020210v4/4w228.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	18.6
75	30.0 - 60.0% of mass 95	45.7
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	90.9
175	5.0 -9.0% of mass 174	7
176	95.0 - 101.0% of mass 174	99.5
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
VSTD0005	W4VM100203-01	4w230.d	03-FEB-10 01:59
VSTD001	W4VM100203-02	4w231.d	03-FEB-10 02:27
VSTD002	W4VM100203-04	4w233.d	03-FEB-10 03:22
VSTD005	W4VM100203-05	4w234.d	03-FEB-10 03:50
VSTD010	W4VM100203-06	4w235.d	03-FEB-10 04:18
VSTD020	W4VM100203-07	4w236.d	03-FEB-10 04:46
VSTD050	W4VM100203-08	4w237.d	03-FEB-10 05:13
VSTD100	W4VM100203-09	4w238.d	03-FEB-10 05:41
VSTD005S	W4VM100203-10	4w240.d	03-FEB-10 06:36
VSTD010S	W4VM100203-11	4w241.d	03-FEB-10 07:04
VSTD025S	W4VM100203-12	4w242.d	03-FEB-10 07:32
VSTD100S	W4VM100203-14	4w244.d	03-FEB-10 08:26
VSTD250S	W4VM100203-15	4w245.d	03-FEB-10 08:54
VSTD500S	W4VM100203-16	4w246.d	03-FEB-10 09:21
SECOND SOURCE	W4VM100203-17	4w248.d	03-FEB-10 10:16
SHORT SECOND SOURCE	W4VM100203-18	4w249.d	03-FEB-10 10:44

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-1623

Instrument ID: VOA4.I **Injection Date/Time:** 13-FEB-10 12:32

Column Description: DB-624 **Lab File ID** /021310v4/4x601.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20.1
75	30.0 - 60.0% of mass 95	49.8
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.8
174	50.0 - 100.0% of mass 95	78.9
175	5.0 -9.0% of mass 174	7.7
176	95.0 - 101.0% of mass 174	99
177	5.0 - 9.0% of mass 176	7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM100213-01	4x602.d	13-FEB-10 13:00
LCS	1202042307	4x603LA.d	13-FEB-10 13:28
VSTD250S	W4VM100213-03	4x604.d	13-FEB-10 13:55
LCS	1202042308	4x605SA.d	13-FEB-10 14:23
BLANK	1202042304	4x606BA.d	13-FEB-10 14:50
RE15-10-8383	246442001	4x608.d	13-FEB-10 15:46
RE15-10-8362	246442003	4x618.d	13-FEB-10 20:20
RE15-10-8359	246442004	4x619.d	13-FEB-10 20:47
RE15-10-8358	246442005	4x620.d	13-FEB-10 21:14
RE15-10-8360	246442006	4x621.d	13-FEB-10 21:41
RE15-10-8361MS	1202042305	4x623.d	13-FEB-10 22:36
RE15-10-8361MSD	1202042306	4x624.d	13-FEB-10 23:03

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-1623

Instrument ID: VOA4.I **Injection Date/Time:** 15-FEB-10 18:32

Column Description: DB-624 **Lab File ID** /021510v4/4y101.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	45.7
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	92.7
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	99.8
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
VSTD050	W4VM100215-01	4y102.d	15-FEB-10 19:00
LCS	1202052762	4y103la.d	15-FEB-10 19:28
VSTD250S	W4VM100215-03	4y104.d	15-FEB-10 19:55
LCS	1202052763	4y105sa.d	15-FEB-10 20:23
BLANK	1202052761	4y106ba.d	15-FEB-10 20:51
RE15-10-8361	246442002	4y109.d	15-FEB-10 22:13

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1623

Instrument: VOA4.I

STD Analysis Time: 13-FEB-10 13:00

GC Column: RTX-VOLATILES

Data File: 4x602.d

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	660011	10.6	559187	13.8	369400	16.2
Upper Limit	1320022	11.1	1118374	14.3	738800	16.7
Lower Limit	330006	10.1	279594	13.3	184700	15.7
Sample ID						
BLK01LCS	663934	10.6	564978	13.8	376023	16.2
BLK01SLCS	661996	10.6	573338	13.8	376896	16.2
BLK01	681861	10.6	554474	13.8	332064	16.2
RE15-10-8383	650427	10.6	525082	13.8	300091	16.2
RE15-10-8362	597366	10.6	455768	13.8	245096	16.2
RE15-10-8359	615606	10.6	498342	13.8	271545	16.2
RE15-10-8358	616479	10.6	485075	13.8	261279	16.2
RE15-10-8360	590666	10.6	463576	13.8	258315	16.2
RE15-10-8361MS	619646	10.6	480320	13.8	265315	16.2
RE15-10-8361MSD	607212	10.6	484757	13.8	272692	16.2

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: 10-1623

Instrument: VOA4.I

STD Analysis Time: 15-FEB-10 19:00

GC Column: RTX-VOLATILES

Data File: 4y102.d

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	745767	10.6	651412	13.8	440720	16.2
Upper Limit	1491534	11.1	1302824	14.3	881440	16.7
Lower Limit	372884	10.1	325706	13.3	220360	15.7
Sample ID						
BLK02LCS	772267	10.6	664641	13.8	450074	16.2
BLK02SLCS	764026	10.6	661902	13.8	443976	16.2
BLK02	750449	10.6	627644	13.8	380700	16.2
RE15-10-8361	709495	10.6	532991	13.8	247500	16.2

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:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:14**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x620.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.407	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.359	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.359	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.359	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.359	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.359	1.20
67-64-1	Acetone	U	5.99	ug/kg	1.99	5.99
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
74-88-4	Iodomethane	U	5.99	ug/kg	1.92	5.99
75-09-2	Methylene chloride	U	5.99	ug/kg	2.39	5.99
75-15-0	Carbon disulfide	U	5.99	ug/kg	1.50	5.99
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.359	1.20
78-93-3	2-Butanone	U	5.99	ug/kg	1.80	5.99
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.359	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.395	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.359	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.359	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.359	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.359	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.359	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.395	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.359	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.359	1.20
108-10-1	4-Methyl-2-pentanone	U	5.99	ug/kg	1.50	5.99
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.359	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.359	1.20
591-78-6	2-Hexanone	U	5.99	ug/kg	1.80	5.99
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.359	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.359	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.359	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.359	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.359	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:14**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:16**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x620.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.359	1.20
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.359	2.39
95-47-6	o-Xylene	U	1.20	ug/kg	0.359	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.359	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.359	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.359	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.359	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.359	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.359	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.359	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.359	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.359	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.359	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.359	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.99	ug/kg	1.92	5.99
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	6.24	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x620.d
Lab Smp Id: 246442005 Client Smp ID: RE15-10-8358
Inj Date : 13-FEB-2010 21:14
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442005|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.45830	% 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)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	616479	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	485075	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	261279	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	136972	43.2017	51.7
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	482168	43.4635	52.0
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	276096	58.6855	70.2

ION RATIO REPORT

VOA REPORT

Data file: 4x620.d
Report Date: 02/24/2010 17:47
Lab. ID: 246442005 SampleType: SAMPLE
Injection Date: 13-FEB-2010 21:14
Operator: ACJ Instrument: VOA4.i
Sample Info: |246442005|952862|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	8538	10.61	10.34	80-120	100	(T)
64	1391	10.62	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	4218	12.25	12.02	80-120	100	(T)
43	2579	12.25	12.02	221-281	61	(QT)
100	327269	12.25	12.02	3- 63	7758	(QT)
58 Ethylbenzene			CAS#: 100-41-4			
91	8004	13.86	13.86	80-120	100	( )
106	1868	13.86	13.86	2- 62	23	( )
66 Bromoform			CAS#: 75-25-2			
173	1056	14.95	14.66	80-120	100	(T)
175	17133	14.95	14.66	19- 79	1622	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x620.d
Lab Smp Id: 246442005 Client Smp ID: RE15-10-8358
Inj Date : 13-FEB-2010 21:14
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442005|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	16.45830	% 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
* 61 Chlorobenzene-d5	13.771	1566233	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Siloxane				CAS #:			
14.825	163279	5.21248372	6.2	0		0	61

Data File: /chem/VOA4.i/021310v4/4x620.d

Date : 13-FEB-2010 21:14

Client ID: RE15-10-8358

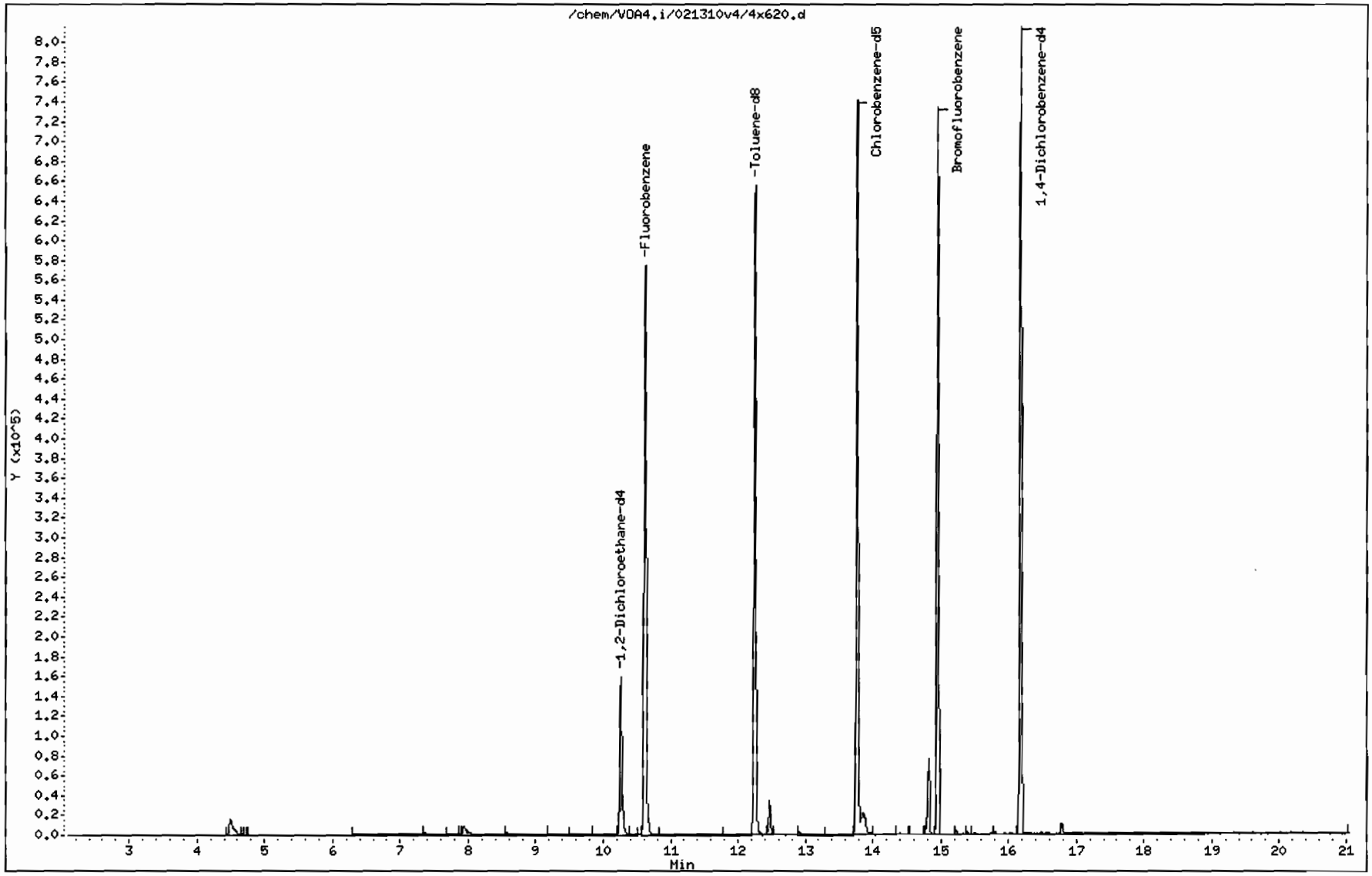
Sample Info: I2464420051952862I1IVOAFI1I

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25



Data File: /chem/VOA4.i/021310v4/4x620.d

Page 1

Date : 13-FEB-2010 21:14

Client ID: RE15-10-8358

Instrument: VOA4.i

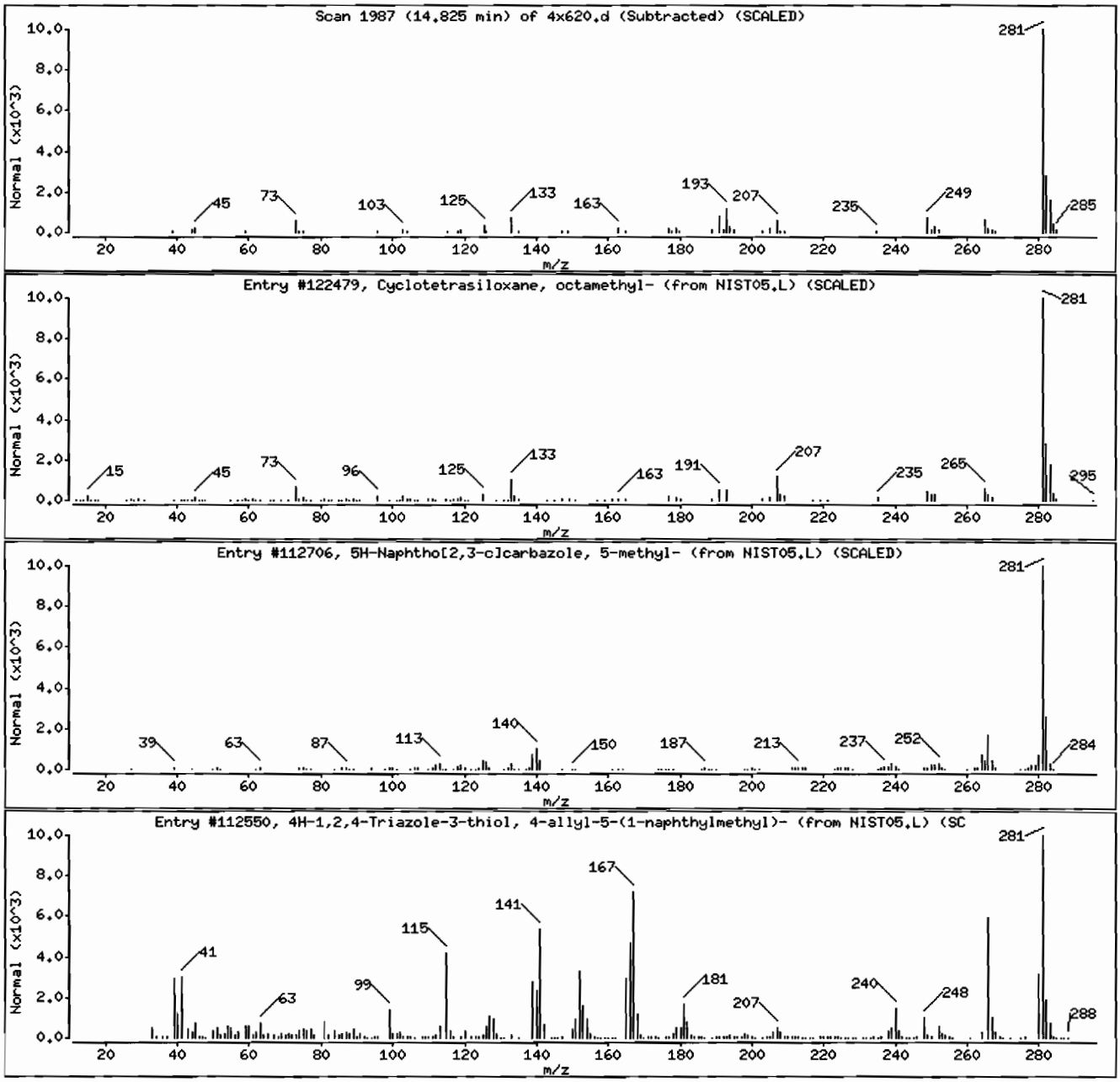
Sample Info: |2464420051952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	78	C8H24O4Si4	296
5H-Naphtho[2,3-c]carbazole, 5-methyl-	100025-44-3	NIST05.L	112706	59	C21H15N	281
4H-1,2,4-Triazole-3-thiol, 4-allyl-5-(1-	31803-13-1	NIST05.L	112550	50	C16H15N3S	281



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x619.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.365	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.322	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.322	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.322	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.322	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.322	1.07
67-64-1	Acetone	J	3.52	ug/kg	1.78	5.37
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
74-88-4	Iodomethane	U	5.37	ug/kg	1.72	5.37
75-09-2	Methylene chloride	U	5.37	ug/kg	2.15	5.37
75-15-0	Carbon disulfide	U	5.37	ug/kg	1.34	5.37
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.322	1.07
78-93-3	2-Butanone	U	5.37	ug/kg	1.61	5.37
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.322	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.322	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.354	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.322	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.322	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.322	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.322	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.322	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.354	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.322	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.322	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.322	1.07
108-10-1	4-Methyl-2-pentanone	U	5.37	ug/kg	1.34	5.37
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
108-88-3	Toluene	J	0.328	ug/kg	0.322	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.322	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.322	1.07
591-78-6	2-Hexanone	U	5.37	ug/kg	1.61	5.37
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.322	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.322	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.322	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.322	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.322	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:47**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x619.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.322	1.07
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.322	2.15
95-47-6	o-Xylene	U	1.07	ug/kg	0.322	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.322	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.322	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.322	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.322	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.322	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.322	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.322	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.322	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.322	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.322	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.322	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.322	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.322	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.37	ug/kg	1.72	5.37
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.322	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.322	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.82	24.3	ug/kg	90	NJ

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x619.d
Lab Smp Id: 246442004 Client Smp ID: RE15-10-8359
Inj Date : 13-FEB-2010 20:47
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442004|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.84520	% 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)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	615606	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	498342	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	271545	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	139501	44.0617	47.3
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	487754	42.7965	45.9
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	281681	57.6091	61.8
10 Acetone	43	7.375	7.358	(0.695)	9429	3.27604	3.5(a)
50 Toluene	92	12.326	12.327	(0.895)	2969	0.30599	0.33(a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4x619.d
Report Date: 02/24/2010 17:47
Lab. ID: 246442004 SampleType: SAMPLE
Injection Date: 13-FEB-2010 20:47
Operator: ACJ Instrument: VOA4.i
Sample Info: |246442004|952862|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone		CAS#: 67-64-1				
43	9429	7.38	7.36	80-120	100	( )
58	2676	7.37	7.36	2- 62	28	( )
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	8508	10.62	10.34	80-120	100	(T)
64	1287	10.62	10.34	2- 62	15	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	4500	12.25	12.02	80-120	100	(T)
43	2261	12.25	12.02	221-281	50	(QT)
100	333002	12.25	12.02	3- 63	7399	(QT)
50 Toluene		CAS#: 108-88-3				
92	2969	12.33	12.33	80-120	100	( )
91	5083	12.33	12.33	138-198	171	( )
60 1,1,1,2-Tetrachloroethane			CAS#: 630-20-6			
131	6477	13.86	13.85	80-120	100	( )
133	32054	13.86	13.85	66-126	495	(Q)
119	192532	13.77	13.85	33- 93	2972	(QT)
58 Ethylbenzene		CAS#: 100-41-4				
91	68546	13.87	13.86	80-120	100	( )
106	19208	13.86	13.86	2- 62	28	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
64 o-Xylene		CAS#: 95-47-6				
106	2765	14.14	14.40	80-120	100	(T)
91	8366	14.13	14.40	177-237	303	(QT)
63 m,p-Xylenes		CAS#: 179601-23-1				
106	19208	13.86	13.97	80-120	100	(T)
91	68546	13.87	13.97	165-225	357	(QT)
66 Bromoform		CAS#: 75-25-2				
173	1229	14.95	14.66	80-120	100	(T)
175	17513	14.95	14.66	19- 79	1425	(QT)
67 Isopropylbenzene		CAS#: 98-82-8				
105	14396	14.79	14.76	80-120	100	( )
120	1307	14.79	14.76	0- 58	9	( )
74 1,2,3-Trichloropropane		CAS#: 96-18-4				
110	688	14.83	15.11	80-120	100	(T)
75	3052	14.82	15.11	240-300	443	(QT)
77	34995	14.79	15.11	58-118	5083	(QT)
76 n-Propylbenzene		CAS#: 103-65-1				
91	7714	15.50	15.18	80-120	100	(T)
120	986	15.40	15.19	0- 55	13	(T)
81 tert-Butylbenzene		CAS#: 98-06-6				
119	9546	15.40	15.70	80-120	100	(T)
91	5121	15.40	15.70	38- 98	54	(T)
134	1212	15.41	15.70	0- 52	13	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x619.d
Lab Smp Id: 246442004 Client Smp ID: RE15-10-8359
Inj Date : 13-FEB-2010 20:47
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442004|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	6.84520	% 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
* 61 Chlorobenzene-d5	13.770	2596833	50.000

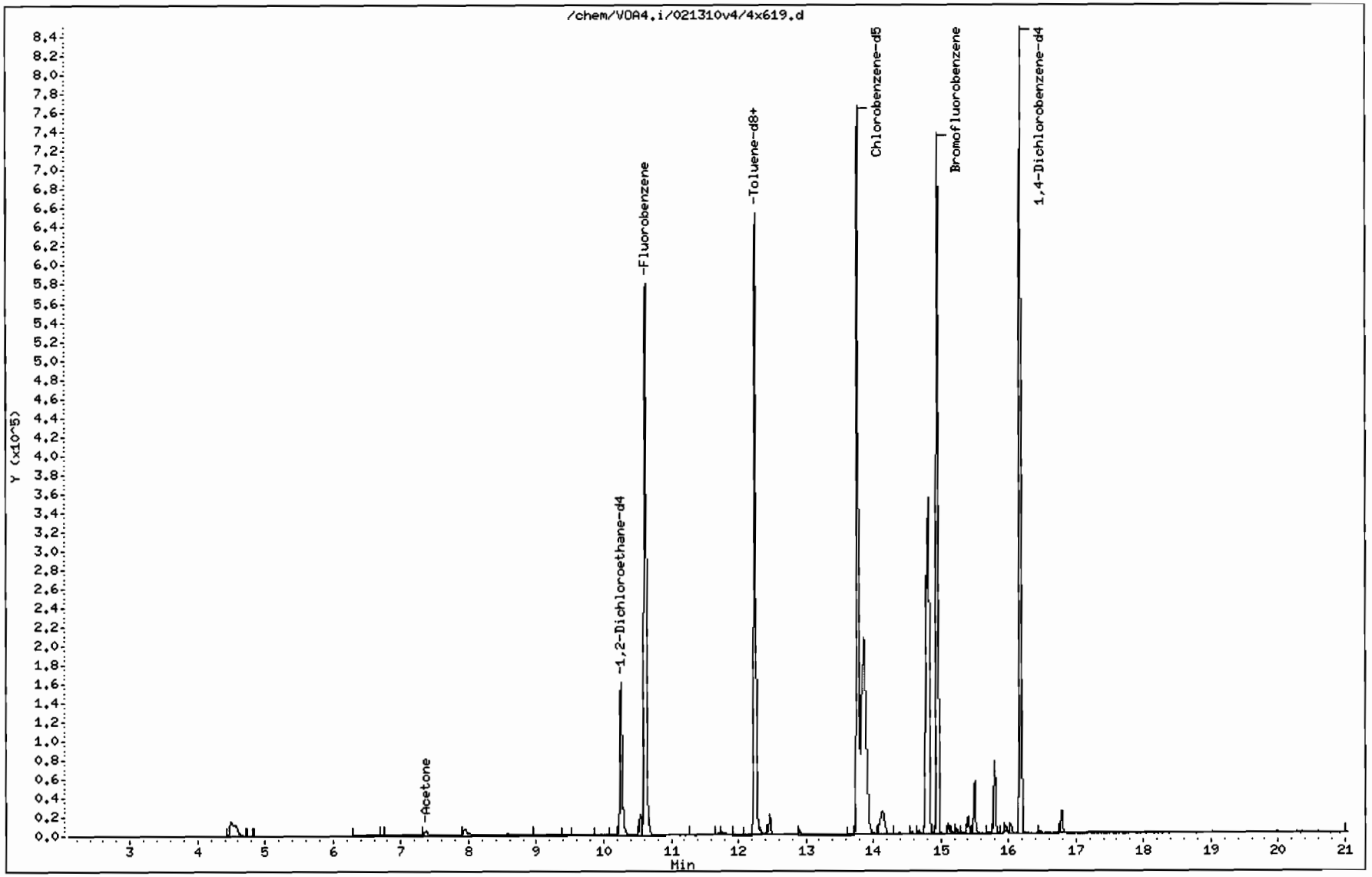
	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-			CAS #: 556-67-2				
14.819	1175771	22.6385427	24.3	90	NIST05.L	122480	61

Data File: /chem/VOA4.i/021310v4/4x619.d
Date : 13-FEB-2010 20:47
Client ID: RE15-10-8359
Sample Info: |246442004|952862|1|VOAF|1|

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

Column phase: RTX-VOLATILES



Data File: /chem/VOA4.i/021310v4/4x619.d

Date : 13-FEB-2010 20:47

Client ID: RE15-10-8359

Instrument: VOA4.i

Sample Info: |2464420041952862|1|VOAF|1|

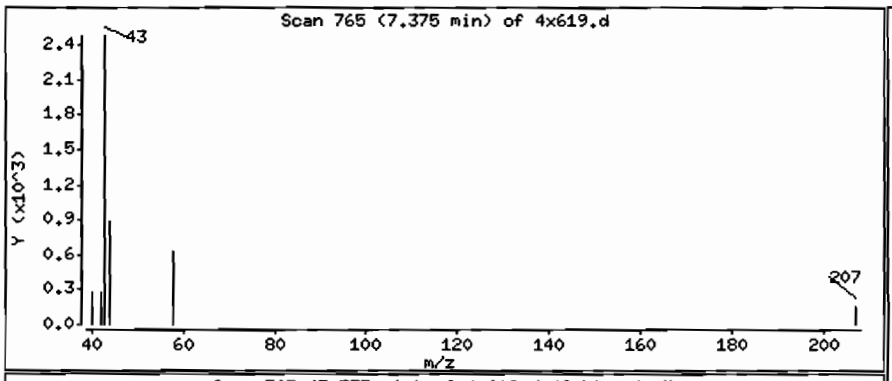
Operator: ACJ

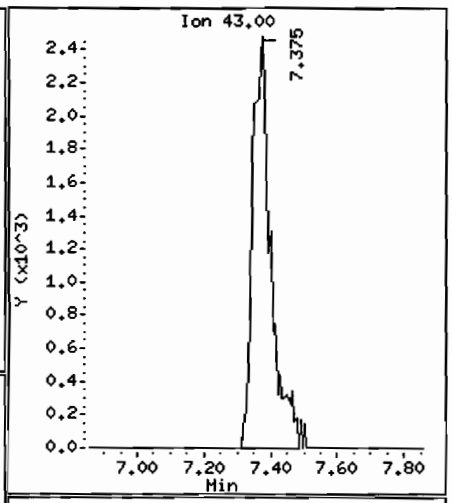
Column phase: RTX-VOLATILES

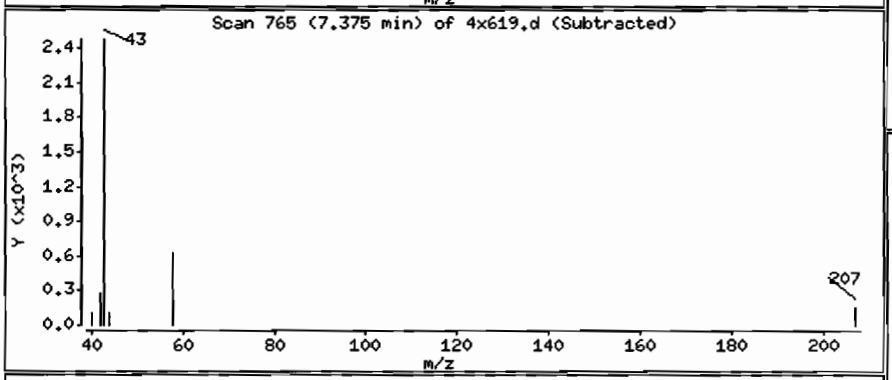
Column diameter: 0.25

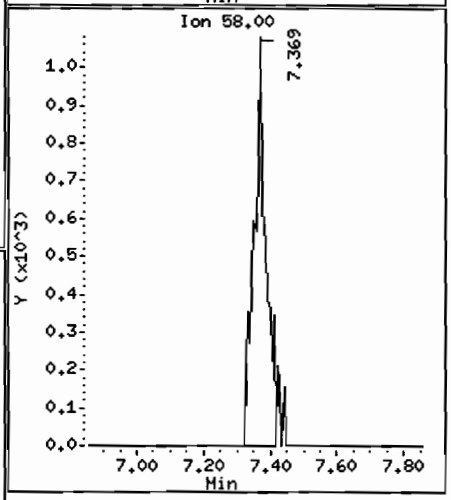
10 Acetone

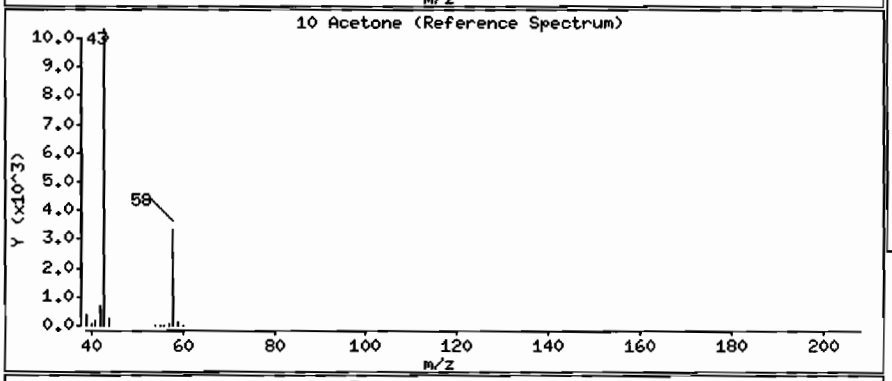
Concentration: 3.5 ug/Kg

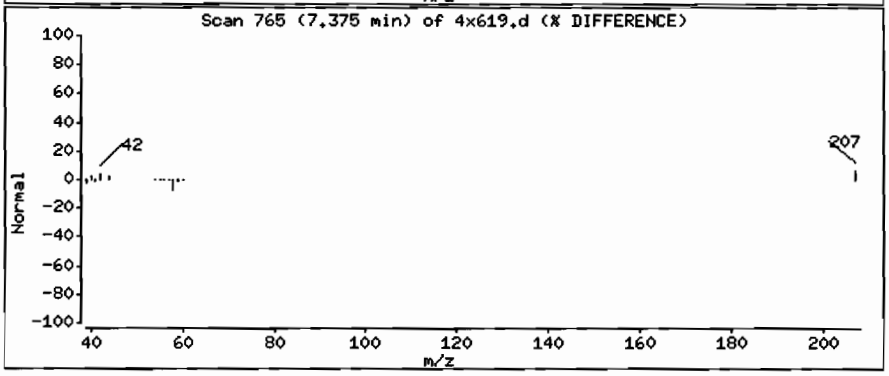












Data File: /chem/VOA4.i/021310v4/4x619.d

Date : 13-FEB-2010 20:47

Client ID: RE15-10-8359

Instrument: VOA4.i

Sample Info: |2464420041952862|1|VOAF|1|

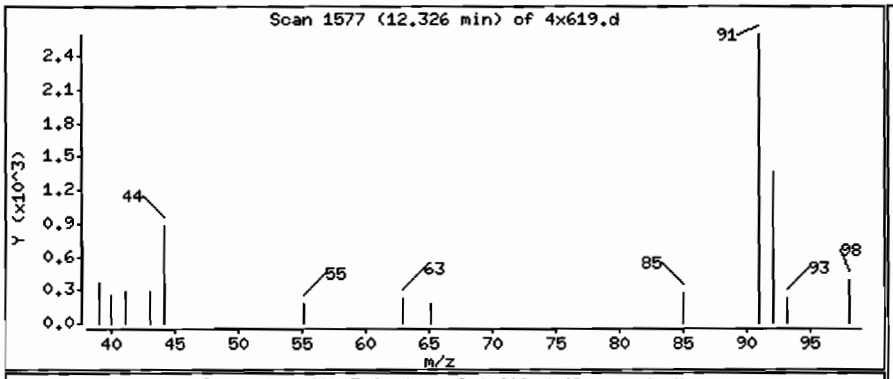
Operator: ACJ

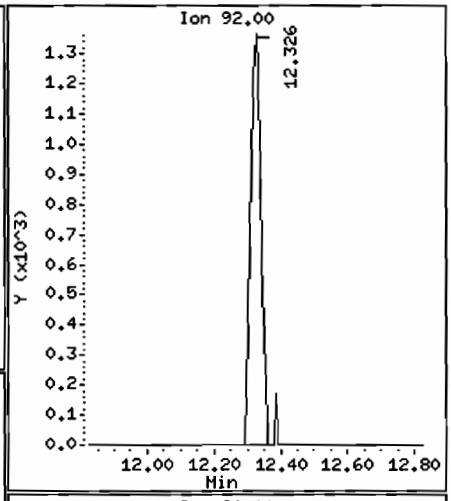
Column phase: RTX-VOLATILES

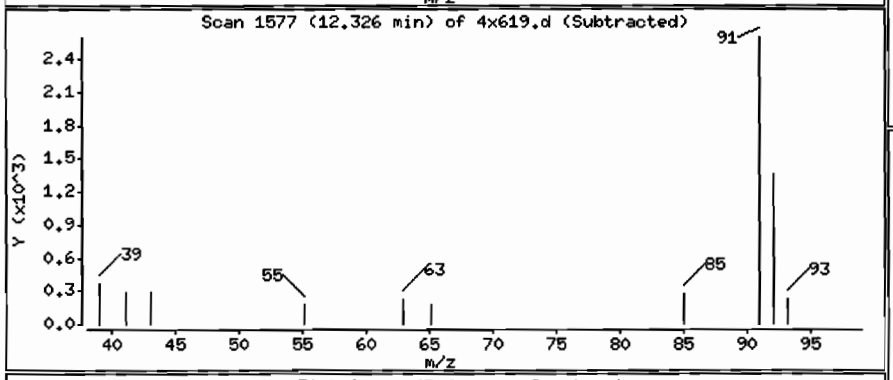
Column diameter: 0.25

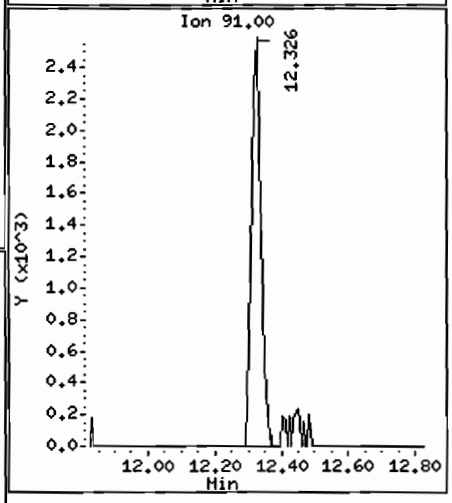
50 Toluene

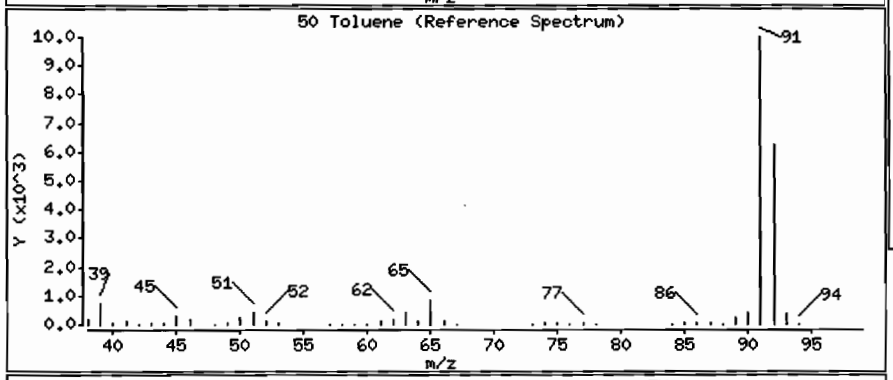
Concentration: 0.33 ug/Kg

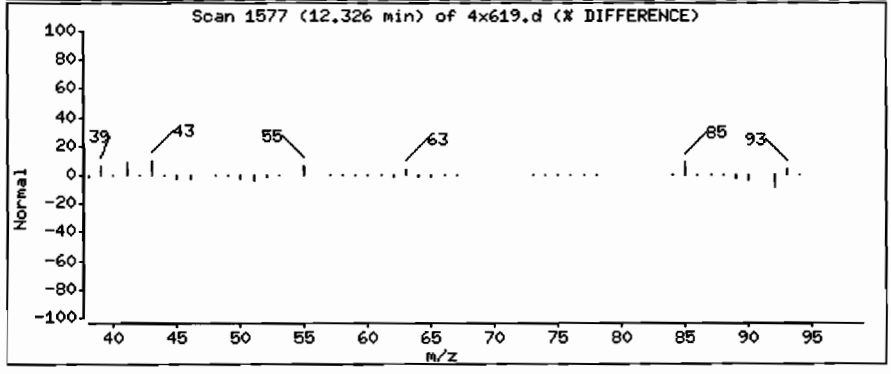












Data File: /chem/VOA4.i/021310v4/4x619.d

Date : 13-FEB-2010 20:47

Client ID: RE15-10-8359

Instrument: VOA4.i

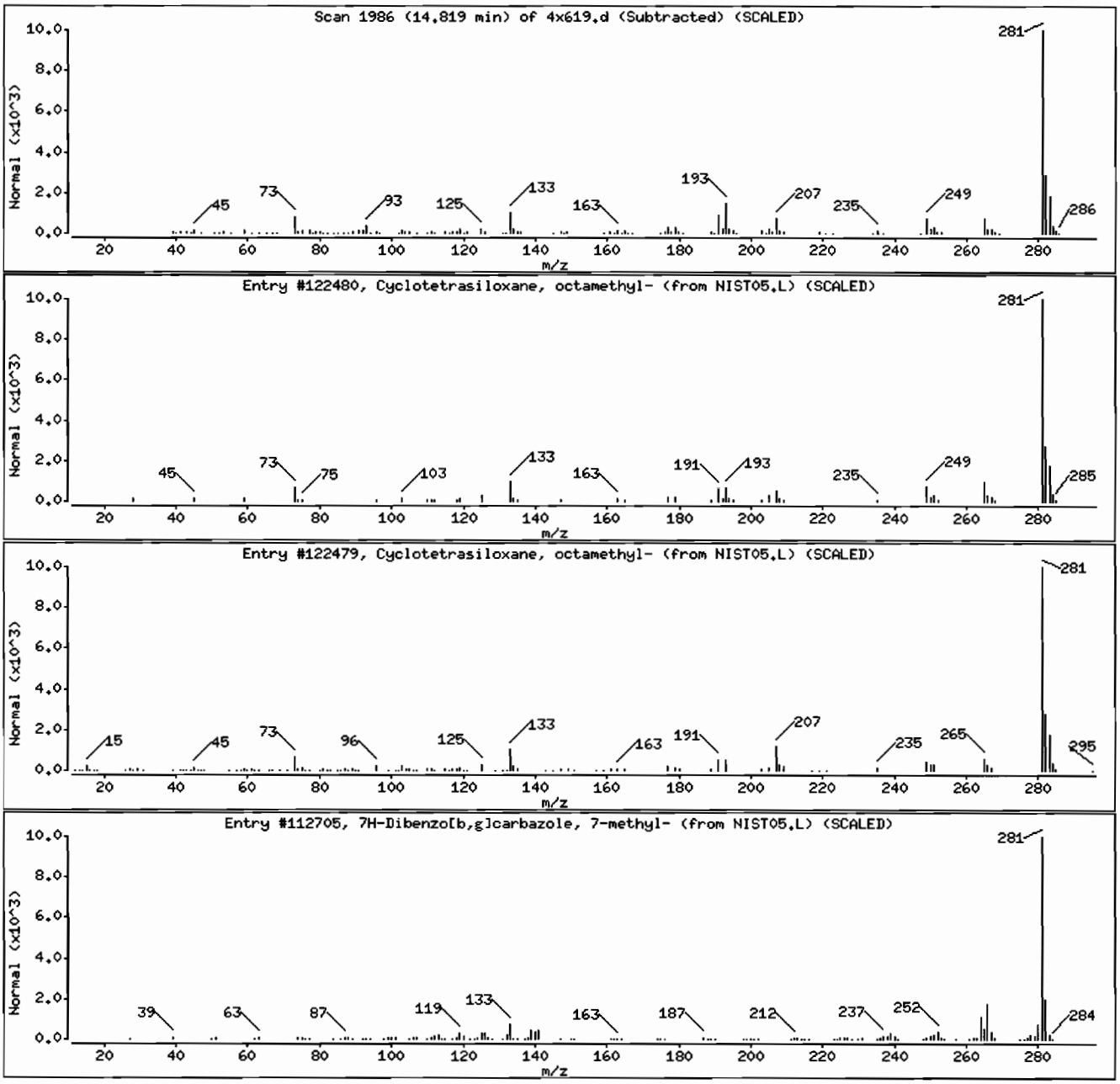
Sample Info: 1246442004|952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	87	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	64	C21H15N	281



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x621.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.38	ug/kg	0.468	1.38
74-87-3	Chloromethane	U	1.38	ug/kg	0.413	1.38
75-01-4	Vinyl chloride	U	1.38	ug/kg	0.413	1.38
74-83-9	Bromomethane	U	1.38	ug/kg	0.413	1.38
75-00-3	Chloroethane	U	1.38	ug/kg	0.413	1.38
75-69-4	Trichlorofluoromethane	U	1.38	ug/kg	0.413	1.38
67-64-1	Acetone	U	6.89	ug/kg	2.29	6.89
75-35-4	1,1-Dichloroethylene	U	1.38	ug/kg	0.413	1.38
74-88-4	Iodomethane	U	6.89	ug/kg	2.20	6.89
75-09-2	Methylene chloride	U	6.89	ug/kg	2.76	6.89
75-15-0	Carbon disulfide	U	6.89	ug/kg	1.72	6.89
156-60-5	trans-1,2-Dichloroethylene	U	1.38	ug/kg	0.413	1.38
75-34-3	1,1-Dichloroethane	U	1.38	ug/kg	0.413	1.38
78-93-3	2-Butanone	U	6.89	ug/kg	2.07	6.89
156-59-2	cis-1,2-Dichloroethylene	U	1.38	ug/kg	0.413	1.38
594-20-7	2,2-Dichloropropane	U	1.38	ug/kg	0.413	1.38
67-66-3	Chloroform	U	1.38	ug/kg	0.413	1.38
74-97-5	Bromochloromethane	U	1.38	ug/kg	0.455	1.38
71-55-6	1,1,1-Trichloroethane	U	1.38	ug/kg	0.413	1.38
563-58-6	1,1-Dichloropropene	U	1.38	ug/kg	0.413	1.38
56-23-5	Carbon tetrachloride	U	1.38	ug/kg	0.413	1.38
107-06-2	1,2-Dichloroethane	U	1.38	ug/kg	0.413	1.38
71-43-2	Benzene	U	1.38	ug/kg	0.413	1.38
79-01-6	Trichloroethylene	U	1.38	ug/kg	0.455	1.38
78-87-5	1,2-Dichloropropane	U	1.38	ug/kg	0.413	1.38
75-27-4	Bromodichloromethane	U	1.38	ug/kg	0.413	1.38
74-95-3	Dibromomethane	U	1.38	ug/kg	0.413	1.38
108-10-1	4-Methyl-2-pentanone	U	6.89	ug/kg	1.72	6.89
10061-01-5	cis-1,3-Dichloropropylene	U	1.38	ug/kg	0.413	1.38
108-88-3	Toluene	U	1.38	ug/kg	0.413	1.38
10061-02-6	trans-1,3-Dichloropropylene	U	1.38	ug/kg	0.413	1.38
79-00-5	1,1,2-Trichloroethane	U	1.38	ug/kg	0.413	1.38
591-78-6	2-Hexanone	U	6.89	ug/kg	2.07	6.89
142-28-9	1,3-Dichloropropane	U	1.38	ug/kg	0.413	1.38
127-18-4	Tetrachloroethylene	U	1.38	ug/kg	0.413	1.38
124-48-1	Dibromochloromethane	U	1.38	ug/kg	0.413	1.38
106-93-4	1,2-Dibromoethane	U	1.38	ug/kg	0.413	1.38
108-90-7	Chlorobenzene	U	1.38	ug/kg	0.413	1.38

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 21:41**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:17**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x621.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.38	ug/kg	0.413	1.38
179601-23-1	m,p-Xylenes	U	2.76	ug/kg	0.413	2.76
95-47-6	o-Xylene	U	1.38	ug/kg	0.413	1.38
100-42-5	Styrene	U	1.38	ug/kg	0.413	1.38
75-25-2	Bromoform	U	1.38	ug/kg	0.413	1.38
79-34-5	1,1,2,2-Tetrachloroethane	U	1.38	ug/kg	0.413	1.38
96-18-4	1,2,3-Trichloropropane	U	1.38	ug/kg	0.413	1.38
108-86-1	Bromobenzene	U	1.38	ug/kg	0.413	1.38
103-65-1	n-Propylbenzene	U	1.38	ug/kg	0.413	1.38
95-49-8	2-Chlorotoluene	U	1.38	ug/kg	0.413	1.38
98-82-8	Isopropylbenzene	U	1.38	ug/kg	0.413	1.38
108-67-8	1,3,5-Trimethylbenzene	U	1.38	ug/kg	0.413	1.38
106-43-4	4-Chlorotoluene	U	1.38	ug/kg	0.413	1.38
98-06-6	tert-Butylbenzene	U	1.38	ug/kg	0.413	1.38
95-63-6	1,2,4-Trimethylbenzene	U	1.38	ug/kg	0.413	1.38
135-98-8	sec-Butylbenzene	U	1.38	ug/kg	0.413	1.38
99-87-6	4-Isopropyltoluene	U	1.38	ug/kg	0.413	1.38
541-73-1	1,3-Dichlorobenzene	U	1.38	ug/kg	0.413	1.38
106-46-7	1,4-Dichlorobenzene	U	1.38	ug/kg	0.413	1.38
104-51-8	n-Butylbenzene	U	1.38	ug/kg	0.413	1.38
96-12-8	1,2-Dibromo-3-chloropropane	U	1.38	ug/kg	0.413	1.38
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.89	ug/kg	2.20	6.89
630-20-6	1,1,1,2-Tetrachloroethane	U	1.38	ug/kg	0.413	1.38
95-50-1	1,2-Dichlorobenzene	U	1.38	ug/kg	0.413	1.38

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/VOA4.i/021310v4/4x621.d
Lab Smp Id: 246442006 Client Smp ID: RE15-10-8360
Inj Date : 13-FEB-2010 21:41
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442006|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	27.40610	% 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)
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	590666	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	463576	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	258315	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	129048	42.4812	58.5
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	467219	44.0692	60.7
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	260545	56.0156	77.2

ION RATIO REPORT

VOA REPORT

Data file: 4x621.d
Report Date: 02/24/2010 17:47
Lab. ID: 246442006 SampleType: SAMPLE
Injection Date: 13-FEB-2010 21:41
Operator: ACJ Instrument: VOA4.i
Sample Info: |246442006|952862|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	8075	10.62	10.34	80-120	100	(T)
64	1454	10.61	10.34	2- 62	18	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	3994	12.25	12.02	80-120	100	(T)
43	2326	12.25	12.02	221-281	58	(QT)
100	317689	12.25	12.02	3- 63	7952	(QT)
66 Bromoform			CAS#: 75-25-2			
173	1109	14.95	14.66	80-120	100	(T)
175	16407	14.95	14.66	19- 79	1479	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x621.d
Lab Smp Id: 246442006 Client Smp ID: RE15-10-8360
Inj Date : 13-FEB-2010 21:41
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442006|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

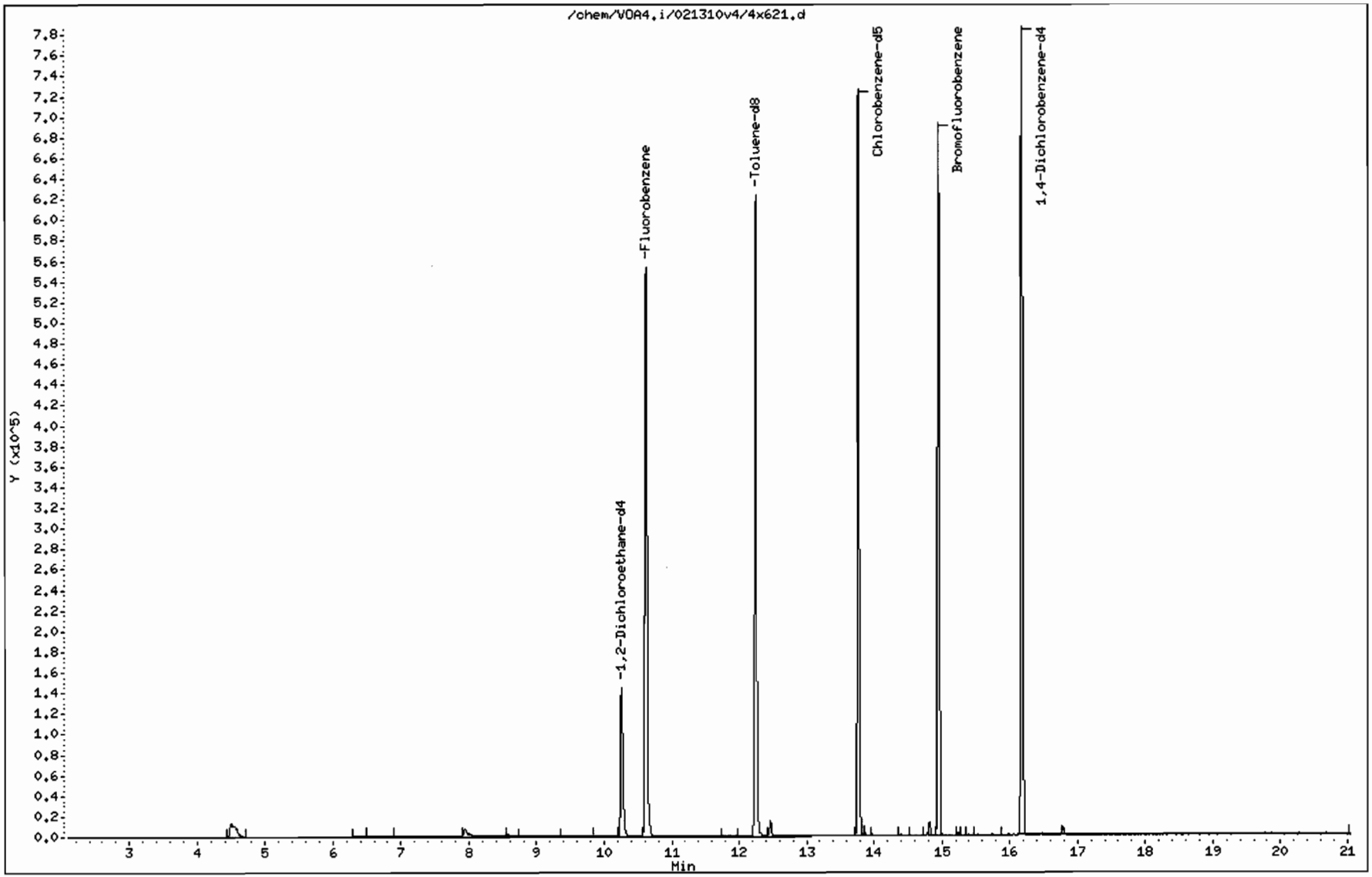
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/021310v4/4x621.d
Date : 13-FEB-2010 21:41
Client ID: RE15-10-8360
Sample Info: |2464420061952862|1|VOAF|1|

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

Column phase: RTX-VOLATILES



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 22:13**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 21:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y109.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.22	ug/kg	0.415	1.22
74-87-3	Chloromethane	U	1.22	ug/kg	0.366	1.22
75-01-4	Vinyl chloride	U	1.22	ug/kg	0.366	1.22
74-83-9	Bromomethane	U	1.22	ug/kg	0.366	1.22
75-00-3	Chloroethane	U	1.22	ug/kg	0.366	1.22
75-69-4	Trichlorofluoromethane	U	1.22	ug/kg	0.366	1.22
67-64-1	Acetone	U	6.10	ug/kg	2.03	6.10
75-35-4	1,1-Dichloroethylene	U	1.22	ug/kg	0.366	1.22
74-88-4	Iodomethane	U	6.10	ug/kg	1.95	6.10
75-09-2	Methylene chloride	U	6.10	ug/kg	2.44	6.10
75-15-0	Carbon disulfide	U	6.10	ug/kg	1.53	6.10
156-60-5	trans-1,2-Dichloroethylene	U	1.22	ug/kg	0.366	1.22
75-34-3	1,1-Dichloroethane	U	1.22	ug/kg	0.366	1.22
78-93-3	2-Butanone	U	6.10	ug/kg	1.83	6.10
156-59-2	cis-1,2-Dichloroethylene	U	1.22	ug/kg	0.366	1.22
594-20-7	2,2-Dichloropropane	U	1.22	ug/kg	0.366	1.22
67-66-3	Chloroform	U	1.22	ug/kg	0.366	1.22
74-97-5	Bromochloromethane	U	1.22	ug/kg	0.403	1.22
71-55-6	1,1,1-Trichloroethane	U	1.22	ug/kg	0.366	1.22
563-58-6	1,1-Dichloropropene	U	1.22	ug/kg	0.366	1.22
56-23-5	Carbon tetrachloride	U	1.22	ug/kg	0.366	1.22
107-06-2	1,2-Dichloroethane	U	1.22	ug/kg	0.366	1.22
71-43-2	Benzene	U	1.22	ug/kg	0.366	1.22
79-01-6	Trichloroethylene	U	1.22	ug/kg	0.403	1.22
78-87-5	1,2-Dichloropropane	U	1.22	ug/kg	0.366	1.22
75-27-4	Bromodichloromethane	U	1.22	ug/kg	0.366	1.22
74-95-3	Dibromomethane	U	1.22	ug/kg	0.366	1.22
108-10-1	4-Methyl-2-pentanone	U	6.10	ug/kg	1.53	6.10
10061-01-5	cis-1,3-Dichloropropylene	U	1.22	ug/kg	0.366	1.22
108-88-3	Toluene	J	0.393	ug/kg	0.366	1.22
10061-02-6	trans-1,3-Dichloropropylene	U	1.22	ug/kg	0.366	1.22
79-00-5	1,1,2-Trichloroethane	U	1.22	ug/kg	0.366	1.22
591-78-6	2-Hexanone	U	6.10	ug/kg	1.83	6.10
142-28-9	1,3-Dichloropropane	U	1.22	ug/kg	0.366	1.22
127-18-4	Tetrachloroethylene	U	1.22	ug/kg	0.366	1.22
124-48-1	Dibromochloromethane	U	1.22	ug/kg	0.366	1.22
106-93-4	1,2-Dibromoethane	U	1.22	ug/kg	0.366	1.22
108-90-7	Chlorobenzene	U	1.22	ug/kg	0.366	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 22:13**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 21:18**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y109.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.22	ug/kg	0.366	1.22
179601-23-1	m,p-Xylenes	U	2.44	ug/kg	0.366	2.44
95-47-6	o-Xylene	U	1.22	ug/kg	0.366	1.22
100-42-5	Styrene	U	1.22	ug/kg	0.366	1.22
75-25-2	Bromoform	U	1.22	ug/kg	0.366	1.22
79-34-5	1,1,2,2-Tetrachloroethane	U	1.22	ug/kg	0.366	1.22
96-18-4	1,2,3-Trichloropropane	U	1.22	ug/kg	0.366	1.22
108-86-1	Bromobenzene	U	1.22	ug/kg	0.366	1.22
103-65-1	n-Propylbenzene	U	1.22	ug/kg	0.366	1.22
95-49-8	2-Chlorotoluene	U	1.22	ug/kg	0.366	1.22
98-82-8	Isopropylbenzene	U	1.22	ug/kg	0.366	1.22
108-67-8	1,3,5-Trimethylbenzene	U	1.22	ug/kg	0.366	1.22
106-43-4	4-Chlorotoluene	U	1.22	ug/kg	0.366	1.22
98-06-6	tert-Butylbenzene	U	1.22	ug/kg	0.366	1.22
95-63-6	1,2,4-Trimethylbenzene	U	1.22	ug/kg	0.366	1.22
135-98-8	sec-Butylbenzene	U	1.22	ug/kg	0.366	1.22
99-87-6	4-Isopropyltoluene	U	1.22	ug/kg	0.366	1.22
541-73-1	1,3-Dichlorobenzene	U	1.22	ug/kg	0.366	1.22
106-46-7	1,4-Dichlorobenzene	U	1.22	ug/kg	0.366	1.22
104-51-8	n-Butylbenzene	U	1.22	ug/kg	0.366	1.22
96-12-8	1,2-Dibromo-3-chloropropane	U	1.22	ug/kg	0.366	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.10	ug/kg	1.95	6.10
630-20-6	1,1,1,2-Tetrachloroethane	U	1.22	ug/kg	0.366	1.22
95-50-1	1,2-Dichlorobenzene	U	1.22	ug/kg	0.366	1.22

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
556-67-2	Cyclotetrasiloxane, octamethyl-	14.83	14.1	ug/kg	90	NJ

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021510v4/4y109.d
Lab Smp Id: 246442002 Client Smp ID: RE15-10-8361
Inj Date : 15-FEB-2010 22:13
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442002|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021510v4/VOA4-8260-020310.m
Meth Date : 15-Feb-2010 20:32 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	18.04950	% 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)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	709495	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.770	(1.000)	532991	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	247500	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	142044	38.9279	47.5
$ 47 Toluene-d8	98	12.253	12.252	(0.890)	545010	44.7116	54.6
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	275468	61.8118	75.4
50 Toluene	92	12.320	12.320	(0.895)	3339	0.32175	0.39(a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4y109.d
Report Date: 02/15/2010 22:58
Lab. ID: 246442002 SampleType: SAMPLE
Injection Date: 15-FEB-2010 22:13
Operator: ACJ Instrument: VOA4.i
Sample Info: |246442002|952862|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/021510v4/VOA4-8260-020310.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
37 1,2-Dichloroethane			CAS#: 107-06-2			
62	9965	10.62	10.34	80-120	100	(T)
64	1579	10.61	10.34	2- 62	16	(T)
49 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	4377	12.25	12.01	80-120	100	(T)
43	2699	12.26	12.01	208-268	62	(QT)
100	377707	12.25	12.02	4- 64	8629	(QT)
50 Toluene			CAS#: 108-88-3			
92	3339	12.32	12.32	80-120	100	( )
91	5543	12.32	12.32	137-197	166	( )
66 Bromoform			CAS#: 75-25-2			
173	1141	14.95	14.65	80-120	100	(T)
175	18479	14.95	14.65	19- 79	1618	(QT)
74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	611	14.83	15.11	80-120	100	(T)
75	1171	14.82	15.11	236-296	192	(QT)
77	1092	14.79	15.11	56-116	179	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021510v4/4y109.d
Lab Smp Id: 246442002 Client Smp ID: RE15-10-8361
Inj Date : 15-FEB-2010 22:13
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442002|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021510v4/VOA4-8260-020310.m
Meth Date : 15-Feb-2010 20:32 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	18.04950	% 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
* 61 Chlorobenzene-d5	13.771	1557211	50.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-			CAS #: 556-67-2				
14.825	358656	11.5159576	14.0	90	NIST05.L	122480	61

Data File: /chem/VOA4.i/021510v4/4y109.d

Date : 15-FEB-2010 22:13

Client ID: RE15-10-8361

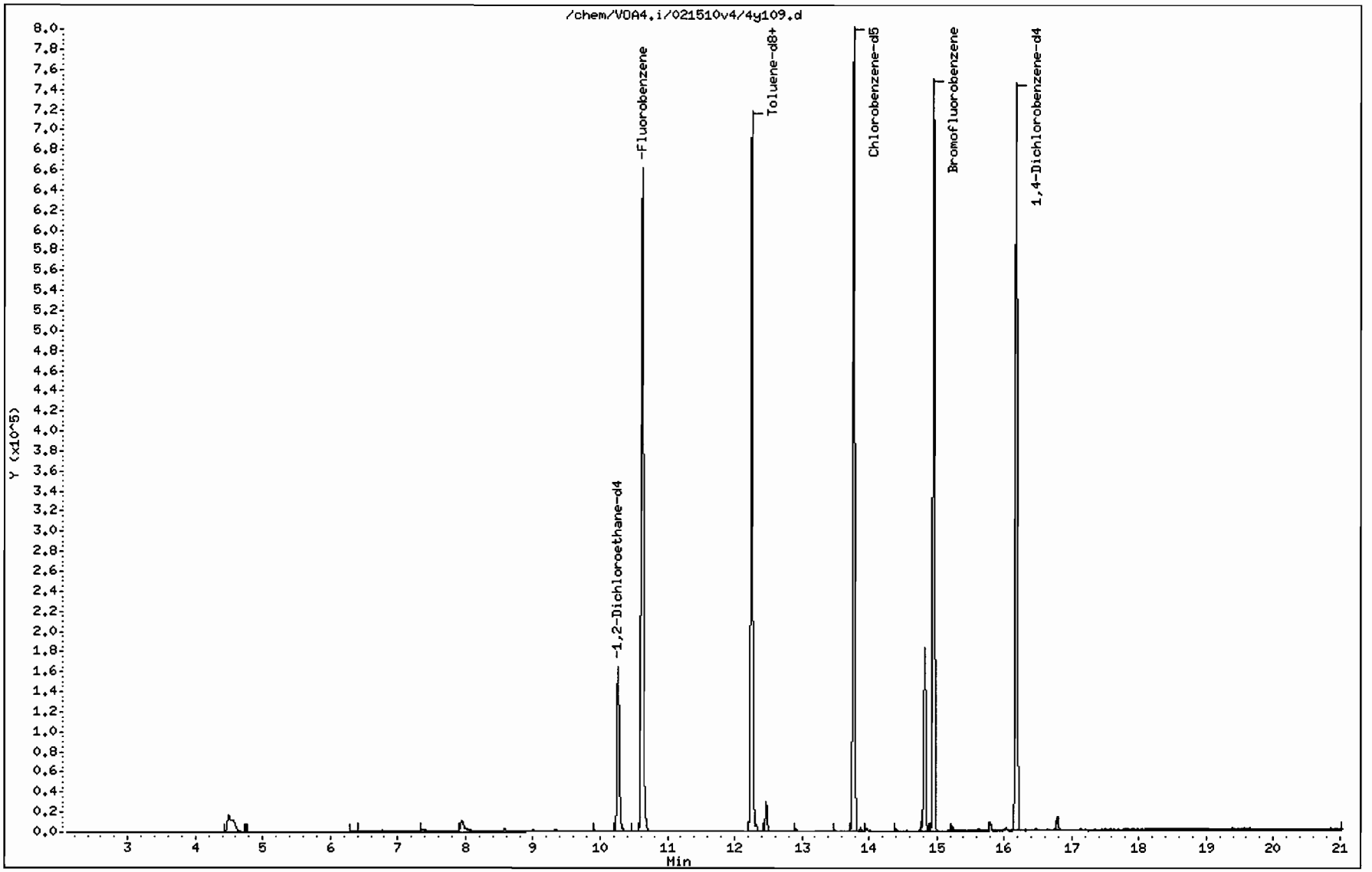
Sample Info: |2464420021952862|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25



Data File: /chem/VOA4.i/021510v4/4y109.d

Date : 15-FEB-2010 22:13

Client ID: RE15-10-8361

Instrument: VOA4.i

Sample Info: |2464420021952862|1|VOAF|1|

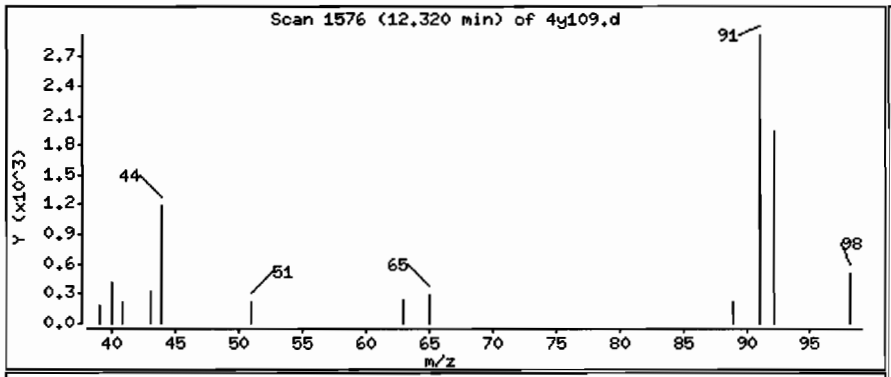
Operator: ACJ

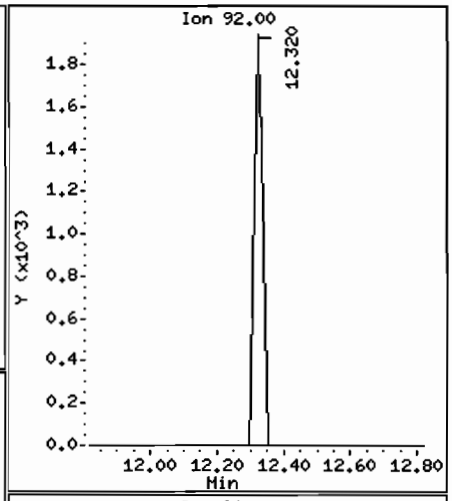
Column phase: RTX-VOLATILES

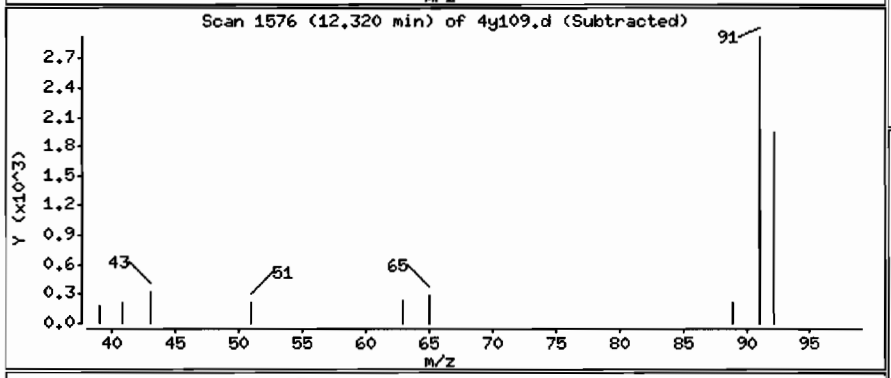
Column diameter: 0.25

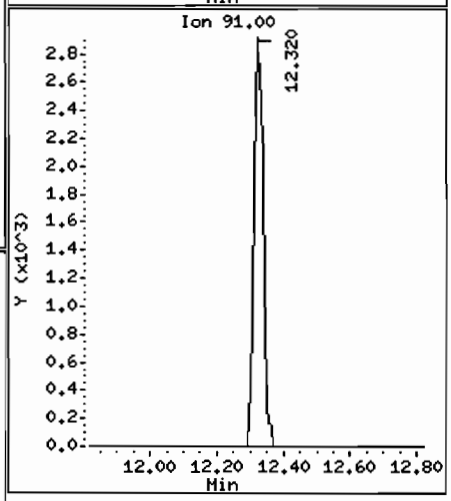
50 Toluene

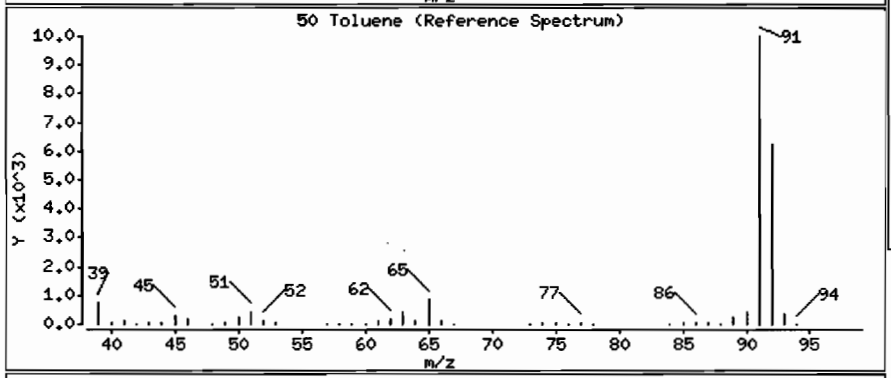
Concentration: 0.39 ug/Kg

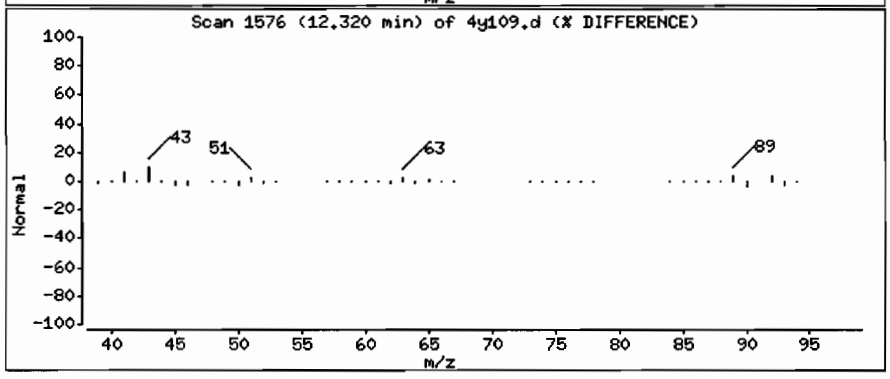












Data File: /chem/VOA4.i/021510v4/4y109.d

Date : 15-FEB-2010 22:13

Client ID: RE15-10-8361

Instrument: VOA4.i

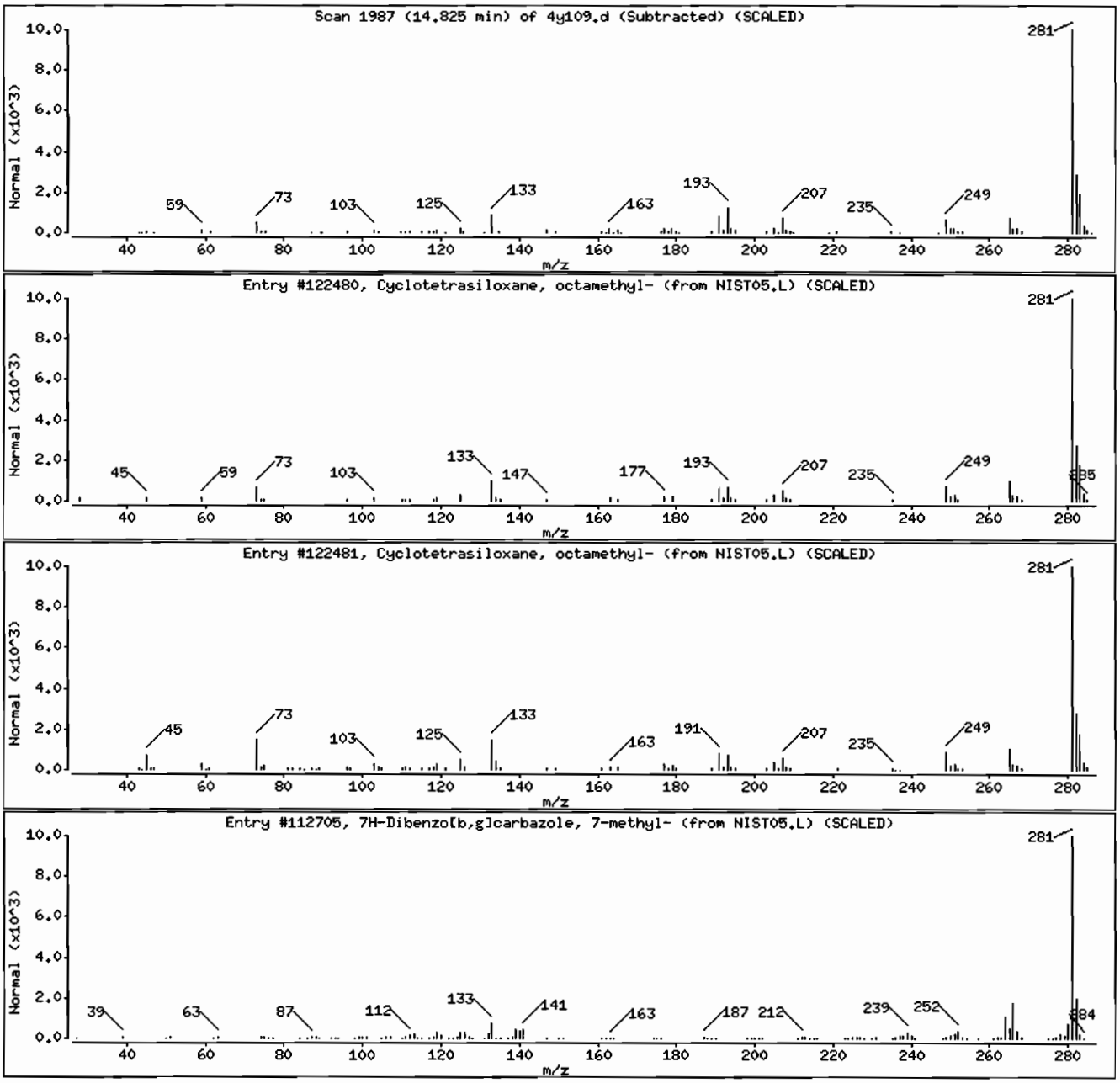
Sample Info: |2464420021952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C8H24O4Si4	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	78	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C21H15N	281



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x618.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.33	ug/kg	0.454	1.33
74-87-3	Chloromethane	U	1.33	ug/kg	0.400	1.33
75-01-4	Vinyl chloride	U	1.33	ug/kg	0.400	1.33
74-83-9	Bromomethane	U	1.33	ug/kg	0.400	1.33
75-00-3	Chloroethane	U	1.33	ug/kg	0.400	1.33
75-69-4	Trichlorofluoromethane	U	1.33	ug/kg	0.400	1.33
67-64-1	Acetone		52.7	ug/kg	2.21	6.67
75-35-4	1,1-Dichloroethylene	U	1.33	ug/kg	0.400	1.33
74-88-4	Iodomethane	U	6.67	ug/kg	2.13	6.67
75-09-2	Methylene chloride	U	6.67	ug/kg	2.67	6.67
75-15-0	Carbon disulfide	U	6.67	ug/kg	1.67	6.67
156-60-5	trans-1,2-Dichloroethylene	U	1.33	ug/kg	0.400	1.33
75-34-3	1,1-Dichloroethane	U	1.33	ug/kg	0.400	1.33
78-93-3	2-Butanone	U	6.67	ug/kg	2.00	6.67
156-59-2	cis-1,2-Dichloroethylene	U	1.33	ug/kg	0.400	1.33
594-20-7	2,2-Dichloropropane	U	1.33	ug/kg	0.400	1.33
67-66-3	Chloroform	U	1.33	ug/kg	0.400	1.33
74-97-5	Bromochloromethane	U	1.33	ug/kg	0.440	1.33
71-55-6	1,1,1-Trichloroethane	U	1.33	ug/kg	0.400	1.33
563-58-6	1,1-Dichloropropene	U	1.33	ug/kg	0.400	1.33
56-23-5	Carbon tetrachloride	U	1.33	ug/kg	0.400	1.33
107-06-2	1,2-Dichloroethane	U	1.33	ug/kg	0.400	1.33
71-43-2	Benzene	U	1.33	ug/kg	0.400	1.33
79-01-6	Trichloroethylene	U	1.33	ug/kg	0.440	1.33
78-87-5	1,2-Dichloropropane	U	1.33	ug/kg	0.400	1.33
75-27-4	Bromodichloromethane	U	1.33	ug/kg	0.400	1.33
74-95-3	Dibromomethane	U	1.33	ug/kg	0.400	1.33
108-10-1	4-Methyl-2-pentanone	U	6.67	ug/kg	1.67	6.67
10061-01-5	cis-1,3-Dichloropropylene	U	1.33	ug/kg	0.400	1.33
108-88-3	Toluene		12.2	ug/kg	0.400	1.33
10061-02-6	trans-1,3-Dichloropropylene	U	1.33	ug/kg	0.400	1.33
79-00-5	1,1,2-Trichloroethane	U	1.33	ug/kg	0.400	1.33
591-78-6	2-Hexanone	U	6.67	ug/kg	2.00	6.67
142-28-9	1,3-Dichloropropane	U	1.33	ug/kg	0.400	1.33
127-18-4	Tetrachloroethylene	U	1.33	ug/kg	0.400	1.33
124-48-1	Dibromochloromethane	U	1.33	ug/kg	0.400	1.33
106-93-4	1,2-Dibromoethane	U	1.33	ug/kg	0.400	1.33
108-90-7	Chlorobenzene	U	1.33	ug/kg	0.400	1.33

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x618.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.33	ug/kg	0.400	1.33
179601-23-1	m,p-Xylenes	J	0.572	ug/kg	0.400	2.67
95-47-6	o-Xylene	U	1.33	ug/kg	0.400	1.33
100-42-5	Styrene	U	1.33	ug/kg	0.400	1.33
75-25-2	Bromoform	U	1.33	ug/kg	0.400	1.33
79-34-5	1,1,2,2-Tetrachloroethane	U	1.33	ug/kg	0.400	1.33
96-18-4	1,2,3-Trichloropropane	U	1.33	ug/kg	0.400	1.33
108-86-1	Bromobenzene	U	1.33	ug/kg	0.400	1.33
103-65-1	n-Propylbenzene	U	1.33	ug/kg	0.400	1.33
95-49-8	2-Chlorotoluene	U	1.33	ug/kg	0.400	1.33
98-82-8	Isopropylbenzene	U	1.33	ug/kg	0.400	1.33
108-67-8	1,3,5-Trimethylbenzene	U	1.33	ug/kg	0.400	1.33
106-43-4	4-Chlorotoluene	U	1.33	ug/kg	0.400	1.33
98-06-6	tert-Butylbenzene	U	1.33	ug/kg	0.400	1.33
95-63-6	1,2,4-Trimethylbenzene	J	0.490	ug/kg	0.400	1.33
135-98-8	sec-Butylbenzene	U	1.33	ug/kg	0.400	1.33
99-87-6	4-Isopropyltoluene		4.28	ug/kg	0.400	1.33
541-73-1	1,3-Dichlorobenzene	U	1.33	ug/kg	0.400	1.33
106-46-7	1,4-Dichlorobenzene	U	1.33	ug/kg	0.400	1.33
104-51-8	n-Butylbenzene	U	1.33	ug/kg	0.400	1.33
96-12-8	1,2-Dibromo-3-chloropropane	U	1.33	ug/kg	0.400	1.33
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.67	ug/kg	2.13	6.67
630-20-6	1,1,1,2-Tetrachloroethane	U	1.33	ug/kg	0.400	1.33
95-50-1	1,2-Dichlorobenzene	U	1.33	ug/kg	0.400	1.33

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	7.73	ug/kg		J
64-17-5	Ethyl alcohol	6.76	27.8	ug/kg	83	NJ
7785-70-8	1R-.alpha.-Pinene	14.79	190	ug/kg	96	NJ
79-92-5	Camphene	15.11	7.9	ug/kg	97	NJ
123-35-3	.beta.-Myrcene	15.3	7.01	ug/kg	91	NJ
535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	15.41	18.5	ug/kg	94	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	15.5	41.5	ug/kg	97	NJ
13466-78-9	3-Carene	15.8	194	ug/kg	96	NJ
1120-21-4	Undecane	16.47	9.65	ug/kg	97	NJ
	Unknown Siloxane	16.78	10.1	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 20:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:14**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x618.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Substituted Benzene	16.95	6.76	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x618.d
Lab Smp Id: 246442003 Client Smp ID: RE15-10-8362
Inj Date : 13-FEB-2010 20:20
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442003|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	25.03120	% 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)
* 40 Fluorobenzene	96	10.614	10.620	(1.000)	597366	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	455768	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.173	16.180	(1.000)	245096	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.967)	131629	42.8448	57.2
$ 47 Toluene-d8	98	12.254	12.253	(0.890)	466455	44.7508	59.7
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.925)	256498	58.1197	77.5
10 Acetone	43	7.358	7.358	(0.693)	110342	39.5081	52.7
50 Toluene	92	12.327	12.327	(0.895)	81004	9.12820	12.2
63 m,p-Xylenes	106	13.967	13.973	(1.014)	2892	0.42904	0.57(a)
79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	5430	0.36771	0.49(a)
84 4-Isopropyltoluene	119	16.052	16.052	(0.992)	50149	3.20761	4.3

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4x618.d
Report Date: 02/24/2010 17:47
Lab. ID: 246442003 SampleType: SAMPLE
Injection Date: 13-FEB-2010 20:20
Operator: ACJ Instrument: VOA4.i
Sample Info: |246442003|952862|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone		CAS#: 67-64-1				
43	110342	7.36	7.36	80-120	100	( )
58	32638	7.36	7.36	2- 62	30	( )
37 1,2-Dichloroethane		CAS#: 107-06-2				
62	8410	10.62	10.34	80-120	100	(T)
64	1266	10.63	10.34	2- 62	15	(T)
49 4-Methyl-2-pentanone		CAS#: 108-10-1				
58	4154	12.25	12.02	80-120	100	(T)
43	2646	12.25	12.02	221-281	64	(QT)
100	317509	12.25	12.02	3- 63	7643	(QT)
50 Toluene		CAS#: 108-88-3				
92	81004	12.33	12.33	80-120	100	( )
91	135706	12.33	12.33	138-198	168	( )
58 Ethylbenzene		CAS#: 100-41-4				
91	6753	13.87	13.86	80-120	100	( )
106	1674	13.86	13.86	2- 62	25	( )
64 o-Xylene		CAS#: 95-47-6				
106	27985	14.79	14.40	80-120	100	(T)
91	441789	14.79	14.40	177-237	1579	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
63 m,p-Xylenes			CAS#: 179601-23-1			
106	2892	13.97	13.97	80-120	100	( )
91	5926	13.96	13.97	165-225	205	( )
65 Styrene			CAS#: 100-42-5			
104	7490	14.79	14.40	80-120	100	(T)
78	50734	14.79	14.40	20- 80	677	(QT)
66 Bromoform			CAS#: 75-25-2			
173	1047	14.95	14.66	80-120	100	(T)
175	15768	14.95	14.66	19- 79	1505	(QT)
67 Isopropylbenzene			CAS#: 98-82-8			
105	109173	14.79	14.76	80-120	100	( )
120	5458	14.79	14.76	0- 58	5	( )
76 n-Propylbenzene			CAS#: 103-65-1			
91	11705	15.12	15.18	80-120	100	(T)
120	204	15.17	15.19	0- 55	2	( )
78 1,3,5-Trimethylbenzene			CAS#: 108-67-8			
105	7399	15.41	15.33	80-120	100	(T)
120	13166	15.41	15.33	20- 80	178	(QT)
79 1,2,4-Trimethylbenzene			CAS#: 95-63-6			
105	5430	15.74	15.74	80-120	100	( )
120	2352	15.75	15.74	19- 79	43	( )
81 tert-Butylbenzene			CAS#: 98-06-6			
119	48532	15.80	15.70	80-120	100	(T)
91	439879	15.80	15.70	38- 98	906	(QT)
134	6752	15.80	15.70	0- 52	14	(T)
83 sec-Butylbenzene			CAS#: 135-98-8			
105	123491	15.80	15.93	80-120	100	(T)
134	6752	15.80	15.93	0- 51	5	(T)
84 4-Isopropyltoluene			CAS#: 99-87-6			
119	50149	16.05	16.05	80-120	100	( )
134	13225	16.05	16.05	0- 57	26	( )
91	25819	16.05	16.05	0- 53	51	( )

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
89	n-Butylbenzene		CAS#: 104-51-8			
91	5177	16.34	16.50	80-120	100	(T)
92	1779	16.35	16.50	26- 86	34	(T)
134	1090	16.34	16.50	0- 58	21	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x618.d
Lab Smp Id: 246442003 Client Smp ID: RE15-10-8362
Inj Date : 13-FEB-2010 20:20
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442003|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	25.03120	% 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
* 40 Fluorobenzene	10.614	1280828	50.000
* 61 Chlorobenzene-d5	13.771	1539862	50.000
* 86 1,4-Dichlorobenzene-d4	16.173	1490463	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
4.496	148367	5.79182720	7.7	0		0	40

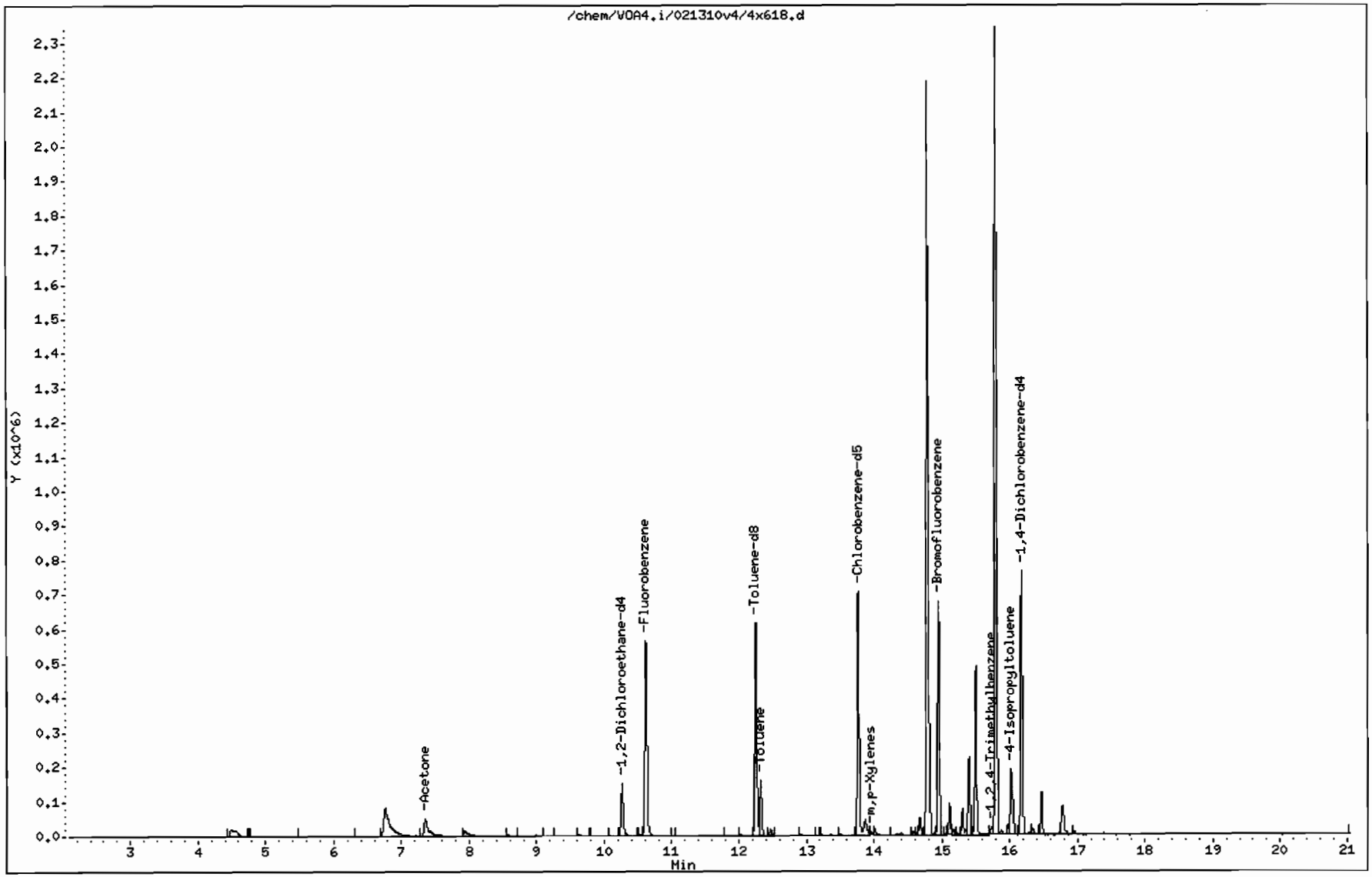
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethyl alcohol				CAS #: 64-17-5			
6.761	533586	20.8297319	27.8	83	NIST05.L	95	40
1R-.alpha.-Pinene				CAS #: 7785-70-8			
14.790	4382986	142.317403	190	96	NIST05.L	15188	61
Camphene				CAS #: 79-92-5			
15.113	176546	5.92250790	7.9	97	NIST05.L	15152	86
.beta.-Myrcene				CAS #: 123-35-3			
15.302	156587	5.25295320	7.0	91	NIST05.L	15177	86
Benzene, 1-methyl-3-(1-methylethyl)-				CAS #: 535-77-3			
15.405	412977	13.8539821	18.5	94	NIST05.L	14426	86
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me				CAS #: 18172-67-3			
15.503	926952	31.0960954	41.5	97	NIST05.L	15390	86
3-Carene				CAS #: 13466-78-9			
15.795	4338085	145.528023	194	96	NIST05.L	15151	86
Undecane				CAS #: 1120-21-4			
16.466	215629	7.23361295	9.6	97	NIST05.L	27237	86
Unknown Siloxane				CAS #:			
16.777	224907	7.54487831	10.1	0		0	86
Unknown Substituted Benzene				CAS #:			
16.954	150983	5.06497608	6.8	0		0	86

Data File: /chem/VOA4.i/021310v4/4x618.d
Date : 13-FEB-2010 20:20
Client ID: RE15-10-8362
Sample Info: |2464420031952862|1|VOAF|1|

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

Column phase: RTX-VOLATILES



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

Sample Info: |2464420031952862|1|VOAF|1|

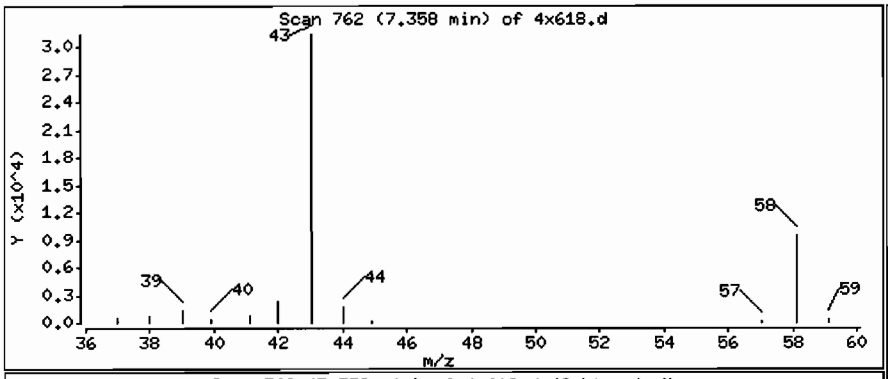
Operator: ACJ

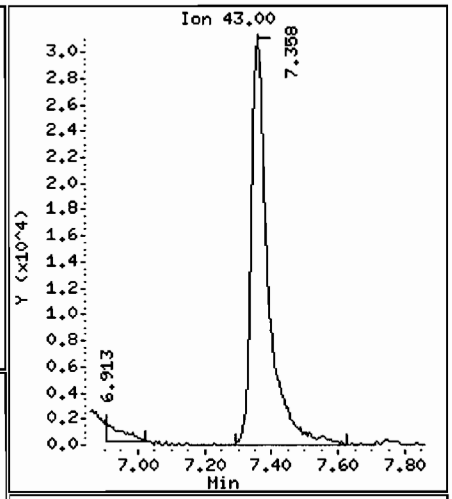
Column phase: RTX-VOLATILES

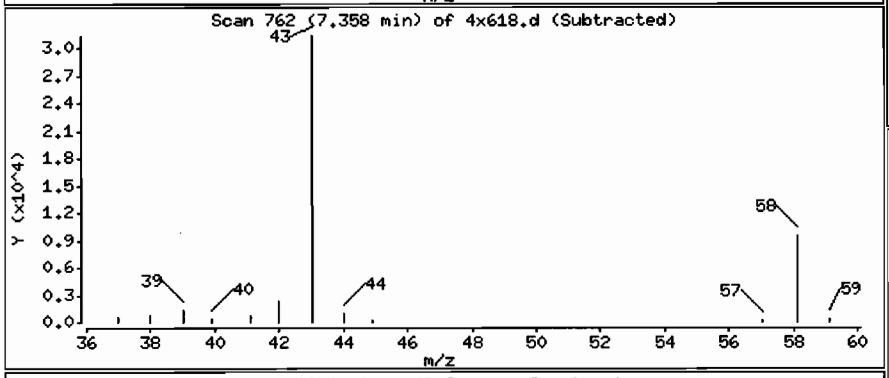
Column diameter: 0.25

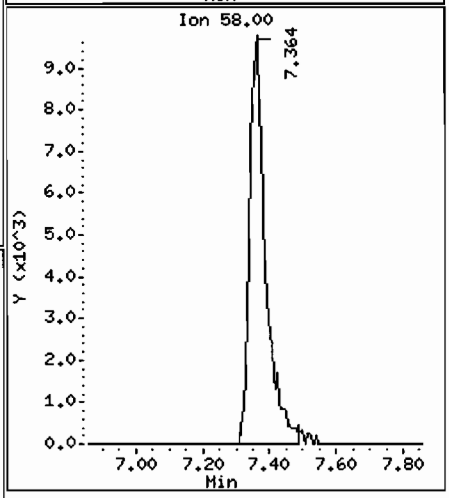
10 Acetone

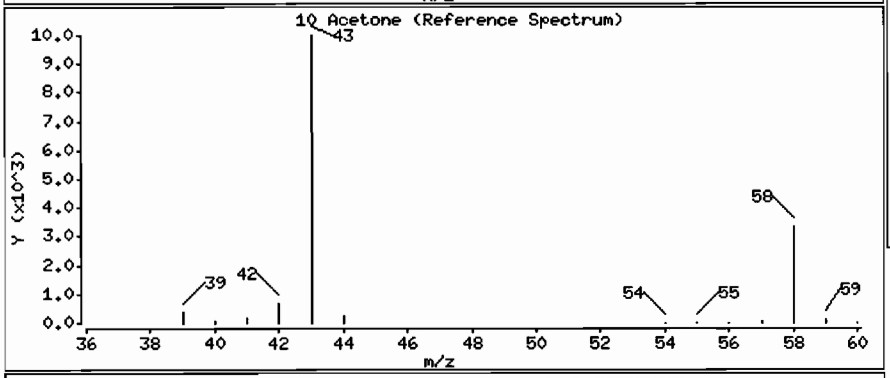
Concentration: 52.7 ug/Kg

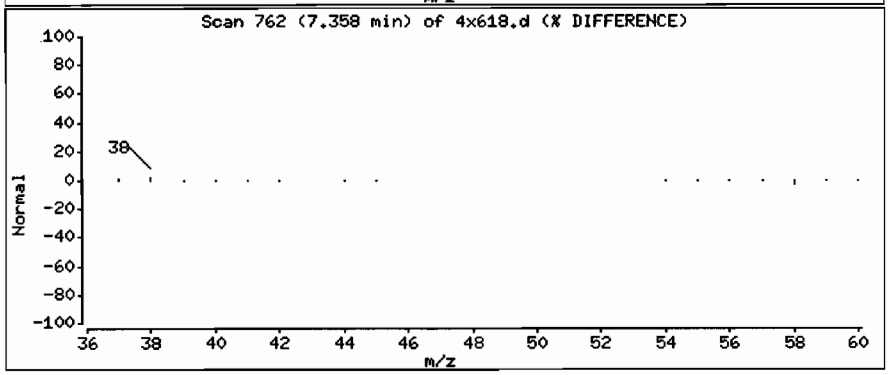












Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

Sample Info: |2464420031952862|1|VOAF|1|

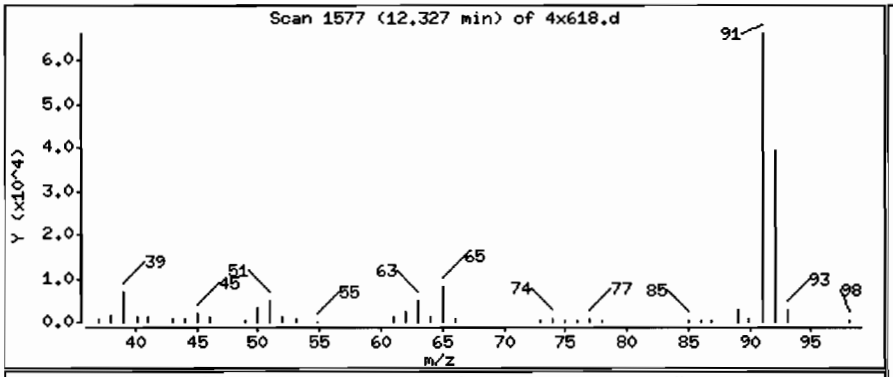
Operator: ACJ

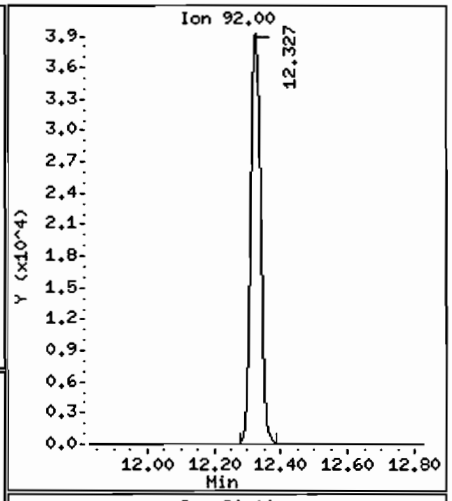
Column phase: RTX-VOLATILES

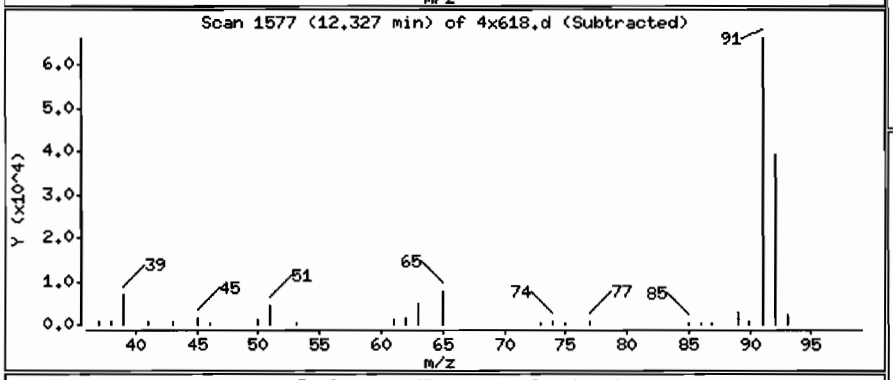
Column diameter: 0.25

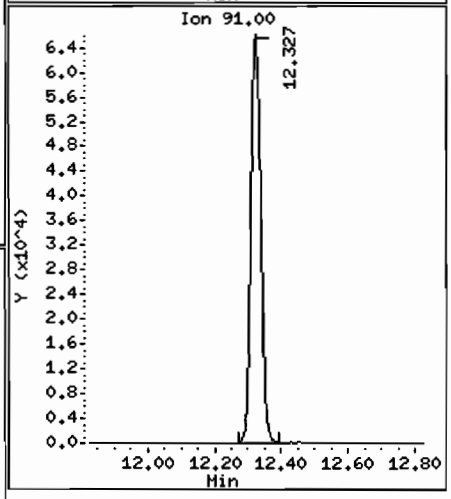
50 Toluene

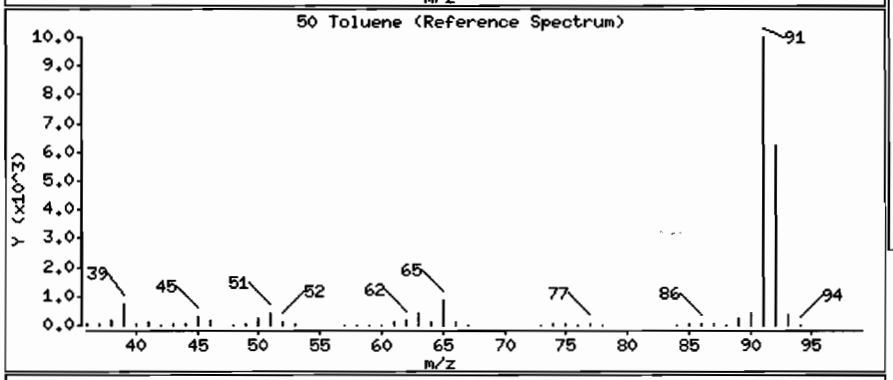
Concentration: 12.2 ug/Kg

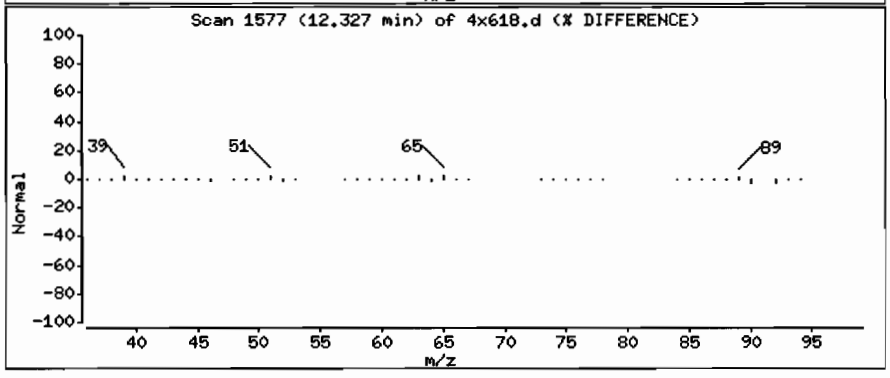












Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

Sample Info: |2464420031952862|1|VOAF|1|

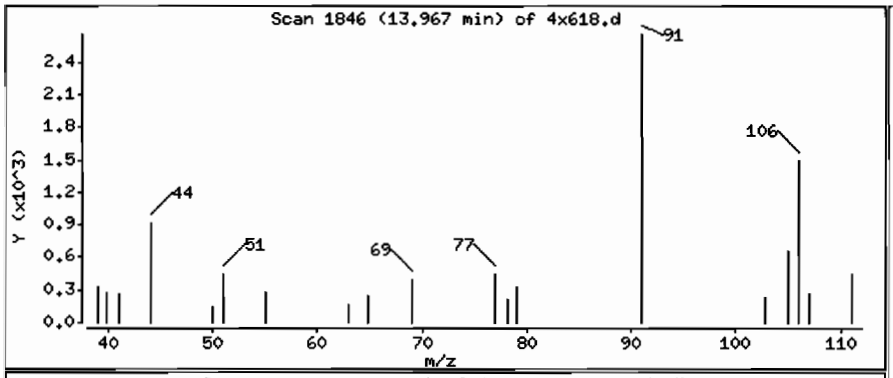
Operator: ACJ

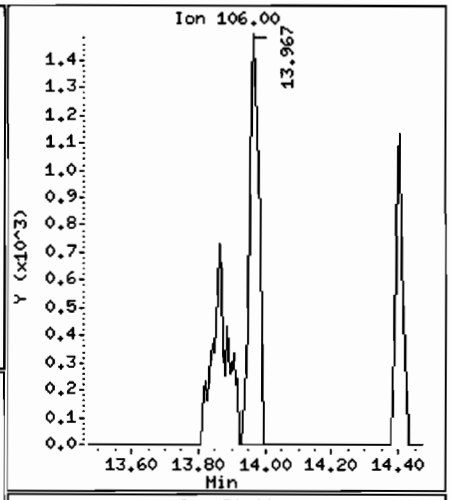
Column phase: RTX-VOLATILES

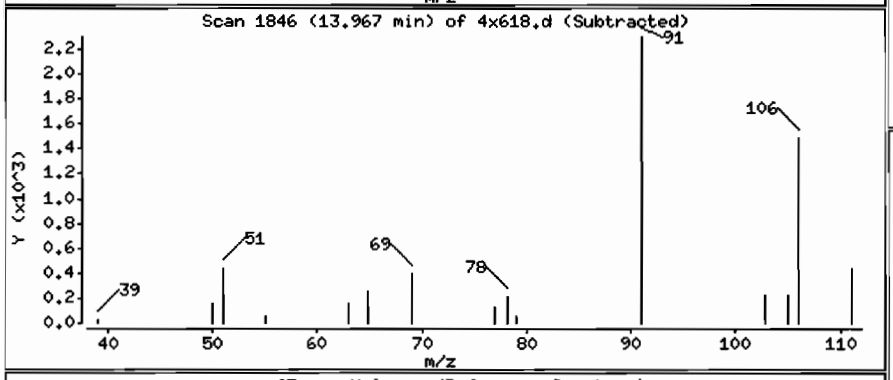
Column diameter: 0.25

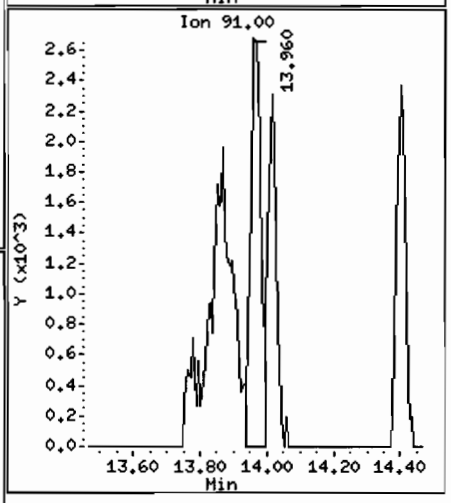
63 m,p-Xylenes

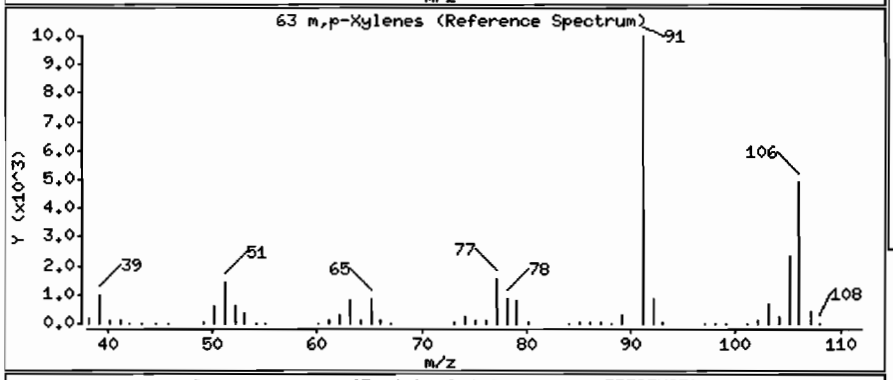
Concentration: 0.57 ug/Kg

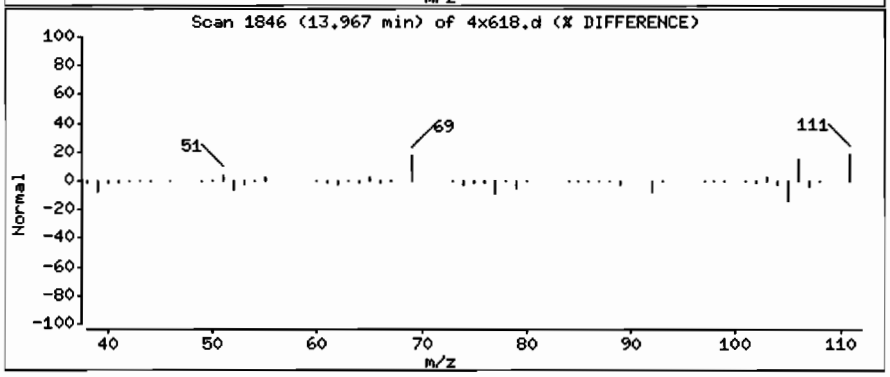












Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

Sample Info: |2464420031952862|1|VOAF|1|

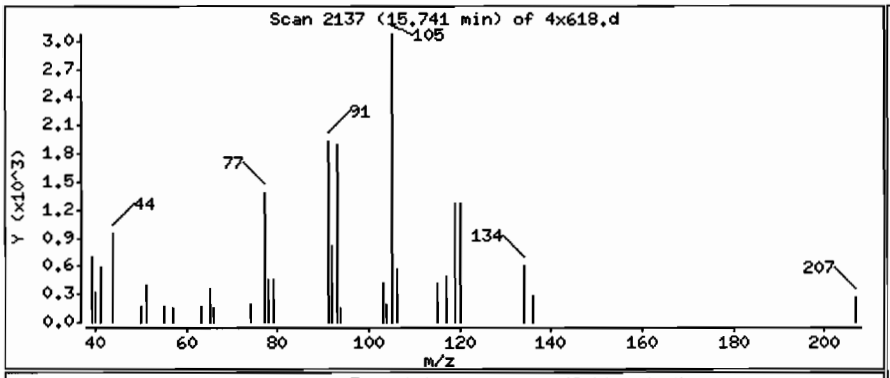
Operator: ACJ

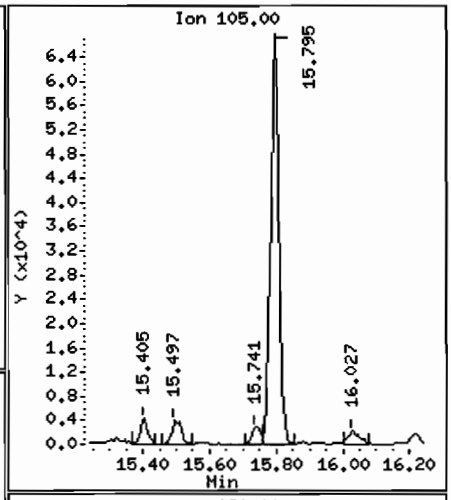
Column phase: RTX-VOLATILES

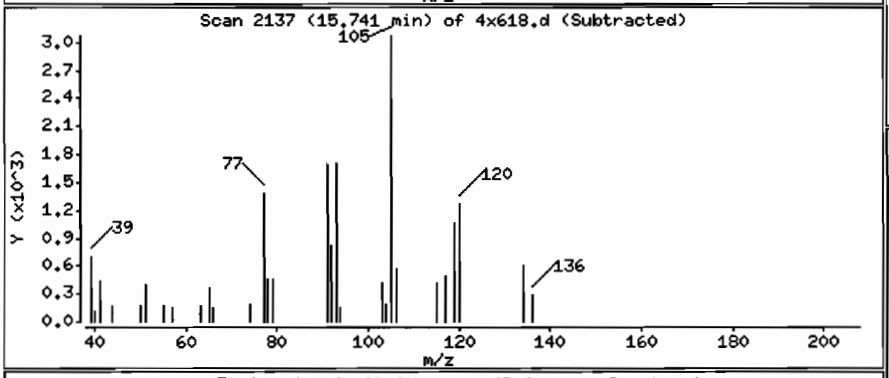
Column diameter: 0.25

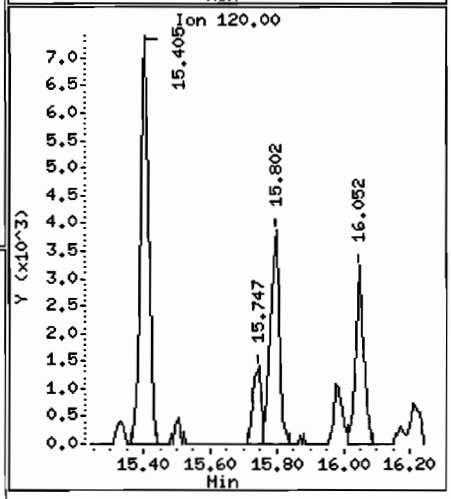
79 1,2,4-Trimethylbenzene

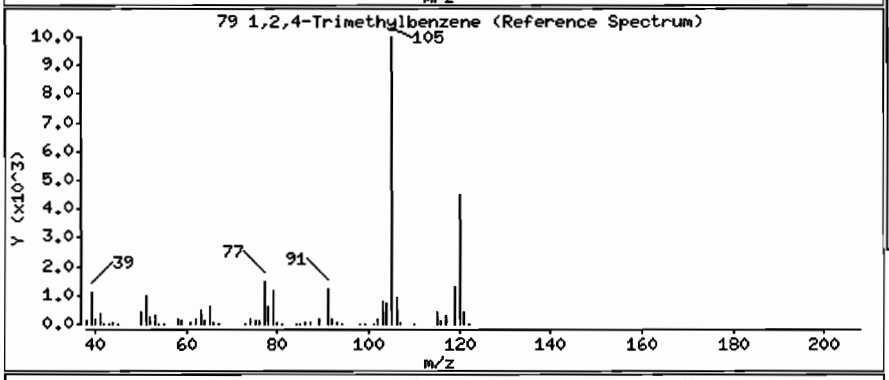
Concentration: 0.49 ug/Kg

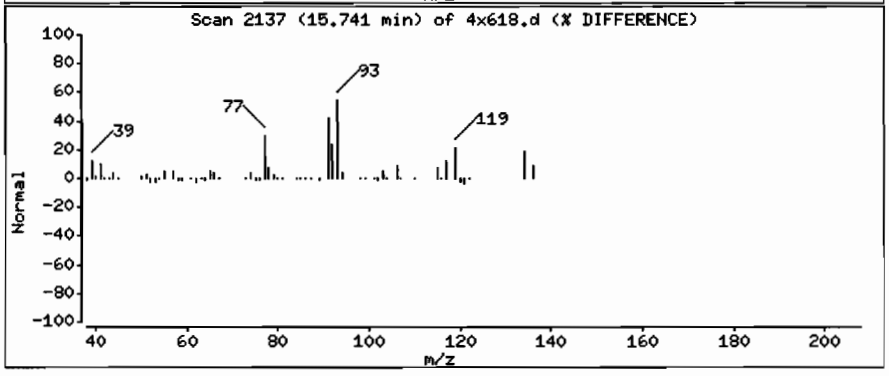












Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

Sample Info: |2464420031952862|1|VOAF|1|

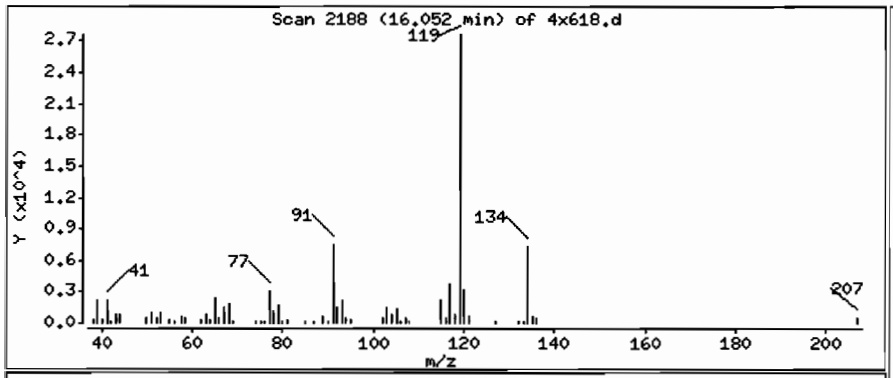
Operator: ACJ

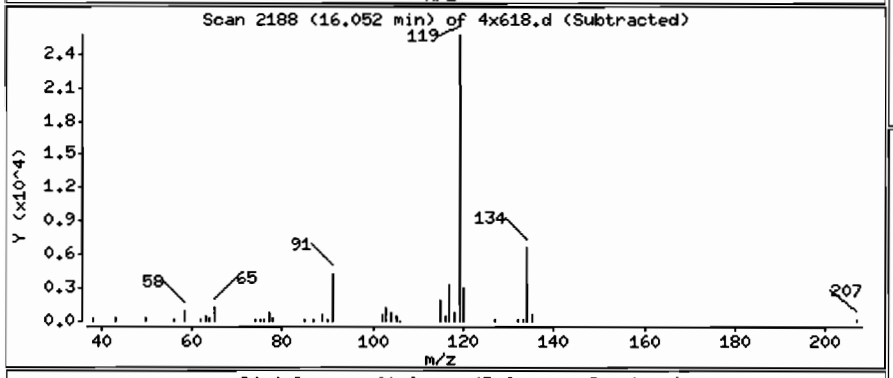
Column phase: RTX-VOLATILES

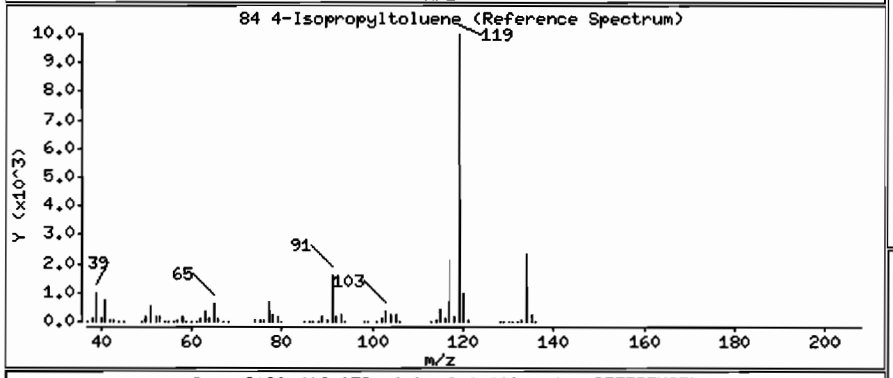
Column diameter: 0.25

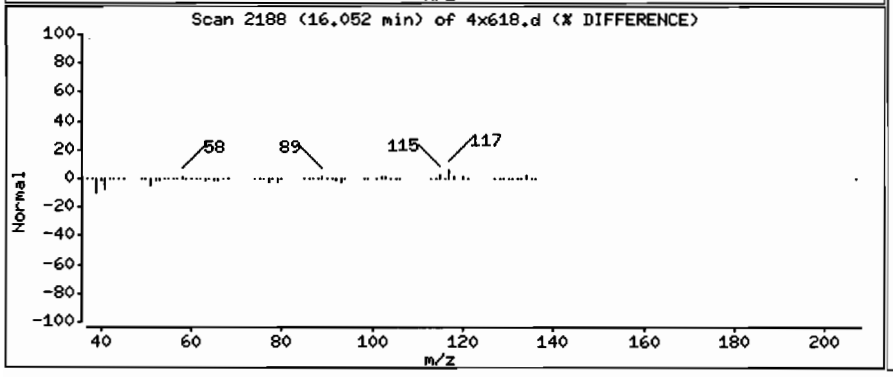
84 4-Isopropyltoluene

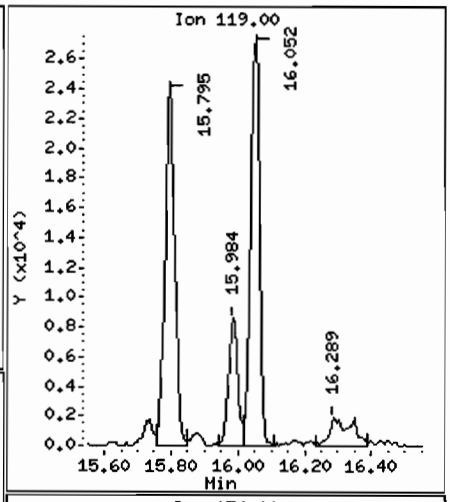
Concentration: 4.3 ug/Kg

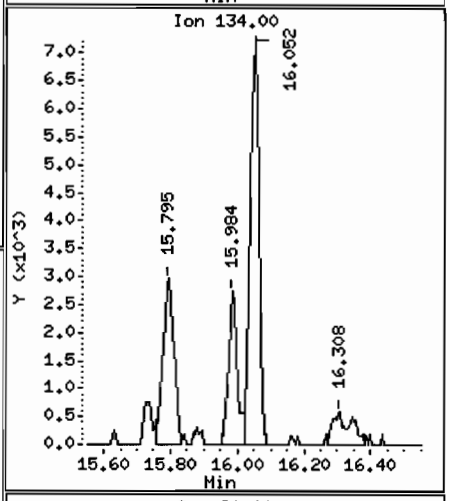


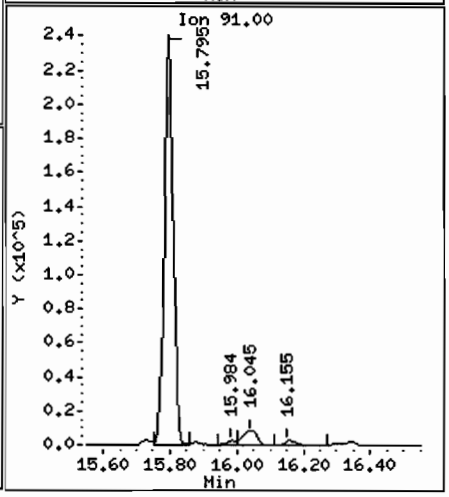












Data File: /chem/VOA4.i/021310v4/4x618.d

Page 1

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

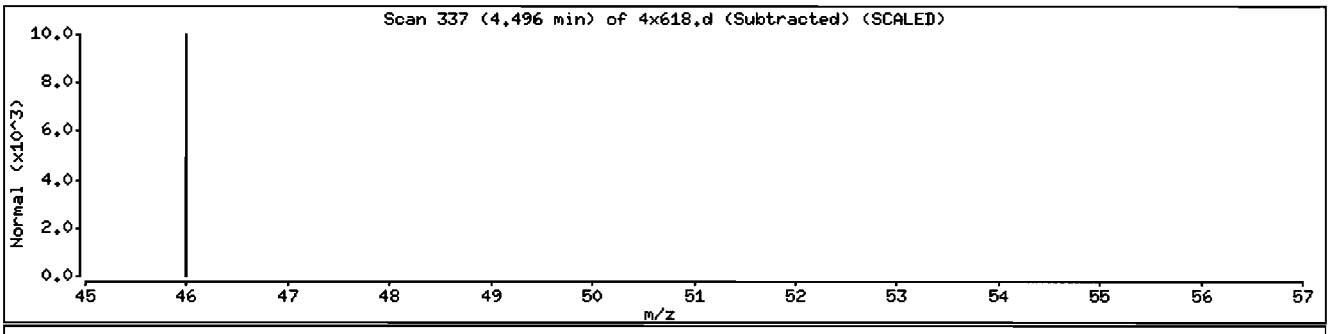
Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

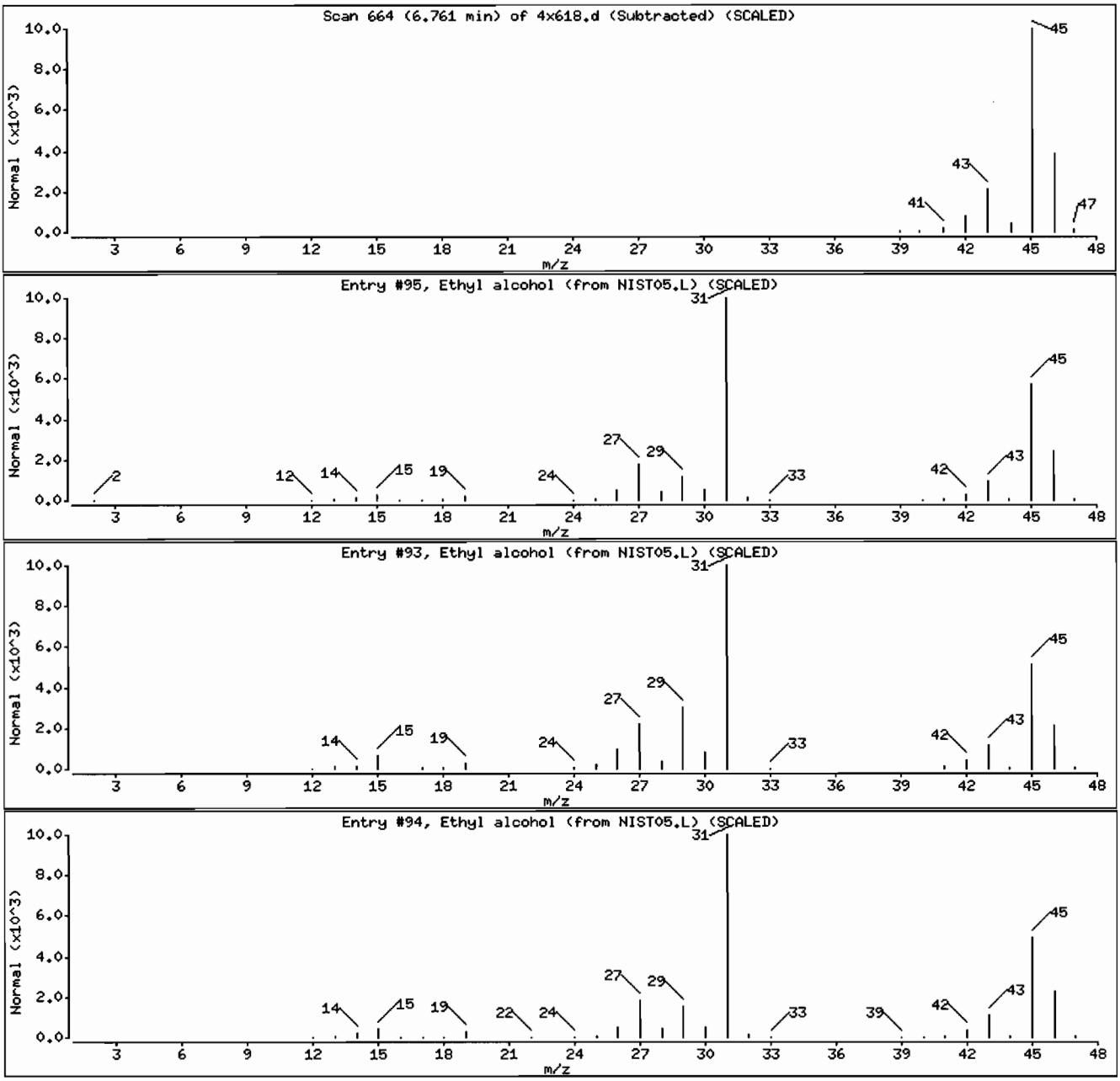
Client ID: RE15-10-8362 Instrument: VOA4.i

Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethyl alcohol	64-17-5	NIST05.L	95	83	C2H6O	46
Ethyl alcohol	64-17-5	NIST05.L	93	74	C2H6O	46
Ethyl alcohol	64-17-5	NIST05.L	94	64	C2H6O	46



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

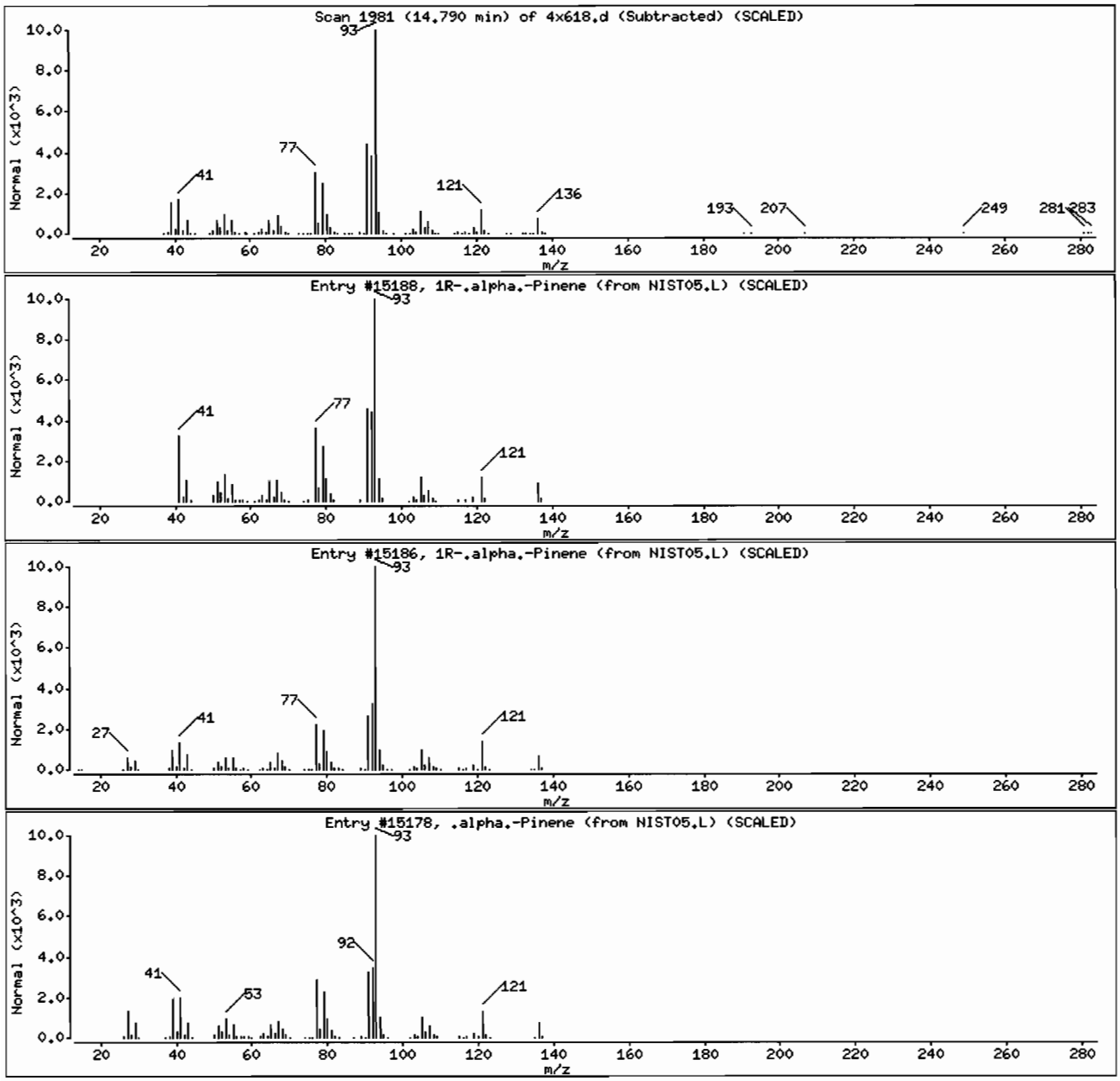
Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

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	96	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

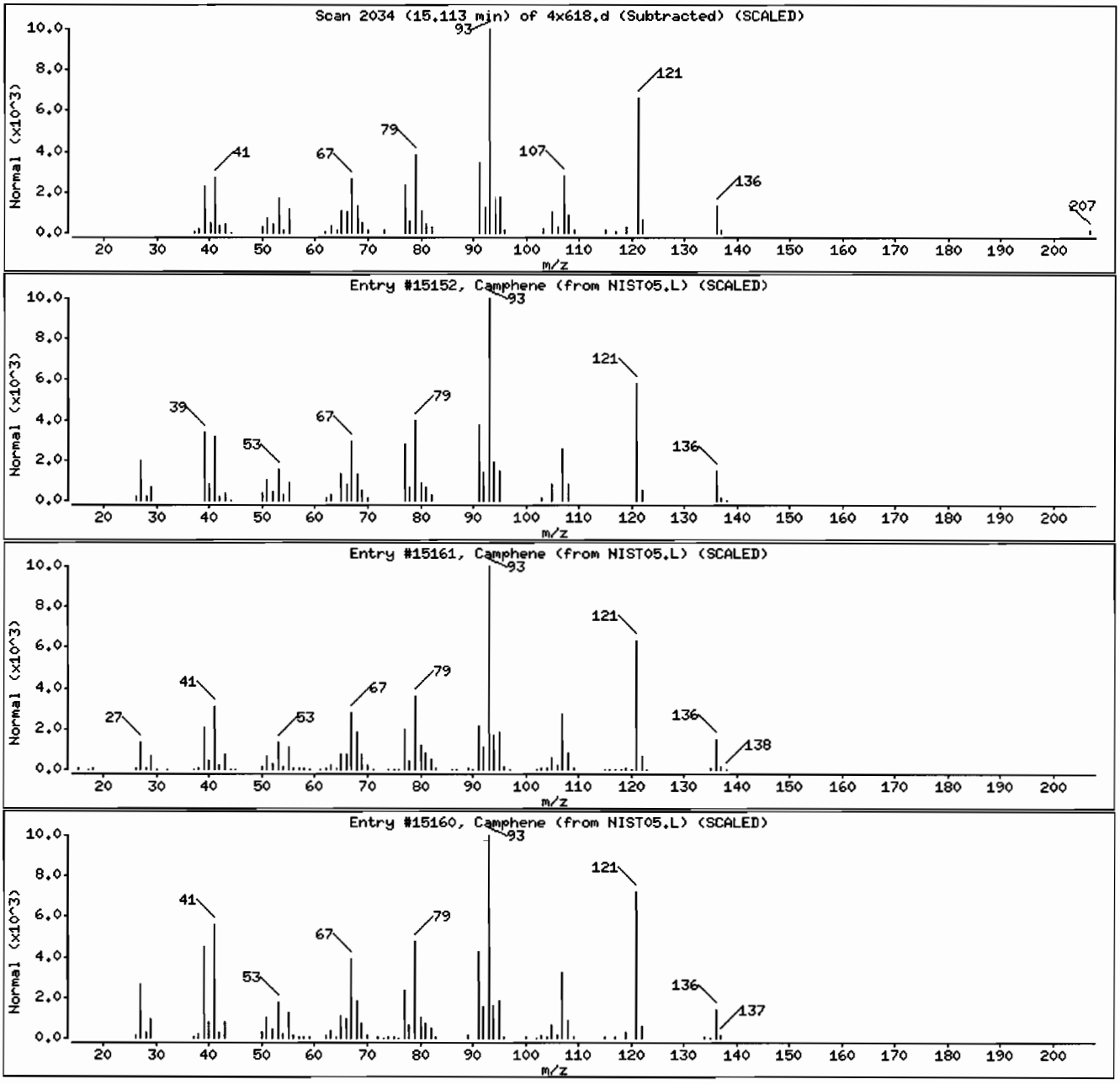
Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

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	97	C10H16	136
Camphene	79-92-5	NIST05.L	15161	97	C10H16	136
Camphene	79-92-5	NIST05.L	15160	95	C10H16	136



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

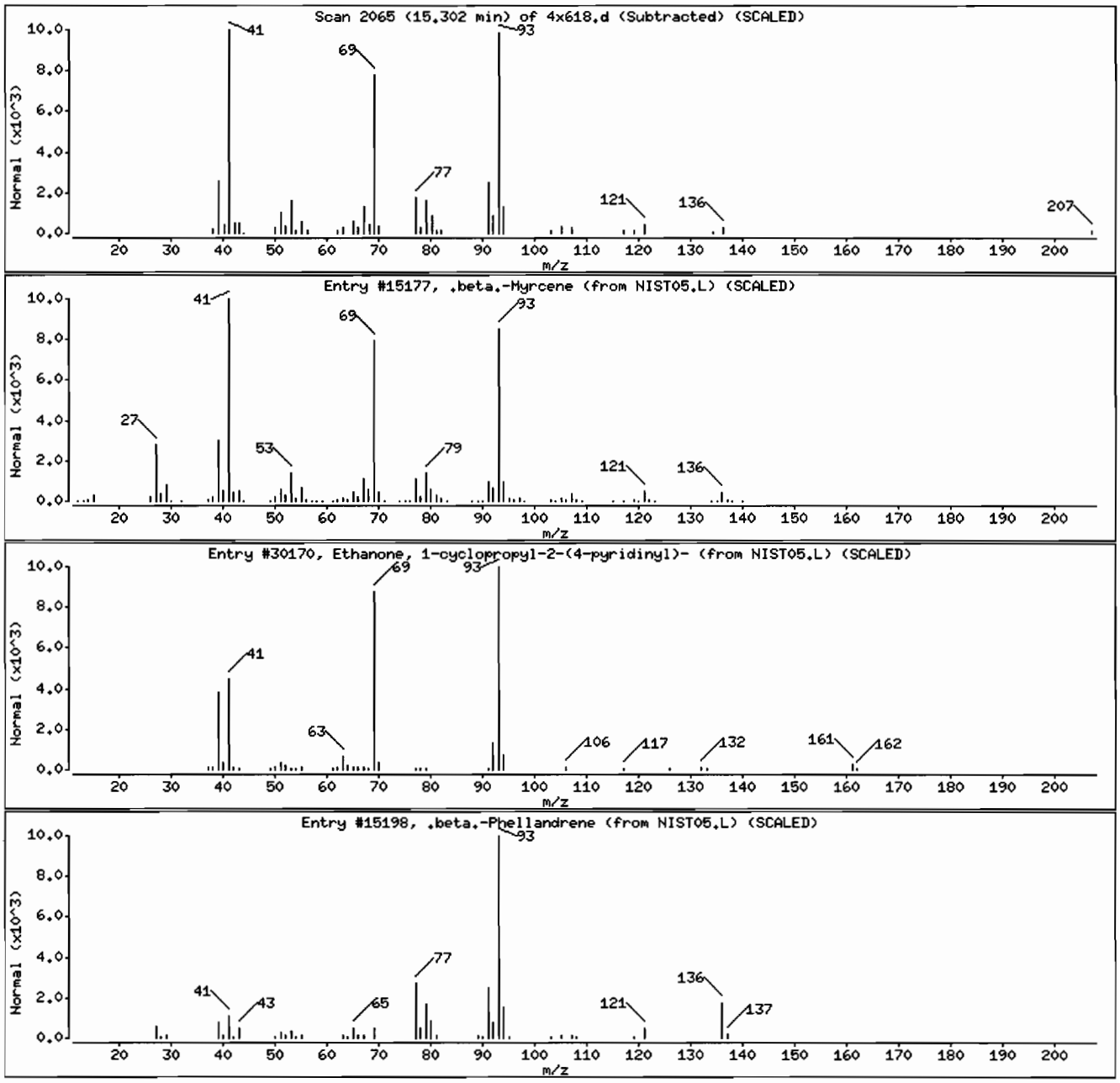
Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Myrcene	123-35-3	NIST05.L	15177	91	C10H16	136
Ethanone, 1-cyclopropyl-2-(4-pyridinyl)-	6580-95-6	NIST05.L	30170	59	C10H11NO	161
.beta.-Phellandrene	555-10-2	NIST05.L	15198	43	C10H16	136



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

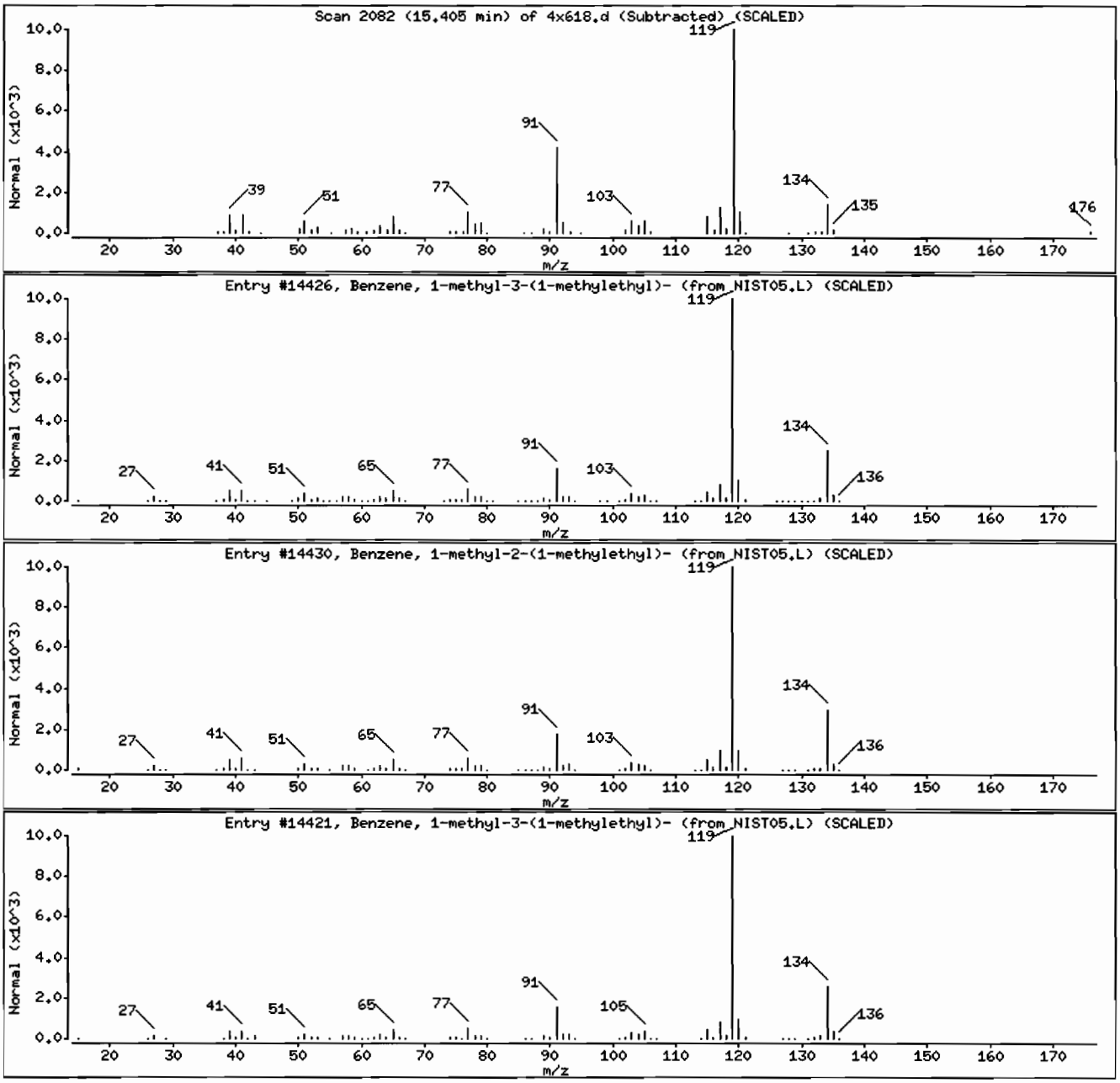
Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14426	94	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST05.L	14430	94	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14421	94	C10H14	134



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

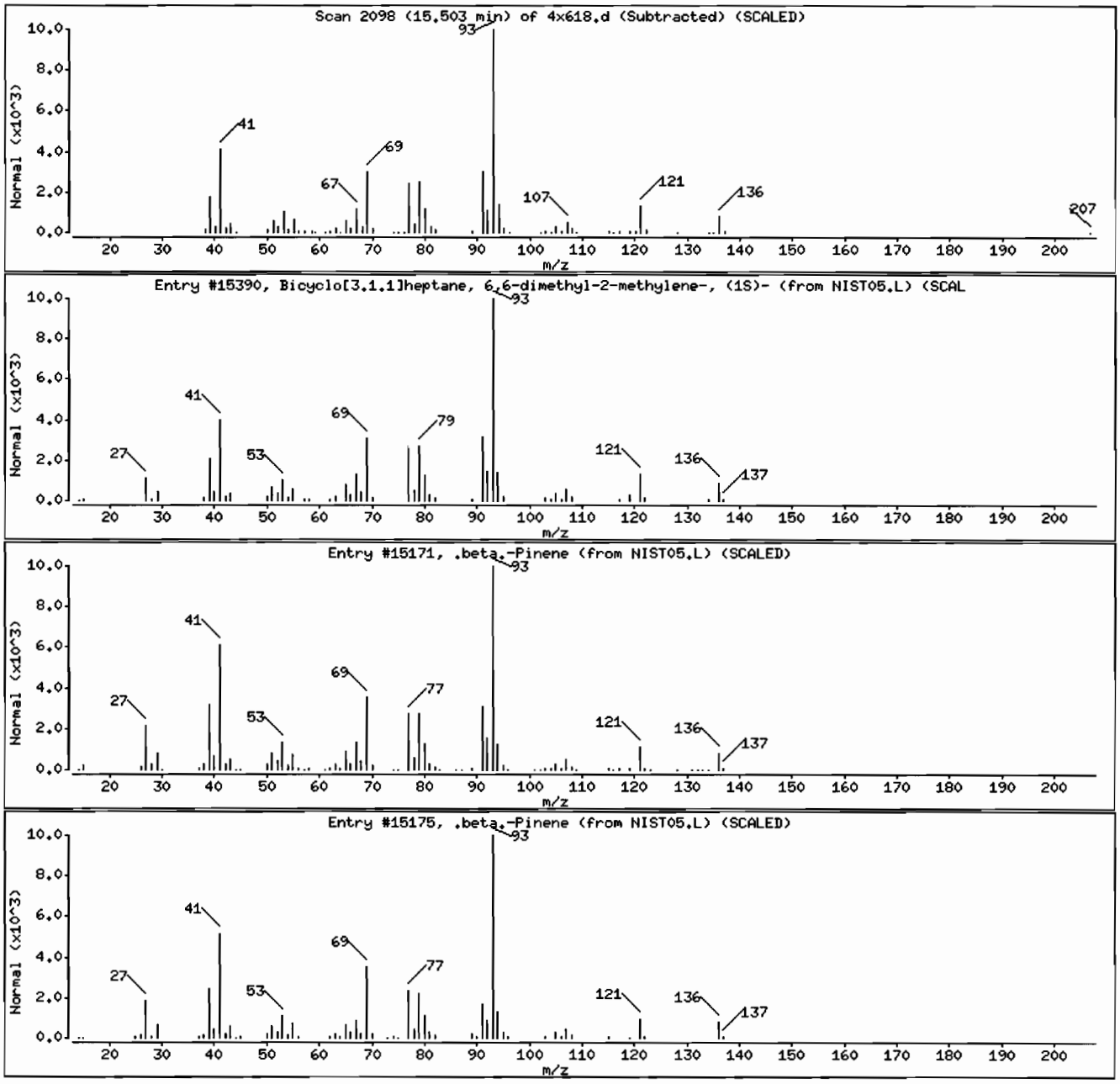
Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	97	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15171	96	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15175	95	C10H16	136



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

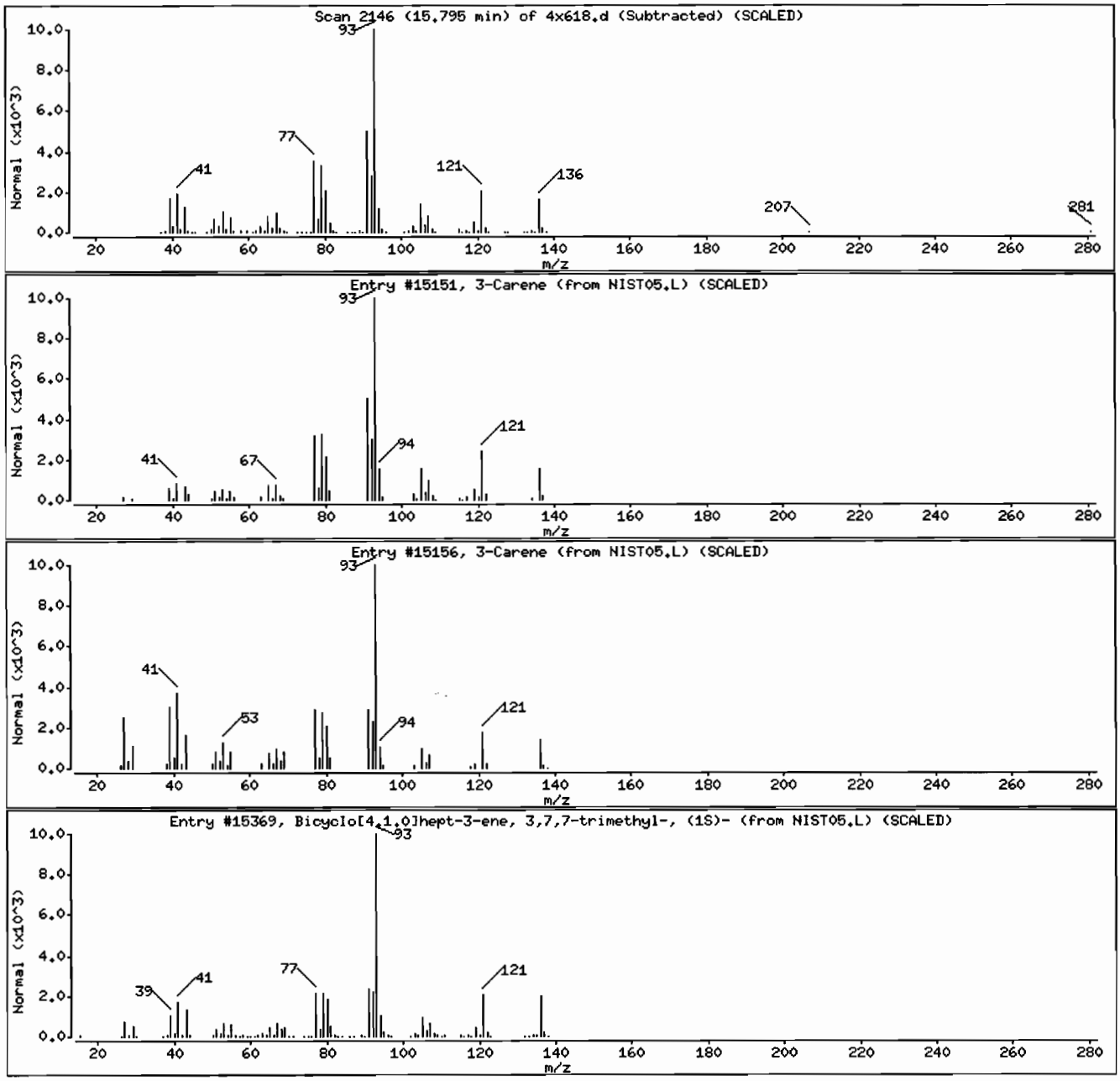
Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

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	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST05.L	15369	96	C10H16	136



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

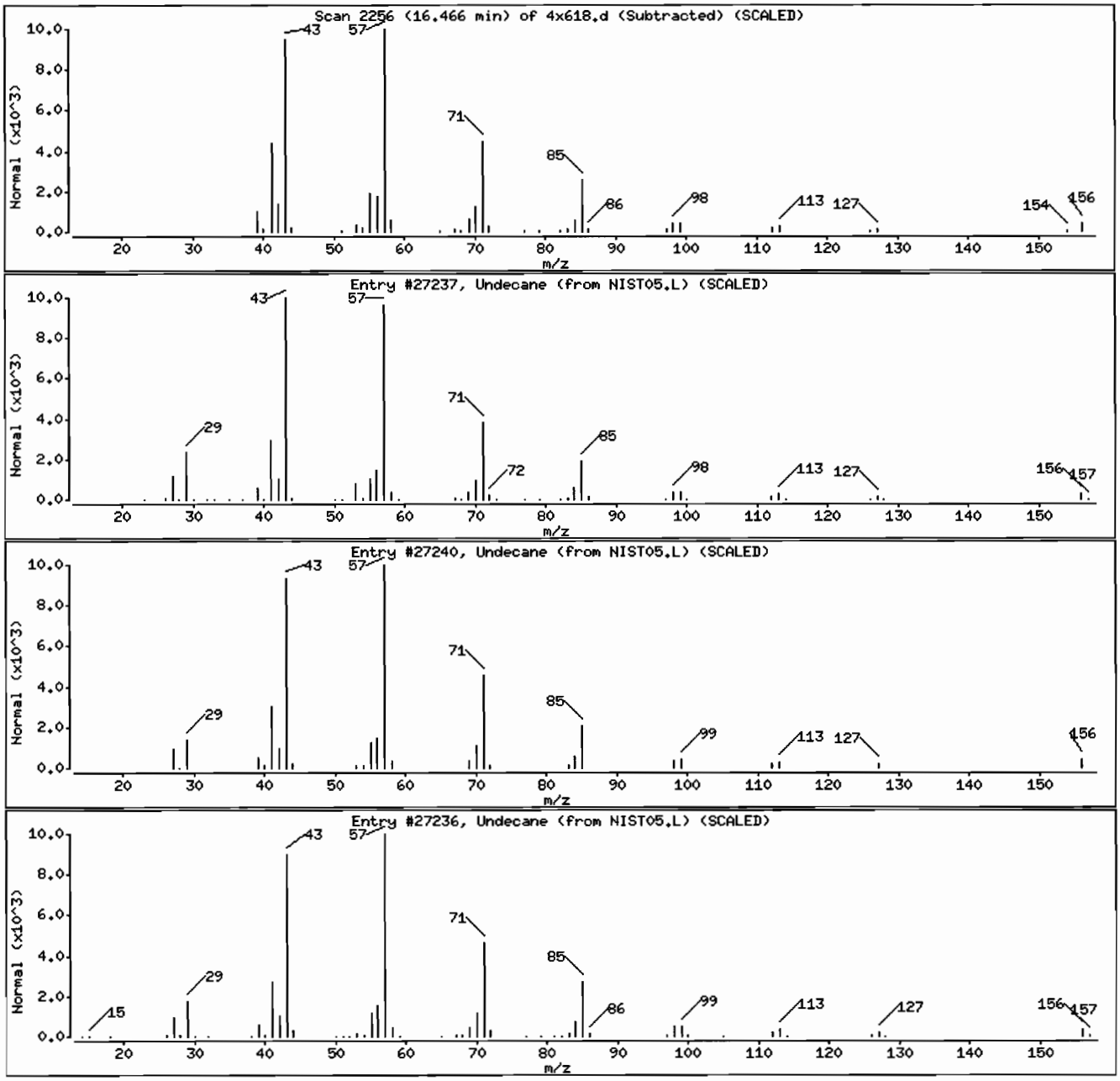
Client ID: RE15-10-8362 Instrument: VOA4.i

Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Undecane	1120-21-4	NIST05.L	27237	97	C11H24	156
Undecane	1120-21-4	NIST05.L	27240	94	C11H24	156
Undecane	1120-21-4	NIST05.L	27236	91	C11H24	156



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

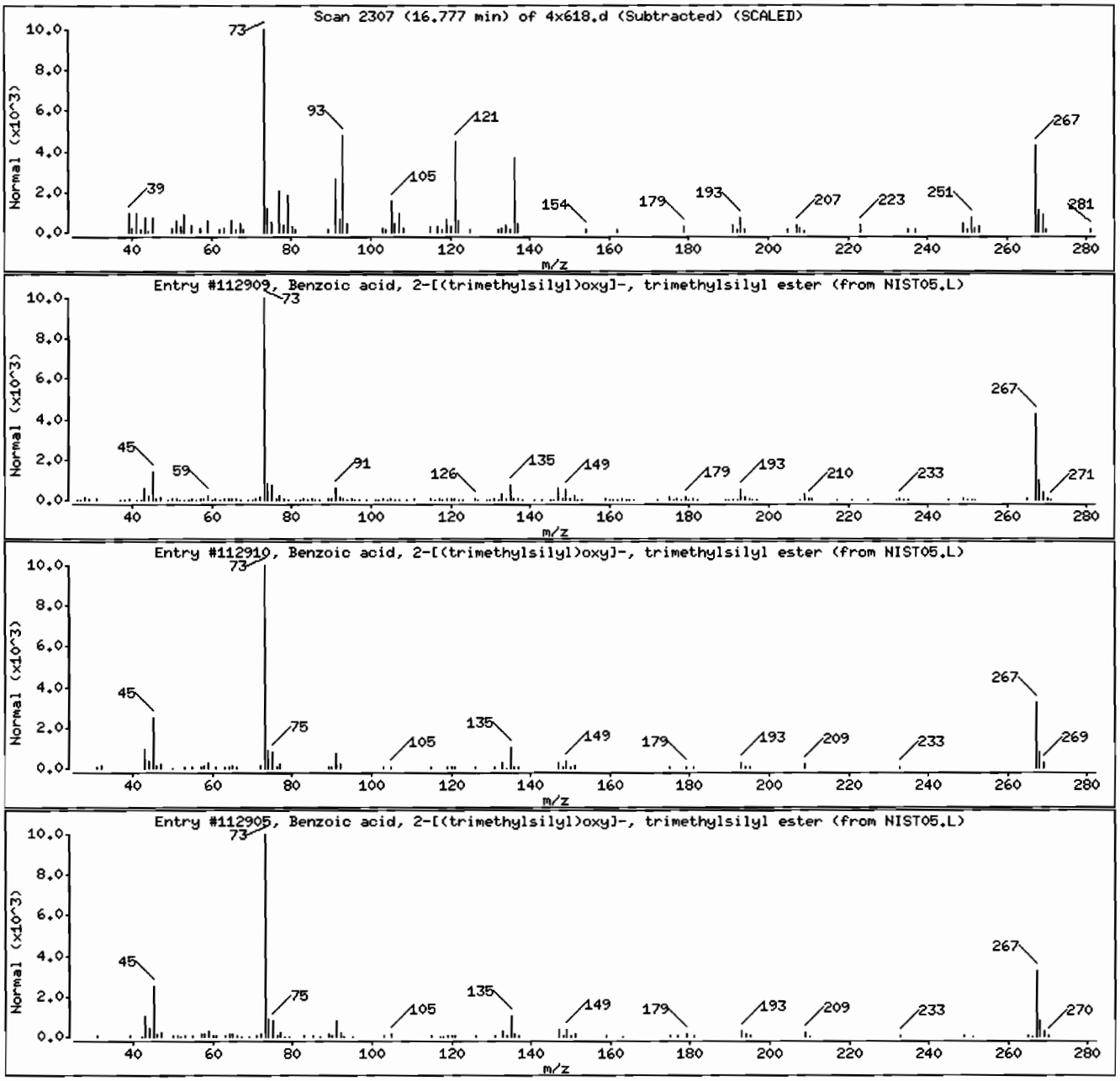
Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	12	C13H2203Si2	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112910	12	C13H2203Si2	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112905	12	C13H2203Si2	282



Data File: /chem/VOA4.i/021310v4/4x618.d

Date : 13-FEB-2010 20:20

Client ID: RE15-10-8362

Instrument: VOA4.i

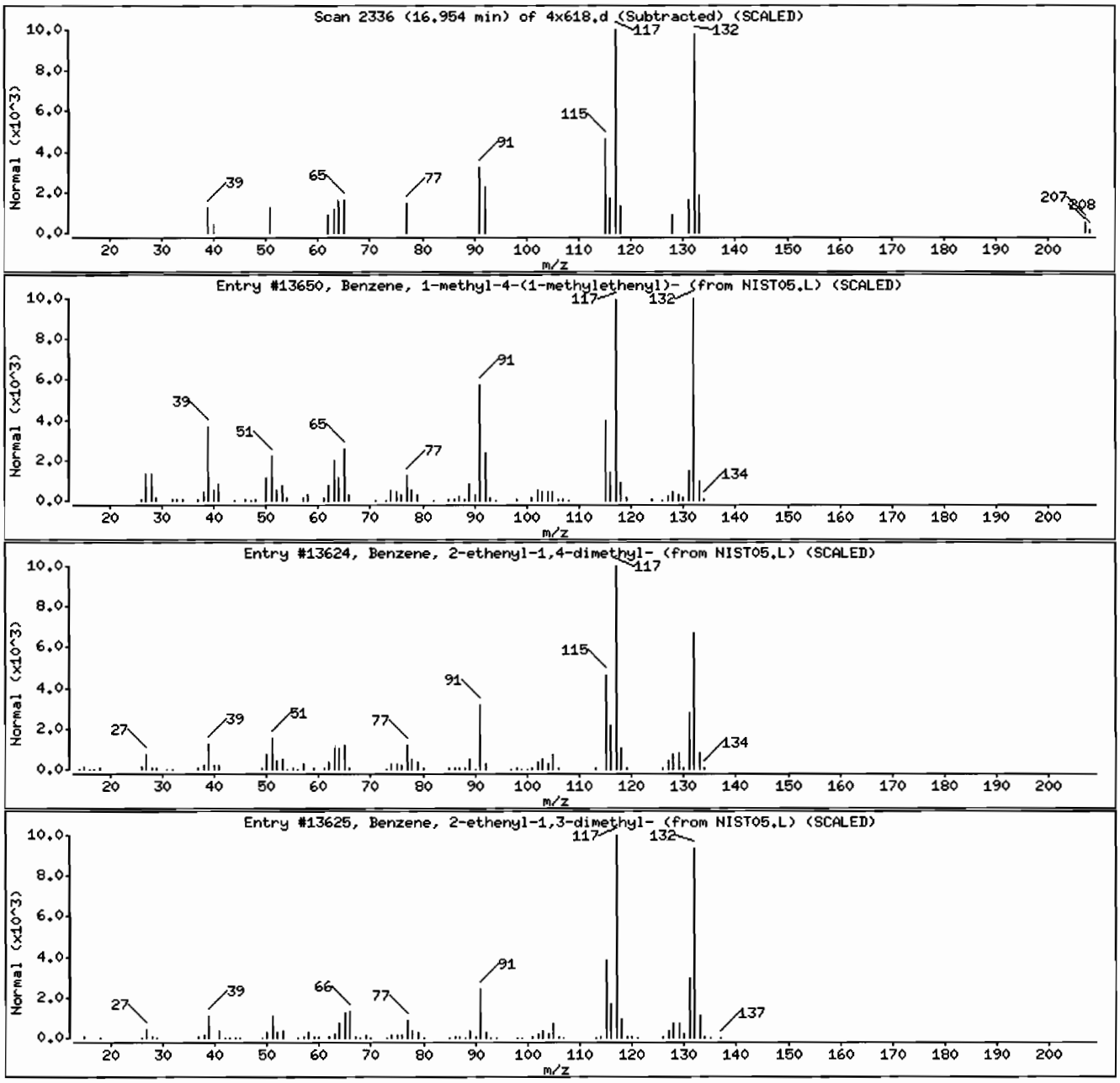
Sample Info: |2464420031952862|1|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Substituted Benzene						
Benzene, 1-methyl-4-(1-methylethenyl)-	1195-32-0	NIST05.L	13650	81	C10H12	132
Benzene, 2-ethenyl-1,4-dimethyl-	2039-89-6	NIST05.L	13624	76	C10H12	132
Benzene, 2-ethenyl-1,3-dimethyl-	2039-90-9	NIST05.L	13625	76	C10H12	132



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**S**
Lab Sample ID:	**246442001**	**Date Received:**	**02/06/2010 09:15**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8383**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 15:46**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x608.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	J	1.98	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:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**S**
Lab Sample ID:	**246442001**	**Date Received:**	**02/06/2010 09:15**		
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8383**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 15:46**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:10**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x608.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-Trifluoroetha *Trichlorotrifluoroethane*	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)	Estimated RT	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/VOA4.i/021310v4/4x608.d
Lab Smp Id: 246442001 Client Smp ID: RE15-10-8383
Inj Date : 13-FEB-2010 15:46
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442001|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	650427	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	525082	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	300091	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	144442	43.1799	43.2
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	522571	43.5165	43.5
$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	298148	55.1765	55.2
10 Acetone	43	7.370	7.358	(0.694)	6020	1.97963	2.0(a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4x608.d
Report Date: 02/24/2010 17:46
Lab. ID: 246442001 SampleType: SAMPLE
Injection Date: 13-FEB-2010 15:46
Operator: ACJ Instrument: VOA4.i
Sample Info: |246442001|952862|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
10 Acetone		CAS#: 67-64-1				
43	6020	7.37	7.36	80-120	100	( )
58	895	7.38	7.36	2- 62	15	( )
37 1,2-Dichloroethane		CAS#: 107-06-2				
62	9090	10.61	10.34	80-120	100	(T)
64	1342	10.63	10.34	2- 62	15	(T)
49 4-Methyl-2-pentanone		CAS#: 108-10-1				
58	4832	12.25	12.02	80-120	100	(T)
43	2467	12.25	12.02	221-281	51	(QT)
100	355228	12.25	12.02	3- 63	7351	(QT)
66 Bromoform		CAS#: 75-25-2				
173	1246	14.95	14.66	80-120	100	(T)
175	18398	14.95	14.66	19- 79	1476	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x608.d
Lab Smp Id: 246442001 Client Smp ID: RE15-10-8383
Inj Date : 13-FEB-2010 15:46
Operator : ACJ Inst ID: VOA4.i
Smp Info : |246442001|952862|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50

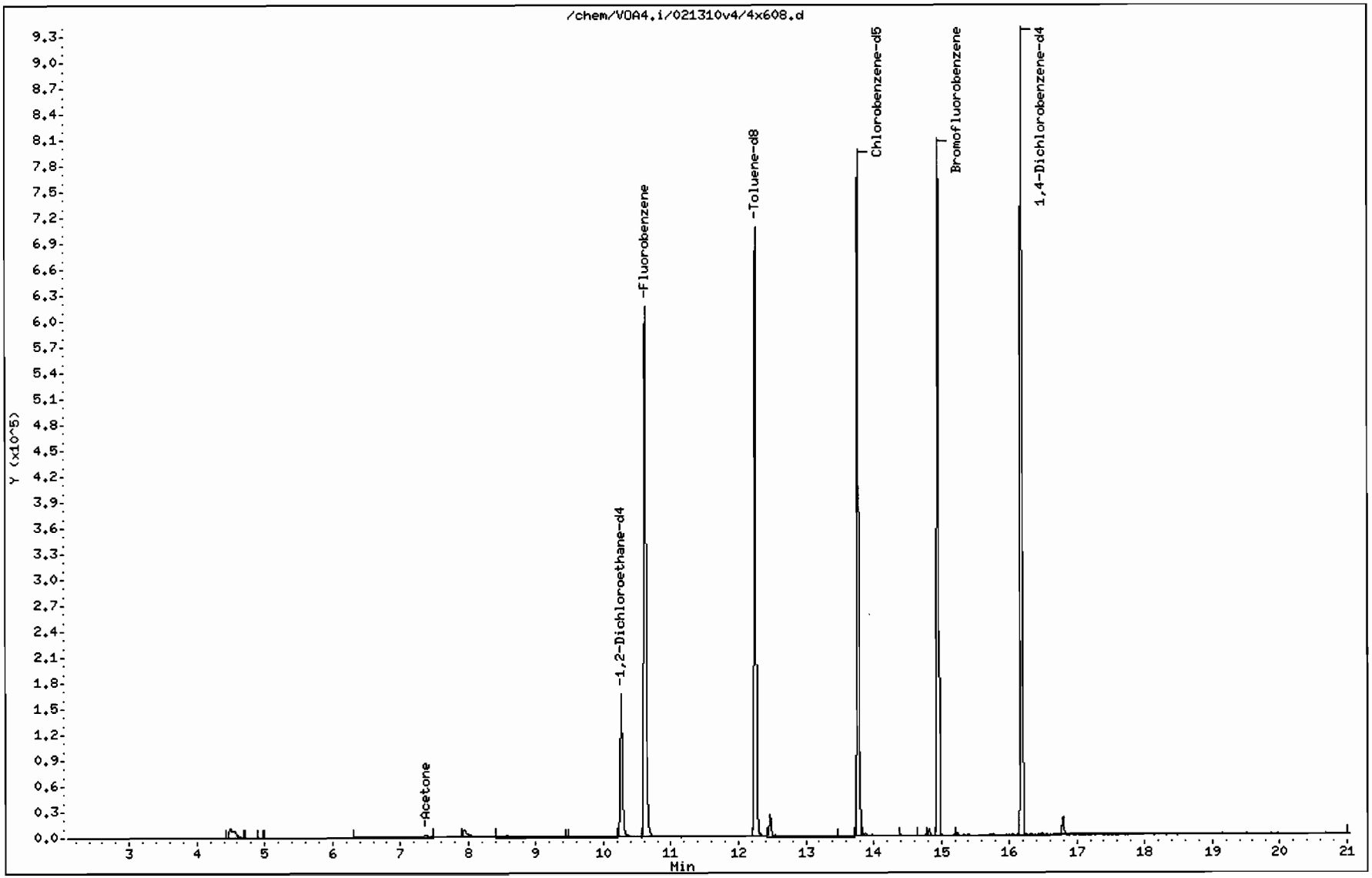
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA4.i/021310v4/4x608.d
Date : 13-FEB-2010 15:46
Client ID: RE15-10-8383
Sample Info: |2464420011952862|1|VOAF|1|

Instrument: VOA4.i

Operator: ACJ
Column diameter: 0.25

Column phase: RTX-VOLATILES



Data File: /chem/VOA4.i/021310v4/4x608.d

Date : 13-FEB-2010 15:46

Client ID: RE15-10-8383

Instrument: VOA4.i

Sample Info: |2464420011952862|1|VOAF|1|

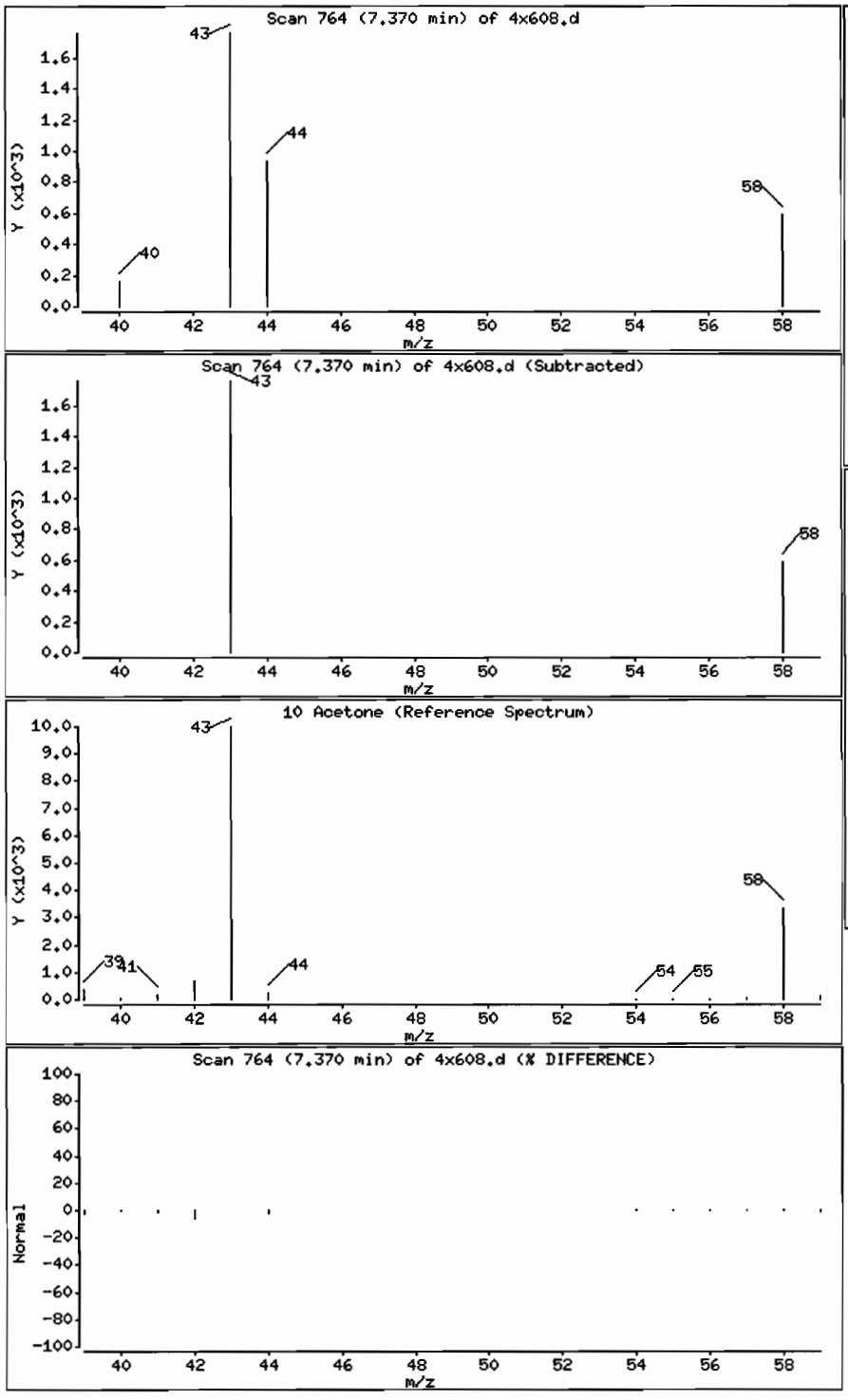
Operator: ACJ

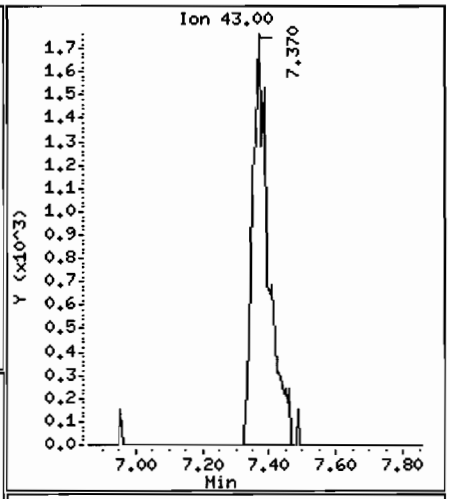
Column phase: RTX-VOLATILES

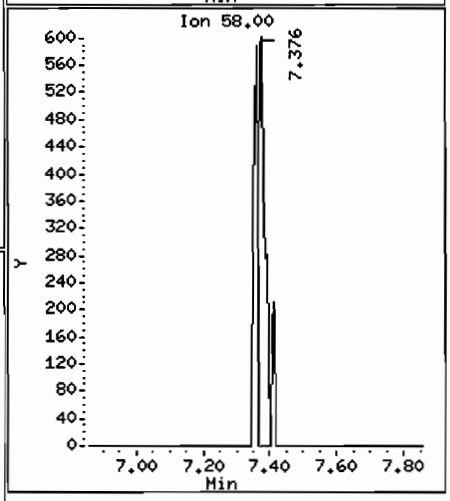
Column diameter: 0.25

10 Acetone

Concentration: 2.0 ug/Kg







Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624

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: 19-Feb-2010 14:04

Calibration History

Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Start Cal Date: 03-FEB-2010 01:59
End Cal Date : 03-FEB-2010 09:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
03-FEB-2010 06:36	ICALsubS	/chem/VOA4.i/020210v4/4w240.d
03-FEB-2010 02:27	CALsubL+	/chem/VOA4.i/020210v4/4w231.d
Cal Level: 2 , Cal Amount: 2.00000		
03-FEB-2010 07:04	ICALsubS	/chem/VOA4.i/020210v4/4w241.d
03-FEB-2010 03:22	CALsubL+	/chem/VOA4.i/020210v4/4w233.d
Cal Level: 3 , Cal Amount: 5.00000		
03-FEB-2010 07:32	ICALsubS	/chem/VOA4.i/020210v4/4w242.d
03-FEB-2010 03:50	CALsubL+	/chem/VOA4.i/020210v4/4w234.d
Cal Level: 4 , Cal Amount: 10.00000		
03-FEB-2010 07:59	ICALsubS	/chem/VOA4.i/020210v4/4w243.d
03-FEB-2010 04:18	CALsubL+	/chem/VOA4.i/020210v4/4w235.d
Cal Level: 5 , Cal Amount: 20.00000		
03-FEB-2010 08:26	ICALsubS	/chem/VOA4.i/020210v4/4w244.d
03-FEB-2010 04:46	CALsubL+	/chem/VOA4.i/020210v4/4w236.d
Cal Level: 6 , Cal Amount: 50.00000		
03-FEB-2010 08:54	ICALsubS	/chem/VOA4.i/020210v4/4w245.d
03-FEB-2010 05:13	CALsubL+	/chem/VOA4.i/020210v4/4w237.d
Cal Level: 7 , Cal Amount: 100.00000		
03-FEB-2010 09:21	ICALsubS	/chem/VOA4.i/020210v4/4w246.d
03-FEB-2010 05:41	CALsubL+	/chem/VOA4.i/020210v4/4w238.d
Cal Level: 8 , Cal Amount: 200.00000		
03-FEB-2010 01:59	BENZENE+	/chem/VOA4.i/020210v4/4w230.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
13-FEB-2010 13:00	CALsubL+	/chem/VOA4.i/021310v4/4x602.d
Ccal Level: 6 , Ccal Amount: 50.0		
13-FEB-2010 13:55	CALsubS+SS	/chem/VOA4.i/021310v4/4x604.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 01:59
End Cal Date : 03-FEB-2010 09:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

Calibration File Names:
Level 1: /chem/VOA4.i/020210v4/4w240.d
Level 2: /chem/VOA4.i/020210v4/4w241.d
Level 3: /chem/VOA4.i/020210v4/4w242.d
Level 4: /chem/VOA4.i/020210v4/4w243.d
Level 5: /chem/VOA4.i/020210v4/4w244.d
Level 6: /chem/VOA4.i/020210v4/4w245.d
Level 7: /chem/VOA4.i/020210v4/4w246.d
Level 8: /chem/VOA4.i/020210v4/4w230.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.76017	0.76229	0.75200	0.73316	0.80732	0.71093					
	0.71511	+++++					AVRG		0.74871		4.41624
M 2 1,2-Dichloroethylene (total)	0.48289	0.49761	0.48288	0.48977	0.48144	0.47258					
	0.47860	+++++					AVRG		0.48368		1.65940
M 135 1,3-Dichloropropylene	0.44817	0.44666	0.44553	0.45159	0.48594	0.46366					
	0.48113	+++++					AVRG		0.46038		3.68756
153 Chlorotrifluoroethylene	0.16151	0.19210	0.20098	+++++	0.24659	0.20577					
	0.23315	+++++					AVRG		0.20825		13.41440
154 2-Chloro-1,1,1-trifluoroethan	0.38598	0.35420	0.33791	+++++	0.35782	0.35695					
	0.36313	+++++					AVRG		0.36057		4.05369

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 01:59
End Cal Date : 03-FEB-2010 09:21
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
3 Dichlorodifluoromethane	0.21472	0.23581	0.27051	0.24885	0.24149	0.25371							
	0.23944	+++++							AVRG		0.24351		7.05454
4 Chloromethane	0.51267	0.52648	0.50916	0.50774	0.50591	0.55870							
	0.50377	+++++							AVRG		0.51777		3.77208
5 Vinyl chloride	0.39650	0.42685	0.41996	0.42024	0.41343	0.45023							
	0.40272	+++++							AVRG		0.41856		4.18441
6 Bromomethane	0.26723	0.29914	0.28826	0.29113	0.28844	0.30462							
	0.28129	+++++							AVRG		0.28859		4.20763
7 Chloroethane	0.24065	0.27291	0.26871	0.27651	0.27098	0.29084							
	0.26575	+++++							AVRG		0.26948		5.59823
8 Trichlorofluoromethane	0.42879	0.45491	0.42213	0.42355	0.43355	0.45062							
	0.42629	+++++							AVRG		0.43426		3.04581
134 Ethyl Ether	0.27564	0.28028	0.26927	0.26357	0.26979	0.28563							
	0.27098	+++++							AVRG		0.27359		2.72783
9 Acrolein	0.05432	0.05435	0.05682	+++++	0.05639	0.05719							
	0.05985	+++++							AVRG		0.05637		3.37531
12 Trichlorotrifluoroethane	11379	16310	44349	+++++	170575	409821							
	790878	+++++							LINR	-0.05231	0.08850		0.99979

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
10 Acetone	0.27161	0.24766	0.22866	0.22685	0.22443	0.21478					
	0.22238	+++++					AVRG		0.23377		8.33319
11 1,1-Dichloroethylene	0.46383	0.52271	0.51120	0.51403	0.50587	0.49765					
	0.52099	+++++					AVRG		0.50518		3.99090
147 Isopropyl Alcohol	0.02841	0.02778	0.02759	+++++	0.03008	0.02823					
	0.03086	+++++					AVRG		0.02882		4.61632
13 Iodomethane	0.55281	0.57732	0.57390	0.58225	0.56167	0.55603					
	0.58061	+++++					AVRG		0.56923		2.13609
15 Acetonitrile	0.05321	0.05663	0.05374	0.05231	0.05047	0.04978					
	0.04851	+++++					AVRG		0.05209		5.27994
128 Methyl acetate	0.27181	0.29131	0.27577	0.26121	0.24940	0.26113					
	0.25538	+++++					AVRG		0.26657		5.31039
14 Carbon disulfide	0.98263	1.04450	1.02833	1.03892	0.98577	0.95256					
	0.96614	+++++					AVRG		0.99983		3.69717
16 Allyl chloride	0.53448	0.47451	0.49769	+++++	0.48560	0.47840					
	0.45129	+++++					AVRG		0.48791		5.23250
148 tert-Butyl Alcohol	0.04514	0.04286	0.04182	+++++	0.04509	0.04258					
	0.04507	+++++					AVRG		0.04376		3.44757

GEL Laboratories LLC

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Integrator : HP RTE
Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
17 Methylene chloride	+++++	25474	45073	77519	140005	322676					
	659396	+++++					LINR	-0.03777	0.35262		0.99971
18 Acrylonitrile	0.13271	0.12956	0.13201	+++++	0.12949	0.12769					
	0.12917	+++++					AVRG		0.13010		1.44886
20 tert-Butyl methyl ether	0.85893	0.96423	0.83159	0.91952	0.78578	0.79627					
	0.81310	+++++					AVRG		0.85277		7.81066
21 trans-1,2-Dichloroethylene	0.44663	0.47674	0.46042	0.46568	0.46399	0.45417					
	0.45927	+++++					AVRG		0.46099		2.04820
23 Vinyl acetate	0.59026	0.57738	0.58136	0.60389	0.62522	0.61813					
	0.51846	+++++					AVRG		0.58781		6.03213
149 Isopropyl ether	1.16442	1.11681	1.11749	+++++	1.15853	1.13491					
	1.17205	+++++					AVRG		1.14403		2.11935
22 1,1-Dichloroethane	0.59116	0.58995	0.58426	0.58901	0.57248	0.56333					
	0.56659	+++++					AVRG		0.57954		2.03647
24 2-Chloro-1,3-butadiene	0.41526	0.38278	0.41421	+++++	0.42386	0.43011					
	0.43069	+++++					AVRG		0.41615		4.27651
150 Ethyl tert-butyl ether	0.98144	0.94940	0.95478	1.00327	1.00673	0.99015					
	1.04705	+++++					AVRG		0.99040		3.36692

GEL Laboratories LLC

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Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
30 2-Butanone	0.29440	0.28995	0.26987	0.27348	0.29186	0.26489					
	0.28741	+++++					AVRG		0.28169		4.23800
26 Ethyl acetate	0.40066	0.34455	0.34082	+++++	0.33313	0.32021					
	0.31239	+++++					AVRG		0.34196		9.13473
31 cis-1,2-Dichloroethylene	0.51914	0.51849	0.50534	0.51386	0.49890	0.49099					
	0.49794	+++++					AVRG		0.50638		2.17927
25 2,2-Dichloropropane	0.30679	0.28444	0.27861	0.28189	0.27634	0.26908					
	0.27433	+++++					AVRG		0.28164		4.32226
28 Propionitrile	0.05535	0.05172	0.05248	+++++	0.05222	0.05039					
	0.05156	+++++					AVRG		0.05229		3.18327
27 Methacrylonitrile	0.20719	0.19388	0.20629	+++++	0.20040	0.19712					
	0.19125	+++++					AVRG		0.19936		3.26059
29 Bromochloromethane	0.17094	0.16989	0.16353	0.16905	0.16803	0.16357					
	0.17073	+++++					AVRG		0.16796		1.88889
32 Chloroform	0.56017	0.52548	0.52464	0.52435	0.52885	0.50405					
	0.51287	+++++					AVRG		0.52577		3.32513
72 Tetrahydrofuran	0.23680	0.23330	0.24190	+++++	0.23159	0.21671					
	0.20305	+++++					AVRG		0.22723		6.40135

GEL Laboratories LLC

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Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	200 Level 8									
36 1,1,1-Trichloroethane	0.39601	0.40904	0.40058	0.40404	0.40149	0.39604					
	0.40280	+++++					AVRG		0.40143		1.14067
19 Isobutyl alcohol	0.01596	0.01523	0.01510	+++++	0.01538	0.01456					
	0.01464	+++++					AVRG		0.01514		3.40402
129 Cyclohexane	0.56054	0.54397	0.52523	0.52868	0.53826	0.52091					
	0.53446	+++++					AVRG		0.53601		2.49233
34 1,1-Dichloropropene	0.39273	0.40413	0.39471	0.39464	0.39293	0.38281					
	0.39139	+++++					AVRG		0.39334		1.59195
33 Carbon tetrachloride	0.38771	0.39783	0.38252	0.38814	0.39329	0.38968					
	0.40569	+++++					AVRG		0.39212		1.95225
37 1,2-Dichloroethane	0.41564	0.43915	0.42552	0.43447	0.41804	0.40900					
	0.41561	+++++					AVRG		0.42249		2.60433
38 Benzene	1.28594	1.29057	1.20818	1.20824	1.18476	1.15883					
	1.15970	1.43309					AVRG		1.24116		7.46228
151 Methyl tert-amyl ether	0.83989	0.84468	0.84647	+++++	0.88536	0.86088					
	0.90254	+++++					AVRG		0.86330		2.93490
139 Cyclohexene	0.59461	0.60356	0.58434	0.58473	0.59317	0.57739					
	0.58407	+++++					AVRG		0.58884		1.48655

GEL Laboratories LLC

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Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
131 n-Butyl alcohol	0.01246	0.01312	0.01278	0.01311	0.01306	0.01356					
	0.01405	0.01250					AVRG		0.01308		4.08555
39 Trichloroethylene	0.32329	0.32454	0.31462	0.31023	0.32212	0.30572					
	0.31545	+++++					AVRG		0.31657		2.24280
42 Methyl methacrylate	0.19987	0.18294	0.20326	+++++	0.20587	0.19946					
	0.19548	+++++					AVRG		0.19781		4.09503
130 Methylcyclohexane	0.50049	0.50048	0.48690	0.48675	0.49850	0.48321					
	0.47974	+++++					AVRG		0.49087		1.78036
41 1,2-Dichloropropane	0.33795	0.34572	0.34469	0.35861	0.35300	0.33853					
	0.34322	+++++					AVRG		0.34596		2.16912
97 1,4-Dioxane	0.00350	0.00353	0.00362	+++++	0.00369	0.00349					
	0.00387	+++++					AVRG		0.00362		4.05338
43 Dibromomethane	0.18103	0.18442	0.18754	0.19334	0.19605	0.19103					
	0.19529	+++++					AVRG		0.18981		2.99840
45 Bromodichloromethane	0.36998	0.38031	0.38388	0.38403	0.40403	0.38579					
	0.40150	+++++					AVRG		0.38707		3.08363
48 2-Nitropropane	0.07729	0.07335	0.07916	+++++	0.08435	0.08761					
	0.09122	+++++					AVRG		0.08216		8.20028

GEL Laboratories LLC

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Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
44 2-Chloroethylvinyl ether	0.15301	0.16321	0.16281	0.17304	0.17929	0.19072					
	0.17798	+++++					AVRG		0.17144		7.38075
46 cis-1,3-Dichloropropylene	0.46933	0.47317	0.47176	0.47764	0.50034	0.48276					
	0.49879	+++++					AVRG		0.48197		2.65359
49 4-Methyl-2-pentanone	0.17676	0.19267	0.18886	0.18490	0.21740	0.18045					
	0.18674	+++++					AVRG		0.18968		7.01375
50 Toluene	1.09401	1.05744	0.96914	0.93741	0.97360	0.89261					
	0.89046	+++++					AVRG		0.97353		7.99272
51 Ethyl methacrylate	0.46747	0.44975	0.48506	+++++	0.49601	0.47532					
	0.43190	+++++					AVRG		0.46758		5.02930
53 trans-1,3-Dichloropropylene	0.54957	0.54436	0.54128	0.53142	0.59687	0.54550					
	0.55172	+++++					AVRG		0.55153		3.81519
54 1,1,2-Trichloroethane	0.31583	0.29958	0.29047	0.28946	0.32061	0.27746					
	0.27876	+++++					AVRG		0.29602		5.72867
55 2-Hexanone	0.46248	0.50826	0.48649	0.48075	0.58176	0.46726					
	0.49424	+++++					AVRG		0.49732		8.11329
52 1,3-Dichloropropane	0.62867	0.62963	0.61423	0.58570	0.63680	0.55245					
	0.53748	+++++					AVRG		0.59785		6.69001

GEL Laboratories LLC

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	200 Level 8									
56 Tetrachloroethylene	0.36751	0.37704	0.34796	0.33528	0.35432	0.32123					
	0.31875	+++++					AVRG		0.34601		6.43103
57 Dibromochloromethane	0.39041	0.39435	0.38308	0.38343	0.45415	0.41035					
	0.42756	+++++					AVRG		0.40619		6.52592
59 1,2-Dibromoethane	0.36807	0.37080	0.36073	0.36543	0.40079	0.36019					
	0.37069	+++++					AVRG		0.37096		3.73181
152 1-Chlorohexane	0.32638	0.30225	0.28220	+++++	0.31574	0.30705					
	0.32553	+++++					AVRG		0.30986		5.36880
62 Chlorobenzene	1.17893	1.18438	1.13445	1.08953	1.20711	1.05380					
	1.05975	+++++					AVRG		1.12971		5.56294
60 1,1,1,2-Tetrachloroethane	0.38715	0.40056	0.41214	0.40545	0.45802	0.40545					
	0.41871	+++++					AVRG		0.41250		5.41650
58 Ethylbenzene	2.00437	1.96139	1.88810	1.85557	1.98292	1.76494					
	1.72289	+++++					AVRG		1.88288		5.78591
63 m,p-Xylenes	0.75341	0.74998	0.75097	0.72192	0.79674	0.69975					
	0.70358	+++++					AVRG		0.73948		4.58261
64 o-Xylene	0.77367	0.78689	0.75408	0.75564	0.82847	0.73327					
	0.73816	+++++					AVRG		0.76717		4.28511

GEL Laboratories LLC

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	200 Level 8									
65 Styrene	1.04454	1.14692	1.17912	1.20766	1.42826	1.25134					
	1.26369	+++++					AVRG		1.21736		9.72909
66 Bromoform	0.46915	0.46677	0.45796	0.47926	0.60662	0.53970					
	0.57740	+++++					AVRG		0.51384		11.74373
67 Isopropylbenzene	3.41779	3.24645	3.22687	3.13198	3.60788	3.03561					
	2.99871	+++++					AVRG		3.23790		6.65731
68 cis-1,4-Dichloro-2-butene	0.23632	0.22916	0.24940	+++++	0.26306	0.25571					
	0.24977	+++++					AVRG		0.24724		5.05057
70 Cyclohexanone	0.06816	0.06280	0.06721	+++++	0.07421	0.06858					
	0.06518	+++++					AVRG		0.06769		5.68019
73 1,1,2,2-Tetrachloroethane	0.91985	0.89846	0.92687	0.89706	1.05063	0.85150					
	0.83809	+++++					AVRG		0.91178		7.62885
69 trans-1,4-Dichloro-2-butene	0.23387	0.23500	0.25062	+++++	0.24886	0.24225					
	0.24042	+++++					AVRG		0.24184		2.85755
74 1,2,3-Trichloropropane	0.27470	0.25182	0.24237	0.23101	0.27849	0.22672					
	0.22716	+++++					AVRG		0.24747		8.82768
75 Bromobenzene	0.99784	0.97862	0.93113	0.89948	1.06043	0.89034					
	0.91141	+++++					AVRG		0.95275		6.52745

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 01:59
End Cal Date : 03-FEB-2010 09:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
76 n-Propylbenzene	4.22071	3.99954	3.94217	3.85275	4.40876	3.63310					
	3.51343	+++++					AVRG		3.93864		7.93350
78 1,3,5-Trimethylbenzene	2.96209	2.89811	2.94738	2.80908	3.26236	2.70564					
	2.67664	+++++					AVRG		2.89447		6.81005
77 2-Chlorotoluene	2.97864	2.84796	2.83370	2.72779	3.06787	2.51427					
	2.44416	+++++					AVRG		2.77349		8.27005
80 4-Chlorotoluene	2.66524	2.52467	2.50808	2.41565	2.80605	2.30005					
	2.29062	+++++					AVRG		2.50148		7.52440
81 tert-Butylbenzene	3.03377	2.95470	2.95061	2.79904	3.34831	2.80280					
	2.79127	+++++					AVRG		2.95436		6.70184
79 1,2,4-Trimethylbenzene	3.05283	3.03468	3.00146	2.92237	3.45687	2.83044					
	2.78876	+++++					AVRG		3.01249		7.31095
82 Pentachloroethane	0.27029	0.25275	0.21280	+++++	0.21871	0.20692					
	0.29512	+++++					AVRG		0.24277		14.69038
83 sec-Butylbenzene	4.03019	4.07414	4.01093	3.84788	4.55817	3.68381					
	3.60468	+++++					AVRG		3.97283		7.90856
84 4-Isopropyltoluene	3.15499	3.18779	3.16596	3.07393	3.72939	3.00269					
	3.01131	+++++					AVRG		3.18944		7.81990

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 01:59
End Cal Date : 03-FEB-2010 09:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
85 1,3-Dichlorobenzene	1.86970	1.85977	1.81531	1.77867	2.08648	1.69658					
	1.70906	+++++					AVRG		1.83080		7.17451
87 1,4-Dichlorobenzene	1.99271	1.91223	1.82403	1.76341	2.10990	1.69061					
	1.71163	+++++					AVRG		1.85779		8.34132
88 Benzyl chloride	1.07403	1.05145	1.16384	+++++	1.22010	1.16680					
	1.07135	+++++					AVRG		1.12460		6.05491
89 n-Butylbenzene	2.90589	3.01938	2.99146	2.86711	3.56741	2.75057					
	2.73326	+++++					AVRG		2.97644		9.48684
90 1,2-Dichlorobenzene	1.88316	1.75687	1.76730	1.72834	2.06782	1.60608					
	1.64768	+++++					AVRG		1.77961		8.72342
91 bis(2-Chloroisopropyl)ether	0.41896	0.39918	0.42071	+++++	0.45874	0.44128					
	0.42582	+++++					AVRG		0.42745		4.78256
92 1,2-Dibromo-3-chloropropane	1138	2478	5778	13706	36889	78029					
	181140	+++++					LINR	0.01502	0.18350		0.99670
93 1,2,4-Trichlorobenzene	0.96510	0.94920	0.92517	0.94990	1.19513	0.90463					
	0.93926	+++++					AVRG		0.97548		10.12755
94 Hexachlorobutadiene	0.80458	0.75781	0.69139	0.65412	0.83082	0.61322					
	0.67332	+++++					AVRG		0.71789		11.31300

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 01:59
End Cal Date : 03-FEB-2010 09:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	1.80719	1.72048	1.71438	1.84289	2.36571	1.81767					
	1.81852	+++++					AVRG		1.86955		12.00766
96 1,2,3-Trichlorobenzene	0.76160	0.74683	0.74001	0.77461	0.95990	0.73138					
	0.75173	+++++					AVRG		0.78086		10.27016
$ 138 1,2-Dichloroethane-d4	0.24518	0.24865	0.25273	0.25262	0.25035	0.26567					
	0.28484	+++++					AVRG		0.25715		5.36302
$ 47 Toluene-d8	1.14649	1.17014	1.17337	1.13757	1.13951	1.12784					
	1.10956	+++++					AVRG		1.14350		1.97470
$ 71 Bromofluorobenzene	0.91533	0.88951	0.91924	0.89072	0.89141	0.89810					
	0.89790	+++++					AVRG		0.90031		1.34734

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 01:59
End Cal Date : 03-FEB-2010 09:21
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Cal Date : 13-Feb-2010 14:26 amj

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

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 03-FEB-2010 10:16
Lab File ID: 4w248.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100203-17 Quant Type: ISTD
Method: /chem/VOA4.i/020210v4/VOA4-8260-020310.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.74871	0.68973	0.68973	0.050	-7.87692	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.48368	0.46387	0.46387	0.050	-4.09560	30.00000	Averaged	
M	135 1,3-Dichloropropylene	0.46038	0.45167	0.45167	0.050	-1.89183	30.00000	Averaged	
	3 Dichlorodifluoromethane	0.24351	0.23098	0.23098	0.050	-5.14296	30.00000	Averaged	
	4 Chloromethane	0.51777	0.48970	0.48970	0.100	-5.42286	30.00000	Averaged	spcc
	5 Vinyl chloride	0.41856	0.41425	0.41425	0.050	-1.03131	20.00000	Averaged	ccc
	6 Bromomethane	0.28859	0.28025	0.28025	0.050	-2.88714	30.00000	Averaged	
	7 Chloroethane	0.26948	0.26822	0.26822	0.050	-0.46579	30.00000	Averaged	
	8 Trichlorofluoromethane	0.43426	0.42409	0.42409	0.050	-2.34305	30.00000	Averaged	
	134 Ethyl Ether	0.27359	0.26665	0.26665	0.001	-2.53653	30.00000	Averaged	
	10 Acetone	0.23377	0.19990	0.19990	0.050	-14.48780	40.00000	Averaged	
	15 Acetonitrile	0.05209	0.05216	0.05216	0.010	0.12902	30.00000	Averaged	
	11 1,1-Dichloroethylene	0.50518	0.48470	0.48470	0.050	-4.05446	20.00000	Averaged	ccc
	128 Methyl acetate	0.26657	0.26197	0.26197	0.010	-1.72677	40.00000	Averaged	
	13 Iodomethane	0.56923	0.53751	0.53751	0.050	-5.57231	30.00000	Averaged	
	17 Methylene chloride	50.45800	50.00000	0.36917	0.050	0.91600	30.00000	Linear	
	14 Carbon disulfide	0.99983	0.99556	0.99556	0.050	-0.42721	30.00000	Averaged	
	20 tert-Butyl methyl ether	0.85277	0.80548	0.80548	0.050	-5.54577	30.00000	Averaged	
	21 trans-1,2-Dichloroethylene	0.46099	0.43949	0.43949	0.050	-4.66381	30.00000	Averaged	
	23 Vinyl acetate	0.58781	0.52695	0.52695	0.010	-10.35492	40.00000	Averaged	
	22 1,1-Dichloroethane	0.57954	0.56245	0.56245	0.100	-2.94948	30.00000	Averaged	spcc
	30 2-Butanone	0.28169	0.24857	0.24857	0.030	-11.75762	40.00000	Averaged	
	31 cis-1,2-Dichloroethylene	0.50638	0.48826	0.48826	0.050	-3.57825	30.00000	Averaged	
	25 2,2-Dichloropropane	0.28164	0.25417	0.25417	0.050	-9.75535	30.00000	Averaged	
	32 Chloroform	0.52577	0.50917	0.50917	0.010	-3.15780	20.00000	Averaged	ccc
	29 Bromochloromethane	0.16796	0.16393	0.16393	0.010	-2.39987	30.00000	Averaged	
	36 1,1,1-Trichloroethane	0.40143	0.38829	0.38829	0.010	-3.27417	30.00000	Averaged	
	129 Cyclohexane	0.53601	0.51924	0.51924	0.010	-3.12872	30.00000	Averaged	
	34 1,1-Dichloropropene	0.39334	0.38263	0.38263	0.010	-2.72092	30.00000	Averaged	
	131 n-Butyl alcohol	0.01308	0.01429	0.01429	0.001	9.27552	40.00000	Averaged	
	33 Carbon tetrachloride	0.39212	0.37484	0.37484	0.010	-4.40742	30.00000	Averaged	
$	138 1,2-Dichloroethane-d4	0.25715	0.26311	0.26311	0.001	2.31965	30.00000	Averaged	
	37 1,2-Dichloroethane	0.42249	0.41360	0.41360	0.010	-2.10414	30.00000	Averaged	
	38 Benzene	1.24116	1.14510	1.14510	0.010	-7.73998	30.00000	Averaged	
	139 Cyclohexene	0.58884	0.54769	0.54769	0.001	-6.98903	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i
Lab File ID: 4w248.d
Analysis Type: WATER
Lab Sample ID: W4VM100203-17
Method: /chem/VOA4.i/020210v4/VOA4-8260-020310.m

Injection Date: 03-FEB-2010 10:16
Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Init. Cal. Times: 01:59 09:21
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.31657	0.30835	0.30835	0.010	-2.59555	30.00000	Averaged	
	41 1,2-Dichloropropane	0.34596	0.33772	0.33772	0.010	-2.38144	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.49087	0.47163	0.47163	0.010	-3.91830	30.00000	Averaged	
	45 Bromodichloromethane	0.38707	0.38588	0.38588	0.010	-0.30762	30.00000	Averaged	
	43 Dibromomethane	0.18981	0.19066	0.19066	0.010	0.44658	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.17144	0.16034	0.16034	0.005	-6.47393	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.18968	0.18429	0.18429	0.010	-2.84392	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.48197	0.46872	0.46872	0.010	-2.75006	30.00000	Averaged	
$	47 Toluene-d8	1.14350	1.12023	1.12023	0.010	-2.03475	30.00000	Averaged	
	50 Toluene	0.97353	0.88565	0.88565	0.010	-9.02625	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55153	0.53838	0.53838	0.010	-2.38386	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.29602	0.28352	0.28352	0.010	-4.22394	30.00000	Averaged	
	55 2-Hexanone	0.49732	0.41807	0.41807	0.010	-15.93622	40.00000	Averaged	
	52 1,3-Dichloropropane	0.59785	0.56366	0.56366	0.010	-5.71971	30.00000	Averaged	
	56 Tetrachloroethylene	0.34601	0.30940	0.30940	0.010	-10.58073	30.00000	Averaged	
	57 Dibromochloromethane	0.40619	0.40926	0.40926	0.010	0.75653	30.00000	Averaged	
	59 1,2-Dibromoethane	0.37096	0.36527	0.36527	0.010	-1.53293	30.00000	Averaged	
	62 Chlorobenzene	1.12971	1.04560	1.04560	0.300	-7.44557	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.41250	0.40401	0.40401	0.010	-2.05672	30.00000	Averaged	
	58 Ethylbenzene	1.88288	1.71229	1.71229	0.010	-9.06015	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.73948	0.67961	0.67961	0.010	-8.09596	30.00000	Averaged	
	64 o-Xylene	0.76717	0.70998	0.70998	0.010	-7.45464	30.00000	Averaged	
	65 Styrene	1.21736	1.22782	1.22782	0.010	0.85901	30.00000	Averaged	
	66 Bromoform	0.51384	0.53572	0.53572	0.100	4.25858	30.00000	Averaged	spcc
	67 Isopropylbenzene	3.23790	2.91422	2.91422	0.010	-9.99674	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.91178	0.84749	0.84749	0.300	-7.05114	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.90031	0.90271	0.90271	0.010	0.26585	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.24747	0.22910	0.22910	0.010	-7.42311	30.00000	Averaged	
	75 Bromobenzene	0.95275	0.88097	0.88097	0.010	-7.53368	30.00000	Averaged	
	76 n-Propylbenzene	3.93864	3.49097	3.49097	0.010	-11.36597	30.00000	Averaged	
	77 2-Chlorotoluene	2.77349	2.46629	2.46629	0.010	-11.07622	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.89447	2.58687	2.58687	0.010	-10.62725	30.00000	Averaged	
	80 4-Chlorotoluene	2.50148	2.23708	2.23708	0.010	-10.56962	30.00000	Averaged	
	81 tert-Butylbenzene	2.95436	2.65160	2.65160	0.010	-10.24786	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	3.01249	2.69691	2.69691	0.010	-10.47559	30.00000	Averaged	
	83 sec-Butylbenzene	3.97283	3.47707	3.47707	0.010	-12.47883	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 03-FEB-2010 10:16
Lab File ID: 4w248.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100203-17 Quant Type: ISTD
Method: /chem/VOA4.i/020210v4/VOA4-8260-020310.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	3.18944	2.80059	2.80059	0.010	-12.19161	30.00000	Averaged
85 1,3-Dichlorobenzene	1.83080	1.61554	1.61554	0.010	-11.75776	30.00000	Averaged
87 1,4-Dichlorobenzene	1.85779	1.62510	1.62510	0.010	-12.52487	30.00000	Averaged
89 n-Butylbenzene	2.97644	2.53565	2.53565	0.010	-14.80926	30.00000	Averaged
90 1,2-Dichlorobenzene	1.77961	1.59569	1.59569	0.010	-10.33489	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	47.45360	50.00000	0.17140	0.010	-5.09280	30.00000	Linear
93 1,2,4-Trichlorobenzene	0.97548	0.83957	0.83957	0.010	-13.93328	30.00000	Averaged
94 Hexachlorobutadiene	0.71789	0.54159	0.54159	0.010	-24.55875	30.00000	Averaged
95 Naphthalene	1.86955	1.76030	1.76030	0.010	-5.84361	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.78086	0.70561	0.70561	0.010	-9.63699	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.51349
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/VOA4.i/020210v4/4w248.d
Lab Smp Id: W4VM100203-17 Client Smp ID: SECOND SOURCE
Inj Date : 03-FEB-2010 10:16
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM100203-17|ICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM100126-01A/IVM100202-01
Comment :
Method : /chem/VOA4.i/020210v4/VOA4-8260-020310.m
Meth Date : 03-Feb-2010 16:59 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 48 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

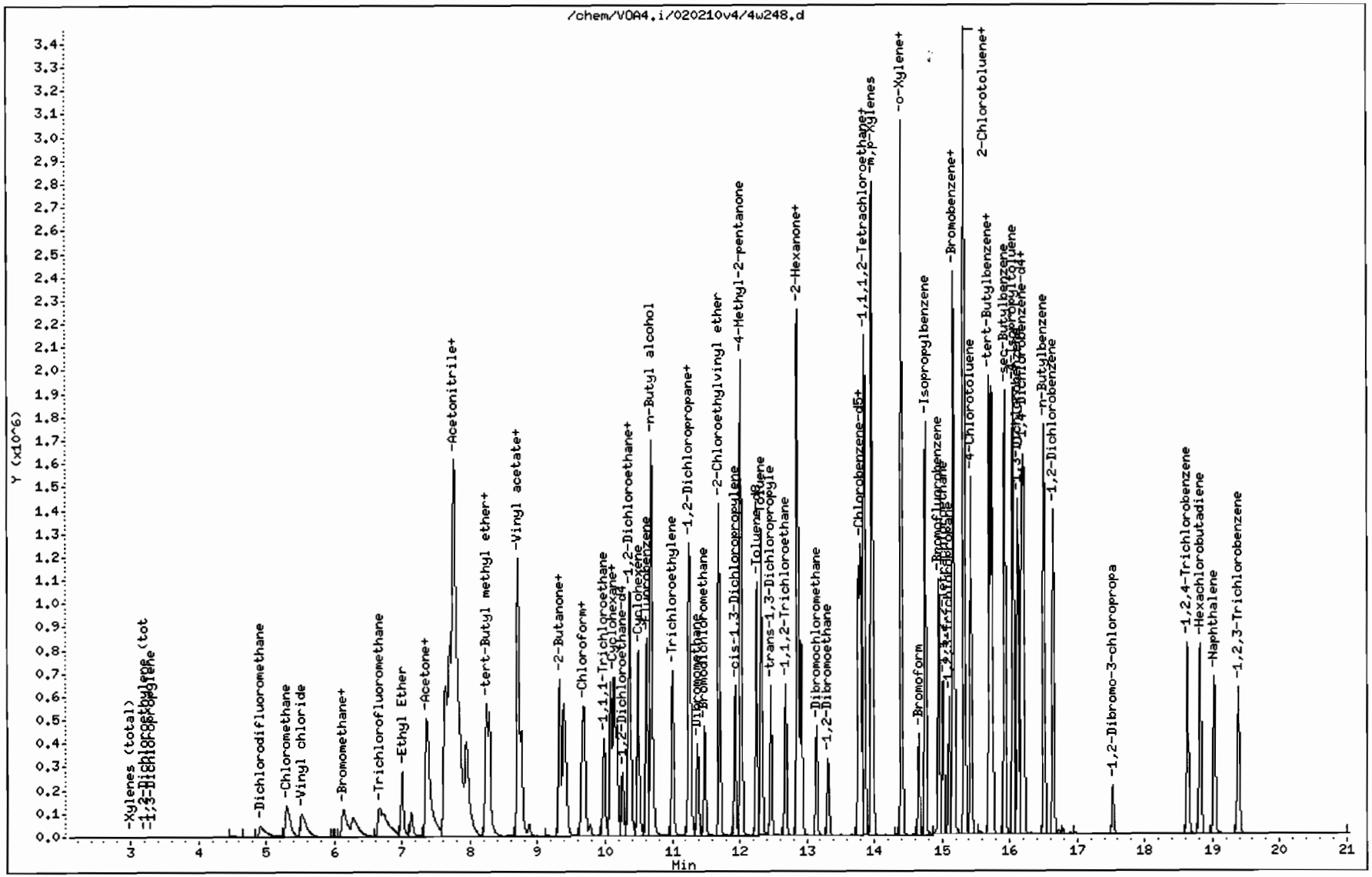
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				1502877	150.000	138
M 2 1,2-Dichloroethylene (total)	96				834687	100.000	95.9
M 135 1,3-Dichloropropylene	75				812734	100.000	98.1
3 Dichlorodifluoromethane	85	4.912	4.912	(0.463)	207813	50.0000	47.4
4 Chloromethane	50	5.299	5.299	(0.499)	440577	50.0000	47.3
5 Vinyl chloride	62	5.521	5.521	(0.520)	372694	50.0000	49.5
6 Bromomethane	94	6.130	6.130	(0.577)	252143	50.0000	48.6
7 Chloroethane	64	6.288	6.288	(0.592)	241320	50.0000	49.8
8 Trichlorofluoromethane	101	6.668	6.668	(0.628)	381549	50.0000	48.8
134 Ethyl Ether	59	7.004	7.004	(0.660)	239907	50.0000	48.7
10 Acetone	43	7.357	7.357	(0.693)	899242	250.000	214
15 Acetonitrile	41	7.699	7.699	(0.725)	1173244	1250.00	1250
11 1,1-Dichloroethylene	61	7.394	7.394	(0.696)	436083	50.0000	48.0
128 Methyl acetate	43	7.753	7.753	(0.730)	1178466	250.000	246
13 Iodomethane	142	7.638	7.638	(0.719)	2417972	250.000	236
17 Methylene chloride	84	7.942	7.942	(0.748)	332142	50.0000	50.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
14	Carbon disulfide	76	7.778	7.778	(0.732)	4478504	250.000	249
20	tert-Butyl methyl ether	73	8.241	8.241	(0.776)	724687	50.0000	47.2
21	trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	395403	50.0000	47.7
23	Vinyl acetate	43	8.711	8.711	(0.820)	2370451	250.000	224
22	1,1-Dichloroethane	63	8.759	8.759	(0.825)	506031	50.0000	48.5
30	2-Butanone	43	9.326	9.326	(0.878)	1118203	250.000	221
31	cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	439284	50.0000	48.2
25	2,2-Dichloropropane	77	9.418	9.418	(0.887)	228672	50.0000	45.1
32	Chloroform	83	9.692	9.692	(0.913)	458098	50.0000	48.4
29	Bromochloromethane	128	9.662	9.662	(0.910)	147489	50.0000	48.8
36	1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	349338	50.0000	48.4
129	Cyclohexane	56	10.082	10.082	(0.949)	467155	50.0000	48.4
34	1,1-Dichloropropene	75	10.137	10.137	(0.955)	344253	50.0000	48.6
131	n-Butyl alcohol	56	10.692	10.692	(1.007)	1285972	5000.00	5460
33	Carbon tetrachloride	117	10.174	10.174	(0.958)	337241	50.0000	47.8
$ 138	1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	236721	50.0000	51.2
37	1,2-Dichloroethane	62	10.344	10.344	(0.974)	372113	50.0000	48.9
38	Benzene	78	10.375	10.375	(0.977)	1030238	50.0000	46.1
139	Cyclohexene	67	10.497	10.497	(0.989)	492750	50.0000	46.5
* 40	Fluorobenzene	96	10.619	10.619	(1.000)	899694	50.0000	
39	Trichloroethylene	95	11.003	11.003	(1.036)	277422	50.0000	48.7
41	1,2-Dichloropropane	63	11.247	11.247	(1.059)	303846	50.0000	48.8
130	Methylcyclohexane	83	11.265	11.265	(1.061)	424326	50.0000	48.0
45	Bromodichloromethane	83	11.484	11.484	(1.082)	347177	50.0000	49.8
43	Dibromomethane	93	11.375	11.375	(1.071)	171536	50.0000	50.2
44	2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	721282	250.000	234
49	4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	669254	250.000	243
46	cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	421702	50.0000	48.6
$ 47	Toluene-d8	98	12.253	12.252	(0.890)	813630	50.0000	49.0
50	Toluene	92	12.326	12.326	(0.895)	643256	50.0000	45.5
53	trans-1,3-Dichloropropylene	75	12.460	12.460	(0.905)	391032	50.0000	48.8
54	1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	205922	50.0000	47.9
55	2-Hexanone	43	12.856	12.856	(0.934)	1518225	250.000	210
52	1,3-Dichloropropane	76	12.880	12.880	(0.935)	409387	50.0000	47.1
56	Tetrachloroethylene	164	12.923	12.923	(0.938)	224722	50.0000	44.7
57	Dibromochloromethane	129	13.143	13.143	(0.954)	297250	50.0000	50.4
59	1,2-Dibromoethane	107	13.319	13.319	(0.967)	265298	50.0000	49.2
* 61	Chlorobenzene-d5	117	13.771	13.770	(1.000)	726307	50.0000	
62	Chlorobenzene	112	13.801	13.801	(1.002)	759423	50.0000	46.3
60	1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	293438	50.0000	49.0
58	Ethylbenzene	91	13.862	13.862	(1.007)	1243648	50.0000	45.5
63	m,p-Xylenes	106	13.972	13.972	(1.015)	987214	100.000	91.9
64	o-Xylene	106	14.405	14.405	(1.046)	515663	50.0000	46.3
65	Styrene	104	14.405	14.405	(1.046)	891774	50.0000	50.4
66	Bromoform	173	14.661	14.661	(0.906)	246519	50.0000	52.1
67	Isopropylbenzene	105	14.758	14.758	(0.912)	1341014	50.0000	45.0
73	1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	389983	50.0000	46.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$	71 Bromofluorobenzene	95	14.953	14.953	(0.924)	415393	50.0000	50.1
	74 1,2,3-Trichloropropane	110	15.112	15.112	(0.934)	105422	50.0000	46.3
	75 Bromobenzene	156	15.167	15.167	(0.937)	405391	50.0000	46.2
	76 n-Propylbenzene	91	15.179	15.179	(0.938)	1606416	50.0000	44.3
	77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1134895	50.0000	44.5
	78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	1190381	50.0000	44.7
	80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1029422	50.0000	44.7
	81 tert-Butylbenzene	119	15.703	15.703	(0.971)	1220168	50.0000	44.9
	79 1,2,4-Trimethylbenzene	105	15.740	15.740	(0.973)	1241018	50.0000	44.8
	83 sec-Butylbenzene	105	15.935	15.935	(0.985)	1600017	50.0000	43.8
	84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	1288729	50.0000	43.9
	85 1,3-Dichlorobenzene	146	16.118	16.118	(0.996)	743410	50.0000	44.1
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	460163	50.0000	
	87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	747812	50.0000	43.7
	89 n-Butylbenzene	91	16.502	16.502	(1.020)	1166813	50.0000	42.6
	90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	734276	50.0000	44.8
	92 1,2-Dibromo-3-chloropropane	157	17.526	17.526	(1.083)	78871	50.0000	47.4
	93 1,2,4-Trichlorobenzene	180	18.635	18.635	(1.152)	386338	50.0000	43.0
	94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	249219	50.0000	37.7
	95 Naphthalene	128	19.032	19.032	(1.176)	810025	50.0000	47.1
	96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	324697	50.0000	45.2

Data File: /chem/VOA4.i/020210v4/4w248.d
Date : 03-FEB-2010 10:16
Client ID: SECOND SOURCE
Sample Info: IW4VM100203-17|ICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 03-FEB-2010 10:44
Lab File ID: 4w249.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100203-18 Quant Type: ISTD
Method: /chem/VOA4.i/020210v4/VOA4-8260-020310.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	153 Chlorotrifluoroethylene	0.20825	0.17672	0.17672	0.010	-15.13796	30.00000	Averaged	
	154 2-Chloro-1,1,1-trifluoroeth	0.36057	0.35480	0.35480	0.010	-1.59893	30.00000	Averaged	
	9 Acrolein	0.05637	0.04817	0.04817	0.001	-14.55181	30.00000	Averaged	
	12 Trichlorotrifluoroethane	244	250	0.08746	0.050	-2.22295	30.00000	Linear	
	147 Isopropyl Alcohol	0.02882	0.03046	0.03046	0.010	5.67071	40.00000	Averaged	
	16 Allyl chloride	0.48791	0.42777	0.42777	0.010	-12.32487	30.00000	Averaged	
	148 tert-Butyl Alcohol	0.04376	0.04571	0.04571	0.010	4.45099	40.00000	Averaged	
	18 Acrylonitrile	0.13010	0.11946	0.11946	0.010	-8.17813	30.00000	Averaged	
	149 Isopropyl ether	1.14403	1.10927	1.10927	0.010	-3.03851	30.00000	Averaged	
	24 2-Chloro-1,3-butadiene	0.41615	0.38277	0.38277	0.010	-8.02077	30.00000	Averaged	
	150 Ethyl tert-butyl ether	0.99040	0.98428	0.98428	0.010	-0.61806	30.00000	Averaged	
	28 Propionitrile	0.05229	0.04702	0.04702	0.010	-10.06767	30.00000	Averaged	
	26 Ethyl acetate	0.34196	0.28788	0.28788	0.010	-15.81445	40.00000	Averaged	
	27 Methacrylonitrile	0.19936	0.18086	0.18086	0.010	-9.27762	30.00000	Averaged	
	72 Tetrahydrofuran	0.22723	0.20247	0.20247	0.010	-10.89541	30.00000	Averaged	
	19 Isobutyl alcohol	0.01514	0.01365	0.01365	0.005	-9.84955	40.00000	Averaged	
	151 Methyl tert-amyl ether	0.86330	0.85272	0.85272	0.010	-1.22626	30.00000	Averaged	
	42 Methyl methacrylate	0.19781	0.18418	0.18418	0.010	-6.89330	30.00000	Averaged	
	51 Ethyl methacrylate	0.46758	0.43001	0.43001	0.010	-8.03597	30.00000	Averaged	
	152 1-Chlorohexane	0.30986	0.29729	0.29729	0.010	-4.05582	30.00000	Averaged	
	97 1,4-Dioxane	0.00362	0.00329	0.00329	0.001	-8.88366	40.00000	Averaged	
	48 2-Nitropropane	0.08216	0.08322	0.08322	0.010	1.29293	30.00000	Averaged	
	68 cis-1,4-Dichloro-2-butene	0.24724	0.24327	0.24327	0.010	-1.60514	30.00000	Averaged	
	70 Cyclohexanone	0.06769	0.01720	0.01720	0.005	-74.58664	40.00000	Averaged	<-
	69 trans-1,4-Dichloro-2-butene	0.24184	0.23224	0.23224	0.010	-3.96713	30.00000	Averaged	
	82 Pentachloroethane	0.24277	0.17935	0.17935	0.010	-26.12360	30.00000	Averaged	
	88 Benzyl chloride	1.12460	0.92408	0.92408	0.010	-17.83008	30.00000	Averaged	
	91 bis(2-Chloroisopropyl)ether	0.42745	0.40924	0.40924	0.010	-4.25890	30.00000	Averaged	
$	138 1,2-Dichloroethane-d4	0.25715	0.24836	0.24836	0.001	-3.41713	30.00000	Averaged	
$	47 Toluene-d8	1.14350	1.13643	1.13643	0.010	-0.61782	30.00000	Averaged	
$	71 Bromofluorobenzene	0.90031	0.89666	0.89666	0.010	-0.40541	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 03-FEB-2010 10:44
Lab File ID: 4w249.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100203-18 Quant Type: ISTD
Method: /chem/VOA4.i/020210v4/VOA4-8260-020310.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	9.51349
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/VOA4.i/020210v4/4w249.d
Lab Smp Id: W4VM100203-18 Client Smp ID: SHORT SECOND SOURCE
Inj Date : 03-FEB-2010 10:44
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM100203-18|SHORTICV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM100118-08A/UVM100125-08A
Comment :
Method : /chem/VOA4.i/020210v4/VOA4-8260-020310.m
Meth Date : 03-Feb-2010 16:59 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 49 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	478587	150.000	127
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	960849	150.000	148
9 Acrolein	56	7.180	7.180	(0.676)	217414	250.000	214
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	394757	250.000	244
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	1374758	2500.00	2640
16 Allyl chloride	41	7.802	7.802	(0.735)	1930771	250.000	219
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	2062981	2500.00	2610
18 Acrylonitrile	53	8.180	8.180	(0.770)	539206	250.000	230
149 Isopropyl ether	45	8.741	8.741	(0.823)	1001352	50.0000	48.5
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	345534	50.0000	46.0
150 Ethyl tert-butyl ether	59	9.149	9.149	(0.862)	888521	50.0000	49.7
28 Propionitrile	54	9.393	9.393	(0.885)	212244	250.000	225
26 Ethyl acetate	43	9.338	9.338	(0.879)	1299369	250.000	210
27 Methacrylonitrile	41	9.576	9.576	(0.902)	816322	250.000	227
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	461238	250.000	223
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	616245	2500.00	2250

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	769758	50.0000	49.4
	42 Methyl methacrylate	69	11.210	11.210	(1.056)	831290	250.000	233
	51 Ethyl methacrylate	69	12.466	12.466	(0.905)	1547049	250.000	230
	152 1-Chlorohexane	55	13.667	13.667	(1.287)	268369	50.0000	48.0
	97 1,4-Dioxane	88	11.326	11.326	(1.067)	148698	2500.00	2280
	48 2-Nitropropane	43	11.673	11.673	(1.099)	375634	250.000	253
	68 cis-1,4-Dichloro-2-butene	53	14.782	14.782	(0.914)	554185	250.000	246
	70 Cyclohexanone	42	14.904	14.904	(1.082)	309442	1250.00	318
	69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	529066	250.000	240
	82 Pentachloroethane	167	15.770	15.770	(0.975)	408565	250.000	185
	88 Benzyl chloride	91	16.319	16.319	(1.009)	2105124	250.000	205
	91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	932288	250.000	239
*	40 Fluorobenzene	96	10.619	10.619	(1.000)	902711	50.0000	
*	61 Chlorobenzene-d5	117	13.770	13.770	(1.000)	719541	50.0000	
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	455615	50.0000	
$	138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	224198	50.0000	48.3
$	47 Toluene-d8	98	12.252	12.252	(0.890)	817709	50.0000	49.7
$	71 Bromofluorobenzene	95	14.953	14.953	(0.924)	408534	50.0000	49.8

Data File: /chem/VOA4.i/020210v4/4w249.d

Date : 03-FEB-2010 10:44

Client ID: SHORT SECOND SOURCE

Instrument: VOA4.i

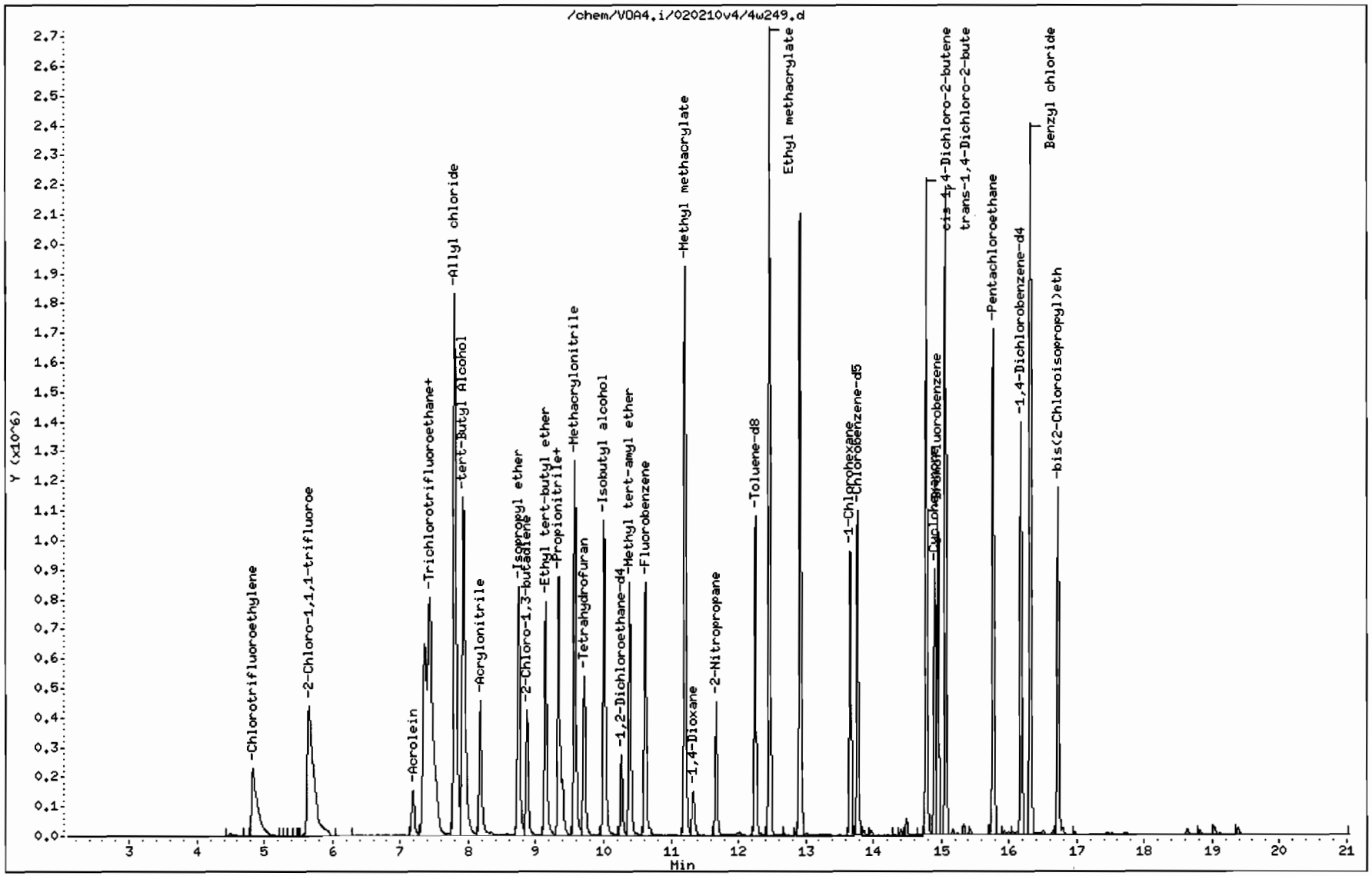
Sample Info: IW4VM100203-18ISHORTICVI1IVOAFI1I

Purge Volume: 5.0

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 13-FEB-2010 13:00
Lab File ID: 4x602.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100213-01 Quant Type: ISTD
Method: /chem/VOA4.i/021310v4/VOA4-8260-020310.m

			CCAL	MIN		MAX		
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.74871	0.76578	0.76578	0.050	2.28014	30.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.48368	0.52380	0.52380	0.050	8.29444	30.00000	Averaged	
M 135 1,3-Dichloropropylene	0.46038	0.49825	0.49825	0.050	8.22615	30.00000	Averaged	
3 Dichlorodifluoromethane	0.24351	0.31753	0.31753	0.050	30.40071	30.00000	Averaged	<-
4 Chloromethane	0.51777	0.52772	0.52772	0.100	1.92107	30.00000	Averaged	spcc
5 Vinyl chloride	0.41856	0.44885	0.44885	0.050	7.23660	20.00000	Averaged	ccc
6 Bromomethane	0.28859	0.31970	0.31970	0.050	10.78124	30.00000	Averaged	
7 Chloroethane	0.26948	0.29975	0.29975	0.050	11.23100	30.00000	Averaged	
8 Trichlorofluoromethane	0.43426	0.54236	0.54236	0.050	24.89201	30.00000	Averaged	
134 Ethyl Ether	0.27359	0.26381	0.26381	0.001	-3.57464	30.00000	Averaged	
10 Acetone	0.23377	0.27692	0.27692	0.050	18.45889	40.00000	Averaged	
15 Acetonitrile	0.05209	0.04917	0.04917	0.010	-5.62264	30.00000	Averaged	
11 1,1-Dichloroethylene	0.50518	0.55109	0.55109	0.050	9.08686	20.00000	Averaged	ccc
128 Methyl acetate	0.26657	0.25551	0.25551	0.010	-4.14902	40.00000	Averaged	
13 Iodomethane	0.56923	0.59383	0.59383	0.050	4.32161	30.00000	Averaged	
17 Methylene chloride	51.27659	50.00000	0.37495	0.050	2.55319	30.00000	Linear	
14 Carbon disulfide	0.99983	1.11565	1.11565	0.050	11.58353	30.00000	Averaged	
20 tert-Butyl methyl ether	0.85277	0.82976	0.82976	0.050	-2.69820	30.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.46099	0.50471	0.50471	0.050	9.48428	30.00000	Averaged	
23 Vinyl acetate	0.58781	0.72096	0.72096	0.010	22.65082	40.00000	Averaged	
22 1,1-Dichloroethane	0.57954	0.61330	0.61330	0.100	5.82566	30.00000	Averaged	spcc
30 2-Butanone	0.28169	0.31550	0.31550	0.030	12.00120	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.50638	0.54290	0.54290	0.050	7.21134	30.00000	Averaged	
25 2,2-Dichloropropane	0.28164	0.33468	0.33468	0.050	18.83164	30.00000	Averaged	
32 Chloroform	0.52577	0.56984	0.56984	0.010	8.38073	20.00000	Averaged	ccc
29 Bromochloromethane	0.16796	0.17214	0.17214	0.010	2.48551	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.40143	0.47996	0.47996	0.010	19.56297	30.00000	Averaged	
129 Cyclohexane	0.53601	0.59208	0.59208	0.010	10.46183	30.00000	Averaged	
34 1,1-Dichloropropene	0.39334	0.45046	0.45046	0.010	14.52396	30.00000	Averaged	
131 n-Butyl alcohol	0.01308	0.01297	0.01297	0.001	-0.81459	40.00000	Averaged	
33 Carbon tetrachloride	0.39212	0.49469	0.49469	0.010	26.15834	30.00000	Averaged	
$ 138 1,2-Dichloroethane-d4	0.25715	0.23757	0.23757	0.001	-7.61394	30.00000	Averaged	
37 1,2-Dichloroethane	0.42249	0.45549	0.45549	0.010	7.81052	30.00000	Averaged	
38 Benzene	1.24116	1.23520	1.23520	0.010	-0.48047	30.00000	Averaged	
139 Cyclohexene	0.58884	0.64917	0.64917	0.001	10.24514	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 13-FEB-2010 13:00
Lab File ID: 4x602.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100213-01 Quant Type: ISTD
Method: /chem/VOA4.i/021310v4/VOA4-8260-020310.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.31657	0.33903	0.33903	0.010	7.09659	30.00000	Averaged	
	41 1,2-Dichloropropane	0.34596	0.35357	0.35357	0.010	2.19998	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.49087	0.55014	0.55014	0.010	12.07525	30.00000	Averaged	
	45 Bromodichloromethane	0.38707	0.43336	0.43336	0.010	11.95735	30.00000	Averaged	
	43 Dibromomethane	0.18981	0.20106	0.20106	0.010	5.92402	30.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.17144	0.13138	0.13138	0.005	-23.36795	30.00000	Averaged	
	49 4-Methyl-2-pentanone	0.18968	0.18031	0.18031	0.010	-4.94098	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.48197	0.51253	0.51253	0.010	6.33951	30.00000	Averaged	
$	47 Toluene-d8	1.14350	0.96379	0.96379	0.010	-15.71532	30.00000	Averaged	
	50 Toluene	0.97353	0.93936	0.93936	0.010	-3.50967	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.55153	0.57125	0.57125	0.010	3.57437	30.00000	Averaged	
	54 1,1,2-Trichloroethane	0.29602	0.27375	0.27375	0.010	-7.52557	30.00000	Averaged	
	55 2-Hexanone	0.49732	0.48541	0.48541	0.010	-2.39485	40.00000	Averaged	
	52 1,3-Dichloropropane	0.59785	0.54911	0.54911	0.010	-8.15244	30.00000	Averaged	
	56 Tetrachloroethylene	0.34601	0.36355	0.36355	0.010	5.06764	30.00000	Averaged	
	57 Dibromochloromethane	0.40619	0.42643	0.42643	0.010	4.98347	30.00000	Averaged	
	59 1,2-Dibromoethane	0.37096	0.36247	0.36247	0.010	-2.28696	30.00000	Averaged	
	62 Chlorobenzene	1.12971	1.13693	1.13693	0.300	0.63965	30.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.41250	0.44431	0.44431	0.010	7.71197	30.00000	Averaged	
	58 Ethylbenzene	1.88288	1.92420	1.92420	0.010	2.19465	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.73948	0.76134	0.76134	0.010	2.95650	30.00000	Averaged	
	64 o-Xylene	0.76717	0.77466	0.77466	0.010	0.97624	30.00000	Averaged	
	65 Styrene	1.21736	1.28955	1.28955	0.010	5.92975	30.00000	Averaged	
	66 Bromoform	0.51384	0.53665	0.53665	0.100	4.44015	30.00000	Averaged	spcc
	67 Isopropylbenzene	3.23790	3.25102	3.25102	0.010	0.40514	30.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.91178	0.81351	0.81351	0.300	-10.77767	30.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.90031	0.91940	0.91940	0.010	2.11941	30.00000	Averaged	
	74 1,2,3-Trichloropropane	0.24747	0.21876	0.21876	0.010	-11.60021	30.00000	Averaged	
	75 Bromobenzene	0.95275	0.92696	0.92696	0.010	-2.70688	30.00000	Averaged	
	76 n-Propylbenzene	3.93864	3.91323	3.91323	0.010	-0.64498	30.00000	Averaged	
	77 2-Chlorotoluene	2.77349	2.67699	2.67699	0.010	-3.47926	30.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.89447	2.91527	2.91527	0.010	0.71870	30.00000	Averaged	
	80 4-Chlorotoluene	2.50148	2.45739	2.45739	0.010	-1.76235	30.00000	Averaged	
	81 tert-Butylbenzene	2.95436	3.06463	3.06463	0.010	3.73249	30.00000	Averaged	
	79 1,2,4-Trimethylbenzene	3.01249	3.03178	3.03178	0.010	0.64045	30.00000	Averaged	
	83 sec-Butylbenzene	3.97283	3.98775	3.98775	0.010	0.37567	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 13-FEB-2010 13:00
Lab File ID: 4x602.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100213-01 Quant Type: ISTD
Method: /chem/VOA4.i/021310v4/VOA4-8260-020310.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84	4-Isopropyltoluene	3.18944	3.36768	3.36768	0.010	5.58849	30.00000	Averaged
85	1,3-Dichlorobenzene	1.83080	1.82359	1.82359	0.010	-0.39382	30.00000	Averaged
87	1,4-Dichlorobenzene	1.85779	1.83589	1.83589	0.010	-1.17882	30.00000	Averaged
89	n-Butylbenzene	2.97644	3.09279	3.09279	0.010	3.90915	30.00000	Averaged
90	1,2-Dichlorobenzene	1.77961	1.73257	1.73257	0.010	-2.64333	30.00000	Averaged
92	1,2-Dibromo-3-chloropropane	45.34664	50.00000	0.16367	0.010	-9.30672	30.00000	Linear
93	1,2,4-Trichlorobenzene	0.97548	1.01259	1.01259	0.010	3.80357	30.00000	Averaged
94	Hexachlorobutadiene	0.71789	0.76126	0.76126	0.010	6.04012	30.00000	Averaged
95	Naphthalene	1.86955	1.69657	1.69657	0.010	-9.25245	30.00000	Averaged
96	1,2,3-Trichlorobenzene	0.78086	0.80362	0.80362	0.010	2.91402	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.25691
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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

Data file : /chem/VOA4.i/021310v4/4x602.d
Lab Smp Id: W4VM100213-01 Client Smp ID: VSTD050
Inj Date : 13-FEB-2010 13:00
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM100213-01|CCV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM100126-01D/IVM100210-01
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				1284645	150.000	153
M 2 1,2-Dichloroethylene (total)	96				691429	100.000	108
M 135 1,3-Dichloropropylene	75				657706	100.000	108
3 Dichlorodifluoromethane	85	4.911	4.911	(0.462)	209575	50.0000	65.2
4 Chloromethane	50	5.299	5.299	(0.499)	348302	50.0000	51.0
5 Vinyl chloride	62	5.521	5.521	(0.520)	296247	50.0000	53.6
6 Bromomethane	94	6.130	6.130	(0.577)	211005	50.0000	55.4
7 Chloroethane	64	6.281	6.281	(0.591)	197835	50.0000	55.6
8 Trichlorofluoromethane	101	6.663	6.663	(0.627)	357963	50.0000	62.4
134 Ethyl Ether	59	6.998	6.998	(0.659)	174120	50.0000	48.2
10 Acetone	43	7.358	7.358	(0.693)	913845	250.000	296
15 Acetonitrile	41	7.699	7.699	(0.725)	811246	1250.00	1180
11 1,1-Dichloroethylene	61	7.389	7.389	(0.696)	363725	50.0000	54.5
128 Methyl acetate	43	7.748	7.748	(0.730)	843208	250.000	240
13 Iodomethane	142	7.632	7.632	(0.719)	1959668	250.000	261
17 Methylene chloride	84	7.937	7.937	(0.747)	247468	50.0000	51.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	14 Carbon disulfide	76	7.773	7.773	(0.732)	3681703	250.000	279
	20 tert-Butyl methyl ether	73	8.242	8.242	(0.776)	547654	50.0000	48.6
	21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.780)	333112	50.0000	54.7
	23 Vinyl acetate	43	8.705	8.705	(0.820)	2379202	250.000	307
	22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	404787	50.0000	52.9
	30 2-Butanone	43	9.327	9.327	(0.878)	1041172	250.000	280
	31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.884)	358317	50.0000	53.6
	25 2,2-Dichloropropane	77	9.419	9.419	(0.887)	220892	50.0000	59.4
	32 Chloroform	83	9.687	9.687	(0.912)	376099	50.0000	54.2
	29 Bromochloromethane	128	9.656	9.656	(0.909)	113613	50.0000	51.2
	36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	316779	50.0000	59.8
	129 Cyclohexane	56	10.083	10.083	(0.949)	390782	50.0000	55.2
	34 1,1-Dichloropropene	75	10.132	10.132	(0.954)	297311	50.0000	57.3
	131 n-Butyl alcohol	56	10.687	10.687	(1.006)	856274	5000.00	4960
	33 Carbon tetrachloride	117	10.175	10.175	(0.958)	326504	50.0000	63.1
$	138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	156798	50.0000	46.2
	37 1,2-Dichloroethane	62	10.339	10.339	(0.974)	300627	50.0000	53.9
	38 Benzene	78	10.370	10.370	(0.976)	815246	50.0000	49.8
	139 Cyclohexene	67	10.492	10.492	(0.988)	428458	50.0000	55.1
*	40 Fluorobenzene	96	10.620	10.620	(1.000)	660011	50.0000	
	39 Trichloroethylene	95	11.004	11.004	(1.036)	223766	50.0000	53.5
	41 1,2-Dichloropropane	63	11.241	11.241	(1.059)	233361	50.0000	51.1
	130 Methylcyclohexane	83	11.260	11.260	(1.060)	363099	50.0000	56.0
	45 Bromodichloromethane	83	11.485	11.485	(1.082)	286021	50.0000	56.0
	43 Dibromomethane	93	11.376	11.376	(1.071)	132700	50.0000	53.0
	44 2-Chloroethylvinyl ether	63	11.699	11.699	(1.102)	433550	250.000	192
	49 4-Methyl-2-pentanone	58	12.016	12.016	(0.872)	504140	250.000	238
	46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.123)	338273	50.0000	53.2
$	47 Toluene-d8	98	12.253	12.253	(0.890)	538940	50.0000	42.1
	50 Toluene	92	12.327	12.327	(0.895)	525277	50.0000	48.2
	53 trans-1,3-Dichloropropylene	75	12.461	12.461	(0.905)	319433	50.0000	51.8
	54 1,1,2-Trichloroethane	83	12.680	12.680	(0.921)	153075	50.0000	46.2
	55 2-Hexanone	43	12.857	12.857	(0.934)	1357178	250.000	244
	52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	307056	50.0000	45.9
	56 Tetrachloroethylene	164	12.918	12.918	(0.938)	203292	50.0000	52.5
	57 Dibromochloromethane	129	13.144	13.144	(0.954)	238455	50.0000	52.5
	59 1,2-Dibromoethane	107	13.320	13.320	(0.967)	202690	50.0000	48.8
*	61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	559187	50.0000	
	62 Chlorobenzene	112	13.802	13.802	(1.002)	635759	50.0000	50.3
	60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	248452	50.0000	53.8
	58 Ethylbenzene	91	13.863	13.863	(1.007)	1075990	50.0000	51.1
	63 m,p-Xylenes	106	13.973	13.973	(1.015)	851466	100.000	103
	64 o-Xylene	106	14.399	14.399	(1.046)	433179	50.0000	50.5
	65 Styrene	104	14.399	14.399	(1.046)	721099	50.0000	53.0
	66 Bromoform	173	14.655	14.655	(0.906)	198240	50.0000	52.2
	67 Isopropylbenzene	105	14.759	14.759	(0.912)	1200926	50.0000	50.2
	73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	300511	50.0000	44.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$	71 Bromofluorobenzene	95	14.954	14.954	(0.924)	339625	50.0000	51.0
	74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	80810	50.0000	44.2
	75 Bromobenzene	156	15.168	15.168	(0.937)	342419	50.0000	48.6
	76 n-Propylbenzene	91	15.180	15.180	(0.938)	1445548	50.0000	49.7
	77 2-Chlorotoluene	91	15.332	15.332	(0.948)	988880	50.0000	48.3
	78 1,3,5-Trimethylbenzene	105	15.332	15.332	(0.948)	1076902	50.0000	50.4
	80 4-Chlorotoluene	91	15.430	15.430	(0.954)	907761	50.0000	49.1
	81 tert-Butylbenzene	119	15.704	15.704	(0.971)	1132074	50.0000	51.9
	79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	1119939	50.0000	50.3
	83 sec-Butylbenzene	105	15.930	15.930	(0.985)	1473076	50.0000	50.2
	84 4-Isopropyltoluene	119	16.052	16.052	(0.992)	1244020	50.0000	52.8
	85 1,3-Dichlorobenzene	146	16.119	16.119	(0.996)	673633	50.0000	49.8
*	86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	369400	50.0000	
	87 1,4-Dichlorobenzene	146	16.204	16.204	(1.002)	678177	50.0000	49.4
	89 n-Butylbenzene	91	16.503	16.503	(1.020)	1142478	50.0000	52.0
	90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	640010	50.0000	48.7
	92 1,2-Dibromo-3-chloropropane	157	17.533	17.533	(1.084)	60458	50.0000	45.3
	93 1,2,4-Trichlorobenzene	180	18.630	18.630	(1.151)	374050	50.0000	51.9
	94 Hexachlorobutadiene	225	18.819	18.819	(1.163)	281208	50.0000	53.0
	95 Naphthalene	128	19.033	19.033	(1.176)	626713	50.0000	45.4
	96 1,2,3-Trichlorobenzene	180	19.386	19.386	(1.198)	296857	50.0000	51.4

Data File: /chem/VOA4.i/021310v4/4x602.d
Date : 13-FEB-2010 13:00
Client ID: VSTD050
Sample Info: IW4VM100213-02ICCV1IVOAF1I
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 13-FEB-2010 13:55
Lab File ID: 4x604.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100213-03 Quant Type: ISTD
Method: /chem/VOA4.i/021310v4/VOA4-8260-020310.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	153 Chlorotrifluoroethylene	0.20825	0.03243	0.03243	0.010	-84.42636	30.00000	Averaged	<-
	154 2-Chloro-1,1,1-trifluoroeth	0.36057	0.28312	0.28312	0.010	-21.48049	30.00000	Averaged	
	9 Acrolein	0.05637	0.05587	0.05587	0.001	-0.89129	30.00000	Averaged	
	12 Trichlorotrifluoroethane	276	250	0.09880	0.050	10.59057	30.00000	Linear	
	147 Isopropyl Alcohol	0.02882	0.03194	0.03194	0.010	10.80175	40.00000	Averaged	
	16 Allyl chloride	0.48791	0.45215	0.45215	0.010	-7.32754	30.00000	Averaged	
	148 tert-Butyl Alcohol	0.04376	0.04768	0.04768	0.010	8.95665	40.00000	Averaged	
	18 Acrylonitrile	0.13010	0.11671	0.11671	0.010	-10.29365	30.00000	Averaged	
	149 Isopropyl ether	1.14403	0.98784	0.98784	0.010	-13.65258	30.00000	Averaged	
	24 2-Chloro-1,3-butadiene	0.41615	0.42165	0.42165	0.010	1.32200	30.00000	Averaged	
	150 Ethyl tert-butyl ether	0.99040	0.87846	0.87846	0.010	-11.30256	30.00000	Averaged	
	28 Propionitrile	0.05229	0.04654	0.04654	0.010	-10.99052	30.00000	Averaged	
	26 Ethyl acetate	0.34196	0.27891	0.27891	0.010	-18.43807	40.00000	Averaged	
	27 Methacrylonitrile	0.19936	0.17497	0.17497	0.010	-12.23248	30.00000	Averaged	
	72 Tetrahydrofuran	0.22723	0.17490	0.17490	0.010	-23.02913	30.00000	Averaged	
	19 Isobutyl alcohol	0.01514	0.01385	0.01385	0.005	-8.55942	40.00000	Averaged	
	151 Methyl tert-amyl ether	0.86330	0.79035	0.79035	0.010	-8.45004	30.00000	Averaged	
	42 Methyl methacrylate	0.19781	0.17914	0.17914	0.010	-9.43800	30.00000	Averaged	
	51 Ethyl methacrylate	0.46758	0.41455	0.41455	0.010	-11.34320	30.00000	Averaged	
	152 1-Chlorohexane	0.30986	0.32998	0.32998	0.010	6.49230	30.00000	Averaged	
	97 1,4-Dioxane	0.00362	0.00362	0.00362	0.001	0.01103	40.00000	Averaged	
	48 2-Nitropropane	0.08216	0.08589	0.08589	0.010	4.53608	30.00000	Averaged	
	68 cis-1,4-Dichloro-2-butene	0.24724	0.25888	0.25888	0.010	4.70784	30.00000	Averaged	
	70 Cyclohexanone	0.06769	0.01826	0.01826	0.005	-73.02531	40.00000	Averaged	<-
	69 trans-1,4-Dichloro-2-butene	0.24184	0.25008	0.25008	0.010	3.40951	30.00000	Averaged	
	82 Pentachloroethane	0.24277	0.42690	0.42690	0.010	75.84863	30.00000	Averaged	<-
	88 Benzyl chloride	1.12460	1.40285	1.40285	0.010	24.74242	30.00000	Averaged	
	91 bis(2-Chloroisopropyl)ether	0.42745	0.39138	0.39138	0.010	-8.43923	30.00000	Averaged	
$	138 1,2-Dichloroethane-d4	0.25715	0.21016	0.21016	0.001	-18.27166	30.00000	Averaged	
$	47 Toluene-d8	1.14350	0.96749	0.96749	0.010	-15.39230	30.00000	Averaged	
$	71 Bromofluorobenzene	0.90031	0.89692	0.89692	0.010	-0.37743	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 13-FEB-2010 13:55
Lab File ID: 4x604.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100213-03 Quant Type: ISTD
Method: /chem/VOA4.i/021310v4/VOA4-8260-020310.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	7.25691
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

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

Data file : /chem/VOA4.i/021310v4/4x604.d
Lab Smp Id: W4VM100213-03 Client Smp ID: VSTD250S
Inj Date : 13-FEB-2010 13:55
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM100213-03|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM100118-08B/UVM100125-08B
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 4 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.826	4.826	(0.454)	67937	150.000	23.4
154 2-Chloro-1,1,1-trifluoroethane	118	5.650	5.650	(0.532)	593065	150.000	118
9 Acrolein	56	7.186	7.186	(0.677)	195059	250.000	248
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	344943	250.000	276
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	1115034	2500.00	2770
16 Allyl chloride	41	7.802	7.802	(0.735)	1578610	250.000	232
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	1664586	2500.00	2720
18 Acrylonitrile	53	8.174	8.174	(0.770)	407475	250.000	224
149 Isopropyl ether	45	8.741	8.741	(0.823)	689774	50.0000	43.2
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	294425	50.0000	50.7
150 Ethyl tert-butyl ether	59	9.143	9.143	(0.861)	613396	50.0000	44.3
28 Propionitrile	54	9.393	9.393	(0.885)	162489	250.000	222
26 Ethyl acetate	43	9.339	9.339	(0.879)	973761	250.000	204
27 Methacrylonitrile	41	9.576	9.576	(0.902)	610872	250.000	219
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	336988	250.000	192
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	483497	2500.00	2290

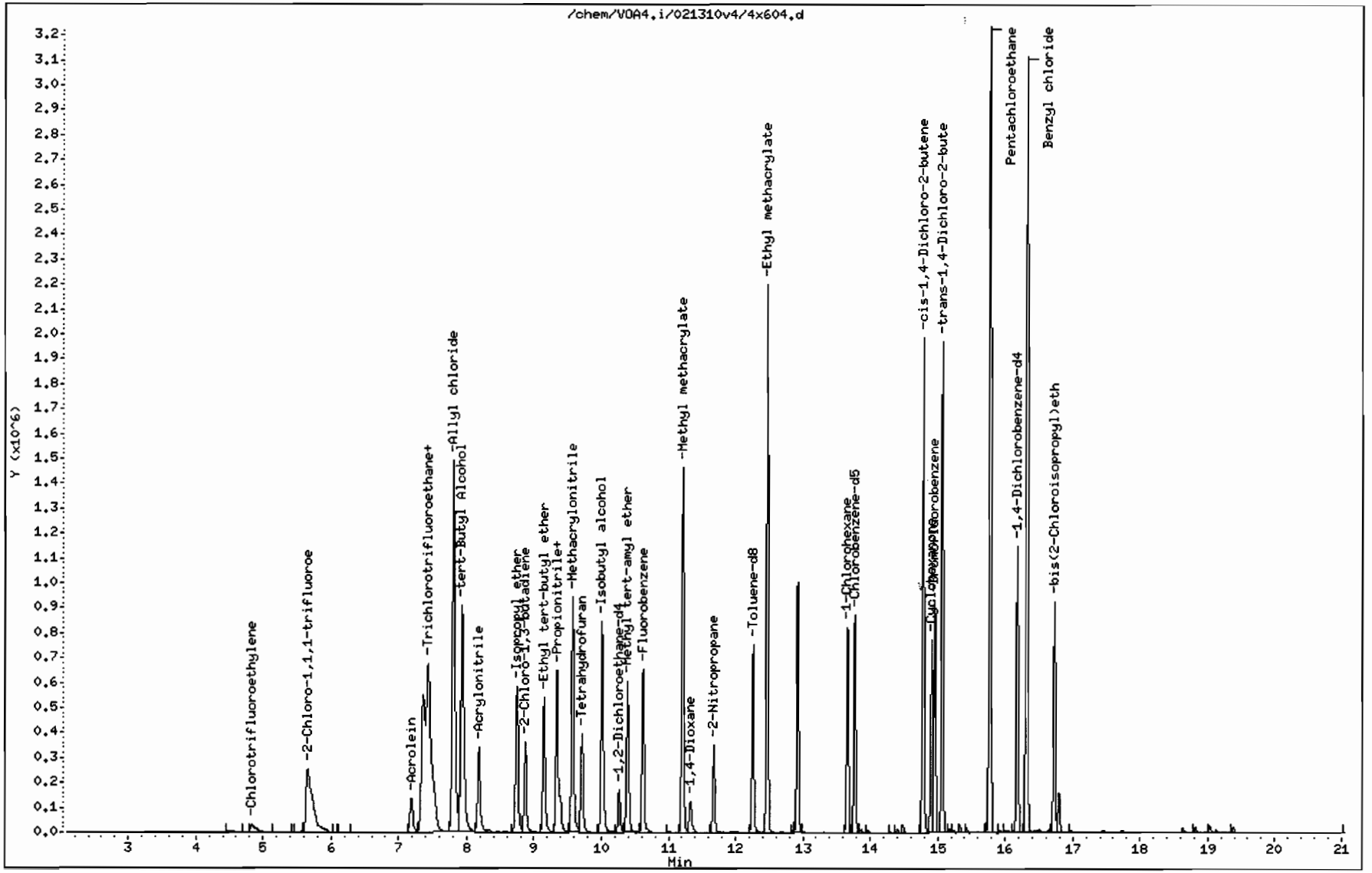
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
151	Methyl tert-amyl ether	73	10.387	10.387	(0.978)	551875	50.0000	45.8
42	Methyl methacrylate	69	11.210	11.210	(1.056)	625442	250.000	226
51	Ethyl methacrylate	69	12.466	12.466	(0.905)	1201543	250.000	222
152	1-Chlorohexane	55	13.661	13.661	(1.286)	230410	50.0000	53.2
97	1,4-Dioxane	88	11.326	11.326	(1.067)	126248	2500.00	2500
48	2-Nitropropane	43	11.673	11.673	(1.099)	299862	250.000	261
68	cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	498798	250.000	262
70	Cyclohexanone	42	14.905	14.905	(1.082)	264615	1250.00	337
69	trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	481852	250.000	258
82	Pentachloroethane	167	15.770	15.770	(0.975)	822541	250.000	440(A)
88	Benzyl chloride	91	16.319	16.319	(1.009)	2702978	250.000	312
91	bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	754092	250.000	229
* 40	Fluorobenzene	96	10.619	10.620	(1.000)	698262	50.0000	
* 61	Chlorobenzene-d5	117	13.771	13.771	(1.000)	579691	50.0000	
* 86	1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	385355	50.0000	
$ 138	1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	146748	50.0000	40.9
$ 47	Toluene-d8	98	12.253	12.253	(0.890)	560843	50.0000	42.3
$ 71	Bromofluorobenzene	95	14.953	14.954	(0.924)	345631	50.0000	49.8

QC Flag Legend

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

Data File: /chem/VOA4.i/021310v4/4x604.d
Date : 13-FEB-2010 13:55
Client ID: VSTD250S
Sample Info: |W4VM100213-03|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 15-FEB-2010 19:00
Lab File ID: 4y102.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100215-01 Quant Type: ISTD
Method: /chem/VOA4.i/021510v4/VOA4-8260-020310.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.74871	0.77580	0.77580	0.050	3.61810	30.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.48368	0.50871	0.50871	0.050	5.17463	30.00000	Averaged	
M	135 1,3-Dichloropropylene	0.46038	0.51992	0.51992	0.050	12.93223	30.00000	Averaged	
	3 Dichlorodifluoromethane	0.24351	0.28606	0.28606	0.050	17.47529	30.00000	Averaged	
	4 Chloromethane	0.51777	0.49503	0.49503	0.100	-4.39357	30.00000	Averaged	spcc
	5 Vinyl chloride	0.41856	0.44615	0.44615	0.050	6.59117	20.00000	Averaged	ccc
	6 Bromomethane	0.28859	0.32056	0.32056	0.050	11.07902	30.00000	Averaged	
	7 Chloroethane	0.26948	0.30071	0.30071	0.050	11.58830	30.00000	Averaged	
	8 Trichlorofluoromethane	0.43426	0.51804	0.51804	0.050	19.29186	30.00000	Averaged	
	134 Ethyl Ether	0.27359	0.28346	0.28346	0.001	3.60708	30.00000	Averaged	
	10 Acetone	0.23377	0.24857	0.24857	0.050	6.33082	40.00000	Averaged	
	15 Acetonitrile	0.05209	0.05056	0.05056	0.010	-2.94511	30.00000	Averaged	
	11 1,1-Dichloroethylene	0.50518	0.53007	0.53007	0.050	4.92515	20.00000	Averaged	ccc
	128 Methyl acetate	0.26657	0.25997	0.25997	0.010	-2.47660	40.00000	Averaged	
	13 Iodomethane	0.56923	0.62183	0.62183	0.050	9.24090	30.00000	Averaged	
	17 Methylene chloride	50.12633	50.00000	0.36683	0.050	0.25266	30.00000	Linear	
	14 Carbon disulfide	0.99983	1.07147	1.07147	0.050	7.16533	30.00000	Averaged	
	20 tert-Butyl methyl ether	0.85277	0.86363	0.86363	0.050	1.27347	30.00000	Averaged	
	21 trans-1,2-Dichloroethylene	0.46099	0.48722	0.48722	0.050	5.69019	30.00000	Averaged	
	23 Vinyl acetate	0.58781	0.70503	0.70503	0.010	19.94041	40.00000	Averaged	
	22 1,1-Dichloroethane	0.57954	0.59265	0.59265	0.100	2.26125	30.00000	Averaged	spcc
	30 2-Butanone	0.28169	0.30679	0.30679	0.030	8.90943	40.00000	Averaged	
	31 cis-1,2-Dichloroethylene	0.50638	0.53021	0.53021	0.050	4.70537	30.00000	Averaged	
	25 2,2-Dichloropropane	0.28164	0.33170	0.33170	0.050	17.77338	30.00000	Averaged	
	32 Chloroform	0.52577	0.55505	0.55505	0.010	5.56822	20.00000	Averaged	ccc
	29 Bromochloromethane	0.16796	0.18492	0.18492	0.010	10.09609	30.00000	Averaged	
	36 1,1,1-Trichloroethane	0.40143	0.46331	0.46331	0.010	15.41647	30.00000	Averaged	
	129 Cyclohexane	0.53601	0.58659	0.58659	0.010	9.43722	30.00000	Averaged	
	34 1,1-Dichloropropene	0.39334	0.43394	0.43394	0.010	10.32334	30.00000	Averaged	
	131 n-Butyl alcohol	0.01308	0.01560	0.01560	0.001	19.23420	40.00000	Averaged	
	33 Carbon tetrachloride	0.39212	0.47092	0.47092	0.010	20.09503	30.00000	Averaged	
$	138 1,2-Dichloroethane-d4	0.25715	0.19588	0.19588	0.001	-23.82636	30.00000	Averaged	
	37 1,2-Dichloroethane	0.42249	0.44037	0.44037	0.010	4.23147	30.00000	Averaged	
	38 Benzene	1.24116	1.21555	1.21555	0.010	-2.06340	30.00000	Averaged	
	139 Cyclohexene	0.58884	0.62053	0.62053	0.001	5.38196	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 15-FEB-2010 19:00
Lab File ID: 4y102.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100215-01 Quant Type: ISTD
Method: /chem/VOA4.i/021510v4/VOA4-8260-020310.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	39 Trichloroethylene	0.31657	0.33737	0.33737	0.010	6.57086	30.00000	Averaged
	41 1,2-Dichloropropane	0.34596	0.35700	0.35700	0.010	3.19225	20.00000	Averaged ccc
	130 Methylcyclohexane	0.49087	0.53734	0.53734	0.010	9.46733	30.00000	Averaged
	45 Bromodichloromethane	0.38707	0.42755	0.42755	0.010	10.45595	30.00000	Averaged
	43 Dibromomethane	0.18981	0.20532	0.20532	0.010	8.16916	30.00000	Averaged
	44 2-Chloroethylvinyl ether	0.17144	0.17793	0.17793	0.005	3.78658	30.00000	Averaged
	49 4-Methyl-2-pentanone	0.18968	0.19813	0.19813	0.010	4.45488	40.00000	Averaged
	46 cis-1,3-Dichloropropylene	0.48197	0.52993	0.52993	0.010	9.95037	30.00000	Averaged
$	47 Toluene-d8	1.14350	0.92266	0.92266	0.010	-19.31220	30.00000	Averaged
	50 Toluene	0.97353	0.91642	0.91642	0.010	-5.86557	20.00000	Averaged ccc
	53 trans-1,3-Dichloropropylene	0.55153	0.58377	0.58377	0.010	5.84503	30.00000	Averaged
	54 1,1,2-Trichloroethane	0.29602	0.28640	0.28640	0.010	-3.25202	30.00000	Averaged
	55 2-Hexanone	0.49732	0.49709	0.49709	0.010	-0.04686	40.00000	Averaged
	52 1,3-Dichloropropane	0.59785	0.55111	0.55111	0.010	-7.81833	30.00000	Averaged
	56 Tetrachloroethylene	0.34601	0.35966	0.35966	0.010	3.94415	30.00000	Averaged
	57 Dibromochloromethane	0.40619	0.46138	0.46138	0.010	13.58651	30.00000	Averaged
	59 1,2-Dibromoethane	0.37096	0.38224	0.38224	0.010	3.04190	30.00000	Averaged
	62 Chlorobenzene	1.12971	1.15397	1.15397	0.300	2.14749	30.00000	Averaged spcc
	60 1,1,1,2-Tetrachloroethane	0.41250	0.46233	0.46233	0.010	12.08015	30.00000	Averaged
	58 Ethylbenzene	1.88288	1.85427	1.85427	0.010	-1.51954	20.00000	Averaged ccc
	63 m,p-Xylenes	0.73948	0.76715	0.76715	0.010	3.74176	30.00000	Averaged
	64 o-Xylene	0.76717	0.79310	0.79310	0.010	3.37970	30.00000	Averaged
	65 Styrene	1.21736	1.36143	1.36143	0.010	11.83468	30.00000	Averaged
	66 Bromoform	0.51384	0.60786	0.60786	0.100	18.29689	30.00000	Averaged spcc
	67 Isopropylbenzene	3.23790	3.15572	3.15572	0.010	-2.53805	30.00000	Averaged
	73 1,1,2,2-Tetrachloroethane	0.91178	0.89247	0.89247	0.300	-2.11740	30.00000	Averaged spcc
$	71 Bromofluorobenzene	0.90031	0.89369	0.89369	0.010	-0.73636	30.00000	Averaged
	74 1,2,3-Trichloropropane	0.24747	0.24117	0.24117	0.010	-2.54583	30.00000	Averaged
	75 Bromobenzene	0.95275	0.98398	0.98398	0.010	3.27775	30.00000	Averaged
	76 n-Propylbenzene	3.93864	3.78495	3.78495	0.010	-3.90190	30.00000	Averaged
	77 2-Chlorotoluene	2.77349	2.61377	2.61377	0.010	-5.75883	30.00000	Averaged
	78 1,3,5-Trimethylbenzene	2.89447	2.89261	2.89261	0.010	-0.06445	30.00000	Averaged
	80 4-Chlorotoluene	2.50148	2.47296	2.47296	0.010	-1.13985	30.00000	Averaged
	81 tert-Butylbenzene	2.95436	3.07224	3.07224	0.010	3.99014	30.00000	Averaged
	79 1,2,4-Trimethylbenzene	3.01249	3.06418	3.06418	0.010	1.71607	30.00000	Averaged
	83 sec-Butylbenzene	3.97283	4.02861	4.02861	0.010	1.40408	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 15-FEB-2010 19:00
Lab File ID: 4y102.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100215-01 Quant Type: ISTD
Method: /chem/VOA4.i/021510v4/VOA4-8260-020310.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84	4-Isopropyltoluene	3.18944	3.42127	3.42127	0.010	7.26894	30.00000	Averaged
85	1,3-Dichlorobenzene	1.83080	1.91871	1.91871	0.010	4.80191	30.00000	Averaged
87	1,4-Dichlorobenzene	1.85779	1.94797	1.94797	0.010	4.85436	30.00000	Averaged
89	n-Butylbenzene	2.97644	3.06837	3.06837	0.010	3.08874	30.00000	Averaged
90	1,2-Dichlorobenzene	1.77961	1.83336	1.83336	0.010	3.02044	30.00000	Averaged
92	1,2-Dibromo-3-chloropropane	55.02943	50.00000	0.19920	0.010	10.05886	30.00000	Linear
93	1,2,4-Trichlorobenzene	0.97548	1.13789	1.13789	0.010	16.64823	30.00000	Averaged
94	Hexachlorobutadiene	0.71789	0.81429	0.81429	0.010	13.42789	30.00000	Averaged
95	Naphthalene	1.86955	1.96667	1.96667	0.010	5.19465	30.00000	Averaged
96	1,2,3-Trichlorobenzene	0.78086	0.91743	0.91743	0.010	17.48845	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.43356
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/VOA4.i/021510v4/4y102.d
Lab Smp Id: W4VM100215-01 Client Smp ID: VSTD050
Inj Date : 15-FEB-2010 19:00
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM100215-01|CCV|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM100126-01D/IVM100214-01
Comment :
Method : /chem/VOA4.i/021510v4/VOA4-8260-020310.m
Meth Date : 15-Feb-2010 20:32 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.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

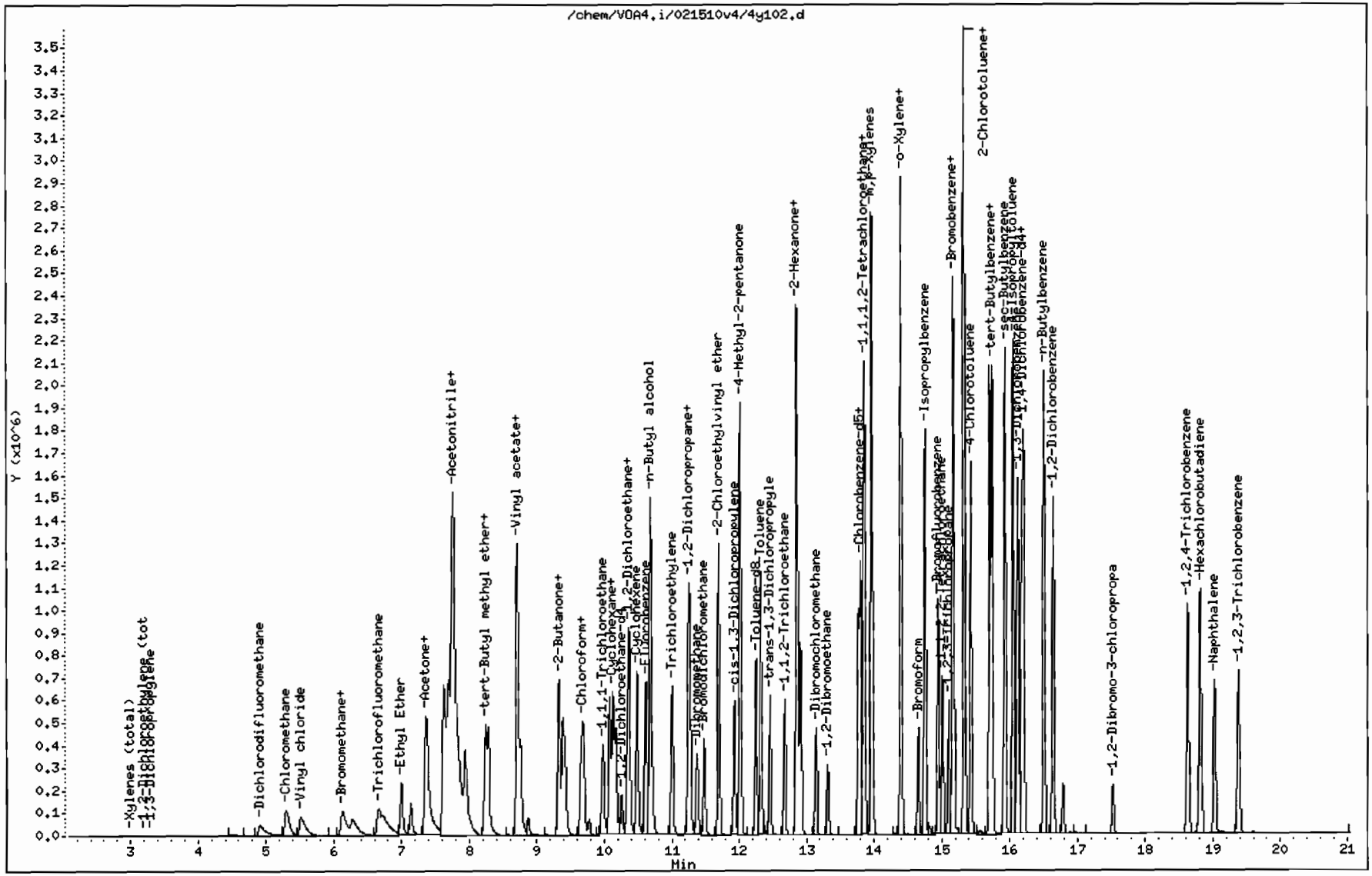
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1	Xylenes (total)	106				1516094	150.000	155
M 2	1,2-Dichloroethylene (total)	96				758760	100.000	105
M 135	1,3-Dichloropropylene	75				775478	100.000	113
3	Dichlorodifluoromethane	85	4.912	4.912	(0.463)	213333	50.0000	58.7
4	Chloromethane	50	5.299	5.299	(0.499)	369174	50.0000	47.8
5	Vinyl chloride	62	5.521	5.521	(0.520)	332724	50.0000	53.3
6	Bromomethane	94	6.130	6.130	(0.577)	239062	50.0000	55.5
7	Chloroethane	64	6.288	6.288	(0.592)	224258	50.0000	55.8
8	Trichlorofluoromethane	101	6.668	6.668	(0.628)	386337	50.0000	59.6
134	Ethyl Ether	59	6.997	6.997	(0.659)	211397	50.0000	51.8
10	Acetone	43	7.357	7.357	(0.693)	926864	250.000	266
15	Acetonitrile	41	7.698	7.698	(0.725)	942658	1250.00	1210
11	1,1-Dichloroethylene	61	7.381	7.381	(0.695)	395305	50.0000	52.5
128	Methyl acetate	43	7.747	7.747	(0.730)	969391	250.000	244
13	Iodomethane	142	7.625	7.625	(0.718)	2318705	250.000	273

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	17 Methylene chloride	84	7.936	7.936	(0.747)	273572	50.0000	50.1
	14 Carbon disulfide	76	7.772	7.772	(0.732)	3995351	250.000	268
	20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	644070	50.0000	50.6
	21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	363350	50.0000	52.8
	23 Vinyl acetate	43	8.710	8.710	(0.820)	2628926	250.000	300
	22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	441976	50.0000	51.1
	30 2-Butanone	43	9.326	9.326	(0.878)	1143977	250.000	272
	31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	395410	50.0000	52.4
	25 2,2-Dichloropropane	77	9.418	9.418	(0.887)	247370	50.0000	58.9
	32 Chloroform	83	9.692	9.692	(0.913)	413938	50.0000	52.8
	29 Bromochloromethane	128	9.655	9.655	(0.909)	137908	50.0000	55.0
	36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	345525	50.0000	57.7
	129 Cyclohexane	56	10.082	10.082	(0.949)	437461	50.0000	54.7
	34 1,1-Dichloropropene	75	10.131	10.131	(0.954)	323619	50.0000	55.2
	131 n-Butyl alcohol	56	10.686	10.686	(1.006)	1163102	5000.00	5960
	33 Carbon tetrachloride	117	10.174	10.174	(0.958)	351196	50.0000	60.0
$	138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	146080	50.0000	38.1
	37 1,2-Dichloroethane	62	10.338	10.338	(0.974)	328411	50.0000	52.1
	38 Benzene	78	10.375	10.375	(0.977)	906520	50.0000	49.0
	139 Cyclohexene	67	10.491	10.491	(0.988)	462772	50.0000	52.7
*	40 Fluorobenzene	96	10.619	10.619	(1.000)	745767	50.0000	
	39 Trichloroethylene	95	11.003	11.003	(1.036)	251599	50.0000	53.3
	41 1,2-Dichloropropane	63	11.240	11.240	(1.059)	266242	50.0000	51.6
	130 Methylcyclohexane	83	11.265	11.265	(1.061)	400730	50.0000	54.7
	45 Bromodichloromethane	83	11.484	11.484	(1.082)	318850	50.0000	55.2
	43 Dibromomethane	93	11.375	11.375	(1.071)	153120	50.0000	54.1
	44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	663471	250.000	259
	49 4-Methyl-2-pentanone	58	12.015	12.015	(0.872)	645335	250.000	261
	46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	395204	50.0000	55.0
$	47 Toluene-d8	98	12.252	12.252	(0.890)	601033	50.0000	40.3
	50 Toluene	92	12.320	12.320	(0.895)	596969	50.0000	47.1
	53 trans-1,3-Dichloropropylene	75	12.460	12.460	(0.905)	380274	50.0000	52.9
	54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	186562	50.0000	48.4
	55 2-Hexanone	43	12.856	12.856	(0.934)	1619046	250.000	250
	52 1,3-Dichloropropane	76	12.874	12.874	(0.935)	358999	50.0000	46.1
	56 Tetrachloroethylene	164	12.917	12.917	(0.938)	234288	50.0000	52.0
	57 Dibromochloromethane	129	13.143	13.143	(0.954)	300546	50.0000	56.8
	59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	248996	50.0000	51.5
*	61 Chlorobenzene-d5	117	13.770	13.770	(1.000)	651412	50.0000	
	62 Chlorobenzene	112	13.801	13.801	(1.002)	751709	50.0000	51.1
	60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	301166	50.0000	56.0
	58 Ethylbenzene	91	13.862	13.862	(1.007)	1207894	50.0000	49.2
	63 m,p-Xylenes	106	13.972	13.972	(1.015)	999461	100.000	104
	64 o-Xylene	106	14.398	14.398	(1.046)	516633	50.0000	51.7
	65 Styrene	104	14.398	14.398	(1.046)	886854	50.0000	55.9
	66 Bromoform	173	14.654	14.654	(0.906)	267894	50.0000	59.1
	67 Isopropylbenzene	105	14.758	14.758	(0.912)	1390789	50.0000	48.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
73	1,1,2,2-Tetrachloroethane	83	15.014	15.014	(0.928)	393331	50.0000	48.9
$ 71	Bromofluorobenzene	95	14.953	14.953	(0.924)	393865	50.0000	49.6
74	1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	106287	50.0000	48.7
75	Bromobenzene	156	15.167	15.167	(0.937)	433659	50.0000	51.6
76	n-Propylbenzene	91	15.179	15.179	(0.938)	1668105	50.0000	48.0
77	2-Chlorotoluene	91	15.331	15.331	(0.948)	1151939	50.0000	47.1
78	1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	1274829	50.0000	50.0
80	4-Chlorotoluene	91	15.429	15.429	(0.954)	1089885	50.0000	49.4
81	tert-Butylbenzene	119	15.703	15.703	(0.971)	1353998	50.0000	52.0
79	1,2,4-Trimethylbenzene	105	15.740	15.740	(0.973)	1350446	50.0000	50.8
83	sec-Butylbenzene	105	15.929	15.929	(0.985)	1775489	50.0000	50.7
84	4-Isopropyltoluene	119	16.050	16.050	(0.992)	1507824	50.0000	53.6
85	1,3-Dichlorobenzene	146	16.118	16.118	(0.996)	845614	50.0000	52.4
* 86	1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	440720	50.0000	
87	1,4-Dichlorobenzene	146	16.203	16.203	(1.002)	858510	50.0000	52.4
89	n-Butylbenzene	91	16.502	16.502	(1.020)	1352294	50.0000	51.5
90	1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	807998	50.0000	51.5
92	1,2-Dibromo-3-chloropropane	157	17.526	17.526	(1.083)	87792	50.0000	55.0
93	1,2,4-Trichlorobenzene	180	18.629	18.629	(1.151)	501489	50.0000	58.3
94	Hexachlorobutadiene	225	18.818	18.818	(1.163)	358875	50.0000	56.7
95	Naphthalene	128	19.032	19.032	(1.176)	866749	50.0000	52.6
96	1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	404328	50.0000	58.7

Data File: /chem/VOA4.i/021510v4/4y102.d
Date : 15-FEB-2010 19:00
Client ID: VSTD050
Sample Info: IW4VM100215-01ICCVI1IVOAFI1I
Purge Volume: 5.0
Column phase: RTX-VOLATILES

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 15-FEB-2010 19:55
Lab File ID: 4y104.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100215-03 Quant Type: ISTD
Method: /chem/VOA4.i/021510v4/VOA4-8260-020310.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	153 Chlorotrifluoroethylene	0.20825	0.20942	0.20942	0.010	0.56260	30.00000	Averaged	
	154 2-Chloro-1,1,1-trifluoroeth	0.36057	0.39000	0.39000	0.010	8.16193	30.00000	Averaged	
	9 Acrolein	0.05637	0.06772	0.06772	0.001	20.13657	30.00000	Averaged	
	12 Trichlorotrifluoroethane	350	250	0.12488	0.050	40.05893	30.00000	Linear	<-
	147 Isopropyl Alcohol	0.02882	0.03041	0.03041	0.010	5.50653	40.00000	Averaged	
	16 Allyl chloride	0.48791	0.51372	0.51372	0.010	5.29075	30.00000	Averaged	
	148 tert-Butyl Alcohol	0.04376	0.04663	0.04663	0.010	6.56048	40.00000	Averaged	
	18 Acrylonitrile	0.13010	0.13752	0.13752	0.010	5.69773	30.00000	Averaged	
	149 Isopropyl ether	1.14403	1.10783	1.10783	0.010	-3.16418	30.00000	Averaged	
	24 2-Chloro-1,3-butadiene	0.41615	0.49431	0.49431	0.010	18.78040	30.00000	Averaged	
	150 Ethyl tert-butyl ether	0.99040	1.02242	1.02242	0.010	3.23268	30.00000	Averaged	
	28 Propionitrile	0.05229	0.05507	0.05507	0.010	5.31979	30.00000	Averaged	
	26 Ethyl acetate	0.34196	0.31923	0.31923	0.010	-6.64754	40.00000	Averaged	
	27 Methacrylonitrile	0.19936	0.19638	0.19638	0.010	-1.49247	30.00000	Averaged	
	72 Tetrahydrofuran	0.22723	0.19057	0.19057	0.010	-16.13045	30.00000	Averaged	
	19 Isobutyl alcohol	0.01514	0.01590	0.01590	0.005	5.00929	40.00000	Averaged	
	151 Methyl tert-amyl ether	0.86330	0.87681	0.87681	0.010	1.56434	30.00000	Averaged	
	42 Methyl methacrylate	0.19781	0.20485	0.20485	0.010	3.55909	30.00000	Averaged	
	51 Ethyl methacrylate	0.46758	0.45112	0.45112	0.010	-3.52110	30.00000	Averaged	
	152 1-Chlorohexane	0.30986	0.33495	0.33495	0.010	8.09636	30.00000	Averaged	
	97 1,4-Dioxane	0.00362	0.00415	0.00415	0.001	14.80202	40.00000	Averaged	
	48 2-Nitropropane	0.08216	0.09659	0.09659	0.010	17.56649	30.00000	Averaged	
	68 cis-1,4-Dichloro-2-butene	0.24724	0.28002	0.28002	0.010	13.26151	30.00000	Averaged	
	70 Cyclohexanone	0.06769	0.02024	0.02024	0.005	-70.09755	40.00000	Averaged	<-
	69 trans-1,4-Dichloro-2-butene	0.24184	0.27151	0.27151	0.010	12.27161	30.00000	Averaged	
	82 Pentachloroethane	0.24277	0.56505	0.56505	0.010	133	30.00000	Averaged	<-
	88 Benzyl chloride	1.12460	1.53269	1.53269	0.010	36.28800	30.00000	Averaged	<-
	91 bis(2-Chloroisopropyl)ether	0.42745	0.42928	0.42928	0.010	0.42790	30.00000	Averaged	
$	138 1,2-Dichloroethane-d4	0.25715	0.19433	0.19433	0.001	-24.42689	30.00000	Averaged	
$	47 Toluene-d8	1.14350	0.92750	0.92750	0.010	-18.88940	30.00000	Averaged	
$	71 Bromofluorobenzene	0.90031	0.89224	0.89224	0.010	-0.89654	30.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 15-FEB-2010 19:55
Lab File ID: 4y104.d Init. Cal. Date(s): 03-FEB-2010 03-FEB-2010
Analysis Type: WATER Init. Cal. Times: 01:59 09:21
Lab Sample ID: W4VM100215-03 Quant Type: ISTD
Method: /chem/VOA4.i/021510v4/VOA4-8260-020310.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	16.45728
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/VOA4.i/021510v4/4y104.d
Lab Smp Id: W4VM100215-03 Client Smp ID: VSTD250S
Inj Date : 15-FEB-2010 19:55
Operator : ACJ Inst ID: VOA4.i
Smp Info : |W4VM100215-03|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A UVM091216-08B/UVM100125-08C
Comment :
Method : /chem/VOA4.i/021510v4/VOA4-8260-020310.m
Meth Date : 15-Feb-2010 20:31 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 4 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
153	Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	471253	150.000	151
154	2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	877607	150.000	162
9	Acrolein	56	7.180	7.180	(0.676)	253997	250.000	300
12	Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	468364	250.000	350
147	Isopropyl Alcohol	45	7.436	7.436	(0.700)	1140568	2500.00	2640
16	Allyl chloride	41	7.802	7.802	(0.735)	1926703	250.000	263
148	tert-Butyl Alcohol	59	7.930	7.930	(0.747)	1748836	2500.00	2660
18	Acrylonitrile	53	8.180	8.180	(0.770)	515756	250.000	264
149	Isopropyl ether	45	8.747	8.747	(0.824)	830986	50.0000	48.4
24	2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	370779	50.0000	59.4
150	Ethyl tert-butyl ether	59	9.143	9.143	(0.861)	766916	50.0000	51.6
28	Propionitrile	54	9.393	9.393	(0.885)	206537	250.000	263
26	Ethyl acetate	43	9.345	9.345	(0.880)	1197267	250.000	233
27	Methacrylonitrile	41	9.576	9.576	(0.902)	736524	250.000	246
72	Tetrahydrofuran	42	9.717	9.717	(0.601)	411780	250.000	210

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	596463	2500.00	2620
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	657694	50.0000	50.8
42 Methyl methacrylate	69	11.210	11.210	(1.056)	768298	250.000	259
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	1456807	250.000	241
152 1-Chlorohexane	55	13.661	13.661	(1.286)	251243	50.0000	54.0
97 1,4-Dioxane	88	11.326	11.326	(1.067)	155678	2500.00	2870
48 2-Nitropropane	43	11.673	11.673	(1.099)	362276	250.000	294
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	605063	250.000	283
70 Cyclohexanone	42	14.905	14.905	(1.082)	326819	1250.00	374
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	586672	250.000	281
82 Pentachloroethane	167	15.770	15.770	(0.975)	1220927	250.000	582(A)
88 Benzyl chloride	91	16.319	16.319	(1.009)	3311757	250.000	341
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	927560	250.000	251
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	750099	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	645861	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	432149	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	145770	50.0000	37.8
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	599034	50.0000	40.6
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	385582	50.0000	49.6

QC Flag Legend

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

Data File: /chem/VOA4.i/021510v4/4y104.d

Date : 15-FEB-2010 19:55

Client ID: VSTD250S

Instrument: VOA4.i

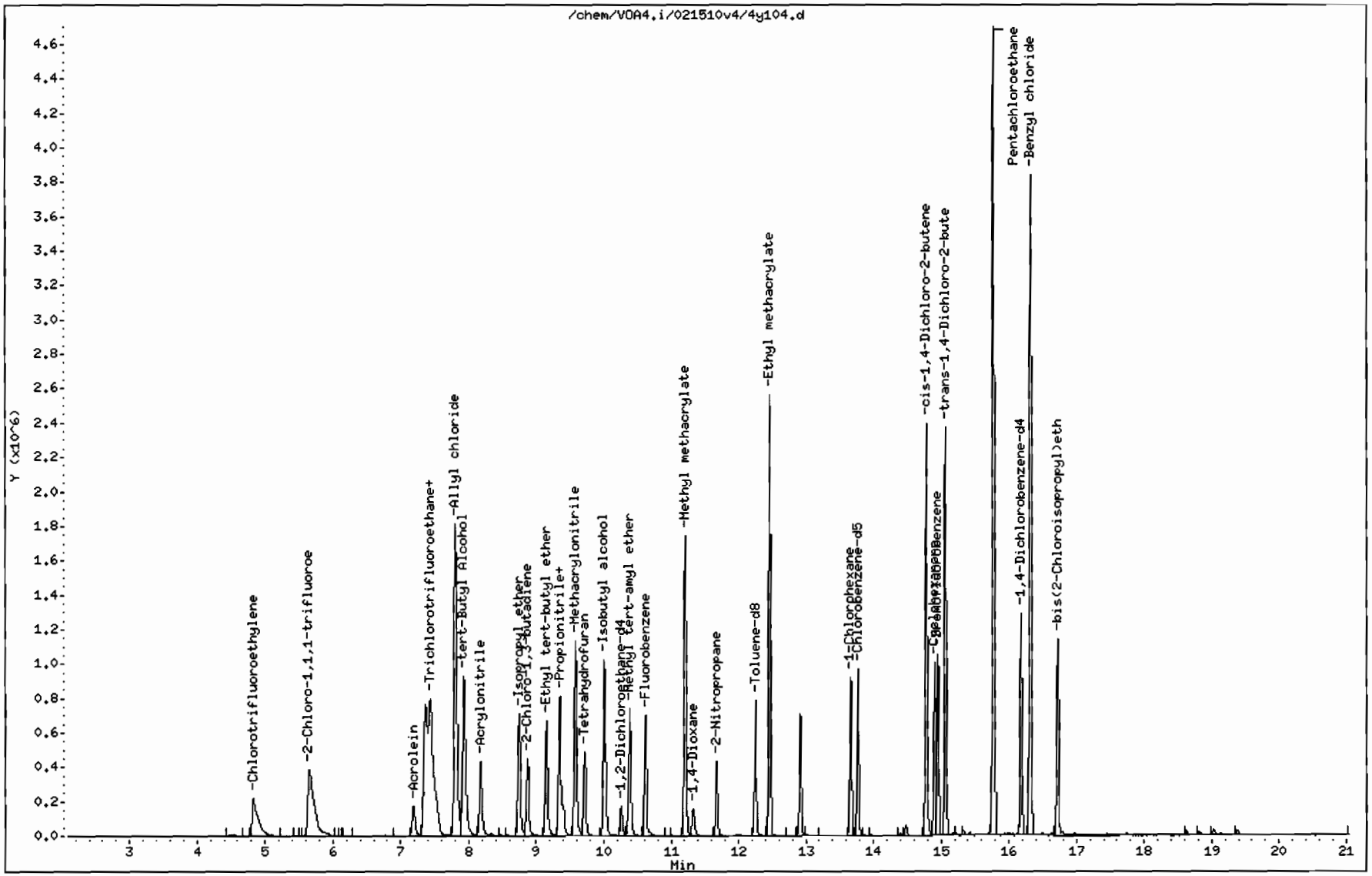
Sample Info: |W4VM100215-03|SHORT|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25



QC Data

Data File: /chem/VOA4.i/020210v4/4w228.d

Page 1

Date : 03-FEB-2010 01:04

Client ID: BFB01

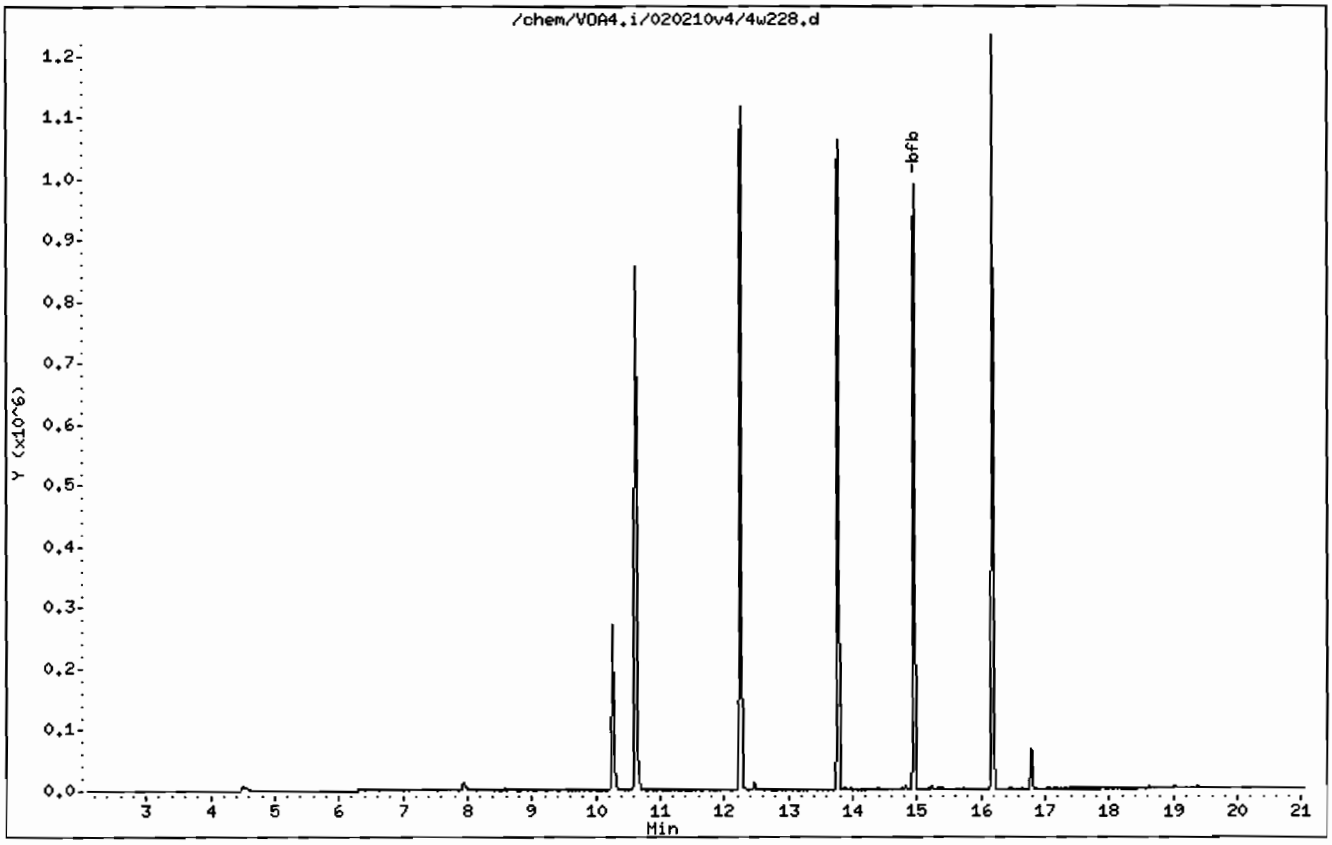
Instrument: VOA4.i

Sample Info: |UVM091216-10|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA4.i/020210v4/4w228.d

Date : 03-FEB-2010 01:04

Client ID: BFB01

Instrument: VOA4.i

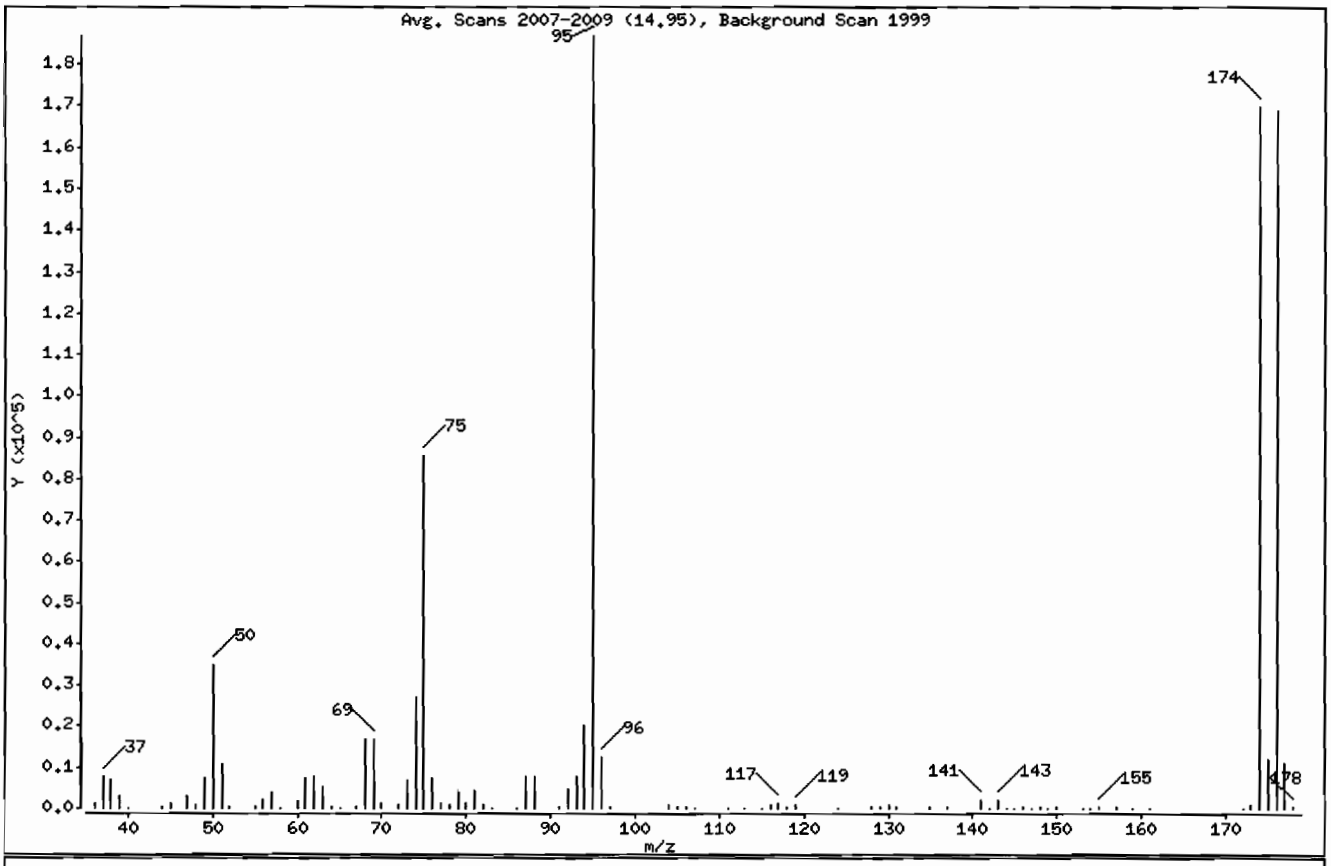
Sample Info: |UVM091216-10|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

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	18.61
75	30.00 - 60.00% of mass 95	45.68
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	0.45 (0.49)
174	50.00 - 100.00% of mass 95	90.86
175	5.00 - 9.00% of mass 174	6.36 (7.00)
176	95.00 - 101.00% of mass 174	90.38 (99.47)
177	5.00 - 9.00% of mass 176	6.04 (6.68)

Data File: /chem/VOA4.i/020210v4/4w228.d

Date : 03-FEB-2010 01:04

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM091216-10|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4w228.d

Spectrum: Avg. Scans 2007-2009 (14,95), Background Scan 1999

Location of Maximum: 95.00

Number of points: 90

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1483	67.00	415	95.00	186944	143.00	1973
37.00	7891	68.00	16664	96.00	12460	144.00	57
38.00	6811	69.00	16760	97.00	346	145.00	150
39.00	2875	70.00	1451	104.00	714	146.00	326
40.00	51	72.00	889	105.00	270	147.00	194
44.00	547	73.00	6771	106.00	632	148.00	503
45.00	1481	74.00	27008	107.00	115	149.00	55
47.00	2809	75.00	85392	111.00	150	150.00	235
48.00	975	76.00	7252	113.00	123	153.00	62
49.00	7102	77.00	1075	115.00	193	154.00	50
50.00	34784	78.00	806	116.00	713	155.00	463
51.00	10539	79.00	3850	117.00	1116	157.00	342
52.00	449	80.00	1154	118.00	642	159.00	178
55.00	499	81.00	4207	119.00	917	161.00	181
56.00	2326	82.00	810	124.00	50	172.00	133
57.00	3865	83.00	56	128.00	623	173.00	837
58.00	155	86.00	131	129.00	425	174.00	169856
60.00	1524	87.00	7607	130.00	819	175.00	11894
61.00	7247	88.00	7613	131.00	321	176.00	168960
62.00	7544	91.00	552	135.00	403	177.00	11284
63.00	5336	92.00	4640	137.00	352	178.00	305
64.00	471	93.00	7569	141.00	2008		
65.00	56	94.00	20176	142.00	205		

Data File: /chem/VOA4.i/021310v4/4x601.d

Page 1

Date : 13-FEB-2010 12:32

Client ID: BFB01

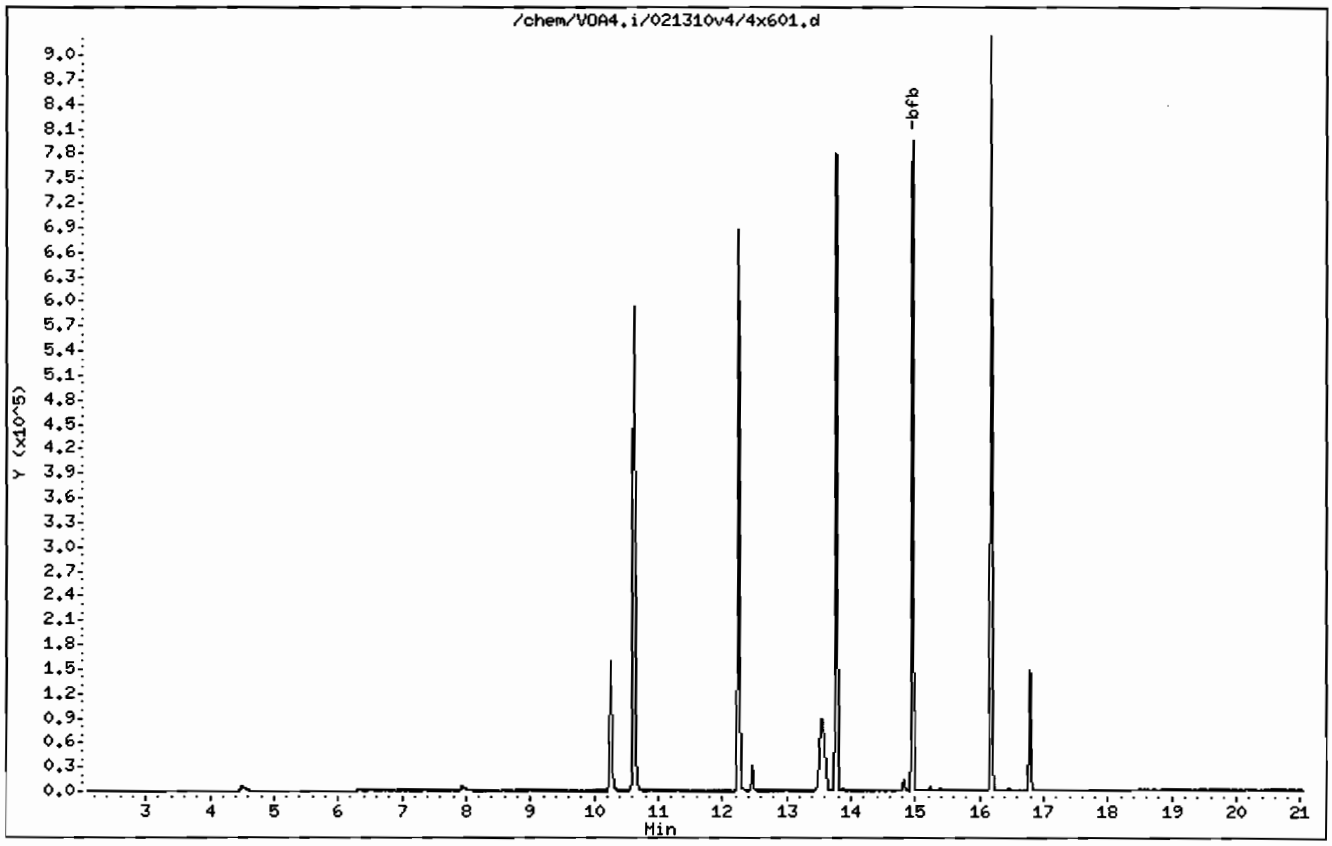
Instrument: VOA4.i

Sample Info: |UVM091216-10|BFB1|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA4.i/021310v4/4x601.d

Date : 13-FEB-2010 12:32

Client ID: BFB01

Instrument: VOA4.i

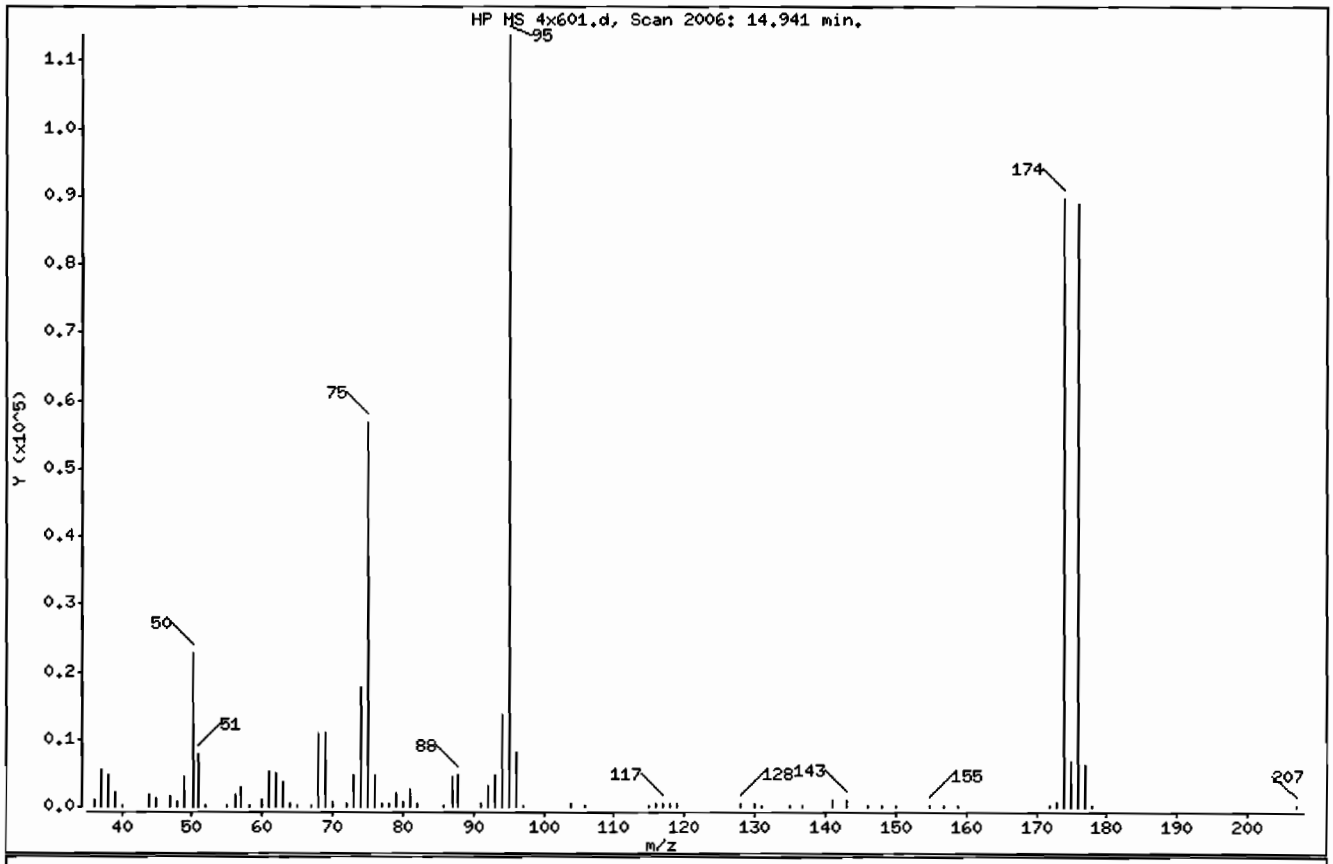
Sample Info: |UVH091216-10|BFB1|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

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	20.10
75	30.00 - 60.00% of mass 95	49.83
96	5.00 - 9.00% of mass 95	7.08
173	Less than 2.00% of mass 174	0.62 (0.78)
174	50.00 - 100.00% of mass 95	78.86
175	5.00 - 9.00% of mass 174	6.06 (7.69)
176	95.00 - 101.00% of mass 174	78.05 (98.98)
177	5.00 - 9.00% of mass 176	5.50 (7.05)

Date : 13-FEB-2010 12:32

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVM091216-10|BFB1|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4x601.d
Spectrum: HP MS 4x601.d, Scan 2006: 14.941 min.
Location of Maximum: 95.00
Number of points: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	959	63.00	3732	87.90	4678	140.90	1081
37.00	5619	63.90	410	91.00	412	142.90	1112
38.00	4760	65.00	241	92.00	3151	145.90	197
39.00	2063	67.00	286	93.00	4672	147.90	301
40.00	214	68.00	10822	94.00	13631	150.00	155
44.00	1786	69.00	11037	95.00	113768	154.90	297
45.00	1232	70.00	883	96.00	8057	156.90	193
47.00	1540	72.00	495	97.00	250	158.80	230
48.00	703	73.00	4759	103.90	487	171.80	285
49.00	4421	74.00	17680	105.90	379	172.90	700
50.10	22864	75.00	56688	114.90	206	173.90	89712
51.00	7771	76.00	4584	115.80	404	174.90	6898
51.90	241	77.00	560	116.80	642	175.90	88800
55.00	316	77.90	621	118.00	402	176.90	6260
56.10	1741	78.90	2165	118.90	511	178.00	188
57.00	2961	79.90	663	127.90	568	207.00	201
58.10	248	80.90	2697	129.90	429		
60.00	1034	82.00	572	130.90	317		
61.00	5139	85.80	159	134.90	330		
62.00	4857	87.00	4434	136.80	211		

Data File: /chem/VOA4.i/021510v4/4y101.d

Page 1

Date : 15-FEB-2010 18:32

Client ID: BFB01

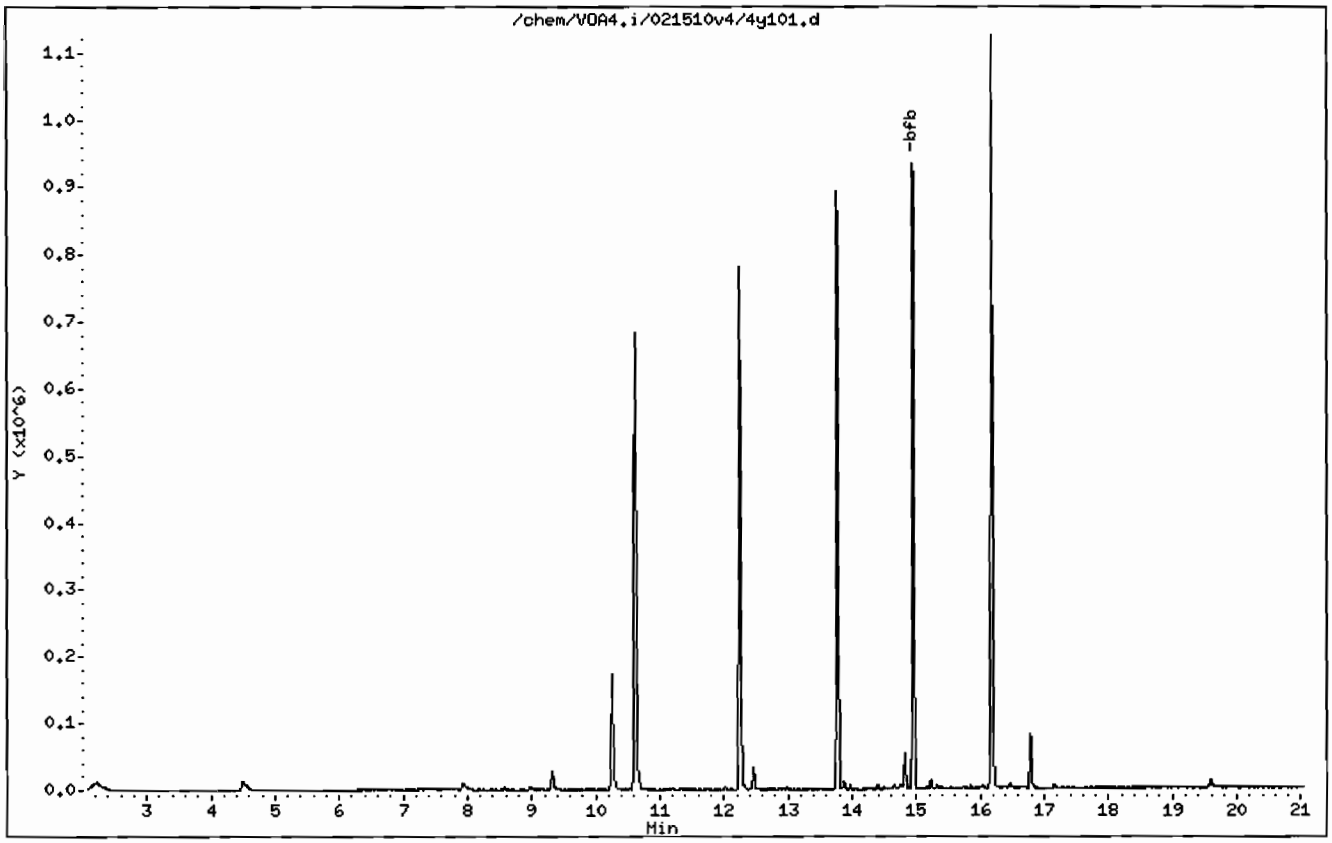
Instrument: VOA4.i

Sample Info: IUVM091216-10|BFB1|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA4.i/021510v4/4y101.d

Date : 15-FEB-2010 18:32

Client ID: BFB01

Instrument: VOA4.i

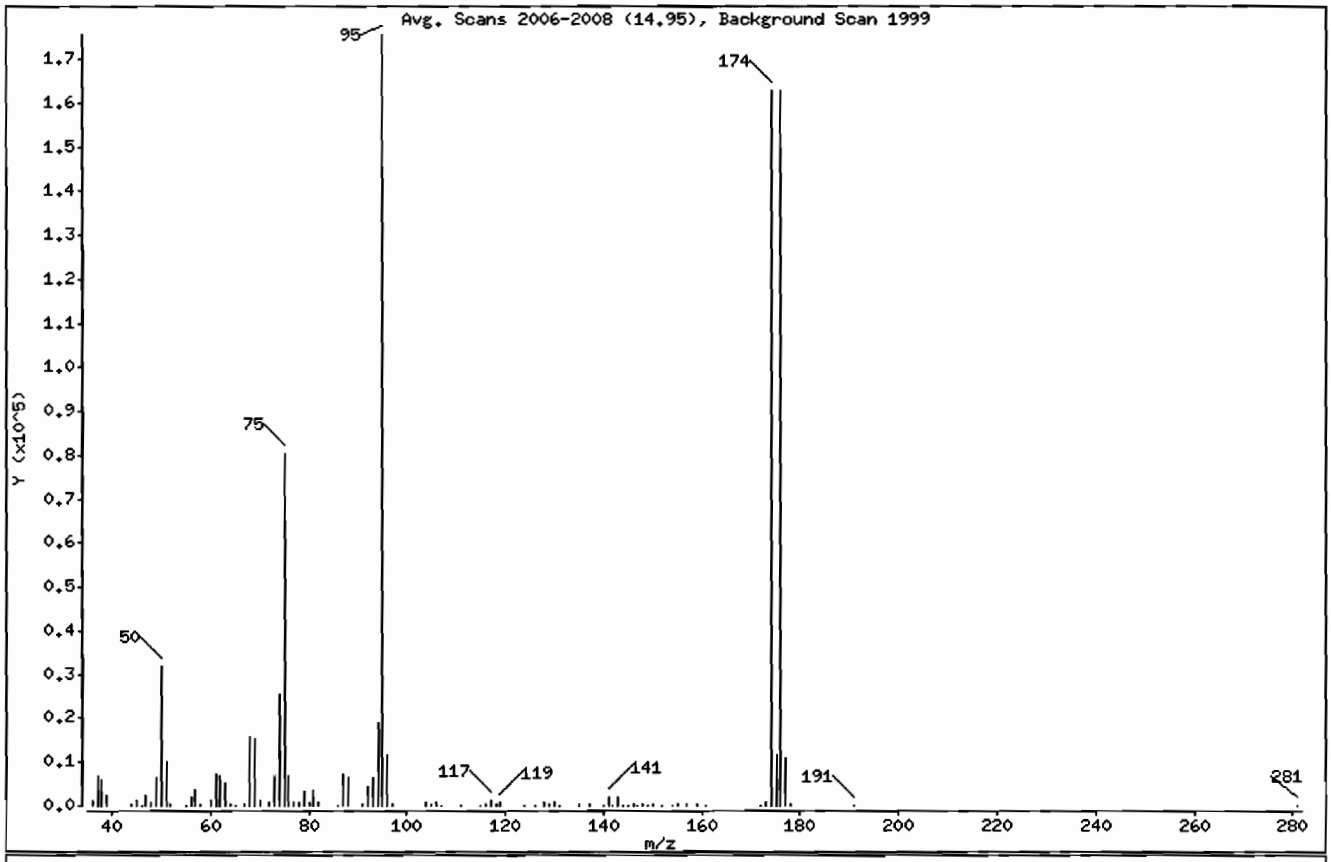
Sample Info: |UVM091216-10|BFB1|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

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	18.21
75	30.00 - 60.00% of mass 95	45.73
96	5.00 - 9.00% of mass 95	6.73
173	Less than 2.00% of mass 174	0.40 (0.43)
174	50.00 - 100.00% of mass 95	92.71
175	5.00 - 9.00% of mass 174	6.69 (7.22)
176	95.00 - 101.00% of mass 174	92.57 (99.84)
177	5.00 - 9.00% of mass 176	6.19 (6.69)

Data File: /chem/VOA4.i/021510v4/4y101.d

Date : 15-FEB-2010 18:32

Client ID: BFB01 Instrument: VOA4.i

Sample Info: |UVH091216-10|BFB1|1|VOAF|1|

Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Data File: 4y101.d

Spectrum: Avg. Scans 2006-2008 (14.95), Background Scan 1999

Location of Maximum: 95.00

Number of points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1223	68.00	15765	104.00	654	146.00	314
37.00	6694	69.00	15392	105.00	209	147.00	128
38.00	6166	70.00	1246	106.00	666	148.00	391
39.00	2498	72.00	616	107.00	113	149.00	60
44.00	466	73.00	6564	111.00	58	150.00	210
45.00	1345	74.00	25616	115.00	171	152.00	69
46.00	52	75.00	80336	116.00	580	154.00	52
47.00	2352	76.00	6895	117.00	1129	155.00	536
48.00	874	77.00	849	118.00	572	157.00	295
49.00	6463	78.00	615	119.00	917	159.00	261
50.00	31984	79.00	3259	124.00	51	161.00	193
51.00	9962	80.00	952	126.00	58	172.00	67
52.00	400	81.00	3463	128.00	682	173.00	707
55.00	177	82.00	815	129.00	305	174.00	162880
56.00	1835	86.00	150	130.00	672	175.00	11756
57.00	3552	87.00	7353	131.00	135	176.00	162624
58.00	289	88.00	6460	135.00	301	177.00	10880
60.00	1361	91.00	467	137.00	349	178.00	283
61.00	7142	92.00	4458	140.00	50	191.00	66
62.00	7049	93.00	6276	141.00	1902	281.00	58
63.00	5146	94.00	18832	142.00	193		
64.00	502	95.00	175680	143.00	1888		
65.00	52	96.00	11817	144.00	60		
67.00	544	97.00	384	145.00	200		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202042304**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 14:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 12:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x606BA.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:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202042304**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 14:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 12:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x606BA.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-Trifluoroetha *Trichlorotrifluoroethane*	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/VOA4.i/021310v4/4x606BA.d
Lab Smp Id: 1202042304 Client Smp ID: BLANK
Inj Date : 13-FEB-2010 14:50
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202042304|952862|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 6 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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.265	10.260	(0.967)	152790	43.5699	43.6
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	681861	50.0000	
$ 47 Toluene-d8	98	12.252	12.253	(0.890)	552699	43.5856	43.6
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	554474	50.0000	
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	319129	53.3728	53.4
69 trans-1,4-Dichloro-2-butene	53	15.069	15.063	(0.931)	1245	0.77517	0.78(a)
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	332064	50.0000	
88 Benzyl chloride	91	16.319	16.319	(1.009)	9848	1.31856	1.3(a)
91 bis(2-Chloroisopropyl)ether	45	16.727	16.721	(1.034)	5528	1.94730	1.9(a)

QC Flag Legend

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

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x606BA.d
Lab Smp Id: 1202042304 Client Smp ID: BLANK
Inj Date : 13-FEB-2010 14:50
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202042304|952862|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 6 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/VOA4.i/021310v4/4x606BA.d

Date : 13-FEB-2010 14:50

Client ID: BLANK

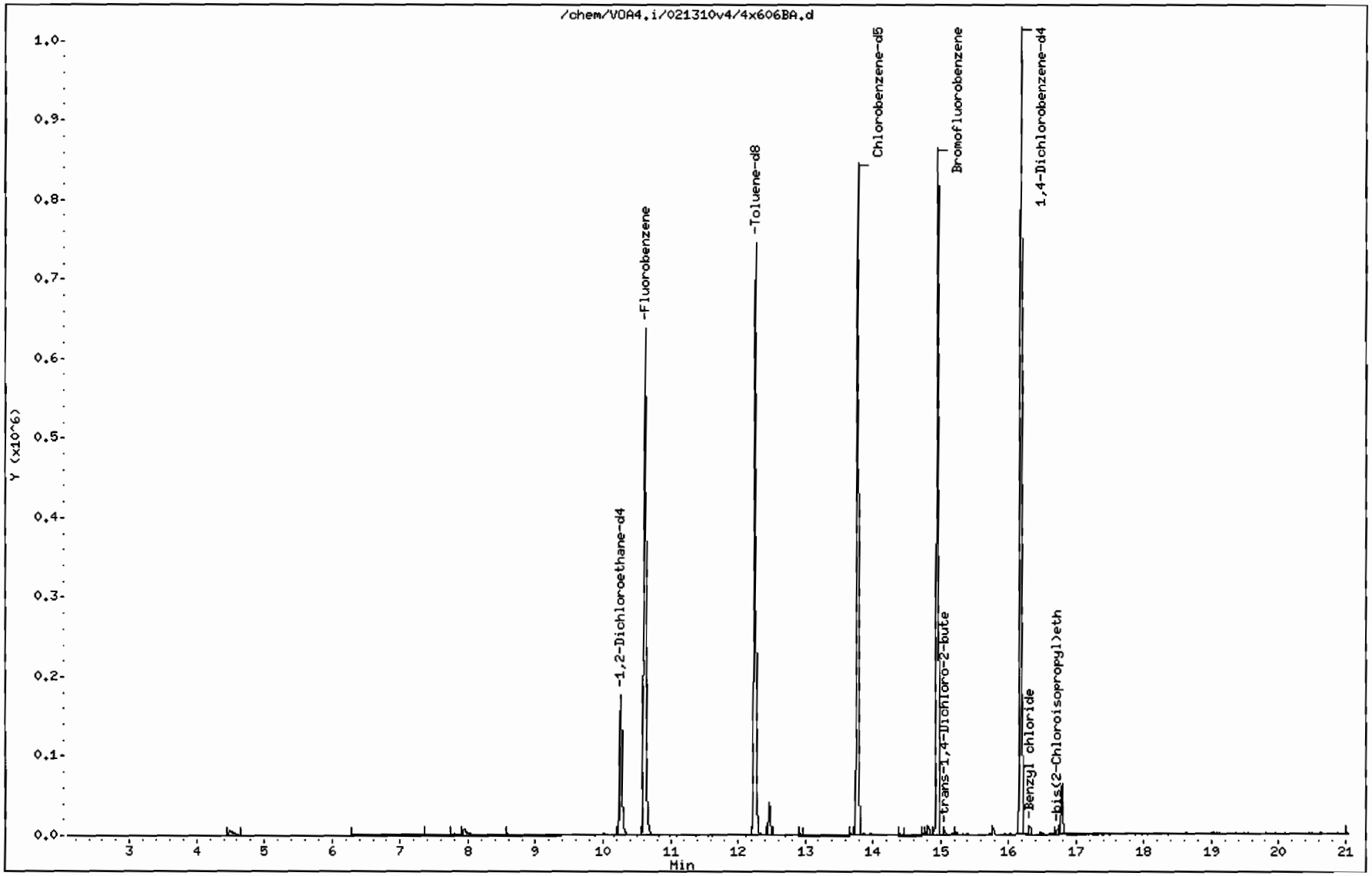
Sample Info: |1202042304|952862|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25



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Date : 13-FEB-2010 14:50

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1202042304|952862|1|VOAF|1|

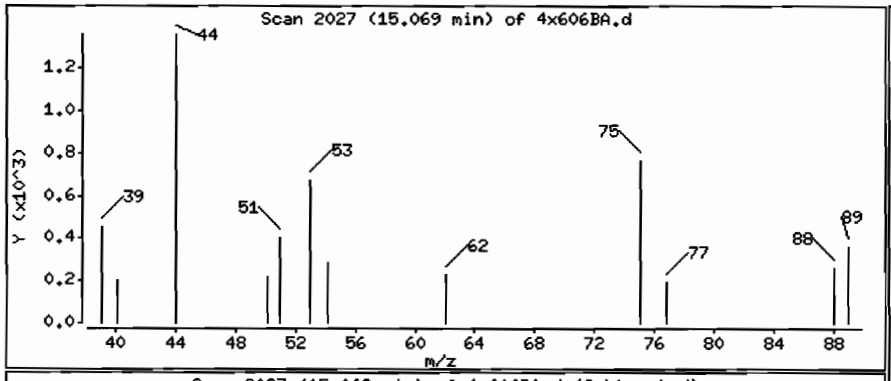
Operator: ACJ

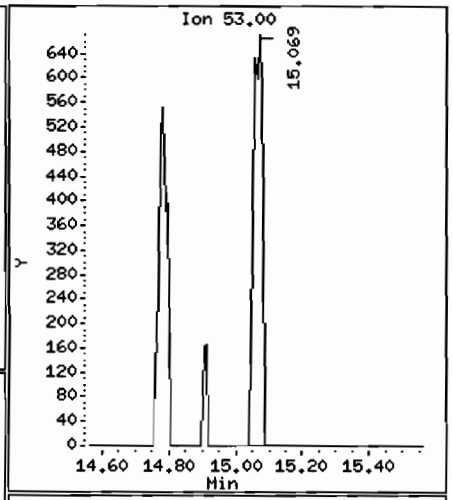
Column phase: RTX-VOLATILES

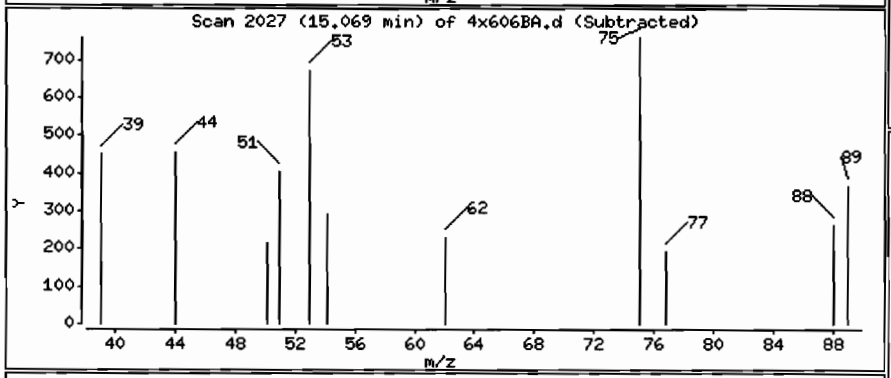
Column diameter: 0.25

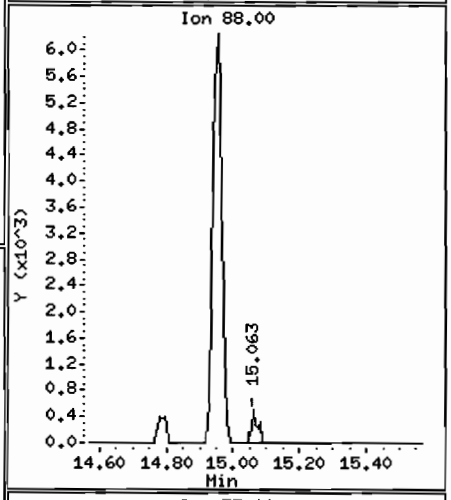
69 trans-1,4-Dichloro-2-butene

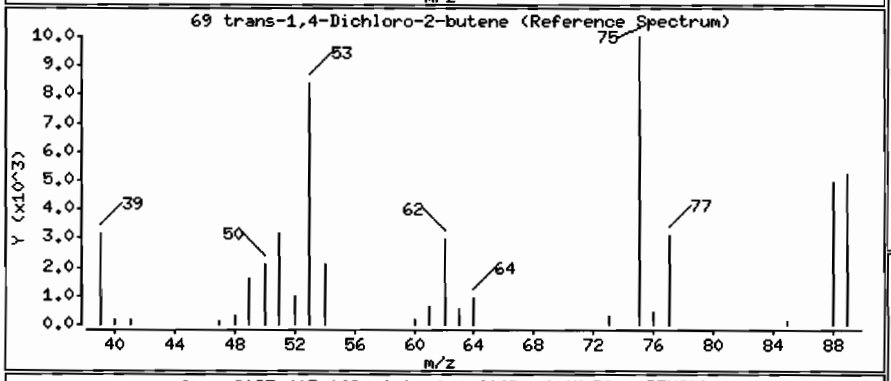
Concentration: 0.78 ug/Kg

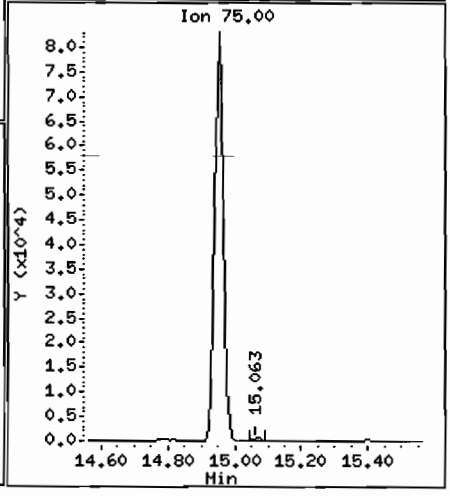


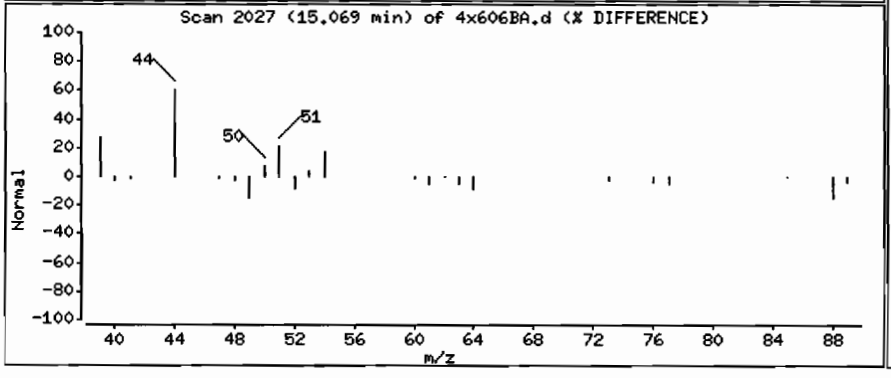












Data File: /chem/VOA4.i/021310v4/4x606BA.d

Date : 13-FEB-2010 14:50

Client ID: BLANK

Instrument: VOA4.i

Sample Info: 1120204230419528621111VOAF111

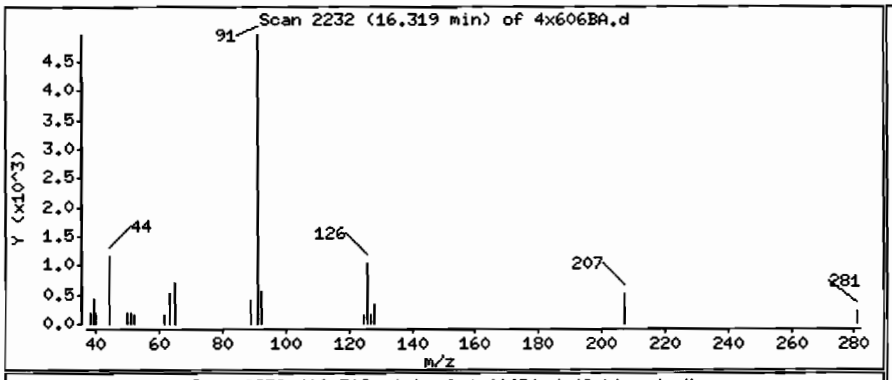
Operator: ACJ

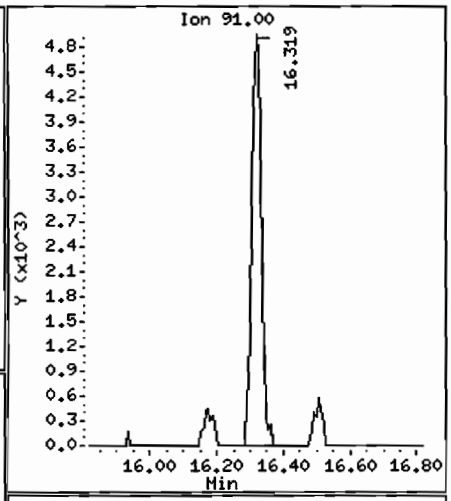
Column phase: RTX-VOLATILES

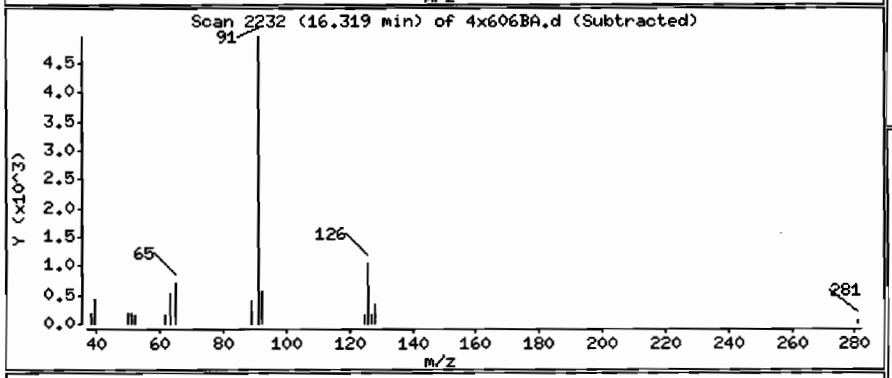
Column diameter: 0.25

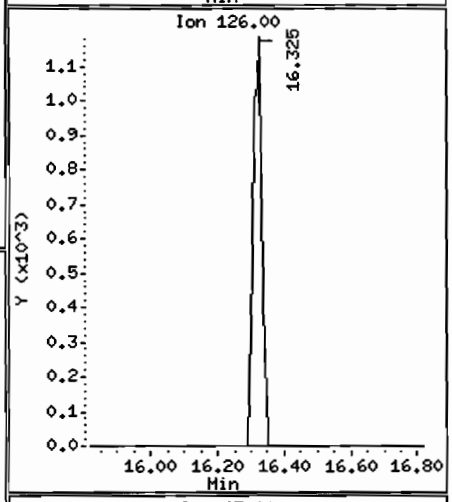
88 Benzyl chloride

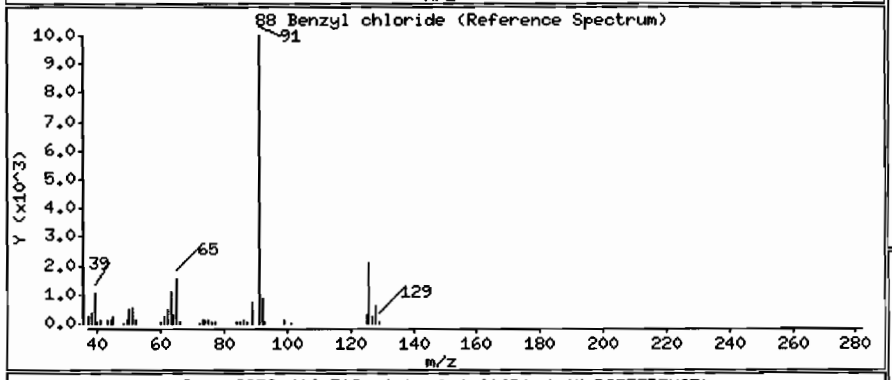
Concentration: 1.3 ug/Kg

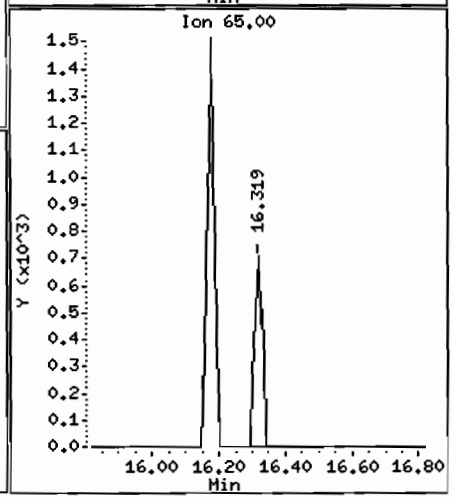


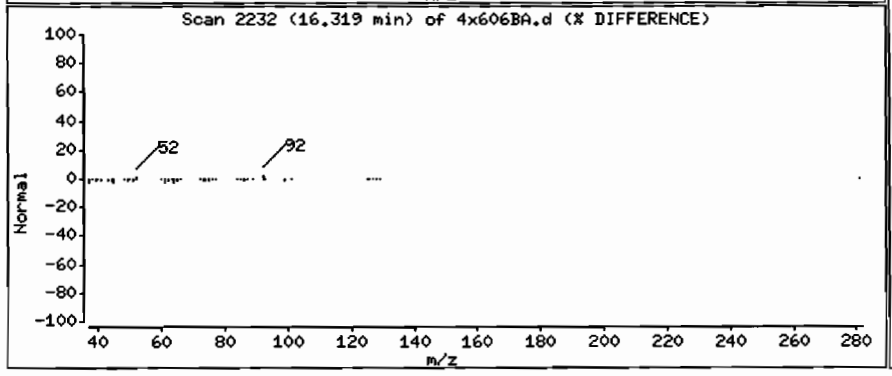












Data File: /chem/VOA4.i/021310v4/4x606BA.d

Date : 13-FEB-2010 14:50

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120204230419528621|VOAF|1|

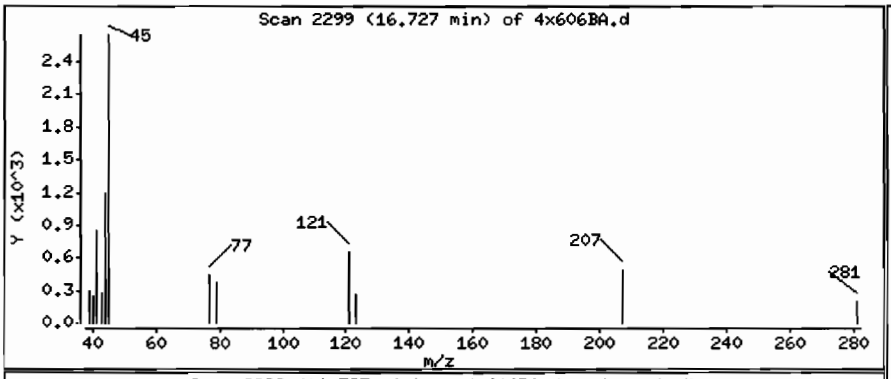
Operator: ACJ

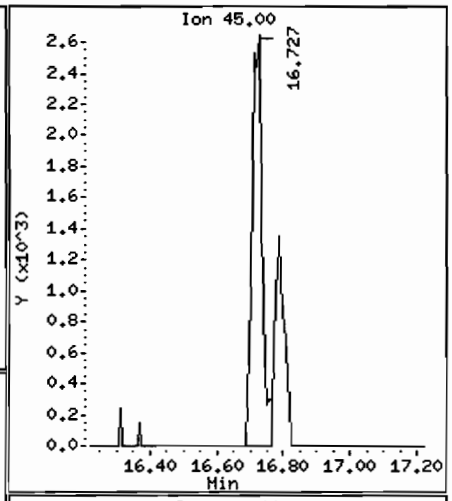
Column phase: RTX-VOLATILES

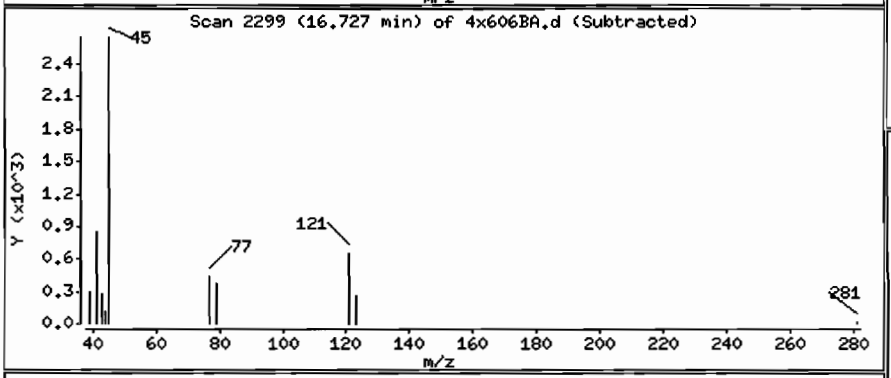
Column diameter: 0.25

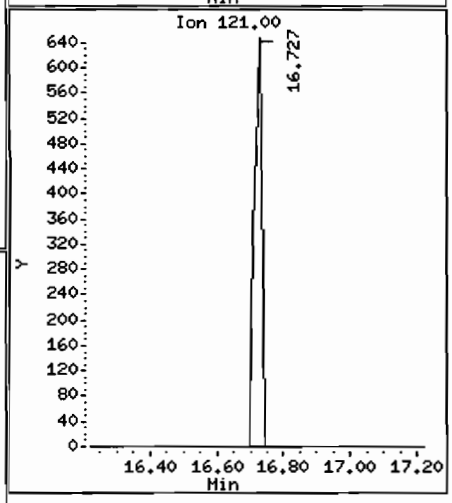
91 bis(2-Chloroisopropyl)ether

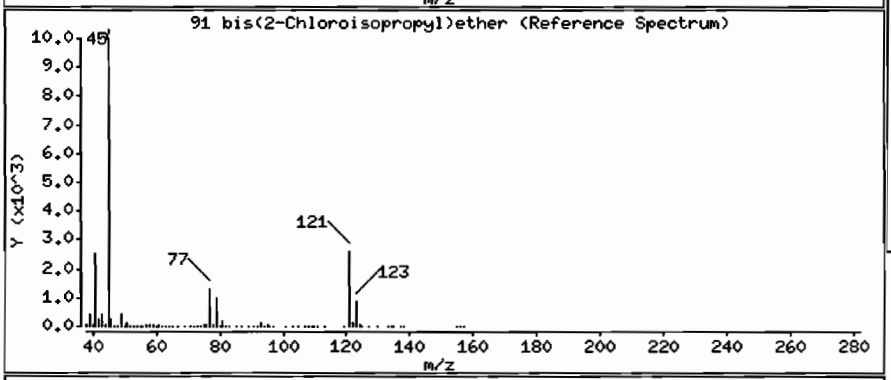
Concentration: 1.9 ug/Kg

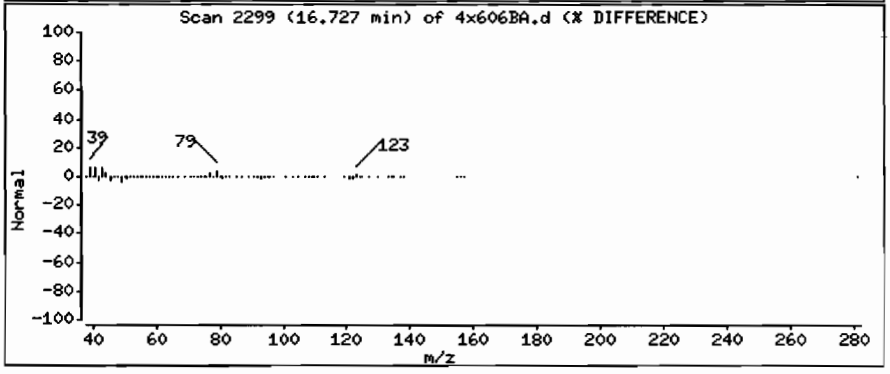












Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202052761**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 20:51**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 18:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y106ba.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:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202052761**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 20:51**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 18:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y106ba.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-Trifluoroetha *Trichlorotrifluoroethane*	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)	Estimated RT	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/VOA4.i/021510v4/4y106ba.d
Lab Smp Id: 1202052761 Client Smp ID: BLANK
Inj Date : 15-FEB-2010 20:51
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202052761|952862|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/021510v4/VOA4-8260-020310.m
Meth Date : 15-Feb-2010 20:32 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 6 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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	149628	38.7685	38.8
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	750449	50.0000	
$ 47 Toluene-d8	98	12.253	12.252	(0.890)	588379	40.9901	41.0
* 61 Chlorobenzene-d5	117	13.771	13.770	(1.000)	627644	50.0000	
$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	364838	53.2222	53.2
69 trans-1,4-Dichloro-2-butene	53	15.075	15.063	(0.932)	1376	0.74728	0.75(a)
82 Pentachloroethane	167	15.776	15.770	(0.975)	2669	1.44394	1.4(a)
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	380700	50.0000	
88 Benzyl chloride	91	16.319	16.319	(1.009)	11373	1.32821	1.3(a)
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	5910	1.81590	1.8(a)

QC Flag Legend

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

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021510v4/4y106ba.d
Lab Smp Id: 1202052761 Client Smp ID: BLANK
Inj Date : 15-FEB-2010 20:51
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202052761|952862|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/021510v4/VOA4-8260-020310.m
Meth Date : 15-Feb-2010 20:32 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 6 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/VOA4.i/021510v4/4y106ba.d

Date : 15-FEB-2010 20:51

Client ID: BLANK

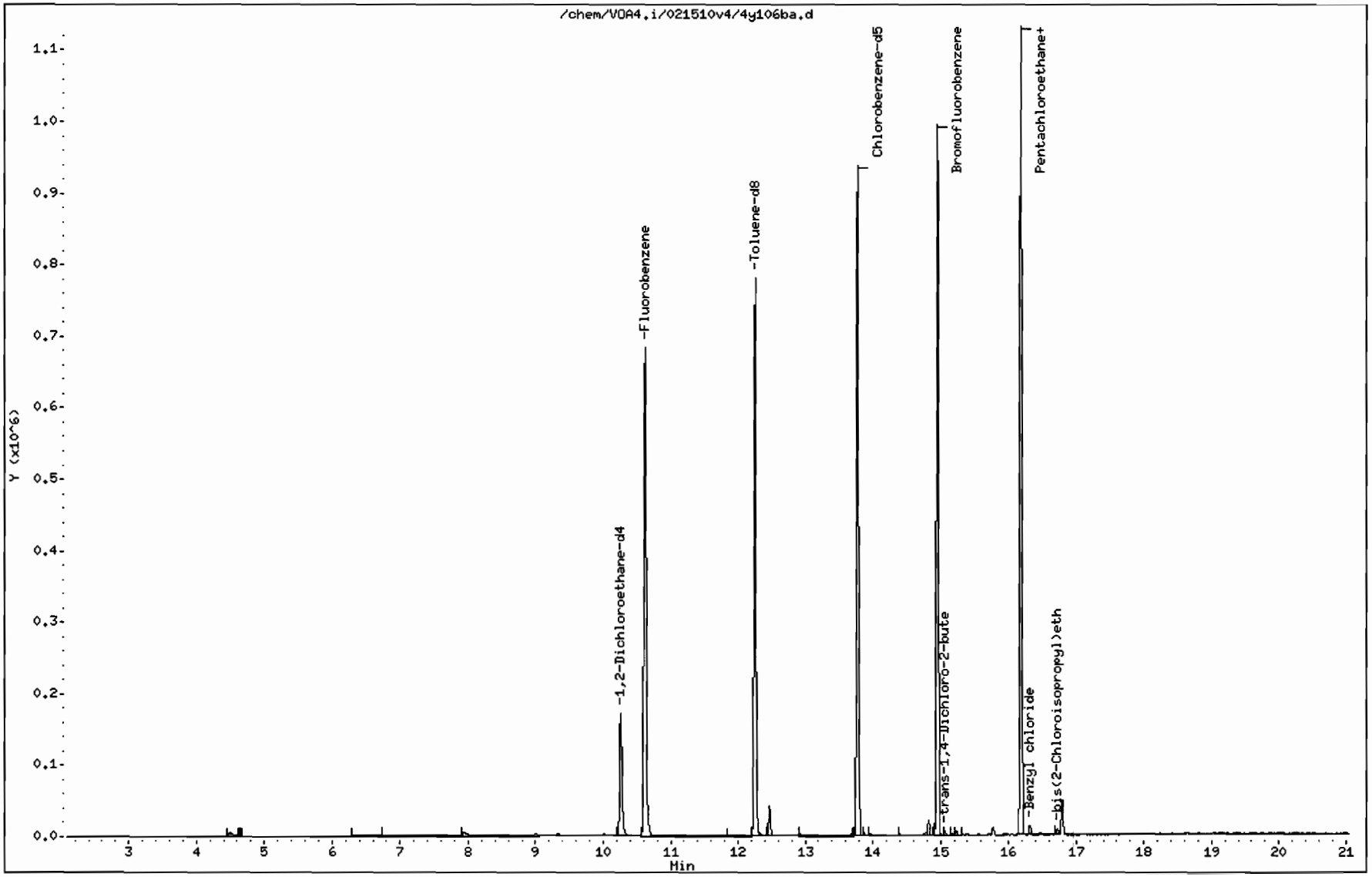
Sample Info: |120205276|952862|1|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25



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Date : 15-FEB-2010 20:51

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1202052761|952862|1|VOAF|1|

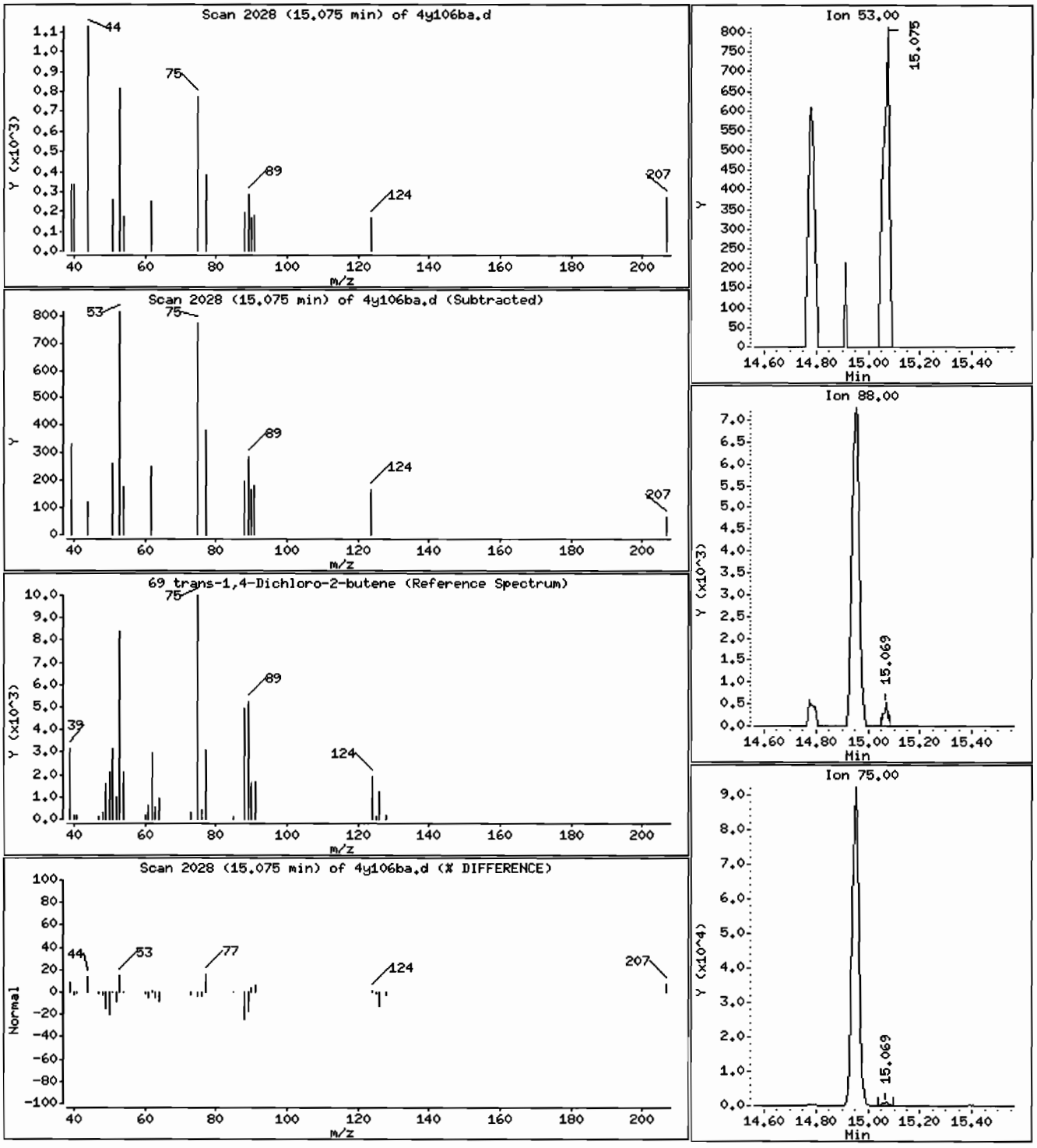
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

69 trans-1,4-Dichloro-2-butene

Concentration: 0.75 ug/Kg



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Date : 15-FEB-2010 20:51

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120205276|952862|1|VOAF|1|

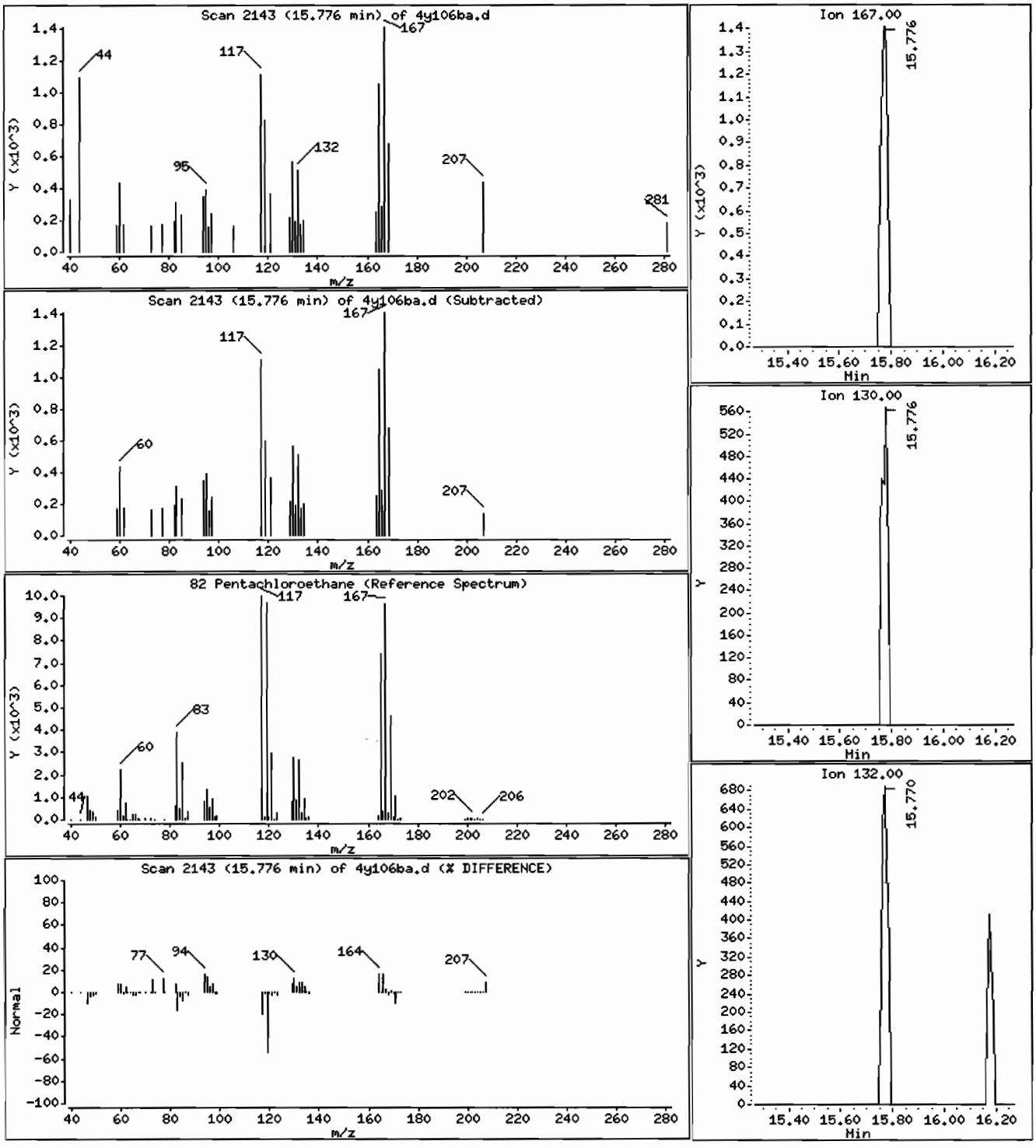
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

82 Pentachloroethane

Concentration: 1.4 ug/Kg



Data File: /chem/VOA4.i/021510v4/4y106ba.d

Date : 15-FEB-2010 20:51

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |120205276|952862|1|VOAF|1|

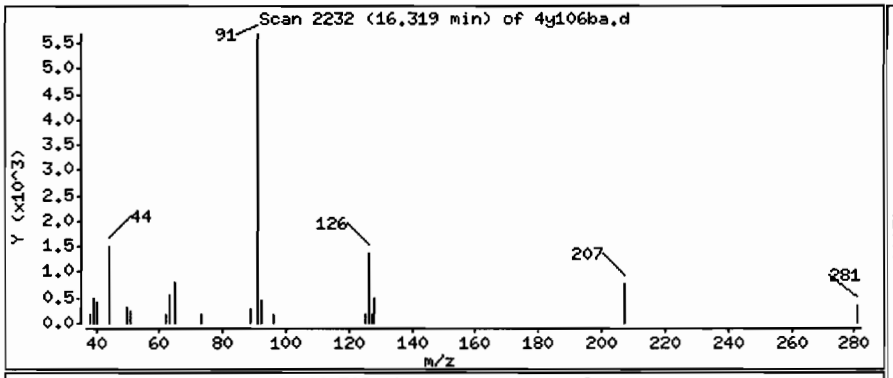
Operator: ACJ

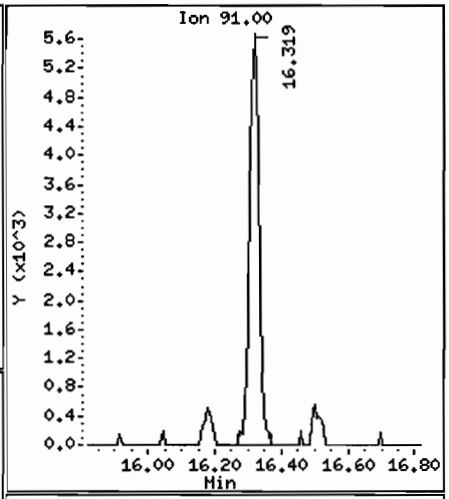
Column phase: RTX-VOLATILES

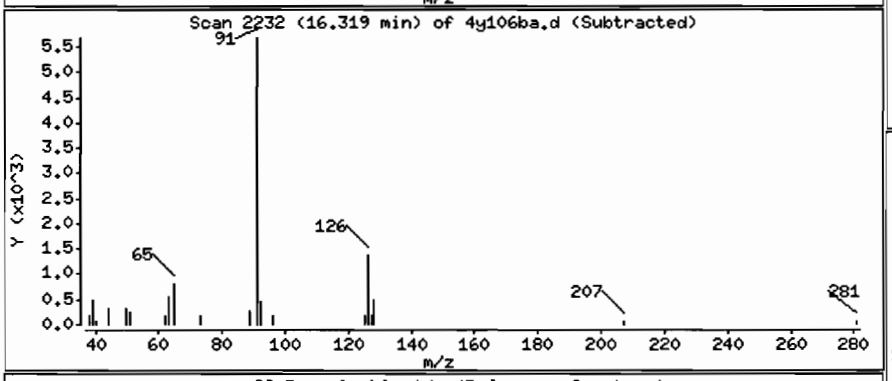
Column diameter: 0.25

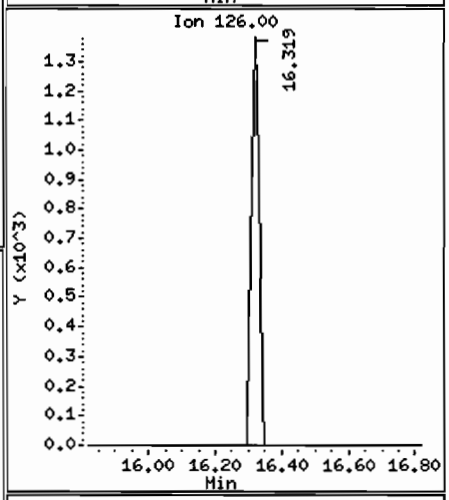
88 Benzyl chloride

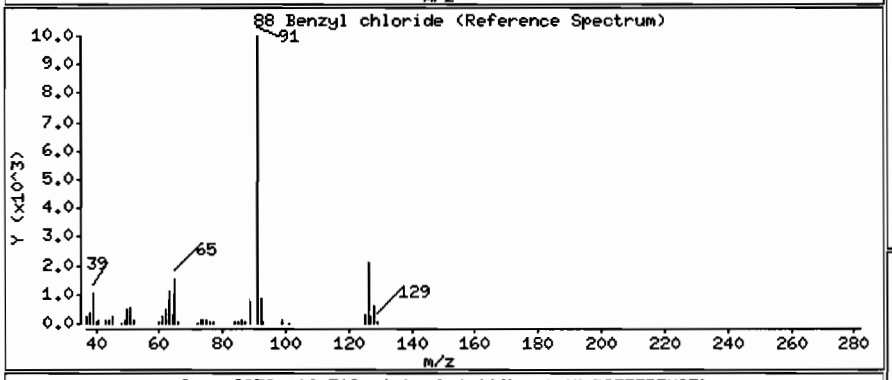
Concentration: 1.3 ug/Kg

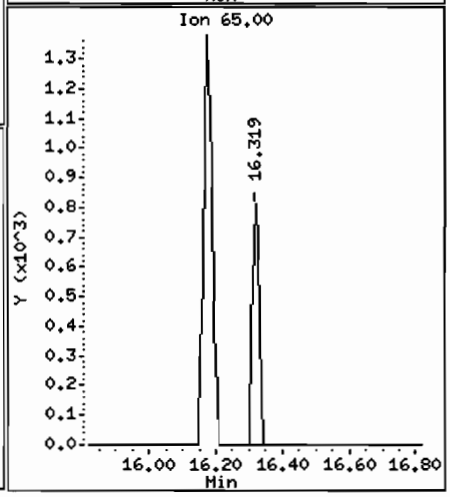


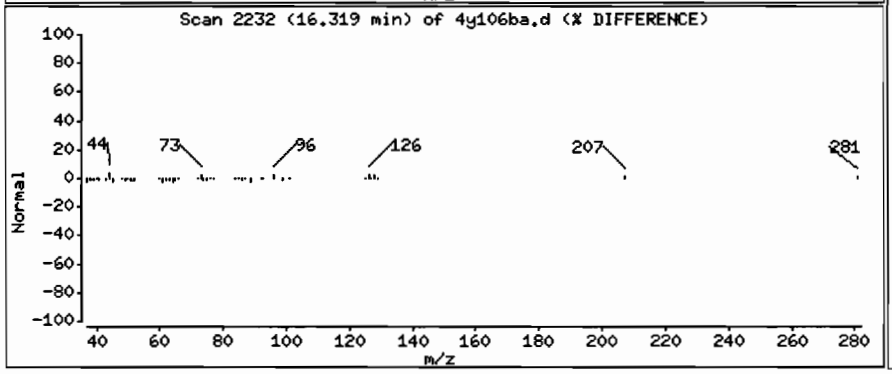












Data File: /chem/VOA4.i/021510v4/4y106ba.d

Date : 15-FEB-2010 20:51

Client ID: BLANK

Instrument: VOA4.i

Sample Info: |1202052761|952862|1|VOAF|1|

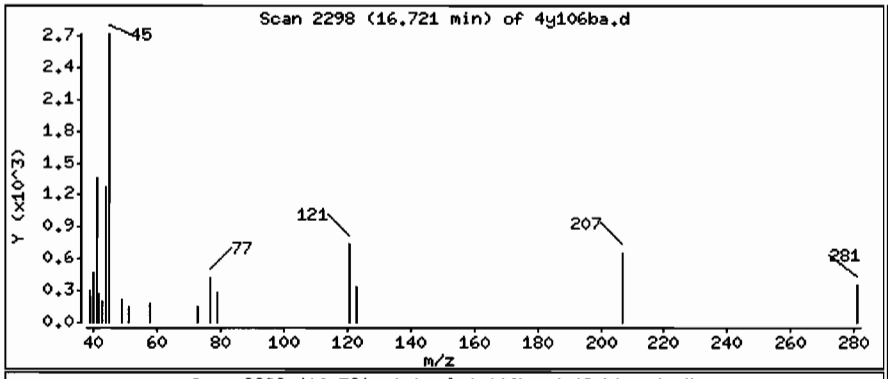
Operator: ACJ

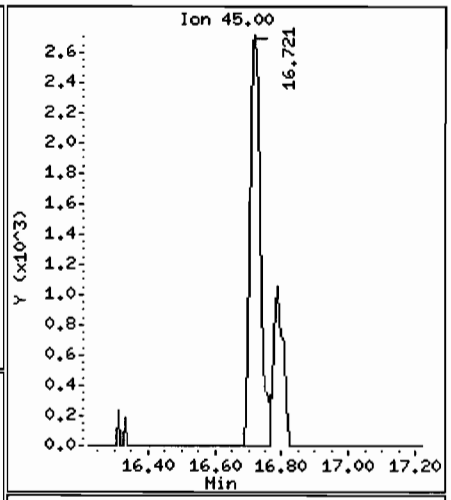
Column phase: RTX-VOLATILES

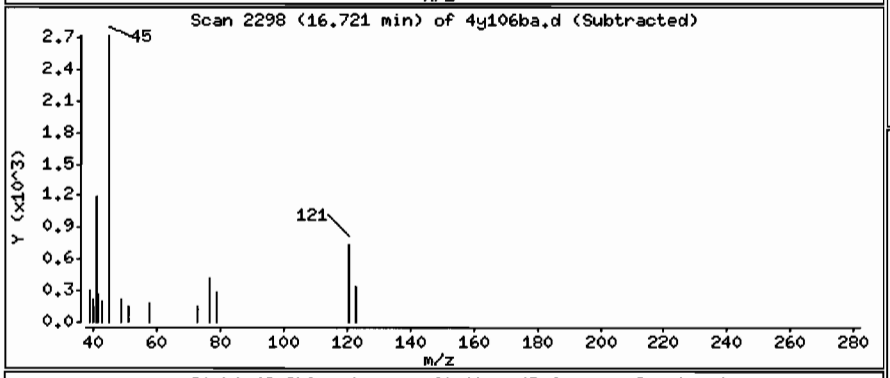
Column diameter: 0.25

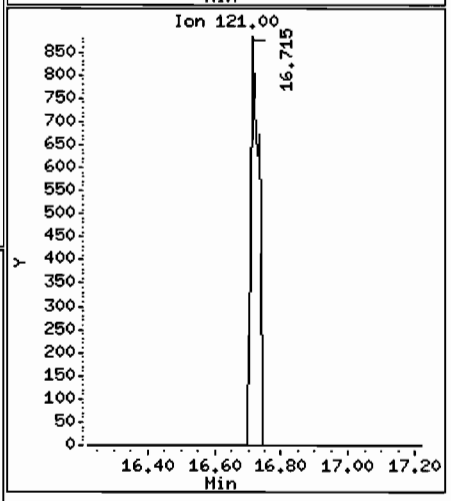
91 bis(2-Chloroisopropyl)ether

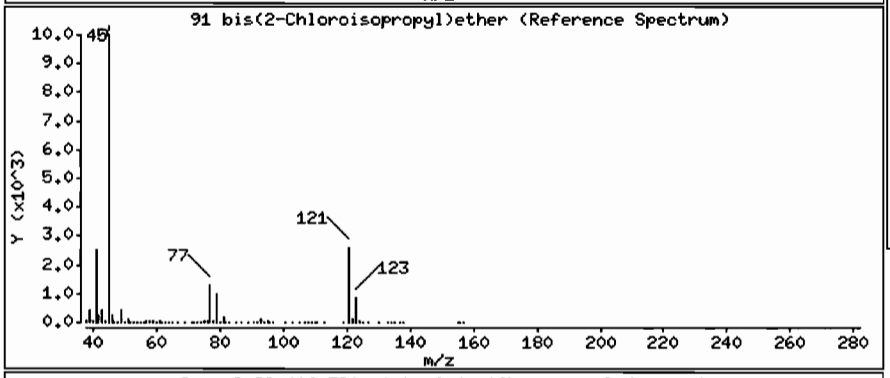
Concentration: 1.8 ug/Kg

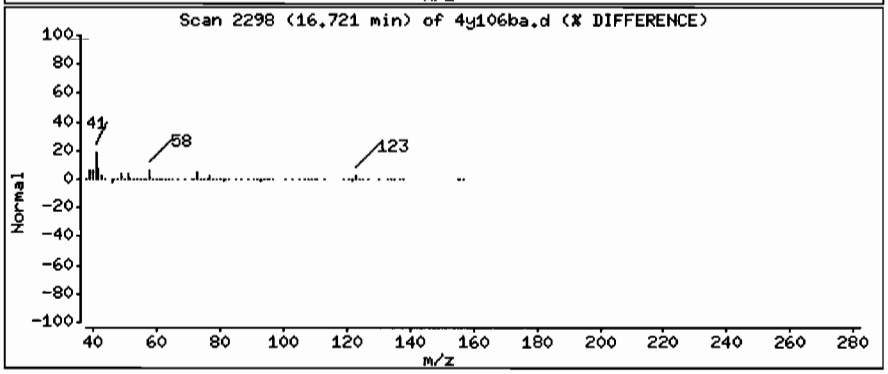












Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202042307**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 13:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 12:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x603LA.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		68.0	ug/kg	0.340	1.00
74-87-3	Chloromethane		49.4	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		54.4	ug/kg	0.300	1.00
74-83-9	Bromomethane		57.6	ug/kg	0.300	1.00
75-00-3	Chloroethane		57.9	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		65.6	ug/kg	0.300	1.00
67-64-1	Acetone		304	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		57.0	ug/kg	0.300	1.00
74-88-4	Iodomethane		275	ug/kg	1.60	5.00
75-09-2	Methylene chloride		52.7	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		287	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		56.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		54.6	ug/kg	0.300	1.00
78-93-3	2-Butanone		296	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		55.0	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		63.3	ug/kg	0.300	1.00
67-66-3	Chloroform		55.8	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		54.9	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		61.8	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		59.3	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		65.3	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		56.5	ug/kg	0.300	1.00
71-43-2	Benzene		51.6	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		56.0	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		53.1	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		57.1	ug/kg	0.300	1.00
74-95-3	Dibromomethane		55.3	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		261	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		55.5	ug/kg	0.300	1.00
108-88-3	Toluene		49.5	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.9	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		48.8	ug/kg	0.300	1.00
591-78-6	2-Hexanone		263	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		48.1	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		54.3	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		54.9	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		51.9	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		51.1	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202042307**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 13:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 12:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x603LA.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.5	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		104	ug/kg	0.300	2.00
95-47-6	o-Xylene		51.2	ug/kg	0.300	1.00
100-42-5	Styrene		54.0	ug/kg	0.300	1.00
75-25-2	Bromoform		55.1	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		46.6	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		47.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		49.6	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		49.7	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		48.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		50.1	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		50.6	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		49.6	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		51.6	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		50.4	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		50.8	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		53.2	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		50.5	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		50.1	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		51.4	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		52.5	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		54.7	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		49.3	ug/kg	0.300	1.00

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x603LA.d
Lab Smp Id: 1202042307 Client Smp ID: LCS
Inj Date : 13-FEB-2010 13:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202042307|952862|1|VOAF|1|
Misc Info : GEL 5G N/A UVM100126-01D/IVM100210-01
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 3 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

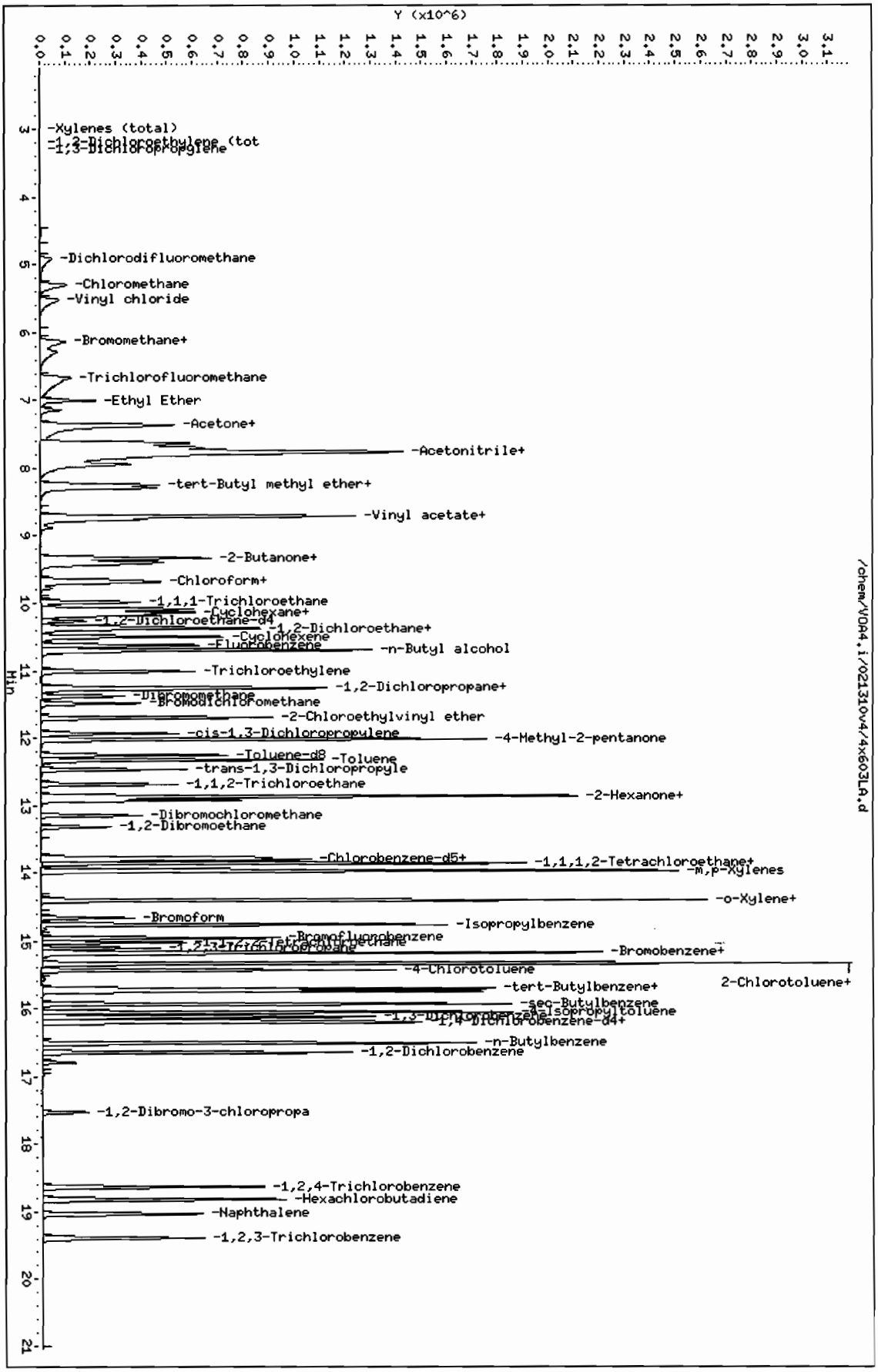
Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				1315767	155.551	156
M 2 1,2-Dichloroethylene (total)	96				718623	111.977	112
M 135 1,3-Dichloropropylene	75				690848	113.008	113
3 Dichlorodifluoromethane	85	4.912	4.911	(0.463)	219784	67.9724	68.0
4 Chloromethane	50	5.299	5.299	(0.499)	339303	49.3505	49.4
5 Vinyl chloride	62	5.521	5.521	(0.520)	302171	54.3673	54.4
6 Bromomethane	94	6.130	6.130	(0.577)	220877	57.6395	57.6
7 Chloroethane	64	6.288	6.281	(0.592)	207016	57.8526	57.8
8 Trichlorofluoromethane	101	6.668	6.663	(0.628)	378213	65.5887	65.6
134 Ethyl Ether	59	7.004	6.998	(0.660)	193884	53.3680	53.4
10 Acetone	43	7.357	7.358	(0.693)	943402	303.919	304
11 1,1-Dichloroethylene	61	7.388	7.389	(0.696)	382214	56.9773	57.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	13 Iodomethane	142	7.631	7.632	(0.719)	2081161	275.336	275
	15 Acetonitrile	41	7.705	7.699	(0.726)	887808	1283.43	1280
	128 Methyl acetate	43	7.753	7.748	(0.730)	916101	258.804	259
	14 Carbon disulfide	76	7.772	7.773	(0.732)	3812387	287.154	287
	17 Methylene chloride	84	7.942	7.937	(0.748)	255582	52.6953	52.7
	20 tert-Butyl methyl ether	73	8.241	8.242	(0.776)	593726	52.4321	52.4
	21 trans-1,2-Dichloroethylene	61	8.284	8.285	(0.780)	348499	56.9324	56.9
	23 Vinyl acetate	43	8.711	8.705	(0.820)	2464699	315.769	316
	22 1,1-Dichloroethane	63	8.759	8.760	(0.825)	420534	54.6464	54.6
	30 2-Butanone	43	9.326	9.327	(0.878)	1108492	296.346	296
	31 cis-1,2-Dichloroethylene	61	9.387	9.388	(0.884)	370124	55.0449	55.0
	25 2,2-Dichloropropane	77	9.424	9.419	(0.887)	236648	63.2778	63.3
	29 Bromochloromethane	128	9.662	9.656	(0.910)	122493	54.9214	54.9
	32 Chloroform	83	9.692	9.687	(0.913)	389838	55.8381	55.8
	36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	329508	61.8162	61.8
	129 Cyclohexane	56	10.082	10.083	(0.949)	420485	59.0778	59.1
	34 1,1-Dichloropropene	75	10.131	10.132	(0.954)	309948	59.3431	59.3
	33 Carbon tetrachloride	117	10.174	10.175	(0.958)	340084	65.3145	65.3
$	138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	161366	47.2579	47.2
	37 1,2-Dichloroethane	62	10.344	10.339	(0.974)	317042	56.5127	56.5
	38 Benzene	78	10.375	10.370	(0.977)	850305	51.5930	51.6
	139 Cyclohexene	67	10.497	10.492	(0.989)	438720	56.1093	56.1
*	40 Fluorobenzene	96	10.619	10.620	(1.000)	663934	50.0000	
	131 n-Butyl alcohol	56	10.692	10.687	(1.007)	983117	5660.26	5660
	39 Trichloroethylene	95	11.003	11.004	(1.036)	235306	55.9772	56.0
	130 Methylcyclohexane	83	11.265	11.260	(1.061)	378578	58.0813	58.1
	41 1,2-Dichloropropane	63	11.247	11.241	(1.059)	243957	53.1046	53.1
	43 Dibromomethane	93	11.375	11.376	(1.071)	139302	55.2684	55.3
	45 Bromodichloromethane	83	11.484	11.485	(1.082)	293402	57.0839	57.1
	44 2-Chloroethylvinyl ether	63	11.698	11.699	(1.102)	447878	196.742	197
	46 cis-1,3-Dichloropropylene	75	11.936	11.930	(1.124)	355124	55.4886	55.5
	49 4-Methyl-2-pentanone	58	12.021	12.016	(0.873)	559118	260.862	261
$	47 Toluene-d8	98	12.253	12.253	(0.890)	548384	42.4413	42.4
	50 Toluene	92	12.326	12.327	(0.895)	544394	49.4885	49.5
	53 trans-1,3-Dichloropropylene	75	12.466	12.461	(0.905)	335724	53.8704	53.9
	54 1,1,2-Trichloroethane	83	12.685	12.680	(0.921)	163202	48.7909	48.8
	55 2-Hexanone	43	12.856	12.857	(0.934)	1479399	263.261	263
	52 1,3-Dichloropropane	76	12.880	12.875	(0.935)	324970	48.1048	48.1
	56 Tetrachloroethylene	164	12.923	12.918	(0.938)	212148	54.2604	54.3
	57 Dibromochloromethane	129	13.149	13.144	(0.955)	251750	54.8504	54.8
	59 1,2-Dibromoethane	107	13.319	13.320	(0.967)	217602	51.9133	51.9
*	61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	564978	50.0000	
	62 Chlorobenzene	112	13.801	13.802	(1.002)	652368	51.1052	51.1
	60 1,1,1,2-Tetrachloroethane	131	13.850	13.851	(1.006)	255072	54.7242	54.7
	58 Ethylbenzene	91	13.862	13.863	(1.007)	1094902	51.4625	51.5
	63 m,p-Xylenes	106	13.972	13.973	(1.015)	872183	104.381	104
	64 o-Xylene	106	14.405	14.399	(1.046)	443584	51.1709	51.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/Kg)
	65 Styrene	104	14.405	14.399	(1.046)	742708	53.9929	54.0
	66 Bromoform	173	14.661	14.655	(0.906)	213020	55.1251	55.1
	67 Isopropylbenzene	105	14.758	14.759	(0.912)	1220611	50.1267	50.1
$	71 Bromofluorobenzene	95	14.953	14.954	(0.924)	343586	50.7454	50.7
	73 1,1,2,2-Tetrachloroethane	83	15.020	15.015	(0.928)	319548	46.6017	46.6
	74 1,2,3-Trichloropropane	110	15.112	15.107	(0.934)	87636	47.0892	47.1
	75 Bromobenzene	156	15.167	15.168	(0.937)	355635	49.6342	49.6
	76 n-Propylbenzene	91	15.185	15.180	(0.939)	1472900	49.7259	49.7
	78 1,3,5-Trimethylbenzene	105	15.331	15.332	(0.948)	1101226	50.5898	50.6
	77 2-Chlorotoluene	91	15.331	15.332	(0.948)	1007319	48.2944	48.3
	80 4-Chlorotoluene	91	15.429	15.430	(0.954)	932333	49.5599	49.6
	81 tert-Butylbenzene	119	15.703	15.704	(0.971)	1147357	51.6406	51.6
	79 1,2,4-Trimethylbenzene	105	15.746	15.741	(0.973)	1141945	50.4053	50.4
	83 sec-Butylbenzene	105	15.935	15.930	(0.985)	1517321	50.7847	50.8
	84 4-Isopropyltoluene	119	16.057	16.052	(0.992)	1277078	53.2426	53.2
	85 1,3-Dichlorobenzene	146	16.124	16.119	(0.997)	695284	50.4984	50.5
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	376023	50.0000	
	87 1,4-Dichlorobenzene	146	16.209	16.204	(1.002)	700305	50.1241	50.1
	89 n-Butylbenzene	91	16.508	16.503	(1.020)	1150628	51.4036	51.4
	90 1,2-Dichlorobenzene	146	16.642	16.643	(1.029)	660013	49.3156	49.3
	92 1,2-Dibromo-3-chloropropane	157	17.532	17.533	(1.084)	71368	52.4669	52.5
	93 1,2,4-Trichlorobenzene	180	18.635	18.630	(1.152)	423226	57.6909	57.7
	94 Hexachlorobutadiene	225	18.818	18.819	(1.163)	301438	55.8333	55.8
	95 Naphthalene	128	19.032	19.033	(1.176)	756248	53.7877	53.8
	96 1,2,3-Trichlorobenzene	180	19.385	19.386	(1.198)	337460	57.4648	57.5


Data File: /chem/VOA4.i/021310v4/4x603LA.d
Date : 13-FEB-2010 13:28
Client ID: LCS
Sample Info: 112020423071952862|1|VOAF|1|
Column phase: RTX-VOLATILES
Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25
/chem/VOA4.i/021310v4/4x603LA.d
Y (x10^6)
Min
-Xylenes (total)
-1,2-Dichloroethylene (tot
-1,3-Dichloropropylene
-Dichlorodifluoromethane
-Chloromethane
-Vinyl chloride
-Bromomethane+
-Trichlorofluoromethane
-Ethyl Ether
-Acetone+
-Acetonitrile+
-tert-Butyl methyl ether+
-Vinyl acetate+
-2-Butanone+
-Chloroform+
-1,1,1-Trichloroethane
-Cyclohexane+
-1,2-Dichloroethane-d4
-1,2-Dichloroethane+
-Cyclohexene
-Fluorobenzene
-n-Butyl alcohol
-Trichloroethylene
-1,2-Dichloropropane+
-Dibromomethane
-Bromodichloromethane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropylene
-4-Methyl-2-pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone+
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene
-Bromofluorobenzene
-Bromobenzene+
-4-Chlorotoluene
2-Chlorotoluene+
-tert-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene
-1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202042308**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 14:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 12:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x605SA.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:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202042308**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 14:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 12:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x605SA.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-Trifluoroetha *Trichlorotrifluoroethane*		306	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

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x605SA.d
Lab Smp Id: 1202042308 Client Smp ID: LCS
Inj Date : 13-FEB-2010 14:23
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202042308|952862|1|VOAF|1|
Misc Info : GEL 5G N/A UVM100118-08B/UVM100125-08B
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 5 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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
153 Chlorotrifluoroethylene	116	4.826	4.826	(0.454)	68750	24.9350	24.9(R)
154 2-Chloro-1,1,1-trifluoroethane	118	5.650	5.650	(0.532)	610640	127.913	128
9 Acrolein	56	7.187	7.186	(0.677)	196519	263.301	263
12 Trichlorotrifluoroethane	85	7.357	7.357	(0.693)	361617	305.996	306
147 Isopropyl Alcohol	45	7.437	7.436	(0.700)	1190938	3120.69	3120
16 Allyl chloride	41	7.802	7.802	(0.735)	1518852	235.123	235
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	1794554	3097.47	3100
18 Acrylonitrile	53	8.174	8.174	(0.770)	413660	240.142	240
149 Isopropyl ether	45	8.741	8.741	(0.823)	680226	44.9086	44.9
24 2-Chloro-1,3-butadiene	53	8.869	8.869	(0.835)	291476	52.9012	52.9
150 Ethyl tert-butyl ether	59	9.144	9.143	(0.861)	620314	47.3058	47.3
26 Ethyl acetate	43	9.339	9.339	(0.879)	978085	216.030	216

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
28 Propionitrile	54	9.393	9.393	(0.885)	164946	238.262	238
27 Methacrylonitrile	41	9.576	9.576	(0.902)	626647	237.416	237
72 Tetrahydrofuran	42	9.717	9.716	(0.601)	344079	200.886	201
19 Isobutyl alcohol	41	10.003	10.009	(0.942)	514378	2565.25	2560
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.966)	145829	42.8327	42.8
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	553423	48.4181	48.4
* 40 Fluorobenzene	96	10.619	10.620	(1.000)	661996	50.0000	
42 Methyl methacrylate	69	11.210	11.210	(1.056)	624570	238.475	238
97 1,4-Dioxane	88	11.326	11.326	(1.067)	127241	2657.98	2660
48 2-Nitropropane	43	11.674	11.673	(1.099)	302415	278.004	278
$ 47 Toluene-d8	98	12.253	12.253	(0.890)	547953	41.7896	41.8
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	1203005	224.371	224
152 1-Chlorohexane	55	13.661	13.661	(1.286)	247244	60.2664	60.3
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	573338	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	519872	278.953	279
70 Cyclohexanone	42	14.905	14.905	(1.082)	284071	365.986	366
$ 71 Bromofluorobenzene	95	14.953	14.954	(0.924)	349479	51.4962	51.5
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	504635	276.824	277
82 Pentachloroethane	167	15.770	15.770	(0.975)	682221	372.809	373
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	376896	50.0000	
88 Benzyl chloride	91	16.319	16.319	(1.009)	2720856	320.965	321
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	810246	251.467	251

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA4.i/021310v4/4x605SA.d

Page 1

Date : 13-FEB-2010 14:23

Client ID: LCS

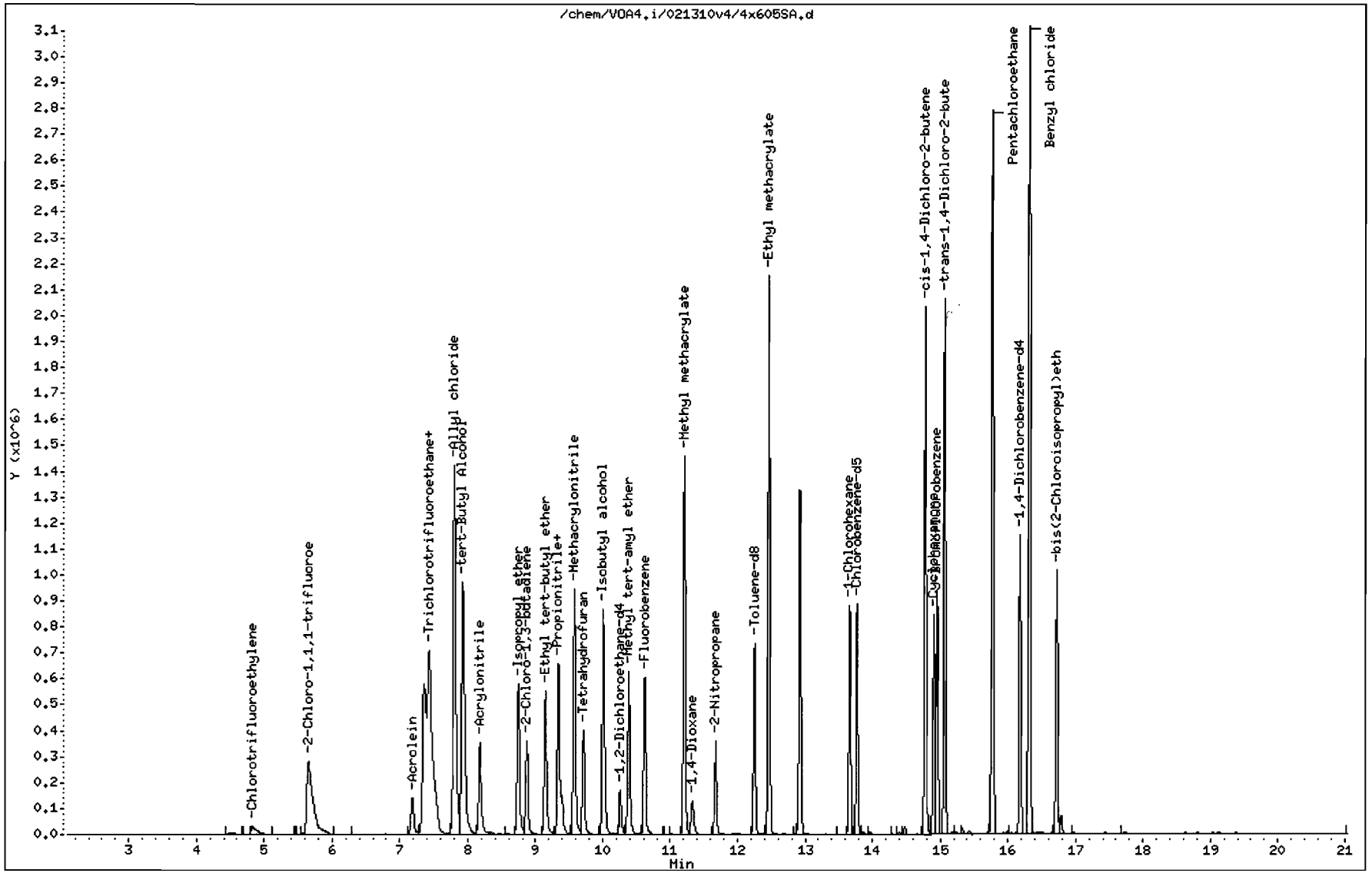
Instrument: VOA4.i

Sample Info: |120204230819528621|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202052762**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 19:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 18:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y103la.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		58.7	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.8	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		51.8	ug/kg	0.300	1.00
74-83-9	Bromomethane		53.6	ug/kg	0.300	1.00
75-00-3	Chloroethane		54.9	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		60.9	ug/kg	0.300	1.00
67-64-1	Acetone		275	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		52.3	ug/kg	0.300	1.00
74-88-4	Iodomethane		269	ug/kg	1.60	5.00
75-09-2	Methylene chloride		49.3	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		266	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		52.8	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		51.3	ug/kg	0.300	1.00
78-93-3	2-Butanone		278	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		51.3	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		59.0	ug/kg	0.300	1.00
67-66-3	Chloroform		51.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		53.5	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		57.7	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		55.6	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		61.5	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		50.7	ug/kg	0.300	1.00
71-43-2	Benzene		48.6	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		53.8	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		49.9	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		54.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		52.9	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		264	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		53.1	ug/kg	0.300	1.00
108-88-3	Toluene		46.5	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		51.0	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		46.8	ug/kg	0.300	1.00
591-78-6	2-Hexanone		255	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		44.9	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		53.0	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		55.3	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		50.8	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		49.9	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202052762**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 19:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 18:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y103la.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		49.3	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		102	ug/kg	0.300	2.00
95-47-6	o-Xylene		50.4	ug/kg	0.300	1.00
100-42-5	Styrene		53.6	ug/kg	0.300	1.00
75-25-2	Bromoform		58.4	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.7	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		48.0	ug/kg	0.300	1.00
108-86-1	Bromobenzene		49.5	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		47.0	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		45.8	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		48.6	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		48.4	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		47.6	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		51.0	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		48.6	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		49.0	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		52.0	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		50.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		50.6	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		49.8	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		56.3	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		54.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		50.1	ug/kg	0.300	1.00

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021510v4/4y1031a.d
Lab Smp Id: 1202052762 Client Smp ID: LCS
Inj Date : 15-FEB-2010 19:28
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202052762|952862|1|VOAF|1|
Misc Info : GEL 5G N/A UVM100126-01D/IVM100214-01
Comment :
Method : /chem/VOA4.i/021510v4/VOA4-8260-020310.m
Meth Date : 15-Feb-2010 20:32 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 3 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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)	106				1515529	152.291	152
M 2 1,2-Dichloroethylene (total)	96				777434	104.136	104
M 135 1,3-Dichloropropylene	75				769154	108.168	108
3 Dichlorodifluoromethane	85	4.904	4.912	(0.462)	220591	58.6519	58.6
4 Chloromethane	50	5.299	5.299	(0.499)	366458	45.8233	45.8
5 Vinyl chloride	62	5.521	5.521	(0.520)	334796	51.7873	51.8
6 Bromomethane	94	6.138	6.130	(0.578)	239047	53.6303	53.6
7 Chloroethane	64	6.288	6.288	(0.592)	228354	54.8637	54.9
8 Trichlorofluoromethane	101	6.662	6.668	(0.627)	408183	60.8562	60.8
134 Ethyl Ether	59	7.004	6.997	(0.660)	217229	51.4060	51.4
10 Acetone	43	7.357	7.357	(0.693)	993513	275.164	275
11 1,1-Dichloroethylene	61	7.382	7.381	(0.695)	408416	52.3427	52.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
	13 Iodomethane	142	7.625	7.625	(0.718)	2365670	269.073	269
	15 Acetonitrile	41	7.699	7.698	(0.725)	973527	1209.92	1210
	128 Methyl acetate	43	7.753	7.747	(0.730)	1006308	244.409	244
	14 Carbon disulfide	76	7.772	7.772	(0.732)	4104203	265.769	266
	17 Methylene chloride	84	7.942	7.936	(0.748)	278921	49.3236	49.3
	20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	651611	49.4717	49.5
	21 trans-1,2-Dichloroethylene	61	8.284	8.284	(0.780)	376091	52.8212	52.8
	23 Vinyl acetate	43	8.711	8.710	(0.820)	2650034	291.887	292
	22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	459076	51.2865	51.3
	30 2-Butanone	43	9.326	9.326	(0.878)	1207418	277.512	278
	31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	401343	51.3148	51.3
	25 2,2-Dichloropropane	77	9.424	9.418	(0.887)	256566	58.9800	59.0
	29 Bromochloromethane	128	9.662	9.655	(0.910)	138824	53.5122	53.5
	32 Chloroform	83	9.692	9.692	(0.913)	421387	51.8901	51.9
	36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	357830	57.7126	57.7
	129 Cyclohexane	56	10.082	10.082	(0.949)	459096	55.4543	55.4
	34 1,1-Dichloropropene	75	10.131	10.131	(0.954)	337586	55.5678	55.6
	33 Carbon tetrachloride	117	10.174	10.174	(0.958)	372314	61.4739	61.5
$	138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	163933	41.2749	41.3
	37 1,2-Dichloroethane	62	10.344	10.338	(0.974)	330562	50.6570	50.6
	38 Benzene	78	10.375	10.375	(0.977)	931378	48.5847	48.6
	139 Cyclohexene	67	10.497	10.491	(0.989)	485908	53.4268	53.4
*	40 Fluorobenzene	96	10.619	10.619	(1.000)	772267	50.0000	
	131 n-Butyl alcohol	56	10.692	10.686	(1.007)	1234801	6112.03	6110
	39 Trichloroethylene	95	11.009	11.003	(1.037)	263209	53.8314	53.8
	130 Methylcyclohexane	83	11.265	11.265	(1.061)	425218	56.0854	56.1
	41 1,2-Dichloropropane	63	11.241	11.240	(1.059)	266660	49.9039	49.9
	43 Dibromomethane	93	11.375	11.375	(1.071)	155208	52.9409	52.9
	45 Bromodichloromethane	83	11.484	11.484	(1.082)	322781	53.9904	54.0
	44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	662154	250.066	250
	46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	395183	53.0859	53.1
	49 4-Methyl-2-pentanone	58	12.021	12.015	(0.873)	665215	263.824	264
$	47 Toluene-d8	98	12.253	12.252	(0.890)	607176	39.9450	39.9
	50 Toluene	92	12.326	12.320	(0.895)	601682	46.4946	46.5
	53 trans-1,3-Dichloropropylene	75	12.460	12.460	(0.905)	373971	51.0094	51.0
	54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	184270	46.8287	46.8
	55 2-Hexanone	43	12.856	12.856	(0.934)	1688261	255.379	255
	52 1,3-Dichloropropane	76	12.874	12.874	(0.935)	356807	44.8976	44.9
	56 Tetrachloroethylene	164	12.923	12.917	(0.938)	243699	52.9837	53.0
	57 Dibromochloromethane	129	13.143	13.143	(0.954)	298671	55.3156	55.3
	59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	250473	50.7950	50.8
*	61 Chlorobenzene-d5	117	13.771	13.770	(1.000)	664641	50.0000	
	62 Chlorobenzene	112	13.801	13.801	(1.002)	748815	49.8645	49.9
	60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	296831	54.1341	54.1
	58 Ethylbenzene	91	13.862	13.862	(1.007)	1234439	49.3207	49.3
	63 m,p-Xylenes	106	13.972	13.972	(1.015)	1001707	101.905	102
	64 o-Xylene	106	14.405	14.398	(1.046)	513822	50.3854	50.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
65	Styrene	104	14.405	14.398	(1.046)	866788	53.5644	53.6
66	Bromoform	173	14.655	14.654	(0.906)	270299	58.4391	58.4
67	Isopropylbenzene	105	14.758	14.758	(0.912)	1415283	48.5586	48.6
$ 71	Bromofluorobenzene	95	14.953	14.953	(0.924)	401370	49.5264	49.5
73	1,1,2,2-Tetrachloroethane	83	15.014	15.014	(0.928)	391401	47.6890	47.7
74	1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	107031	48.0484	48.0
75	Bromobenzene	156	15.167	15.167	(0.937)	424832	49.5364	49.5
76	n-Propylbenzene	91	15.185	15.179	(0.939)	1667900	47.0447	47.0
78	1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	1260091	48.3636	48.4
77	2-Chlorotoluene	91	15.331	15.331	(0.948)	1144338	45.8368	45.8
80	4-Chlorotoluene	91	15.429	15.429	(0.954)	1070973	47.5629	47.6
81	tert-Butylbenzene	119	15.703	15.703	(0.971)	1355434	50.9684	51.0
79	1,2,4-Trimethylbenzene	105	15.740	15.740	(0.973)	1318409	48.6196	48.6
83	sec-Butylbenzene	105	15.929	15.929	(0.985)	1753779	49.0412	49.0
84	4-Isopropyltoluene	119	16.051	16.050	(0.992)	1491942	51.9666	52.0
85	1,3-Dichlorobenzene	146	16.124	16.118	(0.997)	835870	50.7206	50.7
* 86	1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	450074	50.0000	
87	1,4-Dichlorobenzene	146	16.209	16.203	(1.002)	846213	50.6022	50.6
89	n-Butylbenzene	91	16.502	16.502	(1.020)	1333289	49.7638	49.8
90	1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	802308	50.0845	50.1
92	1,2-Dibromo-3-chloropropane	157	17.532	17.526	(1.084)	91819	56.3393	56.3
93	1,2,4-Trichlorobenzene	180	18.629	18.629	(1.151)	515694	58.7297	58.7
94	Hexachlorobutadiene	225	18.818	18.818	(1.163)	367856	56.9250	56.9
95	Naphthalene	128	19.032	19.032	(1.176)	927310	55.1029	55.1
96	1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	421219	59.9264	59.9

Data File: /chem/VOA4.i/021510v4/4y1031a.d

Page 1

Date : 15-FEB-2010 19:28

Client ID: LCS

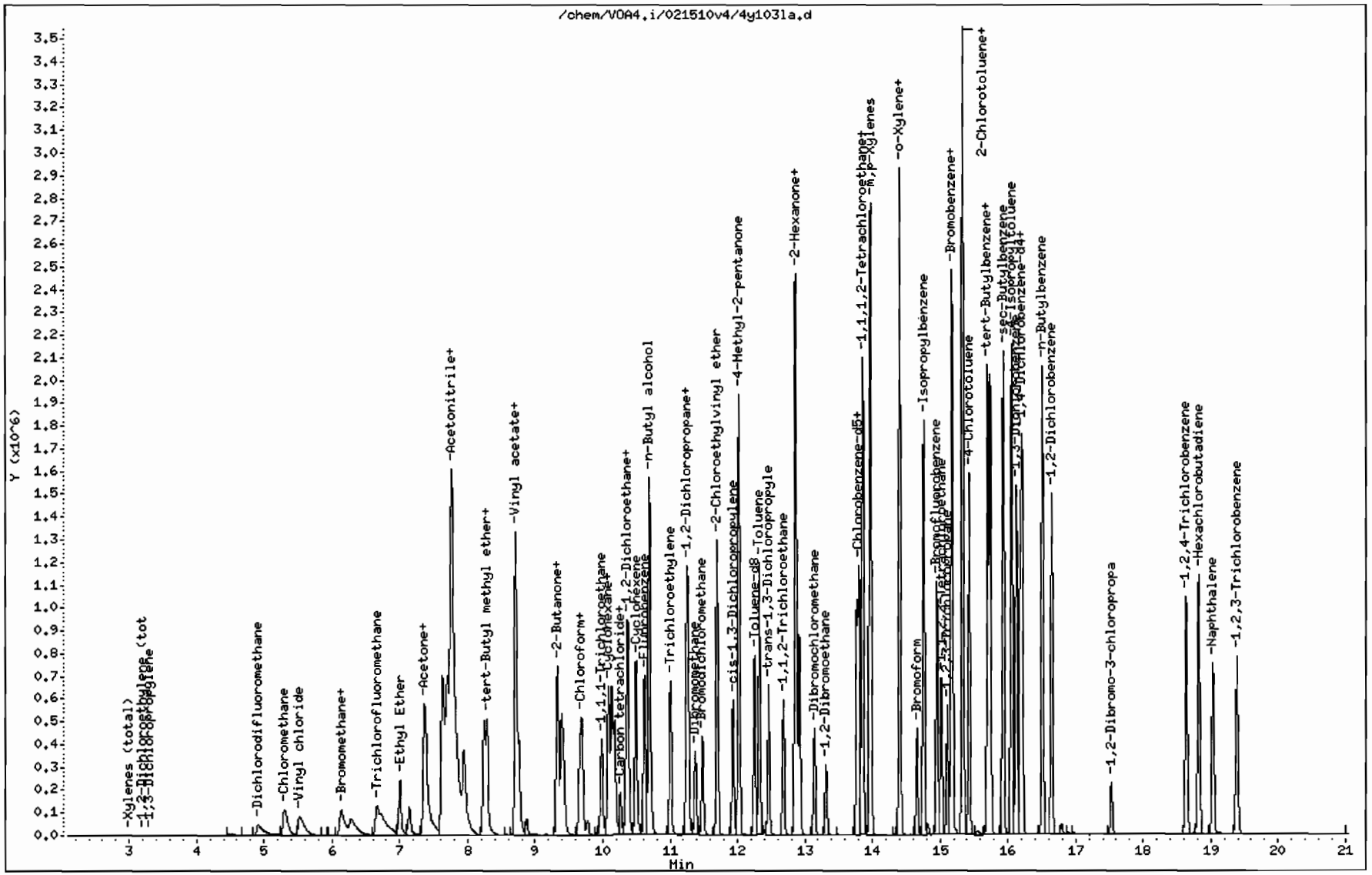
Instrument: VOA4.i

Sample Info: |120205276219528621|VOAF|1|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202052763**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 20:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 18:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y105sa.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:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202052763**				
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 952861**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/15/2010 20:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/15/2010 18:15**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4y105sa.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-Trifluoroetha *Trichlorotrifluoroethane*		352	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

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021510v4/4y105sa.d
Lab Smp Id: 1202052763 Client Smp ID: LCS
Inj Date : 15-FEB-2010 20:23
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202052763|952862|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091216-08B/UVM100125-08C
Comment :
Method : /chem/VOA4.i/021510v4/VOA4-8260-020310.m
Meth Date : 15-Feb-2010 20:32 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 5 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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	494777	155.487	155
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	889624	161.467	161
9 Acrolein	56	7.186	7.180	(0.677)	275863	320.250	320
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	479465	351.926	352(R)
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	1291550	2932.38	2930
16 Allyl chloride	41	7.802	7.802	(0.735)	1969289	264.141	264
148 tert-Butyl Alcohol	59	7.930	7.930	(0.747)	2014187	3012.30	3010
18 Acrylonitrile	53	8.180	8.180	(0.770)	566578	284.991	285
149 Isopropyl ether	45	8.747	8.747	(0.824)	850731	48.6648	48.7
24 2-Chloro-1,3-butadiene	53	8.875	8.869	(0.836)	384107	60.4035	60.4
150 Ethyl tert-butyl ether	59	9.149	9.143	(0.862)	787977	52.0672	52.1
26 Ethyl acetate	43	9.345	9.345	(0.880)	1318430	252.315	252

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/Kg)
	28 Propionitrile	54	9.393	9.393	(0.885)	223850	280.168	280
	27 Methacrylonitrile	41	9.576	9.576	(0.902)	792446	260.138	260
	72 Tetrahydrofuran	42	9.716	9.717	(0.601)	467509	231.709	232
	19 Isobutyl alcohol	41	10.009	10.009	(0.943)	637094	2752.95	2750
$	138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	154020	39.1973	39.2
	151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	682795	51.7593	51.8
*	40 Fluorobenzene	96	10.619	10.619	(1.000)	764026	50.0000	
	42 Methyl methacrylate	69	11.210	11.210	(1.056)	829725	274.501	274
	97 1,4-Dioxane	88	11.326	11.326	(1.067)	163938	2967.23	2970
	48 2-Nitropropane	43	11.673	11.673	(1.099)	391367	311.730	312
$	47 Toluene-d8	98	12.252	12.252	(0.890)	597071	39.4428	39.4
	51 Ethyl methacrylate	69	12.466	12.466	(0.905)	1525617	246.468	246
	152 1-Chlorohexane	55	13.661	13.661	(1.286)	256297	54.1303	54.1
*	61 Chlorobenzene-d5	117	13.771	13.770	(1.000)	661902	50.0000	
	68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	620040	282.433	282
	70 Cyclohexanone	42	14.904	14.905	(1.082)	356994	398.397	398
$	71 Bromofluorobenzene	95	14.953	14.953	(0.924)	398763	49.8805	49.9
	69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	597699	278.337	278
	82 Pentachloroethane	167	15.770	15.770	(0.975)	916702	425.257	425(R)
*	86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	443976	50.0000	
	88 Benzyl chloride	91	16.319	16.319	(1.009)	3263235	326.785	327
	91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1016101	267.709	268

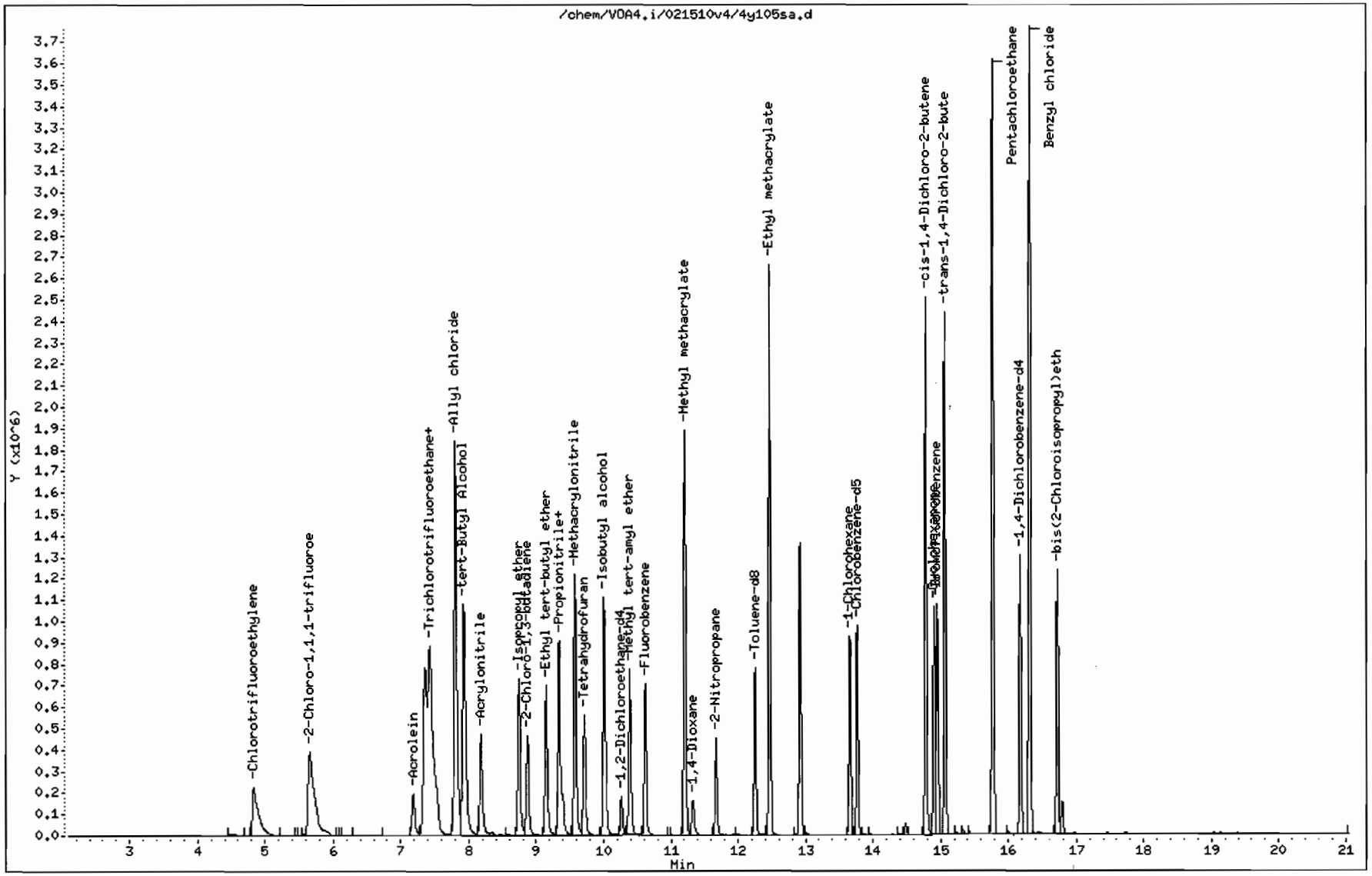
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA4.i/021510v4/4y105sa.d
Date : 15-FEB-2010 20:23
Client ID: LCS
Sample Info: |120205276319528621|VOAF|1|

Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25

Column phase: RTX-VOLATILES



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202042305**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8361PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 22:36**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x623.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		69.2	ug/kg	0.415	1.22
74-87-3	Chloromethane		58.4	ug/kg	0.366	1.22
75-01-4	Vinyl chloride		59.7	ug/kg	0.366	1.22
74-83-9	Bromomethane		55.5	ug/kg	0.366	1.22
75-00-3	Chloroethane		60.8	ug/kg	0.366	1.22
75-69-4	Trichlorofluoromethane		67.6	ug/kg	0.366	1.22
67-64-1	Acetone		109	ug/kg	2.03	6.10
75-35-4	1,1-Dichloroethylene		59.8	ug/kg	0.366	1.22
74-88-4	Iodomethane		241	ug/kg	1.95	6.10
75-09-2	Methylene chloride		59.8	ug/kg	2.44	6.10
75-15-0	Carbon disulfide		292	ug/kg	1.53	6.10
156-60-5	trans-1,2-Dichloroethylene		58.2	ug/kg	0.366	1.22
75-34-3	1,1-Dichloroethane		59.3	ug/kg	0.366	1.22
78-93-3	2-Butanone		139	ug/kg	1.83	6.10
156-59-2	cis-1,2-Dichloroethylene		57.9	ug/kg	0.366	1.22
594-20-7	2,2-Dichloropropane		59.9	ug/kg	0.366	1.22
67-66-3	Chloroform		60.6	ug/kg	0.366	1.22
74-97-5	Bromochloromethane		58.9	ug/kg	0.403	1.22
71-55-6	1,1,1-Trichloroethane		63.4	ug/kg	0.366	1.22
563-58-6	1,1-Dichloropropene		57.4	ug/kg	0.366	1.22
56-23-5	Carbon tetrachloride		65.3	ug/kg	0.366	1.22
107-06-2	1,2-Dichloroethane		61.5	ug/kg	0.366	1.22
71-43-2	Benzene		53.3	ug/kg	0.366	1.22
79-01-6	Trichloroethylene		54.6	ug/kg	0.403	1.22
78-87-5	1,2-Dichloropropane		56.1	ug/kg	0.366	1.22
75-27-4	Bromodichloromethane		60.9	ug/kg	0.366	1.22
74-95-3	Dibromomethane		58.4	ug/kg	0.366	1.22
108-10-1	4-Methyl-2-pentanone		226	ug/kg	1.53	6.10
10061-01-5	cis-1,3-Dichloropropylene		44.5	ug/kg	0.366	1.22
108-88-3	Toluene		53.2	ug/kg	0.366	1.22
10061-02-6	trans-1,3-Dichloropropylene		47.3	ug/kg	0.366	1.22
79-00-5	1,1,2-Trichloroethane		54.7	ug/kg	0.366	1.22
591-78-6	2-Hexanone		96.3	ug/kg	1.83	6.10
142-28-9	1,3-Dichloropropane		55.0	ug/kg	0.366	1.22
127-18-4	Tetrachloroethylene		52.8	ug/kg	0.366	1.22
124-48-1	Dibromochloromethane		59.2	ug/kg	0.366	1.22
106-93-4	1,2-Dibromoethane		51.8	ug/kg	0.366	1.22
108-90-7	Chlorobenzene		50.6	ug/kg	0.366	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202042305**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8361PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 22:36**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:12**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x623.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		52.9	ug/kg	0.366	1.22
179601-23-1	m,p-Xylenes		93.1	ug/kg	0.366	2.44
95-47-6	o-Xylene		52.3	ug/kg	0.366	1.22
100-42-5	Styrene		46.9	ug/kg	0.366	1.22
75-25-2	Bromoform		61.9	ug/kg	0.366	1.22
79-34-5	1,1,2,2-Tetrachloroethane		57.7	ug/kg	0.366	1.22
96-18-4	1,2,3-Trichloropropane		56.7	ug/kg	0.366	1.22
108-86-1	Bromobenzene		52.6	ug/kg	0.366	1.22
103-65-1	n-Propylbenzene		55.2	ug/kg	0.366	1.22
95-49-8	2-Chlorotoluene		55.2	ug/kg	0.366	1.22
98-82-8	Isopropylbenzene		59.8	ug/kg	0.366	1.22
108-67-8	1,3,5-Trimethylbenzene		57.1	ug/kg	0.366	1.22
106-43-4	4-Chlorotoluene		46.7	ug/kg	0.366	1.22
98-06-6	tert-Butylbenzene		58.1	ug/kg	0.366	1.22
95-63-6	1,2,4-Trimethylbenzene		47.0	ug/kg	0.366	1.22
135-98-8	sec-Butylbenzene		54.7	ug/kg	0.366	1.22
99-87-6	4-Isopropyltoluene		22.8	ug/kg	0.366	1.22
541-73-1	1,3-Dichlorobenzene		46.9	ug/kg	0.366	1.22
106-46-7	1,4-Dichlorobenzene		45.4	ug/kg	0.366	1.22
104-51-8	n-Butylbenzene		45.1	ug/kg	0.366	1.22
96-12-8	1,2-Dibromo-3-chloropropane		47.7	ug/kg	0.366	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.10	ug/kg	1.95	6.10
630-20-6	1,1,1,2-Tetrachloroethane		59.9	ug/kg	0.366	1.22
95-50-1	1,2-Dichlorobenzene		45.7	ug/kg	0.366	1.22

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

Data file : /chem/VOA4.i/021310v4/4x623.d
Lab Smp Id: 1202042305 Client Smp ID: RE15-10-8361MS
Inj Date : 13-FEB-2010 22:36
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202042305|952862|1|VOAF|1|
Misc Info : LANL 5G N/A MS 246442002
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 23 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.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	18.04950	% 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)
* 40 Fluorobenzene	96	10.613	10.620	(1.000)	619646	50.0000	
* 61 Chlorobenzene-d5	117	13.764	13.771	(1.000)	480320	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.180	(1.000)	265315	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.259	10.260	(0.967)	144395	45.3102	55.3
$ 47 Toluene-d8	98	12.246	12.253	(0.890)	491723	44.7636	54.6
$ 71 Bromofluorobenzene	95	14.947	14.954	(0.924)	275104	57.5852	70.3
3 Dichlorodifluoromethane	85	4.904	4.911	(0.462)	171047	56.6805	69.2
4 Chloromethane	50	5.299	5.299	(0.499)	306874	47.8240	58.4
5 Vinyl chloride	62	5.521	5.521	(0.520)	253773	48.9229	59.7
6 Bromomethane	94	6.130	6.130	(0.578)	162648	45.4778	55.5
7 Chloroethane	64	6.288	6.281	(0.592)	166482	49.8503	60.8
8 Trichlorofluoromethane	101	6.674	6.663	(0.629)	298356	55.4382	67.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/Kg)
10 Acetone	43	7.357	7.358	(0.693)	257900	89.0213	109
11 1,1-Dichloroethylene	61	7.388	7.389	(0.696)	306619	48.9752	59.8
87 1,4-Dichlorobenzene	146	16.203	16.204	(1.002)	366519	37.1799	45.4
13 Iodomethane	142	7.631	7.632	(0.719)	1393741	197.570	241
17 Methylene chloride	84	7.942	7.937	(0.748)	222306	48.9820	59.8
14 Carbon disulfide	76	7.772	7.773	(0.732)	2965858	239.359	292
21 trans-1,2-Dichloroethylene	61	8.284	8.285	(0.781)	272448	47.6895	58.2
22 1,1-Dichloroethane	63	8.759	8.760	(0.825)	348900	48.5784	59.3
30 2-Butanone	43	9.326	9.327	(0.879)	397984	114.002	139
31 cis-1,2-Dichloroethylene	61	9.387	9.388	(0.885)	297984	47.4836	57.9
85 1,3-Dichlorobenzene	146	16.118	16.119	(0.996)	373229	38.4188	46.9
25 2,2-Dichloropropane	77	9.418	9.419	(0.887)	171352	49.0929	59.9
32 Chloroform	83	9.686	9.687	(0.913)	323544	49.6547	60.6
90 1,2-Dichlorobenzene	146	16.642	16.643	(1.029)	353970	37.4844	45.7
29 Bromochloromethane	128	9.655	9.656	(0.910)	100534	48.2975	58.9
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	258643	51.9898	63.4
34 1,1-Dichloropropene	75	10.131	10.132	(0.955)	229365	47.0533	57.4
33 Carbon tetrachloride	117	10.174	10.175	(0.959)	260034	53.5100	65.3
37 1,2-Dichloroethane	62	10.338	10.339	(0.974)	263702	50.3645	61.4
38 Benzene	78	10.375	10.370	(0.978)	672294	43.7075	53.3
39 Trichloroethylene	95	11.003	11.004	(1.037)	175586	44.7558	54.6
41 1,2-Dichloropropane	63	11.241	11.241	(1.059)	197058	45.9615	56.1
45 Bromodichloromethane	83	11.478	11.485	(1.082)	239473	49.9216	60.9
43 Dibromomethane	93	11.375	11.376	(1.072)	112575	47.8567	58.4
49 4-Methyl-2-pentanone	58	12.015	12.016	(0.873)	337341	185.130	226
46 cis-1,3-Dichloropropylene	75	11.929	11.930	(1.124)	217630	36.4354	44.5
50 Toluene	92	12.320	12.327	(0.895)	407626	43.5867	53.2
53 trans-1,3-Dichloropropylene	75	12.460	12.461	(0.905)	205463	38.7795	47.3
54 1,1,2-Trichloroethane	83	12.679	12.680	(0.921)	127441	44.8150	54.7
55 2-Hexanone	43	12.856	12.857	(0.934)	376892	78.8895	96.3
52 1,3-Dichloropropane	76	12.874	12.875	(0.935)	258942	45.0867	55.0(Q)
56 Tetrachloroethylene	164	12.917	12.918	(0.938)	143888	43.2882	52.8
57 Dibromochloromethane	129	13.143	13.144	(0.955)	189305	48.5147	59.2
59 1,2-Dibromoethane	107	13.313	13.320	(0.967)	151267	42.4483	51.8
62 Chlorobenzene	112	13.801	13.802	(1.003)	450071	41.4719	50.6
60 1,1,1,2-Tetrachloroethane	131	13.850	13.851	(1.006)	194480	49.0787	59.9
58 Ethylbenzene	91	13.862	13.863	(1.007)	783838	43.3354	52.9
63 m,p-Xylenes	106	13.966	13.973	(1.015)	542013	76.2997	93.1
64 o-Xylene	106	14.398	14.399	(1.046)	315811	42.8524	52.3
65 Styrene	104	14.398	14.399	(1.046)	449062	38.3995	46.8
66 Bromoform	173	14.655	14.655	(0.906)	138318	50.7294	61.9
73 1,1,2,2-Tetrachloroethane	83	15.014	15.015	(0.928)	228792	47.2889	57.7
74 1,2,3-Trichloropropane	110	15.106	15.107	(0.934)	60982	46.4401	56.7
75 Bromobenzene	156	15.167	15.168	(0.937)	217940	43.1088	52.6
76 n-Propylbenzene	91	15.179	15.180	(0.938)	945151	45.2234	55.2
77 2-Chlorotoluene	91	15.331	15.332	(0.948)	665433	45.2154	55.2
67 Isopropylbenzene	105	14.758	14.759	(0.912)	842525	49.0374	59.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.331	15.332	(0.948)	718936	46.8090	57.1
80 4-Chlorotoluene	91	15.429	15.430	(0.954)	507702	38.2490	46.7
81 tert-Butylbenzene	119	15.703	15.704	(0.971)	746163	47.5969	58.1
79 1,2,4-Trimethylbenzene	105	15.740	15.741	(0.973)	615425	38.4998	47.0
83 sec-Butylbenzene	105	15.929	15.930	(0.985)	945782	44.8641	54.7
84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	315945	18.6683	22.8
89 n-Butylbenzene	91	16.502	16.503	(1.020)	583639	36.9535	45.1
92 1,2-Dibromo-3-chloropropane	157	17.526	17.533	(1.083)	37359	39.1190	47.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA4.i/021310v4/4x623.d
Date : 13-FEB-2010 22:36
Client ID: RE15-10-8361MS
Sample Info: 1120204230519528621|1|VOAF1|1|
Column phase: RTX-VOLATILES
Instrument: VOA4.i
Operator: ACJ
Column diameter: 0.25
Page 1
Y (x10^6)
Min
/chem/VOA4.i/021310v4/4x623.d
-Xylenes (total)
-1,3-Dichloropropylene
-Dichlorodifluoromethane
-Chloromethane
-Vinyl chloride
-Bromomethane+
-Trichlorofluoromethane
-Ethyl Ether
-Acetone+
-Acetonitrile+
-tert-Butyl methyl ether+
-1,1-Dichloroethane
-2-Butanone
-cis-1,2-Dichloroethylene+
-Chloroform+
-1,1,1-Trichloroethane
-Cyclohexane+
-Carbon tetrachloride+
-1,2-Dichloroethane+
-Cyclohexene
-n-Butyl alcohol
-Trichloroethylene
-1,2-Dichloropropane+
-Dibromomethane
-Bromodichloromethane
-cis-1,3-Dichloropropylene
-4-Methyl-2-pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone+
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene
-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-4-Chlorotoluene
2-Chlorotoluene+
-tert-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202042306**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8361PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 23:03**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:13**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x624.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		71.3	ug/kg	0.415	1.22
74-87-3	Chloromethane		59.9	ug/kg	0.366	1.22
75-01-4	Vinyl chloride		61.7	ug/kg	0.366	1.22
74-83-9	Bromomethane		58.6	ug/kg	0.366	1.22
75-00-3	Chloroethane		64.3	ug/kg	0.366	1.22
75-69-4	Trichlorofluoromethane		68.6	ug/kg	0.366	1.22
67-64-1	Acetone		107	ug/kg	2.03	6.10
75-35-4	1,1-Dichloroethylene		60.1	ug/kg	0.366	1.22
74-88-4	Iodomethane		257	ug/kg	1.95	6.10
75-09-2	Methylene chloride		61.6	ug/kg	2.44	6.10
75-15-0	Carbon disulfide		296	ug/kg	1.53	6.10
156-60-5	trans-1,2-Dichloroethylene		57.5	ug/kg	0.366	1.22
75-34-3	1,1-Dichloroethane		58.8	ug/kg	0.366	1.22
78-93-3	2-Butanone		139	ug/kg	1.83	6.10
156-59-2	cis-1,2-Dichloroethylene		57.6	ug/kg	0.366	1.22
594-20-7	2,2-Dichloropropane		60.0	ug/kg	0.366	1.22
67-66-3	Chloroform		60.1	ug/kg	0.366	1.22
74-97-5	Bromochloromethane		59.2	ug/kg	0.403	1.22
71-55-6	1,1,1-Trichloroethane		63.0	ug/kg	0.366	1.22
563-58-6	1,1-Dichloropropene		56.6	ug/kg	0.366	1.22
56-23-5	Carbon tetrachloride		64.3	ug/kg	0.366	1.22
107-06-2	1,2-Dichloroethane		61.2	ug/kg	0.366	1.22
71-43-2	Benzene		52.9	ug/kg	0.366	1.22
79-01-6	Trichloroethylene		53.2	ug/kg	0.403	1.22
78-87-5	1,2-Dichloropropane		55.8	ug/kg	0.366	1.22
75-27-4	Bromodichloromethane		60.1	ug/kg	0.366	1.22
74-95-3	Dibromomethane		58.1	ug/kg	0.366	1.22
108-10-1	4-Methyl-2-pentanone		230	ug/kg	1.53	6.10
10061-01-5	cis-1,3-Dichloropropylene		43.7	ug/kg	0.366	1.22
108-88-3	Toluene		51.1	ug/kg	0.366	1.22
10061-02-6	trans-1,3-Dichloropropylene		45.6	ug/kg	0.366	1.22
79-00-5	1,1,2-Trichloroethane		53.4	ug/kg	0.366	1.22
591-78-6	2-Hexanone		96.5	ug/kg	1.83	6.10
142-28-9	1,3-Dichloropropane		53.5	ug/kg	0.366	1.22
127-18-4	Tetrachloroethylene		51.4	ug/kg	0.366	1.22
124-48-1	Dibromochloromethane		57.6	ug/kg	0.366	1.22
106-93-4	1,2-Dibromoethane		51.1	ug/kg	0.366	1.22
108-90-7	Chlorobenzene		49.3	ug/kg	0.366	1.22

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202042306**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
Client Sample:	**QC for batch 952861**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8361PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**952862**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**02/13/2010 23:03**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**02/13/2010 14:13**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**4x624.d**	**Column:**	**RTX-VOLATILES**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.5	ug/kg	0.366	1.22
179601-23-1	m,p-Xylenes		91.7	ug/kg	0.366	2.44
95-47-6	o-Xylene		50.5	ug/kg	0.366	1.22
100-42-5	Styrene		45.6	ug/kg	0.366	1.22
75-25-2	Bromoform		61.0	ug/kg	0.366	1.22
79-34-5	1,1,2,2-Tetrachloroethane		55.0	ug/kg	0.366	1.22
96-18-4	1,2,3-Trichloropropane		55.6	ug/kg	0.366	1.22
108-86-1	Bromobenzene		51.3	ug/kg	0.366	1.22
103-65-1	n-Propylbenzene		52.5	ug/kg	0.366	1.22
95-49-8	2-Chlorotoluene		51.6	ug/kg	0.366	1.22
98-82-8	Isopropylbenzene		57.1	ug/kg	0.366	1.22
108-67-8	1,3,5-Trimethylbenzene		53.9	ug/kg	0.366	1.22
106-43-4	4-Chlorotoluene		44.5	ug/kg	0.366	1.22
98-06-6	tert-Butylbenzene		56.2	ug/kg	0.366	1.22
95-63-6	1,2,4-Trimethylbenzene		45.2	ug/kg	0.366	1.22
135-98-8	sec-Butylbenzene		52.2	ug/kg	0.366	1.22
99-87-6	4-Isopropyltoluene		23.1	ug/kg	0.366	1.22
541-73-1	1,3-Dichlorobenzene		44.3	ug/kg	0.366	1.22
106-46-7	1,4-Dichlorobenzene		42.5	ug/kg	0.366	1.22
104-51-8	n-Butylbenzene		42.9	ug/kg	0.366	1.22
96-12-8	1,2-Dibromo-3-chloropropane		44.2	ug/kg	0.366	1.22
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.10	ug/kg	1.95	6.10
630-20-6	1,1,1,2-Tetrachloroethane		59.1	ug/kg	0.366	1.22
95-50-1	1,2-Dichlorobenzene		42.7	ug/kg	0.366	1.22

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/021310v4/4x624.d
Lab Smp Id: 1202042306 Client Smp ID: RE15-10-8361MSD
Inj Date : 13-FEB-2010 23:03
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202042306|952862|1|VOAF|1|
Misc Info : LANL 5G N/A MSD 246442002
Comment :
Method : /chem/VOA4.i/021310v4/VOA4-8260-020310.m
Meth Date : 13-Feb-2010 14:26 amj Quant Type: ISTD
Cal Date : 03-FEB-2010 08:54 Cal File: 4w245.d
Als bottle: 24 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.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	18.04950	% 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)
* 40 Fluorobenzene	96	10.614	10.620	(1.000)	607212	50.0000	
* 61 Chlorobenzene-d5	117	13.765	13.771	(1.000)	484757	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	272692	50.0000	
$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.967)	142753	45.7122	55.8
$ 47 Toluene-d8	98	12.247	12.253	(0.890)	487458	43.9692	53.6
$ 71 Bromofluorobenzene	95	14.948	14.954	(0.924)	276954	56.4041	68.8
3 Dichlorodifluoromethane	85	4.911	4.911	(0.463)	172806	58.4360	71.3
4 Chloromethane	50	5.299	5.299	(0.499)	308497	49.0614	59.9
5 Vinyl chloride	62	5.521	5.521	(0.520)	256902	50.5403	61.7
6 Bromomethane	94	6.130	6.130	(0.578)	168329	48.0301	58.6
7 Chloroethane	64	6.281	6.281	(0.592)	172325	52.6565	64.2
8 Trichlorofluoromethane	101	6.663	6.663	(0.628)	296568	56.2343	68.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.358	7.358	(0.693)	248545	87.5490	107
11 1,1-Dichloroethylene	61	7.389	7.389	(0.696)	302187	49.2556	60.1
87 1,4-Dichlorobenzene	146	16.204	16.204	(1.002)	352505	34.7910	42.4
13 Iodomethane	142	7.632	7.632	(0.719)	1457875	210.893	257
17 Methylene chloride	84	7.937	7.937	(0.748)	224392	50.5108	61.6
14 Carbon disulfide	76	7.773	7.773	(0.732)	2943075	242.384	296
21 trans-1,2-Dichloroethylene	61	8.285	8.285	(0.781)	263665	47.0972	57.5
22 1,1-Dichloroethane	63	8.760	8.760	(0.825)	338893	48.1513	58.8
30 2-Butanone	43	9.327	9.327	(0.879)	389449	113.842	139
31 cis-1,2-Dichloroethylene	61	9.388	9.388	(0.885)	290276	47.2025	57.6
85 1,3-Dichlorobenzene	146	16.119	16.119	(0.996)	362211	36.2760	44.3
25 2,2-Dichloropropane	77	9.419	9.419	(0.887)	168122	49.1538	60.0
32 Chloroform	83	9.687	9.687	(0.913)	314273	49.2196	60.1
90 1,2-Dichlorobenzene	146	16.643	16.643	(1.029)	339860	35.0166	42.7
29 Bromochloromethane	128	9.656	9.656	(0.910)	98980	48.5247	59.2
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	251647	51.6194	63.0
34 1,1-Dichloropropene	75	10.132	10.132	(0.955)	221758	46.4243	56.6
33 Carbon tetrachloride	117	10.175	10.175	(0.959)	250931	52.6942	64.3
37 1,2-Dichloroethane	62	10.339	10.339	(0.974)	257341	50.1560	61.2
38 Benzene	78	10.370	10.370	(0.977)	653372	43.3472	52.9
39 Trichloroethylene	95	11.004	11.004	(1.037)	167482	43.5643	53.2
41 1,2-Dichloropropane	63	11.241	11.241	(1.059)	191960	45.6893	55.8
45 Bromodichloromethane	83	11.485	11.485	(1.082)	231384	49.2231	60.1
43 Dibromomethane	93	11.369	11.376	(1.071)	109797	47.6316	58.1
49 4-Methyl-2-pentanone	58	12.016	12.016	(0.873)	347375	188.892	230
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.124)	209377	35.7715	43.6
50 Toluene	92	12.320	12.327	(0.895)	395052	41.8555	51.1
53 trans-1,3-Dichloropropylene	75	12.461	12.461	(0.905)	199757	37.3575	45.6
54 1,1,2-Trichloroethane	83	12.680	12.680	(0.921)	125523	43.7365	53.4
55 2-Hexanone	43	12.857	12.857	(0.934)	381117	79.0437	96.4
52 1,3-Dichloropropane	76	12.875	12.875	(0.935)	254244	43.8635	53.5(Q)
56 Tetrachloroethylene	164	12.918	12.918	(0.938)	141228	42.0991	51.4
57 Dibromochloromethane	129	13.143	13.144	(0.955)	186030	47.2390	57.6
59 1,2-Dibromoethane	107	13.314	13.320	(0.967)	150593	41.8724	51.1
62 Chlorobenzene	112	13.802	13.802	(1.003)	442153	40.3694	49.3
60 1,1,1,2-Tetrachloroethane	131	13.851	13.851	(1.006)	193782	48.4549	59.1
58 Ethylbenzene	91	13.863	13.863	(1.007)	771068	42.2392	51.5
63 m,p-Xylenes	106	13.967	13.973	(1.015)	538681	75.1365	91.7
64 o-Xylene	106	14.399	14.399	(1.046)	308006	41.4108	50.5
65 Styrene	104	14.399	14.399	(1.046)	441499	37.4072	45.6
66 Bromoform	173	14.655	14.655	(0.906)	140128	50.0029	61.0
73 1,1,2,2-Tetrachloroethane	83	15.015	15.015	(0.928)	223939	45.0337	55.0
74 1,2,3-Trichloropropane	110	15.107	15.107	(0.934)	61531	45.5905	55.6
75 Bromobenzene	156	15.168	15.168	(0.937)	218429	42.0367	51.3
76 n-Propylbenzene	91	15.180	15.180	(0.938)	924313	43.0299	52.5
77 2-Chlorotoluene	91	15.326	15.332	(0.947)	640103	42.3176	51.6
67 Isopropylbenzene	105	14.759	14.759	(0.912)	826432	46.7995	57.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/Kg)
78 1,3,5-Trimethylbenzene	105	15.326	15.332	(0.947)	697514	44.1857	53.9
80 4-Chlorotoluene	91	15.430	15.430	(0.954)	497353	36.4557	44.5
81 tert-Butylbenzene	119	15.704	15.704	(0.971)	742457	46.0793	56.2
79 1,2,4-Trimethylbenzene	105	15.741	15.741	(0.973)	608953	37.0644	45.2
83 sec-Butylbenzene	105	15.930	15.930	(0.985)	926495	42.7603	52.2
84 4-Isopropyltoluene	119	16.051	16.052	(0.992)	329165	18.9233	23.1
89 n-Butylbenzene	91	16.503	16.503	(1.020)	570345	35.1348	42.9
92 1,2-Dibromo-3-chloropropane	157	17.527	17.533	(1.083)	35504	36.2275	44.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA4.i/021310v4/4x624.d

Date : 13-FEB-2010 23:03

Client ID: RE15-10-8361MSD

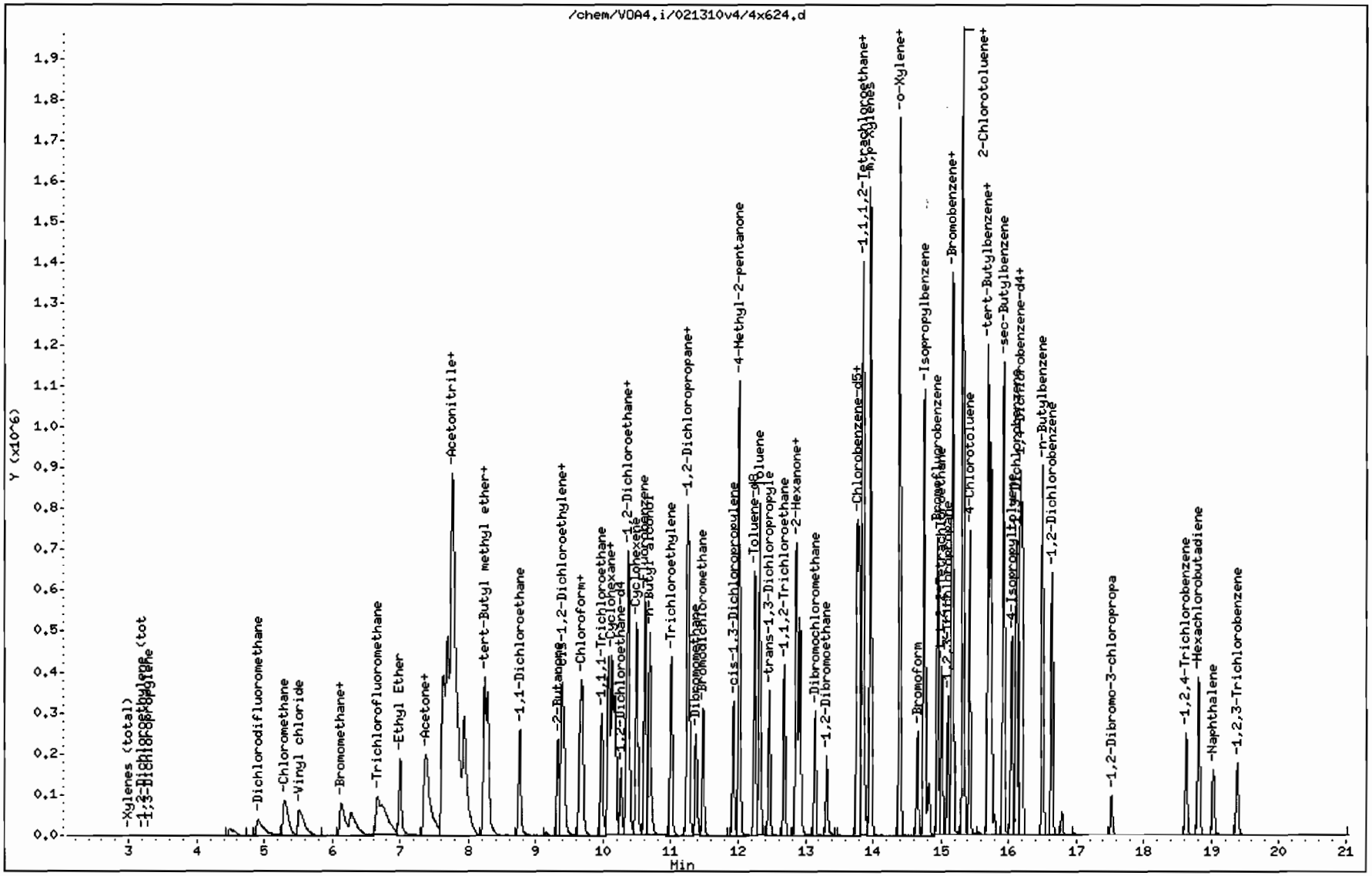
Sample Info: |120204230619528621|VOAF|1|

Column phase: RTX-VOLATILES

Instrument: VOA4.i

Operator: ACJ

Column diameter: 0.25



Miscellaneous Data

Prep Logbook

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

Batch ID: **952861** Verified by: _____

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 14
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202042307 LCS	13-FEB-2010 12:00:00	Soil	5	5	1	
1202042308 LCS	13-FEB-2010 12:15:00	Soil	5	5	1	
1202042304 MB	13-FEB-2010 12:30:00	Soil	5	5	1	
246442001	13-FEB-2010 14:10:00	Soil	5	5	1	
1202042305 PS (246442002)	13-FEB-2010 14:12:00	Soil	5	5	1	
1202042306 PSD (246442002)	13-FEB-2010 14:13:00	Soil	5	5	1	
246442003	13-FEB-2010 14:14:00	Soil	5	5	1	
246442004	13-FEB-2010 14:15:00	Soil	5	5	1	
246442005	13-FEB-2010 14:16:00	Soil	5	5	1	
246442006	13-FEB-2010 14:17:00	Soil	5	5	1	
246477001	13-FEB-2010 14:18:00	Soil	5	5	1	
246477002	13-FEB-2010 14:19:00	Soil	5	5	1	
1202052762 LCS	15-FEB-2010 18:00:00	Soil	5	5	1	
1202052763 LCS	15-FEB-2010 18:15:00	Soil	5	5	1	
1202052761 MB	15-FEB-2010 18:30:00	Soil	5	5	1	
246442002	15-FEB-2010 21:18:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 2/2/2010 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/3/2010

(See pg. 30 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # _____

Sequence Number: 020310v4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM100114-01	1	1	1	
SS	UVM091216-10	1	1	1	
LCS/MS					
BFB	UVM091216-10				1
SHORT					
DHEC					

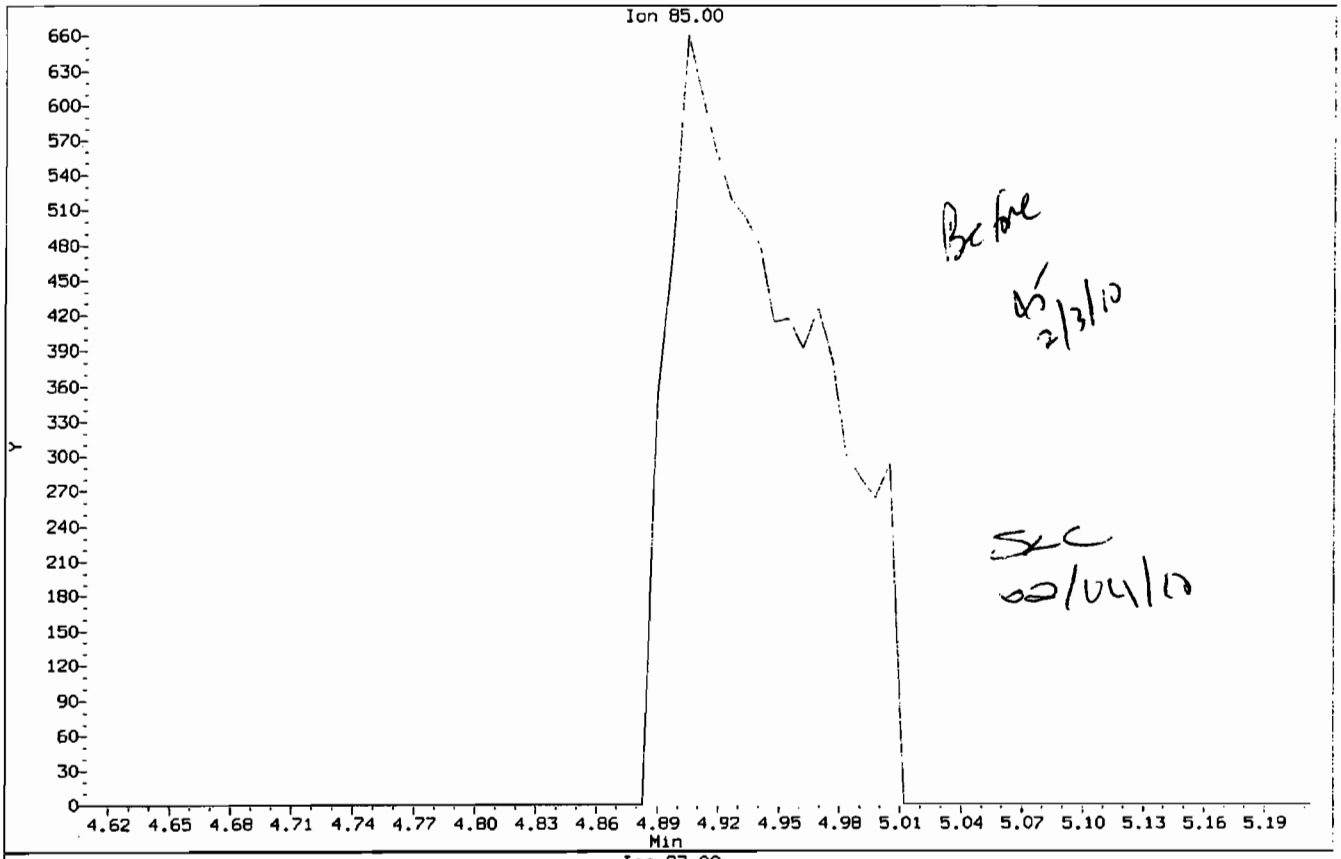
Purge Amount

5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
3 Feb 2010 01:04	4W228.D	UVM091216-10	GEL	BFB	5ML	1	N/A	28	W	ACJ	N/A	O	
3 Feb 2010 01:31	4W229.D	12020----	GEL	BLANK	5ML	1	N/A	29	w	ACJ	N/A	X	
3 Feb 2010 01:59	4W230.D	W4VM100203-01	GEL	VSTD0005	5ML	1	N/A	30	w	ACJ	N/A	O	UVM100106-01B/UVM100202-01A
3 Feb 2010 02:27	4W231.D	W4VM100203-02	GEL	VSTD001	5ML	1	N/A	31	w	ACJ	N/A	O	UVM100106-02B/UVM100202-02A
3 Feb 2010 02:54	4W232.D	W4VM100203-03	GEL	VSTD001	5ML	1	N/A	32	w	ACJ	N/A	O	UVM100106-02B/UVM100202-02A
3 Feb 2010 03:22	4W233.D	W4VM100203-04	GEL	VSTD002	5ML	1	N/A	33	w	ACJ	N/A	O	UVM100106-03B/UVM100202-03A
3 Feb 2010 03:50	4W234.D	W4VM100203-05	GEL	VSTD005	5ML	1	N/A	34	w	ACJ	N/A	O	UVM100106-04B/UVM100202-04A
3 Feb 2010 04:18	4W235.D	W4VM100203-06	GEL	VSTD010	5ML	1	N/A	35	w	ACJ	N/A	O	UVM100106-05B/UVM100202-05A
3 Feb 2010 04:46	4W236.D	W4VM100203-07	GEL	VSTD020	5ML	1	N/A	36	w	ACJ	N/A	O	UVM100106-06B/UVM100202-06A
3 Feb 2010 05:13	4W237.D	W4VM100203-08	GEL	VSTD050	5ML	1	N/A	37	w	ACJ	N/A	O	UVM100106-07B/UVM100202-07A
3 Feb 2010 05:41	4W238.D	W4VM100203-09	GEL	VSTD100	5ML	1	N/A	38	w	ACJ	N/A	O	UVM100106-08B/UVM100202-08A
3 Feb 2010 06:09	4W239.D	12020----	GEL	BLANK	5ML	1	N/A	39	w	ACJ	N/A	X	
3 Feb 2010 06:36	4W240.D	W4VM100203-10	GEL	VSTD005S	5ML	1	N/A	40	w	ACJ	N/A	O	UVM100118-01/UVM100125-01B
3 Feb 2010 07:04	4W241.D	W4VM100203-11	GEL	VSTD010S	5ML	1	N/A	41	w	ACJ	N/A	O	UVM100118-02/UVM100125-02B
3 Feb 2010 07:32	4W242.D	W4VM100203-12	GEL	VSTD025S	5ML	1	N/A	42	w	ACJ	N/A	O	UVM100118-03/UVM100125-03B
3 Feb 2010 07:59	4W243.D	W4VM100203-13	GEL	VSTD050S	5ML	1	N/A	43	w	ACJ	N/A	X	UVM100118-04/UVM100125-04B; PENTACHLOROETHANE
3 Feb 2010 08:26	4W244.D	W4VM100203-14	GEL	VSTD100S	5ML	1	N/A	44	w	ACJ	N/A	O	UVM100118-05/UVM100125-05B
3 Feb 2010 08:54	4W245.D	W4VM100203-15	GEL	VSTD250S	5ML	1	N/A	45	w	ACJ	N/A	O	UVM100118-06/UVM100125-06B
3 Feb 2010 09:21	4W246.D	W4VM100203-16	GEL	VSTD500S	5ML	1	N/A	46	w	ACJ	N/A	O	UVM100118-07/UVM100125-07B
3 Feb 2010 09:49	4W247.D	12020----	GEL	BLANK	5ML	1	N/A	47	w	ACJ	N/A	X	
3 Feb 2010 10:16	4W248.D	W4VM100203-17	GEL	ICV	5ML	1	N/A	48	w	ACJ	N/A	O	UVM100126-01A/IVM100202-01
3 Feb 2010 10:44	4W249.D	W4VM100203-18	GEL	SHORTICV	5ML	1	N/A	49	w	ACJ	N/A	O	UVM100118-08A/UVM100125-08A

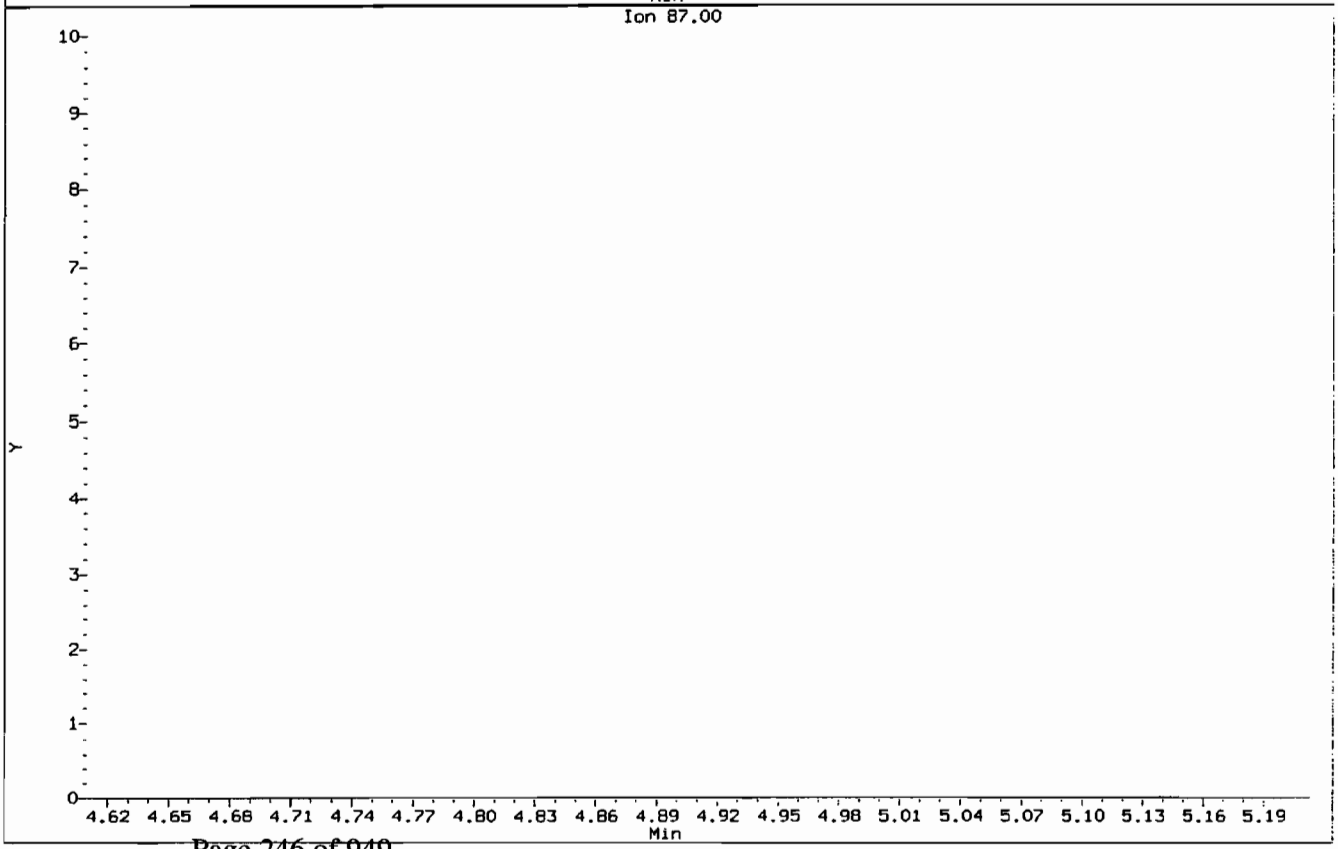
Data File: /chem/VOA4.i/020210v4/4w231.d
Injection Date: 03-FEB-2010 02:27
Instrument: VOA4.i
Client Sample ID: VSTD001

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8



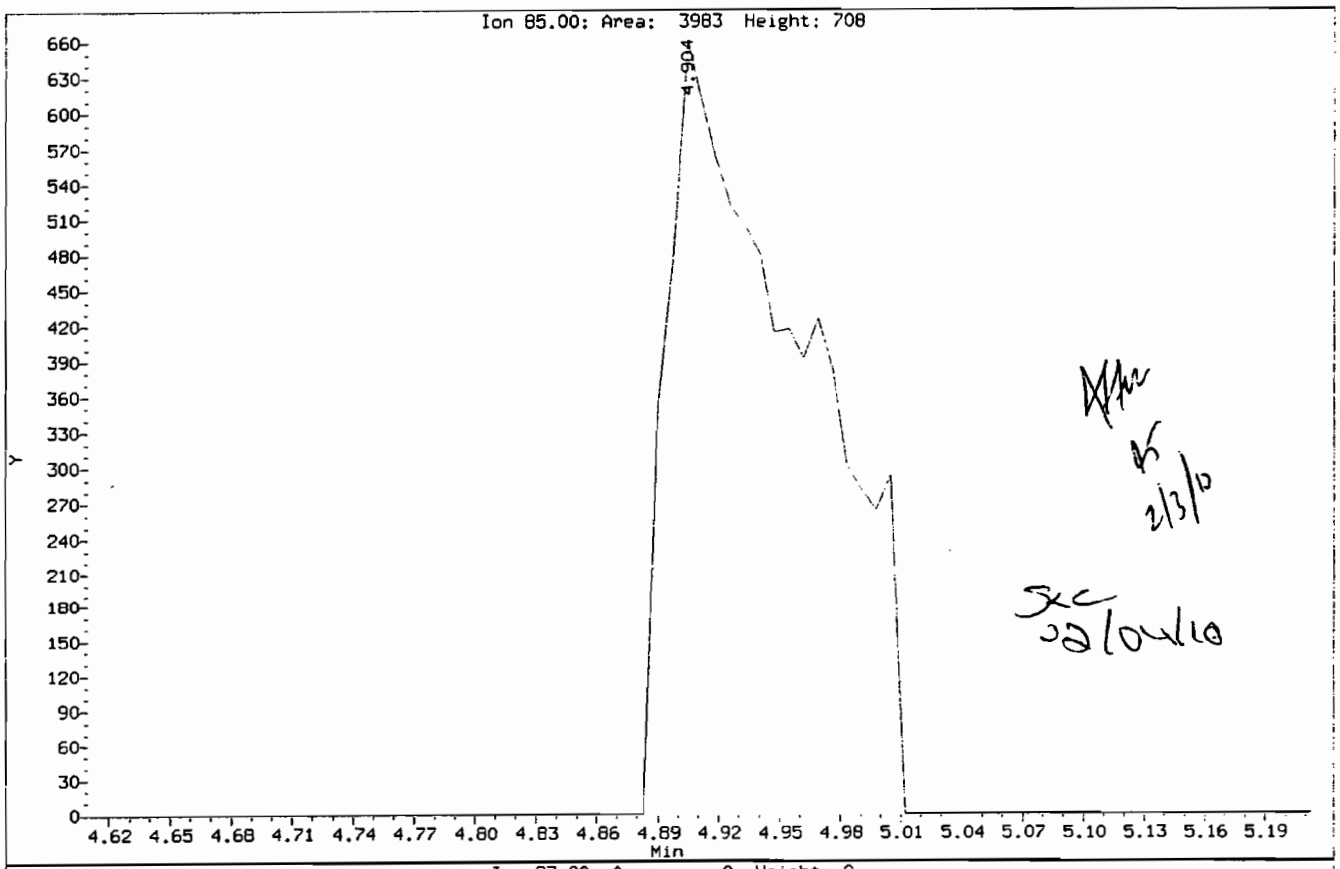
Before
DS 2/3/10

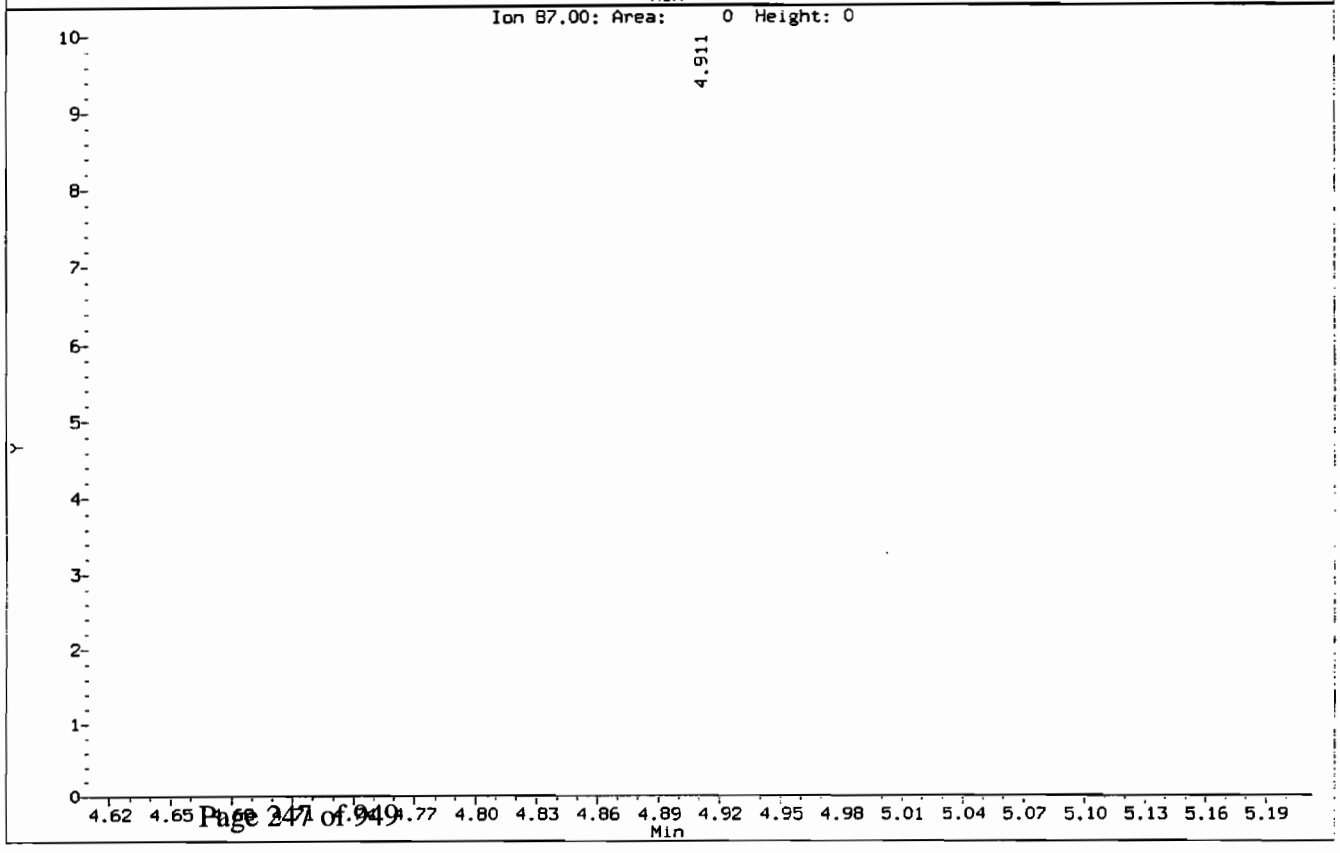
SC
02/04/10



Data File: /chem/VOA4.i/020210v4/4w231.d
Injection Date: 03-FEB-2010 02:27
Instrument: VOA4.i
Client Sample ID: VSTD001

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8





GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 2/13/2010 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/3/2010

(See pg. 30 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

CI test lot # 81710

Sequence Number: 021310V4

Daily Standard — Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM100213-01		5+5		
IS	UVM100114-01	1	1	1	
SS	UVM091216-10	1	1	1	
LCS/MS	W4VM100213-02			5+5	
BFB	UVM091216-10				1
SHORT	W4VM100213-03/04		5+5	5+5	
DHEC	N/A			5	

Purge Amount

5	Water Purge Vol:
5G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	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
2/13/2010	12:32	4X601.D	UVM091216-10	GEL	BFB1	5ML	1	N/A	1	W	ACJ	N/A	O	
2/13/2010	13:00	4X602.D	W4VM100213-01	GEL	CCV	5ML	1	N/A	2	W	ACJ	N/A	O	UVM100126-01D/IVM100210-01
2/13/2010	13:28	4X603.D	W4VM100213-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM100126-01D/IVM100210-01
2/13/2010	13:55	4X604.D	W4VM100213-03	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	UVM100118-08B/UVM100125-08B
2/13/2010	14:23	4X605.D	W4VM100213-04	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	UVM100118-08B/UVM100125-08B
2/13/2010	14:50	4X606.D	12020----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
2/13/2010	15:18	4X607.D	12020----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	X	
2/13/2010	15:46	4X608.D	246442001	LANL	952862	5G	1	N/A	8	S	ACJ	N/A	O	
2/13/2010	16:13	4X609.D	246477001	LANL	952862	5G	1	N/A	9	S	ACJ	N/A	O	
2/13/2010	16:41	4X610.D	246469003	LANL	952842	5G	1	N/A	10	S	ACJ	N/A	X	CONFIRMS 4X520
2/13/2010	17:08	4X611.D	246469004	LANL	952842	5G	1	N/A	11	S	ACJ	N/A	X	CONFIRMS 4X521
2/13/2010	17:36	4X612.D	246469006	LANL	952842	5G	1	N/A	12	S	ACJ	N/A	X	CONFIRMS 4X523
2/13/2010	18:03	4X613.D	246469008	LANL	952842	5G	1	N/A	13	S	ACJ	N/A	O	
2/13/2010	18:30	4X614.D	246469008	LANL	952842	5G	1	N/A	14	S	ACJ	N/A	X	NOT NEEDED; SEE 4X613
2/13/2010	18:58	4X615.D	246469009	LANL	952842	5G	1	N/A	15	S	ACJ	N/A	O	
2/13/2010	19:25	4X616.D	246469009	LANL	952842	5G	1	N/A	16	S	ACJ	N/A	X	NOT NEEDED; SEE 4X615
2/13/2010	19:52	4X617.D	246442002	LANL	952862	5G	1	N/A	17	S	ACJ	N/A	X	SEE 4Y109
2/13/2010	20:20	4X618.D	246442003	LANL	952862	5G	1	N/A	18	S	ACJ	N/A	O	
2/13/2010	20:47	4X619.D	246442004	LANL	952862	5G	1	N/A	19	S	ACJ	N/A	O	
2/13/2010	21:14	4X620.D	246442005	LANL	952862	5G	1	N/A	20	S	ACJ	N/A	O	
2/13/2010	21:41	4X621.D	246442006	LANL	952862	5G	1	N/A	21	S	ACJ	N/A	O	
2/13/2010	22:08	4X622.D	246477002	LANL	952862	5G	1	N/A	22	S	ACJ	N/A	O	
2/13/2010	22:36	4X623.D	1202042305	LANL	952862	5G	1	N/A	23	S	ACJ	N/A	O	MS 246442002
2/13/2010	23:03	4X624.D	1202042306	LANL	952862	5G	1	N/A	24	S	ACJ	N/A	O	MSD 246442002

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 2/15/2010 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1576

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/3/2010

(See pg. 30 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

CI test lot # 81710

Sequence Number: 021510V4

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM100215-01		5+5		
IS	UVM100114-01	1	1	1	
SS	UVM091216-10	1	1	1	
LCS/MS	W4VM100215-01/02			5+5	
BFB	UVM091216-10				1
SHORT	W4VM100215-03/04		5+5	5+5	
DHEC	N/A			5	

Purge Amount	
5	Water Purge Vol:
5G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	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
2/15/2010 18:32	4Y101.D	UVM091216-10	GEL	BFB1	5ML	1	N/A	1	W	ACJ	N/A	O	
2/15/2010 19:00	4Y102.D	W4VM100215-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	O	UVM100126-01D/IVM100214-01
2/15/2010 19:28	4Y103.D	W4VM100215-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM100126-01D/IVM100214-01
2/15/2010 19:55	4Y104.D	W4VM100215-03	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	UVM091216-08B/UVM100125-08C
2/15/2010 20:23	4Y105.D	W4VM100215-04	GEL	SHORT	5ML	1	N/A	5	S	ACJ	N/A	O	UVM091216-08B/UVM100125-08C
2/15/2010 20:51	4Y106.D	12020----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	O	
2/15/2010 21:18	4Y107.D	12020----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	O	
2/15/2010 21:46	4Y108.D	246588001	LANL	953649	5G	1	N/A	8	S	ACJ	N/A	X	RR VOA2
2/15/2010 22:13	4Y109.D	246442002	LANL	952862	5G	1	N/A	9	S	ACJ	N/A	O	
2/15/2010 22:41	4Y110.D	246588002	LANL	953649	5G	1	N/A	10	S	ACJ	N/A	X	RR VOA2
2/15/2010 23:08	4Y111.D	246588003	LANL	953649	5G	1	N/A	11	S	ACJ	N/A	X	RR VOA2
2/15/2010 23:37	4Y112.D	246588004	LANL	953649	5G	1	N/A	12	S	ACJ	N/A	X	RR VOA2
2/16/2010 0:05	4Y113.D	246588005	LANL	953649	5G	1	N/A	13	S	ACJ	N/A	X	RR VOA2
2/16/2010 0:34	4Y114.D	246588006	LANL	953649	5G	1	N/A	14	S	ACJ	N/A	X	RR VOA2
2/16/2010 1:01	4Y115.D	246588007	LANL	953649	5G	1	N/A	15	S	ACJ	N/A	X	RR VOA2
2/16/2010 1:29	4Y116.D	246588008	LANL	953649	5G	1	N/A	16	S	ACJ	N/A	X	RR VOA2
2/16/2010 1:57	4Y117.D	246588009	LANL	953649	5G	1	N/A	17	S	ACJ	N/A	X	RR VOA2
2/16/2010 2:25	4Y118.D	246588010	LANL	953649	5G	1	N/A	18	S	ACJ	N/A	X	RR VOA2
2/16/2010 2:52	4Y119.D	246588011	LANL	953649	5G	1	N/A	19	S	ACJ	N/A	X	RR VOA2
2/16/2010 3:19	4Y120.D	246588012	LANL	953649	5G	1	N/A	20	S	ACJ	N/A	X	RR VOA2
2/16/2010 3:47	4Y121.D	246479003	LANL	953650	5ML	1	PH2	21	W	ACJ	N	X	RR VOA3
2/16/2010 4:14	4Y122.D	246479005	LANL	953650	5ML	1	PH2	22	W	ACJ	N	X	RR VOA3
2/16/2010 4:41	4Y123.D	246569001	LANL	953650	5ML	1	PH2	23	W	ACJ	N	X	RR VOA3
2/16/2010 5:09	4Y124.D	246569002	LANL	953650	5ML	1	PH2	24	W	ACJ	N	X	RR VOA3
2/16/2010 5:36	4Y125.D	1202044453	LANL	953649	5G	1	N/A	25	S	ACJ	N/A	X	MS 246588002; RR VOA2
2/16/2010 6:03	4Y126.D	1202044454	LANL	953649	5G	1	N/A	26	S	ACJ	N/A	X	MSD 246588002; RR VOA2

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
24-FEB-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
952862	See Below		

Potentially affected work order(s)(SDG): 246442(10-1623),246477(10-1647)

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Exception Description:	DER Disposition:
1. QC sample 1202052763LCS was outside the spike recovery acceptance limits for Trichlorotrifluoroethane (140.77%, limits 67.00%-140.00%).	1. Narrate and report data. The total number of unacceptable spike recoveries was less than 5% of the requested analyte list. This satisfies the client criteria.

Originator's Name:

Amy Jamison 24-FEB-10

Data Validator/Group Leader:

Erin Haubert 25-FEB-10

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1623

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:	951989
Prep Batch Number:	951987

Sample Analysis

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

Sample ID	Client ID
246442002	RE15-10-8361
246442003	RE15-10-8362
246442004	RE15-10-8359
246442005	RE15-10-8358
246442006	RE15-10-8360
1202040333	Method Blank (MB)
1202040334	Laboratory Control Sample (LCS)
1202040335	246442002(RE15-10-8361) Matrix Spike (MS)
1202040336	246442002(RE15-10-8361) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 23.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the

Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

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

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

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 246442002 (RE15-10-8361) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were outside of the acceptance criteria for the following sample: 246442003 (RE15-10-8362). The sample was re-analyzed and the failure confirmed. The first analysis data were reported. The re-analysis raw data have been placed in the Miscellaneous Section.

The internal standard responses were outside of the acceptance criteria for the MS. The parent sample and MSD displayed similarly low, but passing, internal standard responses. Therefore, the low recoveries were attributed to sample matrix interference and the data were reported.

Technical Information

Holding Time Specifications
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

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

Miscellaneous Information

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

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples 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:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD4.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

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

Review Validation:

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

Reviewer: Dan Beachum **Date:** 3-5-10

Roadmap for LANL 10-1623 SVOA

This roadmap was analyzed by jos00786 on 02-23-2010, 08:47.
This roadmap was reviewed by jcb on 02-25-2010, 12:37.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD4.i/s022010.b/s4b2019.d	246442002	20-FEB-2010	17:20	10-1623.sub	RE15-10-8361	1	951989	REPORT
☐	N	/chem/MSD4.i/s022010.b/s4b2022.d	246442003	20-FEB-2010	18:28	10-1623.sub	RE15-10-8362	1	951989	REPORT: fails ISTD - rerun s4b2136 confirms failure
■	N	/chem/MSD4.i/s022010.b/s4b2023.d	246442004	20-FEB-2010	18:51	10-1623.sub	RE15-10-8359	1	951989	DUSE: fails ISTD - see rerun s4b2108
☐	N	/chem/MSD4.i/s022010.b/s4b2024.d	246442005	20-FEB-2010	19:13	10-1623.sub	RE15-10-8358	1	951989	REPORT
☐	N	/chem/MSD4.i/s022010.b/s4b2025.d	246442006	20-FEB-2010	19:36	10-1623.sub	RE15-10-8360	1	951989	REPORT
☐	N	/chem/MSD4.i/s022110a.b/s4b2108.d	246442004	21-FEB-2010	12:24	10-1623.sub	RE15-10-8359	1	951989	REPORT
■	N	/chem/MSD4.i/s022110a.b/s4b2136.d	246442003	21-FEB-2010	22:54	10-1623.sub	RE15-10-8362	1	951989	DUSE: rerun of s4b2022 - confirmation of ISTD failure

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	publist	clientid	dilution	batchid	comment
☐	N	/chem/MSD4.i/s022010.b/s4b2015.d	1202040333	mb	20-FEB-2010	15:50	10-1623.sub	SBLK01	1	951989	REPORT
☐	N	/chem/MSD4.i/s022010.b/s4b2016.d	1202040334	lcs	20-FEB-2010	16:13	10-1623.sub	SBLK01LCS	1	951989	REPORT
☐	N	/chem/MSD4.i/s022010.b/s4b2020.d	1202040335	ms	20-FEB-2010	17:43	10-1623.sub	RE15-10-8361MS	1	951989	REPORT: Fails ISTD - CO2/MSD pass but w/ similar low responses
☐	N	/chem/MSD4.i/s022010.b/s4b2021.d	1202040336	msd	20-FEB-2010	18:06	10-1623.sub	RE15-10-8361MSD	1	951989	REPORT

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2024.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	397	ug/kg	79.4	397
108-95-2	Phenol	U	397	ug/kg	79.4	397
95-57-8	2-Chlorophenol	U	397	ug/kg	79.4	397
106-46-7	1,4-Dichlorobenzene	U	397	ug/kg	79.4	397
621-64-7	N-Nitrosodipropylamine	U	397	ug/kg	79.4	397
59-50-7	4-Chloro-3-methylphenol	U	397	ug/kg	79.4	397
83-32-9	Acenaphthene	U	39.7	ug/kg	13.1	39.7
121-14-2	2,4-Dinitrotoluene	U	397	ug/kg	39.7	397
100-02-7	4-Nitrophenol	U	397	ug/kg	131	397
87-86-5	Pentachlorophenol	U	397	ug/kg	99.3	397
129-00-0	Pyrene	U	39.7	ug/kg	11.9	39.7
110-86-1	Pyridine	U	397	ug/kg	79.4	397
62-53-3	Aniline	U	397	ug/kg	119	397
111-44-4	bis(2-Chloroethyl) ether	U	397	ug/kg	79.4	397
541-73-1	1,3-Dichlorobenzene	U	397	ug/kg	79.4	397
100-51-6	Benzyl alcohol	U	397	ug/kg	119	397
95-50-1	1,2-Dichlorobenzene	U	397	ug/kg	79.4	397
108-60-1	bis(2-Chloroisopropyl)ether	U	397	ug/kg	79.4	397
95-48-7	o-Cresol	U	397	ug/kg	79.4	397
65794-96-9	m,p-Cresols	U	397	ug/kg	119	397
67-72-1	Hexachloroethane	U	397	ug/kg	79.4	397
98-95-3	Nitrobenzene	U	397	ug/kg	79.4	397
78-59-1	Isophorone	U	397	ug/kg	79.4	397
88-75-5	2-Nitrophenol	U	397	ug/kg	79.4	397
105-67-9	2,4-Dimethylphenol	U	397	ug/kg	139	397
111-91-1	bis(2-Chloroethoxy)methane	U	397	ug/kg	79.4	397
120-83-2	2,4-Dichlorophenol	U	397	ug/kg	79.4	397
65-85-0	Benzoic acid	U	794	ug/kg	199	794
91-20-3	Naphthalene	U	39.7	ug/kg	11.9	39.7
106-47-8	4-Chloroaniline	U	397	ug/kg	79.4	397
87-68-3	Hexachlorobutadiene	U	397	ug/kg	79.4	397
91-57-6	2-Methylnaphthalene	U	39.7	ug/kg	7.94	39.7
77-47-4	Hexachlorocyclopentadiene	U	397	ug/kg	79.4	397
88-06-2	2,4,6-Trichlorophenol	U	397	ug/kg	79.4	397
95-95-4	2,4,5-Trichlorophenol	U	397	ug/kg	79.4	397
91-58-7	2-Chloronaphthalene	U	39.7	ug/kg	13.1	39.7
88-74-4	2-Nitroaniline	U	397	ug/kg	79.4	397
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	397	ug/kg	79.4	397

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2024.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.1	327	ug/kg		J
	Unknown Aldol Condensate	2.97	399	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2024.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.6	164	ug/kg		J
	Unknown	10.35	237	ug/kg		J
	Unknown	10.85	182	ug/kg		J
	Unknown	12.16	242	ug/kg		J
	Unknown	13.97	198	ug/kg		J
	Unknown	14.07	261	ug/kg		J
20475-86-9	Urs-12-en-24-oic acid, 3-oxo-, methyl es	14.5	374	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/21/2010 12:24**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2108.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	357	ug/kg	71.4	357
108-95-2	Phenol	U	357	ug/kg	71.4	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.4	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357
95-48-7	o-Cresol	U	357	ug/kg	71.4	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357
78-59-1	Isophorone	U	357	ug/kg	71.4	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357
65-85-0	Benzoic acid	U	714	ug/kg	178	714
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	357	ug/kg	71.4	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/21/2010 12:24**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2108.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.05	798	ug/kg		J
	Unknown Aldol Condensate	2.93	457	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/21/2010 12:24**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2108.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.75	219	ug/kg	99	NJ
	Unknown	12.07	213	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2025.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	457	ug/kg	91.5	457
108-95-2	Phenol	U	457	ug/kg	91.5	457
95-57-8	2-Chlorophenol	U	457	ug/kg	91.5	457
106-46-7	1,4-Dichlorobenzene	U	457	ug/kg	91.5	457
621-64-7	N-Nitrosodipropylamine	U	457	ug/kg	91.5	457
59-50-7	4-Chloro-3-methylphenol	U	457	ug/kg	91.5	457
83-32-9	Acenaphthene	U	45.7	ug/kg	15.1	45.7
121-14-2	2,4-Dinitrotoluene	U	457	ug/kg	45.7	457
100-02-7	4-Nitrophenol	U	457	ug/kg	151	457
87-86-5	Pentachlorophenol	U	457	ug/kg	114	457
129-00-0	Pyrene	U	45.7	ug/kg	13.7	45.7
110-86-1	Pyridine	U	457	ug/kg	91.5	457
62-53-3	Aniline	U	457	ug/kg	137	457
111-44-4	bis(2-Chloroethyl) ether	U	457	ug/kg	91.5	457
541-73-1	1,3-Dichlorobenzene	U	457	ug/kg	91.5	457
100-51-6	Benzyl alcohol	U	457	ug/kg	137	457
95-50-1	1,2-Dichlorobenzene	U	457	ug/kg	91.5	457
108-60-1	bis(2-Chloroisopropyl)ether	U	457	ug/kg	91.5	457
95-48-7	o-Cresol	U	457	ug/kg	91.5	457
65794-96-9	m,p-Cresols	U	457	ug/kg	137	457
67-72-1	Hexachloroethane	U	457	ug/kg	91.5	457
98-95-3	Nitrobenzene	U	457	ug/kg	91.5	457
78-59-1	Isophorone	U	457	ug/kg	91.5	457
88-75-5	2-Nitrophenol	U	457	ug/kg	91.5	457
105-67-9	2,4-Dimethylphenol	U	457	ug/kg	160	457
111-91-1	bis(2-Chloroethoxy)methane	U	457	ug/kg	91.5	457
120-83-2	2,4-Dichlorophenol	U	457	ug/kg	91.5	457
65-85-0	Benzoic acid	U	915	ug/kg	229	915
91-20-3	Naphthalene	U	45.7	ug/kg	13.7	45.7
106-47-8	4-Chloroaniline	U	457	ug/kg	91.5	457
87-68-3	Hexachlorobutadiene	U	457	ug/kg	91.5	457
91-57-6	2-Methylnaphthalene	U	45.7	ug/kg	9.15	45.7
77-47-4	Hexachlorocyclopentadiene	U	457	ug/kg	91.5	457
88-06-2	2,4,6-Trichlorophenol	U	457	ug/kg	91.5	457
95-95-4	2,4,5-Trichlorophenol	U	457	ug/kg	91.5	457
91-58-7	2-Chloronaphthalene	U	45.7	ug/kg	15.1	45.7
88-74-4	2-Nitroaniline	U	457	ug/kg	91.5	457
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	457	ug/kg	91.5	457

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2025.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	457	ug/kg	91.5	457
606-20-2	2,6-Dinitrotoluene	U	457	ug/kg	45.7	457
208-96-8	Acenaphthylene	U	45.7	ug/kg	13.7	45.7
51-28-5	2,4-Dinitrophenol	U	915	ug/kg	174	915
132-64-9	Dibenzofuran	U	457	ug/kg	91.5	457
84-66-2	Diethylphthalate	U	457	ug/kg	91.5	457
86-73-7	Fluorene	U	45.7	ug/kg	13.7	45.7
7005-72-3	4-Chlorophenylphenylether	U	457	ug/kg	91.5	457
534-52-1	2-Methyl-4,6-dinitrophenol	U	457	ug/kg	91.5	457
100-01-6	4-Nitroaniline	U	457	ug/kg	137	457
	p-Nitroaniline					
122-39-4	Diphenylamine	U	457	ug/kg	91.5	457
122-66-7	Azobenzene	U	457	ug/kg	91.5	457
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	457	ug/kg	91.5	457
118-74-1	Hexachlorobenzene	U	457	ug/kg	91.5	457
85-01-8	Phenanthrene	U	45.7	ug/kg	13.7	45.7
120-12-7	Anthracene	U	45.7	ug/kg	9.15	45.7
84-74-2	Di-n-butylphthalate	U	457	ug/kg	91.5	457
206-44-0	Fluoranthene	U	45.7	ug/kg	13.7	45.7
85-68-7	Butylbenzylphthalate	U	457	ug/kg	91.5	457
56-55-3	Benzo(a)anthracene	U	45.7	ug/kg	13.7	45.7
91-94-1	3,3'-Dichlorobenzidine	U	457	ug/kg	137	457
218-01-9	Chrysene	U	45.7	ug/kg	13.7	45.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	457	ug/kg	91.5	457
117-84-0	Di-n-octylphthalate	U	457	ug/kg	91.5	457
205-99-2	Benzo(b)fluoranthene	U	45.7	ug/kg	13.7	45.7
207-08-9	Benzo(k)fluoranthene	U	45.7	ug/kg	13.7	45.7
50-32-8	Benzo(a)pyrene	U	45.7	ug/kg	13.7	45.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.7	ug/kg	13.7	45.7
53-70-3	Dibenzo(a,h)anthracene	U	45.7	ug/kg	13.7	45.7
191-24-2	Benzo(ghi)perylene	U	45.7	ug/kg	13.7	45.7
120-82-1	1,2,4-Trichlorobenzene	U	457	ug/kg	91.5	457

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.96	326	ug/kg		J
	Unknown	8.03	267	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2025.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.6	201	ug/kg		J
	Unknown	10.35	285	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:20**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2019.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	405	ug/kg	81.0	405
108-95-2	Phenol	U	405	ug/kg	81.0	405
95-57-8	2-Chlorophenol	U	405	ug/kg	81.0	405
106-46-7	1,4-Dichlorobenzene	U	405	ug/kg	81.0	405
621-64-7	N-Nitrosodipropylamine	U	405	ug/kg	81.0	405
59-50-7	4-Chloro-3-methylphenol	U	405	ug/kg	81.0	405
83-32-9	Acenaphthene	U	40.5	ug/kg	13.4	40.5
121-14-2	2,4-Dinitrotoluene	U	405	ug/kg	40.5	405
100-02-7	4-Nitrophenol	U	405	ug/kg	134	405
87-86-5	Pentachlorophenol	U	405	ug/kg	101	405
129-00-0	Pyrene	U	40.5	ug/kg	12.1	40.5
110-86-1	Pyridine	U	405	ug/kg	81.0	405
62-53-3	Aniline	U	405	ug/kg	121	405
111-44-4	bis(2-Chloroethyl) ether	U	405	ug/kg	81.0	405
541-73-1	1,3-Dichlorobenzene	U	405	ug/kg	81.0	405
100-51-6	Benzyl alcohol	U	405	ug/kg	121	405
95-50-1	1,2-Dichlorobenzene	U	405	ug/kg	81.0	405
108-60-1	bis(2-Chloroisopropyl)ether	U	405	ug/kg	81.0	405
95-48-7	o-Cresol	U	405	ug/kg	81.0	405
65794-96-9	m,p-Cresols	U	405	ug/kg	121	405
67-72-1	Hexachloroethane	U	405	ug/kg	81.0	405
98-95-3	Nitrobenzene	U	405	ug/kg	81.0	405
78-59-1	Isophorone	U	405	ug/kg	81.0	405
88-75-5	2-Nitrophenol	U	405	ug/kg	81.0	405
105-67-9	2,4-Dimethylphenol	U	405	ug/kg	142	405
111-91-1	bis(2-Chloroethoxy)methane	U	405	ug/kg	81.0	405
120-83-2	2,4-Dichlorophenol	U	405	ug/kg	81.0	405
65-85-0	Benzoic acid	U	810	ug/kg	202	810
91-20-3	Naphthalene	U	40.5	ug/kg	12.1	40.5
106-47-8	4-Chloroaniline	U	405	ug/kg	81.0	405
87-68-3	Hexachlorobutadiene	U	405	ug/kg	81.0	405
91-57-6	2-Methylnaphthalene	U	40.5	ug/kg	8.10	40.5
77-47-4	Hexachlorocyclopentadiene	U	405	ug/kg	81.0	405
88-06-2	2,4,6-Trichlorophenol	U	405	ug/kg	81.0	405
95-95-4	2,4,5-Trichlorophenol	U	405	ug/kg	81.0	405
91-58-7	2-Chloronaphthalene	U	40.5	ug/kg	13.4	40.5
88-74-4	2-Nitroaniline	U	405	ug/kg	81.0	405
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	405	ug/kg	81.0	405

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:20**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2019.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	405	ug/kg	81.0	405
606-20-2	2,6-Dinitrotoluene	U	405	ug/kg	40.5	405
208-96-8	Acenaphthylene	U	40.5	ug/kg	12.1	40.5
51-28-5	2,4-Dinitrophenol	U	810	ug/kg	154	810
132-64-9	Dibenzofuran	U	405	ug/kg	81.0	405
84-66-2	Diethylphthalate	U	405	ug/kg	81.0	405
86-73-7	Fluorene	U	40.5	ug/kg	12.1	40.5
7005-72-3	4-Chlorophenylphenylether	U	405	ug/kg	81.0	405
534-52-1	2-Methyl-4,6-dinitrophenol	U	405	ug/kg	81.0	405
100-01-6	4-Nitroaniline	U	405	ug/kg	121	405
	p-Nitroaniline					
122-39-4	Diphenylamine	U	405	ug/kg	81.0	405
122-66-7	Azobenzene	U	405	ug/kg	81.0	405
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	405	ug/kg	81.0	405
118-74-1	Hexachlorobenzene	U	405	ug/kg	81.0	405
85-01-8	Phenanthrene	U	40.5	ug/kg	12.1	40.5
120-12-7	Anthracene	U	40.5	ug/kg	8.10	40.5
84-74-2	Di-n-butylphthalate	U	405	ug/kg	81.0	405
206-44-0	Fluoranthene	U	40.5	ug/kg	12.1	40.5
85-68-7	Butylbenzylphthalate	U	405	ug/kg	81.0	405
56-55-3	Benzo(a)anthracene	U	40.5	ug/kg	12.1	40.5
91-94-1	3,3'-Dichlorobenzidine	U	405	ug/kg	121	405
218-01-9	Chrysene	U	40.5	ug/kg	12.1	40.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	405	ug/kg	81.0	405
117-84-0	Di-n-octylphthalate	U	405	ug/kg	81.0	405
205-99-2	Benzo(b)fluoranthene	U	40.5	ug/kg	12.1	40.5
207-08-9	Benzo(k)fluoranthene	U	40.5	ug/kg	12.1	40.5
50-32-8	Benzo(a)pyrene	U	40.5	ug/kg	12.1	40.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.5	ug/kg	12.1	40.5
53-70-3	Dibenzo(a,h)anthracene	U	40.5	ug/kg	12.1	40.5
191-24-2	Benzo(ghi)perylene	U	40.5	ug/kg	12.1	40.5
120-82-1	1,2,4-Trichlorobenzene	U	405	ug/kg	81.0	405

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.1	422	ug/kg		J
	Unknown Aldol Condensate	2.97	492	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:20**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2019.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-26-4	1S-.alpha.-Pinene	3.5	331	ug/kg	96	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.89	507	ug/kg	97	NJ
	Unknown	8.2	276	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.26	831	ug/kg	95	NJ
	Unknown	8.45	183	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:28**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2022.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	444	ug/kg	88.8	444
108-95-2	Phenol	U	444	ug/kg	88.8	444
95-57-8	2-Chlorophenol	U	444	ug/kg	88.8	444
106-46-7	1,4-Dichlorobenzene	U	444	ug/kg	88.8	444
621-64-7	N-Nitrosodipropylamine	U	444	ug/kg	88.8	444
59-50-7	4-Chloro-3-methylphenol	U	444	ug/kg	88.8	444
83-32-9	Acenaphthene	U	44.4	ug/kg	14.7	44.4
121-14-2	2,4-Dinitrotoluene	U	444	ug/kg	44.4	444
100-02-7	4-Nitrophenol	U	444	ug/kg	147	444
87-86-5	Pentachlorophenol	U	444	ug/kg	111	444
129-00-0	Pyrene	U	44.4	ug/kg	13.3	44.4
110-86-1	Pyridine	U	444	ug/kg	88.8	444
62-53-3	Aniline	U	444	ug/kg	133	444
111-44-4	bis(2-Chloroethyl) ether	U	444	ug/kg	88.8	444
541-73-1	1,3-Dichlorobenzene	U	444	ug/kg	88.8	444
100-51-6	Benzyl alcohol	U	444	ug/kg	133	444
95-50-1	1,2-Dichlorobenzene	U	444	ug/kg	88.8	444
108-60-1	bis(2-Chloroisopropyl)ether	U	444	ug/kg	88.8	444
95-48-7	o-Cresol	U	444	ug/kg	88.8	444
65794-96-9	m,p-Cresols	U	444	ug/kg	133	444
67-72-1	Hexachloroethane	U	444	ug/kg	88.8	444
98-95-3	Nitrobenzene	U	444	ug/kg	88.8	444
78-59-1	Isophorone	U	444	ug/kg	88.8	444
88-75-5	2-Nitrophenol	U	444	ug/kg	88.8	444
105-67-9	2,4-Dimethylphenol	U	444	ug/kg	155	444
111-91-1	bis(2-Chloroethoxy)methane	U	444	ug/kg	88.8	444
120-83-2	2,4-Dichlorophenol	U	444	ug/kg	88.8	444
65-85-0	Benzoic acid	U	888	ug/kg	222	888
91-20-3	Naphthalene	U	44.4	ug/kg	13.3	44.4
106-47-8	4-Chloroaniline	U	444	ug/kg	88.8	444
87-68-3	Hexachlorobutadiene	U	444	ug/kg	88.8	444
91-57-6	2-Methylnaphthalene	U	44.4	ug/kg	8.88	44.4
77-47-4	Hexachlorocyclopentadiene	U	444	ug/kg	88.8	444
88-06-2	2,4,6-Trichlorophenol	U	444	ug/kg	88.8	444
95-95-4	2,4,5-Trichlorophenol	U	444	ug/kg	88.8	444
91-58-7	2-Chloronaphthalene	U	44.4	ug/kg	14.7	44.4
88-74-4	2-Nitroaniline	U	444	ug/kg	88.8	444
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	444	ug/kg	88.8	444

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:28**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2022.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	444	ug/kg	88.8	444
606-20-2	2,6-Dinitrotoluene	U	444	ug/kg	44.4	444
208-96-8	Acenaphthylene	U	44.4	ug/kg	13.3	44.4
51-28-5	2,4-Dinitrophenol	U	888	ug/kg	169	888
132-64-9	Dibenzofuran	U	444	ug/kg	88.8	444
84-66-2	Diethylphthalate	U	444	ug/kg	88.8	444
86-73-7	Fluorene	U	44.4	ug/kg	13.3	44.4
7005-72-3	4-Chlorophenylphenylether	U	444	ug/kg	88.8	444
534-52-1	2-Methyl-4,6-dinitrophenol	U	444	ug/kg	88.8	444
100-01-6	4-Nitroaniline	U	444	ug/kg	133	444
	p-Nitroaniline					
122-39-4	Diphenylamine	U	444	ug/kg	88.8	444
122-66-7	Azobenzene	U	444	ug/kg	88.8	444
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	444	ug/kg	88.8	444
118-74-1	Hexachlorobenzene	U	444	ug/kg	88.8	444
85-01-8	Phenanthrene	U	44.4	ug/kg	13.3	44.4
120-12-7	Anthracene	U	44.4	ug/kg	8.88	44.4
84-74-2	Di-n-butylphthalate	U	444	ug/kg	88.8	444
206-44-0	Fluoranthene	U	44.4	ug/kg	13.3	44.4
85-68-7	Butylbenzylphthalate	U	444	ug/kg	88.8	444
56-55-3	Benzo(a)anthracene	U	44.4	ug/kg	13.3	44.4
91-94-1	3,3'-Dichlorobenzidine	U	444	ug/kg	133	444
218-01-9	Chrysene	U	44.4	ug/kg	13.3	44.4
117-81-7	bis(2-Ethylhexyl)phthalate	J	105	ug/kg	88.8	444
117-84-0	Di-n-octylphthalate	U	444	ug/kg	88.8	444
205-99-2	Benzo(b)fluoranthene	U	44.4	ug/kg	13.3	44.4
207-08-9	Benzo(k)fluoranthene	U	44.4	ug/kg	13.3	44.4
50-32-8	Benzo(a)pyrene	U	44.4	ug/kg	13.3	44.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.4	ug/kg	13.3	44.4
53-70-3	Dibenzo(a,h)anthracene	U	44.4	ug/kg	13.3	44.4
191-24-2	Benzo(ghi)perylene	U	44.4	ug/kg	13.3	44.4
120-82-1	1,2,4-Trichlorobenzene	U	444	ug/kg	88.8	444

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.1	215	ug/kg		J
	Unknown Aldol Condensate	2.97	596	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:28**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2022.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.75	245	ug/kg	97	NJ
13466-78-9	3-Carene	3.89	537	ug/kg	96	NJ
23986-74-5	1,6-Cyclodecadiene, 1-methyl-5-methylene	6.01	324	ug/kg	99	NJ
	Unknown	7.56	204	ug/kg		J
25269-17-4	Thunbergol	7.64	923	ug/kg	94	NJ
112-79-8	9-Octadecenoic acid, (E)-	7.71	419	ug/kg	95	NJ
	Unknown	7.75	292	ug/kg		J
	Unknown	7.91	283	ug/kg		J
	Unknown	8.16	328	ug/kg		J
	Unknown	8.21	260	ug/kg		J
	Unknown	8.49	1830	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.55	1020	ug/kg	96	NJ
	Unknown	8.65	534	ug/kg		J
	Unknown	8.67	591	ug/kg		J
	Unknown	8.78	668	ug/kg		J
	Unknown	8.93	387	ug/kg		J
	Unknown	9.04	741	ug/kg		J
1000099-24-3	(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	9.11	309	ug/kg	93	NJ
1000156-11-9	Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	9.2	2130	ug/kg	91	NJ
	Unknown	9.63	353	ug/kg		J
	Unknown	10.38	353	ug/kg		J
	Unknown	10.62	449	ug/kg		J
	Unknown	10.81	1790	ug/kg		J
83-46-5	.beta.-Sitosterol	12.86	978	ug/kg	99	NJ
1058-61-3	Stigmast-4-en-3-one	13.94	662	ug/kg	98	NJ

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-1623

Matrix Type: SOLID

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

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1202040333	MB for batch 951987	74	75	75	78	78	105
1202040334	LCS for batch 951987	71	71	76	74	84	100
246442002	RE15-10-8361	67	68	69	69	78	95
1202040335	RE15-10-8361MS	70	69	72	71	79	92
1202040336	RE15-10-8361MSD	71	72	75	73	84	95
246442003	RE15-10-8362	66	67	67	68	74	93
246442005	RE15-10-8358	71	74	75	75	88	105
246442006	RE15-10-8360	37	38	35	38	40	51
246442004	RE15-10-8359	68	69	76	68	89	90

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

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 951987
Matrix: SOIL
Lab Sample ID: 1202040334
Instrument: MSD4.I
Analysis Date: 02/20/2010 16:13
Dilution: 1
Analyst: JMB3
Prep Batch ID: 951987
Inj. Vol: .5 uL
Batch ID: 951989

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	1130	68	22-114
108-95-2	LCS	Phenol	1670	0.0	1290	77	39-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1280	77	40-107
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1280	77	33-108
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1450	87	34-113
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1320	79	42-114
83-32-9	LCS	Acenaphthene	1670	0.0	1130	68	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1320	79	49-112
100-02-7	LCS	4-Nitrophenol	1670	0.0	1110	67	24-113
87-86-5	LCS	Pentachlorophenol	1670	0.0	1200	72	27-116
129-00-0	LCS	Pyrene	1670	0.0	1430	86	42-113
110-86-1	LCS	Pyridine	1670	0.0	1130	68	8-125
62-53-3	LCS	Aniline	1670	0.0	1220	73	18-126
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1320	79	32-103
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1270	76	32-108
100-51-6	LCS	Benzyl alcohol	1670	0.0	991	59	27-108
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1270	76	35-111
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1390	84	28-117
95-48-7	LCS	o-Cresol	1670	0.0	1340	81	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1550	93	45-121
67-72-1	LCS	Hexachloroethane	1670	0.0	1300	78	30-109
98-95-3	LCS	Nitrobenzene	1670	0.0	1340	81	33-116

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 951987
Matrix: SOIL
Lab Sample ID: 1202040334
Instrument: MSD4.I
Analysis Date: 02/20/2010 16:13
Dilution: 1
Analyst: JMB3
Prep Batch ID 951987
Inj. Vol: .5 uL
Batch ID: 951989

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	1230	74	35-113
88-75-5	LCS	2-Nitrophenol	1670	0.0	1150	69	31-117
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1380	83	32-112
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1220	73	34-110
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1190	71	34-116
65-85-0	LCS	Benzoic acid	3330	0.0	1890	57	22-138
91-20-3	LCS	Naphthalene	1670	0.0	1190	71	35-103
106-47-8	LCS	4-Chloroaniline	1670	0.0	1170	70	20-118
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1250	75	31-117
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1260	76	38-115
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	1090	66	22-140
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1280	77	40-110
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1410	84	43-113
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1250	75	37-111
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1470	88	41-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1350	81	34-125
131-11-3	LCS	Dimethylphthalate	1670	0.0	1370	82	48-122
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1330	80	47-107
208-96-8	LCS	Acenaphthylene	1670	0.0	1330	80	44-110
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	864	52	18-127
132-64-9	LCS	Dibenzofuran	1670	0.0	1300	78	49-115
84-66-2	LCS	Diethylphthalate	1670	0.0	1440	87	51-126

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623 **Sample Type:** Laboratory Control Sample
Client ID: LCS for batch 951987 **Matrix:** SOIL
Lab Sample ID: 1202040334
Instrument: MSD4.I **Analysis Date:** 02/20/2010 16:13 **Dilution:** 1
Analyst: JMB3 **Prep Batch ID** 951987
Inj. Vol: .5 uL **Batch ID:** 951989

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	1100	66	43-109
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1300	78	45-115
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1060	64	32-117
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1660	100	33-148
122-39-4	LCS	Diphenylamine	1670	0.0	1540	92	46-114
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1610	97	38-123
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1300	78	40-119
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1340	80	43-111
85-01-8	LCS	Phenanthrene	1670	0.0	1300	78	46-107
120-12-7	LCS	Anthracene	1670	0.0	1270	76	46-110
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1470	88	52-132
206-44-0	LCS	Fluoranthene	1670	0.0	1310	79	51-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1750	105	47-137
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1310	79	50-108
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1140	68	36-103
218-01-9	LCS	Chrysene	1670	0.0	1290	77	48-111
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1660	100	48-139
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1650	99	42-141
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1320	79	49-114
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1430	86	50-116
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1400	84	54-114
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1540	92	53-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623 **Sample Type:** Laboratory Control Sample
Client ID: LCS for batch 951987 **Matrix:** SOIL
Lab Sample ID: 1202040334
Instrument: MSD4.I **Analysis Date:** 02/20/2010 16:13 **Dilution:** 1
Analyst: JMB3 **Prep Batch ID** 951987
Inj. Vol: .5 uL **Batch ID:** 951989

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	1550	93	53-121
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1520	91	50-121
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1230	74	32-114

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361MS
Lab Sample ID: 1202040335
Instrument: MSD4.I
Analyst: JMB3
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 18
Analysis Date: 02/20/2010 17:43
Prep Batch ID: 951987
Batch ID: 951989
Dilution: 1

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	2020	0.00	U	1330	66	27-98
108-95-2	MS	Phenol	2020	0.00	U	1560	77	33-94
95-57-8	MS	2-Chlorophenol	2020	0.00	U	1580	78	29-96
106-46-7	MS	1,4-Dichlorobenzene	2020	0.00	U	1530	76	27-96
621-64-7	MS	N-Nitrosodipropylamine	2020	0.00	U	1760	87	29-102
59-50-7	MS	4-Chloro-3-methylphenol	2020	0.00	U	1560	77	29-110
83-32-9	MS	Acenaphthene	2020	0.00	U	1370	68	17-109
121-14-2	MS	2,4-Dinitrotoluene	2020	0.00	U	1500	74	33-107
100-02-7	MS	4-Nitrophenol	2020	0.00	U	1480	73	15-110
87-86-5	MS	Pentachlorophenol	2020	0.00	U	1810	90	23-110
129-00-0	MS	Pyrene	2020	0.00	U	1710	84	24-118
110-86-1	MS	Pyridine	2020	0.00	U	1330	66	25-102
62-53-3	MS	Aniline	2020	0.00	U	1420	70	18-109
111-44-4	MS	bis(2-Chloroethyl) ether	2020	0.00	U	1570	78	29-96
541-73-1	MS	1,3-Dichlorobenzene	2020	0.00	U	1480	73	26-97
100-51-6	MS	Benzyl alcohol	2020	0.00	U	1020	50	19-112
95-50-1	MS	1,2-Dichlorobenzene	2020	0.00	U	1520	75	30-97
108-60-1	MS	bis(2-Chloroisopropyl)ether	2020	0.00	U	1690	83	28-103
95-48-7	MS	o-Cresol	2020	0.00	U	1720	85	32-107
65794-96-9	MS	m,p-Cresols	2020	0.00	U	1920	95	33-115
67-72-1	MS	Hexachloroethane	2020	0.00	U	1550	77	25-100
98-95-3	MS	Nitrobenzene	2020	0.00	U	1600	79	27-106

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361MS
Lab Sample ID: 1202040335
Instrument: MSD4.I
Analyst: JMB3
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 18
Analysis Date: 02/20/2010 17:43
Prep Batch ID: 951987
Batch ID: 951989
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	2020	0.00	U	1460	72	29-104
88-75-5	MS	2-Nitrophenol	2020	0.00	U	1340	66	26-102
105-67-9	MS	2,4-Dimethylphenol	2020	0.00	U	1730	85	22-104
111-91-1	MS	bis(2-Chloroethoxy)methane	2020	0.00	U	1430	71	27-101
120-83-2	MS	2,4-Dichlorophenol	2020	0.00	U	1410	70	26-103
65-85-0	MS	Benzoic acid	4040	0.00	U	3180	79	13-131
91-20-3	MS	Naphthalene	2020	0.00	U	1410	70	23-103
106-47-8	MS	4-Chloroaniline	2020	0.00	U	1340	66	26-103
87-68-3	MS	Hexachlorobutadiene	2020	0.00	U	1460	72	28-101
91-57-6	MS	2-Methylnaphthalene	2020	0.00	U	1500	74	27-106
77-47-4	MS	Hexachlorocyclopentadiene	2020	0.00	U	1220	61	24-117
88-06-2	MS	2,4,6-Trichlorophenol	2020	0.00	U	1500	74	26-105
95-95-4	MS	2,4,5-Trichlorophenol	2020	0.00	U	1810	89	30-110
91-58-7	MS	2-Chloronaphthalene	2020	0.00	U	1510	75	28-102
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	2020	0.00	U	1740	86	33-106
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	2020	0.00	U	1510	75	33-116
131-11-3	MS	Dimethylphthalate	2020	0.00	U	1650	82	38-113
606-20-2	MS	2,6-Dinitrotoluene	2020	0.00	U	1540	76	29-107
208-96-8	MS	Acenaphthylene	2020	0.00	U	1590	79	25-108
51-28-5	MS	2,4-Dinitrophenol	2020	0.00	U	1340	66	14-102
132-64-9	MS	Dibenzofuran	2020	0.00	U	1560	77	35-112
84-66-2	MS	Diethylphthalate	2020	0.00	U	1650	82	36-122

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361MS
Lab Sample ID: 1202040335
Instrument: MSD4.I
Analyst: JMB3
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 18
Analysis Date: 02/20/2010 17:43
Prep Batch ID: 951987
Batch ID: 951989
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	2020	0.00	U	1320	65	33-105
7005-72-3	MS	4-Chlorophenylphenylether	2020	0.00	U	1500	74	30-110
534-52-1	MS	2-Methyl-4,6-dinitrophenol	2020	0.00	U	1390	69	26-97
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	2020	0.00	U	1800	89	28-135
122-39-4	MS	Diphenylamine	2020	0.00	U	1800	89	33-109
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	2020	0.00	U	1910	95	31-113
101-55-3	MS	4-Bromophenylphenylether	2020	0.00	U	1550	77	31-109
118-74-1	MS	Hexachlorobenzene	2020	0.00	U	1540	76	37-99
85-01-8	MS	Phenanthrene	2020	0.00	U	1520	75	29-109
120-12-7	MS	Anthracene	2020	0.00	U	1470	73	19-118
84-74-2	MS	Di-n-butylphthalate	2020	0.00	U	1690	84	39-123
206-44-0	MS	Fluoranthene	2020	0.00	U	1490	74	33-114
85-68-7	MS	Butylbenzylphthalate	2020	0.00	U	2230	110	35-131
56-55-3	MS	Benzo(a)anthracene	2020	0.00	U	1530	76	30-111
91-94-1	MS	3,3'-Dichlorobenzidine	2020	0.00	U	1090	54	30-124
218-01-9	MS	Chrysene	2020	0.00	U	1510	75	32-108
117-81-7	MS	bis(2-Ethylhexyl)phthalate	2020	0.00	U	2150	106	37-129
117-84-0	MS	Di-n-octylphthalate	2020	0.00	U	2830	140	31-143
205-99-2	MS	Benzo(b)fluoranthene	2020	0.00	U	1760	87	29-118
207-08-9	MS	Benzo(k)fluoranthene	2020	0.00	U	1750	87	32-118
50-32-8	MS	Benzo(a)pyrene	2020	0.00	U	1690	84	33-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	2020	0.00	U	1440	71	29-114

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361MS
Lab Sample ID: 1202040335
Instrument: MSD4.I
Analyst: JMB3
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 18
Analysis Date: 02/20/2010 17:43
Prep Batch ID: 951987
Batch ID: 951989

Dilution: 1

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	2020	0.00	U	1470	73	27-119
191-24-2	MS	Benzo(ghi)perylene	2020	0.00	U	1350	67	28-112
120-82-1	MS	1,2,4-Trichlorobenzene	2020	0.00	U	1430	71	28-99

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361MSD
Lab Sample ID: 1202040336
Instrument: MSD4.I
Analyst: JMB3
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 18
Analysis Date: 02/20/2010 18:06
Dilution: 1
Prep Batch ID: 951987
Batch ID: 951989

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	2030	0.00	U	1320	65	27-98	0	0-30
108-95-2	MSD	Phenol	2030	0.00	U	1580	78	33-94	1	0-30
95-57-8	MSD	2-Chlorophenol	2030	0.00	U	1560	77	29-96	2	0-30
106-46-7	MSD	1,4-Dichlorobenzene	2030	0.00	U	1480	73	27-96	3	0-30
621-64-7	MSD	N-Nitrosodipropylamine	2030	0.00	U	1760	87	29-102	0	0-30
59-50-7	MSD	4-Chloro-3-methylphenol	2030	0.00	U	1640	81	29-110	5	0-30
83-32-9	MSD	Acenaphthene	2030	0.00	U	1380	68	17-109	1	0-30
121-14-2	MSD	2,4-Dinitrotoluene	2030	0.00	U	1560	77	33-107	4	0-30
100-02-7	MSD	4-Nitrophenol	2030	0.00	U	1650	81	15-110	11	0-30
87-86-5	MSD	Pentachlorophenol	2030	0.00	U	1890	93	23-110	5	0-30
129-00-0	MSD	Pyrene	2030	0.00	U	1670	82	24-118	2	0-30
110-86-1	MSD	Pyridine	2030	0.00	U	1280	63	25-102	4	0-30
62-53-3	MSD	Aniline	2030	0.00	U	1420	70	18-109	0	0-30
111-44-4	MSD	bis(2-Chloroethyl) ether	2030	0.00	U	1570	77	29-96	0	0-30
541-73-1	MSD	1,3-Dichlorobenzene	2030	0.00	U	1450	71	26-97	2	0-30
100-51-6	MSD	Benzyl alcohol	2030	0.00	U	1110	55	19-112	9	0-30
95-50-1	MSD	1,2-Dichlorobenzene	2030	0.00	U	1500	74	30-97	1	0-30
108-60-1	MSD	bis(2-Chloroisopropyl)ether	2030	0.00	U	1690	83	28-103	0	0-30
95-48-7	MSD	o-Cresol	2030	0.00	U	1820	90	32-107	6	0-30
65794-96-9	MSD	m,p-Cresols	2030	0.00	U	1960	96	33-115	2	0-30
67-72-1	MSD	Hexachloroethane	2030	0.00	U	1540	76	25-100	1	0-30
98-95-3	MSD	Nitrobenzene	2030	0.00	U	1600	79	27-106	0	0-30

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-1623 **Sample Type:** Matrix Spike Duplicate

Client ID: RE15-10-8361MSD **Matrix:** R

Lab Sample ID: 1202040336 **%Moisture:** 18

Instrument: MSD4.I **Analysis Date:** 02/20/2010 18:06 **Dilution:** 1

Analyst: JMB3 **Prep Batch ID** 951987

Inj. Vol: .5 uL **Batch ID:** 951989

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	2030	0.00	U	1490	73	29-104	2	0-30
88-75-5	MSD 2-Nitrophenol	2030	0.00	U	1390	68	26-102	4	0-30
105-67-9	MSD 2,4-Dimethylphenol	2030	0.00	U	1780	88	22-104	3	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	2030	0.00	U	1470	72	27-101	2	0-30
120-83-2	MSD 2,4-Dichlorophenol	2030	0.00	U	1470	72	26-103	4	0-30
65-85-0	MSD Benzoic acid	4060	0.00	U	3350	82	13-131	5	0-30
91-20-3	MSD Naphthalene	2030	0.00	U	1420	70	23-103	0	0-30
106-47-8	MSD 4-Chloroaniline	2030	0.00	U	1380	68	26-103	3	0-30
87-68-3	MSD Hexachlorobutadiene	2030	0.00	U	1450	71	28-101	1	0-30
91-57-6	MSD 2-Methylnaphthalene	2030	0.00	U	1540	76	27-106	3	0-30
77-47-4	MSD Hexachlorocyclopentadiene	2030	0.00	U	1200	59	24-117	2	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	2030	0.00	U	1590	78	26-105	6	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	2030	0.00	U	1800	89	30-110	0	0-30
91-58-7	MSD 2-Chloronaphthalene	2030	0.00	U	1520	75	28-102	0	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	2030	0.00	U	1760	87	33-106	1	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	2030	0.00	U	1590	78	33-116	5	0-30
131-11-3	MSD Dimethylphthalate	2030	0.00	U	1660	82	38-113	0	0-30
606-20-2	MSD 2,6-Dinitrotoluene	2030	0.00	U	1610	79	29-107	4	0-30
208-96-8	MSD Acenaphthylene	2030	0.00	U	1600	79	25-108	0	0-30
51-28-5	MSD 2,4-Dinitrophenol	2030	0.00	U	1440	71	14-102	7	0-30
132-64-9	MSD Dibenzofuran	2030	0.00	U	1570	77	35-112	0	0-30
84-66-2	MSD Diethylphthalate	2030	0.00	U	1720	85	36-122	4	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1623
Client ID: RE15-10-8361MSD
Lab Sample ID: 1202040336
Instrument: MSD4.I
Analyst: JMB3
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 18
Analysis Date: 02/20/2010 18:06
Dilution: 1
Prep Batch ID: 951987
Batch ID: 951989

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	2030	0.00	U	1340	66	33-105	2	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	2030	0.00	U	1530	76	30-110	2	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	2030	0.00	U	1440	71	26-97	3	0-30
100-01-6	MSD 4-Nitroaniline *p-Nitroaniline*	2030	0.00	U	1940	95	28-135	7	0-30
122-39-4	MSD Diphenylamine	2030	0.00	U	1860	92	33-109	3	0-30
122-66-7	MSD Azobenzene *1,2-Diphenylhydrazine*	2030	0.00	U	1970	97	31-113	3	0-30
101-55-3	MSD 4-Bromophenylphenylether	2030	0.00	U	1580	78	31-109	2	0-30
118-74-1	MSD Hexachlorobenzene	2030	0.00	U	1590	78	37-99	4	0-30
85-01-8	MSD Phenanthrene	2030	0.00	U	1560	77	29-109	2	0-30
120-12-7	MSD Anthracene	2030	0.00	U	1510	74	19-118	2	0-30
84-74-2	MSD Di-n-butylphthalate	2030	0.00	U	1760	87	39-123	4	0-30
206-44-0	MSD Fluoranthene	2030	0.00	U	1520	75	33-114	2	0-30
85-68-7	MSD Butylbenzylphthalate	2030	0.00	U	2170	107	35-131	3	0-30
56-55-3	MSD Benzo(a)anthracene	2030	0.00	U	1530	75	30-111	0	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	2030	0.00	U	1370	67	30-124	23	0-30
218-01-9	MSD Chrysene	2030	0.00	U	1530	76	32-108	1	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	2030	0.00	U	2100	104	37-129	2	0-30
117-84-0	MSD Di-n-octylphthalate	2030	0.00	U	2630	130	31-143	7	0-30
205-99-2	MSD Benzo(b)fluoranthene	2030	0.00	U	1660	82	29-118	5	0-30
207-08-9	MSD Benzo(k)fluoranthene	2030	0.00	U	1850	91	32-118	6	0-30
50-32-8	MSD Benzo(a)pyrene	2030	0.00	U	1680	83	33-115	0	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	2030	0.00	U	1470	73	29-114	2	0-30

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-1623 **Sample Type:** Matrix Spike Duplicate

Client ID: RE15-10-8361MSD **Matrix:** R

Lab Sample ID: 1202040336 **%Moisture:** 18

Instrument: MSD4.I **Analysis Date:** 02/20/2010 18:06 **Dilution:** 1

Analyst: JMB3 **Prep Batch ID:** 951987

Inj. Vol: .5 uL **Batch ID:** 951989

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	2030	0.00	U	1530	75	27-119	4	0-30
191-24-2	MSD Benzo(ghi)perylene	2030	0.00	U	1390	68	28-112	3	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	2030	0.00	U	1440	71	28-99	1	0-30

Method Blank Summary

SDG Number:	**10-1623**	**Client:**	**LANL010**	**Matrix:**	**SOIL**
Client ID:	**MB for batch 951987**	**Instrument ID:**	**MSD4.I**	**Data File:**	**s4b2015-1.d**
Lab Sample ID:	**1202040333**	**Prep Date:**	**02/11/2010 22:25**	**Analyzed:**	**02/20/10 15:50**
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 951987	1202040334	s4b2016-1.d	02/20/10	1613
02	RE15-10-8361	246442002	s4b2019.d	02/20/10	1720
03	RE15-10-8361MS	1202040335	s4b2020.d	02/20/10	1743
04	RE15-10-8361MSD	1202040336	s4b2021.d	02/20/10	1806
05	RE15-10-8362	246442003	s4b2022.d	02/20/10	1828
06	RE15-10-8358	246442005	s4b2024.d	02/20/10	1913
07	RE15-10-8360	246442006	s4b2025.d	02/20/10	1936
08	RE15-10-8359	246442004	s4b2108.d	02/21/10	1224

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-1623

Instrument ID: MSD4.I **Injection Date/Time:** 16-FEB-10 09:30

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD4.i/s021610.b/s4b1603.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	42.5
68	Less than 2% of mass 69	1.4
69	Mass 69 Relative Abundance	47.4
70	Less than 2% of mass 69	0
127	40 - 60% of mass 198	59.9
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	22.2
365	Greater than 1% of mass 198	2.8
441	Present, but less than mass 443	84.2
442	Greater than 40% of mass 198	74.8
443	17 - 23% of mass 442	19.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP010	WBN100120-01	s4b1605.d	16-FEB-10 10:08
AP020	WBN100120-02	s4b1606.d	16-FEB-10 10:30
AP040	WBN100120-03.1	s4b1607.d	16-FEB-10 10:52
AP050	WBN100120-04	s4b1608.d	16-FEB-10 11:14
AP080	WBN100120-05	s4b1609.d	16-FEB-10 11:36
AP100	WBN100120-06	s4b1610.d	16-FEB-10 11:59
AP120	WBN100120-07	s4b1611.d	16-FEB-10 12:21
APICV	WBN100120-08.1	s4b1627.d	16-FEB-10 18:17

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-1623

Instrument ID: MSD4.I **Injection Date/Time:** 17-FEB-10 17:07

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD4.i/s021710.b/s4b1702.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	40.4
68	Less than 2% of mass 69	1.3
69	Mass 69 Relative Abundance	45.4
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	59
197	0 - 1% of mass 198	0.3
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	21.2
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	77.6
442	Greater than 40% of mass 198	70.7
443	17 - 23% of mass 442	19.8

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
MEGA001	WBN100215-08	s4b1704.d	17-FEB-10 17:46
MEGA010	WBN100215-07	s4b1705.d	17-FEB-10 18:13
MEGA020	WBN100215-06	s4b1706.d	17-FEB-10 18:40
MEGA040	WBN100215-05.1	s4b1707.d	17-FEB-10 19:07
MEGA050	WBN100215-04	s4b1708.d	17-FEB-10 19:34
MEGA080	WBN100215-03	s4b1709.d	17-FEB-10 20:00
MEGA100	WBN100215-02	s4b1710.d	17-FEB-10 20:27
MEGA120	WBN100215-01	s4b1711.d	17-FEB-10 20:54
MEGAICV	WBN100215-09.1	s4b1713.d	17-FEB-10 21:48

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-1623

Instrument ID: MSD4.I **Injection Date/Time:** 20-FEB-10 14:19

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD4.i/s022010.b/s4b2011.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	43.5
68	Less than 2% of mass 69	1.5
69	Mass 69 Relative Abundance	49.6
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	59.9
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	22.1
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	82.9
442	Greater than 40% of mass 198	70
443	17 - 23% of mass 442	18.6

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
MEGACVS	WBN100215-09.4	s4b2013.d	20-FEB-10 15:00
APCVS	WBN100218-05.3	s4b2014.d	20-FEB-10 15:27
SBLK01	1202040333	s4b2015-1.d	20-FEB-10 15:50
SBLK01LCS	1202040334	s4b2016-1.d	20-FEB-10 16:13
RE15-10-8361	246442002	s4b2019.d	20-FEB-10 17:20
RE15-10-8361MS	1202040335	s4b2020.d	20-FEB-10 17:43
RE15-10-8361MSD	1202040336	s4b2021.d	20-FEB-10 18:06
RE15-10-8362	246442003	s4b2022.d	20-FEB-10 18:28
RE15-10-8358	246442005	s4b2024.d	20-FEB-10 19:13
RE15-10-8360	246442006	s4b2025.d	20-FEB-10 19:36

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-1623

Instrument ID: MSD4.I **Injection Date/Time:** 21-FEB-10 11:21

Column Description: Phenomenex ZB-5MS **Lab File ID** /chem/MSD4.i/s022110a.b/s4b2105.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	54.9
68	Less than 2% of mass 69	1.3
69	Mass 69 Relative Abundance	60.9
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	58.3
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.8
365	Greater than 1% of mass 198	3.6
441	Present, but less than mass 443	84
442	Greater than 40% of mass 198	75.5
443	17 - 23% of mass 442	19.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100215-09.4	s4b2106.d	21-FEB-10 11:34
APCVS	WBN100218-05.3	s4b2107.d	21-FEB-10 12:02
RE15-10-8359	246442004	s4b2108.d	21-FEB-10 12:24

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1623

Instrument: MSD4.I

STD Analysis Time: 20-FEB-10 15:00

GC Column: J&W DB-5MS

Data File: s4b2013.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	194395		3.94	825495		4.8	429249		6.05	661666		7.04	582982		8.75	527731		10.3
Upper Limit	388790		4.44	1650990		5.3	858498		6.55	1323332		7.54	1165964		9.25	1055462		10.8
Lower Limit	97198		3.44	412748		4.3	214625		5.55	330833		6.54	291491		8.25	263866		9.8
Sample ID																		
BLK01	155481		3.93	613164		4.8	323214		6.05	481222		7.04	349489		8.74	305670		10.3
BLK01LCS	168449		3.93	692313		4.8	358752		6.05	546264		7.04	439543		8.74	386215		10.3
RE15-10-8361	163132		3.93	651006		4.8	336014		6.05	502037		7.04	354294		8.73	279535		10.3
RE15-10-8361MS	164768		3.93	687299		4.8	339314		6.05	500757		7.04	384101		8.74	241370	*	10.3
RE15-10-8361MSD	168509		3.93	699635		4.8	363072		6.05	537531		7.04	432073		8.74	297355		10.3
RE15-10-8362	171325		3.93	672457		4.8	351428		6.05	511895		7.04	358561		8.75	228376	*	10.3
RE15-10-8358	173403		3.93	678953		4.8	361872		6.05	537238		7.04	394279		8.73	270912		10.3
RE15-10-8360	165262		3.93	667018		4.8	346896		6.05	524177		7.04	403219		8.73	288057		10.3

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

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1623

Instrument: MSD4.I

STD Analysis Time: 21-FEB-10 11:34

GC Column: J&W DB-5MS

Data File: s4b2106.d

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	141610	3.9	587236	4.77	303287	6.03	484374	7.02	413810	8.72	325829	10.2
Upper Limit	283220	4.4	1174472	5.27	606574	6.53	968748	7.52	827620	9.22	651658	10.7
Lower Limit	70805	3.4	293618	4.27	151644	5.53	242187	6.52	206905	8.22	162915	9.74
Sample ID												
RE15-10-8359	124319	3.9	468352	4.76	256840	6.02	423227	7.01	339173	8.7	265452	10.2

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:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2024.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	**U**	397	ug/kg	79.4	397
108-95-2	Phenol	U	397	ug/kg	79.4	397
95-57-8	2-Chlorophenol	U	397	ug/kg	79.4	397
106-46-7	1,4-Dichlorobenzene	U	397	ug/kg	79.4	397
621-64-7	N-Nitrosodipropylamine	U	397	ug/kg	79.4	397
59-50-7	4-Chloro-3-methylphenol	U	397	ug/kg	79.4	397
83-32-9	Acenaphthene	U	39.7	ug/kg	13.1	39.7
121-14-2	2,4-Dinitrotoluene	U	397	ug/kg	39.7	397
100-02-7	4-Nitrophenol	**U**	397	ug/kg	131	397
87-86-5	Pentachlorophenol	U	397	ug/kg	99.3	397
129-00-0	Pyrene	U	39.7	ug/kg	11.9	39.7
110-86-1	Pyridine	U	397	ug/kg	79.4	397
62-53-3	Aniline	U	397	ug/kg	119	397
111-44-4	bis(2-Chloroethyl) ether	U	397	ug/kg	79.4	397
541-73-1	1,3-Dichlorobenzene	U	397	ug/kg	79.4	397
100-51-6	Benzyl alcohol	U	397	ug/kg	119	397
95-50-1	1,2-Dichlorobenzene	U	397	ug/kg	79.4	397
108-60-1	bis(2-Chloroisopropyl)ether	U	397	ug/kg	79.4	397
95-48-7	o-Cresol	U	397	ug/kg	79.4	397
65794-96-9	m,p-Cresols	U	397	ug/kg	119	397
67-72-1	Hexachloroethane	U	397	ug/kg	79.4	397
98-95-3	Nitrobenzene	U	397	ug/kg	79.4	397
78-59-1	Isophorone	U	397	ug/kg	79.4	397
88-75-5	2-Nitrophenol	U	397	ug/kg	79.4	397
105-67-9	2,4-Dimethylphenol	U	397	ug/kg	139	397
111-91-1	bis(2-Chloroethoxy)methane	U	397	ug/kg	79.4	397
120-83-2	2,4-Dichlorophenol	U	397	ug/kg	79.4	397
65-85-0	Benzoic acid	U	794	ug/kg	199	794
91-20-3	Naphthalene	U	39.7	ug/kg	11.9	39.7
106-47-8	4-Chloroaniline	U	397	ug/kg	79.4	397
87-68-3	Hexachlorobutadiene	U	397	ug/kg	79.4	397
91-57-6	2-Methylnaphthalene	U	39.7	ug/kg	7.94	39.7
77-47-4	Hexachlorocyclopentadiene	U	397	ug/kg	79.4	397
88-06-2	2,4,6-Trichlorophenol	U	397	ug/kg	79.4	397
95-95-4	2,4,5-Trichlorophenol	U	397	ug/kg	79.4	397
91-58-7	2-Chloronaphthalene	U	39.7	ug/kg	13.1	39.7
88-74-4	2-Nitroaniline	U	397	ug/kg	79.4	397
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	397	ug/kg	79.4	397

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2024.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.1	327	ug/kg		J
	Unknown Aldol Condensate	2.97	399	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442005**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**16.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8358**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2024.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.6	164	ug/kg		J
	Unknown	10.35	237	ug/kg		J
	Unknown	10.85	182	ug/kg		J
	Unknown	12.16	242	ug/kg		J
	Unknown	13.97	198	ug/kg		J
	Unknown	14.07	261	ug/kg		J
20475-86-9	Urs-12-en-24-oic acid, 3-oxo-, methyl es	14.5	374	ug/kg	99	NJ

GEL Laboratories LLC

GEL Laboratories, LLC
Data file : /chem/MSD4.i/s022010.b/s4b2024.d
Lab Smp Id: 246442005 Client Smp ID: RE15-10-8358
Inj Date : 20-FEB-2010 19:13
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442005|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	16.45830	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.930	3.935	(1.000)	173403	40.0000	
* 29 Naphthalene-d8	136	4.796	4.802	(1.000)	678953	40.0000	
* 46 Acenaphthene-d10	164	6.053	6.053	(1.000)	361872	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	537238	40.0000	
* 91 Chrysene-d12	240	8.733	8.754	(1.000)	394279	40.0000	
* 98 Perylene-d12	264	10.273	10.300	(1.000)	270912	40.0000	
$ 3 2-Fluorophenol	112	3.122	3.117	(0.794)	350827	71.0021	2820
$ 5 Phenol-d5	99	3.641	3.646	(0.926)	460249	74.1449	2940
$ 20 Nitrobenzene-d5	82	4.294	4.299	(0.895)	194880	37.3775	1480
$ 39 2-Fluorobiphenyl	172	5.540	5.545	(0.915)	350937	37.5588	1490
$ 60 2,4,6-Tribromophenol	329	6.588	6.588	(1.088)	99244	87.6924	3480
$ 81 p-Terphenyl-d14	244	7.963	7.968	(0.912)	324884	52.7115	2090

ION RATIO REPORT

SV REPORT

Data file: s4b2024.d
Report Date: 02/21/2010 09:00
Lab. ID: 246442005 SampleType: SAMPLE
Injection Date: 20-FEB-2010 19:13
Operator: JMB3 Instrument: MSD4.i
Sample Info: |246442005|951989|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100205-01|
Comment:
Method used: /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	17802	3.64	3.72	80-120	100	(T)
93	249	3.61	3.73	486-546	1	(QT)
17 N-Nitrosodipropylamine			CAS#: 621-64-7			
70	24587	4.29	4.18	80-120	100	(T)
42	10549	4.29	4.18	22- 82	43	(T)
27 Benzoic acid		CAS#: 65-85-0				
105	389	4.61	4.58	80-120	100	( )
122	1021	4.54	4.58	49-109	262	(Q)
77	292	4.61	4.58	34- 94	75	( )
43 Dimethylphthalate			CAS#: 131-11-3			
163	63511	6.05	5.82	80-120	100	(T)
164	361872	6.05	5.82	0- 40	570	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	47553	6.05	5.88	80-120	100	(T)
63	356	6.05	5.88	33- 93	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	47553	6.05	6.17	80-120	100	(T)
89	525	6.05	6.17	41-101	1	(QT)
63	356	6.05	6.17	11- 71	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53	Fluorene		CAS#: 86-73-7			
166	4855	6.59	6.43	80-120	100	(T)
165	5121	6.58	6.43	58-118	105	(T)
167	1460	6.58	6.43	0- 44	30	(T)
61	4-Bromophenylphenylether		CAS#: 101-55-3			
248	5030	6.59	6.73	80-120	100	(T)
141	38857	6.58	6.73	51-111	772	(QT)
250	10499	6.59	6.73	68-128	209	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

GEL Laboratories, LLC
Data file : /chem/MSD4.i/s022010.b/s4b2024.d
Lab Smp Id: 246442005 Client Smp ID: RE15-10-8358
Inj Date : 20-FEB-2010 19:13
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442005|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	16.45830	% moisture

Cpnd Variable Local Compound Variable

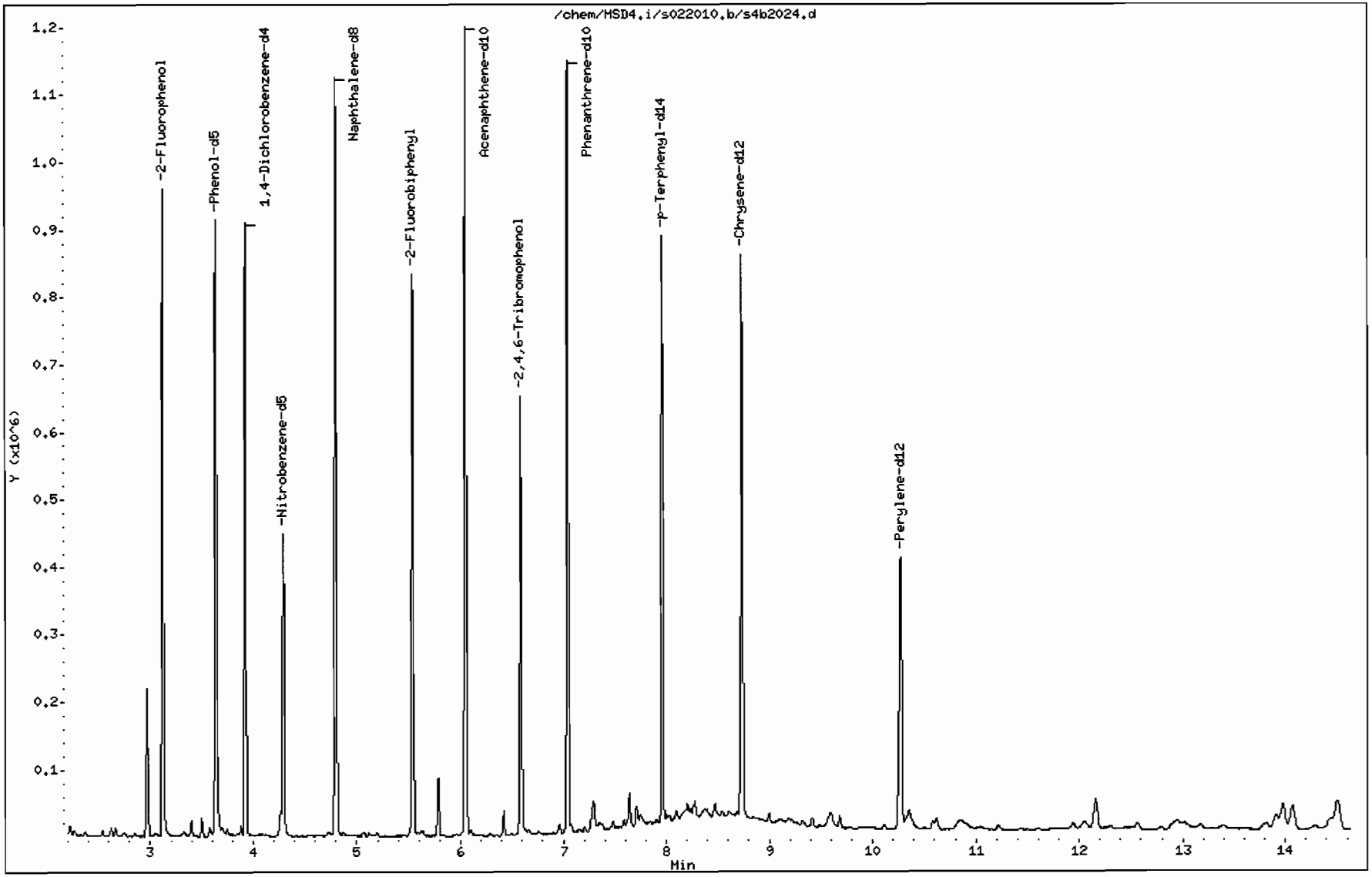
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.930	1004872	40.000
* 98 Perylene-d12	10.273	713772	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.101	206570	8.22275417	326	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.967	252295	10.0428532	399	0		0	10
Unknown				CAS #:			
9.600	73842	4.13813246	164	0		0	98
Unknown				CAS #:			
10.354	106341	5.95939411	237	0		0	98
Unknown				CAS #:			
10.846	81674	4.57704043	182	0		0	98
Unknown				CAS #:			
12.156	108928	6.10436581	242	0		0	98
Unknown				CAS #:			
13.975	89128	4.99473283	198	0		0	98
Unknown				CAS #:			
14.071	117191	6.56740401	261	0		0	98
Urs-12-en-24-oic acid, 3-oxo-, methyl es				CAS #: 20475-86-9			
14.504	167952	9.41210275	374	99	NIST05.L	181925	98

Data File: /chem/MSD4.i/s022010.b/s4b2024.d
Date : 20-FEB-2010 19:13
Client ID: RE15-10-8358
Sample Info: 12464420051951989111SVM11LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD4.i
Operator: JMB3
Column diameter: 0.20



Data File: /chem/MSD4.i/s022010.b/s4b2024.d

Date : 20-FEB-2010 19:13

Client ID: RE15-10-8358

Instrument: MSD4.i

Sample Info: 1246442005|951989|1|SVMI1|LANL

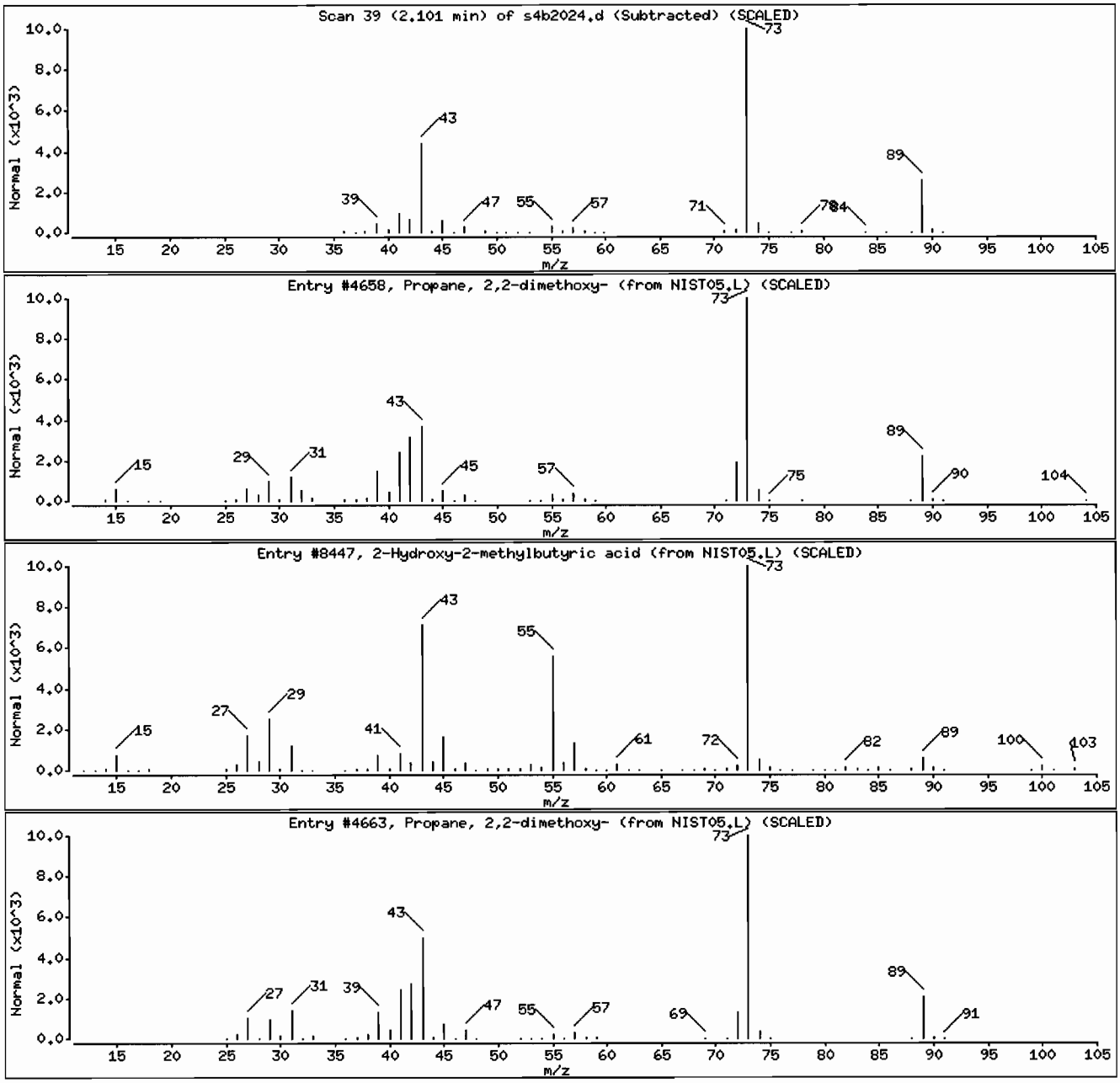
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	50	C5H1202	104
2-Hydroxy-2-methylbutyric acid	3739-30-8	NIST05.L	8447	9	C5H1003	118
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	9	C5H1202	104



Data File: /chem/MSD4.i/s022010.b/s4b2024.d

Date : 20-FEB-2010 19:13

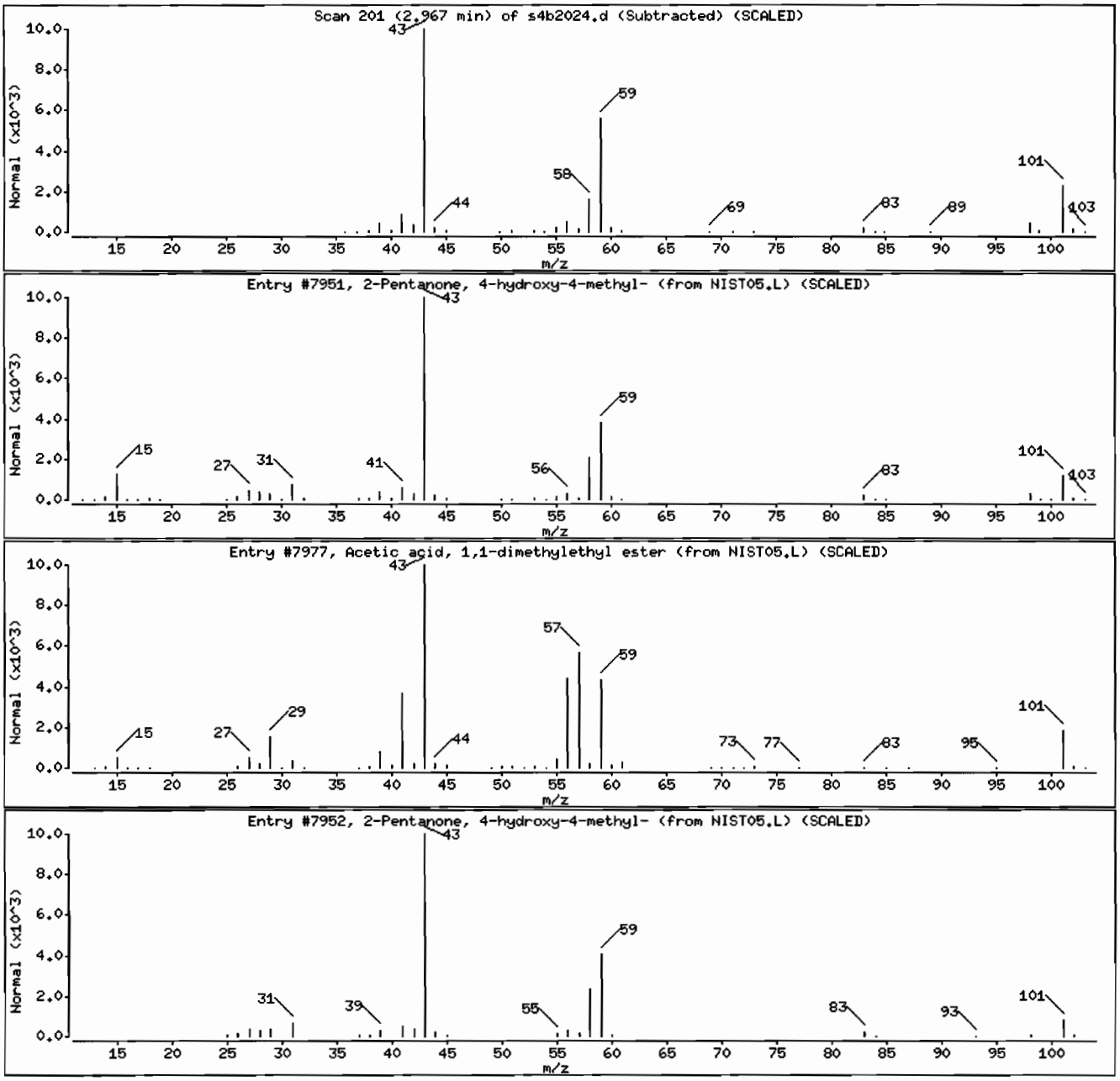
Client ID: RE15-10-8358 Instrument: MSD4.i

Sample Info: I2464420051951989I1ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H1202	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C6H1202	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	39	C6H1202	116



Data File: /chem/MSD4.i/s022010.b/s4b2024.d

Date : 20-FEB-2010 19:13

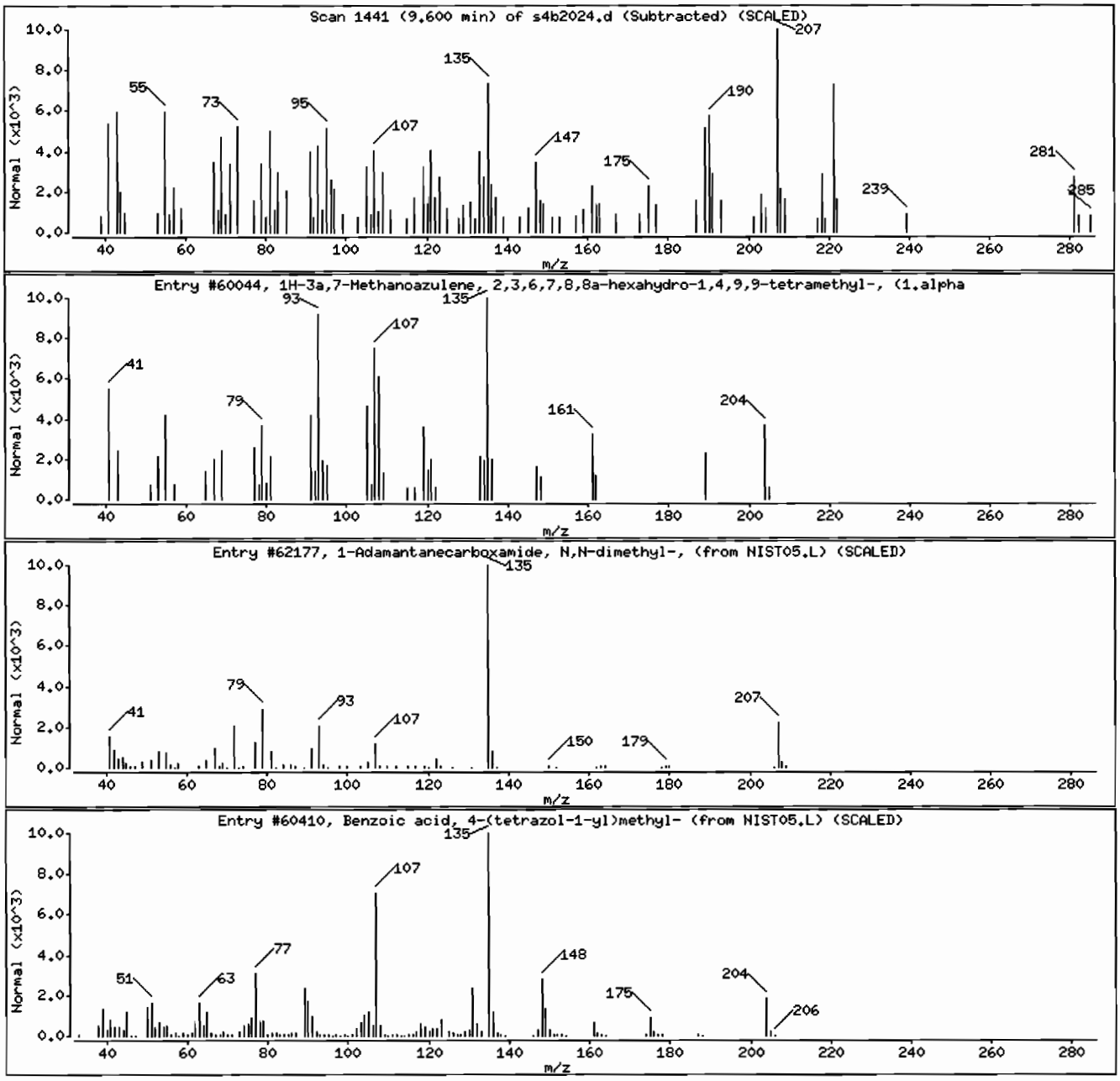
Client ID: RE15-10-8358 Instrument: MSD4.i

Sample Info: I2464420051951989I1ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-3a,7-Methanoazulene, 2,3,6,7,8,8a-hex	560-32-7	NIST05.L	60044	35	C15H24	204
1-Adamantanecarboxamide, N,N-dimethyl-,	1502-00-7	NIST05.L	62177	30	C13H21NO	207
Benzoic acid, 4-(tetrazol-1-yl)methyl-	1000315-95-4	NIST05.L	60410	25	C9H8N4O2	204



Data File: /chem/MSD4.i/s022010.b/s4b2024.d

Date : 20-FEB-2010 19:13

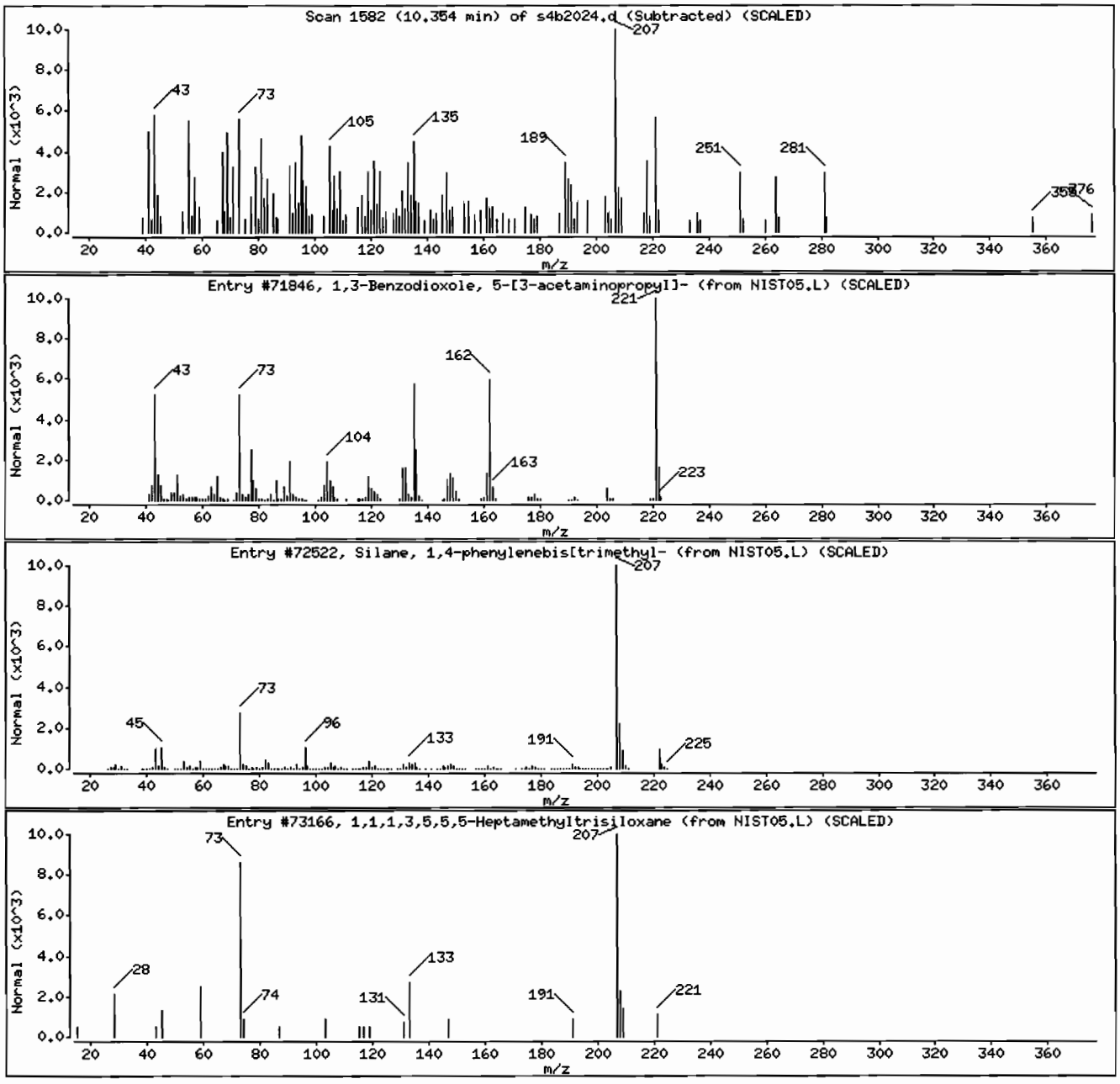
Client ID: RE15-10-8358 Instrument: MSD4.i

Sample Info: I2464420051951989I1ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	25	C12H15NO3	221
Silane, 1,4-phenylenebis[trimethyl-	13183-70-5	NIST05.L	72522	22	C12H22Si2	222
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	22	C7H22O2Si3	222



Data File: /chem/MSD4.i/s022010.b/s4b2024.d

Date : 20-FEB-2010 19:13

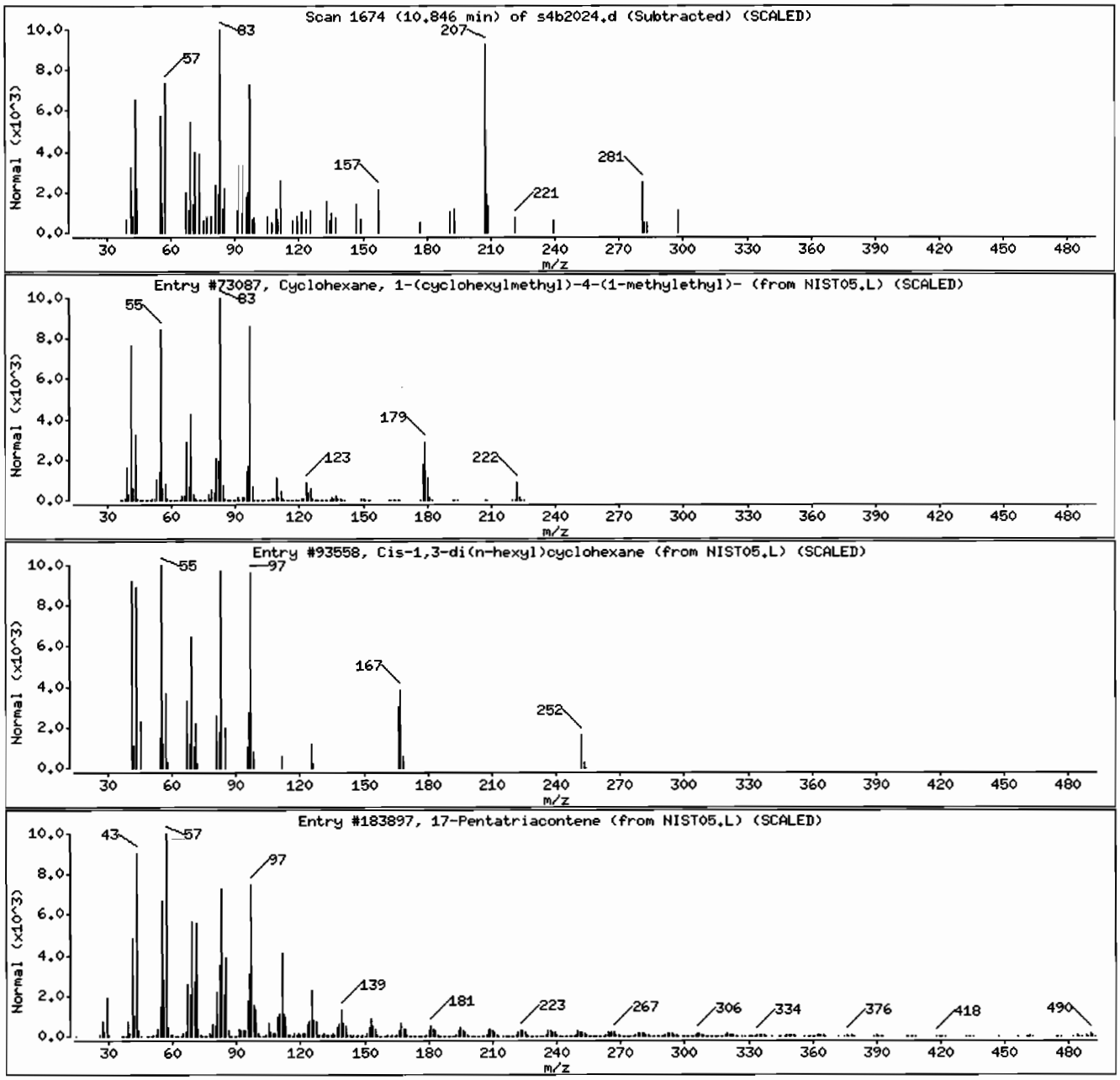
Client ID: RE15-10-8358 Instrument: MSD4.i

Sample Info: |2464420051951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1-(cyclohexylmethyl)-4-(1-m	54965-61-6	NIST05.L	73087	27	C16H30	222
Cis-1,3-di(n-hexyl)cyclohexane	86701-17-9	NIST05.L	93558	22	C18H36	252
17-Pentatriacontene	6971-40-0	NIST05.L	183897	18	C35H70	491



Data File: /chem/MSD4.i/s022010.b/s4b2024.d

Date : 20-FEB-2010 19:13

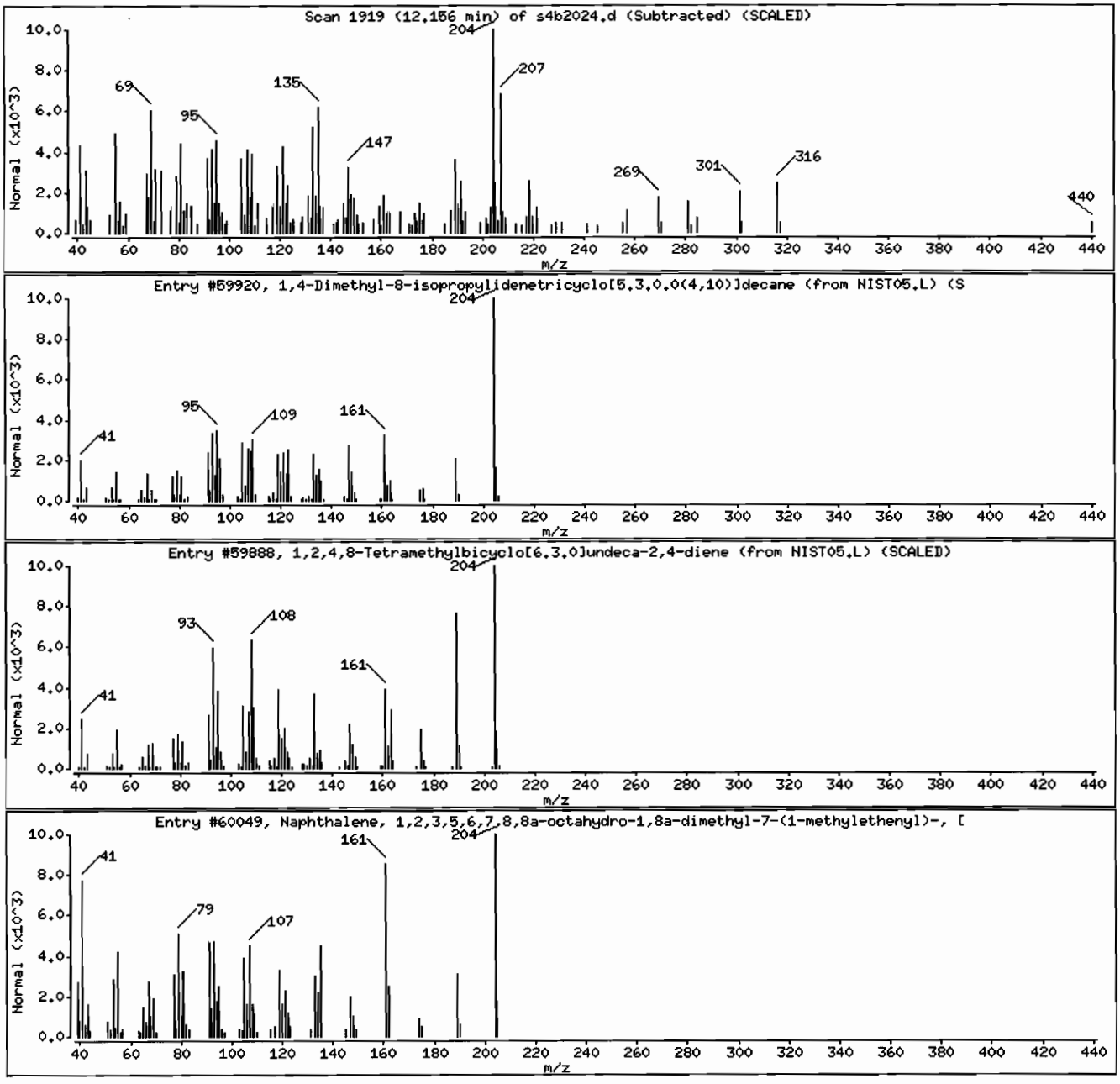
Client ID: RE15-10-8358 Instrument: MSD4.i

Sample Info: 1246442005|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Dimethyl-8-isopropylidenetricyclo[5,	1000140-07-7	NIST05.L	59920	53	C15H24	204
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	52	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	45	C15H24	204



Data File: /chem/MSD4.i/s022010.b/s4b2024.d

Date : 20-FEB-2010 19:13

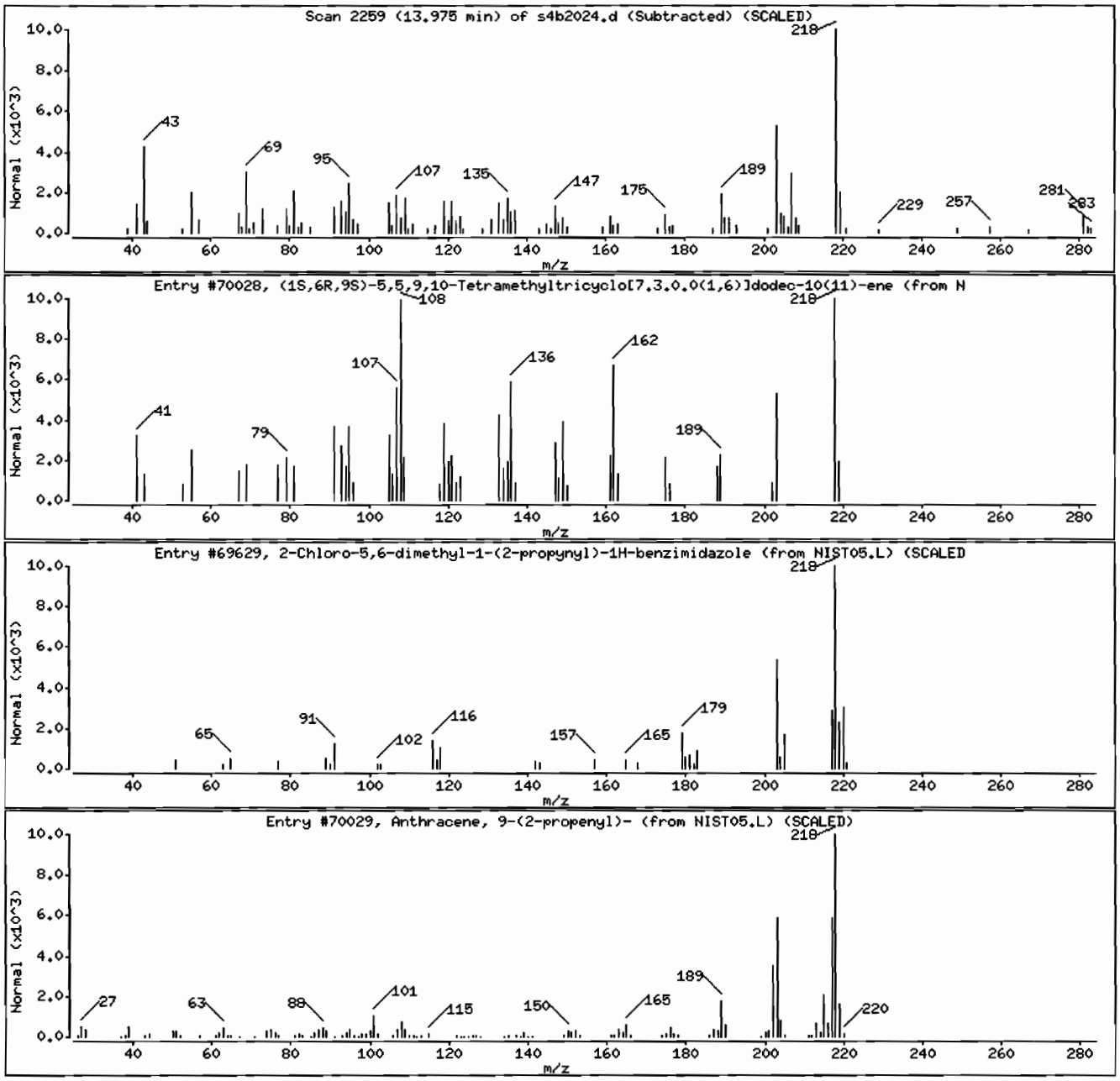
Client ID: RE15-10-8358 Instrument: MSD4.i

Sample Info: I2464420051951989I1ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(1S,6R,9S)-5,5,9,10-Tetramethyltricyclo[	1000298-97-8	NIST05.L	70028	68	C16H26	218
2-Chloro-5,6-dimethyl-1-(2-propynyl)-1H-	80276-20-6	NIST05.L	69629	52	C12H11ClN2	218
Anthracene, 9-(2-propenyl)-	23707-65-5	NIST05.L	70029	50	C17H14	218



Data File: /chem/MSD4.i/s022010.b/s4b2024.d

Date : 20-FEB-2010 19:13

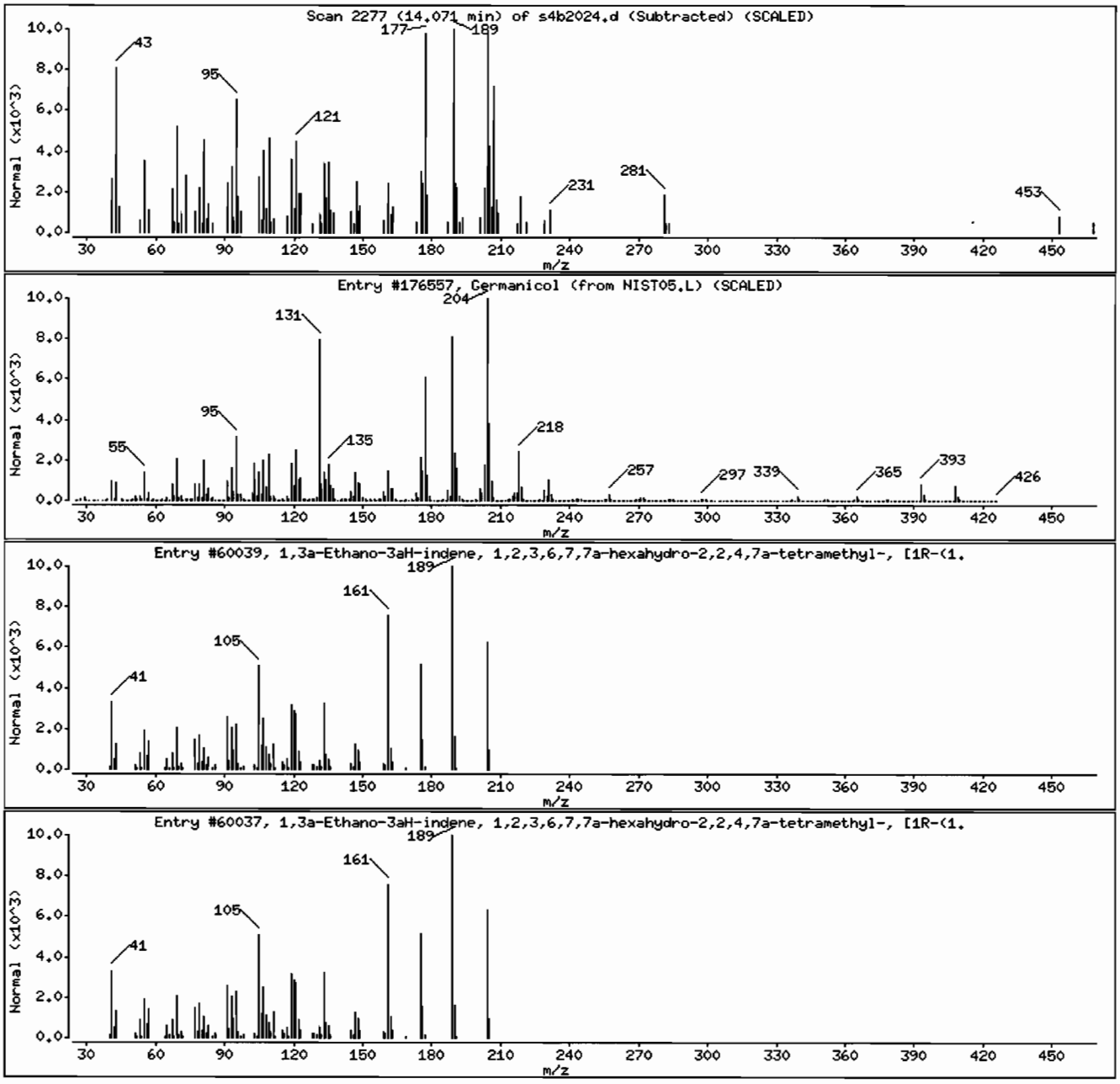
Client ID: RE15-10-8358 Instrument: MSD4.i

Sample Info: |246442005|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Germanicol	465-02-1	NIST05.L	176557	52	C30H500	426
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60039	46	C15H24	204
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIST05.L	60037	46	C15H24	204



Data File: /chem/MSD4.i/s022010.b/s4b2024.d

Date : 20-FEB-2010 19:13

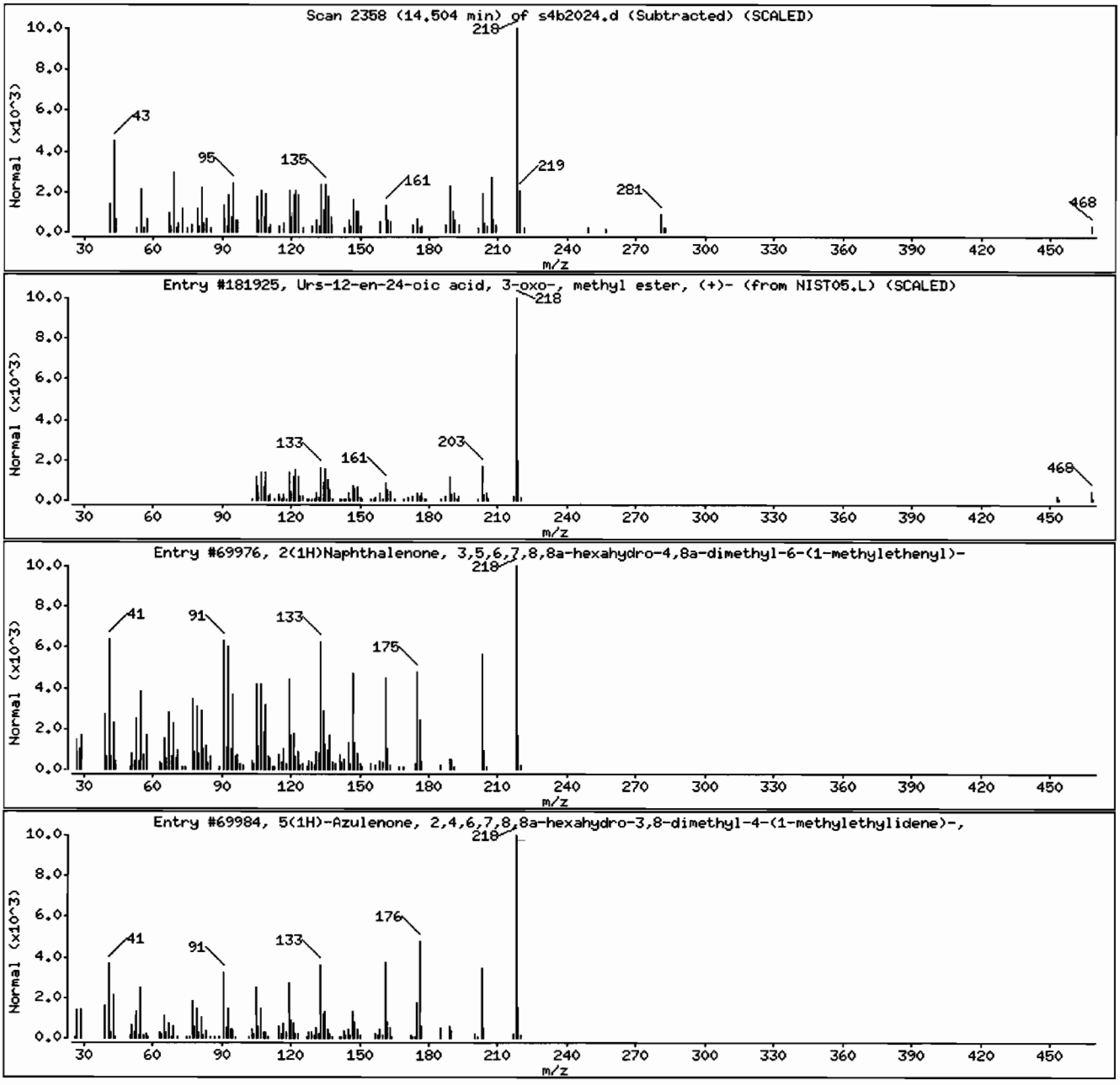
Client ID: RE15-10-8358 Instrument: MSD4.i

Sample Info: 1246442005|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Urs-12-en-24-oic acid, 3-oxo-, methyl es	20475-86-9	NIST05.L	181925	99	C31H4803	468
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	64	C15H220	218
5(1H)-Azulenone, 2,4,6,7,8,8a-hexahydro-	6754-66-1	NIST05.L	69984	58	C15H220	218



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/21/2010 12:24**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2108.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	357	ug/kg	71.4	357
108-95-2	Phenol	U	357	ug/kg	71.4	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.4	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357
95-48-7	o-Cresol	U	357	ug/kg	71.4	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357
78-59-1	Isophorone	U	357	ug/kg	71.4	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357
65-85-0	Benzoic acid	U	714	ug/kg	178	714
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	357	ug/kg	71.4	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/21/2010 12:24**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2108.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	p-Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	U	357	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.05	798	ug/kg		J
	Unknown Aldol Condensate	2.93	457	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442004**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**6.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8359**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/21/2010 12:24**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.09 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2108.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.75	219	ug/kg	99	NJ
	Unknown	12.07	213	ug/kg		J

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Data file : /chem/MSD4.i/s022110a.b/s4b2108.d
Lab Smp Id: 246442004 Client Smp ID: RE15-10-8359
Inj Date : 21-FEB-2010 12:24
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442004|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 12:25 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	6.84520	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.898	3.903	(1.000)	124319	40.0000	
* 29 Naphthalene-d8	136	4.764	4.770	(1.000)	468352	40.0000	
* 46 Acenaphthene-d10	164	6.021	6.027	(1.000)	256840	40.0000	
* 67 Phenanthrene-d10	188	7.011	7.016	(1.000)	423227	40.0000	
* 91 Chrysene-d12	240	8.696	8.717	(1.000)	339173	40.0000	
* 98 Perylene-d12	264	10.209	10.236	(1.000)	265452	40.0000	
$ 3 2-Fluorophenol	112	3.090	3.090	(0.793)	240305	67.8359	2420
$ 5 Phenol-d5	99	3.609	3.614	(0.926)	308806	69.3894	2480
$ 20 Nitrobenzene-d5	82	4.262	4.267	(0.894)	136768	38.0272	1360
$ 39 2-Fluorobiphenyl	172	5.508	5.513	(0.915)	224705	33.8834	1210
$ 60 2,4,6-Tribromophenol	329	6.556	6.561	(1.089)	71709	89.2737	3180
$ 81 p-Terphenyl-d14	244	7.931	7.941	(0.912)	238268	44.9392	1600

ION RATIO REPORT

SV REPORT

Data file: s4b2108.d
Report Date: 02/22/2010 07:40
Lab. ID: 246442004 SampleType: SAMPLE
Injection Date: 21-FEB-2010 12:24
Operator: JMB3 Instrument: MSD4.i
Sample Info: |246442004|951989|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100205-01|
Comment:
Method used: /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	13719	3.61	3.69	80-120	100	(T)
93	248	3.57	3.69	455-515	2	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	17441	4.26	4.14	80-120	100	(T)
42	8567	4.26	4.14	24- 84	49	(T)
27 Benzoic acid		CAS#: 65-85-0				
105	1207	4.50	4.55	80-120	100	( )
122	723	4.50	4.55	40-100	60	( )
77	821	4.50	4.55	39- 99	68	( )
43 Dimethylphthalate			CAS#: 131-11-3			
163	45231	6.02	5.79	80-120	100	(T)
164	256840	6.02	5.79	0- 40	568	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	33089	6.02	5.85	80-120	100	(T)
63	355	6.02	5.85	49-109	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	33089	6.02	6.13	80-120	100	(T)
89	336	6.02	6.13	52-112	1	(QT)
63	355	6.02	6.13	19- 79	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	3048	6.56	6.40	80-120	100	(T)
165	2961	6.56	6.40	59-119	97	(T)
167	1019	6.56	6.40	0- 44	33	(T)
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	3753	6.56	6.71	80-120	100	(T)
141	23579	6.56	6.71	41-101	628	(QT)
250	7684	6.56	6.71	66-126	205	(QT)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD4.i/s022110a.b/s4b2108.d
Lab Smp Id: 246442004 Client Smp ID: RE15-10-8359
Inj Date : 21-FEB-2010 12:24
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442004|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 12:25 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	6.84520	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.898	757501	40.000
* 46 Acenaphthene-d10	6.021	1078577	40.000
* 98 Perylene-d12	10.209	673623	40.000

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

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.047	423563	22.3663137	798	0		0	10
Unknown Aldol Condensate				CAS #:			
2.930	242529	12.8067869	457	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #: 475-20-7			
5.749	165327	6.13129432	219	99	NIST05.L	60023	46
Unknown				CAS #:			
12.065	100566	5.97163838	213	0		0	98

Data File: /chem/MSD4.i/s022110a.b/s4b2108.d

Page 1

Date : 21-FEB-2010 12:24

Client ID: RE15-10-8359

Instrument: MSD4.i

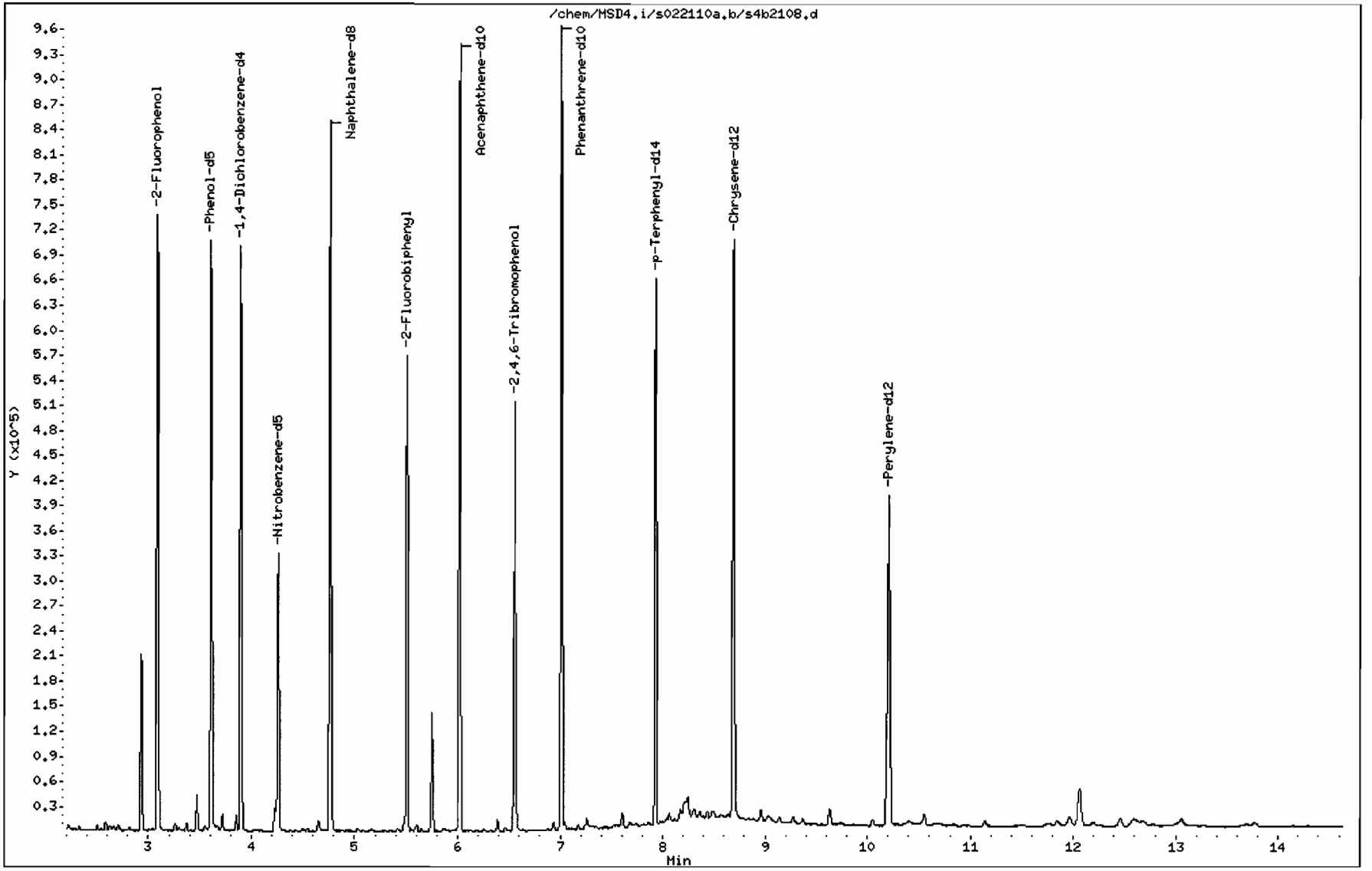
Sample Info: 12464420041951989|1|SVMI1|LANL

Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s022110a.b/s4b2108.d

Date : 21-FEB-2010 12:24

Client ID: RE15-10-8359

Instrument: MSD4.i

Sample Info: 12464420041951989|1|SVMI1|LANL

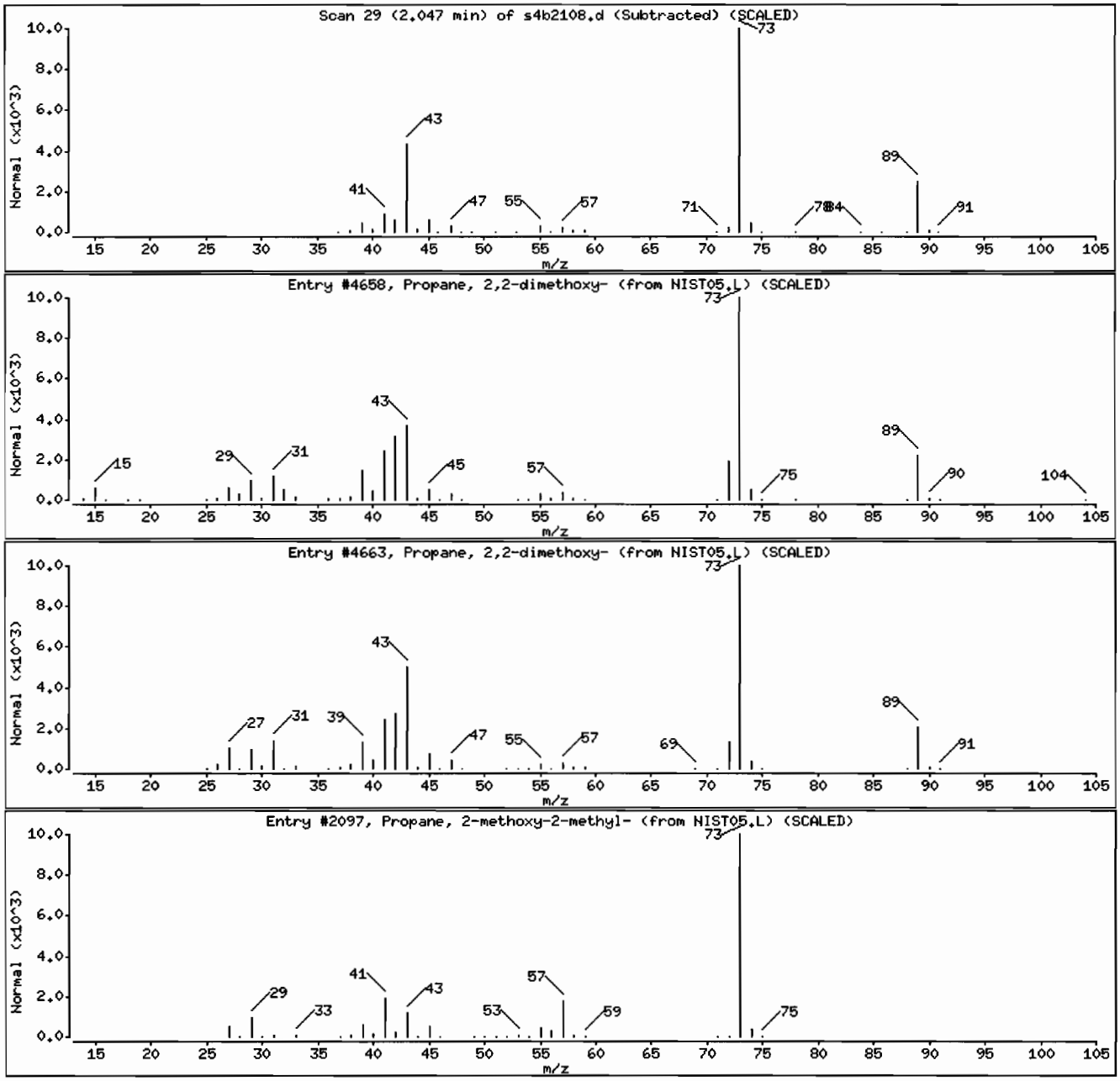
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	50	C5H1202	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	9	C5H1202	104
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2097	9	C5H120	88



Data File: /chem/MSD4.i/s022110a.b/s4b2108.d

Date : 21-FEB-2010 12:24

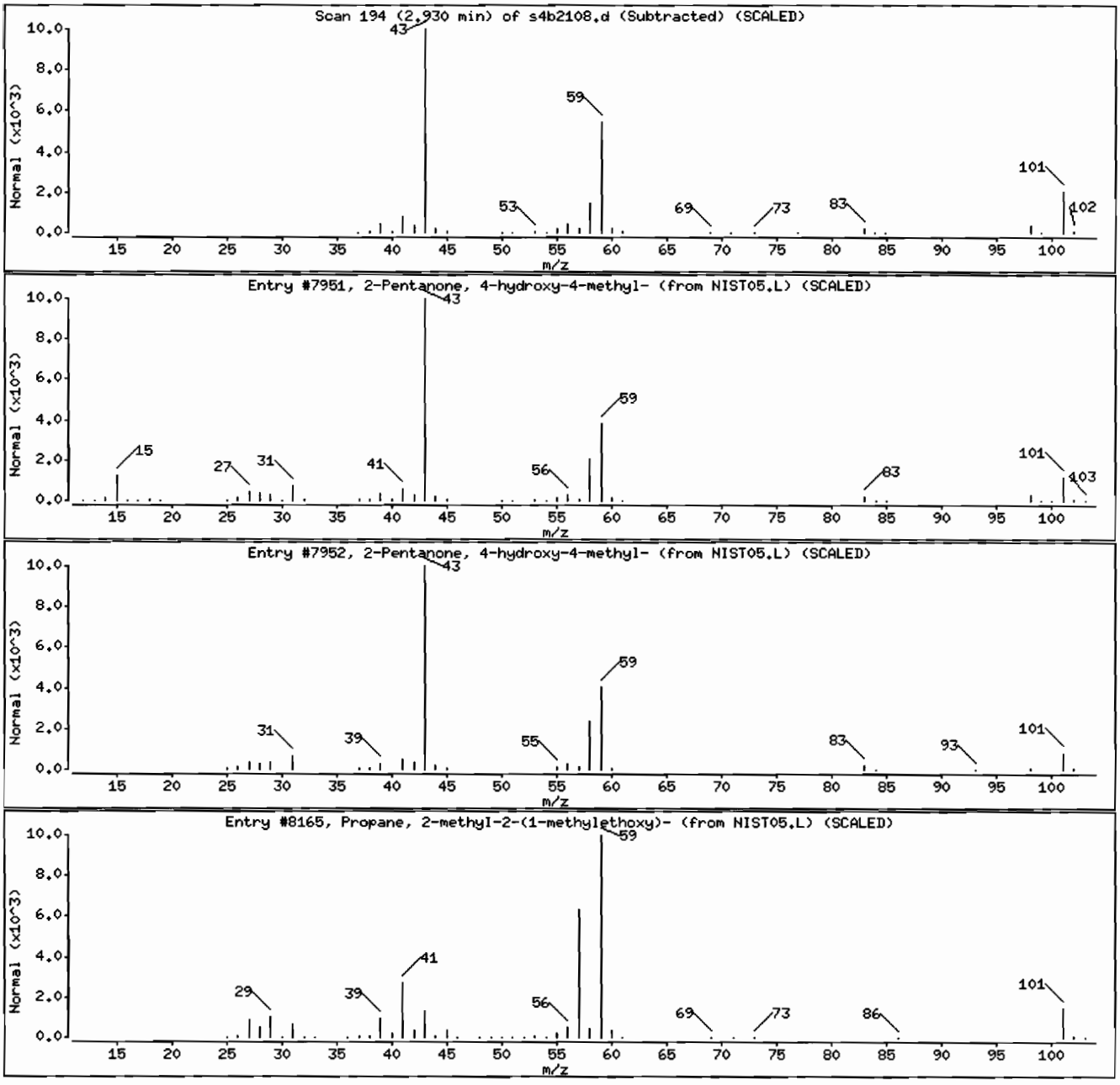
Client ID: RE15-10-8359 Instrument: MSD4.i

Sample Info: 1246442004|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	39	C6H12O2	116
Propane, 2-methyl-2-(1-methylethoxy)-	17348-59-3	NIST05.L	8165	33	C7H16O	116



Data File: /chem/MSD4.i/s022110a.b/s4b2108.d

Date : 21-FEB-2010 12:24

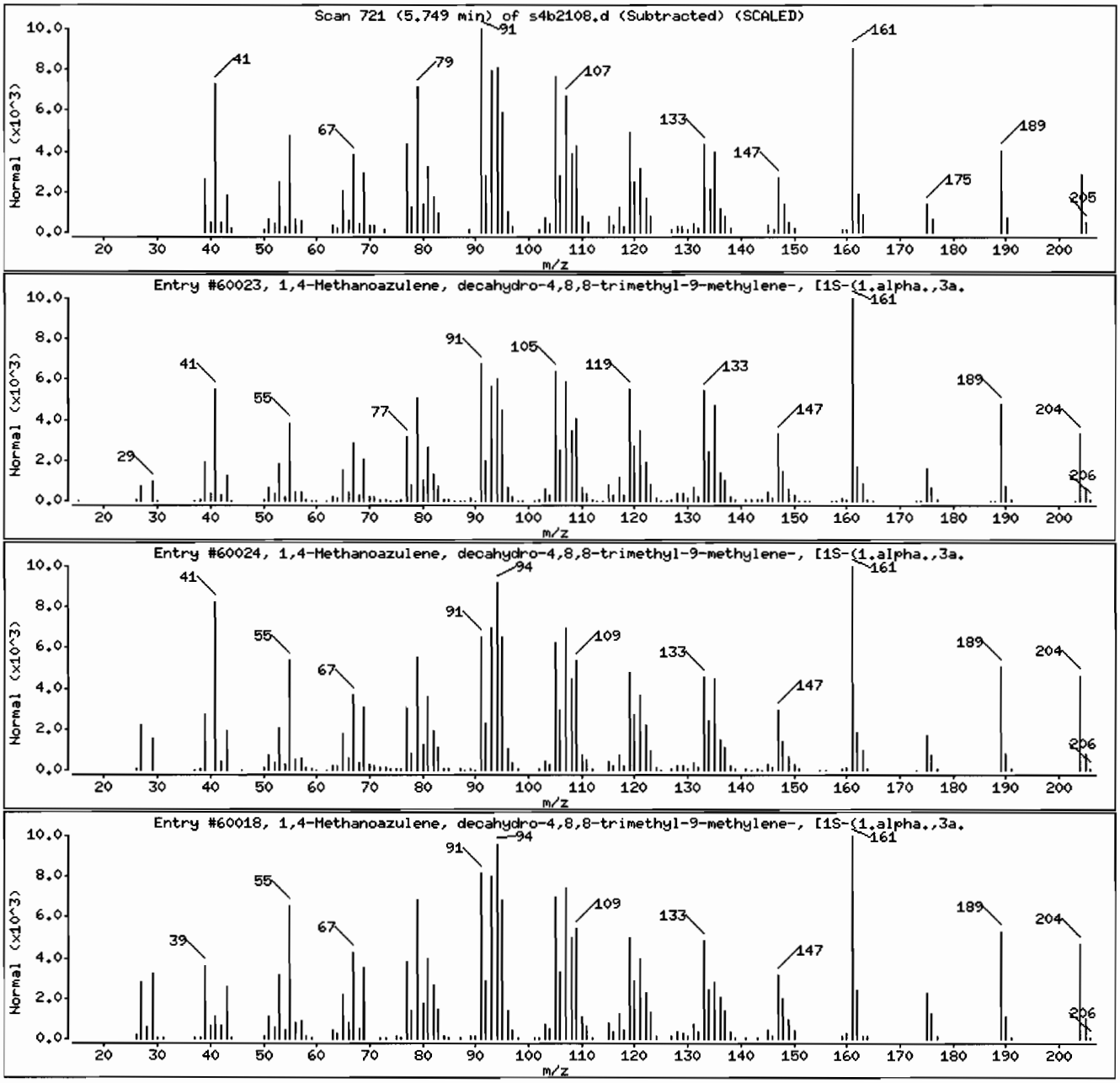
Client ID: RE15-10-8359 Instrument: MSD4.i

Sample Info: |2464420041951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60023	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	98	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	97	C15H24	204



Data File: /chem/MSD4.i/s022110a.b/s4b2108.d

Date : 21-FEB-2010 12:24

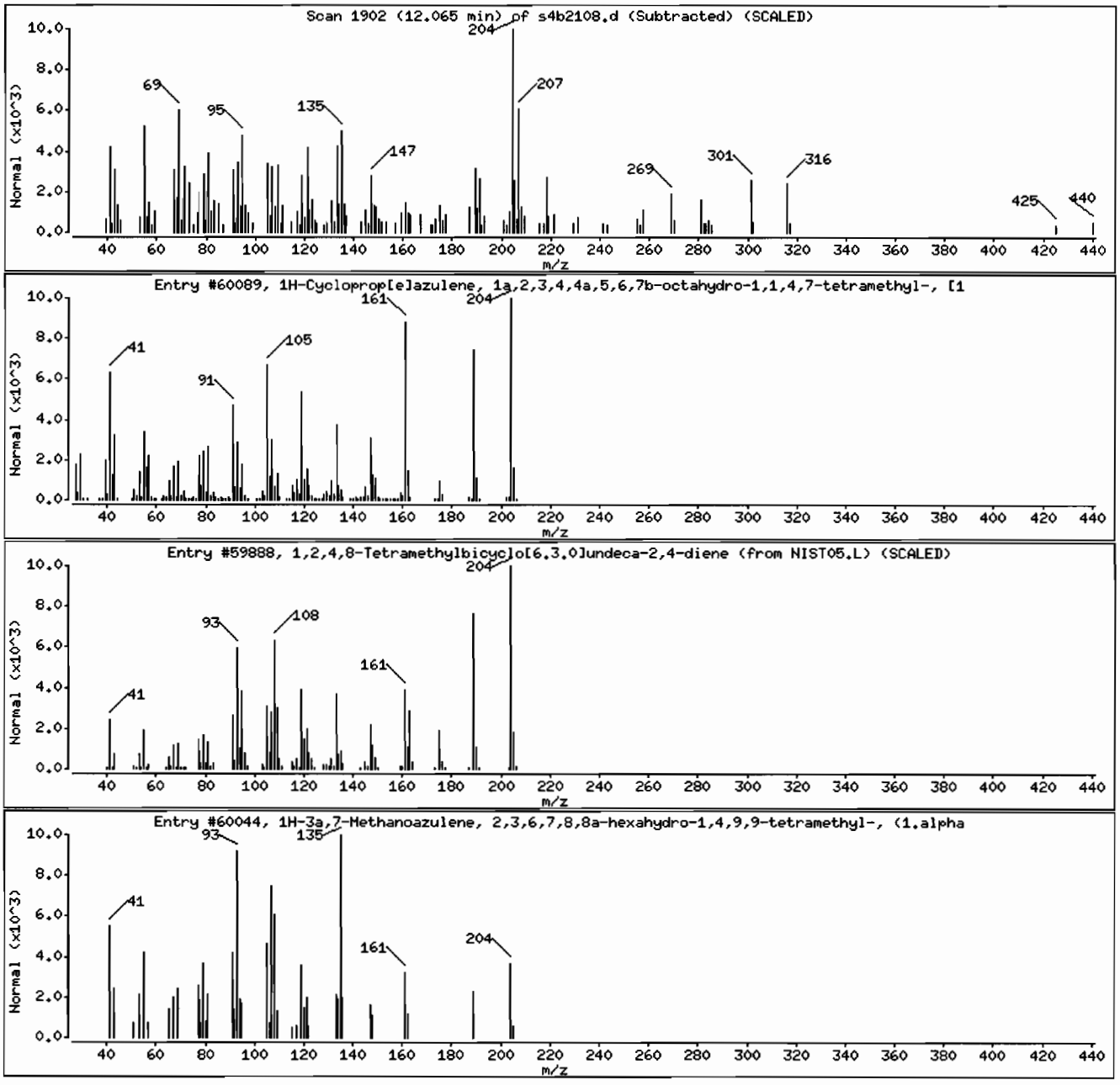
Client ID: RE15-10-8359 Instrument: MSD4.i

Sample Info: I2464420041951989I1ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60089	55	C15H24	204
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	45	C15H24	204
1H-3a,7-Methanoazulene, 2,3,6,7,8,8a-hex	560-32-7	NIST05.L	60044	38	C15H24	204



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2025.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	457	ug/kg	91.5	457
108-95-2	Phenol	U	457	ug/kg	91.5	457
95-57-8	2-Chlorophenol	U	457	ug/kg	91.5	457
106-46-7	1,4-Dichlorobenzene	U	457	ug/kg	91.5	457
621-64-7	N-Nitrosodipropylamine	U	457	ug/kg	91.5	457
59-50-7	4-Chloro-3-methylphenol	U	457	ug/kg	91.5	457
83-32-9	Acenaphthene	U	45.7	ug/kg	15.1	45.7
121-14-2	2,4-Dinitrotoluene	U	457	ug/kg	45.7	457
100-02-7	4-Nitrophenol	U	457	ug/kg	151	457
87-86-5	Pentachlorophenol	U	457	ug/kg	114	457
129-00-0	Pyrene	U	45.7	ug/kg	13.7	45.7
110-86-1	Pyridine	U	457	ug/kg	91.5	457
62-53-3	Aniline	U	457	ug/kg	137	457
111-44-4	bis(2-Chloroethyl) ether	U	457	ug/kg	91.5	457
541-73-1	1,3-Dichlorobenzene	U	457	ug/kg	91.5	457
100-51-6	Benzyl alcohol	U	457	ug/kg	137	457
95-50-1	1,2-Dichlorobenzene	U	457	ug/kg	91.5	457
108-60-1	bis(2-Chloroisopropyl)ether	U	457	ug/kg	91.5	457
95-48-7	o-Cresol	U	457	ug/kg	91.5	457
65794-96-9	m,p-Cresols	U	457	ug/kg	137	457
67-72-1	Hexachloroethane	U	457	ug/kg	91.5	457
98-95-3	Nitrobenzene	U	457	ug/kg	91.5	457
78-59-1	Isophorone	U	457	ug/kg	91.5	457
88-75-5	2-Nitrophenol	U	457	ug/kg	91.5	457
105-67-9	2,4-Dimethylphenol	U	457	ug/kg	160	457
111-91-1	bis(2-Chloroethoxy)methane	U	457	ug/kg	91.5	457
120-83-2	2,4-Dichlorophenol	U	457	ug/kg	91.5	457
65-85-0	Benzoic acid	U	915	ug/kg	229	915
91-20-3	Naphthalene	U	45.7	ug/kg	13.7	45.7
106-47-8	4-Chloroaniline	U	457	ug/kg	91.5	457
87-68-3	Hexachlorobutadiene	U	457	ug/kg	91.5	457
91-57-6	2-Methylnaphthalene	U	45.7	ug/kg	9.15	45.7
77-47-4	Hexachlorocyclopentadiene	U	457	ug/kg	91.5	457
88-06-2	2,4,6-Trichlorophenol	U	457	ug/kg	91.5	457
95-95-4	2,4,5-Trichlorophenol	U	457	ug/kg	91.5	457
91-58-7	2-Chloronaphthalene	U	45.7	ug/kg	15.1	45.7
88-74-4	2-Nitroaniline	U	457	ug/kg	91.5	457
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	457	ug/kg	91.5	457

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2025.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	457	ug/kg	91.5	457
606-20-2	2,6-Dinitrotoluene	U	457	ug/kg	45.7	457
208-96-8	Acenaphthylene	U	45.7	ug/kg	13.7	45.7
51-28-5	2,4-Dinitrophenol	U	915	ug/kg	174	915
132-64-9	Dibenzofuran	U	457	ug/kg	91.5	457
84-66-2	Diethylphthalate	U	457	ug/kg	91.5	457
86-73-7	Fluorene	U	45.7	ug/kg	13.7	45.7
7005-72-3	4-Chlorophenylphenylether	U	457	ug/kg	91.5	457
534-52-1	2-Methyl-4,6-dinitrophenol	U	457	ug/kg	91.5	457
100-01-6	4-Nitroaniline	U	457	ug/kg	137	457
	p-Nitroaniline					
122-39-4	Diphenylamine	U	457	ug/kg	91.5	457
122-66-7	Azobenzene	U	457	ug/kg	91.5	457
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	457	ug/kg	91.5	457
118-74-1	Hexachlorobenzene	U	457	ug/kg	91.5	457
85-01-8	Phenanthrene	U	45.7	ug/kg	13.7	45.7
120-12-7	Anthracene	U	45.7	ug/kg	9.15	45.7
84-74-2	Di-n-butylphthalate	U	457	ug/kg	91.5	457
206-44-0	Fluoranthene	U	45.7	ug/kg	13.7	45.7
85-68-7	Butylbenzylphthalate	U	457	ug/kg	91.5	457
56-55-3	Benzo(a)anthracene	U	45.7	ug/kg	13.7	45.7
91-94-1	3,3'-Dichlorobenzidine	U	457	ug/kg	137	457
218-01-9	Chrysene	U	45.7	ug/kg	13.7	45.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	457	ug/kg	91.5	457
117-84-0	Di-n-octylphthalate	U	457	ug/kg	91.5	457
205-99-2	Benzo(b)fluoranthene	U	45.7	ug/kg	13.7	45.7
207-08-9	Benzo(k)fluoranthene	U	45.7	ug/kg	13.7	45.7
50-32-8	Benzo(a)pyrene	U	45.7	ug/kg	13.7	45.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.7	ug/kg	13.7	45.7
53-70-3	Dibenzo(a,h)anthracene	U	45.7	ug/kg	13.7	45.7
191-24-2	Benzo(ghi)perylene	U	45.7	ug/kg	13.7	45.7
120-82-1	1,2,4-Trichlorobenzene	U	457	ug/kg	91.5	457

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.96	326	ug/kg		J
	Unknown	8.03	267	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442006**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**27.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8360**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2025.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.6	201	ug/kg		J
	Unknown	10.35	285	ug/kg		J

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Data file : /chem/MSD4.i/s022010.b/s4b2025.d
Lab Smp Id: 246442006 Client Smp ID: RE15-10-8360
Inj Date : 20-FEB-2010 19:36
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442006|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	27.40610	% moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
*	10 1,4-Dichlorobenzene-d4	152	3.930	3.935	(1.000)	165262	40.0000	
*	29 Naphthalene-d8	136	4.797	4.802	(1.000)	667018	40.0000	
*	46 Acenaphthene-d10	164	6.054	6.053	(1.000)	346896	40.0000	
*	67 Phenanthrene-d10	188	7.043	7.043	(1.000)	524177	40.0000	
*	91 Chrysene-d12	240	8.733	8.754	(1.000)	403219	40.0000	
*	98 Perylene-d12	264	10.268	10.300	(1.000)	288057	40.0000	
$	3 2-Fluorophenol	112	3.123	3.117	(0.794)	174189	36.9898	1690
$	5 Phenol-d5	99	3.641	3.646	(0.926)	226114	38.2208	1750
$	20 Nitrobenzene-d5	82	4.289	4.299	(0.894)	90144	17.5987	805
$	39 2-Fluorobiphenyl	172	5.540	5.545	(0.915)	171945	19.1968	878
$	60 2,4,6-Tribromophenol	329	6.588	6.588	(1.088)	43889	40.4547	1850
$	81 p-Terphenyl-d14	244	7.958	7.968	(0.911)	160223	25.4193	1160

ION RATIO REPORT

SV REPORT

Data file: s4b2025.d
Report Date: 02/21/2010 09:00
Lab. ID: 246442006 SampleType: SAMPLE
Injection Date: 20-FEB-2010 19:36
Operator: JMB3 Instrument: MSD4.i
Sample Info: |246442006|951989|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100205-01|
Comment:
Method used: /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	8138	3.64	3.72	80-120	100	(T)
93	1328	3.50	3.73	486-546	16	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	11322	4.29	4.18	80-120	100	(T)
42	4991	4.29	4.18	22- 82	44	(T)
43 Dimethylphthalate			CAS#: 131-11-3			
163	60337	6.05	5.82	80-120	100	(T)
164	346896	6.05	5.82	0- 40	575	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	44961	6.05	5.88	80-120	100	(T)
63	317	6.05	5.88	33- 93	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	44961	6.05	6.17	80-120	100	(T)
89	510	6.05	6.17	41-101	1	(QT)
63	317	6.05	6.17	11- 71	1	(QT)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD4.i/s022010.b/s4b2025.d
Lab Smp Id: 246442006 Client Smp ID: RE15-10-8360
Inj Date : 20-FEB-2010 19:36
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442006|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	27.40610	% moisture

Cpnd Variable Local Compound Variable

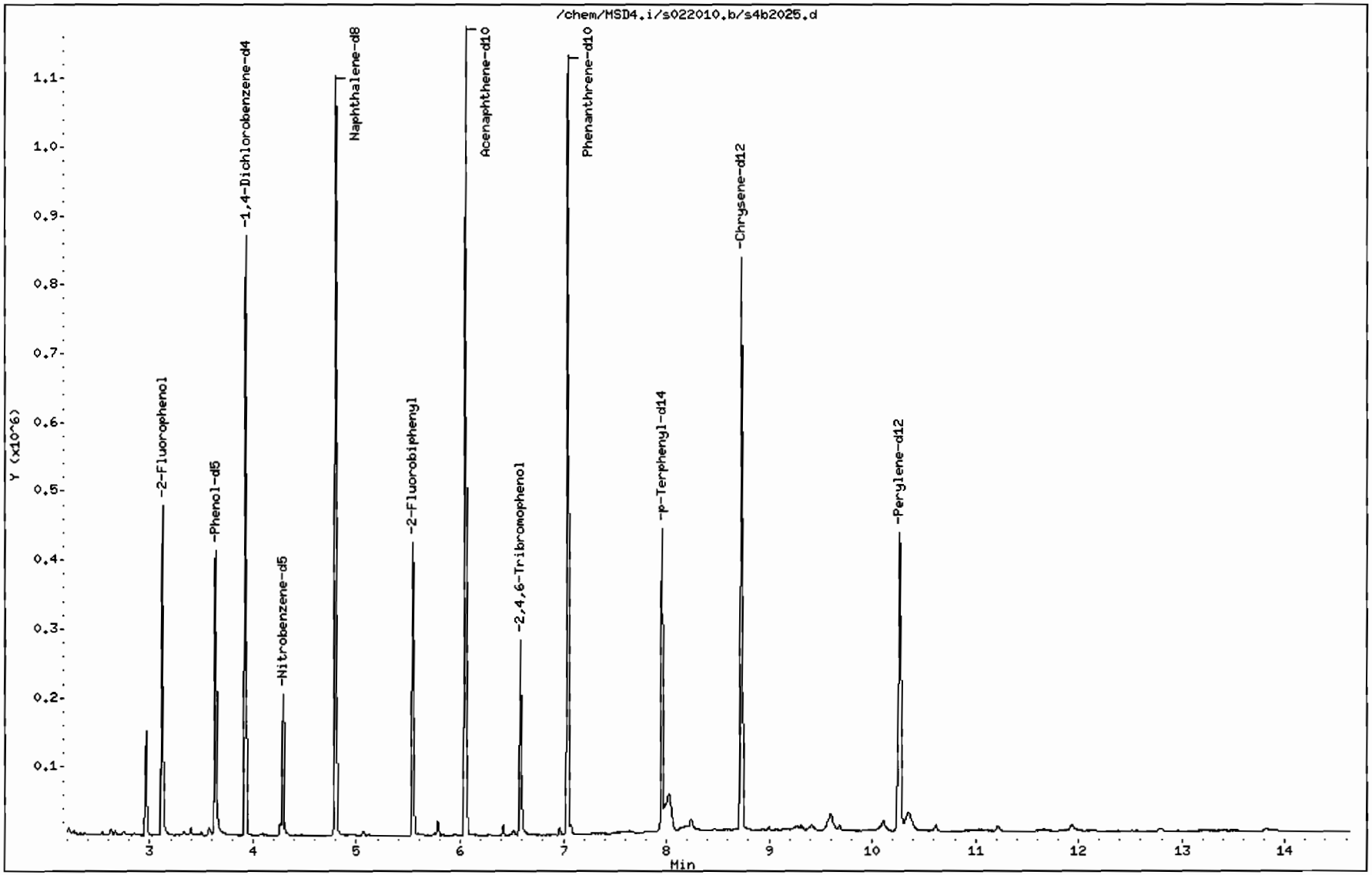
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.930	961651	40.000
* 91 Chrysene-d12	8.733	1058885	40.000
* 98 Perylene-d12	10.268	748370	40.000

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

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown Aldol Condensate				CAS #:			
2.962	171192	7.12073715	326	0		0	10
Unknown				CAS #:			
8.027	154769	5.84649595	267	0		0	91
Unknown				CAS #:			
9.600	82038	4.38488672	201	0		0	98
Unknown				CAS #:			
10.354	116568	6.23048177	285	0		0	98

Data File: /chem/MSD4.i/s022010.b/s4b2025.d
Date : 20-FEB-2010 19:36
Client ID: RE15-10-8360
Sample Info: |246442006|951989|1|SVM|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD4.i
Operator: JMB3
Column diameter: 0.20



Data File: /chem/MSD4.i/s022010.b/s4b2025.d

Date : 20-FEB-2010 19:36

Client ID: RE15-10-8360

Instrument: MSD4.i

Sample Info: |246442006|951989|1|SVM|1|LANL

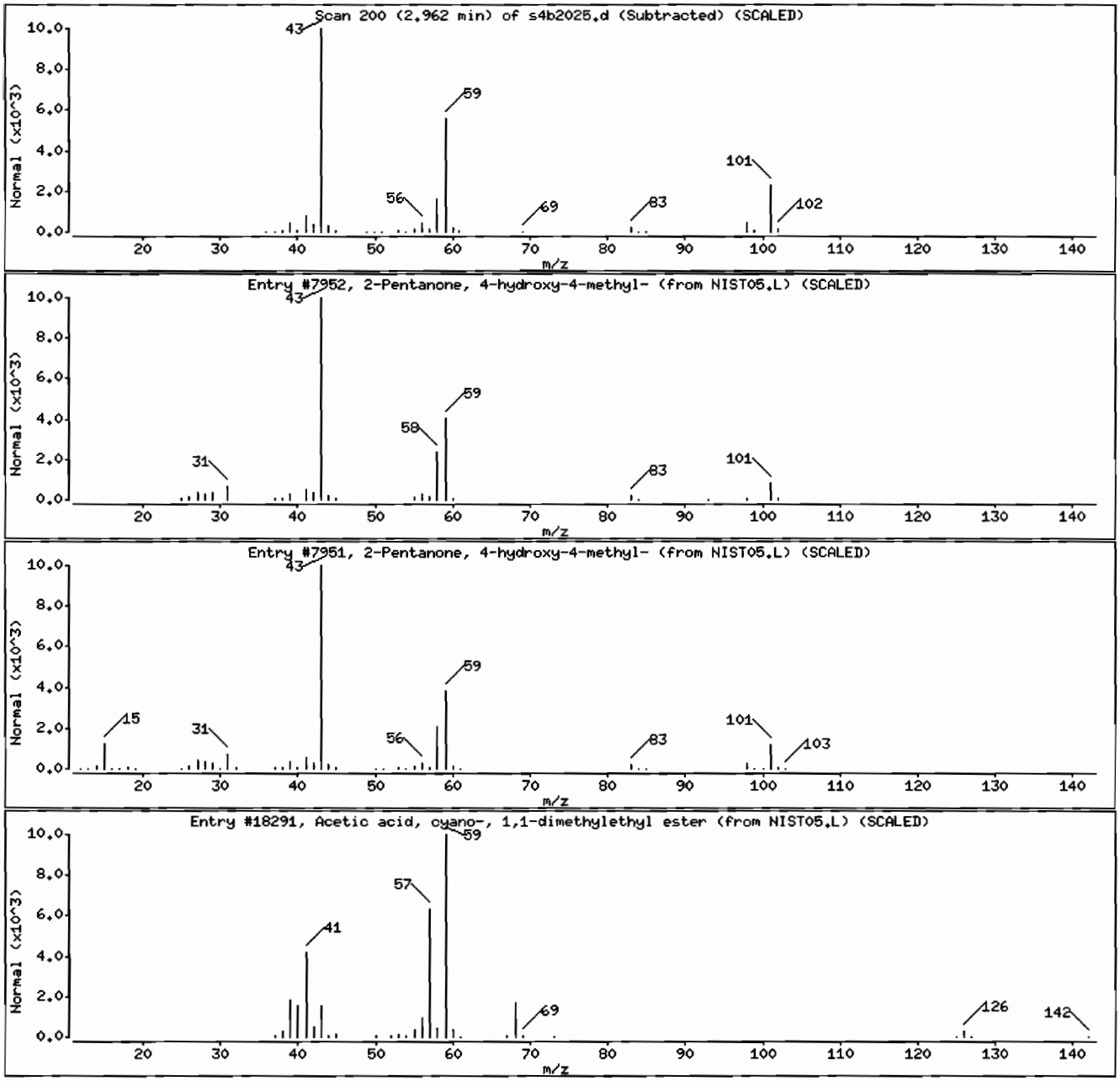
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	17	C7H11NO2	141



Data File: /chem/MSD4.i/s022010.b/s4b2025.d

Date : 20-FEB-2010 19:36

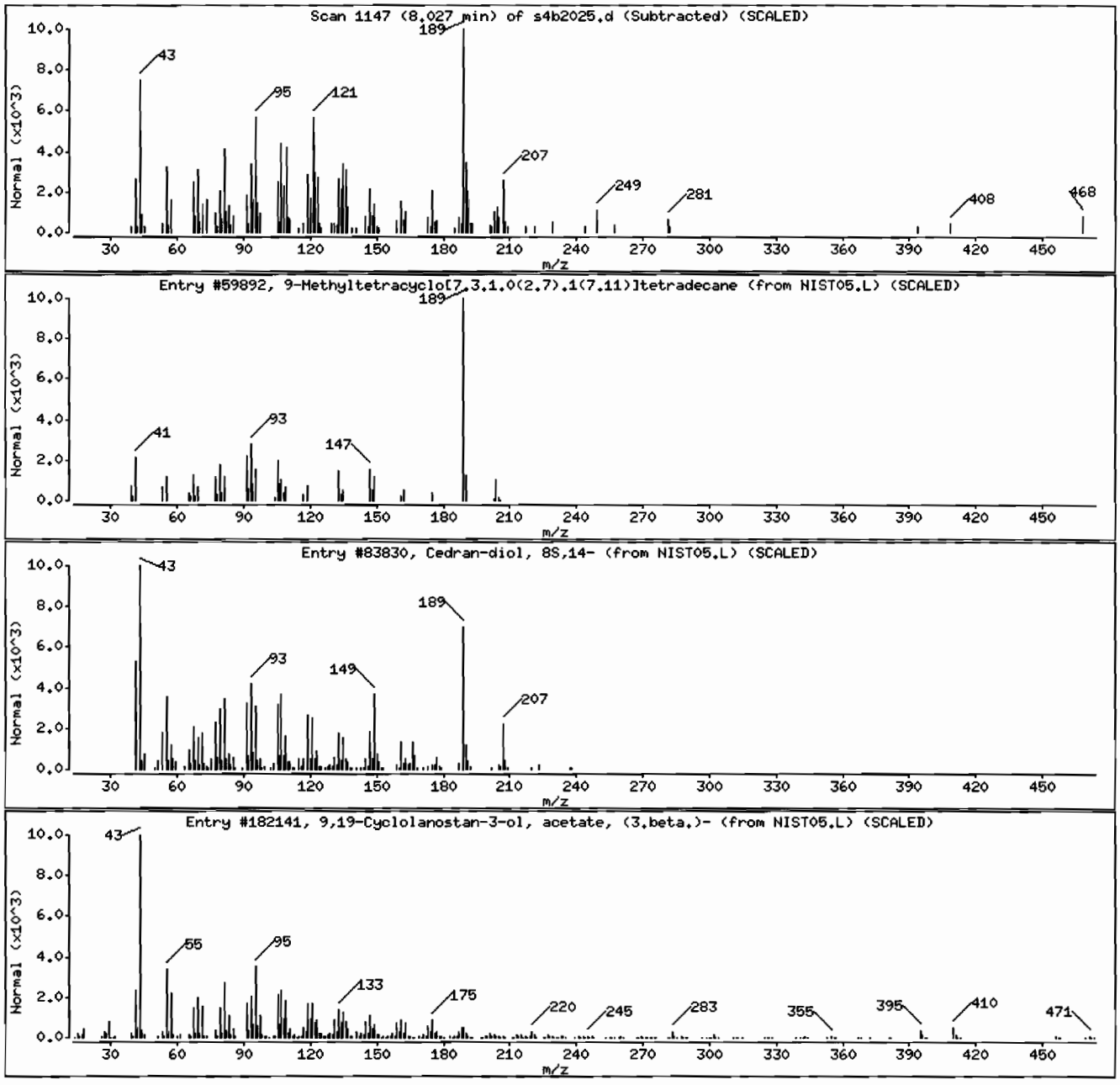
Client ID: RE15-10-8360 Instrument: MSD4.i

Sample Info: 1246442006|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Methyltetracyclo[7.3.1.0(2.7).1(7.11)]	1000215-30-5	NIST05.L	59892	38	C15H24	204
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	37	C15H2602	238
9,19-Cyclolanostan-3-ol, acetate, (3.bet	4575-74-0	NIST05.L	182141	35	C32H5402	470



Data File: /chem/MSD4.i/s022010.b/s4b2025.d

Date : 20-FEB-2010 19:36

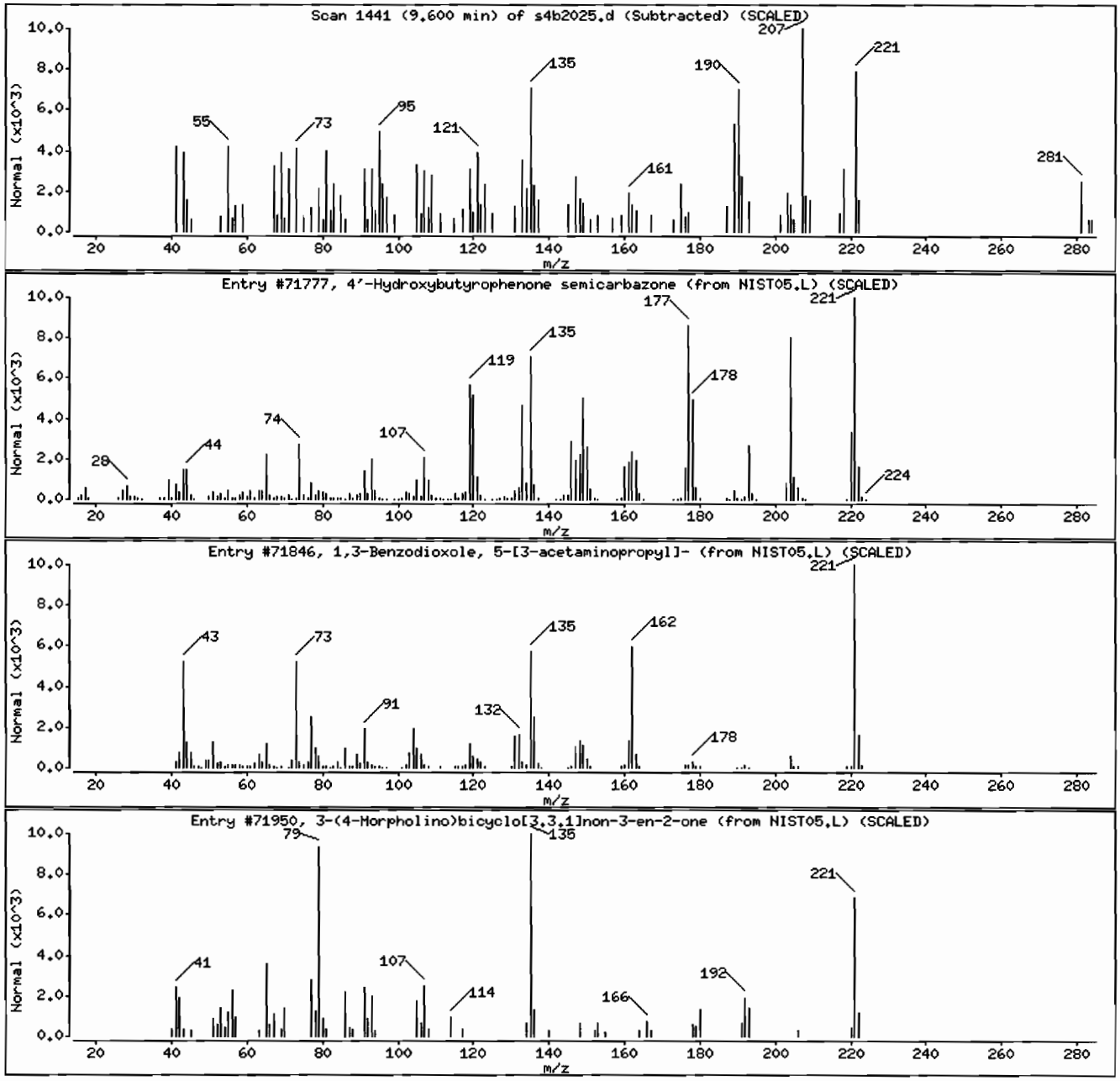
Client ID: RE15-10-8360 Instrument: MSD4.i

Sample Info: I2464420061951989I1ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4'-Hydroxybutyrophenone semicarbazone	1000240-11-4	NIST05.L	71777	38	C11H15N3O2	221
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	25	C12H15NO3	221
3-(4-Morpholino)bicyclo[3.3.1]non-3-en-2	1000101-15-7	NIST05.L	71950	22	C13H19NO2	221



Data File: /chem/MSD4.i/s022010.b/s4b2025.d

Date : 20-FEB-2010 19:36

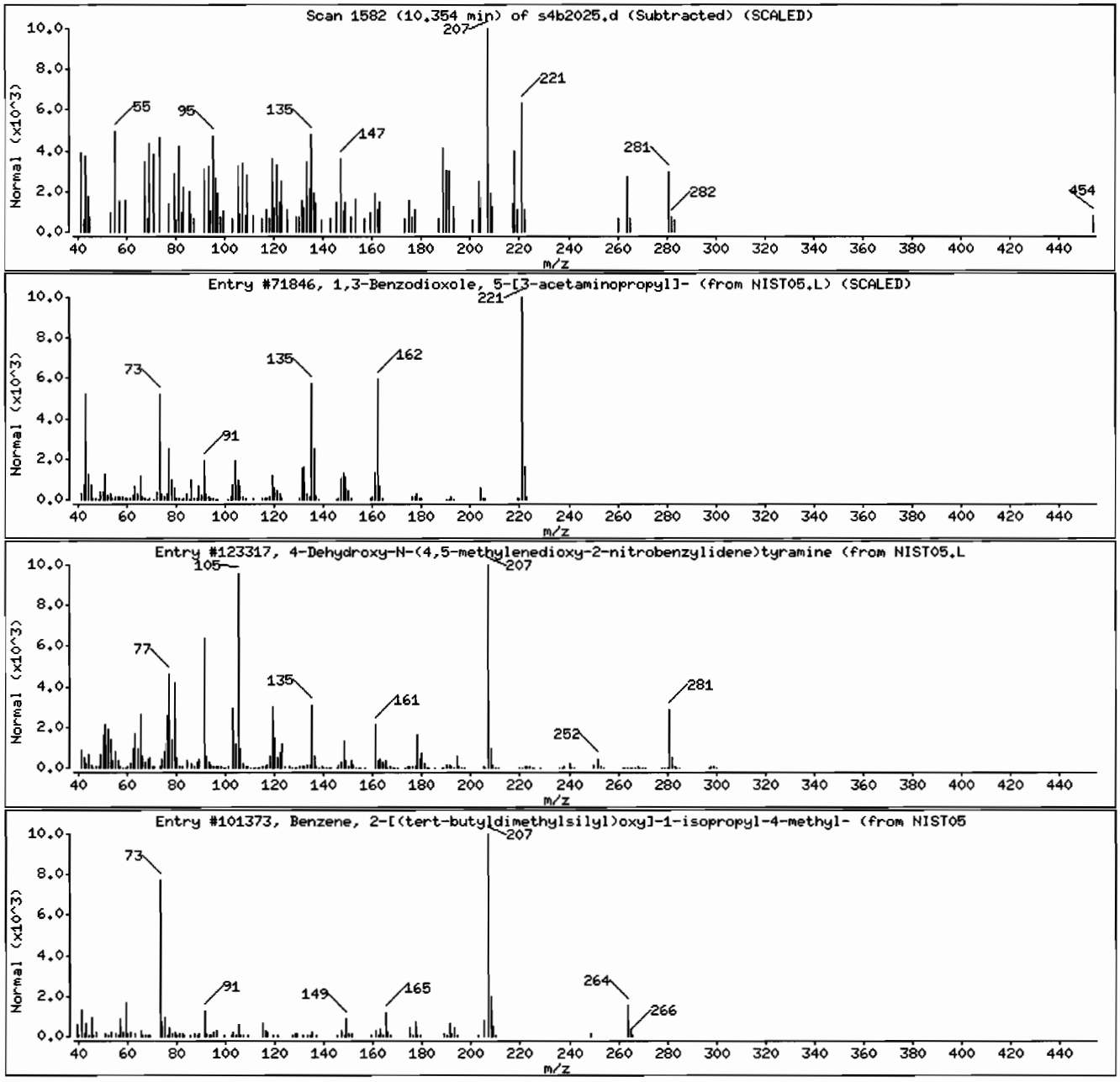
Client ID: RE15-10-8360 Instrument: MSD4.i

Sample Info: |246442006|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	25	C12H15NO3	221
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	22	C16H14N2O4	298
Benzene, 2-[(tert-butyldimethylsilyl)oxy	330455-64-6	NIST05.L	101373	22	C16H28OSi	264



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:20**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2019.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	405	ug/kg	81.0	405
108-95-2	Phenol	U	405	ug/kg	81.0	405
95-57-8	2-Chlorophenol	U	405	ug/kg	81.0	405
106-46-7	1,4-Dichlorobenzene	U	405	ug/kg	81.0	405
621-64-7	N-Nitrosodipropylamine	U	405	ug/kg	81.0	405
59-50-7	4-Chloro-3-methylphenol	U	405	ug/kg	81.0	405
83-32-9	Acenaphthene	U	40.5	ug/kg	13.4	40.5
121-14-2	2,4-Dinitrotoluene	U	405	ug/kg	40.5	405
100-02-7	4-Nitrophenol	U	405	ug/kg	134	405
87-86-5	Pentachlorophenol	U	405	ug/kg	101	405
129-00-0	Pyrene	U	40.5	ug/kg	12.1	40.5
110-86-1	Pyridine	U	405	ug/kg	81.0	405
62-53-3	Aniline	U	405	ug/kg	121	405
111-44-4	bis(2-Chloroethyl) ether	U	405	ug/kg	81.0	405
541-73-1	1,3-Dichlorobenzene	U	405	ug/kg	81.0	405
100-51-6	Benzyl alcohol	U	405	ug/kg	121	405
95-50-1	1,2-Dichlorobenzene	U	405	ug/kg	81.0	405
108-60-1	bis(2-Chloroisopropyl)ether	U	405	ug/kg	81.0	405
95-48-7	o-Cresol	U	405	ug/kg	81.0	405
65794-96-9	m,p-Cresols	U	405	ug/kg	121	405
67-72-1	Hexachloroethane	U	405	ug/kg	81.0	405
98-95-3	Nitrobenzene	U	405	ug/kg	81.0	405
78-59-1	Isophorone	U	405	ug/kg	81.0	405
88-75-5	2-Nitrophenol	U	405	ug/kg	81.0	405
105-67-9	2,4-Dimethylphenol	U	405	ug/kg	142	405
111-91-1	bis(2-Chloroethoxy)methane	U	405	ug/kg	81.0	405
120-83-2	2,4-Dichlorophenol	U	405	ug/kg	81.0	405
65-85-0	Benzoic acid	U	810	ug/kg	202	810
91-20-3	Naphthalene	U	40.5	ug/kg	12.1	40.5
106-47-8	4-Chloroaniline	U	405	ug/kg	81.0	405
87-68-3	Hexachlorobutadiene	U	405	ug/kg	81.0	405
91-57-6	2-Methylnaphthalene	U	40.5	ug/kg	8.10	40.5
77-47-4	Hexachlorocyclopentadiene	U	405	ug/kg	81.0	405
88-06-2	2,4,6-Trichlorophenol	U	405	ug/kg	81.0	405
95-95-4	2,4,5-Trichlorophenol	U	405	ug/kg	81.0	405
91-58-7	2-Chloronaphthalene	U	40.5	ug/kg	13.4	40.5
88-74-4	2-Nitroaniline	U	405	ug/kg	81.0	405
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	405	ug/kg	81.0	405

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:20**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2019.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	405	ug/kg	81.0	405
606-20-2	2,6-Dinitrotoluene	U	405	ug/kg	40.5	405
208-96-8	Acenaphthylene	U	40.5	ug/kg	12.1	40.5
51-28-5	2,4-Dinitrophenol	U	810	ug/kg	154	810
132-64-9	Dibenzofuran	U	405	ug/kg	81.0	405
84-66-2	Diethylphthalate	U	405	ug/kg	81.0	405
86-73-7	Fluorene	U	40.5	ug/kg	12.1	40.5
7005-72-3	4-Chlorophenylphenylether	U	405	ug/kg	81.0	405
534-52-1	2-Methyl-4,6-dinitrophenol	U	405	ug/kg	81.0	405
100-01-6	4-Nitroaniline	U	405	ug/kg	121	405
	p-Nitroaniline					
122-39-4	Diphenylamine	U	405	ug/kg	81.0	405
122-66-7	Azobenzene	U	405	ug/kg	81.0	405
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	405	ug/kg	81.0	405
118-74-1	Hexachlorobenzene	U	405	ug/kg	81.0	405
85-01-8	Phenanthrene	U	40.5	ug/kg	12.1	40.5
120-12-7	Anthracene	U	40.5	ug/kg	8.10	40.5
84-74-2	Di-n-butylphthalate	U	405	ug/kg	81.0	405
206-44-0	Fluoranthene	U	40.5	ug/kg	12.1	40.5
85-68-7	Butylbenzylphthalate	U	405	ug/kg	81.0	405
56-55-3	Benzo(a)anthracene	U	40.5	ug/kg	12.1	40.5
91-94-1	3,3'-Dichlorobenzidine	U	405	ug/kg	121	405
218-01-9	Chrysene	U	40.5	ug/kg	12.1	40.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	405	ug/kg	81.0	405
117-84-0	Di-n-octylphthalate	U	405	ug/kg	81.0	405
205-99-2	Benzo(b)fluoranthene	U	40.5	ug/kg	12.1	40.5
207-08-9	Benzo(k)fluoranthene	U	40.5	ug/kg	12.1	40.5
50-32-8	Benzo(a)pyrene	U	40.5	ug/kg	12.1	40.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.5	ug/kg	12.1	40.5
53-70-3	Dibenzo(a,h)anthracene	U	40.5	ug/kg	12.1	40.5
191-24-2	Benzo(ghi)perylene	U	40.5	ug/kg	12.1	40.5
120-82-1	1,2,4-Trichlorobenzene	U	405	ug/kg	81.0	405

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.1	422	ug/kg		J
	Unknown Aldol Condensate	2.97	492	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442002**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8361**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:20**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2019.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-26-4	1S-.alpha.-Pinene	3.5	331	ug/kg	96	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.89	507	ug/kg	97	NJ
	Unknown	8.2	276	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.26	831	ug/kg	95	NJ
	Unknown	8.45	183	ug/kg		J

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Data file : /chem/MSD4.i/s022010.b/s4b2019.d
Lab Smp Id: 246442002 Client Smp ID: RE15-10-8361
Inj Date : 20-FEB-2010 17:20
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442002|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	18.04950	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.930	3.935	(1.000)	163132	40.0000	
* 29 Naphthalene-d8	136	4.796	4.802	(1.000)	651006	40.0000	
* 46 Acenaphthene-d10	164	6.053	6.053	(1.000)	336014	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	502037	40.0000	
* 91 Chrysene-d12	240	8.733	8.754	(1.000)	354294	40.0000	
* 98 Perylene-d12	264	10.273	10.300	(1.000)	279535	40.0000	
$ 3 2-Fluorophenol	112	3.122	3.117	(0.794)	311898	67.0978	2720
$ 5 Phenol-d5	99	3.641	3.646	(0.926)	399112	68.3440	2770
$ 20 Nitrobenzene-d5	82	4.294	4.299	(0.895)	171918	34.3889	1390
$ 39 2-Fluorobiphenyl	172	5.540	5.545	(0.915)	299486	34.5189	1400
$ 60 2,4,6-Tribromophenol	329	6.588	6.588	(1.088)	81847	77.8858	3150
$ 81 p-Terphenyl-d14	244	7.963	7.968	(0.912)	262798	47.4503	1920

ION RATIO REPORT

SV REPORT

Data file: s4b2019.d
Report Date: 02/21/2010 08:57
Lab. ID: 246442002 SampleType: SAMPLE
Injection Date: 20-FEB-2010 17:20
Operator: JMB3 Instrument: MSD4.i
Sample Info: |246442002|951989|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100205-01|
Comment:
Method used: /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	14872	3.64	3.72	80-120	100	(T)
93	354	3.60	3.73	486-546	2	(QT)
17 N-Nitrosodipropylamine			CAS#: 621-64-7			
70	21494	4.29	4.18	80-120	100	(T)
42	9796	4.29	4.18	22- 82	46	(T)
27 Benzoic acid		CAS#: 65-85-0				
105	1754	4.53	4.58	80-120	100	( )
122	1291	4.53	4.58	49-109	74	( )
77	1459	4.54	4.58	34- 94	83	( )
40 2-Chloronaphthalene			CAS#: 91-58-7			
162	7701	5.79	5.65	80-120	100	(T)
164	384	5.79	5.65	2- 62	5	(T)
127	470	5.79	5.65	7- 67	6	(QT)
42 o-Nitroaniline		CAS#: 88-74-4				
65	7837	5.79	5.71	80-120	100	(T)
92	11828	5.79	5.71	45-105	151	(QT)
138	893	5.79	5.71	93-153	11	(QT)
43 Dimethylphthalate			CAS#: 131-11-3			
163	59133	6.05	5.82	80-120	100	(T)
164	336014	6.05	5.82	0- 40	568	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	43925	6.05	5.88	80-120	100	(T)
63	483	6.05	5.88	33- 93	1	(QT)
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	43925	6.05	6.17	80-120	100	(T)
89	459	6.05	6.17	41-101	1	(QT)
63	483	6.05	6.17	11- 71	1	(QT)
53	Fluorene		CAS#: 86-73-7			
166	3654	6.58	6.43	80-120	100	(T)
165	4072	6.58	6.43	58-118	111	(T)
167	1159	6.58	6.43	0- 44	32	(T)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD4.i/s022010.b/s4b2019.d
Lab Smp Id: 246442002 Client Smp ID: RE15-10-8361
Inj Date : 20-FEB-2010 17:20
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442002|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	18.04950	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.930	959456	40.000
* 91 Chrysene-d12	8.733	925547	40.000

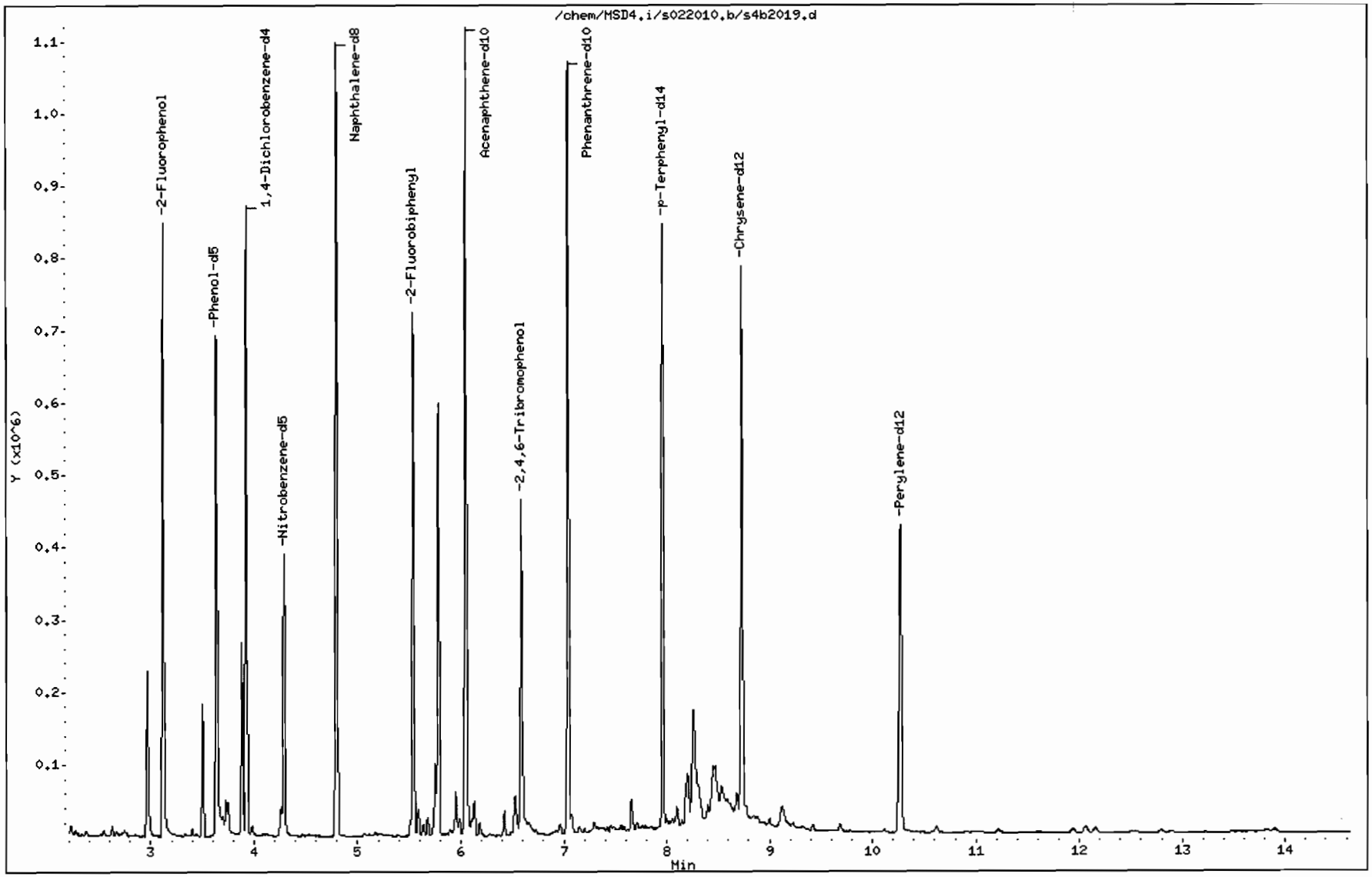
	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown			CAS #:				
2.095	249794	10.4139594	422	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.967	291631	12.1581648	492	0		0	10
1S-.alpha.-Pinene				CAS #: 7785-26-4			
3.502	196144	8.17727986	331	96	NIST05.L	15185	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy				CAS #: 498-15-7			
3.887	300551	12.5300331	507	97	NIST05.L	15369	10
Unknown				CAS #:			
8.204	157804	6.81990823	276	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa				CAS #: 511-15-9			
8.257	474779	20.5188267	831	95	NIST05.L	116239	91
Unknown				CAS #:			
8.450	104632	4.52193358	183	0		0	91

Data File: /chem/MSD4.i/s022010.b/s4b2019.d
Date : 20-FEB-2010 17:20
Client ID: RE15-10-8361
Sample Info: 1246442002|951989|1|SVMI1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD4.i

Operator: JMB3
Column diameter: 0.20



Data File: /chem/MSD4.i/s022010.b/s4b2019.d

Date : 20-FEB-2010 17:20

Client ID: RE15-10-8361

Instrument: MSD4.i

Sample Info: 1246442002|951989|1|SVM|1|LANL

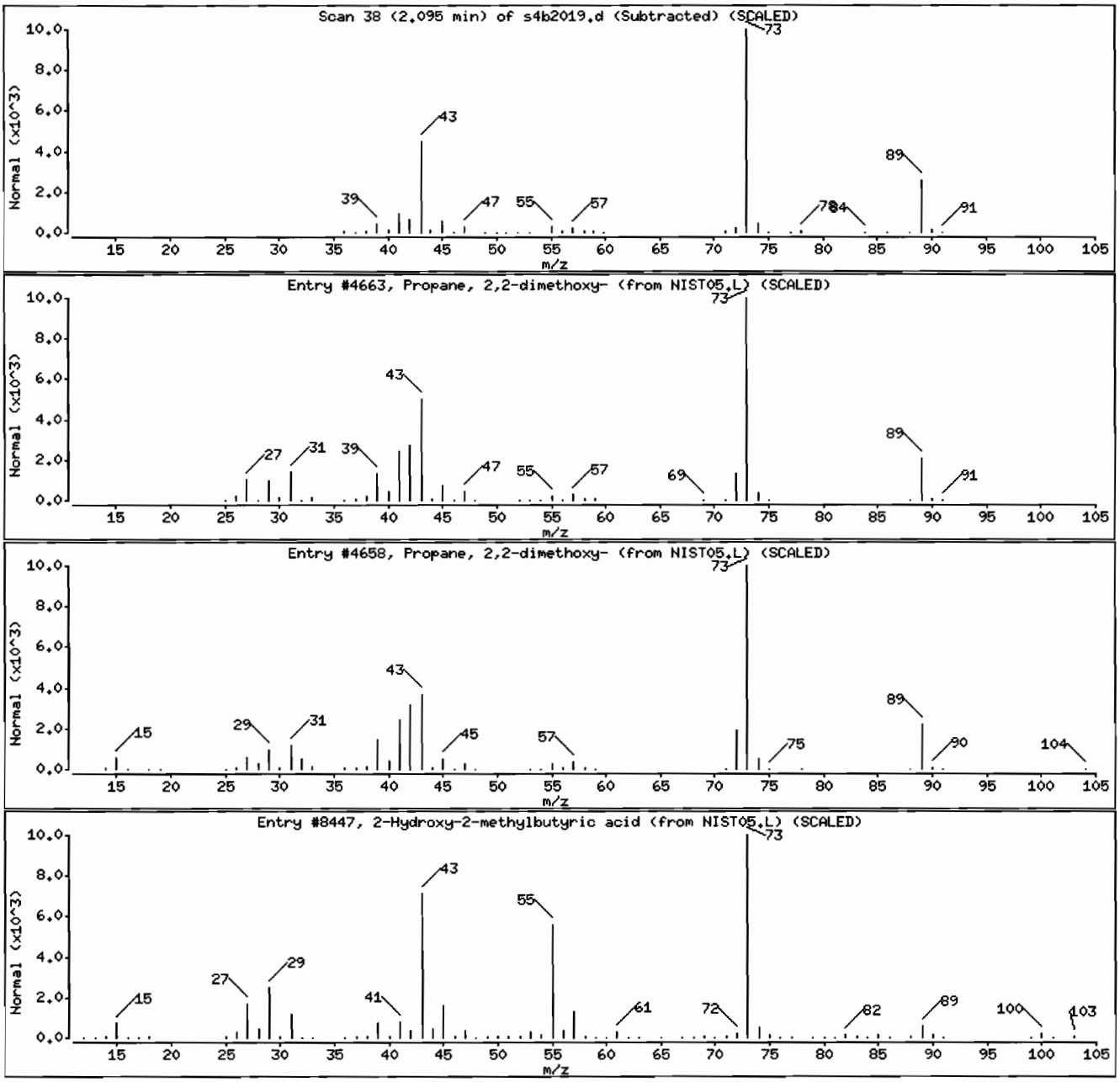
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	50	C5H1202	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	50	C5H1202	104
2-Hydroxy-2-methylbutyric acid	3739-30-8	NIST05.L	8447	9	C5H1003	118



Data File: /chem/MSD4.i/s022010.b/s4b2019.d

Date : 20-FEB-2010 17:20

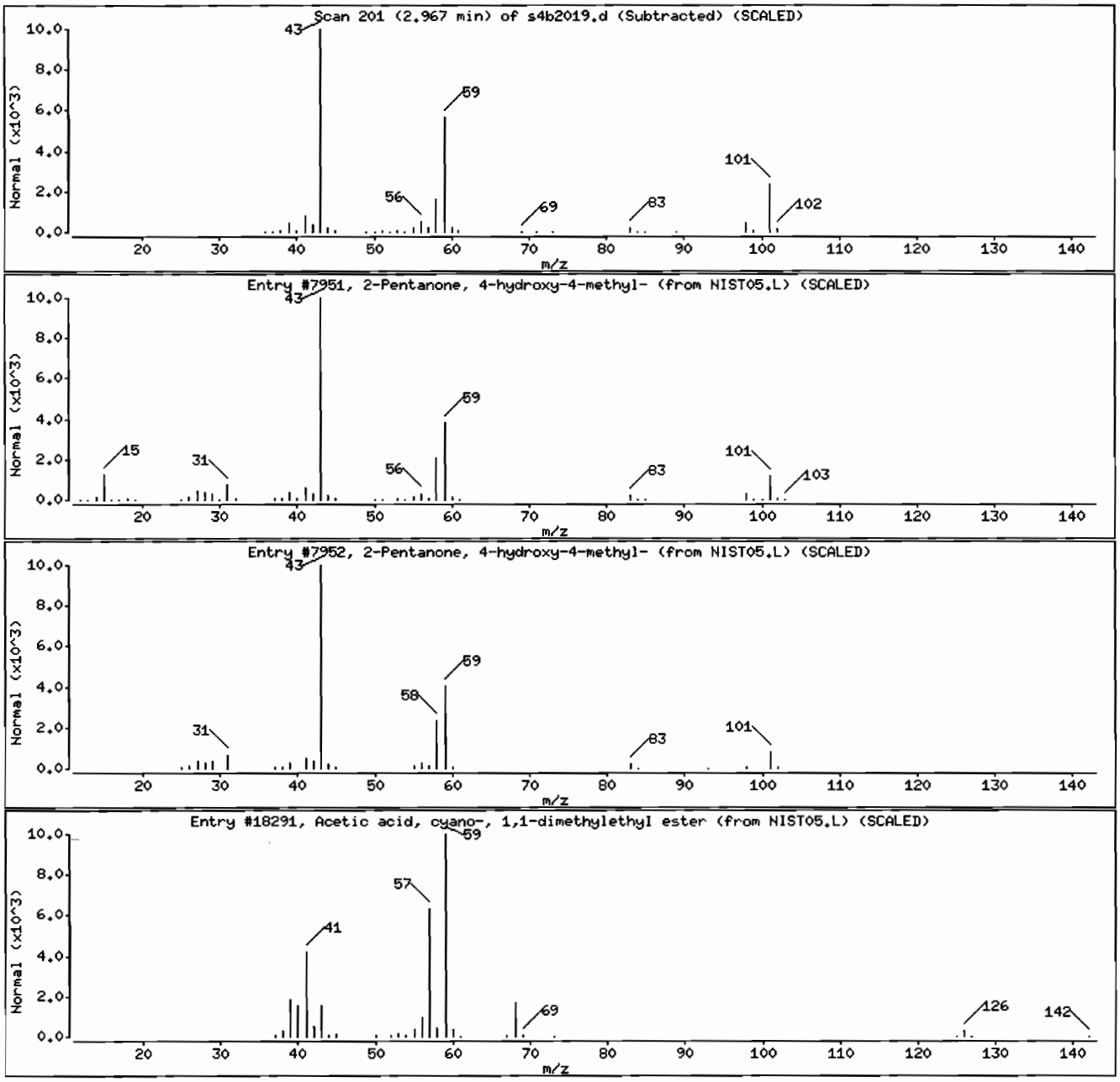
Client ID: RE15-10-8361 Instrument: MSD4.i

Sample Info: |2464420021951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	39	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	17	C7H11NO2	141



Data File: /chem/MSD4.i/s022010.b/s4b2019.d

Date : 20-FEB-2010 17:20

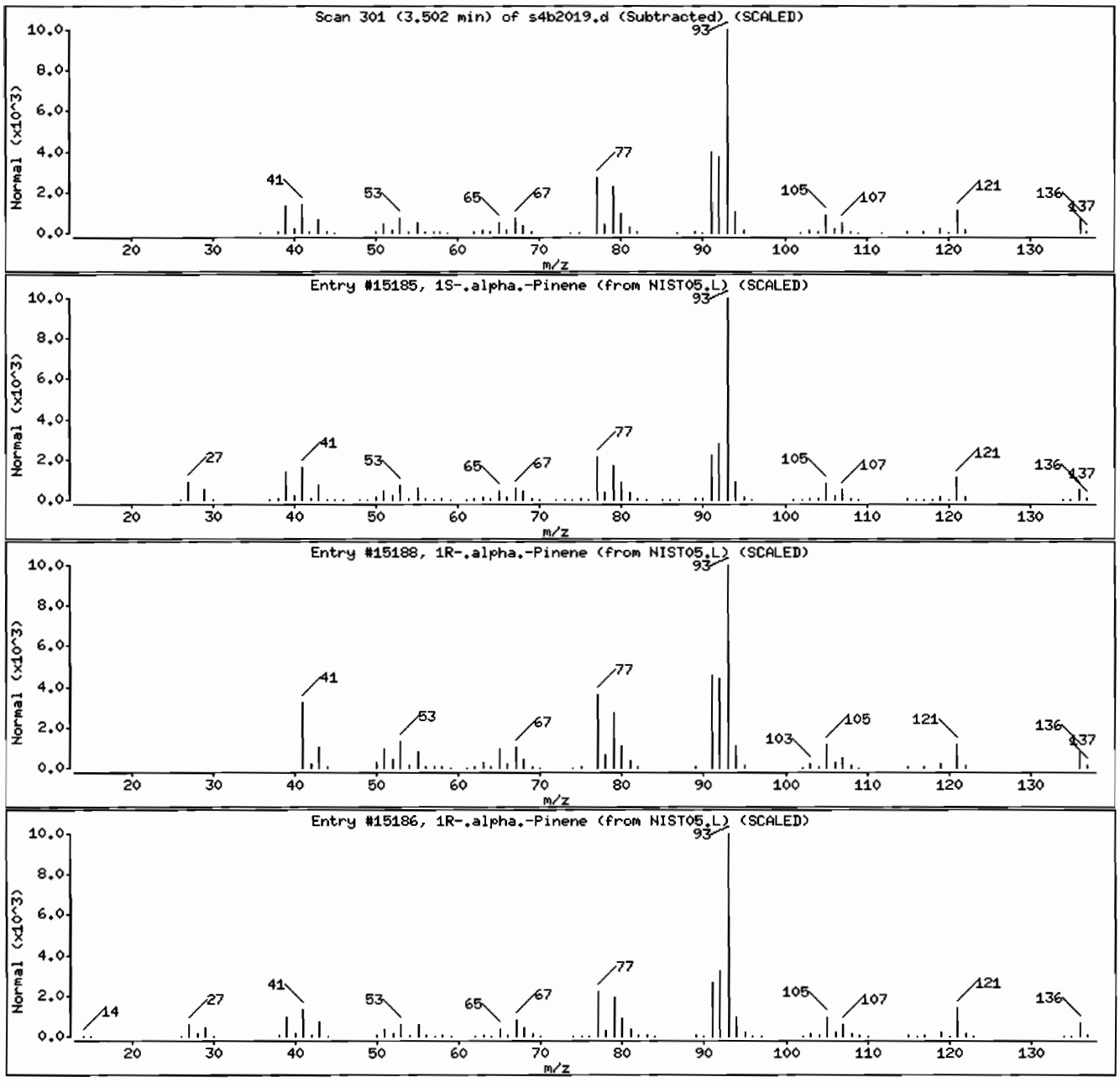
Client ID: RE15-10-8361 Instrument: MSD4.i

Sample Info: |2464420021951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1S-.alpha.-Pinene	7785-26-4	NIST05.L	15185	96	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	95	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	95	C10H16	136



Data File: /chem/MSD4.i/s022010.b/s4b2019.d

Date : 20-FEB-2010 17:20

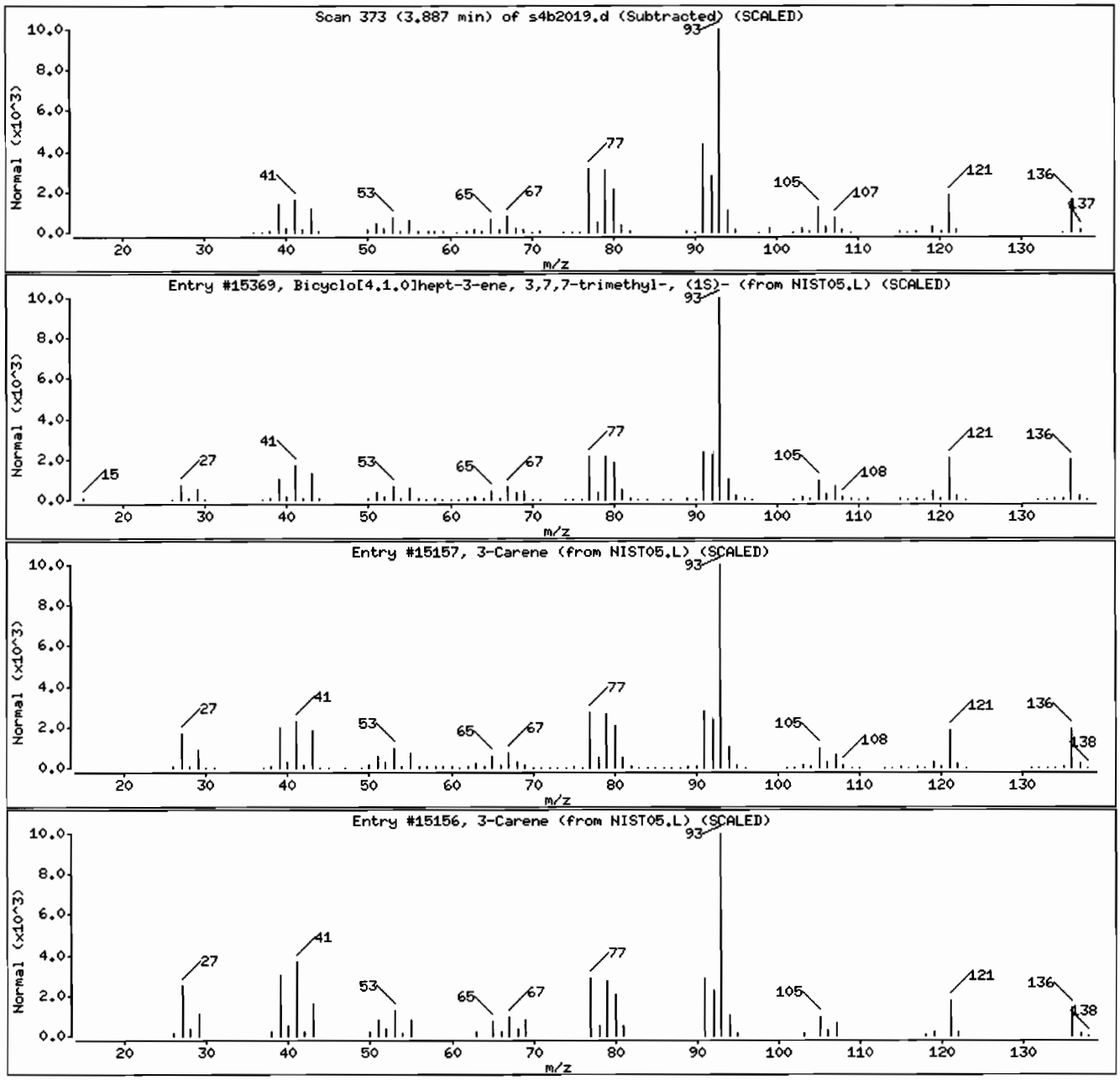
Client ID: RE15-10-8361 Instrument: MSD4.i

Sample Info: 12464420021951989111SVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST05.L	15369	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	95	C10H16	136



Data File: /chem/MSD4.i/s022010.b/s4b2019.d

Date : 20-FEB-2010 17:20

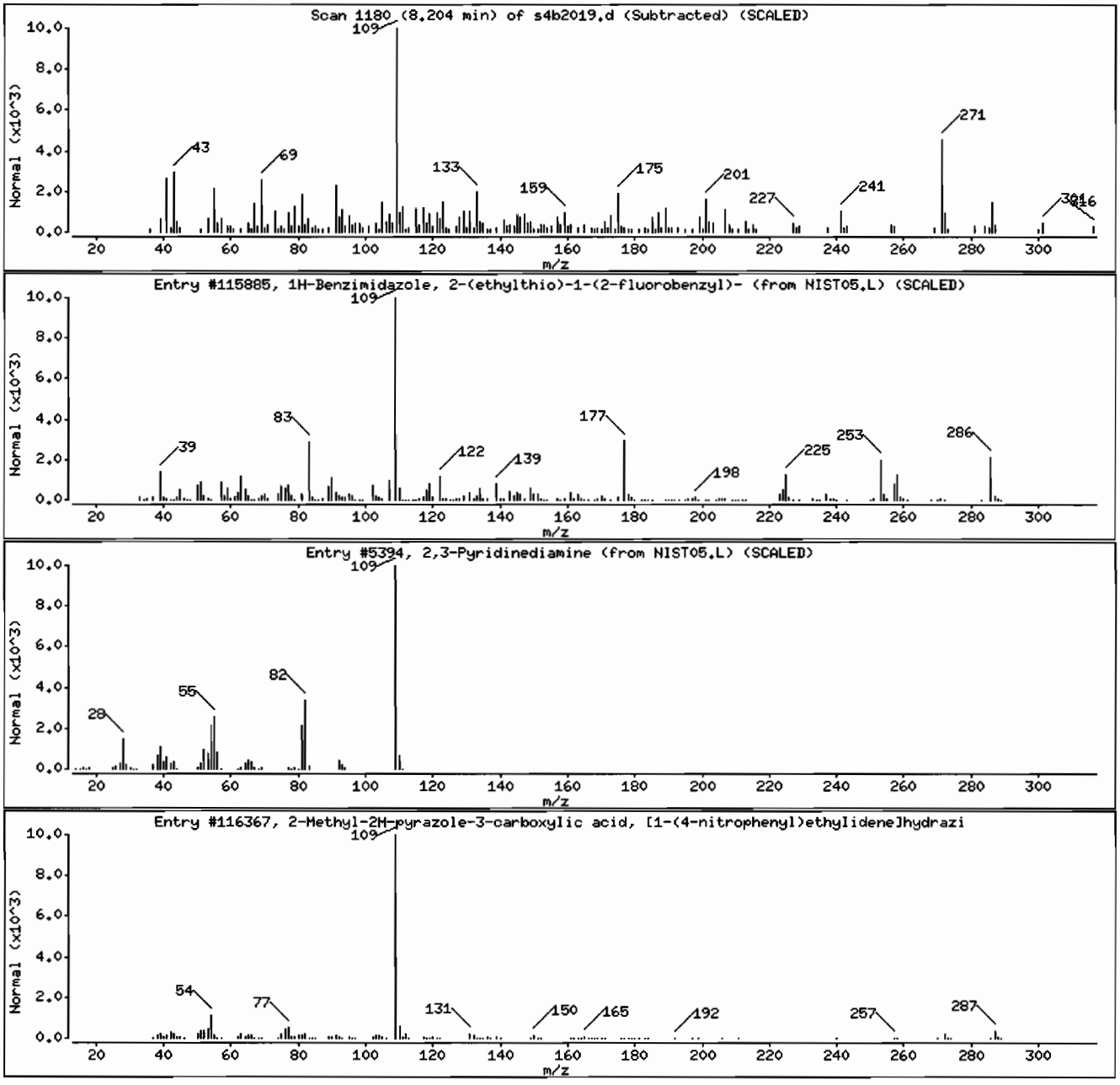
Client ID: RE15-10-8361 Instrument: MSD4.i

Sample Info: I246442002|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Benzimidazole, 2-(ethylthio)-1-(2-flu	298685-19-5	NIST05.L	115885	38	C16H15FN2S	286
2,3-Pyridinediamine	452-58-4	NIST05.L	5394	30	C5H7N3	109
2-Methyl-2H-pyrazole-3-carboxylic acid,	1000260-41-7	NIST05.L	116367	30	C13H13N5O3	287



Data File: /chem/MSD4.i/s022010.b/s4b2019.d

Date : 20-FEB-2010 17:20

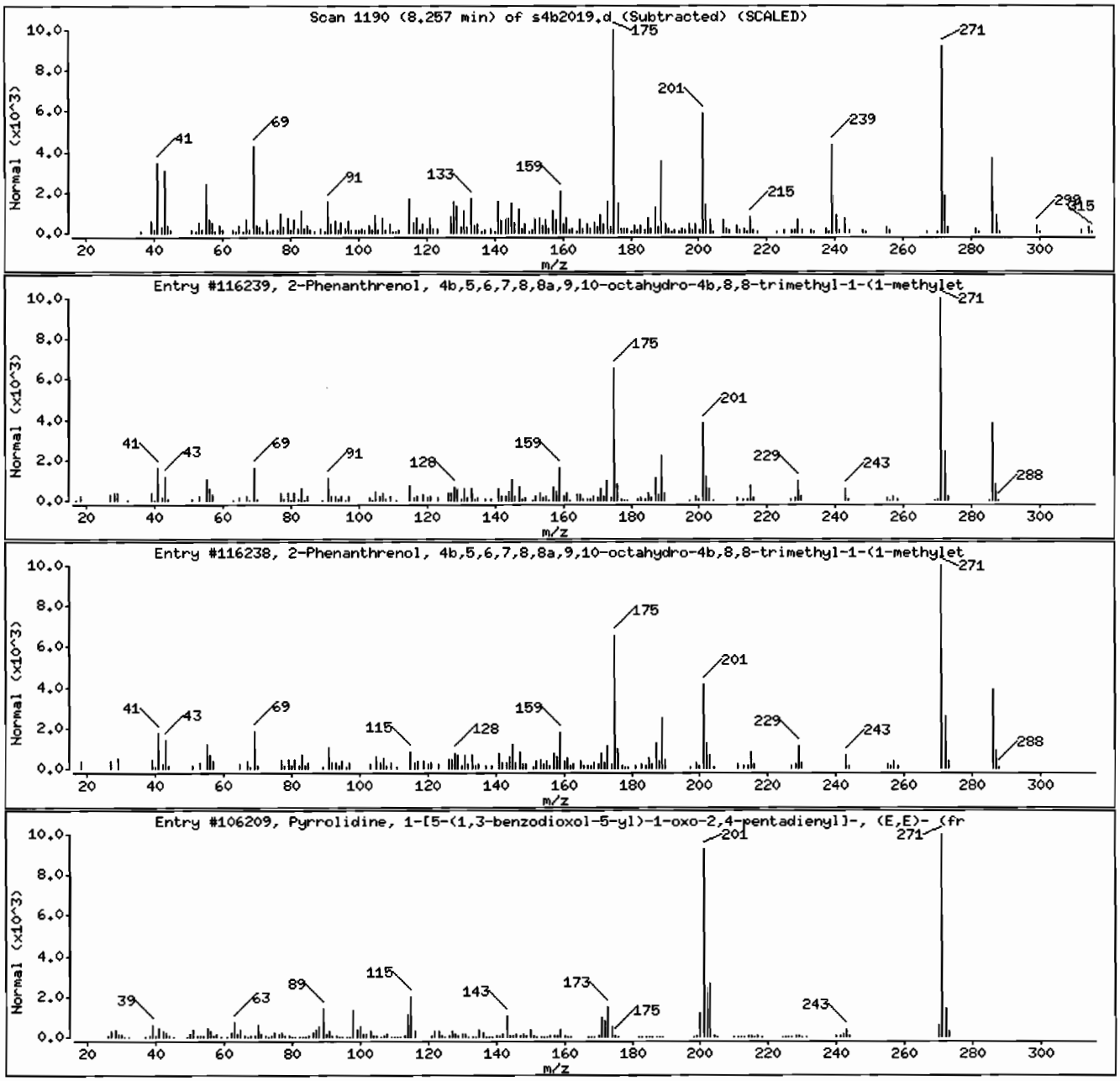
Client ID: RE15-10-8361 Instrument: MSD4.i

Sample Info: I2464420021951989I1ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	95	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	68	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	38	C16H17NO3	271



Data File: /chem/MSD4.i/s022010.b/s4b2019.d

Date : 20-FEB-2010 17:20

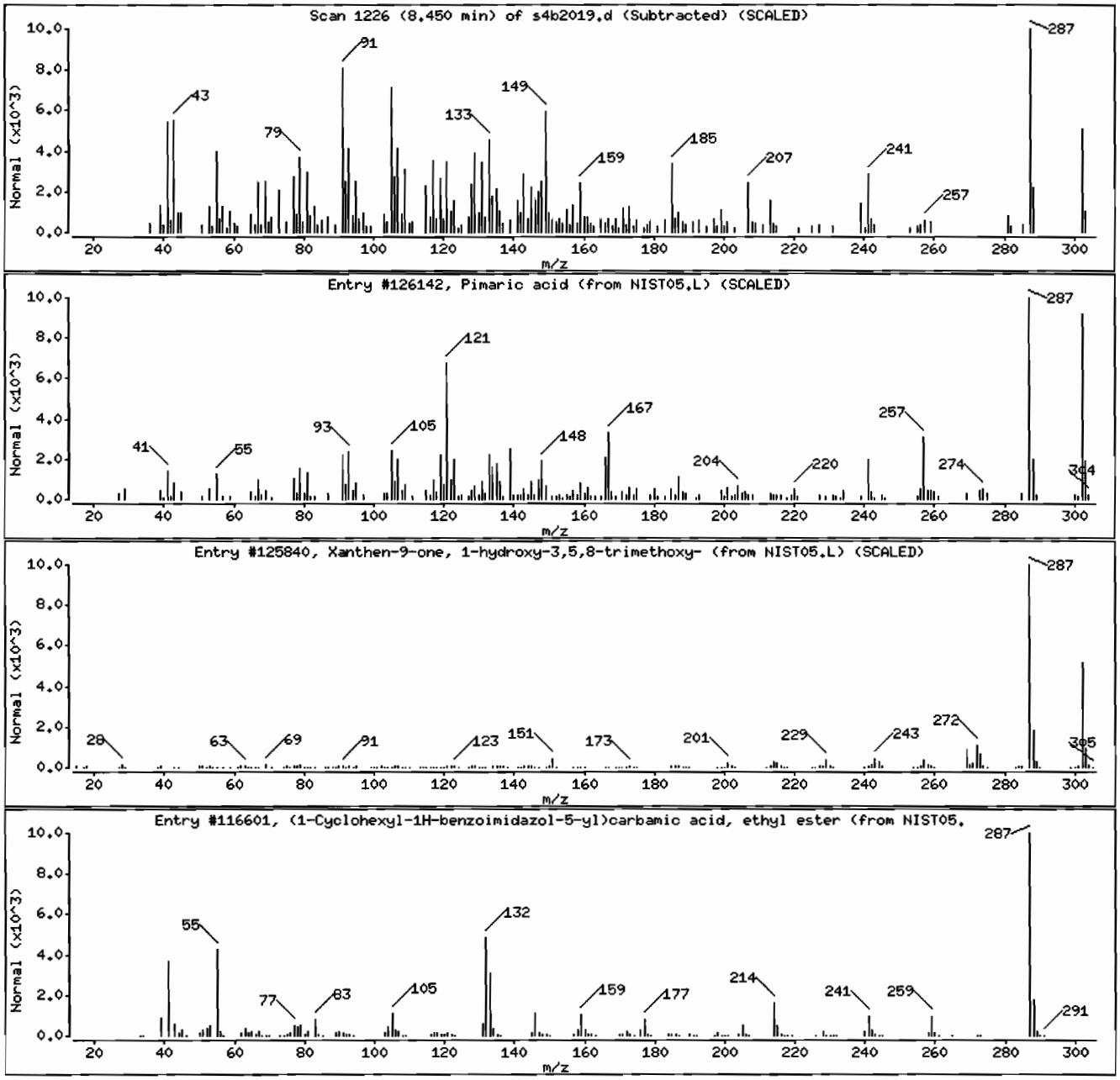
Client ID: RE15-10-8361 Instrument: MSD4.i

Sample Info: 12464420021951989111SVMI11LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pimaric acid	127-27-5	NIST05.L	126142	43	C20H3002	302
Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	49599-09-9	NIST05.L	125840	42	C16H1406	302
(1-Cyclohexyl-1H-benzoimidazol-5-yl)carb	1000310-00-5	NIST05.L	116601	30	C16H21N302	287



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:28**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2022.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	444	ug/kg	88.8	444
108-95-2	Phenol	U	444	ug/kg	88.8	444
95-57-8	2-Chlorophenol	U	444	ug/kg	88.8	444
106-46-7	1,4-Dichlorobenzene	U	444	ug/kg	88.8	444
621-64-7	N-Nitrosodipropylamine	U	444	ug/kg	88.8	444
59-50-7	4-Chloro-3-methylphenol	U	444	ug/kg	88.8	444
83-32-9	Acenaphthene	U	44.4	ug/kg	14.7	44.4
121-14-2	2,4-Dinitrotoluene	U	444	ug/kg	44.4	444
100-02-7	4-Nitrophenol	U	444	ug/kg	147	444
87-86-5	Pentachlorophenol	U	444	ug/kg	111	444
129-00-0	Pyrene	U	44.4	ug/kg	13.3	44.4
110-86-1	Pyridine	U	444	ug/kg	88.8	444
62-53-3	Aniline	U	444	ug/kg	133	444
111-44-4	bis(2-Chloroethyl) ether	U	444	ug/kg	88.8	444
541-73-1	1,3-Dichlorobenzene	U	444	ug/kg	88.8	444
100-51-6	Benzyl alcohol	U	444	ug/kg	133	444
95-50-1	1,2-Dichlorobenzene	U	444	ug/kg	88.8	444
108-60-1	bis(2-Chloroisopropyl)ether	U	444	ug/kg	88.8	444
95-48-7	o-Cresol	U	444	ug/kg	88.8	444
65794-96-9	m,p-Cresols	U	444	ug/kg	133	444
67-72-1	Hexachloroethane	U	444	ug/kg	88.8	444
98-95-3	Nitrobenzene	U	444	ug/kg	88.8	444
78-59-1	Isophorone	U	444	ug/kg	88.8	444
88-75-5	2-Nitrophenol	U	444	ug/kg	88.8	444
105-67-9	2,4-Dimethylphenol	U	444	ug/kg	155	444
111-91-1	bis(2-Chloroethoxy)methane	U	444	ug/kg	88.8	444
120-83-2	2,4-Dichlorophenol	U	444	ug/kg	88.8	444
65-85-0	Benzoic acid	U	888	ug/kg	222	888
91-20-3	Naphthalene	U	44.4	ug/kg	13.3	44.4
106-47-8	4-Chloroaniline	U	444	ug/kg	88.8	444
87-68-3	Hexachlorobutadiene	U	444	ug/kg	88.8	444
91-57-6	2-Methylnaphthalene	U	44.4	ug/kg	8.88	44.4
77-47-4	Hexachlorocyclopentadiene	U	444	ug/kg	88.8	444
88-06-2	2,4,6-Trichlorophenol	U	444	ug/kg	88.8	444
95-95-4	2,4,5-Trichlorophenol	U	444	ug/kg	88.8	444
91-58-7	2-Chloronaphthalene	U	44.4	ug/kg	14.7	44.4
88-74-4	2-Nitroaniline	U	444	ug/kg	88.8	444
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	444	ug/kg	88.8	444

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:28**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2022.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	444	ug/kg	88.8	444
606-20-2	2,6-Dinitrotoluene	U	444	ug/kg	44.4	444
208-96-8	Acenaphthylene	U	44.4	ug/kg	13.3	44.4
51-28-5	2,4-Dinitrophenol	U	888	ug/kg	169	888
132-64-9	Dibenzofuran	U	444	ug/kg	88.8	444
84-66-2	Diethylphthalate	U	444	ug/kg	88.8	444
86-73-7	Fluorene	U	44.4	ug/kg	13.3	44.4
7005-72-3	4-Chlorophenylphenylether	U	444	ug/kg	88.8	444
534-52-1	2-Methyl-4,6-dinitrophenol	U	444	ug/kg	88.8	444
100-01-6	4-Nitroaniline	U	444	ug/kg	133	444
	p-Nitroaniline					
122-39-4	Diphenylamine	U	444	ug/kg	88.8	444
122-66-7	Azobenzene	U	444	ug/kg	88.8	444
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	444	ug/kg	88.8	444
118-74-1	Hexachlorobenzene	U	444	ug/kg	88.8	444
85-01-8	Phenanthrene	U	44.4	ug/kg	13.3	44.4
120-12-7	Anthracene	U	44.4	ug/kg	8.88	44.4
84-74-2	Di-n-butylphthalate	U	444	ug/kg	88.8	444
206-44-0	Fluoranthene	U	44.4	ug/kg	13.3	44.4
85-68-7	Butylbenzylphthalate	U	444	ug/kg	88.8	444
56-55-3	Benzo(a)anthracene	U	44.4	ug/kg	13.3	44.4
91-94-1	3,3'-Dichlorobenzidine	U	444	ug/kg	133	444
218-01-9	Chrysene	U	44.4	ug/kg	13.3	44.4
117-81-7	bis(2-Ethylhexyl)phthalate	J	105	ug/kg	88.8	444
117-84-0	Di-n-octylphthalate	U	444	ug/kg	88.8	444
205-99-2	Benzo(b)fluoranthene	U	44.4	ug/kg	13.3	44.4
207-08-9	Benzo(k)fluoranthene	U	44.4	ug/kg	13.3	44.4
50-32-8	Benzo(a)pyrene	U	44.4	ug/kg	13.3	44.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.4	ug/kg	13.3	44.4
53-70-3	Dibenzo(a,h)anthracene	U	44.4	ug/kg	13.3	44.4
191-24-2	Benzo(ghi)perylene	U	44.4	ug/kg	13.3	44.4
120-82-1	1,2,4-Trichlorobenzene	U	444	ug/kg	88.8	444

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.1	215	ug/kg		J
	Unknown Aldol Condensate	2.97	596	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**246442003**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**25**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8362**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:28**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2022.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.75	245	ug/kg	97	NJ
13466-78-9	3-Carene	3.89	537	ug/kg	96	NJ
23986-74-5	1,6-Cyclodecadiene, 1-methyl-5-methylene	6.01	324	ug/kg	99	NJ
	Unknown	7.56	204	ug/kg		J
25269-17-4	Thunbergol	7.64	923	ug/kg	94	NJ
112-79-8	9-Octadecenoic acid, (E)-	7.71	419	ug/kg	95	NJ
	Unknown	7.75	292	ug/kg		J
	Unknown	7.91	283	ug/kg		J
	Unknown	8.16	328	ug/kg		J
	Unknown	8.21	260	ug/kg		J
	Unknown	8.49	1830	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.55	1020	ug/kg	96	NJ
	Unknown	8.65	534	ug/kg		J
	Unknown	8.67	591	ug/kg		J
	Unknown	8.78	668	ug/kg		J
	Unknown	8.93	387	ug/kg		J
	Unknown	9.04	741	ug/kg		J
1000099-24-3	(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	9.11	309	ug/kg	93	NJ
1000156-11-9	Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	9.2	2130	ug/kg	91	NJ
	Unknown	9.63	353	ug/kg		J
	Unknown	10.38	353	ug/kg		J
	Unknown	10.62	449	ug/kg		J
	Unknown	10.81	1790	ug/kg		J
83-46-5	.beta.-Sitosterol	12.86	978	ug/kg	99	NJ
1058-61-3	Stigmast-4-en-3-one	13.94	662	ug/kg	98	NJ

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Data file : /chem/MSD4.i/s022010.b/s4b2022.d
Lab Smp Id: 246442003 Client Smp ID: RE15-10-8362
Inj Date : 20-FEB-2010 18:28
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442003|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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	25.03120	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.930	3.935	(1.000)	171325	40.0000	
* 29 Naphthalene-d8	136	4.796	4.802	(1.000)	672457	40.0000	
* 46 Acenaphthene-d10	164	6.053	6.053	(1.000)	351428	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	511895	40.0000	
* 91 Chrysene-d12	240	8.749	8.754	(1.000)	358561	40.0000	
* 98 Perylene-d12	264	10.300	10.300	(1.000)	228376	40.0000	
$ 3 2-Fluorophenol	112	3.122	3.117	(0.794)	322537	66.0683	2930
$ 5 Phenol-d5	99	3.641	3.646	(0.926)	413695	67.4535	3000
$ 20 Nitrobenzene-d5	82	4.294	4.299	(0.895)	173763	33.6492	1490
$ 39 2-Fluorobiphenyl	172	5.540	5.545	(0.915)	309276	34.0837	1510
$ 60 2,4,6-Tribromophenol	329	6.588	6.588	(1.088)	81757	74.3877	3300
$ 81 p-Terphenyl-d14	244	7.968	7.968	(0.911)	261643	46.6795	2070

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
93 bis(2-Ethylhexyl)phthalate	149	8.615	8.615	(0.985)	14089	2.37014	105(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s4b2022.d
Report Date: 02/21/2010 08:59
Lab. ID: 246442003 SampleType: SAMPLE
Injection Date: 20-FEB-2010 18:28
Operator: JMB3 Instrument: MSD4.i
Sample Info: |246442003|951989|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100205-01|
Comment:
Method used: /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	16111	3.64	3.72	80-120	100	(T)
93	8278	3.61	3.73	486-546	51	(QT)
6 Phenol		CAS#: 108-95-2				
94	20063	3.50	3.65	80-120	100	(T)
66	2987	3.50	3.65	2- 62	15	(T)
65	11540	3.50	3.65	0- 54	58	(QT)
17 N-Nitrosodipropylamine			CAS#: 621-64-7			
70	22223	4.29	4.18	80-120	100	(T)
42	9742	4.29	4.18	22- 82	44	(T)
27 Benzoic acid			CAS#: 65-85-0			
105	877	4.61	4.58	80-120	100	( )
122	704	4.67	4.58	49-109	80	(T)
77	2179	4.64	4.58	34- 94	248	(Q)
40 2-Chloronaphthalene			CAS#: 91-58-7			
162	6780	5.79	5.65	80-120	100	(T)
164	294	5.79	5.65	2- 62	4	(T)
127	368	5.79	5.65	7- 67	5	(QT)
42 o-Nitroaniline			CAS#: 88-74-4			
65	9069	5.79	5.71	80-120	100	(T)
92	14021	5.79	5.71	45-105	155	(QT)
138	529	5.79	5.71	93-153	6	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
43 Dimethylphthalate			CAS#: 131-11-3			
163	62108	6.05	5.82	80-120	100	(T)
164	351428	6.05	5.82	0- 40	566	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	45941	6.05	5.88	80-120	100	(T)
63	674	6.05	5.88	33- 93	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	45941	6.05	6.17	80-120	100	(T)
89	707	6.05	6.17	41-101	2	(QT)
63	674	6.05	6.17	11- 71	1	(QT)
52 4-Nitrophenol			CAS#: 100-02-7			
139	186	6.10	6.09	80-120	100	( )
109	1513	6.14	6.09	19- 79	810	(Q)
65	1807	6.10	6.09	54-114	967	(Q)
53 Fluorene			CAS#: 86-73-7			
166	3913	6.58	6.43	80-120	100	(T)
165	4487	6.58	6.43	58-118	115	(T)
167	1447	6.58	6.43	0- 44	37	(T)
93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	14089	8.62	8.62	80-120	100	( )
167	4474	8.62	8.62	4- 64	32	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

GEL Laboratories, LLC
Data file : /chem/MSD4.i/s022010.b/s4b2022.d
Lab Smp Id: 246442003 Client Smp ID: RE15-10-8362
Inj Date : 20-FEB-2010 18:28
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442003|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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	25.03120	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.930	991429	40.000
* 46 Acenaphthene-d10	6.053	1570775	40.000
* 67 Phenanthrene-d10	7.043	1269600	40.000
* 91 Chrysene-d12	8.749	901600	40.000
* 98 Perylene-d12	10.300	609647	40.000

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

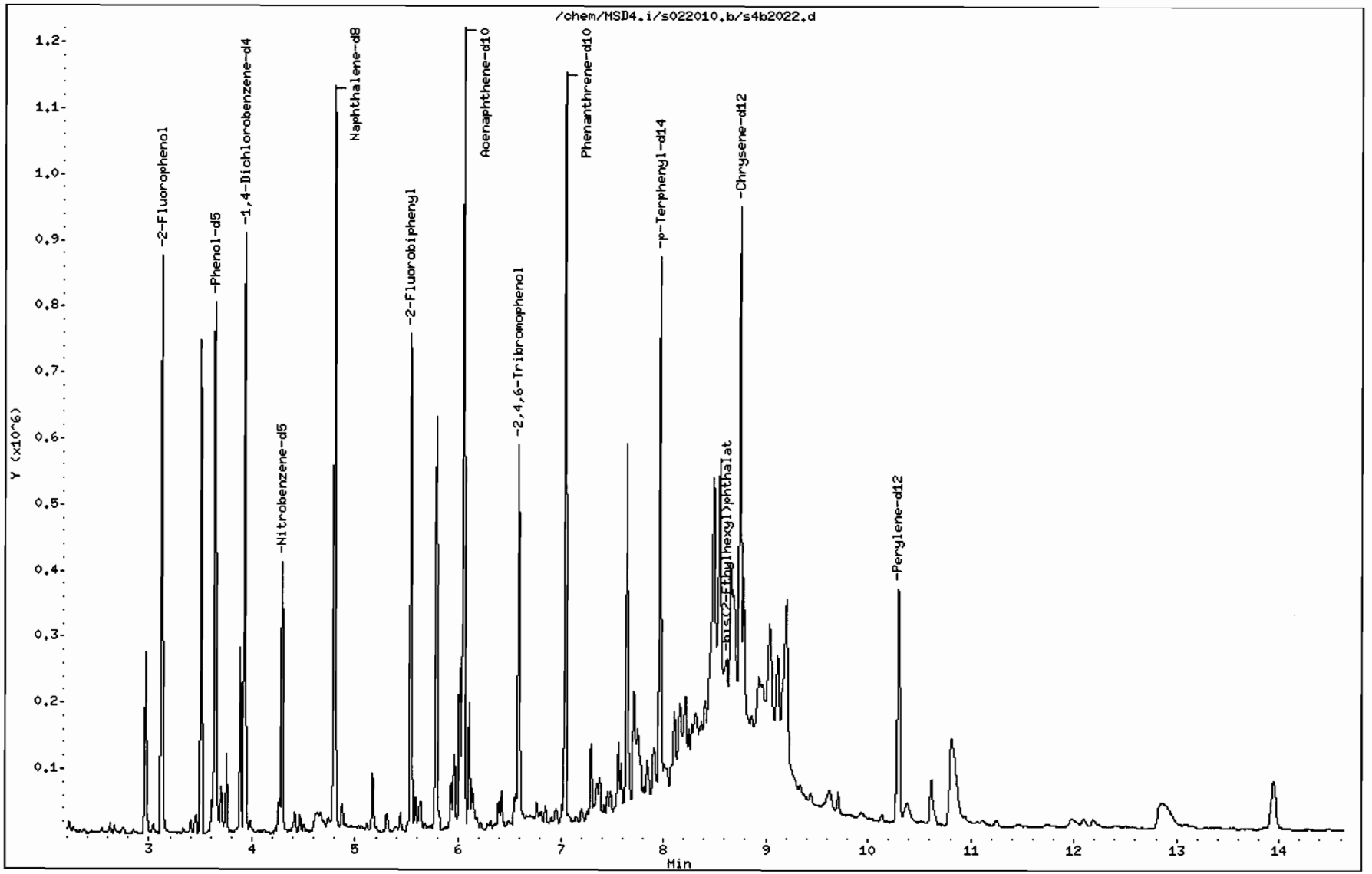
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.095	120076	4.84455603	215	0		0	10
Unknown Aldol Condensate				CAS #:			
2.967	332392	13.4106362	596	0		0	10
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me				CAS #:	18172-67-3		
3.748	136573	5.51013715	245	97	NIST05.L	15390	10
3-Carene				CAS #:	13466-78-9		
3.887	299480	12.0827577	537	96	NIST05.L	15157	10
1,6-Cyclodecadiene, 1-methyl-5-methylene				CAS #:	23986-74-5		
6.011	286801	7.30341569	324	99	NIST05.L	59960	46
Unknown				CAS #:			
7.556	145997	4.59977254	204	0		0	67
Thunbergol				CAS #:	25269-17-4		
7.642	659792	20.7873909	923	94	NIST05.L	118732	67
9-Octadecenoic acid, (E)-				CAS #:	112-79-8		
7.711	299653	9.44085430	419	95	NIST05.L	113363	67
Unknown				CAS #:			
7.754	208454	6.56753115	292	0		0	67
Unknown				CAS #:			
7.909	143748	6.37745089	283	0		0	91
Unknown				CAS #:			
8.161	166582	7.39048368	328	0		0	91
Unknown				CAS #:			
8.214	132062	5.85899267	260	0		0	91
Unknown				CAS #:			
8.492	929719	41.2474583	1830	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4				CAS #:	1740-19-8		
8.551	518771	23.0155687	1020	96	NIST05.L	125034	91
Unknown				CAS #:			
8.653	270905	12.0188500	534	0		0	91

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
8.674	299871	13.3039490	591	0		0	91
Unknown				CAS #:			
8.781	339059	15.0425499	668	0		0	91
Unknown				CAS #:			
8.931	196347	8.71105983	387	0		0	91
Unknown				CAS #:			
9.038	375859	16.6751859	741	0		0	91
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6				CAS #:	1000099-24-3		
9.113	156582	6.94683512	308	93	NIST05.L	36267	91
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-				CAS #:	1000156-11-9		
9.198	1081417	47.9776308	2130	91	NIST05.L	59915	91
Unknown				CAS #:			
9.626	121000	7.93902779	353	0		0	98
Unknown				CAS #:			
10.380	121124	7.94714185	353	0		0	98
Unknown				CAS #:			
10.616	154180	10.1160036	449	0		0	98
Unknown				CAS #:			
10.814	615334	40.3730986	1790	0		0	98
.beta.-Sitosterol				CAS #:	83-46-5		
12.857	335489	22.0119968	978	99	NIST05.L	174400	98
Stigmast-4-en-3-one				CAS #:	1058-61-3		
13.943	227183	14.9058287	662	98	NIST05.L	173936	98

Data File: /chem/MSD4.i/s022010.b/s4b2022.d
Date : 20-FEB-2010 18:28
Client ID: RE15-10-8362
Sample Info: |2464420031951989|1|SVMI1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD4.i

Operator: JMB3
Column diameter: 0.20



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

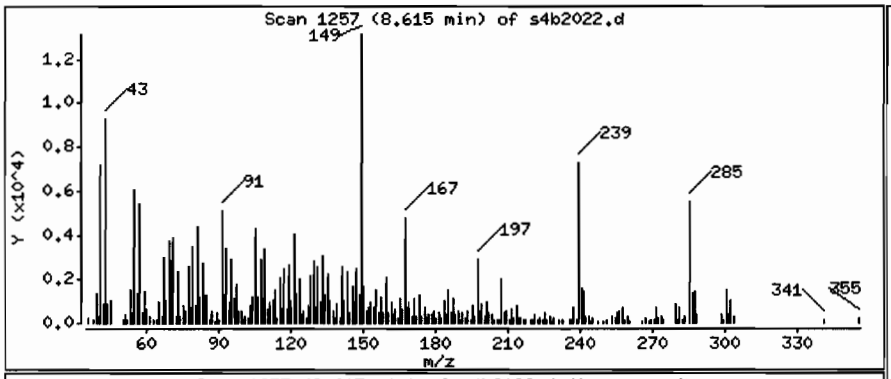
Client ID: RE15-10-8362 Instrument: MSD4.i

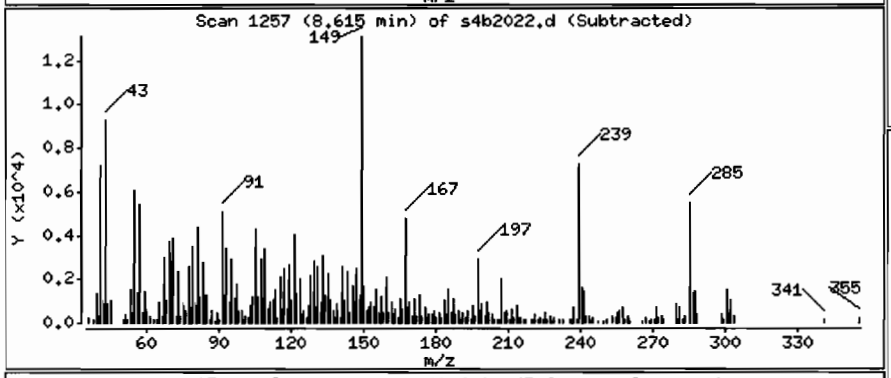
Sample Info: !2464420031951989!1!SVMI1!LANL

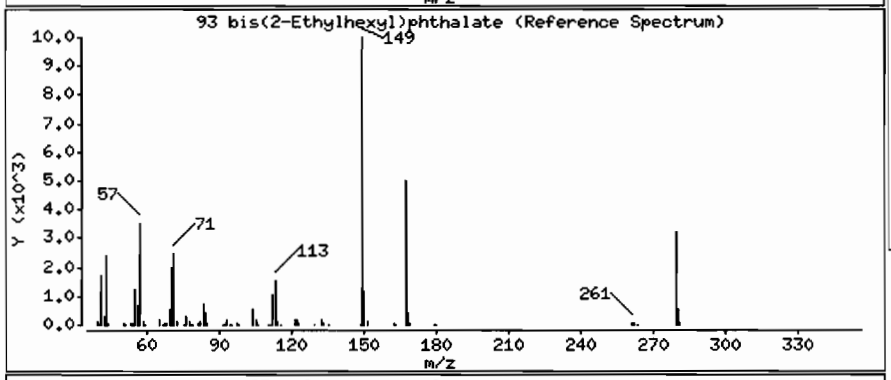
Volume Injected (uL): 0.5 Operator: JMB3

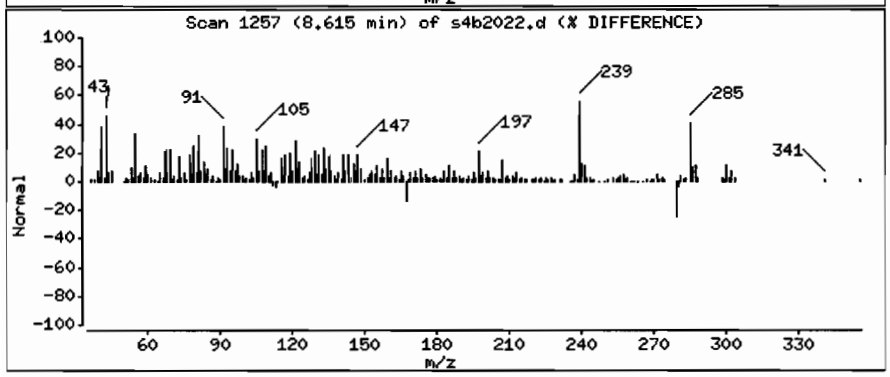
Column phase: J&W DB-5MS Column diameter: 0.20

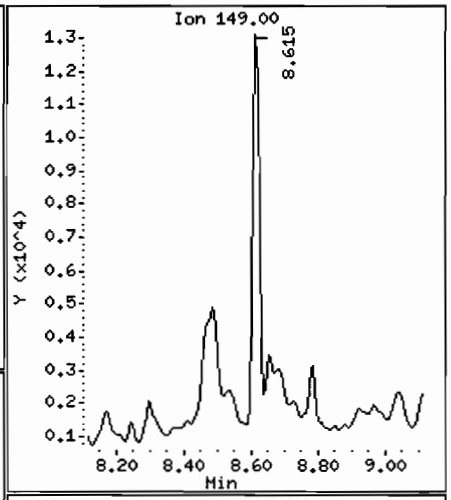
93 bis(2-Ethylhexyl)phthalate Concentration: 105 ug/Kg

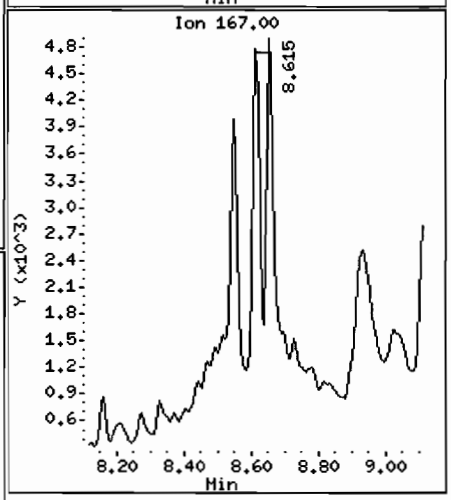












Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

Client ID: RE15-10-8362

Instrument: MSD4.i

Sample Info: 12464420031951989111SVMI11LANL

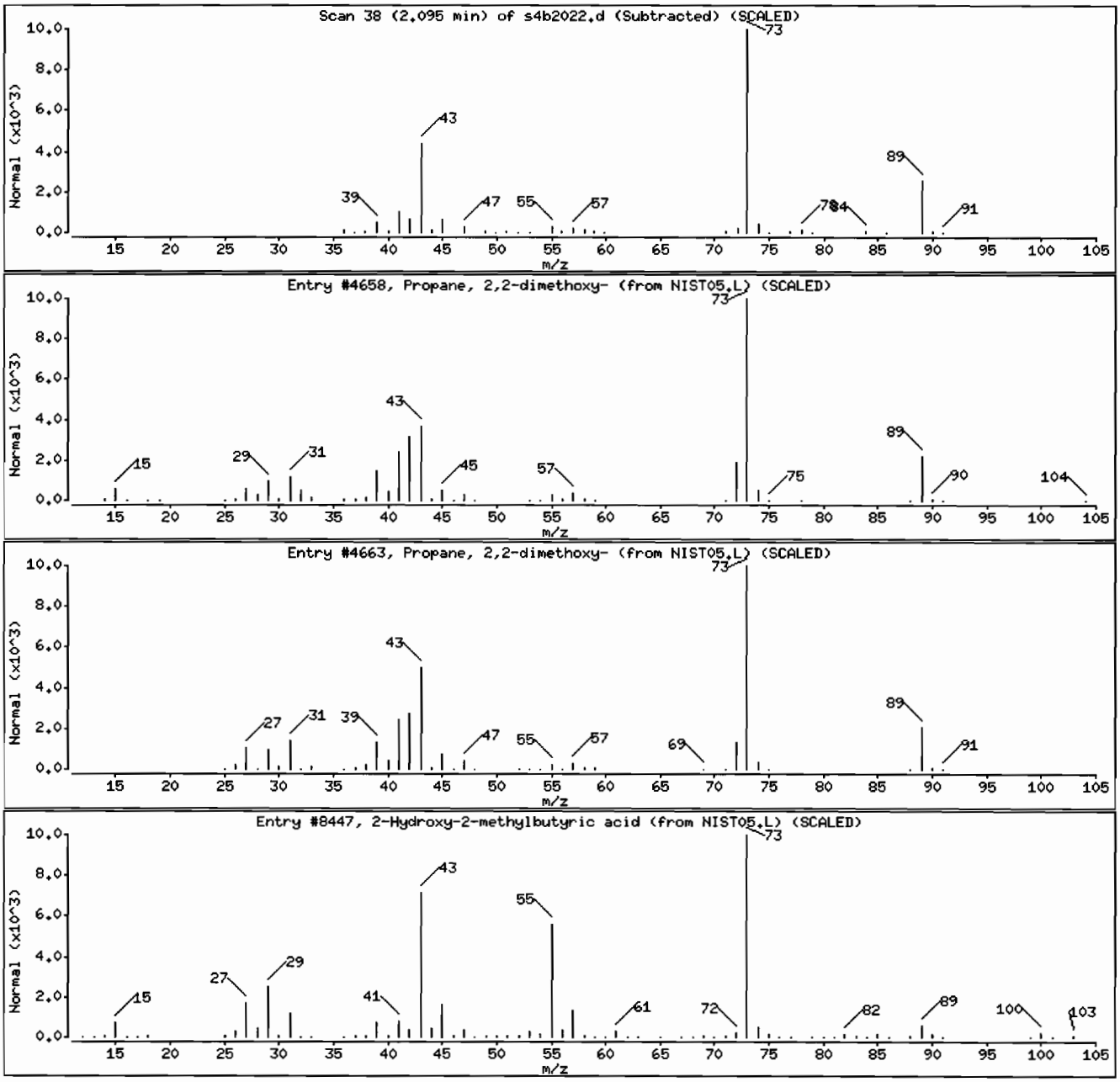
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	9	C5H12O2	104
2-Hydroxy-2-methylbutyric acid	3739-30-8	NIST05.L	8447	9	C5H10O3	118



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

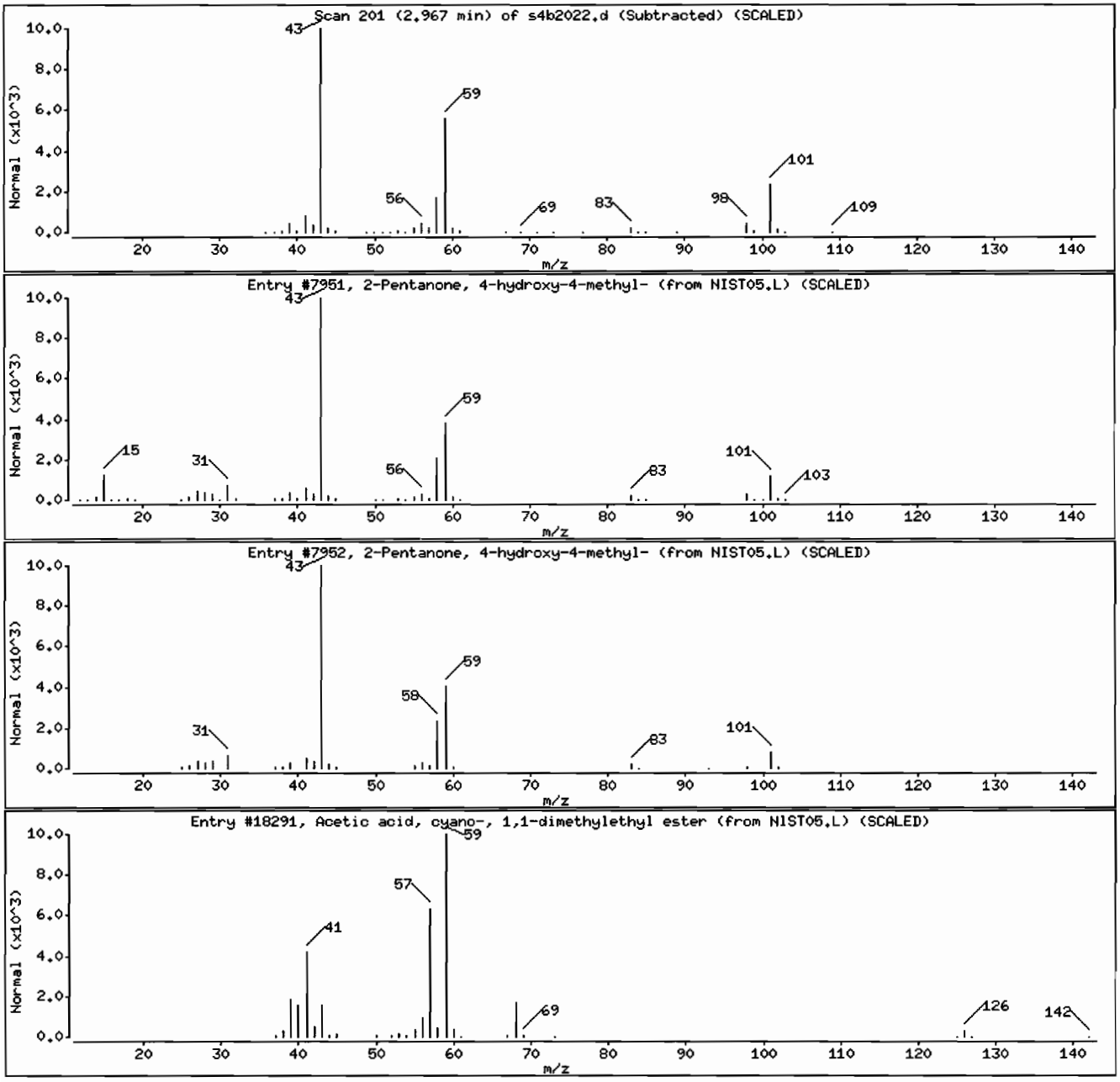
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	17	C7H11NO2	141



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

Client ID: RE15-10-8362

Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVM|1|LANL

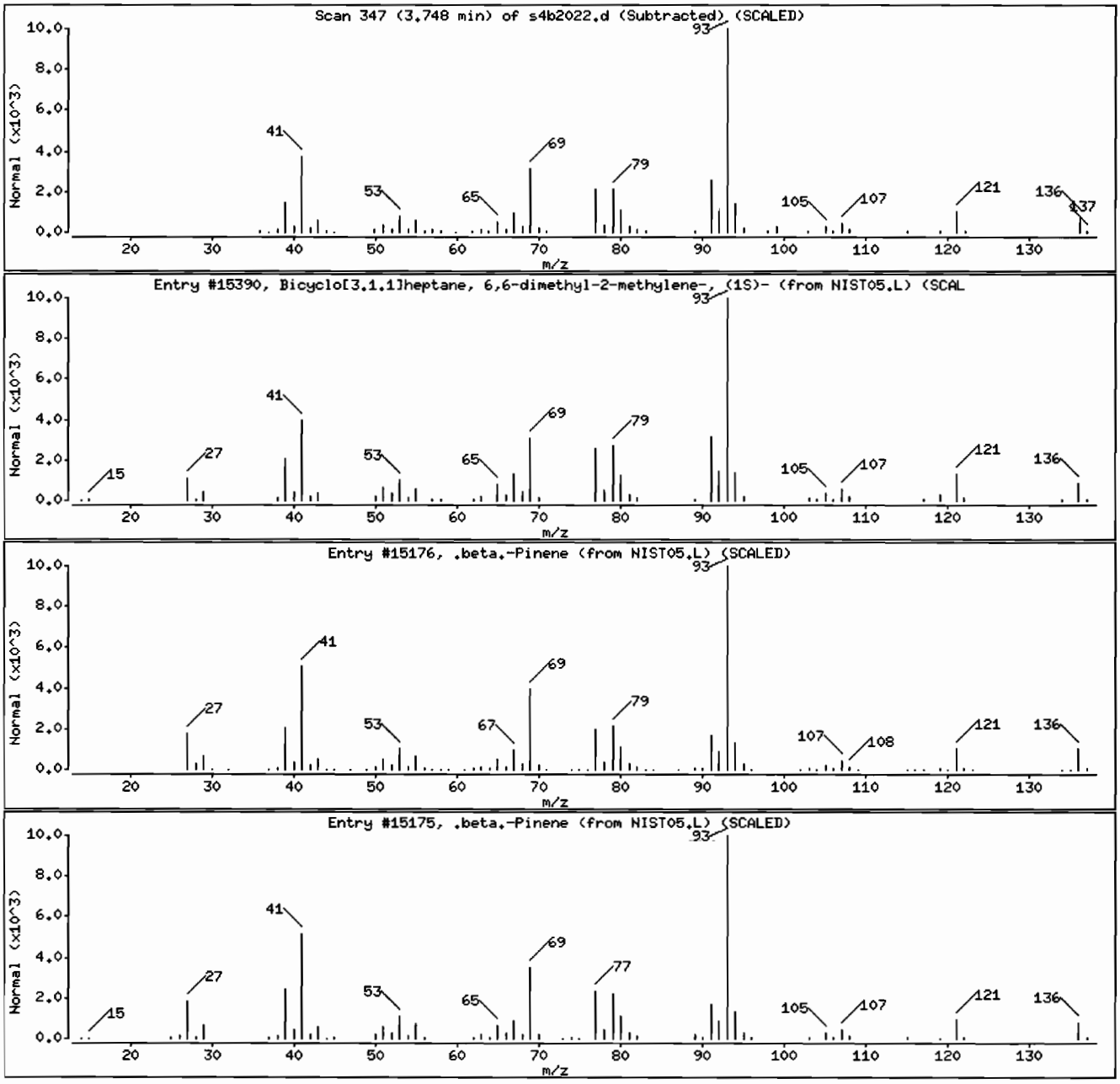
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	97	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15176	97	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15175	95	C10H16	136



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Date : 20-FEB-2010 18:28

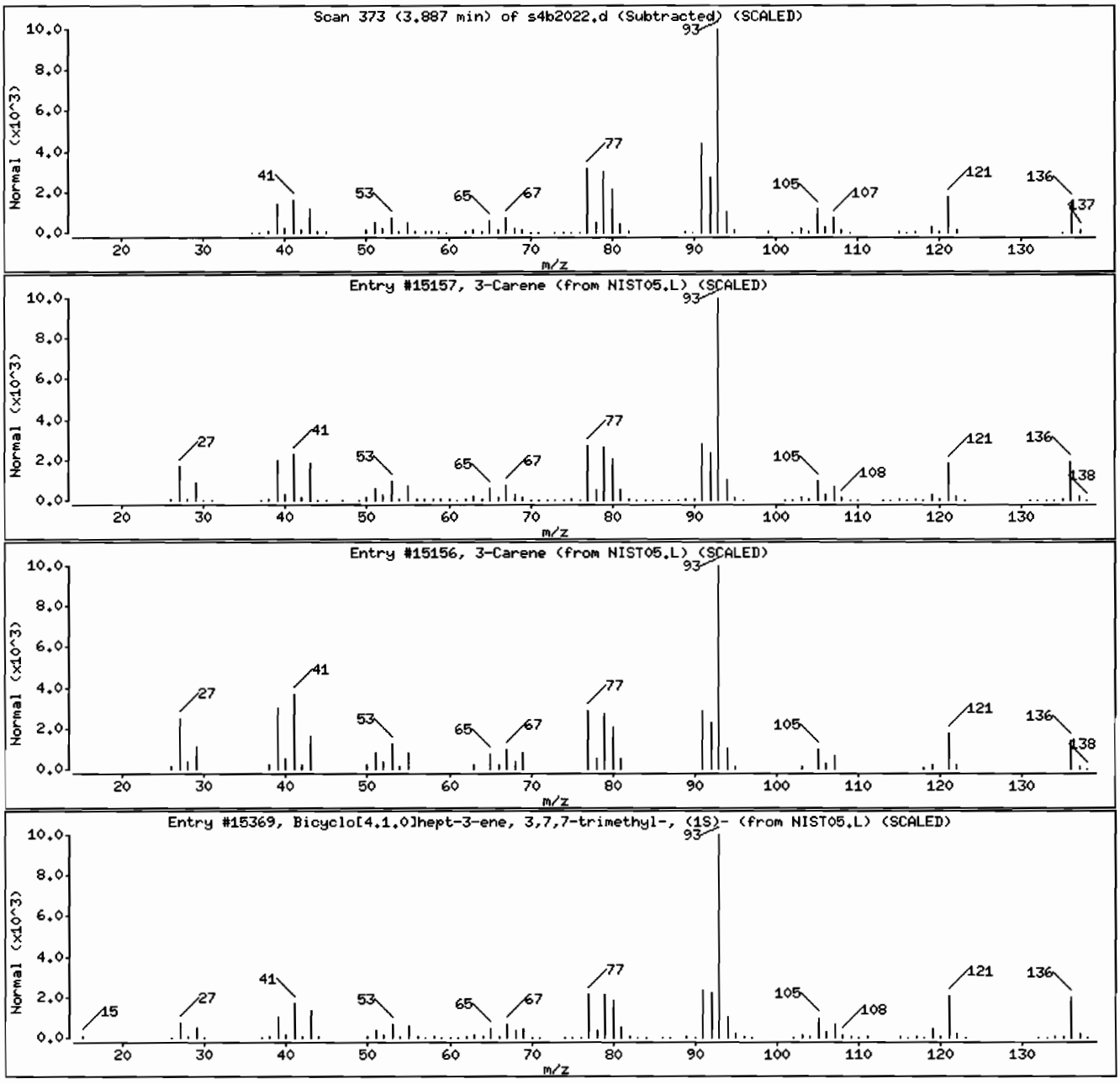
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15157	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	95	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST05.L	15369	95	C10H16	136



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Date : 20-FEB-2010 18:28

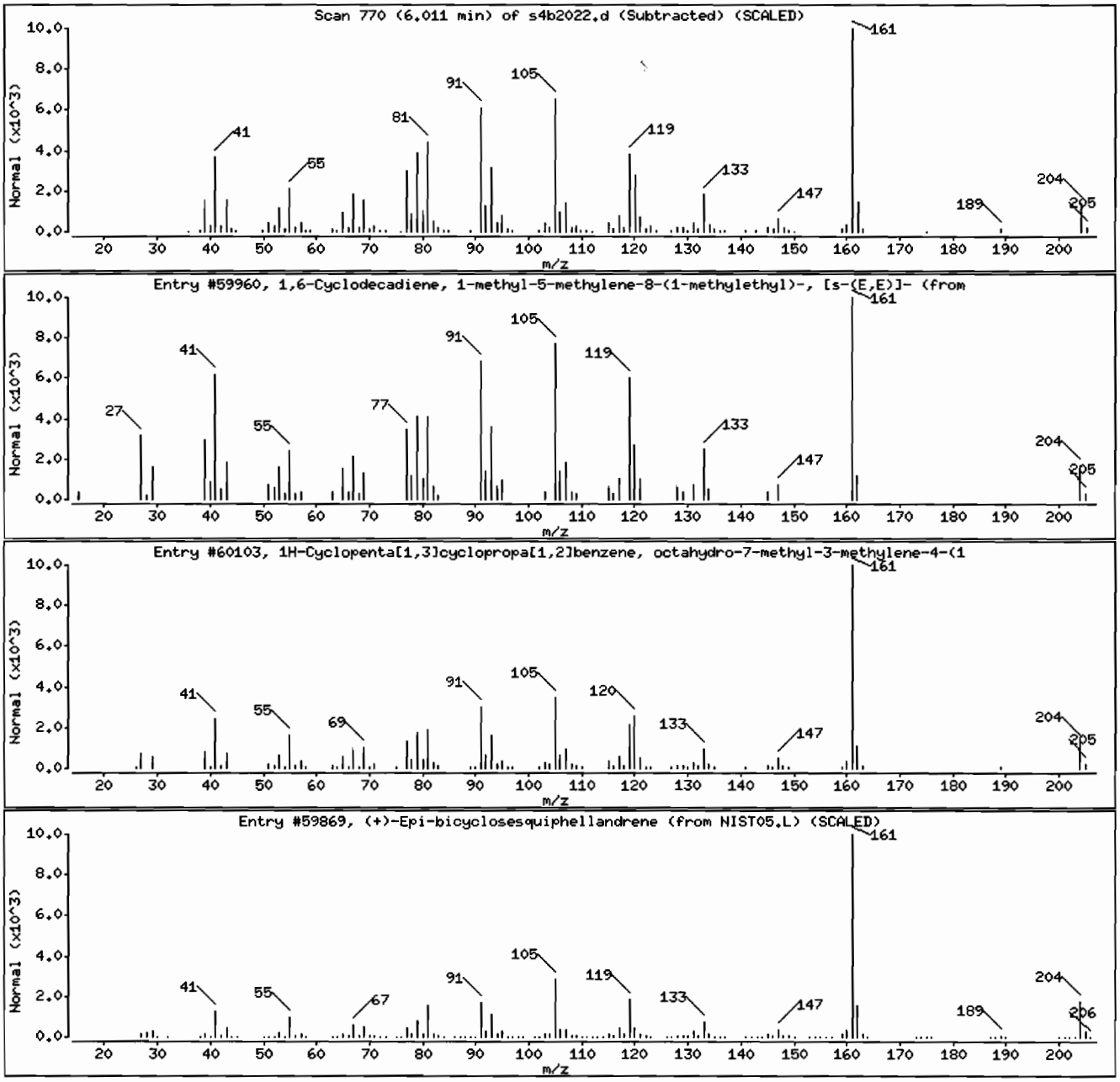
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,6-Cyclodecadiene, 1-methyl-5-methylene	23986-74-5	NIST05.L	59960	99	C15H24	204
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST05.L	60103	96	C15H24	204
(+)-Epi-bicyclosesquiphellandrene	54324-03-7	NIST05.L	59869	95	C15H24	204



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Date : 20-FEB-2010 18:28

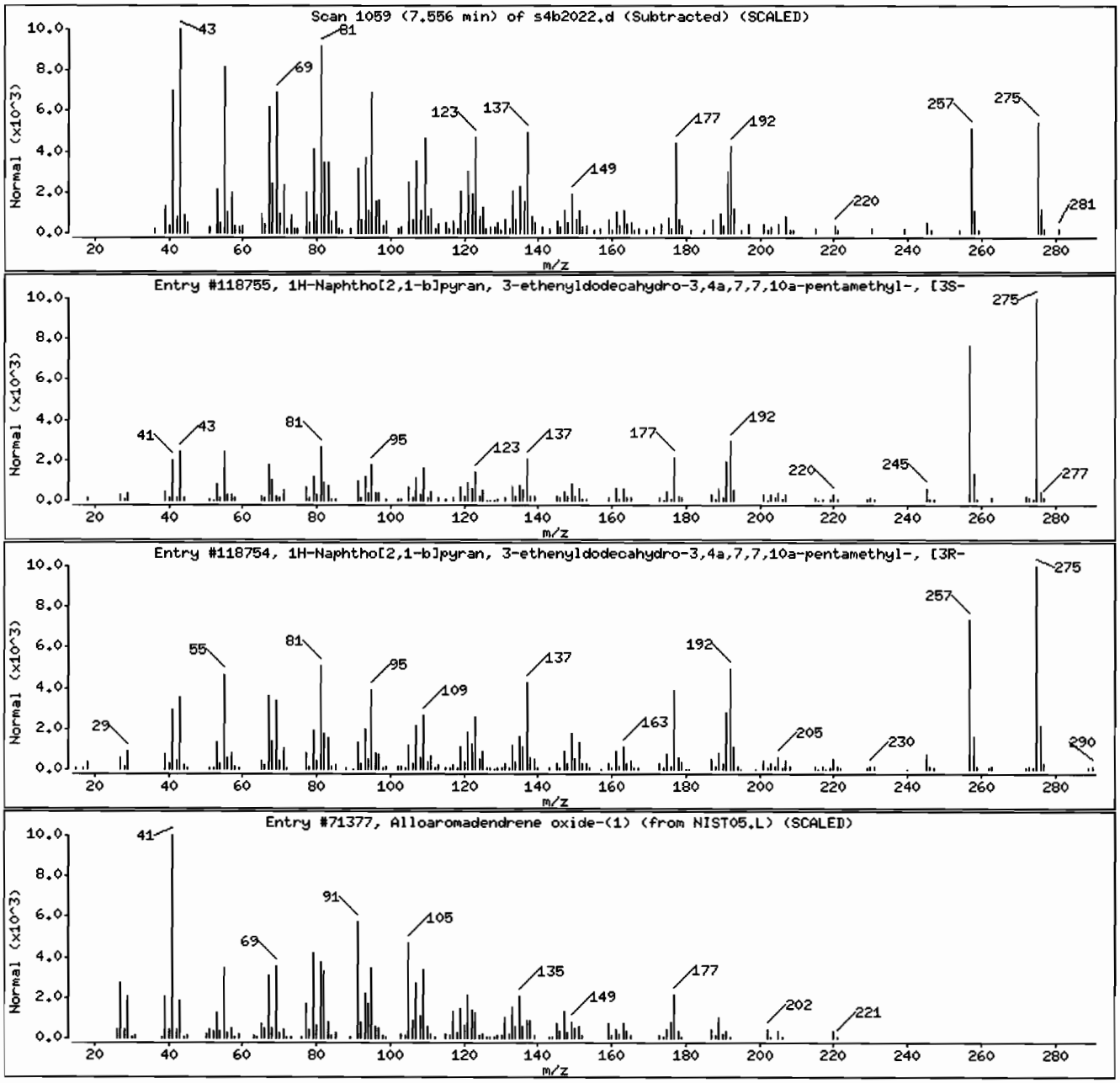
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah	1227-93-6	NIST05.L	118755	76	C20H340	290
1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah	596-84-9	NIST05.L	118754	49	C20H340	290
Alloaromadendrene oxide-(1)	1000156-12-8	NIST05.L	71377	41	C15H240	220



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

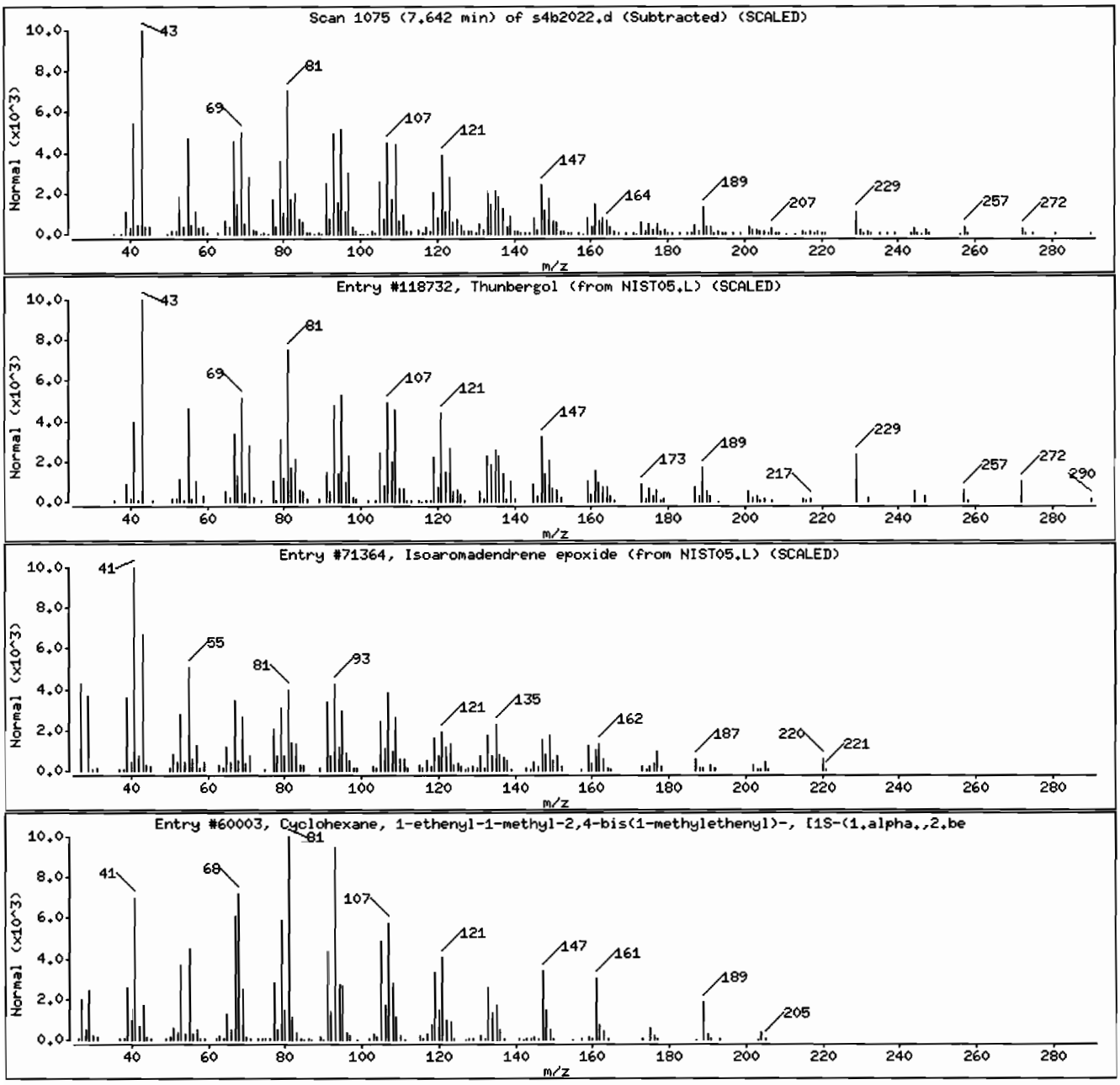
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVM111LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Thunbergol	25269-17-4	NIST05.L	118732	94	C20H34O	290
Isoaromadendrene epoxide	1000159-36-6	NIST05.L	71364	50	C15H24O	220
Cyclohexane, 1-ethenyl-1-methyl-2,4-bis(	515-13-9	NIST05.L	60003	50	C15H24	204



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

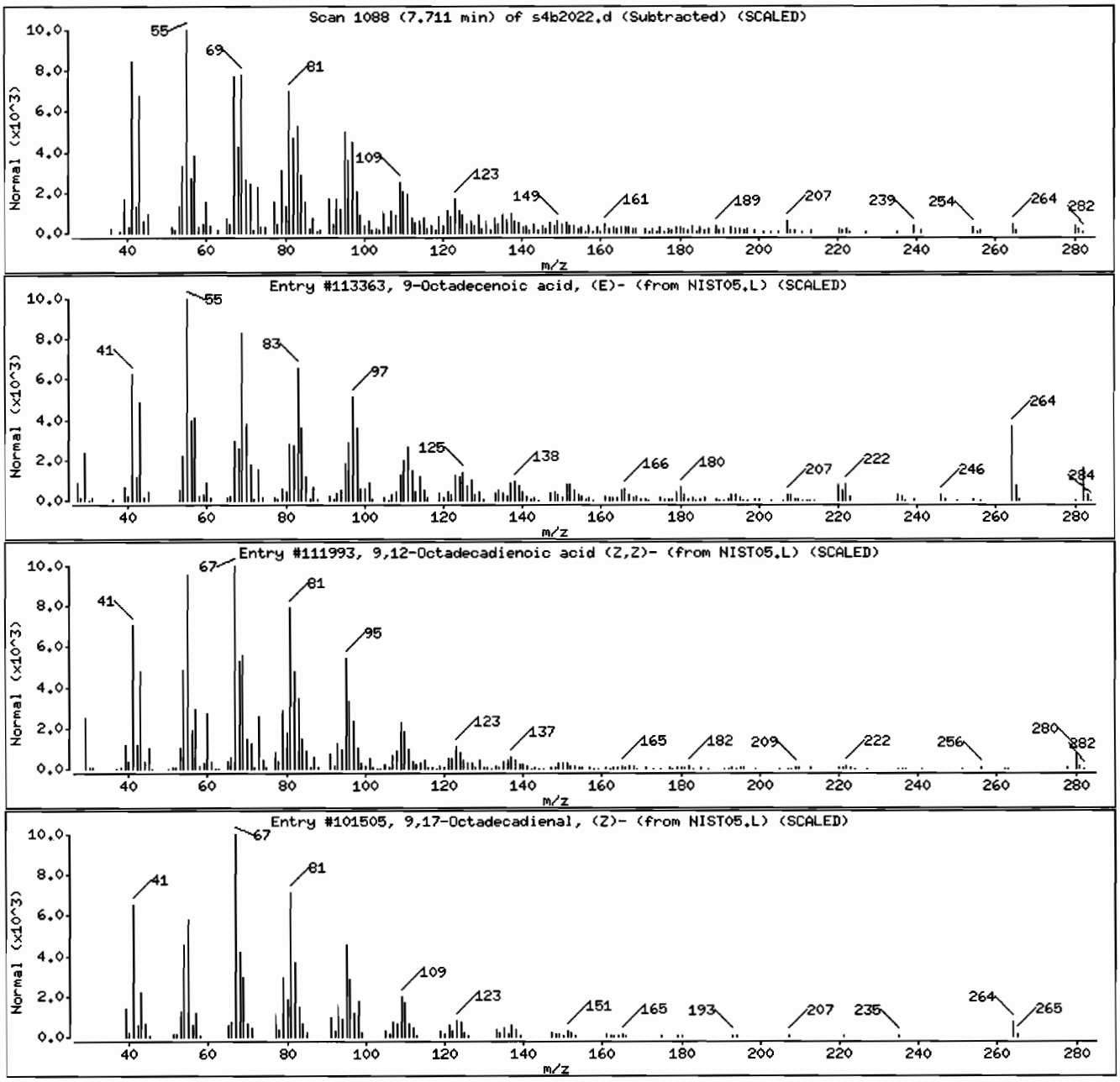
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVMI11LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenoic acid, (E)-	112-79-8	NIST05.L	113363	95	C18H3402	282
9,12-Octadecadienoic acid (Z,Z)-	60-33-3	NIST05.L	111993	95	C18H3202	280
9,17-Octadecadienal, (Z)-	56554-35-9	NIST05.L	101505	95	C18H320	264



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Date : 20-FEB-2010 18:28

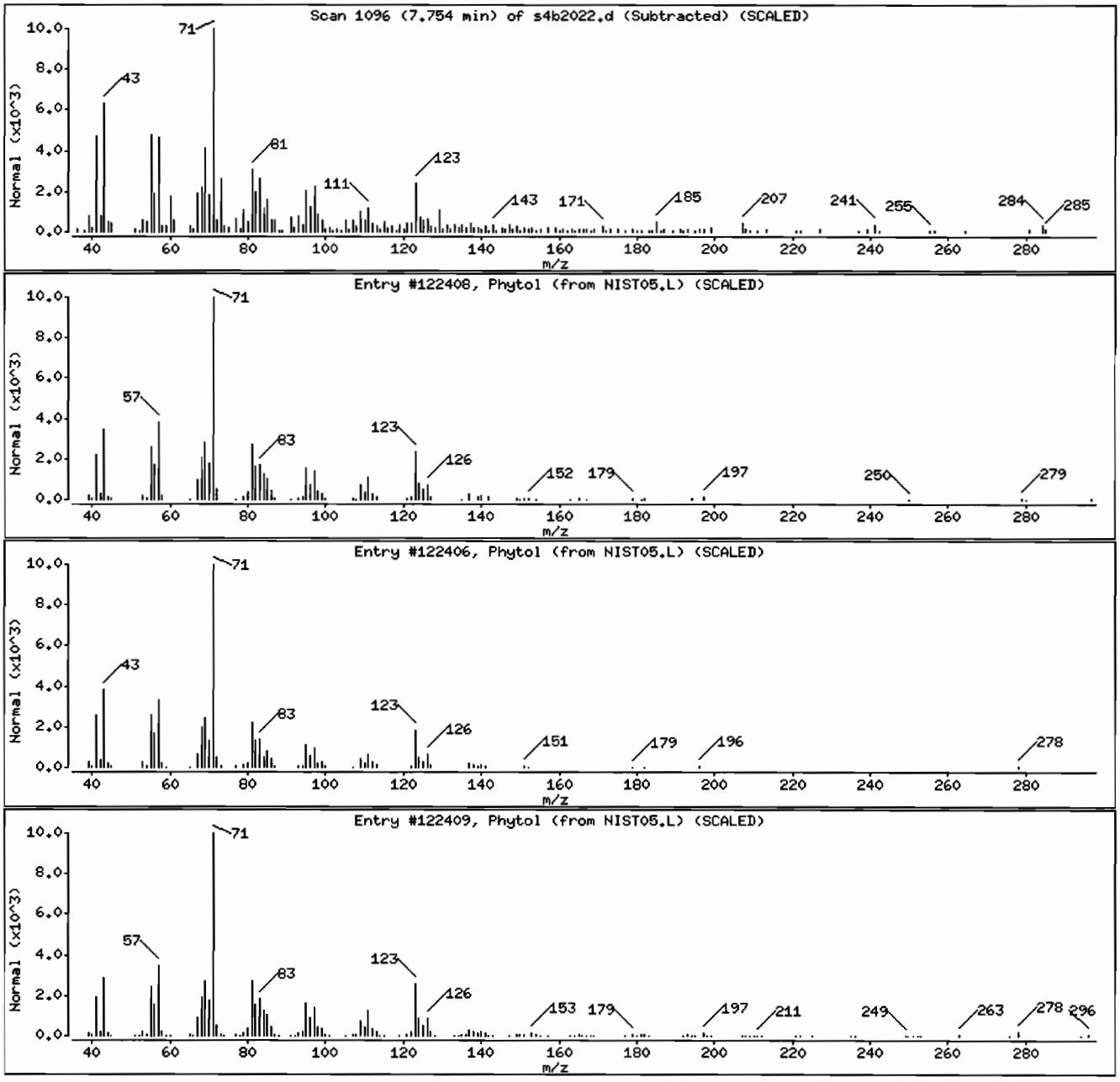
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phytol	150-86-7	NIST05.L	122408	62	C20H40O	296
Phytol	150-86-7	NIST05.L	122406	62	C20H40O	296
Phytol	150-86-7	NIST05.L	122409	58	C20H40O	296



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

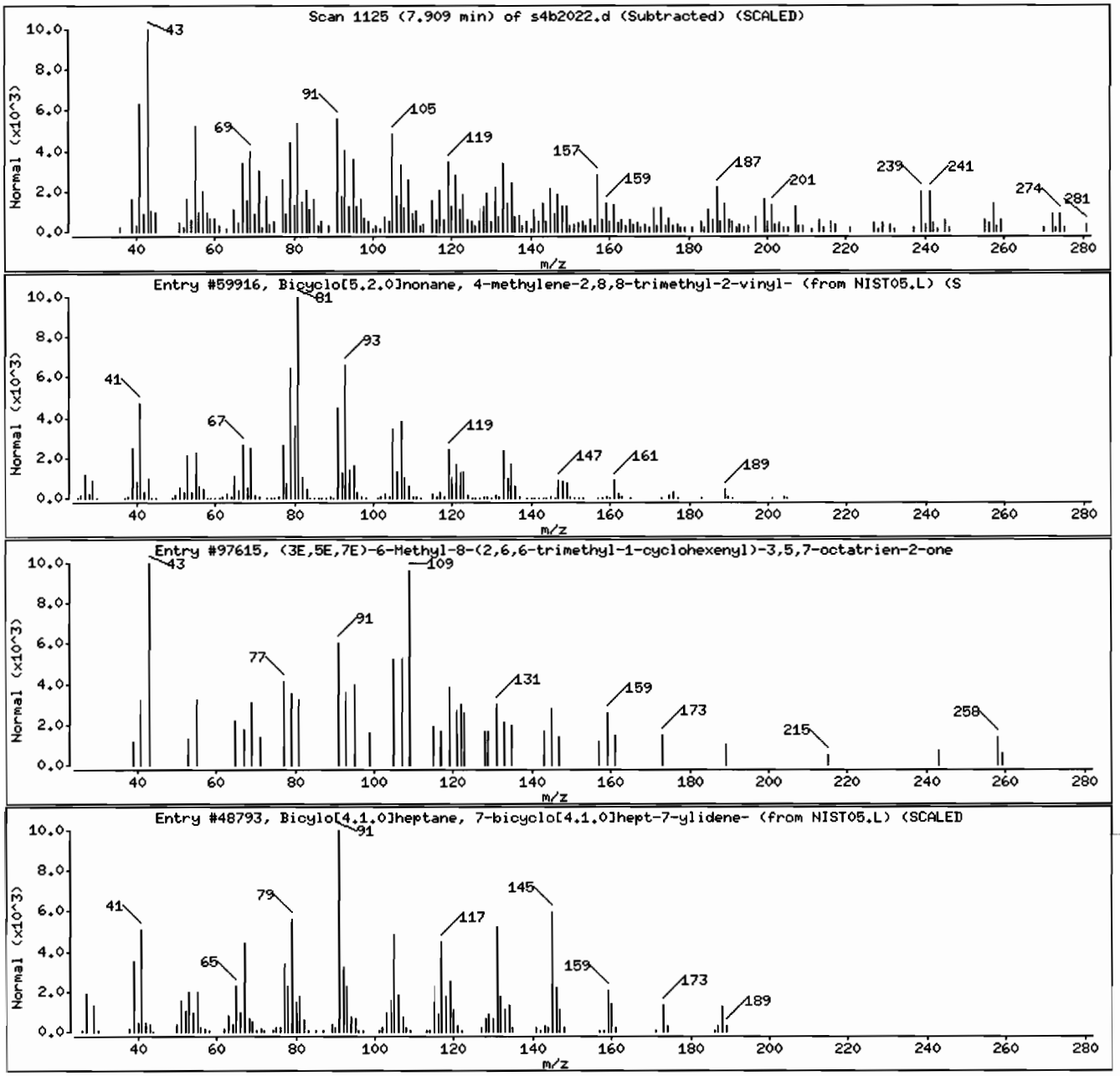
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	64	C15H24	204
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	27	C18H26O	258
Bicylo[4.1.0]heptane, 7-bicyclo[4.1.0]he	1000152-39-9	NIST05.L	48793	25	C14H20	188



Data File: /chem/HSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

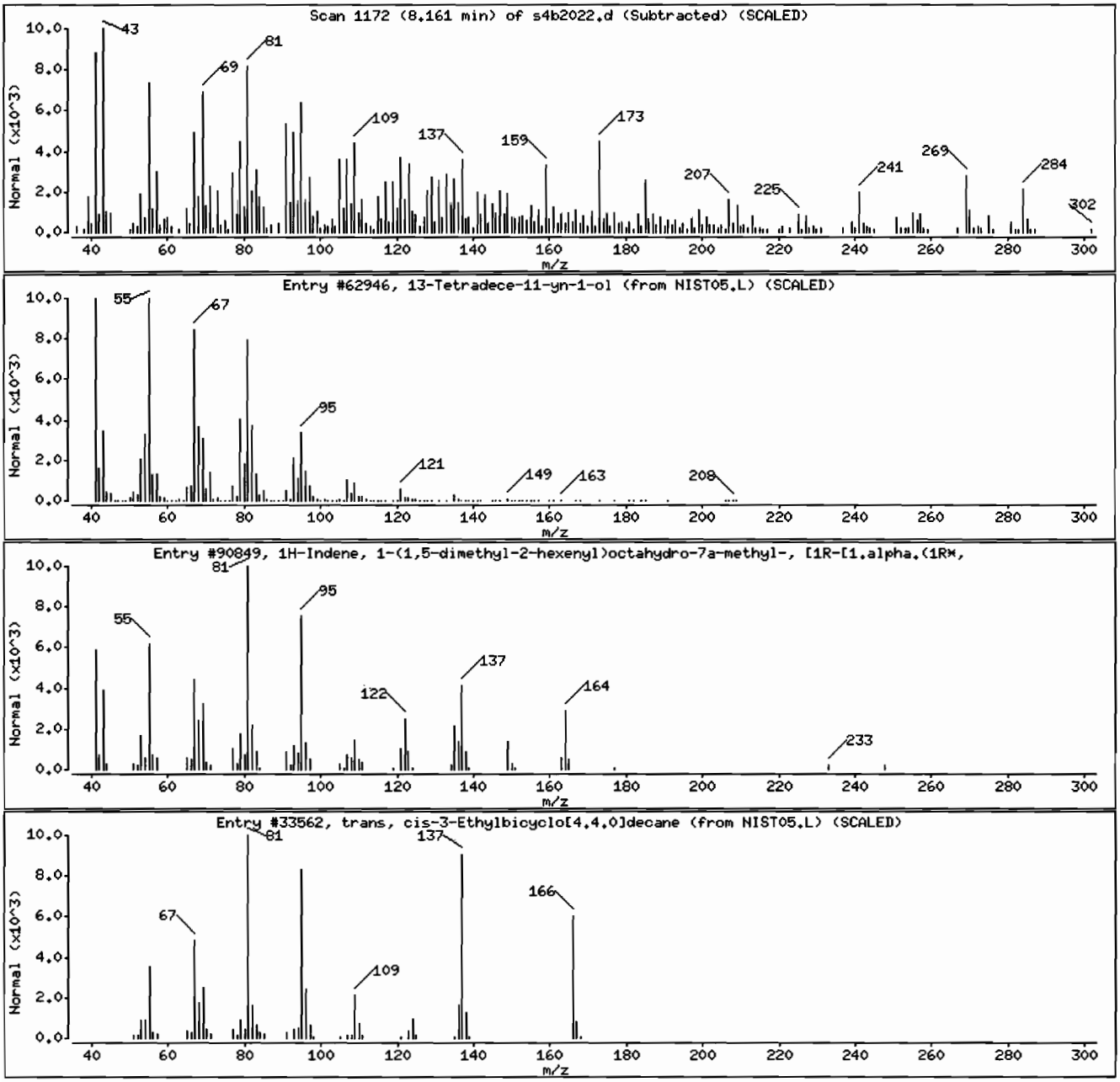
Client ID: RE15-10-8362 Instrument: HSD4.i

Sample Info: |2464420031951989|1|SVHI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
13-Tetradece-11-yn-1-ol	1000131-00-4	NIST05.L	62946	38	C14H24O	208
1H-Indene, 1-(1,5-dimethyl-2-hexenyl)oct	54411-95-9	NIST05.L	90849	30	C18H32	248
trans, cis-3-Ethylbicyclo[4.4.0]decane	66660-43-3	NIST05.L	33562	30	C12H22	166



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

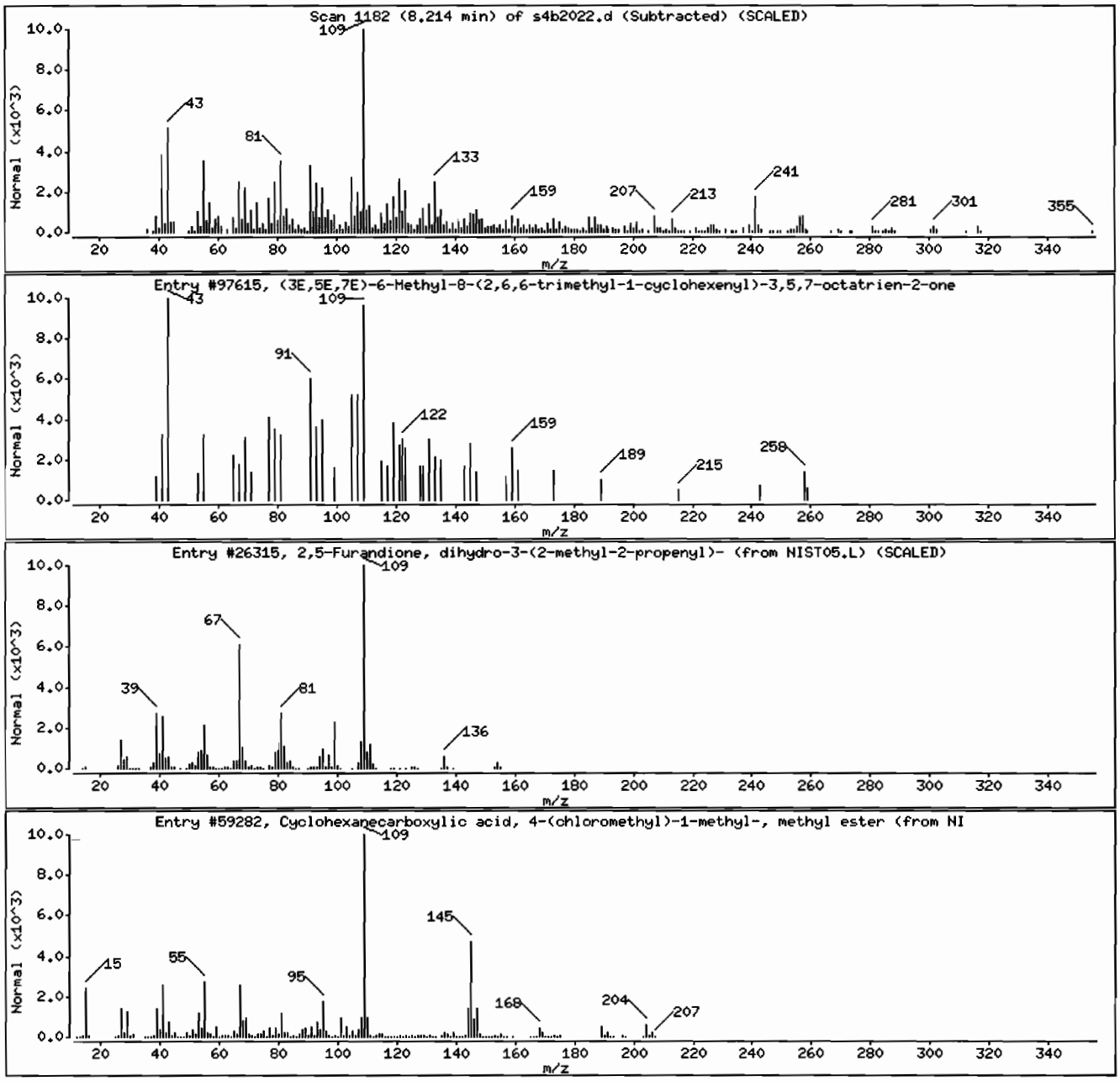
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 1246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	38	C18H26O	258
2,5-Furandione, dihydro-3-(2-methyl-2-pr	18908-20-8	NIST05.L	26315	38	C8H10O3	154
Cyclohexanecarboxylic acid, 4-(chloromet	55590-77-7	NIST05.L	59282	35	C10H17ClO2	204



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

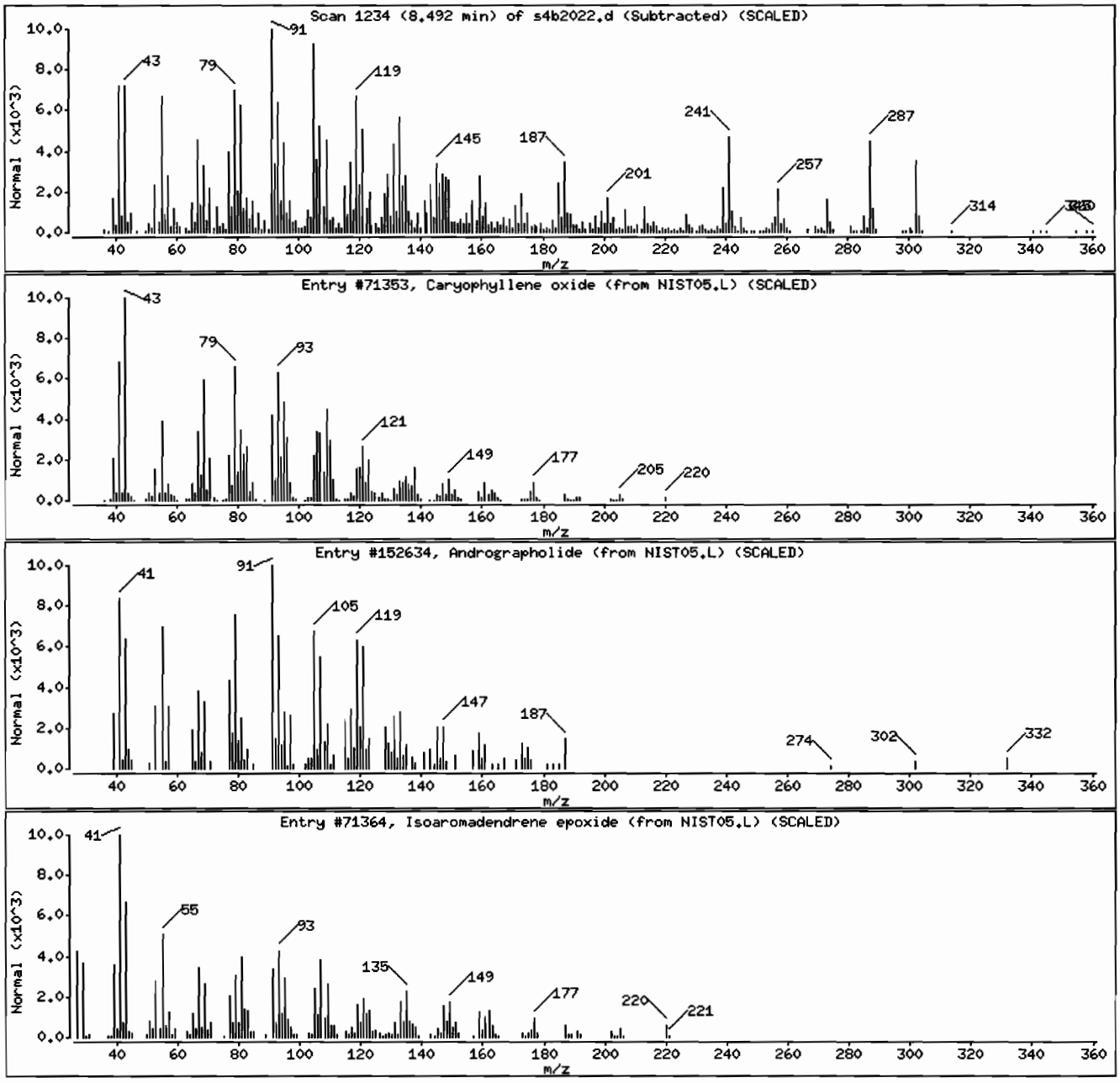
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Caryophyllene oxide	1139-30-6	NIST05.L	71353	47	C15H240	220
Andrographolide	5508-58-7	NIST05.L	152634	41	C20H3005	350
Isoaromadendrene epoxide	1000159-36-6	NIST05.L	71364	35	C15H240	220



Data File: /chem/HSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

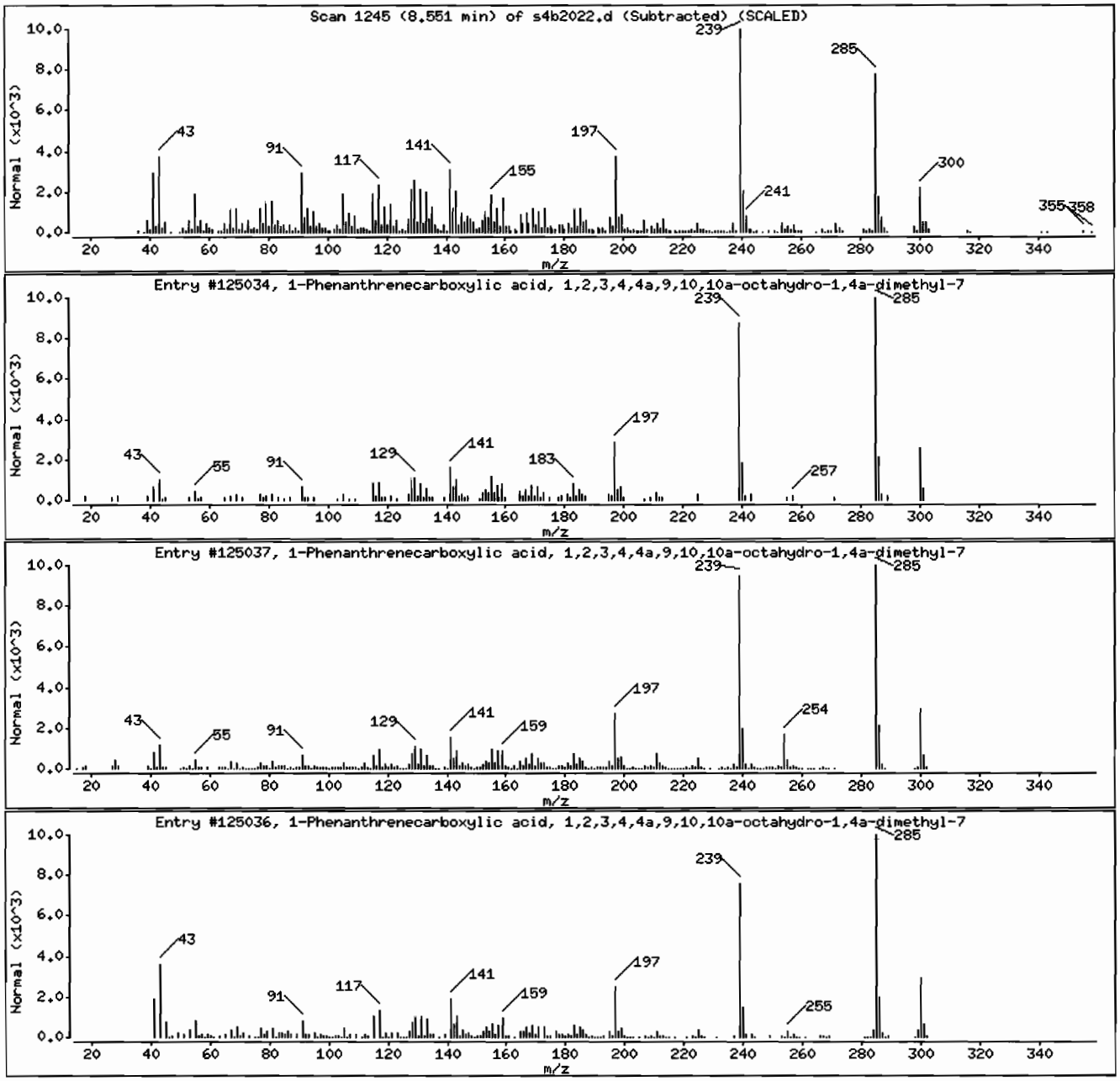
Client ID: RE15-10-8362 Instrument: HSD4.i

Sample Info: 1246442003|951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	96	C20H2802	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	91	C20H2802	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	90	C20H2802	300



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Date : 20-FEB-2010 18:28

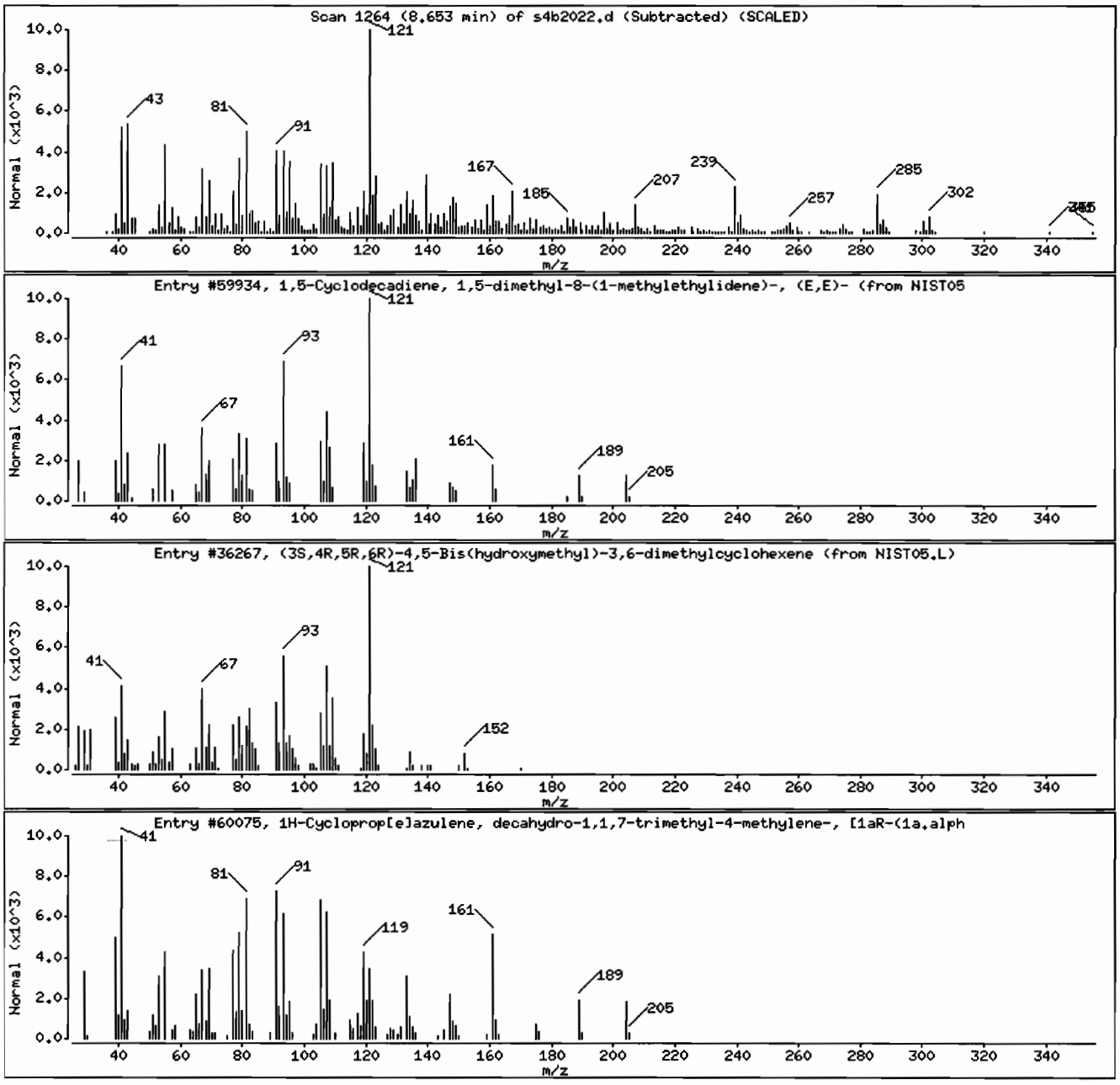
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,5-Cyclodecadiene, 1,5-dimethyl-8-(1-me	15423-57-1	NIST05.L	59934	64	C15H24	204
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	1000099-24-3	NIST05.L	36267	55	C10H18O2	170
1H-Cycloprop[e]azulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60075	53	C15H24	204



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

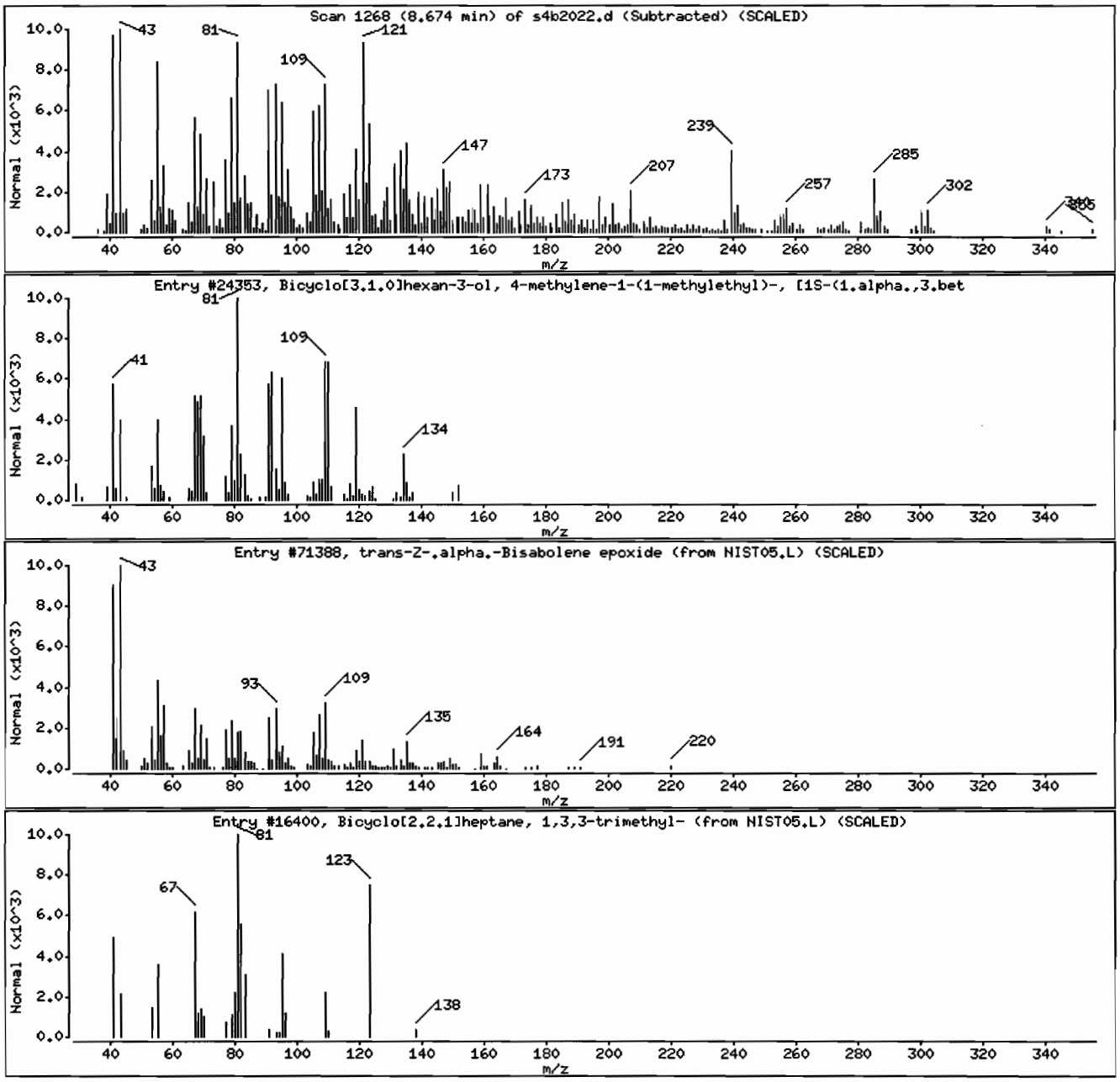
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 1246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[3.1.0]hexan-3-ol, 4-methylene-1-	471-16-9	NIST05.L	24353	51	C10H16O	152
trans-Z-.alpha.-Bisabolene epoxide	1000131-71-1	NIST05.L	71388	38	C15H24O	220
Bicyclo[2.2.1]heptane, 1,3,3-trimethyl-	6248-88-0	NIST05.L	16400	35	C10H18	138



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Date : 20-FEB-2010 18:28

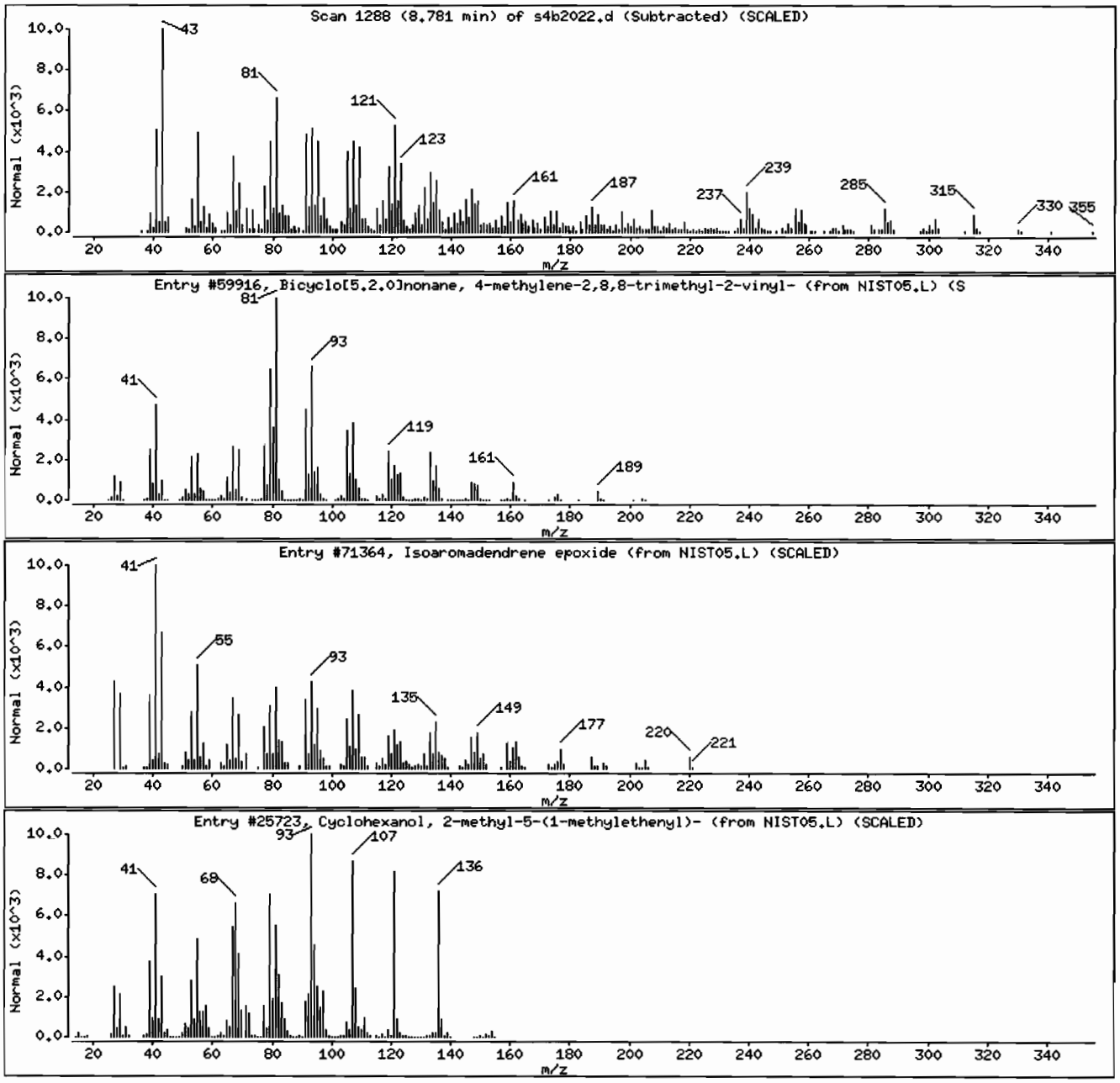
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVMI11LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	72	C15H24	204
Isoaromadendrene epoxide	1000159-36-6	NIST05.L	71364	58	C15H24O	220
Cyclohexanol, 2-methyl-5-(1-methyletheny	619-01-2	NIST05.L	25723	53	C10H18O	154



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

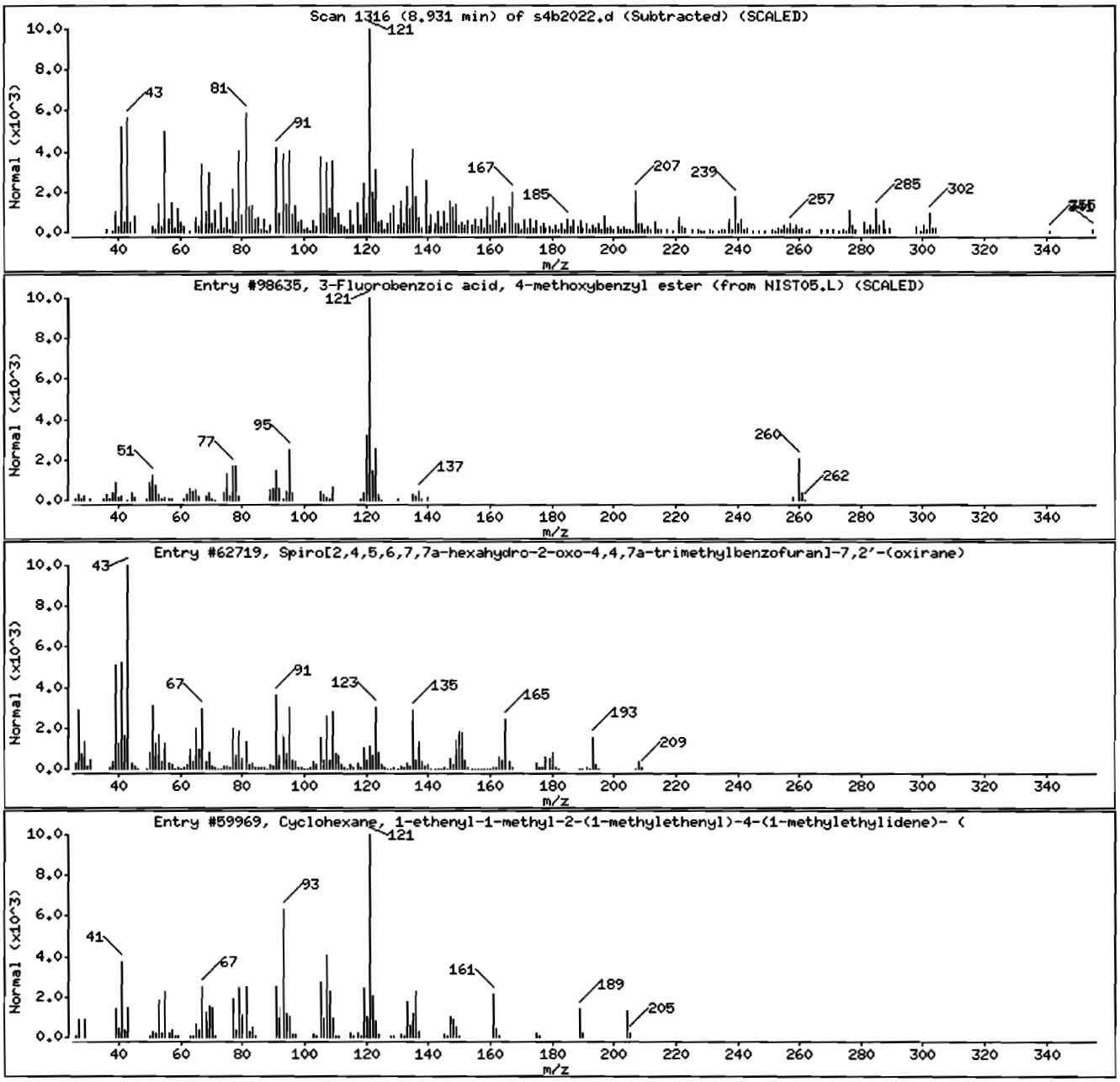
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 1246442003195198911ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Fluorobenzoic acid, 4-methoxybenzyl es	1000279-93-0	NIST05.L	98635	45	C15H13FO3	260
Spiro[2,4,5,6,7,7a-hexahydro-2-oxo-4,4,7	1000197-10-9	NIST05.L	62719	42	C12H16O3	208
Cyclohexane, 1-ethenyl-1-methyl-2-(1-met	3242-08-8	NIST05.L	59969	30	C15H24	204



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

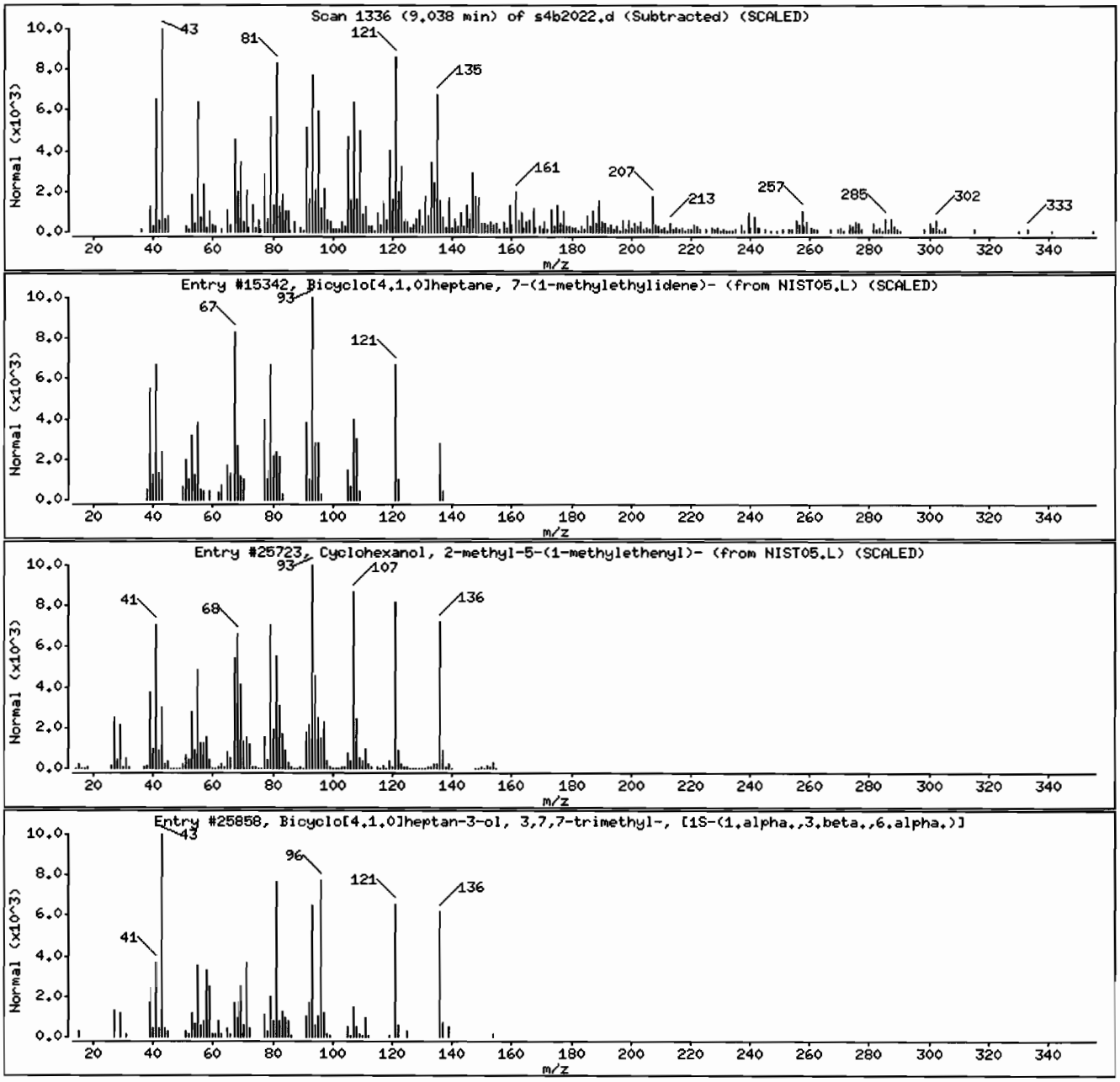
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: !2464420031951989!1!SVM!1!LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[4.1.0]heptane, 7-(1-methylethyli	53282-47-6	NIST05.L	15342	53	C10H16	136
Cyclohexanol, 2-methyl-5-(1-methyletheny	619-01-2	NIST05.L	25723	51	C10H18O	154
Bicyclo[4.1.0]heptan-3-ol, 3,7,7-trimeth	4017-92-9	NIST05.L	25858	49	C10H18O	154



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

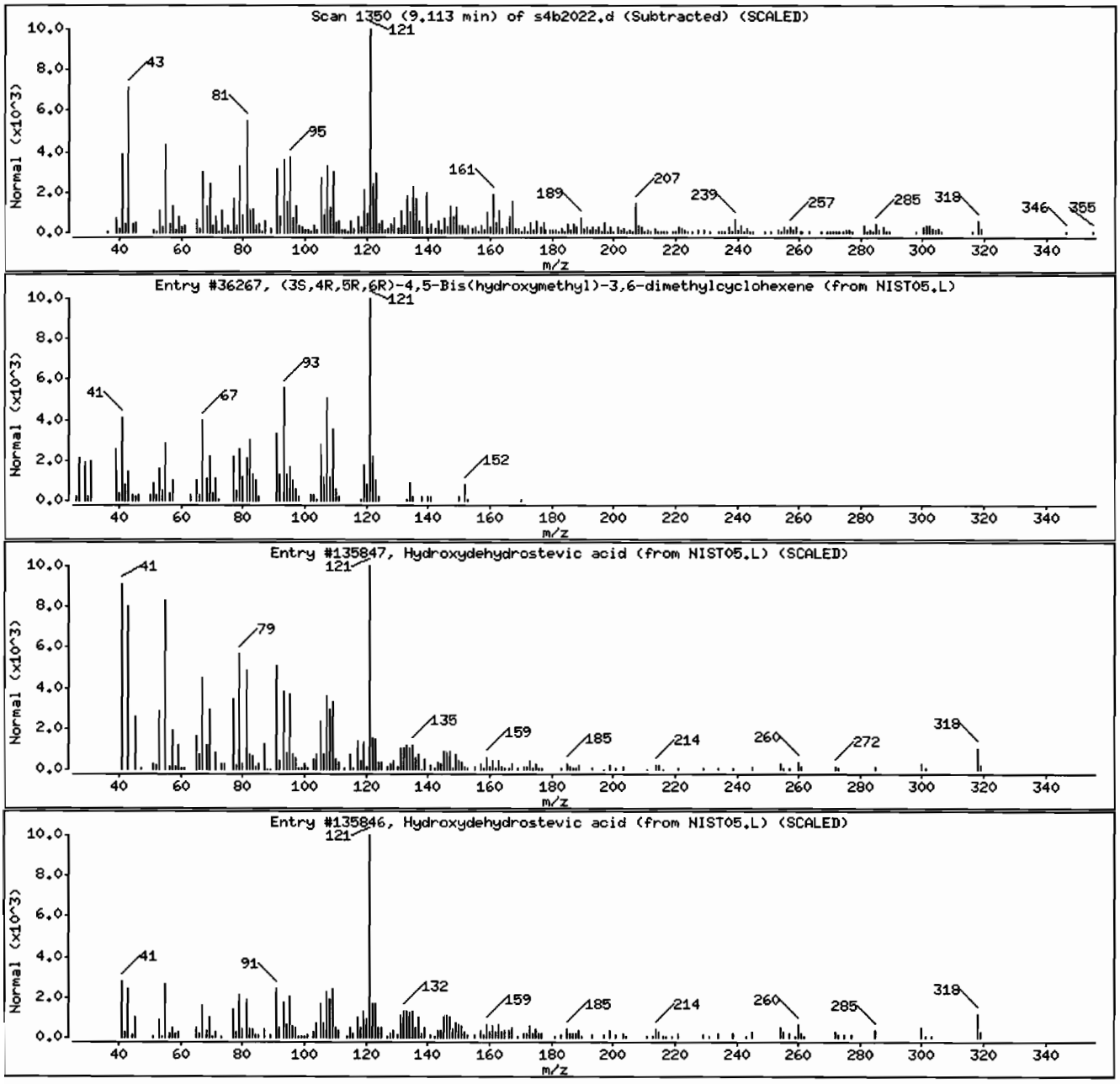
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVM111LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	1000099-24-3	NIST05.L	36267	93	C10H18O2	170
Hydroxydehydrostevic acid	471-80-7	NIST05.L	135847	76	C20H30O3	318
Hydroxydehydrostevic acid	471-80-7	NIST05.L	135846	70	C20H30O3	318



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Date : 20-FEB-2010 18:28

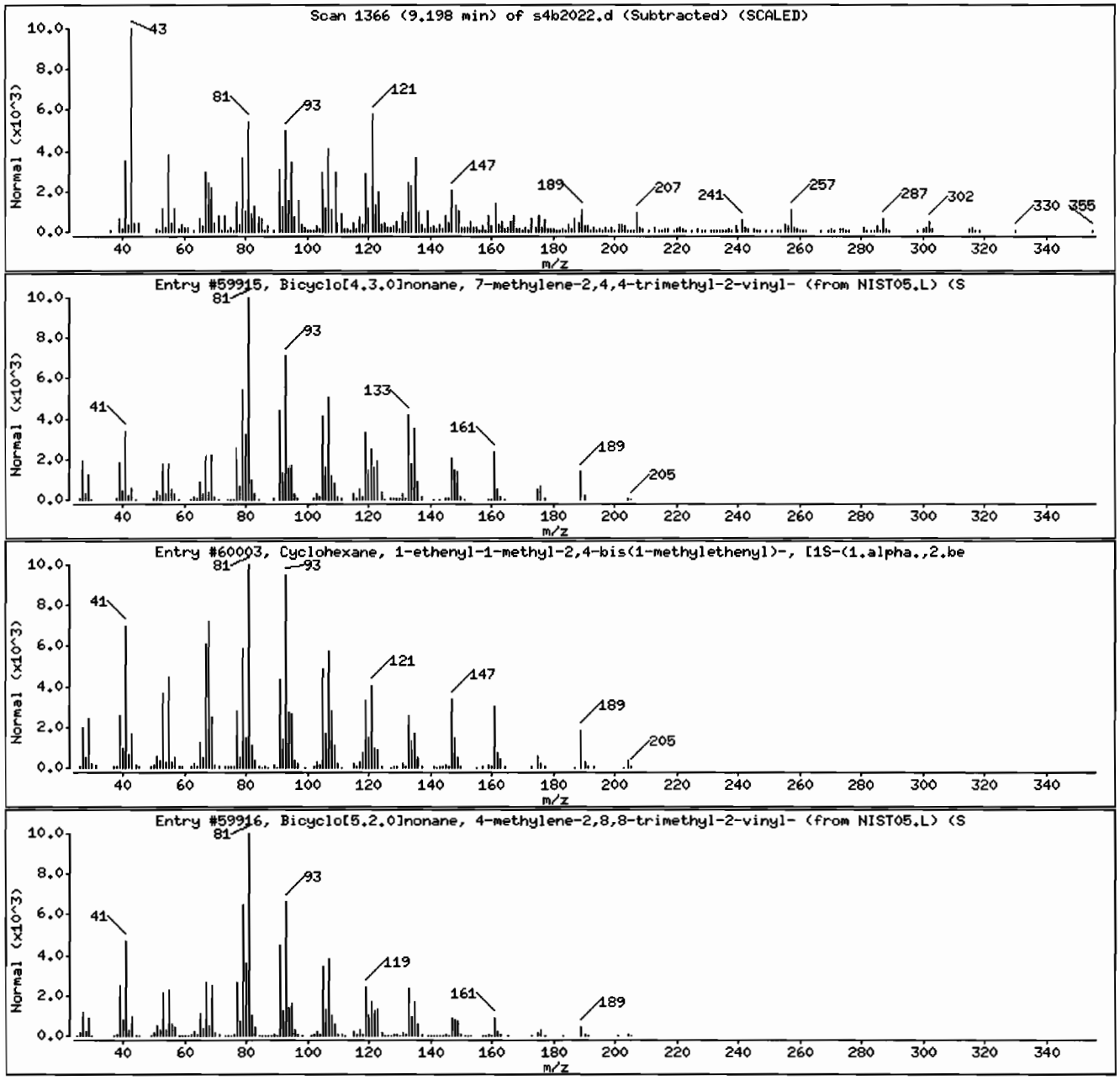
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVHI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Hatch	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	91	C15H24	204
Cyclohexane, 1-ethenyl-1-methyl-2,4-bis(	515-13-9	NIST05.L	60003	64	C15H24	204
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	50	C15H24	204



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

Client ID: RE15-10-8362

Instrument: MSD4.i

Sample Info: |246442003|951989|1|SVM|1|LANL

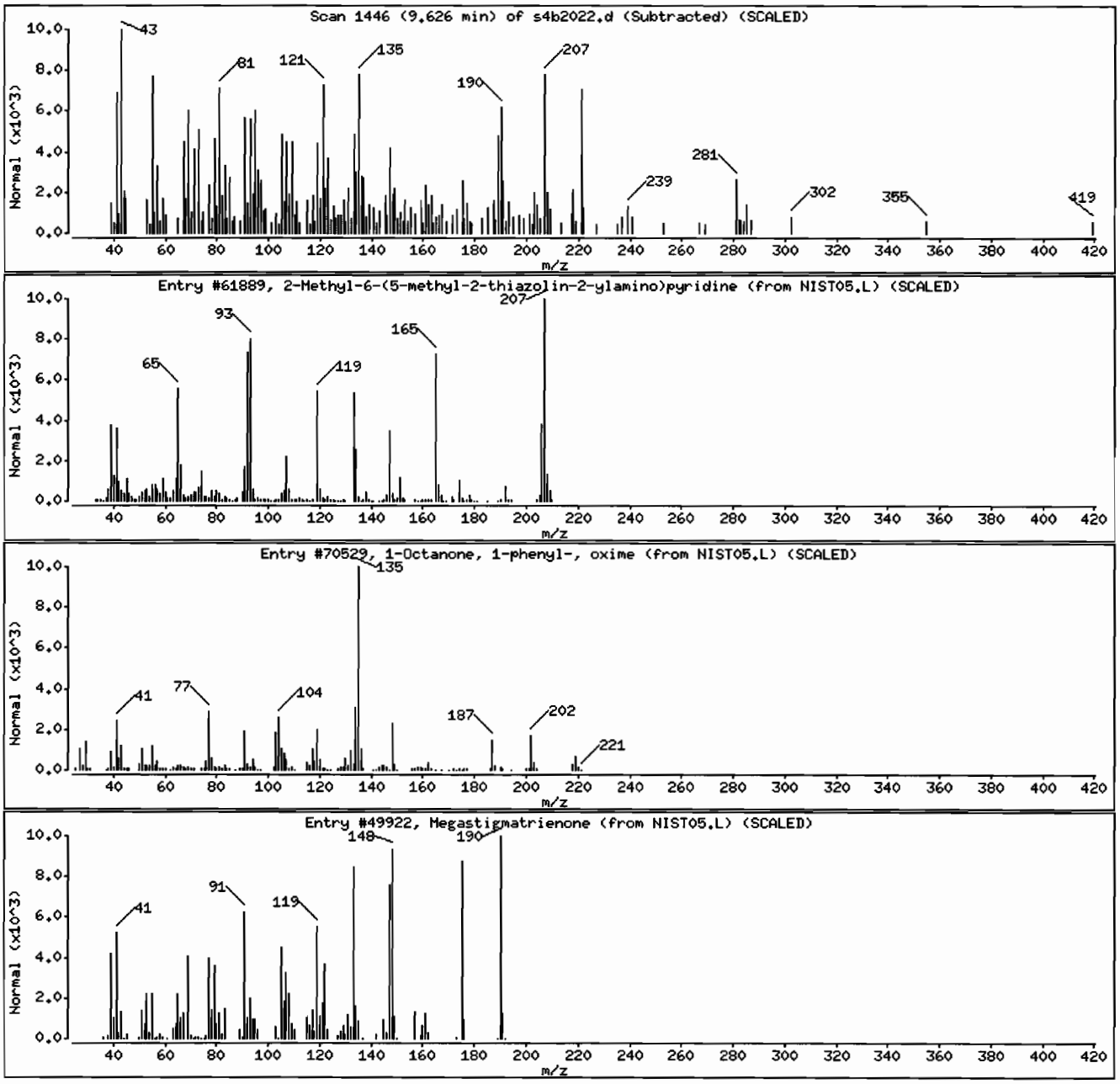
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-6-(5-methyl-2-thiazolin-2-ylami	339352-50-0	NIST05.L	61889	30	C10H13N3S	207
1-Octanone, 1-phenyl-, oxime	77611-70-2	NIST05.L	70529	25	C14H21NO	219
Megastigmatrienone	38818-55-2	NIST05.L	49922	25	C13H18O	190



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

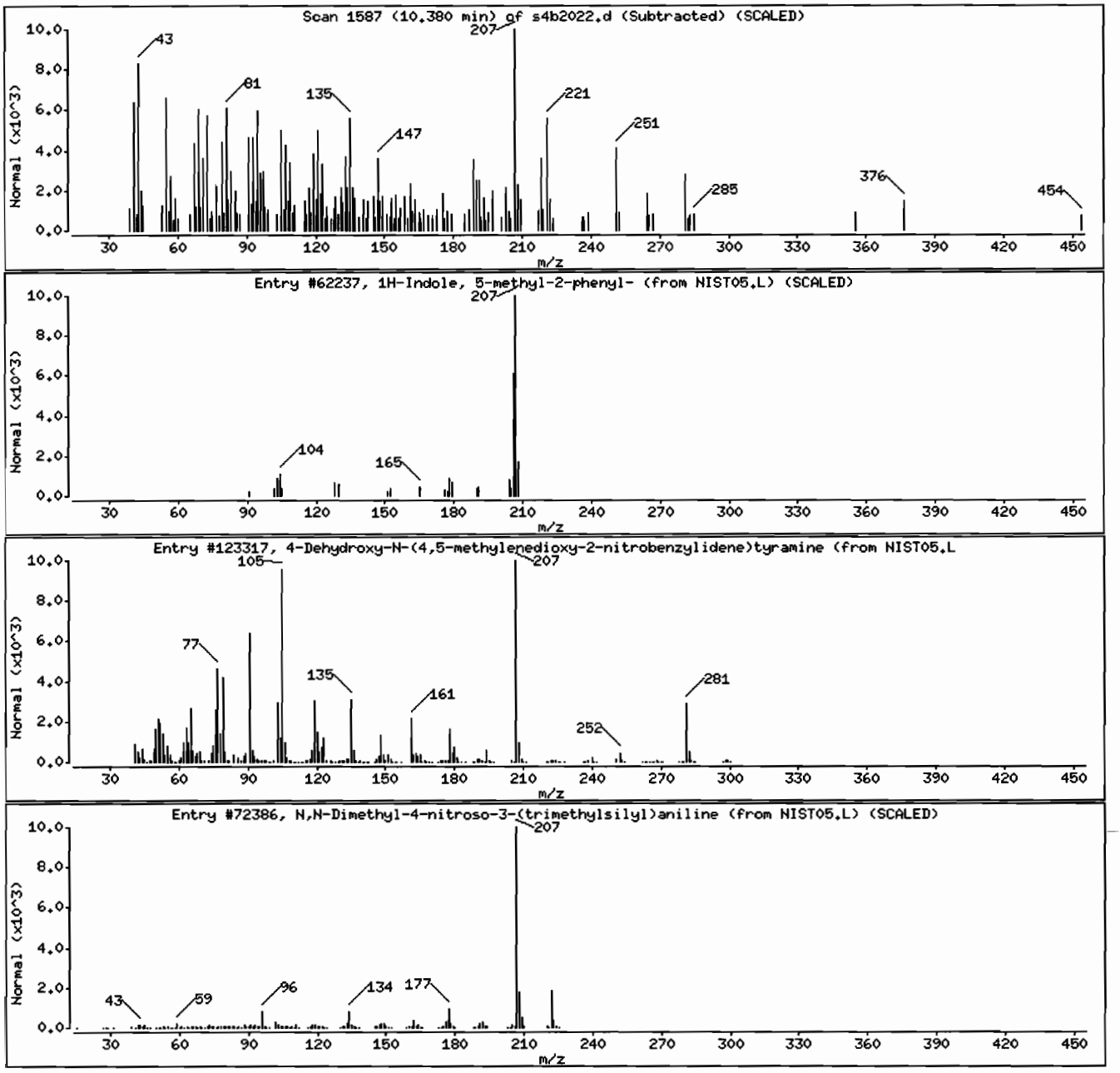
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 1246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&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	C15H13N	207
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	25	C16H14N2O4	298
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl	17993-84-9	NIST05.L	72386	20	C11H18N2OSi	222



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

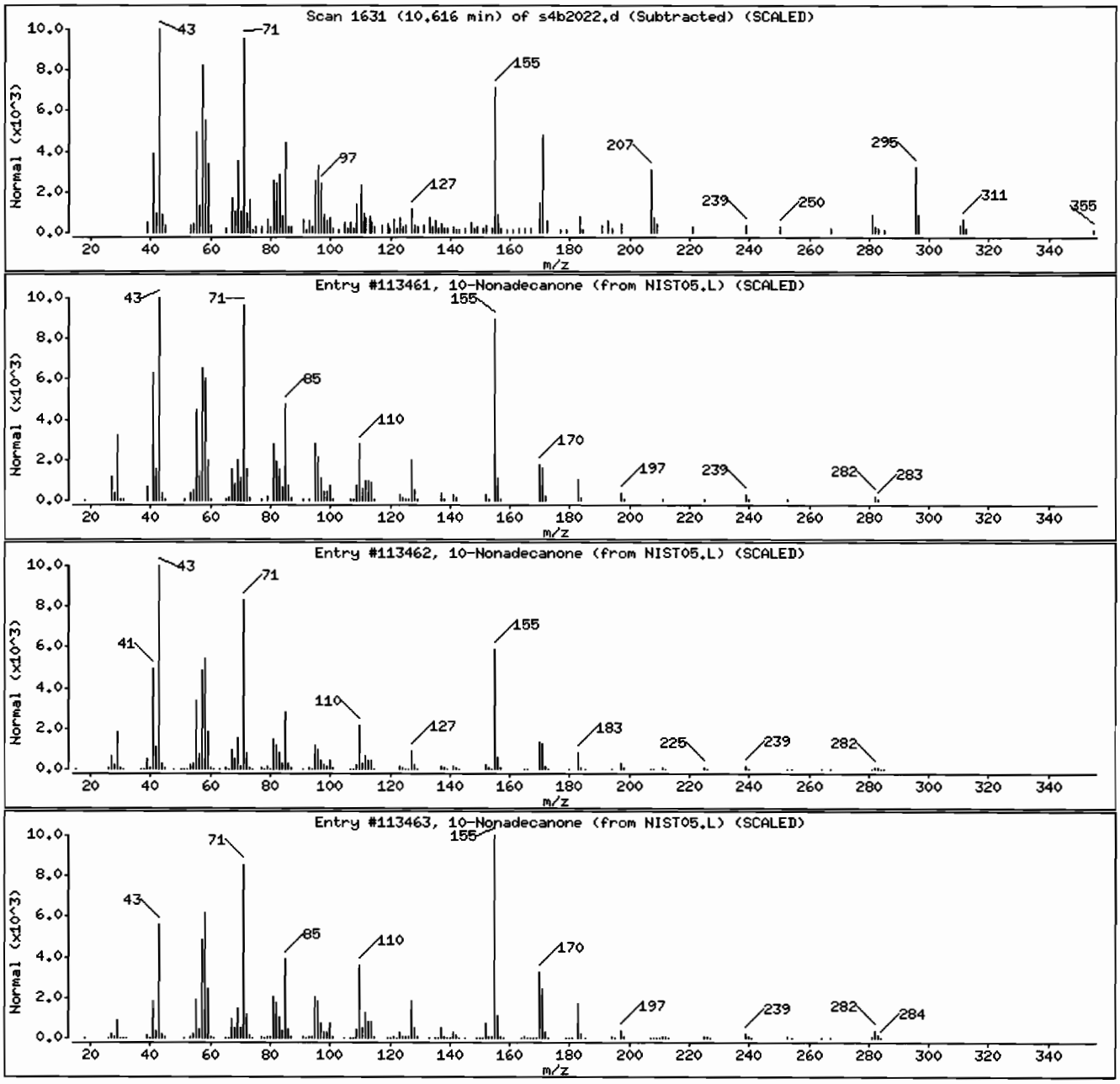
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVM111LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
10-Nonadecanone	504-57-4	NIST05.L	113461	70	C19H38O	282
10-Nonadecanone	504-57-4	NIST05.L	113462	53	C19H38O	282
10-Nonadecanone	504-57-4	NIST05.L	113463	42	C19H38O	282



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

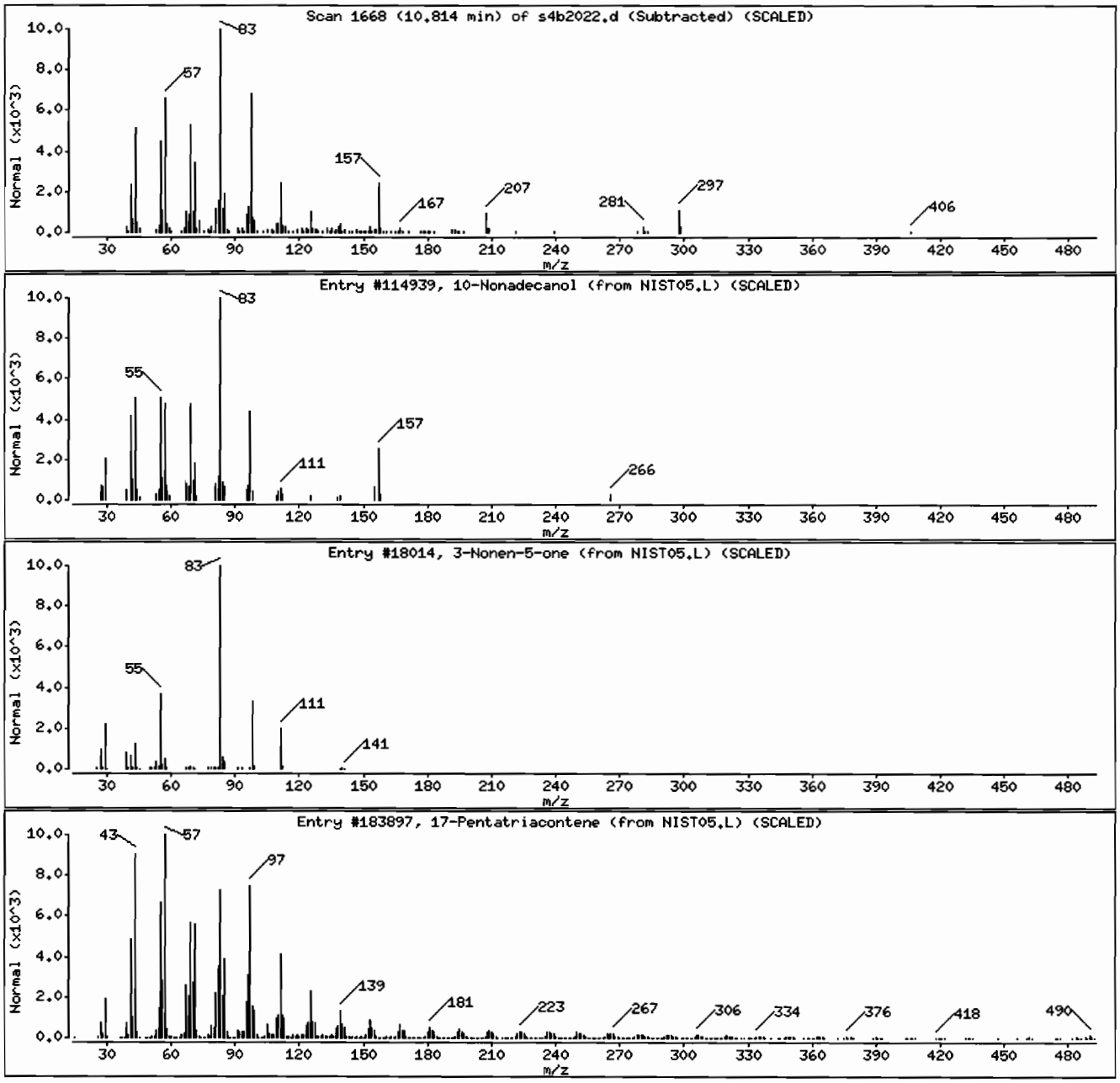
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
10-Nonadecanol	16840-84-9	NIST05.L	114939	59	C19H40O	284
3-Nonen-5-one	82456-34-6	NIST05.L	18014	38	C9H16O	140
17-Pentatriacontene	6971-40-0	NIST05.L	183897	38	C35H70	491



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

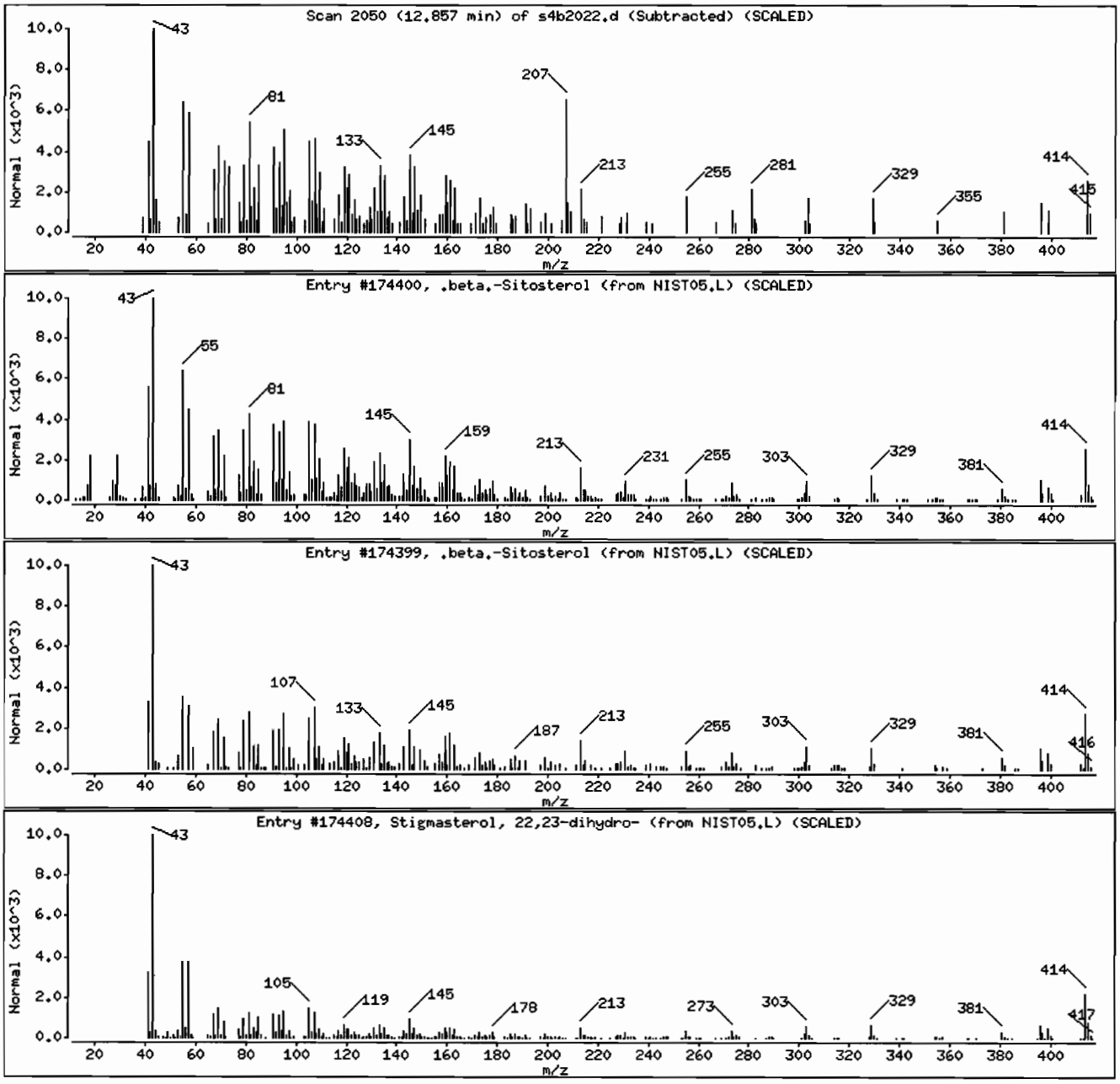
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVM111LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	99	C29H500	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	96	C29H500	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	92	C29H500	414



Data File: /chem/MSD4.i/s022010.b/s4b2022.d

Date : 20-FEB-2010 18:28

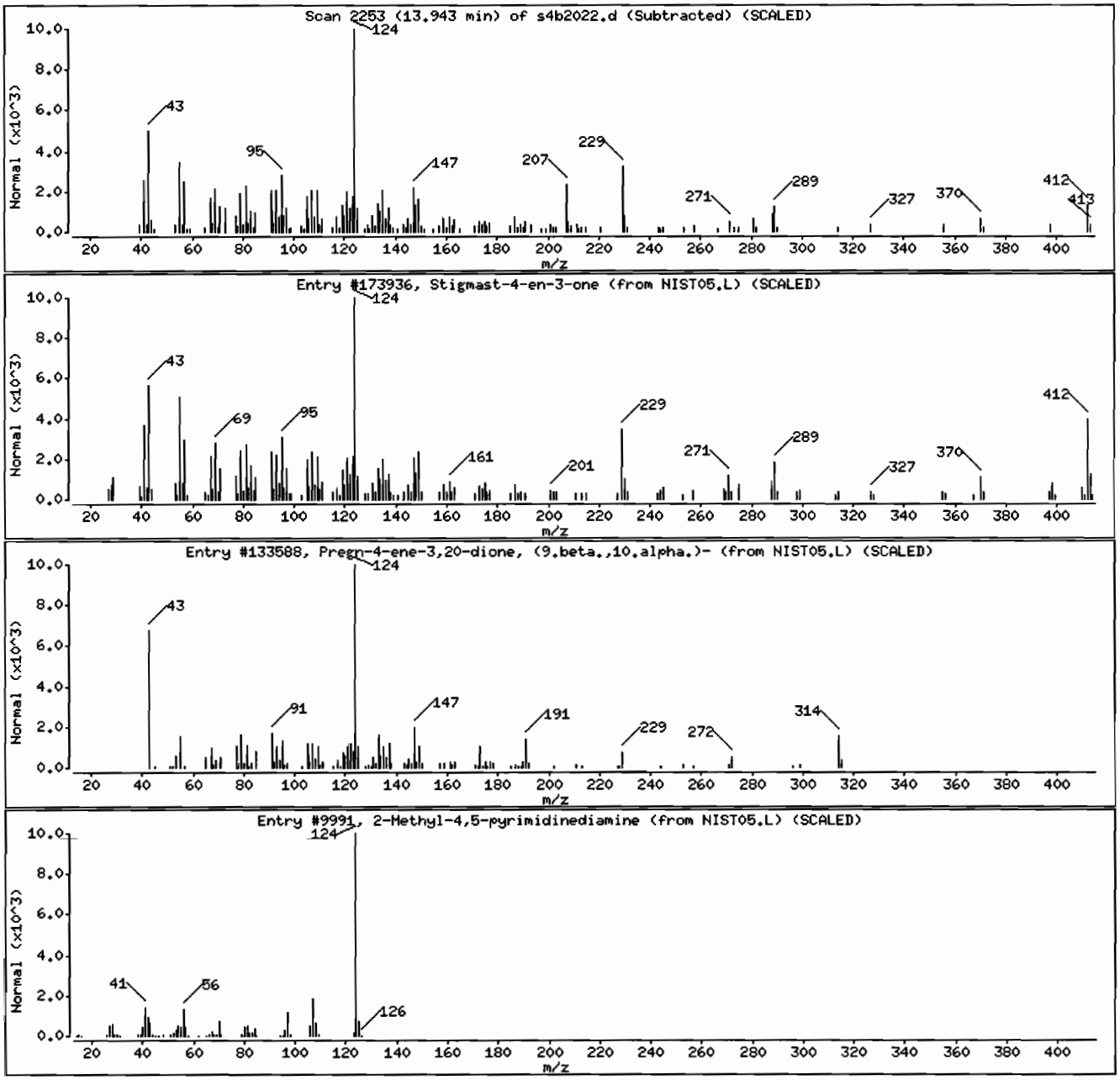
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 1246442003|951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&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
Pregn-4-ene-3,20-dione, (9.beta.,10.alph	2755-10-4	NIST05.L	133588	43	C21H30O2	314
2-Methyl-4,5-pyrimidinediamine	15579-63-2	NIST05.L	9991	38	C5H8N4	124



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 phenyether		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'-Dichlorobenzidene		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-Dimethhylphenethylamine		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate		10	20	40	50	80	100	120
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
4-Aminobiphenyl		10	20	40	50	80	100	120

Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone	1**	10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorophene		500	1000	1250	1500	1750	2000	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Tributylphosphate		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
Dimethoate		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothioanisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120

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,j)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)pyrene		10	20	40	50	80	100	120
Dibenzo(a,l)pyrene		10	20	40	50	80	100	120
7H-Dibenzo(c,g)carbazole		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
** This analyte included in this level at special client request.
(0210/Full list)

Report Date: 21-Feb-2010 08:47

Calibration History

Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Start Cal Date: 16-FEB-2010 10:08
End Cal Date : 17-FEB-2010 20:54

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
17-FEB-2010 17:46	MEGA	/chem/MSD4.i/s021710.b/s4b1704.d
Cal Level: 2 , Cal Amount: 10.00000		
17-FEB-2010 18:13	MEGA	/chem/MSD4.i/s021710.b/s4b1705.d
16-FEB-2010 22:41	BJCO	/chem/MSD4.i/s021610.b/s4b1639.d
16-FEB-2010 20:07	NEV	/chem/MSD4.i/s021610.b/s4b1632.d
16-FEB-2010 15:19	HEX	/chem/MSD4.i/s021610.b/s4b1619.d
16-FEB-2010 12:43	PEST	/chem/MSD4.i/s021610.b/s4b1612.d
16-FEB-2010 10:08	AP12	/chem/MSD4.i/s021610.b/s4b1605.d
Cal Level: 3 , Cal Amount: 20.00000		
17-FEB-2010 18:40	MEGA	/chem/MSD4.i/s021710.b/s4b1706.d
16-FEB-2010 23:09	BJCO	/chem/MSD4.i/s021610.b/s4b1640.d
16-FEB-2010 20:29	NEV	/chem/MSD4.i/s021610.b/s4b1633.d
16-FEB-2010 15:41	HEX	/chem/MSD4.i/s021610.b/s4b1620.d
16-FEB-2010 13:05	PEST	/chem/MSD4.i/s021610.b/s4b1613.d
16-FEB-2010 10:30	AP12	/chem/MSD4.i/s021610.b/s4b1606.d
Cal Level: 4 , Cal Amount: 40.00000		
17-FEB-2010 19:07	MEGA	/chem/MSD4.i/s021710.b/s4b1707.d
16-FEB-2010 23:37	BJCO	/chem/MSD4.i/s021610.b/s4b1641.d
16-FEB-2010 20:51	NEV	/chem/MSD4.i/s021610.b/s4b1634.d
16-FEB-2010 16:03	HEX	/chem/MSD4.i/s021610.b/s4b1621.d
16-FEB-2010 13:27	PEST	/chem/MSD4.i/s021610.b/s4b1614.d
16-FEB-2010 10:52	AP12	/chem/MSD4.i/s021610.b/s4b1607.d
Cal Level: 5 , Cal Amount: 50.00000		
17-FEB-2010 19:34	MEGA	/chem/MSD4.i/s021710.b/s4b1708.d
17-FEB-2010 00:06	BJCO	/chem/MSD4.i/s021610.b/s4b1642.d
16-FEB-2010 21:13	NEV	/chem/MSD4.i/s021610.b/s4b1635.d
16-FEB-2010 16:26	HEX	/chem/MSD4.i/s021610.b/s4b1622.d
16-FEB-2010 13:50	PEST	/chem/MSD4.i/s021610.b/s4b1615.d
16-FEB-2010 11:14	AP12	/chem/MSD4.i/s021610.b/s4b1608.d
Cal Level: 6 , Cal Amount: 80.00000		
17-FEB-2010 20:00	MEGA	/chem/MSD4.i/s021710.b/s4b1709.d
17-FEB-2010 00:34	BJCO	/chem/MSD4.i/s021610.b/s4b1643.d
16-FEB-2010 21:35	NEV	/chem/MSD4.i/s021610.b/s4b1636.d
16-FEB-2010 17:33	PEST	/chem/MSD4.i/s021610.b/s4b1625.d
16-FEB-2010 16:48	HEX	/chem/MSD4.i/s021610.b/s4b1623.d
16-FEB-2010 11:36	AP12	/chem/MSD4.i/s021610.b/s4b1609.d

Cal Level: 7 , Cal Amount: 100.00000		
17-FEB-2010 20:27	MEGA	/chem/MSD4.i/s021710.b/s4b1710.d
17-FEB-2010 01:03	BJCO	/chem/MSD4.i/s021610.b/s4b1644.d
16-FEB-2010 21:57	NEV	/chem/MSD4.i/s021610.b/s4b1637.d
16-FEB-2010 17:55	PEST	/chem/MSD4.i/s021610.b/s4b1626.d
16-FEB-2010 17:11	HEX	/chem/MSD4.i/s021610.b/s4b1624.d
16-FEB-2010 11:59	AP12	/chem/MSD4.i/s021610.b/s4b1610.d

Cal Level: 8 , Cal Amount: 120.00000		
17-FEB-2010 20:54	MEGA	/chem/MSD4.i/s021710.b/s4b1711.d
17-FEB-2010 01:31	BJCO	/chem/MSD4.i/s021610.b/s4b1645.d
16-FEB-2010 22:19	NEV	/chem/MSD4.i/s021610.b/s4b1638.d
16-FEB-2010 14:56	PEST	/chem/MSD4.i/s021610.b/s4b1618.d
16-FEB-2010 12:21	AP12	/chem/MSD4.i/s021610.b/s4b1611.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
20-FEB-2010 15:00	MEGA	/chem/MSD4.i/s022010.b/s4b2013.d

Ccal Level: 4 , Ccal Amount: 40.0		
20-FEB-2010 15:27	AP12	/chem/MSD4.i/s022010.b/s4b2014.d

Ccal Level: 4 , Ccal Amount: 40.0		
20-FEB-2010 14:32	MEGA	/chem/MSD4.i/s022010.b/s4b2012.d

Ccal Level: 4 , Ccal Amount: 40.0		
20-FEB-2010 13:50	MEGA	/chem/MSD4.i/s022010.b/s4b2010.d

Ccal Level: 4 , Ccal Amount: 40.0		
20-FEB-2010 13:00	MEGA	/chem/MSD4.i/s022010.b/s4b2008.d

Ccal Level: 4 , Ccal Amount: 40.0		
20-FEB-2010 13:27	AP12	/chem/MSD4.i/s022010.b/s4b2009.d

GEL Laboratories LLC

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Start Cal Date : 16-FEB-2010 10:08
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Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Cal Date : 21-Feb-2010 08:46 jos00786

Calibration File Names:
Level 1: /chem/MSD4.i/s021710.b/s4b1704.d
Level 2: /chem/MSD4.i/s021710.b/s4b1705.d
Level 3: /chem/MSD4.i/s021710.b/s4b1706.d
Level 4: /chem/MSD4.i/s021710.b/s4b1707.d
Level 5: /chem/MSD4.i/s021710.b/s4b1708.d
Level 6: /chem/MSD4.i/s021710.b/s4b1709.d
Level 7: /chem/MSD4.i/s021710.b/s4b1710.d
Level 8: /chem/MSD4.i/s021710.b/s4b1711.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.80418	0.85785	0.83980	0.82368	0.82845					
	0.81877	0.77310					AVRG		0.82083		3.28243
2 Pyridine	+++++	1.09400	1.16757	1.17533	1.15784	1.17410					
	1.16851	1.11137					AVRG		1.14982		2.87629
4 Aniline	+++++	0.56430	0.58641	0.58402	0.56152	0.57033					
	0.55684	0.52778					AVRG		0.56446		3.47645
209 Benzaldehyde	+++++	0.94179	0.94566	0.91461	0.89926	+++++					
	0.75183	0.69451					AVRG		0.85795		12.51172
6 Phenol	+++++	1.48396	1.58185	1.54422	1.47668	1.43163					
	1.39841	1.27213					AVRG		1.45555		7.01445

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	0.93473	0.90382	0.95402	0.90084	0.87022	0.82025					
	0.77707	0.69920					AVRG		0.85752		10.08779
8 2-Chlorophenol	+++++	1.16562	1.26471	1.25653	1.20113	1.19776					
	1.16785	1.09920					AVRG		1.19326		4.77116
203 n-Decane	+++++	1.29375	1.27793	1.16954	1.07037	0.91611					
	+++++	+++++					AVRG		1.14554		13.68872
9 1,3-Dichlorobenzene	+++++	1.27869	1.32765	1.29245	1.22850	1.12921					
	1.08388	0.98449					AVRG		1.18927		10.63494
11 1,4-Dichlorobenzene	+++++	1.30910	1.36807	1.31235	1.23037	1.09872					
	1.05734	0.96758					AVRG		1.19193		12.71750
12 Benzyl alcohol	+++++	0.47129	0.64378	0.69804	0.68487	0.74780					
	0.72229	0.65983					AVRG		0.66113		13.74141
13 1,2-Dichlorobenzene	+++++	1.21731	1.23554	1.10205	1.01061	0.86196					
	+++++	+++++					AVRG		1.08549		14.25255
14 bis(2-Chloroisopropyl)ether	+++++	1.77530	1.83342	1.72522	1.62425	1.51854					
	1.43930	1.31379					AVRG		1.60426		11.81975
15 o-Cresol	+++++	1.01362	1.03371	0.90903	0.80709	0.76350					
	0.73014	+++++					AVRG		0.87618		14.75629

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.27742	1.29571	1.26833	1.27539	+++++					
	1.11721	1.03412					AVRG		1.21136		8.97525
17 N-Nitrosodipropylamine	0.72496	0.82527	0.88410	0.86015	0.83602	0.83763					
	0.81921	0.73684					AVRG		0.81552		6.89055
18 m,p-Cresols	+++++	1.12604	1.24220	1.22722	1.18662	1.21213					
	1.21648	1.13757					AVRG		1.19261		3.76620
19 Hexachloroethane	+++++	0.47152	0.49032	0.48179	0.45923	0.43586					
	0.41075	0.38331					AVRG		0.44754		8.81052
21 Nitrobenzene	+++++	0.30897	0.31314	0.29994	0.29402	0.30056					
	0.29019	0.27268					AVRG		0.29707		4.49909
22 Isophorone	+++++	0.62344	0.65493	0.60696	0.60549	0.63323					
	0.61955	0.59276					AVRG		0.61948		3.31332
23 2-Nitrophenol	+++++	0.20191	0.16796	0.15767	0.15514	0.14588					
	0.13758	+++++					AVRG		0.16102		14.01066
24 2,4-Dimethylphenol	+++++	0.27305	0.28506	0.24690	0.22220	0.33328					
	0.22457	0.24762					AVRG		0.26181		14.91862
25 bis(2-Chloroethoxy)methane	+++++	0.41155	0.41756	0.37838	0.36379	0.35926					
	0.34104	0.32400					AVRG		0.37080		9.31829

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.20723	0.23055	0.22906	0.22944	0.24021					
	0.23366	0.22120					AVRG		0.22734		4.63274
27 Benzoic acid	+++++	+++++	31319	84119	121130	243867					
	283629	318420					LINR	0.32516	0.24917		0.99486
28 1,2,4-Trichlorobenzene	+++++	0.25902	0.26255	0.23942	0.23042	0.22573					
	0.20919	0.19569					AVRG		0.23172		10.56957
30 Naphthalene	1.06631	0.98051	0.98310	0.88186	0.82227	0.76240					
	+++++	+++++					AVRG		0.91608		12.42718
204 alpha-Terpineol	+++++	0.22196	0.22750	0.20447	0.19403	0.18096					
	0.17224	0.16167					AVRG		0.19469		12.75386
31 4-Chloroaniline	+++++	0.36469	0.43602	0.44386	0.42563	0.42485					
	0.40373	0.37987					AVRG		0.41124		7.21212
189 Caprolactam	+++++	0.08357	0.09284	0.09719	0.09770	+++++					
	0.09330	0.08176					AVRG		0.09106		7.49038
32 Hexachlorobutadiene	+++++	0.12040	0.12555	0.11981	0.11624	0.11342					
	0.10904	0.10156					AVRG		0.11515		6.94622
33 4-Chloro-3-methylphenol	+++++	0.21139	0.22419	0.23112	0.23100	0.24555					
	0.24034	0.22997					AVRG		0.23051		4.78253

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.60539	0.60257	0.61307	0.55152	0.52355	0.49788					
	0.46587	0.43568					AVRG		0.53694		12.59439
35 1-Methylnaphthalene	0.61404	0.58181	0.59642	0.53446	0.50694	0.48316					
	0.44790	0.41212					AVRG		0.52211		13.93272
36 Hexachlorocyclopentadiene	+++++	0.18005	0.20367	0.20303	0.18986	0.19678					
	0.17659	0.16149					AVRG		0.18735		8.28276
208 1,1'-Biphenyl	+++++	1.24024	1.30447	1.20609	1.18032	+++++					
	0.94001	0.91844					AVRG		1.13159		14.34516
205 2,3-Dichloroaniline	+++++	0.57465	0.59577	0.56469	0.53114	0.46018					
	0.41624	+++++					AVRG		0.52378		13.52965
37 2,4,6-Trichlorophenol	+++++	0.27613	0.28716	0.28673	0.26180	0.23912					
	0.20321	+++++					AVRG		0.25903		12.65306
38 2,4,5-Trichlorophenol	+++++	0.29783	0.33607	0.33540	0.32419	0.30242					
	0.26921	0.23176					AVRG		0.29955		12.74968
40 2-Chloronaphthalene	1.08337	1.09248	1.07162	0.98498	0.92539	0.81187					
	0.75234	+++++					AVRG		0.96029		14.23486
42 o-Nitroaniline	+++++	0.26633	0.27939	0.27744	0.26755	0.26837					
	0.25679	0.24513					AVRG		0.26586		4.44658

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	11654	24521	75686	97644	173047					
	192315	209888					LINR	0.07505	0.27104		0.99095
43 Dimethylphthalate	+++++	1.18528	1.18281	1.11730	1.07497	1.00754					
	0.94992	0.89258					AVRG		1.05863		10.71284
44 2,6-Dinitrotoluene	+++++	0.27554	0.28243	0.27380	0.26529	0.23986					
	0.22203	0.20846					AVRG		0.25249		11.51558
45 Acenaphthylene	1.60642	1.68525	1.66961	1.54331	1.46739	1.33676					
	1.24237	1.13960					AVRG		1.46134		13.88756
47 Acenaphthene	1.17310	1.06472	1.05409	0.94017	0.86426	+++++					
	+++++	+++++					AVRG		1.01927		11.73516
48 2,4-Dinitrophenol	+++++	+++++	0.09699	0.10522	0.10011	0.09547					
	0.09024	0.08706					AVRG		0.09585		6.86084
49 Dibenzofuran	+++++	1.44329	1.42238	1.31607	1.23465	1.11457					
	1.03074	+++++					AVRG		1.26028		13.15635
50 2,4-Dinitrotoluene	+++++	0.34085	0.35253	0.34791	0.33556	0.32666					
	0.31039	0.29290					AVRG		0.32954		6.49309
51 Diethylphthalate	+++++	1.11688	1.13783	1.03943	0.98429	0.87732					
	0.82293	+++++					AVRG		0.99645		12.75674

GEL Laboratories LLC

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
52 4-Nitrophenol	+++++	8634	22919	51530	66218	141247					
	151829	180675					LINR	0.16462	0.22976		0.99262
53 Fluorene	1.21543	1.26077	1.23255	1.07905	0.98406	0.88892					
	+++++	+++++					AVRG		1.11013		13.63493
54 4-Chlorophenylphenylether	+++++	0.54200	0.53277	0.47774	0.44237	0.37858					
	+++++	+++++					AVRG		0.47469		14.20786
55 2-Methyl-4,6-dinitrophenol	+++++	0.08970	0.11021	0.11787	0.11534	0.11595					
	0.10876	0.10072					AVRG		0.10836		9.28096
56 p-Nitroaniline	+++++	0.19074	0.14248	0.19133	0.18079	0.22623					
	0.21242	0.20920					AVRG		0.19331		14.09219
133 Diphenylamine	+++++	0.63294	0.58718	0.55648	0.53812	0.50056					
	0.46362	0.42647					AVRG		0.52934		13.49611
58 1,2-Diphenylhydrazine	+++++	0.79439	0.79164	0.72139	0.70540	0.63411					
	0.60070	0.58386					AVRG		0.69021		12.52148
59 Tributylphosphate	+++++	1.41887	1.33083	1.23480	1.19530	1.09018					
	1.00083	+++++					AVRG		1.21180		12.63123
61 4-Bromophenylphenylether	+++++	0.19605	0.20149	0.18140	0.17572	0.15358					
	0.14157	+++++					AVRG		0.17497		13.43356

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
63 Hexachlorobenzene	+++++	0.21893	0.21620	0.19320	0.18788	0.16547						
	0.15108	+++++					AVRG		0.18879		14.30344	
207 Atrazine	+++++	0.04799	0.05161	0.05043	0.04680	+++++						
	0.03578	+++++					AVRG		0.04652		13.53806	
65 Pentachlorophenol	+++++	0.07342	0.09198	0.09190	0.09481	0.10184						
	0.10052	0.09343					AVRG		0.09256		10.08063	
206 n-Octadecane	+++++	0.50573	0.48522	0.39213	0.35974	0.29152						
	0.27543	0.26020					AVRG		0.36714		27.10026	<-
68 Phenanthrene	1.16307	1.06026	1.06504	0.94403	0.89351	0.79560						
	+++++	+++++					AVRG		0.98692		13.56996	
69 Anthracene	1.09158	1.10892	1.11777	0.96353	0.93487	0.79797						
	+++++	+++++					AVRG		1.00244		12.65560	
72 Di-n-butylphthalate	+++++	1.21045	1.24319	1.07041	1.00179	0.88540						
	+++++	+++++					AVRG		1.08225		13.68205	
76 Fluoranthene	0.96471	1.03816	1.03945	0.91347	0.84058	0.74892						
	+++++	+++++					AVRG		0.92422		12.40687	
77 Benzidine	+++++	0.31152	0.27769	0.24474	0.34891	+++++						
	0.34303	+++++					AVRG		0.30518		14.46426	

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Cal Date : 21-Feb-2010 08:46 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
79 Pyrene	1.18417	1.19596	1.19763	1.13694	1.18091	0.98010					
	0.94179	0.90396					AVRG		1.09018		11.54062
85 Butylbenzylphthalate	+++++	0.52625	0.52238	0.45271	0.45022	0.36171					
	+++++	+++++					AVRG		0.46266		14.52117
89 Benzo(a)anthracene	0.97321	0.99775	0.99995	0.97301	0.90521	0.90155					
	0.89529	0.85221					AVRG		0.93727		5.90712
90 3,3'-Dichlorobenzidine	+++++	0.24562	0.25334	0.29621	0.29123	+++++					
	0.26751	0.25830					AVRG		0.26870		7.70295
92 Chrysene	1.12659	0.98604	1.01758	0.94487	0.95184	0.90419					
	0.82431	0.78838					AVRG		0.94297		11.38665
93 bis(2-Ethylhexyl)phthalate	0.55319	0.71676	0.77387	0.73808	0.73538	0.57922					
	0.54547	+++++					AVRG		0.66314		14.94716
94 Di-n-octylphthalate	+++++	1.06000	1.20352	1.30505	1.36606	1.16652					
	1.19415	1.07883					AVRG		1.19630		9.28091
95 Benzo(b)fluoranthene	0.83193	0.94367	0.94819	1.01941	0.96345	0.92745					
	0.99580	0.91907					AVRG		0.94362		5.97092
96 Benzo(k)fluoranthene	0.95209	0.94814	1.00798	0.95552	1.01516	0.96096					
	0.90744	0.89094					AVRG		0.95478		4.49317

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-FEB-2010 10:08
End Cal Date : 17-FEB-2010 20:54
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Method file : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Cal Date : 21-Feb-2010 08:46 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
97 Benzo(a)pyrene	0.69771	0.80448	0.83988	0.84051	0.82813	0.83137					
	0.81974	0.79004					AVRG		0.80648		5.86182
99 Indeno(1,2,3-cd)pyrene	0.67344	0.77380	0.77700	0.76133	0.69140	0.74080					
	0.68357	0.69031					AVRG		0.72396		6.03300
100 Dibenzo(a,h)anthracene	0.51729	0.63864	0.63820	0.62774	0.57478	0.61755					
	0.57370	0.57932					AVRG		0.59590		7.08921
101 Benzo(ghi)perylene	0.59457	0.64715	0.63510	0.62324	0.56676	0.60200					
	0.54542	0.55969					AVRG		0.59674		6.22258
102 1,4-Dioxane	+++++	0.43701	0.44852	0.42721	0.43169	+++++					
	0.39943	0.36164					AVRG		0.41759		7.63695
103 Methyl methacrylate	+++++	0.21383	0.22321	0.21645	0.21988	+++++					
	0.19919	0.17245					AVRG		0.20750		9.18882
104 Ethyl methacrylate	+++++	0.91879	0.93126	0.88754	0.88037	+++++					
	0.80021	0.71918					AVRG		0.85622		9.49222
105 2-Picoline	+++++	1.47733	1.50862	1.43210	1.41825	+++++					
	1.26976	1.12301					AVRG		1.37151		10.71368
106 N-Nitrosomethylethylamine	+++++	0.57675	0.59802	0.59212	0.61345	+++++					
	0.59701	0.58444					AVRG		0.59363		2.12418

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	100 Level 7	120 Level 8									
107 Methyl methanesulfonate	+++++	0.44808	0.44707	0.44147	0.45530	+++++					
	0.41704	0.41778					AVRG		0.43779		3.74385
108 N-Nitrosodiethylamine	+++++	0.58251	0.60714	0.58911	0.61705	+++++					
	0.57594	0.55399					AVRG		0.58762		3.83799
109 Ethyl Methanesulfonate	+++++	0.70032	0.71032	0.70848	0.72117	+++++					
	0.67520	0.66380					AVRG		0.69655		3.19791
110 Pentachloroethane	+++++	0.28931	0.29897	0.29784	0.30591	+++++					
	0.28637	0.26717					AVRG		0.29093		4.67504
111 N-Nitrosopyrrolidine	+++++	0.58623	0.62383	0.60989	0.63161	+++++					
	0.54119	0.50935					AVRG		0.58368		8.36977
113 N-Nitrosomorpholine	+++++	0.50465	0.52297	0.49959	0.51498	+++++					
	0.44347	0.40193					AVRG		0.48127		9.95690
114 o-Toluidine	+++++	2.00344	2.00343	1.95423	1.93613	+++++					
	1.65860	1.47087					AVRG		1.83778		12.04112
115 N-Nitrosopiperidine	+++++	0.15854	0.16315	0.16343	0.16587	+++++					
	0.15258	0.14926					AVRG		0.15881		4.17892
116 a,a-Dimethylphenethylamine	+++++	0.61186	0.67471	0.72021	0.74909	+++++					
	0.75299	0.72331					AVRG		0.70536		7.60986

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
117 Triethylphosphorothioate	+++++	0.13138	0.13619	0.12493	0.12070	0.10932					
	0.10388	0.09438					AVRG		0.11725		12.99911
118 2,6-Dichlorophenol	+++++	0.18487	0.20729	0.20688	0.21343	+++++					
	0.19860	0.18992					AVRG		0.20017		5.53353
119 Hexachloropropene	+++++	6213	14277	25557	44121	+++++					
	76809	108614					LINR	0.05706	0.08815		0.99928
120 p-Phenylenediamine	+++++	0.22424	0.27453	0.23048	0.25311	+++++					
	0.21308	0.20135					AVRG		0.23280		11.54278
121 N-Nitrosodi-n-butylamine	+++++	0.23924	0.21944	0.21484	0.21061	+++++					
	0.18654	0.18056					AVRG		0.20854		10.44422
122 Safrole	+++++	0.19035	0.19915	0.19251	0.19174	+++++					
	0.16895	0.15881					AVRG		0.18358		8.65460
123 1,2,4,5-Tetrachlorobenzene	+++++	0.38887	0.40514	0.38043	0.37090	+++++					
	0.29674	+++++					AVRG		0.36842		11.39903
124 Isosafrole	+++++	0.34486	0.37235	0.35699	0.36921	+++++					
	0.33882	0.32937					AVRG		0.35193		4.87519
125 1,4-Naphthoquinone	+++++	0.33075	0.35799	0.35631	0.32421	+++++					
	0.26182	0.25760					AVRG		0.31478		14.21466

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
126 m-Dinitrobenzene	+++++	0.20126	0.21212	0.21006	0.20086	0.19834					
	0.18376	0.17393					AVRG		0.19719		6.99490
127 Pentachlorobenzene	+++++	0.36147	0.36584	0.35110	0.33904	+++++					
	0.28436	0.26326					AVRG		0.32751		13.16915
128 1-Naphthylamine	+++++	0.91435	0.97977	0.91657	0.92502	+++++					
	0.81151	0.75579					AVRG		0.88383		9.40234
129 2-Naphthylamine	+++++	1.00383	1.07201	0.93930	0.94511	+++++					
	0.85020	0.79412					AVRG		0.93409		10.77629
130 2,3,4,6-Tetrachlorophenol	+++++	0.19124	0.21128	0.22902	0.23318	0.22215					
	0.21552	0.21028					AVRG		0.21610		6.46391
131 5-Nitro-o-toluidine	+++++	0.23112	0.27932	0.27248	0.29398	+++++					
	0.28148	0.28347					AVRG		0.27364		8.02960
132 Thionazin	+++++	0.18285	0.18834	0.17846	0.17300	0.15904					
	0.15116	0.14315					AVRG		0.16800		10.16661
134 Sulfotepp	+++++	0.13177	0.13059	0.11764	0.11040	0.09449					
	+++++	+++++					AVRG		0.11698		13.19951
135 Phorate	+++++	0.51786	0.51840	0.48373	0.44687	0.39200					
	0.36398	+++++					AVRG		0.45381		14.31736

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
136 1,3,5-Trinitrobenzene	+++++	4852	13462	26997	43144	+++++						
	86566	113806					LINR	0.11919	0.12296		0.99947	
137 Phenacetin	+++++	0.24364	0.28017	0.28177	0.30123	+++++						
	0.27930	0.27370					AVRG		0.27663		6.75939	
138 Diallate	+++++	0.34231	0.35600	0.33087	0.31611	+++++						
	0.25464	+++++					AVRG		0.31999		12.30262	
139 Dimethoate	+++++	0.32025	0.33190	0.33278	0.32579	0.31322						
	0.30234	0.28390					AVRG		0.31574		5.59483	
140 4-Aminobiphenyl	+++++	0.58357	0.58918	0.49357	0.55675	+++++						
	0.39500	0.35668					AVRG		0.49579		20.10074	<-
141 Pentachloronitrobenzene	+++++	0.05346	0.05690	0.05795	0.05582	+++++						
	0.04084	+++++					AVRG		0.05299		13.19738	
142 Pronamide	+++++	0.27573	0.28559	0.26119	0.22116	+++++						
	0.15026	0.13287					AVRG		0.22113		29.69110	<-
143 Dinoseb	+++++	0.12009	0.15073	0.15298	0.15310	0.14635						
	0.13858	0.12686					AVRG		0.14124		9.39270	
144 Disulfoton	+++++	0.42976	0.42840	0.39630	0.36664	0.31890						
	+++++	+++++					AVRG		0.38800		12.00353	

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	100 Level 7	120 Level 8										
145 Methyl parathion	+++++	0.21331	0.23115	0.23535	0.22589	0.22988						
	0.20924	0.19247					AVRG		0.21961		6.97965	
146 4-Nitroquinoline-1-oxide	+++++	0.01030	0.01280	0.01596	0.01689	+++++						
	0.01070	0.01052					AVRG		0.01286		22.67654	<-
147 Methapyrilene	+++++	0.34603	0.35642	0.37341	0.35320	+++++						
	0.28364	0.25466					AVRG		0.32789		14.41932	
148 Isodrin	+++++	0.10394	0.10549	0.10192	0.09675	+++++						
	0.07616	+++++					AVRG		0.09685		12.41887	
149 Aramite	+++++	0.04726	0.05217	0.05593	0.05837	+++++						
	0.04781	0.04427					AVRG		0.05097		10.72346	
150 Kepone	+++++	0.07177	0.07418	0.08361	0.07814	+++++						
	0.07109	0.06648					AVRG		0.07421		8.06993	
151 p-(Dimethylamino)azobenzene	+++++	0.30382	0.37529	0.33102	0.32856	+++++						
	0.26452	+++++					AVRG		0.32064		12.65817	
152 Chlorobenzilate	+++++	0.29477	0.34954	0.31392	0.29606	+++++						
	0.22811	+++++					AVRG		0.29648		14.89095	
153 3,3'-Dimethylbenzidine	+++++	0.48872	0.44056	0.45254	0.47761	+++++						
	0.43589	0.43928					AVRG		0.45577		4.87841	

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	100 Level 7	120 Level 8										
154 Famphur	+++++	0.32477	0.33787	0.33991	0.30795	0.31812						
	0.29871	0.26841					AVRG		0.31368		7.94057	
155 2-Acetylaminofluorene	+++++	0.22005	0.22331	0.29381	0.29224	+++++						
	0.29521	0.29946					AVRG		0.27068		14.05582	
157 7,12Dimethylbenz(a)anthracene	+++++	0.40311	0.45332	0.44530	0.45829	+++++						
	0.41903	0.39435					AVRG		0.42890		6.33054	
158 3-Methylcholanthrene	+++++	0.34581	0.36525	0.38823	0.39426	+++++						
	0.38490	0.37939					AVRG		0.37631		4.75402	
26 Phthalic anhydride	+++++	0.03243	0.03910	0.06399	0.06930	0.08256						
	0.08617	0.08295					AVRG		0.06521		33.30166	<-
173 Carbazole	9199	103126	125703	296392	404339	672443						
	756314	+++++					LINR	-0.01291	0.69109		0.99415	
174 Hexachlorophene	+++++	0.03174	0.04319	0.03971	0.04046	0.03942						
	0.03930	+++++					AVRG		0.03897		9.81378	
179 Dibenzo(a,e)pyrene	+++++	0.29736	0.25325	0.31477	0.26273	0.29083						
	0.24280	0.27708					AVRG		0.27697		9.28655	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	705	2799	8892	14980	23399					
	31388	36343					LINR	0.28674	0.10317		0.99336
191 Parathion	+++++	0.07421	0.07950	0.08071	0.07544	0.07054					
	0.06637	0.06361					AVRG		0.07291		8.80466
192 Methoxychlor	+++++	0.44454	0.50851	0.49917	0.47118	0.42407					
	0.39248	0.35727					AVRG		0.44246		12.55033
210 m-Toluidine	+++++	1.73695	1.55746	1.58094	1.66589	1.70837					
	1.76029	1.69321					AVRG		1.67187		4.58370
211 p-Toluidine	+++++	1.01239	1.35463	1.58657	1.43895	1.52710					
	1.36404	1.17184					AVRG		1.35079		14.84253
212 Cis Diallate	+++++	0.34462	0.36403	0.36133	0.37192	+++++					
	0.34172	0.34617					AVRG		0.35497		3.49571
213 Trans Diallate	+++++	0.40272	0.41883	0.38926	0.37189	+++++					
	0.29958	+++++					AVRG		0.37646		12.30262
214 1,4-Dinitrobenzene	+++++	0.19649	0.21008	0.21335	0.20967	0.21262					
	0.20189	0.19463					AVRG		0.20553		3.78486
215 2-Ethoxyethanol	+++++	0.54819	0.62615	0.62879	0.60257	0.60909					
	0.59452	0.57130					AVRG		0.59723		4.87528

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	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	+++++	6144	15434	38735	45971	113009					
	122922	132787					LINR	0.25577	0.15818		0.99125
226 2,2'-Dichlorobenzil	+++++	0.73391	0.77755	0.74844	0.71106	0.65210					
	0.58808	0.57246					AVRG		0.68337		11.76513
227 4-Chlorothioanisole	+++++	0.24561	0.23783	0.23733	0.24554	0.21820					
	0.20051	0.19154					AVRG		0.22522		9.80844
228 4-Chlorothiophenol	+++++	0.15037	0.17527	0.19833	0.21396	0.20296					
	0.19258	0.18665					AVRG		0.18859		11.04491
229 bis(p-Chlorophenyl)sulfone	+++++	0.40444	0.41025	0.38864	0.38040	0.35088					
	0.31929	0.30796					AVRG		0.36598		11.11858
230 bis(p-Chlorophenyl)disulfide	+++++	0.11666	0.11749	0.12579	0.12271	0.12904					
	0.12406	0.12371					AVRG		0.12278		3.58442
231 Diphenyl disulfide	+++++	0.22472	0.22035	0.22400	0.22324	0.21028					
	0.19997	0.19140					AVRG		0.21342		6.22636
232 Diphenyl sulfide	+++++	0.76128	0.71567	0.69045	0.67419	0.55521					
	0.53152	+++++					AVRG		0.65472		13.96615
233 Phenyl sulfone	+++++	0.55733	0.53385	0.51171	0.50602	0.45558					
	0.43866	0.41074					AVRG		0.48770		10.99473

GEL Laboratories LLC

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	100 Level 7	120 Level 8										
234 Hydroxymethyl phthalimide	+++++	0.10740	0.10106	0.09874	0.09826	0.07684						
	0.07582	+++++					AVRG		0.09302		14.33633	
235 Phthalic acid	+++++	0.01621	0.03767	0.05009	0.06595	0.07782						
	0.08975	0.11118					AVRG		0.06410		50.37110	<-
236 Thiophenol	+++++	1.03067	1.11649	1.22885	1.26443	1.18301						
	1.12687	1.06642					AVRG		1.14525		7.40274	
237 bis(Chloromethyl)ether	+++++	0.89985	0.82019	0.86064	0.86684	0.81882						
	0.79484	0.75999					AVRG		0.83160		5.70733	
238 Octachlorostyrene	+++++	0.07975	0.07412	0.07078	0.06803	0.05854						
	0.05421	+++++					AVRG		0.06757		14.22227	
239 Dibenzo(a,h)pyrene	+++++	0.27824	0.28119	0.28194	+++++	0.30474						
	0.31926	0.36821					AVRG		0.30560		11.34606	
240 Benzo(j)fluoranthene	+++++	0.78026	0.80293	0.79275	+++++	0.79934						
	0.75685	0.74190					AVRG		0.77901		3.16722	
241 Dibenzo(a,j)acridine	+++++	0.55533	0.55827	0.55757	+++++	0.53278						
	0.56144	0.56852					AVRG		0.55565		2.17858	
242 Dibenz(a,h)acridine	+++++	0.55365	0.54501	0.54815	+++++	0.53368						
	0.56140	0.56303					AVRG		0.55082		1.99452	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-FEB-2010 10:08
End Cal Date : 17-FEB-2010 20:54
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Cal Date : 21-Feb-2010 08:46 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
243 Quinoline	+++++	0.55484	0.58415	0.54458	+++++	0.49996						
	0.46695	0.44650					AVRG		0.51616		10.41924	
244 2,4-Toluene Diisocyanate	+++++	0.37009	0.39254	0.36282	+++++	0.34089						
	0.31981	0.29701					AVRG		0.34719		10.08701	
245 Dibenzo(a,i)pyrene	+++++	0.16820	0.15467	0.17408	+++++	0.18899						
	0.21050	+++++					AVRG		0.17929		11.91220	
246 1-Nitropyrene	+++++	5444	16162	41252	+++++	64074						
	136367	128837					LINR	0.19997	0.17350		0.99020	
247 5-Methylchrysene	+++++	0.60386	0.58519	0.56613	+++++	0.51437						
	0.46177	0.44559					AVRG		0.52948		12.47937	
248 Dibenzo(a,l)pyrene	+++++	0.28921	0.28347	0.27383	+++++	0.28368						
	0.29157	0.32686					AVRG		0.29144		6.31538	
249 7H-Dibenzo(c,g)carbazole	+++++	0.37231	0.38819	0.39189	+++++	0.37956						
	0.41424	0.42310					AVRG		0.39488		5.02538	
250 1-Hexanol	+++++	0.24321	0.87889	0.85379	+++++	0.81367						
	0.75944	0.71193					AVRG		0.71016		33.33973	<-
251 Propylene glycol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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INITIAL CALIBRATION DATA

Start Cal Date : 16-FEB-2010 10:08
End Cal Date : 17-FEB-2010 20:54
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Cal Date : 21-Feb-2010 08:46 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
M 222 Trichlorophenols	+++++	0.28698	0.31161	0.31106	0.29300	0.27077						
	0.23621	0.20896					AVRG		0.27408		14.12014	
M 223 Tetrachlorophenols	+++++	0.19124	0.21128	0.22902	0.23318	0.22215						
	0.21552	0.21028					AVRG		0.21610		6.46391	
M 224 Benzo(b,k)fluoranthene	0.89201	0.94590	0.97808	0.98746	0.98931	0.94420						
	0.95162	0.90501					AVRG		0.94920		3.81360	
M 225 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 3 2-Fluorophenol	+++++	1.11949	1.20487	1.21075	1.16020	1.13727						
	1.10132	1.04464					AVRG		1.13979		5.14574	
$ 5 Phenol-d5	+++++	1.41206	1.54055	1.49175	1.43963	1.43622						
	1.40127	1.30188					AVRG		1.43191		5.23406	
$ 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	+++++	0.30671	0.31936	0.30528	0.30281	0.31459						
	0.30734	0.29410					AVRG		0.30717		2.64953	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-FEB-2010 10:08
End Cal Date : 17-FEB-2010 20:54
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Cal Date : 21-Feb-2010 08:46 jos00786

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
$ 39 2-Fluorobiphenyl	+++++	1.18516	1.18170	1.09032	1.03055	0.89228					
	0.81688	+++++					AVRG		1.03281		14.68807
$ 60 2,4,6-Tribromophenol	+++++	0.12007	0.12799	0.13293	0.12909	0.12647					
	0.12318	0.11595					AVRG		0.12510		4.61597
$ 81 p-Terphenyl-d14	+++++	0.70671	0.70628	0.66800	0.67922	0.54676					
	0.55063	0.51942					AVRG		0.62529		13.19917

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 16-FEB-2010 10:08
End Cal Date : 17-FEB-2010 20:54
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Cal Date : 21-Feb-2010 08:46 jos00786

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

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 16-FEB-2010 18:17
Lab File ID: s4b1627.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 01:31
Lab Sample ID: WBN100120-08.1 Quant Type: ISTD
Method: /chem/MSD4.i/s021610.b/MSD4-M8270C-AQA-021610a.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF40	RRF40	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.85795	0.76907	0.76907	0.000	-10.35927	60.00000	Averaged
16 Acetophenone	1.21136	1.24515	1.24515	0.000	2.78936	60.00000	Averaged
189 Caprolactam	0.09106	0.10021	0.10021	0.000	10.04671	60.00000	Averaged
208 1,1'-Biphenyl	1.13159	1.25246	1.25246	0.000	10.68111	60.00000	Averaged
207 Atrazine	0.04652	0.04998	0.04998	0.000	7.42614	60.00000	Averaged
77 Benzidine	0.30518	0.36606	0.36606	0.000	19.95179	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.26870	0.31267	0.31267	0.000	16.36283	60.00000	Averaged
102 1,4-Dioxane	0.41759	0.51403	0.51403	0.000	23.09704	60.00000	Averaged
103 Methyl methacrylate	0.20750	0.25772	0.25772	0.000	24.20033	60.00000	Averaged
104 Ethyl methacrylate	0.85622	1.03970	1.03970	0.000	21.42859	60.00000	Averaged
105 2-Picoline	1.37151	1.38665	1.38665	0.000	1.10401	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.59363	0.61028	0.61028	0.000	2.80414	60.00000	Averaged
107 Methyl methanesulfonate	0.43779	0.47803	0.47803	0.000	9.19146	60.00000	Averaged
108 N-Nitrosodiethylamine	0.58762	0.59724	0.59724	0.000	1.63735	60.00000	Averaged
109 Ethyl Methanesulfonate	0.69655	0.86294	0.86294	0.000	23.88866	60.00000	Averaged
110 Pentachloroethane	0.29093	0.40525	0.40525	0.000	39.29786	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.58368	0.62178	0.62178	0.000	6.52641	60.00000	Averaged
113 N-Nitrosomorpholine	0.48127	0.50335	0.50335	0.000	4.58865	60.00000	Averaged
114 o-Toluidine	1.83778	1.94019	1.94019	0.000	5.57261	60.00000	Averaged
115 N-Nitrosopiperidine	0.15881	0.15985	0.15985	0.000	0.65646	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.70536	0.69658	0.69658	0.000	-1.24498	60.00000	Averaged
118 2,6-Dichlorophenol	0.20017	0.21915	0.21915	0.000	9.48481	60.00000	Averaged
119 Hexachloropropene	61.35798	40.00000	0.13019	0.000	53.39495	60.00000	Linear
120 p-Phenylenediamine	0.23280	0.28787	0.28787	0.000	23.65760	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.20854	0.21345	0.21345	0.000	2.35523	60.00000	Averaged
122 Safrole	0.18358	0.22158	0.22158	0.000	20.69892	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36842	0.40661	0.40661	0.000	10.36783	60.00000	Averaged
124 Isosafrole	0.35193	0.48553	0.48553	0.000	37.96055	60.00000	Averaged
125 1,4-Naphthoquinone	0.31478	0.34821	0.34821	0.000	10.62148	60.00000	Averaged
127 Pentachlorobenzene	0.32751	0.35416	0.35416	0.000	8.13618	60.00000	Averaged
128 1-Naphthylamine	0.88383	1.01889	1.01889	0.000	15.28099	60.00000	Averaged
129 2-Naphthylamine	0.93409	1.08794	1.08794	0.000	16.47002	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27364	0.30859	0.30859	0.000	12.76973	60.00000	Averaged
136 1,3,5-Trinitrobenzene	53.76497	40.00000	0.15062	0.000	34.41243	60.00000	Linear
137 Phenacetin	0.27663	0.31639	0.31639	0.000	14.37247	60.00000	Averaged
138 Diallate	0.31999	0.29740	0.29740	0.000	-7.05885	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i
Lab File ID: s4b1627.d
Analysis Type:
Lab Sample ID: WBN100120-08.1
Method: /chem/MSD4.i/s021610.b/MSD4-M8270C-AQA-021610a.m

Injection Date: 16-FEB-2010 18:17
Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Init. Cal. Times: 10:08 01:31
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.35497	0.44709	0.44709	0.000	25.95414	60.00000	Averaged
213 Trans Diallate	0.37646	0.34988	0.34988	0.000	-7.05885	60.00000	Averaged
140 4-Aminobiphenyl	0.49579	0.60632	0.60632	0.000	22.29253	60.00000	Averaged
141 Pentachloronitrobenzene	0.05299	0.05789	0.05789	0.000	9.24498	60.00000	Averaged
142 Pronamide	0.22113	0.23704	0.23704	0.000	7.19212	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01286	0.01618	0.01618	0.000	25.80205	60.00000	Averaged
147 Methapyrilene	0.32789	0.36710	0.36710	0.000	11.95792	60.00000	Averaged
148 Isodrin	0.09685	0.08628	0.08628	0.000	-10.91289	60.00000	Averaged
149 Aramite	0.05097	0.05422	0.05422	0.000	6.38207	60.00000	Averaged
150 Kepone	0.07421	0.07345	0.07345	0.000	-1.02400	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.32064	0.31068	0.31068	0.000	-3.10568	60.00000	Averaged
152 Chlorobenzilate	0.29648	0.27475	0.27475	0.000	-7.33102	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.45577	0.50557	0.50557	0.000	10.92634	60.00000	Averaged
155 2-Acetylaminofluorene	0.27068	0.31597	0.31597	0.000	16.73267	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42890	0.41257	0.41257	0.000	-3.80710	60.00000	Averaged
158 3-Methylcholanthrene	0.37631	0.39843	0.39843	0.000	5.87919	60.00000	Averaged

GEL Laboratories LLC

GEL Laboratories, LLC
Data file : /chem/MSD4.i/s021610.b/s4b1627.d
Lab Smp Id: WBN100120-08.1 Client Smp ID: APICV
Inj Date : 16-FEB-2010 18:17
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |WBN100120-08.1|ICV|1|SVMF|1|APICV
Misc Info : |MSD8270|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s021610.b/MSD4-M8270C-AQA-021610a.m
Meth Date : 18-Feb-2010 11:14 jos00786 Quant Type: ISTD
Cal Date : 16-FEB-2010 12:21 Cal File: s4b1611.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.935	3.930	(1.000)	106876	40.0000	
* 29 Naphthalene-d8	136	4.807	4.802	(1.000)	411053	40.0000	
* 46 Acenaphthene-d10	164	6.059	6.059	(1.000)	216114	40.0000	
* 67 Phenanthrene-d10	188	7.054	7.048	(1.000)	329774	40.0000	
* 91 Chrysene-d12	240	8.755	8.754	(1.000)	299160	40.0000	
* 98 Perylene-d12	264	10.300	10.300	(1.000)	271759	40.0000	
209 Benzaldehyde	77	3.663	3.663	(0.931)	82195	40.0000	35.8
16 Acetophenone	105	4.187	4.187	(1.064)	133077	40.0000	41.1
189 Caprolactam	113	5.085	5.085	(1.058)	41192	40.0000	44.0
208 1,1'-Biphenyl	154	5.631	5.631	(0.929)	270674	40.0000	44.3
207 Atrazine	173	6.818	6.818	(0.967)	16481	40.0000	43.0
77 Benzidine	184	7.835	7.835	(0.895)	109512	40.0000	48.0
90 3,3'-Dichlorobenzidine	252	8.680	8.680	(0.991)	93538	40.0000	46.5
102 1,4-Dioxane	88	2.277	2.277	(0.579)	54938	40.0000	49.2
103 Methyl methacrylate	100	2.267	2.267	(0.576)	27544	40.0000	49.7
104 Ethyl methacrylate	69	2.636	2.636	(0.670)	111119	40.0000	48.6
105 2-Picoline	93	2.834	2.834	(0.720)	148200	40.0000	40.4
106 N-Nitrosomethylethylamine	88	2.876	2.876	(0.731)	65224	40.0000	41.1
107 Methyl methanesulfonate	80	3.032	3.032	(0.770)	51090	40.0000	43.7
108 N-Nitrosodiethylamine	102	3.267	3.267	(0.830)	63831	40.0000	40.6
109 Ethyl Methanesulfonate	79	3.422	3.422	(0.870)	92228	40.0000	49.6
110 Pentachloroethane	167	3.759	3.759	(0.955)	43312	40.0000	55.7
111 N-Nitrosopyrrolidine	100	4.181	4.181	(1.063)	66453	40.0000	42.6
113 N-Nitrosomorpholine	56	4.203	4.203	(1.068)	53796	40.0000	41.8
114 o-Toluidine	106	4.214	4.214	(1.071)	207360	40.0000	42.2
115 N-Nitrosopiperidine	114	4.417	4.417	(0.919)	65706	40.0000	40.3
116 a,a-Dimethylphenethylamine	58	4.674	4.674	(0.972)	286332	40.0000	39.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
118 2,6-Dichlorophenol	162	4.850	4.850	(1.009)	90083	40.0000	43.8
119 Hexachloropropene	213	4.877	4.877	(1.014)	53516	40.0000	61.4
120 p-Phenylenediamine	108	5.091	5.091	(1.059)	118330	40.0000	49.5
121 N-Nitrosodi-n-butylamine	84	5.048	5.048	(1.050)	87739	40.0000	40.9
122 Safrole	162	5.219	5.219	(1.086)	91083	40.0000	48.3
123 1,2,4,5-Tetrachlorobenzene	216	5.422	5.422	(0.895)	87875	40.0000	44.1
124 Isosafrole	162	5.588	5.588	(0.922)	104930	40.0000	55.2
125 1,4-Naphthoquinone	158	5.781	5.781	(0.954)	75254	40.0000	44.2
127 Pentachlorobenzene	250	6.166	6.166	(1.018)	76539	40.0000	43.2
128 1-Naphthylamine	143	6.251	6.251	(1.032)	220197	40.0000	46.1
129 2-Naphthylamine	143	6.305	6.305	(1.041)	235119	40.0000	46.6
131 5-Nitro-o-toluidine	152	6.428	6.428	(1.061)	66690	40.0000	45.1
136 1,3,5-Trinitrobenzene	75	6.642	6.642	(0.942)	49669	40.0000	53.8
137 Phenacetin	108	6.679	6.679	(0.947)	104338	40.0000	45.7(Q)
138 Diallate	86	6.663	6.663	(0.945)	98075	40.0000	37.2
212 Cis Diallate	86	6.727	6.727	(0.954)	22116	6.00000	7.6
213 Trans Diallate	86	6.663	6.663	(0.945)	98075	34.0000	31.6
140 4-Aminobiphenyl	169	6.909	6.909	(0.980)	199947	40.0000	48.9
141 Pentachloronitrobenzene	237	6.925	6.925	(0.982)	19092	40.0000	43.7(Q)
142 Pronamide	173	6.915	6.915	(0.980)	78169	40.0000	42.9
146 4-Nitroquinoline-1-oxide	101	7.524	7.524	(1.067)	5336	40.0000	50.3
147 Methapyrilene	58	7.535	7.535	(1.068)	121061	40.0000	44.8
148 Isodrin	193	7.696	7.696	(1.091)	28454	40.0000	35.6
149 Aramite	185	7.926	7.926	(1.124)	17881	40.0000	42.6
150 Kepone	272	8.364	8.364	(1.186)	24223	40.0000	39.6
151 p-(Dimethylamino)azobenzene	120	8.054	8.054	(0.920)	92944	40.0000	38.8
152 Chlorobenzilate	251	8.070	8.070	(0.922)	82193	40.0000	37.1
153 3,3'-Dimethylbenzidine	212	8.273	8.273	(0.945)	151245	40.0000	44.4
155 2-Acetylaminofluorene	181	8.460	8.460	(0.966)	94526	40.0000	46.7
157 7,12Dimethylbenz(a)anthracene	256	9.771	9.771	(0.949)	112120	40.0000	38.5
158 3-Methylcholanthrene	268	10.685	10.685	(1.037)	108277	40.0000	42.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD4.i/s021610.b/s4b1627.d

Date : 16-FEB-2010 18:17

Client ID: APICV

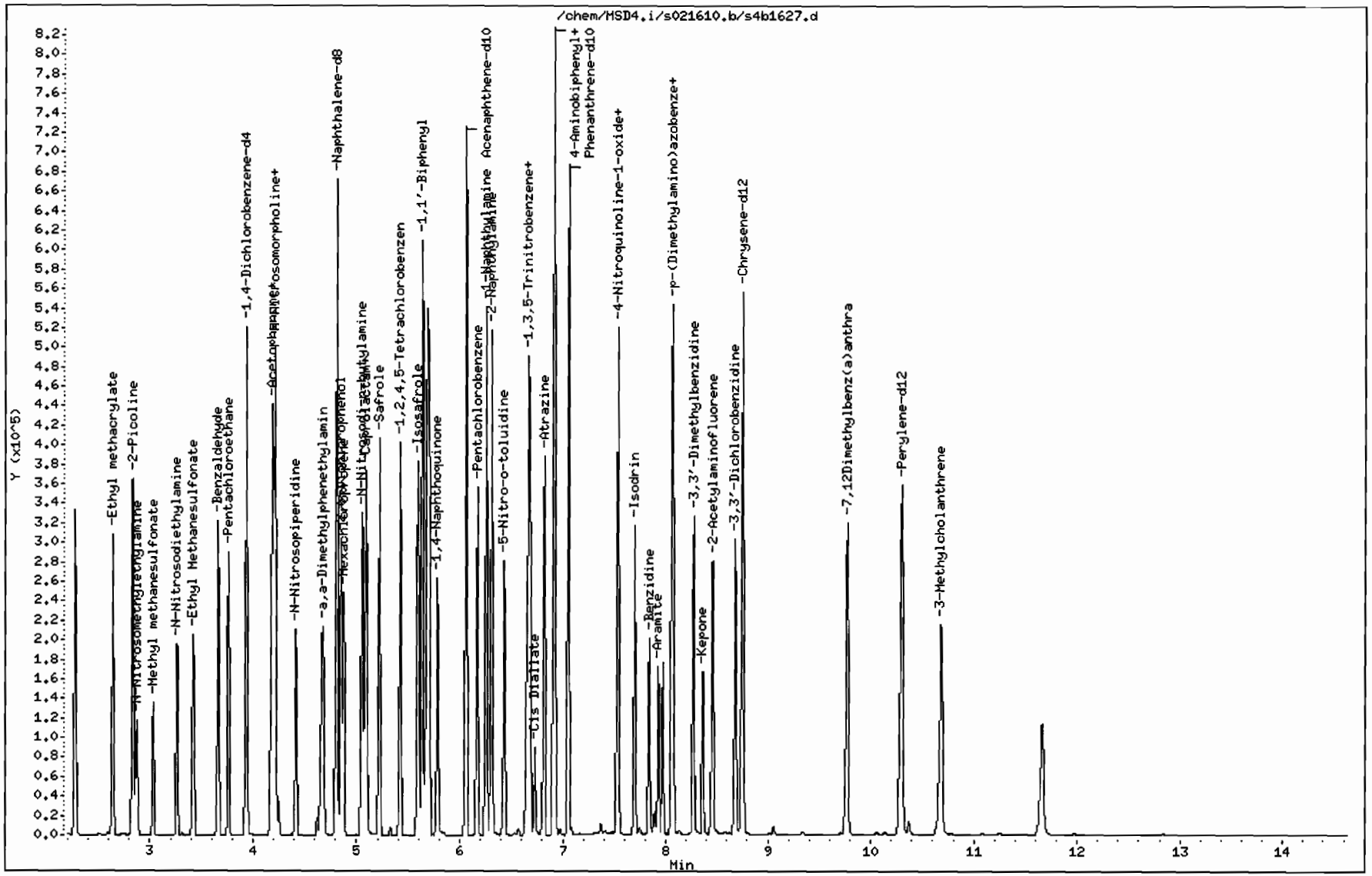
Sample Info: IWBN100120-08.1|ICV|1|SVMF|1|APICV

Column phase: J&W DB-5MS

Instrument: MSD4.i

Operator: JMB3

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 17-FEB-2010 21:48
Lab File ID: s4b1713.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 20:54
Lab Sample ID: WBN100215-09.1 Quant Type: ISTD
Method: /chem/MSD4.i/s021710.b/MSD4-M8270C-AQA-021710.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
I$	3 2-Fluorophenol	1.13979	1.16354	1.16354	0.000	2.08315	60.00000	Averaged	
I$	5 Phenol-d5	1.43191	1.43803	1.43803	0.000	0.42772	60.00000	Averaged	
I$	20 Nitrobenzene-d5	0.30717	0.30277	0.30277	0.000	-1.43237	60.00000	Averaged	
I$	39 2-Fluorobiphenyl	1.03281	1.12873	1.12873	0.000	9.28673	60.00000	Averaged	
I$	60 2,4,6-Tribromophenol	0.12510	0.14597	0.14597	0.000	16.68646	60.00000	Averaged	
I$	81 p-Terphenyl-d14	0.62529	0.72892	0.72892	0.000	16.57366	60.00000	Averaged	
I	1 N-Methyl-N-nitrosomethylami	0.82083	0.78881	0.78881	0.000	-3.90123	60.00000	Averaged	
I	2 Pyridine	1.14982	0.88430	0.88430	0.000	-23.09199	60.00000	Averaged	
I	4 Aniline	0.56446	0.52873	0.52873	0.000	-6.32860	60.00000	Averaged	
I	6 Phenol	1.45555	1.52658	1.52658	0.001	4.87942	20.00000	Averaged	ccc
I	7 bis(2-Chloroethyl) ether	0.85752	0.81241	0.81241	0.000	-5.26035	60.00000	Averaged	
I	8 2-Chlorophenol	1.19326	1.21932	1.21932	0.000	2.18439	60.00000	Averaged	
I	203 n-Decane	1.14554	1.08611	1.08611	0.000	-5.18836	60.00000	Averaged	
I	9 1,3-Dichlorobenzene	1.18927	1.28282	1.28282	0.000	7.86610	60.00000	Averaged	
I	11 1,4-Dichlorobenzene	1.19193	1.26323	1.26323	0.001	5.98137	20.00000	Averaged	ccc
I	13 1,2-Dichlorobenzene	1.08549	1.03731	1.03731	0.000	-4.43915	60.00000	Averaged	
I	14 bis(2-Chloroisopropyl)ether	1.60426	1.59012	1.59012	0.000	-0.88110	60.00000	Averaged	
I	12 Benzyl alcohol	0.66113	0.73587	0.73587	0.000	11.30573	60.00000	Averaged	
I	15 o-Cresol	0.87618	0.81118	0.81118	0.000	-7.41868	60.00000	Averaged	
I	18 m,p-Cresols	1.19261	1.23954	1.23954	0.000	3.93551	60.00000	Averaged	
I	17 N-Nitrosodipropylamine	0.81552	0.83536	0.83536	0.050	2.43285	60.00000	Averaged	spcc
I	19 Hexachloroethane	0.44754	0.46214	0.46214	0.000	3.26215	60.00000	Averaged	
I	21 Nitrobenzene	0.29707	0.28641	0.28641	0.000	-3.58877	60.00000	Averaged	
I	22 Isophorone	0.61948	0.56001	0.56001	0.000	-9.59934	60.00000	Averaged	
I	23 2-Nitrophenol	0.16102	0.15701	0.15701	0.001	-2.48964	20.00000	Averaged	ccc
I	24 2,4-Dimethylphenol	0.26181	0.25204	0.25204	0.000	-3.73203	60.00000	Averaged	
I	25 bis(2-Chloroethoxy)methane	0.37080	0.34715	0.34715	0.000	-6.37678	60.00000	Averaged	
I	26 2,4-Dichlorophenol	0.22734	0.22713	0.22713	0.001	-0.09007	20.00000	Averaged	ccc
I	27 Benzoic acid	37.94583	40.00000	0.15535	0.000	-5.13541	60.00000	Linear	
I	28 1,2,4-Trichlorobenzene	0.23172	0.22972	0.22972	0.000	-0.86168	60.00000	Averaged	
I	30 Naphthalene	0.91608	0.82397	0.82397	0.000	-10.05428	60.00000	Averaged	
I	204 alpha-Terpineol	0.19469	0.17119	0.17119	0.000	-12.07093	60.00000	Averaged	
I	31 4-Chloroaniline	0.41124	0.39701	0.39701	0.000	-3.45985	60.00000	Averaged	
I	32 Hexachlorobutadiene	0.11515	0.11711	0.11711	0.001	1.70874	20.00000	Averaged	ccc
I	33 4-Chloro-3-methylphenol	0.23051	0.22779	0.22779	0.001	-1.17662	20.00000	Averaged	ccc
I	34 2-Methylnaphthalene	0.53694	0.54406	0.54406	0.000	1.32538	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i
Lab File ID: s4b1713.d
Analysis Type:
Lab Sample ID: WBN100215-09.1 Quant Type: ISTD
Method: /chem/MSD4.i/s021710.b/MSD4-M8270C-AQA-021710.m

Injection Date: 17-FEB-2010 21:48
Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Init. Cal. Times: 10:08 20:54

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35	1-Methylnaphthalene	0.52211	0.51488	0.51488	0.000	-1.38407	60.00000	Averaged
36	Hexachlorocyclopentadiene	0.18735	0.16290	0.16290	0.050	-13.05095	60.00000	Averaged spcc
205	2,3-Dichloroaniline	0.52378	0.54850	0.54850	0.000	4.72021	60.00000	Averaged
37	2,4,6-Trichlorophenol	0.25903	0.28741	0.28741	0.001	10.96003	20.00000	Averaged ccc
38	2,4,5-Trichlorophenol	0.29955	0.33654	0.33654	0.000	12.34581	60.00000	Averaged
40	2-Chloronaphthalene	0.96029	0.98817	0.98817	0.000	2.90300	60.00000	Averaged
42	o-Nitroaniline	0.26586	0.26863	0.26863	0.000	1.04202	60.00000	Averaged
41	m-Nitroaniline	41.64852	40.00000	0.26187	0.000	4.12129	60.00000	Linear
43	Dimethylphthalate	1.05863	1.09564	1.09564	0.000	3.49663	60.00000	Averaged
44	2,6-Dinitrotoluene	0.25249	0.26596	0.26596	0.000	5.33622	60.00000	Averaged
50	2,4-Dinitrotoluene	0.32954	0.33987	0.33987	0.000	3.13482	60.00000	Averaged
45	Acenaphthylene	1.46134	1.55694	1.55694	0.000	6.54197	60.00000	Averaged
47	Acenaphthene	1.01927	0.89714	0.89714	0.001	-11.98212	20.00000	Averaged ccc
48	2,4-Dinitrophenol	0.09585	0.10845	0.10845	0.050	13.14781	60.00000	Averaged spcc
49	Dibenzofuran	1.26028	1.30864	1.30864	0.000	3.83724	60.00000	Averaged
51	Diethylphthalate	0.99645	1.02316	1.02316	0.000	2.68098	60.00000	Averaged
52	4-Nitrophenol	40.74265	40.00000	0.19621	0.050	1.85662	60.00000	Linear spcc
53	Fluorene	1.11013	1.04079	1.04079	0.000	-6.24648	60.00000	Averaged
54	4-Chlorophenylphenylether	0.47469	0.46349	0.46349	0.000	-2.36087	60.00000	Averaged
55	2-Methyl-4,6-dinitrophenol	0.10836	0.14871	0.14871	0.000	37.23639	60.00000	Averaged
56	p-Nitroaniline	0.19331	0.21283	0.21283	0.000	10.09570	60.00000	Averaged
133	Diphenylamine	0.52934	0.58081	0.58081	0.001	9.72371	20.00000	Averaged ccc
58	1,2-Diphenylhydrazine	0.69021	0.74431	0.74431	0.000	7.83834	60.00000	Averaged
61	4-Bromophenylphenylether	0.17497	0.17863	0.17863	0.000	2.09074	60.00000	Averaged
63	Hexachlorobenzene	0.18879	0.20071	0.20071	0.000	6.31523	60.00000	Averaged
65	Pentachlorophenol	0.09256	0.10369	0.10369	0.001	12.02595	20.00000	Averaged ccc
206	n-Octadecane	0.36714	0.41235	0.41235	0.000	12.31510	60.00000	Averaged
68	Phenanthrene	0.98692	0.95378	0.95378	0.000	-3.35791	60.00000	Averaged
69	Anthracene	1.00244	0.93251	0.93251	0.000	-6.97608	60.00000	Averaged
72	Di-n-butylphthalate	1.08225	1.11169	1.11169	0.000	2.72014	60.00000	Averaged
76	Fluoranthene	0.92422	0.90886	0.90886	0.001	-1.66128	20.00000	Averaged ccc
79	Pyrene	1.09018	1.08436	1.08436	0.000	-0.53368	60.00000	Averaged
85	Butylbenzylphthalate	0.46266	0.54102	0.54102	0.000	16.93870	60.00000	Averaged
89	Benzo(a)anthracene	0.93727	0.91509	0.91509	0.000	-2.36696	60.00000	Averaged
92	Chrysene	0.94297	0.91305	0.91305	0.000	-3.17305	60.00000	Averaged
93	bis(2-Ethylhexyl)phthalate	0.66314	0.72632	0.72632	0.000	9.52784	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i
Lab File ID: s4b1713.d
Analysis Type:
Lab Sample ID: WBN100215-09.1 Quant Type: ISTD
Method: /chem/MSD4.i/s021710.b/MSD4-M8270C-AQA-021710.m

Injection Date: 17-FEB-2010 21:48
Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Init. Cal. Times: 10:08 20:54

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94	Di-n-octylphthalate	1.19630	1.25643	1.25643	0.001	5.02632	20.00000	Averaged	ccc
95	Benzo(b)fluoranthene	0.94362	0.96796	0.96796	0.000	2.57881	60.00000	Averaged	
96	Benzo(k)fluoranthene	0.95478	0.90606	0.90606	0.000	-5.10258	60.00000	Averaged	
97	Benzo(a)pyrene	0.80648	0.80179	0.80179	0.001	-0.58245	20.00000	Averaged	ccc
99	Indeno(1,2,3-cd)pyrene	0.72396	0.72051	0.72051	0.000	-0.47613	60.00000	Averaged	
100	Dibenzo(a,h)anthracene	0.59590	0.59910	0.59910	0.000	0.53658	60.00000	Averaged	
101	Benzo(ghi)perylene	0.59674	0.59204	0.59204	0.000	-0.78734	60.00000	Averaged	
126	m-Dinitrobenzene	0.19719	0.20810	0.20810	0.000	5.53237	60.00000	Averaged	
130	2,3,4,6-Tetrachlorophenol	0.21610	0.22761	0.22761	0.000	5.32889	60.00000	Averaged	
143	Dinoseb	0.14124	0.15542	0.15542	0.000	10.03842	60.00000	Averaged	
173	Carbazole	47.10001	40.00000	0.82268	0.000	17.75002	60.00000	Linear	
184	p-Benzoquinone	29.47202	40.00000	0.04643	0.000	-26.31994	60.00000	Linear	
192	Methoxychlor	0.44246	0.48849	0.48849	0.000	10.40415	60.00000	Averaged	
211	p-Toluidine	1.35079	1.08032	1.08032	0.000	-20.02280	60.00000	Averaged	
210	m-Toluidine	1.67187	1.73869	1.73869	0.000	3.99633	60.00000	Averaged	
215	2-Ethoxyethanol	0.59723	0.63389	0.63389	0.000	6.13775	60.00000	Averaged	
179	Dibenzo(a,e)pyrene	0.27697	0.19438	0.19438	0.000	-29.82184	60.00000	Averaged	
26	Phthalic anhydride	0.06521	0.10039	0.10039	0.000	53.94488	60.00000	Averaged	
214	1,4-Dinitrobenzene	0.20553	0.20806	0.20806	0.000	1.23100	60.00000	Averaged	
216	Methylenebis(2-chloroanilin	46.03313	40.00000	0.14158	0.000	15.08283	60.00000	Linear	
M 222	Trichlorophenols	0.27408	0.31198	0.31198	0.000	13.82468	60.00000	Averaged	
M 223	Tetrachlorophenols	0.21610	0.22761	0.22761	0.000	5.32889	60.00000	Averaged	
M 224	Benzo(b,k)fluoranthene	0.94920	0.93701	0.93701	0.000	-1.28446	60.00000	Averaged	

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Data file : /chem/MSD4.i/s021710.b/s4b1713.d
Lab Smp Id: WBN100215-09.1 Client Smp ID: MEGAICV
Inj Date : 17-FEB-2010 21:48
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |WBN100215-09.1|ICV|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s021710.b/MSD4-M8270C-AQA-021710.m
Meth Date : 18-Feb-2010 11:03 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 19:07 Cal File: s4b1707.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.935	3.935	(1.000)	132577	40.0000	
*	29 Naphthalene-d8	136	4.807	4.802	(1.000)	535262	40.0000	
*	46 Acenaphthene-d10	164	6.059	6.059	(1.000)	269635	40.0000	
*	67 Phenanthrene-d10	188	7.054	7.048	(1.000)	408520	40.0000	
*	91 Chrysene-d12	240	8.755	8.749	(1.000)	356607	40.0000	
*	98 Perylene-d12	264	10.300	10.295	(1.000)	333947	40.0000	
$	3 2-Fluorophenol	112	3.117	3.117	(0.792)	154258	40.0000	40.8
$	5 Phenol-d5	99	3.647	3.647	(0.927)	190650	40.0000	40.2
$	20 Nitrobenzene-d5	82	4.304	4.304	(0.895)	162061	40.0000	39.4
$	39 2-Fluorobiphenyl	172	5.551	5.551	(0.916)	304345	40.0000	43.7
$	60 2,4,6-Tribromophenol	329	6.599	6.599	(1.089)	39359	40.0000	46.7
$	81 p-Terphenyl-d14	244	7.974	7.974	(0.911)	259938	40.0000	46.6
	1 N-Methyl-N-nitrosomethylamine	74	2.427	2.427	(0.617)	104578	40.0000	38.4
	2 Pyridine	79	2.454	2.454	(0.624)	117238	40.0000	30.8
	4 Aniline	66	3.721	3.721	(0.946)	70098	40.0000	37.5
	6 Phenol	94	3.657	3.657	(0.929)	202389	40.0000	42.0
	7 bis(2-Chloroethyl) ether	63	3.737	3.737	(0.950)	107707	40.0000	37.9
	8 2-Chlorophenol	128	3.802	3.802	(0.966)	161654	40.0000	40.9
	203 n-Decane	43	3.780	3.780	(0.961)	143993	40.0000	37.9
	9 1,3-Dichlorobenzene	146	3.903	3.903	(0.992)	170072	40.0000	43.1
	11 1,4-Dichlorobenzene	146	3.946	3.946	(1.003)	167475	40.0000	42.4
	13 1,2-Dichlorobenzene	146	4.053	4.053	(1.030)	137523	40.0000	38.2
	14 bis(2-Chloroisopropyl)ether	45	4.080	4.080	(1.037)	210814	40.0000	39.6
	12 Benzyl alcohol	108	4.005	4.005	(1.018)	97560	40.0000	44.5
	15 o-Cresol	107	4.053	4.053	(1.030)	107544	40.0000	37.0
	18 m,p-Cresols	107	4.155	4.155	(1.056)	164335	40.0000	41.6
	17 N-Nitrosodipropylamine	70	4.176	4.176	(1.061)	110750	40.0000	41.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
19	Hexachloroethane	117	4.283	4.283	(1.088)	61269	40.0000	41.3
21	Nitrobenzene	77	4.315	4.315	(0.898)	153303	40.0000	38.6
22	Isophorone	82	4.470	4.470	(0.930)	299754	40.0000	36.2
23	2-Nitrophenol	139	4.529	4.529	(0.942)	84044	40.0000	39.0
24	2,4-Dimethylphenol	122	4.518	4.518	(0.940)	134908	40.0000	38.5
25	bis(2-Chloroethoxy)methane	93	4.588	4.588	(0.954)	185817	40.0000	37.4
26	2,4-Dichlorophenol	162	4.695	4.695	(0.977)	121575	40.0000	40.0
27	Benzoic acid	105	4.583	4.583	(0.953)	83153	40.0000	37.9
28	1,2,4-Trichlorobenzene	180	4.754	4.754	(0.989)	122961	40.0000	39.6
30	Naphthalene	128	4.823	4.823	(1.003)	441040	40.0000	36.0
204	alpha-Terpineol	59	4.802	4.802	(0.999)	91631	40.0000	35.2
31	4-Chloroaniline	127	4.839	4.839	(1.007)	212503	40.0000	38.6
32	Hexachlorobutadiene	225	4.882	4.882	(1.016)	62686	40.0000	40.7
33	4-Chloro-3-methylphenol	107	5.150	5.150	(1.071)	121930	40.0000	39.5
34	2-Methylnaphthalene	142	5.305	5.305	(1.103)	291214	40.0000	40.5
35	1-Methylnaphthalene	142	5.380	5.380	(1.119)	275596	40.0000	39.4
36	Hexachlorocyclopentadiene	237	5.406	5.406	(0.892)	43924	40.0000	34.8
205	2,3-Dichloroaniline	161	5.503	5.503	(0.908)	147895	40.0000	41.9
37	2,4,6-Trichlorophenol	196	5.492	5.492	(0.906)	77497	40.0000	44.4
38	2,4,5-Trichlorophenol	196	5.519	5.519	(0.911)	90742	40.0000	44.9
40	2-Chloronaphthalene	162	5.658	5.658	(0.934)	266445	40.0000	41.2
42	o-Nitroaniline	65	5.716	5.716	(0.944)	72432	40.0000	40.4
41	m-Nitroaniline	138	6.011	6.011	(0.992)	70610	40.0000	41.6
43	Dimethylphthalate	163	5.829	5.829	(0.962)	295424	40.0000	41.4
44	2,6-Dinitrotoluene	165	5.882	5.882	(0.971)	71712	40.0000	42.1
50	2,4-Dinitrotoluene	165	6.171	6.171	(1.019)	91642	40.0000	41.2
45	Acenaphthylene	152	5.968	5.968	(0.985)	419805	40.0000	42.6
47	Acenaphthene	154	6.086	6.086	(1.004)	241900	40.0000	35.2
48	2,4-Dinitrophenol	184	6.080	6.080	(1.004)	29242	40.0000	45.2
49	Dibenzofuran	168	6.203	6.203	(1.024)	352856	40.0000	41.5
51	Diethylphthalate	149	6.310	6.310	(1.041)	275880	40.0000	41.1
52	4-Nitrophenol	139	6.096	6.096	(1.006)	52904	40.0000	40.7
53	Fluorene	166	6.439	6.439	(1.063)	280633	40.0000	37.5
54	4-Chlorophenylphenylether	204	6.412	6.412	(1.058)	124972	40.0000	39.0
55	2-Methyl-4,6-dinitrophenol	198	6.449	6.449	(0.914)	60752	40.0000	54.9
56	p-Nitroaniline	138	6.439	6.439	(1.063)	57386	40.0000	44.0
133	Diphenylamine	169	6.492	6.492	(0.920)	237272	40.0000	43.9
58	1,2-Diphenylhydrazine	77	6.524	6.524	(0.925)	304067	40.0000	43.1
61	4-Bromophenylphenylether	248	6.743	6.743	(0.956)	72972	40.0000	40.8
63	Hexachlorobenzene	284	6.797	6.797	(0.964)	81996	40.0000	42.5
65	Pentachlorophenol	266	6.915	6.915	(0.980)	42358	40.0000	44.8
206	n-Octadecane	57	6.893	6.893	(0.977)	168454	40.0000	44.9
68	Phenanthrene	178	7.070	7.070	(1.002)	389638	40.0000	38.6
69	Anthracene	178	7.102	7.102	(1.007)	380949	40.0000	37.2
72	Di-n-butylphthalate	149	7.337	7.337	(1.040)	454146	40.0000	41.1
76	Fluoranthene	202	7.786	7.786	(1.104)	371288	40.0000	39.3
79	Pyrene	202	7.925	7.925	(0.905)	386692	40.0000	39.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
85	Butylbenzylphthalate	149	8.246	8.246	(0.942)	192933	40.0000	46.8
89	Benzo(a)anthracene	228	8.744	8.744	(0.999)	326327	40.0000	39.0
92	Chrysene	228	8.776	8.776	(1.002)	325601	40.0000	38.7
93	bis(2-Ethylhexyl)phthalate	149	8.615	8.615	(0.984)	259011	40.0000	43.8
94	Di-n-octylphthalate	149	9.177	9.177	(0.891)	419582	40.0000	42.0
95	Benzo(b)fluoranthene	252	9.803	9.803	(0.952)	323246	40.0000	41.0(H)
96	Benzo(k)fluoranthene	252	9.835	9.835	(0.955)	302576	40.0000	38.0
97	Benzo(a)pyrene	252	10.225	10.225	(0.993)	267754	40.0000	39.8
99	Indeno(1,2,3-cd)pyrene	276	12.044	12.044	(1.169)	240612	40.0000	39.8
100	Dibenzo(a,h)anthracene	278	12.055	12.055	(1.170)	200068	40.0000	40.2
101	Benzo(ghi)perylene	276	12.584	12.584	(1.222)	197711	40.0000	39.7
126	m-Dinitrobenzene	168	5.872	5.872	(0.969)	56111	40.0000	42.2
130	2,3,4,6-Tetrachlorophenol	232	6.273	6.273	(1.035)	61372	40.0000	42.1
143	Dinoseb	211	7.005	7.005	(0.993)	63492	40.0000	44.0
173	Carbazole	167	7.187	7.187	(1.019)	336080	40.0000	47.1
184	p-Benzoquinone	54	3.427	3.427	(0.871)	6156	40.0000	29.5
192	Methoxychlor	227	8.605	8.605	(0.983)	174200	40.0000	44.2
211	p-Toluidine	106	4.214	4.214	(1.071)	143226	40.0000	32.0
210	m-Toluidine	106	4.235	4.235	(1.076)	230510	40.0000	41.6
215	2-Ethoxyethanol	59	2.267	2.267	(0.576)	84039	40.0000	42.4
179	Dibenzo(a,e)pyrene	302	16.751	16.751	(1.626)	64911	40.0000	28.1
26	Phthalic anhydride	104	5.342	5.342	(1.111)	53737	40.0000	61.6
214	1,4-Dinitrobenzene	75	5.813	5.813	(0.959)	56101	40.0000	40.5
216	Methylenebis(2-chloroaniline)	231	8.674	8.674	(0.991)	50490	40.0000	46.0
M 222	Trichlorophenols	196				168239	80.0000	91.0
M 223	Tetrachlorophenols	232				61372	40.0000	42.1
M 224	Benzo(b,k)fluoranthene	252				625822	80.0000	79.0

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD4.i/s021710.b/s4b1713.d

Date : 17-FEB-2010 21:48

Client ID: MEGAICV

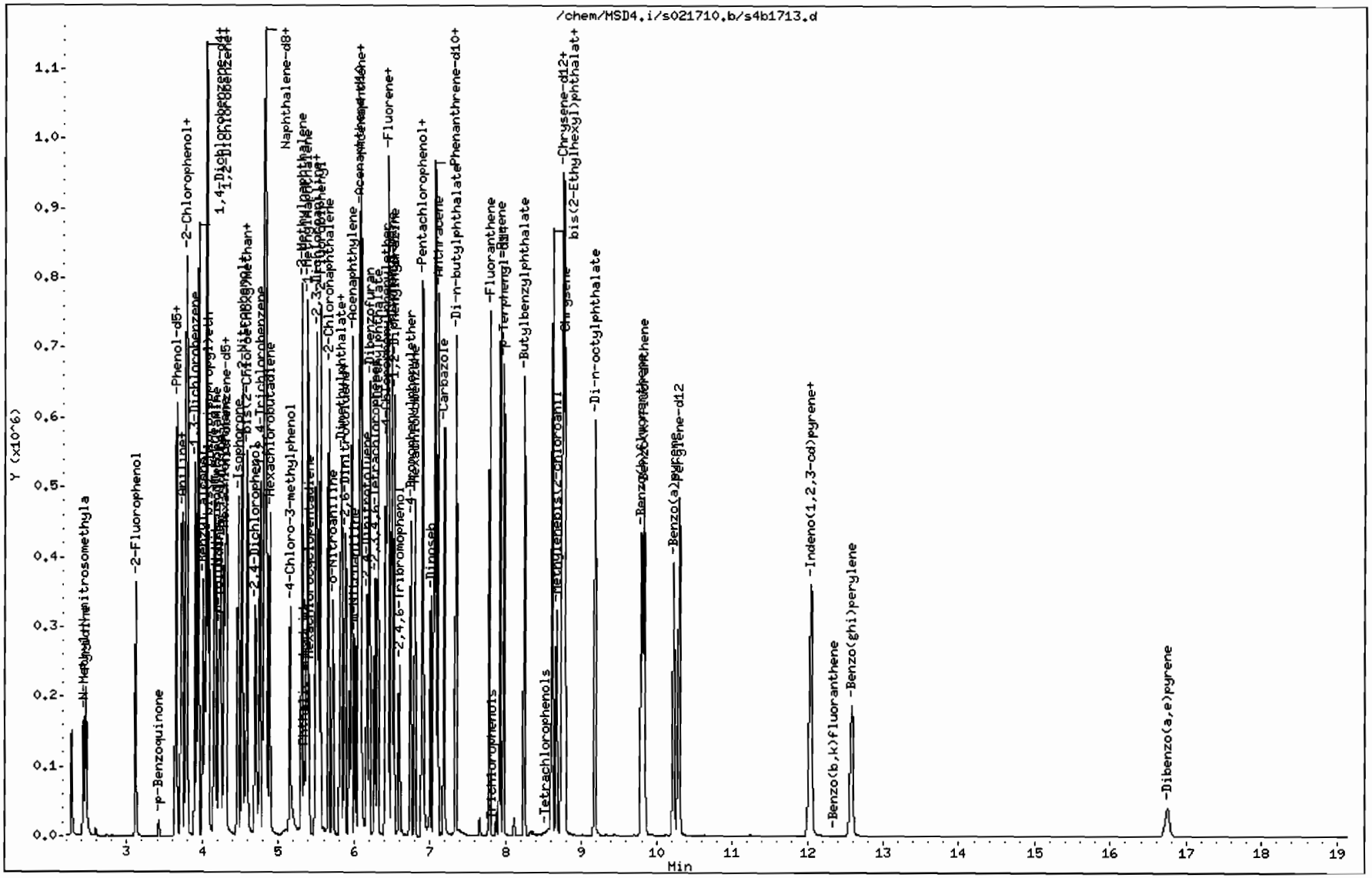
Sample Info: |WBN100215-09.1|ICV|1|SVMF|1|MEGAICV

Column phase: J&W DB-5MS

Instrument: MSD4.i

Operator: JMB3

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 20-FEB-2010 15:00
Lab File ID: s4b2013.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 20:54
Lab Sample ID: WBN100215-09.4 Quant Type: ISTD
Method: /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	3 2-Fluorophenol	1.13979	1.11922	1.11922	0.000	-1.80475	60.00000	Averaged	
$	5 Phenol-d5	1.43191	1.46493	1.46493	0.000	2.30615	60.00000	Averaged	
$	20 Nitrobenzene-d5	0.30717	0.30363	0.30363	0.000	-1.15106	60.00000	Averaged	
$	39 2-Fluorobiphenyl	1.03281	1.02985	1.02985	0.000	-0.28686	60.00000	Averaged	
$	60 2,4,6-Tribromophenol	0.12510	0.12859	0.12859	0.000	2.79375	60.00000	Averaged	
$	81 p-Terphenyl-d14	0.62529	0.62986	0.62986	0.000	0.73131	60.00000	Averaged	
	1 N-Methyl-N-nitrosomethylami	0.82083	0.80730	0.80730	0.000	-1.64801	60.00000	Averaged	
	2 Pyridine	1.14982	1.11331	1.11331	0.000	-3.17496	60.00000	Averaged	
	4 Aniline	0.56446	0.58121	0.58121	0.000	2.96779	60.00000	Averaged	
	6 Phenol	1.45555	1.51915	1.51915	0.001	4.36911	20.00000	Averaged	ccc
	7 bis(2-Chloroethyl) ether	0.85752	0.90630	0.90630	0.000	5.68906	60.00000	Averaged	
	8 2-Chlorophenol	1.19326	1.20235	1.20235	0.000	0.76218	60.00000	Averaged	
	203 n-Decane	1.14554	1.18029	1.18029	0.000	3.03344	60.00000	Averaged	
	9 1,3-Dichlorobenzene	1.18927	1.23014	1.23014	0.000	3.43673	60.00000	Averaged	
	11 1,4-Dichlorobenzene	1.19193	1.25233	1.25233	0.001	5.06675	20.00000	Averaged	ccc
	13 1,2-Dichlorobenzene	1.08549	1.10694	1.10694	0.000	1.97548	60.00000	Averaged	
	14 bis(2-Chloroisopropyl)ether	1.60426	1.72288	1.72288	0.000	7.39429	60.00000	Averaged	
	12 Benzyl alcohol	0.66113	0.76651	0.76651	0.000	15.93903	60.00000	Averaged	
	15 o-Cresol	0.87618	0.85725	0.85725	0.000	-2.16028	60.00000	Averaged	
	18 m,p-Cresols	1.19261	1.22596	1.22596	0.000	2.79630	60.00000	Averaged	
	17 N-Nitrosodipropylamine	0.81552	0.89960	0.89960	0.050	10.30972	60.00000	Averaged	spcc
	19 Hexachloroethane	0.44754	0.48120	0.48120	0.000	7.52136	60.00000	Averaged	
	21 Nitrobenzene	0.29707	0.29742	0.29742	0.000	0.11966	60.00000	Averaged	
	22 Isophorone	0.61948	0.58823	0.58823	0.000	-5.04446	60.00000	Averaged	
	23 2-Nitrophenol	0.16102	0.14298	0.14298	0.001	-11.20803	20.00000	Averaged	ccc
	24 2,4-Dimethylphenol	0.26181	0.27746	0.27746	0.000	5.97643	60.00000	Averaged	
	25 bis(2-Chloroethoxy)methane	0.37080	0.35924	0.35924	0.000	-3.11624	60.00000	Averaged	
	26 2,4-Dichlorophenol	0.22734	0.21287	0.21287	0.001	-6.36301	20.00000	Averaged	ccc
	27 Benzoic acid	41.43355	40.00000	0.17708	0.000	3.58387	60.00000	Linear	
	28 1,2,4-Trichlorobenzene	0.23172	0.22347	0.22347	0.000	-3.56065	60.00000	Averaged	
	30 Naphthalene	0.91608	0.84703	0.84703	0.000	-7.53732	60.00000	Averaged	
	204 alpha-Terpineol	0.19469	0.19343	0.19343	0.000	-0.64622	60.00000	Averaged	
	31 4-Chloroaniline	0.41124	0.42059	0.42059	0.000	2.27472	60.00000	Averaged	
	32 Hexachlorobutadiene	0.11515	0.11287	0.11287	0.001	-1.97450	20.00000	Averaged	ccc
	33 4-Chloro-3-methylphenol	0.23051	0.23044	0.23044	0.001	-0.03076	20.00000	Averaged	ccc
	34 2-Methylnaphthalene	0.53694	0.51350	0.51350	0.000	-4.36581	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i
Lab File ID: s4b2013.d
Analysis Type:
Lab Sample ID: WBN100215-09.4
Method: /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m

Injection Date: 20-FEB-2010 15:00
Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Init. Cal. Times: 10:08 20:54
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.52211	0.50582	0.50582	0.000	-3.11873	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.18735	0.16485	0.16485	0.050	-12.00942	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.52378	0.51688	0.51688	0.000	-1.31695	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.25903	0.29169	0.29169	0.001	12.61008	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.29955	0.29916	0.29916	0.000	-0.13087	60.00000	Averaged	
40	2-Chloronaphthalene	0.96029	0.92618	0.92618	0.000	-3.55269	60.00000	Averaged	
42	o-Nitroaniline	0.26586	0.28050	0.28050	0.000	5.50743	60.00000	Averaged	
41	m-Nitroaniline	39.78663	40.00000	0.24926	0.000	-0.53342	60.00000	Linear	
43	Dimethylphthalate	1.05863	1.07070	1.07070	0.000	1.14082	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.25249	0.25899	0.25899	0.000	2.57660	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.32954	0.32025	0.32025	0.000	-2.82016	60.00000	Averaged	
45	Acenaphthylene	1.46134	1.46084	1.46084	0.000	-0.03409	60.00000	Averaged	
47	Acenaphthene	1.01927	0.91833	0.91833	0.001	-9.90265	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	0.09585	0.10223	0.10223	0.050	6.65533	60.00000	Averaged	spcc
49	Dibenzofuran	1.26028	1.24523	1.24523	0.000	-1.19455	60.00000	Averaged	
51	Diethylphthalate	0.99645	1.01800	1.01800	0.000	2.16270	60.00000	Averaged	
52	4-Nitrophenol	42.72379	40.00000	0.20759	0.050	6.80948	60.00000	Linear	spcc
53	Fluorene	1.11013	1.06254	1.06254	0.000	-4.28674	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.47469	0.45383	0.45383	0.000	-4.39601	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	0.10836	0.10645	0.10645	0.000	-1.76795	60.00000	Averaged	
56	p-Nitroaniline	0.19331	0.19302	0.19302	0.000	-0.15315	60.00000	Averaged	
133	Diphenylamine	0.52934	0.54204	0.54204	0.001	2.40042	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.69021	0.74580	0.74580	0.000	8.05380	60.00000	Averaged	
61	4-Bromophenylphenylether	0.17497	0.17005	0.17005	0.000	-2.80887	60.00000	Averaged	
63	Hexachlorobenzene	0.18879	0.19024	0.19024	0.000	0.76585	60.00000	Averaged	
65	Pentachlorophenol	0.09256	0.10142	0.10142	0.001	9.57528	20.00000	Averaged	ccc
206	n-Octadecane	0.36714	0.39285	0.39285	0.000	7.00386	60.00000	Averaged	
68	Phenanthrene	0.98692	0.95730	0.95730	0.000	-3.00117	60.00000	Averaged	
69	Anthracene	1.00244	0.96144	0.96144	0.000	-4.09000	60.00000	Averaged	
72	Di-n-butylphthalate	1.08225	1.07918	1.07918	0.000	-0.28339	60.00000	Averaged	
76	Fluoranthene	0.92422	0.90224	0.90224	0.001	-2.37811	20.00000	Averaged	ccc
79	Pyrene	1.09018	1.09112	1.09112	0.000	0.08608	60.00000	Averaged	
85	Butylbenzylphthalate	0.46266	0.46375	0.46375	0.000	0.23534	60.00000	Averaged	
89	Benzo(a)anthracene	0.93727	0.92906	0.92906	0.000	-0.87581	60.00000	Averaged	
92	Chrysene	0.94297	0.90221	0.90221	0.000	-4.32293	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	0.66314	0.74339	0.74339	0.000	12.10188	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i
Lab File ID: s4b2013.d
Analysis Type:
Lab Sample ID: WBN100215-09.4 Quant Type: ISTD
Method: /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m

Injection Date: 20-FEB-2010 15:00
Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Init. Cal. Times: 10:08 20:54

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.19630	1.39995	1.39995	0.001	17.02272	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.94362	0.95284	0.95284	0.000	0.97645	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.95478	0.97898	0.97898	0.000	2.53438	60.00000	Averaged	
	97 Benzo(a)pyrene	0.80648	0.83392	0.83392	0.001	3.40263	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	0.72396	0.78345	0.78345	0.000	8.21813	60.00000	Averaged	
	100 Dibenzo(a,h)anthracene	0.59590	0.66178	0.66178	0.000	11.05462	60.00000	Averaged	
	101 Benzo(ghi)perylene	0.59674	0.63872	0.63872	0.000	7.03389	60.00000	Averaged	
	126 m-Dinitrobenzene	0.19719	0.18768	0.18768	0.000	-4.82355	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21610	0.25119	0.25119	0.000	16.24216	60.00000	Averaged	
	143 Dinoseb	0.14124	0.14312	0.14312	0.000	1.33061	60.00000	Averaged	
	173 Carbazole	40.59117	40.00000	0.71022	0.000	1.47793	60.00000	Linear	
	184 p-Benzoquinone	39.46511	40.00000	0.07221	0.000	-1.33722	60.00000	Linear	
	192 Methoxychlor	0.44246	0.46919	0.46919	0.000	6.04215	60.00000	Averaged	
	211 p-Toluidine	1.35079	1.48043	1.48043	0.000	9.59775	60.00000	Averaged	
	210 m-Toluidine	1.67187	1.66669	1.66669	0.000	-0.31014	60.00000	Averaged	
	215 2-Ethoxyethanol	0.59723	0.60637	0.60637	0.000	1.52987	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.27697	0.31724	0.31724	0.000	14.53762	60.00000	Averaged	
	26 Phthalic anhydride	0.06521	0.07143	0.07143	0.000	9.53869	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.20553	0.21680	0.21680	0.000	5.48409	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	36.45407	40.00000	0.10370	0.000	-8.86482	60.00000	Linear	
M	222 Trichlorophenols	0.27408	0.29543	0.29543	0.000	7.78633	60.00000	Averaged	
M	223 Tetrachlorophenols	0.21610	0.25119	0.25119	0.000	16.24216	60.00000	Averaged	
M	224 Benzo(b,k)fluoranthene	0.94920	0.96591	0.96591	0.000	1.76000	60.00000	Averaged	

GEL Laboratories LLC

GEL Laboratories, LLC
Data file : /chem/MSD4.i/s022010.b/s4b2013.d
Lab Smp Id: WBN100215-09.4 Client Smp ID: MEGACVS
Inj Date : 20-FEB-2010 15:00
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |WBN100215-09.4|CVS|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: kilroy

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.935	3.935	(1.000)	194395	40.0000	
*	29 Naphthalene-d8	136	4.802	4.802	(1.000)	825495	40.0000	
*	46 Acenaphthene-d10	164	6.053	6.053	(1.000)	429249	40.0000	
*	67 Phenanthrene-d10	188	7.043	7.043	(1.000)	661666	40.0000	
*	91 Chrysene-d12	240	8.754	8.754	(1.000)	582982	40.0000	
*	98 Perylene-d12	264	10.300	10.300	(1.000)	527731	40.0000	
$	3 2-Fluorophenol	112	3.117	3.117	(0.792)	217571	40.0000	39.3
$	5 Phenol-d5	99	3.646	3.646	(0.927)	284775	40.0000	40.9
$	20 Nitrobenzene-d5	82	4.299	4.299	(0.895)	250648	40.0000	39.5
$	39 2-Fluorobiphenyl	172	5.545	5.545	(0.916)	442063	40.0000	39.9
$	60 2,4,6-Tribromophenol	329	6.588	6.588	(1.088)	55198	40.0000	41.1
$	81 p-Terphenyl-d14	244	7.968	7.968	(0.910)	367197	40.0000	40.3
	1 N-Methyl-N-nitrosomethylamine	74	2.443	2.443	(0.621)	156936	40.0000	39.3
	2 Pyridine	79	2.475	2.475	(0.629)	216422	40.0000	38.7
	4 Aniline	66	3.721	3.721	(0.946)	112984	40.0000	41.2
	6 Phenol	94	3.652	3.652	(0.928)	295315	40.0000	41.7
	7 bis(2-Chloroethyl) ether	63	3.732	3.732	(0.948)	176181	40.0000	42.3
	8 2-Chlorophenol	128	3.796	3.796	(0.965)	233731	40.0000	40.3
	203 n-Decane	43	3.775	3.775	(0.959)	229443	40.0000	41.2
	9 1,3-Dichlorobenzene	146	3.898	3.898	(0.990)	239133	40.0000	41.4
	11 1,4-Dichlorobenzene	146	3.946	3.946	(1.003)	243446	40.0000	42.0
	13 1,2-Dichlorobenzene	146	4.048	4.048	(1.029)	215183	40.0000	40.8
	14 bis(2-Chloroisopropyl)ether	45	4.074	4.074	(1.035)	334920	40.0000	43.0
	12 Benzyl alcohol	108	3.999	3.999	(1.016)	149005	40.0000	46.4
	15 o-Cresol	107	4.048	4.048	(1.029)	166646	40.0000	39.1
	18 m,p-Cresols	107	4.149	4.149	(1.054)	238320	40.0000	41.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17	N-Nitrosodipropylamine	70	4.176	4.176	(1.061)	174878	40.0000	44.1
19	Hexachloroethane	117	4.278	4.278	(1.087)	93543	40.0000	43.0
21	Nitrobenzene	77	4.315	4.315	(0.899)	245522	40.0000	40.0
22	Isophorone	82	4.470	4.470	(0.931)	485581	40.0000	38.0
23	2-Nitrophenol	139	4.524	4.524	(0.942)	118026	40.0000	35.5
24	2,4-Dimethylphenol	122	4.518	4.518	(0.941)	229041	40.0000	42.4
25	bis(2-Chloroethoxy)methane	93	4.582	4.582	(0.954)	296552	40.0000	38.8
26	2,4-Dichlorophenol	162	4.684	4.684	(0.975)	175724	40.0000	37.4
27	Benzoic acid	105	4.577	4.577	(0.953)	146175	40.0000	41.4
28	1,2,4-Trichlorobenzene	180	4.754	4.754	(0.990)	184471	40.0000	38.6
30	Naphthalene	128	4.818	4.818	(1.003)	699217	40.0000	37.0
204	alpha-Terpineol	59	4.791	4.791	(0.998)	159677	40.0000	39.7
31	4-Chloroaniline	127	4.834	4.834	(1.007)	347195	40.0000	40.9
32	Hexachlorobutadiene	225	4.877	4.877	(1.016)	93175	40.0000	39.2
33	4-Chloro-3-methylphenol	107	5.144	5.144	(1.071)	190224	40.0000	40.0
34	2-Methylnaphthalene	142	5.299	5.299	(1.104)	423892	40.0000	38.2
35	1-Methylnaphthalene	142	5.374	5.374	(1.119)	417555	40.0000	38.8
36	Hexachlorocyclopentadiene	237	5.401	5.401	(0.892)	70763	40.0000	35.2
205	2,3-Dichloroaniline	161	5.497	5.497	(0.908)	221870	40.0000	39.5
37	2,4,6-Trichlorophenol	196	5.486	5.486	(0.906)	125207	40.0000	45.0
38	2,4,5-Trichlorophenol	196	5.513	5.513	(0.911)	128415	40.0000	39.9
40	2-Chloronaphthalene	162	5.652	5.652	(0.934)	397560	40.0000	38.6
42	o-Nitroaniline	65	5.711	5.711	(0.943)	120405	40.0000	42.2
41	m-Nitroaniline	138	6.011	6.011	(0.993)	106993	40.0000	39.8
43	Dimethylphthalate	163	5.823	5.823	(0.962)	459599	40.0000	40.4
44	2,6-Dinitrotoluene	165	5.877	5.877	(0.971)	111172	40.0000	41.0
50	2,4-Dinitrotoluene	165	6.166	6.166	(1.019)	137467	40.0000	38.9
45	Acenaphthylene	152	5.962	5.962	(0.985)	627064	40.0000	40.0
47	Acenaphthene	154	6.080	6.080	(1.004)	394194	40.0000	36.0
48	2,4-Dinitrophenol	184	6.075	6.075	(1.004)	43881	40.0000	42.7
49	Dibenzofuran	168	6.198	6.198	(1.024)	534513	40.0000	39.5
51	Diethylphthalate	149	6.305	6.305	(1.042)	436974	40.0000	40.9
52	4-Nitrophenol	139	6.091	6.091	(1.006)	89106	40.0000	42.7
53	Fluorene	166	6.428	6.428	(1.062)	456096	40.0000	38.3
54	4-Chlorophenylphenylether	204	6.406	6.406	(1.058)	194804	40.0000	38.2
55	2-Methyl-4,6-dinitrophenol	198	6.444	6.444	(0.915)	70432	40.0000	39.3
56	p-Nitroaniline	138	6.433	6.433	(1.063)	82852	40.0000	39.9
133	Diphenylamine	169	6.487	6.487	(0.921)	358652	40.0000	41.0
58	1,2-Diphenylhydrazine	77	6.513	6.513	(0.925)	493471	40.0000	43.2
61	4-Bromophenylphenylether	248	6.733	6.733	(0.956)	112518	40.0000	38.9
63	Hexachlorobenzene	284	6.791	6.791	(0.964)	125874	40.0000	40.3
65	Pentachlorophenol	266	6.909	6.909	(0.981)	67105	40.0000	43.8
206	n-Octadecane	57	6.888	6.888	(0.978)	259937	40.0000	42.8
68	Phenanthrene	178	7.059	7.059	(1.002)	633413	40.0000	38.8
69	Anthracene	178	7.091	7.091	(1.007)	636153	40.0000	38.4
72	Di-n-butylphthalate	149	7.332	7.332	(1.041)	714057	40.0000	39.9
76	Fluoranthene	202	7.776	7.776	(1.104)	596979	40.0000	39.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
79	Pyrene	202	7.920	7.920	(0.905)	636104	40.0000	40.0
85	Butylbenzylphthalate	149	8.241	8.241	(0.941)	270355	40.0000	40.1
89	Benzo(a)anthracene	228	8.738	8.738	(0.998)	541628	40.0000	39.6
92	Chrysene	228	8.776	8.776	(1.002)	525972	40.0000	38.3
93	bis(2-Ethylhexyl)phthalate	149	8.615	8.615	(0.984)	433383	40.0000	44.8
94	Di-n-octylphthalate	149	9.182	9.182	(0.891)	738795	40.0000	46.8
95	Benzo(b)fluoranthene	252	9.803	9.803	(0.952)	502841	40.0000	40.4
96	Benzo(k)fluoranthene	252	9.835	9.835	(0.955)	516636	40.0000	41.0
97	Benzo(a)pyrene	252	10.231	10.231	(0.993)	440088	40.0000	41.4
99	Indeno(1,2,3-cd)pyrene	276	12.055	12.055	(1.170)	413452	40.0000	43.3
100	Dibenzo(a,h)anthracene	278	12.055	12.055	(1.170)	349241	40.0000	44.4
101	Benzo(ghi)perylene	276	12.589	12.589	(1.222)	337070	40.0000	42.8
126	m-Dinitrobenzene	168	5.866	5.866	(0.969)	80561	40.0000	38.1
130	2,3,4,6-Tetrachlorophenol	232	6.267	6.267	(1.035)	107825	40.0000	46.5
143	Dinoseb	211	6.995	6.995	(0.993)	94698	40.0000	40.5
173	Carbazole	167	7.177	7.177	(1.019)	469930	40.0000	40.6
184	p-Benzoquinone	54	3.422	3.422	(0.870)	14037	40.0000	39.5
192	Methoxychlor	227	8.605	8.605	(0.983)	273531	40.0000	42.4
211	p-Toluidine	106	4.213	4.213	(1.071)	287789	40.0000	43.8
210	m-Toluidine	106	4.235	4.235	(1.076)	323996	40.0000	39.9
215	2-Ethoxyethanol	59	2.288	2.288	(0.581)	117875	40.0000	40.6
179	Dibenzo(a,e)pyrene	302	16.756	16.756	(1.627)	167417	40.0000	45.8
26	Phthalic anhydride	104	5.342	5.342	(1.113)	58969	40.0000	43.8
214	1,4-Dinitrobenzene	75	5.807	5.807	(0.959)	93063	40.0000	42.2
216	Methylenebis(2-chloroaniline)	231	8.669	8.669	(0.990)	60457	40.0000	36.4
M 222	Trichlorophenols	196				253622	80.0000	86.2
M 223	Tetrachlorophenols	232				107825	40.0000	46.5
M 224	Benzo(b,k)fluoranthene	252				1019477	80.0000	81.4

Data File: /chem/MSD4.i/s022010.b/s4b2013.d

Date : 20-FEB-2010 15:00

Client ID: MEGACVS

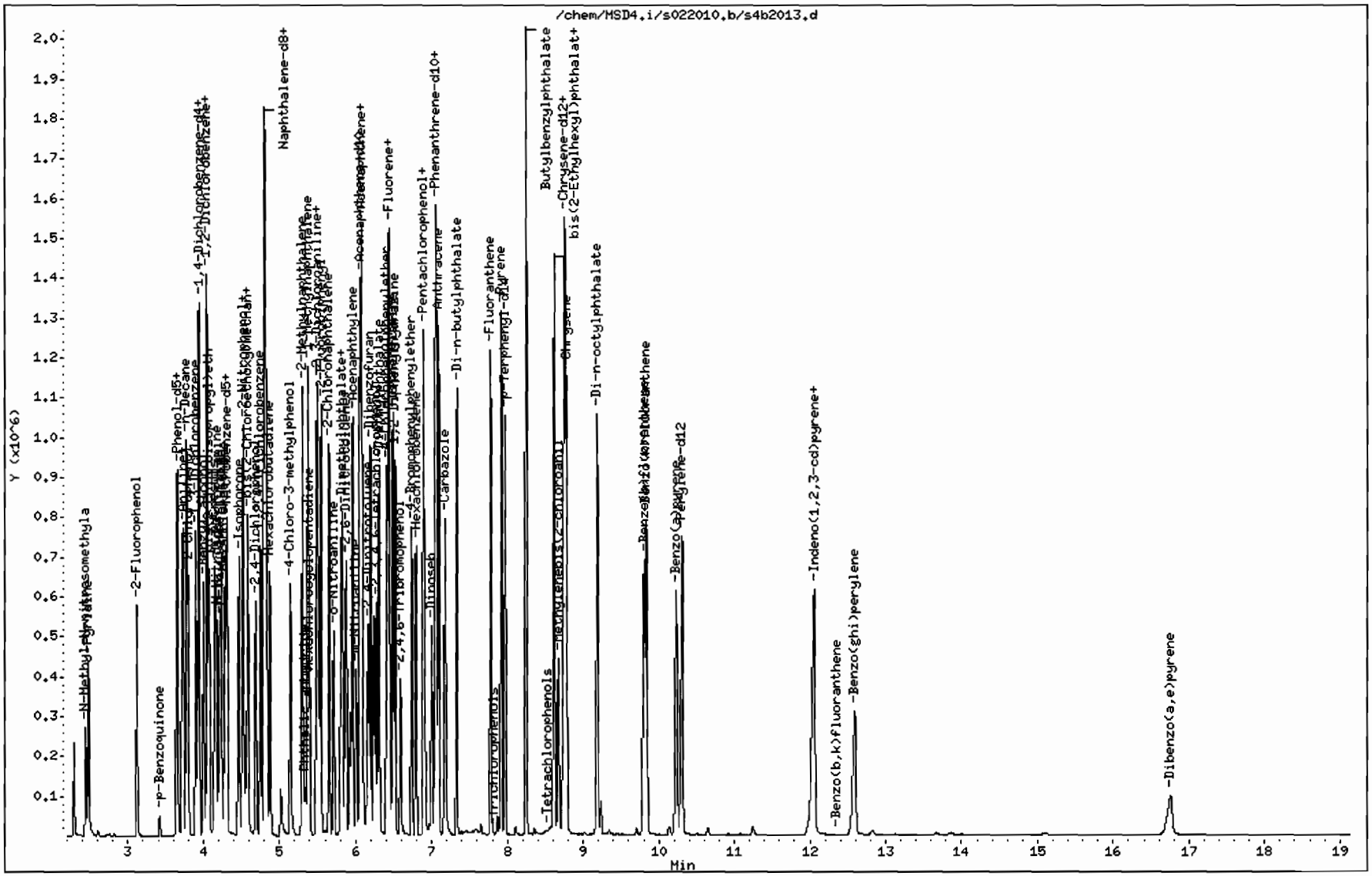
Sample Info: IWBN100215-09.4ICVSI1ISVMFI1IMEGACVS

Column phase: J&W DB-5MS

Instrument: MSD4.i

Operator: JMB3

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 20-FEB-2010 15:27
Lab File ID: s4b2014.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 20:54
Lab Sample ID: WBN100218-05.3 Quant Type: ISTD
Method: /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF40	RRF40	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.85795	1.00226	1.00226	0.000	16.82087	60.00000	Averaged
16 Acetophenone	1.21136	1.35749	1.35749	0.000	12.06310	60.00000	Averaged
189 Caprolactam	0.09106	0.09812	0.09812	0.000	7.75268	60.00000	Averaged
208 1,1'-Biphenyl	1.13159	1.25730	1.25730	0.000	11.10910	60.00000	Averaged
207 Atrazine	0.04652	0.04526	0.04526	0.000	-2.70605	60.00000	Averaged
77 Benzidine	0.30518	0.25456	0.25456	0.000	-16.58658	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.26870	0.28982	0.28982	0.000	7.85958	60.00000	Averaged
102 1,4-Dioxane	0.41759	0.45280	0.45280	0.000	8.43334	60.00000	Averaged
103 Methyl methacrylate	0.20750	0.21947	0.21947	0.000	5.76809	60.00000	Averaged
104 Ethyl methacrylate	0.85622	0.95063	0.95063	0.000	11.02544	60.00000	Averaged
105 2-Picoline	1.37151	1.47573	1.47573	0.000	7.59846	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.59363	0.59249	0.59249	0.000	-0.19221	60.00000	Averaged
107 Methyl methanesulfonate	0.43779	0.49563	0.49563	0.000	13.21054	60.00000	Averaged
108 N-Nitrosodiethylamine	0.58762	0.60014	0.60014	0.000	2.13083	60.00000	Averaged
109 Ethyl Methanesulfonate	0.69655	0.71529	0.71529	0.000	2.69021	60.00000	Averaged
110 Pentachloroethane	0.29093	0.32741	0.32741	0.000	12.54086	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.58368	0.63826	0.63826	0.000	9.35127	60.00000	Averaged
113 N-Nitrosomorpholine	0.48127	0.56852	0.56852	0.000	18.13043	60.00000	Averaged
114 o-Toluidine	1.83778	2.03891	2.03891	0.000	10.94394	60.00000	Averaged
115 N-Nitrosopiperidine	0.15881	0.15894	0.15894	0.000	0.08541	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.70536	0.73795	0.73795	0.000	4.62033	60.00000	Averaged
118 2,6-Dichlorophenol	0.20017	0.21099	0.21099	0.000	5.40501	60.00000	Averaged
119 Hexachloropropene	40.66999	40.00000	0.08460	0.000	1.67497	60.00000	Linear
120 p-Phenylenediamine	0.23280	0.25446	0.25446	0.000	9.30421	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.20854	0.21865	0.21865	0.000	4.85122	60.00000	Averaged
122 Safrole	0.18358	0.19355	0.19355	0.000	5.42620	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.36842	0.39318	0.39318	0.000	6.72264	60.00000	Averaged
124 Isosafrole	0.35193	0.36624	0.36624	0.000	4.06622	60.00000	Averaged
125 1,4-Naphthoquinone	0.31478	0.32013	0.32013	0.000	1.70058	60.00000	Averaged
127 Pentachlorobenzene	0.32751	0.35311	0.35311	0.000	7.81676	60.00000	Averaged
128 1-Naphthylamine	0.88383	0.91605	0.91605	0.000	3.64518	60.00000	Averaged
129 2-Naphthylamine	0.93409	1.00639	1.00639	0.000	7.74011	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27364	0.27116	0.27116	0.000	-0.90789	60.00000	Averaged
136 1,3,5-Trinitrobenzene	42.73899	40.00000	0.11672	0.000	6.84747	60.00000	Linear
137 Phenacetin	0.27663	0.30803	0.30803	0.000	11.35097	60.00000	Averaged
138 Diallate	0.31999	0.33920	0.33920	0.000	6.00475	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 20-FEB-2010 15:27
Lab File ID: s4b2014.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 20:54
Lab Sample ID: WBN100218-05.3 Quant Type: ISTD
Method: /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF40	RRF40	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.35497	0.35581	0.35581	0.000	0.23656	60.00000	Averaged
213 Trans Diallate	0.37646	0.39906	0.39906	0.000	6.00475	60.00000	Averaged
140 4-Aminobiphenyl	0.49579	0.57919	0.57919	0.000	16.82061	60.00000	Averaged
141 Pentachloronitrobenzene	0.05299	0.06780	0.06780	0.000	27.92819	60.00000	Averaged
142 Pronamide	0.22113	0.26888	0.26888	0.000	21.58943	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01286	0.00661	0.00661	0.000	-48.59818	60.00000	Averaged
147 Methapyrilene	0.32789	0.31906	0.31906	0.000	-2.69352	60.00000	Averaged
148 Isodrin	0.09685	0.09566	0.09566	0.000	-1.22702	60.00000	Averaged
149 Aramite	0.05097	0.04610	0.04610	0.000	-9.55622	60.00000	Averaged
150 Kepone	0.07421	0.06882	0.06882	0.000	-7.26219	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.32064	0.33890	0.33890	0.000	5.69308	60.00000	Averaged
152 Chlorobenzilate	0.29648	0.27401	0.27401	0.000	-7.57817	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.45577	0.47785	0.47785	0.000	4.84619	60.00000	Averaged
155 2-Acetylaminofluorene	0.27068	0.31646	0.31646	0.000	16.91480	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42890	0.51139	0.51139	0.000	19.23251	60.00000	Averaged
158 3-Methylcholanthrene	0.37631	0.39414	0.39414	0.000	4.73864	60.00000	Averaged

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Data file : /chem/MSD4.i/s022010.b/s4b2014.d
Lab Smp Id: WBN100218-05.3 Client Smp ID: APCVS
Inj Date : 20-FEB-2010 15:27
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |WBN100218-05.3|CVS|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN100217-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 20-Feb-2010 15:57 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.930	3.930	(1.000)	175572	40.0000	
* 29 Naphthalene-d8	136	4.802	4.802	(1.000)	671400	40.0000	
* 46 Acenaphthene-d10	164	6.053	6.053	(1.000)	351682	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	504090	40.0000	
* 91 Chrysene-d12	240	8.733	8.733	(1.000)	393866	40.0000	
* 98 Perylene-d12	264	10.273	10.273	(1.000)	329897	40.0000	
209 Benzaldehyde	77	3.657	3.657	(0.931)	175968	40.0000	46.7
16 Acetophenone	105	4.187	4.187	(1.065)	238337	40.0000	44.8
189 Caprolactam	113	5.080	5.080	(1.058)	65879	40.0000	43.1
208 1,1'-Biphenyl	154	5.625	5.625	(0.929)	442171	40.0000	44.4
207 Atrazine	173	6.808	6.808	(0.967)	22816	40.0000	38.9
77 Benzidine	184	7.824	7.824	(0.896)	100261	40.0000	33.4
90 3,3'-Dichlorobenzidine	252	8.658	8.658	(0.991)	114150	40.0000	43.1
102 1,4-Dioxane	88	2.293	2.293	(0.584)	79499	40.0000	43.4
103 Methyl methacrylate	100	2.288	2.288	(0.582)	38533	40.0000	42.3
104 Ethyl methacrylate	69	2.646	2.646	(0.673)	166903	40.0000	44.4
105 2-Picoline	93	2.839	2.839	(0.722)	259096	40.0000	43.0
106 N-Nitrosomethylethylamine	88	2.876	2.876	(0.732)	104024	40.0000	39.9
107 Methyl methanesulfonate	80	3.031	3.031	(0.771)	87018	40.0000	45.3
108 N-Nitrosodiethylamine	102	3.261	3.261	(0.830)	105368	40.0000	40.8
109 Ethyl Methanesulfonate	79	3.417	3.417	(0.869)	125584	40.0000	41.1
110 Pentachloroethane	167	3.759	3.759	(0.956)	57484	40.0000	45.0
111 N-Nitrosopyrrolidine	100	4.176	4.176	(1.063)	112061	40.0000	43.7
113 N-Nitrosomorpholine	56	4.197	4.197	(1.068)	99816	40.0000	47.2
114 o-Toluidine	106	4.208	4.208	(1.071)	357975	40.0000	44.4
115 N-Nitrosopiperidine	114	4.411	4.411	(0.919)	106713	40.0000	40.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
116	a,a-Dimethylphenethylamine	58	4.652	4.652	(0.969)	495462	40.0000	41.8
118	2,6-Dichlorophenol	162	4.845	4.845	(1.009)	141655	40.0000	42.2
119	Hexachloropropene	213	4.871	4.871	(1.014)	56800	40.0000	40.7
120	p-Phenylenediamine	108	5.085	5.085	(1.059)	170842	40.0000	43.7
121	N-Nitrosodi-n-butylamine	84	5.042	5.042	(1.050)	146804	40.0000	41.9
122	Safrole	162	5.214	5.214	(1.086)	129947	40.0000	42.2
123	1,2,4,5-Tetrachlorobenzene	216	5.417	5.417	(0.895)	138276	40.0000	42.7
124	Isosafrole	162	5.583	5.583	(0.922)	128801	40.0000	41.6
125	1,4-Naphthoquinone	158	5.775	5.775	(0.954)	112585	40.0000	40.7
127	Pentachlorobenzene	250	6.160	6.160	(1.018)	124184	40.0000	43.1
128	1-Naphthylamine	143	6.246	6.246	(1.032)	322159	40.0000	41.4
129	2-Naphthylamine	143	6.299	6.299	(1.041)	353931	40.0000	43.1
131	5-Nitro-o-toluidine	152	6.422	6.422	(1.061)	95361	40.0000	39.6
136	1,3,5-Trinitrobenzene	75	6.636	6.636	(0.942)	58838	40.0000	42.7
137	Phenacetin	108	6.668	6.668	(0.947)	155277	40.0000	44.5(Q)
138	Diallate	86	6.652	6.652	(0.945)	170988	40.0000	42.4
212	Cis Diallate	86	6.717	6.717	(0.954)	26903	6.00000	6.0
213	Trans Diallate	86	6.652	6.652	(0.945)	170988	34.0000	36.0
140	4-Aminobiphenyl	169	6.898	6.898	(0.979)	291962	40.0000	46.7
141	Pentachloronitrobenzene	237	6.915	6.915	(0.982)	34174	40.0000	51.2(Q)
142	Pronamide	173	6.904	6.904	(0.980)	135537	40.0000	48.6
146	4-Nitroquinoline-1-oxide	101	7.514	7.514	(1.067)	3332	40.0000	20.6
147	Methapyrilene	58	7.524	7.524	(1.068)	160836	40.0000	38.9
148	Isodrin	193	7.685	7.685	(1.091)	48223	40.0000	39.5
149	Aramite	185	7.915	7.915	(1.124)	23237	40.0000	36.2
150	Kepone	272	8.343	8.343	(1.185)	34693	40.0000	37.1
151	p-(Dimethylamino)azobenzene	120	8.038	8.038	(0.920)	133479	40.0000	42.3
152	Chlorobenzilate	251	8.054	8.054	(0.922)	107924	40.0000	37.0
153	3,3'-Dimethylbenzidine	212	8.257	8.257	(0.945)	188210	40.0000	41.9
155	2-Acetylaminofluorene	181	8.439	8.439	(0.966)	124644	40.0000	46.8
157	7,12Dimethylbenz(a)anthracene	256	9.744	9.744	(0.948)	168705	40.0000	47.7
158	3-Methylcholanthrene	268	10.653	10.653	(1.037)	130025	40.0000	41.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD4.i/s022010.b/s4b2014.d
Date : 20-FEB-2010 15:27
Client ID: APCVS
Sample Info: IWBN100218-05,3ICVSI1ISVMFI1IAPCVS
Column phase: J&W DB-5MS

Instrument: MSD4.i
Operator: JMB3
Column diameter: 0.20

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 21-FEB-2010 11:34
Lab File ID: s4b2106.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 20:54
Lab Sample ID: WBN100215-09.4 Quant Type: ISTD
Method: /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	3 2-Fluorophenol	1.13979	1.11758	1.11758	0.000	-1.94905	60.00000	Averaged
$	5 Phenol-d5	1.43191	1.48338	1.48338	0.000	3.59494	60.00000	Averaged
$	20 Nitrobenzene-d5	0.30717	0.33918	0.33918	0.000	10.41970	60.00000	Averaged
$	39 2-Fluorobiphenyl	1.03281	1.00435	1.00435	0.000	-2.75614	60.00000	Averaged
$	60 2,4,6-Tribromophenol	0.12510	0.14593	0.14593	0.000	16.65686	60.00000	Averaged
$	81 p-Terphenyl-d14	0.62529	0.67088	0.67088	0.000	7.29157	60.00000	Averaged
	1 N-Methyl-N-nitrosomethylami	0.82083	0.90367	0.90367	0.000	10.09219	60.00000	Averaged
	2 Pyridine	1.14982	1.24052	1.24052	0.000	7.88847	60.00000	Averaged
	4 Aniline	0.56446	0.65903	0.65903	0.000	16.75450	60.00000	Averaged
	6 Phenol	1.45555	1.56649	1.56649	0.001	7.62122	20.00000	Averaged ccc
	7 bis(2-Chloroethyl) ether	0.85752	1.03993	1.03993	0.000	21.27232	60.00000	Averaged
	8 2-Chlorophenol	1.19326	1.13676	1.13676	0.000	-4.73497	60.00000	Averaged
	203 n-Decane	1.14554	1.42597	1.42597	0.000	24.47942	60.00000	Averaged
	9 1,3-Dichlorobenzene	1.18927	1.20950	1.20950	0.000	1.70166	60.00000	Averaged
	11 1,4-Dichlorobenzene	1.19193	1.24717	1.24717	0.001	4.63429	20.00000	Averaged ccc
	13 1,2-Dichlorobenzene	1.08549	1.09764	1.09764	0.000	1.11914	60.00000	Averaged
	14 bis(2-Chloroisopropyl)ether	1.60426	1.96423	1.96423	0.000	22.43810	60.00000	Averaged
	12 Benzyl alcohol	0.66113	0.79597	0.79597	0.000	20.39634	60.00000	Averaged
	15 o-Cresol	0.87618	0.93749	0.93749	0.000	6.99714	60.00000	Averaged
	18 m,p-Cresols	1.19261	1.24541	1.24541	0.000	4.42709	60.00000	Averaged
	17 N-Nitrosodipropylamine	0.81552	1.01166	1.01166	0.050	24.05028	60.00000	Averaged spcc
	19 Hexachloroethane	0.44754	0.49811	0.49811	0.000	11.30067	60.00000	Averaged
	21 Nitrobenzene	0.29707	0.34812	0.34812	0.000	17.18589	60.00000	Averaged
	22 Isophorone	0.61948	0.65492	0.65492	0.000	5.72139	60.00000	Averaged
	23 2-Nitrophenol	0.16102	0.13471	0.13471	0.001	-16.33888	20.00000	Averaged ccc
	24 2,4-Dimethylphenol	0.26181	0.26235	0.26235	0.000	0.20592	60.00000	Averaged
	25 bis(2-Chloroethoxy)methane	0.37080	0.38822	0.38822	0.000	4.69864	60.00000	Averaged
	26 2,4-Dichlorophenol	0.22734	0.20805	0.20805	0.001	-8.48178	20.00000	Averaged ccc
	27 Benzoic acid	40.24405	40.00000	0.16967	0.000	0.61013	60.00000	Linear
	28 1,2,4-Trichlorobenzene	0.23172	0.23142	0.23142	0.000	-0.12790	60.00000	Averaged
	30 Naphthalene	0.91608	0.81583	0.81583	0.000	-10.94284	60.00000	Averaged
	204 alpha-Terpineol	0.19469	0.24322	0.24322	0.000	24.92899	60.00000	Averaged
	31 4-Chloroaniline	0.41124	0.38907	0.38907	0.000	-5.38913	60.00000	Averaged
	32 Hexachlorobutadiene	0.11515	0.12786	0.12786	0.001	11.03945	20.00000	Averaged ccc
	33 4-Chloro-3-methylphenol	0.23051	0.23780	0.23780	0.001	3.16476	20.00000	Averaged ccc
	34 2-Methylnaphthalene	0.53694	0.48202	0.48202	0.000	-10.22823	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 21-FEB-2010 11:34
Lab File ID: s4b2106.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 20:54
Lab Sample ID: WBN100215-09.4 Quant Type: ISTD
Method: /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35	1-Methylnaphthalene	0.52211	0.47330	0.47330	0.000	-9.34865	60.00000	Averaged	
36	Hexachlorocyclopentadiene	0.18735	0.18308	0.18308	0.050	-2.28037	60.00000	Averaged	spcc
205	2,3-Dichloroaniline	0.52378	0.51622	0.51622	0.000	-1.44337	60.00000	Averaged	
37	2,4,6-Trichlorophenol	0.25903	0.29454	0.29454	0.001	13.71201	20.00000	Averaged	ccc
38	2,4,5-Trichlorophenol	0.29955	0.31676	0.31676	0.000	5.74255	60.00000	Averaged	
40	2-Chloronaphthalene	0.96029	0.90324	0.90324	0.000	-5.94108	60.00000	Averaged	
42	o-Nitroaniline	0.26586	0.31540	0.31540	0.000	18.63568	60.00000	Averaged	
41	m-Nitroaniline	35.45974	40.00000	0.21994	0.000	-11.35066	60.00000	Linear	
43	Dimethylphthalate	1.05863	1.02434	1.02434	0.000	-3.23858	60.00000	Averaged	
44	2,6-Dinitrotoluene	0.25249	0.24216	0.24216	0.000	-4.09113	60.00000	Averaged	
50	2,4-Dinitrotoluene	0.32954	0.30139	0.30139	0.000	-8.54290	60.00000	Averaged	
45	Acenaphthylene	1.46134	1.40921	1.40921	0.000	-3.56692	60.00000	Averaged	
47	Acenaphthene	1.01927	0.90370	0.90370	0.001	-11.33887	20.00000	Averaged	ccc
48	2,4-Dinitrophenol	0.09585	0.09476	0.09476	0.050	-1.13713	60.00000	Averaged	spcc
49	Dibenzofuran	1.26028	1.18744	1.18744	0.000	-5.77967	60.00000	Averaged	
51	Diethylphthalate	0.99645	1.01212	1.01212	0.000	1.57333	60.00000	Averaged	
52	4-Nitrophenol	39.28996	40.00000	0.18786	0.050	-1.77510	60.00000	Linear	spcc
53	Fluorene	1.11013	1.04188	1.04188	0.000	-6.14835	60.00000	Averaged	
54	4-Chlorophenylphenylether	0.47469	0.47581	0.47581	0.000	0.23469	60.00000	Averaged	
55	2-Methyl-4,6-dinitrophenol	0.10836	0.09261	0.09261	0.000	-14.53832	60.00000	Averaged	
56	p-Nitroaniline	0.19331	0.15896	0.15896	0.000	-17.77119	60.00000	Averaged	
133	Diphenylamine	0.52934	0.48448	0.48448	0.001	-8.47409	20.00000	Averaged	ccc
58	1,2-Diphenylhydrazine	0.69021	0.80387	0.80387	0.000	16.46653	60.00000	Averaged	
61	4-Bromophenylphenylether	0.17497	0.17504	0.17504	0.000	0.03947	60.00000	Averaged	
63	Hexachlorobenzene	0.18879	0.19426	0.19426	0.000	2.89571	60.00000	Averaged	
65	Pentachlorophenol	0.09256	0.10491	0.10491	0.001	13.34414	20.00000	Averaged	ccc
206	n-Octadecane	0.36714	0.44571	0.44571	0.000	21.40089	60.00000	Averaged	
68	Phenanthrene	0.98692	0.93059	0.93059	0.000	-5.70772	60.00000	Averaged	
69	Anthracene	1.00244	0.91565	0.91565	0.000	-8.65799	60.00000	Averaged	
72	Di-n-butylphthalate	1.08225	1.03340	1.03340	0.000	-4.51335	60.00000	Averaged	
76	Fluoranthene	0.92422	0.84517	0.84517	0.001	-8.55275	20.00000	Averaged	ccc
79	Pyrene	1.09018	1.06146	1.06146	0.000	-2.63506	60.00000	Averaged	
85	Butylbenzylphthalate	0.46266	0.47313	0.47313	0.000	2.26284	60.00000	Averaged	
89	Benzo(a)anthracene	0.93727	0.87579	0.87579	0.000	-6.56025	60.00000	Averaged	
92	Chrysene	0.94297	0.89056	0.89056	0.000	-5.55800	60.00000	Averaged	
93	bis(2-Ethylhexyl)phthalate	0.66314	0.70618	0.70618	0.000	6.49128	60.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 21-FEB-2010 11:34
Lab File ID: s4b2106.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 20:54
Lab Sample ID: WBN100215-09.4 Quant Type: ISTD
Method: /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	1.19630	1.39908	1.39908	0.001	16.95061	20.00000	Averaged	ccc
	95 Benzo(b)fluoranthene	0.94362	1.01813	1.01813	0.000	7.89589	60.00000	Averaged	
	96 Benzo(k)fluoranthene	0.95478	0.92974	0.92974	0.000	-2.62250	60.00000	Averaged	
	97 Benzo(a)pyrene	0.80648	0.81143	0.81143	0.001	0.61321	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	0.72396	0.78556	0.78556	0.000	8.50961	60.00000	Averaged	
	100 Dibenzo(a,h)anthracene	0.59590	0.66040	0.66040	0.000	10.82357	60.00000	Averaged	
	101 Benzo(ghi)perylene	0.59674	0.63865	0.63865	0.000	7.02358	60.00000	Averaged	
	126 m-Dinitrobenzene	0.19719	0.17304	0.17304	0.000	-12.24694	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.21610	0.25997	0.25997	0.000	20.30534	60.00000	Averaged	
	143 Dinoseb	0.14124	0.12953	0.12953	0.000	-8.29011	60.00000	Averaged	
	173 Carbazole	29.06704	40.00000	0.51112	0.000	-27.33239	60.00000	Linear	
	184 p-Benzoquinone	49.55265	40.00000	0.09823	0.000	23.88164	60.00000	Linear	
	192 Methoxychlor	0.44246	0.46334	0.46334	0.000	4.71949	60.00000	Averaged	
	211 p-Toluidine	1.35079	1.42654	1.42654	0.000	5.60775	60.00000	Averaged	
	210 m-Toluidine	1.67187	1.67815	1.67815	0.000	0.37545	60.00000	Averaged	
	215 2-Ethoxyethanol	0.59723	0.70397	0.70397	0.000	17.87196	60.00000	Averaged	
	179 Dibenzo(a,e)pyrene	0.27697	0.34496	0.34496	0.000	24.54607	60.00000	Averaged	
	26 Phthalic anhydride	0.06521	0.07378	0.07378	0.000	13.13165	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.20553	0.24749	0.24749	0.000	20.41316	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	37.90639	40.00000	0.10945	0.000	-5.23403	60.00000	Linear	
M	222 Trichlorophenols	0.27408	0.30565	0.30565	0.000	11.51663	60.00000	Averaged	
M	223 Tetrachlorophenols	0.21610	0.25997	0.25997	0.000	20.30534	60.00000	Averaged	
M	224 Benzo(b,k)fluoranthene	0.94920	0.97393	0.97393	0.000	2.60579	60.00000	Averaged	

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Data file : /chem/MSD4.i/s022110a.b/s4b2106.d
Lab Smp Id: WBN100215-09.4 Client Smp ID: MEGACVS
Inj Date : 21-FEB-2010 11:34
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |WBN100215-09.4|CVS|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m
Meth Date : 26-Feb-2010 16:45 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGA.sub
Target Version: 3.50
Processing Host: kilroy

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.903	3.903	(1.000)	141610	40.0000	
*	29 Naphthalene-d8	136	4.770	4.770	(1.000)	587236	40.0000	
*	46 Acenaphthene-d10	164	6.027	6.027	(1.000)	303287	40.0000	
*	67 Phenanthrene-d10	188	7.016	7.016	(1.000)	484374	40.0000	
*	91 Chrysene-d12	240	8.717	8.717	(1.000)	413810	40.0000	
*	98 Perylene-d12	264	10.236	10.236	(1.000)	325829	40.0000	
$	3 2-Fluorophenol	112	3.090	3.090	(0.792)	158260	40.0000	39.2
$	5 Phenol-d5	99	3.614	3.614	(0.926)	210062	40.0000	41.4
$	20 Nitrobenzene-d5	82	4.267	4.267	(0.895)	199176	40.0000	44.2
$	39 2-Fluorobiphenyl	172	5.513	5.513	(0.915)	304606	40.0000	38.9
$	60 2,4,6-Tribromophenol	329	6.561	6.561	(1.089)	44260	40.0000	46.7
$	81 p-Terphenyl-d14	244	7.941	7.941	(0.911)	277617	40.0000	42.9
	1 N-Methyl-N-nitrosomethylamine	74	2.406	2.406	(0.616)	127969	40.0000	44.0
	2 Pyridine	79	2.438	2.438	(0.625)	175670	40.0000	43.2
	4 Aniline	66	3.689	3.689	(0.945)	93325	40.0000	46.7
	6 Phenol	94	3.625	3.625	(0.929)	221830	40.0000	43.0
	7 bis(2-Chloroethyl) ether	63	3.700	3.700	(0.948)	147265	40.0000	48.5
	8 2-Chlorophenol	128	3.764	3.764	(0.964)	160976	40.0000	38.1
	203 n-Decane	43	3.748	3.748	(0.960)	201931	40.0000	49.8
	9 1,3-Dichlorobenzene	146	3.871	3.871	(0.992)	171278	40.0000	40.7
	11 1,4-Dichlorobenzene	146	3.914	3.914	(1.003)	176612	40.0000	41.8
	13 1,2-Dichlorobenzene	146	4.016	4.016	(1.029)	155437	40.0000	40.4
	14 bis(2-Chloroisopropyl)ether	45	4.048	4.048	(1.037)	278154	40.0000	49.0
	12 Benzyl alcohol	108	3.967	3.967	(1.016)	112718	40.0000	48.2
	15 o-Cresol	107	4.021	4.021	(1.030)	132758	40.0000	42.8
	18 m,p-Cresols	107	4.123	4.123	(1.056)	176362	40.0000	41.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17	N-Nitrosodipropylamine	70	4.144	4.144	(1.062)	143261	40.0000	49.6
19	Hexachloroethane	117	4.246	4.246	(1.088)	70538	40.0000	44.5
21	Nitrobenzene	77	4.283	4.283	(0.898)	204430	40.0000	46.9
22	Isophorone	82	4.438	4.438	(0.930)	384594	40.0000	42.3
23	2-Nitrophenol	139	4.492	4.492	(0.942)	79109	40.0000	33.5
24	2,4-Dimethylphenol	122	4.486	4.486	(0.941)	154062	40.0000	40.1
25	bis(2-Chloroethoxy)methane	93	4.556	4.556	(0.955)	227976	40.0000	41.9
26	2,4-Dichlorophenol	162	4.652	4.652	(0.975)	122177	40.0000	36.6
27	Benzoic acid	105	4.545	4.545	(0.953)	99634	40.0000	40.2
28	1,2,4-Trichlorobenzene	180	4.722	4.722	(0.990)	135899	40.0000	39.9
30	Naphthalene	128	4.786	4.786	(1.003)	479085	40.0000	35.6
204	alpha-Terpineol	59	4.759	4.759	(0.998)	142830	40.0000	50.0
31	4-Chloroaniline	127	4.802	4.802	(1.007)	228478	40.0000	37.8
32	Hexachlorobutadiene	225	4.850	4.850	(1.017)	75082	40.0000	44.4
33	4-Chloro-3-methylphenol	107	5.112	5.112	(1.072)	139646	40.0000	41.3
34	2-Methylnaphthalene	142	5.267	5.267	(1.104)	283061	40.0000	35.9
35	1-Methylnaphthalene	142	5.342	5.342	(1.120)	277937	40.0000	36.3
36	Hexachlorocyclopentadiene	237	5.369	5.369	(0.891)	55526	40.0000	39.1
205	2,3-Dichloroaniline	161	5.465	5.465	(0.907)	156562	40.0000	39.4
37	2,4,6-Trichlorophenol	196	5.454	5.454	(0.905)	89331	40.0000	45.5
38	2,4,5-Trichlorophenol	196	5.486	5.486	(0.910)	96068	40.0000	42.3
40	2-Chloronaphthalene	162	5.625	5.625	(0.933)	273941	40.0000	37.6
42	o-Nitroaniline	65	5.684	5.684	(0.943)	95658	40.0000	47.4
41	m-Nitroaniline	138	5.979	5.979	(0.992)	66704	40.0000	35.4
43	Dimethylphthalate	163	5.791	5.791	(0.961)	310670	40.0000	38.7
44	2,6-Dinitrotoluene	165	5.850	5.850	(0.971)	73443	40.0000	38.4
50	2,4-Dinitrotoluene	165	6.134	6.134	(1.018)	91408	40.0000	36.6
45	Acenaphthylene	152	5.930	5.930	(0.984)	427396	40.0000	38.6
47	Acenaphthene	154	6.048	6.048	(1.004)	274079	40.0000	35.5
48	2,4-Dinitrophenol	184	6.048	6.048	(1.004)	28739	40.0000	39.5
49	Dibenzofuran	168	6.166	6.166	(1.023)	360136	40.0000	37.7
51	Diethylphthalate	149	6.273	6.273	(1.041)	306964	40.0000	40.6
52	4-Nitrophenol	139	6.064	6.064	(1.006)	56976	40.0000	39.3
53	Fluorene	166	6.401	6.401	(1.062)	315988	40.0000	37.5
54	4-Chlorophenylphenylether	204	6.380	6.380	(1.059)	144306	40.0000	40.1
55	2-Methyl-4,6-dinitrophenol	198	6.417	6.417	(0.915)	44857	40.0000	34.2
56	p-Nitroaniline	138	6.401	6.401	(1.062)	48210	40.0000	32.9
133	Diphenylamine	169	6.455	6.455	(0.920)	234670	40.0000	36.6
58	1,2-Diphenylhydrazine	77	6.487	6.487	(0.925)	389372	40.0000	46.6
61	4-Bromophenylphenylether	248	6.706	6.706	(0.956)	84783	40.0000	40.0
63	Hexachlorobenzene	284	6.759	6.759	(0.963)	94094	40.0000	41.2
65	Pentachlorophenol	266	6.882	6.882	(0.981)	50814	40.0000	45.3
206	n-Octadecane	57	6.861	6.861	(0.978)	215890	40.0000	48.6
68	Phenanthrene	178	7.032	7.032	(1.002)	450753	40.0000	37.7
69	Anthracene	178	7.064	7.064	(1.007)	443517	40.0000	36.5
72	Di-n-butylphthalate	149	7.305	7.305	(1.041)	500553	40.0000	38.2
76	Fluoranthene	202	7.749	7.749	(1.104)	409378	40.0000	36.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79	Pyrene	202	7.893	7.893	(0.906)	439241	40.0000	38.9
85	Butylbenzylphthalate	149	8.214	8.214	(0.942)	195784	40.0000	40.9
89	Benzo(a)anthracene	228	8.701	8.701	(0.998)	362409	40.0000	37.4
92	Chrysene	228	8.738	8.738	(1.002)	368524	40.0000	37.8
93	bis(2-Ethylhexyl)phthalate	149	8.583	8.583	(0.985)	292226	40.0000	42.6
94	Di-n-octylphthalate	149	9.140	9.140	(0.893)	455862	40.0000	46.8
95	Benzo(b)fluoranthene	252	9.749	9.749	(0.952)	331736	40.0000	43.2
96	Benzo(k)fluoranthene	252	9.781	9.781	(0.956)	302936	40.0000	39.0
97	Benzo(a)pyrene	252	10.166	10.166	(0.993)	264387	40.0000	40.2
99	Indeno(1,2,3-cd)pyrene	276	11.953	11.953	(1.168)	255959	40.0000	43.4(H)
100	Dibenzo(a,h)anthracene	278	11.958	11.958	(1.168)	215178	40.0000	44.3
101	Benzo(ghi)perylene	276	12.482	12.482	(1.219)	208092	40.0000	42.8(H)
126	m-Dinitrobenzene	168	5.834	5.834	(0.968)	52481	40.0000	35.1
130	2,3,4,6-Tetrachlorophenol	232	6.235	6.235	(1.035)	78847	40.0000	48.1
143	Dinoseb	211	6.968	6.968	(0.993)	62742	40.0000	36.7
173	Carbazole	167	7.150	7.150	(1.019)	247572	40.0000	29.1
184	p-Benzoquinone	54	3.395	3.395	(0.870)	13910	40.0000	49.6
192	Methoxychlor	227	8.567	8.567	(0.983)	191735	40.0000	41.9
211	p-Toluidine	106	4.181	4.181	(1.071)	202012	40.0000	42.2
210	m-Toluidine	106	4.203	4.203	(1.077)	237643	40.0000	40.2
215	2-Ethoxyethanol	59	2.251	2.251	(0.577)	99689	40.0000	47.1
179	Dibenzo(a,e)pyrene	302	16.574	16.574	(1.619)	112398	40.0000	49.8(H)
26	Phthalic anhydride	104	5.305	5.305	(1.112)	43325	40.0000	45.2
214	1,4-Dinitrobenzene	75	5.775	5.775	(0.958)	75060	40.0000	48.2
216	Methylenebis(2-chloroaniline)	231	8.631	8.631	(0.990)	45290	40.0000	37.9
M 222	Trichlorophenols	196				185399	80.0000	89.2
M 223	Tetrachlorophenols	232				78847	40.0000	48.1
M 224	Benzo(b,k)fluoranthene	252				634672	80.0000	82.1

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD4.i/s022110a.b/s4b2106.d

Page 1

Date : 21-FEB-2010 11:34

Client ID: MEGACVS

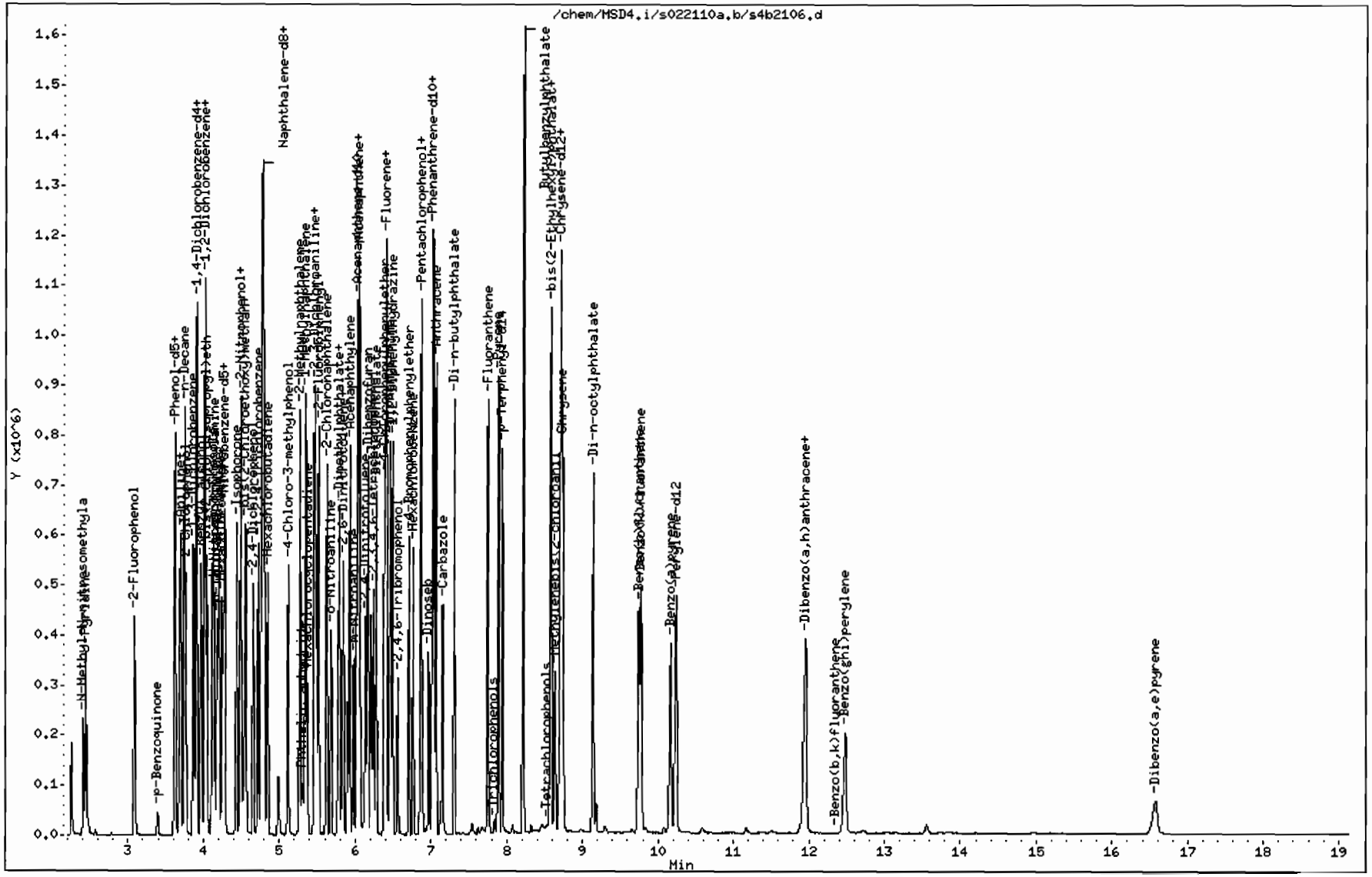
Instrument: MSD4.i

Sample Info: IWBN100215-09.4ICVSI1ISVMFI1IMEGACVS

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 21-FEB-2010 12:02
Lab File ID: s4b2107.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 20:54
Lab Sample ID: WBN100218-05.3 Quant Type: ISTD
Method: /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209	Benzaldehyde	0.85795	1.09218	1.09218	0.000	27.30192	60.00000	Averaged
16	Acetophenone	1.21136	1.39920	1.39920	0.000	15.50607	60.00000	Averaged
189	Caprolactam	0.09106	0.09719	0.09719	0.000	6.73443	60.00000	Averaged
208	1,1'-Biphenyl	1.13159	1.14457	1.14457	0.000	1.14656	60.00000	Averaged
207	Atrazine	0.04652	0.03976	0.03976	0.000	-14.53061	60.00000	Averaged
77	Benzidine	0.30518	0.16284	0.16284	0.000	-46.64134	60.00000	Averaged
90	3,3'-Dichlorobenzidine	0.26870	0.25505	0.25505	0.000	-5.08030	60.00000	Averaged
102	1,4-Dioxane	0.41759	0.43393	0.43393	0.000	3.91384	60.00000	Averaged
103	Methyl methacrylate	0.20750	0.21510	0.21510	0.000	3.66250	60.00000	Averaged
104	Ethyl methacrylate	0.85622	0.99928	0.99928	0.000	16.70833	60.00000	Averaged
105	2-Picoline	1.37151	1.48918	1.48918	0.000	8.57941	60.00000	Averaged
106	N-Nitrosomethylethylamine	0.59363	0.59117	0.59117	0.000	-0.41480	60.00000	Averaged
107	Methyl methanesulfonate	0.43779	0.54581	0.54581	0.000	24.67335	60.00000	Averaged
108	N-Nitrosodiethylamine	0.58762	0.59040	0.59040	0.000	0.47267	60.00000	Averaged
109	Ethyl Methanesulfonate	0.69655	0.76617	0.76617	0.000	9.99467	60.00000	Averaged
110	Pentachloroethane	0.29093	0.29748	0.29748	0.000	2.25137	60.00000	Averaged
111	N-Nitrosopyrrolidine	0.58368	0.64398	0.64398	0.000	10.32963	60.00000	Averaged
113	N-Nitrosomorpholine	0.48127	0.63466	0.63466	0.000	31.87200	60.00000	Averaged
114	o-Toluidine	1.83778	2.02183	2.02183	0.000	10.01484	60.00000	Averaged
115	N-Nitrosopiperidine	0.15881	0.15417	0.15417	0.000	-2.91603	60.00000	Averaged
116	a,a-Dimethylphenethylamine	0.70536	0.80013	0.80013	0.000	13.43474	60.00000	Averaged
118	2,6-Dichlorophenol	0.20017	0.21124	0.21124	0.000	5.53464	60.00000	Averaged
119	Hexachloropropene	44.13692	40.00000	0.09224	0.000	10.34229	60.00000	Linear
120	p-Phenylenediamine	0.23280	0.25024	0.25024	0.000	7.49179	60.00000	Averaged
121	N-Nitrosodi-n-butylamine	0.20854	0.22634	0.22634	0.000	8.53603	60.00000	Averaged
122	Safrole	0.18358	0.18613	0.18613	0.000	1.38871	60.00000	Averaged
123	1,2,4,5-Tetrachlorobenzene	0.36842	0.38922	0.38922	0.000	5.64577	60.00000	Averaged
124	Isosafrole	0.35193	0.33408	0.33408	0.000	-5.07378	60.00000	Averaged
125	1,4-Naphthoquinone	0.31478	0.30557	0.30557	0.000	-2.92498	60.00000	Averaged
127	Pentachlorobenzene	0.32751	0.35968	0.35968	0.000	9.82288	60.00000	Averaged
128	1-Naphthylamine	0.88383	0.83339	0.83339	0.000	-5.70699	60.00000	Averaged
129	2-Naphthylamine	0.93409	0.85641	0.85641	0.000	-8.31614	60.00000	Averaged
131	5-Nitro-o-toluidine	0.27364	0.26077	0.26077	0.000	-4.70619	60.00000	Averaged
136	1,3,5-Trinitrobenzene	45.52856	40.00000	0.12530	0.000	13.82140	60.00000	Linear
137	Phenacetin	0.27663	0.30730	0.30730	0.000	11.08415	60.00000	Averaged
138	Diallate	0.31999	0.32407	0.32407	0.000	1.27460	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 21-FEB-2010 12:02
Lab File ID: s4b2107.d Init. Cal. Date(s): 16-FEB-2010 17-FEB-2010
Analysis Type: Init. Cal. Times: 10:08 20:54
Lab Sample ID: WBN100218-05.3 Quant Type: ISTD
Method: /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.35497	0.33024	0.33024	0.000	-6.96665	60.00000	Averaged
213 Trans Diallate	0.37646	0.38125	0.38125	0.000	1.27460	60.00000	Averaged
140 4-Aminobiphenyl	0.49579	0.50407	0.50407	0.000	1.66914	60.00000	Averaged
141 Pentachloronitrobenzene	0.05299	0.06944	0.06944	0.000	31.03763	60.00000	Averaged
142 Pronamide	0.22113	0.24989	0.24989	0.000	13.00611	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01286	0.00735	0.00735	0.000	-42.84533	60.00000	Averaged
147 Methapyrilene	0.32789	0.36366	0.36366	0.000	10.90910	60.00000	Averaged
148 Isodrin	0.09685	0.08949	0.08949	0.000	-7.60546	60.00000	Averaged
149 Aramite	0.05097	0.04610	0.04610	0.000	-9.55686	60.00000	Averaged
150 Kepone	0.07421	0.06521	0.06521	0.000	-12.13634	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.32064	0.30694	0.30694	0.000	-4.27337	60.00000	Averaged
152 Chlorobenzilate	0.29648	0.32777	0.32777	0.000	10.55313	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.45577	0.38828	0.38828	0.000	-14.80689	60.00000	Averaged
155 2-Acetylaminofluorene	0.27068	0.28870	0.28870	0.000	6.65605	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.42890	0.46291	0.46291	0.000	7.93025	60.00000	Averaged
158 3-Methylcholanthrene	0.37631	0.34739	0.34739	0.000	-7.68458	60.00000	Averaged

GEL Laboratories LLC

GEL Laboratories, LLC
Data file : /chem/MSD4.i/s022110a.b/s4b2107.d
Lab Smp Id: WBN100218-05.3 Client Smp ID: APCVS
Inj Date : 21-FEB-2010 12:02
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |WBN100218-05.3|CVS|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um fi1m thickness
Method : /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 12:25 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.903	3.903	(1.000)	131328	40.0000	
* 29 Naphthalene-d8	136	4.770	4.770	(1.000)	498947	40.0000	
* 46 Acenaphthene-d10	164	6.021	6.027	(1.000)	278369	40.0000	
* 67 Phenanthrene-d10	188	7.016	7.016	(1.000)	449173	40.0000	
* 91 Chrysene-d12	240	8.696	8.717	(1.000)	354106	40.0000	
* 98 Perylene-d12	264	10.209	10.236	(1.000)	262032	40.0000	
209 Benzaldehyde	77	3.630	3.630	(0.930)	143434	40.0000	50.9
16 Acetophenone	105	4.155	4.155	(1.064)	183754	40.0000	46.2
189 Caprolactam	113	5.048	5.048	(1.058)	48495	40.0000	42.7(H)
208 1,1'-Biphenyl	154	5.593	5.593	(0.929)	318612	40.0000	40.4
207 Atrazine	173	6.781	6.781	(0.966)	17860	40.0000	34.2
77 Benzidine	184	7.797	7.797	(0.897)	57662	40.0000	21.3
90 3,3'-Dichlorobenzidine	252	8.626	8.626	(0.992)	90315	40.0000	38.0
102 1,4-Dioxane	88	2.250	2.250	(0.577)	56987	40.0000	41.6
103 Methyl methacrylate	100	2.245	2.245	(0.575)	28249	40.0000	41.5
104 Ethyl methacrylate	69	2.609	2.609	(0.668)	131234	40.0000	46.7
105 2-Picoline	93	2.807	2.807	(0.719)	195571	40.0000	43.4
106 N-Nitrosomethylethylamine	88	2.844	2.844	(0.729)	77637	40.0000	39.8
107 Methyl methanesulfonate	80	3.005	3.005	(0.770)	71680	40.0000	49.9
108 N-Nitrosodiethylamine	102	3.235	3.235	(0.829)	77536	40.0000	40.2
109 Ethyl Methanesulfonate	79	3.390	3.390	(0.868)	100619	40.0000	44.0
110 Pentachloroethane	167	3.727	3.727	(0.955)	39067	40.0000	40.9
111 N-Nitrosopyrrolidine	100	4.144	4.144	(1.062)	84572	40.0000	44.1
113 N-Nitrosomorpholine	56	4.165	4.165	(1.067)	83348	40.0000	52.7(H)
114 o-Toluidine	106	4.181	4.181	(1.071)	265523	40.0000	44.0
115 N-Nitrosopiperidine	114	4.379	4.379	(0.918)	76925	40.0000	38.8
116 a,a-Dimethylphenethylamine	58	4.631	4.631	(0.971)	399221	40.0000	45.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
118	2,6-Dichlorophenol	162	4.812	4.812	(1.009)	105400	40.0000	42.2
119	Hexachloropropene	213	4.839	4.839	(1.015)	46023	40.0000	44.1
120	p-Phenylenediamine	108	5.053	5.053	(1.059)	124855	40.0000	43.0
121	N-Nitrosodi-n-butylamine	84	5.010	5.010	(1.050)	112931	40.0000	43.4(H)
122	Safrole	162	5.182	5.182	(1.086)	92871	40.0000	40.6
123	1,2,4,5-Tetrachlorobenzene	216	5.385	5.385	(0.894)	108346	40.0000	42.2
124	Isosafrole	162	5.551	5.551	(0.922)	92997	40.0000	38.0
125	1,4-Naphthoquinone	158	5.743	5.743	(0.954)	85062	40.0000	38.8
127	Pentachlorobenzene	250	6.128	6.128	(1.018)	100125	40.0000	43.9
128	1-Naphthylamine	143	6.214	6.214	(1.032)	231991	40.0000	37.7(H)
129	2-Naphthylamine	143	6.267	6.267	(1.041)	238399	40.0000	36.7
131	5-Nitro-o-toluidine	152	6.390	6.390	(1.061)	72589	40.0000	38.1
136	1,3,5-Trinitrobenzene	75	6.610	6.610	(0.942)	56280	40.0000	45.5
137	Phenacetin	108	6.642	6.642	(0.947)	138029	40.0000	44.4(Q)
138	Diallate	86	6.626	6.626	(0.944)	145562	40.0000	40.5
212	Cis Diallate	86	6.690	6.690	(0.953)	22250	6.00000	5.6
213	Trans Diallate	86	6.626	6.626	(0.944)	145562	34.0000	34.4
140	4-Aminobiphenyl	169	6.872	6.872	(0.979)	226413	40.0000	40.7
141	Pentachloronitrobenzene	237	6.882	6.882	(0.981)	31192	40.0000	52.4(Q)
142	Pronamide	173	6.877	6.877	(0.980)	112246	40.0000	45.2
146	4-Nitroquinoline-1-oxide	101	7.487	7.487	(1.067)	3302	40.0000	22.9
147	Methapyrilene	58	7.497	7.497	(1.069)	163348	40.0000	44.4
148	Isodrin	193	7.658	7.658	(1.091)	40195	40.0000	37.0(H)
149	Aramite	185	7.888	7.888	(1.124)	20706	40.0000	36.2(H)
150	Kepone	272	8.310	8.310	(1.184)	29289	40.0000	35.1
151	p-(Dimethylamino)azobenzene	120	8.011	8.011	(0.921)	108689	40.0000	38.3
152	Chlorobenzilate	251	8.027	8.027	(0.923)	116065	40.0000	44.2
153	3,3'-Dimethylbenzidine	212	8.225	8.225	(0.946)	137493	40.0000	34.1
155	2-Acetylaminofluorene	181	8.407	8.407	(0.967)	102229	40.0000	42.7
157	7,12Dimethylbenz(a)anthracene	256	9.696	9.696	(0.950)	121298	40.0000	43.2
158	3-Methylcholanthrene	268	10.584	10.584	(1.037)	91027	40.0000	36.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD4.i/s022110a.b/s4b2107.d

Date : 21-FEB-2010 12:02

Client ID: APCVS

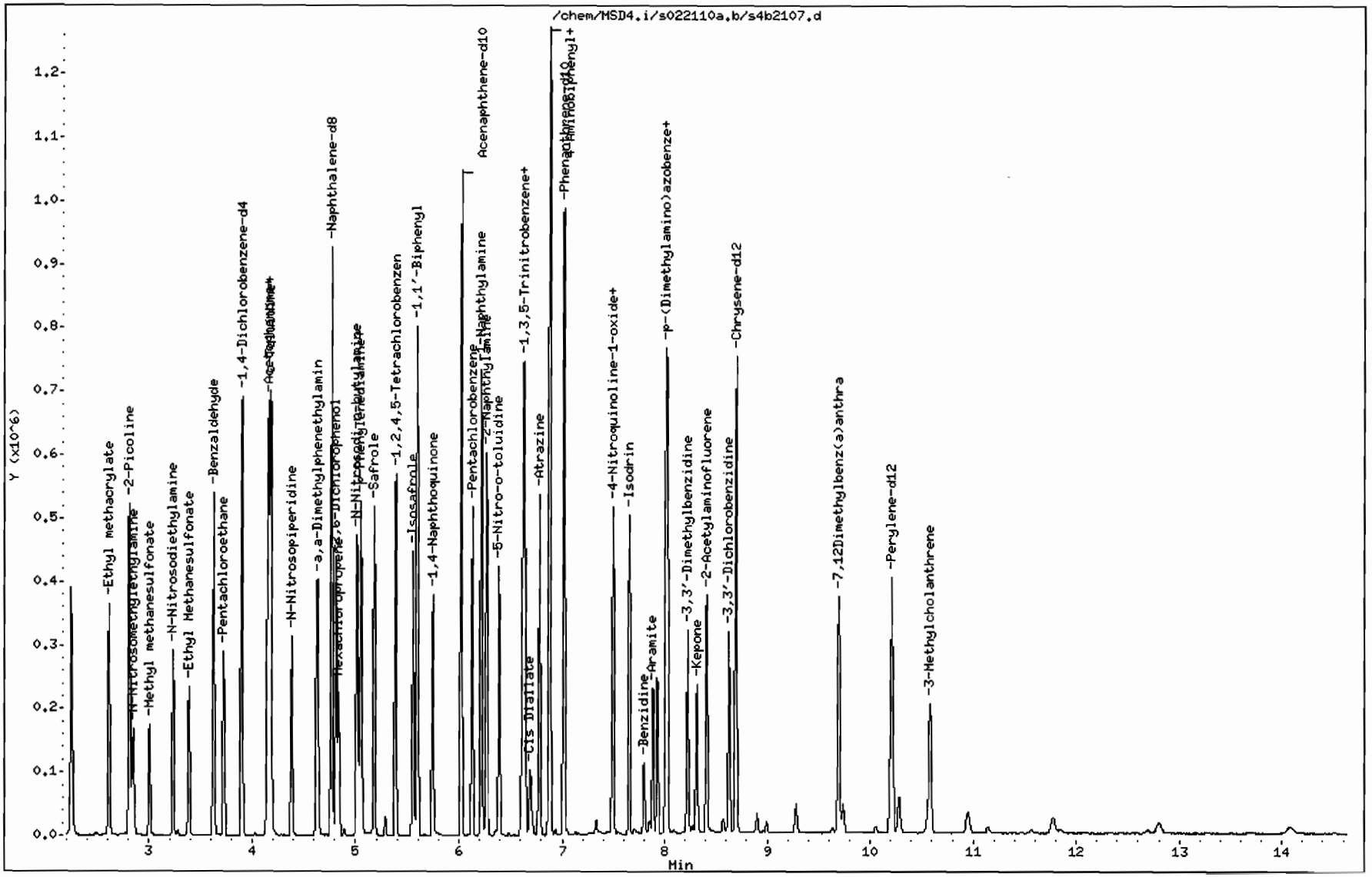
Sample Info: IWBN100218-05.3ICVSI1ISVMFI1IAPCVS

Column phase: J&W DB-5MS

Instrument: MSD4.i

Operator: JMB3

Column diameter: 0.20



QC Data

Data File: /chem/MSD4.i/s021610.b/s4b1603.d

Page 1

Date : 16-FEB-2010 09:30

Client ID: DFTPP

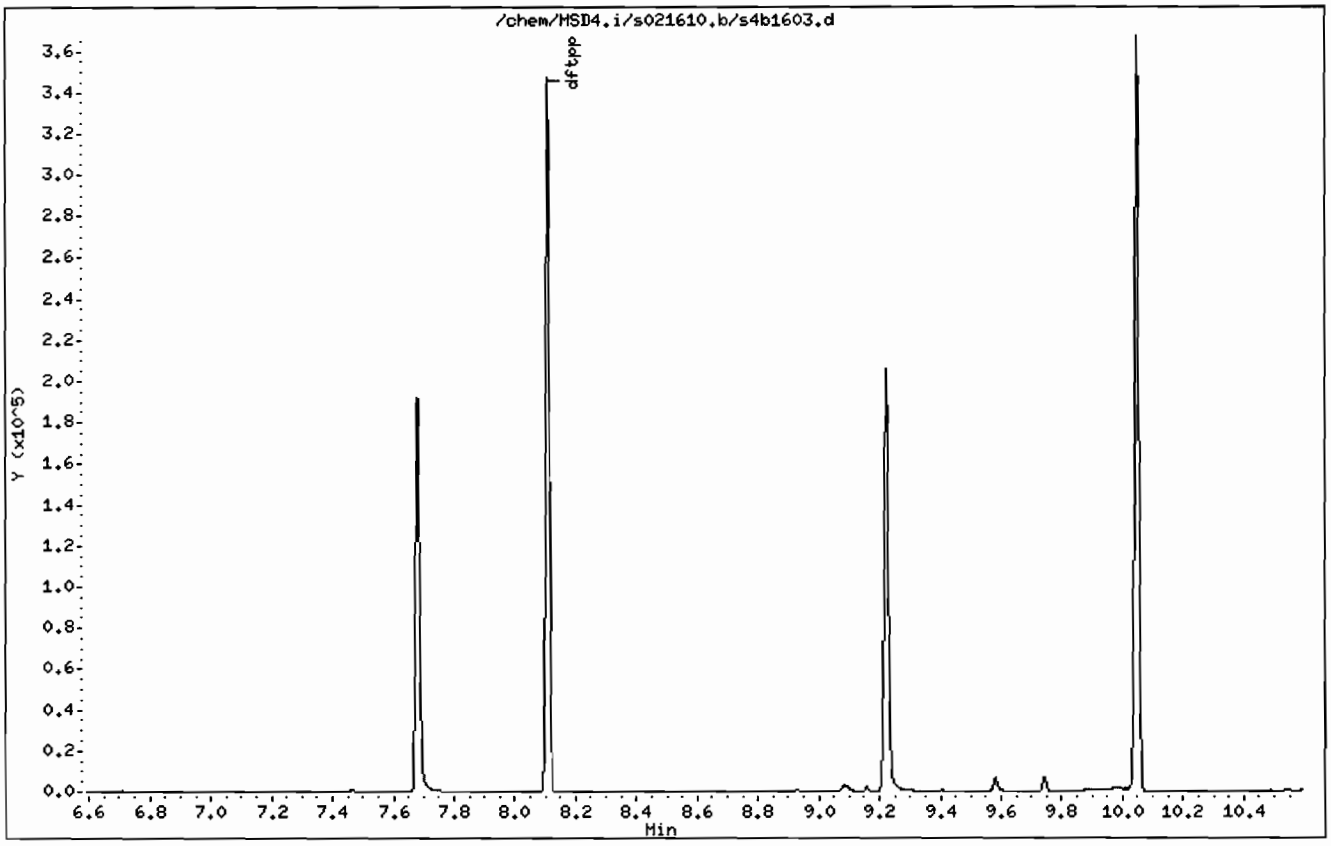
Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s021610.b/s4b1603.d

Date : 16-FEB-2010 09:30

Client ID: DFTPP

Instrument: MSD4.i

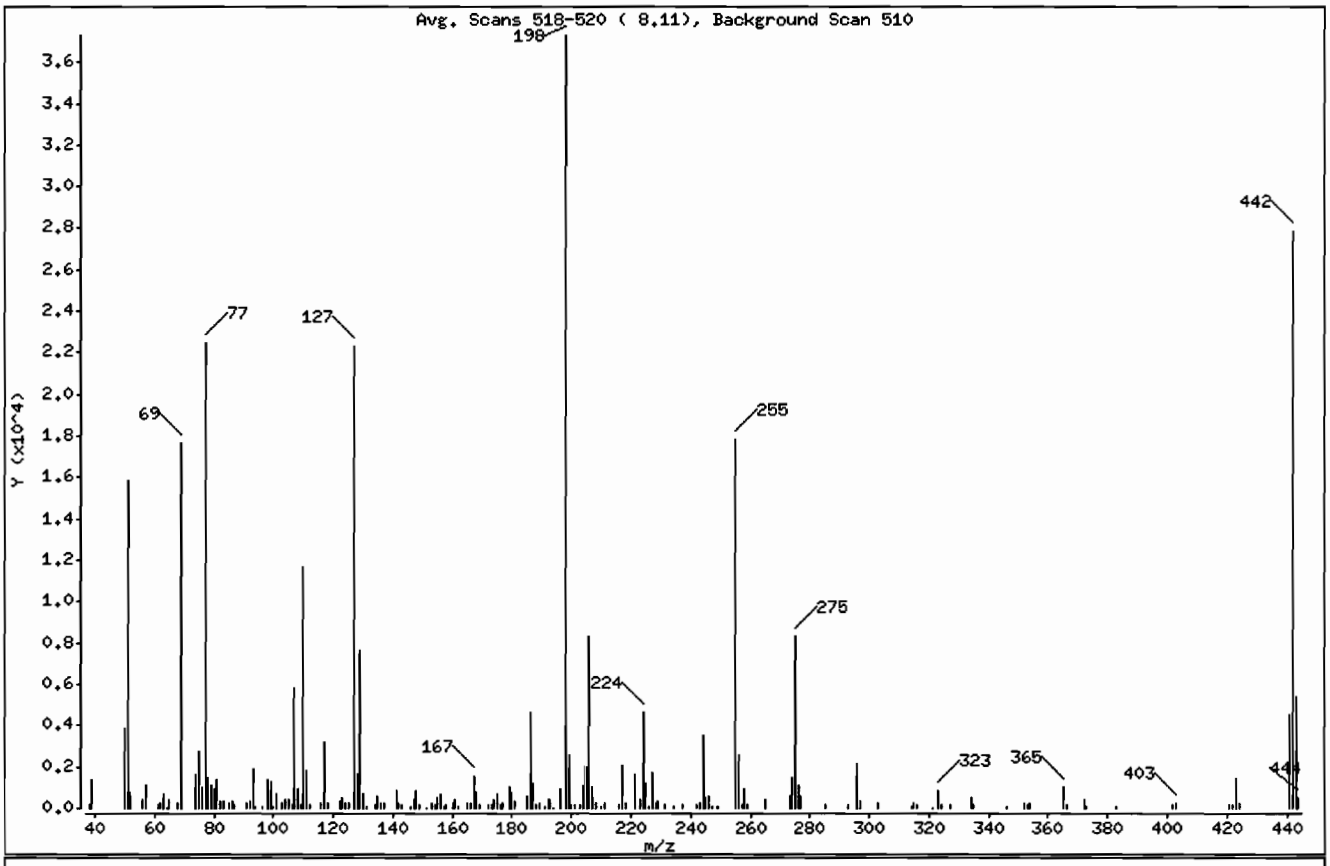
Sample Info: IWBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	42.52
68	Less than 2.00% of mass 69	0.69 (1.45)
69	Mass 69 relative abundance	47.41
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	59.85
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.88
275	10.00 - 30.00% of mass 198	22.19
365	Greater than 1.00% of mass 198	2.82
441	Present, but less than mass 443	12.14
442	Greater than 40.00% of mass 198	74.81
443	17.00 - 23.00% of mass 442	14.43 (19.29)

Date : 16-FEB-2010 09:30

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVHF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5HS Column diameter: 0.20

Data File: s4b1603.d
Spectrum: Avg. Scans 518-520 (8.11), Background Scan 510
Location of Maximum: 198.00
Number of points: 180

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	162	116.00	269	181.00	377	257.00	167
39.00	1340	117.00	3138	185.00	568	258.00	949
50.00	3842	118.00	217	186.00	4658	259.00	145
51.00	15863	122.00	347	187.00	1231	265.00	433
52.00	778	123.00	514	188.00	141	273.00	559
56.00	426	124.00	241	189.00	221	274.00	1488
57.00	1130	125.00	237	191.00	84	275.00	8278
61.00	177	127.00	22328	192.00	406	276.00	1148
62.00	252	128.00	1630	193.00	400	277.00	620
63.00	700	129.00	7646	194.00	33	285.00	146
64.00	35	130.00	699	196.00	976	293.00	148
65.00	402	131.00	77	198.00	37304	296.00	2173
68.00	256	134.00	159	199.00	2566	297.00	302
69.00	17688	135.00	609	200.00	207	303.00	280
74.00	1648	136.00	217	201.00	153	314.00	75
75.00	2721	137.00	274	203.00	195	315.00	229
76.00	1009	141.00	826	204.00	1109	316.00	151
77.00	22472	142.00	261	205.00	1971	321.00	34
78.00	1474	143.00	213	206.00	8360	323.00	840
79.00	1130	146.00	119	207.00	1036	324.00	159
80.00	937	147.00	410	208.00	222	327.00	145
81.00	1382	148.00	851	210.00	107	334.00	483
82.00	326	149.00	175	211.00	275	335.00	130
83.00	337	151.00	34	216.00	137	346.00	123
85.00	227	153.00	294	217.00	2031	352.00	230
86.00	342	154.00	209	218.00	259	353.00	146
87.00	148	155.00	499	221.00	1619	354.00	273
91.00	258	156.00	726	223.00	422	365.00	1053
92.00	309	157.00	114	224.00	4667	366.00	146
93.00	1849	158.00	171	225.00	1164	372.00	435
94.00	128	160.00	266	226.00	69	373.00	124
96.00	71	161.00	412	227.00	1705	383.00	123
98.00	1340	162.00	71	228.00	216	402.00	206
99.00	1312	165.00	262	229.00	355	403.00	220
100.00	116	166.00	275	231.00	146	421.00	210

Date : 16-FEB-2010 09:30

Client ID: DFTPP Instrument: MSD4.i

Sample Info: !WBN100207-01!DFTPP!1!SVMF!1!DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s4b1603.d
Spectrum: Avg. Scans 518-520 (8.11), Background Scan 510
Location of Maximum: 198.00
Number of points: 180

m/z	Y	m/z	Y	m/z	Y	m/z	Y
101.00	722	167.00	1525	234.00	77	422.00	196
103.00	222	168.00	746	237.00	130	423.00	1452
104.00	463	169.00	156	242.00	198	424.00	291
105.00	453	172.00	132	243.00	229	441.00	4531
106.00	149	173.00	195	244.00	3540	442.00	27904
107.00	5852	174.00	394	245.00	499	443.00	5383
108.00	913	175.00	678	246.00	576	444.00	500
109.00	143	176.00	161	247.00	123		
110.00	11683	177.00	286	249.00	113		
111.00	1762	179.00	1069	255.00	17856		
112.00	180	180.00	775	256.00	2548		

Data File: /chem/MSD4.i/s021710.b/s4b1702.d

Page 1

Date : 17-FEB-2010 17:07

Client ID: DFTPP

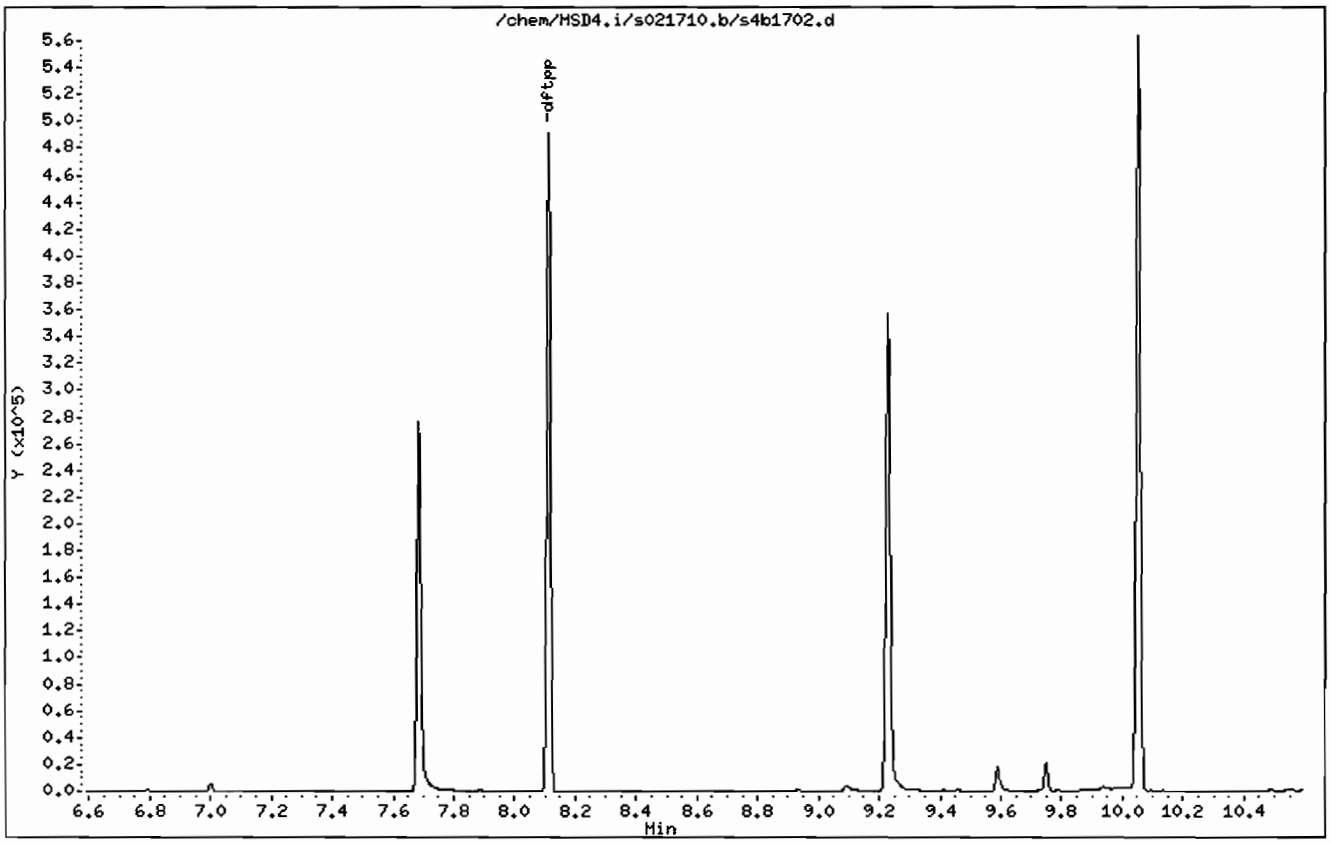
Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s021710.b/s4b1702.d

Date : 17-FEB-2010 17:07

Client ID: DFTPP

Instrument: MSD4.i

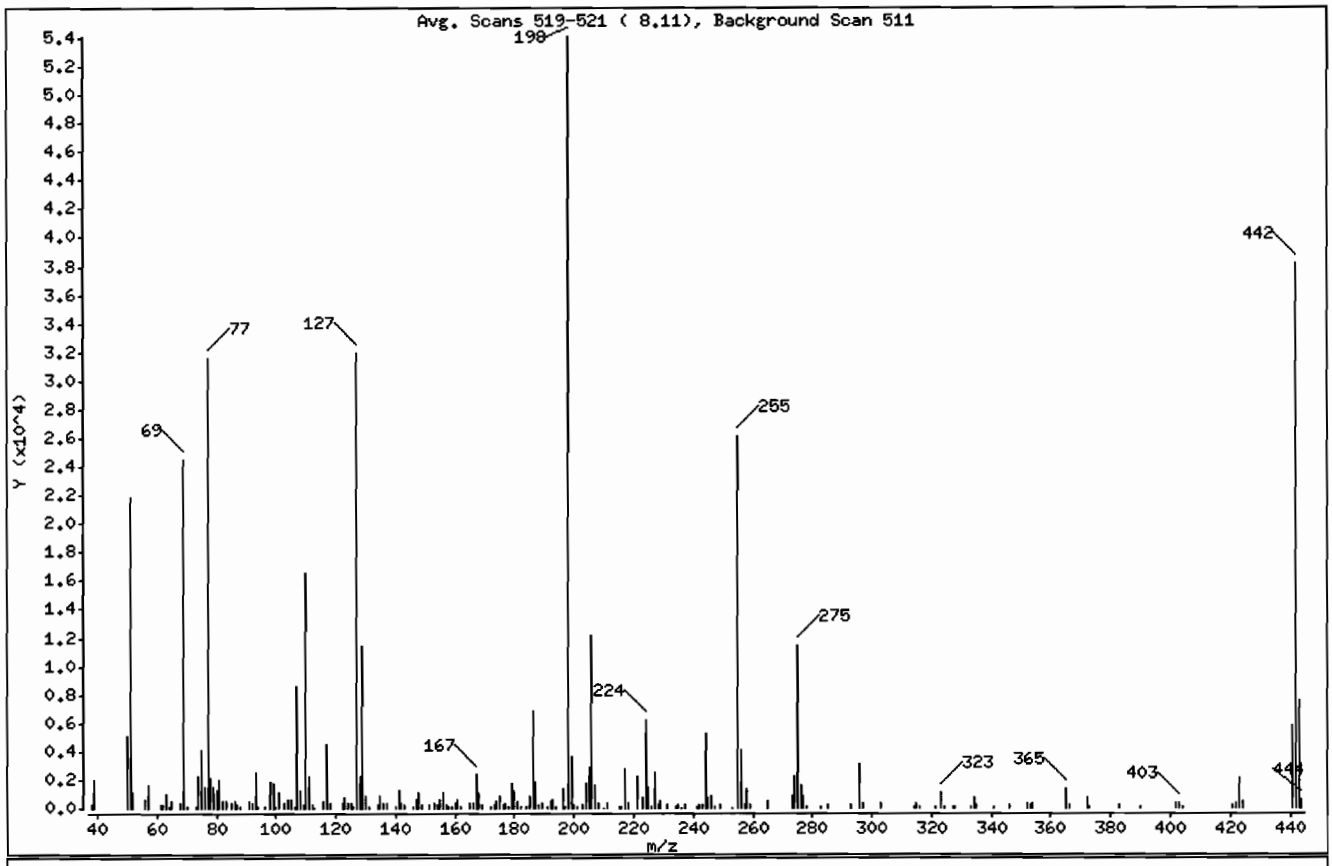
Sample Info: IWBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.39
68	Less than 2.00% of mass 69	0.59 (1.30)
69	Mass 69 relative abundance	45.37
70	Less than 2.00% of mass 69	0.26 (0.58)
127	40.00 - 60.00% of mass 198	58.97
197	Less than 1.00% of mass 198	0.27
199	5.00 - 9.00% of mass 198	6.77
275	10.00 - 30.00% of mass 198	21.23
365	Greater than 1.00% of mass 198	2.63
441	Present, but less than mass 443	10.85
442	Greater than 40.00% of mass 198	70.65
443	17.00 - 23.00% of mass 442	13.99 (19.80)

Date : 17-FEB-2010 17:07

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVHF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s4b1702.d
Spectrum: Avg. Scans 519-521 (8.11), Background Scan 511
Location of Maximum: 198.00
Number of points: 203

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	273	117.00	4500	184.00	95	256.00	4065
39.00	1948	118.00	354	185.00	813	257.00	286
50.00	5065	122.00	366	186.00	6841	258.00	1309
51.00	21856	123.00	744	187.00	1873	259.00	222
52.00	1077	124.00	372	188.00	191	265.00	528
56.00	680	125.00	386	189.00	316	273.00	830
57.00	1583	126.00	77	191.00	167	274.00	2267
61.00	268	127.00	31912	192.00	497	275.00	11487
62.00	283	128.00	2244	193.00	666	276.00	1569
63.00	980	129.00	11391	194.00	140	277.00	829
64.00	79	130.00	836	196.00	1325	278.00	90
65.00	517	131.00	174	197.00	147	283.00	79
68.00	319	134.00	247	198.00	54112	285.00	203
69.00	24552	135.00	896	199.00	3662	293.00	223
70.00	142	136.00	315	200.00	272	296.00	3115
73.00	142	137.00	420	201.00	155	297.00	419
74.00	2216	140.00	118	203.00	228	303.00	314
75.00	4139	141.00	1206	204.00	1730	314.00	185
76.00	1437	142.00	422	205.00	2848	315.00	326
77.00	31616	143.00	263	206.00	12246	316.00	185
78.00	2079	146.00	178	207.00	1625	321.00	153
79.00	1551	147.00	605	208.00	339	323.00	1162
80.00	1297	148.00	1132	210.00	35	324.00	167
81.00	2040	149.00	283	211.00	386	327.00	179
82.00	476	151.00	205	215.00	72	328.00	105
83.00	520	153.00	372	216.00	183	333.00	127
85.00	317	154.00	270	217.00	2788	334.00	781
86.00	453	155.00	678	218.00	347	335.00	196
87.00	215	156.00	1105	221.00	2216	341.00	150
88.00	122	157.00	226	223.00	715	346.00	252
91.00	460	158.00	153	224.00	6281	352.00	396
92.00	427	159.00	167	225.00	1548	353.00	276
93.00	2485	160.00	384	226.00	98	354.00	371
94.00	185	161.00	607	227.00	2510	365.00	1422
96.00	168	162.00	186	228.00	287	366.00	218

Date : 17-FEB-2010 17:07

Client ID: DFTPP Instrument: MSD4.i

Sample Info: !WBN100207-01!DFTPP!1!SVMF!1!DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s4b1702.d
Spectrum: Avg. Scans 519-521 (8.11), Background Scan 511
Location of Maximum: 198.00
Number of points: 203

m/z	Y	m/z	Y	m/z	Y	m/z	Y
98.00	1903	165.00	430	229.00	474	372.00	691
99.00	1773	166.00	356	231.00	201	373.00	110
100.00	130	167.00	2388	234.00	91	383.00	208
101.00	1060	168.00	1093	235.00	188	390.00	71
103.00	322	169.00	221	236.00	34	402.00	329
104.00	610	172.00	170	237.00	192	403.00	356
105.00	610	173.00	258	241.00	126	404.00	81
106.00	174	174.00	465	242.00	262	421.00	299
107.00	8596	175.00	909	243.00	275	422.00	353
108.00	1231	176.00	290	244.00	5265	423.00	2137
109.00	242	177.00	367	245.00	695	424.00	533
110.00	16544	178.00	70	246.00	834	441.00	5874
111.00	2209	179.00	1698	247.00	173	442.00	38232
112.00	292	180.00	1183	249.00	194	443.00	7570
113.00	34	181.00	556	253.00	33	444.00	664
116.00	438	182.00	81	255.00	26152		

Data File: /chem/MSD4.i/s022010.b/s4b2011.d

Date : 20-FEB-2010 14:19

Client ID: DFTPP

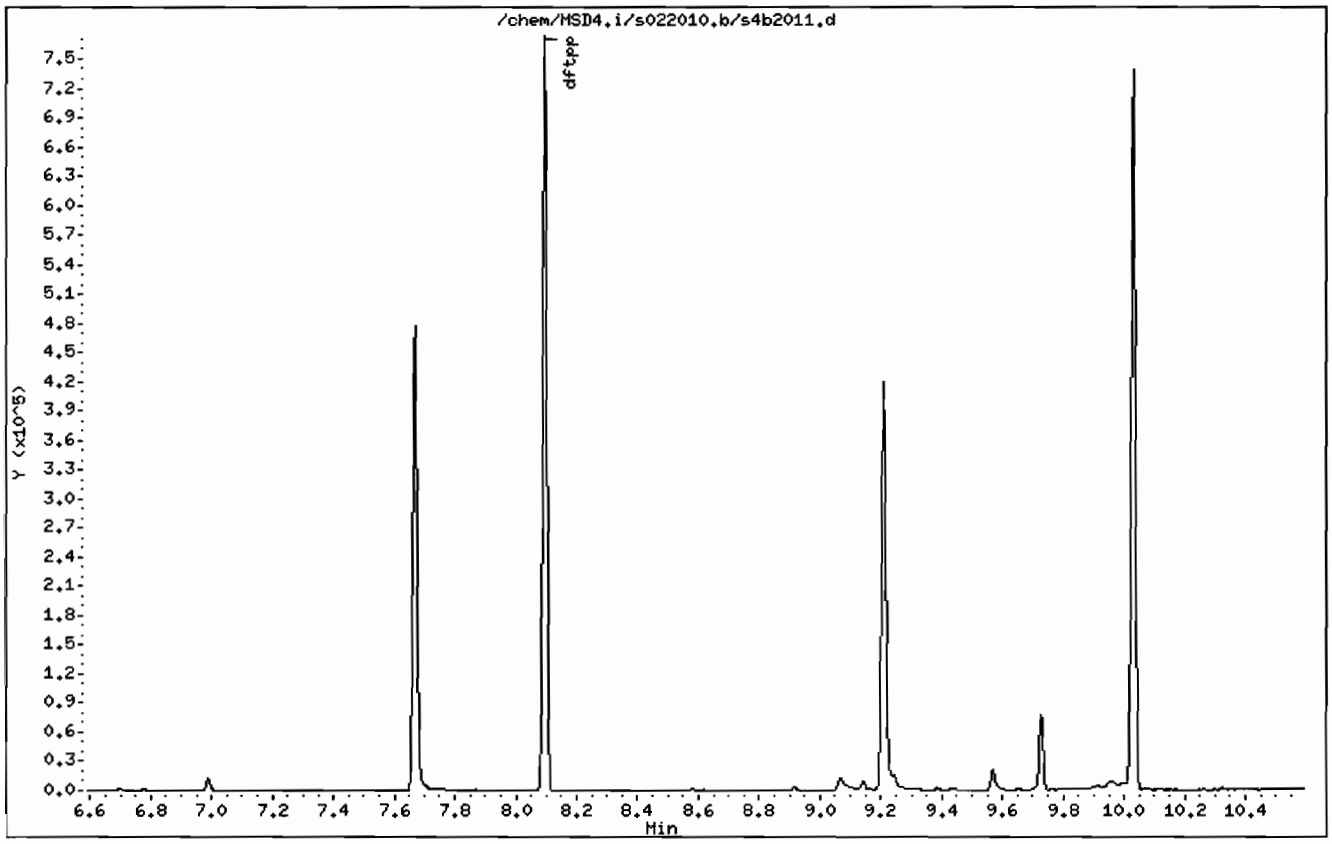
Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s022010.b/s4b2011.d

Date : 20-FEB-2010 14:19

Client ID: DFTPP

Instrument: MSD4.i

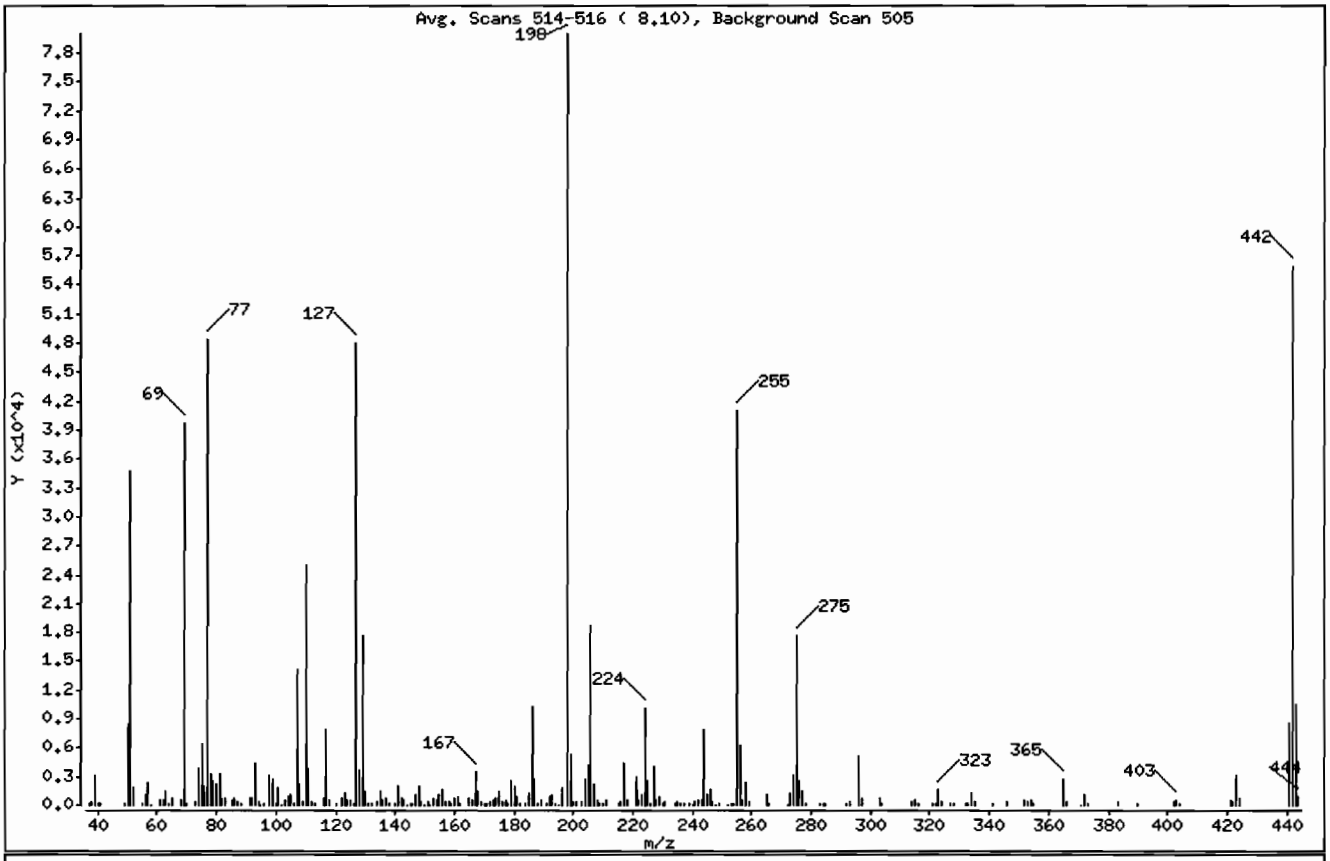
Sample Info: |WBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	43.51
68	Less than 2.00% of mass 69	0.75 (1.50)
69	Mass 69 relative abundance	49.65
70	Less than 2.00% of mass 69	0.17 (0.35)
127	40.00 - 60.00% of mass 198	59.94
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.74
275	10.00 - 30.00% of mass 198	22.05
365	Greater than 1.00% of mass 198	3.37
441	Present, but less than mass 443	10.79
442	Greater than 40.00% of mass 198	69.95
443	17.00 - 23.00% of mass 442	13.02 (18.61)

Date : 20-FEB-2010 14:19

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVHF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s4b2011.d
Spectrum: Avg. Scans 514-516 (8.10), Background Scan 505
Location of Maximum: 198.00
Number of points: 237

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	107	118.00	590	185.00	1362	258.00	2316
38.00	393	120.00	179	186.00	10301	259.00	276
39.00	3121	122.00	805	187.00	2686	265.00	1013
40.00	135	123.00	1267	188.00	246	266.00	145
41.00	137	124.00	572	189.00	620	272.00	91
49.00	223	125.00	586	191.00	274	273.00	1235
50.00	8414	126.00	129	192.00	928	274.00	3093
51.00	34816	127.00	47976	193.00	1079	275.00	17648
52.00	1886	128.00	3716	194.00	163	276.00	2520
55.00	117	129.00	17736	195.00	90	277.00	1475
56.00	1047	130.00	1459	196.00	1900	278.00	232
57.00	2436	131.00	258	198.00	80032	283.00	174
58.00	79	132.00	208	199.00	5395	284.00	121
61.00	464	134.00	387	200.00	374	285.00	259
62.00	516	135.00	1557	201.00	313	292.00	155
63.00	1410	136.00	544	203.00	458	293.00	300
64.00	184	137.00	675	204.00	2747	296.00	5163
65.00	799	138.00	169	205.00	4162	297.00	706
68.00	598	140.00	178	206.00	18848	303.00	716
69.00	39736	141.00	1964	207.00	2263	304.00	140
70.00	140	142.00	739	208.00	518	314.00	301
73.00	395	143.00	544	209.00	176	315.00	554
74.00	3828	144.00	77	210.00	270	316.00	265
75.00	6353	145.00	97	211.00	628	321.00	157
76.00	2093	146.00	235	215.00	153	322.00	113
77.00	48472	147.00	1152	216.00	403	323.00	1704
78.00	3314	148.00	1987	217.00	4499	324.00	316
79.00	2515	149.00	423	218.00	592	327.00	231
80.00	2132	150.00	73	221.00	2862	328.00	186
81.00	3283	151.00	366	222.00	631	332.00	154
82.00	735	152.00	43	223.00	1026	333.00	186
83.00	801	153.00	660	224.00	10154	334.00	1327
85.00	582	154.00	487	225.00	2596	335.00	277
86.00	761	155.00	1130	226.00	239	341.00	228
87.00	406	156.00	1611	227.00	4096	346.00	396

Date : 20-FEB-2010 14:19

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s4b2011.d
Spectrum: Avg. Scans 514-516 (8.10), Background Scan 505
Location of Maximum: 198.00
Number of points: 237

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	173	157.00	304	228.00	482	352.00	557
91.00	764	158.00	294	229.00	882	353.00	436
92.00	693	159.00	239	230.00	110	354.00	631
93.00	4401	160.00	692	231.00	322	355.00	118
94.00	387	161.00	924	234.00	214	365.00	2700
95.00	79	162.00	272	235.00	279	366.00	388
96.00	251	165.00	719	236.00	177	371.00	91
98.00	3123	166.00	562	237.00	254	372.00	1014
99.00	2793	167.00	3556	239.00	127	373.00	219
100.00	244	168.00	1490	240.00	67	383.00	357
101.00	1778	169.00	405	241.00	303	390.00	120
102.00	38	170.00	144	242.00	544	402.00	444
103.00	473	171.00	158	243.00	466	403.00	621
104.00	1008	172.00	365	244.00	7919	404.00	247
105.00	1135	173.00	470	245.00	1057	421.00	480
106.00	252	174.00	776	246.00	1639	422.00	447
107.00	14081	175.00	1518	247.00	279	423.00	3212
108.00	2151	176.00	386	248.00	75	424.00	693
109.00	334	177.00	538	249.00	246	441.00	8636
110.00	24952	178.00	179	252.00	75	442.00	55984
111.00	3841	179.00	2650	253.00	116	443.00	10418
112.00	393	180.00	2010	254.00	180	444.00	992
113.00	114	181.00	891	255.00	41000		
116.00	697	182.00	127	256.00	6311		
117.00	7955	184.00	191	257.00	495		

Data File: /chem/MSD4.i/s022110a.b/s4b2105.d

Date : 21-FEB-2010 11:21

Client ID: DFTPP

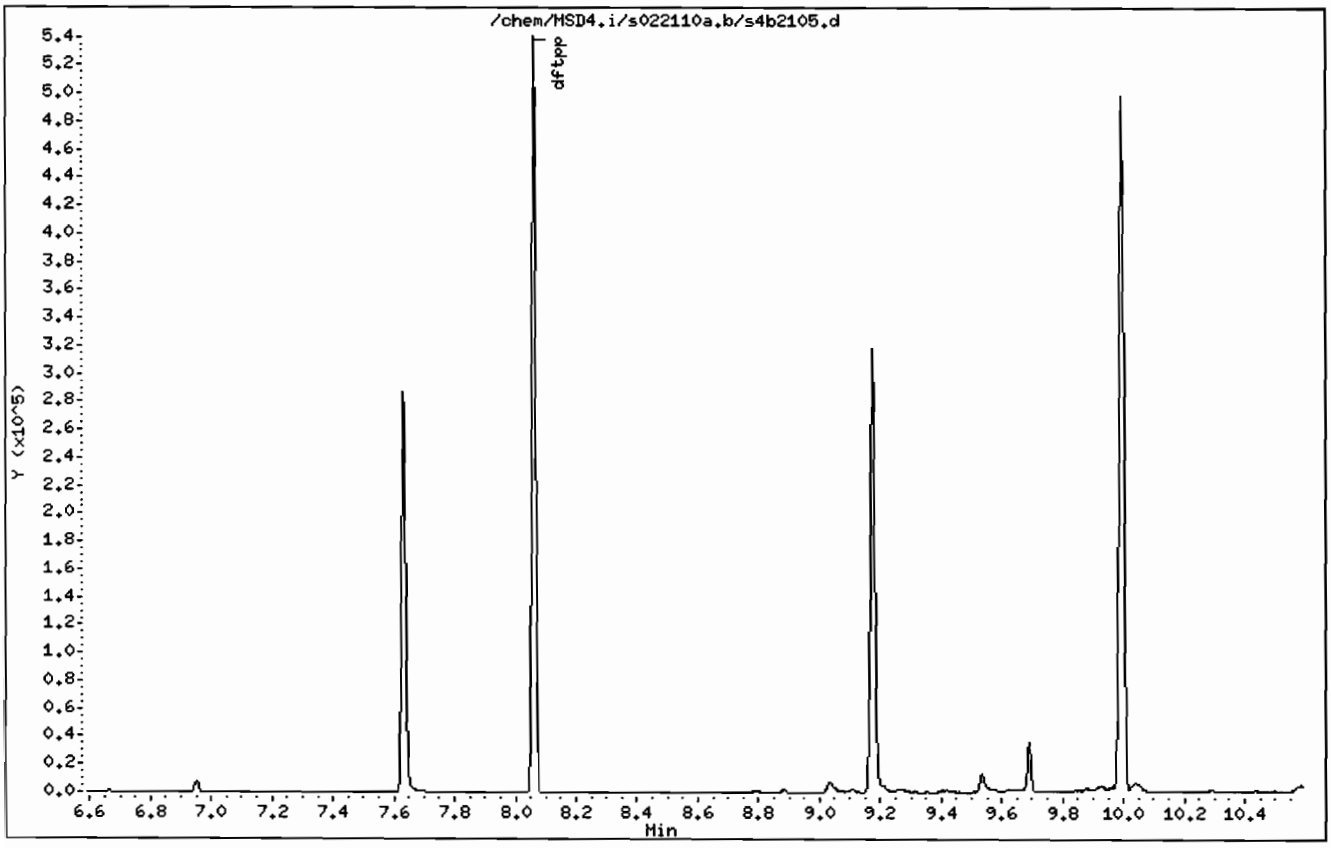
Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s022110a.b/s4b2105.d

Date : 21-FEB-2010 11:21

Client ID: DFTPP

Instrument: MSD4.i

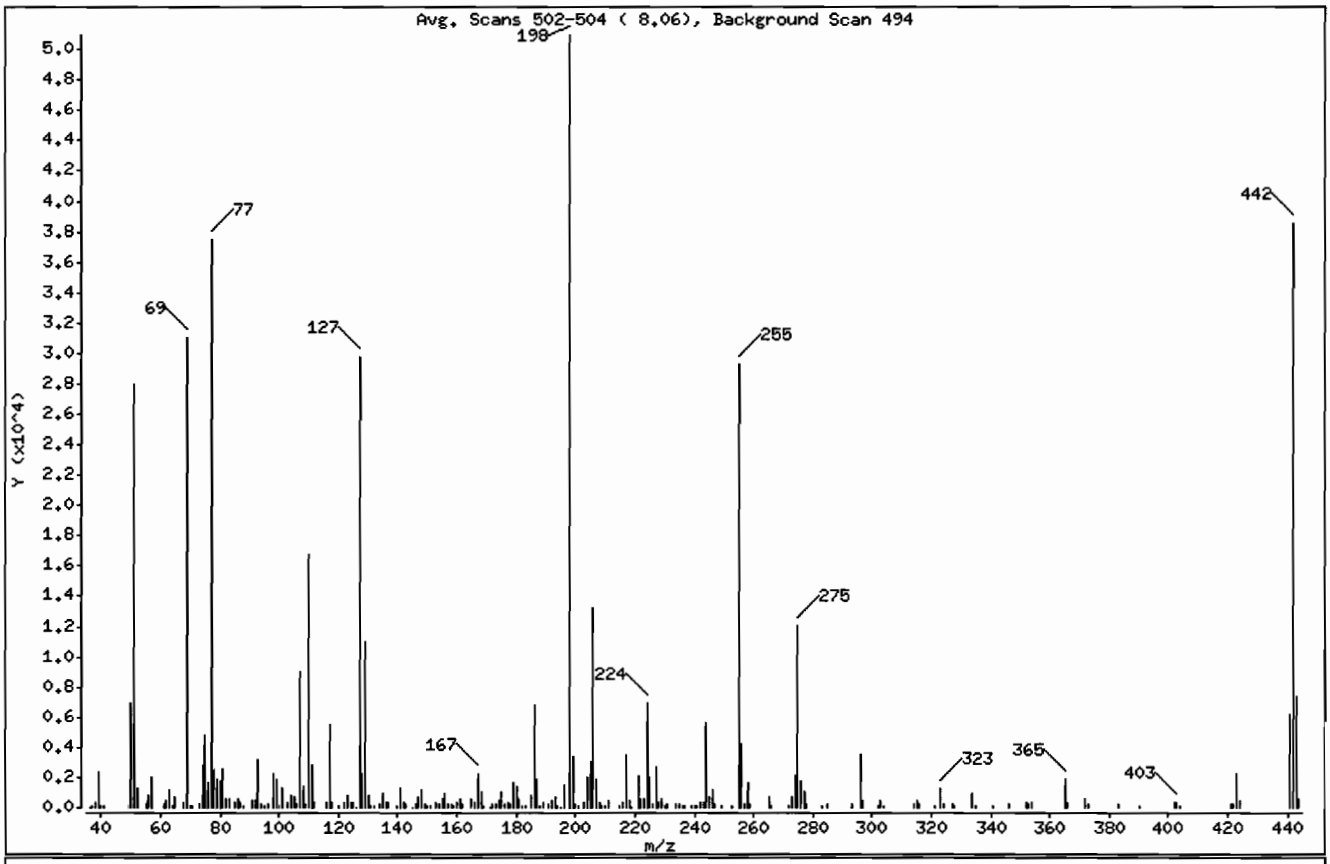
Sample Info: |WBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	54.93
68	Less than 2.00% of mass 69	0.80 (1.31)
69	Mass 69 relative abundance	60.92
70	Less than 2.00% of mass 69	0.32 (0.52)
127	40.00 - 60.00% of mass 198	58.28
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	23.78
365	Greater than 1.00% of mass 198	3.60
441	Present, but less than mass 443	12.22
442	Greater than 40.00% of mass 198	75.52
443	17.00 - 23.00% of mass 442	14.55 (19.27)

Date : 21-FEB-2010 11:21

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s4b2105.d
Spectrum: Avg. Scans 502-504 (8.06), Background Scan 494
Location of Maximum: 198.00
Number of points: 224

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	34	116.00	395	183.00	74	256.00	4273
37.00	71	117.00	5464	185.00	836	257.00	258
38.00	344	118.00	330	186.00	6802	258.00	1619
39.00	2389	120.00	138	187.00	1880	259.00	256
40.00	136	122.00	343	188.00	166	265.00	682
41.00	106	123.00	775	189.00	365	266.00	133
49.00	80	124.00	364	191.00	202	272.00	78
50.00	6909	125.00	317	192.00	510	273.00	742
51.00	27984	126.00	41	193.00	662	274.00	2094
52.00	1346	127.00	29696	194.00	146	275.00	12118
55.00	191	128.00	2238	195.00	33	276.00	1796
56.00	789	129.00	11007	196.00	1526	277.00	1064
57.00	2030	130.00	860	198.00	50952	278.00	187
61.00	292	131.00	153	199.00	3346	283.00	72
62.00	443	132.00	75	200.00	242	285.00	218
63.00	1133	134.00	260	201.00	173	293.00	200
64.00	168	135.00	890	203.00	335	296.00	3544
65.00	752	136.00	296	204.00	1997	297.00	527
68.00	408	137.00	374	205.00	2989	302.00	70
69.00	31040	140.00	127	206.00	13219	303.00	472
70.00	161	141.00	1302	207.00	1855	304.00	132
71.00	136	142.00	378	208.00	351	314.00	188
73.00	275	143.00	269	209.00	150	315.00	432
74.00	2840	145.00	37	210.00	127	316.00	261
75.00	4817	146.00	232	211.00	498	321.00	91
76.00	1612	147.00	677	215.00	69	323.00	1285
77.00	37496	148.00	1220	216.00	293	324.00	216
78.00	2465	149.00	253	217.00	3477	327.00	207
79.00	1882	150.00	119	218.00	462	328.00	124
80.00	1751	151.00	159	219.00	34	334.00	889
81.00	2568	153.00	389	221.00	2065	335.00	174
82.00	607	154.00	277	222.00	587	341.00	122
83.00	611	155.00	589	223.00	635	346.00	287
85.00	370	156.00	966	224.00	6918	352.00	307
86.00	594	157.00	198	225.00	1967	353.00	273

Date : 21-FEB-2010 11:21

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN100207-01|DFTPP|1|SVMF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS Column diameter: 0.20

Data File: s4b2105.d
Spectrum: Avg. Scans 502-504 (8.06), Background Scan 494
Location of Maximum: 198.00
Number of points: 224

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	316	158.00	176	226.00	190	354.00	363
88.00	81	159.00	133	227.00	2731	365.00	1834
91.00	465	160.00	333	228.00	353	366.00	293
92.00	525	161.00	530	229.00	591	372.00	625
93.00	3132	162.00	188	230.00	124	373.00	201
94.00	245	165.00	529	231.00	255	383.00	196
95.00	70	166.00	399	234.00	218	390.00	72
96.00	178	167.00	2258	235.00	241	402.00	344
98.00	2187	168.00	1101	236.00	127	403.00	373
99.00	1919	169.00	155	237.00	151	404.00	155
100.00	166	171.00	33	239.00	119	421.00	241
101.00	1290	172.00	268	240.00	115	422.00	286
103.00	350	173.00	204	241.00	159	423.00	2239
104.00	784	174.00	440	242.00	340	424.00	454
105.00	669	175.00	1048	243.00	307	441.00	6227
106.00	266	176.00	271	244.00	5635	442.00	38480
107.00	8963	177.00	360	245.00	691	443.00	7414
108.00	1393	178.00	180	246.00	1185	444.00	587
109.00	209	179.00	1627	247.00	212		
110.00	16792	180.00	1357	249.00	167		
111.00	2763	181.00	633	253.00	137		
112.00	294	182.00	77	255.00	29272		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202040333**				
Client Sample:	**QC for batch 951987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 951987**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 15:50**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2015-1.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	*o-Nitroaniline* 3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202040333**				
Client Sample:	**QC for batch 951987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 951987**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 15:50**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2015-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-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
	p-Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-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	2.97	416	ug/kg		J

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Data file : /chem/MSD4.i/s022010.b/s4b2015.d
Lab Smp Id: 1202040333 Client Smp ID: SBLK01
Inj Date : 20-FEB-2010 15:50
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |1202040333|951989|1|SVM|1|MB
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

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

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
*	10 1,4-Dichlorobenzene-d4	152	3.930	3.935	(1.000)	155481	40.0000	
*	29 Naphthalene-d8	136	4.797	4.802	(1.000)	613164	40.0000	
*	46 Acenaphthene-d10	164	6.048	6.053	(1.000)	323214	40.0000	
*	67 Phenanthrene-d10	188	7.043	7.043	(1.000)	481222	40.0000	
*	91 Chrysene-d12	240	8.744	8.754	(1.000)	349489	40.0000	
*	98 Perylene-d12	264	10.290	10.300	(1.000)	305670	40.0000	
$	3 2-Fluorophenol	112	3.122	3.117	(0.794)	326250	73.6390	2450
$	5 Phenol-d5	99	3.641	3.646	(0.926)	419027	75.2852	2510
$	20 Nitrobenzene-d5	82	4.294	4.299	(0.895)	176277	37.4370	1250
$	39 2-Fluorobiphenyl	172	5.540	5.545	(0.916)	324310	38.8604	1300
$	60 2,4,6-Tribromophenol	329	6.588	6.588	(1.089)	78669	77.8263	2590
$	81 p-Terphenyl-d14	244	7.968	7.968	(0.911)	286892	52.5128	1750

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Data file : /chem/MSD4.i/s022010.b/s4b2015.d
Lab Smp Id: 1202040333 Client Smp ID: SBLK01
Inj Date : 20-FEB-2010 15:50
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |1202040333|951989|1|SVM|1|MB
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

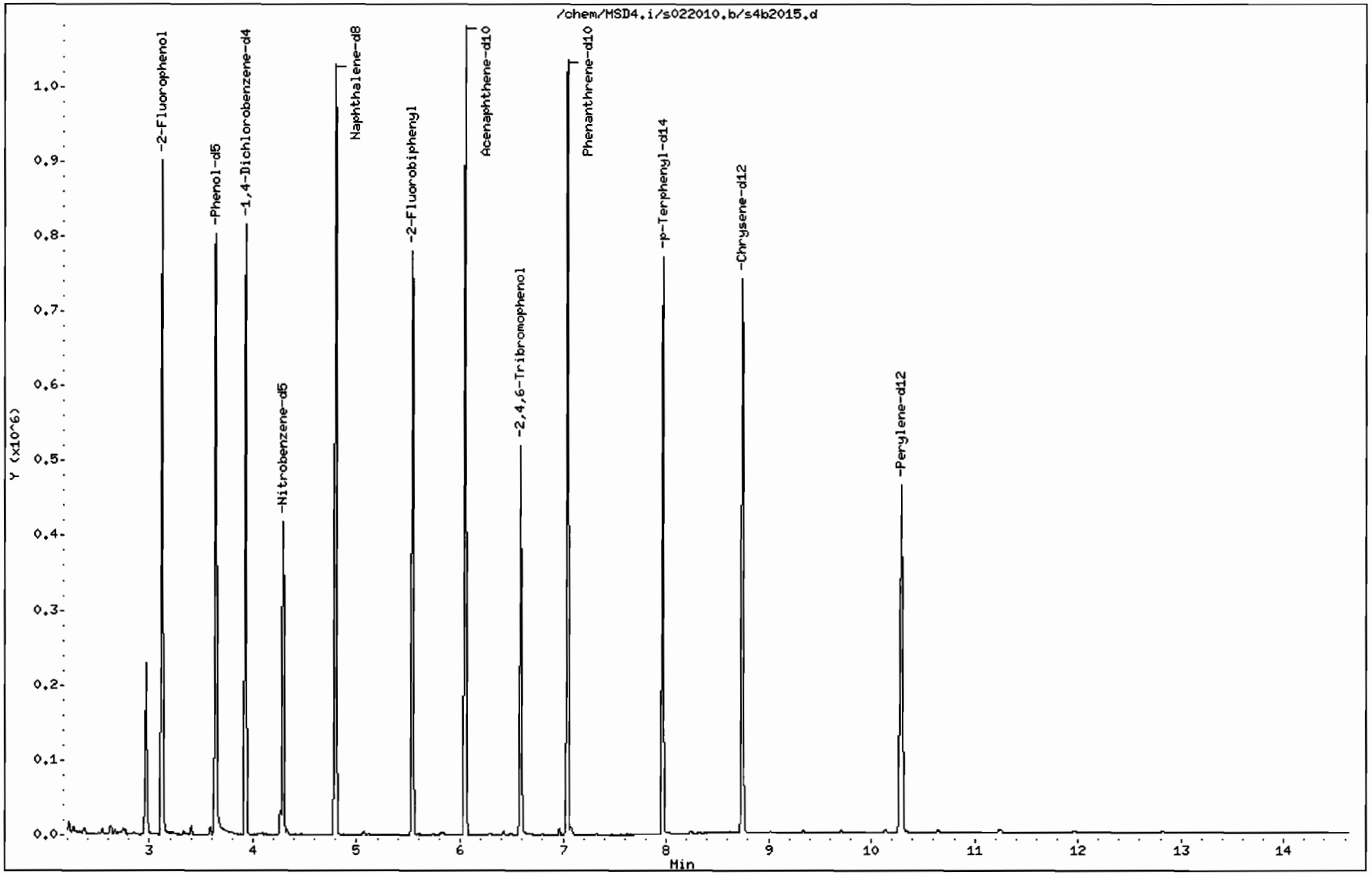
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.930	891446	40.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate			CAS #:				
2.967	278285	12.4868967	416	0		0	10

Data File: /chem/MSD4.i/s022010.b/s4b2015.d
Date : 20-FEB-2010 15:50
Client ID: SBLK01
Sample Info: 1120204033319519891 1 1 SVM 1 1 MB
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD4.i
Operator: JMB3
Column diameter: 0.20



Data File: /chem/MSD4.i/s022010.b/s4b2015.d

Date : 20-FEB-2010 15:50

Client ID: SBLK01

Instrument: MSD4.i

Sample Info: |120204033319519891|1|SVMI1|MB

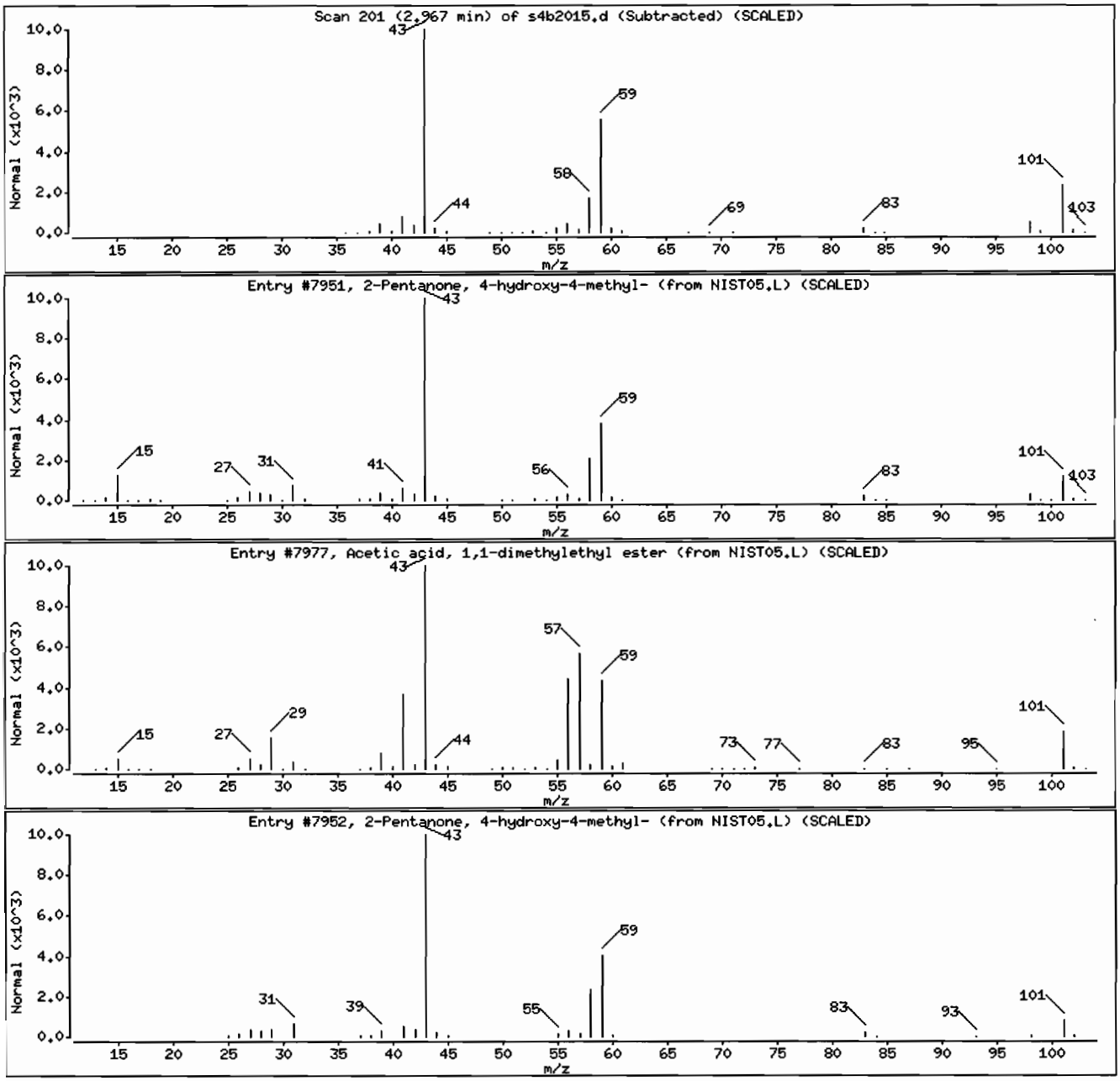
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	37	C6H12O2	116



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202040334**				
Client Sample:	**QC for batch 951987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 951987**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 16:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2016-1.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		1130	ug/kg	66.7	333
108-95-2	Phenol		1290	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1280	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1280	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1450	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1320	ug/kg	66.7	333
83-32-9	Acenaphthene		1130	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1320	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1110	ug/kg	110	333
87-86-5	Pentachlorophenol		1200	ug/kg	83.3	333
129-00-0	Pyrene		1430	ug/kg	10.0	33.3
110-86-1	Pyridine		1130	ug/kg	66.7	333
62-53-3	Aniline		1220	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1320	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1270	ug/kg	66.7	333
100-51-6	Benzyl alcohol		991	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1270	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1390	ug/kg	66.7	333
95-48-7	o-Cresol		1340	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1550	ug/kg	100	333
67-72-1	Hexachloroethane		1300	ug/kg	66.7	333
98-95-3	Nitrobenzene		1340	ug/kg	66.7	333
78-59-1	Isophorone		1230	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1150	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1380	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1220	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1190	ug/kg	66.7	333
65-85-0	Benzoic acid		1890	ug/kg	167	667
91-20-3	Naphthalene		1190	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1170	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1250	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1260	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1090	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1280	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1410	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1250	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1470	ug/kg	66.7	333
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1350	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202040334**				
Client Sample:	**QC for batch 951987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 951987**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 16:13**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2016-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1370	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1330	ug/kg	33.3	333
208-96-8	Acenaphthylene		1330	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		864	ug/kg	127	667
132-64-9	Dibenzofuran		1300	ug/kg	66.7	333
84-66-2	Diethylphthalate		1440	ug/kg	66.7	333
86-73-7	Fluorene		1100	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1300	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1060	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1660	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1540	ug/kg	66.7	333
122-66-7	Azobenzene		1610	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1300	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1340	ug/kg	66.7	333
85-01-8	Phenanthrene		1300	ug/kg	10.0	33.3
120-12-7	Anthracene		1270	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1470	ug/kg	66.7	333
206-44-0	Fluoranthene		1310	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1750	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1310	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1140	ug/kg	100	333
218-01-9	Chrysene		1290	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1660	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1650	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1320	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1430	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1400	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1540	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1550	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1520	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1230	ug/kg	66.7	333

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Data file : /chem/MSD4.i/s022010.b/s4b2016.d
Lab Smp Id: 1202040334 Client Smp ID: SBLK01LCS
Inj Date : 20-FEB-2010 16:13
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |1202040334|951989|1|SVM|1|LCS
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.930	3.935	(1.000)	168449	40.0000	
* 29 Naphthalene-d8	136	4.802	4.802	(1.000)	692313	40.0000	
* 46 Acenaphthene-d10	164	6.054	6.053	(1.000)	358752	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	546264	40.0000	
* 91 Chrysene-d12	240	8.739	8.754	(1.000)	439543	40.0000	
* 98 Perylene-d12	264	10.279	10.300	(1.000)	386215	40.0000	
$ 3 2-Fluorophenol	112	3.123	3.117	(0.794)	341935	71.2377	2370
$ 5 Phenol-d5	99	3.641	3.646	(0.926)	430621	71.4121	2380
$ 20 Nitrobenzene-d5	82	4.294	4.299	(0.894)	202939	38.1720	1270
$ 39 2-Fluorobiphenyl	172	5.545	5.545	(0.916)	343197	37.0499	1230
$ 60 2,4,6-Tribromophenol	329	6.594	6.588	(1.089)	94239	83.9941	2800
$ 81 p-Terphenyl-d14	244	7.963	7.968	(0.911)	343004	49.9204	1660

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.652	3.652	(0.929)	236585	38.5967	1290
8 2-Chlorophenol	128	3.796	3.796	(0.966)	193271	38.4614	1280
11 1,4-Dichlorobenzene	146	3.941	3.946	(1.003)	192236	38.2978	1280
17 N-Nitrosodipropylamine	70	4.171	4.176	(1.061)	149482	43.5255	1450(Q)
28 1,2,4-Trichlorobenzene	180	4.749	4.754	(0.989)	147498	36.7777	1220
33 4-Chloro-3-methylphenol	107	5.155	5.144	(1.073)	157735	39.5368	1320
47 Acenaphthene	154	6.075	6.080	(1.004)	309356	33.8404	1130
50 2,4-Dinitrotoluene	165	6.161	6.166	(1.018)	117060	39.6060	1320
52 4-Nitrophenol	139	6.102	6.091	(1.008)	55314	33.4270	1110
65 Pentachlorophenol	266	6.909	6.909	(0.981)	45395	35.9138	1200
79 Pyrene	202	7.915	7.920	(0.906)	513933	42.9008	1430
2 Pyridine	79	2.507	2.475	(0.638)	163758	33.8194	1130
4 Aniline	66	3.716	3.721	(0.946)	86650	36.4527	1220
7 bis(2-Chloroethyl) ether	63	3.727	3.732	(0.948)	142887	39.5677	1320
9 1,3-Dichlorobenzene	146	3.898	3.898	(0.992)	191048	38.1465	1270
12 Benzyl alcohol	108	4.000	3.999	(1.018)	82776	29.7310	991
13 1,2-Dichlorobenzene	146	4.043	4.048	(1.029)	174371	38.1451	1270
14 bis(2-Chloroisopropyl)ether	45	4.069	4.074	(1.035)	282497	41.8149	1390
15 o-Cresol	107	4.048	4.048	(1.030)	148663	40.2902	1340
18 m,p-Cresols	107	4.149	4.149	(1.056)	233880	46.5679	1550
19 Hexachloroethane	117	4.272	4.278	(1.087)	73356	38.9221	1300
21 Nitrobenzene	77	4.310	4.315	(0.898)	207168	40.2924	1340
22 Isophorone	82	4.460	4.470	(0.929)	394699	36.8126	1230
23 2-Nitrophenol	139	4.524	4.524	(0.942)	96218	34.5243	1150
24 2,4-Dimethylphenol	122	4.519	4.518	(0.941)	187881	41.4621	1380
25 bis(2-Chloroethoxy)methane	93	4.583	4.582	(0.954)	234298	36.5082	1220
26 2,4-Dichlorophenol	162	4.684	4.684	(0.975)	140519	35.7128	1190
27 Benzoic acid	105	4.583	4.577	(0.954)	188052	56.6127	1890
30 Naphthalene	128	4.818	4.818	(1.003)	565612	35.6734	1190
31 4-Chloroaniline	127	4.834	4.834	(1.007)	249371	35.0359	1170
32 Hexachlorobutadiene	225	4.877	4.877	(1.016)	74944	37.6053	1250
34 2-Methylnaphthalene	142	5.299	5.299	(1.104)	352422	37.9221	1260
36 Hexachlorocyclopentadiene	237	5.401	5.401	(0.892)	55128	32.8078	1090
37 2,4,6-Trichlorophenol	196	5.487	5.486	(0.906)	89420	38.4909	1280
38 2,4,5-Trichlorophenol	196	5.519	5.513	(0.912)	113394	42.2066	1410
40 2-Chloronaphthalene	162	5.652	5.652	(0.934)	323432	37.5531	1250
42 o-Nitroaniline	65	5.711	5.711	(0.943)	105115	44.0837	1470
41 m-Nitroaniline	138	6.005	6.011	(0.992)	90898	40.3941	1350
43 Dimethylphthalate	163	5.818	5.823	(0.961)	389435	41.0164	1370
44 2,6-Dinitrotoluene	165	5.877	5.877	(0.971)	90419	39.9289	1330
45 Acenaphthylene	152	5.957	5.962	(0.984)	523224	39.9211	1330
48 2,4-Dinitrophenol	184	6.075	6.075	(1.004)	22279	25.9165	864(Q)
49 Dibenzofuran	168	6.193	6.198	(1.023)	442008	39.1046	1300
51 Diethylphthalate	149	6.305	6.305	(1.042)	387050	43.3091	1440
53 Fluorene	166	6.428	6.428	(1.062)	328238	32.9670	1100
54 4-Chlorophenylphenylether	204	6.407	6.406	(1.058)	166481	39.1037	1300
55 2-Methyl-4,6-dinitrophenol	198	6.444	6.444	(0.915)	47167	31.8726	1060

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/Kg)
56 p-Nitroaniline	138	6.433	6.433	(1.063)	86502	49.8922	1660
133 Diphenylamine	169	6.487	6.487	(0.921)	333011	46.0663	1540
58 1,2-Diphenylhydrazine	77	6.514	6.513	(0.925)	455708	48.3461	1610
61 4-Bromophenylphenylether	248	6.733	6.733	(0.956)	92998	38.9201	1300
63 Hexachlorobenzene	284	6.792	6.791	(0.964)	103536	40.1573	1340
68 Phenanthrene	178	7.059	7.059	(1.002)	524882	38.9437	1300
69 Anthracene	178	7.091	7.091	(1.007)	519831	37.9718	1260
72 Di-n-butylphthalate	149	7.332	7.332	(1.041)	653310	44.2028	1470
76 Fluoranthene	202	7.776	7.776	(1.104)	497621	39.4260	1310
85 Butylbenzylphthalate	149	8.230	8.241	(0.942)	267075	52.5332	1750
89 Benzo(a)anthracene	228	8.728	8.738	(0.999)	406241	39.4436	1310
90 3,3'-Dichlorobenzidine	252	8.664	8.658	(0.991)	100622	34.0786	1140
92 Chrysene	228	8.760	8.776	(1.002)	400759	38.6761	1290
93 bis(2-Ethylhexyl)phthalate	149	8.605	8.615	(0.985)	363637	49.9026	1660
94 Di-n-octylphthalate	149	9.161	9.182	(0.891)	571506	49.4778	1650
95 Benzo(b)fluoranthene	252	9.782	9.803	(0.952)	361305	39.6558	1320(H)
96 Benzo(k)fluoranthene	252	9.814	9.835	(0.955)	395311	42.8812	1430
97 Benzo(a)pyrene	252	10.204	10.231	(0.993)	326500	41.9294	1400
99 Indeno(1,2,3-cd)pyrene	276	12.023	12.055	(1.170)	322083	46.0772	1540
100 Dibenzo(a,h)anthracene	278	12.028	12.055	(1.170)	268057	46.5889	1550
101 Benzo(ghi)perylene	276	12.558	12.589	(1.222)	262131	45.4949	1520
1 N-Methyl-N-nitrosomethylamine	74	2.465	2.443	(0.627)	117064	33.8657	1130

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD4.i/s022010.b/s4b2016.d

Date : 20-FEB-2010 16:13

Client ID: SBLK01LCS

Sample Info: |120204033419519891|1|SVMI1|LCS

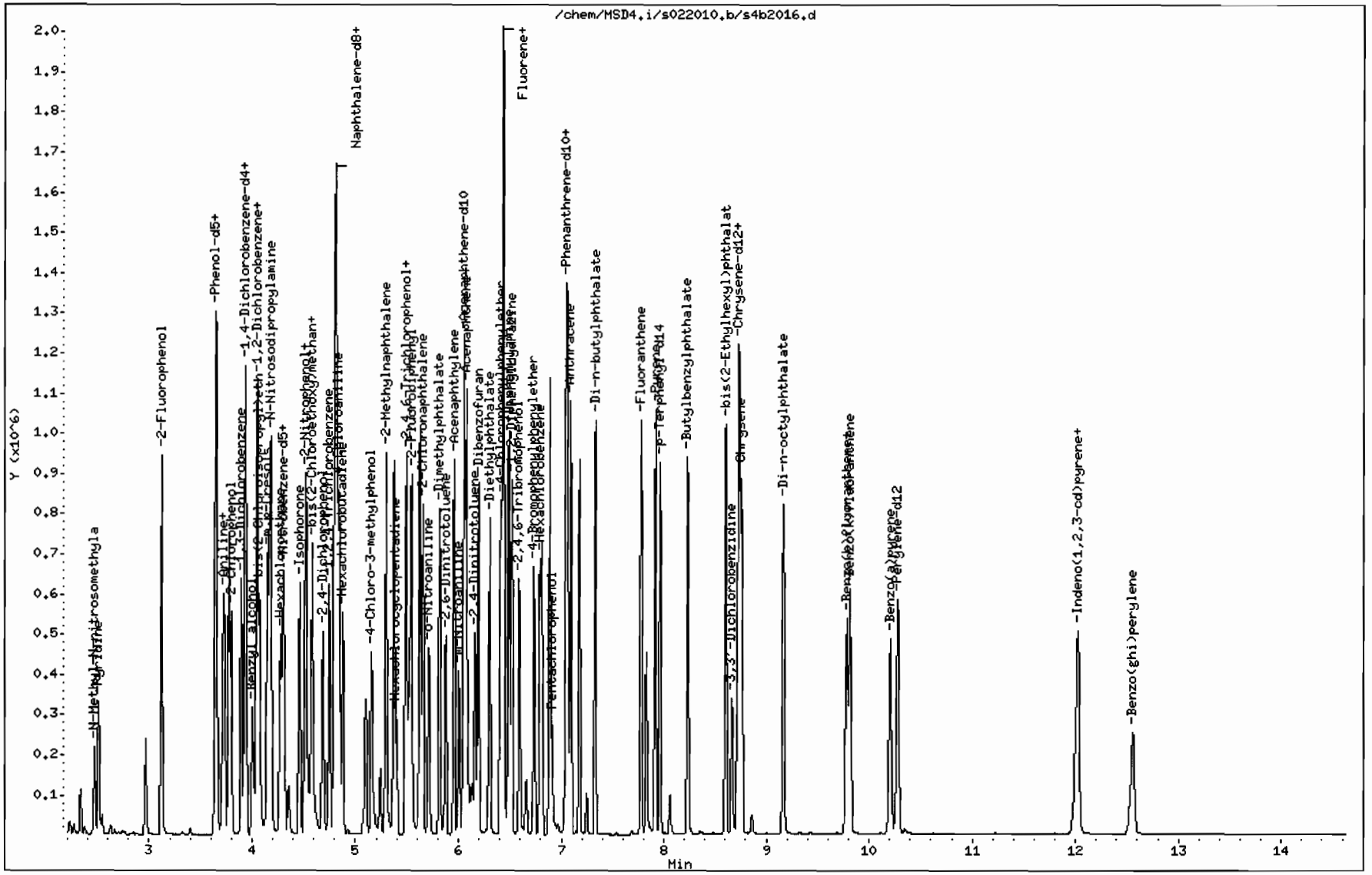
Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD4.i

Operator: JMB3

Column diameter: 0.20



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202040335**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
Client Sample:	**QC for batch 951987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8361MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:43**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2020.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		1330	ug/kg	80.9	404
108-95-2	Phenol		1560	ug/kg	80.9	404
95-57-8	2-Chlorophenol		1580	ug/kg	80.9	404
106-46-7	1,4-Dichlorobenzene		1530	ug/kg	80.9	404
621-64-7	N-Nitrosodipropylamine		1760	ug/kg	80.9	404
59-50-7	4-Chloro-3-methylphenol		1560	ug/kg	80.9	404
83-32-9	Acenaphthene		1370	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene		1500	ug/kg	40.4	404
100-02-7	4-Nitrophenol		1480	ug/kg	133	404
87-86-5	Pentachlorophenol		1810	ug/kg	101	404
129-00-0	Pyrene		1710	ug/kg	12.1	40.4
110-86-1	Pyridine		1330	ug/kg	80.9	404
62-53-3	Aniline		1420	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether		1570	ug/kg	80.9	404
541-73-1	1,3-Dichlorobenzene		1480	ug/kg	80.9	404
100-51-6	Benzyl alcohol		1020	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene		1520	ug/kg	80.9	404
108-60-1	bis(2-Chloroisopropyl)ether		1690	ug/kg	80.9	404
95-48-7	o-Cresol		1720	ug/kg	80.9	404
65794-96-9	m,p-Cresols		1920	ug/kg	121	404
67-72-1	Hexachloroethane		1550	ug/kg	80.9	404
98-95-3	Nitrobenzene		1600	ug/kg	80.9	404
78-59-1	Isophorone		1460	ug/kg	80.9	404
88-75-5	2-Nitrophenol		1340	ug/kg	80.9	404
105-67-9	2,4-Dimethylphenol		1730	ug/kg	142	404
111-91-1	bis(2-Chloroethoxy)methane		1430	ug/kg	80.9	404
120-83-2	2,4-Dichlorophenol		1410	ug/kg	80.9	404
65-85-0	Benzoic acid		3180	ug/kg	202	809
91-20-3	Naphthalene		1410	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline		1340	ug/kg	80.9	404
87-68-3	Hexachlorobutadiene		1460	ug/kg	80.9	404
91-57-6	2-Methylnaphthalene		1500	ug/kg	8.09	40.4
77-47-4	Hexachlorocyclopentadiene		1220	ug/kg	80.9	404
88-06-2	2,4,6-Trichlorophenol		1500	ug/kg	80.9	404
95-95-4	2,4,5-Trichlorophenol		1810	ug/kg	80.9	404
91-58-7	2-Chloronaphthalene		1510	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline		1740	ug/kg	80.9	404
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1510	ug/kg	80.9	404

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202040335**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
Client Sample:	**QC for batch 951987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8361MS**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 17:43**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.17 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2020.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1650	ug/kg	80.9	404
606-20-2	2,6-Dinitrotoluene		1540	ug/kg	40.4	404
208-96-8	Acenaphthylene		1590	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol		1340	ug/kg	154	809
132-64-9	Dibenzofuran		1560	ug/kg	80.9	404
84-66-2	Diethylphthalate		1650	ug/kg	80.9	404
86-73-7	Fluorene		1320	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether		1500	ug/kg	80.9	404
534-52-1	2-Methyl-4,6-dinitrophenol		1390	ug/kg	80.9	404
100-01-6	4-Nitroaniline		1800	ug/kg	121	404
	p-Nitroaniline					
122-39-4	Diphenylamine		1800	ug/kg	80.9	404
122-66-7	Azobenzene		1910	ug/kg	80.9	404
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1550	ug/kg	80.9	404
118-74-1	Hexachlorobenzene		1540	ug/kg	80.9	404
85-01-8	Phenanthrene		1520	ug/kg	12.1	40.4
120-12-7	Anthracene		1470	ug/kg	8.09	40.4
84-74-2	Di-n-butylphthalate		1690	ug/kg	80.9	404
206-44-0	Fluoranthene		1490	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate		2230	ug/kg	80.9	404
56-55-3	Benzo(a)anthracene		1530	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine		1090	ug/kg	121	404
218-01-9	Chrysene		1510	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate		2150	ug/kg	80.9	404
117-84-0	Di-n-octylphthalate		2830	ug/kg	80.9	404
205-99-2	Benzo(b)fluoranthene		1760	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene		1750	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene		1690	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene		1440	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene		1470	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene		1350	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene		1430	ug/kg	80.9	404

GEL Laboratories LLC

GEL Laboratories, LLC
Data file : /chem/MSD4.i/s022010.b/s4b2020.d
Lab Smp Id: 1202040335 Client Smp ID: RE15-10-8361MS
Inj Date : 20-FEB-2010 17:43
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |1202040335|951989|1|SVM|1|MS_LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 9 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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	30.17000	weight of sample
M	18.04950	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.930	3.935	(1.000)	164768	40.0000	
* 29 Naphthalene-d8	136	4.802	4.802	(1.000)	687299	40.0000	
* 46 Acenaphthene-d10	164	6.053	6.053	(1.000)	339314	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	500757	40.0000	
* 91 Chrysene-d12	240	8.738	8.754	(1.000)	384101	40.0000	
* 98 Perylene-d12	264	10.273	10.300	(1.000)	241370	40.0000	
$ 3 2-Fluorophenol	112	3.128	3.117	(0.796)	327243	69.6999	2820
$ 5 Phenol-d5	99	3.646	3.646	(0.928)	405511	68.7503	2780
$ 20 Nitrobenzene-d5	82	4.294	4.299	(0.894)	190077	36.0136	1460
$ 39 2-Fluorobiphenyl	172	5.545	5.545	(0.916)	309370	35.3113	1430
$ 60 2,4,6-Tribromophenol	329	6.594	6.588	(1.089)	84114	79.2646	3200
$ 81 p-Terphenyl-d14	244	7.963	7.968	(0.911)	277545	46.2241	1870

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6	Phenol	94	3.652	3.652	(0.929)	231578	38.6239	1560
8	2-Chlorophenol	128	3.796	3.796	(0.966)	192547	39.1733	1580
11	1,4-Dichlorobenzene	146	3.941	3.946	(1.003)	185933	37.8697	1530
17	N-Nitrosodipropylamine	70	4.171	4.176	(1.061)	146309	43.5534	1760(Q)
28	1,2,4-Trichlorobenzene	180	4.748	4.754	(0.989)	140877	35.3830	1430
33	4-Chloro-3-methylphenol	107	5.155	5.144	(1.073)	152277	38.4471	1560
47	Acenaphthene	154	6.075	6.080	(1.004)	291995	33.7711	1360
50	2,4-Dinitrotoluene	165	6.160	6.166	(1.018)	103875	37.1583	1500
52	4-Nitrophenol	139	6.107	6.091	(1.009)	58560	36.6301	1480
65	Pentachlorophenol	266	6.909	6.909	(0.981)	51857	44.7545	1810
79	Pyrene	202	7.915	7.920	(0.906)	441832	42.2058	1710
2	Pyridine	79	2.502	2.475	(0.637)	155454	32.8216	1330
4	Aniline	66	3.716	3.721	(0.946)	81519	35.0603	1420
7	bis(2-Chloroethyl) ether	63	3.732	3.732	(0.950)	137184	38.8371	1570
9	1,3-Dichlorobenzene	146	3.898	3.898	(0.992)	179288	36.5981	1480
12	Benzyl alcohol	108	3.999	3.999	(1.018)	68483	25.1469	1020
13	1,2-Dichlorobenzene	146	4.048	4.048	(1.030)	168075	37.5892	1520
14	bis(2-Chloroisopropyl)ether	45	4.074	4.074	(1.037)	275476	41.6866	1690
15	o-Cresol	107	4.053	4.048	(1.031)	153525	42.5375	1720
18	m,p-Cresols	107	4.149	4.149	(1.056)	233707	47.5730	1920
19	Hexachloroethane	117	4.272	4.278	(1.087)	70681	38.3406	1550
21	Nitrobenzene	77	4.310	4.315	(0.898)	201598	39.4952	1600
22	Isophorone	82	4.459	4.470	(0.929)	384237	36.0983	1460
23	2-Nitrophenol	139	4.524	4.524	(0.942)	91467	33.0590	1340
24	2,4-Dimethylphenol	122	4.518	4.518	(0.941)	192079	42.6977	1730
25	bis(2-Chloroethoxy)methane	93	4.582	4.582	(0.954)	225854	35.4492	1430
26	2,4-Dichlorophenol	162	4.689	4.684	(0.977)	136307	34.8950	1410
27	Benzoic acid	105	4.599	4.577	(0.958)	280989	78.6385	3180
30	Naphthalene	128	4.818	4.818	(1.003)	549897	34.9353	1410
31	4-Chloroaniline	127	4.834	4.834	(1.007)	233800	33.0878	1340
32	Hexachlorobutadiene	225	4.877	4.877	(1.016)	71175	35.9746	1460
34	2-Methylnaphthalene	142	5.299	5.299	(1.104)	341123	36.9741	1500
36	Hexachlorocyclopentadiene	237	5.401	5.401	(0.892)	48111	30.2720	1220
37	2,4,6-Trichlorophenol	196	5.486	5.486	(0.906)	81555	37.1165	1500
38	2,4,5-Trichlorophenol	196	5.524	5.513	(0.913)	113669	44.7327	1810
40	2-Chloronaphthalene	162	5.652	5.652	(0.934)	304535	37.3846	1510
42	o-Nitroaniline	65	5.711	5.711	(0.943)	96843	42.9412	1740
41	m-Nitroaniline	138	6.005	6.011	(0.992)	79046	37.3814	1510
43	Dimethylphthalate	163	5.818	5.823	(0.961)	366774	40.8426	1650
44	2,6-Dinitrotoluene	165	5.877	5.877	(0.971)	81714	38.1520	1540
45	Acenaphthylene	152	5.957	5.962	(0.984)	488665	39.4202	1590
48	2,4-Dinitrophenol	184	6.075	6.075	(1.004)	26937	33.1301	1340(Q)
49	Dibenzofuran	168	6.192	6.198	(1.023)	412740	38.6071	1560
51	Diethylphthalate	149	6.305	6.305	(1.042)	345502	40.8747	1650
53	Fluorene	166	6.428	6.428	(1.062)	306320	32.5281	1320
54	4-Chlorophenylphenylether	204	6.406	6.406	(1.058)	149340	37.0870	1500
55	2-Methyl-4,6-dinitrophenol	198	6.444	6.444	(0.915)	46660	34.3953	1390

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/Kg)
56	p-Nitroaniline	138	6.433	6.433	(1.063)	72971	44.4989	1800
133	Diphenylamine	169	6.487	6.487	(0.921)	295353	44.5699	1800
58	1,2-Diphenylhydrazine	77	6.513	6.513	(0.925)	408848	47.3164	1910
61	4-Bromophenylphenylether	248	6.733	6.733	(0.956)	83886	38.2971	1550
63	Hexachlorobenzene	284	6.791	6.791	(0.964)	89965	38.0647	1540
68	Phenanthrene	178	7.059	7.059	(1.002)	465351	37.6645	1520
69	Anthracene	178	7.091	7.091	(1.007)	457431	36.4502	1470
72	Di-n-butylphthalate	149	7.332	7.332	(1.041)	566624	41.8217	1690
76	Fluoranthene	202	7.776	7.776	(1.104)	427195	36.9221	1490
85	Butylbenzylphthalate	149	8.230	8.241	(0.942)	244898	55.1241	2230
89	Benzo(a)anthracene	228	8.728	8.738	(0.999)	340111	37.7893	1530
90	3,3'-Dichlorobenzidine	252	8.664	8.658	(0.991)	69359	26.8811	1090
92	Chrysene	228	8.760	8.776	(1.002)	338869	37.4237	1510
93	bis(2-Ethylhexyl)phthalate	149	8.605	8.615	(0.985)	338211	53.1127	2150
94	Di-n-octylphthalate	149	9.166	9.182	(0.892)	504853	69.9359	2830
95	Benzo(b)fluoranthene	252	9.781	9.803	(0.952)	247083	43.3932	1760(H)
96	Benzo(k)fluoranthene	252	9.813	9.835	(0.955)	249746	43.3484	1750
97	Benzo(a)pyrene	252	10.204	10.231	(0.993)	203476	41.8114	1690
99	Indeno(1,2,3-cd)pyrene	276	12.006	12.055	(1.169)	155902	35.6875	1440
100	Dibenzo(a,h)anthracene	278	12.017	12.055	(1.170)	131116	36.4633	1470
101	Benzo(ghi)perylene	276	12.547	12.589	(1.221)	120330	33.4168	1350
1	N-Methyl-N-nitrosomethylamine	74	2.464	2.443	(0.627)	111001	32.8292	1330

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD4.i/s022010.b/s4b2020.d

Date : 20-FEB-2010 17:43

Client ID: RE15-10-8361MS

Sample Info: 1120204033519519891|SVMI1|MS_LANL

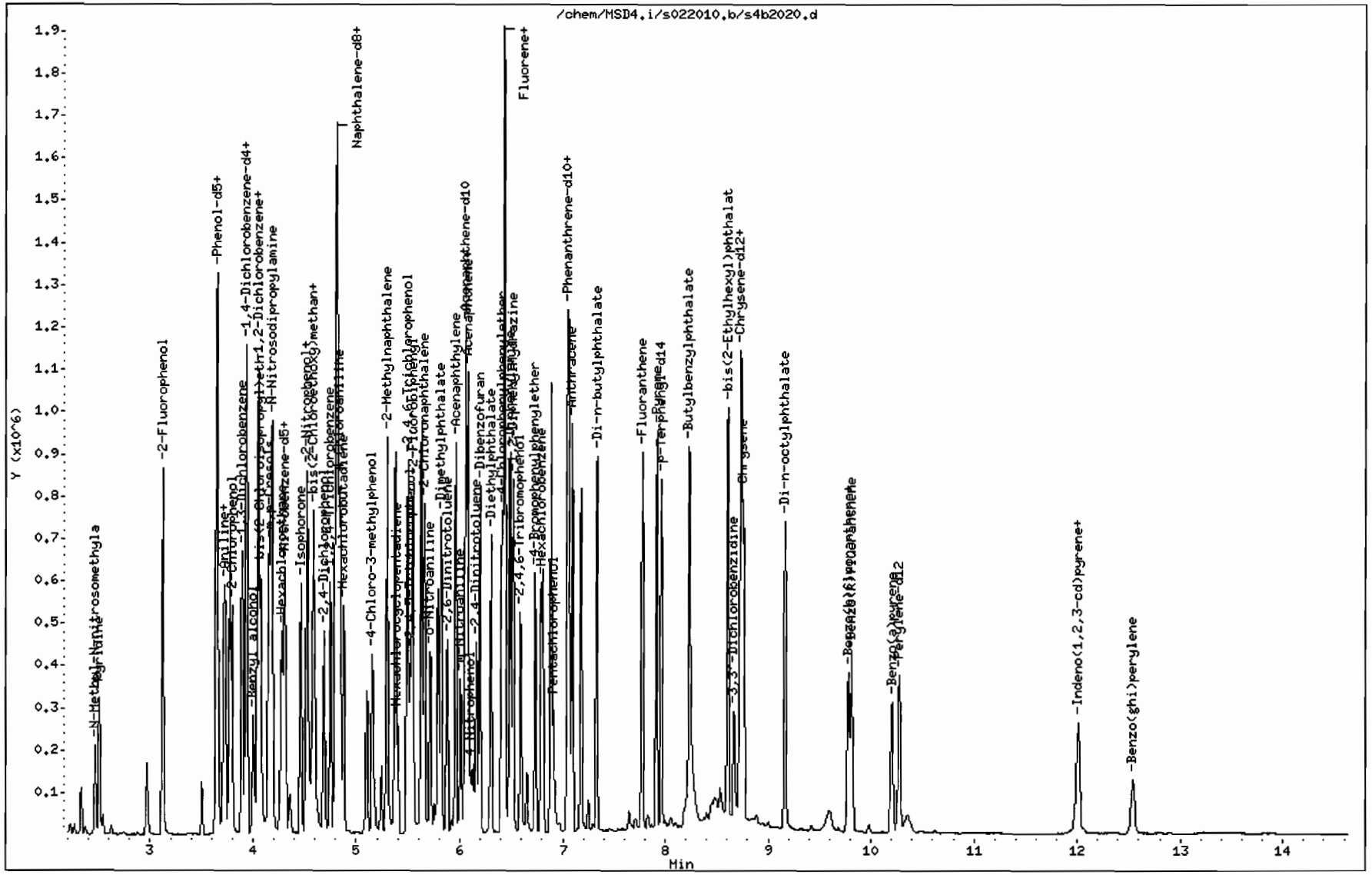
Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD4.i

Operator: JMB3

Column diameter: 0.20



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202040336**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
Client Sample:	**QC for batch 951987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8361MSD**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:06**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2021.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		1320	ug/kg	81.3	406
108-95-2	Phenol		1580	ug/kg	81.3	406
95-57-8	2-Chlorophenol		1560	ug/kg	81.3	406
106-46-7	1,4-Dichlorobenzene		1480	ug/kg	81.3	406
621-64-7	N-Nitrosodipropylamine		1760	ug/kg	81.3	406
59-50-7	4-Chloro-3-methylphenol		1640	ug/kg	81.3	406
83-32-9	Acenaphthene		1380	ug/kg	13.4	40.6
121-14-2	2,4-Dinitrotoluene		1560	ug/kg	40.6	406
100-02-7	4-Nitrophenol		1650	ug/kg	134	406
87-86-5	Pentachlorophenol		1890	ug/kg	102	406
129-00-0	Pyrene		1670	ug/kg	12.2	40.6
110-86-1	Pyridine		1280	ug/kg	81.3	406
62-53-3	Aniline		1420	ug/kg	122	406
111-44-4	bis(2-Chloroethyl) ether		1570	ug/kg	81.3	406
541-73-1	1,3-Dichlorobenzene		1450	ug/kg	81.3	406
100-51-6	Benzyl alcohol		1110	ug/kg	122	406
95-50-1	1,2-Dichlorobenzene		1500	ug/kg	81.3	406
108-60-1	bis(2-Chloroisopropyl)ether		1690	ug/kg	81.3	406
95-48-7	o-Cresol		1820	ug/kg	81.3	406
65794-96-9	m,p-Cresols		1960	ug/kg	122	406
67-72-1	Hexachloroethane		1540	ug/kg	81.3	406
98-95-3	Nitrobenzene		1600	ug/kg	81.3	406
78-59-1	Isophorone		1490	ug/kg	81.3	406
88-75-5	2-Nitrophenol		1390	ug/kg	81.3	406
105-67-9	2,4-Dimethylphenol		1780	ug/kg	142	406
111-91-1	bis(2-Chloroethoxy)methane		1470	ug/kg	81.3	406
120-83-2	2,4-Dichlorophenol		1470	ug/kg	81.3	406
65-85-0	Benzoic acid		3350	ug/kg	203	813
91-20-3	Naphthalene		1420	ug/kg	12.2	40.6
106-47-8	4-Chloroaniline		1380	ug/kg	81.3	406
87-68-3	Hexachlorobutadiene		1450	ug/kg	81.3	406
91-57-6	2-Methylnaphthalene		1540	ug/kg	8.13	40.6
77-47-4	Hexachlorocyclopentadiene		1200	ug/kg	81.3	406
88-06-2	2,4,6-Trichlorophenol		1590	ug/kg	81.3	406
95-95-4	2,4,5-Trichlorophenol		1800	ug/kg	81.3	406
91-58-7	2-Chloronaphthalene		1520	ug/kg	13.4	40.6
88-74-4	2-Nitroaniline		1760	ug/kg	81.3	406
99-09-2	*o-Nitroaniline* 3-Nitroaniline		1590	ug/kg	81.3	406

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-1623**	**Date Collected:**	**02/03/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202040336**	**Date Received:**	**02/06/2010 09:15**	**%Moisture:**	**18**
Client Sample:	**QC for batch 951987**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8361MSD**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**951989**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**02/20/2010 18:06**	**Analyst:**	**JMB3**	**Inj. Vol:**	**.5 uL**
Prep Date:	**02/11/2010 22:25**	**Aliquot:**	**30.03 g**	**Final Volume:**	**1 mL**
Data File:	**s4b2021.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1660	ug/kg	81.3	406
606-20-2	2,6-Dinitrotoluene		1610	ug/kg	40.6	406
208-96-8	Acenaphthylene		1600	ug/kg	12.2	40.6
51-28-5	2,4-Dinitrophenol		1440	ug/kg	154	813
132-64-9	Dibenzofuran		1570	ug/kg	81.3	406
84-66-2	Diethylphthalate		1720	ug/kg	81.3	406
86-73-7	Fluorene		1340	ug/kg	12.2	40.6
7005-72-3	4-Chlorophenylphenylether		1530	ug/kg	81.3	406
534-52-1	2-Methyl-4,6-dinitrophenol		1440	ug/kg	81.3	406
100-01-6	4-Nitroaniline		1940	ug/kg	122	406
	p-Nitroaniline					
122-39-4	Diphenylamine		1860	ug/kg	81.3	406
122-66-7	Azobenzene		1970	ug/kg	81.3	406
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1580	ug/kg	81.3	406
118-74-1	Hexachlorobenzene		1590	ug/kg	81.3	406
85-01-8	Phenanthrene		1560	ug/kg	12.2	40.6
120-12-7	Anthracene		1510	ug/kg	8.13	40.6
84-74-2	Di-n-butylphthalate		1760	ug/kg	81.3	406
206-44-0	Fluoranthene		1520	ug/kg	12.2	40.6
85-68-7	Butylbenzylphthalate		2170	ug/kg	81.3	406
56-55-3	Benzo(a)anthracene		1530	ug/kg	12.2	40.6
91-94-1	3,3'-Dichlorobenzidine		1370	ug/kg	122	406
218-01-9	Chrysene		1530	ug/kg	12.2	40.6
117-81-7	bis(2-Ethylhexyl)phthalate		2100	ug/kg	81.3	406
117-84-0	Di-n-octylphthalate		2630	ug/kg	81.3	406
205-99-2	Benzo(b)fluoranthene		1660	ug/kg	12.2	40.6
207-08-9	Benzo(k)fluoranthene		1850	ug/kg	12.2	40.6
50-32-8	Benzo(a)pyrene		1680	ug/kg	12.2	40.6
193-39-5	Indeno(1,2,3-cd)pyrene		1470	ug/kg	12.2	40.6
53-70-3	Dibenzo(a,h)anthracene		1530	ug/kg	12.2	40.6
191-24-2	Benzo(ghi)perylene		1390	ug/kg	12.2	40.6
120-82-1	1,2,4-Trichlorobenzene		1440	ug/kg	81.3	406

GEL Laboratories LLC

GEL Laboratories, LLC
Data file : /chem/MSD4.i/s022010.b/s4b2021.d
Lab Smp Id: 1202040336 Client Smp ID: RE15-10-8361MSD
Inj Date : 20-FEB-2010 18:06
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |1202040336|951989|1|SVM|1|MSD_LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022010.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 08:46 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 10 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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	18.04950	% moisture

Cpnd Variable Local Compound Variable

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ug/Kg)
*	10 1,4-Dichlorobenzene-d4	152	3.930	3.935	(1.000)	168509	40.0000	
*	29 Naphthalene-d8	136	4.802	4.802	(1.000)	699635	40.0000	
*	46 Acenaphthene-d10	164	6.053	6.053	(1.000)	363072	40.0000	
*	67 Phenanthrene-d10	188	7.043	7.043	(1.000)	537531	40.0000	
*	91 Chrysene-d12	240	8.738	8.754	(1.000)	432073	40.0000	
*	98 Perylene-d12	264	10.279	10.300	(1.000)	297355	40.0000	
$	3 2-Fluorophenol	112	3.122	3.117	(0.794)	341530	71.1280	2890
$	5 Phenol-d5	99	3.647	3.646	(0.928)	435554	72.2044	2930
$	20 Nitrobenzene-d5	82	4.294	4.299	(0.894)	202525	37.6955	1530
$	39 2-Fluorobiphenyl	172	5.545	5.545	(0.916)	342990	36.5869	1490
$	60 2,4,6-Tribromophenol	329	6.588	6.588	(1.088)	94836	83.5205	3390
$	81 p-Terphenyl-d14	244	7.963	7.968	(0.911)	320937	47.5164	1930

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/Kg)
6 Phenol	94	3.652	3.652	(0.929)	239146	39.0006	1580
8 2-Chlorophenol	128	3.796	3.796	(0.966)	192894	38.3727	1560
11 1,4-Dichlorobenzene	146	3.941	3.946	(1.003)	182879	36.4207	1480
17 N-Nitrosodipropylamine	70	4.171	4.176	(1.061)	149065	43.3887	1760(Q)
28 1,2,4-Trichlorobenzene	180	4.748	4.754	(0.989)	143723	35.4614	1440
33 4-Chloro-3-methylphenol	107	5.155	5.144	(1.073)	162859	40.3939	1640
47 Acenaphthene	154	6.075	6.080	(1.004)	315258	34.0757	1380
50 2,4-Dinitrotoluene	165	6.160	6.166	(1.018)	114695	38.3441	1560
52 4-Nitrophenol	139	6.102	6.091	(1.008)	70710	40.4900	1640
65 Pentachlorophenol	266	6.909	6.909	(0.981)	57991	46.6244	1890
79 Pyrene	202	7.915	7.920	(0.906)	484837	41.1717	1670
2 Pyridine	79	2.502	2.475	(0.637)	152599	31.5036	1280
4 Aniline	66	3.716	3.721	(0.946)	83054	34.9275	1420
7 bis(2-Chloroethyl) ether	63	3.727	3.732	(0.948)	139250	38.5468	1570
9 1,3-Dichlorobenzene	146	3.898	3.898	(0.992)	178594	35.6471	1450
12 Benzyl alcohol	108	4.000	3.999	(1.018)	76231	27.3705	1110
13 1,2-Dichlorobenzene	146	4.042	4.048	(1.029)	169257	37.0132	1500
14 bis(2-Chloroisopropyl)ether	45	4.069	4.074	(1.035)	281164	41.6027	1690
15 o-Cresol	107	4.053	4.048	(1.031)	165724	44.8981	1820
18 m,p-Cresols	107	4.149	4.149	(1.056)	242225	48.2123	1960
19 Hexachloroethane	117	4.272	4.278	(1.087)	71358	37.8485	1540
21 Nitrobenzene	77	4.310	4.315	(0.898)	204916	39.4373	1600
22 Isophorone	82	4.460	4.470	(0.929)	397714	36.7056	1490
23 2-Nitrophenol	139	4.524	4.524	(0.942)	96413	34.2322	1390
24 2,4-Dimethylphenol	122	4.518	4.518	(0.941)	201152	43.9262	1780
25 bis(2-Chloroethoxy)methane	93	4.583	4.582	(0.954)	234211	36.1127	1470
26 2,4-Dichlorophenol	162	4.684	4.684	(0.975)	144100	36.2396	1470
27 Benzoic acid	105	4.599	4.577	(0.958)	302183	82.3444	3350
30 Naphthalene	128	4.818	4.818	(1.003)	558724	34.8702	1420
31 4-Chloroaniline	127	4.834	4.834	(1.007)	245046	34.0679	1380
32 Hexachlorobutadiene	225	4.877	4.877	(1.016)	71716	35.6089	1450
34 2-Methylnaphthalene	142	5.299	5.299	(1.104)	354959	37.7954	1540
36 Hexachlorocyclopentadiene	237	5.396	5.401	(0.891)	50141	29.4849	1200
37 2,4,6-Trichlorophenol	196	5.486	5.486	(0.906)	92185	39.2090	1590
38 2,4,5-Trichlorophenol	196	5.519	5.513	(0.912)	120538	44.3319	1800
40 2-Chloronaphthalene	162	5.652	5.652	(0.934)	325430	37.3355	1520
42 o-Nitroaniline	65	5.711	5.711	(0.943)	104626	43.3565	1760
41 m-Nitroaniline	138	6.005	6.011	(0.992)	89121	39.2269	1590
43 Dimethylphthalate	163	5.818	5.823	(0.961)	392013	40.7966	1660
44 2,6-Dinitrotoluene	165	5.877	5.877	(0.971)	90812	39.6253	1610
45 Acenaphthylene	152	5.957	5.962	(0.984)	520680	39.2543	1600
48 2,4-Dinitrophenol	184	6.075	6.075	(1.004)	30858	35.4691	1440(Q)
49 Dibenzofuran	168	6.192	6.198	(1.023)	441305	38.5778	1570
51 Diethylphthalate	149	6.305	6.305	(1.042)	383408	42.3911	1720
53 Fluorene	166	6.428	6.428	(1.062)	333106	33.0579	1340
54 4-Chlorophenylphenylether	204	6.406	6.406	(1.058)	162716	37.7646	1530
55 2-Methyl-4,6-dinitrophenol	198	6.444	6.444	(0.915)	51559	35.4065	1440

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/Kg)
56	p-Nitroaniline	138	6.433	6.433	(1.063)	83681	47.6908	1940
133	Diphenylamine	169	6.487	6.487	(0.921)	326122	45.8463	1860
58	1,2-Diphenylhydrazine	77	6.513	6.513	(0.925)	450151	48.5324	1970
61	4-Bromophenylphenylether	248	6.733	6.733	(0.956)	91285	38.8239	1580
63	Hexachlorobenzene	284	6.792	6.791	(0.964)	99543	39.2359	1590
68	Phenanthrene	178	7.059	7.059	(1.002)	507552	38.2697	1560
69	Anthracene	178	7.091	7.091	(1.007)	500209	37.1321	1510
72	Di-n-butylphthalate	149	7.332	7.332	(1.041)	629172	43.2613	1760
76	Fluoranthene	202	7.776	7.776	(1.104)	465507	37.4809	1520
85	Butylbenzylphthalate	149	8.236	8.241	(0.942)	266947	53.4158	2170
89	Benzo(a)anthracene	228	8.728	8.738	(0.999)	380422	37.5753	1530
90	3,3'-Dichlorobenzidine	252	8.669	8.658	(0.992)	97766	33.6838	1370
92	Chrysene	228	8.765	8.776	(1.003)	384731	37.7712	1530
93	bis(2-Ethylhexyl)phthalate	149	8.605	8.615	(0.985)	370820	51.7681	2100
94	Di-n-octylphthalate	149	9.166	9.182	(0.892)	576059	64.7755	2630
95	Benzo(b)fluoranthene	252	9.781	9.803	(0.952)	286977	40.9104	1660(H)
96	Benzo(k)fluoranthene	252	9.813	9.835	(0.955)	324008	45.6497	1850
97	Benzo(a)pyrene	252	10.204	10.231	(0.993)	248390	41.4308	1680
99	Indeno(1,2,3-cd)pyrene	276	12.012	12.055	(1.169)	195252	36.2800	1470
100	Dibenzo(a,h)anthracene	278	12.017	12.055	(1.169)	166652	37.6200	1530
101	Benzo(ghi)perylene	276	12.552	12.589	(1.221)	151552	34.1633	1390
1	N-Methyl-N-nitrosomethylamine	74	2.464	2.443	(0.627)	112680	32.5859	1320

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD4.i/s022010.b/s4b2021.d

Date : 20-FEB-2010 18:06

Client ID: RE15-10-8361MSD

Sample Info: |12020403361951989|1|SVMI1|MSD_LANL

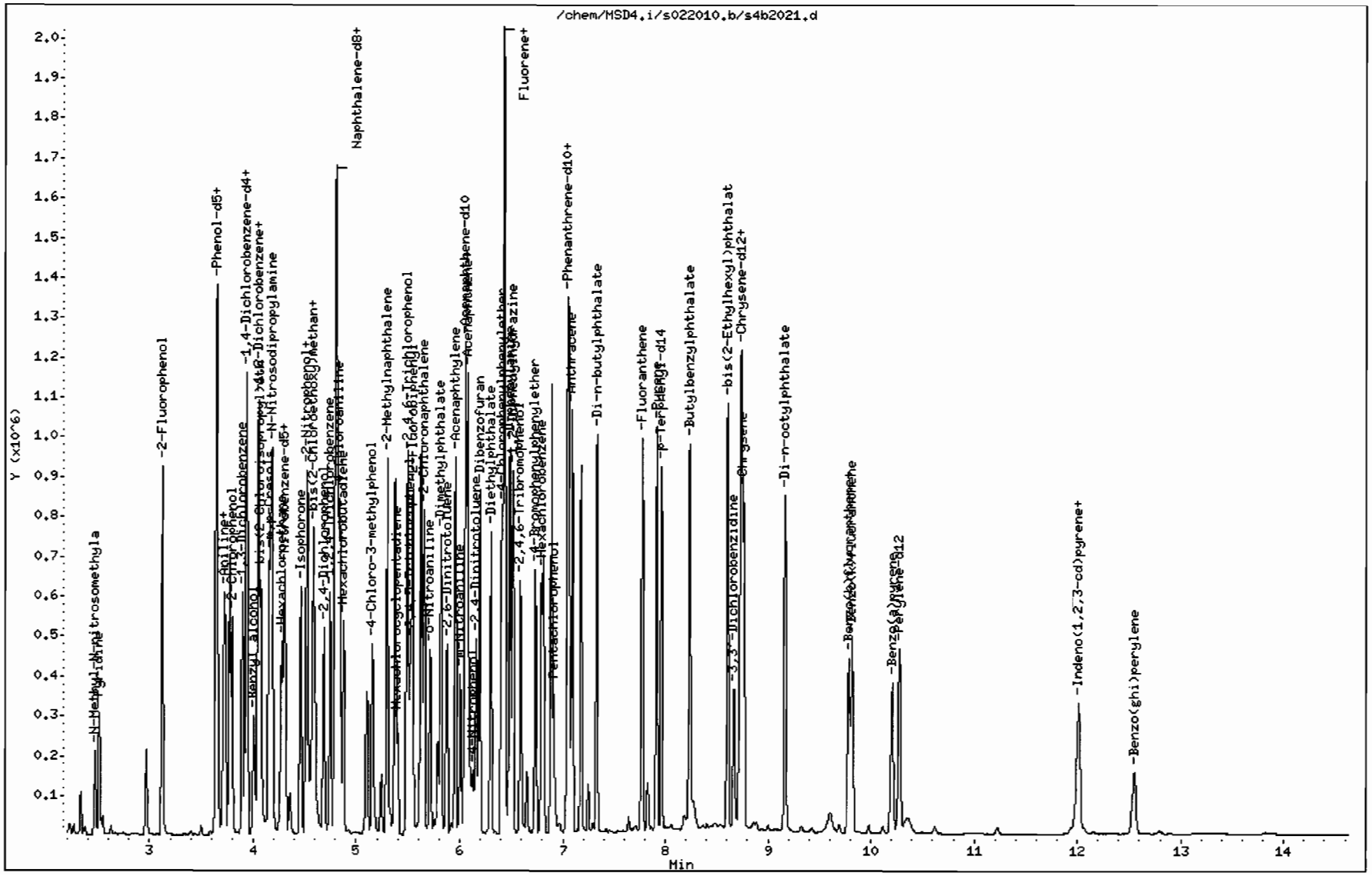
Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: MSD4.i

Operator: JMB3

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: 951987 **Verified by:** _____
Analyst: Alberto Velasco
Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202040333 MB	11-FEB-2010 22:25:00	30	1	0.03333
1202040334 LCS	11-FEB-2010 22:25:00	30	1	0.03333
246434002	11-FEB-2010 22:25:00	30.03	1	0.0333
246434003	11-FEB-2010 22:25:00	30.14	1	0.03318
246434004	11-FEB-2010 22:25:00	30.05	1	0.03328
246434005	11-FEB-2010 22:25:00	30.02	1	0.03331
246434006	11-FEB-2010 22:25:00	30.02	1	0.03331
246434007	11-FEB-2010 22:25:00	30.15	1	0.03317
246434008	11-FEB-2010 22:25:00	30.03	1	0.0333
246434009	11-FEB-2010 22:25:00	30.12	1	0.0332
246434010	11-FEB-2010 22:25:00	30.12	1	0.0332
246434011	11-FEB-2010 22:25:00	30.12	1	0.0332
246434012	11-FEB-2010 22:25:00	30.1	1	0.03322
246434013	11-FEB-2010 22:25:00	30.02	1	0.03331
246434014	11-FEB-2010 22:25:00	30.07	1	0.03326
246434015	11-FEB-2010 22:25:00	30.13	1	0.03319
246442002	11-FEB-2010 22:25:00	30.14	1	0.03318
1202040335 MS (246442002)	11-FEB-2010 22:25:00	30.17	1	0.03315
1202040336 MSD (246442002)	11-FEB-2010 22:25:00	30.03	1	0.0333
246442003	11-FEB-2010 22:25:00	30.03	1	0.0333
246442004	11-FEB-2010 22:25:00	30.09	1	0.03323
246442005	11-FEB-2010 22:25:00	30.14	1	0.03318
246442006	11-FEB-2010 22:25:00	30.11	1	0.03321

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202040334	BENZIDINE LCS	UE100203-22	1	mL
LCS	1202040334	BNA LCS w/o Benzidine 50ppm	UE100204-14	1	mL
MS	1202040335	BENZIDINE LCS	UE100203-22	1	mL
MS	1202040335	BNA LCS w/o Benzidine 50ppm	UE100204-14	1	mL
MSD	1202040336	BENZIDINE LCS	UE100203-22	1	mL
MSD	1202040336	BNA LCS w/o Benzidine 50ppm	UE100204-14	1	mL
SURR	All	BNA for all Surrogate	UE100127-10	1	mL
REGNT	All	Acetone	100211-B1	150	mL
REGNT	All	Methylene Chloride	1266705-D	150	mL
SOURC	All	SODIUM SULFATE	1265308	30	g

Comments:

Verified By: AJS
Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD4

DATE: 02/16/2010 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1239699-D
Multiplier Voltage: 1247 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100205-01
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/MSD4.i/s021610.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s4b1601.d	WBN100207-01	JMB3	16-FEB-2010 08:46	DFTPP	s021610	1.0	DFTPP	DUSE
s4b1602.d	WBN100207-01	JMB3	16-FEB-2010 09:15	DFTPP	s021610	1.0	DFTPP	DUSE
s4b1603-D.d	WBN100207-01	JMB3	16-FEB-2010 09:30	DFTPP	s021610	1.0	DFTPP	8270d TUNE: AP - PEST - HEX
s4b1603.d	WBN100207-01	JMB3	16-FEB-2010 09:30	DFTPP	s021610	1.0	DFTPP	8270c TUNE: AP - PEST - HEX
s4b1604.d	INSTBLANK	JMB3	16-FEB-2010 09:43	IB	s021410	1.0	INSTBLANK	
s4b1605.d	WBN100120-01	JMB3	16-FEB-2010 10:08	ICAL	s021410	1.0	AP010	
s4b1606.d	WBN100120-02	JMB3	16-FEB-2010 10:30	ICAL	s021410	1.0	AP020	
s4b1607.d	WBN100120-03.1	JMB3	16-FEB-2010 10:52	ICAL	s021410	1.0	AP040	
s4b1608.d	WBN100120-04	JMB3	16-FEB-2010 11:14	ICAL	s021410	1.0	AP050	
s4b1609.d	WBN100120-05	JMB3	16-FEB-2010 11:36	ICAL	s021410	1.0	AP080	
s4b1610.d	WBN100120-06	JMB3	16-FEB-2010 11:59	ICAL	s021410	1.0	AP100	
s4b1611.d	WBN100120-07	JMB3	16-FEB-2010 12:21	ICAL	s021410	1.0	AP120	
s4b1612.d	WBN100205-25	JMB3	16-FEB-2010 12:43	ICAL	s021410	1.0	PEST010	
s4b1613.d	WBN100205-24	JMB3	16-FEB-2010 13:05	ICAL	s021410	1.0	PEST020	
s4b1614.d	WBN100205-23.1	JMB3	16-FEB-2010 13:27	ICAL	s021410	1.0	PEST040	
s4b1615.d	WBN100205-22	JMB3	16-FEB-2010 13:50	ICAL	s021410	1.0	PEST050	
s4b1616.d	WBN100205-21	JMB3	16-FEB-2010 14:12	ICAL	s021410	1.0	PEST080	DUSE: see s4b1625
s4b1617.d	WBN100205-20	JMB3	16-FEB-2010 14:34	ICAL	s021410	1.0	PEST100	DUSE: see s4b1626
s4b1618.d	WBN100205-19	JMB3	16-FEB-2010 14:56	ICAL	s021410	1.0	PEST120	

s4b1619.d	WBN100120-16	JMB3	16-FEB-2010 15:19	ICAL	s021410	1.0	HEX500	
s4b1620.d	WBN100120-15	JMB3	16-FEB-2010 15:41	ICAL	s021410	1.0	HEX1000	
s4b1621.d	WBN100120-14	JMB3	16-FEB-2010 16:03	ICAL	s021410	1.0	HEX1250	
s4b1622.d	WBN100120-13	JMB3	16-FEB-2010 16:26	ICAL	s021410	1.0	HEX1500	
s4b1623.d	WBN100120-12	JMB3	16-FEB-2010 16:48	ICAL	s021410	1.0	HEX1750	
s4b1624.d	UBN090828-02	JMB3	16-FEB-2010 17:11	ICAL	s021410	1.0	HEX2000	
s4b1625.d	WBN100205-21	JMB3	16-FEB-2010 17:33	ICAL	s021410	1.0	PEST080	
s4b1626.d	WBN100205-20	JMB3	16-FEB-2010 17:55	ICAL	s021410	1.0	PEST100	
s4b1627-625.d	WBN100120-08.1	JMB3	16-FEB-2010 18:17	ICV	s021410	1.0	APICV	625 AP ICV
s4b1627-D.d	WBN100120-08.1	JMB3	16-FEB-2010 18:17	ICV	s021410	1.0	APICV	8270d AP ICV
s4b1627.d	WBN100120-08.1	JMB3	16-FEB-2010 18:17	ICV	s021410	1.0	APICV	8270c AP ICV
s4b1628-625.d	WBN100205-26.1	JMB3	16-FEB-2010 18:39	ICV	s021410	1.0	PESTICV	625 PEST ICV
s4b1628-D.d	WBN100205-26.1	JMB3	16-FEB-2010 18:39	ICV	s021410	1.0	PESTICV	8270d PEST ICV
s4b1628.d	WBN100205-26.1	JMB3	16-FEB-2010 18:39	ICV	s021410	1.0	PESTICV	8270c PEST ICV
s4b1629-625.d	WBN100103-10.4	JMB3	16-FEB-2010 19:01	ICV	s021410	1.0	HEXICV	625 HEX ICV
s4b1629-D.d	WBN100103-10.4	JMB3	16-FEB-2010 19:01	ICV	s021410	1.0	HEXICV	8270d HEX ICV
s4b1629.d	WBN100103-10.4	JMB3	16-FEB-2010 19:01	ICV	s021410	1.0	HEXICV	8270c HEX ICV
s4b1630-D.d	WBN100207-01	JMB3	16-FEB-2010 19:26	DFTPP	s021610	1.0	DFTPP	8270d TUNE: NEV - BJCO
s4b1630.d	WBN100207-01	JMB3	16-FEB-2010 19:26	DFTPP	s021610	1.0	DFTPP	8270c TUNE: NEV - BJCO
s4b1631.d	INSTBLANK	JMB3	16-FEB-2010 19:38	IB	s021610	1.0	INSTBLANK	
s4b1632.d	UBN100127-01	JMB3	16-FEB-2010 20:07	ICAL	s021410	1.0	NEV010	
s4b1633.d	UBN100127-02	JMB3	16-FEB-2010 20:29	ICAL	s021410	1.0	NEV020	
s4b1634.d	UBN100127-03	JMB3	16-FEB-2010 20:51	ICAL	s021410	1.0	NEV040	
s4b1635.d	UBN100127-04	JMB3	16-FEB-2010 21:13	ICAL	s021410	1.0	NEV050	
s4b1636.d	UBN100127-05	JMB3	16-FEB-2010 21:35	ICAL	s021410	1.0	NEV080	
s4b1637.d	UBN100127-06	JMB3	16-FEB-2010 21:57	ICAL	s021410	1.0	NEV100	
s4b1638.d	UBN100127-07	JMB3	16-FEB-2010 22:19	ICAL	s021410	1.0	NEV120	

s4b1639.d	WBN100121-07	JMB3	16-FEB-2010 22:41	ICAL	s021410	1.0	BJCO010
s4b1640.d	WBN100121-06	JMB3	16-FEB-2010 23:09	ICAL	s021410	1.0	BJCO020
s4b1641.d	WBN100121-05.1	JMB3	16-FEB-2010 23:37	ICAL	s021410	1.0	BJCO040
s4b1642.d	WBN100121-04	JMB3	17-FEB-2010 00:06	ICAL	s021410	1.0	BJCO050
s4b1643.d	WBN100121-03	JMB3	17-FEB-2010 00:34	ICAL	s021410	1.0	BJCO080
s4b1644.d	WBN100121-02	JMB3	17-FEB-2010 01:03	ICAL	s021410	1.0	BJCO100
s4b1645.d	WBN100121-01	JMB3	17-FEB-2010 01:31	ICAL	s021410	1.0	BJCO120

Instrument Batch: /chem/MSD4.i/s021610.b

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD4

DATE: 02/17/2010 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1239699-D
Multiplier Voltage: 1282 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100205-01
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/MSD4.i/s021710.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s4b1701.d	WBN100207-01	JMB3	17-FEB-2010 14:17	DFTPP	s021710	1.0	DFTPP	DUSE
s4b1702-D.d	WBN100207-01	JMB3	17-FEB-2010 17:07	DFTPP	s021710	1.0	DFTPP	8270d TUNE: MEGA
s4b1702.d	WBN100207-01	JMB3	17-FEB-2010 17:07	DFTPP	s021710	1.0	DFTPP	8270c TUNE: MEGA
s4b1703.d	INST BKL	JMB3	17-FEB-2010 17:19	---	s021710	1.0	INST BLK	
s4b1704.d	WBN100215-08	JMB3	17-FEB-2010 17:46	ICAL	s021710	1.0	MEGA001	
s4b1705-D.d	WBN100215-07	JMB3	17-FEB-2010 18:13	ICAL	s021710	1.0	MEGA010	8270d
s4b1705.d	WBN100215-07	JMB3	17-FEB-2010 18:13	ICAL	s021710	1.0	MEGA010	
s4b1706-D.d	WBN100215-06	JMB3	17-FEB-2010 18:40	ICAL	s021710	1.0	MEGA020	8270d
s4b1706.d	WBN100215-06	JMB3	17-FEB-2010 18:40	ICAL	s021710	1.0	MEGA020	
s4b1707.d	WBN100215-05.1	JMB3	17-FEB-2010 19:07	ICAL	s021710	1.0	MEGA040	
s4b1708.d	WBN100215-04	JMB3	17-FEB-2010 19:34	ICAL	s021710	1.0	MEGA050	
s4b1709.d	WBN100215-03	JMB3	17-FEB-2010 20:00	ICAL	s021710	1.0	MEGA080	
s4b1710.d	WBN100215-02	JMB3	17-FEB-2010 20:27	ICAL	s021710	1.0	MEGA100	
s4b1711.d	WBN100215-01	JMB3	17-FEB-2010 20:54	ICAL	s021710	1.0	MEGA120	
s4b1712.d	INST BKL	JMB3	17-FEB-2010 21:22	---	s021710	1.0	INST BLK	
s4b1713-625.d	WBN100215-09.1	JMB3	17-FEB-2010 21:48	ICV	s021710	1.0	MEGAICV	625 MEGA ICV
s4b1713-D.d	WBN100215-09.1	JMB3	17-FEB-2010 21:48	ICV	s021710	1.0	MEGAICV	8270d MEGA ICV
s4b1713.d	WBN100215-09.1	JMB3	17-FEB-2010 21:48	ICV	s021710	1.0	MEGAICV	8270c MEGA ICV

Instrument Batch: /chem/MSD4.i/s021710.b

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD4

DATE: 02/20/2010 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1239699-D
Multiplier Voltage: 1341 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100205-01
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/MSD4.i/s022010.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s4b2001.d	WBN100207-01	JMB3	20-FEB-2010 09:53	DFTPP	s022010	1.0	DFTPP	DUSE
s4b2002.d	WBN100207-01	JMB3	20-FEB-2010 11:07	DFTPP	s022010	1.0	DFTPP	DUSE
s4b2003.d	WBN100207-01	JMB3	20-FEB-2010 11:22	DFTPP	s022010	1.0	DFTPP	DUSE
s4b2004.d	WBN100207-01	JMB3	20-FEB-2010 11:38	DFTPP	s022010	1.0	DFTPP	DUSE
s4b2005.d	WBN100207-01	JMB3	20-FEB-2010 11:53	DFTPP	s022010	1.0	DFTPP	DUSE
s4b2006.d	WBN100207-01	JMB3	20-FEB-2010 12:31	DFTPP	s022010	1.0	DFTPP	DUSE
s4b2007.d	WBN100207-01	JMB3	20-FEB-2010 12:47	DFTPP	s022010	1.0	DFTPP	DUSE
s4b2008.d	WBN100215-09.4	JMB3	20-FEB-2010 13:00	CVS	s022010	1.0	MEGACVS	DUSE
s4b2009.d	WBN100218-05.3	JMB3	20-FEB-2010 13:27	CVS	s022010	1.0	APCVS	DUSE
s4b2010.d	WBN100215-09.4	JMB3	20-FEB-2010 13:50	CVS	s022010	1.0	MEGACVS	DUSE
s4b2011.d	WBN100207-01	JMB3	20-FEB-2010 14:19	DFTPP	s022010	1.0	DFTPP	8270c TUNE: PASSES
s4b2012.d	WBN100215-09.4	JMB3	20-FEB-2010 14:32	CVS	s022010	1.0	MEGACVS	DUSE: see s4b2013
s4b2013.d	WBN100215-09.4	JMB3	20-FEB-2010 15:00	CVS	s022010	1.0	MEGACVS	8270c MEGA CVS (IS1: 194395)
s4b2014.d	WBN100218-05.3	JMB3	20-FEB-2010 15:27	CVS	s022010	1.0	APCVS	8270c AP CVS
s4b2015-1.d	1202040333	JMB3	20-FEB-2010 15:50	951989	10-1620	1.0	MB	REPORT
s4b2015.d	1202040333	JMB3	20-FEB-2010 15:50	951989	10-1623	1.0	MB	REPORT
s4b2016-1.d	1202040334	JMB3	20-FEB-2010 16:13	951989	10-1620	1.0	LCS	REPORT
s4b2016.d	1202040334	JMB3	20-FEB-2010 16:13	951989	10-1623	1.0	LCS	REPORT
s4b2017-1.d	1202044769	JMB3	20-FEB-2010 16:35	953805	10-1710	1.0	MB	REPORT

s4b2017.d	1202044769	JMB3	20-FEB-2010 16:35	953805	10-1742	1.0	MB	REPORT
s4b2018-1.d	1202044770	JMB3	20-FEB-2010 16:58	953805	10-1710	1.0	LCS	REPORT
s4b2018.d	1202044770	JMB3	20-FEB-2010 16:58	953805	10-1740	1.0	LCS	REPORT
s4b2019.d	246442002	JMB3	20-FEB-2010 17:20	951989	10-1623	1.0	LANL	REPORT
s4b2020.d	1202040335	JMB3	20-FEB-2010 17:43	951989	10-1623	1.0	MS_LANL	REPORT: Fails ISTD - 002/MSD pass but w/ similar low responses
s4b2021.d	1202040336	JMB3	20-FEB-2010 18:06	951989	10-1623	1.0	MSD_LANL	REPORT
s4b2022.d	246442003	JMB3	20-FEB-2010 18:28	951989	10-1623	1.0	LANL	REPORT: fails ISTD - rerun s4b2136 confirms failure
s4b2023.d	246442004	JMB3	20-FEB-2010 18:51	951989	10-1623	1.0	LANL	DUSE: fails ISTD - see rerun s4b2108
s4b2024.d	246442005	JMB3	20-FEB-2010 19:13	951989	10-1623	1.0	LANL	REPORT
s4b2025.d	246442006	JMB3	20-FEB-2010 19:36	951989	10-1623	1.0	LANL	REPORT
s4b2026.d	246434002	JMB3	20-FEB-2010 19:58	951989	10-1620	1.0	LANL	REPORT
s4b2027.d	246434003	JMB3	20-FEB-2010 20:20	951989	10-1620	1.0	LANL	REPORT: fails ISTD - rerun s4b2137 confirms failure
s4b2028.d	246434004	JMB3	20-FEB-2010 20:42	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2110
s4b2029.d	246434005	JMB3	20-FEB-2010 21:05	951989	10-1620	1.0	LANL	REPORT
s4b2030.d	246434006	JMB3	20-FEB-2010 21:27	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2111
s4b2031.d	246434007	JMB3	20-FEB-2010 21:49	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2112
s4b2032.d	246434008	JMB3	20-FEB-2010 22:11	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2113
s4b2033.d	246434009	JMB3	20-FEB-2010 22:33	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2114
s4b2034.d	246434010	JMB3	20-FEB-2010 22:55	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2115
s4b2035.d	246434011	JMB3	20-FEB-2010 23:18	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2116
s4b2036.d	246434012	JMB3	20-FEB-2010 23:40	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2117
s4b2037.d	246434013	JMB3	21-FEB-2010 00:02	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2118
s4b2038.d	246434014	JMB3	21-FEB-2010 00:24	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2119
s4b2039.d	246434015	JMB3	21-FEB-2010 00:47	951989	10-1620	1.0	LANL	DUSE: fails ISTD - see rerun s4b2120
s4b2040.d	246732002	JMB3	21-FEB-2010 01:09	953805	10-1742	1.0	LANL	REPORT: fails ISTD - MS/MSD confirm
s4b2041.d	1202044771	JMB3	21-FEB-2010 01:31	953805	10-1742	1.0	MS_LANL	REPORT
s4b2042.d	1202044772	JMB3	21-FEB-2010 01:53	953805	10-1742	1.0	MSD_LANL	REPORT

s4b2043.d	246732003	JMB3	21-FEB-2010 02:15	953805	10-1742	1.0	LANL	DUSE: fails ISTD - see rerun s4b2108
s4b2044.d	246732004	JMB3	21-FEB-2010 02:37	953805	10-1742	1.0	LANL	DUSE: fails ISTD - OUTSIDE TUNE - see rerun s4b2133
s4b2045.d	246732005	JMB3	21-FEB-2010 02:59	953805	10-1742	1.0	LANL	DUSE: fails ISTD - OUTSIDE TUNE - see rerun s4b2134
s4b2046.d	246732006	JMB3	21-FEB-2010 03:22	953805	10-1742	1.0	LANL	DUSE: OUTSIDE TUNE - confirmation of ISTD failure for s4b2135

Instrument Batch: /chem/MSD4.i/s022010.b

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD4

DATE: 02/21/2010 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1239699-D
Multiplier Voltage: 1341 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100205-01
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/MSD4.i/s022110a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments	
s4b2105.d	WBN100207-01	JMB3	21-FEB-2010 11:21	DFTPP	s022110a	1.0	DFTPP	8270c TUNE: PASSES	
s4b2106.d	WBN100215-09.4	JMB3	21-FEB-2010 11:34	CVS	s022110a	1.0	MEGACVS	8270c MEGA CVS	(IS1: 141610)
s4b2107.d	WBN100218-05.3	JMB3	21-FEB-2010 12:02	CVS	s022110a	1.0	APCVS	8270c AP CVS	
s4b2108.d	246442004	JMB3	21-FEB-2010 12:24	951989	10-1623	1.0	LANL	REPORT	
s4b2109.d	246434002	JMB3	21-FEB-2010 12:47	951989	10-1620	1.0	LANL	DUSE: rerun not needed - see s4b2026	
s4b2110.d	246434004	JMB3	21-FEB-2010 13:10	951989	10-1620	1.0	LANL	REPORT	
s4b2111.d	246434006	JMB3	21-FEB-2010 13:32	951989	10-1620	1.0	LANL	REPORT	
s4b2112.d	246434007	JMB3	21-FEB-2010 13:54	951989	10-1620	1.0	LANL	REPORT	
s4b2113.d	246434008	JMB3	21-FEB-2010 14:17	951989	10-1620	1.0	LANL	REPORT	
s4b2114.d	246434009	JMB3	21-FEB-2010 14:40	951989	10-1620	1.0	LANL	REPORT	
s4b2115.d	246434010	JMB3	21-FEB-2010 15:02	951989	10-1620	1.0	LANL	REPORT	
s4b2116.d	246434011	JMB3	21-FEB-2010 15:25	951989	10-1620	1.0	LANL	REPORT	
s4b2117.d	246434012	JMB3	21-FEB-2010 15:48	951989	10-1620	1.0	LANL	REPORT	
s4b2118.d	246434013	JMB3	21-FEB-2010 16:11	951989	10-1620	1.0	LANL	REPORT	
s4b2119.d	246434014	JMB3	21-FEB-2010 16:33	951989	10-1620	1.0	LANL	REPORT	
s4b2120.d	246434015	JMB3	21-FEB-2010 16:56	951989	10-1620	1.0	LANL	REPORT	
s4b2121.d	246725001	JMB3	21-FEB-2010 17:18	953805	10-1710	1.0	LANL	REPORT	
s4b2122.d	246725002	JMB3	21-FEB-2010 17:41	953805	10-1710	1.0	LANL	REPORT	
s4b2123.d	246725003	JMB3	21-FEB-2010 18:04	953805	10-1710	1.0	LANL	REPORT	

s4b2124.d	246725004	JMB3	21-FEB-2010 18:26	953805	10-1710	1.0	LANL	REPORT
s4b2125.d	246725005	JMB3	21-FEB-2010 18:49	953805	10-1710	1.0	LANL	REPORT
s4b2126.d	246725006	JMB3	21-FEB-2010 19:11	953805	10-1710	1.0	LANL	REPORT
s4b2127.d	246725007	JMB3	21-FEB-2010 19:33	953805	10-1710	1.0	LANL	REPORT
s4b2128.d	246725008	JMB3	21-FEB-2010 19:56	953805	10-1710	1.0	LANL	REPORT
s4b2129.d	246725009	JMB3	21-FEB-2010 20:18	953805	10-1710	1.0	LANL	REPORT
s4b2130.d	246725010	JMB3	21-FEB-2010 20:40	953805	10-1710	1.0	LANL	REPORT
s4b2131.d	246725011	JMB3	21-FEB-2010 21:03	953805	10-1710	1.0	LANL	REPORT
s4b2132.d	246732003	JMB3	21-FEB-2010 21:25	953805	10-1742	1.0	LANL	REPORT
s4b2133.d	246732004	JMB3	21-FEB-2010 21:47	953805	10-1742	1.0	LANL	REPORT
s4b2134.d	246732005	JMB3	21-FEB-2010 22:09	953805	10-1742	1.0	LANL	REPORT
s4b2135.d	246732006	JMB3	21-FEB-2010 22:32	953805	10-1742	1.0	LANL	REPORT: fails ISTD - rerun s4b2046 confirms failure
s4b2136.d	246442003	JMB3	21-FEB-2010 22:54	951989	10-1623	1.0	LANL	DUSE: rerun of s4b2022 - confirmation of ISTD failure
s4b2137.d	246434003	JMB3	21-FEB-2010 23:16	951989	10-1620	1.0	LANL	DUSE: rerun of s4b2027 - confirmation of ISTD failure

Instrument Batch: /chem/MSD4.i/s022110a.b

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Data file : /chem/MSD4.i/s022110a.b/s4b2136.d
Lab Smp Id: 246442003 Client Smp ID: RE15-10-8362
Inj Date : 21-FEB-2010 22:54
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442003|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 12:25 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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	25.03120	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.898	3.903	(1.000)	141829	40.0000	
* 29 Naphthalene-d8	136	4.770	4.770	(1.000)	534790	40.0000	
* 46 Acenaphthene-d10	164	6.021	6.027	(1.000)	298240	40.0000	
* 67 Phenanthrene-d10	188	7.016	7.016	(1.000)	484890	40.0000	
* 91 Chrysene-d12	240	8.701	8.717	(1.000)	345451	40.0000	
* 98 Perylene-d12	264	10.220	10.236	(1.000)	160405	40.0000	
$ 3 2-Fluorophenol	112	3.096	3.090	(0.794)	254892	63.0704	2800
$ 5 Phenol-d5	99	3.615	3.614	(0.927)	329567	64.9118	2880
$ 20 Nitrobenzene-d5	82	4.262	4.267	(0.893)	145205	35.3574	1570
$ 39 2-Fluorobiphenyl	172	5.513	5.513	(0.916)	236066	30.6553	1360
$ 60 2,4,6-Tribromophenol	329	6.562	6.561	(1.090)	77427	83.0117	3690
$ 81 p-Terphenyl-d14	244	7.936	7.941	(0.912)	245136	45.3943	2020

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
93 bis(2-Ethylhexyl)phthalate	149	8.567	8.583	(0.985)	12255	2.13985	95.0(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s4b2136.d
Report Date: 02/22/2010 07:47
Lab. ID: 246442003 SampleType: SAMPLE
Injection Date: 21-FEB-2010 22:54
Operator: JMB3 Instrument: MSD4.i
Sample Info: |246442003|951989|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100205-01|
Comment:
Method used: /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-1623
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	13984	3.61	3.69	80-120	100	(T)
93	7042	3.57	3.69	455-515	50	(QT)
6 Phenol		CAS#: 108-95-2				
94	16474	3.47	3.63	80-120	100	(T)
66	2728	3.47	3.63	8- 68	17	(T)
65	10718	3.47	3.63	0- 57	65	(QT)
17 N-Nitrosodipropylamine			CAS#: 621-64-7			
70	19515	4.26	4.14	80-120	100	(T)
42	9122	4.26	4.14	24- 84	47	(T)
27 Benzoic acid		CAS#: 65-85-0				
105	1442	4.51	4.55	80-120	100	( )
122	1024	4.51	4.55	40-100	71	( )
77	833	4.51	4.55	39- 99	58	( )
40 2-Chloronaphthalene			CAS#: 91-58-7			
162	5130	5.75	5.63	80-120	100	(T)
164	239	5.75	5.63	3- 63	5	(T)
127	221	5.75	5.63	6- 66	4	(QT)
42 o-Nitroaniline			CAS#: 88-74-4			
65	7994	5.75	5.68	80-120	100	(T)
92	12150	5.75	5.68	40-100	152	(QT)
138	427	5.75	5.68	69-129	5	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
43 Dimethylphthalate			CAS#: 131-11-3			
163	53072	6.02	5.79	80-120	100	(T)
164	298240	6.02	5.79	0- 40	562	(QT)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	38591	6.02	5.85	80-120	100	(T)
63	592	6.02	5.85	49-109	2	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	38591	6.02	6.13	80-120	100	(T)
89	691	6.02	6.13	52-112	2	(QT)
63	592	6.02	6.13	19- 79	2	(QT)
52 4-Nitrophenol			CAS#: 100-02-7			
139	71	5.90	6.06	80-120	100	(T)
109	1224	5.90	6.06	26- 86	1704	(QT)
65	950	5.90	6.06	73-133	1323	(QT)
53 Fluorene			CAS#: 86-73-7			
166	3281	6.56	6.40	80-120	100	(T)
165	3521	6.56	6.40	59-119	107	(T)
167	1148	6.56	6.40	0- 44	35	(T)
93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	12255	8.57	8.58	80-120	100	( )
167	4317	8.57	8.58	3- 63	35	( )

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

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Data file : /chem/MSD4.i/s022110a.b/s4b2136.d
Lab Smp Id: 246442003 Client Smp ID: RE15-10-8362
Inj Date : 21-FEB-2010 22:54
Operator : JMB3 Inst ID: MSD4.i
Smp Info : |246442003|951989|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100205-01|
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness
Method : /chem/MSD4.i/s022110a.b/MSD4-M8270C-AQA-021710.m
Meth Date : 21-Feb-2010 12:25 jos00786 Quant Type: ISTD
Cal Date : 17-FEB-2010 18:13 Cal File: s4b1705.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1623.sub
Target Version: 3.50
Processing Host: kilroy

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	25.03120	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.898	869009	40.000
* 46 Acenaphthene-d10	6.021	1375286	40.000
* 67 Phenanthrene-d10	7.016	1189694	40.000
* 91 Chrysene-d12	8.701	1033247	40.000
* 98 Perylene-d12	10.220	545866	40.000

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

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.058	95420	4.39210315	195	0		0	10
Unknown Aldol Condensate				CAS #:			
2.935	275524	12.6821948	563	0		0	10
1R-.alpha.-Pinene				CAS #:	7785-70-8		
3.470	698108	32.1334874	1430	96	NIST05.L	15186	10
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me				CAS #:	18172-67-3		
3.716	117644	5.41506829	240	97	NIST05.L	15390	10
3-Carene				CAS #:	13466-78-9		
3.855	254776	11.7272063	521	95	NIST05.L	15156	10
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #:	475-20-7		
5.754	683565	19.8813913	883	97	NIST05.L	60020	46
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene				CAS #:	13744-15-5		
5.984	225413	6.55611591	291	95	NIST05.L	60103	46
Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-				CAS #:	483-76-1		
6.075	178616	5.19502207	231	96	NIST05.L	59980	46
Thunbergol				CAS #:	25269-17-4		
7.615	565505	19.0134451	844	98	NIST05.L	118732	67
9,12-Octadecadienoic acid (Z,Z)-				CAS #:	60-33-3		
7.685	170058	5.71770342	254	98	NIST05.L	111993	67
Phytol				CAS #:	150-86-7		
7.733	154152	5.18290376	230	90	NIST05.L	122408	67
Unknown				CAS #:			
7.872	104882	4.06029970	180	0		0	91
Unknown				CAS #:			
8.177	117765	4.55903933	202	0		0	91
Unknown				CAS #:			
8.444	295658	11.4457948	508	0		0	91
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-				CAS #:	1000159-38-2		
8.733	227721	8.81572772	392	91	NIST05.L	59916	91

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
8.808	162796	6.30230165	280	0		0	91
Cedran-diol, 8S,14-				CAS #: 62600-05-9			
9.017	258062	9.99031626	444	83	NIST05.L	83830	91
Unknown				CAS #:			
9.145	453643	17.5618319	780	0		0	91
Unknown				CAS #:			
9.407	140981	5.45780115	242	0		0	91
Unknown				CAS #:			
10.525	120979	8.86511179	394	0		0	98
Unknown				CAS #:			
10.782	411940	30.1861304	1340	0		0	98
.beta.-Sitosterol				CAS #: 83-46-5			
12.873	82191	6.02282837	268	95	NIST05.L	174400	98
Stigmast-4-en-3-one				CAS #: 1058-61-3			
13.793	131591	9.64273468	428	97	NIST05.L	173936	98

Data File: /chem/MSD4.i/s022110a.b/s4b2136.d

Page 1

Date : 21-FEB-2010 22:54

Client ID: RE15-10-8362

Instrument: MSD4.i

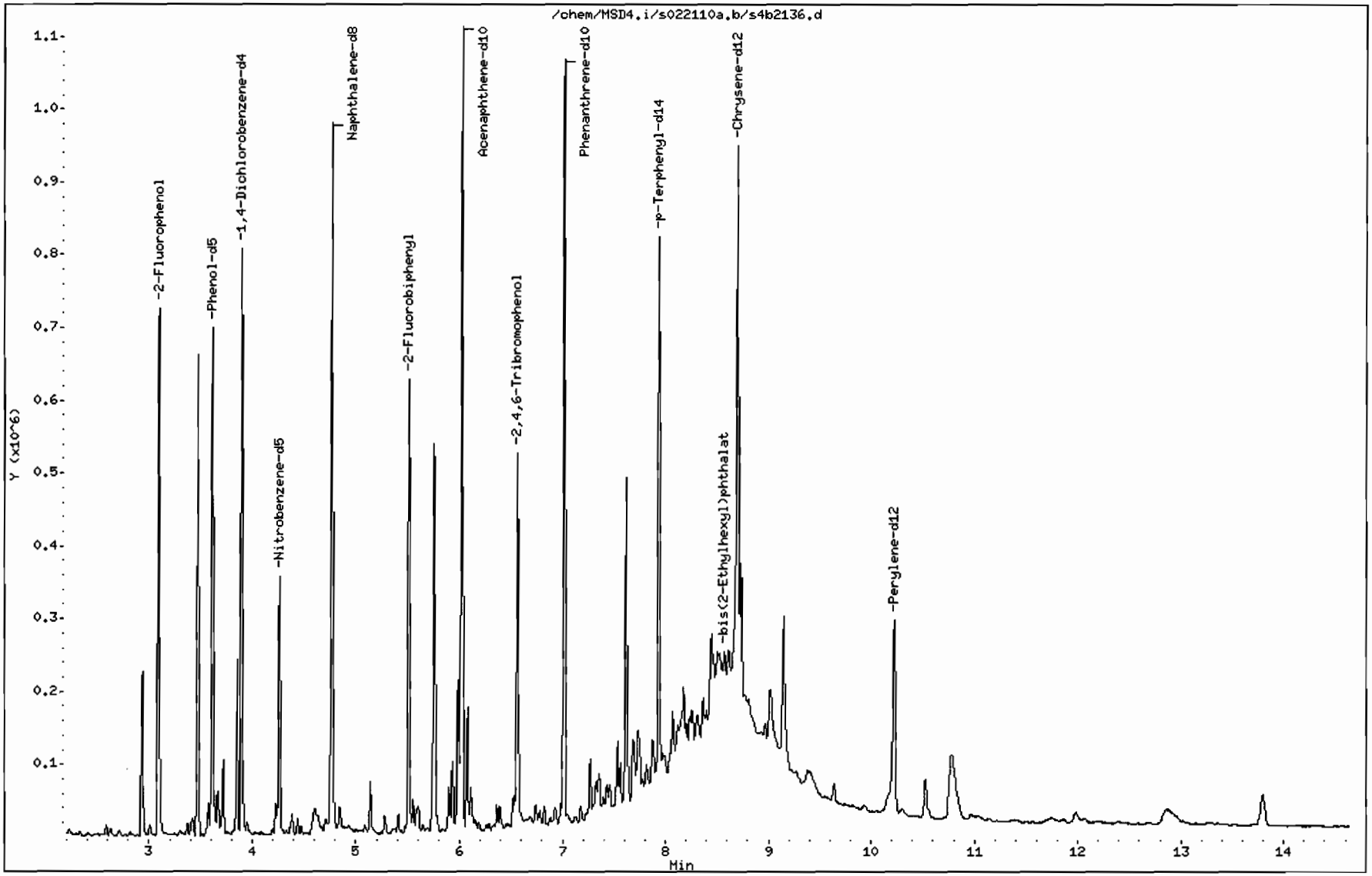
Sample Info: 12464420031951989111SVMI11LANL

Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s022110a.b/s4b2136.d

Date : 21-FEB-2010 22:54

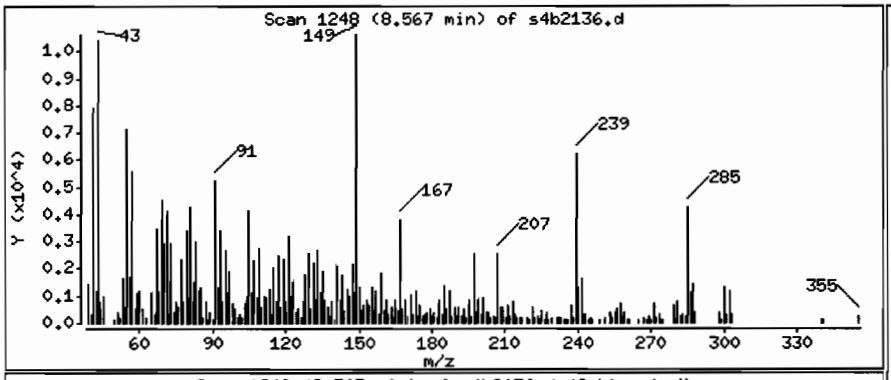
Client ID: RE15-10-8362 Instrument: MSD4.i

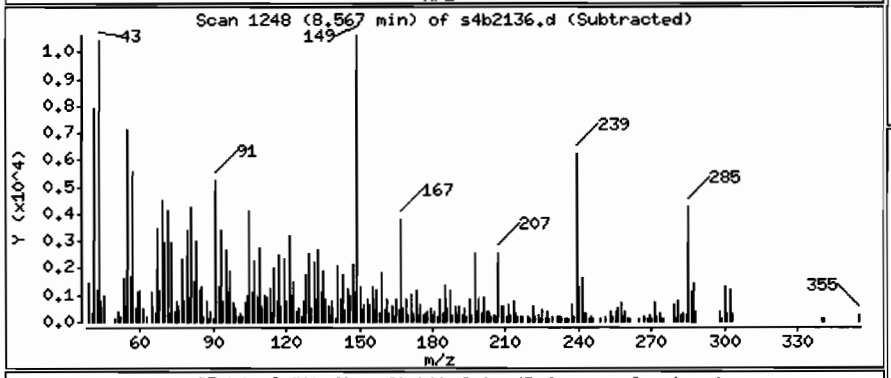
Sample Info: |246442003|951989|1|SVM|1|LANL

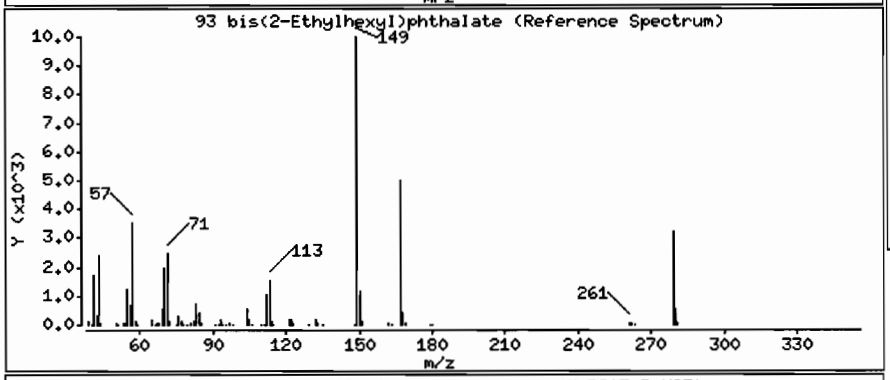
Volume Injected (uL): 0.5 Operator: JMB3

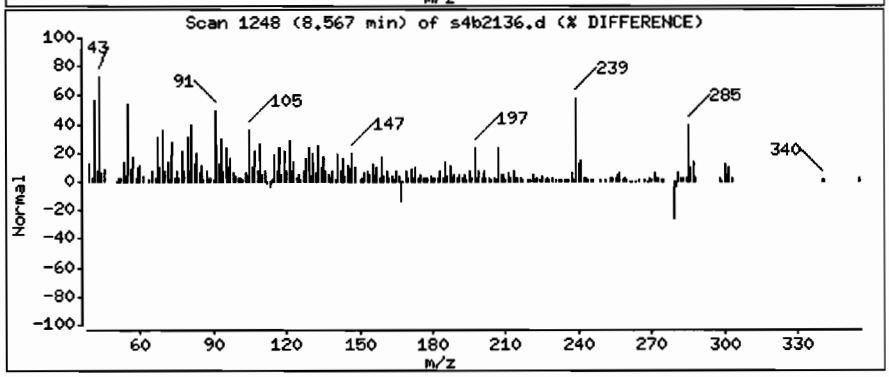
Column phase: J&W DB-5MS Column diameter: 0.20

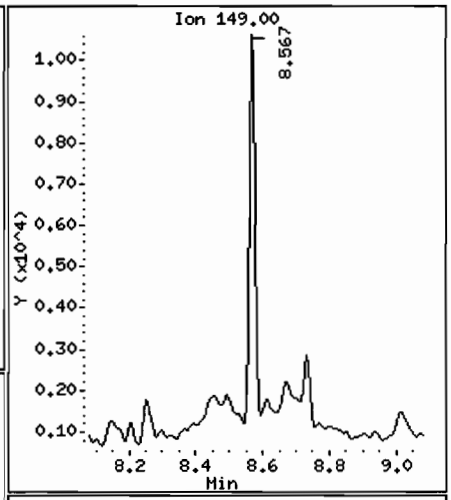
93 bis(2-Ethylhexyl)phthalate Concentration: 95.0 ug/Kg

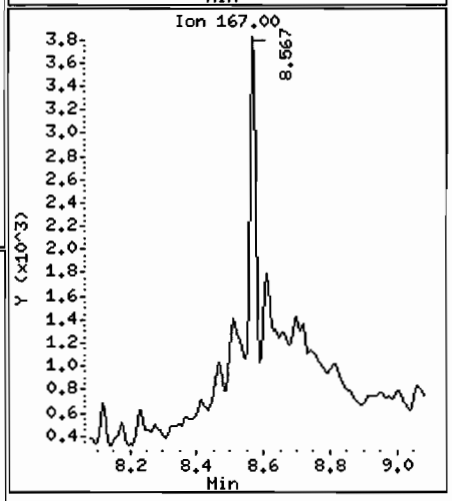












Data File: /chem/MSD4.i/s022110a.b/s4b2136.d

Page 1

Date : 21-FEB-2010 22:54

Client ID: RE15-10-8362

Instrument: MSD4.i

Sample Info: |246442003|951989|1|SVM|1|LANL

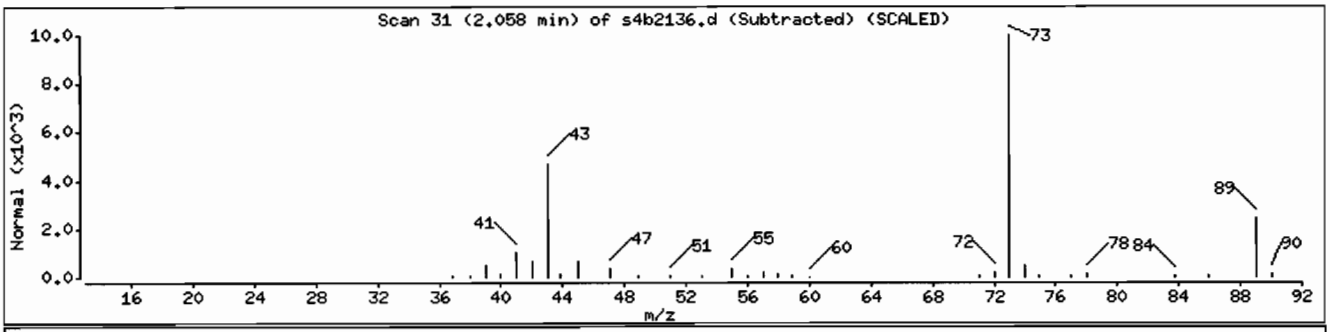
Volume Injected (uL): 0.5

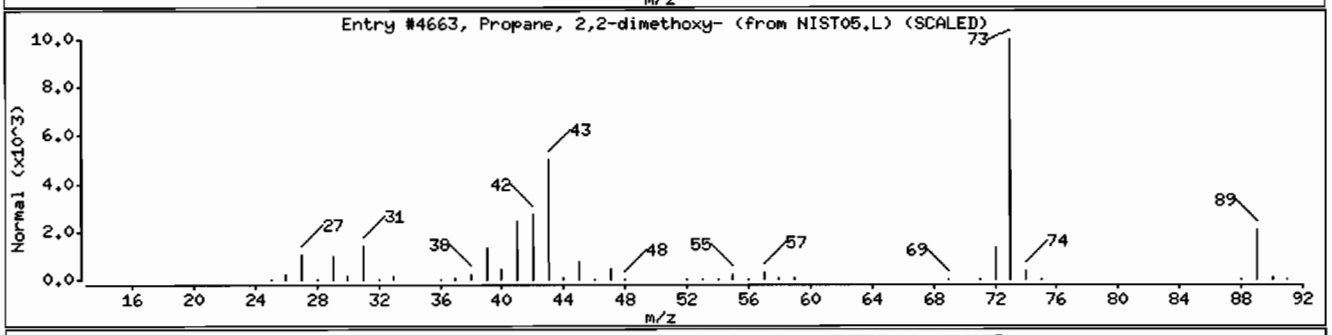
Operator: JMB3

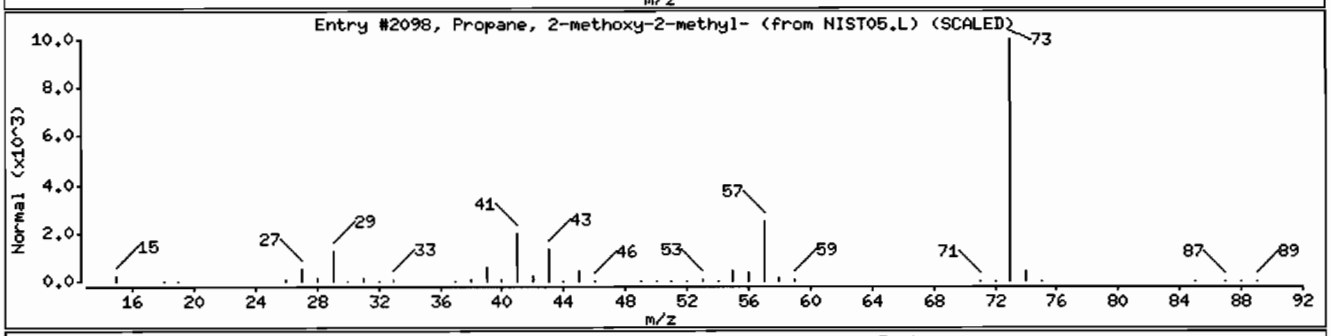
Column phase: J&W DB-5MS

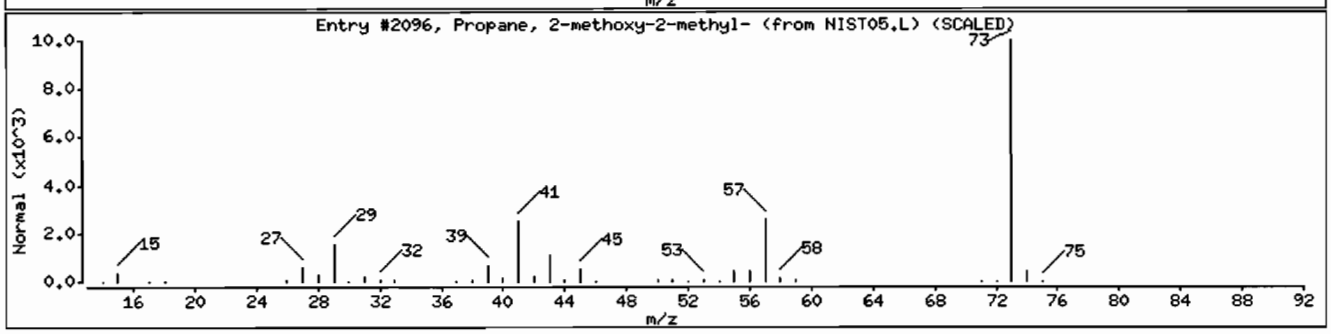
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	78	C5H12O2	104
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2098	17	C5H12O	88
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2096	17	C5H12O	88









Data File: /chem/MSD4.i/s022110a.b/s4b2136.d

Date : 21-FEB-2010 22:54

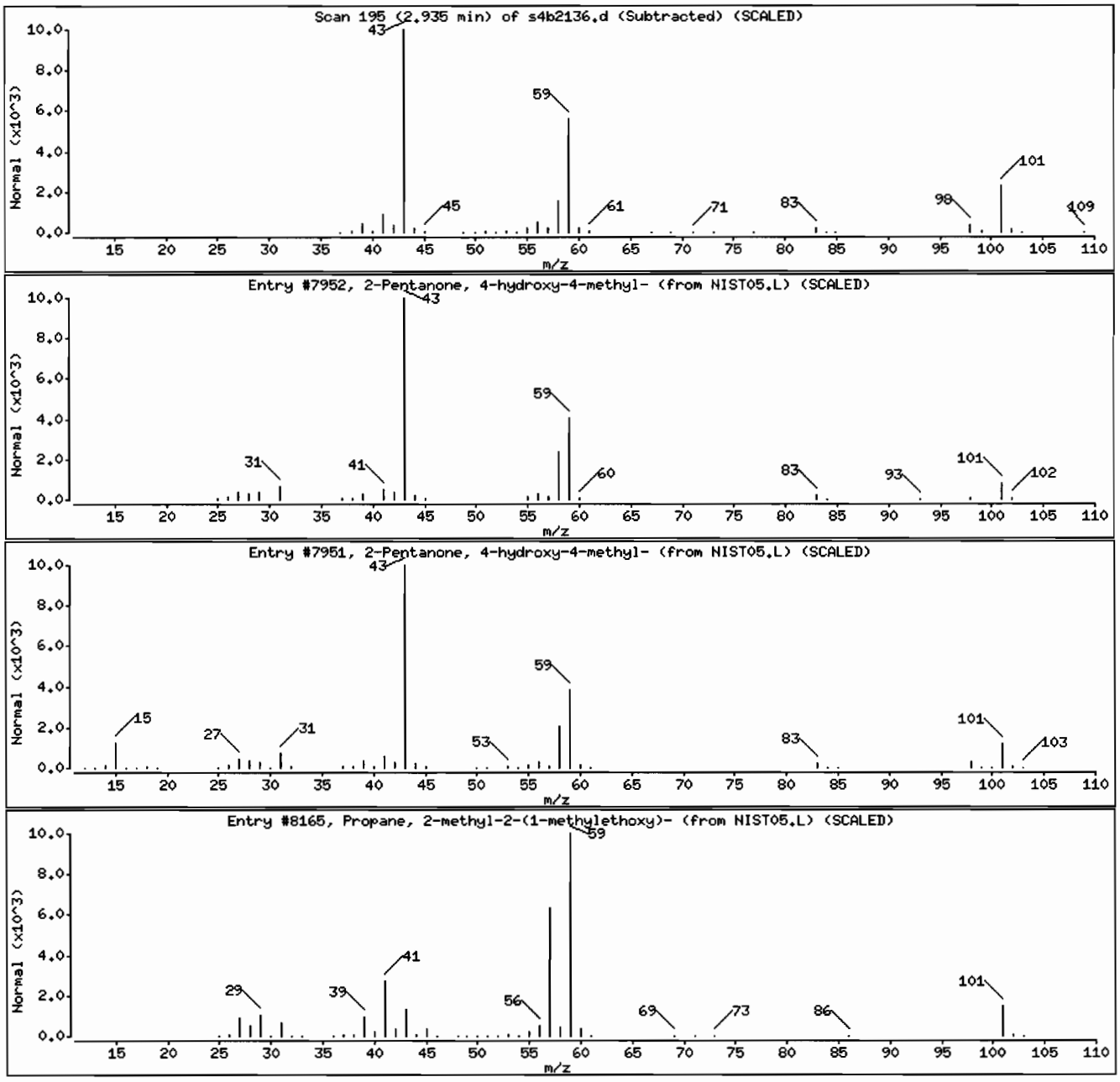
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464200319519891ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
Propane, 2-methyl-2-(1-methylethoxy)-	17348-59-3	NIST05.L	8165	33	C7H16O	116



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Date : 21-FEB-2010 22:54

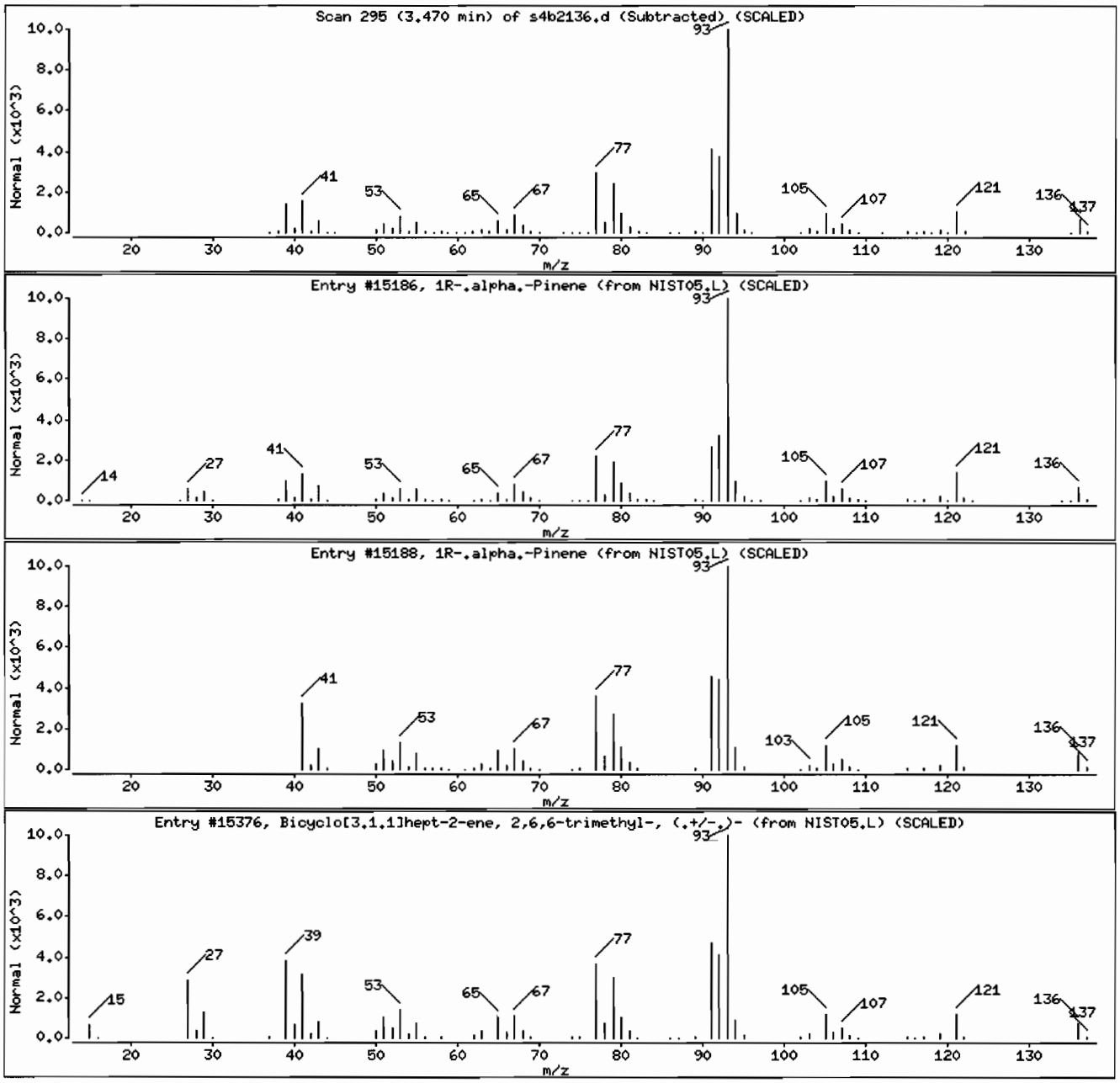
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 1246442003|951989|1|SVH|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

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



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Date : 21-FEB-2010 22:54

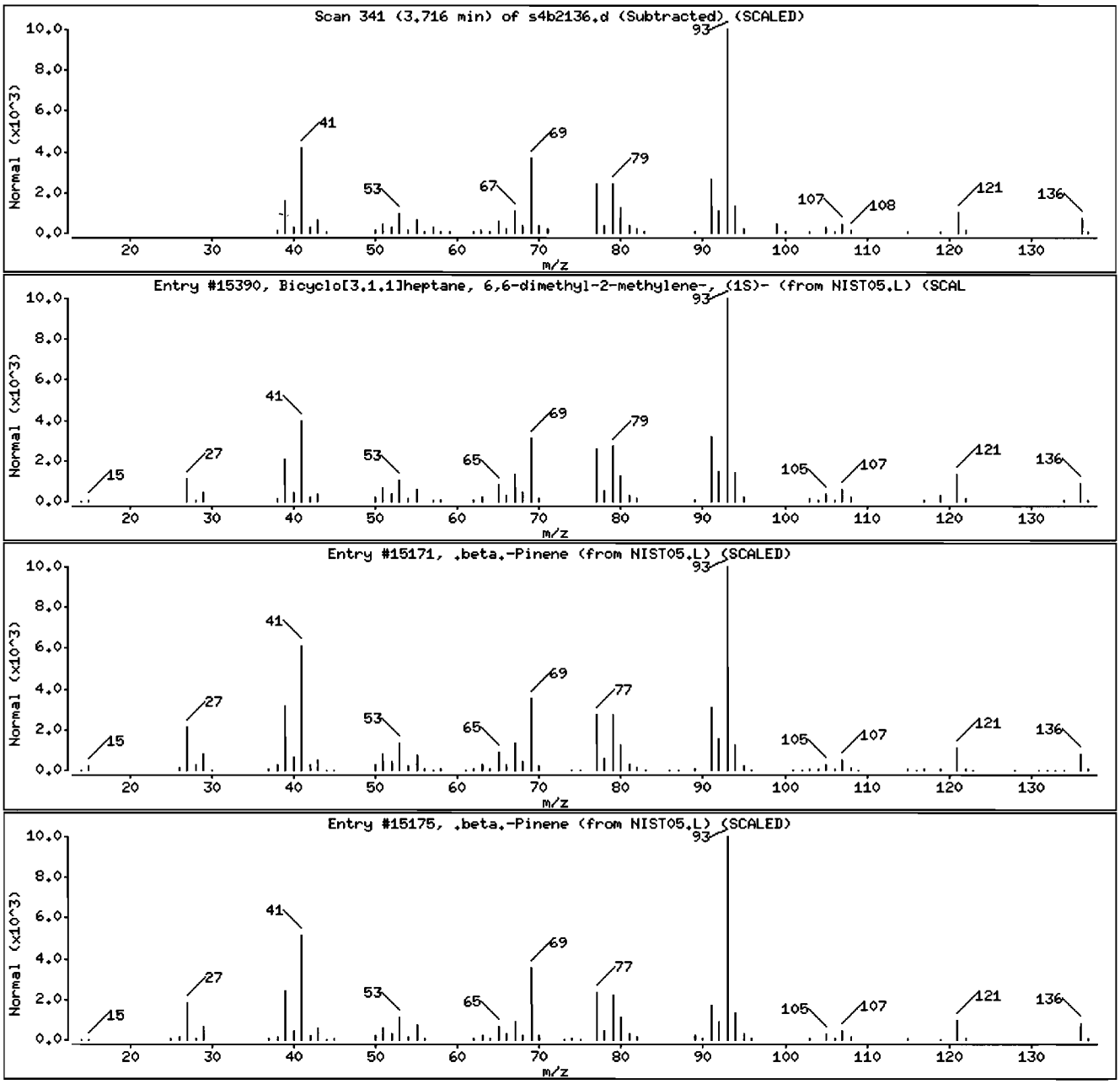
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	97	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15171	96	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15175	93	C10H16	136



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Date : 21-FEB-2010 22:54

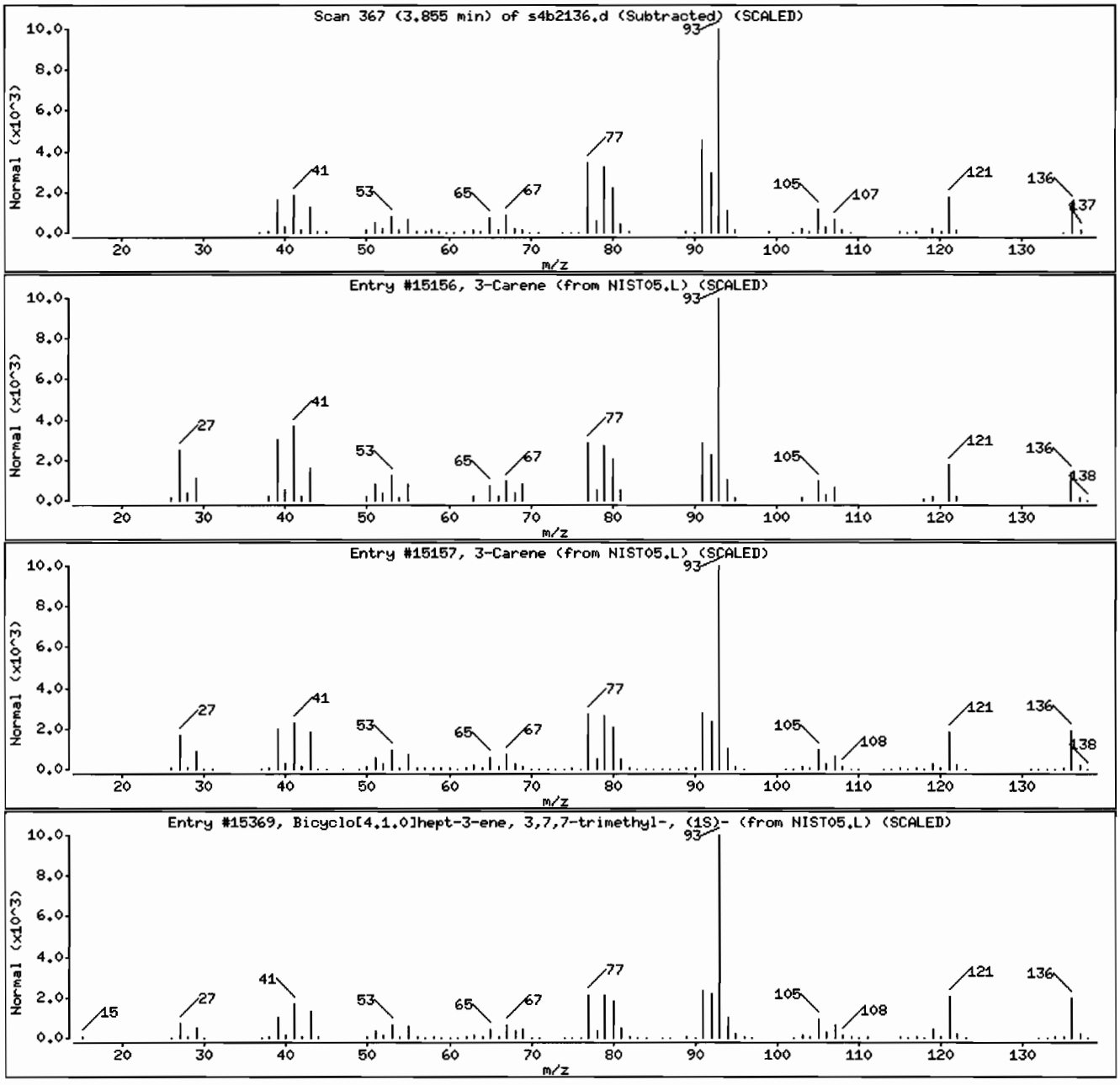
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: I2464420031951989I1ISVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15156	95	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST05.L	15369	95	C10H16	136



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Date : 21-FEB-2010 22:54

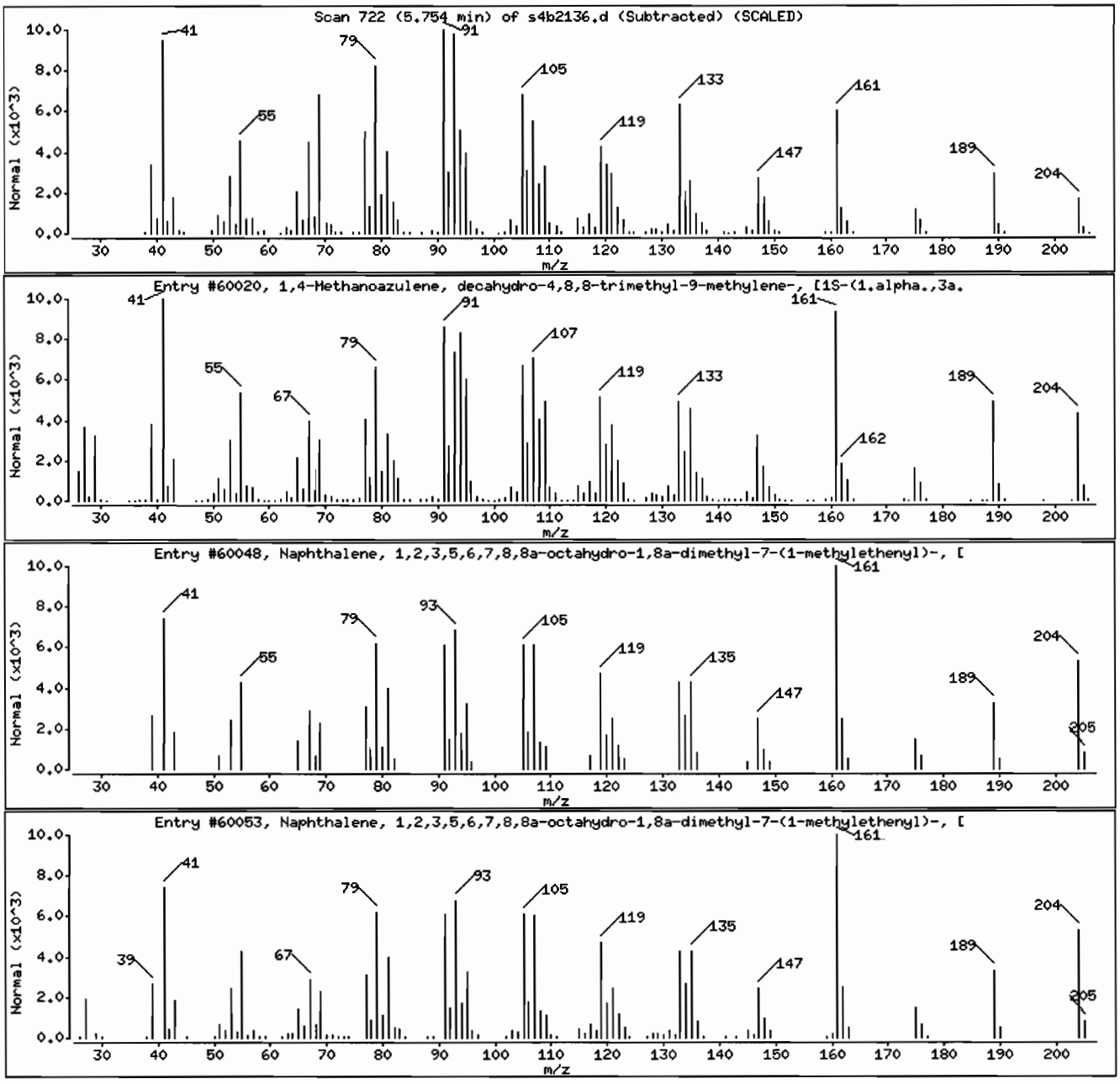
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60048	93	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	10219-75-7	NIST05.L	60053	93	C15H24	204



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Date : 21-FEB-2010 22:54

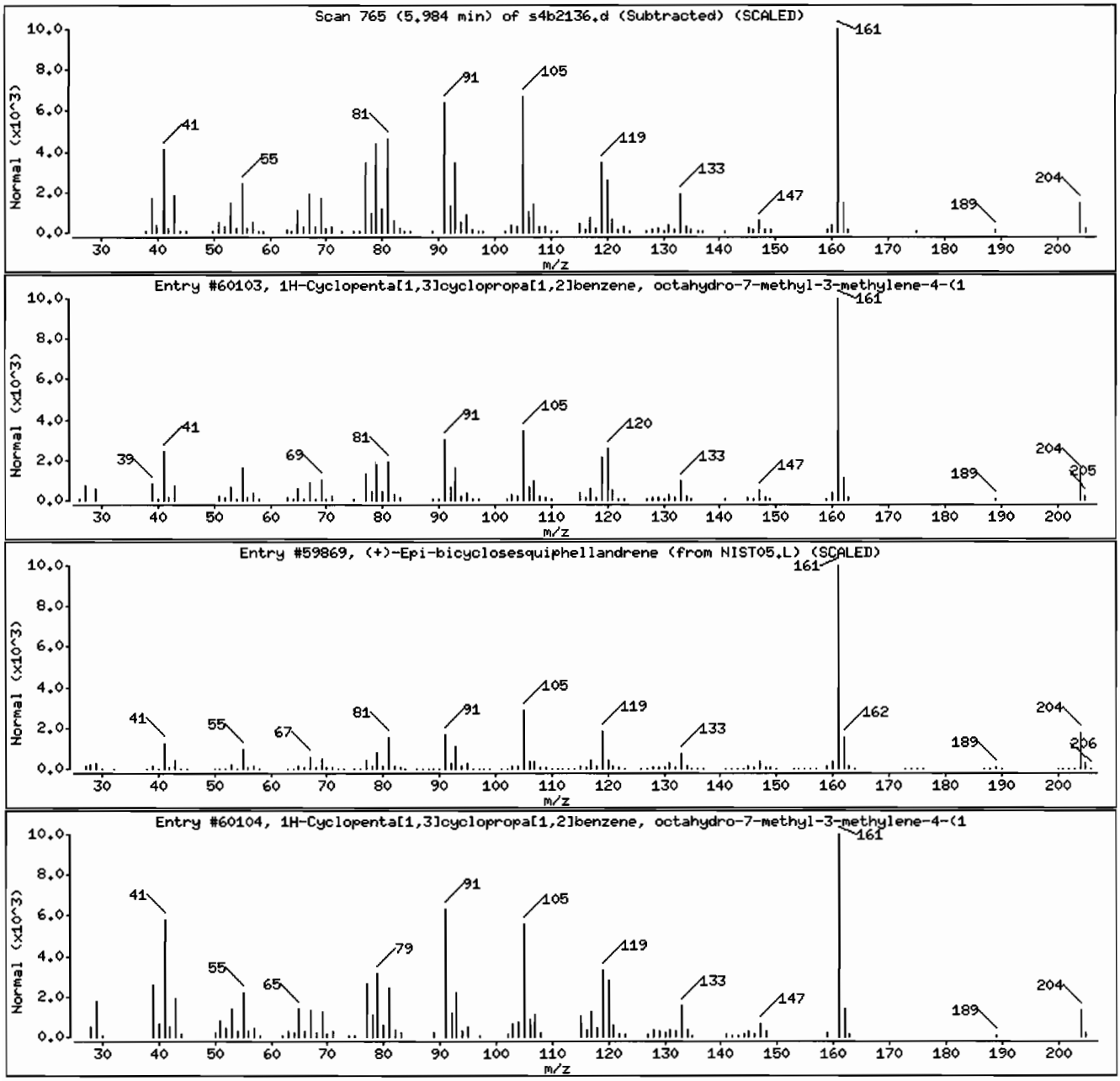
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST05.L	60103	95	C15H24	204
(+)-Epi-bicyclosesquiphellandrene	54324-03-7	NIST05.L	59869	94	C15H24	204
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST05.L	60104	94	C15H24	204



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Date : 21-FEB-2010 22:54

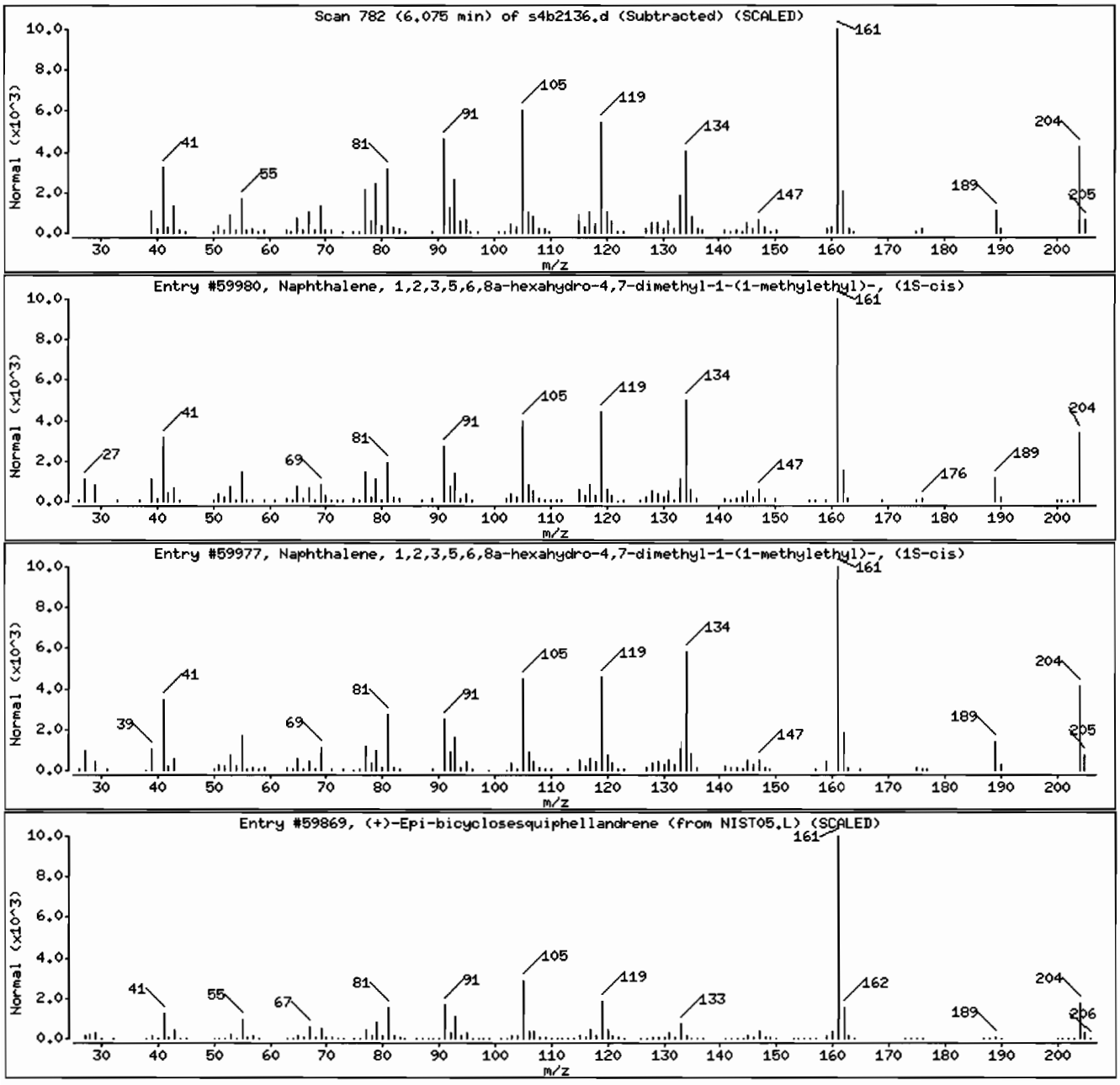
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 124644200319519891ISVHI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-	483-76-1	NIST05.L	59980	96	C15H24	204
Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-	483-76-1	NIST05.L	59977	89	C15H24	204
(+)-Epi-bicyclosesquiphellandrene	54324-03-7	NIST05.L	59869	89	C15H24	204



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Date : 21-FEB-2010 22:54

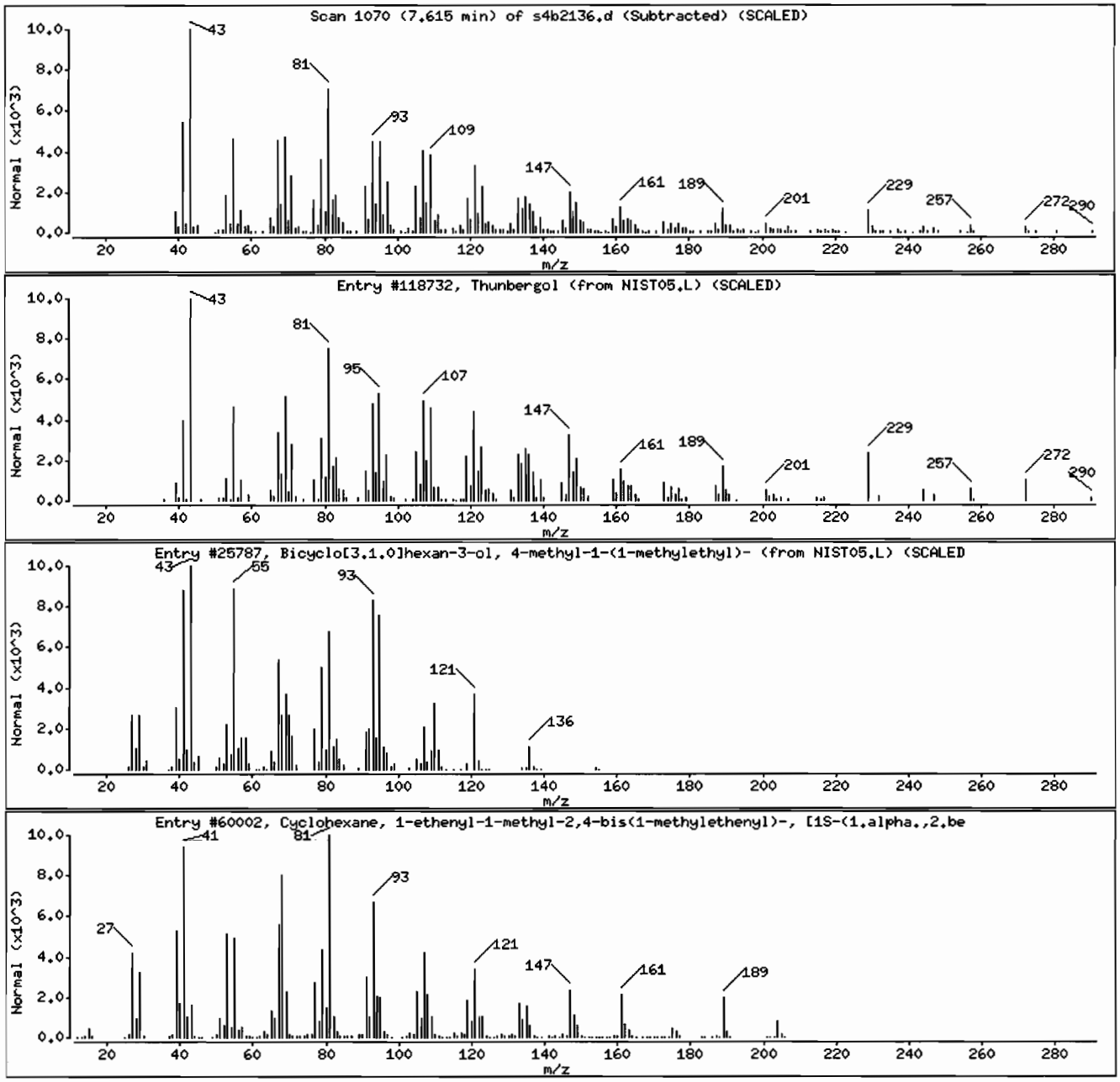
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: I246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Thunbergol	25269-17-4	NIST05.L	118732	98	C20H34O	290
Bicyclo[3.1.0]hexan-3-ol, 4-methyl-1-(1-	513-23-5	NIST05.L	25787	46	C10H18O	154
Cyclohexane, 1-ethenyl-1-methyl-2,4-bis(	515-13-9	NIST05.L	60002	43	C15H24	204



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Date : 21-FEB-2010 22:54

Client ID: RE15-10-8362

Instrument: MSD4.i

Sample Info: 12464420031951989|1|SVMI1|LANL

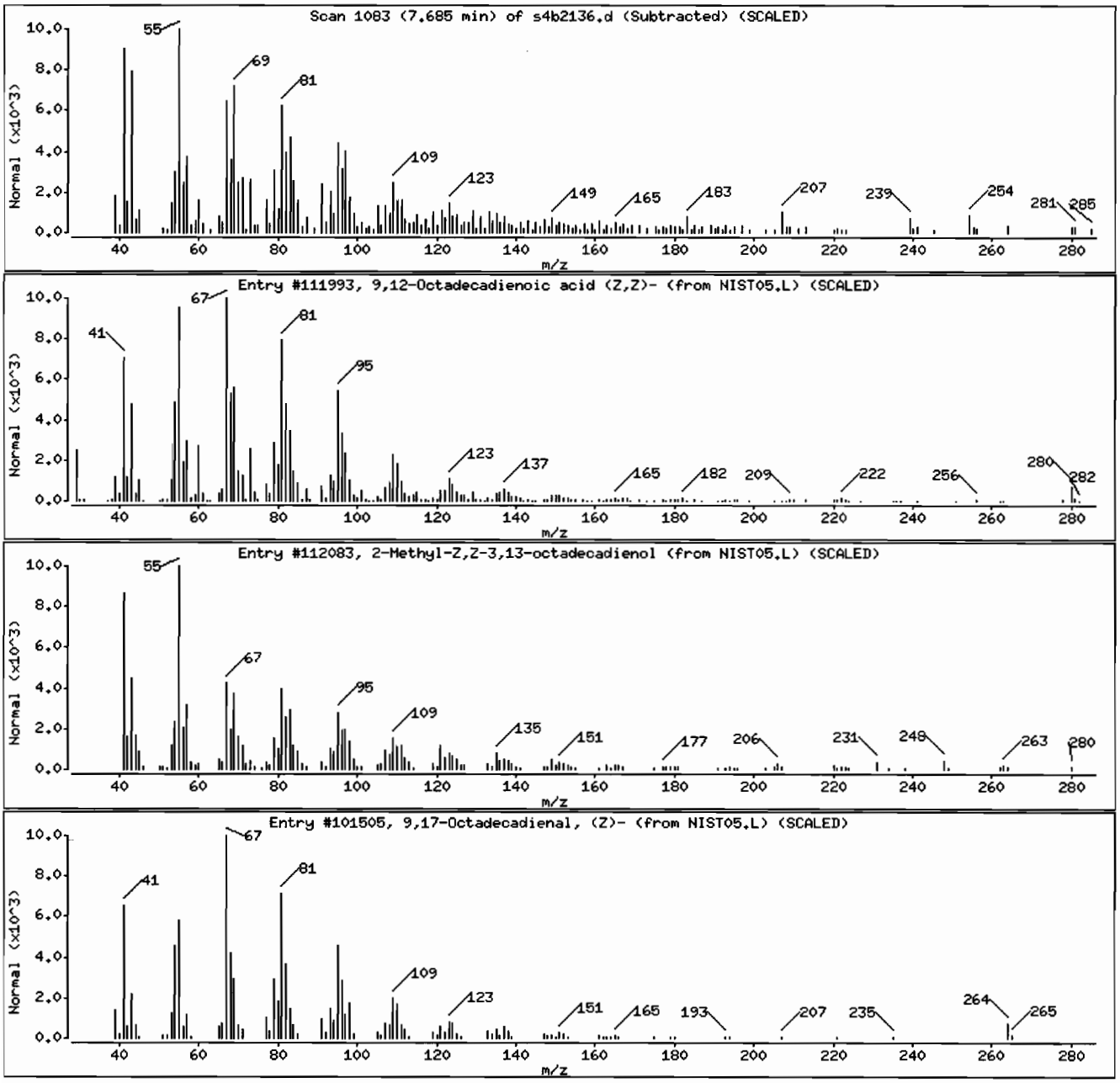
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9,12-Octadecadienoic acid (Z,Z)-	60-33-3	NIST05.L	111993	98	C18H3202	280
2-Methyl-Z,Z-3,13-octadecadienol	1000130-90-5	NIST05.L	112083	90	C19H360	280
9,17-Octadecadienal, (Z)-	56554-35-9	NIST05.L	101505	87	C18H320	264



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Date : 21-FEB-2010 22:54

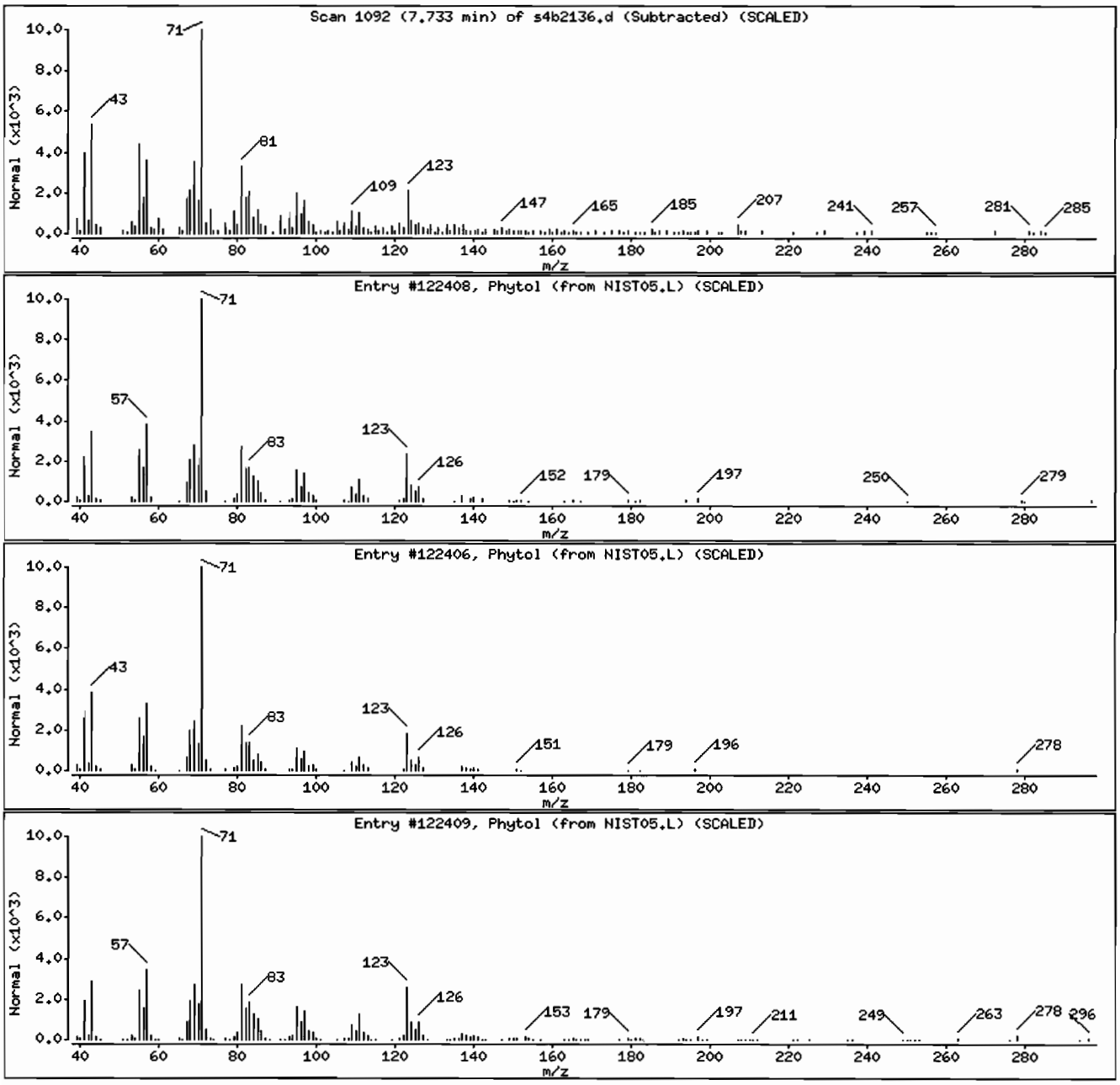
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Phytol	150-86-7	NIST05.L	122408	90	C20H40O	296
Phytol	150-86-7	NIST05.L	122406	74	C20H40O	296
Phytol	150-86-7	NIST05.L	122409	49	C20H40O	296



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Date : 21-FEB-2010 22:54

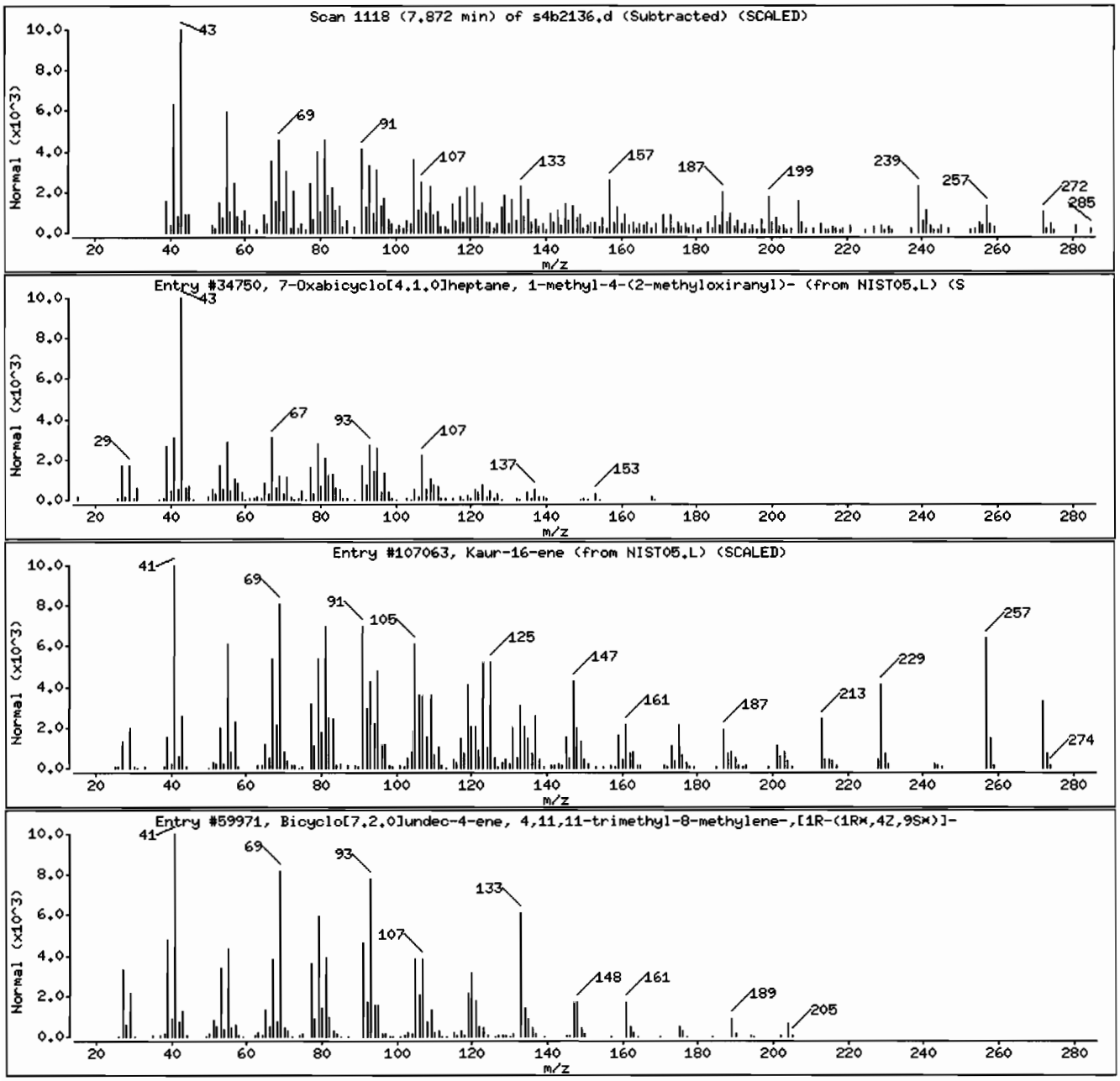
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(	96-08-2	NIST05.L	34750	56	C10H1602	168
Kaur-16-ene	562-28-7	NIST05.L	107063	45	C20H32	272
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime	118-65-0	NIST05.L	59971	38	C15H24	204



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Date : 21-FEB-2010 22:54

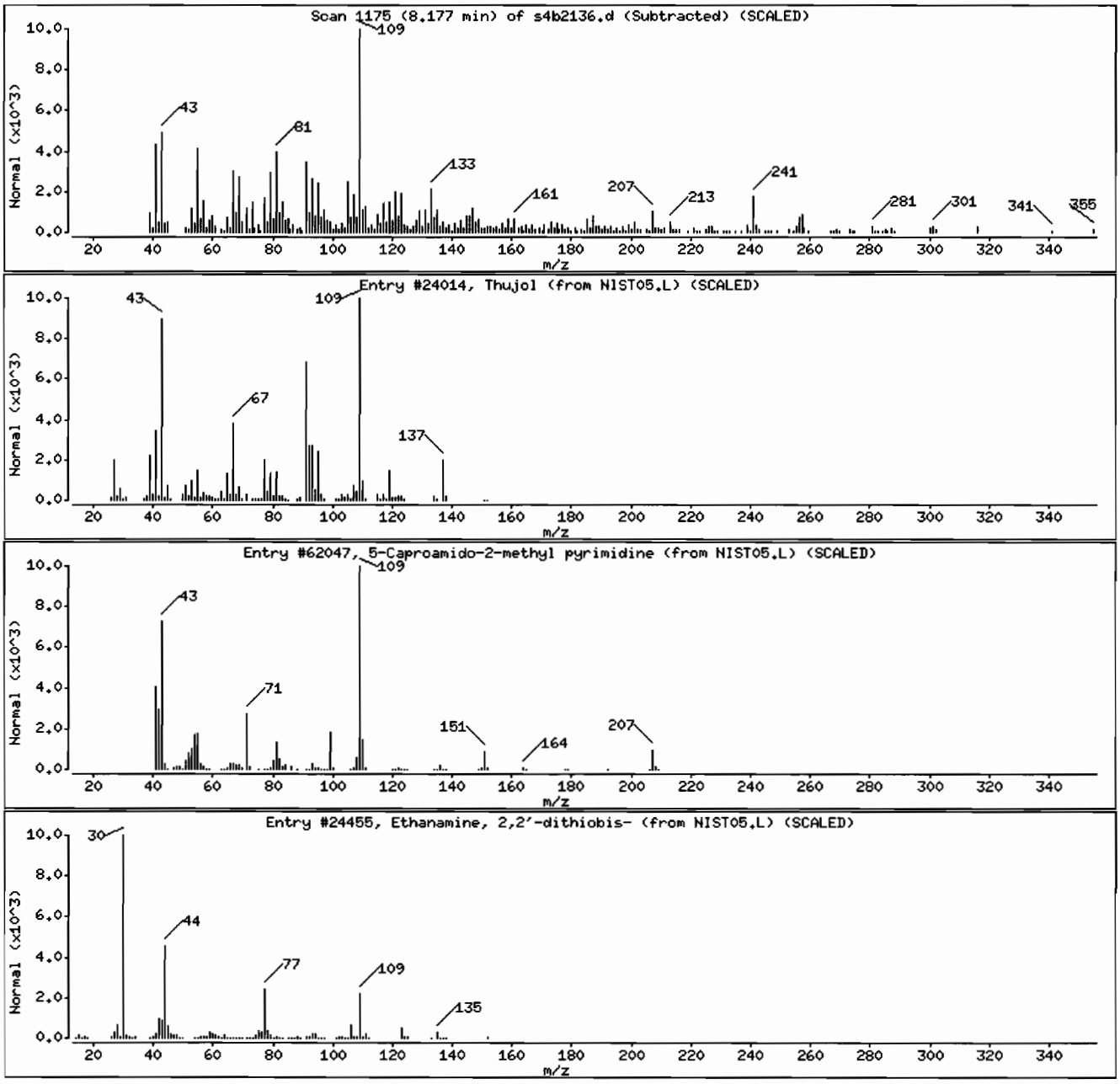
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thujol	1000152-08-2	NIST05.L	24014	38	C10H16O	152
5-Caproamido-2-methyl pyrimidine	1000213-95-8	NIST05.L	62047	38	C11H17N3O	207
Ethanamine, 2,2'-dithiobis-	51-85-4	NIST05.L	24455	38	C4H12N2S2	152



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Date : 21-FEB-2010 22:54

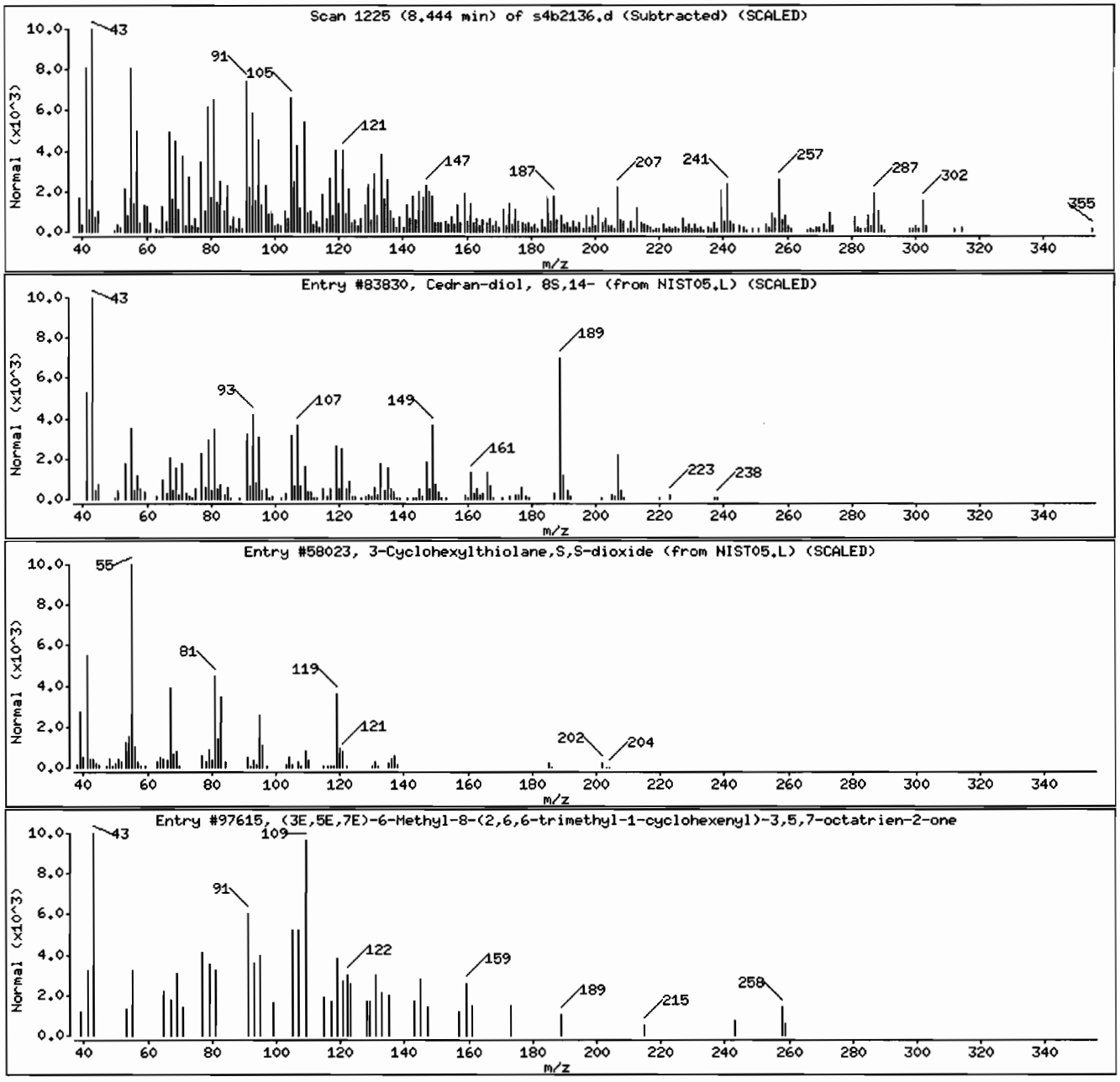
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 1246442003|951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	46	C15H26O2	238
3-Cyclohexylthiolane,S,S-dioxide	71053-08-2	NIST05.L	58023	44	C10H18O2S	202
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	43	C18H26O	258



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Date : 21-FEB-2010 22:54

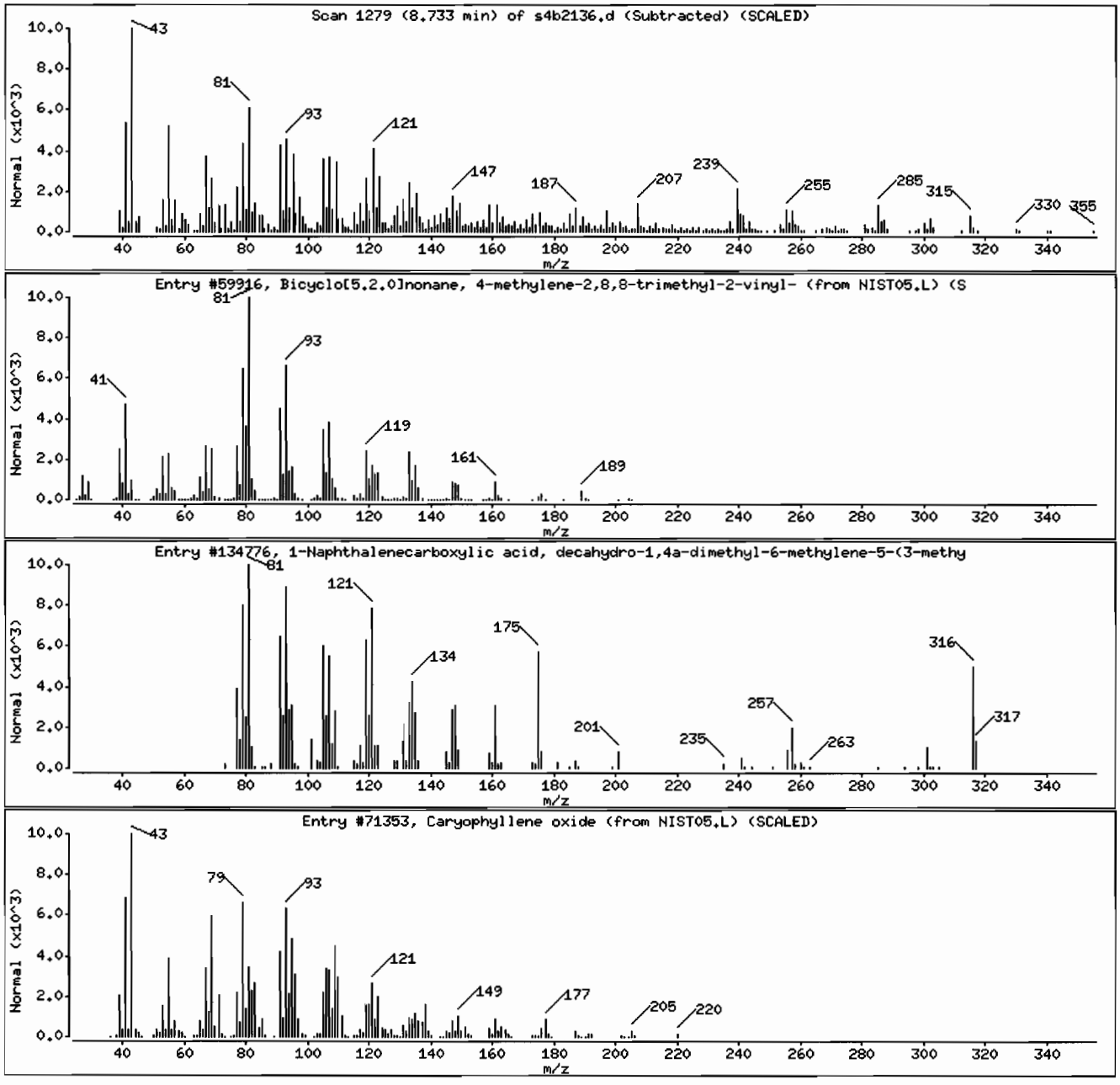
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVM111LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	91	C15H24	204
1-Naphthalenecarboxylic acid, decahydro-	15798-13-7	NIST05.L	134776	78	C21H32O2	316
Caryophyllene oxide	1139-30-6	NIST05.L	71353	64	C15H24O	220



Date : 21-FEB-2010 22:54

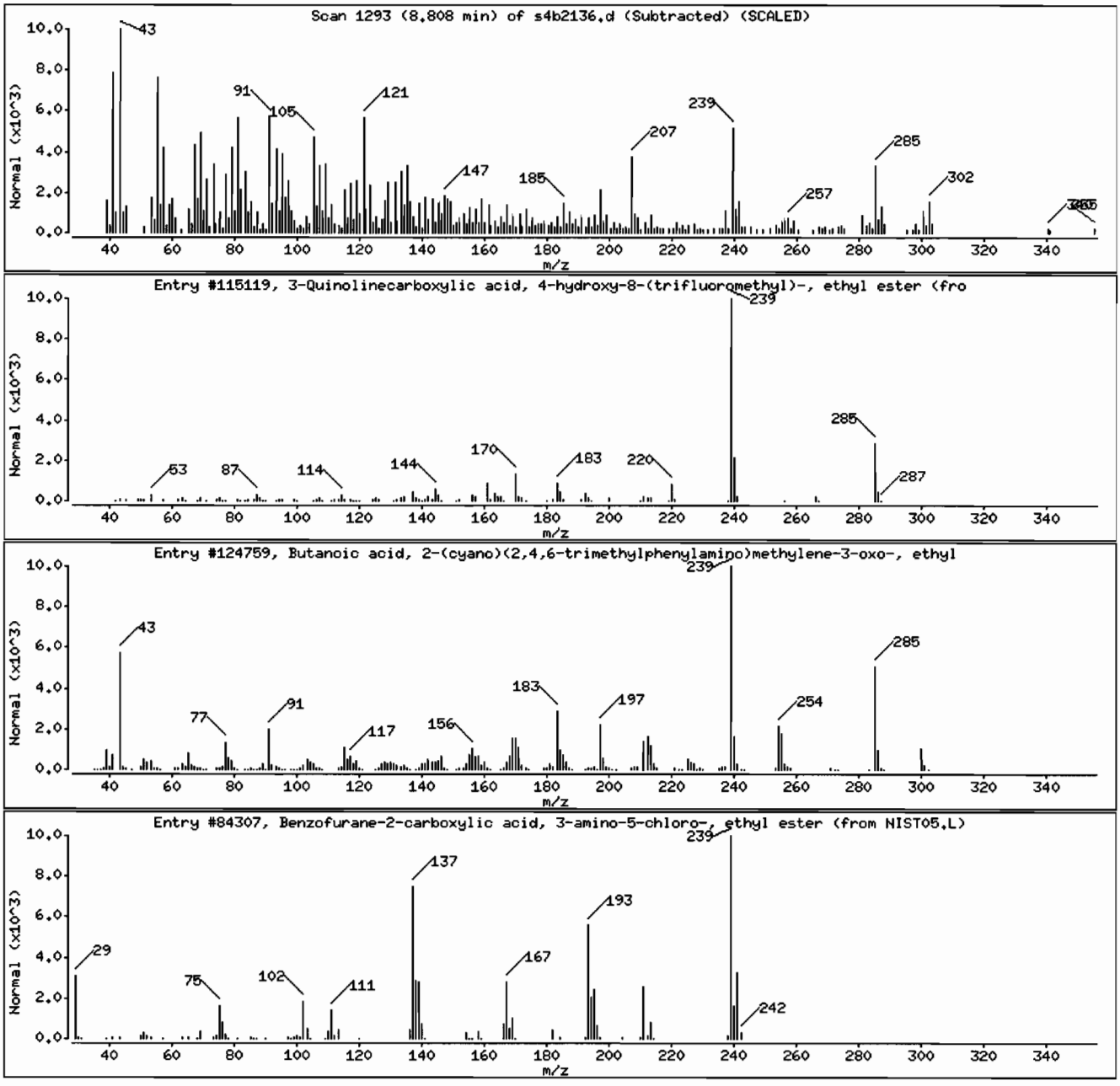
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 1246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Quinolinecarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	38	C13H10F3NO3	285
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	38	C17H20N2O3	300
Benzofurane-2-carboxylic acid, 3-amino-5	329210-07-3	NIST05.L	84307	25	C11H10ClNO3	239



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Date : 21-FEB-2010 22:54

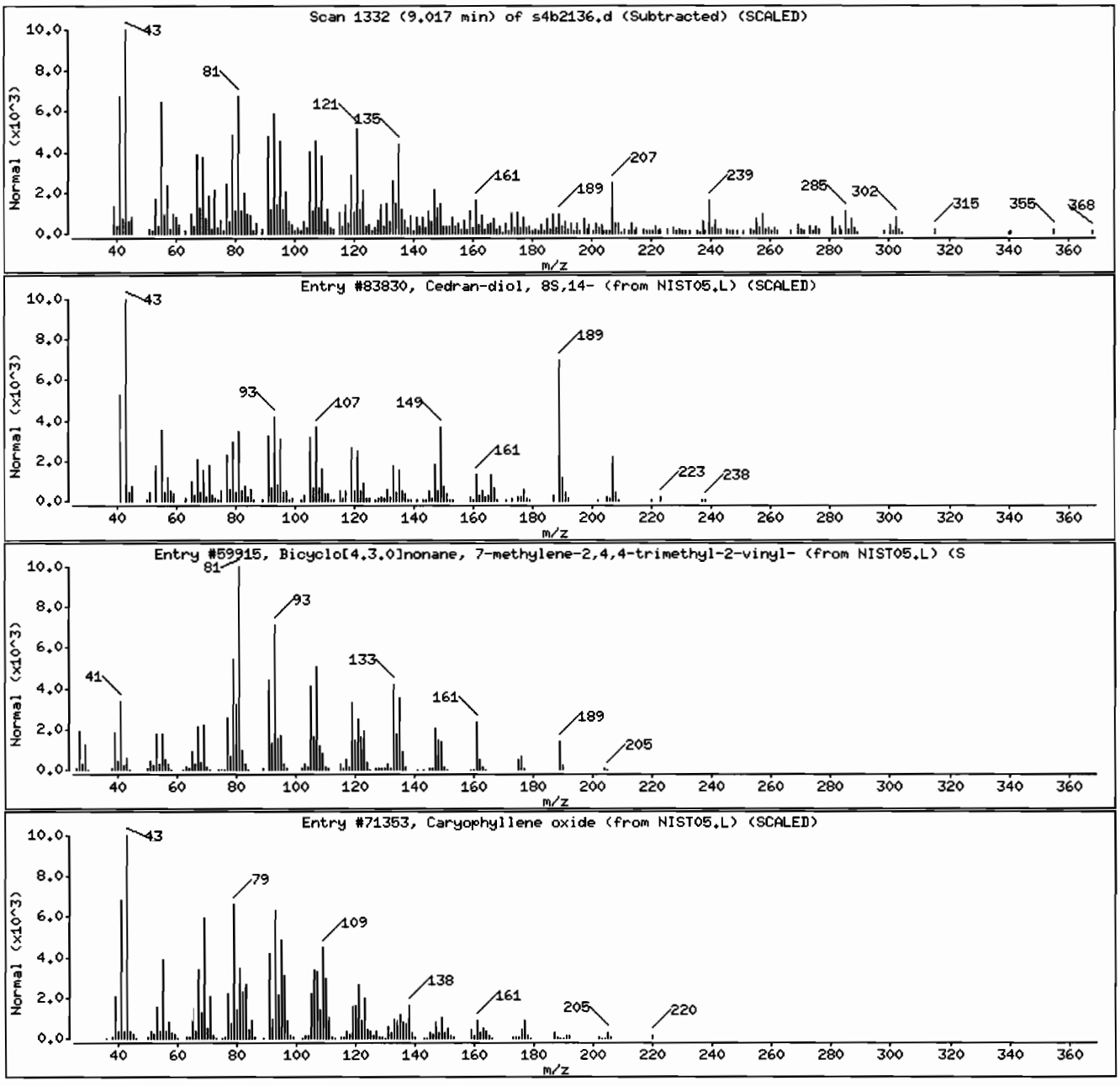
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 1246442003|951989|1|SVMI1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	83	C15H2602	238
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	42	C15H24	204
Caryophyllene oxide	1139-30-6	NIST05.L	71353	38	C15H240	220



Data File: /chem/MSD4.i/s022110a.b/s4b2136.d

Date : 21-FEB-2010 22:54

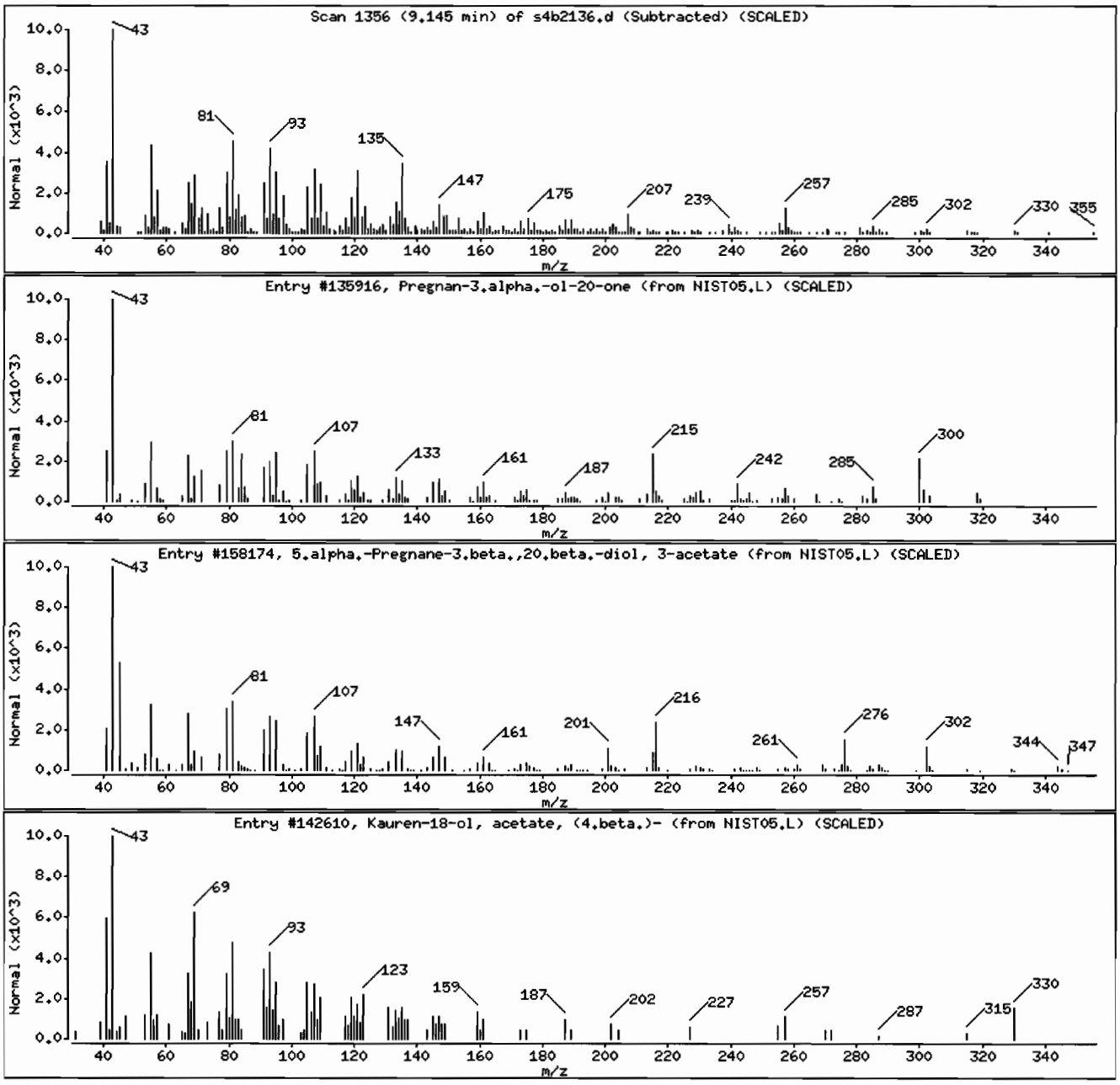
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pregnan-3.alpha.-ol-20-one	128-20-1	NIST05.L	135916	43	C21H3402	318
5.alpha.-Pregnane-3.beta.,20.beta.-diol,	17182-23-9	NIST05.L	158174	38	C23H3803	362
Kauren-18-ol, acetate, (4.beta.)-	72150-74-4	NIST05.L	142610	32	C22H3402	330



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Date : 21-FEB-2010 22:54

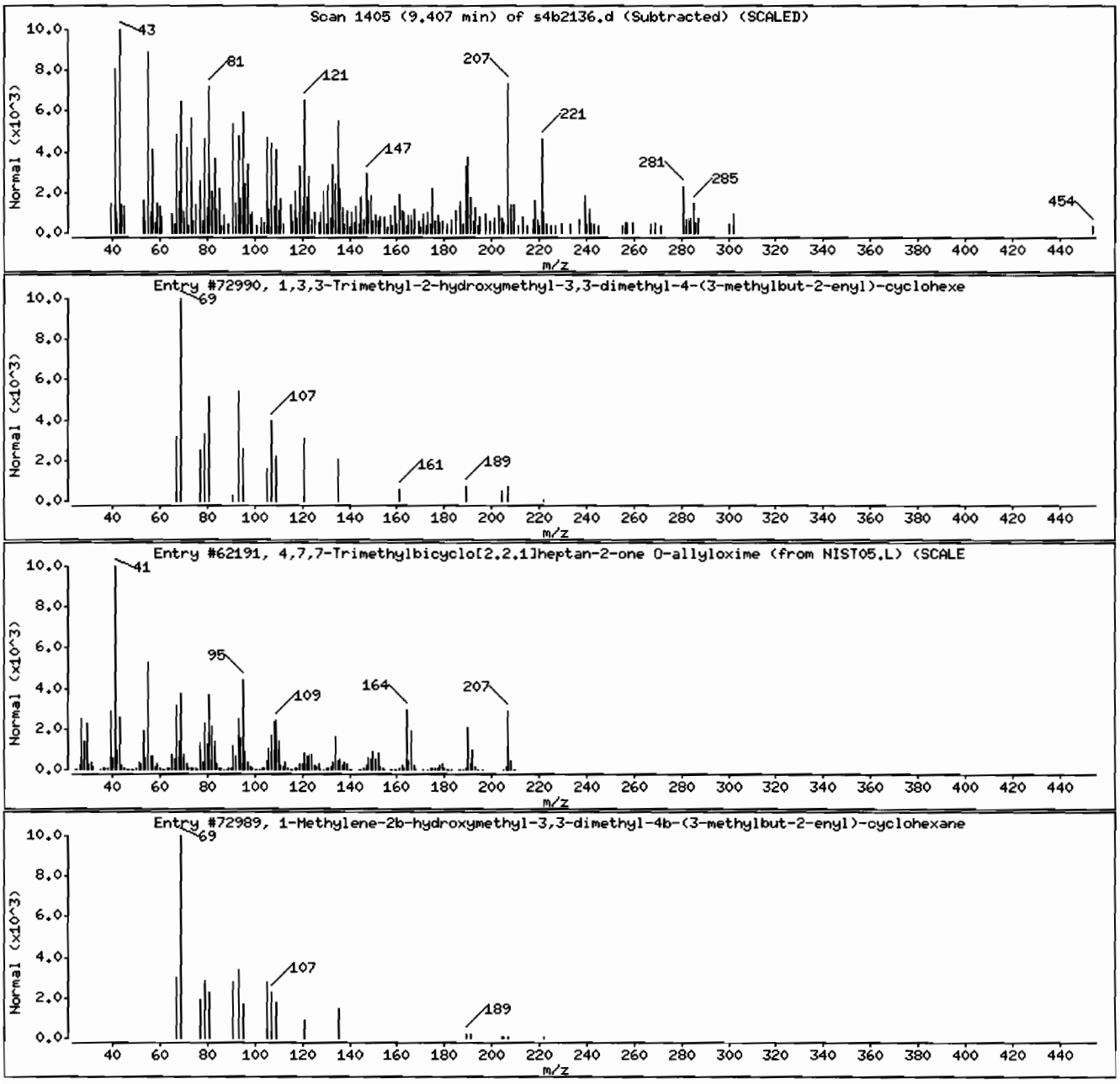
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |246442003|951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3,3-Trimethyl-2-hydroxymethyl-3,3-dime	1000144-10-7	NIST05.L	72990	46	C15H260	222
4,7,7-Trimethylbicyclo[2.2.1]heptan-2-on	1000210-89-8	NIST05.L	62191	46	C13H21NO	207
1-Methylene-2b-hydroxymethyl-3,3-dimethy	1000144-10-6	NIST05.L	72989	46	C15H260	222



Data File: /chem/MSD4.i/s022110a.b/s4b2136.d

Date : 21-FEB-2010 22:54

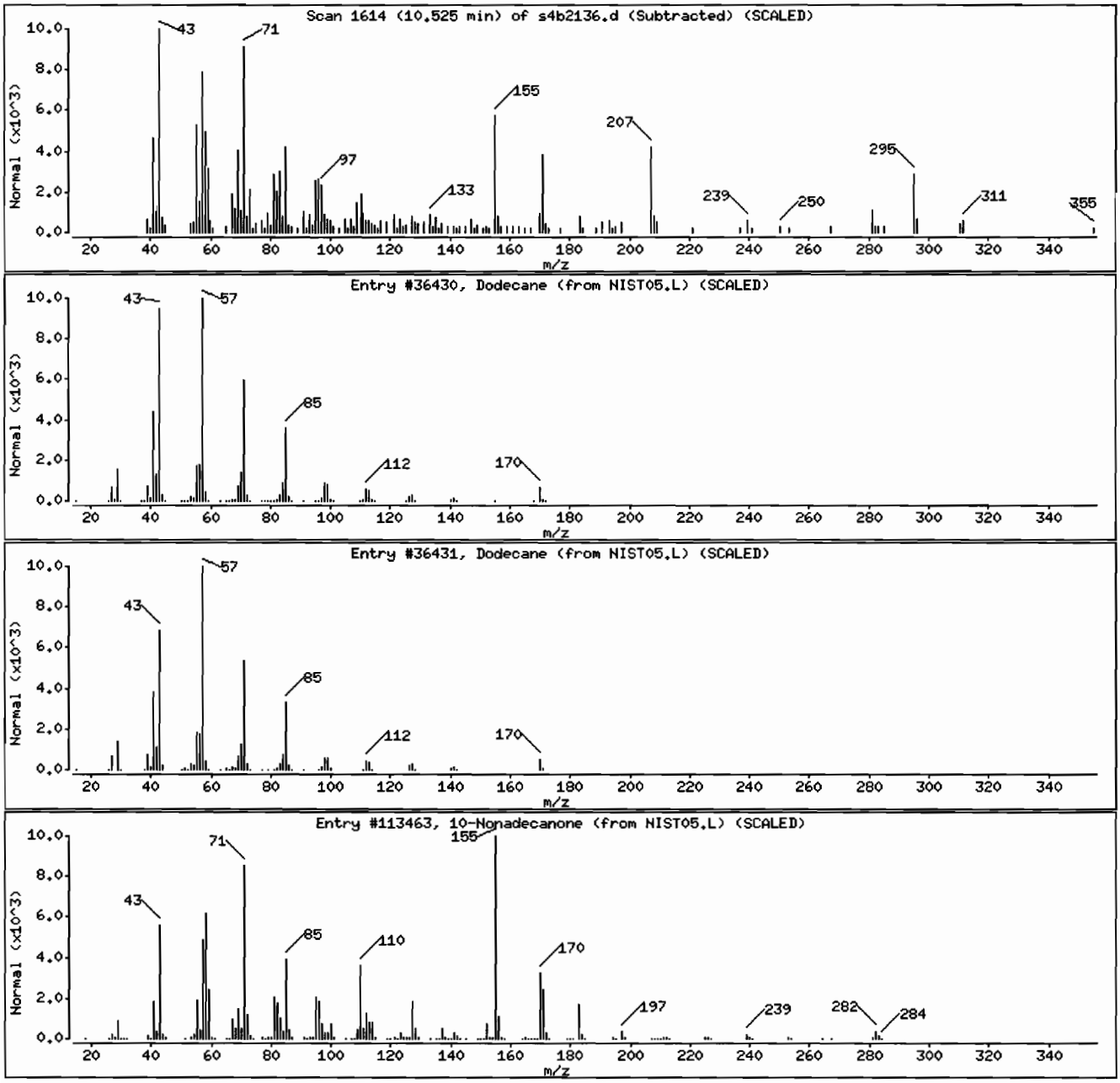
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVH|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dodecane	112-40-3	NIST05.L	36430	53	C12H26	170
Dodecane	112-40-3	NIST05.L	36431	30	C12H26	170
10-Nonadecanone	504-57-4	NIST05.L	113463	30	C19H38O	282



Data File: /chem/MSD4.i/s022110a.b/s4b2136.d

Date : 21-FEB-2010 22:54

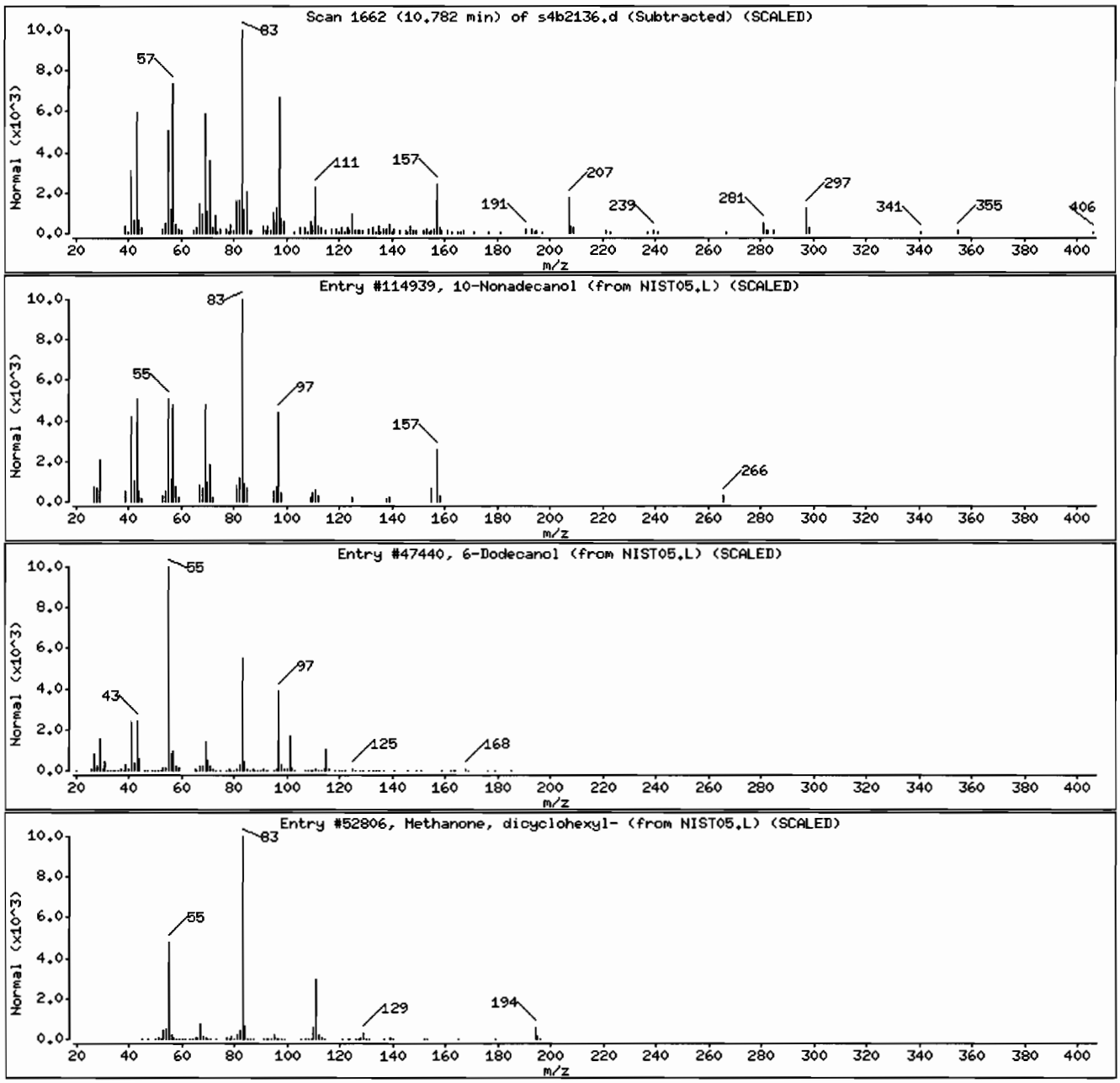
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: 12464420031951989111SVMI1ILANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
10-Nonadecanol	16840-84-9	NIST05.L	114939	50	C19H40O	284
6-Dodecanol	6836-38-0	NIST05.L	47440	43	C12H26O	186
Methanone, dicyclohexyl-	119-60-8	NIST05.L	52806	35	C13H22O	194



Data File: /chem/MSD4.i/s022110a.b/s4b2136.d

Date : 21-FEB-2010 22:54

Client ID: RE15-10-8362

Instrument: MSD4.i

Sample Info: I246442003|951989|1|SVMI1|LANL

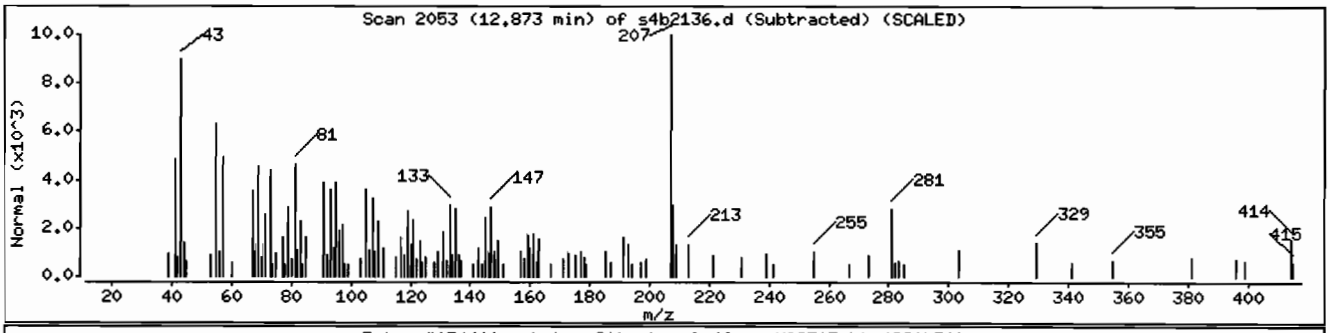
Volume Injected (uL): 0.5

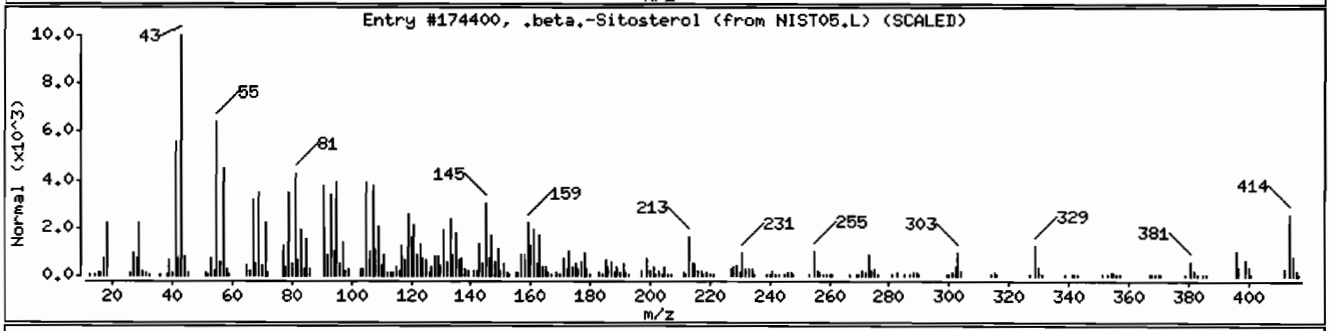
Operator: JMB3

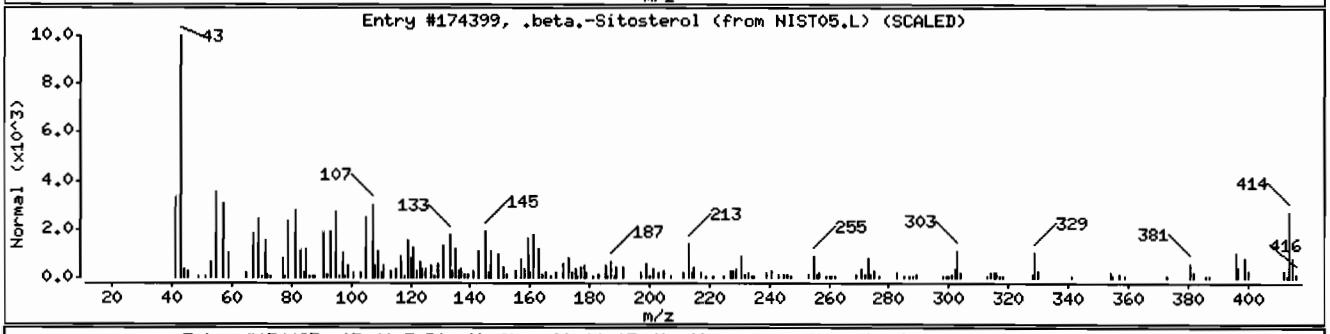
Column phase: J&W DB-5MS

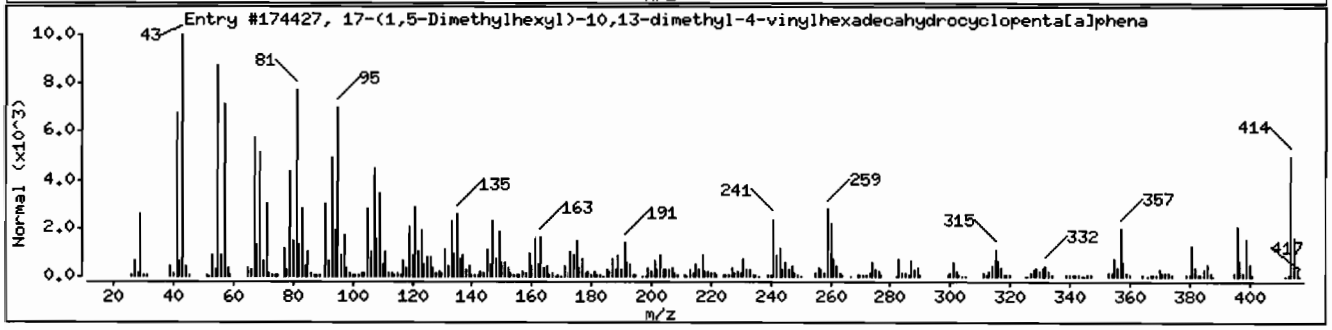
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	95	C29H500	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	93	C29H500	414
17-(1,5-Dimethylhexyl)-10,13-dimethyl-4-	1000210-86-9	NIST05.L	174427	56	C29H500	414









Data File: /chem/MSD4.i/s022110a.b/s4b2136.d

Date : 21-FEB-2010 22:54

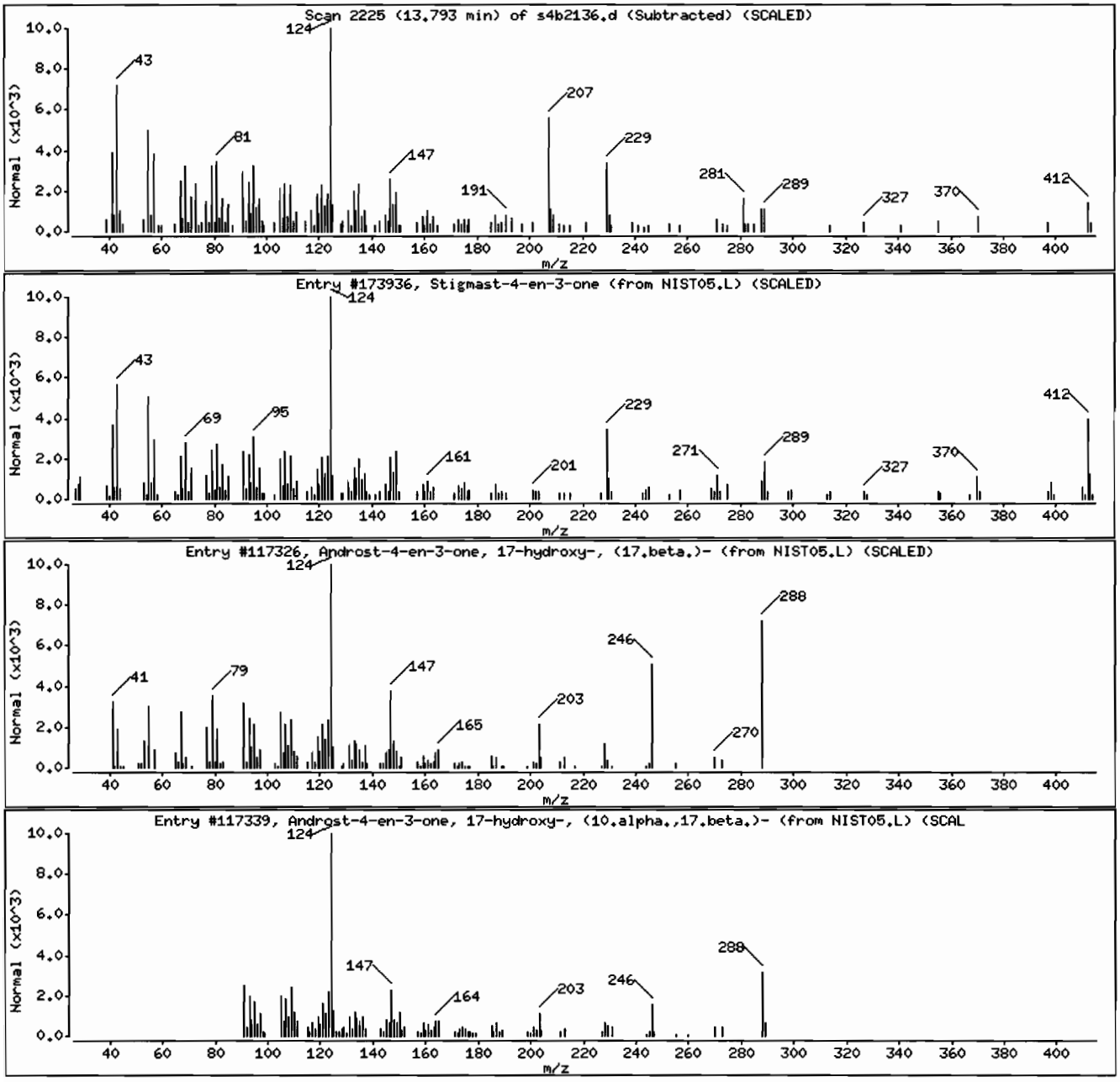
Client ID: RE15-10-8362 Instrument: MSD4.i

Sample Info: |2464420031951989|1|SVM|1|LANL

Volume Injected (uL): 0.5 Operator: JMB3

Column phase: J&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	97	C29H480	412
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117326	42	C19H2802	288
Androst-4-en-3-one, 17-hydroxy-, (10.alp	604-39-7	NIST05.L	117339	38	C19H2802	288



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LC/MS/MS EXPLOSIVES ANALYSIS

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LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1623

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:	950087
Prep Batch Number:	950086

Sample Analysis

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

Sample ID	Client ID
246442002	RE15-10-8361
246442003	RE15-10-8362
246442004	RE15-10-8359
246442005	RE15-10-8358
246442006	RE15-10-8360
1202035690	Method Blank (MB)
1202035691	Laboratory Control Sample (LCS)
1202035692	246434002(RE15-10-8354) Matrix Spike (MS)
1202035693	246434002(RE15-10-8354) 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.

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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 246434002 (RE15-10-8354) from SDG 10-1620 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.

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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 246434002 (RE15-10-8354) from SDG 10-1620 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 standards were not added to the secondary analyte extracts.

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Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-extraction/Re-analysis
Samples 246442004(RE15-10-8359), 246442005(RE15-10-8358) and 246442006(RE15-10-8360) were re-analyzed due to CCV recoveries that did not meet acceptance criteria. The re-analysis passed acceptance criteria and is reported.

Miscellaneous Information

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

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

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

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.

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Chromatographic Columns

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

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

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

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert K Mauer **Date:** 03/25/10

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SAMPLE DATA SUMMARY

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8361

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323042a

Date Analyzed: 24-MAR-10 05:18

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 =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8361

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03010148.wiff

Date Analyzed: 02-MAR-10 23:37

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 =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8362

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442003

Sample Amount 2

Moisture: 25.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323043a

Date Analyzed: 24-MAR-10 05:47

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 =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8362

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442003

Sample Amount 2

Moisture: 25.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03010149.wiff

Date Analyzed: 02-MAR-10 23:53

Units: ug/kg

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

*Concentration =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8359

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442004

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323044a

Date Analyzed: 24-MAR-10 06:17

Units: ug/kg

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

*Concentration = Instrument Value X Concentrated Extract Volume / Sample Amoun X Dilution Factor

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8359

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442004

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03030014.wiff

Date Analyzed: 03-MAR-10 13:06

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 =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8358

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442005

Sample Amount 2

Moisture: 16.5

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323045a

Date Analyzed: 24-MAR-10 06:46

Units: ug/kg

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

*Concentration =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8358

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442005

Sample Amount 2

Moisture: 16.5

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03030015.wiff

Date Analyzed: 03-MAR-10 13:22

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 =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8360

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442006

Sample Amount 2

Moisture: 27.4

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323046a

Date Analyzed: 24-MAR-10 07:15

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 =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8360

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442006

Sample Amount 2

Moisture: 27.4

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03030016.wiff

Date Analyzed: 03-MAR-10 13:37

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 =

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

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QUALITY CONTROL SUMMARY

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2

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–1623

Lab Code: GEL **HPLC Column:** Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
246442002	RE15–10–8361	105	70 – 144	
246442002	RE15–10–8361	97.6	70 – 144	
246442003	RE15–10–8362	107	70 – 144	
246442003	RE15–10–8362	96.4	70 – 144	
246442004	RE15–10–8359	105	70 – 144	
246442004	RE15–10–8359	94.4	70 – 144	
246442005	RE15–10–8358	109	70 – 144	
246442005	RE15–10–8358	97.6	70 – 144	
246442006	RE15–10–8360	103	70 – 144	
246442006	RE15–10–8360	98	70 – 144	
1202035690	MB for batch 950086	103	70 – 144	
1202035690	MB for batch 950086	92.8	70 – 144	
1202035691	LCS for batch 950086	108	70 – 144	
1202035691	LCS for batch 950086	95.2	70 – 144	

DNT = 3,4–Dinitrotoluene

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3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1623

Extract Batch Code: 950086

Date Extracted: 16-FEB-10

GEL LCS ID: 1202035691

GEL LCSDUP ID:

Analysis Date/Time: 23-MAR-10 17:59

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec	#	LCSD Conc	LCSD Rec	#	RPD	#	RPD	Recovery Limits
1,3,5-Trinitrobenzene	5000	4280	85.5								69 - 126
2,4,6-Trinitrotoluene	5000	4540	90.7								73 - 149
2,4-Dinitrotoluene	5000	5080	102								87 - 137
2,6-Dinitrotoluene	5000	5040	101								89 - 120
2-Amino-4,6-dinitrotoluene	5000	5440	109								90 - 130
4-Amino-2,6-dinitrotoluene	5000	5260	105								84 - 130
HMX	5000	4830	96.5								58 - 138
Nitrobenzene	5000	4870	97.5								71 - 122
PETN	5000	5730	115								64 - 137
RDX	5000	5410	108								81 - 137
Tetryl	5000	2560	51.2								51 - 112
m-Dinitrobenzene	5000	5150	103								83 - 122
m-Nitrotoluene	5000	5170	103								73 - 118
o-Nitrotoluene	5000	5210	104								72 - 119
p-Nitrotoluene	5000	5340	107								67 - 131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

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3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10–1623

Extract Batch Code: 950086

Date Extracted: 16–FEB–10

GEL LCS ID: 1202035691

GEL LCSDUP ID:

Analysis Date/Time: 02–MAR–10 18:22

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	5490	110					52 – 114
2,6–Diamino–4–nitrotoluene	5000	5690	114					64 – 122
3,5–Dinitroaniline	5000	4660	93.2					70 – 127
tris(o–cresyl) phosphate	5000	4780	95.6					84 – 119
TATB	5000	5020	100					28 – 162

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

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3
High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8354

Lab Code: GEL

GEL Job No (SDG) 10-1623

Extract Batch Code: 950086

Date Extracted:16-FEB-10

GEL Spike ID:1202035692

GEL SpikeDup ID:1202035693

Analysis Date/Time: 23-MAR-10 18:58

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
PETN	5000	0	5060	101	4800	96.1	5.3	30	60 – 140
RDX	5000	0	4580	91.6	4920	98.4	7.18	30	59 – 152
2,4,6-Trinitrotoluene	5000	0	5370	107	4830	96.7	10.4	30	76 – 144
2,6-Dinitrotoluene	5000	0	4630	92.6	5020	100	7.99	30	90 – 118
Nitrobenzene	5000	0	4620	92.4	4560	91.2	1.22	30	70 – 122
HMX	5000	0	4390	87.7	4750	95	7.98	30	51 – 144
4-Amino-2,6-dinitrotoluene	5000	0	5570	111	5410	108	2.99	30	72 – 143
2-Amino-4,6-dinitrotoluene	5000	0	5100	102	5420	108	6.15	30	85 – 137
2,4-Dinitrotoluene	5000	0	4860	97.2	5130	103	5.47	30	86 – 135
1,3,5-Trinitrobenzene	5000	0	4000	80	4490	89.9	11.7	30	50 – 140
Tetryl	5000	0	3770	75.4	4050	81	7.18	30	36 – 124
m-Dinitrobenzene	5000	0	4830	96.7	5000	100	3.4	30	85 – 118
m-Nitrotoluene	5000	0	4520	90.5	4600	91.9	1.59	30	70 – 120
o-Nitrotoluene	5000	0	4520	90.3	4590	91.9	1.7	30	69 – 123
p-Nitrotoluene	5000	0	4630	92.5	4820	96.4	4.14	30	65 – 133

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

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3
High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8354

Lab Code: GEL

GEL Job No (SDG) 10-1623

Extract Batch Code: 950086

Date Extracted: 16-FEB-10

GEL Spike ID: 1202035692

GEL SpikeDup ID: 1202035693

Analysis Date/Time: 02-MAR-10 18:54

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	5100	102	5210	104	2.13	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	5660	113	5630	113	.531	30	55 - 130
3,5-Dinitroaniline	5000	0	4580	91.6	4630	92.6	1.09	30	73 - 129
tris(o-cresyl) phosphate	5000	0	4500	90	4610	92.2	2.42	30	72 - 127
TATB	5000	0	4930	98.6	5070	101	2.8	30	29 - 155

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

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4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1623

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 23-MAR-10 09:08

GEL Data File: EXP0323001a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

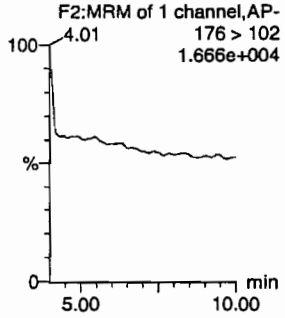
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	229.482
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	228.802
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	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

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\032310expa.mdb, Time: Tue Mar 23 14:06:48 2010
Calibration: Untitled, Time: Wed Mar 24 09:29:41 2010

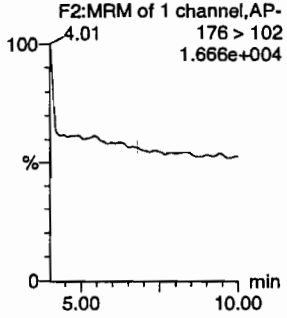
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323001a
Date: 23-Mar-2010
Time: 09:08:58
ID: XIBLK01
Vial: 1:1,A

HMX 3/24/10

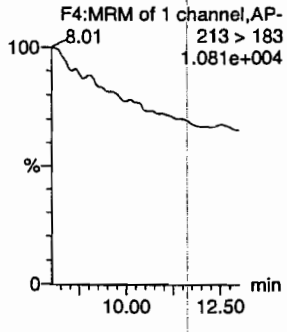
HMX



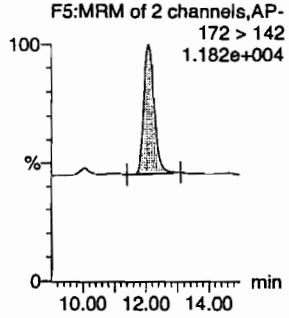
RDX



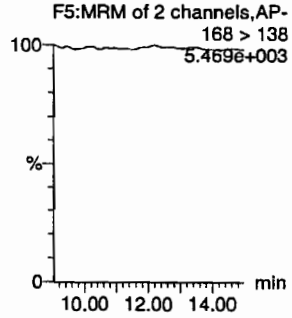
135-Trinitrobenzene



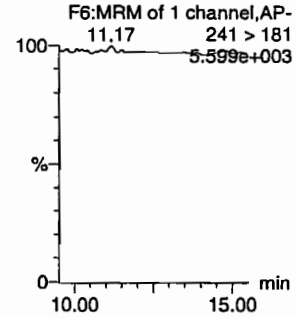
13-Dinitrobenzene-d4



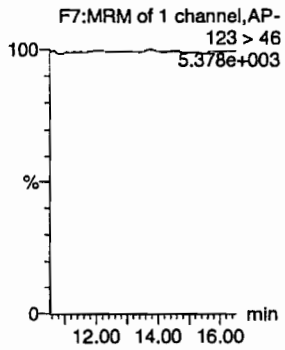
13-Dinitrobenzene



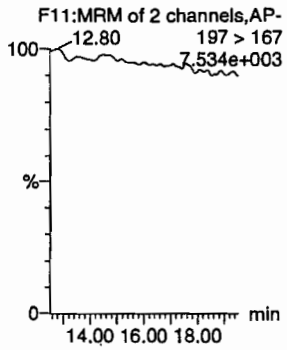
Tetryl



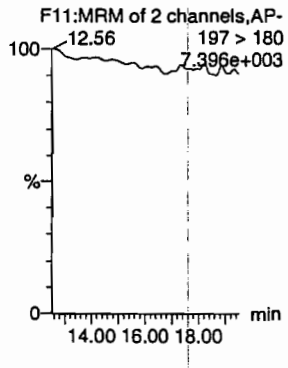
Nitrobenzene



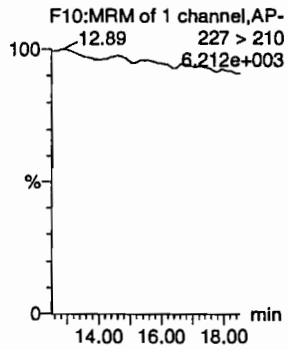
4-Amino-26-dinitrotoluene



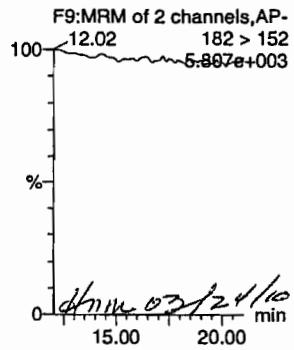
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

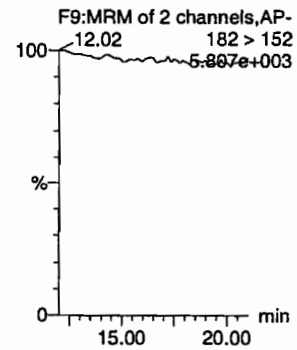


34-dinitrotoluene



dhm 03/24/10

26-dinitrotoluene



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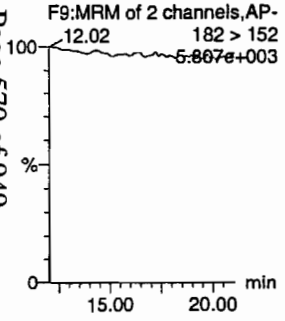
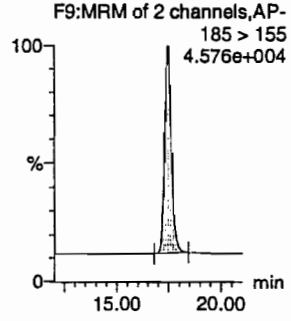
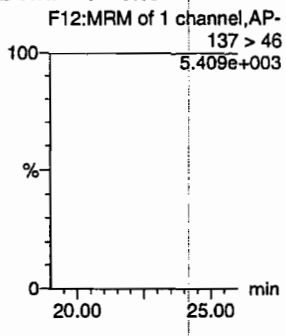
24-dinitrotoluene



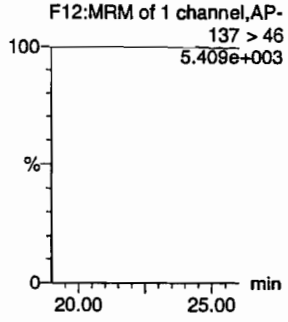
26-dinitrotoluene-d3



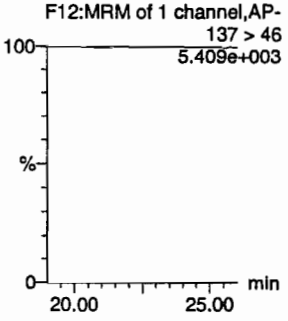
2-Nitrotoluene



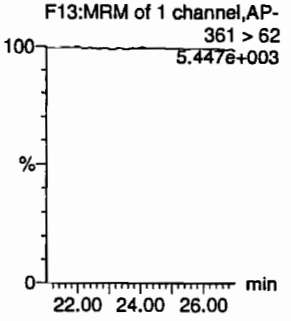
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102			2526.262									
XIBLK01	RDX	176 > 102			2526.262									
XIBLK01	135-Trinitrobenzene	213 > 183			2526.262									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	12.07	2526.262		2526.262	2526.262	bb			229.4819	45.9	-54.1	223.1
XIBLK01	13-Dinitrobenzene	168 > 138			2526.262									
XIBLK01	Tetryl	241 > 181			2526.262									
XIBLK01	Nitrobenzene	123 > 46			2526.262									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			15755.593									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			15755.593									
XIBLK01	246-Trinitrotoluene	227 > 210			15755.593									
XIBLK01	34-dinitrotoluene	182 > 152			15755.593									
XIBLK01	26-dinitrotoluene	182 > 152			15755.593									
XIBLK01	24-dinitrotoluene	182 > 152			15755.593									
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.47	15755.593		15755.593	15755.593	bb			228.8024	45.8	-54.2	1652.1
XIBLK01	2-Nitrotoluene	137 > 46			15755.593									
XIBLK01	4-Nitrotoluene	137 > 46			15755.593									
XIBLK01	3-Nitrotoluene	137 > 46			15755.593									
XIBLK01	PETN	361 > 62			15755.593									

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4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1623

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 23-MAR-10 09:38

GEL Data File: EXP0323002a

Instrument ID: LCMSMS

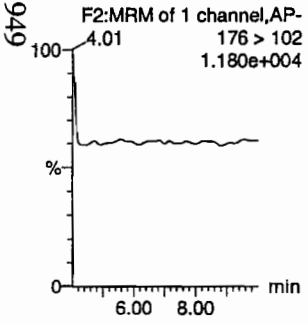
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	249.294
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	247.4
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

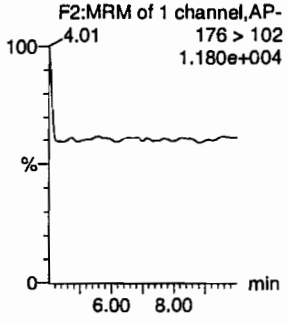
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323002a
Date: 23-Mar-2010
Time: 09:38:34
ID: XIBLK01
Vial: 1:1,A

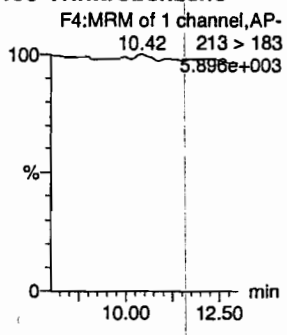
HMX
F2:MRM of 1 channel,AP-
4.01 176 > 102
1.180e+004



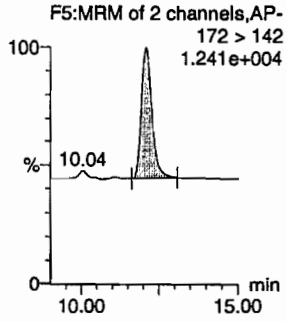
RDX
F2:MRM of 1 channel,AP-
4.01 176 > 102
1.180e+004



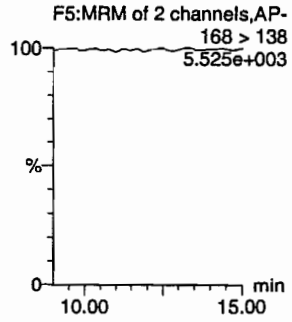
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
10.42 213 > 183
5.896e+003



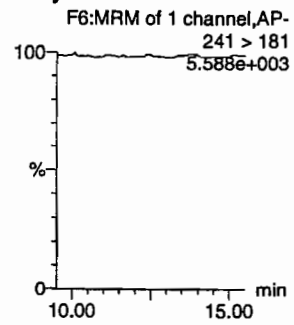
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.241e+004



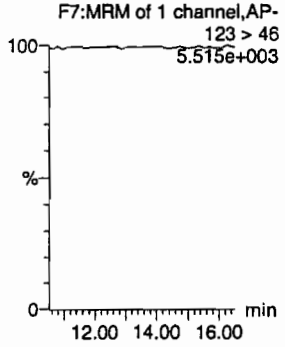
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.525e+003



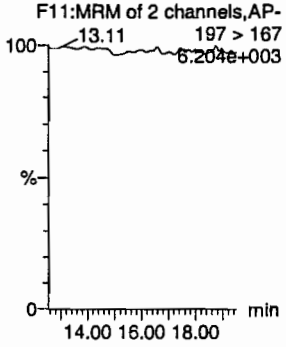
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.588e+003



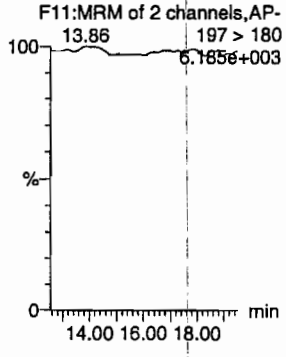
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.515e+003



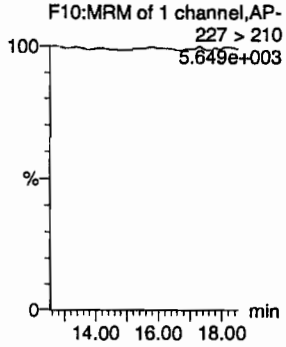
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
13.11 197 > 167
6.204e+003



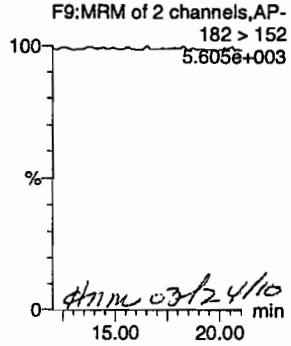
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
13.86 197 > 180
6.185e+003



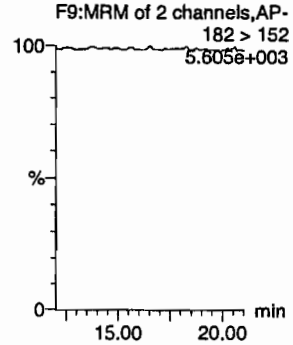
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.649e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.605e+003



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.605e+003



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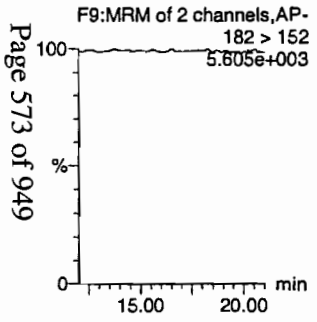
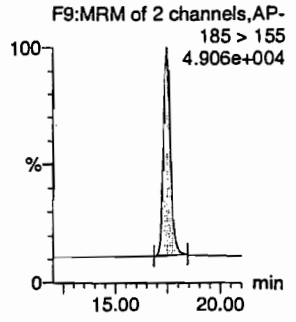
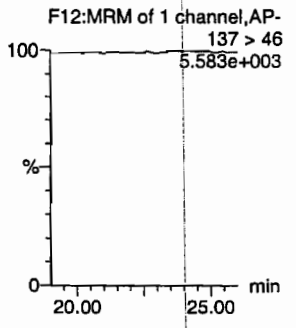
24-dinitrotoluene



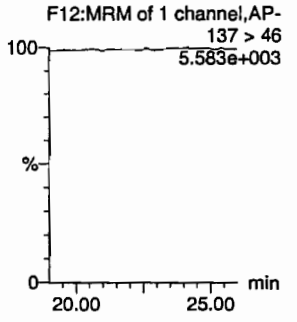
26-dinitrotoluene-d3



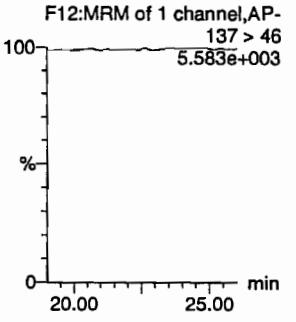
2-Nitrotoluene



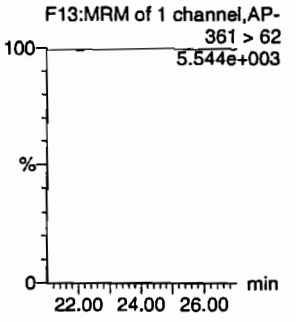
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102			2744.369									
XIBLK01	RDX	176 > 102			2744.369									
XIBLK01	135-Trinitrobenzene	213 > 183			2744.369									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	12.06	2744.369		2744.369	2744.369	bb			249.2945	49.9	-50.1	151.9
XIBLK01	13-Dinitrobenzene	168 > 138			2744.369									
XIBLK01	Tetryl	241 > 181			2744.369									
XIBLK01	Nitrobenzene	123 > 46			2744.369									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			17036.252									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			17036.252									
XIBLK01	246-Trinitrotoluene	227 > 210			17036.252									
XIBLK01	34-dinitrotoluene	182 > 152			17036.252									
XIBLK01	26-dinitrotoluene	182 > 152			17036.252									
XIBLK01	24-dinitrotoluene	182 > 152			17036.252									
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.46	17036.252		17036.252	17036.252	bb			247.4001	49.5	-50.5	2009.2
XIBLK01	2-Nitrotoluene	137 > 46			17036.252									
XIBLK01	4-Nitrotoluene	137 > 46			17036.252									
XIBLK01	3-Nitrotoluene	137 > 46			17036.252									
XIBLK01	PETN	361 > 62			17036.252									

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Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1623

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 01-MAR-10 09:03

GEL Data File: EXS03010001.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

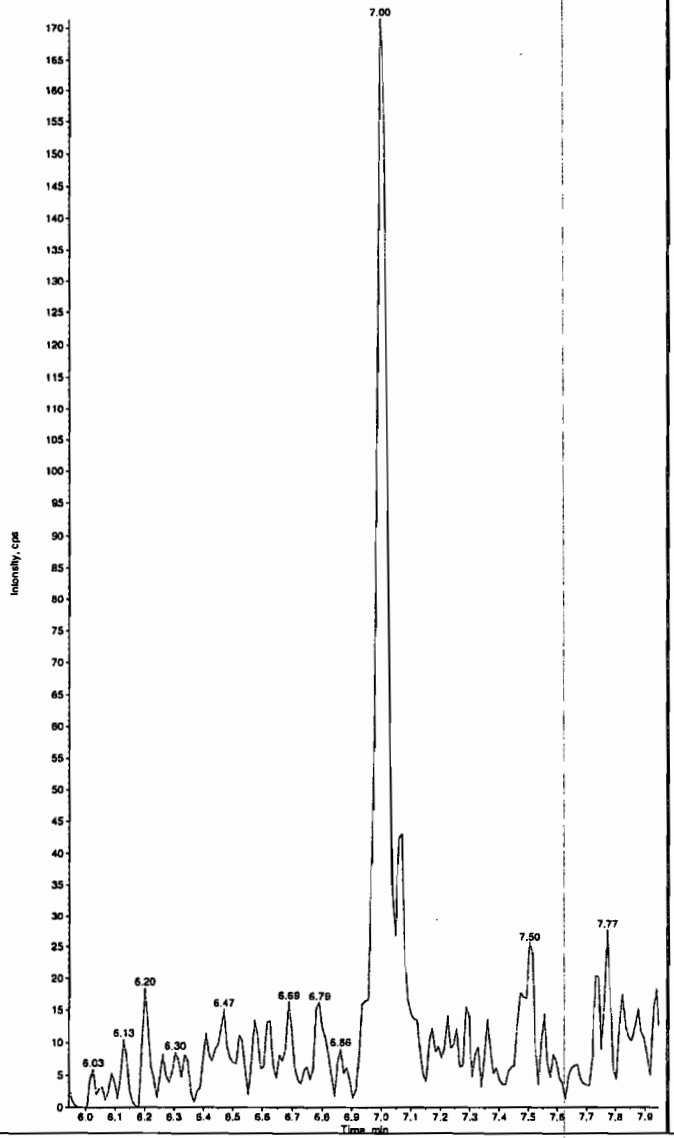
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

LER 3/3/10

Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03010001.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 9:03:19 AM

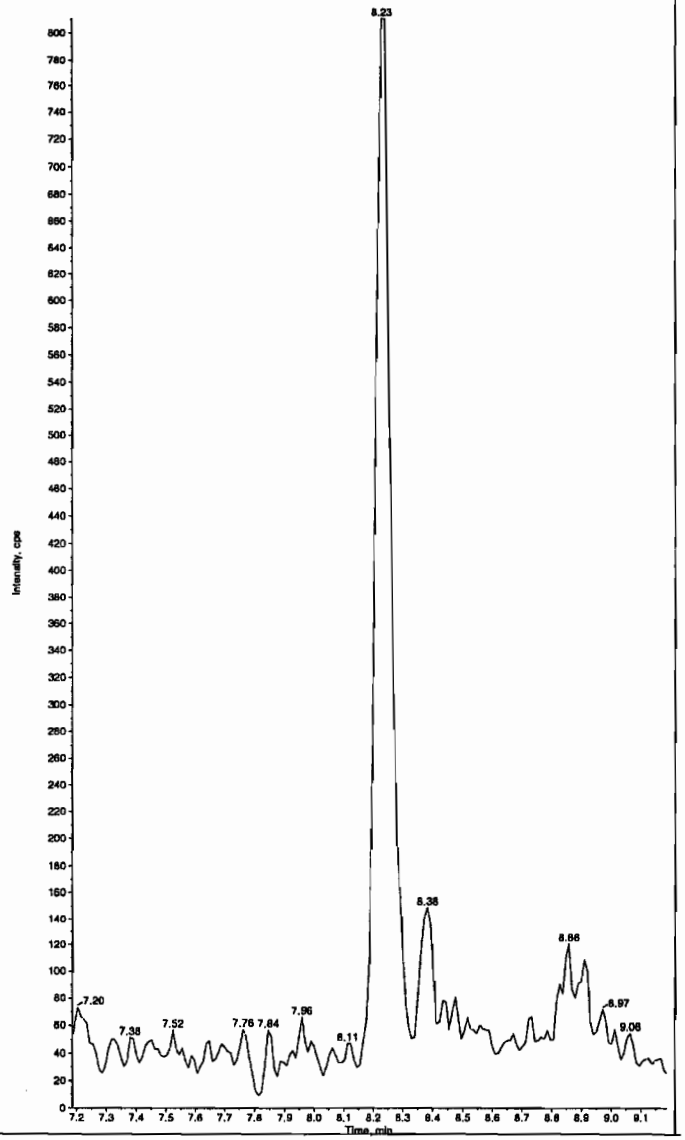
Modified: No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03010001.wiff"
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: 3/1/2010
Acq. Time: 9:03:19 AM

Modified: No



Anum 03/04/10

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

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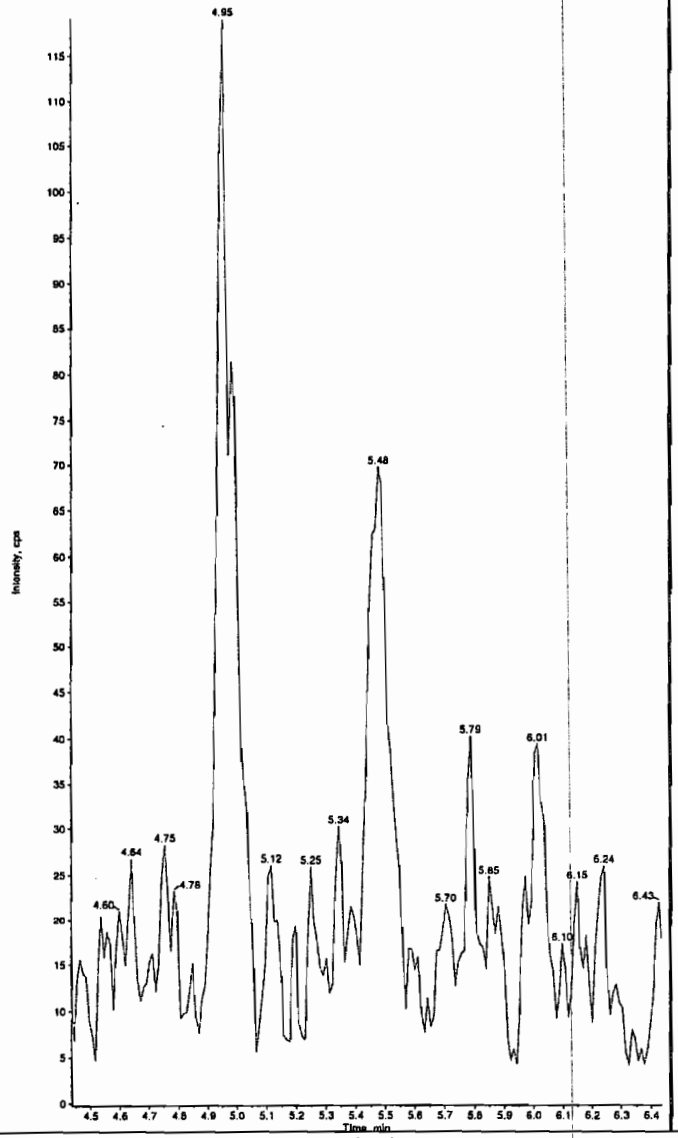
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

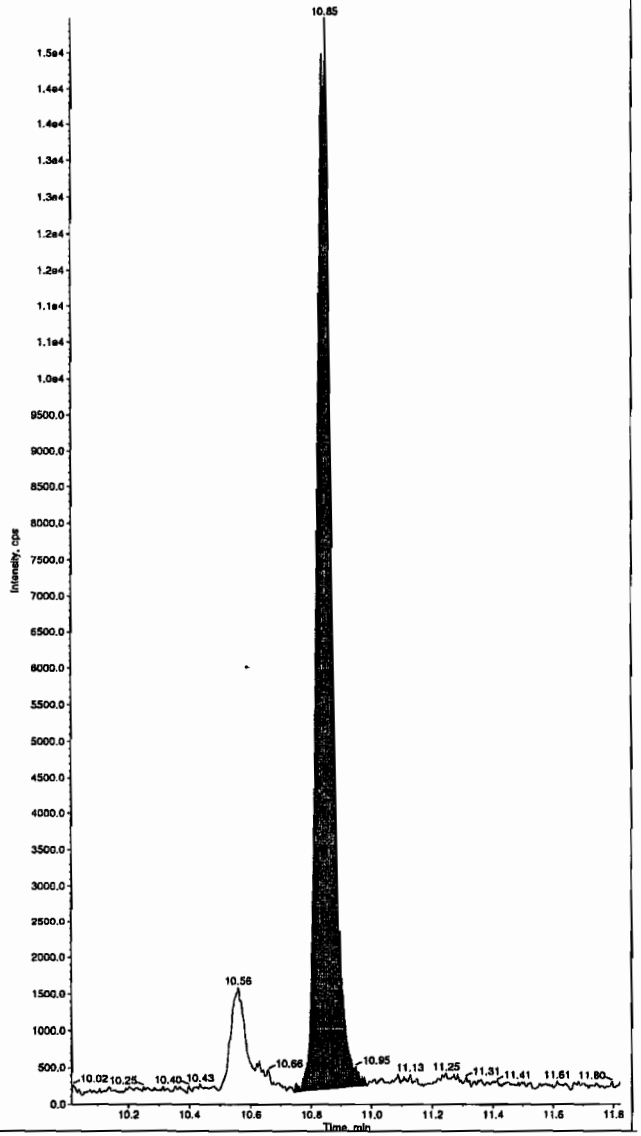
Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03010001.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	3/1/2010
Acq. Time:	9:03:19 AM
Modified:	No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03010001.wiff"
Peak Name: "Iris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	No Intercept
Acq. Date:	3/1/2010
Acq. Time:	9:03:19 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:	10.9 min
Area:	5.36e+004 counts
Height:	14777.323 cps
Start Time:	10.7 min
End Time:	11.0 min



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4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1623

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 01-MAR-10 09:19

GEL Data File: EXS03010002.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

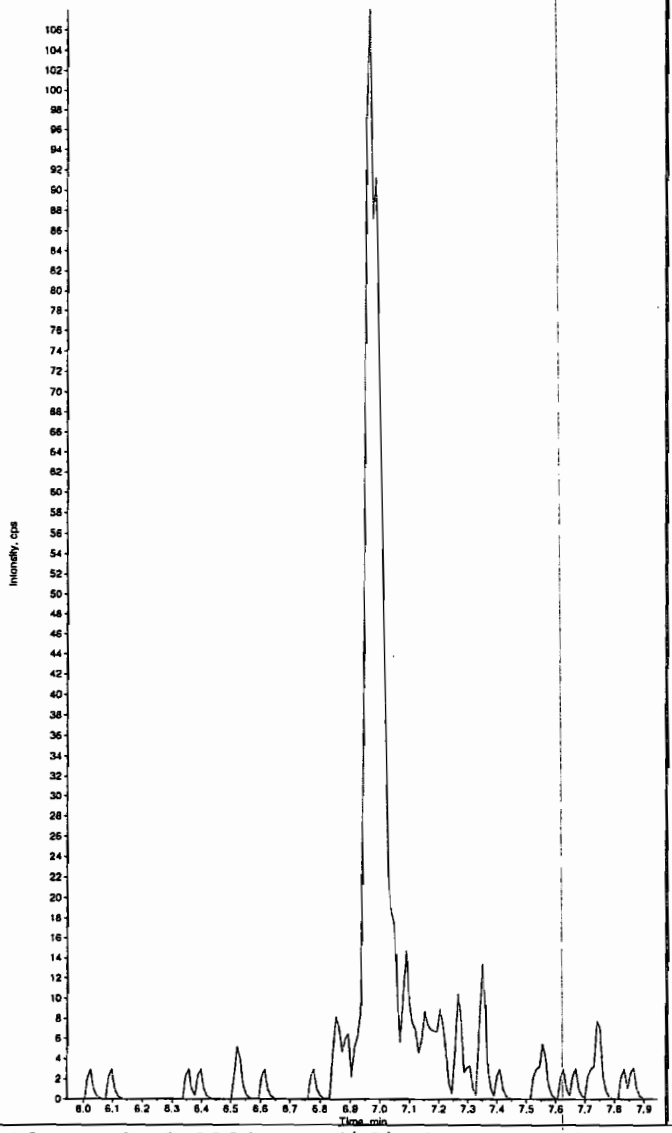
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

fren 3/3/10

Sample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS03010002.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 9:19:07 AM

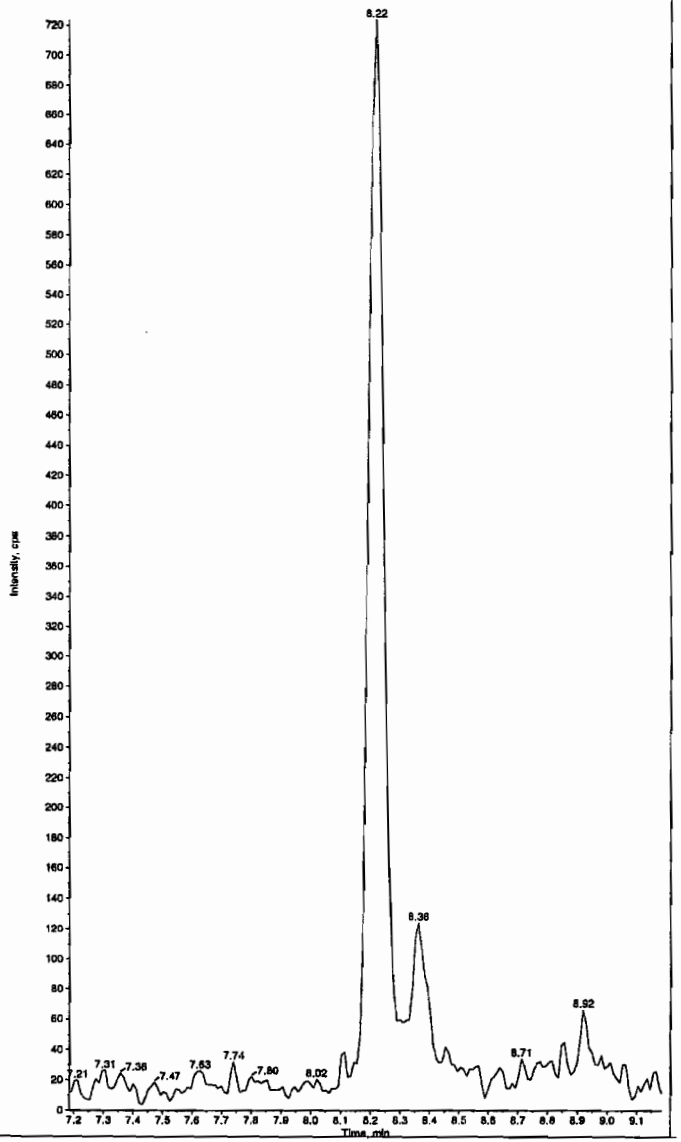
Modified: No



Sample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS03010002.wiff"
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: 3/1/2010
Acq. Time: 9:19:07 AM

Modified: No



Page 179 of 949

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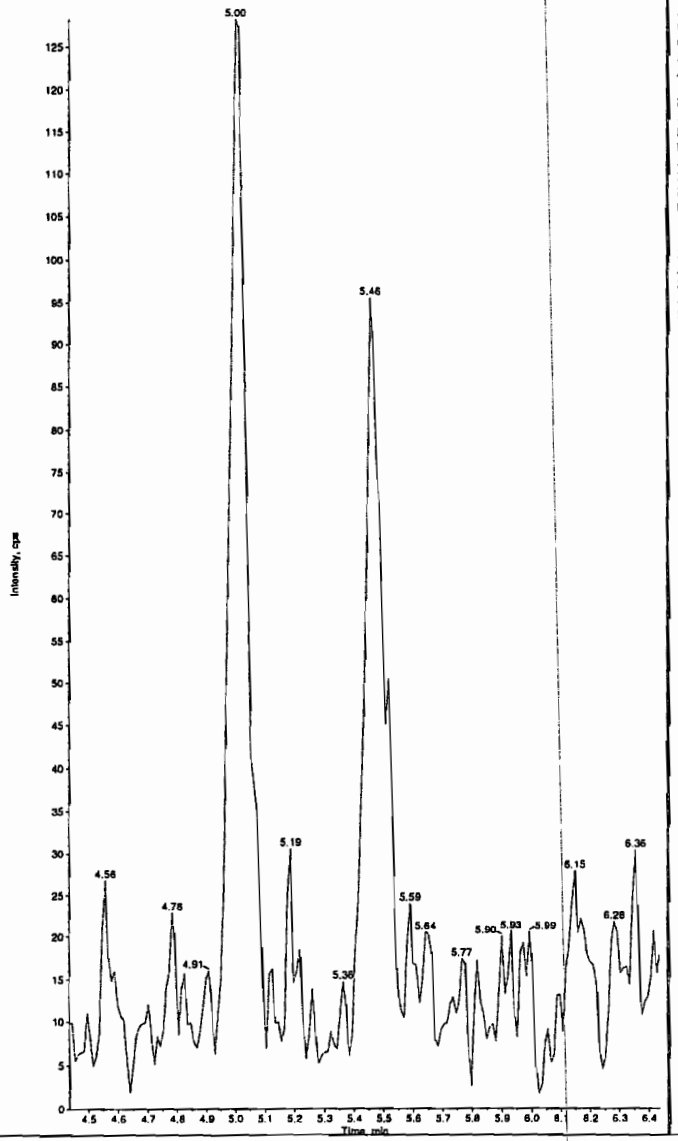
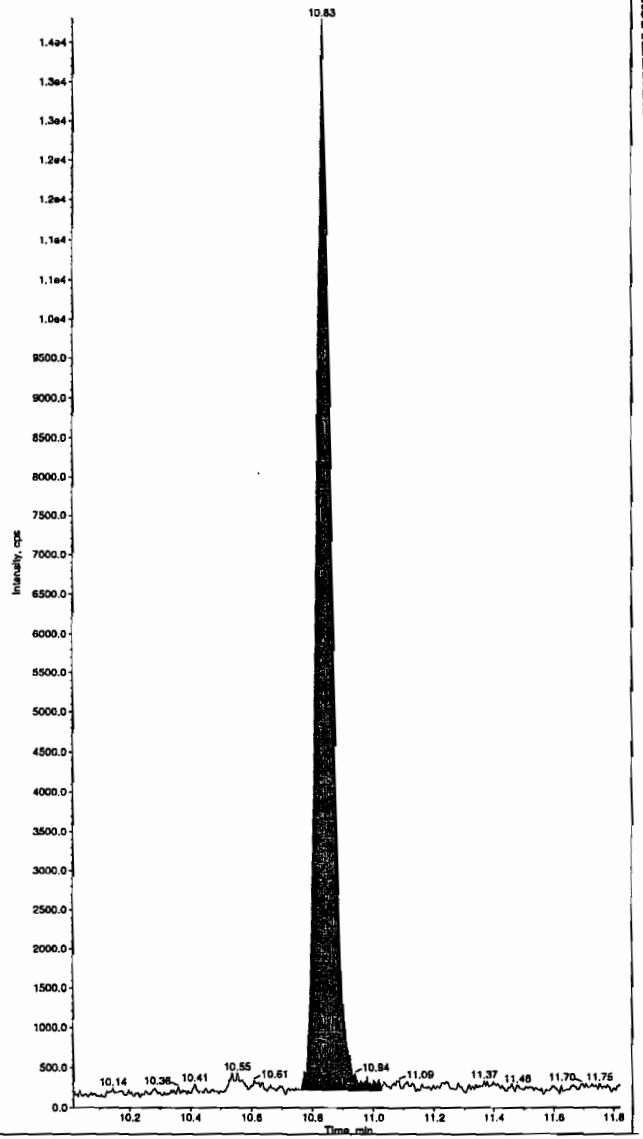
Sample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS03010002.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_8" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	3/1/2010
Acq. Time:	9:19:07 AM
Modified:	No



Sample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS03010002.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_8" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	No Intercept
Acq. Date:	3/1/2010
Acq. Time:	9:19:07 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:	4.80e+004 counts
Height:	13586.056 cps
Start Time:	10.8 min
End Time:	11.0 min



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

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4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1623

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 03-MAR-10 09:42

GEL Data File: EXS03030001.wiff

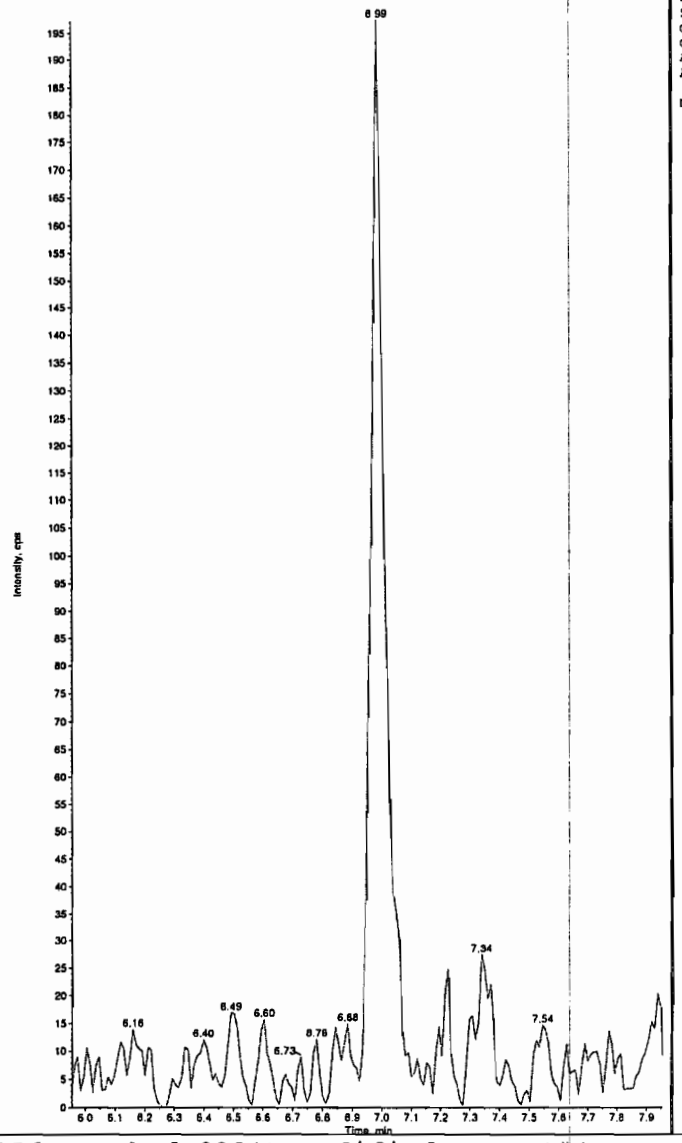
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

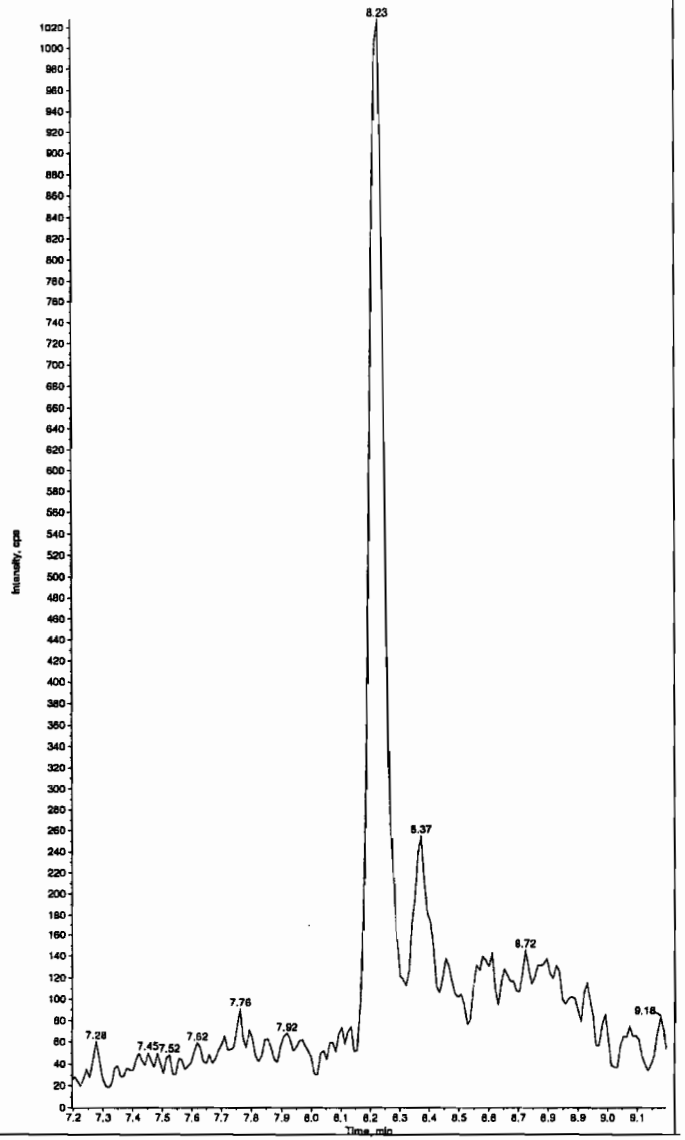
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.42
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Lan 3/8/10

Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03030001.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 9:42:17 AM
Modified: No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03030001.wiff"
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: 3/3/2010
Acq. Time: 9:42:17 AM
Modified: No



Hmm 03/08/10

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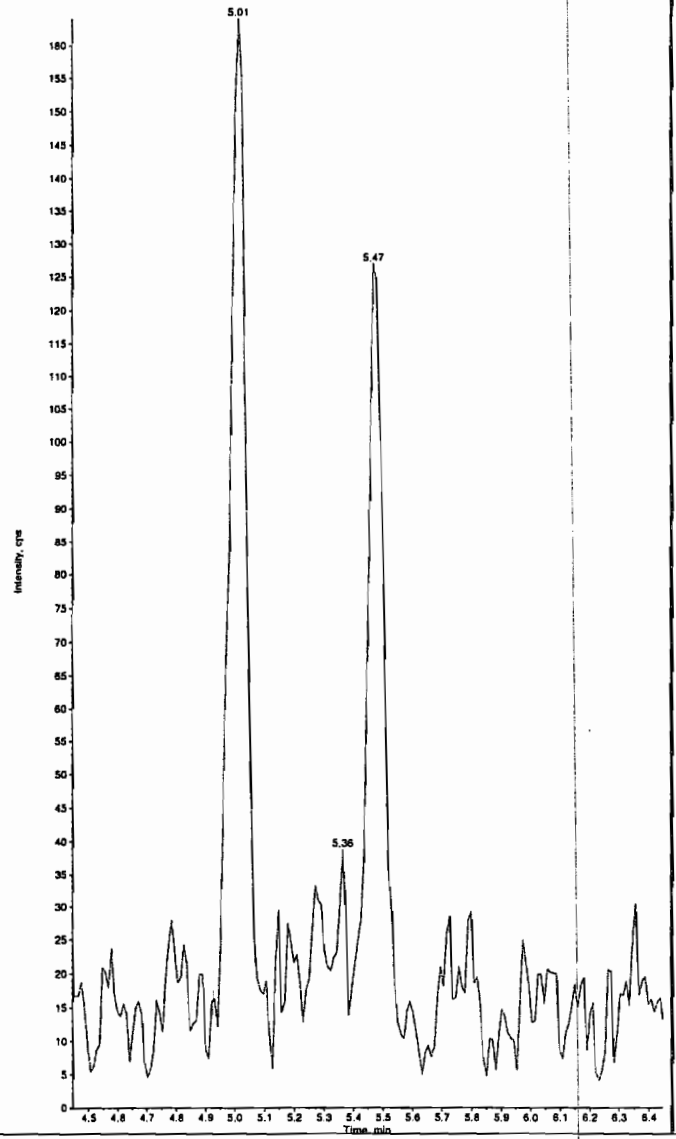
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

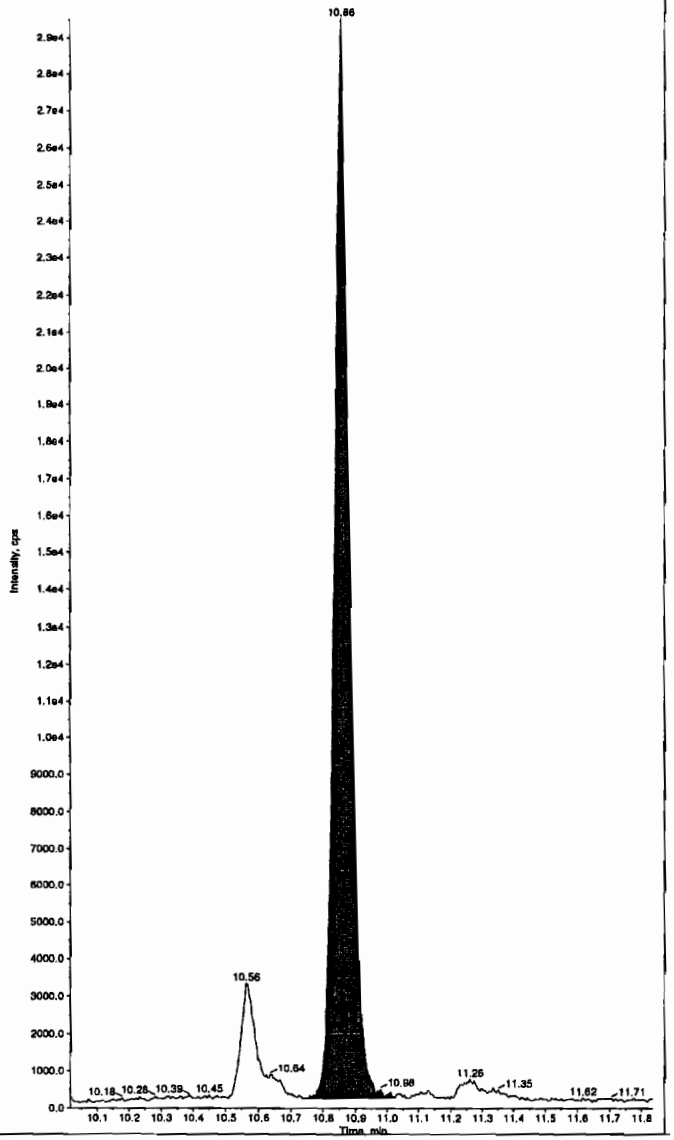
Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03030001.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.00	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	9:42:17 AM	
Modified:	No	



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03030001.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	1.42	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	9:42:17 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:	10.9	min
Area:	9.98e+004	counts
Height:	29275.879	cps
Start Time:	10.7	min
End Time:	11.0	min



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

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4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–1623

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 03–MAR–10 09:58

GEL Data File: EXS03030002.wiff

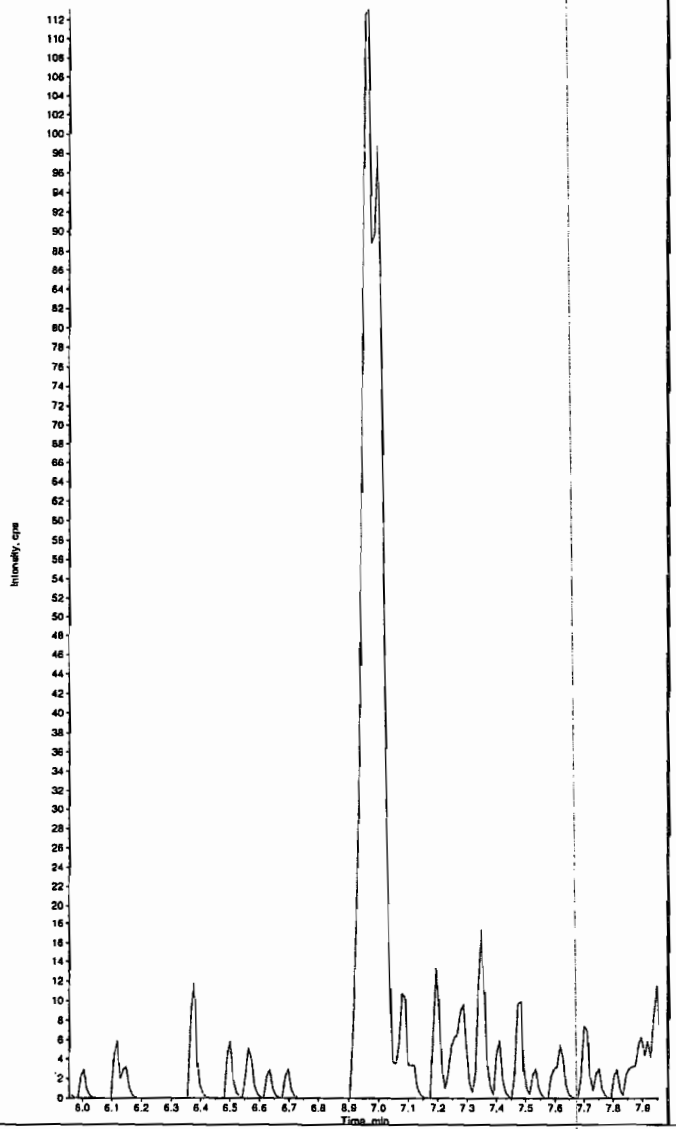
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

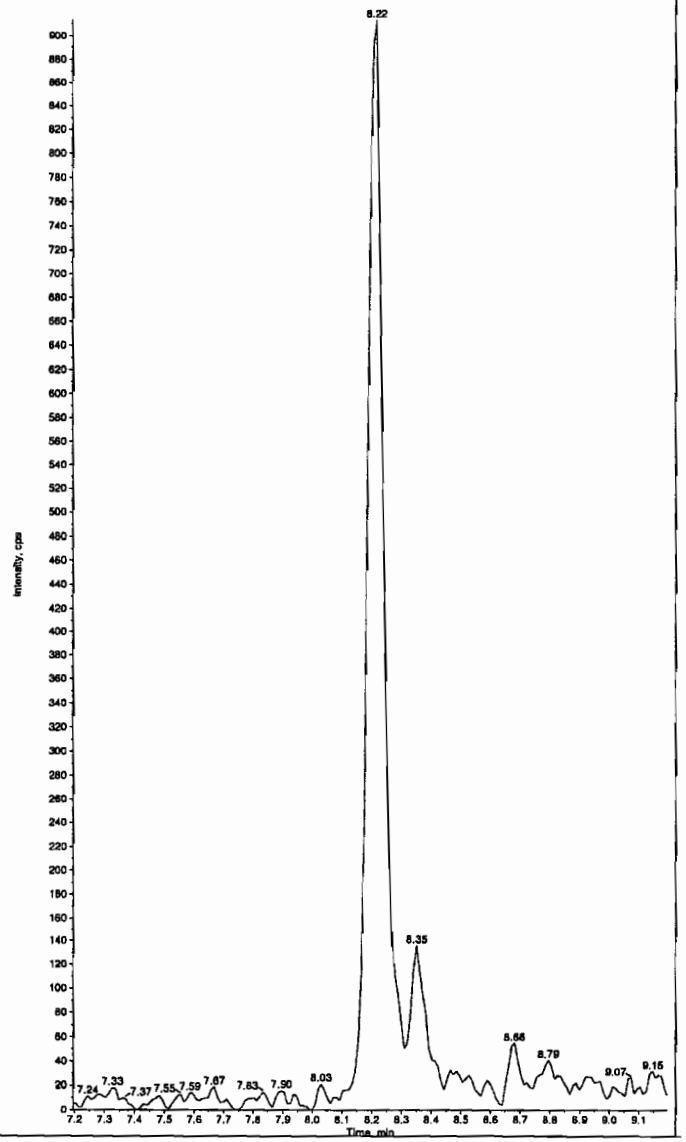
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	1.13
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Jan 3/8/10

Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03030002.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 9:58:05 AM
Modified: No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03030002.wiff"
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: 3/3/2010
Acq. Time: 9:58:05 AM
Modified: No



Hmm 3/08/10

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

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

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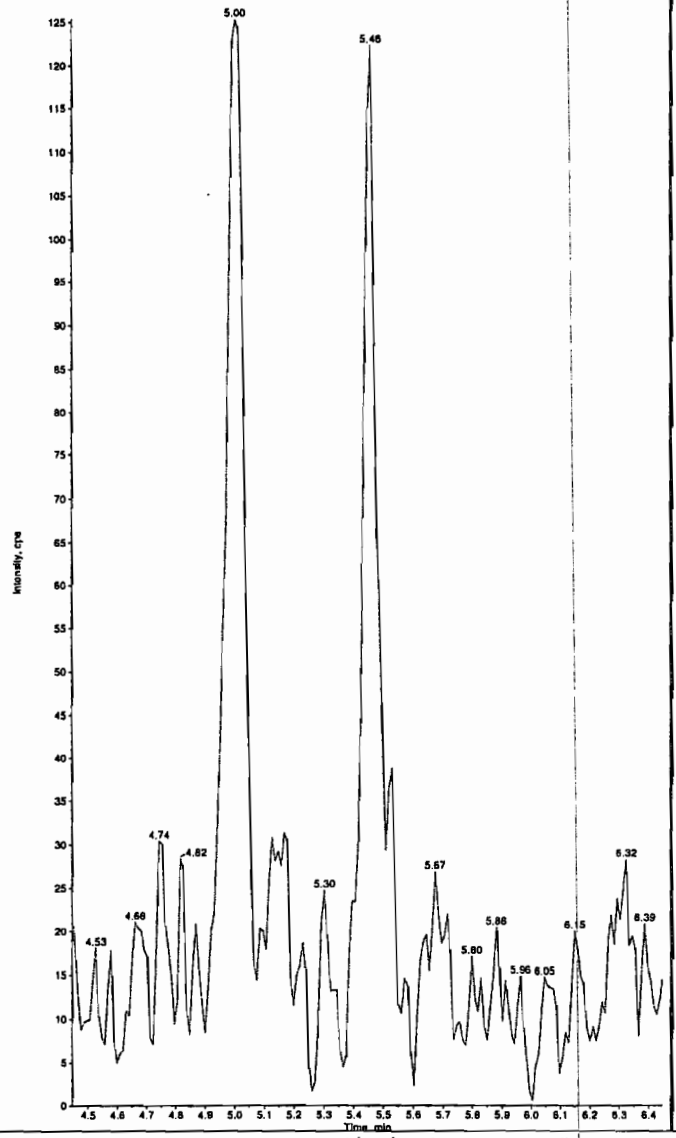
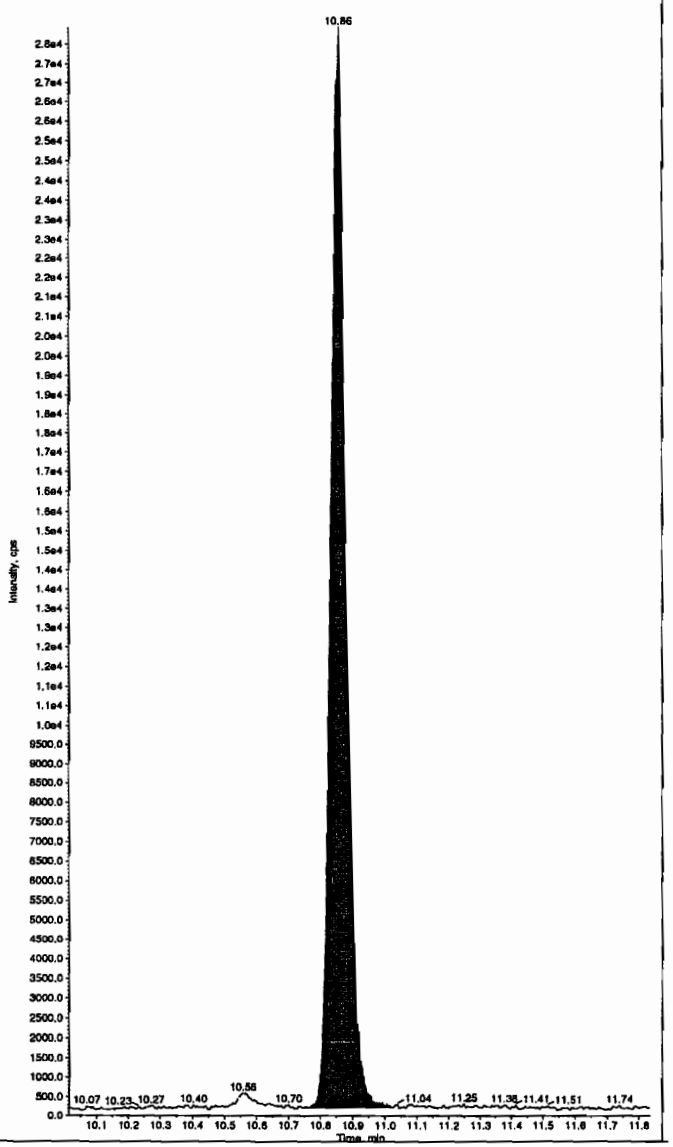
Sample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS03030002.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	3/3/2010
Acq. Time:	9:58:05 AM
Modified:	No



Sample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS03030002.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	1.13 ng/mL
Acq. Date:	3/3/2010
Acq. Time:	9:58:05 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:	10.9 min
Area:	9.51e+004 counts
Height:	27700.220 cps
Start Time:	10.7 min
End Time:	11.0 min



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

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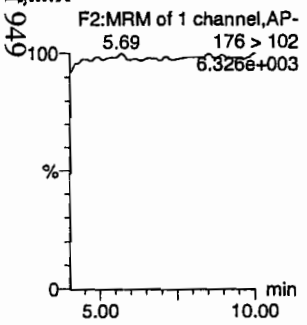
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK02
Analysis Date: 23-MAR-10 13:04
GEL Data File: EXP0323009a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

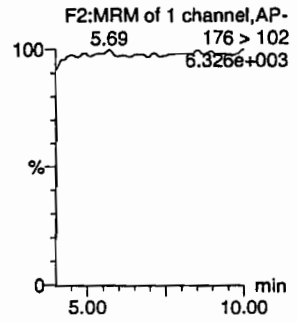
Compound	True	Found (ug/L)
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	400.005
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	359.09
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323009a
Date: 23-Mar-2010
Time: 13:04:52
ID: XIBLK02
Vial: 1:1,A

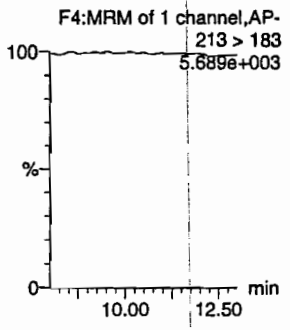
HMX



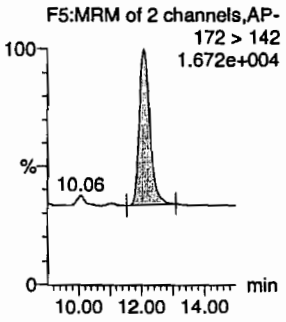
RDX



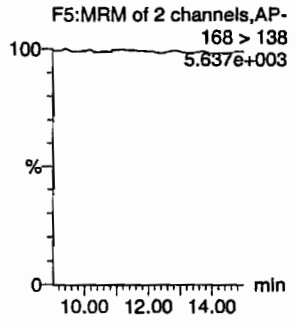
135-Trinitrobenzene



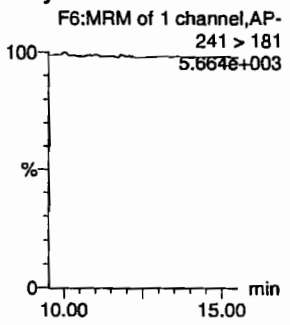
13-Dinitrobenzene-d4



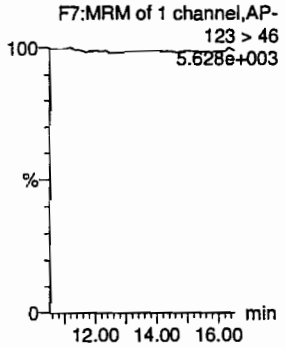
13-Dinitrobenzene



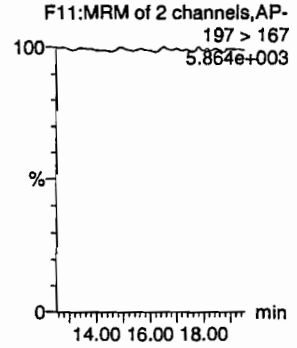
Tetryl



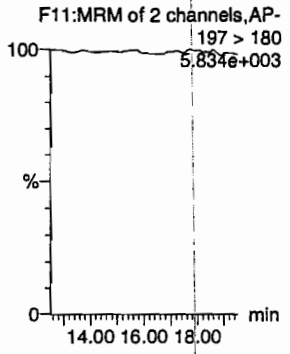
Nitrobenzene



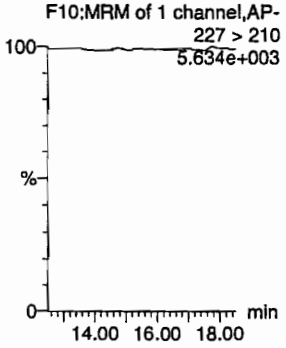
4-Amino-26-dinitrotoluene



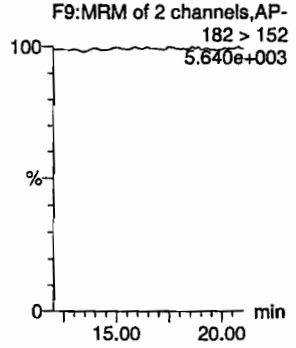
2-Amino-46-dinitrotoluene



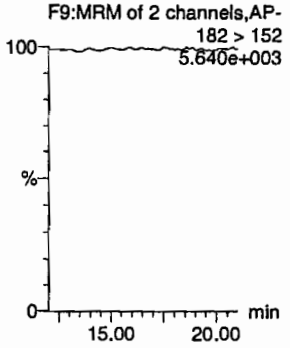
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



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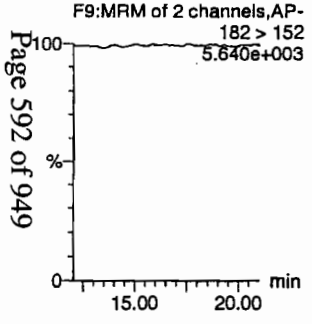
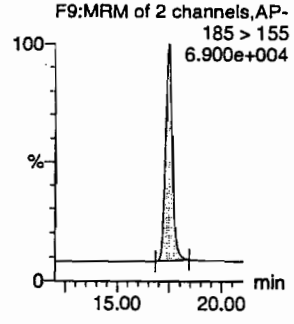
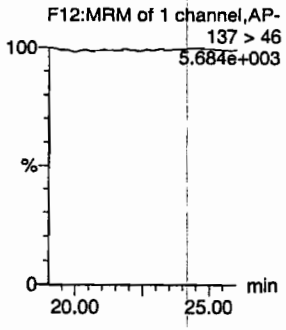
24-dinitrotoluene



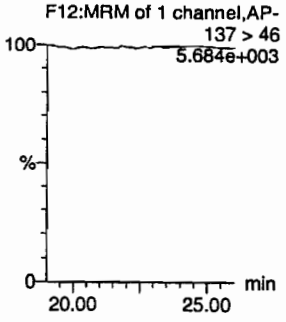
26-dinitrotoluene-d3



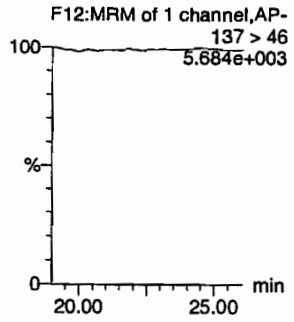
2-Nitrotoluene



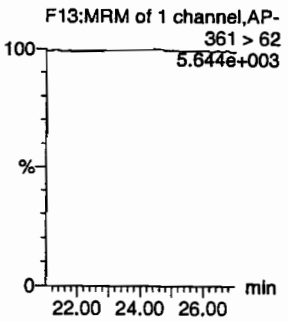
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK02	HMX	176 > 102			4403.474									
XIBLK02	RDX	176 > 102			4403.474									
XIBLK02	135-Trinitrobenzene	213 > 183			4403.474									
XIBLK02	13-Dinitrobenzene-d4	172 > 142	12.07	4403.474		4403.474	4403.474	bb			400.0051	80.0	-20.0	434.0
XIBLK02	13-Dinitrobenzene	168 > 138			4403.474									
XIBLK02	Tetryl	241 > 181			4403.474									
XIBLK02	Nitrobenzene	123 > 46			4403.474									
XIBLK02	4-Amino-26-dinitrotoluene	197 > 167			24727.354									
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180			24727.354									
XIBLK02	246-Trinitrotoluene	227 > 210			24727.354									
XIBLK02	34-dinitrotoluene	182 > 152			24727.354									
XIBLK02	26-dinitrotoluene	182 > 152			24727.354									
XIBLK02	24-dinitrotoluene	182 > 152			24727.354									
XIBLK02	26-dinitrotoluene-d3	185 > 155	17.44	24727.354		24727.354	24727.354	bb			359.0901	71.8	-28.2	3290.4
XIBLK02	2-Nitrotoluene	137 > 46			24727.354									
XIBLK02	4-Nitrotoluene	137 > 46			24727.354									
XIBLK02	3-Nitrotoluene	137 > 46			24727.354									
XIBLK02	PETN	361 > 62			24727.354									

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

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1623

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 23-MAR-10 14:03

GEL Data File: EXP0323011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

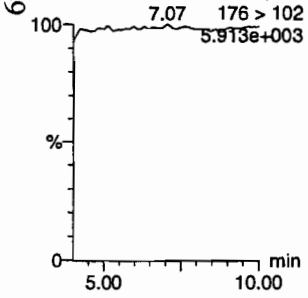
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	505.262
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	469.688
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

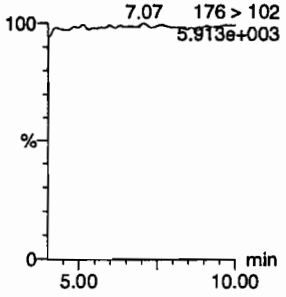
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323011a
Date: 23-Mar-2010
Time: 14:03:49
ID: XIBLK03
Vial: 1:1,A

MM 3/24/10

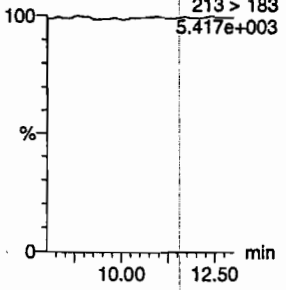
HMX
F2:MRM of 1 channel,AP-
7.07 176 > 102
5.913e+003



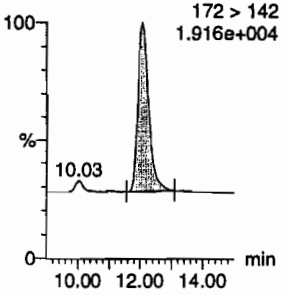
RDX
F2:MRM of 1 channel,AP-
7.07 176 > 102
5.913e+003



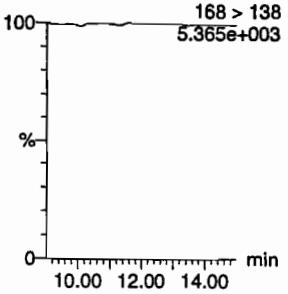
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.417e+003



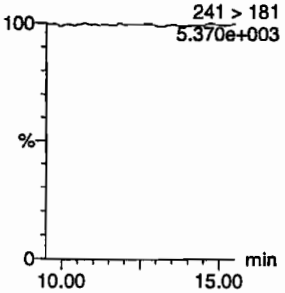
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.916e+004



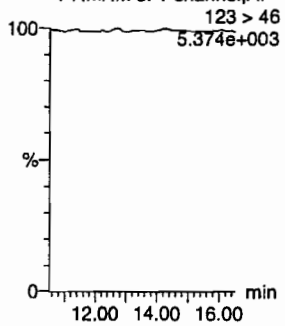
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.365e+003



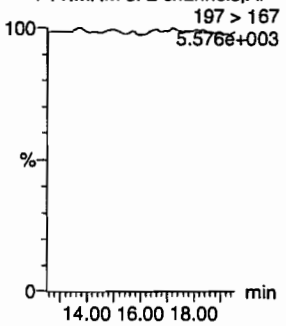
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.370e+003



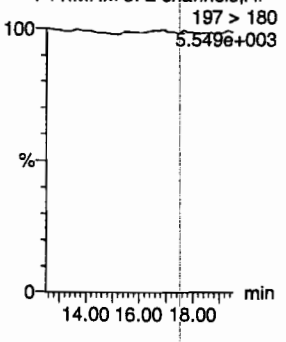
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.374e+003



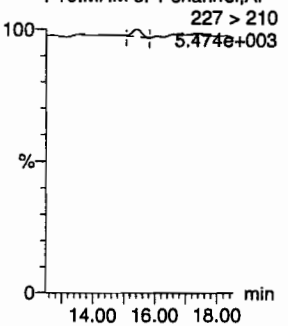
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.576e+003



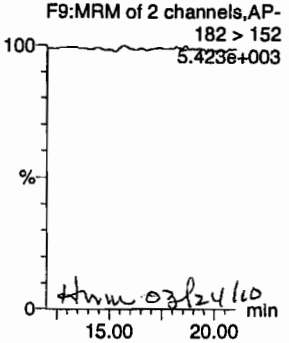
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.549e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.474e+003

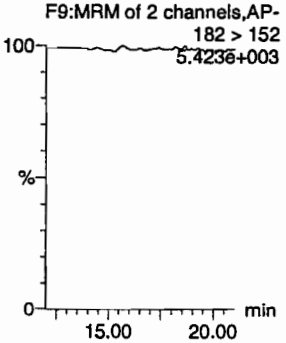


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.423e+003



Hmm 03/24/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.423e+003



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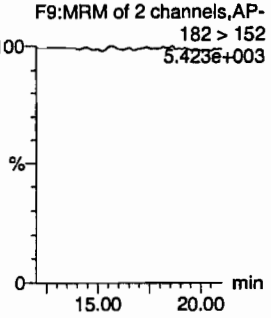
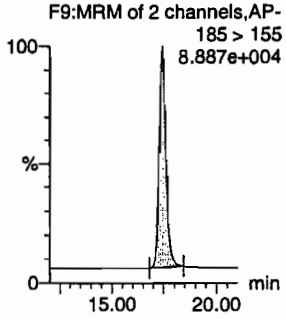
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

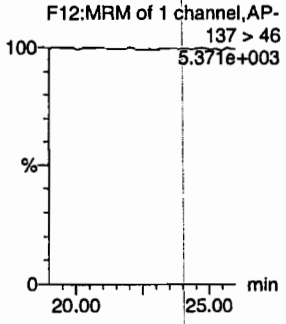
24-dinitrotoluene



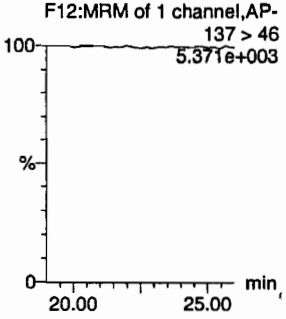
26-dinitrotoluene-d3



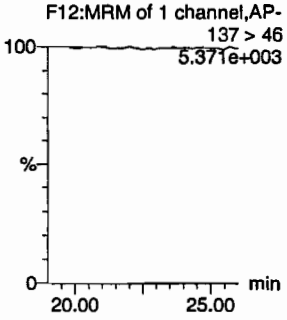
2-Nitrotoluene



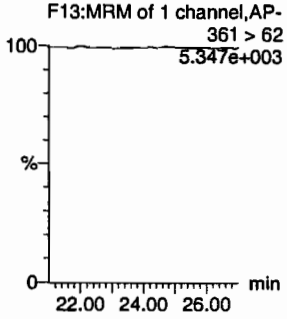
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%DeV	S/N
XIBLK03	HMX	176 > 102			5562.196									
XIBLK03	RDX	176 > 102			5562.196									
XIBLK03	135-Trinitrobenzene	213 > 183			5562.196									
XIBLK03	13-Dinitrobenzene-d4	172 > 142	12.07	5562.196		5562.196	5562.196	bb			505.2617	101.1	1.1	546.8
XIBLK03	13-Dinitrobenzene	168 > 138			5562.196									
XIBLK03	Tetryl	241 > 181			5562.196									
XIBLK03	Nitrobenzene	123 > 46			5562.196									
XIBLK03	4-Amino-26-dinitrotoluene	197 > 167			32343.238									
XIBLK03	2-Amino-46-dinitrotoluene	197 > 180			32343.238									
XIBLK03	246-Trinitrotoluene	227 > 210			32343.238			MM-	24-Mar-10	09:18:21				
XIBLK03	34-dinitrotoluene	182 > 152			32343.238									
XIBLK03	26-dinitrotoluene	182 > 152			32343.238									
XIBLK03	24-dinitrotoluene	182 > 152			32343.238									
XIBLK03	26-dinitrotoluene-d3	185 > 155	17.44	32343.238		32343.238	32343.238	bb			469.6878	93.9	-6.1	5071.7
XIBLK03	2-Nitrotoluene	137 > 46			32343.238									
XIBLK03	4-Nitrotoluene	137 > 46			32343.238									
XIBLK03	3-Nitrotoluene	137 > 46			32343.238									
XIBLK03	PETN	361 > 62			32343.238									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK04
Analysis Date: 23-MAR-10 20:27
GEL Data File: EXP0323024a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	562.021
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	528.426
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

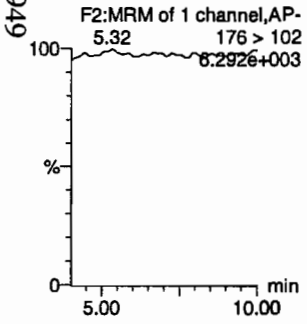
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323024a
Date: 23-Mar-2010
Time: 20:27:13
ID: XIBLK04
Vial: 1:1,A

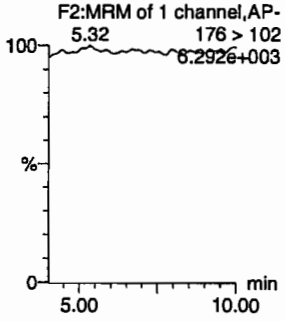
Page 397 of 940

MMP 3/24/10

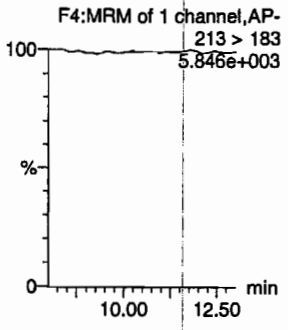
HMX
F2:MRM of 1 channel,AP-
5.32 176 > 102
6.292e+003



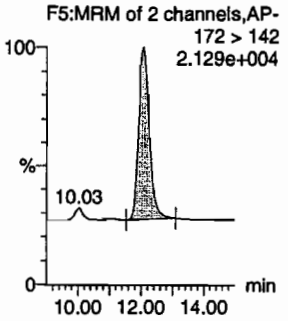
RDX
F2:MRM of 1 channel,AP-
5.32 176 > 102
6.292e+003



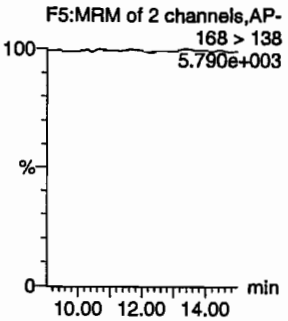
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.846e+003



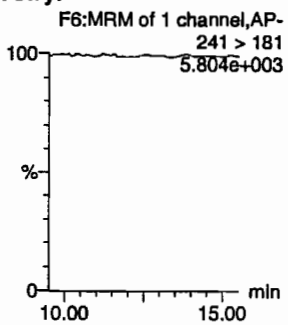
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.129e+004



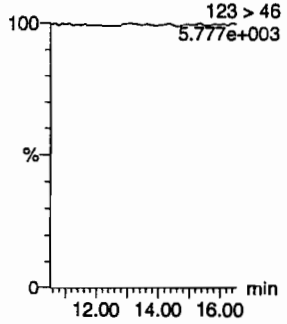
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.790e+003



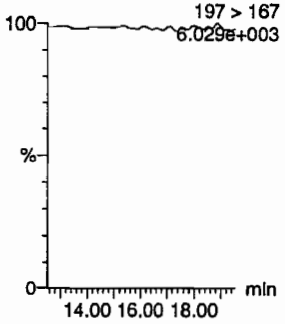
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.804e+003



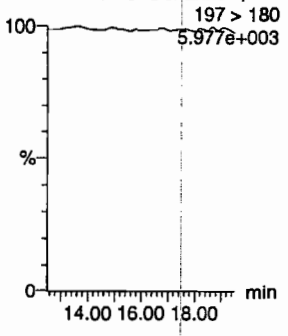
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.777e+003



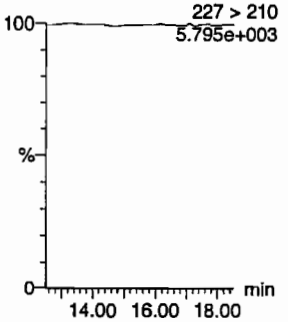
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
6.029e+003



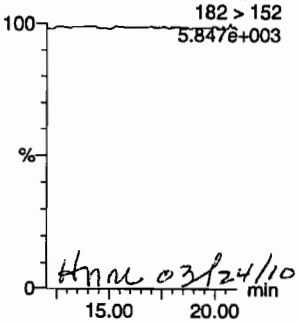
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.977e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.795e+003

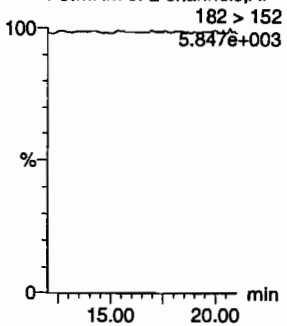


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.847e+003



HMM 03/24/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.847e+003



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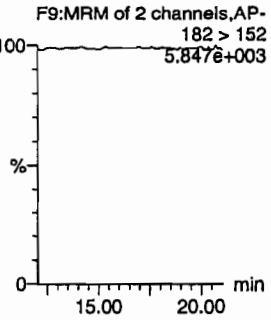
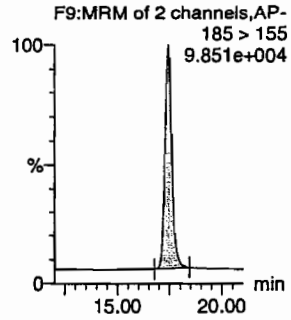
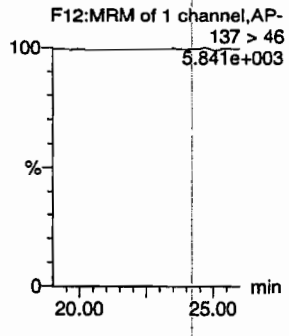
24-dinitrotoluene



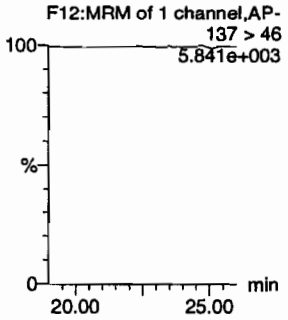
26-dinitrotoluene-d3



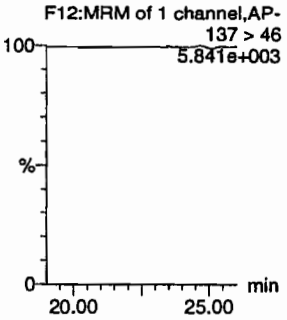
2-Nitrotoluene



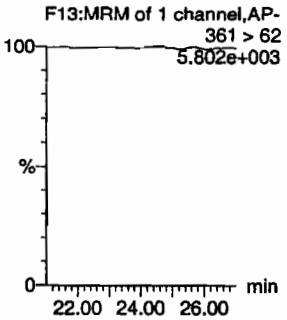
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
XIBLK04	HMX	176 > 102			6187.030									
XIBLK04	RDX	176 > 102			6187.030									
XIBLK04	135-Trinitrobenzene	213 > 183			6187.030									
XIBLK04	13-Dinitrobenzene-d4	172 > 142	12.07	6187.030		6187.030	6187.030	bb			562.0207	112.4	12.4	852.7
XIBLK04	13-Dinitrobenzene	168 > 138			6187.030									
XIBLK04	Tetryl	241 > 181			6187.030									
XIBLK04	Nitrobenzene	123 > 46			6187.030									
XIBLK04	4-Amino-26-dinitrotoluene	197 > 167			36388.039									
XIBLK04	2-Amino-46-dinitrotoluene	197 > 180			36388.039									
XIBLK04	246-Trinitrotoluene	227 > 210			36388.039									
XIBLK04	34-dinitrotoluene	182 > 152			36388.039									
XIBLK04	26-dinitrotoluene	182 > 152			36388.039									
XIBLK04	24-dinitrotoluene	182 > 152			36388.039									
XIBLK04	26-dinitrotoluene-d3	185 > 155	17.42	36388.039		36388.039	36388.039	bb			528.4263	105.7	5.7	3528.7
XIBLK04	2-Nitrotoluene	137 > 46			36388.039									
XIBLK04	4-Nitrotoluene	137 > 46			36388.039									
XIBLK04	3-Nitrotoluene	137 > 46			36388.039									
XIBLK04	PETN	361 > 62			36388.039									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK05
Analysis Date: 24-MAR-10 02:50
GEL Data File: EXP0323037a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

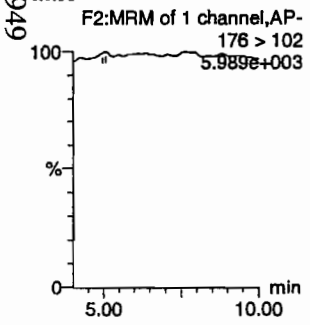
Compound	True	Found (ug/L)
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	534.426
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	585.234
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

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

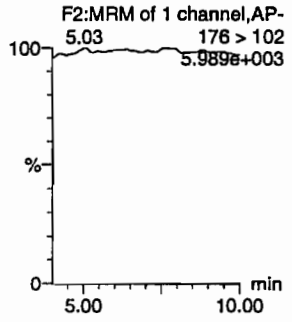
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323037a
Date: 24-Mar-2010
Time: 02:50:36
ID: XIBLK05
Vial: 1:1,A

MM 3/24/10

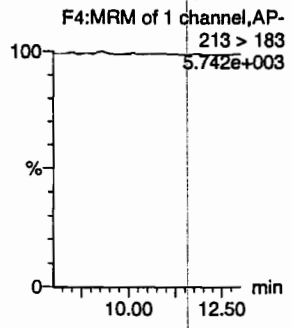
HMX



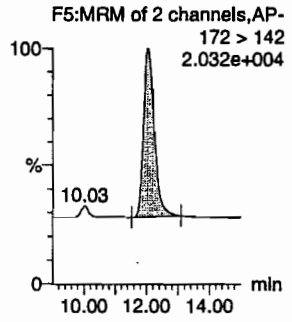
RDX



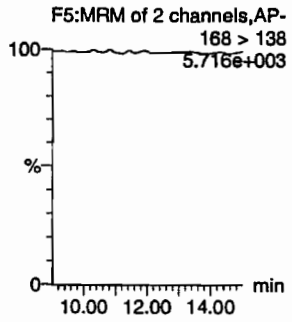
135-Trinitrobenzene



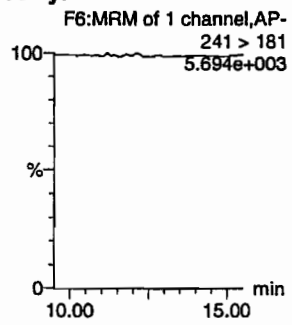
13-Dinitrobenzene-d4



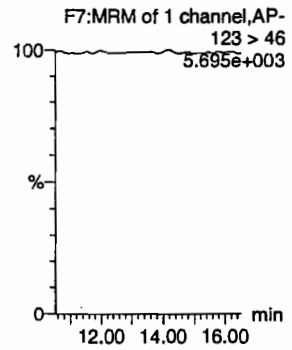
13-Dinitrobenzene



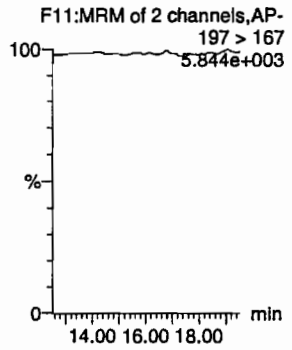
Tetryl



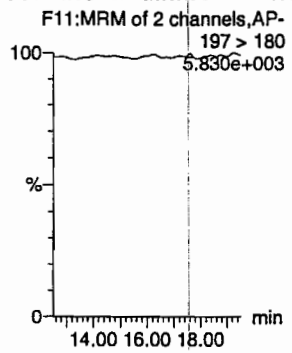
Nitrobenzene



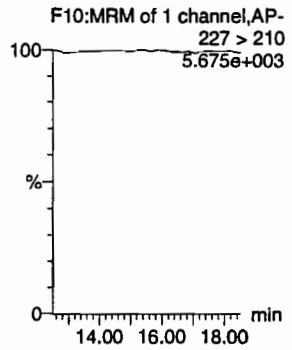
4-Amino-26-dinitrotoluene



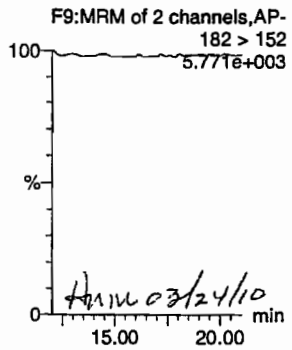
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

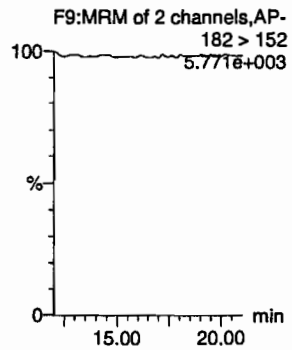


34-dinitrotoluene



HMM 03/24/10

26-dinitrotoluene



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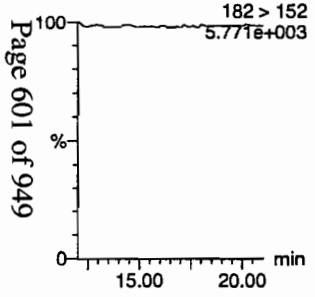
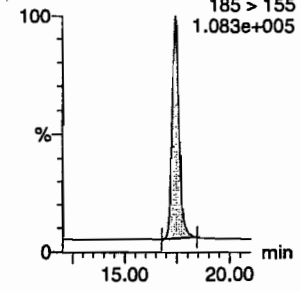
Page 601 of 949

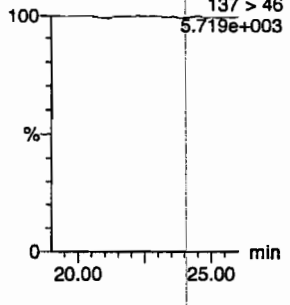
24-dinitrotoluene



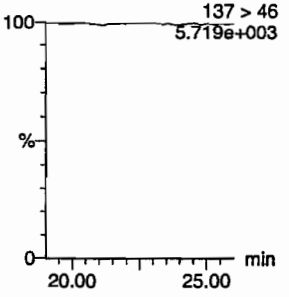
26-dinitrotoluene-d3



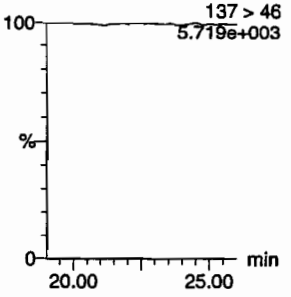
2-Nitrotoluene



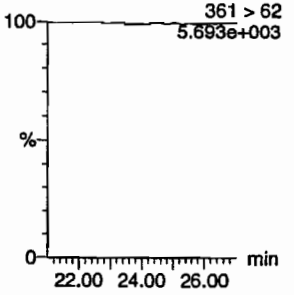
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK05	HMX	176 > 102			5883.251			MM-	24-Mar-10	09:15:51				
XIBLK05	RDX	176 > 102			5883.251									
XIBLK05	135-Trinitrobenzene	213 > 183			5883.251									
XIBLK05	13-Dinitrobenzene-d4	172 > 142	12.03	5883.251		5883.251	5883.251	bb			534.4259	106.9	6.9	1325.9
XIBLK05	13-Dinitrobenzene	168 > 138			5883.251									
XIBLK05	Tetryl	241 > 181			5883.251									
XIBLK05	Nitrobenzene	123 > 46			5883.251									
XIBLK05	4-Amino-26-dinitrotoluene	197 > 167			40299.871									
XIBLK05	2-Amino-46-dinitrotoluene	197 > 180			40299.871									
XIBLK05	246-Trinitrotoluene	227 > 210			40299.871									
XIBLK05	34-dinitrotoluene	182 > 152			40299.871									
XIBLK05	26-dinitrotoluene	182 > 152			40299.871									
XIBLK05	24-dinitrotoluene	182 > 152			40299.871									
XIBLK05	26-dinitrotoluene-d3	185 > 155	17.42	40299.871		40299.871	40299.871	bb			585.2338	117.0	17.0	3824.0
XIBLK05	2-Nitrotoluene	137 > 46			40299.871									
XIBLK05	4-Nitrotoluene	137 > 46			40299.871									
XIBLK05	3-Nitrotoluene	137 > 46			40299.871									
XIBLK05	PETN	361 > 62			40299.871									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK06
Analysis Date: 24-MAR-10 08:15
GEL Data File: EXP0323048a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

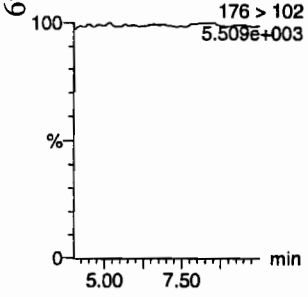
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	525.584
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	553.206
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

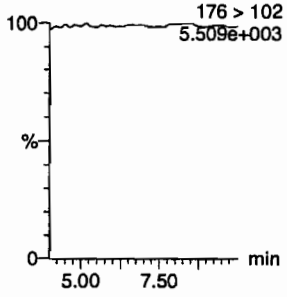
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323048a
Date: 24-Mar-2010
Time: 08:15:01
ID: XIBLK06
Vial: 1:1,A

Page 603 of 949

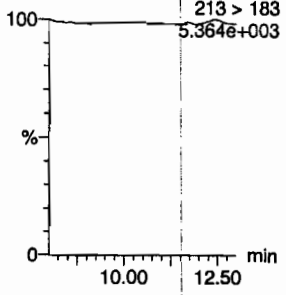
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.509e+003



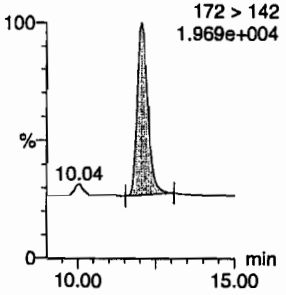
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.509e+003



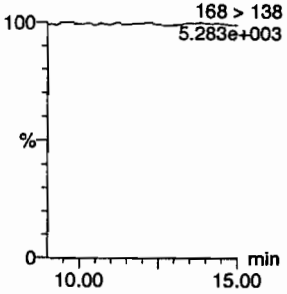
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.364e+003



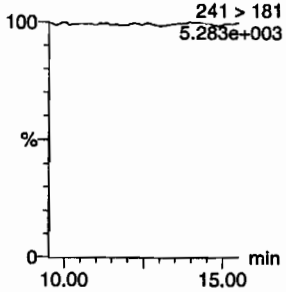
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.969e+004



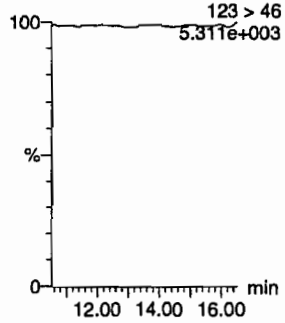
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.283e+003



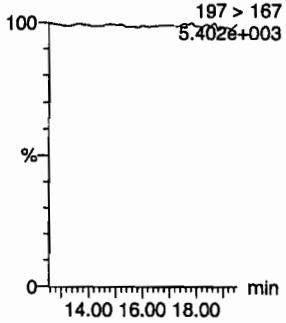
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.283e+003



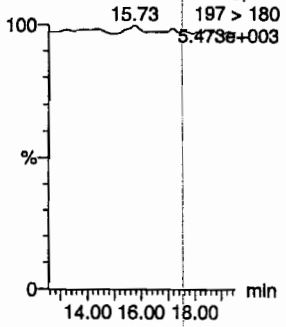
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.311e+003



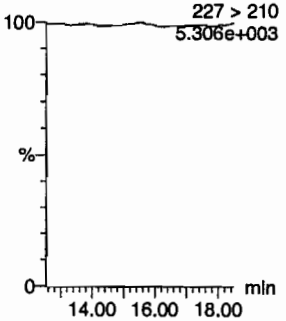
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.402e+003



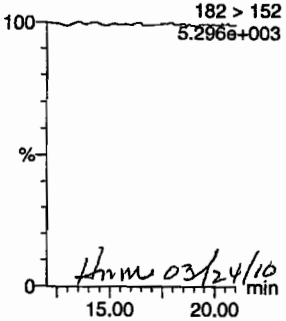
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
15.73
197 > 180
5.473e+003



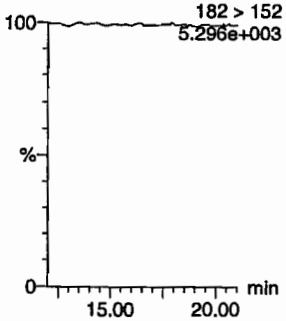
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.306e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.296e+003



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.296e+003



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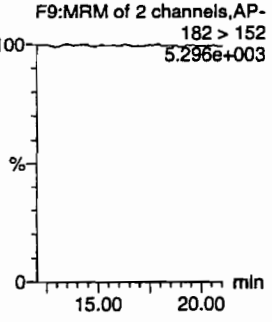
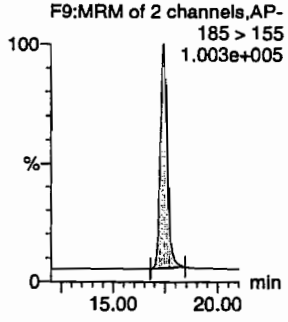
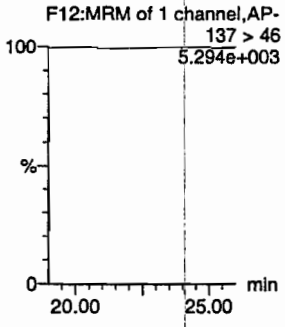
24-dinitrotoluene



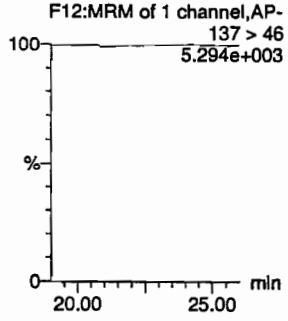
26-dinitrotoluene-d3



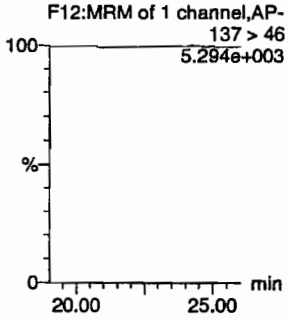
2-Nitrotoluene



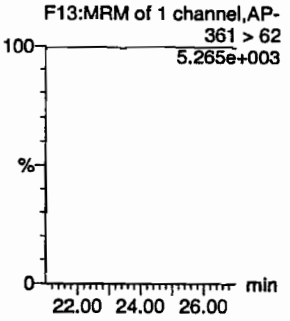
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK06	HMX	176 > 102			5785.916									
XIBLK06	RDX	176 > 102			5785.916									
XIBLK06	135-Trinitrobenzene	213 > 183			5785.916									
XIBLK06	13-Dinitrobenzene-d4	172 > 142	12.03	5785.916		5785.916	5785.916	bb			525.5841	105.1	5.1	741.5
XIBLK06	13-Dinitrobenzene	168 > 138			5785.916									
XIBLK06	Tetryl	241 > 181			5785.916									
XIBLK06	Nitrobenzene	123 > 46			5785.916									
XIBLK06	4-Amino-26-dinitrotoluene	197 > 167			38094.418									
XIBLK06	2-Amino-46-dinitrotoluene	197 > 180			38094.418									
XIBLK06	246-Trinitrotoluene	227 > 210			38094.418									
XIBLK06	34-dinitrotoluene	182 > 152			38094.418									
XIBLK06	26-dinitrotoluene	182 > 152			38094.418									
XIBLK06	24-dinitrotoluene	182 > 152			38094.418									
XIBLK06	26-dinitrotoluene-d3	185 > 155	17.41	38094.418		38094.418	38094.418	bb			553.2063	110.6	10.6	4007.9
XIBLK06	2-Nitrotoluene	137 > 46			38094.418									
XIBLK06	4-Nitrotoluene	137 > 46			38094.418									
XIBLK06	3-Nitrotoluene	137 > 46			38094.418									
XIBLK06	PETN	361 > 62			38094.418									

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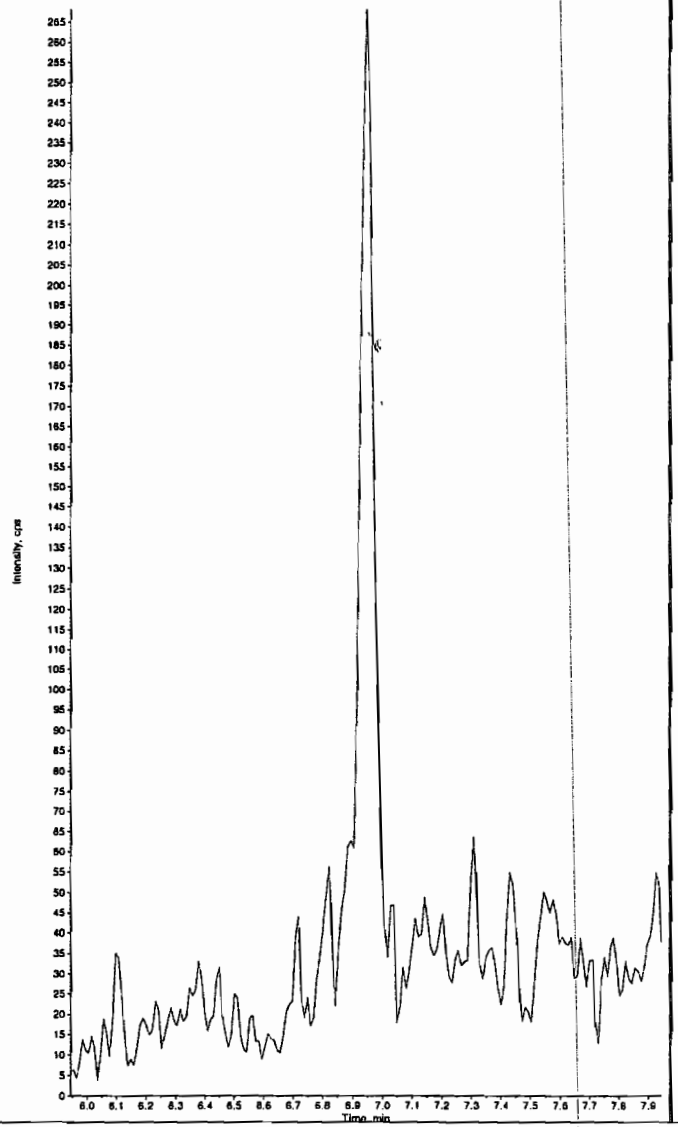
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK02
Analysis Date: 01-MAR-10 11:24
GEL Data File: EXS03010010.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

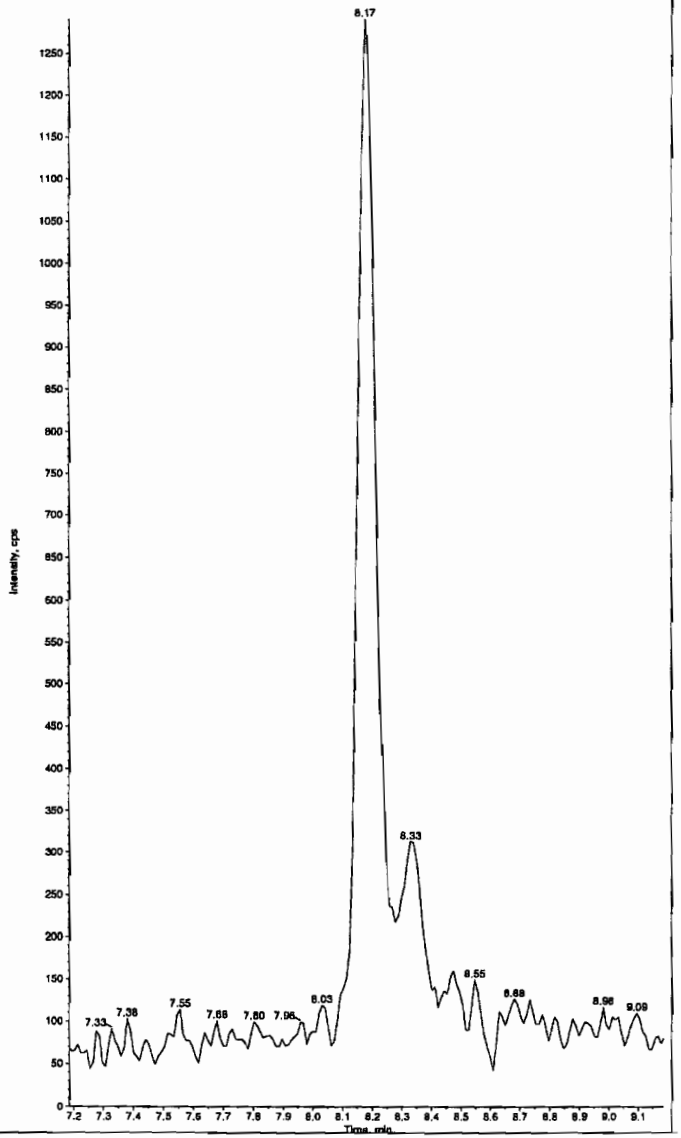
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.74
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Lan 3/3/10

Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS03010010.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 11:24:42 AM
Modified: No



Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS03010010.wiff"
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: 3/1/2010
Acq. Time: 11:24:42 AM
Modified: No



#mm 03/04/10

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

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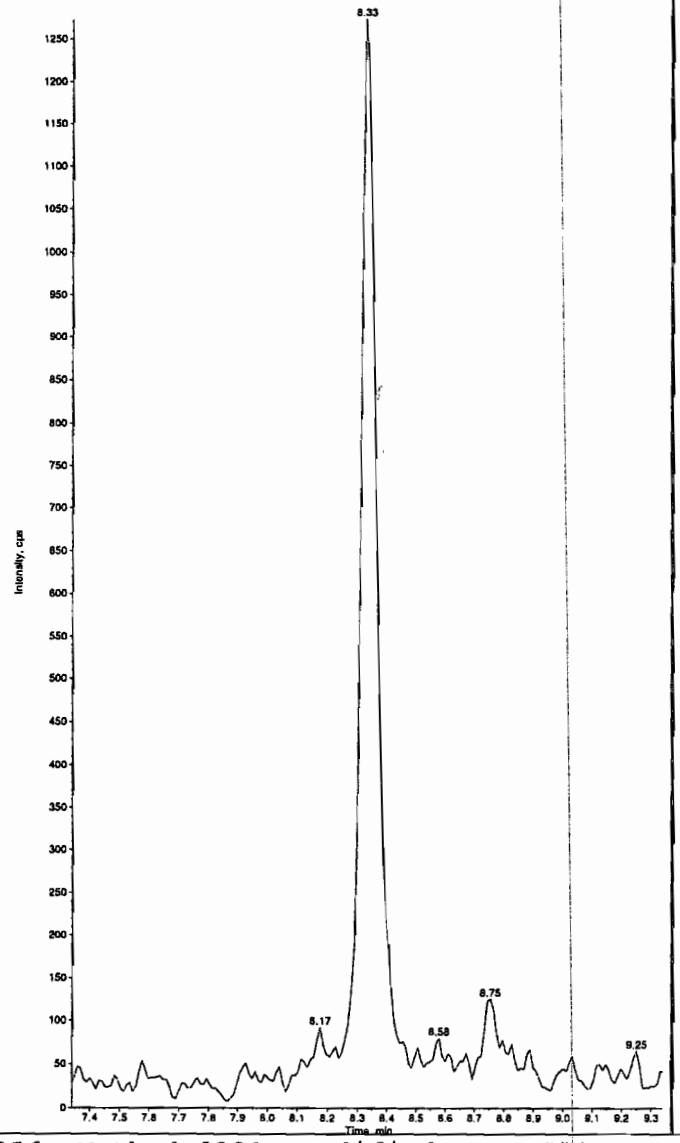
Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03010010.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 11:24:42 AM

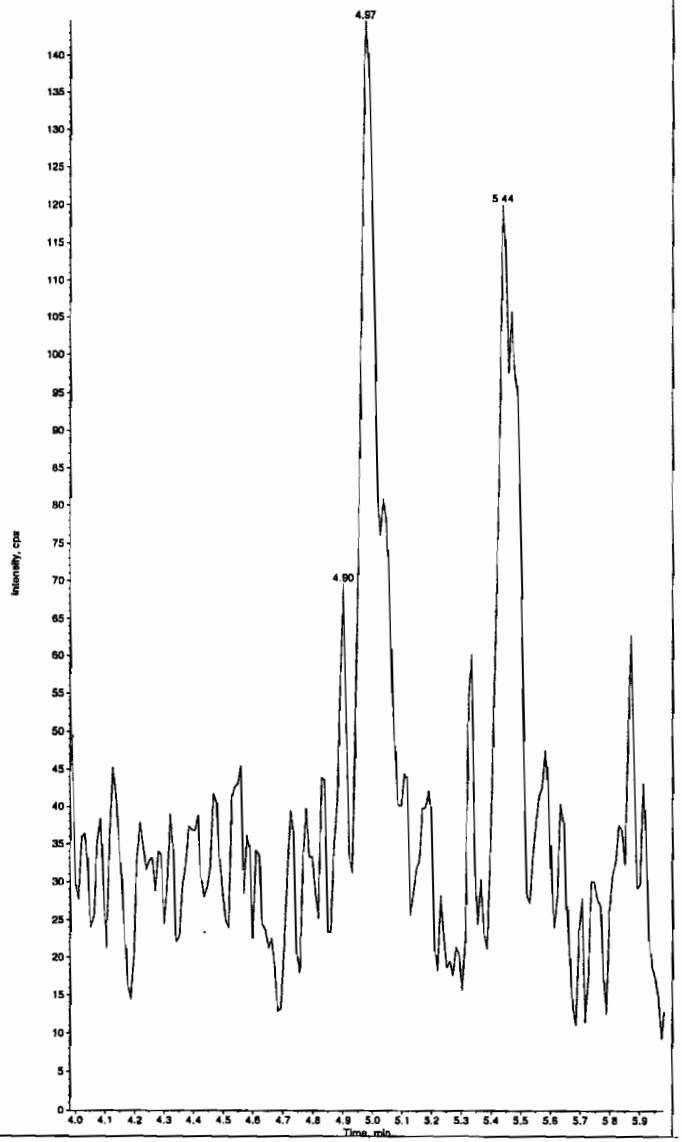
Modified: No



Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03010010.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 11:24:42 AM

Modified: No



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

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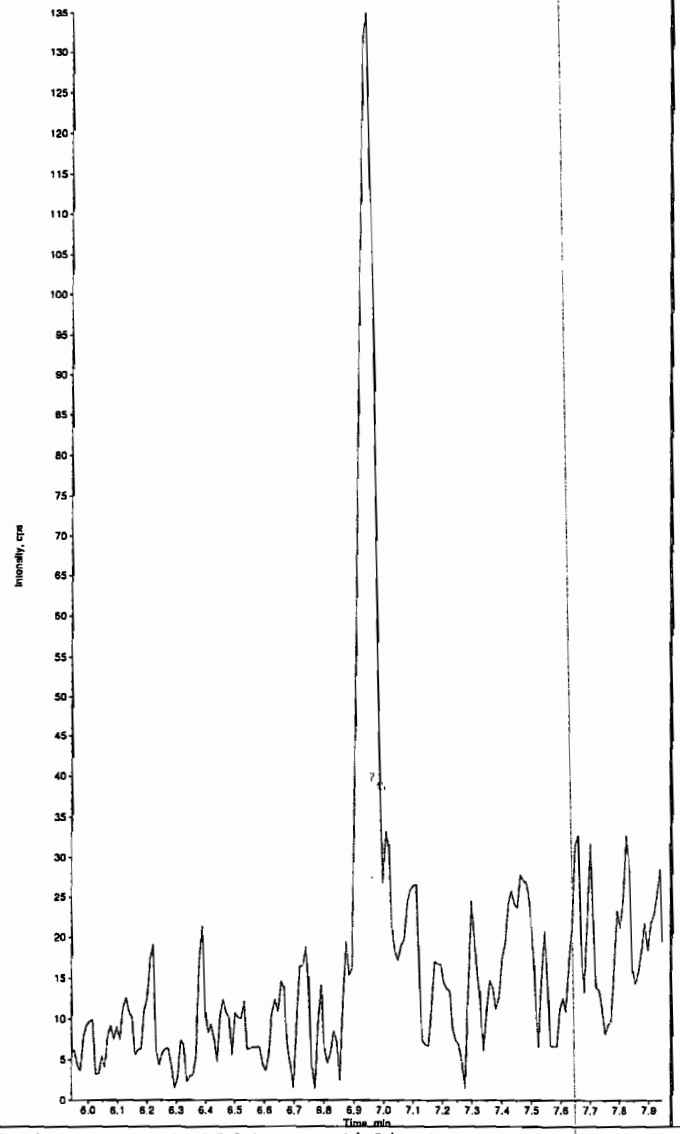
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK03
Analysis Date: 01-MAR-10 11:56
GEL Data File: EXS03010012.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

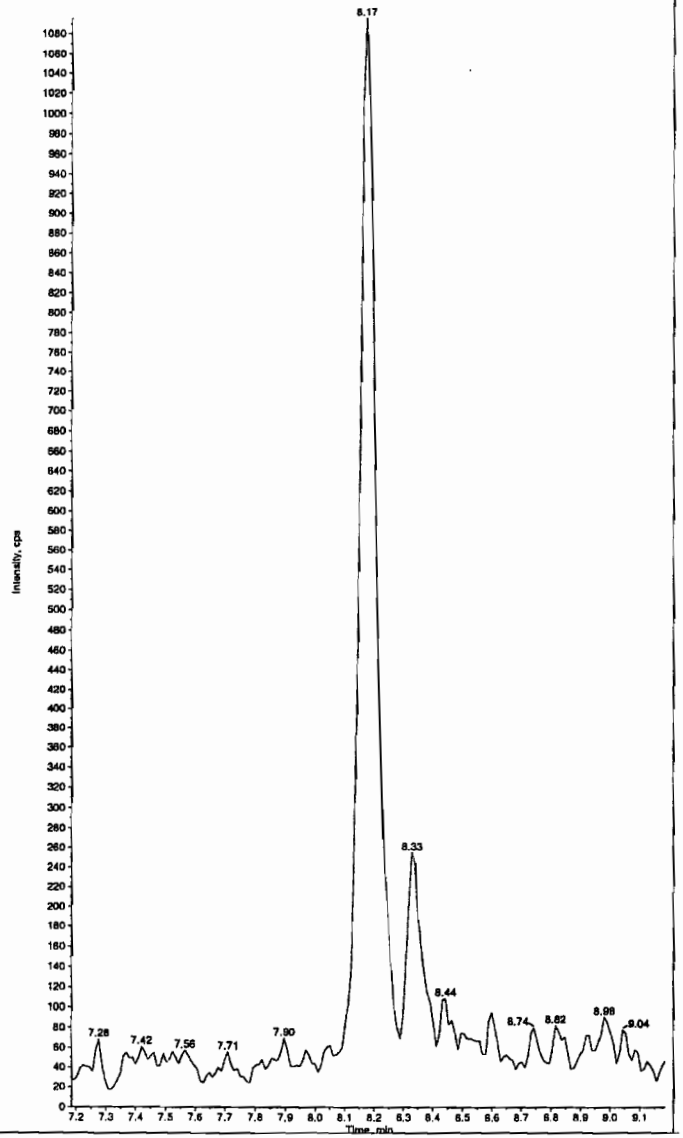
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

ken 3/3/10

Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03010012.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 11:56:08 AM
Modified: No



Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03010012.wiff"
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: 3/1/2010
Acq. Time: 11:56:08 AM
Modified: No



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Page 210 of 949

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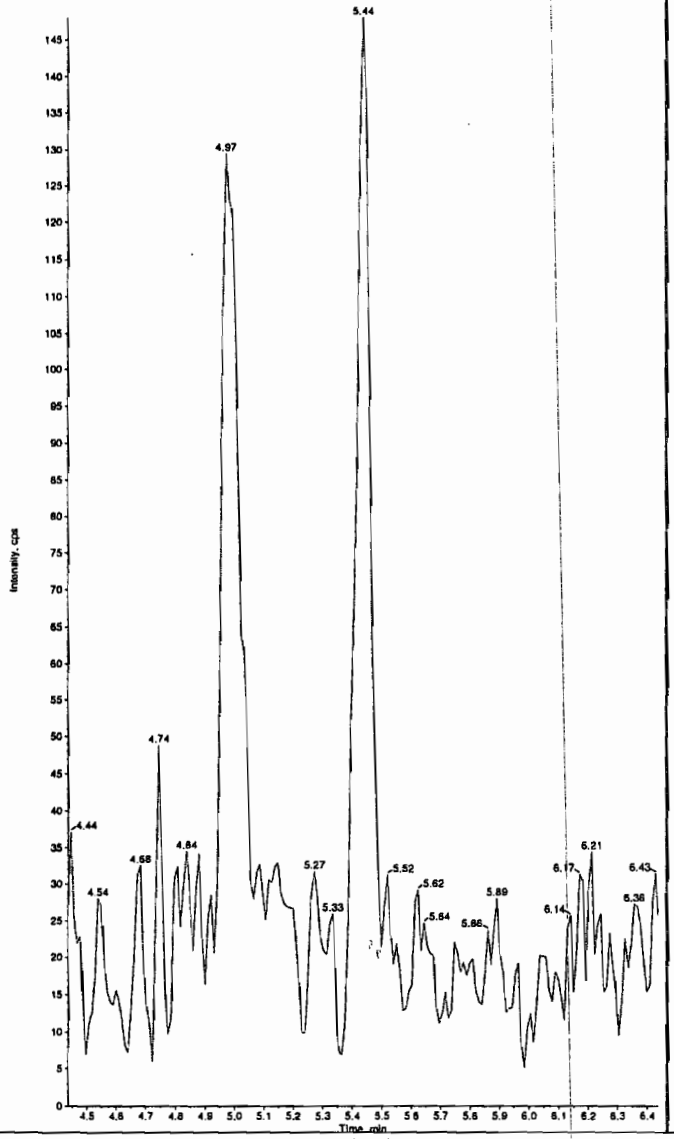
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

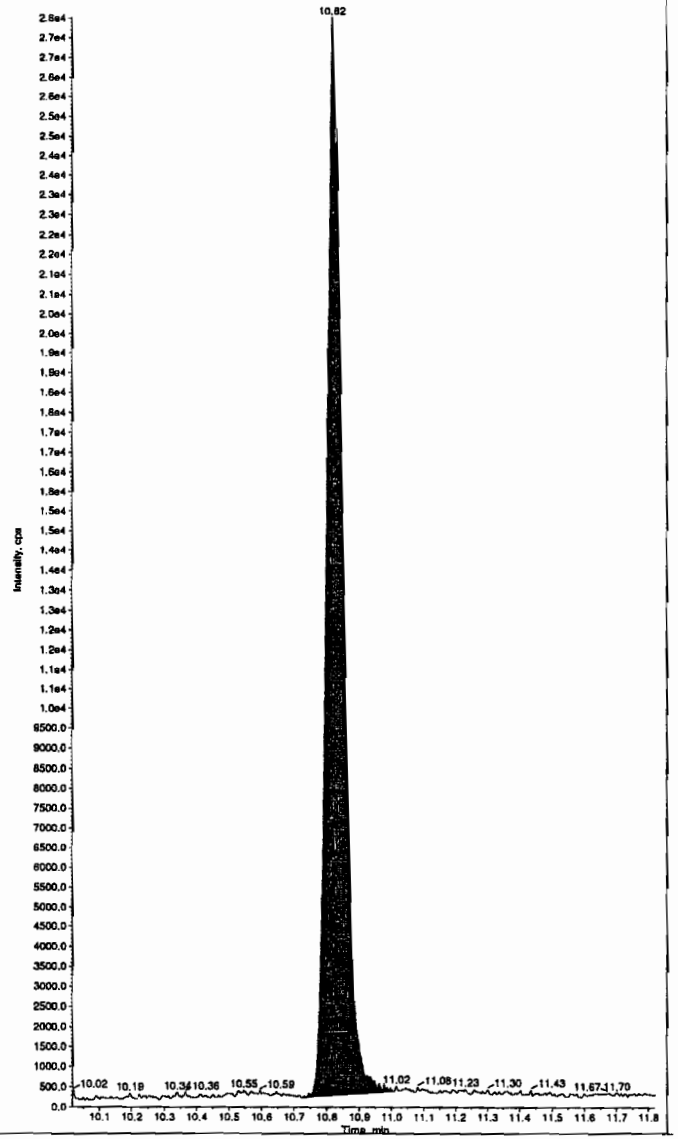
Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03010012.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	3/1/2010
Acq. Time:	11:56:08 AM
Modified:	No



Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03010012.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	< 0
Acq. Date:	3/1/2010
Acq. Time:	11:56:08 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:	9.72e+004 counts
Height:	27251.160 cps
Start Time:	10.7 min
End Time:	11.0 min



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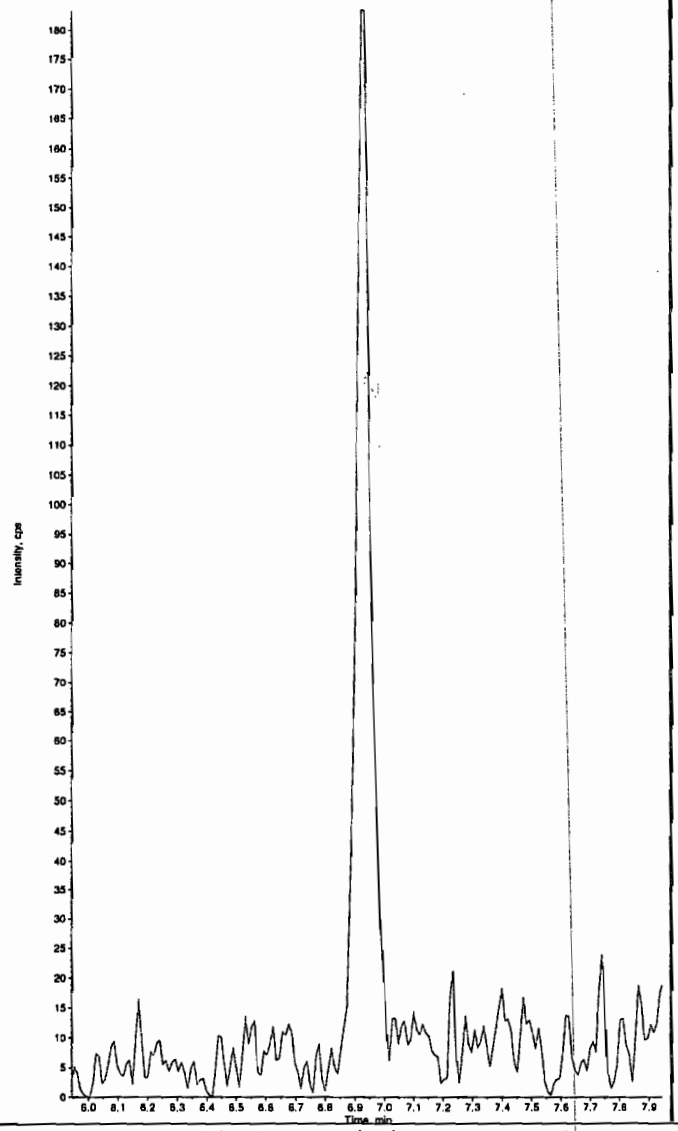
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK04
Analysis Date: 01-MAR-10 15:20
GEL Data File: EXS03010025.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

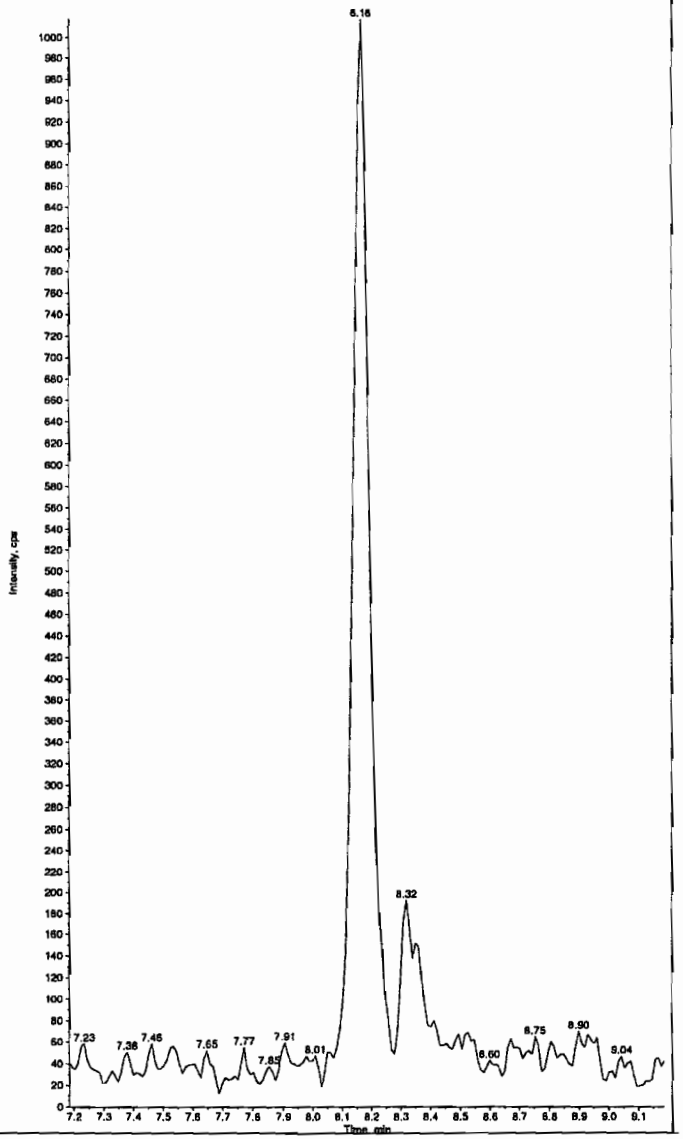
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jrn 3/3/10

Sample Name: "XIBLK04" Sample ID: "1|1|LER" File: "EXS03010025.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 3:20:41 PM
Modified: No



Sample Name: "XIBLK04" Sample ID: "1|1|LER" File: "EXS03010025.wiff"
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: 3/1/2010
Acq. Time: 3:20:41 PM
Modified: No



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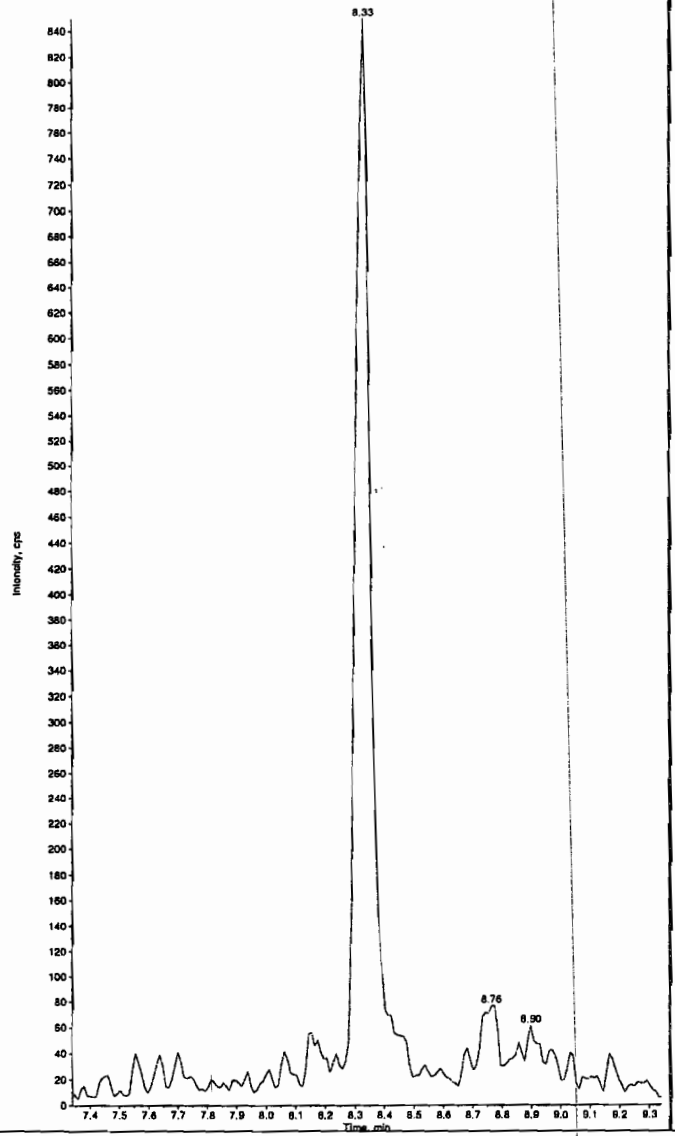
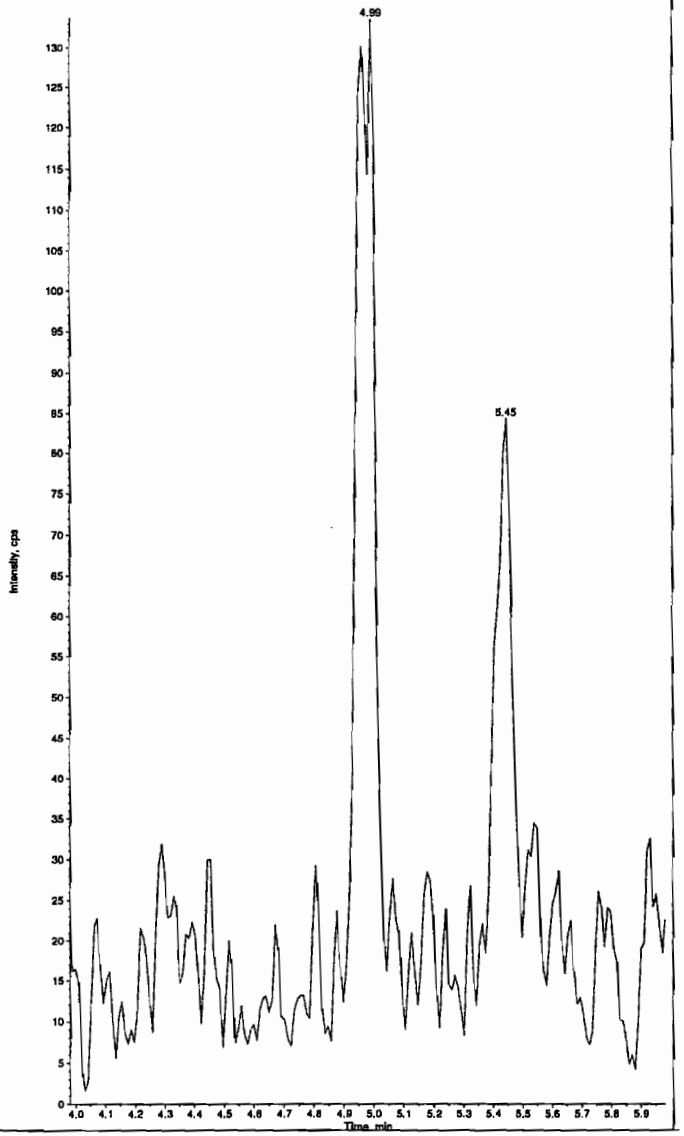
Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03010025.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 3:20:41 PM
Modified: No



Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03010025.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 3:20:41 PM
Modified: No



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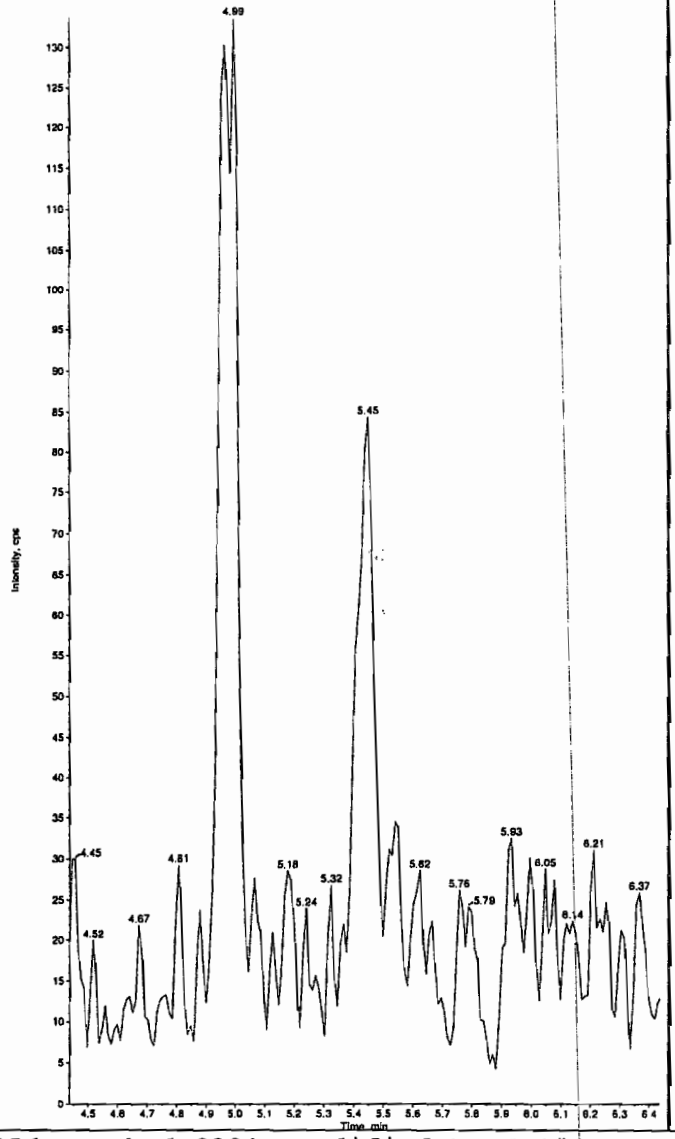
Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03010025.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 3:20:41 PM

Modified: No

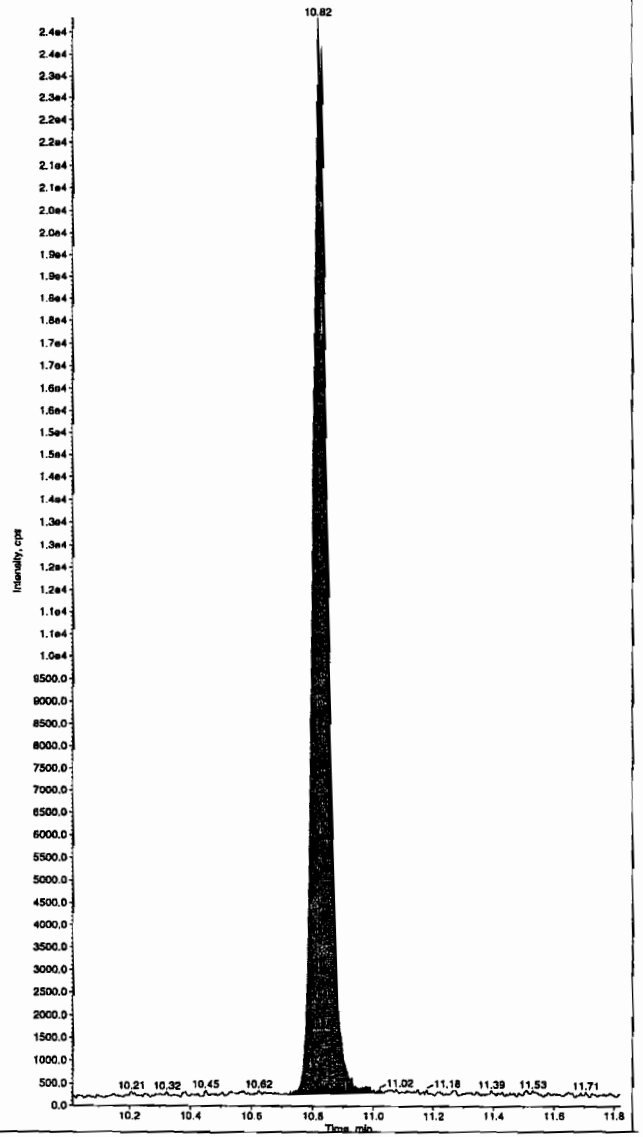


Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03010025.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/1/2010
Acq. Time: 3:20:41 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

Inc. Type: Valley
Retention Time: 10.8 min
Area: 8.41e+004 counts
Height: 24045.229 cps
Start Time: 10.7 min
End Time: 11.0 min



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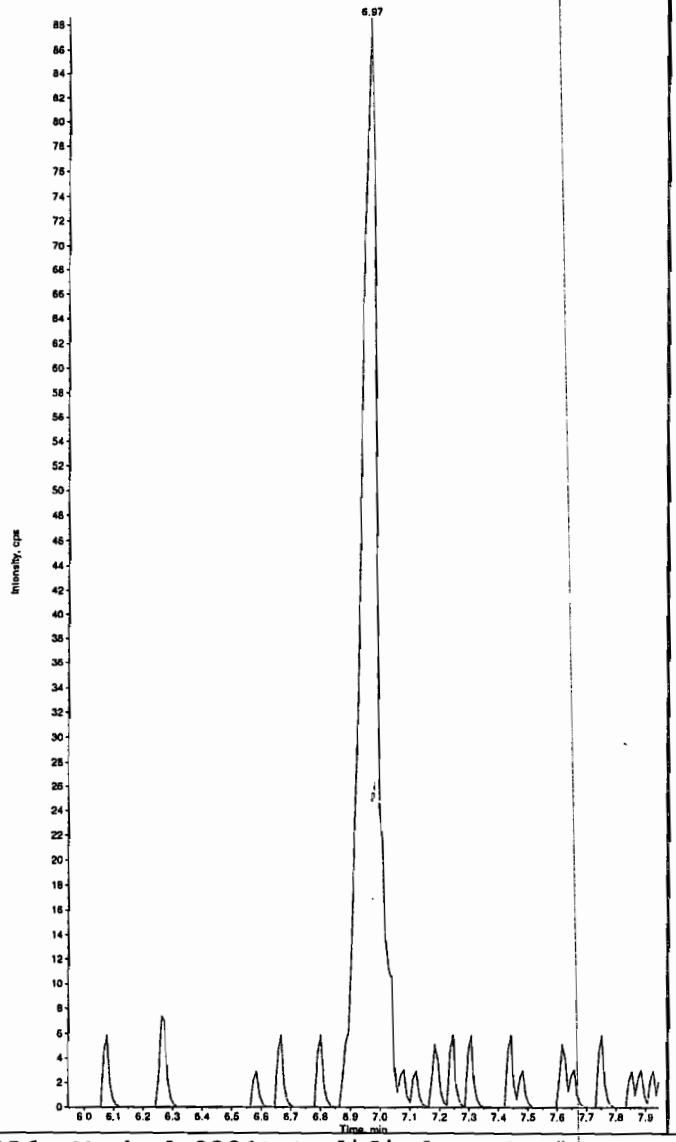
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK05
Analysis Date: 01-MAR-10 16:55
GEL Data File: EXS03010031.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

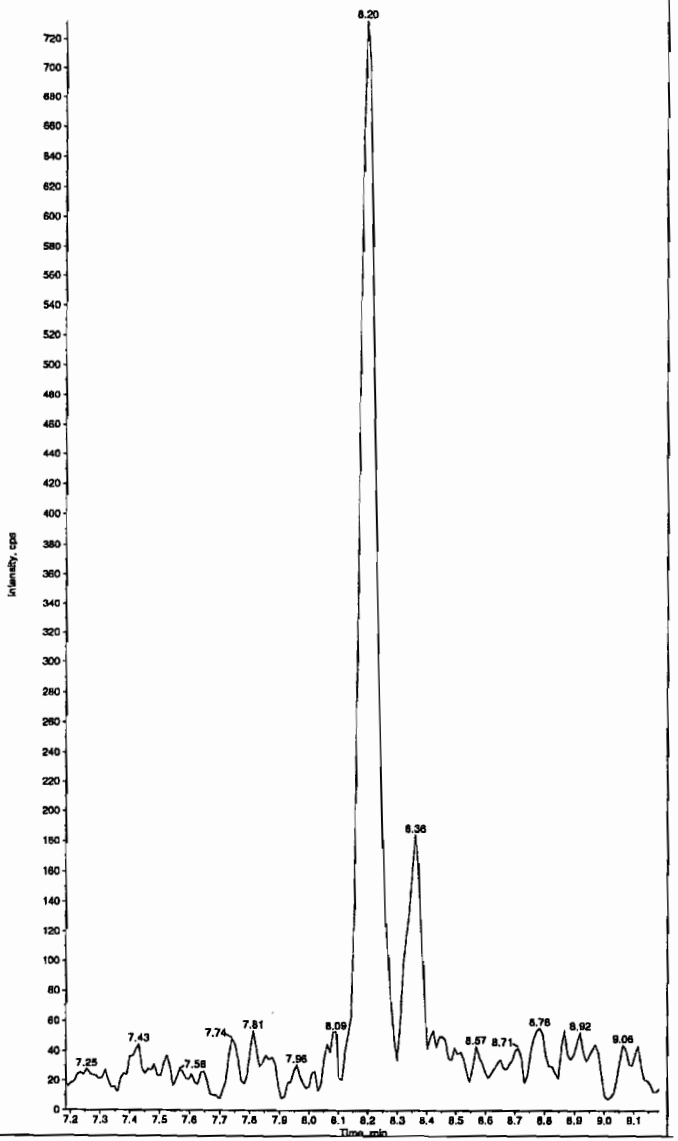
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Lan 3/3/10

Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03010031.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 4:55:04 PM
Modified: No



Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03010031.wiff"
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: 3/1/2010
Acq. Time: 4:55:04 PM
Modified: No



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Page 918 of 949

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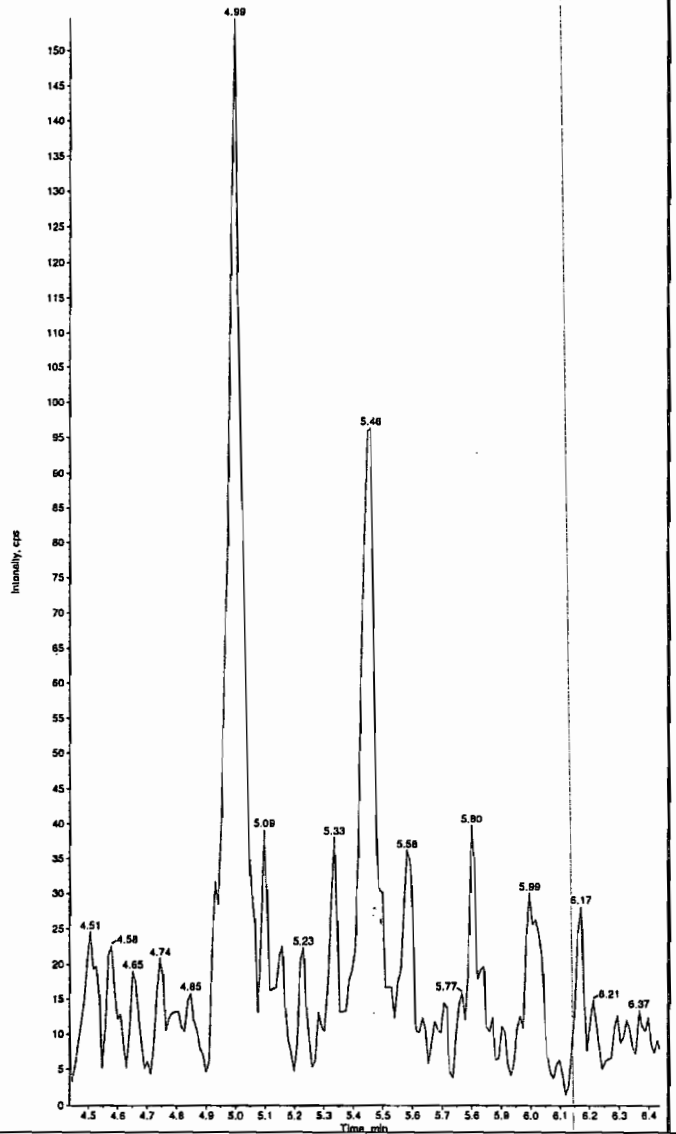
Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03010031.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 4:55:04 PM

Modified: No

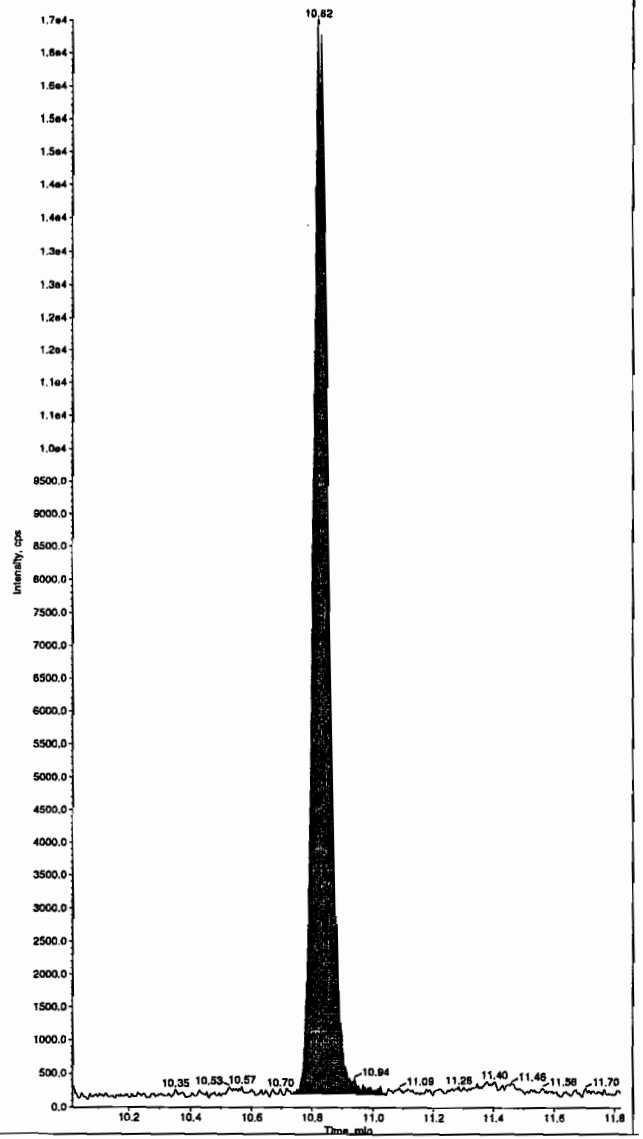


Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03010031.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/1/2010
Acq. Time: 4:55:04 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 8000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 6.03e+004 counts
Height: 16316.530 cps
Start Time: 10.7 min
End Time: 11.0 min



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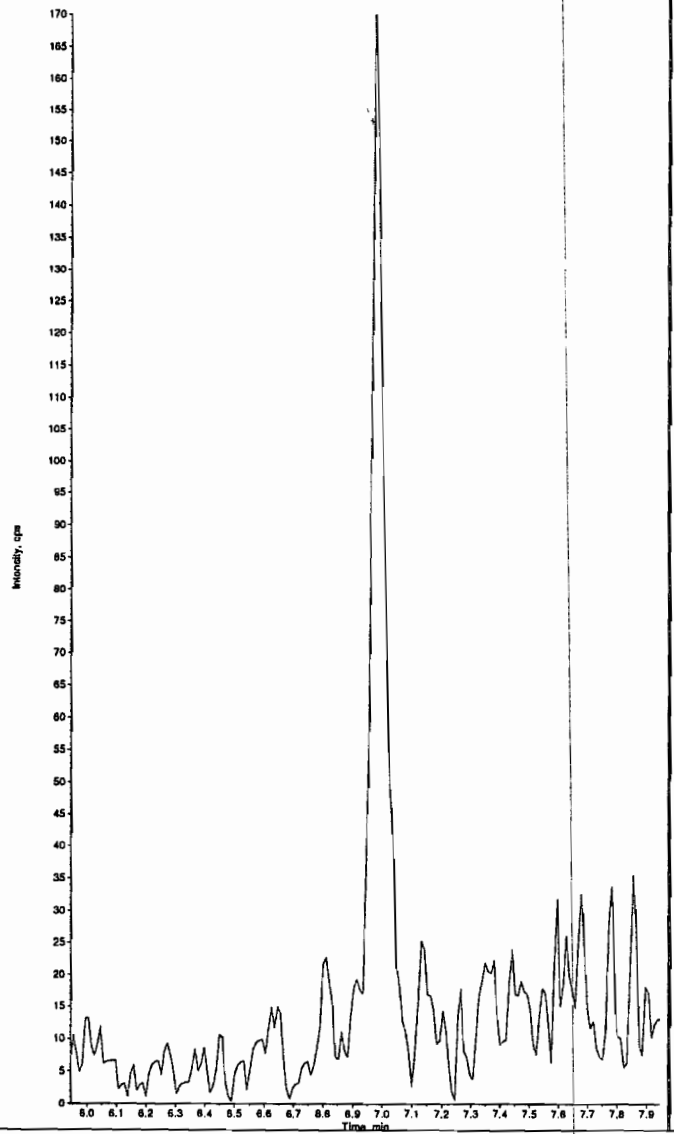
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK06
Analysis Date: 01-MAR-10 18:45
GEL Data File: EXS03010038.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

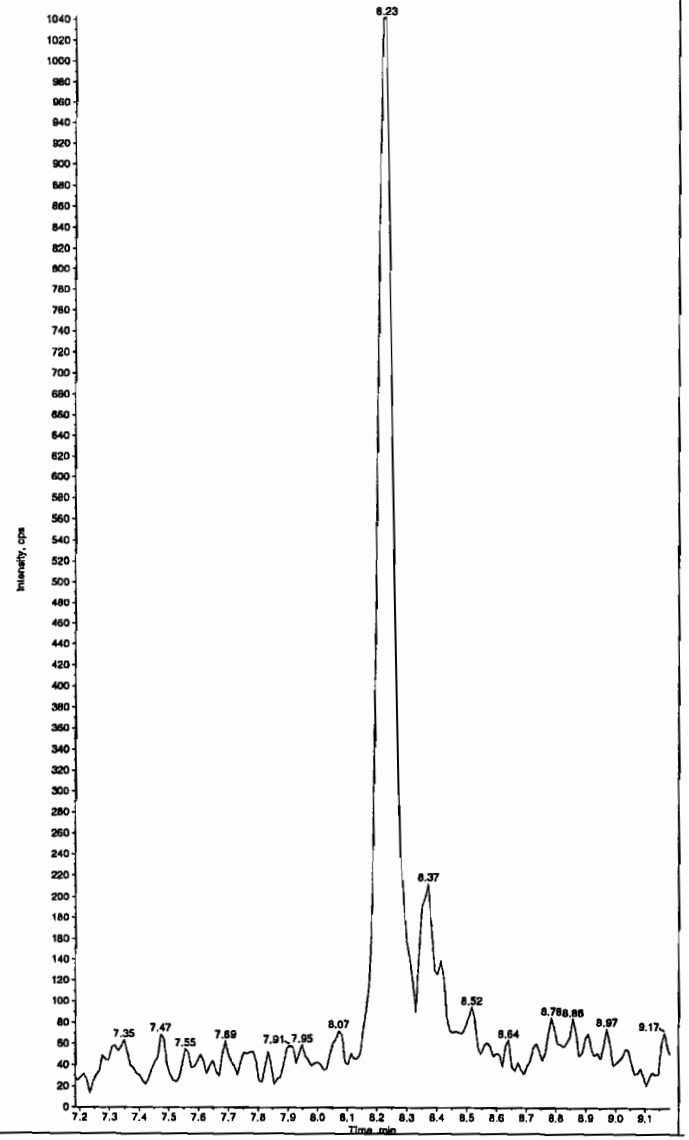
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 3/3/10

Sample Name: "XIBLK06" Sample ID: "|1|LER" File: "EXS03010038.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 6:45:29 PM
Modified: No



Sample Name: "XIBLK06" Sample ID: "|1|LER" File: "EXS03010038.wiff"
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: 3/1/2010
Acq. Time: 6:45:29 PM
Modified: No



Page 922 of 949

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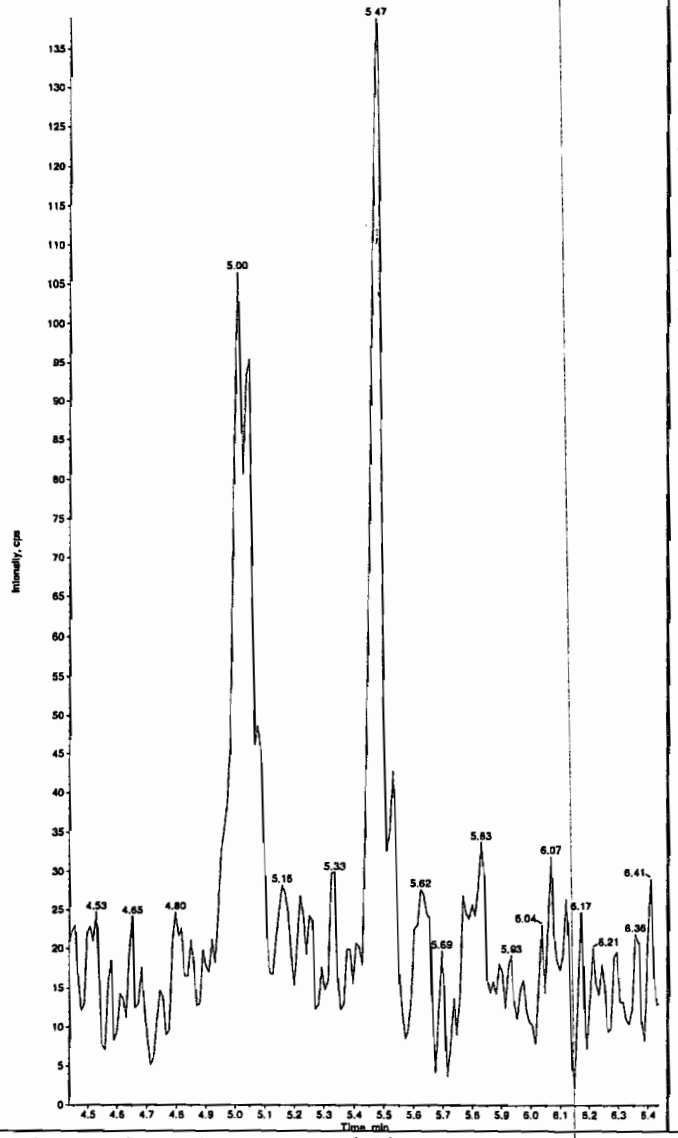
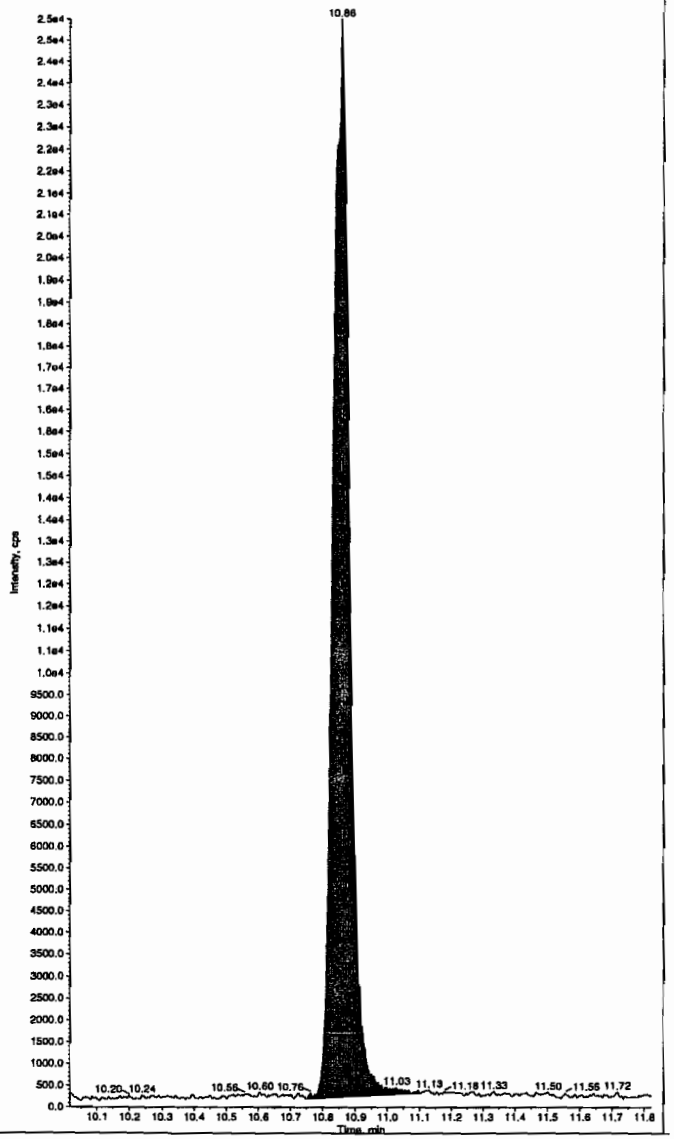
Sample Name: "XIBLK06" Sample ID: "|1|LER" File: "EXS03010038.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	3/1/2010
Acq. Time:	6:45:29 PM
Modified:	No



Sample Name: "XIBLK06" Sample ID: "|1|LER" File: "EXS03010038.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	< 0
Acq. Date:	3/1/2010
Acq. Time:	6:45:29 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:	9.30e+004 counts
Height:	24775.198 cps
Start Time:	10.7 min
End Time:	11.1 min



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–1623
Lab Code: GEL
Lab Sample ID: XIBLK07
Analysis Date: 01–MAR–10 22:10
GEL Data File: EXS03010051.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

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

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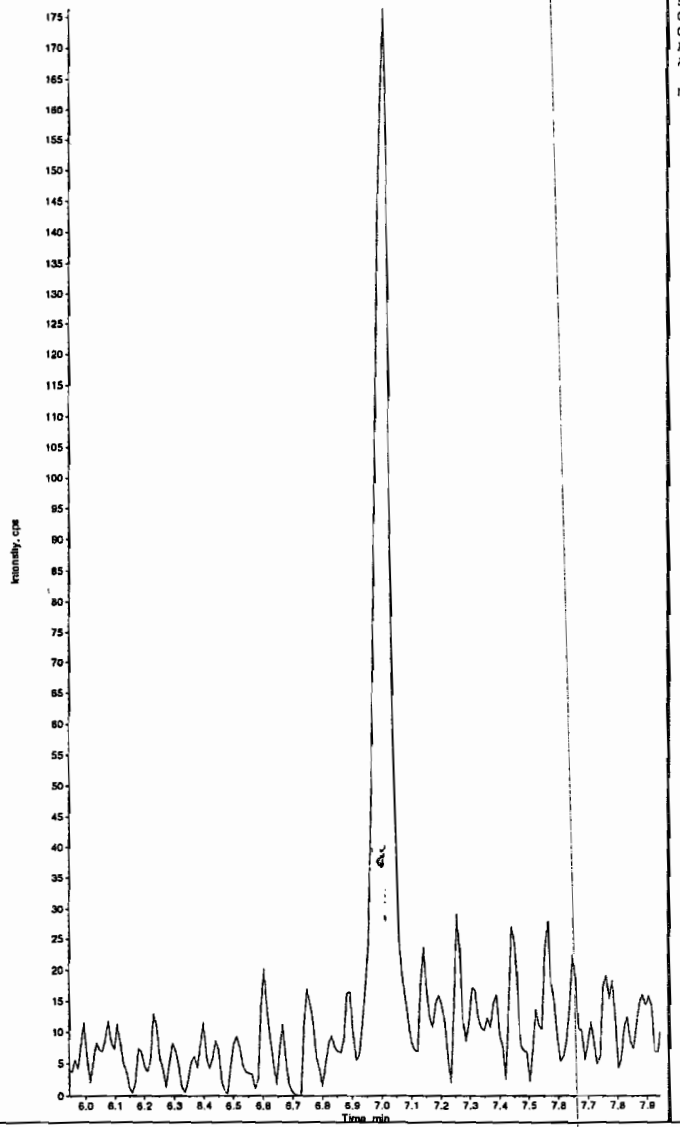
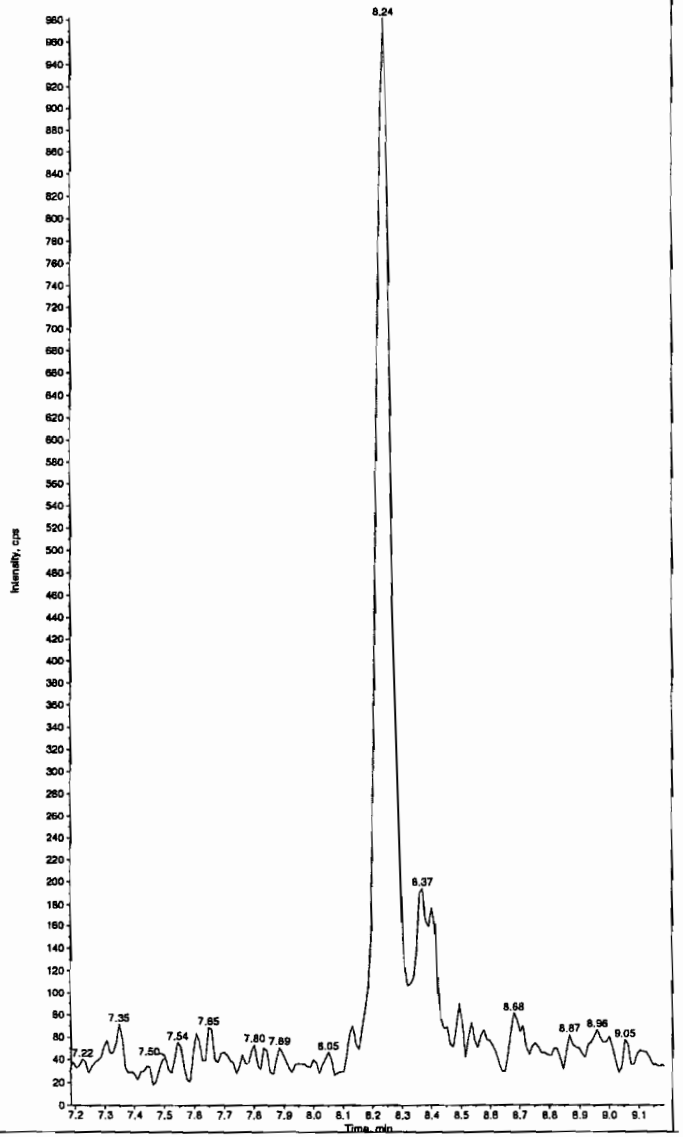
Jan 3/3/10

Sample Name: "XIBLK07" Sample ID: "|1|LER" File: "EXS03010051.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 10:10:00 PM
Modified: No



Sample Name: "XIBLK07" Sample ID: "|1|LER" File: "EXS03010051.wiff"
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: 3/1/2010
Acq. Time: 10:10:00 PM
Modified: No



HMM 03/04/10

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

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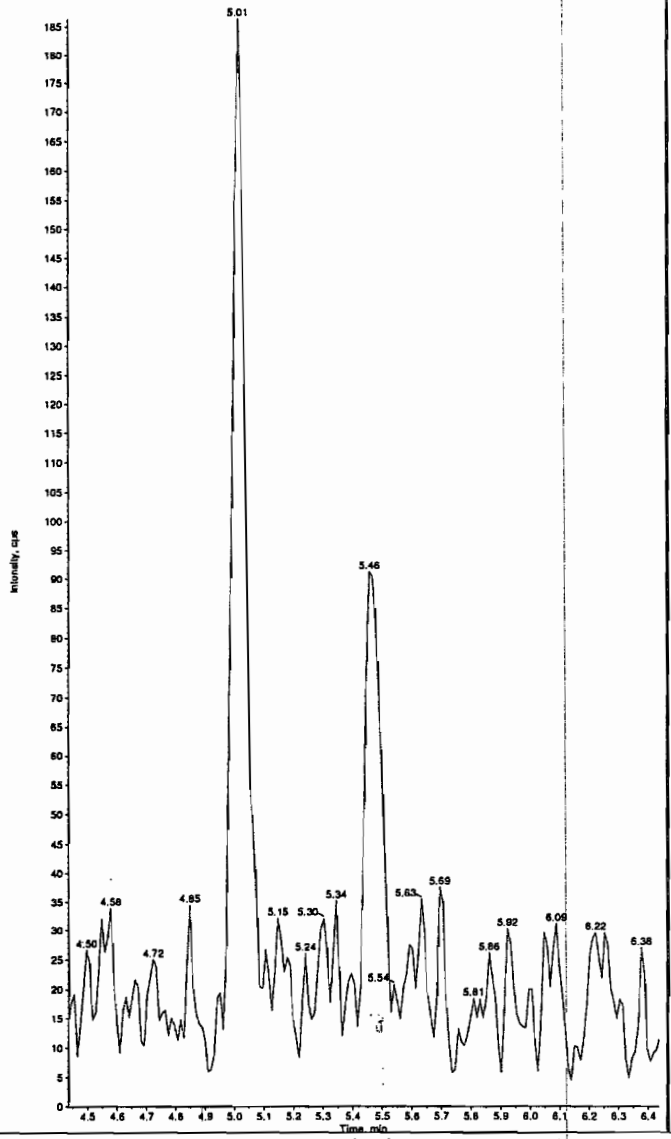
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK07" Sample ID: "[1]LER" File: "EXS03010051.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 10:10:00 PM

Modified: No

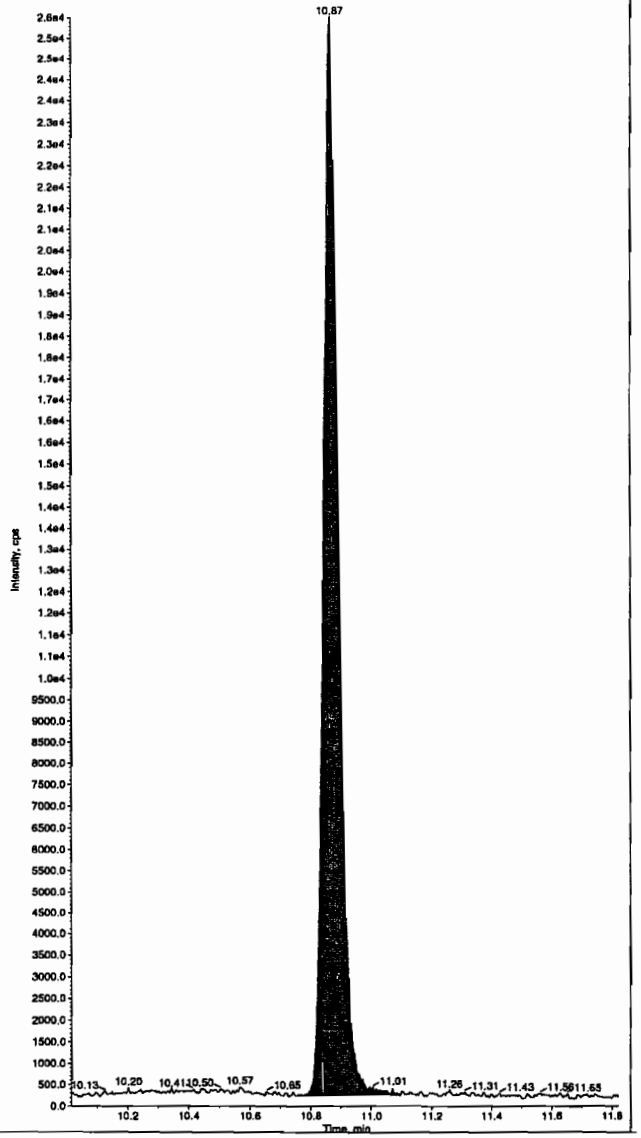


Sample Name: "XIBLK07" Sample ID: "[1]LER" File: "EXS03010051.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/1/2010
Acq. Time: 10:10:00 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: 9.08e+004 counts
Height: 25272.495 cps
Start Time: 10.8 min
End Time: 11.1 min



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

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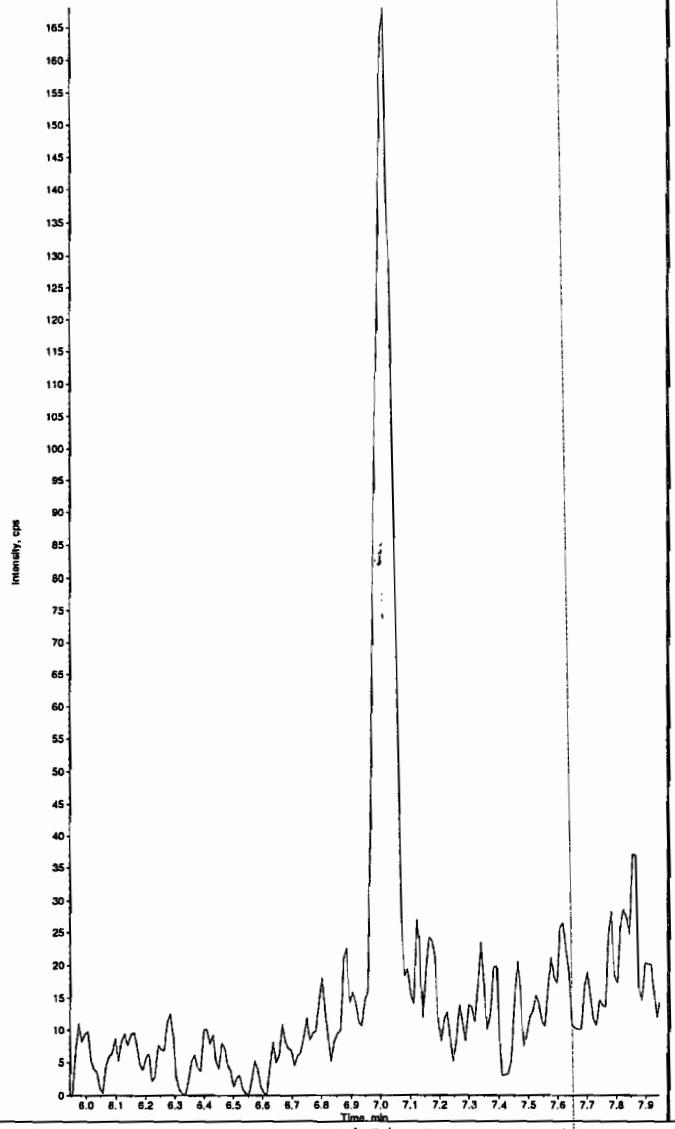
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK08
Analysis Date: 02-MAR-10 01:34
GEL Data File: EXS03010064.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

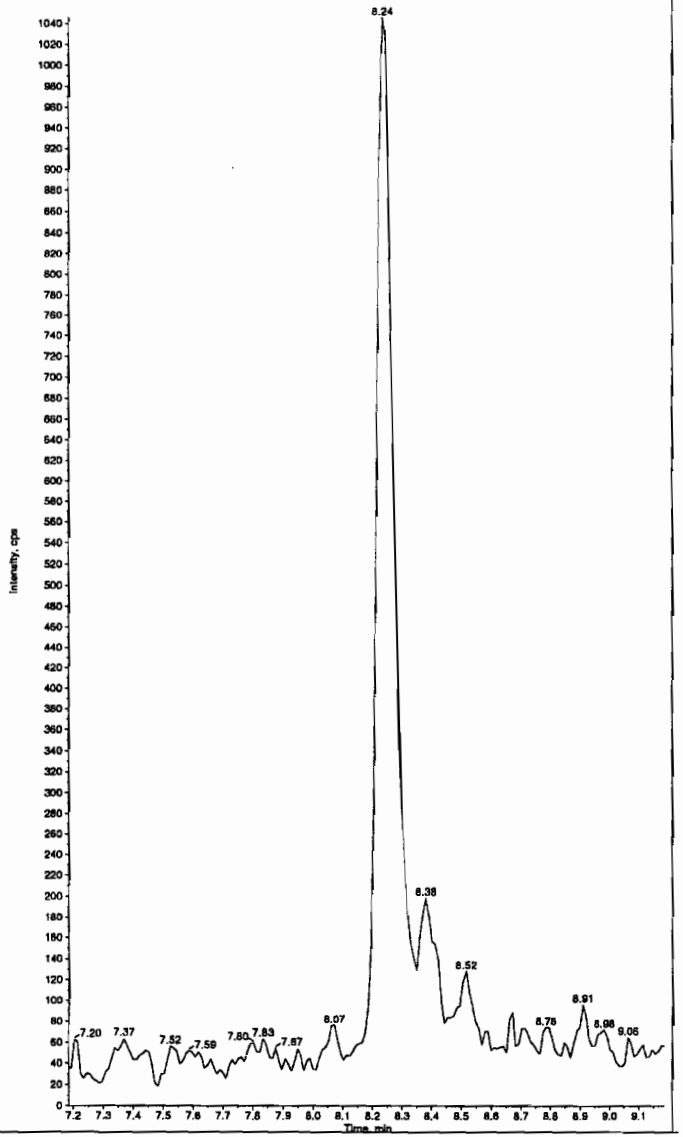
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Page 930 of 949

Sample Name: "XIBLK08" Sample ID: "|1|LER" File: "EXS03010064.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 1:34:36 AM
Modified: No



Sample Name: "XIBLK08" Sample ID: "|1|LER" File: "EXS03010064.wiff"
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: 3/2/2010
Acq. Time: 1:34:36 AM
Modified: No



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

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4A
Explosives Continuing Calibration Blank

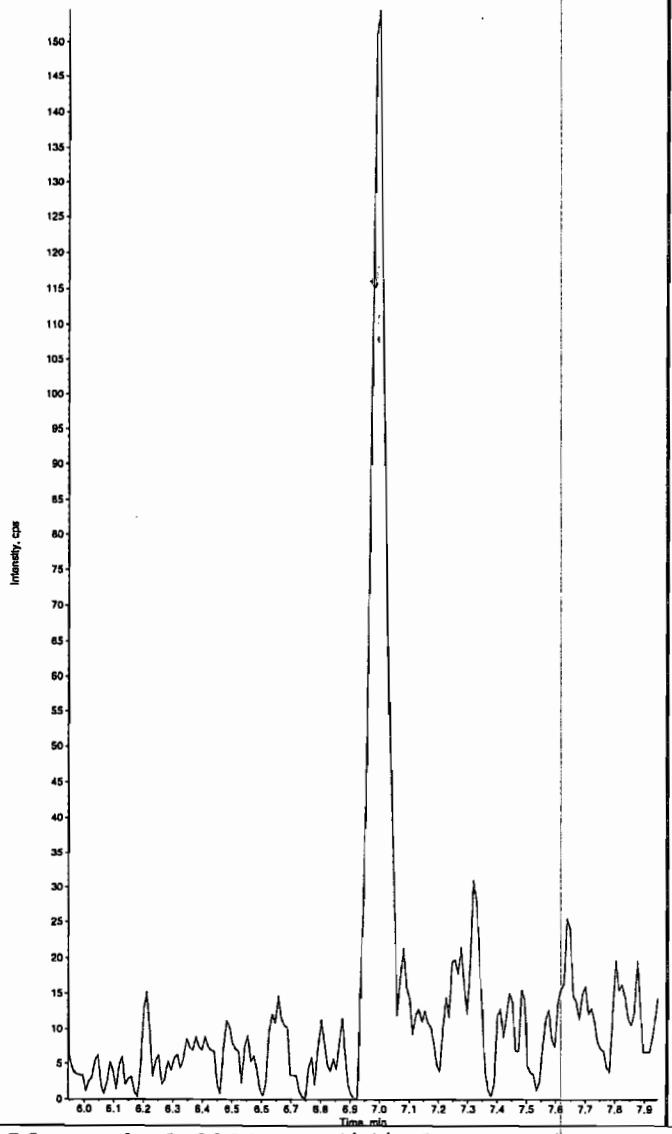
Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–1623
Lab Code: GEL
Lab Sample ID: XIBLK09
Analysis Date: 02–MAR–10 04:27
GEL Data File: EXS03010075.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

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	0
TATB	0	0

Jan 3/3/10

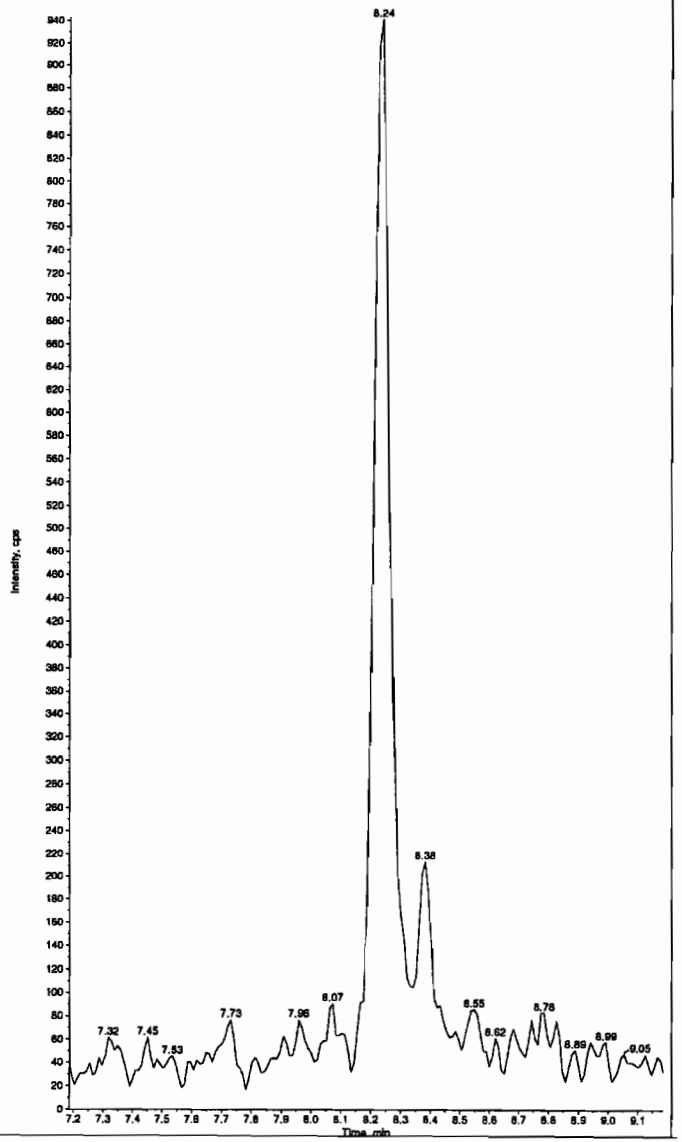
Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS03010075.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 4:27:45 AM

Modified: No



Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS03010075.wiff"
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: 3/2/2010
Acq. Time: 4:27:45 AM

Modified: No



thm 03/04/10

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

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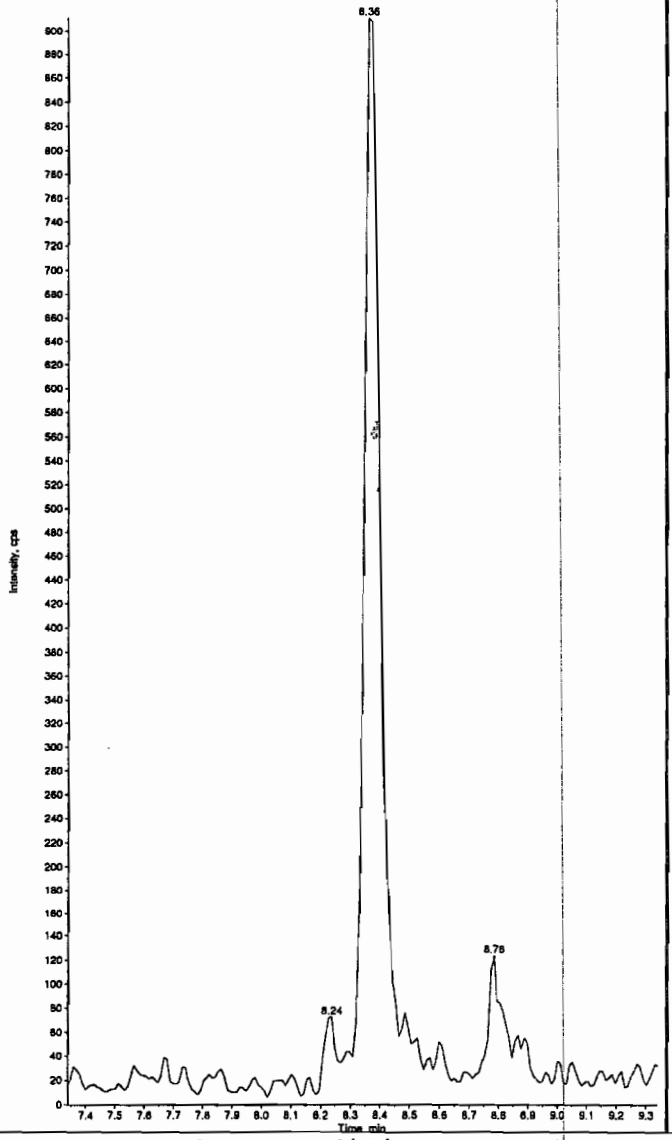
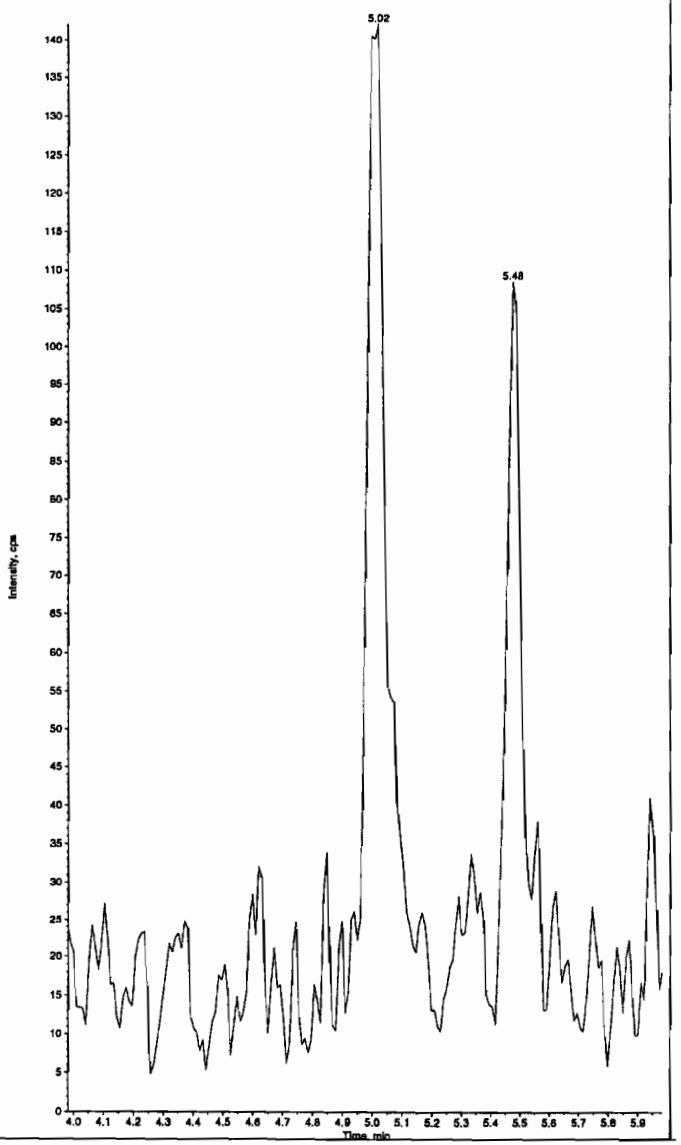
Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS03010075.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 4:27:45 AM
Modified: No



Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS03010075.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 4:27:45 AM
Modified: No



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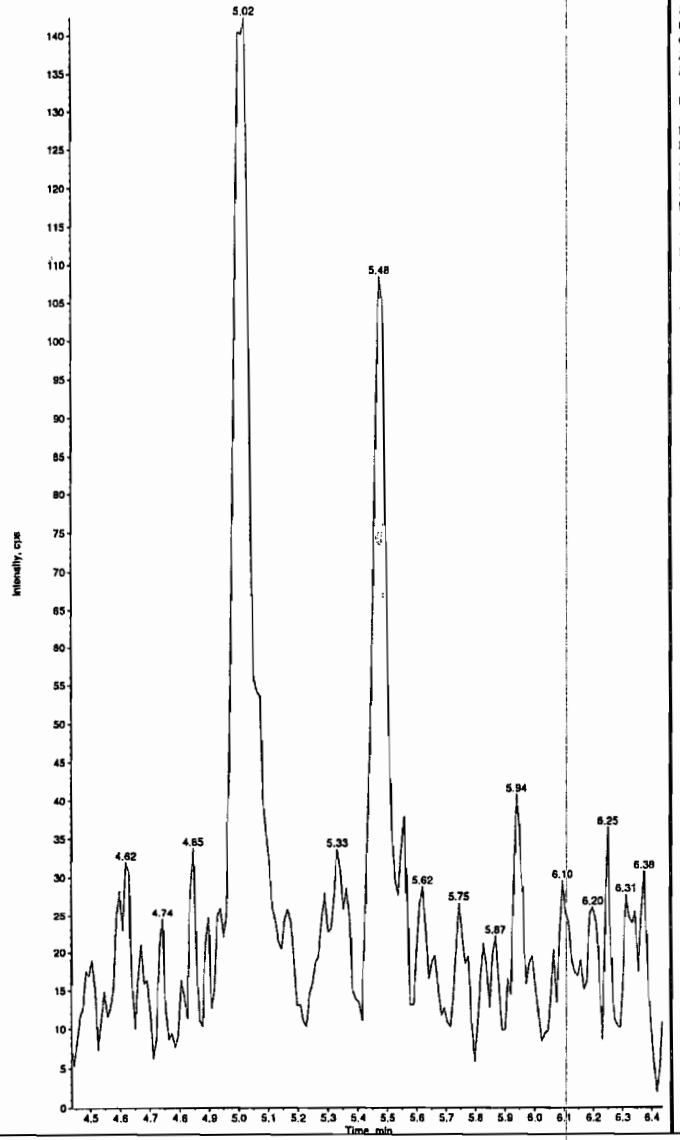
Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS03010075.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 4:27:45 AM

Modified: No

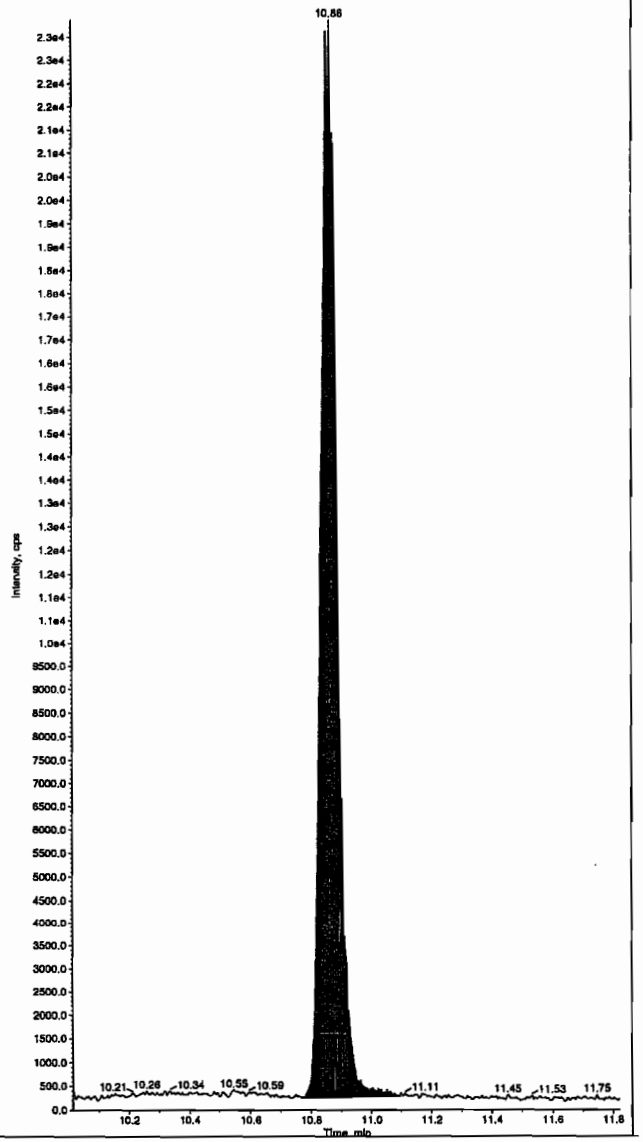


Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS03010075.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/2/2010
Acq. Time: 4:27:45 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: 10.9 min
Area: 8.82e+004 counts
Height: 23102.528 cps
Start Time: 10.8 min
End Time: 11.1 min



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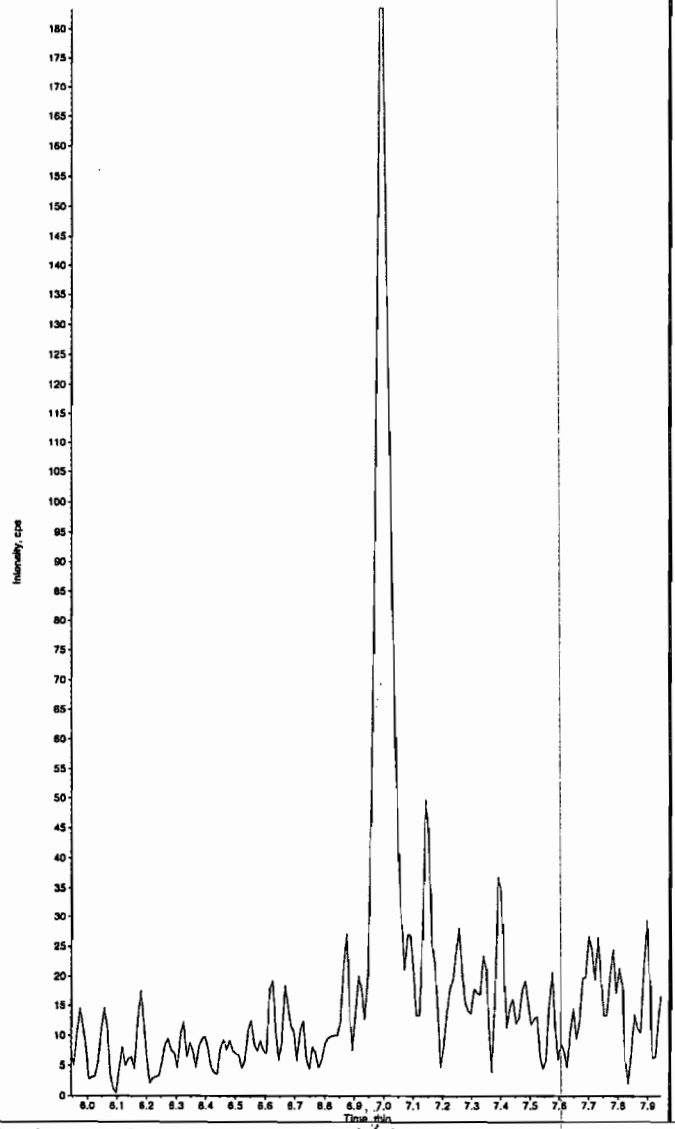
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK10
Analysis Date: 02-MAR-10 07:52
GEL Data File: EXS03010088.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

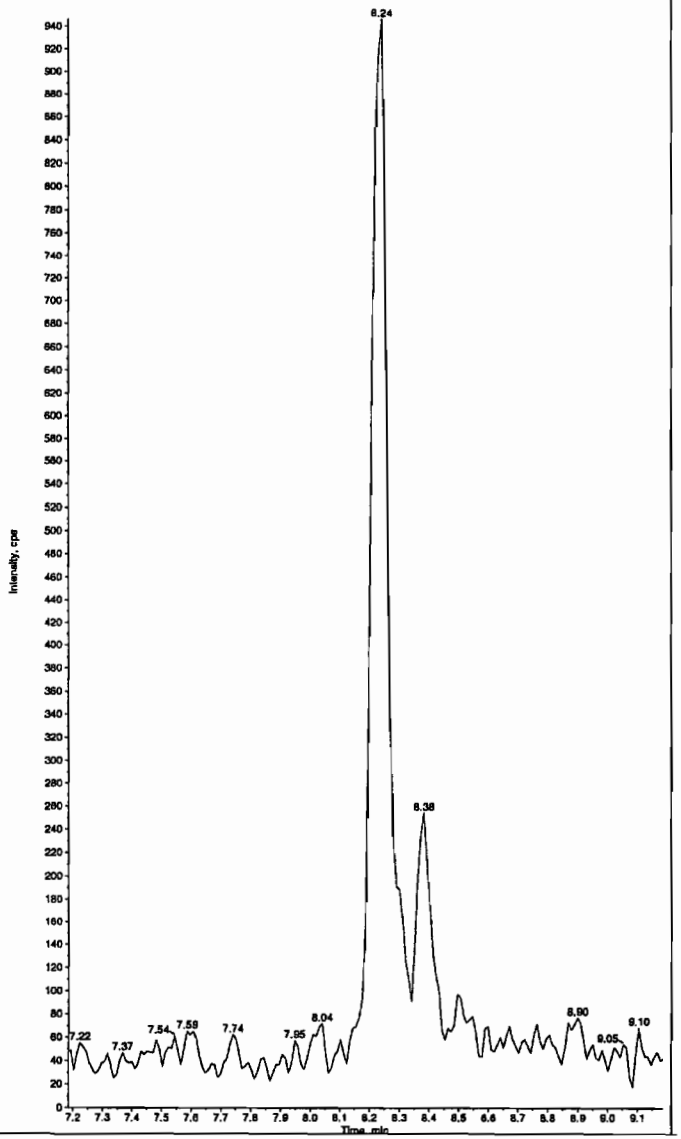
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Lan 3/3/10

Sample Name: "XIBLK10" Sample ID: "|1|LER" File: "EXS03010088.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:52:21 AM
Modified: No



Sample Name: "XIBLK10" Sample ID: "|1|LER" File: "EXS03010088.wiff"
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: 3/2/2010
Acq. Time: 7:52:21 AM
Modified: No



Hmm 03/04/10

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

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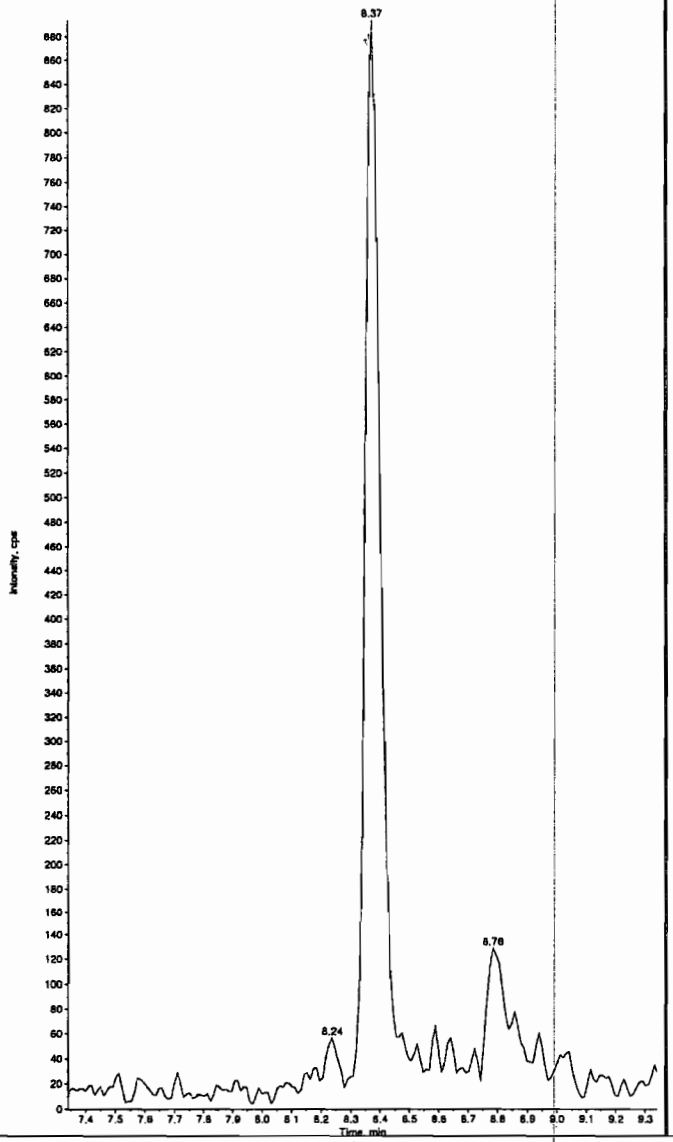
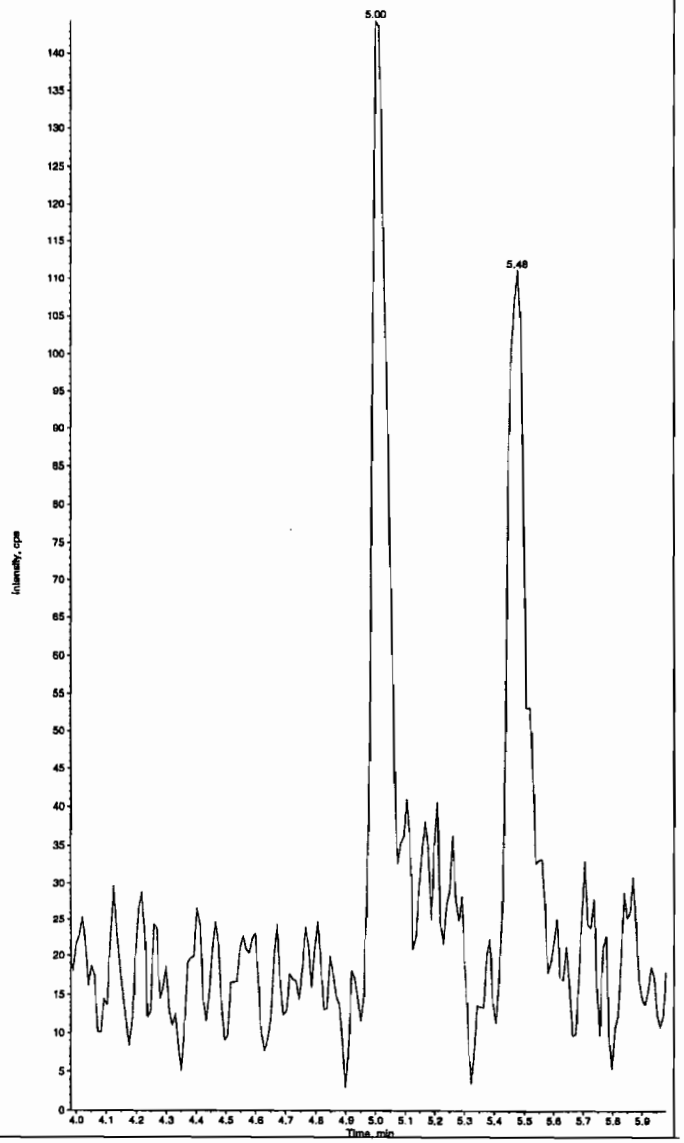
Sample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS03010088.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:52:21 AM
Modified: No



Sample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS03010088.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:52:21 AM
Modified: No



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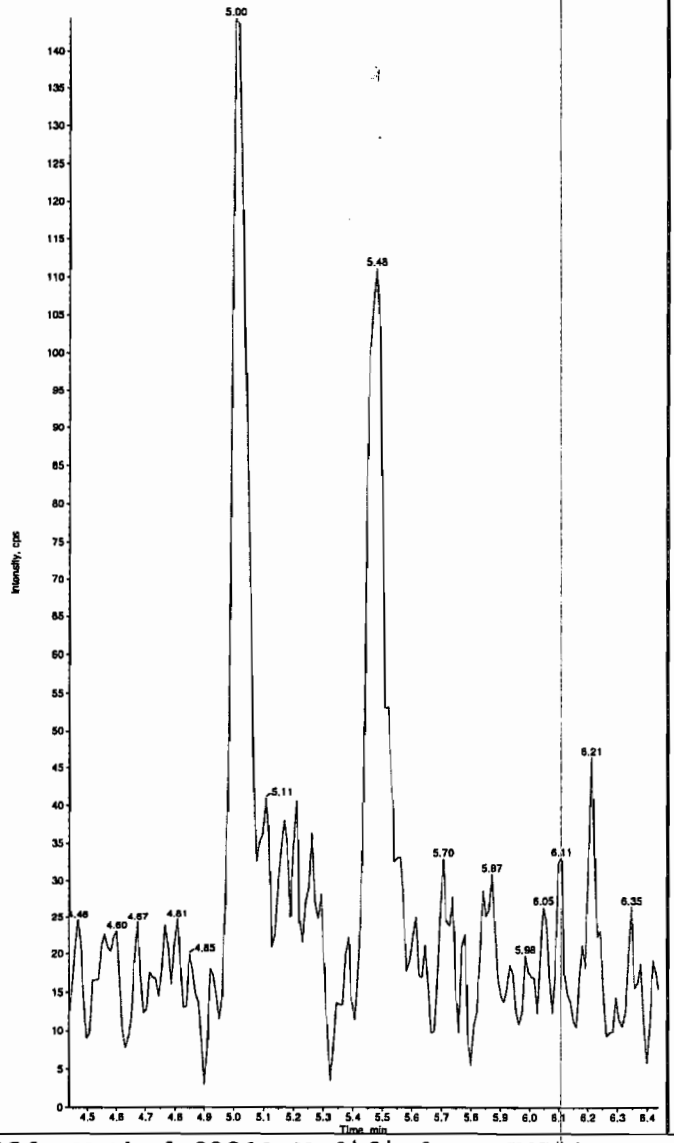
Sample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS03010088.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:52:21 AM

Modified: No

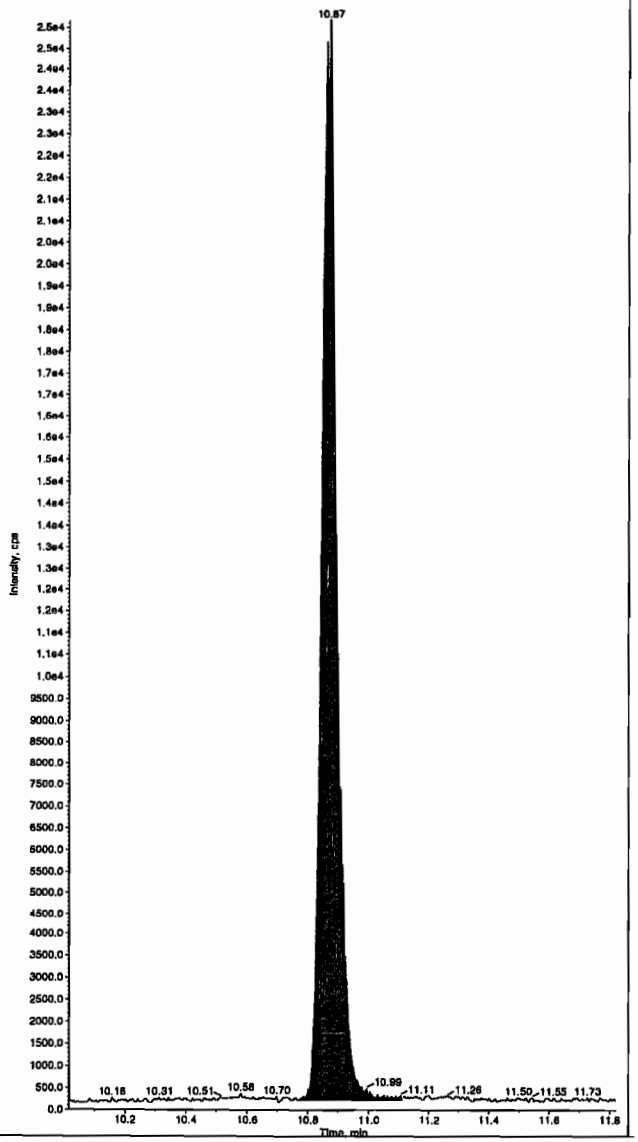


Sample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS03010088.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/2/2010
Acq. Time: 7:52:21 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: 10.9 min
Area: 9.01e+004 counts
Height: 24962.246 cps
Start Time: 10.8 min
End Time: 11.1 min



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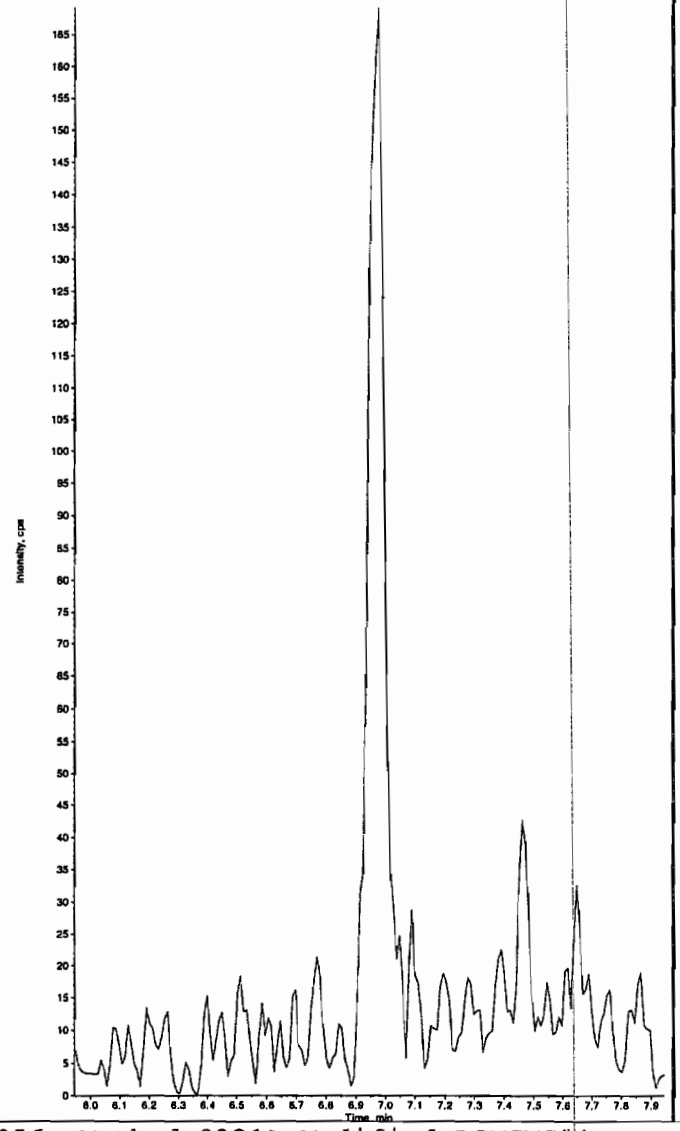
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK11
Analysis Date: 02-MAR-10 11:17
GEL Data File: EXS03010101.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

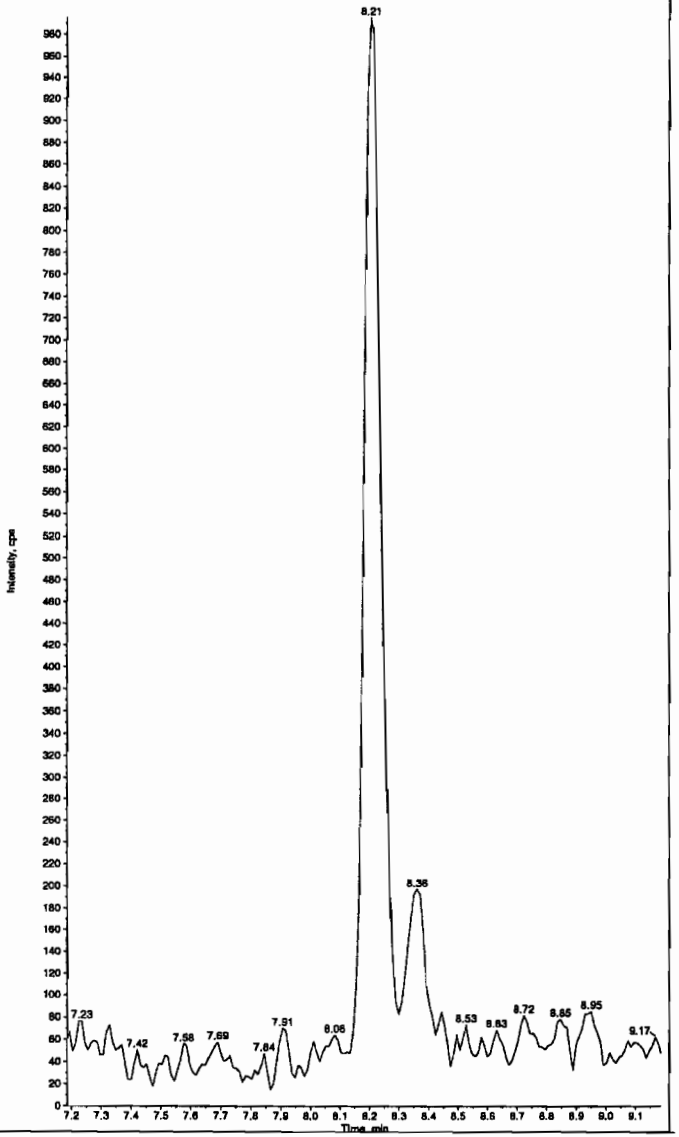
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

JCM 3/3/10

Sample Name: "XIBLK11" Sample ID: "|1|LER" File: "EXS03010101.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 11:17:09 AM
Modified: No



Sample Name: "XIBLK11" Sample ID: "|1|LER" File: "EXS03010101.wiff"
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: 3/2/2010
Acq. Time: 11:17:09 AM
Modified: No



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

Page 842 of 949

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–1623

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 02–MAR–10 12:20

GEL Data File: EXS03010105.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

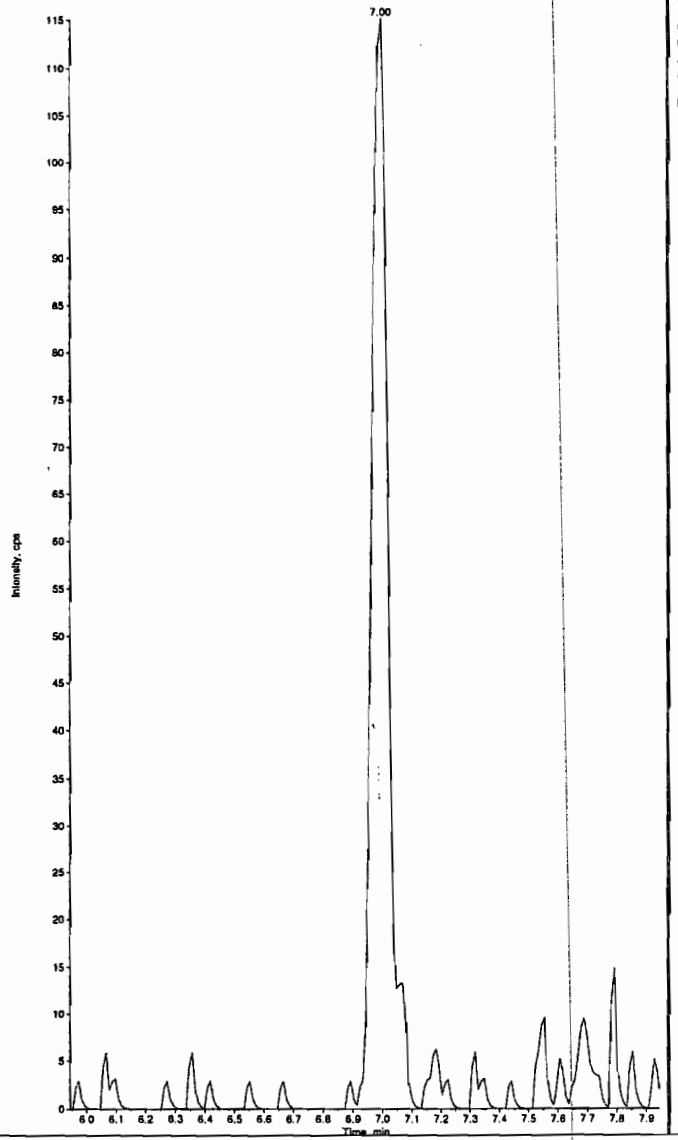
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	0
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

lan 3/3/10

Sample Name: "XIBLK12" Sample ID: "[1]LER" File: "EXS03010105.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 12:20:11 PM

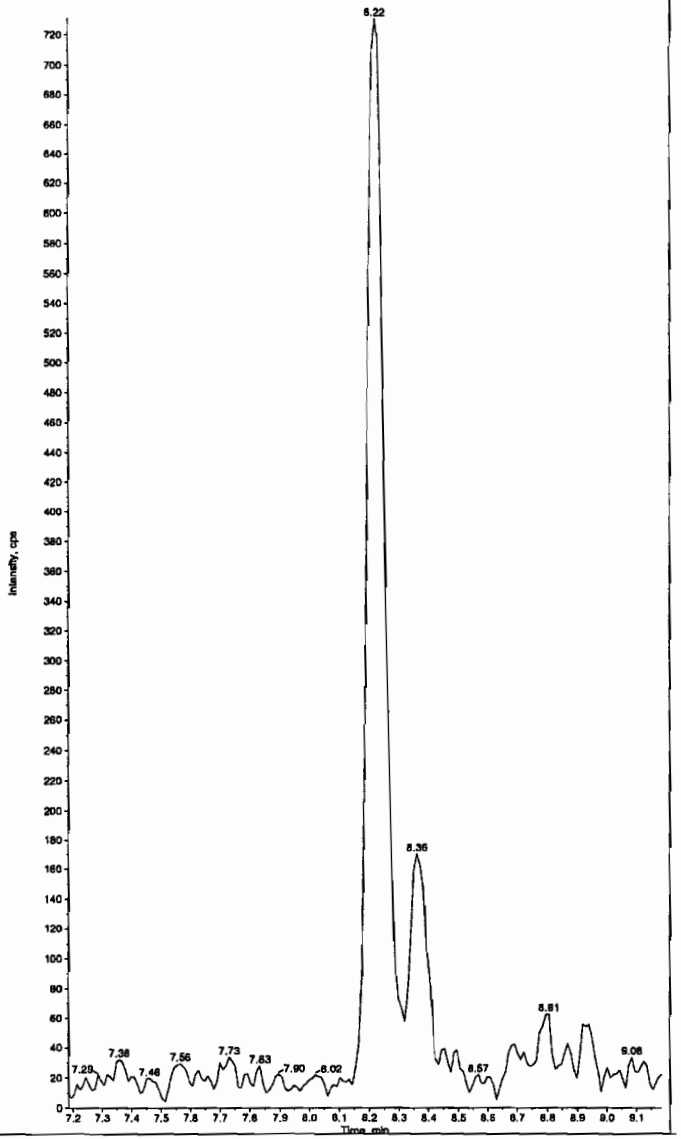
Modified: No



Sample Name: "XIBLK12" Sample ID: "[1]LER" File: "EXS03010105.wiff"
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: 3/2/2010
Acq. Time: 12:20:11 PM

Modified: No



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4A
Explosives Continuing Calibration Blank

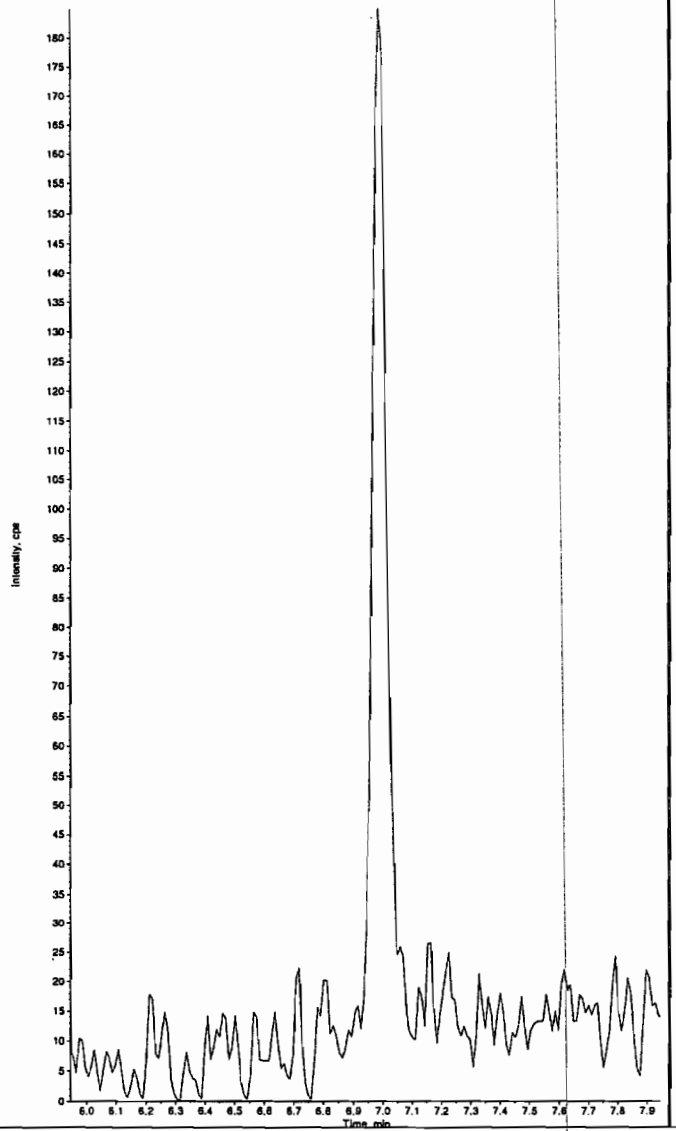
Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK13
Analysis Date: 02-MAR-10 14:10
GEL Data File: EXS03010112.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

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

Sample Name: "XIBLK13" Sample ID: "|1|LER" File: "EXS03010112.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 2:10:39 PM

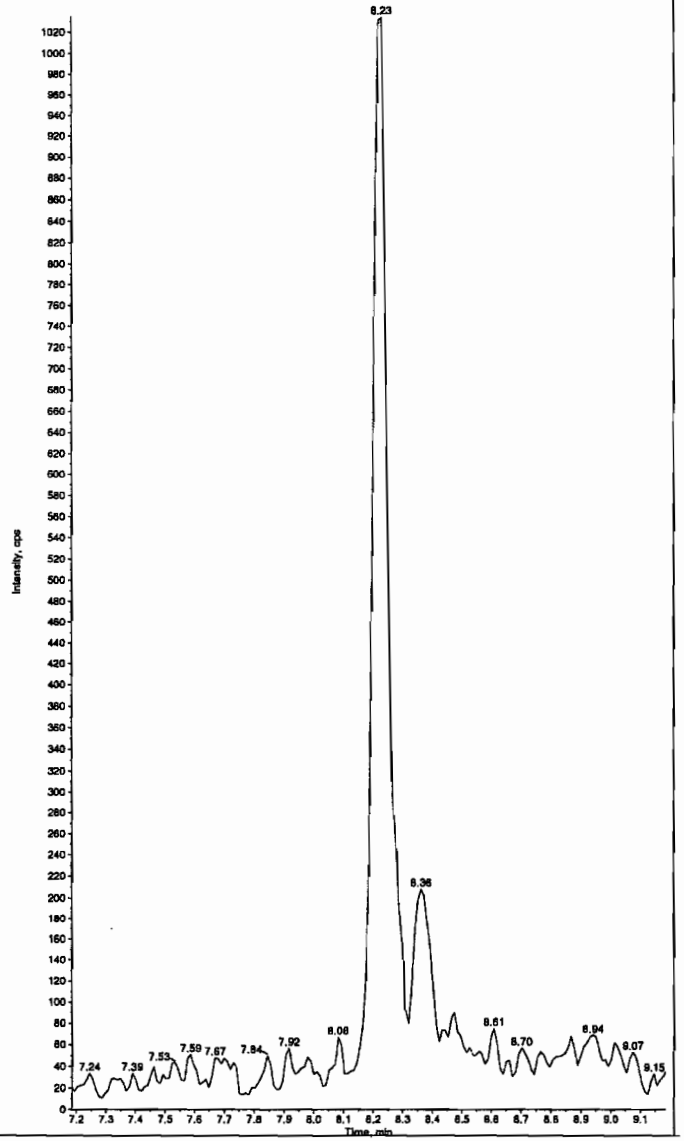
Modified: No



Sample Name: "XIBLK13" Sample ID: "|1|LER" File: "EXS03010112.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/45.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 2:10:39 PM

Modified: No



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–1623

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 02–MAR–10 17:35

GEL Data File: EXS03010125.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

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

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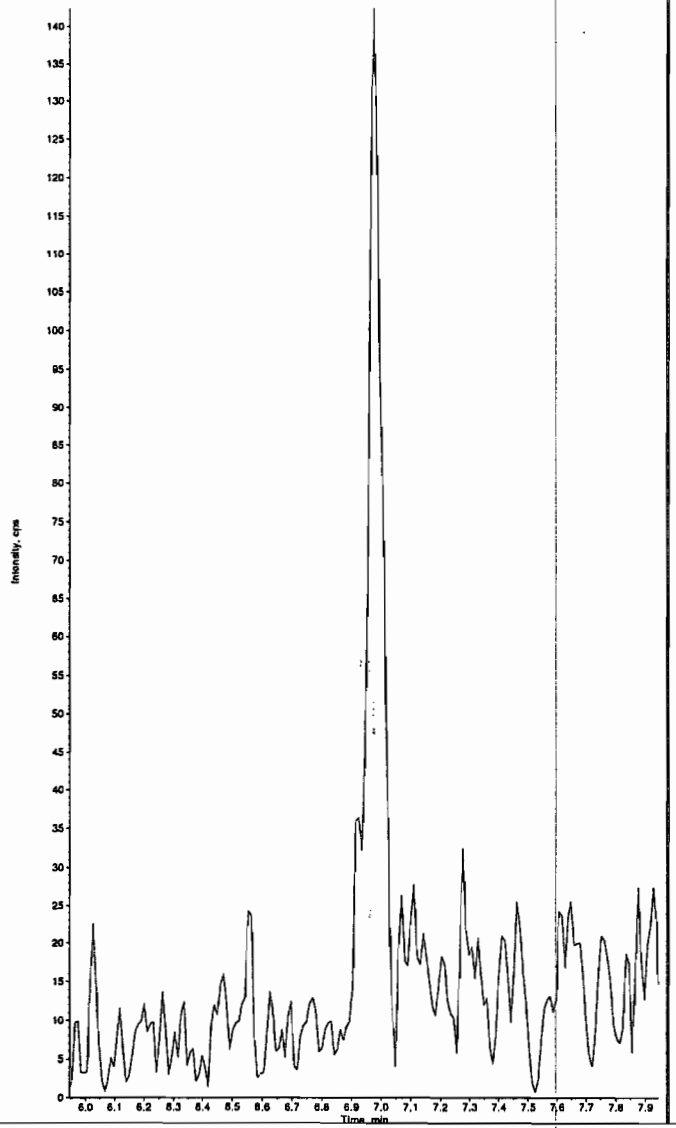
Sample Name: "XIBLK14" Sample ID: "|1|LER" File: "EXS03010125.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 5:35:36 PM

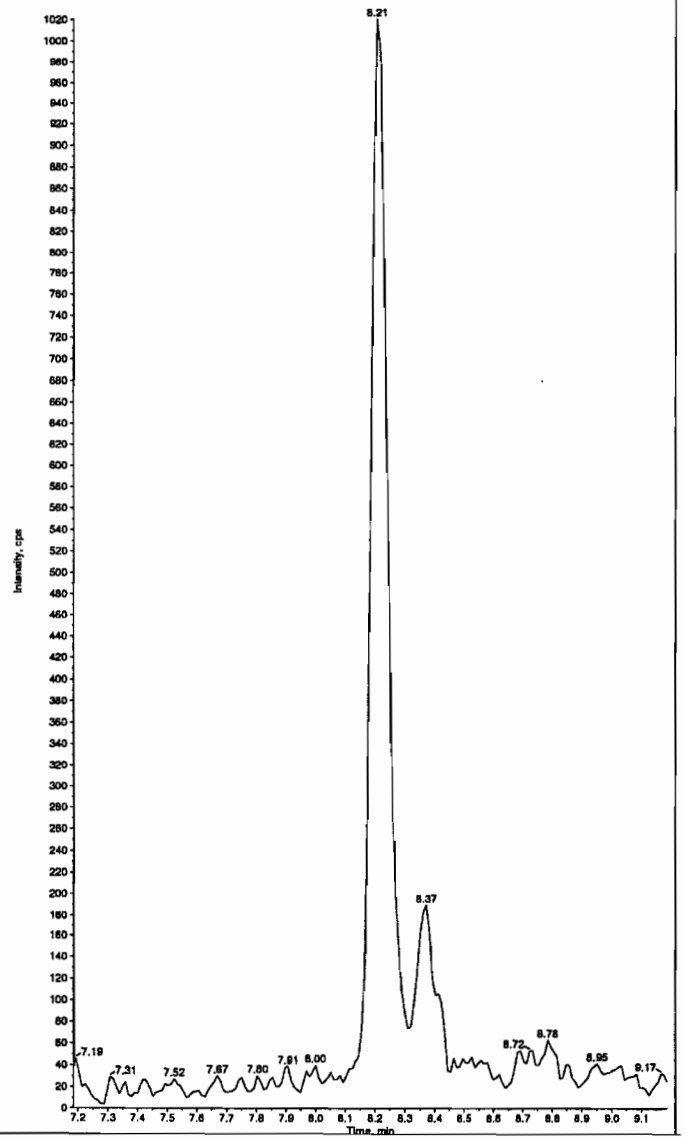
Modified: No



Sample Name: "XIBLK14" Sample ID: "|1|LER" File: "EXS03010125.wiff"
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: 3/2/2010
Acq. Time: 5:35:36 PM

Modified: No



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4A
Explosives Continuing Calibration Blank

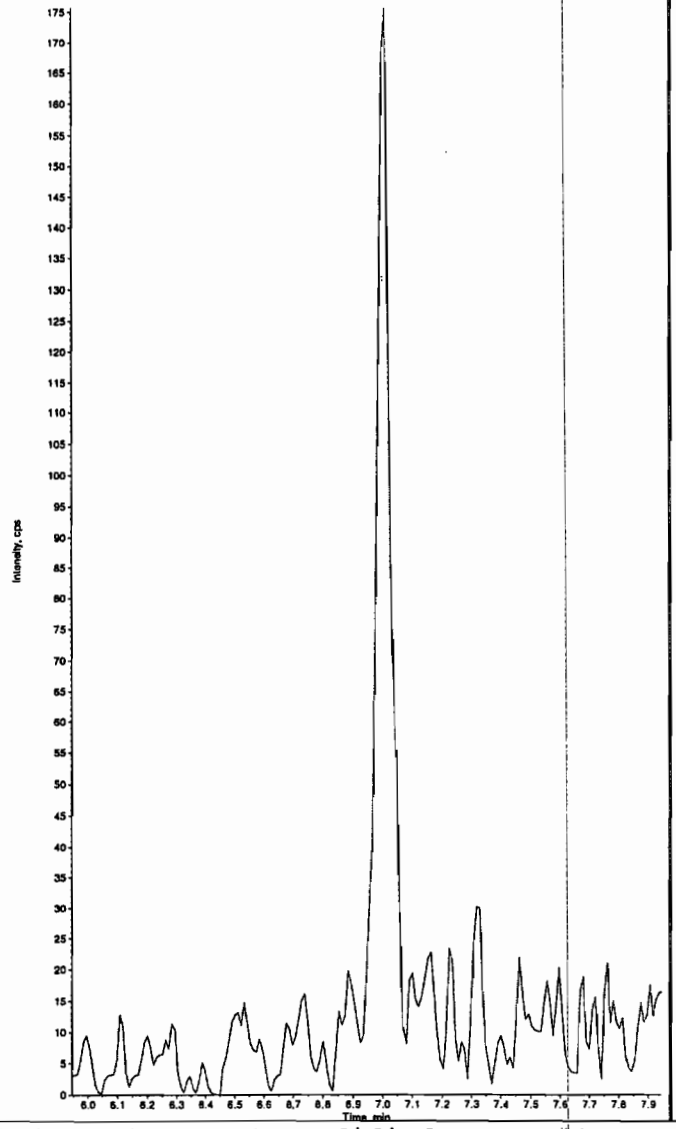
Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK15
Analysis Date: 02-MAR-10 21:00
GEL Data File: EXS03010138.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

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

LCM 3/3/10

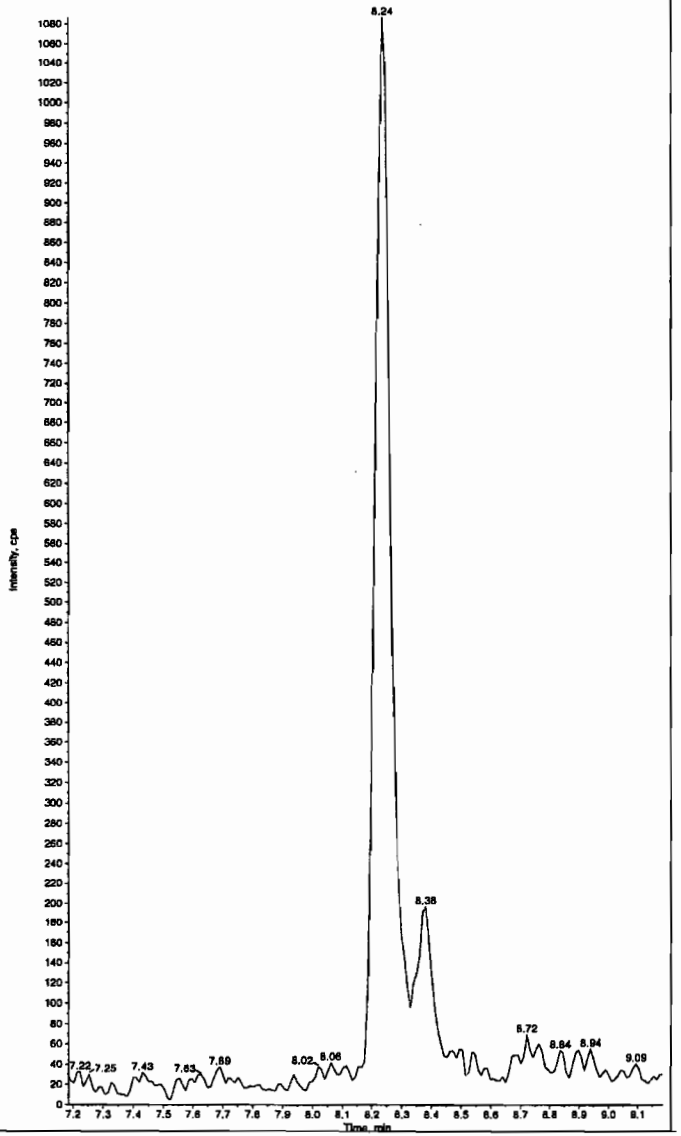
Sample Name: "XIBLK15" Sample ID: "1|LER" File: "EXS03010138.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 9:00:15 PM

Modified: No



Sample Name: "XIBLK15" Sample ID: "1|LER" File: "EXS03010138.wiff"
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: 3/2/2010
Acq. Time: 9:00:15 PM

Modified: No



Hmm 03/04/10

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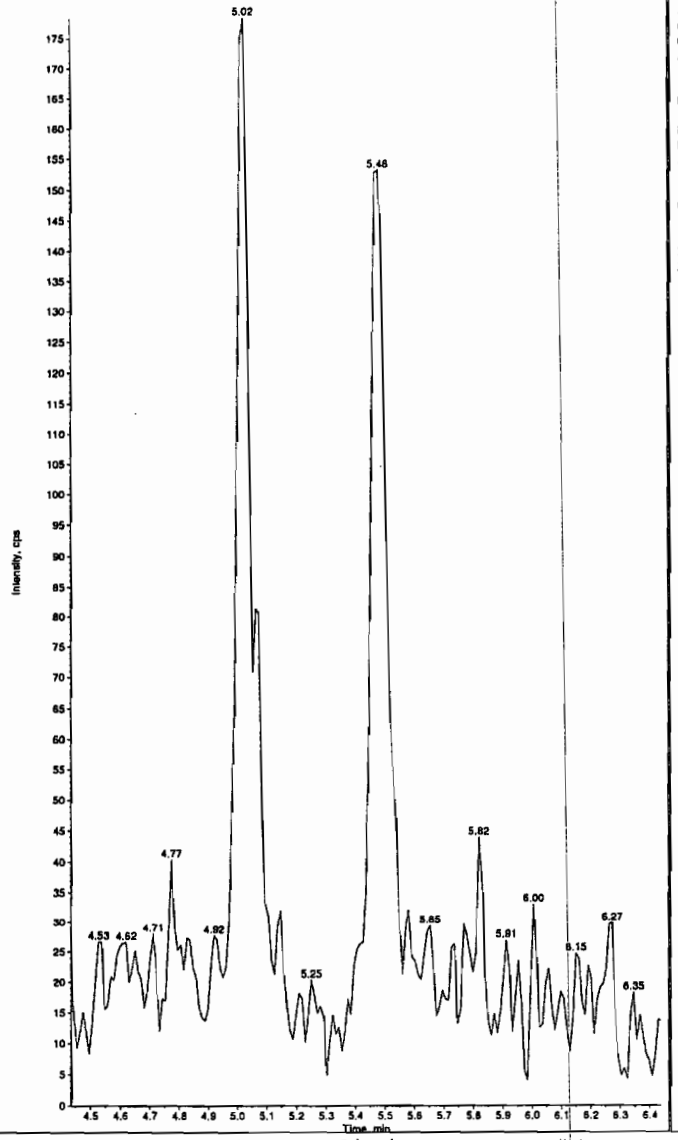
Sample Name: "XIBLK15" Sample ID: "|1|LER" File: "EXS03010138.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 9:00:15 PM

Modified: No

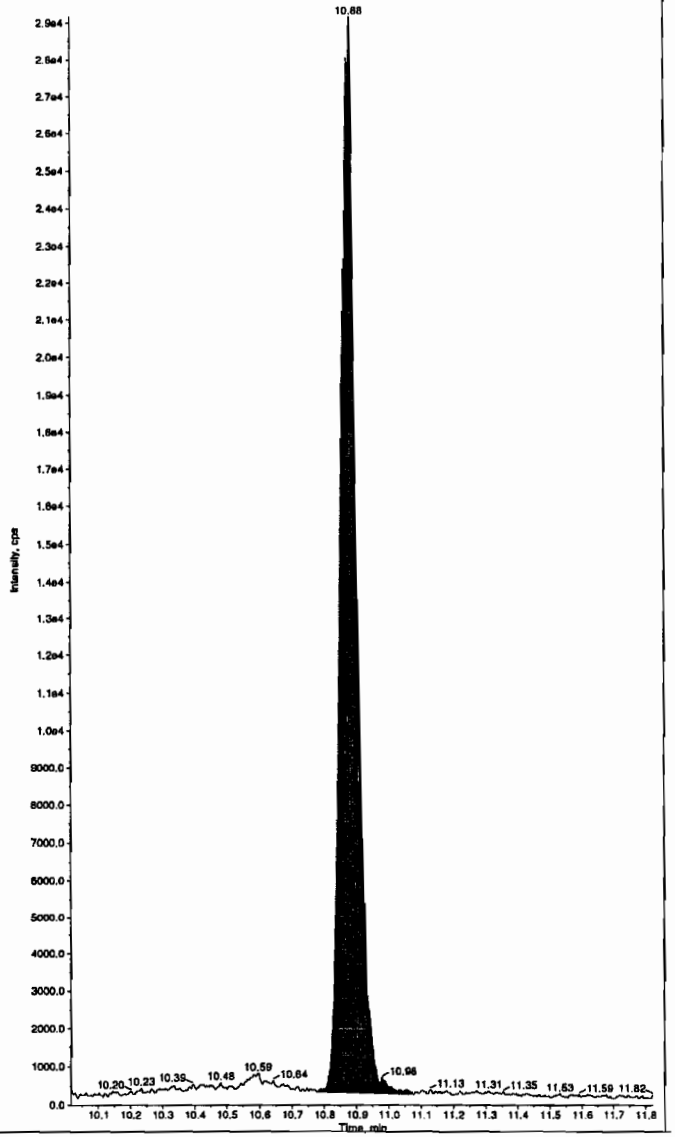


Sample Name: "XIBLK15" Sample ID: "|1|LER" File: "EXS03010138.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: < 0
Acq. Date: 3/2/2010
Acq. Time: 9:00:15 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: 1.02e+005 counts
Height: 28864.624 cps
Start Time: 10.8 min
End Time: 11.1 min



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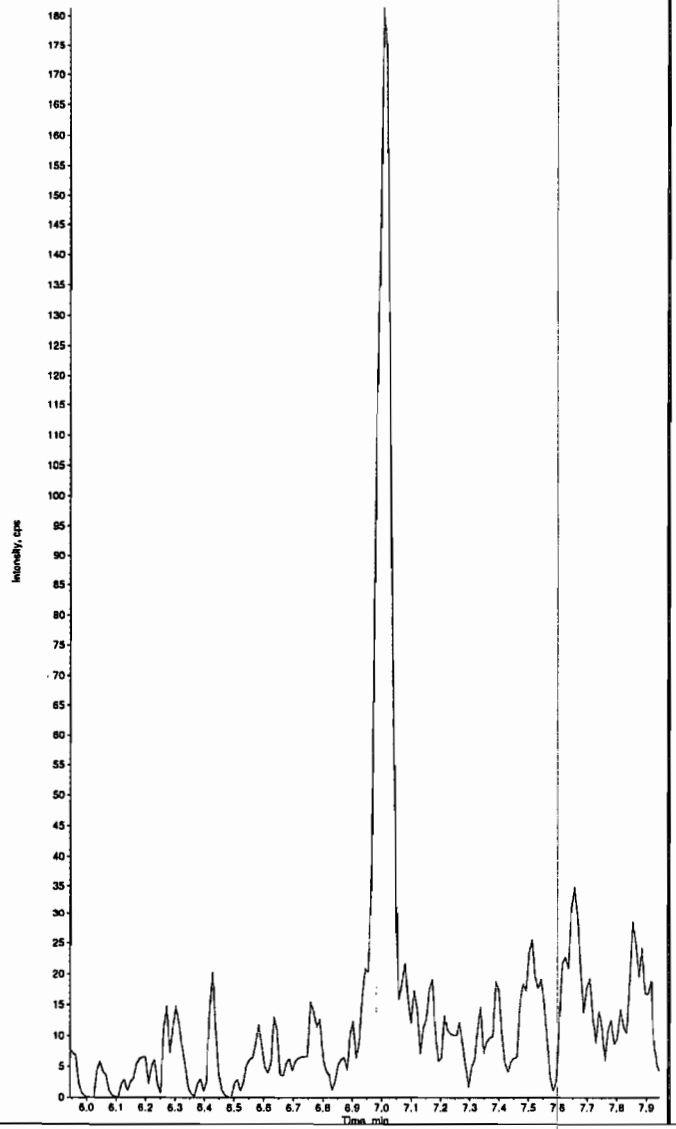
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK16
Analysis Date: 03-MAR-10 00:24
GEL Data File: EXS03010151.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

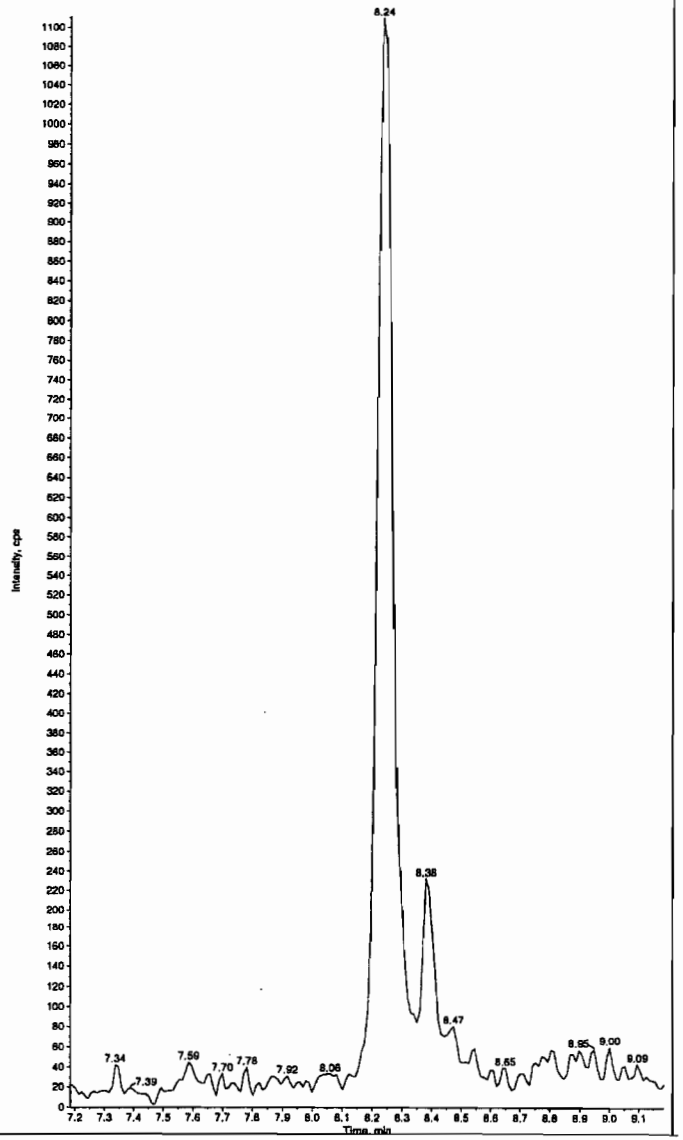
Compound	True	Found (ug/L)
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0

Lab 3/3/10

Sample Name: "XIBLK16" Sample ID: "|1|LER" File: "EXS03010151.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:24:53 AM
Modified: No



Sample Name: "XIBLK16" Sample ID: "|1|LER" File: "EXS03010151.wiff"
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: 3/3/2010
Acq. Time: 12:24:53 AM
Modified: No



Hmm 03/04/10

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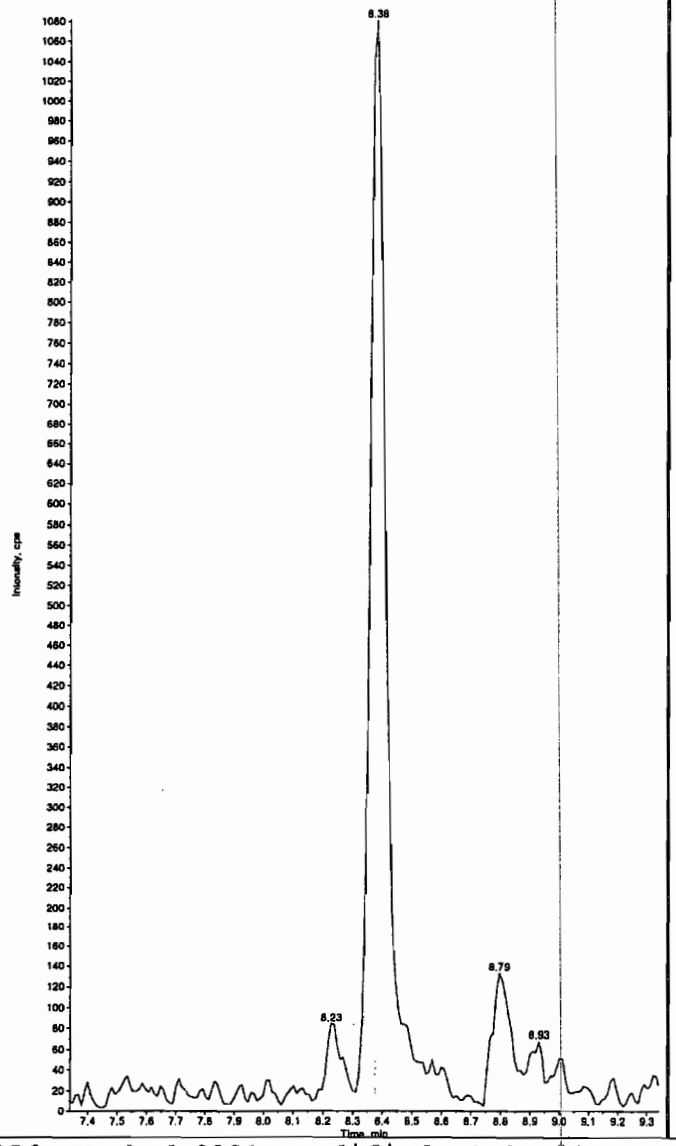
Sample Name: "XIBLK16" Sample ID: "[1]LER" File: "EXS03010151.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:24:53 AM

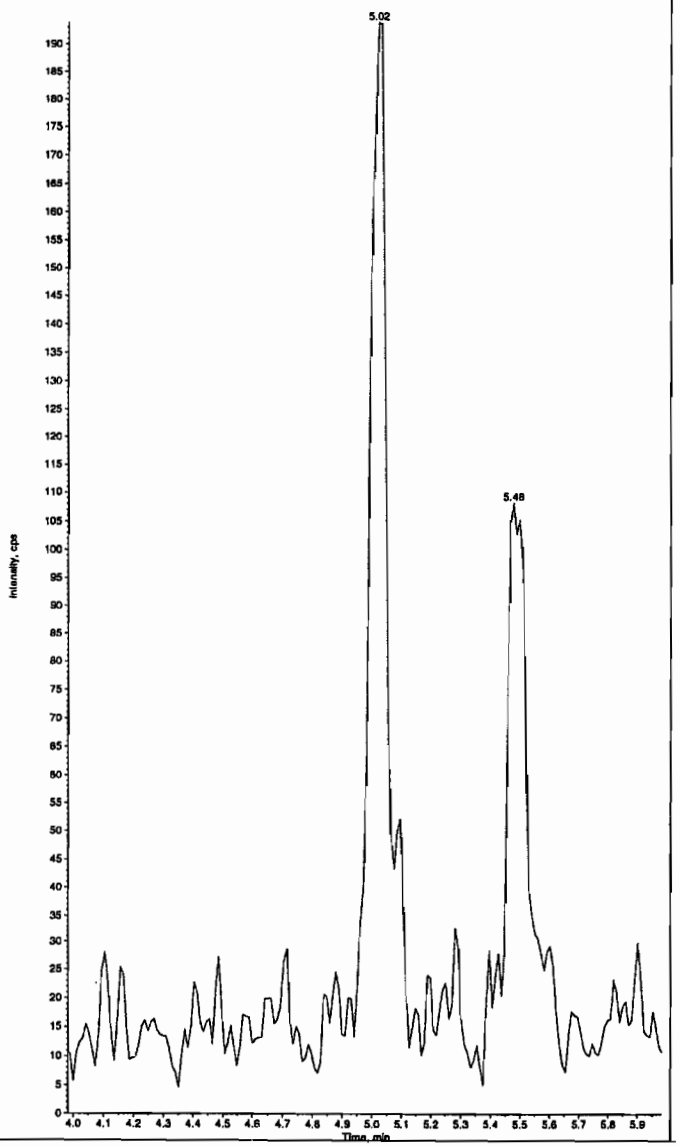
Modified: No



Sample Name: "XIBLK16" Sample ID: "[1]LER" File: "EXS03010151.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:24:53 AM

Modified: No



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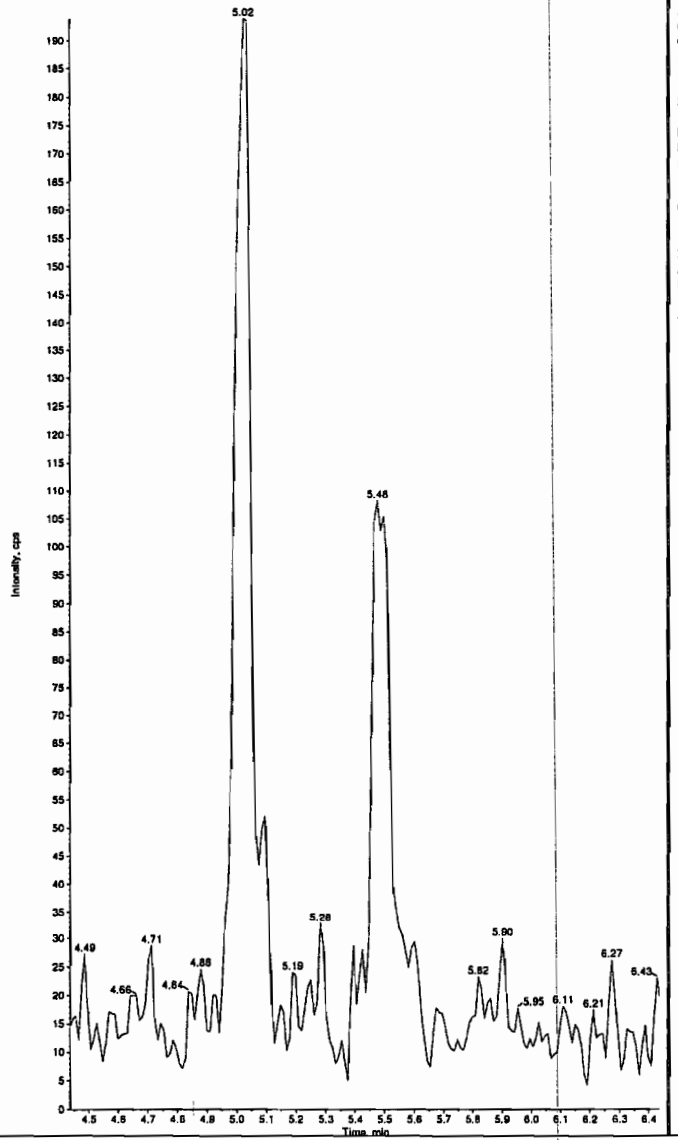
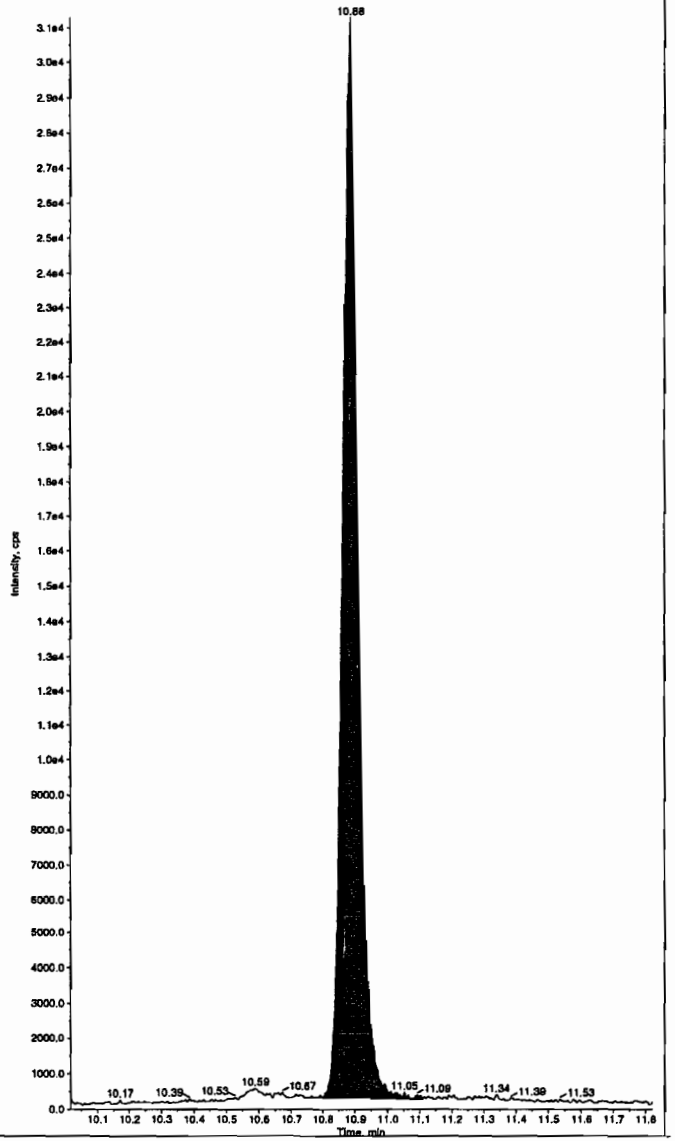
Sample Name: "XIBLK16" Sample ID: "|1|LER" File: "EXS03010151.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:24:53 AM
Modified:	No



Sample Name: "XIBLK16" Sample ID: "|1|LER" File: "EXS03010151.wiff"
Peak Name: "Tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	< 0
Acq. Date:	3/3/2010
Acq. Time:	12:24:53 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:	10.9 min
Area:	1.07e+005 counts
Height:	30999.023 cps
Start Time:	10.8 min
End Time:	11.1 min



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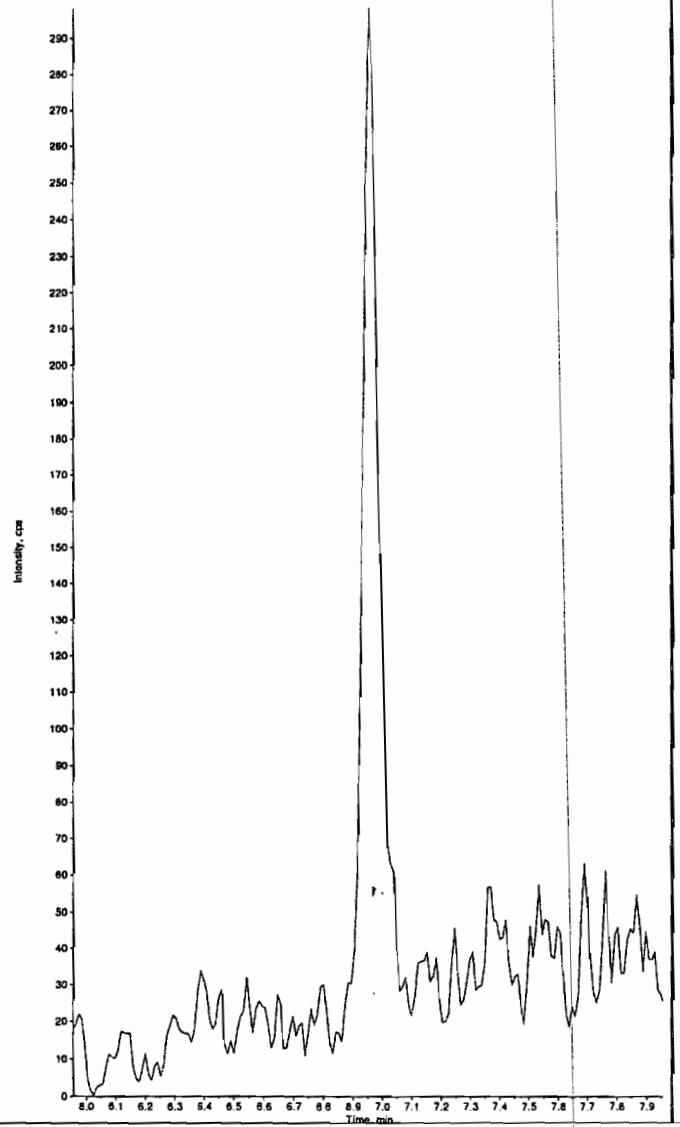
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–1623
Lab Code: GEL
Lab Sample ID: XIBLK02
Analysis Date: 03–MAR–10 12:03
GEL Data File: EXS03030010.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

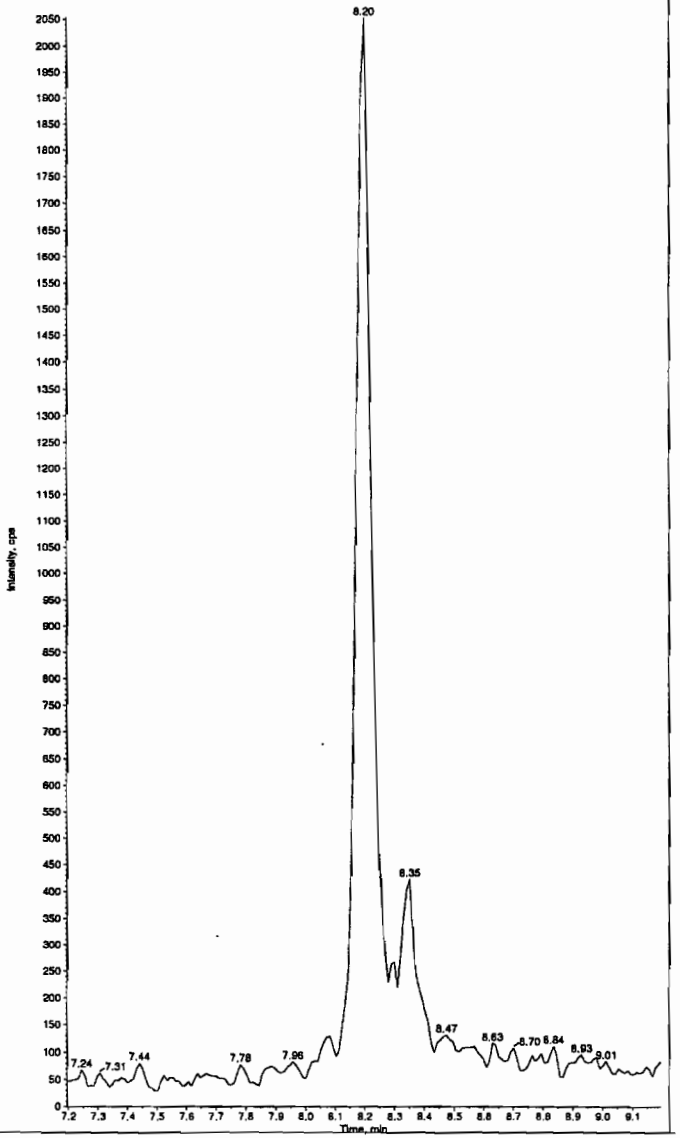
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	.413
tris(o–cresyl) phosphate	0	7.86
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Jan 3/8/10

Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03030010.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:03:37 PM
Modified: No



Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03030010.wiff"
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: 3/3/2010
Acq. Time: 12:03:37 PM
Modified: No



Hmm 3/08/10

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

Page 666 of 949

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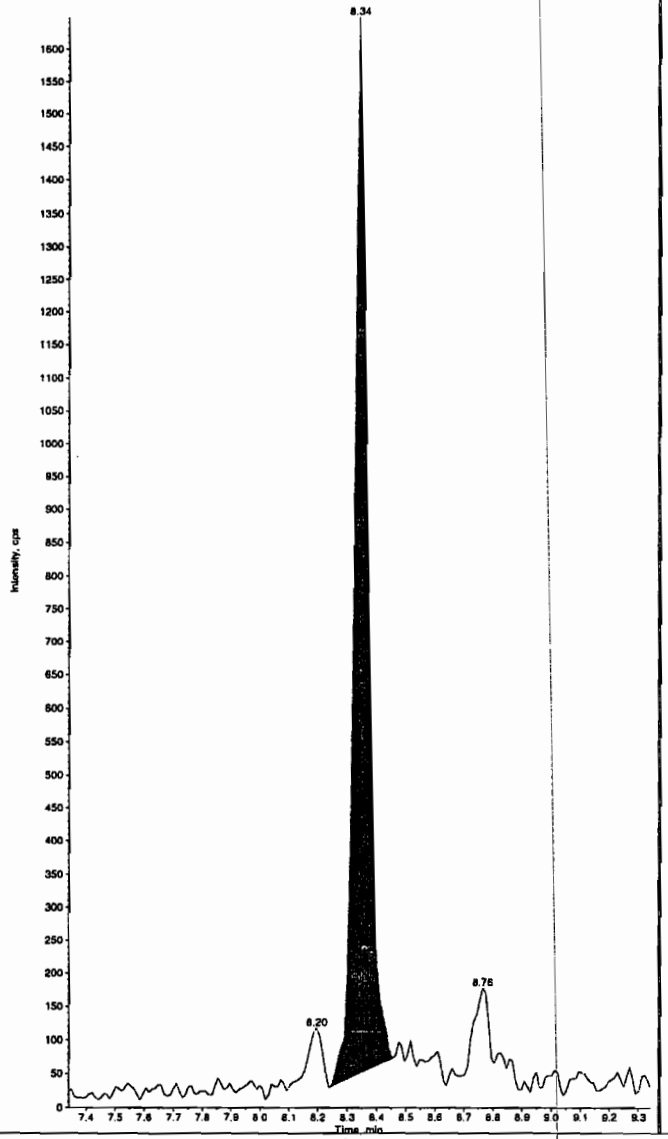
Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS03030010.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.413 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:03:37 PM

Modified: No
Acqc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

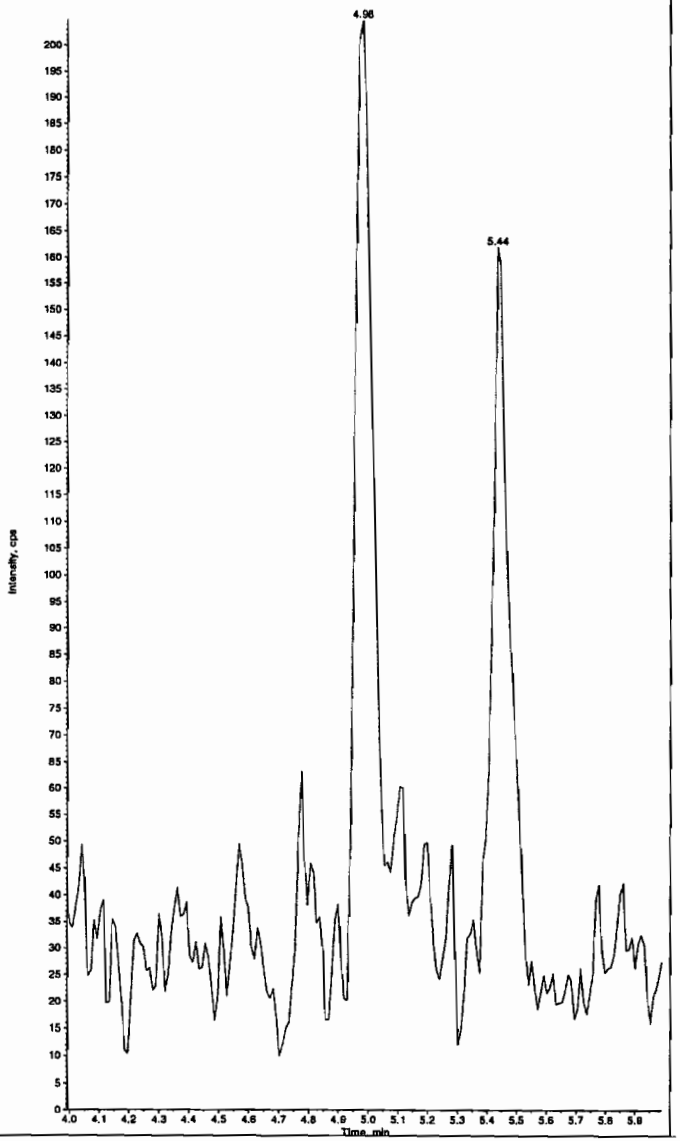
Int. Type: Valley
Retention Time: 8.34 min
Area: 5.41e+003 counts
Height: 1597.524 cps
Start Time: 8.24 min
End Time: 8.45 min



Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS03030010.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:03:37 PM

Modified: No



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

Page 210 of 210

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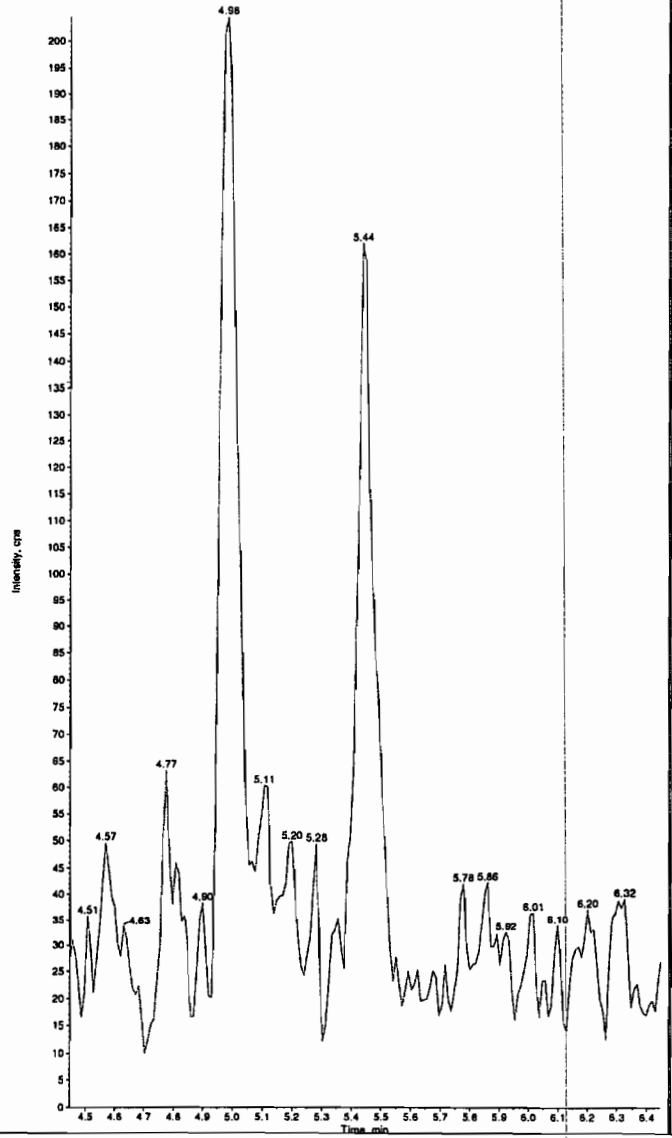
Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS03030010.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:03:37 PM

Modified: No

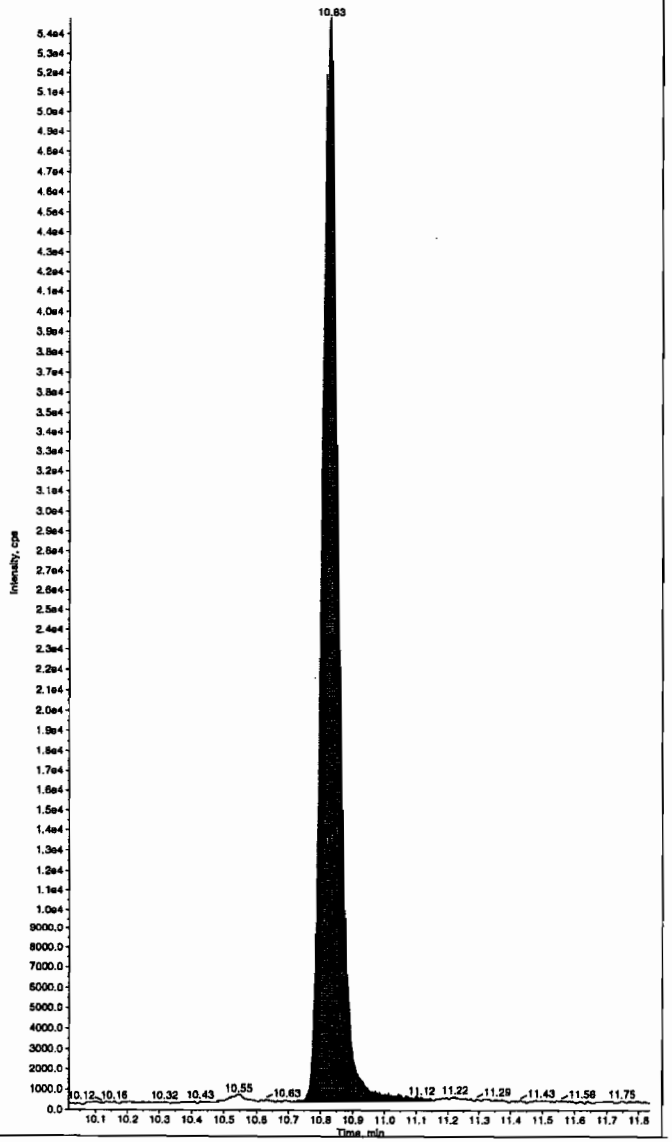


Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS03030010.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 7.86 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:03:37 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: 2.02e+005 counts
Height: 54392.704 cps
Start Time: 10.7 min
End Time: 11.2 min



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

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1623

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 03-MAR-10 12:35

GEL Data File: EXS03030012.wiff

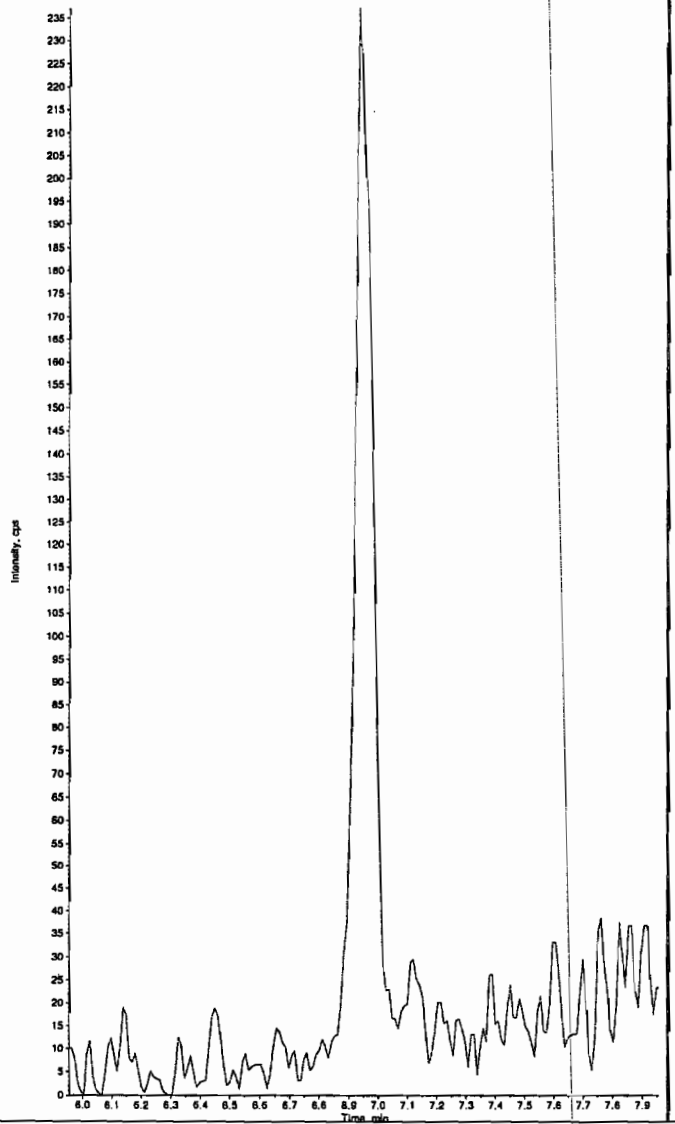
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

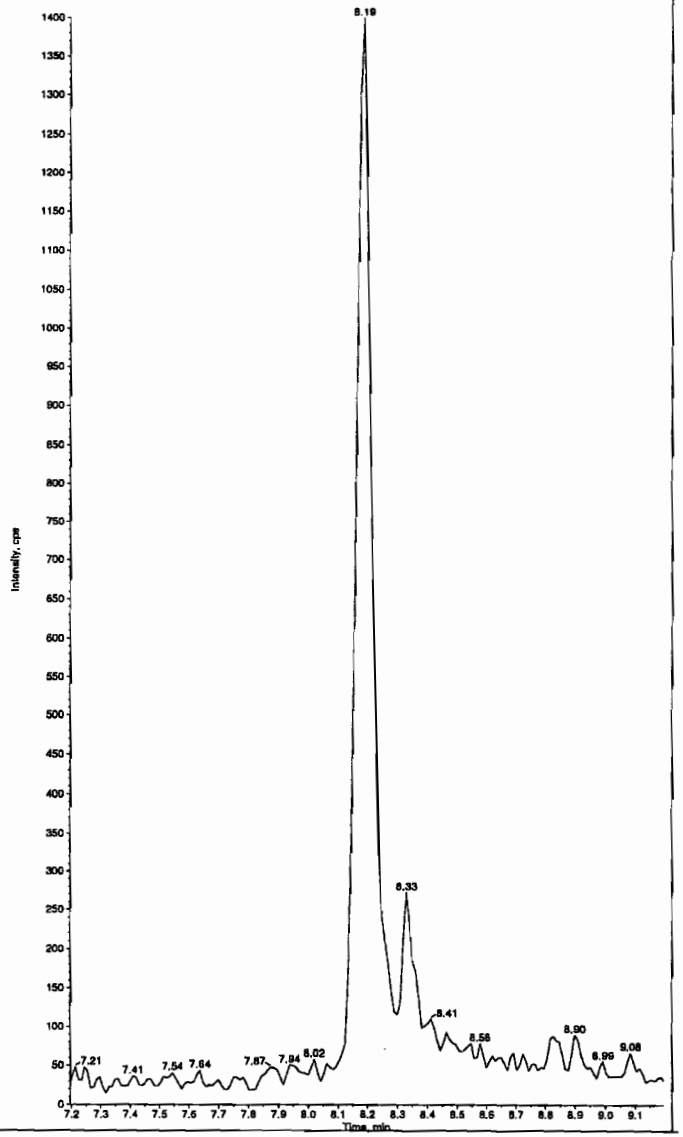
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.43
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Seen 3/8/10

Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03030012.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:35:00 PM
Modified: No



Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03030012.wiff"
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: 3/3/2010
Acq. Time: 12:35:00 PM
Modified: No



Page 670 of 949

Hmm 03/08/10

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

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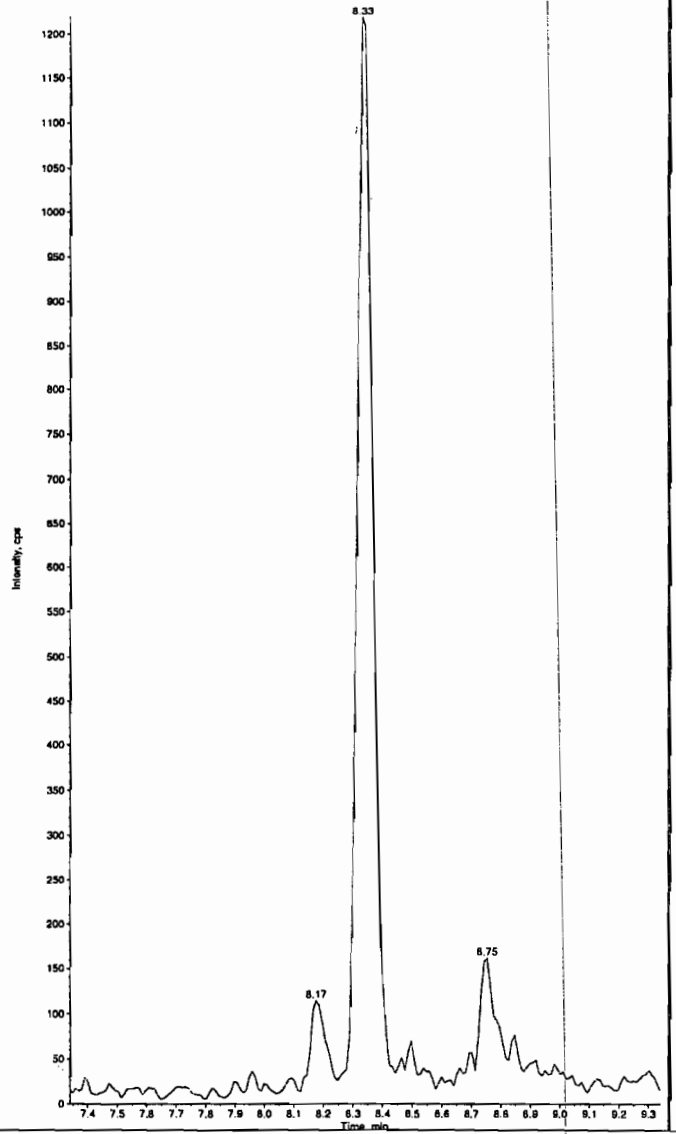
Sample Name: "XIBLK03" Sample ID: "[1]LER" File: "EXS03030012.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:35:00 PM

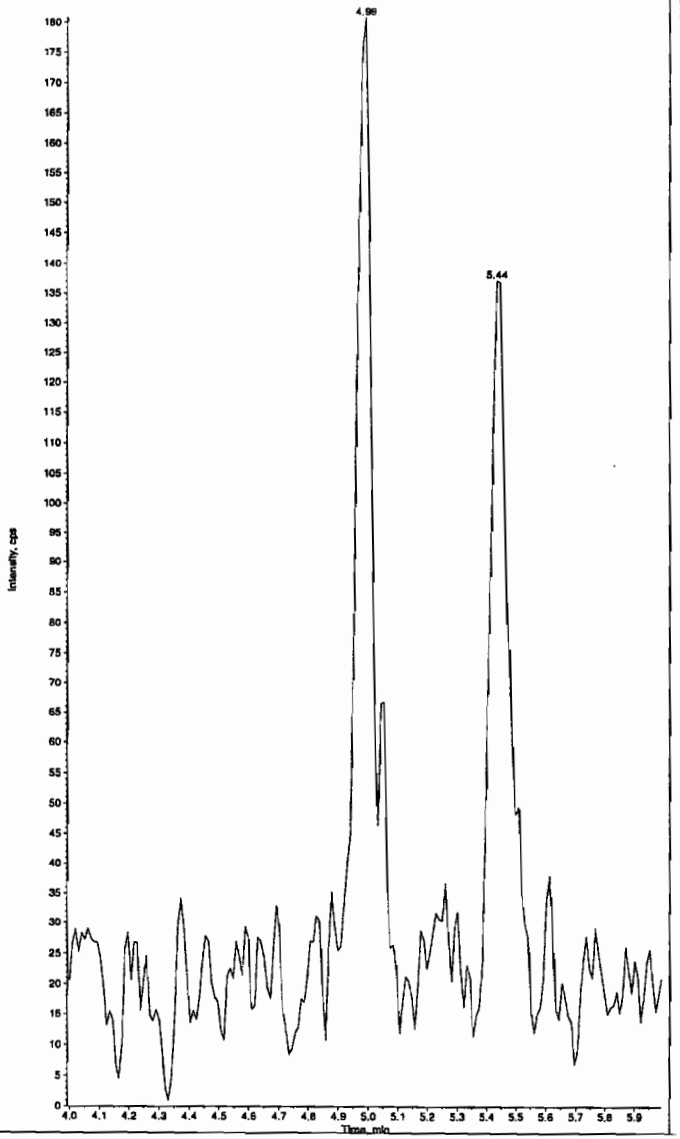
Modified: No



Sample Name: "XIBLK03" Sample ID: "[1]LER" File: "EXS03030012.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:35:00 PM

Modified: No



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

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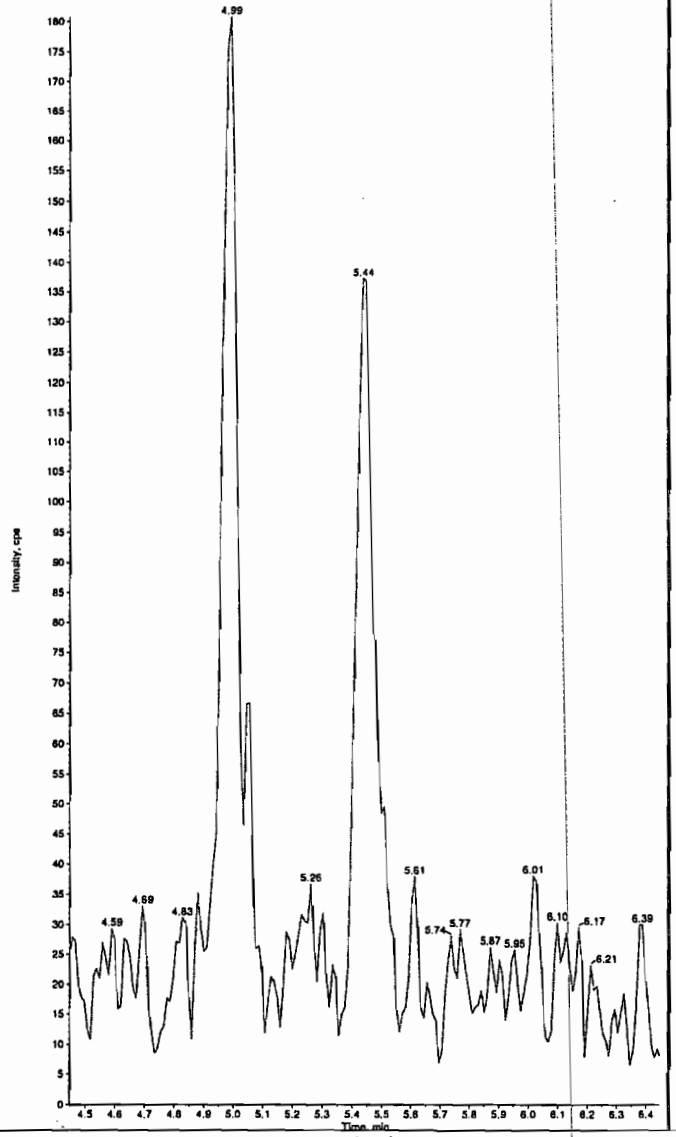
Sample Name: "XIBLK03" Sample ID: "[1]LER" File: "EXS03030012.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:35:00 PM

Modified: No

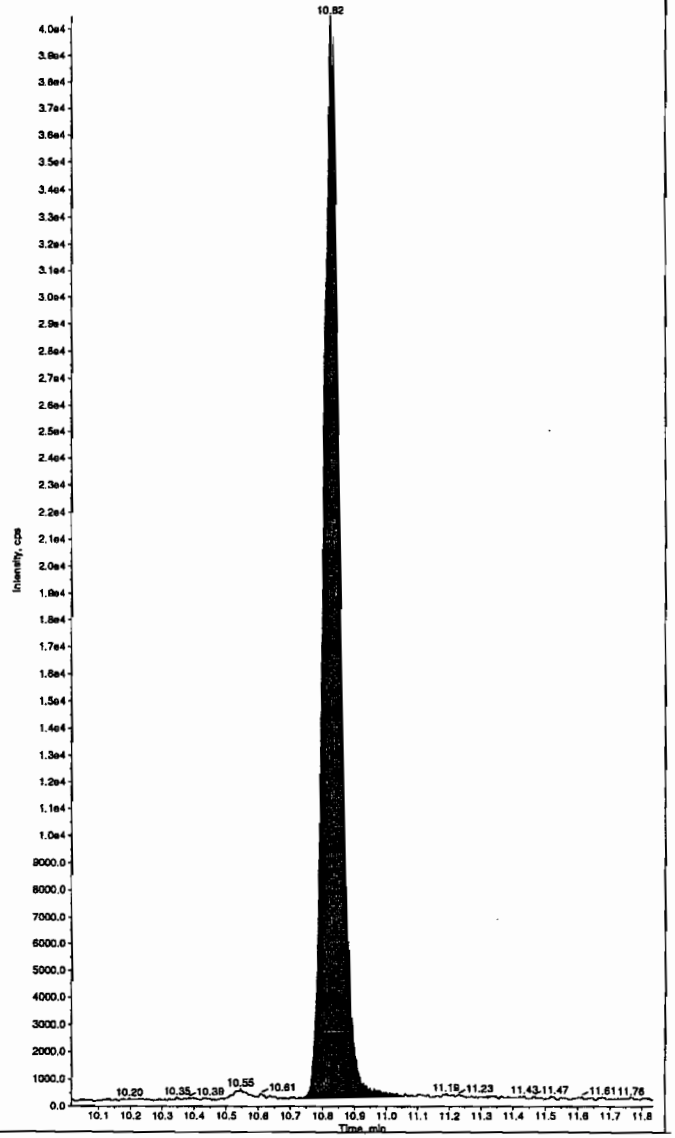


Sample Name: "XIBLK03" Sample ID: "[1]LER" File: "EXS03030012.wiff"
Peak Name: "Tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 4.43 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:35:00 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: 1.48e+005 counts
Height: 40160.530 cps
Start Time: 10.7 min
End Time: 11.1 min



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

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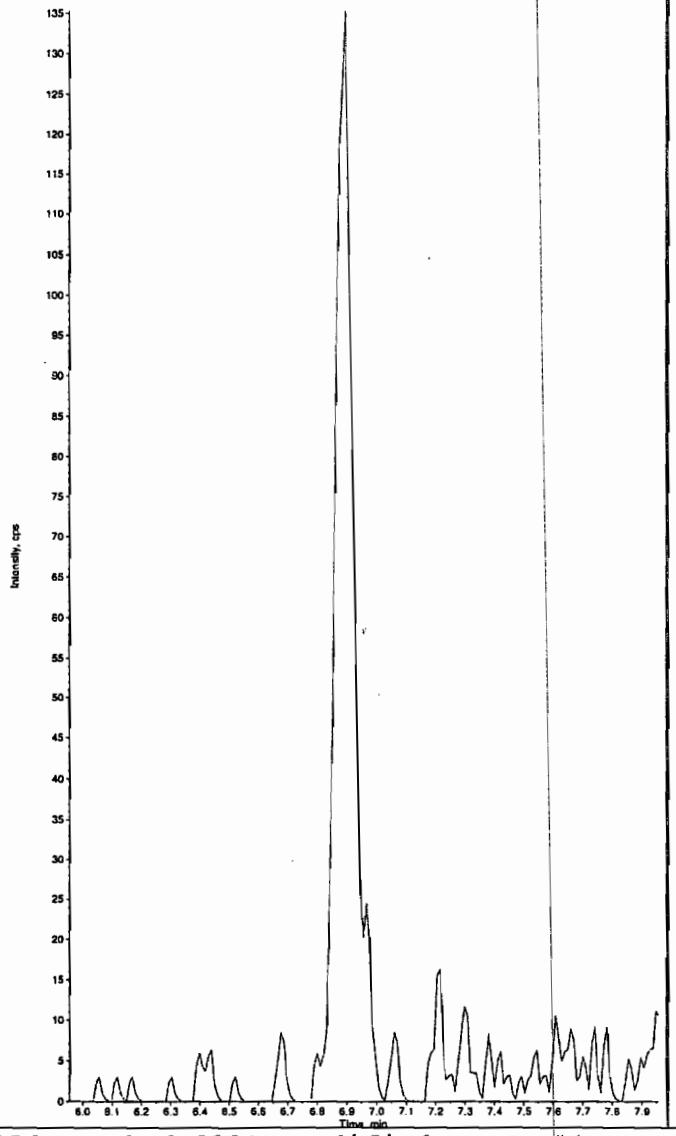
4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–1623
Lab Code: GEL
Lab Sample ID: XIBLK04
Analysis Date: 03–MAR–10 13:53
GEL Data File: EXS03030017.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

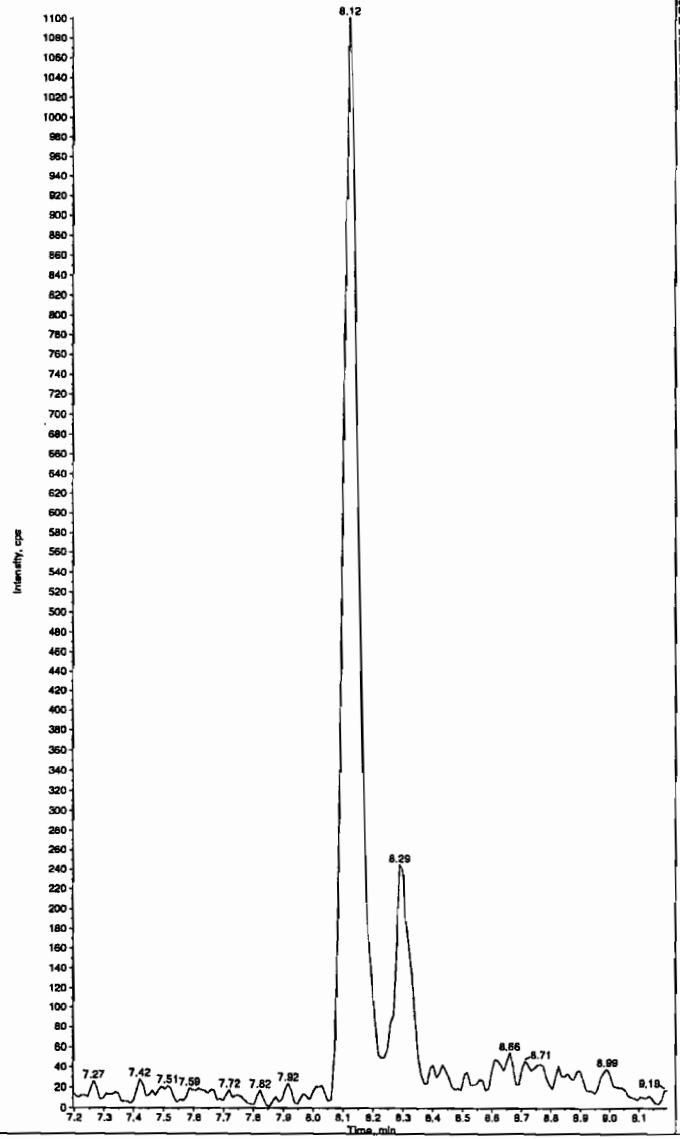
Compound	True	Found (ug/L)
2,6–Diamino–4–nitrotoluene	0	0
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	2.33
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0

Lan 3/8/10

Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03030017.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:53:43 PM
Modified: No



Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03030017.wiff"
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: 3/3/2010
Acq. Time: 1:53:43 PM
Modified: No



Page 674 of 949

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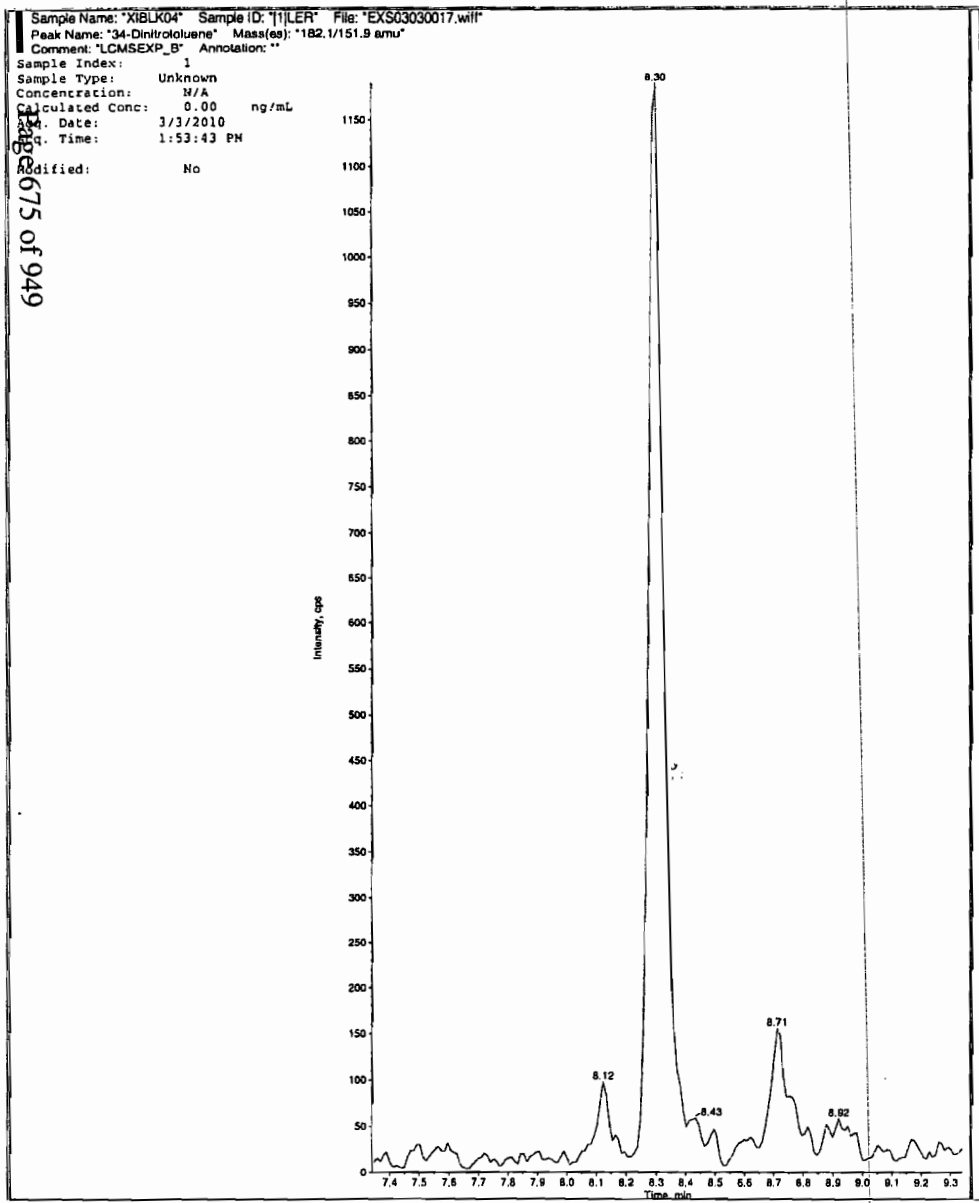
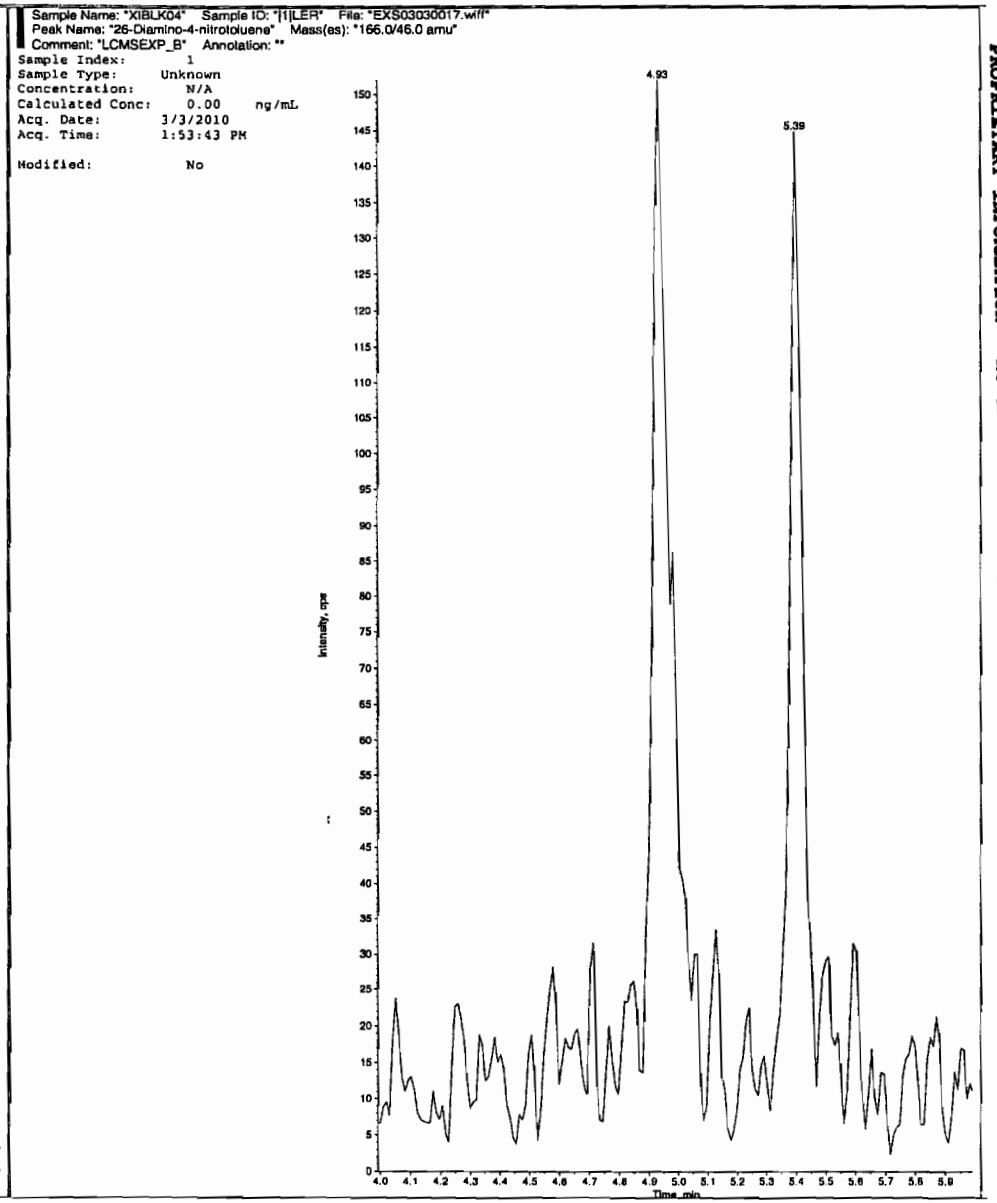
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





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

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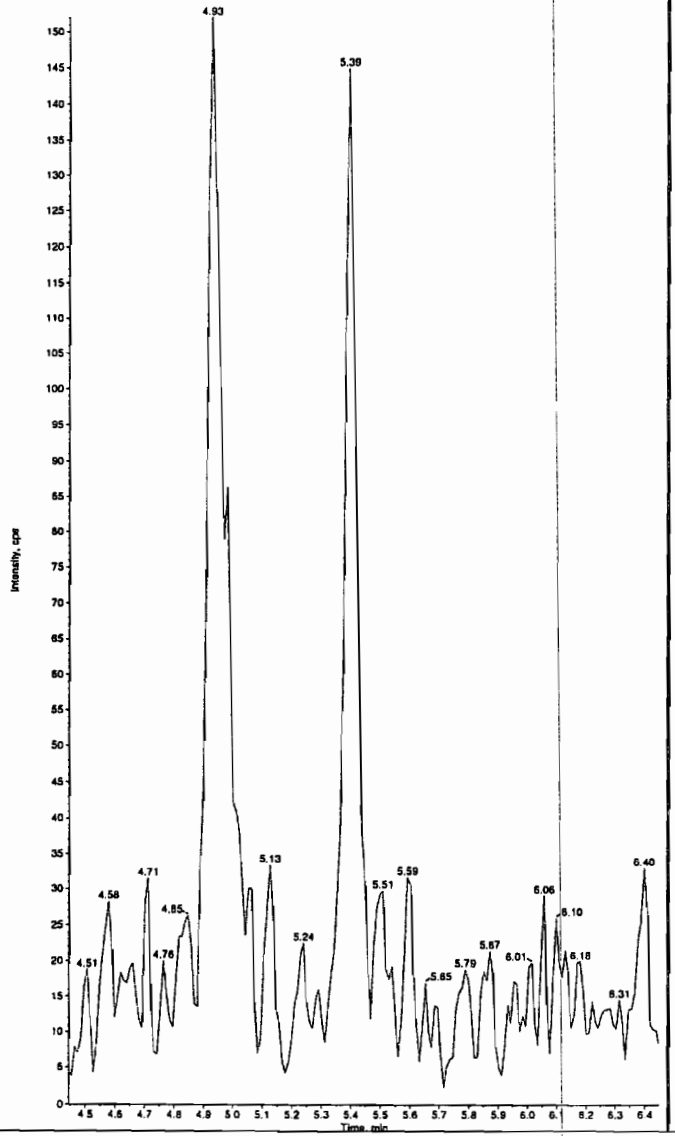
Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03030017.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:53:43 PM

Modified: No

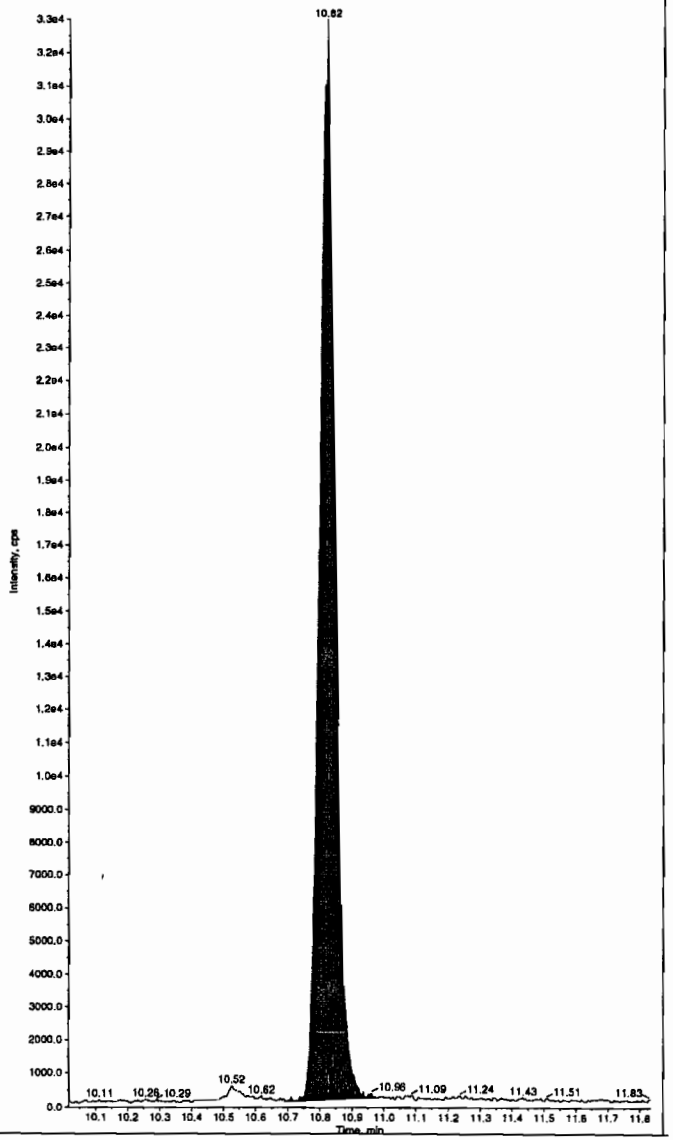


Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03030017.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 2.33 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:53:43 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: 1.14e+005 counts
Height: 32801.373 cps
Start Time: 10.7 min
End Time: 11.0 min



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

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1623
Lab Code: GEL
Lab Sample ID: XIBLK05
Analysis Date: 03-MAR-10 16:00
GEL Data File: EXS03030025.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

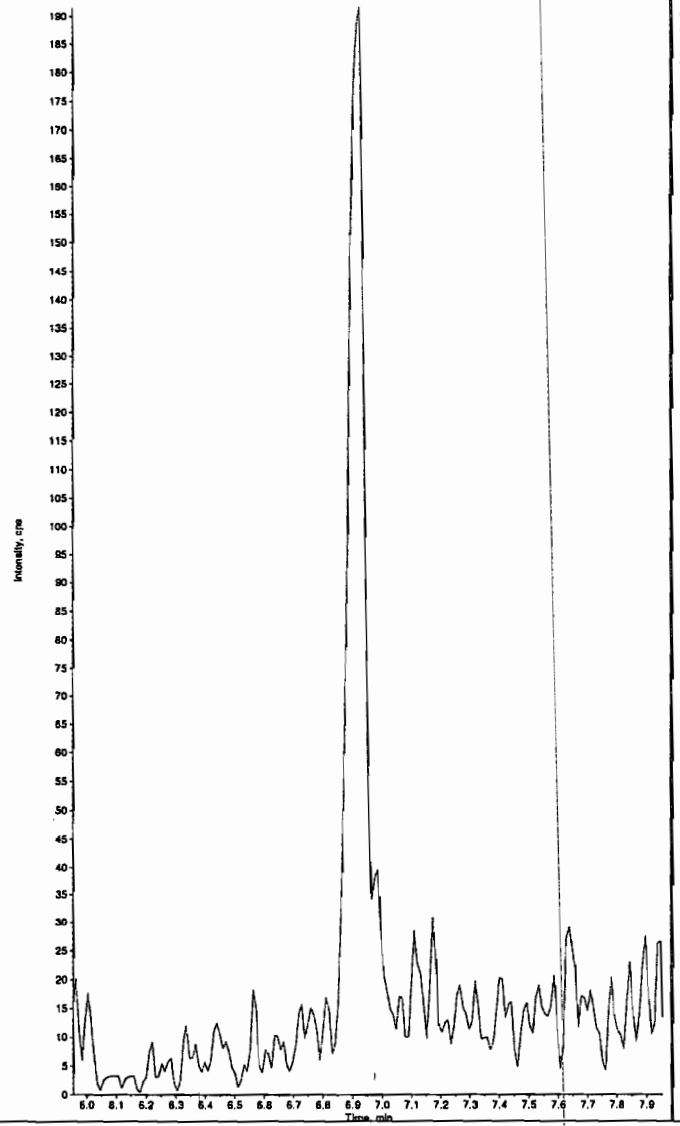
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.02
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Run 318110

Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03030025.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 4:00:00 PM

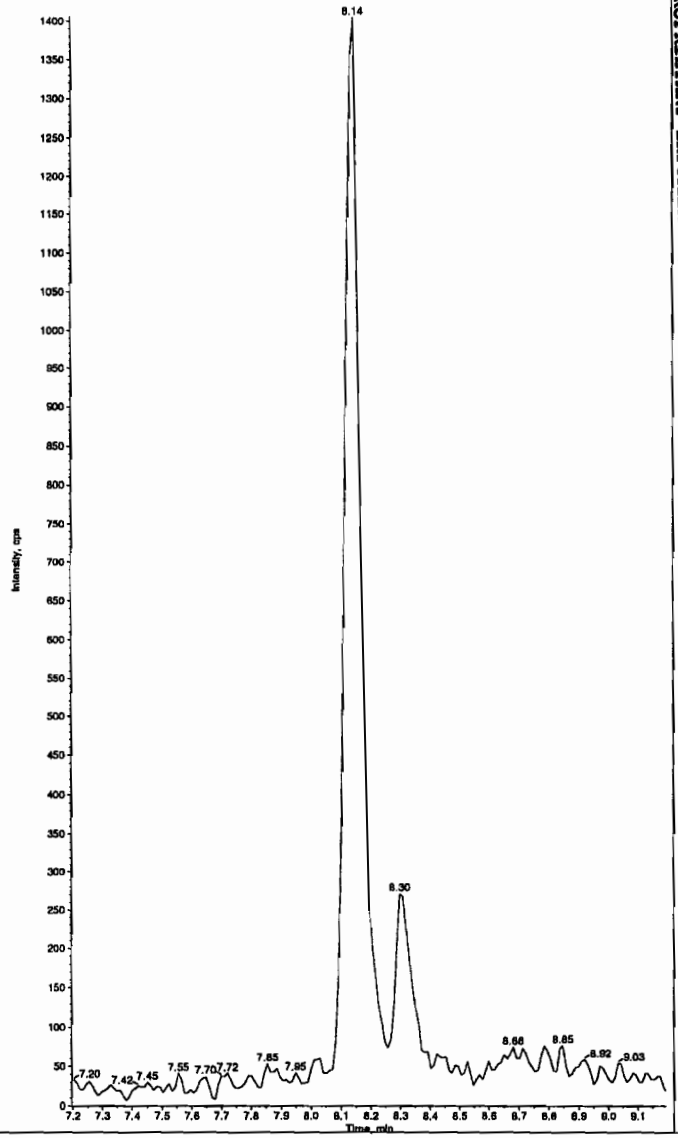
Modified: No



Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03030025.wiff"
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: 3/3/2010
Acq. Time: 4:00:00 PM

Modified: No



Hmc 03/08/10

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

Page 678 of 949

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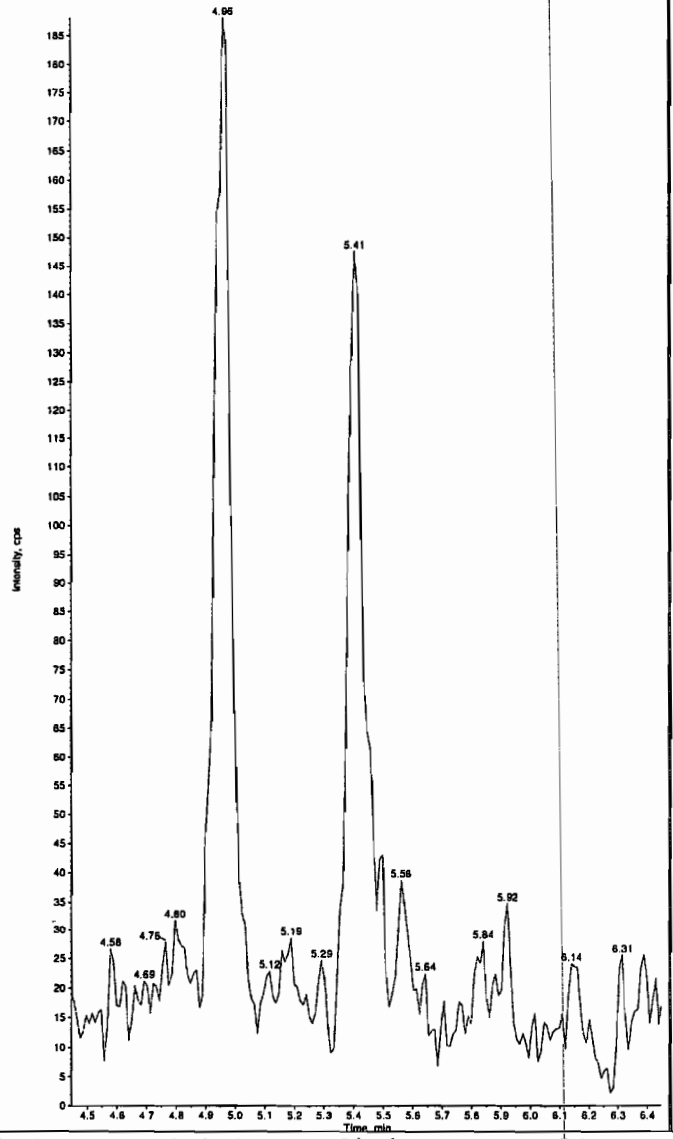
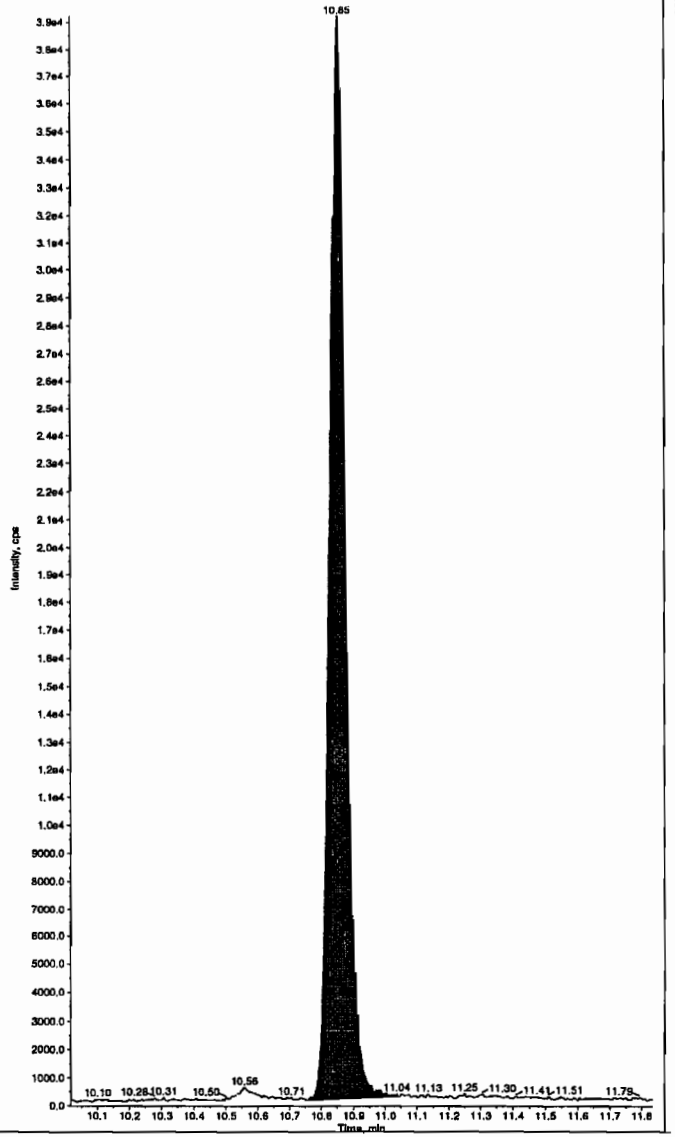
Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03030025.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	3/3/2010
Acq. Time:	4:00:00 PM
Modified:	No



Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03030025.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	4.02 ng/mL
Acq. Date:	3/3/2010
Acq. Time:	4:00:00 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:	1.41e+005 counts
Height:	38990.395 cps
Start Time:	10.8 min
End Time:	11.0 min



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

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;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

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

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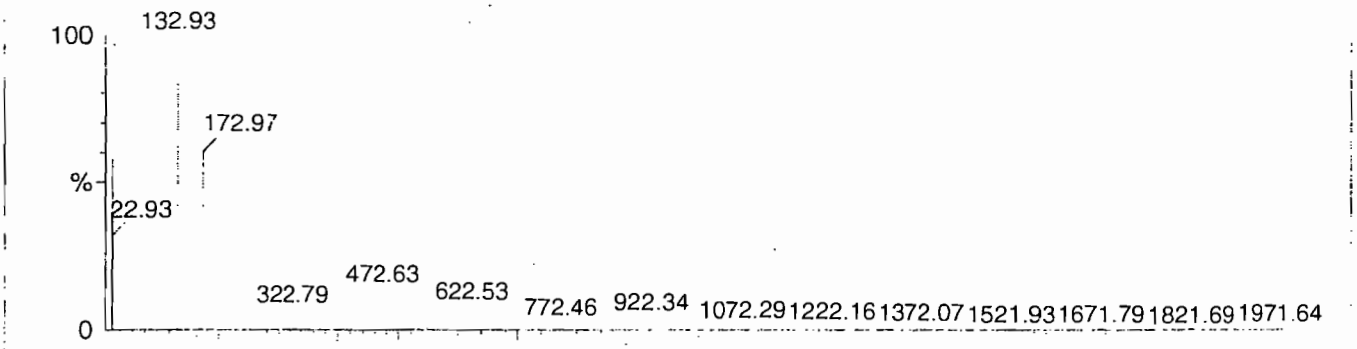
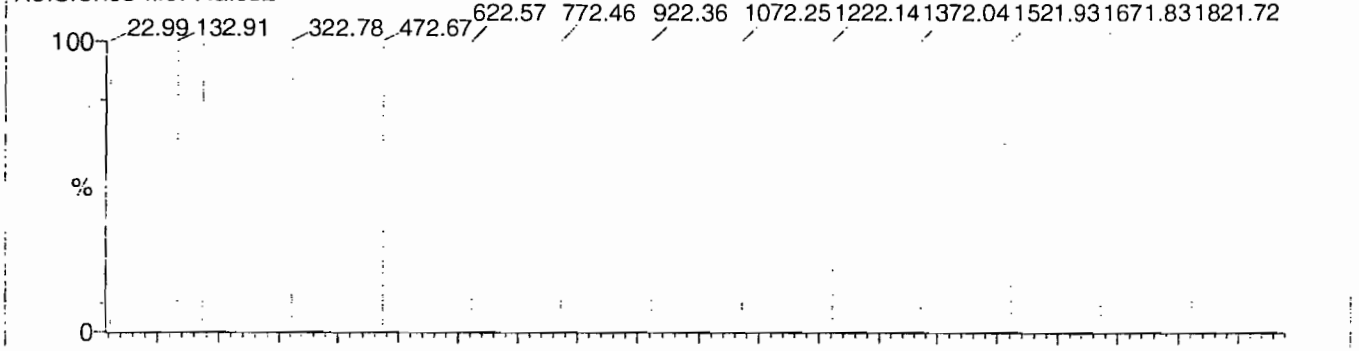
Printed: Fri Aug 25 10:50:01 2006

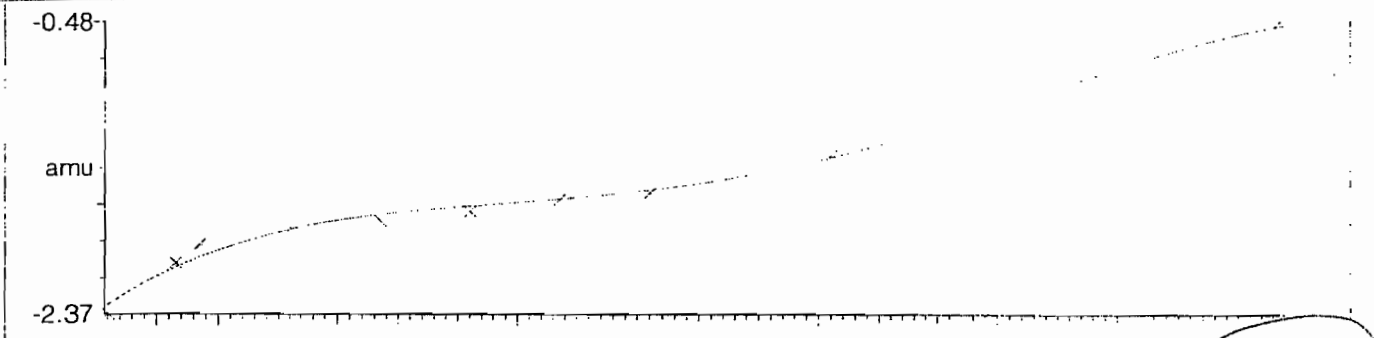
Data file: STATMS1 - Calibrated 15 matches of 15 tested references



Reference file: Naics2

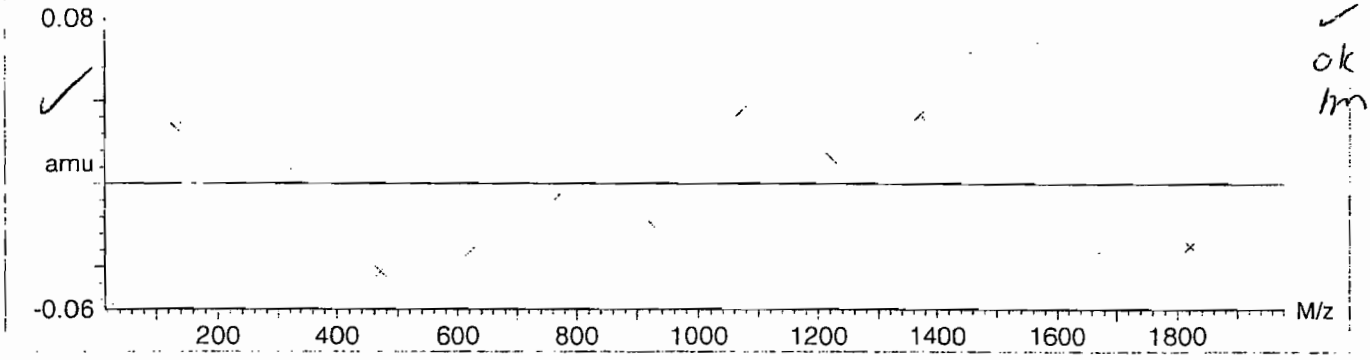


Mass difference (Raw - Ref mass)



Residuals Mean residual = -1.673470e-9 ± 0.036953

ok
lm



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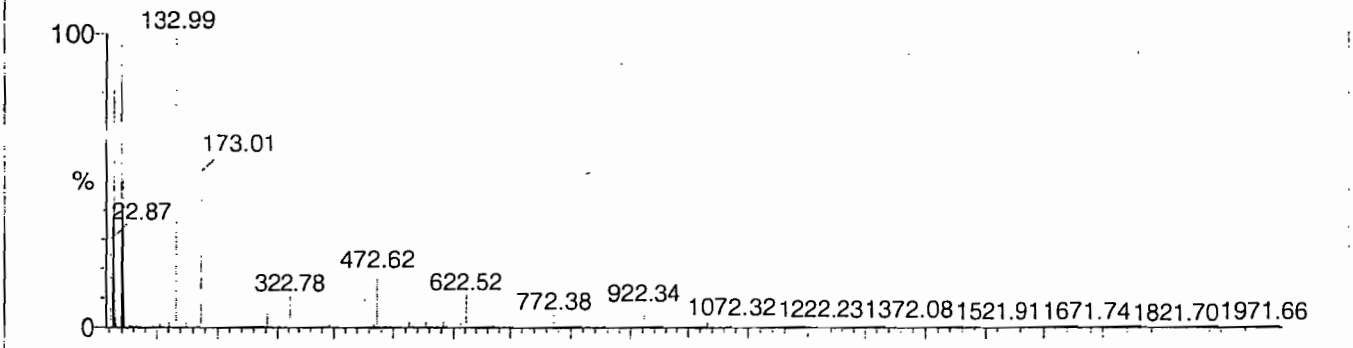
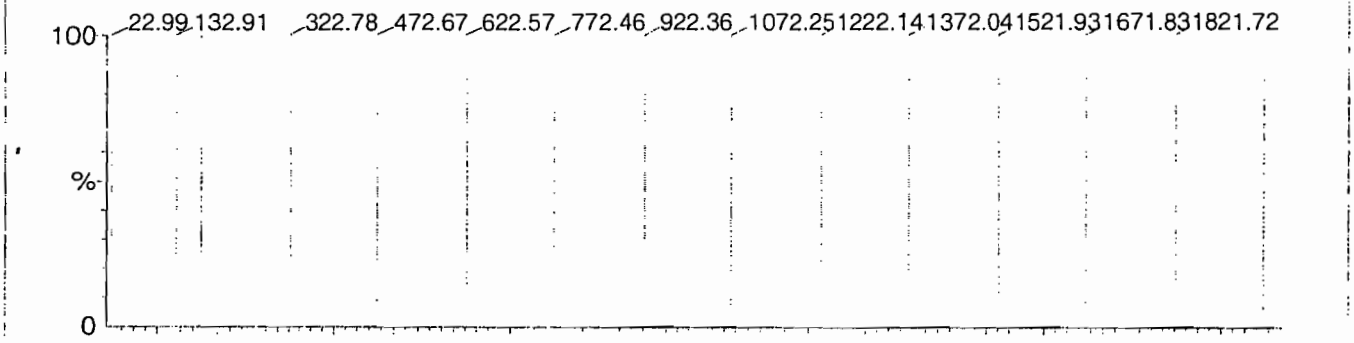
Calibration Report - MS1 Scanning

Printed: Fri Aug 25 10:51:06 2006

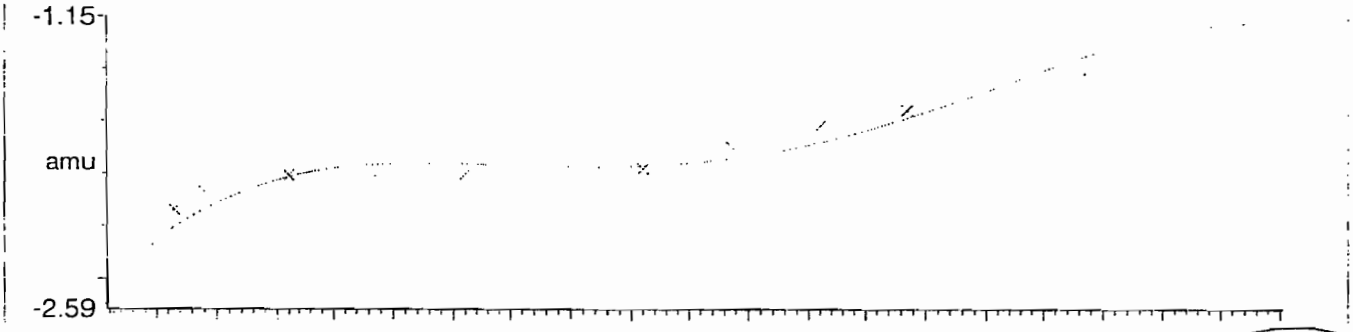
Data file: SCNMS1 - Calibrated 15 matches of 15 tested references



Reference file: Naics2

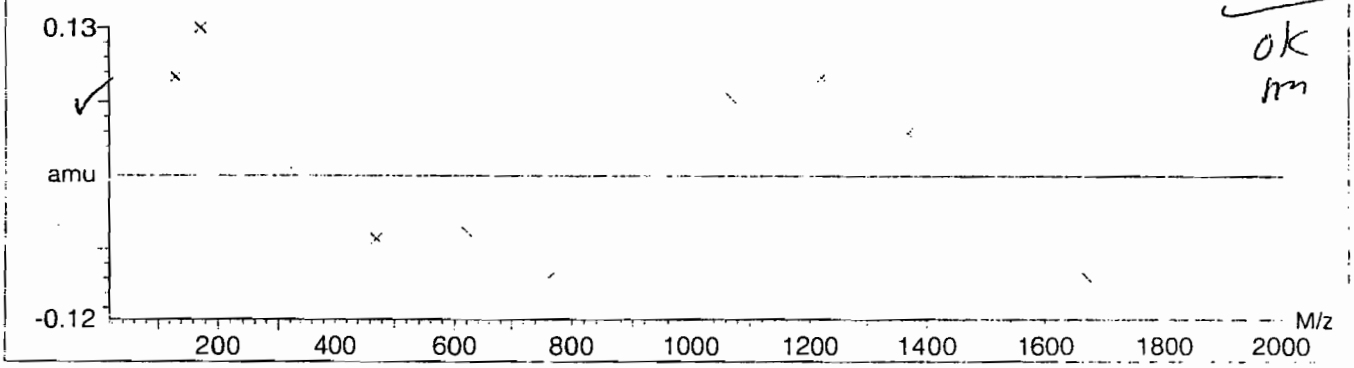


Mass difference (Raw - Ref mass)



Residuals Mean residual = -5.432715e-9 ± 0.069858

ok
m



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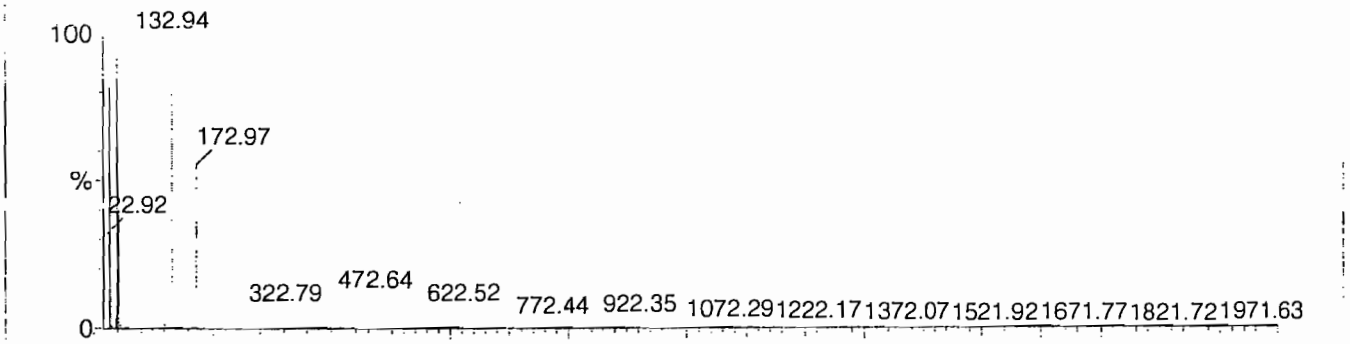
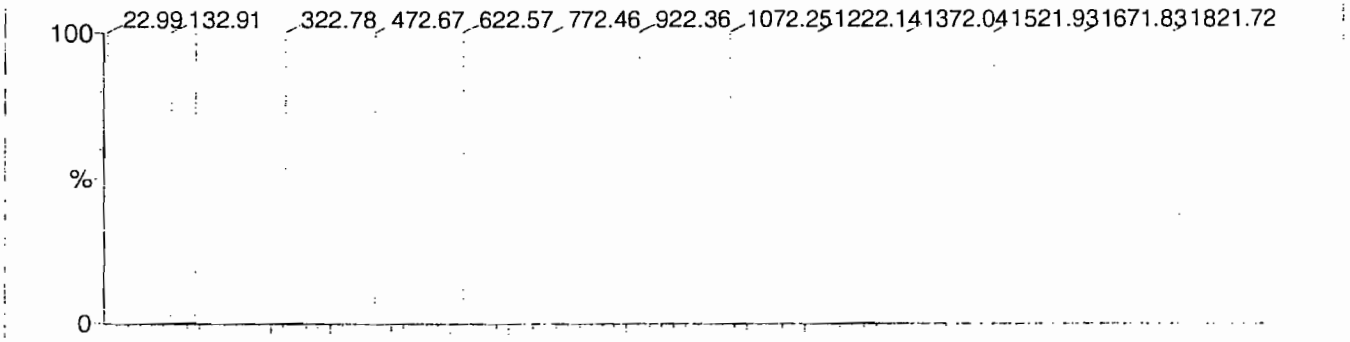
Calibration Report - MS1 Scan Speed Compensation

Printed: Fri Aug 25 10:52:01 2006

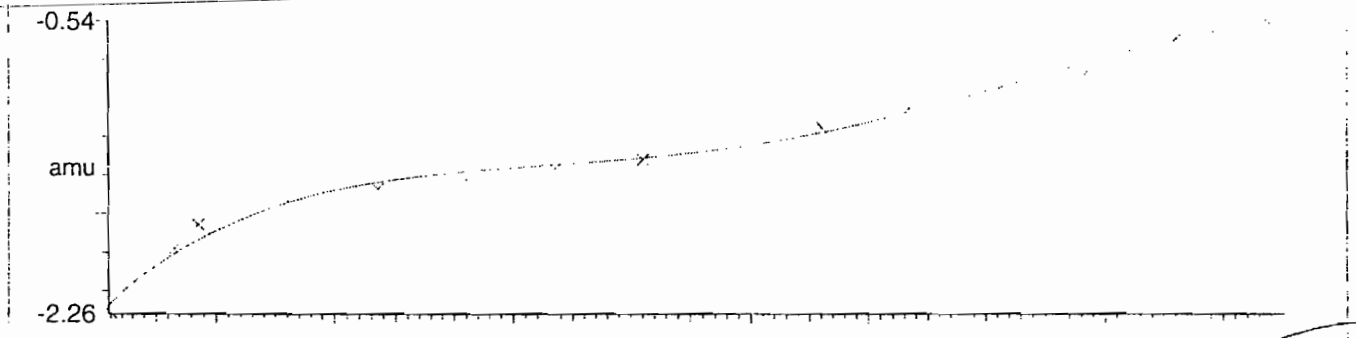
Data file: FASTMS1 - Calibrated 15 matches of 15 tested references



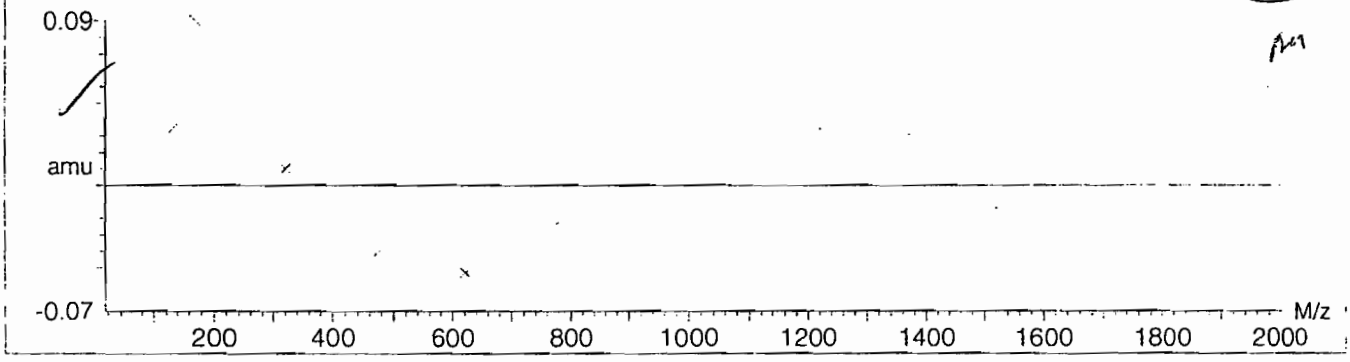
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals Mean residual = 3.486639e-9 ± 0.040487



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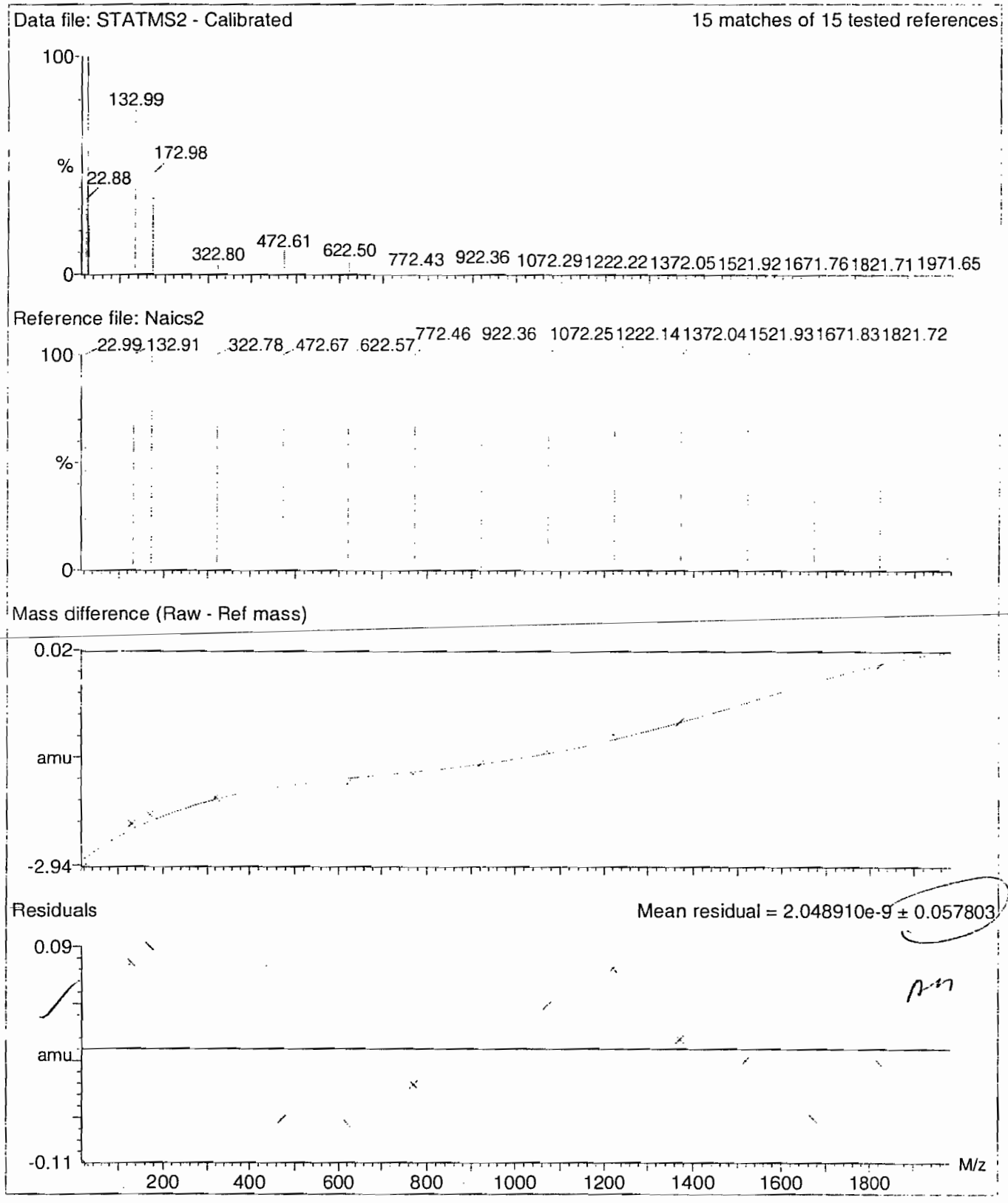
Printed: Fri Aug 25 10:52:54 2006



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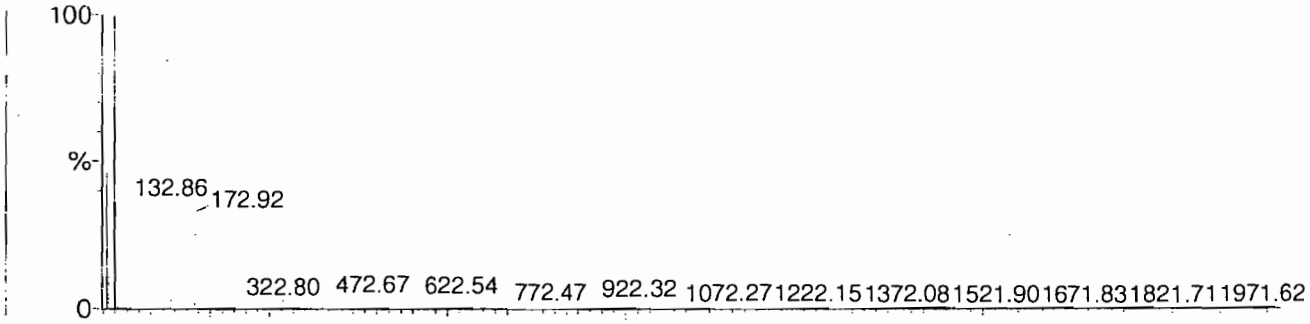
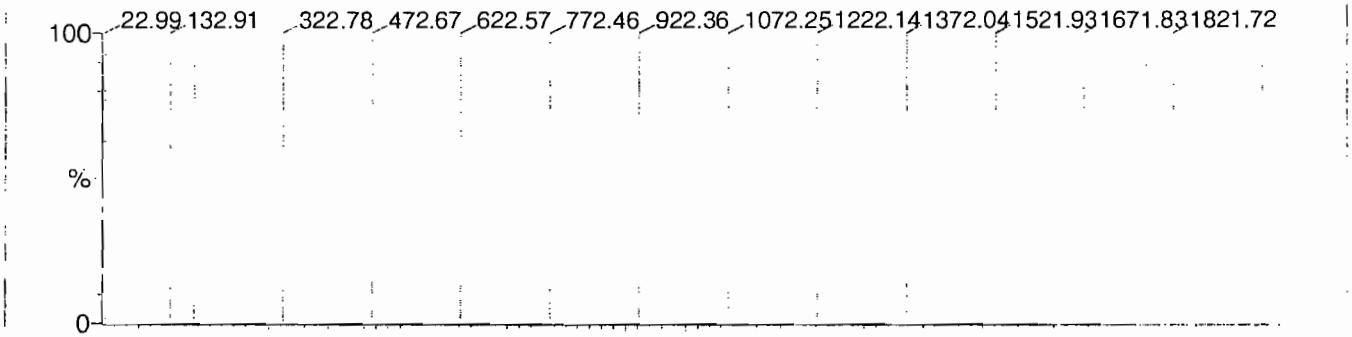
Calibration Report - MS2 Scanning

Printed: Fri Aug 25 10:54:00 2006

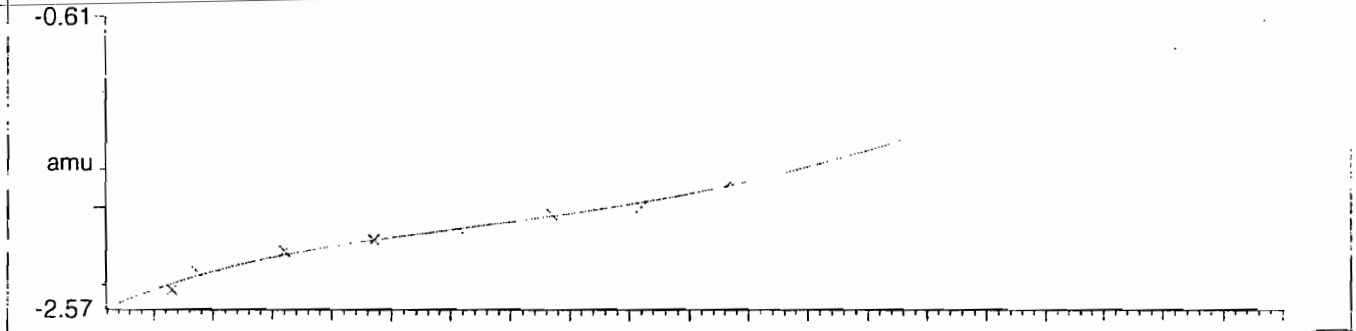
Data file: SCNMS2 - Calibrated 14 matches of 15 tested references



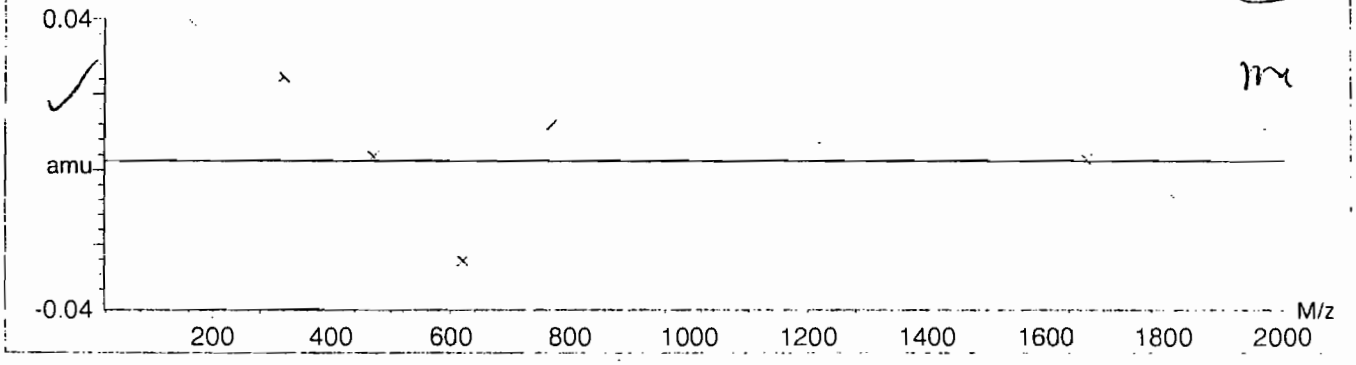
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals Mean residual = -2.623502e-9 ± 0.025622



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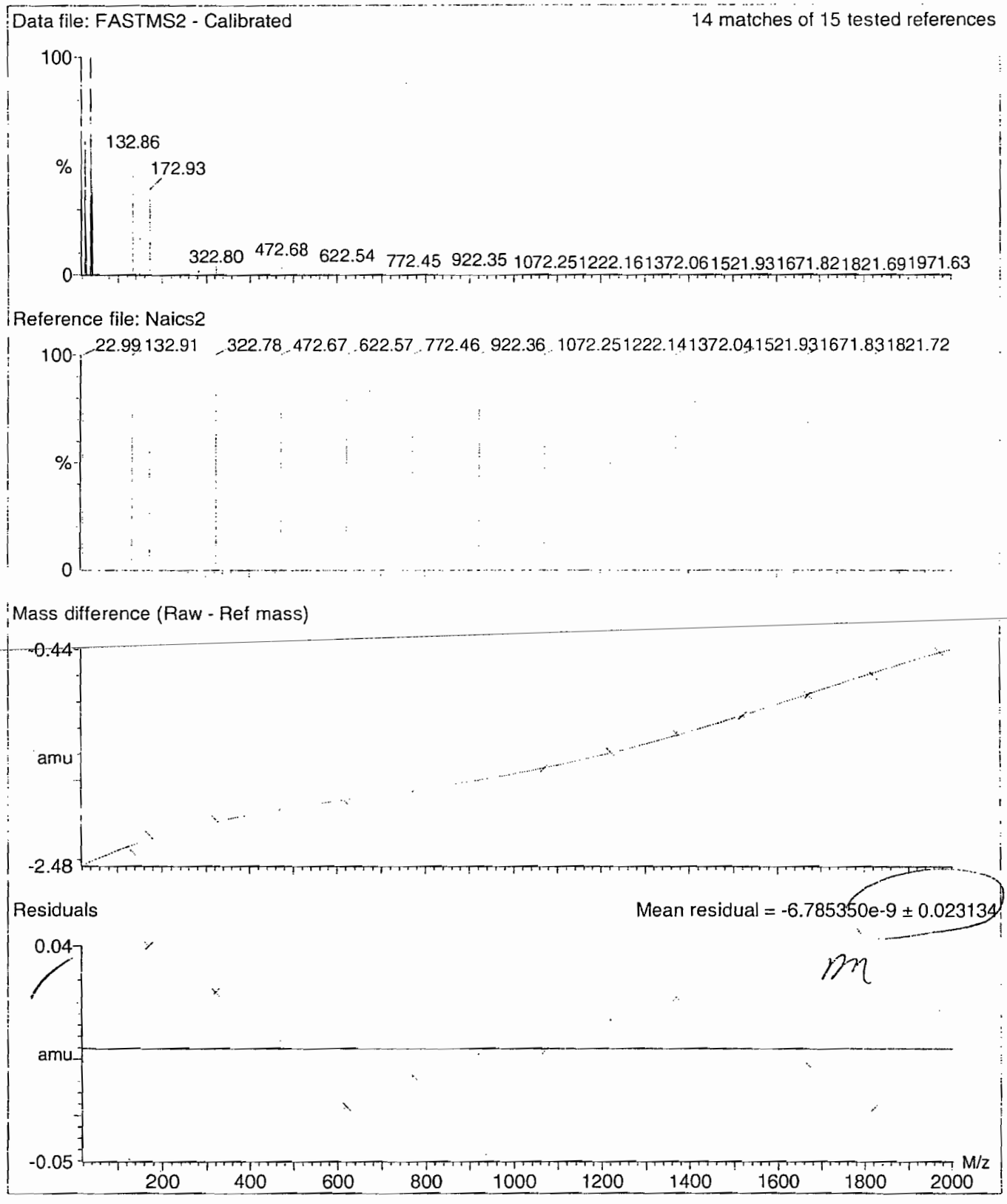
Calibration Report - MS2 Scan Speed Compensation

Printed: Fri Aug 25 10:54:54 2006



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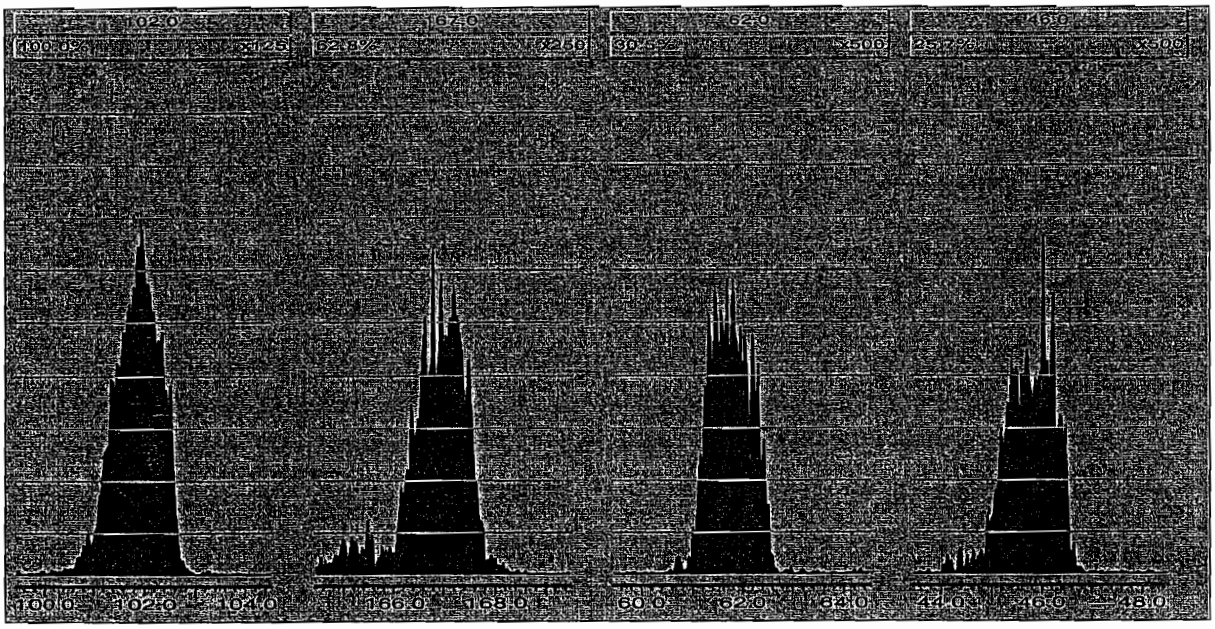
Quattro Micro Tune Parameters

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Tue Mar 23 09:07:10 2010



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8

High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

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) #
			5504.273	12.072	34430.583	17.449
Upper Limit			7155.5549	12.572	44759.7579	17.949
Lower Limit			3852.9911	11.572	24101.4081	16.949
MB for batch 950086	23-mar-10 17:30	EXP0323018a	5750.09	12.067	35516.6	17.444
LCS for batch 950086	23-mar-10 17:59	EXP0323019a	5406.4	12.067	32568.6	17.443
RE15-10-8361	24-mar-10 05:18	EXP0323042a	6307.05	12.033	38069.3	17.422
RE15-10-8362	24-mar-10 05:47	EXP0323043a	6441.79	12.033	39459.8	17.422
RE15-10-8359	24-mar-10 06:17	EXP0323044a	6465.32	12.067	41559.8	17.423
RE15-10-8358	24-mar-10 06:46	EXP0323045a	6730.26	12.032	38673.9	17.422
RE15-10-8360	24-mar-10 07:15	EXP0323046a	6042.68	12.032	40819.2	17.422

IS1 (DNB) = 1,3-Dinitrobenzene-d4
IS2 (DNT) = 2,6-Dinitrotoluene-d3

Area Upper Limit = + 30% of average IS area from multipoint calibration
Area Lower Limit = - 30% of average IS area from multipoint calibration

RT Upper Limit = +0.5 of average multipoint RT
RT Lower Limit = -0.5 of average multipoint RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits

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SAMPLE DATA

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8361

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323042a

Date Analyzed: 24-MAR-10 05:18

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 =

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

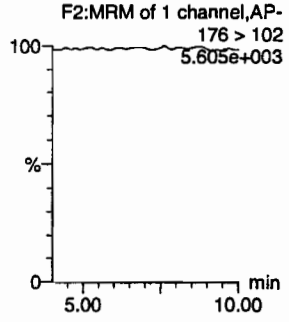
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323042a
Date: 24-Mar-2010
Time: 05:18:00
ID: 246442002
Vial: 2:4,A

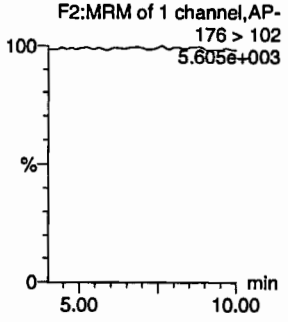
LANL | 950084 | Soil | 2 | 1

MH 3/24/10

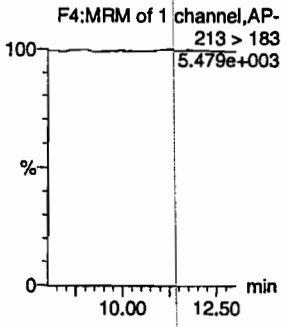
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.605e+003



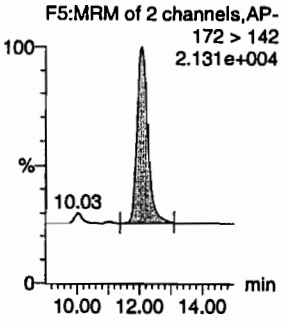
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.605e+003



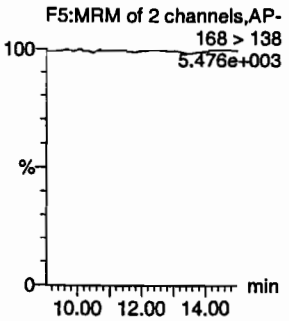
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.479e+003



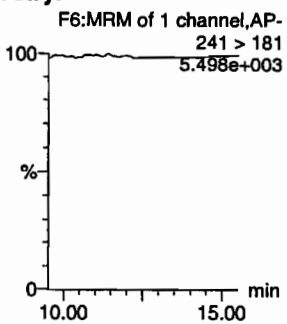
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.131e+004



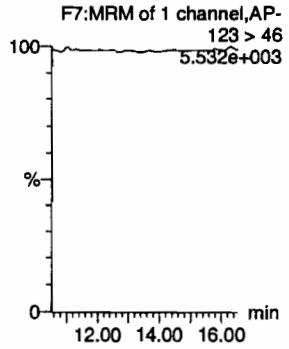
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.476e+003



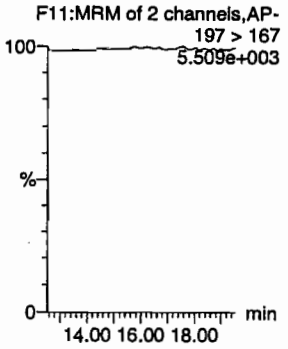
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.498e+003



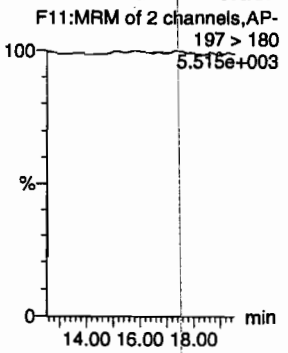
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.532e+003



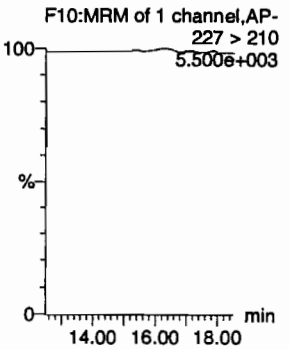
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.509e+003



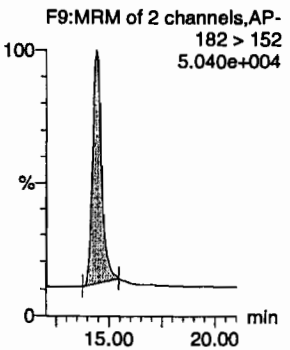
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.515e+003



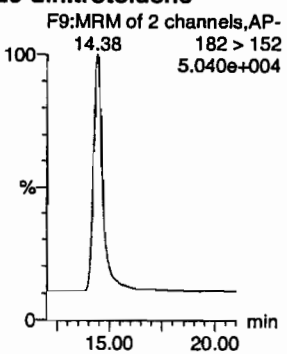
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.500e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.040e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.38
182 > 152
5.040e+004



MM 03/24/10

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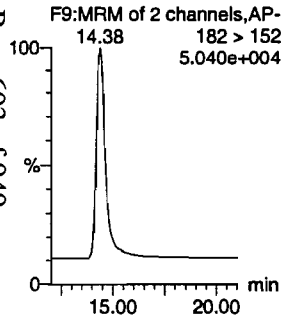
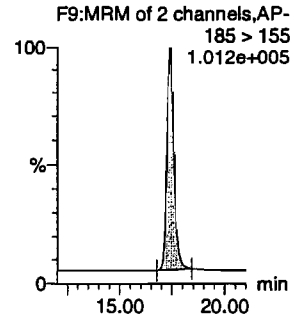
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

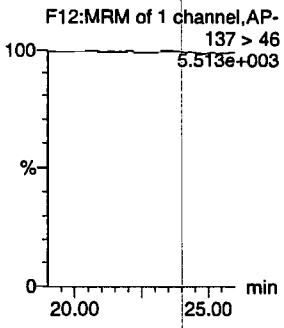
24-dinitrotoluene



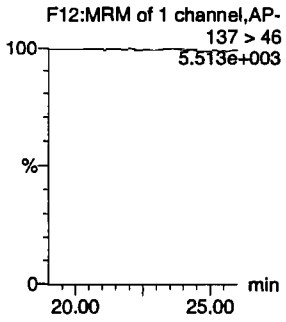
26-dinitrotoluene-d3



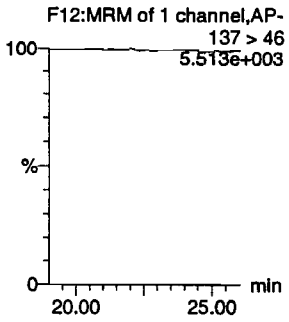
2-Nitrotoluene



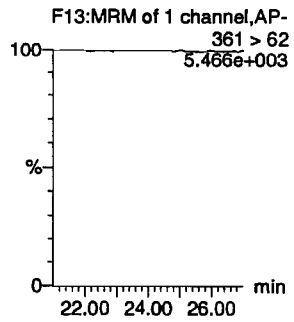
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
246442002	HMX	176 > 102			6307.052									
246442002	RDX	176 > 102			6307.052									
246442002	135-Trinitrobenzene	213 > 183			6307.052									
246442002	13-Dinitrobenzene-d4	172 > 142	12.03	6307.052		6307.052	6307.052	bb			572.9234	114.6	14.6	620.2
246442002	13-Dinitrobenzene	168 > 138			6307.052									
246442002	Tetryl	241 > 181			6307.052									
246442002	Nitrobenzene	123 > 46			6307.052									
246442002	4-Amino-26-dinitrotoluene	197 > 167			38069.270									
246442002	2-Amino-46-dinitrotoluene	197 > 180			38069.270									
246442002	246-Trinitrotoluene	227 > 210			38069.270									
246442002	34-dinitrotoluene	182 > 152	14.38	21169.975	38069.270	21169.975	278.045	bb			262.5836	105.0	5.0	1014.2
246442002	26-dinitrotoluene	182 > 152			38069.270									
246442002	24-dinitrotoluene	182 > 152			38069.270									
246442002	26-dinitrotoluene-d3	185 > 155	17.42	38069.270		38069.270	38069.270	bb			552.8411	110.6	10.6	3511.8
246442002	2-Nitrotoluene	137 > 46			38069.270									
246442002	4-Nitrotoluene	137 > 46			38069.270									
246442002	3-Nitrotoluene	137 > 46			38069.270									
246442002	PETN	361 > 62			38069.270									

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8361

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03010148.wiff

Date Analyzed: 02-MAR-10 23:37

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

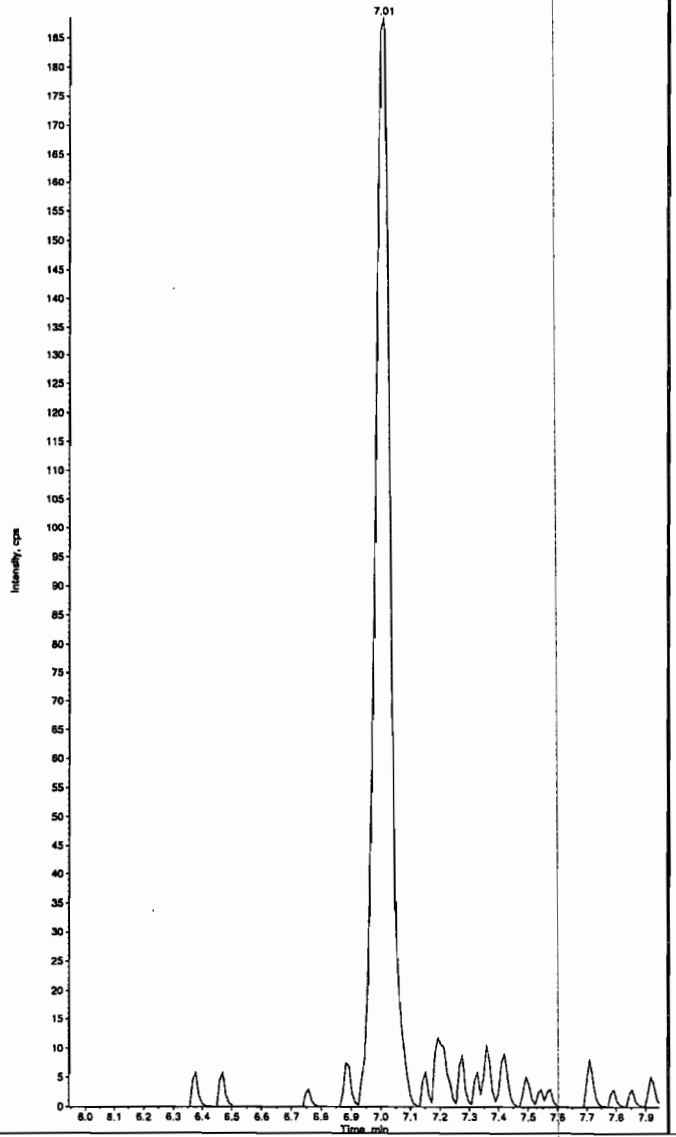
*Concentration =

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

Jan 3/3/10

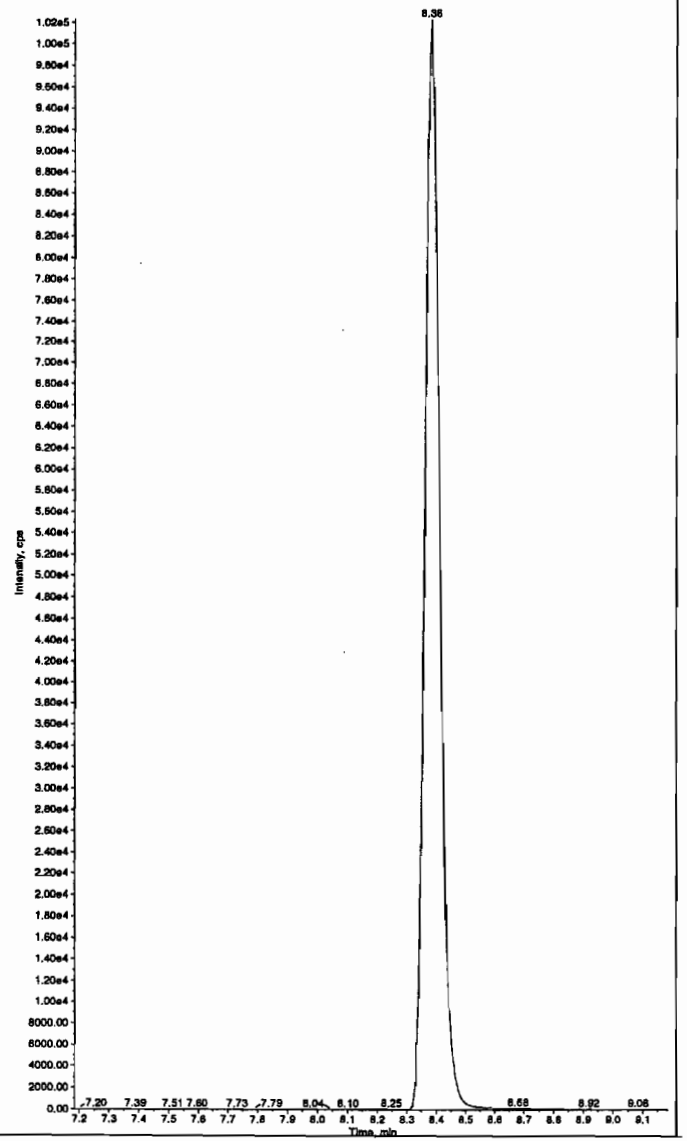
Sample Name: "246442002" Sample ID: "950087|2|LER" File: "EXS03010148.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 11:37:33 PM

Modified: No



Sample Name: "246442002" Sample ID: "950087|2|LER" File: "EXS03010148.wiff"
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: 3/2/2010
Acq. Time: 11:37:33 PM

Modified: No



HMK 03/04/10

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

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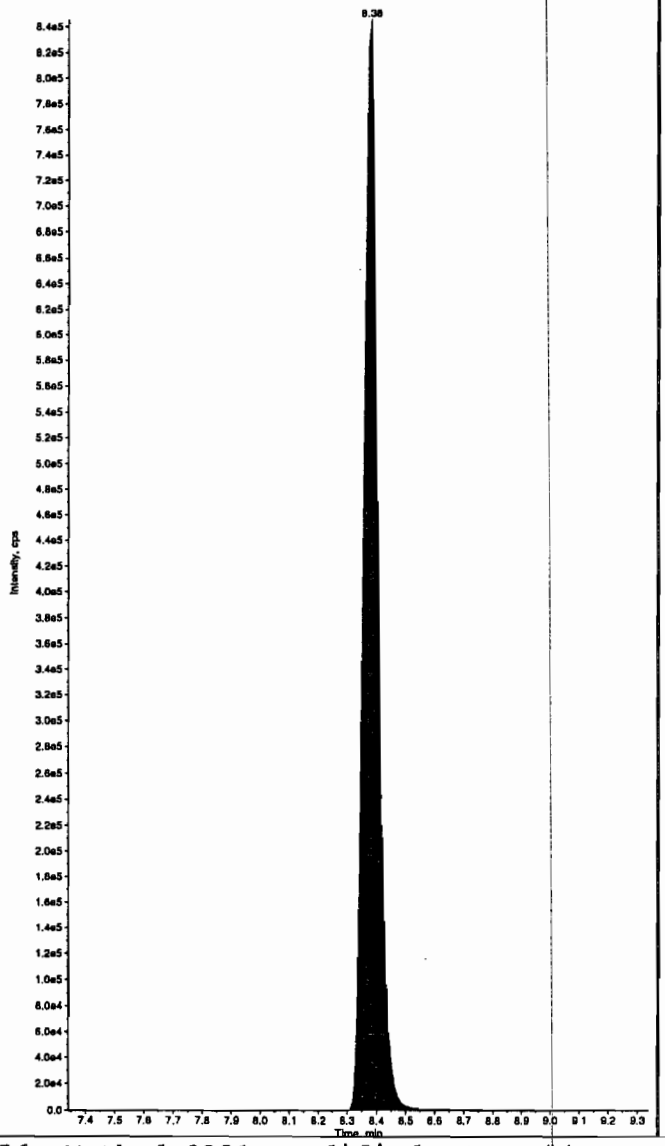
Sample Name: "246442002" Sample ID: "950087|2|LER" File: "EXS03010148.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 244. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 11:37:33 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

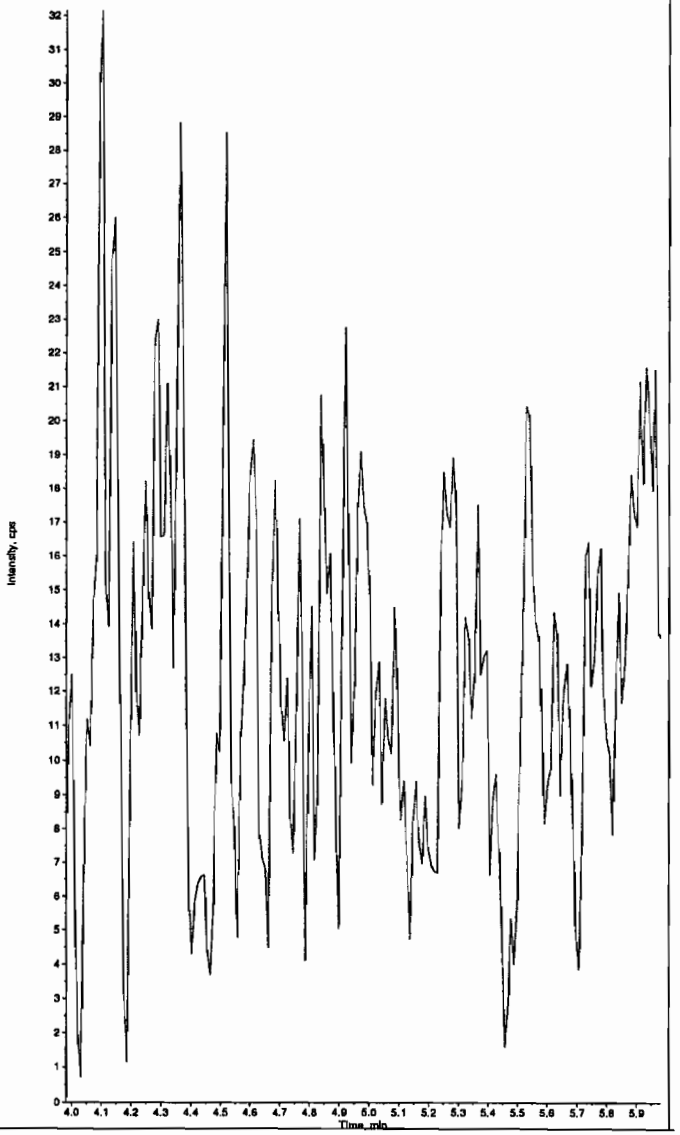
Int. Type: Valley
Retention Time: 8.38 min
Area: 2.97e+006 counts
Height: 845714.233 cps
Start Time: 8.26 min
End Time: 8.71 min



Sample Name: "246442002" Sample ID: "950087|2|LER" File: "EXS03010148.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 11:37:33 PM

Modified: No



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

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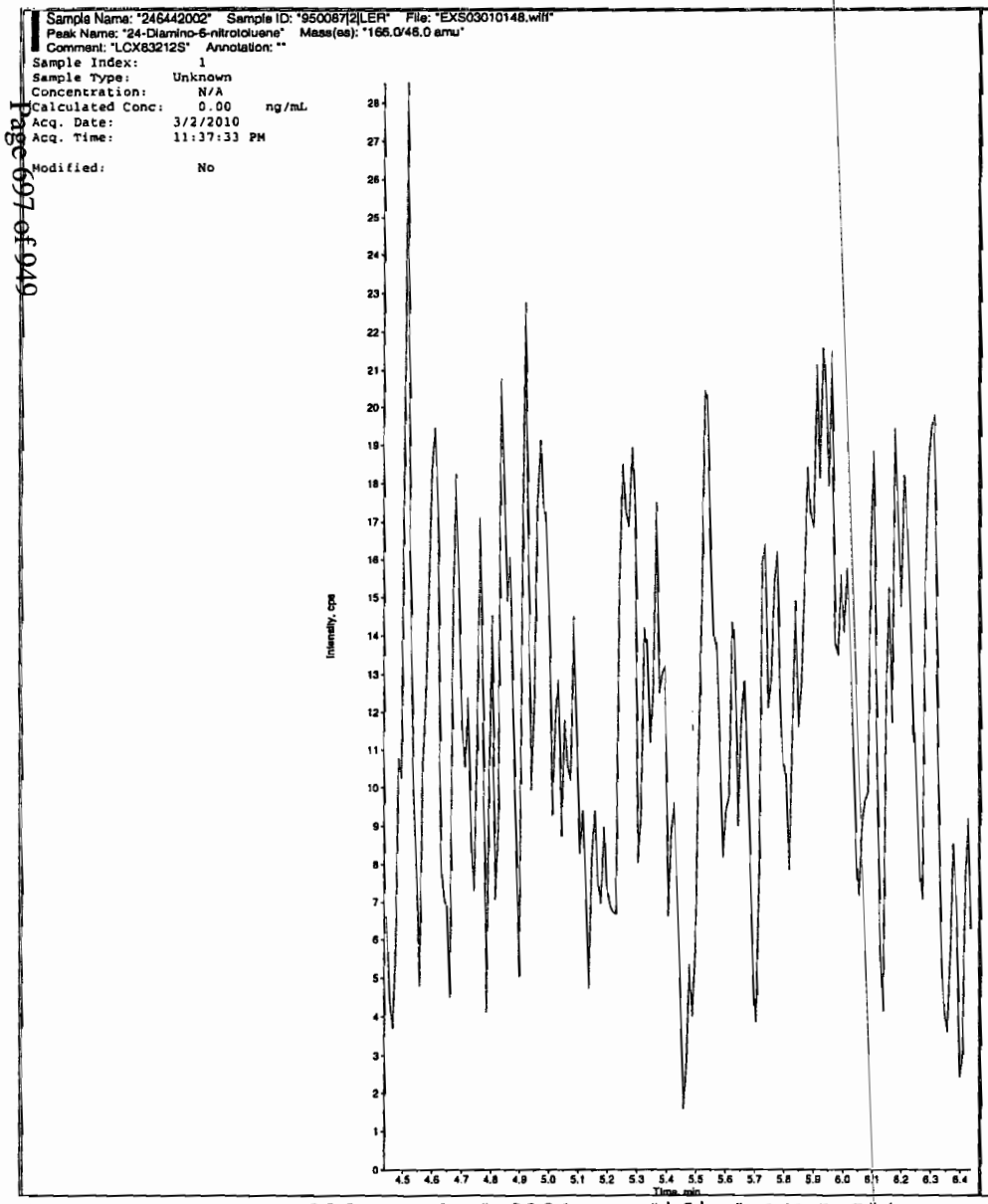

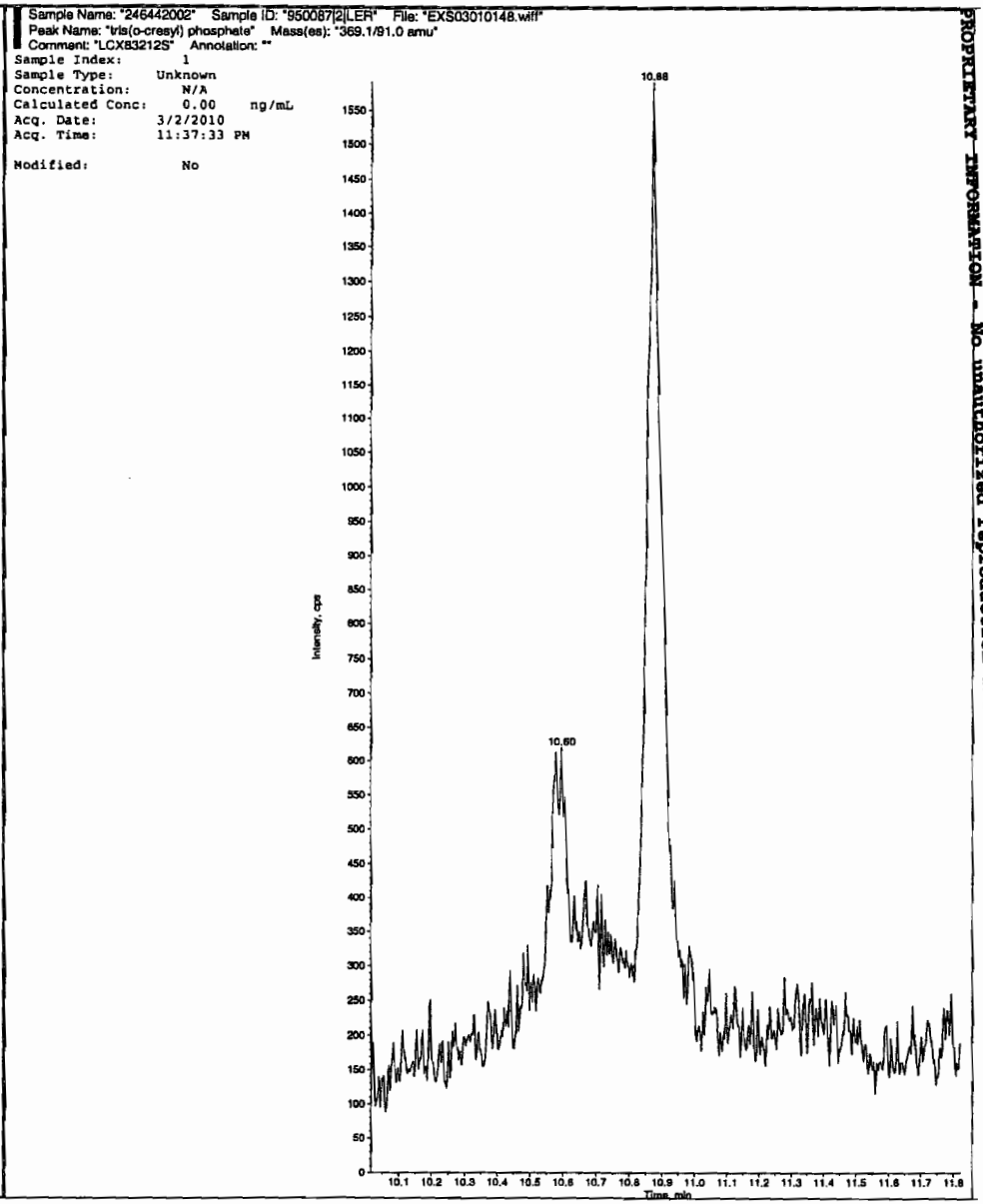

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8362

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442003

Sample Amount 2

Moisture: 25.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323043a

Date Analyzed: 24-MAR-10 05:47

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 =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

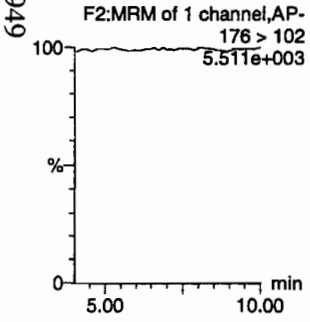
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323043a
Date: 24-Mar-2010
Time: 05:47:30
ID: 246442003
Vial: 2:4,B

LANL | 950057 | Soil | 21

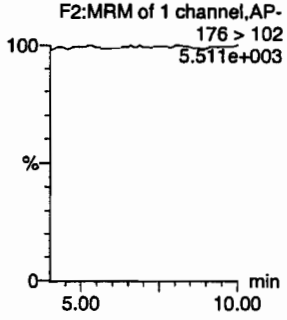
MDH 3/24/10

Page 699 of 949

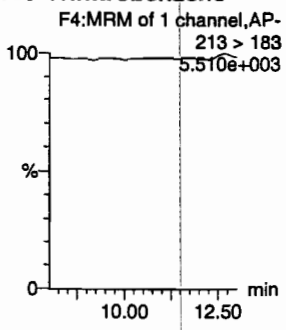
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.511e+003



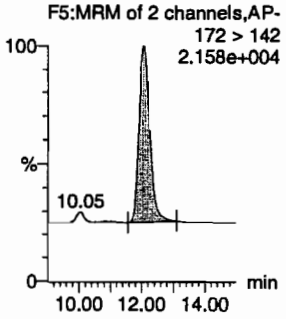
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.511e+003



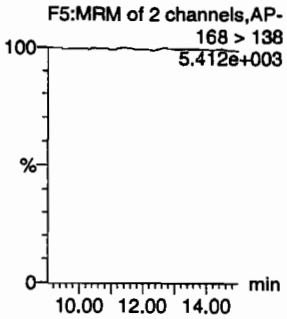
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.510e+003



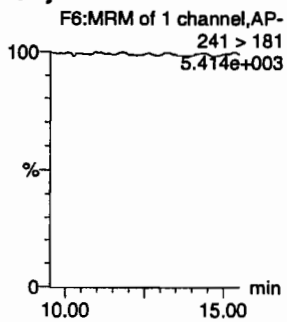
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.158e+004



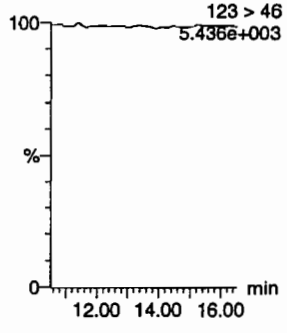
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.412e+003



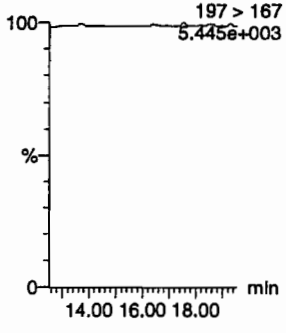
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.414e+003



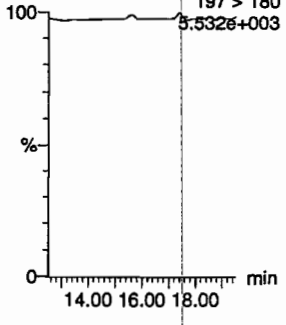
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.436e+003



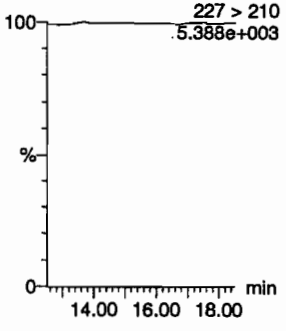
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.445e+003



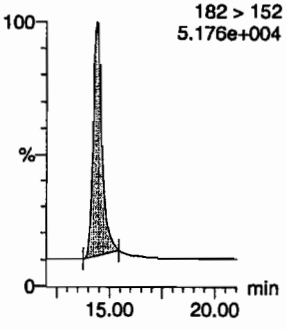
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.532e+003



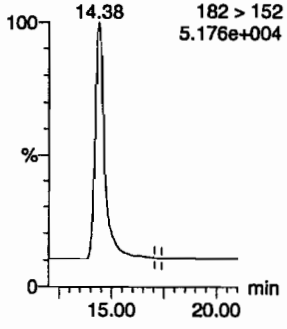
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.388e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.176e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.38
182 > 152
5.176e+004



HMM 03/24/10

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

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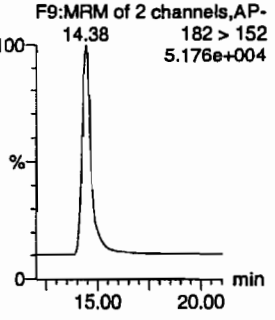
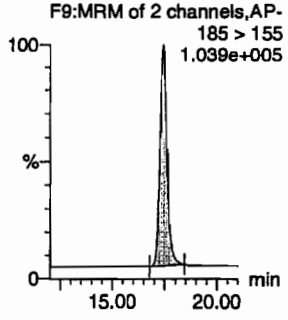
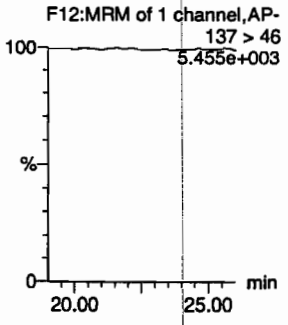
24-dinitrotoluene



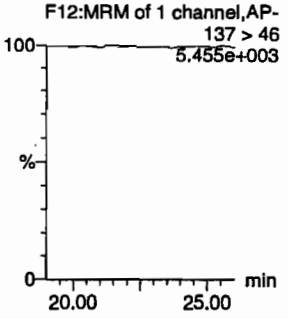
26-dinitrotoluene-d3



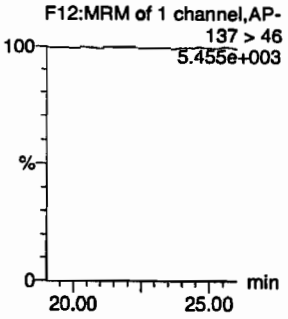
2-Nitrotoluene



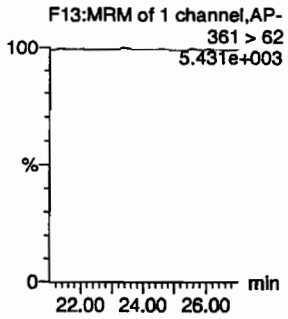
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
246442003	HMX	176 > 102			6441.786									
246442003	RDX	176 > 102			6441.786									
246442003	135-Trinitrobenzene	213 > 183			6441.786									
246442003	13-Dinitrobenzene-d4	172 > 142	12.03	6441.786		6441.786	6441.786	bb			585.1624	117.0	17.0	455.4
246442003	13-Dinitrobenzene	168 > 138			6441.786									
246442003	Tetryl	241 > 181			6441.786									
246442003	Nitrobenzene	123 > 46			6441.786									
246442003	4-Amino-26-dinitrotoluene	197 > 167			39459.805									
246442003	2-Amino-46-dinitrotoluene	197 > 180			39459.805									
246442003	246-Trinitrotoluene	227 > 210			39459.805									
246442003	34-dinitrotoluene	182 > 152	14.38	22261.398	39459.805	22261.398	282.077	bb			266.3909	106.6	6.6	1404.5
246442003	26-dinitrotoluene	182 > 152			39459.805			MM-	24-Mar-10	09:25:33				
246442003	24-dinitrotoluene	182 > 152			39459.805									
246442003	26-dinitrotoluene-d3	185 > 155	17.42	39459.805		39459.805	39459.805	bb			573.0344	114.6	14.6	4360.5
246442003	2-Nitrotoluene	137 > 46			39459.805									
246442003	4-Nitrotoluene	137 > 46			39459.805									
246442003	3-Nitrotoluene	137 > 46			39459.805									
246442003	PETN	361 > 62			39459.805									

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8362

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442003

Sample Amount 2

Moisture: 25.0

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03010149.wiff

Date Analyzed: 02-MAR-10 23:53

Units: ug/kg

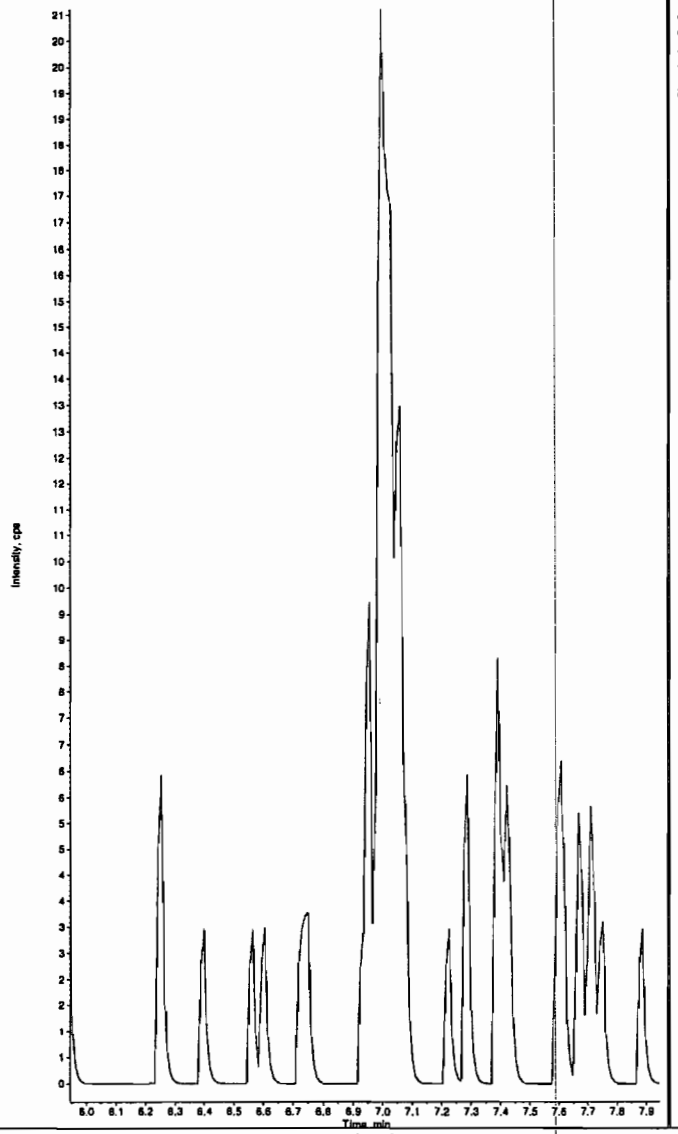
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

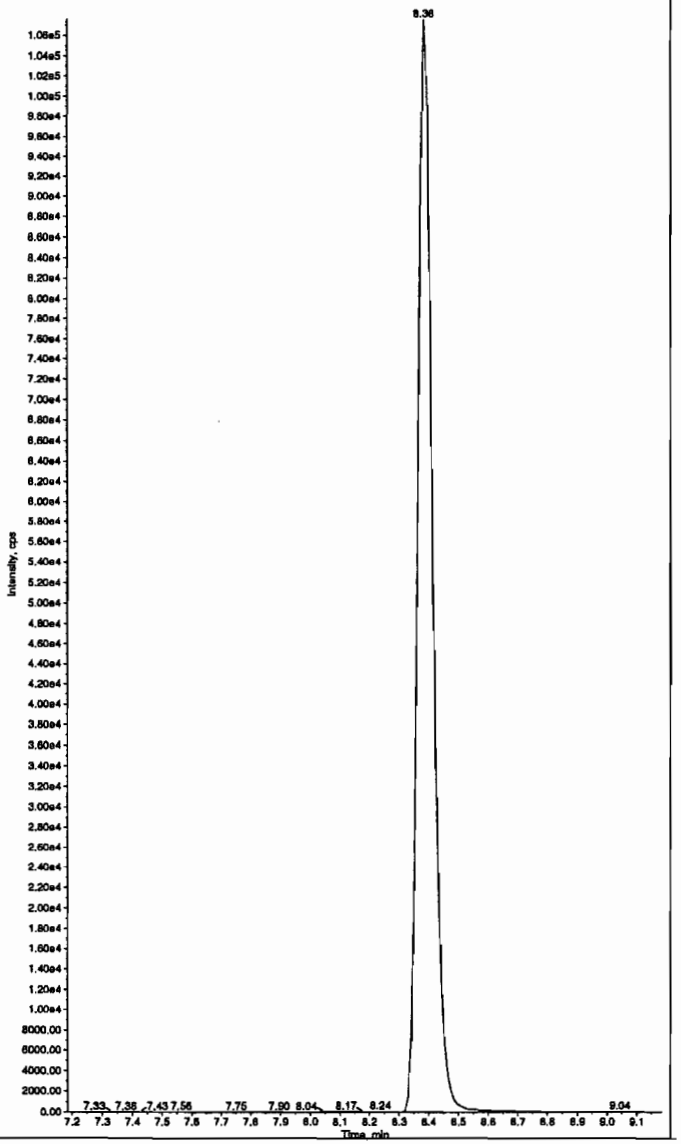
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Lcw 3/3/10

Sample Name: "246442003" Sample ID: "950087|2|LER" File: "EXS03010149.wiff"
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: 3/2/2010
Acq. Time: 11:53:17 PM
Modified: No



Sample Name: "246442003" Sample ID: "950087|2|LER" File: "EXS03010149.wiff"
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: 3/2/2010
Acq. Time: 11:53:17 PM
Modified: No



Hmw 03/04/10

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

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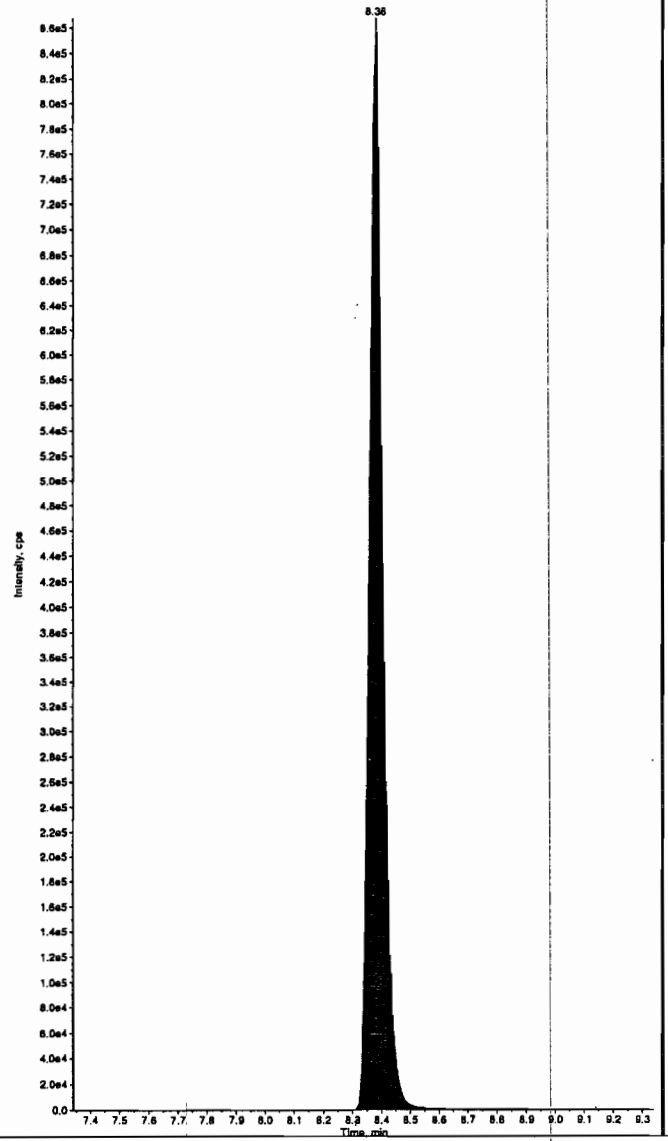
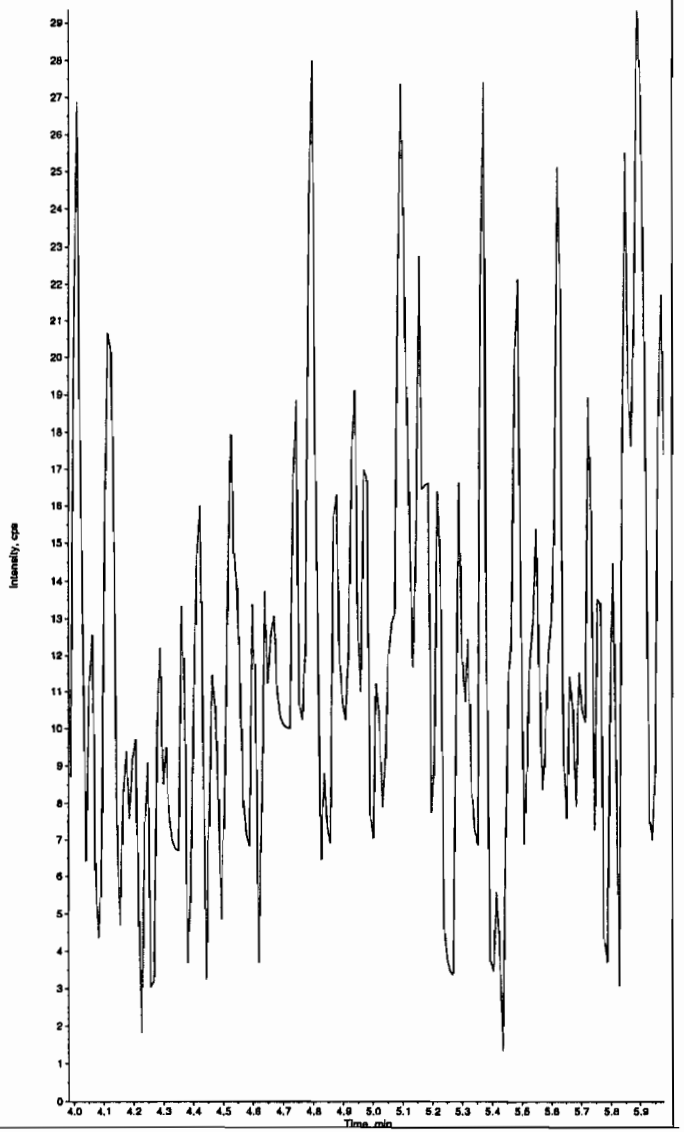
Sample Name: "246442003" Sample ID: "950087|2|LER" File: "EXS03010149.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	241. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	11:53:17 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.38 min
Area:	2.93e+006 counts
Height:	868280.029 cps
Start Time:	8.29 min
End Time:	8.68 min



Sample Name: "246442003" Sample ID: "950087|2|LER" File: "EXS03010149.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	3/2/2010
Acq. Time:	11:53:17 PM
Modified:	No



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

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8359

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442004

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323044a

Date Analyzed: 24-MAR-10 06:17

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

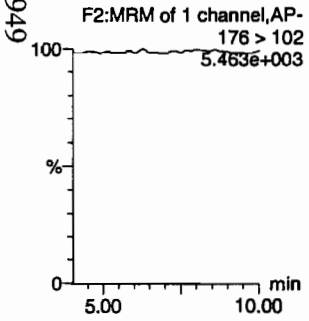
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323044a
Date: 24-Mar-2010
Time: 06:17:00
ID: 246442004
Vial: 2:4,C

LANL | 950087 | Soil | 2 |

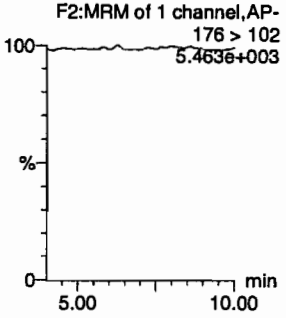
3/24/10

Page 706 of 949

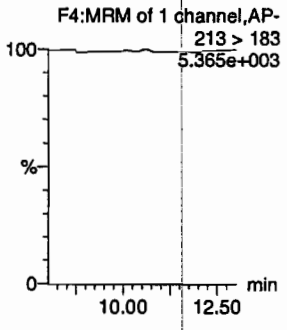
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.463e+003



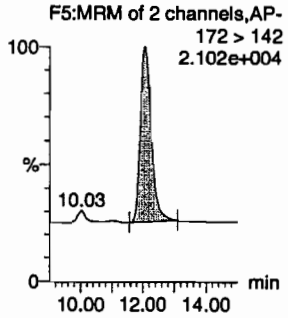
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.463e+003



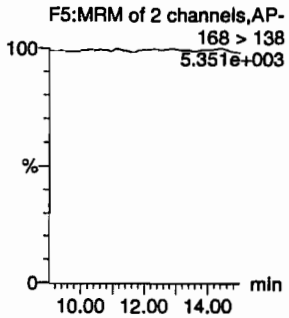
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.365e+003



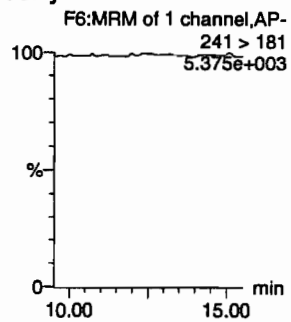
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.102e+004



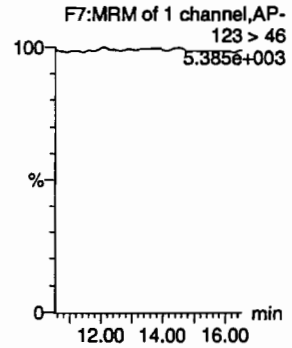
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.351e+003



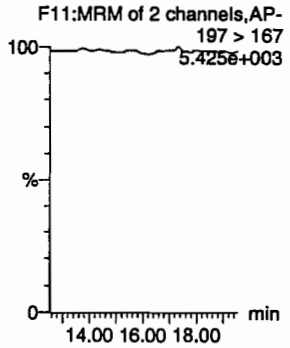
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.375e+003



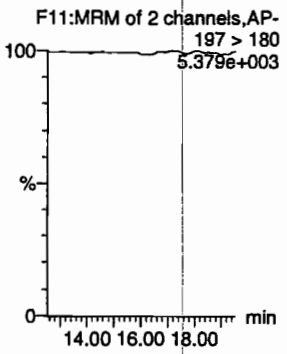
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.385e+003



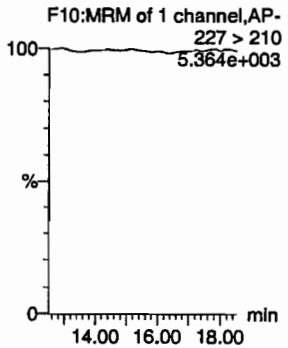
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.425e+003



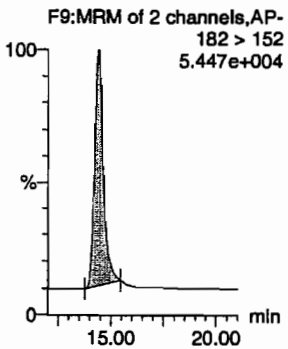
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.379e+003



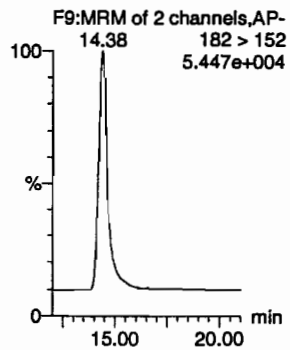
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.364e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.447e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.38
182 > 152
5.447e+004



HMM 03/24/10

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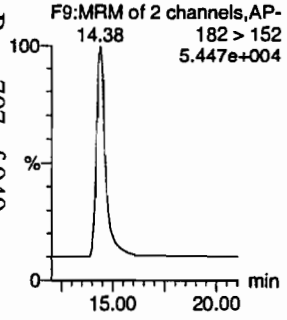
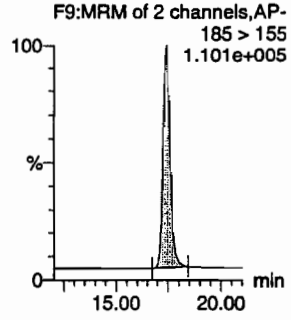
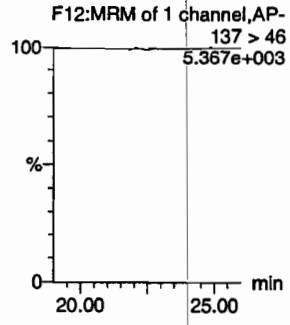
24-dinitrotoluene



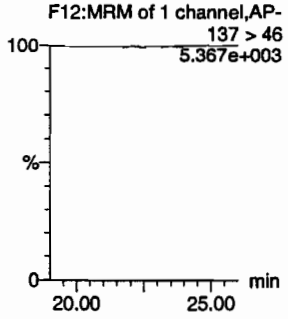
26-dinitrotoluene-d3



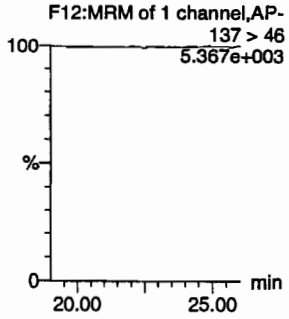
2-Nitrotoluene



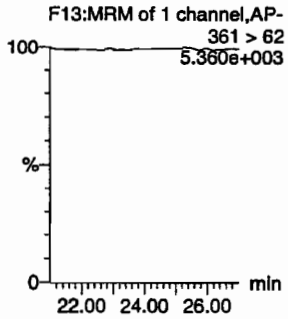
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Ro/mL	%Rec	%Dev	S/N
246442004	HMX	176 > 102			6465.322									
246442004	RDX	176 > 102			6465.322									
246442004	135-Trinitrobenzene	213 > 183			6465.322									
246442004	13-Dinitrobenzene-d4	172 > 142	12.07	6465.322		6465.322	6465.322	bb			587.3004	117.5	17.5	1325.9
246442004	13-Dinitrobenzene	168 > 138			6465.322									
246442004	Tetryl	241 > 181			6465.322									
246442004	Nitrobenzene	123 > 46			6465.322									
246442004	4-Amino-26-dinitrotoluene	197 > 167			41559.848									
246442004	2-Amino-46-dinitrotoluene	197 > 180			41559.848									
246442004	246-Trinitrotoluene	227 > 210			41559.848									
246442004	34-dinitrotoluene	182 > 152	14.38	23108.369	41559.848	23108.369	278.013	bb			262.5531	105.0	5.0	973.1
246442004	26-dinitrotoluene	182 > 152			41559.848									
246442004	24-dinitrotoluene	182 > 152			41559.848									
246442004	26-dinitrotoluene-d3	185 > 155	17.42	41559.848		41559.848	41559.848	bb			603.5312	120.7	20.7	2206.4
246442004	2-Nitrotoluene	137 > 46			41559.848									
246442004	4-Nitrotoluene	137 > 46			41559.848									
246442004	3-Nitrotoluene	137 > 46			41559.848									
246442004	PETN	361 > 62			41559.848									

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8359

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442004

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03030014.wiff

Date Analyzed: 03-MAR-10 13:06

Units: ug/kg

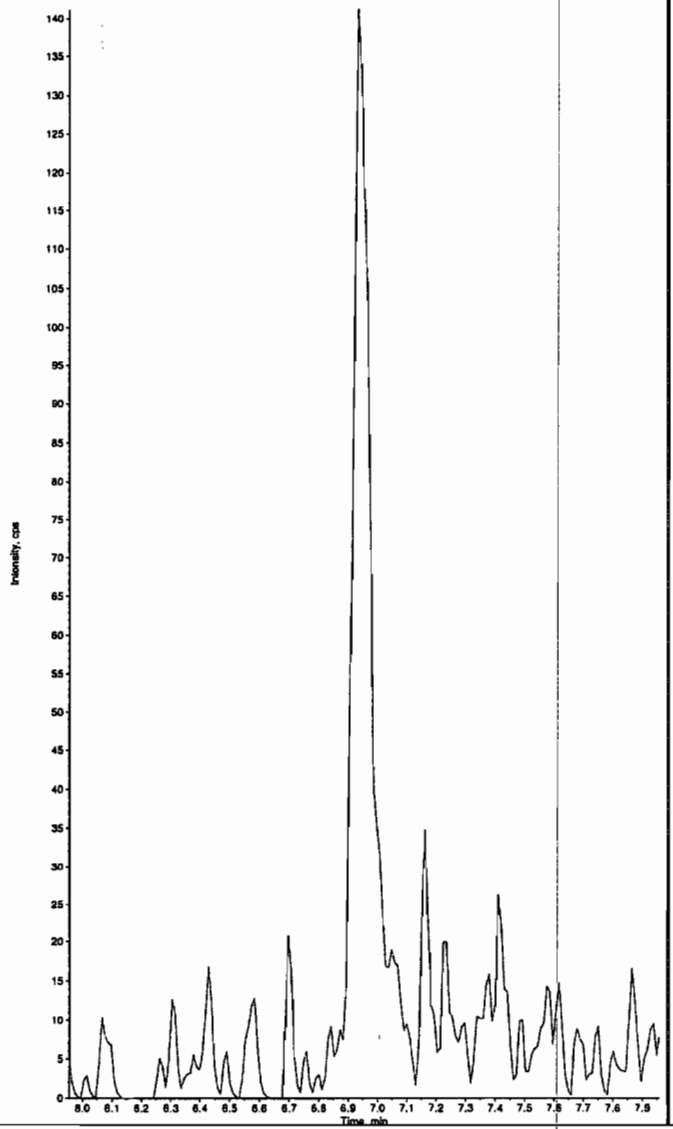
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

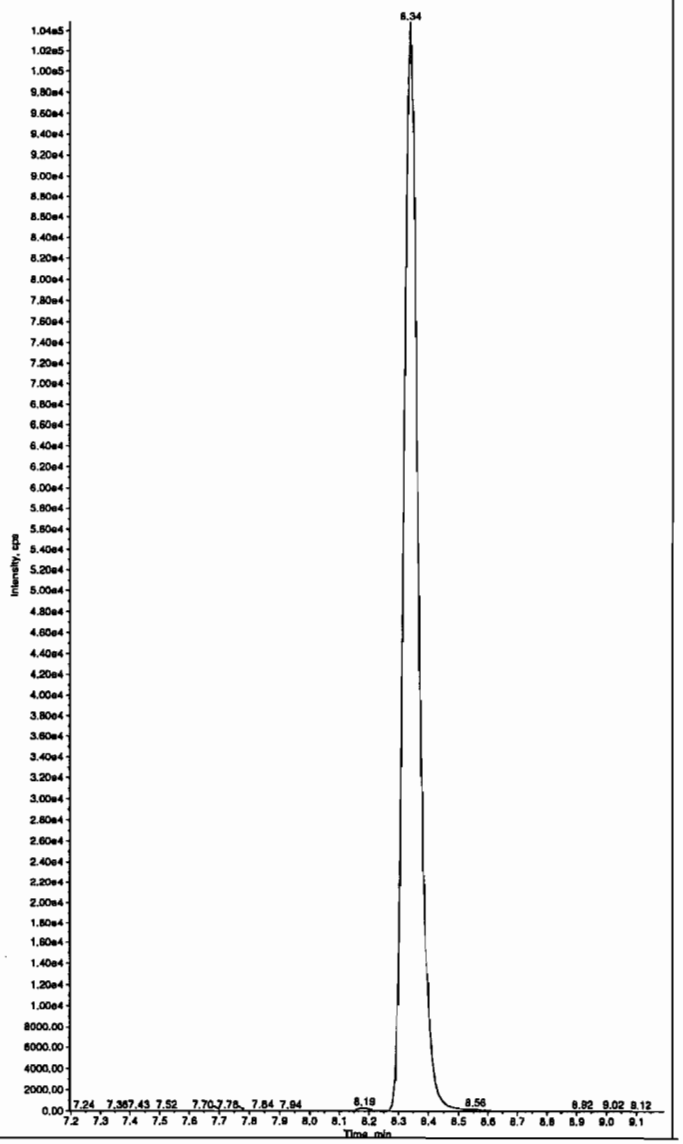
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Ler 3/8/10

Sample Name: "246442004" Sample ID: "950087|2|LER" File: "EXS03030014.wiff"
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: 3/3/2010
Acq. Time: 1:06:23 PM
Modified: No



Sample Name: "246442004" Sample ID: "950087|2|LER" File: "EXS03030014.wiff"
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: 3/3/2010
Acq. Time: 1:06:23 PM
Modified: No



dmw 03/24/10

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

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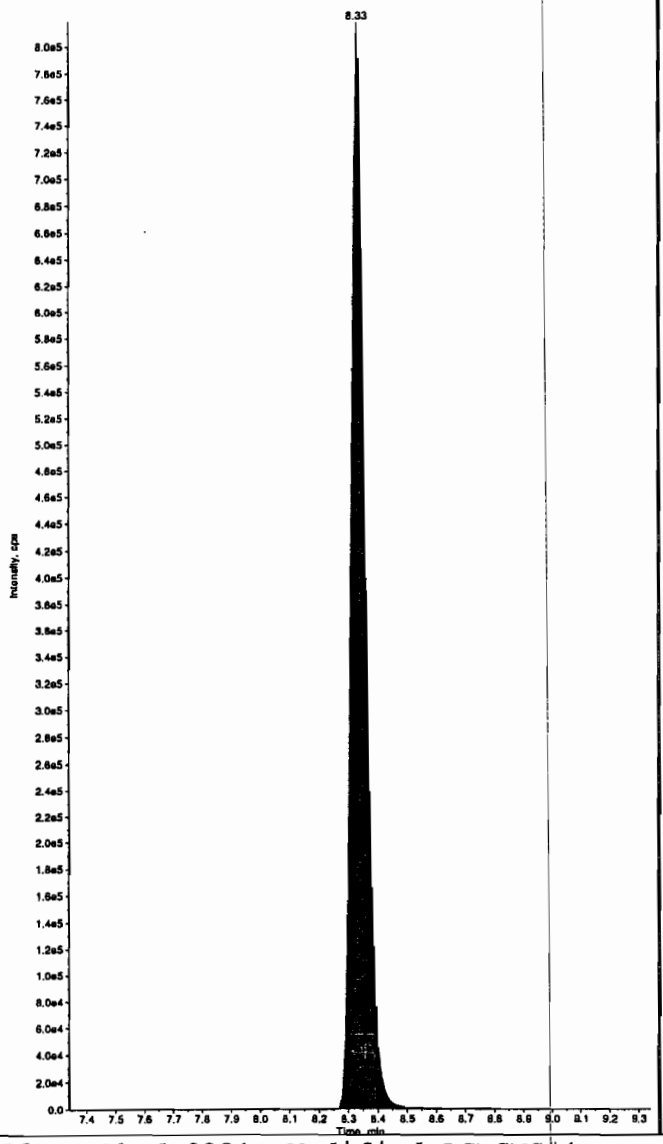
Sample Name: "246442004" Sample ID: "950087|2|LER" File: "EXS03030014.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 236. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:06:23 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

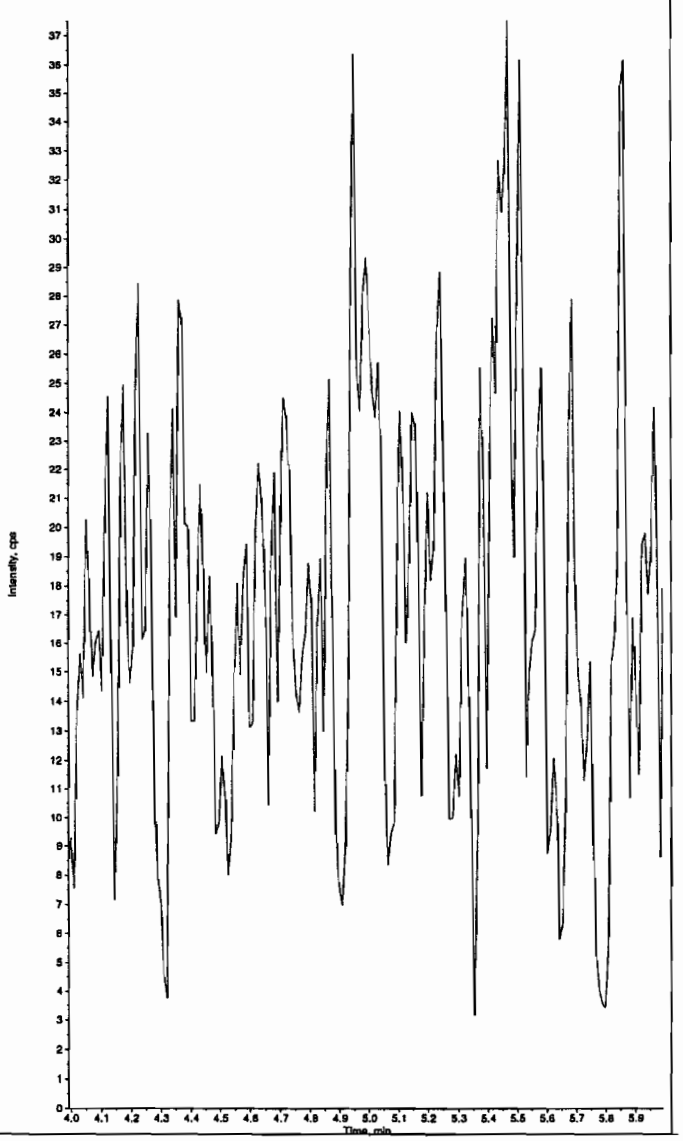
Int. Type: Valley
Retention Time: 8.33 min
Area: 2.87e+006 counts
Height: 819240.540 cps
Start Time: 8.23 min
End Time: 8.73 min



Sample Name: "246442004" Sample ID: "950087|2|LER" File: "EXS03030014.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:06:23 PM

Modified: No



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

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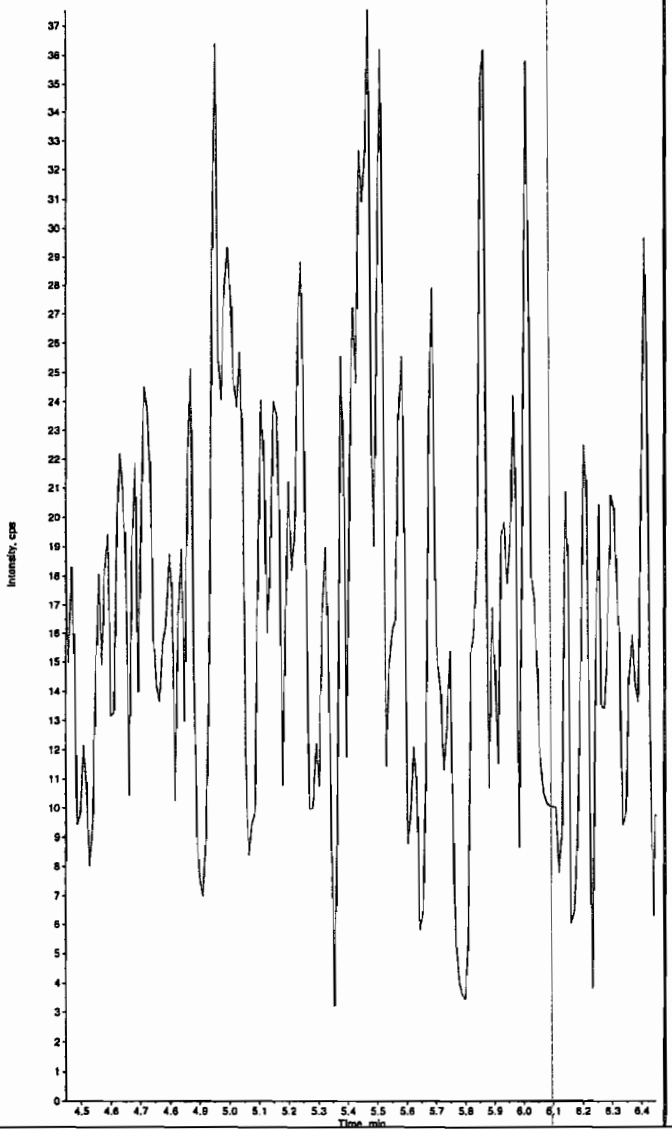
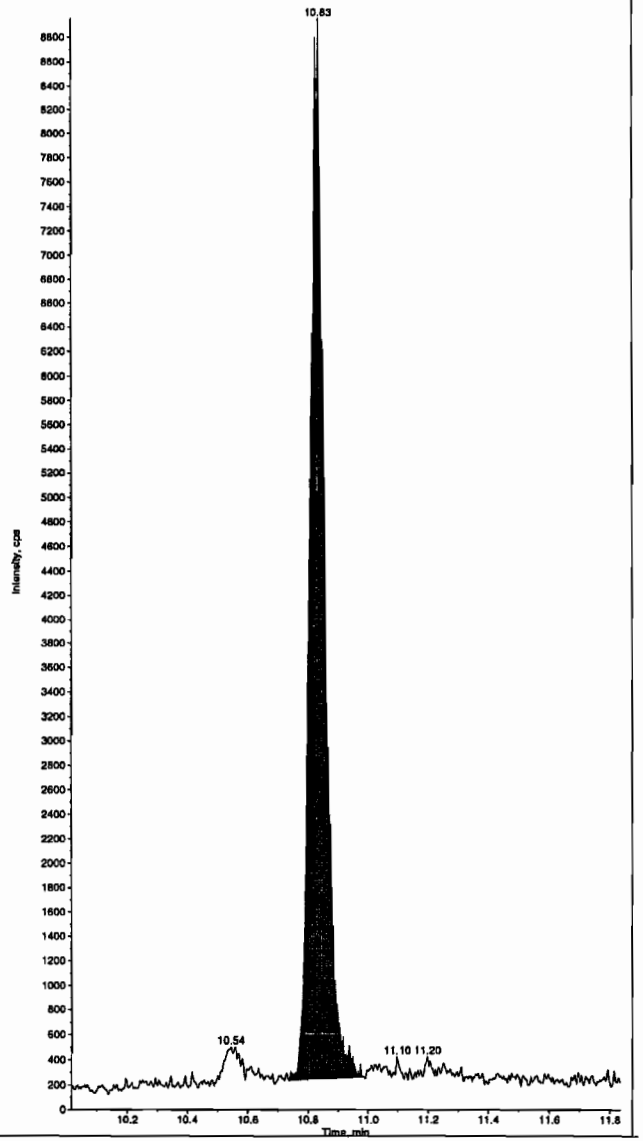
Sample Name: "246442004" Sample ID: "950087|2|LER" File: "EXS03030014.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	3/3/2010
Acq. Time:	1:06:23 PM
Modified:	No



Sample Name: "246442004" Sample ID: "950087|2|LER" File: "EXS03030014.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	No Intercept
Acq. Date:	3/3/2010
Acq. Time:	1:06:23 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:	3.02e+004 counts
Height:	8706.961 cps
Start Time:	10.7 min
End Time:	11.0 min



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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8358

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442005

Sample Amount 2

Moisture: 16.5

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323045a

Date Analyzed: 24-MAR-10 06:46

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

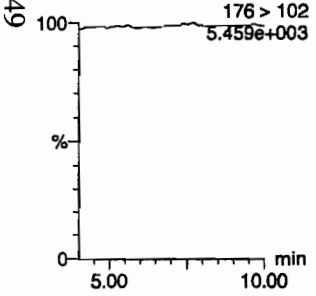
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323045a
Date: 24-Mar-2010
Time: 06:46:28
ID: 246442005
Vial: 2:4,D

LANL | 950087 | Soil | 2 |

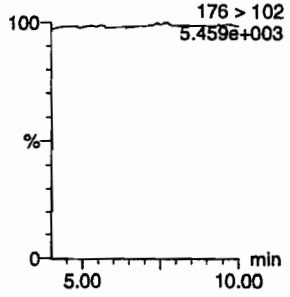
MM 3/24/10

Page 713 of 949

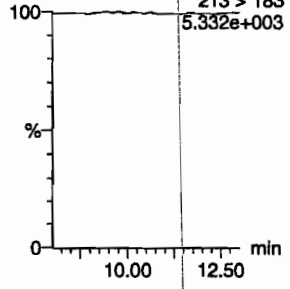
HMX



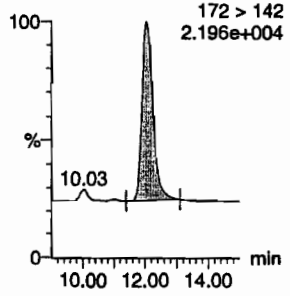
RDX



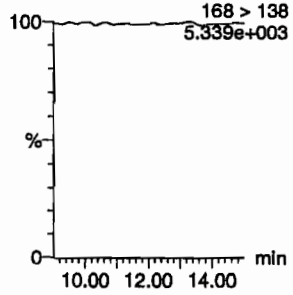
135-Trinitrobenzene



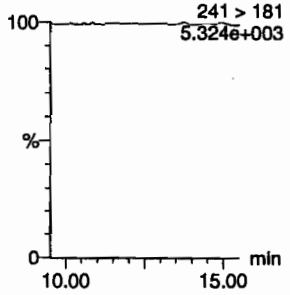
13-Dinitrobenzene-d4



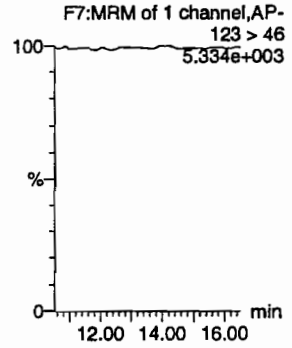
13-Dinitrobenzene



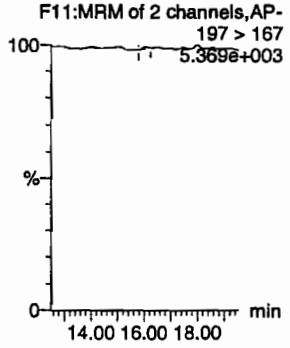
Tetryl



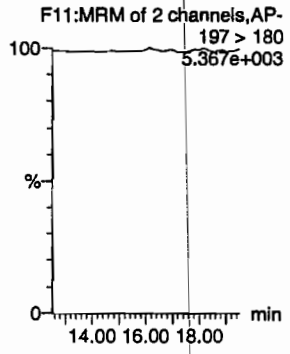
Nitrobenzene



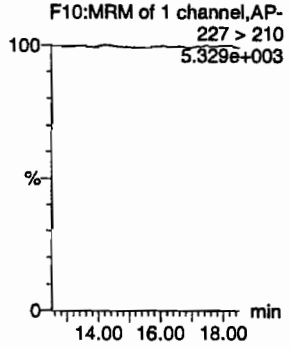
4-Amino-26-dinitrotoluene



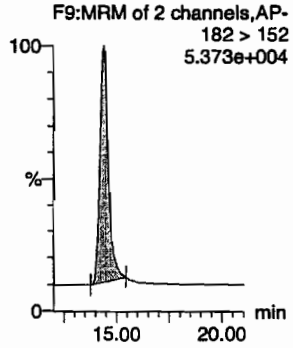
2-Amino-46-dinitrotoluene



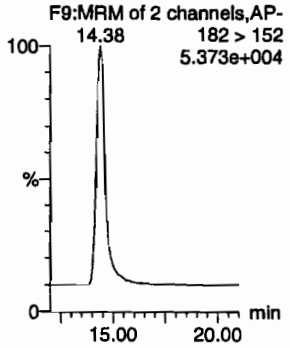
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



Hmm 03/24/10

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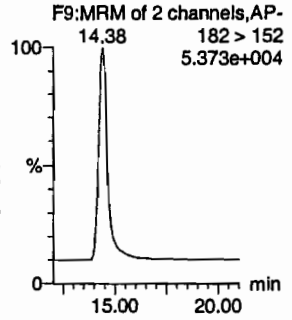
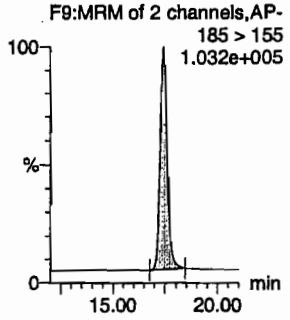
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

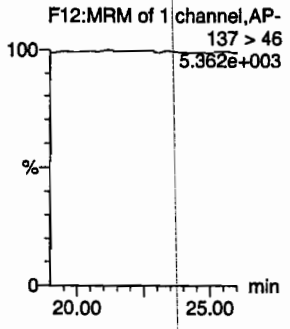
24-dinitrotoluene



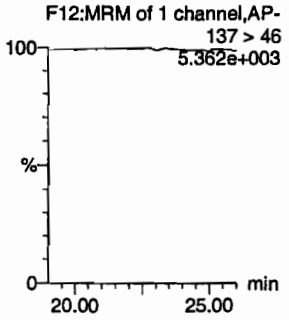
26-dinitrotoluene-d3



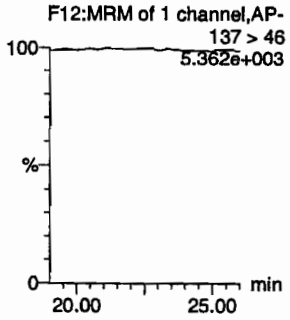
2-Nitrotoluene



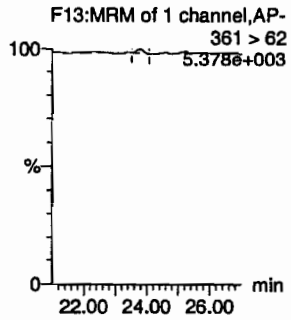
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
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246442005	RDX	176 > 102			6730.262									
246442005	135-Trinitrobenzene	213 > 183			6730.262									
246442005	13-Dinitrobenzene-d4	172 > 142	12.03	6730.262		6730.262	6730.262	bb			611.3671	122.3	22.3	410.1
246442005	13-Dinitrobenzene	168 > 138			6730.262									
246442005	Tetryl	241 > 181			6730.262									
246442005	Nitrobenzene	123 > 46			6730.262									
246442005	4-Amino-26-dinitrotoluene	197 > 167			38673.887			MM-	24-Mar-10	09:22:32				
246442005	2-Amino-46-dinitrotoluene	197 > 180			38673.887									
246442005	246-Trinitrotoluene	227 > 210			38673.887									
246442005	34-dinitrotoluene	182 > 152	14.38	22236.557	38673.887	22236.557	287.488	bb			271.5011	108.6	8.6	918.5
246442005	26-dinitrotoluene	182 > 152			38673.887									
246442005	24-dinitrotoluene	182 > 152			38673.887									
246442005	26-dinitrotoluene-d3	185 > 155	17.42	38673.887		38673.887	38673.887	bb			561.6213	112.3	12.3	4287.2
246442005	2-Nitrotoluene	137 > 46			38673.887									
246442005	4-Nitrotoluene	137 > 46			38673.887									
246442005	3-Nitrotoluene	137 > 46			38673.887									
246442005	PETN	361 > 62			38673.887			MM-	24-Mar-10	09:19:27				

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8358

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442005

Sample Amount 2

Moisture: 16.5

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03030015.wiff

Date Analyzed: 03-MAR-10 13:22

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

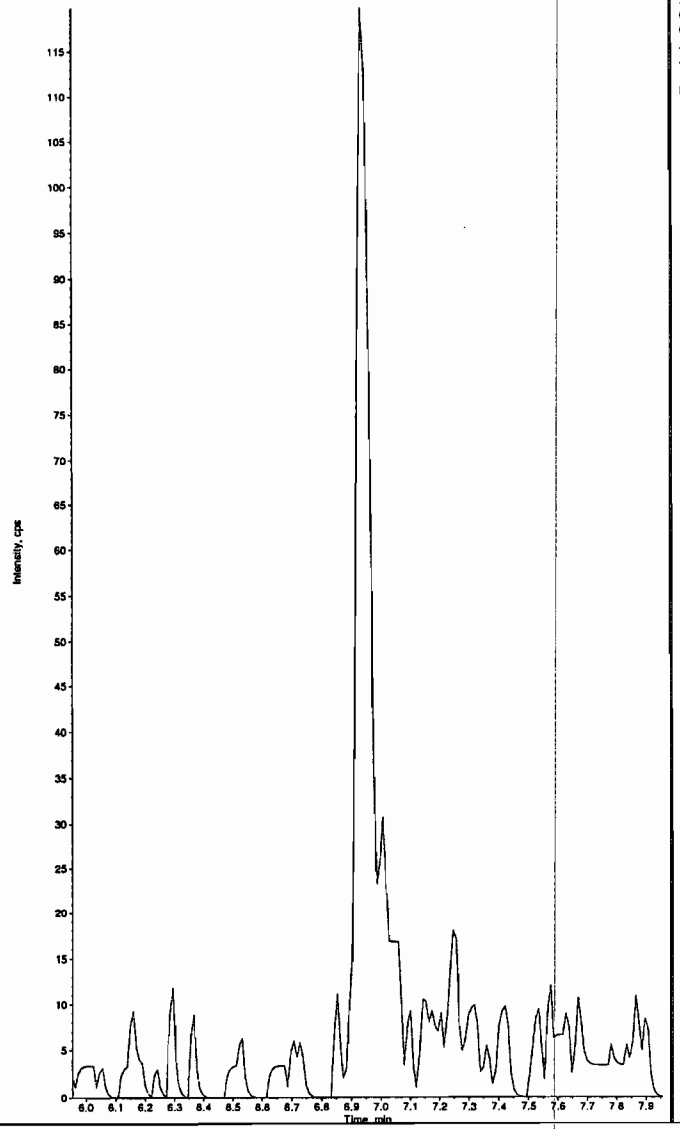
*Concentration =

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

Lcu 3/8/10

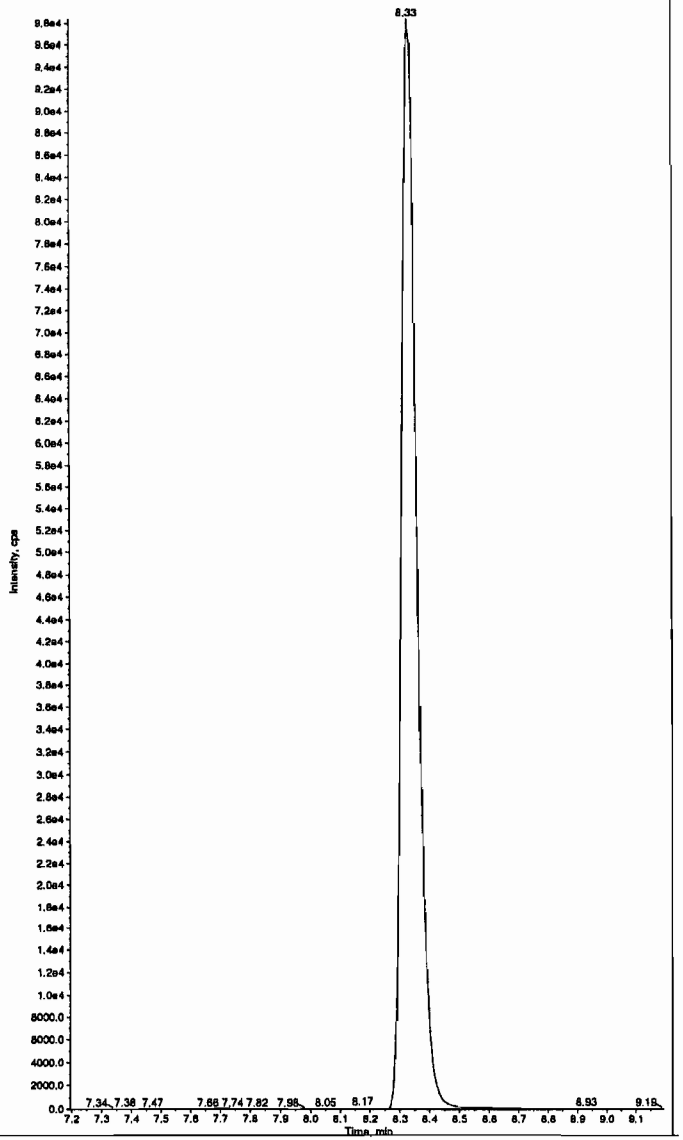
Sample Name: "246442005" Sample ID: "950087|2|LER" File: "EXS03030015.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:22:15 PM

Modified: No



Sample Name: "246442005" Sample ID: "950087|2|LER" File: "EXS03030015.wiff"
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: 3/3/2010
Acq. Time: 1:22:15 PM

Modified: No



Hmm 03/24/10

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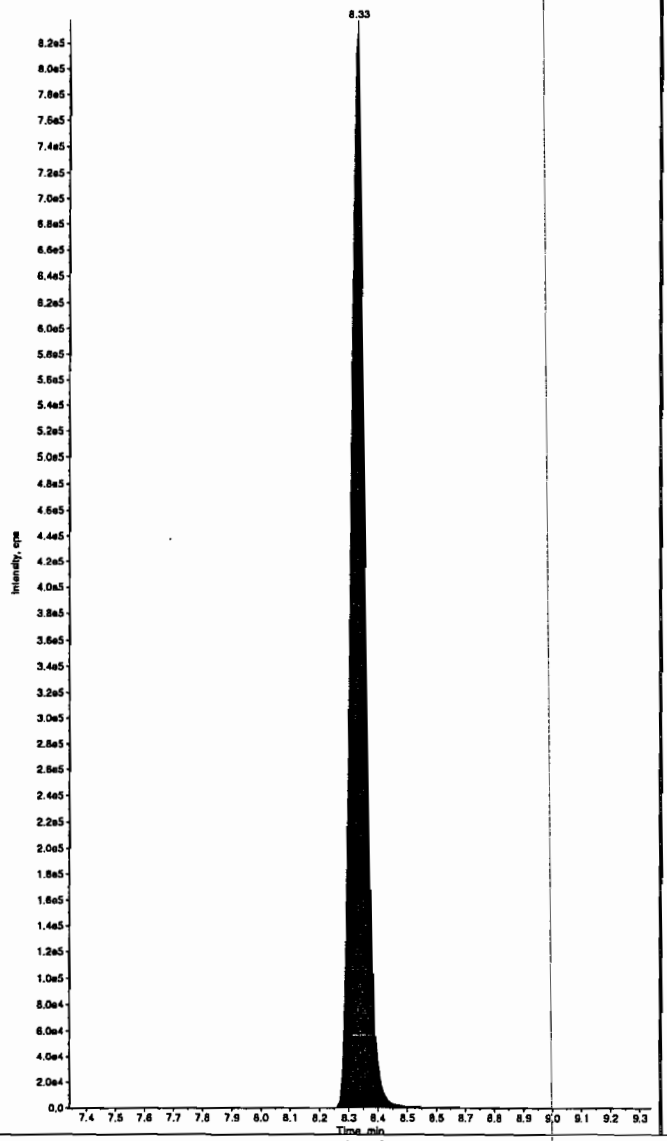
Sample Name: "246442005" Sample ID: "950087|2|LER" File: "EXS03030015.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 244. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:22:15 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

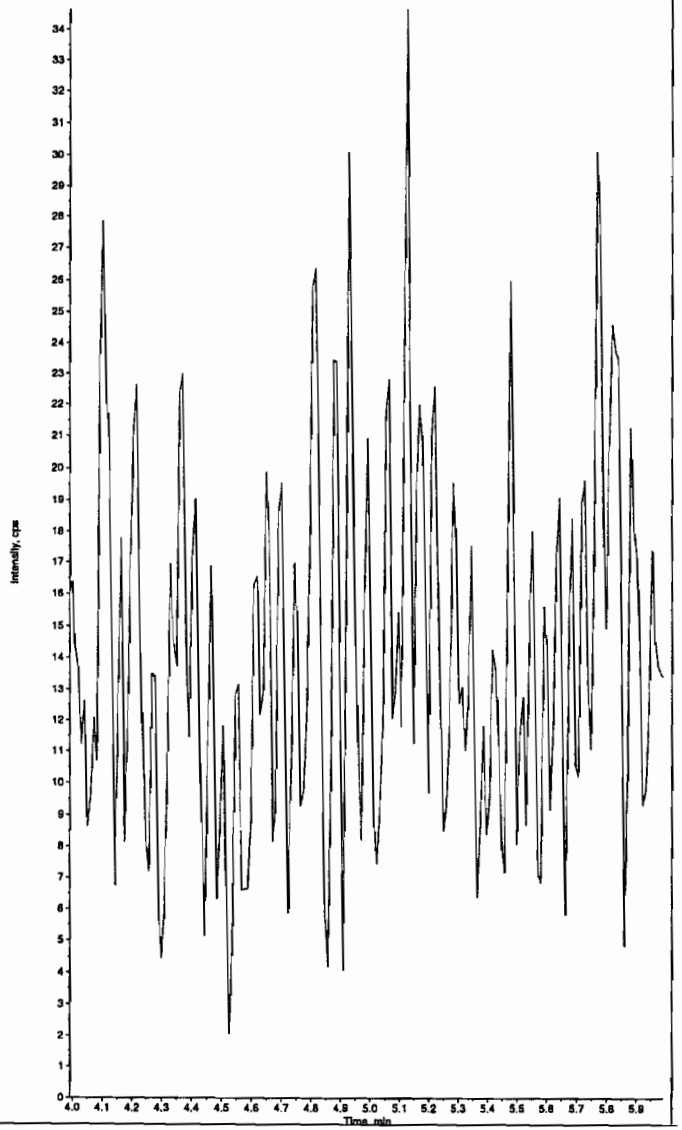
Int. Type: Valley
Retention Time: 8.33 min
Area: 2.96e+006 counts
Height: 838758.057 cps
Start Time: 8.17 min
End Time: 8.70 min



Sample Name: "246442005" Sample ID: "950087|2|LER" File: "EXS03030015.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:22:15 PM

Modified: No



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

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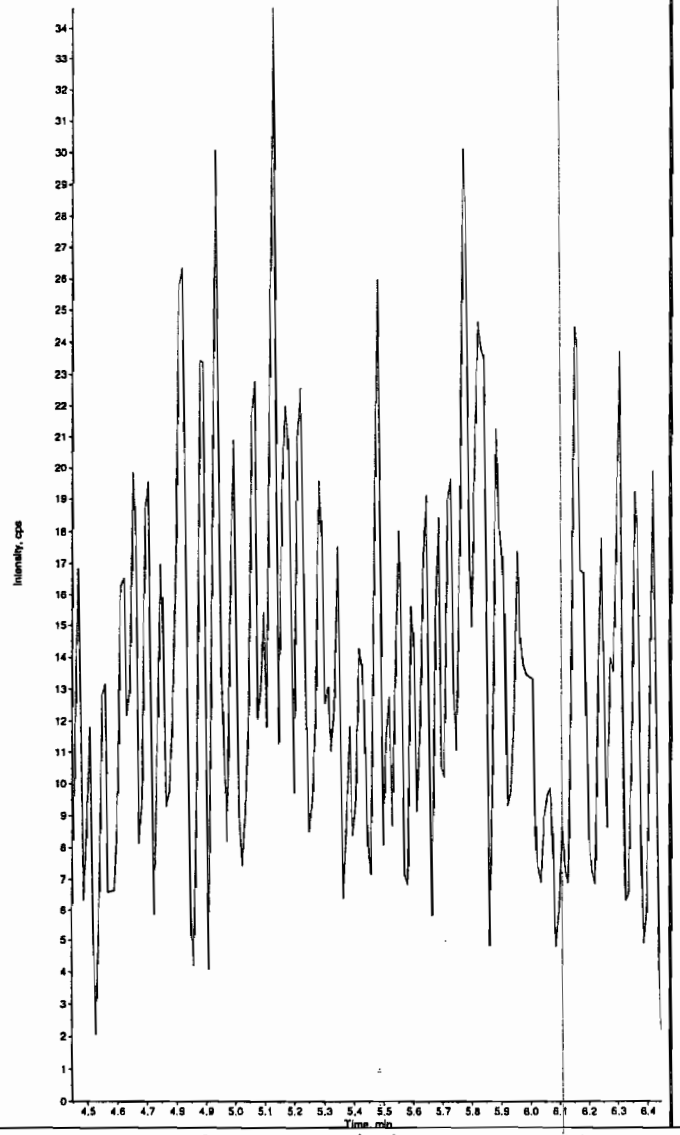
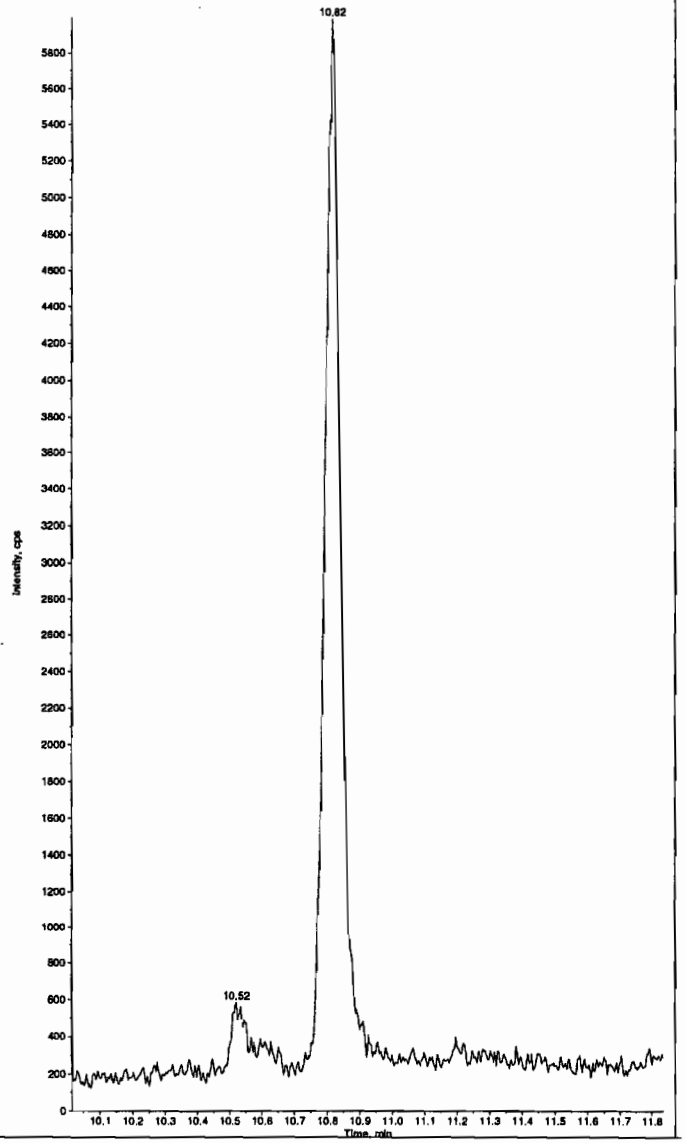
Sample Name: "246442005" Sample ID: "950087|2|LER" File: "EXS03030015.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:22:15 PM
Modified: No



Sample Name: "246442005" Sample ID: "950087|2|LER" File: "EXS03030015.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:22:15 PM
Modified: No



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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8360

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442006

Sample Amount 2

Moisture: 27.4

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323046a

Date Analyzed: 24-MAR-10 07:15

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 =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

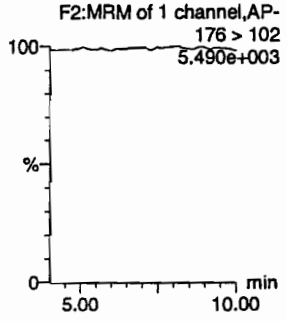
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323046a
Date: 24-Mar-2010
Time: 07:15:58
ID: 246442006
Vial: 2:4,E

LANL | 950087 | Solid | 21

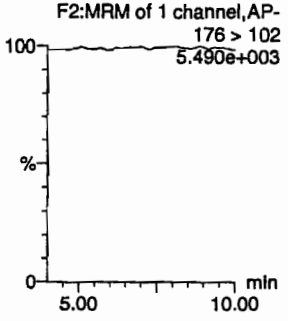
MM 3/24/10

Page 720 of 949

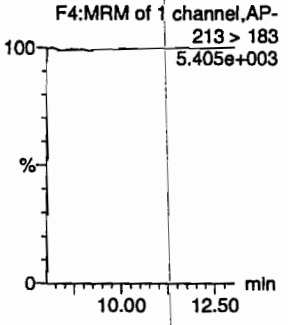
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.490e+003



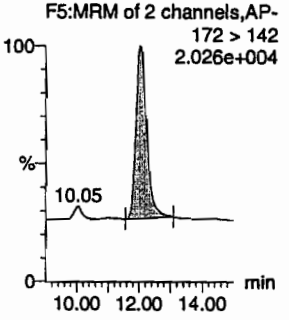
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.490e+003



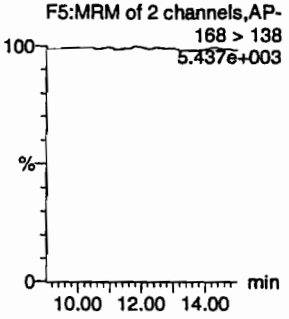
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.405e+003



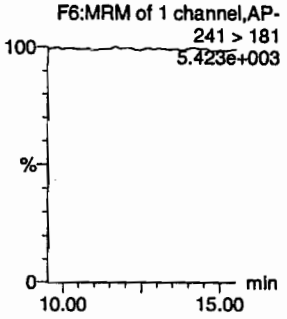
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.026e+004



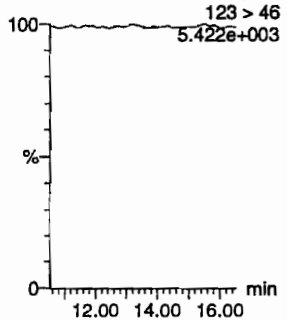
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.437e+003



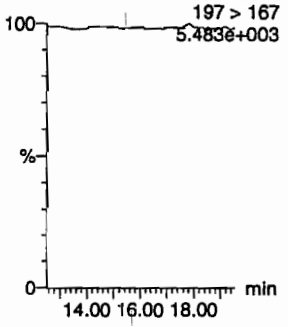
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.423e+003



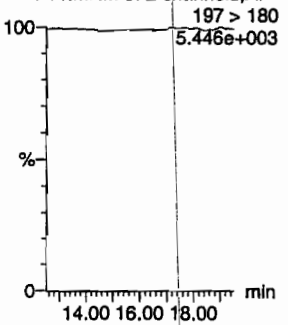
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.422e+003



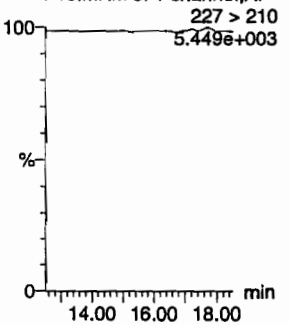
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.483e+003



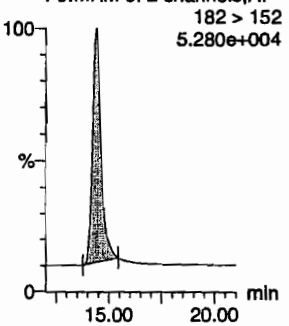
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.446e+003



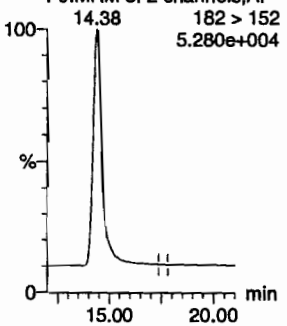
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.449e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.280e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.38
182 > 152
5.280e+004



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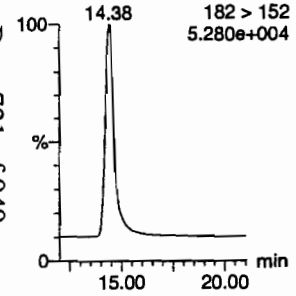
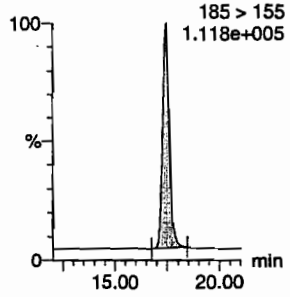
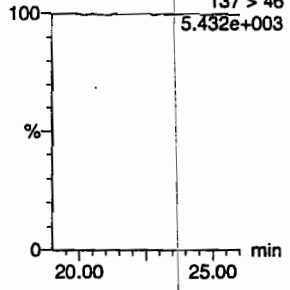
24-dinitrotoluene



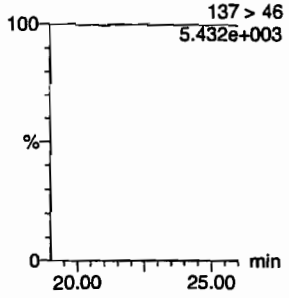
26-dinitrotoluene-d3



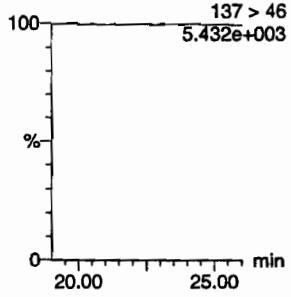
2-Nitrotoluene



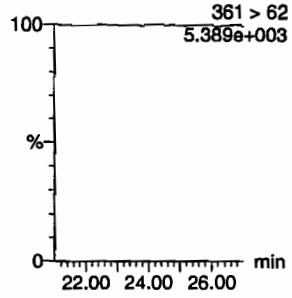
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
246442006	HMX	176 > 102			6042.680									
246442006	RDX	176 > 102			6042.680									
246442006	135-Trinitrobenzene	213 > 183			6042.680									
246442006	13-Dinitrobenzene-d4	172 > 142	12.03	6042.680		6042.680	6042.680	bb			548.9082	109.8	9.8	526.1
246442006	13-Dinitrobenzene	168 > 138			6042.680									
246442006	Tetryl	241 > 181			6042.680									
246442006	Nitrobenzene	123 > 46			6042.680									
246442006	4-Amino-26-dinitrotoluene	197 > 167			40819.230									
246442006	2-Amino-46-dinitrotoluene	197 > 180			40819.230									
246442006	246-Trinitrotoluene	227 > 210			40819.230									
246442006	34-dinitrotoluene	182 > 152	14.38	22320.711	40819.230	22320.711	273.409	bb			258.2053	103.3	3.3	1366.5
246442006	26-dinitrotoluene	182 > 152			40819.230			MM-	24-Mar-10	09:25:40				
246442006	24-dinitrotoluene	182 > 152			40819.230									
246442006	26-dinitrotoluene-d3	185 > 155	17.42	40819.230		40819.230	40819.230	bb			592.7759	118.6	18.6	2701.0
246442006	2-Nitrotoluene	137 > 46			40819.230									
246442006	4-Nitrotoluene	137 > 46			40819.230									
246442006	3-Nitrotoluene	137 > 46			40819.230									
246442006	PETN	361 > 62			40819.230									

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8360

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 246442006

Sample Amount 2

Moisture: 27.4

Amount Units g

Date Received: 06-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03030016.wiff

Date Analyzed: 03-MAR-10 13:37

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 =

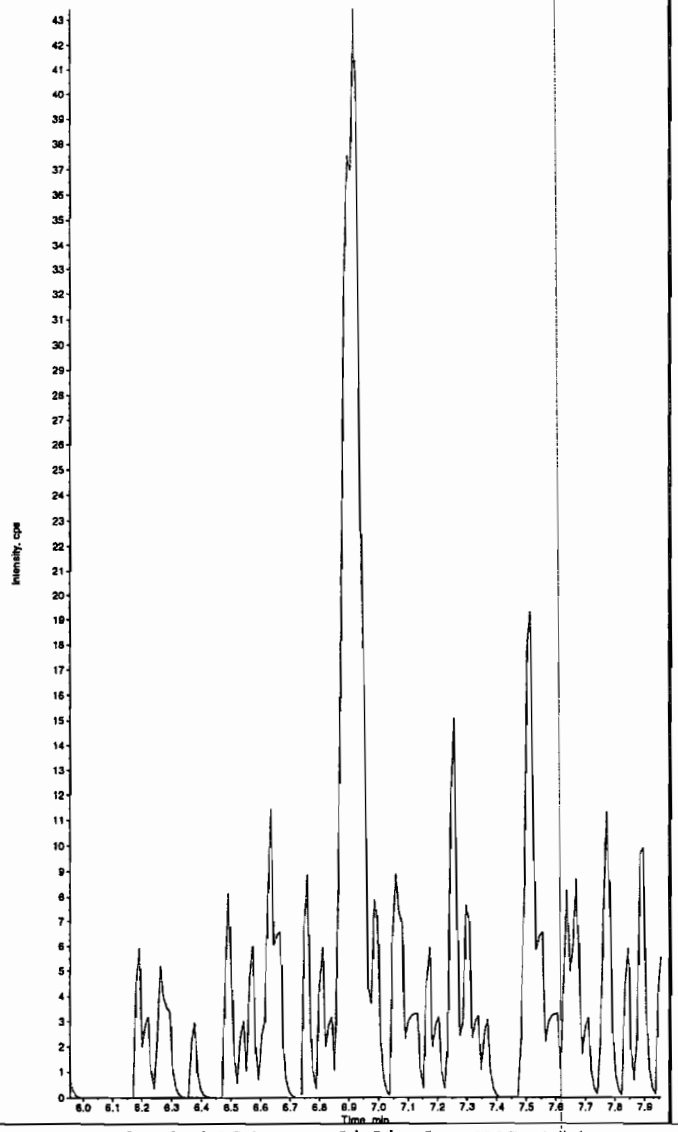
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Ran 3/8/10

Sample Name: "246442006" Sample ID: "950087|2|LER" File: "EXS03030016.wiff"
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: 3/3/2010
Acq. Time: 1:37:59 PM

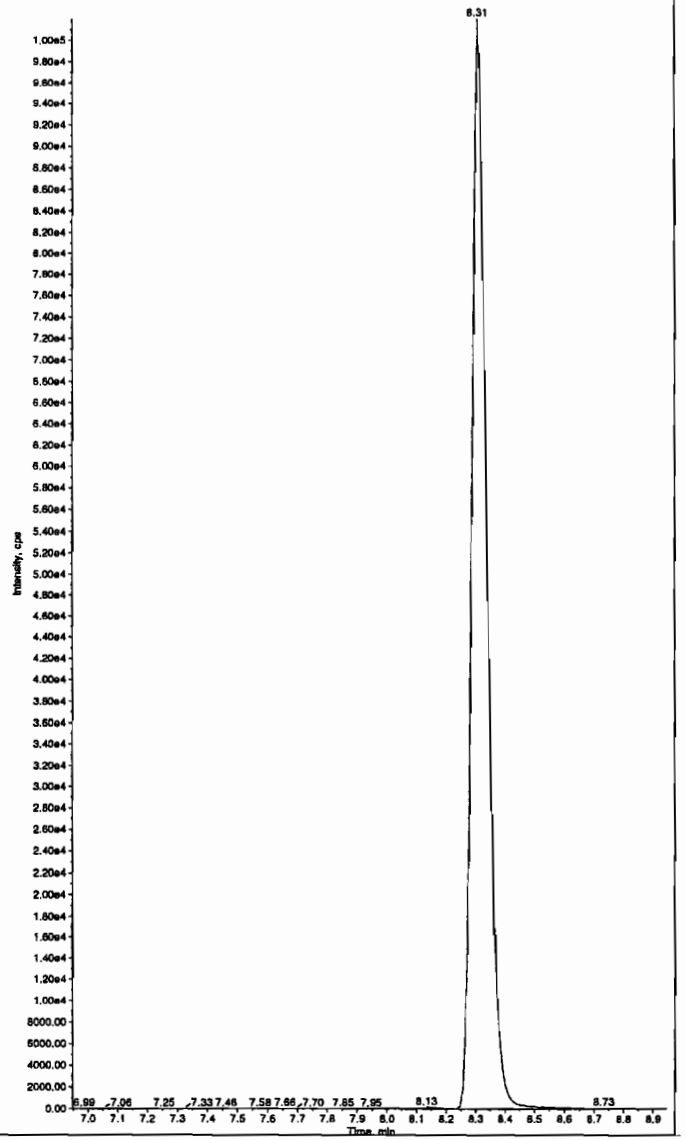
Modified: No



Sample Name: "246442006" Sample ID: "950087|2|LER" File: "EXS03030016.wiff"
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: 3/3/2010
Acq. Time: 1:37:59 PM

Modified: Yes



HMW 03/24/10

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

Page 223 of 949

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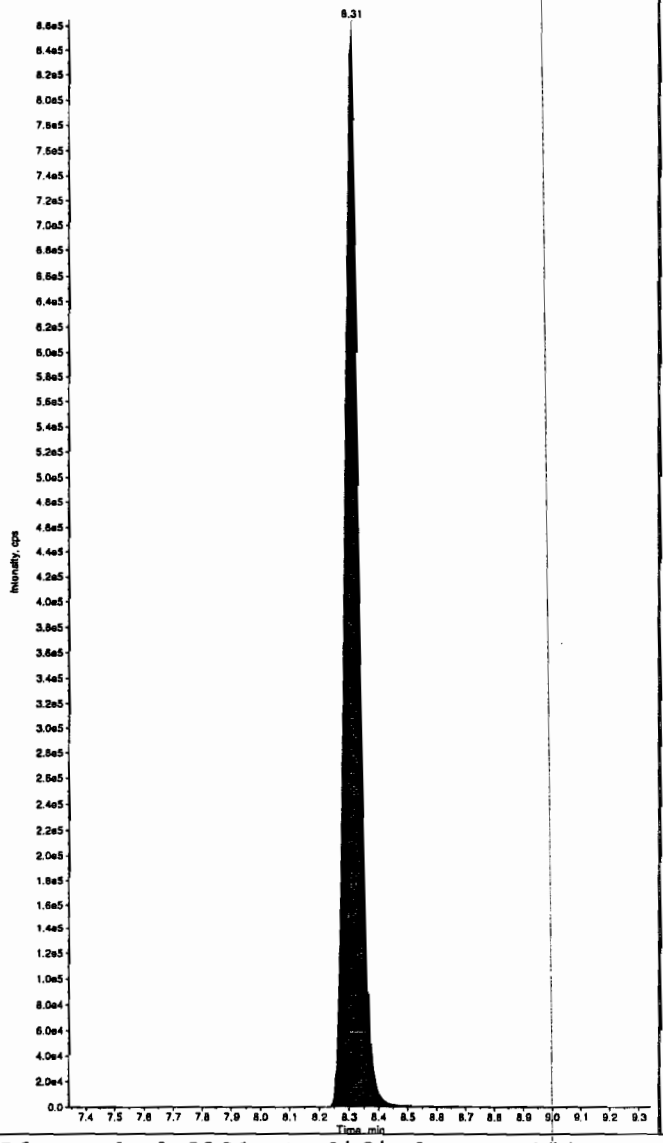
Sample Name: "246442006" Sample ID: "950087|2|LER" File: "EXS03030016.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 245. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:37:59 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

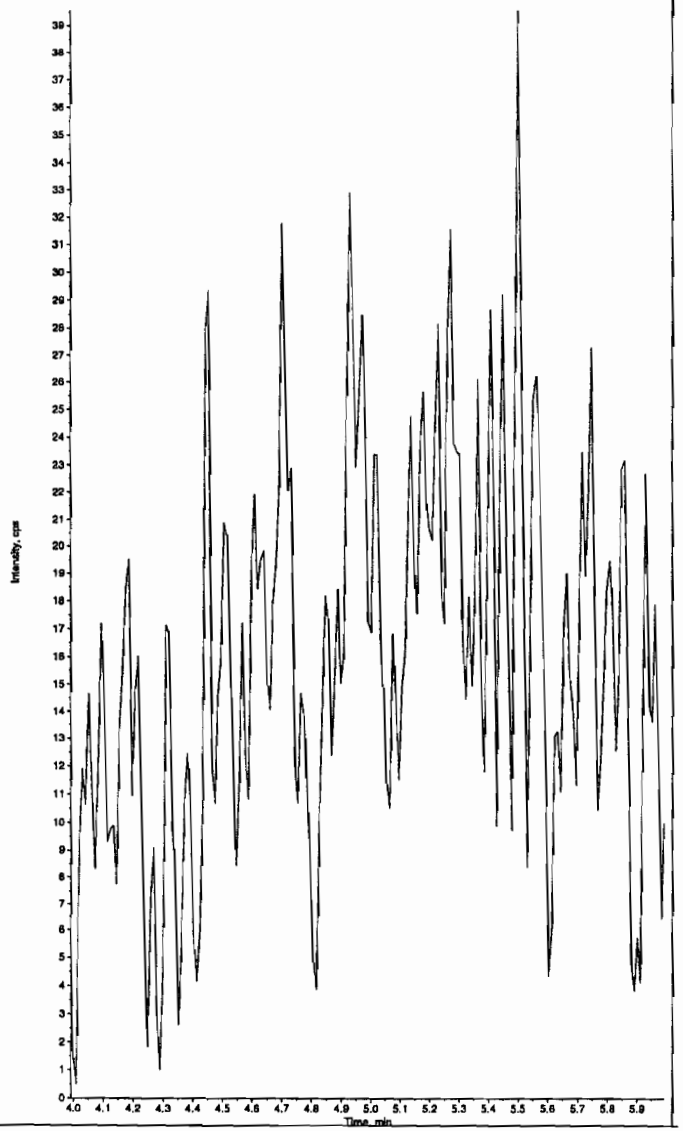
Int. Type: Valley
Retention Time: 8.31 min
Area: 2.98e+006 counts
Height: 865035.156 cps
Start Time: 8.22 min
End Time: 8.69 min



Sample Name: "246442006" Sample ID: "950087|2|LER" File: "EXS03030016.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/3/2010
Acq. Time: 1:37:59 PM

Modified: No



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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
Primary Analytes								
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
Secondary Analytes								
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)

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Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1623

Lab Code: GEL

Run Date: 01-MAR-10,03-MAR-10,23-MAR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Calibration Level:	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0323003a	EXP0323004a	EXP0323005a	EXP0323006a	EXP0323007a	EXP0323008a			
Parmname									
1,3,5-Trinitrobenzene	5.032	4.994	4.537	4.6	4.618	4.575	4.726	4.748	
1,3-Dinitrobenzene-d4	11.754	12.906	11.01	10.6	10.117	9.664	11.009	10.69	
2,4,6-Trinitrotoluene	.424	.368	.38	.453	.443	.394	0.410	8.493	
2,4-Dinitrotoluene	.262	.293	.273	.265	.282	.289	0.277	4.587	
2,6-Dinitrotoluene	1.112	1.205	1.106	1.163	1.182	1.174	1.157	3.448	
2,6-Dinitrotoluene-d3	82.805	73.801	67.998	67.968	62.879	57.717	68.861	12.666	
2-Amino-4,6-dinitrotoluene	.508	.507	.537	.569	.587	.577	0.548	6.473	
3,4-Dinitrotoluene	.915	.995	1.13	1.083	1.133	1.097	1.059	8.15	
4-Amino-2,6-dinitrotoluene	.347	.327	.35	.36	.369	.368	0.354	4.504	
HMX	5.311	4.69	5.261	6.242	6.079	5.497	5.513	10.373	
Nitrobenzene	.686	.654	.672	.653	.651	.615	0.655	3.64	
RDX	3.229	2.859	3.253	3.567	3.545	3.415	3.311	7.936	
Tetryl	1.129	1.002	1.143	1.22	1.115	1.273	1.147	8.152	
m-Dinitrobenzene	1.371	1.208	1.328	1.336	1.345	1.381	1.328	4.687	
m-Nitrotoluene	.051	.048	.054	.052	.048	.049	0.050	4.981	
o-Nitrotoluene	.076	.089	.078	.08	.079	.082	0.081	5.666	
p-Nitrotoluene	.03	.046	.039	.039	.039	.04	0.039	13.369	

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

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Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1623

Lab Code: GEL

Run Date: 01-MAR-10,03-MAR-10,23-MAR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

Calibration Level:	1	2	3	4	5	6	Slope	Intercept	COD	Q
Data File:	EXP0323003a	EXP0323004a	EXP0323005a	EXP0323006a	EXP0323007a	EXP0323008a				
Parmname										
PETN	2318.77	4444.01	14597.9	26021	45749.6	53868.3	.909	16.24	.9989	

Linear fit : Y=mx +b
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)
* Values outside of QC Limit

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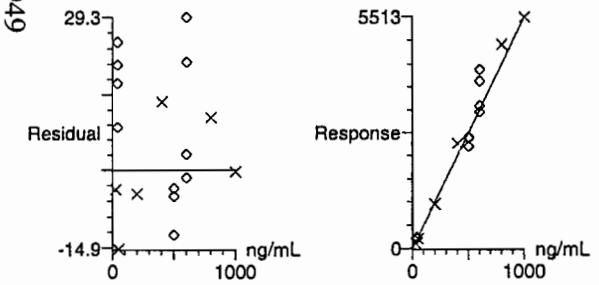
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

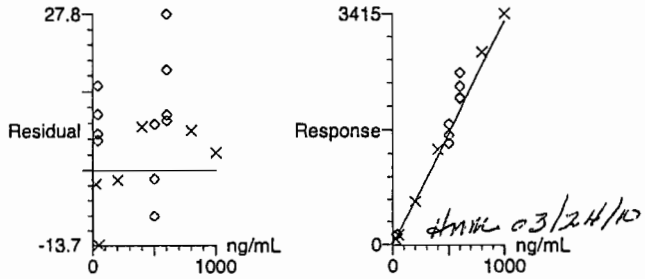
Method: C:\MASSLYNX\New_Exp.PRO\MethDB\032310expa.mdb, Time: Tue Mar 23 14:06:48 2010
Calibration: Untitled, Time: Wed Mar 24 09:29:41 2010

Page 730 of 949

Compound name: HMX
Response Factor: 5.51311
RRF SD: 0.571885, % Relative SD: 10.3732
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: RDX
Response Factor: 3.31129
RRF SD: 0.26278, % Relative SD: 7.93586
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



LMA 3/24/10

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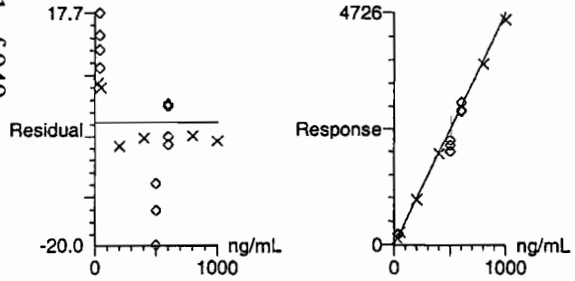
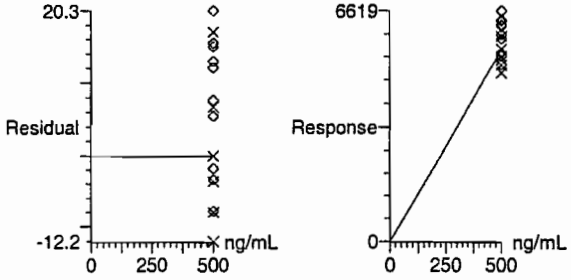
Compound name: 135-Trinitrobenzene
Response Factor: 4.7262
RRF SD: 0.224421, % Relative SD: 4.74845
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 13-Dinitrobenzene-d4
Response Factor: 11.0085
RRF SD: 1.17683, % Relative SD: 10.6902
Response type: External Std, Area
Curve type: RF



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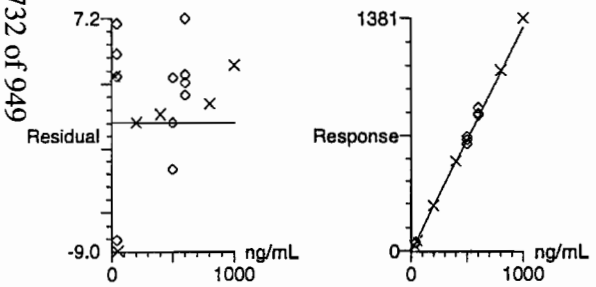
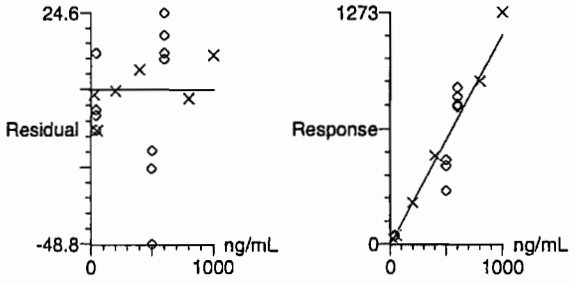
Page 732 of 949

Compound name: 13-Dinitrobenzene
Response Factor: 1.32795
RRF SD: 0.0622466, % Relative SD: 4.68744
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: Tetryl
Response Factor: 1.14683
RRF SD: 0.0934919, % Relative SD: 8.15221
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



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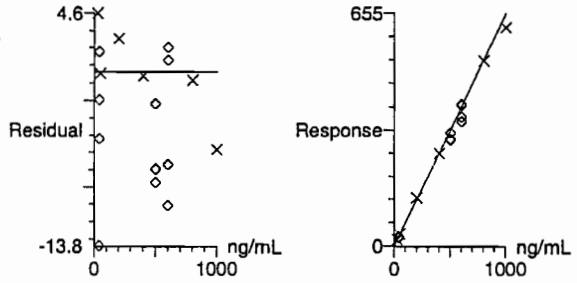
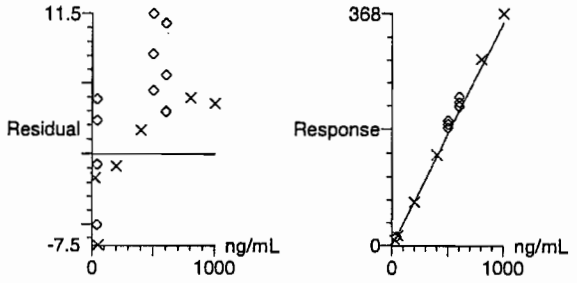
Compound name: Nitrobenzene
Response Factor: 0.655153
RRF SD: 0.0238446, % Relative SD: 3.63954
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 4-Amino-26-dinitrotoluene
Response Factor: 0.353375
RRF SD: 0.0159163, % Relative SD: 4.50407
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



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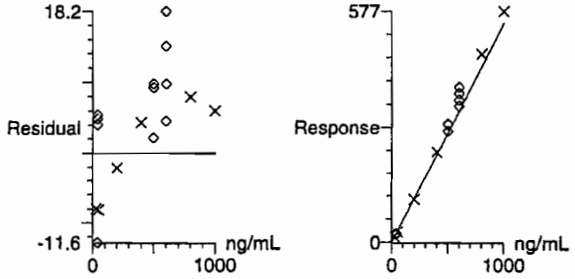
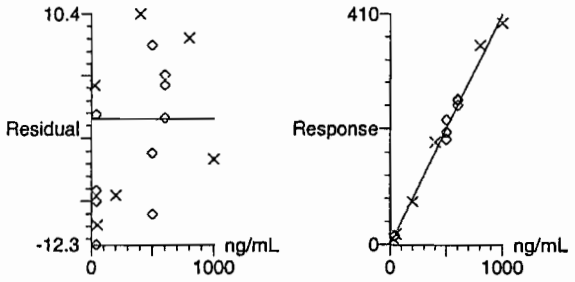
Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.547585
RRF SD: 0.0354456, % Relative SD: 6.47307
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 246-Trinitrotoluene
Response Factor: 0.410071
RRF SD: 0.0348258, % Relative SD: 8.49263
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



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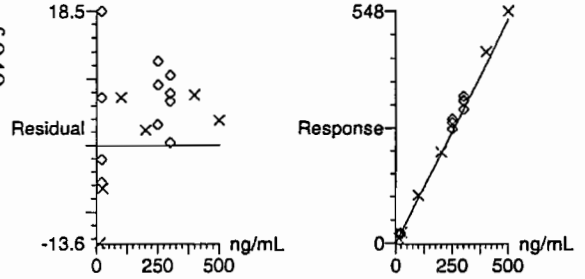
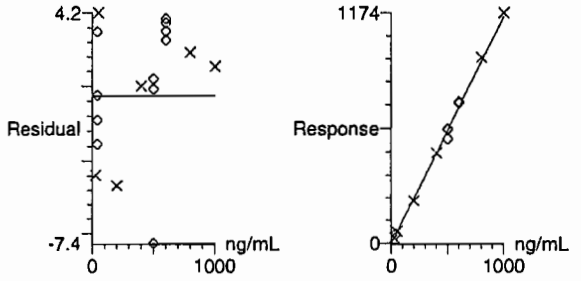
Page 735 of 949

Compound name: 34-dinitrotoluene
Response Factor: 1.05888
RRF SD: 0.0862978, % Relative SD: 8.14988
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 26-dinitrotoluene
Response Factor: 1.15701
RRF SD: 0.0398889, % Relative SD: 3.44758
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



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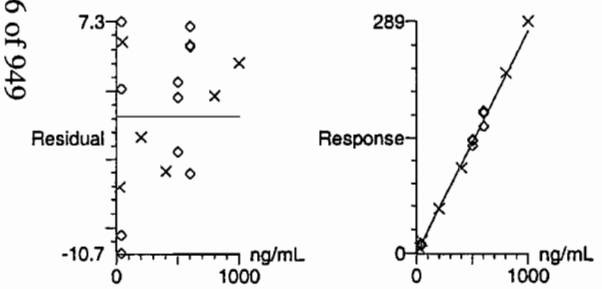
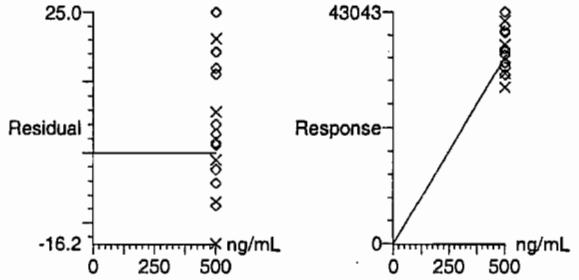
Page 736 of 949

Compound name: 24-dinitrotoluene
Response Factor: 0.277495
RRF SD: 0.0127293, % Relative SD: 4.58723
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 26-dinitrotoluene-d3
Response Factor: 68.8611
RRF SD: 8.72211, % Relative SD: 12.6662
Response type: External Std, Area
Curve type: RF



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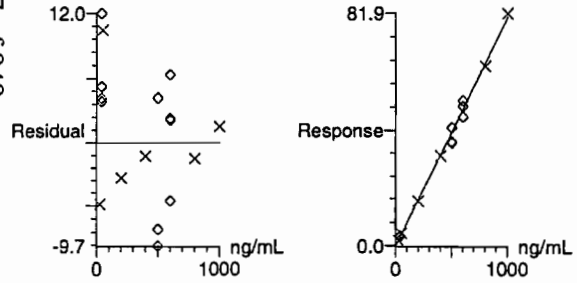
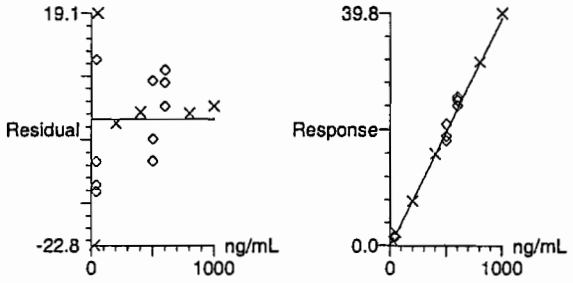
Compound name: 2-Nitrotoluene
Response Factor: 0.0806432
RRF SD: 0.00456922, % Relative SD: 5.66596
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 4-Nitrotoluene
Response Factor: 0.0389409
RRF SD: 0.00520599, % Relative SD: 13.369
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



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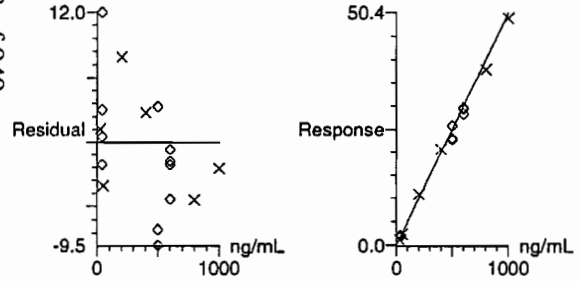
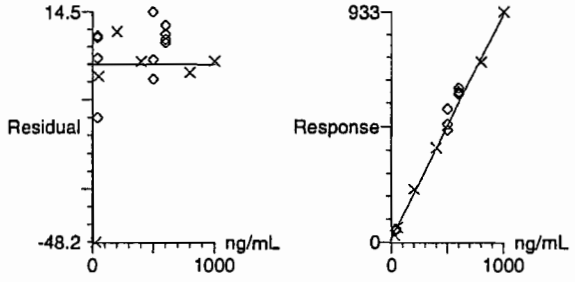
Page 738 of 949

Compound name: 3-Nitrotoluene
Response Factor: 0.0504212
RRF SD: 0.00251151, % Relative SD: 4.98107
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: PETN
Correlation coefficient: r = 0.999467, r^2 = 0.998933
Calibration curve: 0.908775 * x + 16.2395
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: Null, Axis trans: None



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7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0323010a

Analysis Date: 23-MAR-10 13:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	585.721	98	
1,3-Dinitrobenzene-d4	500	460.269	92	
2,4,6-Trinitrotoluene	600	600.545	100	
2,4-Dinitrotoluene	600	572.778	95	
2,6-Dinitrotoluene	600	623.33	104	
2,6-Dinitrotoluene-d3	500	452.986	91	
2-Amino-4,6-dinitrotoluene	600	624.798	104	
3,4-Dinitrotoluene	300	301.181	100	
4-Amino-2,6-dinitrotoluene	600	620.044	103	
HMX	600	591.583	99	
Nitrobenzene	600	611.463	102	
PETN	600	650.548	108	
RDX	600	659.349	110	
Tetryl	600	669.49	112	
m-Dinitrobenzene	600	616.682	103	
m-Nitrotoluene	600	589.179	98	
o-Nitrotoluene	600	638.057	106	
p-Nitrotoluene	600	638.597	106	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

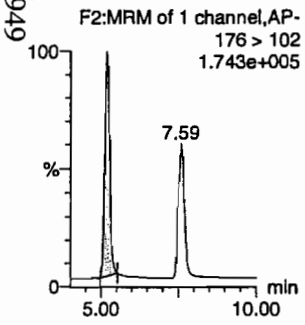
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323010a
Date: 23-Mar-2010
Time: 13:34:21
ID: WXX100323-07ICV
Vial: 1:1,B

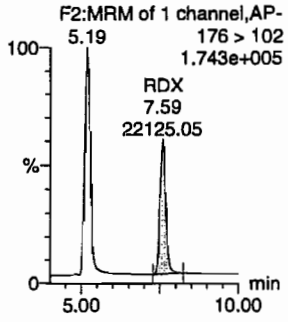
Page 740 of 949

MHP 3/24/10

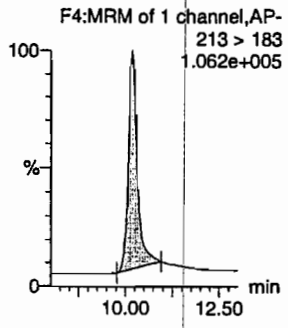
HMX



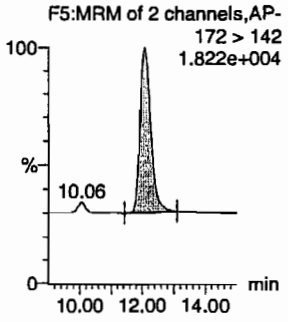
RDX



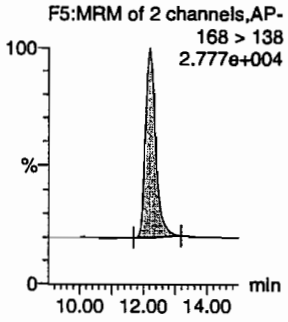
135-Trinitrobenzene



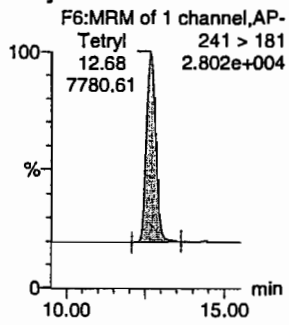
13-Dinitrobenzene-d4



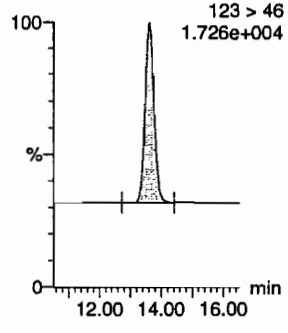
13-Dinitrobenzene



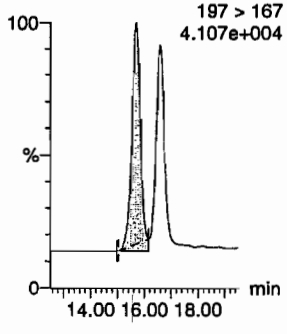
Tetryl



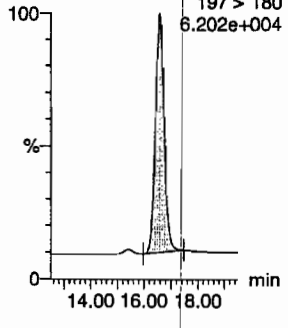
Nitrobenzene



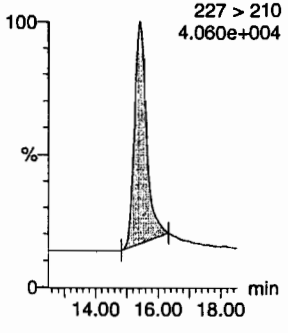
4-Amino-26-dinitrotoluene



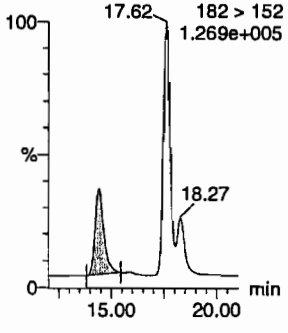
2-Amino-46-dinitrotoluene



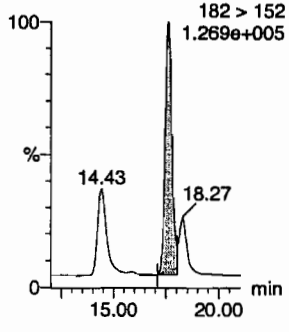
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



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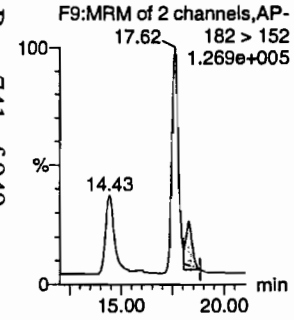
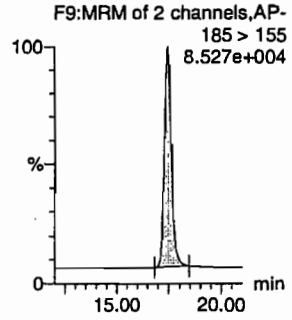
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

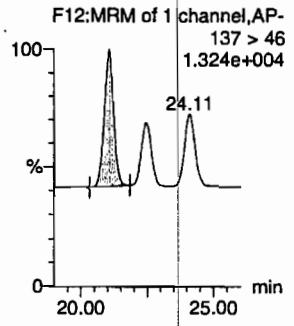
24-dinitrotoluene



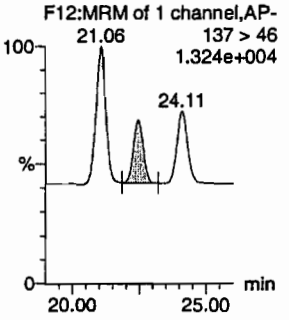
26-dinitrotoluene-d3



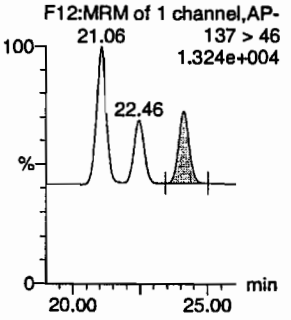
2-Nitrotoluene



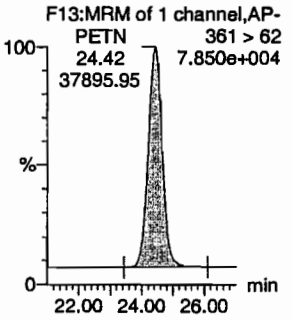
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100323-07ICV	HMX	176 > 102	5.19	33050.891	5066.889	33050.891	3261.458	bb			591.5827	98.6	-1.4	3114.5
WXX100323-07ICV	RDX	176 > 102	7.59	22125.049	5066.889	22125.049	2183.297	bb			659.3486	109.9	9.9	1844.8
WXX100323-07ICV	135-Trinitrobenzene	213 > 183	10.20	28052.678	5066.889	28052.678	2768.235	bb			585.7207	97.6	-2.4	680.8
WXX100323-07ICV	13-Dinitrobenzene-d4	172 > 142	12.07	5066.889		5066.889	5066.889	bb			460.2688	92.1	-7.9	654.9
WXX100323-07ICV	13-Dinitrobenzene	168 > 138	12.20	8298.761	5066.889	8298.761	818.921	bb			616.6825	102.8	2.8	626.3
WXX100323-07ICV	Tetryl	241 > 181	12.68	7780.609	5066.889	7780.609	767.790	bb			669.4895	111.6	11.6	568.8
WXX100323-07ICV	Nitrobenzene	123 > 46	13.63	4059.608	5066.889	4059.608	400.602	bb			611.4632	101.9	1.9	364.9
WXX100323-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.71	13669.333	31193.129	13669.333	219.108	MM	24-Mar-10	09:20:52	620.0440	103.3	3.3	363.1
WXX100323-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.58	21344.205	31193.129	21344.205	342.130	bb			624.7977	104.1	4.1	830.0
WXX100323-07ICV	246-Trinitrotoluene	227 > 210	15.41	15363.621	31193.129	15363.621	246.266	bb			600.5453	100.1	0.1	915.0
WXX100323-07ICV	34-dinitrotoluene	182 > 152	14.43	19895.975	31193.129	19895.975	318.916	bb			301.1814	100.4	0.4	986.3
WXX100323-07ICV	26-dinitrotoluene	182 > 152	17.62	44992.969	31193.129	44992.969	721.200	MM	24-Mar-10	09:24:13	623.3301	103.9	3.9	2899.5
WXX100323-07ICV	24-dinitrotoluene	182 > 152	18.27	9915.864	31193.129	9915.864	158.943	MM	24-Mar-10	09:27:39	572.7777	95.5	-4.5	617.5
WXX100323-07ICV	26-dinitrotoluene-d3	185 > 155	17.44	31193.129		31193.129	31193.129	bb			452.9859	90.6	-9.4	2738.7
WXX100323-07ICV	2-Nitrotoluene	137 > 46	21.06	3210.082	31193.129	3210.082	51.455	bb			638.0566	106.3	6.3	1369.5
WXX100323-07ICV	4-Nitrotoluene	137 > 46	22.46	1551.393	31193.129	1551.393	24.868	bb			638.5974	106.4	6.4	626.4
WXX100323-07ICV	3-Nitrotoluene	137 > 46	24.11	1853.314	31193.129	1853.314	29.707	bb			589.1787	98.2	-1.8	714.8
WXX100323-07ICV	PETN	361 > 62	24.42	37895.953	31193.129	37895.953	607.441	bb			650.5475	108.4	8.4	14931.2

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GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/23/10
Time of Injection: 1334
Standard Number: WXX100323-07ICV
Data File: EXP0323010a

HMX	98.6
RDX	109.9
135-TNB	97.6
13-DNB	102.8
Tetryl	111.6
Nitrobenzene	101.9
4A-26-DNT	103.3
2A-46-DNT	104.1
246-TNT	100.1
34-DNT(surr)	100.4
26-DNT	103.9
24-DNT	95.5
2-NT	106.3
4-NT	106.4
3-NT	98.2
PETN	108.4
Total	1649.0
Average	103.1

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1623

Lab Code: GEL

Run Date: 01-MAR-10,03-MAR-10,23-MAR-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8O

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS03010003.wiff	EXS03010004.wiff	EXS03010005.wiff	EXS03010006.wiff	EXS03010007.wiff	EXS03010008.wiff	EXS03010009.wiff					
Parmname:												
2,4-Diamino-6-nitrotoluene	63600	134000	332000	632000	1000000	1320000	2520000	-9230	1370	-.055	.9999	
2,6-Diamino-4-nitrotoluene	91200	188000	474000	956000	1400000	1830000	3670000	6230	1860	-.014	.9999	
3,4-Dinitrotoluene	296000	604000	1440000	2810000	4210000	5760000	10400000	-77900	13100	-2.67	.999	
3,5-Dinitroaniline	436000	871000	2060000	3980000	5810000	7200000	13000000	75700	8100	-.824	.9998	
TATB	50800	111000	287000	578000	908000	1260000	2600000	-14200	1190	.058	.9999	
tris(o-cresyl) phosphate	864000	1800000	4120000	7770000	11400000	14300000	24200000	110000	16500	-2.25	1	

Quadradic 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

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

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.42e+004			
a1	1.19e+003			
a2	0.0579			

Correlation coefficient 0.9999
Use Area

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

Fit	Quadratic	Weighting	None	Iterate No
a0	7.57e+004			
a1	8.1e+003			
a2	-0.824			

Correlation coefficient 0.9998
Use Area

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

Fit	Quadratic	Weighting	None	Iterate No
a0	-7.79e+004			
a1	1.31e+004			
a2	-2.67			

Correlation coefficient 0.9990
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	6.23e+003			
a1	1.86e+003			
a2	-0.0141			

Correlation coefficient 0.9999
Use Area

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

Lcn 3/3/10

dhmc 03/04/10

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Fit	Quadratic	Weighting	None
a0	-9.23e+003		
a1	1.37e+003		
a2	-0.0545		

Iterate No

Correlation coefficient 0.9999
Use Area

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

Fit	Quadratic	Weighting	None
a0	1.1e+005		
a1	1.65e+004		
a2	-2.25		

Iterate No

Correlation coefficient 1.0000
Use Area

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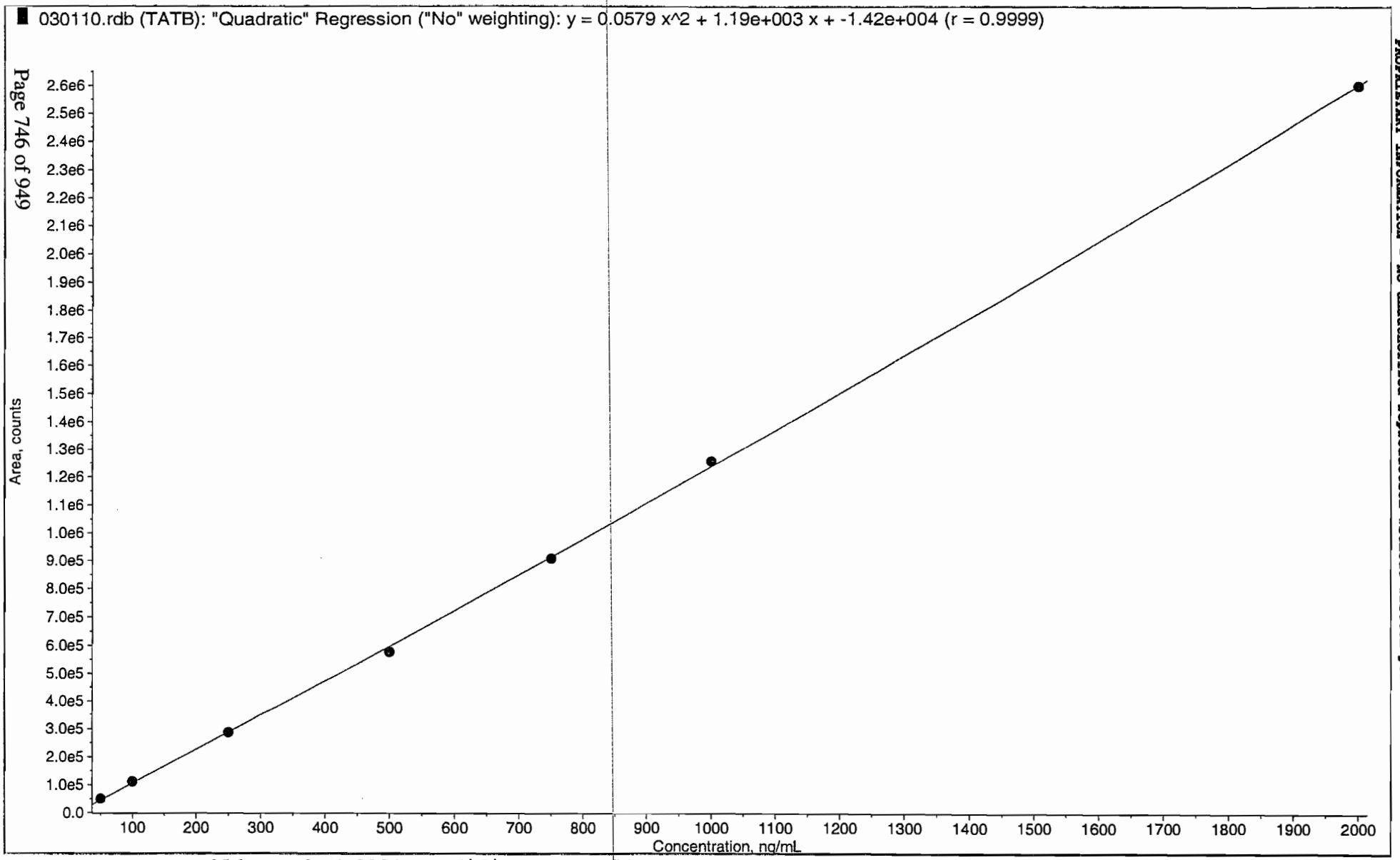

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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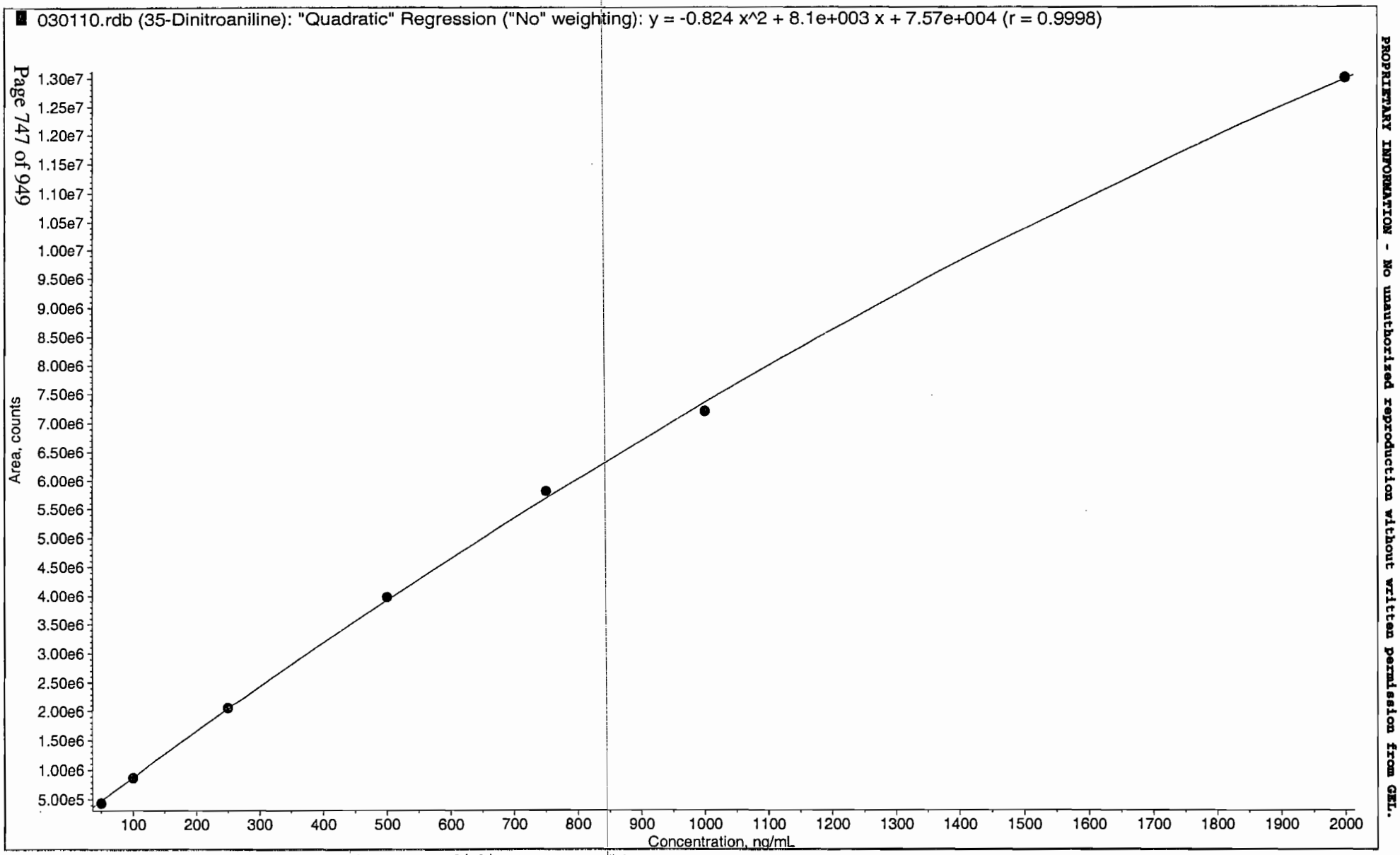

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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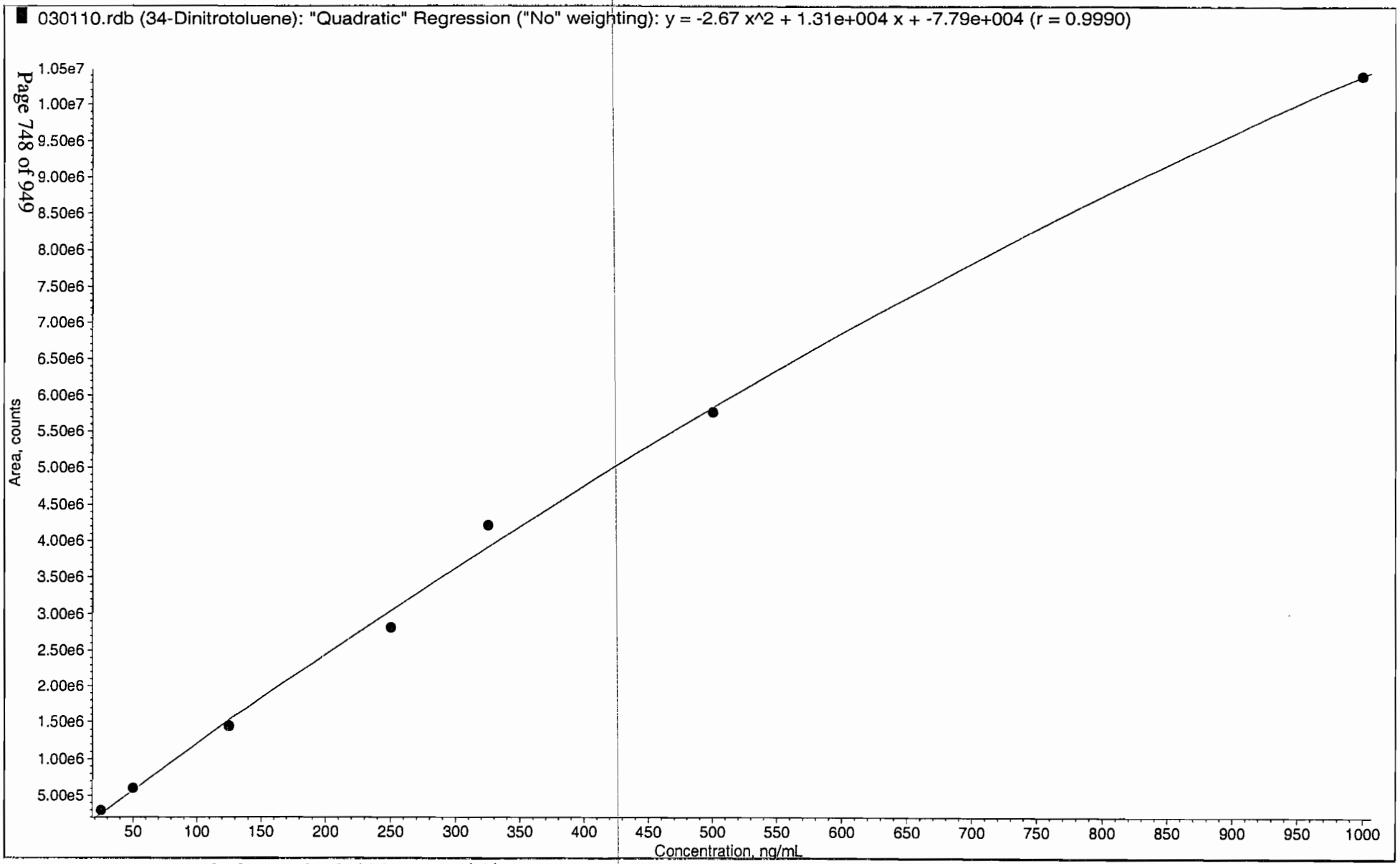

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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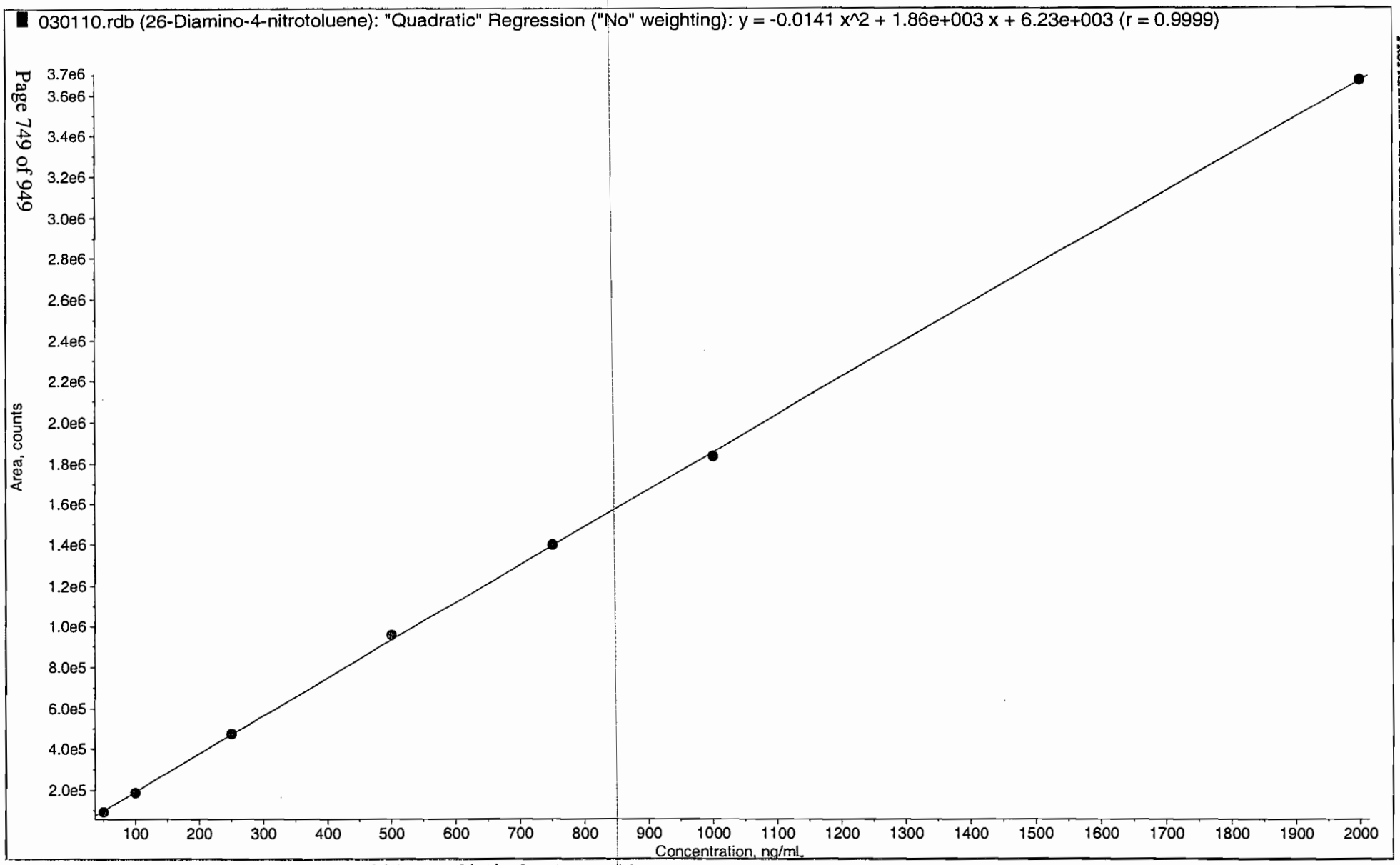

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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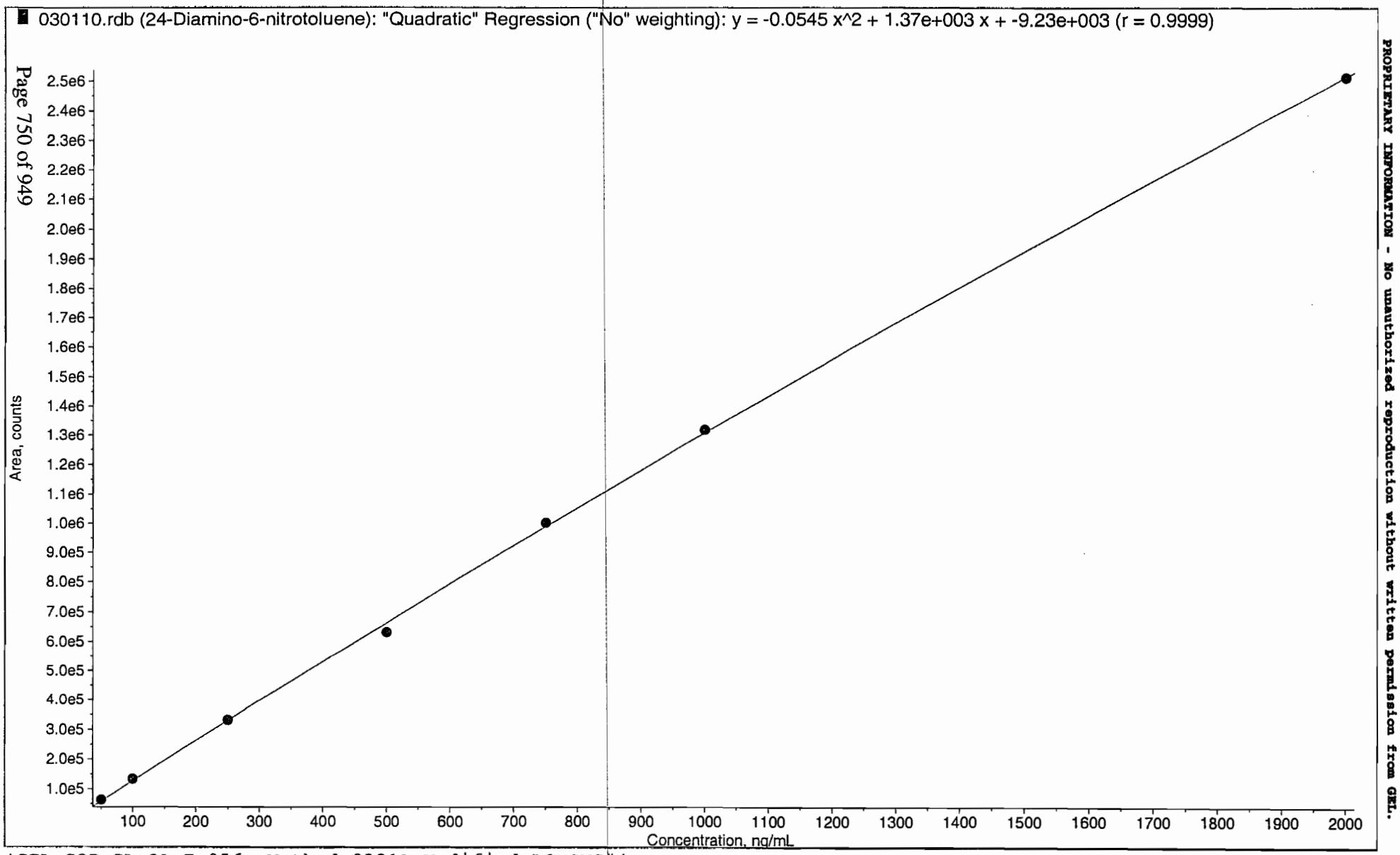

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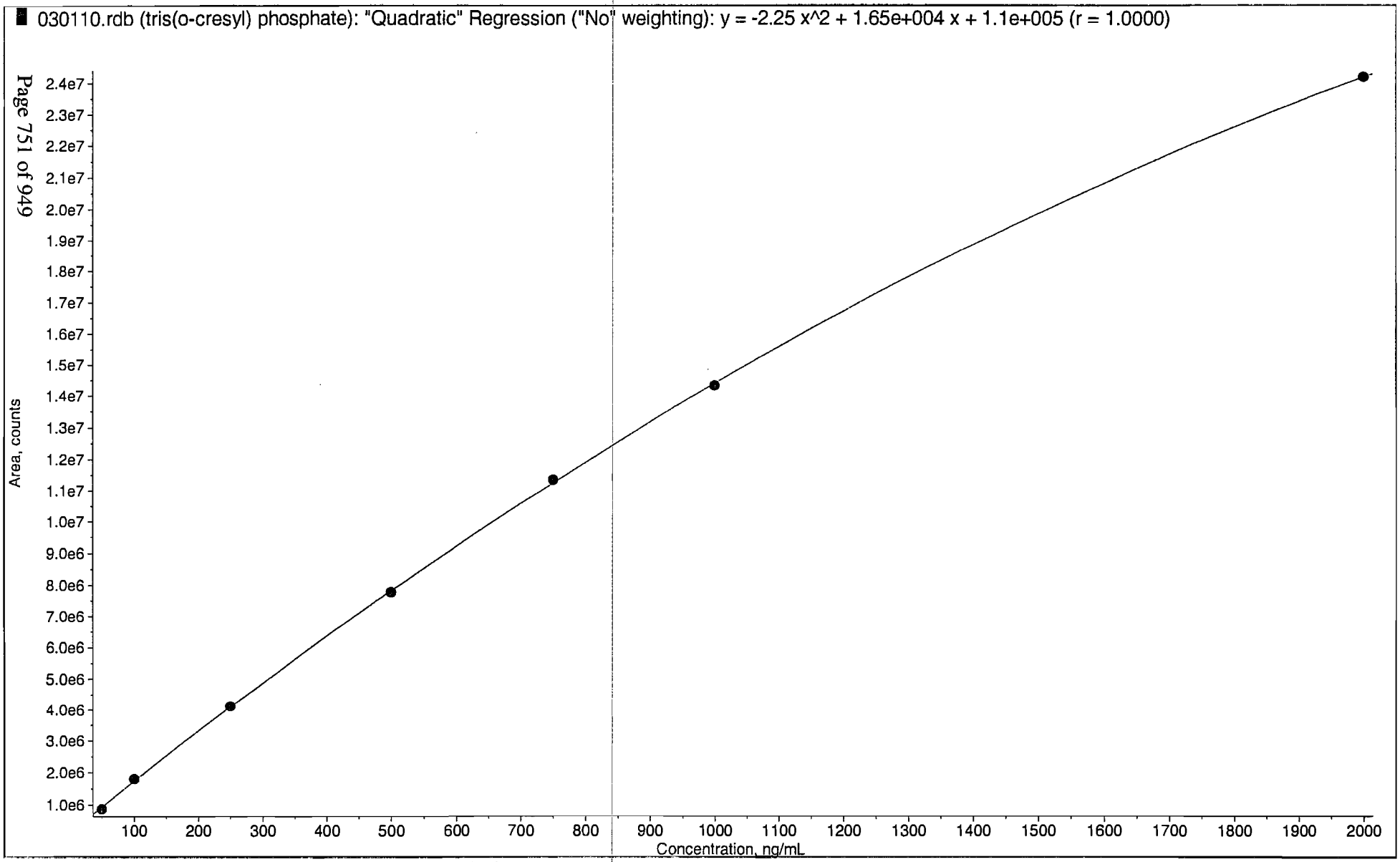

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS03010011.wiff

Analysis Date: 01-MAR-10 11:40

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	503	101	
2,6-Diamino-4-nitrotoluene	500	483	97	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	506	101	
TATB	500	495	99	
tris(o-cresyl) phosphate	500	480	96	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

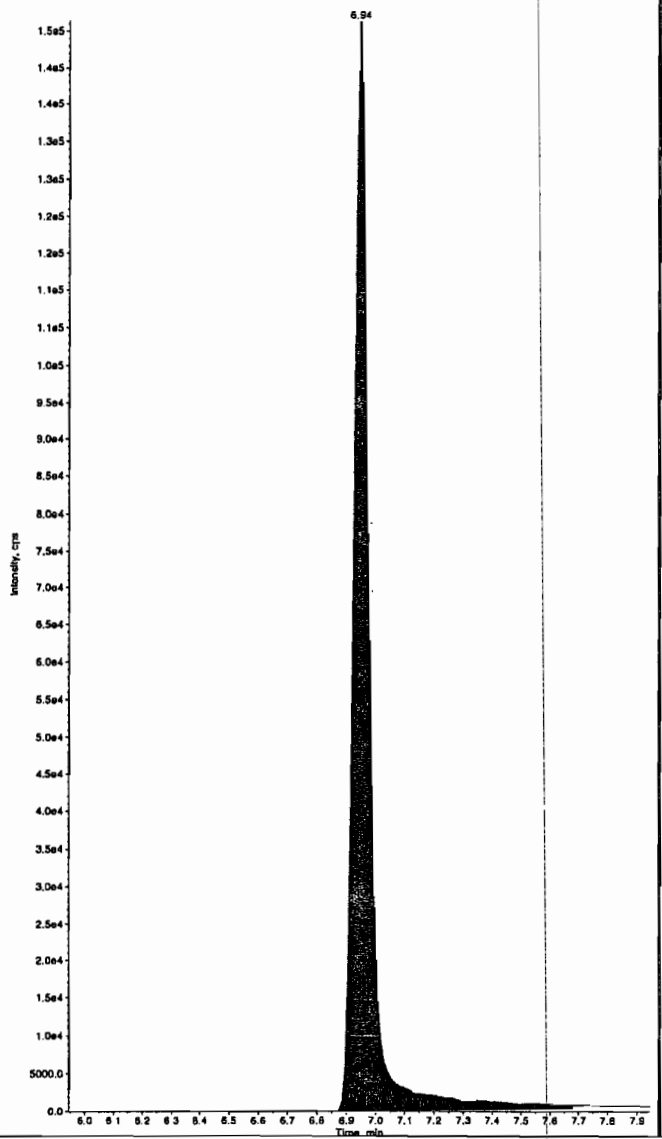
Lan 3/3/10

Sample Name: "WXX100301-26ICV" Sample ID: "|1|LER" File: "EXS03010011.wiff"
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: 495. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 11:40:26 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 6.94 min
Area: 5.91e+005 counts
Height: 146373.276 cps
Start Time: 6.85 min
End Time: 7.68 min

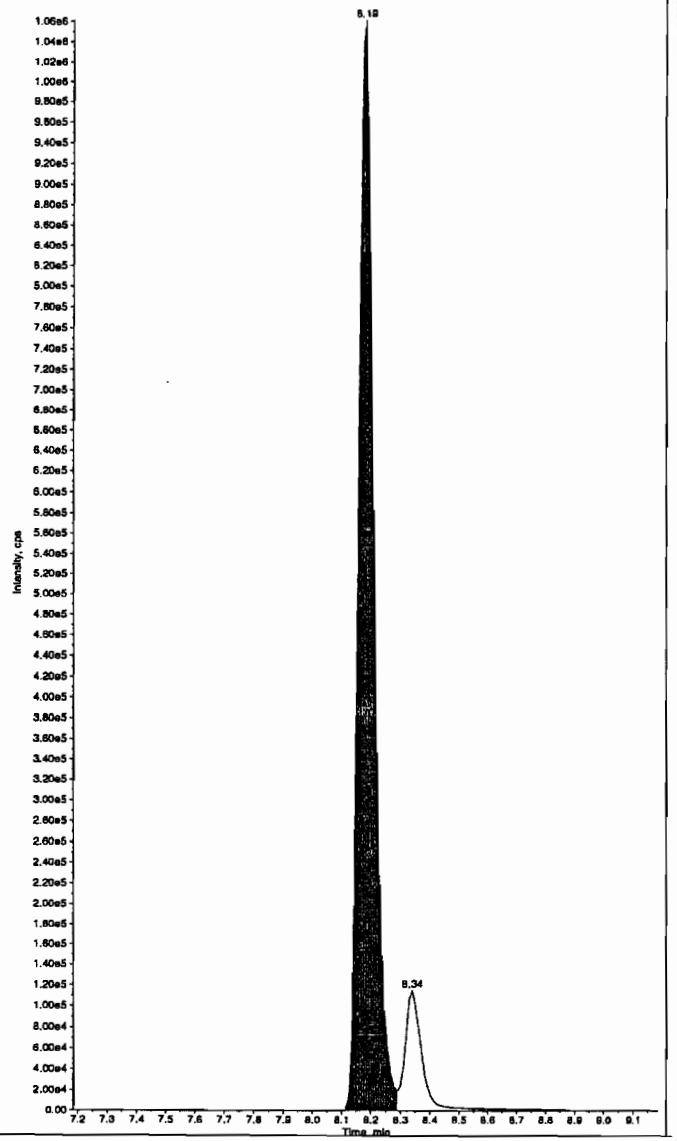


Sample Name: "WXX100301-26ICV" Sample ID: "|1|LER" File: "EXS03010011.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 506. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 11:40:26 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.19 min
Area: 3.96e+006 counts
Height: 1061462.891 cps
Start Time: 8.09 min
End Time: 8.29 min



hmm 03/04/10

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

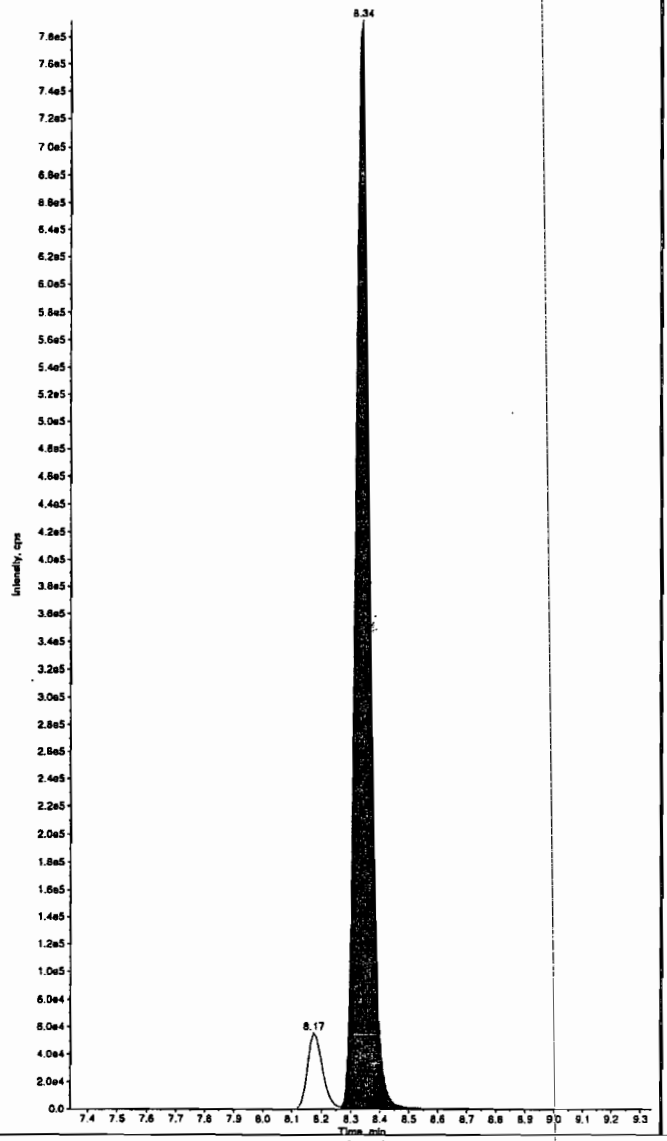
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100301-26ICV" Sample ID: "|1|LER" File: "EXS03010011.wiff"
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: 3/1/2010
Acq. Time: 11:40:26 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.34 min
Area: 2.82e+006 counts
Height: 792388.123 cps
Start Time: 8.27 min
End Time: 8.67 min

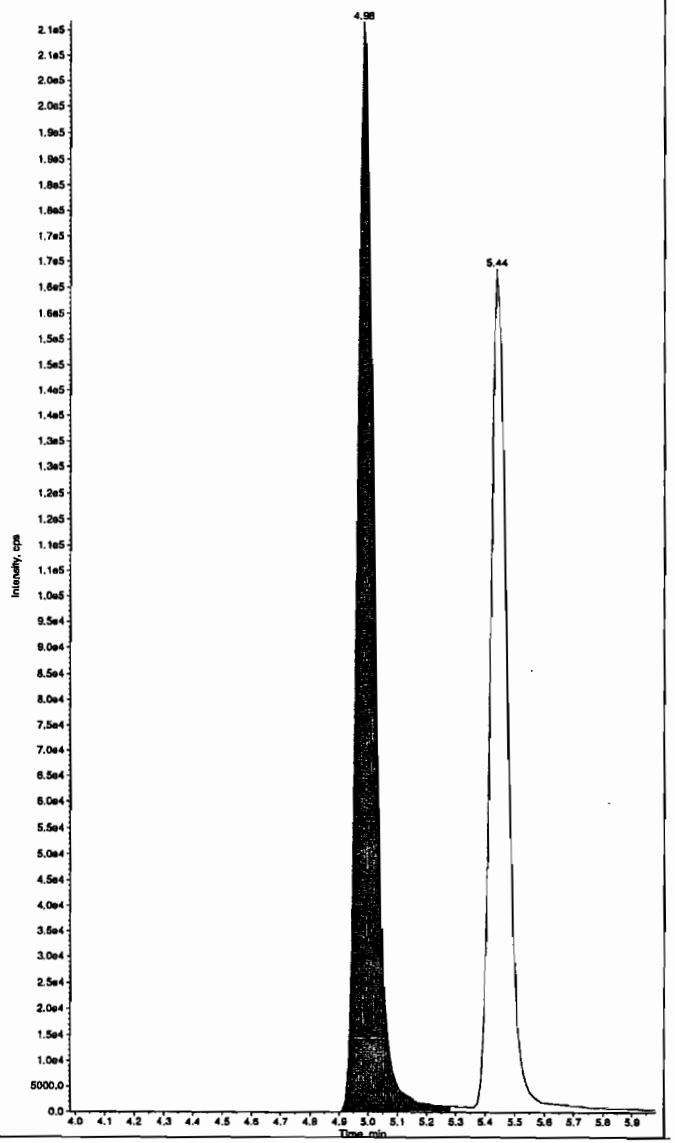


Sample Name: "WXX100301-26ICV" Sample ID: "|1|LER" File: "EXS03010011.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 483. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 11:40:26 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: 4.98 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.98 min
Area: 9.01e+005 counts
Height: 211703.171 cps
Start Time: 4.89 min
End Time: 5.28 min



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

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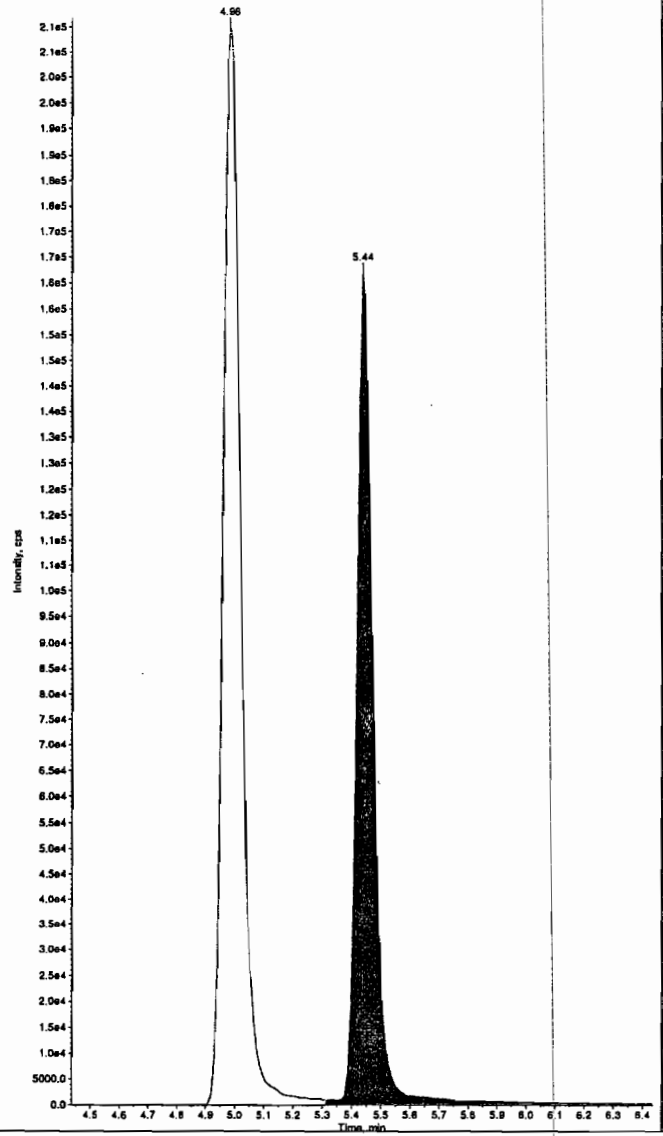
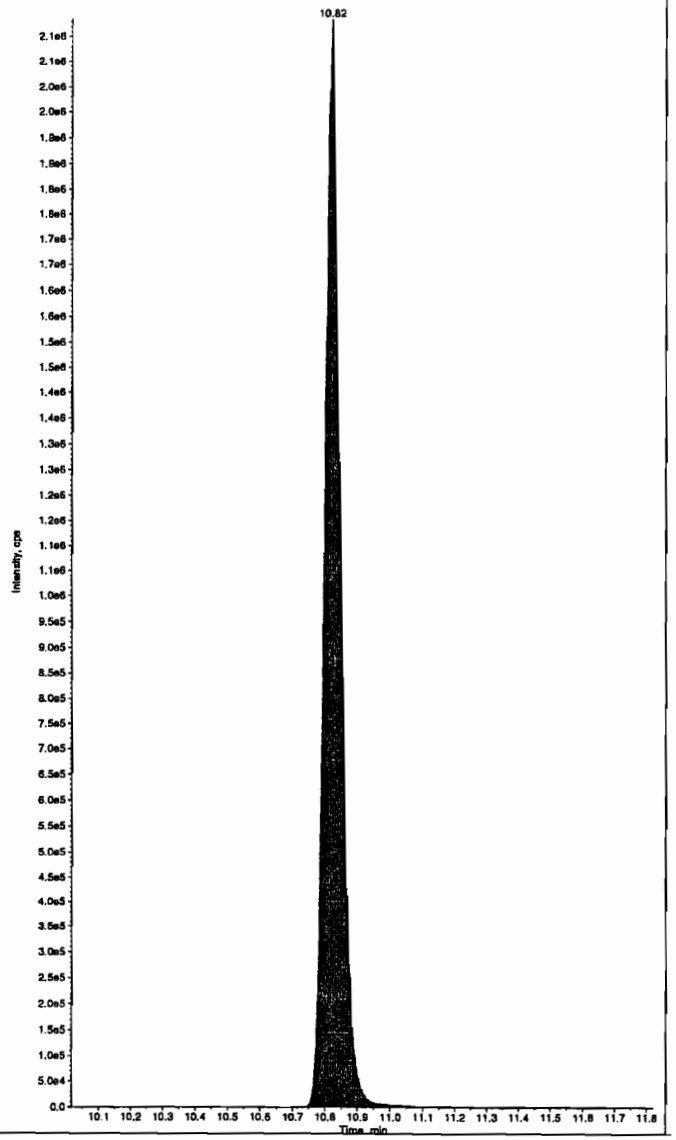
Sample Name: "WXX100301-26ICV" Sample ID: "[1]LER" File: "EXS03010011.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	503.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	11:40:26 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:	5.44	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.44	min
Area:	6.68e+005	counts
Height:	163585.648	cps
Start Time:	5.31	min
End Time:	6.14	min



Sample Name: "WXX100301-26ICV" Sample ID: "[1]LER" File: "EXS03010011.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	480.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	11:40:26 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:	7.53e+006	counts
Height:	2135354.004	cps
Start Time:	10.7	min
End Time:	11.2	min



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

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Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1623

Lab Code: GEL

Run Date: 01-MAR-10,03-MAR-10,23-MAR-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:	EXS03030003.wifl	EXS03030004.wifl	EXS03030005.wifl	EXS03030006.wifl	EXS03030007.wifl	EXS03030008.wifl	EXS03030009.wifl					
Parmname:												
2,4-Diamino-6-nitrotoluene	71900	155000	366000	738000	1100000	1460000	3350000	26600	1270	.196	.9999	
2,6-Diamino-4-nitrotoluene	104000	220000	508000	1030000	1580000	2020000	4520000	29000	1860	.189	.9998	
3,4-Dinitrotoluene	300000	612000	1470000	3020000	4280000	5440000	10200000	140	12800	-2.57	.9982	
3,5-Dinitroaniline	408000	874000	1980000	4050000	5730000	7220000	12600000	29700	8310	-1.02	.9999	
TATB	50600	108000	272000	620000	969000	1270000	2670000	-21800	1260	.043	.9999	
tris(o-cresyl) phosphate	846000	1660000	3870000	7570000	10700000	13800000	23100000	77300	15900	-2.19	1	

Quadradic 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

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

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.18e+004			
a1	1.26e+003			
a2	0.0432			

Correlation coefficient 0.9999
Use Area

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

Fit	Quadratic	Weighting	None	Iterate No
a0	2.97e+004			
a1	8.31e+003			
a2	-1.02			

Correlation coefficient 0.9999
Use Area

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

Fit	Quadratic	Weighting	None	Iterate No
a0	140			
a1	1.28e+004			
a2	-2.57			

Correlation coefficient 0.9982
Use Area

Peak Name: 26-Diamino-4-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	2.9e+004			
a1	1.86e+003			
a2	0.189			

Correlation coefficient 0.9998
Use Area

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

Ken 3/8/10

Anne 03/08/10

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Fit	Quadratic	Weighting	None
a0	2.66e+004		
a1	1.27e+003		
a2	0.196		

Correlation coefficient 0.9999
Use Area

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

Fit	Quadratic	Weighting	None
a0	7.73e+004		
a1	1.59e+004		
a2	-2.19		

Correlation coefficient 1.0000
Use Area

Iterate No

Iterate No

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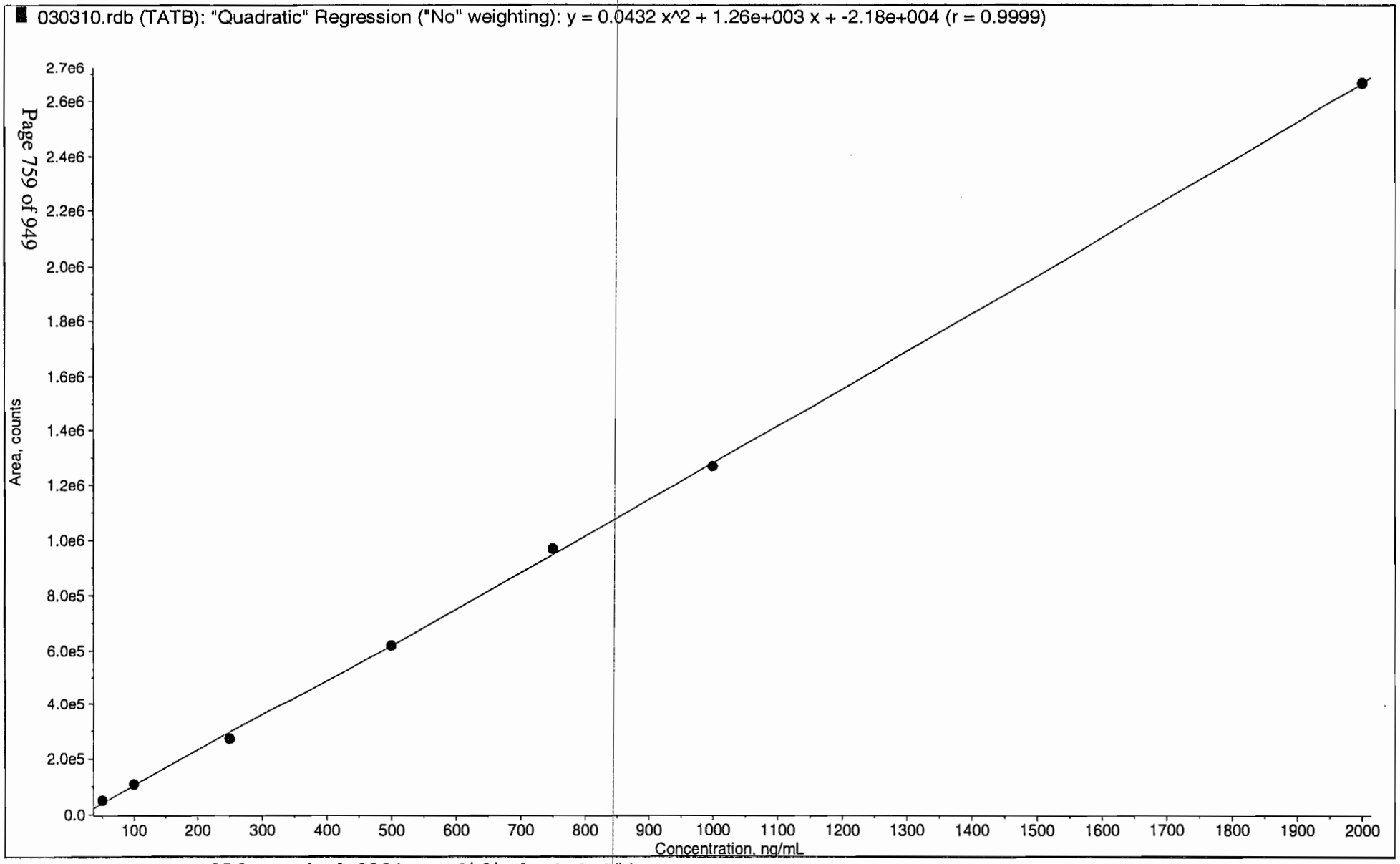

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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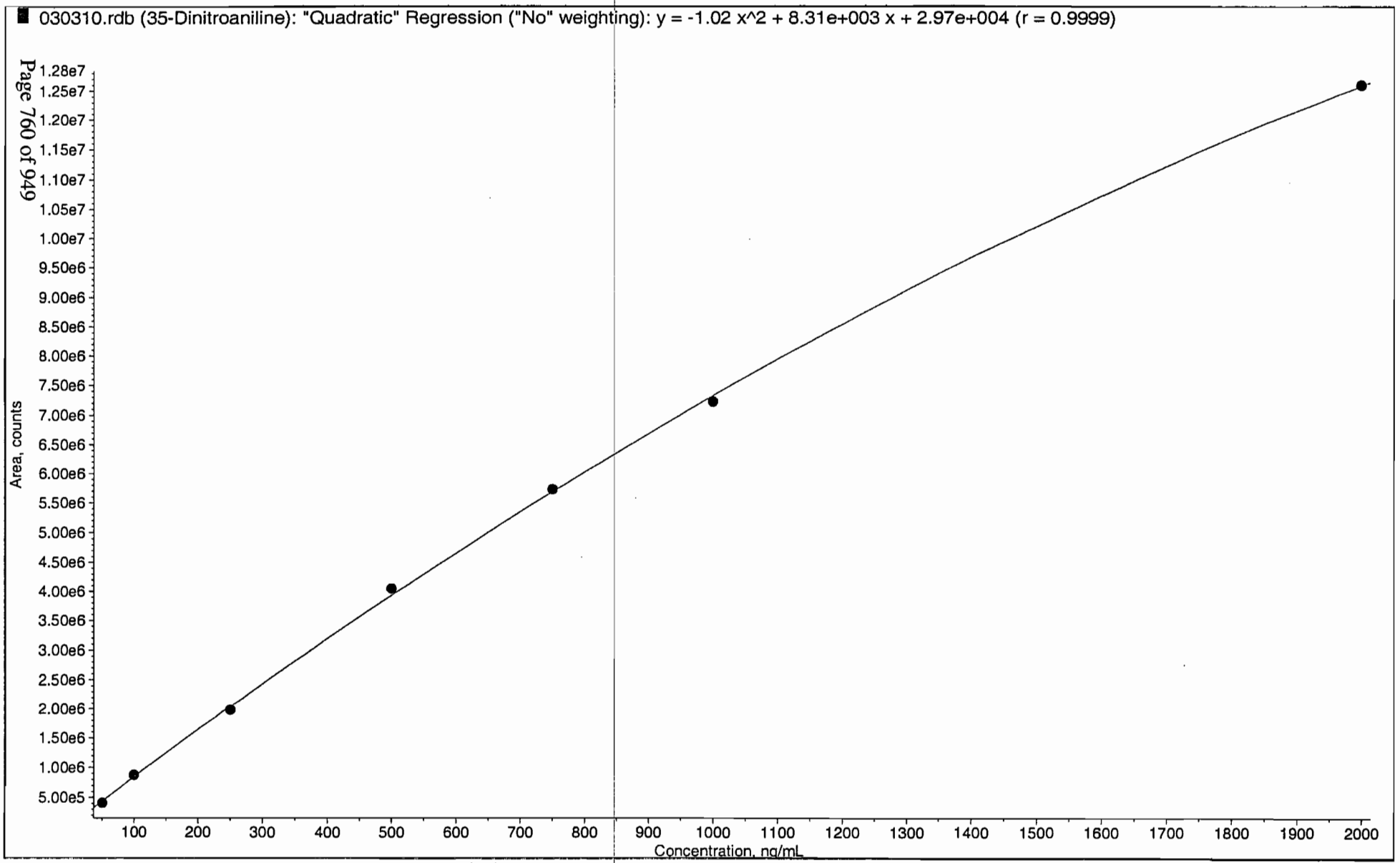

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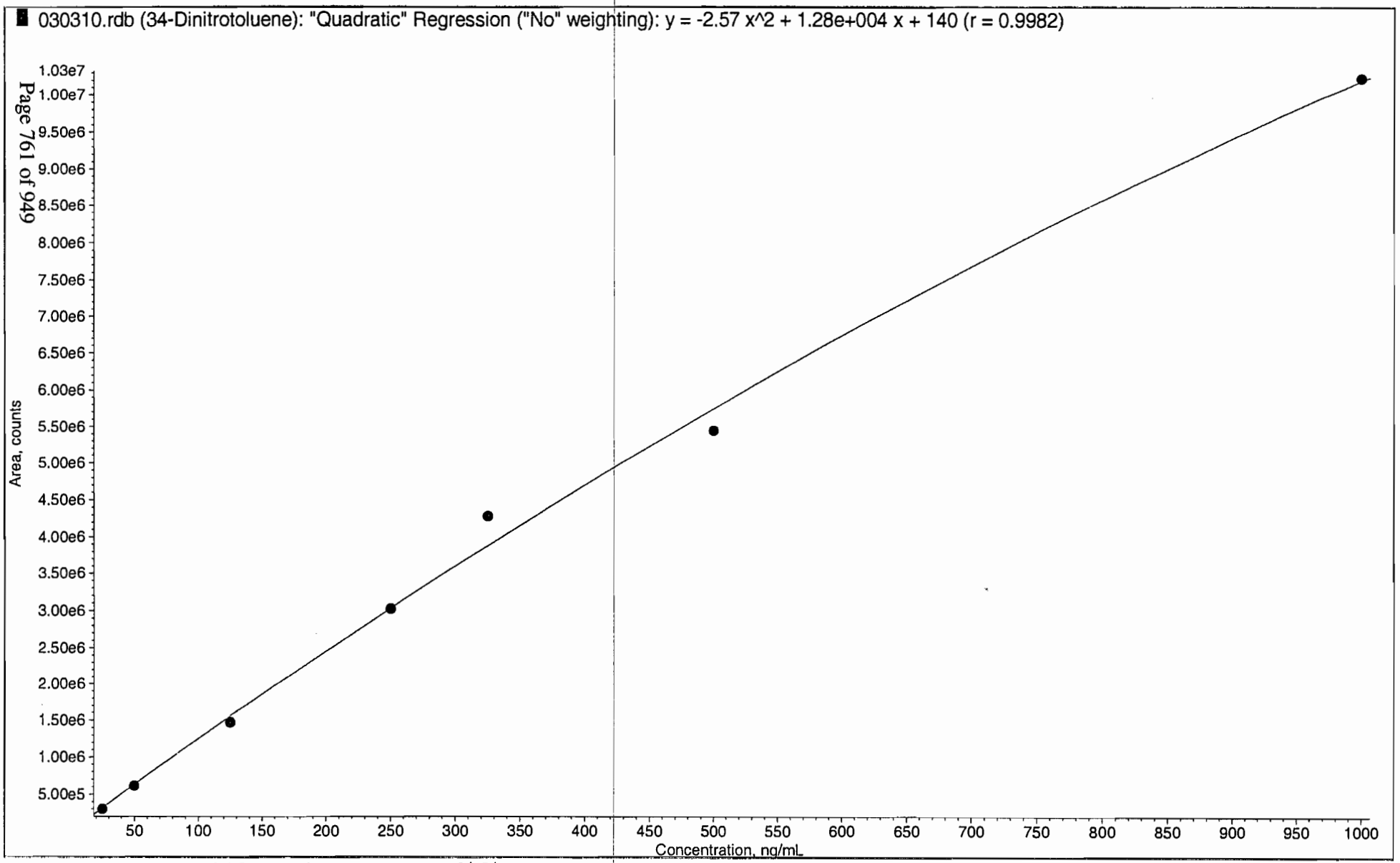

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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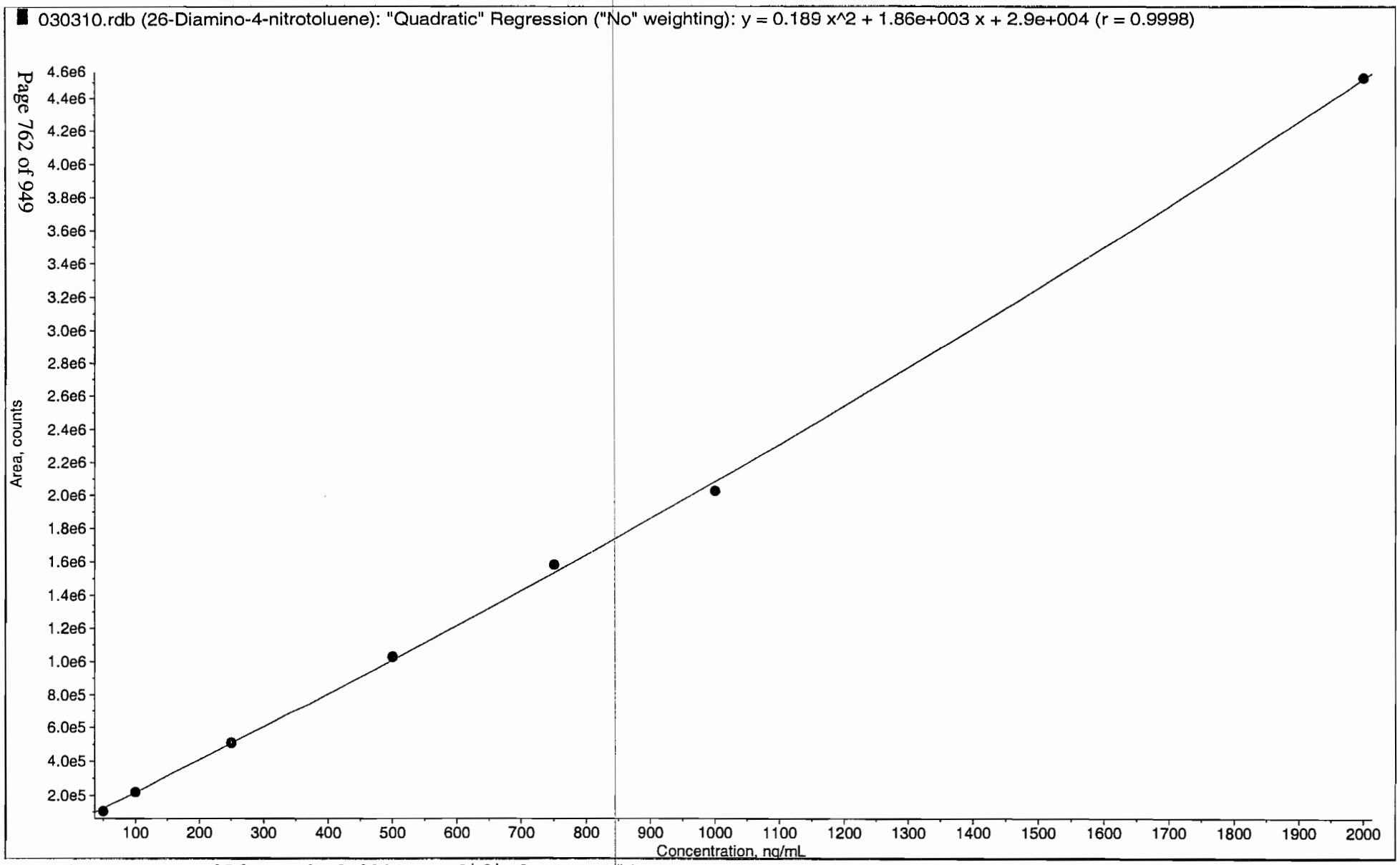

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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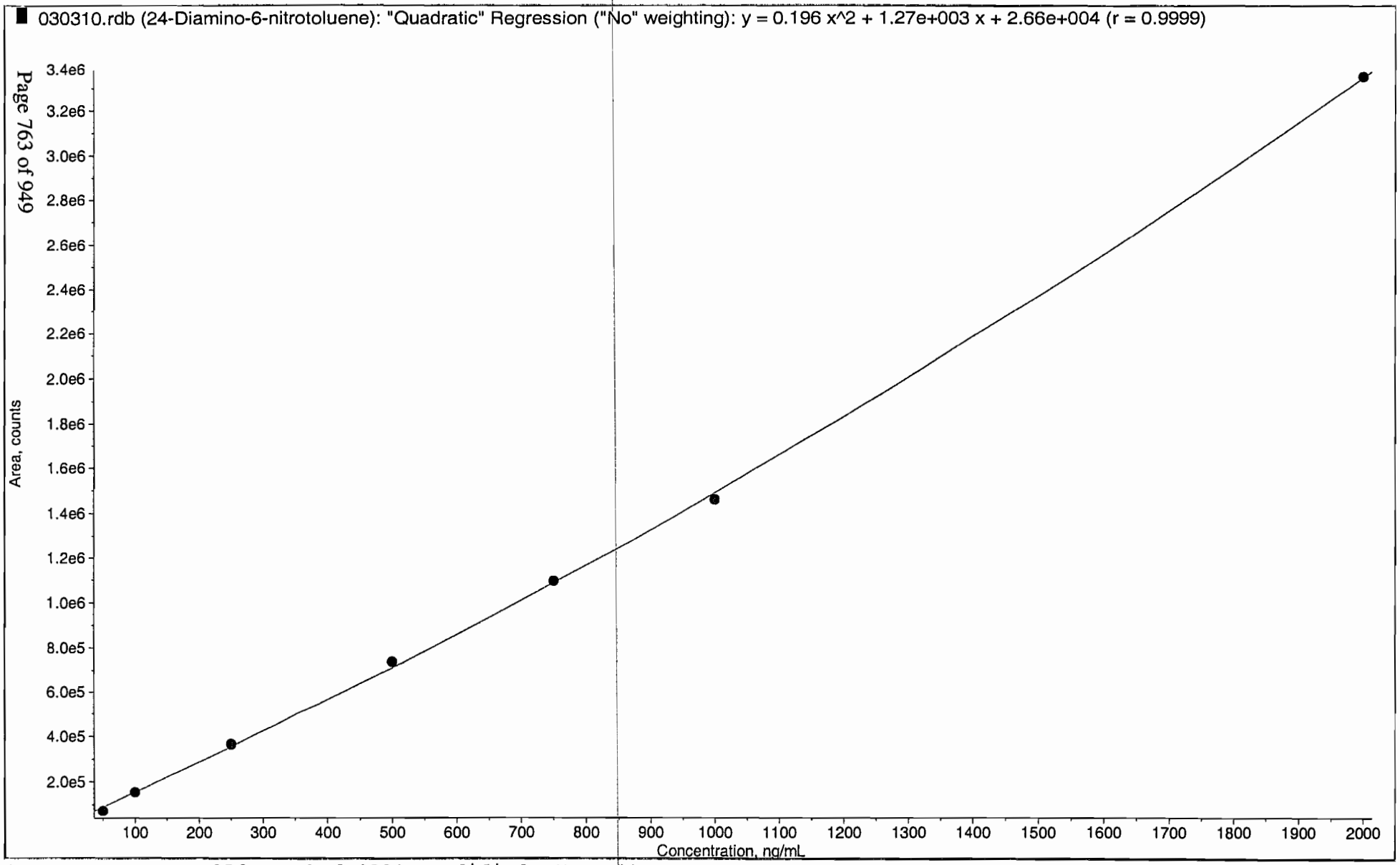

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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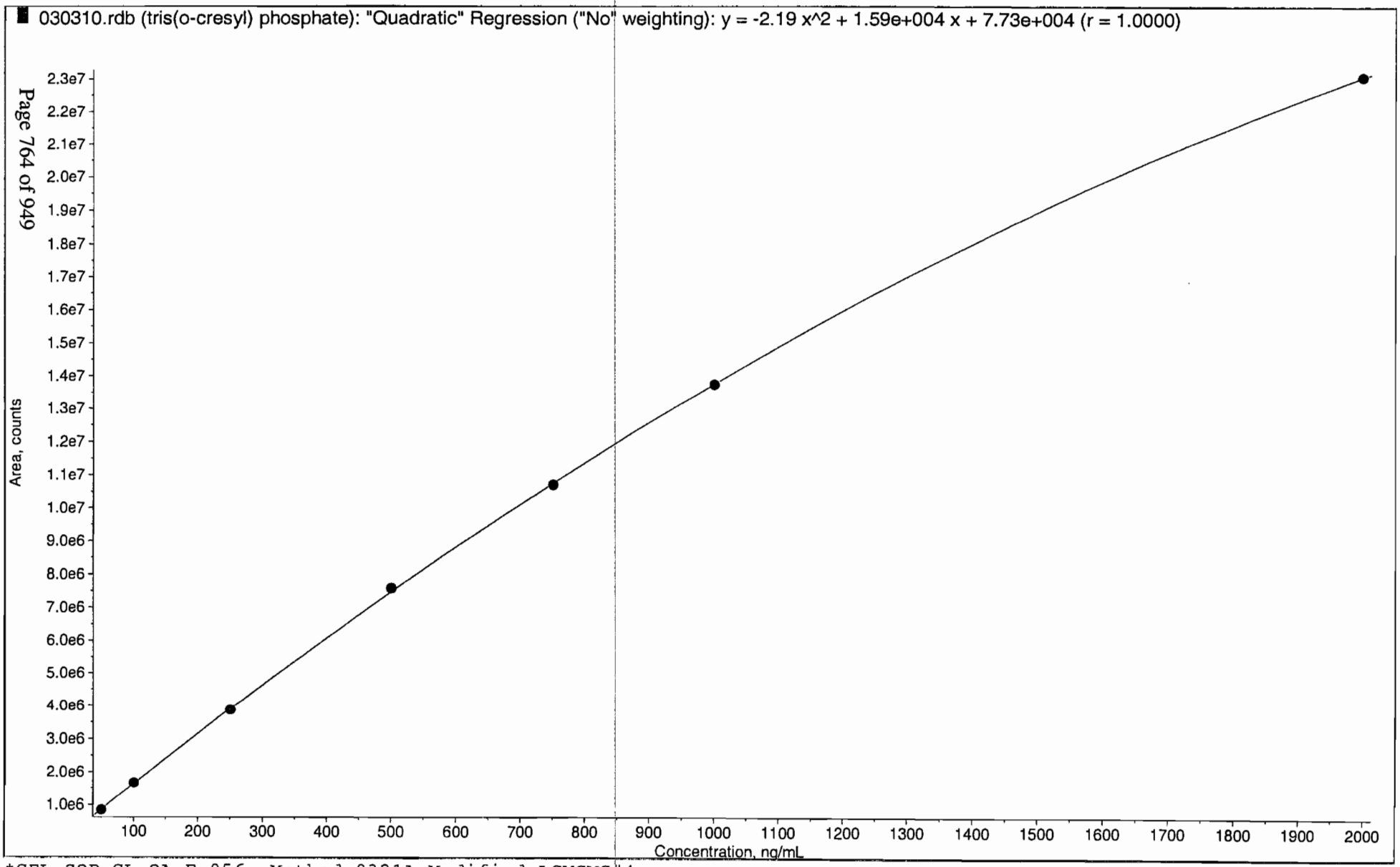

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS03030011.wiff

Analysis Date: 03-MAR-10 12:19

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

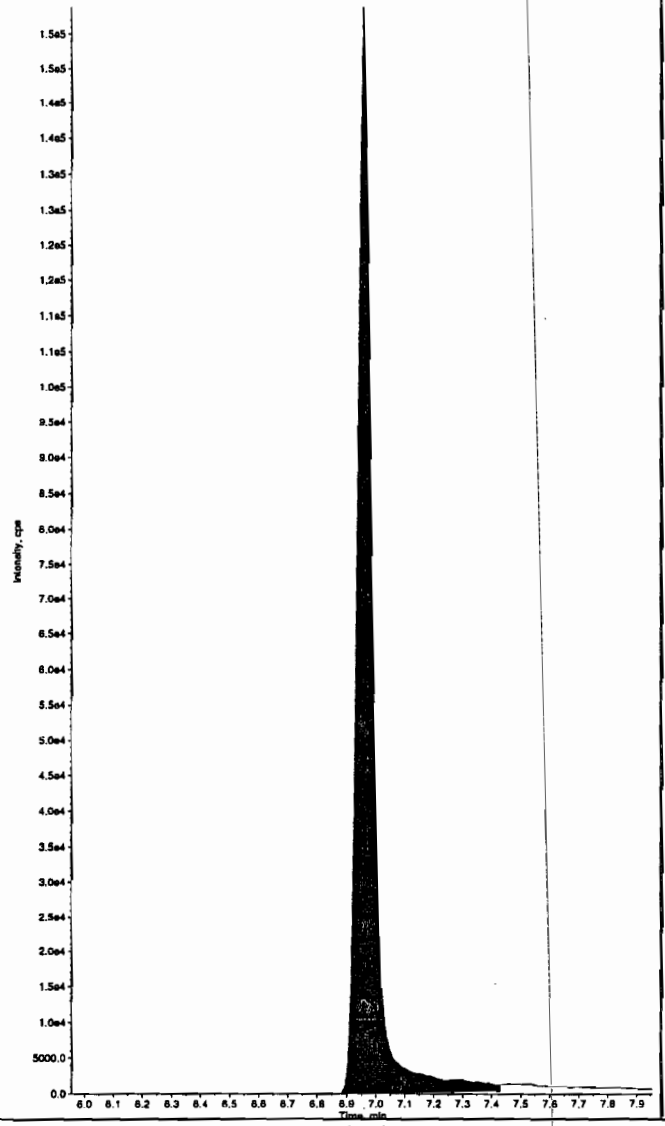
Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	250	239	96	
3,5-Dinitroaniline	500	499	100	
TATB	500	486	97	
tris(o-cresyl) phosphate	500	517	103	
2,4-Diamino-6-nitrotoluene	500	537	107	
2,6-Diamino-4-nitrotoluene	500	544	109	

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%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before Jan 3/8/10

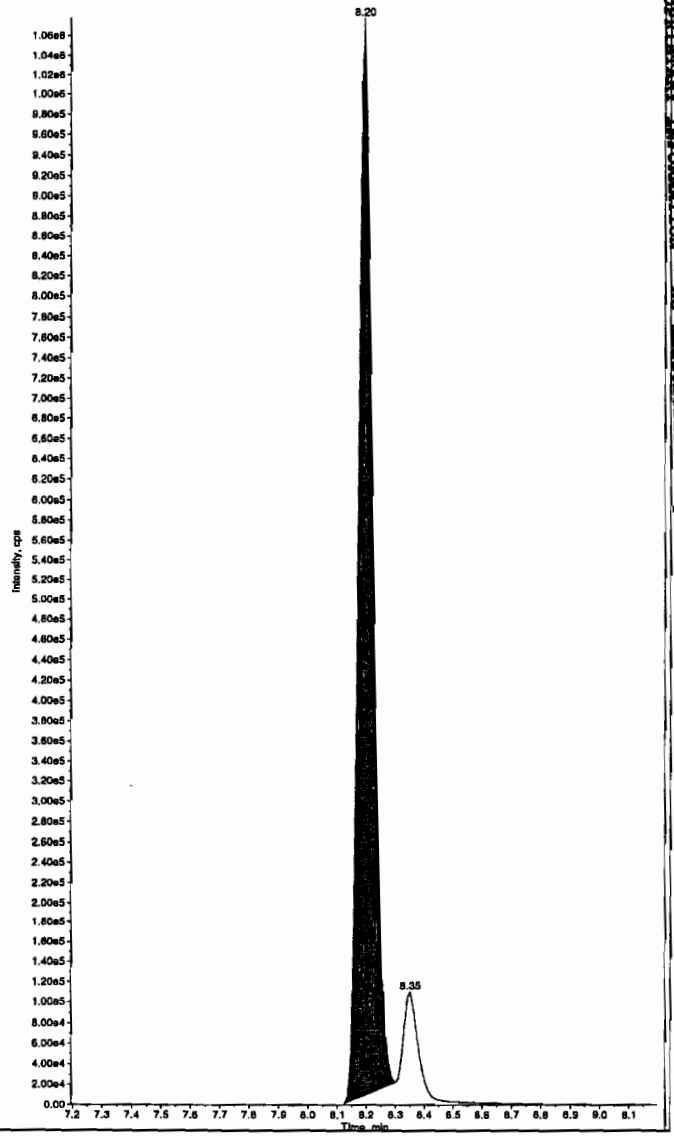
Sample Name: "WXX100303-26ICV" Sample ID: "|1|LER" File: "EXS03030011.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	486. ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:19:18 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:	6.96 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.96 min
Area:	6.00e+005 counts
Height:	153732.224 cps
Start Time:	6.86 min
End Time:	7.43 min



Sample Name: "WXX100303-26ICV" Sample ID: "|1|LER" File: "EXS03030011.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	485. ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:19:18 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:	8.20 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.20 min
Area:	3.82e+006 counts
Height:	1067717.285 cps
Start Time:	8.12 min
End Time:	8.30 min



Hnm 03/08/10

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

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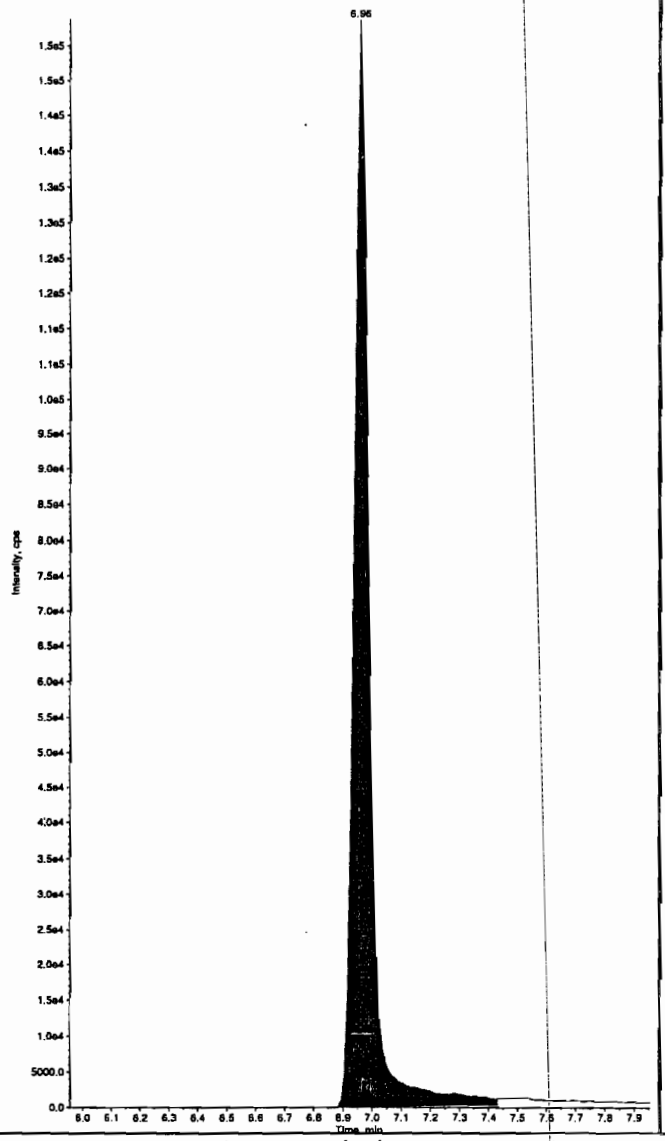
after scan 3/8/10

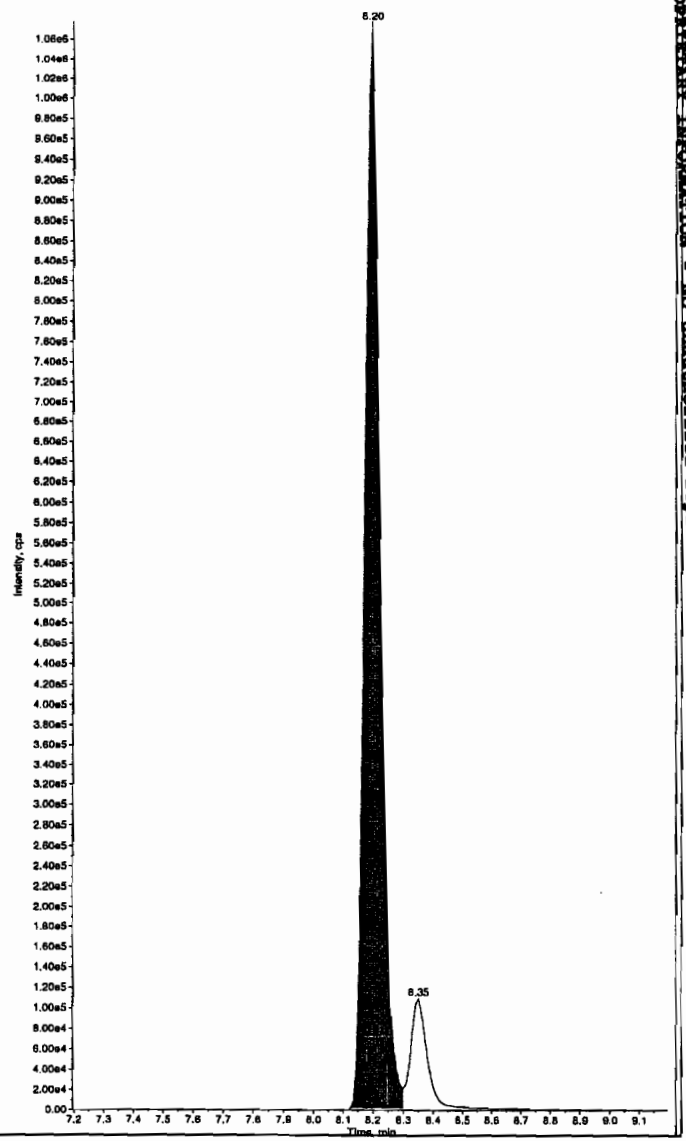
Sample Name: "WXX100303-26ICV" Sample ID: "|1|LER" File: "EXS03030011.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	486.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:19:18 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:	6.96	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.96	min
Area:	6.00e+005	counts
Height:	153732.224	cps
Start Time:	6.86	min
End Time:	7.43	min



Sample Name: "WXX100303-26ICV" Sample ID: "|1|LER" File: "EXS03030011.wiff"
Peak Name: "35-Dinitroanlline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	499.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:19:18 PM	
Modified:	Yes	
RT Window:	15.0	sec
Expected RT:	8.20	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	8.19	min
Area:	3.92e+006	counts
Height:	1077245.957	cps
Start Time:	8.12	min
End Time:	8.30	min

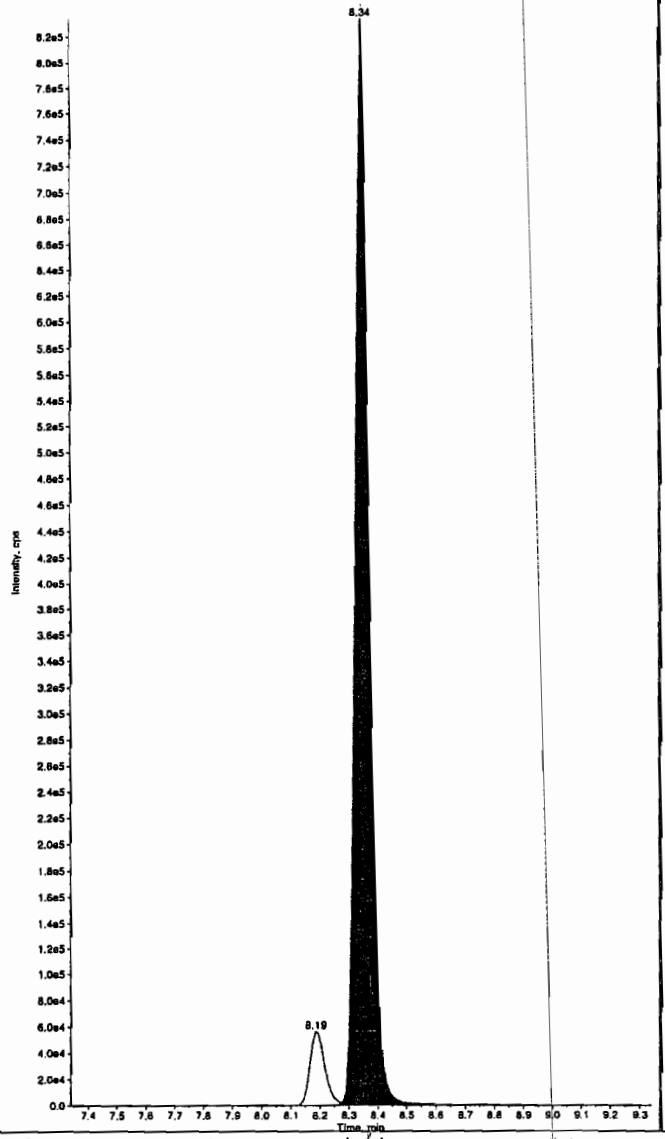


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

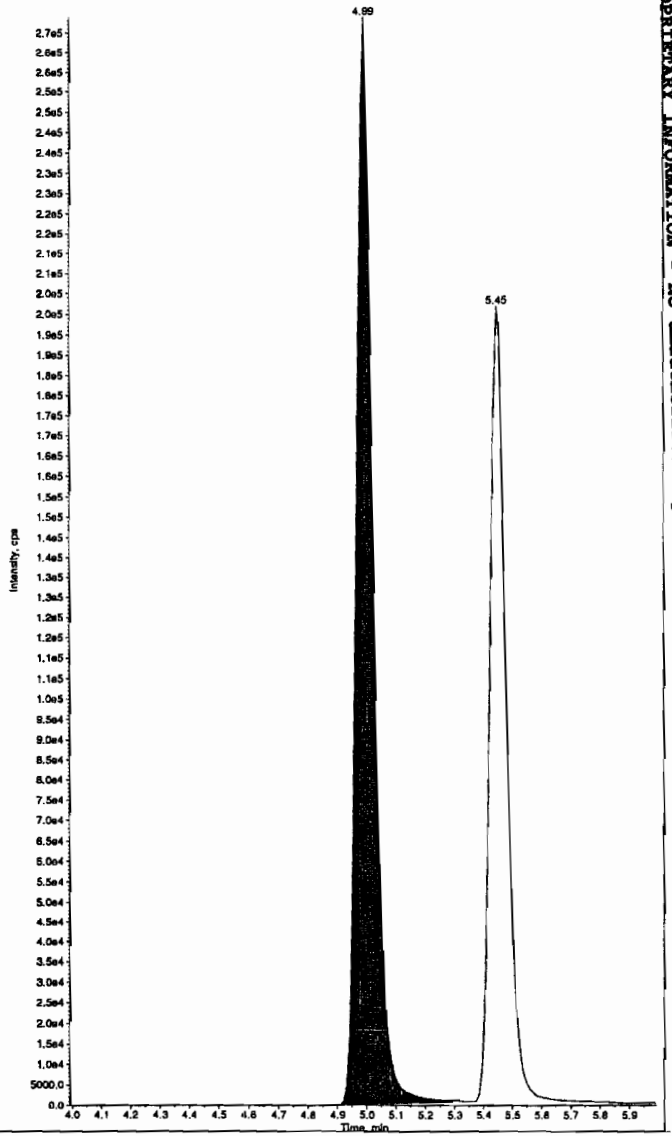
Sample Name: "WXX100303-26ICV" Sample ID: "|1|LER" File: "EXS03030011.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	239.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:19:18 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:	15.0	sec
Expected RT:	8.34	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.34	min
Area:	2.90e+006	counts
Height:	833692.627	cps
Start Time:	8.27	min
End Time:	8.66	min



Sample Name: "WXX100303-26ICV" Sample ID: "|1|LER" File: "EXS03030011.wiff"
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:	544.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:19:18 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:	4.99	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.99	min
Area:	1.10e+006	counts
Height:	268631.012	cps
Start Time:	4.90	min
End Time:	5.29	min



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

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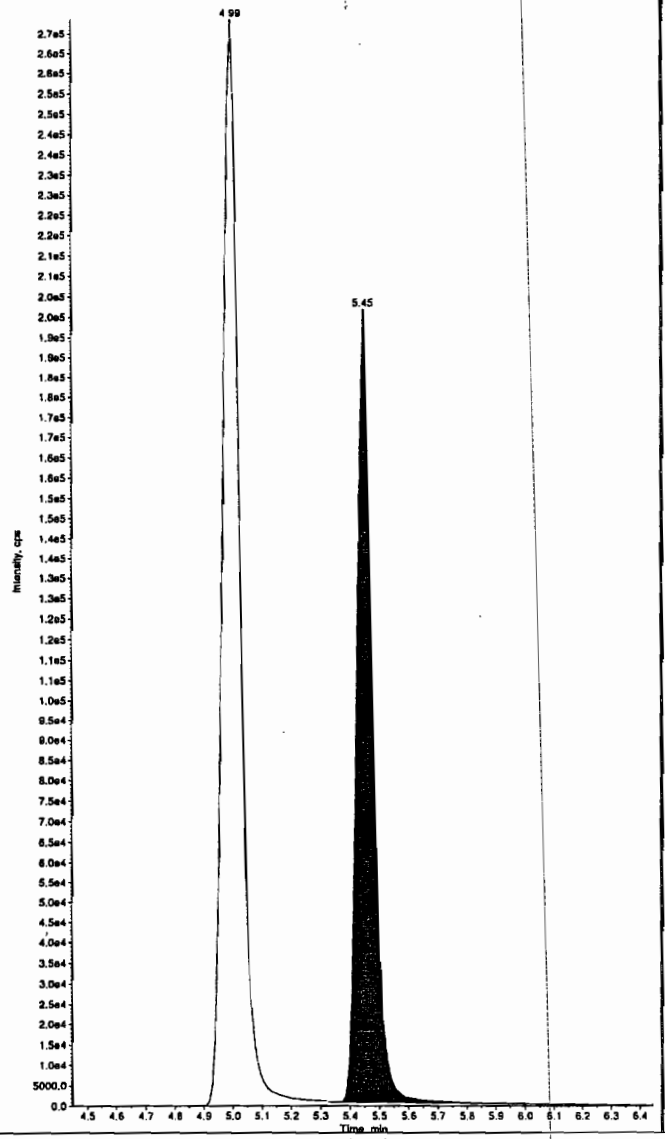
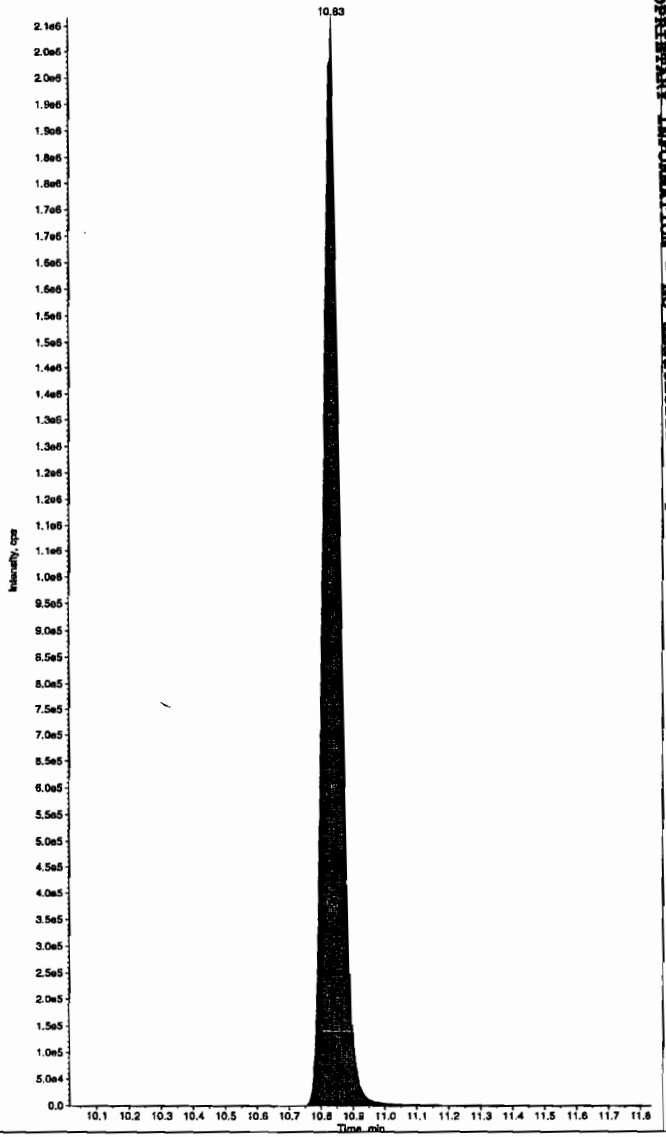
Sample Name: "WXX100303-26ICV" Sample ID: "[1]LER" File: "EXS03030011.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	537.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:19:18 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:	5.45	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.45	min
Area:	7.65e+005	counts
Height:	196145.035	cps
Start Time:	5.34	min
End Time:	5.88	min



Sample Name: "WXX100303-26ICV" Sample ID: "[1]LER" File: "EXS03030011.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	517.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:19:18 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:	7.71e+006	counts
Height:	2066532.471	cps
Start Time:	10.7	min
End Time:	11.1	min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10-1623

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXP0323012a **Analysis Date:** 23-MAR-10 14:33

LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.728	112	
1,3-Dinitrobenzene-d4	500	482.919	97	
2,4,6-Trinitrotoluene	40	35.085	88	
2,4-Dinitrotoluene	40	40.855	102	
2,6-Dinitrotoluene	40	39.526	99	
2,6-Dinitrotoluene-d3	500	484.851	97	
2-Amino-4,6-dinitrotoluene	40	41.982	105	
3,4-Dinitrotoluene	20	19.603	98	
4-Amino-2,6-dinitrotoluene	40	41.07	103	
HMX	40	46.731	117	
Nitrobenzene	40	39.137	98	
PETN	40	43.189	108	
RDX	40	43.979	110	
Tetryl	40	44.65	112	
m-Dinitrobenzene	40	42.729	107	
m-Nitrotoluene	40	44.799	112	
o-Nitrotoluene	40	42.092	105	
p-Nitrotoluene	40	44.279	111	

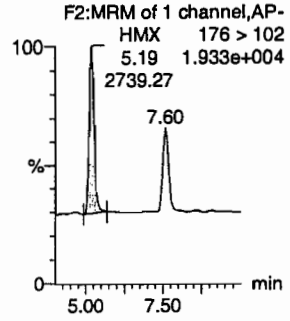
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

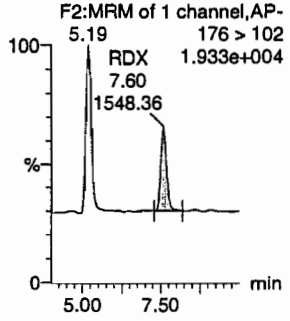
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323012a
Date: 23-Mar-2010
Time: 14:33:19
ID: WXX100323-08CRI
Vial: 1:1,C

LMPT 3/24/10

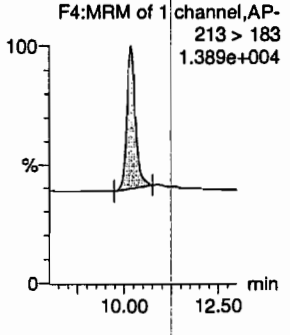
HMX



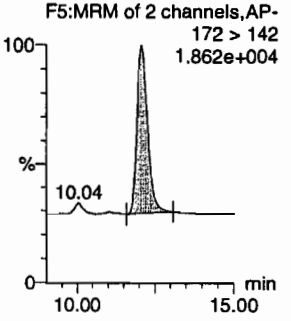
RDX



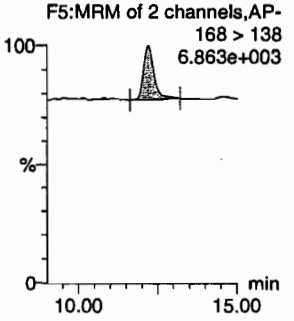
135-Trinitrobenzene



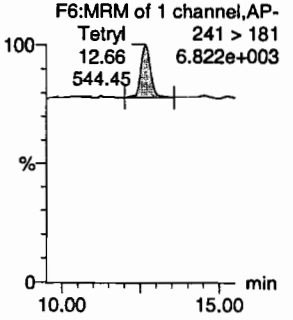
13-Dinitrobenzene-d4



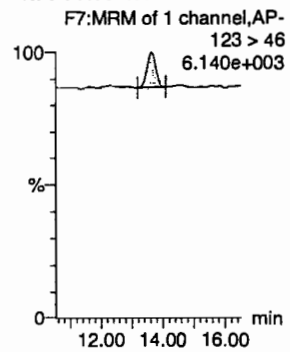
13-Dinitrobenzene



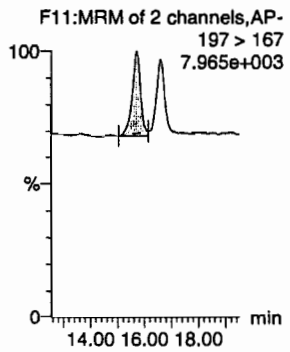
Tetryl



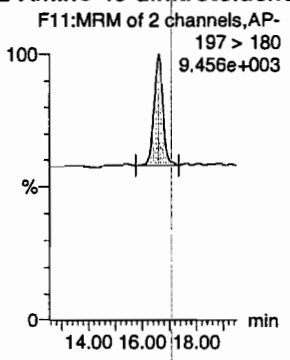
Nitrobenzene



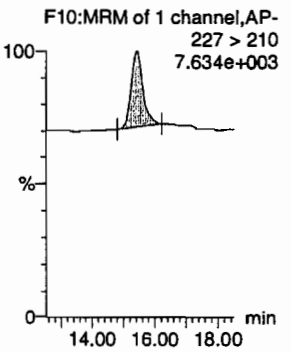
4-Amino-26-dinitrotoluene



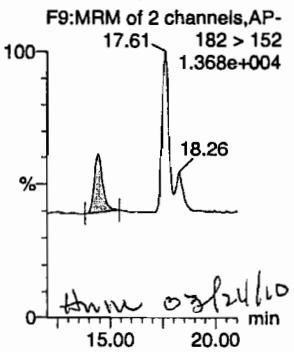
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

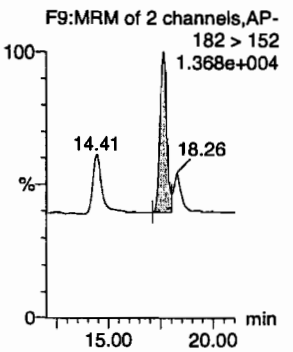


34-dinitrotoluene



HMW 03/24/10

26-dinitrotoluene



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

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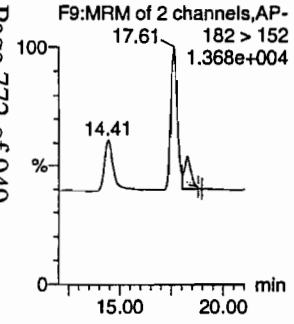
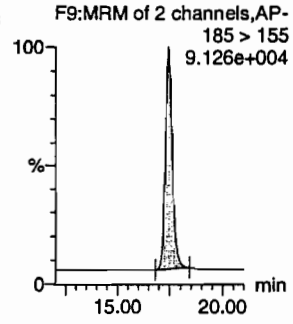
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

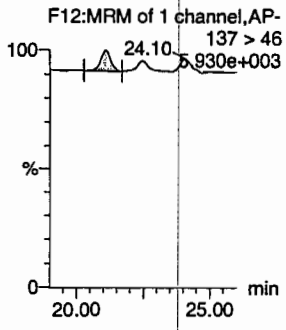
24-dinitrotoluene



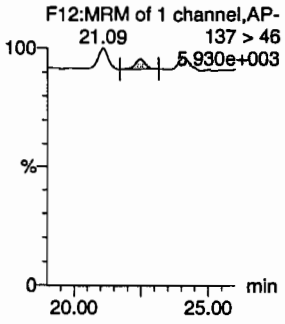
26-dinitrotoluene-d3



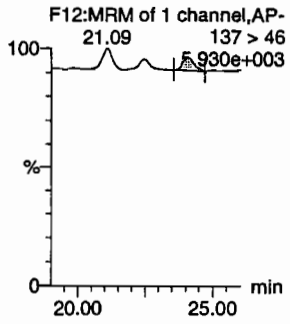
2-Nitrotoluene



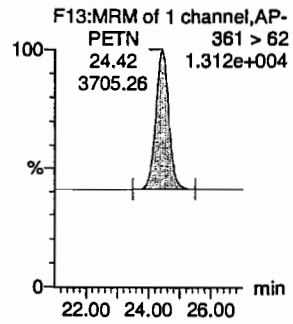
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100323-08CRI	HMX	176 > 102	5.19	2739.266	5316.234	2739.266	257.632	bb			46.7309	116.8	16.8	251.6
WXX100323-08CRI	RDX	176 > 102	7.60	1548.360	5316.234	1548.360	145.626	bb			43.9785	109.9	9.9	127.8
WXX100323-08CRI	135-Trinitrobenzene	213 > 183	10.18	2247.627	5316.234	2247.627	211.393	bb			44.7278	111.8	11.8	445.9
WXX100323-08CRI	13-Dinitrobenzene-d4	172 > 142	12.06	5316.234		5316.234	5316.234	bb			482.9189	96.6	-3.4	660.7
WXX100323-08CRI	13-Dinitrobenzene	168 > 138	12.20	603.300	5316.234	603.300	56.741	bb			42.7286	106.8	6.8	69.7
WXX100323-08CRI	Tetryl	241 > 181	12.66	544.449	5316.234	544.449	51.206	bb			44.6503	111.6	11.6	70.1
WXX100323-08CRI	Nitrobenzene	123 > 46	13.61	272.627	5316.234	272.627	25.641	bb			39.1374	97.8	-2.2	30.1
WXX100323-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.70	969.114	33387.395	969.114	14.513	MM	24-Mar-10	09:21:01	41.0702	102.7	2.7	70.8
WXX100323-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.59	1535.075	33387.395	1535.075	22.989	bb			41.9822	105.0	5.0	104.0
WXX100323-08CRI	246-Trinitrotoluene	227 > 210	15.40	960.700	33387.395	960.700	14.387	bb			35.0846	87.7	-12.3	35.6
WXX100323-08CRI	34-dinitrotoluene	182 > 152	14.41	1386.049	33387.395	1386.049	20.757	bb			19.6028	98.0	-2.0	76.8
WXX100323-08CRI	26-dinitrotoluene	182 > 152	17.61	3053.718	33387.395	3053.718	45.732	MM	24-Mar-10	09:24:21	39.5256	98.8	-1.2	212.4
WXX100323-08CRI	24-dinitrotoluene	182 > 152	18.26	757.031	33387.395	757.031	11.337	MM	24-Mar-10	09:27:48	40.8550	102.1	2.1	49.7
WXX100323-08CRI	26-dinitrotoluene-d3	185 > 155	17.43	33387.395		33387.395	33387.395	bb			484.8510	97.0	-3.0	2744.6
WXX100323-08CRI	2-Nitrotoluene	137 > 46	21.09	226.665	33387.395	226.665	3.394	bb			42.0924	105.2	5.2	67.3
WXX100323-08CRI	4-Nitrotoluene	137 > 46	22.46	115.137	33387.395	115.137	1.724	bb			44.2789	110.7	10.7	32.0
WXX100323-08CRI	3-Nitrotoluene	137 > 46	24.10	150.832	33387.395	150.832	2.259	bb			44.7990	112.0	12.0	39.5
WXX100323-08CRI	PETN	361 > 62	24.42	3705.264	33387.395	3705.264	55.489	bb			43.1894	108.0	8.0	492.3

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/23/10
Time of Injection	1433
Standard Number	WXX100323-08CRI
Data File	EXP0323012a

HMX	116.8
RDX	109.9
135-TNB	111.8
13-DNB	106.8
Tetryl	111.6
Nitrobenzene	97.8
4A-26-DNT	102.7
2A-46-DNT	105.0
246-TNT	87.7
34-DNT(surr)	98.0
26-DNT	98.8
24-DNT	102.1
2-NT	105.2
4-NT	110.7
3-NT	112.0
PETN	108.0
Total	1684.9
Average	105.3

HMM 03/24/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323023a

Analysis Date: 23-MAR-10 19:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	600	641.728	107	
2,6-Dinitrotoluene	600	622.086	104	
2,6-Dinitrotoluene-d3	500	516.532	103	
2-Amino-4,6-dinitrotoluene	600	682.18	114	
3,4-Dinitrotoluene	300	318.667	106	
4-Amino-2,6-dinitrotoluene	600	638.616	106	
HMX	600	775.75	129	*
Nitrobenzene	600	605.281	101	
PETN	600	636.192	106	
RDX	600	766.934	128	*
Tetryl	600	703.31	117	
m-Dinitrobenzene	600	619.864	103	
m-Nitrotoluene	600	587.224	98	
o-Nitrotoluene	600	612.723	102	
p-Nitrotoluene	600	652.819	109	
1,3,5-Trinitrobenzene	600	618.225	103	
1,3-Dinitrobenzene-d4	500	527.566	106	
2,4,6-Trinitrotoluene	600	626.233	104	

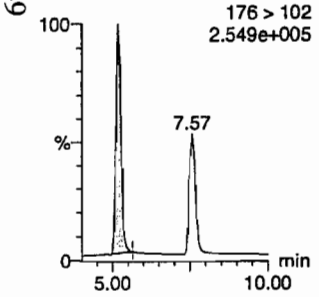
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

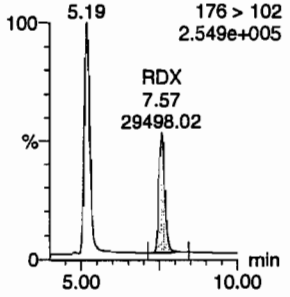
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323023a
Date: 23-Mar-2010
Time: 19:57:38
ID: WXX100323-07CCV
Vial: 1:1,B

Page 775 of 949

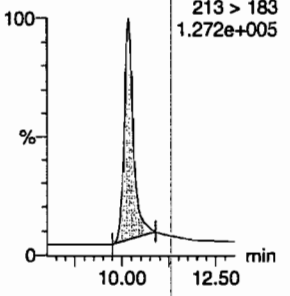
HMX



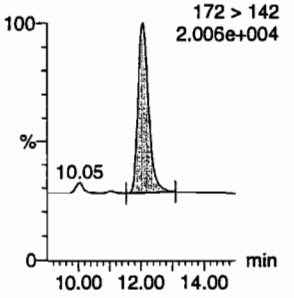
RDX



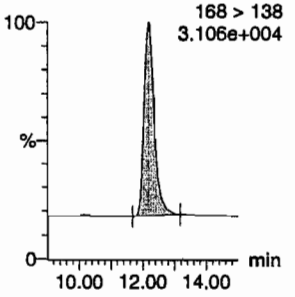
135-Trinitrobenzene



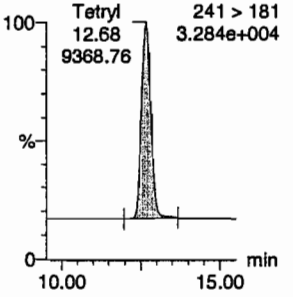
13-Dinitrobenzene-d4



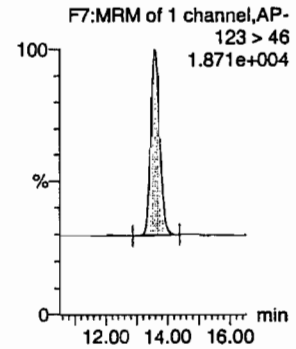
13-Dinitrobenzene



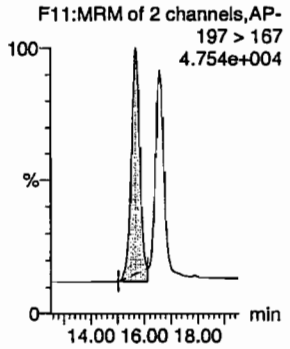
Tetryl



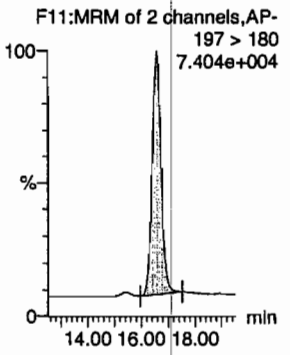
Nitrobenzene



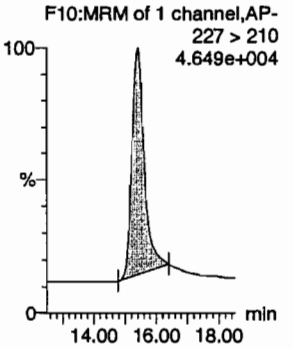
4-Amino-26-dinitrotoluene



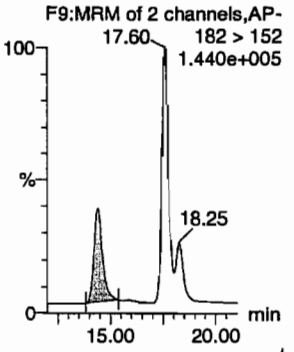
2-Amino-46-dinitrotoluene



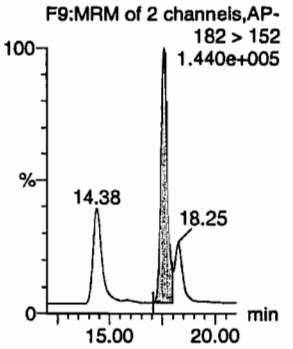
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



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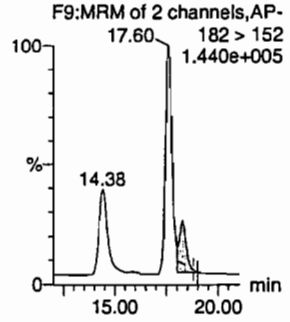
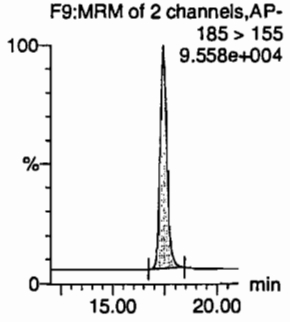
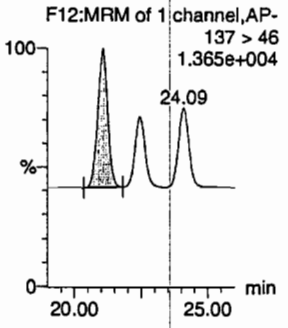
24-dinitrotoluene



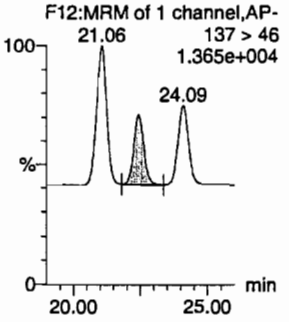
26-dinitrotoluene-d3



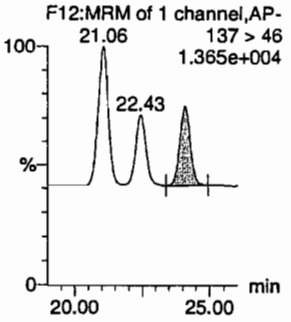
2-Nitrotoluene



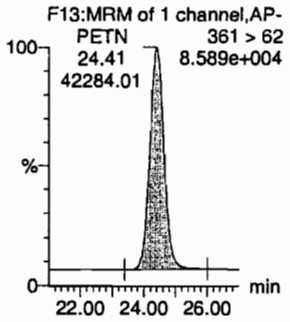
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100323-07CCV	HMX	176 > 102	5.19	49676.969	5807.738	49676.969	4276.791	bb			775.7499	129.3	29.3	1471.7
WXX100323-07CCV	RDX	176 > 102	7.57	29498.021	5807.738	29498.021	2539.545	bb			766.9342	127.8	27.8	773.2
WXX100323-07CCV	135-Trinitrobenzene	213 > 183	10.18	33938.762	5807.738	33938.762	2921.857	bb			618.2251	103.0	3.0	363.0
WXX100323-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	5807.738		5807.738	5807.738	bb			527.5664	105.5	5.5	530.1
WXX100323-07CCV	13-Dinitrobenzene	168 > 138	12.20	9561.233	5807.738	9561.233	823.146	bb			619.8643	103.3	3.3	1122.1
WXX100323-07CCV	Tetryl	241 > 181	12.68	9368.761	5807.738	9368.761	806.576	bb			703.3099	117.2	17.2	808.1
WXX100323-07CCV	Nitrobenzene	123 > 46	13.58	4606.136	5807.738	4606.136	396.552	bb			605.2814	100.9	0.9	436.9
WXX100323-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.68	16053.771	35568.965	16053.771	225.671	MM	24-Mar-10	09:21:43	638.6162	106.4	6.4	555.1
WXX100323-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.58	26573.668	35568.965	26573.668	373.551	bb			682.1795	113.7	13.7	1083.3
WXX100323-07CCV	246-Trinitrotoluene	227 > 210	15.41	18268.205	35568.965	18268.205	256.800	bb			626.2328	104.4	4.4	1903.4
WXX100323-07CCV	34-dinitrotoluene	182 > 152	14.38	24004.193	35568.965	24004.193	337.432	bb			318.6675	106.2	6.2	745.6
WXX100323-07CCV	26-dinitrotoluene	182 > 152	17.60	51202.254	35568.965	51202.254	719.760	MM	24-Mar-10	09:24:58	622.0857	103.7	3.7	2050.7
WXX100323-07CCV	24-dinitrotoluene	182 > 152	18.25	12667.996	35568.965	12667.996	178.077	MM	24-Mar-10	09:28:37	641.7283	107.0	7.0	461.8
WXX100323-07CCV	26-dinitrotoluene-d3	185 > 155	17.42	35568.965		35568.965	35568.965	bb			516.5317	103.3	3.3	2935.3
WXX100323-07CCV	2-Nitrotoluene	137 > 46	21.06	3515.065	35568.965	3515.065	49.412	bb			612.7229	102.1	2.1	589.1
WXX100323-07CCV	4-Nitrotoluene	137 > 46	22.43	1808.423	35568.965	1808.423	25.421	bb			652.8194	108.8	8.8	299.5
WXX100323-07CCV	3-Nitrotoluene	137 > 46	24.09	2106.291	35568.965	2106.291	29.609	bb			587.2244	97.9	-2.1	335.3
WXX100323-07CCV	PETN	361 > 62	24.41	42284.008	35568.965	42284.008	594.395	bb			636.1919	106.0	6.0	11544.8

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

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GRAND MEAN AVERAGE

Vendor:	Restek
Date of Analysis:	03/23/10
Time of Injection:	1957
Standard Number:	WXX100323-07CCV
Data File:	EXP0323023a

HMX	129.3
RDX	127.8
135-TNB	103.0
13-DNB	103.3
Tetryl	117.2
Nitrobenzene	100.9
4A-26-DNT	106.4
2A-46-DNT	113.7
246-TNT	104.4
34-DNT(surr)	106.2
26-DNT	103.7
24-DNT	107.0
2-NT	102.1
4-NT	108.8
3-NT	97.9
PETN	106.0
Total	1737.7
Average	108.6

03/24/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323025a

Analysis Date: 23-MAR-10 20:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

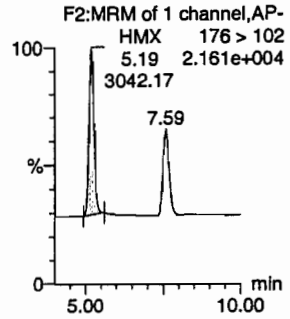
Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene	40	39.059	98	
2,6-Dinitrotoluene-d3	500	625.064	125	
2-Amino-4,6-dinitrotoluene	40	35.345	88	
3,4-Dinitrotoluene	20	18.965	95	
4-Amino-2,6-dinitrotoluene	40	37.682	94	
HMX	40	43.341	108	
Nitrobenzene	40	37.897	95	
PETN	40	34.251	86	
RDX	40	42.597	106	
Tetryl	40	36.872	92	
m-Dinitrobenzene	40	41.891	105	
m-Nitrotoluene	40	39.158	98	
o-Nitrotoluene	40	44.793	112	
p-Nitrotoluene	40	35.3	88	
1,3,5-Trinitrobenzene	40	43.551	109	
1,3-Dinitrobenzene-d4	500	578.273	116	
2,4,6-Trinitrotoluene	40	36.796	92	
2,4-Dinitrotoluene	40	36.274	91	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

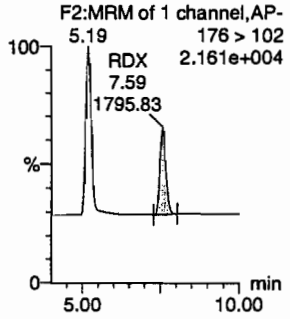
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323025a
Date: 23-Mar-2010
Time: 20:56:42
ID: WXX100323-08CRI
Vial: 1:1,C

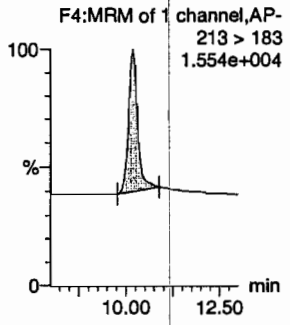
HMX



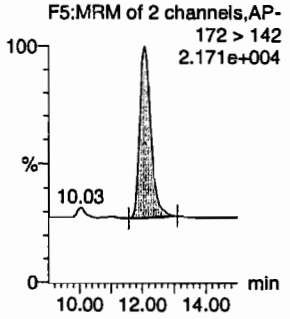
RDX



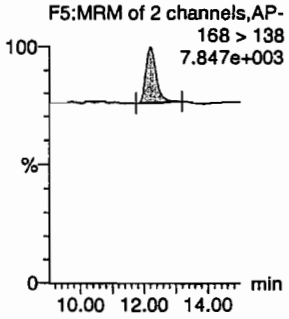
135-Trinitrobenzene



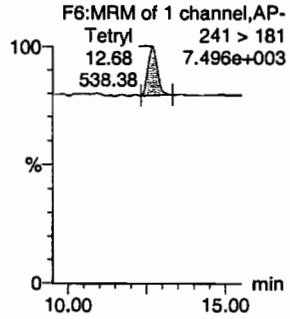
13-Dinitrobenzene-d4



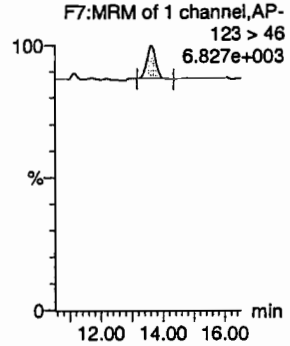
13-Dinitrobenzene



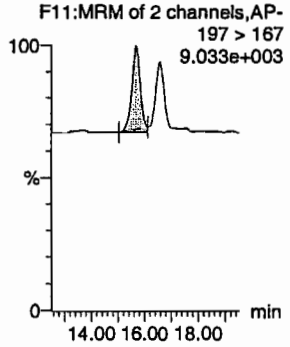
Tetryl



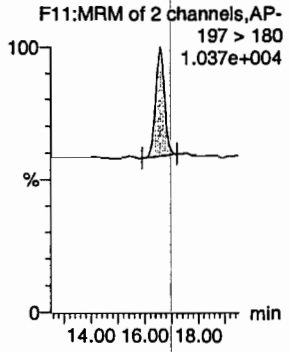
Nitrobenzene



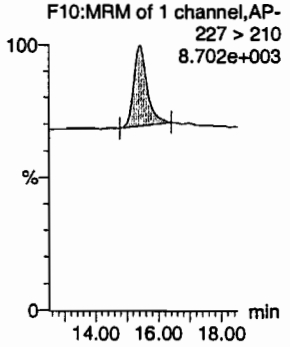
4-Amino-26-dinitrotoluene



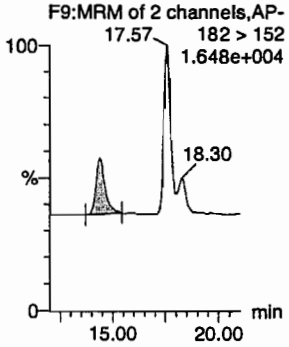
2-Amino-46-dinitrotoluene



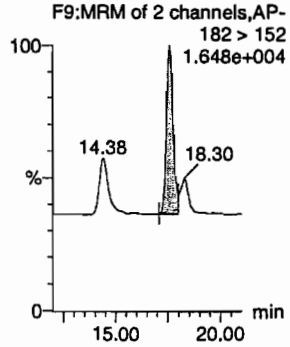
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



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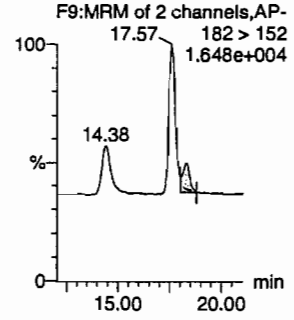
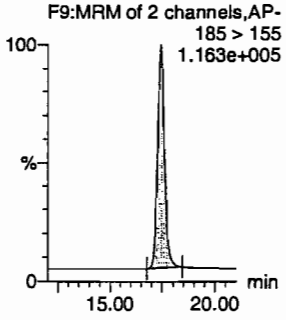
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

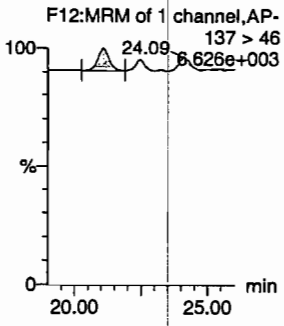
24-dinitrotoluene



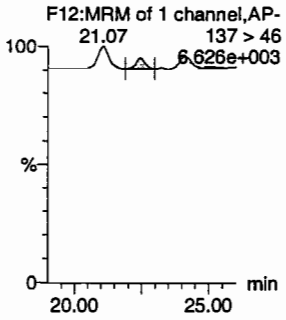
26-dinitrotoluene-d3



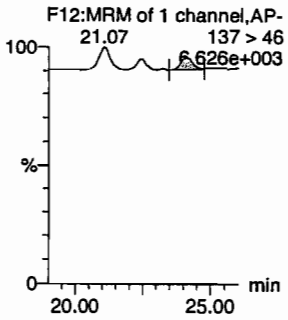
2-Nitrotoluene



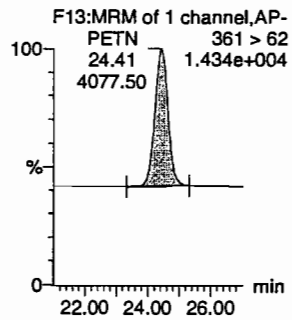
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100323-08CRI	HMX	176 > 102	5.19	3042.172	6365.946	3042.172	238.941	bb			43.3406	108.4	8.4	237.9
WXX100323-08CRI	RDX	176 > 102	7.59	1795.832	6365.946	1795.832	141.050	bb			42.5966	106.5	6.5	121.7
WXX100323-08CRI	135-Trinitrobenzene	213 > 183	10.18	2620.612	6365.946	2620.612	205.831	bb			43.5509	108.9	8.9	183.8
WXX100323-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	6365.946		6365.946	6365.946	bb			578.2732	115.7	15.7	466.5
WXX100323-08CRI	13-Dinitrobenzene	168 > 138	12.20	708.269	6365.946	708.269	55.630	bb			41.8914	104.7	4.7	72.5
WXX100323-08CRI	Tetryl	241 > 181	12.68	538.375	6365.946	538.375	42.286	bb			36.8717	92.2	-7.8	60.2
WXX100323-08CRI	Nitrobenzene	123 > 46	13.58	316.111	6365.946	316.111	24.828	bb			37.8969	94.7	-5.3	11.9
WXX100323-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.68	1146.295	43042.656	1146.295	13.316	MM	24-Mar-10	09:21:55	37.6818	94.2	-5.8	48.6
WXX100323-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.58	1666.137	43042.656	1666.137	19.354	bb			35.3452	88.4	-11.6	109.1
WXX100323-08CRI	246-Trinitrotoluene	227 > 210	15.41	1298.920	43042.656	1298.920	15.089	bb			36.7955	92.0	-8.0	71.0
WXX100323-08CRI	34-dinitrotoluene	182 > 152	14.38	1728.770	43042.656	1728.770	20.082	bb			18.9653	94.8	-5.2	115.8
WXX100323-08CRI	26-dinitrotoluene	182 > 152	17.57	3890.302	43042.656	3890.302	45.191	MM	24-Mar-10	09:25:06	39.0586	97.6	-2.4	351.9
WXX100323-08CRI	24-dinitrotoluene	182 > 152	18.30	866.515	43042.656	866.515	10.066	MM	24-Mar-10	09:28:45	36.2737	90.7	-9.3	71.2
WXX100323-08CRI	26-dinitrotoluene-d3	185 > 155	17.42	43042.656		43042.656	43042.656	bb			625.0645	125.0	25.0	3341.8
WXX100323-08CRI	2-Nitrotoluene	137 > 46	21.07	310.960	43042.656	310.960	3.612	bb			44.7927	112.0	12.0	12.3
WXX100323-08CRI	4-Nitrotoluene	137 > 46	22.45	118.335	43042.656	118.335	1.375	bb			35.3003	88.3	-11.7	5.7
WXX100323-08CRI	3-Nitrotoluene	137 > 46	24.09	169.964	43042.656	169.964	1.974	bb			39.1575	97.9	-2.1	6.4
WXX100323-08CRI	PETN	361 > 62	24.41	4077.497	43042.656	4077.497	47.366	bb			34.2508	85.6	-14.4	415.8

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

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/23/10
Time of Injection	2056
Standard Number	WXX100323-08CRI
Data File	EXP0323025a

HMX	108.4
RDX	106.5
135-TNB	108.9
13-DNB	104.7
Tetryl	92.2
Nitrobenzene	94.7
4A-26-DNT	94.2
2A-46-DNT	88.4
246-TNT	92.0
34-DNT(surr)	94.8
26-DNT	97.6
24-DNT	90.7
2-NT	112.0
4-NT	88.3
3-NT	97.9
PETN	85.6
Total	1556.9
Average	97.3

HMM 03/24/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323036a

Analysis Date: 24-MAR-10 02:21

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

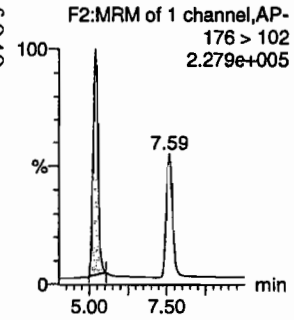
Compound	True	Found	Recovery	Q
Tetryl	600	658.046	110	
m-Dinitrobenzene	600	611.433	102	
m-Nitrotoluene	600	567.971	95	
o-Nitrotoluene	600	566.873	94	
p-Nitrotoluene	600	613.653	102	
1,3,5-Trinitrobenzene	600	577.175	96	
1,3-Dinitrobenzene-d4	500	575.9	115	
2,4,6-Trinitrotoluene	600	619.991	103	
2,4-Dinitrotoluene	600	633.316	106	
2,6-Dinitrotoluene	600	619.655	103	
2,6-Dinitrotoluene-d3	500	508.988	102	
2-Amino-4,6-dinitrotoluene	600	653.379	109	
3,4-Dinitrotoluene	300	321.856	107	
4-Amino-2,6-dinitrotoluene	600	620.656	103	
HMX	600	618.029	103	
Nitrobenzene	600	536.553	89	
PETN	600	641.859	107	
RDX	600	653.059	109	

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%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

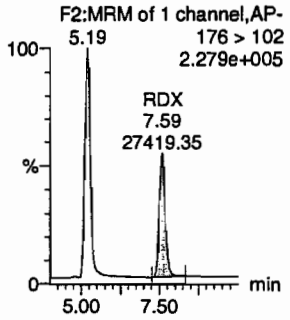
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323036a
Date: 24-Mar-2010
Time: 02:21:01
ID: WXX100323-07CCV
Vial: 1:1,B

3/24/10

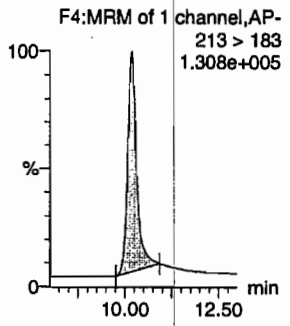
HMX



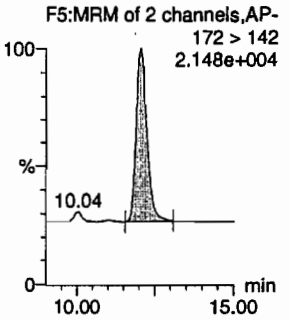
RDX



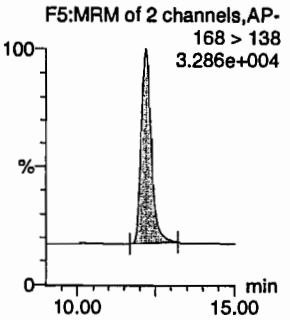
135-Trinitrobenzene



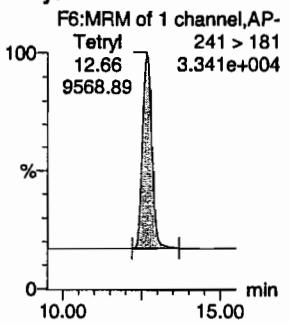
13-Dinitrobenzene-d4



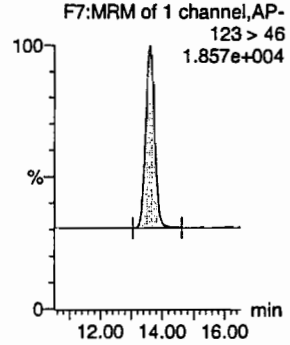
13-Dinitrobenzene



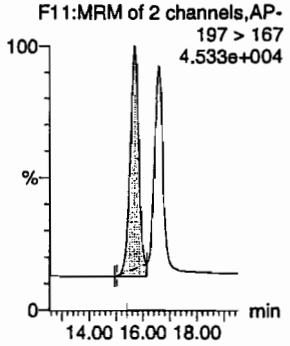
Tetryl



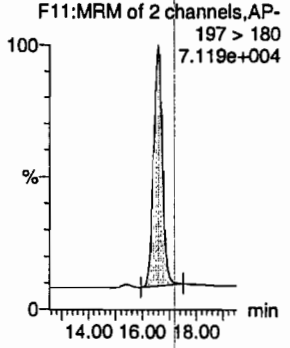
Nitrobenzene



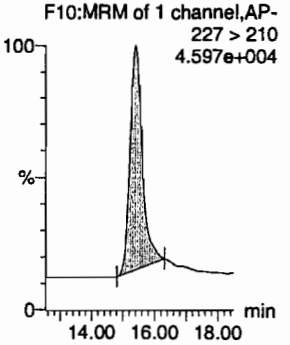
4-Amino-26-dinitrotoluene



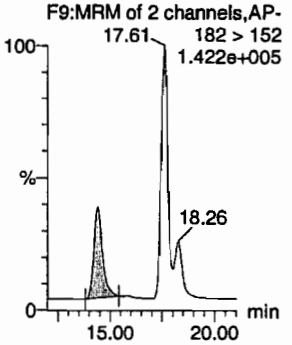
2-Amino-46-dinitrotoluene



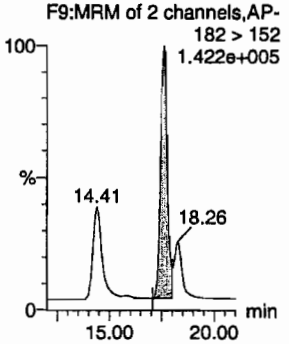
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



03/24/10

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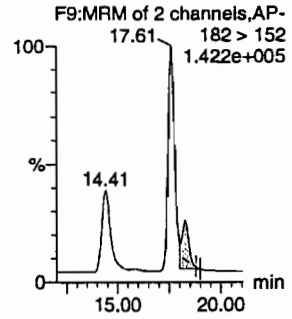
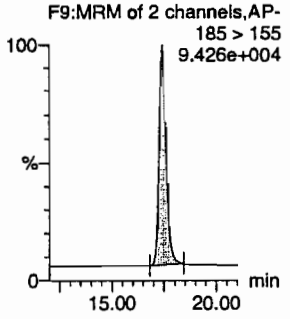
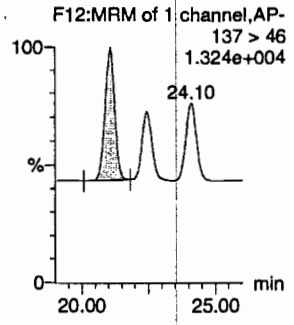
24-dinitrotoluene



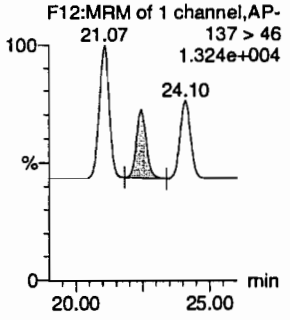
26-dinitrotoluene-d3



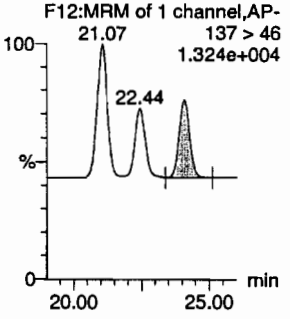
2-Nitrotoluene



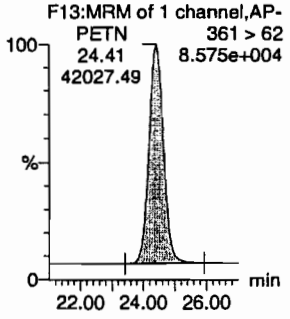
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100323-07CCV	HMX	176 > 102	5.19	43202.789	6339.820	43202.789	3407.257	bb			618.0285	103.0	3.0	4137.3
WXX100323-07CCV	RDX	176 > 102	7.59	27419.350	6339.820	27419.350	2162.471	bb			653.0591	108.8	8.8	2257.6
WXX100323-07CCV	135-Trinitrobenzene	213 > 183	10.18	34588.102	6339.820	34588.102	2727.846	bb			577.1749	96.2	-3.8	1450.1
WXX100323-07CCV	13-Dinitrobenzene-d4	172 > 142	12.06	6339.820		6339.820	6339.820	bb			575.9000	115.2	15.2	988.1
WXX100323-07CCV	13-Dinitrobenzene	168 > 138	12.17	10295.225	6339.820	10295.225	811.949	bb			611.4327	101.9	1.9	1166.6
WXX100323-07CCV	Tetryl	241 > 181	12.66	9568.891	6339.820	9568.891	754.666	bb			658.0460	109.7	9.7	919.0
WXX100323-07CCV	Nitrobenzene	123 > 46	13.61	4457.201	6339.820	4457.201	351.524	bb			536.5533	89.4	-10.6	722.7
WXX100323-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.67	15374.411	35049.496	15374.411	219.324	MM	24-Mar-10	09:22:18	620.6558	103.4	3.4	979.2
WXX100323-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.57	25080.061	35049.496	25080.061	357.781	bb			653.3791	108.9	8.9	1865.2
WXX100323-07CCV	246-Trinitrotoluene	227 > 210	15.40	17821.988	35049.496	17821.988	254.240	bb			619.9912	103.3	3.3	338.4
WXX100323-07CCV	34-dinitrotoluene	182 > 152	14.41	23890.289	35049.496	23890.289	340.808	bb			321.8559	107.3	7.3	730.9
WXX100323-07CCV	26-dinitrotoluene	182 > 152	17.61	50257.344	35049.496	50257.344	716.948	MM	24-Mar-10	09:25:22	619.6552	103.3	3.3	2025.6
WXX100323-07CCV	24-dinitrotoluene	182 > 152	18.26	12319.353	35049.496	12319.353	175.742	MM	24-Mar-10	09:28:57	633.3162	105.6	5.6	441.6
WXX100323-07CCV	26-dinitrotoluene-d3	185 > 155	17.43	35049.496		35049.496	35049.496	bb			508.9880	101.8	1.8	2133.3
WXX100323-07CCV	2-Nitrotoluene	137 > 46	21.07	3204.540	35049.496	3204.540	45.714	bb			566.8732	94.5	-5.5	213.2
WXX100323-07CCV	4-Nitrotoluene	137 > 46	22.44	1675.098	35049.496	1675.098	23.896	bb			613.6528	102.3	2.3	108.3
WXX100323-07CCV	3-Nitrotoluene	137 > 46	24.10	2007.479	35049.496	2007.479	28.638	bb			567.9711	94.7	-5.3	123.0
WXX100323-07CCV	PETN	361 > 62	24.41	42027.492	35049.496	42027.492	599.545	bb			641.8591	107.0	7.0	22480.6

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

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PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/24/10
Time of Injection: 0221
Standard Number: WXX100323-07CCV
Data File: EXP0323036a

HMX		103.0
RDX		108.8
135-TNB		96.2
13-DNB		101.9
Tetryl		109.7
Nitrobenzene		89.4
4A-26-DNT		103.4
2A-46-DNT		108.9
246-TNT		103.3
34-DNT(surr)		107.3
26-DNT		103.3
24-DNT		105.6
2-NT		94.5
4-NT		102.3
3-NT		94.7
PETN		107.0
Total		1639.3
Average		102.5

HMM 03/24/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323038a

Analysis Date: 24-MAR-10 03:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

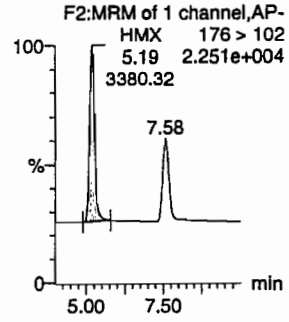
Compound	True	Found	Recovery	Q
m-Nitrotoluene	40	41.221	103	
o-Nitrotoluene	40	41.666	104	
p-Nitrotoluene	40	36.98	92	
1,3,5-Trinitrobenzene	40	45.654	114	
1,3-Dinitrobenzene-d4	500	578.299	116	
2,4,6-Trinitrotoluene	40	40.179	100	
2,4-Dinitrotoluene	40	42.924	107	
2,6-Dinitrotoluene	40	40.014	100	
2,6-Dinitrotoluene-d3	500	568.942	114	
2-Amino-4,6-dinitrotoluene	40	41.784	104	
3,4-Dinitrotoluene	20	23.698	118	
4-Amino-2,6-dinitrotoluene	40	39.666	99	
HMX	40	48.156	120	
Nitrobenzene	40	40.635	102	
PETN	40	42.98	107	
RDX	40	42.128	105	
Tetryl	40	37.542	94	
m-Dinitrobenzene	40	41.281	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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

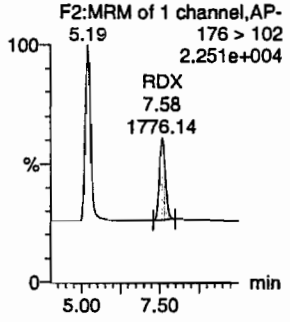
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323038a
Date: 24-Mar-2010
Time: 03:20:06
ID: WXX100323-08CRI
Vial: 1:1,C

HMW 3/24/10

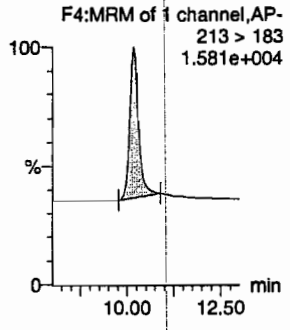
HMX



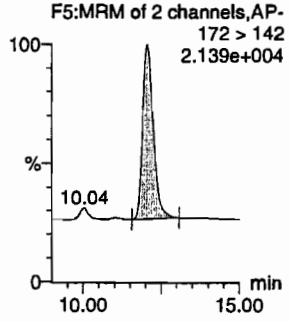
RDX



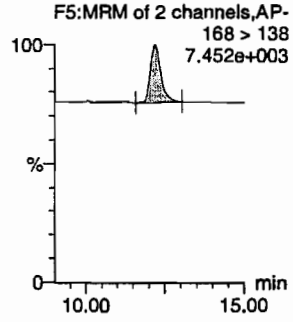
135-Trinitrobenzene



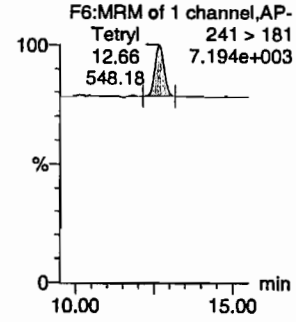
13-Dinitrobenzene-d4



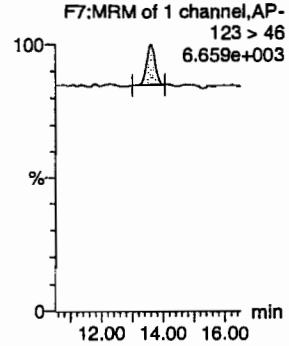
13-Dinitrobenzene



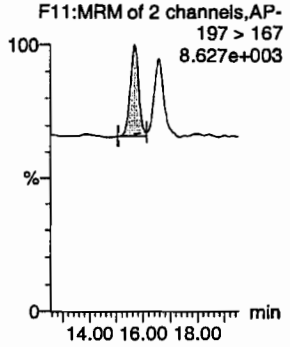
Tetryl



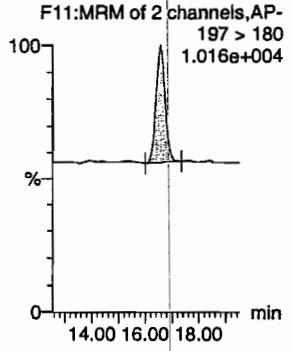
Nitrobenzene



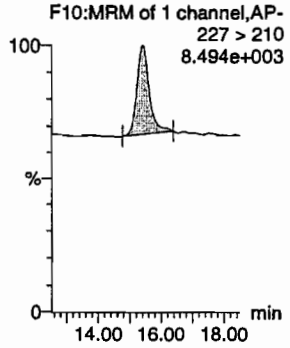
4-Amino-26-dinitrotoluene



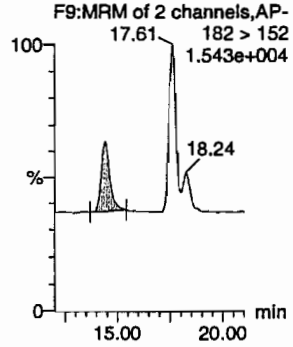
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

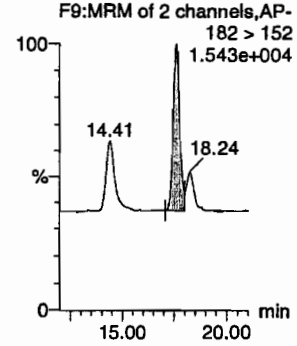


34-dinitrotoluene



HMW 03/24/10

26-dinitrotoluene



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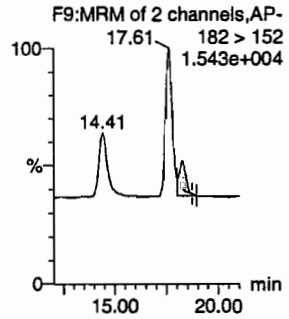
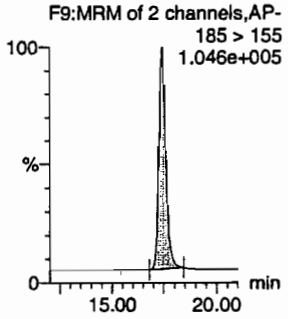
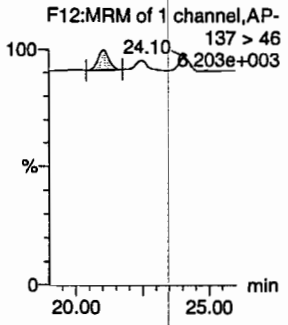
24-dinitrotoluene



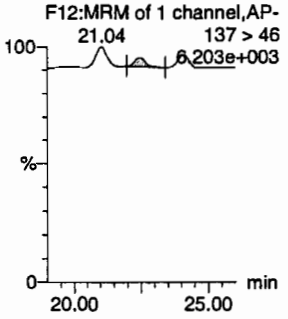
26-dinitrotoluene-d3



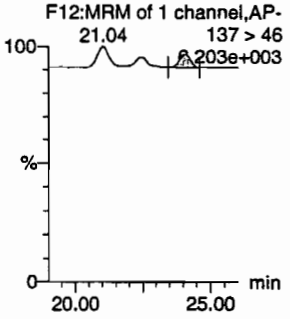
2-Nitrotoluene



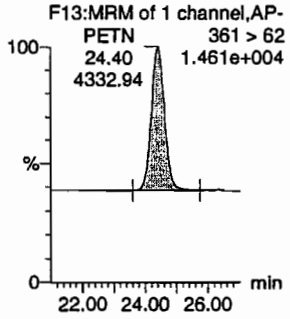
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100323-08CRI	HMX	176 > 102	5.19	3380.315	6366.227	3380.315	265.488	bb			48.1558	120.4	20.4	244.5
WXX100323-08CRI	RDX	176 > 102	7.58	1776.142	6366.227	1776.142	139.497	bb			42.1277	105.3	5.3	115.1
WXX100323-08CRI	135-Trinitrobenzene	213 > 183	10.18	2747.295	6366.227	2747.295	215.771	bb			45.6542	114.1	14.1	337.5
WXX100323-08CRI	13-Dinitrobenzene-d4	172 > 142	12.06	6366.227		6366.227	6366.227	bb			578.2987	115.7	15.7	491.1
WXX100323-08CRI	13-Dinitrobenzene	168 > 138	12.17	697.986	6366.227	697.986	54.819	bb			41.2814	103.2	3.2	80.2
WXX100323-08CRI	Tetryl	241 > 181	12.66	548.183	6366.227	548.183	43.054	bb			37.5418	93.9	-6.1	40.7
WXX100323-08CRI	Nitrobenzene	123 > 46	13.57	338.961	6366.227	338.961	26.622	bb			40.6345	101.6	1.6	24.8
WXX100323-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.70	1098.308	39177.973	1098.308	14.017	MM	24-Mar-10	09:22:26	39.6658	99.2	-0.8	60.9
WXX100323-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.57	1792.816	39177.973	1792.816	22.880	bb			41.7842	104.5	4.5	158.5
WXX100323-08CRI	246-Trinitrotoluene	227 > 210	15.40	1291.005	39177.973	1291.005	16.476	bb			40.1788	100.4	0.4	66.9
WXX100323-08CRI	34-dinitrotoluene	182 > 152	14.41	1966.236	39177.973	1966.236	25.094	bb			23.6982	118.5	18.5	117.7
WXX100323-08CRI	26-dinitrotoluene	182 > 152	17.61	3627.584	39177.973	3627.584	46.296	MM	24-Mar-10	09:25:30	40.0136	100.0	0.0	277.8
WXX100323-08CRI	24-dinitrotoluene	182 > 152	18.24	933.307	39177.973	933.307	11.911	MM	24-Mar-10	09:29:08	42.9237	107.3	7.3	65.3
WXX100323-08CRI	26-dinitrotoluene-d3	185 > 155	17.41	39177.973		39177.973	39177.973	bb			568.9416	113.8	13.8	2237.2
WXX100323-08CRI	2-Nitrotoluene	137 > 46	21.04	263.285	39177.973	263.285	3.360	bb			41.6664	104.2	4.2	29.3
WXX100323-08CRI	4-Nitrotoluene	137 > 46	22.47	112.834	39177.973	112.834	1.440	bb			36.9796	92.4	-7.6	12.6
WXX100323-08CRI	3-Nitrotoluene	137 > 46	24.10	162.856	39177.973	162.856	2.078	bb			41.2210	103.1	3.1	18.7
WXX100323-08CRI	PETN	361 > 62	24.40	4332.945	39177.973	4332.945	55.298	bb			42.9795	107.4	7.4	2404.9

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/24/10
Time of Injection	0320
Standard Number	WXX100323-08CRI
Data File	EXP0323038a

HMX	120.4
RDX	105.3
135-TNB	114.1
13-DNB	103.2
Tetryl	93.9
Nitrobenzene	101.6
4A-26-DNT	99.2
2A-46-DNT	104.5
246-TNT	100.4
34-DNT(surr)	118.5
26-DNT	100.0
24-DNT	107.3
2-NT	104.2
4-NT	92.4
3-NT	103.1
PETN	107.4
Total	1675.5
Average	104.7

HMX 03/24/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–1623

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323047a

Analysis Date: 24–MAR–10 07:45

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	600	615.829	103	
1,3–Dinitrobenzene–d4	500	538.76	108	
2,4,6–Trinitrotoluene	600	626.253	104	
2,4–Dinitrotoluene	600	632.264	105	
2,6–Dinitrotoluene	600	616.827	103	
2,6–Dinitrotoluene–d3	500	506.856	101	
2–Amino–4,6–dinitrotoluene	600	709.295	118	
3,4–Dinitrotoluene	300	329.347	110	
4–Amino–2,6–dinitrotoluene	600	664.121	111	
HMX	600	725.562	121	*
Nitrobenzene	600	556.166	93	
PETN	600	665.305	111	
RDX	600	706.667	118	
Tetryl	600	747.317	125	*
m–Dinitrobenzene	600	643.102	107	
m–Nitrotoluene	600	595.728	99	
o–Nitrotoluene	600	613.859	102	
p–Nitrotoluene	600	639.266	107	

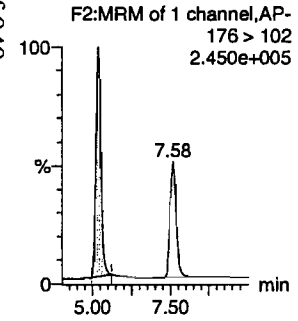
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

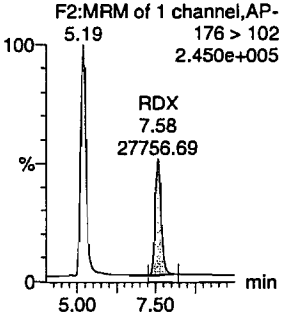
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323047a
Date: 24-Mar-2010
Time: 07:45:25
ID: WXX100323-07CCV
Vial: 1:1,B

MM 3/24/10

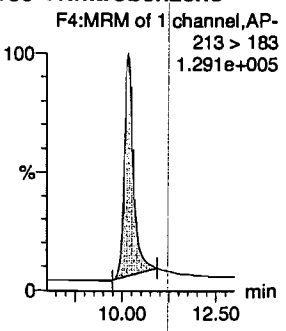
HMX
F2:MRM of 1 channel,AP- 176 > 102 2.450e+005



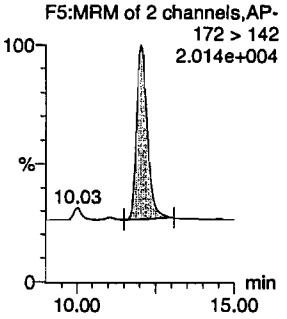
RDX
F2:MRM of 1 channel,AP- 5.19 176 > 102 2.450e+005



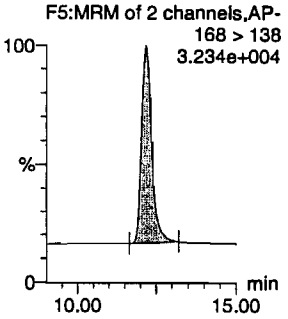
135-Trinitrobenzene
F4:MRM of 1 channel,AP- 213 > 183 1.291e+005



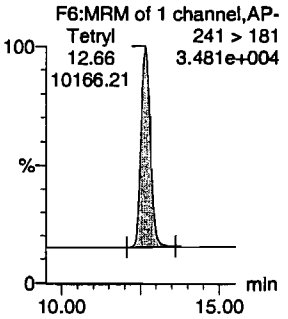
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP- 172 > 142 2.014e+004



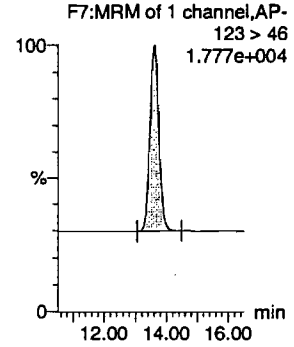
13-Dinitrobenzene
F5:MRM of 2 channels,AP- 168 > 138 3.234e+004



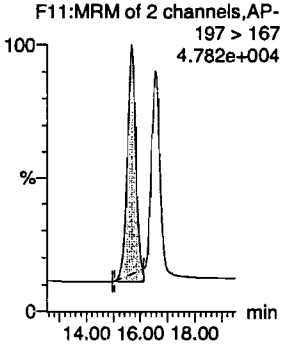
Tetryl
F6:MRM of 1 channel,AP- Tetryl 241 > 181 12.66 3.481e+004 10166.21



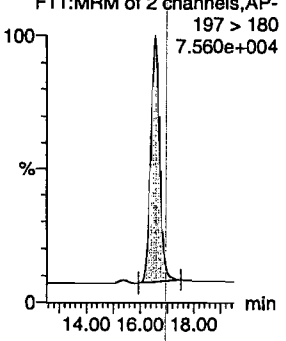
Nitrobenzene
F7:MRM of 1 channel,AP- 123 > 46 1.777e+004



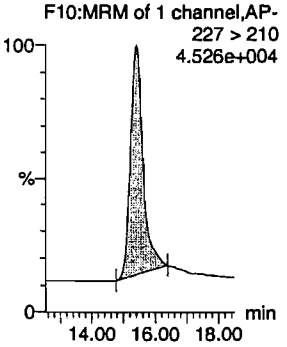
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP- 197 > 167 4.782e+004



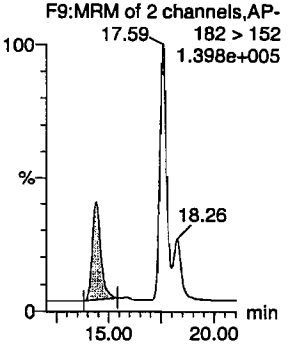
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP- 197 > 180 7.560e+004



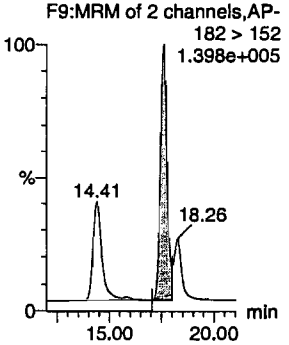
246-Trinitrotoluene
F10:MRM of 1 channel,AP- 227 > 210 4.526e+004



34-dinitrotoluene
F9:MRM of 2 channels,AP- 17.59 182 > 152 1.398e+005



26-dinitrotoluene
F9:MRM of 2 channels,AP- 182 > 152 1.398e+005



MM 03/24/10

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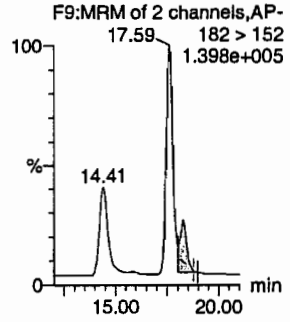
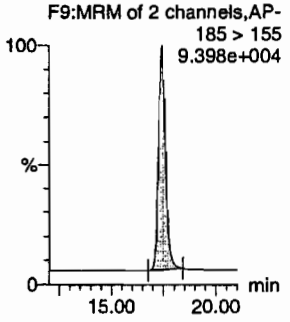
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

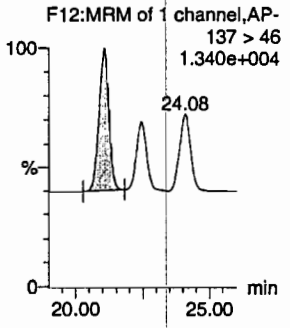
24-dinitrotoluene



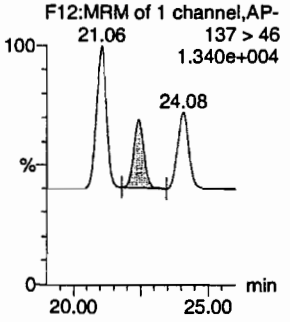
26-dinitrotoluene-d3



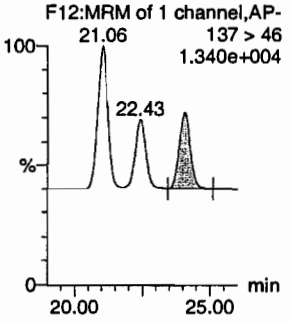
2-Nitrotoluene



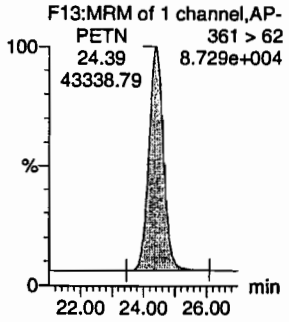
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100323-07CCV	HMX	176 > 102	5.19	47448.902	5930.965	47448.902	4000.100	bb			725.5619	120.9	20.9	2012.7
WXX100323-07CCV	RDX	176 > 102	7.58	27756.693	5930.965	27756.693	2339.981	bb			706.6666	117.8	17.8	1026.7
WXX100323-07CCV	135-Trinitrobenzene	213 > 183	10.18	34524.527	5930.965	34524.527	2910.532	bb			615.8288	102.6	2.6	3107.5
WXX100323-07CCV	13-Dinitrobenzene-d4	172 > 142	12.03	5930.965		5930.965	5930.965	bb			538.7602	107.8	7.8	1246.7
WXX100323-07CCV	13-Dinitrobenzene	168 > 138	12.17	10130.145	5930.965	10130.145	854.005	bb			643.1023	107.2	7.2	838.1
WXX100323-07CCV	Tetryl	241 > 181	12.66	10166.205	5930.965	10166.205	857.045	bb			747.3174	124.6	24.6	1380.8
WXX100323-07CCV	Nitrobenzene	123 > 46	13.61	4322.172	5930.965	4322.172	364.373	bb			556.1658	92.7	-7.3	317.3
WXX100323-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.67	16382.168	34902.664	16382.168	234.684	MM	24-Mar-10	09:22:43	664.1205	110.7	10.7	999.7
WXX100323-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.57	27112.355	34902.664	27112.355	388.400	bb			709.2953	118.2	18.2	772.3
WXX100323-07CCV	246-Trinitrotoluene	227 > 210	15.40	17926.559	34902.664	17926.559	256.808	bb			626.2525	104.4	4.4	874.3
WXX100323-07CCV	34-dinitrotoluene	182 > 152	14.41	24343.902	34902.664	24343.902	348.740	bb			329.3468	109.8	9.8	550.2
WXX100323-07CCV	26-dinitrotoluene	182 > 152	17.59	49818.395	34902.664	49818.395	713.676	MM	24-Mar-10	09:25:47	616.8272	102.8	2.8	1448.2
WXX100323-07CCV	24-dinitrotoluene	182 > 152	18.26	12247.362	34902.664	12247.362	175.450	MM	24-Mar-10	09:29:23	632.2640	105.4	5.4	327.7
WXX100323-07CCV	26-dinitrotoluene-d3	185 > 155	17.41	34902.664		34902.664	34902.664	bb			506.8557	101.4	1.4	2520.5
WXX100323-07CCV	2-Nitrotoluene	137 > 46	21.06	3455.616	34902.664	3455.616	49.504	bb			613.8594	102.3	2.3	1006.8
WXX100323-07CCV	4-Nitrotoluene	137 > 46	22.43	1737.705	34902.664	1737.705	24.894	bb			639.2662	106.5	6.5	487.0
WXX100323-07CCV	3-Nitrotoluene	137 > 46	24.08	2096.766	34902.664	2096.766	30.037	bb			595.7285	99.3	-0.7	543.6
WXX100323-07CCV	PETN	361 > 62	24.39	43338.785	34902.664	43338.785	620.852	bb			665.3052	110.9	10.9	4414.2

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

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GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/24/10
Time of Injection: 0745
Standard Number: WXX100323-07CCV
Data File: EXP0323047a

HMX		120.9
RDX		117.8
135-TNB		102.6
13-DNB		107.2
Tetryl		124.6
Nitrobenzene		92.7
4A-26-DNT		110.7
2A-46-DNT		118.2
246-TNT		104.4
34-DNT(surr)		109.8
26-DNT		102.8
24-DNT		105.4
2-NT		102.3
4-NT		106.5
3-NT		99.3
PETN		110.9
Total		1736.1
Average		108.5

3/24/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323049a

Analysis Date: 24-MAR-10 08:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	47.063	118	
1,3-Dinitrobenzene-d4	500	561.116	112	
2,4,6-Trinitrotoluene	40	37.222	93	
2,4-Dinitrotoluene	40	35.725	89	
2,6-Dinitrotoluene	40	41.3	103	
2,6-Dinitrotoluene-d3	500	588.805	118	
2-Amino-4,6-dinitrotoluene	40	41.485	104	
3,4-Dinitrotoluene	20	21.335	107	
4-Amino-2,6-dinitrotoluene	40	41.766	104	
HMX	40	49.844	125	
Nitrobenzene	40	34.492	86	
PETN	40	40.675	102	
RDX	40	45.987	115	
Tetryl	40	35.013	88	
m-Dinitrobenzene	40	36.691	92	
m-Nitrotoluene	40	40.219	101	
o-Nitrotoluene	40	41.552	104	
p-Nitrotoluene	40	34.803	87	

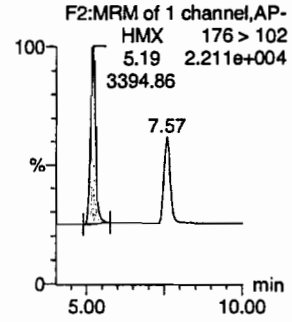
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

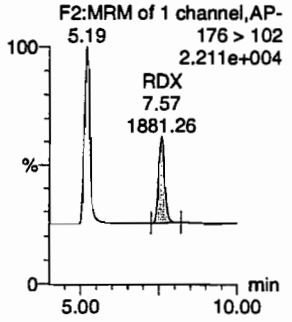
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323049a
Date: 24-Mar-2010
Time: 08:44:30
ID: WXX100323-08CRI
Vial: 1:1,C

MM 3/24/10

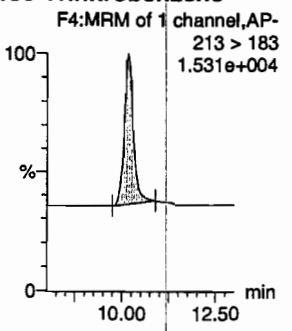
HMX



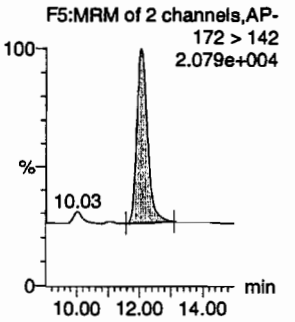
RDX



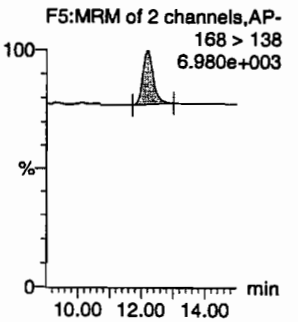
135-Trinitrobenzene



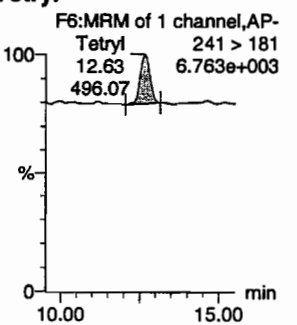
13-Dinitrobenzene-d4



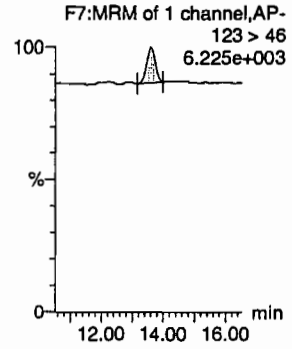
13-Dinitrobenzene



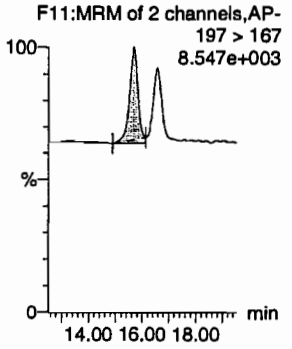
Tetryl



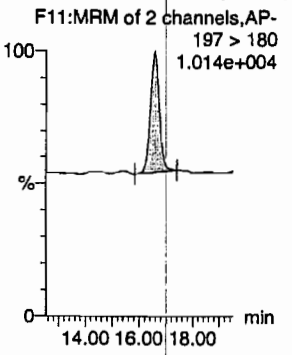
Nitrobenzene



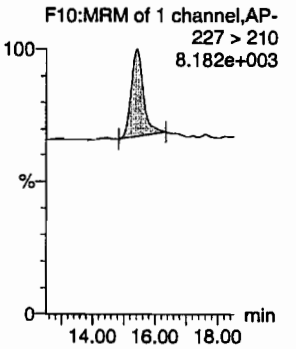
4-Amino-26-dinitrotoluene



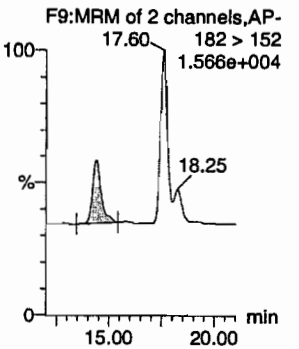
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

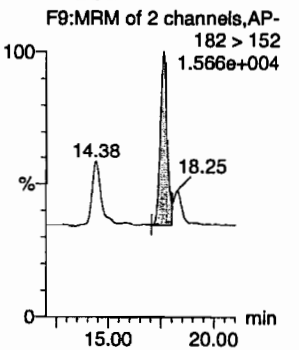


34-dinitrotoluene



Hmm 03/24/10

26-dinitrotoluene



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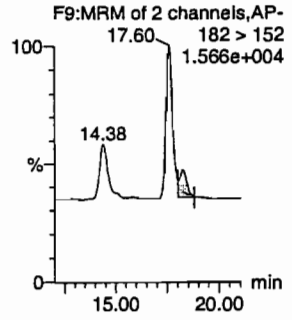
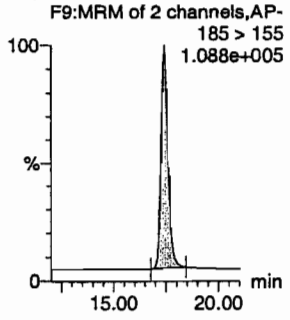
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

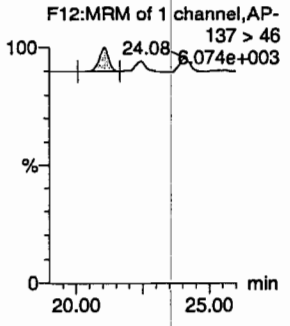
24-dinitrotoluene



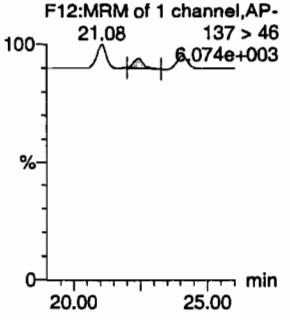
26-dinitrotoluene-d3



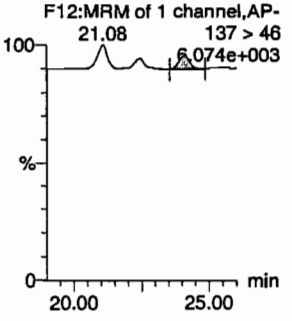
2-Nitrotoluene



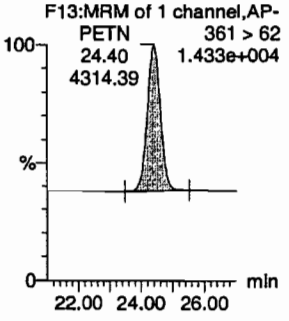
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100323-08CRI	HMX	176 > 102	5.19	3394.862	6177.075	3394.862	274.795	bb			49.8440	124.6	24.6	373.8
WXX100323-08CRI	RDX	176 > 102	7.57	1881.264	6177.075	1881.264	152.278	bb			45.9874	115.0	15.0	183.8
WXX100323-08CRI	135-Trinitrobenzene	213 > 183	10.18	2747.943	6177.075	2747.943	222.431	bb			47.0633	117.7	17.7	189.1
WXX100323-08CRI	13-Dinitrobenzene-d4	172 > 142	12.03	6177.075		6177.075	6177.075	bb			561.1164	112.2	12.2	723.8
WXX100323-08CRI	13-Dinitrobenzene	168 > 138	12.17	601.941	6177.075	601.941	48.724	bb			36.6911	91.7	-8.3	69.4
WXX100323-08CRI	Tetryl	241 > 181	12.63	496.068	6177.075	496.068	40.154	bb			35.0130	87.5	-12.5	65.5
WXX100323-08CRI	Nitrobenzene	123 > 46	13.58	279.173	6177.075	279.173	22.598	bb			34.4920	86.2	-13.8	30.1
WXX100323-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.68	1196.828	40545.816	1196.828	14.759	MM	24-Mar-10	09:22:50	41.7657	104.4	4.4	70.6
WXX100323-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.58	1842.135	40545.816	1842.135	22.717	bb			41.4853	103.7	3.7	179.8
WXX100323-08CRI	246-Trinitrotoluene	227 > 210	15.41	1237.761	40545.816	1237.761	15.264	bb			37.2222	93.1	-6.9	73.0
WXX100323-08CRI	34-dinitrotoluene	182 > 152	14.38	1831.947	40545.816	1831.947	22.591	bb			21.3348	106.7	6.7	99.0
WXX100323-08CRI	26-dinitrotoluene	182 > 152	17.60	3874.927	40545.816	3874.927	47.785	MM	24-Mar-10	09:25:56	41.3000	103.2	3.2	271.9
WXX100323-08CRI	24-dinitrotoluene	182 > 152	18.25	803.896	40545.816	803.896	9.913	MM	24-Mar-10	09:29:31	35.7247	89.3	-10.7	50.9
WXX100323-08CRI	26-dinitrotoluene-d3	185 > 155	17.42	40545.816		40545.816	40545.816	bb			588.8054	117.8	17.8	2316.3
WXX100323-08CRI	2-Nitrotoluene	137 > 46	21.08	271.729	40545.816	271.729	3.351	bb			41.5520	103.9	3.9	69.5
WXX100323-08CRI	4-Nitrotoluene	137 > 46	22.45	109.900	40545.816	109.900	1.355	bb			34.8029	87.0	-13.0	27.8
WXX100323-08CRI	3-Nitrotoluene	137 > 46	24.08	164.443	40545.816	164.443	2.028	bb			40.2185	100.5	0.5	37.2
WXX100323-08CRI	PETN	361 > 62	24.40	4314.385	40545.816	4314.385	53.204	bb			40.6749	101.7	1.7	1131.0

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

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/24/10
Time of Injection	0844
Standard Number	WXX100323-08CRI
Data File	EXP0323049a

HMX		124.6
RDX		115.0
135-TNB		117.7
13-DNB		91.7
Tetryl		87.5
Nitrobenzene		86.2
4A-26-DNT		104.4
2A-46-DNT		103.7
246-TNT		93.1
34-DNT(surr)		106.7
26-DNT		103.2
24-DNT		89.3
2-NT		103.9
4-NT		87.0
3-NT		100.5
PETN		101.7
	Total	1616.2
	Average	101.0

MAT 3/24/10

Hmm 03/24/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03010013.wiff

Analysis Date: 01-MAR-10 12:11

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

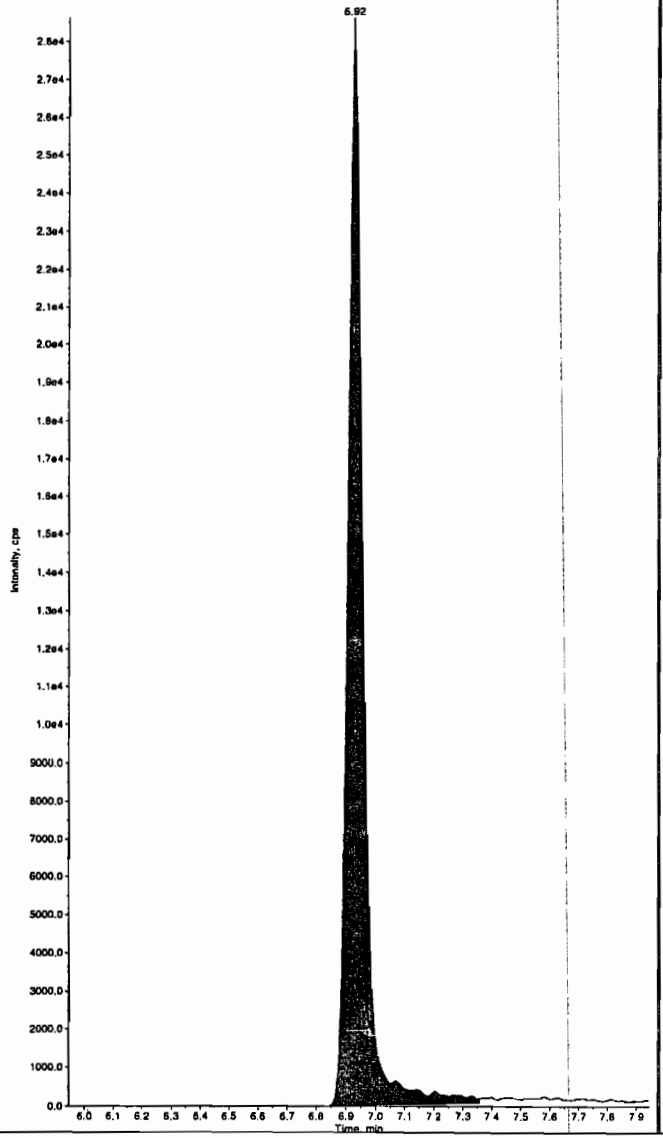
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	99.6	100	
2,6-Diamino-4-nitrotoluene	100	99.3	99	
3,4-Dinitrotoluene	50	52.9	106	
3,5-Dinitroaniline	100	100	100	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	101	101	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Ken 3/3/10

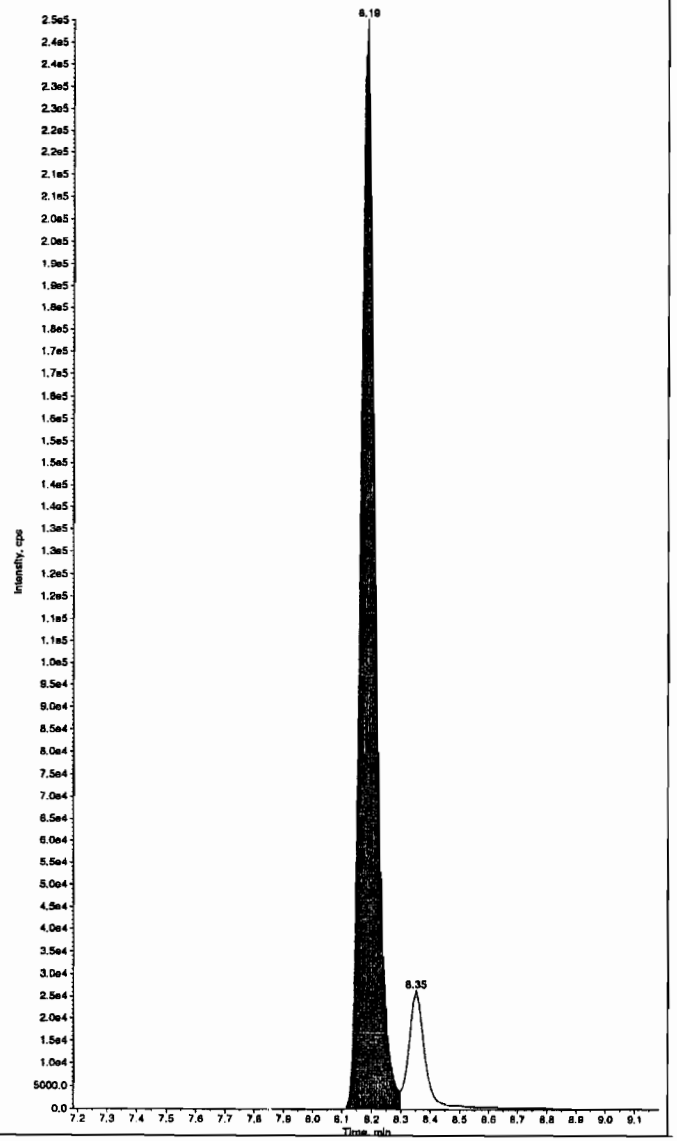
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010013.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	104.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	12:11:50 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.92	min
Area:	1.10e+005	counts
Height:	28624.565	cps
Start Time:	6.84	min
End Time:	7.36	min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010013.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	100.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	12:11:50 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.19	min
Area:	8.79e+005	counts
Height:	245160.095	cps
Start Time:	8.09	min
End Time:	8.30	min



HW 03/04/10

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

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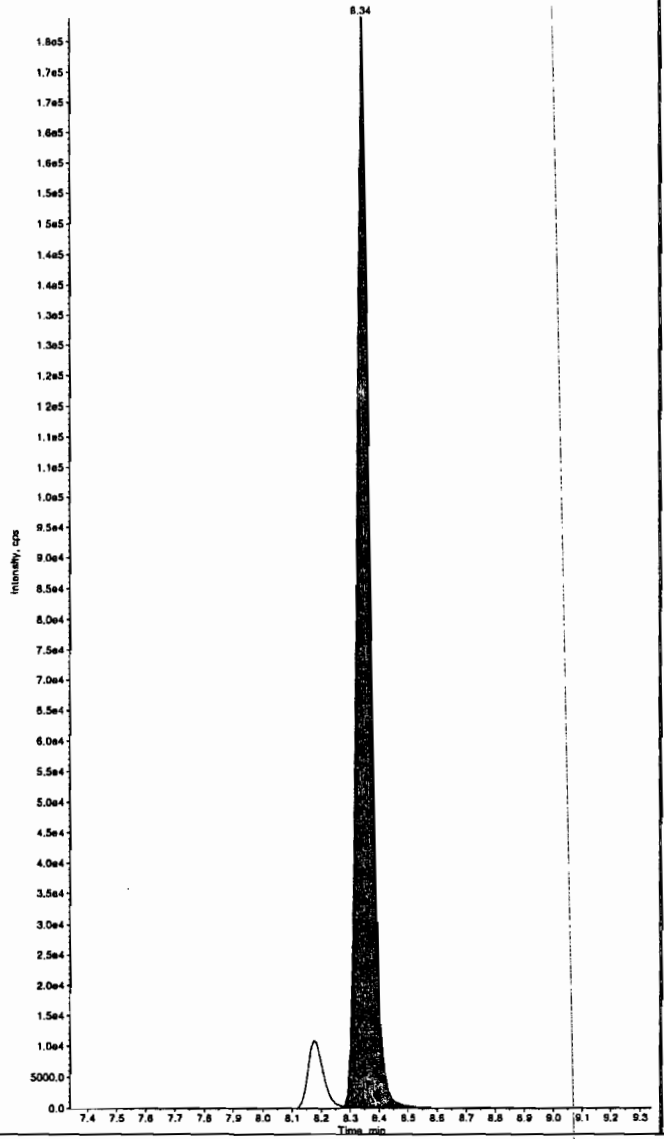
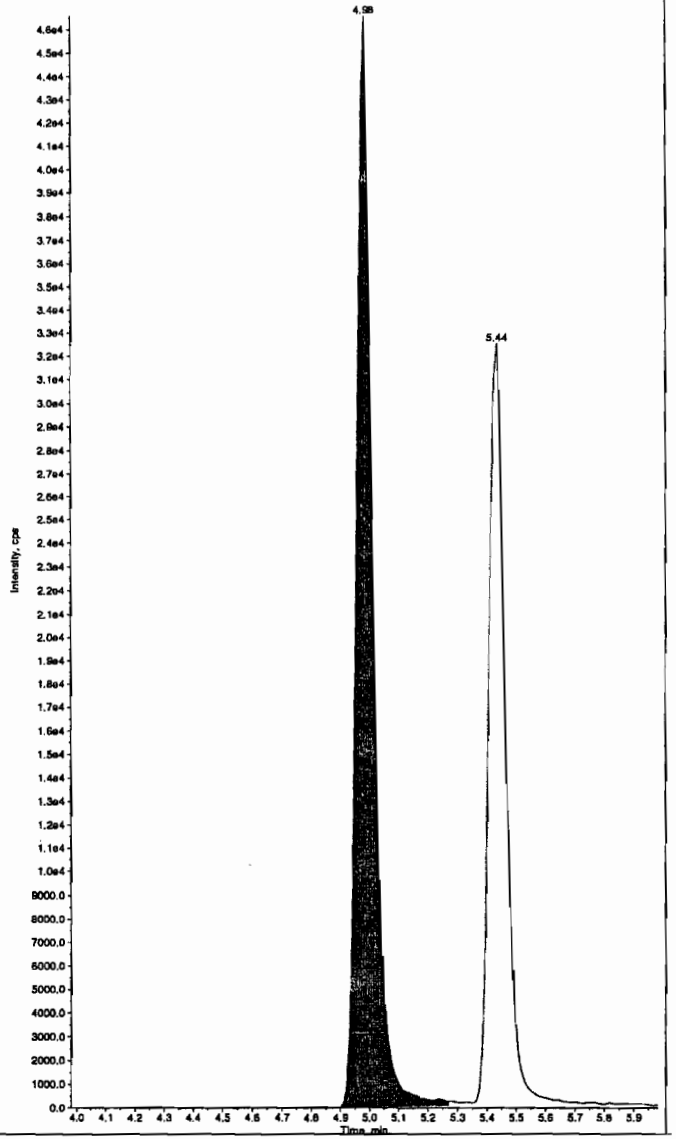
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010013.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	50.0 ng/mL
Calculated Conc:	52.9 ng/mL
Acq. Date:	3/1/2010
Acq. Time:	12:11:50 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.34 min
Area:	6.10e+005 counts
Height:	178867.096 cps
Start Time:	8.27 min
End Time:	8.66 min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010013.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	99.3 ng/mL
Acq. Date:	3/1/2010
Acq. Time:	12:11:50 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	4.98 min
Area:	1.91e+005 counts
Height:	46581.150 cps
Start Time:	4.87 min
End Time:	5.27 min



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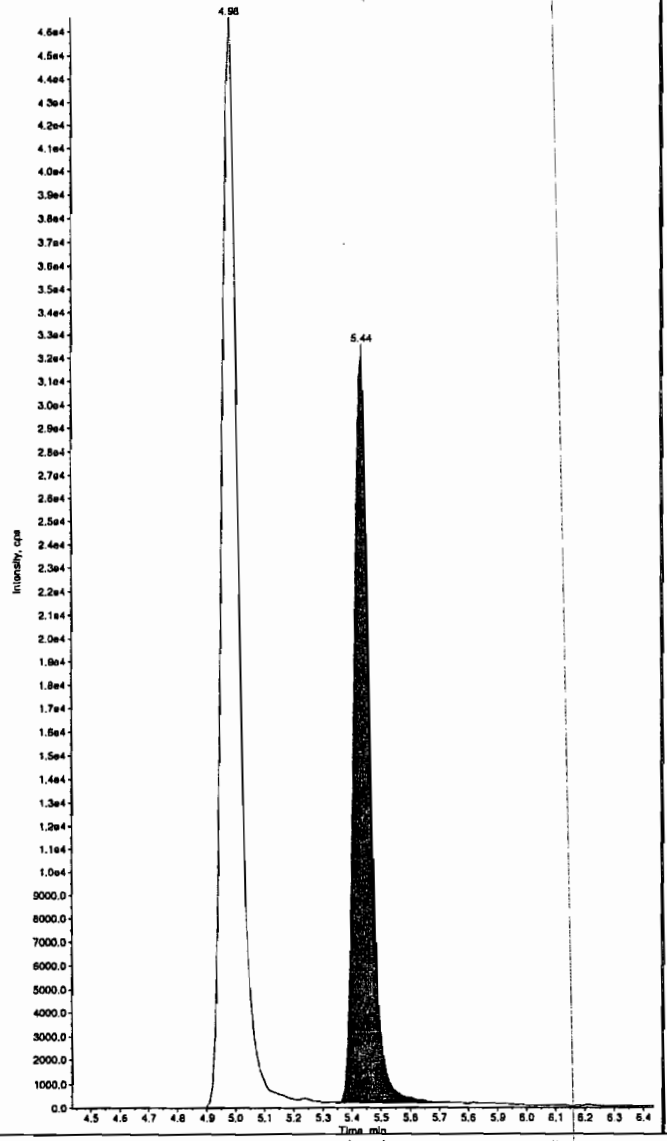
[t]GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

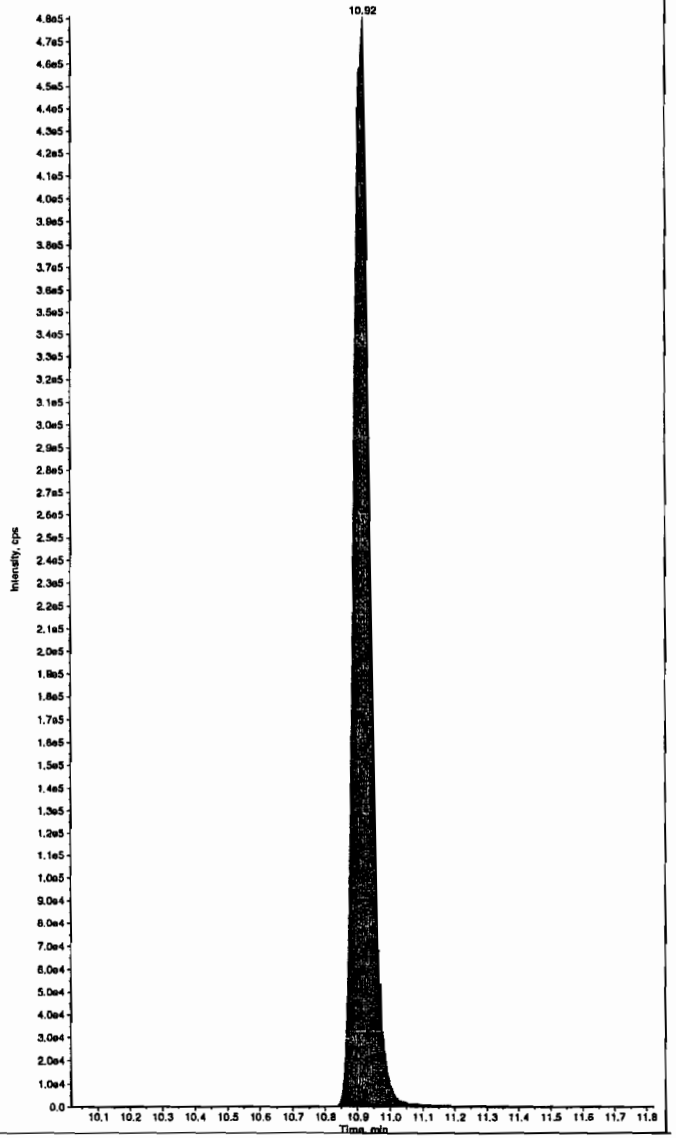
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010013.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	99.6	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	12:11:50 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:	5.44	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.44	min
Area:	1.27e+005	counts
Height:	32363.556	cps
Start Time:	5.35	min
End Time:	5.73	min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010013.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	101.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	12:11:50 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:	1.76e+006	counts
Height:	480812.347	cps
Start Time:	10.8	min
End Time:	11.2	min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–1623

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS03010024.wiff **Analysis Date:** 01–MAR–10 15:04

LCMSMS ID: 1358 **Column ID:** JSphere ODS–H80

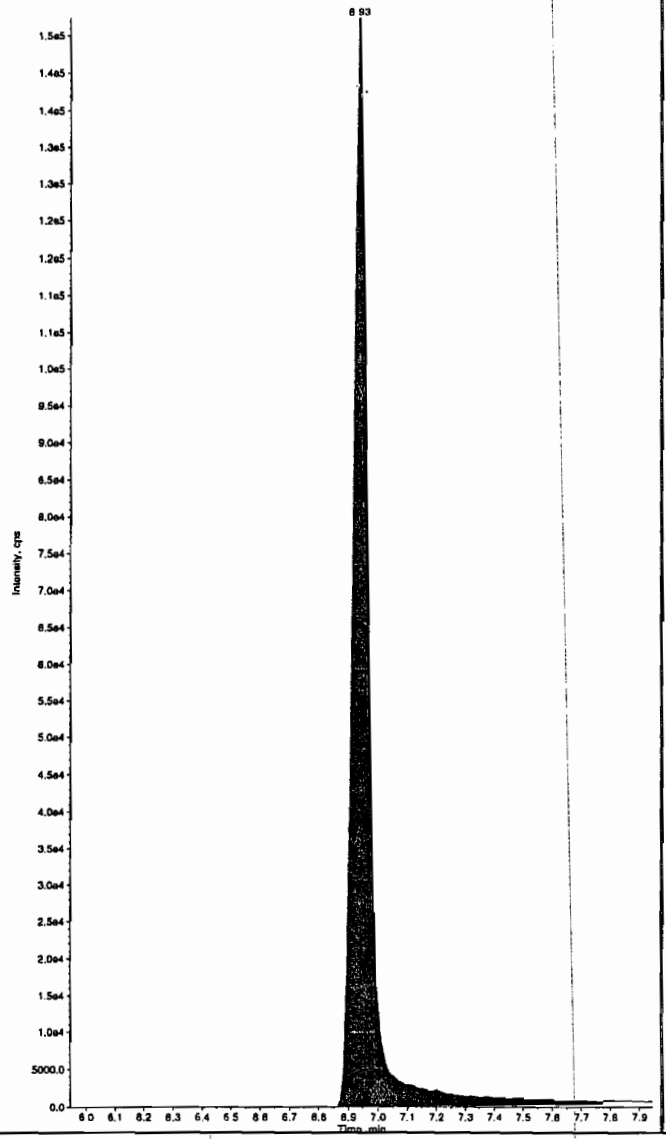
Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	495	99	
2,6–Diamino–4–nitrotoluene	500	499	100	
3,4–Dinitrotoluene	250	229	92	
3,5–Dinitroaniline	500	513	103	
TATB	500	498	100	
tris(o–cresyl) phosphate	500	500	100	

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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before Clar 3/3/10

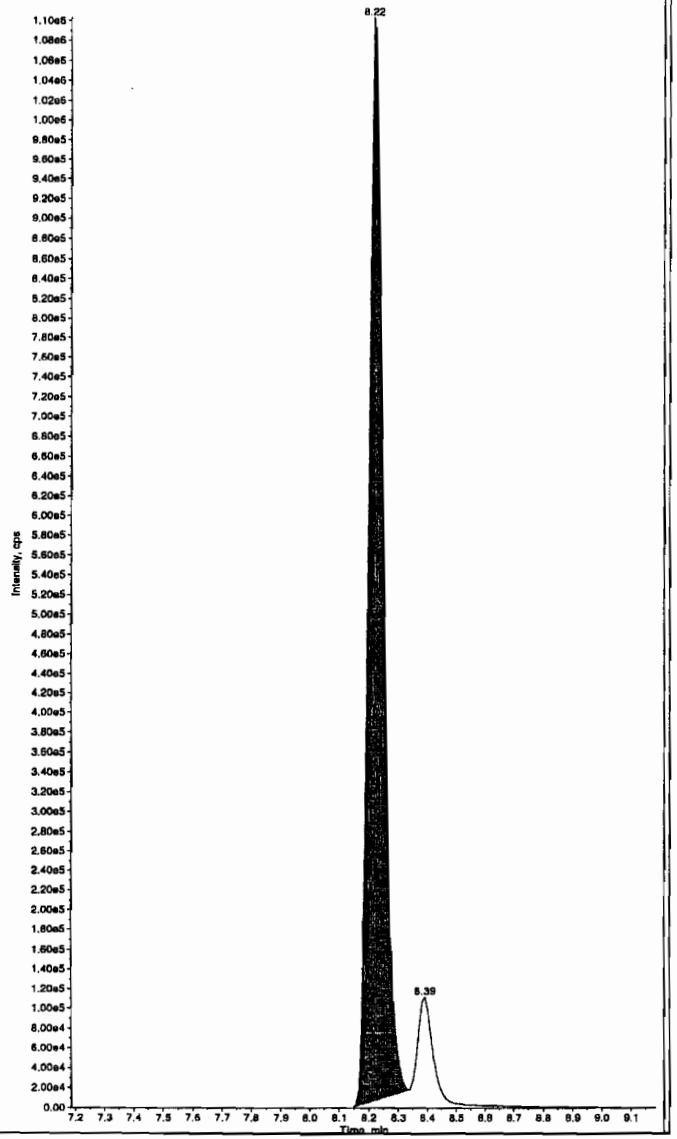
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010024.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	498.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	3:04:50 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.93	min
Area:	5.94e+005	counts
Height:	147589.539	cps
Start Time:	6.84	min
End Time:	7.77	min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010024.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	503.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	3:04:50 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.22	min
Area:	3.94e+006	counts
Height:	1095798.828	cps
Start Time:	8.14	min
End Time:	8.34	min



thm 03/04/10

[1]GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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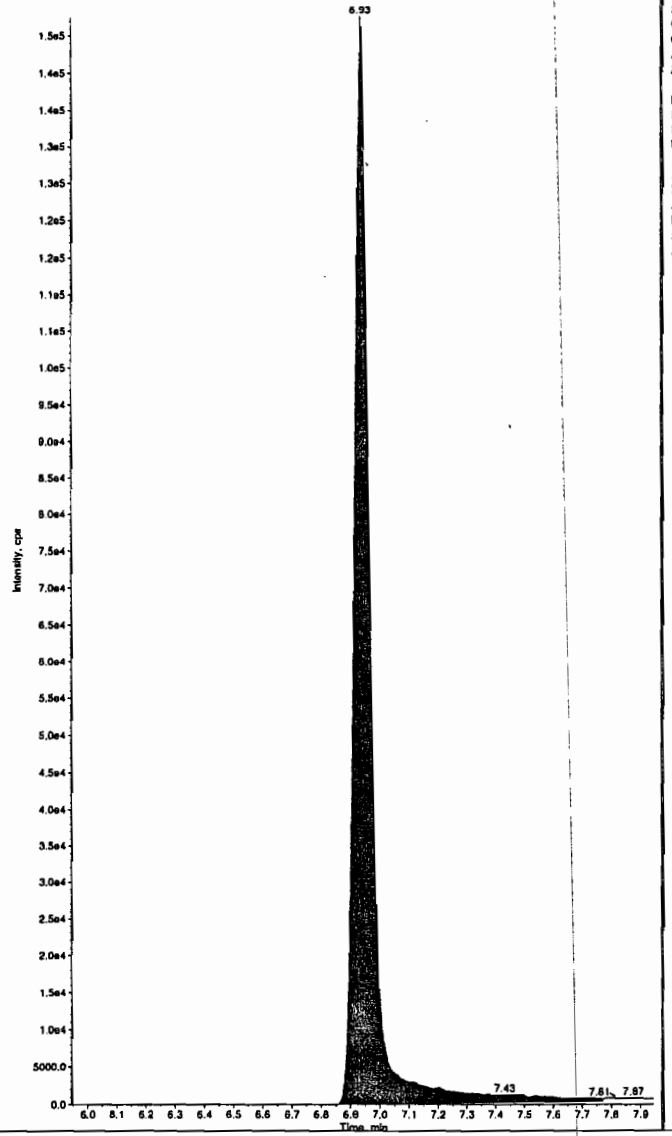
After Run 3/3/10

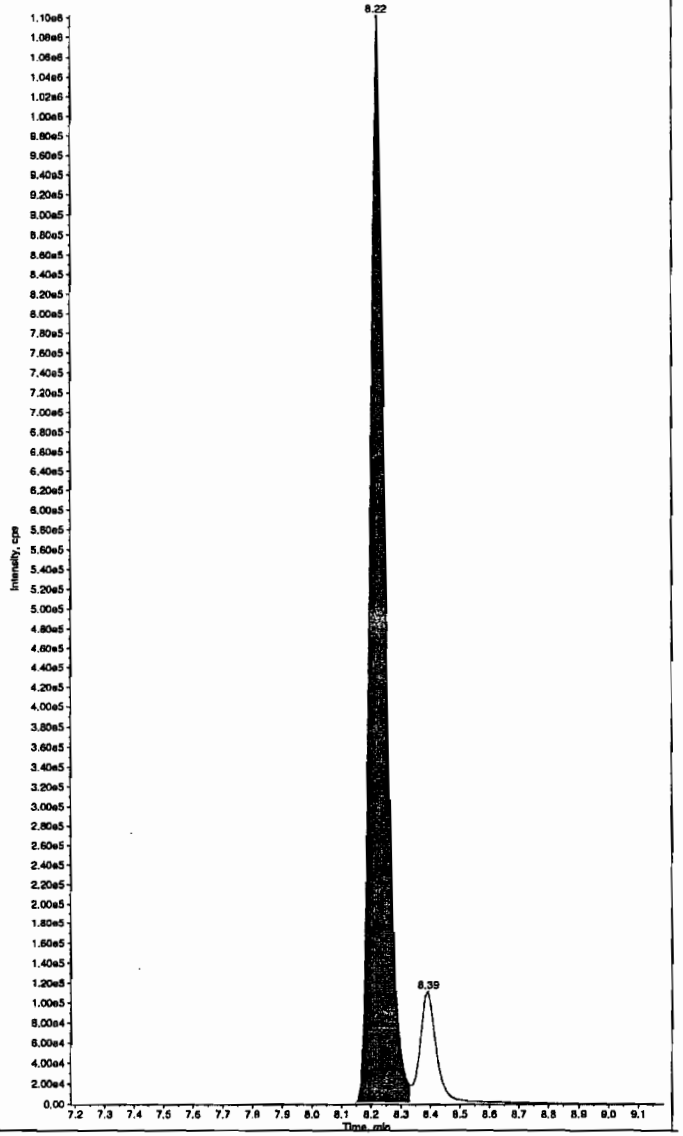
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010024.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	498. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	3:04:50 PM
Modified:	No
Processing Algorithm:	IncelliQuan - IQA
Min. Peak Height:	2500.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	6.94 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.93 min
Area:	5.94e+005 counts
Height:	147589.539 cps
Start Time:	6.84 min
End Time:	7.77 min



Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010024.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	513. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	3:04:50 PM
Modified:	Yes
RT Window:	15.0 sec
Expected RT:	8.19 min
Use Relative RT:	No
Int. Type:	Manual
Retention Time:	8.22 min
Area:	4.02e+006 counts
Height:	1121187.984 cps
Start Time:	8.15 min
End Time:	8.33 min



[1]GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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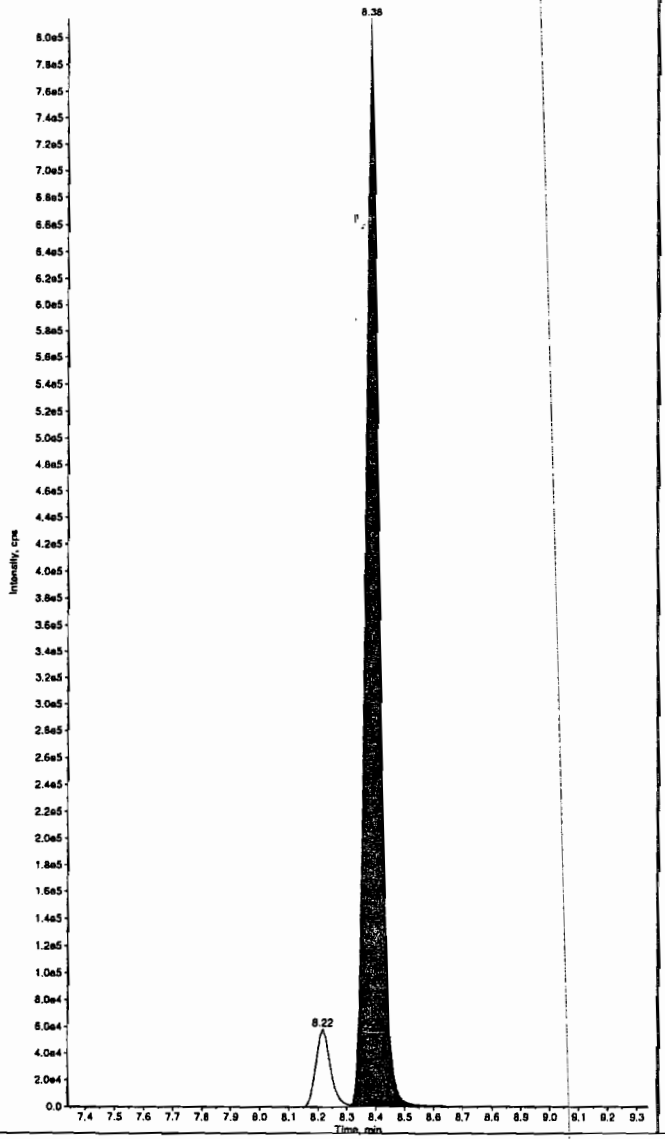
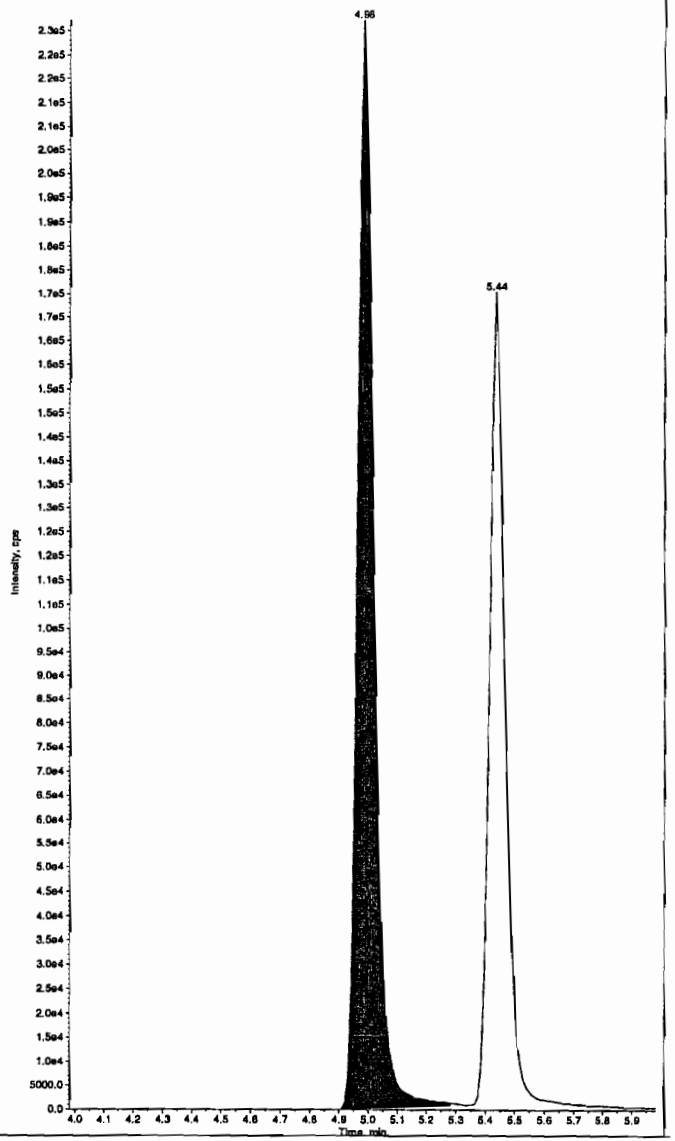
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010024.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:          1
Sample Type:            QC
Concentration:        250.     ng/mL
Calculated Conc:      229.     ng/mL
Acq. Date:          3/1/2010
Acq. Time:          3:04:50 PM

Modified:              No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height:1460.00    cps
Min. Peak Width:     0.00    sec
Smoothing Width:  3         points
RT Window:           15.0     sec
Expected RT:          8.34    min
Use Relative RT:     No

Int. Type:          Valley
Retention Time:       8.38    min
Area:            2.79e+006   counts
Height:            813807.007  cps
Start Time:           8.31    min
End Time:             8.71    min
```



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010024.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

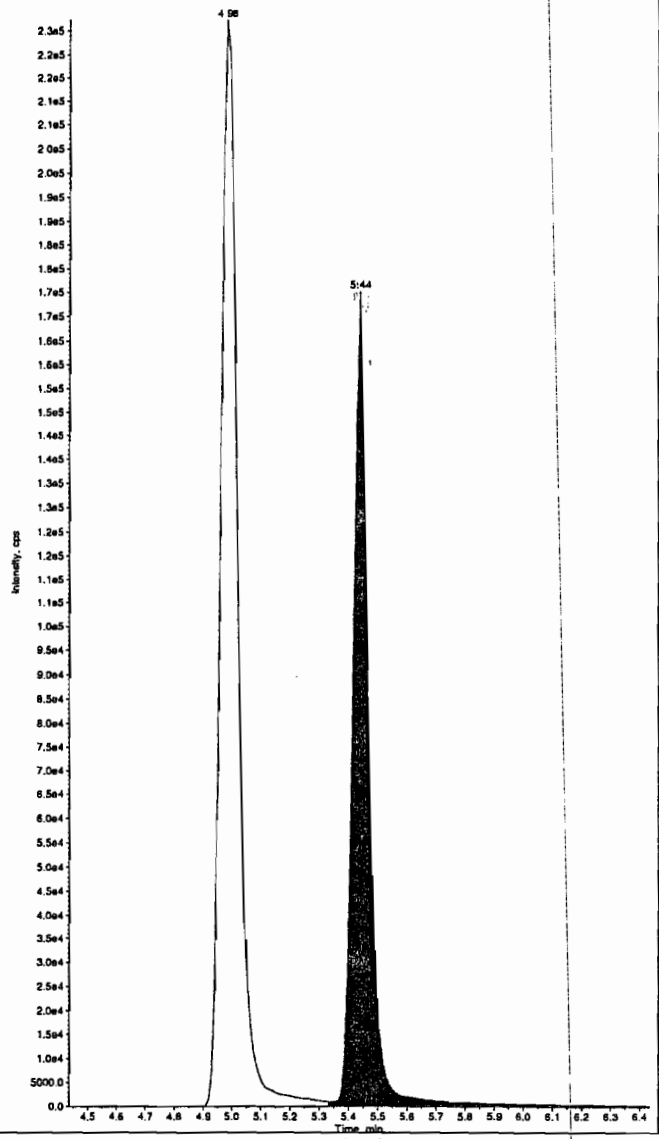
```
Sample Index:          1
Sample Type:            QC
Concentration:        500.     ng/mL
Calculated Conc:      499.     ng/mL
Acq. Date:          3/1/2010
Acq. Time:          3:04:50 PM

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:          4.98    min
Use Relative RT:     No

Int. Type:          Valley
Retention Time:       4.98    min
Area:            9.31e+005   counts
Height:            227229.340  cps
Start Time:           4.90    min
End Time:             5.28    min
```



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

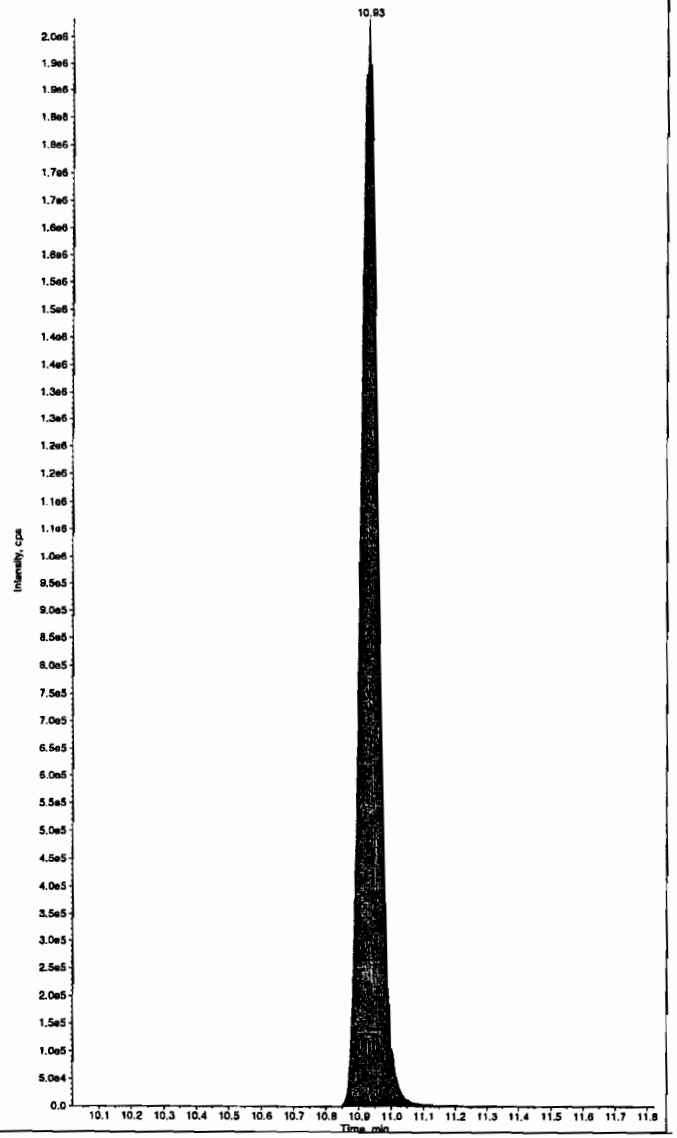
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010024.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	495. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	3:04:50 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:	5.44 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.44 min
Area:	6.57e+005 counts
Height:	170321.594 cps
Start Time:	5.33 min
End Time:	6.07 min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010024.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	500. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	3:04:50 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:	7.81e+006 counts
Height:	1982946.289 cps
Start Time:	10.8 min
End Time:	11.2 min



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

Page 80 of 240

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10-1623

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXS03010026.wiff **Analysis Date:** 01-MAR-10 15:36

LCMSMS ID: 1358 **Column ID:** JSphere ODS-H80

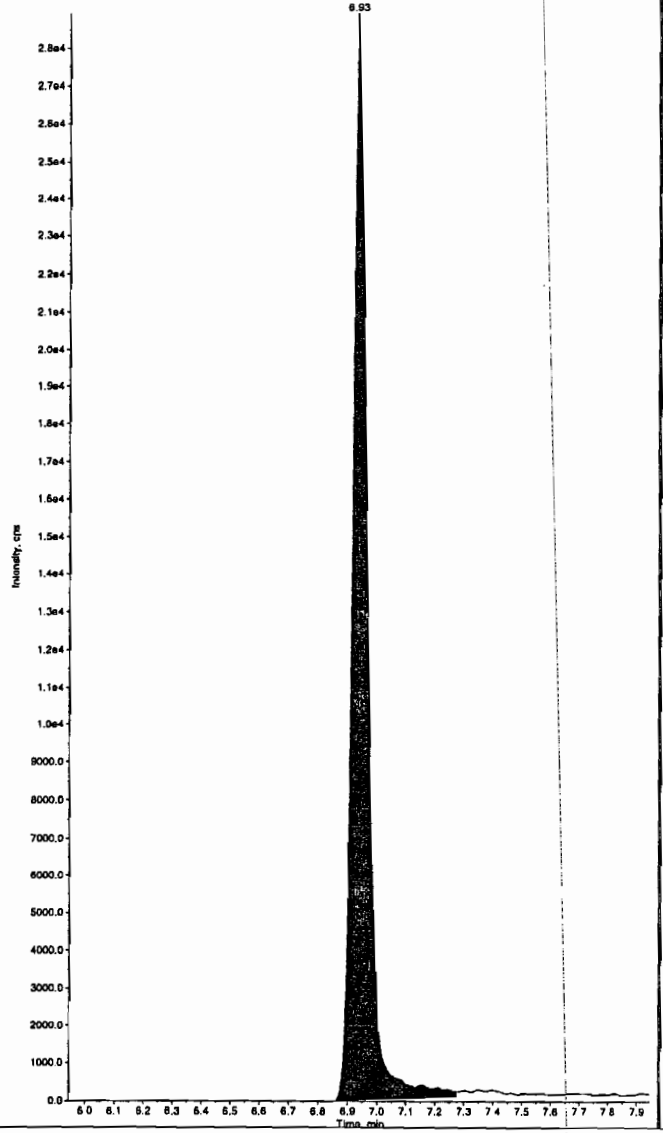
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	99.7	100	
2,6-Diamino-4-nitrotoluene	100	101	101	
3,4-Dinitrotoluene	50	52.7	105	
3,5-Dinitroaniline	100	96.2	96	
TATB	100	102	102	
tris(o-cresyl) phosphate	100	100	100	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

RCH 3/3/10

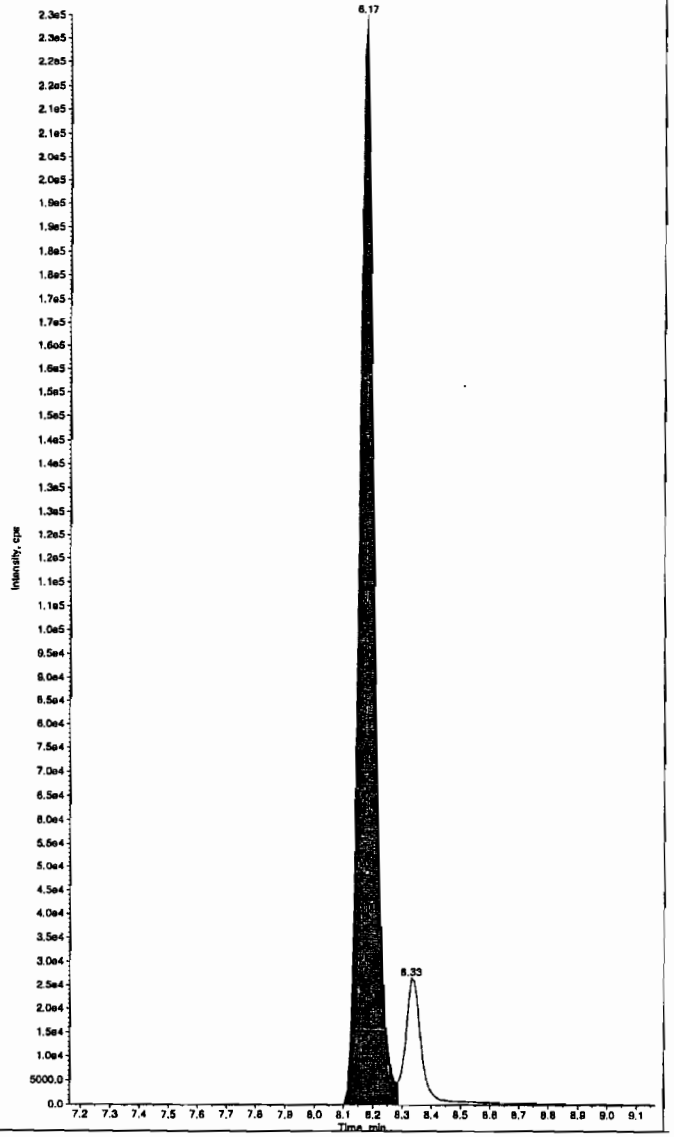
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010026.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	102. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	3:36:24 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:	6.94 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.93 min
Area:	1.08e+005 counts
Height:	28924.082 cps
Start Time:	6.85 min
End Time:	7.28 min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010026.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	96.2 ng/mL
Acq. Date:	3/1/2010
Acq. Time:	3:36:24 PM
Modified:	Yes
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	2000.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.16 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.17 min
Area:	8.48e+005 counts
Height:	230011.292 cps
Start Time:	8.06 min
End Time:	8.29 min



Hmm 03/04/10

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

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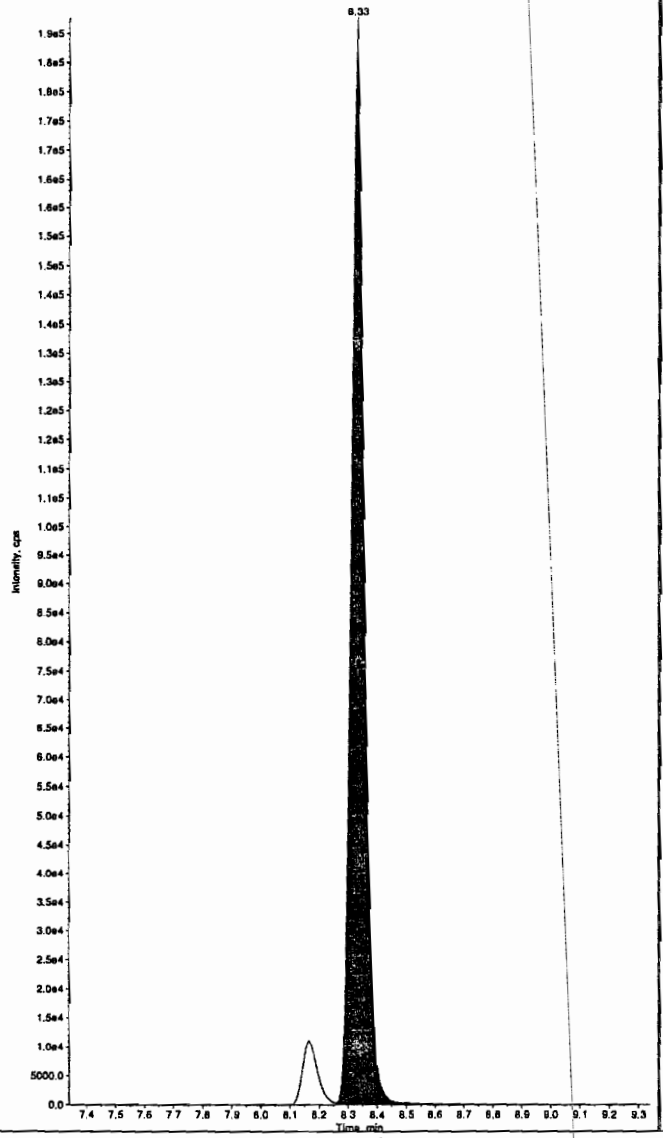
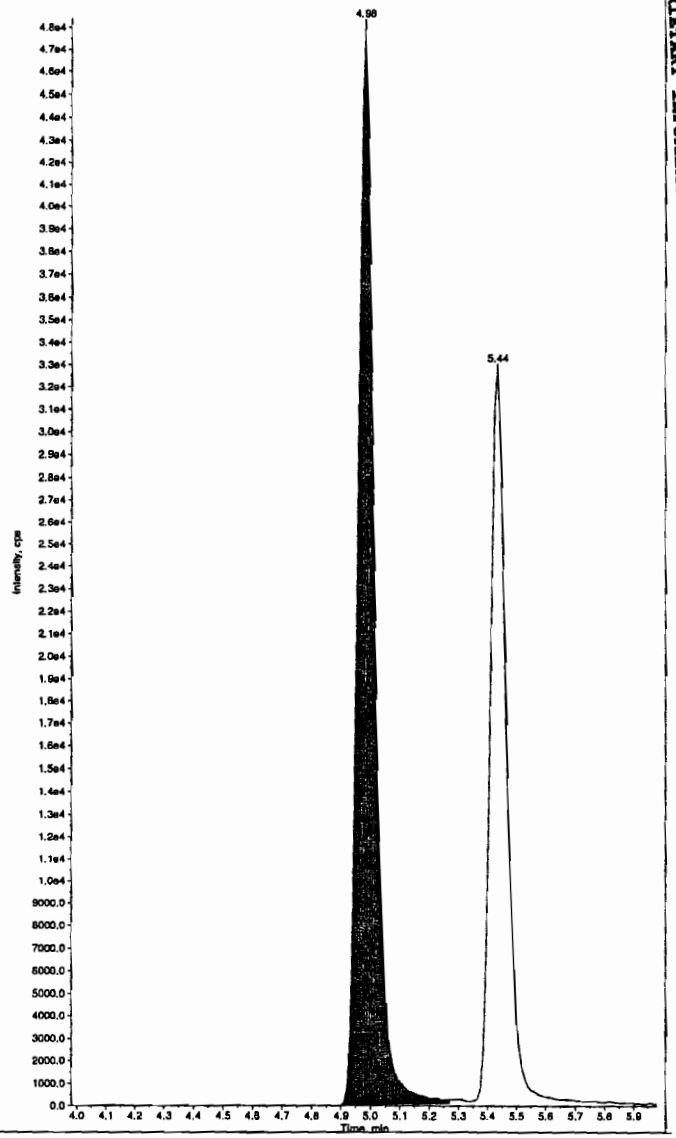
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010026.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	52.7	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	3:36:24 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	15.0	sec
Expected RT:	8.34	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.33	min
Area:	6.07e+005	counts
Height:	157778.061	cps
Start Time:	8.26	min
End Time:	8.67	min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010026.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	101.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	3:36:24 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:	4.98	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.98	min
Area:	1.95e+005	counts
Height:	48368.607	cps
Start Time:	4.89	min
End Time:	5.27	min



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

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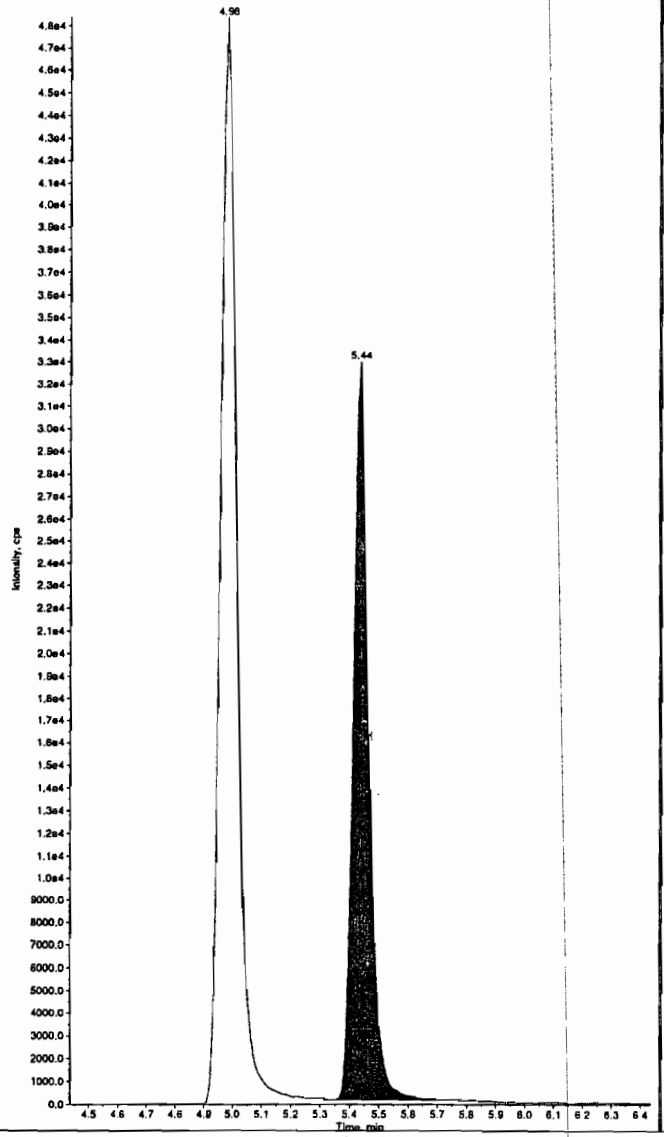
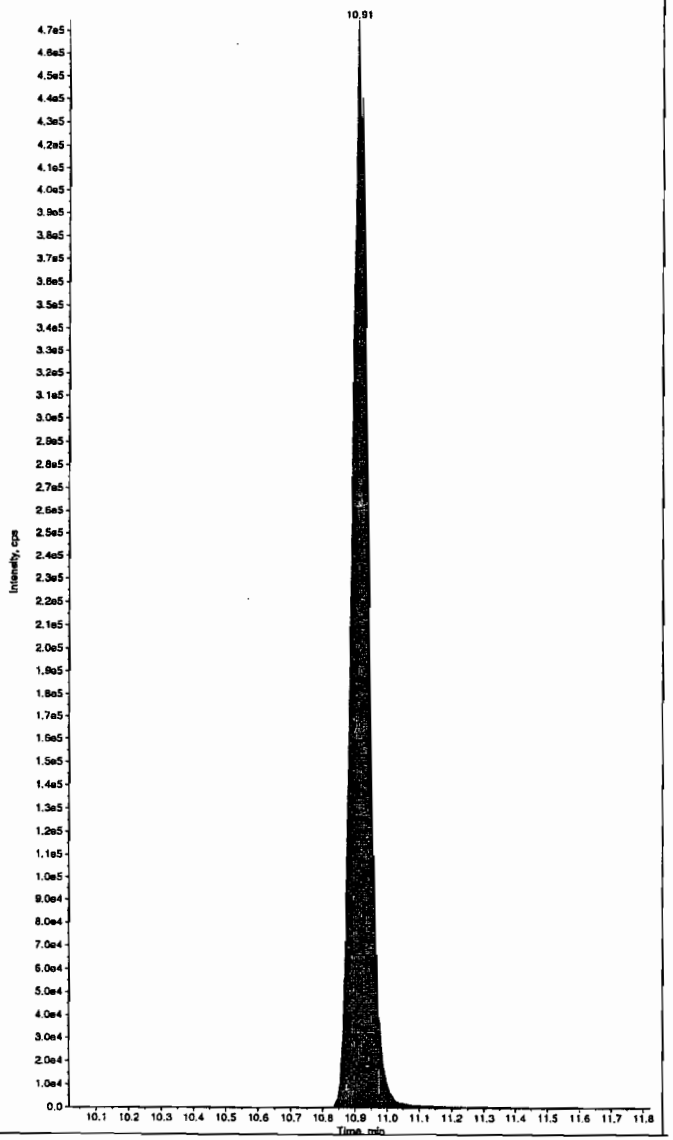
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010026.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	99.7	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	3:36:24 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:	5.44	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.44	min
Area:	1.27e+005	counts
Height:	32860.054	cps
Start Time:	5.33	min
End Time:	5.73	min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010026.wiff"
Peak Name: "Tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	100.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	3:36:24 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:	1.75e+006	counts
Height:	474479.401	cps
Start Time:	10.8	min
End Time:	11.3	min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–1623

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS03010037.wiff **Analysis Date:** 01–MAR–10 18:29

LCMSMS ID: 1358 **Column ID:** JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	503	101	
2,6–Diamino–4–nitrotoluene	500	525	105	
3,4–Dinitrotoluene	250	235	94	
3,5–Dinitroaniline	500	501	100	
TATB	500	493	99	
tris(o–cresyl) phosphate	500	484	97	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

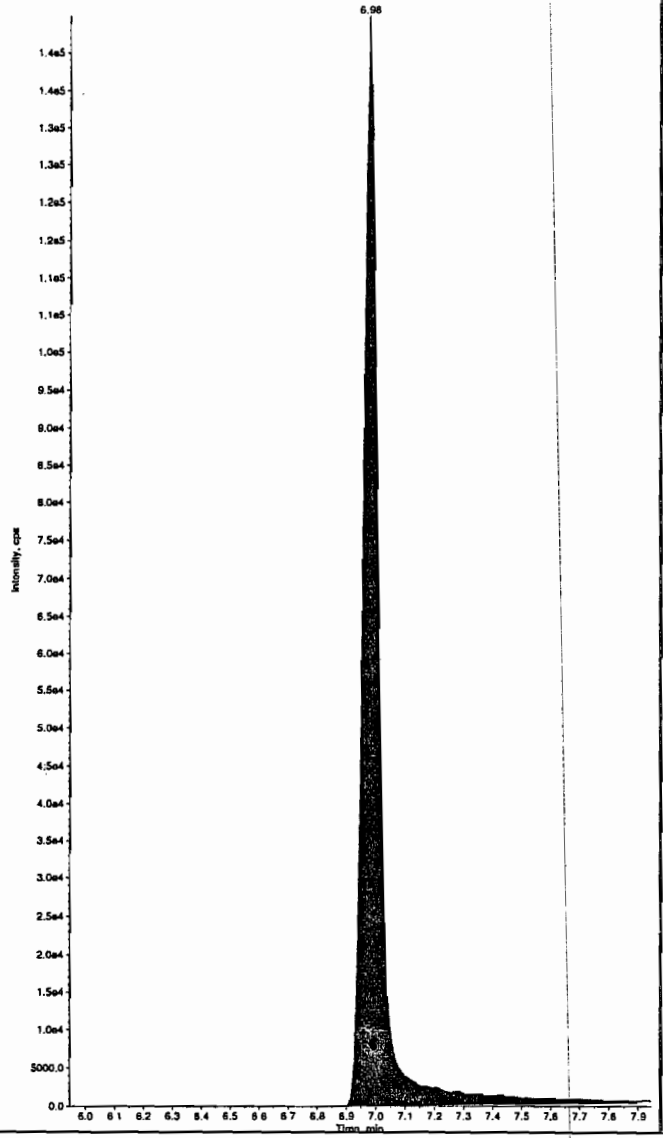
Before Run 3/3/10

Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010037.wiff"
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: 493. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 6:29:39 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 6.98 min
Area: 5.89e+005 counts
Height: 144896.042 cps
Start Time: 6.88 min
End Time: 7.90 min

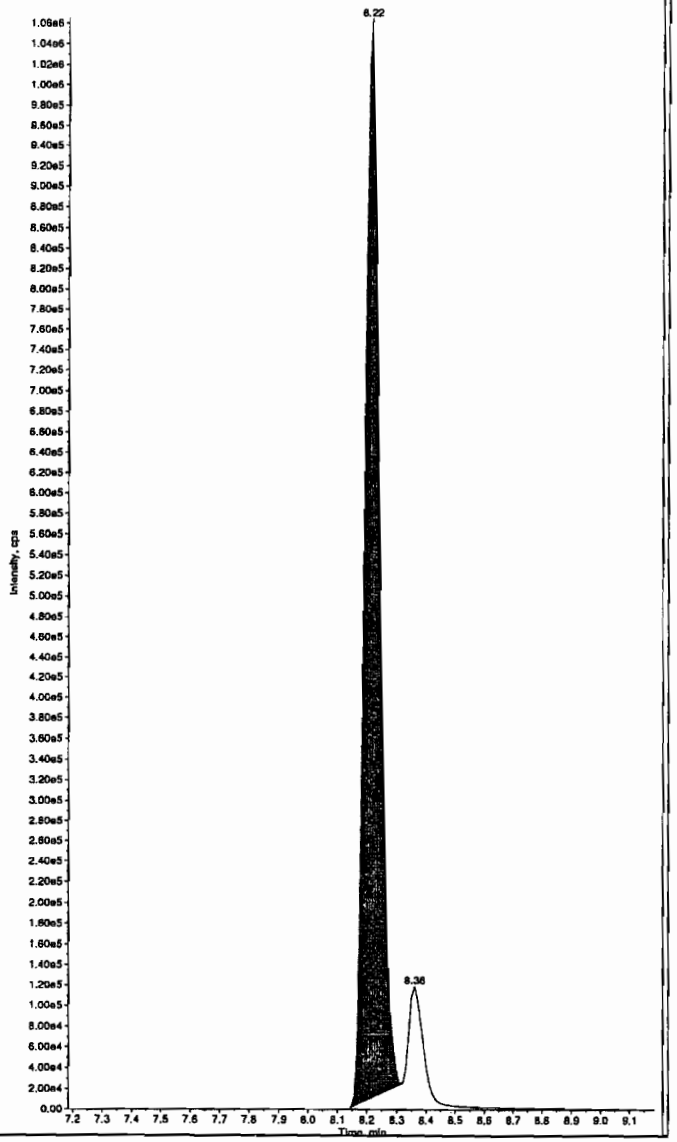


Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010037.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 486. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 6:29:39 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.22 min
Area: 3.82e+006 counts
Height: 1053230.835 cps
Start Time: 8.14 min
End Time: 8.32 min



Hmm 3/04/10

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

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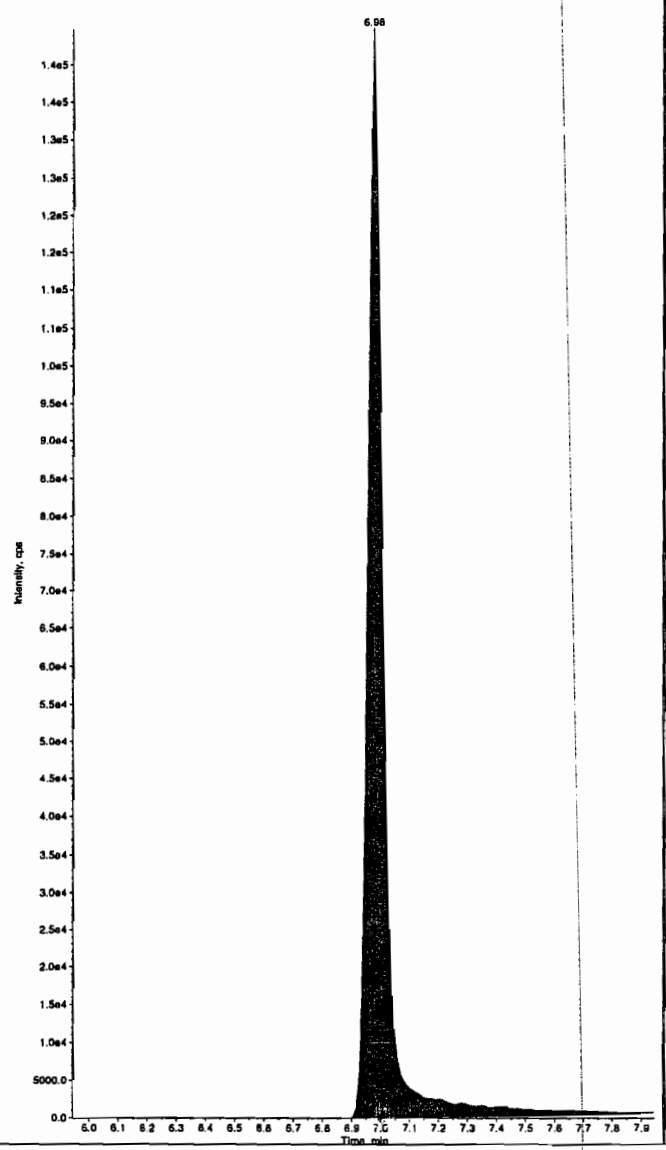
after Run 3/3/10

Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010037.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

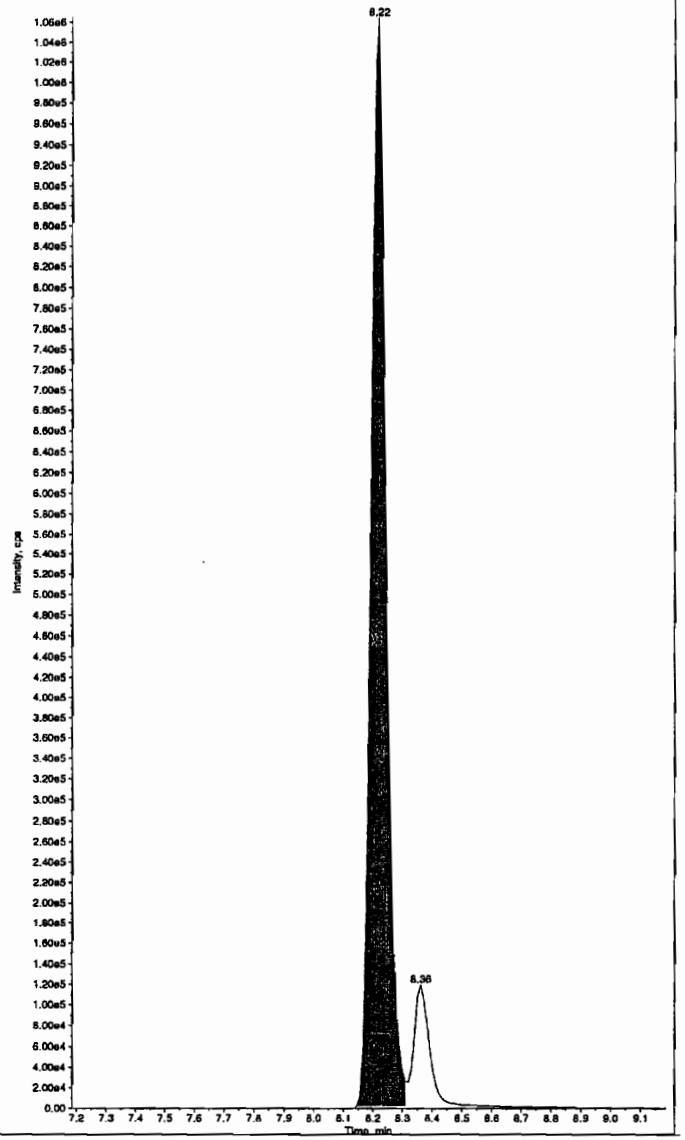
Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	493. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	6:29:39 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	2500.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	6.94 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.98 min
Area:	5.89e+005 counts
Height:	144896.042 cps
Start Time:	6.88 min
End Time:	7.90 min



Page 13 of 69

Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010037.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	501. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	6:29:39 PM
Modified:	Yes
RT Window:	15.0 sec
Expected RT:	8.19 min
Use Relative RT:	No
Int. Type:	Manual
Retention Time:	8.21 min
Area:	3.92e+006 counts
Height:	1067273.537 cps
Start Time:	8.14 min
End Time:	8.31 min



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

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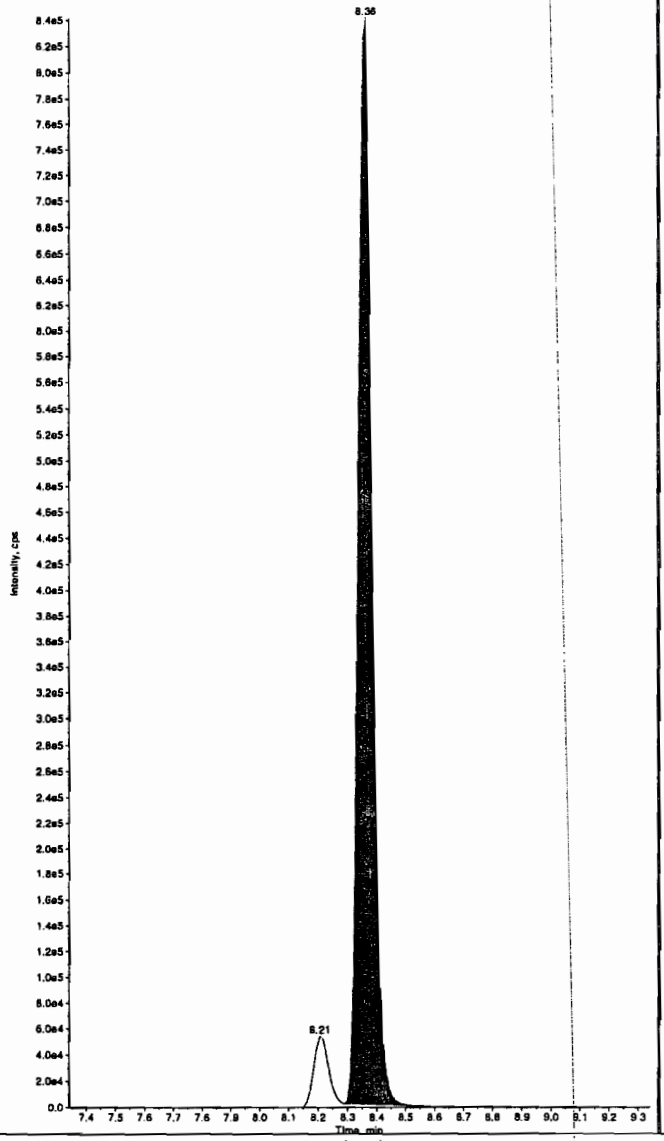
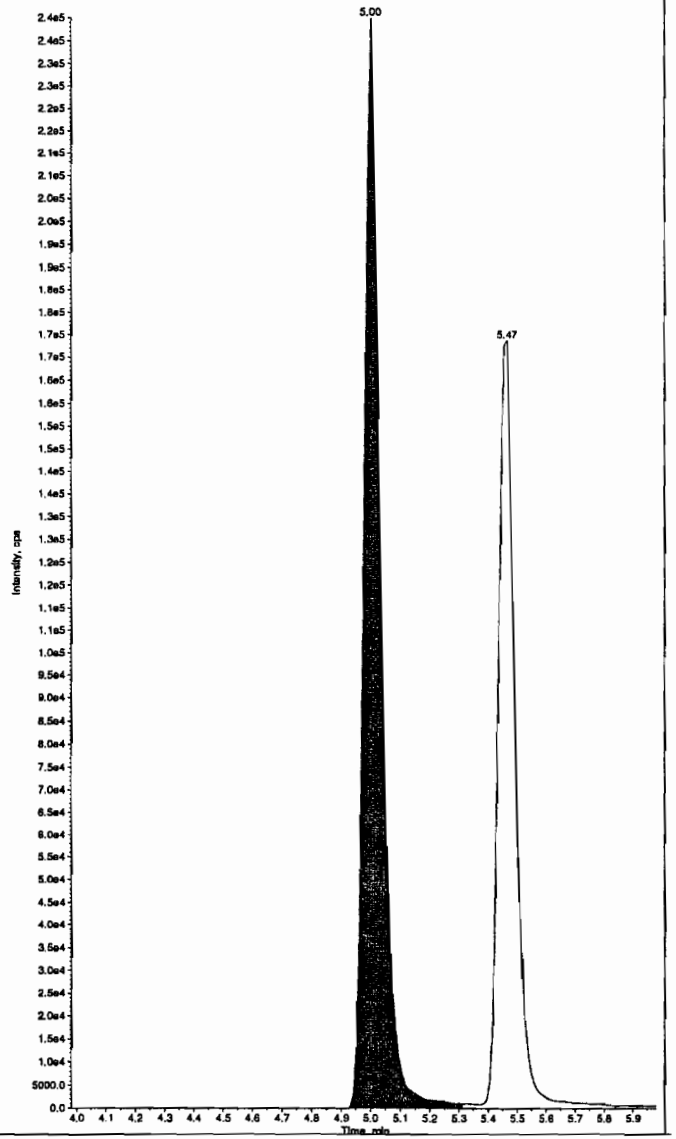
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010037.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	250. ng/mL
Calculated Conc:	235. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	6:29:39 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.36 min
Area:	2.86e+006 counts
Height:	839577.393 cps
Start Time:	8.29 min
End Time:	8.56 min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010037.wiff"
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:	525. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	6:29:39 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	450.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.00 min
Area:	9.79e+005 counts
Height:	239931.122 cps
Start Time:	4.91 min
End Time:	5.31 min



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

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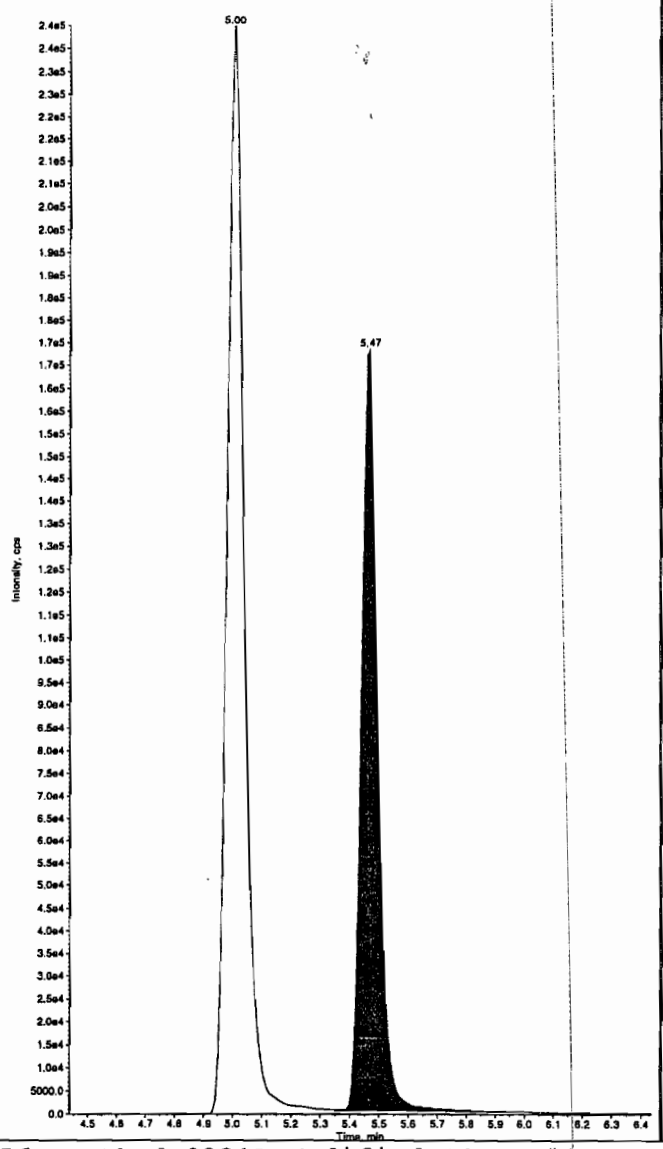
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010037.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 503. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 6:29:39 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: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.47 min
Area: 6.67e+005 counts
Height: 167895.447 cps
Start Time: 5.36 min
End Time: 5.85 min

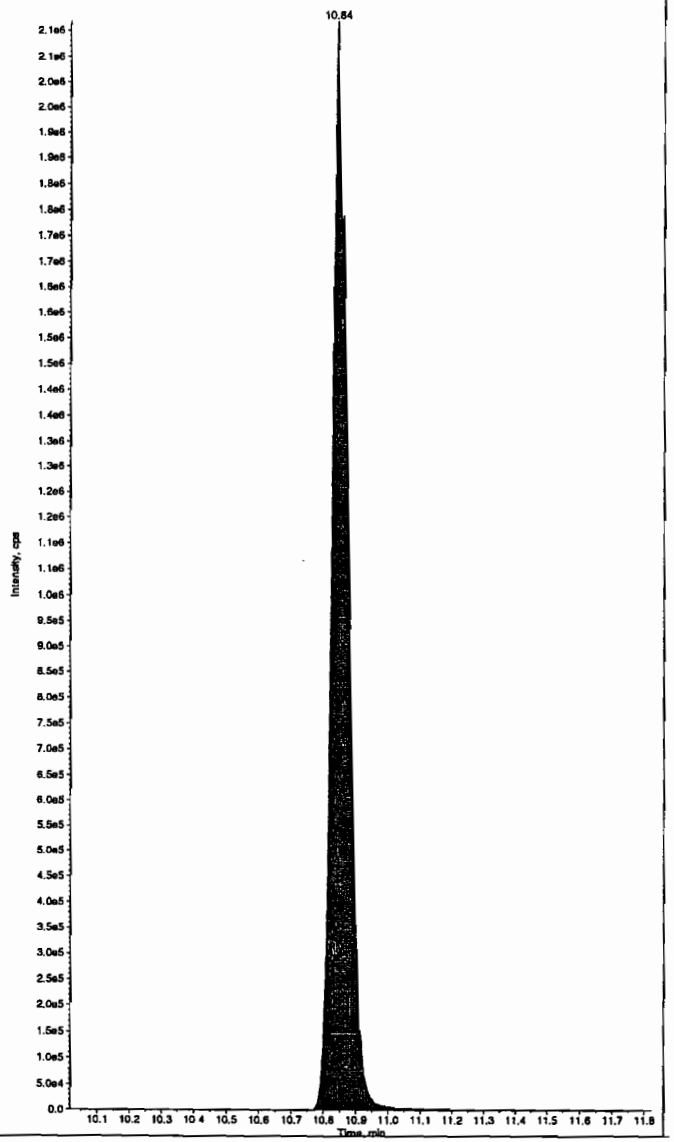


Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010037.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 484. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 6:29:39 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: 7.58e+006 counts
Height: 2117050.049 cps
Start Time: 10.7 min
End Time: 11.2 min



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

Page 215 of 219

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03010039.wiff

Analysis Date: 01-MAR-10 19:01

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

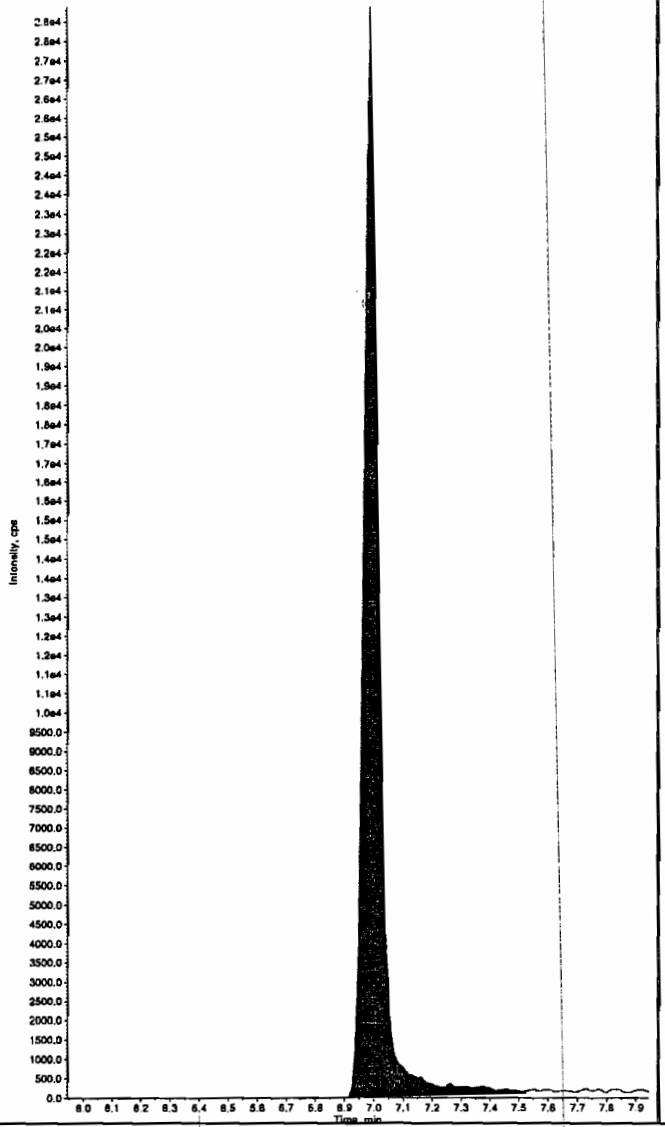
Compound	True	Found	Recovery	Q
3,5-Dinitroaniline	100	93.9	94	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	101	101	
2,4-Diamino-6-nitrotoluene	100	109	109	
2,6-Diamino-4-nitrotoluene	100	103	103	
3,4-Dinitrotoluene	50	51.7	103	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before San 3/3/10

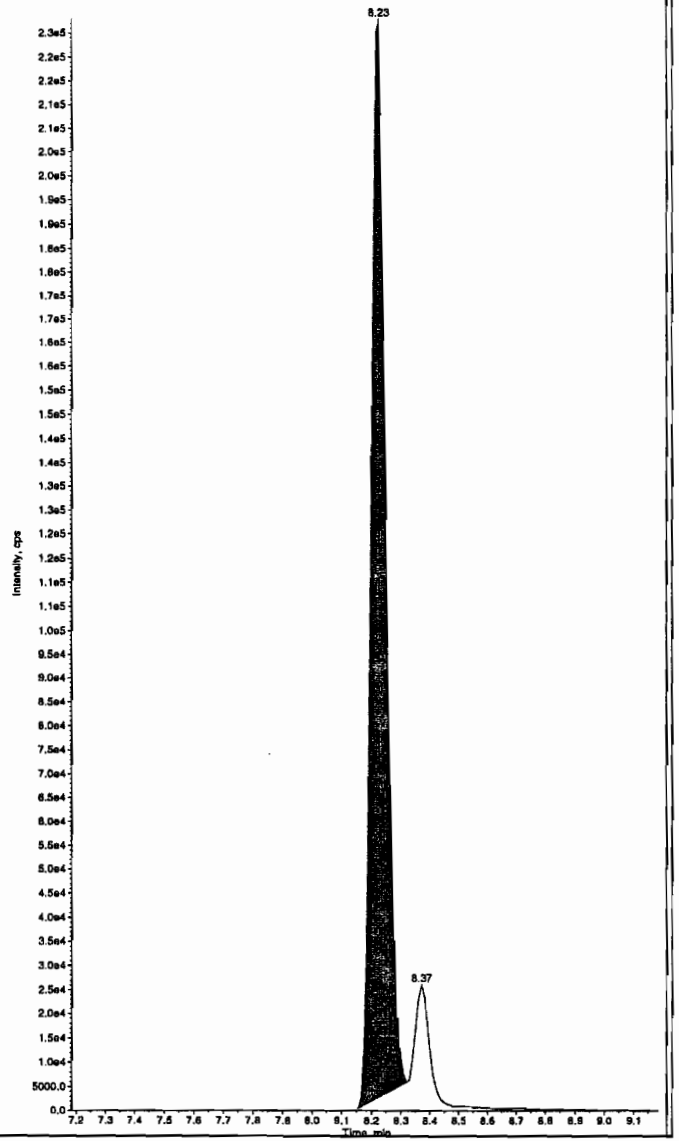
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010039.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	103. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	7:01:13 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:	6.94 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.99 min
Area:	1.10e+005 counts
Height:	28370.554 cps
Start Time:	6.89 min
End Time:	7.52 min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010039.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	90.5 ng/mL
Acq. Date:	3/1/2010
Acq. Time:	7:01:13 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:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.23 min
Area:	8.02e+005 counts
Height:	225071.579 cps
Start Time:	8.15 min
End Time:	8.32 min



Hmm 03/04/10

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

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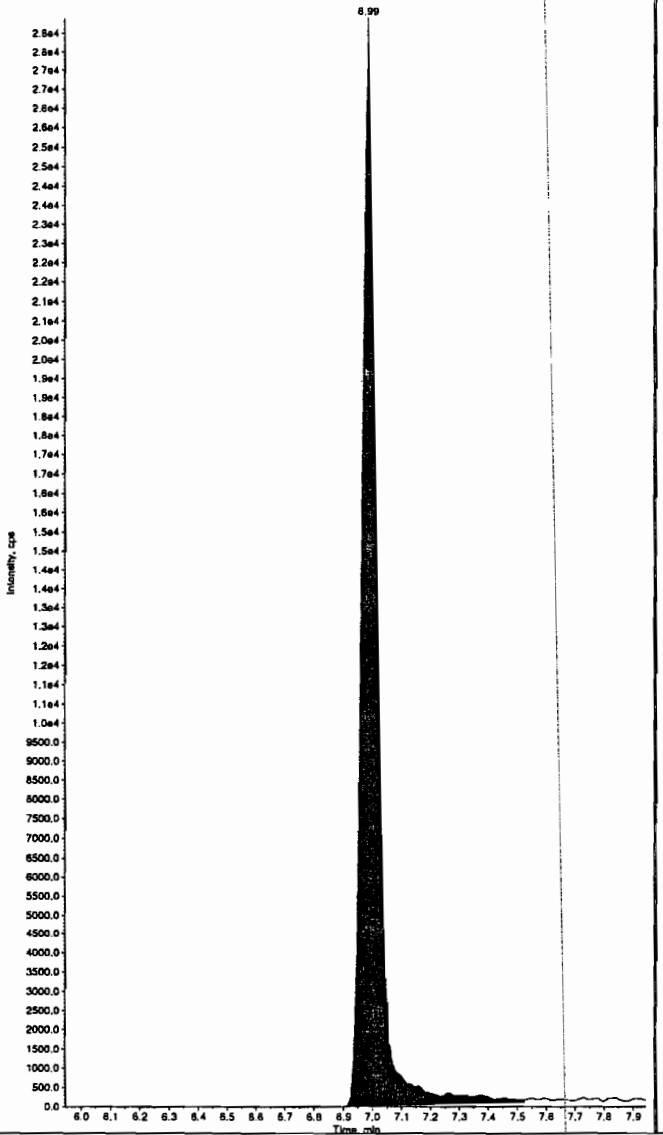
after lan 3/3/10

Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010039.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 103. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 7:01:13 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 6.99 min
Area: 1.10e+005 counts
Height: 28370.554 cps
Start Time: 6.89 min
End Time: 7.52 min

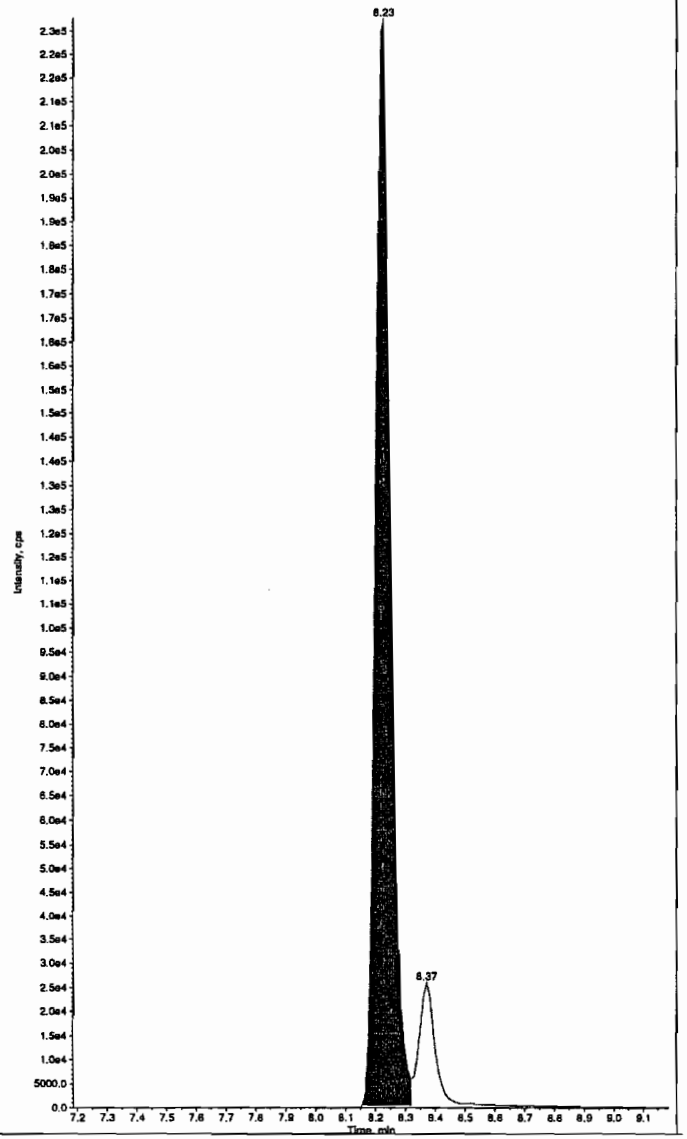


Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010039.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 93.9 ng/mL
Acq. Date: 3/1/2010
Acq. Time: 7:01:13 PM

Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.19 min
Use Relative RT: No

Int. Type: Manual
Retention Time: 8.22 min
Area: 8.29e+005 counts
Height: 231271.689 cps
Start Time: 8.15 min
End Time: 8.32 min

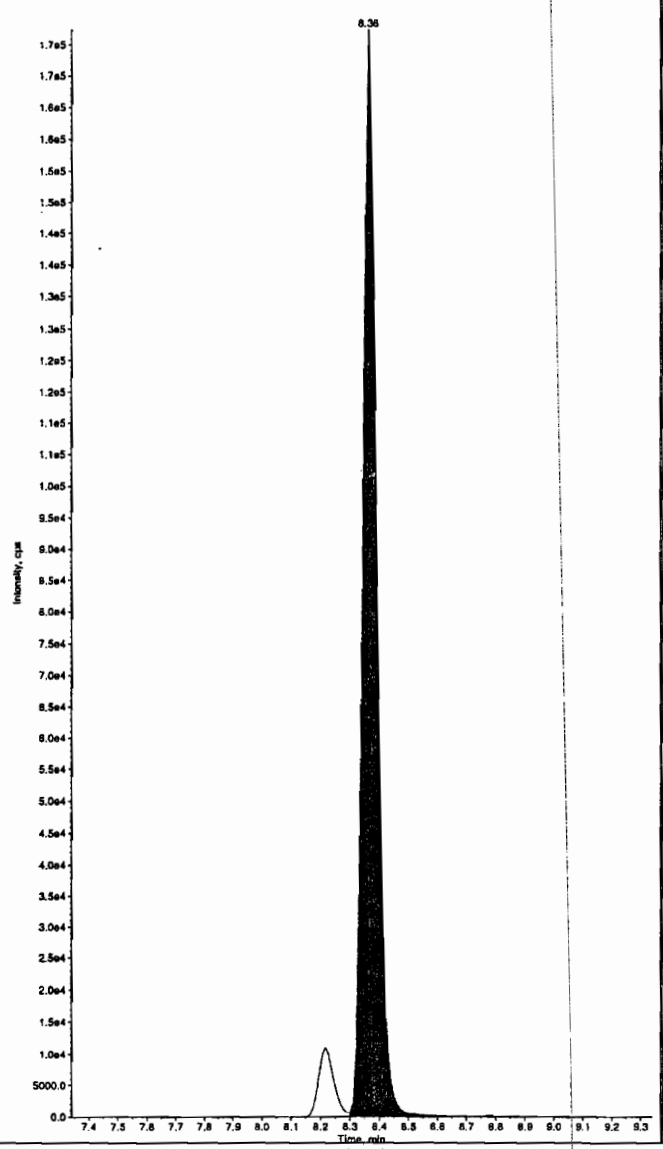


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

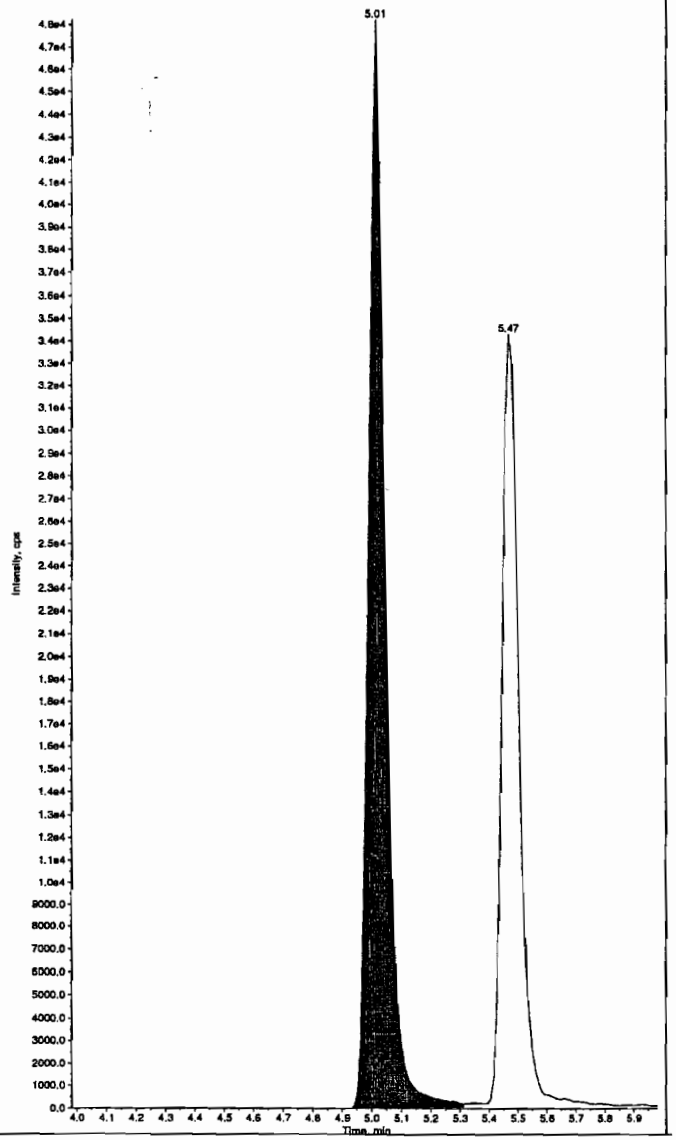
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010039.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	51.7	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	7:01:13 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	15.0	sec
Expected RT:	8.34	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.36	min
Area:	5.95e+005	counts
Height:	172563.049	cps
Start Time:	8.30	min
End Time:	8.68	min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010039.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	103.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	7:01:13 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:	4.98	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.01	min
Area:	1.99e+005	counts
Height:	48209.217	cps
Start Time:	4.92	min
End Time:	5.31	min

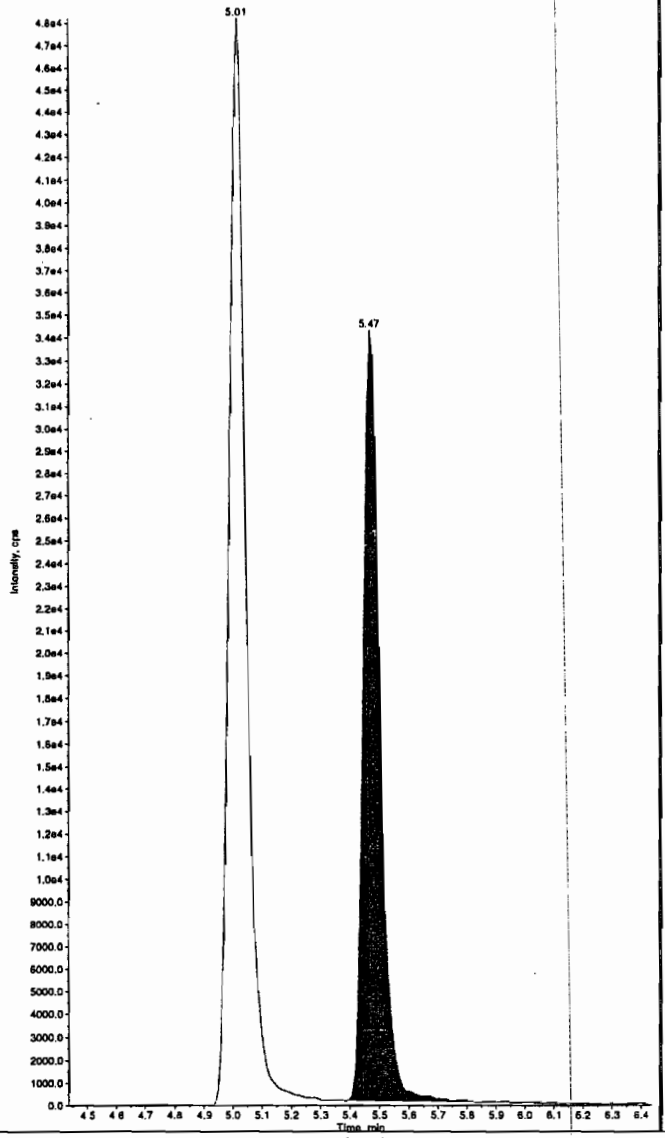


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

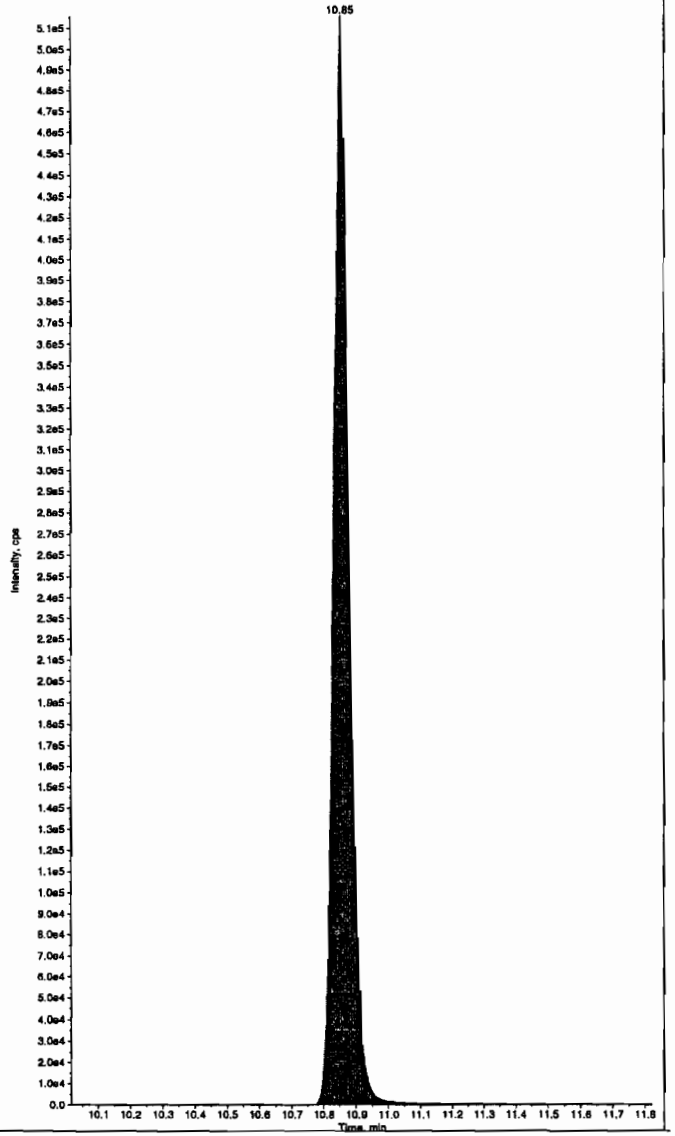
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010039.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	109.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	7:01:13 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:	5.44	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.47	min
Area:	1.40e+005	counts
Height:	34102.001	cps
Start Time:	5.38	min
End Time:	5.76	min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010039.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	101.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	7:01:13 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:	1.76e+006	counts
Height:	515516.296	cps
Start Time:	10.8	min
End Time:	11.1	min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–1623

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS03010050.wiff **Analysis Date:** 01–MAR–10 21:54

LCMSMS ID: 1358 **Column ID:** JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	513	103	
2,6–Diamino–4–nitrotoluene	500	527	105	
3,4–Dinitrotoluene	250	237	95	
3,5–Dinitroaniline	500	506	101	
TATB	500	501	100	
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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

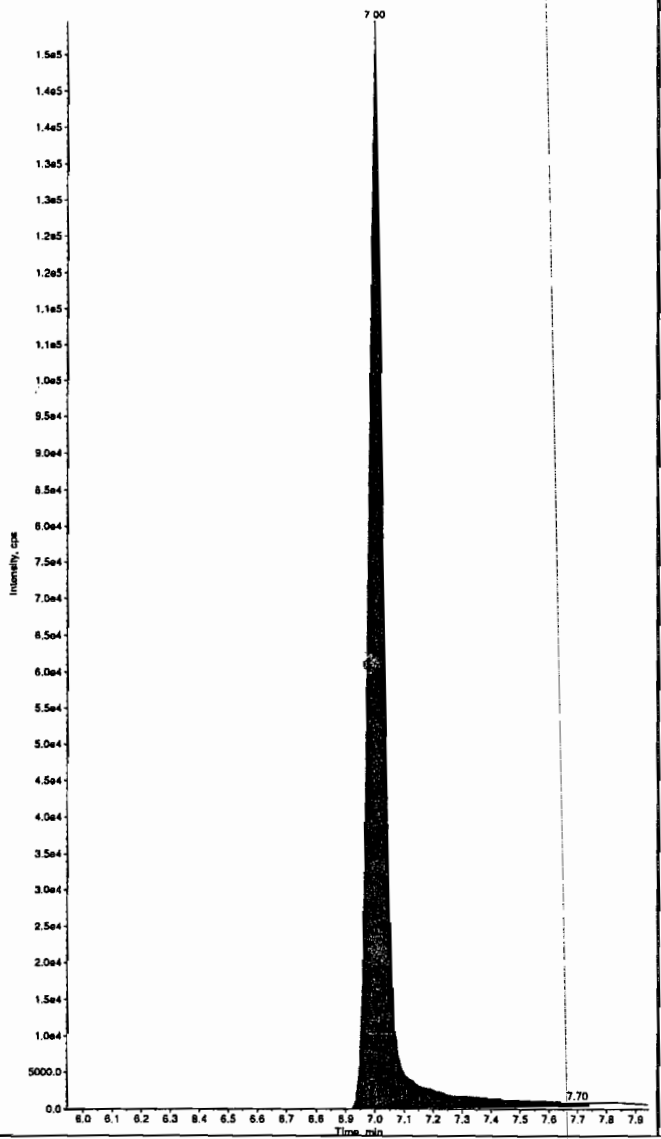
Ken 3/3/10

Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010050.wiff"
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: 501. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 9:54:09 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.00 min
Area: 5.98e+005 counts
Height: 149686.050 cps
Start Time: 6.88 min
End Time: 7.74 min

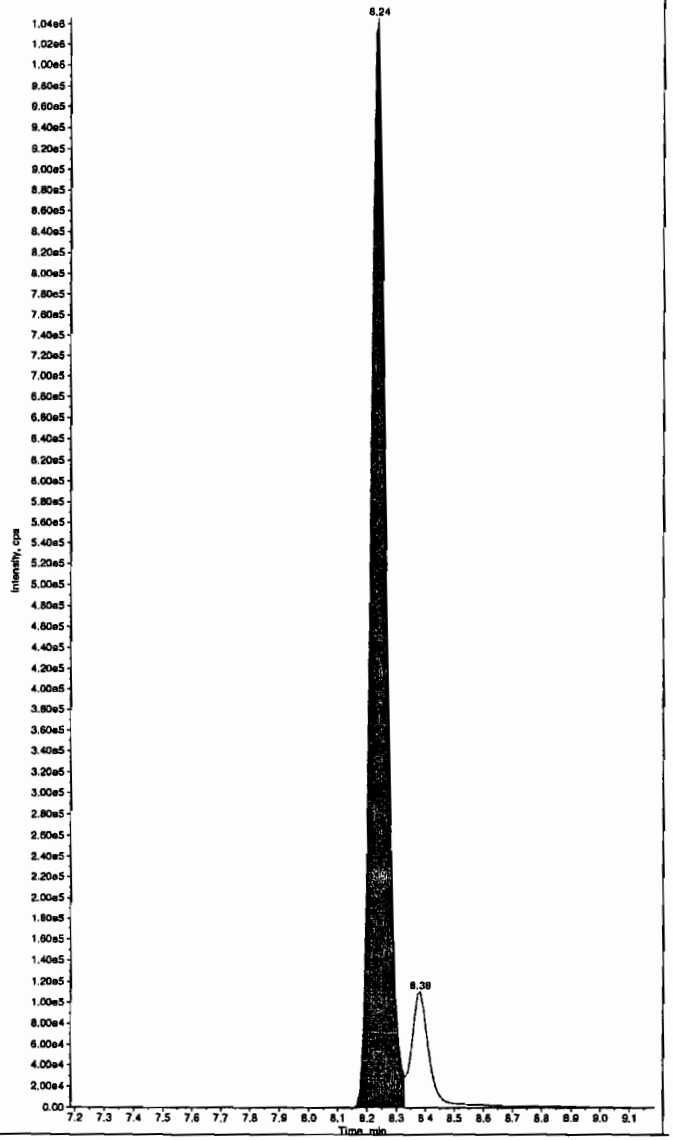


Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010050.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 506. ng/mL
Acq. Date: 3/1/2010
Acq. Time: 9:54:09 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.24 min
Area: 3.97e+006 counts
Height: 1046075.073 cps
Start Time: 8.14 min
End Time: 8.33 min



Hmm 03/04/10

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

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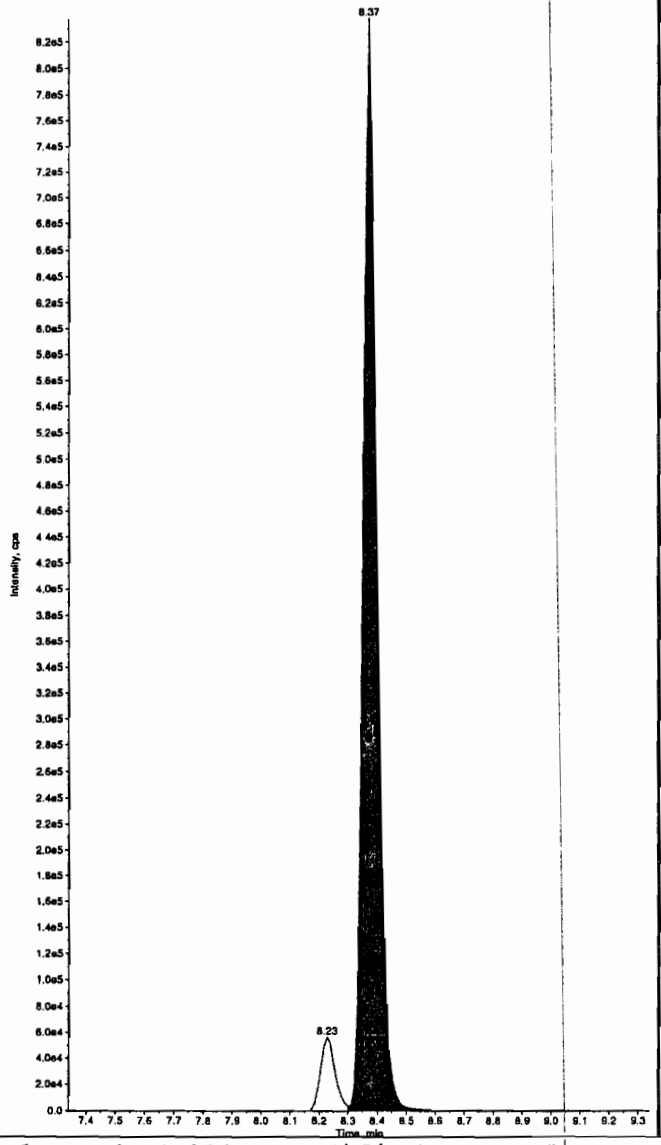
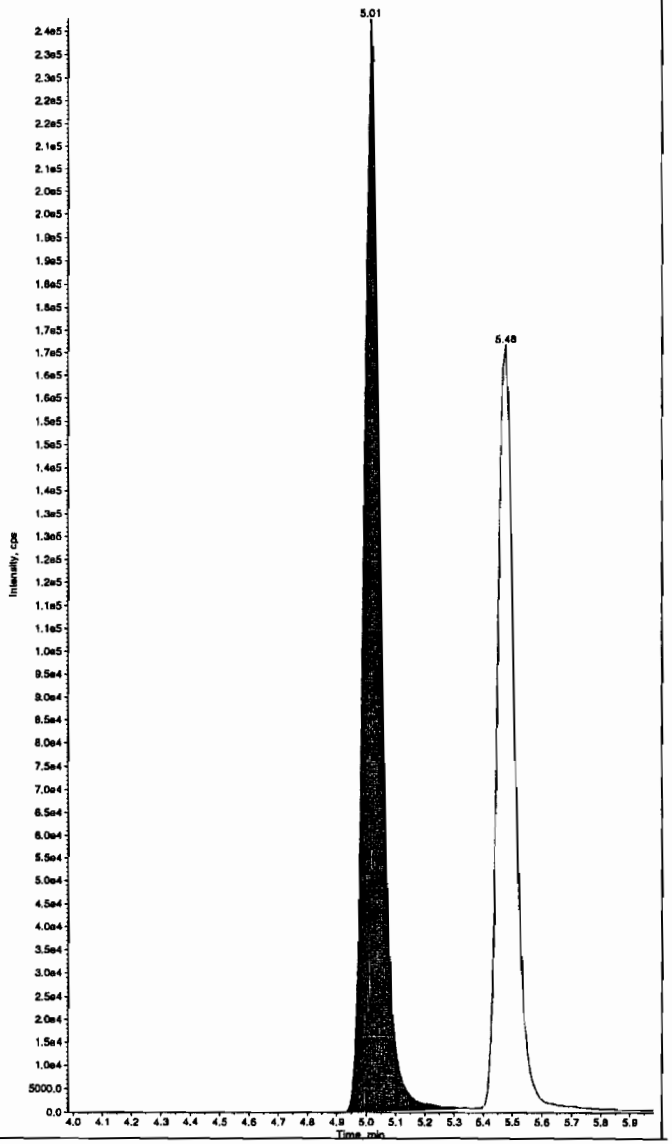
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010050.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	237.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	9:54:09 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	15.0	sec
Expected RT:	8.34	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.37	min
Area:	2.89e+006	counts
Height:	837665.588	cps
Start Time:	8.30	min
End Time:	8.69	min



Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010050.wiff"
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:	527.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	9:54:09 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:	4.98	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.01	min
Area:	9.82e+005	counts
Height:	237667.511	cps
Start Time:	4.92	min
End Time:	5.32	min



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

Page 823 of 849

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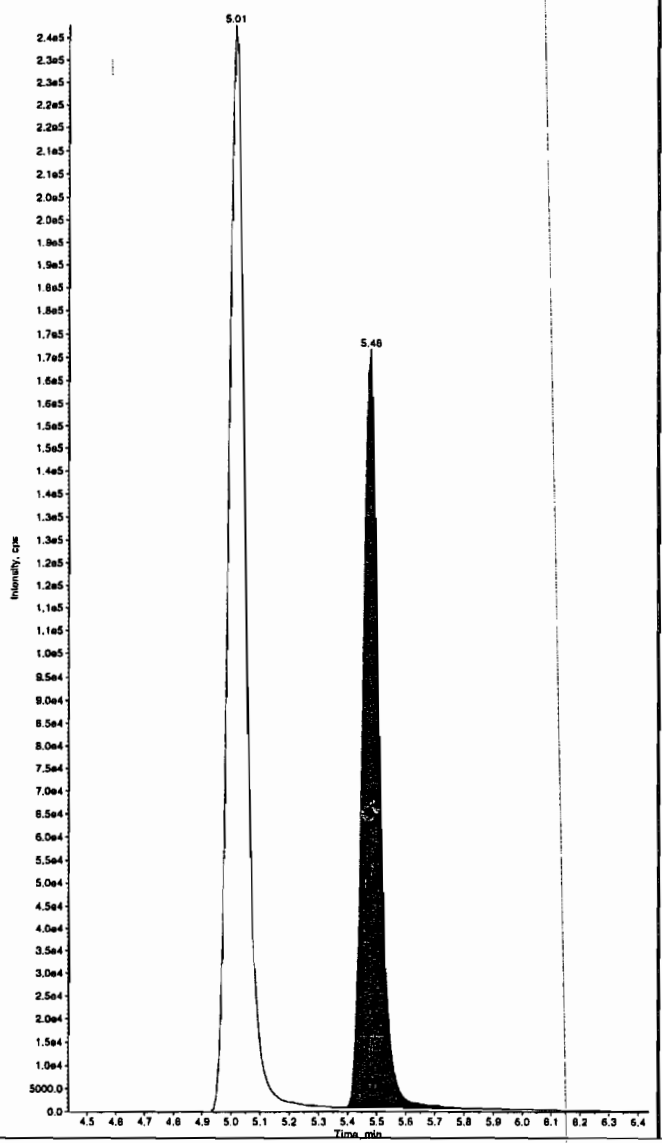
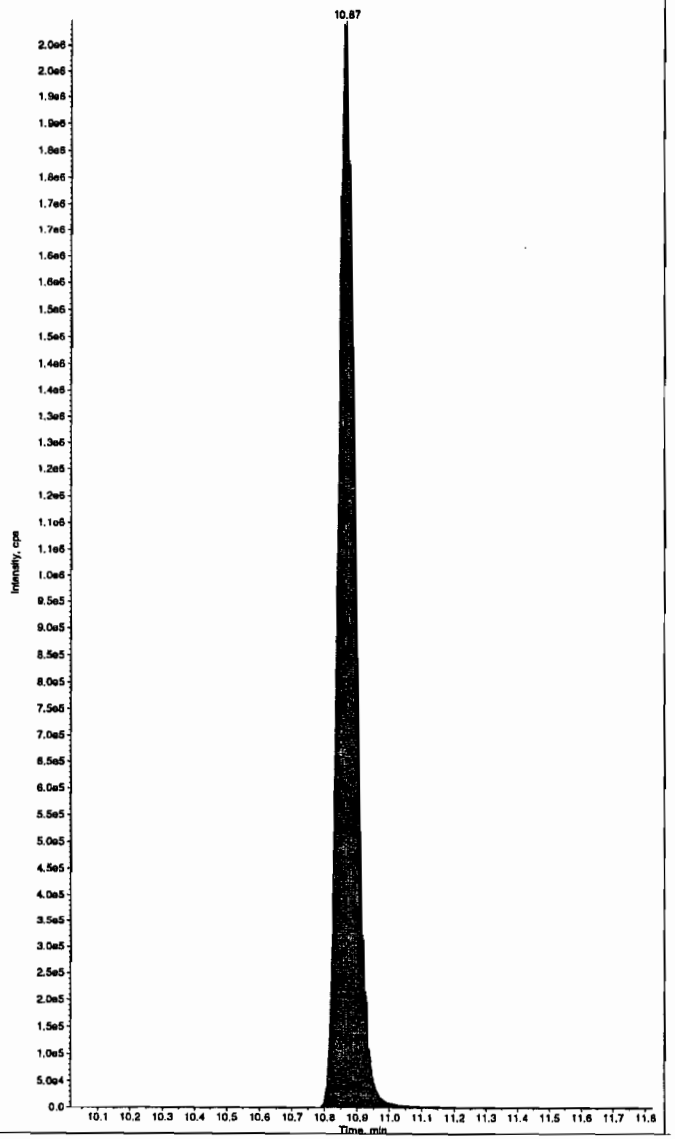
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010050.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	513.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	9:54:09 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:	5.44	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.48	min
Area:	6.81e+005	counts
Height:	166032.608	cps
Start Time:	5.36	min
End Time:	5.87	min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010050.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	499.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	9:54:09 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:	7.80e+006	counts
Height:	2048136.230	cps
Start Time:	10.8	min
End Time:	11.2	min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03010052.wiff

Analysis Date: 01-MAR-10 22:25

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

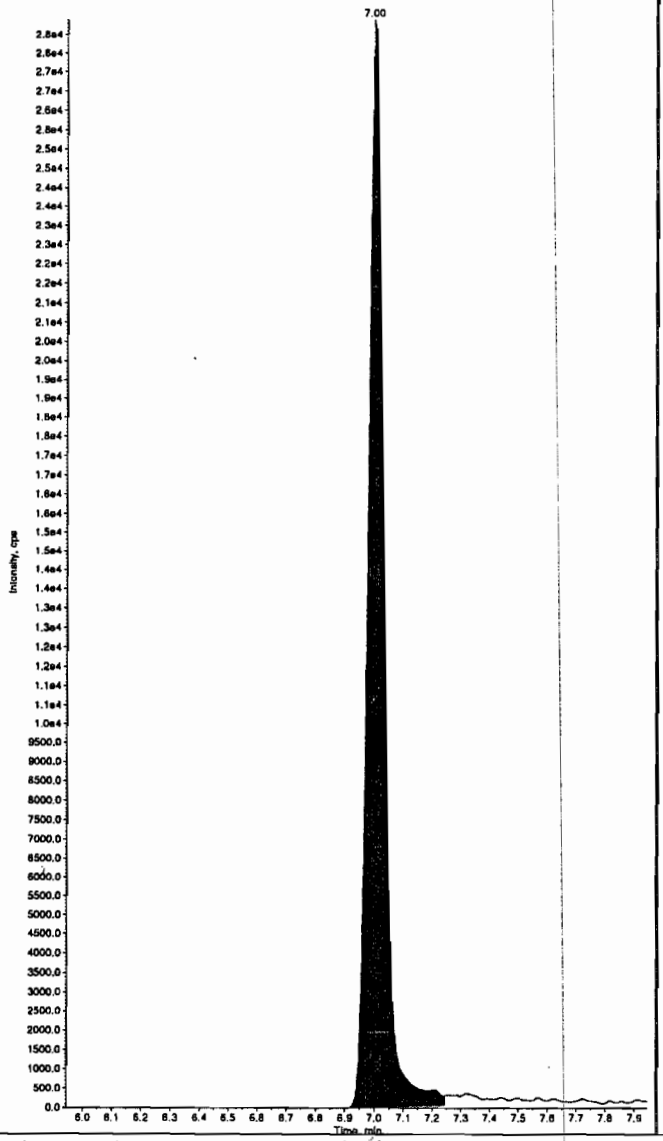
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	107	107	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	53	106	
3,5-Dinitroaniline	100	97.3	97	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	103	103	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
*-Value outside of Recovery Limits

Jan 3/3/10

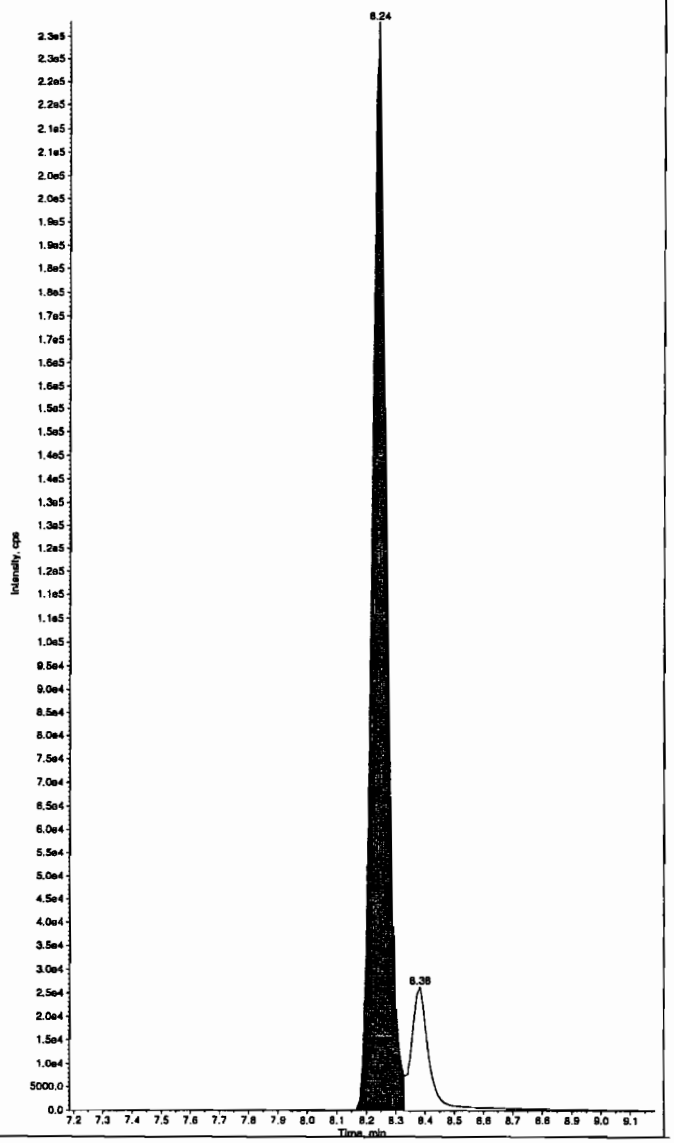
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010052.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	104.	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	10:25:42 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.00	min
Area:	1.11e+005	counts
Height:	28387.428	cps
Start Time:	6.90	min
End Time:	7.24	min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010052.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	97.3	ng/mL
Acq. Date:	3/1/2010	
Acq. Time:	10:25:42 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.24	min
Area:	8.56e+005	counts
Height:	233470.886	cps
Start Time:	8.14	min
End Time:	8.33	min



Hnm 03/04/10

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

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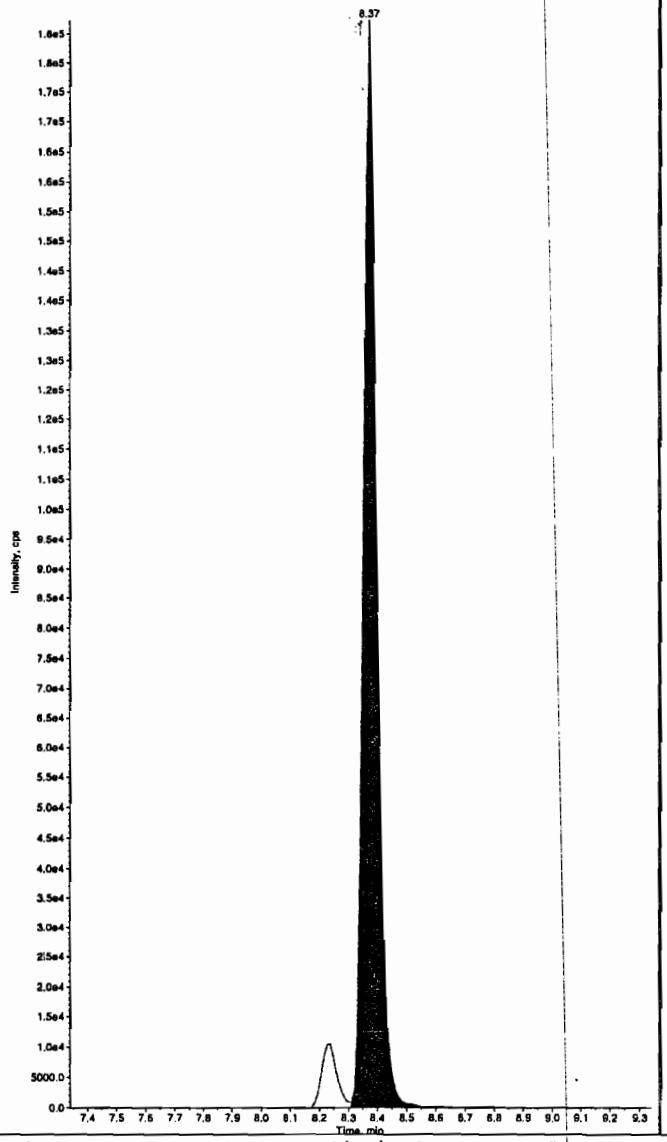
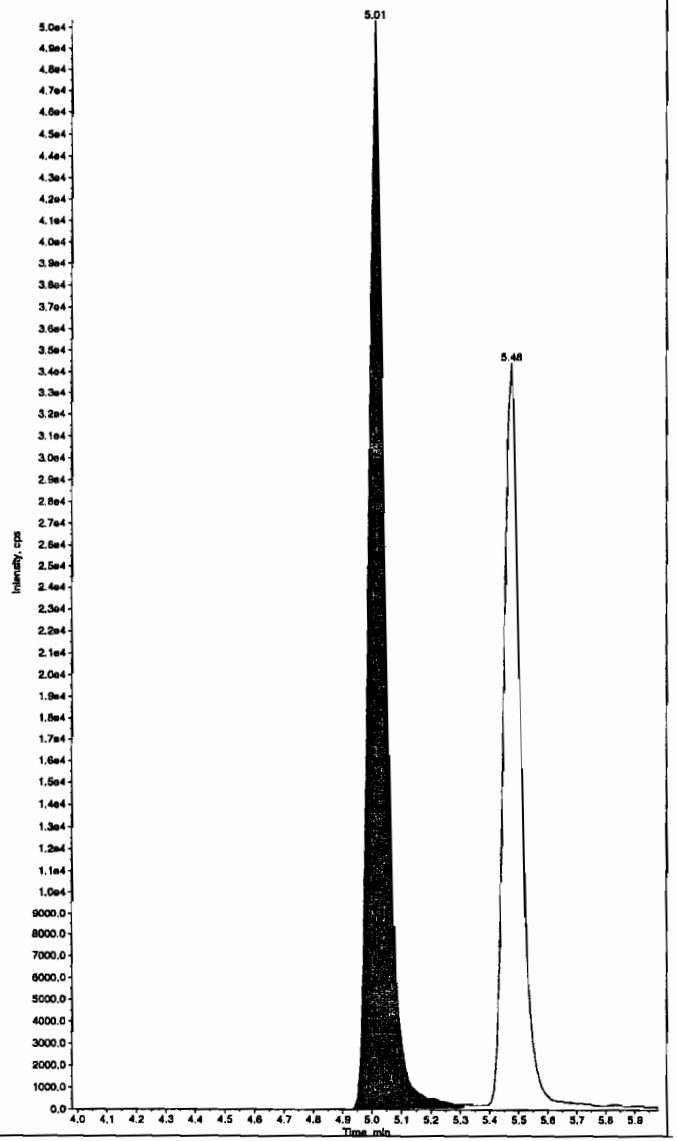
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010052.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	50.0 ng/mL
Calculated Conc:	53.0 ng/mL
Acq. Date:	3/1/2010
Acq. Time:	10:25:42 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.37 min
Area:	6.12e+005 counts
Height:	182391.998 cps
Start Time:	8.31 min
End Time:	8.70 min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010052.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	108. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	10:25:42 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.01 min
Area:	2.06e+005 counts
Height:	50291.931 cps
Start Time:	4.92 min
End Time:	5.31 min



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

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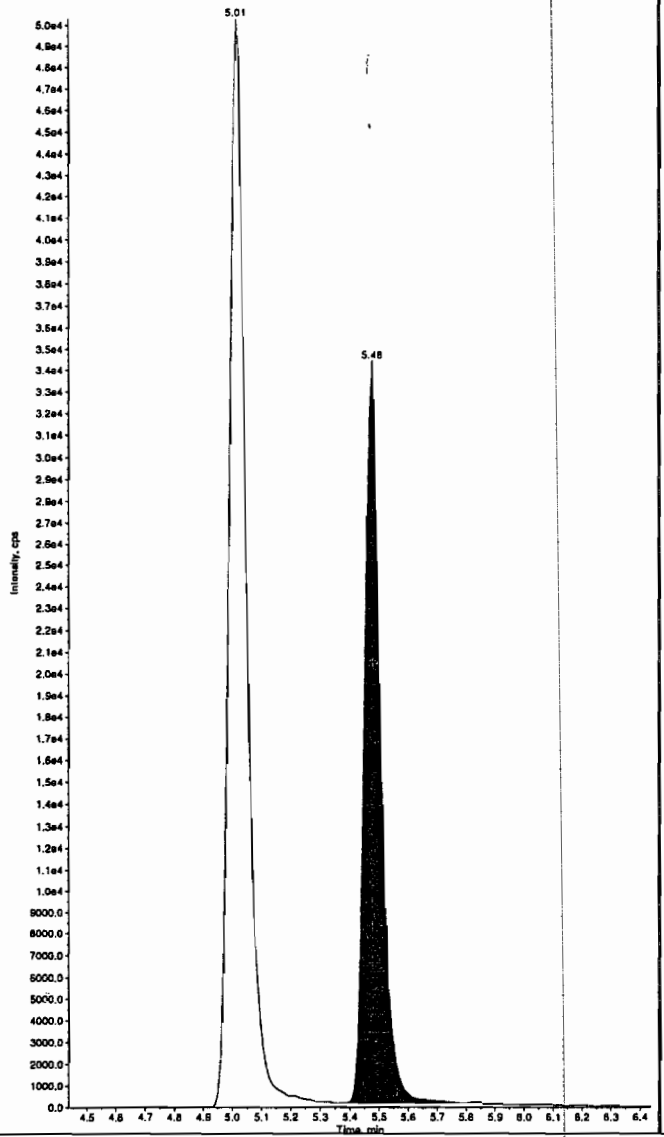
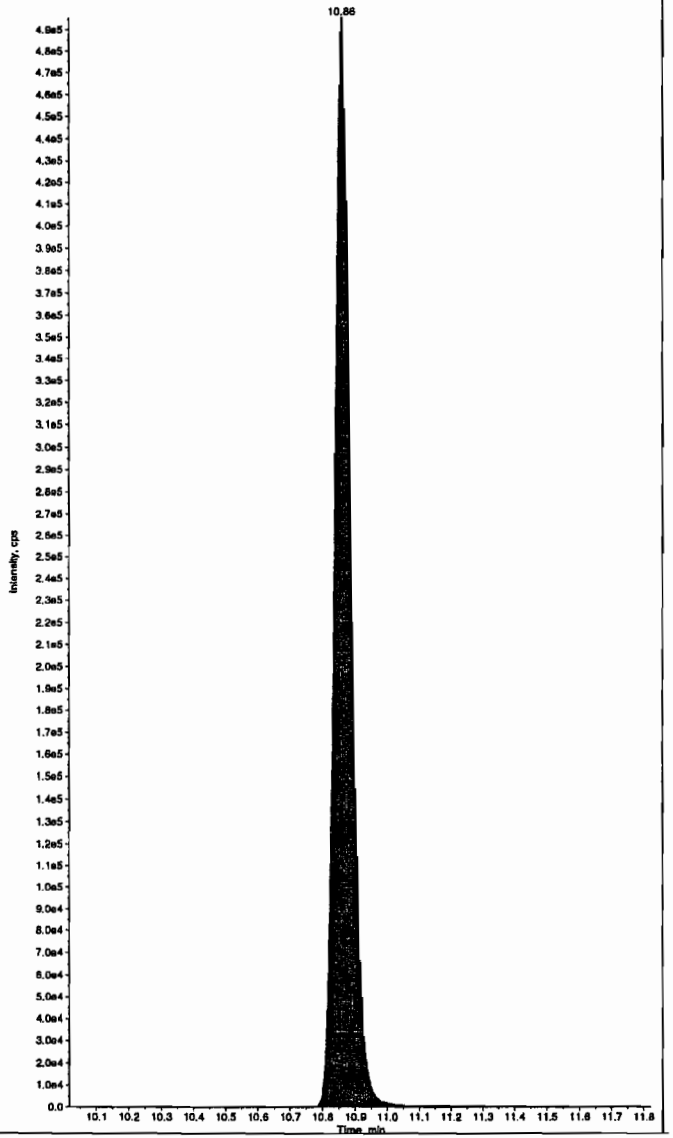
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010052.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	107. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	10:25:42 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:	5.44 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.48 min
Area:	1.37e+005 counts
Height:	34251.171 cps
Start Time:	5.36 min
End Time:	5.79 min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010052.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	103. ng/mL
Acq. Date:	3/1/2010
Acq. Time:	10:25:42 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:	1.78e+006 counts
Height:	495618.866 cps
Start Time:	10.8 min
End Time:	11.1 min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03010063.wiff

Analysis Date: 02-MAR-10 01:18

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

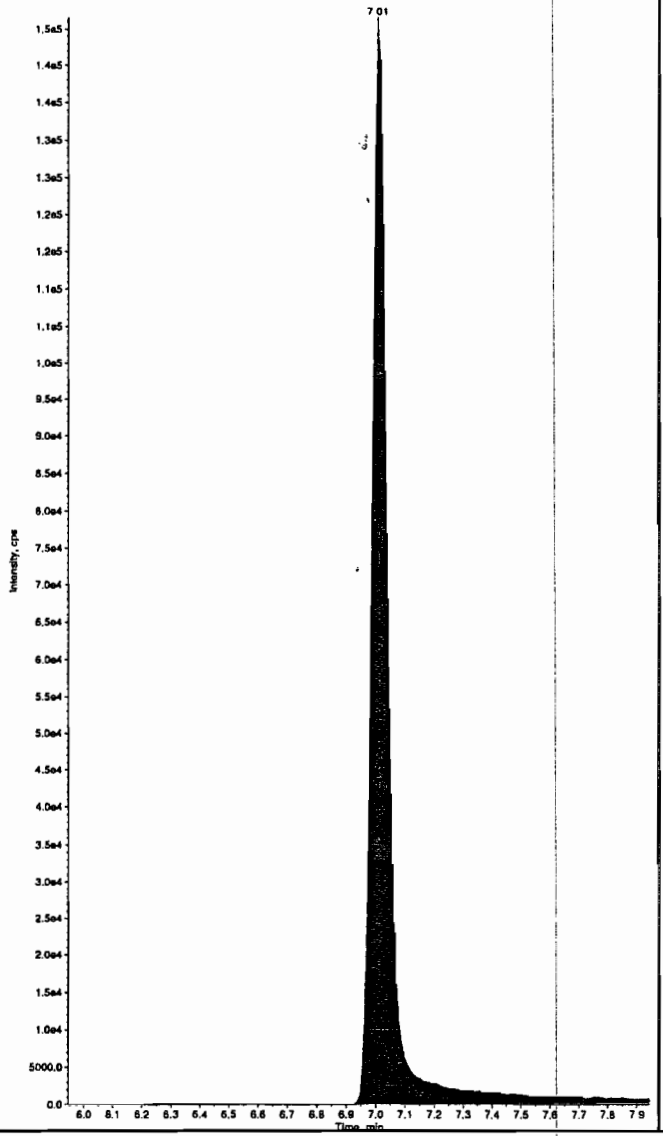
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	564	113	
2,6-Diamino-4-nitrotoluene	500	551	110	
3,4-Dinitrotoluene	250	238	95	
3,5-Dinitroaniline	500	523	105	
TATB	500	513	103	
tris(o-cresyl) phosphate	500	478	96	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before Run 3/3/10

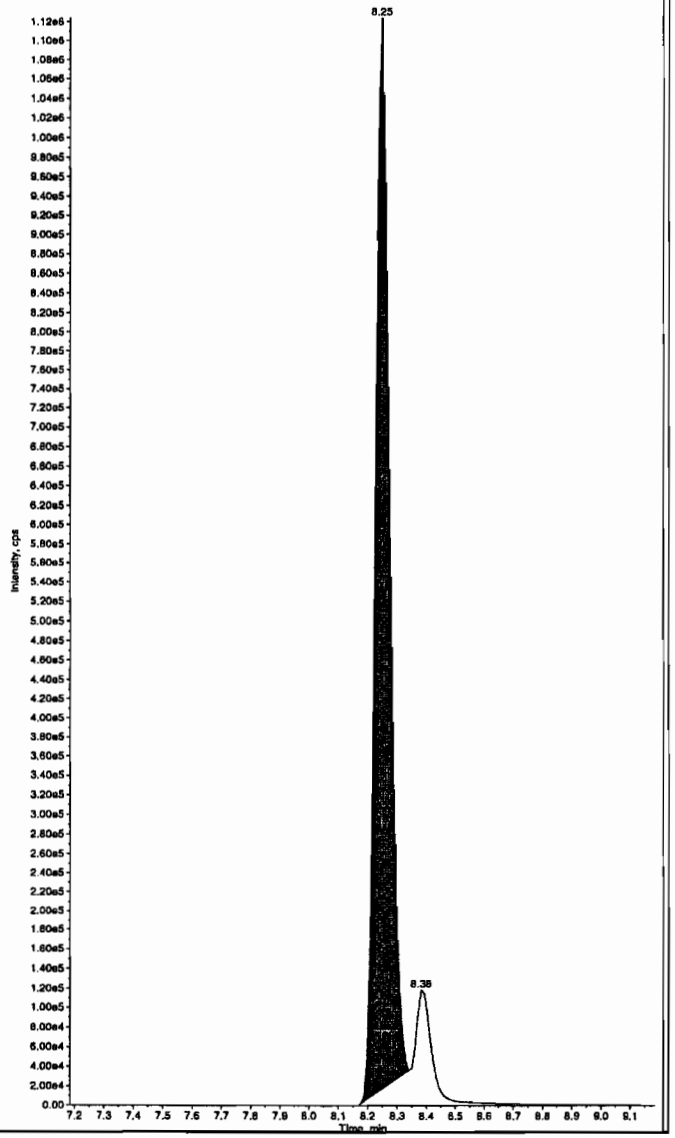
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010063.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	513. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:18:44 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:	6.94 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	7.01 min
Area:	6.14e+005 counts
Height:	146538.147 cps
Start Time:	6.90 min
End Time:	8.08 min



Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010063.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	501. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:18:44 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:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.25 min
Area:	3.93e+006 counts
Height:	1107759.521 cps
Start Time:	8.17 min
End Time:	8.34 min



Hmm 03/04/10

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

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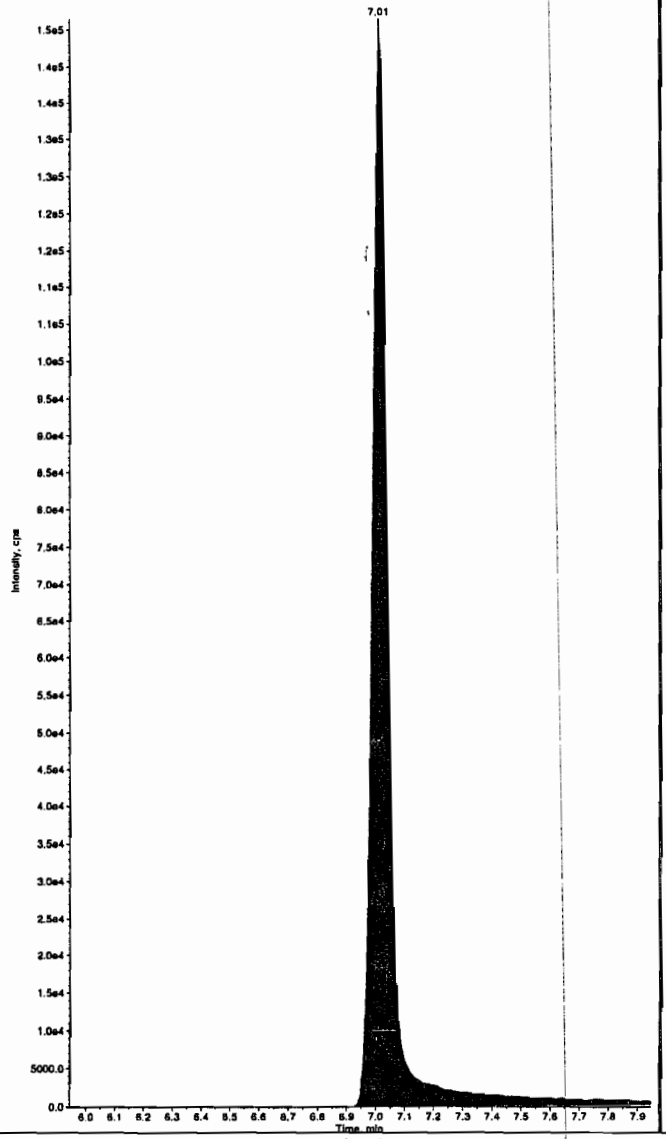
after Lan 3/3/10

Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010063.wiff"
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: 513. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 1:18:44 AM

Modified: No
PFGQ. 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 6.14e+005 counts
Height: 146538.147 cps
Start Time: 6.90 min
End Time: 8.08 min

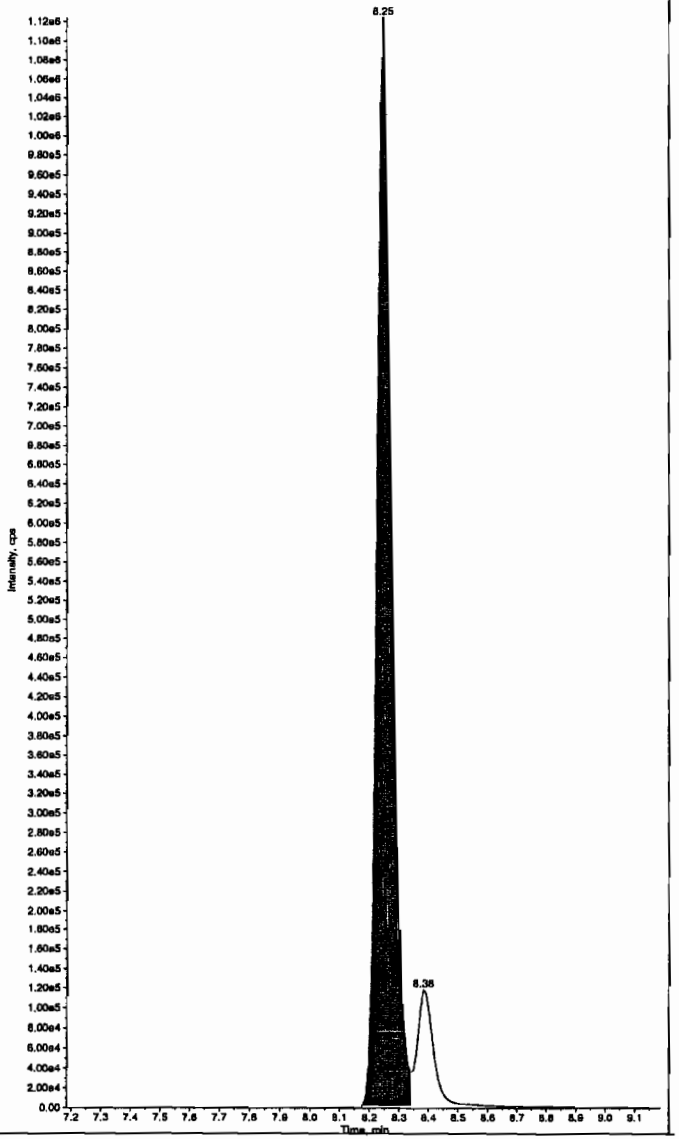


Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010063.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 523. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 1:18:44 AM

Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.19 min
Use Relative RT: No

Int. Type: Manual
Retention Time: 8.25 min
Area: 4.09e+006 counts
Height: 1121858.383 cps
Start Time: 8.17 min
End Time: 8.34 min



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

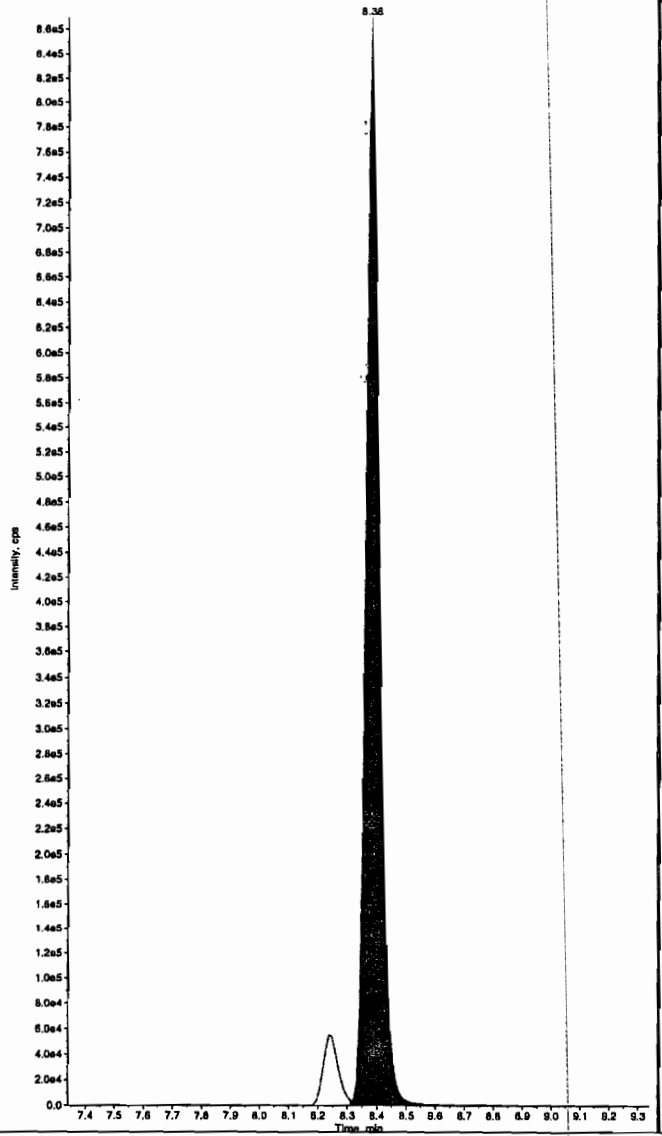
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010063.wiff"
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: 238. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 1:18:44 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 2.89e+006 counts
Height: 869403.381 cps
Start Time: 8.31 min
End Time: 8.71 min

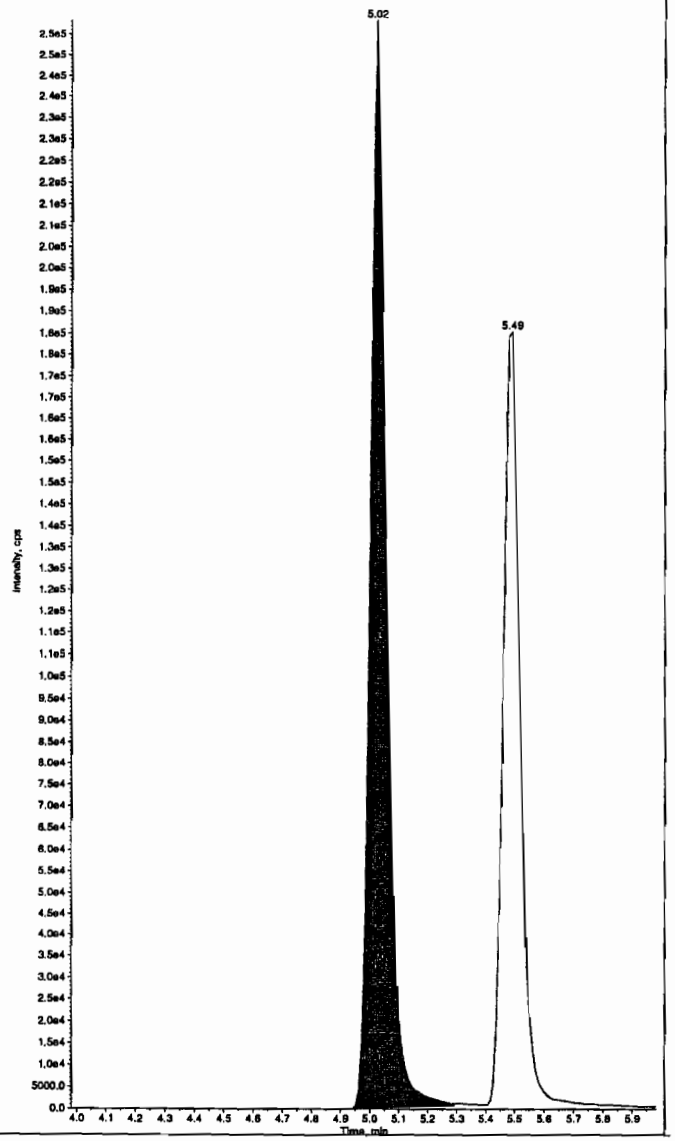


Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010063.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 551. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 1:18:44 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: 4.98 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.02 min
Area: 1.03e+006 counts
Height: 253181.808 cps
Start Time: 4.93 min
End Time: 5.29 min

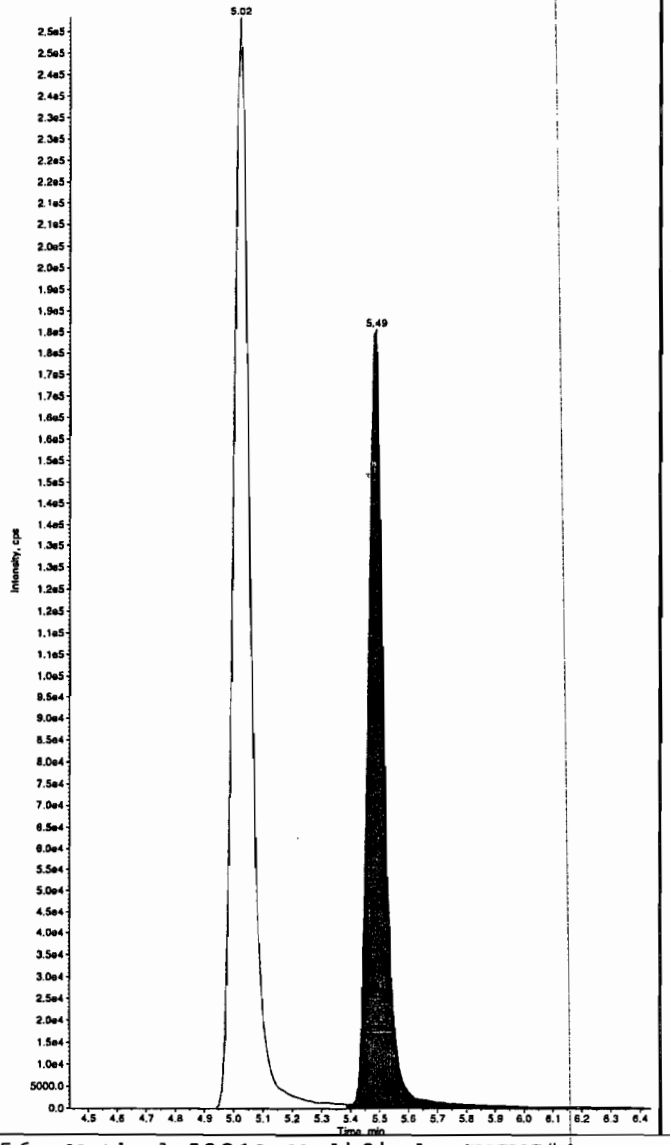


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

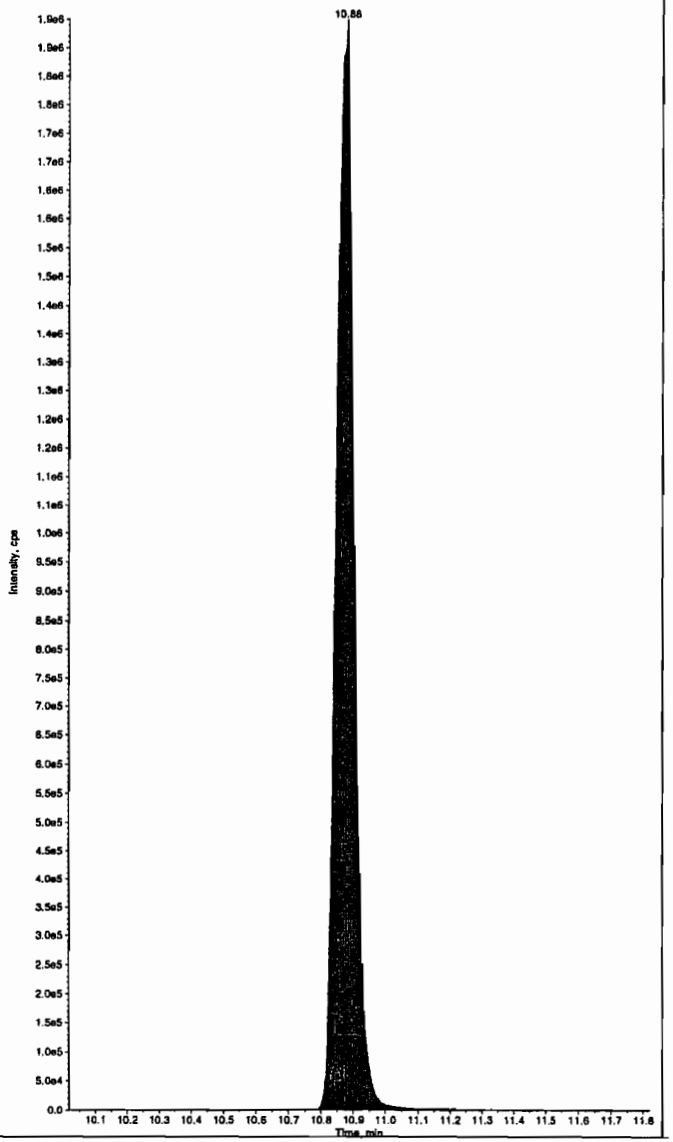
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010063.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	564. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:18:44 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	350.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	5.44 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.49 min
Area:	7.48e+005 counts
Height:	180488.724 cps
Start Time:	5.38 min
End Time:	6.14 min



Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010063.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	478. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:18:44 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:	10.9 min
Area:	7.51e+006 counts
Height:	1900361.328 cps
Start Time:	10.8 min
End Time:	11.2 min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03010065.wiff

Analysis Date: 02-MAR-10 01:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

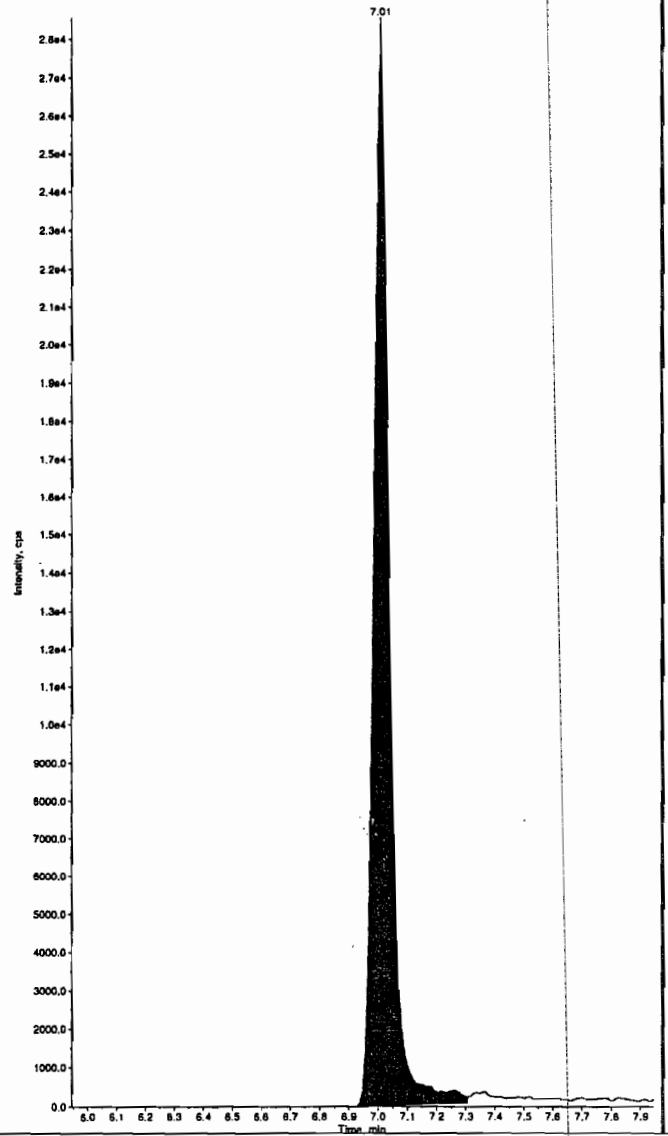
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	117	117	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	51.2	102	
3,5-Dinitroaniline	100	95.4	95	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	102	102	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lan 3/3/10

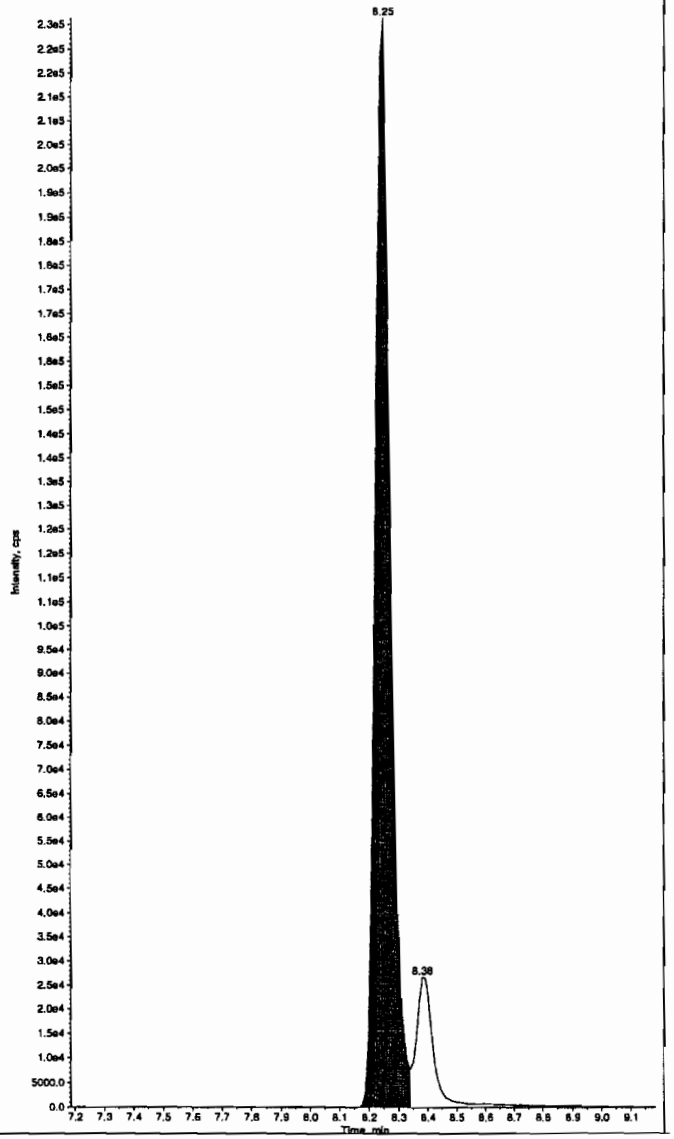
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010065.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	104.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	1:50:18 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2500.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.01	min
Area:	1.11e+005	counts
Height:	28546.782	cps
Start Time:	6.91	min
End Time:	7.31	min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010065.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	95.4	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	1:50:18 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.25	min
Area:	8.42e+005	counts
Height:	226284.119	cps
Start Time:	8.13	min
End Time:	8.34	min



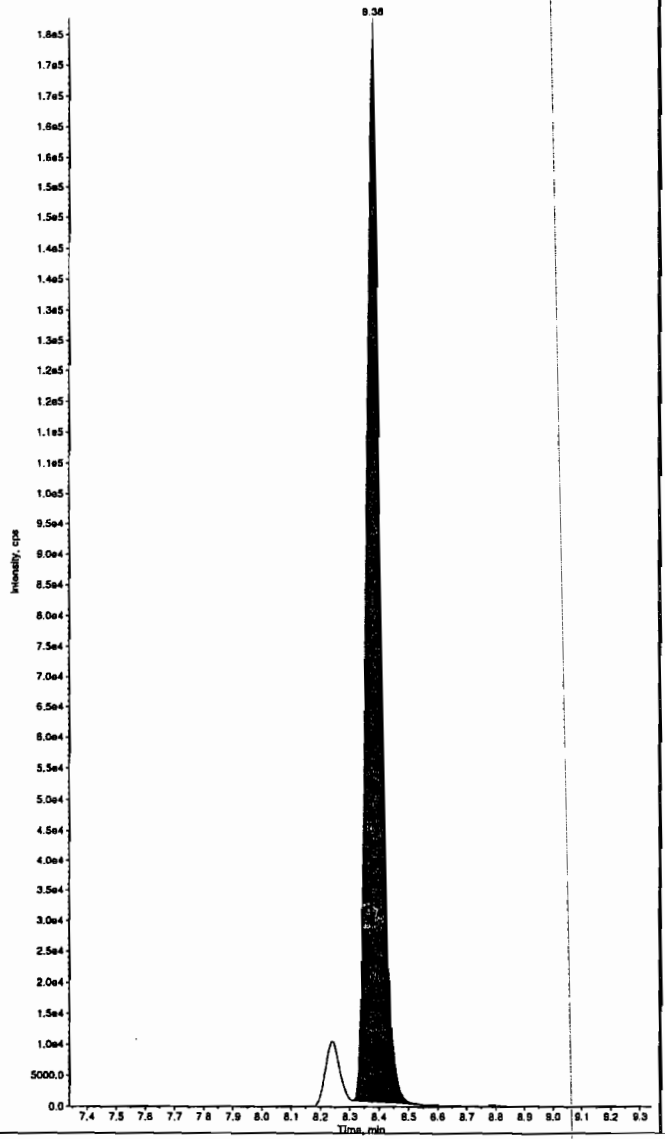
Hmm 03/04/10

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

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

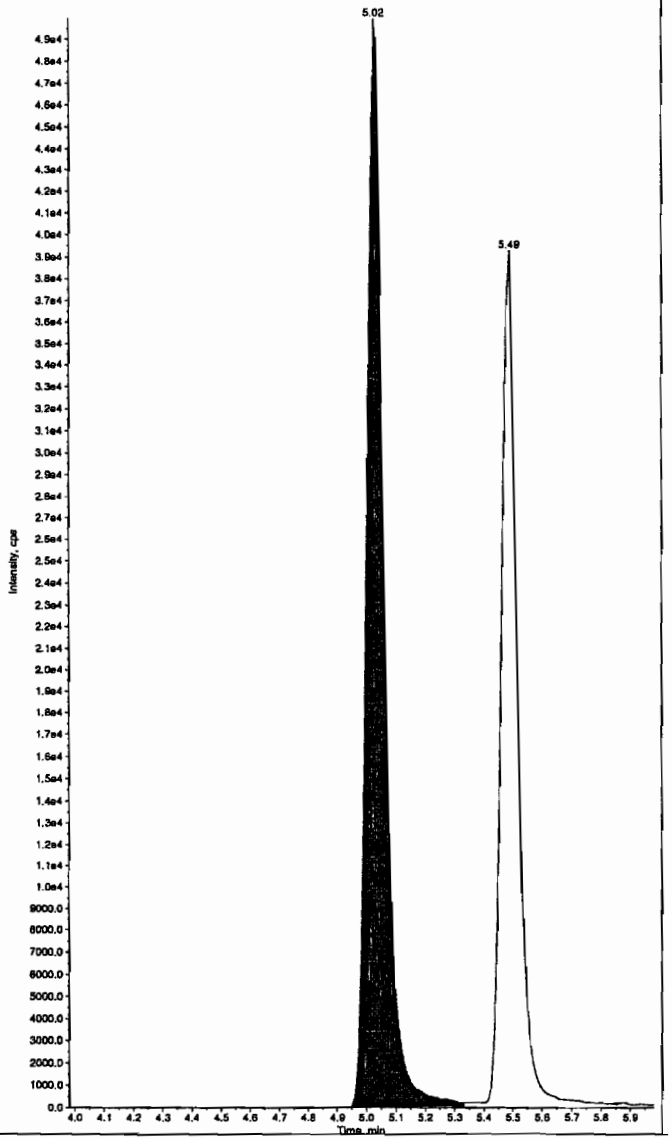
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010065.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	50.0 ng/mL
Calculated Conc:	51.2 ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:50:18 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.38 min
Area:	5.88e+005 counts
Height:	176862.183 cps
Start Time:	8.31 min
End Time:	8.54 min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010065.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	109. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:50:18 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.02 min
Area:	2.10e+005 counts
Height:	49941.132 cps
Start Time:	4.89 min
End Time:	5.33 min



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

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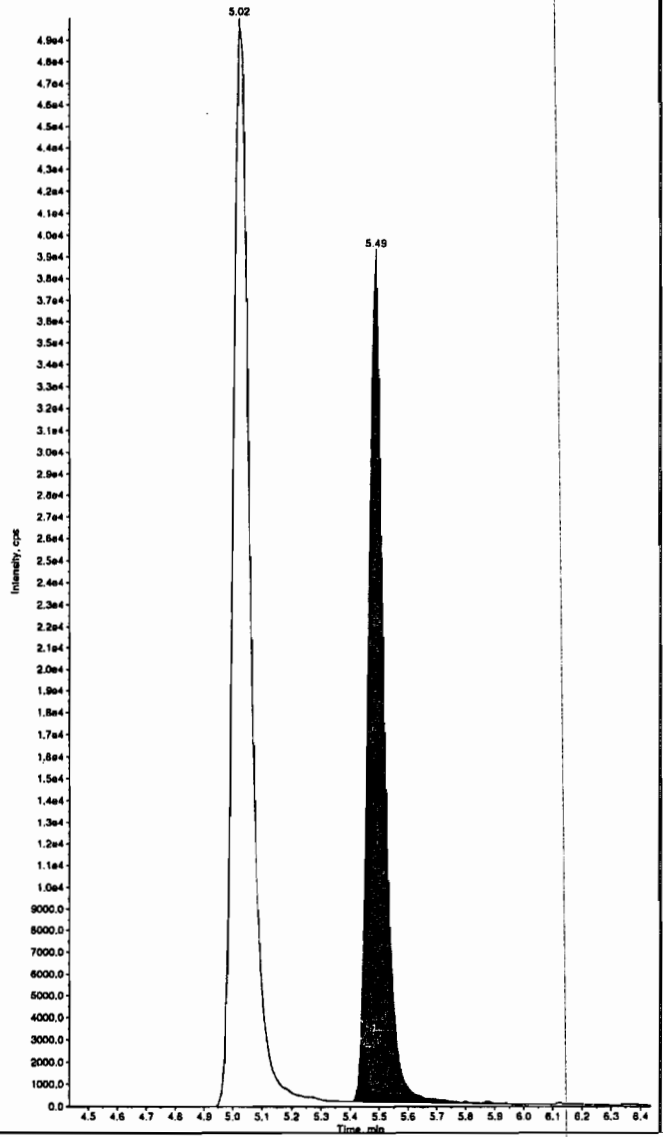
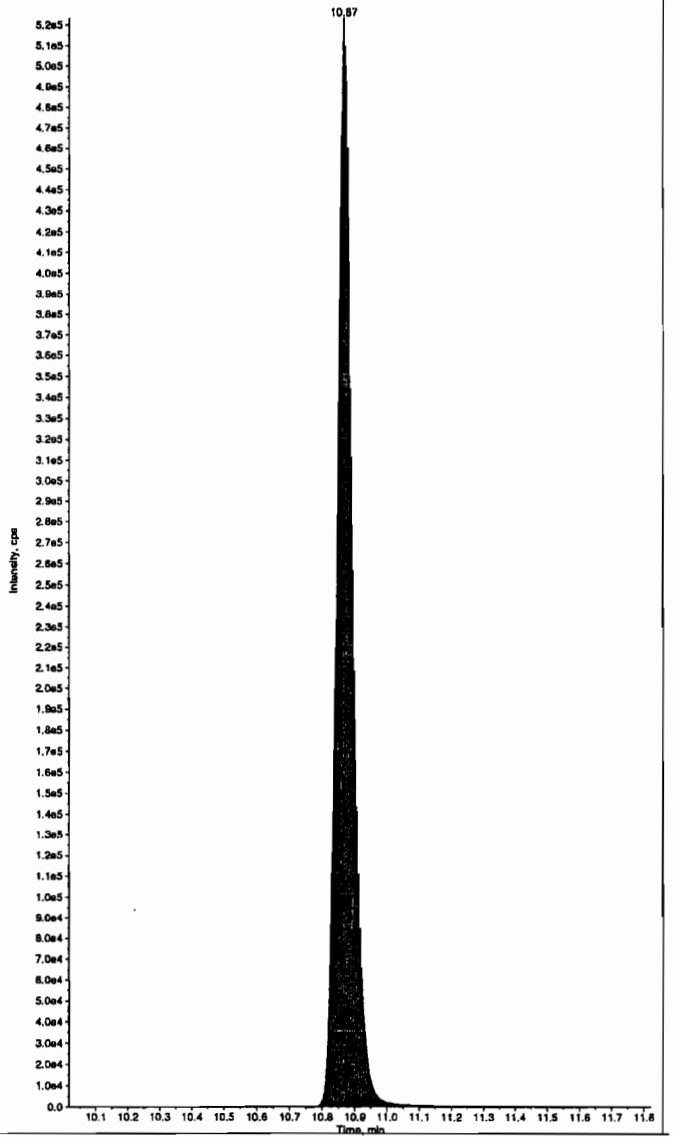
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010065.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	117. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:50:18 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	350.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	5.44 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.49 min
Area:	1.51e+005 counts
Height:	39117.947 cps
Start Time:	5.41 min
End Time:	5.99 min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010065.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	102. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:50:18 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:	10.9 min
Area:	1.77e+006 counts
Height:	523160.869 cps
Start Time:	10.7 min
End Time:	11.2 min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03010074.wiff

Analysis Date: 02-MAR-10 04:11

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

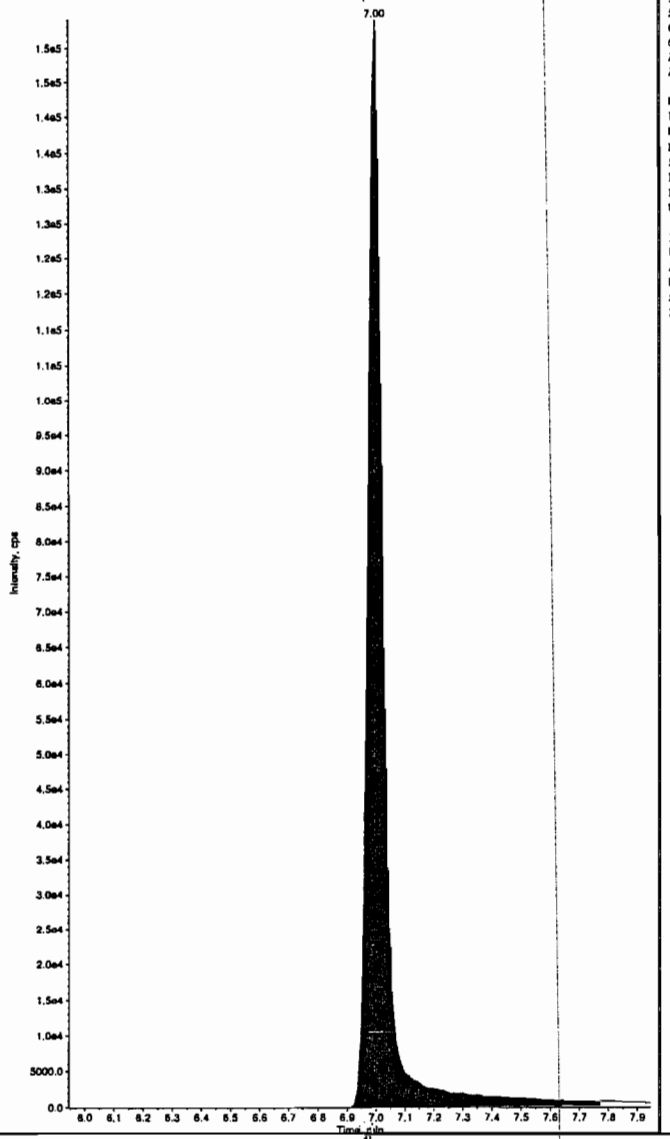
Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	250	243	97	
3,5-Dinitroaniline	500	499	100	
TATB	500	522	104	
tris(o-cresyl) phosphate	500	498	100	
2,4-Diamino-6-nitrotoluene	500	586	117	
2,6-Diamino-4-nitrotoluene	500	558	112	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before Run 3/3/10

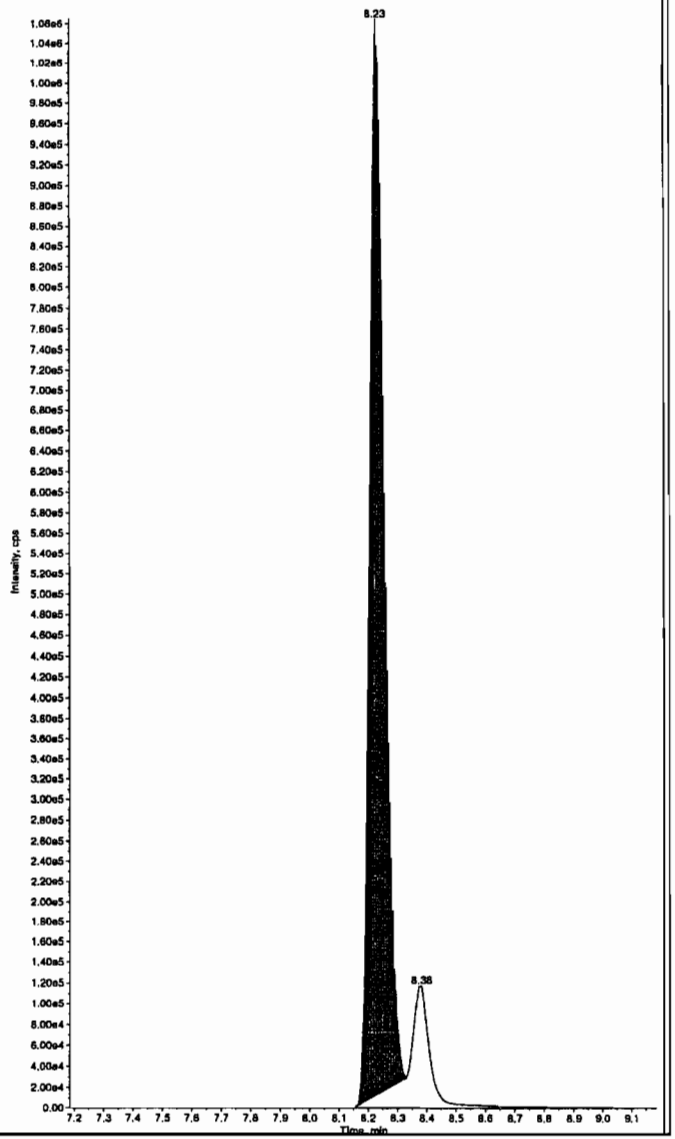
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010074.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	522.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	4:11:54 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.00	min
Area:	6.25e+005	counts
Height:	154030.548	cps
Start Time:	6.90	min
End Time:	7.77	min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010074.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	481.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	4:11:54 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.23	min
Area:	3.78e+006	counts
Height:	1052406.250	cps
Start Time:	8.15	min
End Time:	8.33	min



Hmm 03/04/10

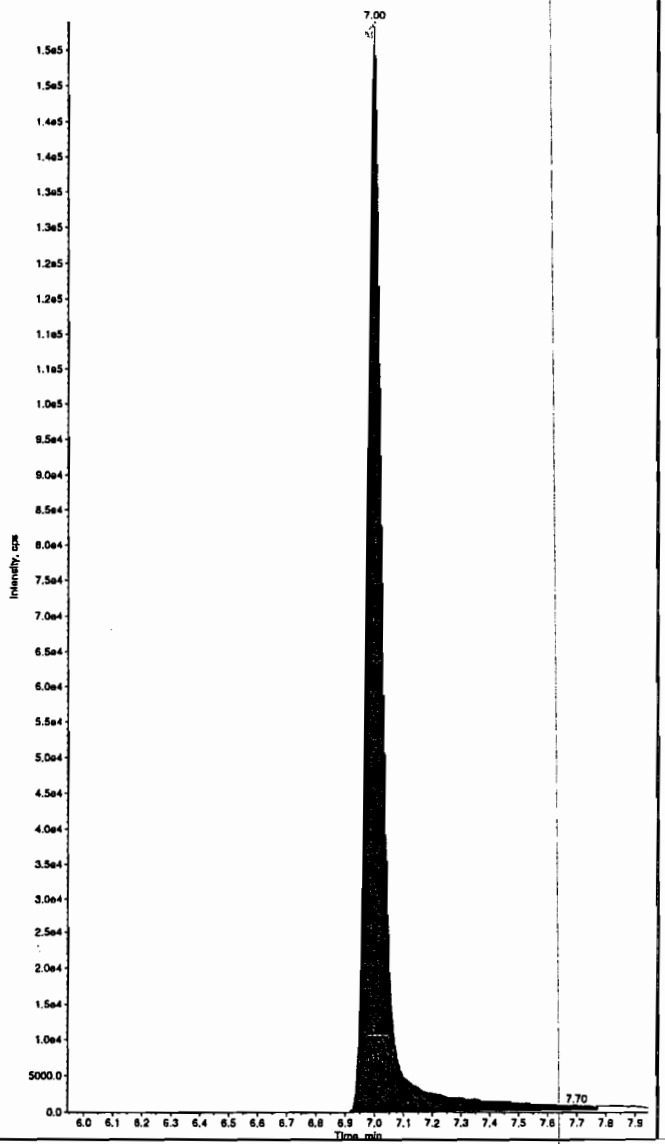
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

after scan 3/3/10

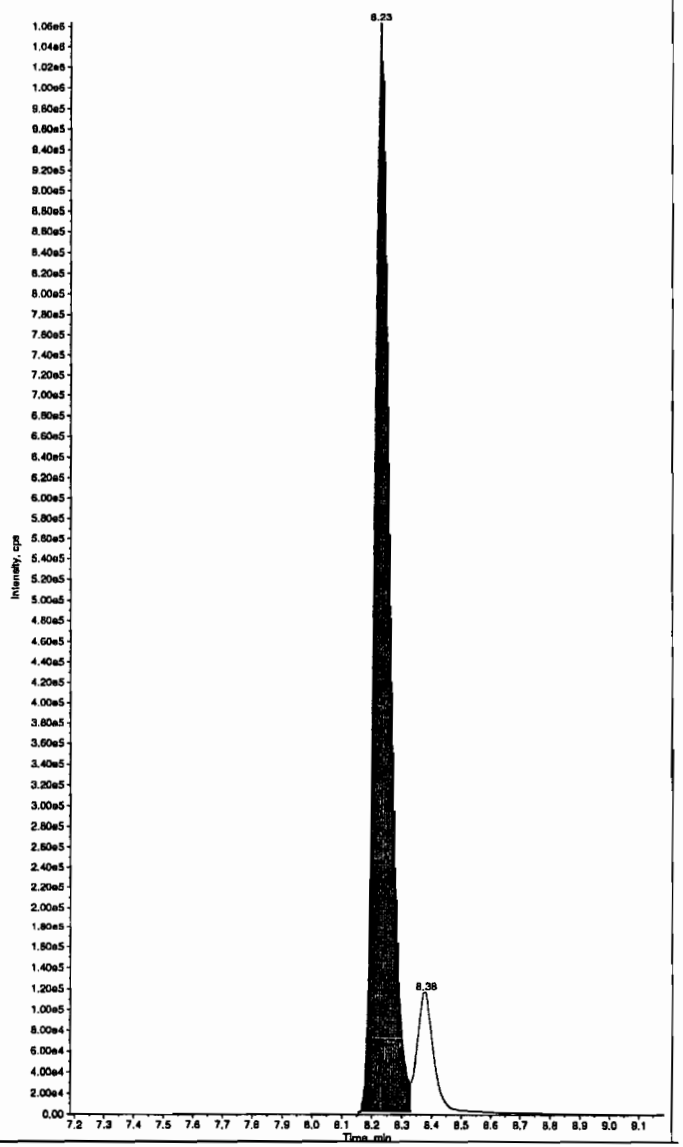
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010074.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	522. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	4:11:54 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:	6.94 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	7.00 min
Area:	6.25e+005 counts
Height:	154030.548 cps
Start Time:	6.90 min
End Time:	7.77 min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010074.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	499. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	4:11:54 AM
Modified:	Yes
RT Window:	15.0 sec
Expected RT:	8.19 min
Use Relative RT:	No
Int. Type:	Manual
Retention Time:	8.23 min
Area:	3.92e+006 counts
Height:	1066817.625 cps
Start Time:	8.15 min
End Time:	8.33 min

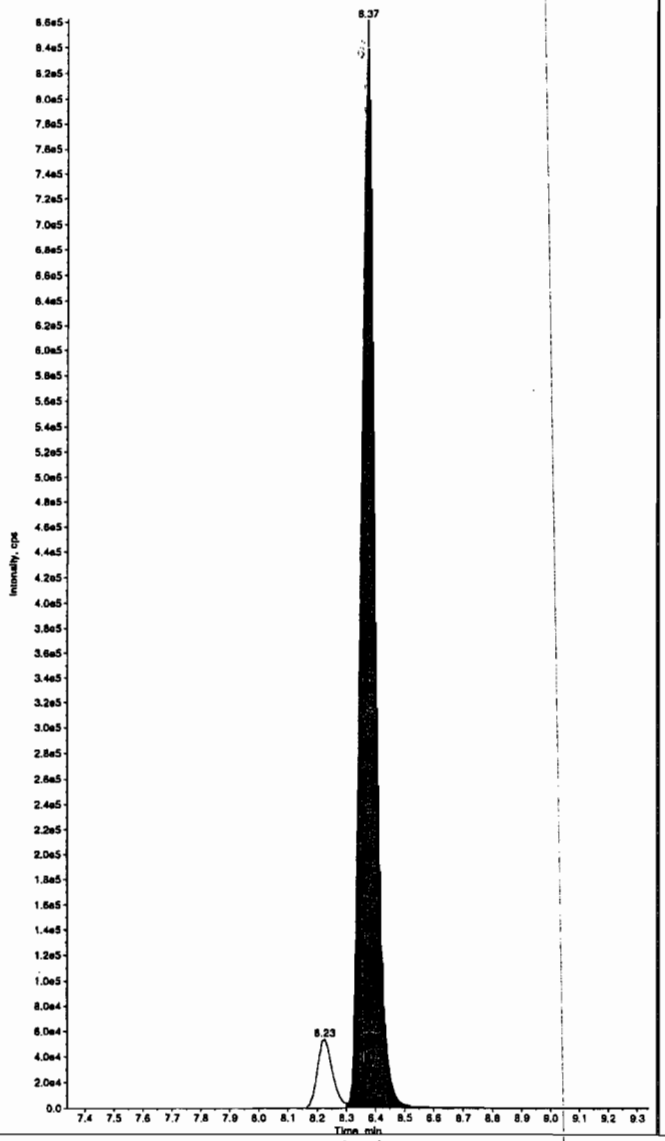


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

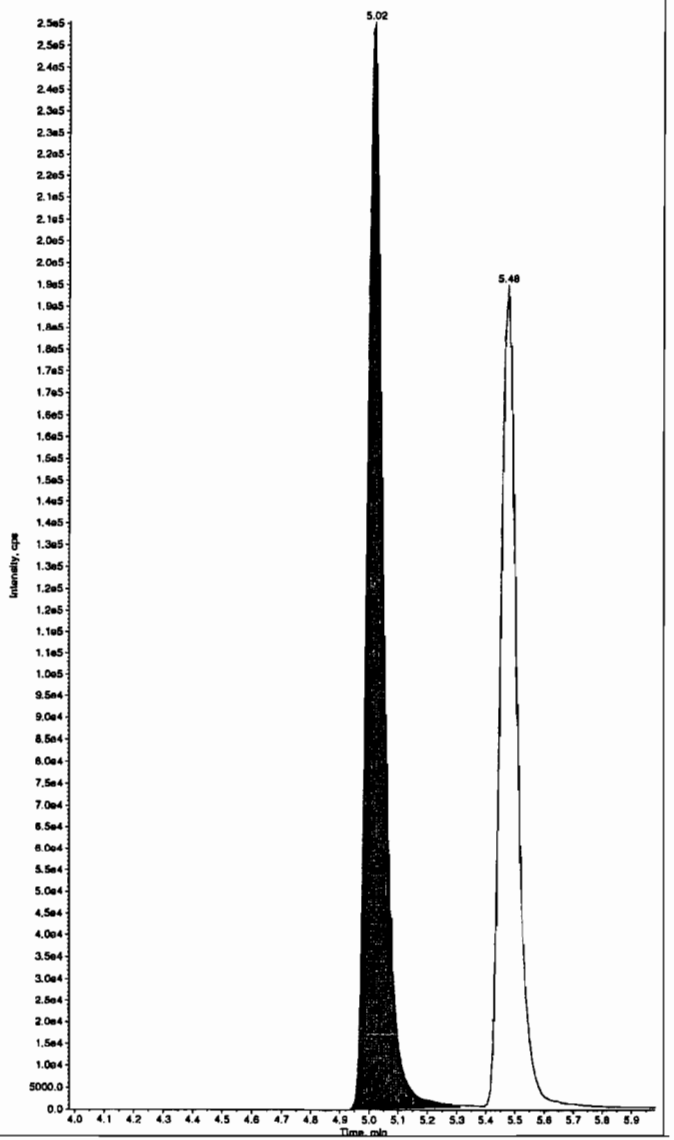
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010074.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	250. ng/mL
Calculated Conc:	243. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	4:11:54 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.37 min
Area:	2.96e+006 counts
Height:	862218.384 cps
Start Time:	8.30 min
End Time:	8.69 min



Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010074.wiff"
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:	558. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	4:11:54 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.02 min
Area:	1.04e+006 counts
Height:	250286.514 cps
Start Time:	4.92 min
End Time:	5.31 min



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

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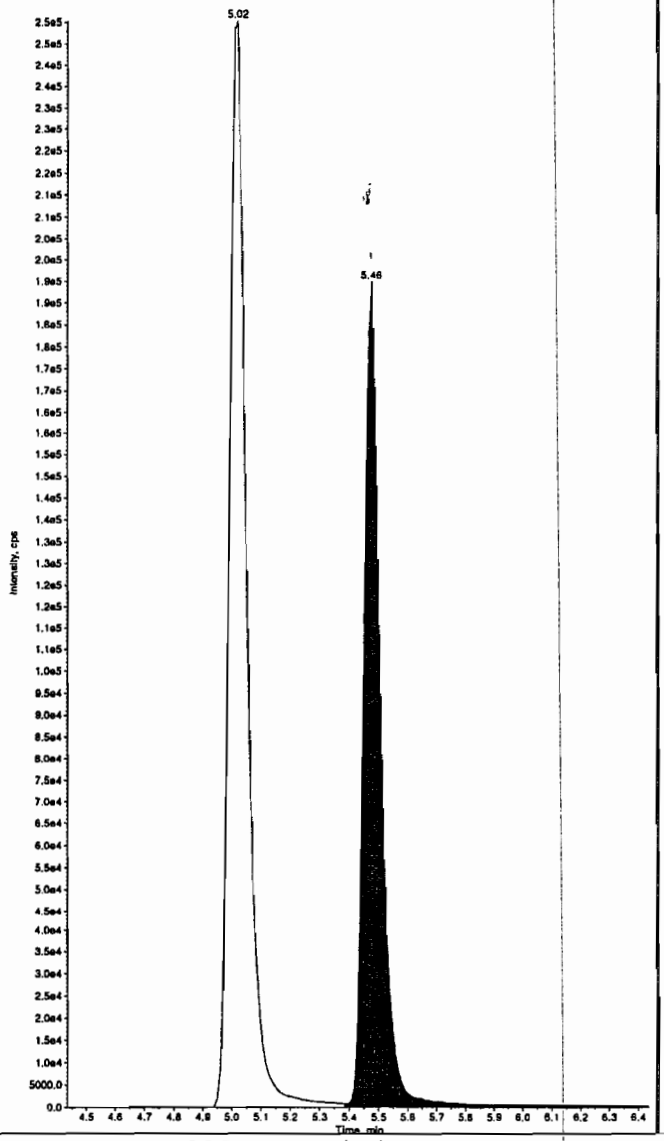
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010074.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 586. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 4:11:54 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: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.48 min
Area: 7.76e+005 counts
Height: 189887.344 cps
Start Time: 5.38 min
End Time: 6.11 min

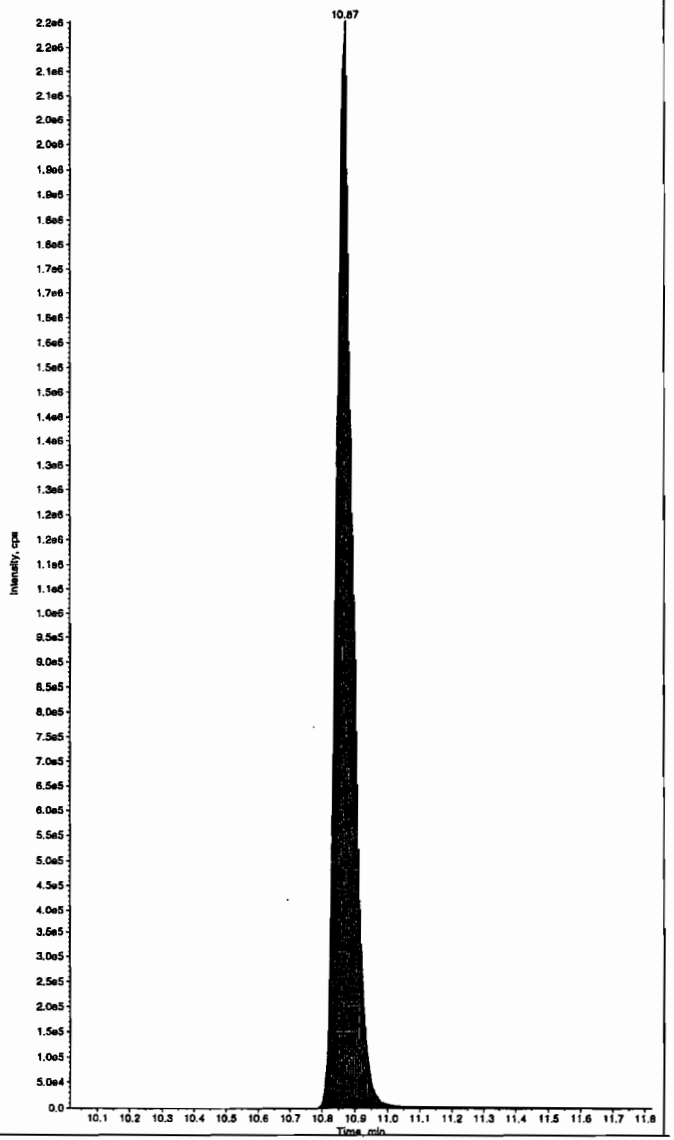


Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010074.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 498. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 4:11:54 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: 10.9 min
Area: 7.79e+006 counts
Height: 2204759.521 cps
Start Time: 10.8 min
End Time: 11.2 min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10-1623

Lab Code: GEI **GEL Sample ID:** WXXCRI

GEL Data File EXS03010076.wiff **Analysis Date:** 02-MAR-10 04:43

LCMSMS ID: 1358 **Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	125	125	
2,6-Diamino-4-nitrotoluene	100	113	113	
3,4-Dinitrotoluene	50	51.9	104	
3,5-Dinitroaniline	100	97.5	98	
TATB	100	107	107	
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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

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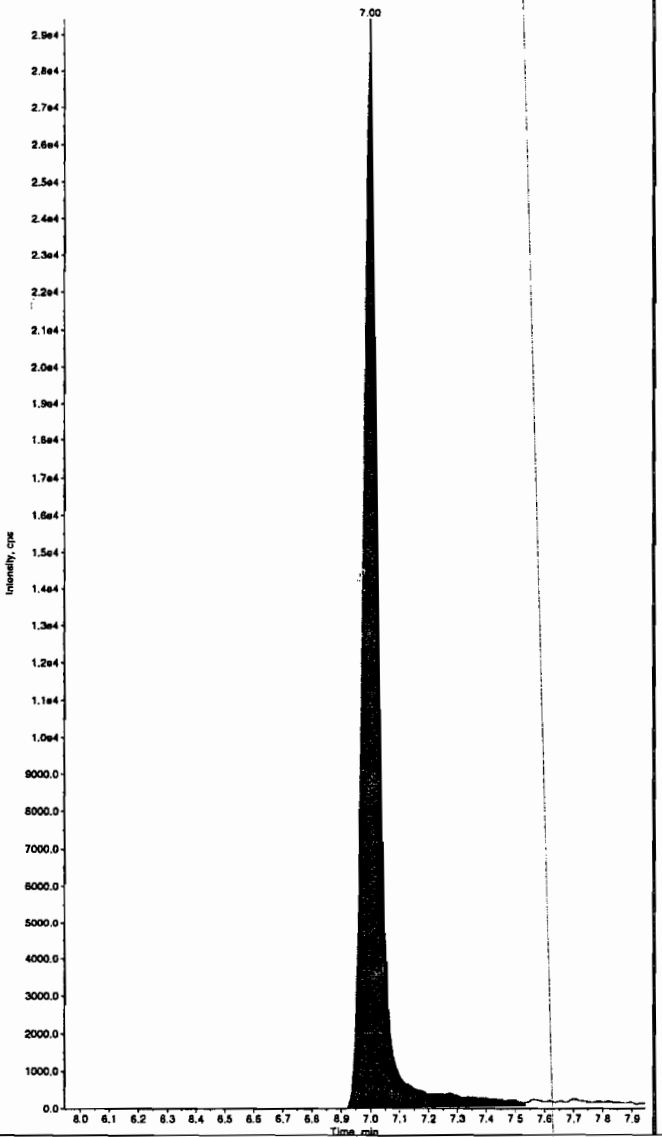
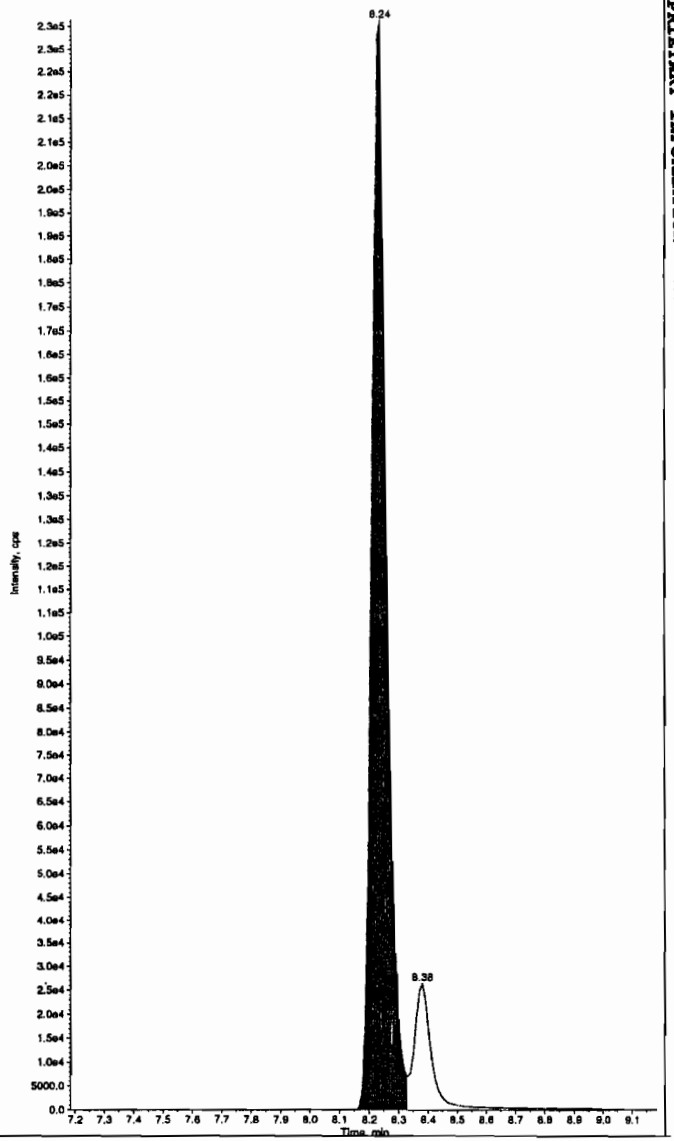
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010076.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	107.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	4:43:28 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.00	min
Area:	1.14e+005	counts
Height:	29411.873	cps
Start Time:	6.90	min
End Time:	7.53	min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010076.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/45.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	97.5	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	4:43:28 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.24	min
Area:	8.58e+005	counts
Height:	231412.018	cps
Start Time:	8.13	min
End Time:	8.33	min



Hmm 03/04/10

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

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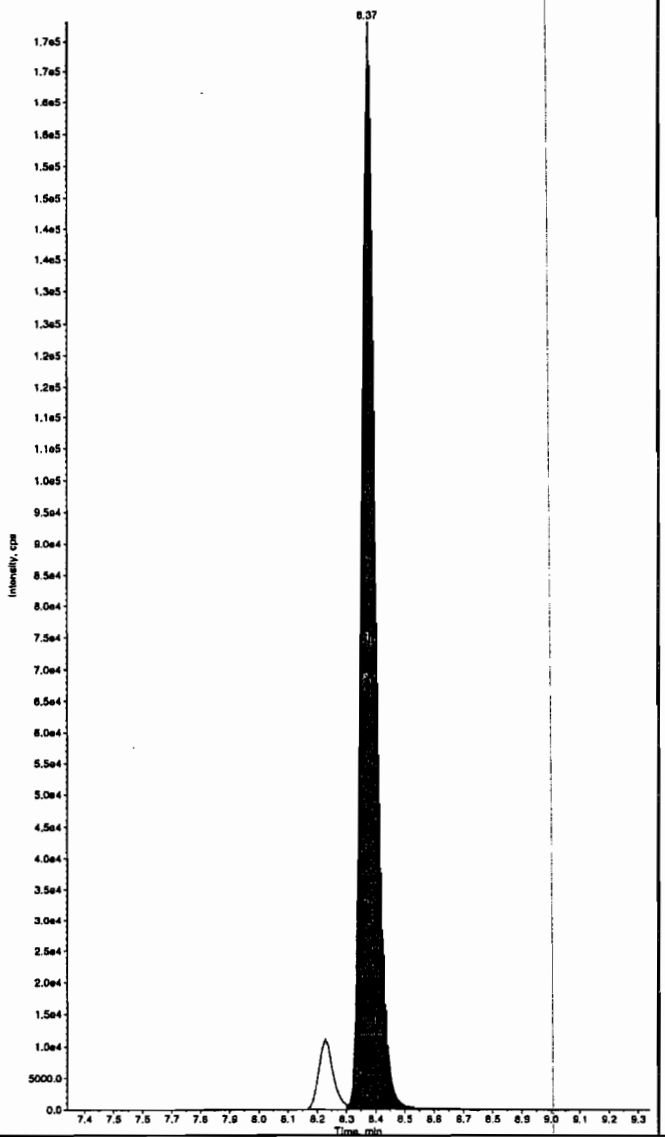
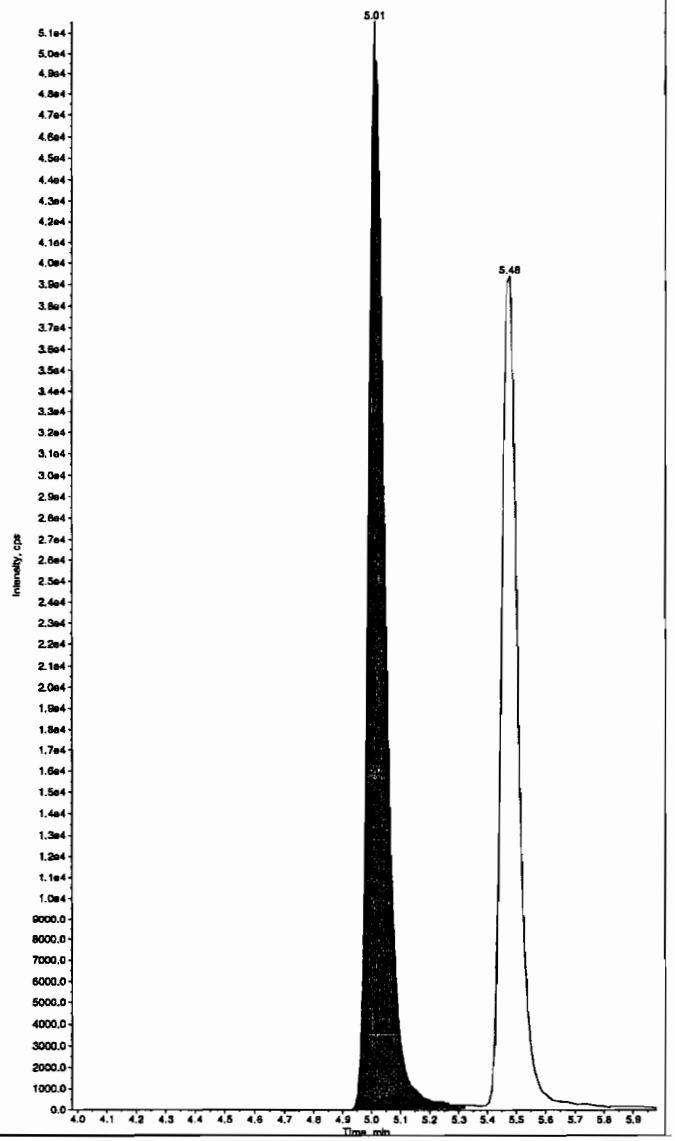
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010076.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	50.0 ng/mL
Calculated Conc:	51.9 ng/mL
Acq. Date:	3/2/2010
Acq. Time:	4:43:28 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.37 min
Area:	5.97e+005 counts
Height:	173230.148 cps
Start Time:	8.30 min
End Time:	8.71 min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010076.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	113. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	4:43:28 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.01 min
Area:	2.16e+005 counts
Height:	51517.998 cps
Start Time:	4.91 min
End Time:	5.32 min



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

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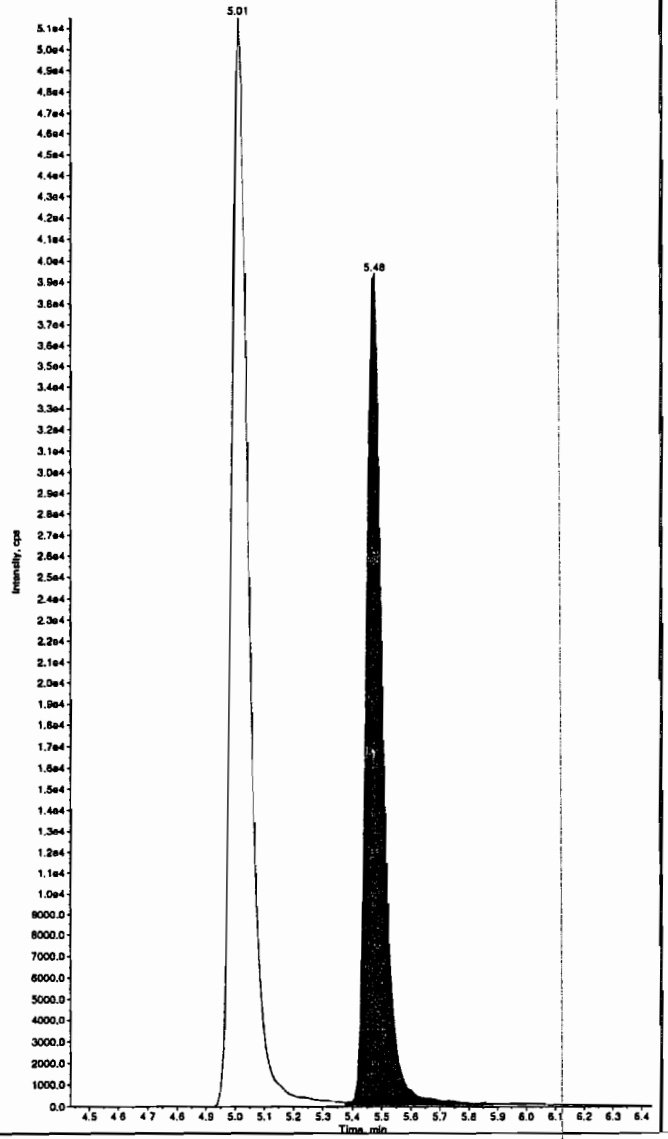
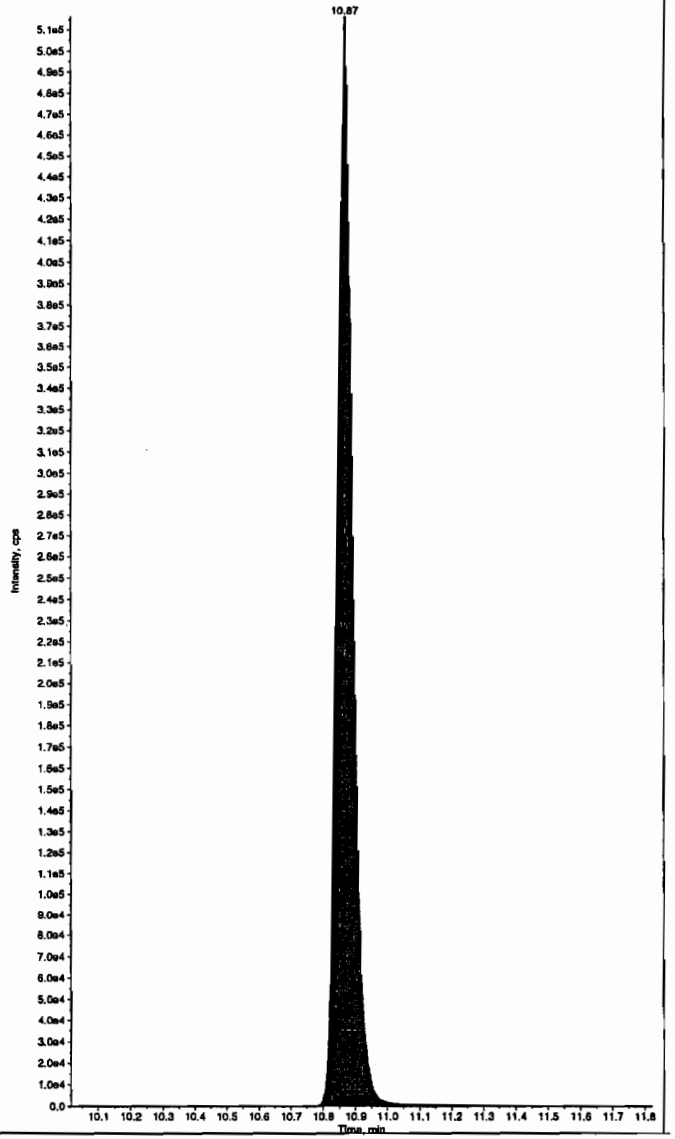
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010076.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	125. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	4:43:28 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:	5.44 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.48 min
Area:	1.61e+005 counts
Height:	39328.377 cps
Start Time:	5.37 min
End Time:	5.98 min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010076.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	102. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	4:43:28 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:	10.9 min
Area:	1.77e+006 counts
Height:	516487.244 cps
Start Time:	10.8 min
End Time:	11.1 min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03010087.wiff

Analysis Date: 02-MAR-10 07:36

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	521	104	
2,6-Diamino-4-nitrotoluene	500	543	109	
3,4-Dinitrotoluene	250	239	95	
3,5-Dinitroaniline	500	504	101	
TATB	500	504	101	
tris(o-cresyl) phosphate	500	492	98	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

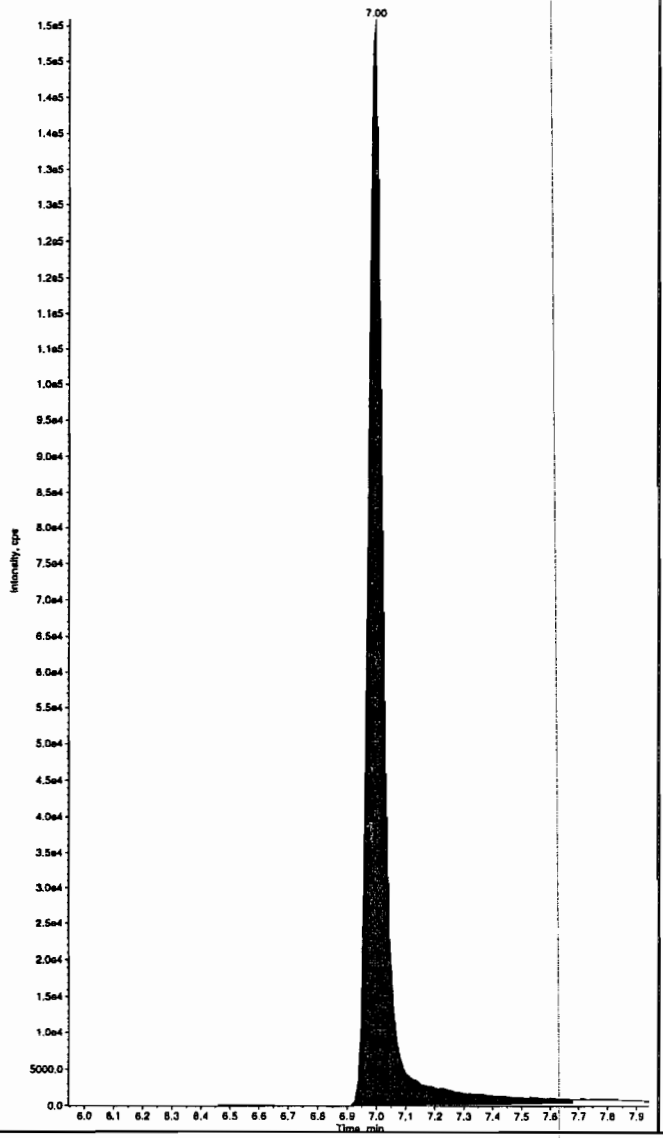
Before Jan 3/3/10

Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010087.wiff"
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: 504. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:36:30 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.00 min
Area: 6.03e+005 counts
Height: 150876.785 cps
Start Time: 6.89 min
End Time: 7.68 min

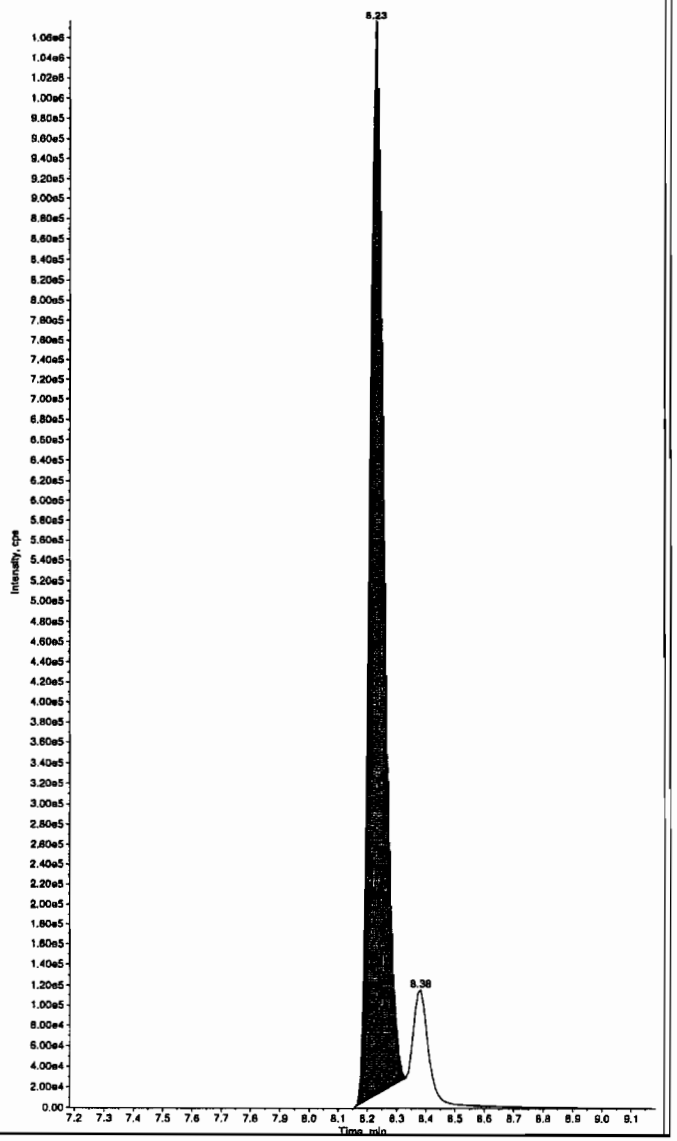


Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010087.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 487. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:36:30 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.23 min
Area: 3.82e+006 counts
Height: 1065488.403 cps
Start Time: 8.15 min
End Time: 8.33 min



Hmm 02/04/10

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

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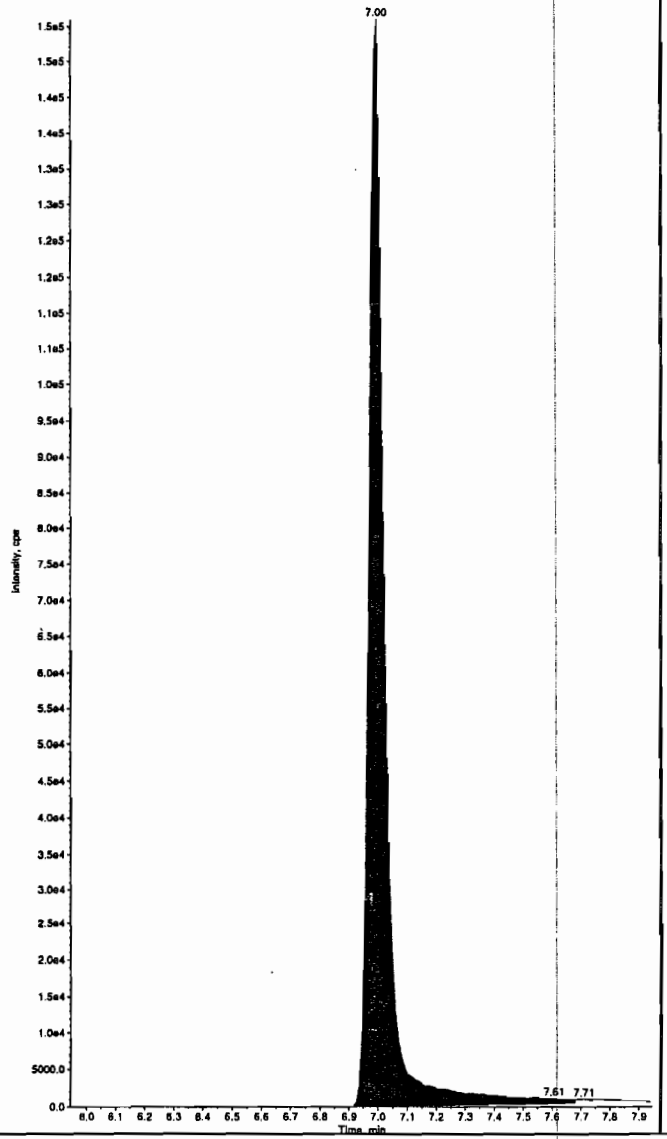
after Dan 3/3/10

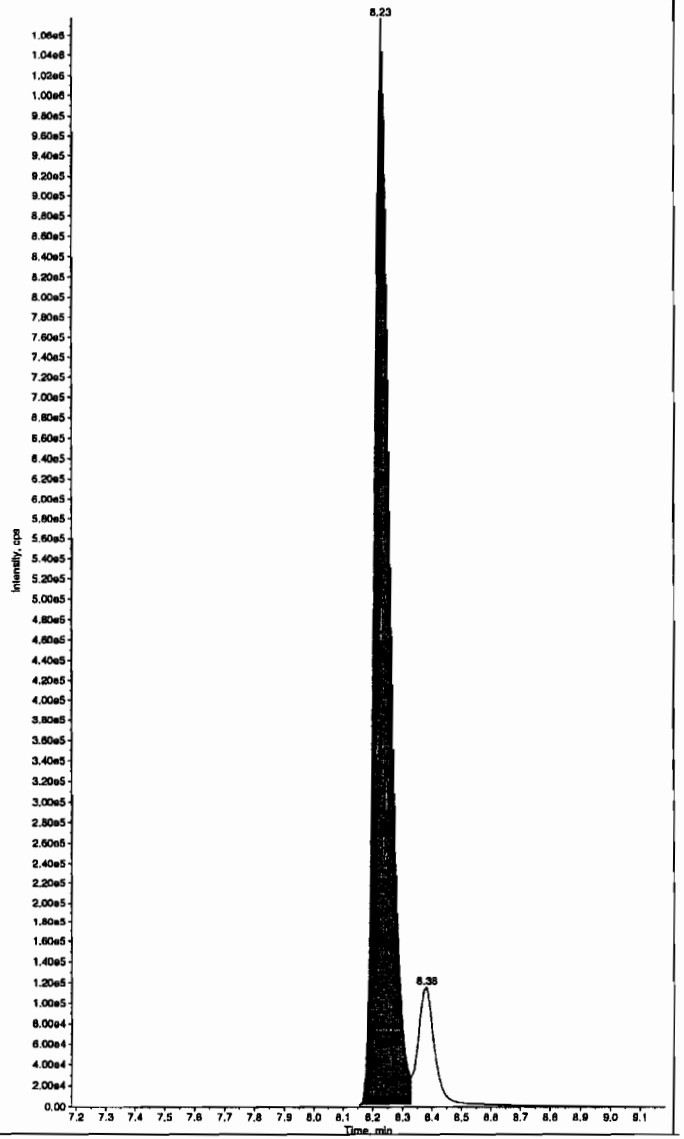
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010087.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	504.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	7:36:30 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.00	min
Area:	6.03e+005	counts
Height:	150876.785	cps
Start Time:	6.89	min
End Time:	7.68	min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010087.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	504.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	7:36:30 AM	
Modified:	Yes	
RT Window:	15.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	8.23	min
Area:	3.95e+006	counts
Height:	1076280.520	cps
Start Time:	8.15	min
End Time:	8.33	min



Page 846 of 946

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

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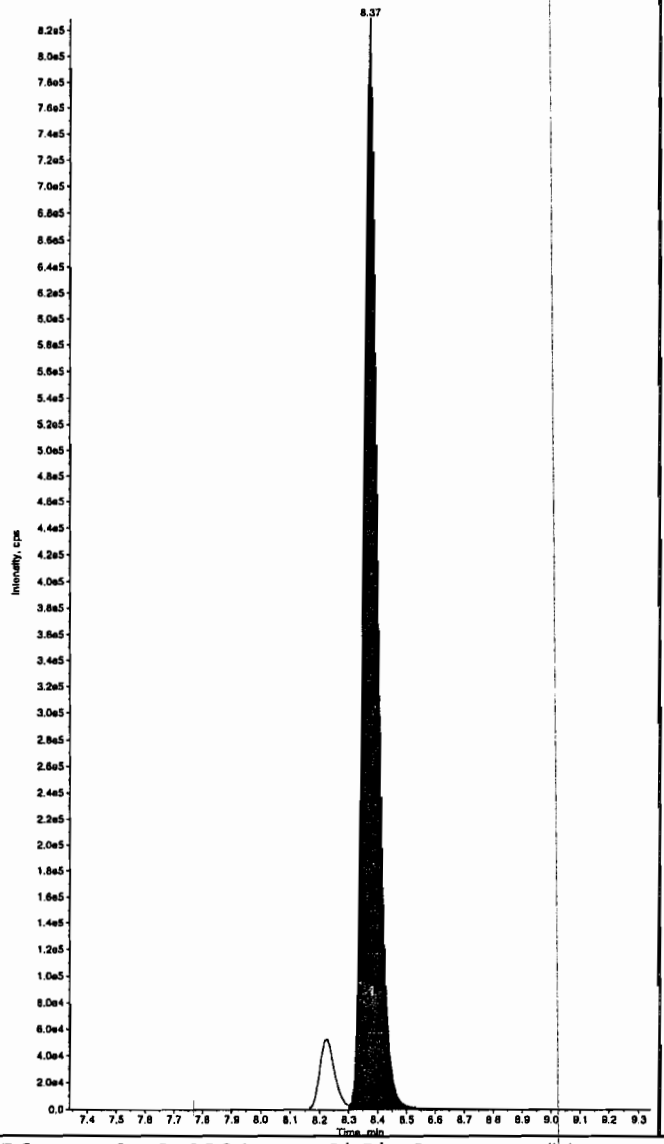
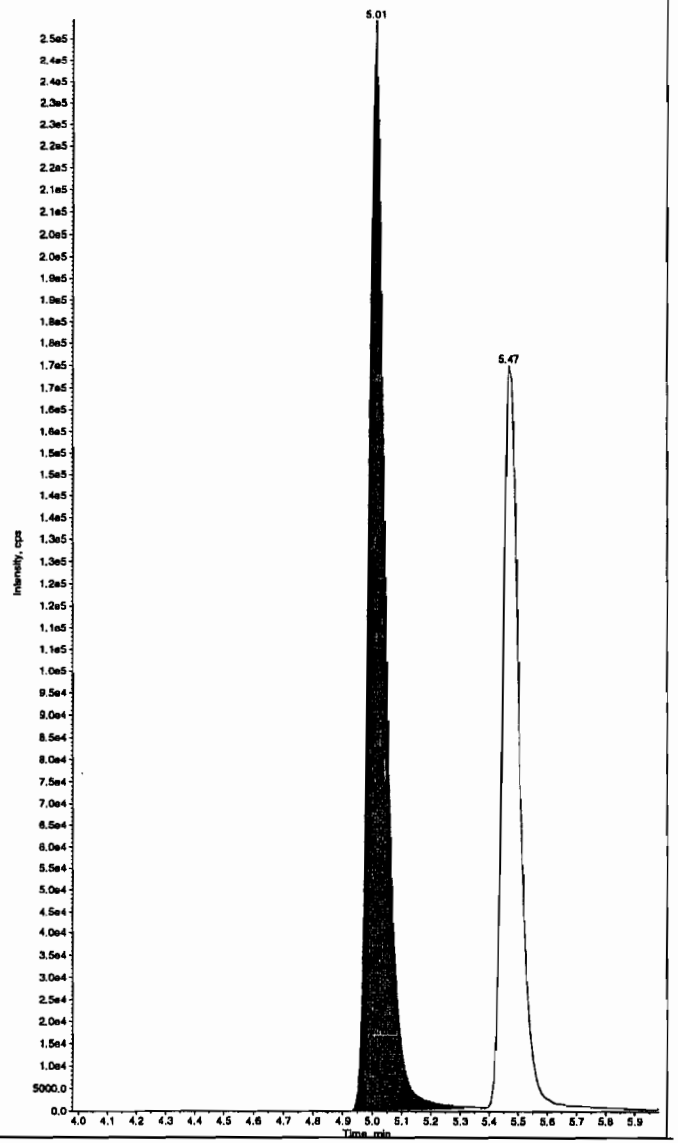
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010087.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	250. ng/mL
Calculated Conc:	239. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	7:36:30 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.37 min
Area:	2.91e+006 counts
Height:	828268.005 cps
Start Time:	8.30 min
End Time:	8.70 min



Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010087.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	543. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	7:36:30 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.01 min
Area:	1.01e+006 counts
Height:	249172.897 cps
Start Time:	4.92 min
End Time:	5.31 min



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

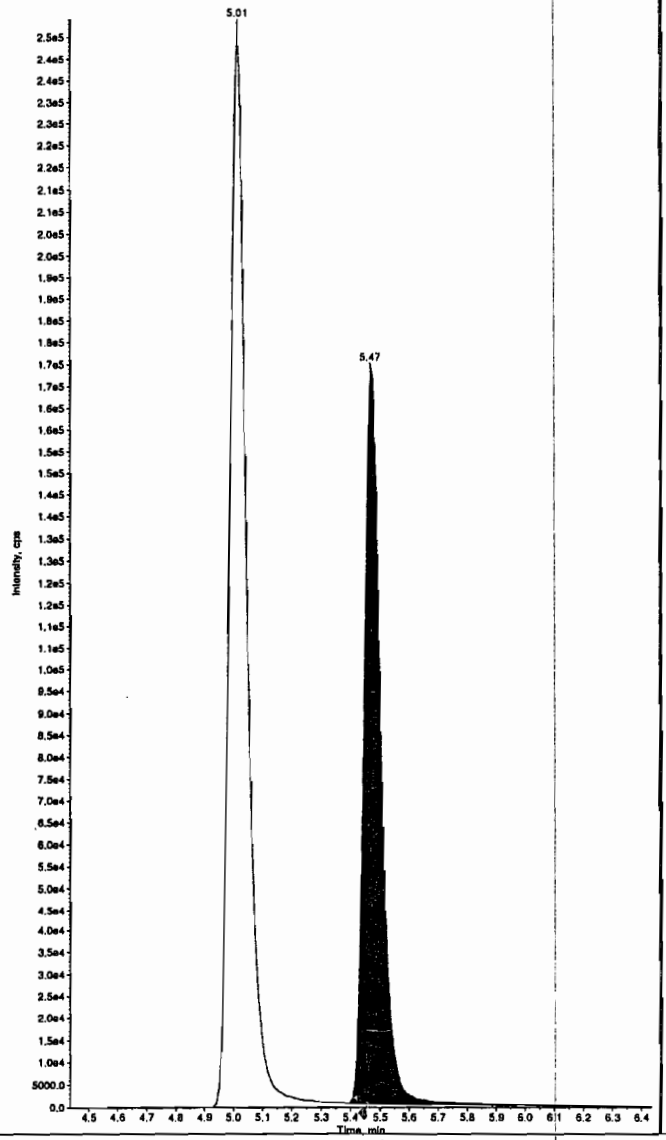
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010087.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 521. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:36:30 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: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.47 min
Area: 6.91e+005 counts
Height: 169533.401 cps
Start Time: 5.38 min
End Time: 5.95 min

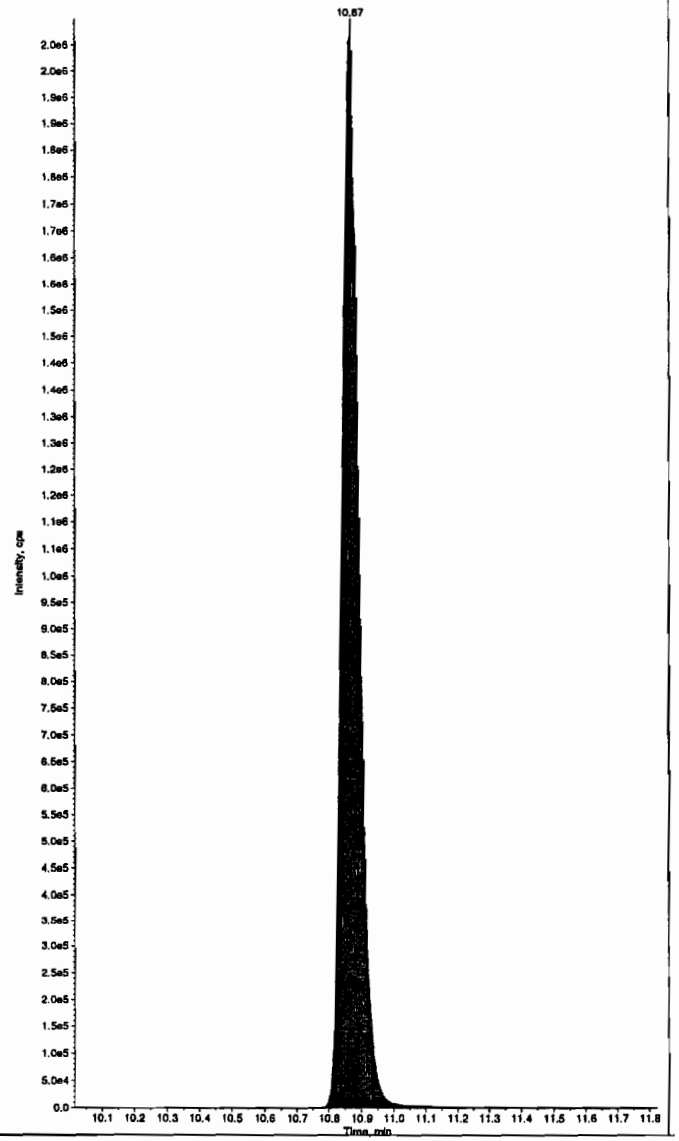


Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010087.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 492. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:36:30 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: 10.9 min
Area: 7.71e+006 counts
Height: 2048922.363 cps
Start Time: 10.8 min
End Time: 11.2 min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03010089.wiff

Analysis Date: 02–MAR–10 08:08

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

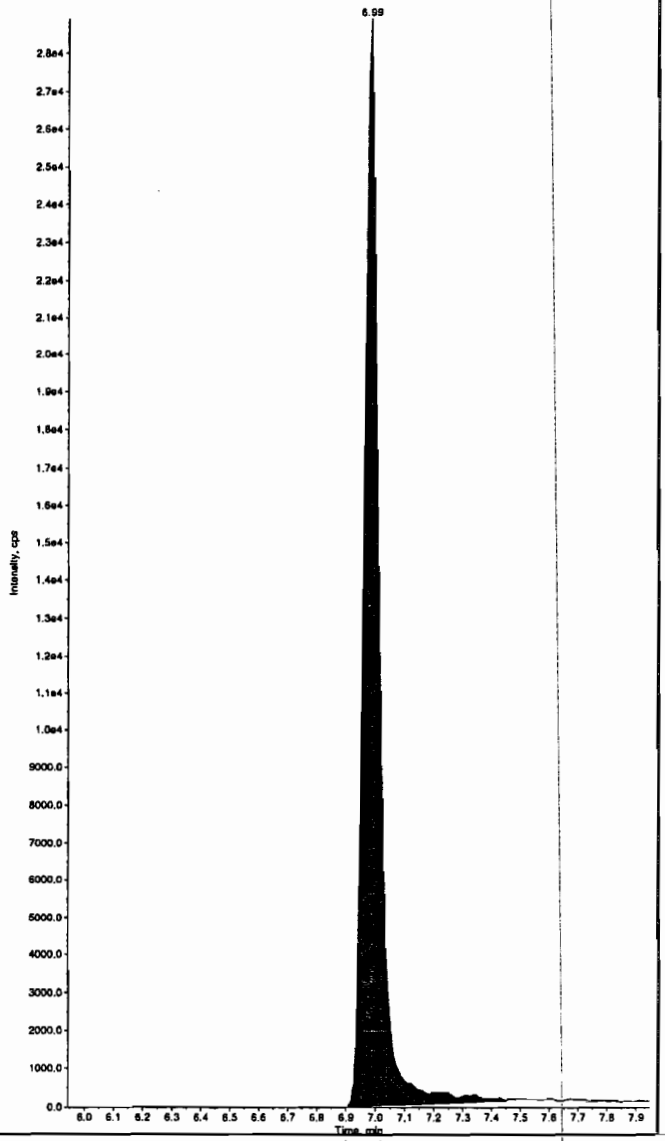
Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	100	117	117	
2,6–Diamino–4–nitrotoluene	100	113	113	
3,4–Dinitrotoluene	50	52.9	106	
3,5–Dinitroaniline	100	94.2	94	
TATB	100	104	104	
tris(o–cresyl) phosphate	100	93.9	94	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Run 3/3/10

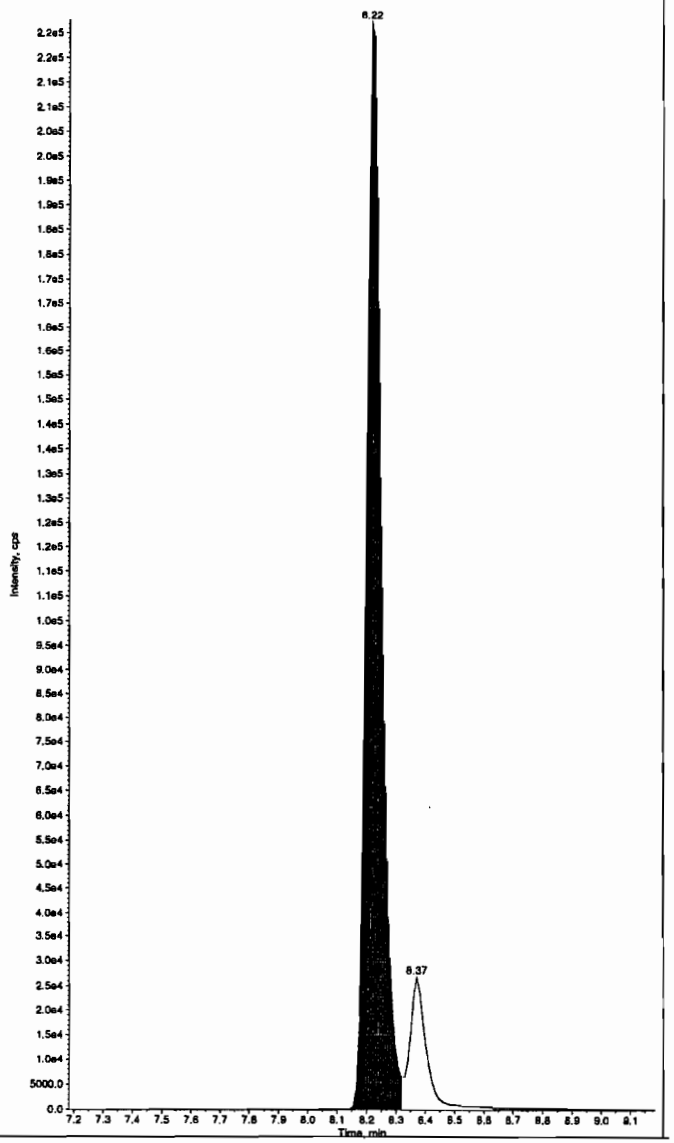
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010089.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	104.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	8:08:03 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.99	min
Area:	1.11e+005	counts
Height:	28895.948	cps
Start Time:	6.86	min
End Time:	7.45	min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010089.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	94.2	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	8:08:03 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.22	min
Area:	8.31e+005	counts
Height:	222751.526	cps
Start Time:	8.13	min
End Time:	8.32	min



Amm 03/04/10

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

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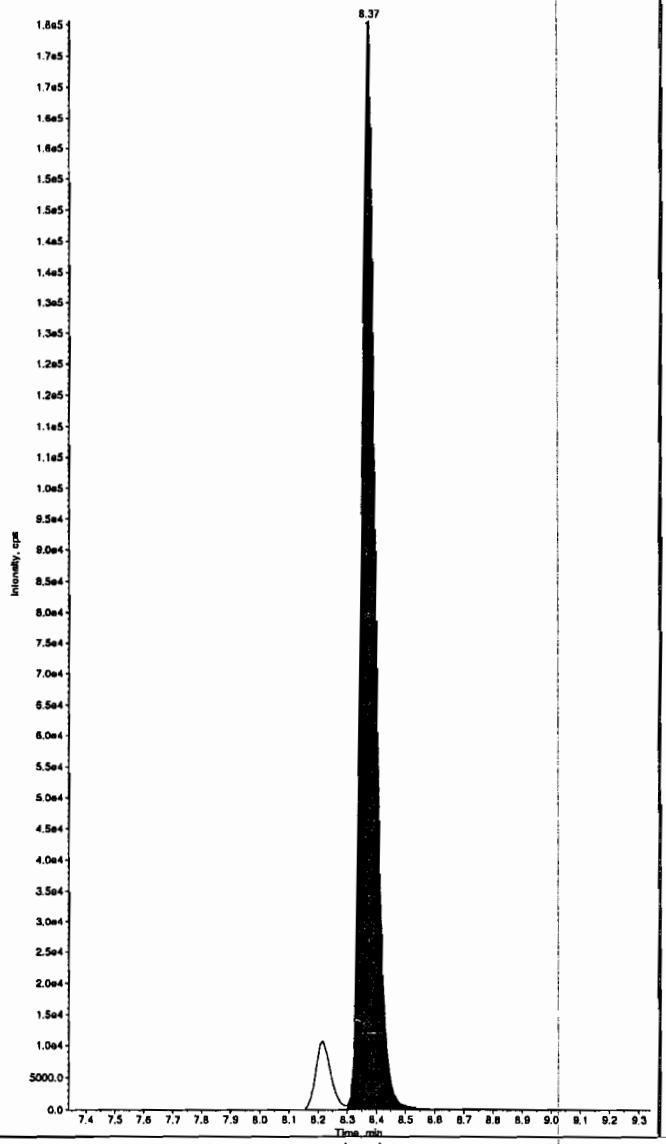
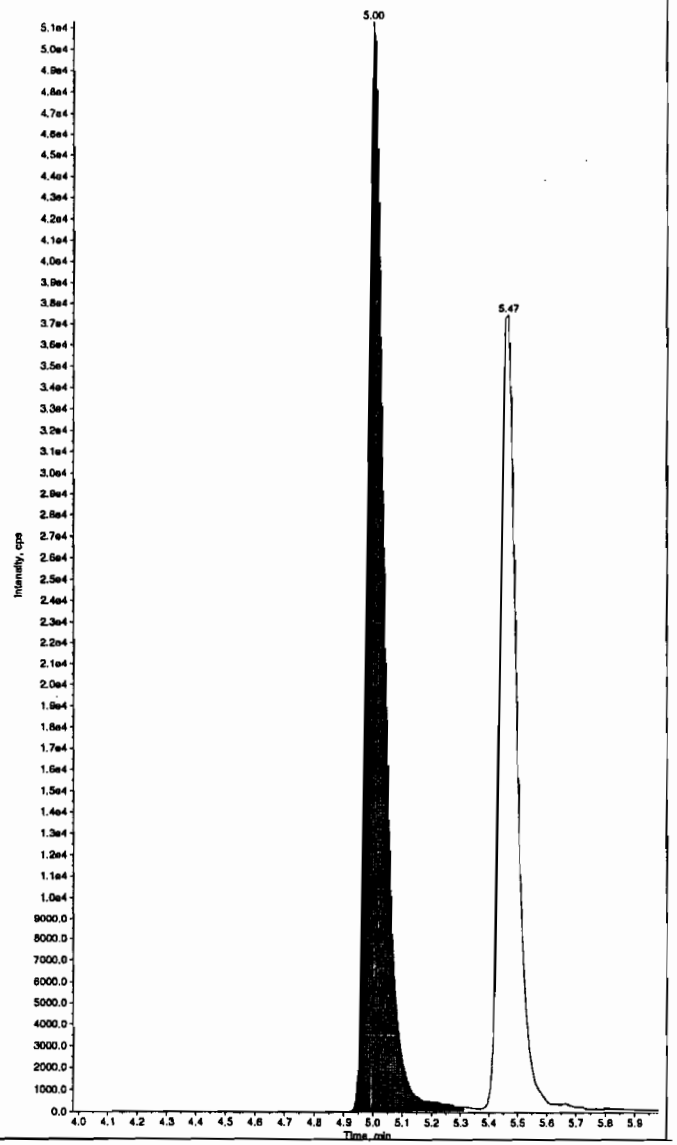
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010089.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	50.0 ng/mL
Calculated Conc:	52.9 ng/mL
Acq. Date:	3/2/2010
Acq. Time:	8:08:03 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.37 min
Area:	6.10e+005 counts
Height:	175682.648 cps
Start Time:	8.30 min
End Time:	8.71 min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010089.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	113. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	8:08:03 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.00 min
Area:	2.16e+005 counts
Height:	51282.207 cps
Start Time:	4.90 min
End Time:	5.31 min



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

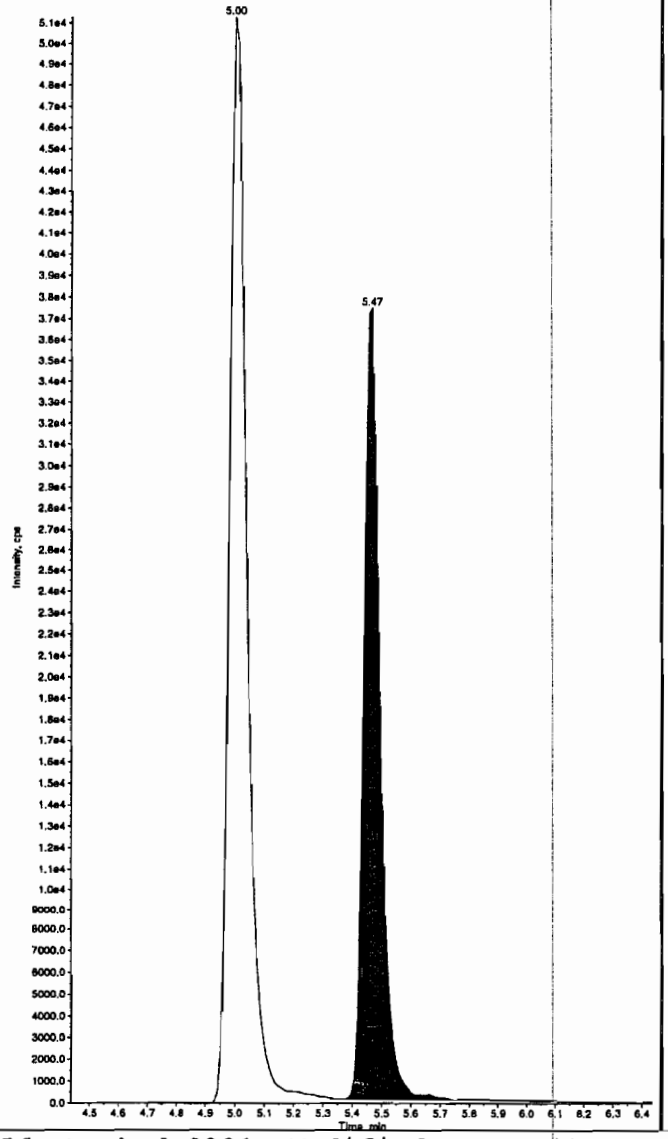
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010089.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 117. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 8:08:03 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: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.47 min
Area: 1.51e+005 counts
Height: 37312.218 cps
Start Time: 5.36 min
End Time: 5.75 min

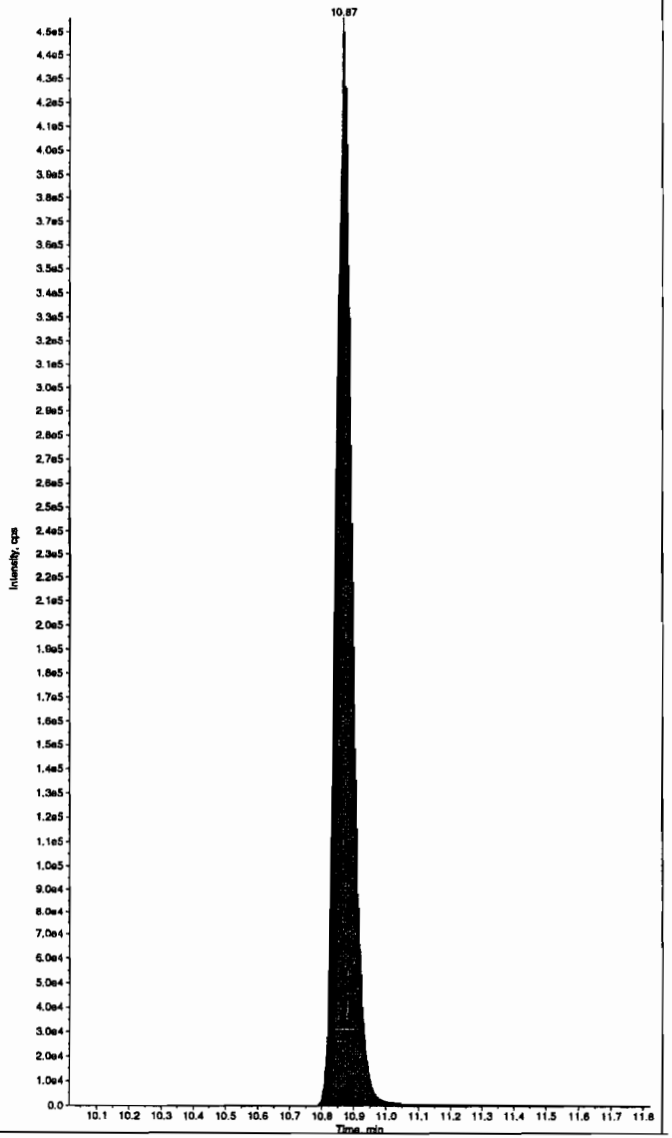


Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010089.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 93.9 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 8:08:03 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: 10.9 min
Area: 1.64e+006 counts
Height: 455869.049 cps
Start Time: 10.8 min
End Time: 11.2 min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–1623

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03010100.wiff

Analysis Date: 02–MAR–10 11:01

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	518	104	
2,6–Diamino–4–nitrotoluene	500	509	102	
3,4–Dinitrotoluene	250	228	91	
3,5–Dinitroaniline	500	486	97	
TATB	500	516	103	
tris(o–cresyl) phosphate	500	478	96	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

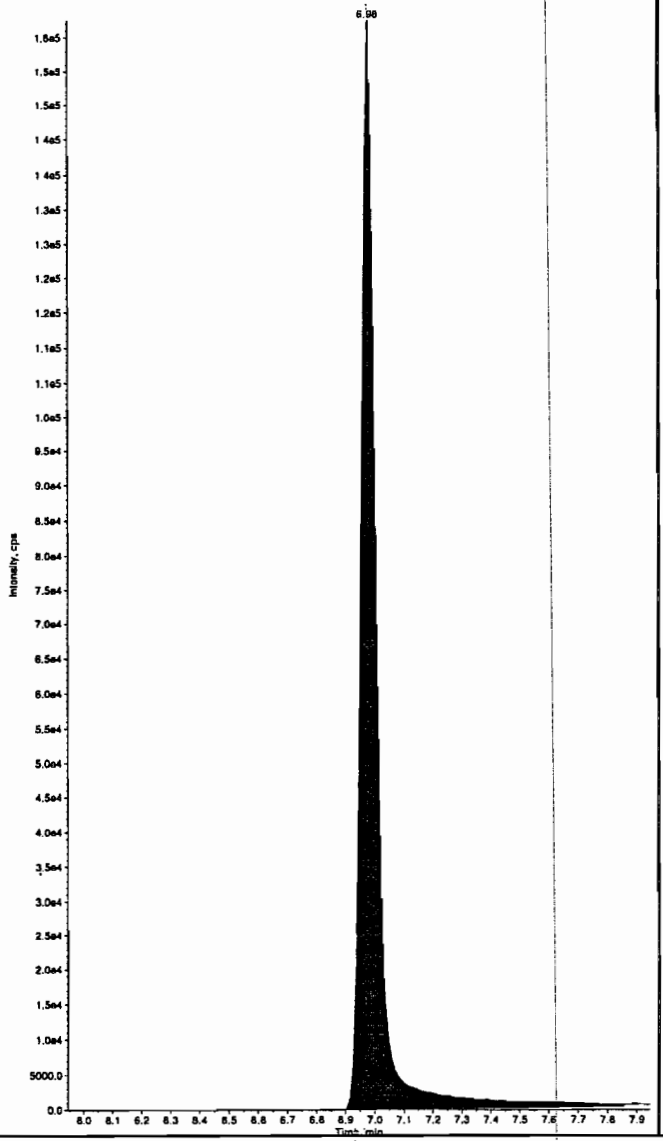
Before Run 3/3/10

Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010100.wiff"
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: 516. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 11:01:17 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 6.98 min
Area: 6.17e+005 counts
Height: 157492.126 cps
Start Time: 6.88 min
End Time: 7.85 min

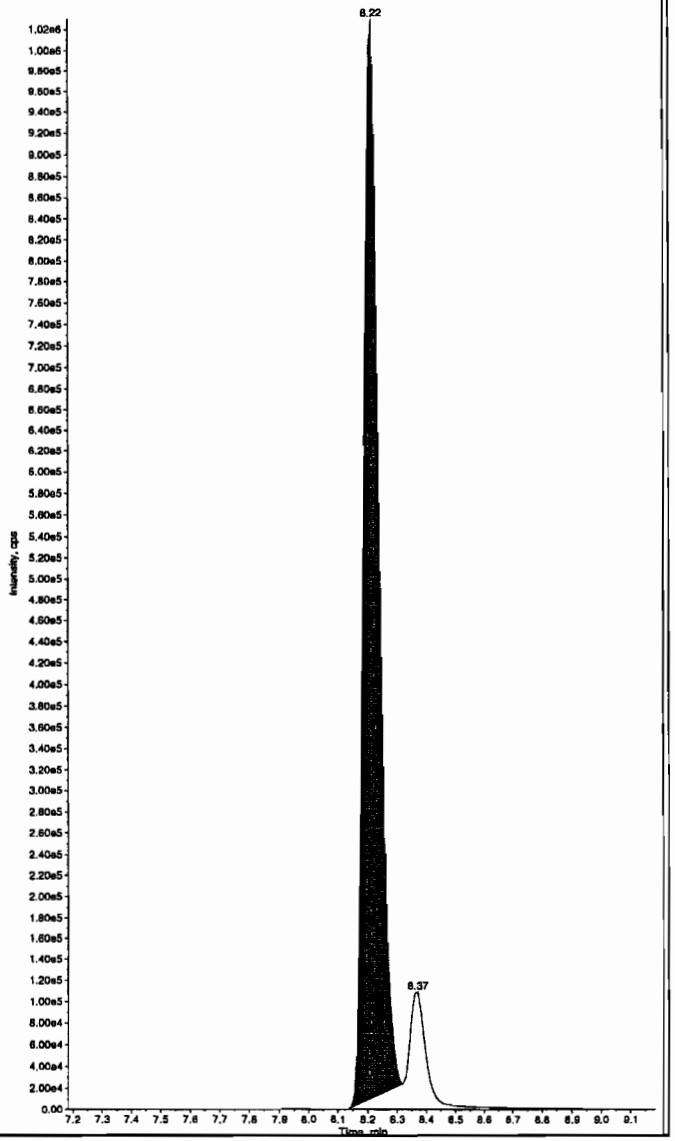


Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010100.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 471. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 11:01:17 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.22 min
Area: 3.71e+006 counts
Height: 1019064.331 cps
Start Time: 8.13 min
End Time: 8.32 min



Hmm 03/04/10

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

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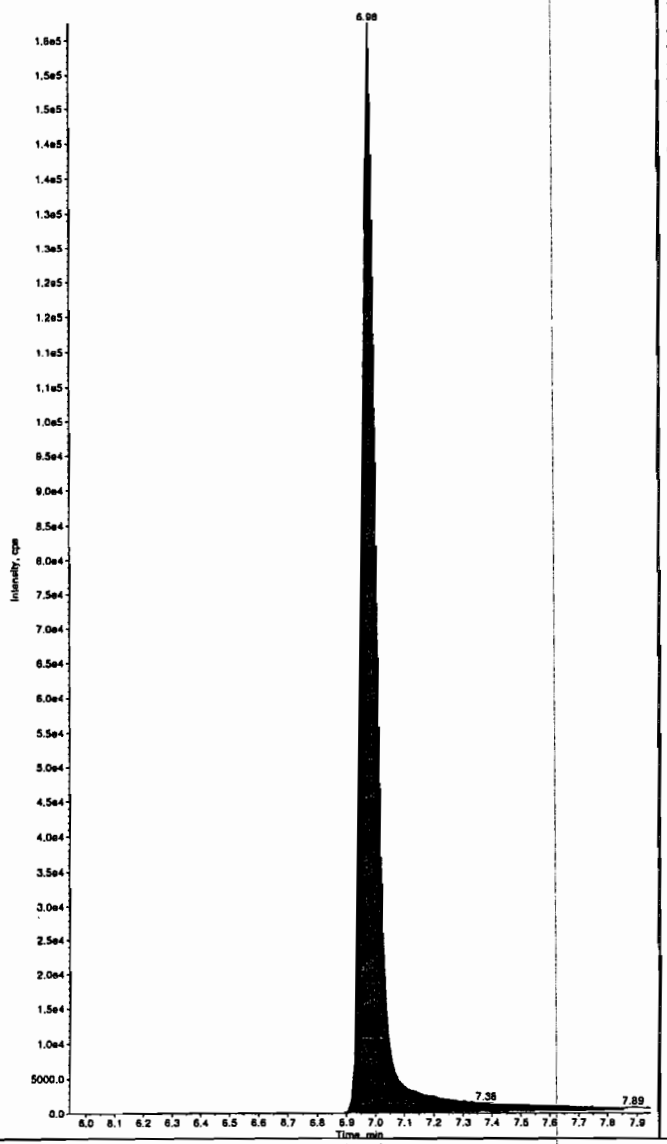
after Lan 3/3/10

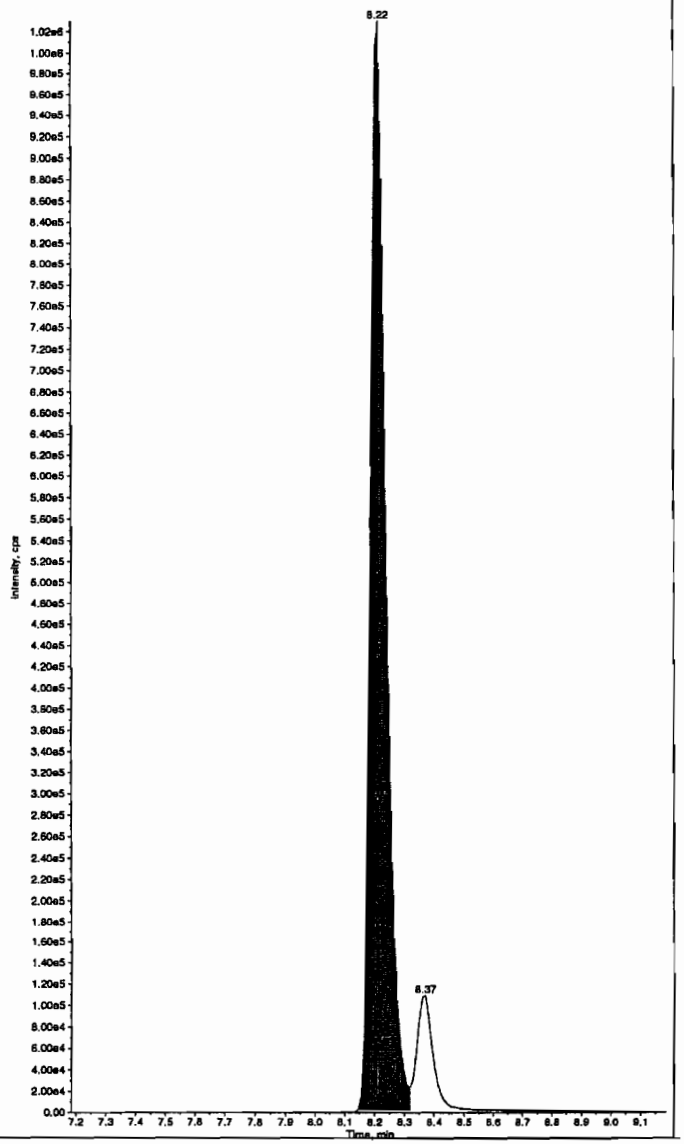
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010100.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	516.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	11:01:17 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.98	min
Area:	6.17e+005	counts
Height:	157492.126	cps
Start Time:	6.88	min
End Time:	7.85	min



Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010100.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	486.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	11:01:17 AM	
Modified:	Yes	
RT Window:	15.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	8.21	min
Area:	3.82e+006	counts
Height:	1039376.488	cps
Start Time:	8.14	min
End Time:	8.32	min

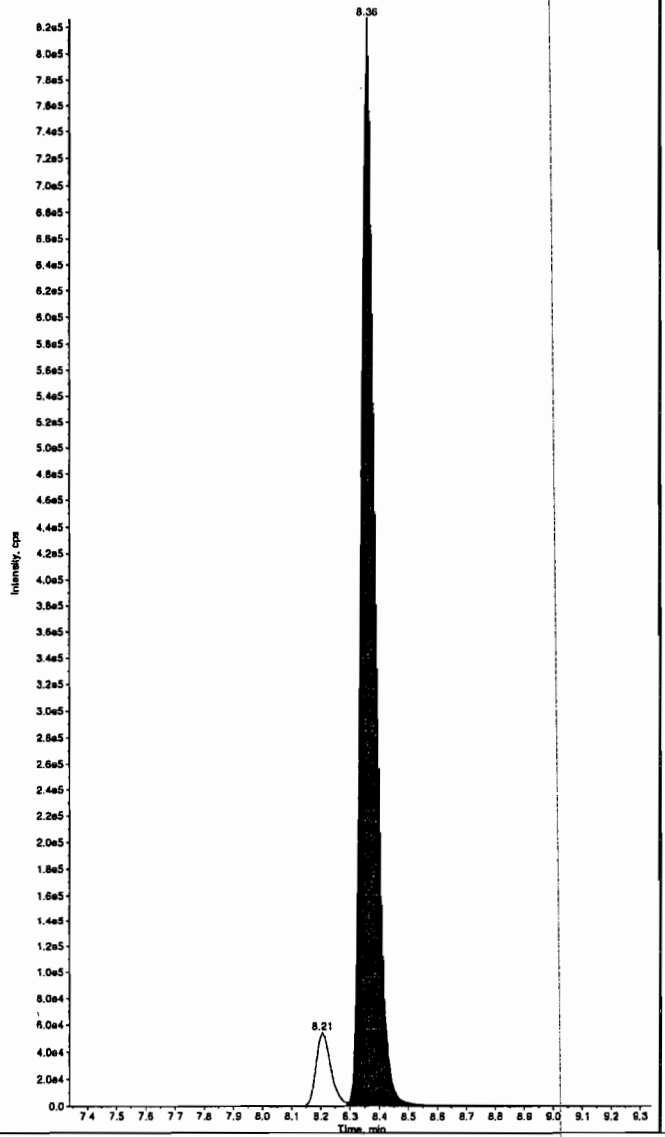


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

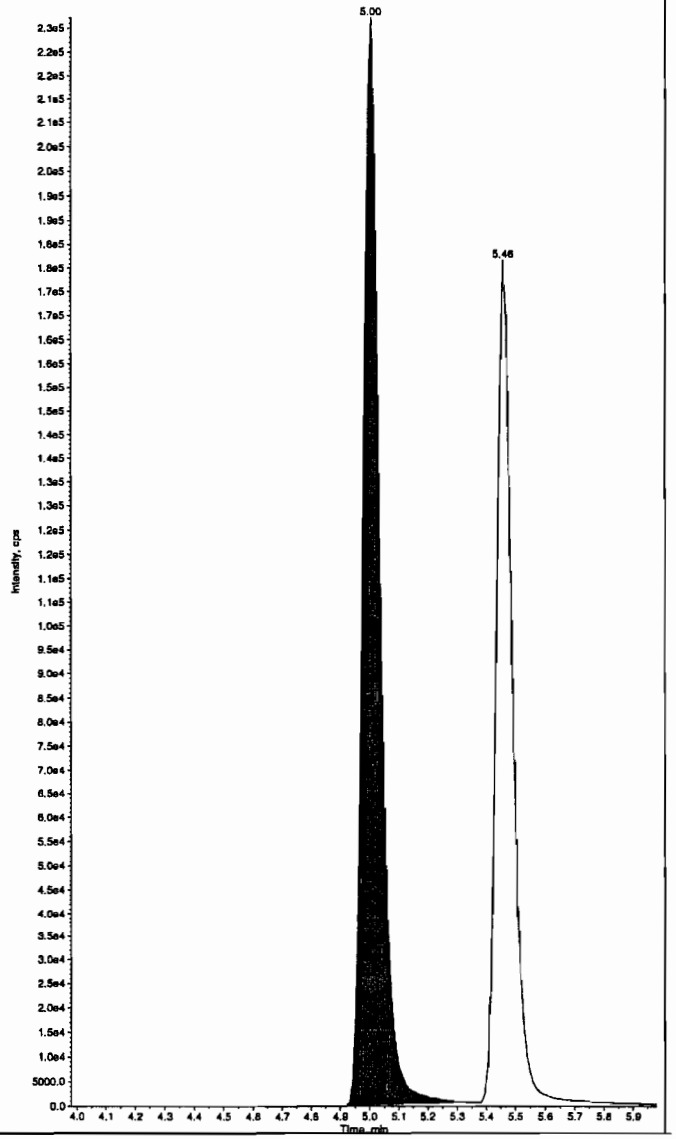
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010100.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	228.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	11:01:17 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:	15.0	sec
Expected RT:	8.34	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.36	min
Area:	2.79e+006	counts
Height:	826173.828	cps
Start Time:	8.29	min
End Time:	8.64	min



Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010100.wiff"
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:	509.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	11:01:17 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:	4.98	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.00	min
Area:	9.50e+005	counts
Height:	227016.037	cps
Start Time:	4.91	min
End Time:	5.30	min



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

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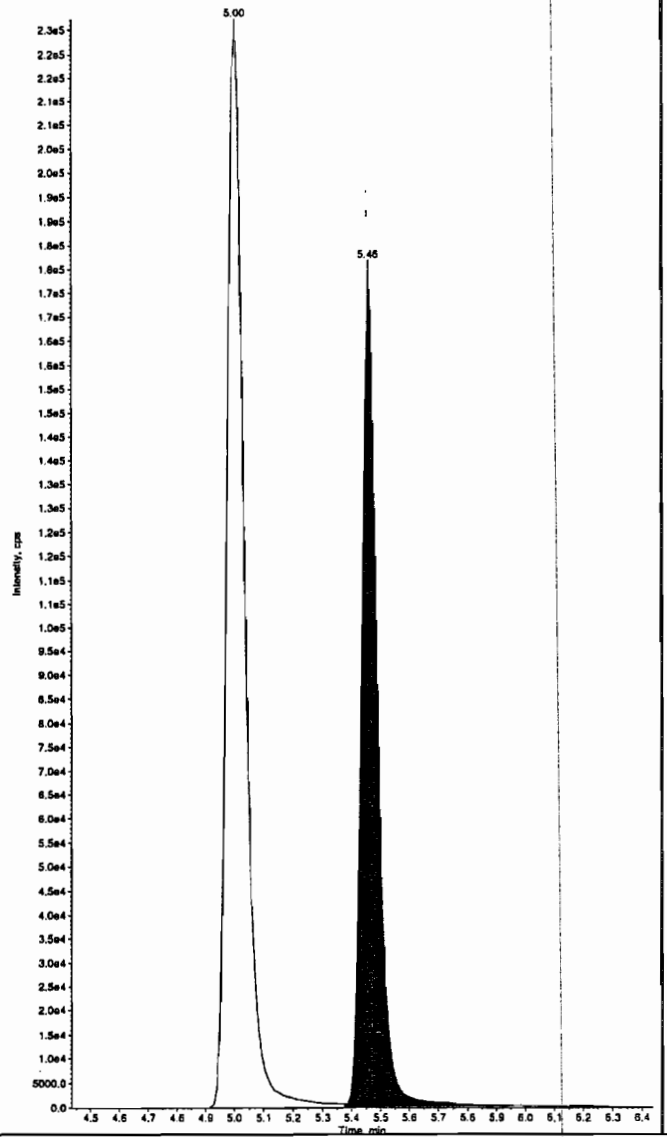
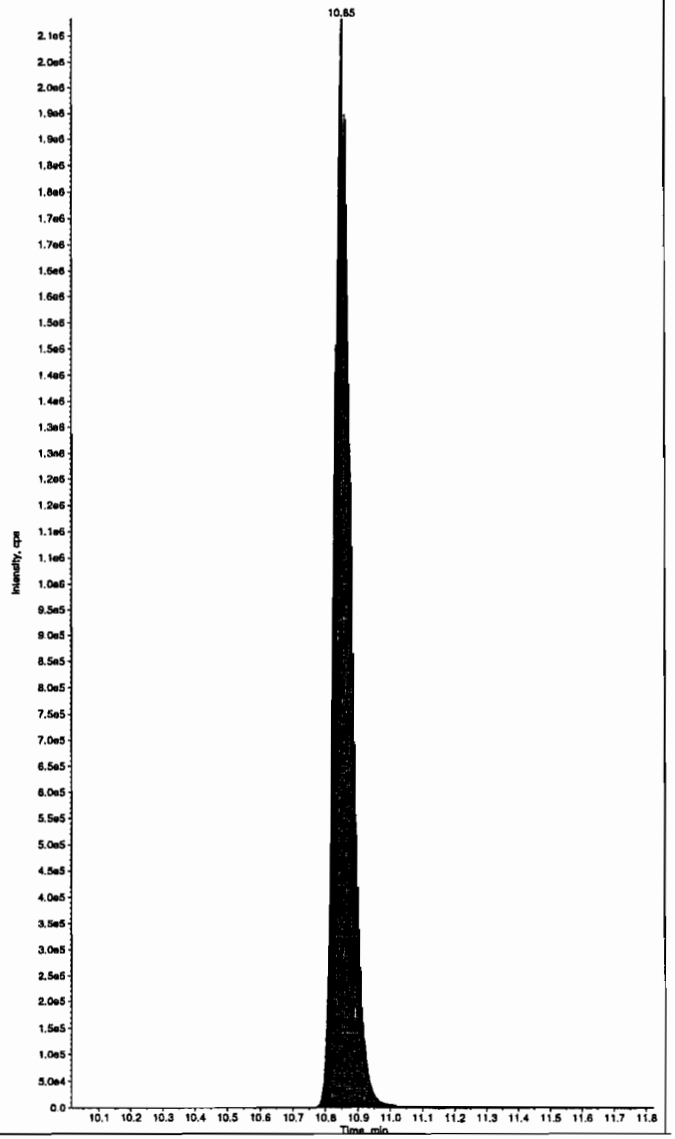
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010100.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	518. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	11:01:17 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:	5.44 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.46 min
Area:	6.88e+005 counts
Height:	176669.724 cps
Start Time:	5.37 min
End Time:	5.96 min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010100.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	478. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	11:01:17 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:	10.9 min
Area:	7.50e+006 counts
Height:	2081722.168 cps
Start Time:	10.8 min
End Time:	11.2 min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03010102.wiff

Analysis Date: 02–MAR–10 11:32

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
tris(o–cresyl) phosphate	100	97	97	
TATB	100	104	104	
2,4–Diamino–6–nitrotoluene	100	108	108	
2,6–Diamino–4–nitrotoluene	100	106	106	
3,4–Dinitrotoluene	50	52.1	104	
3,5–Dinitroaniline	100	94.3	94	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

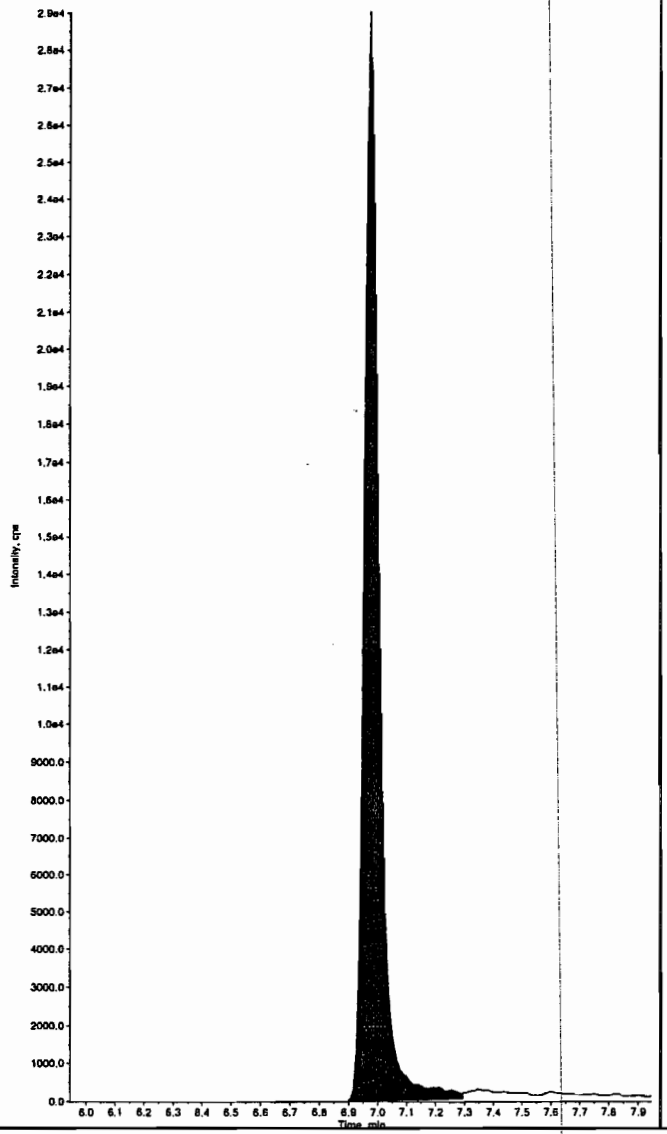
Before Run 3/3/10

Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010102.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 104. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 11:32:52 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 6.98 min
Area: 1.10e+005 counts
Height: 29022.581 cps
Start Time: 6.85 min
End Time: 7.30 min

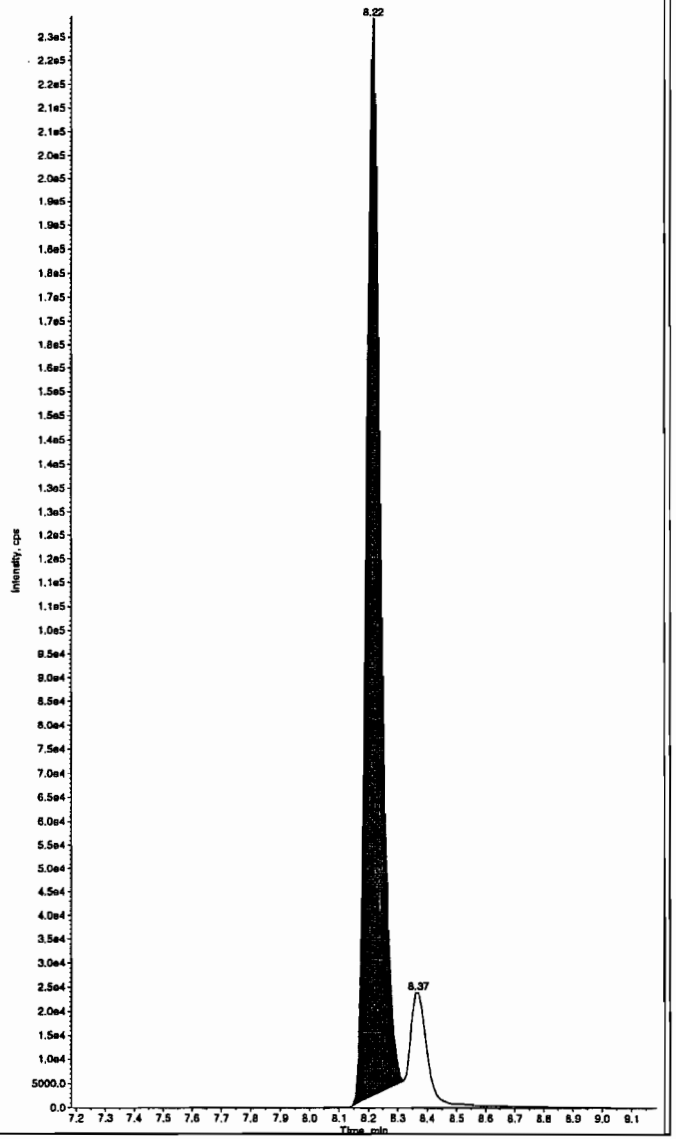


Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010102.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 91.0 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 11:32:52 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.22 min
Area: 8.07e+005 counts
Height: 226852.982 cps
Start Time: 8.14 min
End Time: 8.32 min



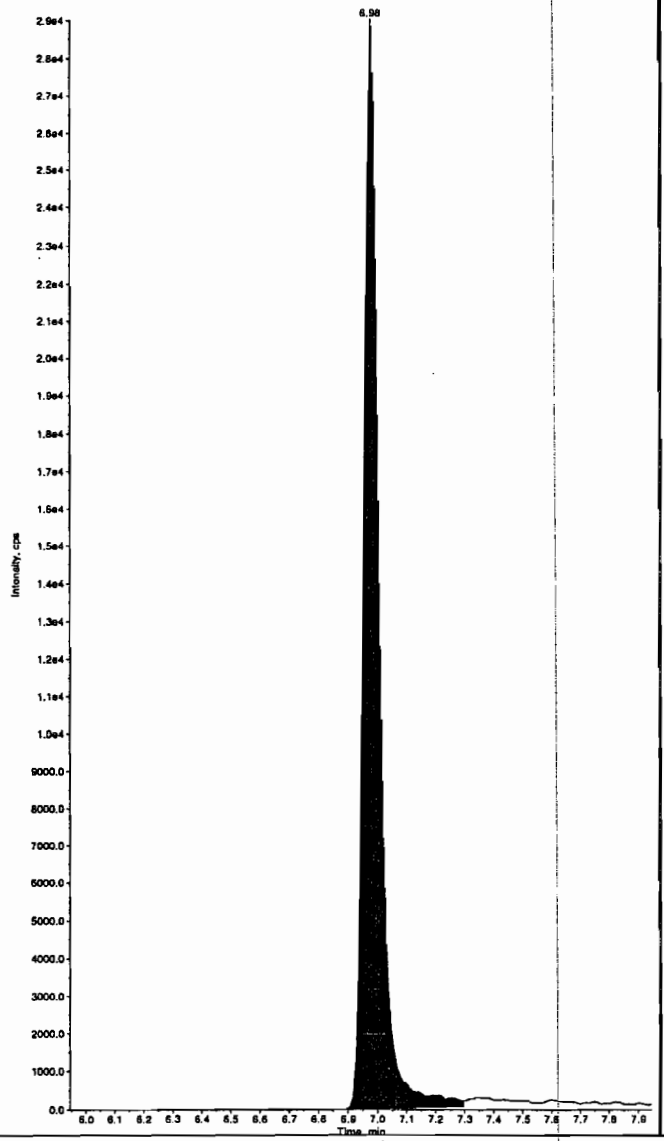
Hmm 03/04/10

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

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

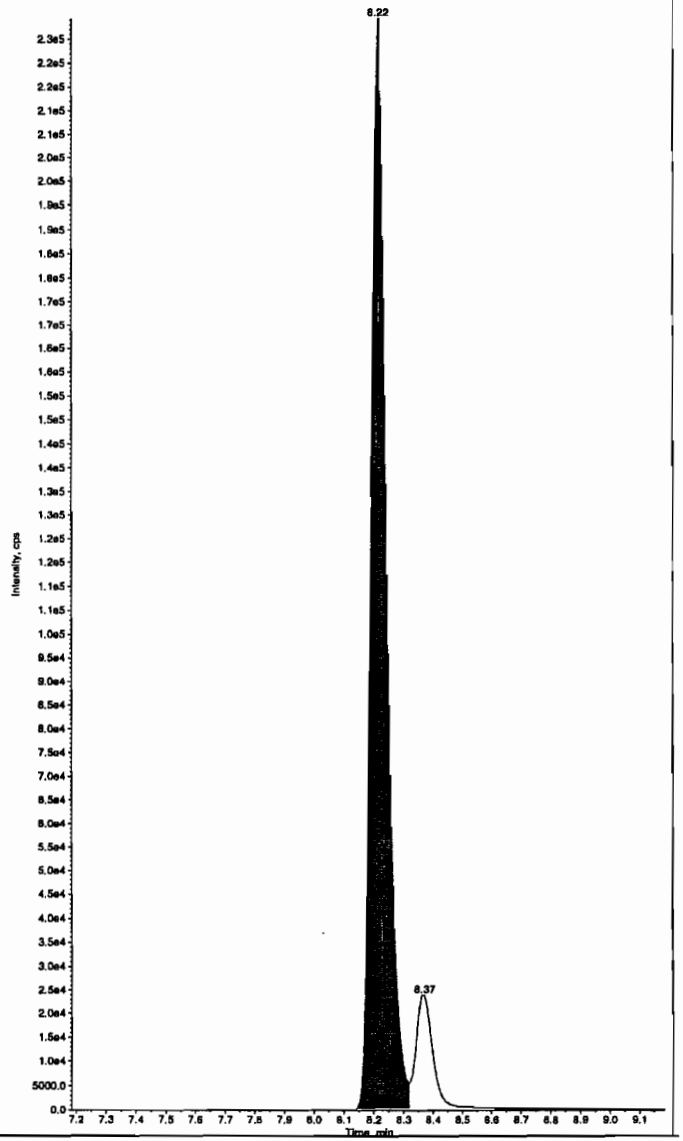
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010102.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	104.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	11:32:52 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.98	min
Area:	1.10e+005	counts
Height:	29022.581	cps
Start Time:	6.85	min
End Time:	7.30	min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010102.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	94.3	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	11:32:52 AM	
Modified:	Yes	
RT Window:	15.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	8.22	min
Area:	8.33e+005	counts
Height:	229043.159	cps
Start Time:	8.14	min
End Time:	8.32	min

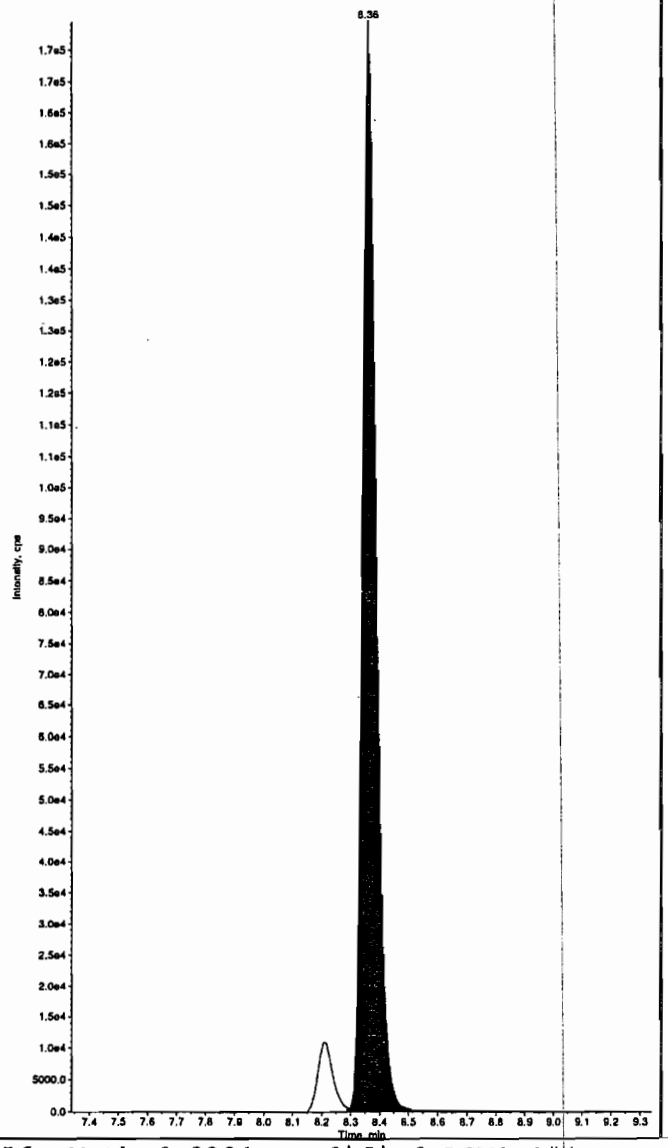


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

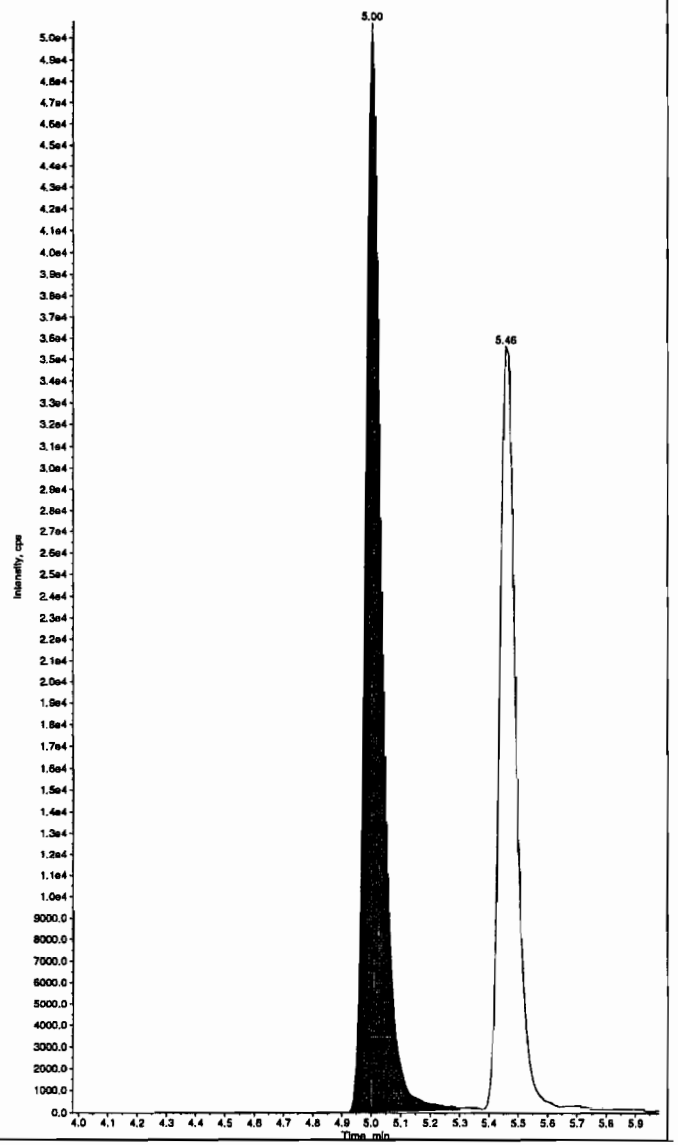
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010102.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	50.0 ng/mL
Calculated Conc:	52.1 ng/mL
Acq. Date:	3/2/2010
Acq. Time:	11:32:52 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.36 min
Area:	5.99e+005 counts
Height:	174424.454 cps
Start Time:	8.29 min
End Time:	8.68 min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010102.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	106. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	11:32:52 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.00 min
Area:	2.04e+005 counts
Height:	50723.469 cps
Start Time:	4.91 min
End Time:	5.30 min



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

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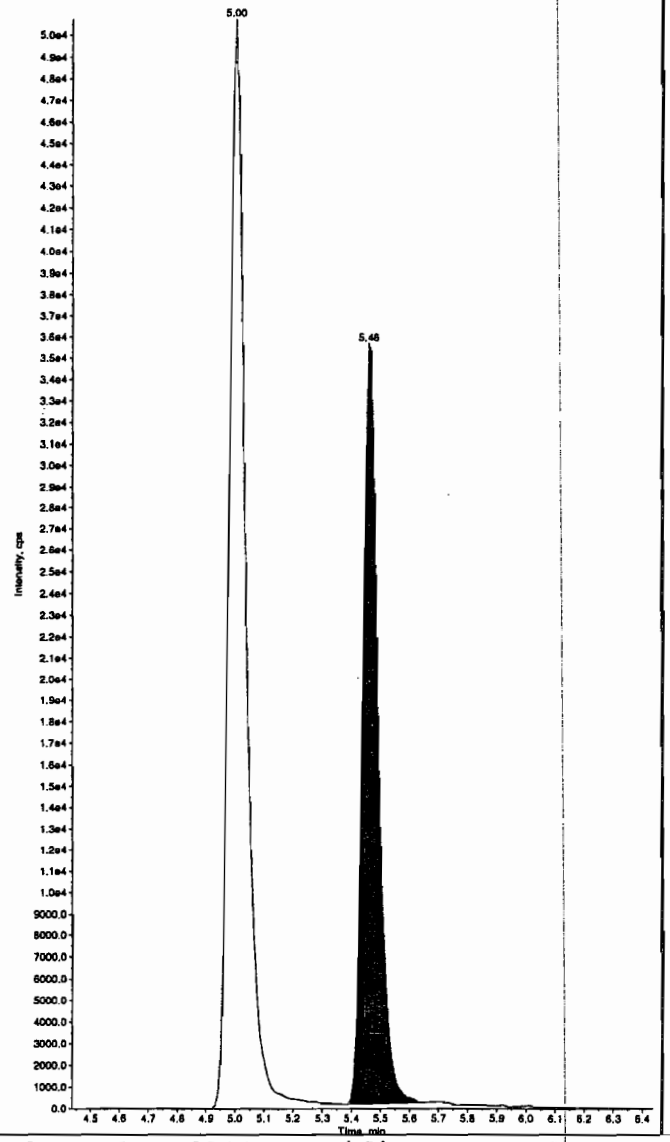
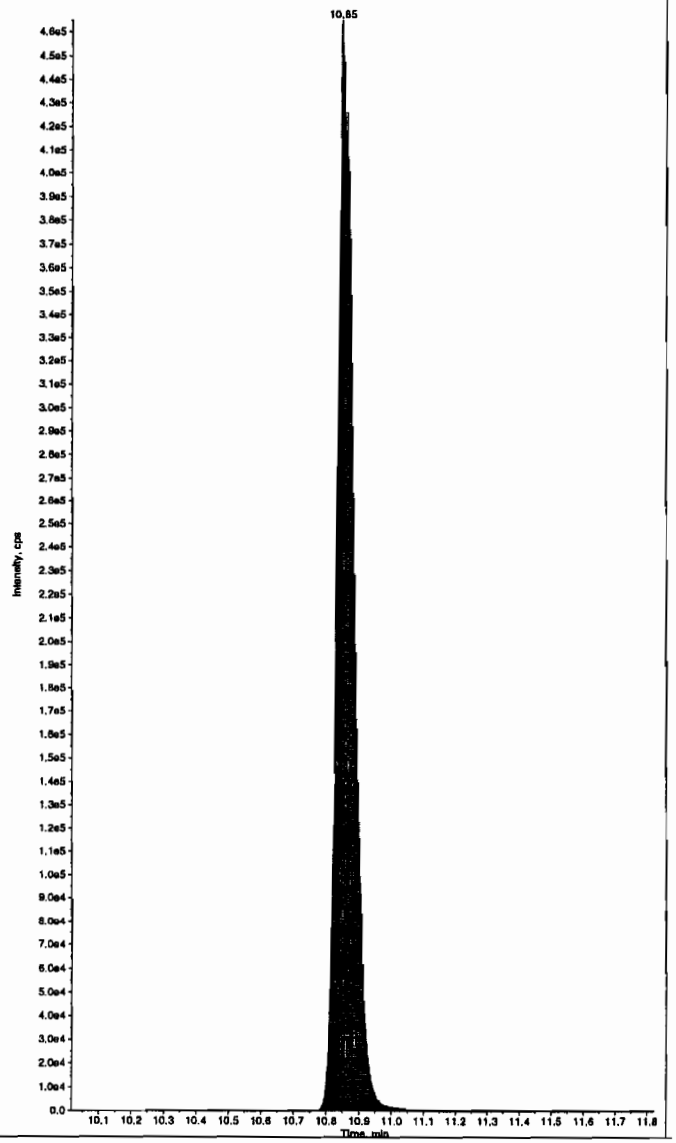
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010102.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	108. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	11:32:52 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:	5.44 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.46 min
Area:	1.38e+005 counts
Height:	35473.808 cps
Start Time:	5.38 min
End Time:	5.65 min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010102.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	97.0 ng/mL
Acq. Date:	3/2/2010
Acq. Time:	11:32:52 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:	10.9 min
Area:	1.69e+006 counts
Height:	465036.774 cps
Start Time:	10.7 min
End Time:	11.2 min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–1623

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS03010111.wiff **Analysis Date:** 02–MAR–10 13:54

LCMSMS ID: 1358 **Column ID:** JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	583	117	
2,6–Diamino–4–nitrotoluene	500	569	114	
3,4–Dinitrotoluene	250	229	91	
3,5–Dinitroaniline	500	466	93	
TATB	500	461	92	
tris(o–cresyl) phosphate	500	474	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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

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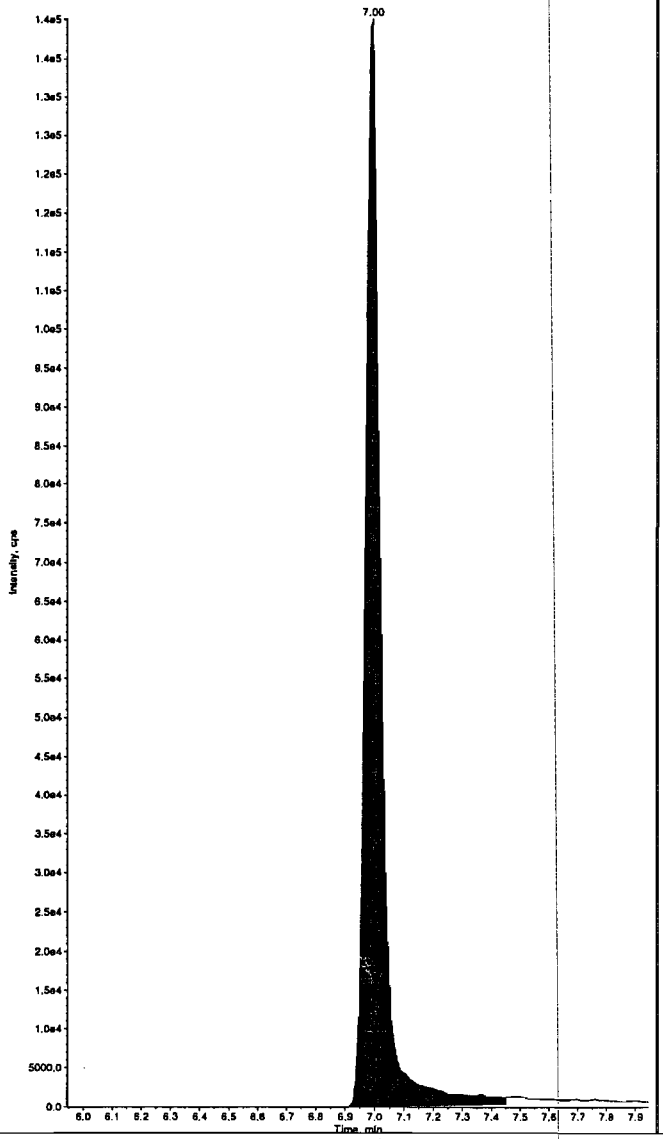
LCM 3/3/10

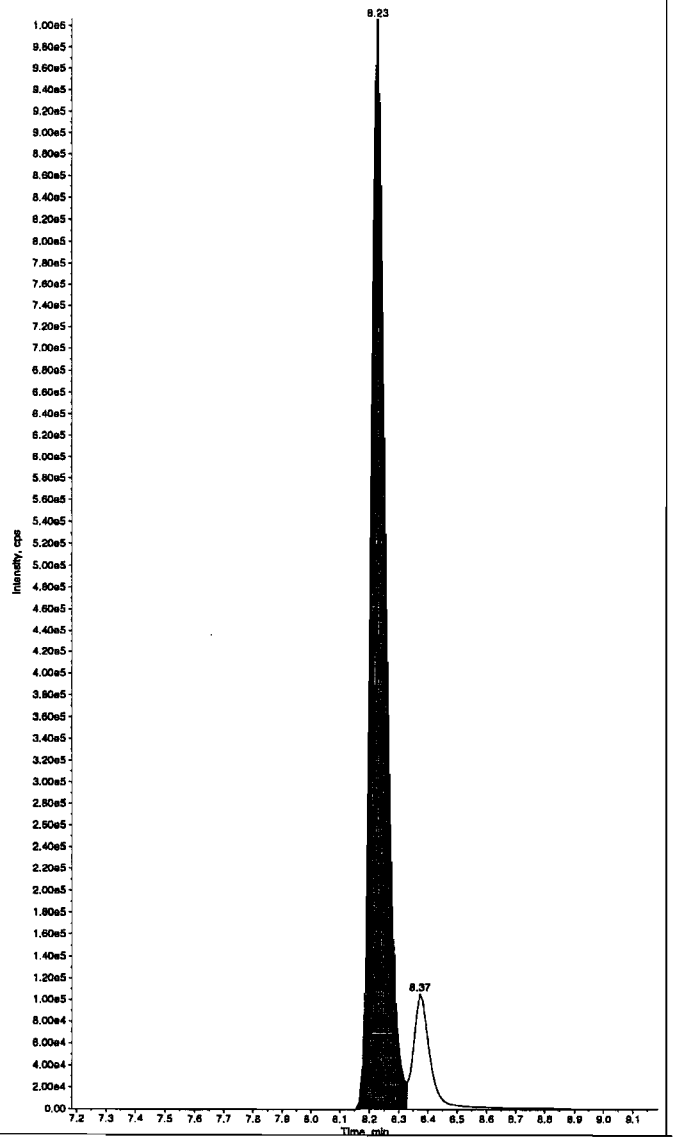
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010111.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	461. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:54:48 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:	6.94 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	7.00 min
Area:	5.49e+005 counts
Height:	140054.199 cps
Start Time:	6.89 min
End Time:	7.45 min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010111.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	466. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:54:48 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:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.23 min
Area:	3.67e+006 counts
Height:	1005667.664 cps
Start Time:	8.13 min
End Time:	8.33 min

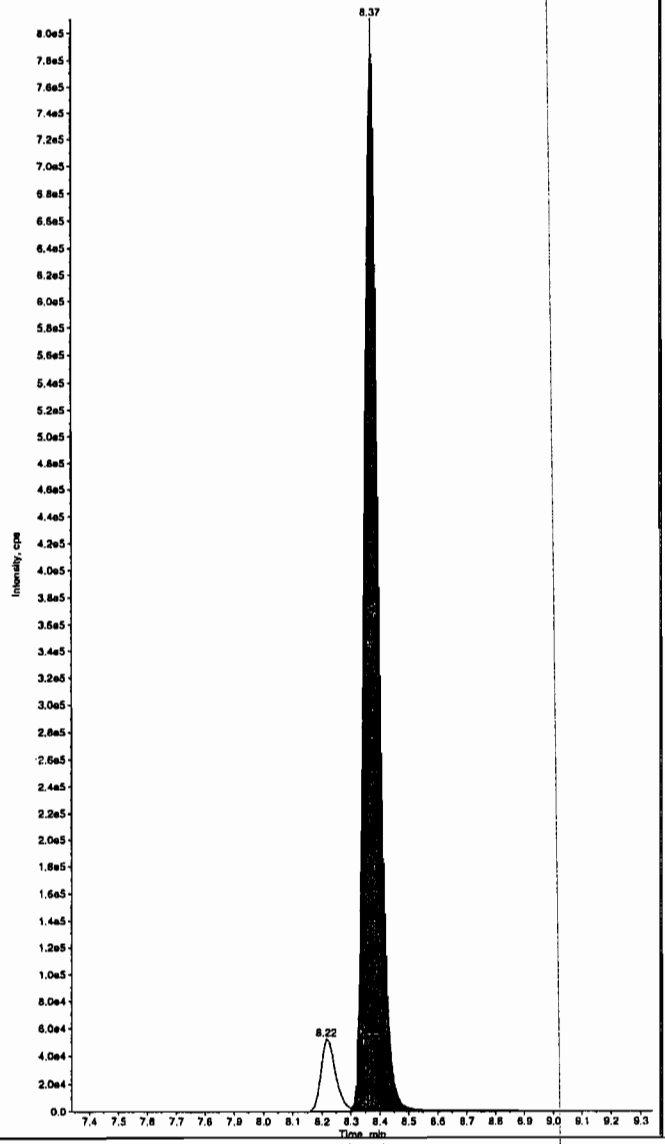


HMM 03/04/10

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

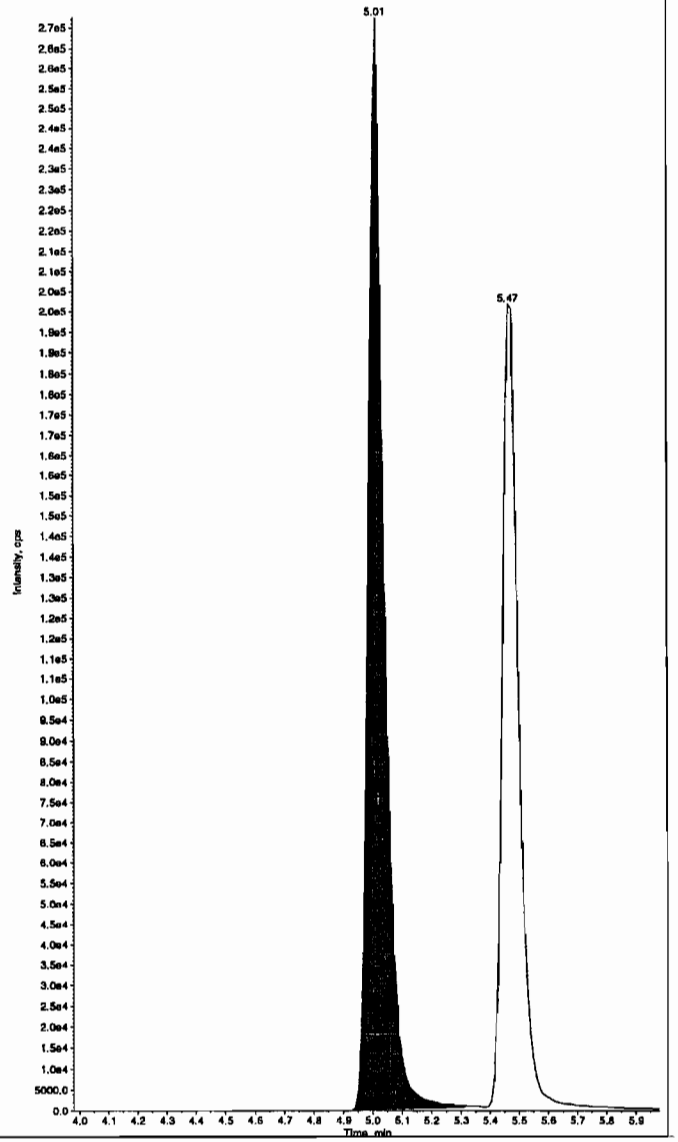
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010111.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	250. ng/mL
Calculated Conc:	229. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:54:48 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.37 min
Area:	2.79e+006 counts
Height:	809941.589 cps
Start Time:	8.30 min
End Time:	8.69 min



Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010111.wiff"
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:	569. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	1:54:48 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.01 min
Area:	1.06e+006 counts
Height:	267390.594 cps
Start Time:	4.92 min
End Time:	5.31 min



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

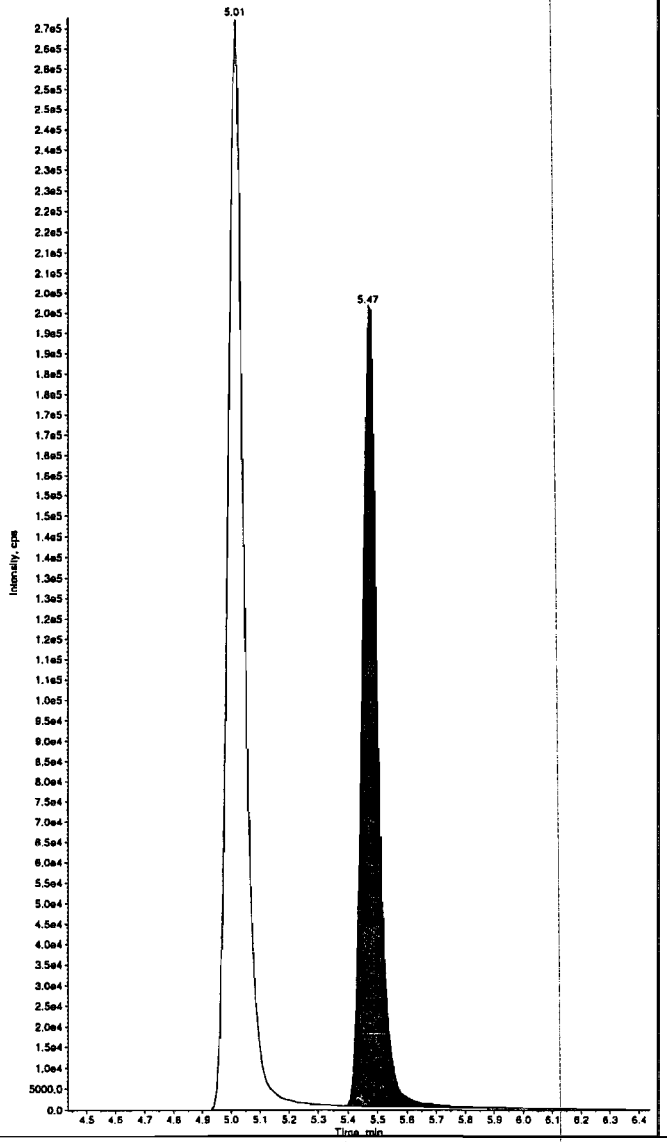
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010111.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 583. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 1:54:48 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 350.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.47 min
Area: 7.73e+005 counts
Height: 196171.432 cps
Start Time: 5.38 min
End Time: 5.96 min

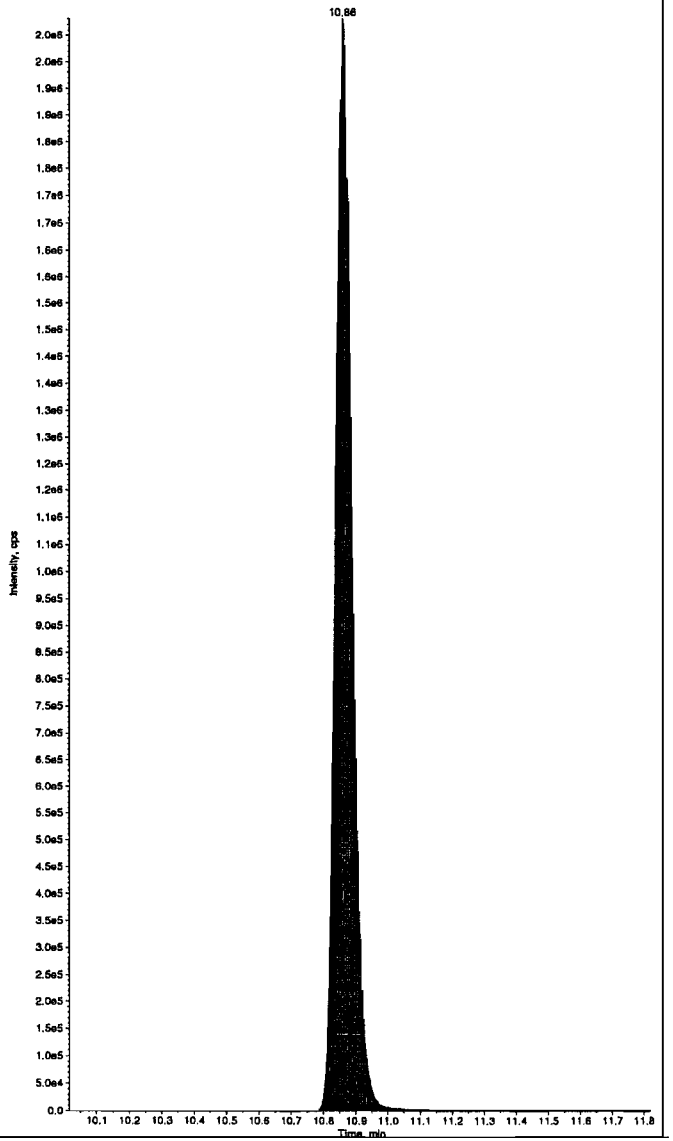


Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010111.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 474. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 1:54:48 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: 7.45e+006 counts
Height: 2029886.230 cps
Start Time: 10.8 min
End Time: 11.2 min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03010113.wiff

Analysis Date: 02-MAR-10 14:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

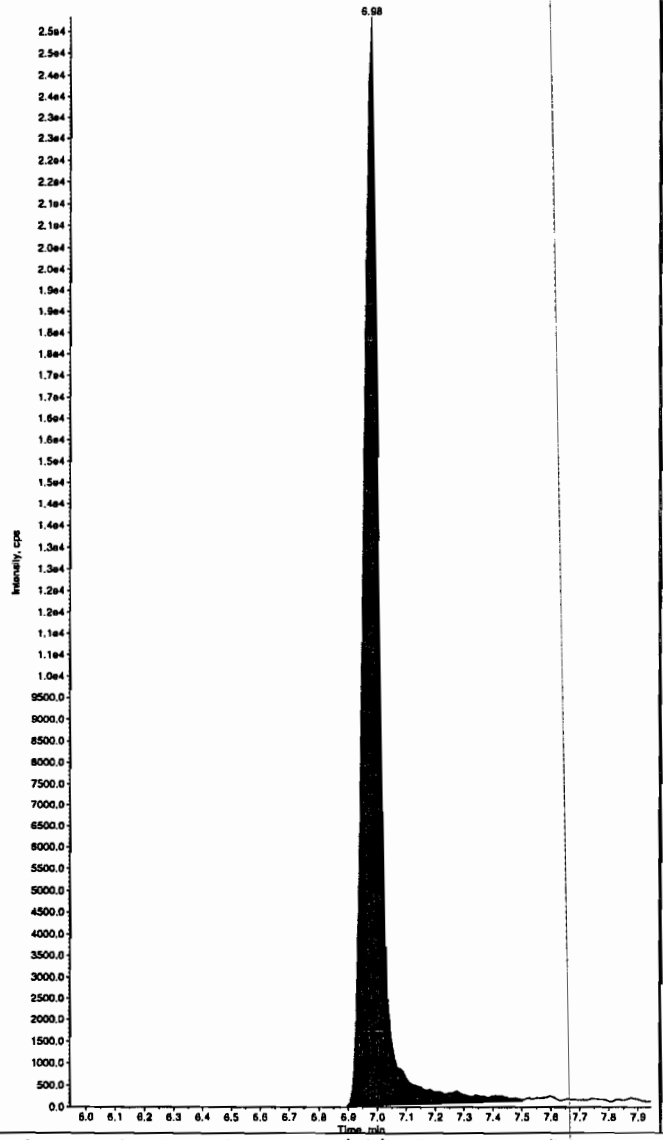
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	118	118	
2,6-Diamino-4-nitrotoluene	100	112	112	
3,4--Dinitrotoluene	50	51	102	
3,5-Dinitroaniline	100	94.3	94	
TATB	100	97.1	97	
tris(o-cresyl) phosphate	100	96.7	97	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lar 3/3/10

Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010113.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

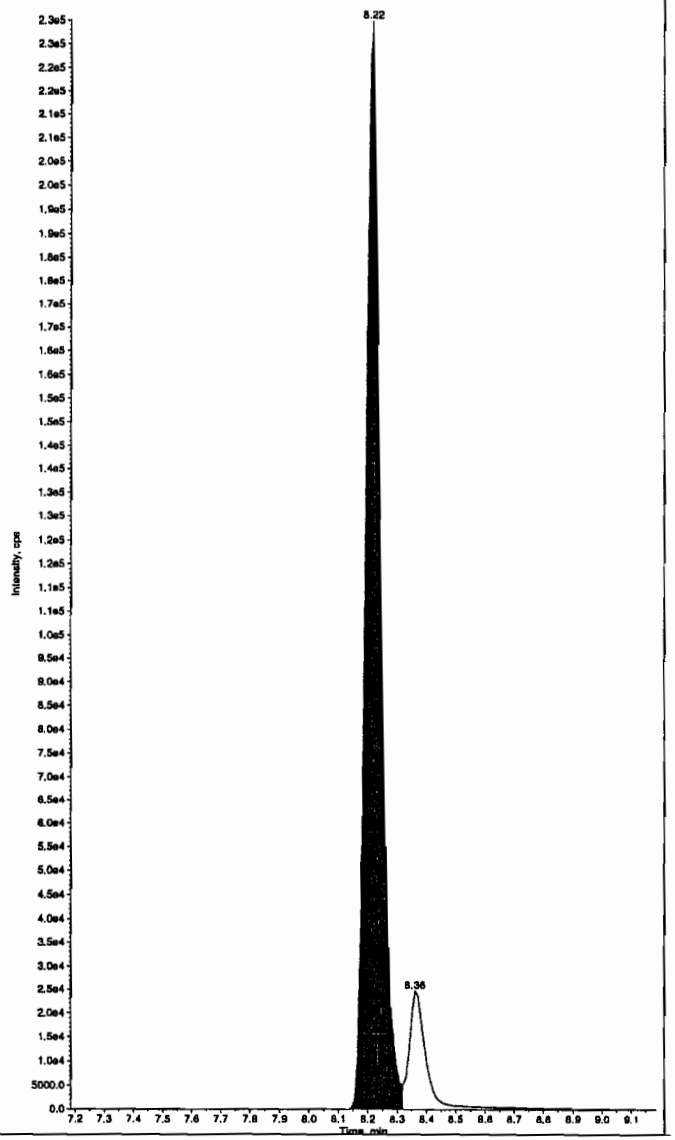
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	97.1	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	2:26:22 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2500.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.98	min
Area:	1.02e+005	counts
Height:	25287.630	cps
Start Time:	6.88	min
End Time:	7.50	min



Page 19 of 49

Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010113.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	94.3	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	2:26:22 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.22	min
Area:	8.32e+005	counts
Height:	230069.916	cps
Start Time:	8.12	min
End Time:	8.32	min



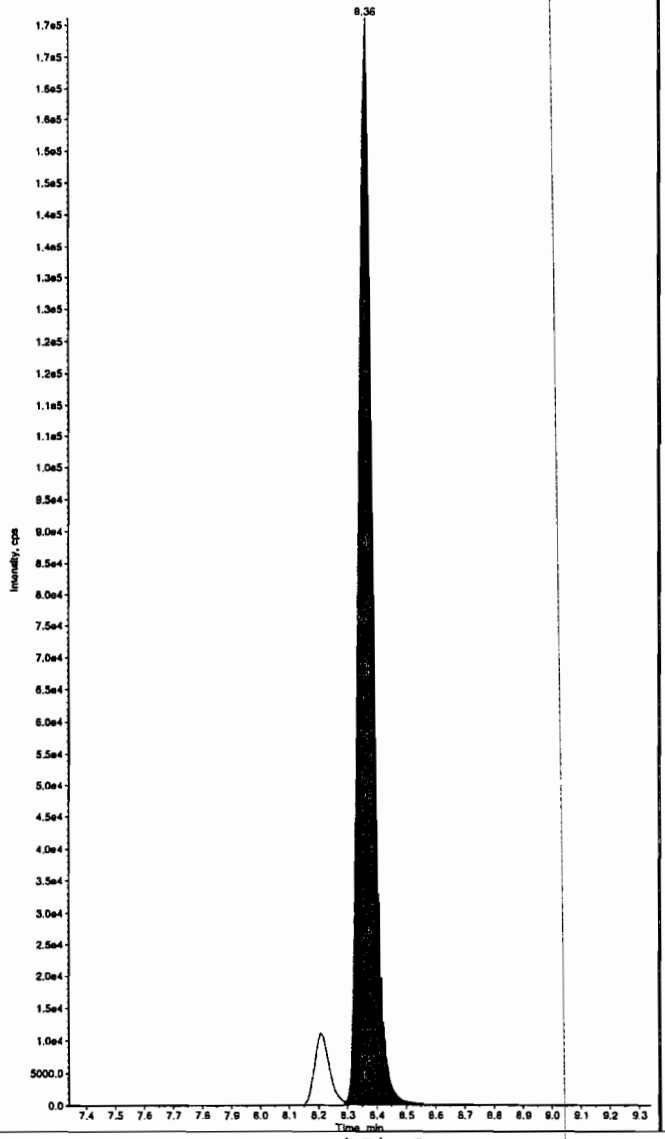
#mm 03/04/10

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

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

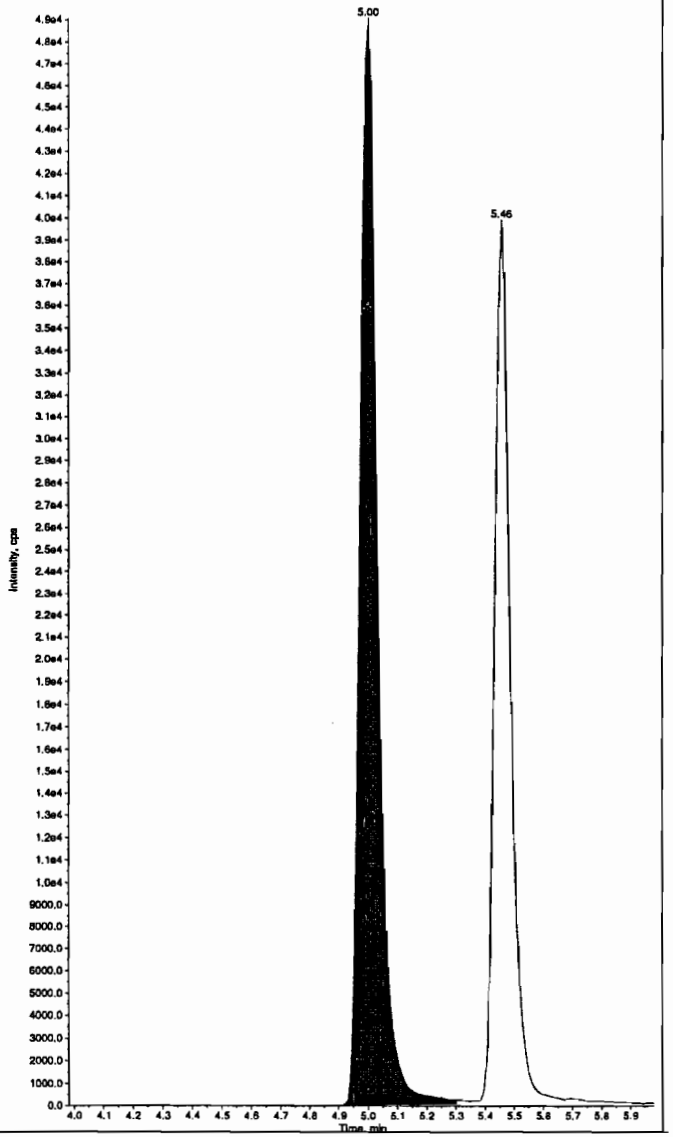
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010113.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	51.0	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	2:26:22 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	15.0	sec
Expected RT:	8.34	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.36	min
Area:	5.85e+005	counts
Height:	171177.277	cps
Start Time:	8.29	min
End Time:	8.67	min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010113.wiff"
Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	112.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	2:26:22 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:	4.98	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.00	min
Area:	2.14e+005	counts
Height:	49042.316	cps
Start Time:	4.89	min
End Time:	5.30	min



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

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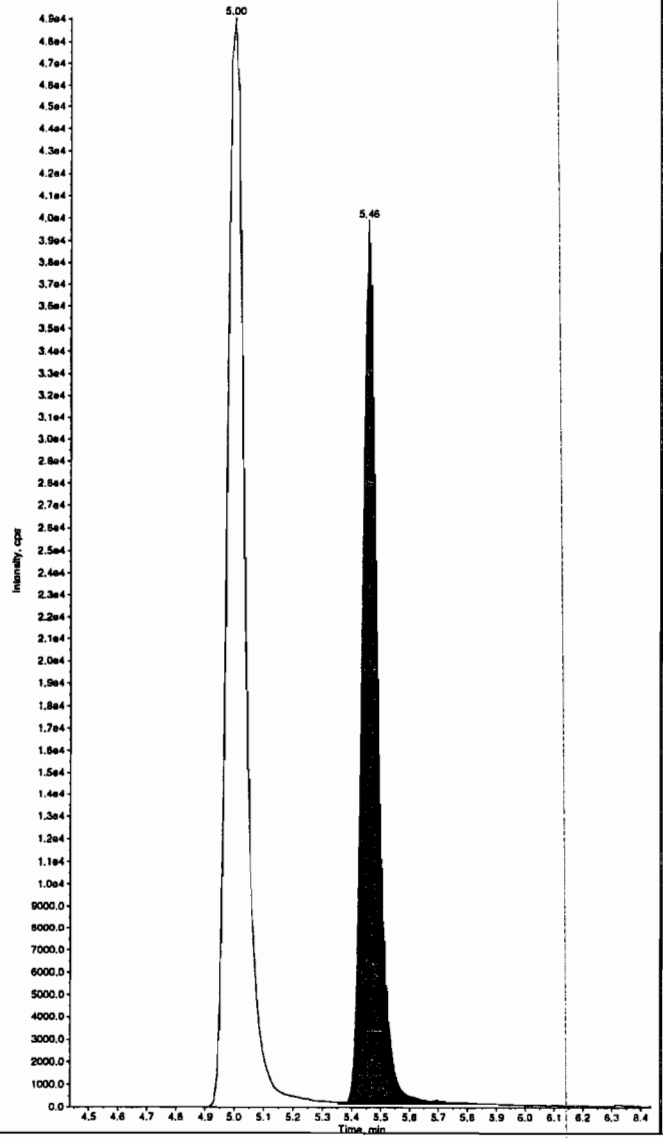
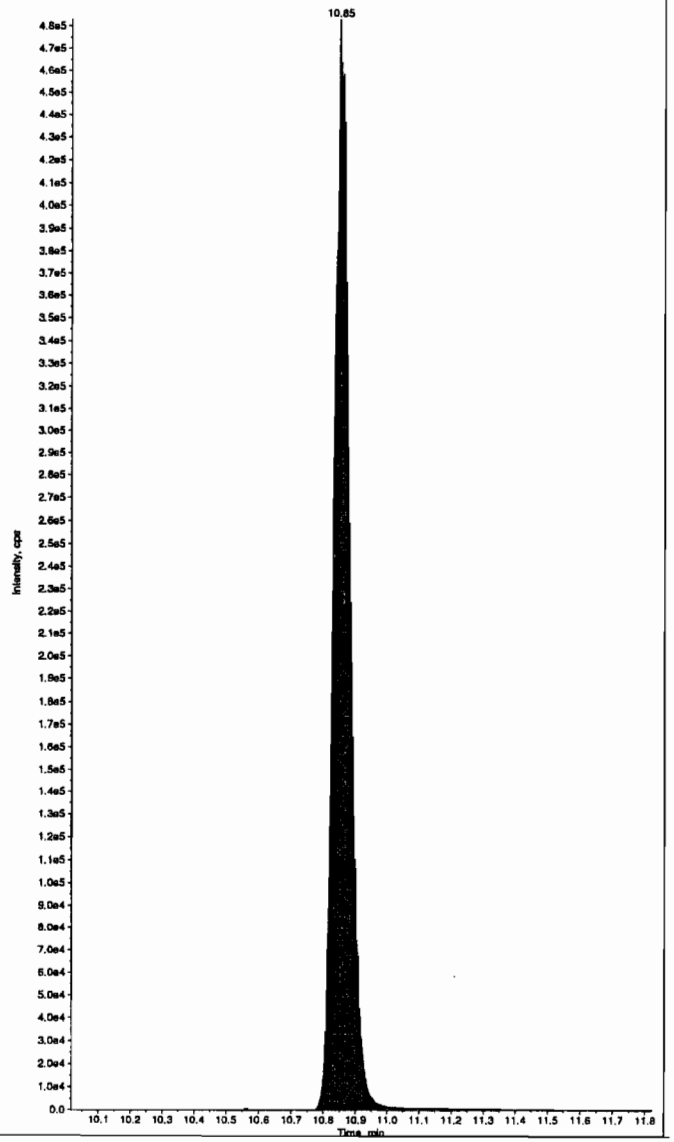
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010113.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	118. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	2:26:22 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:	5.44 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.46 min
Area:	1.53e+005 counts
Height:	39776.421 cps
Start Time:	5.35 min
End Time:	5.78 min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010113.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	96.7 ng/mL
Acq. Date:	3/2/2010
Acq. Time:	2:26:22 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:	1.69e+006 counts
Height:	482736.786 cps
Start Time:	10.7 min
End Time:	11.1 min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–1623

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS03010124.wiff **Analysis Date:** 02–MAR–10 17:19

LCMSMS ID: 1358 **Column ID:** JSphere ODS–H80

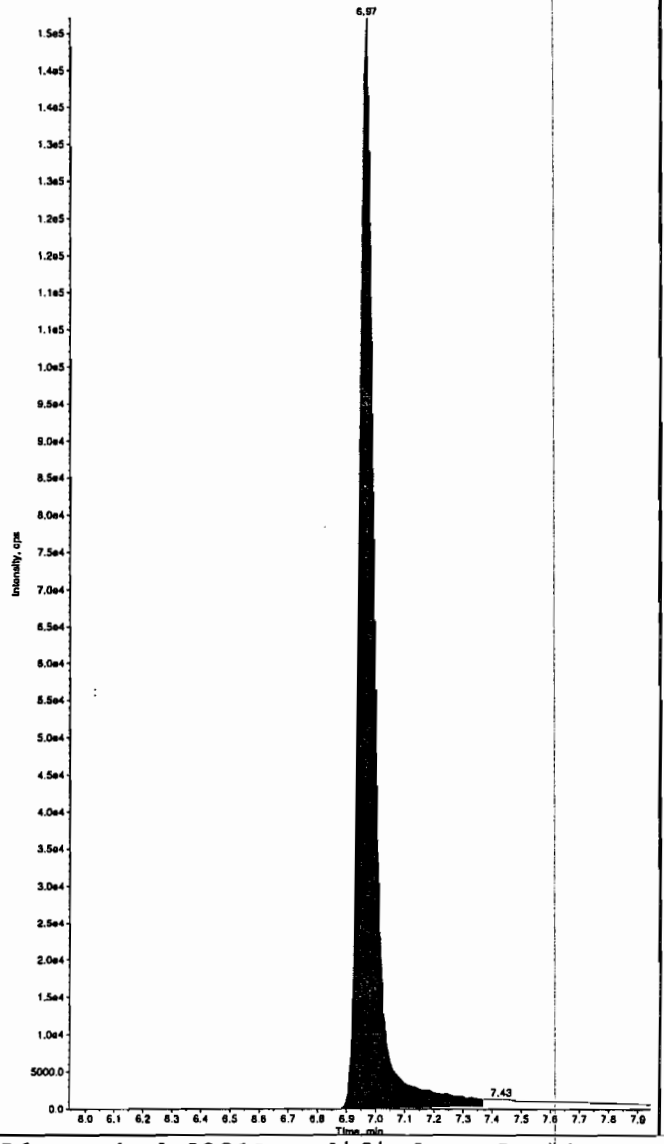
Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	559	112	
2,6–Diamino–4–nitrotoluene	500	572	114	
3,4–Dinitrotoluene	250	238	95	
3,5–Dinitroaniline	500	487	97	
TATB	500	477	95	
tris(o–cresyl) phosphate	500	465	93	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lan 3/3/10

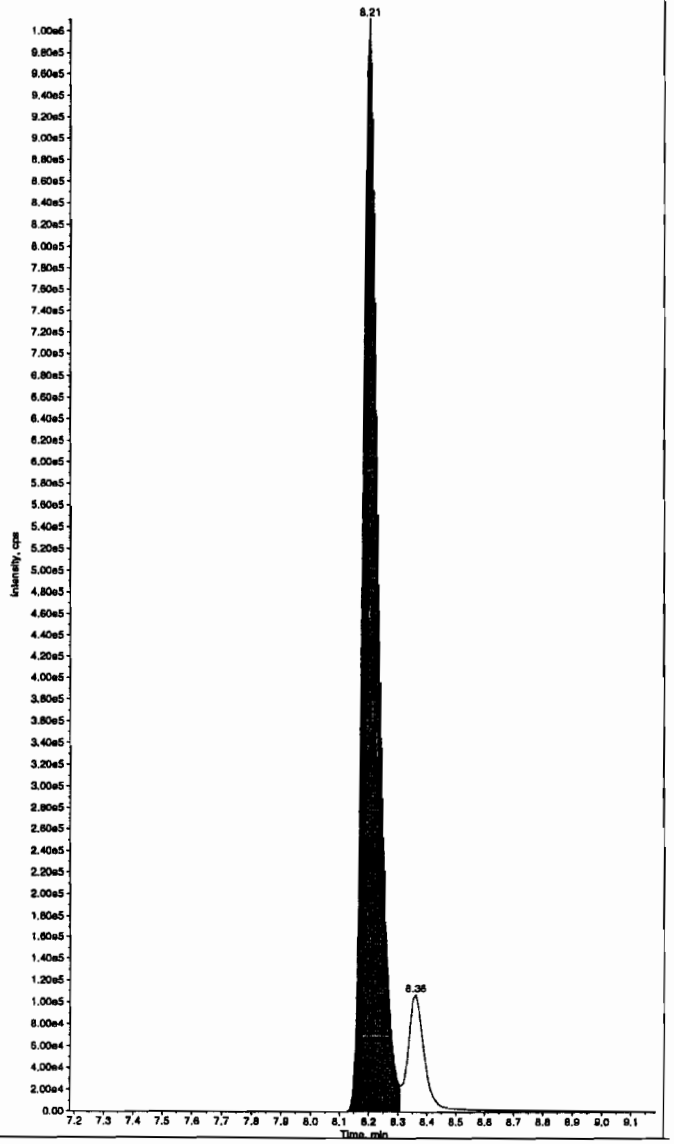
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010124.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	477.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:19:42 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.97	min
Area:	5.68e+005	counts
Height:	147003.006	cps
Start Time:	6.86	min
End Time:	7.37	min



Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010124.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	487.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:19:42 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.21	min
Area:	3.83e+006	counts
Height:	1010674.011	cps
Start Time:	8.10	min
End Time:	8.31	min



Hmc 3/04/10

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

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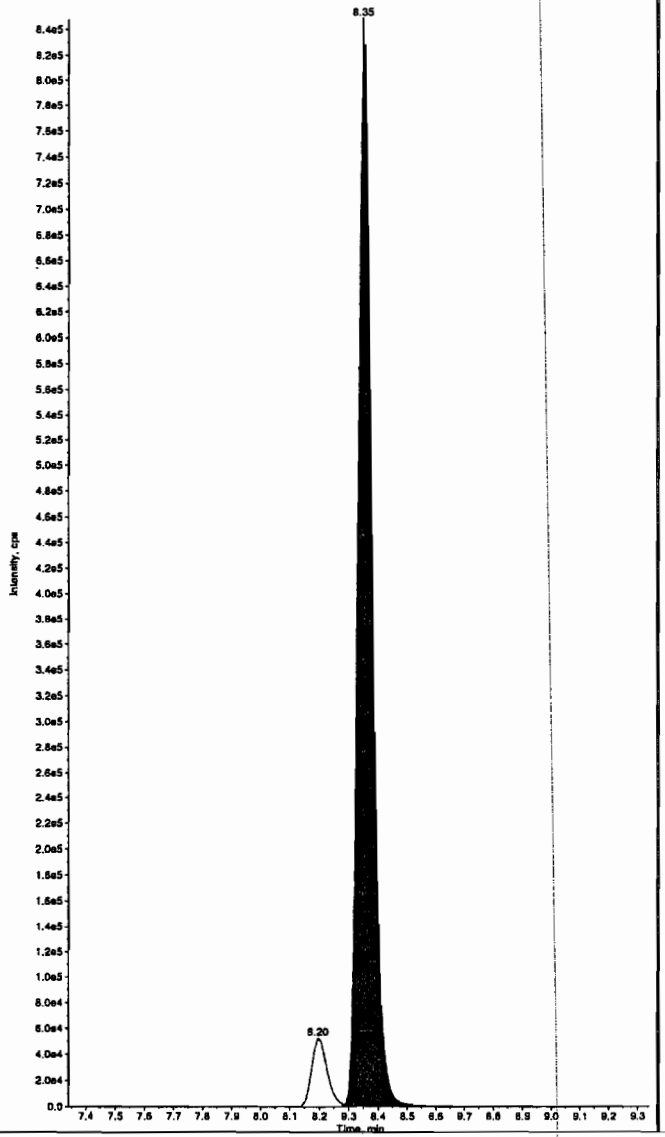
Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010124.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 250. ng/mL
Calculated Conc: 238. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 5:19:42 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.35 min
Area: 2.90e+006 counts
Height: 847537.903 cps
Start Time: 8.28 min
End Time: 8.67 min

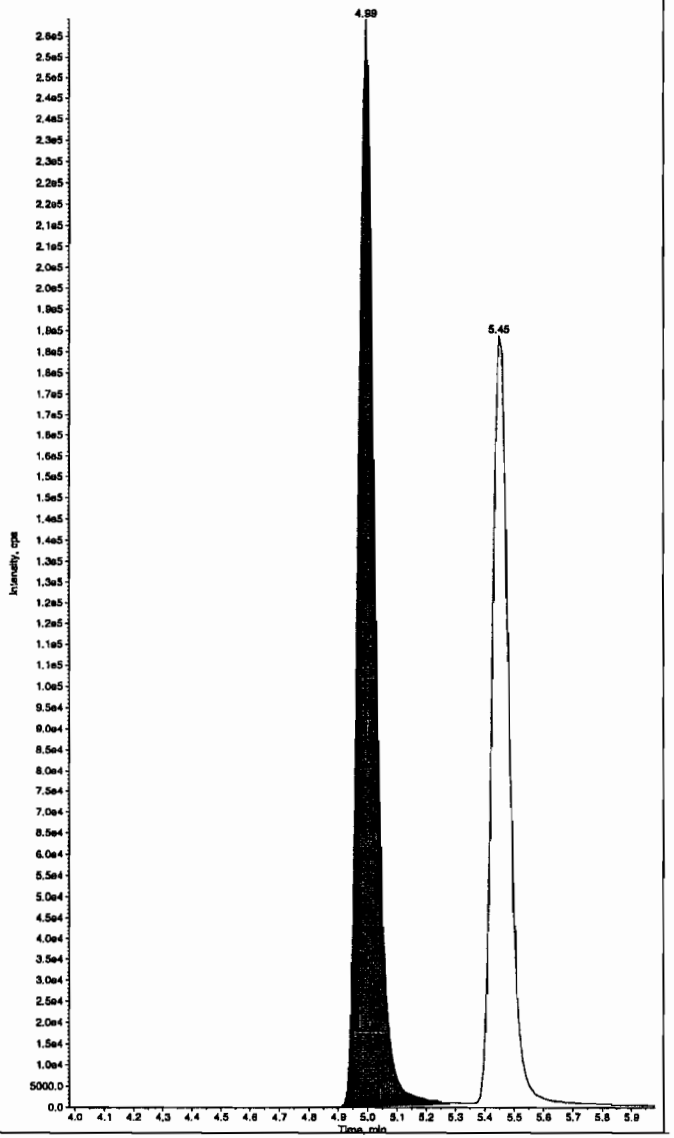


Sample Name: "WXX100301-26CCV" Sample ID: "|1|LER" File: "EXS03010124.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 572. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 5:19:42 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: 4.98 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.99 min
Area: 1.07e+006 counts
Height: 258901.550 cps
Start Time: 4.90 min
End Time: 5.28 min



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

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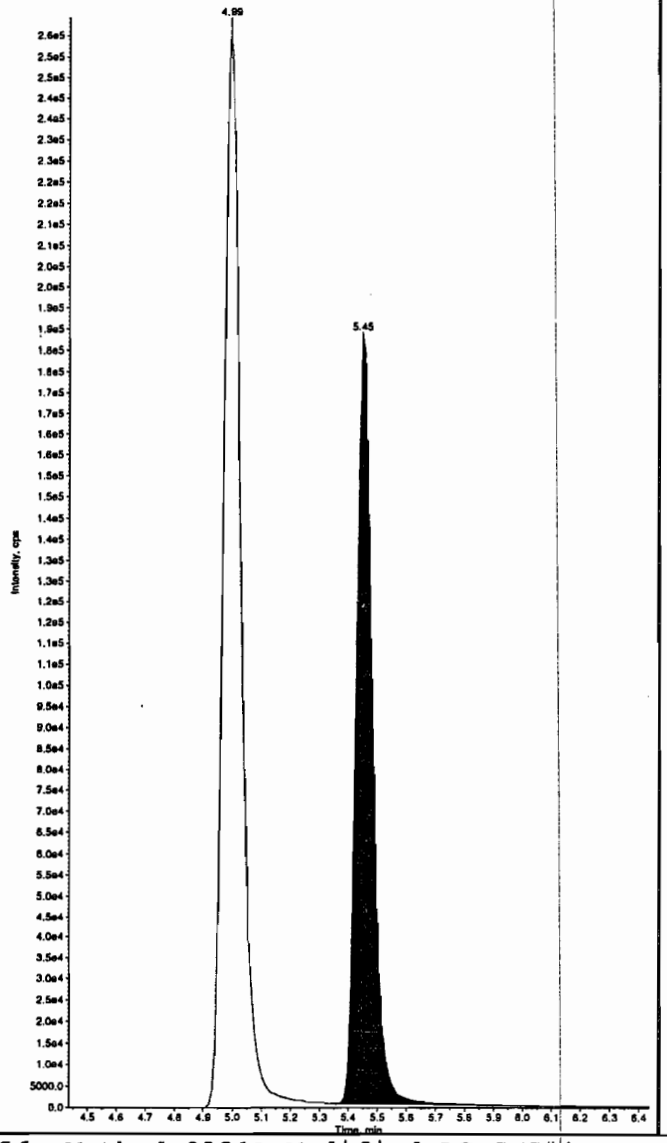
Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010124.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 559. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 5:19:42 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: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.45 min
Area: 7.41e+005 counts
Height: 183310.806 cps
Start Time: 5.33 min
End Time: 5.90 min

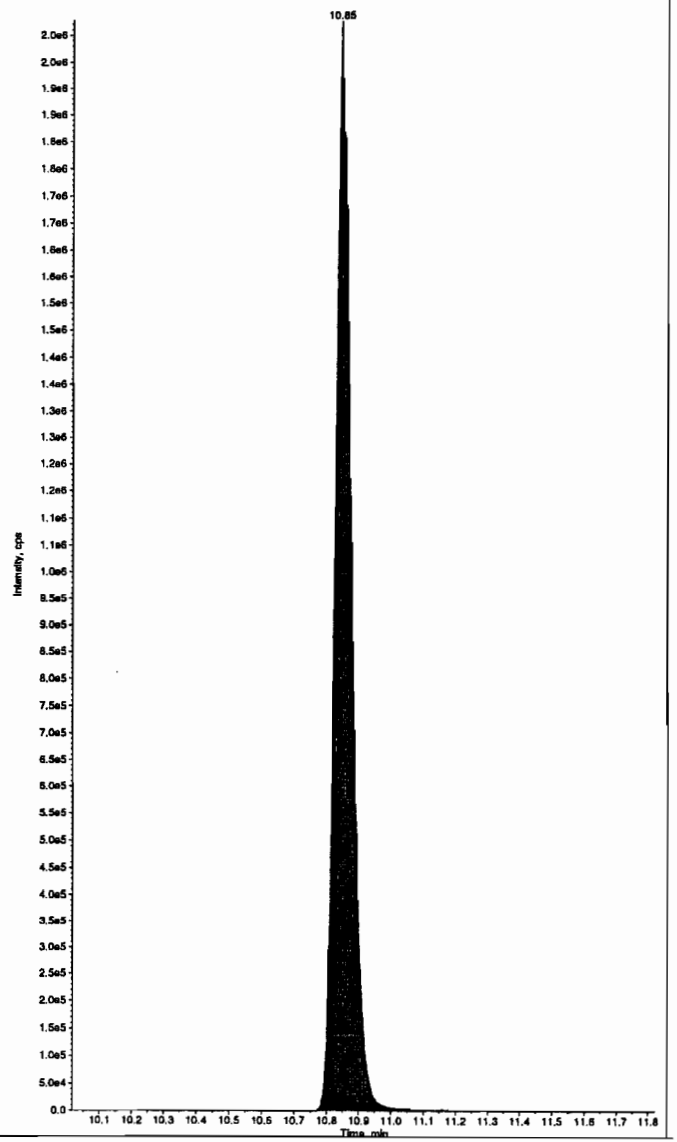


Sample Name: "WXX100301-26CCV" Sample ID: "[1]LER" File: "EXS03010124.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 465. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 5:19:42 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: 7.31e+006 counts
Height: 2027213.257 cps
Start Time: 10.7 min
End Time: 11.2 min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10-1623

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXS03010126.wiff **Analysis Date:** 02-MAR-10 17:51

LCMSMS ID: 1358 **Column ID:** JSphere ODS-H80

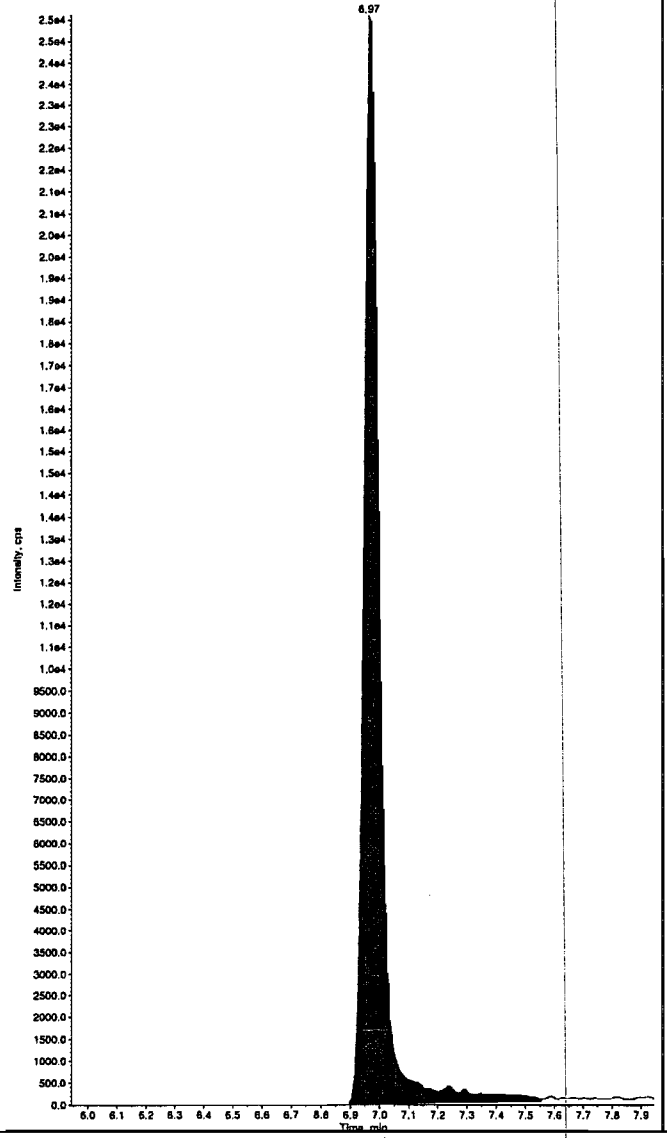
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	123	123	
2,6-Diamino-4-nitrotoluene	100	119	119	
3,4-Dinitrotoluene	50	51.2	102	
3,5-Dinitroaniline	100	90.6	91	
TATB	100	96.8	97	
tris(o-cresyl) phosphate	100	95	95	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before Jan 31/10

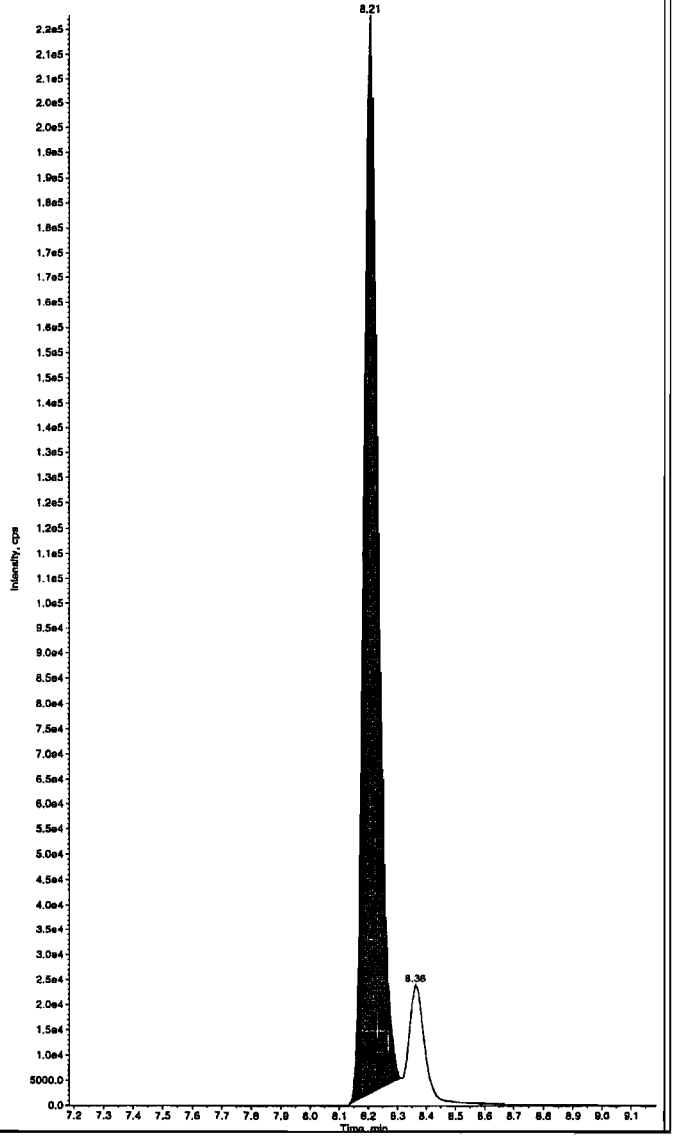
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010126.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	96.8	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:51:18 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.97	min
Area:	1.02e+005	counts
Height:	25089.636	cps
Start Time:	6.88	min
End Time:	7.55	min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010126.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	87.6	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:51:18 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.21	min
Area:	7.79e+005	counts
Height:	215354.279	cps
Start Time:	8.13	min
End Time:	8.31	min



thmw 03/04/10

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

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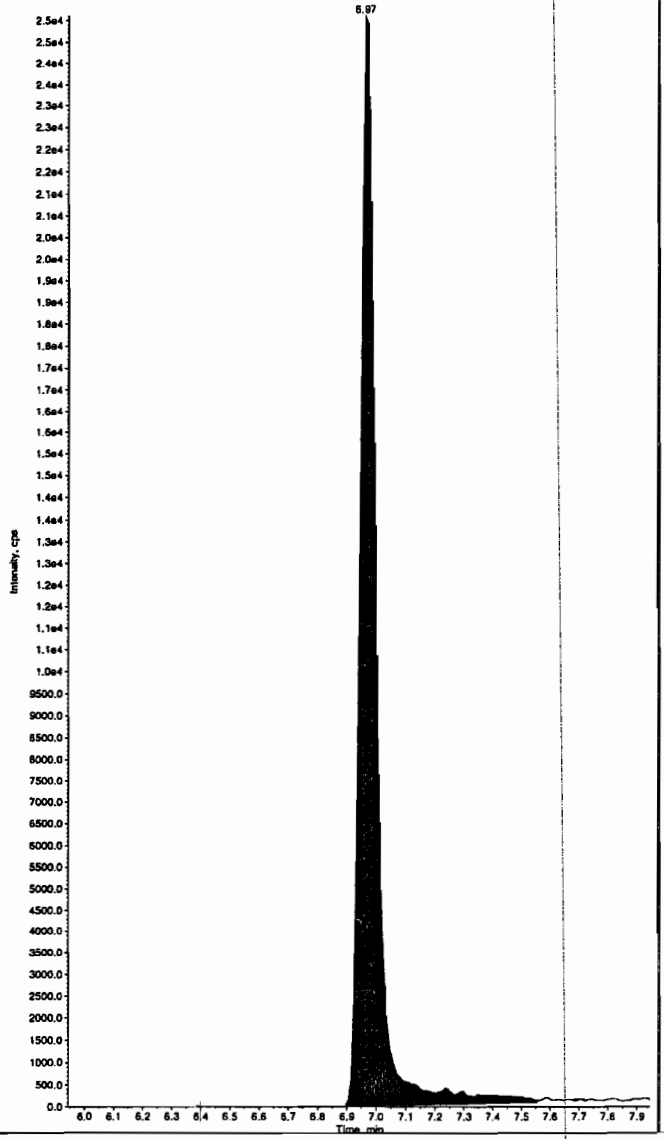
after Jan 3/3/10

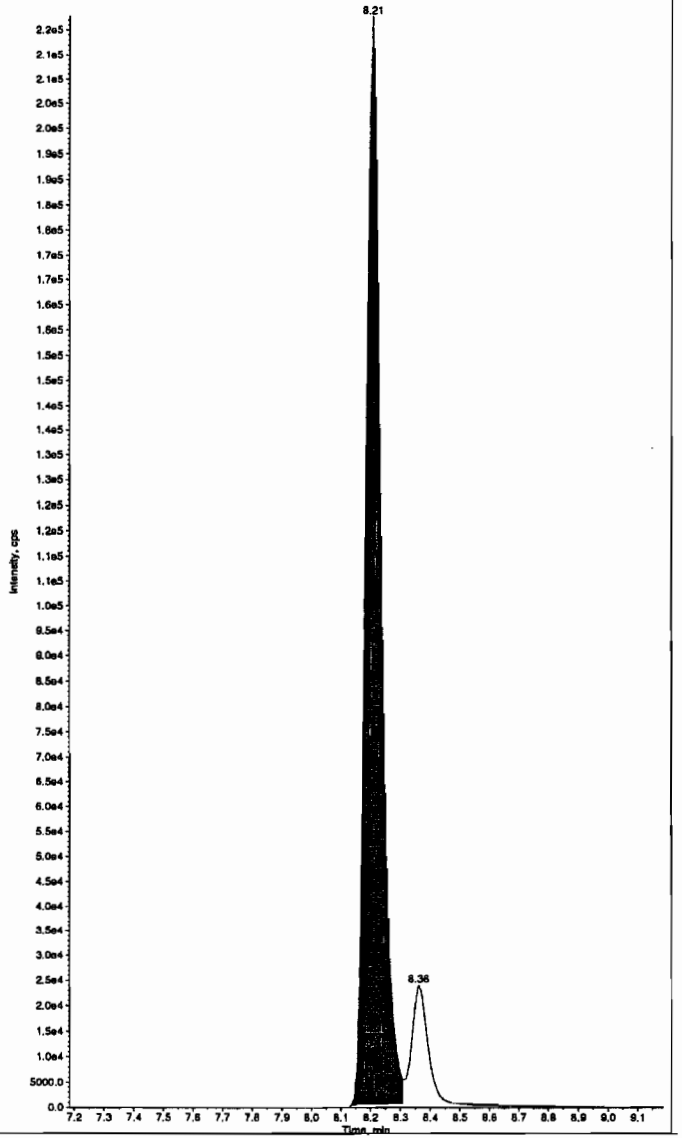
Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010126.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	96.8	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:51:18 PM	
Modified:	No	
Peak 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.97	min
Area:	1.02e+005	counts
Height:	25089.636	cps
Start Time:	6.88	min
End Time:	7.55	min



Sample Name: "WXX100301-27CRI" Sample ID: "[1]LER" File: "EXS03010126.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	90.6	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:51:18 PM	
Modified:	Yes	
RT Window:	15.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	8.21	min
Area:	8.03e+005	counts
Height:	217201.871	cps
Start Time:	8.13	min
End Time:	8.31	min



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

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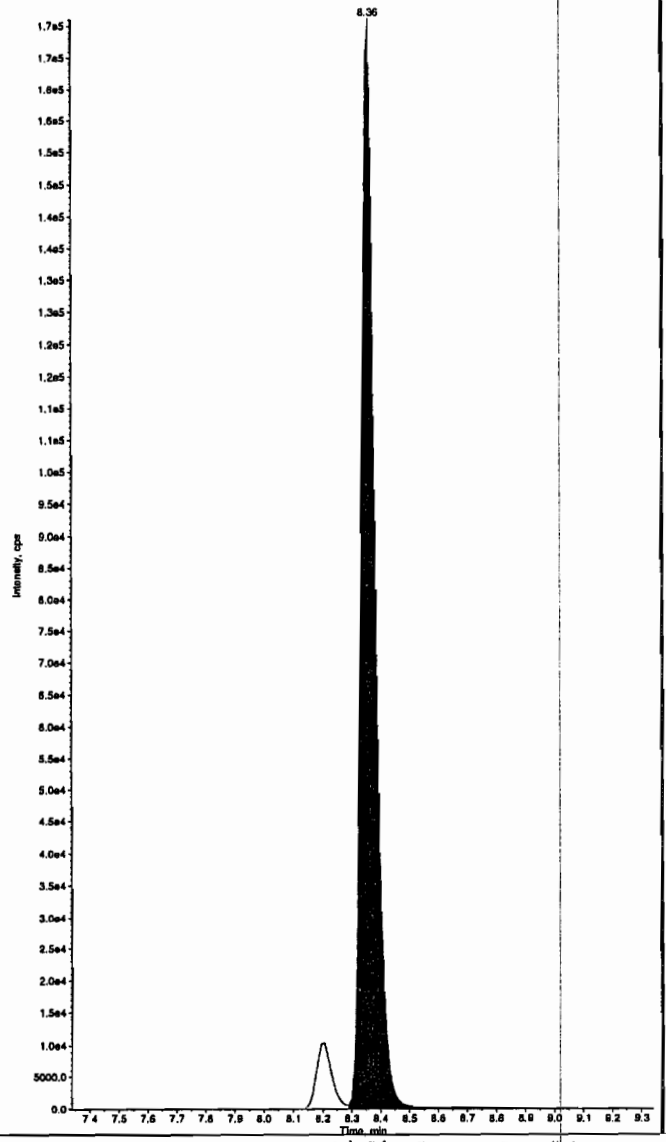
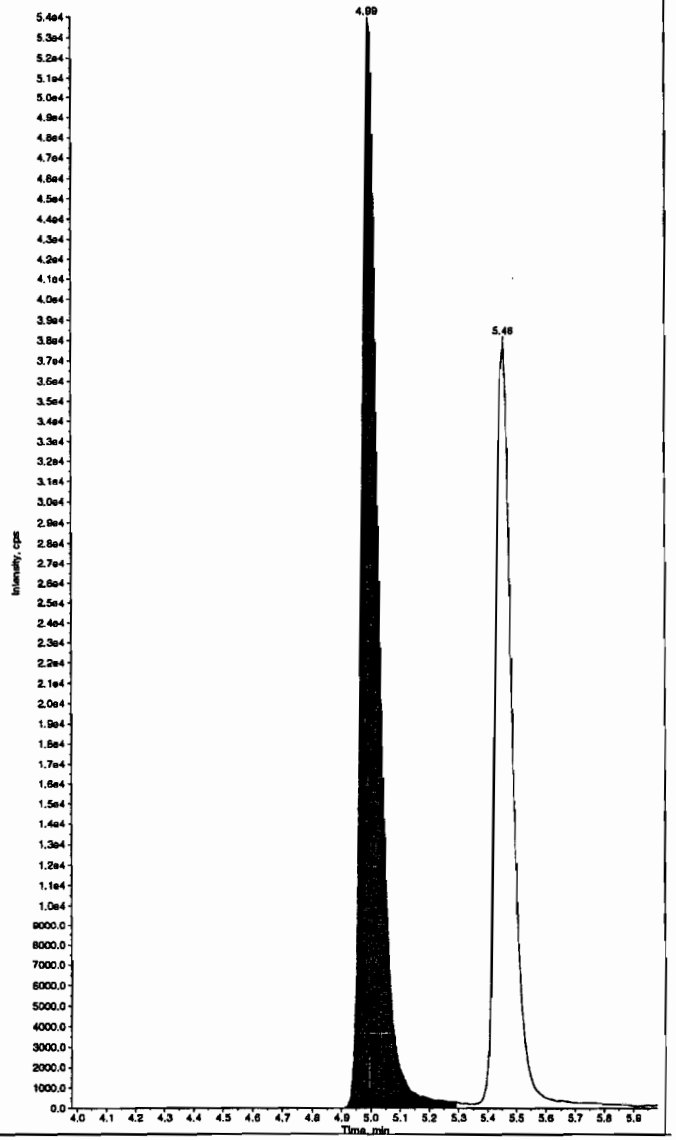
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010126.wiff"
Peak Name: "3,4-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	51.2	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:51:18 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:	15.0	sec
Expected RT:	8.34	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.36	min
Area:	5.88e+005	counts
Height:	170927.063	cps
Start Time:	8.29	min
End Time:	8.69	min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010126.wiff"
Peak Name: "2,6-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	119.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:51:18 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:	4.98	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.99	min
Area:	2.27e+005	counts
Height:	53980.629	cps
Start Time:	4.84	min
End Time:	5.29	min

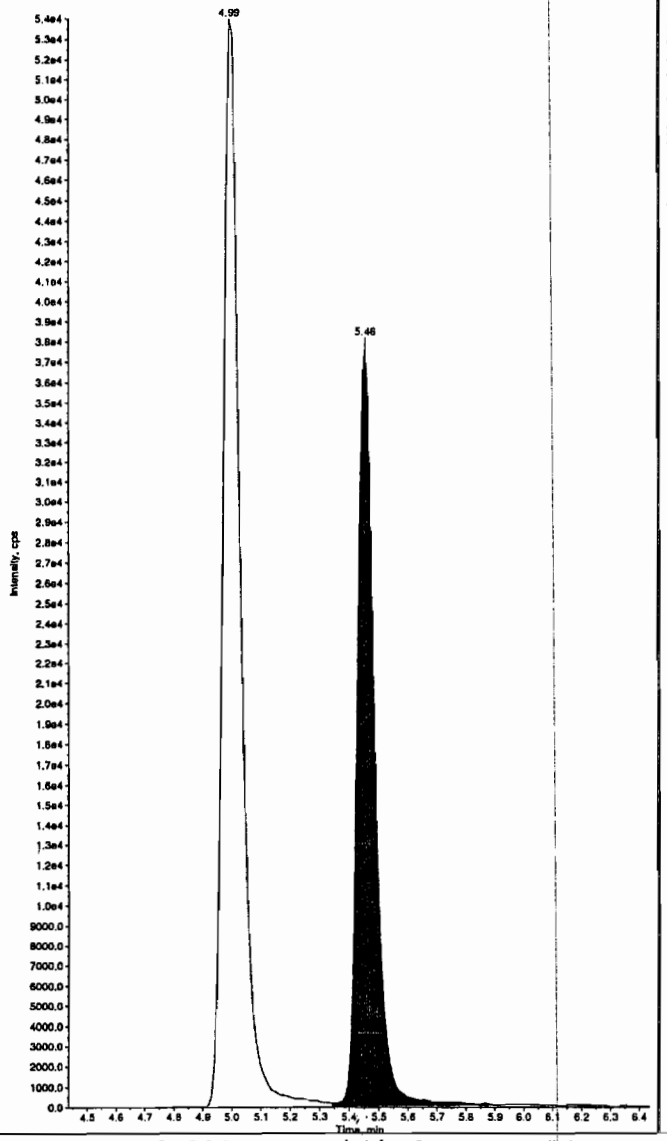


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

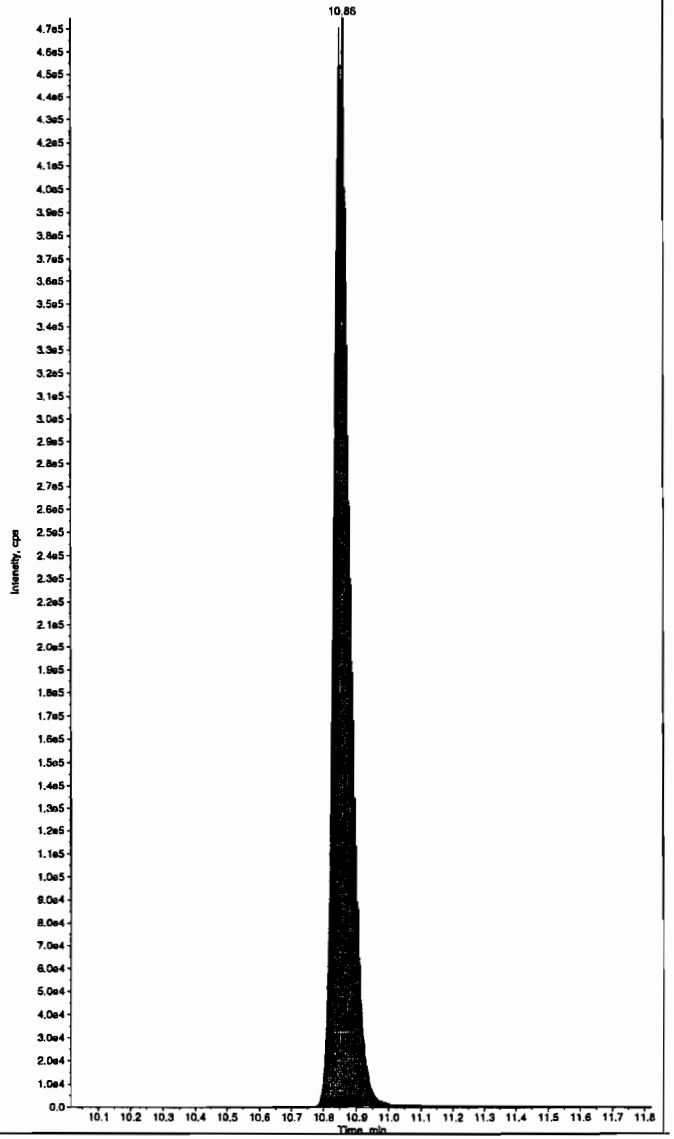
Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010126.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	123.	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:51:18 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:	5.44	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.46	min
Area:	1.58e+005	counts
Height:	38125.629	cps
Start Time:	5.34	min
End Time:	5.91	min



Sample Name: "WXX100301-27CRI" Sample ID: "|1|LER" File: "EXS03010126.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	95.0	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	5:51:18 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:	1.66e+006	counts
Height:	474493.378	cps
Start Time:	10.8	min
End Time:	11.1	min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03010137.wiff

Analysis Date: 02-MAR-10 20:44

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	623	125	
2,6-Diamino-4-nitrotoluene	500	615	123	
3,4-Dinitrotoluene	250	235	94	
3,5-Dinitroaniline	500	488	98	
TATB	500	484	97	
tris(o-cresyl) phosphate	500	481	96	

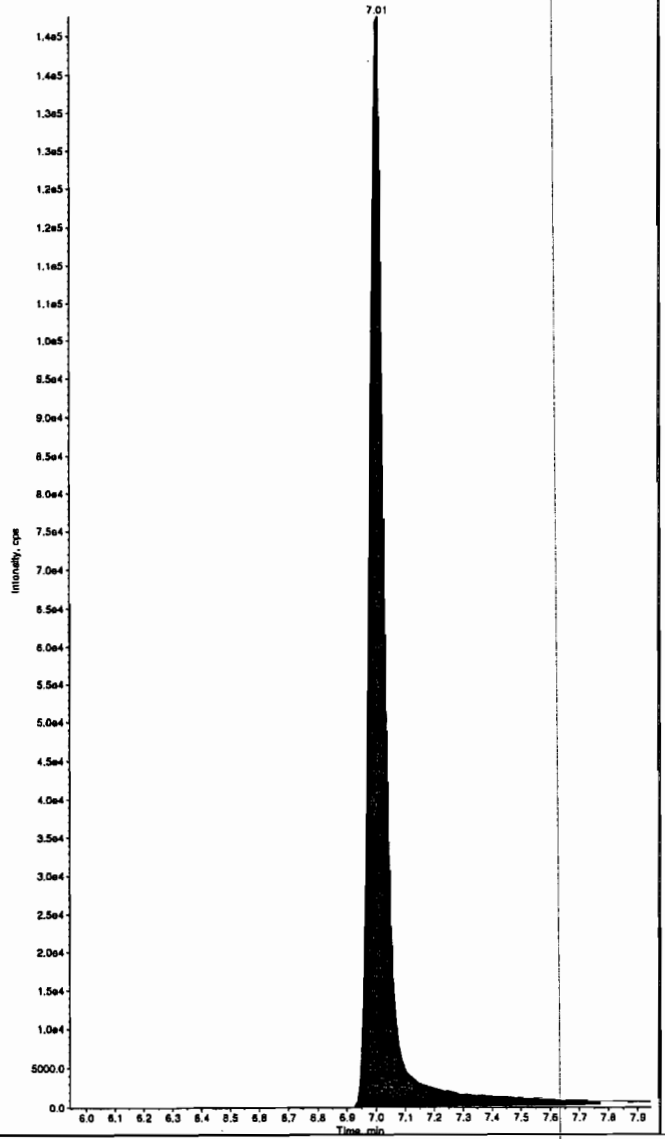
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Sample Name: "WXX100302-26CCV" Sample ID: "|1|LER" File: "EXS03010137.wiff"
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: 484. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 8:44:23 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 5.77e+005 counts
Height: 142667.267 cps
Start Time: 6.90 min
End Time: 7.77 min

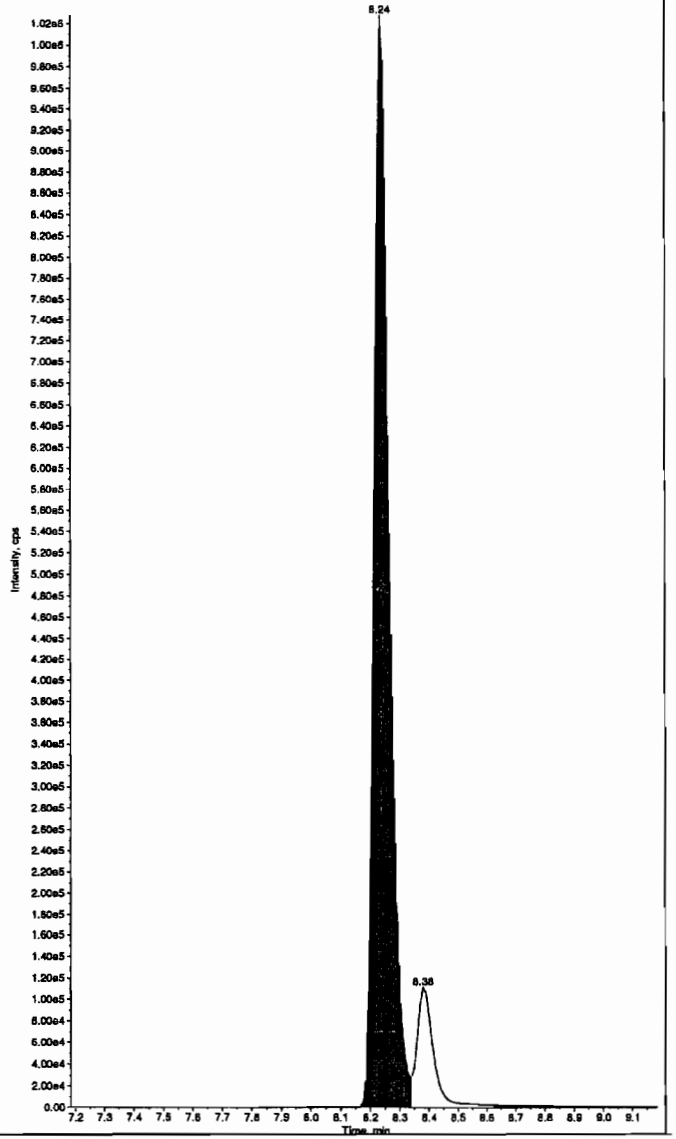


Sample Name: "WXX100302-26CCV" Sample ID: "|1|LER" File: "EXS03010137.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 488. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 8:44:23 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.24 min
Area: 3.83e+006 counts
Height: 1027694.946 cps
Start Time: 8.14 min
End Time: 8.34 min



Lan 3/3/10

Thm 03/04/10

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

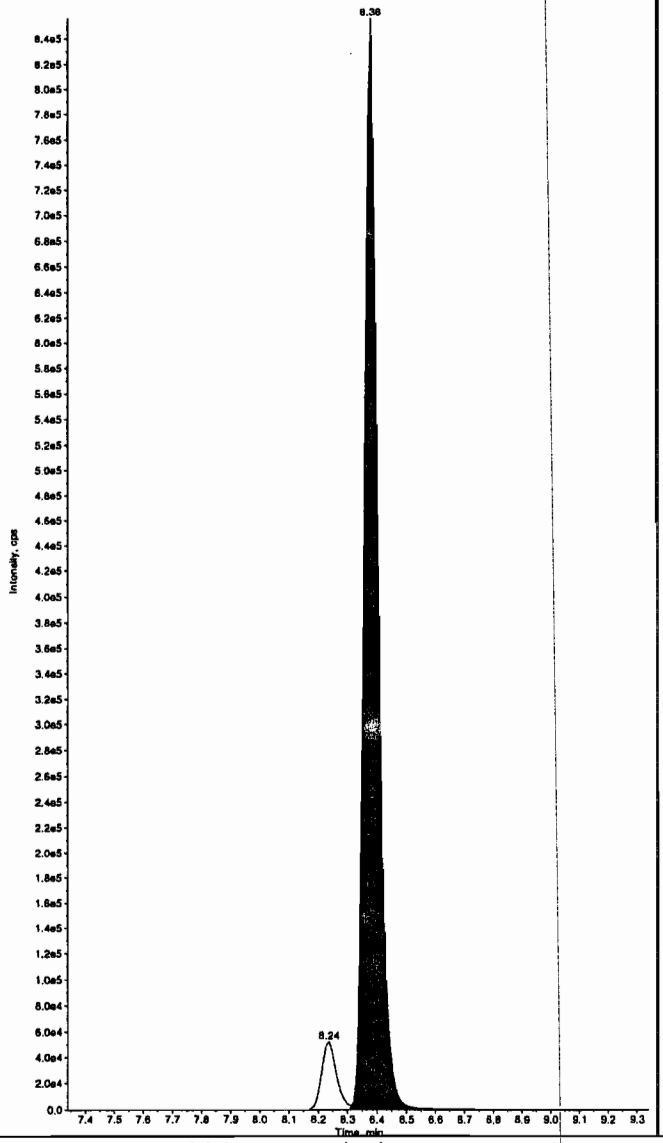
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100302-26CCV" Sample ID: "[1]LER" File: "EXS03010137.wiff"
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: 235. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 8:44:23 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 2.87e+006 counts
Height: 856800.842 cps
Start Time: 8.31 min
End Time: 8.69 min

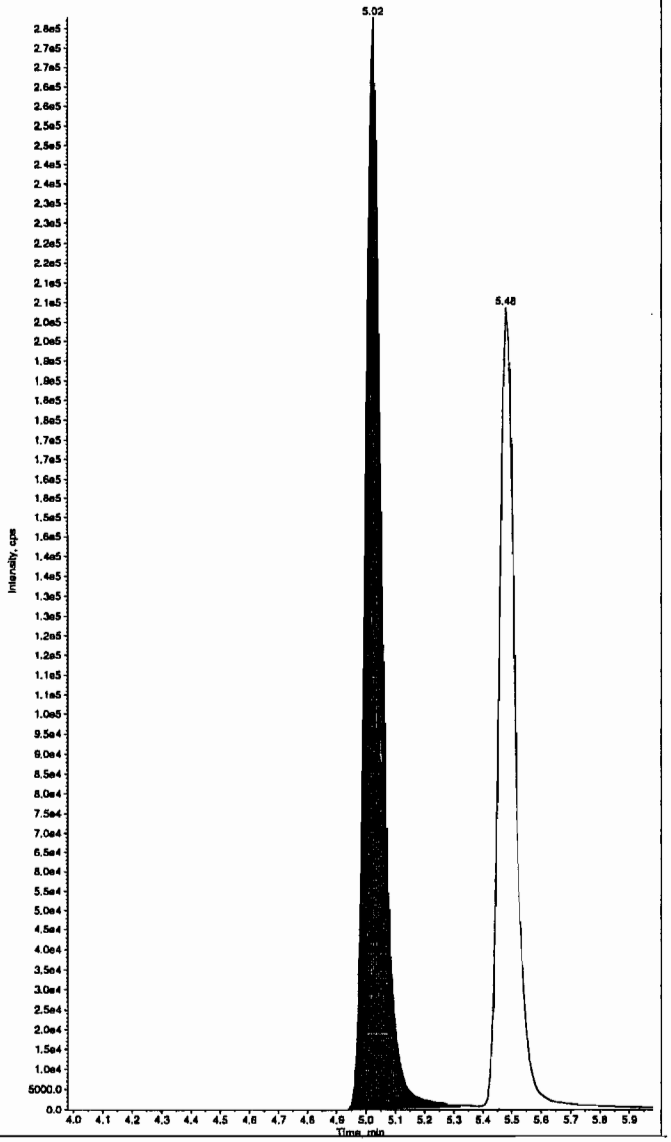


Sample Name: "WXX100302-26CCV" Sample ID: "[1]LER" File: "EXS03010137.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 615. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 8:44:23 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: 4.98 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.02 min
Area: 1.14e+006 counts
Height: 277762.878 cps
Start Time: 4.93 min
End Time: 5.32 min



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

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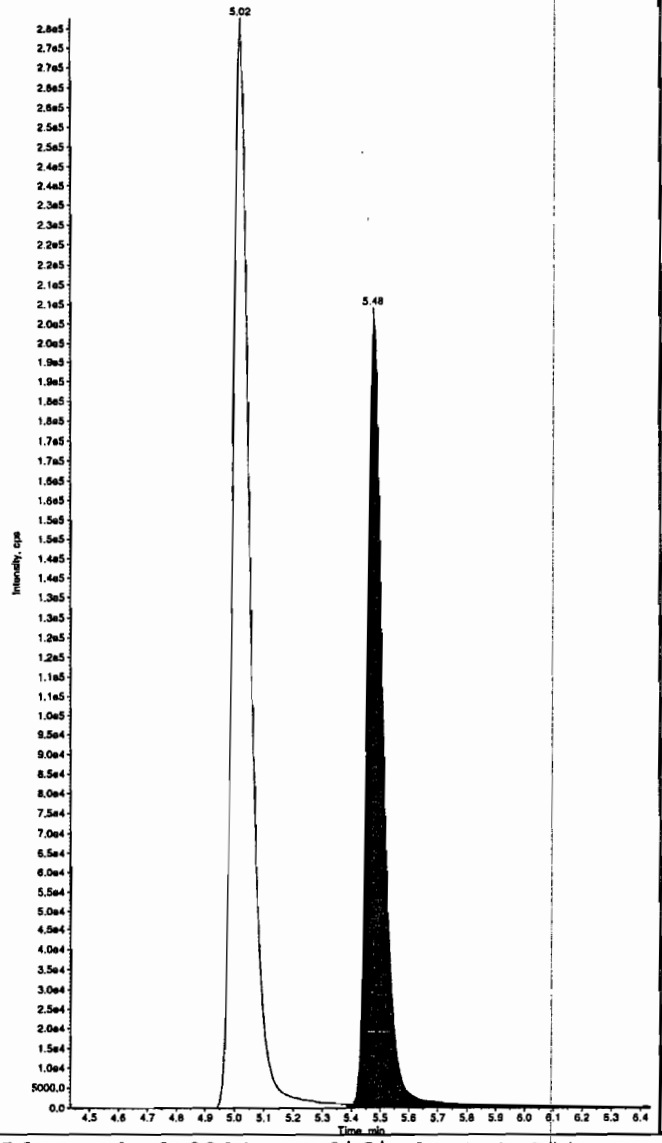
Sample Name: "WXX100302-26CCV" Sample ID: "|1|LER" File: "EXS03010137.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 623. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 8:44:23 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: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.48 min
Area: 8.25e+005 counts
Height: 203926.224 cps
Start Time: 5.38 min
End Time: 6.21 min

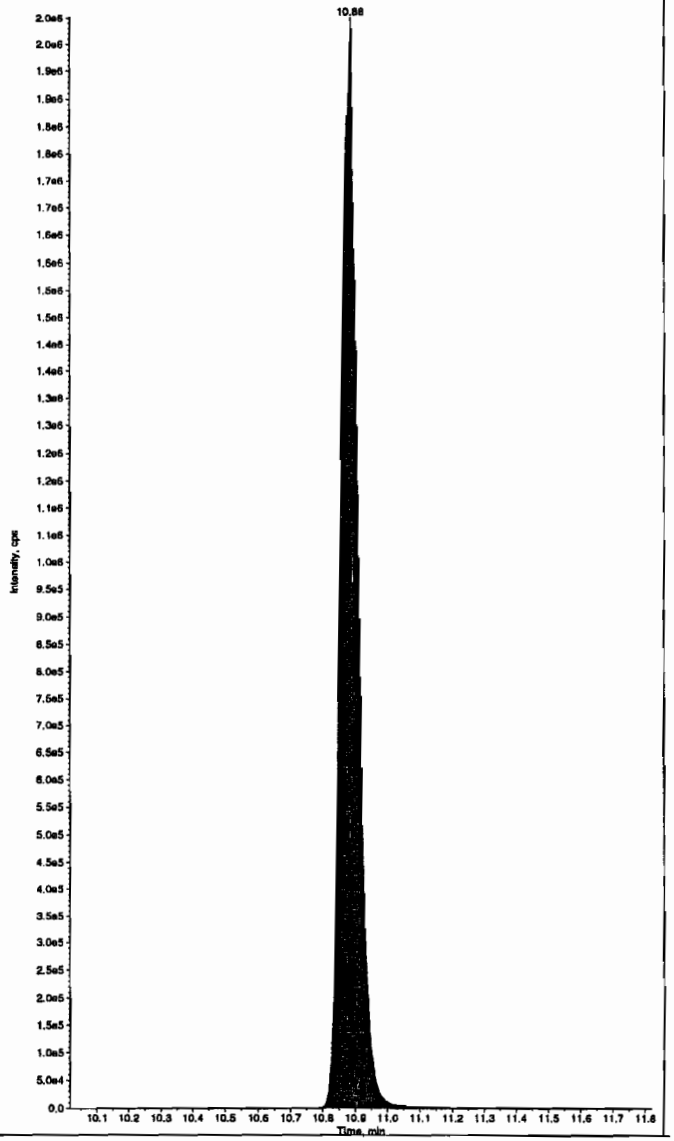


Sample Name: "WXX100302-26CCV" Sample ID: "|1|LER" File: "EXS03010137.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 481. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 8:44:23 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: 7.54e+006 counts
Height: 2002495.728 cps
Start Time: 10.8 min
End Time: 11.2 min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03010139.wiff

Analysis Date: 02-MAR-10 21:15

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

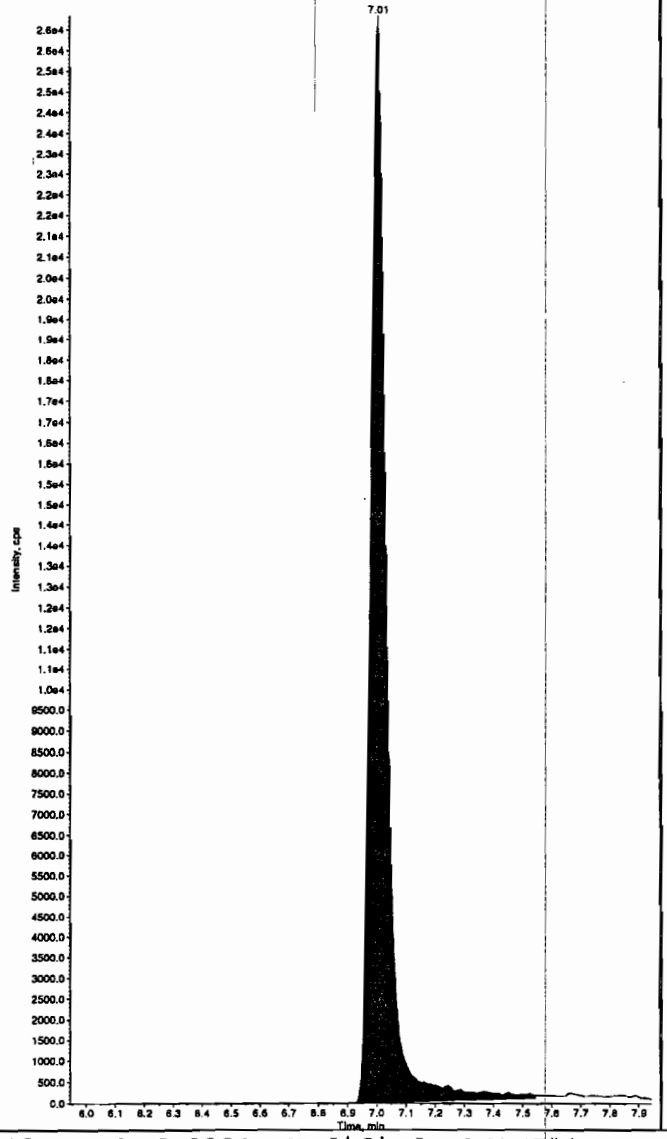
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	130	130	
2,6-Diamino-4-nitrotoluene	100	124	124	
3,4-Dinitrotoluene	50	51.6	103	
3,5-Dinitroaniline	100	93.5	94	
TATB	100	99.9	100	
tris(o-cresyl) phosphate	100	99	99	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lan 3/3/10

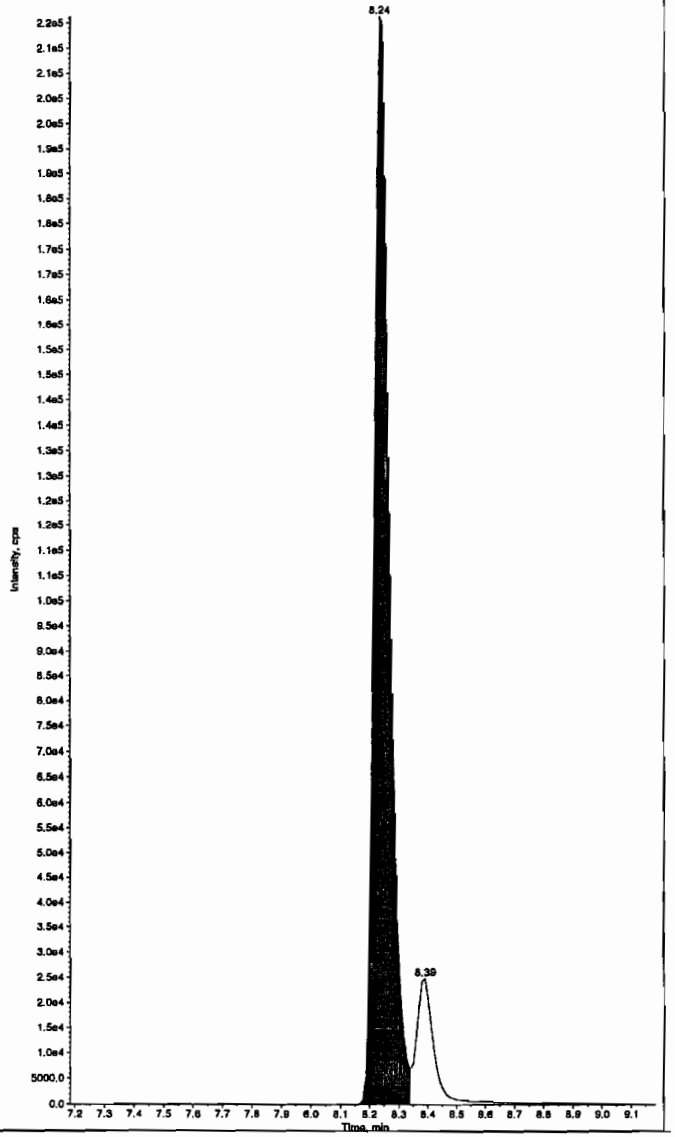
Sample Name: "WXX100302-27CRI" Sample ID: "|1|LER" File: "EXS03010139.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	99.9	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	9:15:57 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.01	min
Area:	1.06e+005	counts
Height:	26326.061	cps
Start Time:	6.89	min
End Time:	7.54	min



Sample Name: "WXX100302-27CRI" Sample ID: "|1|LER" File: "EXS03010139.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	93.5	ng/mL
Acq. Date:	3/2/2010	
Acq. Time:	9:15:57 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:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.24	min
Area:	8.26e+005	counts
Height:	216318.832	cps
Start Time:	8.14	min
End Time:	8.34	min



Anm 03/04/10

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

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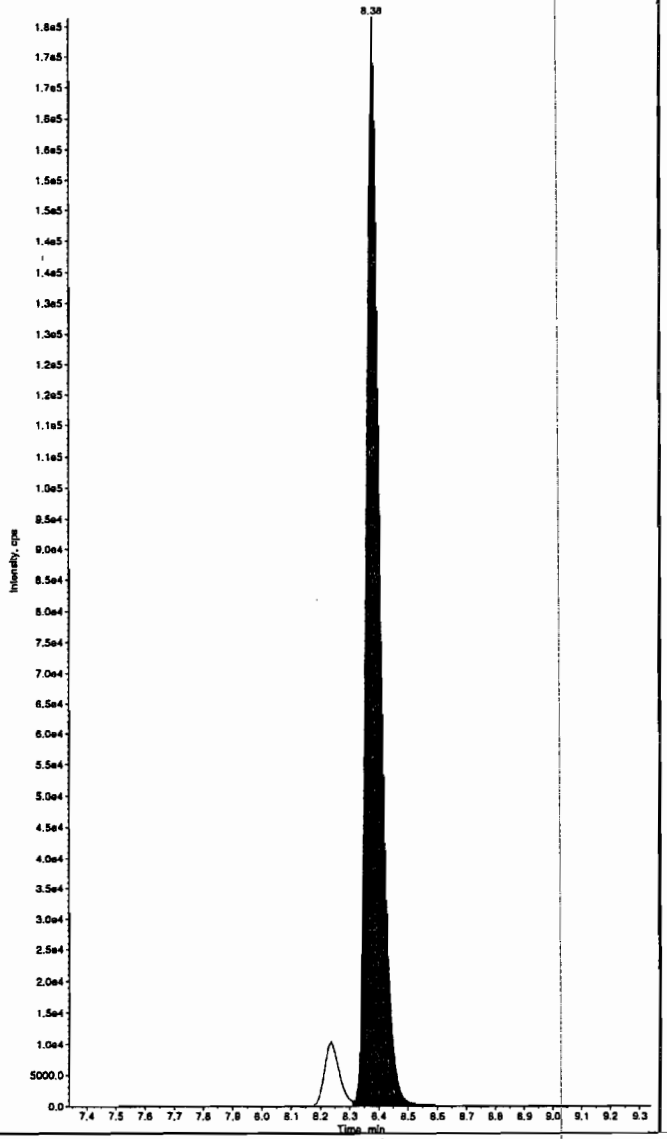
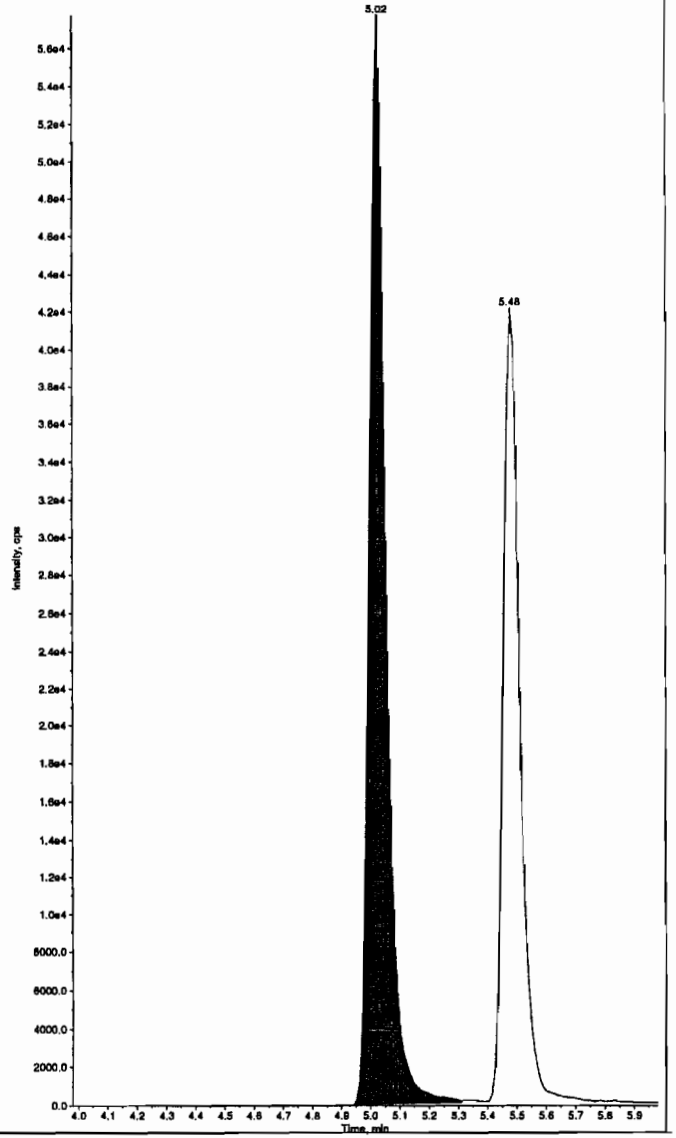
Sample Name: "WXX100302-27CRI" Sample ID: "|1|LER" File: "EXS03010139.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	50.0 ng/mL
Calculated Conc:	51.6 ng/mL
Acq. Date:	3/2/2010
Acq. Time:	9:15:57 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.38 min
Area:	5.93e+005 counts
Height:	176438.660 cps
Start Time:	8.31 min
End Time:	8.70 min



Sample Name: "WXX100302-27CRI" Sample ID: "|1|LER" File: "EXS03010139.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	124. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	9:15:57 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.02 min
Area:	2.37e+005 counts
Height:	57782.001 cps
Start Time:	4.93 min
End Time:	5.31 min



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

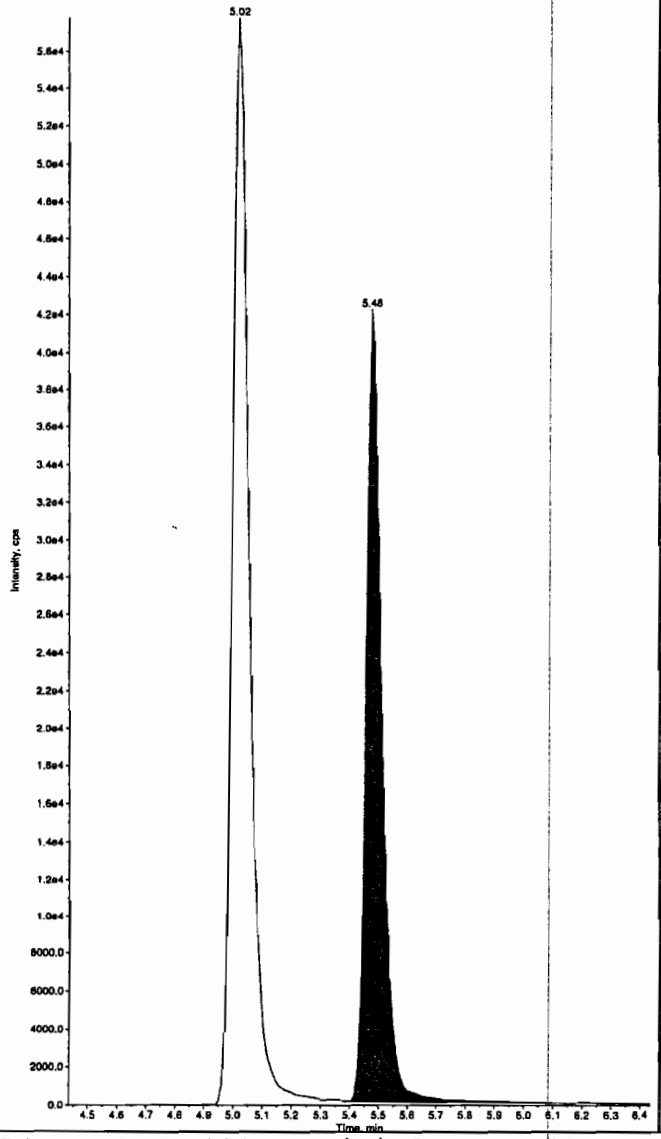
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100302-27CRI" Sample ID: "|1|LER" File: "EXS03010139.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 130. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 9:15:57 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: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.48 min
Area: 1.68e+005 counts
Height: 42055.286 cps
Start Time: 5.38 min
End Time: 5.96 min

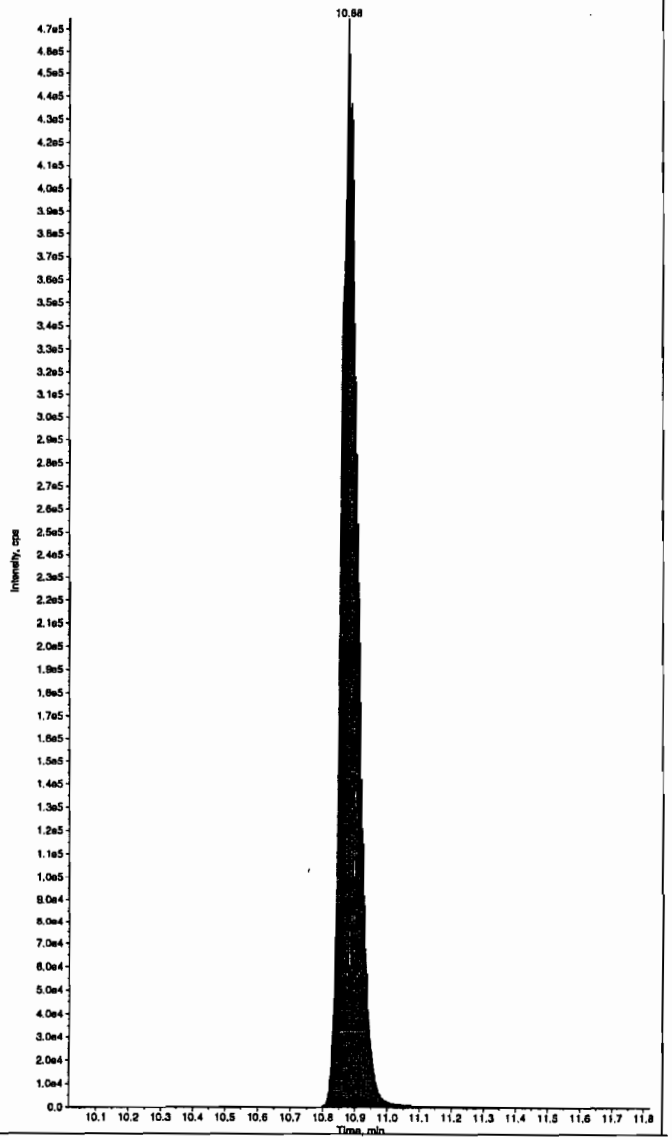


Sample Name: "WXX100302-27CRI" Sample ID: "|1|LER" File: "EXS03010139.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 99.0 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 9:15:57 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: 1.72e+006 counts
Height: 474518.402 cps
Start Time: 10.8 min
End Time: 11.2 min



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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–1623

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS03010150.wiff **Analysis Date:** 03–MAR–10 00:09

LCMSMS ID: 1358 **Column ID:** JSphere ODS–H80

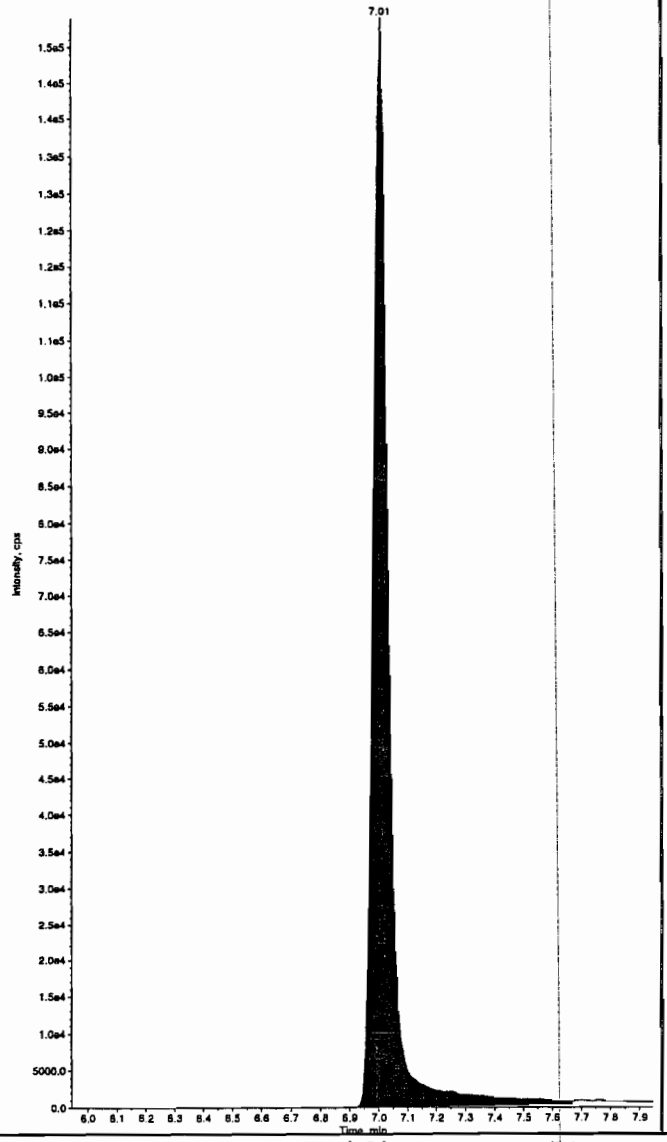
Compound	True	Found	Recovery	Q
2,6–Diamino–4–nitrotoluene	500	621	124	
3,4–Dinitrotoluene	250	228	91	
3,5–Dinitroaniline	500	484	97	
TATB	500	489	98	
tris(o–cresyl) phosphate	500	462	92	
2,4–Diamino–6–nitrotoluene	500	612	122	

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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before Run 3/3/10

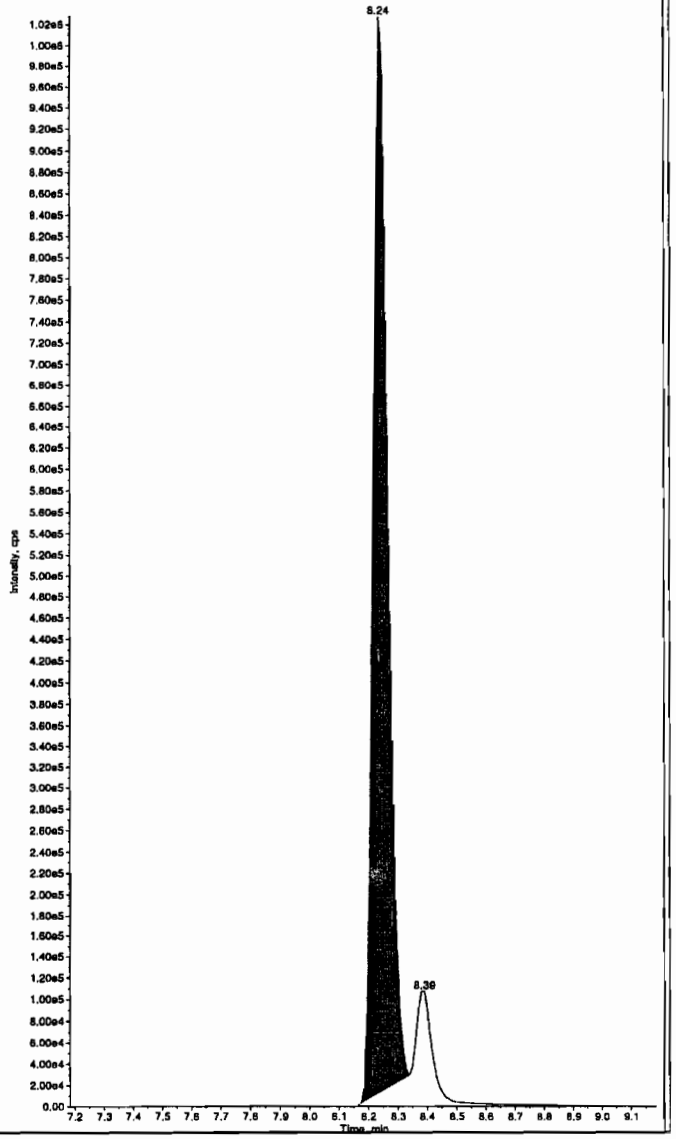
Sample Name: "WXX100302-26CCV" Sample ID: "[1]LER" File: "EXS03010150.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	489.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:09:01 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:	6.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.01	min
Area:	5.84e+005	counts
Height:	148932.816	cps
Start Time:	6.91	min
End Time:	7.67	min



Sample Name: "WXX100302-26CCV" Sample ID: "[1]LER" File: "EXS03010150.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	464.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:09:01 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2000.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	15.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.24	min
Area:	3.66e+006	counts
Height:	1014722.229	cps
Start Time:	8.17	min
End Time:	8.34	min



hmm 03/04/10

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

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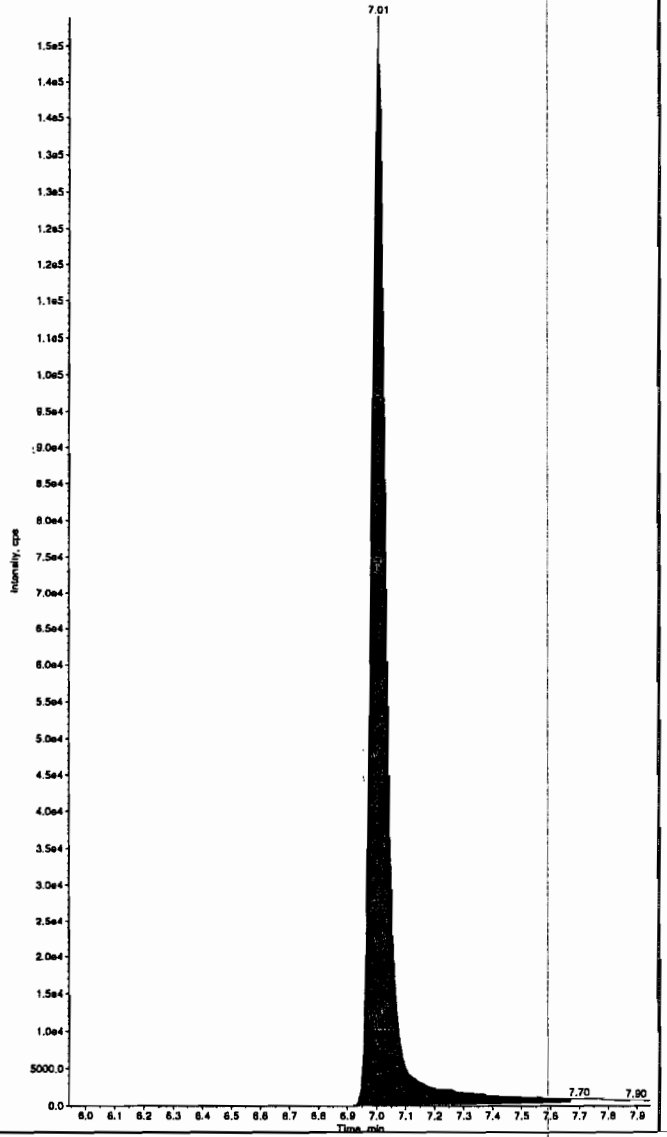
after ler 3/3/10

Sample Name: "WXX100302-26CCV" Sample ID: "[1]LER" File: "EXS03010150.wiff"
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: 489. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:09:01 AM

Modified: No
Integ. 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 5.84e+005 counts
Height: 148932.816 cps
Start Time: 6.91 min
End Time: 7.67 min

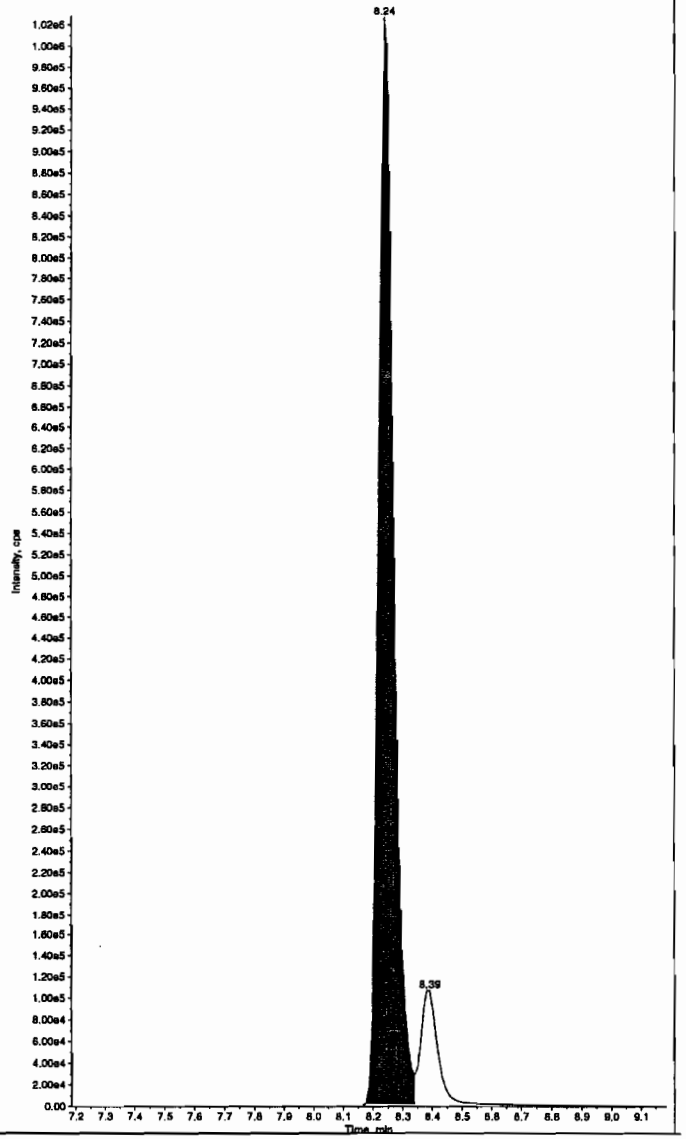


Sample Name: "WXX100302-26CCV" Sample ID: "[1]LER" File: "EXS03010150.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 484. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:09:01 AM

Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.19 min
Use Relative RT: No

Int. Type: Manual
Retention Time: 8.24 min
Area: 3.80e+006 counts
Height: 1038100.525 cps
Start Time: 8.16 min
End Time: 8.34 min



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

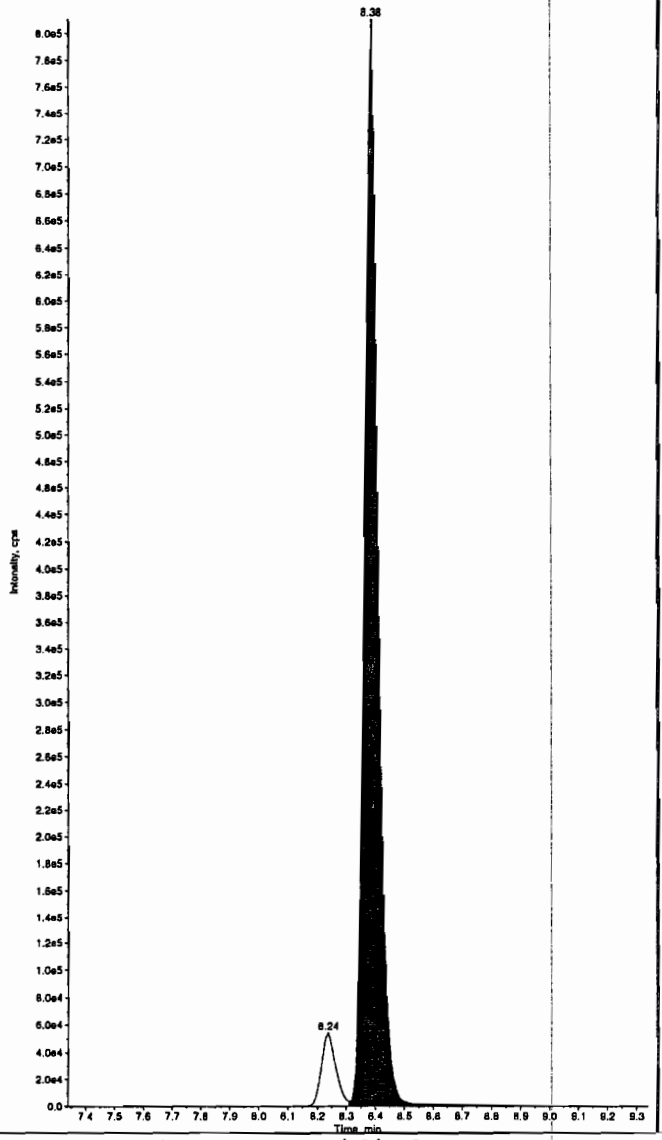
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100302-26CCV" Sample ID: "|1|LER" File: "EXS03010150.wiff"
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: 228. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:09:01 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 2.78e+006 counts
Height: 810863.647 cps
Start Time: 8.31 min
End Time: 8.68 min

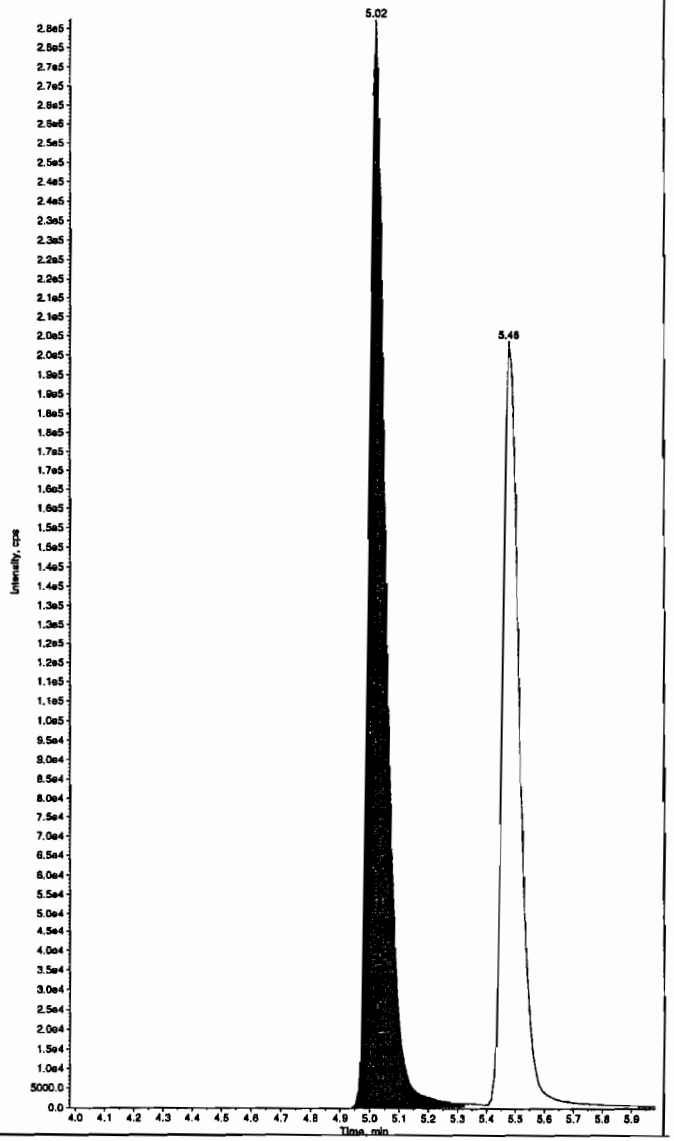


Sample Name: "WXX100302-26CCV" Sample ID: "|1|LER" File: "EXS03010150.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 621. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:09:01 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: 4.98 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.02 min
Area: 1.16e+006 counts
Height: 282356.659 cps
Start Time: 4.92 min
End Time: 5.32 min



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

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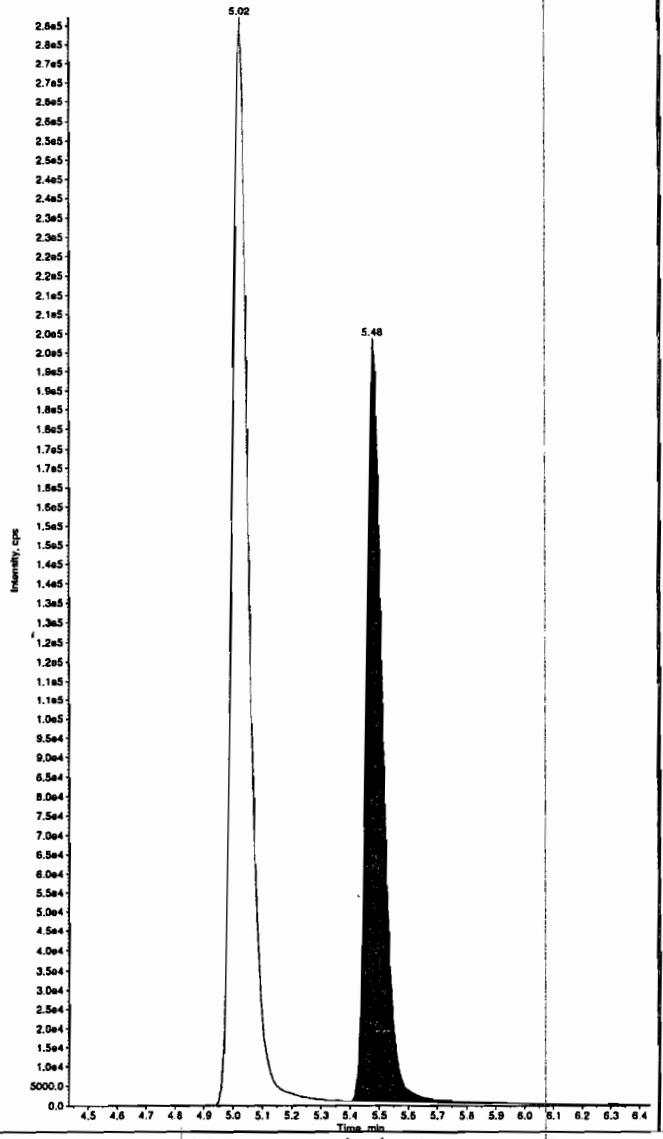
Sample Name: "WXX100302-26CCV" Sample ID: "[1]LER" File: "EXS03010150.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 612. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:09:01 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: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.48 min
Area: 8.10e+005 counts
Height: 197853.882 cps
Start Time: 5.39 min
End Time: 5.95 min

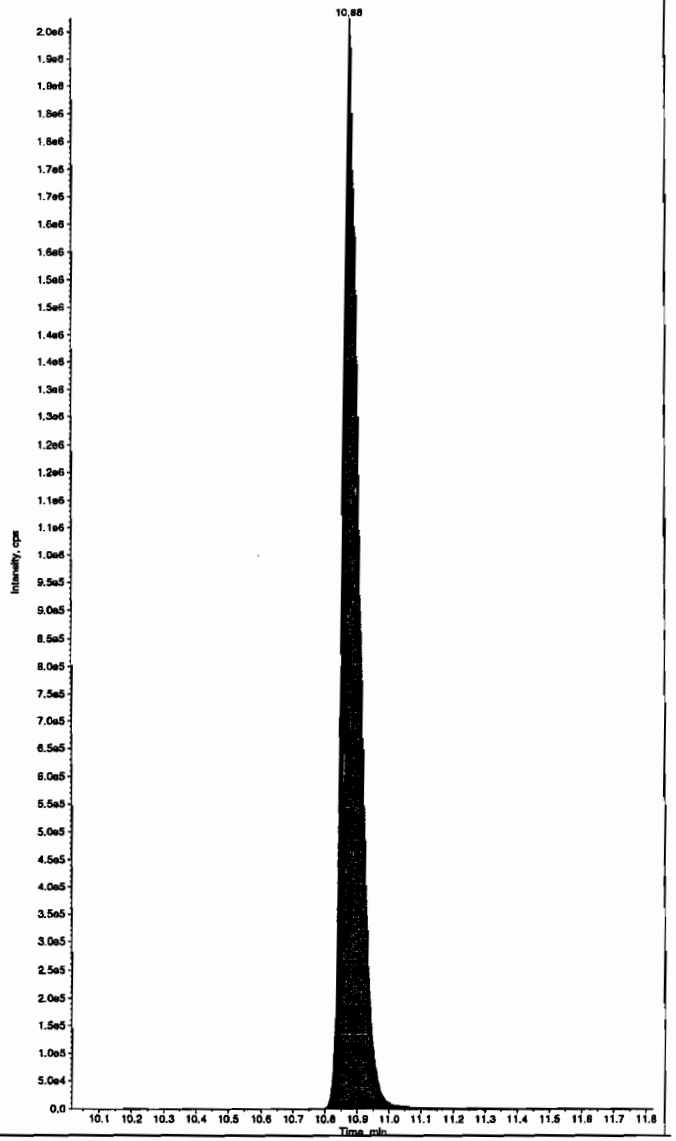


Sample Name: "WXX100302-26CCV" Sample ID: "[1]LER" File: "EXS03010150.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 462. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:09:01 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: 10.9 min
Area: 7.27e+006 counts
Height: 1974025.879 cps
Start Time: 10.8 min
End Time: 11.2 min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03010152.wiff

Analysis Date: 03–MAR–10 00:40

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

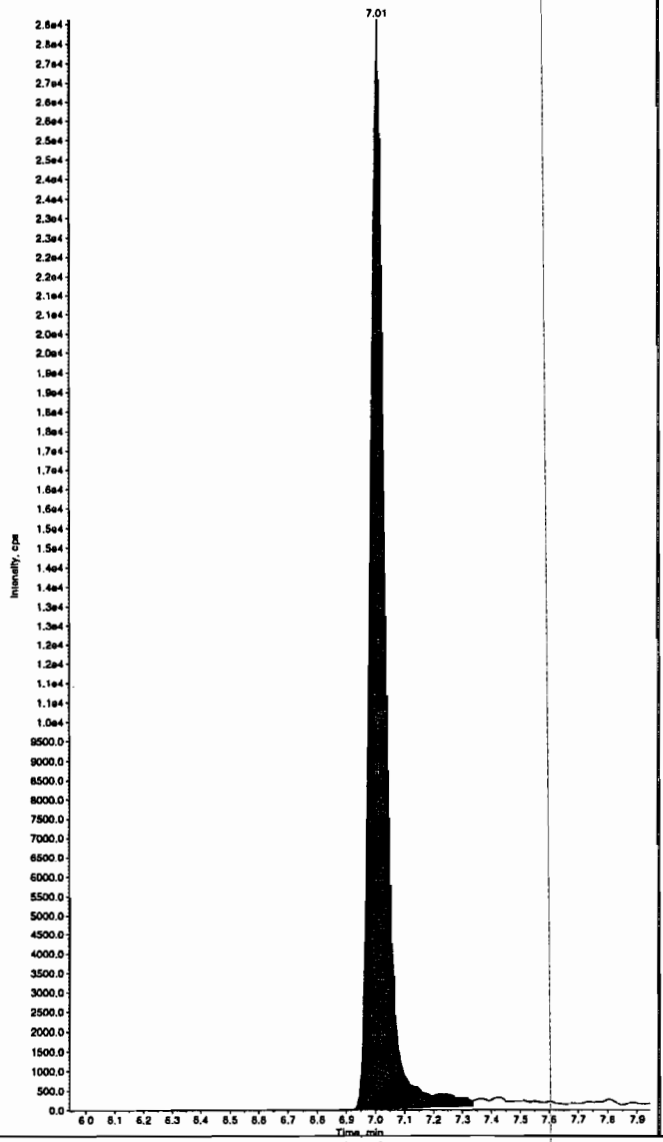
Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	100	133	133	
2,6–Diamino–4–nitrotoluene	100	126	126	
3,4–Dinitrotoluene	50	51.1	102	
3,5–Dinitroaniline	100	93.6	94	
TATB	100	100	100	
tris(o–cresyl) phosphate	100	97.7	98	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lan 3/3/10

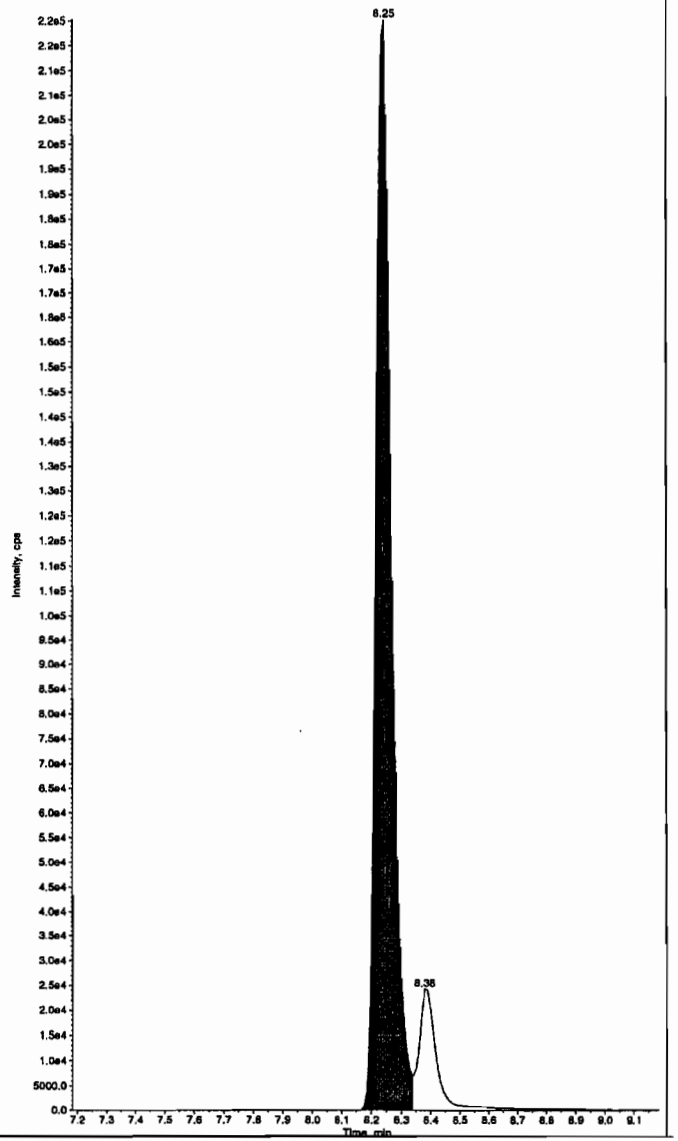
Sample Name: "WXX100302-27CRI" Sample ID: "|1|LER" File: "EXS03010152.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	100. ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:40:36 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:	6.94 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	7.01 min
Area:	1.06e+005 counts
Height:	28095.684 cps
Start Time:	6.91 min
End Time:	7.34 min



Sample Name: "WXX100302-27CRI" Sample ID: "|1|LER" File: "EXS03010152.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	93.6 ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:40:36 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:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.25 min
Area:	8.27e+005 counts
Height:	220319.366 cps
Start Time:	8.15 min
End Time:	8.34 min



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

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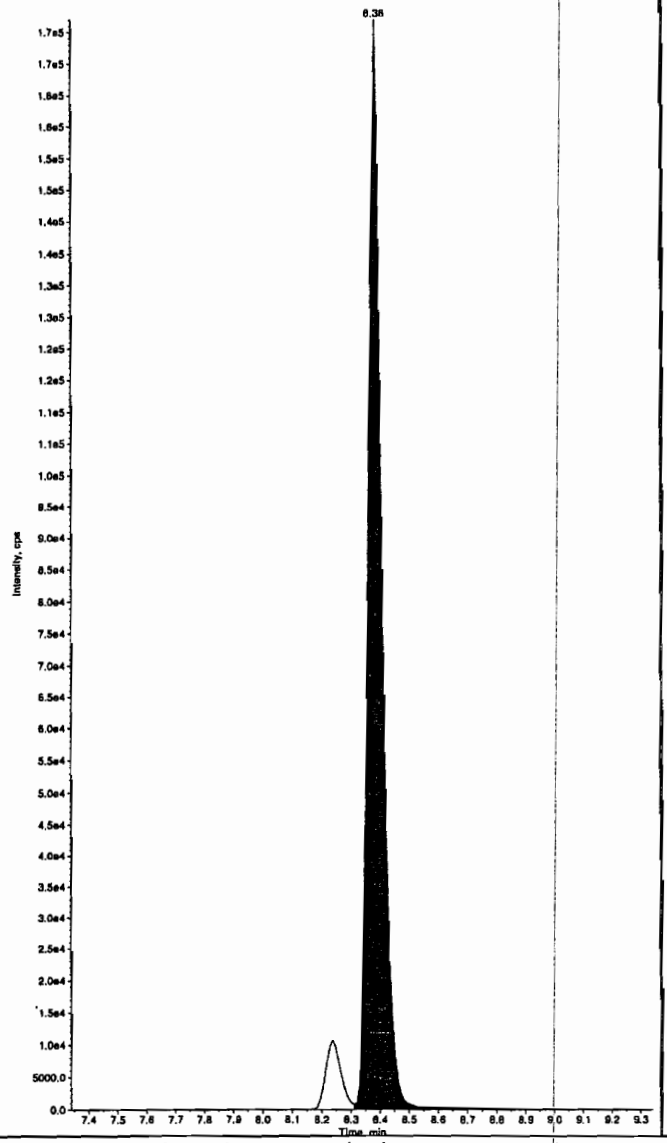
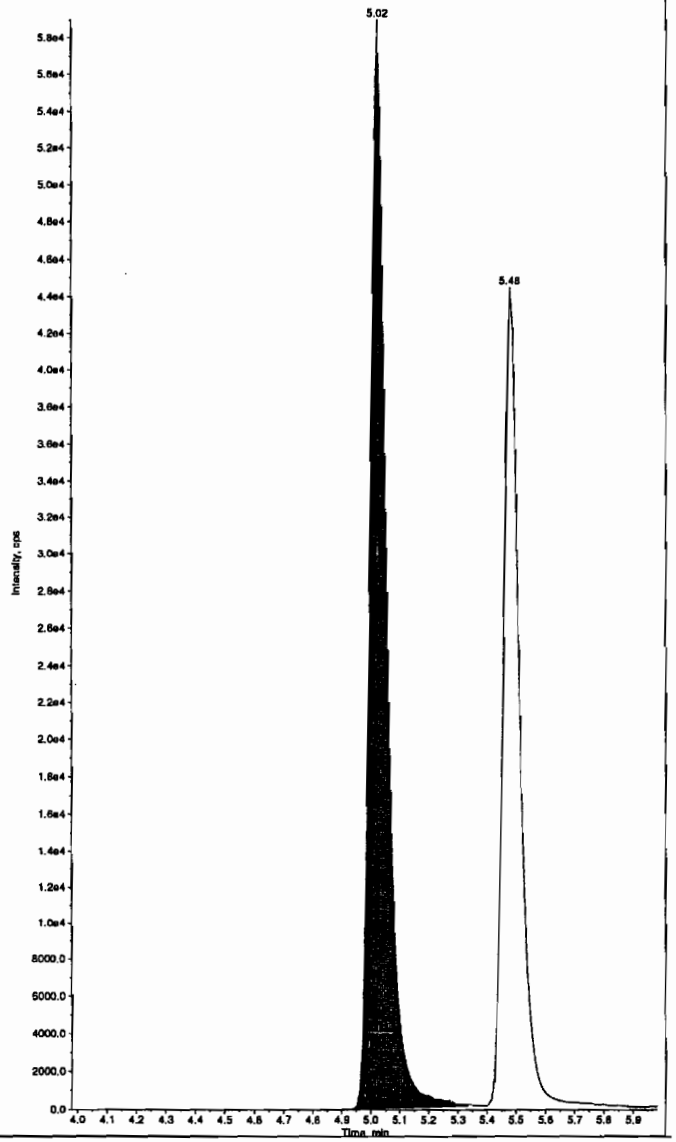
Sample Name: "WXX100302-27CRI" Sample ID: "[1]LER" File: "EXS03010152.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	50.0 ng/mL
Calculated Conc:	51.1 ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:40:36 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.38 min
Area:	5.87e+005 counts
Height:	172108.093 cps
Start Time:	8.31 min
End Time:	8.67 min



Sample Name: "WXX100302-27CRI" Sample ID: "[1]LER" File: "EXS03010152.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	126. ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:40:36 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.02 min
Area:	2.41e+005 counts
Height:	58991.249 cps
Start Time:	4.92 min
End Time:	5.33 min



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

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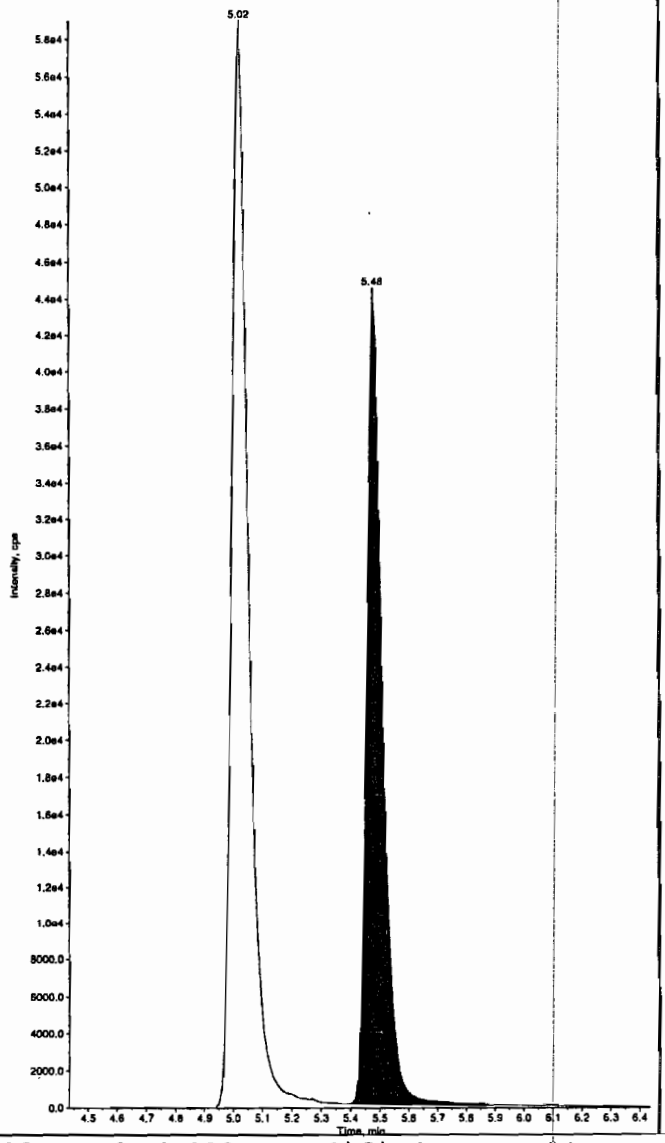
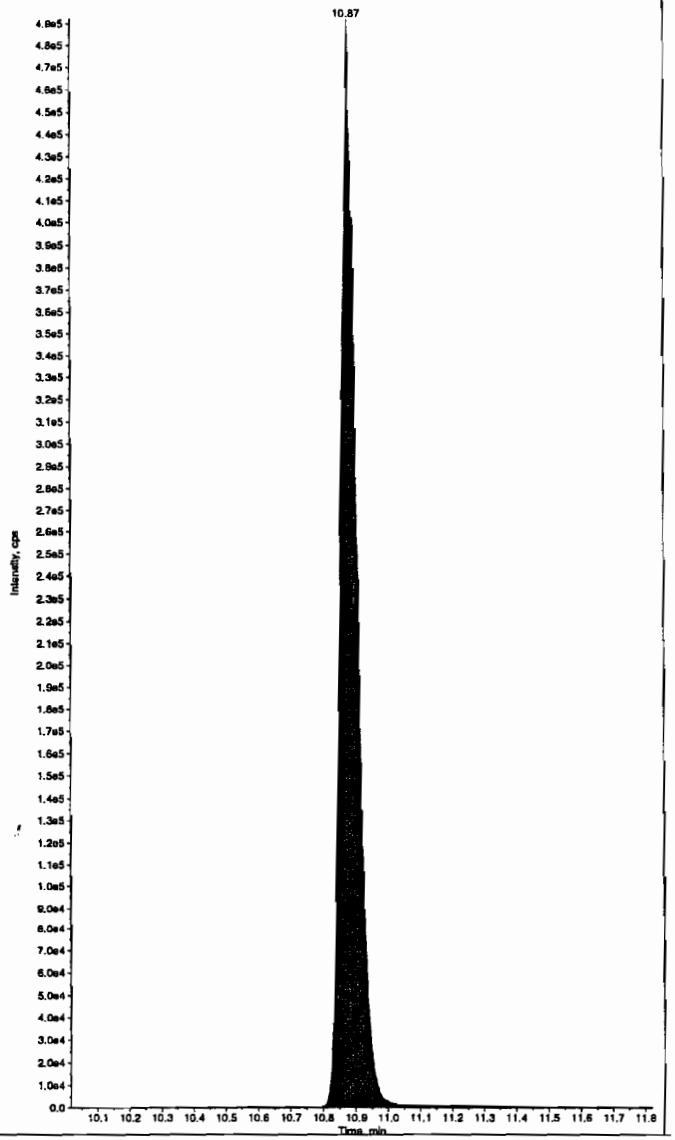
Sample Name: "WXX100302-27CRi" Sample ID: "|1|LER" File: "EXS03010152.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	133.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:40:36 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:	5.44	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.48	min
Area:	1.73e+005	counts
Height:	44324.234	cps
Start Time:	5.37	min
End Time:	5.82	min



Sample Name: "WXX100302-27CRi" Sample ID: "|1|LER" File: "EXS03010152.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	97.7	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	12:40:36 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:	10.9	min
Area:	1.70e+006	counts
Height:	492241.425	cps
Start Time:	10.8	min
End Time:	11.2	min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10-1623

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXS03030013.wiff **Analysis Date:** 03-MAR-10 12:50

LCMSMS ID: 1358 **Column ID:** JSphere ODS-H80

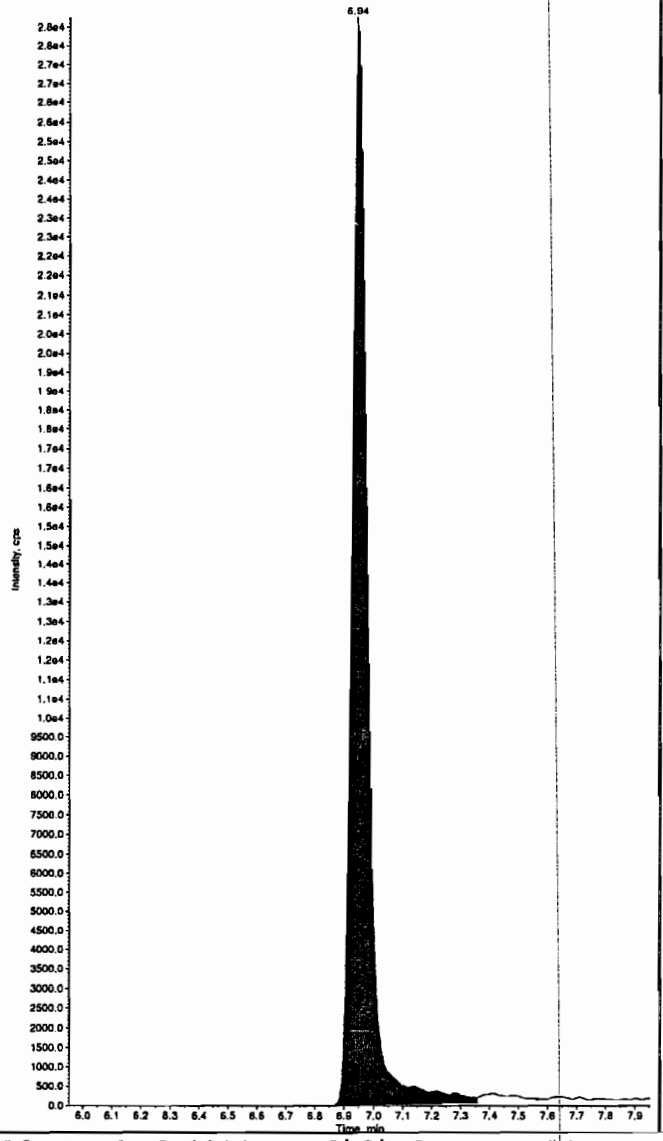
Compound	True	Found	Recovery	Q
tris(o-cresyl) phosphate	100	103	103	
2,4-Diamino-6-nitrotoluene	100	106	106	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	49.3	99	
3,5-Dinitroaniline	100	103	103	
TATB	100	104	104	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lan 3/8/10

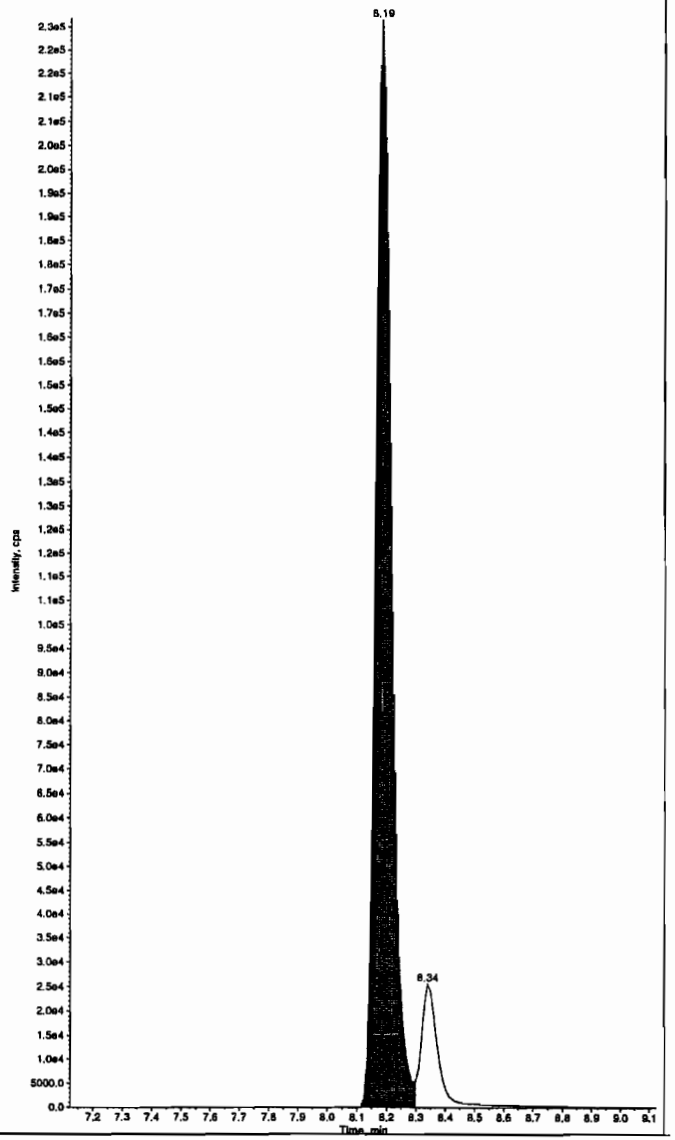
Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030013.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	104. ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:50:41 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:	6.96 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.94 min
Area:	1.10e+005 counts
Height:	28239.336 cps
Start Time:	6.81 min
End Time:	7.36 min



Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030013.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	104. ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:50:41 PM
Modified:	Yes
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	2000.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.12 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.19 min
Area:	8.76e+005 counts
Height:	226690.079 cps
Start Time:	8.09 min
End Time:	8.30 min



HMM 3/08/10

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

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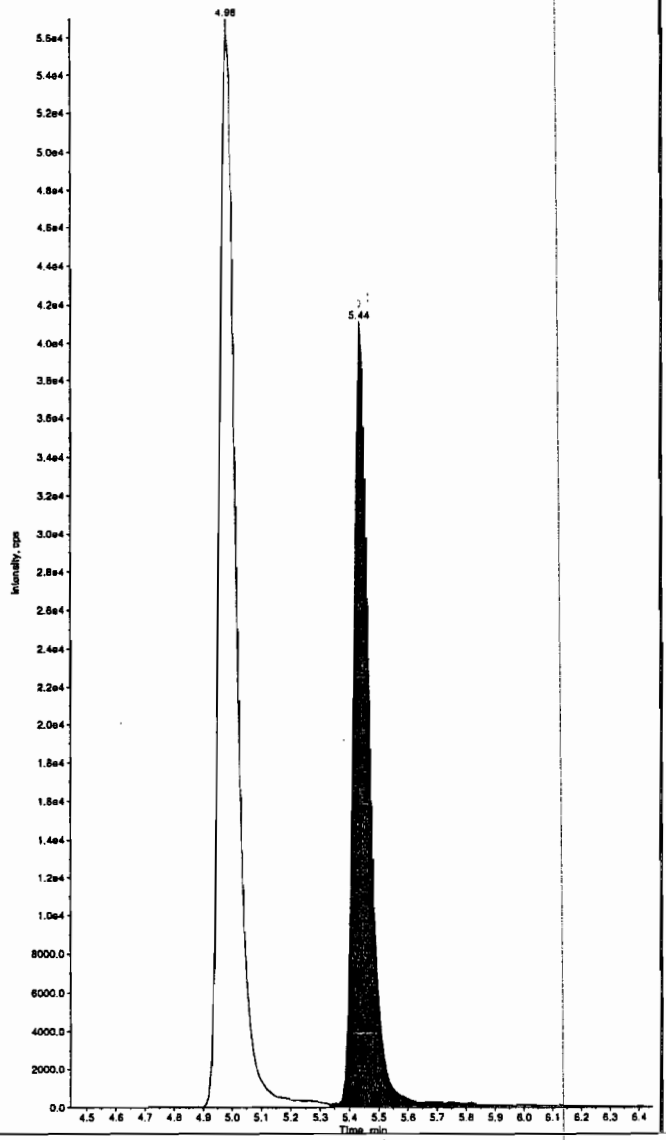
Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030013.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 106. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:50:41 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: 5.45 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.44 min
Area: 1.63e+005 counts
Height: 41039.158 cps
Start Time: 5.33 min
End Time: 5.97 min

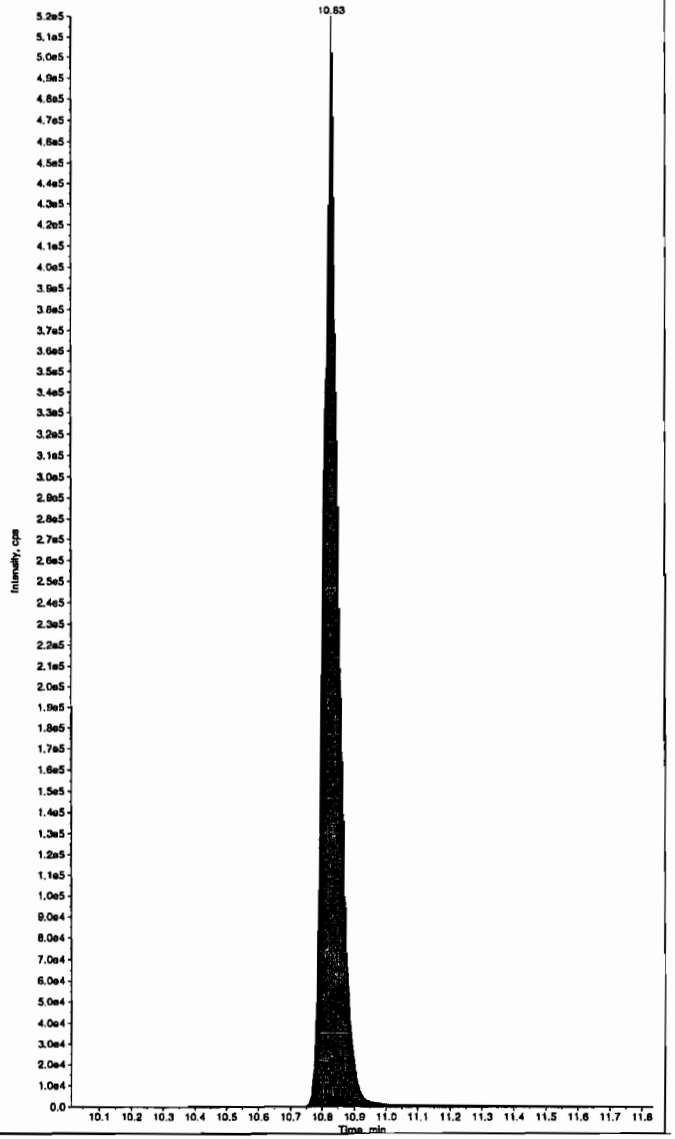


Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030013.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 103. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 12:50:41 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: 1.68e+006 counts
Height: 519726.318 cps
Start Time: 10.7 min
End Time: 11.1 min



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

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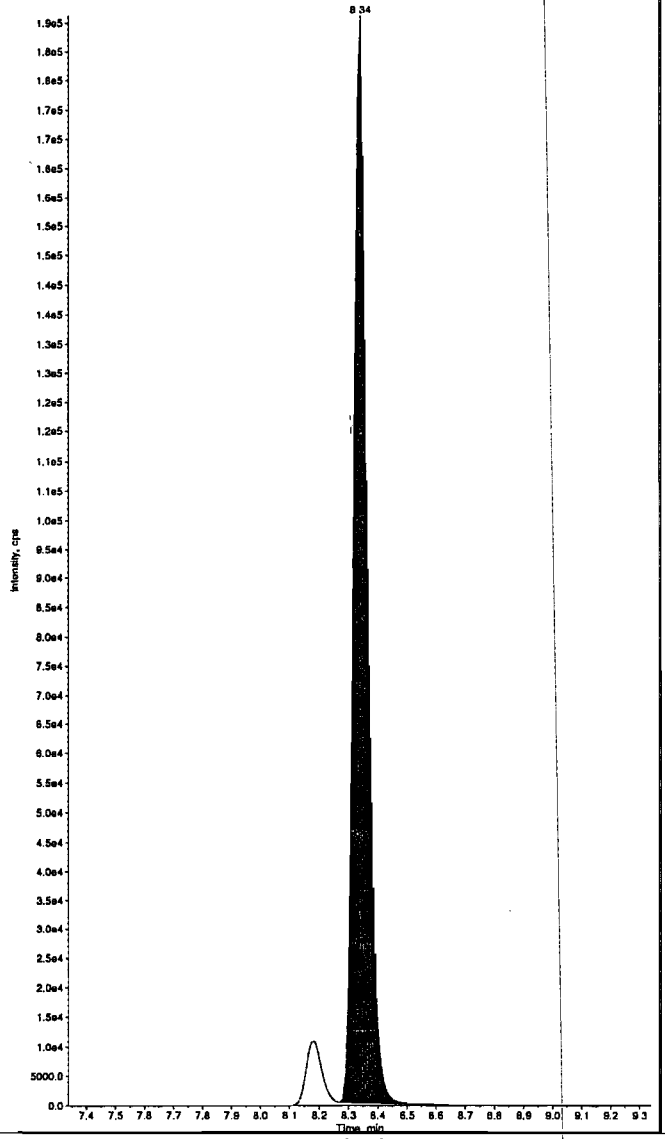
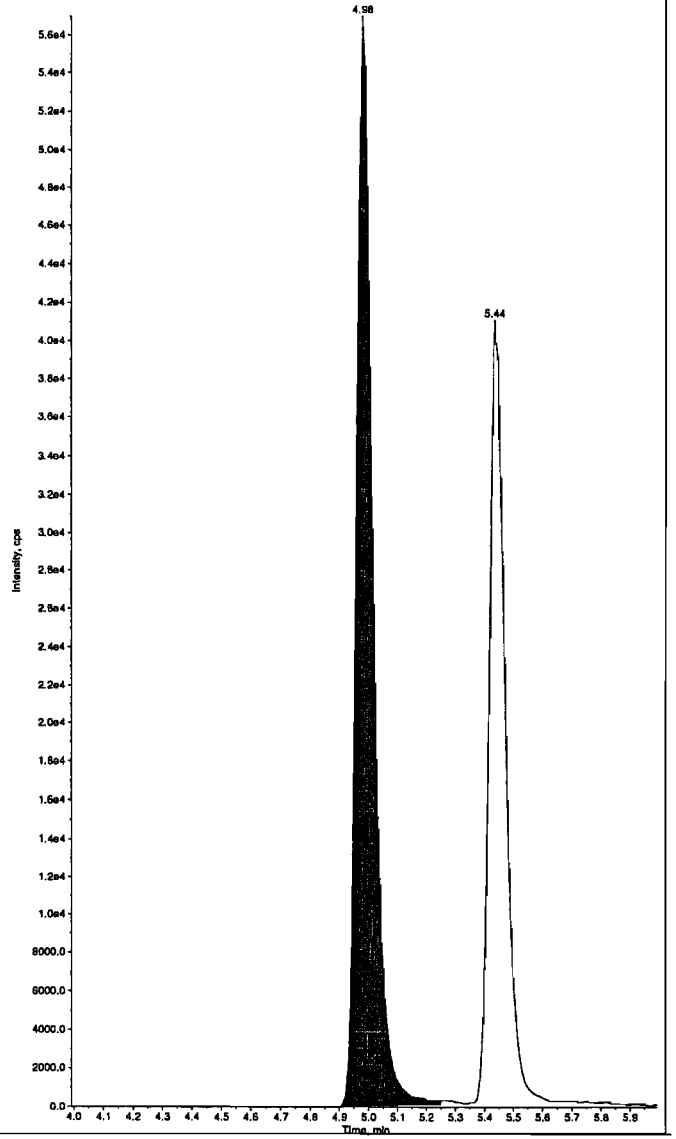
Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030013.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	50.0 ng/mL
Calculated Conc:	49.3 ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:50:41 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.34 min
Area:	6.23e+005 counts
Height:	185965.897 cps
Start Time:	8.27 min
End Time:	8.59 min



Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030013.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	108. ng/mL
Acq. Date:	3/3/2010
Acq. Time:	12:50:41 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:	4.99 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	4.98 min
Area:	2.32e+005 counts
Height:	56978.073 cps
Start Time:	4.88 min
End Time:	5.25 min



Page 6 of 40

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

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10-1623

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS03030024.wiff **Analysis Date:** 03-MAR-10 15:44

LCMSMS ID: 1358 **Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	519	104	
2,6-Diamino-4-nitrotoluene	500	528	106	
3,4-Dinitrotoluene	250	239	96	
3,5-Dinitroaniline	500	545	109	
TATB	500	513	103	
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%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

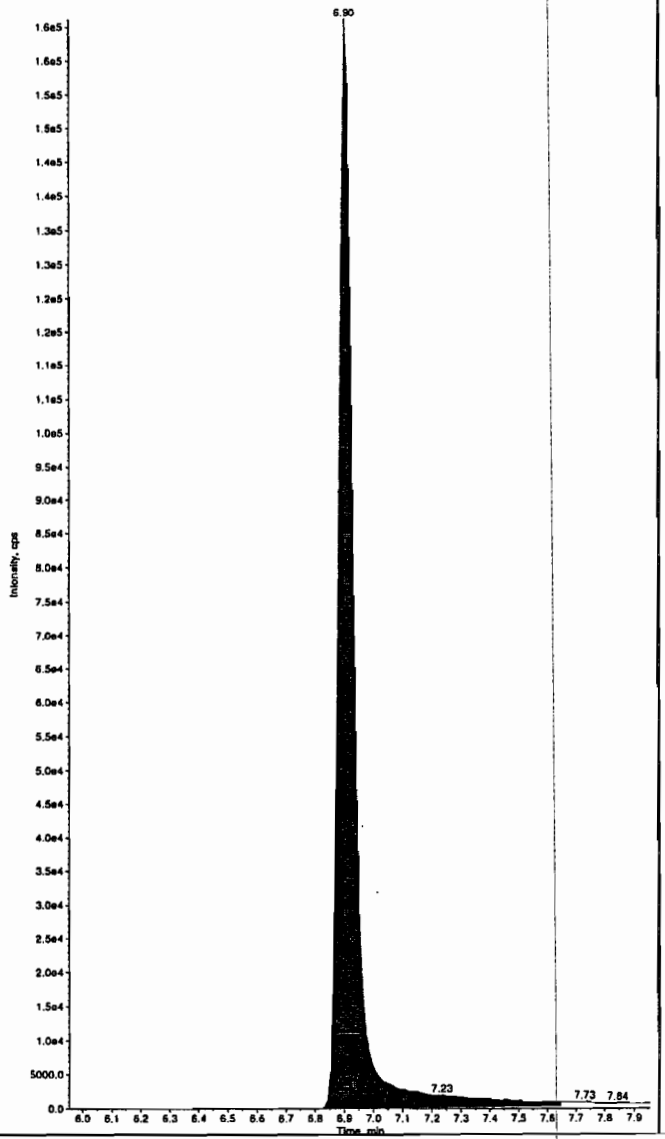
Lee 3/8/10

Sample Name: "WXX100303-26CCV" Sample ID: "[1]LER" File: "EXS03030024.wiff"
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: 513. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 3:44:08 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 1 points
RT Window: 30.0 sec
Expected RT: 6.96 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 6.90 min
Area: 6.36e+005 counts
Height: 161061.234 cps
Start Time: 6.79 min
End Time: 7.65 min

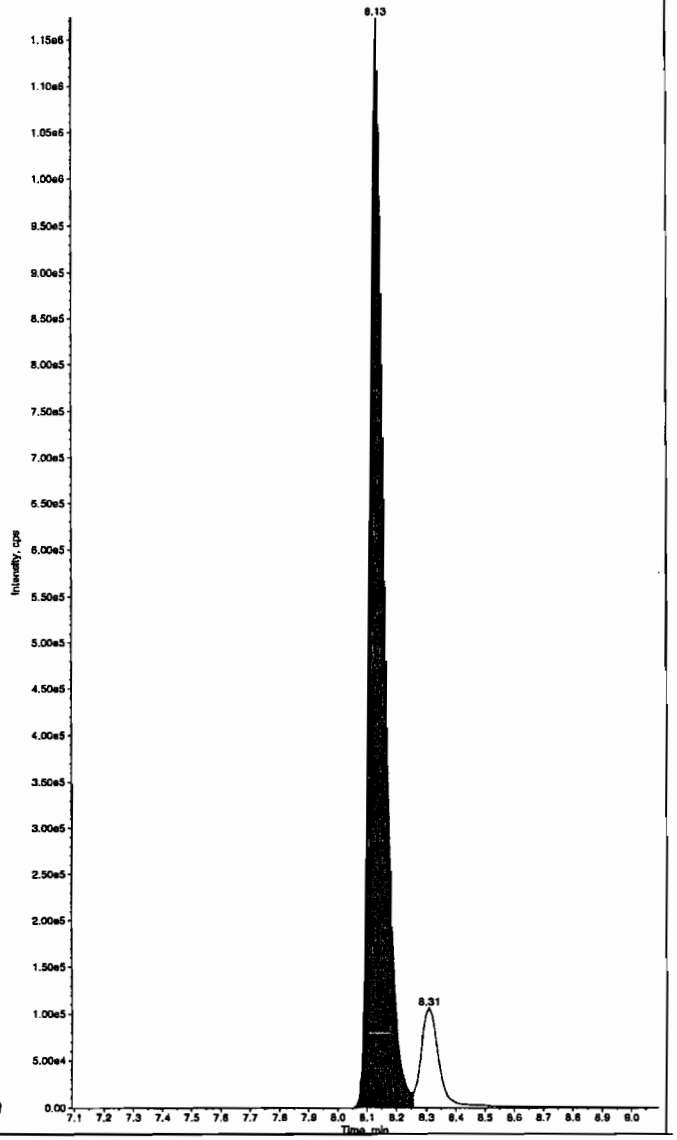


Sample Name: "WXX100303-25CCV" Sample ID: "[1]LER" File: "EXS03030024.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 555. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 3:44:08 PM

Modified: Yes
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 1 points
RT Window: 15.0 sec
Expected RT: 8.09 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.13 min
Area: 4.26e+006 counts
Height: 1173933.960 cps
Start Time: 8.04 min
End Time: 8.26 min



Hmm 03/08/10

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

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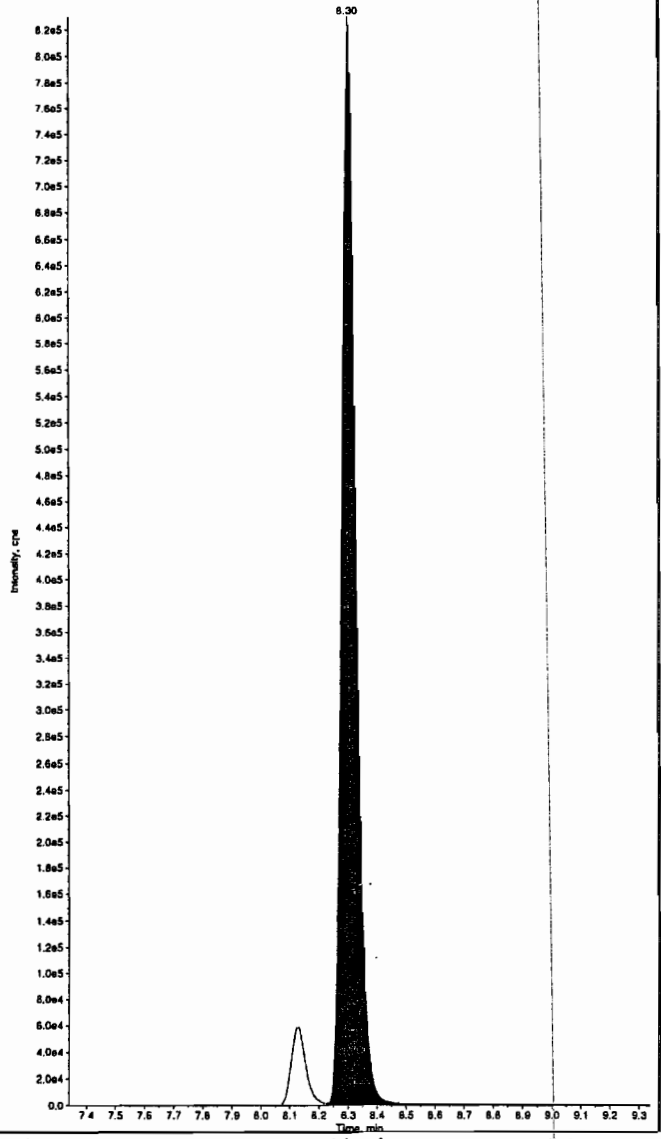
Sample Name: "WXX100303-26CCV" Sample ID: "|1|LER" File: "EXS03030024.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 250. ng/mL
Calculated Conc: 239. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 3:44:08 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.30 min
Area: 2.91e+006 counts
Height: 829483.582 cps
Start Time: 8.23 min
End Time: 8.62 min

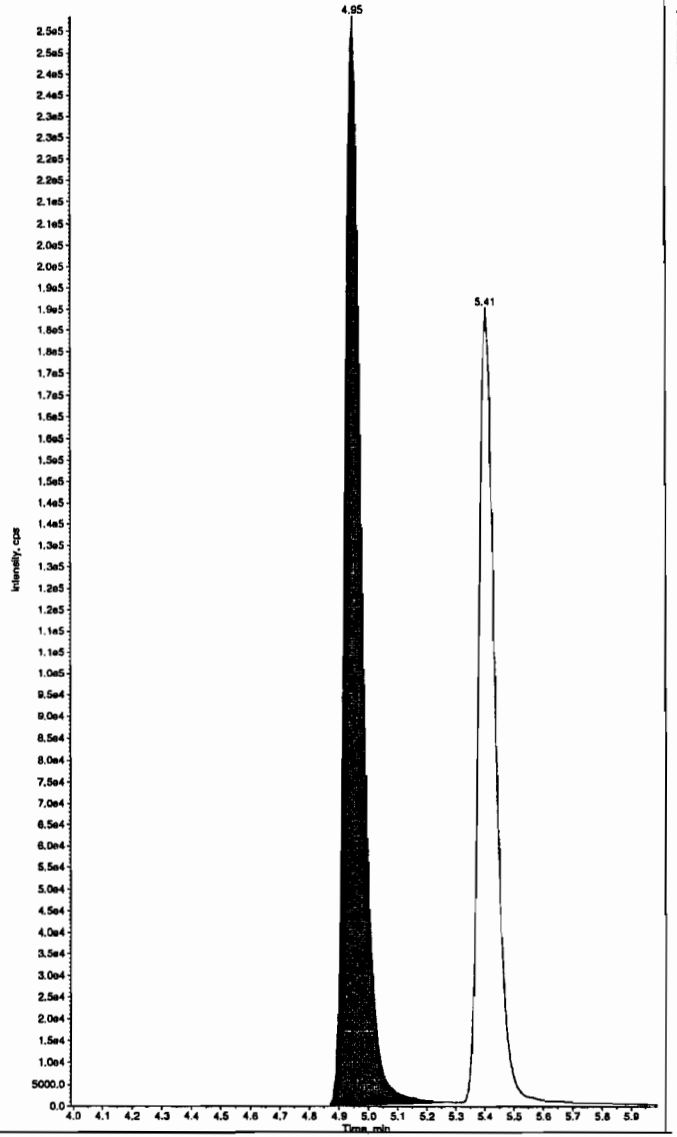


Sample Name: "WXX100303-26CCV" Sample ID: "|1|LER" File: "EXS03030024.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 528. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 3:44:08 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: 4.99 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.95 min
Area: 1.07e+006 counts
Height: 253187.607 cps
Start Time: 4.86 min
End Time: 5.25 min



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

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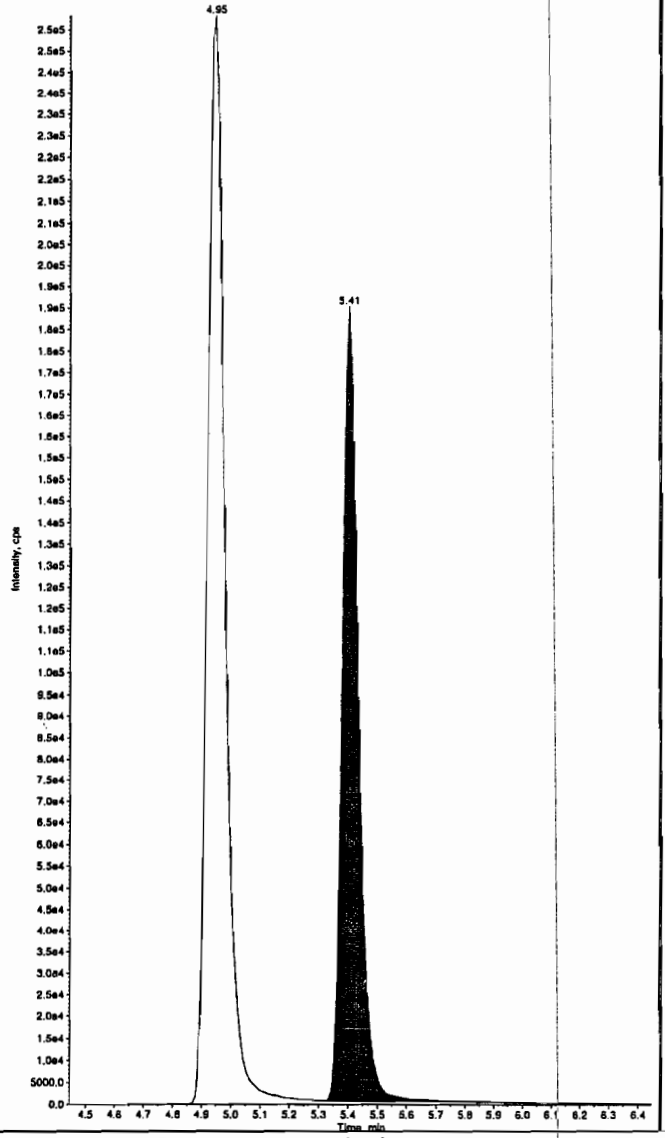
Sample Name: "WXX100303-26CCV" Sample ID: "|1|LER" File: "EXS03030024.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 519. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 3:44:08 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: 5.45 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.41 min
Area: 7.39e+005 counts
Height: 184446.564 cps
Start Time: 5.32 min
End Time: 5.87 min

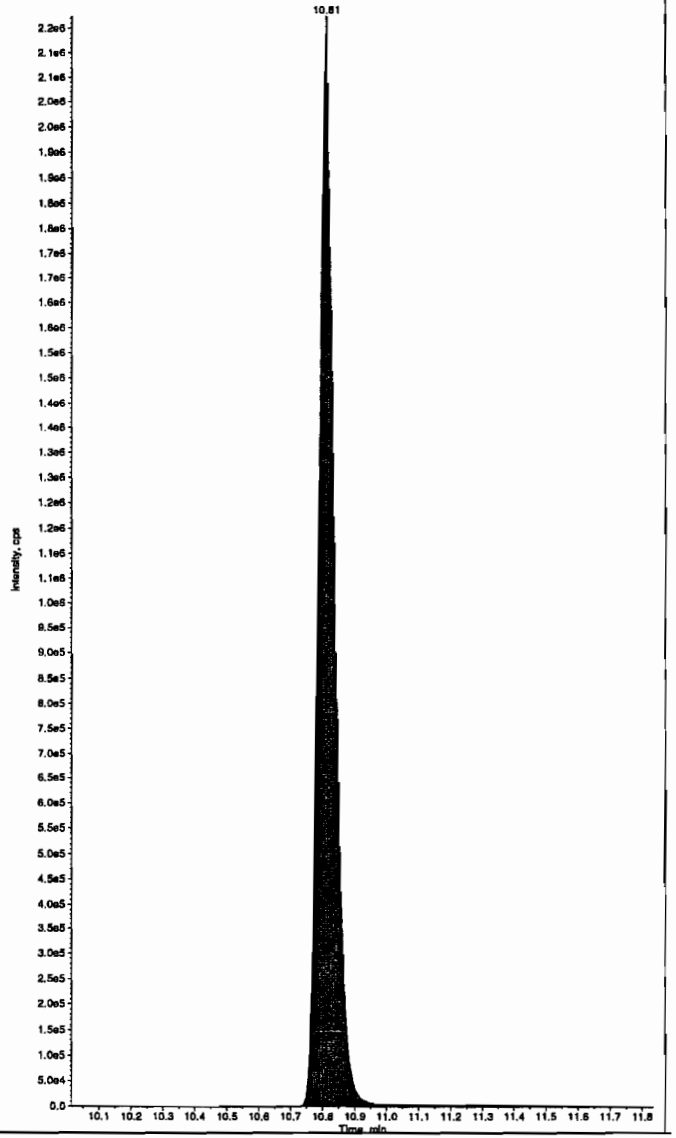


Sample Name: "WXX100303-26CCV" Sample ID: "|1|LER" File: "EXS03030024.wiff"
Peak Name: "Tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 504. ng/mL
Acq. Date: 3/3/2010
Acq. Time: 3:44:08 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: 7.52e+006 counts
Height: 2173588.379 cps
Start Time: 10.7 min
End Time: 11.0 min



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

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1623

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03030026.wiff

Analysis Date: 03-MAR-10 16:15

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

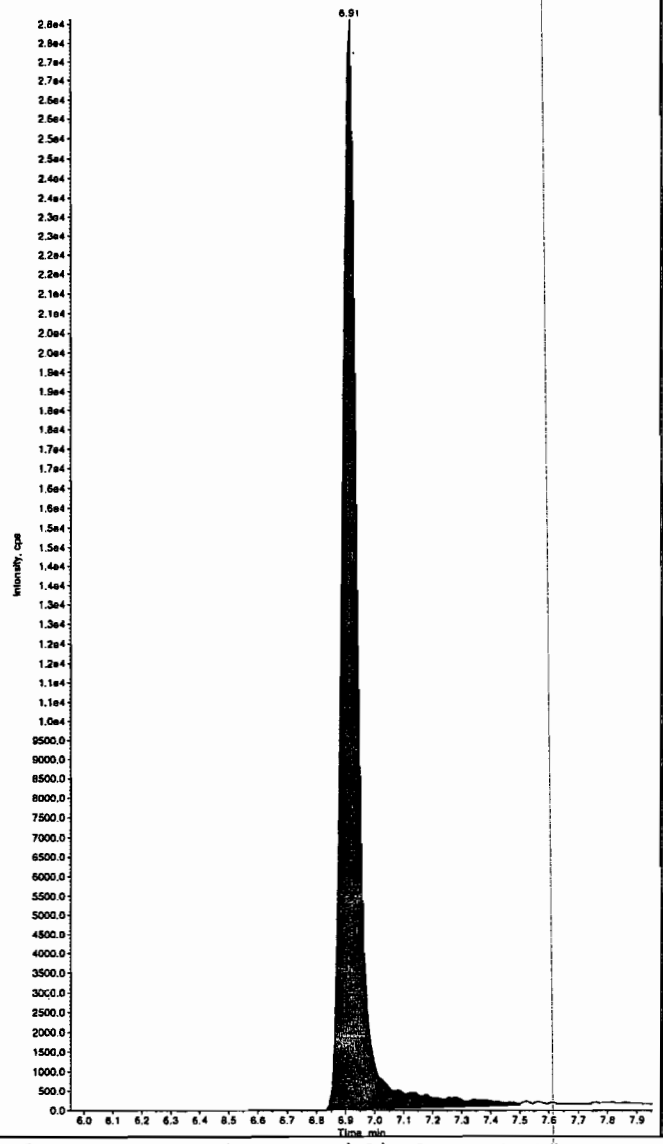
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	98.1	98	
2,6-Diamino-4-nitrotoluene	100	101	101	
3,4-Dinitrotoluene	50	49.5	99	
3,5-Dinitroaniline	100	102	102	
TATB	100	106	106	
tris(o-cresyl) phosphate	100	103	103	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

LCM 3/8/10

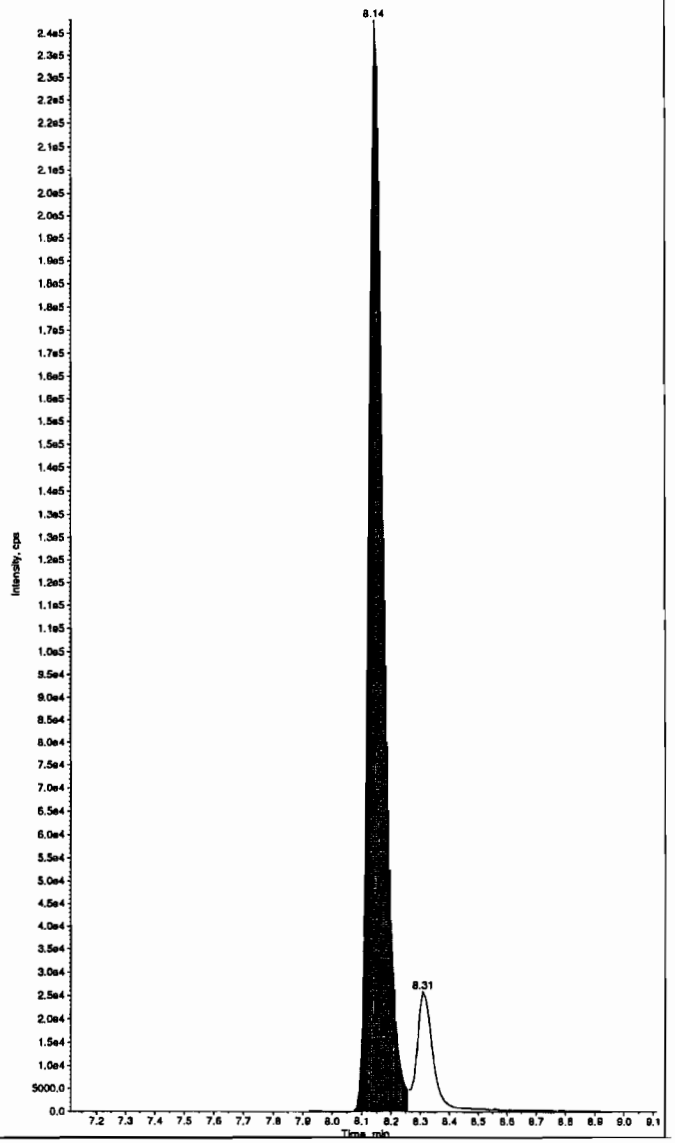
Sample Name: "WXX100303-27CRI" Sample ID: "[1]LER" File: "EXS03030026.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	106. ng/mL
Acq. Date:	3/3/2010
Acq. Time:	4:15:43 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:	6.96 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.91 min
Area:	1.13e+005 counts
Height:	28097.651 cps
Start Time:	6.82 min
End Time:	7.50 min



Sample Name: "WXX100303-27CRI" Sample ID: "[1]LER" File: "EXS03030026.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	103. ng/mL
Acq. Date:	3/3/2010
Acq. Time:	4:15:43 PM
Modified:	Yes
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	2000.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.11 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.14 min
Area:	8.70e+005 counts
Height:	238098.145 cps
Start Time:	8.03 min
End Time:	8.26 min



HMM 03/08/10

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

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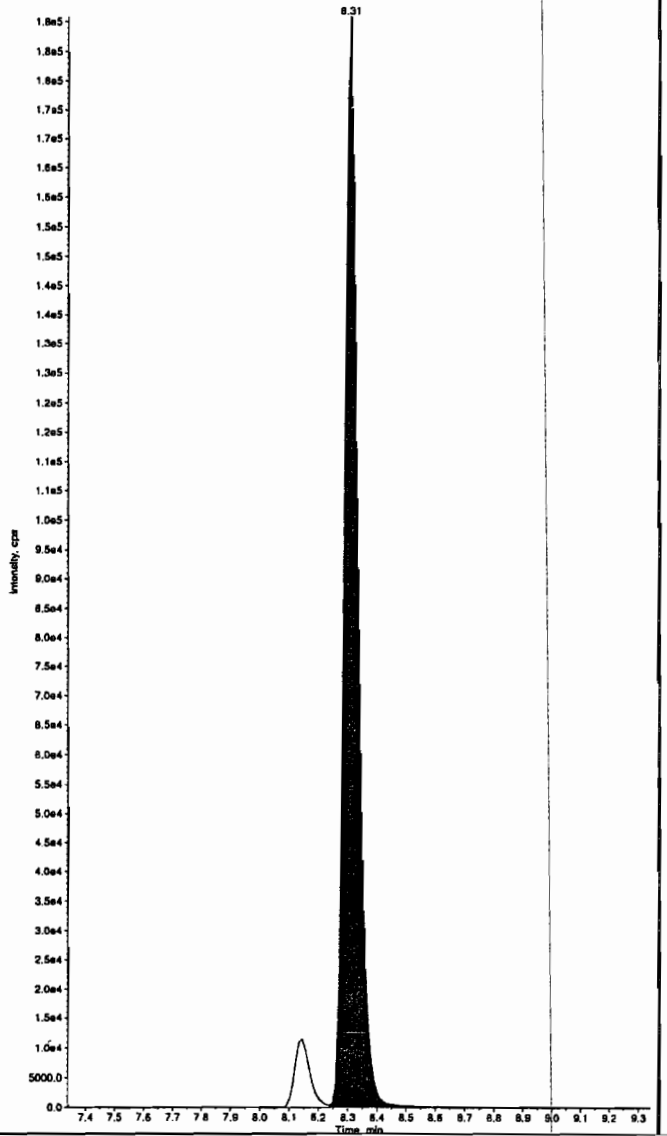
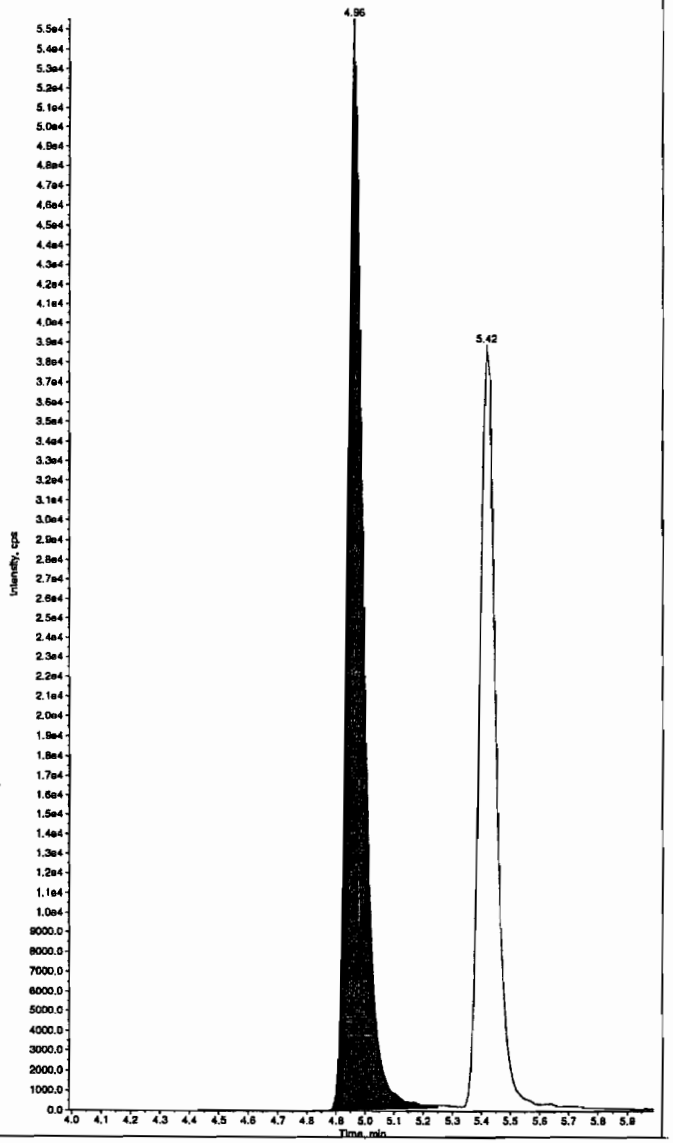
Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030026.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	49.5	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	4:15:43 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	15.0	sec
Expected RT:	8.34	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.31	min
Area:	6.26e+005	counts
Height:	185858.017	cps
Start Time:	8.24	min
End Time:	8.64	min



Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030026.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	101.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	4:15:43 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:	4.99	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.96	min
Area:	2.20e+005	counts
Height:	55481.541	cps
Start Time:	4.85	min
End Time:	5.25	min



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

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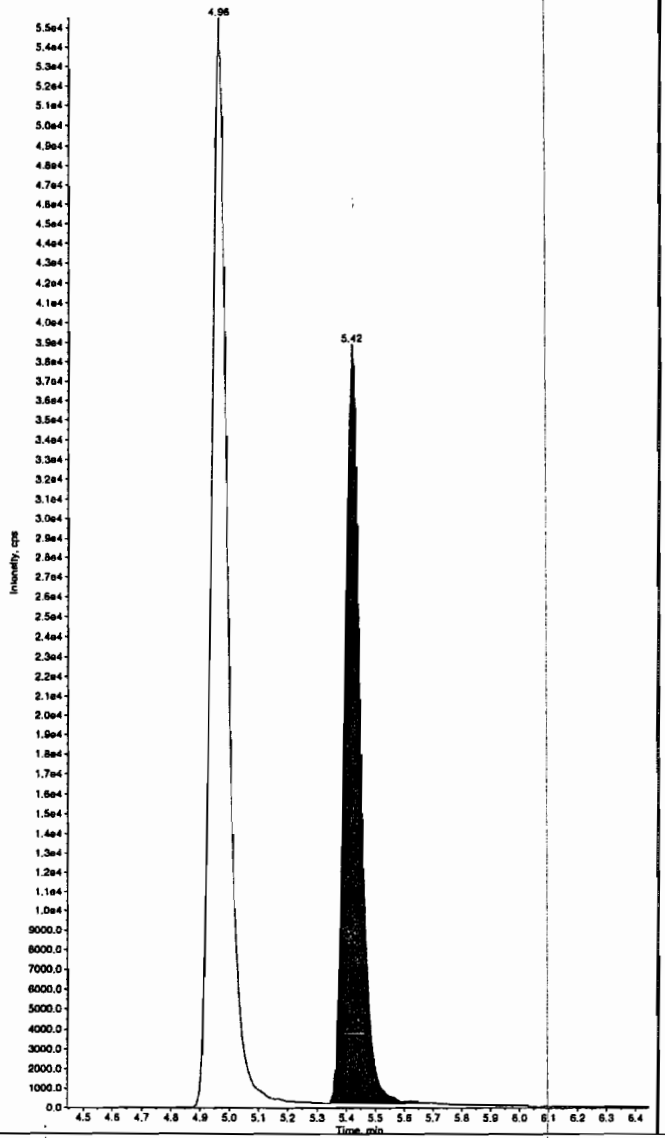
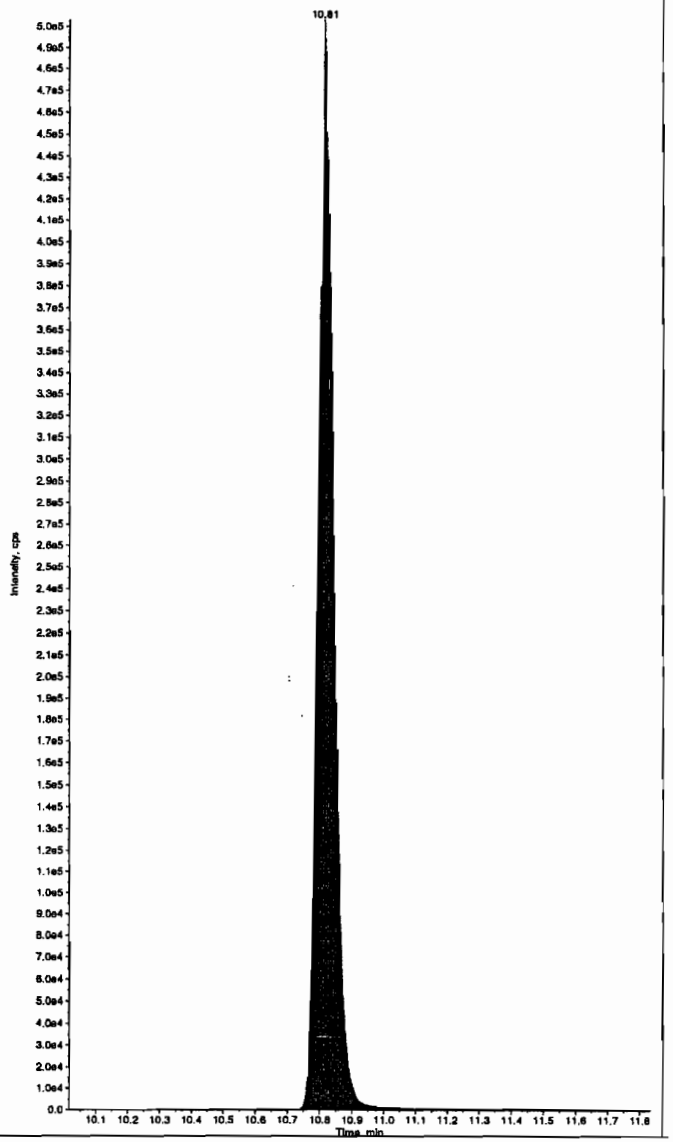
Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030026.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	98.1	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	4:15:43 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:	5.45	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.42	min
Area:	1.53e+005	counts
Height:	38675.751	cps
Start Time:	5.33	min
End Time:	5.66	min



Sample Name: "WXX100303-27CRI" Sample ID: "|1|LER" File: "EXS03030026.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	103.	ng/mL
Acq. Date:	3/3/2010	
Acq. Time:	4:15:43 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:	1.69e+006	counts
Height:	503262.909	cps
Start Time:	10.7	min
End Time:	11.1	min



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

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QUALITY CONTROL DATA

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 950086

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 1202035690

Sample Amount 2

Moisture:

Amount Units g

Date Received: 07-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323018a

Date Analyzed: 23-MAR-10 17:30

Units: ug/kg

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

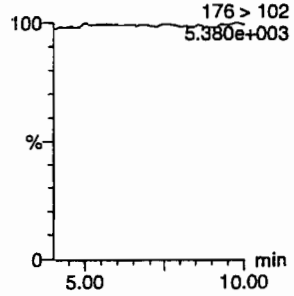
*Concentration =

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

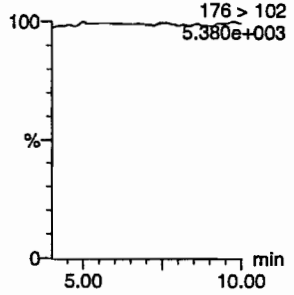
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323018a
Date: 23-Mar-2010
Time: 17:30:13
ID: 1202035690 | LANL | 950087 | Solid | MM | 2 |
Vial: 2:1,A

MM 3/24/10

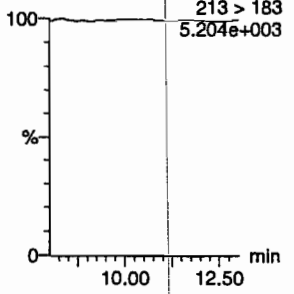
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.380e+003



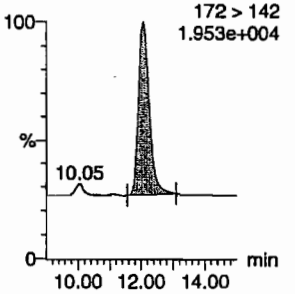
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.380e+003



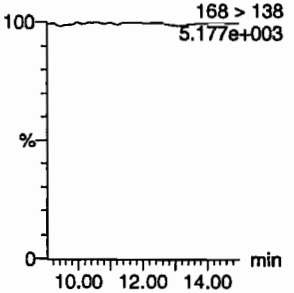
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.204e+003



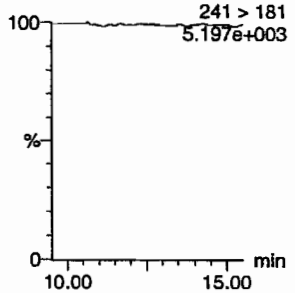
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.953e+004



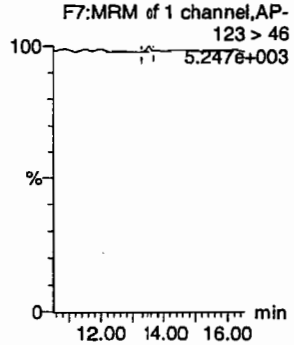
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.177e+003



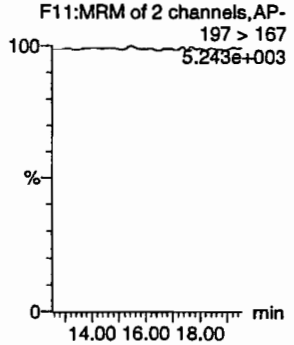
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.197e+003



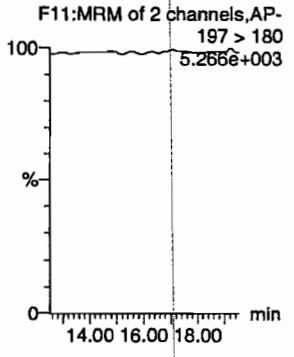
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.247e+003



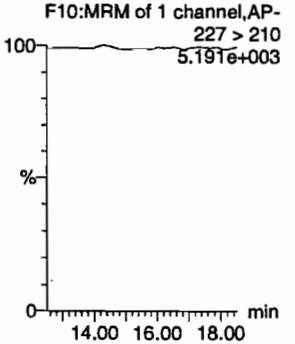
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.243e+003



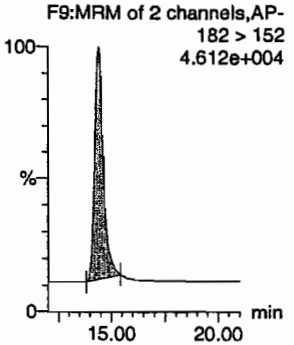
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.266e+003



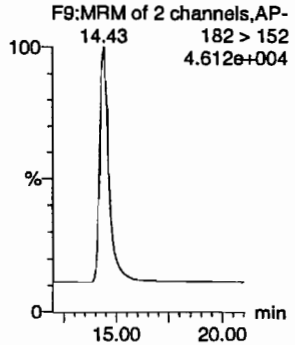
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.191e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
4.612e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.43
182 > 152
4.612e+004



HMM 03/24/10

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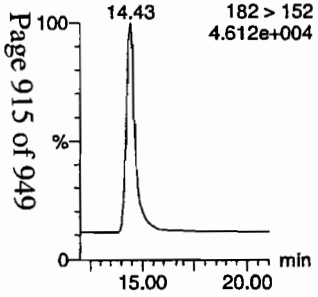
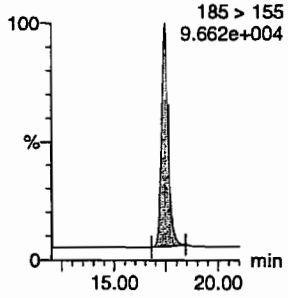
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

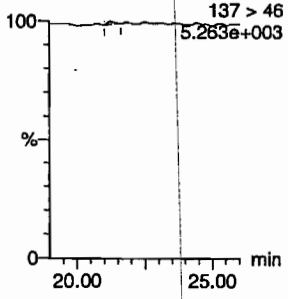
24-dinitrotoluene



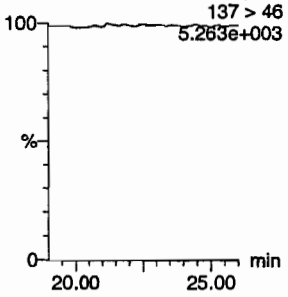
26-dinitrotoluene-d3



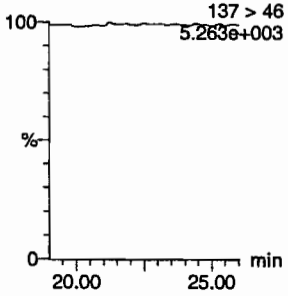
2-Nitrotoluene



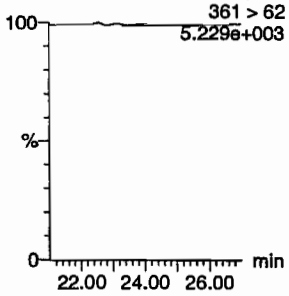
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
1202035690	HMX	176 > 102			5750.093									
1202035690	RDX	176 > 102			5750.093									
1202035690	135-Trinitrobenzene	213 > 183			5750.093									
1202035690	13-Dinitrobenzene-d4	172 > 142	12.07	5750.093		5750.093	5750.093	bb			522.3300	104.5	4.5	308.2
1202035690	13-Dinitrobenzene	168 > 138			5750.093									
1202035690	Tetryl	241 > 181			5750.093									
1202035690	Nitrobenzene	123 > 46			5750.093			MM-	24-Mar-10	09:17:48				
1202035690	4-Amino-26-dinitrotoluene	197 > 167			35516.586									
1202035690	2-Amino-46-dinitrotoluene	197 > 180			35516.586									
1202035690	246-Trinitrotoluene	227 > 210			35516.586									
1202035690	34-dinitrotoluene	182 > 152	14.43	19293.844	35516.586	19293.844	271.617	bb			256.5130	102.6	2.6	974.1
1202035690	26-dinitrotoluene	182 > 152			35516.586									
1202035690	24-dinitrotoluene	182 > 152			35516.586									
1202035690	26-dinitrotoluene-d3	185 > 155	17.44	35516.586		35516.586	35516.586	bb			515.7710	103.2	3.2	2094.8
1202035690	2-Nitrotoluene	137 > 46			35516.586			MM-	24-Mar-10	09:18:51				
1202035690	4-Nitrotoluene	137 > 46			35516.586									
1202035690	3-Nitrotoluene	137 > 46			35516.586									
1202035690	PETN	361 > 62			35516.586									

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 950086

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 1202035690

Sample Amount 2

Moisture:

Amount Units g

Date Received: 07-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03010127.wiff

Date Analyzed: 02-MAR-10 18:07

Units: ug/kg

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

*Concentration =

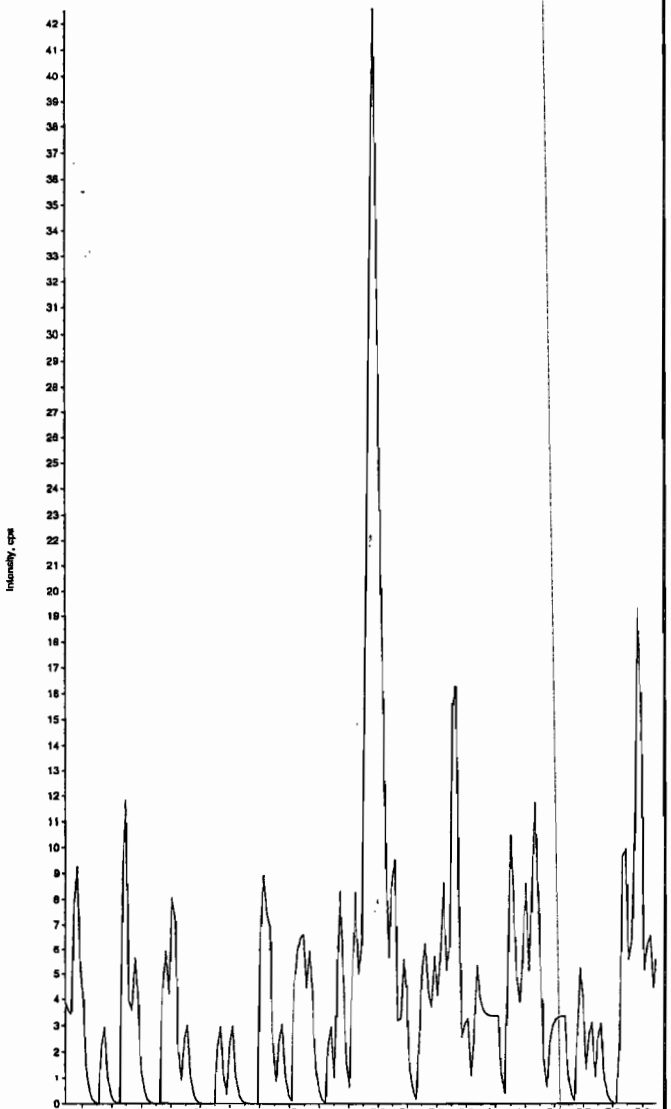
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Lan 3/3/10

Sample Name: "1202035690" Sample ID: "950087|2|LER" File: "EXS03010127.wiff"
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: 3/2/2010
Acq. Time: 6:07:00 PM

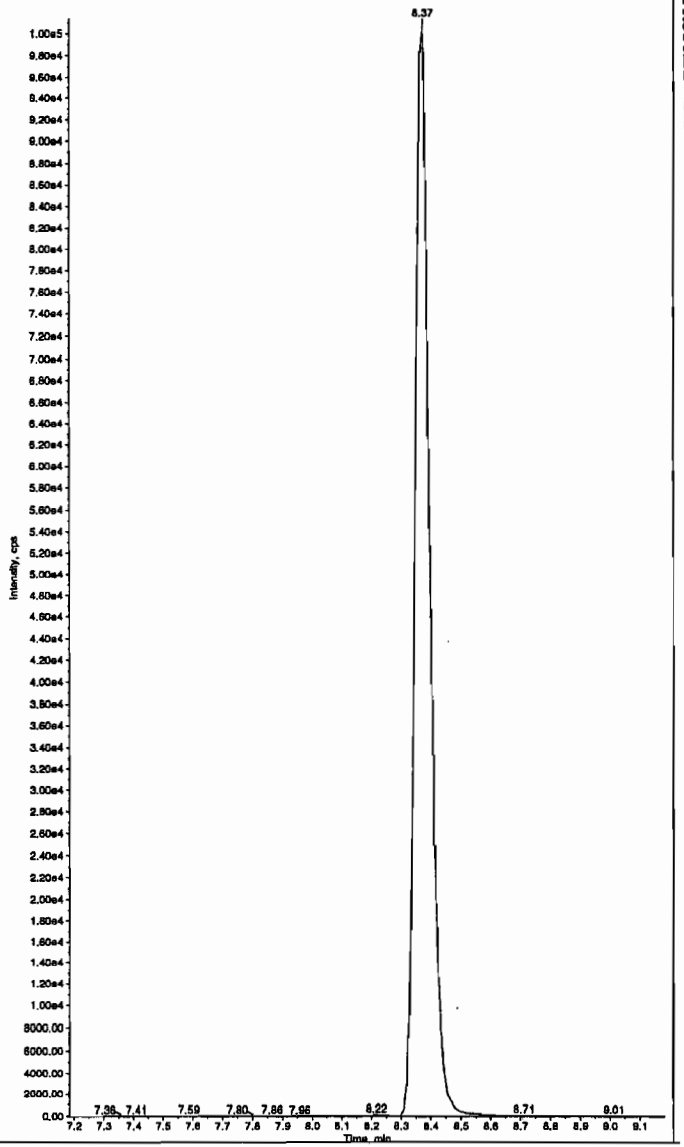
Modified: No



Sample Name: "1202035690" Sample ID: "950087|2|LER" File: "EXS03010127.wiff"
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: 3/2/2010
Acq. Time: 6:07:00 PM

Modified: No



Ann 03/04/10

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

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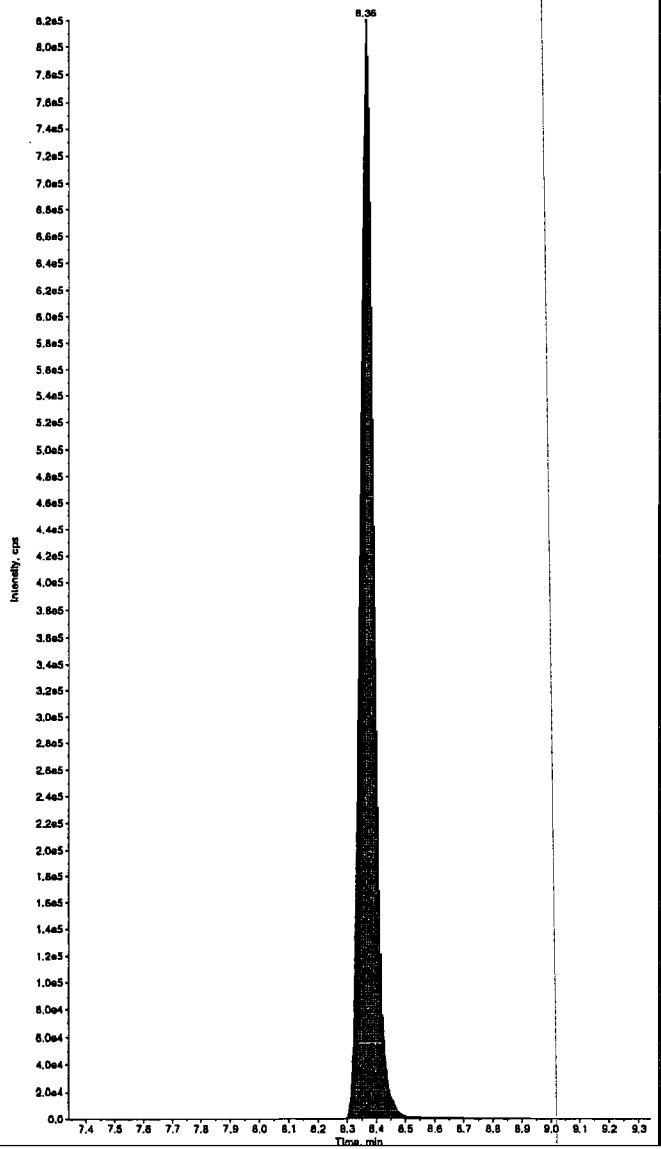
Sample Name: "1202035690" Sample ID: "950087|2|LER" File: "EXS03010127.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 232. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:07:00 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.34 min
Use Relative RT: No

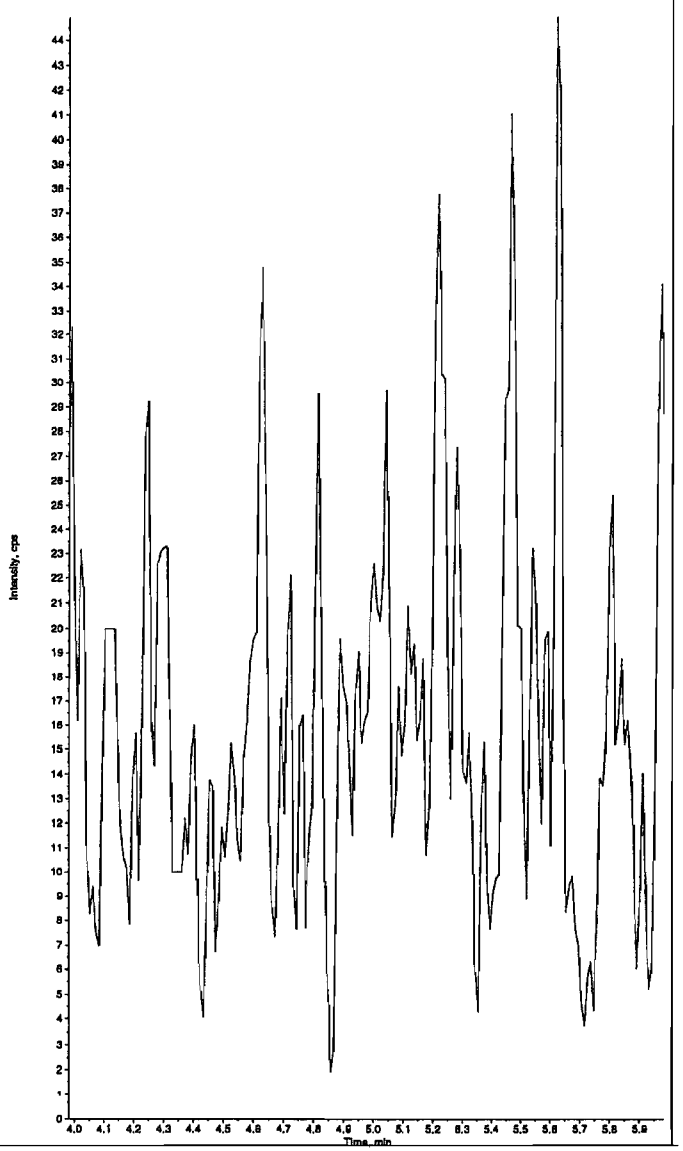
Int. Type: Valley
Retention Time: 8.36 min
Area: 2.83e+006 counts
Height: 821059.753 cps
Start Time: 8.28 min
End Time: 8.70 min



Sample Name: "1202035690" Sample ID: "950087|2|LER" File: "EXS03010127.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:07:00 PM

Modified: No



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

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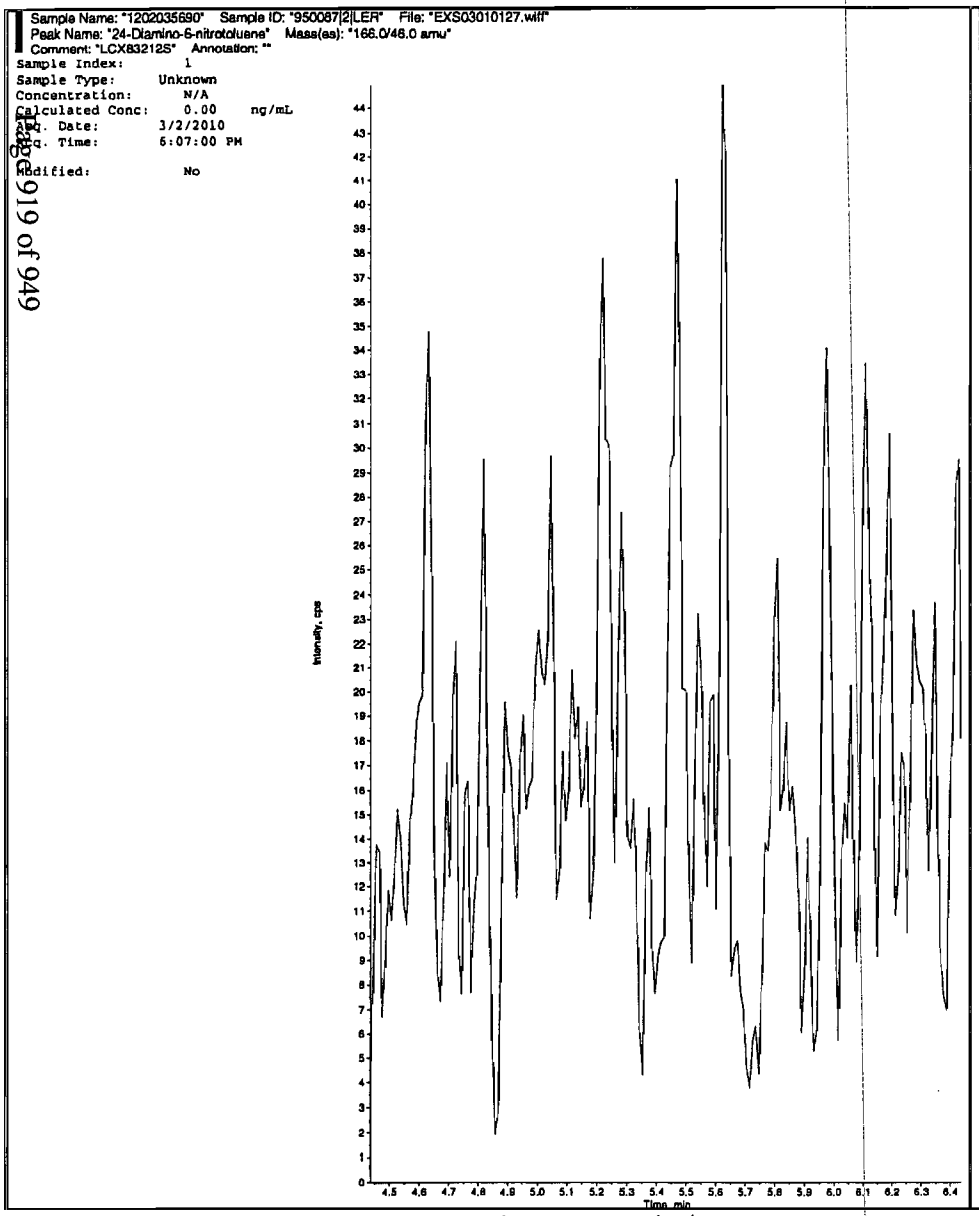

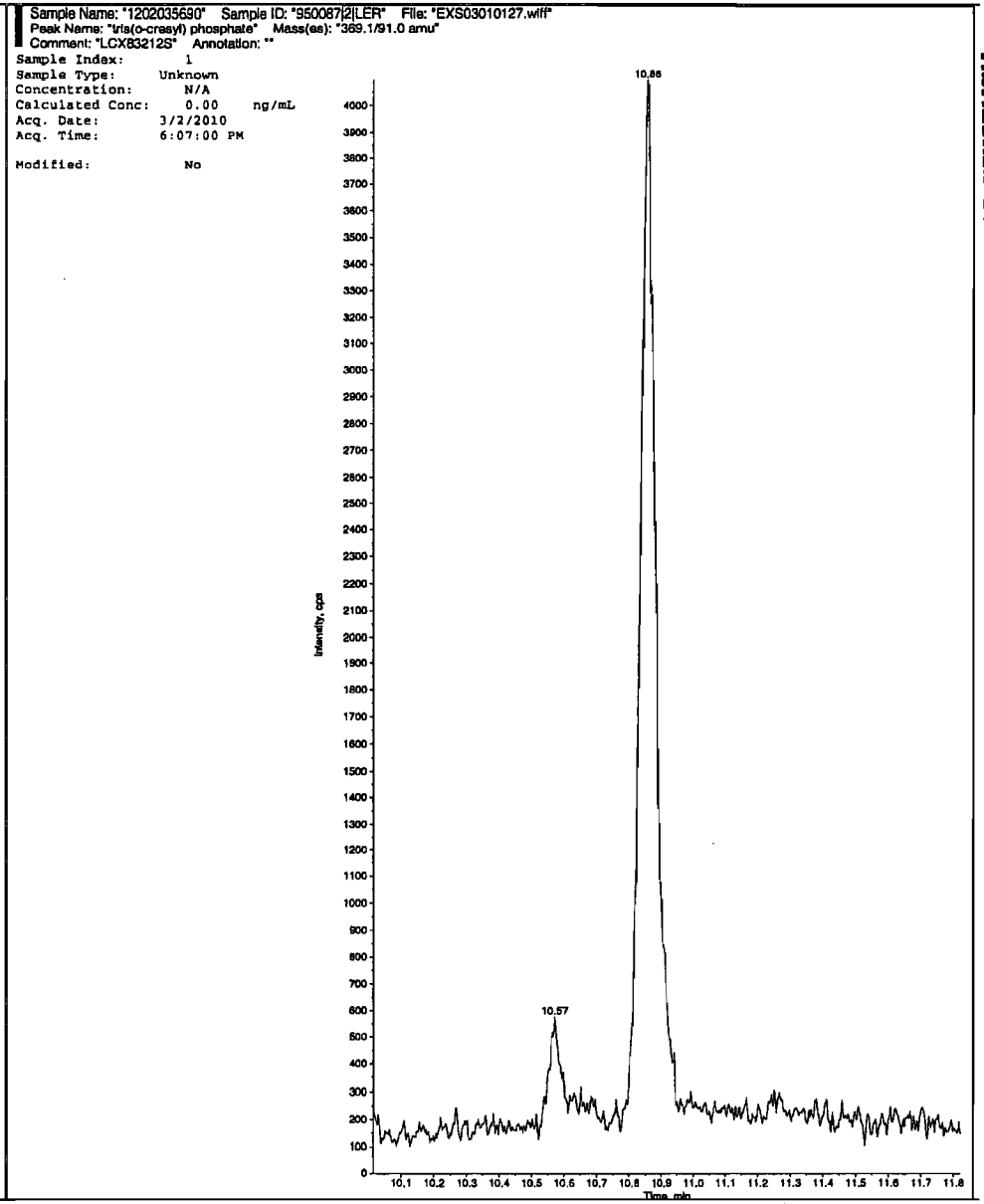

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 950086

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 1202035691

Sample Amount 2

Moisture:

Amount Units g

Date Received: 07-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323019a

Date Analyzed: 23-MAR-10 17:59

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4540	
121-14-2	2,4-Dinitrotoluene	5080	
121-82-4	RDX	5410	
19406-51-0	4-Amino-2,6-dinitrotoluene	5260	
2691-41-0	HMX	4830	
35572-78-2	2-Amino-4,6-dinitrotoluene	5440	
479-45-8	Tetryl	2560	
606-20-2	2,6-Dinitrotoluene	5040	
78-11-5	PETN	5730	
88-72-2	o-Nitrotoluene	5210	
98-95-3	Nitrobenzene	4870	
99-08-1	m-Nitrotoluene	5170	
99-35-4	1,3,5-Trinitrobenzene	4280	
99-65-0	m-Dinitrobenzene	5150	
99-99-0	p-Nitrotoluene	5340	

*Concentration =

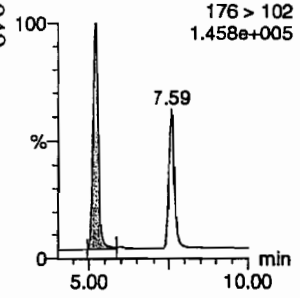
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323019a
Date: 23-Mar-2010
Time: 17:59:46
ID: 1202035691
Vial: 2:1,B

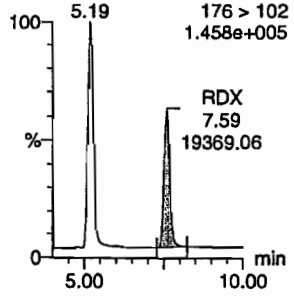
MM 3/24/10

LANL / 950082 / Solid / LCS / 2

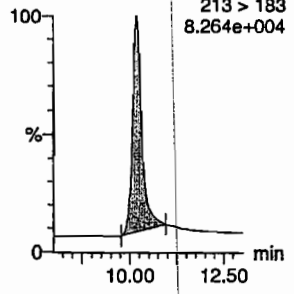
HMX



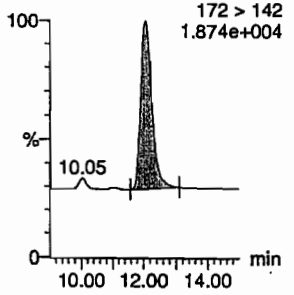
RDX



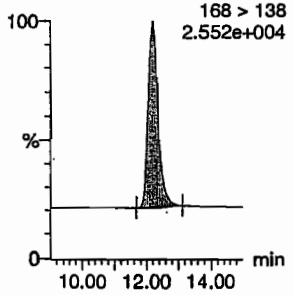
135-Trinitrobenzene



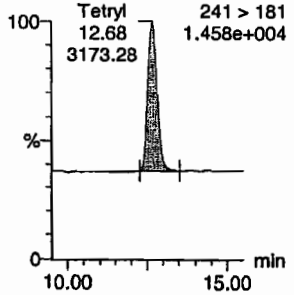
13-Dinitrobenzene-d4



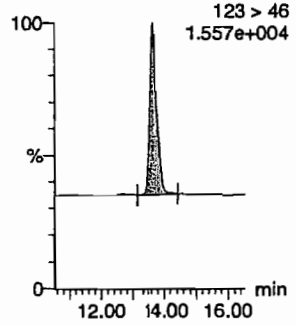
13-Dinitrobenzene



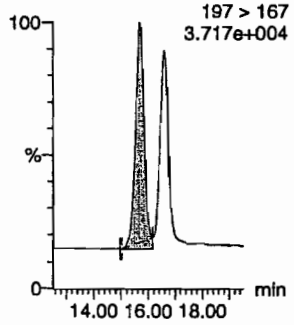
Tetryl



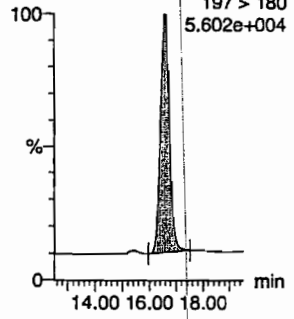
Nitrobenzene



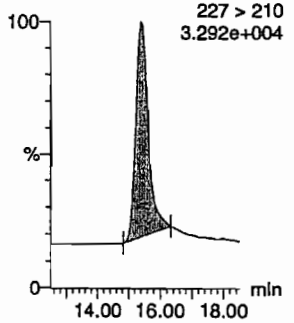
4-Amino-26-dinitrotoluene



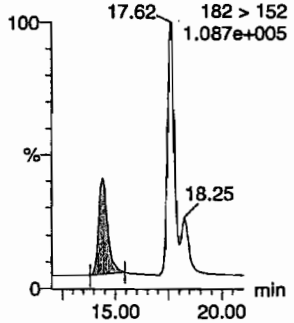
2-Amino-46-dinitrotoluene



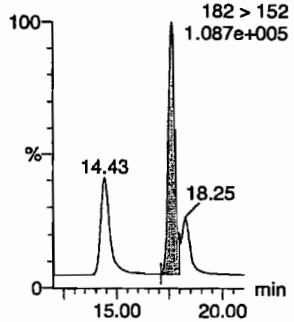
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



Hmm 03/24/10

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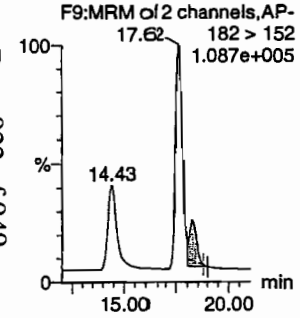
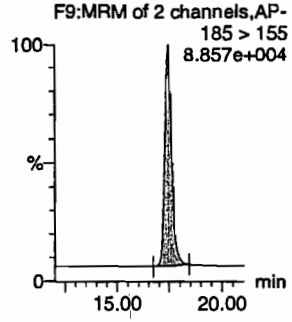
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

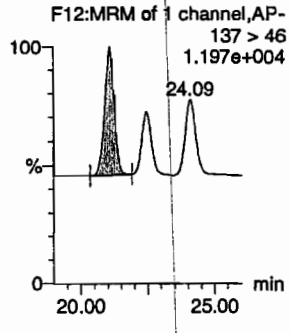
24-dinitrotoluene



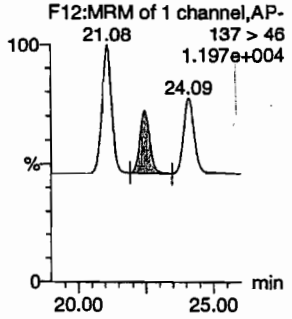
26-dinitrotoluene-d3



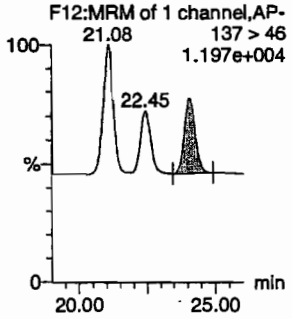
2-Nitrotoluene



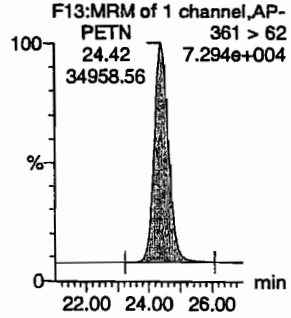
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
1202035691	HMX	176 > 102	5.19	28770.895	5406.396	28770.895	2660.820	dd			482.6354	96.5	-3.5	1846.9
1202035691	RDX	176 > 102	7.59	19369.064	5406.396	19369.064	1791.310	bb			540.9698	108.2	8.2	1135.4
1202035691	135-Trinitrobenzene	213 > 183	10.20	21855.439	5406.396	21855.439	2021.258	bb			427.6705	85.5	-14.5	5004.3
1202035691	13-Dinitrobenzene-d4	172 > 142	12.07	5406.396		5406.396	5406.396	bb			491.1091	98.2	-1.8	711.4
1202035691	13-Dinitrobenzene	168 > 138	12.20	7401.354	5406.396	7401.354	684.500	bb			515.4577	103.1	3.1	336.5
1202035691	Tetryl	241 > 181	12.68	3173.282	5406.396	3173.282	293.475	bb			255.9012	51.2	-48.8	289.5
1202035691	Nitrobenzene	123 > 46	13.63	3453.114	5406.396	3453.114	319.355	bb			487.4507	97.5	-2.5	413.8
1202035691	4-Amino-26-dinitrotoluene	197 > 167	15.68	12100.677	32568.648	12100.677	185.772	MM	24-Mar-10	09:21:12	525.7073	105.1	5.1	528.6
1202035691	2-Amino-46-dinitrotoluene	197 > 180	16.58	19418.797	32568.648	19418.797	298.121	bb			544.4287	108.9	8.9	935.3
1202035691	246-Trinitrotoluene	227 > 210	15.41	12114.537	32568.648	12114.537	185.985	bb			453.5428	90.7	-9.3	890.8
1202035691	34-dinitrotoluene	182 > 152	14.43	18694.117	32568.648	18694.117	286.996	bb			271.0361	108.4	8.4	506.8
1202035691	26-dinitrotoluene	182 > 152	17.62	38005.422	32568.648	38005.422	583.466	MM	24-Mar-10	09:24:30	504.2875	100.9	0.9	1346.8
1202035691	24-dinitrotoluene	182 > 152	18.25	9174.444	32568.648	9174.444	140.848	MM	24-Mar-10	09:28:01	507.5683	101.5	1.5	284.9
1202035691	26-dinitrotoluene-d3	185 > 155	17.44	32568.648		32568.648	32568.648	bb			472.9612	94.6	-5.4	3121.5
1202035691	2-Nitrotoluene	137 > 46	21.08	2736.248	32568.648	2736.248	42.007	bb			520.9041	104.2	4.2	721.7
1202035691	4-Nitrotoluene	137 > 46	22.45	1355.309	32568.648	1355.309	20.807	bb			534.3218	106.9	6.9	346.5
1202035691	3-Nitrotoluene	137 > 46	24.09	1696.861	32568.648	1696.861	26.051	bb			516.6584	103.3	3.3	417.8
1202035691	PETN	361 > 62	24.42	34958.563	32568.648	34958.563	536.690	bb			572.6951	114.5	14.5	8790.0

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 950086

Lab Code: GEL

GEL Job No (SDG) 10-1623

Matrix: SOIL

GEL Sample ID: 1202035691

Sample Amount 2

Moisture:

Amount Units g

Date Received: 07-FEB-10

Extraction Type Sonication

Extraction Batch ID: 950086

Concentrated Extract Volume (mL) 10

Date Extracted: 16-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03010128.wiff

Date Analyzed: 02-MAR-10 18:22

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5020	
59229-75-3	2,6-Diamino-4-nitrotoluene	5690	
618-87-1	3,5-Dinitroaniline	4660	
6629-29-4	2,4-Diamino-6-nitrotoluene	5490	
78-30-8	tris(o-cresyl) phosphate	4780	

*Concentration = Instrument Value X Concentrated Extract Volume / Sample Amoun X Dilution Factor

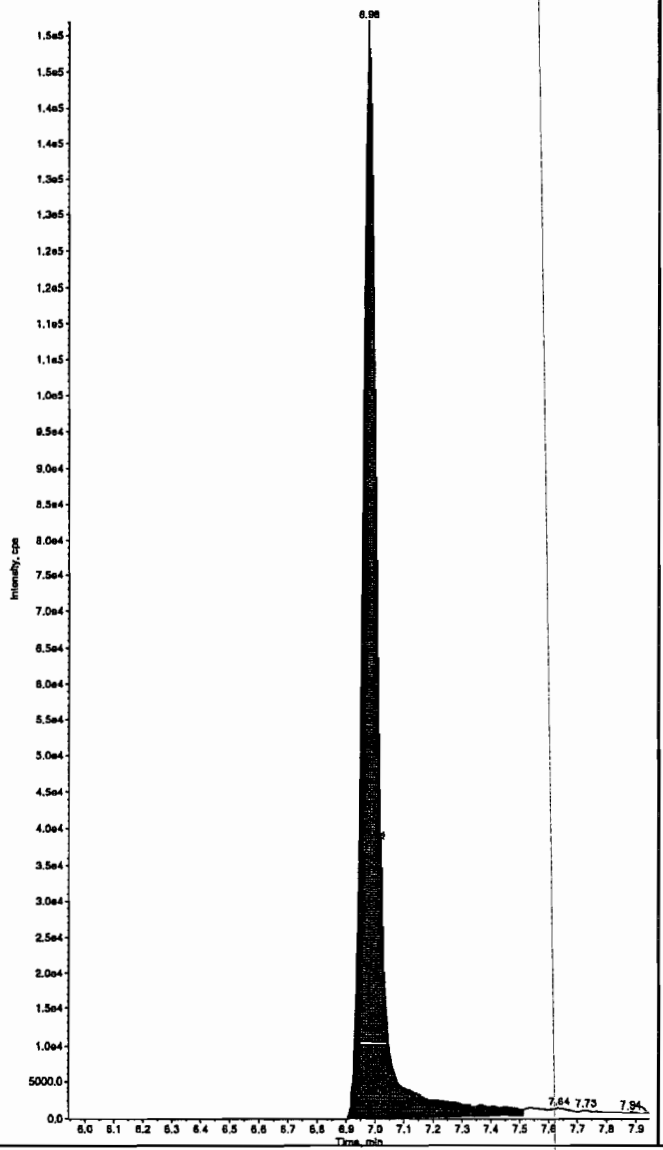
Jan 3/3/10

Sample Name: "1202035691" Sample ID: "950087|2|LER" File: "EXS03010128.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 502. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:22:50 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 6.98 min
Area: 6.00e+005 counts
Height: 151965.332 cps
Start Time: 6.88 min
End Time: 7.51 min

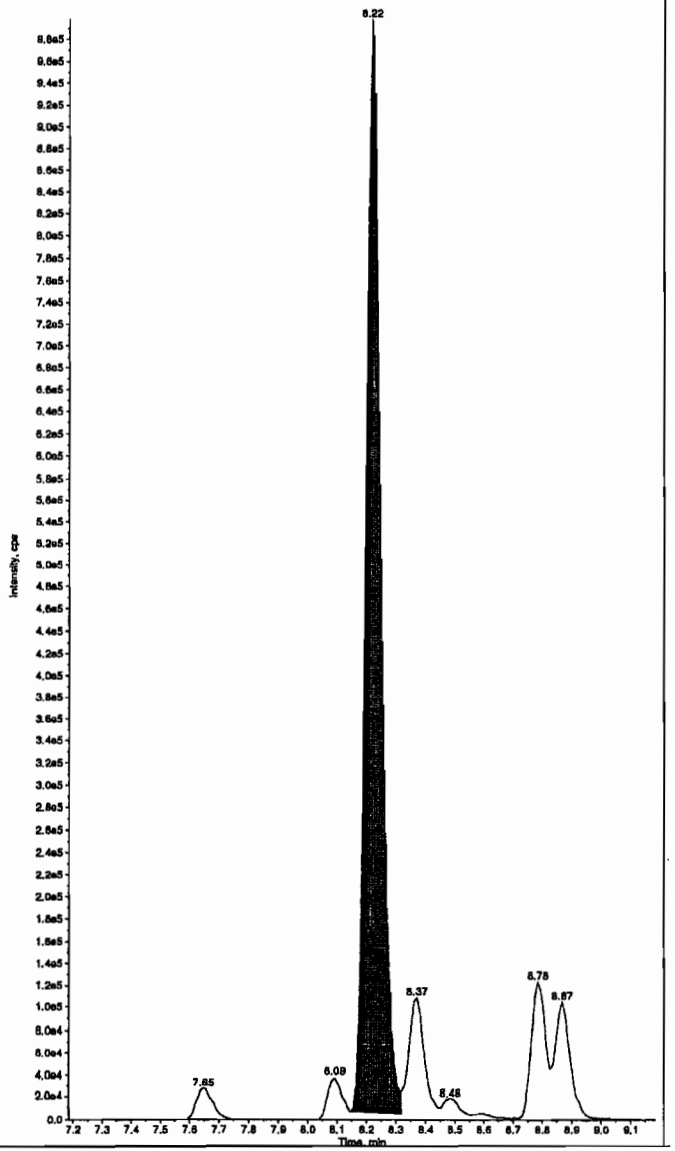


Sample Name: "1202035691" Sample ID: "950087|2|LER" File: "EXS03010128.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 466. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:22:50 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.22 min
Area: 3.67e+006 counts
Height: 992777.100 cps
Start Time: 8.14 min
End Time: 8.32 min



Hmm 03/04/10

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

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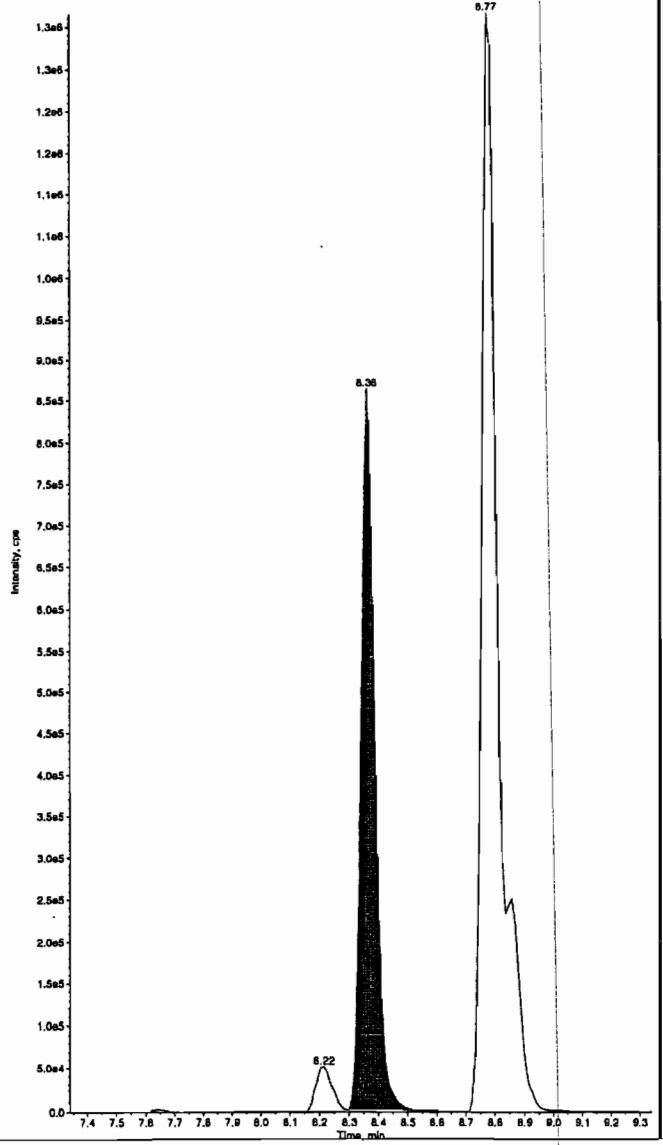
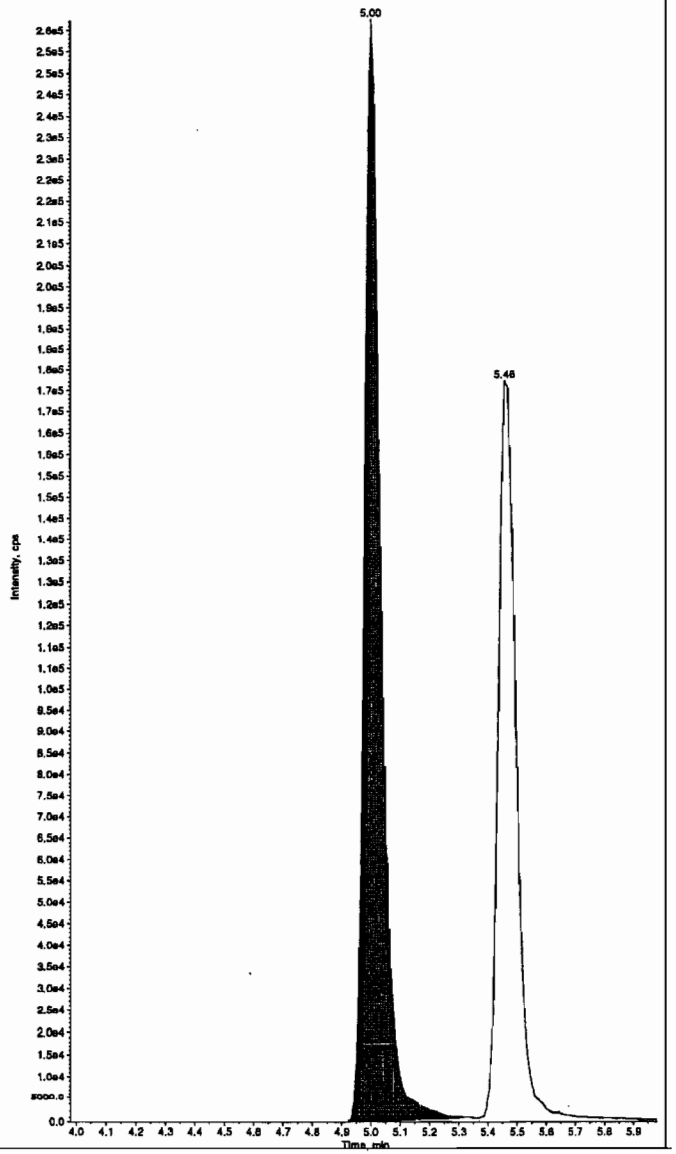
Sample Name: "1202035691" Sample ID: "950087|2|LER" File: "EXS03010128.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	238. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	6:22:50 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.36 min
Area:	2.90e+006 counts
Height:	860906.921 cps
Start Time:	8.29 min
End Time:	8.53 min



Sample Name: "1202035691" Sample ID: "950087|2|LER" File: "EXS03010128.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	569. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	6:22:50 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.00 min
Area:	1.06e+006 counts
Height:	257262.024 cps
Start Time:	4.91 min
End Time:	5.30 min



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

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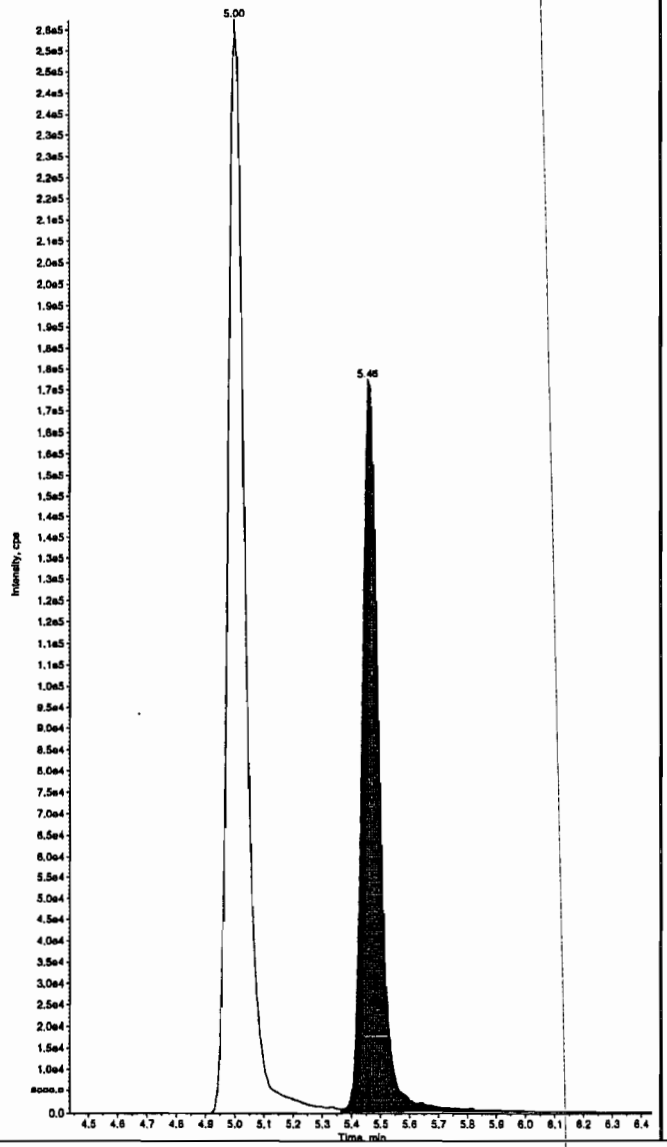
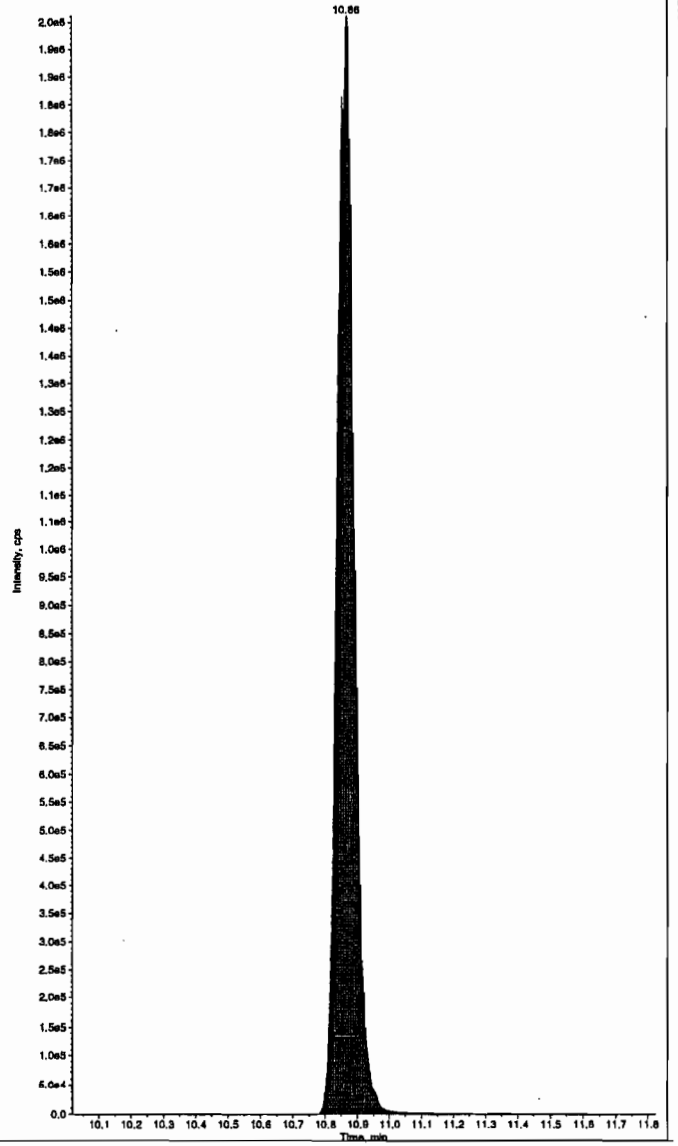
Sample Name: "1202035691" Sample ID: "950087|2|LER" File: "EXS03010128.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	549. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	6:22:50 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:	5.44 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.46 min
Area:	7.28e+005 counts
Height:	171622.025 cps
Start Time:	5.36 min
End Time:	5.96 min



Sample Name: "1202035691" Sample ID: "950087|2|LER" File: "EXS03010128.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	478. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	6:22:50 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:	7.50e+006 counts
Height:	1961634.521 cps
Start Time:	10.7 min
End Time:	11.2 min



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

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MISCELLANEOUS DATA

Prep Logbook

Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 950086 **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)
1202035690 MB	16-FEB-2010 15:00:00	2	10	5
1202035691 LCS	16-FEB-2010 15:00:00	2	10	5
246434002	16-FEB-2010 15:00:00	2	10	5
1202035692 MS (246434002)	16-FEB-2010 15:00:00	2	10	5
1202035693 MSD (246434002)	16-FEB-2010 15:00:00	2	10	5
246434003	16-FEB-2010 15:00:00	2	10	5
246434004	16-FEB-2010 15:00:00	2	10	5
246434005	16-FEB-2010 15:00:00	2	10	5
246434006	16-FEB-2010 15:00:00	2	10	5
246434007	16-FEB-2010 15:00:00	2	10	5
246434008	16-FEB-2010 15:00:00	2	10	5
246434009	16-FEB-2010 15:00:00	2	10	5
246434010	16-FEB-2010 15:00:00	2	10	5
246434011	16-FEB-2010 15:00:00	2	10	5
246434012	16-FEB-2010 15:00:00	2	10	5
246434013	16-FEB-2010 15:00:00	2	10	5
246434014	16-FEB-2010 15:00:00	2	10	5
246434015	16-FEB-2010 15:00:00	2	10	5
246442002	16-FEB-2010 15:00:00	2	10	5
246442003	16-FEB-2010 15:00:00	2	10	5
246442004	16-FEB-2010 15:00:00	2	10	5
246442005	16-FEB-2010 15:00:00	2	10	5
246442006	16-FEB-2010 15:00:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202035691	8321 Explosives LCS	IXX100208-03	.1	mL	Final Solvent: ACN
LCS	1202035691	8321 LANL Explosives Mix 10mg/L	UXX100210-02.1	1	mL	
MS	1202035692	8321 Explosives LCS	IXX100208-03	.1	mL	
MS	1202035692	8321 LANL Explosives Mix 10mg/L	UXX100210-02.1	1	mL	
MSD	1202035693	8321 Explosives LCS	IXX100208-03	.1	mL	
MSD	1202035693	8321 LANL Explosives Mix 10mg/L	UXX100210-02.1	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Surr.) 100ppm	IXP100215-02	.05	mL	

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 03/23/10
Extr. Injection Volume: 50uL
Sequence Number: 032310expA
Initial Calibration Date: 03/23/10

Method: SW846 8321A-Modified
Int. Std.: UXX100309-01.2
Mobile Phase Lot#: 1289327, 1281642
Standard-Samp Reagent Lot#: 1283379, 1284736

Reviewed BY: [signature]
Date: 03/24/10
SOP: GL-OA-E-056 Rev.12
Alt Check Std. ID: WXX100323-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0323001a	XIBLK01	MAP	3/23/10 9:08			1		USE	B
EXP0323002a	XIBLK01	MAP	3/23/10 9:38			1		USE	B
EXP0323003a	WXXICAL-01	MAP	3/23/10 10:08			1		USE	I
EXP0323004a	WXXICAL-02	MAP	3/23/10 10:37			1		USE	I
EXP0323005a	WXXICAL-03	MAP	3/23/10 11:07			1		USE	I
EXP0323006a	WXXICAL-04	MAP	3/23/10 11:36			1		USE	I
EXP0323007a	WXXICAL-05	MAP	3/23/10 12:05			1		USE	I
EXP0323008a	WXXICAL-06	MAP	3/23/10 12:35			1		USE	I
EXP0323009a	XIBLK02	MAP	3/23/10 13:04			1		USE	B
EXP0323010a	WXXICV	MAP	3/23/10 13:34			1		USE	C
EXP0323011a	XIBLK03	MAP	3/23/10 14:03			1		USE	B
EXP0323012a	WXXCRI	MAP	3/23/10 14:33			1		USE	C
EXP0323013a	247562004	MAP	3/23/10 15:02	956045	10-1950	2	LANL	USE	S
EXP0323014a	247565007	MAP	3/23/10 15:32	956053	10-1956	2	LANL	USE	S
EXP0323015a	247565008	MAP	3/23/10 16:01	956053	10-1956	2	LANL	USE	S
EXP0323016a	247565009	MAP	3/23/10 16:31	956053	10-1956	2	LANL	USE	S
EXP0323017a	247565010	MAP	3/23/10 17:00	956053	10-1956	2	LANL	USE	S
EXP0323018a	1202035690	MAP	3/23/10 17:30	950087	Various	2	LANL	USE	S
EXP0323019a	1202035691	MAP	3/23/10 17:59	950087	Various	2	LANL	USE	S
EXP0323020a	246434002	MAP	3/23/10 18:29	950087	10-1620	2	LANL	USE	S
EXP0323021a	1202035692	MAP	3/23/10 18:58	950087	10-1620	2	LANL	USE	S
EXP0323022a	1202035693	MAP	3/23/10 19:28	950087	10-1620	2	LANL	USE	S
EXP0323023a	WXXCCV	MAP	3/23/10 19:57			1		USE	C
EXP0323024a	XIBLK04	MAP	3/23/10 20:27			1		USE	B
EXP0323025a	WXXCRI	MAP	3/23/10 20:56			1		USE	C
EXP0323026a	246434003	MAP	3/23/10 21:26	950087	10-1620	2	LANL	USE	S
EXP0323027a	246434004	MAP	3/23/10 21:55	950087	10-1620	2	LANL	USE	S
EXP0323028a	246434005	MAP	3/23/10 22:25	950087	10-1620	2	LANL	USE	S
EXP0323029a	246434006	MAP	3/23/10 22:54	950087	10-1620	2	LANL	USE	S

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EXP0323030a	246434007	MAP	3/23/10 23:24	950087	10-1620	2	LANL	USE	S
EXP0323031a	246434008	MAP	3/23/10 23:53	950087	10-1620	2	LANL	USE	S
EXP0323032a	246434009	MAP	3/24/10 0:23	950087	10-1620	2	LANL	USE	S
EXP0323033a	246434010	MAP	3/24/10 0:52	950087	10-1620	2	LANL	USE	S
EXP0323034a	246434011	MAP	3/24/10 1:22	950087	10-1620	2	LANL	USE	S
EXP0323035a	246434012	MAP	3/24/10 1:51	950087	10-1620	2	LANL	USE	S
EXP0323036a	WXXCCV	MAP	3/24/10 2:21			1		USE	C
EXP0323037a	XIBLK05	MAP	3/24/10 2:50			1		USE	B
EXP0323038a	WXXCRI	MAP	3/24/10 3:20			1		USE	C
EXP0323039a	246434013	MAP	3/24/10 3:49	950087	10-1620	2	LANL	USE	S
EXP0323040a	246434014	MAP	3/24/10 4:19	950087	10-1620	2	LANL	USE	S
EXP0323041a	246434015	MAP	3/24/10 4:48	950087	10-1620	2	LANL	USE	S
EXP0323042a	246442002	MAP	3/24/10 5:18	950087	10-1623	2	LANL	USE	S
EXP0323043a	246442003	MAP	3/24/10 5:47	950087	10-1623	2	LANL	USE	S
EXP0323044a	246442004	MAP	3/24/10 6:17	950087	10-1623	2	LANL	USE	S
EXP0323045a	246442005	MAP	3/24/10 6:46	950087	10-1623	2	LANL	USE	S
EXP0323046a	246442006	MAP	3/24/10 7:15	950087	10-1623	2	LANL	USE	S
EXP0323047a	WXXCCV	MAP	3/24/10 7:45			1		USE	C
EXP0323048a	XIBLK06	MAP	3/24/10 8:15			1		USE	B
EXP0323049a	WXXCRI	MAP	3/24/10 8:44			1		USE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 03/01/10 Method: 8321A-Modified Reviewed By: [signature]
Extr. Injection Volume: 10uL Int. Std.: N/A Date: 03/04/10
Sequence Number: 030110exs Mobile Phase Lot#:1268566, 1268568 SOP: GL-OA-E-056 Rev.12
Initial Calibration Date: 030110 Standard-Samp Reagent Lot# :1274562, 1261217 Alt Check Std. ID: WXX100301-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS03010001.wiff	XIBLK01	LER	3/1/2010 9:03			1		USE	B
EXS03010002.wiff	XIBLK01	LER	3/1/2010 9:19			1		USE	B
EXS03010003.wiff	WXXICAL-19	LER	3/1/2010 9:34			1		USE	I
EXS03010004.wiff	WXXICAL-20	LER	3/1/2010 9:50			1		USE	I
EXS03010005.wiff	WXXICAL-21	LER	3/1/2010 10:06			1		USE	I
EXS03010006.wiff	WXXICAL-22	LER	3/1/2010 10:21			1		USE	I
EXS03010007.wiff	WXXICAL-23	LER	3/1/2010 10:37			1		USE	I
EXS03010008.wiff	WXXICAL-24	LER	3/1/2010 10:53			1		USE	I
EXS03010009.wiff	WXXICAL-25	LER	3/1/2010 11:09			1		USE	I
EXS03010010.wiff	XIBLK02	LER	3/1/2010 11:24			1		USE	B
EXS03010011.wiff	WXXICV	LER	3/1/2010 11:40			1		USE	C
EXS03010012.wiff	XIBLK03	LER	3/1/2010 11:56			1		USE	B
EXS03010013.wiff	WXXCRI	LER	3/1/2010 12:11			1		USE	C
EXS03010014.wiff	246744003	LER	3/1/2010 12:27	952051	10-1736	2	LANL	USE	S
EXS03010015.wiff	246744004	LER	3/1/2010 12:43	952051	10-1736	2	LANL	USE	S
EXS03010016.wiff	246752002	LER	3/1/2010 12:59	952051	10-1745	2	LANL	USE	S
EXS03010017.wiff	246752003	LER	3/1/2010 13:14	952051	10-1745	2	LANL	USE	S
EXS03010018.wiff	246760001	LER	3/1/2010 13:30	952051	10-1739	2	LANL	USE	S
EXS03010019.wiff	246760002	LER	3/1/2010 13:46	952051	10-1739	2	LANL	USE	S
EXS03010020.wiff	246760003	LER	3/1/2010 14:01	952051	10-1739	2	LANL	USE	S
EXS03010021.wiff	246760004	LER	3/1/2010 14:17	952051	10-1739	2	LANL	USE	S
EXS03010022.wiff	246760005	LER	3/1/2010 14:33	952051	10-1739	2	LANL	USE	S
EXS03010023.wiff	246760006	LER	3/1/2010 14:49	952051	10-1739	2	LANL	USE	S
EXS03010024.wiff	WXXCCV	LER	3/1/2010 15:04			1		USE	C
EXS03010025.wiff	XIBLK04	LER	3/1/2010 15:20			1		USE	B
EXS03010026.wiff	WXXCRI	LER	3/1/2010 15:36			1		USE	C
EXS03010027.wiff	246760007	LER	3/1/2010 15:52	952051	10-1739	2	LANL	USE	S
EXS03010028.wiff	246760008	LER	3/1/2010 16:07	952051	10-1739	2	LANL	USE	S
EXS03010029.wiff	246760009	LER	3/1/2010 16:23	952051	10-1739	2	LANL	USE	S
EXS03010030.wiff	246760010	LER	3/1/2010 16:39	952051	10-1739	2	LANL	USE	S

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EXS03010031.wiff	XIBLK05	LER	3/1/2010 16:55			1		USE	B
EXS03010032.wiff	1202040457	LER	3/1/2010 17:10	952043	VARIOUS	2	LANL	USE	S
EXS03010033.wiff	1202040458	LER	3/1/2010 17:26	952043	VARIOUS	2	LANL	USE	S
EXS03010034.wiff	246677001	LER	3/1/2010 17:42	952043	10-1703	2	LANL	USE	S
EXS03010035.wiff	1202040459	LER	3/1/2010 17:58	952043	10-1703	2	LANL	USE	S
EXS03010036.wiff	1202040460	LER	3/1/2010 18:13	952043	10-1703	2	LANL	USE	S
EXS03010037.wiff	WXXCCV	LER	3/1/2010 18:29			1		USE	C
EXS03010038.wiff	XIBLK06	LER	3/1/2010 18:45			1		USE	B
EXS03010039.wiff	WXXCRI	LER	3/1/2010 19:01			1		USE	C
EXS03010040.wiff	1202041915	LER	3/1/2010 19:16	952684	10-1752-1	2	LANL	USE	S
EXS03010041.wiff	1202041916	LER	3/1/2010 19:32	952684	10-1752-1	2	LANL	USE	S
EXS03010042.wiff	246851001	LER	3/1/2010 19:48	952684	10-1752-1	2	LANL	USE	S
EXS03010043.wiff	1202041917	LER	3/1/2010 20:04	952684	10-1752-1	2	LANL	USE	S
EXS03010044.wiff	1202041918	LER	3/1/2010 20:19	952684	10-1752-1	2	LANL	USE	S
EXS03010045.wiff	246851002	LER	3/1/2010 20:35	952684	10-1752-1	2	LANL	USE	S
EXS03010046.wiff	246851003	LER	3/1/2010 20:51	952684	10-1752-1	2	LANL	USE	S
EXS03010047.wiff	246851004	LER	3/1/2010 21:07	952684	10-1752-1	2	LANL	USE	S
EXS03010048.wiff	246851005	LER	3/1/2010 21:22	952684	10-1752-1	2	LANL	USE	S
EXS03010049.wiff	246851006	LER	3/1/2010 21:38	952684	10-1752-1	2	LANL	USE	S
EXS03010050.wiff	WXXCCV	LER	3/1/2010 21:54			1		USE	C
EXS03010051.wiff	XIBLK07	LER	3/1/2010 22:10			1		USE	B
EXS03010052.wiff	WXXCRI	LER	3/1/2010 22:25			1		USE	C
EXS03010053.wiff	246851007	LER	3/1/2010 22:41	952684	10-1752-1	2	LANL	USE	S
EXS03010054.wiff	246851008	LER	3/1/2010 22:57	952684	10-1752-1	2	LANL	USE	S
EXS03010055.wiff	246851009	LER	3/1/2010 23:12	952684	10-1752-1	2	LANL	USE	S
EXS03010056.wiff	246851010	LER	3/1/2010 23:28	952684	10-1752-1	2	LANL	USE	S
EXS03010057.wiff	246851011	LER	3/1/2010 23:44	952684	10-1752-1	2	LANL	USE	S
EXS03010058.wiff	1202041927	LER	3/2/2010 0:00	952690	10-1755	2	LANL	USE	S
EXS03010059.wiff	1202041928	LER	3/2/2010 0:15	952690	10-1755	2	LANL	USE	S
EXS03010060.wiff	246856002	LER	3/2/2010 0:31	952690	10-1755	2	LANL	USE	S
EXS03010061.wiff	1202041929	LER	3/2/2010 0:47	952690	10-1755	2	LANL	USE	S
EXS03010062.wiff	1202041930	LER	3/2/2010 1:02	952690	10-1755	2	LANL	USE	S
EXS03010063.wiff	WXXCCV	LER	3/2/2010 1:18			1		USE	C
EXS03010064.wiff	XIBLK08	LER	3/2/2010 1:34			1		USE	B
EXS03010065.wiff	WXXCRI	LER	3/2/2010 1:50			1		USE	C
EXS03010066.wiff	246856003	LER	3/2/2010 2:05	952690	10-1755	2	LANL	USE	S
EXS03010067.wiff	246856004	LER	3/2/2010 2:21	952690	10-1755	2	LANL	USE	S

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EXS03010068.wiff	246856005	LER	3/2/2010 2:37	952690	10-1755	2	LANL	USE	S
EXS03010069.wiff	246856006	LER	3/2/2010 2:53	952690	10-1755	2	LANL	USE	S
EXS03010070.wiff	246856007	LER	3/2/2010 3:09	952690	10-1755	2	LANL	USE	S
EXS03010071.wiff	246856008	LER	3/2/2010 3:24	952690	10-1755	2	LANL	USE	S
EXS03010072.wiff	246856009	LER	3/2/2010 3:40	952690	10-1755	2	LANL	USE	S
EXS03010073.wiff	246856010	LER	3/2/2010 3:56	952690	10-1755	2	LANL	USE	S
EXS03010074.wiff	WXXCCV	LER	3/2/2010 4:11			1		USE	C
EXS03010075.wiff	XIBLK09	LER	3/2/2010 4:27			1		USE	B
EXS03010076.wiff	WXXCRI	LER	3/2/2010 4:43			1		USE	C
EXS03010077.wiff	1202035678	LER	3/2/2010 4:59	950081	VARIOUS	2	LANL	USE	S
EXS03010078.wiff	1202035679	LER	3/2/2010 5:15	950081	VARIOUS	2	LANL	USE	S
EXS03010079.wiff	246318001	LER	3/2/2010 5:30	950081	10-1564	2	LANL	USE	S
EXS03010080.wiff	246318002	LER	3/2/2010 5:46	950081	10-1564	2	LANL	USE	S
EXS03010081.wiff	246318003	LER	3/2/2010 6:02	950081	10-1564	2	LANL	USE	S
EXS03010082.wiff	246318004	LER	3/2/2010 6:17	950081	10-1564	2	LANL	USE	S
EXS03010083.wiff	246318005	LER	3/2/2010 6:33	950081	10-1564	2	LANL	USE	S
EXS03010084.wiff	246318006	LER	3/2/2010 6:49	950081	10-1564	2	LANL	USE	S
EXS03010085.wiff	246318007	LER	3/2/2010 7:05	950081	10-1564	2	LANL	USE	S
EXS03010086.wiff	246318008	LER	3/2/2010 7:20	950081	10-1564	2	LANL	USE	S
EXS03010087.wiff	WXXCCV	LER	3/2/2010 7:36			1		USE	C
EXS03010088.wiff	XIBLK10	LER	3/2/2010 7:52			1		USE	B
EXS03010089.wiff	WXXCRI	LER	3/2/2010 8:08			1		USE	C
EXS03010090.wiff	246318009	LER	3/2/2010 8:23	950081	10-1564	2	LANL	USE	S
EXS03010091.wiff	246330002	LER	3/2/2010 8:39	950081	10-1567	2	LANL	USE	S
EXS03010092.wiff	1202035680	LER	3/2/2010 8:55	950081	10-1567	2	LANL	USE	S
EXS03010093.wiff	1202035681	LER	3/2/2010 9:11	950081	10-1567	2	LANL	USE	S
EXS03010094.wiff	246330003	LER	3/2/2010 9:26	950081	10-1567	2	LANL	USE	S
EXS03010095.wiff	246330004	LER	3/2/2010 9:42	950081	10-1567	2	LANL	USE	S
EXS03010096.wiff	246330005	LER	3/2/2010 9:58	950081	10-1567	2	LANL	USE	S
EXS03010097.wiff	246330006	LER	3/2/2010 10:14	950081	10-1567	2	LANL	USE	S
EXS03010098.wiff	246330007	LER	3/2/2010 10:29	950081	10-1567	2	LANL	USE	S
EXS03010099.wiff	246330008	LER	3/2/2010 10:45	950081	10-1567	2	LANL	USE	S
EXS03010100.wiff	WXXCCV	LER	3/2/2010 11:01			1		USE	C
EXS03010101.wiff	XIBLK11	LER	3/2/2010 11:17			1		USE	B
EXS03010102.wiff	WXXCRI	LER	3/2/2010 11:32			1		USE	C
EXS03010103.wiff	246330009	LER	3/2/2010 11:48	950081	10-1567	2	LANL	USE	S
EXS03010104.wiff	246330010	LER	3/2/2010 12:04	950081	10-1567	2	LANL	USE	S

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EXS03010105.wiff	XIBLK12	LER	3/2/2010 12:20			1		USE	B
EXS03010106.wiff	1202049788	LER	3/2/2010 12:36	956029	VARIOUS	2	LANL	USE	S
EXS03010107.wiff	1202049789	LER	3/2/2010 12:51	956029	VARIOUS	2	LANL	USE	S
EXS03010108.wiff	247429004	LER	3/2/2010 13:07	956029	10-1926	2	LANL	USE	S
EXS03010109.wiff	1202049790	LER	3/2/2010 13:23	956029	10-1926	2	LANL	USE	S
EXS03010110.wiff	1202049791	LER	3/2/2010 13:39	956029	10-1926	2	LANL	USE	S
EXS03010111.wiff	WXXCCV	LER	3/2/2010 13:54			1		USE	C
EXS03010112.wiff	XIBLK13	LER	3/2/2010 14:10			1		USE	B
EXS03010113.wiff	WXXCRI	LER	3/2/2010 14:26			1		USE	C
EXS03010114.wiff	247432006	LER	3/2/2010 14:42	956029	10-1928	2	LANL	USE	S
EXS03010115.wiff	1202049868	LER	3/2/2010 14:57	956029	10-1928	2	LANL	USE	S
EXS03010116.wiff	1202049869	LER	3/2/2010 15:13	956029	10-1928	2	LANL	USE	S
EXS03010117.wiff	247437006	LER	3/2/2010 15:29	956029	10-1931	2	LANL	USE	S
EXS03010118.wiff	246318002	LER	3/2/2010 15:45	950081	10-1564	2	LANL	USE	S
EXS03010119.wiff	246318004	LER	3/2/2010 16:01	950081	10-1564	2	LANL	USE	S
EXS03010120.wiff	246318006	LER	3/2/2010 16:16	950081	10-1564	2	LANL	USE	S
EXS03010121.wiff	246318001	LER	3/2/2010 16:32	950081	10-1564	10	LANL	USE	S
EXS03010122.wiff	246318003	LER	3/2/2010 16:48	950081	10-1564	10	LANL	USE	S
EXS03010123.wiff	246318005	LER	3/2/2010 17:03	950081	10-1564	10	LANL	USE	S
EXS03010124.wiff	WXXCCV	LER	3/2/2010 17:19			1		USE	C
EXS03010125.wiff	XIBLK14	LER	3/2/2010 17:35			1		USE	B
EXS03010126.wiff	WXXCRI	LER	3/2/2010 17:51			1		USE	C
EXS03010127.wiff	1202035690	LER	3/2/2010 18:07	950087	VARIOUS	2	LANL	USE	S
EXS03010128.wiff	1202035691	LER	3/2/2010 18:22	950087	VARIOUS	2	LANL	USE	S
EXS03010129.wiff	246434002	LER	3/2/2010 18:38	950087	10-1620	2	LANL	USE	S
EXS03010130.wiff	1202035692	LER	3/2/2010 18:54	950087	10-1620	2	LANL	USE	S
EXS03010131.wiff	1202035693	LER	3/2/2010 19:10	950087	10-1620	2	LANL	USE	S
EXS03010132.wiff	246434003	LER	3/2/2010 19:25	950087	10-1620	2	LANL	USE	S
EXS03010133.wiff	246434004	LER	3/2/2010 19:41	950087	10-1620	2	LANL	USE	S
EXS03010134.wiff	246434005	LER	3/2/2010 19:57	950087	10-1620	2	LANL	USE	S
EXS03010135.wiff	246434006	LER	3/2/2010 20:12	950087	10-1620	2	LANL	USE	S
EXS03010136.wiff	246434007	LER	3/2/2010 20:28	950087	10-1620	2	LANL	USE	S
EXS03010137.wiff	WXXCCV	LER	3/2/2010 20:44			1		USE	C
EXS03010138.wiff	XIBLK15	LER	3/2/2010 21:00			1		USE	B
EXS03010139.wiff	WXXCRI	LER	3/2/2010 21:15			1		USE	C
EXS03010140.wiff	246434008	LER	3/2/2010 21:31	950087	10-1620	2	LANL	USE	S
EXS03010141.wiff	246434009	LER	3/2/2010 21:47	950087	10-1620	2	LANL	USE	S

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EXS03010142.wiff	246434010	LER	3/2/2010 22:03	950087	10-1620	2	LANL	USE	S
EXS03010143.wiff	246434011	LER	3/2/2010 22:18	950087	10-1620	2	LANL	USE	S
EXS03010144.wiff	246434012	LER	3/2/2010 22:34	950087	10-1620	2	LANL	USE	S
EXS03010145.wiff	246434013	LER	3/2/2010 22:50	950087	10-1620	2	LANL	USE	S
EXS03010146.wiff	246434014	LER	3/2/2010 23:06	950087	10-1620	2	LANL	USE	S
EXS03010147.wiff	246434015	LER	3/2/2010 23:21	950087	10-1620	2	LANL	USE	S
EXS03010148.wiff	246442002	LER	3/2/2010 23:37	950087	10-1623	2	LANL	USE	S
EXS03010149.wiff	246442003	LER	3/2/2010 23:53	950087	10-1623	2	LANL	USE	S
EXS03010150.wiff	WXXCCV	LER	3/3/2010 0:09			1		USE	C
EXS03010151.wiff	XIBLK16	LER	3/3/2010 0:24			1		USE	B
EXS03010152.wiff	WXXCRI	LER	3/3/2010 0:40			1		USE	C
EXS03010153.wiff	246442004	LER	3/3/2010 0:56	950087	10-1623	2	LANL	DUSE-RA	S
EXS03010154.wiff	246442005	LER	3/3/2010 1:12	950087	10-1623	2	LANL	DUSE-RA	S
EXS03010155.wiff	246442006	LER	3/3/2010 1:27	950087	10-1623	2	LANL	DUSE-RA	S
EXS03010156.wiff	XIBLK17	LER	3/3/2010 1:43			1		DUSE-RA	B
EXS03010157.wiff	1202035603	LER	3/3/2010 1:59	950039	VARIOUS	2	LANL	DUSE-RA	S
EXS03010158.wiff	1202035604	LER	3/3/2010 2:15	950039	VARIOUS	2	LANL	DUSE-RA	S
EXS03010159.wiff	246289008	LER	3/3/2010 2:31	950039	10-1590	2	LANL	DUSE-RA	S
EXS03010160.wiff	1202035607	LER	3/3/2010 2:46	950039	10-1590	2	LANL	DUSE-RA	S
EXS03010161.wiff	1202035608	LER	3/3/2010 3:02	950039	10-1590	2	LANL	DUSE-RA	S
EXS03010162.wiff	246301006	LER	3/3/2010 3:18	950039	10-1596	2	LANL	DUSE-RA	S
EXS03010163.wiff	WXXCCV	LER	3/3/2010 3:34			1		DUSE-RA	C
EXS03010164.wiff	XIBLK18	LER	3/3/2010 3:49			1		DUSE-RA	B
EXS03010165.wiff	WXXCRI	LER	3/3/2010 4:05			1		DUSE-RA	C
EXS03010166.wiff	246301011	LER	3/3/2010 4:21	950039	10-1596	2	LANL	DUSE-RA	S
EXS03010167.wiff	246345006	LER	3/3/2010 4:37	950039	10-1614	2	LANL	DUSE-RA	S
EXS03010168.wiff	246473005	LER	3/3/2010 4:52	950039	10-1643	2	LANL	DUSE-RA	S
EXS03010169.wiff	246475004	LER	3/3/2010 5:08	950039	10-1645	2	LANL	DUSE-RA	S
EXS03010170.wiff	246479004	LER	3/3/2010 5:24	950039	10-1654	2	LANL	DUSE-RA	S
EXS03010171.wiff	1202035605	LER	3/3/2010 5:40	950039	10-1654	2	LANL	DUSE-RA	S
EXS03010172.wiff	1202035606	LER	3/3/2010 5:55	950039	10-1654	2	LANL	DUSE-RA	S
EXS03010173.wiff	WXXCCV	LER	3/3/2010 6:11			1		DUSE-RA	C
EXS03010174.wiff	XIBLK19	LER	3/3/2010 6:27			1		DUSE-RA	B
EXS03010175.wiff	WXXCRI	LER	3/3/2010 6:43			1		DUSE-RA	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 03/03/10 Method: 8321A-Modified Reviewed By: HM MC
Extr. Injection Volume: 10uL Int. Std.: N/A Date: 03/24/10
Sequence Number: 030310exs Mobile Phase Lot#:1268566, 1268568 SOP: GL-OA-E-056 Rev.12
Initial Calibration Date: 030310 Standard-Samp Reagent Lot# :1274562, 1261217 Alt Check Std. ID: WXX100303-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS03030001.wiff	XIBLK01	LER	3/3/2010 9:42			1		USE	B
EXS03030002.wiff	XIBLK01	LER	3/3/2010 9:58			1		USE	B
EXS03030003.wiff	WXXICAL-19	LER	3/3/2010 10:13			1		USE	I
EXS03030004.wiff	WXXICAL-20	LER	3/3/2010 10:29			1		USE	I
EXS03030005.wiff	WXXICAL-21	LER	3/3/2010 10:45			1		USE	I
EXS03030006.wiff	WXXICAL-22	LER	3/3/2010 11:00			1		USE	I
EXS03030007.wiff	WXXICAL-23	LER	3/3/2010 11:16			1		USE	I
EXS03030008.wiff	WXXICAL-24	LER	3/3/2010 11:32			1		USE	I
EXS03030009.wiff	WXXICAL-25	LER	3/3/2010 11:47			1		USE	I
EXS03030010.wiff	XIBLK02	LER	3/3/2010 12:03			1		USE	B
EXS03030011.wiff	WXXICV	LER	3/3/2010 12:19			1		USE	C
EXS03030012.wiff	XIBLK03	LER	3/3/2010 12:35			1		USE	B
EXS03030013.wiff	WXXCRI	LER	3/3/2010 12:50			1		USE	C
EXS03030014.wiff	246442004	LER	3/3/2010 13:06	950087	10-1623	2	LANL	USE	S
EXS03030015.wiff	246442005	LER	3/3/2010 13:22	950087	10-1623	2	LANL	USE	S
EXS03030016.wiff	246442006	LER	3/3/2010 13:37	950087	10-1623	2	LANL	USE	S
EXS03030017.wiff	XIBLK04	LER	3/3/2010 13:53			1		USE	B
EXS03030018.wiff	1202035603	LER	3/3/2010 14:09	950039	VARIOUS	2	LANL	USE	S
EXS03030019.wiff	1202035604	LER	3/3/2010 14:25	950039	VARIOUS	2	LANL	USE	S
EXS03030020.wiff	246289008	LER	3/3/2010 14:41	950039	10-1590	2	LANL	USE	S
EXS03030021.wiff	1202035607	LER	3/3/2010 14:56	950039	10-1590	2	LANL	USE	S
EXS03030022.wiff	1202035608	LER	3/3/2010 15:12	950039	10-1590	2	LANL	USE	S
EXS03030023.wiff	246301006	LER	3/3/2010 15:28	950039	10-1596	2	LANL	USE	S
EXS03030024.wiff	WXXCCV	LER	3/3/2010 15:44			1		USE	C
EXS03030025.wiff	XIBLK05	LER	3/3/2010 16:00			1		USE	B
EXS03030026.wiff	WXXCRI	LER	3/3/2010 16:15			1		USE	C
EXS03030027.wiff	246301011	LER	3/3/2010 16:31	950039	10-1596	2	LANL	USE	S
EXS03030028.wiff	246345006	LER	3/3/2010 16:47	950039	10-1614	2	LANL	USE	S
EXS03030029.wiff	246473005	LER	3/3/2010 17:03	950039	10-1643	2	LANL	USE	S
EXS03030030.wiff	246475004	LER	3/3/2010 17:18	950039	10-1645	2	LANL	USE	S

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EXS03030031.wiff	246479004	LER	3/3/2010 17:34	950039	10-1654	2	LANL	USE	S
EXS03030032.wiff	1202035605	LER	3/3/2010 17:50	950039	10-1654	2	LANL	USE	S
EXS03030033.wiff	1202035606	LER	3/3/2010 18:05	950039	10-1654	2	LANL	USE	S
EXS03030034.wiff	WXXCCV	LER	3/3/2010 18:21			1		USE	C
EXS03030035.wiff	XIBLK06	LER	3/3/2010 18:37			1		USE	B
EXS03030036.wiff	WXXCRI	LER	3/3/2010 18:53			1		USE	C
EXS03030037.wiff	1202045643	LER	3/3/2010 19:08	954271	VARIOUS	2	LANL	USE	S
EXS03030038.wiff	1202045644	LER	3/3/2010 19:24	954271	VARIOUS	2	LANL	USE	S
EXS03030039.wiff	247172001	LER	3/3/2010 19:40	954271	10-1866	2	LANL	USE	S
EXS03030040.wiff	247172002	LER	3/3/2010 19:56	954271	10-1866	2	LANL	USE	S
EXS03030041.wiff	247175001	LER	3/3/2010 20:11	954271	10-1870-1	2	LANL	USE	S
EXS03030042.wiff	247175002	LER	3/3/2010 20:27	954271	10-1870-1	2	LANL	USE	S
EXS03030043.wiff	247175003	LER	3/3/2010 20:43	954271	10-1870-1	2	LANL	USE	S
EXS03030044.wiff	247175004	LER	3/3/2010 20:58	954271	10-1870-1	2	LANL	USE	S
EXS03030045.wiff	247175005	LER	3/3/2010 21:14	954271	10-1870-1	2	LANL	USE	S
EXS03030046.wiff	247175006	LER	3/3/2010 21:30	954271	10-1870-1	2	LANL	USE	S
EXS03030047.wiff	WXXCCV	LER	3/3/2010 21:46			1		USE	C
EXS03030048.wiff	XIBLK07	LER	3/3/2010 22:01			1		USE	B
EXS03030049.wiff	WXXCRI	LER	3/3/2010 22:17			1		USE	C
EXS03030050.wiff	247175007	LER	3/3/2010 22:33	954271	10-1870-1	2	LANL	USE	S
EXS03030051.wiff	247175008	LER	3/3/2010 22:48	954271	10-1870-1	2	LANL	USE	S
EXS03030052.wiff	247175009	LER	3/3/2010 23:04	954271	10-1870-1	2	LANL	USE	S
EXS03030053.wiff	247175010	LER	3/3/2010 23:20	954271	10-1870-1	2	LANL	USE	S
EXS03030054.wiff	247181001	LER	3/3/2010 23:36	954271	10-1871-1	2	LANL	USE	S
EXS03030055.wiff	247181002	LER	3/3/2010 23:51	954271	10-1871-1	2	LANL	USE	S
EXS03030056.wiff	247187001	LER	3/4/2010 0:07	954271	10-1867	2	LANL	USE	S
EXS03030057.wiff	247187002	LER	3/4/2010 0:23	954271	10-1867	2	LANL	USE	S
EXS03030058.wiff	247187003	LER	3/4/2010 0:38	954271	10-1867	2	LANL	USE	S
EXS03030059.wiff	WXXCCV	LER	3/4/2010 0:54			1		USE	C
EXS03030060.wiff	XIBLK08	LER	3/4/2010 1:10			1		USE	B
EXS03030061.wiff	WXXCRI	LER	3/4/2010 1:25			1		USE	C
EXS03030062.wiff	247197001	LER	3/4/2010 1:41	954271	10-1865-1	2	LANL	USE	S
EXS03030063.wiff	1202045645	LER	3/4/2010 1:57	954271	10-1865-1	2	LANL	USE	S
EXS03030064.wiff	1202045646	LER	3/4/2010 2:13	954271	10-1865-1	2	LANL	USE	S
EXS03030065.wiff	247197002	LER	3/4/2010 2:28	954271	10-1865-1	2	LANL	USE	S
EXS03030066.wiff	XIBLK09	LER	3/4/2010 2:44			1		USE	B
EXS03030067.wiff	1202045802	LER	3/4/2010 3:00	954361	10-1839	2	LANL	USE	S

EXS03030068.wiff	1202045803	LER	3/4/2010 3:15	954361	10-1839	2	LANL	USE	S
EXS03030069.wiff	247116002	LER	3/4/2010 3:31	954361	10-1839	2	LANL	USE	S
EXS03030070.wiff	1202045804	LER	3/4/2010 3:47	954361	10-1839	2	LANL	USE	S
EXS03030071.wiff	1202045805	LER	3/4/2010 4:03	954361	10-1839	2	LANL	USE	S
EXS03030072.wiff	WXXCCV	LER	3/4/2010 4:18			1		USE	C
EXS03030073.wiff	XIBLK10	LER	3/4/2010 4:34			1		USE	B
EXS03030074.wiff	WXXCRI	LER	3/4/2010 4:50			1		USE	C
EXS03030075.wiff	247116003	LER	3/4/2010 5:05	954361	10-1839	2	LANL	USE	S
EXS03030076.wiff	247116004	LER	3/4/2010 5:21	954361	10-1839	2	LANL	USE	S
EXS03030077.wiff	247116006	LER	3/4/2010 5:37	954361	10-1839	2	LANL	USE	S
EXS03030078.wiff	247116007	LER	3/4/2010 5:53	954361	10-1839	2	LANL	USE	S
EXS03030079.wiff	247116008	LER	3/4/2010 6:08	954361	10-1839	2	LANL	USE	S
EXS03030080.wiff	247116009	LER	3/4/2010 6:24	954361	10-1839	2	LANL	USE	S
EXS03030081.wiff	247116010	LER	3/4/2010 6:40	954361	10-1839	2	LANL	USE	S
EXS03030082.wiff	247116011	LER	3/4/2010 6:55	954361	10-1839	2	LANL	USE	S
EXS03030083.wiff	247116012	LER	3/4/2010 7:11	954361	10-1839	2	LANL	USE	S
EXS03030084.wiff	247116013	LER	3/4/2010 7:27	954361	10-1839	2	LANL	USE	S
EXS03030085.wiff	WXXCCV	LER	3/4/2010 7:43			1		USE	C
EXS03030086.wiff	XIBLK11	LER	3/4/2010 7:58			1		USE	B
EXS03030087.wiff	WXXCRI	LER	3/4/2010 8:14			1		USE	C
EXS03030088.wiff	247116014	LER	3/4/2010 8:30	954361	10-1839	2	LANL	USE	S
EXS03030089.wiff	247116015	LER	3/4/2010 8:45	954361	10-1839	2	LANL	USE	S
EXS03030090.wiff	247116016	LER	3/4/2010 9:01	954361	10-1839	2	LANL	USE	S
EXS03030091.wiff	247116017	LER	3/4/2010 9:17	954361	10-1839	2	LANL	USE	S
EXS03030092.wiff	XIBLK12	LER	3/4/2010 9:32			1		USE	B
EXS03030093.wiff	1202045670	LER	3/4/2010 9:48	954278	VARIOUS	2	LANL	USE	S
EXS03030094.wiff	1202045671	LER	3/4/2010 10:04	954278	VARIOUS	2	LANL	USE	S
EXS03030095.wiff	247111001	LER	3/4/2010 10:20	954278	10-1838	2	LANL	USE	S
EXS03030096.wiff	1202045672	LER	3/4/2010 10:35	954278	10-1838	2	LANL	USE	S
EXS03030097.wiff	1202045673	LER	3/4/2010 10:51	954278	10-1838	2	LANL	USE	S
EXS03030098.wiff	WXXCCV	LER	3/4/2010 11:07			1		USE	C
EXS03030099.wiff	XIBLK13	LER	3/4/2010 11:22			1		USE	B
EXS03030100.wiff	WXXCRI	LER	3/4/2010 11:38			1		USE	C
EXS03030101.wiff	247111002	LER	3/4/2010 11:54	954278	10-1838	2	LANL	USE	S
EXS03030102.wiff	247111003	LER	3/4/2010 12:10	954278	10-1838	2	LANL	USE	S
EXS03030103.wiff	247111004	LER	3/4/2010 12:25	954278	10-1838	2	LANL	USE	S
EXS03030104.wiff	247111005	LER	3/4/2010 12:41	954278	10-1838	2	LANL	USE	S

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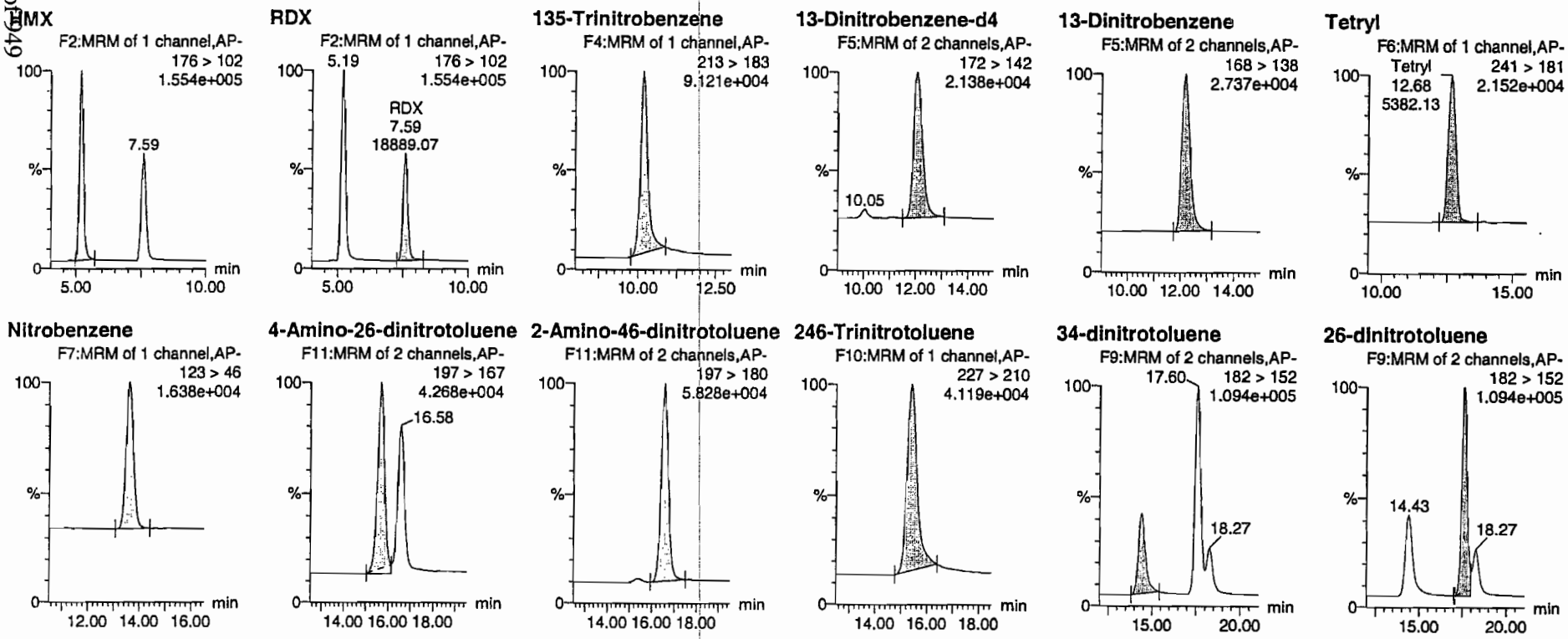
EXS03030105.wiff	247134001	LER	3/4/2010 12:57	954278	10-1852	2	LANL	USE	S
EXS03030106.wiff	247134002	LER	3/4/2010 13:12	954278	10-1852	2	LANL	USE	S
EXS03030107.wiff	247134003	LER	3/4/2010 13:28	954278	10-1852	2	LANL	USE	S
EXS03030108.wiff	247134004	LER	3/4/2010 13:44	954278	10-1852	2	LANL	USE	S
EXS03030109.wiff	247134005	LER	3/4/2010 13:59	954278	10-1852	2	LANL	USE	S
EXS03030110.wiff	247134006	LER	3/4/2010 14:15	954278	10-1852	2	LANL	USE	S
EXS03030111.wiff	WXXCCV	LER	3/4/2010 14:31			1		USE	C
EXS03030112.wiff	XIBLK14	LER	3/4/2010 14:46			1		USE	B
EXS03030113.wiff	WXXCRI	LER	3/4/2010 15:02			1		USE	C
EXS03030114.wiff	247134007	LER	3/4/2010 15:18	954278	10-1852	2	LANL	USE	S
EXS03030115.wiff	247134008	LER	3/4/2010 15:34	954278	10-1852	2	LANL	USE	S
EXS03030116.wiff	247136001	LER	3/4/2010 15:49	954278	10-1853	2	LANL	USE	S
EXS03030117.wiff	247136002	LER	3/4/2010 16:05	954278	10-1853	2	LANL	USE	S
EXS03030118.wiff	247138001	LER	3/4/2010 16:21	954278	10-1854	2	LANL	USE	S
EXS03030119.wiff	247174001	LER	3/4/2010 16:36	954278	10-1860	2	LANL	USE	S
EXS03030120.wiff	247174002	LER	3/4/2010 16:52	954278	10-1860	2	LANL	USE	S
EXS03030121.wiff	247174003	LER	3/4/2010 17:08	954278	10-1860	2	LANL	USE	S
EXS03030122.wiff	WXXCCV	LER	3/4/2010 17:24			1		USE	C
EXS03030123.wiff	XIBLK15	LER	3/4/2010 17:39			1		USE	B
EXS03030124.wiff	WXXCRI	LER	3/4/2010 17:55			1		USE	C
EXS03030125.wiff	1202045806	LER	3/4/2010 18:11	954365	10-1872	2	LANL	USE	S
EXS03030126.wiff	1202045807	LER	3/4/2010 18:26	954365	10-1872	2	LANL	USE	S
EXS03030127.wiff	247200001	LER	3/4/2010 18:42	954365	10-1872	2	LANL	USE	S
EXS03030128.wiff	1202045808	LER	3/4/2010 18:58	954365	10-1872	2	LANL	USE	S
EXS03030129.wiff	1202045809	LER	3/4/2010 19:13	954365	10-1872	2	LANL	USE	S
EXS03030130.wiff	247200002	LER	3/4/2010 19:29	954365	10-1872	2	LANL	USE	S
EXS03030131.wiff	247200003	LER	3/4/2010 19:45	954365	10-1872	2	LANL	USE	S
EXS03030132.wiff	247200004	LER	3/4/2010 20:01	954365	10-1872	2	LANL	USE	S
EXS03030133.wiff	247200005	LER	3/4/2010 20:16	954365	10-1872	2	LANL	USE	S
EXS03030134.wiff	247200006	LER	3/4/2010 20:32	954365	10-1872	2	LANL	USE	S
EXS03030135.wiff	WXXCCV	LER	3/4/2010 20:48			1		USE	C
EXS03030136.wiff	XIBLK16	LER	3/4/2010 21:03			1		USE	B
EXS03030137.wiff	WXXCRI	LER	3/4/2010 21:19			1		USE	C
EXS03030138.wiff	247200007	LER	3/4/2010 21:35	954365	10-1872	2	LANL	USE	S
EXS03030139.wiff	WXXCCV	LER	3/4/2010 21:50			1		USE	C
EXS03030140.wiff	XIBLK17	LER	3/4/2010 22:06			1		USE	B
EXS03030141.wiff	WXXCRI	LER	3/4/2010 22:22			1		USE	C

Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323021a
Date: 23-Mar-2010
Time: 18:58:43
ID: 1202035692 | LANL | 950087 | Soled | 246434002MS | 2 |
Vial: 2:1,D

MET 3/24/10



HMM 03/24/10

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

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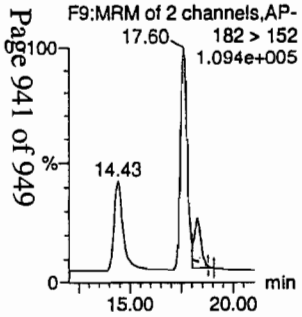
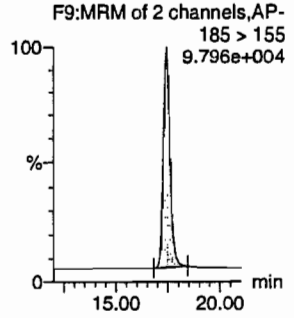
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Page 941 of 949

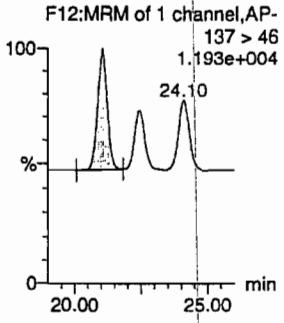
24-dinitrotoluene



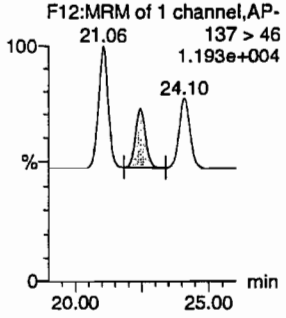
26-dinitrotoluene-d3



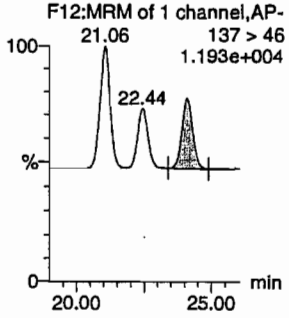
2-Nitrotoluene



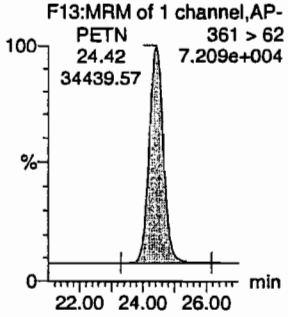
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
1202035692	HMX	176 > 102	5.19	30121.066	6226.520	30121.066	2418.772	bb			438.7313	87.7	-12.3	1280.0
1202035692	RDX	176 > 102	7.59	18889.070	6226.520	18889.070	1516.824	bb			458.0759	91.6	-8.4	718.0
1202035692	135-Trinitrobenzene	213 > 183	10.18	23533.723	6226.520	23533.723	1889.797	bb			399.8553	80.0	-20.0	1201.9
1202035692	13-Dinitrobenzene-d4	172 > 142	12.07	6226.520		6226.520	6226.520	bb			565.6079	113.1	13.1	552.1
1202035692	13-Dinitrobenzene	168 > 138	12.20	7992.163	6226.520	7992.163	641.784	bb			483.2910	96.7	-3.3	969.2
1202035692	Tetryl	241 > 181	12.68	5382.128	6226.520	5382.128	432.194	bb			376.8601	75.4	-24.6	758.7
1202035692	Nitrobenzene	123 > 46	13.63	3767.361	6226.520	3767.361	302.525	bb			461.7633	92.4	-7.6	498.8
1202035692	4-Amino-26-dinitrotoluene	197 > 167	15.68	14237.759	36138.207	14237.759	196.990	MM	24-Mar-10	09:21:19	557.4541	111.5	11.5	513.8
1202035692	2-Amino-46-dinitrotoluene	197 > 180	16.58	20170.494	36138.207	20170.494	279.074	bb			509.6457	101.9	1.9	1630.8
1202035692	246-Trinitrotoluene	227 > 210	15.41	15906.514	36138.207	15906.514	220.079	bb			536.6851	107.3	7.3	1362.7
1202035692	34-dinitrotoluene	182 > 152	14.43	19686.879	36138.207	19686.879	272.383	bb			257.2362	102.9	2.9	1086.3
1202035692	26-dinitrotoluene	182 > 152	17.60	38730.078	36138.207	38730.078	535.861	MM	24-Mar-10	09:24:41	463.1420	92.6	-7.4	2783.0
1202035692	24-dinitrotoluene	182 > 152	18.27	9747.452	36138.207	9747.452	134.864	MM	24-Mar-10	09:28:13	486.0031	97.2	-2.8	620.9
1202035692	26-dinitrotoluene-d3	185 > 155	17.44	36138.207		36138.207	36138.207	bb			524.7982	105.0	5.0	5819.9
1202035692	2-Nitrotoluene	137 > 46	21.06	2632.423	36138.207	2632.423	36.422	bb			451.6386	90.3	-9.7	371.6
1202035692	4-Nitrotoluene	137 > 46	22.44	1302.237	36138.207	1302.237	18.017	bb			462.6874	92.5	-7.5	177.3
1202035692	3-Nitrotoluene	137 > 46	24.10	1648.554	36138.207	1648.554	22.809	bb			452.3698	90.5	-9.5	210.6
1202035692	PETN	361 > 62	24.42	34439.566	36138.207	34439.566	476.498	bb			506.4604	101.3	1.3	7207.4

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

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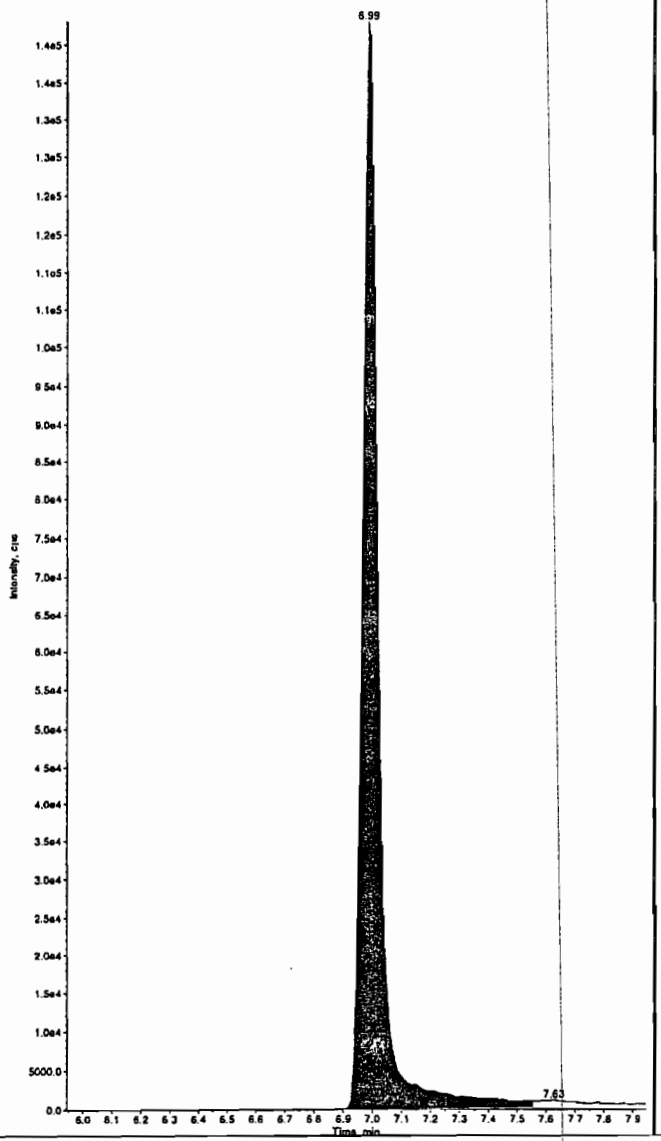
Lan 3/3/10

Sample Name: "1202035692" Sample ID: "950087|2|LER" File: "EXS03010130.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 493. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:54:17 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 6.99 min
Area: 5.89e+005 counts
Height: 142964.935 cps
Start Time: 6.87 min
End Time: 7.55 min

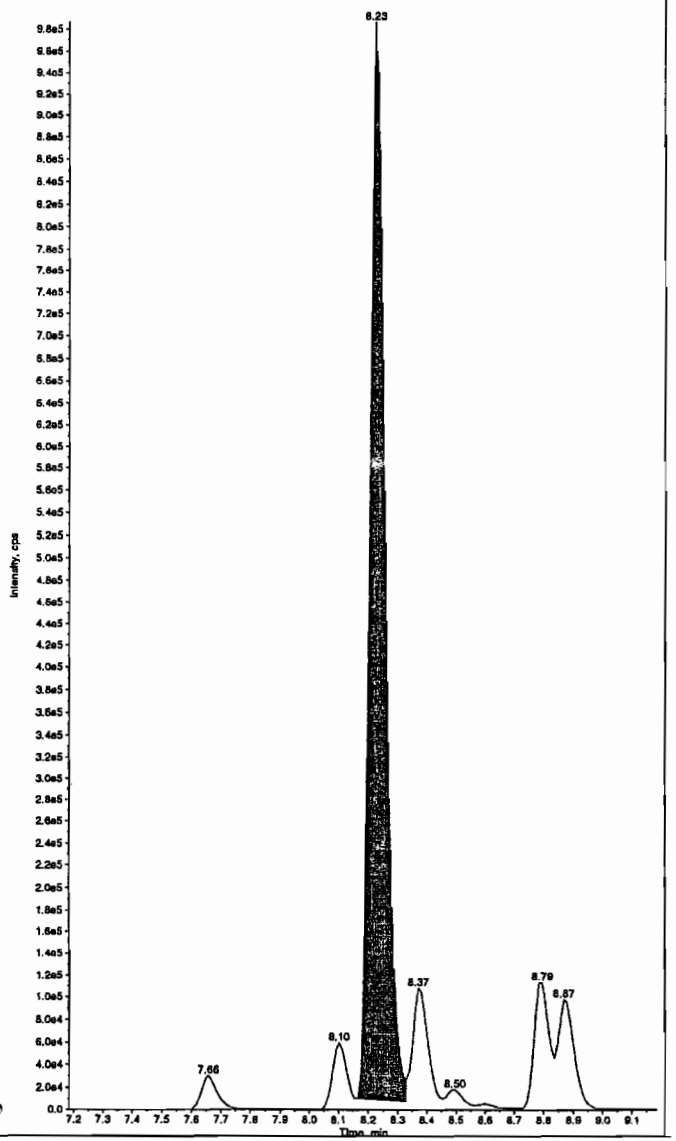


Sample Name: "1202035692" Sample ID: "950087|2|LER" File: "EXS03010130.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 458. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:54:17 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.23 min
Area: 3.62e+006 counts
Height: 977065.796 cps
Start Time: 8.15 min
End Time: 8.33 min



Hmw 03/04/10

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

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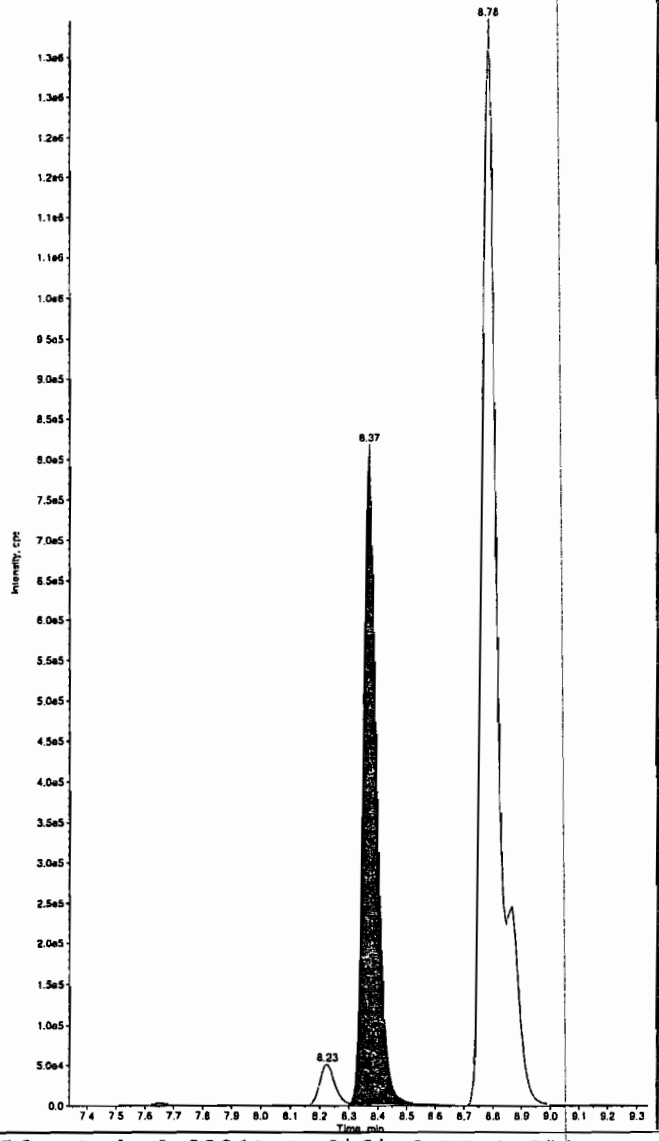
Sample Name: "1202035692" Sample ID: "950087|2|LER" File: "EXS03010130.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 230. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:54:17 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 5.34 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.37 min
Area: 2.80e+006 counts
Height: 816667.786 cps
Start Time: 8.30 min
End Time: 8.61 min

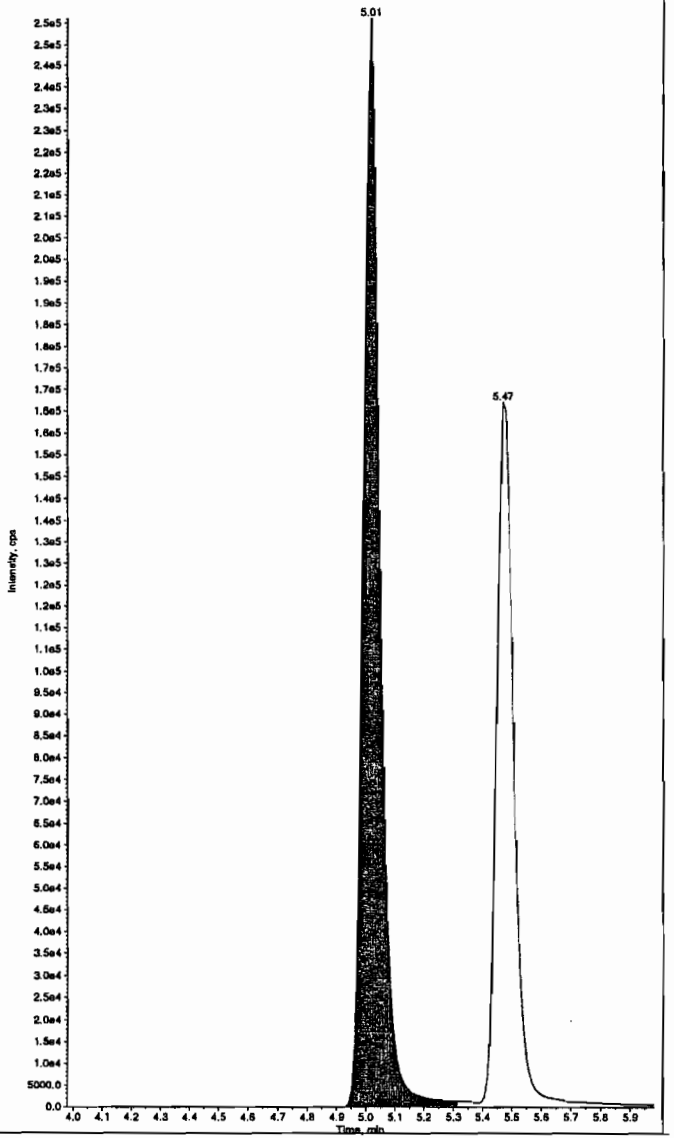


Sample Name: "1202035692" Sample ID: "950087|2|LER" File: "EXS03010130.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 566. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:54:17 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: 4.98 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.01 min
Area: 1.06e+006 counts
Height: 251118.637 cps
Start Time: 4.91 min
End Time: 5.31 min



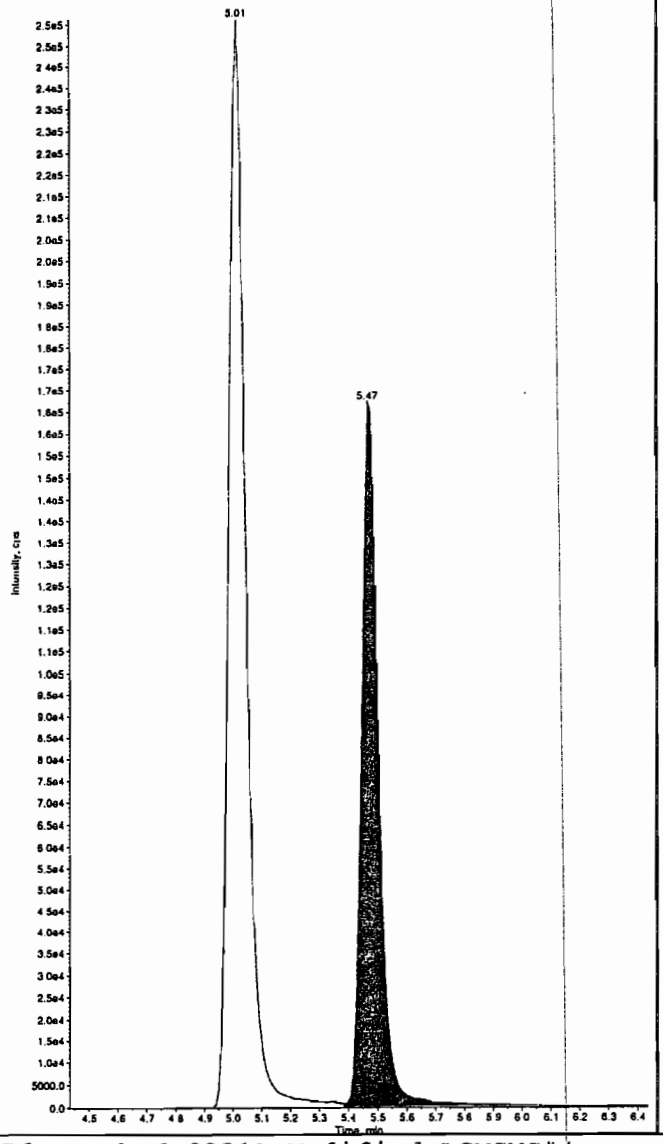
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202035692" Sample ID: "950087|2|LER" File: "EXS03010130.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 510. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:54:17 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 350.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.47 min
Area: 6.77e+005 counts
Height: 161871.460 cps
Start Time: 5.38 min
End Time: 5.93 min

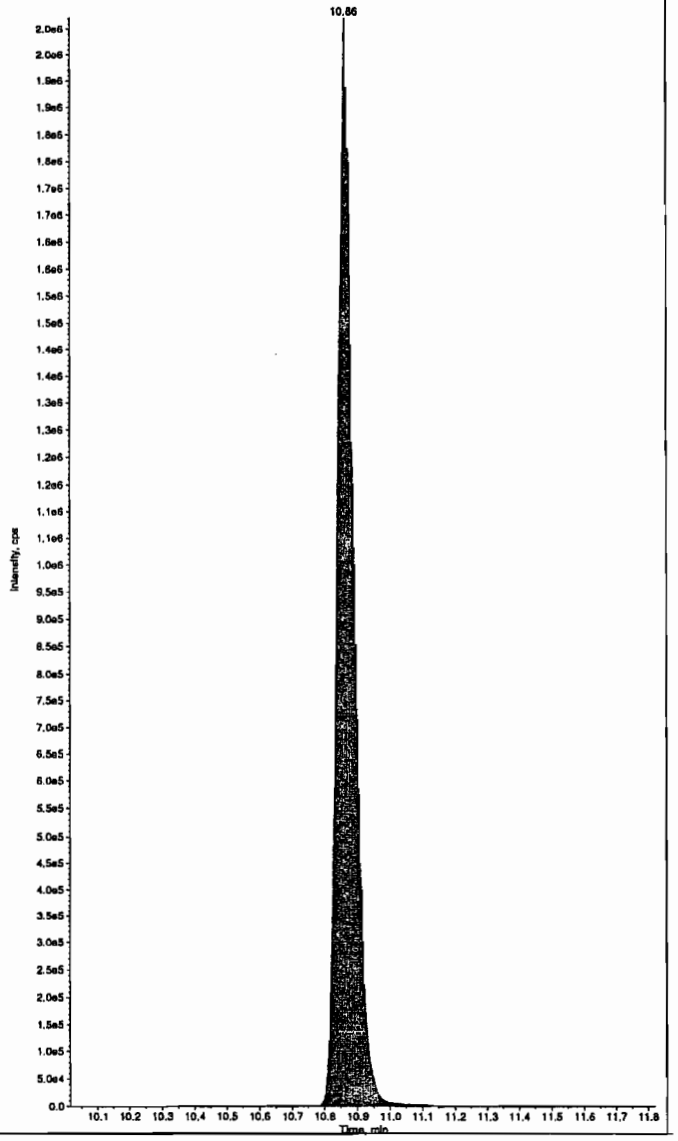


Sample Name: "1202035692" Sample ID: "950087|2|LER" File: "EXS03010130.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 450. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 6:54:17 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: 7.10e+006 counts
Height: 2022241.211 cps
Start Time: 10.8 min
End Time: 11.2 min



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

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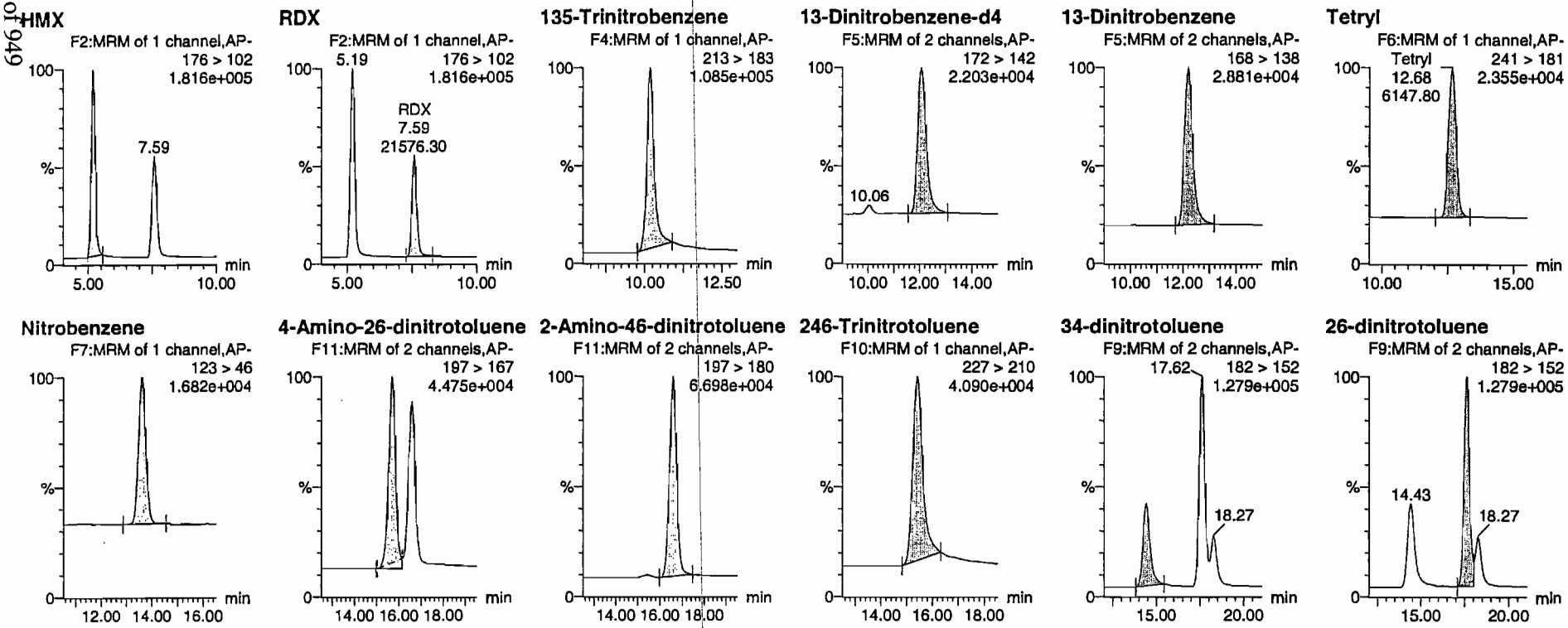
Dataset: C:\MASSLYNX\New_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0323022a
Date: 23-Mar-2010
Time: 19:28:11
ID: 1202035693 | LANL | 950087 | Solid | 246434002 MSD | 2 |
Vial: 2:1,E

LAP 3/24/10



HMM 03/24/10

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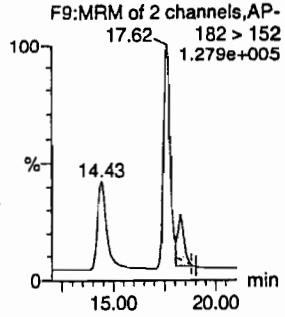
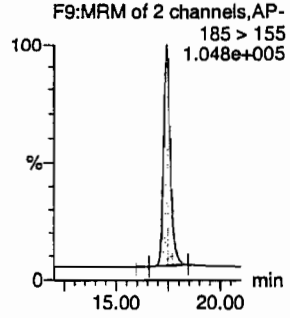
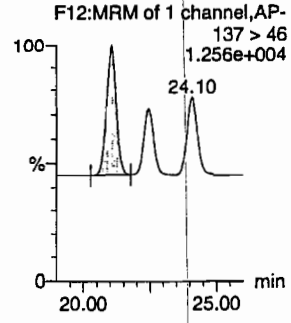
24-dinitrotoluene



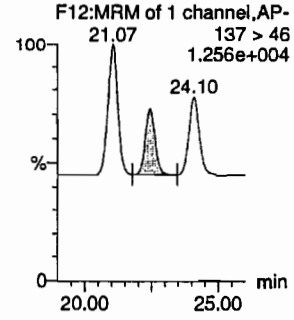
26-dinitrotoluene-d3



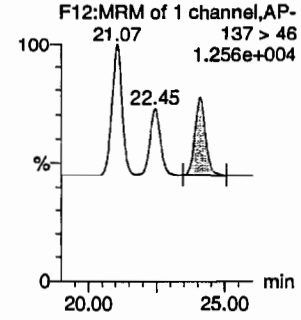
2-Nitrotoluene



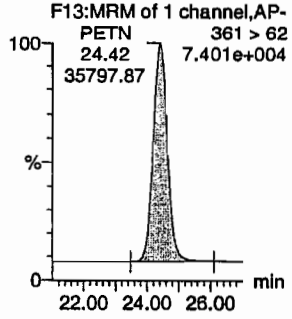
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
1202035693	HMX	176 > 102	5.19	34682.094	6619.136	34682.094	2619.835	bb			475.2013	95.0	-5.0	1068.1
1202035693	RDX	176 > 102	7.59	21576.301	6619.136	21576.301	1629.843	bb			492.2071	98.4	-1.6	579.6
1202035693	135-Trinitrobenzene	213 > 183	10.18	28113.635	6619.136	28113.635	2123.663	bb			449.3382	89.9	-10.1	2200.2
1202035693	13-Dinitrobenzene-d4	172 > 142	12.07	6619.136		6619.136	6619.136	bb			601.2726	120.3	20.3	291.9
1202035693	13-Dinitrobenzene	168 > 138	12.20	8789.971	6619.136	8789.971	663.982	bb			500.0068	100.0	0.0	871.4
1202035693	Tetryl	241 > 181	12.68	6147.800	6619.136	6147.800	464.396	bb			404.9394	81.0	-19.0	795.7
1202035693	Nitrobenzene	123 > 46	13.63	3956.247	6619.136	3956.247	298.849	bb			456.1521	91.2	-8.8	185.4
1202035693	4-Amino-26-dinitrotoluene	197 > 167	15.68	15118.712	39536.930	15118.712	191.197	MM	24-Mar-10	09:21:31	541.0606	108.2	8.2	627.9
1202035693	2-Amino-46-dinitrotoluene	197 > 180	16.58	23468.021	39536.930	23468.021	296.786	bb			541.9908	108.4	8.4	1479.6
1202035693	246-Trinitrotoluene	227 > 210	15.41	15677.033	39536.930	15677.033	198.258	bb			483.4728	96.7	-3.3	609.9
1202035693	34-dinitrotoluene	182 > 152	14.43	23376.285	39536.930	23376.285	295.626	bb			279.1865	111.7	11.7	502.2
1202035693	26-dinitrotoluene	182 > 152	17.62	45896.871	39536.930	45896.871	580.430	MM	24-Mar-10	09:24:50	501.6635	100.3	0.3	1275.0
1202035693	24-dinitrotoluene	182 > 152	18.27	11263.906	39536.930	11263.906	142.448	MM	24-Mar-10	09:28:24	513.3346	102.7	2.7	300.5
1202035693	26-dinitrotoluene-d3	185 > 155	17.44	39536.930		39536.930	39536.930	bb			574.1544	114.8	14.8	3049.1
1202035693	2-Nitrotoluene	137 > 46	21.07	2929.476	39536.930	2929.476	37.047	bb			459.3979	91.9	-8.1	449.9
1202035693	4-Nitrotoluene	137 > 46	22.45	1484.920	39536.930	1484.920	18.779	bb			482.2413	96.4	-3.6	222.4
1202035693	3-Nitrotoluene	137 > 46	24.10	1832.436	39536.930	1832.436	23.174	bb			459.6030	91.9	-8.1	261.3
1202035693	PETN	361 > 62	24.42	35797.867	39536.930	35797.867	452.714	bb			480.2893	96.1	-3.9	7325.5

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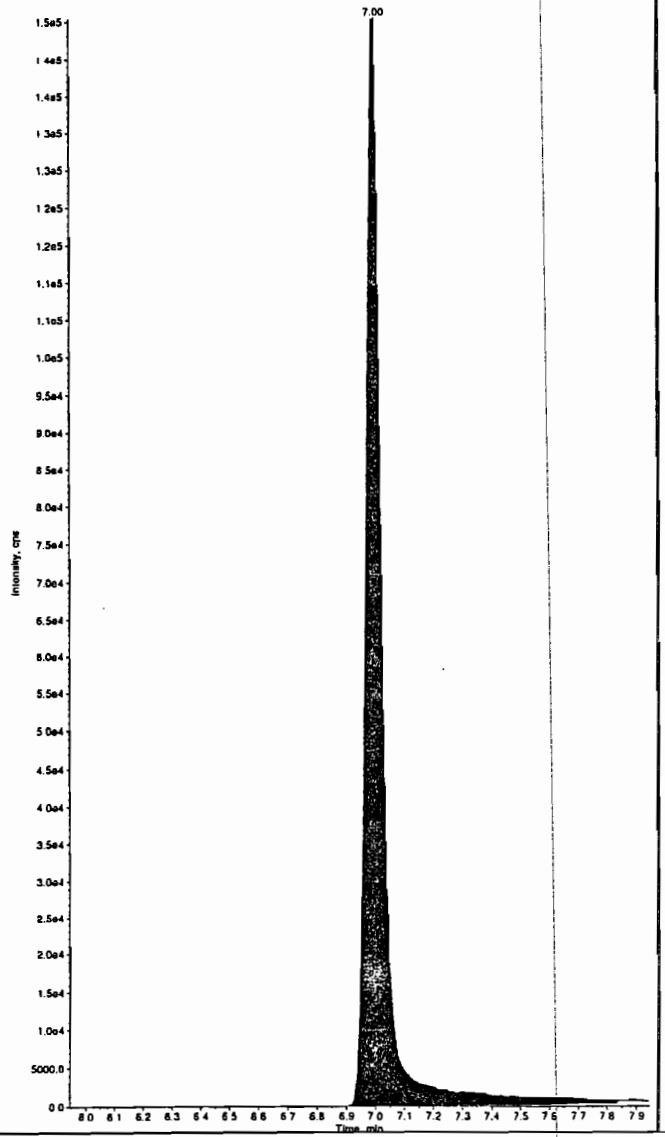
3/3/10

Sample Name: "1202035693" Sample ID: "950087|2|LER" File: "EXS03010131.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 507. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:10:00 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: 6.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.00 min
Area: 6.07e+005 counts
Height: 145410.797 cps
Start Time: 6.87 min
End Time: 7.83 min

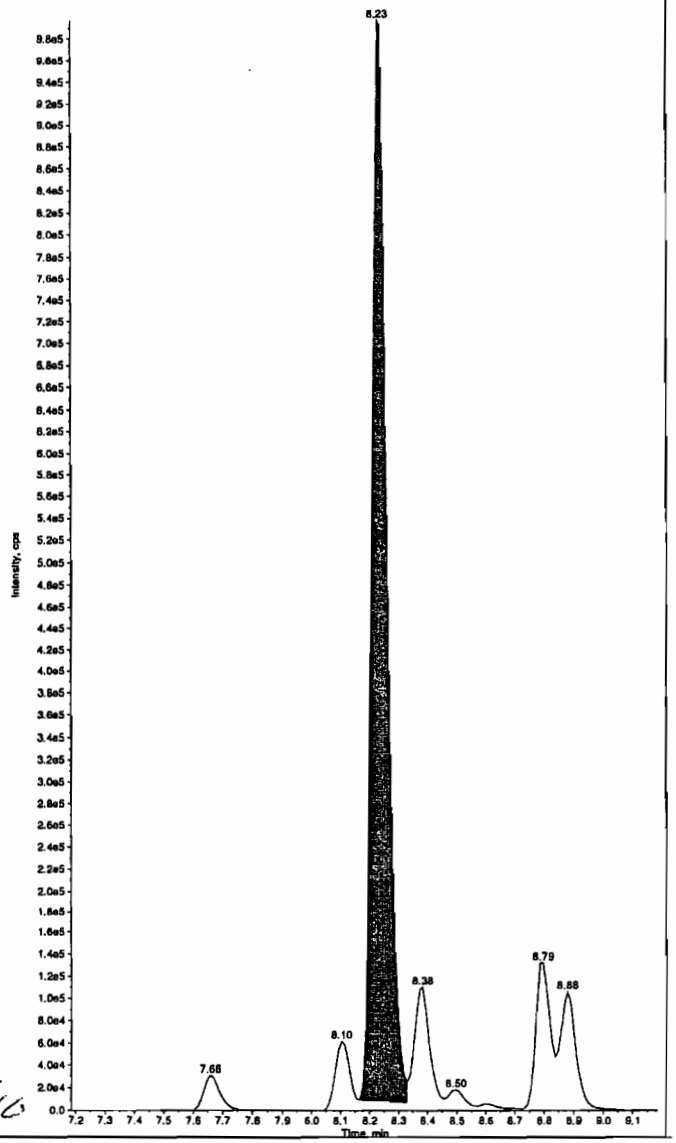


Sample Name: "1202035693" Sample ID: "950087|2|LER" File: "EXS03010131.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 463. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:10:00 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: 8.19 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.23 min
Area: 3.65e+006 counts
Height: 988353.699 cps
Start Time: 8.16 min
End Time: 8.33 min



Hmc 03/04/10

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

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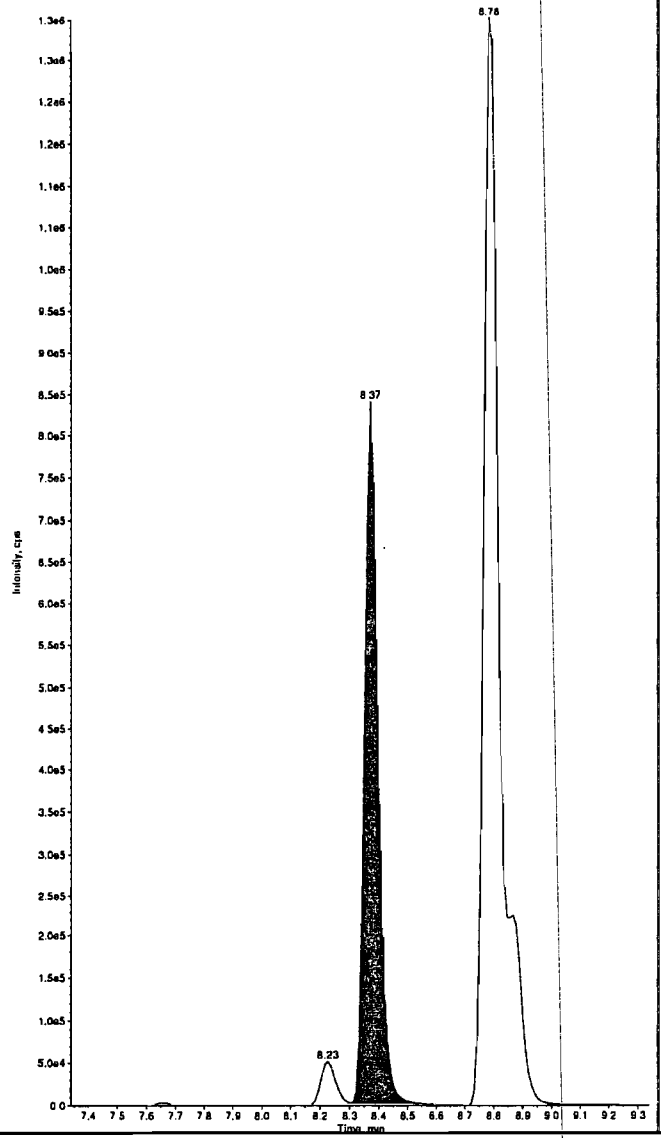
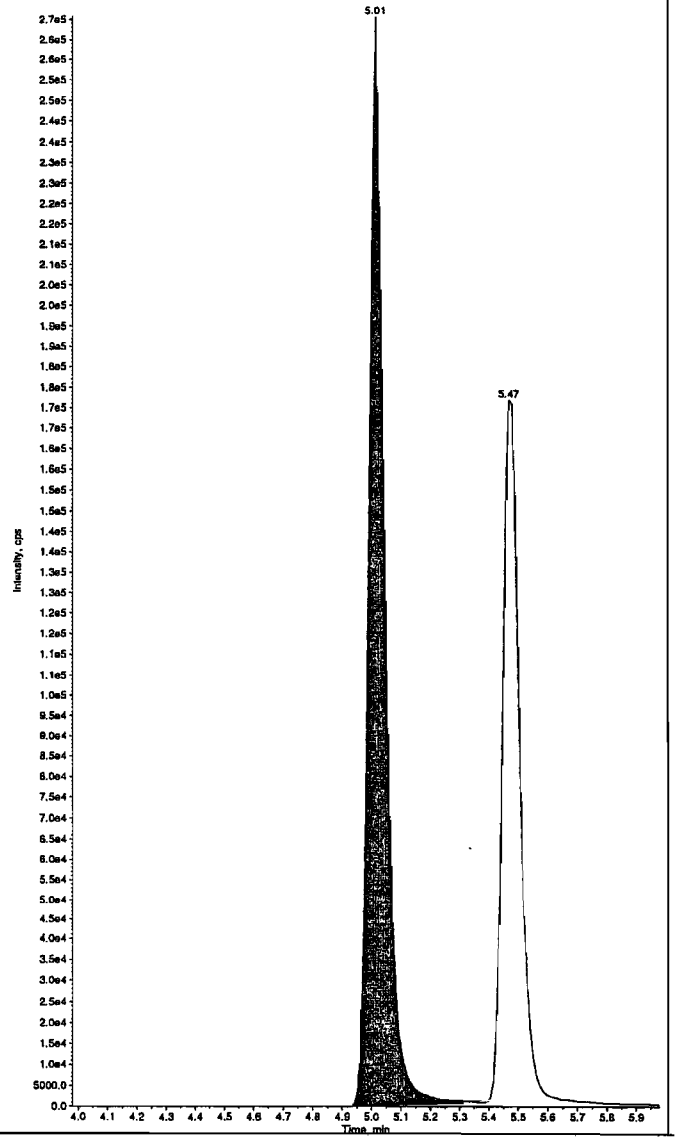
Sample Name: "1202035693" Sample ID: "950087|2|LER" File: "EXS03010131.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	235. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	7:10:00 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	15.0 sec
Expected RT:	8.34 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.37 min
Area:	2.86e+006 counts
Height:	538427.490 cps
Start Time:	8.30 min
End Time:	8.55 min



Sample Name: "1202035693" Sample ID: "950087|2|LER" File: "EXS03010131.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	563. ng/mL
Acq. Date:	3/2/2010
Acq. Time:	7:10:00 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:	4.98 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	5.01 min
Area:	1.05e+006 counts
Height:	265704.132 cps
Start Time:	4.92 min
End Time:	5.31 min



Page 148 of 949

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

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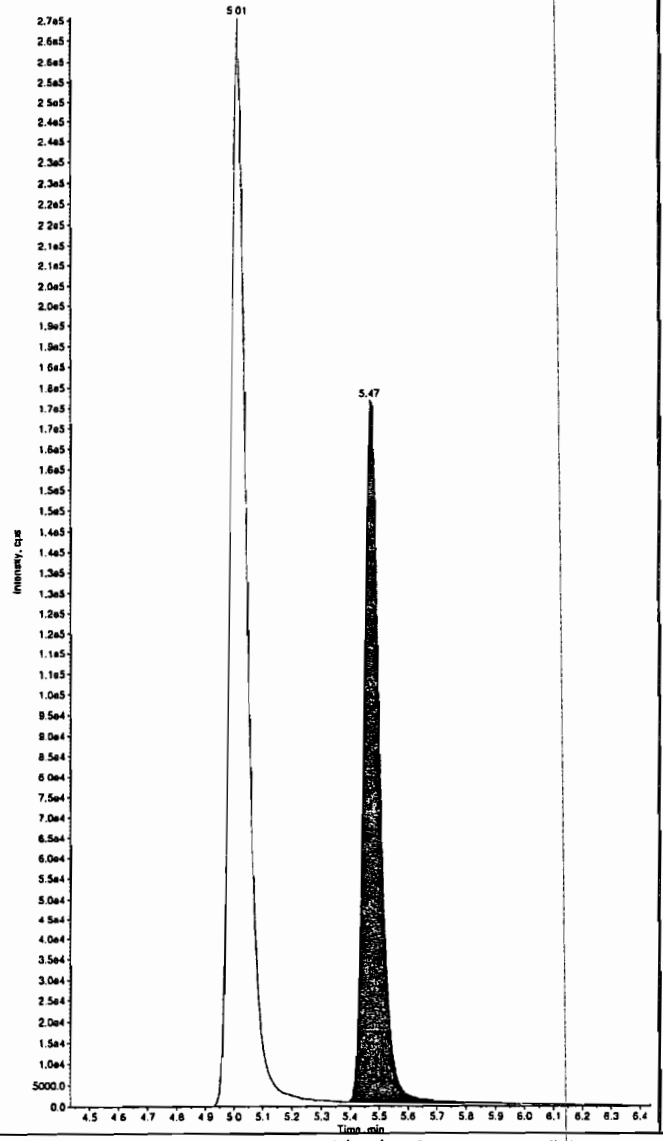
Sample Name: "1202035693" Sample ID: "950087|2|LER" File: "EXS03010131.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 521. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:10:00 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 350.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 5.44 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.47 min
Area: 6.91e+005 counts
Height: 171109.604 cps
Start Time: 5.38 min
End Time: 5.83 min

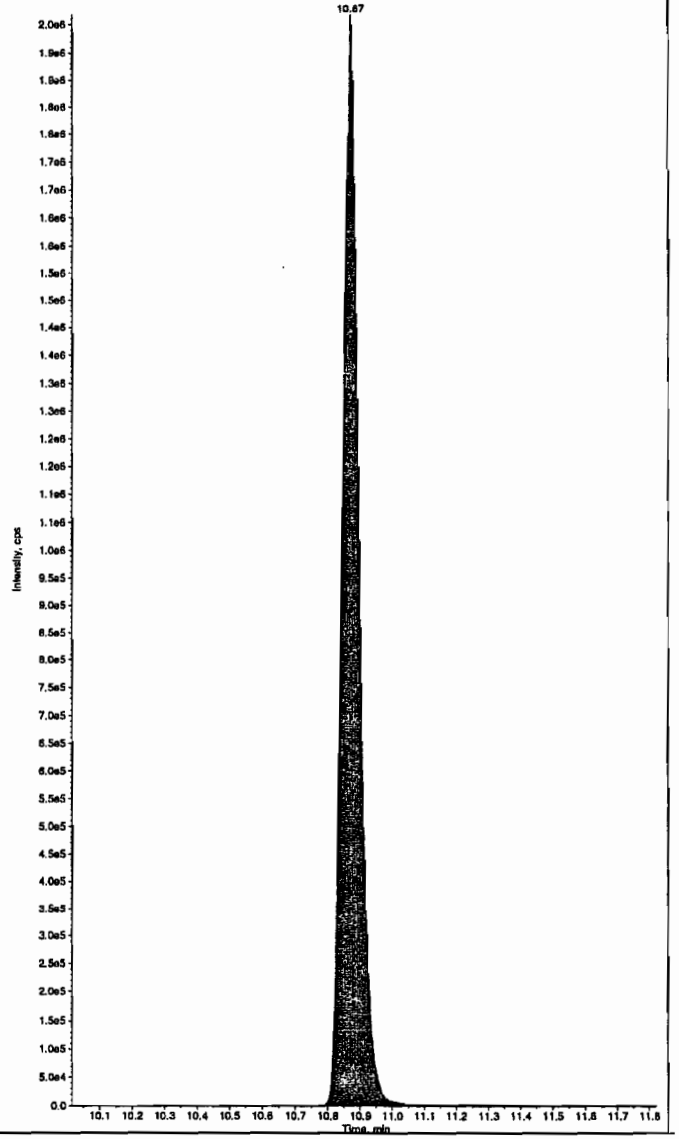


Sample Name: "1202035693" Sample ID: "950087|2|LER" File: "EXS03010131.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 461. ng/mL
Acq. Date: 3/2/2010
Acq. Time: 7:10:00 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: 7.25e+006 counts
Height: 1967907.227 cps
Start Time: 10.8 min
End Time: 11.2 min



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

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