

Tuesday, March 09, 2010

REQUEST NUMBER: 10-2154

**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: 10-2154

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 3/1/2010

TURNAROUND/REPORT DUE: 3/31/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8082		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
SW-846:8260B		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1				

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REQUEST NUMBER: 10-2154

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8260B						
1		1	RE36-10-7498	R	2/24/2010	
1		1	RE36-10-7499	R	2/24/2010	
1		1	RE36-10-7500	R	2/24/2010	
1		1	RE36-10-7521	R	2/24/2010	
1		1	RE36-10-7522	R	2/24/2010	
1		1	RE36-10-7523	R	2/24/2010	
1		1	RE36-10-7541	S	2/24/2010	
1		1	RE36-10-7491	R	2/24/2010	
1		1	RE36-10-7492	R	2/24/2010	
1		1	RE36-10-7493	R	2/24/2010	
1		1	RE36-10-7494	R	2/24/2010	
1		1	RE36-10-7495	R	2/24/2010	
1		1	RE36-10-7496	R	2/24/2010	
1		1	RE36-10-7497	R	2/24/2010	
1		1	RE36-10-7498	R	2/24/2010	
1		1	RE36-10-7499	R	2/24/2010	
1		1	RE36-10-7500	R	2/24/2010	
1		1	RE36-10-7521	R	2/24/2010	
1		1	RE36-10-7522	R	2/24/2010	
1		1	RE36-10-7523	R	2/24/2010	
1		1	RE36-10-7491	R	2/24/2010	
1		1	RE36-10-7492	R	2/24/2010	
1		1	RE36-10-7493	R	2/24/2010	
1		1	RE36-10-7494	R	2/24/2010	
1		1	RE36-10-7495	R	2/24/2010	
1		1	RE36-10-7496	R	2/24/2010	
1		1	RE36-10-7497	R	2/24/2010	
1		1	RE36-10-7498	R	2/24/2010	
SW-846:8270C						
1		1	RE36-10-7498	R	2/24/2010	
1		1	RE36-10-7499	R	2/24/2010	
1		1	RE36-10-7500	R	2/24/2010	
1		1	RE36-10-7521	R	2/24/2010	
1		1	RE36-10-7522	R	2/24/2010	
1		1	RE36-10-7523	R	2/24/2010	
1		1	RE36-10-7491	R	2/24/2010	
1		1	RE36-10-7492	R	2/24/2010	
1		1	RE36-10-7493	R	2/24/2010	
1		1	RE36-10-7494	R	2/24/2010	
1		1	RE36-10-7495	R	2/24/2010	
1		1	RE36-10-7496	R	2/24/2010	
1		1	RE36-10-7497	R	2/24/2010	
1		1	RE36-10-7498	R	2/24/2010	
1		1	RE36-10-7499	R	2/24/2010	
1		1	RE36-10-7500	R	2/24/2010	
1		1	RE36-10-7521	R	2/24/2010	
1		1	RE36-10-7522	R	2/24/2010	
1		1	RE36-10-7523	R	2/24/2010	
1		1	RE36-10-7491	R	2/24/2010	
1		1	RE36-10-7492	R	2/24/2010	
1		1	RE36-10-7493	R	2/24/2010	
1		1	RE36-10-7494	R	2/24/2010	
1		1	RE36-10-7495	R	2/24/2010	
1		1	RE36-10-7496	R	2/24/2010	
1		1	RE36-10-7497	R	2/24/2010	
1		1	RE36-10-7498	R	2/24/2010	
SW-846:8321A_MOD						
1		1	RE36-10-7491	R	2/24/2010	
1		1	RE36-10-7492	R	2/24/2010	
1		1	RE36-10-7493	R	2/24/2010	
1		1	RE36-10-7494	R	2/24/2010	
1		1	RE36-10-7495	R	2/24/2010	
1		1	RE36-10-7496	R	2/24/2010	
1		1	RE36-10-7497	R	2/24/2010	
1		1	RE36-10-7498	R	2/24/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8321A_MOD						
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	

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REQUEST NUMBER: 10-2154

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: 10-2154
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

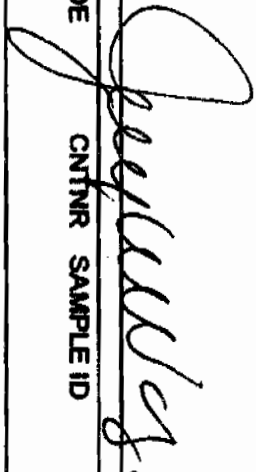
Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 3/1/2010
TURNAROUND/REPORT DUE: 3/31/2010
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
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SW-846:8082	1	1	RE36-10-7519	R	2/24/2010	
	1	1	RE36-10-7520	R	2/24/2010	
	1	1	RE36-10-7521	R	2/24/2010	
	1	1	RE36-10-7522	R	2/24/2010	
	1	1	RE36-10-7523	R	2/24/2010	
	1	1	RE36-10-7491	R	2/24/2010	
SW-846:82608	1	1	RE36-10-7492	R	2/24/2010	
	1	1	RE36-10-7493	R	2/24/2010	
	1	1	RE36-10-7494	R	2/24/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7541	S	2/24/2010	
	SW-846:8270C	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:8270A	1	RE36-10-7494	R	2/24/2010	

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REQUEST NUMBER: 10-2154

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD					
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	

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LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2154

LOS ALAMOS

REQUEST NUMBER: 10-2154

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/31/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Request Hard Copy Flag: True

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7494	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7494	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7493	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7493	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7492	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7492	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7491	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7491	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7496	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7496	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7499	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7499	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7497	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7497	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7495	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7495	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7498	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7498	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7500	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7500	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7523	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7523	1	SEPTUM AMBER GLASS	8260B	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2154

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7520	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7520	1	SEPTUM AMBER GLASS	8280B	Ice	R
RE36-10-7519	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7519	1	SEPTUM AMBER GLASS	8280B	Ice	R
RE36-10-7522	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7522	1	SEPTUM AMBER GLASS	8280B	Ice	R
RE36-10-7521	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7521	1	SEPTUM AMBER GLASS	8280B	Ice	R
RE36-10-7541	1	SEPTUM AMBER GLASS	8280B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7491

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	OBT3	ALLH	
TIME COLLECTED (HH:MM)		13:30		SUB-MEDIA:	TUFF1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610618	↓		FIELD QC TYPE:	NA	↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA	↓	
TOP DEPTH:	0	0 ft		SAMPLE USAGE:	INV	↓	
BOTTOM DEPTH:	0	0.5 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO	NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS ^{2KM} 2/24/10 clear	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

2KM 2/24/10
Dark brown, moist, organic top soil, dry, mossy

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-45

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 47 dpm
Beta/Gamma = 1693 dpmPID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	02/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0700AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7492

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		13:40		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610618		↓	FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		
TOP DEPTH:	0		2.0 ft	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		3.0 ft	SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R		S	EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO	NA			WATER FLOWING: YES/NO	NA		
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+NO3+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Dark brown, dry, organic top soil

SAMPLE COMMENTS:

LOCATION DESC: 8-45

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 1668 dpm

PID $\frac{\text{Ambient}}{\text{Reading}}$ $\frac{0}{0}$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7493

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED(HH:MM)		13:55		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610619	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0 ft		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.5 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO	NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS <i>1 km 10/10 clear</i>	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Dark brown, slightly moist, organic, silty sandy soil

SAMPLE COMMENTS:

glass bits

LOCATION DESC: 8-34

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 47 dpm
Beta/Gamma = 1805 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} \frac{0}{0}$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7494

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	OBT3	ALLH	
TIME COLLECTED (HH:MM)		14:05		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610619	↓		FIELD QC TYPE:	NA	↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA	↓	
TOP DEPTH:	0	2.0 ft		SAMPLE USAGE:	INV	↓	
BOTTOM DEPTH:	0	3.0 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO			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		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1	✓	Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Medium brown, dry, organic silty topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-34

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 1780 dpm

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

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherin Sherwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sherin Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7495

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/27/		MEDIA:	QBT3	ALLH	
TIME COLLECTED (HH:MM)		14:25		SUB-MEDIA:	TUFF1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610620	↓		FIELD QC TYPE:	NA	↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA	↓	
TOP DEPTH:	0	0		SAMPLE USAGE:	INV	↓	
BOTTOM DEPTH:	0	0.5 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO			WATER FLOWING: YES/NO/NA	NO		
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS 2cm clear	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Brown, dry, organic, silty topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-44

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 88 dpm
Beta/Gamma = 1840 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7496

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		14:35		SUB-MEDIA:		TUFF 1	
PRS ID: 36-008		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 36-610620		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		2.0 ft		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		3.0 ft		SCREEN/PORT DESC: NA		↓	
FIELD MATRIX: R		E		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 2/24/10 clear	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Brown, dry, silty organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-44

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 58 dpm
Beta/Gamma = 2160 dpm

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

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 2/25/10 0750 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 2/25/10 0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7497

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/27/2010		MEDIA:	OBT3	ALH	
TIME COLLECTED (HH:MM)		14:45		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610621	↓		FIELD QC TYPE:	NA	↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA	↓	
TOP DEPTH:	0	0		SAMPLE USAGE:	INV	↓	
BOTTOM DEPTH:	0	0.5 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	E		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO			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		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Brown, dry, silty, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-54

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 82 dpm
Beta/Gamma = 1517 dpm

PID Ambient Reading 0 ppr

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

L. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherif Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherif Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7498

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA: OBT3		ALLH	
TIME COLLECTED (HH:MM)		14:55		SUB-MEDIA: TUFF 1		NA	
PRS ID: 36-008		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 36-610621		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		2.0 ft		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		3.0 ft		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		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Medium brown, dry, silty, organic topsoil

SAMPLE COMMENTS:

LOCATION DESC: 8-54

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 58 dpm
Beta/Gamma = 1829 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} \frac{0}{0}$ ppm

COLLECTED BY (PRINT)

TON BRANCH

REVIEWED BY (PRINT)

JOH MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TON MARIN	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7499

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		15:20		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610622		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		0.5 ft	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 12m 1/2410 clear	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice		
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Dark brown, dry, silty, top soil

SAMPLE COMMENTS:

NA

LOCATION DESC:

855

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 1827 dpm

PID $\frac{\text{Ambient Reading}}{0}$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherrill Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherrill Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7500

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		15:30		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610622	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0 ft		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO	NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS ^{125ml} clear	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Dark brown, dry, silty, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-55

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 53 dpm
Beta/Gamma = 1902 dpmPID $\frac{\text{Ambient Reading}}{0} = 0$ ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

L. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) J. Marin	07:50 AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7521

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:		QRT3	
TIME COLLECTED (HH:MM)		11:35		SUB-MEDIA:		TUFF 1	
PRS ID: 36-008		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: UNK		36-610614		FIELD QC TYPE:		FD	
LOCATION TYPE: GENERIC		OK		FIELD PREP:		NA	
TOP DEPTH: 0		2.0 ft		SAMPLE USAGE:		QC	
BOTTOM DEPTH: 0		3.0 ft		SCREEN/PORT DESC:		N/A	
FIELD MATRIX: R		S		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC: QC Sample of

Dark brown, moist, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-31

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 29 dpm
Beta/Gamma \leq 1844 dpm

PID $\frac{\text{Ambient Reading}}{0}$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jon MARIN	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7522

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		11:52		SUB-MEDIA:		TUFF 1	
PRS ID: 36-008		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: UNK		36-610616		FIELD QC TYPE:		ED	
LOCATION TYPE: GENERIC		OK		FIELD PREP:		NA	
TOP DEPTH: 0		2.0 ft		SAMPLE USAGE:		QC	
BOTTOM DEPTH: 0		3.0 ft		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		S		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		NA	

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

SAMPLE DESC: QC Sample of RE36-10-7488

Dark brown, dry, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-47

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 1844 dpm

PID Ambient Reading = 0 ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) J. MARIN	2/25/10
(Signature) Jon R. Marin	07:50 AM	(Signature) J. Marin	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7523

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	OBT3	ALL H	
TIME COLLECTED (HH:MM)		13:40		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	UNK	36-610618		FIELD QC TYPE:	FD		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	2.0 ft		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	3.0 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO	NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC: QC Sample of RE36-10-7492

Dark brown, dry, organic top soil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-45

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \pm 41 dpm
 Beta/Gamma \pm 146 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

L. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherin Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherin Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7533

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA: NA		OK	
TIME COLLECTED (HH:MM)		10:15		SUB-MEDIA: OTHER		↓	
PRS ID: 36-008		OK		SAMPLE TECH CODE: DC		OK	
LOCATION ID: UNK				FIELD QC TYPE: ER		↓	
LOCATION TYPE: GENERIC		OK		FIELD PREP: UF		↓	
TOP DEPTH: 0		↓		SAMPLE USAGE: QC		↓	
BOTTOM DEPTH: 0		↓		SCREEN/PORT DESC: NA		↓	
FIELD MATRIX: W				EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA				COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC: QC Sample of RE36-10-7479

SAMPLE COMMENTS:

LOCATION DESC: 8-

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherrin Sherwood	2/25/10
(Signature) Jon R. Marin	0750 Am	(Signature) Sherrin Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esthela Lujan	2/25/10	(Printed Name)	
(Signature) E. Lujan	0750 Am	(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7535

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	NA		OK
TIME COLLECTED (HH:MM)		16:01		SUB-MEDIA:	OTHER		
PRS ID:	36-008	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	36-610621		FIELD QC TYPE:	ER		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:		NA	
FIELD MATRIX:	W			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				WATER FLOWING: YES/NO/NA			
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC: QC Sample of RE36-10-7497

SAMPLE COMMENTS:

Field in site

LOCATION DESC: 8-54

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

LARRY A. LOPEZ

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	02/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7541

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	NA		ok
TIME COLLECTED(HH:MM)		10:11		SUB-MEDIA:	OTHER		
PRS ID:	36-008		ok	SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK		36-610612	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		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC: QC Sample of RE36-10-7479

SAMPLE COMMENTS:

FTB

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sherri Sherwood	0750
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):

RE36-10-7498	7494	7488	7481	7479
7499	7493	7487	7417	7478
7500	7523	7486	7482	7477
7497	7492	7485	7481	
7496	7491	7484	7416	
7495	7490	7521	7415	
7420	7489	7489 ca	7480	
7419	7522	7483	7541	

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):

RE36-10-7553
RE36-10-7534
RE36-10-7535

Reason:

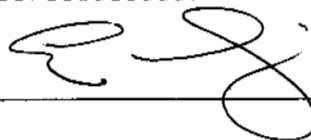
Field Rinsate

.....

Print Last Name

Lujim

Signature



Date

2/25/10



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00074

Client Sample ID: RE36-10-7491

Sample Collection Date: 02/24/10 13:30

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: AR52-10-00074-021

Date Received: 02/25/10 00:00

Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	YPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	9.76	18.43	34.06	18.47		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	49.69	15.99	17.92	17.11		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	48.59	0.15	48.59		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	13.23	7.34	1.67	7.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.17	0.13	0.13	0.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.91	0.46	0.09	0.45		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.00	0.01	0.46	0.01		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.28	0.50	0.10	0.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.00	0.00	0.41	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.28	1.04	0.55	1.04		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.43	4.13	1.66	4.25		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.04	48.50	0.10	48.50		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.86

Matthew J. Folie
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



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

ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RES6-10-7492
Sample Collection Date: 02/24/10 13:40
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-022
Date Received: 02/25/10 00:00
Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	YPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	2.77	13.70	32.85	13.70		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	28.50	13.76	18.12	14.19		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	48.84	0.16	48.84		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	17.39	8.44	1.68	8.48		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.13	0.18	0.14	0.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.34	0.28	0.09	0.28		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
BU-182	-0.66	189.07	0.42	189.07		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.38	0.59	0.18	0.59		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.24	1.11	0.41	1.11		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.17	0.84	0.57	0.84		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.55	3.47	1.59	3.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.11	0.26	0.13	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.48										

M. J. Eder
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7493

Sample Collection Date: 02/24/10 13:55

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-023

Date Received: 02/25/10 00:00

Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	14.34	20.42	33.91	20.50		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	18.98	12.45	17.73	12.67		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	48.42	0.15	48.42		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	21.30	9.30	1.67	9.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.15	0.28	0.11	0.28		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.85	0.44	0.09	0.44		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.01	0.01	0.45	0.01		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.72	0.57	0.26	0.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.84	0.93	0.41	0.93		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.32	0.56	0.65	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	1.94	3.46	1.70	3.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.42	0.32	0.11	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.90										

Matthew J. Edman
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-872-2770 FAX 505-872-9534

ARS Sample Delivery Group: AR52-10-00074
Client Sample ID: RE36-10-7494
Sample Collection Date: 02/24/10 14:08
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-024
Date Received: 02/25/10 00:00
Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	HDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Trace/Chem Recovery
GROSS ALPHA	24.52	26.00	37.46	26.18		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	49.17	16.31	18.42	17.39		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	44.41	0.14	44.41		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	33.49	11.16	1.53	11.20		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.26	0.20	0.13	0.20		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.21	0.36	0.39	0.30		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.98	0.46	0.14	0.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.43	0.62	0.69	0.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.67	0.67	0.53	0.67		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.31	3.35	1.39	3.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.02	-0.22	0.10	-0.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.40										

M. J. Edin
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



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

ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7495
Sample Collection Date: 02/24/10 14:25
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-025
Date Received: 02/25/10 00:00
Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	NDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	-4.08	9.70	34.07	9.71		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	43.44	15.17	18.08	15.08		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	54.69	0.17	54.69		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	29.20	10.75	1.88	10.77		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.18	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.43	0.38	0.12	0.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.37	0.38	0.11	0.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.20	-0.32	0.50	-0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.41	0.64	0.21	0.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.36	1.14	0.46	1.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.51	0.95	0.80	0.95		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.04	4.03	1.62	4.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.04	0.16	0.10	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.85										

Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074
 Client Sample ID: RE36-10-7496
 Sample Collection Date: 02/24/10 14:35
 Sample Matrix: Soil/Solid

Request or PO Number:
 ARS Sample ID: ARS2-10-00074-026
 Date Received: 02/25/10 00:00
 Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	22.08	23.39	32.75	23.55		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	64.14	18.25	18.31	19.86		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	42.58	0.14	42.58		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	2.23	8.22	4.02	8.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.29	0.26	0.11	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.40	0.28	0.08	0.28		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
BU-152	-0.57	164.82	0.37	164.82		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.25	0.55	0.20	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.00	158.99	0.36	158.99		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.46	0.96	0.44	0.97		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.76	3.68	1.54	3.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AN-241	0.11	0.32	0.15	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.36										

Matthew J. Edm
 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 required the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # E67558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7497

Sample Collection Date: 02/24/10 14:45

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-027

Date Received: 02/25/10 00:00

Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	YPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	9.74	18.93	33.91	18.37		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	34.86	14.32	17.73	14.94		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.02	25.38	0.08	25.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	0.80	4.78	2.39	4.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.10	0.08	0.09	0.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.21	0.16	0.05	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.14	0.18	0.22	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.19	0.36	0.07	0.36		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.29	0.54	0.21	0.59		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.73	0.65	0.38	0.65		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	2.84	2.30	0.98	2.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.19	0.24	0.09	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.63										

Matthew L. Eden
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7498

Sample Collection Date: 02/24/10 14:55

Sample Matrix: Soil/Solid

Request or PD Number:

ARS Sample ID: ARS2-10-00074-028

Date Received: 02/25/10 00:00

Report Date: 02/26/10 14:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Trace/Chem Recovery
GROSS ALPHA	9.67	19.79	37.39	19.82		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	41.32	15.15	15.23	15.97		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	45.35	0.14	45.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	4.27	9.52	3.98	9.52		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.38	0.34	0.19	0.34		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.32	0.26	0.09	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RU-152	-0.61	175.54	0.39	175.54		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.19	0.53	0.17	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.89	0.92	0.38	0.92		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.58	0.43	0.62	0.43		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	8.58	3.68	1.15	4.15		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.08	0.19	0.10	0.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.87										

Matthew J. Edger
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # B87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7499

Sample Collection Date: 02/24/10 15:20

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-029

Date Received: 02/25/10 00:00

Report Date: 02/26/10 14:38

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	9.78	18.42	34.06	18.46		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	29.05	13.70	17.92	14.15		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	44.34	0.14	44.34		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	34.37	11.30	1.53	11.34		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	6.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.12	0.13	0.10	0.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.31	0.25	0.09	0.25		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
KU-152	-0.60	171.63	0.38	171.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.34	0.50	0.11	0.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.93	1.62	0.37	1.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.26	0.31	0.51	0.31		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	2.43	2.81	1.27	2.86		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.02	-0.14	0.07	-0.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.51										

Matthew J. Edley
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # R87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7500

Sample Collection Date: 02/24/10 15:30

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-030

Date Received: 02/25/10 00:00

Report Date: 02/26/10 14:38

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	2.77	13.70	32.65	13.70		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	26.65	13.52	18.12	13.91		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	45.13	0.14	45.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	18.91	8.46	1.86	8.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	-0.06	43.88	0.10	43.88		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.26	0.24	0.09	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.42	-1.46	0.39	-1.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.28	0.56	0.19	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.12	0.53	0.38	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.20	1.22	0.65	1.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	1.24	3.38	1.60	3.36		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.10	0.19	0.10	0.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 2.64

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

NE LAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7521

Sample Collection Date: 02/24/10 11:35

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-031

Date Received: 02/25/10 00:00

Report Date: 02/26/10 14:38

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	5.15	15.97	33.91	15.98		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	25.79	13.13	17.73	13.50		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	51.27	0.16	51.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	11.48	9.22	2.70	9.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.17	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.20	0.34	0.17	0.34		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.55	0.40	0.10	0.40		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
BU-152	-0.59	-2.55	0.44	-2.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.67	0.51	0.22	0.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.88	0.53	0.43	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.33	-1.24	0.33	-1.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.57	4.08	1.68	4.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.04	48.55	0.11	48.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.33

Matthew L. Edner
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00074
 Client Sample ID: RE36-10-7522
 Sample Collection Date: 02/24/10 11:52
 Sample Matrix: Soil/Solid

Request or PO Number:
 ARS Sample ID: AR52-10-00074-032
 Date Received: 02/25/10 00:00
 Report Date: 02/26/10 14:38

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	9.68	19.78	37.39	19.82		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	32.83	14.21	18.23	14.77		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	45.35	0.14	45.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	9.50	8.01	1.56	8.01		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	-0.06	44.09	0.10	44.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.26	0.39	0.39	0.39		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.47	0.58	0.18	0.58		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.00	169.33	0.38	169.33		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	2.01	1.07	0.54	1.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	1.82	3.24	1.89	3.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.11	0.32	0.16	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 1.28

Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Request or PQ Number:

Client Sample ID: RE36-10-7523

ARS Sample ID: ARS2-10-00074-033

Sample Collection Date: 02/24/10 13:40

Date Received: 02/25/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/26/10 14:38

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	14.34	20.45	33.94	20.53		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	30.89	13.93	17.78	14.44		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	47.35	0.15	47.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	27.77	10.50	1.83	10.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.31	0.19	0.21	0.20		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
BU-152	-0.05	-0.10	0.41	-0.10		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.89	0.61	0.12	0.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-226	3.00	1.22	0.40	1.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.51	0.55	0.54	0.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	6.97	5.35	1.95	5.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.15	0.23	0.11	0.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.91										

Matthew J. Edger
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2154 VALIDATION DATE: 4/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. It should be noted that the laboratory received no containers for samples RE36-10-7519 and -7520. The analyses could not be performed. No sample results were qualified.
2. In the ICV/CCV associated with sample -7498 only, the %Ds for 2-butanone and trichlorotrifluoroethane were >20%. The associated sample results were NDs and, thus, were qualified UJ,V7c.
3. The surrogate %Rs for bromofluorobenzene were > the laboratory UAL in samples -7491, -7495, and -7521. The results for chloromethane; acetone; and toluene in sample -7491; acetone; toluene; m,p-xylenes; and 4-isopropyltoluene in sample -7495; and acetone; toluene and 4-isopropyltoluene in sample -7521 were detects and, thus, were qualified J+,V3b. All other associated sample results were NDs and, thus, were not qualified.

Reviewed by: ETM


Level: 1

Date: 4/28/10


VALIDATOR'S SIGNATURE:

Allison Felix

DATE: 4/26/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$ (10X for common laboratory contaminants).	N/A	J, V4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	19. The quantitating IS are count is $<10\%$ of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20. The IS area count for the quantitating IS is $<50\%$ but $>10\%$ for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373001

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Allquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7494
 Batch ID: 962617
 Run Date: 03/08/2010 13:56
 Prep Date: 03/08/2010 12:05
 Data File: 030810V9\9C109.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	J	2.29	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.83	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.43	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.43	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373001	Date Received: 03/02/2010 08:50	%Moisture: 12.3
Client ID: RE36-10-7494	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 13:56	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:05	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C109.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	J	0.548	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	J	0.388	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.70	ug/kg	1.83	5.70
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	4.55	11.1	ug/kg	0	J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 25.5
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7493
Batch ID: 962617
Run Date: 03/08/2010 14:27
Prep Date: 03/08/2010 12:08
Data File: 030810V9\9C110.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.34	ug/kg	0.456	1.34
74-87-3	Chloromethane	U	1.34	ug/kg	0.403	1.34
75-01-4	Vinyl chloride	U	1.34	ug/kg	0.403	1.34
74-83-9	Bromomethane	U	1.34	ug/kg	0.403	1.34
75-00-3	Chloroethane	U	1.34	ug/kg	0.403	1.34
75-69-4	Trichlorofluoromethane	U	1.34	ug/kg	0.403	1.34
67-64-1	Acetone	U	6.71	ug/kg	2.23	6.71
75-35-4	1,1-Dichloroethylene	U	1.34	ug/kg	0.403	1.34
74-88-4	Iodomethane	U	6.71	ug/kg	2.15	6.71
75-09-2	Methylene chloride	U	6.71	ug/kg	2.68	6.71
75-15-0	Carbon disulfide	U	6.71	ug/kg	1.68	6.71
156-60-5	trans-1,2-Dichloroethylene	U	1.34	ug/kg	0.403	1.34
75-34-3	1,1-Dichloroethane	U	1.34	ug/kg	0.403	1.34
78-93-3	2-Butanone	U	6.71	ug/kg	2.01	6.71
156-59-2	cis-1,2-Dichloroethylene	U	1.34	ug/kg	0.403	1.34
594-20-7	2,2-Dichloropropane	U	1.34	ug/kg	0.403	1.34
67-66-3	Chloroform	U	1.34	ug/kg	0.403	1.34
74-97-5	Bromochloromethane	U	1.34	ug/kg	0.443	1.34
71-55-6	1,1,1-Trichloroethane	U	1.34	ug/kg	0.403	1.34
563-58-6	1,1-Dichloropropene	U	1.34	ug/kg	0.403	1.34
56-23-5	Carbon tetrachloride	U	1.34	ug/kg	0.403	1.34
107-06-2	1,2-Dichloroethane	U	1.34	ug/kg	0.403	1.34
71-43-2	Benzene	U	1.34	ug/kg	0.403	1.34
79-01-6	Trichloroethylene	U	1.34	ug/kg	0.443	1.34
78-87-5	1,2-Dichloropropane	U	1.34	ug/kg	0.403	1.34
75-27-4	Bromodichloromethane	U	1.34	ug/kg	0.403	1.34
74-95-3	Dibromomethane	U	1.34	ug/kg	0.403	1.34
108-10-1	4-Methyl-2-pentanone	U	6.71	ug/kg	1.68	6.71
10061-01-5	cis-1,3-Dichloropropylene	U	1.34	ug/kg	0.403	1.34
108-88-3	Toluene	U	1.34	ug/kg	0.403	1.34
10061-02-6	trans-1,3-Dichloropropylene	U	1.34	ug/kg	0.403	1.34
79-00-5	1,1,2-Trichloroethane	U	1.34	ug/kg	0.403	1.34
591-78-6	2-Hexanone	U	6.71	ug/kg	2.01	6.71
142-28-9	1,3-Dichloropropane	U	1.34	ug/kg	0.403	1.34
127-18-4	Tetrachloroethylene	U	1.34	ug/kg	0.403	1.34
124-48-1	Dibromochloromethane	U	1.34	ug/kg	0.403	1.34
106-93-4	1,2-Dibromoethane	U	1.34	ug/kg	0.403	1.34
108-90-7	Chlorobenzene	U	1.34	ug/kg	0.403	1.34

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373002

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 25.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7493
 Batch ID: 962617
 Run Date: 03/08/2010 14:27
 Prep Date: 03/08/2010 12:08
 Data File: 030810V9\9C110.D

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.34	ug/kg	0.403	1.34
179601-23-1	m,p-Xylenes	U	2.68	ug/kg	0.403	2.68
95-47-6	o-Xylene	U	1.34	ug/kg	0.403	1.34
100-42-5	Styrene	U	1.34	ug/kg	0.403	1.34
75-25-2	Bromoform	U	1.34	ug/kg	0.403	1.34
79-34-5	1,1,2,2-Tetrachloroethane	U	1.34	ug/kg	0.403	1.34
96-18-4	1,2,3-Trichloropropane	U	1.34	ug/kg	0.403	1.34
108-86-1	Bromobenzene	U	1.34	ug/kg	0.403	1.34
103-65-1	n-Propylbenzene	U	1.34	ug/kg	0.403	1.34
95-49-8	2-Chlorotoluene	U	1.34	ug/kg	0.403	1.34
98-82-8	Isopropylbenzene	U	1.34	ug/kg	0.403	1.34
108-67-8	1,3,5-Trimethylbenzene	U	1.34	ug/kg	0.403	1.34
106-43-4	4-Chlorotoluene	U	1.34	ug/kg	0.403	1.34
98-06-6	tert-Butylbenzene	U	1.34	ug/kg	0.403	1.34
95-63-6	1,2,4-Trimethylbenzene	U	1.34	ug/kg	0.403	1.34
135-98-8	sec-Butylbenzene	U	1.34	ug/kg	0.403	1.34
99-87-6	4-Isopropyltoluene	U	1.34	ug/kg	0.403	1.34
541-73-1	1,3-Dichlorobenzene	U	1.34	ug/kg	0.403	1.34
106-46-7	1,4-Dichlorobenzene	U	1.34	ug/kg	0.403	1.34
104-51-8	n-Butylbenzene	U	1.34	ug/kg	0.403	1.34
96-12-8	1,2-Dibromo-3-chloropropane	U	1.34	ug/kg	0.403	1.34
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.71	ug/kg	2.15	6.71
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.34	ug/kg	0.403	1.34
95-50-1	1,2-Dichlorobenzene	U	1.34	ug/kg	0.403	1.34

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	4.55	15.3	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373003

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.1
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7492
 Batch ID: 962617
 Run Date: 03/08/2010 14:58
 Prep Date: 03/08/2010 12:09
 Data File: 030810V9\9C111.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.431	1.27
74-87-3	Chloromethane	U	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	J	5.96	ug/kg	2.10	6.34
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	U	6.34	ug/kg	2.03	6.34
75-09-2	Methylene chloride	U	6.34	ug/kg	2.54	6.34
75-15-0	Carbon disulfide	U	6.34	ug/kg	1.59	6.34
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	U	6.34	ug/kg	1.90	6.34
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	U	6.34	ug/kg	1.59	6.34
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	J	0.418	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	U	6.34	ug/kg	1.90	6.34
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.380	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373003	Date Received: 03/02/2010 08:50	%Moisture: 21.1
Client ID: RE36-10-7492	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 14:58	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:09	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C111.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	J	0.774	ug/kg	0.380	2.54
95-47-6	o-Xylene	J	0.393	ug/kg	0.380	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	J	0.862	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.34	ug/kg	2.03	6.34
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	15.1	ug/kg	0	J
	unknown siloxane	14.95	14.8	ug/kg	0	J
000124-18-5	Decane	15.38	8.83	ug/kg	91	NJ
000127-91-3	.beta.-Pinene	15.67	16.7	ug/kg	96	NJ
	unknown hydrocarbon	16.63	1380	ug/kg	0	J
	unknown siloxane	16.93	14.5	ug/kg	0	J
	unknown hydrocarbon	19.36	6.42	ug/kg	0	J

AMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
Client ID: RE36-10-7491	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 15:30	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:10	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C112.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.54	ug/kg	0.525	1.54
74-87-3	Chloromethane	J	0.633	ug/kg	0.463	1.54 J+,V3b
75-01-4	Vinyl chloride	U	1.54	ug/kg	0.463	1.54
74-83-9	Bromomethane	U	1.54	ug/kg	0.463	1.54
75-00-3	Chloroethane	U	1.54	ug/kg	0.463	1.54
75-69-4	Trichlorofluoromethane	U	1.54	ug/kg	0.463	1.54
67-64-1	Acetone	J	3.09	ug/kg	2.56	7.72 J+,V3b
75-35-4	1,1-Dichloroethylene	U	1.54	ug/kg	0.463	1.54
74-88-4	Iodomethane	U	7.72	ug/kg	2.47	7.72
75-09-2	Methylene chloride	U	7.72	ug/kg	3.09	7.72
75-15-0	Carbon disulfide	U	7.72	ug/kg	1.93	7.72
156-60-5	trans-1,2-Dichloroethylene	U	1.54	ug/kg	0.463	1.54
75-34-3	1,1-Dichloroethane	U	1.54	ug/kg	0.463	1.54
78-93-3	2-Butanone	U	7.72	ug/kg	2.32	7.72
156-59-2	cis-1,2-Dichloroethylene	U	1.54	ug/kg	0.463	1.54
594-20-7	2,2-Dichloropropane	U	1.54	ug/kg	0.463	1.54
67-66-3	Chloroform	U	1.54	ug/kg	0.463	1.54
74-97-5	Bromochloromethane	U	1.54	ug/kg	0.509	1.54
71-55-6	1,1,1-Trichloroethane	U	1.54	ug/kg	0.463	1.54
563-58-6	1,1-Dichloropropene	U	1.54	ug/kg	0.463	1.54
56-23-5	Carbon tetrachloride	U	1.54	ug/kg	0.463	1.54
107-06-2	1,2-Dichloroethane	U	1.54	ug/kg	0.463	1.54
71-43-2	Benzene	U	1.54	ug/kg	0.463	1.54
79-01-6	Trichloroethylene	U	1.54	ug/kg	0.509	1.54
78-87-5	1,2-Dichloropropane	U	1.54	ug/kg	0.463	1.54
75-27-4	Bromodichloromethane	U	1.54	ug/kg	0.463	1.54
74-95-3	Dibromomethane	U	1.54	ug/kg	0.463	1.54
108-10-1	4-Methyl-2-pentanone	U	7.72	ug/kg	1.93	7.72
10061-01-5	cis-1,3-Dichloropropylene	U	1.54	ug/kg	0.463	1.54
108-88-3	Toluene	J	0.494	ug/kg	0.463	1.54 J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.54	ug/kg	0.463	1.54
79-00-5	1,1,2-Trichloroethane	U	1.54	ug/kg	0.463	1.54
591-78-6	2-Hexanone	U	7.72	ug/kg	2.32	7.72
142-28-9	1,3-Dichloropropane	U	1.54	ug/kg	0.463	1.54
127-18-4	Tetrachloroethylene	U	1.54	ug/kg	0.463	1.54
124-48-1	Dibromochloromethane	U	1.54	ug/kg	0.463	1.54
106-93-4	1,2-Dibromoethane	U	1.54	ug/kg	0.463	1.54
108-90-7	Chlorobenzene	U	1.54	ug/kg	0.463	1.54

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
Client ID: RE36-10-7491	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 15:30	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:10	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C112.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.54	ug/kg	0.463	1.54
179601-23-1	m,p-Xylenes	U	3.09	ug/kg	0.463	3.09
95-47-6	o-Xylene	U	1.54	ug/kg	0.463	1.54
100-42-5	Styrene	U	1.54	ug/kg	0.463	1.54
75-25-2	Bromoform	U	1.54	ug/kg	0.463	1.54
79-34-5	1,1,2,2-Tetrachloroethane	U	1.54	ug/kg	0.463	1.54
96-18-4	1,2,3-Trichloropropane	U	1.54	ug/kg	0.463	1.54
108-86-1	Bromobenzene	U	1.54	ug/kg	0.463	1.54
103-65-1	n-Propylbenzene	U	1.54	ug/kg	0.463	1.54
95-49-8	2-Chlorotoluene	U	1.54	ug/kg	0.463	1.54
98-82-8	Isopropylbenzene	U	1.54	ug/kg	0.463	1.54
108-67-8	1,3,5-Trimethylbenzene	U	1.54	ug/kg	0.463	1.54
106-43-4	4-Chlorotoluene	U	1.54	ug/kg	0.463	1.54
98-06-6	tert-Butylbenzene	U	1.54	ug/kg	0.463	1.54
95-63-6	1,2,4-Trimethylbenzene	U	1.54	ug/kg	0.463	1.54
135-98-8	sec-Butylbenzene	U	1.54	ug/kg	0.463	1.54
99-87-6	4-Isopropyltoluene	U	1.54	ug/kg	0.463	1.54
541-73-1	1,3-Dichlorobenzene	U	1.54	ug/kg	0.463	1.54
106-46-7	1,4-Dichlorobenzene	U	1.54	ug/kg	0.463	1.54
104-51-8	n-Butylbenzene	U	1.54	ug/kg	0.463	1.54
96-12-8	1,2-Dibromo-3-chloropropane	U	1.54	ug/kg	0.463	1.54
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.72	ug/kg	2.47	7.72
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.54	ug/kg	0.463	1.54
95-50-1	1,2-Dichlorobenzene	U	1.54	ug/kg	0.463	1.54

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.57	21.7	ug/kg	0	J
	unknown siloxane	14.95	18	ug/kg	0	J
	unknown siloxane	16.94	13.5	ug/kg	0	J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 11.4
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7496
Batch ID: 962617
Run Date: 03/08/2010 16:01
Prep Date: 03/08/2010 12:11
Data File: 030810V9\9C113.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.339	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.339	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.339	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.339	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.339	1.13
67-64-1	Acetone		7.46	ug/kg	1.87	5.65
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
74-88-4	Iodomethane	U	5.65	ug/kg	1.81	5.65
75-09-2	Methylene chloride	U	5.65	ug/kg	2.26	5.65
75-15-0	Carbon disulfide	U	5.65	ug/kg	1.41	5.65
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.339	1.13
78-93-3	2-Butanone	U	5.65	ug/kg	1.69	5.65
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.339	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.373	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.339	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.339	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.339	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.339	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.339	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.373	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.339	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.339	1.13
108-10-1	4-Methyl-2-pentanone	U	5.65	ug/kg	1.41	5.65
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
108-88-3	Toluene	J	0.599	ug/kg	0.339	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.339	1.13
591-78-6	2-Hexanone	U	5.65	ug/kg	1.69	5.65
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.339	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.339	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.339	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.339	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.339	1.13

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 11.4
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7496
Batch ID: 962617
Run Date: 03/08/2010 16:01
Prep Date: 03/08/2010 12:11
Data File: 030810V9\9C113.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.339	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.339	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.339	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.339	1.13
75-25-2	Bromofom	U	1.13	ug/kg	0.339	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.339	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.339	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.339	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.339	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.339	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.339	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.339	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.339	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.339	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.65	ug/kg	1.81	5.65
630-20-6	Trichlorotrifluoroethane	U	1.13	ug/kg	0.339	1.13
95-50-1	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	6.89	11.1	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	14.95	22.9	ug/kg	97	NJ
013466-78-9	3-Carene	15.96	14.4	ug/kg	95	NJ
	unknown siloxane	16.94	6.34	ug/kg	0	J

AMF
4/26/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154

Lab Sample ID: 248373006

Date Collected: 02/24/2010 12:00

Date Received: 03/02/2010 08:50

Matrix: R

%Moisture: 27

Client ID: RE36-10-7499

Batch ID: 962617

Run Date: 03/08/2010 16:32

Prep Date: 03/08/2010 12:12

Data File: 030810V9\9C114.D

Client: LANL010

Method: SW846 8260B

Inst: VOA9.1

Analyst: RXY1

Allquot: 5 g

Column: DB-624

Project: LANL01004

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.37	ug/kg	0.466	1.37
74-87-3	Chloromethane	U	1.37	ug/kg	0.411	1.37
75-01-4	Vinyl chloride	U	1.37	ug/kg	0.411	1.37
74-83-9	Bromomethane	U	1.37	ug/kg	0.411	1.37
75-00-3	Chloroethane	U	1.37	ug/kg	0.411	1.37
75-69-4	Trichlorofluoromethane	U	1.37	ug/kg	0.411	1.37
67-64-1	Acetone	J	3.16	ug/kg	2.27	6.85
75-35-4	1,1-Dichloroethylene	U	1.37	ug/kg	0.411	1.37
74-88-4	Iodomethane	U	6.85	ug/kg	2.19	6.85
75-09-2	Methylene chloride	U	6.85	ug/kg	2.74	6.85
75-15-0	Carbon disulfide	U	6.85	ug/kg	1.71	6.85
156-60-5	trans-1,2-Dichloroethylene	U	1.37	ug/kg	0.411	1.37
75-34-3	1,1-Dichloroethane	U	1.37	ug/kg	0.411	1.37
78-93-3	2-Butanone	U	6.85	ug/kg	2.05	6.85
156-59-2	cis-1,2-Dichloroethylene	U	1.37	ug/kg	0.411	1.37
594-20-7	2,2-Dichloropropane	U	1.37	ug/kg	0.411	1.37
67-66-3	Chloroform	U	1.37	ug/kg	0.411	1.37
74-97-5	Bromochloromethane	U	1.37	ug/kg	0.452	1.37
71-55-6	1,1,1-Trichloroethane	U	1.37	ug/kg	0.411	1.37
563-58-6	1,1-Dichloropropene	U	1.37	ug/kg	0.411	1.37
56-23-5	Carbon tetrachloride	U	1.37	ug/kg	0.411	1.37
107-06-2	1,2-Dichloroethane	U	1.37	ug/kg	0.411	1.37
71-43-2	Benzene	U	1.37	ug/kg	0.411	1.37
79-01-6	Trichloroethylene	U	1.37	ug/kg	0.452	1.37
78-87-5	1,2-Dichloropropane	U	1.37	ug/kg	0.411	1.37
75-27-4	Bromodichloromethane	U	1.37	ug/kg	0.411	1.37
74-95-3	Dibromomethane	U	1.37	ug/kg	0.411	1.37
108-10-1	4-Methyl-2-pentanone	U	6.85	ug/kg	1.71	6.85
10061-01-5	cis-1,3-Dichloropropylene	U	1.37	ug/kg	0.411	1.37
108-88-3	Toluene	U	1.37	ug/kg	0.411	1.37
10061-02-6	trans-1,3-Dichloropropylene	U	1.37	ug/kg	0.411	1.37
79-00-5	1,1,2-Trichloroethane	U	1.37	ug/kg	0.411	1.37
591-78-6	2-Hexanone	U	6.85	ug/kg	2.05	6.85
142-28-9	1,3-Dichloropropane	U	1.37	ug/kg	0.411	1.37
127-18-4	Tetrachloroethylene	U	1.37	ug/kg	0.411	1.37
124-48-1	Dibromochloromethane	U	1.37	ug/kg	0.411	1.37
106-93-4	1,2-Dibromoethane	U	1.37	ug/kg	0.411	1.37
108-90-7	Chlorobenzene	U	1.37	ug/kg	0.411	1.37

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373006	Date Received: 03/02/2010 08:50	%Moisture: 27
Client ID: RE36-10-7499	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 16:32	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:12	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V99C114.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.37	ug/kg	0.411	1.37
179601-23-1	m,p-Xylenes	U	2.74	ug/kg	0.411	2.74
95-47-6	o-Xylene	U	1.37	ug/kg	0.411	1.37
100-42-5	Styrene	U	1.37	ug/kg	0.411	1.37
75-25-2	Bromoform	U	1.37	ug/kg	0.411	1.37
79-34-5	1,1,2,2-Tetrachloroethane	U	1.37	ug/kg	0.411	1.37
96-18-4	1,2,3-Trichloropropane	U	1.37	ug/kg	0.411	1.37
108-86-1	Bromobenzene	U	1.37	ug/kg	0.411	1.37
103-65-1	n-Propylbenzene	U	1.37	ug/kg	0.411	1.37
95-49-8	2-Chlorotoluene	U	1.37	ug/kg	0.411	1.37
98-82-8	Isopropylbenzene	U	1.37	ug/kg	0.411	1.37
108-67-8	1,3,5-Trimethylbenzene	U	1.37	ug/kg	0.411	1.37
106-43-4	4-Chlorotoluene	U	1.37	ug/kg	0.411	1.37
98-06-6	tert-Butylbenzene	U	1.37	ug/kg	0.411	1.37
95-63-6	1,2,4-Trimethylbenzene	U	1.37	ug/kg	0.411	1.37
135-98-8	sec-Butylbenzene	U	1.37	ug/kg	0.411	1.37
99-87-6	4-Isopropyltoluene	U	1.37	ug/kg	0.411	1.37
541-73-1	1,3-Dichlorobenzene	U	1.37	ug/kg	0.411	1.37
106-46-7	1,4-Dichlorobenzene	U	1.37	ug/kg	0.411	1.37
104-51-8	n-Butylbenzene	U	1.37	ug/kg	0.411	1.37
96-12-8	1,2-Dibromo-3-chloropropane	U	1.37	ug/kg	0.411	1.37
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.85	ug/kg	2.19	6.85
630-20-6	1,1,1,2-Tetrachloroethane	U	1.37	ug/kg	0.411	1.37
95-50-1	1,2-Dichlorobenzene	U	1.37	ug/kg	0.411	1.37

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	4.55	16.8	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373007	Date Received: 03/02/2010 08:50	%Moisture: 32.5
Client ID: RE36-10-7497	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 17:02	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:13	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C115.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.48	ug/kg	0.504	1.48
74-87-3	Chloromethane	U	1.48	ug/kg	0.444	1.48
75-01-4	Vinyl chloride	U	1.48	ug/kg	0.444	1.48
74-83-9	Bromomethane	U	1.48	ug/kg	0.444	1.48
75-00-3	Chloroethane	U	1.48	ug/kg	0.444	1.48
75-69-4	Trichlorofluoromethane	U	1.48	ug/kg	0.444	1.48
67-64-1	Acetone	J	3.53	ug/kg	2.46	7.41
75-35-4	1,1-Dichloroethylene	J	0.711	ug/kg	0.444	1.48
74-88-4	Iodomethane	U	7.41	ug/kg	2.37	7.41
75-09-2	Methylene chloride	U	7.41	ug/kg	2.96	7.41
75-15-0	Carbon disulfide	U	7.41	ug/kg	1.85	7.41
156-60-5	trans-1,2-Dichloroethylene	U	1.48	ug/kg	0.444	1.48
75-34-3	1,1-Dichloroethane	U	1.48	ug/kg	0.444	1.48
78-93-3	2-Butanone	U	7.41	ug/kg	2.22	7.41
156-59-2	cis-1,2-Dichloroethylene	U	1.48	ug/kg	0.444	1.48
594-20-7	2,2-Dichloropropane	U	1.48	ug/kg	0.444	1.48
67-66-3	Chloroform	U	1.48	ug/kg	0.444	1.48
74-97-5	Bromochloromethane	U	1.48	ug/kg	0.489	1.48
71-55-6	1,1,1-Trichloroethane	U	1.48	ug/kg	0.444	1.48
563-58-6	1,1-Dichloropropene	U	1.48	ug/kg	0.444	1.48
56-23-5	Carbon tetrachloride	U	1.48	ug/kg	0.444	1.48
107-06-2	1,2-Dichloroethane	U	1.48	ug/kg	0.444	1.48
71-43-2	Benzene	U	1.48	ug/kg	0.444	1.48
79-01-6	Trichloroethylene	U	1.48	ug/kg	0.489	1.48
78-87-5	1,2-Dichloropropane	U	1.48	ug/kg	0.444	1.48
75-27-4	Bromodichloromethane	U	1.48	ug/kg	0.444	1.48
74-95-3	Dibromomethane	U	1.48	ug/kg	0.444	1.48
108-10-1	4-Methyl-2-pentanone	U	7.41	ug/kg	1.85	7.41
10061-01-5	cis-1,3-Dichloropropylene	U	1.48	ug/kg	0.444	1.48
108-88-3	Toluene	J	0.874	ug/kg	0.444	1.48
10061-02-6	trans-1,3-Dichloropropylene	U	1.48	ug/kg	0.444	1.48
79-00-5	1,1,2-Trichloroethane	U	1.48	ug/kg	0.444	1.48
591-78-6	2-Hexanone	U	7.41	ug/kg	2.22	7.41
142-28-9	1,3-Dichloropropane	U	1.48	ug/kg	0.444	1.48
127-18-4	Tetrachloroethylene	U	1.48	ug/kg	0.444	1.48
124-48-1	Dibromochloromethane	U	1.48	ug/kg	0.444	1.48
106-93-4	1,2-Dibromoethane	U	1.48	ug/kg	0.444	1.48
108-90-7	Chlorobenzene	U	1.48	ug/kg	0.444	1.48

AMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373007	Date Received: 03/02/2010 08:50	%Moisture: 32.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7497	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962617	Inst: VOA9.I	Dilution: 1
Run Date: 03/08/2010 17:02	Analyst: RXY1	Purge Vol: 5 mL
Prep Date: 03/08/2010 12:13	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030810V9\9C115.D	Column: DB-624	

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.48	ug/kg	0.444	1.48
179601-23-1	m,p-Xylenes	U	2.96	ug/kg	0.444	2.96
95-47-6	o-Xylene	U	1.48	ug/kg	0.444	1.48
100-42-5	Styrene	U	1.48	ug/kg	0.444	1.48
75-25-2	Bromoform	U	1.48	ug/kg	0.444	1.48
79-34-5	1,1,2,2-Tetrachloroethane	U	1.48	ug/kg	0.444	1.48
96-18-4	1,2,3-Trichloropropane	U	1.48	ug/kg	0.444	1.48
108-86-1	Bromobenzene	U	1.48	ug/kg	0.444	1.48
103-65-1	n-Propylbenzene	U	1.48	ug/kg	0.444	1.48
95-49-8	2-Chlorotoluene	U	1.48	ug/kg	0.444	1.48
98-82-8	Isopropylbenzene	U	1.48	ug/kg	0.444	1.48
108-67-8	1,3,5-Trimethylbenzene	U	1.48	ug/kg	0.444	1.48
106-43-4	4-Chlorotoluene	U	1.48	ug/kg	0.444	1.48
98-06-6	tert-Butylbenzene	U	1.48	ug/kg	0.444	1.48
95-63-6	1,2,4-Trimethylbenzene	U	1.48	ug/kg	0.444	1.48
135-98-8	sec-Butylbenzene	U	1.48	ug/kg	0.444	1.48
99-87-6	4-Isopropyltoluene	J	1.17	ug/kg	0.444	1.48
541-73-1	1,3-Dichlorobenzene	U	1.48	ug/kg	0.444	1.48
106-46-7	1,4-Dichlorobenzene	U	1.48	ug/kg	0.444	1.48
104-51-8	n-Butylbenzene	U	1.48	ug/kg	0.444	1.48
96-12-8	1,2-Dibromo-3-chloropropane	U	1.48	ug/kg	0.444	1.48
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.41	ug/kg	2.37	7.41
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.48	ug/kg	0.444	1.48
95-50-1	1,2-Dichlorobenzene	U	1.48	ug/kg	0.444	1.48

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	21.8	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	14.95	12.1	ug/kg	97	NJ

AMF
4/26/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373008	Date Received: 03/02/2010 08:50	%Moisture: 27.3
Client ID: RE36-10-7495	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 17:33	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:14	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C116.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parname	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		9.90	ug/kg	2.28	6.88 J+,V3b
75-35-4	1,1-Dichloroethylene	U	1.38	ug/kg	0.413	1.38
74-88-4	Iodomethane	U	6.88	ug/kg	2.20	6.88
75-09-2	Methylene chloride	U	6.88	ug/kg	2.75	6.88
75-15-0	Carbon disulfide	U	6.88	ug/kg	1.72	6.88
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	6.88	ug/kg	2.06	6.88
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	0.454	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	0.454	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	6.88	ug/kg	1.72	6.88
10061-01-5	cis-1,3-Dichloropropylene	U	1.38	ug/kg	0.413	1.38
108-88-3	Toluene	J	1.06	ug/kg	0.413	1.38 J+,V3b
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	6.88	ug/kg	2.06	6.88
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: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373008	Date Received: 03/02/2010 08:50	%Moisture: 27.3
Client ID: RE36-10-7495	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 17:33	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:14	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C116.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmaame	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	J	0.523	ug/kg	0.413	2.75 J+,V3b
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	J	0.591	ug/kg	0.413	1.38 J+,V3b
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-Trifluoroethane	U	6.88	ug/kg	2.20	6.88
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
	unknown hydrocarbon	4.47	7.18	ug/kg	0	J
	unknown hydrocarbon	6.87	29.2	ug/kg	0	J
	unknown hydrocarbon	14.3	35.7	ug/kg	0	J
000475-20-7	1,4-Methanoazulene, decahydro-4,8,	14.63	82.5	ug/kg	99	NJ
007785-70-8	1R-.alpha.-Pinene	14.95	9.16	ug/kg	97	NJ
003242-08-8	Cyclohexane, 1-ethenyl-1-methyl-2-	15.29	30.2	ug/kg	50	NJ
	unknown hydrocarbon	15.55	17.3	ug/kg	0	J
013466-78-9	3-Carene	15.96	17.6	ug/kg	96	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373009

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Allquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7498
 Batch ID: 962617
 Run Date: 03/09/2010 16:54
 Prep Date: 03/09/2010 12:13
 Data File: 030910V9\9C215.D

CAS No.	Parmaame	Qualfler	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.29	ug/kg	0.440	1.29
74-87-3	Chloromethane	U	1.29	ug/kg	0.388	1.29
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.388	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.388	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.388	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.388	1.29
67-64-1	Acetone	U	6.47	ug/kg	2.15	6.47
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
74-88-4	Iodomethane	U	6.47	ug/kg	2.07	6.47
75-09-2	Methylene chloride	U	6.47	ug/kg	2.59	6.47
75-15-0	Carbon disulfide	U	6.47	ug/kg	1.62	6.47
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.388	1.29
78-93-3	2-Butanone	U	6.47	ug/kg	1.94	6.47 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.388	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.427	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.388	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.388	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.388	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.388	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.388	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.427	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.388	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.388	1.29
108-10-1	4-Methyl-2-pentanone	U	6.47	ug/kg	1.62	6.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.388	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.388	1.29
591-78-6	2-Hexanone	U	6.47	ug/kg	1.94	6.47
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.388	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.388	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.388	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.388	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.388	1.29

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373009	Date Received: 03/02/2010 08:50	%Moisture: 22.7
Client ID: RE36-10-7498	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/09/2010 16:54	Inst: VOA9.1	Dilution: 1
Prep Date: 03/09/2010 12:13	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030910V9\9C215.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.388	1.29
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.388	2.59
95-47-6	o-Xylene	U	1.29	ug/kg	0.388	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.388	1.29
75-25-2	Bromoforn	U	1.29	ug/kg	0.388	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.388	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.388	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.388	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.388	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.388	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.388	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.388	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.388	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.388	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.47	ug/kg	2.07	6.47 UJ,V7c
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29

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: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373010	Date Received: 03/02/2010 08:50	%Moisture: 21.8
Client ID: RE36-10-7500	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 18:31	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:16	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C118.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.28	ug/kg	0.435	1.28
74-87-3	Chloromethane	U	1.28	ug/kg	0.384	1.28
75-01-4	Vinyl chloride	U	1.28	ug/kg	0.384	1.28
74-83-9	Bromomethane	U	1.28	ug/kg	0.384	1.28
75-00-3	Chloroethane	U	1.28	ug/kg	0.384	1.28
75-69-4	Trichlorofluoromethane	U	1.28	ug/kg	0.384	1.28
67-64-1	Acetone	J	2.73	ug/kg	2.12	6.40
75-35-4	1,1-Dichloroethylene	U	1.28	ug/kg	0.384	1.28
74-88-4	Iodomethane	U	6.40	ug/kg	2.05	6.40
75-09-2	Methylene chloride	U	6.40	ug/kg	2.56	6.40
75-15-0	Carbon disulfide	U	6.40	ug/kg	1.60	6.40
156-60-5	trans-1,2-Dichloroethylene	U	1.28	ug/kg	0.384	1.28
75-34-3	1,1-Dichloroethane	U	1.28	ug/kg	0.384	1.28
78-93-3	2-Butanone	U	6.40	ug/kg	1.92	6.40
156-59-2	cis-1,2-Dichloroethylene	U	1.28	ug/kg	0.384	1.28
594-20-7	2,2-Dichloropropane	U	1.28	ug/kg	0.384	1.28
67-66-3	Chloroform	U	1.28	ug/kg	0.384	1.28
74-97-5	Bromochloromethane	U	1.28	ug/kg	0.422	1.28
71-55-6	1,1,1-Trichloroethane	U	1.28	ug/kg	0.384	1.28
563-58-6	1,1-Dichloropropene	U	1.28	ug/kg	0.384	1.28
56-23-5	Carbon tetrachloride	U	1.28	ug/kg	0.384	1.28
107-06-2	1,2-Dichloroethane	U	1.28	ug/kg	0.384	1.28
71-43-2	Benzene	U	1.28	ug/kg	0.384	1.28
79-01-6	Trichloroethylene	J	0.448	ug/kg	0.422	1.28
78-87-5	1,2-Dichloropropane	U	1.28	ug/kg	0.384	1.28
75-27-4	Bromodichloromethane	U	1.28	ug/kg	0.384	1.28
74-95-3	Dibromomethane	U	1.28	ug/kg	0.384	1.28
108-10-1	4-Methyl-2-pentanone	U	6.40	ug/kg	1.60	6.40
10061-01-5	cis-1,3-Dichloropropylene	U	1.28	ug/kg	0.384	1.28
108-88-3	Toluene	J	0.537	ug/kg	0.384	1.28
10061-02-6	trans-1,3-Dichloropropylene	U	1.28	ug/kg	0.384	1.28
79-00-5	1,1,2-Trichloroethane	U	1.28	ug/kg	0.384	1.28
591-78-6	2-Hexanone	U	6.40	ug/kg	1.92	6.40
142-28-9	1,3-Dichloropropane	U	1.28	ug/kg	0.384	1.28
127-18-4	Tetrachloroethylene	U	1.28	ug/kg	0.384	1.28
124-48-1	Dibromochloromethane	U	1.28	ug/kg	0.384	1.28
106-93-4	1,2-Dibromoethane	U	1.28	ug/kg	0.384	1.28
108-90-7	Chlorobenzene	U	1.28	ug/kg	0.384	1.28

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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373010	Date Received: 03/02/2010 08:50	%Moisture: 21.8
Client ID: RE36-10-7500	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 18:31	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:16	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C118.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.28	ug/kg	0.384	1.28
179601-23-1	m,p-Xylenes	U	2.56	ug/kg	0.384	2.56
95-47-6	o-Xylene	U	1.28	ug/kg	0.384	1.28
100-42-5	Styrene	U	1.28	ug/kg	0.384	1.28
75-25-2	Bromoform	U	1.28	ug/kg	0.384	1.28
79-34-5	1,1,2,2-Tetrachloroethane	U	1.28	ug/kg	0.384	1.28
96-18-4	1,2,3-Trichloropropane	U	1.28	ug/kg	0.384	1.28
108-86-1	Bromobenzene	U	1.28	ug/kg	0.384	1.28
103-65-1	n-Propylbenzene	U	1.28	ug/kg	0.384	1.28
95-49-8	2-Chlorotoluene	U	1.28	ug/kg	0.384	1.28
98-82-8	Isopropylbenzene	U	1.28	ug/kg	0.384	1.28
108-67-8	1,3,5-Trimethylbenzene	U	1.28	ug/kg	0.384	1.28
106-43-4	4-Chlorotoluene	U	1.28	ug/kg	0.384	1.28
98-06-6	tert-Butylbenzene	U	1.28	ug/kg	0.384	1.28
95-63-6	1,2,4-Trimethylbenzene	U	1.28	ug/kg	0.384	1.28
135-98-8	sec-Butylbenzene	U	1.28	ug/kg	0.384	1.28
99-87-6	4-Isopropyltoluene	U	1.28	ug/kg	0.384	1.28
541-73-1	1,3-Dichlorobenzene	U	1.28	ug/kg	0.384	1.28
106-46-7	1,4-Dichlorobenzene	U	1.28	ug/kg	0.384	1.28
104-51-8	n-Butylbenzene	U	1.28	ug/kg	0.384	1.28
96-12-8	1,2-Dibromo-3-chloropropane	U	1.28	ug/kg	0.384	1.28
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.40	ug/kg	2.05	6.40
630-20-6	1,1,1,2-Tetrachloroethane	U	1.28	ug/kg	0.384	1.28
95-50-1	1,2-Dichlorobenzene	U	1.28	ug/kg	0.384	1.28

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	4.55	14.3	ug/kg	0	J
	unknown hydrocarbon	14.31	40	ug/kg	0	J
000475-20-7	1,4-Methanoazulene, decahydro-4,8,	14.64	66	ug/kg	99	NJ
007785-70-8	1R-.alpha.-Pinene	14.95	10.2	ug/kg	95	NJ
	unknown hydrocarbon	15.29	26.9	ug/kg	0	J
	unknown hydrocarbon	15.57	16.2	ug/kg	0	J
	unknown siloxane	16.93	14.5	ug/kg	0	J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373011	Date Received: 03/02/2010 08:50	%Moisture: 15.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7523	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962617	Inst: VOA9.I	Dilution: 1
Run Date: 03/08/2010 18:59	Analyst: RXY1	Purge Vol: 5 mL
Prep Date: 03/08/2010 12:17	Allquot: 5 g	Final Volume: 5 mL
Data File: 030810V9\9C119.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.404	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.356	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.356	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.356	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.356	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.356	1.19
67-64-1	Acetone	U	5.94	ug/kg	1.97	5.94
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.356	1.19
74-88-4	Iodomethane	U	5.94	ug/kg	1.90	5.94
75-09-2	Methylene chloride	U	5.94	ug/kg	2.38	5.94
75-15-0	Carbon disulfide	U	5.94	ug/kg	1.49	5.94
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.356	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.356	1.19
78-93-3	2-Butanone	U	5.94	ug/kg	1.78	5.94
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.356	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.356	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.356	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.392	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.356	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.356	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.356	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.356	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.356	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.392	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.356	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.356	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.356	1.19
108-10-1	4-Methyl-2-pentanone	U	5.94	ug/kg	1.49	5.94
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.356	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.356	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.356	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.356	1.19
591-78-6	2-Hexanone	U	5.94	ug/kg	1.78	5.94
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.356	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.356	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.356	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.356	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.356	1.19

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373011	Date Received: 03/02/2010 08:50	%Moisture: 15.8
Client ID: RE36-10-7523	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 18:59	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:17	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V99C119.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.356	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.356	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.356	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.356	1.19
75-25-2	Bromofom	U	1.19	ug/kg	0.356	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.356	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.356	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.356	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.356	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.356	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.356	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.356	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.356	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.356	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.356	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.356	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.356	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.356	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.356	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.356	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.356	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	U	5.94	ug/kg	1.90	5.94
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.356	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.356	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	4.54	11.4	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	14.95	8.8	ug/kg	96	NJ
000127-91-3	.beta.-Pinene	15.66	8.72	ug/kg	95	NJ

AMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154

Lab Sample ID: 248373014

Date Collected: 02/24/2010 12:00

Date Received: 03/02/2010 08:50

Matrix: R

%Moisture: 11.3

Client ID: RE36-10-7522

Batch ID: 962617

Run Date: 03/08/2010 19:27

Prep Date: 03/08/2010 12:18

Data File: 030810V9\9C120.D

Client: LANL010

Method: SW846 8260B

Inst: VOA9.I

Analyst: RXY1

Allquot: 5 g

Column: DB-624

Project: LANL01004

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.383	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	U	5.63	ug/kg	1.87	5.63
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.63	ug/kg	1.80	5.63
75-09-2	Methylene chloride	U	5.63	ug/kg	2.25	5.63
75-15-0	Carbon disulfide	U	5.63	ug/kg	1.41	5.63
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.63	ug/kg	1.69	5.63
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.63	ug/kg	1.41	5.63
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.63	ug/kg	1.69	5.63
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373014	Date Received: 03/02/2010 08:50	%Moisture: 11.3
Client ID: RE36-10-7522	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 19:27	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:18	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C120.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.25	ug/kg	0.338	2.25
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.63	ug/kg	1.80	5.63
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	9	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
Client ID: RE36-10-7521	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 19:55	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:19	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C121.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.30	ug/kg	0.441	1.30
74-87-3	Chloromethane	U	1.30	ug/kg	0.389	1.30
75-01-4	Vinyl chloride	U	1.30	ug/kg	0.389	1.30
74-83-9	Bromomethane	U	1.30	ug/kg	0.389	1.30
75-00-3	Chloroethane	U	1.30	ug/kg	0.389	1.30
75-69-4	Trichlorofluoromethane	U	1.30	ug/kg	0.389	1.30
67-64-1	Acetone		8.52	ug/kg	2.15	6.49 J+,V3b
75-35-4	1,1-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
74-88-4	Iodomethane	U	6.49	ug/kg	2.08	6.49
75-09-2	Methylene chloride	U	6.49	ug/kg	2.59	6.49
75-15-0	Carbon disulfide	U	6.49	ug/kg	1.62	6.49
156-60-5	trans-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
75-34-3	1,1-Dichloroethane	U	1.30	ug/kg	0.389	1.30
78-93-3	2-Butanone	U	6.49	ug/kg	1.95	6.49
156-59-2	cis-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
594-20-7	2,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
67-66-3	Chloroform	U	1.30	ug/kg	0.389	1.30
74-97-5	Bromochloromethane	U	1.30	ug/kg	0.428	1.30
71-55-6	1,1,1-Trichloroethane	U	1.30	ug/kg	0.389	1.30
563-58-6	1,1-Dichloropropene	U	1.30	ug/kg	0.389	1.30
56-23-5	Carbon tetrachloride	U	1.30	ug/kg	0.389	1.30
107-06-2	1,2-Dichloroethane	U	1.30	ug/kg	0.389	1.30
71-43-2	Benzene	U	1.30	ug/kg	0.389	1.30
79-01-6	Trichloroethylene	U	1.30	ug/kg	0.428	1.30
78-87-5	1,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
75-27-4	Bromodichloromethane	U	1.30	ug/kg	0.389	1.30
74-95-3	Dibromomethane	U	1.30	ug/kg	0.389	1.30
108-10-1	4-Methyl-2-pentanone	U	6.49	ug/kg	1.62	6.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
108-88-3	Toluene	J	0.869	ug/kg	0.389	1.30 J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
79-00-5	1,1,2-Trichloroethane	U	1.30	ug/kg	0.389	1.30
591-78-6	2-Hexanone	U	6.49	ug/kg	1.95	6.49
142-28-9	1,3-Dichloropropane	U	1.30	ug/kg	0.389	1.30
127-18-4	Tetrachloroethylene	U	1.30	ug/kg	0.389	1.30
124-48-1	Dibromochloromethane	U	1.30	ug/kg	0.389	1.30
106-93-4	1,2-Dibromoethane	U	1.30	ug/kg	0.389	1.30
108-90-7	Chlorobenzene	U	1.30	ug/kg	0.389	1.30

AMF
4/26/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
Client ID: RE36-10-7521	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 19:55	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:19	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C121.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.30	ug/kg	0.389	1.30
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.389	2.59
95-47-6	o-Xylene	U	1.30	ug/kg	0.389	1.30
100-42-5	Styrene	U	1.30	ug/kg	0.389	1.30
75-25-2	Bromoform	U	1.30	ug/kg	0.389	1.30
79-34-5	1,1,2,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
96-18-4	1,2,3-Trichloropropane	U	1.30	ug/kg	0.389	1.30
108-86-1	Bromobenzene	U	1.30	ug/kg	0.389	1.30
103-65-1	n-Propylbenzene	U	1.30	ug/kg	0.389	1.30
95-49-8	2-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-82-8	Isopropylbenzene	U	1.30	ug/kg	0.389	1.30
108-67-8	1,3,5-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
106-43-4	4-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-06-6	tert-Butylbenzene	U	1.30	ug/kg	0.389	1.30
95-63-6	1,2,4-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
135-98-8	sec-Butylbenzene	U	1.30	ug/kg	0.389	1.30
99-87-6	4-Isopropyltoluene	J	0.765	ug/kg	0.389	1.30 J+, V3b
541-73-1	1,3-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
106-46-7	1,4-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
104-51-8	n-Butylbenzene	U	1.30	ug/kg	0.389	1.30
96-12-8	1,2-Dibromo-3-chloropropane	U	1.30	ug/kg	0.389	1.30
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.49	ug/kg	2.08	6.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
95-50-1	1,2-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
000064-17-5	Ethyl alcohol	6.87	30.8	ug/kg	83	NJ
007785-70-8	1R-.alpha.-Pinene	14.95	27.9	ug/kg	97	NJ
000079-92-5	Camphene	15.28	14.7	ug/kg	97	NJ
000498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-tr	15.96	20.8	ug/kg	94	NJ
	unknown siloxane	16.94	7.85	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: S
Lab Sample ID: 248373016	Date Received: 03/02/2010 08:50	
Client ID: RE36-10-7541	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 12:54	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:20	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V99C107.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: S
Lab Sample ID: 248373016	Date Received: 03/02/2010 08:50	
Client ID: RE36-10-7541	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 12:54	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:20	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V9\9C107.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	7	ug/kg	0	J

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2154 VALIDATION DATE: 4/26/10 LAB CODE: GEL
 CONTRACT LABORATORY NAME: GEL Laboratories LLC
 VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.
 ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check


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

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


1. It should be noted that the laboratory received no containers for samples RE36-10-7519 and -7520. The analyses could not be performed. No sample results were qualified.
2. The ICV/CCV %Ds for pyridine; benzyl alcohol; hexachlorocyclopentadiene; 2-methyl-4,6-dinitrophenol; and 4-nitroaniline were >20%. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
3. The MS/MSD %R for 3,3'-dichlorobenzidine and the RPDs for fifty-three target analytes were outside the laboratory acceptance limits. MS/MSD analyses are not required for SVOCs, thus, no sample results were qualified.

Reviewed by: ETM Level: 1 Date: 4/28/10


VALIDATOR'S SIGNATURE: Allison FelixDATE: 4/26/10

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


Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

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

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminants).	N/A	J, SV4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20. The quantitating IS area count is $<10\%$ of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

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

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

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	37. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, SV19	J, R, SV19

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

SDG Number: 10-2154
Lab Sample ID: 248373004

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7491
Batch ID: 961922
Run Date: 03/21/2010 14:26
Prep Date: 03/07/2010 12:04
Data File: s8c2114.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	512	ug/kg	102	512
108-95-2	Phenol	U	512	ug/kg	102	512
95-57-8	2-Chlorophenol	U	512	ug/kg	102	512
106-46-7	1,4-Dichlorobenzene	U	512	ug/kg	102	512
621-64-7	N-Nitrosodipropylamine	U	512	ug/kg	102	512
59-50-7	4-Chloro-3-methylphenol	U	512	ug/kg	102	512
83-32-9	Acenaphthene	U	51.2	ug/kg	16.9	51.2
121-14-2	2,4-Dinitrotoluene	U	512	ug/kg	51.2	512
100-02-7	4-Nitrophenol	U	512	ug/kg	169	512
87-86-5	Pentachlorophenol	U	512	ug/kg	128	512
129-00-0	Pyrene	J	16.0	ug/kg	15.3	51.2
110-86-1	Pyridine	U	512	ug/kg	102	512 UJ,SV7c
62-53-3	Aniline	U	512	ug/kg	153	512
111-44-4	bis(2-Chloroethyl) ether	U	512	ug/kg	102	512
541-73-1	1,3-Dichlorobenzene	U	512	ug/kg	102	512
100-51-6	Benzyl alcohol	U	512	ug/kg	153	512 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	512	ug/kg	102	512
108-60-1	bis(2-Chloroisopropyl) ether	U	512	ug/kg	102	512
95-48-7	o-Cresol	U	512	ug/kg	102	512
65794-96-9	m,p-Cresols	U	512	ug/kg	153	512
67-72-1	Hexachloroethane	U	512	ug/kg	102	512
98-95-3	Nitrobenzene	U	512	ug/kg	102	512
78-59-1	Isophorone	U	512	ug/kg	102	512
88-75-5	2-Nitrophenol	U	512	ug/kg	102	512
105-67-9	2,4-Dimethylphenol	U	512	ug/kg	179	512
111-91-1	bis(2-Chloroethoxy) methane	U	512	ug/kg	102	512
120-83-2	2,4-Dichlorophenol	U	512	ug/kg	102	512
65-85-0	Benzoic acid	U	1020	ug/kg	256	1020
91-20-3	Naphthalene	U	51.2	ug/kg	15.3	51.2
106-47-8	4-Chloroaniline	U	512	ug/kg	102	512
87-68-3	Hexachlorobutadiene	U	512	ug/kg	102	512
91-57-6	2-Methylnaphthalene	U	51.2	ug/kg	10.2	51.2
77-47-4	Hexachlorocyclopentadiene	U	512	ug/kg	102	512 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	512	ug/kg	102	512
95-95-4	2,4,5-Trichlorophenol	U	512	ug/kg	102	512
91-58-7	2-Chloronaphthalene	U	51.2	ug/kg	16.9	51.2
88-74-4	2-Nitroaniline	U	512	ug/kg	102	512
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	512	ug/kg	102	512

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
Client ID: RE36-10-7491	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 14:26	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2114.d	Aliquot: 30.18 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	512	ug/kg	102	512
606-20-2	2,6-Dinitrotoluene	U	512	ug/kg	51.2	512
208-96-8	Acenaphthylene	U	51.2	ug/kg	15.3	51.2
51-28-5	2,4-Dinitrophenol	U	1020	ug/kg	194	1020
132-64-9	Dibenzofuran	U	512	ug/kg	102	512
84-66-2	Diethylphthalate	U	512	ug/kg	102	512
86-73-7	Fluorene	U	51.2	ug/kg	15.3	51.2
7005-72-3	4-Chlorophenylphenylether	U	512	ug/kg	102	512
534-52-1	2-Methyl-4,6-dinitrophenol	U	512	ug/kg	102	512 UJ,SV7c
100-01-6	4-Nitroaniline	U	512	ug/kg	153	512 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	512	ug/kg	102	512
122-66-7	Azobenzene	U	512	ug/kg	102	512
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	512	ug/kg	102	512
118-74-1	Hexachlorobenzene	U	512	ug/kg	102	512
85-01-8	Phenanthrene	U	51.2	ug/kg	15.3	51.2
120-12-7	Anthracene	U	51.2	ug/kg	10.2	51.2
84-74-2	Di-n-butylphthalate	U	512	ug/kg	102	512
206-44-0	Fluoranthene	J	18.0	ug/kg	15.3	51.2
85-68-7	Butylbenzylphthalate	U	512	ug/kg	102	512
56-55-3	Benzo(a)anthracene	U	51.2	ug/kg	15.3	51.2
91-94-1	3,3'-Dichlorobenzidine	U	512	ug/kg	153	512
218-01-9	Chrysene	U	51.2	ug/kg	15.3	51.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	512	ug/kg	102	512
117-84-0	Di-n-octylphthalate	U	512	ug/kg	102	512
205-99-2	Benzo(b)fluoranthene	U	51.2	ug/kg	15.3	51.2
207-08-9	Benzo(k)fluoranthene	U	51.2	ug/kg	15.3	51.2
50-32-8	Benzo(a)pyrene	U	51.2	ug/kg	15.3	51.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	51.2	ug/kg	15.3	51.2
53-70-3	Dibenzo(a,h)anthracene	U	51.2	ug/kg	15.3	51.2
191-24-2	Benzo(ghi)perylene	U	51.2	ug/kg	15.3	51.2
120-82-1	1,2,4-Trichlorobenzene	U	512	ug/kg	102	512

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
7785-70-8	1R-.alpha.-Pinene	3.69	884	ug/kg	97	NJ
495-61-4	Cyclohexene, 1-methyl-4-(5-methyl-1-meth	7.45	307	ug/kg	97	NJ

AMF
4/26/10

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
Client ID: RE36-10-7491	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 14:26	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2114.d	Aliquot: 30.18 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
57-10-3	n-Hexadecanoic acid	9.6	503	ug/kg	98	NJ
2091-29-4	9-Hexadecenoic acid	10.36	653	ug/kg	91	NJ
	Unknown	10.5	254	ug/kg		J
25491-20-7	1H-3a,7-Methanoazulene, octahydro-1,4,9,	10.93	239	ug/kg	84	NJ
	Unknown	11.16	458	ug/kg		J
506-30-9	Eicosanoic acid	11.23	309	ug/kg	99	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	330	ug/kg	97	NJ
	Unknown	11.31	459	ug/kg		J
	Unknown	11.35	407	ug/kg		J
	Unknown	11.48	463	ug/kg		J
	Unknown	11.56	2610	ug/kg		J
	Unknown	11.63	439	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.68	2970	ug/kg	91	NJ
	Unknown	11.73	498	ug/kg		J
	Unknown	11.77	399	ug/kg		J
4630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	11.83	734	ug/kg	94	NJ
112-85-6	Docosanoic acid	12	632	ug/kg	93	NJ
	Unknown	12.04	225	ug/kg		J
	Unknown	12.06	465	ug/kg		J
	Unknown	12.1	297	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.12	398	ug/kg	91	NJ
629-78-7	Heptadecane	12.55	406	ug/kg	96	NJ
557-59-5	Tetracosanoic acid	12.89	512	ug/kg	98	NJ
	Unknown	14.21	1010	ug/kg		J
	Unknown	15.1	2860	ug/kg		J
83-46-5	.beta.-Sitosterol	16.85	1410	ug/kg	97	NJ
1058-61-3	Stigmast-4-en-3-one	17.28	1320	ug/kg	94	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373003	Date Received: 03/02/2010 08:50	%Moisture: 21.1
Client ID: RE36-10-7492	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 13:56	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2113.d	Aliquot: 30.12 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	421	ug/kg	84.2	421
108-95-2	Phenol	U	421	ug/kg	84.2	421
95-57-8	2-Chlorophenol	U	421	ug/kg	84.2	421
106-46-7	1,4-Dichlorobenzene	U	421	ug/kg	84.2	421
621-64-7	N-Nitrosodipropylamine	U	421	ug/kg	84.2	421
59-50-7	4-Chloro-3-methylphenol	U	421	ug/kg	84.2	421
83-32-9	Acenaphthene	U	42.1	ug/kg	13.9	42.1
121-14-2	2,4-Dinitrotoluene	U	421	ug/kg	42.1	421
100-02-7	4-Nitrophenol	U	421	ug/kg	139	421
87-86-5	Pentachlorophenol	U	421	ug/kg	105	421
129-00-0	Pyrene	U	42.1	ug/kg	12.6	42.1
110-86-1	Pyridine	U	421	ug/kg	84.2	421 UJ,SV7c
62-53-3	Aniline	U	421	ug/kg	126	421
111-44-4	bis(2-Chloroethyl) ether	U	421	ug/kg	84.2	421
541-73-1	1,3-Dichlorobenzene	U	421	ug/kg	84.2	421
100-51-6	Benzyl alcohol	U	421	ug/kg	126	421 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	421	ug/kg	84.2	421
108-60-1	bis(2-Chloroisopropyl)ether	U	421	ug/kg	84.2	421
95-48-7	o-Cresol	U	421	ug/kg	84.2	421
65794-96-9	m,p-Cresols	U	421	ug/kg	126	421
67-72-1	Hexachloroethane	U	421	ug/kg	84.2	421
98-95-3	Nitrobenzene	U	421	ug/kg	84.2	421
78-59-1	Isophorone	U	421	ug/kg	84.2	421
88-75-5	2-Nitrophenol	U	421	ug/kg	84.2	421
105-67-9	2,4-Dimethylphenol	U	421	ug/kg	147	421
111-91-1	bis(2-Chloroethoxy)methane	U	421	ug/kg	84.2	421
120-83-2	2,4-Dichlorophenol	U	421	ug/kg	84.2	421
65-85-0	Benzoic acid	U	842	ug/kg	211	842
91-20-3	Naphthalene	U	42.1	ug/kg	12.6	42.1
106-47-8	4-Chloroaniline	U	421	ug/kg	84.2	421
87-68-3	Hexachlorobutadiene	U	421	ug/kg	84.2	421
91-57-6	2-Methylnaphthalene	U	42.1	ug/kg	8.42	42.1
77-47-4	Hexachlorocyclopentadiene	U	421	ug/kg	84.2	421 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	421	ug/kg	84.2	421
95-95-4	2,4,5-Trichlorophenol	U	421	ug/kg	84.2	421
91-58-7	2-Chloronaphthalene	U	42.1	ug/kg	13.9	42.1
88-74-4	2-Nitroaniline	U	421	ug/kg	84.2	421
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	421	ug/kg	84.2	421

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373003	Date Received: 03/02/2010 08:50	%Moisture: 21.1
Client ID: RE36-10-7492	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 13:56	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2113.d	Aliquot: 30.12 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	421	ug/kg	84.2	421
606-20-2	2,6-Dinitrotoluene	U	421	ug/kg	42.1	421
208-96-8	Acenaphthylene	U	42.1	ug/kg	12.6	42.1
51-28-5	2,4-Dinitrophenol	U	842	ug/kg	160	842
132-64-9	Dibenzofuran	U	421	ug/kg	84.2	421
84-66-2	Diethylphthalate	U	421	ug/kg	84.2	421
86-73-7	Fluorene	U	42.1	ug/kg	12.6	42.1
7005-72-3	4-Chlorophenylphenylether	U	421	ug/kg	84.2	421
534-52-1	2-Methyl-4,6-dinitrophenol	U	421	ug/kg	84.2	421 UJ,SV7c
100-01-6	4-Nitroaniline	U	421	ug/kg	126	421 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	421	ug/kg	84.2	421
122-66-7	Azobenzene	U	421	ug/kg	84.2	421
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	421	ug/kg	84.2	421
118-74-1	Hexachlorobenzene	U	421	ug/kg	84.2	421
85-01-8	Phenanthrene	U	42.1	ug/kg	12.6	42.1
120-12-7	Anthracene	U	42.1	ug/kg	8.42	42.1
84-74-2	Di-n-butylphthalate	U	421	ug/kg	84.2	421
206-44-0	Fluoranthene	U	42.1	ug/kg	12.6	42.1
85-68-7	Butylbenzylphthalate	U	421	ug/kg	84.2	421
56-55-3	Benzo(a)anthracene	U	42.1	ug/kg	12.6	42.1
91-94-1	3,3'-Dichlorobenzidine	U	421	ug/kg	126	421
218-01-9	Chrysene	U	42.1	ug/kg	12.6	42.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	421	ug/kg	84.2	421
117-84-0	Di-n-octylphthalate	U	421	ug/kg	84.2	421
205-99-2	Benzo(b)fluoranthene	U	42.1	ug/kg	12.6	42.1
207-08-9	Benzo(k)fluoranthene	U	42.1	ug/kg	12.6	42.1
50-32-8	Benzo(a)pyrene	U	42.1	ug/kg	12.6	42.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.1	ug/kg	12.6	42.1
53-70-3	Dibenzo(a,h)anthracene	U	42.1	ug/kg	12.6	42.1
191-24-2	Benzo(ghi)perylene	U	42.1	ug/kg	12.6	42.1
120-82-1	1,2,4-Trichlorobenzene	U	421	ug/kg	84.2	421

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.71	763	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.69	1710	ug/kg	97	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373003	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7492	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 13:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s8c2113.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.25	556	ug/kg	97	NJ
1120-21-4	Undecane	4.85	246	ug/kg	90	NJ
1000130-90-8	Z-7-Hexadecenoic acid	9.52	196	ug/kg	98	NJ
57-10-3	n-Hexadecanoic acid	9.59	627	ug/kg	98	NJ
	Unknown	10.15	180	ug/kg		J
593-39-5	6-Octadecenoic acid, (Z)-	10.36	1270	ug/kg	91	NJ
	Unknown	10.92	170	ug/kg		J
	Unknown	11.16	245	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	211	ug/kg	98	NJ
	Unknown	11.3	318	ug/kg		J
	Unknown	11.35	201	ug/kg		J
	Unknown	11.55	871	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.66	1600	ug/kg	90	NJ
112-85-6	Docosanoic acid	11.99	258	ug/kg	99	NJ
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.2	186	ug/kg	91	NJ
112-95-8	Eicosane	12.69	194	ug/kg	95	NJ
557-59-5	Tetracosanoic acid	12.89	255	ug/kg	98	NJ
55320-06-4	Heneicosane, 11-decyl-	12.92	447	ug/kg	83	NJ
1599-67-3	1-Docosene	13.17	352	ug/kg	96	NJ
	Unknown	13.7	477	ug/kg		J
4860-03-1	Hexadecane, 1-chloro-	13.96	274	ug/kg	86	NJ
	Unknown	15.32	380	ug/kg		J
	Unknown	16.08	400	ug/kg		J
	Unknown	17.01	338	ug/kg		J
	Unknown	17.27	760	ug/kg		J

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373002	Date Received: 03/02/2010 08:50	%Moisture: 25.5
Client ID: RE36-10-7493	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 13:27	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2112.d	Aliquot: 30.13 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	445	ug/kg	89.1	445
108-95-2	Phenol	U	445	ug/kg	89.1	445
95-57-8	2-Chlorophenol	U	445	ug/kg	89.1	445
106-46-7	1,4-Dichlorobenzene	U	445	ug/kg	89.1	445
621-64-7	N-Nitrosodipropylamine	U	445	ug/kg	89.1	445
59-50-7	4-Chloro-3-methylphenol	U	445	ug/kg	89.1	445
83-32-9	Acenaphthene	U	44.5	ug/kg	14.7	44.5
121-14-2	2,4-Dinitrotoluene	U	445	ug/kg	44.5	445
100-02-7	4-Nitrophenol	U	445	ug/kg	147	445
87-86-5	Pentachlorophenol	U	445	ug/kg	111	445
129-00-0	Pyrene	J	29.8	ug/kg	13.4	44.5
110-86-1	Pyridine	U	445	ug/kg	89.1	445 UJ,SV7c
62-53-3	Aniline	U	445	ug/kg	134	445
111-44-4	bis(2-Chloroethyl) ether	U	445	ug/kg	89.1	445
541-73-1	1,3-Dichlorobenzene	U	445	ug/kg	89.1	445
100-51-6	Benzyl alcohol	U	445	ug/kg	134	445 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	445	ug/kg	89.1	445
108-60-1	bis(2-Chloroisopropyl) ether	U	445	ug/kg	89.1	445
95-48-7	o-Cresol	U	445	ug/kg	89.1	445
65794-96-9	m,p-Cresols	U	445	ug/kg	134	445
67-72-1	Hexachloroethane	U	445	ug/kg	89.1	445
98-95-3	Nitrobenzene	U	445	ug/kg	89.1	445
78-59-1	Isophorone	U	445	ug/kg	89.1	445
88-75-5	2-Nitrophenol	U	445	ug/kg	89.1	445
105-67-9	2,4-Dimethylphenol	U	445	ug/kg	156	445
111-91-1	bis(2-Chloroethoxy)methane	U	445	ug/kg	89.1	445
120-83-2	2,4-Dichlorophenol	U	445	ug/kg	89.1	445
65-85-0	Benzoic acid	U	891	ug/kg	223	891
91-20-3	Naphthalene	U	44.5	ug/kg	13.4	44.5
106-47-8	4-Chloroaniline	U	445	ug/kg	89.1	445
87-68-3	Hexachlorobutadiene	U	445	ug/kg	89.1	445
91-57-6	2-Methylnaphthalene	U	44.5	ug/kg	8.91	44.5
77-47-4	Hexachlorocyclopentadiene	U	445	ug/kg	89.1	445 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	445	ug/kg	89.1	445
95-95-4	2,4,5-Trichlorophenol	U	445	ug/kg	89.1	445
91-58-7	2-Chloronaphthalene	U	44.5	ug/kg	14.7	44.5
88-74-4	2-Nitroaniline	U	445	ug/kg	89.1	445
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	445	ug/kg	89.1	445

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 2 of 3

SDG Number: 10-2154
Lab Sample ID: 248373002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Allquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 25.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<i>m-Nitroaniline</i>						
131-11-3	Dimethylphthalate	U	445	ug/kg	89.1	445
606-20-2	2,6-Dinitrotoluene	U	445	ug/kg	44.5	445
208-96-8	Acenaphthylene	U	44.5	ug/kg	13.4	44.5
51-28-5	2,4-Dinitrophenol	U	891	ug/kg	169	891
132-64-9	Dibenzofuran	U	445	ug/kg	89.1	445
84-66-2	Diethylphthalate	U	445	ug/kg	89.1	445
86-73-7	Fluorene	U	44.5	ug/kg	13.4	44.5
7005-72-3	4-Chlorophenylphenylether	U	445	ug/kg	89.1	445
534-52-1	2-Methyl-4,6-dinitrophenol	U	445	ug/kg	89.1	445 UJ,SV7c
100-01-6	4-Nitroaniline	U	445	ug/kg	134	445 UJ,SV7c
<i>p-Nitroaniline</i>						
122-39-4	Diphenylamine	U	445	ug/kg	89.1	445
122-66-7	Azobenzene	U	445	ug/kg	89.1	445
<i>1,2-Diphenylhydrazine</i>						
101-55-3	4-Bromophenylphenylether	U	445	ug/kg	89.1	445
118-74-1	Hexachlorobenzene	U	445	ug/kg	89.1	445
85-01-8	Phenanthrene		112	ug/kg	13.4	44.5
120-12-7	Anthracene	U	44.5	ug/kg	8.91	44.5
84-74-2	Di-n-butylphthalate	U	445	ug/kg	89.1	445
206-44-0	Fluoranthene	J	35.9	ug/kg	13.4	44.5
85-68-7	Butylbenzylphthalate	U	445	ug/kg	89.1	445
56-55-3	Benzo(a)anthracene	U	44.5	ug/kg	13.4	44.5
91-94-1	3,3'-Dichlorobenzidine	U	445	ug/kg	134	445
218-01-9	Chrysene	J	33.7	ug/kg	13.4	44.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	445	ug/kg	89.1	445
117-84-0	Di-n-octylphthalate	U	445	ug/kg	89.1	445
205-99-2	Benzo(b)fluoranthene	J	23.2	ug/kg	13.4	44.5
207-08-9	Benzo(k)fluoranthene	U	44.5	ug/kg	13.4	44.5
50-32-8	Benzo(a)pyrene	J	17.3	ug/kg	13.4	44.5
193-39-5	Indeno(1,2,3-cd)pyrene	J	19.7	ug/kg	13.4	44.5
53-70-3	Dibenzo(a,h)anthracene	J	16.9	ug/kg	13.4	44.5
191-24-2	Benzo(ghi)perylene	J	23.4	ug/kg	13.4	44.5
120-82-1	1,2,4-Trichlorobenzene	U	445	ug/kg	89.1	445

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	496	ug/kg		J
112-85-6	Docosanoic acid	11.99	179	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373002	Date Received: 03/02/2010 08:50	%Moisture: 25.5
Client ID: RE36-10-7493	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 13:27	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2112.d	Allquot: 30.13 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	12.28	422	ug/kg		J
593-49-7	Heptacosane	12.55	436	ug/kg	98	NJ
	Unknown	13.02	181	ug/kg		J
62951-96-6	1,5,9-Undecatriene, 2,6,10-trimethyl-, (	13.13	425	ug/kg	83	NJ
629-96-9	1-Eicosanol	13.19	234	ug/kg	93	NJ
14811-95-1	1,19-Eicosadiene	13.23	530	ug/kg	97	NJ
	Unknown	13.31	298	ug/kg		J
7225-66-3	Tridecane, 7-hexyl-	13.53	1050	ug/kg	95	NJ
	Unknown	14.12	325	ug/kg		J
	Unknown	14.35	265	ug/kg		J
112-95-8	Eicosane	14.68	386	ug/kg	97	NJ
	Unknown	16.38	302	ug/kg		J
	Unknown	16.84	183	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	17.27	683	ug/kg	92	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373001	Date Received: 03/02/2010 08:50	%Moisture: 12.3
Client ID: RE36-10-7494	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 11:58	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2109.d	Allquot: 30.17 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	378	ug/kg	75.6	378
108-95-2	Phenol	U	378	ug/kg	75.6	378
95-57-8	2-Chlorophenol	U	378	ug/kg	75.6	378
106-46-7	1,4-Dichlorobenzene	U	378	ug/kg	75.6	378
621-64-7	N-Nitrosodipropylamine	U	378	ug/kg	75.6	378
59-50-7	4-Chloro-3-methylphenol	U	378	ug/kg	75.6	378
83-32-9	Acenaphthene	U	37.8	ug/kg	12.5	37.8
121-14-2	2,4-Dinitrotoluene	U	378	ug/kg	37.8	378
100-02-7	4-Nitrophenol	U	378	ug/kg	125	378
87-86-5	Pentachlorophenol	U	378	ug/kg	94.5	378
129-00-0	Pyrene	U	37.8	ug/kg	11.3	37.8
110-86-1	Pyridine	U	378	ug/kg	75.6	378 UJ,SV7c
62-53-3	Aniline	U	378	ug/kg	113	378
111-44-4	bis(2-Chloroethyl) ether	U	378	ug/kg	75.6	378
541-73-1	1,3-Dichlorobenzene	U	378	ug/kg	75.6	378
100-51-6	Benzyl alcohol	U	378	ug/kg	113	378 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	378	ug/kg	75.6	378
108-60-1	bis(2-Chloroisopropyl)ether	U	378	ug/kg	75.6	378
95-48-7	o-Cresol	U	378	ug/kg	75.6	378
65794-96-9	m,p-Cresols	U	378	ug/kg	113	378
67-72-1	Hexachloroethane	U	378	ug/kg	75.6	378
98-95-3	Nitrobenzene	U	378	ug/kg	75.6	378
78-59-1	Isophorone	U	378	ug/kg	75.6	378
88-75-5	2-Nitrophenol	U	378	ug/kg	75.6	378
105-67-9	2,4-Dimethylphenol	U	378	ug/kg	132	378
111-91-1	bis(2-Chloroethoxy)methane	U	378	ug/kg	75.6	378
120-83-2	2,4-Dichlorophenol	U	378	ug/kg	75.6	378
65-85-0	Benzoic acid	U	756	ug/kg	189	756
91-20-3	Naphthalene	U	37.8	ug/kg	11.3	37.8
106-47-8	4-Chloroaniline	U	378	ug/kg	75.6	378
87-68-3	Hexachlorobutadiene	U	378	ug/kg	75.6	378
91-57-6	2-Methylnaphthalene	U	37.8	ug/kg	7.56	37.8
77-47-4	Hexachlorocyclopentadiene	U	378	ug/kg	75.6	378 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	378	ug/kg	75.6	378
95-95-4	2,4,5-Trichlorophenol	U	378	ug/kg	75.6	378
91-58-7	2-Chloronaphthalene	U	37.8	ug/kg	12.5	37.8
88-74-4	2-Nitroaniline	U	378	ug/kg	75.6	378
99-09-2	o-Nitroaniline	U	378	ug/kg	75.6	378
	3-Nitroaniline					

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

SDG Number: 10-2154
Lab Sample ID: 248373001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Allquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	378	ug/kg	75.6	378
606-20-2	2,6-Dinitrotoluene	U	378	ug/kg	37.8	378
208-96-8	Acenaphthylene	U	37.8	ug/kg	11.3	37.8
51-28-5	2,4-Dinitrophenol	U	756	ug/kg	144	756
132-64-9	Dibenzofuran	U	378	ug/kg	75.6	378
84-66-2	Diethylphthalate	U	378	ug/kg	75.6	378
86-73-7	Fluorene	U	37.8	ug/kg	11.3	37.8
7005-72-3	4-Chlorophenylphenylether	U	378	ug/kg	75.6	378
534-52-1	2-Methyl-4,6-dinitrophenol	U	378	ug/kg	75.6	378 UJ,SV7c
100-01-6	4-Nitroaniline	U	378	ug/kg	113	378 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	378	ug/kg	75.6	378
122-66-7	Azobenzene	U	378	ug/kg	75.6	378
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	378	ug/kg	75.6	378
118-74-1	Hexachlorobenzene	U	378	ug/kg	75.6	378
85-01-8	Phenanthrene	U	37.8	ug/kg	11.3	37.8
120-12-7	Anthracene	U	37.8	ug/kg	7.56	37.8
84-74-2	Di-n-butylphthalate	U	378	ug/kg	75.6	378
206-44-0	Fluoranthene	U	37.8	ug/kg	11.3	37.8
85-68-7	Butylbenzylphthalate	U	378	ug/kg	75.6	378
56-55-3	Benzo(a)anthracene	U	37.8	ug/kg	11.3	37.8
91-94-1	3,3'-Dichlorobenzidine	U	378	ug/kg	113	378
218-01-9	Chrysene	U	37.8	ug/kg	11.3	37.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	378	ug/kg	75.6	378
117-84-0	Di-n-octylphthalate	U	378	ug/kg	75.6	378
205-99-2	Benzo(b)fluoranthene	U	37.8	ug/kg	11.3	37.8
207-08-9	Benzo(k)fluoranthene	U	37.8	ug/kg	11.3	37.8
50-32-8	Benzo(a)pyrene	U	37.8	ug/kg	11.3	37.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.8	ug/kg	11.3	37.8
53-70-3	Dibenzo(a,h)anthracene	U	37.8	ug/kg	11.3	37.8
191-24-2	Benzo(ghi)perylene	U	37.8	ug/kg	11.3	37.8
120-82-1	1,2,4-Trichlorobenzene	U	378	ug/kg	75.6	378

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	1.73	2690	ug/kg		J
13287-24-6	Nonadecane, 9-methyl-	13.53	212	ug/kg	93	NJ

AMF
4/26/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373008

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 27.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7495
Batch ID: 961922
Run Date: 03/21/2010 16:26
Prep Date: 03/07/2010 12:04
Data File: s8c2118.d

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	J	40.3	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 UJ,SV7c
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 UJ,SV7c
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	<i>o</i> -Nitroaniline	U	457	ug/kg	91.5	457
	3-Nitroaniline					

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373008	Date Received: 03/02/2010 08:50	%Moisture: 27.3
Client ID: RE36-10-7495	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 16:26	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2118.d	Aliquot: 30.06 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<i>m-Nitroaniline</i>						
131-11-3	Dimethylphthalate	U	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 UJ,SV7c
<i>p-Nitroaniline</i>						
122-39-4	Diphenylamine	U	457	ug/kg	91.5	457
122-66-7	Azobenzene	U	457	ug/kg	91.5	457
<i>1,2-Diphenylhydrazine</i>						
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		114	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	J	38.3	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	J	32.7	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	J	22.1	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
495-61-4	Cyclohexene, 1-methyl-4-(5-methyl-1-meth	7.45	503	ug/kg	94	NJ
57-10-3	n-Hexadecanoic acid	9.6	728	ug/kg	98	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373008	Date Received: 03/02/2010 08:50	%Moisture: 27.3
Client ID: RE36-10-7495	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 16:26	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2118.d	Aliquot: 30.06 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	10.38	501	ug/kg	91	NJ
	Unknown	10.51	225	ug/kg		J
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	11.15	289	ug/kg	92	NJ
	Unknown	11.47	194	ug/kg		J
	Unknown	11.58	1510	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.67	511	ug/kg	95	NJ
4860-03-1	Hexadecane, 1-chloro-	11.73	208	ug/kg	94	NJ
118625-56-2	1-Hexadecene, 16-bromo-	11.93	394	ug/kg	93	NJ
112-85-6	Docosanoic acid	12.01	464	ug/kg	95	NJ
4860-03-1	Hexadecane, 1-chloro-	12.12	183	ug/kg	93	NJ
	Unknown	12.39	235	ug/kg		J
62016-76-6	Nonadecane, 1-chloro-	12.55	332	ug/kg	90	NJ
1599-67-3	1-Docosene	12.81	301	ug/kg	96	NJ
	Unknown	14.98	4200	ug/kg		J
83-47-6	.gamma.-Sitosterol	16.71	4130	ug/kg	94	NJ
1058-61-3	Stigmast-4-en-3-one	17.29	1510	ug/kg	93	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Allquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7496
Batch ID: 961922
Run Date: 03/21/2010 14:56
Prep Date: 03/07/2010 12:04
Data File: s8c2115.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	74.9	375
108-95-2	Phenol	U	375	ug/kg	74.9	375
95-57-8	2-Chlorophenol	U	375	ug/kg	74.9	375
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	74.9	375
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	74.9	375
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	74.9	375
83-32-9	Acenaphthene	U	37.5	ug/kg	12.4	37.5
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375
87-86-5	Pentachlorophenol	U	375	ug/kg	93.7	375
129-00-0	Pyrene	J	12.6	ug/kg	11.2	37.5
110-86-1	Pyridine	U	375	ug/kg	74.9	375 UJ,SV7c
62-53-3	Aniline	U	375	ug/kg	112	375
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	74.9	375
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	74.9	375
100-51-6	Benzyl alcohol	U	375	ug/kg	112	375 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	74.9	375
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	74.9	375
95-48-7	o-Cresol	U	375	ug/kg	74.9	375
65794-96-9	m,p-Cresols	U	375	ug/kg	112	375
67-72-1	Hexachloroethane	U	375	ug/kg	74.9	375
98-95-3	Nitrobenzene	U	375	ug/kg	74.9	375
78-59-1	Isophorone	U	375	ug/kg	74.9	375
88-75-5	2-Nitrophenol	U	375	ug/kg	74.9	375
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	74.9	375
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	74.9	375
65-85-0	Benzoic acid	U	749	ug/kg	187	749
91-20-3	Naphthalene	U	37.5	ug/kg	11.2	37.5
106-47-8	4-Chloroaniline	U	375	ug/kg	74.9	375
87-68-3	Hexachlorobutadiene	U	375	ug/kg	74.9	375
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.49	37.5
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	74.9	375 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	74.9	375
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	74.9	375
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5
88-74-4	2-Nitroaniline	U	375	ug/kg	74.9	375
99-09-2	o-Nitroaniline	U	375	ug/kg	74.9	375
	3-Nitroaniline					

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373005	Date Received: 03/02/2010 08:50	%Moisture: 11.4
Client ID: RE36-10-7496	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 14:56	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2115.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	375	ug/kg	74.9	375
208-96-8	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375
51-28-5	Acenaphthylene	U	37.5	ug/kg	11.2	37.5
132-64-9	2,4-Dinitrophenol	U	749	ug/kg	142	749
84-66-2	Dibenzofuran	U	375	ug/kg	74.9	375
86-73-7	Diethylphthalate	U	375	ug/kg	74.9	375
7005-72-3	Fluorene	U	37.5	ug/kg	11.2	37.5
534-52-1	4-Chlorophenylphenylether	U	375	ug/kg	74.9	375
100-01-6	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	74.9	375 UJ,SV7c
	4-Nitroaniline	U	375	ug/kg	112	375 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	375	ug/kg	74.9	375
122-66-7	Azobenzene	U	375	ug/kg	74.9	375
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	74.9	375
118-74-1	Hexachlorobenzene	U	375	ug/kg	74.9	375
85-01-8	Phenanthrene	U	37.5	ug/kg	11.2	37.5
120-12-7	Anthracene	U	37.5	ug/kg	7.49	37.5
84-74-2	Di-n-butylphthalate	U	375	ug/kg	74.9	375
206-44-0	Fluoranthene	J	15.2	ug/kg	11.2	37.5
85-68-7	Butylbenzylphthalate	U	375	ug/kg	74.9	375
56-55-3	Benzo(a)anthracene	U	37.5	ug/kg	11.2	37.5
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	112	375
218-01-9	Chrysene	U	37.5	ug/kg	11.2	37.5
117-81-7	bis(2-Ethylhexyl)phthalate		604	ug/kg	74.9	375
117-84-0	Di-n-octylphthalate	U	375	ug/kg	74.9	375
205-99-2	Benzo(b)fluoranthene	U	37.5	ug/kg	11.2	37.5
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.2	37.5
50-32-8	Benzo(a)pyrene	U	37.5	ug/kg	11.2	37.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.5	ug/kg	11.2	37.5
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.2	37.5
191-24-2	Benzo(ghi)perylene	U	37.5	ug/kg	11.2	37.5
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	74.9	375

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.71	2030	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.69	360	ug/kg	97	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373005	Date Received: 03/02/2010 08:50	%Moisture: 11.4
Client ID: RE36-10-7496	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 14:56	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2115.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.25	446	ug/kg	97	NJ
593-39-5	6-Octadecenoic acid, (Z)-	10.35	225	ug/kg	95	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	153	ug/kg	98	NJ
	Unknown	11.3	222	ug/kg		J
	Unknown	11.46	162	ug/kg		J
	Unknown	11.52	310	ug/kg		J
	Unknown	11.55	471	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.65	549	ug/kg	94	NJ
629-78-7	Heptadecane	11.72	224	ug/kg	95	NJ
112-85-6	Docosanoic acid	11.99	196	ug/kg	98	NJ
	Unknown	12.04	289	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.1	219	ug/kg	89	NJ
62016-76-6	Nonadecane, 1-chloro-	12.12	208	ug/kg	98	NJ
	Unknown	12.55	217	ug/kg		J
557-59-5	Tetracosanoic acid	12.89	291	ug/kg	98	NJ
1599-67-3	1-Docosene	12.98	603	ug/kg	99	NJ
	Unknown	13.02	698	ug/kg		J
7683-64-9	Squalene	13.13	251	ug/kg	81	NJ
	Unknown	13.36	248	ug/kg		J
112-95-8	Eicosane	13.53	474	ug/kg	96	NJ
	Unknown	14.24	239	ug/kg		J
	Unknown	16.08	295	ug/kg		J
1000111-66-9	4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	16.85	857	ug/kg	80	NJ
	Unknown	17.28	252	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Allquot: 30.15 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7497
Batch ID: 961922
Run Date: 03/21/2010 15:56
Prep Date: 03/07/2010 12:04
Data File: s8c2117.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	491	ug/kg	98.2	491
108-95-2	Phenol	U	491	ug/kg	98.2	491
95-57-8	2-Chlorophenol	U	491	ug/kg	98.2	491
106-46-7	1,4-Dichlorobenzene	U	491	ug/kg	98.2	491
621-64-7	N-Nitrosodipropylamine	U	491	ug/kg	98.2	491
59-50-7	4-Chloro-3-methylphenol	U	491	ug/kg	98.2	491
83-32-9	Acenaphthene	U	49.1	ug/kg	16.2	49.1
121-14-2	2,4-Dinitrotoluene	U	491	ug/kg	49.1	491
100-02-7	4-Nitrophenol	U	491	ug/kg	162	491
87-86-5	Pentachlorophenol	U	491	ug/kg	123	491
129-00-0	Pyrene	U	49.1	ug/kg	14.7	49.1
110-86-1	Pyridine	U	491	ug/kg	98.2	491 UJ,SV7c
62-53-3	Aniline	U	491	ug/kg	147	491
111-44-4	bis(2-Chloroethyl) ether	U	491	ug/kg	98.2	491
541-73-1	1,3-Dichlorobenzene	U	491	ug/kg	98.2	491
100-51-6	Benzyl alcohol	U	491	ug/kg	147	491 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	491	ug/kg	98.2	491
108-60-1	bis(2-Chloroisopropyl)ether	U	491	ug/kg	98.2	491
95-48-7	o-Cresol	U	491	ug/kg	98.2	491
65794-96-9	m,p-Cresols	U	491	ug/kg	147	491
67-72-1	Hexachloroethane	U	491	ug/kg	98.2	491
98-95-3	Nitrobenzene	U	491	ug/kg	98.2	491
78-59-1	Isophorone	U	491	ug/kg	98.2	491
88-75-5	2-Nitrophenol	U	491	ug/kg	98.2	491
105-67-9	2,4-Dimethylphenol	U	491	ug/kg	172	491
111-91-1	bis(2-Chloroethoxy)methane	U	491	ug/kg	98.2	491
120-83-2	2,4-Dichlorophenol	U	491	ug/kg	98.2	491
65-85-0	Benzoic acid	U	982	ug/kg	246	982
91-20-3	Naphthalene	U	49.1	ug/kg	14.7	49.1
106-47-8	4-Chloroaniline	U	491	ug/kg	98.2	491
87-68-3	Hexachlorobutadiene	U	491	ug/kg	98.2	491
91-57-6	2-Methylnaphthalene	U	49.1	ug/kg	9.82	49.1
77-47-4	Hexachlorocyclopentadiene	U	491	ug/kg	98.2	491 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	491	ug/kg	98.2	491
95-95-4	2,4,5-Trichlorophenol	U	491	ug/kg	98.2	491
91-58-7	2-Chloronaphthalene	U	49.1	ug/kg	16.2	49.1
88-74-4	2-Nitroaniline	U	491	ug/kg	98.2	491
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	491	ug/kg	98.2	491

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373007	Date Received: 03/02/2010 08:50	%Moisture: 32.5
Client ID: RE36-10-7497	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 15:56	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2117.d	Aliquot: 30.15 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	491	ug/kg	98.2	491
208-96-8	2,6-Dinitrotoluene	U	491	ug/kg	49.1	491
51-28-5	Acenaphthylene	U	49.1	ug/kg	14.7	49.1
132-64-9	2,4-Dinitrophenol	U	982	ug/kg	187	982
84-66-2	Dibenzofuran	U	491	ug/kg	98.2	491
86-73-7	Diethylphthalate	U	491	ug/kg	98.2	491
86-73-7	Fluorene	U	49.1	ug/kg	14.7	49.1
7005-72-3	4-Chlorophenylphenylether	U	491	ug/kg	98.2	491
534-52-1	2-Methyl-4,6-dinitrophenol	U	491	ug/kg	98.2	491 UJ,SV7c
100-01-6	4-Nitroaniline	U	491	ug/kg	147	491 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	491	ug/kg	98.2	491
122-66-7	Azobenzene	U	491	ug/kg	98.2	491
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	491	ug/kg	98.2	491
118-74-1	Hexachlorobenzene	U	491	ug/kg	98.2	491
85-01-8	Phenanthrene	U	49.1	ug/kg	14.7	49.1
120-12-7	Anthracene	U	49.1	ug/kg	9.82	49.1
84-74-2	Di-n-butylphthalate	U	491	ug/kg	98.2	491
206-44-0	Fluoranthene	U	49.1	ug/kg	14.7	49.1
85-68-7	Butylbenzylphthalate	U	491	ug/kg	98.2	491
56-55-3	Benzo(a)anthracene	U	49.1	ug/kg	14.7	49.1
91-94-1	3,3'-Dichlorobenzidine	U	491	ug/kg	147	491
218-01-9	Chrysene	U	49.1	ug/kg	14.7	49.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	491	ug/kg	98.2	491
117-84-0	Di-n-octylphthalate	U	491	ug/kg	98.2	491
205-99-2	Benzo(b)fluoranthene	U	49.1	ug/kg	14.7	49.1
207-08-9	Benzo(k)fluoranthene	U	49.1	ug/kg	14.7	49.1
50-32-8	Benzo(a)pyrene	U	49.1	ug/kg	14.7	49.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	49.1	ug/kg	14.7	49.1
53-70-3	Dibenzo(a,h)anthracene	U	49.1	ug/kg	14.7	49.1
191-24-2	Benzo(ghi)perylene	U	49.1	ug/kg	14.7	49.1
120-82-1	1,2,4-Trichlorobenzene	U	491	ug/kg	98.2	491

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	3.69	3100	ug/kg		J
13466-78-9	3-Carene	4.25	770	ug/kg	96	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.15 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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	7.02	3140	ug/kg	99	NJ
11028-42-5	Cedrene	7.04	1040	ug/kg	90	NJ
470-40-6	Thujopsene	7.14	650	ug/kg	90	NJ
	Unknown	7.22	1310	ug/kg		J
67650-90-2	Bicyclogermacrene	7.31	733	ug/kg	83	NJ
	Unknown Aldol Condensate	7.34	955	ug/kg		J
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	7.52	357	ug/kg	99	NJ
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	7.54	624	ug/kg	83	NJ
639-99-6	Cyclohexanemethanol, 4-ethenyl-.alpha.,	7.72	478	ug/kg	94	NJ
	Unknown	8.34	617	ug/kg		J
	Unknown	8.4	720	ug/kg		J
	Unknown	8.87	3510	ug/kg		J
	Unknown	10.47	1330	ug/kg		J
25246-27-9	1H-Cycloprop[e]azulene, decahydro-1,1,7-	11.02	402	ug/kg	91	NJ
	Unknown	11.1	425	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.2	4800	ug/kg	97	NJ
	Unknown	11.25	592	ug/kg		J
	Unknown	11.34	894	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.44	536	ug/kg	83	NJ
	Unknown	11.54	695	ug/kg		J
	Unknown	11.72	1230	ug/kg		J
	Unknown	11.81	343	ug/kg		J
	Unknown	11.99	531	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	12.12	579	ug/kg	96	NJ
	Unknown	14.89	2200	ug/kg		J
	Unknown	15.06	818	ug/kg		J
	Unknown	15.7	1550	ug/kg		J
	Unknown	16.8	797	ug/kg		J

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

SDG Number: 10-2154
Lab Sample ID: 248373009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	429	ug/kg	85.9	429
108-95-2	Phenol	U	429	ug/kg	85.9	429
95-57-8	2-Chlorophenol	U	429	ug/kg	85.9	429
106-46-7	1,4-Dichlorobenzene	U	429	ug/kg	85.9	429
621-64-7	N-Nitrosodipropylamine	U	429	ug/kg	85.9	429
59-50-7	4-Chloro-3-methylphenol	U	429	ug/kg	85.9	429
83-32-9	Acenaphthene	U	42.9	ug/kg	14.2	42.9
121-14-2	2,4-Dinitrotoluene	U	429	ug/kg	42.9	429
100-02-7	4-Nitrophenol	U	429	ug/kg	142	429
87-86-5	Pentachlorophenol	U	429	ug/kg	107	429
129-00-0	Pyrene	U	42.9	ug/kg	12.9	42.9
110-86-1	Pyridine	U	429	ug/kg	85.9	429 UJ,SV7c
62-53-3	Aniline	U	429	ug/kg	129	429
111-44-4	bis(2-Chloroethyl) ether	U	429	ug/kg	85.9	429
541-73-1	1,3-Dichlorobenzene	U	429	ug/kg	85.9	429
100-51-6	Benzyl alcohol	U	429	ug/kg	129	429 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	429	ug/kg	85.9	429
108-60-1	bis(2-Chloroisopropyl)ether	U	429	ug/kg	85.9	429
95-48-7	o-Cresol	U	429	ug/kg	85.9	429
65794-96-9	m,p-Cresols	U	429	ug/kg	129	429
67-72-1	Hexachloroethane	U	429	ug/kg	85.9	429
98-95-3	Nitrobenzene	U	429	ug/kg	85.9	429
78-59-1	Isophorone	U	429	ug/kg	85.9	429
88-75-5	2-Nitrophenol	U	429	ug/kg	85.9	429
105-67-9	2,4-Dimethylphenol	U	429	ug/kg	150	429
111-91-1	bis(2-Chloroethoxy)methane	U	429	ug/kg	85.9	429
120-83-2	2,4-Dichlorophenol	U	429	ug/kg	85.9	429
65-85-0	Benzoic acid	U	859	ug/kg	215	859
91-20-3	Naphthalene	U	42.9	ug/kg	12.9	42.9
106-47-8	4-Chloroaniline	U	429	ug/kg	85.9	429
87-68-3	Hexachlorobutadiene	U	429	ug/kg	85.9	429
91-57-6	2-Methylnaphthalene	U	42.9	ug/kg	8.59	42.9
77-47-4	Hexachlorocyclopentadiene	U	429	ug/kg	85.9	429 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	429	ug/kg	85.9	429
95-95-4	2,4,5-Trichlorophenol	U	429	ug/kg	85.9	429
91-58-7	2-Chloronaphthalene	U	42.9	ug/kg	14.2	42.9
88-74-4	2-Nitroaniline	U	429	ug/kg	85.9	429
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	429	ug/kg	85.9	429

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7498
Batch ID: 961922
Run Date: 03/21/2010 16:56
Prep Date: 03/07/2010 12:04
Data File: s8c2119.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	429	ug/kg	85.9	429
606-20-2	2,6-Dinitrotoluene	U	429	ug/kg	42.9	429
208-96-8	Acenaphthylene	U	42.9	ug/kg	12.9	42.9
51-28-5	2,4-Dinitrophenol	U	859	ug/kg	163	859
132-64-9	Dibenzofuran	U	429	ug/kg	85.9	429
84-66-2	Diethylphthalate	U	429	ug/kg	85.9	429
86-73-7	Fluorene	U	42.9	ug/kg	12.9	42.9
7005-72-3	4-Chlorophenylphenylether	U	429	ug/kg	85.9	429
534-52-1	2-Methyl-4,6-dinitrophenol	U	429	ug/kg	85.9	429 UJ,SV7c
100-01-6	4-Nitroaniline	U	429	ug/kg	129	429 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	429	ug/kg	85.9	429
122-66-7	Azobenzene	U	429	ug/kg	85.9	429
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	429	ug/kg	85.9	429
118-74-1	Hexachlorobenzene	U	429	ug/kg	85.9	429
85-01-8	Phenanthrene	U	42.9	ug/kg	12.9	42.9
120-12-7	Anthracene	U	42.9	ug/kg	8.59	42.9
84-74-2	Di-n-butylphthalate	U	429	ug/kg	85.9	429
206-44-0	Fluoranthene	U	42.9	ug/kg	12.9	42.9
85-68-7	Butylbenzylphthalate	U	429	ug/kg	85.9	429
56-55-3	Benzo(a)anthracene	U	42.9	ug/kg	12.9	42.9
91-94-1	3,3'-Dichlorobenzidine	U	429	ug/kg	129	429
218-01-9	Chrysene	U	42.9	ug/kg	12.9	42.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	429	ug/kg	85.9	429
117-84-0	Di-n-octylphthalate	U	429	ug/kg	85.9	429
205-99-2	Benzo(b)fluoranthene	U	42.9	ug/kg	12.9	42.9
207-08-9	Benzo(k)fluoranthene	U	42.9	ug/kg	12.9	42.9
50-32-8	Benzo(a)pyrene	U	42.9	ug/kg	12.9	42.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.9	ug/kg	12.9	42.9
53-70-3	Dibenzo(a,h)anthracene	U	42.9	ug/kg	12.9	42.9
191-24-2	Benzo(ghi)perylene	U	42.9	ug/kg	12.9	42.9
120-82-1	1,2,4-Trichlorobenzene	U	429	ug/kg	85.9	429

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	1.72	384	ug/kg		J
	Unknown Aldol Condensate	2.93	229	ug/kg		JA

AMF
4/26/10

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373009	Date Received: 03/02/2010 08:50	%Moisture: 22.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7498	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 16:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2119.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.02	1150	ug/kg	99	NJ
11028-42-5	Cedrene	7.03	606	ug/kg	95	NJ
470-40-6	Thujopsene	7.14	303	ug/kg	93	NJ
1000151-28-9	Cyclohexene, 1,3-diisopropenyl-6-methyl-	7.22	524	ug/kg	87	NJ
	Unknown	7.3	315	ug/kg		J
	Unknown	7.34	370	ug/kg		J
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	7.54	304	ug/kg	95	NJ
	Unknown	8.35	221	ug/kg		J
1000196-17-7	2,2,6,6,7-Tetramethylbicyclo[4.3.0]n	8.39	182	ug/kg	89	NJ
17351-34-7	14-Pentadecenoic acid	10.35	210	ug/kg	93	NJ
	Unknown	10.47	258	ug/kg		J
	Unknown	10.6	356	ug/kg		J
	Unknown	11.09	265	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.2	2540	ug/kg	98	NJ
	Unknown	11.24	508	ug/kg		J
112-95-8	Eicosane	11.72	210	ug/kg	97	NJ
	Unknown	14.69	276	ug/kg		J
	Unknown	15.02	400	ug/kg		J
	Unknown	15.03	385	ug/kg		J
83-46-5	.beta.-Sitosterol	16.73	417	ug/kg	93	NJ
	Unknown	17.28	430	ug/kg		J

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

SDG Number: 10-2154
Lab Sample ID: 248373006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 27
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7499
Batch ID: 961922
Run Date: 03/21/2010 15:26
Prep Date: 03/07/2010 12:04
Data File: s8c2116.d

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	456	ug/kg	91.1	456
108-95-2	Phenol	U	456	ug/kg	91.1	456
95-57-8	2-Chlorophenol	U	456	ug/kg	91.1	456
106-46-7	1,4-Dichlorobenzene	U	456	ug/kg	91.1	456
621-64-7	N-Nitrosodipropylamine	U	456	ug/kg	91.1	456
59-50-7	4-Chloro-3-methylphenol	U	456	ug/kg	91.1	456
83-32-9	Acenaphthene	U	45.6	ug/kg	15.0	45.6
121-14-2	2,4-Dinitrotoluene	U	456	ug/kg	45.6	456
100-02-7	4-Nitrophenol	U	456	ug/kg	150	456
87-86-5	Pentachlorophenol	U	456	ug/kg	114	456
129-00-0	Pyrene	U	45.6	ug/kg	13.7	45.6
110-86-1	Pyridine	U	456	ug/kg	91.1	456 UJ,SV7c
62-53-3	Aniline	U	456	ug/kg	137	456
111-44-4	bis(2-Chloroethyl) ether	U	456	ug/kg	91.1	456
541-73-1	1,3-Dichlorobenzene	U	456	ug/kg	91.1	456
100-51-6	Benzyl alcohol	U	456	ug/kg	137	456 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	456	ug/kg	91.1	456
108-60-1	bis(2-Chloroisopropyl) ether	U	456	ug/kg	91.1	456
95-48-7	o-Cresol	U	456	ug/kg	91.1	456
65794-96-9	m,p-Cresols	U	456	ug/kg	137	456
67-72-1	Hexachloroethane	U	456	ug/kg	91.1	456
98-95-3	Nitrobenzene	U	456	ug/kg	91.1	456
78-59-1	Isophorone	U	456	ug/kg	91.1	456
88-75-5	2-Nitrophenol	U	456	ug/kg	91.1	456
105-67-9	2,4-Dimethylphenol	U	456	ug/kg	159	456
111-91-1	bis(2-Chloroethoxy)methane	U	456	ug/kg	91.1	456
120-83-2	2,4-Dichlorophenol	U	456	ug/kg	91.1	456
65-85-0	Benzoic acid	U	911	ug/kg	228	911
91-20-3	Naphthalene	U	45.6	ug/kg	13.7	45.6
106-47-8	4-Chloroaniline	U	456	ug/kg	91.1	456
87-68-3	Hexachlorobutadiene	U	456	ug/kg	91.1	456
91-57-6	2-Methylnaphthalene	U	45.6	ug/kg	9.11	45.6
77-47-4	Hexachlorocyclopentadiene	U	456	ug/kg	91.1	456 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	456	ug/kg	91.1	456
95-95-4	2,4,5-Trichlorophenol	U	456	ug/kg	91.1	456
91-58-7	2-Chloronaphthalene	U	45.6	ug/kg	15.0	45.6
88-74-4	2-Nitroaniline	U	456	ug/kg	91.1	456
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	456	ug/kg	91.1	456

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 2 of 3

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373006	Date Received: 03/02/2010 08:50	%Moisture: 27
Client ID: RE36-10-7499	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 15:26	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2116.d	Aliquot: 30.07 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualfler	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	456	ug/kg	91.1	456
208-96-8	2,6-Dinitrotoluene	U	456	ug/kg	45.6	456
51-28-5	Acenaphthylene	U	45.6	ug/kg	13.7	45.6
132-64-9	2,4-Dinitrophenol	U	911	ug/kg	173	911
84-66-2	Dibenzofuran	U	456	ug/kg	91.1	456
86-73-7	Diethylphthalate	U	456	ug/kg	91.1	456
7005-72-3	Fluorene	U	45.6	ug/kg	13.7	45.6
534-52-1	4-Chlorophenylphenylether	U	456	ug/kg	91.1	456
100-01-6	2-Methyl-4,6-dinitrophenol	U	456	ug/kg	91.1	456 UJ,SV7c
	4-Nitroaniline	U	456	ug/kg	137	456 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	456	ug/kg	91.1	456
122-66-7	Azobenzene	U	456	ug/kg	91.1	456
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	456	ug/kg	91.1	456
118-74-1	Hexachlorobenzene	U	456	ug/kg	91.1	456
85-01-8	Phenanthrene	U	45.6	ug/kg	13.7	45.6
120-12-7	Anthracene	U	45.6	ug/kg	9.11	45.6
84-74-2	Di-n-butylphthalate	U	456	ug/kg	91.1	456
206-44-0	Fluoranthene	U	45.6	ug/kg	13.7	45.6
85-68-7	Butylbenzylphthalate	U	456	ug/kg	91.1	456
56-55-3	Benzo(a)anthracene	U	45.6	ug/kg	13.7	45.6
91-94-1	3,3'-Dichlorobenzidine	U	456	ug/kg	137	456
218-01-9	Chrysene	U	45.6	ug/kg	13.7	45.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	456	ug/kg	91.1	456
117-84-0	Di-n-octylphthalate	U	456	ug/kg	91.1	456
205-99-2	Benzo(b)fluoranthene	U	45.6	ug/kg	13.7	45.6
207-08-9	Benzo(k)fluoranthene	U	45.6	ug/kg	13.7	45.6
50-32-8	Benzo(a)pyrene	U	45.6	ug/kg	13.7	45.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.6	ug/kg	13.7	45.6
53-70-3	Dibenzo(a,h)anthracene	U	45.6	ug/kg	13.7	45.6
191-24-2	Benzo(ghi)perylene	U	45.6	ug/kg	13.7	45.6
120-82-1	1,2,4-Trichlorobenzene	U	456	ug/kg	91.1	456

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R- α -Pinene	3.69	878	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	4.25	581	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Allquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 27
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.86	460	ug/kg		J
	Unknown	10.34	360	ug/kg		J
	Unknown	10.69	941	ug/kg		J
	Unknown	10.92	376	ug/kg		J
	Unknown	11.04	224	ug/kg		J
	Unknown	11.16	370	ug/kg		J
	Unknown	11.29	309	ug/kg		J
1000159-38-2	Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	11.35	591	ug/kg	80	NJ
	Unknown	11.38	801	ug/kg		J
	Unknown	11.45	404	ug/kg		J
	Unknown	11.58	7040	ug/kg		J
	Unknown	11.61	4740	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.71	5160	ug/kg	96	NJ
	Unknown	11.75	614	ug/kg		J
	Unknown	11.79	285	ug/kg		J
	Unknown	11.81	370	ug/kg		J
	Unknown	12.01	347	ug/kg		J
	Unknown	12.04	522	ug/kg		J
	Unknown	12.08	371	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.13	1530	ug/kg	93	NJ
	Unknown	12.27	217	ug/kg		J
	Unknown	12.36	225	ug/kg		J
	Unknown	13.36	541	ug/kg		J
	Unknown	14.24	561	ug/kg		J
	Unknown	15.09	519	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Allquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	424	ug/kg	84.8	424
108-95-2	Phenol	U	424	ug/kg	84.8	424
95-57-8	2-Chlorophenol	U	424	ug/kg	84.8	424
106-46-7	1,4-Dichlorobenzene	U	424	ug/kg	84.8	424
621-64-7	N-Nitrosodipropylamine	U	424	ug/kg	84.8	424
59-50-7	4-Chloro-3-methylphenol	U	424	ug/kg	84.8	424
83-32-9	Acenaphthene	U	42.4	ug/kg	14.0	42.4
121-14-2	2,4-Dinitrotoluene	U	424	ug/kg	42.4	424
100-02-7	4-Nitrophenol	U	424	ug/kg	140	424
87-86-5	Pentachlorophenol	U	424	ug/kg	106	424
129-00-0	Pyrene	U	42.4	ug/kg	12.7	42.4
110-86-1	Pyridine	U	424	ug/kg	84.8	424 UJ,SV7c
62-53-3	Aniline	U	424	ug/kg	127	424
111-44-4	bis(2-Chloroethyl) ether	U	424	ug/kg	84.8	424
541-73-1	1,3-Dichlorobenzene	U	424	ug/kg	84.8	424
100-51-6	Benzyl alcohol	U	424	ug/kg	127	424 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	424	ug/kg	84.8	424
108-60-1	bis(2-Chloroisopropyl)ether	U	424	ug/kg	84.8	424
95-48-7	o-Cresol	U	424	ug/kg	84.8	424
65794-96-9	m,p-Cresols	U	424	ug/kg	127	424
67-72-1	Hexachloroethane	U	424	ug/kg	84.8	424
98-95-3	Nitrobenzene	U	424	ug/kg	84.8	424
78-59-1	Isophorone	U	424	ug/kg	84.8	424
88-75-5	2-Nitrophenol	U	424	ug/kg	84.8	424
105-67-9	2,4-Dimethylphenol	U	424	ug/kg	148	424
111-91-1	bis(2-Chloroethoxy)methane	U	424	ug/kg	84.8	424
120-83-2	2,4-Dichlorophenol	U	424	ug/kg	84.8	424
65-85-0	Benzoic acid	U	848	ug/kg	212	848
91-20-3	Naphthalene	U	42.4	ug/kg	12.7	42.4
106-47-8	4-Chloroaniline	U	424	ug/kg	84.8	424
87-68-3	Hexachlorobutadiene	U	424	ug/kg	84.8	424
91-57-6	2-Methylnaphthalene	U	42.4	ug/kg	8.48	42.4
77-47-4	Hexachlorocyclopentadiene	U	424	ug/kg	84.8	424 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	424	ug/kg	84.8	424
95-95-4	2,4,5-Trichlorophenol	U	424	ug/kg	84.8	424
91-58-7	2-Chloronaphthalene	U	42.4	ug/kg	14.0	42.4
88-74-4	2-Nitroaniline	U	424	ug/kg	84.8	424
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	424	ug/kg	84.8	424

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373010	Date Received: 03/02/2010 08:50	%Moisture: 21.8
Client ID: RE36-10-7500	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 17:25	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2120.d	Aliquot: 30.18 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<i>m-Nitroaniline</i>						
131-11-3	Dimethylphthalate	U	424	ug/kg	84.8	424
606-20-2	2,6-Dinitrotoluene	U	424	ug/kg	42.4	424
208-96-8	Acenaphthylene	U	42.4	ug/kg	12.7	42.4
51-28-5	2,4-Dinitrophenol	U	848	ug/kg	161	848
132-64-9	Dibenzofuran	U	424	ug/kg	84.8	424
84-66-2	Diethylphthalate	U	424	ug/kg	84.8	424
86-73-7	Fluorene	U	42.4	ug/kg	12.7	42.4
7005-72-3	4-Chlorophenylphenylether	U	424	ug/kg	84.8	424
534-52-1	2-Methyl-4,6-dinitrophenol	U	424	ug/kg	84.8	424 UJ,SV7c
100-01-6	4-Nitroaniline	U	424	ug/kg	127	424 UJ,SV7c
<i>p-Nitroaniline</i>						
122-39-4	Diphenylamine	U	424	ug/kg	84.8	424
122-66-7	Azobenzene	U	424	ug/kg	84.8	424
<i>1,2-Diphenylhydrazine</i>						
101-55-3	4-Bromophenylphenylether	U	424	ug/kg	84.8	424
118-74-1	Hexachlorobenzene	U	424	ug/kg	84.8	424
85-01-8	Phenanthrene	U	42.4	ug/kg	12.7	42.4
120-12-7	Anthracene	U	42.4	ug/kg	8.48	42.4
84-74-2	Di-n-butylphthalate	U	424	ug/kg	84.8	424
206-44-0	Fluoranthene	U	42.4	ug/kg	12.7	42.4
85-68-7	Butylbenzylphthalate	U	424	ug/kg	84.8	424
56-55-3	Benzo(a)anthracene	U	42.4	ug/kg	12.7	42.4
91-94-1	3,3'-Dichlorobenzidine	U	424	ug/kg	127	424
218-01-9	Chrysene	U	42.4	ug/kg	12.7	42.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	424	ug/kg	84.8	424
117-84-0	Di-n-octylphthalate	U	424	ug/kg	84.8	424
205-99-2	Benzo(b)fluoranthene	U	42.4	ug/kg	12.7	42.4
207-08-9	Benzo(k)fluoranthene	U	42.4	ug/kg	12.7	42.4
50-32-8	Benzo(a)pyrene	U	42.4	ug/kg	12.7	42.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.4	ug/kg	12.7	42.4
53-70-3	Dibenzo(a,h)anthracene	U	42.4	ug/kg	12.7	42.4
191-24-2	Benzo(ghi)perylene	U	42.4	ug/kg	12.7	42.4
120-82-1	1,2,4-Trichlorobenzene	U	424	ug/kg	84.8	424

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
7785-70-8	1R-.alpha.-Pinene	3.69	693	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.01	387	ug/kg	99	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373010	Date Received: 03/02/2010 08:50	%Moisture: 21.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7500	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 17:25	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s8c2120.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
593-39-5	6-Octadecenoic acid, (Z)-	10.36	236	ug/kg	93	NJ
	Unknown	10.47	227	ug/kg		J
242794-76-9	Bicyclo[5.2.0]nonane, 2-methylene-4,8,8-	10.93	196	ug/kg	90	NJ
112-95-8	Eicosane	10.98	196	ug/kg	97	NJ
	Unknown	11.16	240	ug/kg		J
	Unknown	11.24	299	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	251	ug/kg	86	NJ
	Unknown	11.3	219	ug/kg		J
	Unknown	11.33	177	ug/kg		J
	Unknown	11.35	357	ug/kg		J
	Unknown	11.45	246	ug/kg		J
	Unknown	11.54	933	ug/kg		J
	Unknown	11.61	199	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.66	1100	ug/kg	93	NJ
	Unknown	11.72	398	ug/kg		J
	Unknown	11.76	283	ug/kg		J
1000099-24-3	(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	11.83	624	ug/kg	89	NJ
	Unknown	11.96	270	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12	362	ug/kg	90	NJ
	Unknown	12.04	243	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	12.12	381	ug/kg	95	NJ
	Unknown	12.36	228	ug/kg		J
	Unknown	12.4	254	ug/kg		J
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	12.45	242	ug/kg	92	NJ
629-78-7	Heptadecane	12.55	415	ug/kg	94	NJ
	Unknown	14.98	1520	ug/kg		J
83-47-6	.gamma.-Sitosterol	16.73	1560	ug/kg	93	NJ
1058-61-3	Stigmast-4-en-3-one	17.29	694	ug/kg	94	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373015

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Allquot: 30.1 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7521
Batch ID: 961922
Run Date: 03/21/2010 18:55
Prep Date: 03/07/2010 12:04
Data File: s8c2123.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	431	ug/kg	86.2	431
108-95-2	Phenol	U	431	ug/kg	86.2	431
95-57-8	2-Chlorophenol	U	431	ug/kg	86.2	431
106-46-7	1,4-Dichlorobenzene	U	431	ug/kg	86.2	431
621-64-7	N-Nitrosodipropylamine	U	431	ug/kg	86.2	431
59-50-7	4-Chloro-3-methylphenol	U	431	ug/kg	86.2	431
83-32-9	Acenaphthene	U	43.1	ug/kg	14.2	43.1
121-14-2	2,4-Dinitrotoluene	U	431	ug/kg	43.1	431
100-02-7	4-Nitrophenol	U	431	ug/kg	142	431
87-86-5	Pentachlorophenol	U	431	ug/kg	108	431
129-00-0	Pyrene	J	14.6	ug/kg	12.9	43.1
110-86-1	Pyridine	U	431	ug/kg	86.2	431 UJ,SV7c
62-53-3	Aniline	U	431	ug/kg	129	431
111-44-4	bis(2-Chloroethyl) ether	U	431	ug/kg	86.2	431
541-73-1	1,3-Dichlorobenzene	U	431	ug/kg	86.2	431
100-51-6	Benzyl alcohol	U	431	ug/kg	129	431 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	431	ug/kg	86.2	431
108-60-1	bis(2-Chloroisopropyl) ether	U	431	ug/kg	86.2	431
95-48-7	o-Cresol	U	431	ug/kg	86.2	431
65794-96-9	m,p-Cresols	U	431	ug/kg	129	431
67-72-1	Hexachloroethane	U	431	ug/kg	86.2	431
98-95-3	Nitrobenzene	U	431	ug/kg	86.2	431
78-59-1	Isophorone	U	431	ug/kg	86.2	431
88-75-5	2-Nitrophenol	U	431	ug/kg	86.2	431
105-67-9	2,4-Dimethylphenol	U	431	ug/kg	151	431
111-91-1	bis(2-Chloroethoxy)methane	U	431	ug/kg	86.2	431
120-83-2	2,4-Dichlorophenol	U	431	ug/kg	86.2	431
65-85-0	Benzoic acid	U	862	ug/kg	215	862
91-20-3	Naphthalene	U	43.1	ug/kg	12.9	43.1
106-47-8	4-Chloroaniline	U	431	ug/kg	86.2	431
87-68-3	Hexachlorobutadiene	U	431	ug/kg	86.2	431
91-57-6	2-Methylnaphthalene	U	43.1	ug/kg	8.62	43.1
77-47-4	Hexachlorocyclopentadiene	U	431	ug/kg	86.2	431 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	431	ug/kg	86.2	431
95-95-4	2,4,5-Trichlorophenol	U	431	ug/kg	86.2	431
91-58-7	2-Chloronaphthalene	U	43.1	ug/kg	14.2	43.1
88-74-4	2-Nitroaniline	U	431	ug/kg	86.2	431
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	431	ug/kg	86.2	431

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
Client ID: RE36-10-7521	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 18:55	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2123.d	Aliquot: 30.1 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	431	ug/kg	86.2	431
606-20-2	2,6-Dinitrotoluene	U	431	ug/kg	43.1	431
208-96-8	Acenaphthylene	U	43.1	ug/kg	12.9	43.1
51-28-5	2,4-Dinitrophenol	U	862	ug/kg	164	862
132-64-9	Dibenzofuran	U	431	ug/kg	86.2	431
84-66-2	Diethylphthalate	U	431	ug/kg	86.2	431
86-73-7	Fluorene	U	43.1	ug/kg	12.9	43.1
7005-72-3	4-Chlorophenylphenylether	U	431	ug/kg	86.2	431
534-52-1	2-Methyl-4,6-dinitrophenol	U	431	ug/kg	86.2	431 UJ,SV7c
100-01-6	4-Nitroaniline	U	431	ug/kg	129	431 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	431	ug/kg	86.2	431
122-66-7	Azobenzene	U	431	ug/kg	86.2	431
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	431	ug/kg	86.2	431
118-74-1	Hexachlorobenzene	U	431	ug/kg	86.2	431
85-01-8	Phenanthrene	U	43.1	ug/kg	12.9	43.1
120-12-7	Anthracene	U	43.1	ug/kg	8.62	43.1
84-74-2	Di-n-butylphthalate	U	431	ug/kg	86.2	431
206-44-0	Fluoranthene	U	43.1	ug/kg	12.9	43.1
85-68-7	Butylbenzylphthalate	U	431	ug/kg	86.2	431
56-55-3	Benzo(a)anthracene	U	43.1	ug/kg	12.9	43.1
91-94-1	3,3'-Dichlorobenzidine	U	431	ug/kg	129	431
218-01-9	Chrysene	U	43.1	ug/kg	12.9	43.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	431	ug/kg	86.2	431
117-84-0	Di-n-octylphthalate	U	431	ug/kg	86.2	431
205-99-2	Benzo(b)fluoranthene	U	43.1	ug/kg	12.9	43.1
207-08-9	Benzo(k)fluoranthene	U	43.1	ug/kg	12.9	43.1
50-32-8	Benzo(a)pyrene	U	43.1	ug/kg	12.9	43.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.1	ug/kg	12.9	43.1
53-70-3	Dibenzo(a,h)anthracene	U	43.1	ug/kg	12.9	43.1
191-24-2	Benzo(ghi)perylene	U	43.1	ug/kg	12.9	43.1
120-82-1	1,2,4-Trichlorobenzene	U	431	ug/kg	86.2	431

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
2437-95-8	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl	3.69	3620	ug/kg	97	NJ
	Unknown	9.97	1500	ug/kg		J

AMF
4/26/10

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7521	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 18:55	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.1 g	Final Volume: 1 mL
Data File: s8c2123.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.16	2060	ug/kg		J
	Unknown	10.35	1500	ug/kg		J
	Unknown	10.93	746	ug/kg		J
	Unknown	11.11	689	ug/kg		J
	Unknown	11.17	560	ug/kg		J
	Unknown	11.33	750	ug/kg		J
	Unknown	11.36	463	ug/kg		J
	Unknown	11.39	471	ug/kg		J
	Unknown	11.41	553	ug/kg		J
19402-34-7	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.47	1270	ug/kg	90	NJ
	Unknown	11.59	2920	ug/kg		J
	Unknown	11.63	737	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.69	1860	ug/kg	95	NJ
	Unknown	11.73	3740	ug/kg		J
	Unknown	11.82	513	ug/kg		J
	Unknown	11.85	831	ug/kg		J
	Unknown	11.98	503	ug/kg		J
112-85-6	Docosanoic acid	12.02	975	ug/kg	94	NJ
	Unknown	12.09	737	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.14	1530	ug/kg	89	NJ
	Unknown	12.33	679	ug/kg		J
	Unknown	12.39	561	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	12.56	763	ug/kg	96	NJ
	Unknown	12.65	463	ug/kg		J
1599-67-3	1-Docosene	12.77	1150	ug/kg	95	NJ
	Unknown	12.9	2140	ug/kg		J
	Unknown	14.93	4380	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	17.3	1880	ug/kg	86	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Allquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7522
Batch ID: 961922
Run Date: 03/21/2010 18:25
Prep Date: 03/07/2010 12:04
Data File: s8c2122.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	374	ug/kg	74.8	374
108-95-2	Phenol	U	374	ug/kg	74.8	374
95-57-8	2-Chlorophenol	U	374	ug/kg	74.8	374
106-46-7	1,4-Dichlorobenzene	U	374	ug/kg	74.8	374
621-64-7	N-Nitrosodipropylamine	U	374	ug/kg	74.8	374
59-50-7	4-Chloro-3-methylphenol	U	374	ug/kg	74.8	374
83-32-9	Acenaphthene	U	37.4	ug/kg	12.3	37.4
121-14-2	2,4-Dinitrotoluene	U	374	ug/kg	37.4	374
100-02-7	4-Nitrophenol	U	374	ug/kg	123	374
87-86-5	Pentachlorophenol	U	374	ug/kg	93.5	374
129-00-0	Pyrene	U	37.4	ug/kg	11.2	37.4
110-86-1	Pyridine	U	374	ug/kg	74.8	374 UJ,SV7c
62-53-3	Aniline	U	374	ug/kg	112	374
111-44-4	bis(2-Chloroethyl) ether	U	374	ug/kg	74.8	374
541-73-1	1,3-Dichlorobenzene	U	374	ug/kg	74.8	374
100-51-6	Benzyl alcohol	U	374	ug/kg	112	374 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	374	ug/kg	74.8	374
108-60-1	bis(2-Chloroisopropyl) ether	U	374	ug/kg	74.8	374
95-48-7	o-Cresol	U	374	ug/kg	74.8	374
65794-96-9	m,p-Cresols	U	374	ug/kg	112	374
67-72-1	Hexachloroethane	U	374	ug/kg	74.8	374
98-95-3	Nitrobenzene	U	374	ug/kg	74.8	374
78-59-1	Isophorone	U	374	ug/kg	74.8	374
88-75-5	2-Nitrophenol	U	374	ug/kg	74.8	374
105-67-9	2,4-Dimethylphenol	U	374	ug/kg	131	374
111-91-1	bis(2-Chloroethoxy)methane	U	374	ug/kg	74.8	374
120-83-2	2,4-Dichlorophenol	U	374	ug/kg	74.8	374
65-85-0	Benzoic acid	U	748	ug/kg	187	748
91-20-3	Naphthalene	U	37.4	ug/kg	11.2	37.4
106-47-8	4-Chloroaniline	U	374	ug/kg	74.8	374
87-68-3	Hexachlorobutadiene	U	374	ug/kg	74.8	374
91-57-6	2-Methylnaphthalene	U	37.4	ug/kg	7.48	37.4
77-47-4	Hexachlorocyclopentadiene	U	374	ug/kg	74.8	374 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	374	ug/kg	74.8	374
95-95-4	2,4,5-Trichlorophenol	U	374	ug/kg	74.8	374
91-58-7	2-Chloronaphthalene	U	37.4	ug/kg	12.3	37.4
88-74-4	2-Nitroaniline	U	374	ug/kg	74.8	374
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	374	ug/kg	74.8	374

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	374	ug/kg	74.8	374
606-20-2	2,6-Dinitrotoluene	U	374	ug/kg	37.4	374
208-96-8	Acenaphthylene	U	37.4	ug/kg	11.2	37.4
51-28-5	2,4-Dinitrophenol	U	748	ug/kg	142	748
132-64-9	Dibenzofuran	U	374	ug/kg	74.8	374
84-66-2	Diethylphthalate	U	374	ug/kg	74.8	374
86-73-7	Fluorene	U	37.4	ug/kg	11.2	37.4
7005-72-3	4-Chlorophenylphenylether	U	374	ug/kg	74.8	374
534-52-1	2-Methyl-4,6-dinitrophenol	U	374	ug/kg	74.8	374 UJ,SV7c
100-01-6	4-Nitroaniline	U	374	ug/kg	112	374 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	374	ug/kg	74.8	374
122-66-7	Azobenzene	U	374	ug/kg	74.8	374
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	374	ug/kg	74.8	374
118-74-1	Hexachlorobenzene	U	374	ug/kg	74.8	374
85-01-8	Phenanthrene	U	37.4	ug/kg	11.2	37.4
120-12-7	Anthracene	U	37.4	ug/kg	7.48	37.4
84-74-2	Di-n-butylphthalate	U	374	ug/kg	74.8	374
206-44-0	Fluoranthene	U	37.4	ug/kg	11.2	37.4
85-68-7	Butylbenzylphthalate	U	374	ug/kg	74.8	374
56-55-3	Benzo(a)anthracene	U	37.4	ug/kg	11.2	37.4
91-94-1	3,3'-Dichlorobenzidine	U	374	ug/kg	112	374
218-01-9	Chrysene	U	37.4	ug/kg	11.2	37.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	374	ug/kg	74.8	374
117-84-0	Di-n-octylphthalate	U	374	ug/kg	74.8	374
205-99-2	Benzo(b)fluoranthene	U	37.4	ug/kg	11.2	37.4
207-08-9	Benzo(k)fluoranthene	U	37.4	ug/kg	11.2	37.4
50-32-8	Benzo(a)pyrene	U	37.4	ug/kg	11.2	37.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.4	ug/kg	11.2	37.4
53-70-3	Dibenzo(a,h)anthracene	U	37.4	ug/kg	11.2	37.4
191-24-2	Benzo(ghi)perylene	U	37.4	ug/kg	11.2	37.4
120-82-1	1,2,4-Trichlorobenzene	U	374	ug/kg	74.8	374

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	1.71	2500	ug/kg		J
	Unknown Aldol Condensate	2.93	205	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	13.36	473	ug/kg		J
70038-20-9	7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	14.24	606	ug/kg	90	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-2154
Lab Sample ID: 248373011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Allquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 15.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7523
Batch ID: 961922
Run Date: 03/21/2010 17:56
Prep Date: 03/07/2010 12:04
Data File: s8c2121.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	394	ug/kg	78.9	394
108-95-2	Phenol	U	394	ug/kg	78.9	394
95-57-8	2-Chlorophenol	U	394	ug/kg	78.9	394
106-46-7	1,4-Dichlorobenzene	U	394	ug/kg	78.9	394
621-64-7	N-Nitrosodipropylamine	U	394	ug/kg	78.9	394
59-50-7	4-Chloro-3-methylphenol	U	394	ug/kg	78.9	394
83-32-9	Acenaphthene	U	39.4	ug/kg	13.0	39.4
121-14-2	2,4-Dinitrotoluene	U	394	ug/kg	39.4	394
100-02-7	4-Nitrophenol	U	394	ug/kg	130	394
87-86-5	Pentachlorophenol	U	394	ug/kg	98.6	394
129-00-0	Pyrene	U	39.4	ug/kg	11.8	39.4
110-86-1	Pyridine	U	394	ug/kg	78.9	394 UJ,SV7c
62-53-3	Aniline	U	394	ug/kg	118	394
111-44-4	bis(2-Chloroethyl) ether	U	394	ug/kg	78.9	394
541-73-1	1,3-Dichlorobenzene	U	394	ug/kg	78.9	394
100-51-6	Benzyl alcohol	U	394	ug/kg	118	394 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	394	ug/kg	78.9	394
108-60-1	bis(2-Chloroisopropyl)ether	U	394	ug/kg	78.9	394
95-48-7	o-Cresol	U	394	ug/kg	78.9	394
65794-96-9	m,p-Cresols	U	394	ug/kg	118	394
67-72-1	Hexachloroethane	U	394	ug/kg	78.9	394
98-95-3	Nitrobenzene	U	394	ug/kg	78.9	394
78-59-1	Isophorone	U	394	ug/kg	78.9	394
88-75-5	2-Nitrophenol	U	394	ug/kg	78.9	394
105-67-9	2,4-Dimethylphenol	U	394	ug/kg	138	394
111-91-1	bis(2-Chloroethoxy)methane	U	394	ug/kg	78.9	394
120-83-2	2,4-Dichlorophenol	U	394	ug/kg	78.9	394
65-85-0	Benzoic acid	U	789	ug/kg	197	789
91-20-3	Naphthalene	U	39.4	ug/kg	11.8	39.4
106-47-8	4-Chloroaniline	U	394	ug/kg	78.9	394
87-68-3	Hexachlorobutadiene	U	394	ug/kg	78.9	394
91-57-6	2-Methylnaphthalene	U	39.4	ug/kg	7.89	39.4
77-47-4	Hexachlorocyclopentadiene	U	394	ug/kg	78.9	394 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	394	ug/kg	78.9	394
95-95-4	2,4,5-Trichlorophenol	U	394	ug/kg	78.9	394
91-58-7	2-Chloronaphthalene	U	39.4	ug/kg	13.0	39.4
88-74-4	2-Nitroaniline	U	394	ug/kg	78.9	394
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	394	ug/kg	78.9	394

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373011	Date Received: 03/02/2010 08:50	%Moisture: 15.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7523	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 17:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Allquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2121.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	394	ug/kg	78.9	394
606-20-2	2,6-Dinitrotoluene	U	394	ug/kg	39.4	394
208-96-8	Acenaphthylene	U	39.4	ug/kg	11.8	39.4
51-28-5	2,4-Dinitrophenol	U	789	ug/kg	150	789
132-64-9	Dibenzofuran	U	394	ug/kg	78.9	394
84-66-2	Diethylphthalate	U	394	ug/kg	78.9	394
86-73-7	Fluorene	U	39.4	ug/kg	11.8	39.4
7005-72-3	4-Chlorophenylphenylether	U	394	ug/kg	78.9	394
534-52-1	2-Methyl-4,6-dinitrophenol	U	394	ug/kg	78.9	394 UJ,SV7c
100-01-6	4-Nitroaniline	U	394	ug/kg	118	394 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	394	ug/kg	78.9	394
122-66-7	Azobenzene	U	394	ug/kg	78.9	394
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	394	ug/kg	78.9	394
118-74-1	Hexachlorobenzene	U	394	ug/kg	78.9	394
85-01-8	Phenanthrene	U	39.4	ug/kg	11.8	39.4
120-12-7	Anthracene	U	39.4	ug/kg	7.89	39.4
84-74-2	Di-n-butylphthalate	U	394	ug/kg	78.9	394
206-44-0	Fluoranthene	U	39.4	ug/kg	11.8	39.4
85-68-7	Butylbenzylphthalate	U	394	ug/kg	78.9	394
56-55-3	Benzo(a)anthracene	U	39.4	ug/kg	11.8	39.4
91-94-1	3,3'-Dichlorobenzidine	U	394	ug/kg	118	394
218-01-9	Chrysene	U	39.4	ug/kg	11.8	39.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	394	ug/kg	78.9	394
117-84-0	Di-n-octylphthalate	U	394	ug/kg	78.9	394
205-99-2	Benzo(b)fluoranthene	U	39.4	ug/kg	11.8	39.4
207-08-9	Benzo(k)fluoranthene	U	39.4	ug/kg	11.8	39.4
50-32-8	Benzo(a)pyrene	U	39.4	ug/kg	11.8	39.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.4	ug/kg	11.8	39.4
53-70-3	Dibenzo(a,h)anthracene	U	39.4	ug/kg	11.8	39.4
191-24-2	Benzo(ghi)perylene	U	39.4	ug/kg	11.8	39.4
120-82-1	1,2,4-Trichlorobenzene	U	394	ug/kg	78.9	394

Tentatively Identified Compound Summary


CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.73	4760	ug/kg		J
4630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	7.01	251	ug/kg	99	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373011	Date Received: 03/02/2010 08:50	%Moisture: 15.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7523	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 17:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Allquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2121.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.54	166	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.65	199	ug/kg	87	NJ
	Unknown	13.36	180	ug/kg		J
	Unknown	14.25	278	ug/kg		J
83-46-5	.beta.-Sitosterol	16.73	273	ug/kg	93	NJ
83-47-6	.gamma.-Sitosterol	16.74	163	ug/kg	92	NJ
	Unknown	16.79	300	ug/kg		J
	Unknown	17.28	198	ug/kg		J

DATA VALIDATION COVER SHEET	
<div style="display: flex; justify-content: space-between;"> <div>5122-1</div> <div style="text-align: center;">Data Validation Cover Sheet</div> </div>	<div style="text-align: center;">Records Use only</div> <div style="text-align: center;">  </div>

Section I.

REQUEST NUMBER: 10-2154 VALIDATION DATE: 4/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

- It should be noted that the laboratory received no containers for samples RE36-10-7519 and -7520. The analyses could not be performed. No sample results were qualified.
- The LCS %R for tetryl was <10%. The associated sample results were NDs and, thus, were qualified R,HE12.
- The MS/MSD %Rs for tetryl were <10%. The associated sample results were NDs and, thus, were qualified R,HE12d. The MS/MSD RPD for tetryl was > the laboratory acceptance limit. The associated sample results were NDs and, thus, were qualified UJ,HE12g.
- In the ICAL associated with samples -7491 and -7521, the RRFs for m-nitrotoluene and p-nitrotoluene were <0.05 but ≥ 0.01 . In the ICAL associated with all other samples the RRF for p-nitrotoluene was <0.05 but ≥ 0.01 . The associated sample results were NDs and, thus, were qualified UJ,HE7b.
- In the ICV/CCVs associated with all samples except -7491 and -7521, the %Ds for o-nitrotoluene; m-nitrotoluene; and p-nitrotoluene were >20% but $\leq 40\%$ with negative bias. The associated sample results were NDs and, thus, were qualified UJ,HE7c. In the ICV/CCVs associated with all samples except -7491 and -7521, the %D for RDX was >20% with positive bias. In the ICV/CCVs associated with samples -7491 and -7521, the %Ds for 1,3,5-trinitrobenzene; HMX; and RDX were >20% with positive bias. The associated sample results were NDs and, thus, were not qualified.
- It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only



in the data package. Thus, the surrogate retention time criteria could not be evaluated. No sample data were qualified as a result.

Reviewed by: ETM

Level: 1

Date: 4/28/10

VALIDATOR'S SIGNATURE:


Alison Selix

DATE: 4/27/10


Form 5122-1, Revision 0.0

LOS ALAMOS


Environmental Restoration Project

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


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

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

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

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

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

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

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373001

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412206a

Date Analyzed: 16-APR-10 20:29

Units: ug/kg

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

*Concentration =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373001

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080018.wiff

Date Analyzed: 08-APR-10 21:16

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7493

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373002

Sample Amount 2

Moisture: 25.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 260306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412209a

Date Analyzed: 16-APR-10 21:57

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7493

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373002

Sample Amount 2

Moisture: 25.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080021.wiff

Date Analyzed: 08-APR-10 22:03

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7492

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373003

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412210a

Date Analyzed: 16-APR-10 22:27

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7492

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373003

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080022.wiff

Date Analyzed: 08-APR-10 22:19

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7491

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373004

Sample Amount 2

Moisture: 35.2

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0418028a

Date Analyzed: 19-APR-10 03:02

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7b	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 =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7491

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373004

Sample Amount 2

Moisture: 35.2

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080023.wiff

Date Analyzed: 08-APR-10 22:35

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7496

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373005

Sample Amount 2

Moisture: 11.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412212a

Date Analyzed: 16-APR-10 23:26

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

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

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7496

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373005

Sample Amount 2

Molsture: 11.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080027.wiff

Date Analyzed: 08-APR-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 =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7499

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373006

Sample Amount 2

Moisture: 27.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412213a

Date Analyzed: 16-APR-10 23:55

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7499

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373006

Sample Amount 2

Moisture: 27.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080028.wiff

Date Analyzed: 08-APR-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 =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7497

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373007

Sample Amount 2

Moisture: 32.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412217a

Date Analyzed: 17-APR-10 01:53

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 R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7497

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373007

Sample Amount 2

Moisture: 32.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080029.wiff

Date Analyzed: 09-APR-10 00:09

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7495

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373008

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412218a

Date Analyzed: 17-APR-10 02:23

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 R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7495

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373008

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080030.wiff

Date Analyzed: 09-APR-10 00:25

Units: ug/kg

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

*Concentration =

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

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7498

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373009

Sample Amount 2

Moisture: 22.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412219a

Date Analyzed: 17-APR-10 02:52

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 R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7498

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373009

Sample Amount 2

Moisture: 22.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080031.wiff

Date Analyzed: 09-APR--10 00:40

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7500

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373010

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412220a

Date Analyzed: 17-APR-10 03:22

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 R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7500

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373010

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080032.wiff

Date Analyzed: 09-APR-10 00:56

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7523

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373011

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412221a

Date Analyzed: 17-APR-10 03:51

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 R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7523

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373011

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080033.wiff

Date Analyzed: 09-APR-10 01:12

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7522

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373014

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412222a

Date Analyzed: 17-APR-10 04:21

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 R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7c	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 =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7522

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373014

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080034.wiff

Date Analyzed: 09-APR-10 01:28

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7521

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373015

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0418029a

Date Analyzed: 19-APR-10 03:30

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 R,HE12	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7b	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 =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7521

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373015

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 260306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080035.wiff

Date Analyzed: 09-APR-10 01:43

Units: ug/kg

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

*Concentration =

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

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2154 VALIDATION DATE: 4/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. It should be noted that the laboratory received no containers for samples RE36-10-7519 and -7520. The analyses could not be performed. No sample results were qualified.
2. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN and that the raw data for the parent sample was not included in the data package. No sample results were qualified.

Reviewed by: ETM

Level: 1

Date: 4/28/10

VALIDATOR'S SIGNATURE:

Allison Felix

DATE: 4/27/10

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


5116-2

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

Records Use only



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

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

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

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

5116-2

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

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The surrogate is < the Lower Acceptance Level (LAL) but $\geq 10\%R$. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

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

5116-2

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

Records Use only



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

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373015

Client ID: RE36-10-7521
Batch ID: 965805
Run Date: 03/17/2010 11:52
Prep Date: 03/16/2010 21:02
Data File: 032f3201.d
032b3201.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 5
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	21.6	ug/kg	7.20	21.6	1
11104-28-2	Aroclor-1221	U	21.6	ug/kg	7.20	21.6	1
11141-16-5	Aroclor-1232	U	21.6	ug/kg	7.20	21.6	1
53469-21-9	Aroclor-1242	U	21.6	ug/kg	7.20	21.6	1
12672-29-6	Aroclor-1248	U	21.6	ug/kg	7.20	21.6	1
11097-69-1	Aroclor-1254	U	21.6	ug/kg	7.20	21.6	1
11096-82-5	Aroclor-1260	U	21.6	ug/kg	7.20	21.6	1

AMF
4/27/10

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-2154
Lab Sample ID: 248373014Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Allquot: 30.14 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 11.3
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.74	ug/kg	1.24	3.74	1
11104-28-2	Aroclor-1221	U	3.74	ug/kg	1.24	3.74	1
11141-16-5	Aroclor-1232	U	3.74	ug/kg	1.24	3.74	1
53469-21-9	Aroclor-1242	U	3.74	ug/kg	1.24	3.74	1
12672-29-6	Aroclor-1248	U	3.74	ug/kg	1.24	3.74	1
11097-69-1	Aroclor-1254	U	3.74	ug/kg	1.24	3.74	1
11096-82-5	Aroclor-1260	U	3.74	ug/kg	1.24	3.74	1

AMF
4/27/10

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-2154
Lab Sample ID: 248373011Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.1
Analyst: YS1
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 15.8
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.94	ug/kg	1.31	3.94	1
11104-28-2	Aroclor-1221	U	3.94	ug/kg	1.31	3.94	1
11141-16-5	Aroclor-1232	U	3.94	ug/kg	1.31	3.94	1
53469-21-9	Aroclor-1242	J	2.70	ug/kg	1.31	3.94	2
12672-29-6	Aroclor-1248	U	3.94	ug/kg	1.31	3.94	1
11097-69-1	Aroclor-1254	U	3.94	ug/kg	1.31	3.94	1
11096-82-5	Aroclor-1260	U	3.94	ug/kg	1.31	3.94	1

Hard Copy Required

Page 1 of

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2154

LOS ALAMOS

REQUEST NUMBER: 10-2154

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/31/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Request Hard Copy Flag: True

Charleston, SC 29407

LAB REQUEST COMMENTS:

048373%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7494	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7494	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7493	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7493	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7492	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7492	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7491	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7491	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7498	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7498	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7499	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7499	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7497	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7497	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7495	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7495	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7498	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7498	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7500	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7500	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7523	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7523	1	SEPTUM AMBER GLASS	8260B	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2154

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7520	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7520	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7519	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7519	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7522	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7522	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7521	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7521	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7541	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:	Date	Time	Received By:	Date	Time
<i>[Signature]</i>	3/1/10	1400	<i>[Signature]</i>	3/2/10	08:50
Printed Name	Signature		Printed Name	Signature	

Printed Name	Signature	Printed Name	Signature
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Printed Name	Signature	Printed Name	Signature
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Received for DISPOSAL By:	Date	Time	Remarks:
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Printed Name	Signature
--------------	-----------

Hard Copy Required

Page 1 of 3

Tuesday, March 09, 2010

REQUEST NUMBER: 10-2154

**LOS ALAMOS
NATIONAL LABORATORY**

ATTN: Valerie Davis

These Samples are on:

General Engineering Laboratories, Inc., Charleston, SC.

LANL Request Number: 10-2154

2040 Savage Rd

Per Agreement Number: 128310011

Charleston, SC 29407

Project Cost Code: MR3A05529E00

Please analyze the enclosed samples
according to the schedule indicated:

SHIP DATE: 3/1/2010

TURNAROUND/REPORT DUE: 3/31/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR / SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8082	1 RE36-10-7521	R	2/24/2010	
		1 RE36-10-7522	R	2/24/2010	
		1 RE36-10-7523	R	2/24/2010	
		1 RE36-10-7491	R	2/24/2010	
		1 RE36-10-7492	R	2/24/2010	
		1 RE36-10-7493	R	2/24/2010	
		1 RE36-10-7494	R	2/24/2010	
		1 RE36-10-7495	R	2/24/2010	
	SW-846-8260B	1 RE36-10-7496	R	2/24/2010	

Hard Copy Required

Page 2 of 3

Tuesday, March 09, 2010

REQUEST NUMBER: 10-2154

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8260B	1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7541	S	2/24/2010	
	SW-846-8270C	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846-8321A_MOD	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	

REQUEST NUMBER: 10-2154

Tuesday, March 09, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8321A_MOD	1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2154



March 09, 2010

www.gel.com

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Order: 248373
SDG: 10-2154

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on March 02, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-2154
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 248373
SDG: 10-2154

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Sample Data.....	1602
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Quality Control Data.....	1705
Miscellaneous Data.....	1720

Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 248373
SDG # : 10-2154**

March 09, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on March 02, 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 lab did not receive any containers for samples RE36-10-7519 and 7520. Los Alamos was notified. Please see attached e-mail and revised COC. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

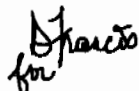
<u>Laboratory ID</u>	<u>Client ID</u>
248373001	RE36-10-7494
248373002	RE36-10-7493
248373003	RE36-10-7492
248373004	RE36-10-7491
248373005	RE36-10-7496
248373006	RE36-10-7499
248373007	RE36-10-7497
248373008	RE36-10-7495
248373009	RE36-10-7498
248373010	RE36-10-7500
248373011	RE36-10-7523
248373014	RE36-10-7522
248373015	RE36-10-7521
248373016	RE36-10-7541

Case Narrative

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

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

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

A handwritten signature in black ink, appearing to read "for Valerie Davis".

Valerie Davis

Project Manager

List of current GEL Certifications as of 09 March 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

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2154

LOS ALAMOS

REQUEST NUMBER: 10-2154

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/31/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Request Hard Copy Flag: True

Charleston, SC 29407

LAB REQUEST COMMENTS:

048373%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7494	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7494	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7493	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7493	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7492	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7492	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7491	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7491	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7496	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7496	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7499	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7499	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7497	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7497	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7495	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7495	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7498	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7498	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7500	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7500	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7523	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7523	1	SEPTUM AMBER GLASS	8260B	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2154

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7520	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7520	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7519	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7519	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7522	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7522	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7521	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7521	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7541	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Tuesday, March 09, 2010

REQUEST NUMBER: 10-2154

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

These Samples are on:

General Engineering Laboratories, Inc., Charleston, SC.

LANL Request Number: 10-2154

2040 Savage Rd

Per Agreement Number: 126310011

Charleston, SC 29407

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 3/1/2010

TURNAROUND/REPORT DUE: 3/31/2010

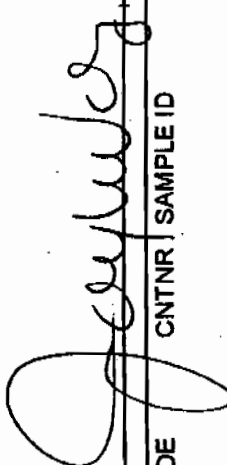
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
	SW-846:8260B	1	RE36-10-7496	R	2/24/2010	

Tuesday, March 09, 2010

REQUEST NUMBER: 10-2154

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7541	S	2/24/2010	
	SW-846:8270C	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:8321A_MOD	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	

Tuesday, March 09, 2010

REQUEST NUMBER: 10-2154

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2154

Monday, March 01, 2010

**LOS ALAMOS
NATIONAL LABORATORY**

ATTN: Valerie Davis

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

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 3/1/2010

TURNAROUND/REPORT DUE: 3/31/2010

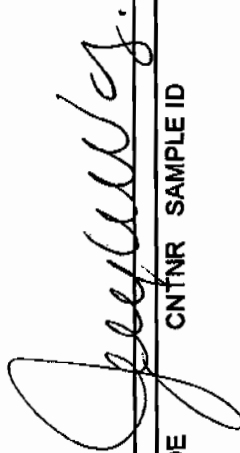
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



Page 1 of 3
REQUEST NUMBER: 10-2154

These Samples are on:

LANL Request Number: 10-2154
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:8260B	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	

Monday, March 01, 2010

Page 2 of 3
REQUEST NUMBER: 10-2154

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7541	S	2/24/2010	
	SW-846:8270C	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:8270A MON	1	RE36-10-7494	R	2/24/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7519	R	2/24/2010	
		1	RE36-10-7520	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2154

SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCOC/Work Order: 10-2154	
Received By: Patricia Dover-Dent		Date Received: 3/2/10	
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*: 40cpm
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 0-4,6 13-15,17
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: No time on Chain of Custody.
11	Number of containers received match number indicated on COC?			X	Sample ID's affected: RE36-10-7519,7520 for the lab didn't receive any containers.
12	COC form is properly signed in relinquished/received sections?	X			

Comments:

Fed Ex Tracking Numbers:

7209 7850 2797 0C 7209 7850 2889 3C 7209 7850 2786 4C
 7209 7850 2764 1C 7209 7850 2867 3C 7209 7850 2890 6C
 7209 7850 2775 2C 7209 7850 2904 3C 7209 7850 2683 13C
 7209 7850 2856 2C 7209 7850 2753 3C 7209 7850 2661 13C
 7209 7850 2801 2C 7209 7850 2710 3C 7209 7850 2672 14C
 7209 7850 2834 2C 7209 7850 2845 3C 7209 7850 2650 14C
 7209 7850 2878 2C 7209 7850 2742 4C 7209 7850 2694 15C
 7209 7850 2720 2C 7209 7850 2731 4C 7209 7850 2709 17C

Subject: Sample Receipt for 3/2/10

From: Dionne Francis <Dionne.Francis@gel.com>

Date: Wed, 03 Mar 2010 11:47:54 -0500

To: "Keith R. Greene" <kgreene@lanl.gov>, Joylene Valdez <joylenev@lanl.gov>, Valerie Davis <vsd@gel.com>

Keith,

RN 10-2175: the lab rec'd (1) 40ml vial 8260B container for sample CAPA-10-12920 instead of (2) as indicated on the COC.

RN 10-2176: the Metals container for sample CAPA-10-12913 was preserved prior to analysis.

RN 10-2158: the Metals container for sample WST16-10-12240 was preserved prior to analysis.

RN 10-2185: the Metals container for sample GW29-10-13276 was preserved prior to analysis.

RN 10-2184: the Gross A/B container for sample CAPA-10-12794 was preserve prior to analysis.

RN 10-2164: the lab did not receive the 40ml vial 8260B container for sample WSTPU-10-13504.

RN 10-2165: the Metals container for sample WST16-10-12241 was preserved prior to analysis.

RN 10-2190: the lab rec'd (1) 40ml vial 8260B container for sample RE11-10-1881 instead of (2) as indicated on the COC.

RN 10-2154: the lab did not received any containers for samples RE36-10-7519 and 7520.

A number of containers were received without a chain of custody.

Thanks,
Dionne

--

Dionne Francis
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7376 Ext. 4432
Main: 843.556.8171
Fax: 843.766.1178
E-mail: daf@gel.com
Web: www.gel.com

Let the Bible fill the memory, rule the heart, and guide the feet.

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 61.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 65.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGWMO

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGWMO



2 of 2
MPS# 7209 7850 2797
0263

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TUE - 02MAR A1
PRIORITY OVERNIGHT

1 of 2
TRY# 7209 7850 2764
0201

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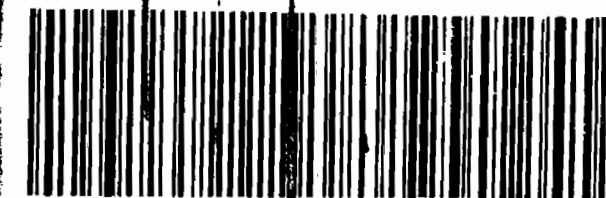
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PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

XX 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

ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

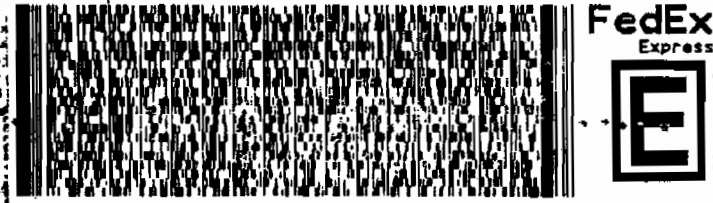
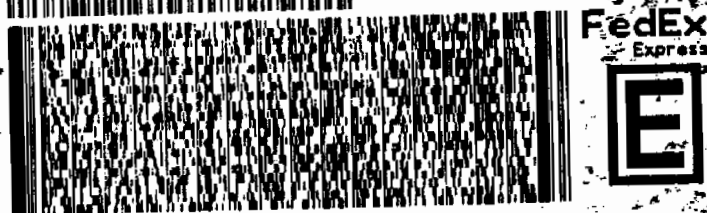
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00



2 of 2
MPS# 7209 7850 2775
0263

Mstr# 7209 7850 2764 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

1 of 2
TRK# 7209 7850 2856
0201

MM MASTER MM

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

XX CHSA

29407
SC-US
CHS

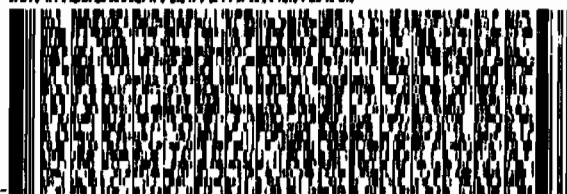


ORIGIN ID: 0000 (000) 000-0000
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2450
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGWMO



FedEx
Express

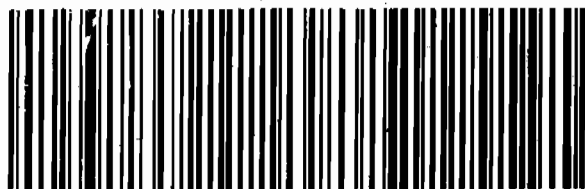


TRKH 7209 7850 2801
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TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS



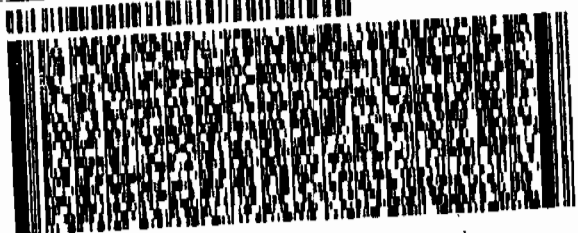
ORIGIN ID: 0000 (000) 000-0000
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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



FedEx
Express



TRKH 7209 7850 2878
0201
NN MASTER NN

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

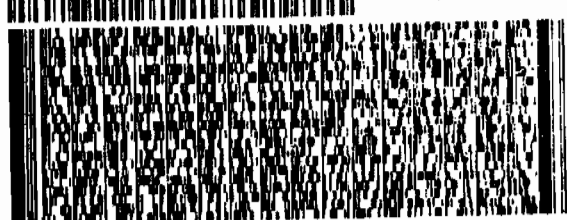


ORIGIN ID: 0000 (000) 000-0000
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2450
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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



FedEx
Express

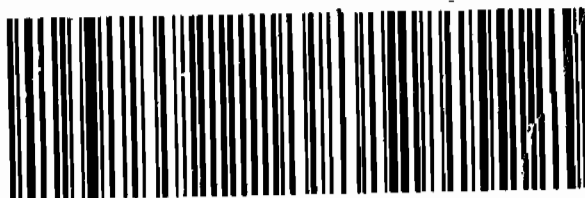


1 of 2
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NN MASTER NN

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

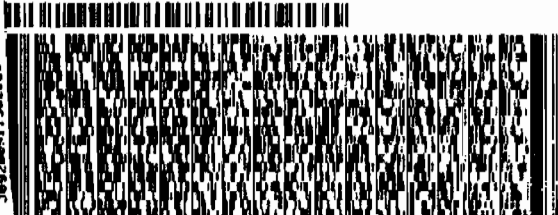


LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450
B. SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A051BYD0



FedEx
Express



TRKH 7209 7850 2720
0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS



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

SHIP DATE: 01MAR10
ACTWGT: 41.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

FedEx
Express



FedEx
Express



2 of 2
MPS# 7209 7850 2889
0263

Mstr# 7209 7850 2878 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



2 of 2
MPS# 7209 7850 2867
0263

Mstr# 7209 7850 2856 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



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

SHIP DATE: 01MAR10
ACTWGT: 17.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGWMO

FedEx
Express



FedEx
Express



2 of 2
MPS# 7209 7850 2904
0263

Mstr# 7209 7850 2890 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

Page 18 of 1741

2 of 2
MPS# 7209 7850 2753
0263

Mstr# 7209 7850 2742 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

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SC-US
CHS

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

SHIP DATE: 01MAR10
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2450

S ALAMOS, NM 87545
UNITED STATES US

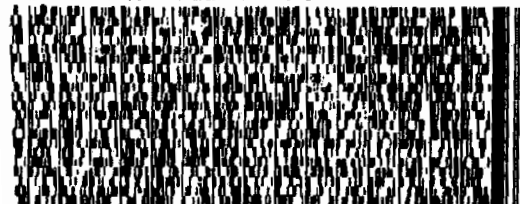
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR1A015AGWMO

1 of 2



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Express

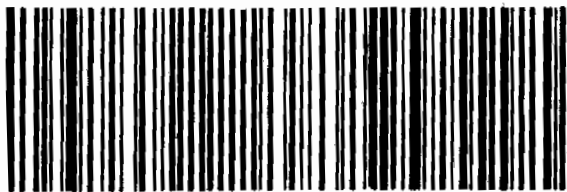


1 of 2
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MASTER NH

TUE - 02MAR A1
PRIORITY OVERNIGHT

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S ALAMOS NATL LAB
100 BLDG 1237 DPU 03

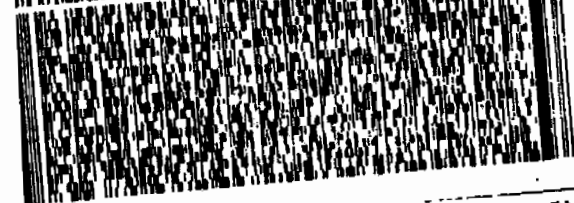
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UNITED STATES US

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A05529E00

2 of 2



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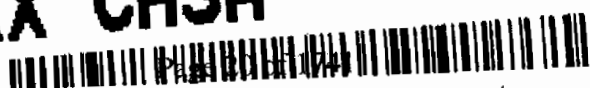


MPSH 7209 7850 2683
Mstr# 7209 7850 2672 0201

XX CHSA

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
SC-US
CHS



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

SHIP DATE: 01MAR10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2450

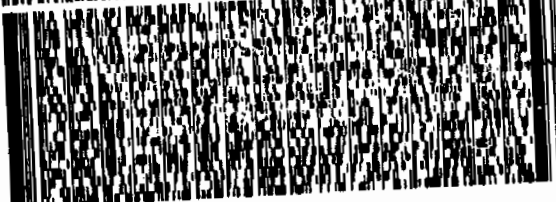
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A0532VA00

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NH MASTER NH

TUE - 02MAR A1
PRIORITY OVERNIGHT

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CHS



LOS ALAMOS NATL LAB
100 BLDG 1237 DPU 03

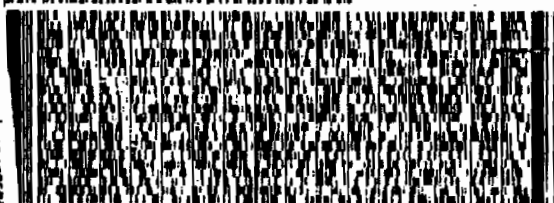
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UNITED STATES US

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A05529E00

3 of 3



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Mstr# 7209 7850 2640 0201

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TUE - 02MAR A1
PRIORITY OVERNIGHT

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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: 01MAR10
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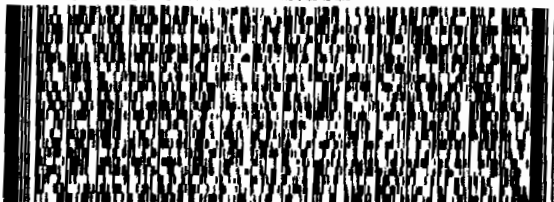
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A05529E00

1 of 2



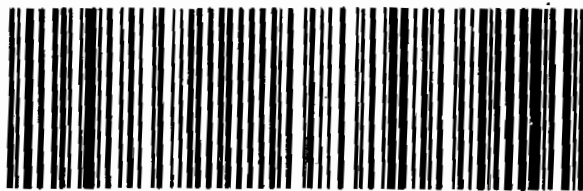
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SC-US
CHS



JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2450

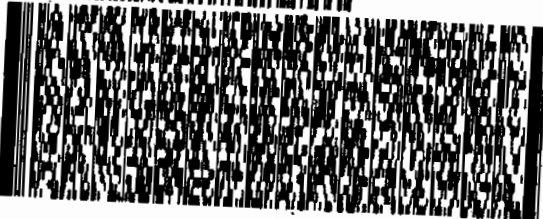
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A05529E00

2 of 3



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MPS# 7209 7850 2650
0263
Mstr# 7209 7850 2640 0201

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CHS



LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A05529E00

1 of 2



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Express



TRK# 7209 7850 2694
0201

XX CHSA

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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: 01MAR10
ACTWGT: 61.0 LB MAN
CAD: 0014176/CAFE2450

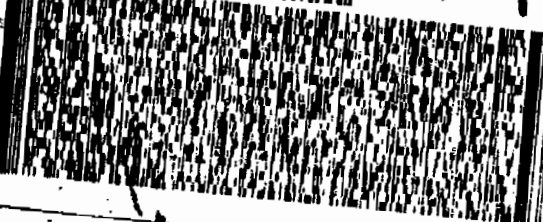
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR2A0518YD0

1 of 2



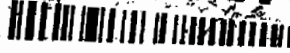
FedEx
Express



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0201
NN MASTER NN

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SC-US
CHS



Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier Explanation

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

GC/MS Volatile Analysis

Case Narrative

ChemStation Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2154

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B
Prep Method: SW846 5030
Analytical Batch Number: 962617
Prep Batch Number: 962616

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
248373001	RE36-10-7494
248373002	RE36-10-7493
248373003	RE36-10-7492
248373004	RE36-10-7491
248373005	RE36-10-7496
248373006	RE36-10-7499
248373007	RE36-10-7497
248373008	RE36-10-7495
248373009	RE36-10-7498
248373010	RE36-10-7500
248373011	RE36-10-7523
248373014	RE36-10-7522
248373015	RE36-10-7521
248373016	RE36-10-7541
1202065140	Method Blank (MB)
1202065143	Laboratory Control Sample (LCS)
1202065144	Laboratory Control Sample (LCS)
1202066320	Method Blank (MB)
1202066321	Laboratory Control Sample (LCS)
1202066322	Laboratory Control Sample (LCS)
1202068774	Method Blank (MB)
1202068775	Laboratory Control Sample (LCS)
1202068776	Laboratory Control Sample (LCS)
1202065141	248373001(RE36-10-7494) Post Spike (PS)
1202065142	248373001(RE36-10-7494) 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 248373 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 014 and 015 in this SDG were analyzed on an "dry weight" basis. Sample 248373 016 in this SDG was analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

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

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

Calibration Information

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

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

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration

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

Continuing Calibration Verification Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

Samples 248373004 (RE36-10-7491), 248373008 (RE36-10-7495) and 248373015 (RE36-10-7521) did not pass surrogate recoveries. The samples were re-analyzed and confirmed the results. It is believed matrix interference has been demonstrated. See DER 804838.

Laboratory Control Sample (LCS) Recovery

The LCS recoveries were within the acceptance limits, except Ethylbenzene and 1,2-Dibromomethane in LCS (1202065143). The unacceptable recoveries were less than 5% of the requested analyte list. This satisfies the client criteria. The results are reported. See DER 804838.

QC Sample Designation

Sample 248373001 (RE36-10-7494) 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

In samples 248373002 (RE36-10-7493), 248373003 (RE36-10-7492), 248373004 (RE36-10-7491), 248373005 (RE36-10-7496), 248373006 (RE36-10-7499), 248373007 (RE36-10-7497), 248373008

(RE36-10-7495), 248373010 (RE36-10-7500) and 248373015 (RE36-10-7521), internal standard responses were outside the required acceptance criteria. The samples were re-analyzed and confirmed the results. It is believed matrix interference has been demonstrated. See DER 804838.

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

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

Miscellaneous Information

Electronic Packaging Comment

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

Data Exception (DER) Documentation

DER # 804838 was generated for this SDG.

Manual Integrations

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

TIC Comment

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

Additional Comments

Additional comments were not required for this SDG.

Residual Chlorine

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

System Configuration

The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA9.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 the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

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

Client SDG: 10-2154 GEL Work Order: 248373

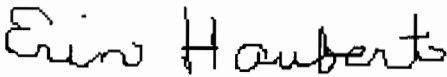
The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

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

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

Signature: 

Name: Erin Haubert

Date: 29 MAR 2010

Title: Data Validator

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373001

 Client ID: RE36-10-7494
 Batch ID: 962617
 Run Date: 03/08/2010 13:56
 Prep Date: 03/08/2010 12:05
 Data File: 030810V99C109.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	J	2.29	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.83	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.43	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.43	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373001
 Client ID: RE36-10-7494
 Batch ID: 962617
 Run Date: 03/08/2010 13:56
 Prep Date: 03/08/2010 12:05
 Data File: 030810V99C109.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	J	0.548	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	J	0.388	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.70	ug/kg	1.83	5.70
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	11.1	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373002
 Client ID: RE36-10-7493
 Batch ID: 962617
 Run Date: 03/08/2010 14:27
 Prep Date: 03/08/2010 12:08
 Data File: 030810V99C110.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 25.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.34	ug/kg	0.456	1.34
74-87-3	Chloromethane	U	1.34	ug/kg	0.403	1.34
75-01-4	Vinyl chloride	U	1.34	ug/kg	0.403	1.34
74-83-9	Bromomethane	U	1.34	ug/kg	0.403	1.34
75-00-3	Chloroethane	U	1.34	ug/kg	0.403	1.34
75-69-4	Trichlorofluoromethane	U	1.34	ug/kg	0.403	1.34
67-64-1	Acetone	U	6.71	ug/kg	2.23	6.71
75-35-4	1,1-Dichloroethylene	U	1.34	ug/kg	0.403	1.34
74-88-4	Iodomethane	U	6.71	ug/kg	2.15	6.71
75-09-2	Methylene chloride	U	6.71	ug/kg	2.68	6.71
75-15-0	Carbon disulfide	U	6.71	ug/kg	1.68	6.71
156-60-5	trans-1,2-Dichloroethylene	U	1.34	ug/kg	0.403	1.34
75-34-3	1,1-Dichloroethane	U	1.34	ug/kg	0.403	1.34
78-93-3	2-Butanone	U	6.71	ug/kg	2.01	6.71
156-59-2	cis-1,2-Dichloroethylene	U	1.34	ug/kg	0.403	1.34
594-20-7	2,2-Dichloropropane	U	1.34	ug/kg	0.403	1.34
67-66-3	Chloroform	U	1.34	ug/kg	0.403	1.34
74-97-5	Bromochloromethane	U	1.34	ug/kg	0.443	1.34
71-55-6	1,1,1-Trichloroethane	U	1.34	ug/kg	0.403	1.34
563-58-6	1,1-Dichloropropene	U	1.34	ug/kg	0.403	1.34
56-23-5	Carbon tetrachloride	U	1.34	ug/kg	0.403	1.34
107-06-2	1,2-Dichloroethane	U	1.34	ug/kg	0.403	1.34
71-43-2	Benzene	U	1.34	ug/kg	0.403	1.34
79-01-6	Trichloroethylene	U	1.34	ug/kg	0.443	1.34
78-87-5	1,2-Dichloropropane	U	1.34	ug/kg	0.403	1.34
75-27-4	Bromodichloromethane	U	1.34	ug/kg	0.403	1.34
74-95-3	Dibromomethane	U	1.34	ug/kg	0.403	1.34
108-10-1	4-Methyl-2-pentanone	U	6.71	ug/kg	1.68	6.71
10061-01-5	cis-1,3-Dichloropropylene	U	1.34	ug/kg	0.403	1.34
108-88-3	Toluene	U	1.34	ug/kg	0.403	1.34
10061-02-6	trans-1,3-Dichloropropylene	U	1.34	ug/kg	0.403	1.34
79-00-5	1,1,2-Trichloroethane	U	1.34	ug/kg	0.403	1.34
591-78-6	2-Hexanone	U	6.71	ug/kg	2.01	6.71
142-28-9	1,3-Dichloropropane	U	1.34	ug/kg	0.403	1.34
127-18-4	Tetrachloroethylene	U	1.34	ug/kg	0.403	1.34
124-48-1	Dibromochloromethane	U	1.34	ug/kg	0.403	1.34
106-93-4	1,2-Dibromoethane	U	1.34	ug/kg	0.403	1.34
108-90-7	Chlorobenzene	U	1.34	ug/kg	0.403	1.34

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373002

 Client ID: RE36-10-7493
 Batch ID: 962617
 Run Date: 03/08/2010 14:27
 Prep Date: 03/08/2010 12:08
 Data File: 030810V99C110.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.1
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 25.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.34	ug/kg	0.403	1.34
179601-23-1	m,p-Xylenes	U	2.68	ug/kg	0.403	2.68
95-47-6	o-Xylene	U	1.34	ug/kg	0.403	1.34
100-42-5	Styrene	U	1.34	ug/kg	0.403	1.34
75-25-2	Bromoform	U	1.34	ug/kg	0.403	1.34
79-34-5	1,1,2,2-Tetrachloroethane	U	1.34	ug/kg	0.403	1.34
96-18-4	1,2,3-Trichloropropane	U	1.34	ug/kg	0.403	1.34
108-86-1	Bromobenzene	U	1.34	ug/kg	0.403	1.34
103-65-1	n-Propylbenzene	U	1.34	ug/kg	0.403	1.34
95-49-8	2-Chlorotoluene	U	1.34	ug/kg	0.403	1.34
98-82-8	Isopropylbenzene	U	1.34	ug/kg	0.403	1.34
108-67-8	1,3,5-Trimethylbenzene	U	1.34	ug/kg	0.403	1.34
106-43-4	4-Chlorotoluene	U	1.34	ug/kg	0.403	1.34
98-06-6	tert-Butylbenzene	U	1.34	ug/kg	0.403	1.34
95-63-6	1,2,4-Trimethylbenzene	U	1.34	ug/kg	0.403	1.34
135-98-8	sec-Butylbenzene	U	1.34	ug/kg	0.403	1.34
99-87-6	4-Isopropyltoluene	U	1.34	ug/kg	0.403	1.34
541-73-1	1,3-Dichlorobenzene	U	1.34	ug/kg	0.403	1.34
106-46-7	1,4-Dichlorobenzene	U	1.34	ug/kg	0.403	1.34
104-51-8	n-Butylbenzene	U	1.34	ug/kg	0.403	1.34
96-12-8	1,2-Dibromo-3-chloropropane	U	1.34	ug/kg	0.403	1.34
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.71	ug/kg	2.15	6.71
630-20-6	1,1,1,2-Tetrachloroethane	U	1.34	ug/kg	0.403	1.34
95-50-1	1,2-Dichlorobenzene	U	1.34	ug/kg	0.403	1.34

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	15.3	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373003
 Client ID: RE36-10-7492
 Batch ID: 962617
 Run Date: 03/08/2010 14:58
 Prep Date: 03/08/2010 12:09
 Data File: 030810V99C111.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.1
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.431	1.27
74-87-3	Chloromethane	U	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	J	5.96	ug/kg	2.10	6.34
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	U	6.34	ug/kg	2.03	6.34
75-09-2	Methylene chloride	U	6.34	ug/kg	2.54	6.34
75-15-0	Carbon disulfide	U	6.34	ug/kg	1.59	6.34
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	U	6.34	ug/kg	1.90	6.34
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	U	6.34	ug/kg	1.59	6.34
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	J	0.418	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	U	6.34	ug/kg	1.90	6.34
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.380	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373003
 Client ID: RE36-10-7492
 Batch ID: 962617
 Run Date: 03/08/2010 14:58
 Prep Date: 03/08/2010 12:09
 Data File: 030810V99C111.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 % Moisture: 21.1
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	J	0.774	ug/kg	0.380	2.54
95-47-6	o-Xylene	J	0.393	ug/kg	0.380	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	J	0.862	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.34	ug/kg	2.03	6.34
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	15.1	ug/kg	0	J
	unknown siloxane	14.95	14.8	ug/kg	0	J
000124-18-5	Decane	15.38	8.83	ug/kg	91	NJ
000127-91-3	.beta.-Pinene	15.67	16.7	ug/kg	96	NJ
	unknown hydrocarbon	16.63	1380	ug/kg	0	J
	unknown siloxane	16.93	14.5	ug/kg	0	J
	unknown hydrocarbon	19.36	6.42	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373004
 Client ID: RE36-10-7491
 Batch ID: 962617
 Run Date: 03/08/2010 15:30
 Prep Date: 03/08/2010 12:10
 Data File: 030810V99C112.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 % Moisture: 35.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.54	ug/kg	0.525	1.54
74-87-3	Chloromethane	J	0.633	ug/kg	0.463	1.54
75-01-4	Vinyl chloride	U	1.54	ug/kg	0.463	1.54
74-83-9	Bromomethane	U	1.54	ug/kg	0.463	1.54
75-00-3	Chloroethane	U	1.54	ug/kg	0.463	1.54
75-69-4	Trichlorofluoromethane	U	1.54	ug/kg	0.463	1.54
67-64-1	Acetone	J	3.09	ug/kg	2.56	7.72
75-35-4	1,1-Dichloroethylene	U	1.54	ug/kg	0.463	1.54
74-88-4	Iodomethane	U	7.72	ug/kg	2.47	7.72
75-09-2	Methylene chloride	U	7.72	ug/kg	3.09	7.72
75-15-0	Carbon disulfide	U	7.72	ug/kg	1.93	7.72
156-60-5	trans-1,2-Dichloroethylene	U	1.54	ug/kg	0.463	1.54
75-34-3	1,1-Dichloroethane	U	1.54	ug/kg	0.463	1.54
78-93-3	2-Butanone	U	7.72	ug/kg	2.32	7.72
156-59-2	cis-1,2-Dichloroethylene	U	1.54	ug/kg	0.463	1.54
594-20-7	2,2-Dichloropropane	U	1.54	ug/kg	0.463	1.54
67-66-3	Chloroform	U	1.54	ug/kg	0.463	1.54
74-97-5	Bromochloromethane	U	1.54	ug/kg	0.509	1.54
71-55-6	1,1,1-Trichloroethane	U	1.54	ug/kg	0.463	1.54
563-58-6	1,1-Dichloropropene	U	1.54	ug/kg	0.463	1.54
56-23-5	Carbon tetrachloride	U	1.54	ug/kg	0.463	1.54
107-06-2	1,2-Dichloroethane	U	1.54	ug/kg	0.463	1.54
71-43-2	Benzene	U	1.54	ug/kg	0.463	1.54
79-01-6	Trichloroethylene	U	1.54	ug/kg	0.509	1.54
78-87-5	1,2-Dichloropropane	U	1.54	ug/kg	0.463	1.54
75-27-4	Bromodichloromethane	U	1.54	ug/kg	0.463	1.54
74-95-3	Dibromomethane	U	1.54	ug/kg	0.463	1.54
108-10-1	4-Methyl-2-pentanone	U	7.72	ug/kg	1.93	7.72
10061-01-5	cis-1,3-Dichloropropylene	U	1.54	ug/kg	0.463	1.54
108-88-3	Toluene	J	0.494	ug/kg	0.463	1.54
10061-02-6	trans-1,3-Dichloropropylene	U	1.54	ug/kg	0.463	1.54
79-00-5	1,1,2-Trichloroethane	U	1.54	ug/kg	0.463	1.54
591-78-6	2-Hexanone	U	7.72	ug/kg	2.32	7.72
142-28-9	1,3-Dichloropropane	U	1.54	ug/kg	0.463	1.54
127-18-4	Tetrachloroethylene	U	1.54	ug/kg	0.463	1.54
124-48-1	Dibromochloromethane	U	1.54	ug/kg	0.463	1.54
106-93-4	1,2-Dibromoethane	U	1.54	ug/kg	0.463	1.54
108-90-7	Chlorobenzene	U	1.54	ug/kg	0.463	1.54

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373004
 Client ID: RE36-10-7491
 Batch ID: 962617
 Run Date: 03/08/2010 15:30
 Prep Date: 03/08/2010 12:10
 Data File: 030810V99C112.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 35.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.54	ug/kg	0.463	1.54
179601-23-1	m,p-Xylenes	U	3.09	ug/kg	0.463	3.09
95-47-6	o-Xylene	U	1.54	ug/kg	0.463	1.54
100-42-5	Styrene	U	1.54	ug/kg	0.463	1.54
75-25-2	Bromoform	U	1.54	ug/kg	0.463	1.54
79-34-5	1,1,2,2-Tetrachloroethane	U	1.54	ug/kg	0.463	1.54
96-18-4	1,2,3-Trichloropropane	U	1.54	ug/kg	0.463	1.54
108-86-1	Bromobenzene	U	1.54	ug/kg	0.463	1.54
103-65-1	n-Propylbenzene	U	1.54	ug/kg	0.463	1.54
95-49-8	2-Chlorotoluene	U	1.54	ug/kg	0.463	1.54
98-82-8	Isopropylbenzene	U	1.54	ug/kg	0.463	1.54
108-67-8	1,3,5-Trimethylbenzene	U	1.54	ug/kg	0.463	1.54
106-43-4	4-Chlorotoluene	U	1.54	ug/kg	0.463	1.54
98-06-6	tert-Butylbenzene	U	1.54	ug/kg	0.463	1.54
95-63-6	1,2,4-Trimethylbenzene	U	1.54	ug/kg	0.463	1.54
135-98-8	sec-Butylbenzene	U	1.54	ug/kg	0.463	1.54
99-87-6	4-Isopropyltoluene	U	1.54	ug/kg	0.463	1.54
541-73-1	1,3-Dichlorobenzene	U	1.54	ug/kg	0.463	1.54
106-46-7	1,4-Dichlorobenzene	U	1.54	ug/kg	0.463	1.54
104-51-8	n-Butylbenzene	U	1.54	ug/kg	0.463	1.54
96-12-8	1,2-Dibromo-3-chloropropane	U	1.54	ug/kg	0.463	1.54
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	7.72	ug/kg	2.47	7.72
630-20-6	1,1,1,2-Tetrachloroethane	U	1.54	ug/kg	0.463	1.54
95-50-1	1,2-Dichlorobenzene	U	1.54	ug/kg	0.463	1.54

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.57	21.7	ug/kg	0	J
	unknown siloxane	14.95	18	ug/kg	0	J
	unknown siloxane	16.94	13.5	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373005
 Client ID: RE36-10-7496
 Batch ID: 962617
 Run Date: 03/08/2010 16:01
 Prep Date: 03/08/2010 12:11
 Data File: 030810V99C113.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 11.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.339	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.339	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.339	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.339	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.339	1.13
67-64-1	Acetone		7.46	ug/kg	1.87	5.65
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
74-88-4	Iodomethane	U	5.65	ug/kg	1.81	5.65
75-09-2	Methylene chloride	U	5.65	ug/kg	2.26	5.65
75-15-0	Carbon disulfide	U	5.65	ug/kg	1.41	5.65
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.339	1.13
78-93-3	2-Butanone	U	5.65	ug/kg	1.69	5.65
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.339	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.373	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.339	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.339	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.339	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.339	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.339	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.373	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.339	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.339	1.13
108-10-1	4-Methyl-2-pentanone	U	5.65	ug/kg	1.41	5.65
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
108-88-3	Toluene	J	0.599	ug/kg	0.339	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.339	1.13
591-78-6	2-Hexanone	U	5.65	ug/kg	1.69	5.65
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.339	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.339	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.339	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.339	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.339	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373005
 Client ID: RE36-10-7496
 Batch ID: 962617
 Run Date: 03/08/2010 16:01
 Prep Date: 03/08/2010 12:11
 Data File: 030810V99C113.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 11.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.339	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.339	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.339	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.339	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.339	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.339	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.339	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.339	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.339	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.339	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.339	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.339	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.339	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.339	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	5.65	ug/kg	1.81	5.65
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	6.89	11.1	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	14.95	22.9	ug/kg	97	NJ
013466-78-9	3-Carene	15.96	14.4	ug/kg	95	NJ
	unknown siloxane	16.94	6.34	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373006
 Client ID: RE36-10-7499
 Batch ID: 962617
 Run Date: 03/08/2010 16:32
 Prep Date: 03/08/2010 12:12
 Data File: 030810V99C114.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 27
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.37	ug/kg	0.466	1.37
74-87-3	Chloromethane	U	1.37	ug/kg	0.411	1.37
75-01-4	Vinyl chloride	U	1.37	ug/kg	0.411	1.37
74-83-9	Bromomethane	U	1.37	ug/kg	0.411	1.37
75-00-3	Chloroethane	U	1.37	ug/kg	0.411	1.37
75-69-4	Trichlorofluoromethane	U	1.37	ug/kg	0.411	1.37
67-64-1	Acetone	J	3.16	ug/kg	2.27	6.85
75-35-4	1,1-Dichloroethylene	U	1.37	ug/kg	0.411	1.37
74-88-4	Iodomethane	U	6.85	ug/kg	2.19	6.85
75-09-2	Methylene chloride	U	6.85	ug/kg	2.74	6.85
75-15-0	Carbon disulfide	U	6.85	ug/kg	1.71	6.85
156-60-5	trans-1,2-Dichloroethylene	U	1.37	ug/kg	0.411	1.37
75-34-3	1,1-Dichloroethane	U	1.37	ug/kg	0.411	1.37
78-93-3	2-Butanone	U	6.85	ug/kg	2.05	6.85
156-59-2	cis-1,2-Dichloroethylene	U	1.37	ug/kg	0.411	1.37
594-20-7	2,2-Dichloropropane	U	1.37	ug/kg	0.411	1.37
67-66-3	Chloroform	U	1.37	ug/kg	0.411	1.37
74-97-5	Bromochloromethane	U	1.37	ug/kg	0.452	1.37
71-55-6	1,1,1-Trichloroethane	U	1.37	ug/kg	0.411	1.37
563-58-6	1,1-Dichloropropene	U	1.37	ug/kg	0.411	1.37
56-23-5	Carbon tetrachloride	U	1.37	ug/kg	0.411	1.37
107-06-2	1,2-Dichloroethane	U	1.37	ug/kg	0.411	1.37
71-43-2	Benzene	U	1.37	ug/kg	0.411	1.37
79-01-6	Trichloroethylene	U	1.37	ug/kg	0.452	1.37
78-87-5	1,2-Dichloropropane	U	1.37	ug/kg	0.411	1.37
75-27-4	Bromodichloromethane	U	1.37	ug/kg	0.411	1.37
74-95-3	Dibromomethane	U	1.37	ug/kg	0.411	1.37
108-10-1	4-Methyl-2-pentanone	U	6.85	ug/kg	1.71	6.85
10061-01-5	cis-1,3-Dichloropropylene	U	1.37	ug/kg	0.411	1.37
108-88-3	Toluene	U	1.37	ug/kg	0.411	1.37
10061-02-6	trans-1,3-Dichloropropylene	U	1.37	ug/kg	0.411	1.37
79-00-5	1,1,2-Trichloroethane	U	1.37	ug/kg	0.411	1.37
591-78-6	2-Hexanone	U	6.85	ug/kg	2.05	6.85
142-28-9	1,3-Dichloropropane	U	1.37	ug/kg	0.411	1.37
127-18-4	Tetrachloroethylene	U	1.37	ug/kg	0.411	1.37
124-48-1	Dibromochloromethane	U	1.37	ug/kg	0.411	1.37
106-93-4	1,2-Dibromoethane	U	1.37	ug/kg	0.411	1.37
108-90-7	Chlorobenzene	U	1.37	ug/kg	0.411	1.37

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373006
 Client ID: RE36-10-7499
 Batch ID: 962617
 Run Date: 03/08/2010 16:32
 Prep Date: 03/08/2010 12:12
 Data File: 030810V99C114.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 27
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.37	ug/kg	0.411	1.37
179601-23-1	m,p-Xylenes	U	2.74	ug/kg	0.411	2.74
95-47-6	o-Xylene	U	1.37	ug/kg	0.411	1.37
100-42-5	Styrene	U	1.37	ug/kg	0.411	1.37
75-25-2	Bromoform	U	1.37	ug/kg	0.411	1.37
79-34-5	1,1,2,2-Tetrachloroethane	U	1.37	ug/kg	0.411	1.37
96-18-4	1,2,3-Trichloropropane	U	1.37	ug/kg	0.411	1.37
108-86-1	Bromobenzene	U	1.37	ug/kg	0.411	1.37
103-65-1	n-Propylbenzene	U	1.37	ug/kg	0.411	1.37
95-49-8	2-Chlorotoluene	U	1.37	ug/kg	0.411	1.37
98-82-8	Isopropylbenzene	U	1.37	ug/kg	0.411	1.37
108-67-8	1,3,5-Trimethylbenzene	U	1.37	ug/kg	0.411	1.37
106-43-4	4-Chlorotoluene	U	1.37	ug/kg	0.411	1.37
98-06-6	tert-Butylbenzene	U	1.37	ug/kg	0.411	1.37
95-63-6	1,2,4-Trimethylbenzene	U	1.37	ug/kg	0.411	1.37
135-98-8	sec-Butylbenzene	U	1.37	ug/kg	0.411	1.37
99-87-6	4-Isopropyltoluene	U	1.37	ug/kg	0.411	1.37
541-73-1	1,3-Dichlorobenzene	U	1.37	ug/kg	0.411	1.37
106-46-7	1,4-Dichlorobenzene	U	1.37	ug/kg	0.411	1.37
104-51-8	n-Butylbenzene	U	1.37	ug/kg	0.411	1.37
96-12-8	1,2-Dibromo-3-chloropropane	U	1.37	ug/kg	0.411	1.37
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.85	ug/kg	2.19	6.85
630-20-6	1,1,1,2-Tetrachloroethane	U	1.37	ug/kg	0.411	1.37
95-50-1	1,2-Dichlorobenzene	U	1.37	ug/kg	0.411	1.37

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	16.8	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373007

Client ID: RE36-10-7497
 Batch ID: 962617
 Run Date: 03/08/2010 17:02
 Prep Date: 03/08/2010 12:13
 Data File: 030810V99C115.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 32.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.48	ug/kg	0.504	1.48
74-87-3	Chloromethane	U	1.48	ug/kg	0.444	1.48
75-01-4	Vinyl chloride	U	1.48	ug/kg	0.444	1.48
74-83-9	Bromomethane	U	1.48	ug/kg	0.444	1.48
75-00-3	Chloroethane	U	1.48	ug/kg	0.444	1.48
75-69-4	Trichlorofluoromethane	U	1.48	ug/kg	0.444	1.48
67-64-1	Acetone	J	3.53	ug/kg	2.46	7.41
75-35-4	1,1-Dichloroethylene	J	0.711	ug/kg	0.444	1.48
74-88-4	Iodomethane	U	7.41	ug/kg	2.37	7.41
75-09-2	Methylene chloride	U	7.41	ug/kg	2.96	7.41
75-15-0	Carbon disulfide	U	7.41	ug/kg	1.85	7.41
156-60-5	trans-1,2-Dichloroethylene	U	1.48	ug/kg	0.444	1.48
75-34-3	1,1-Dichloroethane	U	1.48	ug/kg	0.444	1.48
78-93-3	2-Butanone	U	7.41	ug/kg	2.22	7.41
156-59-2	cis-1,2-Dichloroethylene	U	1.48	ug/kg	0.444	1.48
594-20-7	2,2-Dichloropropane	U	1.48	ug/kg	0.444	1.48
67-66-3	Chloroform	U	1.48	ug/kg	0.444	1.48
74-97-5	Bromochloromethane	U	1.48	ug/kg	0.489	1.48
71-55-6	1,1,1-Trichloroethane	U	1.48	ug/kg	0.444	1.48
563-58-6	1,1-Dichloropropene	U	1.48	ug/kg	0.444	1.48
56-23-5	Carbon tetrachloride	U	1.48	ug/kg	0.444	1.48
107-06-2	1,2-Dichloroethane	U	1.48	ug/kg	0.444	1.48
71-43-2	Benzene	U	1.48	ug/kg	0.444	1.48
79-01-6	Trichloroethylene	U	1.48	ug/kg	0.489	1.48
78-87-5	1,2-Dichloropropane	U	1.48	ug/kg	0.444	1.48
75-27-4	Bromodichloromethane	U	1.48	ug/kg	0.444	1.48
74-95-3	Dibromomethane	U	1.48	ug/kg	0.444	1.48
108-10-1	4-Methyl-2-pentanone	U	7.41	ug/kg	1.85	7.41
10061-01-5	cis-1,3-Dichloropropylene	U	1.48	ug/kg	0.444	1.48
108-88-3	Toluene	J	0.874	ug/kg	0.444	1.48
10061-02-6	trans-1,3-Dichloropropylene	U	1.48	ug/kg	0.444	1.48
79-00-5	1,1,2-Trichloroethane	U	1.48	ug/kg	0.444	1.48
591-78-6	2-Hexanone	U	7.41	ug/kg	2.22	7.41
142-28-9	1,3-Dichloropropane	U	1.48	ug/kg	0.444	1.48
127-18-4	Tetrachloroethylene	U	1.48	ug/kg	0.444	1.48
124-48-1	Dibromochloromethane	U	1.48	ug/kg	0.444	1.48
106-93-4	1,2-Dibromoethane	U	1.48	ug/kg	0.444	1.48
108-90-7	Chlorobenzene	U	1.48	ug/kg	0.444	1.48

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373007
 Client ID: RE36-10-7497
 Batch ID: 962617
 Run Date: 03/08/2010 17:02
 Prep Date: 03/08/2010 12:13
 Data File: 030810V99C115.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 32.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.48	ug/kg	0.444	1.48
179601-23-1	m,p-Xylenes	U	2.96	ug/kg	0.444	2.96
95-47-6	o-Xylene	U	1.48	ug/kg	0.444	1.48
100-42-5	Styrene	U	1.48	ug/kg	0.444	1.48
75-25-2	Bromoform	U	1.48	ug/kg	0.444	1.48
79-34-5	1,1,2,2-Tetrachloroethane	U	1.48	ug/kg	0.444	1.48
96-18-4	1,2,3-Trichloropropane	U	1.48	ug/kg	0.444	1.48
108-86-1	Bromobenzene	U	1.48	ug/kg	0.444	1.48
103-65-1	n-Propylbenzene	U	1.48	ug/kg	0.444	1.48
95-49-8	2-Chlorotoluene	U	1.48	ug/kg	0.444	1.48
98-82-8	Isopropylbenzene	U	1.48	ug/kg	0.444	1.48
108-67-8	1,3,5-Trimethylbenzene	U	1.48	ug/kg	0.444	1.48
106-43-4	4-Chlorotoluene	U	1.48	ug/kg	0.444	1.48
98-06-6	tert-Butylbenzene	U	1.48	ug/kg	0.444	1.48
95-63-6	1,2,4-Trimethylbenzene	U	1.48	ug/kg	0.444	1.48
135-98-8	sec-Butylbenzene	U	1.48	ug/kg	0.444	1.48
99-87-6	4-Isopropyltoluene	J	1.17	ug/kg	0.444	1.48
541-73-1	1,3-Dichlorobenzene	U	1.48	ug/kg	0.444	1.48
106-46-7	1,4-Dichlorobenzene	U	1.48	ug/kg	0.444	1.48
104-51-8	n-Butylbenzene	U	1.48	ug/kg	0.444	1.48
96-12-8	1,2-Dibromo-3-chloropropane	U	1.48	ug/kg	0.444	1.48
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.41	ug/kg	2.37	7.41
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.48	ug/kg	0.444	1.48
95-50-1	1,2-Dichlorobenzene	U	1.48	ug/kg	0.444	1.48

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	21.8	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	14.95	12.1	ug/kg	97	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373008
 Client ID: RE36-10-7495
 Batch ID: 962617
 Run Date: 03/08/2010 17:33
 Prep Date: 03/08/2010 12:14
 Data File: 030810V99C116.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 27.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parname	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		9.90	ug/kg	2.28	6.88
75-35-4	1,1-Dichloroethylene	U	1.38	ug/kg	0.413	1.38
74-88-4	Iodomethane	U	6.88	ug/kg	2.20	6.88
75-09-2	Methylene chloride	U	6.88	ug/kg	2.75	6.88
75-15-0	Carbon disulfide	U	6.88	ug/kg	1.72	6.88
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	6.88	ug/kg	2.06	6.88
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	0.454	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	0.454	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	6.88	ug/kg	1.72	6.88
10061-01-5	cis-1,3-Dichloropropylene	U	1.38	ug/kg	0.413	1.38
108-88-3	Toluene	J	1.06	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	6.88	ug/kg	2.06	6.88
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: 10-2154
 Lab Sample ID: 248373008
 Client ID: RE36-10-7495
 Batch ID: 962617
 Run Date: 03/08/2010 17:33
 Prep Date: 03/08/2010 12:14
 Data File: 030810V99C116.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.1
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 27.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.38	ug/kg	0.413	1.38
179601-23-1	m,p-Xylenes	J	0.523	ug/kg	0.413	2.75
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	J	0.591	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-Trifluoroethane	U	6.88	ug/kg	2.20	6.88
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
	unknown hydrocarbon	4.47	7.18	ug/kg	0	J
	unknown hydrocarbon	6.87	29.2	ug/kg	0	J
	unknown hydrocarbon	14.3	35.7	ug/kg	0	J
000475-20-7	1,4-Methanoazulene, decahydro-4,8,	14.63	82.5	ug/kg	99	NJ
007785-70-8	1R-.alpha.-Pinene	14.95	9.16	ug/kg	97	NJ
003242-08-8	Cyclohexane, 1-ethenyl-1-methyl-2-	15.29	30.2	ug/kg	50	NJ
	unknown hydrocarbon	15.55	17.3	ug/kg	0	J
013466-78-9	3-Carene	15.96	17.6	ug/kg	96	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373009
 Client ID: RE36-10-7498
 Batch ID: 962617
 Run Date: 03/09/2010 16:54
 Prep Date: 03/09/2010 12:13
 Data File: 030910V99C215.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 22.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.29	ug/kg	0.440	1.29
74-87-3	Chloromethane	U	1.29	ug/kg	0.388	1.29
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.388	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.388	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.388	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.388	1.29
67-64-1	Acetone	U	6.47	ug/kg	2.15	6.47
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
74-88-4	Iodomethane	U	6.47	ug/kg	2.07	6.47
75-09-2	Methylene chloride	U	6.47	ug/kg	2.59	6.47
75-15-0	Carbon disulfide	U	6.47	ug/kg	1.62	6.47
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.388	1.29
78-93-3	2-Butanone	U	6.47	ug/kg	1.94	6.47
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.388	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.427	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.388	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.388	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.388	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.388	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.388	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.427	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.388	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.388	1.29
108-10-1	4-Methyl-2-pentanone	U	6.47	ug/kg	1.62	6.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.388	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.388	1.29
591-78-6	2-Hexanone	U	6.47	ug/kg	1.94	6.47
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.388	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.388	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.388	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.388	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.388	1.29

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373009

Client ID: RE36-10-7498
Batch ID: 962617
Run Date: 03/09/2010 16:54
Prep Date: 03/09/2010 12:13
Data File: 030910V99C215.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXYJ
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.388	1.29
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.388	2.59
95-47-6	o-Xylene	U	1.29	ug/kg	0.388	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.388	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.388	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.388	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.388	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.388	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.388	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.388	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.388	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.388	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.388	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.388	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.47	ug/kg	2.07	6.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29

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: 10-2154
Lab Sample ID: 248373010

Client ID: RE36-10-7500
Batch ID: 962617
Run Date: 03/08/2010 18:31
Prep Date: 03/08/2010 12:16
Data File: 030810V99C118.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 21.8
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.28	ug/kg	0.435	1.28
74-87-3	Chloromethane	U	1.28	ug/kg	0.384	1.28
75-01-4	Vinyl chloride	U	1.28	ug/kg	0.384	1.28
74-83-9	Bromomethane	U	1.28	ug/kg	0.384	1.28
75-00-3	Chloroethane	U	1.28	ug/kg	0.384	1.28
75-69-4	Trichlorofluoromethane	U	1.28	ug/kg	0.384	1.28
67-64-1	Acetone	J	2.73	ug/kg	2.12	6.40
75-35-4	1,1-Dichloroethylene	U	1.28	ug/kg	0.384	1.28
74-88-4	Iodomethane	U	6.40	ug/kg	2.05	6.40
75-09-2	Methylene chloride	U	6.40	ug/kg	2.56	6.40
75-15-0	Carbon disulfide	U	6.40	ug/kg	1.60	6.40
156-60-5	trans-1,2-Dichloroethylene	U	1.28	ug/kg	0.384	1.28
75-34-3	1,1-Dichloroethane	U	1.28	ug/kg	0.384	1.28
78-93-3	2-Butanone	U	6.40	ug/kg	1.92	6.40
156-59-2	cis-1,2-Dichloroethylene	U	1.28	ug/kg	0.384	1.28
594-20-7	2,2-Dichloropropane	U	1.28	ug/kg	0.384	1.28
67-66-3	Chloroform	U	1.28	ug/kg	0.384	1.28
74-97-5	Bromochloromethane	U	1.28	ug/kg	0.422	1.28
71-55-6	1,1,1-Trichloroethane	U	1.28	ug/kg	0.384	1.28
563-58-6	1,1-Dichloropropene	U	1.28	ug/kg	0.384	1.28
56-23-5	Carbon tetrachloride	U	1.28	ug/kg	0.384	1.28
107-06-2	1,2-Dichloroethane	U	1.28	ug/kg	0.384	1.28
71-43-2	Benzene	U	1.28	ug/kg	0.384	1.28
79-01-6	Trichloroethylene	J	0.448	ug/kg	0.422	1.28
78-87-5	1,2-Dichloropropane	U	1.28	ug/kg	0.384	1.28
75-27-4	Bromodichloromethane	U	1.28	ug/kg	0.384	1.28
74-95-3	Dibromomethane	U	1.28	ug/kg	0.384	1.28
108-10-1	4-Methyl-2-pentanone	U	6.40	ug/kg	1.60	6.40
10061-01-5	cis-1,3-Dichloropropylene	U	1.28	ug/kg	0.384	1.28
108-88-3	Toluene	J	0.537	ug/kg	0.384	1.28
10061-02-6	trans-1,3-Dichloropropylene	U	1.28	ug/kg	0.384	1.28
79-00-5	1,1,2-Trichloroethane	U	1.28	ug/kg	0.384	1.28
591-78-6	2-Hexanone	U	6.40	ug/kg	1.92	6.40
142-28-9	1,3-Dichloropropane	U	1.28	ug/kg	0.384	1.28
127-18-4	Tetrachloroethylene	U	1.28	ug/kg	0.384	1.28
124-48-1	Dibromochloromethane	U	1.28	ug/kg	0.384	1.28
106-93-4	1,2-Dibromoethane	U	1.28	ug/kg	0.384	1.28
108-90-7	Chlorobenzene	U	1.28	ug/kg	0.384	1.28

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373010
 Client ID: RE36-10-7500
 Batch ID: 962617
 Run Date: 03/08/2010 18:31
 Prep Date: 03/08/2010 12:16
 Data File: 030810V99C118.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.28	ug/kg	0.384	1.28
179601-23-1	m,p-Xylenes	U	2.56	ug/kg	0.384	2.56
95-47-6	o-Xylene	U	1.28	ug/kg	0.384	1.28
100-42-5	Styrene	U	1.28	ug/kg	0.384	1.28
75-25-2	Bromoform	U	1.28	ug/kg	0.384	1.28
79-34-5	1,1,2,2-Tetrachloroethane	U	1.28	ug/kg	0.384	1.28
96-18-4	1,2,3-Trichloropropane	U	1.28	ug/kg	0.384	1.28
108-86-1	Bromobenzene	U	1.28	ug/kg	0.384	1.28
103-65-1	n-Propylbenzene	U	1.28	ug/kg	0.384	1.28
95-49-8	2-Chlorotoluene	U	1.28	ug/kg	0.384	1.28
98-82-8	Isopropylbenzene	U	1.28	ug/kg	0.384	1.28
108-67-8	1,3,5-Trimethylbenzene	U	1.28	ug/kg	0.384	1.28
106-43-4	4-Chlorotoluene	U	1.28	ug/kg	0.384	1.28
98-06-6	tert-Butylbenzene	U	1.28	ug/kg	0.384	1.28
95-63-6	1,2,4-Trimethylbenzene	U	1.28	ug/kg	0.384	1.28
135-98-8	sec-Butylbenzene	U	1.28	ug/kg	0.384	1.28
99-87-6	4-Isopropyltoluene	U	1.28	ug/kg	0.384	1.28
541-73-1	1,3-Dichlorobenzene	U	1.28	ug/kg	0.384	1.28
106-46-7	1,4-Dichlorobenzene	U	1.28	ug/kg	0.384	1.28
104-51-8	n-Butylbenzene	U	1.28	ug/kg	0.384	1.28
96-12-8	1,2-Dibromo-3-chloropropane	U	1.28	ug/kg	0.384	1.28
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.40	ug/kg	2.05	6.40
630-20-6	1,1,1,2-Tetrachloroethane	U	1.28	ug/kg	0.384	1.28
95-50-1	1,2-Dichlorobenzene	U	1.28	ug/kg	0.384	1.28

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	14.3	ug/kg	0	J
	unknown hydrocarbon	14.31	40	ug/kg	0	J
000475-20-7	1,4-Methanoazulene, decahydro-4,8,	14.64	66	ug/kg	99	NJ
007785-70-8	1R-.alpha.-Pinene	14.95	10.2	ug/kg	95	NJ
	unknown hydrocarbon	15.29	26.9	ug/kg	0	J
	unknown hydrocarbon	15.57	16.2	ug/kg	0	J
	unknown siloxane	16.93	14.5	ug/kg	0	J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373011

Client ID: RE36-10-7523
Batch ID: 962617
Run Date: 03/08/2010 18:59
Prep Date: 03/08/2010 12:17
Data File: 030810V99C119.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 15.8
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.404	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.356	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.356	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.356	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.356	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.356	1.19
67-64-1	Acetone	U	5.94	ug/kg	1.97	5.94
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.356	1.19
74-88-4	Iodomethane	U	5.94	ug/kg	1.90	5.94
75-09-2	Methylene chloride	U	5.94	ug/kg	2.38	5.94
75-15-0	Carbon disulfide	U	5.94	ug/kg	1.49	5.94
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.356	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.356	1.19
78-93-3	2-Butanone	U	5.94	ug/kg	1.78	5.94
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.356	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.356	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.356	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.392	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.356	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.356	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.356	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.356	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.356	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.392	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.356	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.356	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.356	1.19
108-10-1	4-Methyl-2-pentanone	U	5.94	ug/kg	1.49	5.94
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.356	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.356	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.356	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.356	1.19
591-78-6	2-Hexanone	U	5.94	ug/kg	1.78	5.94
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.356	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.356	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.356	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.356	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.356	1.19

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373011
 Client ID: RE36-10-7523
 Batch ID: 962617
 Run Date: 03/08/2010 18:59
 Prep Date: 03/08/2010 12:17
 Data File: 030810V99C119.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 15.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.356	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.356	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.356	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.356	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.356	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.356	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.356	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.356	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.356	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.356	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.356	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.356	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.356	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.356	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.356	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.356	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.356	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.356	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.356	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.356	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.356	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.94	ug/kg	1.90	5.94
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.356	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.356	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.54	11.4	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	14.95	8.8	ug/kg	96	NJ
000127-91-3	.beta.-Pinene	15.66	8.72	ug/kg	95	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373014
 Client ID: RE36-10-7522
 Batch ID: 962617
 Run Date: 03/08/2010 19:27
 Prep Date: 03/08/2010 12:18
 Data File: 030810V99C120.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.1
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 % Moisture: 11.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.383	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	U	5.63	ug/kg	1.87	5.63
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.63	ug/kg	1.80	5.63
75-09-2	Methylene chloride	U	5.63	ug/kg	2.25	5.63
75-15-0	Carbon disulfide	U	5.63	ug/kg	1.41	5.63
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.63	ug/kg	1.69	5.63
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.63	ug/kg	1.41	5.63
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.63	ug/kg	1.69	5.63
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373014
 Client ID: RE36-10-7522
 Batch ID: 962617
 Run Date: 03/08/2010 19:27
 Prep Date: 03/08/2010 12:18
 Data File: 030810V99C120.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 11.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.25	ug/kg	0.338	2.25
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.63	ug/kg	1.80	5.63
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	9	ug/kg	0	J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373015

Client ID: RE36-10-7521
Batch ID: 962617
Run Date: 03/08/2010 19:55
Prep Date: 03/08/2010 12:19
Data File: 030810V99C121.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.30	ug/kg	0.441	1.30
74-87-3	Chloromethane	U	1.30	ug/kg	0.389	1.30
75-01-4	Vinyl chloride	U	1.30	ug/kg	0.389	1.30
74-83-9	Bromomethane	U	1.30	ug/kg	0.389	1.30
75-00-3	Chloroethane	U	1.30	ug/kg	0.389	1.30
75-69-4	Trichlorofluoromethane	U	1.30	ug/kg	0.389	1.30
67-64-1	Acetone		8.52	ug/kg	2.15	6.49
75-35-4	1,1-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
74-88-4	Iodomethane	U	6.49	ug/kg	2.08	6.49
75-09-2	Methylene chloride	U	6.49	ug/kg	2.59	6.49
75-15-0	Carbon disulfide	U	6.49	ug/kg	1.62	6.49
156-60-5	trans-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
75-34-3	1,1-Dichloroethane	U	1.30	ug/kg	0.389	1.30
78-93-3	2-Butanone	U	6.49	ug/kg	1.95	6.49
156-59-2	cis-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
594-20-7	2,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
67-66-3	Chloroform	U	1.30	ug/kg	0.389	1.30
74-97-5	Bromochloromethane	U	1.30	ug/kg	0.428	1.30
71-55-6	1,1,1-Trichloroethane	U	1.30	ug/kg	0.389	1.30
563-58-6	1,1-Dichloropropene	U	1.30	ug/kg	0.389	1.30
56-23-5	Carbon tetrachloride	U	1.30	ug/kg	0.389	1.30
107-06-2	1,2-Dichloroethane	U	1.30	ug/kg	0.389	1.30
71-43-2	Benzene	U	1.30	ug/kg	0.389	1.30
79-01-6	Trichloroethylene	U	1.30	ug/kg	0.428	1.30
78-87-5	1,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
75-27-4	Bromodichloromethane	U	1.30	ug/kg	0.389	1.30
74-95-3	Dibromomethane	U	1.30	ug/kg	0.389	1.30
108-10-1	4-Methyl-2-pentanone	U	6.49	ug/kg	1.62	6.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
108-88-3	Toluene	J	0.869	ug/kg	0.389	1.30
10061-02-6	trans-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
79-00-5	1,1,2-Trichloroethane	U	1.30	ug/kg	0.389	1.30
591-78-6	2-Hexanone	U	6.49	ug/kg	1.95	6.49
142-28-9	1,3-Dichloropropane	U	1.30	ug/kg	0.389	1.30
127-18-4	Tetrachloroethylene	U	1.30	ug/kg	0.389	1.30
124-48-1	Dibromochloromethane	U	1.30	ug/kg	0.389	1.30
106-93-4	1,2-Dibromoethane	U	1.30	ug/kg	0.389	1.30
108-90-7	Chlorobenzene	U	1.30	ug/kg	0.389	1.30

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373015

Client ID: RE36-10-7521
Batch ID: 962617
Run Date: 03/08/2010 19:55
Prep Date: 03/08/2010 12:19
Data File: 030810V99C121.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9J
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.30	ug/kg	0.389	1.30
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.389	2.59
95-47-6	o-Xylene	U	1.30	ug/kg	0.389	1.30
100-42-5	Styrene	U	1.30	ug/kg	0.389	1.30
75-25-2	Bromoform	U	1.30	ug/kg	0.389	1.30
79-34-5	1,1,2,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
96-18-4	1,2,3-Trichloropropane	U	1.30	ug/kg	0.389	1.30
108-86-1	Bromobenzene	U	1.30	ug/kg	0.389	1.30
103-65-1	n-Propylbenzene	U	1.30	ug/kg	0.389	1.30
95-49-8	2-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-82-8	Isopropylbenzene	U	1.30	ug/kg	0.389	1.30
108-67-8	1,3,5-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
106-43-4	4-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-06-6	tert-Butylbenzene	U	1.30	ug/kg	0.389	1.30
95-63-6	1,2,4-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
135-98-8	sec-Butylbenzene	U	1.30	ug/kg	0.389	1.30
99-87-6	4-Isopropyltoluene	J	0.765	ug/kg	0.389	1.30
541-73-1	1,3-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
106-46-7	1,4-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
104-51-8	n-Butylbenzene	U	1.30	ug/kg	0.389	1.30
96-12-8	1,2-Dibromo-3-chloropropane	U	1.30	ug/kg	0.389	1.30
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.49	ug/kg	2.08	6.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
95-50-1	1,2-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000064-17-5	Ethyl alcohol	6.87	30.8	ug/kg	83	NJ
007785-70-8	1R-.alpha.-Pinene	14.95	27.9	ug/kg	97	NJ
000079-92-5	Camphene	15.28	14.7	ug/kg	97	NJ
000498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-tr	15.96	20.8	ug/kg	94	NJ
	unknown siloxane	16.94	7.85	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373016
 Client ID: RE36-10-7541
 Batch ID: 962617
 Run Date: 03/08/2010 12:54
 Prep Date: 03/08/2010 12:20
 Data File: 030810V99C107.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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: 10-2154
 Lab Sample ID: 248373016
 Client ID: RE36-10-7541
 Batch ID: 962617
 Run Date: 03/08/2010 12:54
 Prep Date: 03/08/2010 12:20
 Data File: 030810V99C107.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

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

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	7	ug/kg	0	J

Quality Control Summary

Volatile
Surrogate Recovery Report

Page 1 of 2

SDG Number: 10-2154

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202065143	LCS for batch 962616	97	97	98
1202065144	LCS for batch 962616	99	100	97
1202065140	MB for batch 962616	102	101	103
248373016	RE36-10-7541	107	102	104
248373001	RE36-10-7494	105	108	124
248373002	RE36-10-7493	104	116	129
248373003	RE36-10-7492	106	111	122
248373004	RE36-10-7491	104	122	134 *
248373005	RE36-10-7496	109	112	125
248373006	RE36-10-7499	105	114	125
248373007	RE36-10-7497	106	115	127
248373008	RE36-10-7495	100	125	133 *
248373010	RE36-10-7500	104	112	130
248373011	RE36-10-7523	108	109	121
248373014	RE36-10-7522	106	101	107
248373015	RE36-10-7521	105	124	135 *
1202066321	LCS for batch 962616	103	101	102
1202066322	LCS for batch 962616	102	100	96
1202066320	MB for batch 962616	107	98	101
248373009	RE36-10-7498	113	106	112
1202068775	LCS for batch 962616	103	100	101
1202068776	LCS for batch 962616	102	100	97
1202068774	MB for batch 962616	109	99	103
1202065141	RE36-10-7494PS	101	106	121

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
Surrogate Recovery Report

Page 2 of 2

SDG Number: 10-2154**Matrix Type: SOLID**

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202065142	RE36-10-7494PSD	105	103	115

Surrogate**Acceptance Limits**

DCED4 = 1,2-Dichloroethane-d4

(66%-134%)

TOL = Toluene-d8

(71%-128%)

BFB = Bromofluorobenzene

(65%-130%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Volatile

Page 1 of 6

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Post Spike

Client ID: RE36-10-7494PS

Matrix: R

Lab Sample ID: 1202065141

%Moisture: 12.3

Instrument: VOA9.I

Analysis Date: 03/10/2010 17:10

Dilution: 1

Analyst: RXY1

Pre Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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	25.5	51	39-148
74-87-3	PS Chloromethane	50.0	0.00 U	34.9	70	42-131
75-01-4	PS Vinyl chloride	50.0	0.00 U	41.5	83	50-127
74-83-9	PS Bromomethane	50.0	0.00 U	37.6	75	26-135
75-00-3	PS Chloroethane	50.0	0.00 U	40.5	81	54-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00 U	41.4	83	55-138
67-64-1	PS Acetone	250	2.01 J	109	43	20-144
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00 U	42.1	84	55-128
74-88-4	PS Iodomethane	250	0.00 U	182	73	47-132
75-09-2	PS Methylene chloride	50.0	0.00 U	44.1	88	56-123
75-15-0	PS Carbon disulfide	250	0.00 U	212	85	53-133
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00 U	42.2	84	57-119
75-34-3	PS 1,1-Dichloroethane	50.0	0.00 U	43.1	86	62-125
78-93-3	PS 2-Butanone	250	0.00 U	142	57	30-150
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00 U	42.8	86	60-124
594-20-7	PS 2,2-Dichloropropane	50.0	0.00 U	47.8	96	56-129
67-66-3	PS Chloroform	50.0	0.00 U	41.0	82	62-120
74-97-5	PS Bromochloromethane	50.0	0.00 U	41.4	83	51-135
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00 U	44.4	89	58-129
563-58-6	PS 1,1-Dichloropropene	50.0	0.00 U	41.9	84	59-126
56-23-5	PS Carbon tetrachloride	50.0	0.00 U	44.6	89	55-132
107-06-2	PS 1,2-Dichloroethane	50.0	0.00 U	42.8	86	54-121

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Post Spike

Client ID: RE36-10-7494PS

Matrix: R

Lab Sample ID: 1202065141

%Moisture: 12.3

Instrument: VOA9.I

Analysis Date: 03/10/2010 17:10

Dilution: 1

Analyst: RXY1

Prep Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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 40.5	81	58-120
79-01-6	PS Trichloroethylene	50.0	0.00	U 40.4	81	54-130
78-87-5	PS 1,2-Dichloropropane	50.0	0.00	U 41.7	83	59-121
75-27-4	PS Bromodichloromethane	50.0	0.00	U 42.3	85	57-130
74-95-3	PS Dibromomethane	50.0	0.00	U 40.2	80	57-124
108-10-1	PS 4-Methyl-2-pentanone	250	0.00	U 219	88	40-137
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00	U 36.1	72	50-131
108-88-3	PS Toluene	50.0	0.00	U 42.5	85	54-119
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00	U 42.0	84	47-133
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00	U 41.6	83	60-130
591-78-6	PS 2-Hexanone	250	0.00	U 143	57	30-139
142-28-9	PS 1,3-Dichloropropane	50.0	0.00	U 41.0	82	59-125
127-18-4	PS Tetrachloroethylene	50.0	0.00	U 40.1	80	50-126
124-48-1	PS Dibromochloromethane	50.0	0.00	U 43.5	87	54-131
106-93-4	PS 1,2-Dibromoethane	50.0	0.00	U 41.3	83	55-127
108-90-7	PS Chlorobenzene	50.0	0.00	U 38.4	77	50-130
100-41-4	PS Ethylbenzene	50.0	0.00	U 36.6	73	50-121
179601-23-1	PS m,p-Xylenes	100	0.480	J 76.2	76	47-125
95-47-6	PS o-Xylene	50.0	0.00	U 38.2	76	51-127
100-42-5	PS Styrene	50.0	0.00	U 35.8	72	41-136
75-25-2	PS Bromoform	50.0	0.00	U 53.7	107	48-143
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00	U 51.3	103	52-129

Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-2154

Sample Type: Post Spike

Client ID: RE36-10-7494PS

Matrix: R

Lab Sample ID: 1202065141

%Moisture: 12.3

Instrument: VOA9.I

Analysis Date: 03/10/2010 17:10

Dilution: 1

Analyst: RXY1

Prep Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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	52.2	104	56-139
108-86-1	PS Bromobenzene	50.0	0.00 U	44.7	89	54-125
103-65-1	PS n-Propylbenzene	50.0	0.00 U	46.3	93	46-127
95-49-8	PS 2-Chlorotoluene	50.0	0.00 U	46.7	93	47-130
98-82-8	PS Isopropylbenzene	50.0	0.00 U	52.2	104	42-126
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00 U	46.3	93	44-132
106-43-4	PS 4-Chlorotoluene	50.0	0.00 U	44.7	89	46-127
98-06-6	PS tert-Butylbenzene	50.0	0.00 U	49.0	98	48-136
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.340 J	46.2	92	42-132
135-98-8	PS sec-Butylbenzene	50.0	0.00 U	44.0	88	47-130
99-87-6	PS 4-Isopropyltoluene	50.0	0.00 U	40.3	81	36-142
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00 U	37.2	74	41-130
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00 U	37.9	76	41-126
104-51-8	PS n-Butylbenzene	50.0	0.00 U	38.5	77	37-136
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00 U	42.7	85	42-143
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00 U	42.2	84	58-127
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00 U	36.0	72	42-128

Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 6

SDG Number: 10-2154

Sample Type: Post Spike Duplicate

Client ID: RE36-10-7494PSD

Matrix: R

Lab Sample ID: 1202065142

%Moisture: 12.3

Instrument: VOA9.I

Analysis Date: 03/10/2010 17:41

Dilution: 1

Analyst: RXY1

Pre Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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	25.9	52	39-148	2	0-19
74-87-3	PSD Chloromethane	50.0	0.00 U	35.2	70	42-131	1	0-23
75-01-4	PSD Vinyl chloride	50.0	0.00 U	40.4	81	50-127	3	0-23
74-83-9	PSD Bromomethane	50.0	0.00 U	37.2	74	26-135	1	0-22
75-00-3	PSD Chloroethane	50.0	0.00 U	41.1	82	54-128	1	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00 U	40.9	82	55-138	1	0-21
67-64-1	PSD Acetone	250	2.01 J	118	46	20-144	8	0-22
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00 U	42.0	84	55-128	0	0-20
74-88-4	PSD Iodomethane	250	0.00 U	185	74	47-132	2	0-20
75-09-2	PSD Methylene chloride	50.0	0.00 U	43.9	88	56-123	1	0-20
75-15-0	PSD Carbon disulfide	250	0.00 U	209	84	53-133	2	0-22
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00 U	42.0	84	57-119	0	0-20
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00 U	43.3	87	62-125	1	0-20
78-93-3	PSD 2-Butanone	250	0.00 U	147	59	30-150	3	0-21
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00 U	42.9	86	60-124	0	0-20
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00 U	46.3	93	56-129	3	0-20
67-66-3	PSD Chloroform	50.0	0.00 U	40.9	82	62-120	0	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00 U	42.1	84	51-135	2	0-20
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00 U	44.1	88	58-129	1	0-20
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00 U	40.9	82	59-126	2	0-20
56-23-5	PSD Carbon tetrachloride	50.0	0.00 U	43.5	87	55-132	2	0-20
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00 U	43.2	86	54-121	1	0-20

Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 6

SDG Number: 10-2154

Sample Type: Post Spike Duplicate

Client ID: RE36-10-7494PSD

Matrix: R

Lab Sample ID: 1202065142

%Moisture: 12.3

Instrument: VOA9.I

Analysis Date: 03/10/2010 17:41

Dilution: 1

Analyst: RXY1

Prep Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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	40.5	81	58-120	0	0-20
79-01-6	PSD Trichloroethylene	50.0	0.00 U	40.1	80	54-130	1	0-23
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00 U	41.4	83	59-121	1	0-20
75-27-4	PSD Bromodichloromethane	50.0	0.00 U	42.6	85	57-130	1	0-20
74-95-3	PSD Dibromomethane	50.0	0.00 U	41.6	83	57-124	3	0-20
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00 U	217	87	40-137	1	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00 U	36.9	74	50-131	2	0-20
108-88-3	PSD Toluene	50.0	0.00 U	40.4	81	54-119	5	0-23
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00 U	41.4	83	47-133	1	0-24
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00 U	40.9	82	60-130	2	0-20
591-78-6	PSD 2-Hexanone	250	0.00 U	140	56	30-139	2	0-21
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00 U	40.6	81	59-125	1	0-20
127-18-4	PSD Tetrachloroethylene	50.0	0.00 U	38.7	77	50-126	4	0-20
124-48-1	PSD Dibromochloromethane	50.0	0.00 U	43.6	87	54-131	0	0-23
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00 U	41.1	82	55-127	0	0-23
108-90-7	PSD Chlorobenzene	50.0	0.00 U	38.3	77	50-130	0	0-24
100-41-4	PSD Ethylbenzene	50.0	0.00 U	35.8	72	50-121	2	0-24
179601-23-1	PSD m,p-Xylenes	100	0.480 J	74.8	74	47-125	2	0-25
95-47-6	PSD o-Xylene	50.0	0.00 U	37.6	75	51-127	2	0-24
100-42-5	PSD Styrene	50.0	0.00 U	36.2	72	41-136	1	0-24
75-25-2	PSD Bromoform	50.0	0.00 U	51.0	102	48-143	5	0-20
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00 U	48.3	97	52-129	6	0-20

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Post Spike Duplicate

Client ID: RE36-10-7494PSD

Matrix: R

Lab Sample ID: 1202065142

%Moisture: 12.3

Instrument: VOA9.I

Analysis Date: 03/10/2010 17:41

Dilution: 1

Analyst: RXY1

Pren Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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 49.2	98	56-139	6	0-34
108-86-1	PSD Bromobenzene	50.0	0.00	U 42.0	84	54-125	6	0-22
103-65-1	PSD n-Propylbenzene	50.0	0.00	U 42.1	84	46-127	10	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U 42.8	86	47-130	9	0-24
98-82-8	PSD Isopropylbenzene	50.0	0.00	U 46.5	93	42-126	12	0-22
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U 42.6	85	44-132	8	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U 41.7	83	46-127	7	0-26
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U 44.2	88	48-136	11	0-24
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.340	J 42.6	84	42-132	8	0-26
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U 41.2	82	47-130	7	0-27
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U 37.2	74	36-142	8	0-27
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U 36.3	73	41-130	2	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U 36.6	73	41-126	3	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U 37.0	74	37-136	4	0-29
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U 42.2	84	42-143	1	0-21
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U 41.3	83	58-127	2	0-20
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U 35.8	72	42-128	1	0-24

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962616

Matrix: SOIL

Lab Sample ID:1202065144

Instrument: VOA9.I

Analysis Date: 03/08/2010 11:23

Dilution: 1

Analyst: RXYI

Prep Batch ID 962616

Purge Vol: 5 mL

Batch ID: 962617

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	294	117	67-140

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962616

Matrix: MISC SOLID

Lab Sample ID: 1202066321

Instrument: VOA9.I

Analysis Date: 03/09/2010 10:52

Dilution: 1

Analyst: RXY1

Pren Batch II 962616

Purge Vol: 5 mL

Batch ID: 962617

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	43.8	88	52-151
74-87-3	LCS Chloromethane	50.0	0.0	39.3	79	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	45.2	90	66-130
74-83-9	LCS Bromomethane	50.0	0.0	43.5	87	70-126
75-00-3	LCS Chloroethane	50.0	0.0	44.7	89	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	48.5	97	73-143
67-64-1	LCS Acetone	250	0.0	198	79	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	45.8	92	71-129
74-88-4	LCS Iodomethane	250	0.0	214	86	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	43.9	88	64-121
75-15-0	LCS Carbon disulfide	250	0.0	237	95	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	44.6	89	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	43.3	87	73-120
78-93-3	LCS 2-Butanone	250	0.0	203	81	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	43.9	88	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	50.7	101	73-134
67-66-3	LCS Chloroform	50.0	0.0	42.5	85	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	42.8	86	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	48.0	96	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	46.0	92	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	48.6	97	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	43.2	86	65-120

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962616

Matrix: MISC SOLID

Lab Sample ID: 1202066321

Instrument: VOA9.I

Analysis Date: 03/09/2010 10:52

Dilution: 1

Analyst: RXY1

Prep Batch II 962616

Purge Vol: 5 mL

Batch ID: 962617

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	42.4	85	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	44.3	89	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	42.4	85	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	43.5	87	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	42.3	85	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	225	90	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	43.9	88	78-127
108-88-3	LCS Toluene	50.0	0.0	41.9	84	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	45.8	92	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	40.6	81	75-120
591-78-6	LCS 2-Hexanone	250	0.0	201	80	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	39.9	80	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	43.4	87	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	44.7	89	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	41.7	83	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	41.5	83	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	38.4	77	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	82.8	83	76-120
95-47-6	LCS o-Xylene	50.0	0.0	40.4	81	76-122
100-42-5	LCS Styrene	50.0	0.0	41.6	83	75-125
75-25-2	LCS Bromoform	50.0	0.0	44.6	89	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	42.2	84	72-122

Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962616

Matrix: MISC SOLID

Lab Sample ID: 1202066321

Instrument: VOA9.I

Analysis Date: 03/09/2010 10:52

Dilution: 1

Analyst: RXY1

Prep Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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	44.3	89	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	39.5	79	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	40.1	80	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	41.3	83	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	42.3	85	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	40.7	81	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	41.3	83	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	43.5	87	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	42.3	85	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	42.5	85	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	43.2	86	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	40.8	82	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	41.1	82	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	43.5	87	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	44.5	89	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	43.1	86	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	40.9	82	75-120

Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962616

Matrix: MISC SOLID

Lab Sample ID:1202066322

Instrument: VOA9.I

Analysis Date: 03/09/2010 11:21

Dilution: 1

Analyst: RXY1

Prep Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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	302	121	67-140

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962616

Matrix: MISC SOLID

Lab Sample ID: 1202068775

Instrument: VOA9.1

Analysis Date: 03/10/2010 10:01

Dilution: 1

Analyst: RXY1

Prep Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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	41.7	83	52-151
74-87-3	LCS Chloromethane	50.0	0.0	44.1	88	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	50.7	101	66-130
74-83-9	LCS Bromomethane	50.0	0.0	49.2	98	70-126
75-00-3	LCS Chloroethane	50.0	0.0	49.8	100	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	53.5	107	73-143
67-64-1	LCS Acetone	250	0.0	223	89	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	51.4	103	71-129
74-88-4	LCS Iodomethane	250	0.0	241	96	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	51.3	103	64-121
75-15-0	LCS Carbon disulfide	250	0.0	263	105	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	50.6	101	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	49.7	99	73-120
78-93-3	LCS 2-Butanone	250	0.0	227	91	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	50.5	101	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	57.0	114	73-134
67-66-3	LCS Chloroform	50.0	0.0	48.7	97	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	49.3	99	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	54.1	108	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	51.9	104	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	54.4	109	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	50.7	101	65-120

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962616

Matrix: MISC SOLID

Lab Sample ID: 1202068775

Instrument: VOA9.1

Analysis Date: 03/10/2010 10:01

Dilution: 1

Analyst: RXY1

Prep Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

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	48.8	98	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	50.5	101	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	48.9	98	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	51.1	102	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	49.1	98	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	250	100	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	51.3	103	78-127
108-88-3	LCS Toluene	50.0	0.0	47.3	95	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	53.1	106	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	46.5	93	75-120
591-78-6	LCS 2-Hexanone	250	0.0	219	88	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	45.6	91	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	48.5	97	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	51.4	103	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	48.5	97	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	47.4	95	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	42.6	85	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	92.6	93	76-120
95-47-6	LCS o-Xylene	50.0	0.0	45.7	91	76-122
100-42-5	LCS Styrene	50.0	0.0	47.0	94	75-125
75-25-2	LCS Bromoform	50.0	0.0	51.5	103	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	47.2	94	72-122

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962616

Matrix: MISC SOLID

Lab Sample ID: 1202068775

Instrument: VOA9.I

Analysis Date: 03/10/2010 10:01

Dilution: 1

Analyst: RXY1

Preo Batch ID: 962616

Purge Vol: 5 mL

Batch ID: 962617

CAS No	Parname	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	47.7	95	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	44.0	88	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	43.7	87	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	45.7	91	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	46.1	92	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	44.9	90	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	46.3	93	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	47.4	95	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	46.4	93	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	46.4	93	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	47.4	95	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	44.8	90	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	45.6	91	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	47.4	95	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	50.1	100	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	49.2	98	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	45.6	91	75-120

Volatile

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 962616

Matrix: MISC SOLID

Lab Sample ID: 1202068776

Instrument: VOA9.I

Analysis Date: 03/10/2010 10:31

Dilution: 1

Analyst: RXY1

Pren Batch II 962616

Purge Vol: 5 mL

Batch ID: 962617

CAS No	Paramname	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	292	117	67-140

Method Blank Summary

Page 1 of 1

SDG Number:	10-2154	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 962616	Instrument ID:	VOA9.1	Data File:	030810V99C105B1.D
Lab Sample ID:	1202065140	Prep Date:	03/08/2010 10:02	Analyzed:	03/08/10 11:53
Column:	DB-624				

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 962616	1202065143	030810V99C103L1.D	03/08/10	1053
02 LCS for batch 962616	1202065144	030810V99C104L1.D	03/08/10	1123
03 RE36-10-7541	248373016	030810V99C107.D	03/08/10	1254
04 RE36-10-7494	248373001	030810V99C109.D	03/08/10	1356
05 RE36-10-7493	248373002	030810V99C110.D	03/08/10	1427
06 RE36-10-7492	248373003	030810V99C111.D	03/08/10	1458
07 RE36-10-7491	248373004	030810V99C112.D	03/08/10	1530
08 RE36-10-7496	248373005	030810V99C113.D	03/08/10	1601
09 RE36-10-7499	248373006	030810V99C114.D	03/08/10	1632
10 RE36-10-7497	248373007	030810V99C115.D	03/08/10	1702
11 RE36-10-7495	248373008	030810V99C116.D	03/08/10	1733
12 RE36-10-7500	248373010	030810V99C118.D	03/08/10	1831
13 RE36-10-7523	248373011	030810V99C119.D	03/08/10	1859
14 RE36-10-7522	248373014	030810V99C120.D	03/08/10	1927
15 RE36-10-7521	248373015	030810V99C121.D	03/08/10	1955

Method Blank Summary

Page 1 of 1

SDG Number:	10-2154	Client:	LANL010	Matrix:	MISC SOLID
Client ID:	MB for batch 962616	Instrument ID:	VOA9.I	Data File:	030910V99C206B.D
Lab Sample ID:	1202066320	Prep Date:	03/09/2010 10:02	Analyzed:	03/09/10 12:19
Column:	DB-624				

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 962616	1202066321	030910V99C203L.D	03/09/10	1052
02 LCS for batch 962616	1202066322	030910V99C204L.D	03/09/10	1121
03 RE36-10-7498	248373009	030910V99C215.D	03/09/10	1654

Method Blank Summary

Page 1 of 1

SDG Number:	10-2154	Client:	LANL010	Matrix:	MISC SOLID
Client ID:	MB for batch 962616	Instrument ID:	VOA9.I	Data File:	031010V99C306B.D
Lab Sample ID:	1202068774	Prep Date:	03/10/2010 09:02	Analyzed:	03/10/10 11:30
Column:	DB-624				

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 962616	1202068775	031010V99C303L.D	03/10/10	1001
02 LCS for batch 962616	1202068776	031010V99C304L.D	03/10/10	1031
03 RE36-10-7494PS	1202065141	031010V99C317.D	03/10/10	1710
04 RE36-10-7494PSD	1202065142	031010V99C318.D	03/10/10	1741

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2154

Instrument ID: VOA9.I

Injection Date/Time: 02-MAR-10 12:10

Column Description: DB-624

Lab File ID 030210V9\9B209.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	24.9
75	30.0 - 60.0% of mass 95	49.7
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	56.9
175	5.0 - 9.0% of mass 174	6.6
176	95.0 - 101.0% of mass 174	96.5
177	5.0 - 9.0% of mass 176	6.5

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	W9VM100302-07	030210V9\9B210.D	02-MAR-10 12:38
ICALMIX[A]	W9VM100302-08	030210V9\9B211.D	02-MAR-10 13:07
ICALMIX[A]	W9VM100302-09	030210V9\9B212.D	02-MAR-10 13:36
ICALMIX[A]	W9VM100302-10	030210V9\9B213.D	02-MAR-10 14:04
ICALMIX[A]	W9VM100302-11	030210V9\9B214.D	02-MAR-10 14:33
ICALMIX[A]	W9VM100302-12	030210V9\9B215.D	02-MAR-10 15:02
ICALMIX[A]	W9VM100302-13	030210V9\9B216.D	02-MAR-10 15:31
ICALMIX[A]	W9VM100302-14	030210V9\9B217.D	02-MAR-10 16:00
ICALMIX[B]	W9VM100302-18	030210V9\9B223.D	02-MAR-10 18:51
ICALMIX[B]	W9VM100302-19	030210V9\9B224.D	02-MAR-10 19:19
ICALMIX[B]	W9VM100302-20	030210V9\9B225.D	02-MAR-10 19:48
ICALMIX[B]	W9VM100302-21	030210V9\9B226.D	02-MAR-10 20:16
ICALMIX[B]	W9VM100302-22	030210V9\9B227.D	02-MAR-10 20:44
ICALMIX[B]	W9VM100302-23	030210V9\9B228.D	02-MAR-10 21:12
ICALMIX[B]	W9VM100302-24	030210V9\9B229.D	02-MAR-10 21:40

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2154

Instrument ID: VOA9.I

Injection Date/Time: 03-MAR-10 10:50

Column Description: DB-624

Lab File ID 030310V9\9B303BFB.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	25.6
75	30.0 - 60.0% of mass 95	49.8
95	Base Peak, 100% Relative Abundance	100
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	53.3
175	5.0 - 9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	97.5
177	5.0 - 9.0% of mass 176	6.4

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICVMIX[A]01	W9VM100303-03	030310V9\9B303ICV.D	03-MAR-10 10:50
ICVMIX[B]02	W9VM100303-05	030310V9\9B305ICV.D	03-MAR-10 12:00

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2154

Instrument ID: VOA9.I

Injection Date/Time: 08-MAR-10 09:55

Column Description: DB-624

Lab File ID 030810V9\9C101\BFB.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	25.4
75	30.0 - 60.0% of mass 95	49.5
95	Base Peak, 100% Relative Abundance	100
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	54.5
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.3
177	5.0 - 9.0% of mass 176	6.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]01	W9VM100308-01	030810V9\9C101.D	08-MAR-10 09:55
BLK01LCS	1202065143	030810V9\9C103L1.D	08-MAR-10 10:53
CCVMIX[B]02	W9VM100308-04	030810V9\9C104.D	08-MAR-10 11:23
BLK01SLCS	1202065144	030810V9\9C104L1.D	08-MAR-10 11:23
BLK01	1202065140	030810V9\9C105B1.D	08-MAR-10 11:53
RE36-10-7541	248373016	030810V9\9C107.D	08-MAR-10 12:54
RE36-10-7494	248373001	030810V9\9C109.D	08-MAR-10 13:56
RE36-10-7493	248373002	030810V9\9C110.D	08-MAR-10 14:27
RE36-10-7492	248373003	030810V9\9C111.D	08-MAR-10 14:58
RE36-10-7491	248373004	030810V9\9C112.D	08-MAR-10 15:30
RE36-10-7496	248373005	030810V9\9C113.D	08-MAR-10 16:01
RE36-10-7499	248373006	030810V9\9C114.D	08-MAR-10 16:32
RE36-10-7497	248373007	030810V9\9C115.D	08-MAR-10 17:02
RE36-10-7495	248373008	030810V9\9C116.D	08-MAR-10 17:33
RE36-10-7500	248373010	030810V9\9C118.D	08-MAR-10 18:31
RE36-10-7523	248373011	030810V9\9C119.D	08-MAR-10 18:59
RE36-10-7522	248373014	030810V9\9C120.D	08-MAR-10 19:27
RE36-10-7521	248373015	030810V9\9C121.D	08-MAR-10 19:55

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2154

Instrument ID: VOA9.I

Injection Date/Time: 09-MAR-10 10:24

Column Description: DB-624

Lab File ID 030910V9\9C202BFB.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	27.3
75	30.0 - 60.0% of mass 95	51.2
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.4
174	50.0 - 100.0% of mass 95	52.2
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.6
177	5.0 - 9.0% of mass 176	6.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]03	W9VM100309-02	030910V9\9C202.D	09-MAR-10 10:24
BLK02LCS	1202066321	030910V9\9C203L.D	09-MAR-10 10:52
CCVMIX[B]04	W9VM100309-04	030910V9\9C204.D	09-MAR-10 11:21
BLK02SLCS	1202066322	030910V9\9C204L.D	09-MAR-10 11:21
BLK02	1202066320	030910V9\9C206B.D	09-MAR-10 12:19
RE36-10-7498	248373009	030910V9\9C215.D	09-MAR-10 16:54

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2154

Instrument ID: VOA9.I

Injection Date/Time: 10-MAR-10 09:04

Column Description: DB-624

Lab File ID 031010V9\9C301BFB.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	26.7
75	30.0 - 60.0% of mass 95	51.1
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	53.8
175	5.0 - 9.0% of mass 174	7.6
176	95.0 - 101.0% of mass 174	97.5
177	5.0 - 9.0% of mass 176	7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]05	W9VM100310-01	031010V9\9C301.D	10-MAR-10 09:04
BLK03LCS	1202068775	031010V9\9C303L.D	10-MAR-10 10:01
CCVMIX[B]06	W9VM100309-04	031010V9\9C304.D	10-MAR-10 10:31
BLK03SLCS	1202068776	031010V9\9C304L.D	10-MAR-10 10:31
BLK03	1202068774	031010V9\9C306B.D	10-MAR-10 11:30
RE36-10-7494MS	1202065141	031010V9\9C317.D	10-MAR-10 17:10
RE36-10-7494MSD	1202065142	031010V9\9C318.D	10-MAR-10 17:41

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2154

Instrument: VOA9.1

STD Analysis Time: 08-MAR-10 09:55

GC Column: DB-624

Data File: C:\msdchem\1\DATA\030810V9\9C101.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT	Area	#	RT	Area	#	RT
12 Hour STD	1162475		10.8	807552		13.9	365175		16.4
Upper Limit	2324950		11.3	1615104		14.4	730350		16.9
Lower Limit	581238		10.3	403776		13.4	182588		15.9
Sample ID									
BLK01LCS	1180473		10.8	828834		13.9	380317		16.4
BLK01SLCS	1155144		10.8	808706		13.9	368409		16.4
BLK01	1144493		10.8	783121		13.9	351451		16.4
RE36-10-7541	1036388		10.8	720260		13.9	322175		16.4
RE36-10-7494	1017932		10.8	634037		13.9	199403		16.4
RE36-10-7493	938723		10.8	524785		13.9	141285	*	16.4
RE36-10-7492	928722		10.8	542134		13.9	159607	*	16.4
RE36-10-7491	860270		10.8	432579		13.9	104593	*	16.4
RE36-10-7496	917658		10.8	544704		13.9	160325	*	16.4
RE36-10-7499	890506		10.8	513218		13.9	153063	*	16.4
RE36-10-7497	757191		10.8	437353		13.9	120347	*	16.4
RE36-10-7495	831951		10.8	384933	*	13.9	84783	*	16.4
RE36-10-7500	912109		10.8	547239		13.9	159413	*	16.4
RE36-10-7523	910503		10.8	557791		13.9	182627		16.4
RE36-10-7522	952865		10.8	637957		13.9	257977		16.4
RE36-10-7521	816238		10.8	424214		13.9	105742	*	16.4

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2154

Instrument: VOA9.I

STD Analysis Time: 09-MAR-10 10:24

GC Column: DB-624

Data File: C:\msdchem\1\DATA\030910V9\9C202.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1012592		10.8	669627		13.9	308900		16.4
Upper Limit	2025184		11.3	1339254		14.4	617800		16.9
Lower Limit	506296		10.3	334814		13.4	154450		15.9
Sample ID									
BLK02LCS	989146		10.8	687807		13.9	314113		16.4
BLK02SLCS	1016593		10.8	705662		13.9	327563		16.4
BLK02	954040		10.8	663075		13.9	299712		16.4
RE36-10-7498	696357		10.8	451810		13.9	170231		16.4

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2154

Instrument: VOA9.1

STD Analysis Time: 10-MAR-10 09:04

GC Column: DB-624

Data File: C:\msdchem\1\DATA\031010V9\9C301.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1033778		10.8	708505		13.9	318710		16.4
Upper Limit	2067556		11.3	1417010		14.4	637420		16.9
Lower Limit	516889		10.3	354253		13.4	159355		15.9
Sample ID									
BLK03LCS	1005009		10.8	710761		13.9	326978		16.4
BLK03SLCS	1023106		10.8	713960		13.9	332065		16.4
BLK03	961788		10.8	674644		13.9	302646		16.4
RE36-10-7494MS	980779		10.8	626937		13.9	207334		16.4
RE36-10-7494MSD	960680		10.8	640996		13.9	235551		16.4

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373016
 Client ID: RE36-10-7541
 Batch ID: 962617
 Run Date: 03/08/2010 12:54
 Prep Date: 03/08/2010 12:20
 Data File: 030810V99C107.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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: 10-2154
 Lab Sample ID: 248373016
 Client ID: RE36-10-7541
 Batch ID: 962617
 Run Date: 03/08/2010 12:54
 Prep Date: 03/08/2010 12:20
 Data File: 030810V99C107.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

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

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	7	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C107.D
Acq On : 8 Mar 2010 12:54 pm
Operator : RXY1
InstName : VOA9
Sample : |248373016|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 08 13:15:32 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1036388	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	720260	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	322192	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1036388	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	720260	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	322175	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	371252	53.31	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	106.62%			
43) Toluene-d8	12.412	12.412	0.890	98	939744	50.78	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	101.56%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	407110	51.95	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	103.90%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491	50	227	N.D.		
4) Vinyl chloride	5.546	5.546	0.515	62	499	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659	59	1363	N.D.		
9) Acetone	7.502	7.490	0.696	43	6351	N.D.		
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	7.882	7.858	0.731	41	203	Below Cal	#	35
13) Methyl acetate	0.000	7.882	0.000		0	N.D.		
14) Carbon disulfide	7.882	7.906	0.731	76	1292	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	4663	Below Cal		84
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	8.842	8.854	0.821	43	391	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.494	9.483	0.881	43	1589	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	0.000	10.230	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	10.538	10.538	0.978	78	438	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.846	10.846	1.007	56	622	Below Cal	#	21
34) Trichloroethylene	0.000	11.167	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C107.D
Acq On : 8 Mar 2010 12:54 pm
Operator : RXY1
InstName : VOA9
Sample : |248373016|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 08 13:15:32 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.495	12.483	0.896	91	2476	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935	43	895	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	13.977	13.977	1.003	112	248	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.131	14.024	1.014	91	1155	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	435	N.D.	
56) o-Xylene	0.000	14.570	0.000		0	N.D.	
57) Styrene	14.570	14.570	1.045	104	387	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.353	15.353	0.938	91	602	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	179	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	15.602	15.614	0.953	91	662	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	407	N.D.	
71) sec-Butylbenzene	16.112	16.112	0.984	105	404	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	563	N.D.	
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	246	N.D.	
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	533	N.D.	
75) n-Butylbenzene	16.693	16.693	1.020	91	723	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	1634	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.550	0.000		0	N.D.	
88) Allyl chloride	7.882	7.929	0.731	41	203	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.494	9.483	0.881	43	1589	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C107.D
Acq On : 8 Mar 2010 12:54 pm
Operator : RXY1
InstName : VOA9
Sample : |248373016|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 08 13:15:32 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

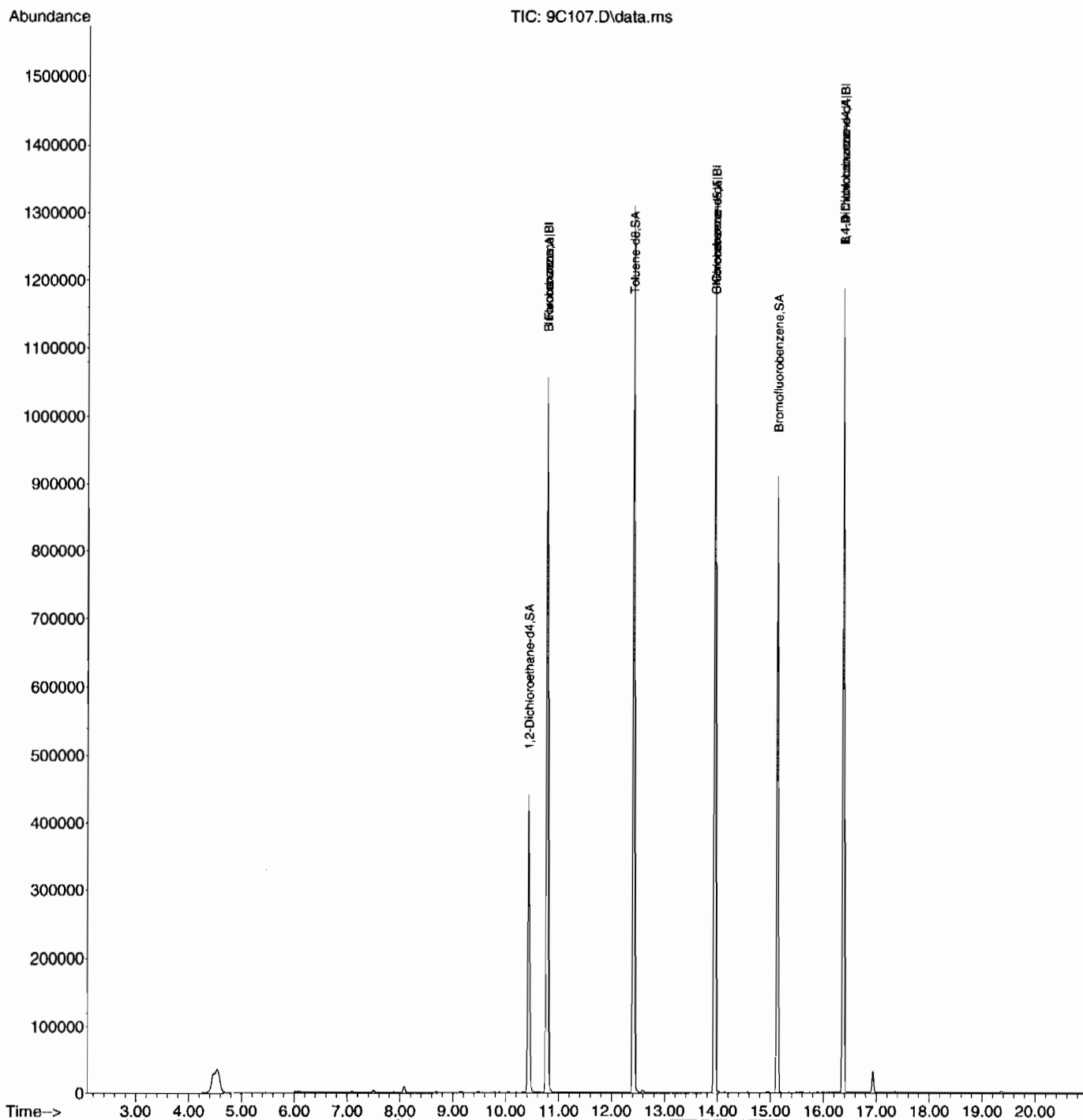
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	9.886	9.744	0.917	41	186	N.D.	
97) Tetrahydrofuran	9.874	9.874	0.916	42	734	N.D.	
98) Isobutyl alcohol	0.000	10.159	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	11.914	11.854	1.106	43	216	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0	N.D.	
108) Cyclohexanone	0.000	15.092	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.515	16.527	1.009	91	489	N.D.	
112) bis(2-Chloroisopropyl)...	16.942	16.918	1.035	45	3047	N.D.	

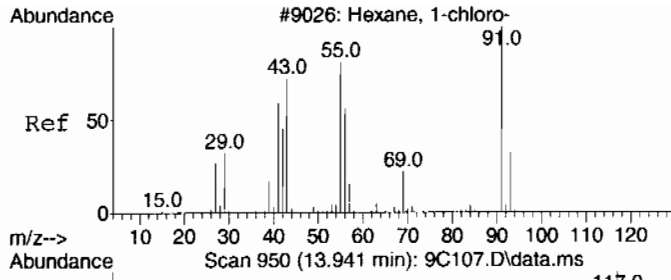
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C107.D
Acq On : 8 Mar 2010 12:54 pm
Operator : RXY1
InstName : VOA9
Sample : |248373016|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 7 Sample Multiplier: 1

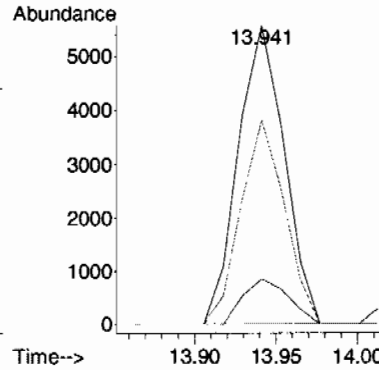
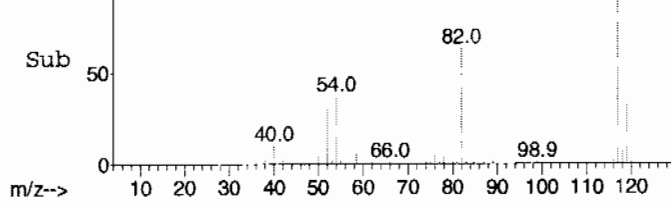
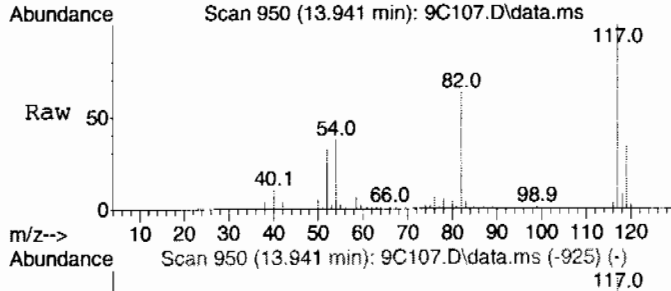
Quant Time: Mar 08 13:15:32 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





#106 BEFORE analyst DELETION
 1-Chlorohexane
 Concen: 1.74 ug/L
 RT: 13.941 min Scan# 950
 Delta R.T. 0.118 min
 Lab File: 9C107.D
 Acq: 8 Mar 2010 12:54 pm

Tgt Ion	Ratio	Lower	Upper
55	100		
91	15.0	74.8	134.8#
56	65.3	31.8	91.8



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C107.D
Acq On : 8 Mar 2010 12:54 pm
Operator : RXY1
Sample : |248373016|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 7 Sample Multiplier: 1

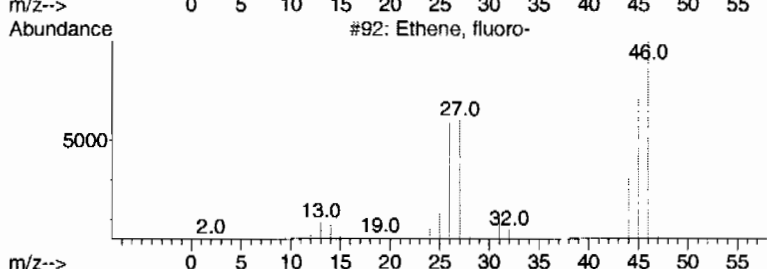
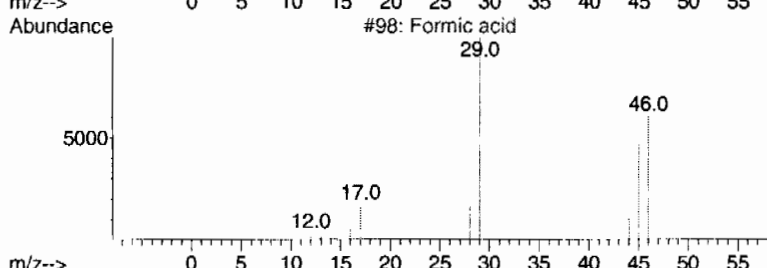
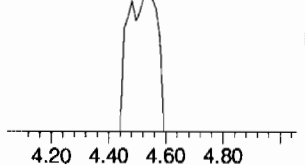
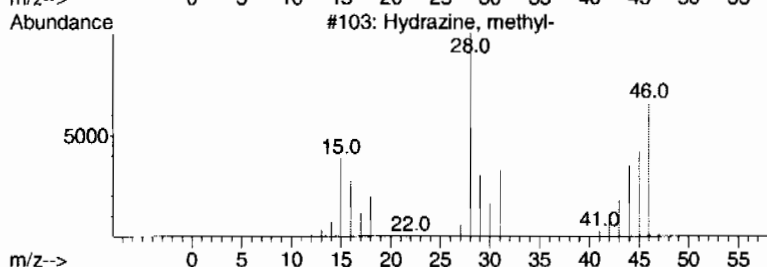
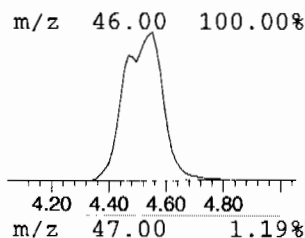
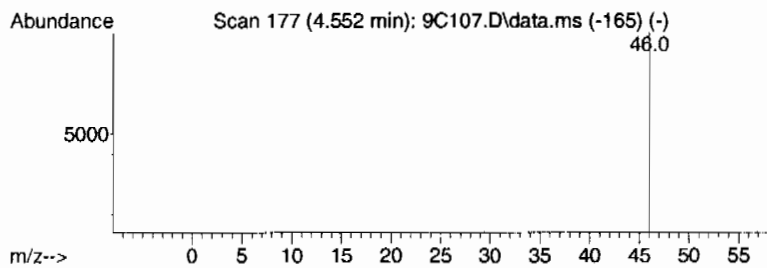
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.552	7.00 ug/L	336358	Fluorobenzene	10.775

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2			Formic acid	46	CH2O2	000064-18-6	4
3			Ethene, fluoro-	46	C2H3F	000075-02-5	3
4			Formic acid	46	CH2O2	000064-18-6	3
5			Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C107.D
Acq On : 8 Mar 2010 12:54 pm
Operator : RXY1
Sample : |248373016|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	4.552	7.0	ug/L	336358	1	10.775	2401740	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373001

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL.010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7494
 Batch ID: 962617
 Run Date: 03/08/2010 13:56
 Prep Date: 03/08/2010 12:05
 Data File: 030810V99C109.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.342	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.342	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.342	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.342	1.14
67-64-1	Acetone	J	2.29	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
74-88-4	Iodomethane	U	5.70	ug/kg	1.83	5.70
75-09-2	Methylene chloride	U	5.70	ug/kg	2.28	5.70
75-15-0	Carbon disulfide	U	5.70	ug/kg	1.43	5.70
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.342	1.14
78-93-3	2-Butanone	U	5.70	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.342	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.342	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.342	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.342	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone	U	5.70	ug/kg	1.43	5.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.342	1.14
591-78-6	2-Hexanone	U	5.70	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.342	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.342	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373001

 Client ID: RE36-10-7494
 Batch ID: 962617
 Run Date: 03/08/2010 13:56
 Prep Date: 03/08/2010 12:05
 Data File: 030810V99C109.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes	J	0.548	ug/kg	0.342	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.342	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.342	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.342	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene	J	0.388	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	5.70	ug/kg	1.83	5.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.342	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	11.1	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C109.D
Acq On : 8 Mar 2010 1:56 pm
Operator : RXY1
InstName : VOA9
Sample : |248373001|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 08 14:27:11 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1017932	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	634037	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	199390	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1017932	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	634037	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	199403	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	357476	52.26	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	104.52%			
43) Toluene-d8	12.412	12.412	0.890	98	882356	54.16	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	108.32%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	300799	62.02	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	124.04%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659	59	788	N.D.		
9) Acetone	7.490	7.490	0.695	43	9148	2.01	ug/L	86
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	8.072	7.858	0.749	41	208	Below Cal	#	1
13) Methyl acetate	7.882	7.882	0.731	43	603	Below Cal	#	67
14) Carbon disulfide	7.894	7.906	0.733	76	1353	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	5289	Below Cal		82
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.495	9.483	0.881	43	1365	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	0.000	10.230	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	10.538	10.538	0.978	78	402	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	7391	Below Cal	#	21
34) Trichloroethylene	11.167	11.167	1.036	95	645	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C109.D
Acq On : 8 Mar 2010 1:56 pm
Operator : RXY1
InstName : VOA9
Sample : |248373001|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 08 14:27:11 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	5340	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935	43	785	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.025	14.024	1.006	91	4932	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	3645	0.48 ug/L #	61
56) o-Xylene	14.570	14.570	1.045	106	1669	N.D.	
57) Styrene	14.570	14.570	1.045	104	417	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	14.914	14.926	0.911	105	391	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.353	15.353	0.938	91	2073	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	1627	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	15.614	15.614	0.954	91	289	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972	105	4093	0.34 ug/L	93
71) sec-Butylbenzene	16.112	16.112	0.984	105	431	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	771	N.D.	
73) 1,3-Dichlorobenzene	16.396	16.313	1.001	146	454	N.D.	
74) 1,4-Dichlorobenzene	16.396	16.408	1.001	146	454	N.D.	
75) n-Butylbenzene	16.681	16.693	1.019	91	511	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.910	18.922	1.155	180	254	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	1161	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.562	7.550	0.702	45	429	N.D.	
88) Allyl chloride	8.072	7.929	0.749	41	208	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.495	9.483	0.881	43	1365	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C109.D
Acq On : 8 Mar 2010 1:56 pm
Operator : RXY1
InstName : VOA9
Sample : |248373001|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 08 14:27:11 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

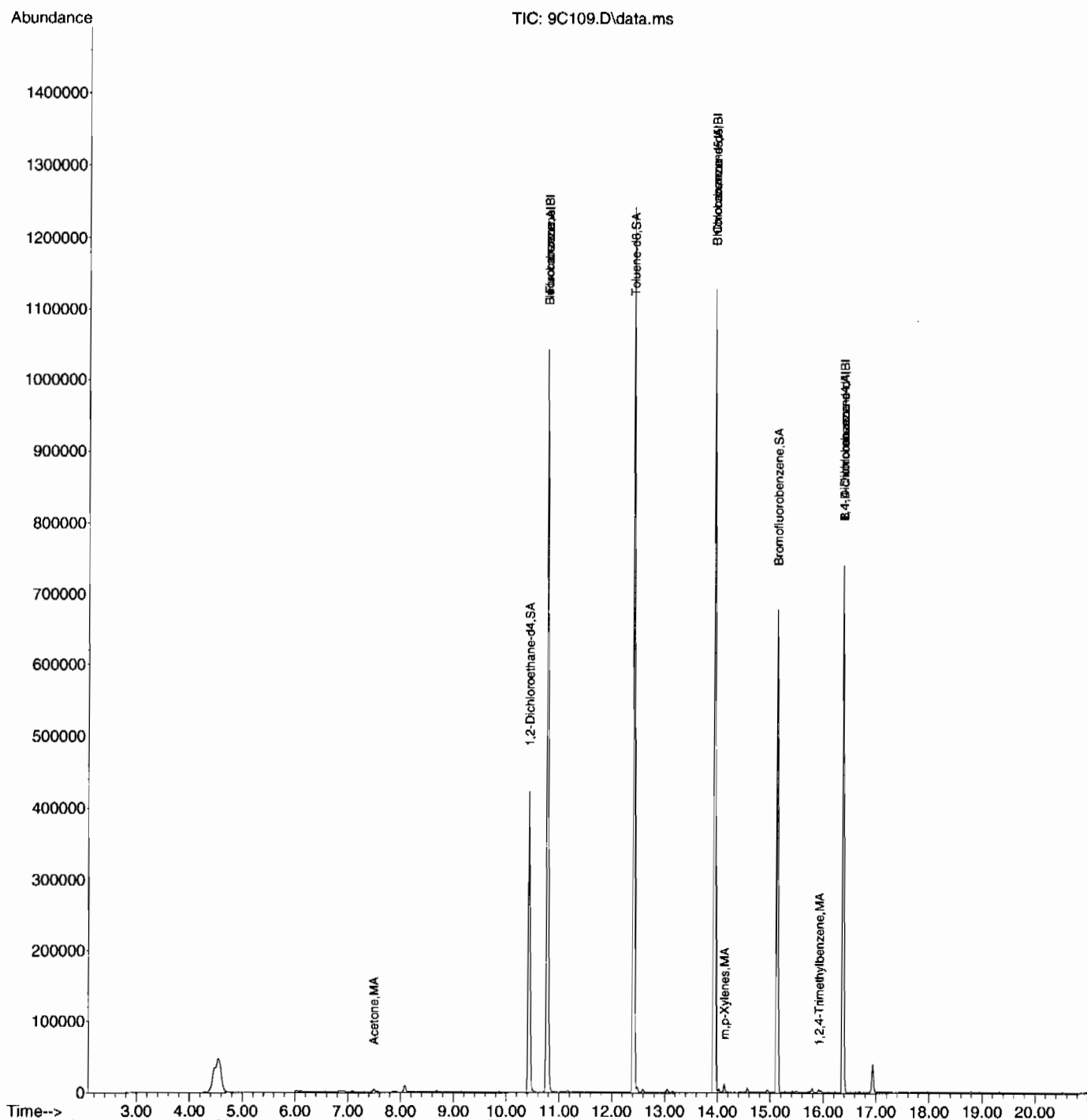
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	9.874	9.744	0.916	41	182	N.D.	
97) Tetrahydrofuran	9.874	9.874	0.916	42	639	N.D.	
98) Isobutyl alcohol	0.000	10.159	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0	N.D.	
108) Cyclohexanone	0.000	15.092	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.527	16.527	1.009	91	245	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.918	0.000		0m	N.D.	d

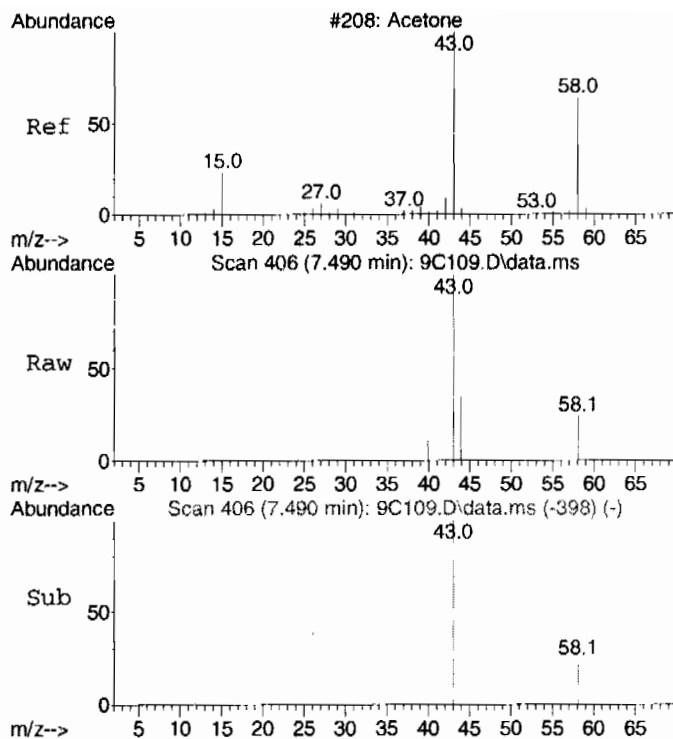
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C109.D
Acq On : 8 Mar 2010 1:56 pm
Operator : RXY1
InstName : VOA9
Sample : |248373001|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 9 Sample Multiplier: 1

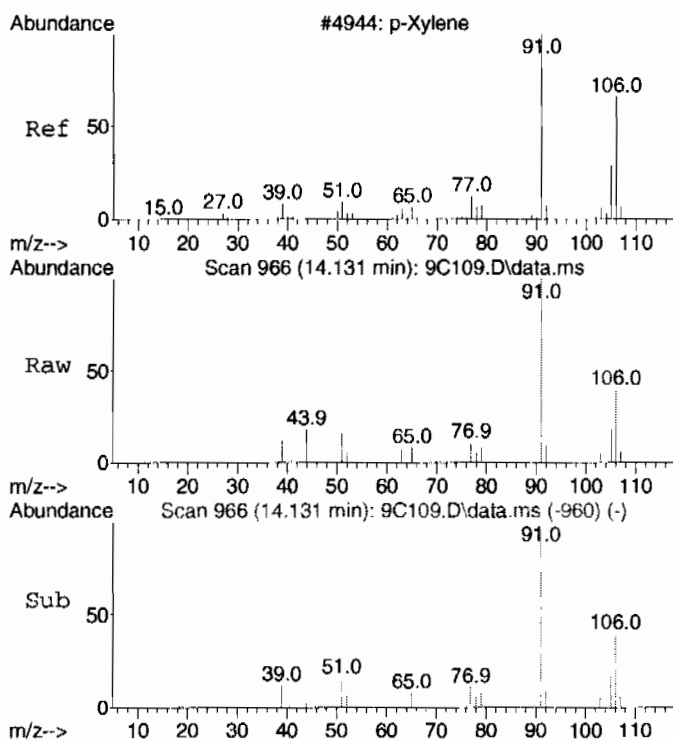
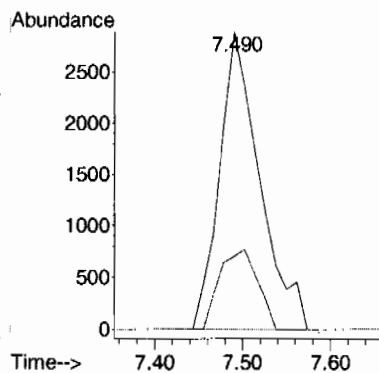
Quant Time: Mar 08 14:27:11 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





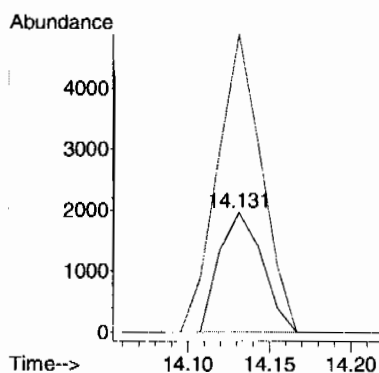
#9
Acetone
Concen: 2.01 ug/L
RT: 7.490 min Scan# 406
Delta R.T. 0.000 min
Lab File: 9C109.D
Acq: 8 Mar 2010 1:56 pm

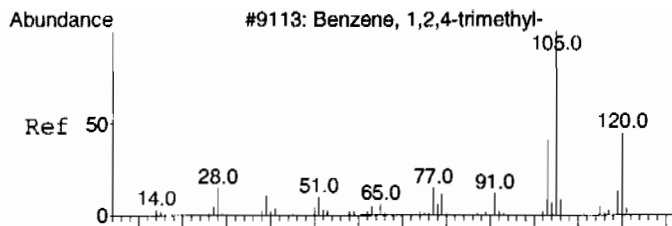
Tgt Ion: 43 Resp: 9148
Ion Ratio Lower Upper
43 100
58 25.4 3.2 63.2



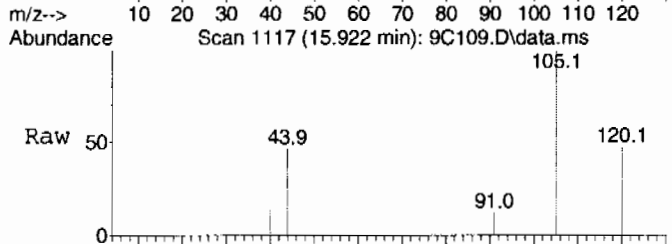
#55
m,p-Xylenes
Concen: 0.48 ug/L
RT: 14.131 min Scan# 966
Delta R.T. 0.000 min
Lab File: 9C109.D
Acq: 8 Mar 2010 1:56 pm

Tgt Ion: 106 Resp: 3645
Ion Ratio Lower Upper
106 100
91 252.9 164.9 224.9#

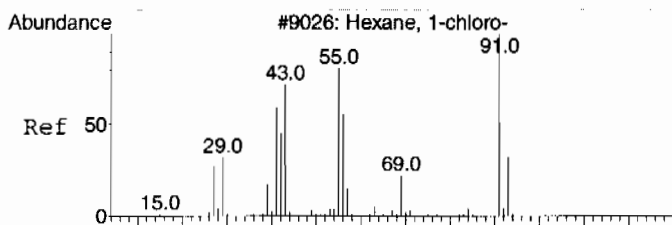
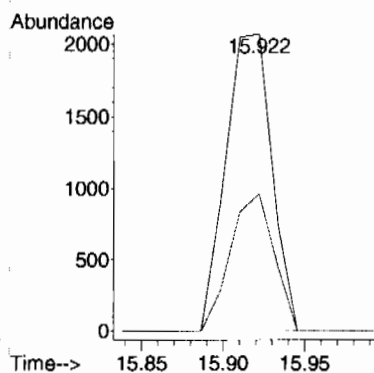
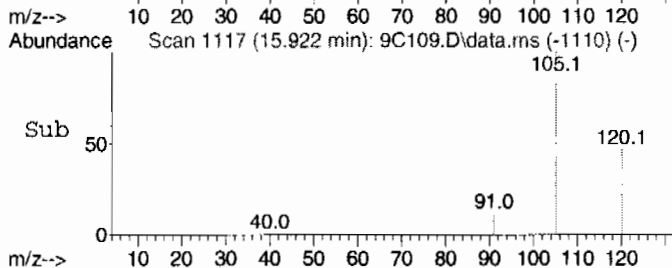




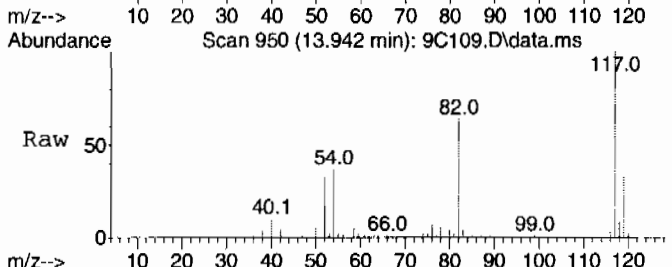
#70
1,2,4-Trimethylbenzene
Concen: 0.34 ug/L
RT: 15.922 min Scan# 1117
Delta R.T. 0.012 min
Lab File: 9C109.D
Acq: 8 Mar 2010 1:56 pm



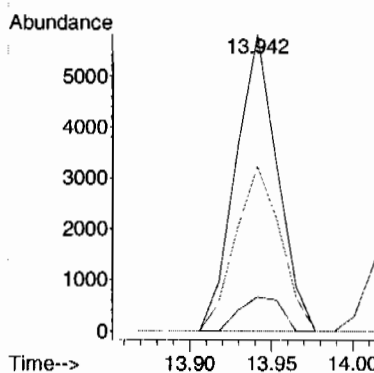
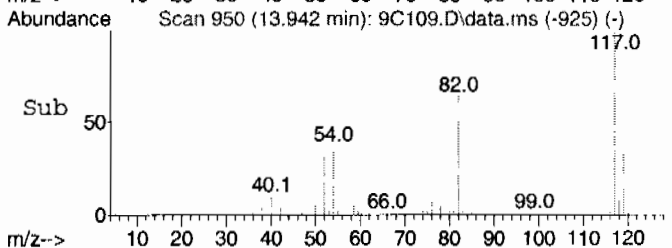
Tgt Ion: 105 Resp: 4093
Ion Ratio Lower Upper
105 100
120 44.0 18.4 78.4

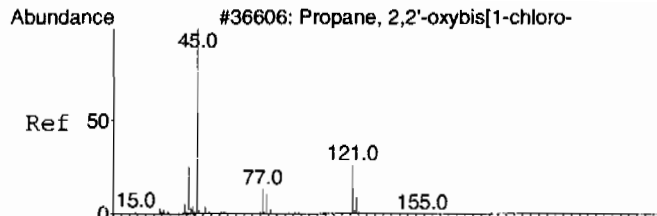


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.63 ug/L
RT: 13.942 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C109.D
Acq: 8 Mar 2010 1:56 pm

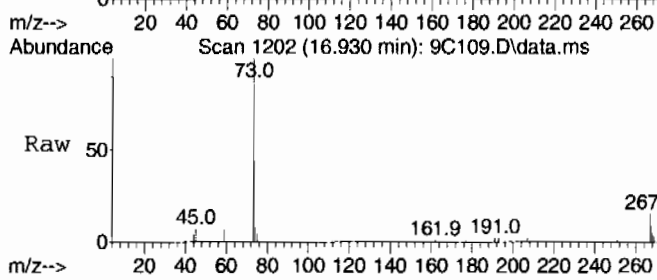


Tgt Ion: 55 Resp: 10328
Ion Ratio Lower Upper
55 100
91 11.4 74.8 134.8#
56 59.9 31.8 91.8

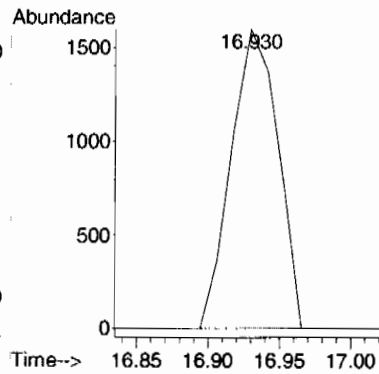
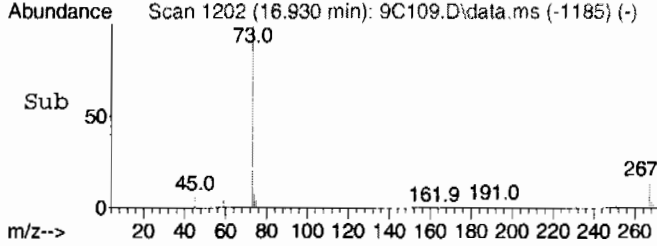




#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 1.53 ug/L
 RT: 16.930 min Scan# 1202
 Delta R.T. 0.012 min
 Lab File: 9C109.D
 Acq: 8 Mar 2010 1:56 pm



Tgt Ion: 45 Resp: 3654
 Ion Ratio Lower Upper
 45 100
 121 0.0 0.0 46.4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C109.D
Acq On : 8 Mar 2010 1:56 pm
Operator : RXY1
Sample : |248373001|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 9 Sample Multiplier: 1

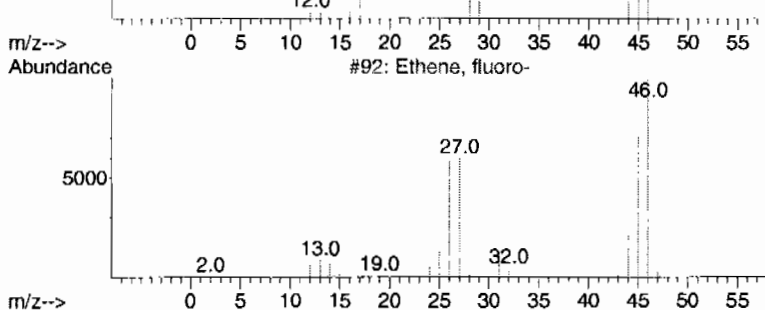
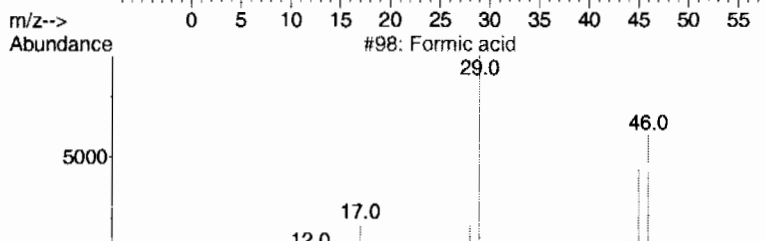
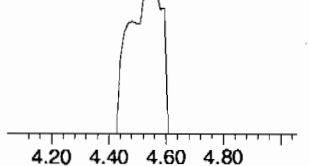
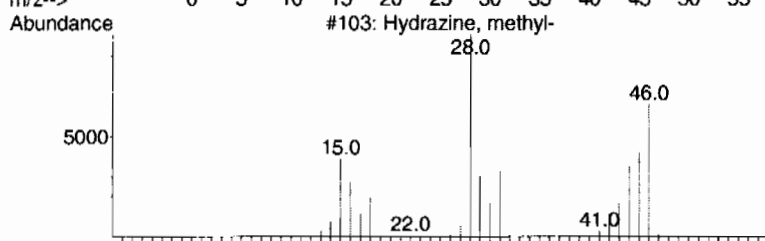
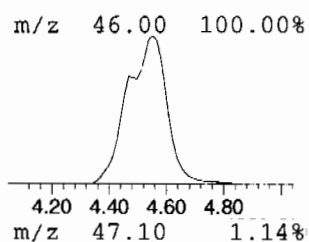
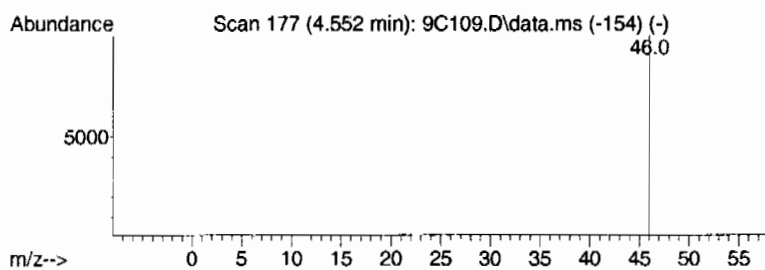
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.552	9.75 ug/L	461918	Fluorobenzene	10.775

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2			Formic acid	46	CH2O2	000064-18-6	4
3			Ethene, fluoro-	46	C2H3F	000075-02-5	3
4			Formic acid	46	CH2O2	000064-18-6	3
5			Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C109.D
Acq On : 8 Mar 2010 1:56 pm
Operator : RXY1
Sample : |248373001|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown hydroca...	4.552	9.8	ug/L	461918	1	10.775	2367820	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373002

 Client ID: RE36-10-7493
 Batch ID: 962617
 Run Date: 03/08/2010 14:27
 Prep Date: 03/08/2010 12:08
 Data File: 030810V99C110.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 25.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.34	ug/kg	0.456	1.34
74-87-3	Chloromethane	U	1.34	ug/kg	0.403	1.34
75-01-4	Vinyl chloride	U	1.34	ug/kg	0.403	1.34
74-83-9	Bromomethane	U	1.34	ug/kg	0.403	1.34
75-00-3	Chloroethane	U	1.34	ug/kg	0.403	1.34
75-69-4	Trichlorofluoromethane	U	1.34	ug/kg	0.403	1.34
67-64-1	Acetone	U	6.71	ug/kg	2.23	6.71
75-35-4	1,1-Dichloroethylene	U	1.34	ug/kg	0.403	1.34
74-88-4	Iodomethane	U	6.71	ug/kg	2.15	6.71
75-09-2	Methylene chloride	U	6.71	ug/kg	2.68	6.71
75-15-0	Carbon disulfide	U	6.71	ug/kg	1.68	6.71
156-60-5	trans-1,2-Dichloroethylene	U	1.34	ug/kg	0.403	1.34
75-34-3	1,1-Dichloroethane	U	1.34	ug/kg	0.403	1.34
78-93-3	2-Butanone	U	6.71	ug/kg	2.01	6.71
156-59-2	cis-1,2-Dichloroethylene	U	1.34	ug/kg	0.403	1.34
594-20-7	2,2-Dichloropropane	U	1.34	ug/kg	0.403	1.34
67-66-3	Chloroform	U	1.34	ug/kg	0.403	1.34
74-97-5	Bromochloromethane	U	1.34	ug/kg	0.443	1.34
71-55-6	1,1,1-Trichloroethane	U	1.34	ug/kg	0.403	1.34
563-58-6	1,1-Dichloropropene	U	1.34	ug/kg	0.403	1.34
56-23-5	Carbon tetrachloride	U	1.34	ug/kg	0.403	1.34
107-06-2	1,2-Dichloroethane	U	1.34	ug/kg	0.403	1.34
71-43-2	Benzene	U	1.34	ug/kg	0.403	1.34
79-01-6	Trichloroethylene	U	1.34	ug/kg	0.443	1.34
78-87-5	1,2-Dichloropropane	U	1.34	ug/kg	0.403	1.34
75-27-4	Bromodichloromethane	U	1.34	ug/kg	0.403	1.34
74-95-3	Dibromomethane	U	1.34	ug/kg	0.403	1.34
108-10-1	4-Methyl-2-pentanone	U	6.71	ug/kg	1.68	6.71
10061-01-5	cis-1,3-Dichloropropylene	U	1.34	ug/kg	0.403	1.34
108-88-3	Toluene	U	1.34	ug/kg	0.403	1.34
10061-02-6	trans-1,3-Dichloropropylene	U	1.34	ug/kg	0.403	1.34
79-00-5	1,1,2-Trichloroethane	U	1.34	ug/kg	0.403	1.34
591-78-6	2-Hexanone	U	6.71	ug/kg	2.01	6.71
142-28-9	1,3-Dichloropropane	U	1.34	ug/kg	0.403	1.34
127-18-4	Tetrachloroethylene	U	1.34	ug/kg	0.403	1.34
124-48-1	Dibromochloromethane	U	1.34	ug/kg	0.403	1.34
106-93-4	1,2-Dibromoethane	U	1.34	ug/kg	0.403	1.34
108-90-7	Chlorobenzene	U	1.34	ug/kg	0.403	1.34

Volatile
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Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373002

 Client ID: RE36-10-7493
 Batch ID: 962617
 Run Date: 03/08/2010 14:27
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 Data File: 030810V99C110.D

Date Collected: 02/24/2010 12:00
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 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 25.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.34	ug/kg	0.403	1.34
179601-23-1	m,p-Xylenes	U	2.68	ug/kg	0.403	2.68
95-47-6	o-Xylene	U	1.34	ug/kg	0.403	1.34
100-42-5	Styrene	U	1.34	ug/kg	0.403	1.34
75-25-2	Bromoform	U	1.34	ug/kg	0.403	1.34
79-34-5	1,1,2,2-Tetrachloroethane	U	1.34	ug/kg	0.403	1.34
96-18-4	1,2,3-Trichloropropane	U	1.34	ug/kg	0.403	1.34
108-86-1	Bromobenzene	U	1.34	ug/kg	0.403	1.34
103-65-1	n-Propylbenzene	U	1.34	ug/kg	0.403	1.34
95-49-8	2-Chlorotoluene	U	1.34	ug/kg	0.403	1.34
98-82-8	Isopropylbenzene	U	1.34	ug/kg	0.403	1.34
108-67-8	1,3,5-Trimethylbenzene	U	1.34	ug/kg	0.403	1.34
106-43-4	4-Chlorotoluene	U	1.34	ug/kg	0.403	1.34
98-06-6	tert-Butylbenzene	U	1.34	ug/kg	0.403	1.34
95-63-6	1,2,4-Trimethylbenzene	U	1.34	ug/kg	0.403	1.34
135-98-8	sec-Butylbenzene	U	1.34	ug/kg	0.403	1.34
99-87-6	4-Isopropyltoluene	U	1.34	ug/kg	0.403	1.34
541-73-1	1,3-Dichlorobenzene	U	1.34	ug/kg	0.403	1.34
106-46-7	1,4-Dichlorobenzene	U	1.34	ug/kg	0.403	1.34
104-51-8	n-Butylbenzene	U	1.34	ug/kg	0.403	1.34
96-12-8	1,2-Dibromo-3-chloropropane	U	1.34	ug/kg	0.403	1.34
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.71	ug/kg	2.15	6.71
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.34	ug/kg	0.403	1.34
95-50-1	1,2-Dichlorobenzene	U	1.34	ug/kg	0.403	1.34

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	15.3	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C110.D
Acq On : 8 Mar 2010 2:27 pm
Operator : RXY1
InstName : VOA9
Sample : |248373002|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 08 15:46:26 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	938723	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	524785	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	141294	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	938723	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	524785	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	141285	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	329108	52.17	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	104.34%		
43) Toluene-d8	12.412	12.412	0.890	98	780731	57.90	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	115.80%		
61) Bromofluorobenzene	15.127	15.127	0.924	95	221635	64.49	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	128.98%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.308	5.308	0.493	50	1197	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.087	7.099	0.658	59	181	N.D.		
9) Acetone	7.502	7.490	0.696	43	4135	N.D.		
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	0.000	7.858	0.000		0	N.D.		
13) Methyl acetate	7.870	7.882	0.730	43	615	Below Cal	#	67
14) Carbon disulfide	7.894	7.906	0.733	76	923	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	3845	Below Cal		83
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.494	9.483	0.881	43	1124	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.218	10.230	0.948	56	754	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	0.000	10.538	0.000		0	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	6925	Below Cal	#	21
34) Trichloroethylene	11.167	11.167	1.036	95	199	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C110.D
Acq On : 8 Mar 2010 2:27 pm
Operator : RXY1
InstName : VOA9
Sample : |248373002|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 08 15:46:26 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.495	12.483	0.896	91	1269	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.052	13.028	0.936	43	1368	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.131	14.024	1.014	91	823	N.D.	
55) m,p-Xylenes	14.143	14.131	1.014	106	387	N.D.	
56) o-Xylene	0.000	14.570	0.000		0	N.D.	
57) Styrene	0.000	14.570	0.000		0	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.353	15.353	0.938	91	206	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.495	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	15.613	15.614	0.954	91	203	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	485	N.D.	
71) sec-Butylbenzene	0.000	16.112	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	16.230	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	16.396	16.313	1.001	146	213	N.D.	
74) 1,4-Dichlorobenzene	16.396	16.408	1.001	146	213	N.D.	
75) n-Butylbenzene	16.693	16.693	1.020	91	190	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	855	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.550	0.000		0	N.D.	
88) Allyl chloride	0.000	7.929	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.494	9.483	0.881	43	1124	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C110.D
Acq On : 8 Mar 2010 2:27 pm
Operator : RXY1
InstName : VOA9
Sample : |248373002|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 08 15:46:26 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

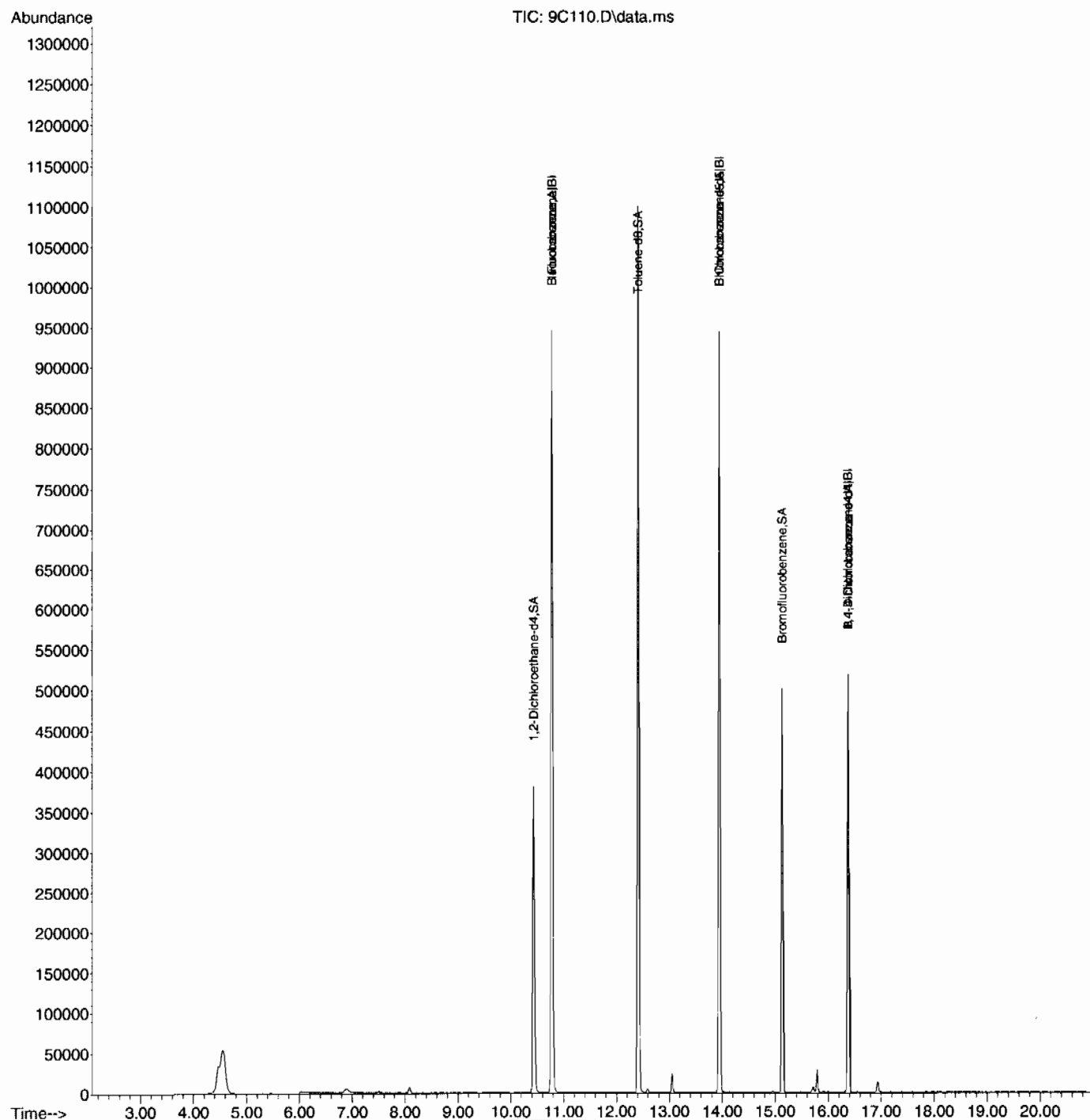
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	9.874	0.000		0	N.D.	
98) Isobutyl alcohol	10.218	10.159	0.948	41	263	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0	N.D.	
108) Cyclohexanone	0.000	15.092	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.527	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034	45	1207	N.D.	

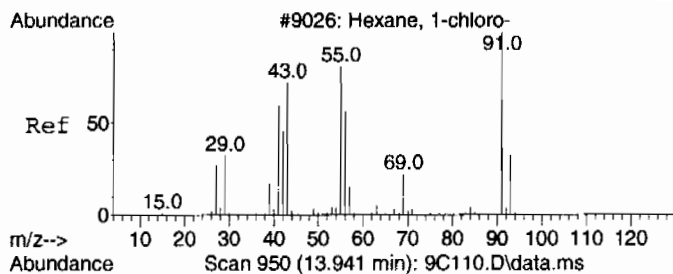
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C110.D
Acq On : 8 Mar 2010 2:27 pm
Operator : RXY1
InstName : VOA9
Sample : |248373002|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 10 Sample Multiplier: 1

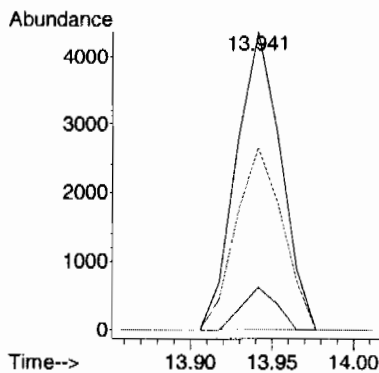
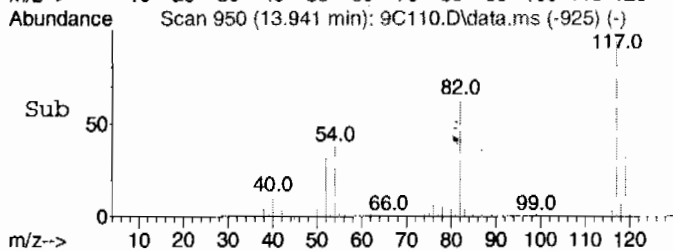
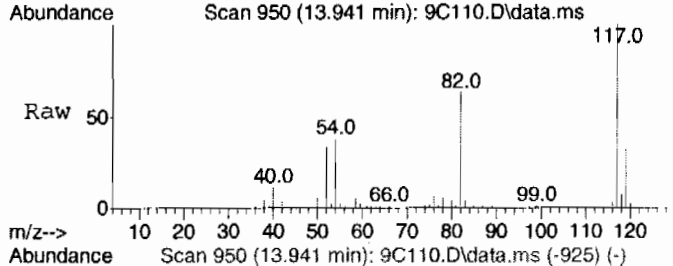
Quant Time: Mar 08 15:46:26 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.98 ug/L
RT: 13.941 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C110.D
Acq: 8 Mar 2010 2:27 pm

Tgt Ion: 55 Resp: 8302
Ion Ratio Lower Upper
55 100
91 11.2 74.8 134.8#
56 63.8 31.8 91.8



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C110.D
Acq On : 8 Mar 2010 2:27 pm
Operator : RXY1
Sample : |248373002|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 10 Sample Multiplier: 1

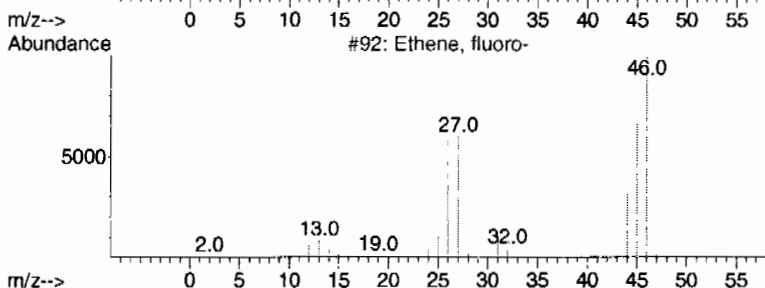
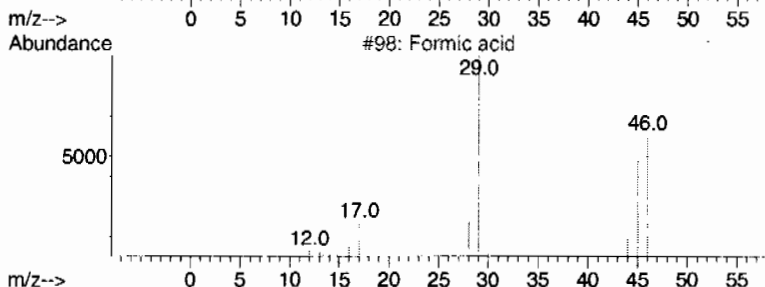
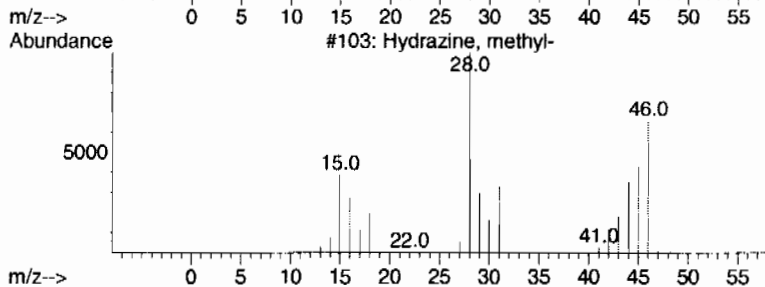
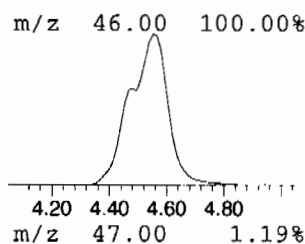
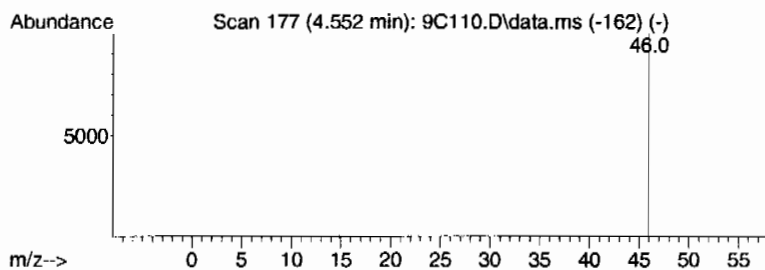
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.552	11.43 ug/L	500273	Fluorobenzene	10.775

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2	Formic acid	46	CH2O2	000064-18-6	4
3	Ethene, fluoro-	46	C2H3F	000075-02-5	3
4	Formic acid	46	CH2O2	000064-18-6	3
5	Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C110.D
Acq On : 8 Mar 2010 2:27 pm
Operator : RXY1
Sample : |248373002|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	4.552	11.4	ug/L	500273	1	10.775	2188560	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373003	Date Received: 03/02/2010 08:50	%Moisture: 21.1
Client ID: RE36-10-7492	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 14:58	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:09	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V99C111.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.431	1.27
74-87-3	Chloromethane	U	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	J	5.96	ug/kg	2.10	6.34
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	U	6.34	ug/kg	2.03	6.34
75-09-2	Methylene chloride	U	6.34	ug/kg	2.54	6.34
75-15-0	Carbon disulfide	U	6.34	ug/kg	1.59	6.34
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	U	6.34	ug/kg	1.90	6.34
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	U	6.34	ug/kg	1.59	6.34
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	J	0.418	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	U	6.34	ug/kg	1.90	6.34
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.380	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373003

 Client ID: RE36-10-7492
 Batch ID: 962617
 Run Date: 03/08/2010 14:58
 Prep Date: 03/08/2010 12:09
 Data File: 030810V99C111.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.1
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	J	0.774	ug/kg	0.380	2.54
95-47-6	o-Xylene	J	0.393	ug/kg	0.380	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	J	0.862	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.34	ug/kg	2.03	6.34
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.380	1.27

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	15.1	ug/kg	0	J
	unknown siloxane	14.95	14.8	ug/kg	0	J
000124-18-5	Decane	15.38	8.83	ug/kg	91	NJ
000127-91-3	.beta.-Pinene	15.67	16.7	ug/kg	96	NJ
	unknown hydrocarbon	16.63	1380	ug/kg	0	J
	unknown siloxane	16.93	14.5	ug/kg	0	J
	unknown hydrocarbon	19.36	6.42	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
InstName : VOA9
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 16:00:38 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	928722	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	542134	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	159617	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	928722	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	542134	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	159607	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	329276	52.76	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 105.52%			
43) Toluene-d8	12.412	12.412	0.890	98	776083	55.72	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 111.44%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	236285	60.86	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 121.72%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.308	5.308	0.493	50	218	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.087	7.099	0.658	59	869	N.D.		
9) Acetone	7.490	7.490	0.695	43	19517	4.70	ug/L	84
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	8.071	7.858	0.749	41	475	Below Cal	#	1
13) Methyl acetate	7.882	7.882	0.731	43	3993	Below Cal	#	67
14) Carbon disulfide	7.893	7.906	0.733	76	1258	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	7807	Below Cal		89
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.494	9.483	0.881	43	899	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	0.000	10.230	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	10.526	10.538	0.977	78	379	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.858	10.846	1.008	56	913	Below Cal		68
34) Trichloroethylene	11.166	11.167	1.036	95	1390	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
InstName : VOA9
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 16:00:38 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	5200	0.33 ug/L	85
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935	43	492	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.024	14.024	1.006	91	4355	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	3978	0.61 ug/L	96
56) o-Xylene	14.570	14.570	1.045	106	2088	0.31 ug/L #	69
57) Styrene	14.570	14.570	1.045	104	255	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.341	15.353	0.937	91	1937	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	1936	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	15.578	15.614	0.951	91	416	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972	105	6642	0.68 ug/L	76
71) sec-Butylbenzene	0.000	16.112	0.000		0	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	1403	N.D.	
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	213	N.D.	
74) 1,4-Dichlorobenzene	16.396	16.408	1.001	146	194	N.D.	
75) n-Butylbenzene	16.692	16.693	1.020	91	791	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	1099	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.550	0.000		0m	N.D.	d
88) Allyl chloride	8.071	7.929	0.749	41	293	N.D.	
89) tert-Butyl Alcohol	8.059	8.060	0.748	59	524	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.494	9.483	0.881	43	899	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
InstName : VOA9
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 16:00:38 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

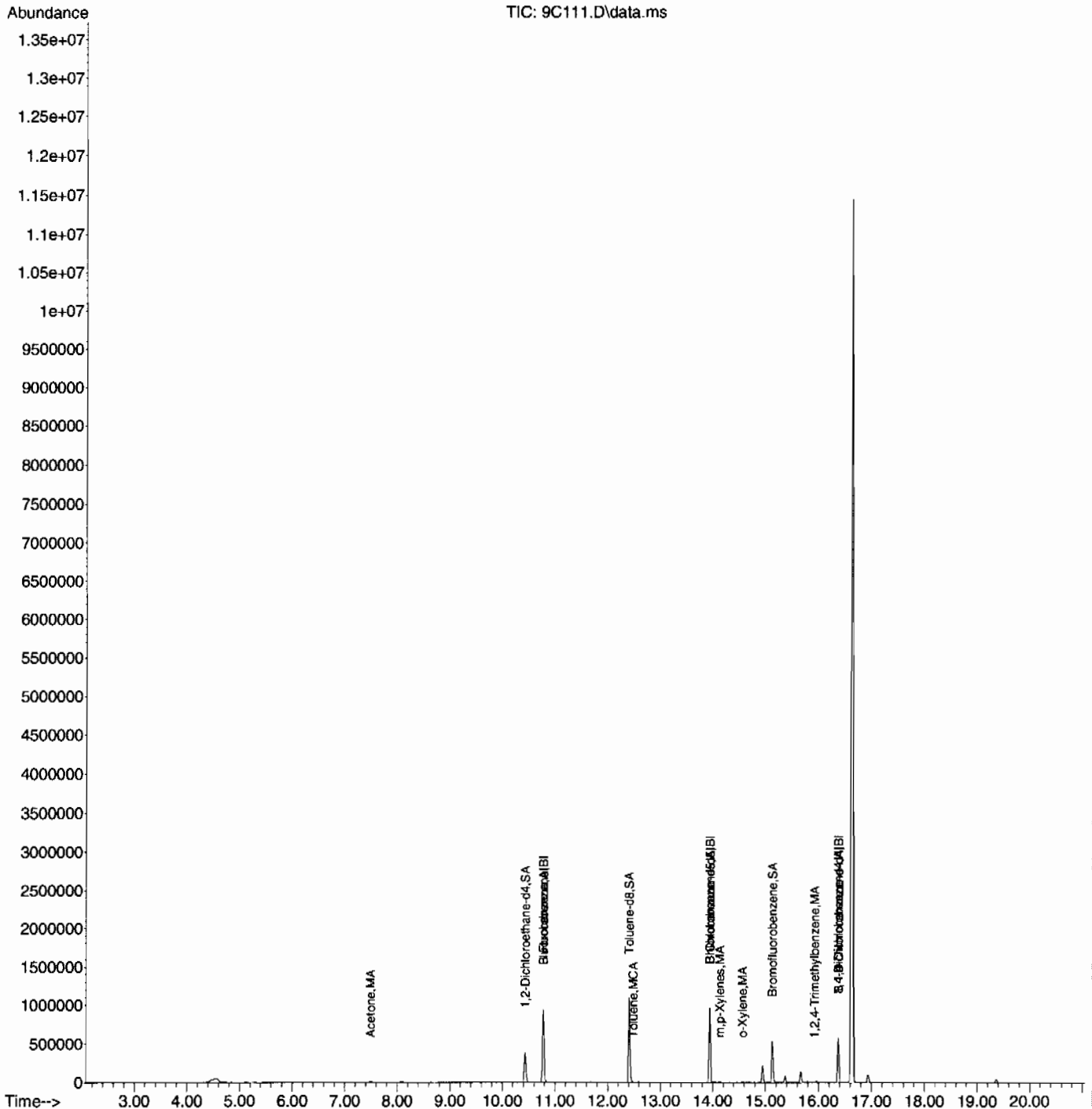
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	9.886	9.744	0.917	41	227	N.D.	
97) Tetrahydrofuran	9.886	9.874	0.917	42	746	N.D.	
98) Isobutyl alcohol	10.230	10.159	0.949	41	233	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0m	N.D.	d
108) Cyclohexanone	15.175	15.092	0.927	42	974	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.515	16.527	1.009	91	430	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.918	0.000		0m	N.D.	d

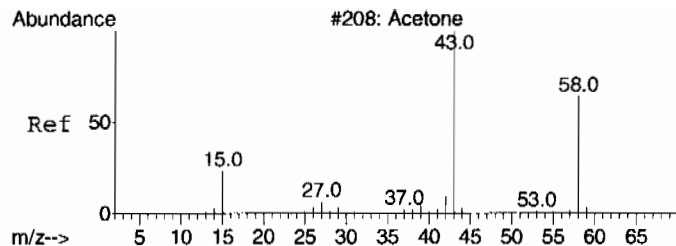
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
InstName : VOA9
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

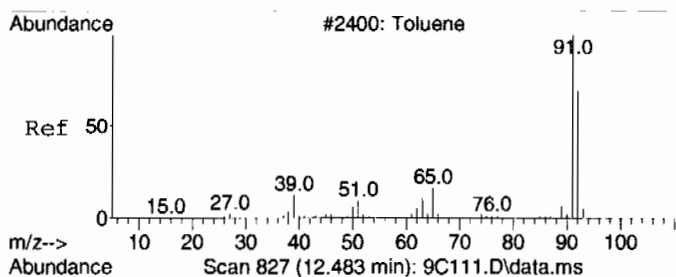
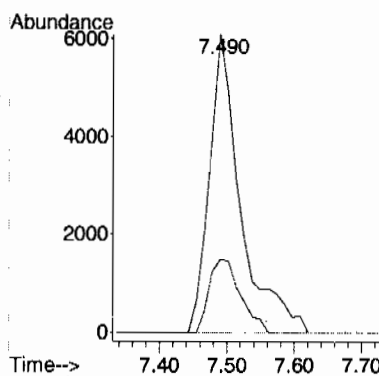
Quant Time: Mar 09 16:00:38 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





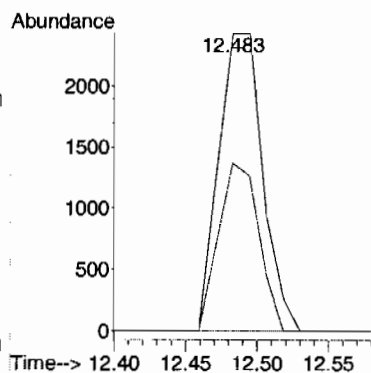
#9
Acetone
Concen: 4.70 ug/L
RT: 7.490 min Scan# 406
Delta R.T. 0.000 min
Lab File: 9C111.D
Acq: 8 Mar 2010 2:58 pm

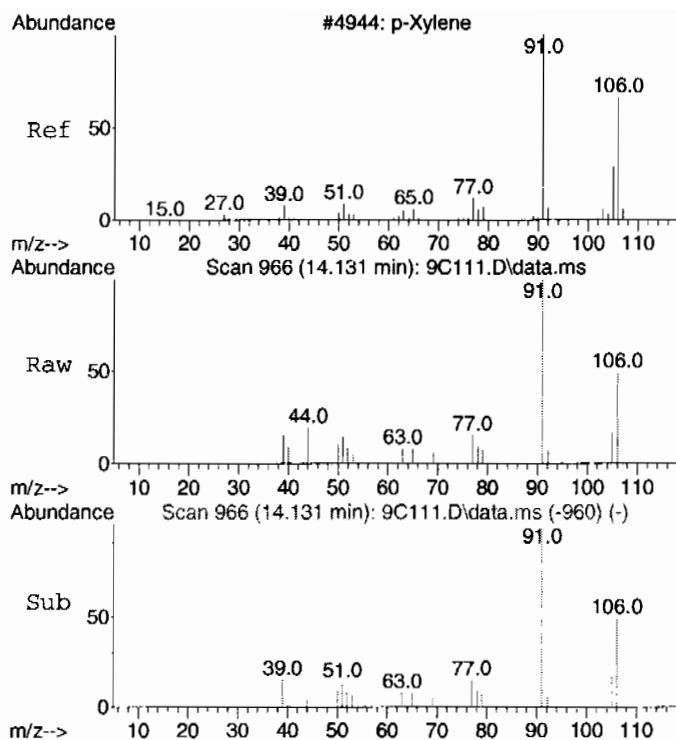
Tgt Ion: 43 Resp: 19517
Ion Ratio Lower Upper
43 100
58 24.4 3.2 63.2



#44
Toluene
Concen: 0.33 ug/L
RT: 12.483 min Scan# 827
Delta R.T. -0.000 min
Lab File: 9C111.D
Acq: 8 Mar 2010 2:58 pm

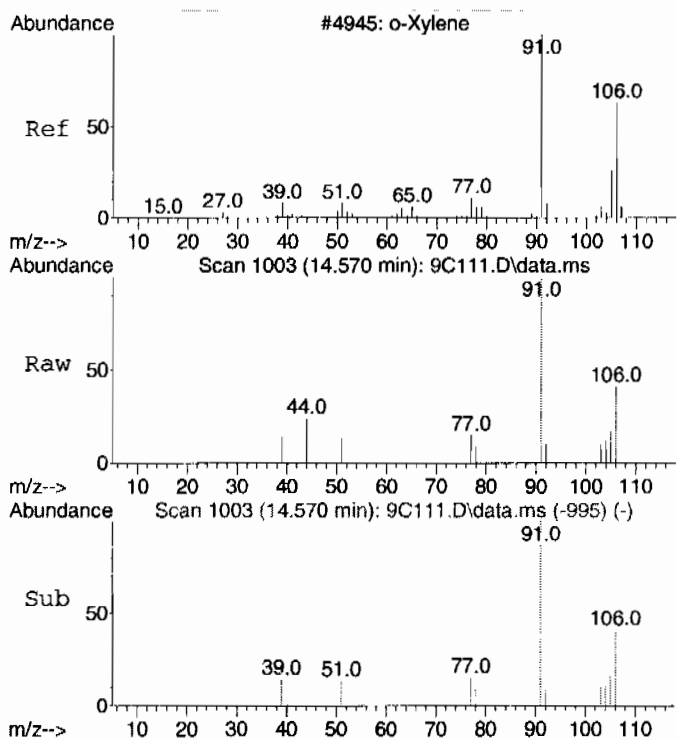
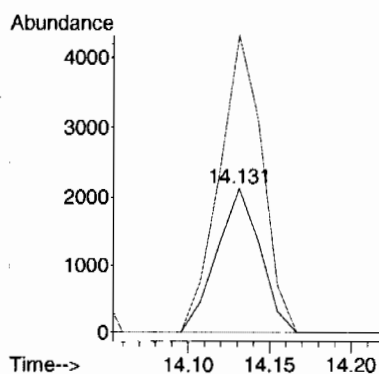
Tgt Ion: 91 Resp: 5200
Ion Ratio Lower Upper
91 100
92 51.6 33.0 93.0





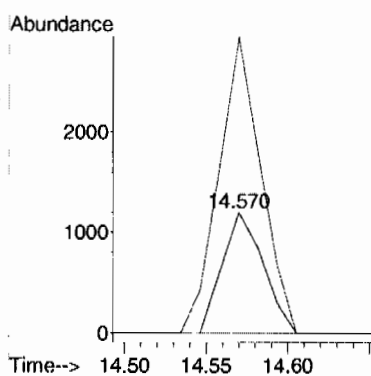
#55
m,p-Xylenes
Concen: 0.61 ug/L
RT: 14.131 min Scan# 966
Delta R.T. 0.000 min
Lab File: 9C111.D
Acq: 8 Mar 2010 2:58 pm

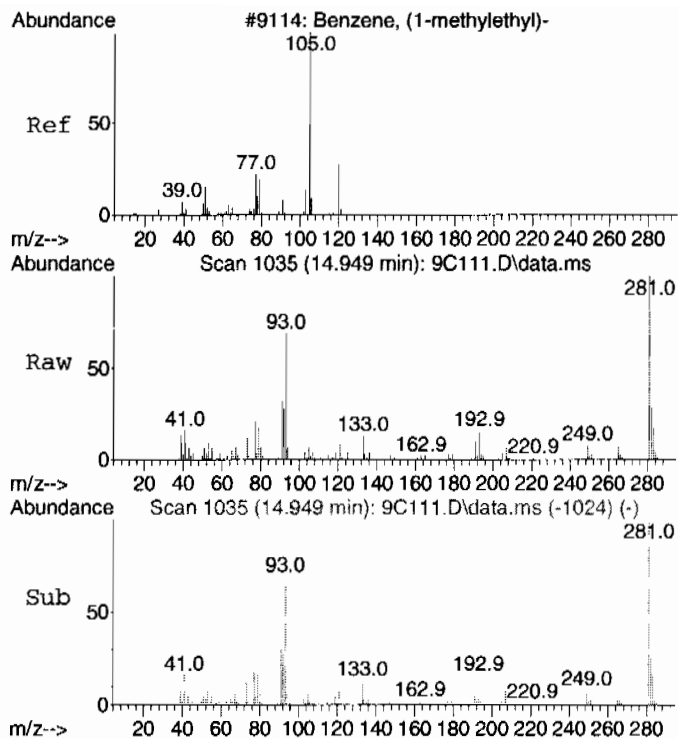
Tgt Ion	Ratio	Lower	Upper
106	100		
91	201.3	164.9	224.9



#56
o-Xylene
Concen: 0.31 ug/L
RT: 14.570 min Scan# 1003
Delta R.T. -0.000 min
Lab File: 9C111.D
Acq: 8 Mar 2010 2:58 pm

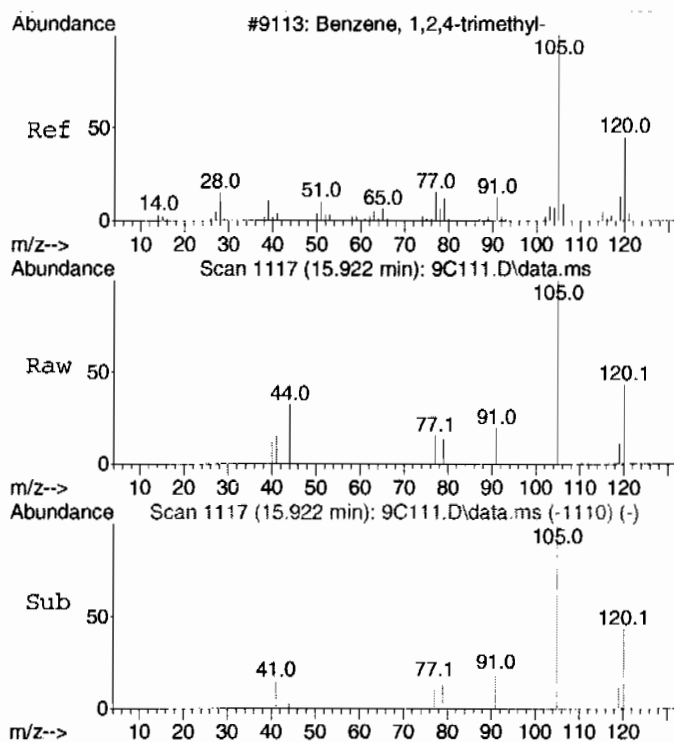
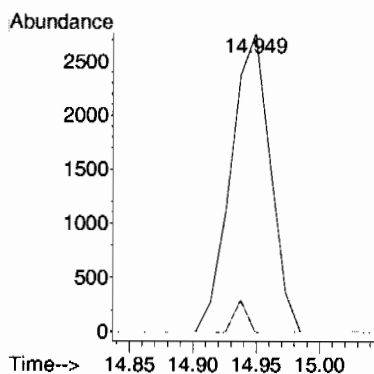
Tgt Ion	Ratio	Lower	Upper
106	100		
91	254.7	177.2	237.2#





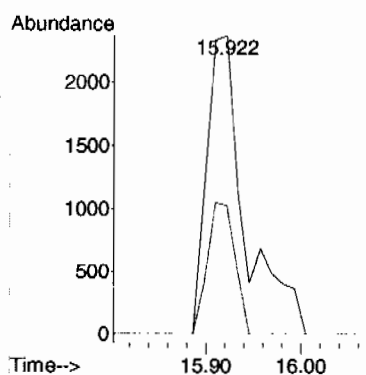
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.53 ug/L
RT: 14.949 min Scan# 1035
Delta R.T. 0.023 min
Lab File: 9C111.D
Acq: 8 Mar 2010 2:58 pm

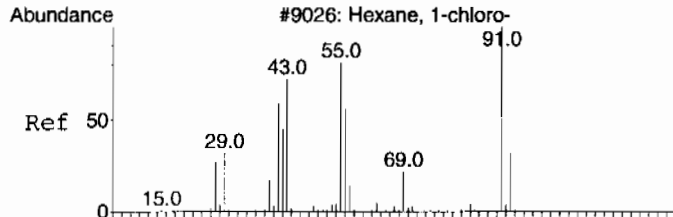
Tgt Ion:105 Resp: 5970
Ion Ratio Lower Upper
105 100
120 3.5 0.0 58.0



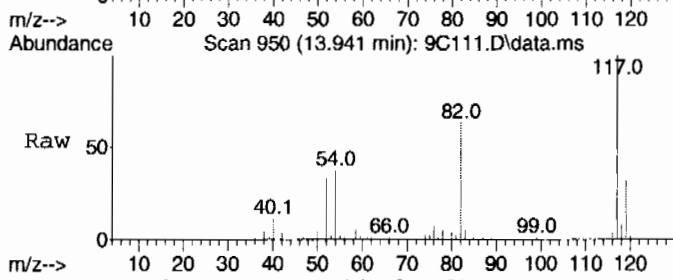
#70
1,2,4-Trimethylbenzene
Concen: 0.68 ug/L
RT: 15.922 min Scan# 1117
Delta R.T. 0.012 min
Lab File: 9C111.D
Acq: 8 Mar 2010 2:58 pm

Tgt Ion:105 Resp: 6642
Ion Ratio Lower Upper
105 100
120 31.9 18.4 78.4

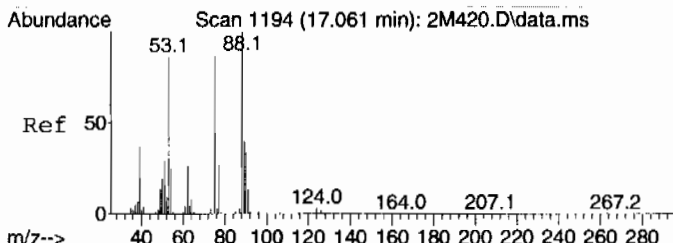
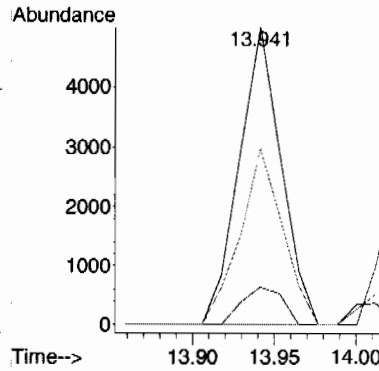
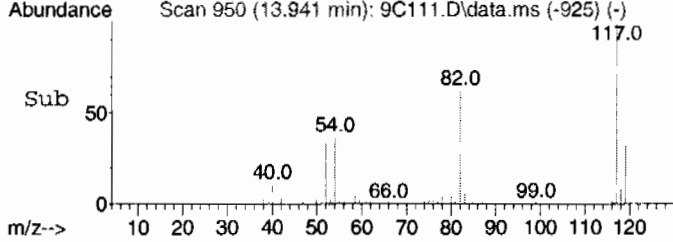




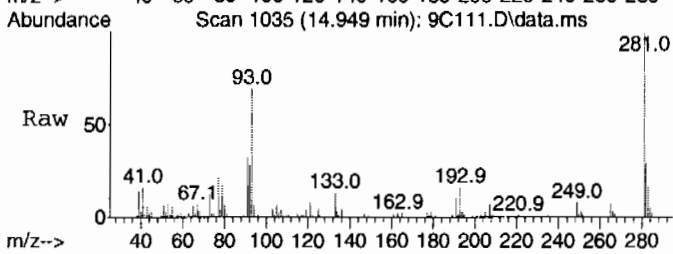
#106 BEFORE analyst DELETION
 1-Chlorohexane
 Concen: 2.85 ug/L
 RT: 13.941 min Scan# 950
 Delta R.T. 0.118 min
 Lab File: 9C111.D
 Acq: 8 Mar 2010 2:58 pm



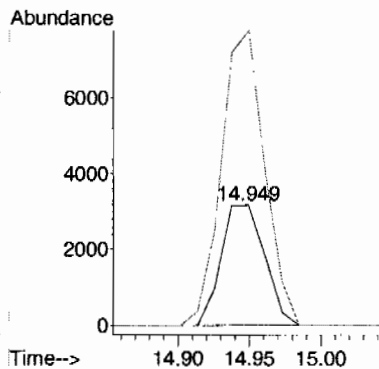
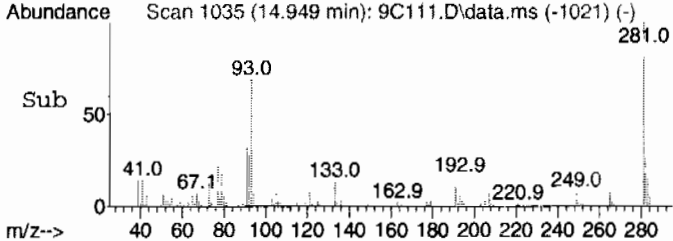
Tgt Ion:	55	Resp:	8980
Ion Ratio	100	Lower	Upper
91	12.2	74.8	134.8#
56	60.5	31.8	91.8

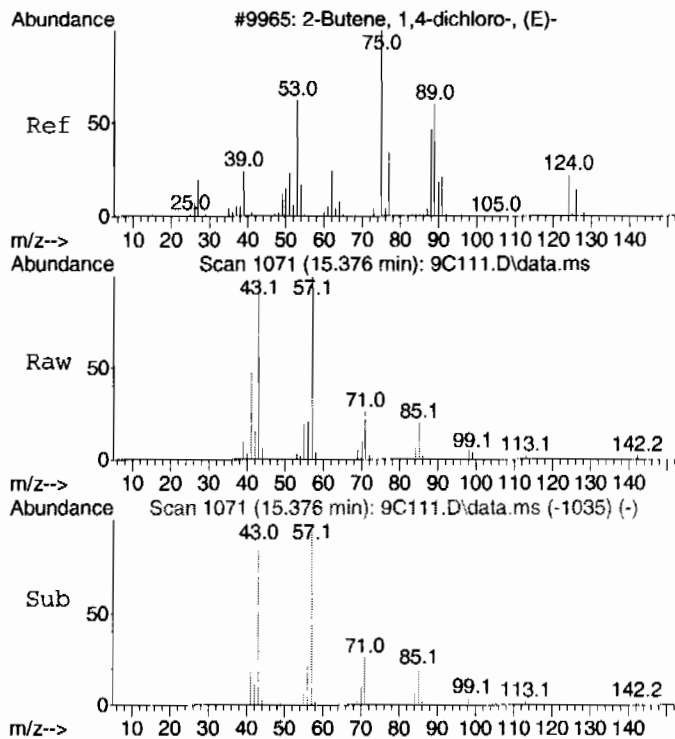


#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 6.07 ug/L
 RT: 14.949 min Scan# 1035
 Delta R.T. -0.012 min
 Lab File: 9C111.D
 Acq: 8 Mar 2010 2:58 pm



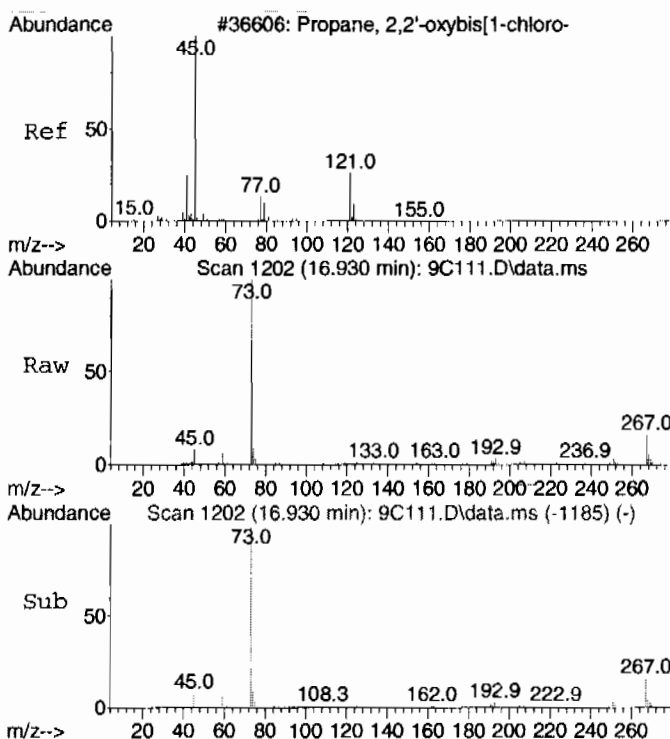
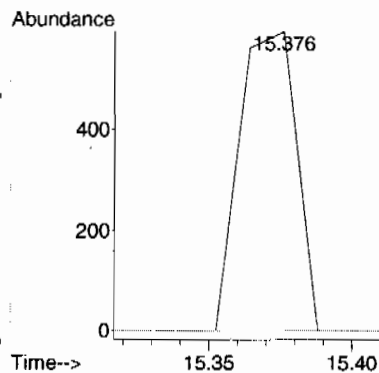
Tgt Ion:	53	Resp:	6727
Ion Ratio	100	Lower	Upper
88	0.0	55.7	115.7#
77	243.3	0.0	58.7#





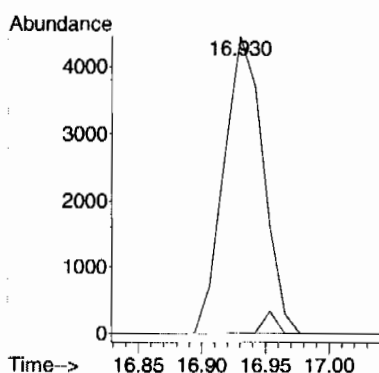
#109 BEFORE analyst DELETION
trans-1,4-Dichloro-2-butene
Concen: 0.79 ug/L
RT: 15.376 min Scan# 1071
Delta R.T. 0.130 min
Lab File: 9C111.D
Acq: 8 Mar 2010 2:58 pm

Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	10.7	70.7#
75	0.0	76.2	136.2#



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 5.01 ug/L
RT: 16.930 min Scan# 1202
Delta R.T. 0.012 min
Lab File: 9C111.D
Acq: 8 Mar 2010 2:58 pm

Tgt Ion	Ratio	Lower	Upper
45	100		
121	2.5	0.0	46.4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

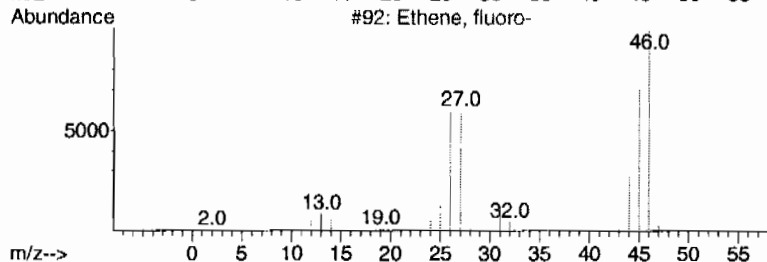
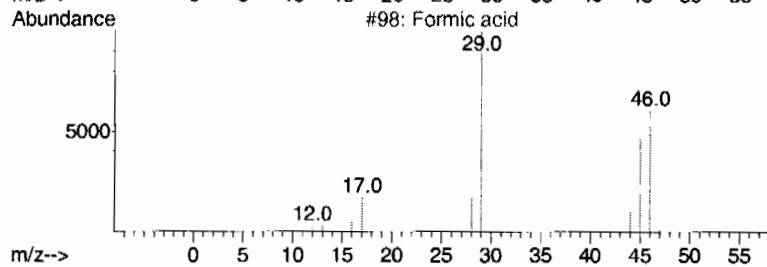
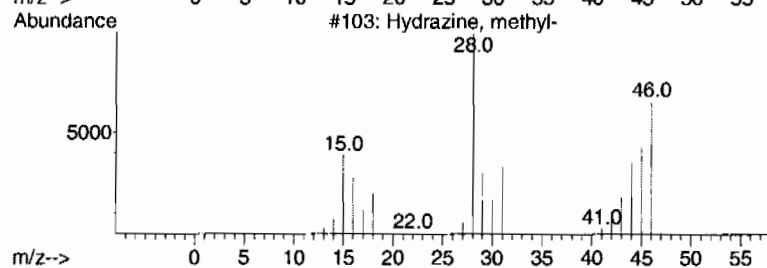
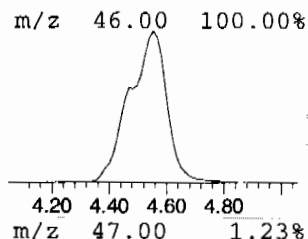
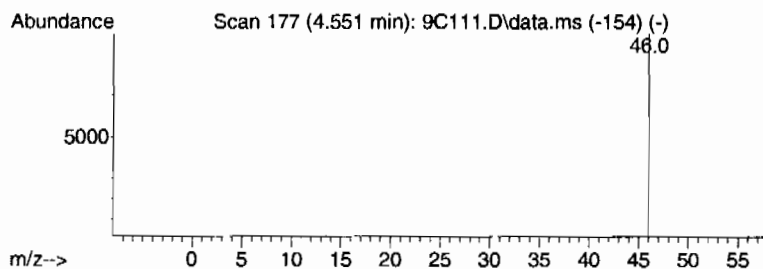
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.551	11.88 ug/L	513743	Fluorobenzene	10.775

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2		Formic acid	46	CH2O2	000064-18-6	4
3		Ethene, fluoro-	46	C2H3F	000075-02-5	3
4		Formic acid	46	CH2O2	000064-18-6	3
5		Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANTL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

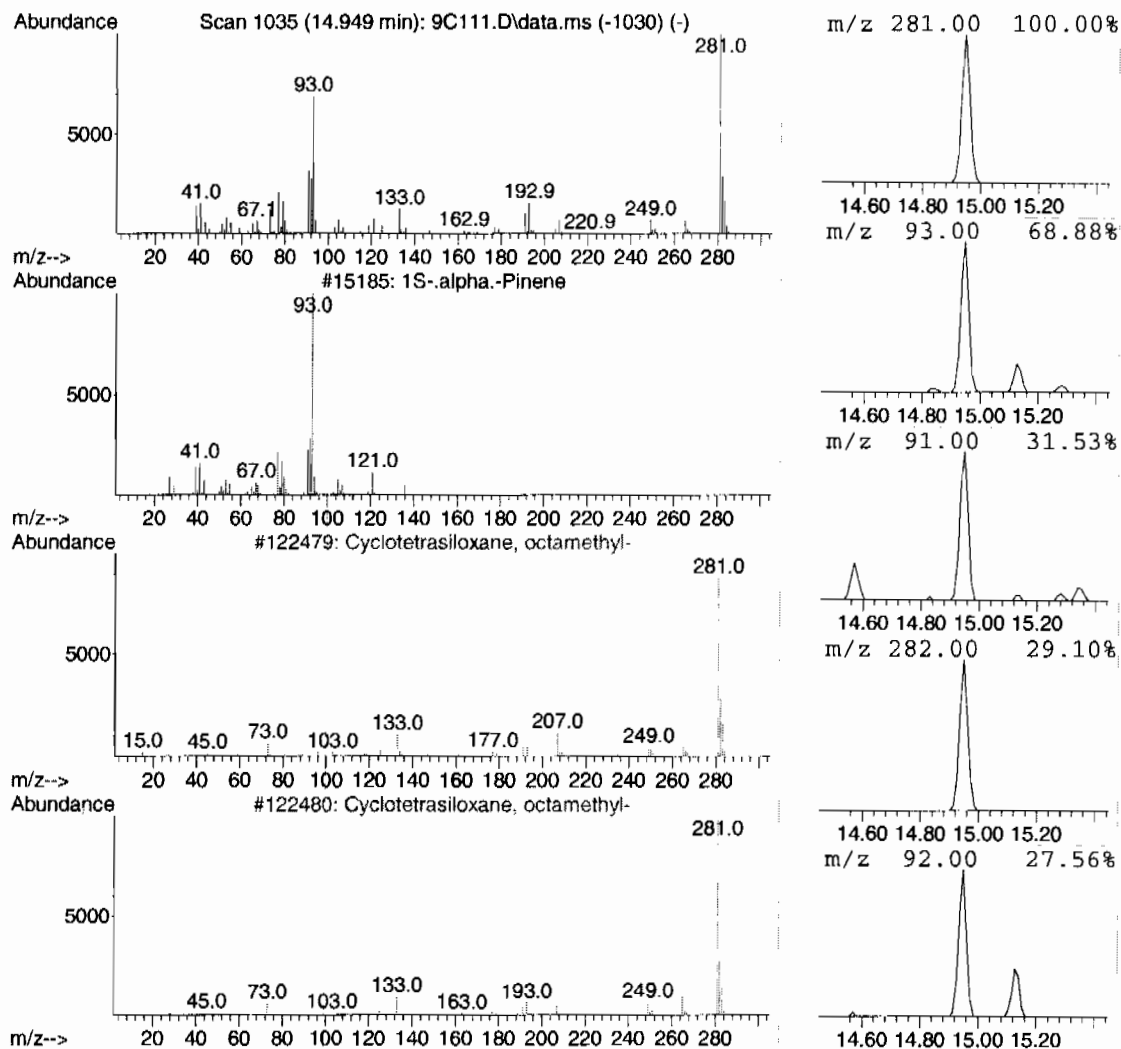
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 2 unknown siloxane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.949	11.65 ug/L	446870	B Chlorobenzene-d5	13.941

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		1S-.alpha.-Pinene	136	C10H16	007785-26-4	60
2		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	58
3		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	53
4		Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	43
5		1R-.alpha.-Pinene	136	C10H16	007785-70-8	43



Library Search Compound Report
GEL Laboratories, LLC

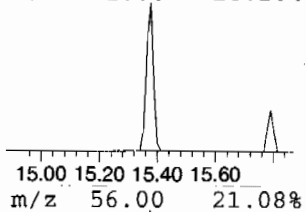
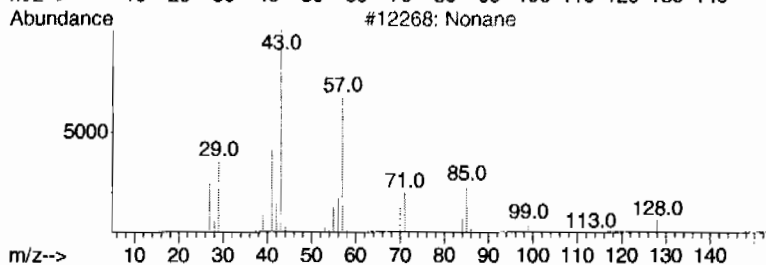
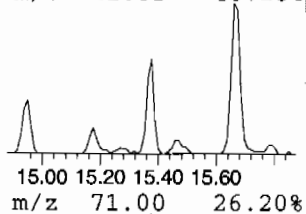
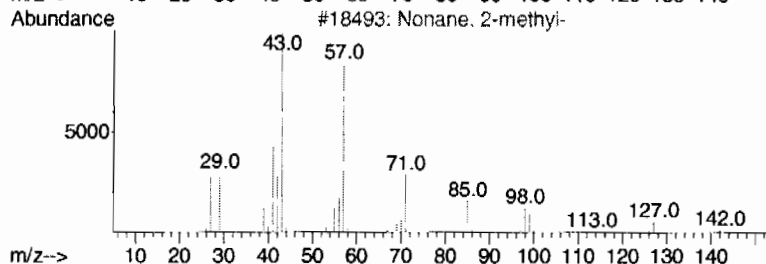
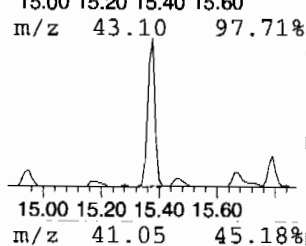
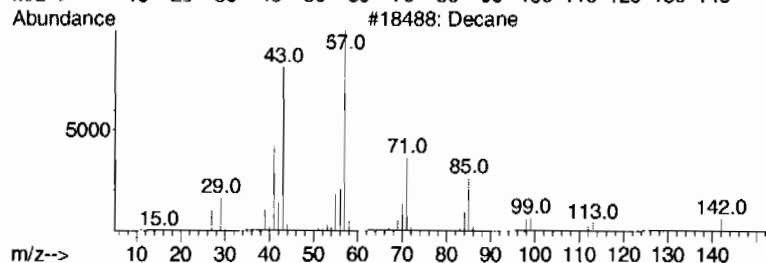
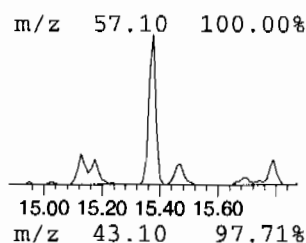
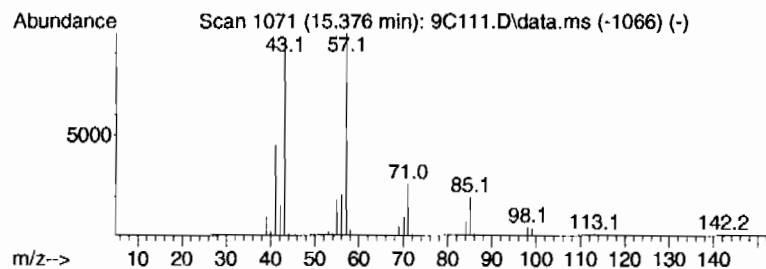
Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 3 Decane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.		
15.376	6.96 ug/L	160060	1,4-Dichlorobenzene-d4	16.372		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Decane	142	C10H22	000124-18-5	91
2		Nonane, 2-methyl-	142	C10H22	000871-83-0	64
3		Nonane	128	C9H20	000111-84-2	64
4		Oxalic acid, isobutyl pentyl ester	216	C11H20O4	1000309-37-0	64
5		Octane, 2,7-dimethyl-	142	C10H22	001072-16-8	64



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

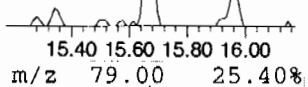
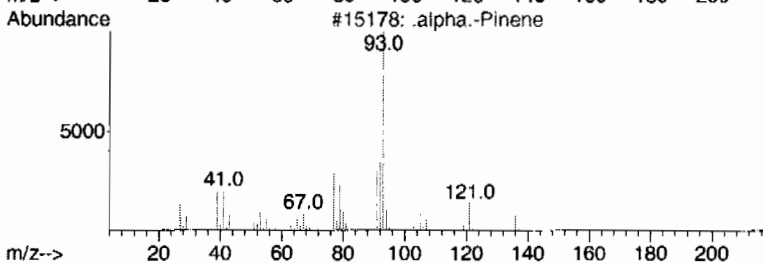
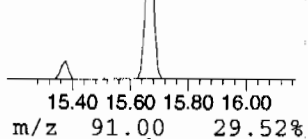
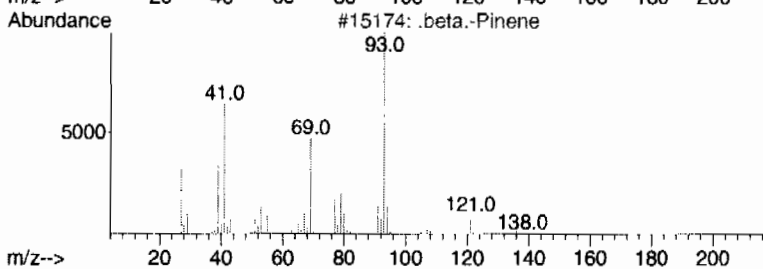
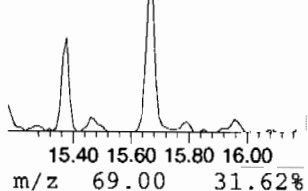
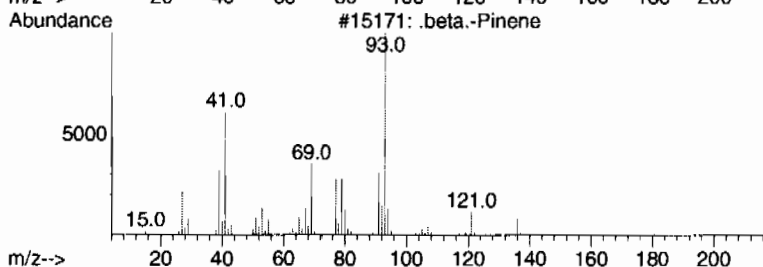
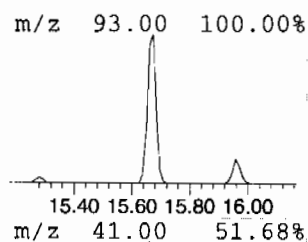
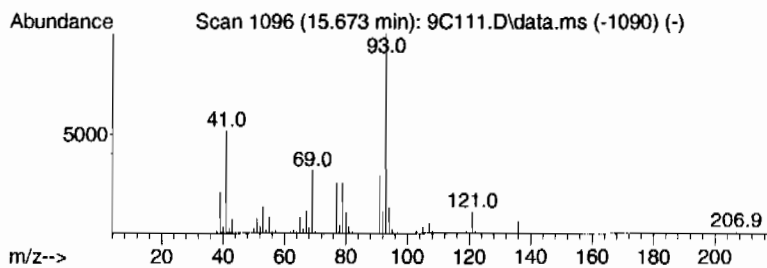
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 4 .beta.-Pinene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.673	13.20 ug/L	303352	1,4-Dichlorobenzene-d4	16.372

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		.beta.-Pinene	136	C10H16	000127-91-3	96
2		.beta.-Pinene	136	C10H16	000127-91-3	91
3		.alpha.-Pinene	136	C10H16	000080-56-8	91
4		.beta.-Pinene	136	C10H16	000127-91-3	91
5		.beta.-Pinene	136	C10H16	000127-91-3	90



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

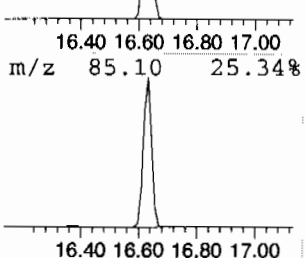
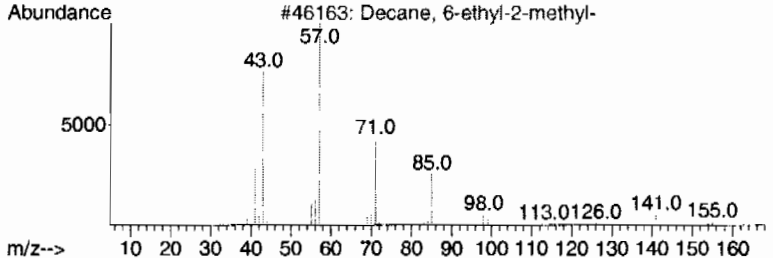
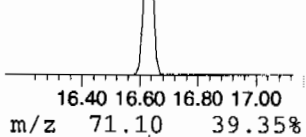
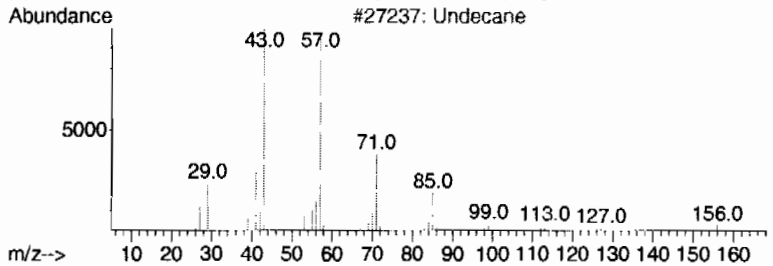
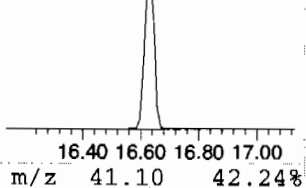
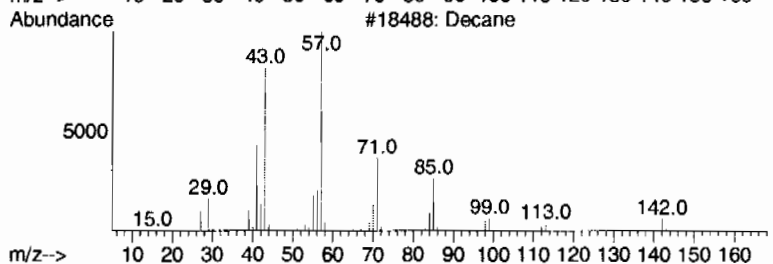
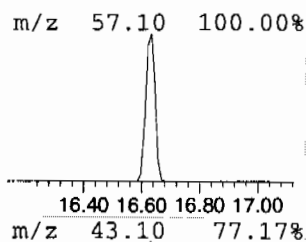
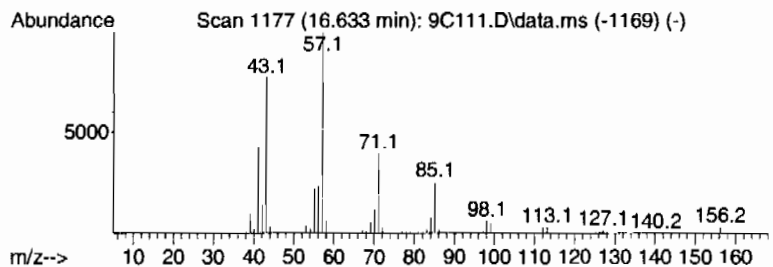
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 5 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.633	1091.52 ug/L	25088000	B 1,4-Dichlorobenzene-d4	16.372

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane		142	C10H22	000124-18-5	86
2	Undecane		156	C11H24	001120-21-4	81
3	Decane, 6-ethyl-2-methyl-		184	C13H28	062108-21-8	78
4	Hexadecane		226	C16H34	000544-76-3	72
5	Decane		142	C10H22	000124-18-5	72



Library Search Compound Report
GEL Laboratories, LLC

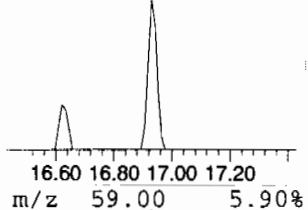
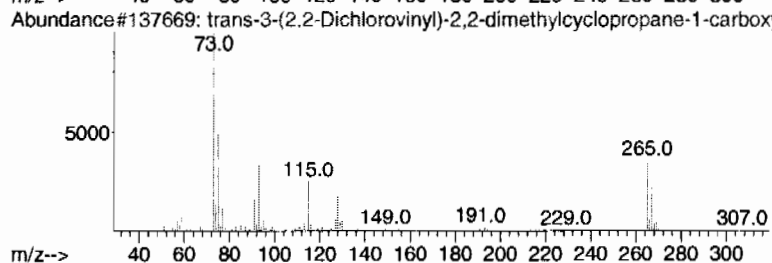
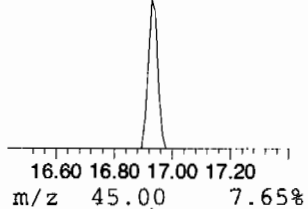
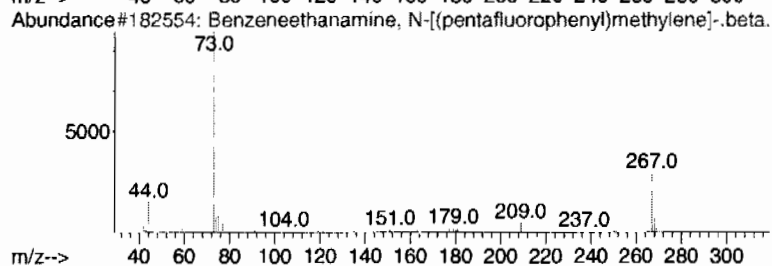
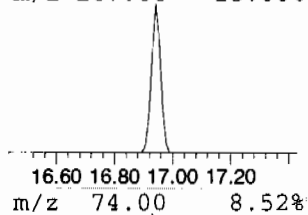
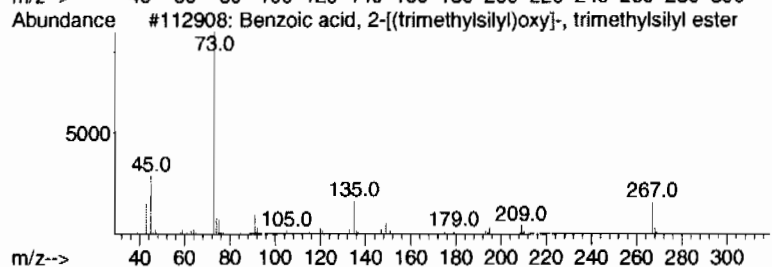
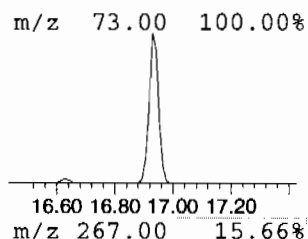
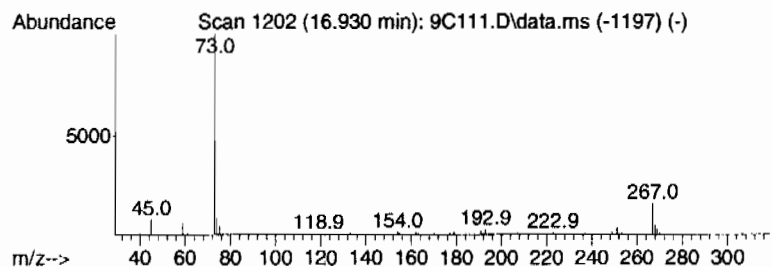
Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 6 unknown siloxane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.	
16.930	11.44 ug/L	262952	B 1,4-Dichlorobenzene-d4	16.372	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester	282	C13H22O3Si2	003789-85-3	33
2	Benzeneethanamine, N-[(pentafluorophenyl)methylene]-, beta., (Z)-isomer	475	C21H26F5NO2Si2	055429-85-1	25
3	trans-3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylic acid	322	C14H24Cl2O2Si	1000314-29-8	25
4	1H-Dibenzo[b,e][1,4]diazepin-11-yl trimethylsilane	267	C16H17N3O	013450-73-2	9
5	Benzeneacetic acid, 3-methoxy-4-methylphenyl trimethylsilane ester	268	C13H20O4Si	015964-84-8	9



Library Search Compound Report
GEL Laboratories, LLC

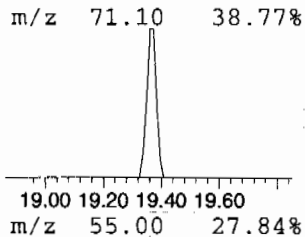
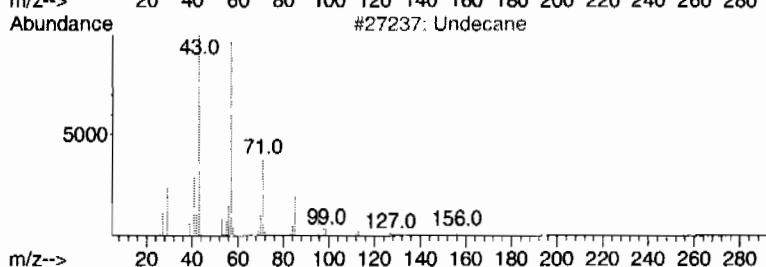
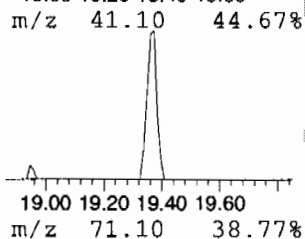
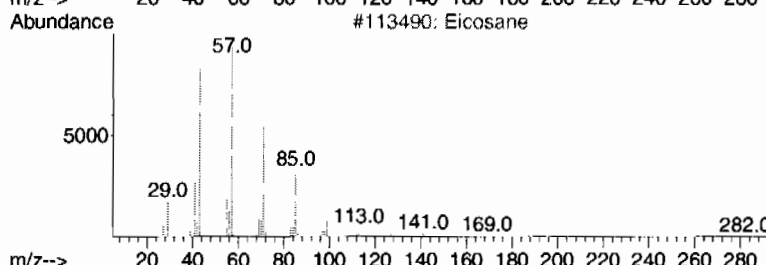
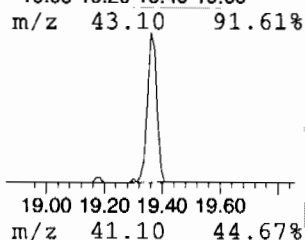
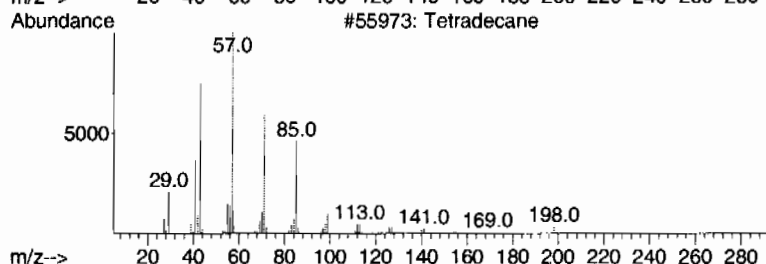
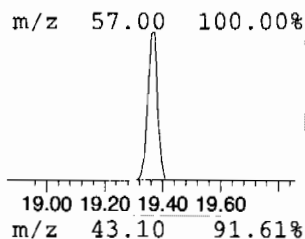
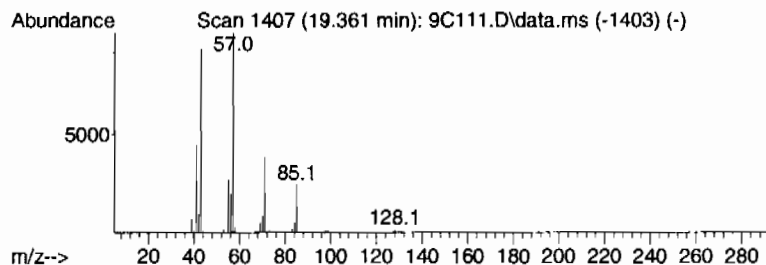
Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 7 unknown hydrocarbon Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.	
19.361	5.06 ug/L	116314	B 1,4-Dichlorobenzene-d4	16.372	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetradecane	198	C14H30	000629-59-4	72
2	Eicosane	282	C20H42	000112-95-8	72
3	Undecane	156	C11H24	001120-21-4	72
4	Octane, 3-ethyl-2,7-dimethyl-	170	C12H26	062183-55-5	64
5	Undecane, 4,7-dimethyl-	184	C13H28	017301-32-5	59



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C111.D
Acq On : 8 Mar 2010 2:58 pm
Operator : RXY1
Sample : |248373003|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---			
					#	RT	Resp	Conc
unknown hydroca...	4.551	11.9	ug/L	513743	1	10.775	2161840	50.0
unknown siloxane	14.949	11.7	ug/L	446870	4	13.941	1917230	50.0
Decane	15.376	7.0	ug/L	160060	5	16.372	1149220	50.0
.beta.-Pinene	15.673	13.2	ug/L	303352	5	16.372	1149220	50.0
unknown hydroca...	16.633	1091.5	ug/L	25088000	6	16.372	1149220	50.0
unknown siloxane	16.930	11.4	ug/L	262952	6	16.372	1149220	50.0
unknown hydroca...	19.361	5.1	ug/L	116314	6	16.372	1149220	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373004
 Client ID: RE36-10-7491
 Batch ID: 962617
 Run Date: 03/08/2010 15:30
 Prep Date: 03/08/2010 12:10
 Data File: 030810V99C112.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 35.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.54	ug/kg	0.525	1.54
74-87-3	Chloromethane	J	0.633	ug/kg	0.463	1.54
75-01-4	Vinyl chloride	U	1.54	ug/kg	0.463	1.54
74-83-9	Bromomethane	U	1.54	ug/kg	0.463	1.54
75-00-3	Chloroethane	U	1.54	ug/kg	0.463	1.54
75-69-4	Trichlorofluoromethane	U	1.54	ug/kg	0.463	1.54
67-64-1	Acetone	J	3.09	ug/kg	2.56	7.72
75-35-4	1,1-Dichloroethylene	U	1.54	ug/kg	0.463	1.54
74-88-4	Iodomethane	U	7.72	ug/kg	2.47	7.72
75-09-2	Methylene chloride	U	7.72	ug/kg	3.09	7.72
75-15-0	Carbon disulfide	U	7.72	ug/kg	1.93	7.72
156-60-5	trans-1,2-Dichloroethylene	U	1.54	ug/kg	0.463	1.54
75-34-3	1,1-Dichloroethane	U	1.54	ug/kg	0.463	1.54
78-93-3	2-Butanone	U	7.72	ug/kg	2.32	7.72
156-59-2	cis-1,2-Dichloroethylene	U	1.54	ug/kg	0.463	1.54
594-20-7	2,2-Dichloropropane	U	1.54	ug/kg	0.463	1.54
67-66-3	Chloroform	U	1.54	ug/kg	0.463	1.54
74-97-5	Bromochloromethane	U	1.54	ug/kg	0.509	1.54
71-55-6	1,1,1-Trichloroethane	U	1.54	ug/kg	0.463	1.54
563-58-6	1,1-Dichloropropene	U	1.54	ug/kg	0.463	1.54
56-23-5	Carbon tetrachloride	U	1.54	ug/kg	0.463	1.54
107-06-2	1,2-Dichloroethane	U	1.54	ug/kg	0.463	1.54
71-43-2	Benzene	U	1.54	ug/kg	0.463	1.54
79-01-6	Trichloroethylene	U	1.54	ug/kg	0.509	1.54
78-87-5	1,2-Dichloropropane	U	1.54	ug/kg	0.463	1.54
75-27-4	Bromodichloromethane	U	1.54	ug/kg	0.463	1.54
74-95-3	Dibromomethane	U	1.54	ug/kg	0.463	1.54
108-10-1	4-Methyl-2-pentanone	U	7.72	ug/kg	1.93	7.72
10061-01-5	cis-1,3-Dichloropropylene	U	1.54	ug/kg	0.463	1.54
108-88-3	Toluene	J	0.494	ug/kg	0.463	1.54
10061-02-6	trans-1,3-Dichloropropylene	U	1.54	ug/kg	0.463	1.54
79-00-5	1,1,2-Trichloroethane	U	1.54	ug/kg	0.463	1.54
591-78-6	2-Hexanone	U	7.72	ug/kg	2.32	7.72
142-28-9	1,3-Dichloropropane	U	1.54	ug/kg	0.463	1.54
127-18-4	Tetrachloroethylene	U	1.54	ug/kg	0.463	1.54
124-48-1	Dibromochloromethane	U	1.54	ug/kg	0.463	1.54
106-93-4	1,2-Dibromoethane	U	1.54	ug/kg	0.463	1.54
108-90-7	Chlorobenzene	U	1.54	ug/kg	0.463	1.54

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7491	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962617	Inst: VOA9.I	Dilution: 1
Run Date: 03/08/2010 15:30	Analyst: RXY1	Purge Vol: 5 mL
Prep Date: 03/08/2010 12:10	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030810V99C112.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.54	ug/kg	0.463	1.54
179601-23-1	m,p-Xylenes	U	3.09	ug/kg	0.463	3.09
95-47-6	o-Xylene	U	1.54	ug/kg	0.463	1.54
100-42-5	Styrene	U	1.54	ug/kg	0.463	1.54
75-25-2	Bromoform	U	1.54	ug/kg	0.463	1.54
79-34-5	1,1,2,2-Tetrachloroethane	U	1.54	ug/kg	0.463	1.54
96-18-4	1,2,3-Trichloropropane	U	1.54	ug/kg	0.463	1.54
108-86-1	Bromobenzene	U	1.54	ug/kg	0.463	1.54
103-65-1	n-Propylbenzene	U	1.54	ug/kg	0.463	1.54
95-49-8	2-Chlorotoluene	U	1.54	ug/kg	0.463	1.54
98-82-8	Isopropylbenzene	U	1.54	ug/kg	0.463	1.54
108-67-8	1,3,5-Trimethylbenzene	U	1.54	ug/kg	0.463	1.54
106-43-4	4-Chlorotoluene	U	1.54	ug/kg	0.463	1.54
98-06-6	tert-Butylbenzene	U	1.54	ug/kg	0.463	1.54
95-63-6	1,2,4-Trimethylbenzene	U	1.54	ug/kg	0.463	1.54
135-98-8	sec-Butylbenzene	U	1.54	ug/kg	0.463	1.54
99-87-6	4-Isopropyltoluene	U	1.54	ug/kg	0.463	1.54
541-73-1	1,3-Dichlorobenzene	U	1.54	ug/kg	0.463	1.54
106-46-7	1,4-Dichlorobenzene	U	1.54	ug/kg	0.463	1.54
104-51-8	n-Butylbenzene	U	1.54	ug/kg	0.463	1.54
96-12-8	1,2-Dibromo-3-chloropropane	U	1.54	ug/kg	0.463	1.54
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.72	ug/kg	2.47	7.72
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.54	ug/kg	0.463	1.54
95-50-1	1,2-Dichlorobenzene	U	1.54	ug/kg	0.463	1.54

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.57	21.7	ug/kg	0	J
	unknown siloxane	14.95	18	ug/kg	0	J
	unknown siloxane	16.94	13.5	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C112.D
Acq On : 8 Mar 2010 3:30 pm
Operator : RXY1
InstName : VOA9
Sample : |248373004|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 16:04:38 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	10.775	10.775	1.000	96	860270	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	432579	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	104584	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	860270	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	432579	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	104593	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	300406	51.97	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	103.94%			
43) Toluene-d8	12.412	12.412	0.890	98	677494	60.96	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	121.92%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	170294	66.94	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	133.88%#			
Target Compounds								
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.308	5.308	0.493	50	2811	0.41	ug/L	89
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659	59	313	N.D.		
9) Acetone	7.490	7.490	0.695	43	7701	2.00	ug/L	82
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	760	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	8.083	7.858	0.750	41	477	Below Cal	#	1
13) Methyl acetate	7.882	7.882	0.731	43	392	Below Cal	#	67
14) Carbon disulfide	7.894	7.906	0.733	76	1337	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	4709	Below Cal		85
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.495	9.483	0.881	43	441	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.230	10.230	0.949	56	1910	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	0.000	10.538	0.000		0	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	6374	Below Cal	#	21
34) Trichloroethylene	11.167	11.167	1.036	95	561	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C112.D
Acq On : 8 Mar 2010 3:30 pm
Operator : RXY1
InstName : VOA9
Sample : |248373004|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 16:04:38 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	4013	0.32 ug/L	92
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935	43	186	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.131	14.024	1.014	91	1207	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	433	N.D.	
56) o-Xylene	14.570	14.570	1.045	106	255	N.D.	
57) Styrene	14.570	14.570	1.045	104	1711	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.329	15.353	0.936	91	567	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	202	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.614	0.000		0m	N.D.	d
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972	105	460	N.D.	
71) sec-Butylbenzene	0.000	16.112	0.000		0	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	923	N.D.	
73) 1,3-Dichlorobenzene	0.000	16.313	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	16.408	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.693	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	466	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.585	7.550	0.704	45	1612	N.D.	
88) Allyl chloride	0.000	7.929	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.495	9.483	0.881	43	441	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C112.D
Acq On : 8 Mar 2010 3:30 pm
Operator : RXY1
InstName : VOA9
Sample : |248373004|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 16:04:38 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

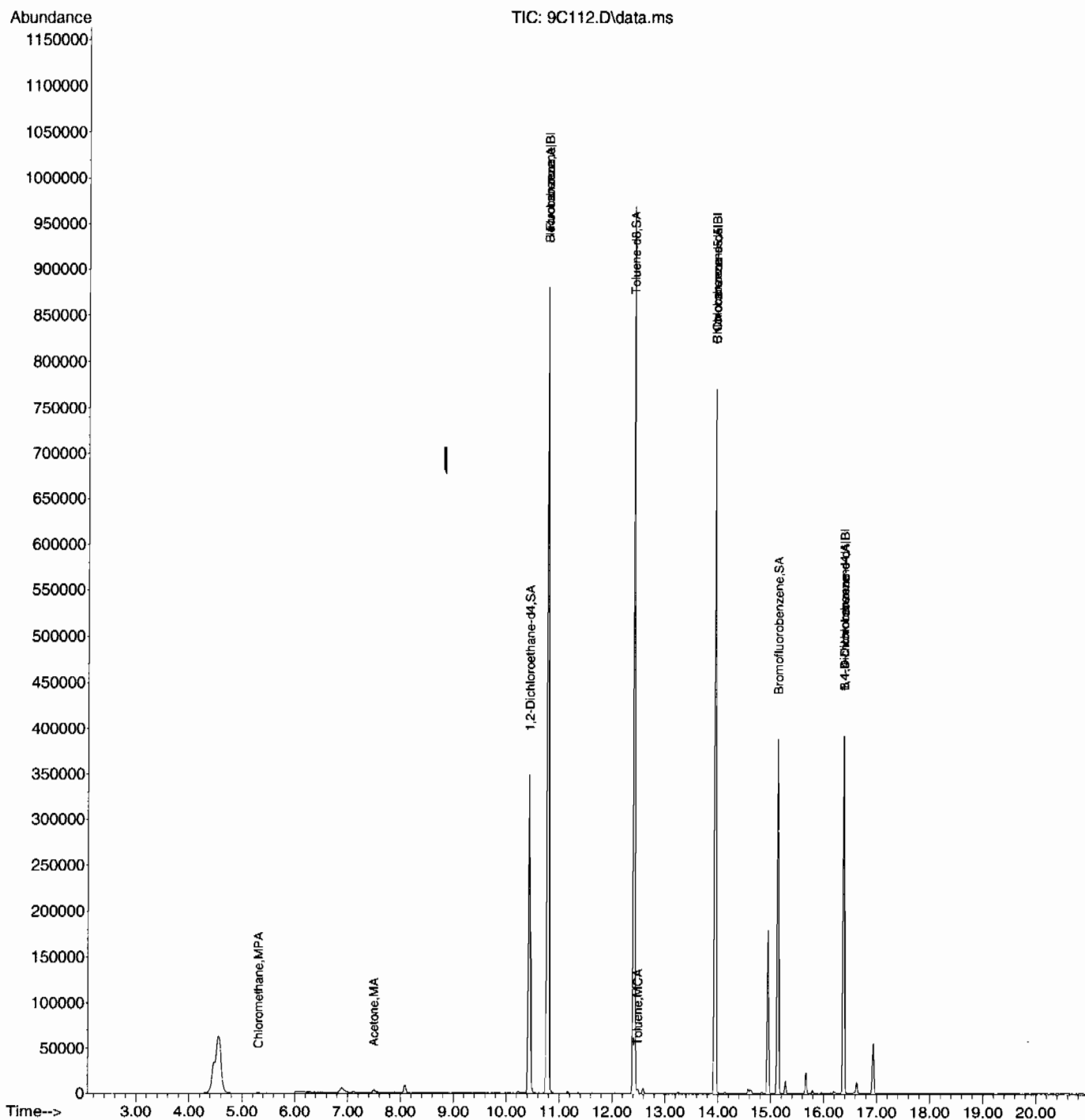
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	9.862	9.874	0.915	42	403	N.D.	
98) Isobutyl alcohol	10.218	10.159	0.948	41	1008	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0m	N.D.	d
108) Cyclohexanone	14.938	15.092	0.912	42	194	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.527	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.918	0.000		0m	N.D.	d

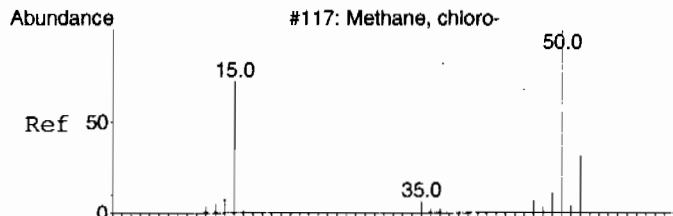
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C112.D
Acq On : 8 Mar 2010 3:30 pm
Operator : RXY1
InstName : VOA9
Sample : |248373004|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 12 Sample Multiplier: 1

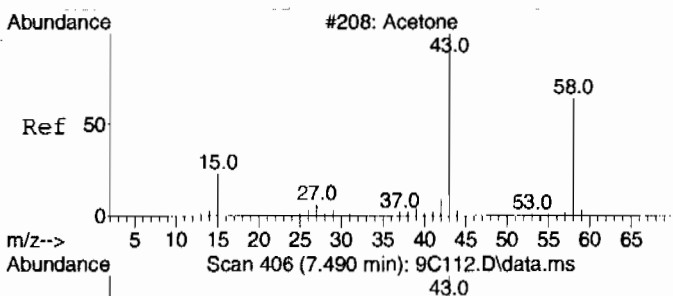
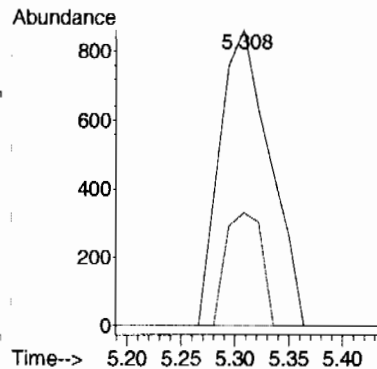
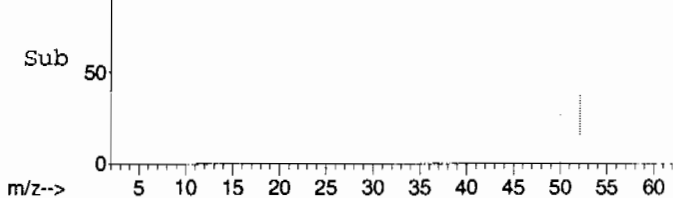
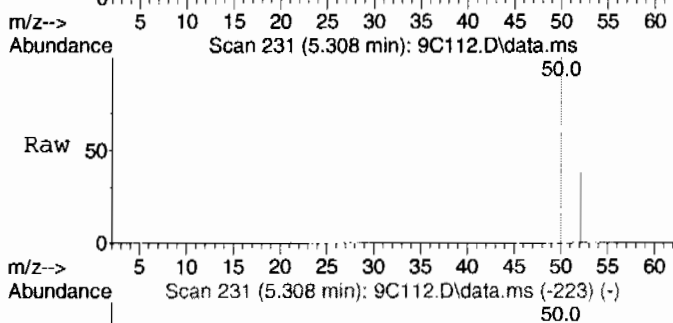
Quant Time: Mar 09 16:04:38 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





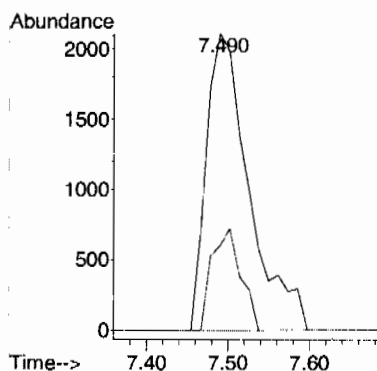
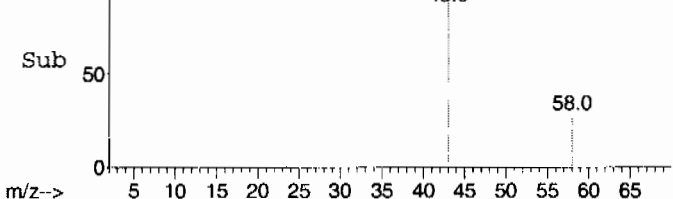
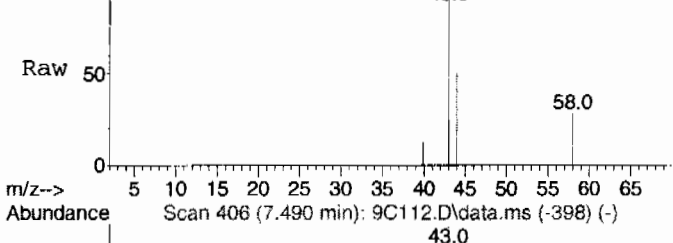
#3
Chloromethane
Concen: 0.41 ug/L
RT: 5.308 min Scan# 231
Delta R.T. -0.000 min
Lab File: 9C112.D
Acq: 8 Mar 2010 3:30 pm

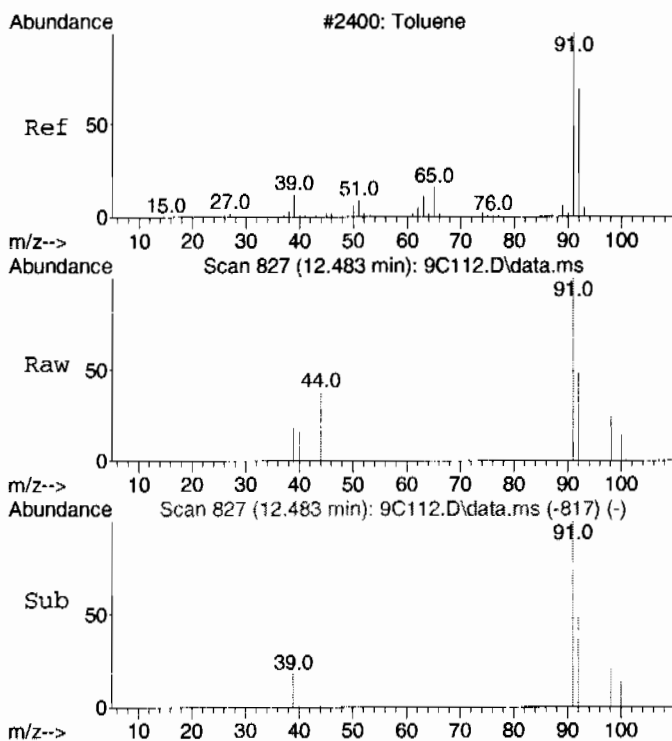
Tgt Ion: 50 Resp: 2811
Ion Ratio Lower Upper
50 100
52 27.7 4.2 64.2



#9
Acetone
Concen: 2.00 ug/L
RT: 7.490 min Scan# 406
Delta R.T. 0.000 min
Lab File: 9C112.D
Acq: 8 Mar 2010 3:30 pm

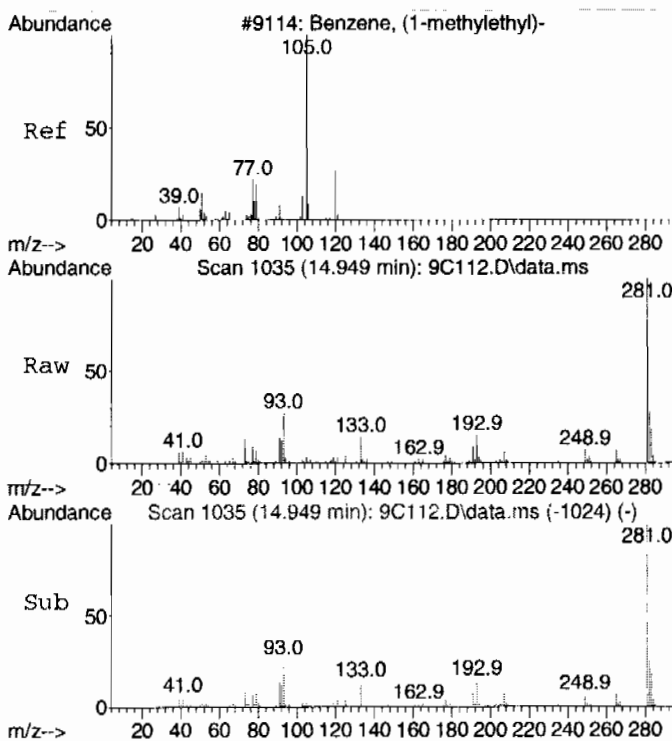
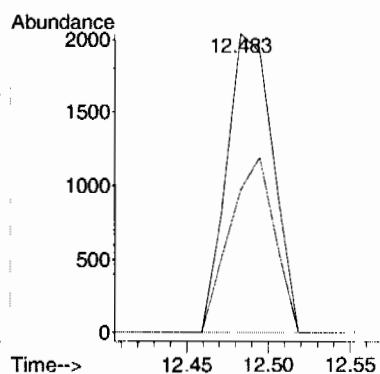
Tgt Ion: 43 Resp: 7701
Ion Ratio Lower Upper
43 100
58 23.2 3.2 63.2





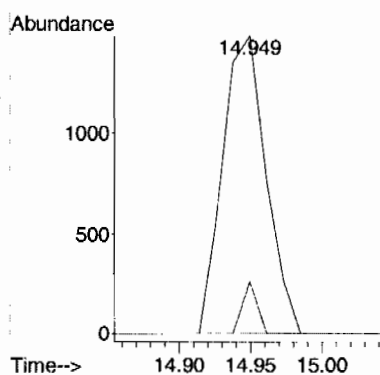
#44
Toluene
Concen: 0.32 ug/L
RT: 12.483 min Scan# 827
Delta R.T. -0.000 min
Lab File: 9C112.D
Acq: 8 Mar 2010 3:30 pm

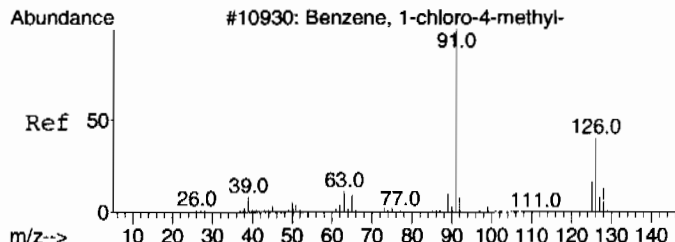
Tgt Ion	Resp	Lower	Upper
91	100		
92	56.9	33.0	93.0



#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.43 ug/L
RT: 14.949 min Scan# 1035
Delta R.T. 0.023 min
Lab File: 9C112.D
Acq: 8 Mar 2010 3:30 pm

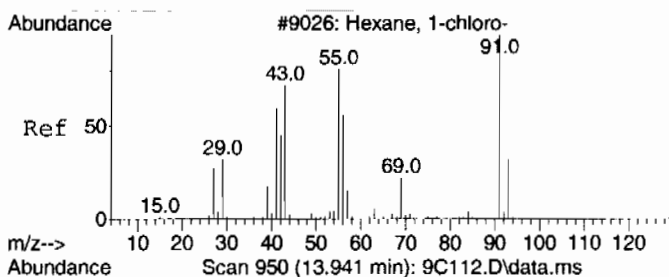
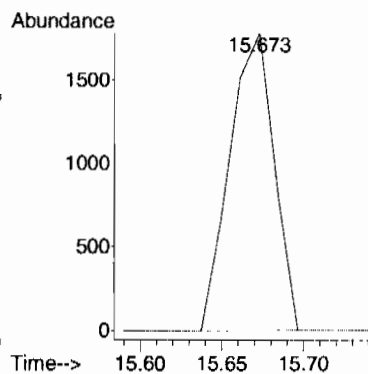
Tgt Ion	Resp	Lower	Upper
105	100		
120	5.9	0.0	58.0





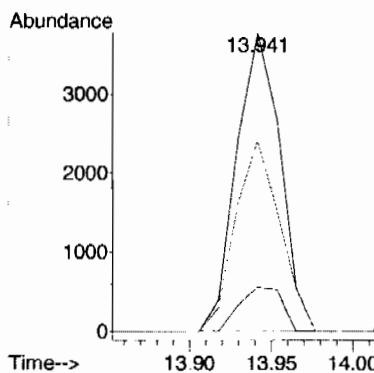
#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.55 ug/L
RT: 15.673 min Scan# 1096
Delta R.T. 0.059 min
Lab File: 9C112.D
Acq: 8 Mar 2010 3:30 pm

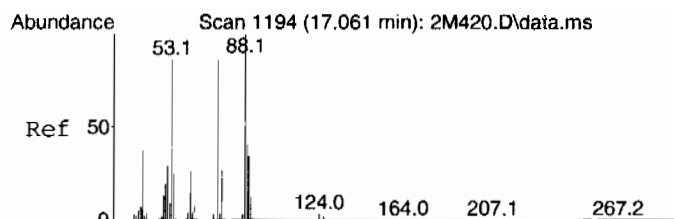
Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	1.2	61.2#



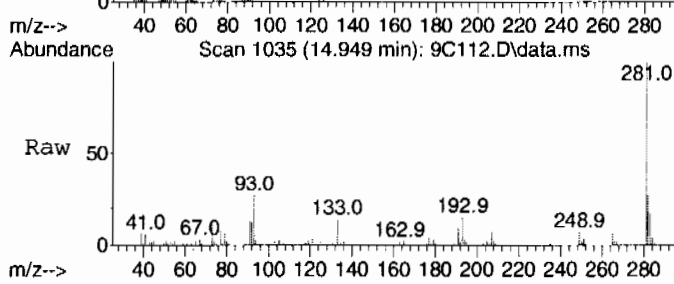
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 3.41 ug/L
RT: 13.941 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C112.D
Acq: 8 Mar 2010 3:30 pm

Tgt Ion	Ratio	Lower	Upper
55	100		
91	14.4	74.8	134.8#
56	65.0	31.8	91.8

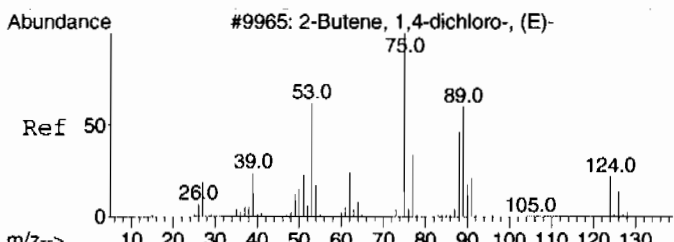
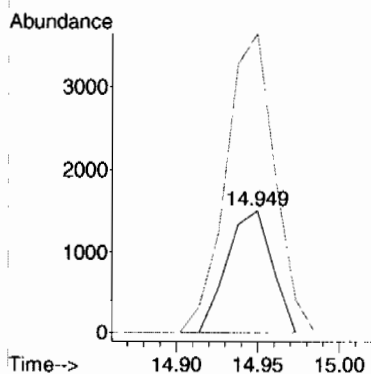
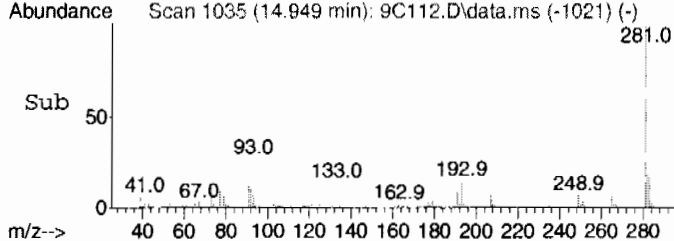




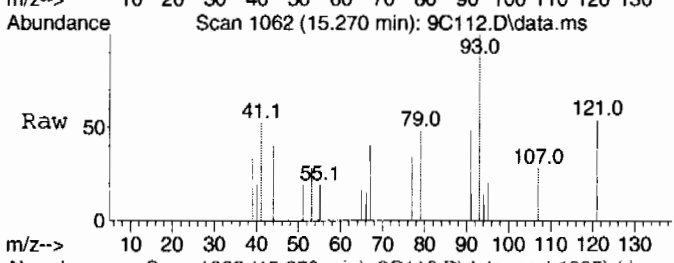
#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 4.00 ug/L
 RT: 14.949 min Scan# 1035
 Delta R.T. -0.012 min
 Lab File: 9C112.D
 Acq: 8 Mar 2010 3:30 pm



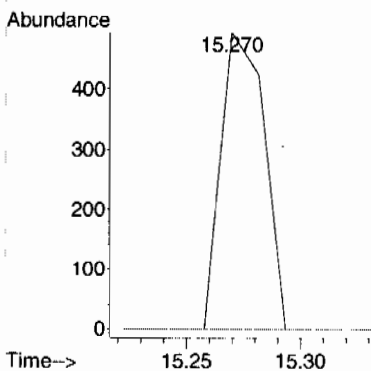
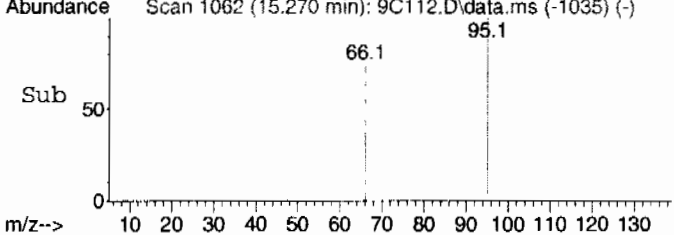
Tgt Ion: 53 Resp: 2908
 Ion Ratio Lower Upper
 53 100
 88 0.0 55.7 115.7#
 77 262.6 0.0 58.7#

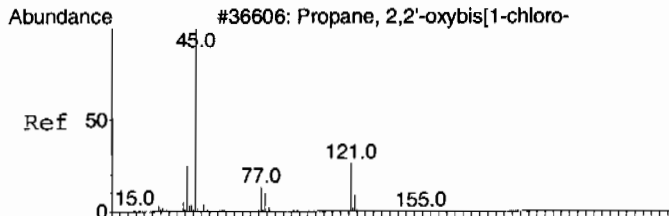


#109 BEFORE analyst DELETION
 trans-1,4-Dichloro-2-butene
 Concen: 0.95 ug/L
 RT: 15.270 min Scan# 1062
 Delta R.T. 0.024 min
 Lab File: 9C112.D
 Acq: 8 Mar 2010 3:30 pm

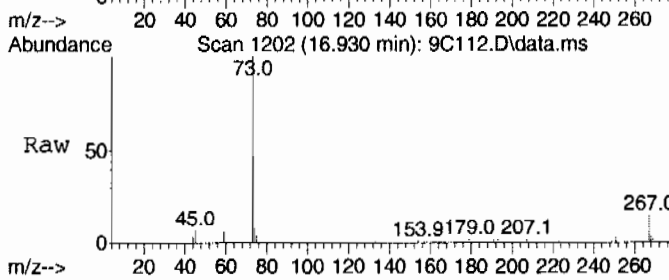


Tgt Ion: 53 Resp: 653
 Ion Ratio Lower Upper
 53 100
 88 0.0 10.7 70.7#
 75 0.0 76.2 136.2#

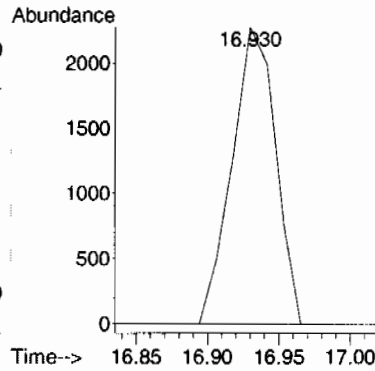
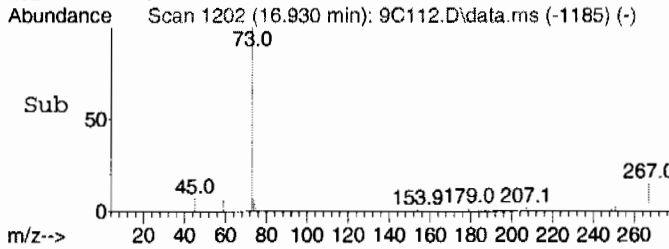




#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 3.85 ug/L
 RT: 16.930 min Scan# 1202
 Delta R.T. 0.012 min
 Lab File: 9C112.D
 Acq: 8 Mar 2010 3:30 pm



Tgt Ion: 45 Resp: 4837
 Ion Ratio Lower Upper
 45 100
 121 0.0 0.0 46.4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C112.D
Acq On : 8 Mar 2010 3:30 pm
Operator : RXY1
Sample : |248373004|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 12 Sample Multiplier: 1

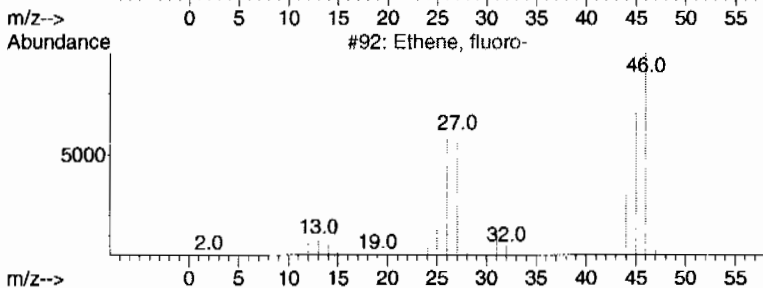
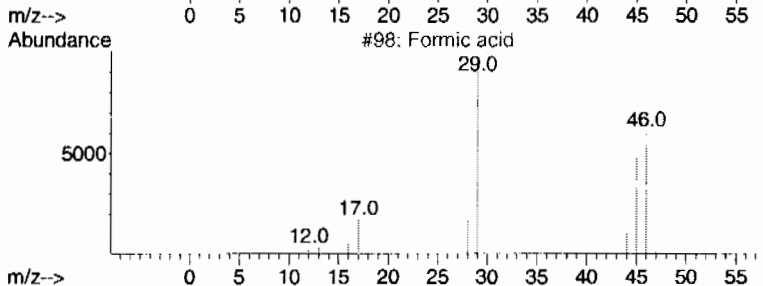
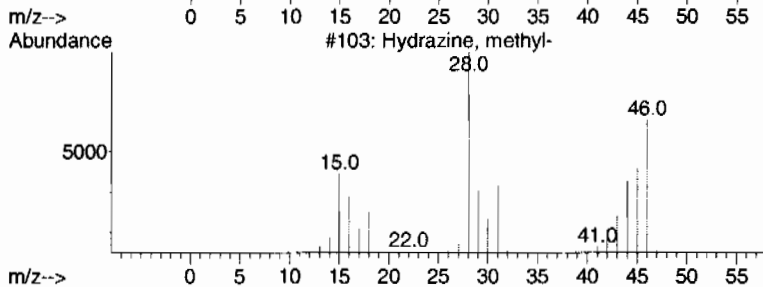
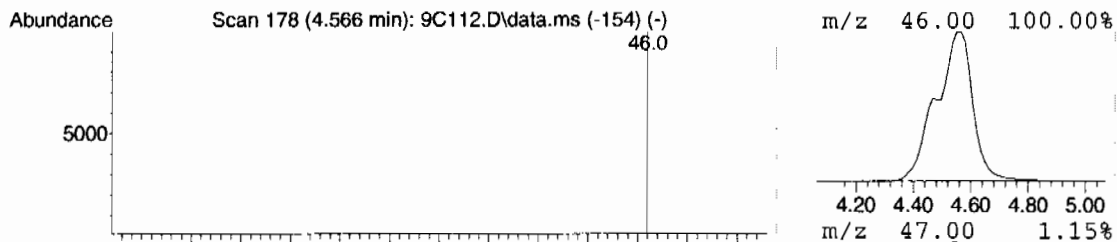
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.566	14.05 ug/L	564235	Fluorobenzene	10.775

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2			Formic acid	46	CH2O2	000064-18-6	4
3			Ethene, fluoro-	46	C2H3F	000075-02-5	3
4			Formic acid	46	CH2O2	000064-18-6	3
5			Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C112.D
Acq On : 8 Mar 2010 3:30 pm
Operator : RXY1
Sample : |248373004|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Quant Title : Volatile Organics 8260B

SubList :

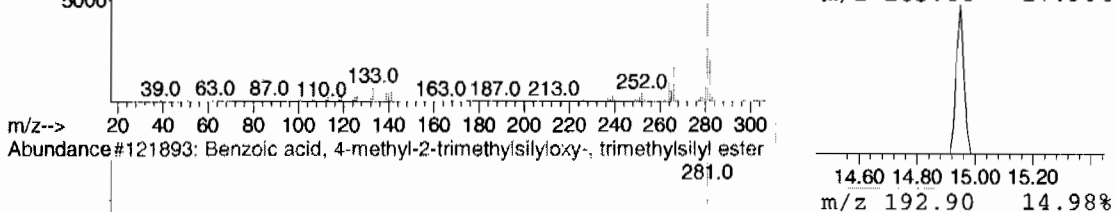
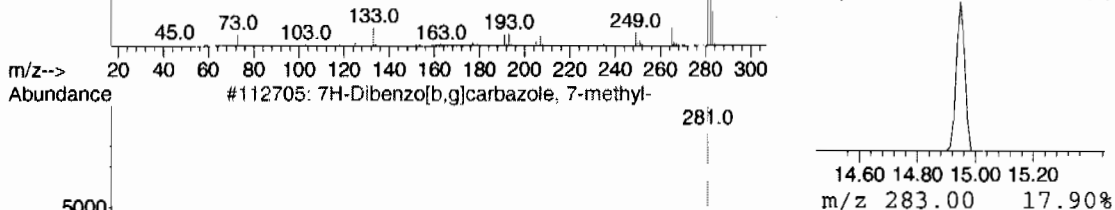
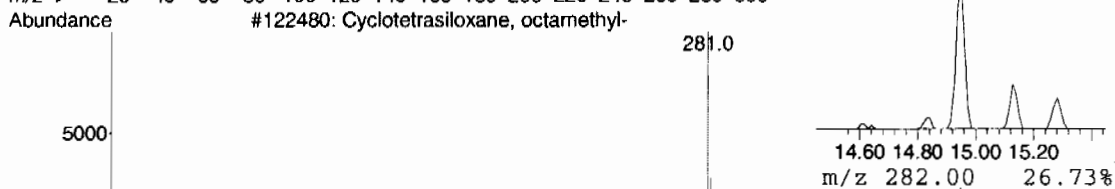
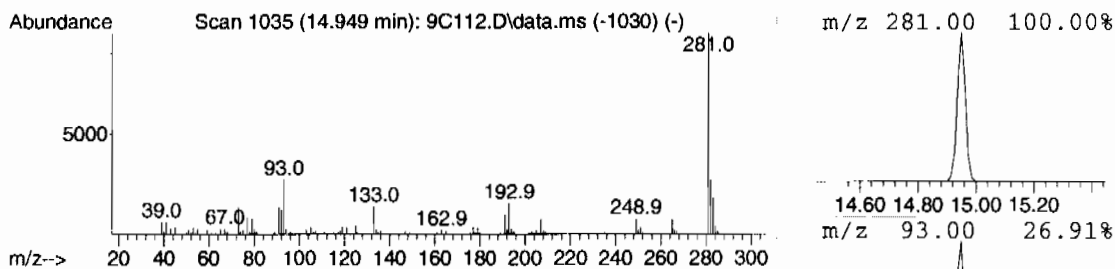
TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 2 unknown siloxane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.950	11.69 ug/L	360103	B Chlorobenzene-d5	13.942

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	72
2			7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	50
3			Benzoic acid, 4-methyl-2-trimeth...	296	C14H24O3Si2	1000153-59-3	50
4			trans-4-Dimethylamino-4'-methoxy...	281	C18H19NO2	052119-37-6	47
5			5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	47



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C112.D
Acq On : 8 Mar 2010 3:30 pm
Operator : RXY1
Sample : |248373004|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 12 Sample Multiplier: 1

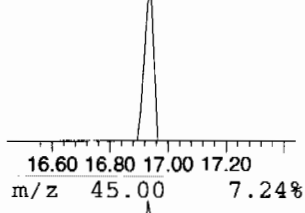
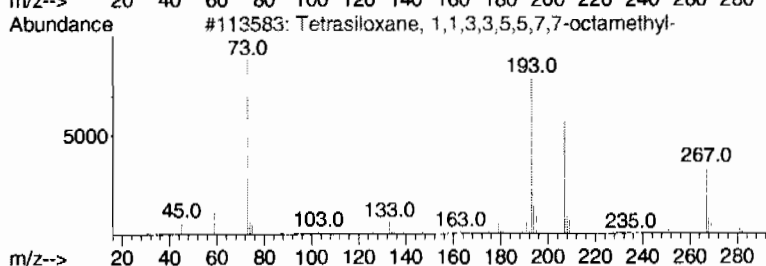
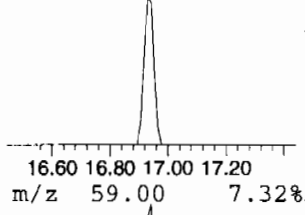
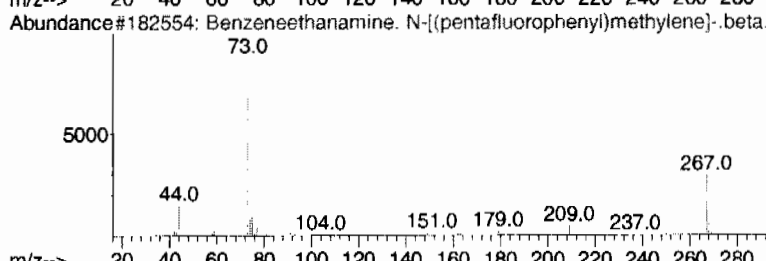
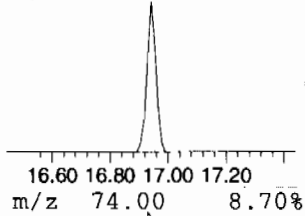
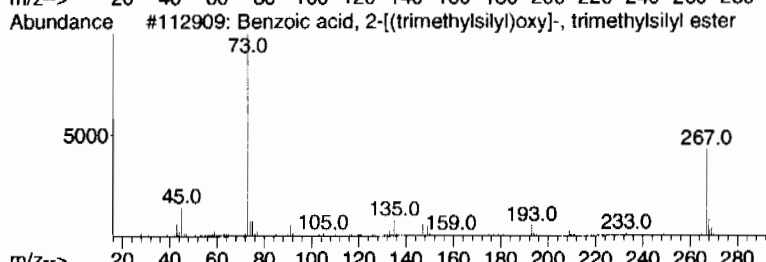
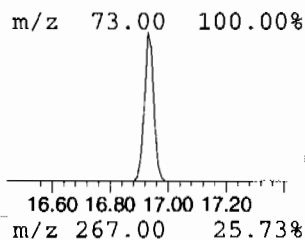
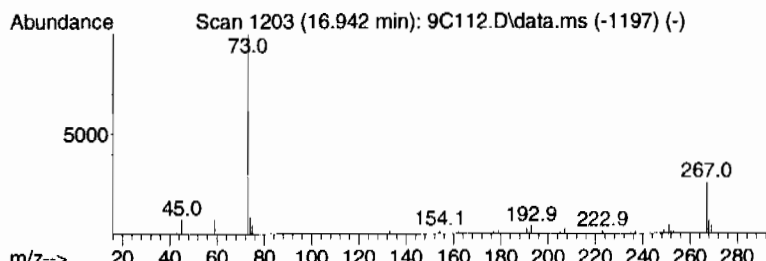
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 3 unknown siloxane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.942	8.73 ug/L	132193	B 1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester	282	C13H22O3Si2	003789-85-3	38
2			Benzeneethanamine, N-[(pentafluorophenyl)methylene]-, beta.,	475	C21H26F5NO2Si2	055429-85-1	36
3			Tetrasiloxane, 1,1,3,3,5,5,7,7-octamethyl-	282	C8H26O3Si4	001000-05-1	33
4			11H-Dibenzo[b,e][1,4]diazepin-11-yl	267	C16H17N3O	013450-73-2	9
5			1,4-Cyclohexadiene, 1,3,6-tris(t...)	296	C15H32Si3	1000150-10-8	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C112.D
Acq On : 8 Mar 2010 3:30 pm
Operator : RXY1
Sample : |248373004|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	4.566	14.1	ug/L	564235	1	10.775	2007540	50.0
unknown siloxane	14.950	11.7	ug/L	360103	4	13.942	1540160	50.0
unknown siloxane	16.942	8.7	ug/L	132193	6	16.372	757373	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373005	Date Received: 03/02/2010 08:50	%Moisture: 11.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7496	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962617	Inst: VOA9J	Dilution: 1
Run Date: 03/08/2010 16:01	Analyst: RXY1	Purge Vol: 5 mL
Prep Date: 03/08/2010 12:11	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030810V99C113.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.384	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.339	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.339	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.339	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.339	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.339	1.13
67-64-1	Acetone		7.46	ug/kg	1.87	5.65
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
74-88-4	Iodomethane	U	5.65	ug/kg	1.81	5.65
75-09-2	Methylene chloride	U	5.65	ug/kg	2.26	5.65
75-15-0	Carbon disulfide	U	5.65	ug/kg	1.41	5.65
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.339	1.13
78-93-3	2-Butanone	U	5.65	ug/kg	1.69	5.65
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.339	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.339	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.373	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.339	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.339	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.339	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.339	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.339	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.373	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.339	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.339	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.339	1.13
108-10-1	4-Methyl-2-pentanone	U	5.65	ug/kg	1.41	5.65
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
108-88-3	Toluene	J	0.599	ug/kg	0.339	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.339	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.339	1.13
591-78-6	2-Hexanone	U	5.65	ug/kg	1.69	5.65
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.339	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.339	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.339	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.339	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.339	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373005
 Client ID: RE36-10-7496
 Batch ID: 962617
 Run Date: 03/08/2010 16:01
 Prep Date: 03/08/2010 12:11
 Data File: 030810V99C113.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 11.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.339	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.339	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.339	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.339	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.339	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.339	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.339	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.339	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.339	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.339	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.339	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.339	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.339	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.339	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.339	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.339	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.65	ug/kg	1.81	5.65
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.339	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.339	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	6.89	11.1	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	14.95	22.9	ug/kg	97	NJ
013466-78-9	3-Carene	15.96	14.4	ug/kg	95	NJ
	unknown siloxane	16.94	6.34	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C113.D
Acq On : 8 Mar 2010 4:01 pm
Operator : RXY1
InstName : VOA9
Sample : |248373005|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 08 16:23:07 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	10.775	10.775	1.000	96	917658	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	544704	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	160315	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	917658	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	544704	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	160325	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	334818	54.30	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	108.60%			
43) Toluene-d8	12.412	12.412	0.890	98	781158	55.82	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	111.64%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	243491	62.44	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	124.88%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659	59	188	N.D.		
9) Acetone	7.502	7.490	0.696	43	27121	6.61	ug/L	89
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	8.072	7.858	0.749	41	211	Below Cal	#	1
13) Methyl acetate	7.870	7.882	0.730	43	789	Below Cal	#	67
14) Carbon disulfide	7.906	7.906	0.734	76	716	N.D.		
15) Methylene chloride	8.095	8.083	0.751	84	3327	Below Cal	#	77
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.495	9.483	0.881	43	963	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.242	10.230	0.950	56	426	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	0.000	10.538	0.000		0	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	6758	Below Cal	#	21
34) Trichloroethylene	11.167	11.167	1.036	95	1478	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C113.D
Acq On : 8 Mar 2010 4:01 pm
Operator : RXY1
InstName : VOA9
Sample : |248373005|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 08 16:23:07 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.495	12.483	0.896	91	8417	0.53 ug/L	91
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.017	13.028	0.934	43	902	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.025	14.024	1.006	91	2243	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	1457	N.D.	
56) o-Xylene	14.570	14.570	1.045	106	1707	N.D.	
57) Styrene	0.000	14.570	0.000		0	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.341	15.353	0.937	91	1345	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	1402	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	15.566	15.614	0.951	91	813	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	0.000	15.910	0.000		0m	N.D.	d
71) sec-Butylbenzene	16.207	16.112	0.990	105	867	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	2342	N.D.	
73) 1,3-Dichlorobenzene	0.000	16.313	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	16.408	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.693	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.337	19.349	1.181	128	495	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.574	7.550	0.703	45	2555	N.D.	
88) Allyl chloride	8.072	7.929	0.749	41	211	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.495	9.483	0.881	43	963	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C113.D
Acq On : 8 Mar 2010 4:01 pm
Operator : RXY1
InstName : VOA9
Sample : |248373005|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 08 16:23:07 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

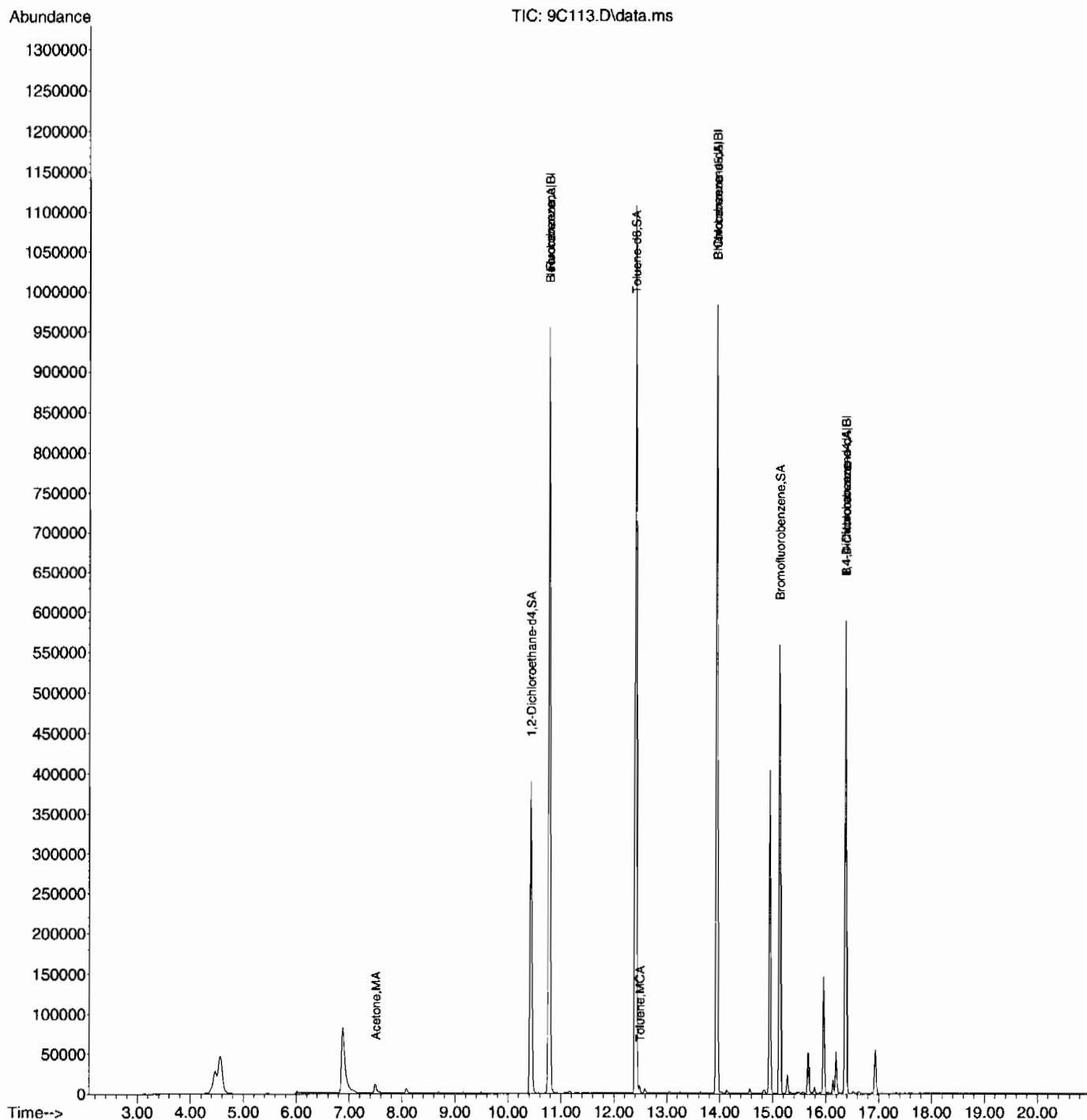
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	9.874	9.874	0.916	42	722	N.D.	
98) Isobutyl alcohol	0.000	10.159	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	11.914	11.854	1.106	43	634	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	15.092	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.515	16.527	1.009	91	998	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.918	0.000		0m	N.D.	d

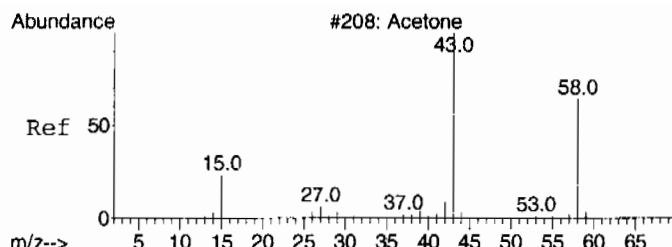
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C113.D
Acq On : 8 Mar 2010 4:01 pm
Operator : RXY1
InstName : VOA9
Sample : |248373005|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 13 Sample Multiplier: 1

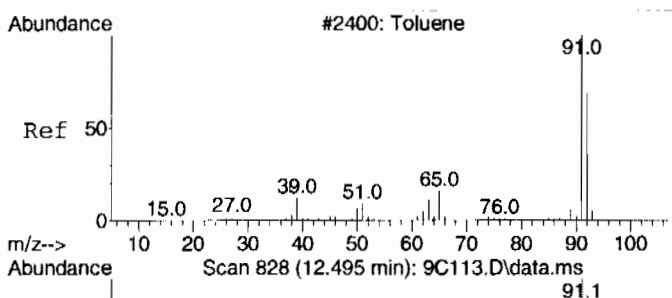
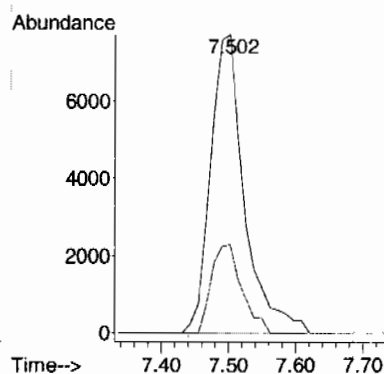
Quant Time: Mar 08 16:23:07 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





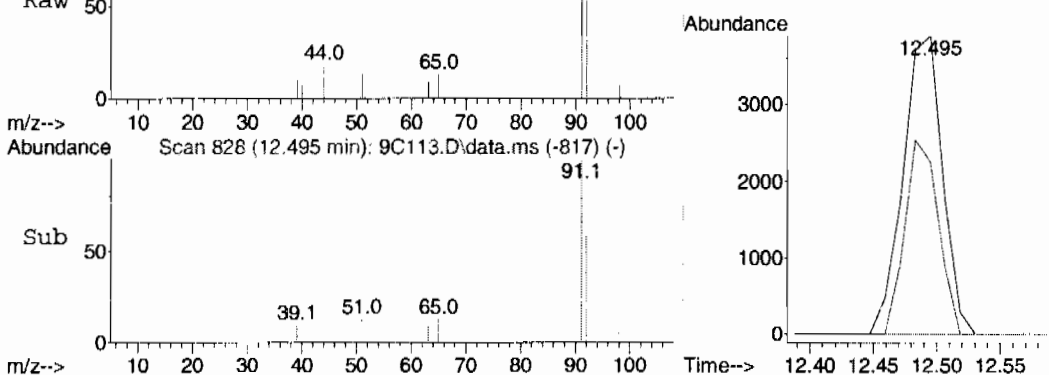
#9
Acetone
Concen: 6.61 ug/L
RT: 7.502 min Scan# 407
Delta R.T. 0.012 min
Lab File: 9C113.D
Acq: 8 Mar 2010 4:01 pm

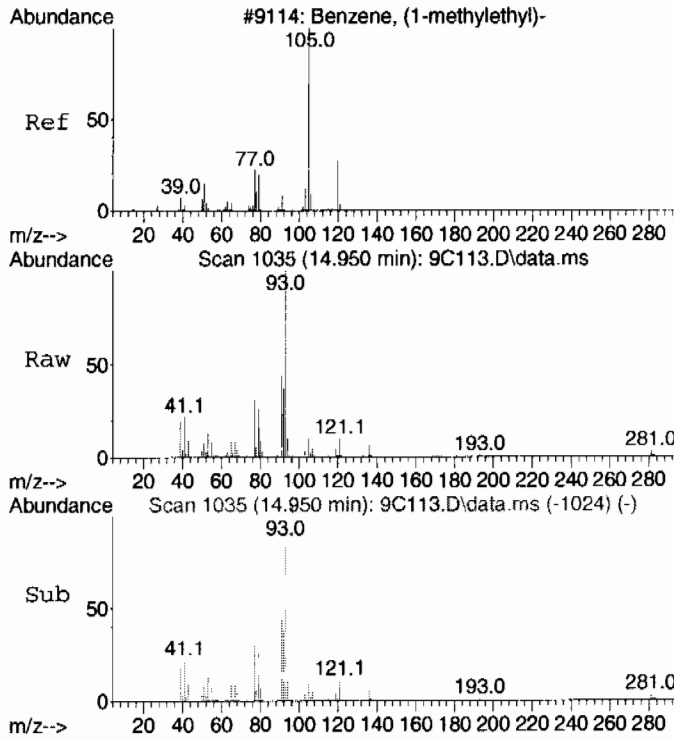
Tgt Ion: 43 Resp: 27121
Ion Ratio Lower Upper
43 100
58 26.8 3.2 63.2



#44
Toluene
Concen: 0.53 ug/L
RT: 12.495 min Scan# 828
Delta R.T. 0.012 min
Lab File: 9C113.D
Acq: 8 Mar 2010 4:01 pm

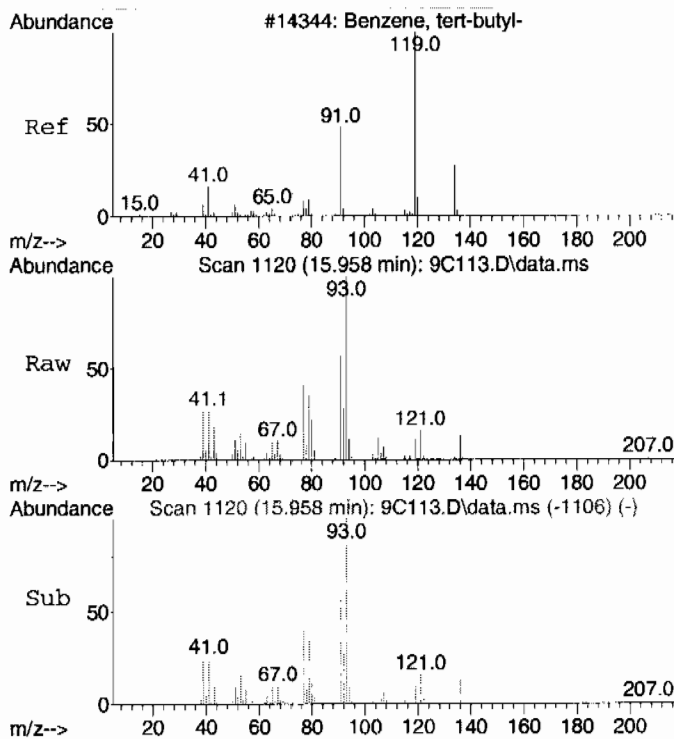
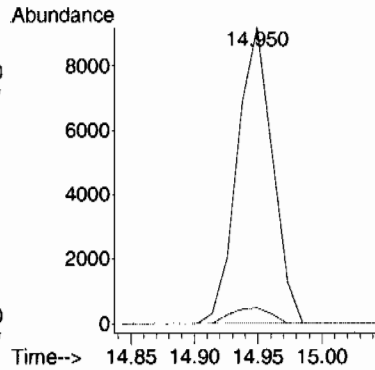
Tgt Ion: 91 Resp: 8417
Ion Ratio Lower Upper
91 100
92 55.7 33.0 93.0





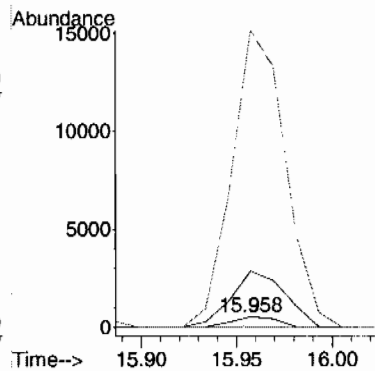
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 1.57 ug/L
RT: 14.950 min Scan# 1035
Delta R.T. 0.024 min
Lab File: 9C113.D
Acq: 8 Mar 2010 4:01 pm

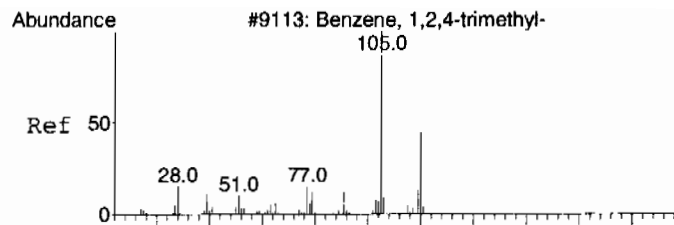
Tgt Ion:105 Resp: 17700
Ion Ratio Lower Upper
105 100
120 6.0 0.0 58.0



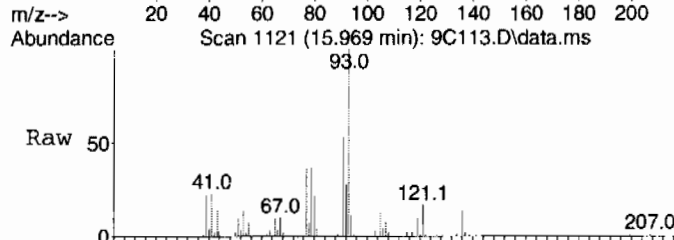
#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 0.47 ug/L
RT: 15.958 min Scan# 1120
Delta R.T. 0.084 min
Lab File: 9C113.D
Acq: 8 Mar 2010 4:01 pm

Tgt Ion:134 Resp: 859
Ion Ratio Lower Upper
134 100
119 653.6 445.6 505.6#
91 3425.7 344.7 404.7#

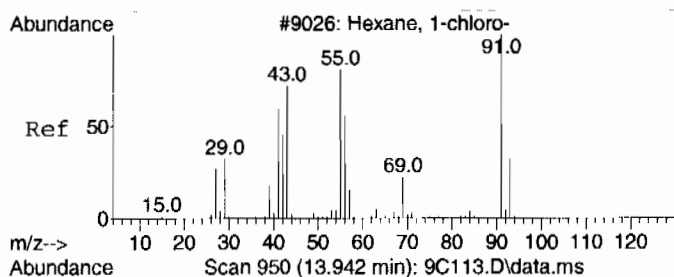
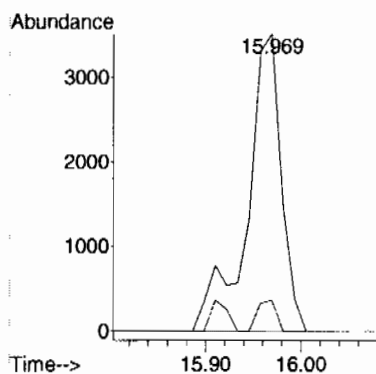
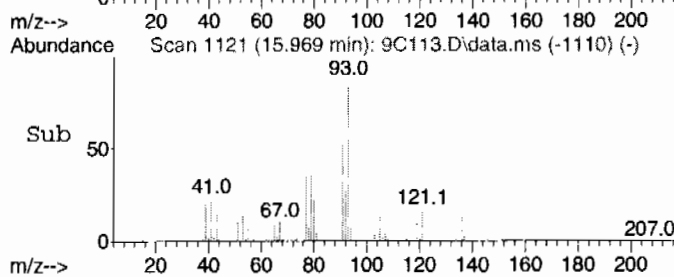




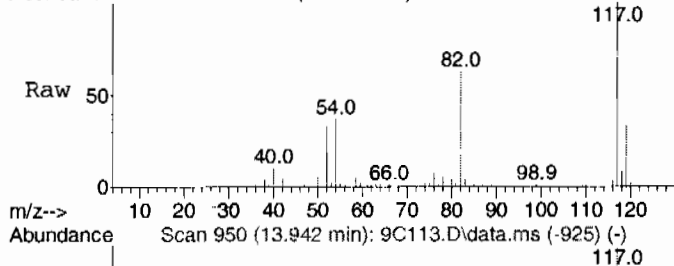
#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 0.89 ug/L
RT: 15.969 min Scan# 1121
Delta R.T. 0.059 min
Lab File: 9C113.D
Acq: 8 Mar 2010 4:01 pm



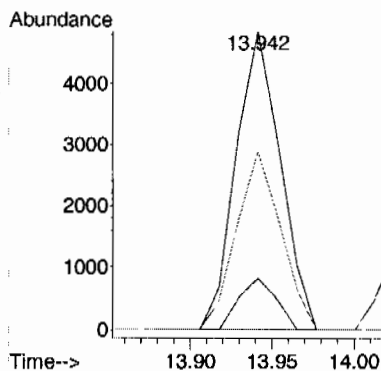
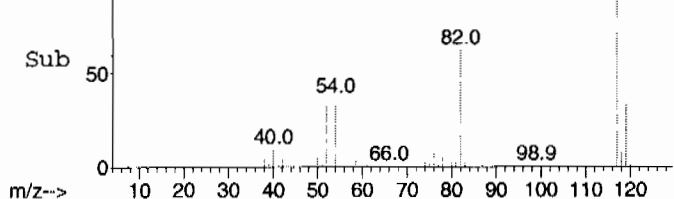
Tgt Ion: 105 Resp: 8662
Ion Ratio Lower Upper
105 100
120 5.6 18.4 78.4#

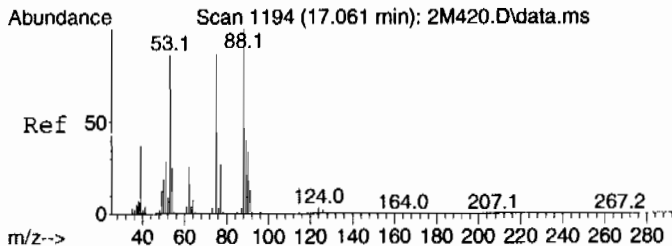


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.89 ug/L
RT: 13.942 min Scan# 950
Delta R.T. 0.119 min
Lab File: 9C113.D
Acq: 8 Mar 2010 4:01 pm



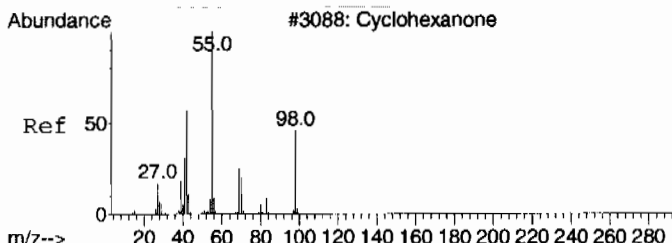
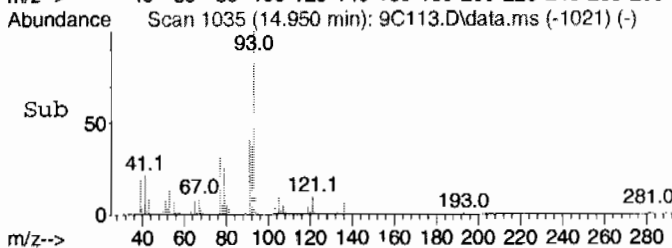
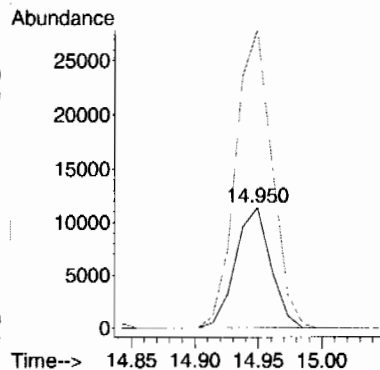
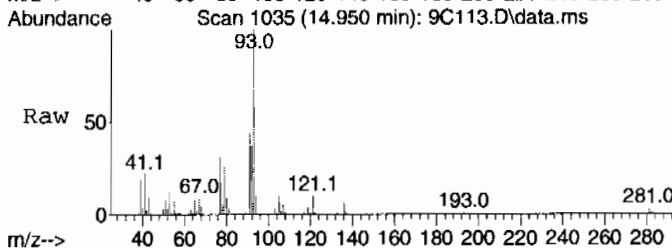
Tgt Ion: 55 Resp: 9141
Ion Ratio Lower Upper
55 100
91 14.0 74.8 134.8#
56 59.2 31.8 91.8





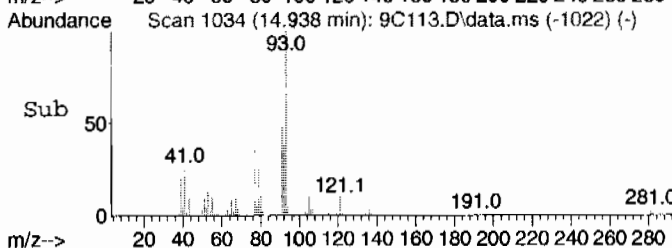
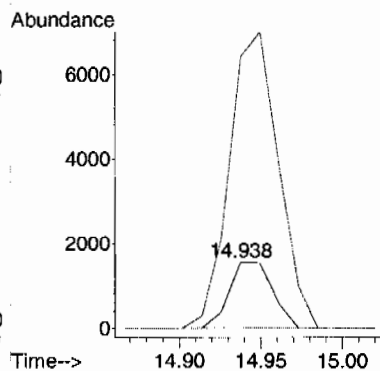
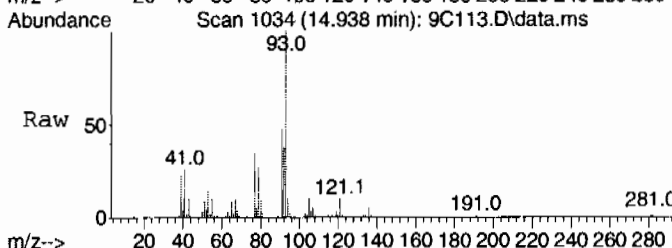
#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 19.88 ug/L
 RT: 14.950 min Scan# 1035
 Delta R.T. -0.011 min
 Lab File: 9C113.D
 Acq: 8 Mar 2010 4:01 pm

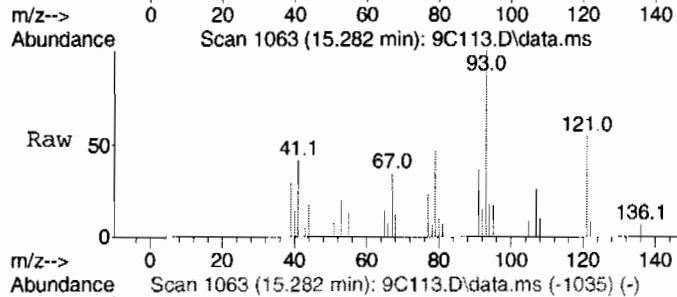
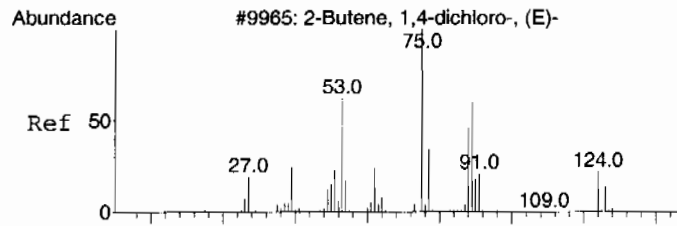
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	55.7	115.7#
77	252.6	0.0	58.7#



#108 BEFORE analyst DELETION
 Cyclohexanone
 Concen: 29.94 ug/L
 RT: 14.938 min Scan# 1034
 Delta R.T. -0.154 min
 Lab File: 9C113.D
 Acq: 8 Mar 2010 4:01 pm

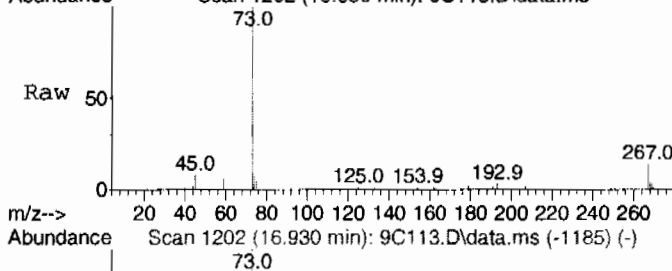
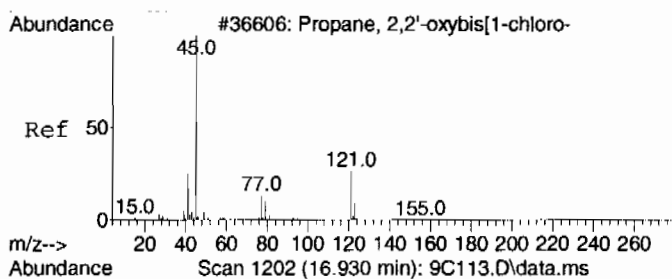
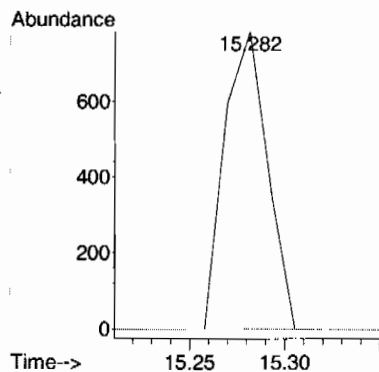
Tgt Ion	Ratio	Lower	Upper
42	100		
55	509.1	135.4	195.4#
98	0.0	25.5	85.5#





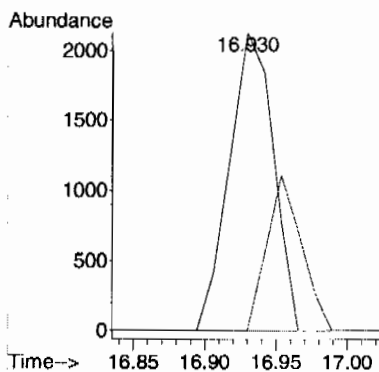
#109 BEFORE analyst DELETION
trans-1,4-Dichloro-2-butene
Concen: 1.17 ug/L
RT: 15.282 min Scan# 1063
Delta R.T. 0.036 min
Lab File: 9C113.D
Acq: 8 Mar 2010 4:01 pm

Tgt Ion: 53 Resp: 1229
Ion Ratio Lower Upper
53 100
88 0.0 10.7 70.7#
75 0.0 76.2 136.2#



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 2.38 ug/L
RT: 16.930 min Scan# 1202
Delta R.T. 0.012 min
Lab File: 9C113.D
Acq: 8 Mar 2010 4:01 pm

Tgt Ion: 45 Resp: 4574
Ion Ratio Lower Upper
45 100
121 40.9 0.0 46.4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C113.D
Acq On : 8 Mar 2010 4:01 pm
Operator : RXY1
Sample : |248373005|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 13 Sample Multiplier: 1

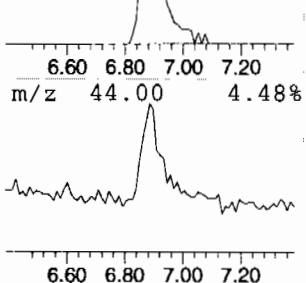
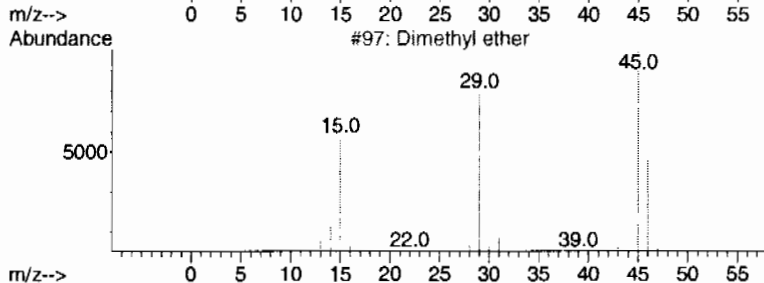
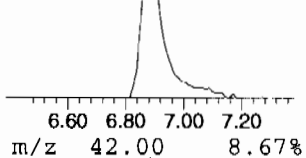
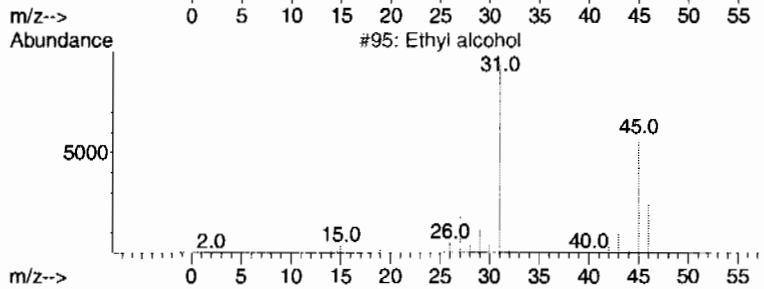
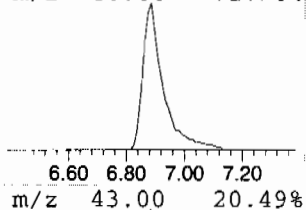
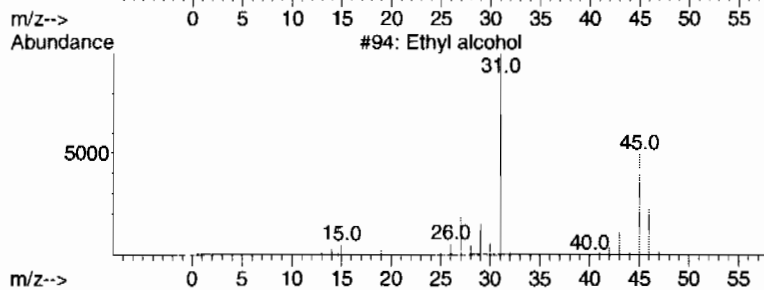
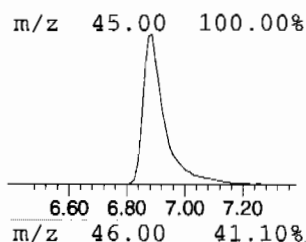
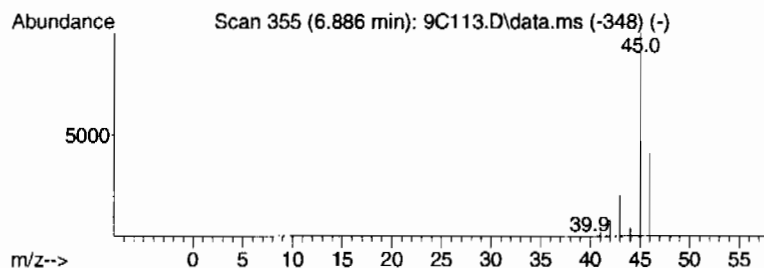
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.886	9.83 ug/L	423861	Fluorobenzene	10.775

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Ethyl alcohol	46	C2H6O	000064-17-5	74
2			Ethyl alcohol	46	C2H6O	000064-17-5	9
3			Dimethyl ether	46	C2H6O	000115-10-6	9
4			Ethyl alcohol	46	C2H6O	000064-17-5	9
5			Methane, nitroso-	45	CH3NO	000865-40-7	4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C113.D
Acq On : 8 Mar 2010 4:01 pm
Operator : RXY1
Sample : |248373005|962617|1|VOA|1|VOA8260BS|
Misc : LANTL 5.0g n/a SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Quant Title : Volatile Organics 8260B

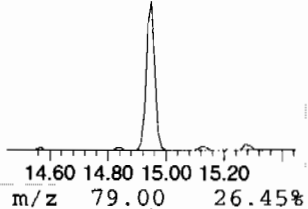
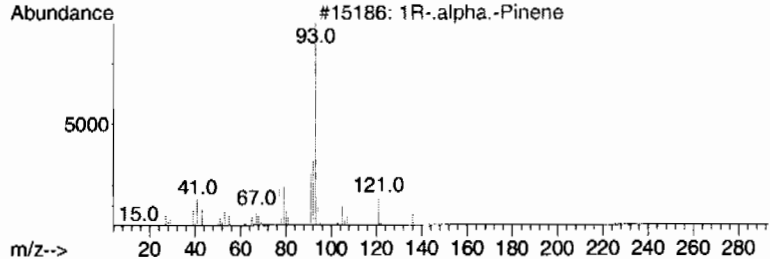
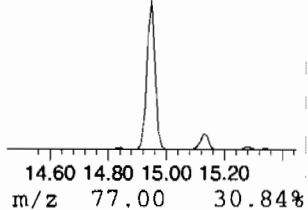
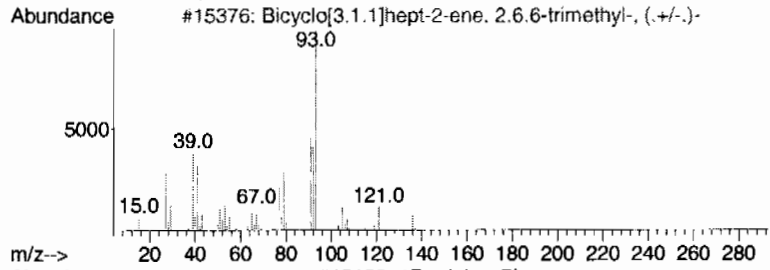
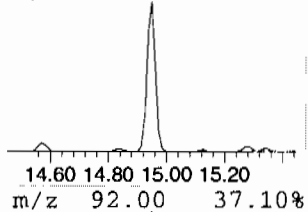
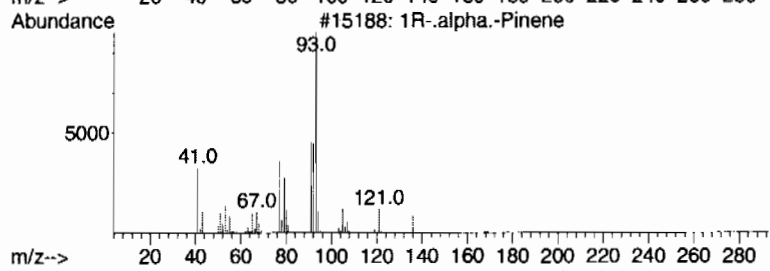
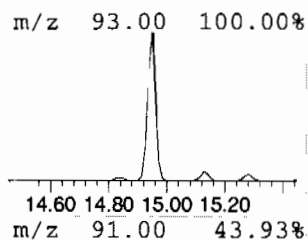
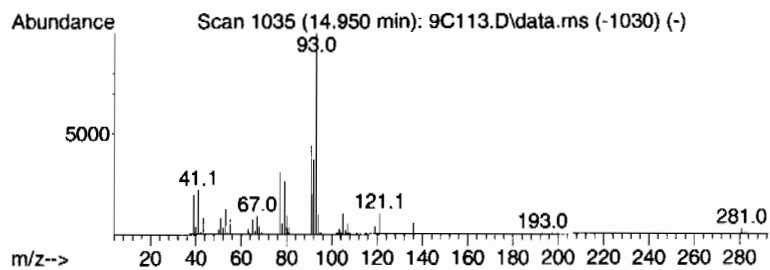
SubList :

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

Peak Number 2 1R-.alpha.-Pinene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.950	20.29 ug/L	784979	B Chlorobenzene-d5	13.942

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1R-.alpha.-Pinene	136	C10H16	007785-70-8	97
2			Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	95
3			1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
4			.alpha.-Pinene	136	C10H16	000080-56-8	93
5			1S-.alpha.-Pinene	136	C10H16	007785-26-4	91



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C113.D
Acq On : 8 Mar 2010 4:01 pm
Operator : RXY1
Sample : |248373005|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 13 Sample Multiplier: 1

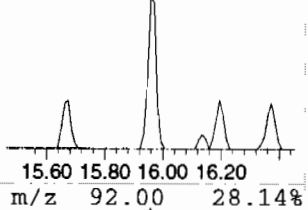
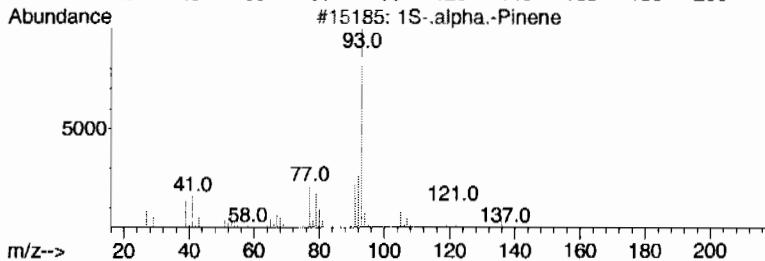
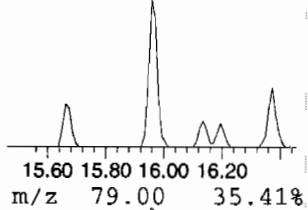
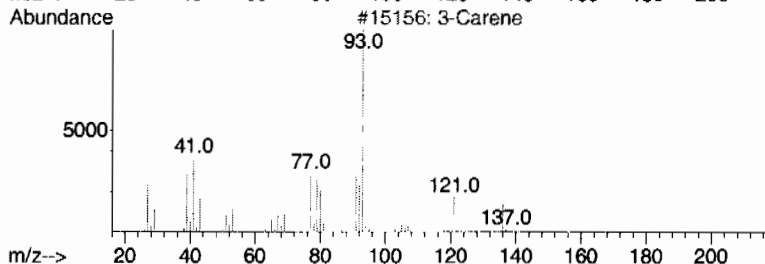
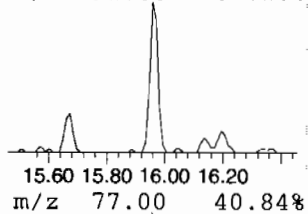
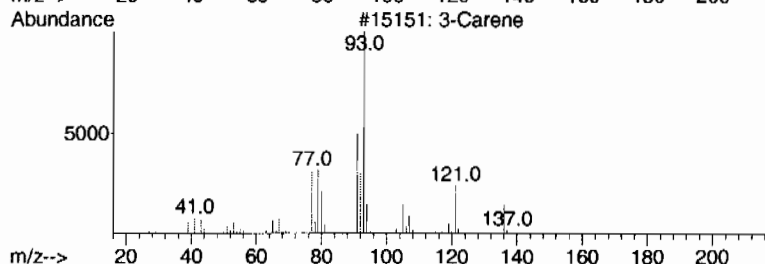
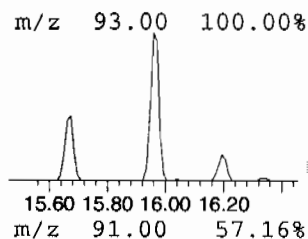
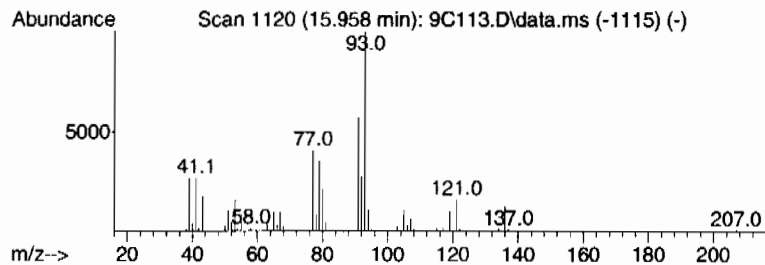
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 3 3-Carene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.958	12.73 ug/L	292105	1,4-Dichlorobenzene-d4	16.373

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3-Carene	136	C10H16	013466-78-9	95
2			3-Carene	136	C10H16	013466-78-9	95
3			1S-.alpha.-Pinene	136	C10H16	007785-26-4	95
4			Cyclopropane, 1,1-dimethyl-2-(3-...	136	C10H16	068998-21-0	93
5			3-Carene	136	C10H16	013466-78-9	90



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C113.D
Acq On : 8 Mar 2010 4:01 pm
Operator : RXY1
Sample : |248373005|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 13 Sample Multiplier: 1

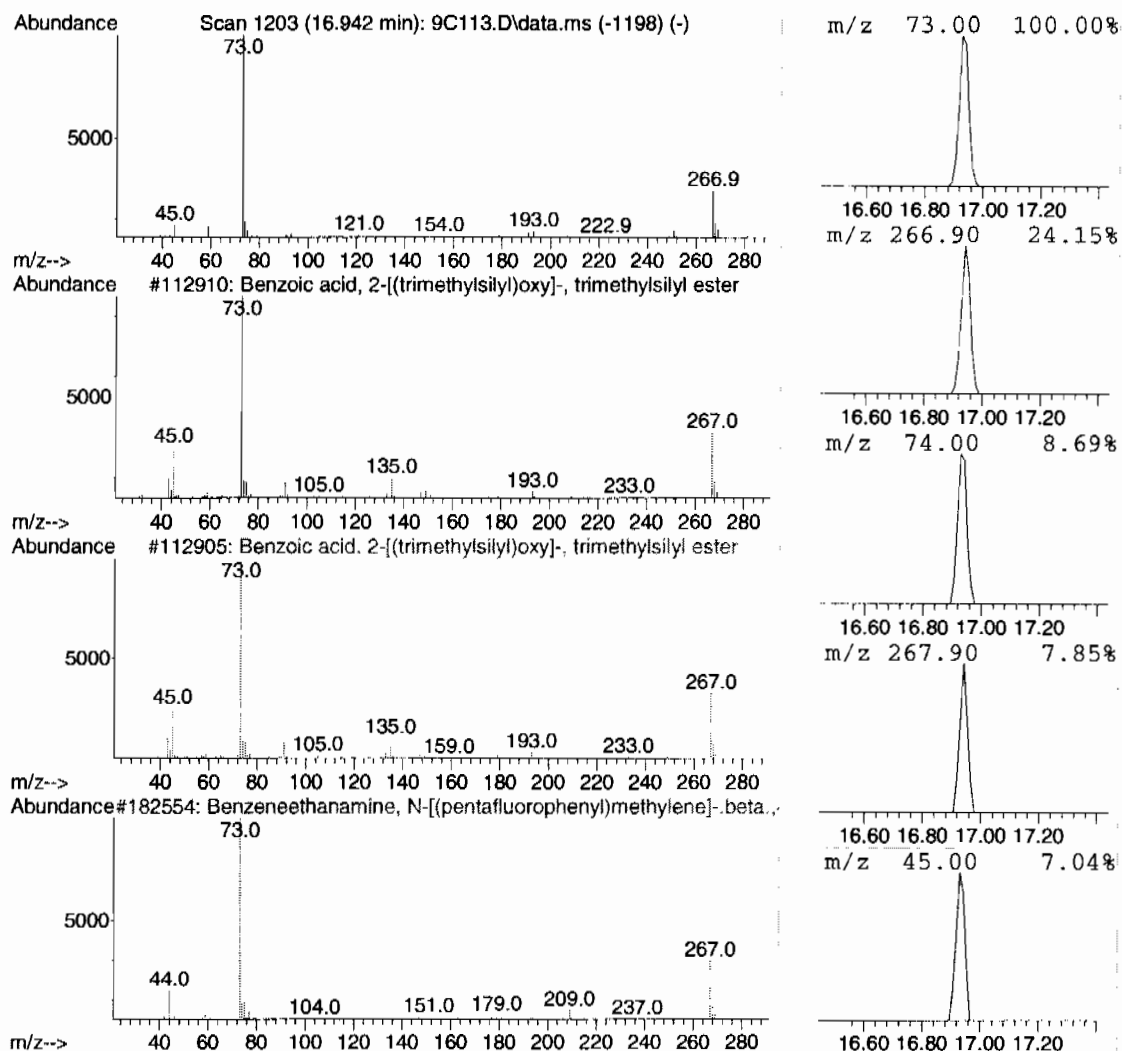
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 4 unknown siloxane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.942	5.61 ug/L	128634	B 1,4-Dichlorobenzene-d4	16.373

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester	282	C13H22O3Si2	003789-85-3	45
2			Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester	282	C13H22O3Si2	003789-85-3	42
3			Benzeneethanamine, N-[(pentafluorophenyl)methylene]-, beta., (Z)-	475	C21H26F5NO2Si2	055429-85-1	36
4			4,6-Dioxo-3,8-disiladecane, 5-(2,2,4,4-tetramethyl-1,3-dioxane-5-yl)-	532	C32H60O2Si2	109629-49-4	36
5			Tetrasiloxane, 1,1,3,3,5,5,7,7-octa-(trimethylsilyl)-	282	C8H26O3Si4	001000-05-1	33



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C113.D
Acq On : 8 Mar 2010 4:01 pm
Operator : RXY1
Sample : |248373005|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	6.886	9.8	ug/L	423861	1	10.775	2156790	50.0
1R-.alpha.-Pinene	14.950	20.3	ug/L	784979	4	13.942	1934320	50.0
3-Carene	15.958	12.7	ug/L	292105	5	16.373	1147140	50.0
unknown siloxane	16.942	5.6	ug/L	128634	6	16.373	1147140	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373006
 Client ID: RE36-10-7499
 Batch ID: 962617
 Run Date: 03/08/2010 16:32
 Prep Date: 03/08/2010 12:12
 Data File: 030810V99C114.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 27
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.37	ug/kg	0.466	1.37
74-87-3	Chloromethane	U	1.37	ug/kg	0.411	1.37
75-01-4	Vinyl chloride	U	1.37	ug/kg	0.411	1.37
74-83-9	Bromomethane	U	1.37	ug/kg	0.411	1.37
75-00-3	Chloroethane	U	1.37	ug/kg	0.411	1.37
75-69-4	Trichlorofluoromethane	U	1.37	ug/kg	0.411	1.37
67-64-1	Acetone	J	3.16	ug/kg	2.27	6.85
75-35-4	1,1-Dichloroethylene	U	1.37	ug/kg	0.411	1.37
74-88-4	Iodomethane	U	6.85	ug/kg	2.19	6.85
75-09-2	Methylene chloride	U	6.85	ug/kg	2.74	6.85
75-15-0	Carbon disulfide	U	6.85	ug/kg	1.71	6.85
156-60-5	trans-1,2-Dichloroethylene	U	1.37	ug/kg	0.411	1.37
75-34-3	1,1-Dichloroethane	U	1.37	ug/kg	0.411	1.37
78-93-3	2-Butanone	U	6.85	ug/kg	2.05	6.85
156-59-2	cis-1,2-Dichloroethylene	U	1.37	ug/kg	0.411	1.37
594-20-7	2,2-Dichloropropane	U	1.37	ug/kg	0.411	1.37
67-66-3	Chloroform	U	1.37	ug/kg	0.411	1.37
74-97-5	Bromochloromethane	U	1.37	ug/kg	0.452	1.37
71-55-6	1,1,1-Trichloroethane	U	1.37	ug/kg	0.411	1.37
563-58-6	1,1-Dichloropropene	U	1.37	ug/kg	0.411	1.37
56-23-5	Carbon tetrachloride	U	1.37	ug/kg	0.411	1.37
107-06-2	1,2-Dichloroethane	U	1.37	ug/kg	0.411	1.37
71-43-2	Benzene	U	1.37	ug/kg	0.411	1.37
79-01-6	Trichloroethylene	U	1.37	ug/kg	0.452	1.37
78-87-5	1,2-Dichloropropane	U	1.37	ug/kg	0.411	1.37
75-27-4	Bromodichloromethane	U	1.37	ug/kg	0.411	1.37
74-95-3	Dibromomethane	U	1.37	ug/kg	0.411	1.37
108-10-1	4-Methyl-2-pentanone	U	6.85	ug/kg	1.71	6.85
10061-01-5	cis-1,3-Dichloropropylene	U	1.37	ug/kg	0.411	1.37
108-88-3	Toluene	U	1.37	ug/kg	0.411	1.37
10061-02-6	trans-1,3-Dichloropropylene	U	1.37	ug/kg	0.411	1.37
79-00-5	1,1,2-Trichloroethane	U	1.37	ug/kg	0.411	1.37
591-78-6	2-Hexanone	U	6.85	ug/kg	2.05	6.85
142-28-9	1,3-Dichloropropane	U	1.37	ug/kg	0.411	1.37
127-18-4	Tetrachloroethylene	U	1.37	ug/kg	0.411	1.37
124-48-1	Dibromochloromethane	U	1.37	ug/kg	0.411	1.37
106-93-4	1,2-Dibromoethane	U	1.37	ug/kg	0.411	1.37
108-90-7	Chlorobenzene	U	1.37	ug/kg	0.411	1.37

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373006
 Client ID: RE36-10-7499
 Batch ID: 962617
 Run Date: 03/08/2010 16:32
 Prep Date: 03/08/2010 12:12
 Data File: 030810V99C114.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 27
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.37	ug/kg	0.411	1.37
179601-23-1	m,p-Xylenes	U	2.74	ug/kg	0.411	2.74
95-47-6	o-Xylene	U	1.37	ug/kg	0.411	1.37
100-42-5	Styrene	U	1.37	ug/kg	0.411	1.37
75-25-2	Bromoform	U	1.37	ug/kg	0.411	1.37
79-34-5	1,1,2,2-Tetrachloroethane	U	1.37	ug/kg	0.411	1.37
96-18-4	1,2,3-Trichloropropane	U	1.37	ug/kg	0.411	1.37
108-86-1	Bromobenzene	U	1.37	ug/kg	0.411	1.37
103-65-1	n-Propylbenzene	U	1.37	ug/kg	0.411	1.37
95-49-8	2-Chlorotoluene	U	1.37	ug/kg	0.411	1.37
98-82-8	Isopropylbenzene	U	1.37	ug/kg	0.411	1.37
108-67-8	1,3,5-Trimethylbenzene	U	1.37	ug/kg	0.411	1.37
106-43-4	4-Chlorotoluene	U	1.37	ug/kg	0.411	1.37
98-06-6	tert-Butylbenzene	U	1.37	ug/kg	0.411	1.37
95-63-6	1,2,4-Trimethylbenzene	U	1.37	ug/kg	0.411	1.37
135-98-8	sec-Butylbenzene	U	1.37	ug/kg	0.411	1.37
99-87-6	4-Isopropyltoluene	U	1.37	ug/kg	0.411	1.37
541-73-1	1,3-Dichlorobenzene	U	1.37	ug/kg	0.411	1.37
106-46-7	1,4-Dichlorobenzene	U	1.37	ug/kg	0.411	1.37
104-51-8	n-Butylbenzene	U	1.37	ug/kg	0.411	1.37
96-12-8	1,2-Dibromo-3-chloropropane	U	1.37	ug/kg	0.411	1.37
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.85	ug/kg	2.19	6.85
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.37	ug/kg	0.411	1.37
95-50-1	1,2-Dichlorobenzene	U	1.37	ug/kg	0.411	1.37

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	16.8	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C114.D
Acq On : 8 Mar 2010 4:32 pm
Operator : RXY1
InstName : VOA9
Sample : |248373006|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 08 16:54:48 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	890506	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	513218	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	153054	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	890506	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	513218	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	153063	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	314895	52.62	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	105.24%			
43) Toluene-d8	12.412	12.412	0.890	98	750983	56.95	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	113.90%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	231732	62.25	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	124.50%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659	59	180	N.D.		
9) Acetone	7.490	7.490	0.695	43	9209	2.31	ug/L	80
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	0.000	7.858	0.000		0	N.D.		
13) Methyl acetate	0.000	7.882	0.000		0	N.D.		
14) Carbon disulfide	7.893	7.906	0.733	76	279	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	3634	Below Cal	#	78
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.483	9.483	0.880	43	847	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.218	10.230	0.948	56	781	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	0.000	10.538	0.000		0	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	6264	Below Cal	#	21
34) Trichloroethylene	11.166	11.167	1.036	95	189	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C114.D
Acq On : 8 Mar 2010 4:32 pm
Operator : RXY1
InstName : VOA9
Sample : |248373006|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 08 16:54:48 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	3395	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.016	13.028	0.934	43	206	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.024	14.024	1.006	91	443	N.D.	
55) m,p-Xylenes	0.000	14.131	0.000		0	N.D.	
56) o-Xylene	0.000	14.570	0.000		0	N.D.	
57) Styrene	0.000	14.570	0.000		0	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.341	15.353	0.937	91	756	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.495	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	15.661	15.614	0.957	91	2198	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972	105	217	N.D.	
71) sec-Butylbenzene	0.000	16.112	0.000		0	N.D.	
72) 4-Isopropyltoluene	16.218	16.230	0.991	119	1201	N.D.	
73) 1,3-Dichlorobenzene	16.408	16.313	1.002	146	181	N.D.	
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	181	N.D.	
75) n-Butylbenzene	0.000	16.693	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	519	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.573	7.550	0.703	45	2455	N.D.	
88) Allyl chloride	0.000	7.929	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.483	9.483	0.880	43	847	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C114.D
Acq On : 8 Mar 2010 4:32 pm
Operator : RXY1
InstName : VOA9
Sample : |248373006|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 08 16:54:48 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

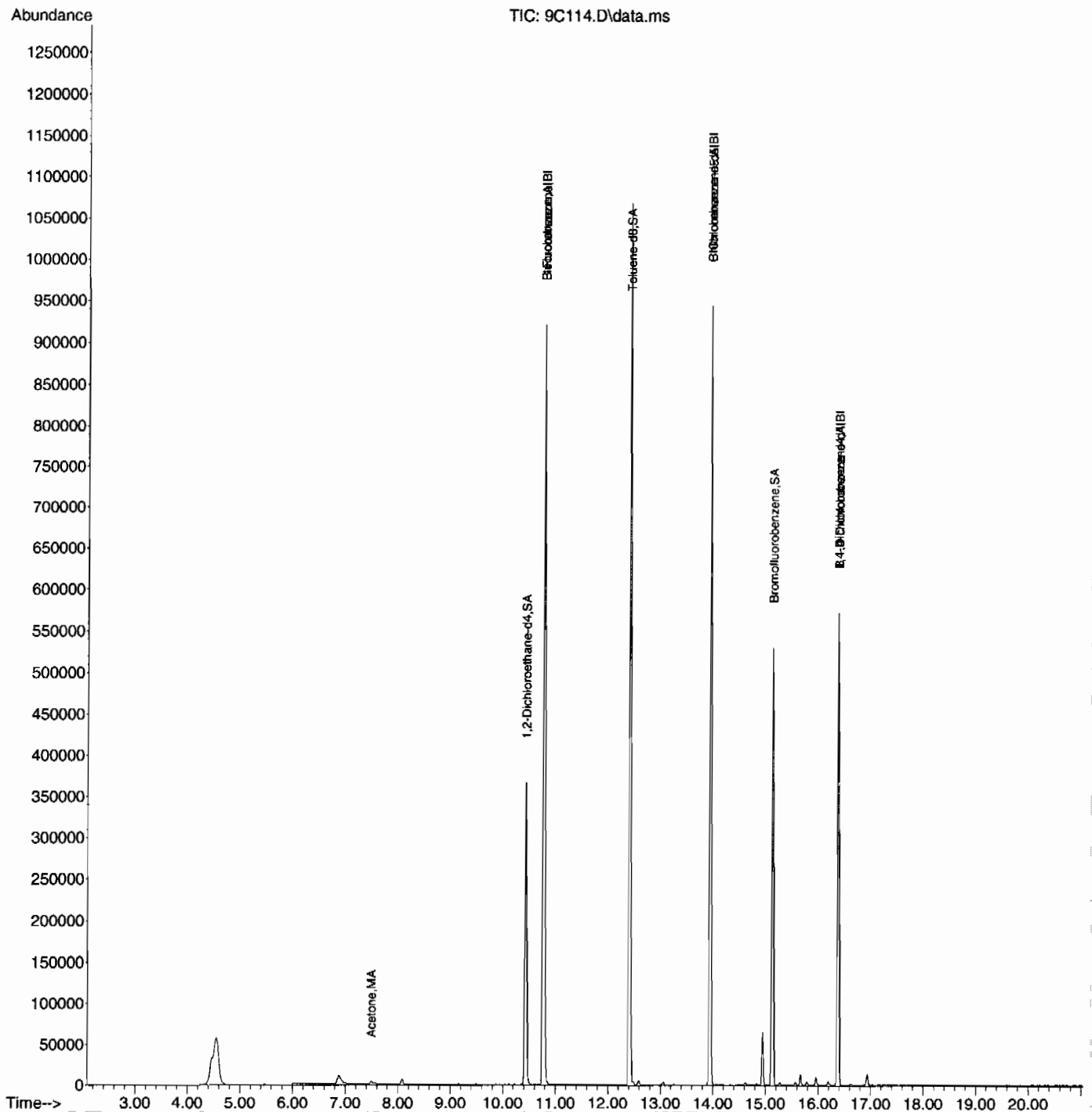
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	9.874	9.874	0.916	42	236	N.D.	
98) Isobutyl alcohol	10.218	10.159	0.948	41	210	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	11.914	11.854	1.106	43	186	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0m	N.D.	d
108) Cyclohexanone	14.937	15.092	0.912	42	181	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.372	16.527	1.000	91	208	N.D.	
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034	45	1285	N.D.	

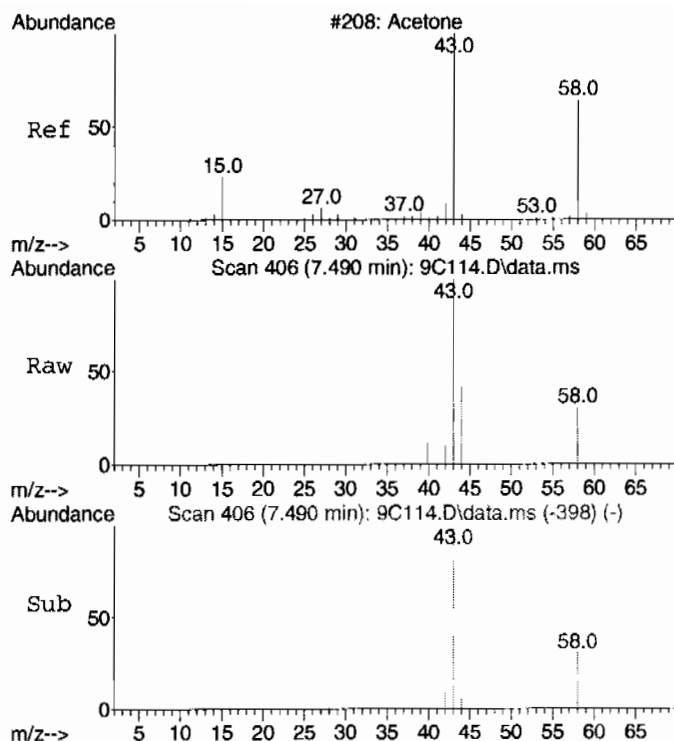
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C114.D
Acq On : 8 Mar 2010 4:32 pm
Operator : RXY1
InstName : VOA9
Sample : |248373006|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 08 16:54:48 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

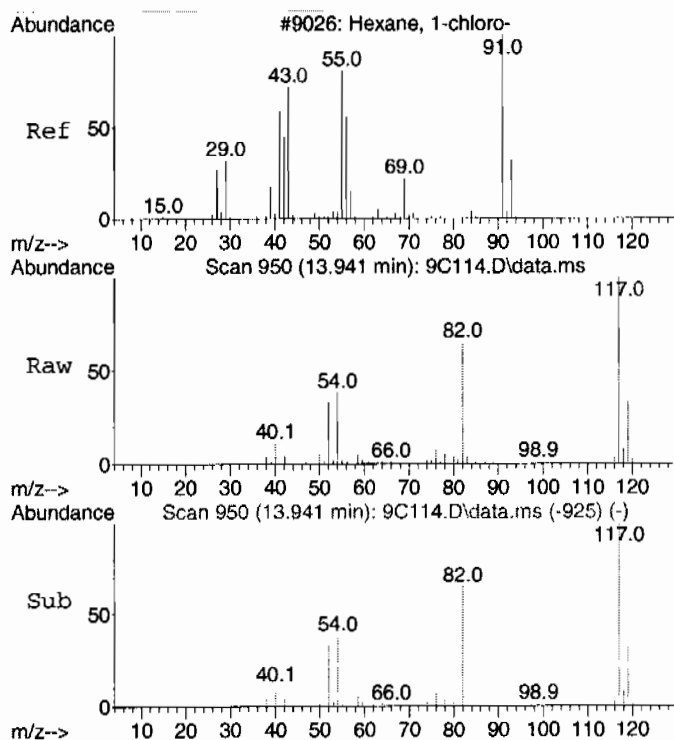
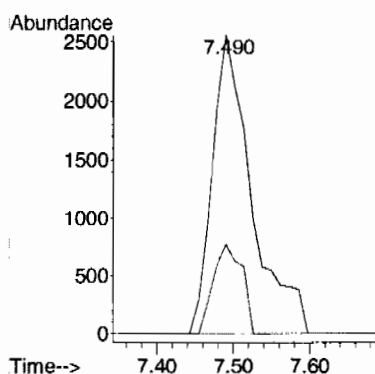




#9
Acetone
Concen: 2.31 ug/L
RT: 7.490 min Scan# 406
Delta R.T. 0.000 min
Lab File: 9C114.D
Acq: 8 Mar 2010 4:32 pm

Tgt Ion: 43 Resp: 9209

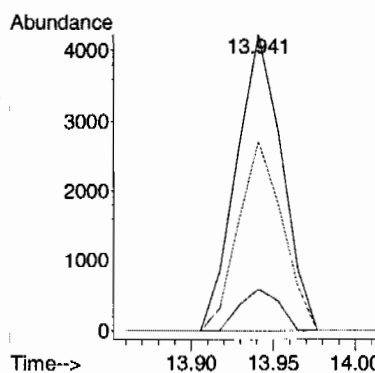
Ion	Ratio	Lower	Upper
43	100		
58	22.0	3.2	63.2

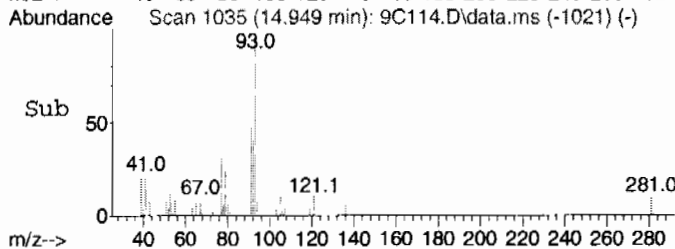
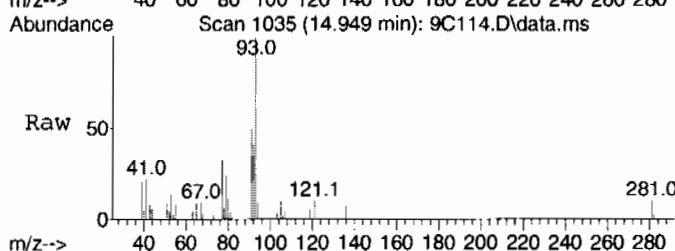
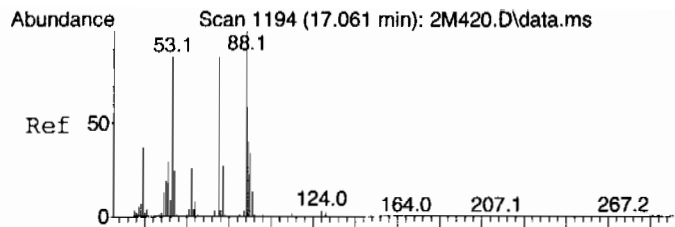


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.71 ug/L
RT: 13.941 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C114.D
Acq: 8 Mar 2010 4:32 pm

Tgt Ion: 55 Resp: 8167

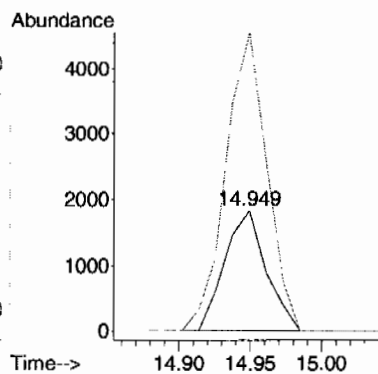
Ion	Ratio	Lower	Upper
55	100		
91	11.8	74.8	134.8#
56	61.7	31.8	91.8





#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 3.48 ug/L
 RT: 14.949 min Scan# 1035
 Delta R.T. -0.012 min
 Lab File: 9C114.D
 Acq: 8 Mar 2010 4:32 pm

Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	55.7	115.7#
77	246.2	0.0	58.7#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C114.D
Acq On : 8 Mar 2010 4:32 pm
Operator : RXY1
Sample : |248373006|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 14 Sample Multiplier: 1

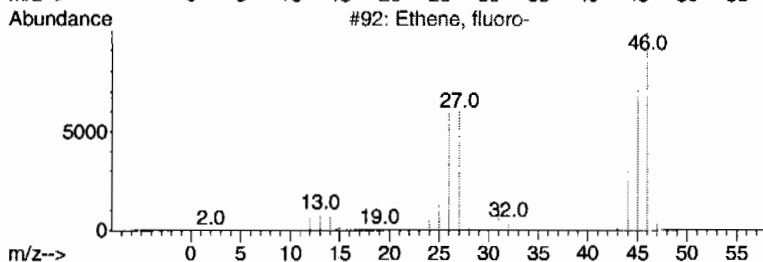
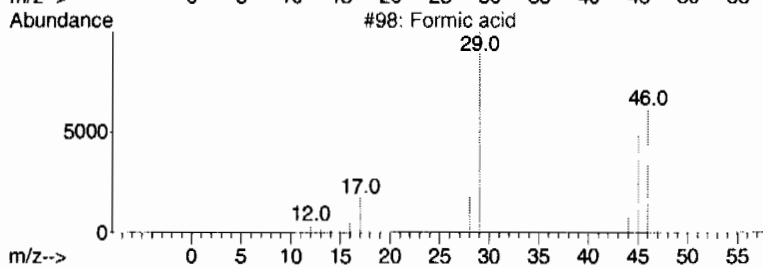
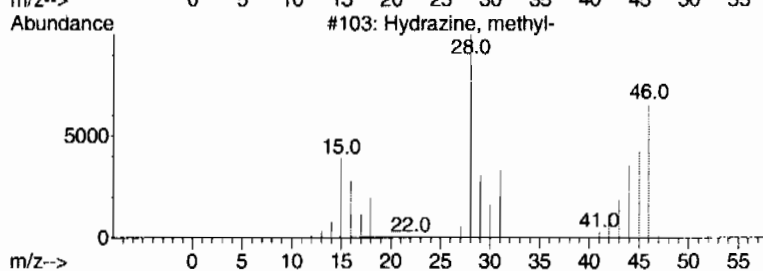
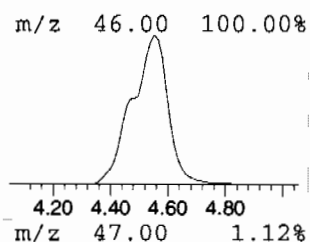
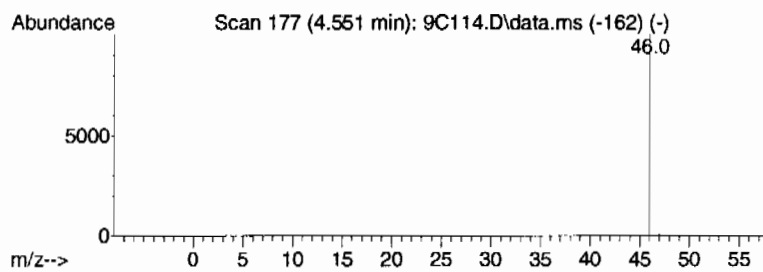
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.551	12.25 ug/L	510193	Fluorobenzene	10.775

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2			Formic acid	46	CH2O2	000064-18-6	4
3			Ethene, fluoro-	46	C2H3F	000075-02-5	3
4			Formic acid	46	CH2O2	000064-18-6	3
5			Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C114.D
Acq On : 8 Mar 2010 4:32 pm
Operator : RXY1
Sample : |248373006|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---			
					#	RT	Resp	Conc
unknown hydroca...	4.551	12.3	ug/L	510193	1	10.775	2082660	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373007
 Client ID: RE36-10-7497
 Batch ID: 962617
 Run Date: 03/08/2010 17:02
 Prep Date: 03/08/2010 12:13
 Data File: 030810V99C115.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 32.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.48	ug/kg	0.504	1.48
74-87-3	Chloromethane	U	1.48	ug/kg	0.444	1.48
75-01-4	Vinyl chloride	U	1.48	ug/kg	0.444	1.48
74-83-9	Bromomethane	U	1.48	ug/kg	0.444	1.48
75-00-3	Chloroethane	U	1.48	ug/kg	0.444	1.48
75-69-4	Trichlorofluoromethane	U	1.48	ug/kg	0.444	1.48
67-64-1	Acetone	J	3.53	ug/kg	2.46	7.41
75-35-4	1,1-Dichloroethylene	J	0.711	ug/kg	0.444	1.48
74-88-4	Iodomethane	U	7.41	ug/kg	2.37	7.41
75-09-2	Methylene chloride	U	7.41	ug/kg	2.96	7.41
75-15-0	Carbon disulfide	U	7.41	ug/kg	1.85	7.41
156-60-5	trans-1,2-Dichloroethylene	U	1.48	ug/kg	0.444	1.48
75-34-3	1,1-Dichloroethane	U	1.48	ug/kg	0.444	1.48
78-93-3	2-Butanone	U	7.41	ug/kg	2.22	7.41
156-59-2	cis-1,2-Dichloroethylene	U	1.48	ug/kg	0.444	1.48
594-20-7	2,2-Dichloropropane	U	1.48	ug/kg	0.444	1.48
67-66-3	Chloroform	U	1.48	ug/kg	0.444	1.48
74-97-5	Bromochloromethane	U	1.48	ug/kg	0.489	1.48
71-55-6	1,1,1-Trichloroethane	U	1.48	ug/kg	0.444	1.48
563-58-6	1,1-Dichloropropene	U	1.48	ug/kg	0.444	1.48
56-23-5	Carbon tetrachloride	U	1.48	ug/kg	0.444	1.48
107-06-2	1,2-Dichloroethane	U	1.48	ug/kg	0.444	1.48
71-43-2	Benzene	U	1.48	ug/kg	0.444	1.48
79-01-6	Trichloroethylene	U	1.48	ug/kg	0.489	1.48
78-87-5	1,2-Dichloropropane	U	1.48	ug/kg	0.444	1.48
75-27-4	Bromodichloromethane	U	1.48	ug/kg	0.444	1.48
74-95-3	Dibromomethane	U	1.48	ug/kg	0.444	1.48
108-10-1	4-Methyl-2-pentanone	U	7.41	ug/kg	1.85	7.41
10061-01-5	cis-1,3-Dichloropropylene	U	1.48	ug/kg	0.444	1.48
108-88-3	Toluene	J	0.874	ug/kg	0.444	1.48
10061-02-6	trans-1,3-Dichloropropylene	U	1.48	ug/kg	0.444	1.48
79-00-5	1,1,2-Trichloroethane	U	1.48	ug/kg	0.444	1.48
591-78-6	2-Hexanone	U	7.41	ug/kg	2.22	7.41
142-28-9	1,3-Dichloropropane	U	1.48	ug/kg	0.444	1.48
127-18-4	Tetrachloroethylene	U	1.48	ug/kg	0.444	1.48
124-48-1	Dibromochloromethane	U	1.48	ug/kg	0.444	1.48
106-93-4	1,2-Dibromoethane	U	1.48	ug/kg	0.444	1.48
108-90-7	Chlorobenzene	U	1.48	ug/kg	0.444	1.48

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373007

Client ID: RE36-10-7497
Batch ID: 962617
Run Date: 03/08/2010 17:02
Prep Date: 03/08/2010 12:13
Data File: 030810V99C115.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 32.5
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.48	ug/kg	0.444	1.48
179601-23-1	m,p-Xylenes	U	2.96	ug/kg	0.444	2.96
95-47-6	o-Xylene	U	1.48	ug/kg	0.444	1.48
100-42-5	Styrene	U	1.48	ug/kg	0.444	1.48
75-25-2	Bromoform	U	1.48	ug/kg	0.444	1.48
79-34-5	1,1,2,2-Tetrachloroethane	U	1.48	ug/kg	0.444	1.48
96-18-4	1,2,3-Trichloropropane	U	1.48	ug/kg	0.444	1.48
108-86-1	Bromobenzene	U	1.48	ug/kg	0.444	1.48
103-65-1	n-Propylbenzene	U	1.48	ug/kg	0.444	1.48
95-49-8	2-Chlorotoluene	U	1.48	ug/kg	0.444	1.48
98-82-8	Isopropylbenzene	U	1.48	ug/kg	0.444	1.48
108-67-8	1,3,5-Trimethylbenzene	U	1.48	ug/kg	0.444	1.48
106-43-4	4-Chlorotoluene	U	1.48	ug/kg	0.444	1.48
98-06-6	tert-Butylbenzene	U	1.48	ug/kg	0.444	1.48
95-63-6	1,2,4-Trimethylbenzene	U	1.48	ug/kg	0.444	1.48
135-98-8	sec-Butylbenzene	U	1.48	ug/kg	0.444	1.48
99-87-6	4-Isopropyltoluene	J	1.17	ug/kg	0.444	1.48
541-73-1	1,3-Dichlorobenzene	U	1.48	ug/kg	0.444	1.48
106-46-7	1,4-Dichlorobenzene	U	1.48	ug/kg	0.444	1.48
104-51-8	n-Butylbenzene	U	1.48	ug/kg	0.444	1.48
96-12-8	1,2-Dibromo-3-chloropropane	U	1.48	ug/kg	0.444	1.48
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.41	ug/kg	2.37	7.41
630-20-6	1,1,1,2-Tetrachloroethane	U	1.48	ug/kg	0.444	1.48
95-50-1	1,2-Dichlorobenzene	U	1.48	ug/kg	0.444	1.48

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	21.8	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	14.95	12.1	ug/kg	97	NJ

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C115.D
Acq On : 8 Mar 2010 5:02 pm
Operator : RXY1
InstName : VOA9
Sample : |248373007|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 10:59:51 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	757191	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	437353	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	120337	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	757191	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	437353	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	120347	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	269482	52.96	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	105.92%			
43) Toluene-d8	12.412	12.412	0.890	98	643842	57.30	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	114.60%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	185430	63.35	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	126.70%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.490	7.490	0.695	43	8061	2.38	ug/L	84
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	3309	0.48	ug/L	89
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	8.083	7.858	0.750	41	401	Below Cal	#	35
13) Methyl acetate	7.882	7.882	0.731	43	635	Below Cal	#	67
14) Carbon disulfide	7.905	7.906	0.734	76	216	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	3562	Below Cal	#	80
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.494	9.483	0.881	43	732	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.230	10.230	0.949	56	5293	0.61	ug/L	85
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	10.526	10.538	0.977	78	402	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	5637	Below Cal	#	21
34) Trichloroethylene	0.000	11.167	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C115.D
Acq On : 8 Mar 2010 5:02 pm
Operator : RXY1
InstName : VOA9
Sample : |248373007|962617|1|VOA|1|VOA8260BS|
Misc : LANTL 5.0g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 10:59:51 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	7476	0.59 ug/L	89
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935	43	199	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	0.000	14.024	0.000		0m	N.D. d	
55) m,p-Xylenes	14.131	14.131	1.014	106	1095	N.D.	
56) o-Xylene	14.570	14.570	1.045	106	460	N.D.	
57) Styrene	14.570	14.570	1.045	104	180	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	0.000	15.353	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	197	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.614	0.000		0m	N.D. d	
69) tert-Butylbenzene	15.957	15.874	0.975	134	191	N.D.	
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	1052	N.D.	
71) sec-Butylbenzene	16.195	16.112	0.989	105	200	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	5939	0.79 ug/L #	68
73) 1,3-Dichlorobenzene	0.000	16.313	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	16.408	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.693	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.337	19.349	1.181	128	249	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.561	7.550	0.702	45	1374	N.D.	
88) Allyl chloride	0.000	7.929	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.494	9.483	0.881	43	732	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C115.D
Acq On : 8 Mar 2010 5:02 pm
Operator : RXY1
InstName : VOA9
Sample : |248373007|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 10:59:51 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

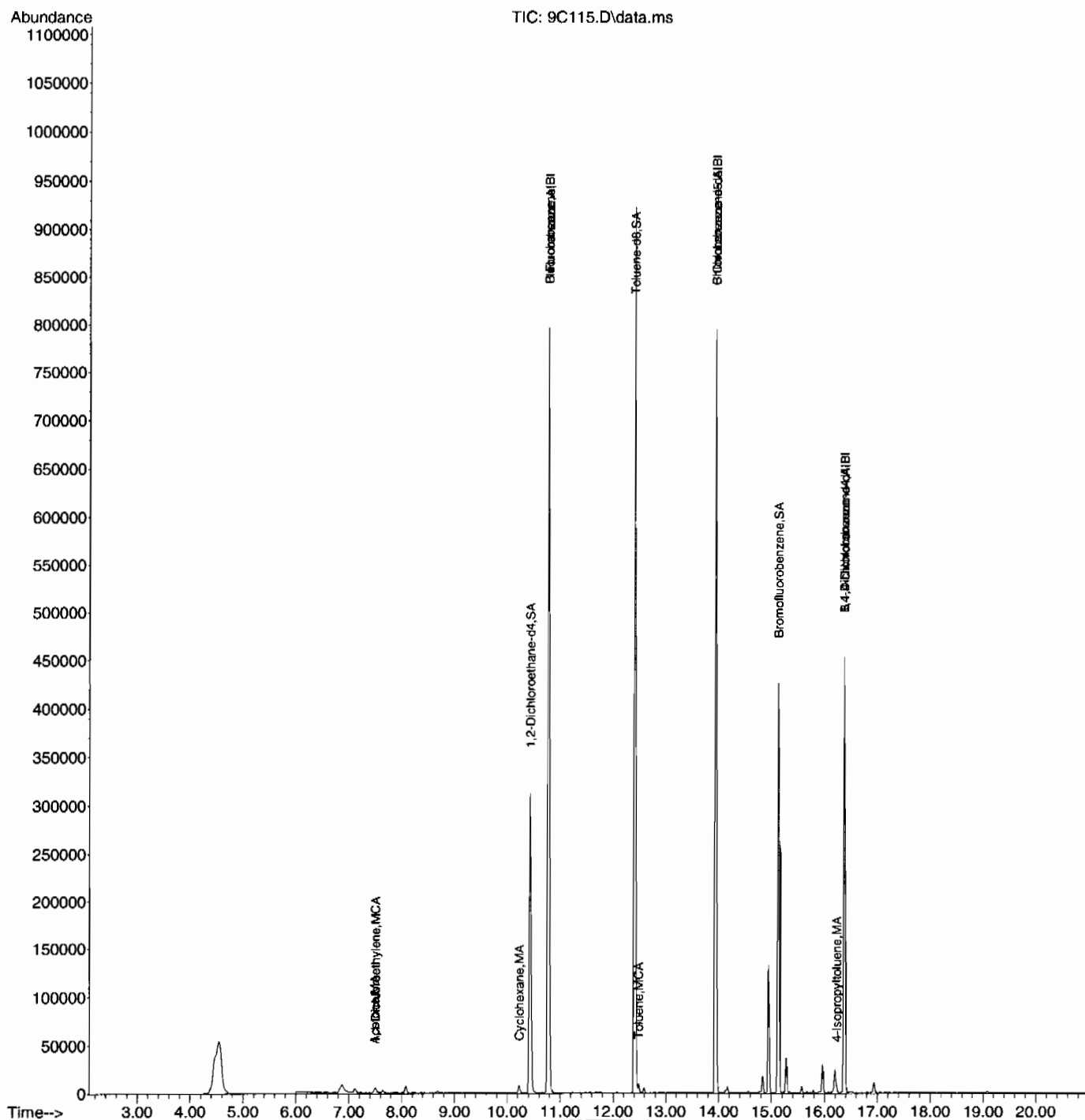
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	9.886	9.874	0.917	42	359	N.D.	
98) Isobutyl alcohol	0.000	10.159	0.000		0m	N.D.	d
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0m	N.D.	d
108) Cyclohexanone	14.938	15.092	0.912	42	753	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.515	16.527	1.009	91	592	N.D.	
112) bis(2-Chloroisopropyl)...	16.942	16.918	1.035	45	921	N.D.	

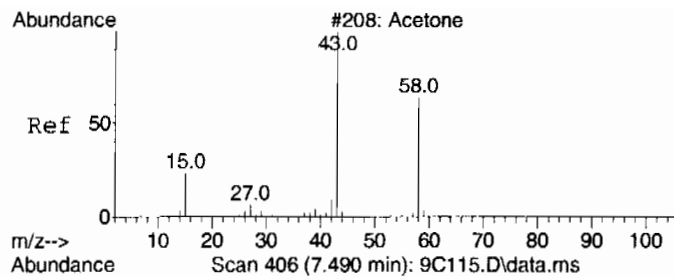
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C115.D
Acq On : 8 Mar 2010 5:02 pm
Operator : RXY1
InstName : VOA9
Sample : |248373007|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 10:59:51 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





#9

Acetone

Concen: 2.38 ug/L

RT: 7.490 min Scan# 406

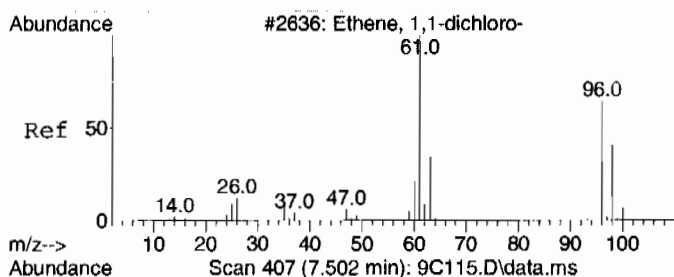
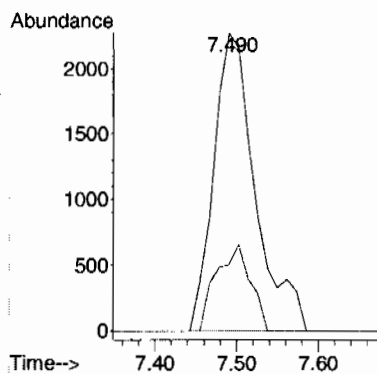
Delta R.T. 0.000 min

Lab File: 9C115.D

Acq: 8 Mar 2010 5:02 pm

Tgt Ion: 43 Resp: 8061

Ion	Ratio	Lower	Upper
43	100		
58	23.9	3.2	63.2



#10

1,1-Dichloroethylene

Concen: 0.48 ug/L

RT: 7.502 min Scan# 407

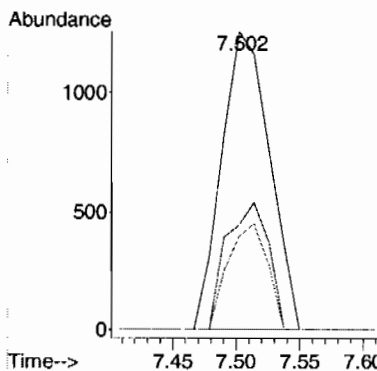
Delta R.T. 0.000 min

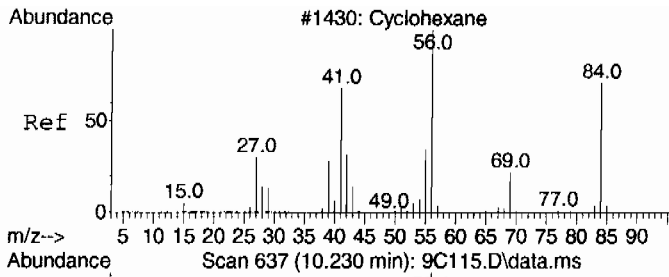
Lab File: 9C115.D

Acq: 8 Mar 2010 5:02 pm

Tgt Ion: 61 Resp: 3309

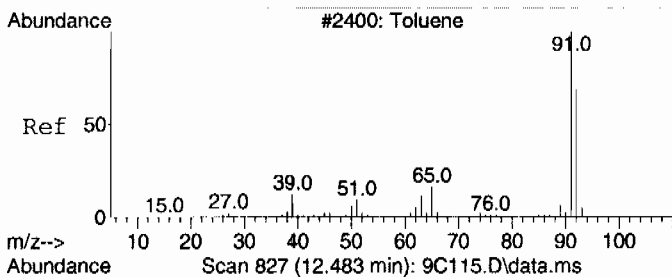
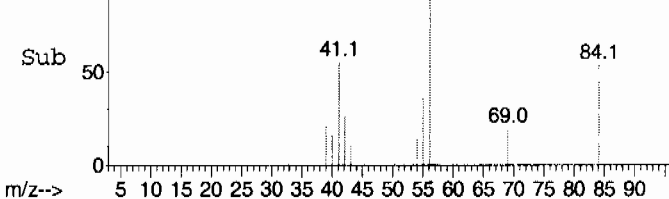
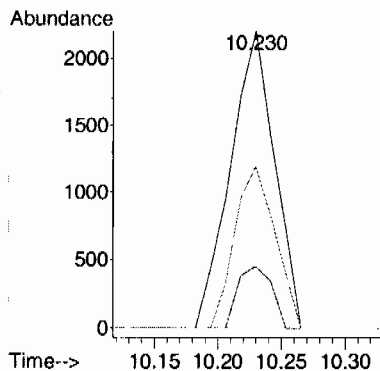
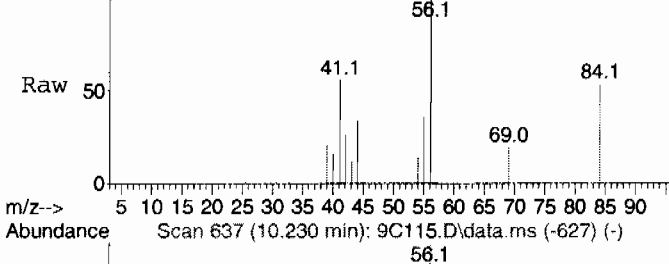
Ion	Ratio	Lower	Upper
61	100		
96	37.5	18.1	78.1
63	29.3	1.3	61.3





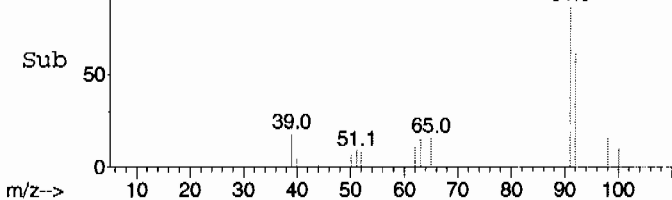
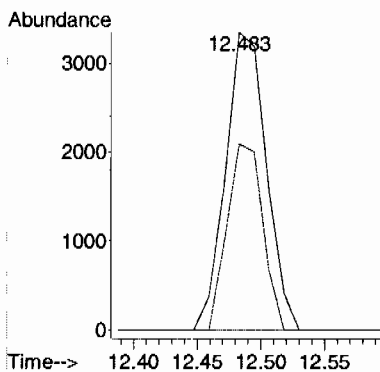
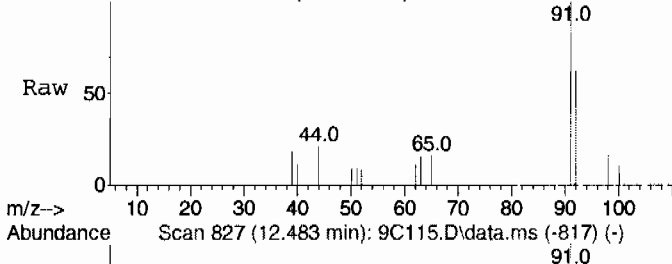
#26
Cyclohexane
Concen: 0.61 ug/L
RT: 10.230 min Scan# 637
Delta R.T. -0.000 min
Lab File: 9C115.D
Acq: 8 Mar 2010 5:02 pm

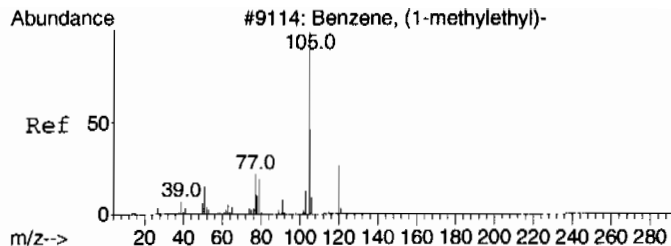
Tgt Ion: 56 Resp: 5293
Ion Ratio Lower Upper
56 100
69 15.7 0.0 53.1
84 49.5 31.0 91.0



#44
Toluene
Concen: 0.59 ug/L
RT: 12.483 min Scan# 827
Delta R.T. -0.000 min
Lab File: 9C115.D
Acq: 8 Mar 2010 5:02 pm

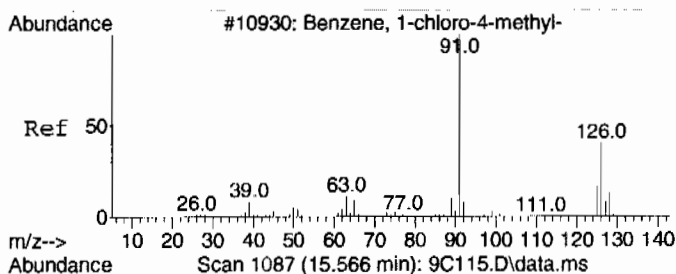
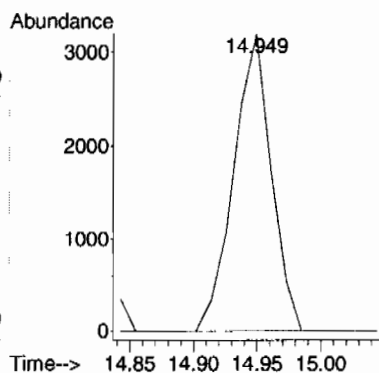
Tgt Ion: 91 Resp: 7476
Ion Ratio Lower Upper
91 100
92 54.6 33.0 93.0





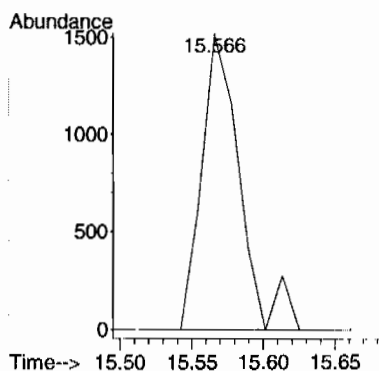
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.78 ug/L
RT: 14.949 min Scan# 1035
Delta R.T. 0.023 min
Lab File: 9C115.D
Acq: 8 Mar 2010 5:02 pm

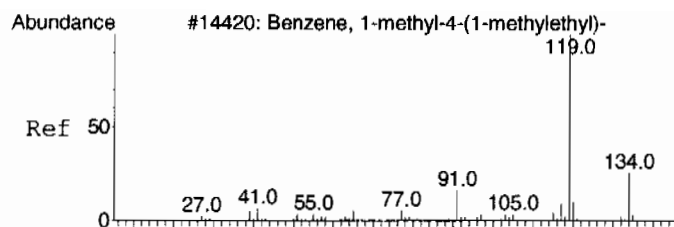
Tgt Ion: 105 Resp: 6624
Ion Ratio Lower Upper
105 100
120 0.0 0.0 58.0



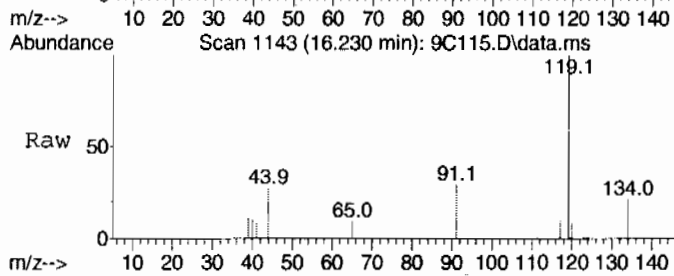
#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.40 ug/L
RT: 15.566 min Scan# 1087
Delta R.T. -0.048 min
Lab File: 9C115.D
Acq: 8 Mar 2010 5:02 pm

Tgt Ion: 91 Resp: 2812
Ion Ratio Lower Upper
91 100
126 0.0 1.2 61.2#

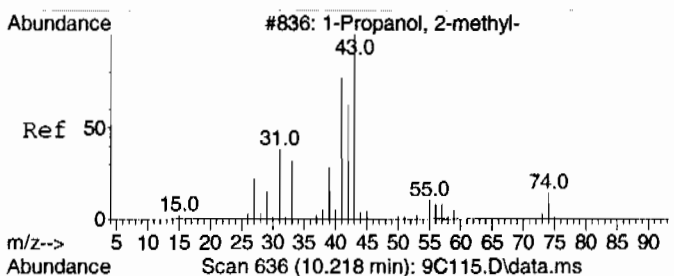
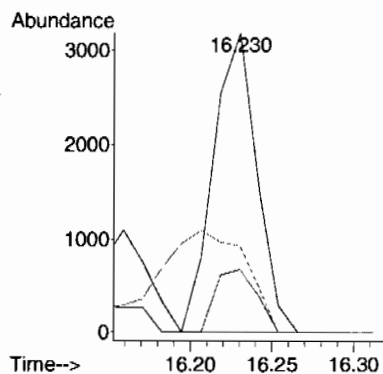
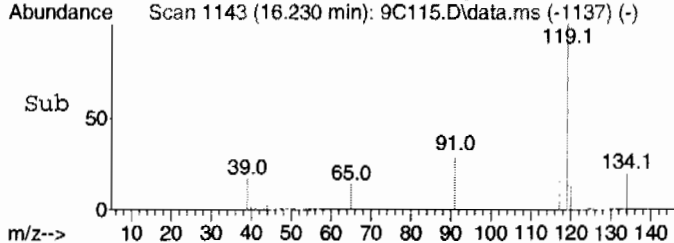




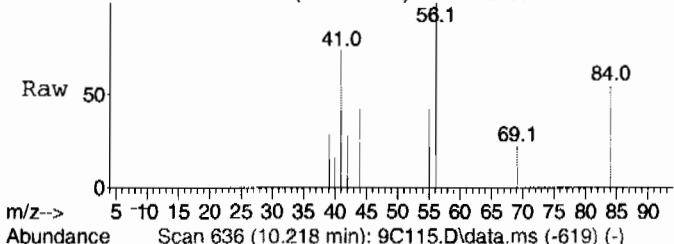
#72
4-Isopropyltoluene
Concen: 0.79 ug/L
RT: 16.230 min Scan# 1143
Delta R.T. 0.000 min
Lab File: 9C115.D
Acq: 8 Mar 2010 5:02 pm



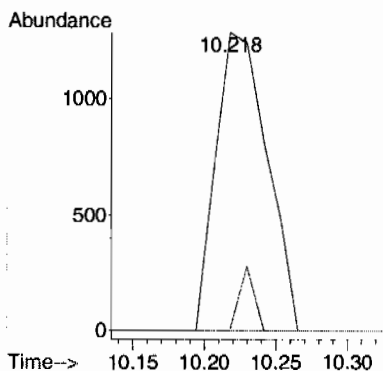
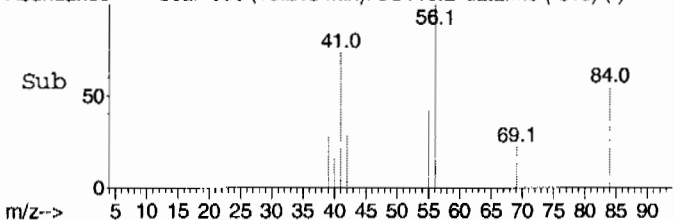
Tgt Ion: 119 Resp: 5939
Ion Ratio Lower Upper
119 100
134 20.2 0.0 56.1
91 0.0 0.0 57.2

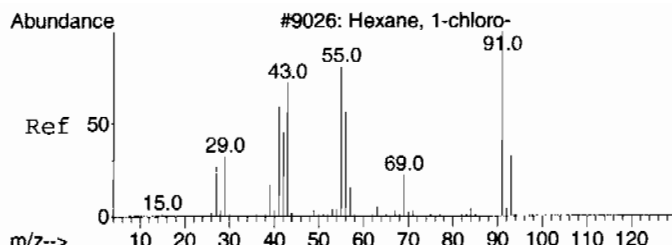


#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 16.87 ug/L
RT: 10.218 min Scan# 636
Delta R.T. 0.059 min
Lab File: 9C115.D
Acq: 8 Mar 2010 5:02 pm



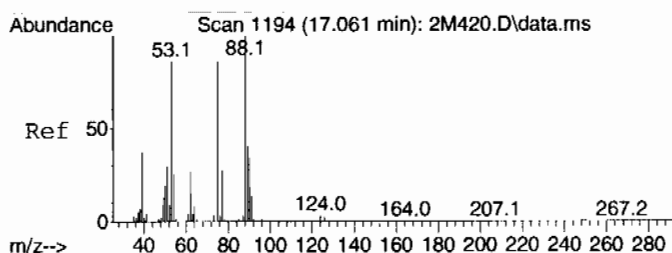
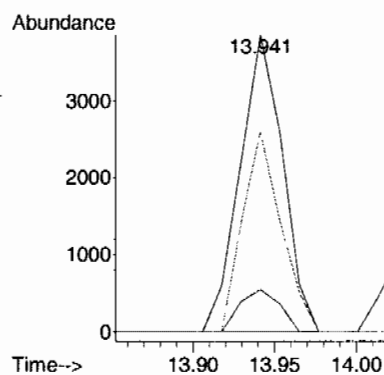
Tgt Ion: 41 Resp: 3193
Ion Ratio Lower Upper
41 100
43 6.1 131.7 191.7#





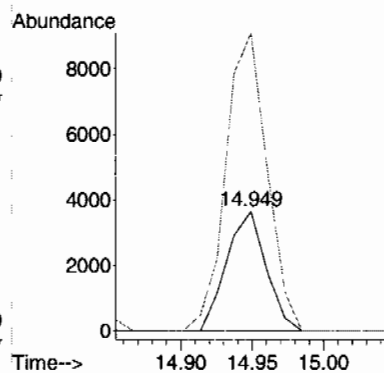
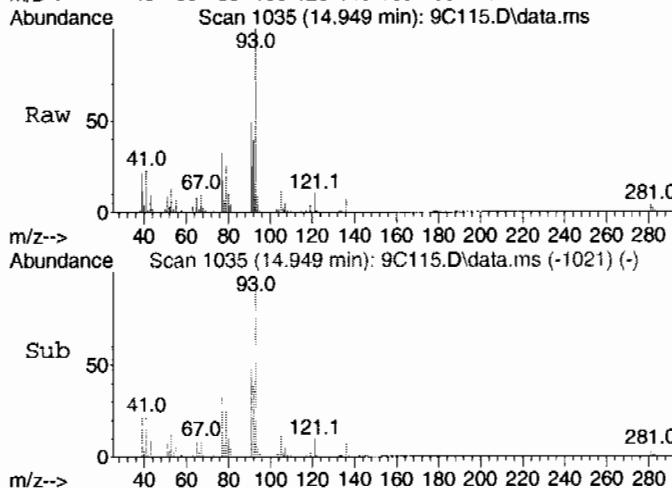
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.97 ug/L
RT: 13.941 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C115.D
Acq: 8 Mar 2010 5:02 pm

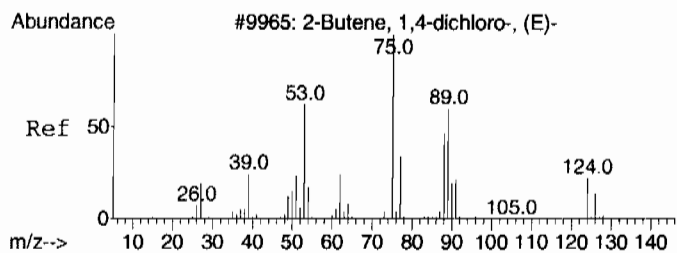
Tgt Ion	Ratio	Lower	Upper
55	100		
91	13.2	74.8	134.8#
56	60.4	31.8	91.8



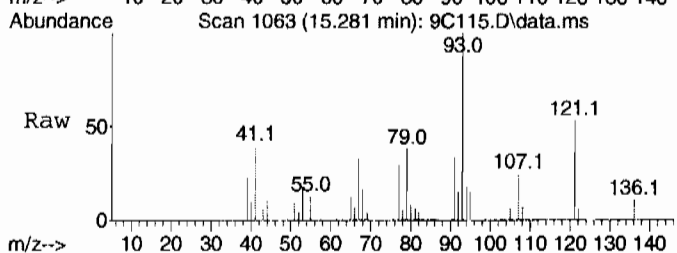
#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 8.45 ug/L
RT: 14.949 min Scan# 1035
Delta R.T. -0.012 min
Lab File: 9C115.D
Acq: 8 Mar 2010 5:02 pm

Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	55.7	115.7#
77	258.4	0.0	58.7#

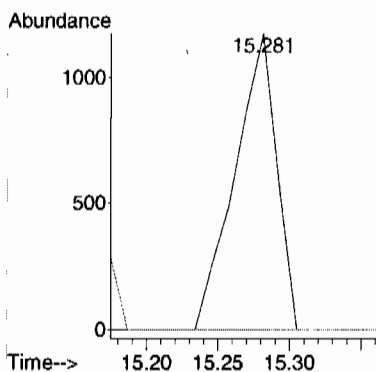
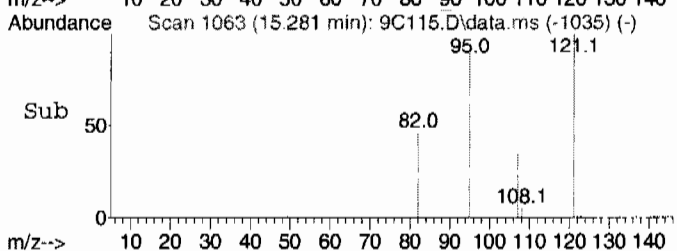




#109 BEFORE analyst DELETION
 trans-1,4-Dichloro-2-butene
 Concen: 2.99 ug/L
 RT: 15.281 min Scan# 1063
 Delta R.T. 0.035 min
 Lab File: 9C115.D
 Acq: 8 Mar 2010 5:02 pm



Tgt Ion: 53 Resp: 2366
 Ion Ratio Lower Upper
 53 100
 88 0.0 10.7 70.7#
 75 0.0 76.2 136.2#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C115.D
Acq On : 8 Mar 2010 5:02 pm
Operator : RXY1
Sample : |248373007|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

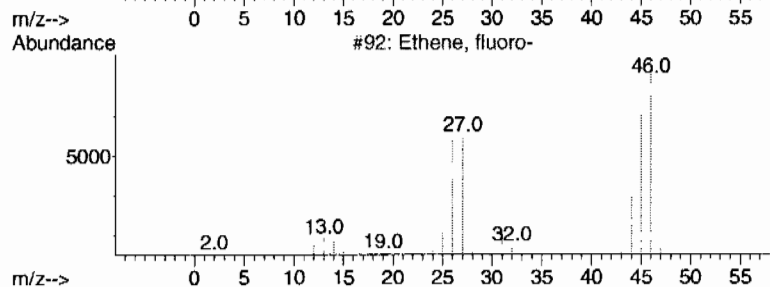
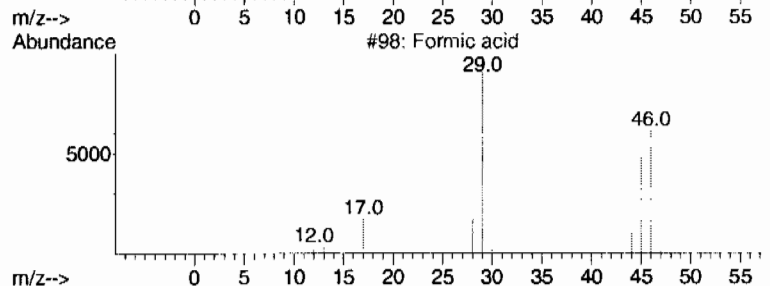
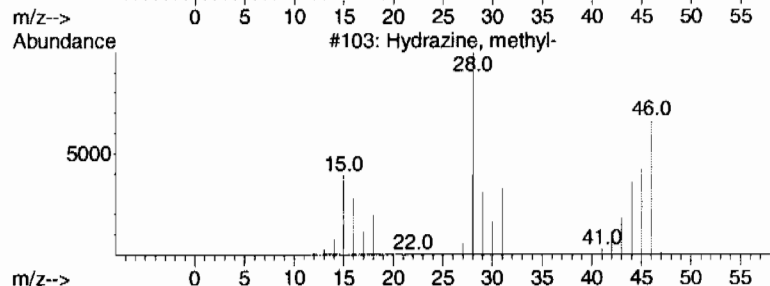
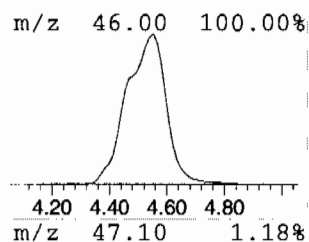
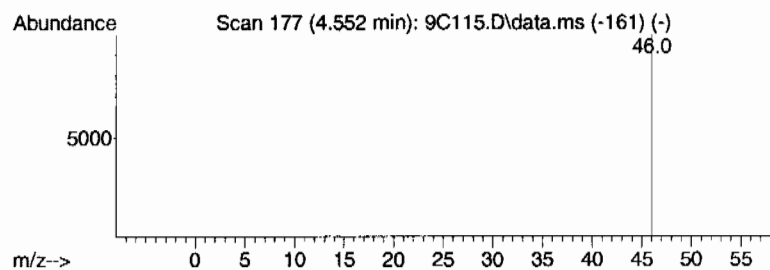
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.552	14.75 ug/L	524185	Fluorobenzene	10.775

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2		Formic acid	46	CH2O2	000064-18-6	4
3		Ethene, fluoro-	46	C2H3F	000075-02-5	3
4		Formic acid	46	CH2O2	000064-18-6	3
5		Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C115.D
Acq On : 8 Mar 2010 5:02 pm
Operator : RXY1
Sample : |248373007|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

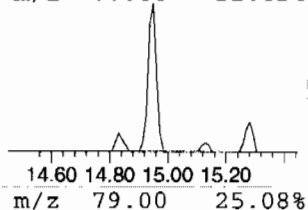
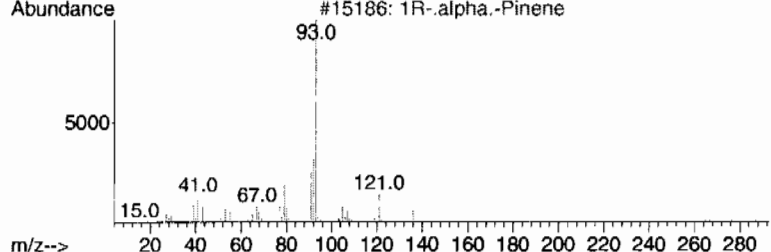
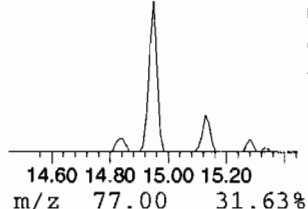
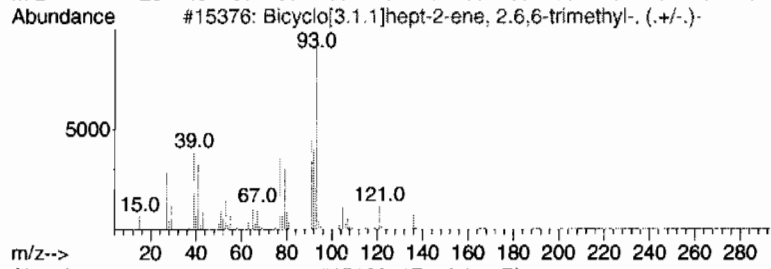
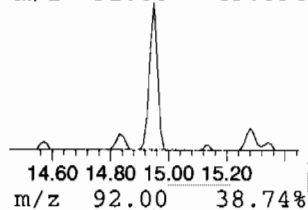
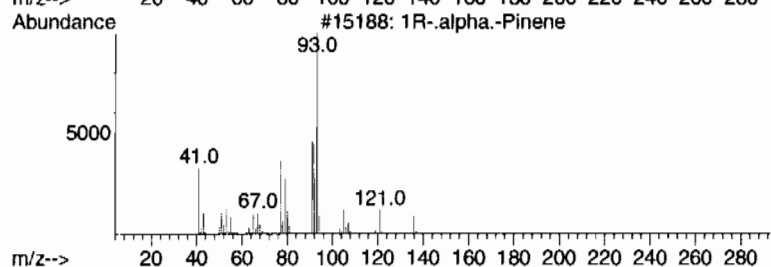
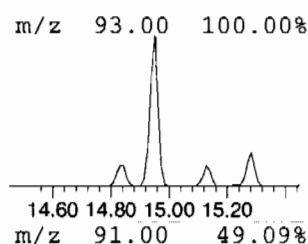
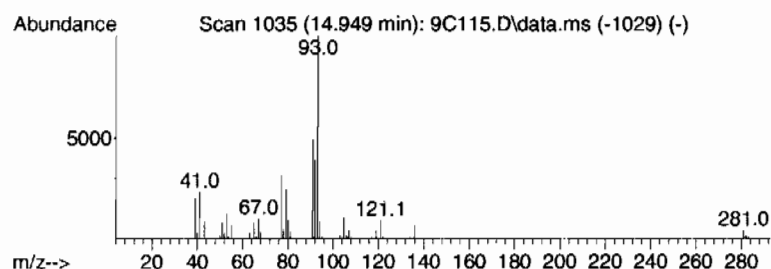
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 2 1R-.alpha.-Pinene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.949	8.16 ug/L	254351	B Chlorobenzene-d5	13.941

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1R-.alpha.-Pinene	136	C10H16	007785-70-8	97
2	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	95
3	1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
4	.alpha.-Pinene	136	C10H16	000080-56-8	90
5	.alpha.-Pinene	136	C10H16	000080-56-8	90



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C115.D
Acq On : 8 Mar 2010 5:02 pm
Operator : RXY1
Sample : |248373007|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	4.552	14.8	ug/L	524185	1	10.775	1777460	50.0
1R-.alpha.-Pinene	14.949	8.2	ug/L	254351	4	13.941	1558720	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373008
 Client ID: RE36-10-7495
 Batch ID: 962617
 Run Date: 03/08/2010 17:33
 Prep Date: 03/08/2010 12:14
 Data File: 030810V99C116.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 27.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.38	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		9.90	ug/kg	2.28	6.88
75-35-4	1,1-Dichloroethylene	U	1.38	ug/kg	0.413	1.38
74-88-4	Iodomethane	U	6.88	ug/kg	2.20	6.88
75-09-2	Methylene chloride	U	6.88	ug/kg	2.75	6.88
75-15-0	Carbon disulfide	U	6.88	ug/kg	1.72	6.88
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	6.88	ug/kg	2.06	6.88
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	0.454	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	0.454	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	6.88	ug/kg	1.72	6.88
10061-01-5	cis-1,3-Dichloropropylene	U	1.38	ug/kg	0.413	1.38
108-88-3	Toluene	J	1.06	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	6.88	ug/kg	2.06	6.88
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: 10-2154
 Lab Sample ID: 248373008
 Client ID: RE36-10-7495
 Batch ID: 962617
 Run Date: 03/08/2010 17:33
 Prep Date: 03/08/2010 12:14
 Data File: 030810V99C116.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.1
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 27.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.38	ug/kg	0.413	1.38
179601-23-1	m,p-Xylenes	J	0.523	ug/kg	0.413	2.75
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	J	0.591	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-Trifluoroethane	U	6.88	ug/kg	2.20	6.88
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
	unknown hydrocarbon	4.47	7.18	ug/kg	0	J
	unknown hydrocarbon	6.87	29.2	ug/kg	0	J
	unknown hydrocarbon	14.3	35.7	ug/kg	0	J
000475-20-7	1,4-Methanoazulene, decahydro-4,8,	14.63	82.5	ug/kg	99	NJ
007785-70-8	1R-.alpha.-Pinene	14.95	9.16	ug/kg	97	NJ
003242-08-8	Cyclohexane, 1-ethenyl-1-methyl-2-	15.29	30.2	ug/kg	50	NJ
	unknown hydrocarbon	15.55	17.3	ug/kg	0	J
013466-78-9	3-Carene	15.96	17.6	ug/kg	96	NJ

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
InstName : VOA9
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 09 11:02:09 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.775	10.775	1.000	96	831951	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	384933	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	84790	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	831951	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	384933	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	84783	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	280201	50.12	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	100.24%			
43) Toluene-d8	12.412	12.412	0.890	98	616181	62.30	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	124.60%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	137430	66.64	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	133.28%#			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659	59	198	N.D.		
9) Acetone	7.490	7.490	0.695	43	26795	7.20	ug/L	84
10) 1,1-Dichloroethylene	7.514	7.502	0.697	61	966	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	8.083	7.858	0.750	41	401	Below Cal	#	28
13) Methyl acetate	7.870	7.882	0.730	43	1593	Below Cal	#	67
14) Carbon disulfide	7.894	7.906	0.733	76	1398	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	4516	Below Cal	#	80
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.494	9.483	0.881	43	3541	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.230	10.230	0.949	56	995	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	10.538	10.538	0.978	78	179	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	6282	Below Cal	#	23
34) Trichloroethylene	11.167	11.167	1.036	95	749	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
InstName : VOA9
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 09 11:02:09 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.		
44) Toluene	12.483	12.483	0.895	91	8569	0.77 ug/L		87
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.		
47) 2-Hexanone	13.052	13.028	0.936	43	968	N.D.		
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.		
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.		
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.		
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.		
54) Ethylbenzene	14.024	14.024	1.006	91	2476	N.D.		
55) m,p-Xylenes	14.131	14.131	1.014	106	1779	0.38 ug/L #		1
56) o-Xylene	0.000	14.570	0.000		0m	N.D. d		
57) Styrene	0.000	14.570	0.000		0m	N.D. d		
59) Bromoform	0.000	14.855	0.000		0	N.D.		
60) Isopropylbenzene	0.000	14.926	0.000		0m	N.D. d		
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.		
64) Bromobenzene	0.000	15.353	0.000		0	N.D.		
65) n-Propylbenzene	0.000	15.353	0.000		0	N.D.		
66) 1,3,5-Trimethylbenzene	0.000	15.495	0.000		0m	N.D. d		
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000	15.614	0.000		0m	N.D. d		
69) tert-Butylbenzene	0.000	15.874	0.000		0m	N.D. d		
70) 1,2,4-Trimethylbenzene	0.000	15.910	0.000		0m	N.D. d		
71) sec-Butylbenzene	16.195	16.112	0.989	105	179	N.D.		
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	2256	0.43 ug/L #		70
73) 1,3-Dichlorobenzene	0.000	16.313	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000	16.408	0.000		0	N.D.		
75) n-Butylbenzene	16.681	16.693	1.019	91	203	N.D.		
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.		
80) Naphthalene	19.349	19.349	1.182	128	196	N.D.		
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.		
85) Acrolein	0.000	7.313	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000	7.550	0.000		0m	N.D. d		
88) Allyl chloride	0.000	7.929	0.000		0	N.D.		
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.		
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.		
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.		
94) Ethyl acetate	9.494	9.483	0.881	43	3541	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
InstName : VOA9
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 09 11:02:09 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

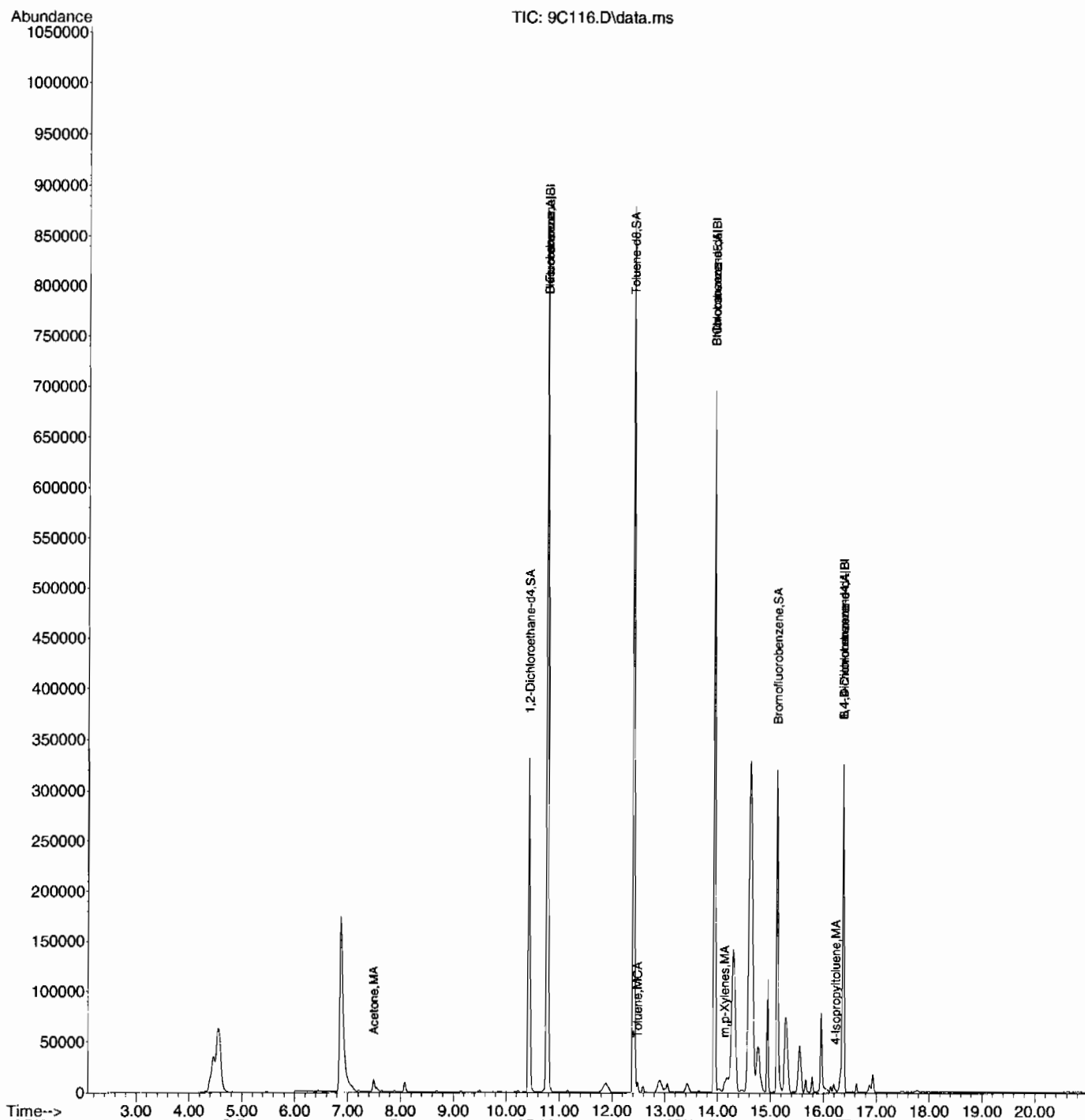
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	9.862	9.874	0.915	42	184	N.D.	
98) Isobutyl alcohol	10.170	10.159	0.944	41	248	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	11.748	11.854	1.090	43	211	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0m	N.D.	d
108) Cyclohexanone	14.938	15.092	0.912	42	457	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.515	16.527	1.009	91	624	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.918	0.000		0m	N.D.	d

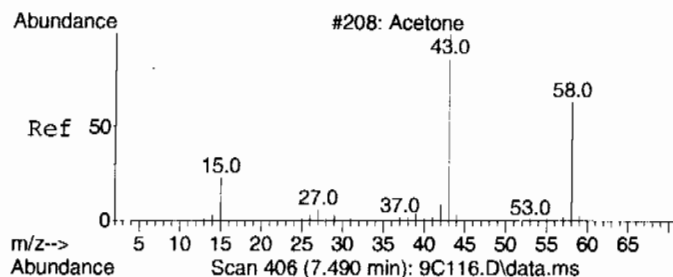
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
InstName : VOA9
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

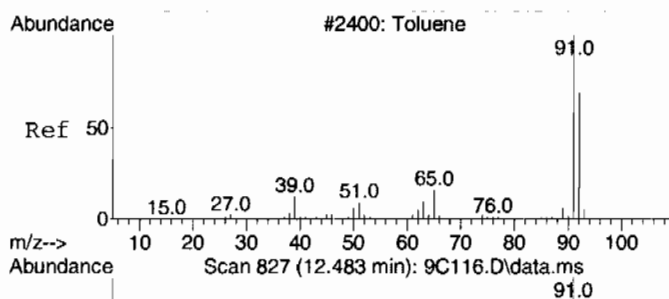
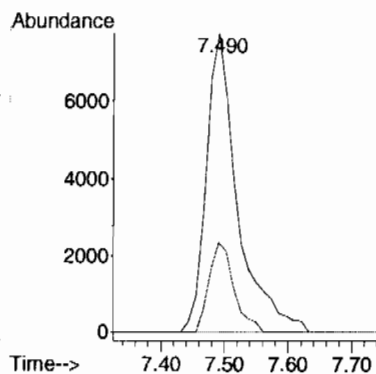
Quant Time: Mar 09 11:02:09 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





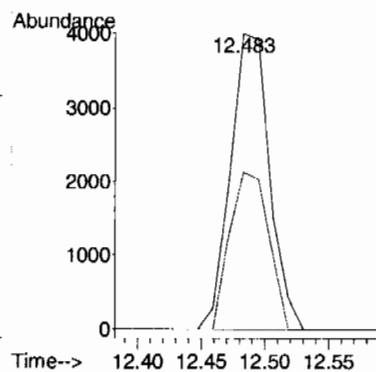
#9
Acetone
Concen: 7.20 ug/L
RT: 7.490 min Scan# 406
Delta R.T. 0.000 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

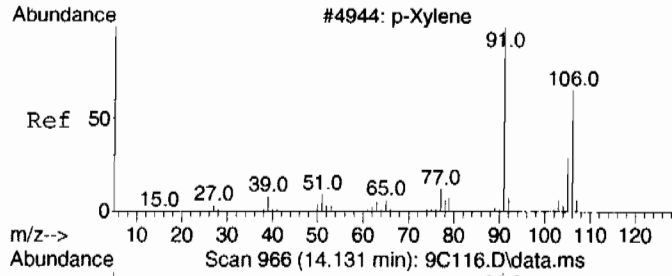
Tgt Ion: 43 Resp: 26795
Ion Ratio Lower Upper
43 100
58 24.1 3.2 63.2



#44
Toluene
Concen: 0.77 ug/L
RT: 12.483 min Scan# 827
Delta R.T. -0.000 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

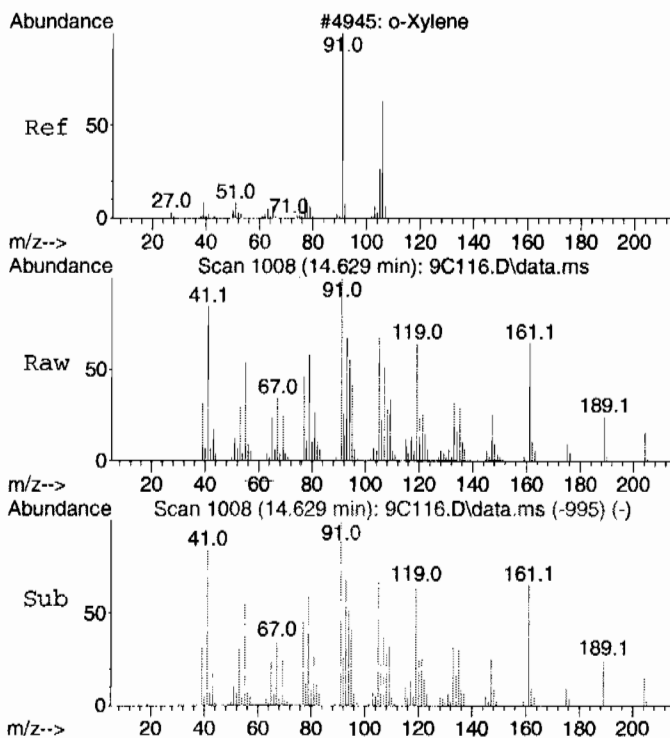
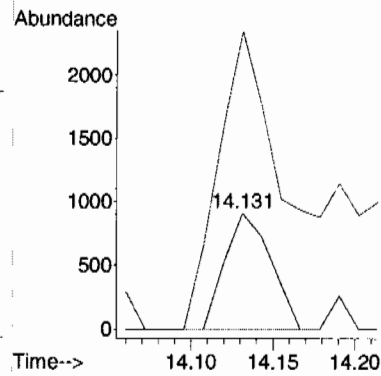
Tgt Ion: 91 Resp: 8569
Ion Ratio Lower Upper
91 100
92 53.1 33.0 93.0





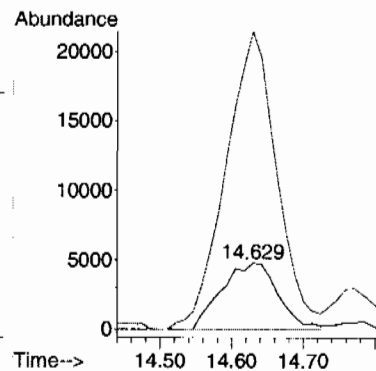
#55
m,p-Xylenes
Concen: 0.38 ug/L
RT: 14.131 min Scan# 966
Delta R.T. 0.000 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

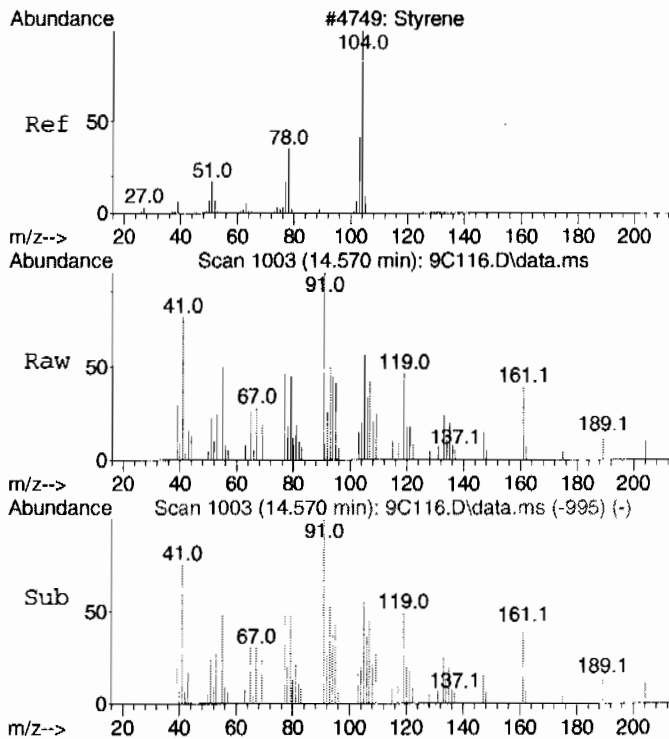
Tgt Ion:106 Resp: 1779
Ion Ratio Lower Upper
106 100
91 449.1 164.9 224.9#



#56 BEFORE analyst DELETION
o-Xylene
Concen: 5.42 ug/L
RT: 14.629 min Scan# 1008
Delta R.T. 0.059 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

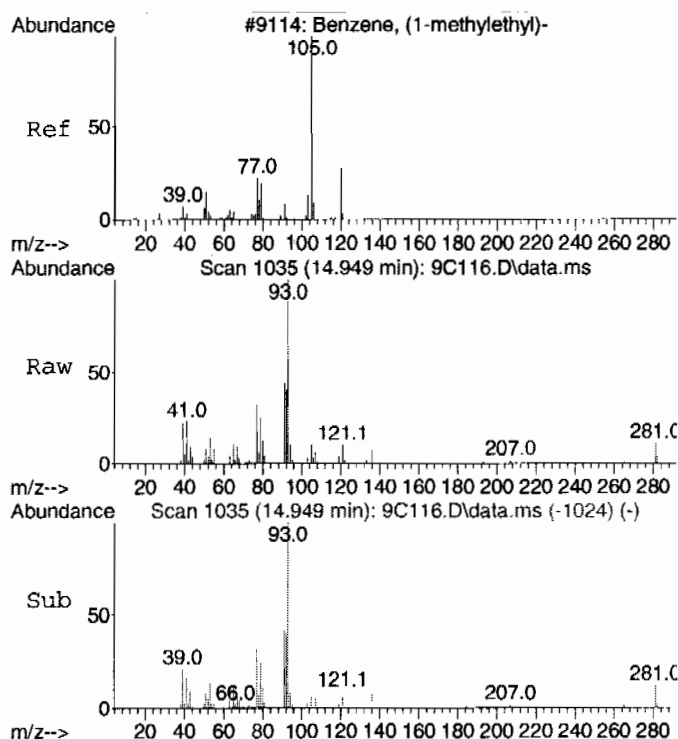
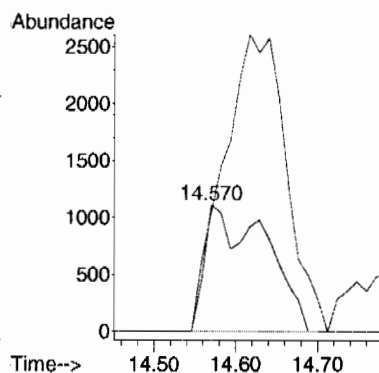
Tgt Ion:106 Resp: 26078
Ion Ratio Lower Upper
106 100
91 407.1 177.2 237.2#





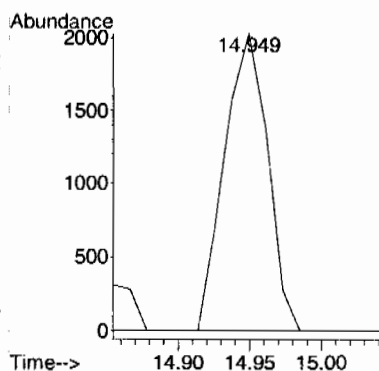
#57 BEFORE analyst DELETION
Styrene
Concen: 0.74 ug/L
RT: 14.570 min Scan# 1003
Delta R.T. -0.000 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

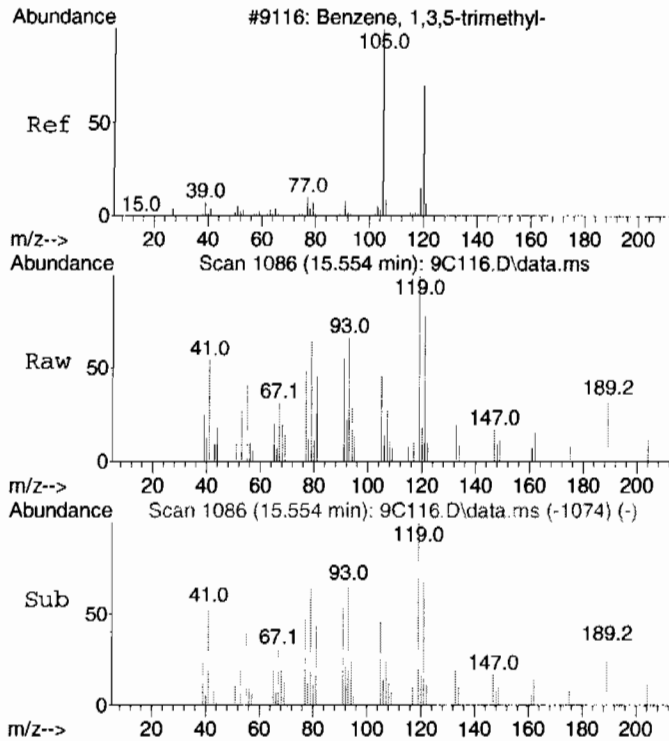
Tgt Ion:104 Resp: 5738
Ion Ratio Lower Upper
104 100
78 239.9 24.3 84.3#



#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.71 ug/L
RT: 14.949 min Scan# 1035
Delta R.T. 0.023 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

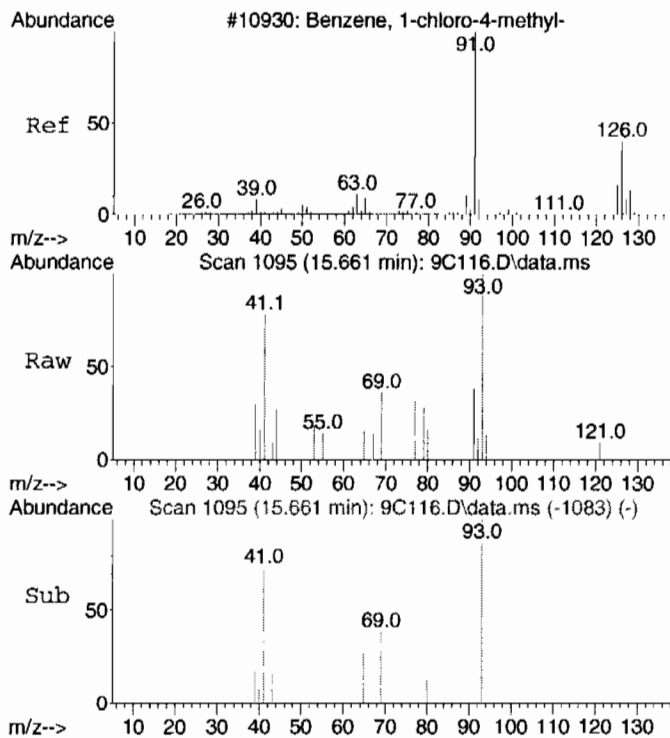
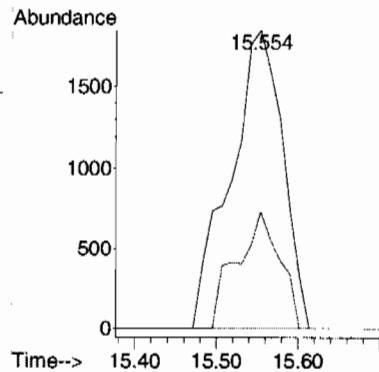
Tgt Ion:105 Resp: 4230
Ion Ratio Lower Upper
105 100
120 0.0 0.0 58.0





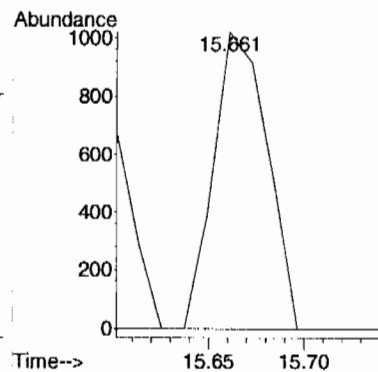
#66 BEFORE analyst DELETION
1,3,5-Trimethylbenzene
Concen: 1.62 ug/L
RT: 15.554 min Scan# 1086
Delta R.T. 0.059 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

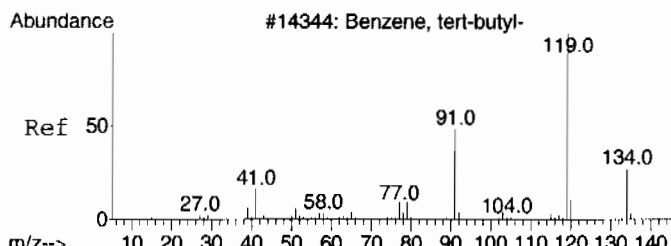
Tgt Ion: 105 Resp: 8250
Ion Ratio Lower Upper
105 100
120 32.6 20.9 80.9



#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.41 ug/L
RT: 15.661 min Scan# 1095
Delta R.T. 0.047 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

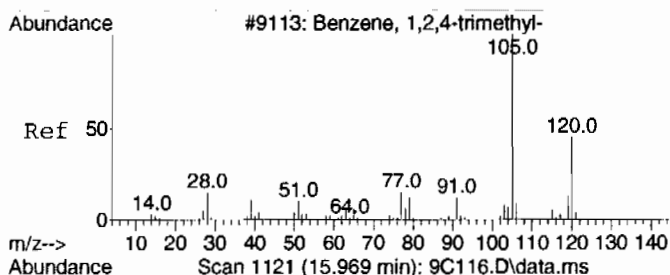
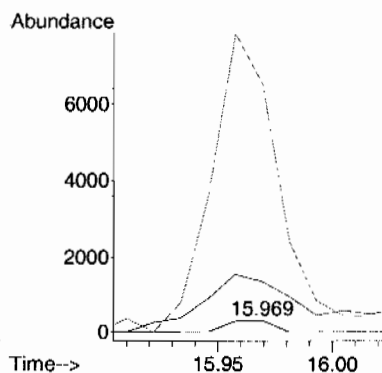
Tgt Ion: 91 Resp: 2001
Ion Ratio Lower Upper
91 100
126 0.0 1.2 61.2#





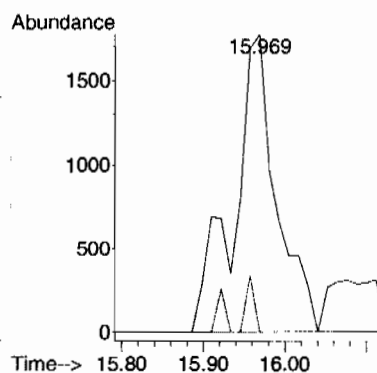
#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 0.44 ug/L
RT: 15.969 min Scan# 1121
Delta R.T. 0.095 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

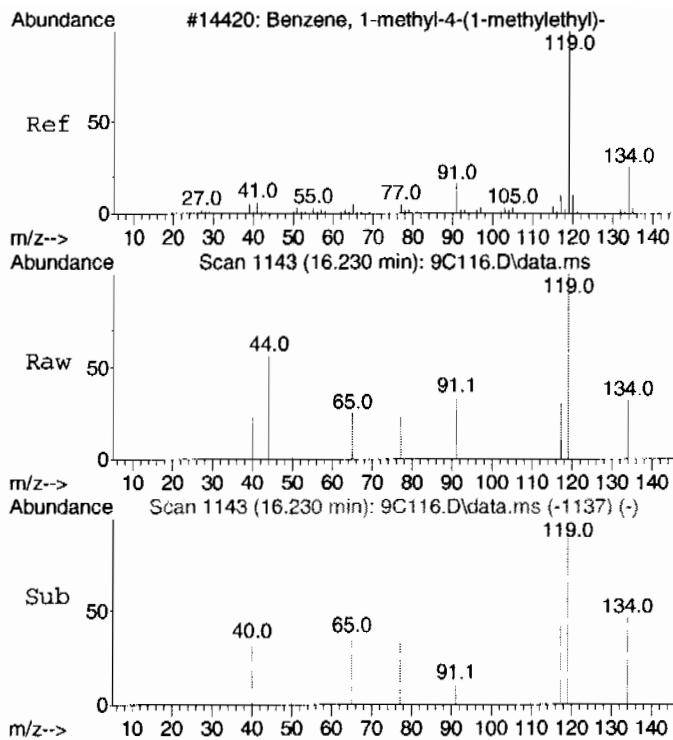
Tgt Ion:134 Resp: 423
Ion Ratio Lower Upper
134 100
119 1155.8 445.6 505.6#
91 3914.2 344.7 404.7#



#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 1.25 ug/L
RT: 15.969 min Scan# 1121
Delta R.T. 0.059 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

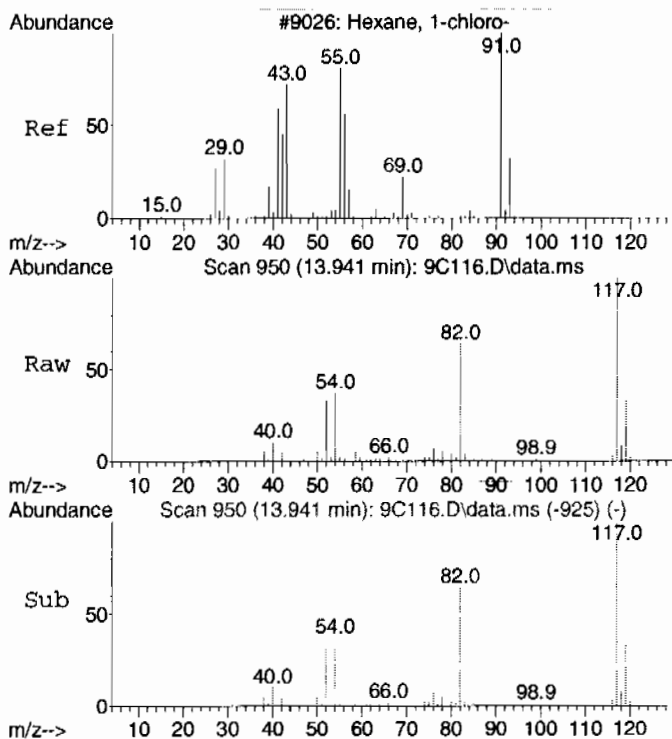
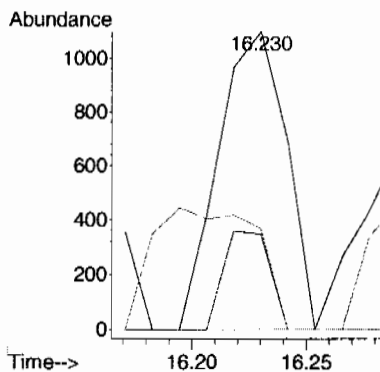
Tgt Ion:105 Resp: 6454
Ion Ratio Lower Upper
105 100
120 3.7 18.4 78.4#





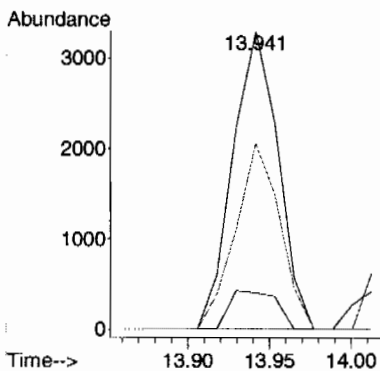
#72
4-Isopropyltoluene
Concen: 0.43 ug/L
RT: 16.230 min Scan# 1143
Delta R.T. 0.000 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

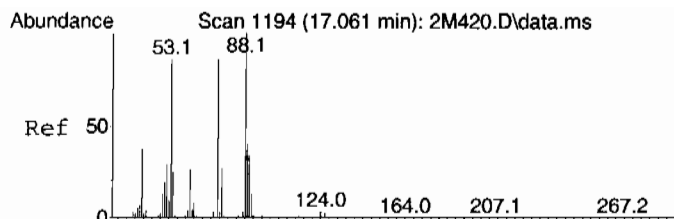
Tgt Ion: 119 Resp: 2256
Ion Ratio Lower Upper
119 100
134 22.3 0.0 56.1
91 0.0 0.0 57.2



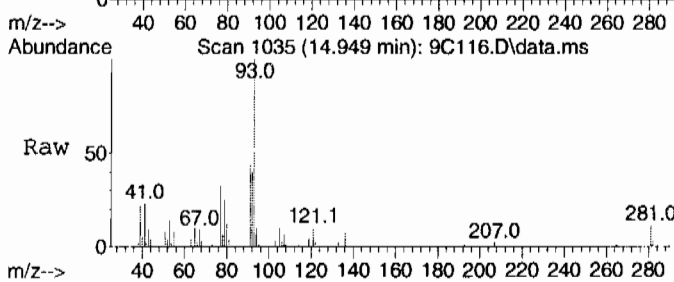
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 3.82 ug/L
RT: 13.941 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C116.D
Acq: 8 Mar 2010 5:33 pm

Tgt Ion: 55 Resp: 6387
Ion Ratio Lower Upper
55 100
91 13.2 74.8 134.8#
56 61.3 31.8 91.8

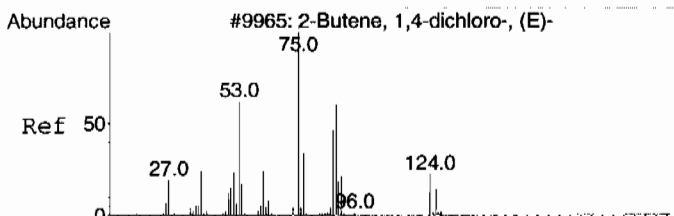
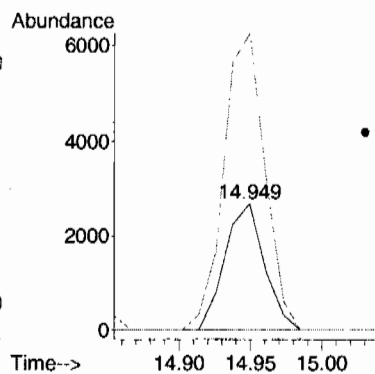
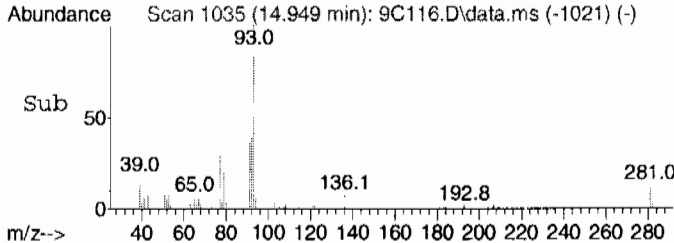




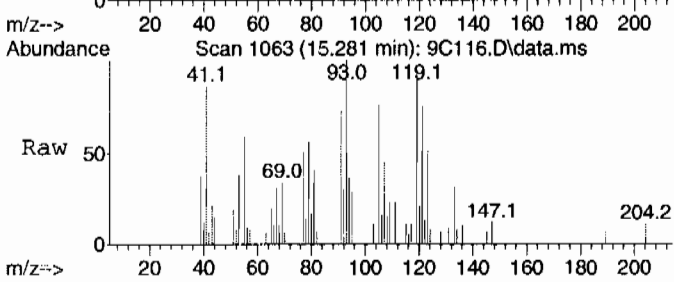
#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 8.77 ug/L
 RT: 14.949 min Scan# 1035
 Delta R.T. -0.012 min
 Lab File: 9C116.D
 Acq: 8 Mar 2010 5:33 pm



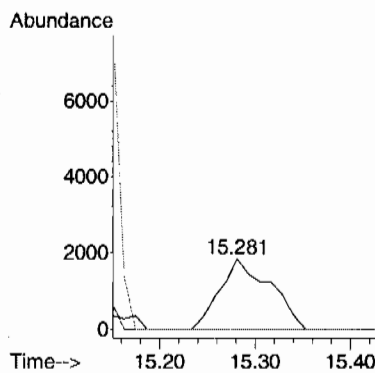
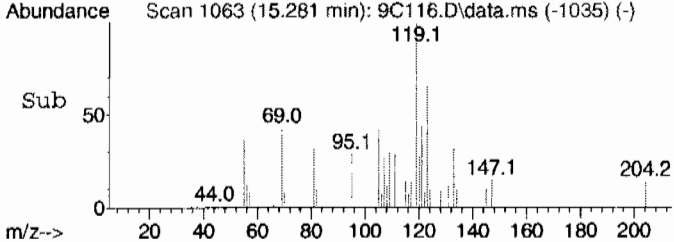
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	55.7	115.7#
77	243.6	0.0	58.7#

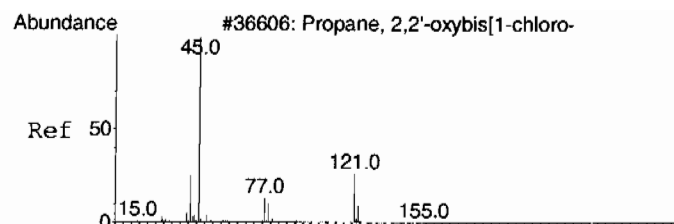


#109 BEFORE analyst DELETION
 trans-1,4-Dichloro-2-butene
 Concen: 11.98 ug/L
 RT: 15.281 min Scan# 1063
 Delta R.T. 0.035 min
 Lab File: 9C116.D
 Acq: 8 Mar 2010 5:33 pm

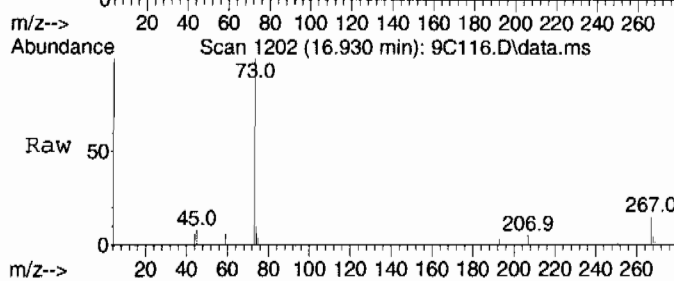


Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	10.7	70.7#
75	0.0	76.2	136.2#

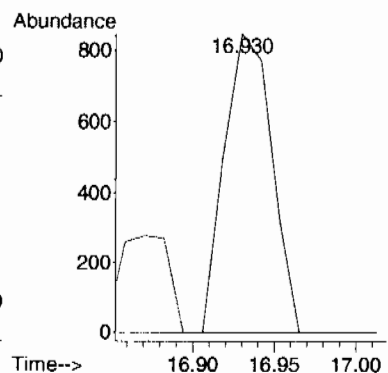
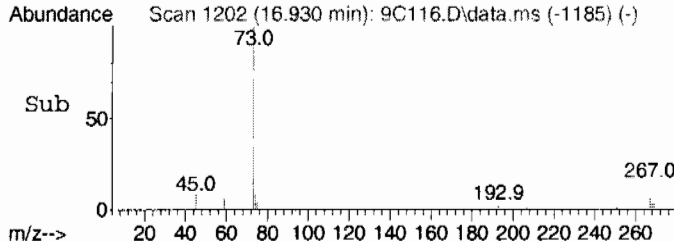




#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 1.70 ug/L
 RT: 16.930 min Scan# 1202
 Delta R.T. 0.012 min
 Lab File: 9C116.D
 Acq: 8 Mar 2010 5:33 pm



Tgt Ion: 45 Resp: 1728
 Ion Ratio Lower Upper
 45 100
 121 0.0 0.0 46.4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

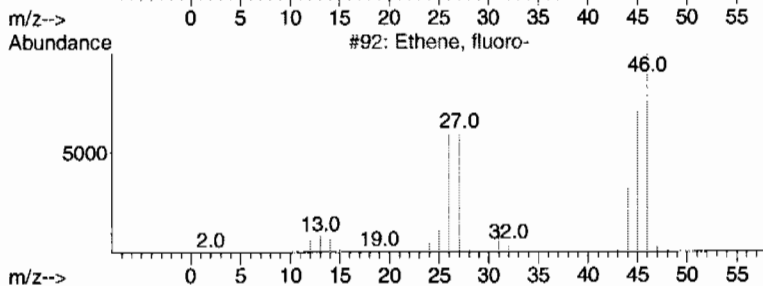
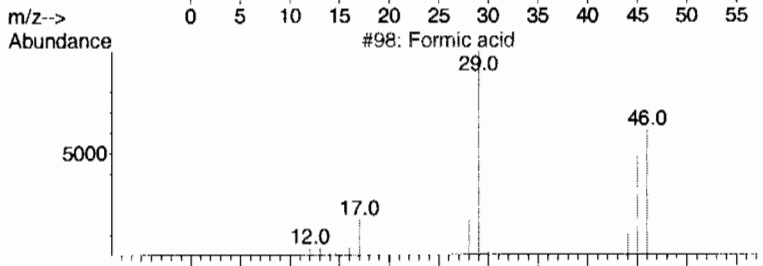
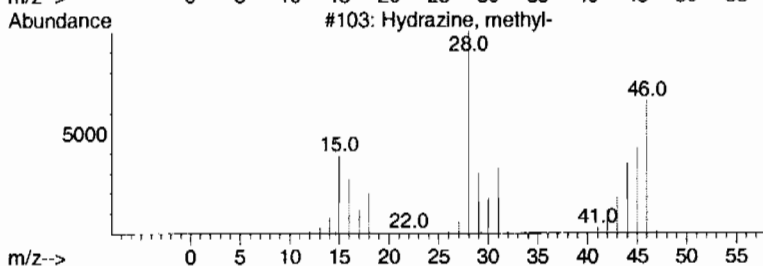
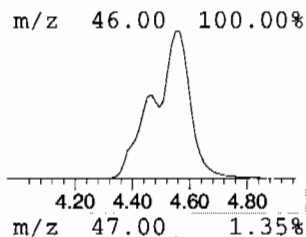
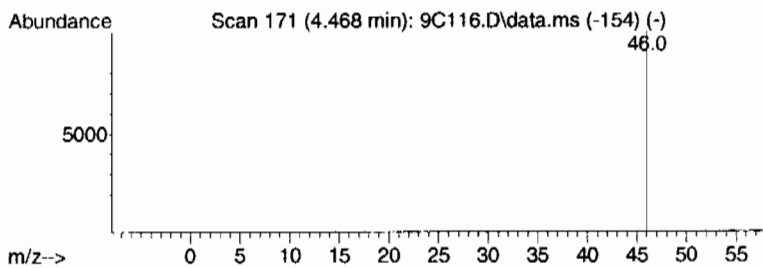
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.468	5.22 ug/L	203743	Fluorobenzene	10.775

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2			Formic acid	46	CH2O2	000064-18-6	4
3			Ethene, fluoro-	46	C2H3F	000075-02-5	3
4			Formic acid	46	CH2O2	000064-18-6	3
5			Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

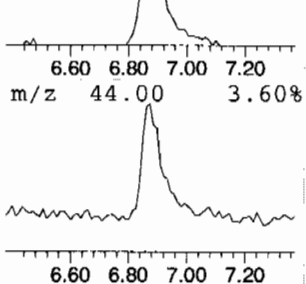
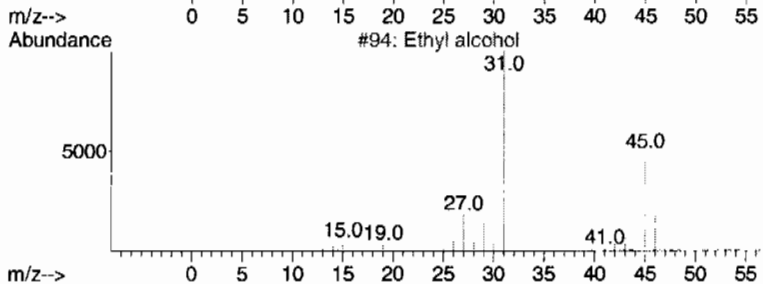
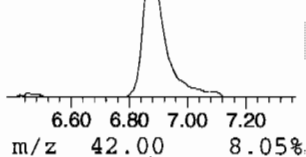
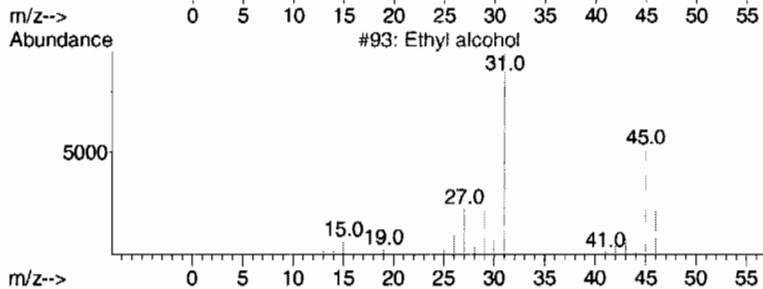
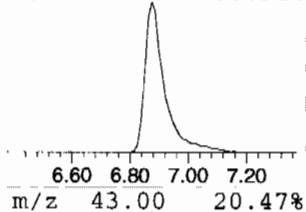
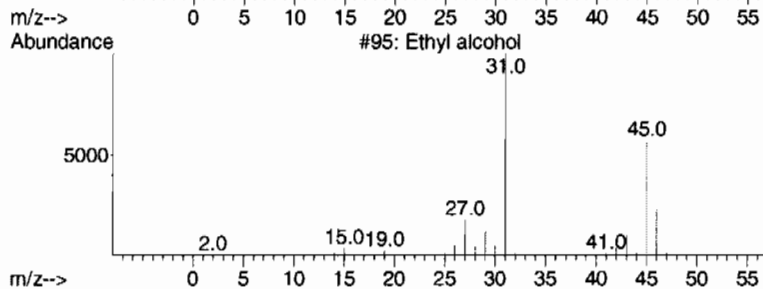
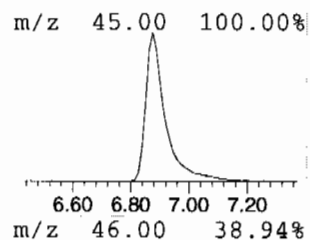
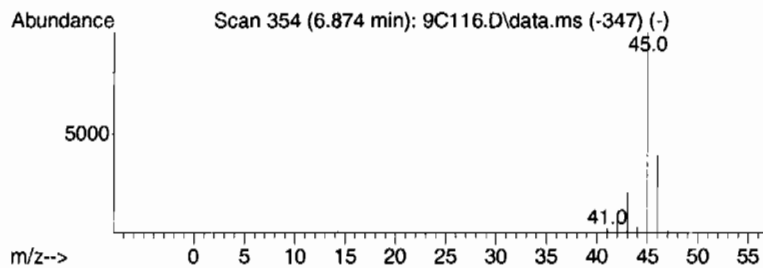
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 2 unknown hydrocarbon Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.874	21.23 ug/L	828603	Fluorobenzene	10.775

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Ethyl alcohol	46	C2H6O	000064-17-5	74
2		Ethyl alcohol	46	C2H6O	000064-17-5	74
3		Ethyl alcohol	46	C2H6O	000064-17-5	64
4		Dimethyl ether	46	C2H6O	000115-10-6	9
5		Methane, nitroso-	45	CH3NO	000865-40-7	4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

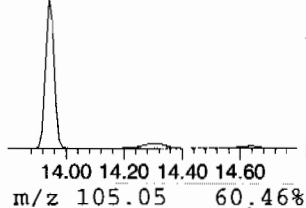
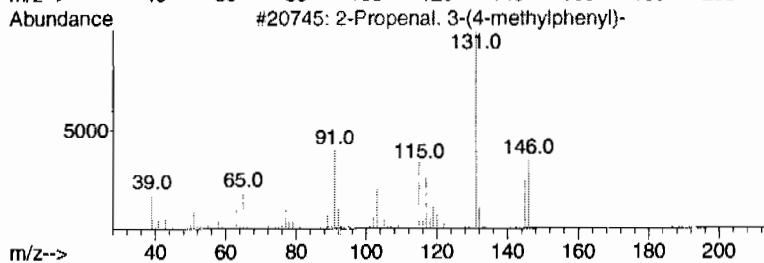
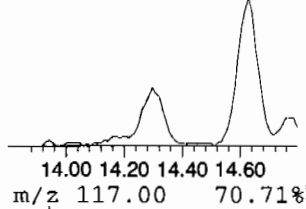
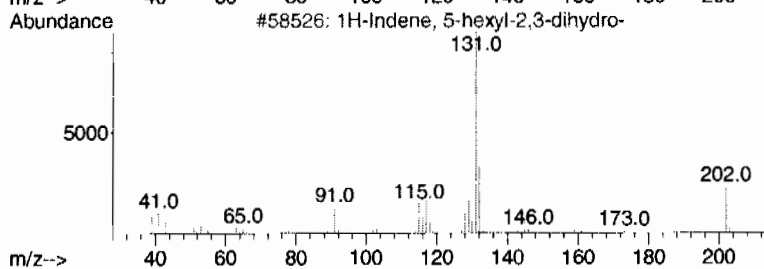
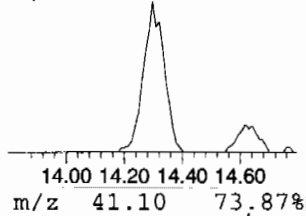
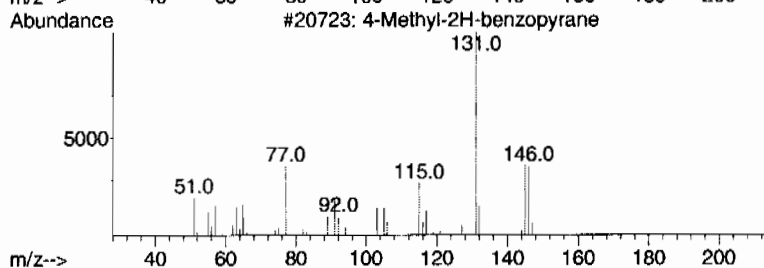
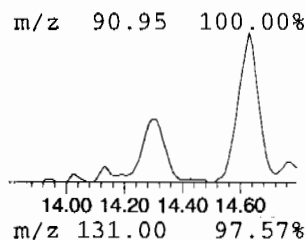
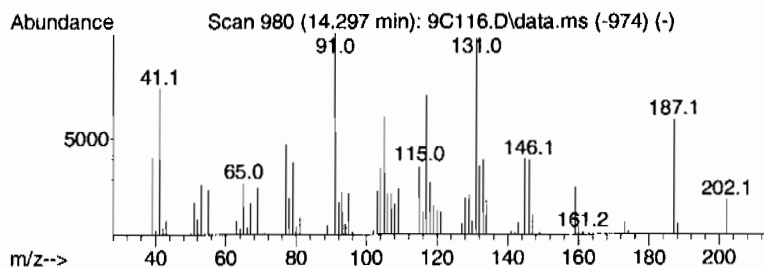
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 3 unknown hydrocarbon Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.297	25.95 ug/L	705963	B Chlorobenzene-d5	13.941

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Methyl-2H-benzopyrane	146	C10H10O	021776-94-3	50
2	1H-Indene, 5-hexyl-2,3-dihydro-	202	C15H22	054889-55-3	41
3	2-Propenal, 3-(4-methylphenyl)-	146	C10H10O	001504-75-2	38
4	Benzene, (3-methyl-2-butenyl)-	146	C11H14	004489-84-3	30
5	Benzene, (1-methyl-1-butenyl)-	146	C11H14	053172-84-2	30



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Quant Title : Volatile Organics 8260B

SubList :

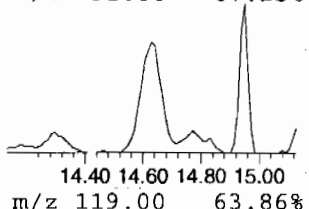
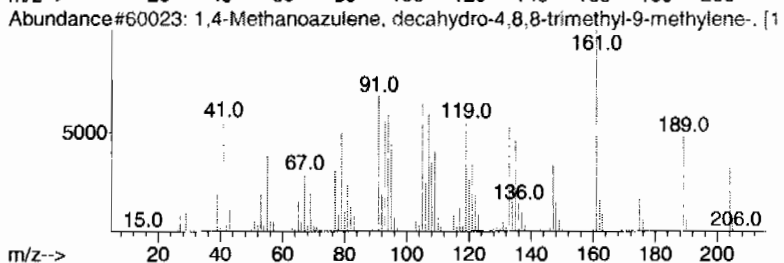
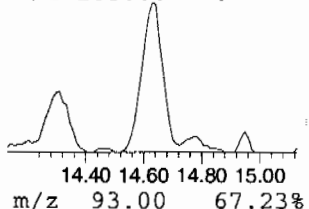
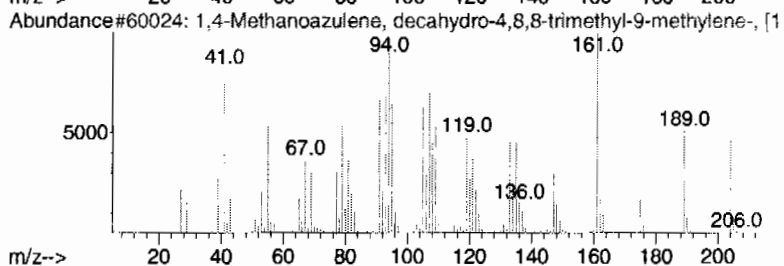
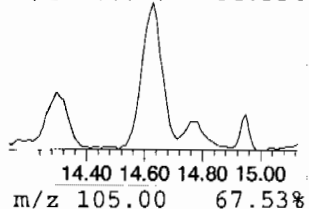
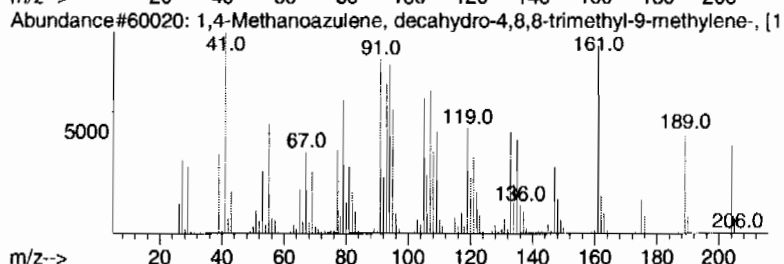
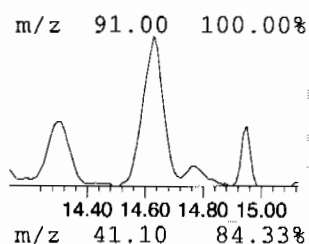
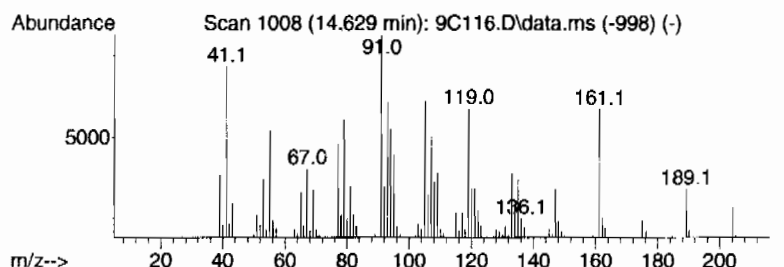
TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 4 1,4-Methanoazulene, decahyd... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.629	59.96 ug/L	1630900	B Chlorobenzene-d5	13.941

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	99
2			1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	99
3			1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	99
4			1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	95
5			1H-Cycloprop[e]azulene, decahydr...	204	C15H24	025246-27-9	95



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

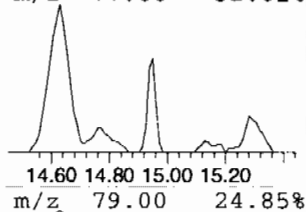
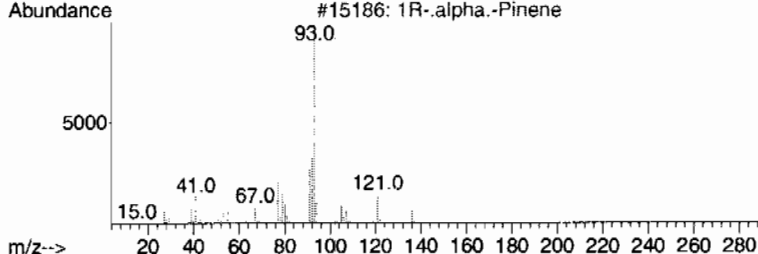
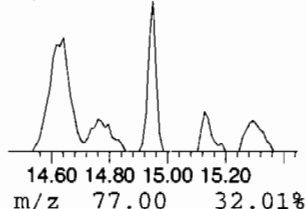
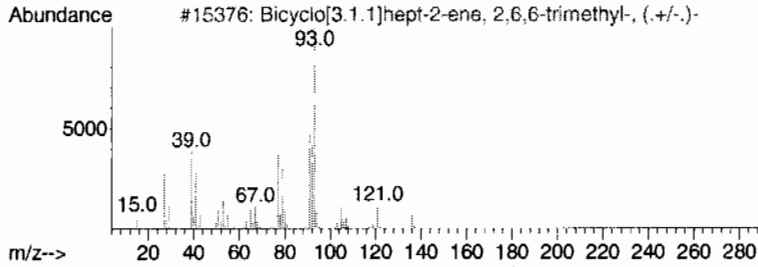
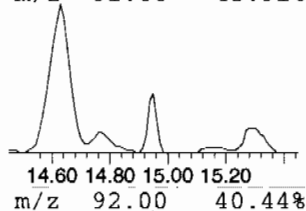
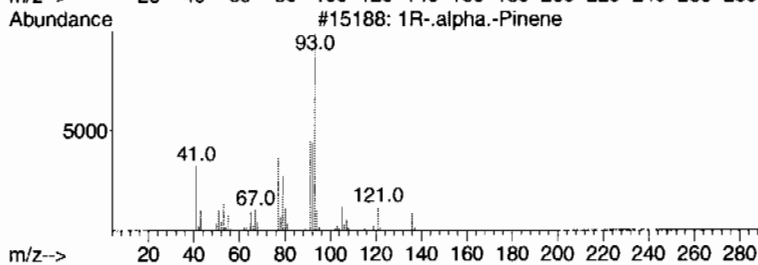
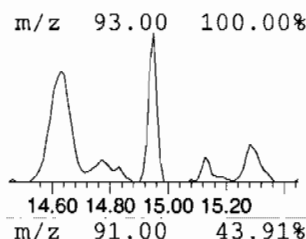
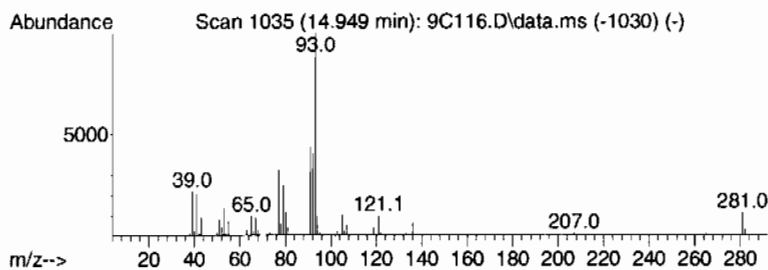
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 5 1R-.alpha.-Pinene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.949	6.66 ug/L	181219	B Chlorobenzene-d5	13.941

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	1R-.alpha.-Pinene		136	C10H16	007785-70-8	97
2	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...		136	C10H16	002437-95-8	93
3	1R-.alpha.-Pinene		136	C10H16	007785-70-8	93
4	Bicyclo[3.1.1]heptane, 6,6-dimet...		136	C10H16	018172-67-3	92
5	.alpha.-Pinene		136	C10H16	000080-56-8	91



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

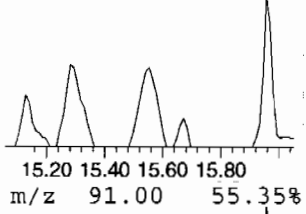
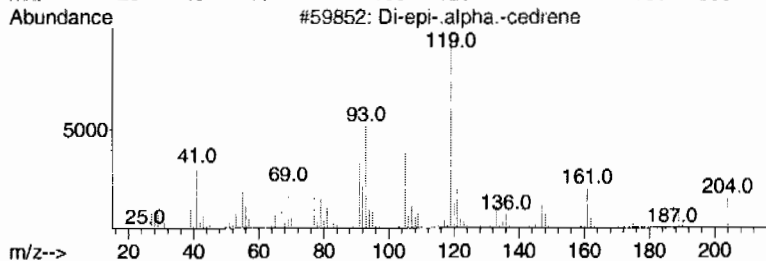
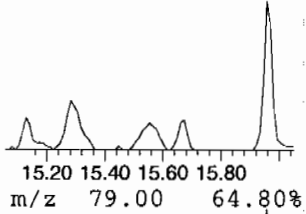
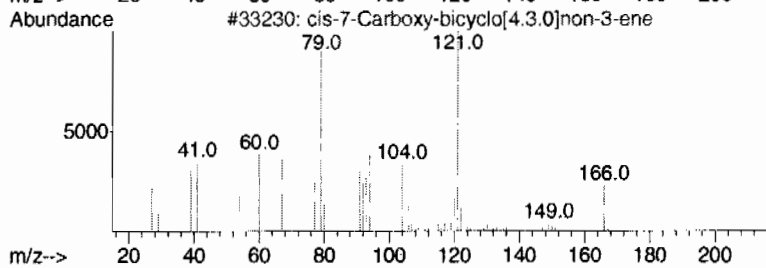
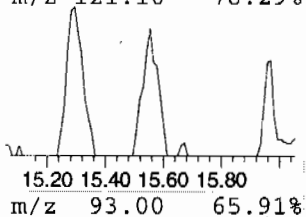
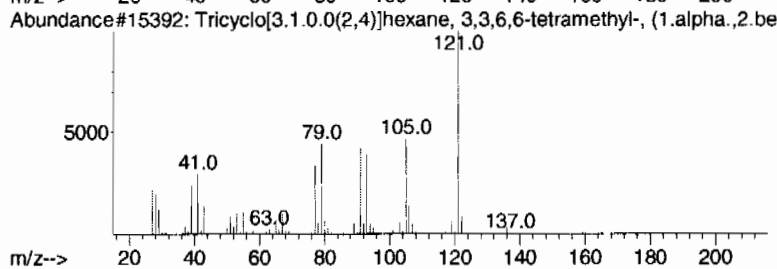
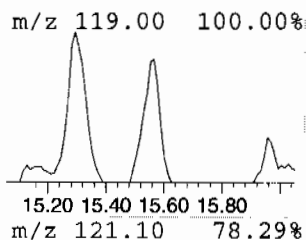
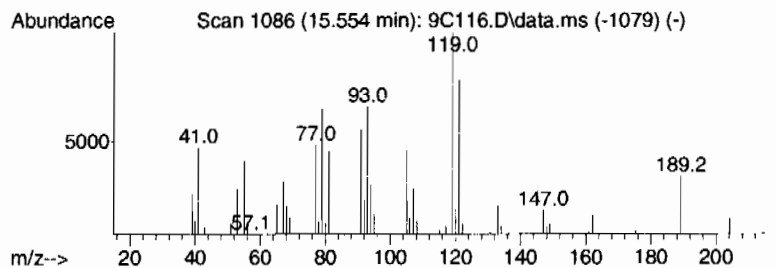
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 7 unknown hydrocarbon Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.554	12.57 ug/L	174112	1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Tricyclo[3.1.0.0(2,4)]hexane, 3,...	136	C10H16	058987-01-2	43
2			cis-7-Carboxy-bicyclo[4.3.0]non-...	166	C10H14O2	1000145-85-3	38
3			Di-epi-.alpha.-cedrene	204	C15H24	1000156-13-3	38
4			Cyclohexane, 1-ethenyl-1-methyl-...	204	C15H24	003242-08-8	35
5			Bicyclogermacrene	204	C15H24	067650-90-2	35



Library Search Compound Report
GEL Laboratories, LLC

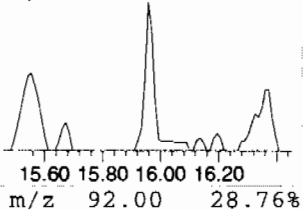
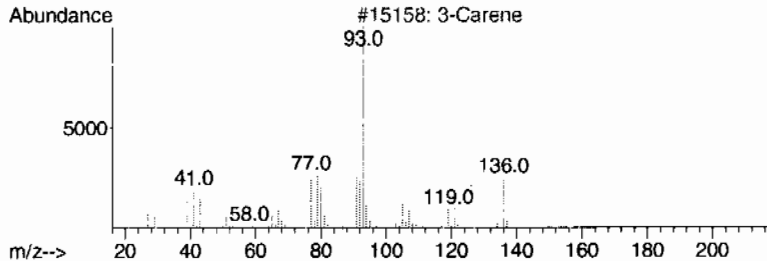
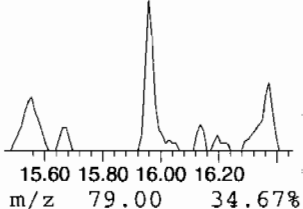
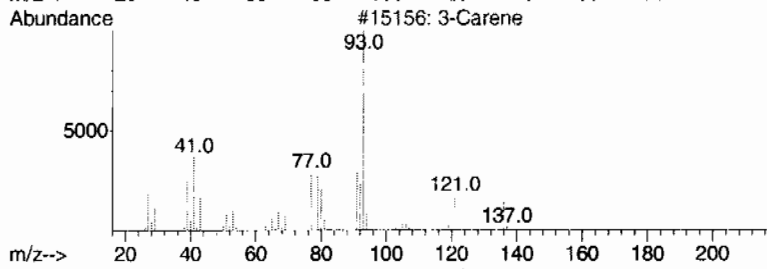
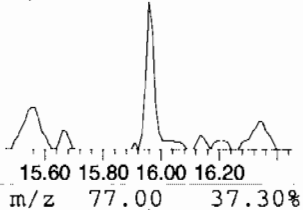
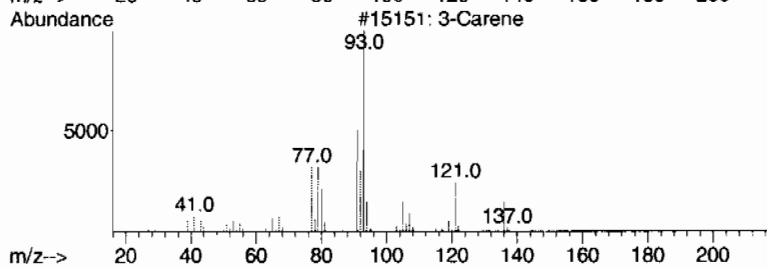
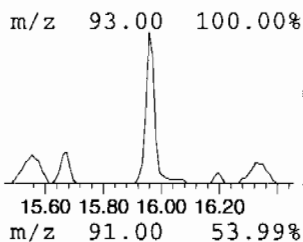
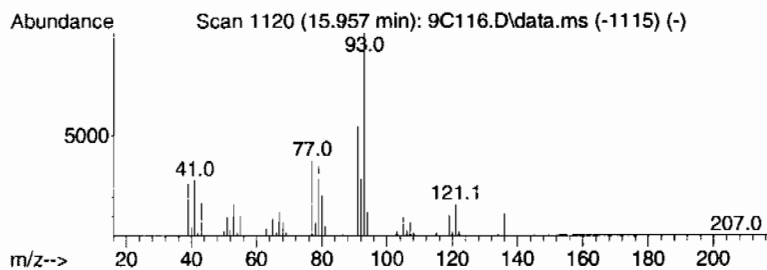
Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 8 3-Carene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.		
15.957	12.81 ug/L	177384	1,4-Dichlorobenzene-d4	16.372		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Carene		136	C10H16	013466-78-9	96
2	3-Carene		136	C10H16	013466-78-9	95
3	3-Carene		136	C10H16	013466-78-9	94
4	Bicyclo[4.1.0]hept-3-ene, 3,7,7-...		136	C10H16	000498-15-7	91
5	3-Carene		136	C10H16	013466-78-9	91



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C116.D
Acq On : 8 Mar 2010 5:33 pm
Operator : RXY1
Sample : |248373008|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---			
					#	RT	Resp	Conc
unknown hydroca...	4.468	5.2	ug/L	203743	1	10.775	1951180	50.0
unknown hydroca...	6.874	21.2	ug/L	828603	1	10.775	1951180	50.0
unknown hydroca...	14.297	25.9	ug/L	705963	4	13.941	1360090	50.0
1,4-Methanoazul...	14.629	60.0	ug/L	1630900	4	13.941	1360090	50.0
1R-.alpha.-Pinene	14.949	6.7	ug/L	181219	4	13.941	1360090	50.0
unknown hydroca...	15.293	21.9	ug/L	303950	5	16.372	692633	50.0
unknown hydroca...	15.554	12.6	ug/L	174112	5	16.372	692633	50.0
3-Carene	15.957	12.8	ug/L	177384	5	16.372	692633	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373010	Date Received: 03/02/2010 08:50	% Moisture: 21.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7500	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962617	Inst: VOA9.I	Dilution: 1
Run Date: 03/08/2010 18:31	Analyst: RXY1	Purge Vol: 5 mL
Prep Date: 03/08/2010 12:16	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030810V99C118.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.28	ug/kg	0.435	1.28
74-87-3	Chloromethane	U	1.28	ug/kg	0.384	1.28
75-01-4	Vinyl chloride	U	1.28	ug/kg	0.384	1.28
74-83-9	Bromomethane	U	1.28	ug/kg	0.384	1.28
75-00-3	Chloroethane	U	1.28	ug/kg	0.384	1.28
75-69-4	Trichlorofluoromethane	U	1.28	ug/kg	0.384	1.28
67-64-1	Acetone	J	2.73	ug/kg	2.12	6.40
75-35-4	1,1-Dichloroethylene	U	1.28	ug/kg	0.384	1.28
74-88-4	Iodomethane	U	6.40	ug/kg	2.05	6.40
75-09-2	Methylene chloride	U	6.40	ug/kg	2.56	6.40
75-15-0	Carbon disulfide	U	6.40	ug/kg	1.60	6.40
156-60-5	trans-1,2-Dichloroethylene	U	1.28	ug/kg	0.384	1.28
75-34-3	1,1-Dichloroethane	U	1.28	ug/kg	0.384	1.28
78-93-3	2-Butanone	U	6.40	ug/kg	1.92	6.40
156-59-2	cis-1,2-Dichloroethylene	U	1.28	ug/kg	0.384	1.28
594-20-7	2,2-Dichloropropane	U	1.28	ug/kg	0.384	1.28
67-66-3	Chloroform	U	1.28	ug/kg	0.384	1.28
74-97-5	Bromochloromethane	U	1.28	ug/kg	0.422	1.28
71-55-6	1,1,1-Trichloroethane	U	1.28	ug/kg	0.384	1.28
563-58-6	1,1-Dichloropropene	U	1.28	ug/kg	0.384	1.28
56-23-5	Carbon tetrachloride	U	1.28	ug/kg	0.384	1.28
107-06-2	1,2-Dichloroethane	U	1.28	ug/kg	0.384	1.28
71-43-2	Benzene	U	1.28	ug/kg	0.384	1.28
79-01-6	Trichloroethylene	J	0.448	ug/kg	0.422	1.28
78-87-5	1,2-Dichloropropane	U	1.28	ug/kg	0.384	1.28
75-27-4	Bromodichloromethane	U	1.28	ug/kg	0.384	1.28
74-95-3	Dibromomethane	U	1.28	ug/kg	0.384	1.28
108-10-1	4-Methyl-2-pentanone	U	6.40	ug/kg	1.60	6.40
10061-01-5	cis-1,3-Dichloropropylene	U	1.28	ug/kg	0.384	1.28
108-88-3	Toluene	J	0.537	ug/kg	0.384	1.28
10061-02-6	trans-1,3-Dichloropropylene	U	1.28	ug/kg	0.384	1.28
79-00-5	1,1,2-Trichloroethane	U	1.28	ug/kg	0.384	1.28
591-78-6	2-Hexanone	U	6.40	ug/kg	1.92	6.40
142-28-9	1,3-Dichloropropane	U	1.28	ug/kg	0.384	1.28
127-18-4	Tetrachloroethylene	U	1.28	ug/kg	0.384	1.28
124-48-1	Dibromochloromethane	U	1.28	ug/kg	0.384	1.28
106-93-4	1,2-Dibromoethane	U	1.28	ug/kg	0.384	1.28
108-90-7	Chlorobenzene	U	1.28	ug/kg	0.384	1.28

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373010
 Client ID: RE36-10-7500
 Batch ID: 962617
 Run Date: 03/08/2010 18:31
 Prep Date: 03/08/2010 12:16
 Data File: 030810V99C118.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.1
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.28	ug/kg	0.384	1.28
179601-23-1	m,p-Xylenes	U	2.56	ug/kg	0.384	2.56
95-47-6	o-Xylene	U	1.28	ug/kg	0.384	1.28
100-42-5	Styrene	U	1.28	ug/kg	0.384	1.28
75-25-2	Bromoform	U	1.28	ug/kg	0.384	1.28
79-34-5	1,1,2,2-Tetrachloroethane	U	1.28	ug/kg	0.384	1.28
96-18-4	1,2,3-Trichloropropane	U	1.28	ug/kg	0.384	1.28
108-86-1	Bromobenzene	U	1.28	ug/kg	0.384	1.28
103-65-1	n-Propylbenzene	U	1.28	ug/kg	0.384	1.28
95-49-8	2-Chlorotoluene	U	1.28	ug/kg	0.384	1.28
98-82-8	Isopropylbenzene	U	1.28	ug/kg	0.384	1.28
108-67-8	1,3,5-Trimethylbenzene	U	1.28	ug/kg	0.384	1.28
106-43-4	4-Chlorotoluene	U	1.28	ug/kg	0.384	1.28
98-06-6	tert-Butylbenzene	U	1.28	ug/kg	0.384	1.28
95-63-6	1,2,4-Trimethylbenzene	U	1.28	ug/kg	0.384	1.28
135-98-8	sec-Butylbenzene	U	1.28	ug/kg	0.384	1.28
99-87-6	4-Isopropyltoluene	U	1.28	ug/kg	0.384	1.28
541-73-1	1,3-Dichlorobenzene	U	1.28	ug/kg	0.384	1.28
106-46-7	1,4-Dichlorobenzene	U	1.28	ug/kg	0.384	1.28
104-51-8	n-Butylbenzene	U	1.28	ug/kg	0.384	1.28
96-12-8	1,2-Dibromo-3-chloropropane	U	1.28	ug/kg	0.384	1.28
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.40	ug/kg	2.05	6.40
630-20-6	1,1,1,2-Tetrachloroethane	U	1.28	ug/kg	0.384	1.28
95-50-1	1,2-Dichlorobenzene	U	1.28	ug/kg	0.384	1.28

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	14.3	ug/kg	0	J
	unknown hydrocarbon	14.31	40	ug/kg	0	J
000475-20-7	1,4-Methanoazulene, decahydro-4,8,	14.64	66	ug/kg	99	NJ
007785-70-8	1R-.alpha.-Pinene	14.95	10.2	ug/kg	95	NJ
	unknown hydrocarbon	15.29	26.9	ug/kg	0	J
	unknown hydrocarbon	15.57	16.2	ug/kg	0	J
	unknown siloxane	16.93	14.5	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
InstName : VOA9
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 09 18:47:54 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	912109	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	547239	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	159425	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	912109	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	547239	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	159413	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	319501	52.13	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	104.26%			
43) Toluene-d8	12.412	12.412	0.890	98	784666	55.81	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	111.62%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	251200	64.78	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	129.56%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659	59	507	N.D.		
9) Acetone	7.502	7.490	0.696	43	8672	2.13	ug/L	88
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	8.095	7.858	0.751	41	197	Below Cal	#	35
13) Methyl acetate	7.894	7.882	0.733	43	211	Below Cal	#	67
14) Carbon disulfide	7.905	7.906	0.734	76	1660	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	6494	Below Cal	#	82
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.494	9.483	0.881	43	773	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.218	10.230	0.948	56	669	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	10.526	10.538	0.977	78	380	N.D.		
32) Cyclohexene	10.775	10.645	1.000	67	178	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	7013	Below Cal	#	27
34) Trichloroethylene	11.166	11.167	1.036	95	1595	0.35	ug/L	83
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
InstName : VOA9
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 09 18:47:54 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	6650	0.42 ug/L	88
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.016	13.028	0.934	43	1875	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.024	14.024	1.006	91	4219	N.D.	
55) m,p-Xylenes	0.000	14.131	0.000		0m	N.D. d	
56) o-Xylene	0.000	14.570	0.000		0m	N.D. d	
57) Styrene	0.000	14.570	0.000		0m	N.D. d	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0m	N.D. d	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0m	N.D. d	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	0.000	15.353	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.495	0.000		0m	N.D. d	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.614	0.000		0m	N.D. d	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	15.910	0.000		0m	N.D. d	
71) sec-Butylbenzene	16.194	16.112	0.989	105	878	N.D.	
72) 4-Isopropyltoluene	0.000	16.230	0.000		0m	N.D. d	
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	209	N.D.	
74) 1,4-Dichlorobenzene	0.000	16.408	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.693	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	450	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.561	7.550	0.702	45	1681	N.D.	
88) Allyl chloride	0.000	7.929	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.494	9.483	0.881	43	773	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
InstName : VOA9
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 09 18:47:54 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

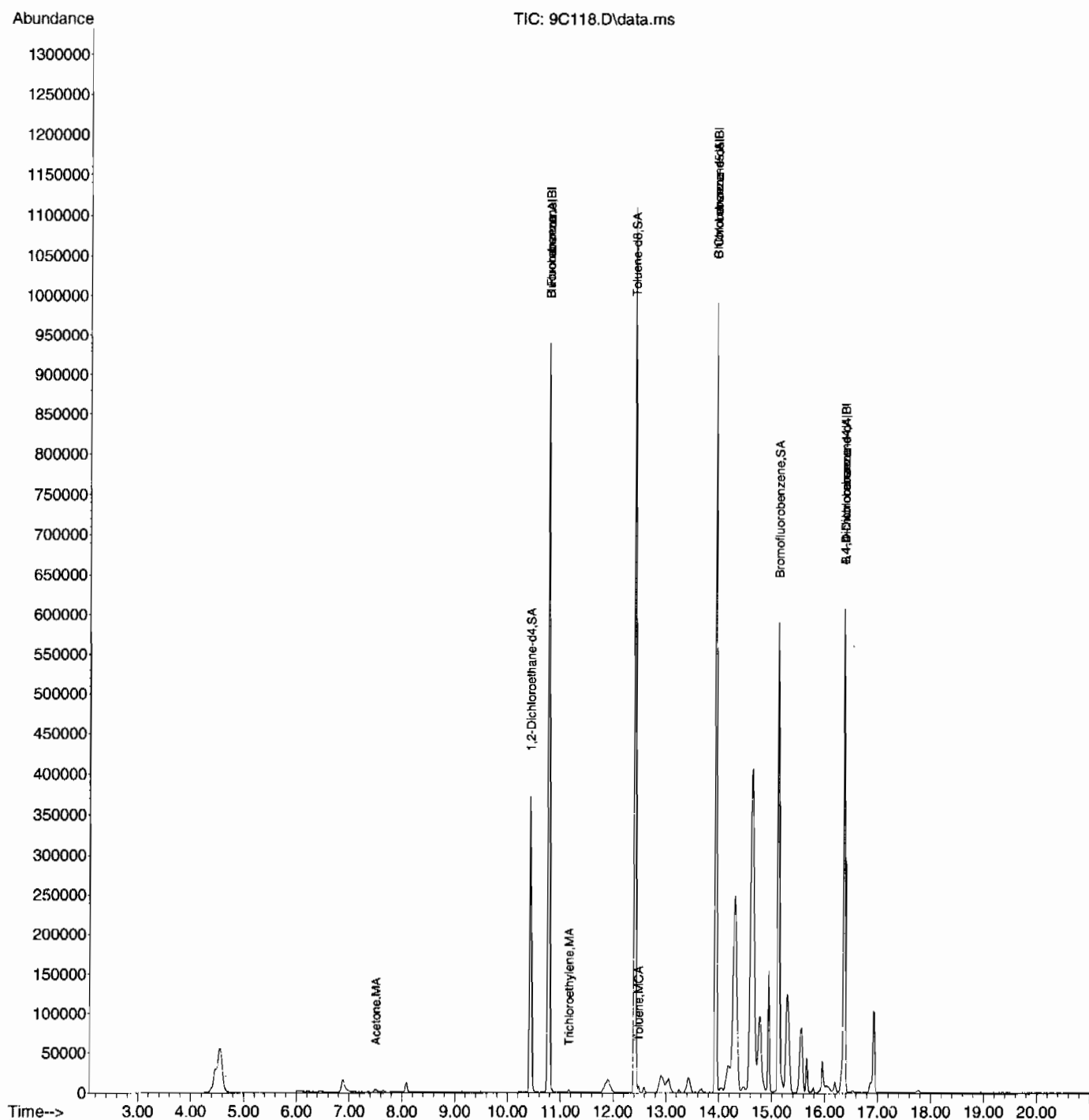
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	9.886	9.874	0.917	42	231	N.D.	
98) Isobutyl alcohol	10.218	10.159	0.948	41	211	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0m	N.D.	d
108) Cyclohexanone	14.949	15.092	0.913	42	874	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.527	16.527	1.009	91	1853	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.918	0.000		0m	N.D.	d

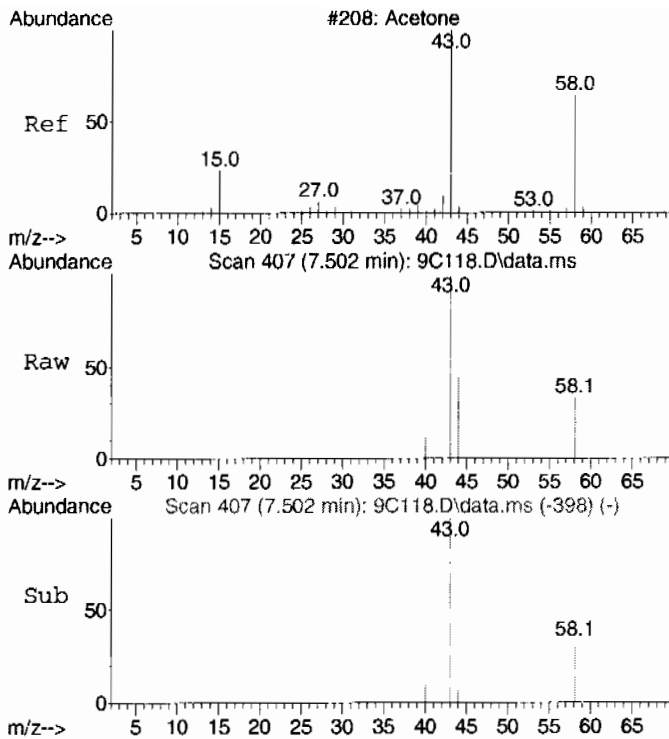
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
InstName : VOA9
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 09 18:47:54 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

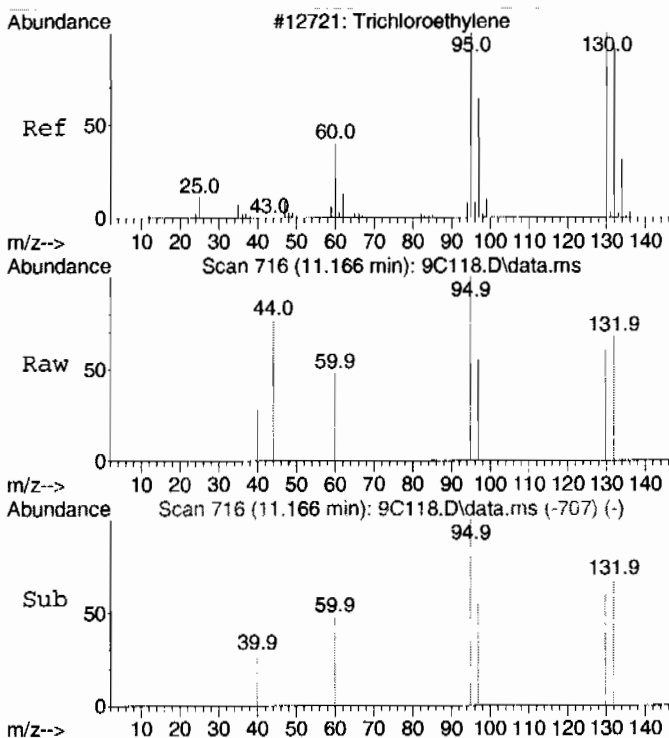
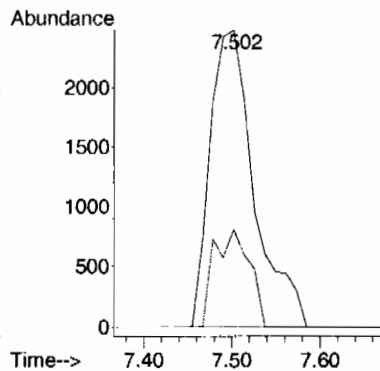




#9
Acetone
Concen: 2.13 ug/L
RT: 7.502 min Scan# 407
Delta R.T. 0.012 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

Tgt Ion: 43 Resp: 8672

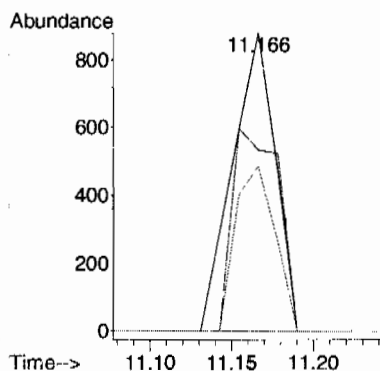
Ion	Ratio	Lower	Upper
43	100		
58	26.1	3.2	63.2

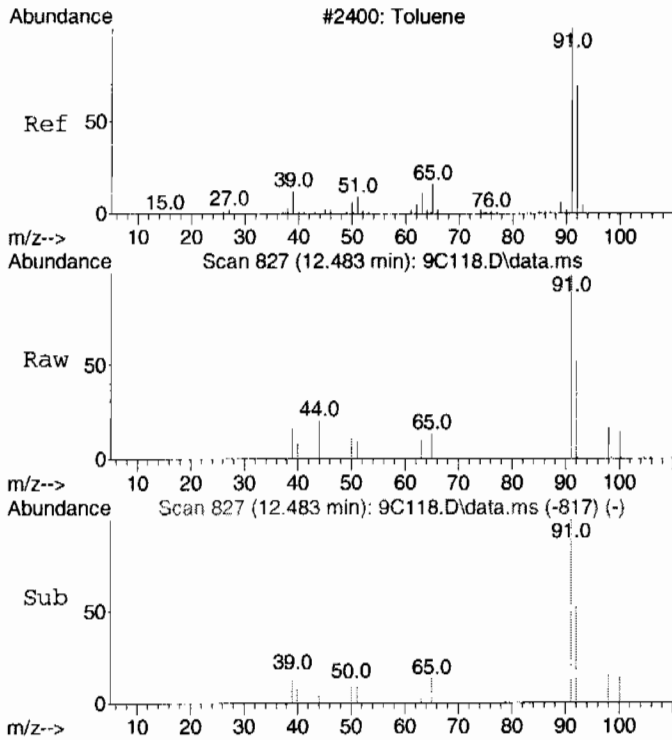


#34
Trichloroethylene
Concen: 0.35 ug/L
RT: 11.166 min Scan# 716
Delta R.T. -0.001 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

Tgt Ion: 95 Resp: 1595

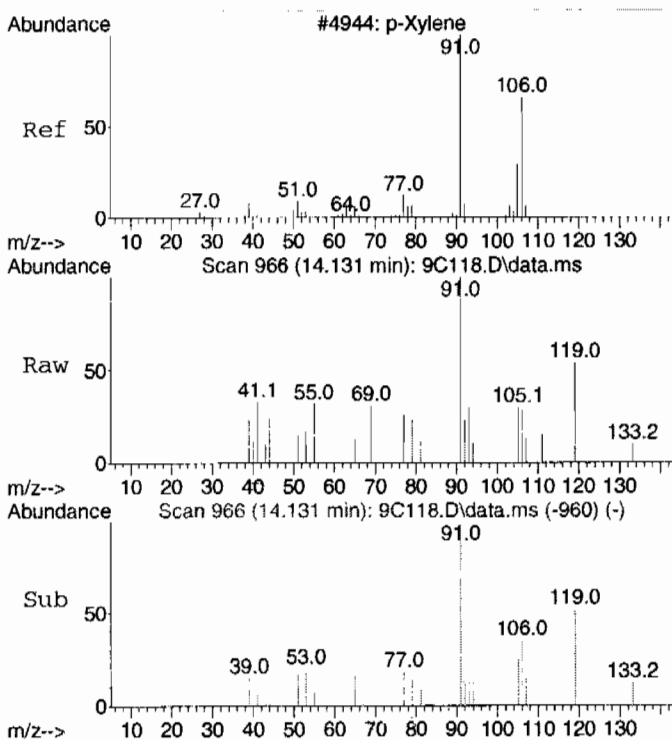
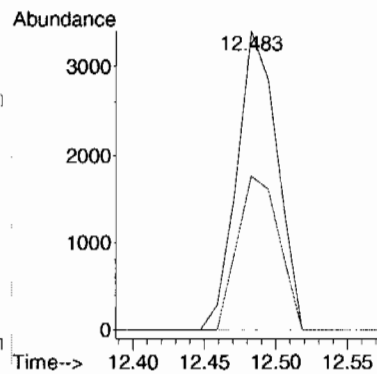
Ion	Ratio	Lower	Upper
95	100		
130	73.7	59.3	119.3
97	51.5	35.8	95.8





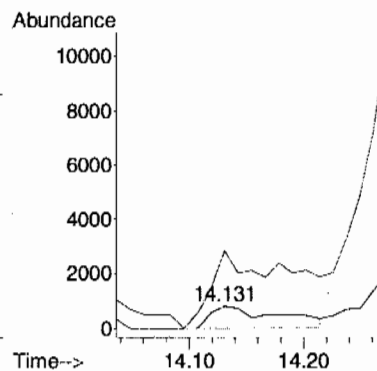
#44
Toluene
Concen: 0.42 ug/L
RT: 12.483 min Scan# 827
Delta R.T. -0.000 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

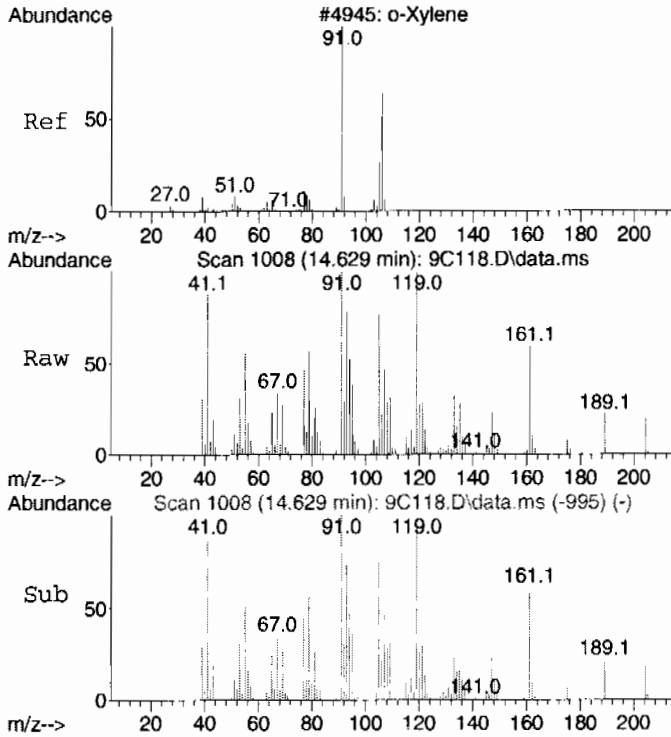
Tgt Ion: 91 Resp: 6650
Ion Ratio Lower Upper
91 100
92 53.6 33.0 93.0



#55 BEFORE analyst DELETION
m,p-Xylenes
Concen: 0.51 ug/L
RT: 14.131 min Scan# 966
Delta R.T. 0.000 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

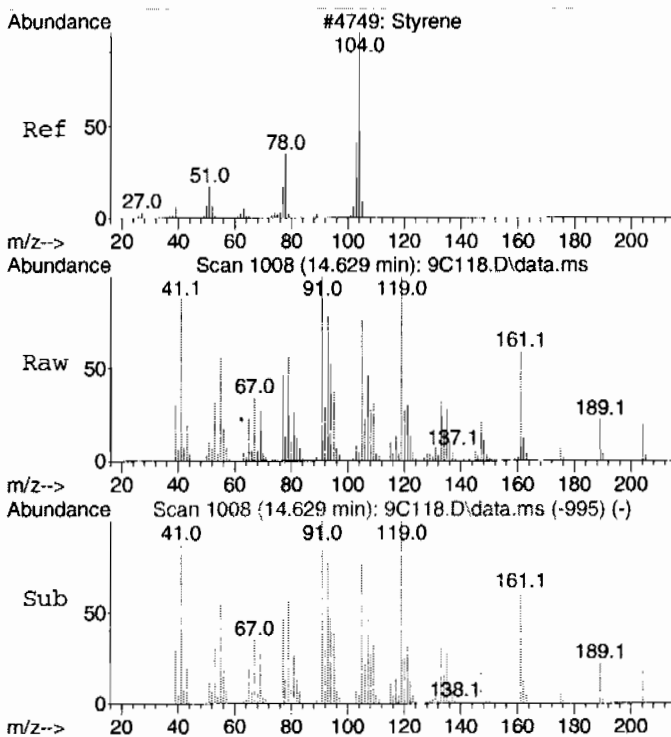
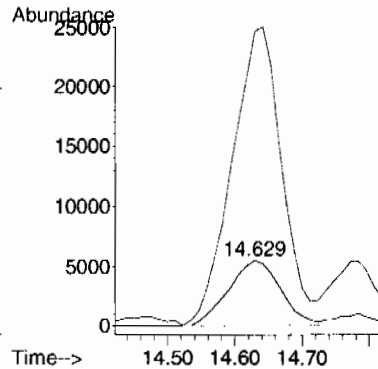
Tgt Ion: 106 Resp: 3377
Ion Ratio Lower Upper
106 100
91 401.2 164.9 224.9#





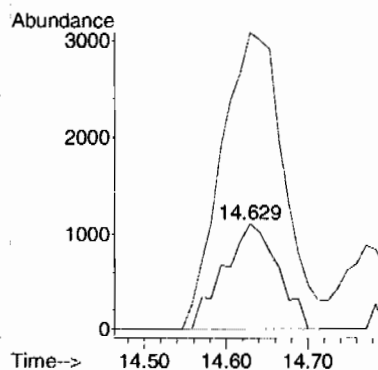
#56 BEFORE analyst DELETION
o-Xylene
Concen: 4.34 ug/L
RT: 14.629 min Scan# 1008
Delta R.T. 0.059 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

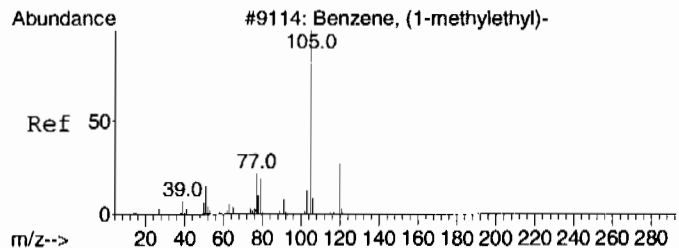
Tgt Ion:106 Resp: 29717
Ion Ratio Lower Upper
106 100
91 427.7 177.2 237.2#



#57 BEFORE analyst DELETION
Styrene
Concen: 0.46 ug/L
RT: 14.629 min Scan# 1008
Delta R.T. 0.059 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

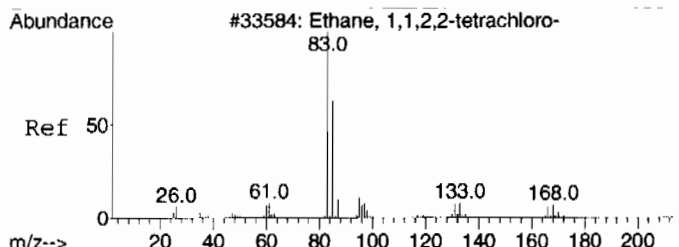
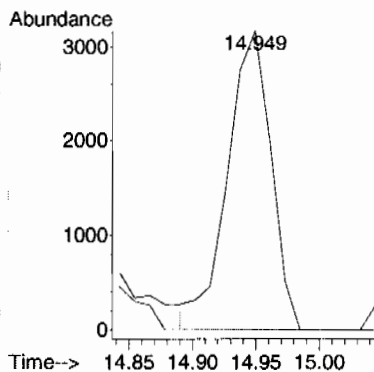
Tgt Ion:104 Resp: 5096
Ion Ratio Lower Upper
104 100
78 324.5 24.3 84.3#





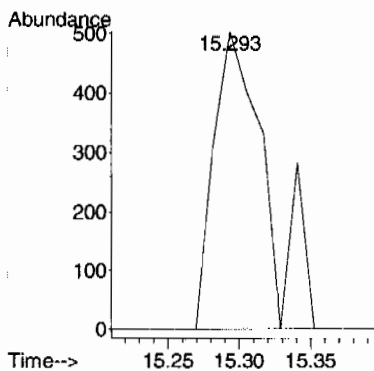
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.68 ug/L
RT: 14.949 min Scan# 1035
Delta R.T. 0.023 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

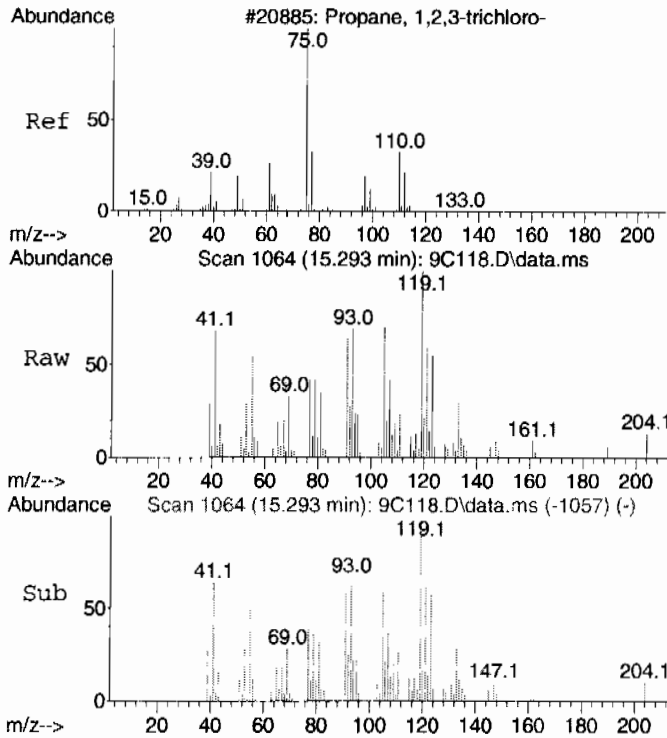
Tgt Ion: 105 Resp: 7572
Ion Ratio Lower Upper
105 100
120 0.0 0.0 58.0



#62 BEFORE analyst DELETION
1,1,2,2-Tetrachloroethane
Concen: 0.41 ug/L
RT: 15.293 min Scan# 1064
Delta R.T. 0.095 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

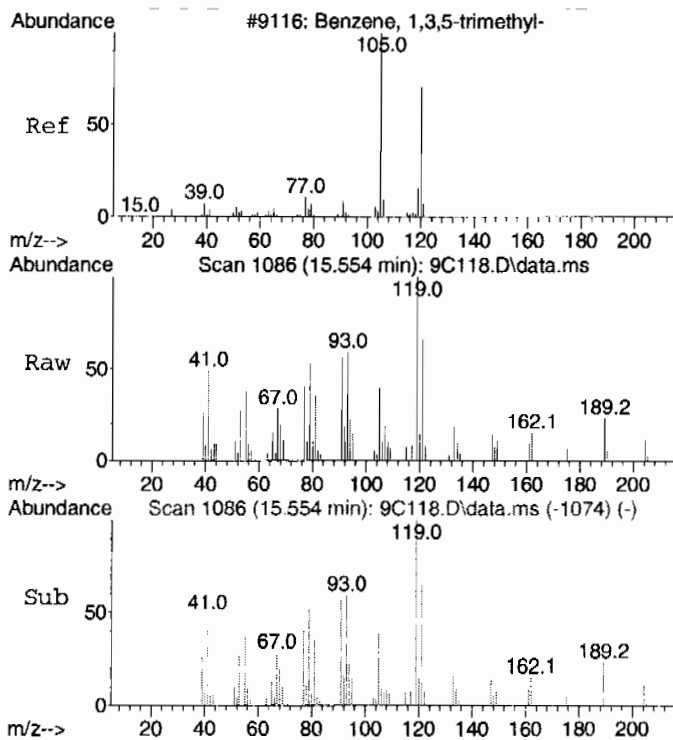
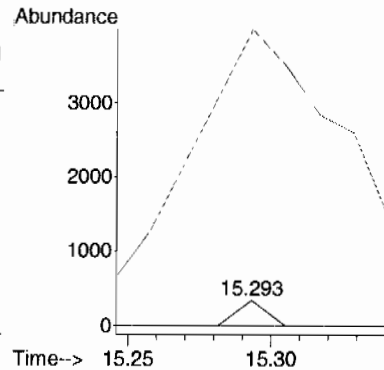
Tgt Ion: 83 Resp: 1303
Ion Ratio Lower Upper
83 100
85 0.0 35.2 95.2#





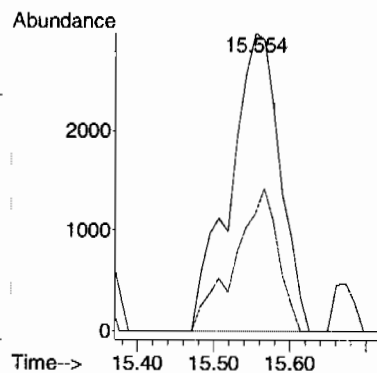
#63 BEFORE analyst DELETION
1,2,3-Trichloropropane
Concen: 0.31 ug/L
RT: 15.293 min Scan# 1064
Delta R.T. 0.000 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

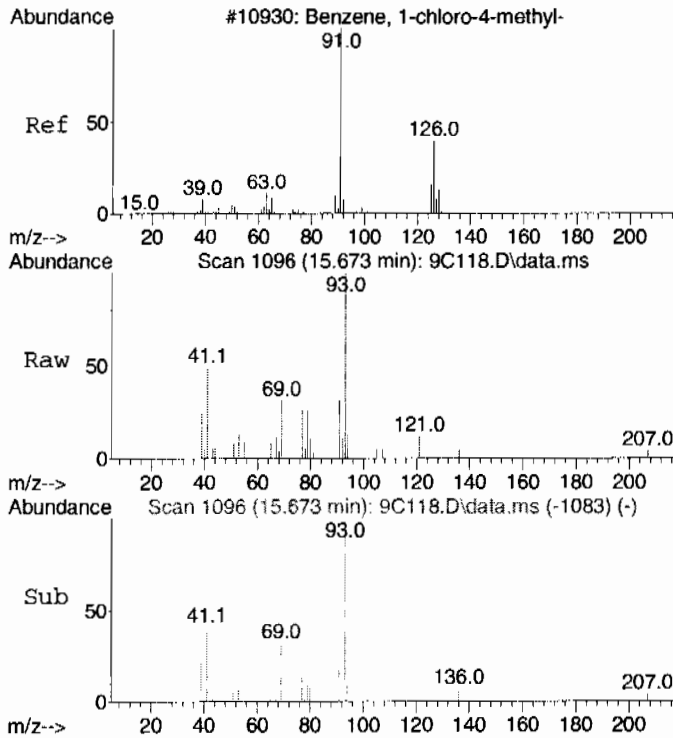
Tgt Ion:110 Resp: 240
Ion Ratio Lower Upper
110 100
75 0.0 320.0 380.0#
77 6842.5 0.0 30.0#



#66 BEFORE analyst DELETION
1,3,5-Trimethylbenzene
Concen: 1.41 ug/L
RT: 15.554 min Scan# 1086
Delta R.T. 0.059 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

Tgt Ion:105 Resp: 13493
Ion Ratio Lower Upper
105 100
120 41.4 20.9 80.9

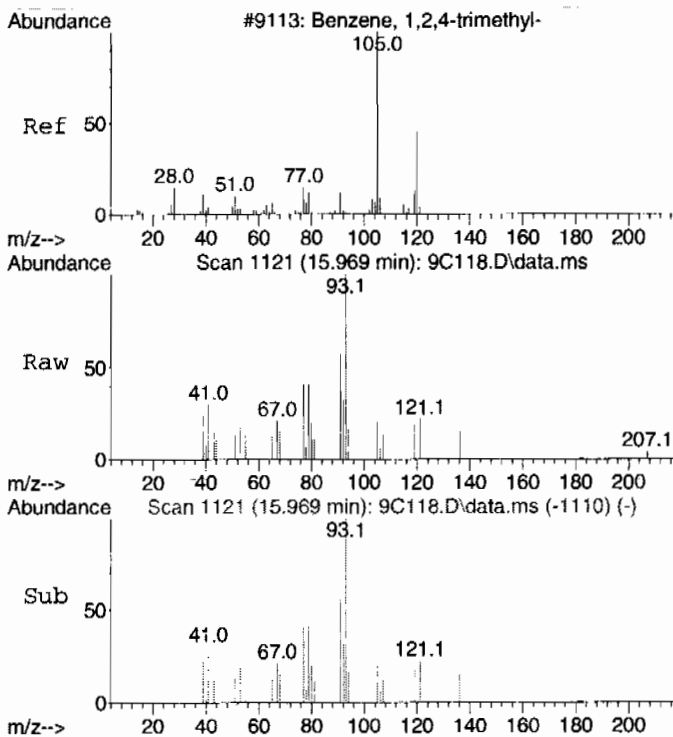
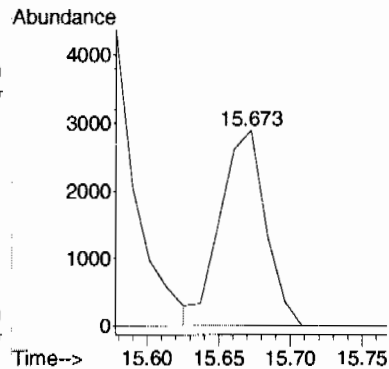




#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.69 ug/L
RT: 15.673 min Scan# 1096
Delta R.T. 0.059 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

Tgt Ion: 91 Resp: 6384

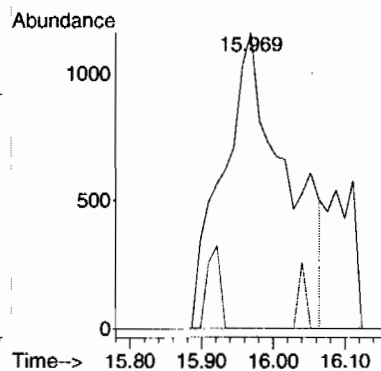
Ion	Ratio	Lower	Upper
91	100		
126	0.0	1.2	61.2#

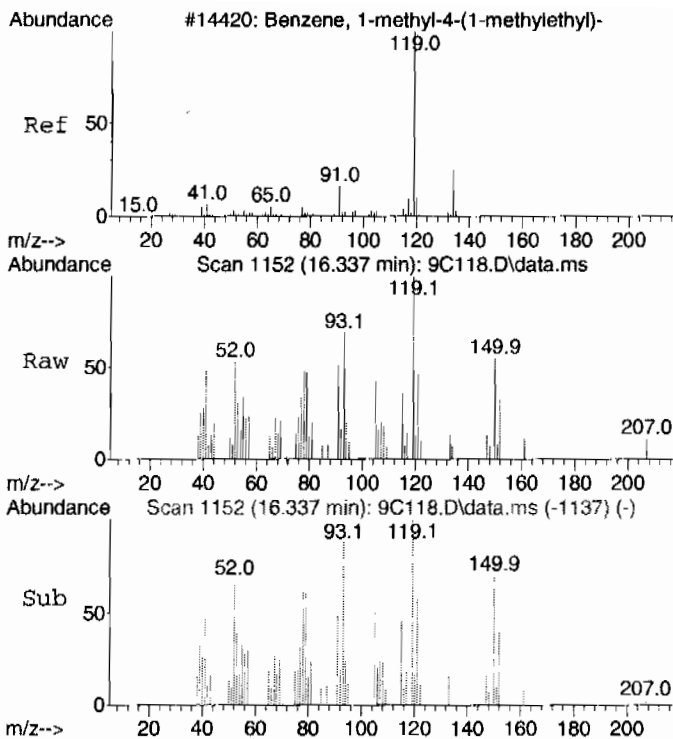


#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 0.73 ug/L
RT: 15.969 min Scan# 1121
Delta R.T. 0.059 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

Tgt Ion: 105 Resp: 7041

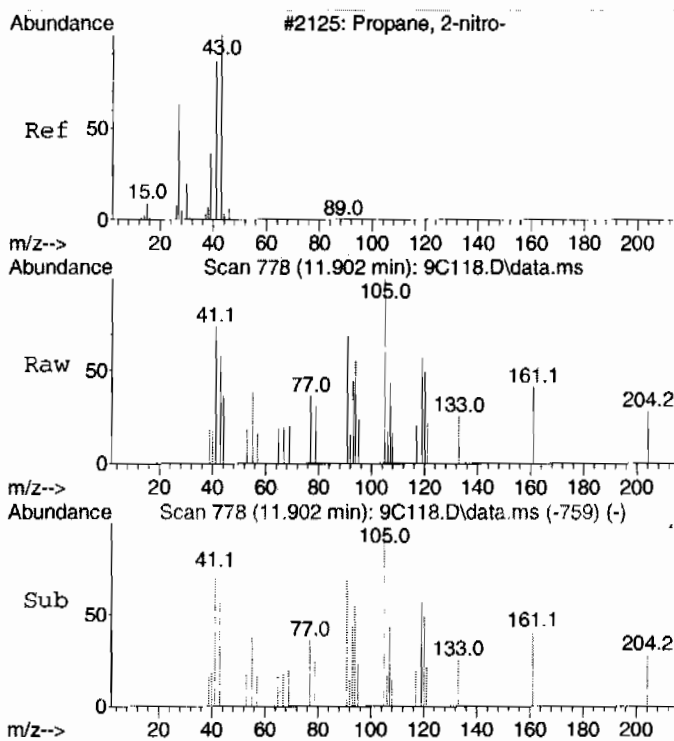
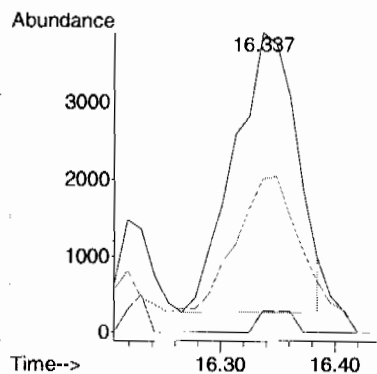
Ion	Ratio	Lower	Upper
105	100		
120	5.8	18.4	78.4#





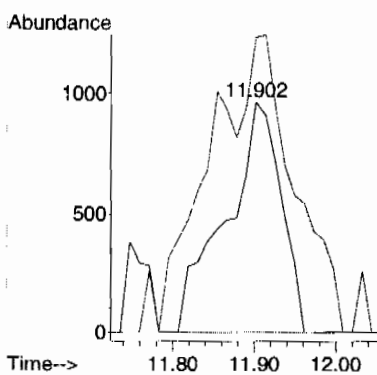
#72 BEFORE analyst DELETION
4-Isopropyltoluene
Concen: 1.41 ug/L
RT: 16.337 min Scan# 1152
Delta R.T. 0.107 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

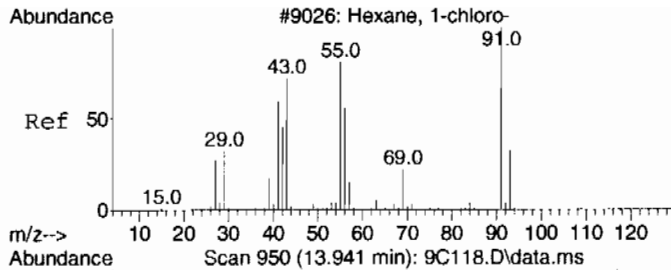
Tgt Ion	Ratio	Lower	Upper
119	100		
134	4.2	0.0	56.1
91	44.5	0.0	57.2



#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 3.13 ug/L
RT: 11.902 min Scan# 778
Delta R.T. 0.048 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

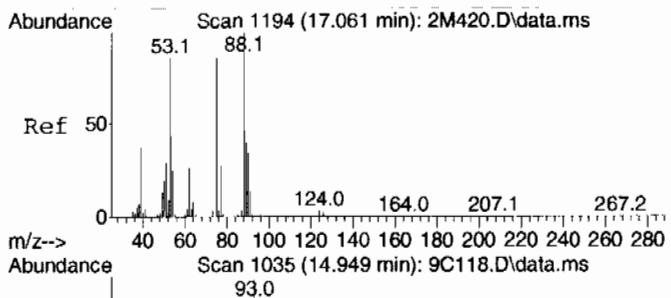
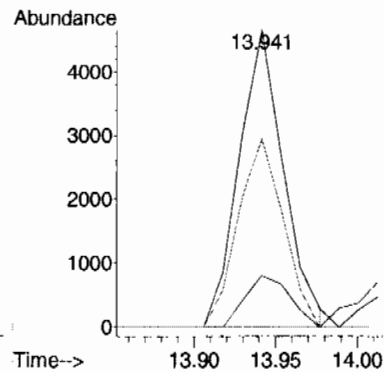
Tgt Ion	Ratio	Lower	Upper
43	100		
41	85.8	49.2	109.2





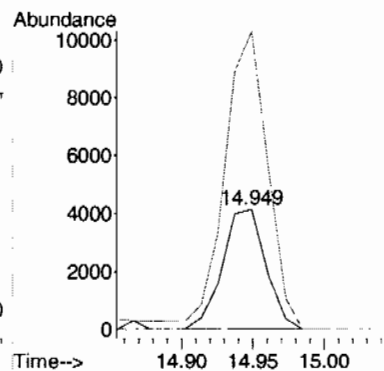
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.82 ug/L
RT: 13.941 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

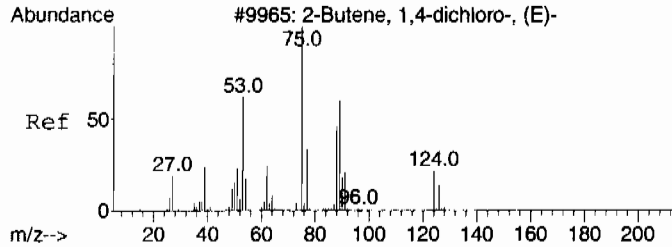
Tgt Ion	Ratio	Lower	Upper
55	100		
91	17.3	74.8	134.8#
56	64.3	31.8	91.8



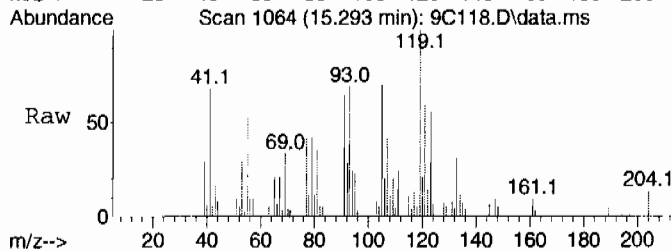
#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 7.92 ug/L
RT: 14.949 min Scan# 1035
Delta R.T. -0.012 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm

Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	55.7	115.7#
77	243.8	0.0	58.7#

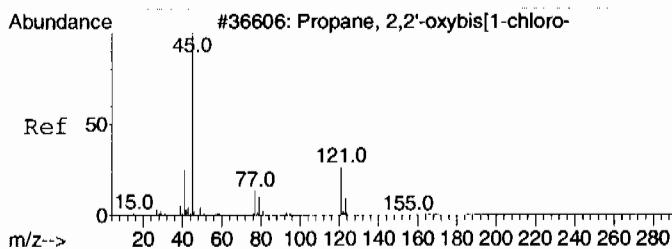
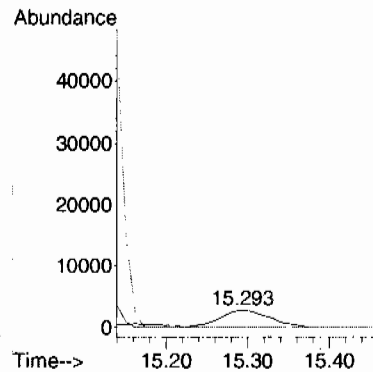
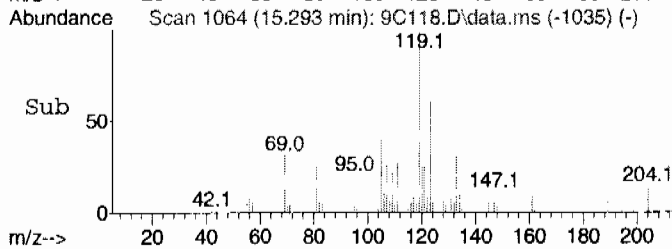




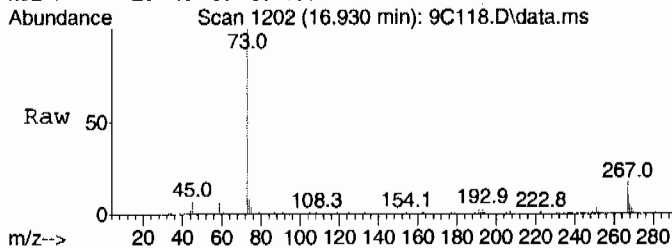
#109 BEFORE analyst DELETION
trans-1,4-Dichloro-2-butene
Concen: 11.54 ug/L
RT: 15.293 min Scan# 1064
Delta R.T. 0.047 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm



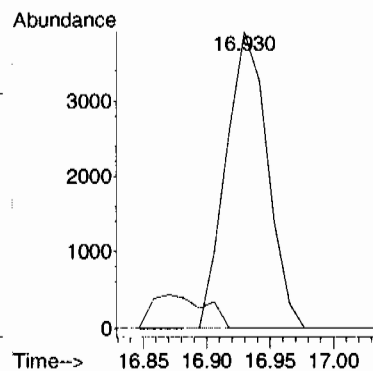
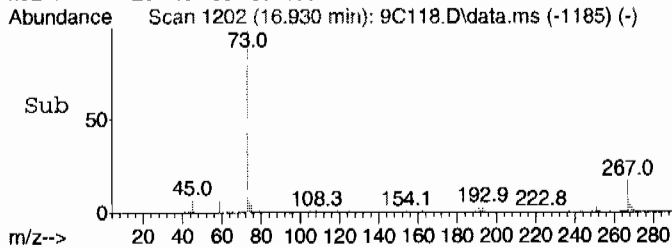
Tgt Ion: 53 Resp: 12105
Ion Ratio Lower Upper
53 100
88 0.0 10.7 70.7#
75 0.0 76.2 136.2#



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 4.65 ug/L
RT: 16.930 min Scan# 1202
Delta R.T. 0.012 min
Lab File: 9C118.D
Acq: 8 Mar 2010 6:31 pm



Tgt Ion: 45 Resp: 8891
Ion Ratio Lower Upper
45 100
121 0.0 0.0 46.4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

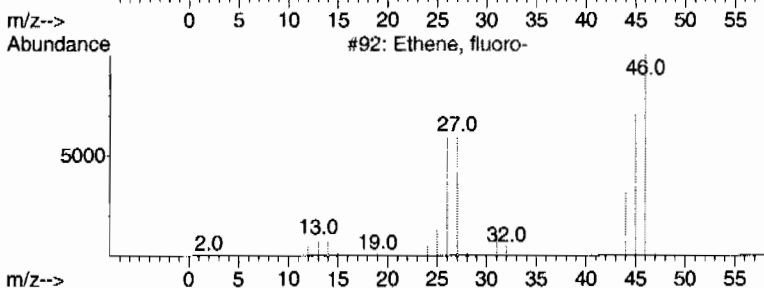
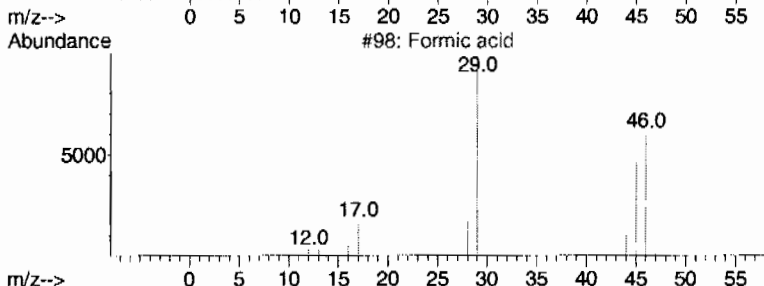
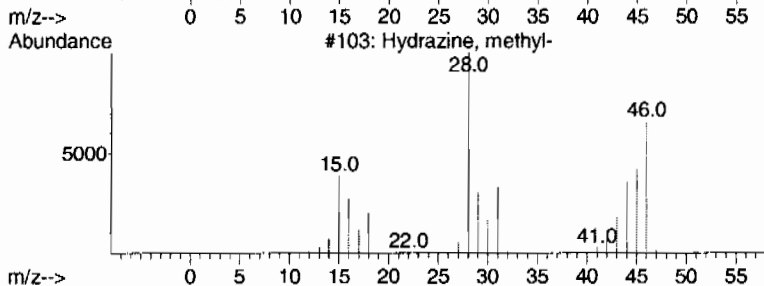
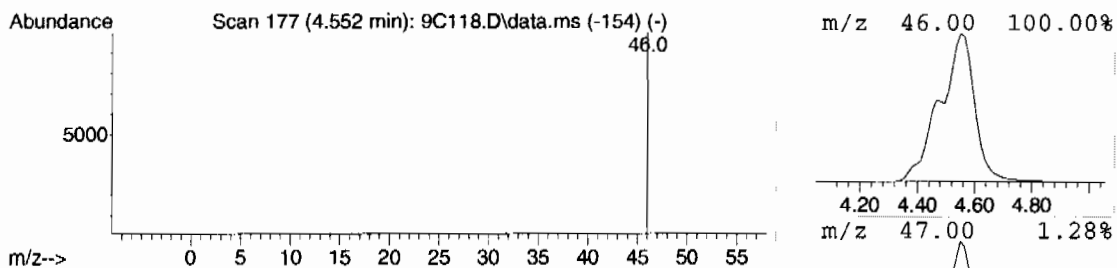
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.552	11.14 ug/L	477475	Fluorobenzene	10.775

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2			Formic acid	46	CH2O2	000064-18-6	4
3			Ethene, fluoro-	46	C2H3F	000075-02-5	3
4			Formic acid	46	CH2O2	000064-18-6	3
5			Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

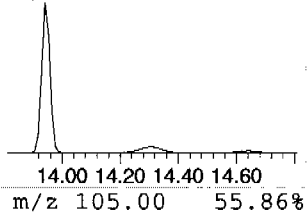
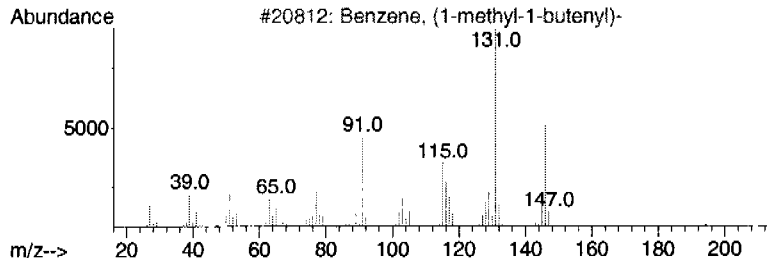
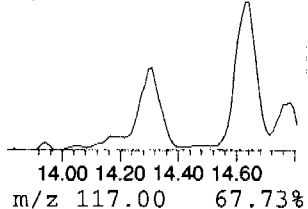
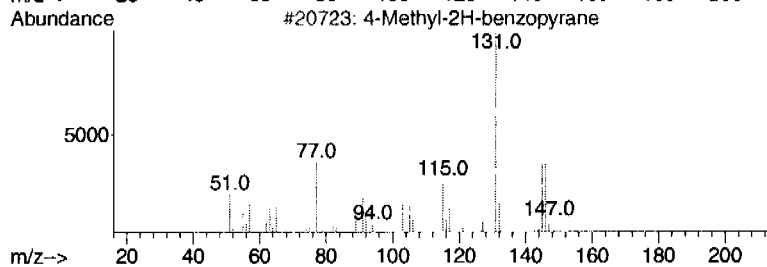
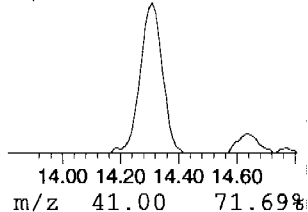
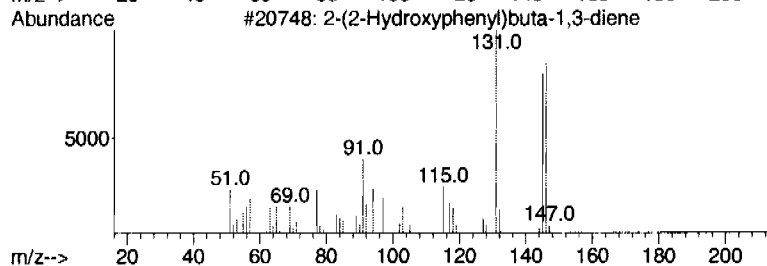
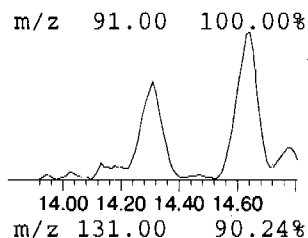
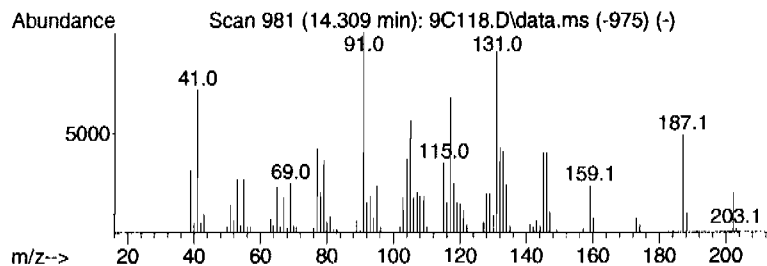
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 2 unknown hydrocarbon Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.309	31.24 ug/L	1209800	B Chlorobenzene-d5	13.941

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-(2-Hydroxyphenyl)buta-1,3-diene	146	C10H10O	038865-47-3	43
2			4-Methyl-2H-benzopyrane	146	C10H10O	021776-94-3	41
3			Benzene, (1-methyl-1-butenyl)-	146	C11H14	053172-84-2	38
4			Naphthalene, 1,2,3,4-tetrahydro-	146	C11H14	002809-64-5	38
5			Benzene, (3-methyl-2-butenyl)-	146	C11H14	004489-84-3	30



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Quant Title : Volatile Organics 8260B

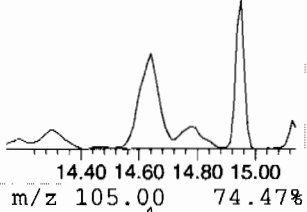
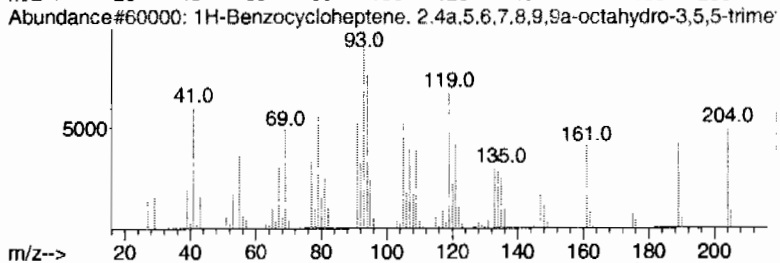
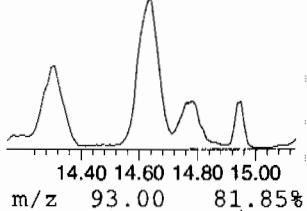
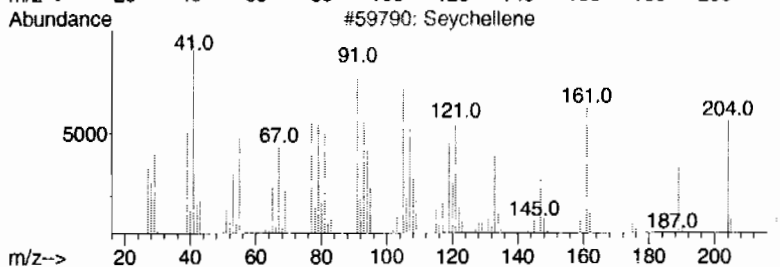
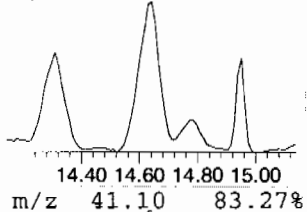
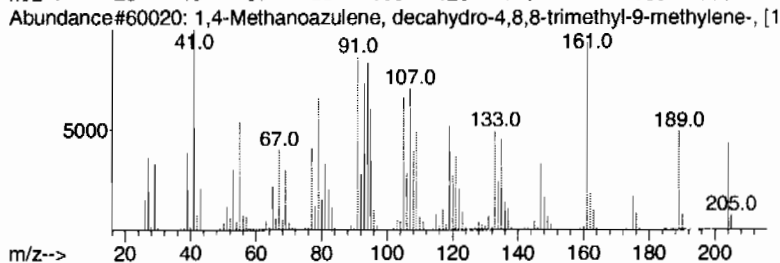
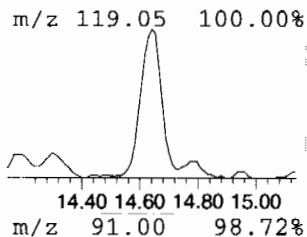
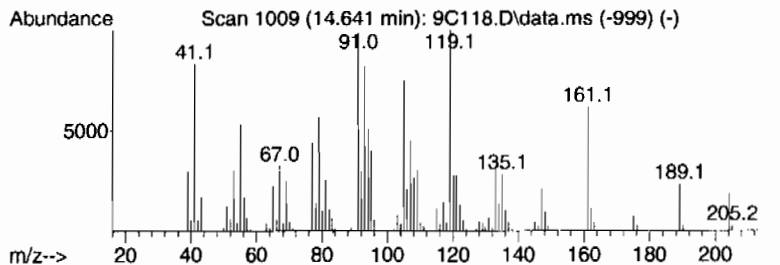
SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 3 1,4-Methanoazulene, decahyd... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.		
14.641	51.56 ug/L	1996560	B Chlorobenzene-d5	13.941		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	99
2		Seychellene	204	C15H24	020085-93-2	93
3		1H-Benzocycloheptene, 2,4a,5,6,7...	204	C15H24	003853-83-6	89
4		1H-Benzocycloheptene, 2,4a,5,6,7...	204	C15H24	003853-83-6	89
5		1,2,4-Metheno-1H-indene, octahyd...	204	C15H24	022469-52-9	70



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

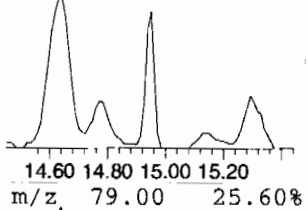
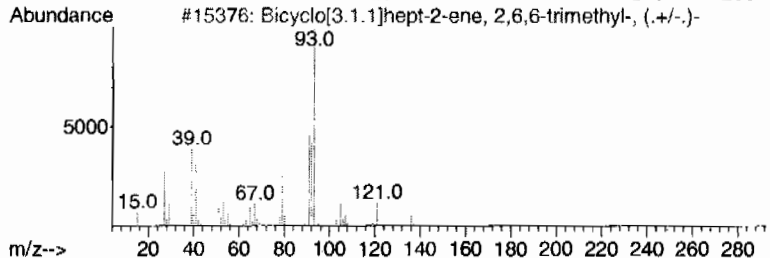
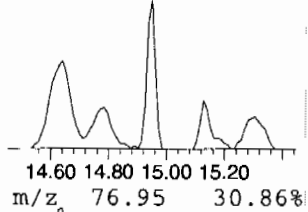
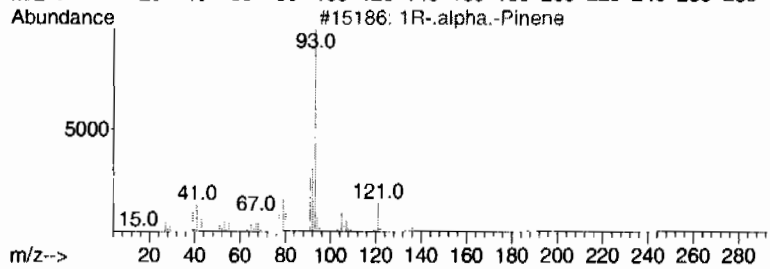
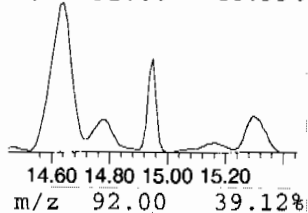
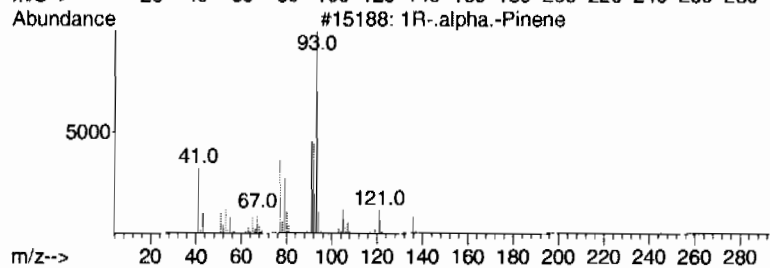
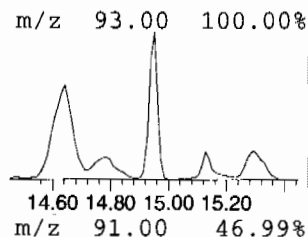
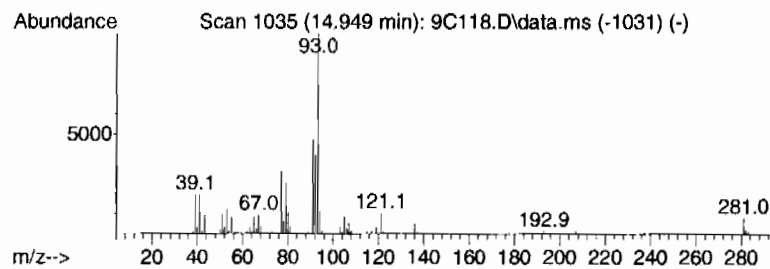
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 4 1R-.alpha.-Pinene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.949	8.01 ug/L	310155	B Chlorobenzene-d5	13.941

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1R-.alpha.-Pinene	136	C10H16	007785-70-8	95
2			1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
3			Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	94
4			Bicyclo[3.1.1]hept-2-ene, 3,6,6-...	136	C10H16	004889-83-2	91
5			.alpha.-Pinene	136	C10H16	000080-56-8	91



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

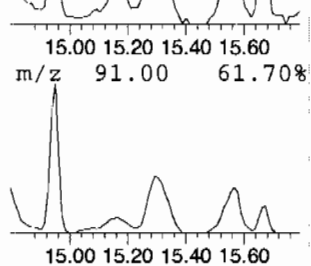
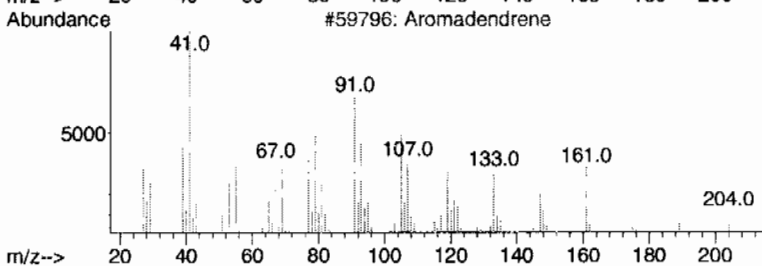
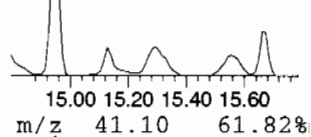
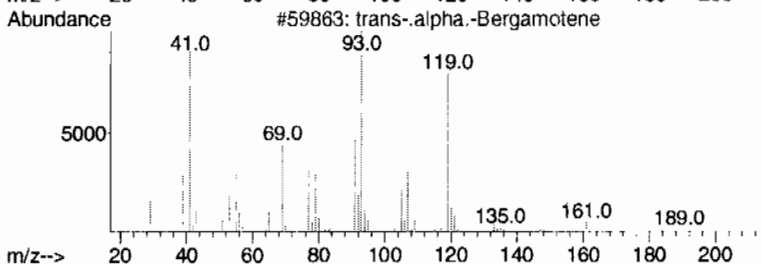
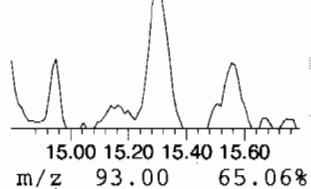
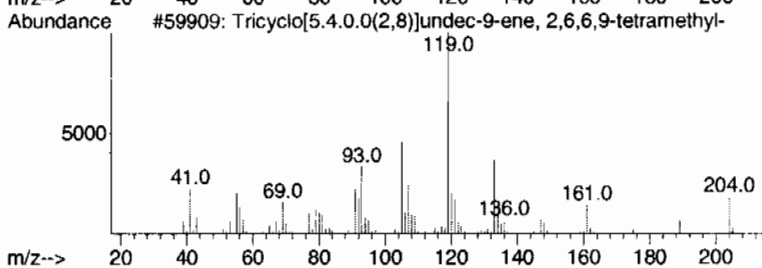
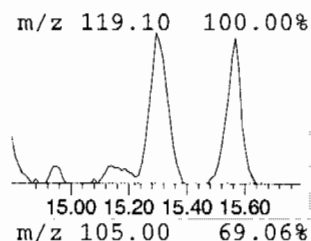
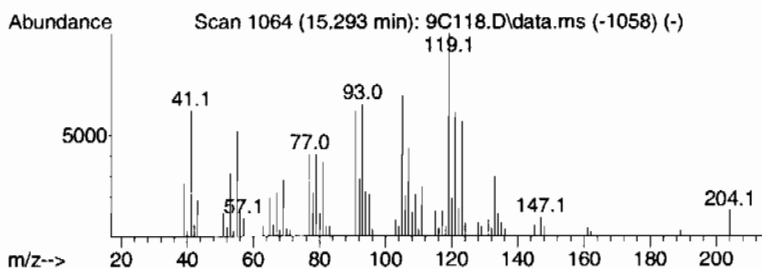
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 5 unknown hydrocarbon Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.293	20.99 ug/L	543016	1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Tricyclo[5.4.0.0(2,8)]undec-9-en...	204	C15H24	005989-08-2	50
2			trans-.alpha.-Bergamotene	204	C15H24	1000293-01-5	43
3			Aromadendrene	204	C15H24	109119-91-7	38
4			1,4-Cyclohexadiene, 3-ethenyl-1,...	134	C10H14	062338-57-2	38
5			Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	22



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

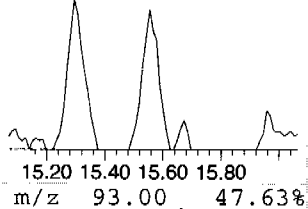
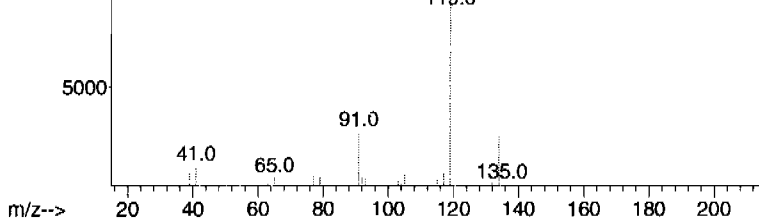
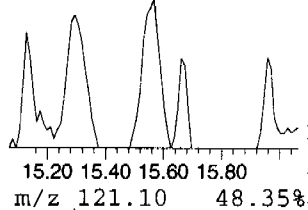
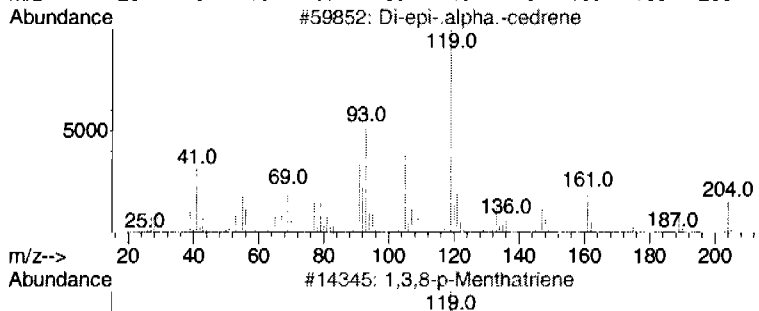
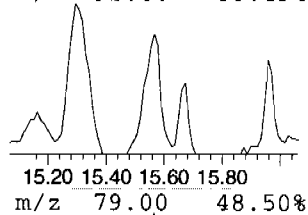
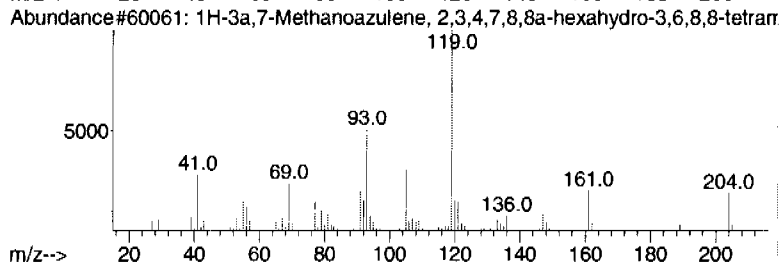
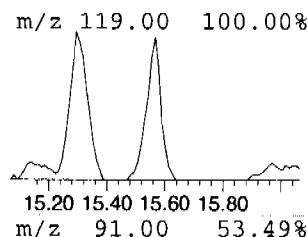
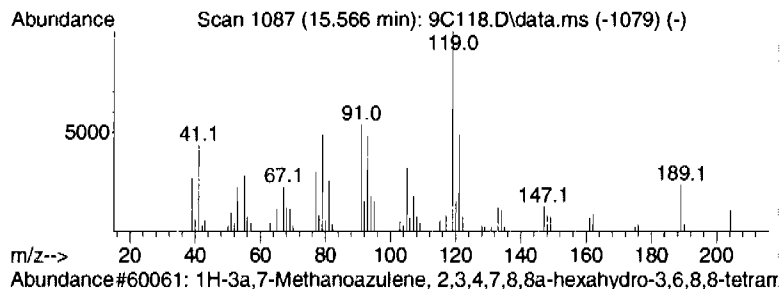
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 6 unknown hydrocarbon Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.566	12.64 ug/L	326848	1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	64
2			Di-epi-.alpha.-cedrene	204	C15H24	1000156-13-3	46
3			1,3,8-p-Menthatriene	134	C10H14	021195-59-5	38
4			Copaene	204	C15H24	003856-25-5	35
5			Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	25



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANTL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

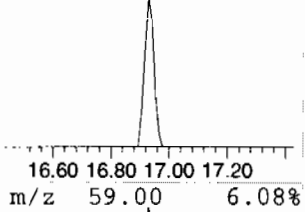
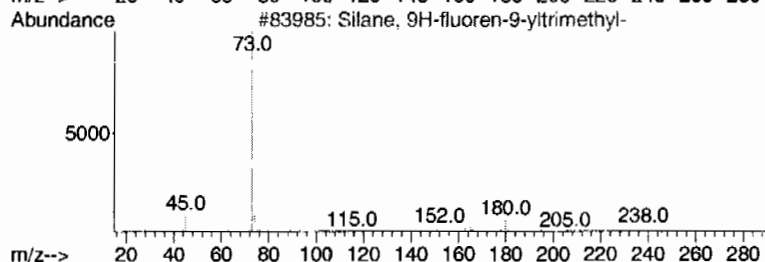
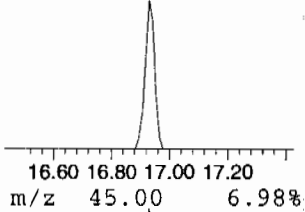
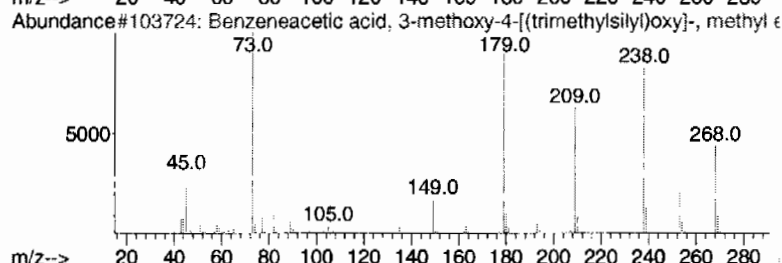
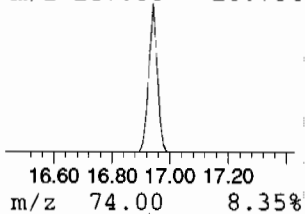
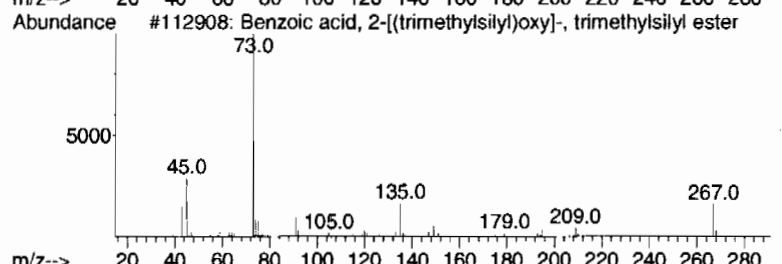
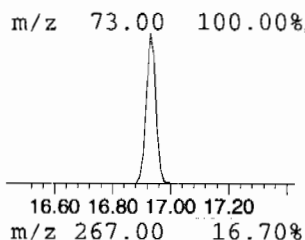
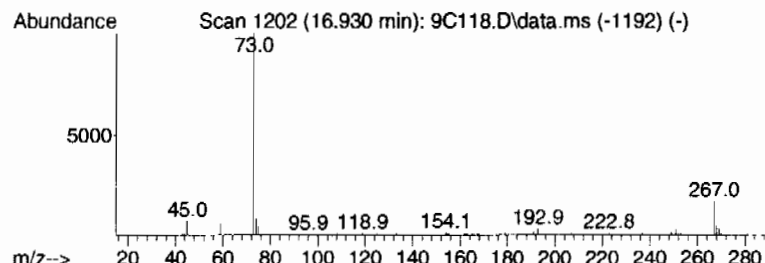
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 7 unknown siloxane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.930	11.31 ug/L	292591	B 1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester	282	C13H22O3Si2	003789-85-3	33
2			Benzeneacetic acid, 3-methoxy-4-[(trimethylsilyl)oxy]-, methyl ester	268	C13H20O4Si	015964-84-8	16
3			Silane, 9H-fluoren-9-yltrimethyl-	238	C16H18Si	007385-10-6	12
4			11H-Dibenzo[b,e][1,4]diazepin-11-yltrimethyl-	267	C16H17N3O	013450-73-2	9
5			Benzeneethanamine, N-[(pentafluorophenyl)dimethylsilyl]-	475	C21H26F5NO2Si2	055429-85-1	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C118.D
Acq On : 8 Mar 2010 6:31 pm
Operator : RXY1
Sample : |248373010|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	4.552	11.1	ug/L	477475	1	10.775	2142920	50.0
unknown hydroca...	14.309	31.2	ug/L	1209800	4	13.941	1936130	50.0
1,4-Methanoazul...	14.641	51.6	ug/L	1996560	4	13.941	1936130	50.0
1R-.alpha.-Pinene	14.949	8.0	ug/L	310155	4	13.941	1936130	50.0
unknown hydroca...	15.293	21.0	ug/L	543016	5	16.372	1293350	50.0
unknown hydroca...	15.566	12.6	ug/L	326848	5	16.372	1293350	50.0
unknown siloxane	16.930	11.3	ug/L	292591	6	16.372	1293350	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373011
 Client ID: RE36-10-7523
 Batch ID: 962617
 Run Date: 03/08/2010 18:59
 Prep Date: 03/08/2010 12:17
 Data File: 030810V99C119.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 15.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.404	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.356	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.356	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.356	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.356	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.356	1.19
67-64-1	Acetone	U	5.94	ug/kg	1.97	5.94
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.356	1.19
74-88-4	Iodomethane	U	5.94	ug/kg	1.90	5.94
75-09-2	Methylene chloride	U	5.94	ug/kg	2.38	5.94
75-15-0	Carbon disulfide	U	5.94	ug/kg	1.49	5.94
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.356	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.356	1.19
78-93-3	2-Butanone	U	5.94	ug/kg	1.78	5.94
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.356	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.356	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.356	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.392	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.356	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.356	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.356	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.356	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.356	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.392	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.356	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.356	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.356	1.19
108-10-1	4-Methyl-2-pentanone	U	5.94	ug/kg	1.49	5.94
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.356	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.356	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.356	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.356	1.19
591-78-6	2-Hexanone	U	5.94	ug/kg	1.78	5.94
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.356	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.356	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.356	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.356	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.356	1.19

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373011
 Client ID: RE36-10-7523
 Batch ID: 962617
 Run Date: 03/08/2010 18:59
 Prep Date: 03/08/2010 12:17
 Data File: 030810V99C119.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 15.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.356	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.356	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.356	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.356	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.356	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.356	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.356	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.356	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.356	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.356	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.356	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.356	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.356	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.356	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.356	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.356	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.356	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.356	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.356	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.356	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.356	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	5.94	ug/kg	1.90	5.94
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.356	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.356	1.19

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.54	11.4	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	14.95	8.8	ug/kg	96	NJ
000127-91-3	.beta.-Pinene	15.66	8.72	ug/kg	95	NJ

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C119.D
Acq On : 8 Mar 2010 6:59 pm
Operator : RXY1
InstName : VOA9
Sample : |248373011|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 09 11:09:47 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	910503	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	557791	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	182641	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	910503	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	557791	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	182627	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	331280	54.14	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	108.28%			
43) Toluene-d8	12.412	12.412	0.890	98	779647	54.40	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	108.80%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	268741	60.50	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	121.00%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.490	7.490	0.695	43	3105	N.D.		
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	0.000	7.858	0.000		0	N.D.		
13) Methyl acetate	0.000	7.882	0.000		0	N.D.		
14) Carbon disulfide	7.894	7.906	0.733	76	451	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	1698	Below Cal		97
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	0.000	9.483	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	0.000	10.230	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	0.000	10.538	0.000		0	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	6762	Below Cal	#	21
34) Trichloroethylene	0.000	11.167	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C119.D
Acq On : 8 Mar 2010 6:59 pm
Operator : RXY1
InstName : VOA9
Sample : |248373011|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 09 11:09:47 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.495	12.483	0.896	91	1057	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935	43	184	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.143	14.024	1.014	91	406	N.D.	
55) m,p-Xylenes	0.000	14.131	0.000		0	N.D.	
56) o-Xylene	14.629	14.570	1.049	106	757	N.D.	
57) Styrene	0.000	14.570	0.000		0	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	0.000	15.353	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	15.554	15.495	0.950	105	206	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.614	0.000		0m	N.D.	d
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	238	N.D.	
71) sec-Butylbenzene	0.000	16.112	0.000		0	N.D.	
72) 4-Isopropyltoluene	16.349	16.230	0.999	119	2157	N.D.	
73) 1,3-Dichlorobenzene	0.000	16.313	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	16.408	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.693	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	211	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.550	0.000		0	N.D.	
88) Allyl chloride	0.000	7.929	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.483	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C119.D
Acq On : 8 Mar 2010 6:59 pm
Operator : RXY1
InstName : VOA9
Sample : |248373011|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 09 11:09:47 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

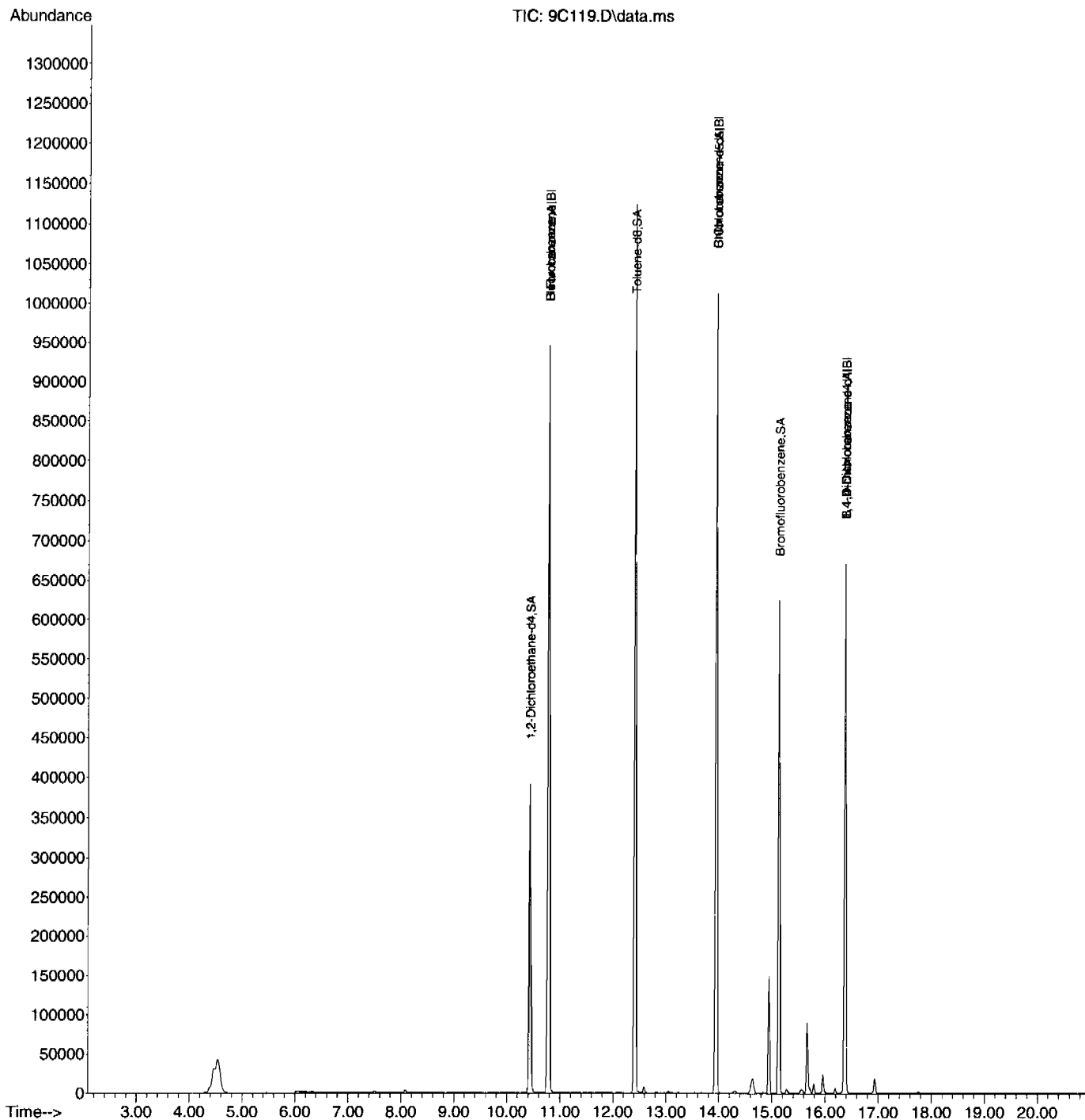
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	9.874	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	10.159	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0m	N.D.	d
108) Cyclohexanone	14.937	15.092	0.912	42	946	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	0.000	16.527	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034	45	1683	N.D.	

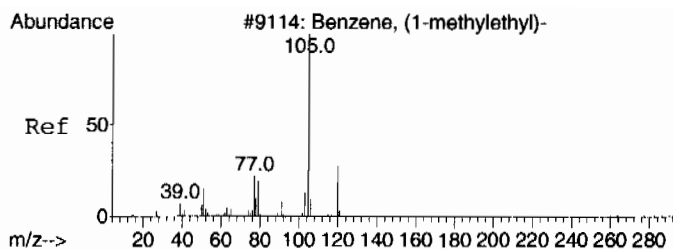
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C119.D
Acq On : 8 Mar 2010 6:59 pm
Operator : RXY1
InstName : VOA9
Sample : |248373011|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 19 Sample Multiplier: 1

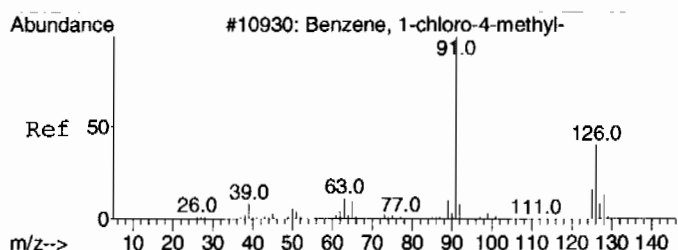
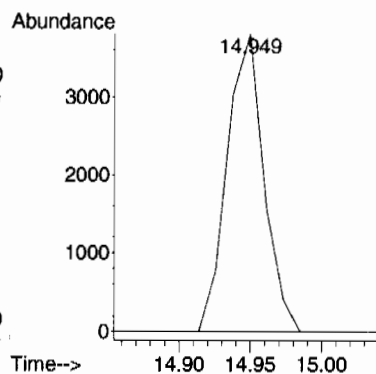
Quant Time: Mar 09 11:09:47 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





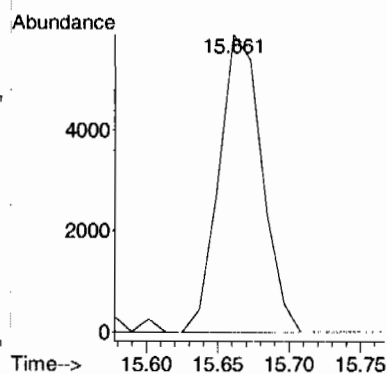
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.53 ug/L
RT: 14.949 min Scan# 1035
Delta R.T. 0.023 min
Lab File: 9C119.D
Acq: 8 Mar 2010 6:59 pm

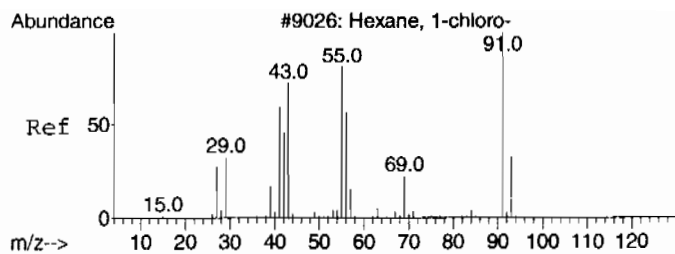
Tgt Ion	Ratio	Lower	Upper
105	100		
120	0.0	0.0	58.0



#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 1.17 ug/L
RT: 15.661 min Scan# 1095
Delta R.T. 0.047 min
Lab File: 9C119.D
Acq: 8 Mar 2010 6:59 pm

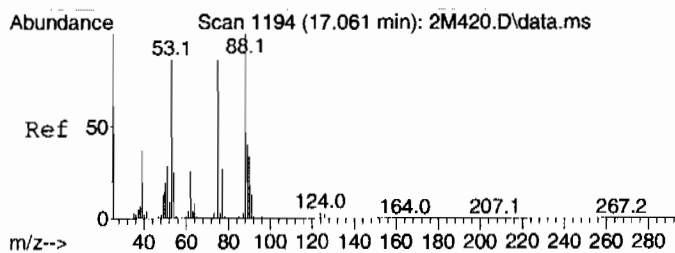
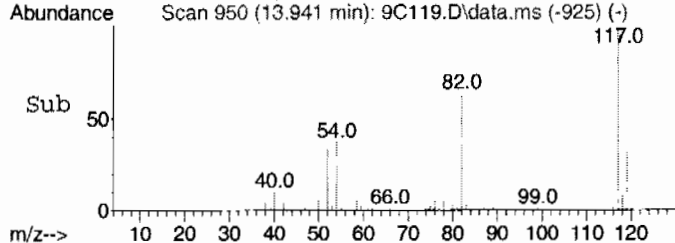
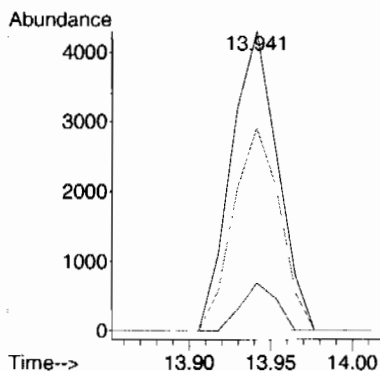
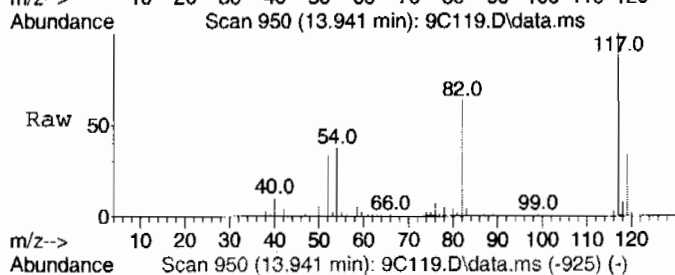
Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	1.2	61.2#





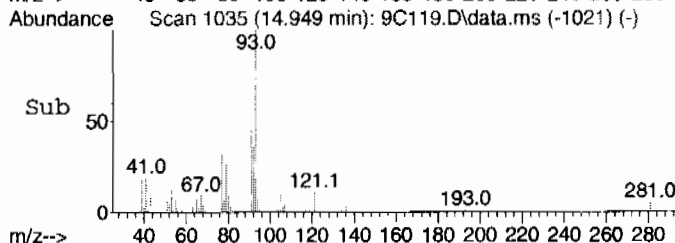
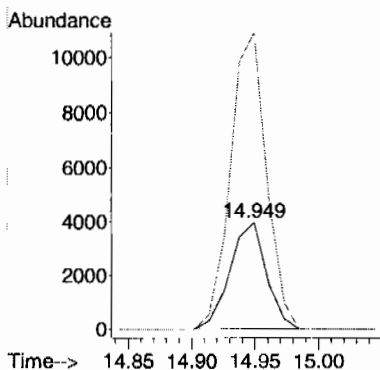
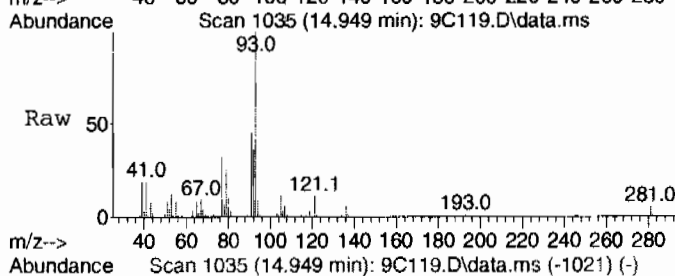
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.36 ug/L
RT: 13.941 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C119.D
Acq: 8 Mar 2010 6:59 pm

Tgt Ion	Ratio	Lower	Upper
55	100		
91	12.3	74.8	134.8#
56	68.3	31.8	91.8



#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 6.28 ug/L
RT: 14.949 min Scan# 1035
Delta R.T. -0.012 min
Lab File: 9C119.D
Acq: 8 Mar 2010 6:59 pm

Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	55.7	115.7#
77	272.0	0.0	58.7#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C119.D
Acq On : 8 Mar 2010 6:59 pm
Operator : RXY1
Sample : |248373011|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 19 Sample Multiplier: 1

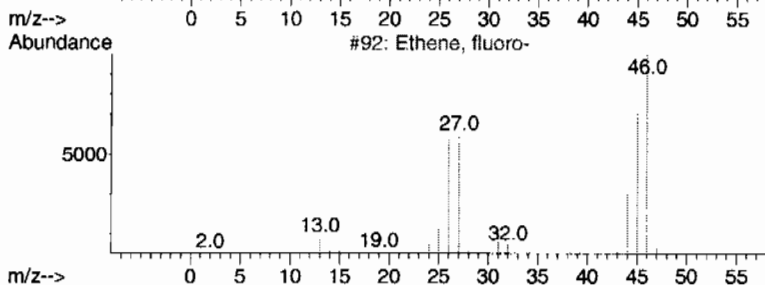
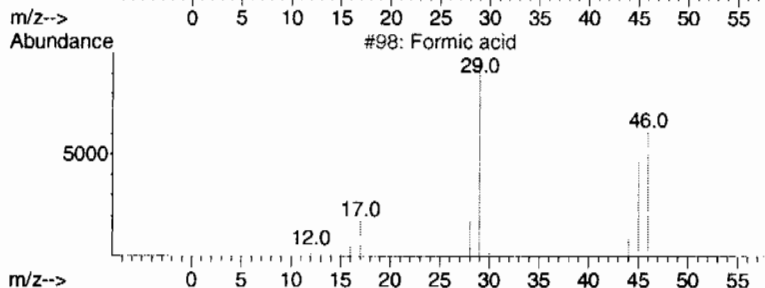
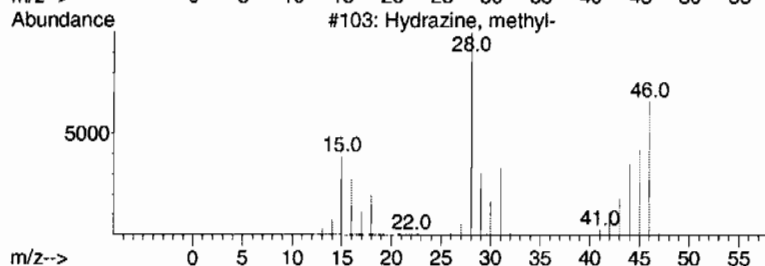
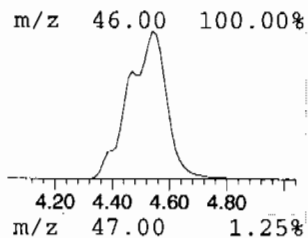
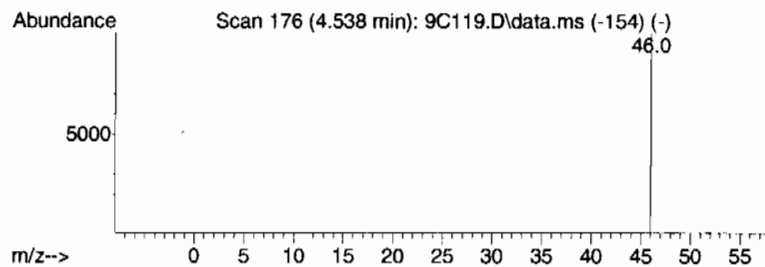
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.538	9.58 ug/L	405720	Fluorobenzene	10.775

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2			Formic acid	46	CH2O2	000064-18-6	4
3			Ethene, fluoro-	46	C2H3F	000075-02-5	3
4			Formic acid	46	CH2O2	000064-18-6	3
5			Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C119.D
Acq On : 8 Mar 2010 6:59 pm
Operator : RXY1
Sample : |248373011|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 19 Sample Multiplier: 1

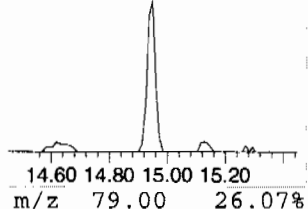
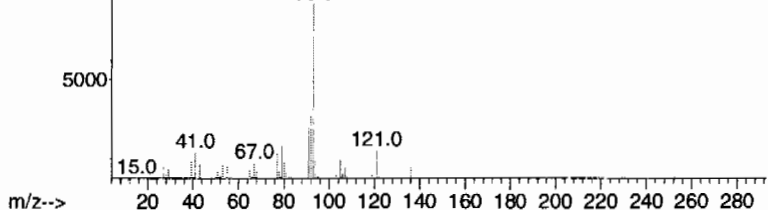
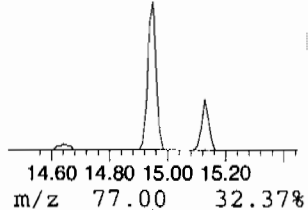
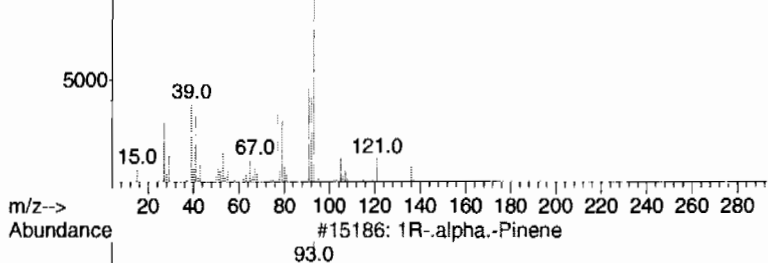
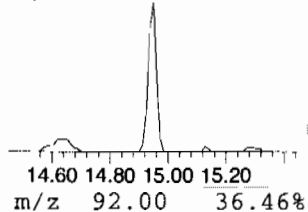
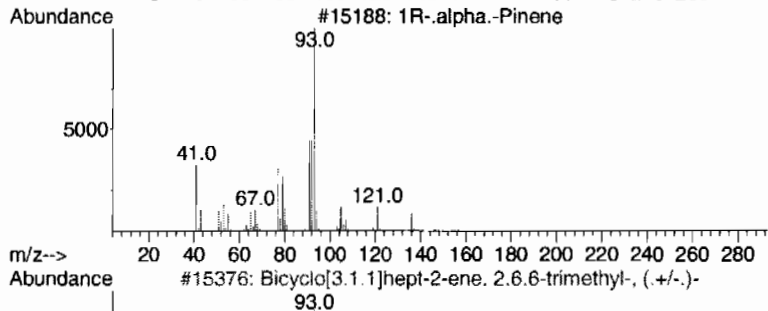
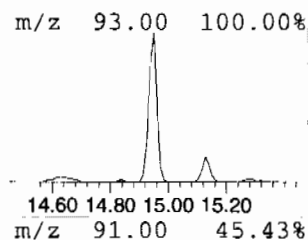
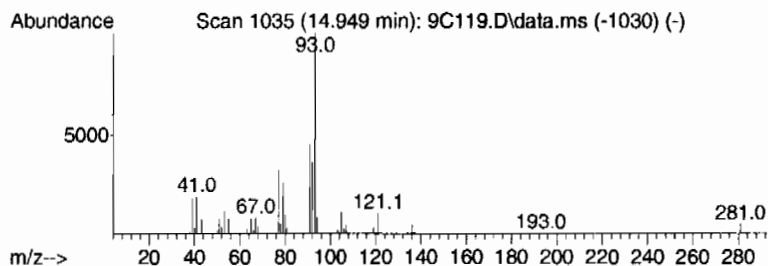
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 2 1R-.alpha.-Pinene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.949	7.41 ug/L	293184	B Chlorobenzene-d5	13.941

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1R-.alpha.-Pinene	136	C10H16	007785-70-8	96
2	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	95
3	1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
4	Bicyclo[3.1.1]hept-2-ene, 3,6,6-...	136	C10H16	004889-83-2	91
5	1S-.alpha.-Pinene	136	C10H16	007785-26-4	91



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C119.D
Acq On : 8 Mar 2010 6:59 pm
Operator : RXY1
Sample : |248373011|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 19 Sample Multiplier: 1

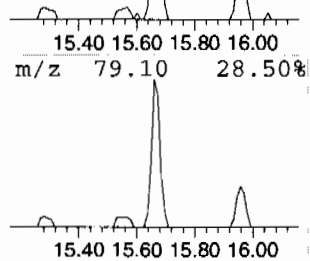
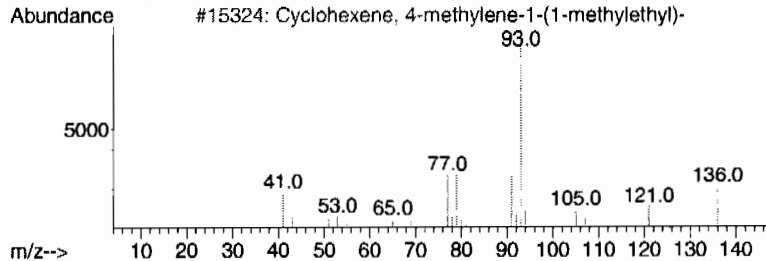
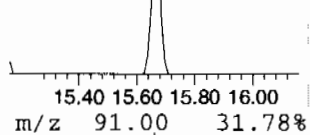
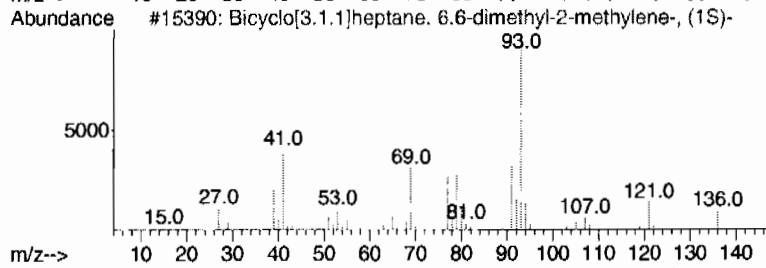
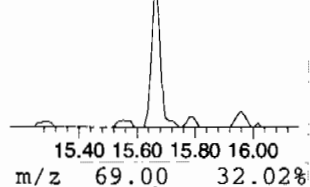
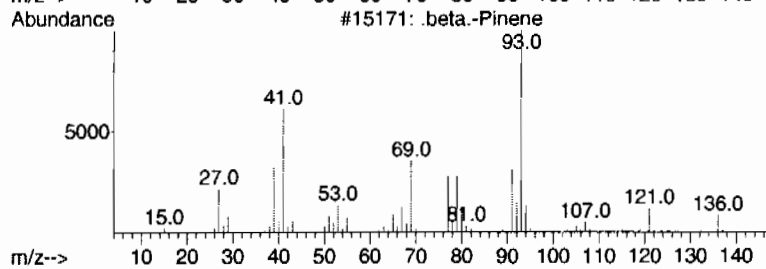
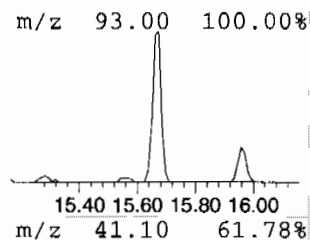
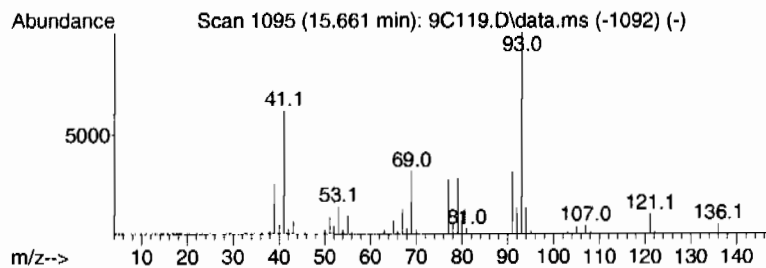
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 3 .beta.-Pinene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.661	7.34 ug/L	194122	1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			.beta.-Pinene	136	C10H16	000127-91-3	95
2			Bicyclo[3.1.1]heptane, 6,6-dimet...	136	C10H16	018172-67-3	94
3			Cyclohexene, 4-methylene-1-(1-me...	136	C10H16	000099-84-3	91
4			1R-.alpha.-Pinene	136	C10H16	007785-70-8	91
5			1R-.alpha.-Pinene	136	C10H16	007785-70-8	87



Tentatively Identified Compound (LSC) summary

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C119.D
Acq On : 8 Mar 2010 6:59 pm
Operator : RXY1
Sample : |248373011|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown hydroca...	4.538	9.6	ug/L	405720	1	10.775	2117540	50.0
1R-.alpha.-Pinene	14.949	7.4	ug/L	293184	4	13.941	1979060	50.0
.beta.-Pinene	15.661	7.3	ug/L	194122	5	16.372	1322820	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373014

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 11.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7522
 Batch ID: 962617
 Run Date: 03/08/2010 19:27
 Prep Date: 03/08/2010 12:18
 Data File: 030810V99C120.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.383	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	U	5.63	ug/kg	1.87	5.63
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	U	5.63	ug/kg	1.80	5.63
75-09-2	Methylene chloride	U	5.63	ug/kg	2.25	5.63
75-15-0	Carbon disulfide	U	5.63	ug/kg	1.41	5.63
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	U	5.63	ug/kg	1.69	5.63
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	U	5.63	ug/kg	1.41	5.63
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	U	5.63	ug/kg	1.69	5.63
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 248373014
 Client ID: RE36-10-7522
 Batch ID: 962617
 Run Date: 03/08/2010 19:27
 Prep Date: 03/08/2010 12:18
 Data File: 030810V99C120.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 11.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	U	2.25	ug/kg	0.338	2.25
95-47-6	o-Xylene	U	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.63	ug/kg	1.80	5.63
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.338	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.55	9	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C120.D
Acq On : 8 Mar 2010 7:27 pm
Operator : RXY1
InstName : VOA9
Sample : |248373014|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 09 11:10:29 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	10.775	10.775	1.000	96	952865	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	637957	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	257993	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	952865	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	637957	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	257977	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	340398	53.16	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	106.32%			
43) Toluene-d8	12.412	12.412	0.890	98	825341	50.35	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	100.70%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	336302	53.59	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	107.18%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659	59	203	N.D.		
9) Acetone	7.490	7.490	0.695	43	2232	N.D.		
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	0.000	7.858	0.000		0	N.D.		
13) Methyl acetate	0.000	7.882	0.000		0	N.D.		
14) Carbon disulfide	0.000	7.906	0.000		0	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	3033	Below Cal		91
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	0.000	9.483	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	0.000	10.230	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	0.000	10.538	0.000		0	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	6538	Below Cal	#	21
34) Trichloroethylene	0.000	11.167	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C120.D
Acq On : 8 Mar 2010 7:27 pm
Operator : RXY1
InstName : VOA9
Sample : |248373014|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 09 11:10:29 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.495	12.483	0.896	91	1025	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	0.000	13.028	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.131	14.024	1.014	91	2517	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	1122	N.D.	
56) o-Xylene	14.570	14.570	1.045	106	362	N.D.	
57) Styrene	0.000	14.570	0.000		0	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.341	15.353	0.937	91	179	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	419	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.614	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	1125	N.D.	
71) sec-Butylbenzene	0.000	16.112	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	16.230	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	16.313	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	16.408	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.693	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	0.000	19.349	0.000		0	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.573	7.550	0.703	45	368	N.D.	
88) Allyl chloride	0.000	7.929	0.000		0	N.D.	
89) tert-Butyl Alcohol	8.071	8.060	0.749	59	185	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.483	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C120.D
Acq On : 8 Mar 2010 7:27 pm
Operator : RXY1
InstName : VOA9
Sample : |248373014|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 09 11:10:29 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

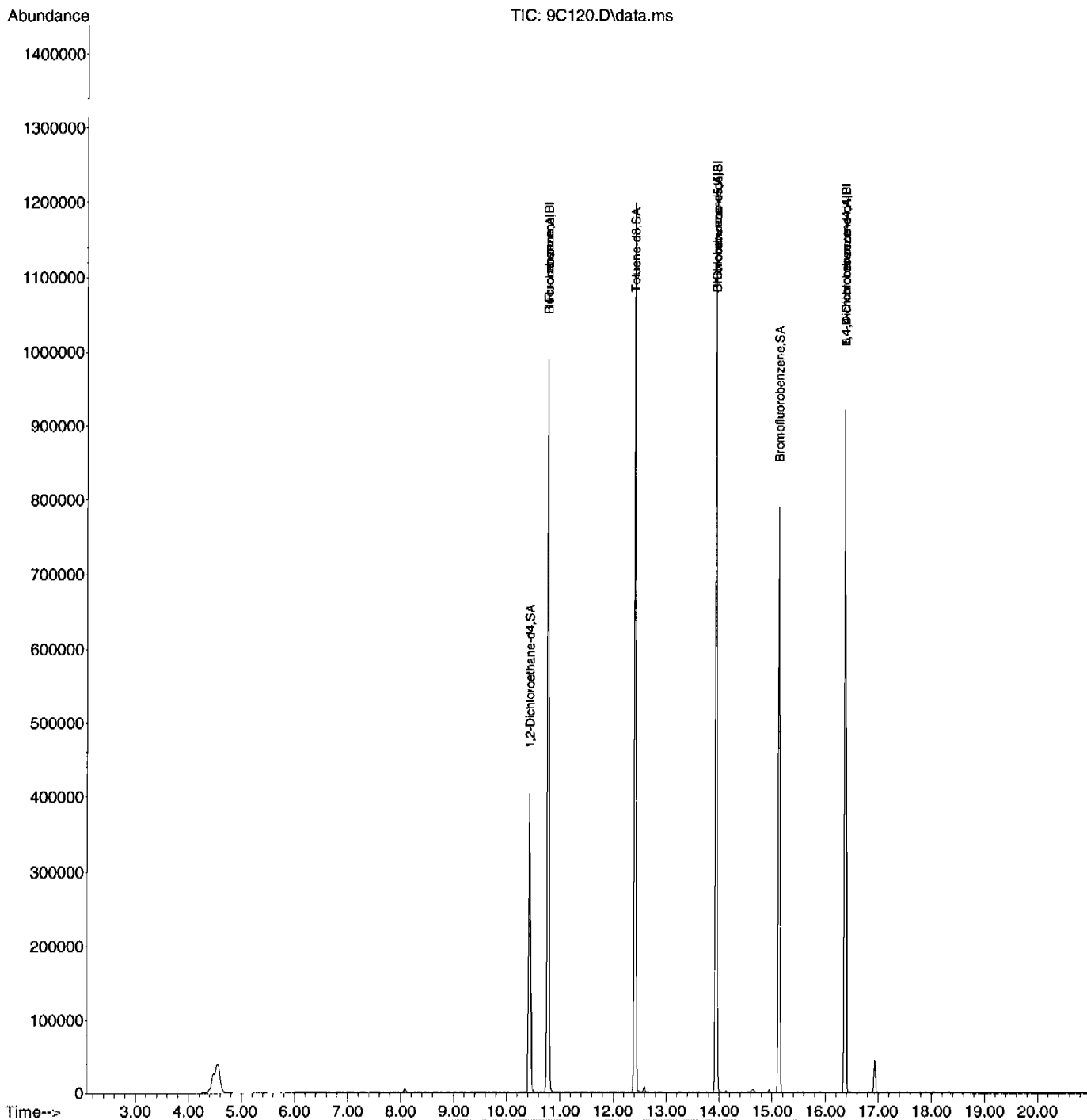
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	9.874	9.874	0.916	42	221	N.D.	
98) Isobutyl alcohol	0.000	10.159	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0	N.D.	
108) Cyclohexanone	0.000	15.092	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.372	16.527	1.000	91	908	N.D.	
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034	45	3964	N.D.	

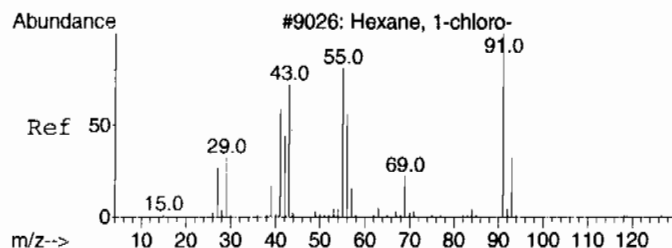
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

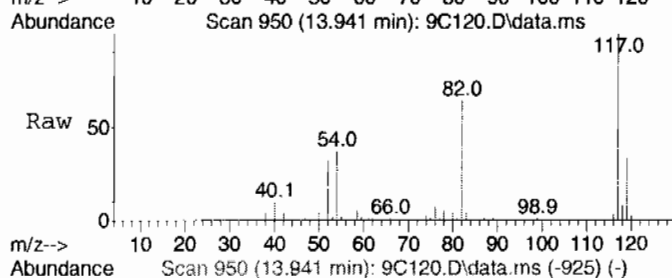
Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C120.D
Acq On : 8 Mar 2010 7:27 pm
Operator : RXY1
InstName : VOA9
Sample : |248373014|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 09 11:10:29 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

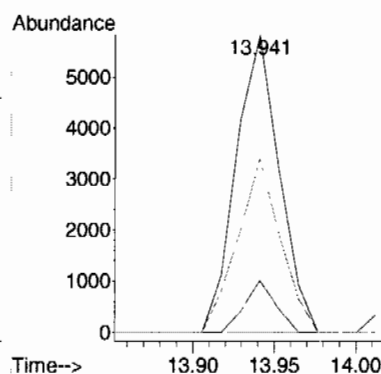
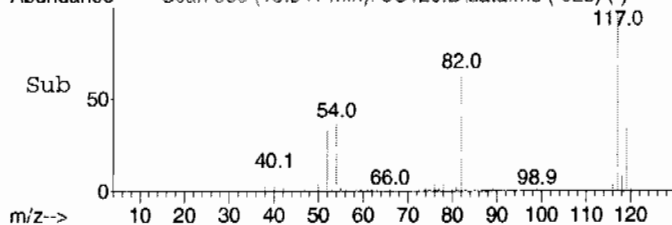




#106 BEFORE analyst DELETION
 1-Chlorohexane
 Concen: 2.12 ug/L
 RT: 13.941 min Scan# 950
 Delta R.T. 0.118 min
 Lab File: 9C120.D
 Acq: 8 Mar 2010 7:27 pm



Tgt Ion: 55 Resp: 10768
 Ion Ratio Lower Upper
 55 100
 91 12.3 74.8 134.8#
 56 57.7 31.8 91.8



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C120.D
Acq On : 8 Mar 2010 7:27 pm
Operator : RXY1
Sample : |248373014|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 20 Sample Multiplier: 1

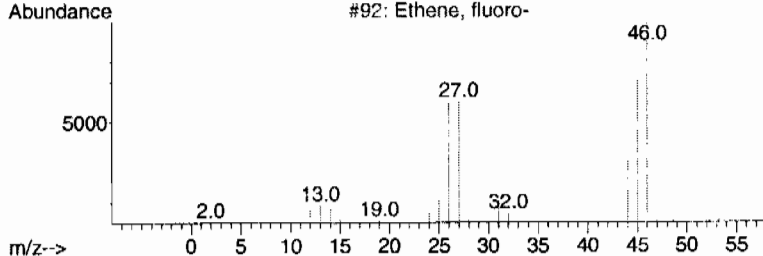
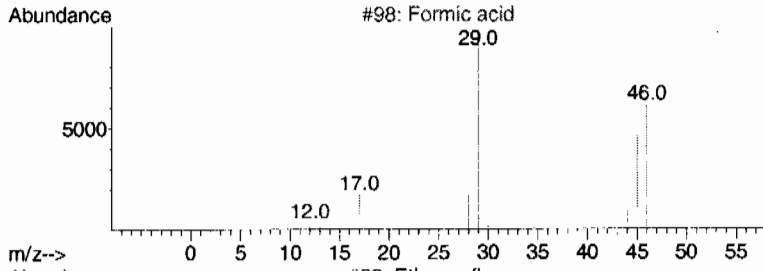
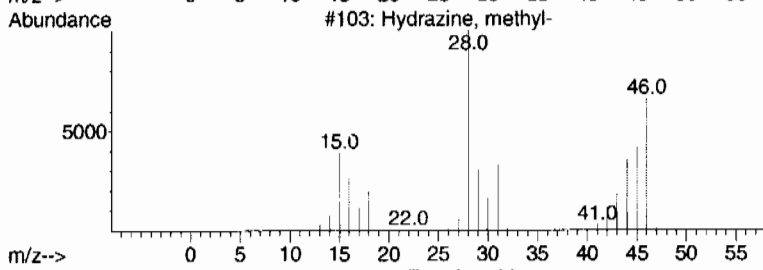
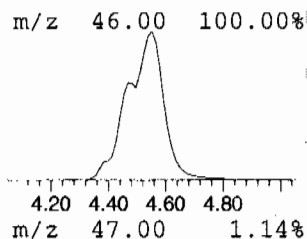
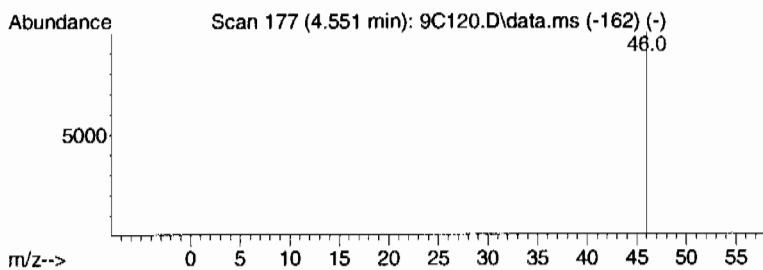
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.551	7.99 ug/L	354062	Fluorobenzene	10.775

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydrazine, methyl-	46	CH6N2	000060-34-4	4
2	Formic acid	46	CH2O2	000064-18-6	4
3	Ethene, fluoro-	46	C2H3F	000075-02-5	3
4	Formic acid	46	CH2O2	000064-18-6	3
5	Hydrazine, methyl-	46	CH6N2	000060-34-4	3



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C120.D
Acq On : 8 Mar 2010 7:27 pm
Operator : RXY1
Sample : |248373014|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	4.551	8.0	ug/L	354062	1	10.775	2215030	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
Client ID: RE36-10-7521	Client: LANL010	Project: LANL01004
Batch ID: 962617	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/08/2010 19:55	Inst: VOA9.I	Dilution: 1
Prep Date: 03/08/2010 12:19	Analyst: RXY1	Purge Vol: 5 mL
Data File: 030810V99C121.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.30	ug/kg	0.441	1.30
74-87-3	Chloromethane	U	1.30	ug/kg	0.389	1.30
75-01-4	Vinyl chloride	U	1.30	ug/kg	0.389	1.30
74-83-9	Bromomethane	U	1.30	ug/kg	0.389	1.30
75-00-3	Chloroethane	U	1.30	ug/kg	0.389	1.30
75-69-4	Trichlorofluoromethane	U	1.30	ug/kg	0.389	1.30
67-64-1	Acetone		8.52	ug/kg	2.15	6.49
75-35-4	1,1-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
74-88-4	Iodomethane	U	6.49	ug/kg	2.08	6.49
75-09-2	Methylene chloride	U	6.49	ug/kg	2.59	6.49
75-15-0	Carbon disulfide	U	6.49	ug/kg	1.62	6.49
156-60-5	trans-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
75-34-3	1,1-Dichloroethane	U	1.30	ug/kg	0.389	1.30
78-93-3	2-Butanone	U	6.49	ug/kg	1.95	6.49
156-59-2	cis-1,2-Dichloroethylene	U	1.30	ug/kg	0.389	1.30
594-20-7	2,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
67-66-3	Chloroform	U	1.30	ug/kg	0.389	1.30
74-97-5	Bromochloromethane	U	1.30	ug/kg	0.428	1.30
71-55-6	1,1,1-Trichloroethane	U	1.30	ug/kg	0.389	1.30
563-58-6	1,1-Dichloropropene	U	1.30	ug/kg	0.389	1.30
56-23-5	Carbon tetrachloride	U	1.30	ug/kg	0.389	1.30
107-06-2	1,2-Dichloroethane	U	1.30	ug/kg	0.389	1.30
71-43-2	Benzene	U	1.30	ug/kg	0.389	1.30
79-01-6	Trichloroethylene	U	1.30	ug/kg	0.428	1.30
78-87-5	1,2-Dichloropropane	U	1.30	ug/kg	0.389	1.30
75-27-4	Bromodichloromethane	U	1.30	ug/kg	0.389	1.30
74-95-3	Dibromomethane	U	1.30	ug/kg	0.389	1.30
108-10-1	4-Methyl-2-pentanone	U	6.49	ug/kg	1.62	6.49
10061-01-5	cis-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
108-88-3	Toluene	J	0.869	ug/kg	0.389	1.30
10061-02-6	trans-1,3-Dichloropropylene	U	1.30	ug/kg	0.389	1.30
79-00-5	1,1,2-Trichloroethane	U	1.30	ug/kg	0.389	1.30
591-78-6	2-Hexanone	U	6.49	ug/kg	1.95	6.49
142-28-9	1,3-Dichloropropane	U	1.30	ug/kg	0.389	1.30
127-18-4	Tetrachloroethylene	U	1.30	ug/kg	0.389	1.30
124-48-1	Dibromochloromethane	U	1.30	ug/kg	0.389	1.30
106-93-4	1,2-Dibromoethane	U	1.30	ug/kg	0.389	1.30
108-90-7	Chlorobenzene	U	1.30	ug/kg	0.389	1.30

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373015

Client ID: RE36-10-7521
Batch ID: 962617
Run Date: 03/08/2010 19:55
Prep Date: 03/08/2010 12:19
Data File: 030810V99C121.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.30	ug/kg	0.389	1.30
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.389	2.59
95-47-6	o-Xylene	U	1.30	ug/kg	0.389	1.30
100-42-5	Styrene	U	1.30	ug/kg	0.389	1.30
75-25-2	Bromoform	U	1.30	ug/kg	0.389	1.30
79-34-5	1,1,2,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
96-18-4	1,2,3-Trichloropropane	U	1.30	ug/kg	0.389	1.30
108-86-1	Bromobenzene	U	1.30	ug/kg	0.389	1.30
103-65-1	n-Propylbenzene	U	1.30	ug/kg	0.389	1.30
95-49-8	2-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-82-8	Isopropylbenzene	U	1.30	ug/kg	0.389	1.30
108-67-8	1,3,5-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
106-43-4	4-Chlorotoluene	U	1.30	ug/kg	0.389	1.30
98-06-6	tert-Butylbenzene	U	1.30	ug/kg	0.389	1.30
95-63-6	1,2,4-Trimethylbenzene	U	1.30	ug/kg	0.389	1.30
135-98-8	sec-Butylbenzene	U	1.30	ug/kg	0.389	1.30
99-87-6	4-Isopropyltoluene	J	0.765	ug/kg	0.389	1.30
541-73-1	1,3-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
106-46-7	1,4-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30
104-51-8	n-Butylbenzene	U	1.30	ug/kg	0.389	1.30
96-12-8	1,2-Dibromo-3-chloropropane	U	1.30	ug/kg	0.389	1.30
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.49	ug/kg	2.08	6.49
630-20-6	1,1,1,2-Tetrachloroethane	U	1.30	ug/kg	0.389	1.30
95-50-1	1,2-Dichlorobenzene	U	1.30	ug/kg	0.389	1.30

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000064-17-5	Ethyl alcohol	6.87	30.8	ug/kg	83	NJ
007785-70-8	1R-alpha-Pinene	14.95	27.9	ug/kg	97	NJ
000079-92-5	Camphene	15.28	14.7	ug/kg	97	NJ
000498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-tr	15.96	20.8	ug/kg	94	NJ
	unknown siloxane	16.94	7.85	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
InstName : VOA9
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 09 11:12:39 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	10.775	10.775	1.000	96	816238	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	424214	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	105750	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	816238	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	424214	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	105742	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	288076	52.52	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	105.04%			
43) Toluene-d8	12.412	12.412	0.890	98	673286	61.77	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	123.54%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	173110	67.30	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	134.60%#			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659	59	444	N.D.		
9) Acetone	7.490	7.490	0.695	43	23976	6.57	ug/L	86
10) 1,1-Dichloroethylene	7.514	7.502	0.697	61	766	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	8.083	7.858	0.750	41	1307	Below Cal	#	52
13) Methyl acetate	7.882	7.882	0.731	43	926	Below Cal	#	67
14) Carbon disulfide	7.894	7.906	0.733	76	1688	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	5297	Below Cal		83
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.495	9.483	0.881	43	2963	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	9.862	9.850	0.915	83	292	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.230	10.230	0.949	56	2401	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	10.526	10.538	0.977	78	514	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	6198	Below Cal	#	21
34) Trichloroethylene	11.167	11.167	1.036	95	1054	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
InstName : VOA9
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 09 11:12:39 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	8251	0.67 ug/L	93
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.017	13.028	0.934	43	192	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.131	14.024	1.014	91	1901	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	771	N.D.	
56) o-Xylene	14.582	14.570	1.046	106	479	N.D.	
57) Styrene	0.000	14.570	0.000		0	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.448	15.353	0.944	91	559	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.495	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	15.566	15.614	0.951	91	655	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0m	N.D. d	
70) 1,2,4-Trimethylbenzene	0.000	15.910	0.000		0m	N.D. d	
71) sec-Butylbenzene	16.195	16.112	0.989	105	397	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	3892	0.59 ug/L #	62
73) 1,3-Dichlorobenzene	0.000	16.313	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	16.408	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.693	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	0.000	19.349	0.000		0	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.550	0.000		0m	N.D. d	
88) Allyl chloride	0.000	7.929	0.000		0	N.D.	
89) tert-Butyl Alcohol	8.060	8.060	0.748	59	891	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.495	9.483	0.881	43	2963	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
InstName : VOA9
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 09 11:12:39 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

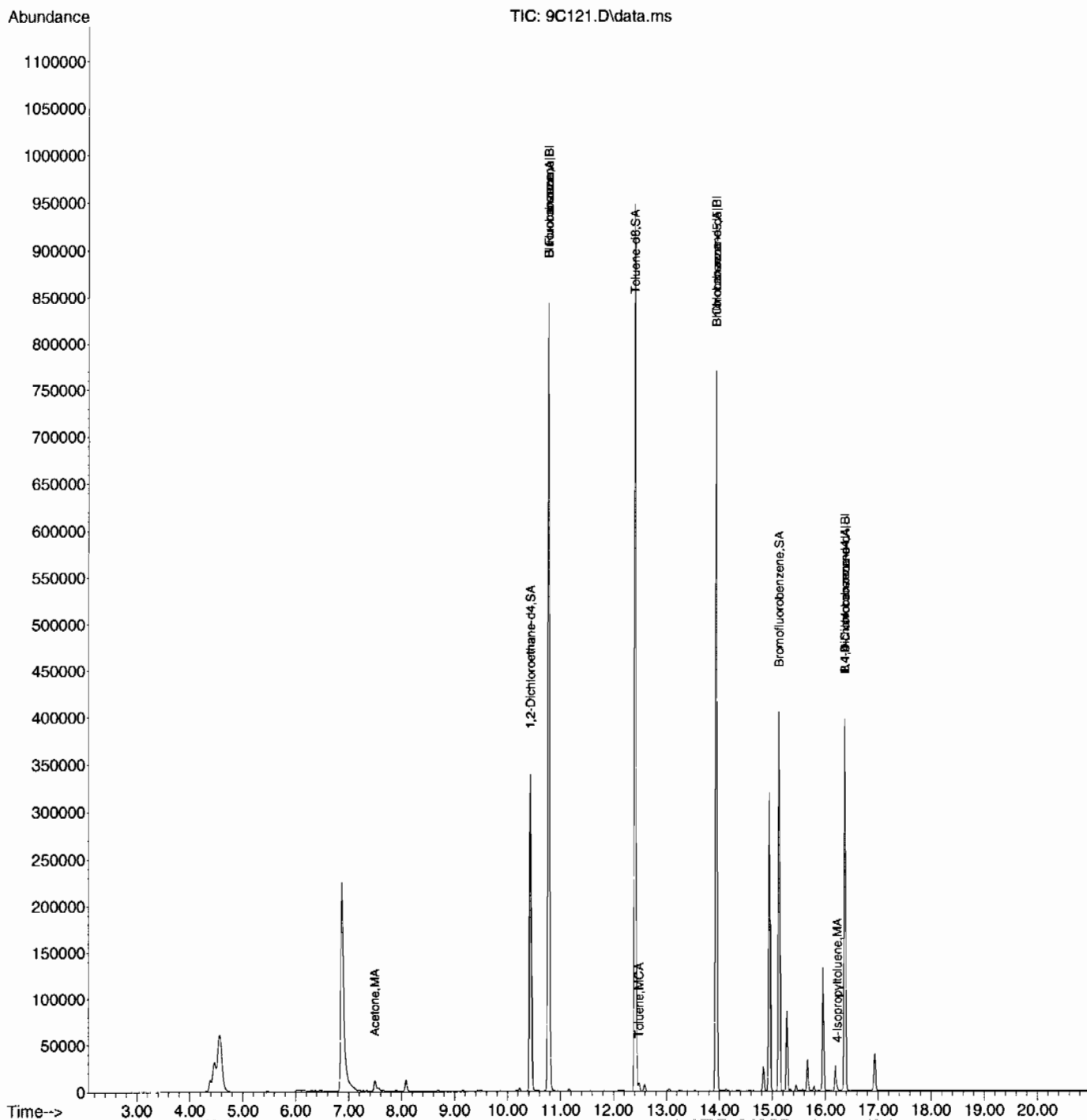
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	9.874	0.000		0	N.D.	
98) Isobutyl alcohol	10.171	10.159	0.944	41	278	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	15.092	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.527	16.527	1.009	91	220	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.918	0.000		0m	N.D.	d

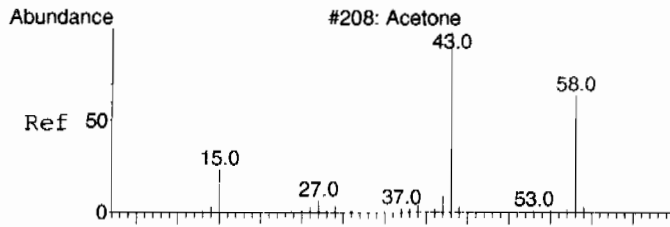
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
InstName : VOA9
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

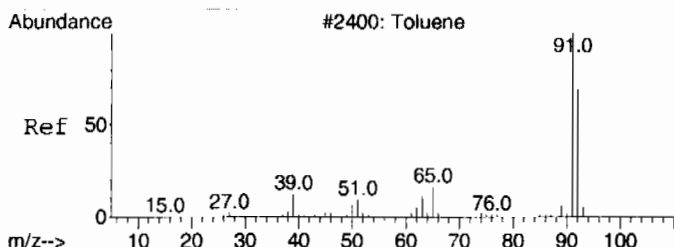
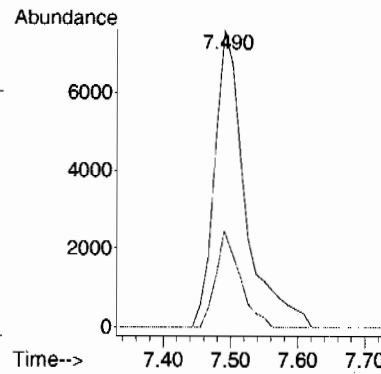
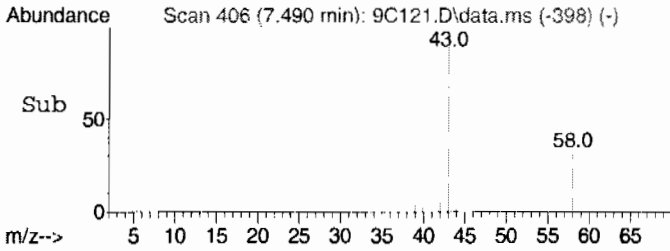
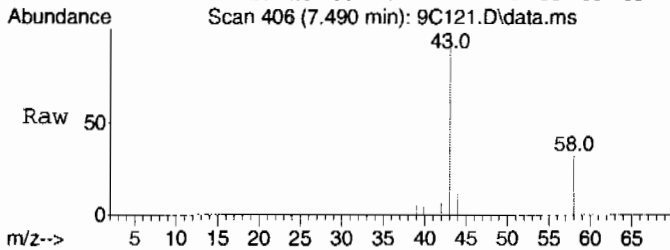
Quant Time: Mar 09 11:12:39 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





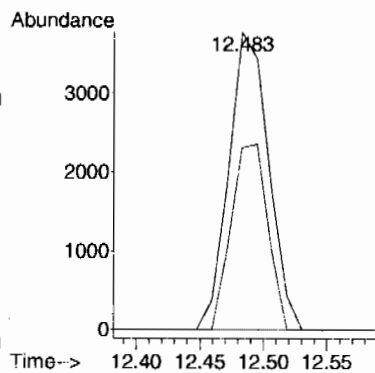
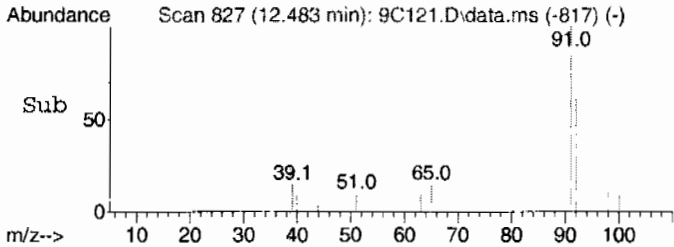
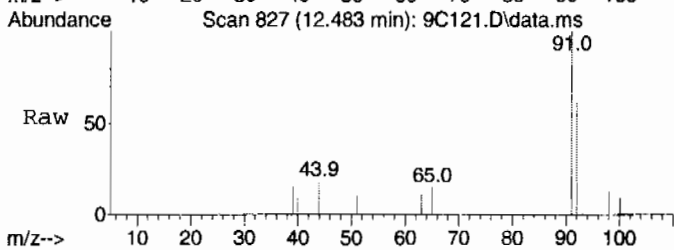
#9
Acetone
Concen: 6.57 ug/L
RT: 7.490 min Scan# 406
Delta R.T. 0.000 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm

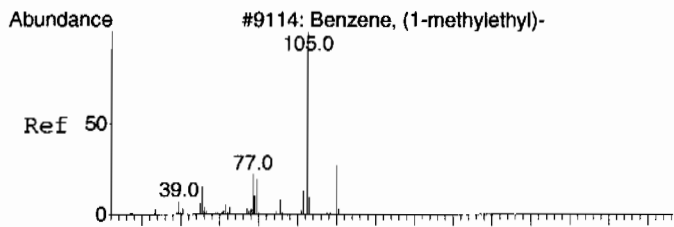
Tgt Ion: 43 Resp: 23976
Ion Ratio Lower Upper
43 100
58 25.4 3.2 63.2



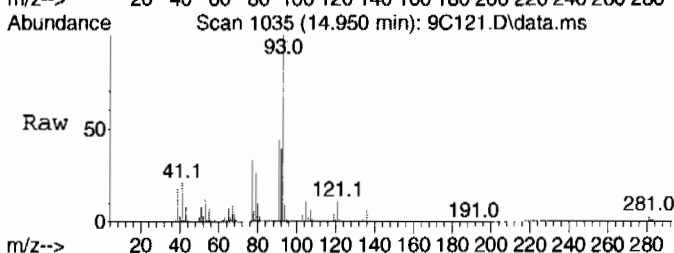
#44
Toluene
Concen: 0.67 ug/L
RT: 12.483 min Scan# 827
Delta R.T. -0.000 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm

Tgt Ion: 91 Resp: 8251
Ion Ratio Lower Upper
91 100
92 57.4 33.0 93.0

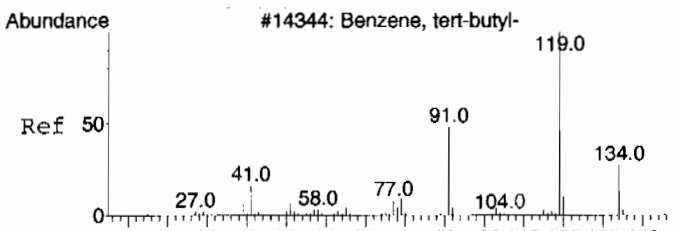
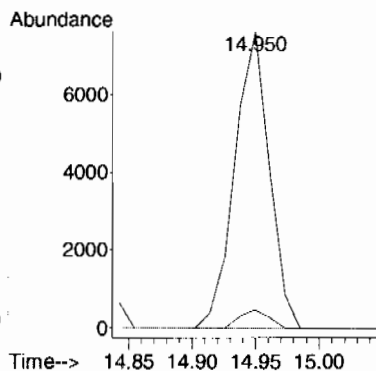
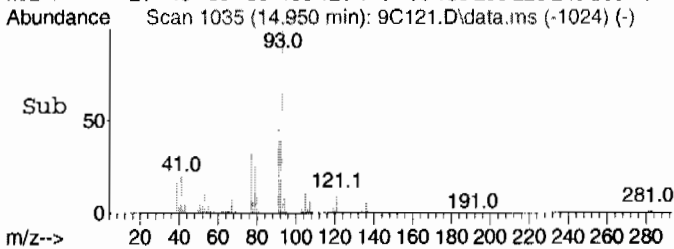




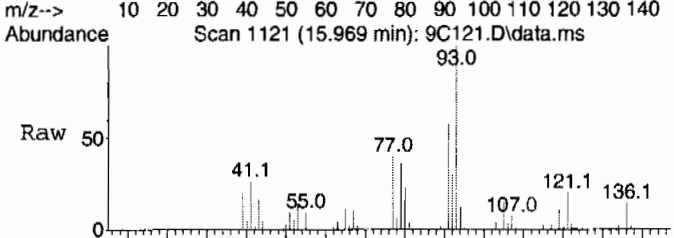
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 1.95 ug/L
RT: 14.950 min Scan# 1035
Delta R.T. 0.024 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm



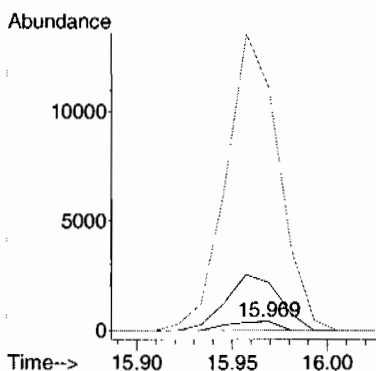
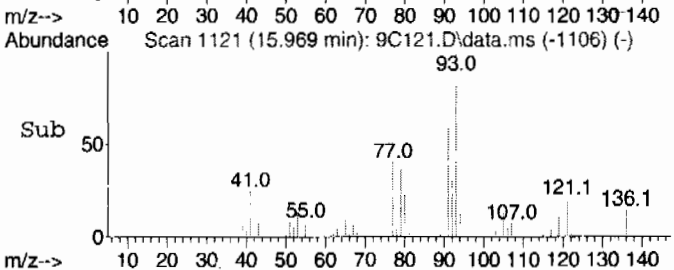
Tgt Ion:105 Resp: 14484
Ion Ratio Lower Upper
105 100
120 5.2 0.0 58.0

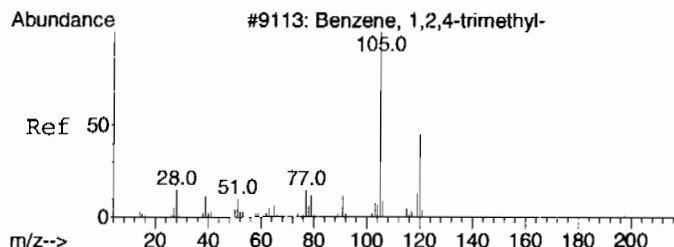


#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 0.63 ug/L
RT: 15.969 min Scan# 1121
Delta R.T. 0.095 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm



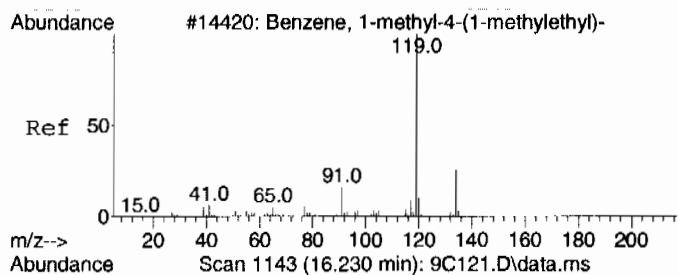
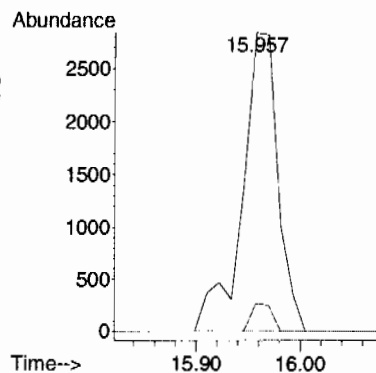
Tgt Ion:134 Resp: 757
Ion Ratio Lower Upper
134 100
119 656.5 445.6 505.6#
91 3448.6 344.7 404.7#





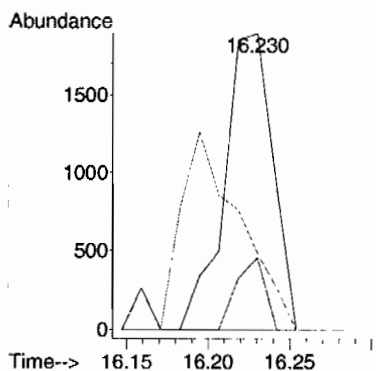
#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 1.06 ug/L
RT: 15.957 min Scan# 1120
Delta R.T. 0.047 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm

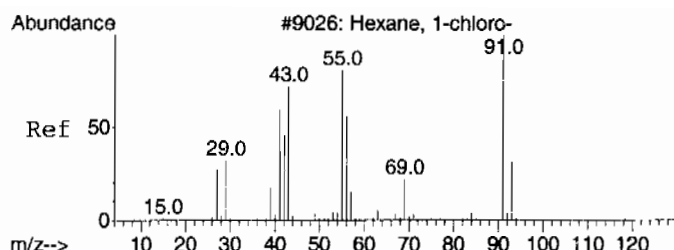
Tgt Ion:105 Resp: 6814
Ion Ratio Lower Upper
105 100
120 5.5 18.4 78.4#



#72
4-Isopropyltoluene
Concen: 0.59 ug/L
RT: 16.230 min Scan# 1143
Delta R.T. 0.000 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm

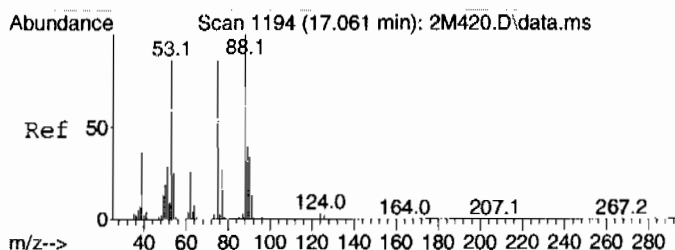
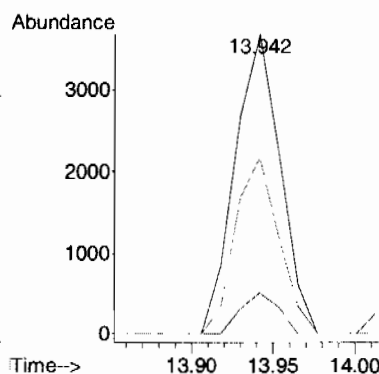
Tgt Ion:119 Resp: 3892
Ion Ratio Lower Upper
119 100
134 14.2 0.0 56.1
91 0.0 0.0 57.2





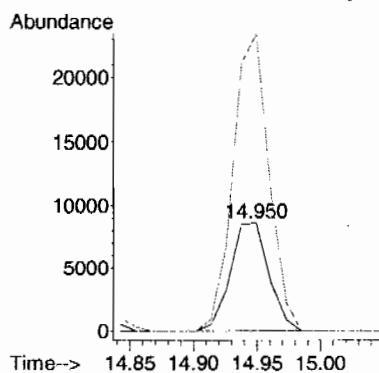
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 3.43 ug/L
RT: 13.942 min Scan# 950
Delta R.T. 0.119 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm

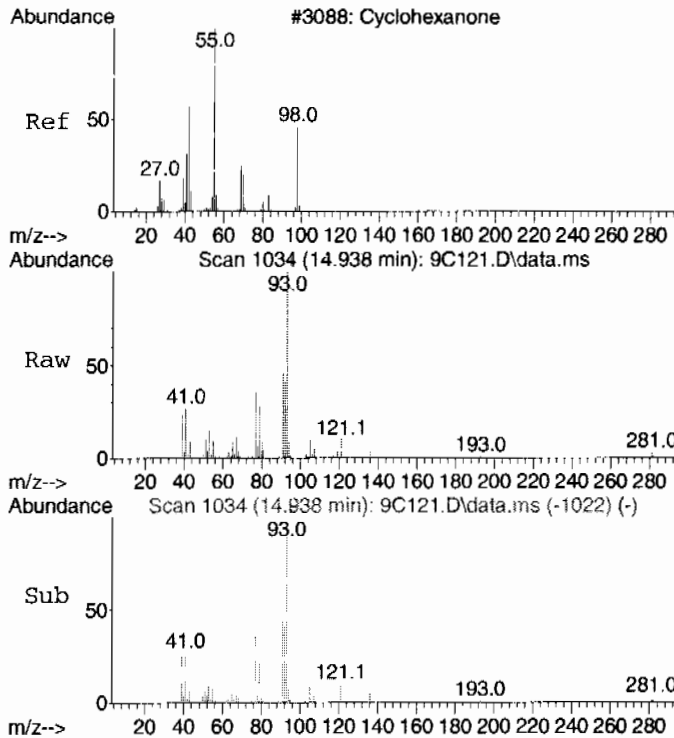
Tgt Ion	Ratio	Lower	Upper
55	100		
91	11.4	74.8	134.8#
56	57.1	31.8	91.8



#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 24.86 ug/L
RT: 14.950 min Scan# 1035
Delta R.T. -0.011 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm

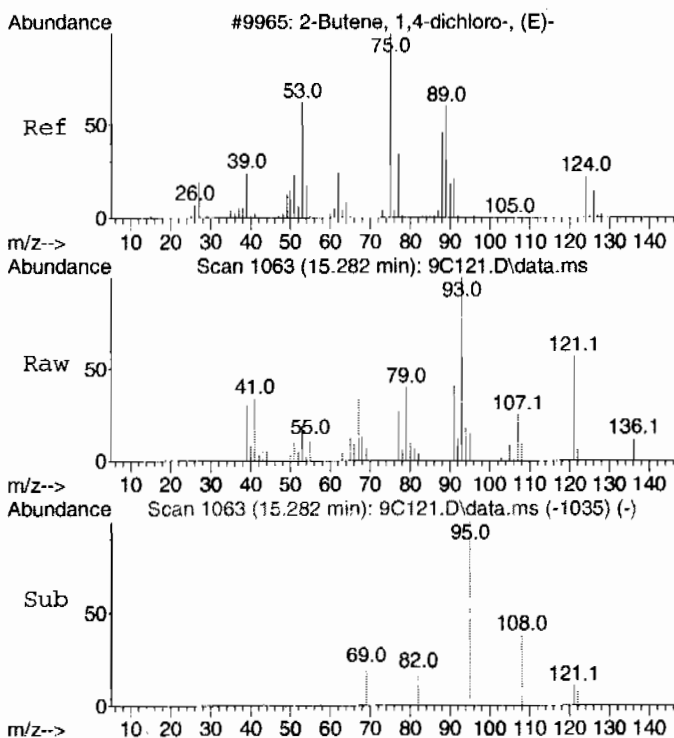
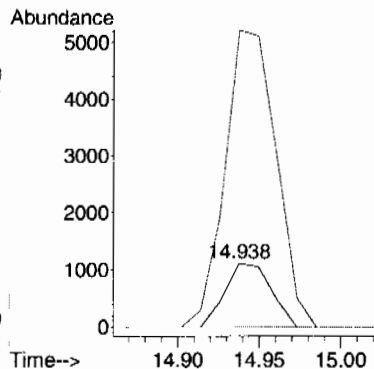
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	55.7	115.7#
77	255.3	0.0	58.7#





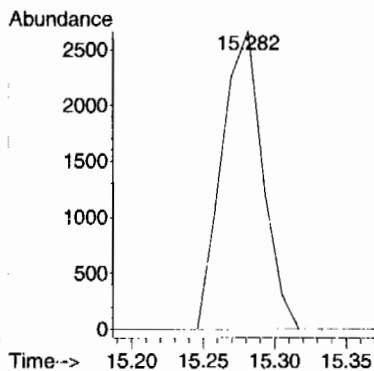
#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 34.62 ug/L
RT: 14.938 min Scan# 1034
Delta R.T. -0.154 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm

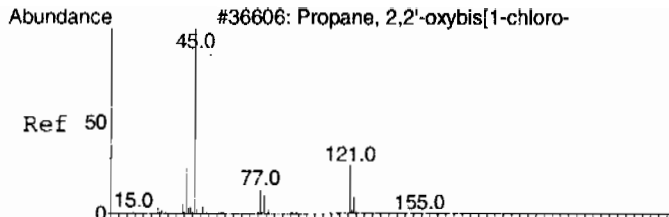
Tgt Ion: 42 Resp: 2199
Ion Ratio Lower Upper
42 100
55 516.1 135.4 195.4#
98 0.0 25.5 85.5#



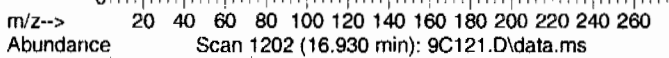
#109 BEFORE analyst DELETION
trans-1,4-Dichloro-2-butene
Concen: 7.61 ug/L
RT: 15.282 min Scan# 1063
Delta R.T. 0.036 min
Lab File: 9C121.D
Acq: 8 Mar 2010 7:55 pm

Tgt Ion: 53 Resp: 5297
Ion Ratio Lower Upper
53 100
88 0.0 10.7 70.7#
75 0.0 76.2 136.2#

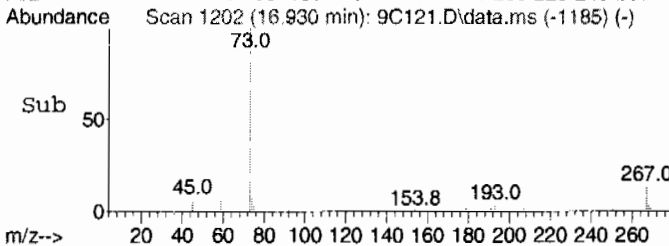
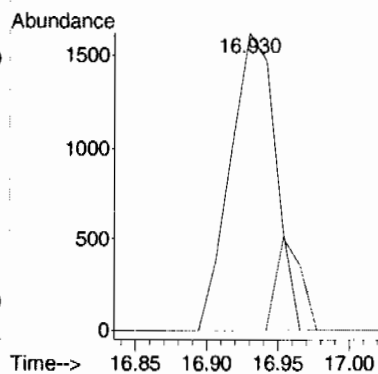
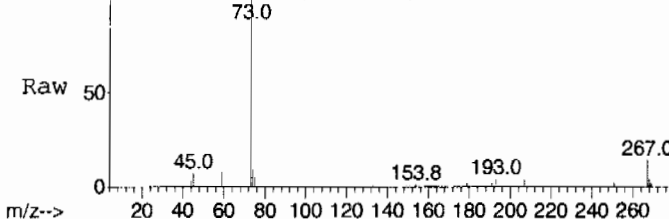




#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 2.82 ug/L
 RT: 16.930 min Scan# 1202
 Delta R.T. 0.012 min
 Lab File: 9C121.D
 Acq: 8 Mar 2010 7:55 pm



Tgt Ion: 45 Resp: 3579
 Ion Ratio Lower Upper
 45 100
 121 17.0 0.0 46.4



Library Search Compound Report
GEL Laboratories, LLC

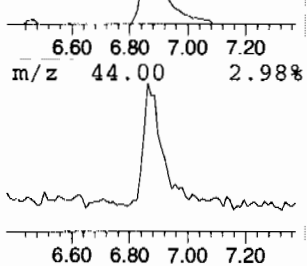
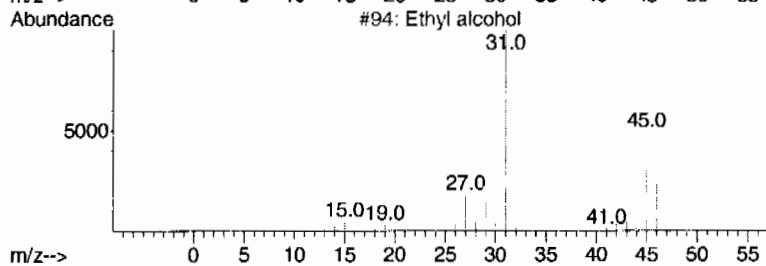
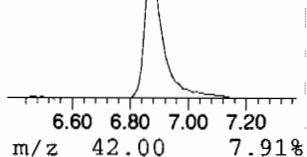
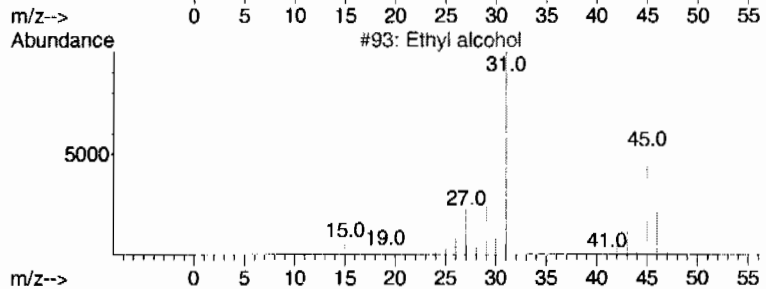
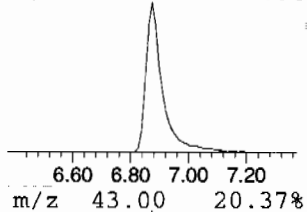
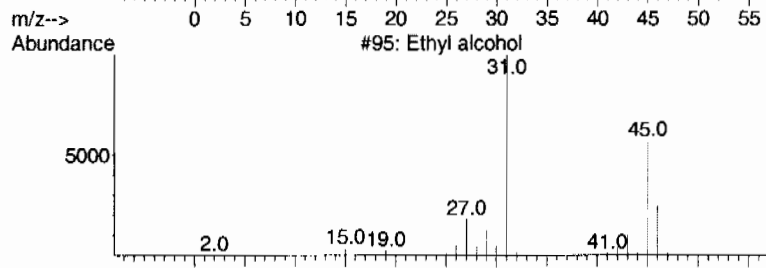
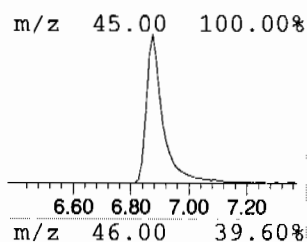
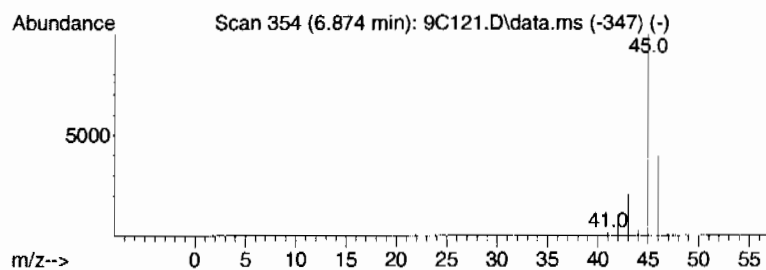
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Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 Ethyl alcohol Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.		
6.874	23.74 ug/L	899085	Fluorobenzene	10.775		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethyl alcohol		46	C2H6O	000064-17-5	83
2	Ethyl alcohol		46	C2H6O	000064-17-5	74
3	Ethyl alcohol		46	C2H6O	000064-17-5	64
4	Dimethyl ether		46	C2H6O	000115-10-6	9
5	Methane, nitroso-		45	CH3NO	000865-40-7	4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Quant Title : Volatile Organics 8260B

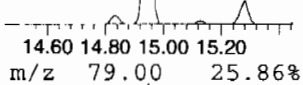
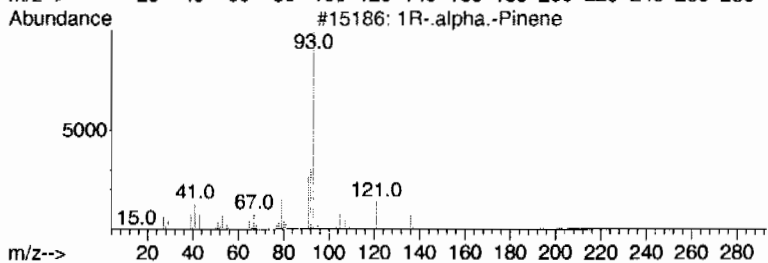
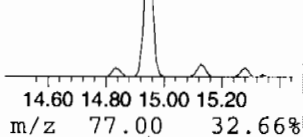
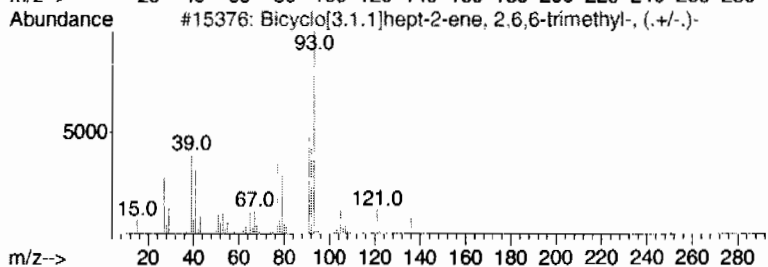
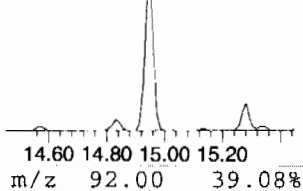
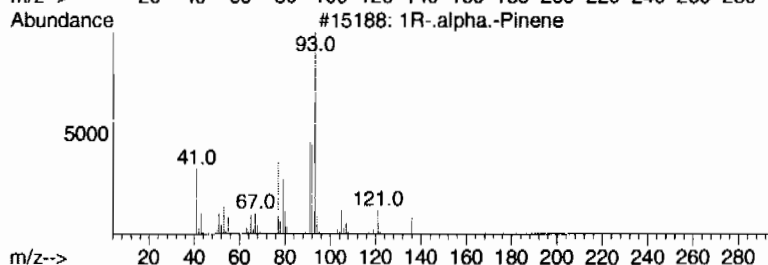
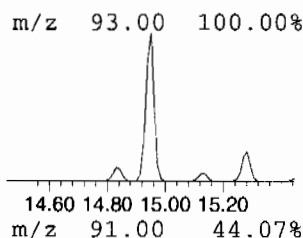
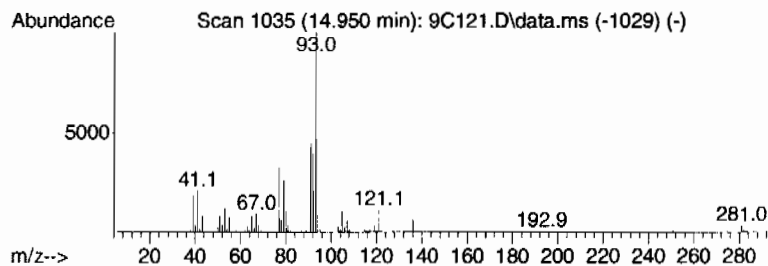
SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 2 1R-.alpha.-Pinene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.	
14.950	21.47 ug/L	642152	B Chlorobenzene-d5	13.942	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1R-.alpha.-Pinene	136	C10H16	007785-70-8	97
2	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	95
3	1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
4	Bicyclo[3.1.1]hept-2-ene, 3,6,6-...	136	C10H16	004889-83-2	91
5	.alpha.-Pinene	136	C10H16	000080-56-8	90



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

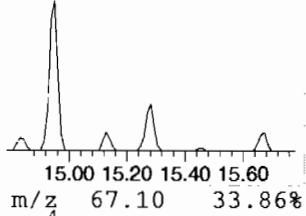
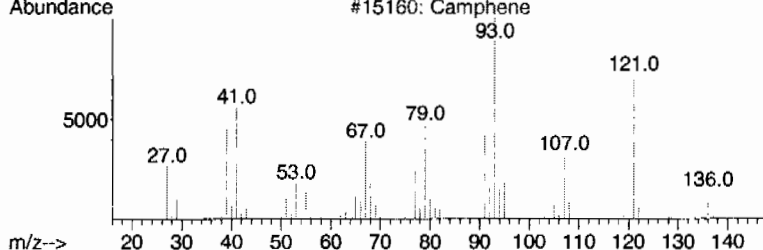
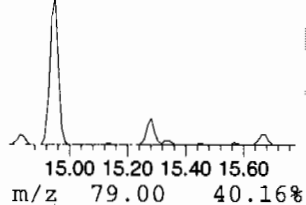
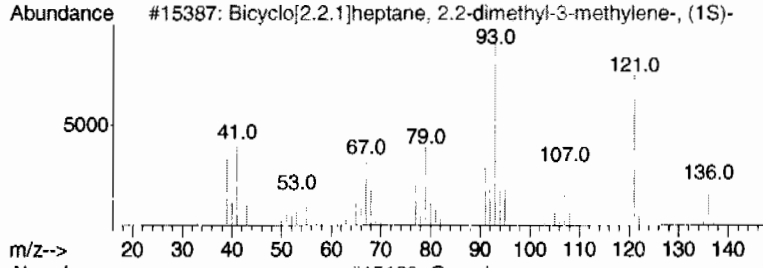
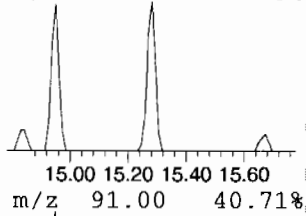
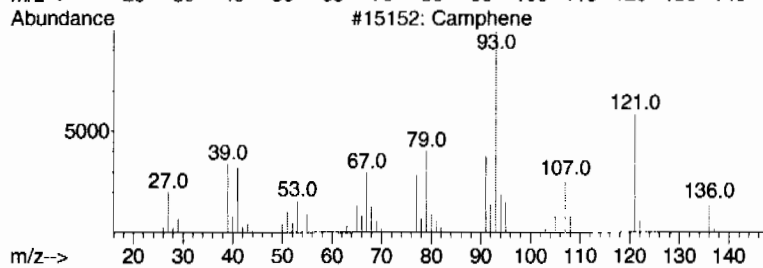
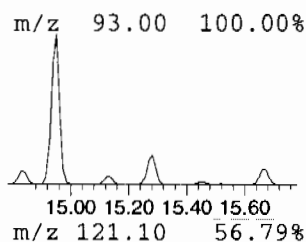
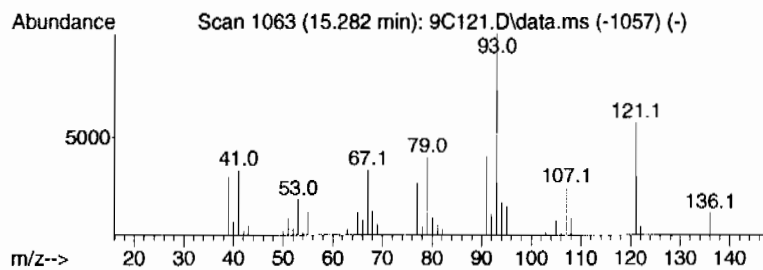
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 3 Camphene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.282	11.34 ug/L	175537	1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Camphene	136	C10H16	000079-92-5	97
2			Bicyclo[2.2.1]heptane, 2,2-dimet...	136	C10H16	005794-04-7	95
3			Camphene	136	C10H16	000079-92-5	94
4			Camphene	136	C10H16	000079-92-5	94
5			1,3,6-Heptatriene, 2,5,5-trimethyl-	136	C10H16	029548-02-5	91



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANTL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

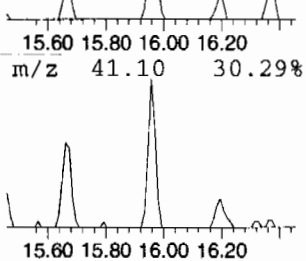
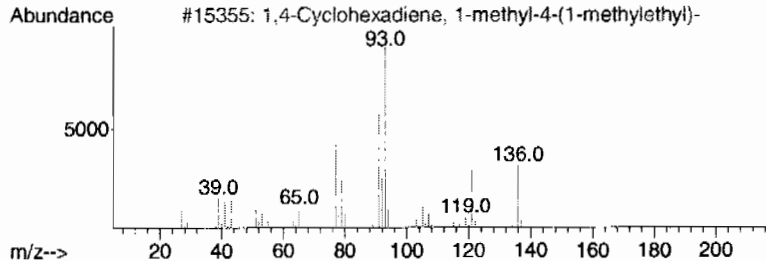
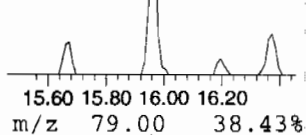
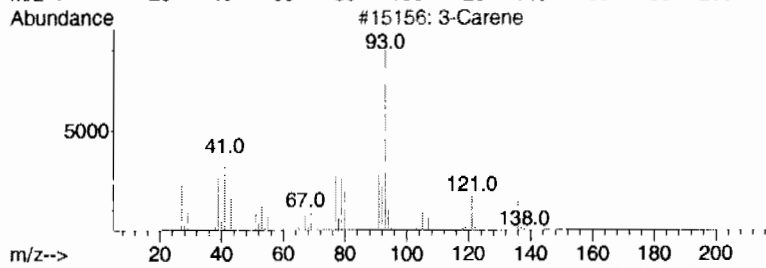
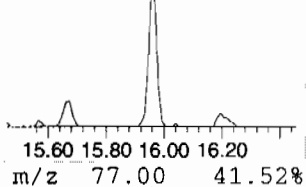
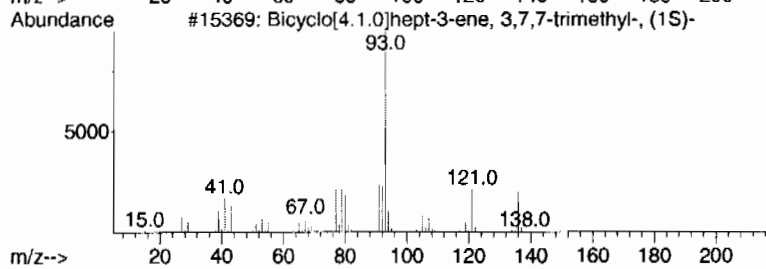
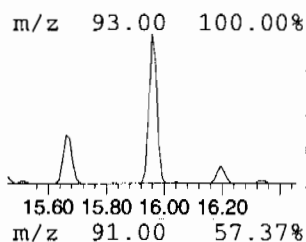
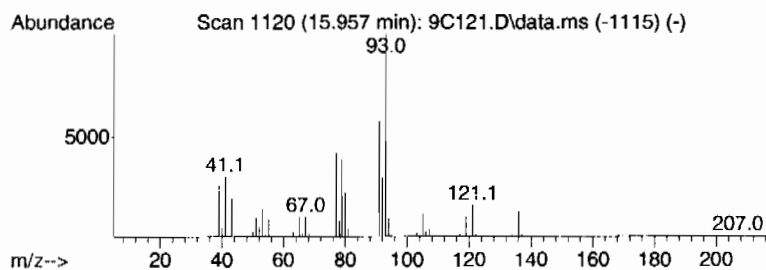
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 4 Bicyclo[4.1.0]hept-3-ene, 3... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.958	16.06 ug/L	248639	1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Bicyclo[4.1.0]hept-3-ene, 3,7,7-...	136	C10H16	000498-15-7	94
2			3-Carene	136	C10H16	013466-78-9	94
3			1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	93
4			3-Carene	136	C10H16	013466-78-9	93
5			Cyclopropane, 1,1-dimethyl-2-(3-...	136	C10H16	068998-21-0	90



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

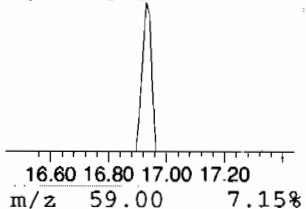
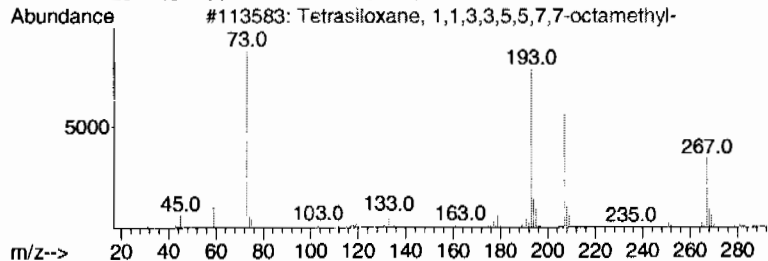
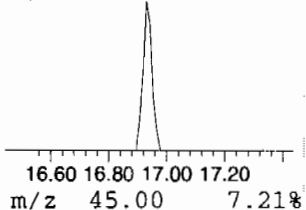
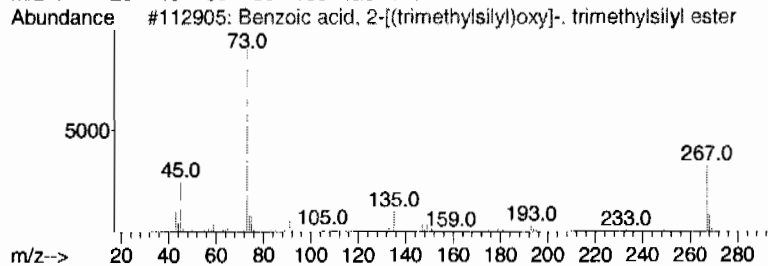
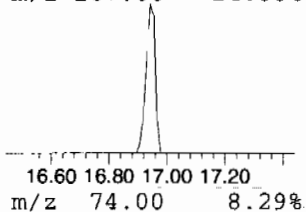
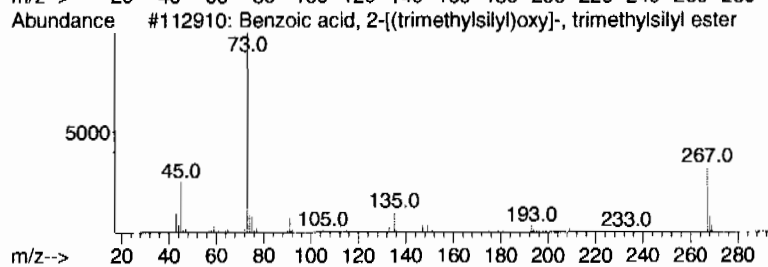
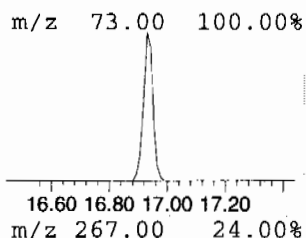
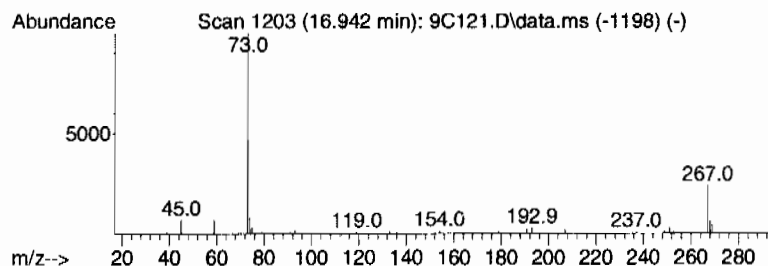
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 5 unknown siloxane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.942	6.05 ug/L	93660	B 1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzoic acid, 2-[(trimethylsilyl...]	282	C13H22O3Si2	003789-85-3	42
2			Benzoic acid, 2-[(trimethylsilyl...]	282	C13H22O3Si2	003789-85-3	36
3			Tetrasiloxane, 1,1,3,3,5,5,7,7-o...	282	C8H26O3Si4	001000-05-1	36
4			4,6-Dioxa-3,8-disiladecane, 5-(2...	532	C32H60O2Si2	109629-49-4	9
5			Benzoic acid, 2-[(trimethylsilyl...]	282	C13H22O3Si2	003789-85-3	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C121.D
Acq On : 8 Mar 2010 7:55 pm
Operator : RXY1
Sample : |248373015|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Ethyl alcohol	6.874	23.7	ug/L	899085	1	10.775	1893610	50.0
1R-.alpha.-Pinene	14.950	21.5	ug/L	642152	4	13.942	1495560	50.0
Camphene	15.282	11.3	ug/L	175537	5	16.372	774316	50.0
Bicyclo[4.1.0]h...	15.958	16.1	ug/L	248639	5	16.372	774316	50.0
unknown siloxane	16.942	6.0	ug/L	93660	6	16.372	774316	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373009	Date Received: 03/02/2010 08:50	%Moisture: 22.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7498	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962617	Inst: VOA9.1	Dilution: 1
Run Date: 03/09/2010 16:54	Analyst: RXYI	Purge Vol: 5 mL
Prep Date: 03/09/2010 12:13	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V99C215.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.29	ug/kg	0.440	1.29
74-87-3	Chloromethane	U	1.29	ug/kg	0.388	1.29
75-01-4	Vinyl chloride	U	1.29	ug/kg	0.388	1.29
74-83-9	Bromomethane	U	1.29	ug/kg	0.388	1.29
75-00-3	Chloroethane	U	1.29	ug/kg	0.388	1.29
75-69-4	Trichlorofluoromethane	U	1.29	ug/kg	0.388	1.29
67-64-1	Acetone	U	6.47	ug/kg	2.15	6.47
75-35-4	1,1-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
74-88-4	Iodomethane	U	6.47	ug/kg	2.07	6.47
75-09-2	Methylene chloride	U	6.47	ug/kg	2.59	6.47
75-15-0	Carbon disulfide	U	6.47	ug/kg	1.62	6.47
156-60-5	trans-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
75-34-3	1,1-Dichloroethane	U	1.29	ug/kg	0.388	1.29
78-93-3	2-Butanone	U	6.47	ug/kg	1.94	6.47
156-59-2	cis-1,2-Dichloroethylene	U	1.29	ug/kg	0.388	1.29
594-20-7	2,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
67-66-3	Chloroform	U	1.29	ug/kg	0.388	1.29
74-97-5	Bromochloromethane	U	1.29	ug/kg	0.427	1.29
71-55-6	1,1,1-Trichloroethane	U	1.29	ug/kg	0.388	1.29
563-58-6	1,1-Dichloropropene	U	1.29	ug/kg	0.388	1.29
56-23-5	Carbon tetrachloride	U	1.29	ug/kg	0.388	1.29
107-06-2	1,2-Dichloroethane	U	1.29	ug/kg	0.388	1.29
71-43-2	Benzene	U	1.29	ug/kg	0.388	1.29
79-01-6	Trichloroethylene	U	1.29	ug/kg	0.427	1.29
78-87-5	1,2-Dichloropropane	U	1.29	ug/kg	0.388	1.29
75-27-4	Bromodichloromethane	U	1.29	ug/kg	0.388	1.29
74-95-3	Dibromomethane	U	1.29	ug/kg	0.388	1.29
108-10-1	4-Methyl-2-pentanone	U	6.47	ug/kg	1.62	6.47
10061-01-5	cis-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
108-88-3	Toluene	U	1.29	ug/kg	0.388	1.29
10061-02-6	trans-1,3-Dichloropropylene	U	1.29	ug/kg	0.388	1.29
79-00-5	1,1,2-Trichloroethane	U	1.29	ug/kg	0.388	1.29
591-78-6	2-Hexanone	U	6.47	ug/kg	1.94	6.47
142-28-9	1,3-Dichloropropane	U	1.29	ug/kg	0.388	1.29
127-18-4	Tetrachloroethylene	U	1.29	ug/kg	0.388	1.29
124-48-1	Dibromochloromethane	U	1.29	ug/kg	0.388	1.29
106-93-4	1,2-Dibromoethane	U	1.29	ug/kg	0.388	1.29
108-90-7	Chlorobenzene	U	1.29	ug/kg	0.388	1.29

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 248373009

Client ID: RE36-10-7498
Batch ID: 962617
Run Date: 03/09/2010 16:54
Prep Date: 03/09/2010 12:13
Data File: 030910V99C215.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.29	ug/kg	0.388	1.29
179601-23-1	m,p-Xylenes	U	2.59	ug/kg	0.388	2.59
95-47-6	o-Xylene	U	1.29	ug/kg	0.388	1.29
100-42-5	Styrene	U	1.29	ug/kg	0.388	1.29
75-25-2	Bromoform	U	1.29	ug/kg	0.388	1.29
79-34-5	1,1,2,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
96-18-4	1,2,3-Trichloropropane	U	1.29	ug/kg	0.388	1.29
108-86-1	Bromobenzene	U	1.29	ug/kg	0.388	1.29
103-65-1	n-Propylbenzene	U	1.29	ug/kg	0.388	1.29
95-49-8	2-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-82-8	Isopropylbenzene	U	1.29	ug/kg	0.388	1.29
108-67-8	1,3,5-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
106-43-4	4-Chlorotoluene	U	1.29	ug/kg	0.388	1.29
98-06-6	tert-Butylbenzene	U	1.29	ug/kg	0.388	1.29
95-63-6	1,2,4-Trimethylbenzene	U	1.29	ug/kg	0.388	1.29
135-98-8	sec-Butylbenzene	U	1.29	ug/kg	0.388	1.29
99-87-6	4-Isopropyltoluene	U	1.29	ug/kg	0.388	1.29
541-73-1	1,3-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
106-46-7	1,4-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29
104-51-8	n-Butylbenzene	U	1.29	ug/kg	0.388	1.29
96-12-8	1,2-Dibromo-3-chloropropane	U	1.29	ug/kg	0.388	1.29
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.47	ug/kg	2.07	6.47
630-20-6	1,1,1,2-Tetrachloroethane	U	1.29	ug/kg	0.388	1.29
95-50-1	1,2-Dichlorobenzene	U	1.29	ug/kg	0.388	1.29

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C215.D
Acq On : 9 Mar 2010 4:54 pm
Operator : RXY1
InstName : VOA9
Sample : |248373009|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 17:13:53 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	696357	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	451810	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	170220	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	696357	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	451810	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	170231	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	263529	56.32	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	112.64%			
43) Toluene-d8	12.412	12.412	0.890	98	615092	52.99	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	105.98%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	230958	55.78	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	111.56%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	0.000	5.308	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.546	0.000		0	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.491	7.490	0.695	43	2862	N.D.		
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	0.000	7.858	0.000		0	N.D.		
13) Methyl acetate	0.000	7.882	0.000		0	N.D.		
14) Carbon disulfide	7.906	7.906	0.734	76	748	N.D.		
15) Methylene chloride	8.083	8.083	0.750	84	4303	Below Cal		85
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.854	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	0.000	9.483	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	0.000	10.230	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	0.000	10.538	0.000		0	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.775	10.846	1.000	56	5788	Below Cal	#	21
34) Trichloroethylene	0.000	11.167	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C215.D
Acq On : 9 Mar 2010 4:54 pm
Operator : RXY1
InstName : VOA9
Sample : |248373009|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 17:13:53 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	3984	0.30 ug/L	99
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	0.000	13.028	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.131	14.024	1.014	91	1826	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	790	N.D.	
56) o-Xylene	14.570	14.570	1.045	106	510	N.D.	
57) Styrene	0.000	14.570	0.000		0	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	14.938	14.926	0.912	105	490	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.353	15.353	0.938	91	233	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	196	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	15.614	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972	105	459	N.D.	
71) sec-Butylbenzene	0.000	16.112	0.000		0	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	456	N.D.	
73) 1,3-Dichlorobenzene	0.000	16.313	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	16.408	0.000		0	N.D.	
75) n-Butylbenzene	0.000	16.693	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.922	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.337	19.349	1.181	128	378	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.550	0.000		0	N.D.	
88) Allyl chloride	0.000	7.929	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.483	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C215.D
Acq On : 9 Mar 2010 4:54 pm
Operator : RXY1
InstName : VOA9
Sample : |248373009|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 17:13:53 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

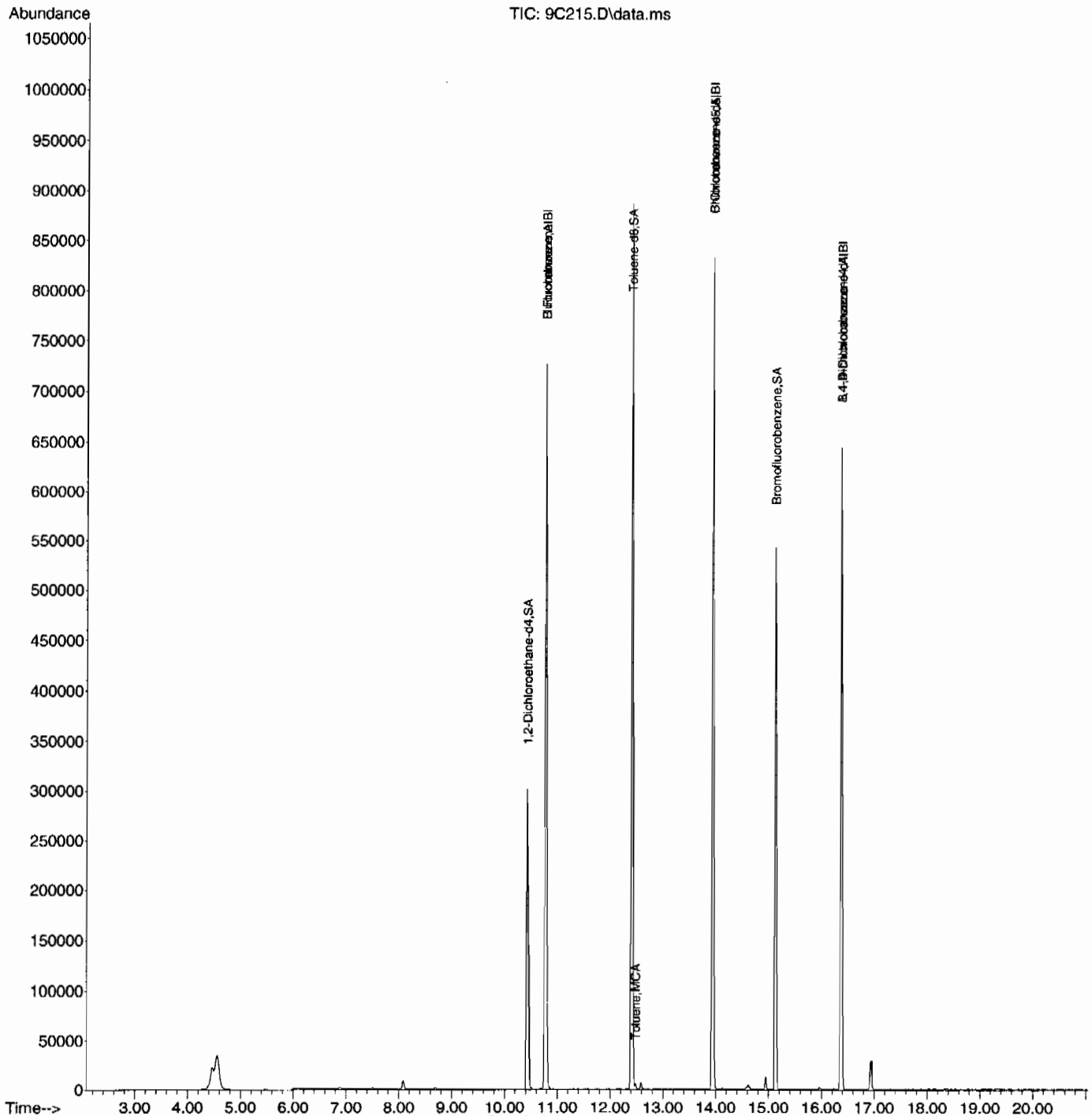
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	9.886	9.874	0.917	42	563	N.D.	
98) Isobutyl alcohol	0.000	10.159	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.950	14.961	0.913	53	630	N.D.	
108) Cyclohexanone	0.000	15.092	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.246	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.361	16.527	0.999	91	640	N.D.	
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034	45	2841	N.D.	

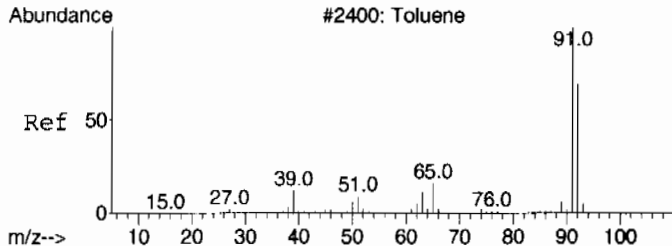
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

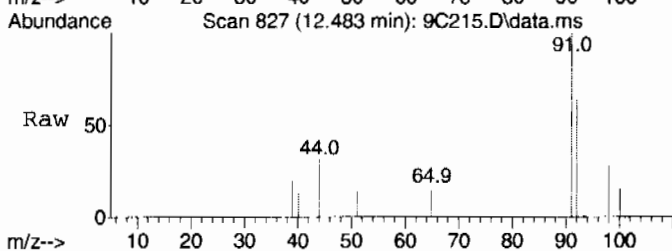
Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C215.D
Acq On : 9 Mar 2010 4:54 pm
Operator : RXY1
InstName : VOA9
Sample : |248373009|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 17:13:53 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

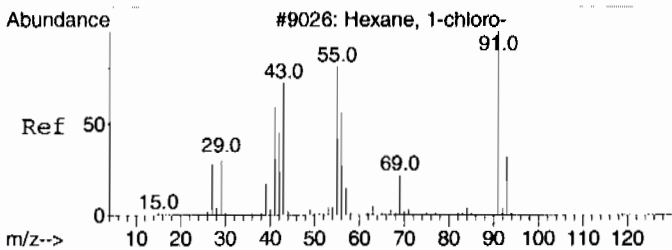
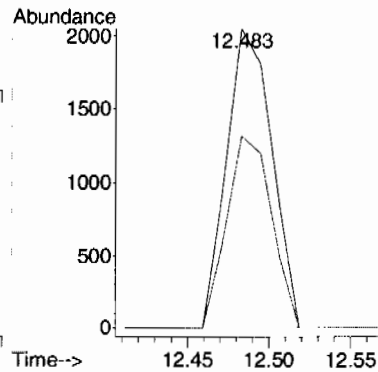
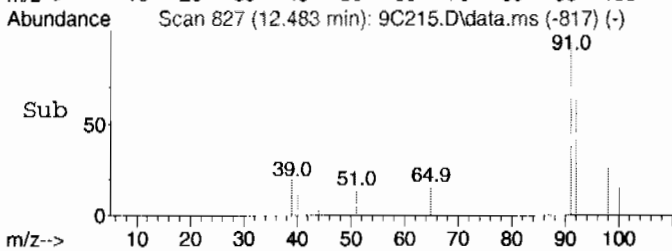




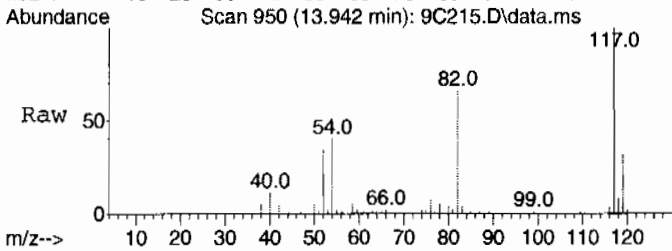
#44
Toluene
Concen: 0.30 ug/L
RT: 12.483 min Scan# 827
Delta R.T. -0.000 min
Lab File: 9C215.D
Acq: 9 Mar 2010 4:54 pm



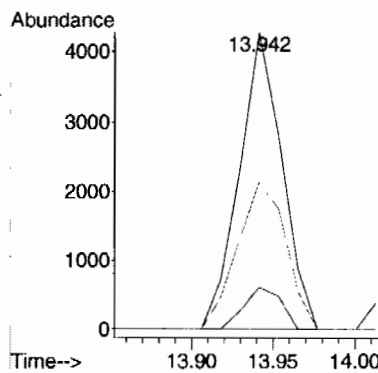
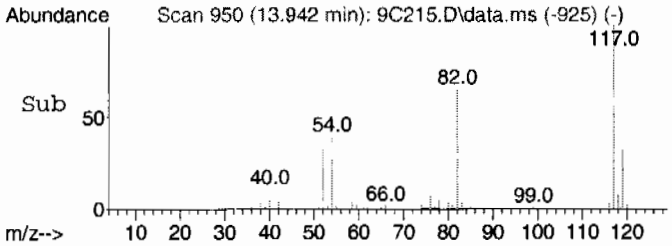
Tgt Ion: 91 Resp: 3984
Ion Ratio Lower Upper
91 100
92 63.8 33.0 93.0



#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.33 ug/L
RT: 13.942 min Scan# 950
Delta R.T. 0.119 min
Lab File: 9C215.D
Acq: 9 Mar 2010 4:54 pm



Tgt Ion: 55 Resp: 7828
Ion Ratio Lower Upper
55 100
91 12.2 74.8 134.8#
56 56.7 31.8 91.8



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C215.D
Acq On : 9 Mar 2010 4:54 pm
Operator : RXY1
Sample : |248373009|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C215.D
Acq On : 9 Mar 2010 4:54 pm
Operator : RXY1
Sample : |248373009|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5g n/a SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

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

Standards

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

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Calibration History Report VOA9

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Last Update : Wed Mar 03 09:48:05 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\030210V9\9B210.D

Injection Date	Mix	Calibration File
2 Mar 2010 12:38 pm	A	C:\msdchem\1\DATA\030210V9\9B210.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\030210V9\9B223.D

Injection Date	Mix	Calibration File
2 Mar 2010 1:07 pm	A	C:\msdchem\1\DATA\030210V9\9B211.D
2 Mar 2010 6:51 pm	B	C:\msdchem\1\DATA\030210V9\9B223.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\030210V9\9B224.D

Injection Date	Mix	Calibration File
2 Mar 2010 1:36 pm	A	C:\msdchem\1\DATA\030210V9\9B212.D
2 Mar 2010 7:19 pm	B	C:\msdchem\1\DATA\030210V9\9B224.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\030210V9\9B225.D

Injection Date	Mix	Calibration File
2 Mar 2010 2:04 pm	A	C:\msdchem\1\DATA\030210V9\9B213.D
2 Mar 2010 7:48 pm	B	C:\msdchem\1\DATA\030210V9\9B225.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\030210V9\9B226.D

Injection Date	Mix	Calibration File
2 Mar 2010 2:33 pm	A	C:\msdchem\1\DATA\030210V9\9B214.D
2 Mar 2010 8:16 pm	B	C:\msdchem\1\DATA\030210V9\9B226.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\030210V9\9B227.D

Injection Date	Mix	Calibration File
2 Mar 2010 3:02 pm	A	C:\msdchem\1\DATA\030210V9\9B215.D
2 Mar 2010 8:44 pm	B	C:\msdchem\1\DATA\030210V9\9B227.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\030210V9\9B216.D

Injection Date	Mix	Calibration File
2 Mar 2010 3:31 pm	A	C:\msdchem\1\DATA\030210V9\9B216.D
2 Mar 2010 9:12 pm	B	C:\msdchem\1\DATA\030210V9\9B228.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\030210V9\9B229.D

Injection Date	Mix	Calibration File
2 Mar 2010 4:00 pm	A	C:\msdchem\1\DATA\030210V9\9B217.D
2 Mar 2010 9:40 pm	B	C:\msdchem\1\DATA\030210V9\9B229.D

VOA9-8260-030210.M Thu Mar 18 08:46:00 2010

VOA9-8260-030210.M Thu Mar 18 08:16:51 2010

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Response Factor Report VOA9
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Last Update : Wed Mar 03 09:48:05 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m_1(x) + m_2(xE2)$

b	Compound ml | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
2)MA	Dichlorodifluoromethane	0.1472534	0.1476374 0.1434503	0.1525562	0.1938436	0.1559301	0.1571292	0.1568	AVRG		10.8723
3)MPA	Chloromethane	0.3746618	0.4660623 0.3493483	0.4184783	0.4371195	0.3786000	0.3734662	0.3997	AVRG		10.4430
4)MCA	Vinyl chloride	0.2866614	0.3217009 0.2714328	0.2997456	0.3026155	0.2804646	0.2822206	0.2921	AVRG		5.8211
5)MA	Bromomethane	0.2087821	0.1850927 0.1931165	0.1876338	0.2040400	0.1961536	0.1963611	0.1959	AVRG		4.2984
6)MA	Chloroethane	0.2244208	0.1970318 0.2098022	0.2266581	0.2211997	0.2154075	0.2164887	0.2159	AVRG		4.6719
7)MA	Trichlorofluoromethane	0.3323397	0.3233025 0.3084532	0.3259708	0.3341540	0.3125275	0.3255175	0.3232	AVRG		2.9570
8)MA	Ethyl ether	0.2948129	0.2906156 0.2710840	0.2774487	0.2906022	0.2785802	0.2840597	0.2839	AVRG		3.0278
9)MA	Acetone	0.2086445	0.2656890 0.1915796	0.2469669	0.2427717	0.2335843	0.1764634	0.2237	AVRG		14.4360
10)MCA	1,1-Dichloroethylene	0.4494584	0.4179055 0.4447909	0.4508080	0.5230365	0.4921364	0.4065384	0.4550	AVRG		8.9217
11)MA	Iodomethane	0.2869819	0.2931344 0.2655895	0.2964186	0.3539625	0.3358961	0.2587273	0.2987	AVRG		11.6827
12)MA	Acetonitrile 0.0274 | 0.0392 | 0.00	1480442	37968 2649868	65685	176997	358544	483059		LINR		0.9948
13)MA	Methyl acetate 0.0221 | 0.2226 | 0.00	1662316	38323 3003320	71663	196507	410986	491300		LINR		0.9935
14)MA	Carbon disulfide	0.6201504	0.6188466 0.5622642	0.6631031	0.7963456	0.7411253	0.5435523	0.6493	AVRG		14.1676
15)MA	Methylene chloride 0.0106 | 0.2485 | 0.00	349713	689038	24857	50029	89221	141011		LINR		0.9996
16)MA	tert-Butyl methyl ether	0.6865890	0.7244277 0.6606341	0.7054802	0.7636577	0.7892043	0.5536261	0.6977	AVRG		11.0646

Response Factor Report VOA9

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Last Update : Wed Mar 03 09:48:05 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m_1(x) + m_2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
17)MA	trans-1,2-Dichloroethylene	0.4199159	0.4653707 0.4157909	0.4499965	0.5035113	0.4766072	0.4177994	0.4499	AVRG		7.5491
18)MA	Vinyl acetate	0.6414402	0.6722887 0.4985933	0.6427979	0.6870887	0.6658144	0.6884478	0.6424	AVRG		10.2952
19)MPA	1,1-Dichloroethane	0.5224316	0.5696196 0.5125873	0.5567047	0.6153310	0.5853374	0.5112857	0.5533	AVRG		7.2017
20)MA	2-Butanone	0.2703742	0.2803800 0.2387283	0.2850802	0.2899111	0.2853008	0.2668745	0.2738	AVRG		6.4167
21)MA	cis-1,2-Dichloroethylene	0.4792706	0.5598281 0.4680827	0.4870844	0.5802923	0.5354943	0.4909380	0.5144	AVRG		8.5202
22)MA	2,2-Dichloropropane	0.3110846	0.3091066 0.3079831	0.3075837	0.3557556	0.3425448	0.3146859	0.3212	AVRG		6.0956
23)MA	Bromochloromethane	0.1098648	0.1059597 0.1061113	0.1155421	0.1203996	0.1264884	0.1100169	0.1135	AVRG		6.7997
24)MCA	Chloroform	0.4140239	0.4737063 0.3995848	0.4479310	0.4928328	0.4740006	0.4656351	0.4525	AVRG		7.5547
25)MA	1,1,1-Trichloroethane	0.3292436	0.3280709 0.3214085	0.3299544	0.3739609	0.3521021	0.3349078	0.3385	AVRG		5.4135
26)MA	Cyclohexane	0.5529980	0.5791563 0.5423433	0.5529240	0.6490126	0.6021021	0.5599430	0.5769	AVRG		6.5118
27)MA	1,1-Dichloropropene	0.3027793	0.3244673 0.2944936	0.3372761	0.3616065	0.3357663	0.3120474	0.3241	AVRG		7.1186
28)MA	Carbon tetrachloride	0.2762088	0.2807876 0.2745016	0.2646680	0.3051664	0.2962211	0.2771692	0.2821	AVRG		4.9157
29)SA	1,2-Dichloroethane-d4	0.3265190	0.3343666 0.3207524	0.3295738	0.3689487	0.3351233	0.3366745	0.3360	AVRG		4.6318
30)MA	1,2-Dichloroethane	0.4027770	0.4207811 0.3849316	0.4199722	0.4690362	0.4625664	0.4334455	0.4276	AVRG		7.0896
31)MA	Benzene	0.8769692	1.0341168 0.8326346	0.9795724	1.0808151	1.0191586	0.9047000	0.9611	AVRG		9.5109

Response Factor Report VOA9

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Last Update : Wed Mar 03 09:48:05 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}, x = \text{response ratio}, y = b + m_1(x) + m_2(x^2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
32)MA	Cyclohexene	0.4806021	0.5223363 0.4688600	0.5076293	0.5672928	0.5365795	0.4890821	0.5103	AVRG		6.7596
33)MA	n-Butyl alcohol 0.0318 | 0.0102 | 0.00	13608 1550435	26542 2733273	53083	140383	312815	758062		LINR		0.9909
34)MA	Trichloroethylene	0.2341661	0.2410755 0.2278934	0.2521272	0.2782923	0.2566721	0.2597801	0.2500	AVRG		6.8590
35)MA	1,2-Dichloropropane	0.2966667	0.3354964 0.2823848	0.3176348	0.3550511	0.3413460	0.3388749	0.3239	AVRG		8.1072
36)MA	Methylcyclohexane	0.3809803	0.4036732 0.3667074	0.4055686	0.4631260	0.4341511	0.4193925	0.4105	AVRG		7.8734
37)MA	Dibromomethane	0.1508399	0.1500397 0.1450326	0.1502509	0.1641738	0.1703412	0.1680682	0.1570	AVRG		6.5132
38)MA	Bromodichloromethane	0.3275310	0.3133290 0.3197953	0.3250856	0.3470497	0.3548956	0.4077097	0.3422	AVRG		9.4841
39)MA	2-Chloroethylvinyl ether	0.1769678	0.1659100 0.1493751	0.1560049	0.2164129	0.1774467	0.1738874	0.1737	AVRG		12.4681
40)MA	cis-1,3-Dichloropropylene	0.3918995	0.3870385 0.3837026	0.3616570	0.4254177	0.4251217	0.4760597	0.4073	AVRG		9.3291
42)MA	4-Methyl-2-pentanone	0.1959823	0.1908742 0.1781461	0.2027142	0.2151534	0.2156581	0.2374407	0.2051	AVRG		9.4946
43)SA	Toluene-d8	1.2473074	1.2883111 1.2479950	1.2832375	1.4091322	1.2571669	1.2595407	1.2847	AVRG		4.4530
44)MA	Toluene	1.2559453	1.6311715 1.1674146	1.5157013	1.6126680	1.4767168	1.5089578	1.4527	AVRG		12.0961
45)MA	trans-1,3-Dichloropropyl	0.5200492	0.4626700 0.5082026	0.4886037	0.5376485	0.5574011	0.6715061	0.5352	AVRG		12.6434
46)MA	1,1,2-Trichloroethane	0.2549339	0.2993962 0.2414829	0.2819196	0.2911071	0.2878545	0.3444982	0.2859	AVRG		11.5964
47)MA	2-Hexanone	0.5221123	0.5613026 0.4390635	0.5881973	0.5904674	0.5892408	0.6407765	0.5616	AVRG		11.5280

Response Factor Report VOA9
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Last Update : Wed Mar 03 09:48:05 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m_1(x) + m_2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
48)MA	1,3-Dichloropropane	0.4978358	0.5954507 0.4599480	0.5922259	0.6147254	0.5890273	0.6553679	0.5721	AVRG		11.9583
49)MA	Tetrachloroethylene	0.1840632	0.2092223 0.1747417	0.2269070	0.2344125	0.2126851	0.2177419	0.2085	AVRG		10.4519
50)MA	Dibromochloromethane 0.0073 | 0.3117 | 0.00	297610	4948 593594	10693	29547	63883	159058		LINR		0.9953
51)MA	1,2-Dibromoethane	0.2981151	0.3156348 0.2857973	0.3092925	0.3269176	0.3241840	0.3724980	0.3189	AVRG		8.6780
52)MPA	Chlorobenzene	0.7938753	0.9457035 0.7524095	0.9181662	0.9673958	0.9067684	1.0491657	0.9048	AVRG		11.2480
53)MA	1,1,1,2-Tetrachloroethan	0.2818454	0.2602878 0.2719111	0.2929915	0.3076457	0.3142201	0.3970874	0.3037	AVRG		14.9289
54)MCA	Ethylbenzene		1.7395159	1.8037838	1.8204414	1.6784848	1.9089935	1.7902	AVRG		4.8584
55)MA	m,p-Xylenes	0.5154516	0.6182683 0.4862620	0.6518673	0.6569421	0.6058274	0.6998315	0.6049	AVRG		12.8372
56)MA	o-Xylene	0.5370559	0.6380053 0.5112298	0.6476120	0.6698932	0.6270496	0.7450380	0.6251	AVRG		12.6948
57)MA	Styrene	0.8959110	0.9618377 0.8193340	1.0143716	1.0588759	1.0352055	1.2640800	1.0071	AVRG		13.9975
59)MPA	Bromoform 0.0048 | 0.3804 | 0.00	166876	2443 330739	5191	14669	32312	84225		LINR		0.9967
60)MA	Isopropylbenzene	2.9804302	3.4971295 2.7427422	3.7510546	3.8005851	3.5627158	4.2214993	3.5080	AVRG		14.3516
61)SA	Bromofluorobenzene	1.1666904	1.2013128 1.1921074	1.2126933	1.3373281	1.2169830	1.1859127	1.2161	AVRG		4.6095
62)MPA	1,1,2,2-Tetrachloroethan	0.9082576	0.9735380 0.8523526	1.0497038	1.0184044	1.0296258	1.1882554	1.0029	AVRG		10.7692
63)MA	1,2,3-Trichloropropane	0.2240788	0.2112090 0.2143559	0.2596422	0.2443653	0.2467733	0.2926599	0.2419	AVRG		11.8626

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m1(x) + m2(xE2)$

b	Compound m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
64)MA	Bromobenzene	0.6373839	0.7806000 0.5996815	0.7924772	0.8270700	0.7545939	0.9004857	0.7560	AVRG		13.9112
65)MA	n-Propylbenzene	3.6487862	4.4922710	4.8536059	4.8329116	4.5268683	5.3297049	4.6140	AVRG		12.1509
66)MA	1,3,5-Trimethylbenzene	2.4865552	2.7677804	3.0259772	3.1815467	2.9990847	3.6002670	3.0102	AVRG		12.5262
67)MA	2-Chlorotoluene	0.7160813	0.8735642 0.6852049	0.9040049	0.9175399	0.8586027	1.0168713	0.8531	AVRG		13.6173
68)MA	4-Chlorotoluene	2.4561437	2.9473885 2.2879852	3.0798263	3.0933343	2.8879388	3.4985004	2.8930	AVRG		14.1224
69)MA	tert-Butylbenzene	0.5052107	0.5307804 0.4894823	0.5771397	0.6263287	0.5456842	0.6890710	0.5662	AVRG		12.5112
70)MA	1,2,4-Trimethylbenzene	2.6084404	2.9064797 2.3954121	3.2952226	3.2280868	3.1515120	3.6870200	3.0389	AVRG		14.4137
71)MA	sec-Butylbenzene	3.3847108	3.9511484 3.1163324	4.3806883	4.2890806	4.0118410	4.8422168	3.9966	AVRG		14.8019
72)MA	4-Isopropyltoluene	2.6996659	2.9615227 2.5297696	3.2721865	3.3604406	3.1091994	3.8165032	3.1070	AVRG		13.8757
73)MA	1,3-Dichlorobenzene	1.3108105	1.6851905 1.2274756	1.6458733	1.6272835	1.5413973	1.8427464	1.5544	AVRG		13.9054
74)MA	1,4-Dichlorobenzene	1.2717651	1.5467211 1.2038807	1.6422794	1.5524288	1.4899896	1.7765950	1.4977	AVRG		13.3963
75)MA	n-Butylbenzene	2.9282019	3.4732277 2.6650895	3.5133291	3.6104500	3.4405283	4.1274654	3.3940	AVRG		14.0056
76)MA	1,2-Dichlorobenzene	1.2916244	1.4850131 1.2249851	1.5777077	1.5333565	1.4968949	1.7919747	1.4859	AVRG		12.5993
77)MA	1,2-Dibromo-3-chloroprop 0.0007 | 0.1513 | 0.00	66201	921 131229	2147	5795	12078	31067		LINR		0.9984
78)MA	1,2,4-Trichlorobenzene	0.8437424	0.9545774 0.7883980	0.9676929	0.9487235	0.9554281	1.1430201	0.9431	AVRG		11.8308

Response Factor Report VOA9

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Last Update : Wed Mar 03 09:48:05 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m_1(x) + m_2(xE2)$

b		Compound		8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
		m1	m2	6	7								
79)MA	Hexachlorobutadiene			0.3985668	0.4271294 0.3892581	0.4695594	0.4465646	0.4368439	0.5490925	0.4453	AVRG		11.9852
80)MA	Naphthalene			2.4517532	2.4819932 2.2461319	2.3287670	2.5307603	2.6428340	3.2258243	2.5583	AVRG		12.5733
81)MA	1,2,3-Trichlorobenzene			0.7582996	0.8443764 0.7031437	0.7918291	0.8221079	0.8398679	1.0291682	0.8270	AVRG		12.3575
83)B	Chlorotrifluoroethylene			0.0824430	0.0961882 0.0912472	0.0865555	0.0843713	0.0863942	0.1202562	0.0925	AVRG		14.1339
84)B	2-Chloro-1,1,1-trifluoro			0.2026459	0.2162198 0.1968224	0.2125439	0.2258463	0.2060994	0.2244076	0.2121	AVRG		5.1522
85)B	Acrolein			335107	4379 732477	8997	24400	50440	104962		LINR		0.9966
86)B	Trichlorotrifluoroethane	-0.0125	0.0533	0.0644732	0.0774762 0.0679645	0.0855444	0.0796362	0.0784645	0.0768733	0.0758	AVRG		9.4922
87)B	Isopropyl Alcohol			0.0234891	0.0231203 0.0236553	0.0230129	0.0252959	0.0254713	0.0251017	0.0242	AVRG		4.4694
88)B	Allyl chloride			0.4481804	0.5195764 0.4100815	0.5556699	0.5191052	0.5002615	0.4960520	0.4927	AVRG		9.8950
89)B	tert-Butyl Alcohol			0.0335457	0.0322083 0.0334044	0.0331544	0.0380542	0.0366874	0.0362058	0.0348	AVRG		6.3326
90)B	Acrylonitrile			0.1314014	0.1263668 0.1321071	0.1371169	0.1368889	0.1333613	0.1365959	0.1334	AVRG		2.9246
91)B	Isopropyl ether			1.1786418	1.2182275 1.1620931	1.2461026	1.3682860	1.2706696	1.3204028	1.2521	AVRG		5.9402
92)B	2-Chloro-1,3-butadiene			0.4501787	0.4052194 0.4456551	0.4461528	0.4383873	0.4409943	0.4497868	0.4395	AVRG		3.5744
93)B	Ethyl tert-butyl ether			1.0116017	1.0139294 1.0070676	0.9757690	1.1421939	1.0504886	1.1049463	1.0437	AVRG		5.7182
94)B	Ethyl acetate			0.3024143	0.3562260 0.2825284	0.3595199	0.3507009	0.3354244	0.3303789	0.3310	AVRG		8.7419

Response Factor Report VOA9

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Last Update : Wed Mar 03 09:48:05 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m1(x) + m2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
95)B	Propionitrile	0.0508092	0.0521867 0.0518541	0.0534173	0.0518532	0.0502164	0.0515169	0.0517	AVRG		1.9761
96)B	Methacrylonitrile	0.1915482	0.1931913 0.1798854	0.2154773	0.2161646	0.2087863	0.2073865	0.2018	AVRG		6.8100
97)B	Tetrahydrofuran	0.1042643	0.1185047 0.1040504	0.1179262	0.1126520	0.1101508	0.1090612	0.1109	AVRG		5.2705
98)B	Isobutyl alcohol	0.0125718	0.0122160 0.0112450	0.0127807	0.0130356	0.0128722	0.0127557	0.0125	AVRG		4.8787
99)B	Methyl tert-amyl ether	0.7026508	0.6590688 0.7116438	0.6715446	0.7653116	0.7134329	0.7464296	0.7100	AVRG		5.3098
100)B	Methyl methacrylate	0.1601083	0.1528382 0.1486081	0.1737197	0.1728712	0.1696768	0.1703010	0.1640	AVRG		6.2064
101)B	1,4-Dioxane	0.0026769	0.0024959 0.0027069	0.0028851	0.0025792	0.0027252	0.0026682	0.0027	AVRG	#	4.5482
102)B	2-Nitropropane	0.0889104	0.0649966 0.0941351	0.0684643	0.0751530	0.0811045	0.0847881	0.0797	AVRG		13.4064
104)B	Ethyl methacrylate	0.4186415	0.4128027 0.3631801	0.4665493	0.4821596	0.4687102	0.4672360	0.4399	AVRG		9.7977
106)B	1-Chlorohexane	0.9094329	1.0323023 0.9203834	0.9274308	1.0269946	1.0127783	1.0736003	0.9861	AVRG		6.6514
107)B	cis-1,4-Dichloro-2-buten	0.3492118	0.3092989 0.3390761	0.3504452	0.3579210	0.3571278	0.3681356	0.3473	AVRG		5.4740
108)B	Cyclohexanone		0.0271307	0.0288157	0.0283410	0.0321433	0.0337446	0.0300	AVRG		9.2684
109)B	trans-1,4-Dichloro-2-but	0.3273745	0.3045262 0.3171022	0.3319908	0.3410833	0.3347336	0.3457361	0.3289	AVRG		4.3191
110)B	Pentachloroethane	0.2228954	0.2197338 0.1588173	0.2249505	0.1693181	0.1816313	0.2142965	0.1988	AVRG		14.0861
111)B	Benzyl chloride	1.1016260	0.8909499 1.0022308	1.0466718	1.1096677	1.1570406	1.1916552	1.0714	AVRG		9.4979

Response Factor Report VOA9

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Last Update : Wed Mar 03 09:48:05 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}, x = \text{response ratio. } y = b + m1(x) + m2(xE2)$

b	Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/ r^2
	m1 | m2	6	7								
0.012	Bis(2-Chloroisopropyl)et	0.6060860	0.5708472	0.5924487	0.6096016	0.6115560	0.6245797	0.6003	AVRG		2.9943

(#) = Out of Range

Continuing Calibration Summary

Page 1 of 3

Client SDG: 10-2154

Instrument ID: VOA9.1

Injection Date 03-MAR-10 10:50

Data File: 030310V9\9B303ICV.D

Init. Cal. Date(s) 02-MAR-10 12:38 - 02-MAR-10 21:4

Lab Sample ID W9VM100303-03

Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.336	0.31683		.01		-5.70536	30		Averaged	
S Toluene-d8	1.2847	1.29661		.01		0.92706	30		Averaged	
S Bromofluorobenzene	1.2161	1.23691		.01		1.71121	30		Averaged	
Dichlorodifluoromethane	0.1568	0.16563		.01		5.63138	30		Averaged	
Chloromethane	0.3997	0.35494		.1		-11.1984	30		Averaged	spcc
Vinyl chloride	0.2921	0.29839		.01		2.15337	20		Averaged	ccc
Bromomethane	0.1959	0.20224		.01		3.23635	30		Averaged	
Chloroethane	0.2159	0.22412		.01		3.80732	30		Averaged	
Trichlorofluoromethane	0.3232	0.33974		.01		5.11757	30		Averaged	
Ethyl ether	0.2839	0.26225		.01		-7.62592	30		Averaged	
Acetone	0.2237	0.19755		.01		-11.68976	40		Averaged	
1,1-Dichloroethylene	0.455	0.46291		.01		1.73846	20		Averaged	ccc
Iodomethane	0.2987	0.2872		.01		-3.85002	30		Averaged	
Acetonitrile	1250	1212.24	1250			-3.0208	30		Linear	
Methyl acetate	250	235.05	250			-5.98	40		Linear	
Carbon disulfide	0.6493	0.68832		.01		6.00955	30		Averaged	
Methylene chloride	50	49.94	50			-0.12	30		Linear	
tert-Butyl methyl ether	0.6977	0.65576		.01		-6.01118	30		Averaged	
trans-1,2-Dichloroethylene	0.4499	0.44399		.01		-1.31363	30		Averaged	
Vinyl acetate	0.6424	0.63215		.01		-1.59558	40		Averaged	
1,1-Dichloroethane	0.5533	0.53632		.1		-3.06886	30		Averaged	spcc
2-Butanone	0.2738	0.23451		.01		-14.34989	40		Averaged	
cis-1,2-Dichloroethylene	0.5144	0.49748		.01		-3.28927	30		Averaged	
2,2-Dichloropropane	0.3212	0.35431		.01		10.30822	30		Averaged	
Bromochloromethane	0.1135	0.10602		.01		-6.59031	30		Averaged	
Chloroform	0.4525	0.42156		.01		-6.83757	20		Averaged	ccc
1,1,1-Trichloroethane	0.3385	0.34667		.01		2.41359	30		Averaged	
Cyclohexane	0.5769	0.6083		.01		5.44288	30		Averaged	
1,1-Dichloropropene	0.3241	0.3261		.01		0.61709	30		Averaged	
Carbon tetrachloride	0.2821	0.29048		.01		2.97058	30		Averaged	
1,2-Dichloroethane	0.4276	0.38514		.01		-9.92984	30		Averaged	
Benzene	0.9611	0.91469		.01		-4.82884	30		Averaged	
Cyclohexene	0.5103	0.50149		.01		-1.72644	30		Averaged	
n-Butyl alcohol	5000	4625.95	5000			-7.481	40		Linear	
Trichloroethylene	0.25	0.24157		.01		-3.372	30		Averaged	
1,2-Dichloropropane	0.3239	0.29641		.01		-8.48719	20		Averaged	ccc
Methylcyclohexane	0.4105	0.41623		.01		1.39586	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA9.1

Injection Date 03-MAR-10 10:50

Data File: 030310V9\9B303ICV.D

Init. Cal. Date(s) 02-MAR-10 12:38 02-MAR-10 21:4

Lab Sample ID W9VM100303-03

Quant Type ISTD

Method:030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.157	0.14278		.01		-9.05732	30		Averaged	
Bromodichloromethane	0.3422	0.3232		.01		-5.55231	30		Averaged	
2-Chloroethylvinyl ether	0.1737	0.14925		.01		-14.07599	30		Averaged	
cis-1,3-Dichloropropylene	0.4073	0.39359		.01		-3.36607	30		Averaged	
4-Methyl-2-pentanone	0.2051	0.18859		.01		-8.04973	40		Averaged	
Toluene	1.4527	1.35705		.01		-6.58429	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.5352	0.53657		.01		0.25598	30		Averaged	
1,1,2-Trichloroethane	0.2859	0.25903		.01		-9.39839	30		Averaged	
2-Hexanone	0.5616	0.46671		.01		-16.89637	40		Averaged	
1,3-Dichloropropane	0.5721	0.49853		.01		-12.85964	30		Averaged	
Tetrachloroethylene	0.2085	0.20304		.01		-2.61871	30		Averaged	
Dibromochloromethane	50	48.8	50			-2.4	30		Linear	
1,2-Dibromoethane	0.3189	0.29473		.01		-7.57918	30		Averaged	
Chlorobenzene	0.9048	0.852		.3		-5.83554	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3037	0.29404		.01		-3.18077	30		Averaged	
Ethylbenzene	1.7902	1.49911		.01		-16.26019	20		Averaged	ccc
m,p-Xylenes	0.6049	0.56376		.01		-6.80112	30		Averaged	
o-Xylene	0.6251	0.57597		.01		-7.85954	30		Averaged	
Styrene	1.0071	0.93978		.01		-6.68454	30		Averaged	
Bromoform	50	48.14	50			-3.72	30		Linear	spcc
Isopropylbenzene	3.508	3.24572		.01		-7.47662	30		Averaged	
1,1,2,2-Tetrachloroethane	1.0029	0.90272		.3		-9.98903	30		Averaged	spcc
1,2,3-Trichloropropane	0.2419	0.21369		.01		-11.66184	30		Averaged	
Bromobenzene	0.756	0.67302		.01		-10.97619	30		Averaged	
n-Propylbenzene	4.614	4.03418		.01		-12.56654	30		Averaged	
1,3,5-Trimethylbenzene	3.0102	2.71132		.01		-9.92891	30		Averaged	
2-Chlorotoluene	0.8531	0.786		.01		-7.86543	30		Averaged	
4-Chlorotoluene	2.893	2.67189		.01		-7.64293	30		Averaged	
tert-Butylbenzene	0.5662	0.55084		.01		-2.71282	30		Averaged	
1,2,4-Trimethylbenzene	3.0389	2.80226		.01		-7.78703	30		Averaged	
sec-Butylbenzene	3.9966	3.74557		.01		-6.28109	30		Averaged	
4-Isopropyltoluene	3.107	2.9416		.01		-5.32346	30		Averaged	
1,3-Dichlorobenzene	1.5544	1.40443		.01		-9.6481	30		Averaged	
1,4-Dichlorobenzene	1.4977	1.37274		.01		-8.34346	30		Averaged	
n-Butylbenzene	3.394	3.23614		.01		-4.65115	30		Averaged	
1,2-Dichlorobenzene	1.4859	1.35762		.01		-8.63315	30		Averaged	
1,2-Dibromo-3-chloropropane	50	46.21	50			-7.58	30		Linear	

Continuing Calibration Summary

Instrument ID: VOA9.I

Injection Date 03-MAR-10 10:50

Data File: 030310V9\9B3031CV.D

Init. Cal. Date(s) 02-MAR-10 12:38 02-MAR-10 21:4

Lab Sample ID W9VM100303-03 Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.9431	0.90851		.01		-3.66769	30		Averaged
Hexachlorobutadiene	0.4453	0.44307		.01		-0.50079	30		Averaged
Naphthalene	2.5583	2.38163		.01		-6.90576	30		Averaged
1,2,3-Trichlorobenzene	0.827	0.79902		.01		-3.38331	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V9\
Data File : 9B303ICV.D
Acq On : 3 Mar 2010 10:50 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100303-03|ICV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0220-01C/0301-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 03 11:19:44 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1360321	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	918430	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	419873	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1360321	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	918430	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	419896	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	430986	47.15	ug/L	0.00
43) Toluene-d8	12.412	12.412	0.890	98	1190843	50.46	ug/L	0.00
61) Bromofluorobenzene	15.127	15.127	0.924	95	519347	50.85	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.944	4.944	0.459	85	225312	52.81	ug/L	98
3) Chloromethane	5.308	5.308	0.493	50	482839	44.40	ug/L	100
4) Vinyl chloride	5.560	5.546	0.516	62	405912	51.07	ug/L	99
5) Bromomethane	6.186	6.186	0.574	94	275105	51.62	ug/L	99
6) Chloroethane	6.340	6.340	0.588	64	304879	51.91	ug/L	98
7) Trichlorofluoromethane	6.767	6.767	0.628	101	462157	52.56	ug/L	100
8) Ethyl ether	7.099	7.099	0.659	59	356744	46.19	ug/L	96
9) Acetone	7.490	7.490	0.695	43	1343662	220.80	ug/L	99
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	629706	50.87	ug/L	98
11) Iodomethane	7.763	7.763	0.720	142	1953451	240.40	ug/L	97
12) Acetonitrile	7.858	7.858	0.729	41	1331412	1212.24	ug/L	99
13) Methyl acetate	7.882	7.882	0.731	43	1453506	235.05	ug/L	97
14) Carbon disulfide	7.905	7.906	0.734	76	4681713	265.01	ug/L	99
15) Methylene chloride	8.083	8.083	0.750	84	351995	49.94	ug/L	93
16) tert-Butyl methyl ether	8.368	8.368	0.777	73	892045	47.00	ug/L	97
17) trans-1,2-Dichloroethy...	8.427	8.427	0.782	61	603972	49.35	ug/L	97
18) Vinyl acetate	8.854	8.854	0.822	43	4299631	246.03	ug/L	97
19) 1,1-Dichloroethane	8.913	8.913	0.827	63	729573	48.46	ug/L	99
20) 2-Butanone	9.482	9.483	0.880	43	1595078	214.12	ug/L	95
21) cis-1,2-Dichloroethylene	9.554	9.554	0.887	61	676735	48.35	ug/L	97
22) 2,2-Dichloropropane	9.577	9.578	0.889	77	481977	55.15	ug/L	97
23) Bromochloromethane	9.826	9.827	0.912	128	144217	46.71	ug/L	92
24) Chloroform	9.850	9.850	0.914	83	573456	46.58	ug/L	97
25) 1,1,1-Trichloroethane	10.135	10.135	0.941	97	471579	51.20	ug/L	100
26) Cyclohexane	10.230	10.230	0.949	56	827479	52.72	ug/L	97
27) 1,1-Dichloropropene	10.289	10.289	0.955	75	443597	50.31	ug/L	99
28) Carbon tetrachloride	10.324	10.325	0.958	117	395144	51.48	ug/L	99
30) 1,2-Dichloroethane	10.514	10.514	0.976	62	523916	45.03	ug/L	100
31) Benzene	10.538	10.538	0.978	78	1244274	47.58	ug/L	99
32) Cyclohexene	10.645	10.645	0.988	67	682190	49.13	ug/L	94
33) n-Butyl alcohol	10.846	10.846	1.007	56	1333113	4625.95	ug/L	97
34) Trichloroethylene	11.166	11.167	1.036	95	328616	48.31	ug/L	100
35) 1,2-Dichloropropane	11.415	11.416	1.059	63	403208	45.75	ug/L	99
36) Methylcyclohexane	11.415	11.416	1.059	83	566202	50.70	ug/L	96
37) Dibromomethane	11.558	11.558	1.073	93	194224	45.48	ug/L	99
38) Bromodichloromethane	11.664	11.665	1.083	83	439658	47.22	ug/L	99
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101	63	1015121	214.79	ug/L	98
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123	75	535408	48.32	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V9\
Data File : 9B303ICV.D
Acq On : 3 Mar 2010 10:50 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100303-03|ICV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0220-01C/0301-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 03 11:19:44 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	12.186	12.186	0.874	58	866043	229.84	ug/L	92
44) Toluene	12.483	12.483	0.895	91	1246358	46.71	ug/L	98
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906	75	492800	50.13	ug/L	100
46) 1,1,2-Trichloroethane	12.862	12.862	0.923	83	237905	45.30	ug/L	99
47) 2-Hexanone	13.028	13.028	0.935	43	2143186	207.76	ug/L	97
48) 1,3-Dichloropropane	13.052	13.052	0.936	76	457862	43.57	ug/L	100
49) Tetrachloroethylene	13.087	13.088	0.939	164	186477	48.68	ug/L	97
50) Dibromochloromethane	13.325	13.325	0.956	129	286114	48.80	ug/L	99
51) 1,2-Dibromoethane	13.503	13.503	0.969	107	270685	46.21	ug/L	100
52) Chlorobenzene	13.977	13.977	1.003	112	782506	47.08	ug/L	99
53) 1,1,1,2-Tetrachloroethane	14.024	14.024	1.006	131	270058	48.41	ug/L	99
54) Ethylbenzene	14.024	14.024	1.006	91	1376829	41.87	ug/L	98 E
55) m,p-Xylenes	14.131	14.131	1.014	106	1035541	93.19	ug/L	94
56) o-Xylene	14.570	14.570	1.045	106	528989	46.07	ug/L	94
57) Styrene	14.570	14.570	1.045	104	863119	46.66	ug/L	98
59) Bromoform	14.854	14.855	0.907	173	155800	48.14	ug/L	97
60) Isopropylbenzene	14.926	14.926	0.912	105	1362789	46.26	ug/L	99
62) 1,1,2,2-Tetrachloroethane	15.198	15.198	0.928	83	379028	45.01	ug/L	100
63) 1,2,3-Trichloropropane	15.293	15.293	0.934	110	89723	44.17	ug/L #	91
64) Bromobenzene	15.352	15.353	0.938	156	282582	44.51	ug/L	98
65) n-Propylbenzene	15.352	15.353	0.938	91	1693842	43.72	ug/L	99
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	1138408	45.04	ug/L	97
67) 2-Chlorotoluene	15.507	15.507	0.947	126	330021	46.07	ug/L	96
68) 4-Chlorotoluene	15.613	15.614	0.954	91	1121853	46.18	ug/L	100
69) tert-Butylbenzene	15.874	15.874	0.970	134	231284	48.64	ug/L	94
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972	105	1176592	46.11	ug/L	98
71) sec-Butylbenzene	16.111	16.112	0.984	105	1572665	46.86	ug/L	99
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	1235098	47.34	ug/L	99
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	589681	45.18	ug/L	100
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	576376	45.83	ug/L	99
75) n-Butylbenzene	16.692	16.693	1.020	91	1358767	47.67	ug/L	99
76) 1,2-Dichlorobenzene	16.858	16.859	1.030	146	570026	45.68	ug/L	99
77) 1,2-Dibromo-3-chloropr...	17.783	17.784	1.086	157	59005	46.21	ug/L	99
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156	180	381458	48.17	ug/L	100
79) Hexachlorobutadiene	19.088	19.088	1.166	225	186032	49.75	ug/L	99
80) Naphthalene	19.349	19.349	1.182	128	999984	46.55	ug/L	100
81) 1,2,3-Trichlorobenzene	19.716	19.717	1.204	180	335486	48.31	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.		
85) Acrolein	7.253	7.313	0.673		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.		
87) Isopropyl Alcohol	7.490	7.550	0.695		0m	N.D.	d	
88) Allyl chloride	7.858	7.929	0.729		0m	N.D.	d	
89) tert-Butyl Alcohol	8.059	8.060	0.748		0m	N.D.	d	
90) Acrylonitrile	8.380	8.332	0.778		0m	N.D.	d	
91) Isopropyl ether	8.854	8.866	0.822		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836		0m	N.D.	d	
93) Ethyl tert-butyl ether	9.281	9.269	0.861		0m	N.D.	d	
94) Ethyl acetate	9.482	9.483	0.880		0m	N.D.	d	
95) Propionitrile	9.494	9.578	0.881		0m	N.D.	d	
96) Methacrylonitrile	9.838	9.744	0.913		0m	N.D.	d	
97) Tetrahydrofuran	9.838	9.874	0.913		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V9\
Data File : 9B303ICV.D
Acq On : 3 Mar 2010 10:50 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100303-03|ICV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0220-01C/0301-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 03 11:19:44 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

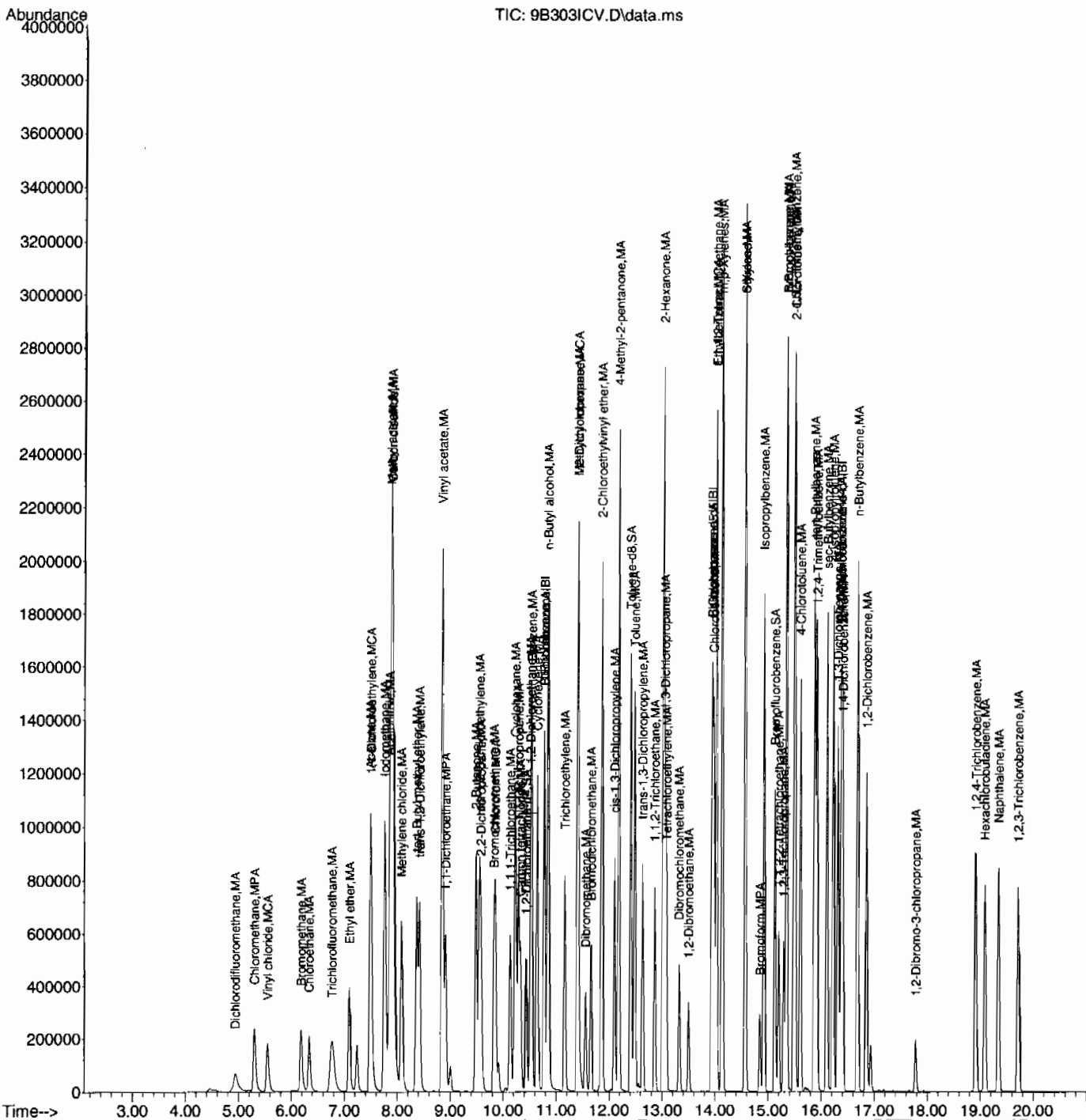
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	10.135	10.159	0.941		0m	N.D.	d
99) Methyl tert-amyl ether	10.538	10.526	0.978		0m	N.D.	d
100) Methyl methacrylate	11.415	11.368	1.059		0m	N.D.	d
101) 1,4-Dioxane	11.498	11.487	1.067		0m	N.D.	d
102) 2-Nitropropane	11.866	11.854	1.101		0m	N.D.	d
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	13.941	13.823	0.852		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.926	14.961	0.912		0m	N.D.	d
108) Cyclohexanone	14.914	15.092	0.911		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.352	15.246	0.938		0m	N.D.	d
110) Pentachloroethane	15.957	15.957	0.975		0m	N.D.	d
111) Benzyl chloride	16.515	16.527	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034		0m	N.D.	d

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

GEL Laboratories, LLC

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Data Path : C:\msdchem\1\DATA\030310V9\  
Data File : 9B303ICV.D  
Acq On : 3 Mar 2010 10:50 am  
Operator : RXY1  
InstName : VOA9  
Sample : |W9VM100303-03|ICV|1|VOA|1|VOA8260BL|  
Misc : GEL 5ml n/a MIX[A]0220-01C/0301-01  
ALS Vial : 3 Sample Multiplier: 1
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Quant Time: Mar 03 11:19:44 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2154

Instrument ID: VOA9.1

Injection Date: 03-MAR-10 12:00

Data File: 030310V9\B305ICV.D

Init. Cal. Date(s): 02-MAR-10 12:38 - 02-MAR-10 21:4

Lab Sample ID: W9VM100303-05 Quant Type: ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.336	0.31548		.01		-6.10714	30		Averaged
S Toluene-d8	1.2847	1.29899		.01		1.11232	30		Averaged
S Bromofluorobenzene	1.2161	1.15928		.01		-4.67231	30		Averaged
Acrolein	250	238.83	250			-4.468	30		Linear
Trichlorotrifluoroethane	0.0758	0.06806		.01		-10.21108	30		Averaged
Isopropyl Alcohol	0.0242	0.00039		.01		-98.38843	40	*	Averaged
Allyl chloride	0.4927	0.43147		.01		-12.42744	30		Averaged
Acrylonitrile	0.1334	0.12173		.01		-8.74813	30		Averaged
2-Chloro-1,3-butadiene	0.4395	0.46631		.01		6.10011	30		Averaged
Ethyl acetate	0.331	0.26844		.01		-18.9003	40		Averaged
Propionitrile	0.0517	0.04699		.01		-9.11025	30		Averaged
Methacrylonitrile	0.2018	0.17239		.01		-14.57384	30		Averaged
Tetrahydrofuran	0.1109	0.09692		.01		-12.60595	30		Averaged
Isobutyl alcohol	0.0125	0.01069		.01		-14.48	40		Averaged
Methyl methacrylate	0.164	0.14664		.01		-10.58537	30		Averaged
1,4-Dioxane	0.0027	0.00237		.01		-12.22222	40		Averaged
2-Nitropropane	0.0797	0.08627		.01		8.24341	30		Averaged
Ethyl methacrylate	0.4399	0.39111		.01		-11.09116	30		Averaged
1-Chlorohexane	0.9861	0.03228		.01		-96.7265	30	*	Averaged
cis-1,4-Dichloro-2-butene	0.3473	0.37413		.01		7.72531	30		Averaged
Cyclohexanone	0.03	0.066		.01		120	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.3289	0.35198		.01		7.01733	30		Averaged
Pentachloroethane	0.1988	0.31447		.01		58.1841	30	*	Averaged
Benzyl chloride	1.0714	1.41286		.01		31.87045	30	*	Averaged
bis(2-Chloroisopropyl)ether	0.6003	0.60597		.01		0.94453	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V9\
Data File : 9B305ICV.D
Acq On : 3 Mar 2010 12:00 pm
Operator : RXY1
InstName : VOA9
Sample : |W9VM100303-05|ICV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[B]UVM100215-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 08 16:35:52 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1429846	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	964157	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	438994	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1429846	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	964157	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	438970	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	451081	46.95	ug/L	0.00
43) Toluene-d8	12.412	12.412	0.890	98	1252434	50.56	ug/L	0.00
61) Bromofluorobenzene	15.127	15.127	0.924	95	508915	47.66	ug/L	0.00
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491		0m	N.D.	d	
4) Vinyl chloride	5.546	5.546	0.515		0m	N.D.	d	
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	7.099	7.099	0.659		0m	N.D.	d	
9) Acetone	7.491	7.490	0.695		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.467	7.502	0.693		0m	N.D.	d	
11) Iodomethane	7.751	7.763	0.719		0m	N.D.	d	
12) Acetonitrile	7.941	7.858	0.737		0m	N.D.	d	
13) Methyl acetate	7.882	7.882	0.731		0m	N.D.	d	
14) Carbon disulfide	7.941	7.906	0.737		0m	N.D.	d	
15) Methylene chloride	8.095	8.083	0.751		0m	N.D.	d	
16) tert-Butyl methyl ether	8.368	8.368	0.777		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.415	8.427	0.781		0m	N.D.	d	
18) Vinyl acetate	8.854	8.854	0.822		0m	N.D.	d	
19) 1,1-Dichloroethane	8.914	8.913	0.827		0m	N.D.	d	
20) 2-Butanone	9.483	9.483	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.483	9.554	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	9.578	9.578	0.889		0m	N.D.	d	
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	9.850	9.850	0.914		0m	N.D.	d	
25) 1,1,1-Trichloroethane	10.123	10.135	0.939		0m	N.D.	d	
26) Cyclohexane	10.171	10.230	0.944		0m	N.D.	d	
27) 1,1-Dichloropropene	10.289	10.289	0.955		0m	N.D.	d	
28) Carbon tetrachloride	10.325	10.325	0.958		0m	N.D.	d	
30) 1,2-Dichloroethane	10.514	10.514	0.976		0m	N.D.	d	
31) Benzene	10.538	10.538	0.978		0m	N.D.	d	
32) Cyclohexene	10.633	10.645	0.987		0m	N.D.	d	
33) n-Butyl alcohol	10.858	10.846	1.008		0m	N.D.	d	
34) Trichloroethylene	11.167	11.167	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	11.416	11.416	1.059		0m	N.D.	d	
36) Methylcyclohexane	11.368	11.416	1.055		0m	N.D.	d	
37) Dibromomethane	11.558	11.558	1.073		0m	N.D.	d	
38) Bromodichloromethane	11.653	11.665	1.081		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V9\
Data File : 9B305ICV.D
Acq On : 3 Mar 2010 12:00 pm
Operator : RXY1
InstName : VOA9
Sample : |W9VM100303-05|ICV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[B]UVM100215-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 08 16:35:52 2010

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Wed Mar 03 09:48:05 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	12.186	12.186	0.874		0m	N.D.	d
44) Toluene	12.495	12.483	0.896		0m	N.D.	d
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906		0m	N.D.	d
46) 1,1,2-Trichloroethane	12.874	12.862	0.923		0m	N.D.	d
47) 2-Hexanone	13.028	13.028	0.935		0m	N.D.	d
48) 1,3-Dichloropropane	13.088	13.052	0.939		0m	N.D.	d
49) Tetrachloroethylene	13.076	13.088	0.938		0m	N.D.	d
50) Dibromochloromethane	13.325	13.325	0.956		0m	N.D.	d
51) 1,2-Dibromoethane	13.503	13.503	0.969		0m	N.D.	d
52) Chlorobenzene	13.977	13.977	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006		0m	N.D.	d
54) Ethylbenzene	14.025	14.024	1.006		0m	N.D.	d
55) m,p-Xylenes	14.131	14.131	1.014		0m	N.D.	d
56) o-Xylene	14.570	14.570	1.045		0m	N.D.	d
57) Styrene	14.570	14.570	1.045		0m	N.D.	d
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	14.926	14.926	0.912		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	15.246	15.198	0.931		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	15.341	15.353	0.937		0m	N.D.	d
65) n-Propylbenzene	15.353	15.353	0.938		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946		0m	N.D.	d
67) 2-Chlorotoluene	15.507	15.507	0.947		0m	N.D.	d
68) 4-Chlorotoluene	15.602	15.614	0.953		0m	N.D.	d
69) tert-Butylbenzene	15.874	15.874	0.970		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972		0m	N.D.	d
71) sec-Butylbenzene	16.112	16.112	0.984		0m	N.D.	d
72) 4-Isopropyltoluene	16.230	16.230	0.991		0m	N.D.	d
73) 1,3-Dichlorobenzene	16.313	16.313	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	16.408	16.408	1.002		0m	N.D.	d
75) n-Butylbenzene	16.693	16.693	1.020		0m	N.D.	d
76) 1,2-Dichlorobenzene	16.859	16.859	1.030		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	17.796	17.784	1.087		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	18.910	18.922	1.155		0m	N.D.	d
79) Hexachlorobutadiene	19.100	19.088	1.167		0m	N.D.	d
80) Naphthalene	19.349	19.349	1.182		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	7.313	7.313	0.679	56	346016	238.83 ug/L	100
86) Trichlorotrifluoroethane	7.467	7.467	0.693	85	486554	224.53 ug/L	98
87) Isopropyl Alcohol	7.562	7.550	0.702	45	27742	40.15 ug/L	# 59
88) Allyl chloride	7.941	7.929	0.737	41	3084693	218.93 ug/L	97
89) tert-Butyl Alcohol	8.072	8.060	0.749	59	1571	N.D.	
90) Acrylonitrile	8.344	8.332	0.774	53	870307	228.13 ug/L	98
91) Isopropyl ether	8.866	8.866	0.823	45	685	N.D.	
92) 2-Chloro-1,3-butadiene	9.020	9.008	0.837	53	666748	53.05 ug/L	97
93) Ethyl tert-butyl ether	9.269	9.269	0.860	59	381	N.D.	
94) Ethyl acetate	9.483	9.483	0.880	43	1919144	202.73 ug/L	96
95) Propionitrile	9.578	9.578	0.889	54	335941	227.25 ug/L	100
96) Methacrylonitrile	9.755	9.744	0.905	41	1232459	213.59 ug/L	99
97) Tetrahydrofuran	9.874	9.874	0.916	42	692928	218.41 ug/L	96

Quantitation Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V9\
Data File : 9B305ICV.D
Acq On : 3 Mar 2010 12:00 pm
Operator : RXY1
InstName : VOA9
Sample : |W9VM100303-05|ICV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[B]UVM100215-08A
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 08 16:35:52 2010

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Wed Mar 03 09:48:05 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	10.171	10.159	0.944	41	764512	2139.29	ug/L	96
99) Methyl tert-amyl ether	10.526	10.526	0.977	73	982	N.D.		
100) Methyl methacrylate	11.368	11.368	1.055	69	1048391	223.52	ug/L	91
101) 1,4-Dioxane	11.487	11.487	1.066	88	169565	2215.16	ug/L	100
102) 2-Nitropropane	11.866	11.854	1.101	43	616746	270.77	ug/L	100
104) Ethyl methacrylate	12.613	12.613	0.905	69	1885436	222.27	ug/L	94
106) 1-Chlorohexane	13.942	13.823	0.852	55	14168	1.64	ug/L #	43
107) cis-1,4-Dichloro-2-butene	14.961	14.961	0.914	53	821166	269.30	ug/L	98
108) Cyclohexanone	15.092	15.092	0.922	42	724288	2746.74	ug/L	93 E
109) trans-1,4-Dichloro-2-b...	15.246	15.246	0.931	53	772548	267.52	ug/L	95
110) Pentachloroethane	15.957	15.957	0.975	167	690219	395.45	ug/L	95
111) Benzyl chloride	16.527	16.527	1.009	91	3101024	329.68	ug/L	99
112) bis(2-Chloroisopropyl)...	16.918	16.918	1.033	45	1330023	252.35	ug/L	97

(#)= qualifier out of range (m)= manual integration (+)= signals summed

(E)= Over the calibration range (d)= deleted

Continuing Calibration Summary

Client SDG: 10-2154

Instrument ID: VOA9.I

Injection Date 08-MAR-10 09:55

Data File: 030810V9\9C101.D

Init. Cal. Date(s) 02-MAR-10 12:38 - 02-MAR-10 21:4

Lab Sample ID W9VM100308-01

Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.336	0.33386		.01		-0.6369	30		Averaged	
SToluene-d8	1.2847	1.314		.01		2.28069	30		Averaged	
SBromofluorobenzene	1.2161	1.2333		.01		1.41436	30		Averaged	
Dichlorodifluoromethane	0.1568	0.1628		.01		3.82653	30		Averaged	
Chloromethane	0.3997	0.38019		.1		-4.88116	30		Averaged	spcc
Vinyl chloride	0.2921	0.29988		.01		2.66347	20		Averaged	ccc
Bromomethane	0.1959	0.2025		.01		3.36907	30		Averaged	
Chloroethane	0.2159	0.22687		.01		5.08106	30		Averaged	
Trichlorofluoromethane	0.3232	0.32928		.01		1.88119	30		Averaged	
Ethyl ether	0.2839	0.27994		.01		-1.39486	30		Averaged	
Acetone	0.2237	0.2278		.01		1.83281	40		Averaged	
1,1-Dichloroethylene	0.455	0.44667		.01		-1.83077	20		Averaged	ccc
Iodomethane	0.2987	0.27637		.01		-7.47573	30		Averaged	
Acetonitrile	1000	1291.45	1000			29.145	30		Linear	
Methyl acetate	250	262.99	250			5.196	40		Linear	
Carbon disulfide	0.6493	0.59729		.01		-8.01016	30		Averaged	
Methylene chloride	50	48.46	50			-3.08	30		Linear	
tert-Butyl methyl ether	0.6977	0.67994		.01		-2.54551	30		Averaged	
trans-1,2-Dichloroethylene	0.4499	0.43349		.01		-3.64748	30		Averaged	
Vinyl acetate	0.6424	0.60946		.01		-5.12765	40		Averaged	
1,1-Dichloroethane	0.5533	0.52727		.1		-4.7045	30		Averaged	spcc
2-Butanone	0.2738	0.2788		.01		1.82615	40		Averaged	
cis-1,2-Dichloroethylene	0.5144	0.49471		.01		-3.82776	30		Averaged	
2,2-Dichloropropane	0.3212	0.34101		.01		6.1675	30		Averaged	
Bromochloromethane	0.1135	0.10948		.01		-3.54185	30		Averaged	
Chloroform	0.4525	0.41783		.01		-7.66188	20		Averaged	ccc
1,1,1-Trichloroethane	0.3385	0.34213		.01		1.07238	30		Averaged	
Cyclohexane	0.5769	0.58477		.01		1.36419	30		Averaged	
1,1-Dichloropropene	0.3241	0.31203		.01		-3.72416	30		Averaged	
Carbon tetrachloride	0.2821	0.28304		.01		0.33322	30		Averaged	
1,2-Dichloroethane	0.4276	0.39605		.01		-7.37839	30		Averaged	
Benzene	0.9611	0.89053		.01		-7.34263	30		Averaged	
Cyclohexene	0.5103	0.49992		.01		-2.0341	30		Averaged	
n-Butyl alcohol	5000	5403.41	5000			8.0682	40		Linear	
Trichloroethylene	0.25	0.23789		.01		-4.844	30		Averaged	
1,2-Dichloropropane	0.3239	0.30372		.01		-6.23032	20		Averaged	ccc
Methylcyclohexane	0.4105	0.40067		.01		-2.39464	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA9.1

Injection Date 08-MAR-10 09:55

Data File: 030810V9\9C101.D

Init. Cal. Date(s) 02-MAR-10 12:38 02-MAR-10 21:4

Lab Sample ID W9VM100308-01

Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Dibromomethane	0.157	0.14679		.01		-6.50318	30		Averaged
Bromodichloromethane	0.3422	0.33041		.01		-3.44535	30		Averaged
2-Chloroethylvinyl ether	0.1737	0.15561		.01		-10.41451	30		Averaged
cis-1,3-Dichloropropylene	0.4073	0.40317		.01		-1.01399	30		Averaged
4-Methyl-2-pentanone	0.2051	0.21987		.01		7.20137	40		Averaged
Toluene	1.4527	1.32715		.01		-8.64253	20		Averaged ccc
trans-1,3-Dichloropropylene	0.5352	0.54766		.01		2.3281	30		Averaged
1,1,2-Trichloroethane	0.2859	0.26236		.01		-8.23365	30		Averaged
2-Hexanone	0.5616	0.56442		.01		0.50214	40		Averaged
1,3-Dichloropropane	0.5721	0.50755		.01		-11.28299	30		Averaged
Tetrachloroethylene	0.2085	0.19595		.01		-6.01918	30		Averaged
Dibromochloromethane	50	50.48	50			0.96	30		Linear
1,2-Dibromoethane	0.3189	0.29916		.01		-6.19003	30		Averaged
Chlorobenzene	0.9048	0.83764		.3		-7.42263	30		Averaged spcc
1,1,1,2-Tetrachloroethane	0.3037	0.30015		.01		-1.16892	30		Averaged
Ethylbenzene	1.7902	1.51227		.01		-15.52508	20		Averaged ccc
m,p-Xylenes	0.6049	0.5703		.01		-5.71995	30		Averaged
o-Xylene	0.6251	0.58339		.01		-6.67253	30		Averaged
Styrene	1.0071	0.95319		.01		-5.35299	30		Averaged
Bromoform	50	51.6	50			3.2	30		Linear spcc
Isopropylbenzene	3.508	3.28773		.01		-6.27908	30		Averaged
1,1,2,2-Tetrachloroethane	1.0029	0.98191		.3		-2.09293	30		Averaged spcc
1,2,3-Trichloropropane	0.2419	0.23213		.01		-4.03886	30		Averaged
Bromobenzene	0.756	0.68022		.01		-10.02381	30		Averaged
n-Propylbenzene	4.614	4.08492		.01		-11.46684	30		Averaged
1,3,5-Trimethylbenzene	3.0102	2.75839		.01		-8.36522	30		Averaged
2-Chlorotoluene	0.8531	0.79455		.01		-6.8632	30		Averaged
4-Chlorotoluene	2.893	2.69967		.01		-6.68268	30		Averaged
tert-Butylbenzene	0.5662	0.55764		.01		-1.51183	30		Averaged
1,2,4-Trimethylbenzene	3.0389	2.87942		.01		-5.24795	30		Averaged
sec-Butylbenzene	3.9966	3.79584		.01		-5.02327	30		Averaged
4-Isopropyltoluene	3.107	3.00408		.01		-3.31252	30		Averaged
1,3-Dichlorobenzene	1.5544	1.42912		.01		-8.0597	30		Averaged
1,4-Dichlorobenzene	1.4977	1.39813		.01		-6.64819	30		Averaged
n-Butylbenzene	3.394	3.29457		.01		-2.92958	30		Averaged
1,2-Dichlorobenzene	1.4859	1.39033		.01		-6.43179	30		Averaged
1,2-Dibromo-3-chloropropane	50	49.83	50			-0.34	30		Linear

Continuing Calibration Summary

Instrument ID: VOA9.I

Injection Date 08-MAR-10 09:55

Data File: 030810V9\9C101.D

Init. Cal. Date(s) 02-MAR-10 12:38 02-MAR-10 21:4

Lab Sample ID W9VM100308-01 Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.9431	0.91887		.01		-2.56919	30		Averaged
Hexachlorobutadiene	0.4453	0.44396		.01		-0.30092	30		Averaged
Naphthalene	2.5583	2.46861		.01		-3.50584	30		Averaged
1,2,3-Trichlorobenzene	0.827	0.7898		.01		-4.49819	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C101.D
Acq On : 8 Mar 2010 9:55 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100308-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0106-07D/0222-07B
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 10:16:30 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1162475	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	807552	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	365194	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1162475	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	807552	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	365175	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	388108	49.68	ug/L	0.00
43) Toluene-d8	12.412	12.412	0.890	98	1061121	51.14	ug/L	0.00
61) Bromofluorobenzene	15.127	15.127	0.924	95	450395	50.71	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.944	4.944	0.459	85	189252	51.90	ug/L	99
3) Chloromethane	5.294	5.308	0.491	50	441962	47.56	ug/L	98
4) Vinyl chloride	5.546	5.546	0.515	62	348604	51.33	ug/L	99
5) Bromomethane	6.186	6.186	0.574	94	235396	51.69	ug/L	99
6) Chloroethane	6.340	6.340	0.588	64	263728	52.55	ug/L	97
7) Trichlorofluoromethane	6.767	6.767	0.628	101	382781	50.94	ug/L	99
8) Ethyl ether	7.087	7.099	0.658	59	325427	49.31	ug/L	96
9) Acetone	7.479	7.490	0.694	43	1324078	254.62	ug/L	100
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	519246	49.09	ug/L	97
11) Iodomethane	7.763	7.763	0.720	142	1606392	231.34	ug/L	97
12) Acetonitrile	7.858	7.858	0.729	41	1210032	1291.45	ug/L	100
13) Methyl acetate	7.870	7.882	0.730	43	1386676	262.99	ug/L	97
14) Carbon disulfide	7.894	7.906	0.733	76	3471686	229.96	ug/L	99
15) Methylene chloride	8.083	8.083	0.750	84	292222	48.46	ug/L	90
16) tert-Butyl methyl ether	8.368	8.368	0.777	73	790415	48.73	ug/L	96
17) trans-1,2-Dichloroethy...	8.415	8.427	0.781	61	503922	48.18	ug/L	96
18) Vinyl acetate	8.842	8.854	0.821	43	3542435	237.20	ug/L	97
19) 1,1-Dichloroethane	8.913	8.913	0.827	63	612941	47.65	ug/L	98
20) 2-Butanone	9.483	9.483	0.880	43	1620465	254.55	ug/L	95
21) cis-1,2-Dichloroethylene	9.542	9.554	0.886	61	575085	48.08	ug/L	95
22) 2,2-Dichloropropane	9.578	9.578	0.889	77	396420	53.08	ug/L	98
23) Bromochloromethane	9.827	9.827	0.912	128	127265	48.24	ug/L	92
24) Chloroform	9.850	9.850	0.914	83	485717	46.17	ug/L	97
25) 1,1,1-Trichloroethane	10.135	10.135	0.941	97	397721	50.53	ug/L	100
26) Cyclohexane	10.230	10.230	0.949	56	679777	50.68	ug/L	94
27) 1,1-Dichloropropene	10.289	10.289	0.955	75	362722	48.14	ug/L	99
28) Carbon tetrachloride	10.325	10.325	0.958	117	329025	50.17	ug/L	99
30) 1,2-Dichloroethane	10.514	10.514	0.976	62	460397	46.31	ug/L	98
31) Benzene	10.538	10.538	0.978	78	1035219	46.33	ug/L	97
32) Cyclohexene	10.645	10.645	0.988	67	581142	48.98	ug/L	91
33) n-Butyl alcohol	10.846	10.846	1.007	56	1324471	5403.41	ug/L	98
34) Trichloroethylene	11.167	11.167	1.036	95	276542	47.58	ug/L	99
35) 1,2-Dichloropropane	11.416	11.416	1.059	63	353071	46.88	ug/L	98
36) Methylcyclohexane	11.416	11.416	1.059	83	465765	48.80	ug/L	93
37) Dibromomethane	11.558	11.558	1.073	93	170644	46.76	ug/L	99
38) Bromodichloromethane	11.653	11.665	1.081	83	384099	48.28	ug/L	99
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101	63	904473	223.95	ug/L	98
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123	75	468677	49.50	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C101.D
Acq On : 8 Mar 2010 9:55 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100308-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0106-07D/0222-07B
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 10:16:30 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	12.186	12.186	0.874	58	887771	267.95	ug/L 94
44) Toluene	12.483	12.483	0.895	91	1071740	45.68	ug/L 97
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906	75	442265	51.17	ug/L 99
46) 1,1,2-Trichloroethane	12.862	12.862	0.923	83	211871	45.89	ug/L 100
47) 2-Hexanone	13.028	13.028	0.935	43	2278997	251.26	ug/L 98
48) 1,3-Dichloropropane	13.052	13.052	0.936	76	409877	44.36	ug/L 90
49) Tetrachloroethylene	13.076	13.088	0.938	164	158239	46.98	ug/L 98
50) Dibromochloromethane	13.325	13.325	0.956	129	260024	50.48	ug/L 100
51) 1,2-Dibromoethane	13.503	13.503	0.969	107	241590	46.90	ug/L 99
52) Chlorobenzene	13.977	13.977	1.003	112	676435	46.29	ug/L 99
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006	131	242384	49.41	ug/L 98
54) Ethylbenzene	14.025	14.024	1.006	91	1221233	42.24	ug/L 98 E
55) m,p-Xylenes	14.131	14.131	1.014	106	921086	94.28	ug/L 95
56) o-Xylene	14.570	14.570	1.045	106	471114	46.66	ug/L 94
57) Styrene	14.570	14.570	1.045	104	769753	47.32	ug/L 98
59) Bromoform	14.855	14.855	0.907	173	145128	51.60	ug/L 100
60) Isopropylbenzene	14.926	14.926	0.912	105	1200658	46.86	ug/L 98
62) 1,1,2,2-Tetrachloroethane	15.198	15.198	0.928	83	358588	48.95	ug/L 99
63) 1,2,3-Trichloropropane	15.293	15.293	0.934	110	84774	47.99	ug/L # 93
64) Bromobenzene	15.353	15.353	0.938	156	248414	44.99	ug/L 99
65) n-Propylbenzene	15.353	15.353	0.938	91	1491788	44.27	ug/L 98
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	1007347	45.82	ug/L 98
67) 2-Chlorotoluene	15.507	15.507	0.947	126	290165	46.57	ug/L 97
68) 4-Chlorotoluene	15.602	15.614	0.953	91	985903	46.66	ug/L 99
69) tert-Butylbenzene	15.874	15.874	0.970	134	203646	49.24	ug/L 93
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	1051546	47.38	ug/L 96
71) sec-Butylbenzene	16.100	16.112	0.983	105	1386219	47.49	ug/L 98
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	1097071	48.34	ug/L 99
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	521907	45.97	ug/L 100
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	510589	46.68	ug/L 100
75) n-Butylbenzene	16.693	16.693	1.020	91	1203159	48.53	ug/L 98
76) 1,2-Dichlorobenzene	16.859	16.859	1.030	146	507739	46.78	ug/L 99
77) 1,2-Dibromo-3-chloropr...	17.784	17.784	1.086	157	55327	49.83	ug/L 99
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156	180	335564	48.72	ug/L 99
79) Hexachlorobutadiene	19.088	19.088	1.166	225	162130	49.85	ug/L 99
80) Naphthalene	19.349	19.349	1.182	128	901520	48.25	ug/L 100
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204	180	288431	47.75	ug/L 100
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	7.241	7.313	0.672		0m	N.D.	d
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.490	7.550	0.695		0m	N.D.	d
88) Allyl chloride	7.858	7.929	0.729		0m	N.D.	d
89) tert-Butyl Alcohol	8.060	8.060	0.748		0m	N.D.	d
90) Acrylonitrile	8.368	8.332	0.777		0m	N.D.	d
91) Isopropyl ether	8.842	8.866	0.821		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836		0m	N.D.	d
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.483	9.483	0.880		0m	N.D.	d
95) Propionitrile	9.495	9.578	0.881		0m	N.D.	d
96) Methacrylonitrile	9.827	9.744	0.912		0m	N.D.	d
97) Tetrahydrofuran	9.862	9.874	0.915		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C101.D
Acq On : 8 Mar 2010 9:55 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100308-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0106-07D/0222-07B
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 10:16:30 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QI on	Response	Conc	Units
98) Isobutyl alcohol	10.123	10.159	0.939		0m	N.D.	d
99) Methyl tert-amyl ether	10.538	10.526	0.978		0m	N.D.	d
100) Methyl methacrylate	11.404	11.368	1.058		0m	N.D.	d
101) 1,4-Dioxane	11.487	11.487	1.066		0m	N.D.	d
102) 2-Nitropropane	11.866	11.854	1.101		0m	N.D.	d
104) Ethyl methacrylate	12.613	12.613	0.905		0m	N.D.	d
106) 1-Chlorohexane	13.942	13.823	0.852		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.926	14.961	0.912		0m	N.D.	d
108) Cyclohexanone	15.104	15.092	0.923		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.341	15.246	0.937		0m	N.D.	d
110) Pentachloroethane	15.957	15.957	0.975		0m	N.D.	d
111) Benzyl chloride	16.515	16.527	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034		0m	N.D.	d

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

```

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C101.D
Acq On    : 8 Mar 2010 9:55 am
Operator  : RXY1
InstName  : VOA9
Sample    : |W9VM100308-01|CCV|1|VOA|1|VOA8260BL|
Misc      : GEL 5ml n/a MIX[A]0106-07D/0222-07B
ALS Vial  : 1 Sample Multiplier: 1

```

[illegible]

Continuing Calibration Summary

Client SDG: 10-2154

Instrument ID: VOA9.1

Injection Date: 08-MAR-10 11:23

Data File: 030810V9\9C104.D

Init. Cal. Date(s): 02-MAR-10 12:38 - 02-MAR-10 21:4

Lab Sample ID: W9VM100308-04

Quant Type: ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.336	0.33373		.01		-0.6756	30		Averaged
S Toluene-d8	1.2847	1.27862		.01		-0.47326	30		Averaged
S Bromofluorobenzene	1.2161	1.18523		.01		-2.53844	30		Averaged
Acrolein	250	286.26	250			14.504	30		Linear
Trichlorotrifluoroethane	0.0758	0.08902		.01		17.44063	30		Averaged
Allyl chloride	0.4927	0.52966		.01		7.50152	30		Averaged
Acrylonitrile	0.1334	0.14285		.01		7.08396	30		Averaged
2-Chloro-1,3-butadiene	0.4395	0.57844		.01		31.6132	30	*	Averaged
Ethyl acetate	0.331	0.30925		.01		-6.571	40		Averaged
Propionitrile	0.0517	0.05438		.01		5.18375	30		Averaged
Methacrylonitrile	0.2018	0.19988		.01		-0.95144	30		Averaged
Tetrahydrofuran	0.1109	0.11282		.01		1.73129	30		Averaged
Isobutyl alcohol	0.0125	0.01239		.01		-0.88	40		Averaged
Methyl methacrylate	0.164	0.16467		.01		0.40854	30		Averaged
1,4-Dioxane	0.0027	0.00255		.01		-5.55556	40		Averaged
2-Nitropropane	0.0797	0.10063		.01		26.26098	30		Averaged
Ethyl methacrylate	0.4399	0.43214		.01		-1.76404	30		Averaged
cis-1,4-Dichloro-2-butene	0.3473	0.43219		.01		24.44284	30		Averaged
Cyclohexanone	0.03	0.10364		.01		245.46667	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.3289	0.40344		.01		22.66342	30		Averaged
Pentachloroethane	0.1988	0.33587		.01		68.94869	30	*	Averaged
Benzyl chloride	1.0714	1.62425		.01		51.60071	30	*	Averaged
bis(2-Chloroisopropyl)ether	0.6003	0.66243		.01		10.34983	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C104.D
Acq On : 8 Mar 2010 11:23 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100308-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 08 11:50:06 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1155144	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	808706	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	368433	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1155144	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	808706	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	368409	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	385507	49.66	ug/L	0.00
43) Toluene-d8	12.412	12.412	0.890	98	1034028	49.76	ug/L	0.00
61) Bromofluorobenzene	15.127	15.127	0.924	95	436679	48.73	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491		0m	N.D.	d	
4) Vinyl chloride	5.532	5.546	0.513		0m	N.D.	d	
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.479	7.490	0.694		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.467	7.502	0.693		0m	N.D.	d	
11) Iodomethane	7.751	7.763	0.719		0m	N.D.	d	
12) Acetonitrile	7.929	7.858	0.736		0m	N.D.	d	
13) Methyl acetate	7.882	7.882	0.731		0m	N.D.	d	
14) Carbon disulfide	7.929	7.906	0.736		0m	N.D.	d	
15) Methylene chloride	8.083	8.083	0.750		0m	N.D.	d	
16) tert-Butyl methyl ether	8.368	8.368	0.777		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.404	8.427	0.780		0m	N.D.	d	
18) Vinyl acetate	8.854	8.854	0.822		0m	N.D.	d	
19) 1,1-Dichloroethane	8.913	8.913	0.827		0m	N.D.	d	
20) 2-Butanone	9.483	9.483	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.483	9.554	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	9.862	9.850	0.915		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.170	10.230	0.944		0m	N.D.	d	
27) 1,1-Dichloropropene	10.289	10.289	0.955		0m	N.D.	d	
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.514	10.514	0.976		0m	N.D.	d	
31) Benzene	10.538	10.538	0.978		0m	N.D.	d	
32) Cyclohexene	10.657	10.645	0.989		0m	N.D.	d	
33) n-Butyl alcohol	10.846	10.846	1.007		0m	N.D.	d	
34) Trichloroethylene	11.167	11.167	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	11.368	11.416	1.055		0m	N.D.	d	
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		
38) Bromodichloromethane	11.653	11.665	1.081		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C104.D
Acq On : 8 Mar 2010 11:23 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100308-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 08 11:50:06 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	12.186	12.186	0.874		0m	N.D.	d
44) Toluene	12.483	12.483	0.895		0m	N.D.	d
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906		0m	N.D.	d
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935		0m	N.D.	d
48) 1,3-Dichloropropane	13.088	13.052	0.939		0m	N.D.	d
49) Tetrachloroethylene	13.076	13.088	0.938		0m	N.D.	d
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	13.503	13.503	0.969		0m	N.D.	d
52) Chlorobenzene	13.977	13.977	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006		0m	N.D.	d
54) Ethylbenzene	14.025	14.024	1.006		0m	N.D.	d
55) m,p-Xylenes	14.131	14.131	1.014		0m	N.D.	d
56) o-Xylene	14.582	14.570	1.046		0m	N.D.	d
57) Styrene	14.570	14.570	1.045		0m	N.D.	d
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	14.926	14.926	0.912		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	15.246	15.198	0.931		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	15.353	15.353	0.938		0m	N.D.	d
65) n-Propylbenzene	15.353	15.353	0.938		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946		0m	N.D.	d
67) 2-Chlorotoluene	15.602	15.507	0.953		0m	N.D.	d
68) 4-Chlorotoluene	15.614	15.614	0.954		0m	N.D.	d
69) tert-Butylbenzene	15.874	15.874	0.970		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972		0m	N.D.	d
71) sec-Butylbenzene	16.100	16.112	0.983		0m	N.D.	d
72) 4-Isopropyltoluene	16.230	16.230	0.991		0m	N.D.	d
73) 1,3-Dichlorobenzene	16.313	16.313	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	16.408	16.408	1.002		0m	N.D.	d
75) n-Butylbenzene	16.693	16.693	1.020		0m	N.D.	d
76) 1,2-Dichlorobenzene	16.847	16.859	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156		0m	N.D.	d
79) Hexachlorobutadiene	19.088	19.088	1.166		0m	N.D.	d
80) Naphthalene	19.349	19.349	1.182		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	7.313	7.313	0.679	56	337931	286.26 ug/L	98
86) Trichlorotrifluoroethane	7.467	7.467	0.693	85	514165	293.70 ug/L	97
87) Isopropyl Alcohol	0.000	7.550	0.000		0m	N.D.	d
88) Allyl chloride	7.929	7.929	0.736	41	3059158	268.75 ug/L	97
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	8.332	8.332	0.773	53	825060	267.70 ug/L	98
91) Isopropyl ether	9.008	8.866	0.836	45	366	N.D.	
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836	53	668180	65.81 ug/L	94
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.483	9.483	0.880	43	1786124	233.55 ug/L	95
95) Propionitrile	9.578	9.578	0.889	54	314088	263.00 ug/L	99
96) Methacrylonitrile	9.744	9.744	0.904	41	1154448	247.65 ug/L	98
97) Tetrahydrofuran	9.874	9.874	0.916	42	651614	254.23 ug/L	94

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C104.D
Acq On : 8 Mar 2010 11:23 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100308-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 08 11:50:06 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

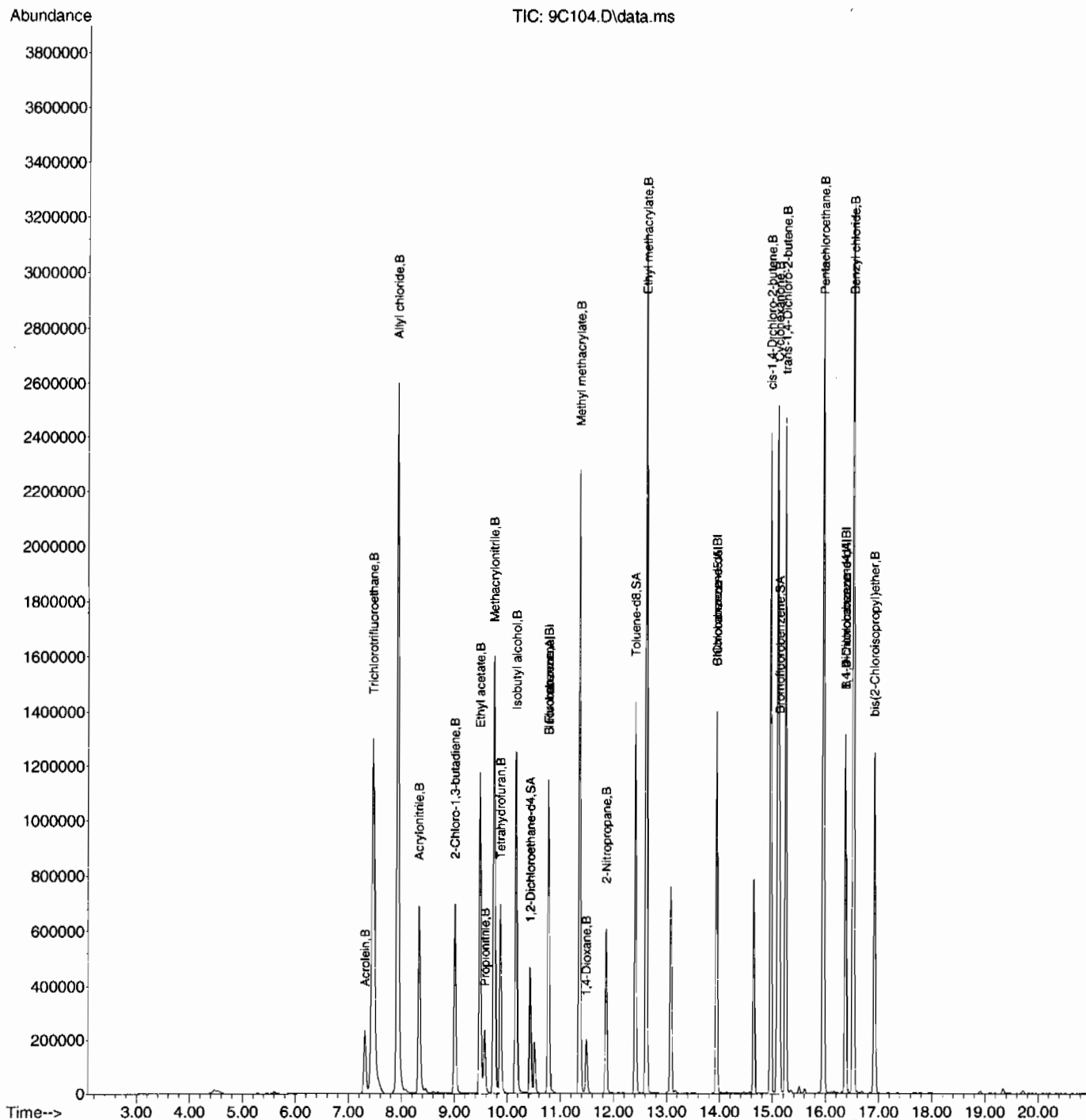
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	10.170	10.159	0.944	41	715406	2477.94	ug/L	94
99) Methyl tert-amyl ether	10.526	10.526	0.977	73	453	N.D.		
100) Methyl methacrylate	11.368	11.368	1.055	69	951075	250.99	ug/L	87
101) 1,4-Dioxane	11.487	11.487	1.066	88	147353	2382.76	ug/L	96
102) 2-Nitropropane	11.866	11.854	1.101	43	581192	315.84	ug/L	99
104) Ethyl methacrylate	12.613	12.613	0.905	69	1747371	245.59	ug/L	91
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d	
107) cis-1,4-Dichloro-2-butene	14.961	14.961	0.914	53	796111	311.09	ug/L	98
108) Cyclohexanone	15.104	15.092	0.923	42	954514	4313.14	ug/L	94 E
109) trans-1,4-Dichloro-2-b...	15.246	15.246	0.931	53	743153	306.63	ug/L	93
110) Pentachloroethane	15.957	15.957	0.975	167	618695	422.36	ug/L	95
111) Benzyl chloride	16.527	16.527	1.009	91	2991949	379.00	ug/L	98
112) bis(2-Chloroisopropyl)...	16.918	16.918	1.033	45	1220230	275.87	ug/L	96

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C104.D
Acq On : 8 Mar 2010 11:23 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100308-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 08 11:50:06 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2154

Instrument ID: VOA9.I

Injection Date 09-MAR-10 10:24

Data File: 030910V9\9C202.D

Init. Cal. Date(s) 02-MAR-10 12:38 - 02-MAR-10 21:4

Lab Sample ID W9VM100309-02

Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.336	0.31653		.01		-5.79464	30		Averaged	
S Toluene-d8	1.2847	1.29228		.01		0.59002	30		Averaged	
S Bromofluorobenzene	1.2161	1.1597		.01		-4.63778	30		Averaged	
Dichlorodifluoromethane	0.1568	0.15601		.01		-0.50383	30		Averaged	
Chloromethane	0.3997	0.33485		.1		-16.22467	30		Averaged	spcc
Vinyl chloride	0.2921	0.27647		.01		-5.35091	20		Averaged	ccc
Bromomethane	0.1959	0.18604		.01		-5.03318	30		Averaged	
Chloroethane	0.2159	0.20568		.01		-4.73367	30		Averaged	
Trichlorofluoromethane	0.3232	0.33485		.01		3.60458	30		Averaged	
Ethyl ether	0.2839	0.24723		.01		-12.91652	30		Averaged	
Acetone	0.2237	0.17974		.01		-19.65132	40		Averaged	
1,1-Dichloroethylene	0.455	0.44578		.01		-2.02637	20		Averaged	ccc
Iodomethane	0.2987	0.2748		.01		-8.00134	30		Averaged	
Acetonitrile	1000	1231.28	1000			23.128	30		Linear	
Methyl acetate	250	236.48	250			-5.408	40		Linear	
Carbon disulfide	0.6493	0.65405		.01		0.73156	30		Averaged	
Methylene chloride	50	47.14	50			-5.72	30		Linear	
tert-Butyl methyl ether	0.6977	0.63915		.01		-8.39186	30		Averaged	
trans-1,2-Dichloroethylene	0.4499	0.44664		.01		-0.72461	30		Averaged	
Vinyl acetate	0.6424	0.63588		.01		-1.01494	40		Averaged	
1,1-Dichloroethane	0.5533	0.51293		.1		-7.29622	30		Averaged	spcc
2-Butanone	0.2738	0.21166		.01		-22.6954	40		Averaged	
cis-1,2-Dichloroethylene	0.5144	0.46889		.01		-8.8472	30		Averaged	
2,2-Dichloropropane	0.3212	0.33844		.01		5.36737	30		Averaged	
Bromochloromethane	0.1135	0.10193		.01		-10.19383	30		Averaged	
Chloroform	0.4525	0.40952		.01		-9.49834	20		Averaged	ccc
1,1,1-Trichloroethane	0.3385	0.34804		.01		2.81832	30		Averaged	
Cyclohexane	0.5769	0.59781		.01		3.62454	30		Averaged	
1,1-Dichloropropene	0.3241	0.37395		.01		15.38106	30		Averaged	
Carbon tetrachloride	0.2821	0.29431		.01		4.32825	30		Averaged	
1,2-Dichloroethane	0.4276	0.3932		.01		-8.0449	30		Averaged	
Benzene	0.9611	0.87174		.01		-9.29768	30		Averaged	
Cyclohexene	0.5103	0.48797		.01		-4.37586	30		Averaged	
n-Butyl alcohol	5000	4576.68	5000			-8.4664	40		Linear	
Trichloroethylene	0.25	0.22813		.01		-8.748	30		Averaged	
1,2-Dichloropropane	0.3239	0.28554		.01		-11.84316	20		Averaged	ccc
Methylcyclohexane	0.4105	0.39639		.01		-3.43727	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA9.1

Injection Date 09-MAR-10 10:24

Data File: 030910V9\9C202.D

Init. Cal. Date(s) 02-MAR-10 12:38 02-MAR-10 21:4

Lab Sample ID W9VM100309-02

Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.157	0.16092		.01		2.49682	30		Averaged	
Bromodichloromethane	0.3422	0.32637		.01		-4.62595	30		Averaged	
2-Chloroethylvinyl ether	0.1737	0.12462		.01		-28.25561	30		Averaged	
cis-1,3-Dichloropropylene	0.4073	0.38545		.01		-5.3646	30		Averaged	
4-Methyl-2-pentanone	0.2051	0.18293		.01		-10.80936	40		Averaged	
Toluene	1.4527	1.36857		.01		-5.79129	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.5352	0.62258		.01		16.32661	30		Averaged	
1,1,2-Trichloroethane	0.2859	0.23436		.01		-18.02728	30		Averaged	
2-Hexanone	0.5616	0.44768		.01		-20.2849	40		Averaged	
1,3-Dichloropropane	0.5721	0.49207		.01		-13.98881	30		Averaged	
Tetrachloroethylene	0.2085	0.18692		.01		-10.35012	30		Averaged	
Dibromochloromethane	50	49.69	50			-0.62	30		Linear	
1,2-Dibromoethane	0.3189	0.29477		.01		-7.56664	30		Averaged	
Chlorobenzene	0.9048	0.8499		.3		-6.06764	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3037	0.29279		.01		-3.59236	30		Averaged	
Ethylbenzene	1.7902	1.57225		.01		-12.17462	20		Averaged	ccc
m,p-Xylenes	0.6049	0.56005		.01		-7.41445	30		Averaged	
o-Xylene	0.6251	0.56778		.01		-9.16973	30		Averaged	
Styrene	1.0071	0.93732		.01		-6.92881	30		Averaged	
Bromoform	50	45.61	50			-8.78	30		Linear	spcc
Isopropylbenzene	3.508	3.295		.01		-6.07184	30		Averaged	
1,1,2,2-Tetrachloroethane	1.0029	0.87784		.3		-12.46984	30		Averaged	spcc
1,2,3-Trichloropropane	0.2419	0.21238		.01		-12.20339	30		Averaged	
Bromobenzene	0.756	0.67186		.01		-11.12963	30		Averaged	
n-Propylbenzene	4.614	4.08492		.01		-11.46684	30		Averaged	
1,3,5-Trimethylbenzene	3.0102	2.73607		.01		-9.1067	30		Averaged	
4-Chlorotoluene	2.893	2.61004		.01		-9.78085	30		Averaged	
2-Chlorotoluene	0.8531	0.80402		.01		-5.75314	30		Averaged	
tert-Butylbenzene	0.5662	0.54592		.01		-3.58177	30		Averaged	
1,2,4-Trimethylbenzene	3.0389	2.92774		.01		-3.6579	30		Averaged	
sec-Butylbenzene	3.9966	3.63425		.01		-9.06646	30		Averaged	
4-Isopropyltoluene	3.107	3.02106		.01		-2.76601	30		Averaged	
1,3-Dichlorobenzene	1.5544	1.41178		.01		-9.17524	30		Averaged	
1,4-Dichlorobenzene	1.4977	1.37837		.01		-7.96755	30		Averaged	
n-Butylbenzene	3.394	3.3115		.01		-2.43076	30		Averaged	
1,2-Dichlorobenzene	1.4859	1.34392		.01		-9.55515	30		Averaged	
1,2-Dibromo-3-chloropropane	50	47.41	50			-5.18	30		Linear	

Continuing Calibration Summary

Instrument ID: VOA9.1

Injection Date 09-MAR-10 10:24

Data File: 030910V9\9C202.D

Init. Cal. Date(s) 02-MAR-10 12:38 02-MAR-10 21:4

Lab Sample ID W9VM100309-02

Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.9431	0.90374		.01		-4.17347	30		Averaged
Hexachlorobutadiene	0.4453	0.43607		.01		-2.07276	30		Averaged
Naphthalene	2.5583	2.38216		.01		-6.88504	30		Averaged
1,2,3-Trichlorobenzene	0.827	0.78161		.01		-5.48851	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C202.D
Acq On : 9 Mar 2010 10:24 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100309-02|CCV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0220-01E/0308-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 10:44:18 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1012854	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	669627	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	308920	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1012592	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	669627	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	308900	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	320595	47.10	ug/L	0.00
43) Toluene-d8	12.412	12.412	0.890	98	865346	50.30	ug/L	0.00
61) Bromofluorobenzene	15.127	15.127	0.924	95	358254	47.68	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.944	4.944	0.459	85	158012	49.74	ug/L	100
3) Chloromethane	5.308	5.308	0.493	50	339159	41.89	ug/L	98
4) Vinyl chloride	5.546	5.546	0.515	62	280027	47.32	ug/L	99
5) Bromomethane	6.186	6.186	0.574	94	188435	47.49	ug/L	98
6) Chloroethane	6.340	6.340	0.588	64	208324	47.64	ug/L	97
7) Trichlorofluoromethane	6.767	6.767	0.628	101	339154	51.81	ug/L	100
8) Ethyl ether	7.087	7.099	0.658	59	250404	43.54	ug/L	92
9) Acetone	7.490	7.490	0.695	43	910247	200.90	ug/L	94
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	451515	48.99	ug/L	97
11) Iodomethane	7.763	7.763	0.720	142	1391677	230.02	ug/L	95
12) Acetonitrile	7.858	7.858	0.729	41	1006458	1231.28	ug/L	99
13) Methyl acetate	7.870	7.882	0.730	43	1088663	236.48	ug/L	96
14) Carbon disulfide	7.906	7.906	0.734	76	3312289	251.81	ug/L	99
15) Methylene chloride	8.083	8.083	0.750	84	247959	47.14	ug/L	88
16) tert-Butyl methyl ether	8.368	8.368	0.777	73	647363	45.81	ug/L	97
17) trans-1,2-Dichloroethy...	8.415	8.427	0.781	61	452381	49.64	ug/L	93
18) Vinyl acetate	8.842	8.854	0.821	43	3220283	247.48	ug/L	96
19) 1,1-Dichloroethane	8.913	8.913	0.827	63	519520	46.35	ug/L	98
20) 2-Butanone	9.483	9.483	0.880	43	1071928	193.26	ug/L	95
21) cis-1,2-Dichloroethylene	9.542	9.554	0.886	61	474922	45.57	ug/L #	1
22) 2,2-Dichloropropane	9.578	9.578	0.889	77	342792	52.68	ug/L	94
23) Bromochloromethane	9.827	9.827	0.912	128	103236	44.91	ug/L #	88
24) Chloroform	9.850	9.850	0.914	83	414780	45.25	ug/L	97
25) 1,1,1-Trichloroethane	10.135	10.135	0.941	97	352511	51.41	ug/L	99
26) Cyclohexane	10.230	10.230	0.949	56	605496	51.81	ug/L	95
27) 1,1-Dichloropropene	10.289	10.289	0.955	75	378755	57.70	ug/L #	44
28) Carbon tetrachloride	10.325	10.325	0.958	117	298094	52.16	ug/L	99
30) 1,2-Dichloroethane	10.514	10.514	0.976	62	398253	45.97	ug/L	99
31) Benzene	10.538	10.538	0.978	78	882946	45.35	ug/L	97
32) Cyclohexene	10.645	10.645	0.988	67	494244	47.81	ug/L	91
33) n-Butyl alcohol	10.846	10.846	1.007	56	982367	4576.68	ug/L	92
34) Trichloroethylene	11.167	11.167	1.036	95	231067	45.63	ug/L	100
35) 1,2-Dichloropropane	11.416	11.416	1.059	63	289209	44.08	ug/L	99
36) Methylcyclohexane	11.416	11.416	1.059	83	401483	48.28	ug/L	87
37) Dibromomethane	11.558	11.558	1.073	93	162987	51.26	ug/L	86
38) Bromodichloromethane	11.653	11.665	1.081	83	330561	47.69	ug/L	100
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101	63	631122	179.35	ug/L	97
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123	75	390403	47.32	ug/L	95

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C202.D
Acq On : 9 Mar 2010 10:24 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100309-02|CCV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0220-01E/0308-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 10:44:18 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	12.186	12.186	0.874	58	612482	222.94	ug/L	84
44) Toluene	12.483	12.483	0.895	91	916429	47.11	ug/L	96
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906	75	416899	58.17	ug/L	98
46) 1,1,2-Trichloroethane	12.862	12.862	0.923	83	156935	40.99	ug/L #	75
47) 2-Hexanone	13.028	13.028	0.935	43	1498904	199.29	ug/L	93
48) 1,3-Dichloropropane	13.052	13.052	0.936	76	329503	43.01	ug/L #	83
49) Tetrachloroethylene	13.076	13.088	0.938	164	125164	44.82	ug/L	97
50) Dibromochloromethane	13.325	13.325	0.956	129	212317	49.69	ug/L	100
51) 1,2-Dibromoethane	13.503	13.503	0.969	107	197386	46.21	ug/L	98
52) Chlorobenzene	13.977	13.977	1.003	112	569118	46.97	ug/L	100
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006	131	196060	48.20	ug/L	98
54) Ethylbenzene	14.025	14.024	1.006	91	1052818	43.91	ug/L	95 E
55) m,p-Xylenes	14.131	14.131	1.014	106	750044	92.58	ug/L	90
56) o-Xylene	14.570	14.570	1.045	106	380203	45.41	ug/L	90
57) Styrene	14.570	14.570	1.045	104	627653	46.54	ug/L	96
59) Bromoform	14.843	14.855	0.907	173	108673	45.61	ug/L	98
60) Isopropylbenzene	14.926	14.926	0.912	105	1017890	46.96	ug/L	97
62) 1,1,2,2-Tetrachloroethane	15.198	15.198	0.928	83	271181	43.77	ug/L	100
63) 1,2,3-Trichloropropane	15.293	15.293	0.934	110	65607	43.90	ug/L #	90
64) Bromobenzene	15.353	15.353	0.938	156	207552	44.43	ug/L	100
65) n-Propylbenzene	15.353	15.353	0.938	91	1261913	44.27	ug/L	98
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	845227	45.45	ug/L	91
67) 2-Chlorotoluene	15.614	15.507	0.954	126	248377	47.12	ug/L	91
68) 4-Chlorotoluene	15.602	15.614	0.953	91	806295	45.11	ug/L	99
69) tert-Butylbenzene	15.874	15.874	0.970	134	168646	48.21	ug/L	99
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	904437	48.17	ug/L	90
71) sec-Butylbenzene	16.112	16.112	0.984	105	1122691	45.47	ug/L	98
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	933267	48.62	ug/L	98
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	436127	45.41	ug/L	99
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	425806	46.02	ug/L	99
75) n-Butylbenzene	16.693	16.693	1.020	91	1022988	48.78	ug/L	96
76) 1,2-Dichlorobenzene	16.859	16.859	1.030	146	415163	45.22	ug/L	99
77) 1,2-Dibromo-3-chloropr...	17.784	17.784	1.086	157	44534	47.41	ug/L	100
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156	180	279182	47.91	ug/L	100
79) Hexachlorobutadiene	19.088	19.088	1.166	225	134712	48.97	ug/L	100
80) Naphthalene	19.349	19.349	1.182	128	735897	46.56	ug/L	99
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204	180	241456	47.26	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.		
85) Acrolein	7.301	7.313	0.678		0m	N.D.	d	
86) Trichlorotrifluoroethane	7.348	7.467	0.682		0m	N.D.	d	
87) Isopropyl Alcohol	7.562	7.550	0.702		0m	N.D.	d	
88) Allyl chloride	7.858	7.929	0.729		0m	N.D.	d	
89) tert-Butyl Alcohol	8.048	8.060	0.747		0m	N.D.	d	
90) Acrylonitrile	8.368	8.332	0.777		0m	N.D.	d	
91) Isopropyl ether	8.854	8.866	0.822		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836		0m	N.D.	d	
93) Ethyl tert-butyl ether	9.340	9.269	0.867		0m	N.D.	d	
94) Ethyl acetate	9.483	9.483	0.880		0m	N.D.	d	
95) Propionitrile	9.566	9.578	0.888		0m	N.D.	d	
96) Methacrylonitrile	9.732	9.744	0.903		0m	N.D.	d	
97) Tetrahydrofuran	9.838	9.874	0.913		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C202.D
Acq On : 9 Mar 2010 10:24 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100309-02|CCV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0220-01E/0308-01
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 10:44:18 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	10.147	10.159	0.942		0m	N.D.	d
99) Methyl tert-amyl ether	10.526	10.526	0.977		0m	N.D.	d
100) Methyl methacrylate	11.404	11.368	1.058		0m	N.D.	d
101) 1,4-Dioxane	11.546	11.487	1.072		0m	N.D.	d
102) 2-Nitropropane	11.866	11.854	1.101		0m	N.D.	d
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	13.728	13.823	0.838		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.926	14.961	0.912		0m	N.D.	d
108) Cyclohexanone	15.127	15.092	0.924		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.281	15.246	0.933		0m	N.D.	d
110) Pentachloroethane	15.969	15.957	0.975		0m	N.D.	d
111) Benzyl chloride	16.467	16.527	1.006		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034		0m	N.D.	d

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

```

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C202.D
Acq On    : 9 Mar 2010 10:24 am
Operator  : RXY1
InstName  : VOA9
Sample    : |W9VM100309-02|CCV|1|VOA|1|VOA8260BL|
Misc      : GEL 5ml n/a MIX[A]0220-01E/0308-01
ALS Vial  : 2 Sample Multiplier: 1

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[illegible]

Continuing Calibration Summary

Client SDG: 10-2154

Instrument ID: VOA9.1

Injection Date 09-MAR-10 11:21

Data File: 030910V9\9C204.D

Init. Cal. Date(s) 02-MAR-10 12:38 - 02-MAR-10 21:4

Lab Sample ID W9VM100309-04 Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.336	0.34125		.01		1.5625	30		Averaged
SToluene-d8	1.2847	1.28311		.01		-0.12376	30		Averaged
SBromofluorobenzene	1.2161	1.16314		.01		-4.35491	30		Averaged
Acrolein	250	296.91	250			18.764	30		Linear
Trichlorotrifluoroethane	0.0758	0.09143		.01		20.62005	30		Averaged
Allyl chloride	0.4927	0.54752		.01		11.12645	30		Averaged
Acrylonitrile	0.1334	0.15044		.01		12.77361	30		Averaged
2-Chloro-1,3-butadiene	0.4395	0.58858		.01		33.92036	30	*	Averaged
Ethyl acetate	0.331	0.33905		.01		2.43202	40		Averaged
Propionitrile	0.0517	0.05747		.01		11.16054	30		Averaged
Methacrylonitrile	0.2018	0.2184		.01		8.22597	30		Averaged
Tetrahydrofuran	0.1109	0.12454		.01		12.29937	30		Averaged
Isobutyl alcohol	0.0125	0.01427		.01		14.16	40		Averaged
Methyl methacrylate	0.164	0.16985		.01		3.56707	30		Averaged
1,4-Dioxane	0.0027	0.00289		.01		7.03704	40		Averaged
2-Nitropropane	0.0797	0.11244		.01		41.07905	30	*	Averaged
Ethyl methacrylate	0.4399	0.44688		.01		1.58672	30		Averaged
cis-1,4-Dichloro-2-butene	0.3473	0.4565		.01		31.44256	30	*	Averaged
Cyclohexanone	0.03	0.11585		.01		286.16667	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.3289	0.43012		.01		30.77531	30	*	Averaged
Pentachloroethane	0.1988	0.31971		.01		60.81992	30	*	Averaged
Benzyl chloride	1.0714	1.66266		.01		55.18574	30	*	Averaged
bis(2-Chloroisopropyl)ether	0.6003	0.73525		.01		22.48043	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C204.D
Acq On : 9 Mar 2010 11:21 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100309-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 11:45:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1016593	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	705662	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	327584	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1016593	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	705662	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	327563	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	346913	50.78	ug/L	0.00
43) Toluene-d8	12.412	12.412	0.890	98	905445	49.94	ug/L	0.00
61) Bromofluorobenzene	15.127	15.127	0.924	95	381027	47.82	ug/L	0.00
Target Compounds								
	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491		0m	N.D.	d	
4) Vinyl chloride	5.546	5.546	0.515		0m	N.D.	d	
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.479	7.490	0.694		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.467	7.502	0.693		0m	N.D.	d	
11) Iodomethane	7.751	7.763	0.719		0m	N.D.	d	
12) Acetonitrile	7.941	7.858	0.737		0m	N.D.	d	
13) Methyl acetate	7.882	7.882	0.731		0m	N.D.	d	
14) Carbon disulfide	7.941	7.906	0.737		0m	N.D.	d	
15) Methylene chloride	8.083	8.083	0.750		0m	N.D.	d	
16) tert-Butyl methyl ether	8.380	8.368	0.778		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.415	8.427	0.781		0m	N.D.	d	
18) Vinyl acetate	8.854	8.854	0.822		0m	N.D.	d	
19) 1,1-Dichloroethane	9.008	8.913	0.836		0m	N.D.	d	
20) 2-Butanone	9.483	9.483	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.483	9.554	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	9.577	9.578	0.889		0m	N.D.	d	
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	9.862	9.850	0.915		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.170	10.230	0.944		0m	N.D.	d	
27) 1,1-Dichloropropene	10.289	10.289	0.955		0m	N.D.	d	
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.514	10.514	0.976		0m	N.D.	d	
31) Benzene	10.538	10.538	0.978		0m	N.D.	d	
32) Cyclohexene	10.645	10.645	0.988		0m	N.D.	d	
33) n-Butyl alcohol	10.858	10.846	1.008		0m	N.D.	d	
34) Trichloroethylene	11.166	11.167	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	11.368	11.416	1.055		0m	N.D.	d	
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	11.854	11.866	1.100		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C204.D
Acq On : 9 Mar 2010 11:21 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100309-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 11:45:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	12.186	12.186	0.874		0m	N.D.	d
44) Toluene	12.483	12.483	0.895		0m	N.D.	d
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906		0m	N.D.	d
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935		0m	N.D.	d
48) 1,3-Dichloropropane	13.099	13.052	0.940		0m	N.D.	d
49) Tetrachloroethylene	13.076	13.088	0.938		0m	N.D.	d
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	13.503	13.503	0.969		0m	N.D.	d
52) Chlorobenzene	13.977	13.977	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	14.024	14.024	1.006		0m	N.D.	d
54) Ethylbenzene	14.024	14.024	1.006		0m	N.D.	d
55) m,p-Xylenes	14.131	14.131	1.014		0m	N.D.	d
56) o-Xylene	14.570	14.570	1.045		0m	N.D.	d
57) Styrene	14.570	14.570	1.045		0m	N.D.	d
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	14.926	14.926	0.912		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	15.246	15.198	0.931		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	15.353	15.353	0.938		0m	N.D.	d
65) n-Propylbenzene	15.353	15.353	0.938		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946		0m	N.D.	d
67) 2-Chlorotoluene	15.507	15.507	0.947		0m	N.D.	d
68) 4-Chlorotoluene	15.602	15.614	0.953		0m	N.D.	d
69) tert-Butylbenzene	15.957	15.874	0.975		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972		0m	N.D.	d
71) sec-Butylbenzene	16.100	16.112	0.983		0m	N.D.	d
72) 4-Isopropyltoluene	16.230	16.230	0.991		0m	N.D.	d
73) 1,3-Dichlorobenzene	16.313	16.313	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	16.408	16.408	1.002		0m	N.D.	d
75) n-Butylbenzene	16.693	16.693	1.020		0m	N.D.	d
76) 1,2-Dichlorobenzene	16.859	16.859	1.030		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.910	18.922	1.155		0m	N.D.	d
79) Hexachlorobutadiene	19.100	19.088	1.167		0m	N.D.	d
80) Naphthalene	19.349	19.349	1.182		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	19.728	19.717	1.205		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	7.312	7.313	0.679	56	308945	296.91 ug/L	98
86) Trichlorotrifluoroethane	7.467	7.467	0.693	85	464732	301.64 ug/L	96
87) Isopropyl Alcohol	0.000	7.550	0.000		0m	N.D.	d
88) Allyl chloride	7.941	7.929	0.737	41	2783043	277.82 ug/L	95
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	8.344	8.332	0.774	53	764681	281.92 ug/L	97
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	9.020	9.008	0.837	53	598351	66.96 ug/L	92
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.483	9.483	0.880	43	1723378	256.06 ug/L	94
95) Propionitrile	9.577	9.578	0.889	54	292124	277.94 ug/L	98
96) Methacrylonitrile	9.755	9.744	0.905	41	1110130	270.60 ug/L	98
97) Tetrahydrofuran	9.874	9.874	0.916	42	633043	280.64 ug/L	92

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C204.D
Acq On : 9 Mar 2010 11:21 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100309-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 11:45:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

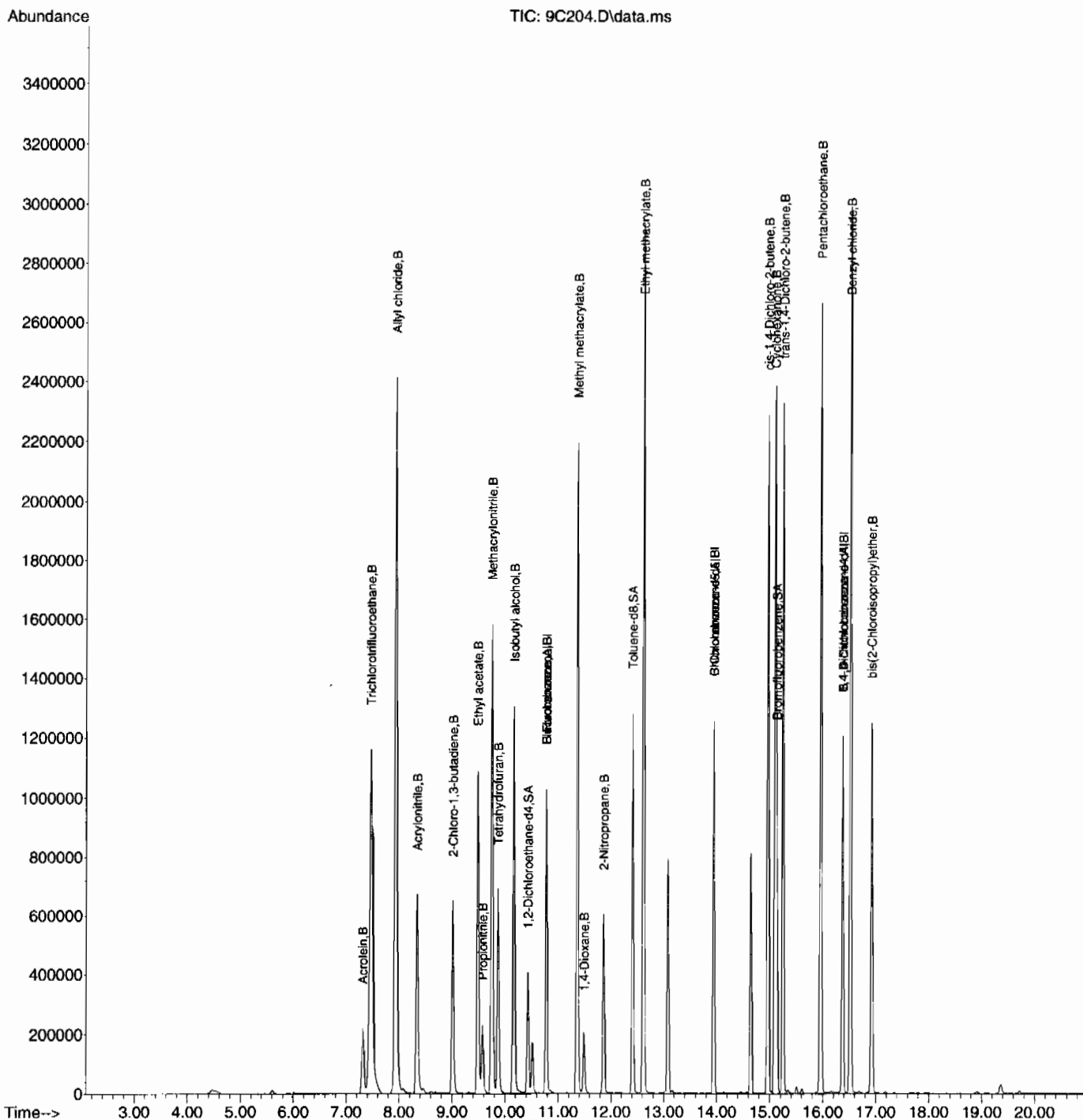
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	10.170	10.159	0.944	41	725332	2854.72	ug/L	93
99) Methyl tert-amyl ether	10.514	10.526	0.976	73	386	N.D.		
100) Methyl methacrylate	11.368	11.368	1.055	69	863341	258.89	ug/L	81
101) 1,4-Dioxane	11.499	11.487	1.067	88	146827	2697.84	ug/L	97
102) 2-Nitropropane	11.866	11.854	1.101	43	571519	352.91	ug/L	99
104) Ethyl methacrylate	12.613	12.613	0.905	69	1576743	253.97	ug/L	87
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d	
107) cis-1,4-Dichloro-2-butene	14.961	14.961	0.914	53	747662	328.59	ug/L	98
108) Cyclohexanone	15.092	15.092	0.922	42	948704	4821.45	ug/L	90 E
109) trans-1,4-Dichloro-2-b...	15.246	15.246	0.931	53	704458	326.90	ug/L	91
110) Pentachloroethane	15.957	15.957	0.975	167	523623	402.04	ug/L	93
111) Benzyl chloride	16.515	16.527	1.009	91	2723134	387.96	ug/L	98
112) bis(2-Chloroisopropyl)...	16.918	16.918	1.033	45	1204210	306.19	ug/L	95

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C204.D
Acq On : 9 Mar 2010 11:21 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100309-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 11:45:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2154

Instrument ID: VOA9.I

Injection Date 10-MAR-10 09:04

Data File: 031010V9\9C301.D

Init. Cal. Date(s) 02-MAR-10 12:38 - 02-MAR-10 21:4

Lab Sample ID W9VM100310-01

Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.336	0.32636		.01		-2.86905	30		Averaged	
S Toluene-d8	1.2847	1.26707		.01		-1.3723	30		Averaged	
S Bromofluorobenzene	1.2161	1.20429		.01		-0.97114	30		Averaged	
Dichlorodifluoromethane	0.1568	0.18576		.01		18.46939	30		Averaged	
Chloromethane	0.3997	0.42689		.1		6.8026	30		Averaged	spcc
Vinyl chloride	0.2921	0.33182		.01		13.59808	20		Averaged	ccc
Bromomethane	0.1959	0.22307		.01		13.86932	30		Averaged	
Chloroethane	0.2159	0.24852		.01		15.10885	30		Averaged	
Trichlorofluoromethane	0.3232	0.39188		.01		21.25	30		Averaged	
Ethyl ether	0.2839	0.29001		.01		2.15217	30		Averaged	
Acetone	0.2237	0.24264		.01		8.4667	40		Averaged	
1,1-Dichloroethylene	0.455	0.51952		.01		14.18022	20		Averaged	ccc
Iodomethane	0.2987	0.30937		.01		3.57215	30		Averaged	
Acetonitrile	1000	1389.21	1000			38.921	30	*	Linear	
Methyl acetate	250	280.54	250			12.216	40		Linear	
Carbon disulfide	0.6493	0.68368		.01		5.29493	30		Averaged	
Methylene chloride	50	53.2	50			6.4	30		Linear	
tert-Butyl methyl ether	0.6977	0.71835		.01		2.95972	30		Averaged	
trans-1,2-Dichloroethylene	0.4499	0.483		.01		7.35719	30		Averaged	
Vinyl acetate	0.6424	0.66091		.01		2.88138	40		Averaged	
1,1-Dichloroethane	0.5533	0.57631		.1		4.15868	30		Averaged	spcc
2-Butanone	0.2738	0.28997		.01		5.90577	40		Averaged	
cis-1,2-Dichloroethylene	0.5144	0.53635		.01		4.26711	30		Averaged	
2,2-Dichloropropane	0.3212	0.39593		.01		23.26588	30		Averaged	
Bromochloromethane	0.1135	0.1124		.01		-0.96916	30		Averaged	
Chloroform	0.4525	0.46674		.01		3.14696	20		Averaged	ccc
1,1,1-Trichloroethane	0.3385	0.3941		.01		16.42541	30		Averaged	
Cyclohexane	0.5769	0.65667		.01		13.82735	30		Averaged	
1,1-Dichloropropene	0.3241	0.35709		.01		10.17896	30		Averaged	
Carbon tetrachloride	0.2821	0.33735		.01		19.58525	30		Averaged	
1,2-Dichloroethane	0.4276	0.42492		.01		-0.62675	30		Averaged	
Benzene	0.9611	0.98278		.01		2.25575	30		Averaged	
Cyclohexene	0.5103	0.57314		.01		12.31432	30		Averaged	
n-Butyl alcohol	5000	5695.59	5000			13.9118	40		Linear	
Trichloroethylene	0.25	0.26752		.01		7.008	30		Averaged	
1,2-Dichloropropane	0.3239	0.31861		.01		-1.63322	20		Averaged	ccc
Methylcyclohexane	0.4105	0.45594		.01		11.06943	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA9.I

Injection Date 10-MAR-10 09:04

Data File: 031010V9\9C301.D

Init. Cal. Date(s) 02-MAR-10 12:38 02-MAR-10 21:4

Lab Sample ID W9VM100310-01

Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.157	0.15612		.01		-0.56051	30		Averaged	
Bromodichloromethane	0.3422	0.35778		.01		4.55289	30		Averaged	
2-Chloroethylvinyl ether	0.1737	0.16321		.01		-6.03915	30		Averaged	
cis-1,3-Dichloropropylene	0.4073	0.42546		.01		4.45863	30		Averaged	
4-Methyl-2-pentanone	0.2051	0.22213		.01		8.30327	40		Averaged	
Toluene	1.4527	1.49013		.01		2.57658	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.5352	0.58579		.01		9.45254	30		Averaged	
1,1,2-Trichloroethane	0.2859	0.27649		.01		-3.29136	30		Averaged	
2-Hexanone	0.5616	0.59506		.01		5.95798	40		Averaged	
1,3-Dichloropropane	0.5721	0.52705		.01		-7.8745	30		Averaged	
Tetrachloroethylene	0.2085	0.22624		.01		8.50839	30		Averaged	
Dibromochloromethane	50	54.66	50			9.32	30		Linear	
1,2-Dibromoethane	0.3189	0.31774		.01		-0.36375	30		Averaged	
Chlorobenzene	0.9048	0.90449		.3		-0.03426	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3037	0.32589		.01		7.30655	30		Averaged	
Ethylbenzene	1.7902	1.67642		.01		-6.35571	20		Averaged	ccc
m,p-Xylenes	0.6049	0.6199		.01		2.47975	30		Averaged	
o-Xylene	0.6251	0.63036		.01		0.84147	30		Averaged	
Styrene	1.0071	1.03243		.01		2.51514	30		Averaged	
Bromoform	50	54.89	50			9.78	30		Linear	spcc
Isopropylbenzene	3.508	3.7769		.01		7.66534	30		Averaged	
1,1,2,2-Tetrachloroethane	1.0029	1.02765		.3		2.46784	30		Averaged	spcc
1,2,3-Trichloropropane	0.2419	0.24378		.01		0.77718	30		Averaged	
Bromobenzene	0.756	0.72495		.01		-4.10714	30		Averaged	
n-Propylbenzene	4.614	4.63858		.01		0.53273	30		Averaged	
1,3,5-Trimethylbenzene	3.0102	3.07621		.01		2.19288	30		Averaged	
2-Chlorotoluene	0.8531	0.86175		.01		1.01395	30		Averaged	
4-Chlorotoluene	2.893	2.97182		.01		2.72451	30		Averaged	
tert-Butylbenzene	0.5662	0.6294		.01		11.16213	30		Averaged	
1,2,4-Trimethylbenzene	3.0389	3.21292		.01		5.72641	30		Averaged	
sec-Butylbenzene	3.9966	4.34956		.01		8.83151	30		Averaged	
4-Isopropyltoluene	3.107	3.40489		.01		9.58771	30		Averaged	
1,3-Dichlorobenzene	1.5544	1.54977		.01		-0.29786	30		Averaged	
1,4-Dichlorobenzene	1.4977	1.50005		.01		0.15691	30		Averaged	
n-Butylbenzene	3.394	3.73578		.01		10.07012	30		Averaged	
1,2-Dichlorobenzene	1.4859	1.48148		.01		-0.29746	30		Averaged	
1,2-Dibromo-3-chloropropane	50	51.75	50			3.5	30		Linear	

Continuing Calibration Summary

Instrument ID: VOA9.I

Injection Date: 10-MAR-10 09:04

Data File: 031010V9\9C301.D

Init. Cal. Date(s) 02-MAR-10 12:38 02-MAR-10 21:4

Lab Sample ID W9VM100310-01 Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.9431	0.93831		.01		-0.5079	30		Averaged
Hexachlorobutadiene	0.4453	0.47025		.01		5.60296	30		Averaged
Naphthalene	2.5583	2.46351		.01		-3.70519	30		Averaged
1,2,3-Trichlorobenzene	0.827	0.79147		.01		-4.29625	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C301.D
Acq On : 10 Mar 2010 9:04 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100310-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0106-07E/0222-07B
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 10 09:28:45 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1033778	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	708505	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	318730	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1033778	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	708505	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	318710	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	337388	48.57	ug/L	0.00
43) Toluene-d8	12.412	12.412	0.890	98	897722	49.31	ug/L	0.00
61) Bromofluorobenzene	15.127	15.127	0.924	95	383844	49.51	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.944	4.944	0.459	85	192035	59.22	ug/L	100
3) Chloromethane	5.308	5.308	0.493	50	441314	53.40	ug/L	99
4) Vinyl chloride	5.546	5.546	0.515	62	343028	56.80	ug/L	100
5) Bromomethane	6.186	6.186	0.574	94	230603	56.94	ug/L	98
6) Chloroethane	6.340	6.340	0.588	64	256916	57.57	ug/L	99
7) Trichlorofluoromethane	6.767	6.767	0.628	101	405115	60.63	ug/L	99
8) Ethyl ether	7.087	7.099	0.658	59	299801	51.08	ug/L	93
9) Acetone	7.479	7.490	0.694	43	1254164	271.20	ug/L	96
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	537073	57.10	ug/L	97
11) Iodomethane	7.763	7.763	0.720	142	1599084	258.95	ug/L	96
12) Acetonitrile	7.858	7.858	0.729	41	1155390	1389.21	ug/L	100
13) Methyl acetate	7.870	7.882	0.730	43	1313942	280.54	ug/L	96
14) Carbon disulfide	7.906	7.906	0.734	76	3533881	263.22	ug/L	99
15) Methylene chloride	8.083	8.083	0.750	84	284232	53.20	ug/L	90
16) tert-Butyl methyl ether	8.368	8.368	0.777	73	742615	51.48	ug/L	98
17) trans-1,2-Dichloroethy...	8.415	8.427	0.781	61	499318	53.68	ug/L	96
18) Vinyl acetate	8.842	8.854	0.821	43	3416167	257.22	ug/L	96
19) 1,1-Dichloroethane	8.914	8.913	0.827	63	595772	52.08	ug/L	99
20) 2-Butanone	9.483	9.483	0.880	43	1498847	264.76	ug/L	93
21) cis-1,2-Dichloroethylene	9.542	9.554	0.886	61	554463	52.13	ug/L	96
22) 2,2-Dichloropropane	9.578	9.578	0.889	77	409301	61.62	ug/L	95
23) Bromochloromethane	9.827	9.827	0.912	128	116199	49.52	ug/L #	87
24) Chloroform	9.850	9.850	0.914	83	482504	51.57	ug/L	97
25) 1,1,1-Trichloroethane	10.135	10.135	0.941	97	407416	58.21	ug/L	99
26) Cyclohexane	10.230	10.230	0.949	56	678847	56.91	ug/L	96
27) 1,1-Dichloropropene	10.289	10.289	0.955	75	369148	55.10	ug/L	97
28) Carbon tetrachloride	10.325	10.325	0.958	117	348750	59.79	ug/L	100
30) 1,2-Dichloroethane	10.514	10.514	0.976	62	439271	49.68	ug/L	98
31) Benzene	10.538	10.538	0.978	78	1015976	51.13	ug/L	97
32) Cyclohexene	10.645	10.645	0.988	67	592502	56.15	ug/L	92
33) n-Butyl alcohol	10.846	10.846	1.007	56	1239751	5695.59	ug/L	94
34) Trichloroethylene	11.167	11.167	1.036	95	276552	53.50	ug/L	99
35) 1,2-Dichloropropane	11.416	11.416	1.059	63	329374	49.18	ug/L	99
36) Methylcyclohexane	11.416	11.416	1.059	83	471345	55.53	ug/L	92
37) Dibromomethane	11.558	11.558	1.073	93	161398	49.73	ug/L	99
38) Bromodichloromethane	11.653	11.665	1.081	83	369870	52.28	ug/L	100
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101	63	843609	234.88	ug/L	98
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123	75	439827	52.23	ug/L	95

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C301.D
Acq On : 10 Mar 2010 9:04 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100310-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0106-07E/0222-07B
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 10 09:28:45 2010

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M

Quant Title : Volatile Organics 8260B SubList :

QLast Update : Wed Mar 03 09:48:05 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	12.186	12.186	0.874	58	786885	270.70	ug/L	87
44) Toluene	12.483	12.483	0.895	91	1055767	51.29	ug/L	97
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906	75	415035	54.73	ug/L	97
46) 1,1,2-Trichloroethane	12.862	12.862	0.923	83	195898	48.36	ug/L	99
47) 2-Hexanone	13.028	13.028	0.935	43	2108017	264.90	ug/L	95
48) 1,3-Dichloropropane	13.052	13.052	0.936	76	373419	46.06	ug/L	86
49) Tetrachloroethylene	13.076	13.088	0.938	164	160290	54.24	ug/L	98
50) Dibromochloromethane	13.325	13.325	0.956	129	246565	54.66	ug/L	100
51) 1,2-Dibromoethane	13.503	13.503	0.969	107	225123	49.82	ug/L	99
52) Chlorobenzene	13.977	13.977	1.003	112	640833	49.98	ug/L	100
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006	131	230892	53.65	ug/L	98
54) Ethylbenzene	14.025	14.024	1.006	91	1187754	46.82	ug/L	98 E
55) m,p-Xylenes	14.131	14.131	1.014	106	878399	102.48	ug/L	91
56) o-Xylene	14.570	14.570	1.045	106	446612	50.42	ug/L	92
57) Styrene	14.570	14.570	1.045	104	731482	51.26	ug/L	96
59) Bromoform	14.843	14.855	0.907	173	134643	54.89	ug/L	99
60) Isopropylbenzene	14.926	14.926	0.912	105	1203810	53.83	ug/L	98
62) 1,1,2,2-Tetrachloroethane	15.199	15.198	0.928	83	327544	51.24	ug/L	100
63) 1,2,3-Trichloropropane	15.293	15.293	0.934	110	77699	50.39	ug/L #	93
64) Bromobenzene	15.353	15.353	0.938	156	231062	47.94	ug/L	99
65) n-Propylbenzene	15.353	15.353	0.938	91	1478455	50.27	ug/L	97 E
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	980480	51.10	ug/L	98 E
67) 2-Chlorotoluene	15.507	15.507	0.947	126	274667	50.51	ug/L	92
68) 4-Chlorotoluene	15.602	15.614	0.953	91	947207	51.36	ug/L	98
69) tert-Butylbenzene	15.874	15.874	0.970	134	200609	55.58	ug/L	92
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	1024055	52.86	ug/L	95
71) sec-Butylbenzene	16.112	16.112	0.984	105	1386335	54.42	ug/L	98
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	1085241	54.79	ug/L	99
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	493957	49.85	ug/L	99
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	478111	50.08	ug/L	99
75) n-Butylbenzene	16.693	16.693	1.020	91	1190705	55.03	ug/L	97
76) 1,2-Dichlorobenzene	16.859	16.859	1.030	146	472191	49.85	ug/L	98
77) 1,2-Dibromo-3-chloropr...	17.784	17.784	1.086	157	50138	51.75	ug/L	100
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156	180	299069	49.75	ug/L	99
79) Hexachlorobutadiene	19.088	19.088	1.166	225	149882	52.80	ug/L	99
80) Naphthalene	19.349	19.349	1.182	128	785196	48.15	ug/L	100
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204	180	252264	47.85	ug/L	100
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.		
85) Acrolein	7.241	7.313	0.672		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.		
87) Isopropyl Alcohol	7.491	7.550	0.695		0m	N.D.	d	
88) Allyl chloride	7.858	7.929	0.729		0m	N.D.	d	
89) tert-Butyl Alcohol	8.048	8.060	0.747		0m	N.D.	d	
90) Acrylonitrile	8.368	8.332	0.777		0m	N.D.	d	
91) Isopropyl ether	8.842	8.866	0.821		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.		
94) Ethyl acetate	9.483	9.483	0.880		0m	N.D.	d	
95) Propionitrile	9.495	9.578	0.881		0m	N.D.	d	
96) Methacrylonitrile	9.827	9.744	0.912		0m	N.D.	d	
97) Tetrahydrofuran	9.850	9.874	0.914		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C301.D
Acq On : 10 Mar 2010 9:04 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100310-01|CCV|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0106-07E/0222-07B
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 10 09:28:45 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	10.230	10.159	0.949		0m	N.D.	d
99) Methyl tert-amyl ether	10.526	10.526	0.977		0m	N.D.	d
100) Methyl methacrylate	11.416	11.368	1.059		0m	N.D.	d
101) 1,4-Dioxane	11.487	11.487	1.066		0m	N.D.	d
102) 2-Nitropropane	11.866	11.854	1.101		0m	N.D.	d
104) Ethyl methacrylate	12.613	12.613	0.905		0m	N.D.	d
106) 1-Chlorohexane	13.942	13.823	0.852		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.926	14.961	0.912		0m	N.D.	d
108) Cyclohexanone	14.926	15.092	0.912		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.341	15.246	0.937		0m	N.D.	d
110) Pentachloroethane	15.957	15.957	0.975		0m	N.D.	d
111) Benzyl chloride	16.515	16.527	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034		0m	N.D.	d

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

Continuing Calibration Summary

Client SDG: 10-2154

Instrument ID: VOA9.I

Injection Date 10-MAR-10 10:31

Data File: 031010V9\9C304.D

Init. Cal. Date(s) 02-MAR-10 12:38 - 02-MAR-10 21:4

Lab Sample ID W9VM100309-04 Quant Type ISTD

Method: 030210V9\VOA9-8260-030210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.336	0.34307		.01		2.10417	30		Averaged
SToluene-d8	1.2847	1.27853		.01		-0.48027	30		Averaged
SBromofluorobenzene	1.2161	1.18263		.01		-2.75224	30		Averaged
Acrolein	250	278.32	250			11.328	30		Linear
Trichlorotrifluoroethane	0.0758	0.08859		.01		16.87335	30		Averaged
Allyl chloride	0.4927	0.52943		.01		7.45484	30		Averaged
Acrylonitrile	0.1334	0.14357		.01		7.62369	30		Averaged
2-Chloro-1,3-butadiene	0.4395	0.56839		.01		29.32651	30		Averaged
Ethyl acetate	0.331	0.32439		.01		-1.99698	40		Averaged
Propionitrile	0.0517	0.05482		.01		6.03482	30		Averaged
Methacrylonitrile	0.2018	0.21014		.01		4.1328	30		Averaged
Tetrahydrofuran	0.1109	0.11692		.01		5.42831	30		Averaged
Isobutyl alcohol	0.0125	0.01304		.01		4.32	40		Averaged
Methyl methacrylate	0.164	0.1664		.01		1.46341	30		Averaged
1,4-Dioxane	0.0027	0.00257		.01		-4.81481	40		Averaged
2-Nitropropane	0.0797	0.10751		.01		34.89335	30	*	Averaged
Ethyl methacrylate	0.4399	0.4363		.01		-0.81837	30		Averaged
cis-1,4-Dichloro-2-butene	0.3473	0.44127		.01		27.0573	30		Averaged
Cyclohexanone	0.03	0.10659		.01		255.3	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.3289	0.41101		.01		24.96503	30		Averaged
Pentachloroethane	0.1988	0.34547		.01		73.77767	30	*	Averaged
Benzyl chloride	1.0714	1.61117		.01		50.37988	30	*	Averaged
bis(2-Chloroisopropyl)ether	0.6003	0.67755		.01		12.86857	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C304.D
Acq On : 10 Mar 2010 10:31 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100310-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 10:52:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1023106	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	713960	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	332083	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1023106	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	713960	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	332065	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	351001	51.05	ug/L	0.00
43) Toluene-d8	12.412	12.412	0.890	98	912822	49.76	ug/L	0.00
61) Bromofluorobenzene	15.127	15.127	0.924	95	392730	48.62	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491		0m	N.D.	d	
4) Vinyl chloride	5.532	5.546	0.513		0m	N.D.	d	
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.490	7.490	0.695		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.478	7.502	0.694		0m	N.D.	d	
11) Iodomethane	7.763	7.763	0.720		0m	N.D.	d	
12) Acetonitrile	7.941	7.858	0.737		0m	N.D.	d	
13) Methyl acetate	7.882	7.882	0.731		0m	N.D.	d	
14) Carbon disulfide	7.941	7.906	0.737		0m	N.D.	d	
15) Methylene chloride	8.095	8.083	0.751		0m	N.D.	d	
16) tert-Butyl methyl ether	8.368	8.368	0.777		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.427	8.427	0.782		0m	N.D.	d	
18) Vinyl acetate	8.854	8.854	0.822		0m	N.D.	d	
19) 1,1-Dichloroethane	8.890	8.913	0.825		0m	N.D.	d	
20) 2-Butanone	9.483	9.483	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.494	9.554	0.881		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	9.850	9.850	0.914		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.170	10.230	0.944		0m	N.D.	d	
27) 1,1-Dichloropropene	10.289	10.289	0.955		0m	N.D.	d	
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.514	10.514	0.976		0m	N.D.	d	
31) Benzene	10.526	10.538	0.977		0m	N.D.	d	
32) Cyclohexene	10.645	10.645	0.988		0m	N.D.	d	
33) n-Butyl alcohol	10.858	10.846	1.008		0m	N.D.	d	
34) Trichloroethylene	11.166	11.167	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	11.368	11.416	1.055		0m	N.D.	d	
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		
38) Bromodichloromethane	11.665	11.665	1.083		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C304.D
Acq On : 10 Mar 2010 10:31 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100310-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 10:52:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	12.186	12.186	0.874		0m	N.D.	d
44) Toluene	12.495	12.483	0.896		0m	N.D.	d
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906		0m	N.D.	d
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935		0m	N.D.	d
48) 1,3-Dichloropropane	13.099	13.052	0.940		0m	N.D.	d
49) Tetrachloroethylene	13.088	13.088	0.939		0m	N.D.	d
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	13.503	13.503	0.969		0m	N.D.	d
52) Chlorobenzene	13.977	13.977	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	14.024	14.024	1.006		0m	N.D.	d
54) Ethylbenzene	14.024	14.024	1.006		0m	N.D.	d
55) m,p-Xylenes	14.131	14.131	1.014		0m	N.D.	d
56) o-Xylene	14.570	14.570	1.045		0m	N.D.	d
57) Styrene	14.570	14.570	1.045		0m	N.D.	d
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	14.926	14.926	0.912		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	15.246	15.198	0.931		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	15.353	15.353	0.938		0m	N.D.	d
65) n-Propylbenzene	15.353	15.353	0.938		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946		0m	N.D.	d
67) 2-Chlorotoluene	15.602	15.507	0.953		0m	N.D.	d
68) 4-Chlorotoluene	15.613	15.614	0.954		0m	N.D.	d
69) tert-Butylbenzene	15.957	15.874	0.975		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972		0m	N.D.	d
71) sec-Butylbenzene	16.111	16.112	0.984		0m	N.D.	d
72) 4-Isopropyltoluene	16.230	16.230	0.991		0m	N.D.	d
73) 1,3-Dichlorobenzene	16.313	16.313	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	16.408	16.408	1.002		0m	N.D.	d
75) n-Butylbenzene	16.693	16.693	1.020		0m	N.D.	d
76) 1,2-Dichlorobenzene	16.859	16.859	1.030		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156		0m	N.D.	d
79) Hexachlorobutadiene	19.100	19.088	1.167		0m	N.D.	d
80) Naphthalene	19.349	19.349	1.182		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	19.716	19.717	1.204		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	7.312	7.313	0.679	56	290653	278.32 ug/L	99
86) Trichlorotrifluoroethane	7.467	7.467	0.693	85	453205	292.29 ug/L	96
87) Isopropyl Alcohol	0.000	7.550	0.000		0m	N.D.	d
88) Allyl chloride	7.941	7.929	0.737	41	2708340	268.64 ug/L	95
89) tert-Butyl Alcohol	8.071	8.060	0.749	59	201	N.D.	
90) Acrylonitrile	8.344	8.332	0.774	53	734443	269.05 ug/L	97
91) Isopropyl ether	9.008	8.866	0.836	45	186	N.D.	
92) 2-Chloro-1,3-butadiene	9.020	9.008	0.837	53	581524	64.67 ug/L	91
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.483	9.483	0.880	43	1659451	244.99 ug/L	94
95) Propionitrile	9.577	9.578	0.889	54	280410	265.10 ug/L	100
96) Methacrylonitrile	9.755	9.744	0.905	41	1074964	260.36 ug/L	99
97) Tetrahydrofuran	9.874	9.874	0.916	42	598116	263.47 ug/L	93

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C304.D
Acq On : 10 Mar 2010 10:31 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100310-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 10:52:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

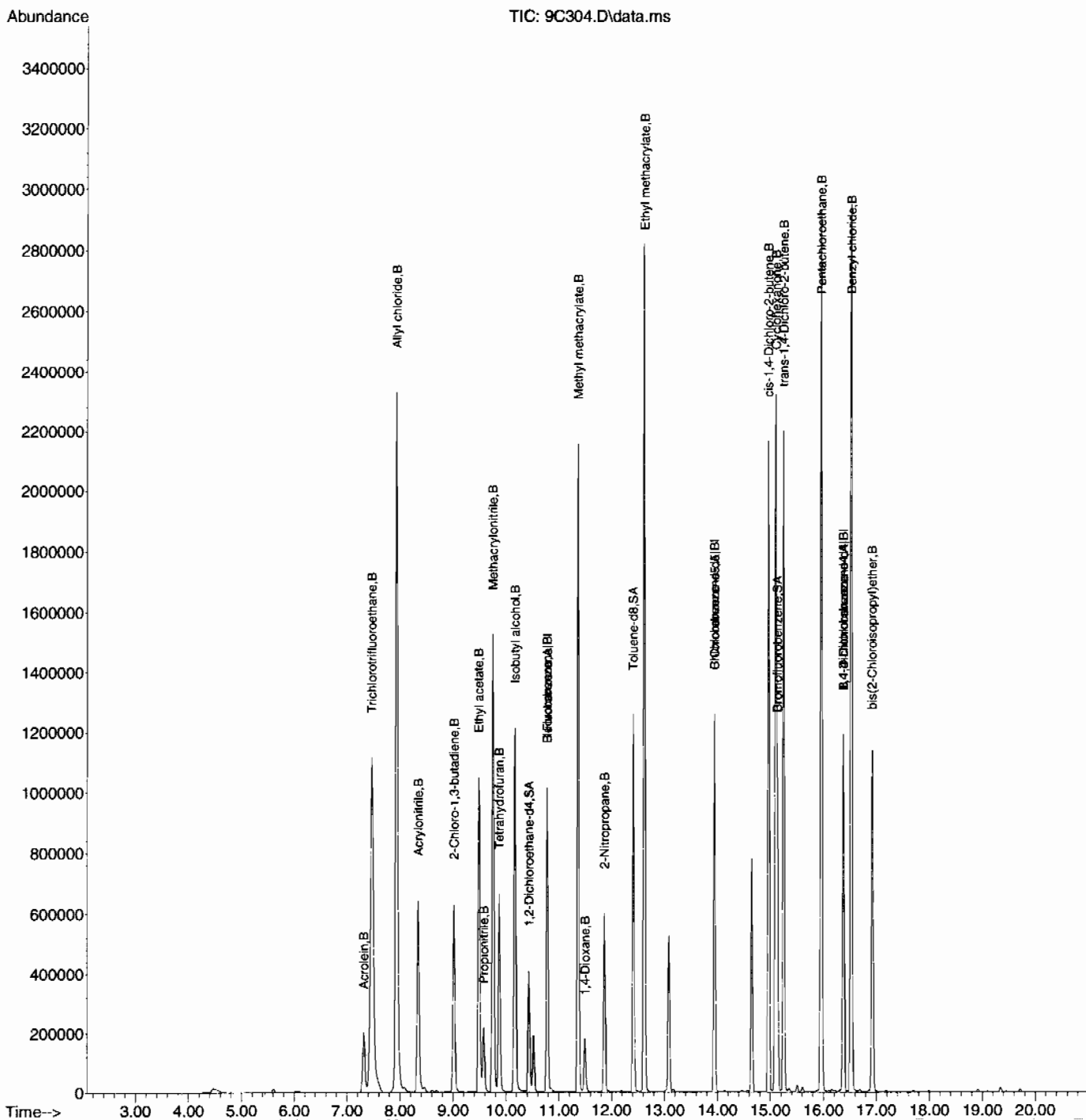
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	10.170	10.159	0.944	41	667093	2608.80	ug/L	94
99) Methyl tert-amyl ether	10.514	10.526	0.976	73	582	N.D.		
100) Methyl methacrylate	11.368	11.368	1.055	69	851211	253.63	ug/L	82
101) 1,4-Dioxane	11.499	11.487	1.067	88	131628	2403.18	ug/L	95
102) 2-Nitropropane	11.866	11.854	1.101	43	549973	337.45	ug/L	99
104) Ethyl methacrylate	12.625	12.613	0.906	69	1557493	247.95	ug/L	88
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d	
107) cis-1,4-Dichloro-2-butene	14.961	14.961	0.914	53	732644	317.62	ug/L	97
108) Cyclohexanone	15.104	15.092	0.923	42	884872	4436.07	ug/L	90 E
109) trans-1,4-Dichloro-2-b...	15.246	15.246	0.931	53	682409	312.38	ug/L	91
110) Pentachloroethane	15.957	15.957	0.975	167	573598	434.43	ug/L	94
111) Benzyl chloride	16.527	16.527	1.009	91	2675062	375.95	ug/L	98
112) bis(2-Chloroisopropyl)...	16.918	16.918	1.033	45	1124955	282.16	ug/L	95

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C304.D
Acq On : 10 Mar 2010 10:31 am
Operator : RXY1
InstName : VOA9
Sample : |W9VM100310-04|CCV|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 10:52:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



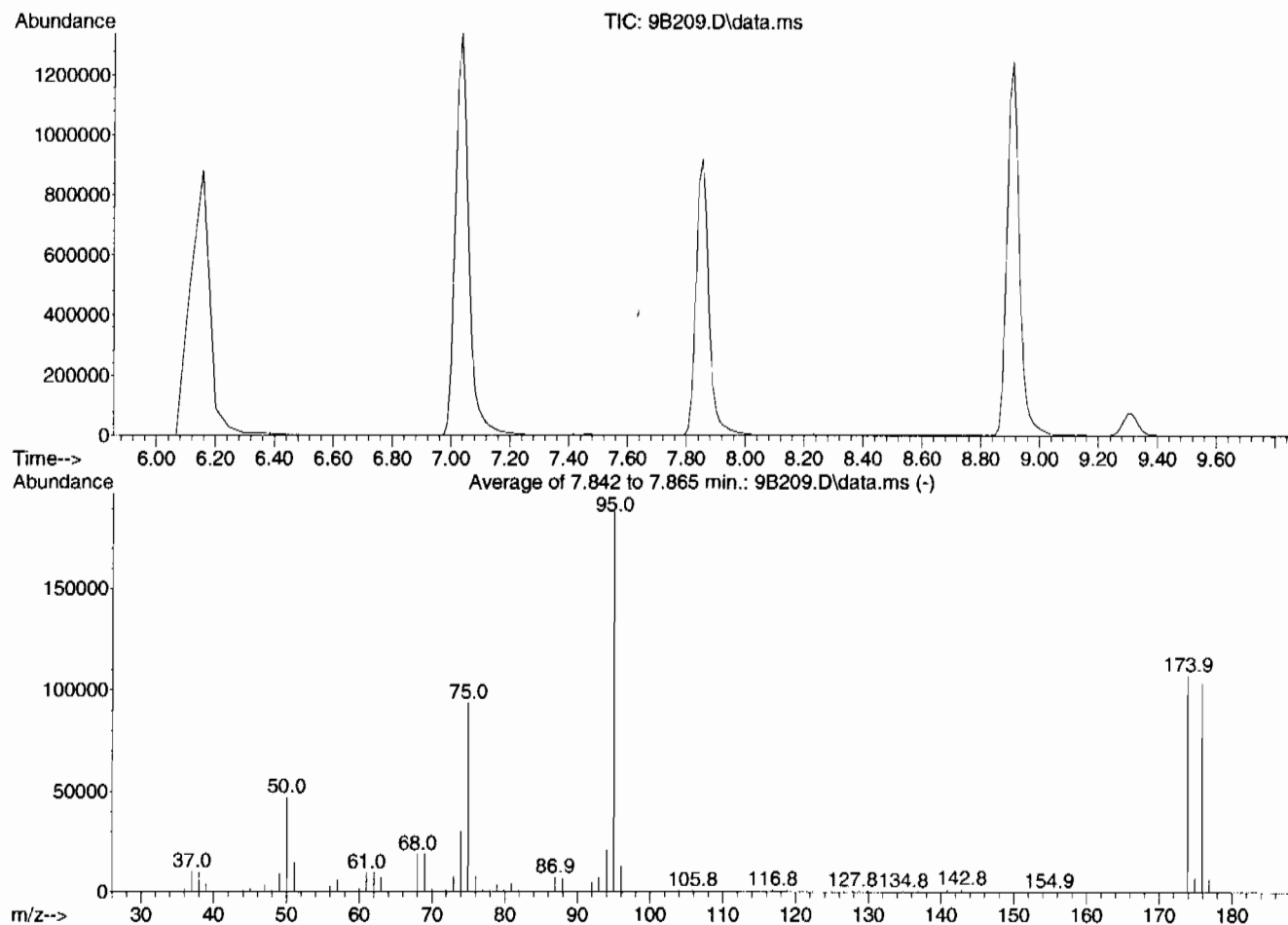
Quality Control Data

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030210V9\
Data File : 9B209.D
Acq On : 2 Mar 2010 12:10 pm
Operator : RXY1
Sample : |UVM100203-02|BFB|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a
ALS Vial : 9 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Title : Volatile Organics 8260B SubList :
Last Update : Tue Mar 02 12:19:44 2010



AutoFind: Scans 223, 224, 225; Background Corrected with Scan 216

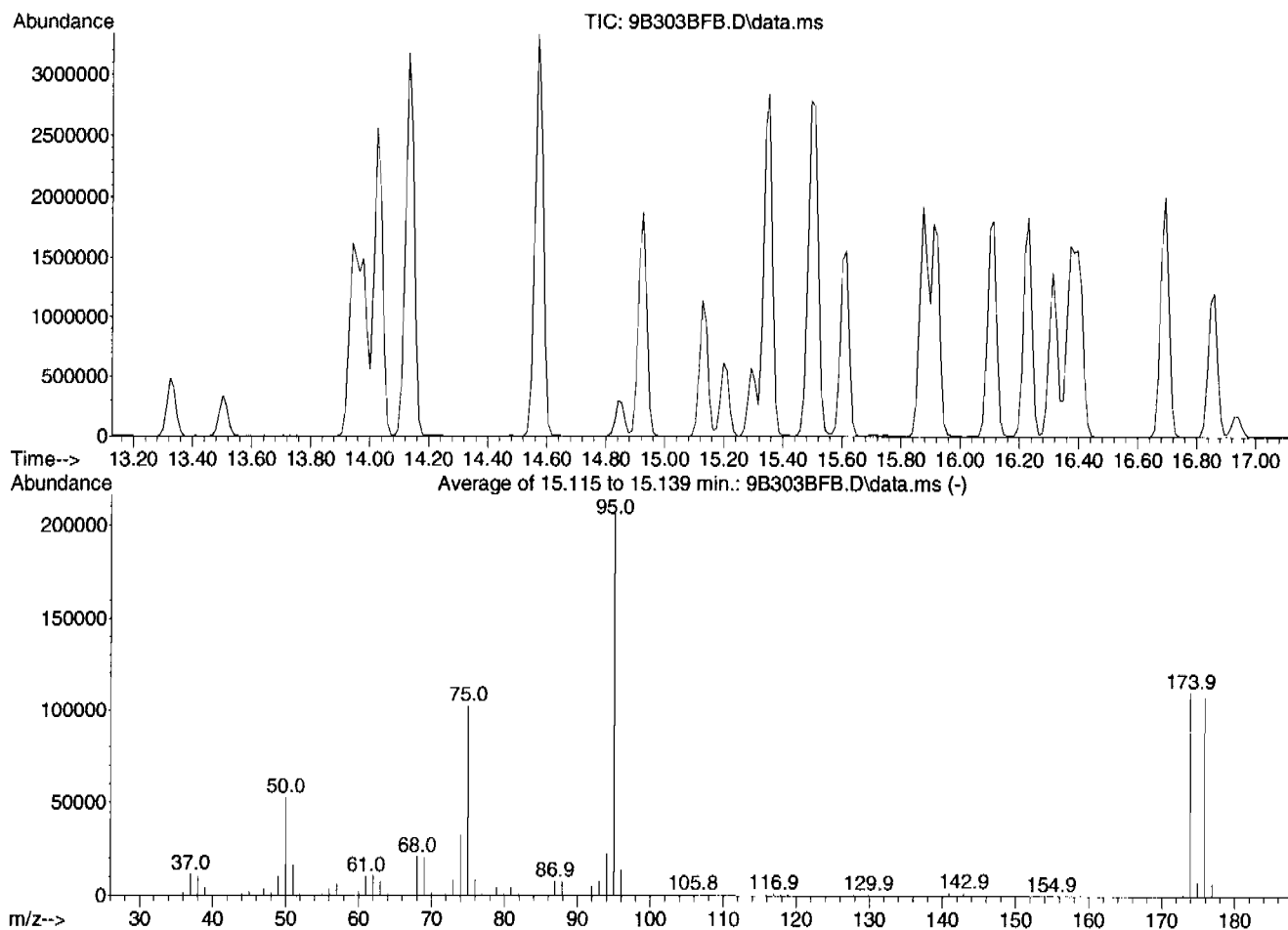
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.9	46856	PASS
75	95	30	60	49.7	93451	PASS
95	95	100	100	100.0	188181	PASS
96	95	5	9	6.9	13004	PASS
173	174	0.00	2	0.5	552	PASS
174	95	50	100	56.9	107056	PASS
175	174	5	9	6.6	7038	PASS
176	174	95	101	96.5	103259	PASS
177	176	5	9	6.5	6668	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V9\
Data File : 9B303BFB.D
Acq On : 3 Mar 2010 10:50 am
Operator : RXY1
Sample : |W9VM100303-03|BFB|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0220-01C/0301-01
ALS Vial : 3 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Title : Volatile Organics 8260B SubList :
Last Update : Wed Mar 03 09:48:05 2010



Spectrum Information: Average of 15.115 to 15.139 min.

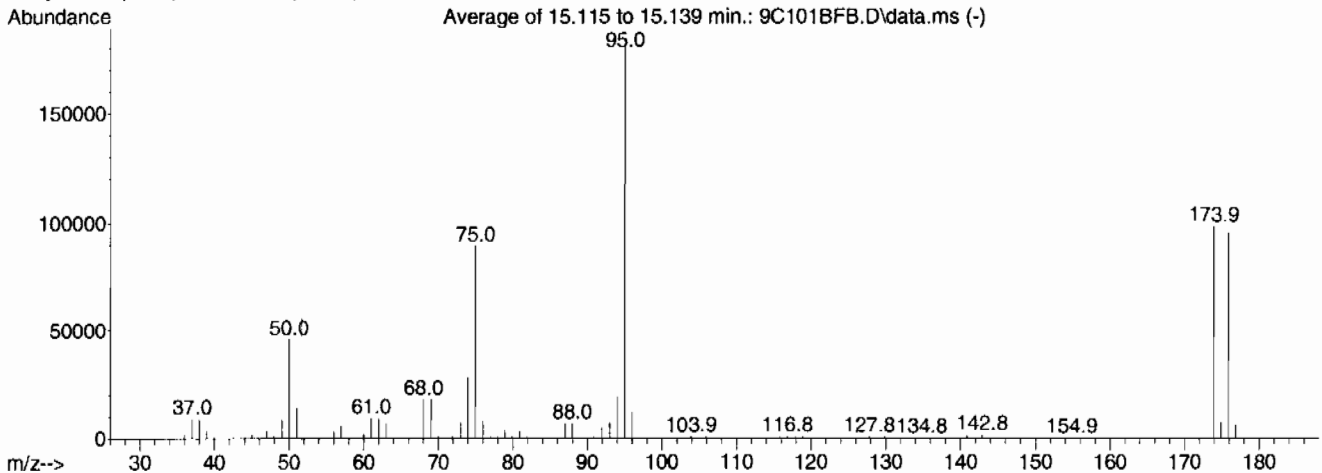
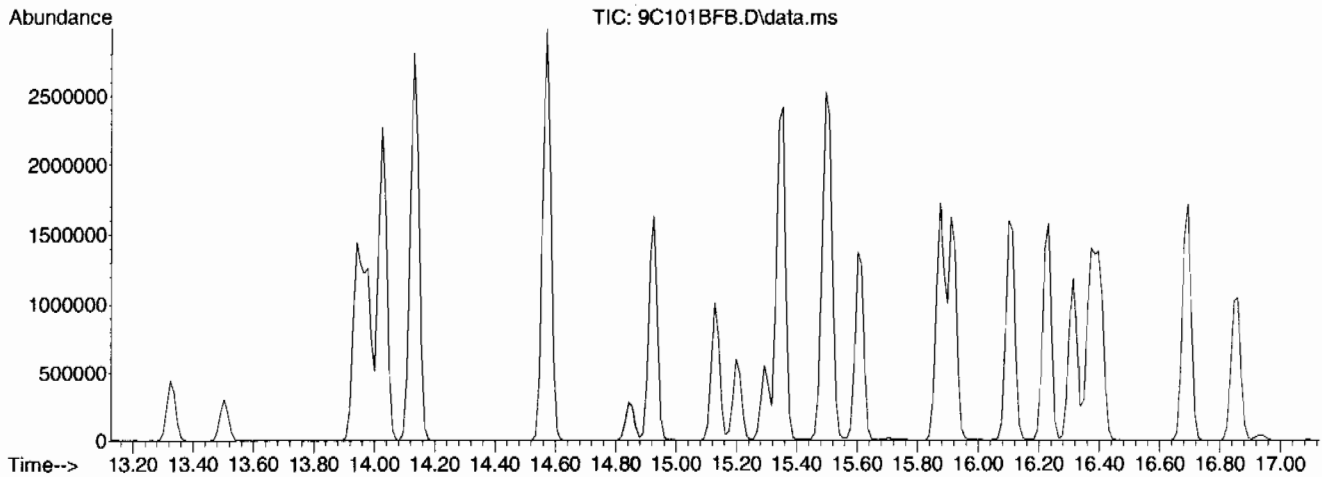
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.6	52624	PASS
75	95	30	60	49.8	102501	PASS
95	95	100	100	100.0	205867	PASS
96	95	5	9	6.7	13713	PASS
173	174	0.00	2	0.5	581	PASS
174	95	50	100	53.3	109765	PASS
175	174	5	9	6.9	7618	PASS
176	174	95	101	97.5	107037	PASS
177	176	5	9	6.4	6838	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C101BFB.D
Acq On : 8 Mar 2010 9:55 am
Operator : RXY1
Sample : |W9VM100308-01|BFB|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0106-07D/0222-07B
ALS Vial : 1 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Title : Volatile Organics 8260B SubList :
Last Update : Wed Mar 03 09:48:05 2010



Spectrum Information: Average of 15.115 to 15.139 min.

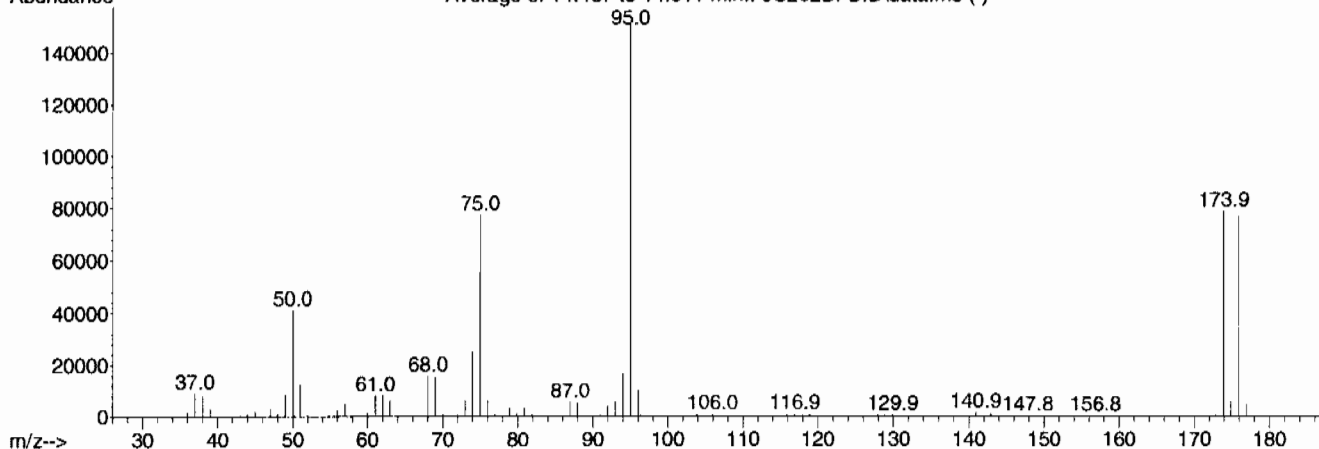
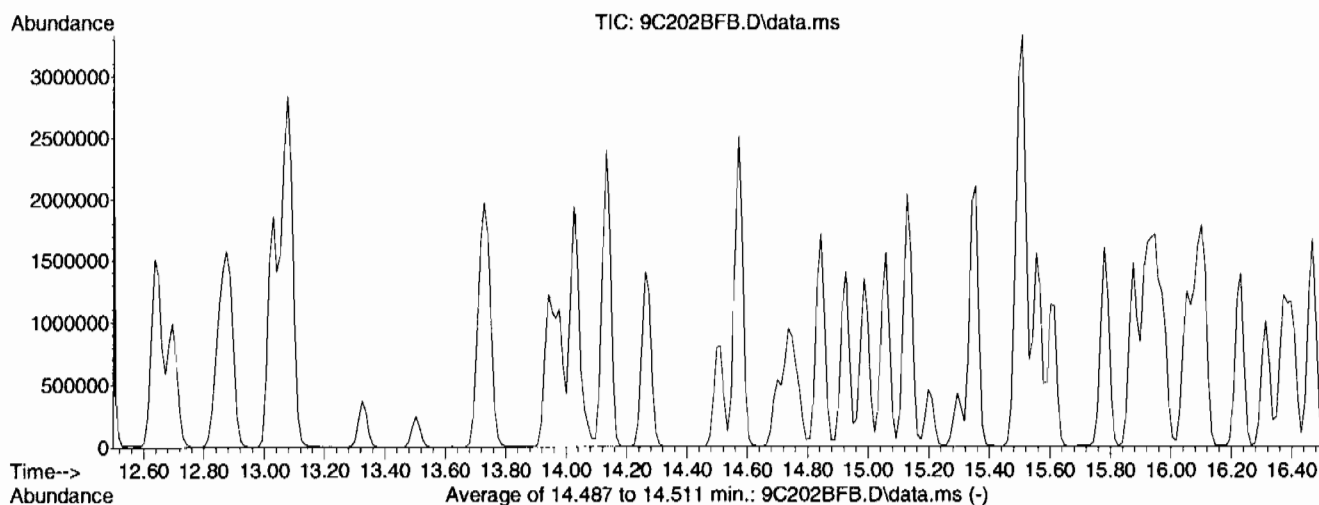
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.4	45888	PASS
75	95	30	60	49.5	89344	PASS
95	95	100	100	100.0	180403	PASS
96	95	5	9	6.7	12082	PASS
173	174	0.00	2	0.4	416	PASS
174	95	50	100	54.5	98309	PASS
175	174	5	9	7.2	7039	PASS
176	174	95	101	97.3	95675	PASS
177	176	5	9	6.3	5994	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C202BFB.D
Acq On : 9 Mar 2010 10:24 am
Operator : RXY1
Sample : |W9VM100309-02|BFB|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0220-01E/0308-01
ALS Vial : 2 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Title : Volatile Organics 8260B SubList :
Last Update : Wed Mar 03 09:48:05 2010



Spectrum Information: Average of 14.487 to 14.511 min.

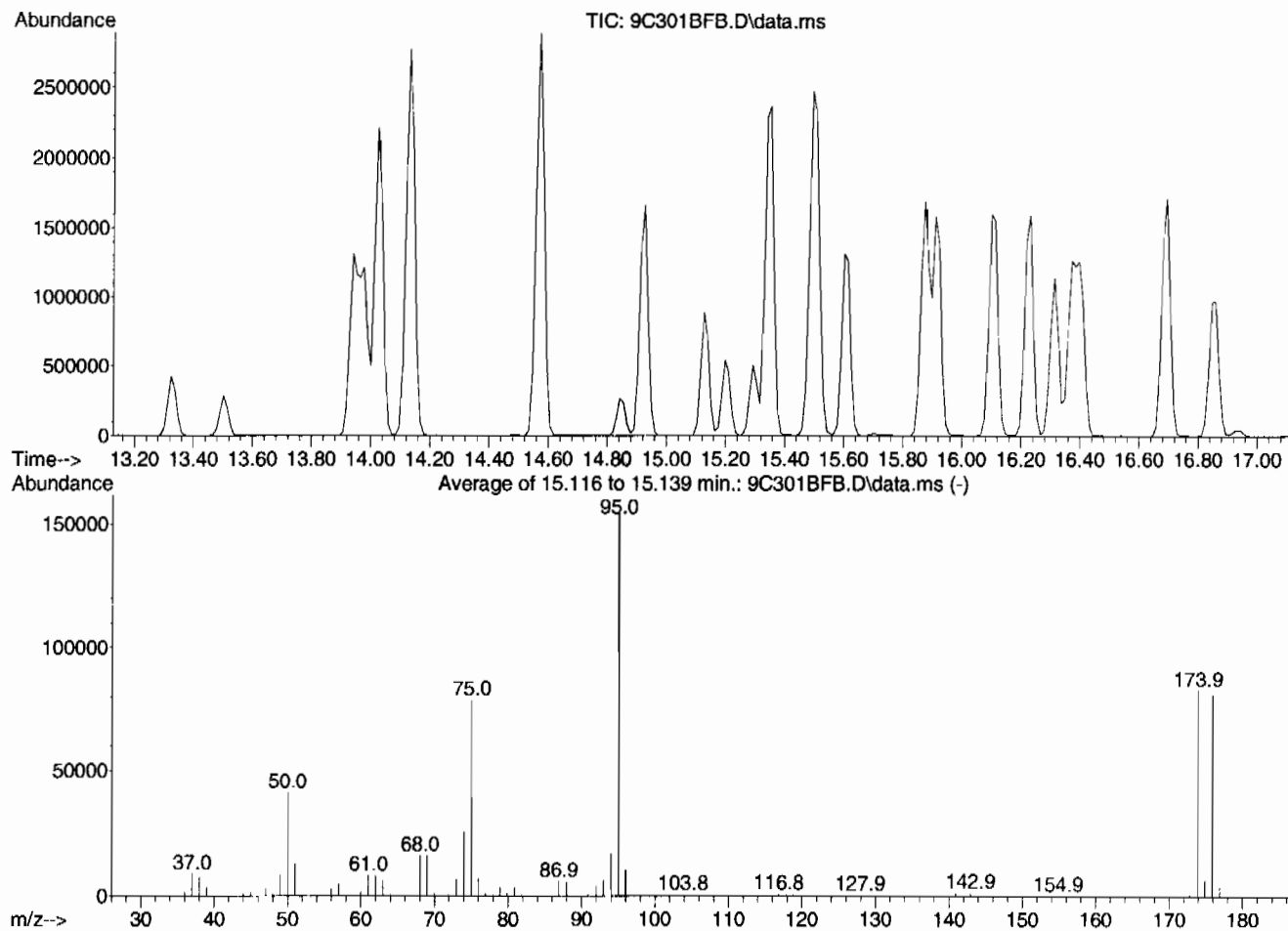
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.3	41053	PASS
75	95	30	60	51.2	77053	PASS
95	95	100	100	100.0	150427	PASS
96	95	5	9	6.9	10333	PASS
173	174	0.00	2	0.4	353	PASS
174	95	50	100	52.2	78461	PASS
175	174	5	9	7.2	5674	PASS
176	174	95	101	97.6	76552	PASS
177	176	5	9	6.3	4807	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C301BFB.D
Acq On : 10 Mar 2010 9:04 am
Operator : RXY1
Sample : |W9VM100310-01|BFB|1|VOA|1|VOA8260BL|
Misc : GEL 5ml n/a MIX[A]0106-07E/0222-07B
ALS Vial : 1 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Title : Volatile Organics 8260B SubList :
Last Update : Wed Mar 03 09:48:05 2010



Spectrum Information: Average of 15.116 to 15.139 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.7	41061	PASS
75	95	30	60	51.1	78619	PASS
95	95	100	100	100.0	153859	PASS
96	95	5	9	6.7	10374	PASS
173	174	0.00	2	0.6	467	PASS
174	95	50	100	53.8	82741	PASS
175	174	5	9	7.6	6307	PASS
176	174	95	101	97.5	80683	PASS
177	176	5	9	7.0	5639	PASS

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154

Matrix: SOIL

Lab Sample ID: 1202065140

Client Sample: QC for batch 962616

Client: LANL010

Project: QC

Client ID: MB for batch 962616

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 962617

Inst: VOA9.I

Dilution: 1

Run Date: 03/08/2010 11:53

Analyst: RXY1

Purge Vol: 5 mL

Prep Date: 03/08/2010 10:02

Aliquot: 5 g

Final Volume: 5 mL

Data File: 030810V99C105B1.D

Column: DB-624

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 1202065140
 Client Sample: QC for batch 962616
 Client ID: MB for batch 962616
 Batch ID: 962617
 Run Date: 03/08/2010 11:53
 Prep Date: 03/08/2010 10:02
 Data File: 030810V99C105B1.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

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

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C105B1.D
Acq On : 8 Mar 2010 11:53 am
Operator : RXY1
InstName : VOA9
Sample : |1202065140|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 08 12:27:55 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units		
Internal Standards									Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1144493	50.00	ug/L		0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	783121	50.00	ug/L		0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	351474	50.00	ug/L		0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1144493	50.00	ug/L		0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	783121	50.00	ug/L		0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	351451	50.00	ug/L		0.00
System Monitoring Compounds									Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	394032	51.23	ug/L		0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 102.46%				
43) Toluene-d8	12.412	12.412	0.890	98	1014437	50.42	ug/L		0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 100.84%				
61) Bromofluorobenzene	15.127	15.127	0.924	95	439857	51.45	ug/L		0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 102.90%				
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue	
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.			
3) Chloromethane	5.294	5.308	0.491	50	741	N.D.			
4) Vinyl chloride	5.532	5.546	0.513	62	575	N.D.			
5) Bromomethane	0.000	6.186	0.000		0	N.D.			
6) Chloroethane	0.000	6.340	0.000		0	N.D.			
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.			
8) Ethyl ether	7.087	7.099	0.658	59	581	N.D.			
9) Acetone	7.502	7.490	0.696	43	3101	N.D.			
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.			
11) Iodomethane	0.000	7.763	0.000		0	N.D.			
12) Acetonitrile	7.870	7.858	0.730	41	2137	Below Cal	#		22
13) Methyl acetate	7.882	7.882	0.731	43	455	Below Cal	#		67
14) Carbon disulfide	7.894	7.906	0.733	76	3634	N.D.			
15) Methylene chloride	8.083	8.083	0.750	84	10073	Below Cal			86
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.			
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.			
18) Vinyl acetate	8.854	8.854	0.822	43	1437	N.D.			
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.			
20) 2-Butanone	9.495	9.483	0.881	43	3224	N.D.			
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.			
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.			
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.			
24) Chloroform	0.000	9.850	0.000		0	N.D.			
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.			
26) Cyclohexane	0.000	10.230	0.000		0	N.D.			
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.			
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.			
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.			
31) Benzene	10.538	10.538	0.978	78	528	N.D.			
32) Cyclohexene	10.787	10.645	1.001	67	374	N.D.			
33) n-Butyl alcohol	10.858	10.846	1.008	56	1512	Below Cal			98
34) Trichloroethylene	0.000	11.167	0.000		0	N.D.			
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.			
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.			
37) Dibromomethane	0.000	11.558	0.000		0	N.D.			

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C105B1.D
Acq On : 8 Mar 2010 11:53 am
Operator : RXY1
InstName : VOA9
Sample : |1202065140|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 08 12:27:55 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	2342	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935	43	2231	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	13.977	13.977	1.003	112	897	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.131	14.024	1.014	91	2105	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	761	N.D.	
56) o-Xylene	14.570	14.570	1.045	106	392	N.D.	
57) Styrene	14.570	14.570	1.045	104	926	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	14.926	14.926	0.912	105	973	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	15.353	15.353	0.938	156	222	N.D.	
65) n-Propylbenzene	15.353	15.353	0.938	91	1817	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	933	N.D.	
67) 2-Chlorotoluene	15.507	15.507	0.947	126	240	N.D.	
68) 4-Chlorotoluene	15.614	15.614	0.954	91	1556	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972	105	1122	N.D.	
71) sec-Butylbenzene	16.100	16.112	0.983	105	1426	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	1105	N.D.	
73) 1,3-Dichlorobenzene	16.325	16.313	0.997	146	1039	N.D.	
74) 1,4-Dichlorobenzene	16.396	16.408	1.001	146	1120	N.D.	
75) n-Butylbenzene	16.693	16.693	1.020	91	1676	N.D.	
76) 1,2-Dichlorobenzene	16.859	16.859	1.030	146	819	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.910	18.922	1.155	180	864	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	4611	N.D.	
81) 1,2,3-Trichlorobenzene	19.728	19.717	1.205	180	868	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.550	0.000		0	N.D.	
88) Allyl chloride	7.870	7.929	0.730	41	2137	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	8.344	8.332	0.774	53	1483	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	8.997	9.008	0.835	53	207	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.495	9.483	0.881	43	3224	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C105B1.D
Acq On : 8 Mar 2010 11:53 am
Operator : RXY1
InstName : VOA9
Sample : |1202065140|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 08 12:27:55 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

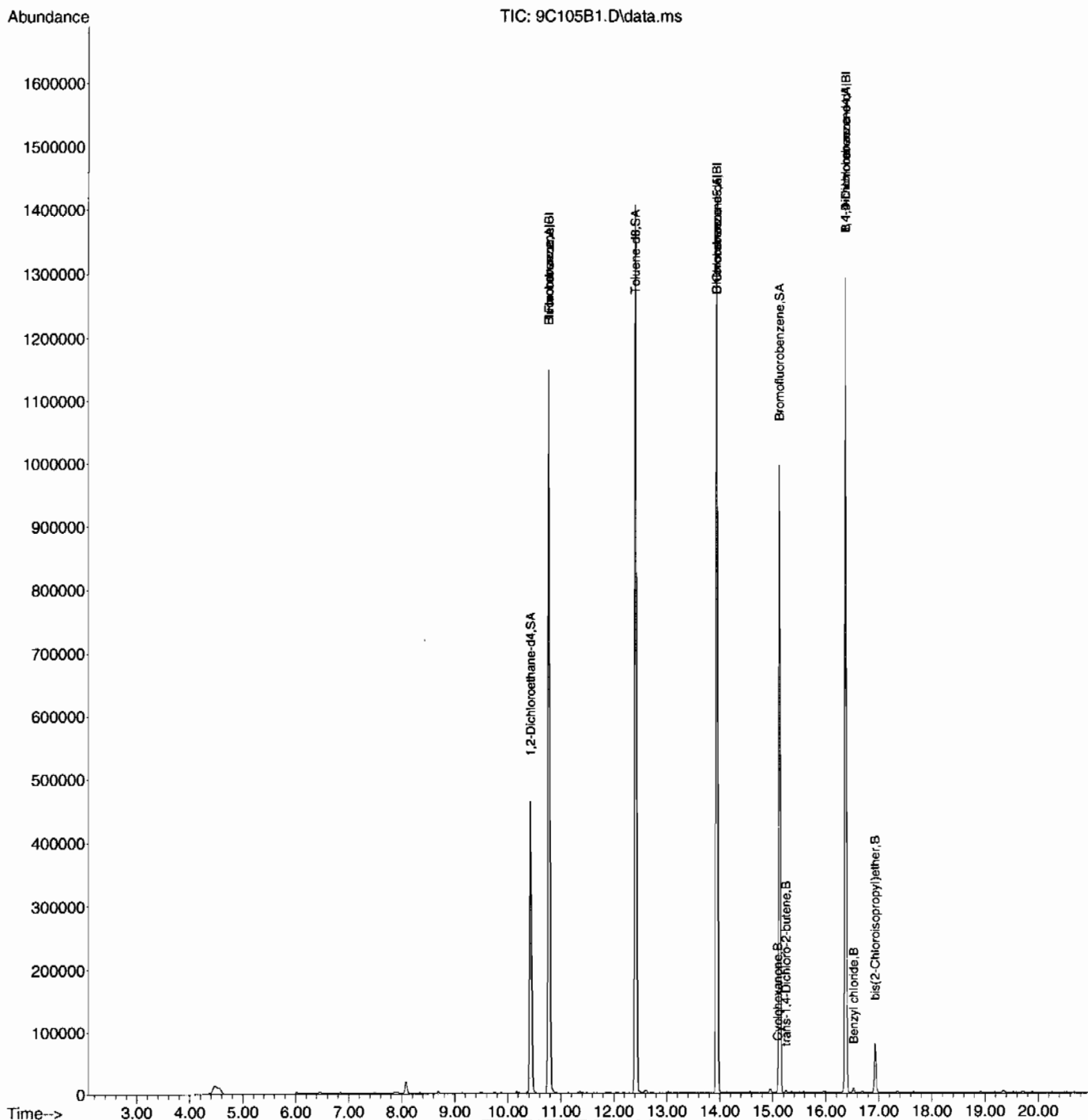
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.589	9.578	0.890	54	191	N.D.	
96) Methacrylonitrile	9.744	9.744	0.904	41	1363	N.D.	
97) Tetrahydrofuran	9.874	9.874	0.916	42	1207	N.D.	
98) Isobutyl alcohol	10.171	10.159	0.944	41	2078	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	11.368	11.368	1.055	69	809	N.D.	
101) 1,4-Dioxane	11.487	11.487	1.066	88	384	N.D.	
102) 2-Nitropropane	11.854	11.854	1.100	43	428	N.D.	
104) Ethyl methacrylate	12.613	12.613	0.905	69	2200	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.961	14.961	0.914	53	1655	N.D.	
108) Cyclohexanone	15.092	15.092	0.922	42	4206	19.92	ug/L # 77
109) trans-1,4-Dichloro-2-b...	15.246	15.246	0.931	53	1950	0.84	ug/L # 65
110) Pentachloroethane	15.957	15.957	0.975	167	566	N.D.	
111) Benzyl chloride	16.527	16.527	1.009	91	8290	1.10	ug/L 88
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034	45	13041	3.09	ug/L 75

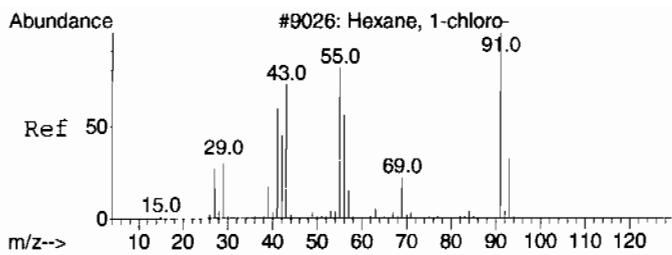
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C105B1.D
Acq On : 8 Mar 2010 11:53 am
Operator : RXY1
InstName : VOA9
Sample : |1202065140|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 5 Sample Multiplier: 1

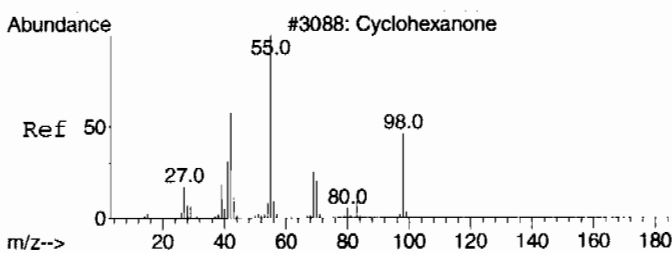
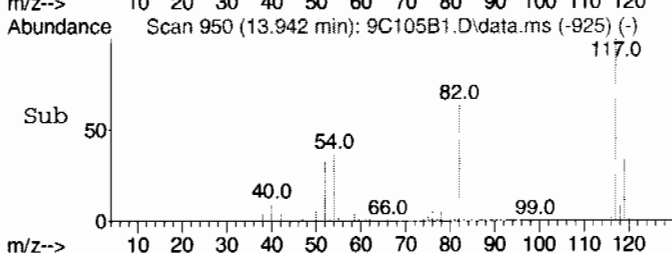
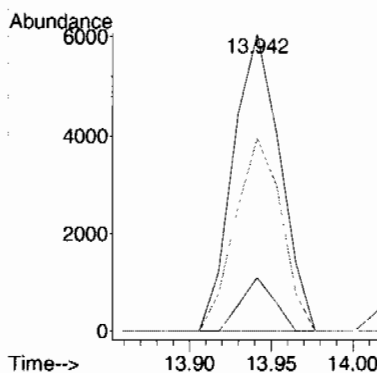
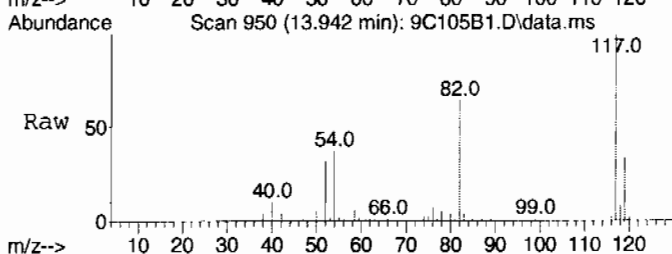
Quant Time: Mar 08 12:27:55 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





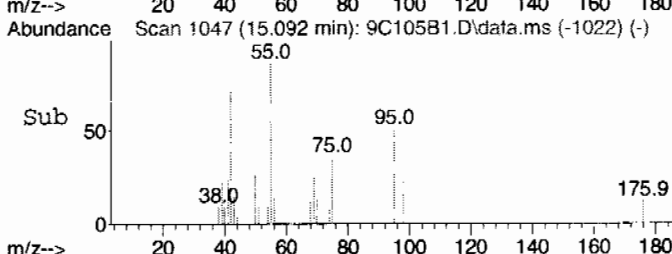
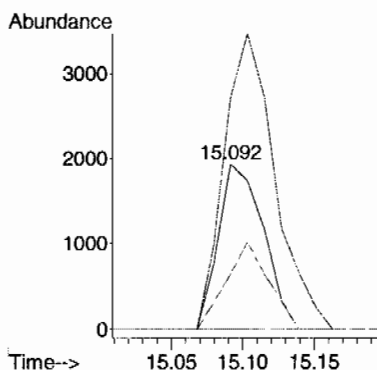
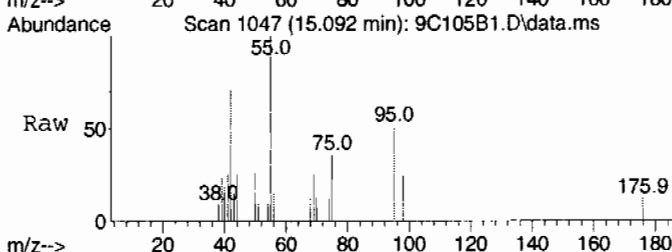
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.76 ug/L
RT: 13.942 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C105B1.D
Acq: 8 Mar 2010 11:53 am

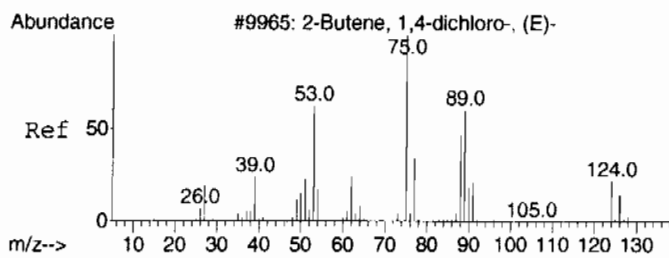
Tgt Ion	Ratio	Lower	Upper
55	100		
91	13.0	74.8	134.8#
56	64.3	31.8	91.8



#108
Cyclohexanone
Concen: 19.92 ug/L
RT: 15.092 min Scan# 1047
Delta R.T. -0.000 min
Lab File: 9C105B1.D
Acq: 8 Mar 2010 11:53 am

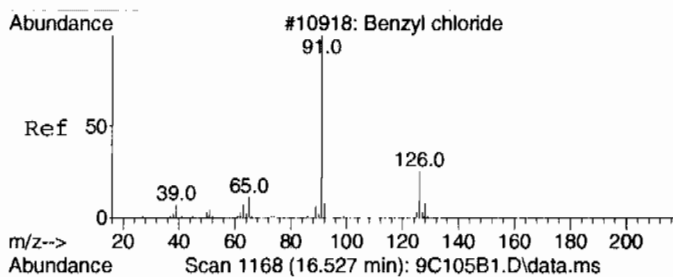
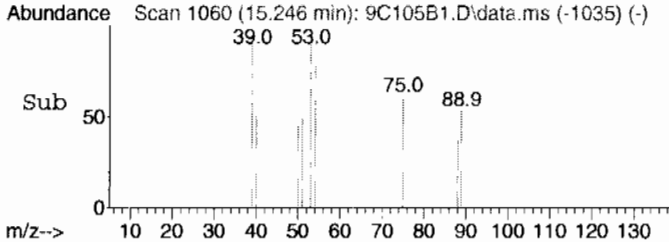
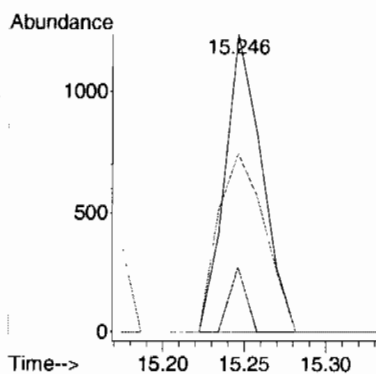
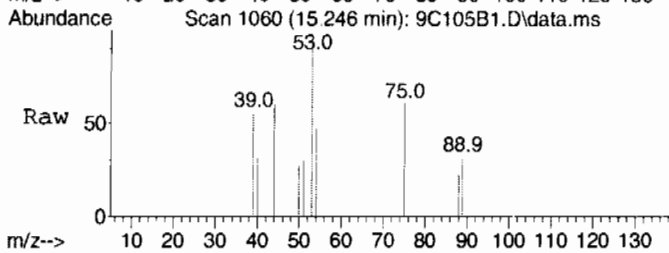
Tgt Ion	Ratio	Lower	Upper
42	100		
55	203.1	135.4	195.4#
98	49.8	25.5	85.5





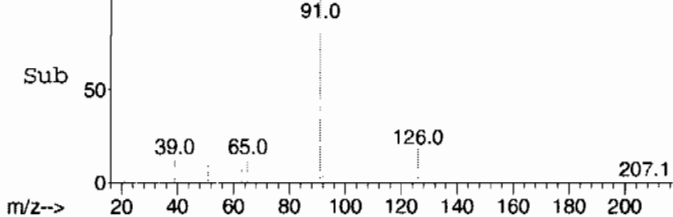
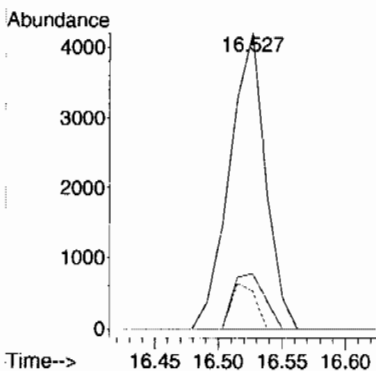
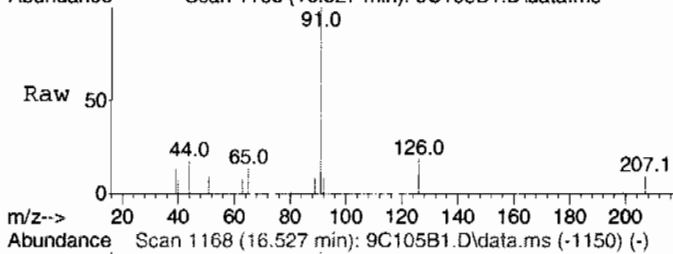
#109
trans-1,4-Dichloro-2-butene
Concen: 0.84 ug/L
RT: 15.246 min Scan# 1060
Delta R.T. -0.000 min
Lab File: 9C105B1.D
Acq: 8 Mar 2010 11:53 am

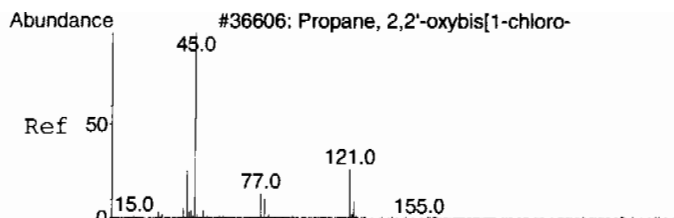
Tgt Ion: 53 Resp: 1950
Ion Ratio Lower Upper
53 100
88 9.9 10.7 70.7#
75 75.9 76.2 136.2#



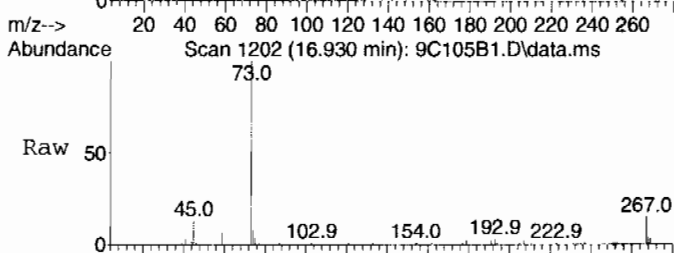
#111
Benzyl chloride
Concen: 1.10 ug/L
RT: 16.527 min Scan# 1168
Delta R.T. -0.000 min
Lab File: 9C105B1.D
Acq: 8 Mar 2010 11:53 am

Tgt Ion: 91 Resp: 8290
Ion Ratio Lower Upper
91 100
126 16.2 0.0 51.4
65 10.0 0.0 45.5

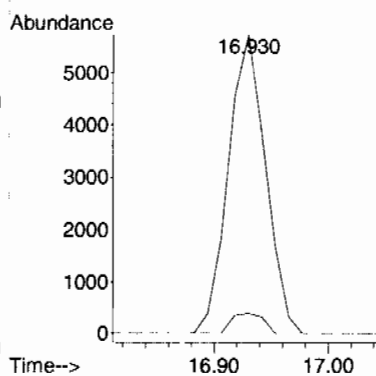
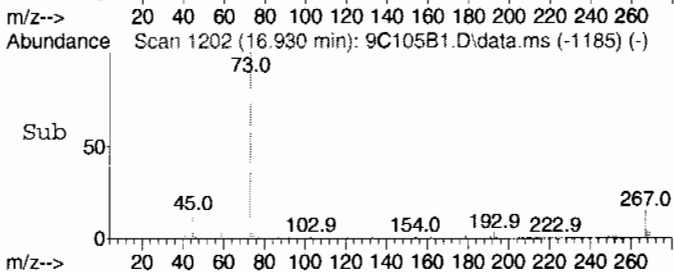




#112
 bis(2-Chloroisopropyl)ether
 Concen: 3.09 ug/L
 RT: 16.930 min Scan# 1202
 Delta R.T. 0.012 min
 Lab File: 9C105B1.D
 Acq: 8 Mar 2010 11:53 am



Tgt Ion: 45 Resp: 13041
 Ion Ratio Lower Upper
 45 100
 121 5.8 0.0 46.4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C105B1.D
Acq On : 8 Mar 2010 11:53 am
Operator : RXY1
Sample : |1202065140|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C105B1.D
Acq On : 8 Mar 2010 11:53 am
Operator : RXY1
Sample : |1202065140|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 1202066320
Client Sample: QC for batch 962616
Client ID: MB for batch 962616
Batch ID: 962617
Run Date: 03/09/2010 12:19
Prep Date: 03/09/2010 10:02
Data File: 030910V99C206B.D

Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: MISC SOLID
Project: QC
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 1202066320
Client Sample: QC for batch 962616
Client ID: MB for batch 962616
Batch ID: 962617
Run Date: 03/09/2010 12:19
Prep Date: 03/09/2010 10:02
Data File: 030910V9\9C206B.D

Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: MISC SOLID
Project: QC
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C206B.D
Acq On : 9 Mar 2010 12:19 pm
Operator : RXY1
InstName : VOA9
Sample : |1202066320|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:59:30 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	954040	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	663075	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	299696	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	954040	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	663075	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	299712	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	342294	53.39	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	106.78%			
43) Toluene-d8	12.412	12.412	0.890	98	833185	48.91	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	97.82%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	366567	50.29	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	100.58%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491	50	318	N.D.		
4) Vinyl chloride	5.546	5.546	0.515	62	459	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.502	7.490	0.696	43	3084	N.D.		
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	7.929	7.858	0.736	41	1027	Below Cal	#	35
13) Methyl acetate	0.000	7.882	0.000		0	N.D.		
14) Carbon disulfide	7.894	7.906	0.733	76	1323	N.D.		
15) Methylene chloride	8.095	8.083	0.751	84	3077	Below Cal		89
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	8.842	8.854	0.821	43	608	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.495	9.483	0.881	43	1188	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	0.000	10.230	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	10.538	10.538	0.978	78	201	N.D.		
32) Cyclohexene	10.775	10.645	1.000	67	184	N.D.		
33) n-Butyl alcohol	10.858	10.846	1.008	56	433	Below Cal	#	49
34) Trichloroethylene	0.000	11.167	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C206B.D
Acq On : 9 Mar 2010 12:19 pm
Operator : RXY1
InstName : VOA9
Sample : |1202066320|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:59:30 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.483	12.483	0.895	91	1158	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935	43	1382	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	13.977	13.977	1.003	112	239	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.131	14.024	1.014	91	975	N.D.	
55) m,p-Xylenes	14.131	14.131	1.014	106	197	N.D.	
56) o-Xylene	0.000	14.570	0.000		0	N.D.	
57) Styrene	14.570	14.570	1.045	104	409	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.353	15.353	0.938	91	482	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	245	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	15.614	15.614	0.954	91	425	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	408	N.D.	
71) sec-Butylbenzene	16.112	16.112	0.984	105	194	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	189	N.D.	
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	215	N.D.	
74) 1,4-Dichlorobenzene	16.396	16.408	1.001	146	521	N.D.	
75) n-Butylbenzene	16.693	16.693	1.020	91	490	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.859	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.910	18.922	1.155	180	381	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	2107	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.550	0.000		0	N.D.	
88) Allyl chloride	7.929	7.929	0.736	41	1027	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.495	9.483	0.881	43	1188	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C206B.D
Acq On : 9 Mar 2010 12:19 pm
Operator : RXY1
InstName : VOA9
Sample : |1202066320|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:59:30 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

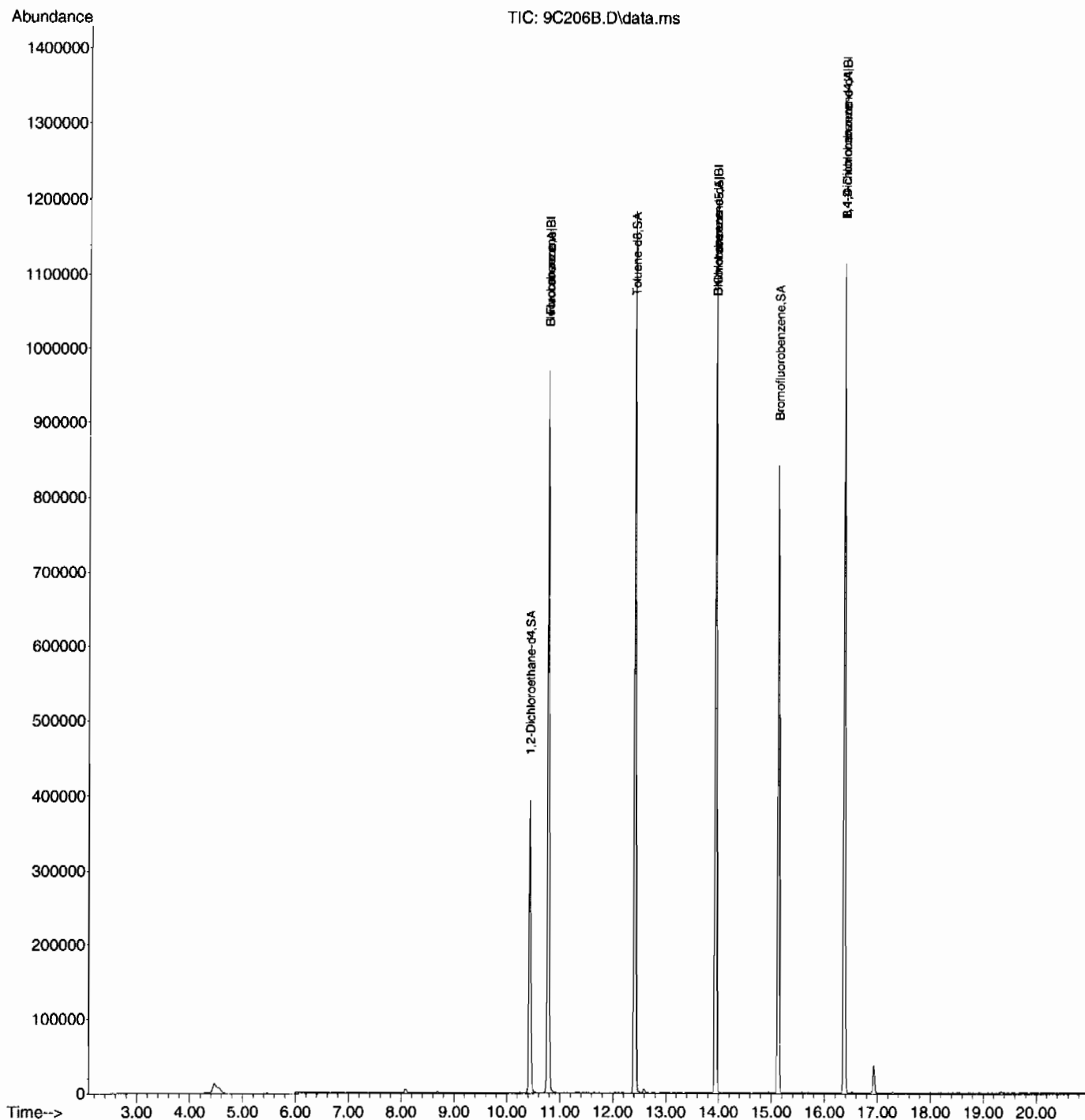
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	0.000	9.744	0.000		0	N.D.	
97) Tetrahydrofuran	9.874	9.874	0.916	42	501	N.D.	
98) Isobutyl alcohol	0.000	10.159	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	12.625	12.613	0.906	69	272	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0	N.D.	
108) Cyclohexanone	15.104	15.092	0.923	42	489	N.D.	
109) trans-1,4-Dichloro-2-b...	15.258	15.246	0.932	53	179	N.D.	
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.527	16.527	1.009	91	1456	N.D.	
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034	45	4378	N.D.	

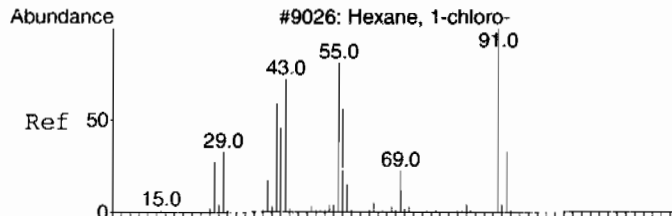
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

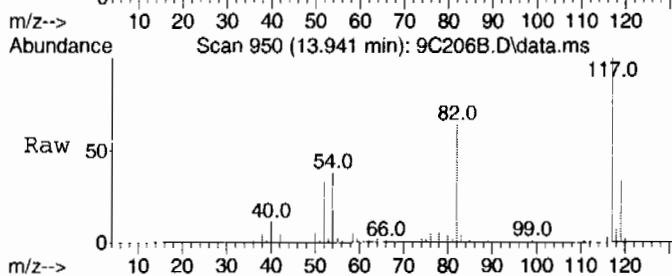
Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C206B.D
Acq On : 9 Mar 2010 12:19 pm
Operator : RXY1
InstName : VOA9
Sample : |1202066320|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:59:30 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



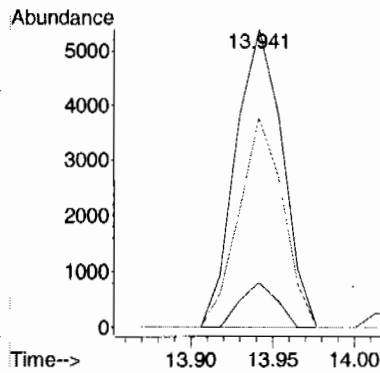
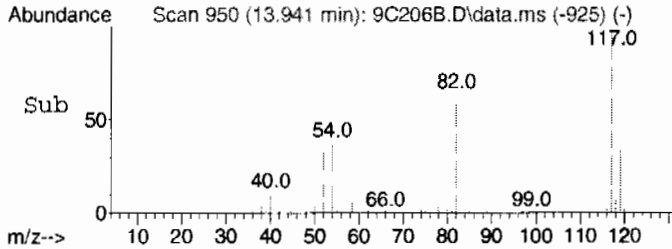


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.82 ug/L
RT: 13.941 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C206B.D
Acq: 9 Mar 2010 12:19 pm



Tgt Ion: 55 Resp: 10733

Ion	Ratio	Lower	Upper
55	100		
91	11.8	74.8	134.8#
56	66.2	31.8	91.8



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C206B.D
Acq On : 9 Mar 2010 12:19 pm
Operator : RXY1
Sample : |1202066320|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C206B.D
Acq On : 9 Mar 2010 12:19 pm
Operator : RXY1
Sample : |1202066320|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 1202068774
 Client Sample: QC for batch 962616
 Client ID: MB for batch 962616
 Batch ID: 962617
 Run Date: 03/10/2010 11:30
 Prep Date: 03/10/2010 09:02
 Data File: 031010V99C306B.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: MISC SOLID
 Project: QC
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 1202068774
Client Sample: QC for batch 962616
Client ID: MB for batch 962616
Batch ID: 962617
Run Date: 03/10/2010 11:30
Prep Date: 03/10/2010 09:02
Data File: 031010V99C306B.D

Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: MISC SOLID
Project: QC
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	16.94	9.48	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C306B.D
Acq On : 10 Mar 2010 11:30 am
Operator : RXY1
InstName : VOA9
Sample : |1202068774|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 10 11:56:18 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.787	10.775	1.000	96	961788	50.00	ug/L	0.01
41) Chlorobenzene-d5	13.941	13.941	1.000	117	674644	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	302630	50.00	ug/L	0.00
82) B Fluorobenzene	10.787	10.775	1.000	96	961788	50.00	ug/L	0.01
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	674644	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	302646	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.967	65	352669	54.57	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	109.14%			
43) Toluene-d8	12.412	12.412	0.890	98	861790	49.72	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	99.44%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	378227	51.38	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	102.76%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491	50	275	N.D.		
4) Vinyl chloride	5.546	5.546	0.514	62	434	N.D.		
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.490	7.490	0.694	43	2260	N.D.		
10) 1,1-Dichloroethylene	0.000	7.502	0.000		0	N.D.		
11) Iodomethane	0.000	7.763	0.000		0	N.D.		
12) Acetonitrile	7.882	7.858	0.731	41	1080	Below Cal	#	1
13) Methyl acetate	0.000	7.882	0.000		0	N.D.		
14) Carbon disulfide	7.893	7.906	0.732	76	1416	N.D.		
15) Methylene chloride	8.083	8.083	0.749	84	3033	Below Cal	#	81
16) tert-Butyl methyl ether	0.000	8.368	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.427	0.000		0	N.D.		
18) Vinyl acetate	8.866	8.854	0.822	43	734	N.D.		
19) 1,1-Dichloroethane	0.000	8.913	0.000		0	N.D.		
20) 2-Butanone	9.494	9.483	0.880	43	1083	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.554	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	0.000	9.850	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	0.000	10.230	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.289	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.514	0.000		0	N.D.		
31) Benzene	10.526	10.538	0.976	78	211	N.D.		
32) Cyclohexene	0.000	10.645	0.000		0	N.D.		
33) n-Butyl alcohol	10.834	10.846	1.004	56	393	Below Cal	#	22
34) Trichloroethylene	0.000	11.167	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.416	0.000		0	N.D.		
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C306B.D
Acq On : 10 Mar 2010 11:30 am
Operator : RXY1
InstName : VOA9
Sample : |1202068774|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 10 11:56:18 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	12.103	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.186	0.000		0	N.D.	
44) Toluene	12.495	12.483	0.896	91	1380	N.D.	
45) trans-1,3-Dichloroprop...	0.000	12.637	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.040	13.028	0.935	43	1117	N.D.	
48) 1,3-Dichloropropane	0.000	13.052	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	13.088	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.503	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.977	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	14.024	0.000		0	N.D.	
54) Ethylbenzene	14.143	14.024	1.014	91	1133	N.D.	
55) m,p-Xylenes	14.143	14.131	1.014	106	444	N.D.	
56) o-Xylene	0.000	14.570	0.000		0	N.D.	
57) Styrene	14.582	14.570	1.046	104	178	N.D.	
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.926	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.198	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	0.000	15.353	0.000		0	N.D.	
65) n-Propylbenzene	15.341	15.353	0.937	91	598	N.D.	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	183	N.D.	
67) 2-Chlorotoluene	0.000	15.507	0.000		0	N.D.	
68) 4-Chlorotoluene	15.613	15.614	0.954	91	688	N.D.	
69) tert-Butylbenzene	0.000	15.874	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	460	N.D.	
71) sec-Butylbenzene	16.100	16.112	0.983	105	470	N.D.	
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	248	N.D.	
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	391	N.D.	
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	524	N.D.	
75) n-Butylbenzene	16.692	16.693	1.020	91	543	N.D.	
76) 1,2-Dichlorobenzene	16.847	16.859	1.029	146	193	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156	180	180	N.D.	
79) Hexachlorobutadiene	0.000	19.088	0.000		0	N.D.	
80) Naphthalene	19.349	19.349	1.182	128	2526	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.717	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	0.000	7.313	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.550	0.000		0	N.D.	
88) Allyl chloride	7.882	7.929	0.731	41	1080	N.D.	
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.	
90) Acrylonitrile	0.000	8.332	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.494	9.483	0.880	43	1083	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C306B.D
Acq On : 10 Mar 2010 11:30 am
Operator : RXY1
InstName : VOA9
Sample : |1202068774|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 10 11:56:18 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

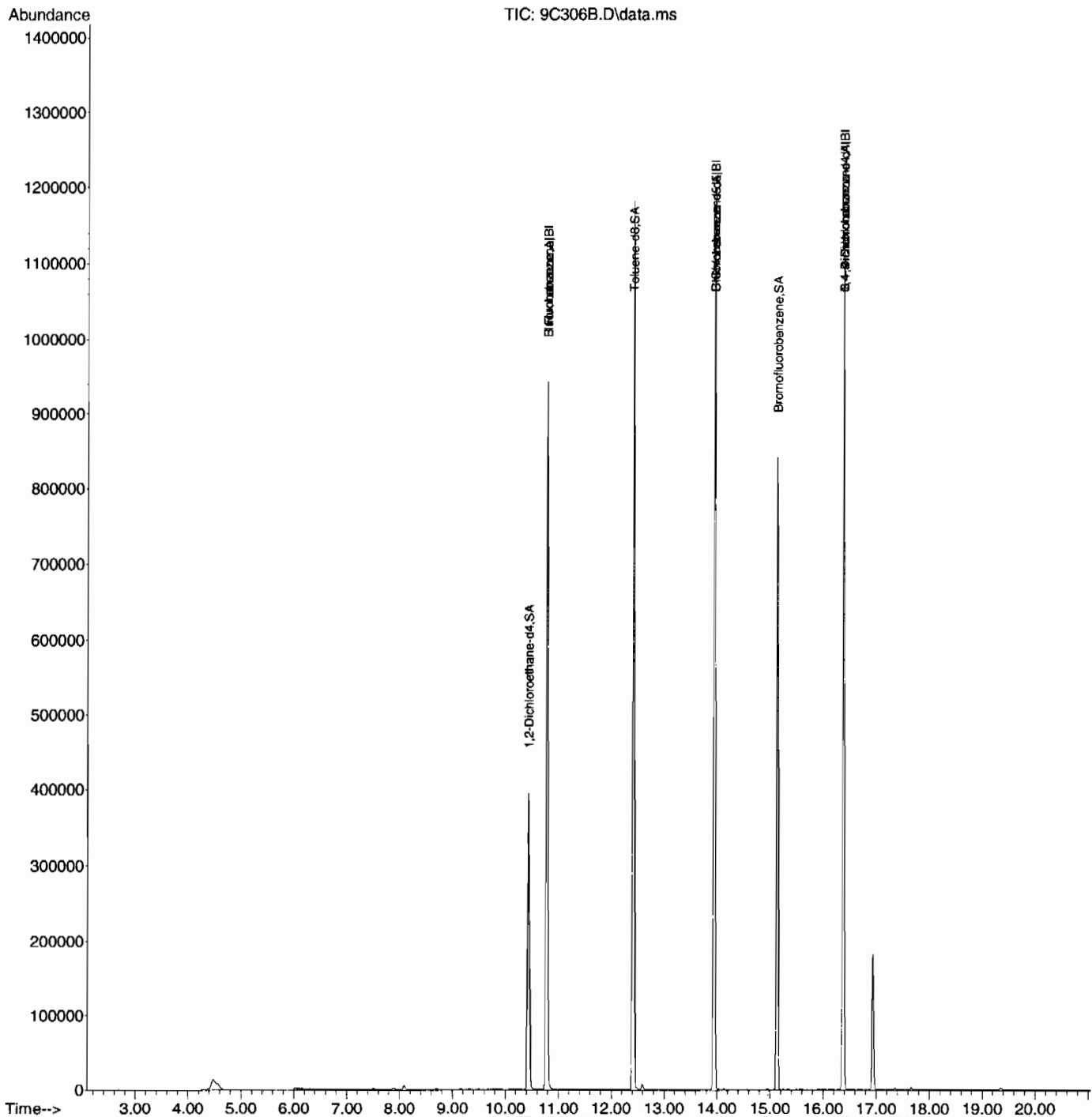
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	9.578	0.000		0	N.D.	
96) Methacrylonitrile	9.874	9.744	0.915	41	200	N.D.	
97) Tetrahydrofuran	9.874	9.874	0.915	42	498	N.D.	
98) Isobutyl alcohol	0.000	10.159	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	10.526	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.368	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.854	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.961	0.000		0	N.D.	
108) Cyclohexanone	15.103	15.092	0.922	42	180	N.D.	
109) trans-1,4-Dichloro-2-b...	15.246	15.246	0.931	53	208	N.D.	
110) Pentachloroethane	0.000	15.957	0.000		0	N.D.	
111) Benzyl chloride	16.526	16.527	1.009	91	1389	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.918	0.000		0m	N.D.	d

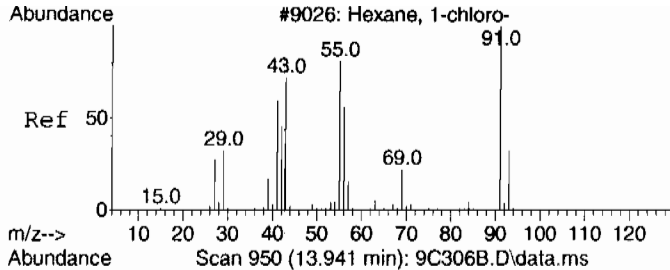
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C306B.D
Acq On : 10 Mar 2010 11:30 am
Operator : RXY1
InstName : VOA9
Sample : |1202068774|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

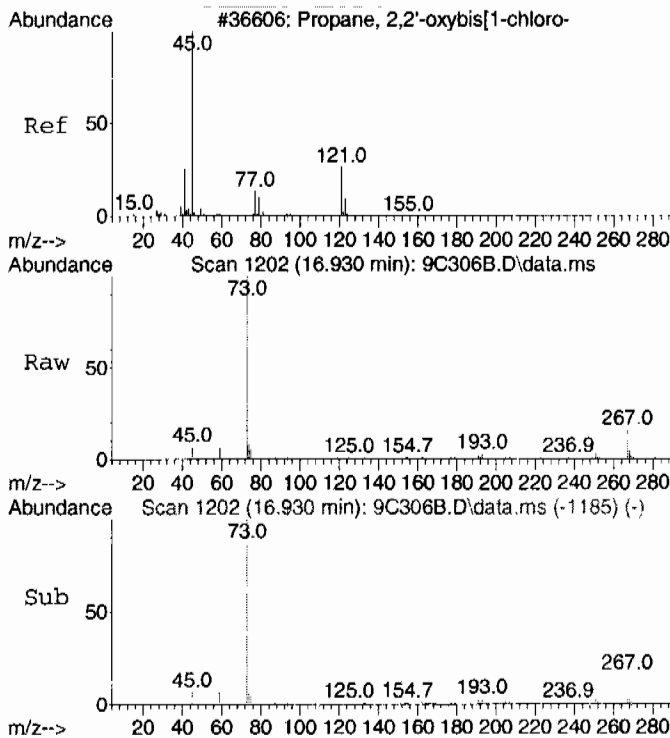
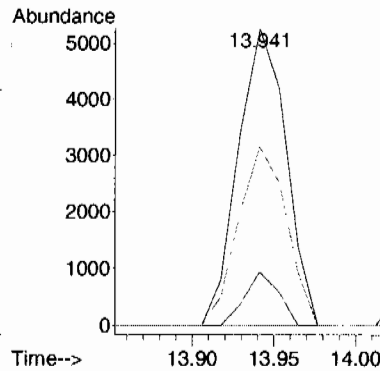
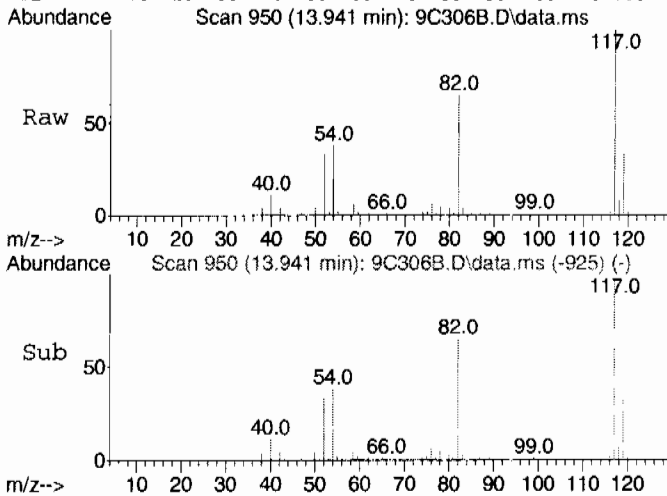
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Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE





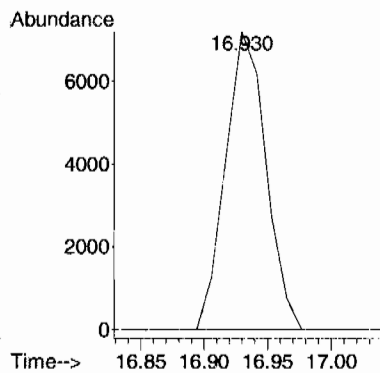
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.80 ug/L
RT: 13.941 min Scan# 950
Delta R.T. 0.118 min
Lab File: 9C306B.D
Acq: 10 Mar 2010 11:30 am

Tgt Ion: 55 Resp: 10724
Ion Ratio Lower Upper
55 100
91 12.7 74.8 134.8#
56 60.4 31.8 91.8



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl) ether
Concen: 4.41 ug/L
RT: 16.930 min Scan# 1202
Delta R.T. 0.012 min
Lab File: 9C306B.D
Acq: 10 Mar 2010 11:30 am

Tgt Ion: 45 Resp: 16009
Ion Ratio Lower Upper
45 100
121 0.0 0.0 46.4



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C306B.D
Acq On : 10 Mar 2010 11:30 am
Operator : RXY1
Sample : |1202068774|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

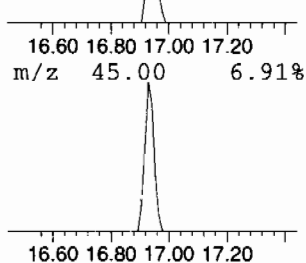
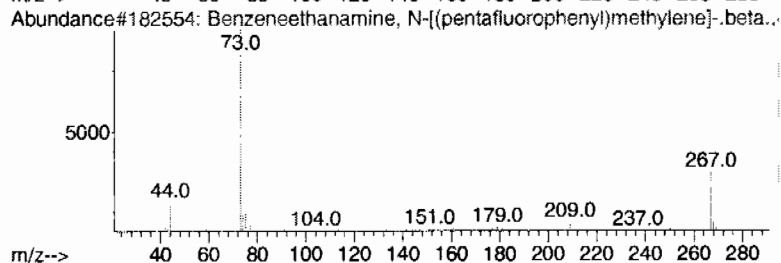
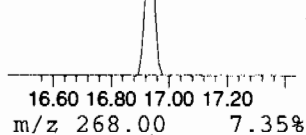
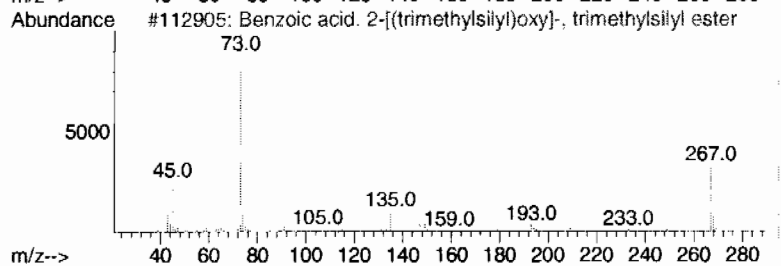
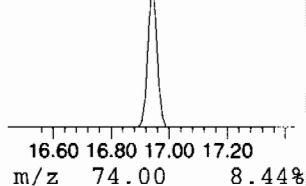
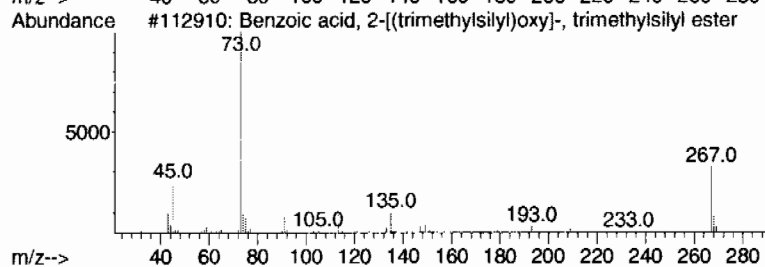
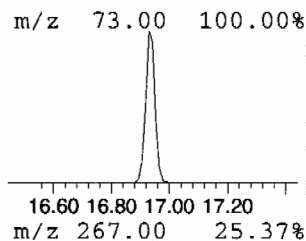
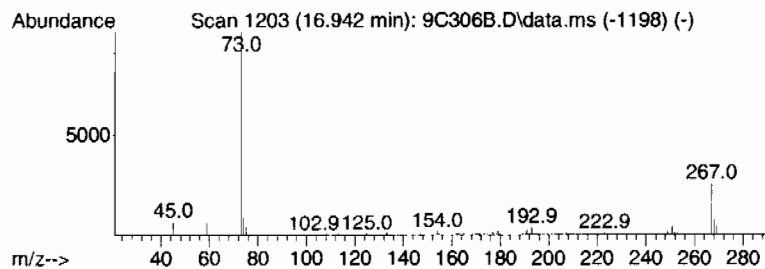
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.942	9.48 ug/L	417718	B 1,4-Dichlorobenzene-d4	16.372

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester	282	C13H22O3Si2	003789-85-3	59
2			Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester	282	C13H22O3Si2	003789-85-3	59
3			Benzenethanamine, N-[(pentafluorophenyl)methylene]-, beta...	475	C21H26F5NO2Si2	055429-85-1	25
4			Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester	282	C13H22O3Si2	003789-85-3	17
5			Cyclopropene, 3,3-diphenyl-1-trimethylsilyl-	264	C18H20Si	173595-34-1	10



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C306B.D
Acq On : 10 Mar 2010 11:30 am
Operator : RXY1
Sample : |1202068774|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown siloxane	16.942	9.5	ug/L	417718	6	16.372	2202590	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 1202065143
 Client Sample: QC for batch 962616
 Client ID: LCS for batch 962616
 Batch ID: 962617
 Run Date: 03/08/2010 10:53
 Prep Date: 03/08/2010 10:00
 Data File: 030810V99C103L1.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		26.6	ug/kg	0.340	1.00
74-87-3	Chloromethane		32.8	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		39.2	ug/kg	0.300	1.00
74-83-9	Bromomethane		39.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		39.8	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		40.5	ug/kg	0.300	1.00
67-64-1	Acetone		181	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		40.9	ug/kg	0.300	1.00
74-88-4	Iodomethane		195	ug/kg	1.60	5.00
75-09-2	Methylene chloride		41.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		209	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		41.0	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		40.6	ug/kg	0.300	1.00
78-93-3	2-Butanone		180	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		41.4	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		45.6	ug/kg	0.300	1.00
67-66-3	Chloroform		39.3	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		40.0	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		42.0	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		41.4	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		43.2	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		39.7	ug/kg	0.300	1.00
71-43-2	Benzene		39.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		40.7	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		40.0	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		40.3	ug/kg	0.300	1.00
74-95-3	Dibromomethane		39.6	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		204	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		41.6	ug/kg	0.300	1.00
108-88-3	Toluene		38.5	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		42.4	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		37.8	ug/kg	0.300	1.00
591-78-6	2-Hexanone		176	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		37.2	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		39.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		41.9	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		39.1	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		39.5	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 1202065143
 Client Sample: QC for batch 962616
 Client ID: LCS for batch 962616
 Batch ID: 962617
 Run Date: 03/08/2010 10:53
 Prep Date: 03/08/2010 10:00
 Data File: 030810V9\9C103L1.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	E	35.3	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		77.5	ug/kg	0.300	2.00
95-47-6	o-Xylene		38.0	ug/kg	0.300	1.00
100-42-5	Styrene		39.4	ug/kg	0.300	1.00
75-25-2	Bromoform		40.2	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		38.0	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		37.3	ug/kg	0.300	1.00
108-86-1	Bromobenzene		37.4	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		36.6	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		38.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		38.4	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		37.5	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		38.2	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		39.6	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		38.9	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		38.7	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		39.6	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		37.6	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		38.3	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		39.6	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		39.0	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		40.5	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		38.7	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C103L1.D
Acq On : 8 Mar 2010 10:53 am
Operator : RXY1
InstName : VOA9
Sample : |1202065143|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01D/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 08 11:18:27 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1180473	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	828834	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	380342	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1180473	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	828834	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	380317	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	383996	48.41	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	96.82%		
43) Toluene-d8	12.412	12.412	0.890	98	1037460	48.72	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	97.44%		
61) Bromofluorobenzene	15.127	15.127	0.924	95	455509	49.24	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	98.48%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.944	4.944	0.459	85	98400	26.58	ug/L	96
3) Chloromethane	5.308	5.308	0.493	50	309146	32.76	ug/L	99
4) Vinyl chloride	5.546	5.546	0.515	62	270609	39.24	ug/L	100
5) Bromomethane	6.186	6.186	0.574	94	181274	39.20	ug/L	98
6) Chloroethane	6.340	6.340	0.588	64	202924	39.82	ug/L	98
7) Trichlorofluoromethane	6.767	6.767	0.628	101	308928	40.49	ug/L	100
8) Ethyl ether	7.099	7.099	0.659	59	271709	40.54	ug/L	94
9) Acetone	7.491	7.490	0.695	43	953940	180.64	ug/L	99
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	439543	40.92	ug/L	97
11) Iodomethane	7.763	7.763	0.720	142	1377550	195.36	ug/L	97
12) Acetonitrile	7.858	7.858	0.729	41	1024996	1071.50	ug/L	99
13) Methyl acetate	7.882	7.882	0.731	43	1159828	215.74	ug/L	97
14) Carbon disulfide	7.906	7.906	0.734	76	3208936	209.32	ug/L	99
15) Methylene chloride	8.083	8.083	0.750	84	258221	41.89	ug/L	89
16) tert-Butyl methyl ether	8.368	8.368	0.777	73	680821	41.33	ug/L	95
17) trans-1,2-Dichloroethy...	8.427	8.427	0.782	61	435331	40.99	ug/L	96
18) Vinyl acetate	8.854	8.854	0.822	43	3262832	215.15	ug/L	97
19) 1,1-Dichloroethane	8.914	8.913	0.827	63	529704	40.55	ug/L	98
20) 2-Butanone	9.483	9.483	0.880	43	1164199	180.09	ug/L	94
21) cis-1,2-Dichloroethylene	9.554	9.554	0.887	61	502409	41.37	ug/L	95
22) 2,2-Dichloropropane	9.578	9.578	0.889	77	345637	45.57	ug/L	97
23) Bromochloromethane	9.827	9.827	0.912	128	107092	39.97	ug/L	# 87
24) Chloroform	9.850	9.850	0.914	83	419393	39.25	ug/L	96
25) 1,1,1-Trichloroethane	10.135	10.135	0.941	97	335932	42.03	ug/L	99
26) Cyclohexane	10.230	10.230	0.949	56	601848	44.19	ug/L	94
27) 1,1-Dichloropropene	10.289	10.289	0.955	75	316480	41.36	ug/L	99
28) Carbon tetrachloride	10.325	10.325	0.958	117	288003	43.24	ug/L	98
30) 1,2-Dichloroethane	10.514	10.514	0.976	62	400953	39.71	ug/L	99
31) Benzene	10.538	10.538	0.978	78	900792	39.70	ug/L	97
32) Cyclohexene	10.645	10.645	0.988	67	492879	40.91	ug/L	91
33) n-Butyl alcohol	10.846	10.846	1.007	56	1087191	4338.00	ug/L	97
34) Trichloroethylene	11.167	11.167	1.036	95	240322	40.72	ug/L	98
35) 1,2-Dichloropropane	11.416	11.416	1.059	63	306070	40.02	ug/L	98
36) Methylcyclohexane	11.416	11.416	1.059	83	402846	41.56	ug/L	91
37) Dibromomethane	11.558	11.558	1.073	93	146899	39.64	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C103L1.D
Acq On : 8 Mar 2010 10:53 am
Operator : RXY1
InstName : VOA9
Sample : |1202065143|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01D/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 08 11:18:27 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	11.653	11.665	1.081	83	325173	40.25 ug/L	99
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101	63	904708	220.59 ug/L	97
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123	75	399641	41.56 ug/L	99
42) 4-Methyl-2-pentanone	12.186	12.186	0.874	58	692117	203.53 ug/L	91
44) Toluene	12.483	12.483	0.895	91	926291	38.47 ug/L	97
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906	75	376343	42.42 ug/L	99
46) 1,1,2-Trichloroethane	12.862	12.862	0.923	83	179045	37.78 ug/L	100
47) 2-Hexanone	13.028	13.028	0.935	43	1641325	176.31 ug/L	97
48) 1,3-Dichloropropane	13.052	13.052	0.936	76	352876	37.21 ug/L	100
49) Tetrachloroethylene	13.076	13.088	0.938	164	137019	39.64 ug/L	98
50) Dibromochloromethane	13.325	13.325	0.956	129	222345	41.87 ug/L	99
51) 1,2-Dibromoethane	13.503	13.503	0.969	107	206550	39.07 ug/L	99
52) Chlorobenzene	13.977	13.977	1.003	112	591648	39.45 ug/L	99
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006	131	203843	40.49 ug/L	99
54) Ethylbenzene	14.025	14.024	1.006	91	1048897	35.34 ug/L	98 E
55) m,p-Xylenes	14.131	14.131	1.014	106	777480	77.53 ug/L	91
56) o-Xylene	14.570	14.570	1.045	106	394036	38.03 ug/L	91
57) Styrene	14.570	14.570	1.045	104	656847	39.35 ug/L	98
59) Bromoform	14.855	14.855	0.907	173	118002	40.15 ug/L	100
60) Isopropylbenzene	14.926	14.926	0.912	105	1024757	38.40 ug/L	98
62) 1,1,2,2-Tetrachloroethane	15.199	15.198	0.928	83	289532	37.95 ug/L	100
63) 1,2,3-Trichloropropane	15.293	15.293	0.934	110	68708	37.34 ug/L #	91
64) Bromobenzene	15.353	15.353	0.938	156	214795	37.35 ug/L	100
65) n-Propylbenzene	15.353	15.353	0.938	91	1284039	36.58 ug/L	98
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	858880	37.51 ug/L	97
67) 2-Chlorotoluene	15.507	15.507	0.947	126	248285	38.26 ug/L	94
68) 4-Chlorotoluene	15.614	15.614	0.954	91	841335	38.23 ug/L	100
69) tert-Butylbenzene	15.874	15.874	0.970	134	170360	39.55 ug/L	91
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	899230	38.90 ug/L	96
71) sec-Butylbenzene	16.100	16.112	0.983	105	1177768	38.74 ug/L	98
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	935026	39.56 ug/L	99
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	444310	37.58 ug/L	100
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	435710	38.25 ug/L	99
75) n-Butylbenzene	16.693	16.693	1.020	91	1021520	39.57 ug/L	97
76) 1,2-Dichlorobenzene	16.859	16.859	1.030	146	437595	38.71 ug/L	99
77) 1,2-Dibromo-3-chloropr...	17.784	17.784	1.086	157	45171	39.02 ug/L	99
78) 1,2,4-Trichlorobenzene	18.910	18.922	1.155	180	292363	40.75 ug/L	100
79) Hexachlorobutadiene	19.088	19.088	1.166	225	137435	40.57 ug/L	99
80) Naphthalene	19.349	19.349	1.182	128	776893	39.92 ug/L	100
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204	180	260453	41.40 ug/L	99
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	7.230	7.313	0.671		0m	N.D. d	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.491	7.550	0.695		0m	N.D. d	
88) Allyl chloride	7.858	7.929	0.729		0m	N.D. d	
89) tert-Butyl Alcohol	8.072	8.060	0.749		0m	N.D. d	
90) Acrylonitrile	8.368	8.332	0.777		0m	N.D. d	
91) Isopropyl ether	8.854	8.866	0.822		0m	N.D. d	
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836		0m	N.D. d	
93) Ethyl tert-butyl ether	9.281	9.269	0.861		0m	N.D. d	
94) Ethyl acetate	9.483	9.483	0.880		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C103L1.D
Acq On : 8 Mar 2010 10:53 am
Operator : RXY1
InstName : VOA9
Sample : |1202065143|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01D/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 08 11:18:27 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.483	9.578	0.880		0m	N.D.	d
96) Methacrylonitrile	9.744	9.744	0.904		0m	N.D.	d
97) Tetrahydrofuran	9.922	9.874	0.921		0m	N.D.	d
98) Isobutyl alcohol	10.230	10.159	0.949		0m	N.D.	d
99) Methyl tert-amyl ether	10.538	10.526	0.978		0m	N.D.	d
100) Methyl methacrylate	11.416	11.368	1.059		0m	N.D.	d
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	11.866	11.854	1.101		0m	N.D.	d
104) Ethyl methacrylate	12.613	12.613	0.905		0m	N.D.	d
106) 1-Chlorohexane	13.942	13.823	0.852		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.926	14.961	0.912		0m	N.D.	d
108) Cyclohexanone	15.092	15.092	0.922		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.341	15.246	0.937		0m	N.D.	d
110) Pentachloroethane	15.957	15.957	0.975		0m	N.D.	d
111) Benzyl chloride	16.527	16.527	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034		0m	N.D.	d

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

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Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C103L1.D
Acq On    : 8 Mar 2010 10:53 am
Operator  : RXY1
InstName  : VOA9
Sample    : |1202065143|962617|1|VOA|1|VOA8260BS|
Misc      : GEL 5g n/a MIX[A]0220-01D/0308-01SOIL
ALS Vial  : 3 Sample Multiplier: 1

```

[illegible]

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 1202065144
 Client Sample: QC for batch 962616
 Client ID: LCS for batch 962616
 Batch ID: 962617
 Run Date: 03/08/2010 11:23
 Prep Date: 03/08/2010 10:01
 Data File: 030810V99C104L1.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 1202065144
 Client Sample: QC for batch 962616
 Client ID: LCS for batch 962616
 Batch ID: 962617
 Run Date: 03/08/2010 11:23
 Prep Date: 03/08/2010 10:01
 Data File: 030810V99C104L1.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		294	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C104L1.D
Acq On : 8 Mar 2010 11:23 am
Operator : RXY1
InstName : VOA9
Sample : |1202065144|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 08 11:50:06 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1155144	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	808706	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	368433	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1155144	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	808706	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	368409	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	385507	49.66	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 99.32%			
43) Toluene-d8	12.412	12.412	0.890	98	1034028	49.76	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 99.52%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	436679	48.73	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 97.46%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491		0m	N.D.	d	
4) Vinyl chloride	5.532	5.546	0.513		0m	N.D.	d	
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.479	7.490	0.694		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.467	7.502	0.693		0m	N.D.	d	
11) Iodomethane	7.751	7.763	0.719		0m	N.D.	d	
12) Acetonitrile	7.929	7.858	0.736		0m	N.D.	d	
13) Methyl acetate	7.882	7.882	0.731		0m	N.D.	d	
14) Carbon disulfide	7.929	7.906	0.736		0m	N.D.	d	
15) Methylene chloride	8.083	8.083	0.750		0m	N.D.	d	
16) tert-Butyl methyl ether	8.368	8.368	0.777		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.404	8.427	0.780		0m	N.D.	d	
18) Vinyl acetate	8.854	8.854	0.822		0m	N.D.	d	
19) 1,1-Dichloroethane	8.913	8.913	0.827		0m	N.D.	d	
20) 2-Butanone	9.483	9.483	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.483	9.554	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	9.862	9.850	0.915		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.170	10.230	0.944		0m	N.D.	d	
27) 1,1-Dichloropropene	10.289	10.289	0.955		0m	N.D.	d	
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.514	10.514	0.976		0m	N.D.	d	
31) Benzene	10.538	10.538	0.978		0m	N.D.	d	
32) Cyclohexene	10.657	10.645	0.989		0m	N.D.	d	
33) n-Butyl alcohol	10.846	10.846	1.007		0m	N.D.	d	
34) Trichloroethylene	11.167	11.167	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	11.368	11.416	1.055		0m	N.D.	d	
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C104L1.D
Acq On : 8 Mar 2010 11:23 am
Operator : RXY1
InstName : VOA9
Sample : |1202065144|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 08 11:50:06 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.653	11.665	1.081		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123		0m	N.D.	d	
42) 4-Methyl-2-pentanone	12.186	12.186	0.874		0m	N.D.	d	
44) Toluene	12.483	12.483	0.895		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906		0m	N.D.	d	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.		
47) 2-Hexanone	13.028	13.028	0.935		0m	N.D.	d	
48) 1,3-Dichloropropane	13.088	13.052	0.939		0m	N.D.	d	
49) Tetrachloroethylene	13.076	13.088	0.938		0m	N.D.	d	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.		
51) 1,2-Dibromoethane	13.503	13.503	0.969		0m	N.D.	d	
52) Chlorobenzene	13.977	13.977	1.003		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006		0m	N.D.	d	
54) Ethylbenzene	14.025	14.024	1.006		0m	N.D.	d	
55) m,p-Xylenes	14.131	14.131	1.014		0m	N.D.	d	
56) o-Xylene	14.582	14.570	1.046		0m	N.D.	d	
57) Styrene	14.570	14.570	1.045		0m	N.D.	d	
59) Bromoform	0.000	14.855	0.000		0	N.D.		
60) Isopropylbenzene	14.926	14.926	0.912		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	15.246	15.198	0.931		0m	N.D.	d	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.		
64) Bromobenzene	15.353	15.353	0.938		0m	N.D.	d	
65) n-Propylbenzene	15.353	15.353	0.938		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946		0m	N.D.	d	
67) 2-Chlorotoluene	15.602	15.507	0.953		0m	N.D.	d	
68) 4-Chlorotoluene	15.614	15.614	0.954		0m	N.D.	d	
69) tert-Butylbenzene	15.874	15.874	0.970		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972		0m	N.D.	d	
71) sec-Butylbenzene	16.100	16.112	0.983		0m	N.D.	d	
72) 4-Isopropyltoluene	16.230	16.230	0.991		0m	N.D.	d	
73) 1,3-Dichlorobenzene	16.313	16.313	0.996		0m	N.D.	d	
74) 1,4-Dichlorobenzene	16.408	16.408	1.002		0m	N.D.	d	
75) n-Butylbenzene	16.693	16.693	1.020		0m	N.D.	d	
76) 1,2-Dichlorobenzene	16.847	16.859	1.029		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156		0m	N.D.	d	
79) Hexachlorobutadiene	19.088	19.088	1.166		0m	N.D.	d	
80) Naphthalene	19.349	19.349	1.182		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204		0m	N.D.	d	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.		
85) Acrolein	7.313	7.313	0.679	56	337931	286.26	ug/L	98
86) Trichlorotrifluoroethane	7.467	7.467	0.693	85	514165	293.70	ug/L	97
87) Isopropyl Alcohol	0.000	7.550	0.000		0m	N.D.	d	
88) Allyl chloride	7.929	7.929	0.736	41	3059158	268.75	ug/L	97
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.		
90) Acrylonitrile	8.332	8.332	0.773	53	825060	267.70	ug/L	98
91) Isopropyl ether	9.008	8.866	0.836	45	366	N.D.		
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836	53	668180	65.81	ug/L	94
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.		
94) Ethyl acetate	9.483	9.483	0.880	43	1786124	233.55	ug/L	95

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C104L1.D
Acq On : 8 Mar 2010 11:23 am
Operator : RXY1
InstName : VOA9
Sample : |1202065144|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 08 11:50:06 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

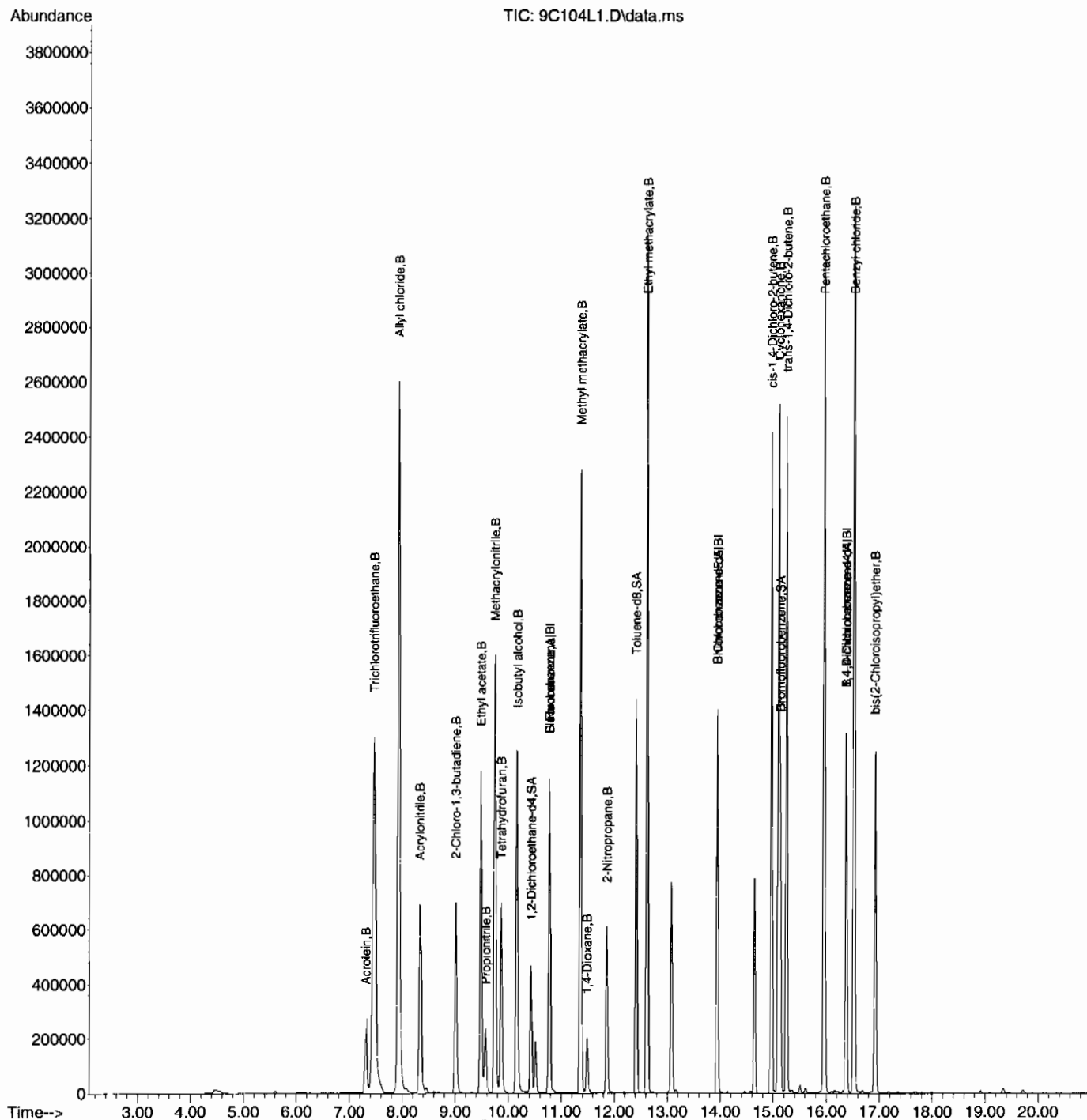
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	9.578	9.578	0.889	54	314088	263.00	ug/L	99
96) Methacrylonitrile	9.744	9.744	0.904	41	1154448	247.65	ug/L	98
97) Tetrahydrofuran	9.874	9.874	0.916	42	651614	254.23	ug/L	94
98) Isobutyl alcohol	10.170	10.159	0.944	41	715406	2477.94	ug/L	94
99) Methyl tert-amyl ether	10.526	10.526	0.977	73	453	N.D.		
100) Methyl methacrylate	11.368	11.368	1.055	69	951075	250.99	ug/L	87
101) 1,4-Dioxane	11.487	11.487	1.066	88	147353	2382.76	ug/L	96
102) 2-Nitropropane	11.866	11.854	1.101	43	581192	315.84	ug/L	99
104) Ethyl methacrylate	12.613	12.613	0.905	69	1747371	245.59	ug/L	91
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d	
107) cis-1,4-Dichloro-2-butene	14.961	14.961	0.914	53	796111	311.09	ug/L	98
108) Cyclohexanone	15.104	15.092	0.923	42	954514	4313.14	ug/L	94 E
109) trans-1,4-Dichloro-2-b...	15.246	15.246	0.931	53	743153	306.63	ug/L	93
110) Pentachloroethane	15.957	15.957	0.975	167	618695	422.36	ug/L	95
111) Benzyl chloride	16.527	16.527	1.009	91	2991949	379.00	ug/L	98
112) bis(2-Chloroisopropyl)...	16.918	16.918	1.033	45	1220230	275.87	ug/L	96

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030810V9\
Data File : 9C104L1.D
Acq On : 8 Mar 2010 11:23 am
Operator : RXY1
InstName : VOA9
Sample : |1202065144|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 08 11:50:06 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154

Lab Sample ID: 1202066321

Client Sample: QC for batch 962616

Client ID: LCS for batch 962616

Batch ID: 962617

Run Date: 03/09/2010 10:52

Prep Date: 03/09/2010 10:00

Data File: 030910V99C203LD

Client: LANL010

Method: SW846 8260B

Inst: VOA9.I

Analyst: RXY1

Aliquot: 5 g

Column: DB-624

Matrix: MISC SOLID

Project: QC

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		43.8	ug/kg	0.340	1.00
74-87-3	Chloromethane		39.3	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		45.2	ug/kg	0.300	1.00
74-83-9	Bromomethane		43.5	ug/kg	0.300	1.00
75-00-3	Chloroethane		44.7	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		48.5	ug/kg	0.300	1.00
67-64-1	Acetone		198	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		45.8	ug/kg	0.300	1.00
74-88-4	Iodomethane		214	ug/kg	1.60	5.00
75-09-2	Methylene chloride		43.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		237	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		44.6	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		43.3	ug/kg	0.300	1.00
78-93-3	2-Butanone		203	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		43.9	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		50.7	ug/kg	0.300	1.00
67-66-3	Chloroform		42.5	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		42.8	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		48.0	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		46.0	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		48.6	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		43.2	ug/kg	0.300	1.00
71-43-2	Benzene		42.4	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		44.3	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		42.4	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		43.5	ug/kg	0.300	1.00
74-95-3	Dibromomethane		42.3	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		225	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		43.9	ug/kg	0.300	1.00
108-88-3	Toluene		41.9	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		45.8	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		40.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone		201	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		39.9	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		43.4	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		44.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		41.7	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		41.5	ug/kg	0.300	1.00

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
 Lab Sample ID: 1202066321
 Client Sample: QC for batch 962616
 Client ID: LCS for batch 962616
 Batch ID: 962617
 Run Date: 03/09/2010 10:52
 Prep Date: 03/09/2010 10:00
 Data File: 030910V99C203L.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: MISC SOLID
 Project: QC
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	E	38.4	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		82.8	ug/kg	0.300	2.00
95-47-6	o-Xylene		40.4	ug/kg	0.300	1.00
100-42-5	Styrene		41.6	ug/kg	0.300	1.00
75-25-2	Bromoform		44.6	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		42.2	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		44.3	ug/kg	0.300	1.00
108-86-1	Bromobenzene		39.5	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		40.1	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		41.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		42.3	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		40.7	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		41.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		43.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		42.3	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		42.5	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		43.2	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		40.8	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		41.1	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		43.5	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		44.5	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		43.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		40.9	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C203L.D
Acq On : 9 Mar 2010 10:52 am
Operator : RXY1
InstName : VOA9
Sample : |1202066321|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01E/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 11:25:40 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.775	10.775	1.000	96	989146	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	687807	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	314137	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	989146	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	687807	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	314113	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	342003	51.45	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	102.90%			
43) Toluene-d8	12.412	12.412	0.890	98	890224	50.37	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	100.74%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	390065	51.05	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	102.10%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.944	4.944	0.459	85	135768	43.76	ug/L	97
3) Chloromethane	5.294	5.308	0.491	50	310482	39.27	ug/L	100
4) Vinyl chloride	5.546	5.546	0.515	62	261240	45.21	ug/L	98
5) Bromomethane	6.186	6.186	0.574	94	168728	43.54	ug/L	98
6) Chloroethane	6.340	6.340	0.588	64	191052	44.74	ug/L	99
7) Trichlorofluoromethane	6.755	6.767	0.627	101	310112	48.50	ug/L	99
8) Ethyl ether	7.099	7.099	0.659	59	240466	42.82	ug/L	92
9) Acetone	7.490	7.490	0.695	43	876755	198.14	ug/L	96
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	412532	45.84	ug/L	97
11) Iodomethane	7.763	7.763	0.720	142	1263015	213.76	ug/L	95
12) Acetonitrile	7.858	7.858	0.729	41	1042207	1307.67	ug/L	100
13) Methyl acetate	7.882	7.882	0.731	43	1119802	249.34	ug/L	96
14) Carbon disulfide	7.894	7.906	0.733	76	3041726	236.79	ug/L	99
15) Methylene chloride	8.083	8.083	0.750	84	226145	43.88	ug/L	87
16) tert-Butyl methyl ether	8.368	8.368	0.777	73	615622	44.60	ug/L	96
17) trans-1,2-Dichloroethy...	8.427	8.427	0.782	61	396840	44.59	ug/L	95
18) Vinyl acetate	8.854	8.854	0.822	43	3090428	243.19	ug/L	96
19) 1,1-Dichloroethane	8.914	8.913	0.827	63	474124	43.31	ug/L	98
20) 2-Butanone	9.483	9.483	0.880	43	1098916	202.88	ug/L	93
21) cis-1,2-Dichloroethylene	9.542	9.554	0.886	61	446695	43.89	ug/L	94
22) 2,2-Dichloropropane	9.578	9.578	0.889	77	321957	50.66	ug/L	94
23) Bromochloromethane	9.827	9.827	0.912	128	95983	42.75	ug/L	# 87
24) Chloroform	9.850	9.850	0.914	83	380081	42.46	ug/L	95
25) 1,1,1-Trichloroethane	10.135	10.135	0.941	97	321200	47.96	ug/L	98
26) Cyclohexane	10.230	10.230	0.949	56	565761	49.57	ug/L	93
27) 1,1-Dichloropropene	10.289	10.289	0.955	75	295035	46.02	ug/L	96
28) Carbon tetrachloride	10.325	10.325	0.958	117	271425	48.64	ug/L	100
30) 1,2-Dichloroethane	10.514	10.514	0.976	62	365375	43.19	ug/L	99
31) Benzene	10.538	10.538	0.978	78	806036	42.39	ug/L	97
32) Cyclohexene	10.645	10.645	0.988	67	458486	45.41	ug/L	90
33) n-Butyl alcohol	10.846	10.846	1.007	56	1082571	5184.33	ug/L	94
34) Trichloroethylene	11.167	11.167	1.036	95	219045	44.29	ug/L	98
35) 1,2-Dichloropropane	11.416	11.416	1.059	63	271619	42.39	ug/L	99
36) Methylcyclohexane	11.404	11.416	1.058	83	370278	45.59	ug/L	90
37) Dibromomethane	11.558	11.558	1.073	93	131324	42.29	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C203L.D
Acq On : 9 Mar 2010 10:52 am
Operator : RXY1
InstName : VOA9
Sample : |1202066321|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01E/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 11:25:40 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	11.653	11.665	1.081	83	294692	43.53 ug/L	99
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101	63	765225	222.67 ug/L	97
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123	75	353424	43.87 ug/L	95
42) 4-Methyl-2-pentanone	12.186	12.186	0.874	58	635204	225.10 ug/L	85
44) Toluene	12.483	12.483	0.895	91	837328	41.90 ug/L	97
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906	75	337335	45.82 ug/L	98
46) 1,1,2-Trichloroethane	12.862	12.862	0.923	83	159657	40.60 ug/L	100
47) 2-Hexanone	13.028	13.028	0.935	43	1549229	200.54 ug/L	93
48) 1,3-Dichloropropane	13.052	13.052	0.936	76	313645	39.85 ug/L	94
49) Tetrachloroethylene	13.076	13.088	0.938	164	124493	43.40 ug/L	97
50) Dibromochloromethane	13.325	13.325	0.956	129	196597	44.68 ug/L	99
51) 1,2-Dibromoethane	13.503	13.503	0.969	107	182879	41.69 ug/L	100
52) Chlorobenzene	13.977	13.977	1.003	112	516093	41.47 ug/L	100
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006	131	179851	43.05 ug/L	99
54) Ethylbenzene	14.025	14.024	1.006	91	944526	38.35 ug/L	96 E
55) m,p-Xylenes	14.131	14.131	1.014	106	688676	82.76 ug/L	88
56) o-Xylene	14.570	14.570	1.045	106	347374	40.40 ug/L	87
57) Styrene	14.570	14.570	1.045	104	575736	41.56 ug/L	97
59) Bromoform	14.843	14.855	0.907	173	108088	44.60 ug/L	100
60) Isopropylbenzene	14.926	14.926	0.912	105	931227	42.25 ug/L	97
62) 1,1,2,2-Tetrachloroethane	15.198	15.198	0.928	83	265821	42.19 ug/L	99
63) 1,2,3-Trichloropropane	15.293	15.293	0.934	110	67266	44.27 ug/L #	97
64) Bromobenzene	15.353	15.353	0.938	156	187699	39.52 ug/L	98
65) n-Propylbenzene	15.353	15.353	0.938	91	1162343	40.10 ug/L	96
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	769183	40.67 ug/L	96
67) 2-Chlorotoluene	15.507	15.507	0.947	126	221363	41.30 ug/L	93
68) 4-Chlorotoluene	15.602	15.614	0.953	91	751354	41.34 ug/L	98
69) tert-Butylbenzene	15.874	15.874	0.970	134	154696	43.48 ug/L	91
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	808125	42.33 ug/L	94
71) sec-Butylbenzene	16.100	16.112	0.983	105	1067529	42.52 ug/L	98
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	843912	43.23 ug/L	98
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	398058	40.76 ug/L	98
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	386508	41.08 ug/L	99
75) n-Butylbenzene	16.693	16.693	1.020	91	926622	43.45 ug/L	96
76) 1,2-Dichlorobenzene	16.859	16.859	1.030	146	381470	40.86 ug/L	99
77) 1,2-Dibromo-3-chloropr...	17.784	17.784	1.086	157	42508	44.48 ug/L	98
78) 1,2,4-Trichlorobenzene	18.910	18.922	1.155	180	255588	43.14 ug/L	99
79) Hexachlorobutadiene	19.088	19.088	1.166	225	122597	43.82 ug/L	99
80) Naphthalene	19.349	19.349	1.182	128	719236	44.75 ug/L	99
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204	180	234180	45.07 ug/L	99
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	7.241	7.313	0.672		0m	N.D. d	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.	
87) Isopropyl Alcohol	7.562	7.550	0.702		0m	N.D. d	
88) Allyl chloride	7.858	7.929	0.729		0m	N.D. d	
89) tert-Butyl Alcohol	8.048	8.060	0.747		0m	N.D. d	
90) Acrylonitrile	8.368	8.332	0.777		0m	N.D. d	
91) Isopropyl ether	8.854	8.866	0.822		0m	N.D. d	
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836		0m	N.D. d	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.483	9.483	0.880		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C203L.D
Acq On : 9 Mar 2010 10:52 am
Operator : RXY1
InstName : VOA9
Sample : |1202066321|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01E/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 11:25:40 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

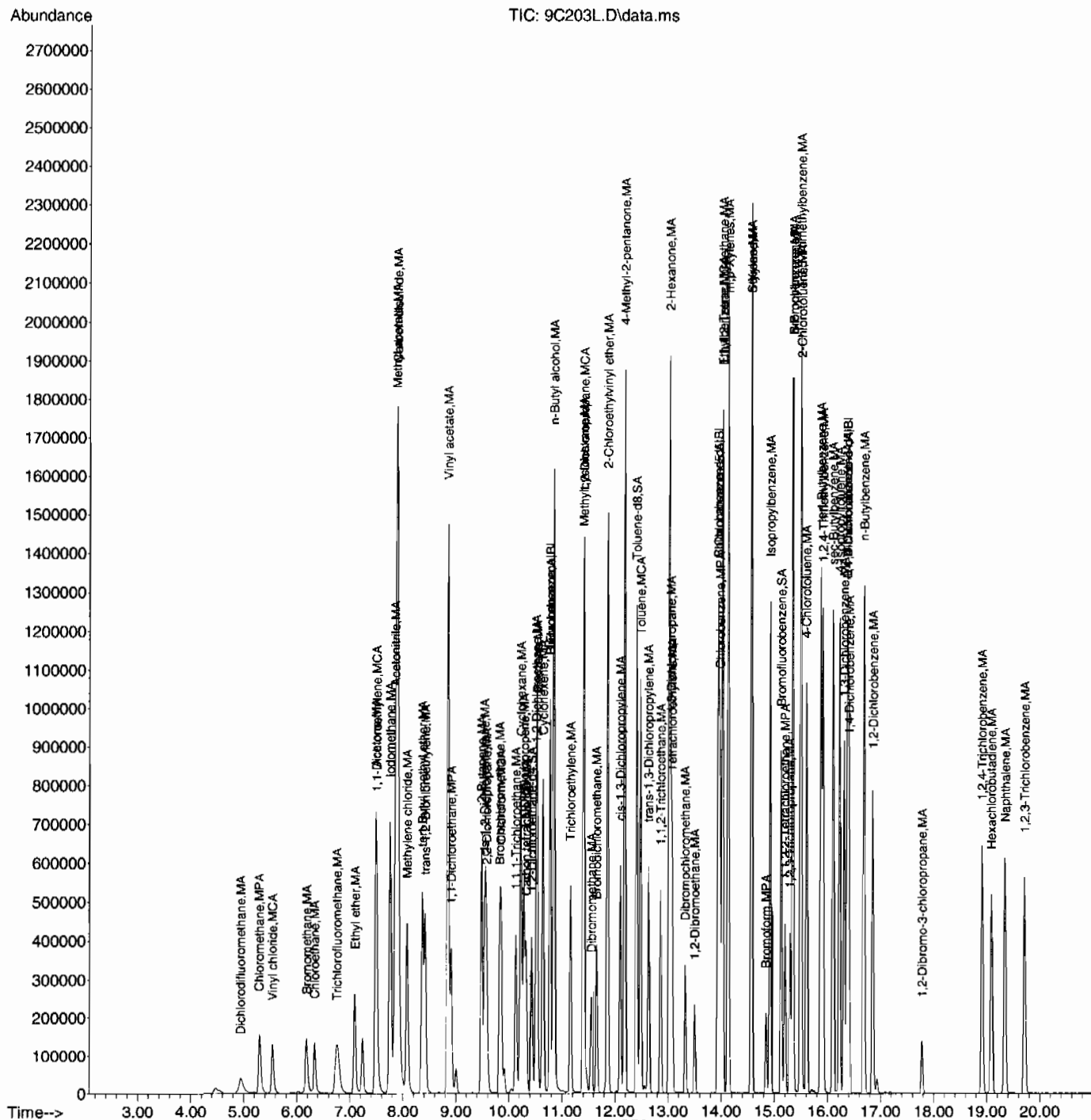
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.495	9.578	0.881		0m	N.D.	d
96) Methacrylonitrile	9.827	9.744	0.912		0m	N.D.	d
97) Tetrahydrofuran	9.850	9.874	0.914		0m	N.D.	d
98) Isobutyl alcohol	10.230	10.159	0.949		0m	N.D.	d
99) Methyl tert-amyl ether	10.526	10.526	0.977		0m	N.D.	d
100) Methyl methacrylate	11.404	11.368	1.058		0m	N.D.	d
101) 1,4-Dioxane	0.000	11.487	0.000		0	N.D.	
102) 2-Nitropropane	11.866	11.854	1.101		0m	N.D.	d
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	13.942	13.823	0.852		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.926	14.961	0.912		0m	N.D.	d
108) Cyclohexanone	14.914	15.092	0.911		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.341	15.246	0.937		0m	N.D.	d
110) Pentachloroethane	15.957	15.957	0.975		0m	N.D.	d
111) Benzyl chloride	16.527	16.527	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034		0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C203L.D
Acq On : 9 Mar 2010 10:52 am
Operator : RXY1
InstName : VOA9
Sample : |1202066321|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01E/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 11:25:40 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154

Matrix: MISC SOLID

Lab Sample ID: 1202066322

Client Sample: QC for batch 962616

Client: LANL010

Project: QC

Client ID: LCS for batch 962616

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 962617

Inst: VOA9.I

Dilution: 1

Run Date: 03/09/2010 11:21

Analyst: RXY1

Purge Vol: 5 mL

Prep Date: 03/09/2010 10:01

Aliquot: 5 g

Final Volume: 5 mL

Data File: 030910V99C204LD

Column: DB-624

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
 Lab Sample ID: 1202066322
 Client Sample: QC for batch 962616
 Client ID: LCS for batch 962616
 Batch ID: 962617
 Run Date: 03/09/2010 11:21
 Prep Date: 03/09/2010 10:01
 Data File: 030910V99C204L.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: MISC SOLID
 Project: QC
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		302	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C204L.D
Acq On : 9 Mar 2010 11:21 am
Operator : RXY1
InstName : VOA9
Sample : |1202066322|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 11:45:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1016593	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	705662	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	327584	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1016593	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	705662	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	327563	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	346913	50.78	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	101.56%		
43) Toluene-d8	12.412	12.412	0.890	98	905445	49.94	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	99.88%		
61) Bromofluorobenzene	15.127	15.127	0.924	95	381027	47.82	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	95.64%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491		0m	N.D.	d	
4) Vinyl chloride	5.546	5.546	0.515		0m	N.D.	d	
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.479	7.490	0.694		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.467	7.502	0.693		0m	N.D.	d	
11) Iodomethane	7.751	7.763	0.719		0m	N.D.	d	
12) Acetonitrile	7.941	7.858	0.737		0m	N.D.	d	
13) Methyl acetate	7.882	7.882	0.731		0m	N.D.	d	
14) Carbon disulfide	7.941	7.906	0.737		0m	N.D.	d	
15) Methylene chloride	8.083	8.083	0.750		0m	N.D.	d	
16) tert-Butyl methyl ether	8.380	8.368	0.778		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.415	8.427	0.781		0m	N.D.	d	
18) Vinyl acetate	8.854	8.854	0.822		0m	N.D.	d	
19) 1,1-Dichloroethane	9.008	8.913	0.836		0m	N.D.	d	
20) 2-Butanone	9.483	9.483	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.483	9.554	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	9.577	9.578	0.889		0m	N.D.	d	
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	9.862	9.850	0.915		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.170	10.230	0.944		0m	N.D.	d	
27) 1,1-Dichloropropene	10.289	10.289	0.955		0m	N.D.	d	
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.514	10.514	0.976		0m	N.D.	d	
31) Benzene	10.538	10.538	0.978		0m	N.D.	d	
32) Cyclohexene	10.645	10.645	0.988		0m	N.D.	d	
33) n-Butyl alcohol	10.858	10.846	1.008		0m	N.D.	d	
34) Trichloroethylene	11.166	11.167	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	11.368	11.416	1.055		0m	N.D.	d	
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C204L.D
Acq On : 9 Mar 2010 11:21 am
Operator : RXY1
InstName : VOA9
Sample : |1202066322|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 11:45:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	0.000	11.665	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	11.854	11.866	1.100		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123		0m	N.D.	d	
42) 4-Methyl-2-pentanone	12.186	12.186	0.874		0m	N.D.	d	
44) Toluene	12.483	12.483	0.895		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906		0m	N.D.	d	
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.		
47) 2-Hexanone	13.028	13.028	0.935		0m	N.D.	d	
48) 1,3-Dichloropropane	13.099	13.052	0.940		0m	N.D.	d	
49) Tetrachloroethylene	13.076	13.088	0.938		0m	N.D.	d	
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.		
51) 1,2-Dibromoethane	13.503	13.503	0.969		0m	N.D.	d	
52) Chlorobenzene	13.977	13.977	1.003		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	14.024	14.024	1.006		0m	N.D.	d	
54) Ethylbenzene	14.024	14.024	1.006		0m	N.D.	d	
55) m,p-Xylenes	14.131	14.131	1.014		0m	N.D.	d	
56) o-Xylene	14.570	14.570	1.045		0m	N.D.	d	
57) Styrene	14.570	14.570	1.045		0m	N.D.	d	
59) Bromoform	0.000	14.855	0.000		0	N.D.		
60) Isopropylbenzene	14.926	14.926	0.912		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	15.246	15.198	0.931		0m	N.D.	d	
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.		
64) Bromobenzene	15.353	15.353	0.938		0m	N.D.	d	
65) n-Propylbenzene	15.353	15.353	0.938		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946		0m	N.D.	d	
67) 2-Chlorotoluene	15.507	15.507	0.947		0m	N.D.	d	
68) 4-Chlorotoluene	15.602	15.614	0.953		0m	N.D.	d	
69) tert-Butylbenzene	15.957	15.874	0.975		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972		0m	N.D.	d	
71) sec-Butylbenzene	16.100	16.112	0.983		0m	N.D.	d	
72) 4-Isopropyltoluene	16.230	16.230	0.991		0m	N.D.	d	
73) 1,3-Dichlorobenzene	16.313	16.313	0.996		0m	N.D.	d	
74) 1,4-Dichlorobenzene	16.408	16.408	1.002		0m	N.D.	d	
75) n-Butylbenzene	16.693	16.693	1.020		0m	N.D.	d	
76) 1,2-Dichlorobenzene	16.859	16.859	1.030		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	18.910	18.922	1.155		0m	N.D.	d	
79) Hexachlorobutadiene	19.100	19.088	1.167		0m	N.D.	d	
80) Naphthalene	19.349	19.349	1.182		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	19.728	19.717	1.205		0m	N.D.	d	
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.		
85) Acrolein	7.312	7.313	0.679	56	308945	296.91	ug/L	98
86) Trichlorotrifluoroethane	7.467	7.467	0.693	85	464732	301.64	ug/L	96
87) Isopropyl Alcohol	0.000	7.550	0.000		0m	N.D.	d	
88) Allyl chloride	7.941	7.929	0.737	41	2783043	277.82	ug/L	95
89) tert-Butyl Alcohol	0.000	8.060	0.000		0	N.D.		
90) Acrylonitrile	8.344	8.332	0.774	53	764681	281.92	ug/L	97
91) Isopropyl ether	0.000	8.866	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	9.020	9.008	0.837	53	598351	66.96	ug/L	92
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.		
94) Ethyl acetate	9.483	9.483	0.880	43	1723378	256.06	ug/L	94

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C204L.D
Acq On : 9 Mar 2010 11:21 am
Operator : RXY1
InstName : VOA9
Sample : |1202066322|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 11:45:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	9.577	9.578	0.889	54	292124	277.94	ug/L	98
96) Methacrylonitrile	9.755	9.744	0.905	41	1110130	270.60	ug/L	98
97) Tetrahydrofuran	9.874	9.874	0.916	42	633043	280.64	ug/L	92
98) Isobutyl alcohol	10.170	10.159	0.944	41	725332	2854.72	ug/L	93
99) Methyl tert-amyl ether	10.514	10.526	0.976	73	386	N.D.		
100) Methyl methacrylate	11.368	11.368	1.055	69	863341	258.89	ug/L	81
101) 1,4-Dioxane	11.499	11.487	1.067	88	146827	2697.84	ug/L	97
102) 2-Nitropropane	11.866	11.854	1.101	43	571519	352.91	ug/L	99
104) Ethyl methacrylate	12.613	12.613	0.905	69	1576743	253.97	ug/L	87
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d	
107) cis-1,4-Dichloro-2-butene	14.961	14.961	0.914	53	747662	328.59	ug/L	98
108) Cyclohexanone	15.092	15.092	0.922	42	948704	4821.45	ug/L	90 E
109) trans-1,4-Dichloro-2-b...	15.246	15.246	0.931	53	704458	326.90	ug/L	91
110) Pentachloroethane	15.957	15.957	0.975	167	523623	402.04	ug/L	93
111) Benzyl chloride	16.515	16.527	1.009	91	2723134	387.96	ug/L	98
112) bis(2-Chloroisopropyl)...	16.918	16.918	1.033	45	1204210	306.19	ug/L	95

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

```

Data Path : C:\msdchem\1\DATA\030910V9\
Data File : 9C204L.D
Acq On    : 9 Mar 2010 11:21 am
Operator  : RXY1
InstName  : VOA9
Sample    : |1202066322|962617|1|VOA|1|VOA8260BS|
Misc      : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial  : 4 Sample Multiplier: 1

```

Abundance

TIC: 9C204L.D\data.ms

Time-->

3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00

Acrolein, B

Trichlorotrifluoroethane, B

Allyl chloride, B

Acrylonitrile, B

2-Chloro-1,3-butadiene, B

Ethyl acetate, B

Propionitrile, B

Tetrahydrofuran, B

Methacrylonitrile, B

Isobutyl alcohol, B

1,2-Dichloroethane-d4, SA

1,4-Dioxane, B

Methyl methacrylate, B

2-Nitropropane, B

Toluene-d8, SA

Ethyl methacrylate, B

Bis(2-chloroisopropyl)ether, B

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

cis-1,4-Dichloro-2-butene, B

Pentachloroethane, B

Benzyl chloride, B

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 1202068775
 Client Sample: QC for batch 962616
 Client ID: LCS for batch 962616
 Batch ID: 962617
 Run Date: 03/10/2010 10:01
 Prep Date: 03/10/2010 09:00
 Data File: 031010V99C303LD

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: MISC SOLID
 Project: QC
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		41.7	ug/kg	0.340	1.00
74-87-3	Chloromethane		44.1	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		50.7	ug/kg	0.300	1.00
74-83-9	Bromomethane		49.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		49.8	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		53.5	ug/kg	0.300	1.00
67-64-1	Acetone		223	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		51.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		241	ug/kg	1.60	5.00
75-09-2	Methylene chloride		51.3	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		263	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		50.6	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		49.7	ug/kg	0.300	1.00
78-93-3	2-Butanone		227	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		50.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		57.0	ug/kg	0.300	1.00
67-66-3	Chloroform		48.7	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		49.3	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		54.1	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		51.9	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		54.4	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		50.7	ug/kg	0.300	1.00
71-43-2	Benzene		48.8	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		50.5	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		48.9	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		51.1	ug/kg	0.300	1.00
74-95-3	Dibromomethane		49.1	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		250	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		51.3	ug/kg	0.300	1.00
108-88-3	Toluene		47.3	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.1	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		46.5	ug/kg	0.300	1.00
591-78-6	2-Hexanone		219	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		45.6	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		48.5	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		51.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		48.5	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		47.4	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 1202068775
 Client Sample: QC for batch 962616
 Client ID: LCS for batch 962616
 Batch ID: 962617
 Run Date: 03/10/2010 10:01
 Prep Date: 03/10/2010 09:00
 Data File: 031010V99C303LLD

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.I
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: MISC SOLID
 Project: QC
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	E	42.6	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		92.6	ug/kg	0.300	2.00
95-47-6	o-Xylene		45.7	ug/kg	0.300	1.00
100-42-5	Styrene		47.0	ug/kg	0.300	1.00
75-25-2	Bromoform		51.5	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.2	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		47.7	ug/kg	0.300	1.00
108-86-1	Bromobenzene		44.0	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		43.7	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		45.7	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		46.1	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		44.9	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		46.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		47.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		46.4	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		46.4	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		47.4	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		44.8	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		45.6	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		47.4	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		50.1	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		49.2	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		45.6	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C303L.D
Acq On : 10 Mar 2010 10:01 am
Operator : RXY1
InstName : VOA9
Sample : |1202068775|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01E/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 10 10:40:07 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.775	10.775	1.000	96	1005009	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	710761	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	326961	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1005009	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	710761	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	326978	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	347087	51.39	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 102.78%			
43) Toluene-d8	12.412	12.412	0.890	98	908975	49.77	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 99.54%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	400520	50.36	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 100.72%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.944	4.944	0.459	85	131469	41.71	ug/L	96
3) Chloromethane	5.308	5.308	0.493	50	354406	44.12	ug/L	97
4) Vinyl chloride	5.560	5.546	0.516	62	297545	50.67	ug/L	99
5) Bromomethane	6.186	6.186	0.574	94	193879	49.24	ug/L	99
6) Chloroethane	6.340	6.340	0.588	64	216187	49.83	ug/L	98
7) Trichlorofluoromethane	6.767	6.767	0.628	101	347608	53.51	ug/L	99
8) Ethyl ether	7.099	7.099	0.659	59	286176	50.15	ug/L	92
9) Acetone	7.490	7.490	0.695	43	1000327	222.50	ug/L	96
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	469902	51.39	ug/L	96
11) Iodomethane	7.763	7.763	0.720	142	1447165	241.06	ug/L	95
12) Acetonitrile	7.858	7.858	0.729	41	1155362	1429.94	ug/L	99
13) Methyl acetate	7.882	7.882	0.731	43	1287112	282.72	ug/L	96
14) Carbon disulfide	7.906	7.906	0.734	76	3430070	262.80	ug/L	99
15) Methylene chloride	8.083	8.083	0.750	84	266838	51.30	ug/L	87
16) tert-Butyl methyl ether	8.368	8.368	0.777	73	717110	51.14	ug/L	96
17) trans-1,2-Dichloroethy...	8.427	8.427	0.782	61	457369	50.58	ug/L	96
18) Vinyl acetate	8.854	8.854	0.822	43	3619023	280.30	ug/L	96
19) 1,1-Dichloroethane	8.914	8.913	0.827	63	552943	49.72	ug/L	99
20) 2-Butanone	9.495	9.483	0.881	43	1248702	226.89	ug/L	93
21) cis-1,2-Dichloroethylene	9.554	9.554	0.887	61	522621	50.54	ug/L	95
22) 2,2-Dichloropropane	9.578	9.578	0.889	77	368308	57.04	ug/L	94
23) Bromochloromethane	9.827	9.827	0.912	128	112479	49.31	ug/L	# 83
24) Chloroform	9.862	9.850	0.915	83	443271	48.73	ug/L	95
25) 1,1,1-Trichloroethane	10.135	10.135	0.941	97	367958	54.08	ug/L	99
26) Cyclohexane	10.230	10.230	0.949	56	639346	55.13	ug/L	93
27) 1,1-Dichloropropene	10.289	10.289	0.955	75	337732	51.85	ug/L	95
28) Carbon tetrachloride	10.325	10.325	0.958	117	308286	54.37	ug/L	99
30) 1,2-Dichloroethane	10.514	10.514	0.976	62	435578	50.67	ug/L	99
31) Benzene	10.538	10.538	0.978	78	942293	48.78	ug/L	96
32) Cyclohexene	10.645	10.645	0.988	67	525705	51.25	ug/L	90
33) n-Butyl alcohol	10.846	10.846	1.007	56	1169822	5523.61	ug/L	94
34) Trichloroethylene	11.167	11.167	1.036	95	253701	50.49	ug/L	98
35) 1,2-Dichloropropane	11.416	11.416	1.059	63	318630	48.94	ug/L	99
36) Methylcyclohexane	11.416	11.416	1.059	83	423076	51.27	ug/L	92
37) Dibromomethane	11.558	11.558	1.073	93	154993	49.13	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C303L.D
Acq On : 10 Mar 2010 10:01 am
Operator : RXY1
InstName : VOA9
Sample : |1202068775|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01E/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 10 10:40:07 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.665	11.665	1.083	83	351600	51.12	ug/L	99
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101	63	783539	224.40	ug/L	97
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123	75	419815	51.28	ug/L	95
42) 4-Methyl-2-pentanone	12.186	12.186	0.874	58	729688	250.23	ug/L	86
44) Toluene	12.495	12.483	0.896	91	976601	47.29	ug/L	97
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906	75	403601	53.05	ug/L	98
46) 1,1,2-Trichloroethane	12.862	12.862	0.923	83	189030	46.51	ug/L	100
47) 2-Hexanone	13.028	13.028	0.935	43	1748815	219.06	ug/L	94
48) 1,3-Dichloropropane	13.052	13.052	0.936	76	371035	45.62	ug/L	96
49) Tetrachloroethylene	13.088	13.088	0.939	164	143672	48.47	ug/L	97
50) Dibromochloromethane	13.325	13.325	0.956	129	232839	51.38	ug/L	100
51) 1,2-Dibromoethane	13.503	13.503	0.969	107	219853	48.50	ug/L	100
52) Chlorobenzene	13.977	13.977	1.003	112	609509	47.39	ug/L	100
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006	131	212183	49.15	ug/L	98
54) Ethylbenzene	14.025	14.024	1.006	91	1084830	42.63	ug/L	97 E
55) m,p-Xylenes	14.131	14.131	1.014	106	796452	92.62	ug/L	90
56) o-Xylene	14.570	14.570	1.045	106	406350	45.73	ug/L	90
57) Styrene	14.570	14.570	1.045	104	672881	47.00	ug/L	96
59) Bromoform	14.855	14.855	0.907	173	129724	51.52	ug/L	100
60) Isopropylbenzene	14.926	14.926	0.912	105	1056798	46.07	ug/L	98
62) 1,1,2,2-Tetrachloroethane	15.198	15.198	0.928	83	309605	47.21	ug/L	100
63) 1,2,3-Trichloropropane	15.293	15.293	0.934	110	75511	47.74	ug/L #	94
64) Bromobenzene	15.353	15.353	0.938	156	217570	44.01	ug/L	98
65) n-Propylbenzene	15.353	15.353	0.938	91	1318076	43.69	ug/L	98
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	883776	44.90	ug/L	96
67) 2-Chlorotoluene	15.507	15.507	0.947	126	254776	45.67	ug/L	93
68) 4-Chlorotoluene	15.614	15.614	0.954	91	875183	46.26	ug/L	98
69) tert-Butylbenzene	15.874	15.874	0.970	134	175560	47.41	ug/L	90
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	921185	46.36	ug/L	95
71) sec-Butylbenzene	16.112	16.112	0.984	105	1213265	46.42	ug/L	98
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	963189	47.41	ug/L	99
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	455089	44.77	ug/L	99
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	446273	45.57	ug/L	99
75) n-Butylbenzene	16.693	16.693	1.020	91	1051248	47.37	ug/L	97
76) 1,2-Dichlorobenzene	16.859	16.859	1.030	146	443170	45.61	ug/L	99
77) 1,2-Dibromo-3-chloropr...	17.784	17.784	1.086	157	49800	50.10	ug/L	98
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156	180	299929	48.63	ug/L	99
79) Hexachlorobutadiene	19.100	19.088	1.167	225	137897	47.36	ug/L	100
80) Naphthalene	19.349	19.349	1.182	128	826918	49.43	ug/L	99
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204	180	270503	50.02	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.		
85) Acrolein	7.230	7.313	0.671		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.		
87) Isopropyl Alcohol	7.490	7.550	0.695		0m	N.D.	d	
88) Allyl chloride	7.858	7.929	0.729		0m	N.D.	d	
89) tert-Butyl Alcohol	8.060	8.060	0.748		0m	N.D.	d	
90) Acrylonitrile	8.368	8.332	0.777		0m	N.D.	d	
91) Isopropyl ether	8.854	8.866	0.822		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.		
94) Ethyl acetate	9.495	9.483	0.881		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C303L.D
Acq On : 10 Mar 2010 10:01 am
Operator : RXY1
InstName : VOA9
Sample : |1202068775|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01E/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 10 10:40:07 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

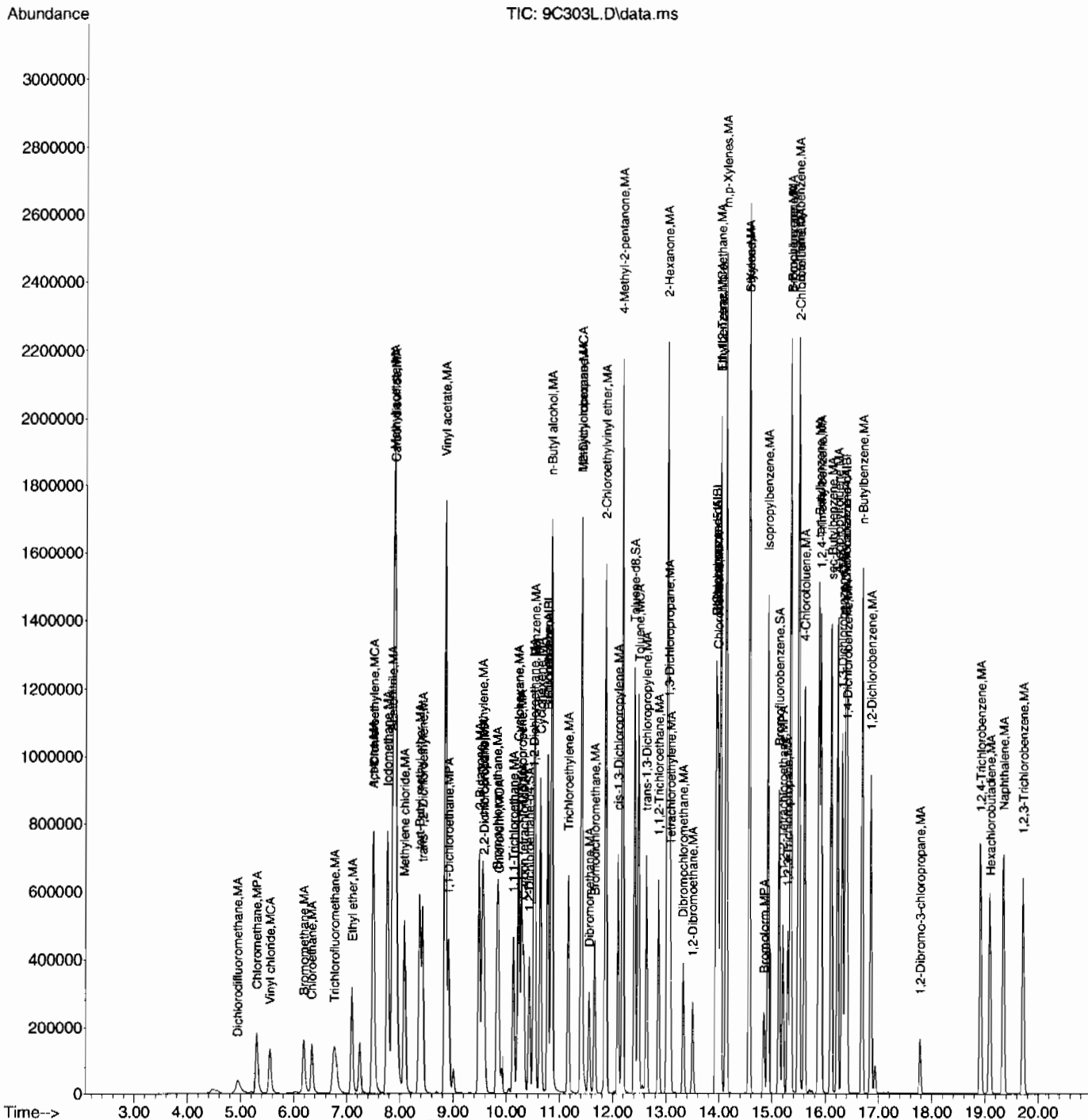
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.495	9.578	0.881		0m	N.D.	d
96) Methacrylonitrile	9.838	9.744	0.913		0m	N.D.	d
97) Tetrahydrofuran	9.838	9.874	0.913		0m	N.D.	d
98) Isobutyl alcohol	10.135	10.159	0.941		0m	N.D.	d
99) Methyl tert-amyl ether	10.538	10.526	0.978		0m	N.D.	d
100) Methyl methacrylate	11.416	11.368	1.059		0m	N.D.	d
101) 1,4-Dioxane	11.558	11.487	1.073		0m	N.D.	d
102) 2-Nitropropane	11.866	11.854	1.101		0m	N.D.	d
104) Ethyl methacrylate	12.613	12.613	0.905		0m	N.D.	d
106) 1-Chlorohexane	13.942	13.823	0.852		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.926	14.961	0.912		0m	N.D.	d
108) Cyclohexanone	14.914	15.092	0.911		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.341	15.246	0.937		0m	N.D.	d
110) Pentachloroethane	15.969	15.957	0.975		0m	N.D.	d
111) Benzyl chloride	16.527	16.527	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034		0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C303L.D
Acq On : 10 Mar 2010 10:01 am
Operator : RXY1
InstName : VOA9
Sample : |1202068775|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[A]0220-01E/0308-01SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 10 10:40:07 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154

Matrix: MISC SOLID

Lab Sample ID: 1202068776

Client Sample: QC for batch 962616

Client: LANL010

Project: QC

Client ID: LCS for batch 962616

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 962617

Inst: VOA9.I

Dilution: 1

Run Date: 03/10/2010 10:31

Analyst: RXY1

Purge Vol: 5 mL

Prep Date: 03/10/2010 09:01

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031010V99C304LD

Column: DB-624

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
 Lab Sample ID: 1202068776
 Client Sample: QC for batch 962616
 Client ID: LCS for batch 962616
 Batch ID: 962617
 Run Date: 03/10/2010 10:31
 Prep Date: 03/10/2010 09:01
 Data File: 031010V99C304LD

Client: LANL010
 Method: SW846 8260B
 Inst: VOA9.J
 Analyst: RXY1
 Aliquot: 5 g
 Column: DB-624

Matrix: MISC SOLID
 Project: QC
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		292	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C304L.D
Acq On : 10 Mar 2010 10:31 am
Operator : RXY1
InstName : VOA9
Sample : |1202068776|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 10:52:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.775	10.775	1.000	96	1023106	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.941	13.941	1.000	117	713960	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	332083	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	1023106	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	713960	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	332065	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	351001	51.05	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 102.10%			
43) Toluene-d8	12.412	12.412	0.890	98	912822	49.76	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 99.52%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	392730	48.62	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 97.24%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.944	0.000		0	N.D.		
3) Chloromethane	5.294	5.308	0.491		0m	N.D.	d	
4) Vinyl chloride	5.532	5.546	0.513		0m	N.D.	d	
5) Bromomethane	0.000	6.186	0.000		0	N.D.		
6) Chloroethane	0.000	6.340	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.767	0.000		0	N.D.		
8) Ethyl ether	0.000	7.099	0.000		0	N.D.		
9) Acetone	7.490	7.490	0.695		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.478	7.502	0.694		0m	N.D.	d	
11) Iodomethane	7.763	7.763	0.720		0m	N.D.	d	
12) Acetonitrile	7.941	7.858	0.737		0m	N.D.	d	
13) Methyl acetate	7.882	7.882	0.731		0m	N.D.	d	
14) Carbon disulfide	7.941	7.906	0.737		0m	N.D.	d	
15) Methylene chloride	8.095	8.083	0.751		0m	N.D.	d	
16) tert-Butyl methyl ether	8.368	8.368	0.777		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.427	8.427	0.782		0m	N.D.	d	
18) Vinyl acetate	8.854	8.854	0.822		0m	N.D.	d	
19) 1,1-Dichloroethane	8.890	8.913	0.825		0m	N.D.	d	
20) 2-Butanone	9.483	9.483	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.494	9.554	0.881		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	9.578	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.827	0.000		0	N.D.		
24) Chloroform	9.850	9.850	0.914		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	10.135	0.000		0	N.D.		
26) Cyclohexane	10.170	10.230	0.944		0m	N.D.	d	
27) 1,1-Dichloropropene	10.289	10.289	0.955		0m	N.D.	d	
28) Carbon tetrachloride	0.000	10.325	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.514	10.514	0.976		0m	N.D.	d	
31) Benzene	10.526	10.538	0.977		0m	N.D.	d	
32) Cyclohexene	10.645	10.645	0.988		0m	N.D.	d	
33) n-Butyl alcohol	10.858	10.846	1.008		0m	N.D.	d	
34) Trichloroethylene	11.166	11.167	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	11.416	0.000		0	N.D.		
36) Methylcyclohexane	11.368	11.416	1.055		0m	N.D.	d	
37) Dibromomethane	0.000	11.558	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C304L.D
Acq On : 10 Mar 2010 10:31 am
Operator : RXY1
InstName : VOA9
Sample : |1202068776|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 10:52:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	11.665	11.665	1.083		0m	N.D.	d
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101		0m	N.D.	d
40) cis-1,3-Dichloropropylene	12.103	12.103	1.123		0m	N.D.	d
42) 4-Methyl-2-pentanone	12.186	12.186	0.874		0m	N.D.	d
44) Toluene	12.495	12.483	0.896		0m	N.D.	d
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906		0m	N.D.	d
46) 1,1,2-Trichloroethane	0.000	12.862	0.000		0	N.D.	
47) 2-Hexanone	13.028	13.028	0.935		0m	N.D.	d
48) 1,3-Dichloropropane	13.099	13.052	0.940		0m	N.D.	d
49) Tetrachloroethylene	13.088	13.088	0.939		0m	N.D.	d
50) Dibromochloromethane	0.000	13.325	0.000		0	N.D.	
51) 1,2-Dibromoethane	13.503	13.503	0.969		0m	N.D.	d
52) Chlorobenzene	13.977	13.977	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	14.024	14.024	1.006		0m	N.D.	d
54) Ethylbenzene	14.024	14.024	1.006		0m	N.D.	d
55) m,p-Xylenes	14.131	14.131	1.014		0m	N.D.	d
56) o-Xylene	14.570	14.570	1.045		0m	N.D.	d
57) Styrene	14.570	14.570	1.045		0m	N.D.	d
59) Bromoform	0.000	14.855	0.000		0	N.D.	
60) Isopropylbenzene	14.926	14.926	0.912		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	15.246	15.198	0.931		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	15.293	0.000		0	N.D.	
64) Bromobenzene	15.353	15.353	0.938		0m	N.D.	d
65) n-Propylbenzene	15.353	15.353	0.938		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946		0m	N.D.	d
67) 2-Chlorotoluene	15.602	15.507	0.953		0m	N.D.	d
68) 4-Chlorotoluene	15.613	15.614	0.954		0m	N.D.	d
69) tert-Butylbenzene	15.957	15.874	0.975		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972		0m	N.D.	d
71) sec-Butylbenzene	16.111	16.112	0.984		0m	N.D.	d
72) 4-Isopropyltoluene	16.230	16.230	0.991		0m	N.D.	d
73) 1,3-Dichlorobenzene	16.313	16.313	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	16.408	16.408	1.002		0m	N.D.	d
75) n-Butylbenzene	16.693	16.693	1.020		0m	N.D.	d
76) 1,2-Dichlorobenzene	16.859	16.859	1.030		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	17.784	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156		0m	N.D.	d
79) Hexachlorobutadiene	19.100	19.088	1.167		0m	N.D.	d
80) Naphthalene	19.349	19.349	1.182		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	19.716	19.717	1.204		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.	
85) Acrolein	7.312	7.313	0.679	56	290653	278.32 ug/L	99
86) Trichlorotrifluoroethane	7.467	7.467	0.693	85	453205	292.29 ug/L	96
87) Isopropyl Alcohol	0.000	7.550	0.000		0m	N.D.	d
88) Allyl chloride	7.941	7.929	0.737	41	2708340	268.64 ug/L	95
89) tert-Butyl Alcohol	8.071	8.060	0.749	59	201	N.D.	
90) Acrylonitrile	8.344	8.332	0.774	53	734443	269.05 ug/L	97
91) Isopropyl ether	9.008	8.866	0.836	45	186	N.D.	
92) 2-Chloro-1,3-butadiene	9.020	9.008	0.837	53	581524	64.67 ug/L	91
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.	
94) Ethyl acetate	9.483	9.483	0.880	43	1659451	244.99 ug/L	94

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C304L.D
Acq On : 10 Mar 2010 10:31 am
Operator : RXY1
InstName : VOA9
Sample : |1202068776|962617|1|VOA|1|VOA8260BS|
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 10:52:37 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	9.577	9.578	0.889	54	280410	265.10	ug/L	100
96) Methacrylonitrile	9.755	9.744	0.905	41	1074964	260.36	ug/L	99
97) Tetrahydrofuran	9.874	9.874	0.916	42	598116	263.47	ug/L	93
98) Isobutyl alcohol	10.170	10.159	0.944	41	667093	2608.80	ug/L	94
99) Methyl tert-amyl ether	10.514	10.526	0.976	73	582	N.D.		
100) Methyl methacrylate	11.368	11.368	1.055	69	851211	253.63	ug/L	82
101) 1,4-Dioxane	11.499	11.487	1.067	88	131628	2403.18	ug/L	95
102) 2-Nitropropane	11.866	11.854	1.101	43	549973	337.45	ug/L	99
104) Ethyl methacrylate	12.625	12.613	0.906	69	1557493	247.95	ug/L	88
106) 1-Chlorohexane	0.000	13.823	0.000		0m	N.D.	d	
107) cis-1,4-Dichloro-2-butene	14.961	14.961	0.914	53	732644	317.62	ug/L	97
108) Cyclohexanone	15.104	15.092	0.923	42	884872	4436.07	ug/L	90 E
109) trans-1,4-Dichloro-2-b...	15.246	15.246	0.931	53	682409	312.38	ug/L	91
110) Pentachloroethane	15.957	15.957	0.975	167	573598	434.43	ug/L	94
111) Benzyl chloride	16.527	16.527	1.009	91	2675062	375.95	ug/L	98
112) bis(2-Chloroisopropyl)...	16.918	16.918	1.033	45	1124955	282.16	ug/L	95

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

```
Data Path : C:\msdchem\1\DATA\031010V9\  
Data File : 9C304L.D  
Acq On : 10 Mar 2010 10:31 am  
Operator : RXY1  
InstName : VOA9  
Sample : |1202068776|962617|1|VOA|1|VOA8260BS|  
Misc : GEL 5g n/a MIX[B]UVM100215-08B SOIL  
ALS Vial : 4 Sample Multiplier: 1
```

Abundance

TIC: 9C304L.D\data.ms

Time-->

3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00

Acrolein.B
Trichlorotrifluoroethane.B
Acrylonitrile.B
2-Chloro-1,3-butadiene.B
Propionitrile.B
Ethyl acetate.B
Tetrahydrofuran.B
1,2-Dichloroethane-d4, SA
1,4-Dioxane.B
1,4-Dioxane.B
2-Nitropropane.B
Toluene-d8, SA
Ethyl methacrylate.B
Methyl methacrylate.B
Bromochloroethane-45, BI
Bromochloroethane-45, BI
cis-1,4-Dichloro-2-butene.B
trans-1,4-Dichloro-2-butene.B
Bromochloroethane-45, BI
Bromochloroethane-45, BI
Pentachloroethane.B
Benzyl chloride.B
bis(2-Chloroisopropyl)ether.B

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202065141	Date Received: 03/02/2010 08:50	%Moisture: 12.3
Client Sample: QC for batch 962616	Client: LANL010	Project: QC
Client ID: RE36-10-7494PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962617	Inst: VOA9.I	Dilution: 1
Run Date: 03/10/2010 17:10	Analyst: RXY1	Purge Vol: 5 mL
Prep Date: 03/08/2010 12:06	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V99C317.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		29.1	ug/kg	0.388	1.14
74-87-3	Chloromethane		39.8	ug/kg	0.342	1.14
75-01-4	Vinyl chloride		47.3	ug/kg	0.342	1.14
74-83-9	Bromomethane		42.9	ug/kg	0.342	1.14
75-00-3	Chloroethane		46.2	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane		47.2	ug/kg	0.342	1.14
67-64-1	Acetone		125	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene		48.0	ug/kg	0.342	1.14
74-88-4	Iodomethane		207	ug/kg	1.83	5.70
75-09-2	Methylene chloride		50.3	ug/kg	2.28	5.70
75-15-0	Carbon disulfide		242	ug/kg	1.43	5.70
156-60-5	trans-1,2-Dichloroethylene		48.1	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane		49.1	ug/kg	0.342	1.14
78-93-3	2-Butanone		162	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene		48.9	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane		54.5	ug/kg	0.342	1.14
67-66-3	Chloroform		46.7	ug/kg	0.342	1.14
74-97-5	Bromochloromethane		47.2	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane		50.6	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene		47.8	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride		50.8	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane		48.8	ug/kg	0.342	1.14
71-43-2	Benzene		46.1	ug/kg	0.342	1.14
79-01-6	Trichloroethylene		46.1	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane		47.6	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane		48.3	ug/kg	0.342	1.14
74-95-3	Dibromomethane		45.8	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone		250	ug/kg	1.43	5.70
10061-01-5	cis-1,3-Dichloropropylene		41.1	ug/kg	0.342	1.14
108-88-3	Toluene		48.5	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene		47.9	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane		47.5	ug/kg	0.342	1.14
591-78-6	2-Hexanone		163	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane		46.8	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene		45.8	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane		49.7	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane		47.1	ug/kg	0.342	1.14
108-90-7	Chlorobenzene		43.8	ug/kg	0.342	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202065141	Date Received: 03/02/2010 08:50	%Moisture: 12.3
Client Sample: QC for batch 962616	Client: LANL010	Project: QC
Client ID: RE36-10-7494PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962617	Inst: VOA9.1	Dilution: 1
Run Date: 03/10/2010 17:10	Analyst: RXY1	Purge Vol: 5 mL
Prep Date: 03/08/2010 12:06	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V99C317.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	E	41.8	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes		86.9	ug/kg	0.342	2.28
95-47-6	o-Xylene		43.6	ug/kg	0.342	1.14
100-42-5	Styrene		40.9	ug/kg	0.342	1.14
75-25-2	Bromoform		61.3	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane		58.6	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane		59.5	ug/kg	0.342	1.14
108-86-1	Bromobenzene		51.0	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene		52.8	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene		53.3	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene		59.5	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene		52.8	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene		50.9	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene		55.9	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene		52.6	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene		50.2	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene		45.9	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene		42.4	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene		43.2	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene		43.9	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane		48.7	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.70	ug/kg	1.83	5.70
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane		48.2	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene		41.0	ug/kg	0.342	1.14

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C317.D
Acq On : 10 Mar 2010 5:10 pm
Operator : RXY1
InstName : VOA9
Sample : |1202065141|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a MIX[A] MS 248373001SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 11 10:26:55 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	10.775	10.775	1.000	96	980779	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.942	13.941	1.000	117	626937	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	207350	50.00	ug/L	0.00
82) B Fluorobenzene	10.775	10.775	1.000	96	980779	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.942	13.942	1.000	117	626937	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.373	16.372	1.000	152	207334	50.00	ug/L	0.00

System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.968	65	332179	50.40	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	100.80%		
43) Toluene-d8	12.412	12.412	0.890	98	857377	53.23	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	106.46%		
61) Bromofluorobenzene	15.127	15.127	0.924	95	306340	60.74	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	121.48%		

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.958	4.944	0.460	85	78439	25.50	ug/L	97
3) Chloromethane	5.308	5.308	0.493	50	273449	34.88	ug/L	97
4) Vinyl chloride	5.574	5.546	0.517	62	237784	41.50	ug/L	99
5) Bromomethane	6.198	6.186	0.575	94	144453	37.59	ug/L	98
6) Chloroethane	6.352	6.340	0.590	64	171481	40.50	ug/L	99
7) Trichlorofluoromethane	6.767	6.767	0.628	101	262378	41.39	ug/L	100
8) Ethyl ether	7.099	7.099	0.659	59	237258	42.61	ug/L	91
9) Acetone	7.491	7.490	0.695	43	479347	109.25	ug/L	94
10) 1,1-Dichloroethylene	7.502	7.502	0.696	61	375460	42.07	ug/L	96
11) Iodomethane	7.763	7.763	0.720	142	1065312	181.84	ug/L	95
12) Acetonitrile	7.858	7.858	0.729	41	970862	1226.44	ug/L	99
13) Methyl acetate	7.882	7.882	0.731	43	948549	212.29	ug/L	95
14) Carbon disulfide	7.906	7.906	0.734	76	2702249	212.15	ug/L	98
15) Methylene chloride	8.083	8.083	0.750	84	225404	44.12	ug/L	# 84
16) tert-Butyl methyl ether	8.368	8.368	0.777	73	595623	43.52	ug/L	96
17) trans-1,2-Dichloroethy...	8.427	8.427	0.782	61	372065	42.16	ug/L	95
18) Vinyl acetate	8.854	8.854	0.822	43	52571	4.17	ug/L	92
19) 1,1-Dichloroethane	8.914	8.913	0.827	63	467284	43.05	ug/L	99
20) 2-Butanone	9.495	9.483	0.881	43	764659	142.37	ug/L	92
21) cis-1,2-Dichloroethylene	9.554	9.554	0.887	61	432296	42.84	ug/L	95
22) 2,2-Dichloropropane	9.578	9.578	0.889	77	301049	47.77	ug/L	92
23) Bromochloromethane	9.827	9.827	0.912	128	92116	41.38	ug/L	# 82
24) Chloroform	9.862	9.850	0.915	83	363773	40.98	ug/L	94
25) 1,1,1-Trichloroethane	10.135	10.135	0.941	97	294767	44.39	ug/L	98
26) Cyclohexane	10.230	10.230	0.949	56	479264	42.35	ug/L	92
27) 1,1-Dichloropropene	10.289	10.289	0.955	75	266363	41.90	ug/L	94
28) Carbon tetrachloride	10.337	10.325	0.959	117	246607	44.57	ug/L	98
30) 1,2-Dichloroethane	10.514	10.514	0.976	62	358796	42.77	ug/L	99
31) Benzene	10.538	10.538	0.978	78	762587	40.45	ug/L	95
32) Cyclohexene	10.645	10.645	0.988	67	410745	41.03	ug/L	90
33) n-Butyl alcohol	10.847	10.846	1.007	56	880154	4222.98	ug/L	92
34) Trichloroethylene	11.167	11.167	1.036	95	198195	40.42	ug/L	98
35) 1,2-Dichloropropane	11.416	11.416	1.059	63	265136	41.73	ug/L	100
36) Methylcyclohexane	11.416	11.416	1.059	83	285937	35.51	ug/L	90
37) Dibromomethane	11.558	11.558	1.073	93	123747	40.19	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C317.D
Acq On : 10 Mar 2010 5:10 pm
Operator : RXY1
InstName : VOA9
Sample : |1202065141|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a MIX[A] MS 248373001SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 11 10:26:55 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.665	11.665	1.083	83	283993	42.31	ug/L	99
39) 2-Chloroethylvinyl ether	11.866	11.866	1.101	63	222	N.D.		
40) cis-1,3-Dichloropropylene	12.104	12.103	1.123	75	288185	36.07	ug/L	94
42) 4-Methyl-2-pentanone	12.187	12.186	0.874	58	563302	219.00	ug/L #	82
44) Toluene	12.495	12.483	0.896	91	774673	42.53	ug/L	96
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906	75	281865	42.01	ug/L	96
46) 1,1,2-Trichloroethane	12.862	12.862	0.923	83	149109	41.60	ug/L	98
47) 2-Hexanone	13.028	13.028	0.935	43	1004165	142.60	ug/L	91
48) 1,3-Dichloropropane	13.052	13.052	0.936	76	294288	41.03	ug/L	91
49) Tetrachloroethylene	13.088	13.088	0.939	164	104913	40.12	ug/L	96
50) Dibromochloromethane	13.325	13.325	0.956	129	174730	43.54	ug/L	99
51) 1,2-Dibromoethane	13.503	13.503	0.969	107	164948	41.25	ug/L	98
52) Chlorobenzene	13.977	13.977	1.003	112	436038	38.43	ug/L	98
53) 1,1,1,2-Tetrachloroethane	14.025	14.024	1.006	131	160817	42.23	ug/L	99
54) Ethylbenzene	14.025	14.024	1.006	91	822571	36.64	ug/L	96 E
55) m,p-Xylenes	14.131	14.131	1.014	106	577845	76.18	ug/L	87
56) o-Xylene	14.570	14.570	1.045	106	299371	38.19	ug/L	86
57) Styrene	14.570	14.570	1.045	104	452338	35.82	ug/L	96
59) Bromoform	14.855	14.855	0.907	173	85775	53.74	ug/L	98
60) Isopropylbenzene	14.926	14.926	0.912	105	759009	52.17	ug/L	96
62) 1,1,2,2-Tetrachloroethane	15.199	15.198	0.928	83	213513	51.34	ug/L	99
63) 1,2,3-Trichloropropane	15.293	15.293	0.934	110	52349	52.19	ug/L #	98
64) Bromobenzene	15.353	15.353	0.938	156	140094	44.68	ug/L	97
65) n-Propylbenzene	15.353	15.353	0.938	91	886390	46.32	ug/L	97
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	577824	46.29	ug/L	96
67) 2-Chlorotoluene	15.507	15.507	0.947	126	165325	46.73	ug/L	91
68) 4-Chlorotoluene	15.614	15.614	0.954	91	535797	44.66	ug/L	97
69) tert-Butylbenzene	15.874	15.874	0.970	134	115142	49.03	ug/L	92
70) 1,2,4-Trimethylbenzene	15.910	15.910	0.972	105	581611	46.15	ug/L	95
71) sec-Butylbenzene	16.112	16.112	0.984	105	729040	43.99	ug/L	97
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	518866	40.27	ug/L	98
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	239559	37.16	ug/L	98
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	235228	37.87	ug/L	99
75) n-Butylbenzene	16.693	16.693	1.020	91	541226	38.45	ug/L	95
76) 1,2-Dichlorobenzene	16.859	16.859	1.030	146	221663	35.97	ug/L	98
77) 1,2-Dibromo-3-chloropr...	17.784	17.784	1.086	157	26943	42.71	ug/L	96
78) 1,2,4-Trichlorobenzene	18.910	18.922	1.155	180	83379	21.32	ug/L	100
79) Hexachlorobutadiene	19.088	19.088	1.166	225	51249	27.75	ug/L	97
80) Naphthalene	19.349	19.349	1.182	128	232446	21.91	ug/L	99
81) 1,2,3-Trichlorobenzene	19.717	19.717	1.204	180	66074	19.27	ug/L	98
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.		
85) Acrolein	0.000	7.313	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.		
87) Isopropyl Alcohol	7.562	7.550	0.702		0m	N.D.	d	
88) Allyl chloride	7.858	7.929	0.729		0m	N.D.	d	
89) tert-Butyl Alcohol	8.083	8.060	0.750		0m	N.D.	d	
90) Acrylonitrile	8.368	8.332	0.777		0m	N.D.	d	
91) Isopropyl ether	8.866	8.866	0.823		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	9.008	9.008	0.836		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.		
94) Ethyl acetate	9.495	9.483	0.881		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C317.D
Acq On : 10 Mar 2010 5:10 pm
Operator : RXY1
InstName : VOA9
Sample : |1202065141|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a MIX[A] MS 248373001SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 11 10:26:55 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

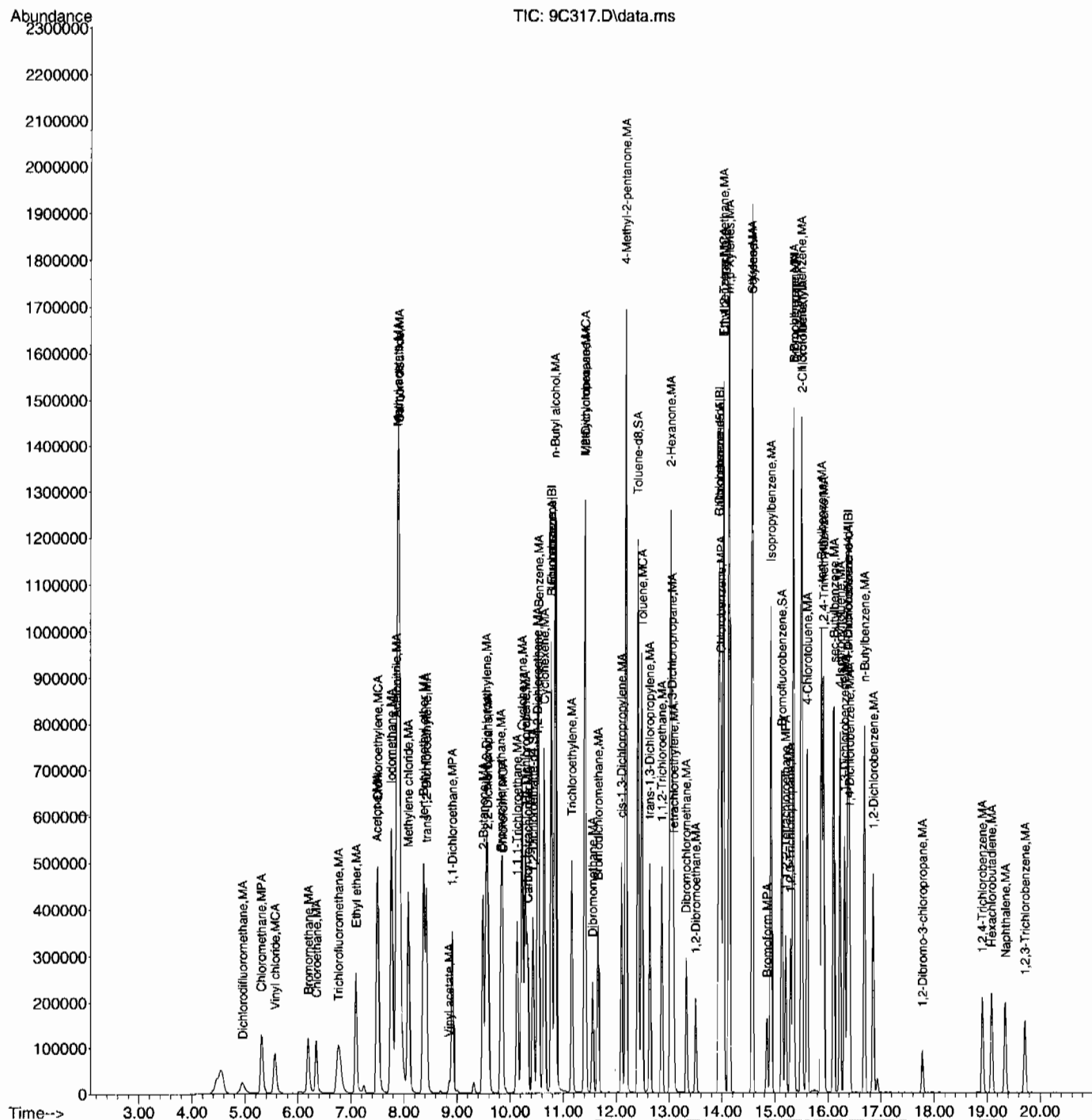
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.495	9.578	0.881		0m	N.D.	d
96) Methacrylonitrile	9.862	9.744	0.915		0m	N.D.	d
97) Tetrahydrofuran	9.850	9.874	0.914		0m	N.D.	d
98) Isobutyl alcohol	10.230	10.159	0.949		0m	N.D.	d
99) Methyl tert-amyl ether	10.538	10.526	0.978		0m	N.D.	d
100) Methyl methacrylate	11.416	11.368	1.059		0m	N.D.	d
101) 1,4-Dioxane	11.546	11.487	1.072		0m	N.D.	d
102) 2-Nitropropane	11.866	11.854	1.101		0m	N.D.	d
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	13.942	13.823	0.852		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.926	14.961	0.912		0m	N.D.	d
108) Cyclohexanone	14.926	15.092	0.912		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.341	15.246	0.937		0m	N.D.	d
110) Pentachloroethane	15.958	15.957	0.975		0m	N.D.	d
111) Benzyl chloride	16.527	16.527	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034		0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C317.D
Acq On : 10 Mar 2010 5:10 pm
Operator : RXY1
InstName : VOA9
Sample : |1202065141|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a MIX[A] MS 248373001SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 11 10:26:55 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202065142	Date Received: 03/02/2010 08:50	%Moisture: 12.3
Client Sample: QC for batch 962616	Client: LANL010	Project: QC
Client ID: RE36-10-7494PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 962617	Inst: VOA9.I	Dilution: 1
Run Date: 03/10/2010 17:41	Analyst: RXY1	Purge Vol: 5 mL
Prep Date: 03/08/2010 12:07	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V99C318.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		29.6	ug/kg	0.388	1.14
74-87-3	Chloromethane		40.1	ug/kg	0.342	1.14
75-01-4	Vinyl chloride		46.0	ug/kg	0.342	1.14
74-83-9	Bromomethane		42.4	ug/kg	0.342	1.14
75-00-3	Chloroethane		46.9	ug/kg	0.342	1.14
75-69-4	Trichlorofluoromethane		46.6	ug/kg	0.342	1.14
67-64-1	Acetone		134	ug/kg	1.89	5.70
75-35-4	1,1-Dichloroethylene		47.9	ug/kg	0.342	1.14
74-88-4	Iodomethane		211	ug/kg	1.83	5.70
75-09-2	Methylene chloride		50.0	ug/kg	2.28	5.70
75-15-0	Carbon disulfide		238	ug/kg	1.43	5.70
156-60-5	trans-1,2-Dichloroethylene		47.9	ug/kg	0.342	1.14
75-34-3	1,1-Dichloroethane		49.4	ug/kg	0.342	1.14
78-93-3	2-Butanone		168	ug/kg	1.71	5.70
156-59-2	cis-1,2-Dichloroethylene		48.9	ug/kg	0.342	1.14
594-20-7	2,2-Dichloropropane		52.8	ug/kg	0.342	1.14
67-66-3	Chloroform		46.6	ug/kg	0.342	1.14
74-97-5	Bromochloromethane		48.0	ug/kg	0.376	1.14
71-55-6	1,1,1-Trichloroethane		50.3	ug/kg	0.342	1.14
563-58-6	1,1-Dichloropropene		46.6	ug/kg	0.342	1.14
56-23-5	Carbon tetrachloride		49.6	ug/kg	0.342	1.14
107-06-2	1,2-Dichloroethane		49.2	ug/kg	0.342	1.14
71-43-2	Benzene		46.2	ug/kg	0.342	1.14
79-01-6	Trichloroethylene		45.8	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane		47.2	ug/kg	0.342	1.14
75-27-4	Bromodichloromethane		48.6	ug/kg	0.342	1.14
74-95-3	Dibromomethane		47.4	ug/kg	0.342	1.14
108-10-1	4-Methyl-2-pentanone		247	ug/kg	1.43	5.70
10061-01-5	cis-1,3-Dichloropropylene		42.0	ug/kg	0.342	1.14
108-88-3	Toluene		46.0	ug/kg	0.342	1.14
10061-02-6	trans-1,3-Dichloropropylene		47.3	ug/kg	0.342	1.14
79-00-5	1,1,2-Trichloroethane		46.7	ug/kg	0.342	1.14
591-78-6	2-Hexanone		160	ug/kg	1.71	5.70
142-28-9	1,3-Dichloropropane		46.3	ug/kg	0.342	1.14
127-18-4	Tetrachloroethylene		44.1	ug/kg	0.342	1.14
124-48-1	Dibromochloromethane		49.7	ug/kg	0.342	1.14
106-93-4	1,2-Dibromoethane		46.9	ug/kg	0.342	1.14
108-90-7	Chlorobenzene		43.6	ug/kg	0.342	1.14

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2154
Lab Sample ID: 1202065142
Client Sample: QC for batch 962616
Client ID: RE36-10-7494PSD
Batch ID: 962617
Run Date: 03/10/2010 17:41
Prep Date: 03/08/2010 12:07
Data File: 031010V99C318.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA9.I
Analyst: RXY1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 12.3
Project: QC
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	E	40.9	ug/kg	0.342	1.14
179601-23-1	m,p-Xylenes		85.4	ug/kg	0.342	2.28
95-47-6	o-Xylene		42.9	ug/kg	0.342	1.14
100-42-5	Styrene		41.3	ug/kg	0.342	1.14
75-25-2	Bromoform		58.2	ug/kg	0.342	1.14
79-34-5	1,1,2,2-Tetrachloroethane		55.1	ug/kg	0.342	1.14
96-18-4	1,2,3-Trichloropropane		56.2	ug/kg	0.342	1.14
108-86-1	Bromobenzene		47.9	ug/kg	0.342	1.14
103-65-1	n-Propylbenzene		48.0	ug/kg	0.342	1.14
95-49-8	2-Chlorotoluene		48.8	ug/kg	0.342	1.14
98-82-8	Isopropylbenzene		53.0	ug/kg	0.342	1.14
108-67-8	1,3,5-Trimethylbenzene		48.6	ug/kg	0.342	1.14
106-43-4	4-Chlorotoluene		47.5	ug/kg	0.342	1.14
98-06-6	tert-Butylbenzene		50.4	ug/kg	0.342	1.14
95-63-6	1,2,4-Trimethylbenzene		48.6	ug/kg	0.342	1.14
135-98-8	sec-Butylbenzene		47.0	ug/kg	0.342	1.14
99-87-6	4-Isopropyltoluene		42.5	ug/kg	0.342	1.14
541-73-1	1,3-Dichlorobenzene		41.4	ug/kg	0.342	1.14
106-46-7	1,4-Dichlorobenzene		41.7	ug/kg	0.342	1.14
104-51-8	n-Butylbenzene		42.2	ug/kg	0.342	1.14
96-12-8	1,2-Dibromo-3-chloropropane		48.1	ug/kg	0.342	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.70	ug/kg	1.83	5.70
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane		47.1	ug/kg	0.342	1.14
95-50-1	1,2-Dichlorobenzene		40.8	ug/kg	0.342	1.14

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C318.D
Acq On : 10 Mar 2010 5:41 pm
Operator : RXY1
InstName : VOA9
Sample : |1202065142|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a MIX[A] MSD 248373001SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 11 10:27:00 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	10.787	10.775	1.000	96	960680	50.00	ug/L	0.01
41) Chlorobenzene-d5	13.941	13.941	1.000	117	640996	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	235566	50.00	ug/L	0.00
82) B Fluorobenzene	10.787	10.775	1.000	96	960680	50.00	ug/L	0.01
103) B Chlorobenzene-d5	13.941	13.942	1.000	117	640996	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.372	16.372	1.000	152	235551	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	10.431	10.431	0.967	65	339857	52.64	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 105.28%			
43) Toluene-d8	12.412	12.412	0.890	98	851362	51.69	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 103.38%			
61) Bromofluorobenzene	15.127	15.127	0.924	95	328166	57.27	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 114.54%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.958	4.944	0.460	85	78123	25.93	ug/L	99
3) Chloromethane	5.308	5.308	0.492	50	270192	35.18	ug/L	99
4) Vinyl chloride	5.574	5.546	0.517	62	226463	40.35	ug/L	100
5) Bromomethane	6.198	6.186	0.575	94	139855	37.16	ug/L	99
6) Chloroethane	6.340	6.340	0.588	64	170504	41.11	ug/L	97
7) Trichlorofluoromethane	6.767	6.767	0.627	101	253788	40.87	ug/L	99
8) Ethyl ether	7.099	7.099	0.658	59	229319	42.04	ug/L	91
9) Acetone	7.490	7.490	0.694	43	506479	117.85	ug/L	95
10) 1,1-Dichloroethylene	7.502	7.502	0.695	61	367125	42.00	ug/L	96
11) Iodomethane	7.775	7.763	0.721	142	1061309	184.94	ug/L	96
12) Acetonitrile	7.858	7.858	0.728	41	1004629	1297.61	ug/L	100
13) Methyl acetate	7.882	7.882	0.731	43	1031863	236.31	ug/L	95
14) Carbon disulfide	7.905	7.906	0.733	76	2606284	208.90	ug/L	98
15) Methylene chloride	8.083	8.083	0.749	84	219480	43.85	ug/L	# 84
16) tert-Butyl methyl ether	8.380	8.368	0.777	73	593288	44.26	ug/L	96
17) trans-1,2-Dichloroethy...	8.427	8.427	0.781	61	362580	41.95	ug/L	95
18) Vinyl acetate	8.854	8.854	0.821	43	71621	5.80	ug/L	95
19) 1,1-Dichloroethane	8.913	8.913	0.826	63	460064	43.27	ug/L	98
20) 2-Butanone	9.494	9.483	0.880	43	774882	147.29	ug/L	92
21) cis-1,2-Dichloroethylene	9.554	9.554	0.886	61	423788	42.88	ug/L	95
22) 2,2-Dichloropropane	9.577	9.578	0.888	77	285610	46.27	ug/L	92
23) Bromochloromethane	9.826	9.827	0.911	128	91766	42.09	ug/L	# 82
24) Chloroform	9.862	9.850	0.914	83	355470	40.88	ug/L	95
25) 1,1,1-Trichloroethane	10.135	10.135	0.940	97	287016	44.13	ug/L	99
26) Cyclohexane	10.230	10.230	0.948	56	467804	42.20	ug/L	93
27) 1,1-Dichloropropene	10.289	10.289	0.954	75	254526	40.88	ug/L	94
28) Carbon tetrachloride	10.336	10.325	0.958	117	235884	43.52	ug/L	99
30) 1,2-Dichloroethane	10.514	10.514	0.975	62	354599	43.16	ug/L	99
31) Benzene	10.538	10.538	0.977	78	747485	40.48	ug/L	95
32) Cyclohexene	10.645	10.645	0.987	67	397974	40.59	ug/L	88
33) n-Butyl alcohol	10.846	10.846	1.005	56	881353	4320.67	ug/L	92
34) Trichloroethylene	11.166	11.167	1.035	95	192653	40.11	ug/L	98
35) 1,2-Dichloropropane	11.415	11.416	1.058	63	257577	41.39	ug/L	98
36) Methylcyclohexane	11.415	11.416	1.058	83	291559	36.96	ug/L	90
37) Dibromomethane	11.558	11.558	1.071	93	125350	41.56	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C318.D
Acq On : 10 Mar 2010 5:41 pm
Operator : RXY1
InstName : VOA9
Sample : |1202065142|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a MIX[A] MSD 248373001SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 11 10:27:00 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	11.664	11.665	1.081	83	280230	42.62	ug/L	100
39) 2-Chloroethylvinyl ether	0.000	11.866	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	12.103	12.103	1.122	75	288458	36.86	ug/L	95
42) 4-Methyl-2-pentanone	12.186	12.186	0.874	58	569717	216.63	ug/L #	82
44) Toluene	12.495	12.483	0.896	91	751425	40.35	ug/L	97
45) trans-1,3-Dichloroprop...	12.637	12.637	0.906	75	284317	41.44	ug/L	96
46) 1,1,2-Trichloroethane	12.862	12.862	0.923	83	150040	40.94	ug/L	99
47) 2-Hexanone	13.028	13.028	0.935	43	1007560	139.95	ug/L	92
48) 1,3-Dichloropropane	13.052	13.052	0.936	76	298009	40.63	ug/L	90
49) Tetrachloroethylene	13.087	13.088	0.939	164	103383	38.67	ug/L	96
50) Dibromochloromethane	13.325	13.325	0.956	129	178757	43.57	ug/L	99
51) 1,2-Dibromoethane	13.503	13.503	0.969	107	168214	41.14	ug/L	99
52) Chlorobenzene	13.977	13.977	1.003	112	443663	38.25	ug/L	99
53) 1,1,1,2-Tetrachloroethane	14.024	14.024	1.006	131	160709	41.28	ug/L	99
54) Ethylbenzene	14.024	14.024	1.006	91	822287	35.83	ug/L	96 E
55) m,p-Xylenes	14.131	14.131	1.014	106	580196	74.82	ug/L	87
56) o-Xylene	14.570	14.570	1.045	106	301302	37.60	ug/L	87
57) Styrene	14.570	14.570	1.045	104	467764	36.23	ug/L	97
59) Bromoform	14.854	14.855	0.907	173	92573	51.02	ug/L	99
60) Isopropylbenzene	14.926	14.926	0.912	105	768256	46.48	ug/L	97
62) 1,1,2,2-Tetrachloroethane	15.198	15.198	0.928	83	228182	48.29	ug/L	99
63) 1,2,3-Trichloropropane	15.293	15.293	0.934	110	56112	49.24	ug/L #	98
64) Bromobenzene	15.352	15.353	0.938	156	149680	42.02	ug/L	98
65) n-Propylbenzene	15.352	15.353	0.938	91	914324	42.06	ug/L	96
66) 1,3,5-Trimethylbenzene	15.495	15.495	0.946	105	603945	42.59	ug/L	95
67) 2-Chlorotoluene	15.507	15.507	0.947	126	172006	42.79	ug/L	90
68) 4-Chlorotoluene	15.613	15.614	0.954	91	567993	41.67	ug/L	98
69) tert-Butylbenzene	15.874	15.874	0.970	134	117790	44.15	ug/L #	89
70) 1,2,4-Trimethylbenzene	15.922	15.910	0.972	105	609294	42.56	ug/L	95
71) sec-Butylbenzene	16.111	16.112	0.984	105	775321	41.18	ug/L	97
72) 4-Isopropyltoluene	16.230	16.230	0.991	119	545092	37.24	ug/L	98
73) 1,3-Dichlorobenzene	16.313	16.313	0.996	146	265876	36.31	ug/L	99
74) 1,4-Dichlorobenzene	16.408	16.408	1.002	146	258017	36.57	ug/L	100
75) n-Butylbenzene	16.692	16.693	1.020	91	591081	36.96	ug/L	95
76) 1,2-Dichlorobenzene	16.858	16.859	1.030	146	250307	35.75	ug/L	98
77) 1,2-Dibromo-3-chloropr...	17.783	17.784	1.086	157	30220	42.16	ug/L	97
78) 1,2,4-Trichlorobenzene	18.922	18.922	1.156	180	98590	22.19	ug/L	100
79) Hexachlorobutadiene	19.100	19.088	1.167	225	55756	26.58	ug/L	99
80) Naphthalene	19.349	19.349	1.182	128	279620	23.20	ug/L	98
81) 1,2,3-Trichlorobenzene	19.716	19.717	1.204	180	81600	20.94	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.860	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.700	0.000		0	N.D.		
85) Acrolein	0.000	7.313	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	7.467	0.000		0	N.D.		
87) Isopropyl Alcohol	7.561	7.550	0.701		0m	N.D.	d	
88) Allyl chloride	7.858	7.929	0.728		0m	N.D.	d	
89) tert-Butyl Alcohol	8.059	8.060	0.747		0m	N.D.	d	
90) Acrylonitrile	8.368	8.332	0.776		0m	N.D.	d	
91) Isopropyl ether	8.866	8.866	0.822		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	0.000	9.008	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	9.269	0.000		0	N.D.		
94) Ethyl acetate	9.494	9.483	0.880		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V9\
Data File : 9C318.D
Acq On : 10 Mar 2010 5:41 pm
Operator : RXY1
InstName : VOA9
Sample : |1202065142|962617|1|VOA|1|VOA8260BS|
Misc : LANL 5.0g n/a MIX[A] MSD 248373001SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 11 10:27:00 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE

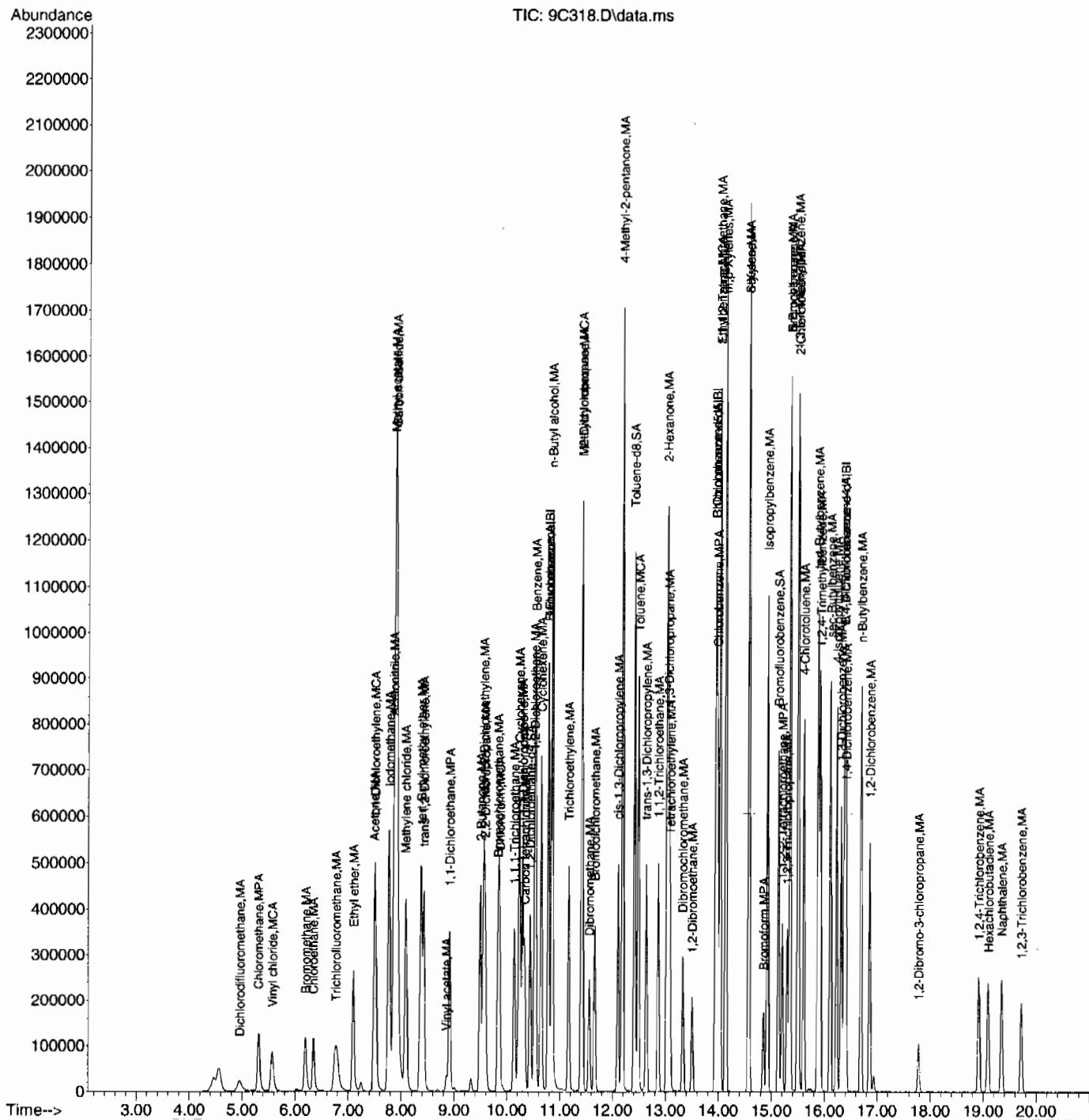
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	9.494	9.578	0.880		0m	N.D.	d
96) Methacrylonitrile	9.767	9.744	0.905		0m	N.D.	d
97) Tetrahydrofuran	9.850	9.874	0.913		0m	N.D.	d
98) Isobutyl alcohol	10.230	10.159	0.948		0m	N.D.	d
99) Methyl tert-amyl ether	10.538	10.526	0.977		0m	N.D.	d
100) Methyl methacrylate	11.415	11.368	1.058		0m	N.D.	d
101) 1,4-Dioxane	11.558	11.487	1.071		0m	N.D.	d
102) 2-Nitropropane	11.854	11.854	1.099		0m	N.D.	d
104) Ethyl methacrylate	0.000	12.613	0.000		0	N.D.	
106) 1-Chlorohexane	13.941	13.823	0.852		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.926	14.961	0.912		0m	N.D.	d
108) Cyclohexanone	14.914	15.092	0.911		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.352	15.246	0.938		0m	N.D.	d
110) Pentachloroethane	15.969	15.957	0.975		0m	N.D.	d
111) Benzyl chloride	16.515	16.527	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.930	16.918	1.034		0m	N.D.	d

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

GEL Laboratories, LLC

```
Data Path : C:\msdchem\1\DATA\031010V9\  
Data File : 9C318.D  
Acq On : 10 Mar 2010 5:41 pm  
Operator : RXY1  
InstName : VOA9  
Sample : |1202065142|962617|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g n/a MIX[A] MSD 248373001SOIL  
ALS Vial : 18 Sample Multiplier: 1
```

Quant Time: Mar 11 10:27:00 2010
Quant Method : C:\msdchem\1\DATA\030210V9\VOA9-8260-030210.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Wed Mar 03 09:48:05 2010
Response via : Initial Calibration
Integrator: RTE



Miscellaneous

Prep Logbook

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

Batch ID: 962616
Analyst: Ramona Yarbrough
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 14
Instrument: Sartorius Balance B-001

Verified by: _____
 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
1202065143 LCS	08-MAR-2010 10:00:00	Soil	5	5	1	
1202065144 LCS	08-MAR-2010 10:01:00	Soil	5	5	1	
1202065140 MB	08-MAR-2010 10:02:00	Soil	5	5	1	
248373001	08-MAR-2010 12:05:00	Soil	5	5	1	
1202065141 PS (248373001)	08-MAR-2010 12:06:00	Soil	5	5	1	
1202065142 PSD (248373001)	08-MAR-2010 12:07:00	Soil	5	5	1	
248373002	08-MAR-2010 12:08:00	Soil	5	5	1	
248373003	08-MAR-2010 12:09:00	Soil	5	5	1	
248373004	08-MAR-2010 12:10:00	Soil	5	5	1	
248373005	08-MAR-2010 12:11:00	Soil	5	5	1	
248373006	08-MAR-2010 12:12:00	Soil	5	5	1	
248373007	08-MAR-2010 12:13:00	Soil	5	5	1	
248373008	08-MAR-2010 12:14:00	Soil	5	5	1	
248373010	08-MAR-2010 12:16:00	Soil	5	5	1	
248373011	08-MAR-2010 12:17:00	Soil	5	5	1	
248373014	08-MAR-2010 12:18:00	Soil	5	5	1	
248373015	08-MAR-2010 12:19:00	Soil	5	5	1	
248373016	08-MAR-2010 12:20:00	Misc Solid	5	5	1	
1202066321 LCS	09-MAR-2010 10:00:00	Misc Solid	5	5	1	
1202066322 LCS	09-MAR-2010 10:01:00	Misc Solid	5	5	1	
1202066320 MB	09-MAR-2010 10:02:00	Misc Solid	5	5	1	
248373009	09-MAR-2010 12:13:00	Soil	5	5	1	
1202068775 LCS	10-MAR-2010 09:00:00	Misc Solid	5	5	1	
1202068776 LCS	10-MAR-2010 09:01:00	Misc Solid	5	5	1	
1202068774 MB	10-MAR-2010 09:02:00	Misc Solid	5	5	1	

Reagent/Solvent Lot ID: _____ Description: _____ Amount: _____ Comments: _____

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

ORGANIC RUN LOG - INSTRUMENT ID#VOA9

Date: 3/2/2010 Method 8260/624 Operator: RXY1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY Not# 1 Daily Instrument Readings:

CALIBRATION & CC INFORMATION:

Multiplier Voltage: 1553

Initial Calibration Date: 3/2/2010

Daily Standard Volume Added for Purge (ul)

Purge Amount

(See pg. 59 for ICAI Std. Sci. Ids)

Soln ID#	Smpl	CCV	LCS	BFB
IS	1	1	1	
SS	1	1	1	
BFB				1

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

Sequence Number: 030210V9

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)	Acceptance ble(O/X)	Comments
2 Mar 2010	07:29	9B201.D	W9VM100302-01	-----	CCV	5ml	1	1	-----	1	w / s	RXY1	N/A	X	MIX[AL]VM100220-01B/VM100301-01
2 Mar 2010	07:57	9B202.D	W9VM100302-02	-----	CCV	5g	1	1	-----	2	s	RXY1	N/A	X	MIX[AL]VM100220-01B/VM100301-01 SOIL
2 Mar 2010	08:50	9B203.D	W9VM100302-03	-----	CCV	5ml	1	1	-----	3	w	RXY1	N/A	X	MIX[AL]VM100220-01B/VM100301-01
2 Mar 2010	09:19	9B204.D	W9VM100302-04	-----	LCS	5g	1	1	-----	4	s	RXY1	N/A	X	MIX[AL]VM100220-01B/VM100301-01 SOIL
2 Mar 2010	09:57	9B205.D	W9VM100302-05	-----	CCV	5ml	1	1	-----	5	w	RXY1	N/A	X	MIX[AL]VM100106-07C/VM100222-07A
2 Mar 2010	10:25	9B206.D	W9VM100302-06	-----	LCS	5ml	1	1	-----	6	w	RXY1	N/A	X	MIX[AL]VM100126-02E/VM100301-01
2 Mar 2010	11:14	9B207.D	1202-----	-----	BLANK	5ml	1	1	n/a	7	w	RXY1	N/A	X	Instrument blank
2 Mar 2010	11:43	9B208.D	1202-----	-----	BLANK	5ml	1	1	n/a	8	w	RXY1	N/A	X	Instrument blank
2 Mar 2010	12:10	9B209.D	UVM100203-02	-----	BFB	-----	1	1	-----	9	w	RXY1	N/A	O	
2 Mar 2010	12:38	9B210.D	W9VM100302-07	-----	ICAL	5ml	1	1	n/a	10	w	RXY1	N/A	O	MIX[AL]VM100106-01C/VM100222-01A
2 Mar 2010	13:07	9B211.D	W9VM100302-08	-----	ICAL	5ml	1	1	n/a	11	w	RXY1	N/A	O	MIX[AL]VM100106-02C/VM100222-02A
2 Mar 2010	13:36	9B212.D	W9VM100302-09	-----	ICAL	5ml	1	1	n/a	12	w	RXY1	N/A	O	MIX[AL]VM100106-03C/VM100222-03A
2 Mar 2010	14:04	9B213.D	W9VM100302-10	-----	ICAL	5ml	1	1	n/a	13	w	RXY1	N/A	O	MIX[AL]VM100106-04C/VM100222-04A
2 Mar 2010	14:33	9B214.D	W9VM100302-11	-----	ICAL	5ml	1	1	n/a	14	w	RXY1	N/A	O	MIX[AL]VM100106-05C/VM100222-05A
2 Mar 2010	15:02	9B215.D	W9VM100302-12	-----	ICAL	5ml	1	1	n/a	15	w	RXY1	N/A	O	MIX[AL]VM100106-06C/VM100222-06A
2 Mar 2010	15:31	9B216.D	W9VM100302-13	-----	ICAL	5ml	1	1	n/a	16	w	RXY1	N/A	O	MIX[AL]VM100106-08C/VM100222-07A
2 Mar 2010	16:00	9B217.D	W9VM100302-14	-----	ICAL	5ml	1	1	n/a	17	w	RXY1	N/A	O	MIX[AL]VM100106-08C/VM100222-08A
2 Mar 2010	16:28	9B218.D	1202-----	GEL	BLANK	5ml	1	1	n/a	18	w	RXY1	N/A	X	Instrument blank
2 Mar 2010	16:57	9B219.D	W9VM100302-15	-----	ICV	5ml	1	1	n/a	19	w	RXY1	N/A	X	MIX[B]VM100215-08A/VM100125-08E
2 Mar 2010	17:25	9B220.D	W9VM100302-16	-----	ICV	5ml	1	1	n/a	20	w	RXY1	N/A	X	MIX[AL]VM100220-01C/VM100301-01
2 Mar 2010	17:54	9B221.D	W9VM100302-17	-----	ICV	5ml	1	1	n/a	21	w	RXY1	N/A	X	MIX[AL]VM100126-02E/VM100301-01
2 Mar 2010	18:23	9B222.D	1202-----	GEL	BLANK	5ml	1	1	n/a	22	w	RXY1	N/A	X	Instrument blank
2 Mar 2010	18:51	9B223.D	W9VM100302-18	-----	ICAL	5ml	1	1	n/a	23	w	RXY1	N/A	O	MIX[B]VM100215-01/VM100227-01A
2 Mar 2010	19:19	9B224.D	W9VM100302-19	-----	ICAL	5ml	1	1	n/a	24	w	RXY1	N/A	O	MIX[B]VM100215-02/VM100227-02A
2 Mar 2010	19:48	9B225.D	W9VM100302-20	-----	ICAL	5ml	1	1	n/a	25	w	RXY1	N/A	O	MIX[B]VM100215-03/VM100227-03A
2 Mar 2010	20:16	9B226.D	W9VM100302-21	-----	ICAL	5ml	1	1	n/a	26	w	RXY1	N/A	O	MIX[B]VM100215-04/VM100227-04A
2 Mar 2010	20:44	9B227.D	W9VM100302-22	-----	ICAL	5ml	1	1	n/a	27	w	RXY1	N/A	O	MIX[B]VM100215-05/VM100227-05A
2 Mar 2010	21:12	9B228.D	W9VM100302-23	-----	ICAL	5ml	1	1	n/a	28	w	RXY1	N/A	O	MIX[B]VM100215-06/VM100227-06A
2 Mar 2010	21:40	9B229.D	W9VM100302-24	-----	ICAL	5ml	1	1	n/a	29	w	RXY1	N/A	O	MIX[B]VM100215-07/VM100227-07A
2 Mar 2010	22:09	9B230.D	1202-----	GEL	BLANK	5ml	1	1	n/a	30	w	RXY1	N/A	X	Instrument blank

Date: 3/3/2010 Method 8260/624 Operator: RXY1

REVIEWED BY: _____
DATE: _____
Multiplier Voltage: 1553

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings:

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/2/2010 & 3/3/2010

(See pg. 59 & 61 for ICAL Std. Sci. Ids)	Daily Standard	Volume Added for Purge (ul)	MS/ BIK/	CCV	LCS	BFB
Solution ID#	W9VM100303-03	5+5	1	1	1	
IS	UVM100217-01	1	1	1	1	
SS	UVM100203-02	1	1	1	1	
LCS/MS	W9VM100303-03/04				5+5	
BFB	UVM100203-02					1
SHORT	W9VM100303-05	5	5	5		
N/A						

Purge Amount

5 Water Purge Vol:
5.2g Soil Purge Wt.
X Mid level ext. MeOH Vol:
100 ul
DA 057 Methanol Lot #
X Heated Purge

Sequence Number: 030310V9

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix	Analyst	Cl test (Y/N)	Accepta ble(O/X)	Comments
3 Mar 2010	09:53	9B301.D	W9VM100303-01	-----	CCV	5ml	1	-----	1	w/s	RXY1	N/A	X	MIX[A]UVM100106-08CJVM100222-07A
3 Mar 2010	10:22	9B302.D	W9VM100303-02	-----	LCS	5ml	1	-----	2	w	RXY1	N/A	X	MIX[A]UVM100126-02EJVM100301-01
3 Mar 2010	10:50	9B303.D	W9VM100303-03	-----	BFB/CCV/LCS	5ml	1	-----	3	w	RXY1	N/A	O	MIX[A]UVM100220-01CJVM100301-01
3 Mar 2010	11:32	9B304.D	W9VM100303-04	-----	LCS	5g	1	-----	4	s	RXY1	N/A	O	MIX[A]UVM100126-02EJVM100301-01 SOIL
3 Mar 2010	12:00	9B305.D	W9VM100303-05	-----	CCV/ICV	5ml	1	-----	5	w	RXY1	N/A	O	MIX[B]UVM100215-08A
3 Mar 2010	12:29	9B306.D	W9VM100303-06	-----	LCS	5g	1	-----	6	s	RXY1	N/A	X	MIX[B]UVM100215-08A SOIL
3 Mar 2010	12:58	9B307.D	1202-----	-----	BLANK	5ml	1	-----	7	w	RXY1	N/A	X	CO - Use 9B309
3 Mar 2010	13:26	9B308.D	1202-----	-----	BLANK	5g	1	-----	8	s	RXY1	N/A	O	SOIL
3 Mar 2010	13:55	9B309.D	1202-----	-----	BLANK	5ml	1	-----	9	w	RXY1	N/A	O	
3 Mar 2010	14:24	9B310.D	248086003	PSCT	959462	5ml	1	pH2	10	w	RXY1	N	O	
3 Mar 2010	14:53	9B311.D	1202-----	-----	HB	100ul	50	-----	11	s	RXY1	N/A	O	SOIL Lot DA 057
3 Mar 2010	15:22	9B312.D	248086001	PSCT	959462	5ml	1	pH2	12	w	RXY1	N	O	
3 Mar 2010	15:51	9B313.D	248086002	PSCT	959462	5ml	1	pH2	13	w	RXY1	N	O	
3 Mar 2010	16:21	9B314.D	247864009	WASP	959467	5ml	1	pH2	14	w	RXY1	N	O	
3 Mar 2010	16:50	9B315.D	248061001	FUJI	960376	100ul	50	n/a	15	s	RXY1	N/A	O	SOIL 5.2g
3 Mar 2010	17:19	9B316.D	248050001	LANL	960378	5ml	1	pH2	16	w	RXY1	N	O	
3 Mar 2010	17:48	9B317.D	248050002	LANL	960378	5ml	1	pH2	17	w	RXY1	N	O	
3 Mar 2010	18:16	9B318.D	248062001	LANL	960378	5ml	1	pH2	18	w	RXY1	N	O	
3 Mar 2010	18:45	9B319.D	248062002	LANL	960378	5ml	1	pH2	19	w	RXY1	N	O	
3 Mar 2010	19:13	9B320.D	248062003	LANL	960378	5ml	1	pH2	20	w	RXY1	N	O	
3 Mar 2010	19:41	9B321.D	1202060004	LANL	960378	5ml	1	pH2	21	w	RXY1	N	O	MIX [A] MS 248062001
3 Mar 2010	20:09	9B322.D	1202060005	LANL	960378	5ml	1	pH2	22	w	RXY1	N	O	MIX [A] MSD 248062001
3 Mar 2010	20:38	9B323.D	1202057851	PSCT	959462	5ml	1	pH2	23	w	RXY1	N	O	MIX[A] MS 248086001
3 Mar 2010	21:06	9B324.D	1202057852	PSCT	959462	5ml	1	pH2	24	w	RXY1	N	O	MIX[A] MSD 248086001
3 Mar 2010	21:34	9B325.D	1202059980	FUJI	960376	100ul	50	n/a	25	s	RXY1	N/A	O	MIX[A] MS 248061001 SOIL
3 Mar 2010	22:02	9B326.D	1202059981	FUJI	960376	100ul	50	n/a	26	s	RXY1	N/A	O	MIX[A] MSD 248061001 SOIL
3 Mar 2010	22:30	9B327.D	1202-----	GEL	BLANK	5ml	1	n/a	27	w	RXY1	N/A	X	Instrument blank

Date: 3/8/2010 Method 8260/624 Operator: RXY1

REVIEWED BY: _____
DATE: _____
Multiplier Voltage: 1553

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings:

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/2/2010 & 3/3/2010

(See pg 59 & 61 for ICAI Std. Sol. Ids)

NaHSO4 lot # N/A

Cl test lot # 84515

Sequence Number: 030810V9

Daily Standard Volume Added for Purge (ul)

Soln ID#	CCV	W9VM100308-01	IS	UVM100217-01	SS	UVM100203-02	LCS/MS	W9VM100308-02/03	BFB	UVM100203-02	SHORT	W9VM100308-04	N/A
CCV	5+5	1	1	1	1	1	5+5	1	1	5	5		
IS	1	1	1	1	1	1	5+5	1	1	5	5		
SS	1	1	1	1	1	1	5+5	1	1	5	5		
LCS/MS	1	1	1	1	1	1	5+5	1	1	5	5		
BFB	1	1	1	1	1	1	5+5	1	1	5	5		
SHORT	1	1	1	1	1	1	5+5	1	1	5	5		
N/A													

Purge Amount

5	Water Purge Vol:
5.0g	Soil Purge Wt.
X	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 #	Vol(ml/ul)	Dil.	Factor	pH	AS	Matrix	Analyst	CI test	Accepta	Comments
8 Mar 2010	09:55	9C101.D		W9VM100308-01		LANL	962617	5.0g	1	1	n/a	1	w/s	RXY1	N/A	O	MIX(A)UVM100106-07D/UVM100222-07B
8 Mar 2010	10:24	9C102.D		W9VM100308-02		LANL	962617	5.0g	1	1	n/a	2	w	RXY1	N/A	O	MIX(A)UVM100220-01D/UVM100308-01
8 Mar 2010	10:53	9C103.D		W9VM100308-03		LANL	962617	5.0g	1	1	n/a	3	s	RXY1	N/A	O	MIX(A)UVM100220-01D/UVM100308-01 SOIL
8 Mar 2010	11:23	9C104.D		W9VM100308-04		LANL	962617	5.0g	1	1	n/a	4	s	RXY1	N/A	O	MIX(B)UVM100215-08B SOIL
8 Mar 2010	11:53	9C105.D		1202-----		GEL	BLANK	5ml	1	1	n/a	5	s	RXY1	N/A	O	SOIL
8 Mar 2010	12:23	9C106.D		1202-----		GEL	BLANK	5ml	1	1	n/a	6	w	RXY1	N/A	O	SOIL
8 Mar 2010	12:54	9C107.D		248373016		LANL	962617	5.0g	1	1	n/a	7	s	RXY1	N/A	O	SOIL
8 Mar 2010	13:25	9C108.D		248545003		LANL	962109	5.0g	1	1	n/a	8	s	RXY1	N/A	O	SOIL
8 Mar 2010	13:56	9C109.D		248373001		LANL	962617	5.0g	1	1	n/a	9	s	RXY1	N/A	O	SOIL
8 Mar 2010	14:27	9C110.D		248373002		LANL	962617	5.0g	1	1	n/a	10	s	RXY1	N/A	O	Low IS: See 9C208 SOIL
8 Mar 2010	14:58	9C111.D		248373003		LANL	962617	5.0g	1	1	n/a	11	s	RXY1	N/A	O	Low IS: See 9C209 SOIL
8 Mar 2010	15:30	9C112.D		248373004		LANL	962617	5.0g	1	1	n/a	12	s	RXY1	N/A	O	Low IS High SS: See 9C210 SOIL
8 Mar 2010	16:01	9C113.D		248373005		LANL	962617	5.0g	1	1	n/a	13	s	RXY1	N/A	O	Low IS: See 9C211 SOIL
8 Mar 2010	16:32	9C114.D		248373006		LANL	962617	5.0g	1	1	n/a	14	s	RXY1	N/A	O	Low IS: See 9C212 SOIL
8 Mar 2010	17:02	9C115.D		248373007		LANL	962617	5.0g	1	1	n/a	15	s	RXY1	N/A	O	Low IS: See 9C213 SOIL
8 Mar 2010	17:33	9C116.D		248373008		LANL	962617	5.0g	1	1	n/a	16	s	RXY1	N/A	O	Low IS High SS: See 9C214 SOIL
8 Mar 2010	18:03	9C117.D		248373009		LANL	962617	5.0g	1	1	n/a	17	s	RXY1	N/A	X	Low IS: Report 9C215 SOIL
8 Mar 2010	18:31	9C118.D		248373010		LANL	962617	5.0g	1	1	n/a	18	s	RXY1	N/A	O	Low IS: See 9C216 SOIL
8 Mar 2010	18:59	9C119.D		248373011		LANL	962617	5.0g	1	1	n/a	19	s	RXY1	N/A	O	SOIL
8 Mar 2010	19:27	9C120.D		248373014		LANL	962617	5.0g	1	1	n/a	20	s	RXY1	N/A	O	SOIL
8 Mar 2010	19:55	9C121.D		248373015		LANL	962617	5.0g	1	1	n/a	21	s	RXY1	N/A	O	Low IS High SS: See 9C217 SOIL
8 Mar 2010	20:23	9C122.D		248701002		COMM	962107	5ml	1	1	pH2	22	w	RXY1	N	X	Napthalene OR - See 9C221
8 Mar 2010	20:51	9C123.D		248699002		COMM	962107	5ml	1	1	pH2	23	w	RXY1	N	X	CO - See 9C219
8 Mar 2010	21:19	9C124.D		248717003		COMM	962107	5ml	1	1	pH2	24	w	RXY1	N	X	CO - See 9C218
8 Mar 2010	21:47	9C125.D		1202063702		COMM	962107	5ml	1	1	pH2	25	w	RXY1	N	X	MIX(A) MS 248701002: See 9C224
8 Mar 2010	22:14	9C126.D		1202063703		COMM	962107	5ml	1	1	pH2	26	w	RXY1	N	X	MIX(A) MSD 248701002: See 9C225
8 Mar 2010	22:42	9C127.D		1202-----		GEL	BLANK	5ml	1	1	n/a	27	w	RXY1	N/A	X	Instrument blank
8 Mar 2010	23:10	9C128.D		1202-----		GEL	BLANK	5ml	1	1	n/a	28	w	RXY1	N/A	X	Instrument blank
8 Mar 2010	23:38	9C129.D		248600002		HILT	962611	5ml	1	1	pH2	29	w	RXY1	N	X	624 sample: CO - See 9C230
9 Mar 2010	00:06	9C130.D		1202065132		HILT	962611	5ml	1	1	pH2	30	w	RXY1	N	X	624 sample: CO - See 9C231
9 Mar 2010	00:34	9C131.D		1202065133		HILT	962611	5ml	1	1	pH2	31	w	RXY1	N	X	MIX(A) MS 248600002 624 sample - See 9C232
9 Mar 2010	01:02	9C132.D		1202-----		GEL	BLANK	5ml	1	1	n/a	32	w	RXY1	N/A	X	Instrument blank

Date: 3/9/2010 Method 8260/624 Operator: RXY1

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 Daily Instrument Readings:

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/2/2010 & 3/3/2010

(See pg. 59 & 61 for ICAI Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 84515

Sequence Number: 030910V9

REVIEWED BY: [Signature]
DATE: 5/16/10
Multiplier Voltage: 1553

Purge Amount
5 Water Purge Vol:
5.0g Soil Purge Wt:
X Mid level ext. MeOH Vol:
N/A ul
N/A Methanol Lot #
X Heated Purge

Analysis		Lab Sample ID		Client		Batch #		Wt.(g) or Dil.		AS		Matrix		Analyst		Cl test		Accepta		Comments	
Date	Time	Data File	No MS or GC data	present				Factor	pH	Slot #	w or s					(Y/N)	ble(O/X)				
9 Mar 2010 10:24	9C201.D	W9VM100309-02	W9VM100309-02			8F6CCV/LCS	5ml	1		2	w			RXY1	N/A	N/A	X			No data acquired for 9C201	
9 Mar 2010 10:52	9C203.D	W9VM100309-03	W9VM100309-03			LCS	5g	1		3	s			RXY1	N/A	N/A	O			MIX(A)UVM100220-01E/MV100308-01	
9 Mar 2010 11:21	9C204.D	W9VM100309-04	W9VM100309-04			CCV/LCS	5g	1		4	s			RXY1	N/A	N/A	O			MIX(A)UVM100220-01E/MV100308-01 SOIL	
9 Mar 2010 11:50	9C205.D	1202-----				BLANK	5ml	1	n/a	5	w			RXY1	N/A	N/A	O			MIX(B)UVM100215-08B SOIL	
9 Mar 2010 12:19	9C206.D	1202-----				BLANK	5g	1	n/a	6	s			RXY1	N/A	N/A	O			SOIL	
9 Mar 2010 12:49	9C207.D	248373001	248373001			962617	5g	1	n/a	7	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C109	
9 Mar 2010 13:19	9C209.D	248373002	248373002			962617	5g	1	n/a	8	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C110	
9 Mar 2010 13:49	9C210.D	248373003	248373003			962617	5g	1	n/a	9	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C111	
9 Mar 2010 14:20	9C208.D	248373004	248373004			962617	5g	1	n/a	10	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C112	
9 Mar 2010 14:51	9C211.D	248373005	248373005			962617	5g	1	n/a	11	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C113	
9 Mar 2010 15:22	9C212.D	248373006	248373006			962617	5g	1	n/a	12	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C114	
9 Mar 2010 15:52	9C213.D	248373007	248373007			962617	5g	1	n/a	13	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C115	
9 Mar 2010 16:23	9C214.D	248373008	248373008			962617	5g	1	n/a	14	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C116	
9 Mar 2010 16:54	9C215.D	248373009	248373009			962617	5g	1	n/a	15	s			RXY1	N/A	N/A	O			SOIL	
9 Mar 2010 17:24	9C216.D	248373010	248373010			962617	5g	1	n/a	16	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C118	
9 Mar 2010 17:54	9C217.D	248373015	248373015			962617	5g	1	n/a	17	s			RXY1	N/A	N/A	X			SOIL: Confirmation for 9C121	
9 Mar 2010 18:24	9C218.D	248717003	248717003			962107	5ml	1	ph2	18	w			RXY1	N/A	N/A	O				
9 Mar 2010 18:54	9C219.D	248699002	248699002			962107	5ml	1	ph2	19	w			RXY1	N/A	N/A	O				
9 Mar 2010 19:24	9C220.D	248701002	248701002			962107	2.5ml	2	ph2	20	w			RXY1	N/A	N/A	O				
9 Mar 2010 19:52	9C221.D	248701002	248701002			962107	5ml	1	ph2	21	w			RXY1	N/A	N/A	O				
9 Mar 2010 20:21	9C222.D	1202065141	1202065141			962617	5g	1	n/a	22	s			RXY1	N/A	N/A	X			MIX(A) MS 248373001: Report 9C317	
9 Mar 2010 20:49	9C223.D	1202065142	1202065142			962617	5g	1	n/a	23	s			RXY1	N/A	N/A	X			MIX(A) MSD 248373001: Report 9C318	
9 Mar 2010 21:17	9C224.D	1202063702	1202063702			962107	5ml	1	ph2	24	w			RXY1	N/A	N/A	O			MIX(A) MS 248701002	
9 Mar 2010 21:45	9C225.D	1202063703	1202063703			962107	5ml	1	ph2	25	w			RXY1	N/A	N/A	O			MIX(A) MSD 248701002	
9 Mar 2010 22:13	9C226.D	1202-----				BLANK	5ml	1	n/a	26	w			RXY1	N/A	N/A	X			Instrument blank	
9 Mar 2010 22:41	9C227.D	1202-----				BLANK	5ml	1	n/a	27	w			RXY1	N/A	N/A	X			Instrument blank	
9 Mar 2010 23:09	9C228.D	1202-----				BLANK	5ml	1	n/a	28	w			RXY1	N/A	N/A	X			Instrument blank	
9 Mar 2010 23:38	9C229.D	1202-----				BLANK	5ml	1	n/a	29	w			RXY1	N/A	N/A	X			Instrument blank	
3/10/2010 0:06	9C230.D	248600002	248600002			HILT	5ml	1	ph2	30	w			RXY1	N/A	N/A	O			624 sample	
3/10/2010 0:34	9C231.D	1202065132	1202065132			HILT	5ml	1	ph2	31	w			RXY1	N/A	N/A	O			DUP 624 sample	
3/10/2010 1:02	9C232.D	1202065133	1202065133			HILT	5ml	1	ph2	32	w			RXY1	N/A	N/A	O			MIX(A) MS 248600002	
3/10/2010 1:29	9C233.D	1202-----				BLANK	5ml	1	n/a	33	w			RXY1	N/A	N/A	X			Instrument blank	

8260/624 Operator: RXY1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY		1	Daily Instrument Readings:

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/2/2010 & 3/3/2010

(See pg. 59 & 61 for |CAL Std. Sci. lds)

NaHSO ₄ lot #	N/A

CI test lot # 84515

Sequence Number: 031010VS

Daily Standard	Volume Added for Purge (ul)
1	100
2	200
3	300
4	400
5	500
6	600
7	700
8	800
9	900
10	1000
11	1100
12	1200
13	1300
14	1400
15	1500
16	1600
17	1700
18	1800
19	1900
20	2000
21	2100
22	2200
23	2300
24	2400
25	2500
26	2600
27	2700
28	2800
29	2900
30	3000
31	3100
32	3200
33	3300
34	3400
35	3500
36	3600
37	3700
38	3800
39	3900
40	4000
41	4100
42	4200
43	4300
44	4400
45	4500
46	4600
47	4700
48	4800
49	4900
50	5000
51	5100
52	5200
53	5300
54	5400
55	5500
56	5600
57	5700
58	5800
59	5900
60	6000
61	6100
62	6200
63	6300
64	6400
65	6500
66	6600
67	6700
68	6800
69	6900
70	7000
71	7100
72	7200
73	7300
74	7400
75	7500
76	7600
77	7700
78	7800
79	7900
80	8000
81	8100
82	8200
83	8300
84	8400
85	8500
86	8600
87	8700
88	8800
89	8900
90	9000
91	9100
92	9200
93	9300
94	9400
95	9500
96	9600
97	9700
98	9800
99	9900
100	10000

Solution ID#	Smpl	CCV	LCS	BFB
--------------	------	-----	-----	-----

CCV	W9VM100310-01	5+5	
-----	---------------	-----	--

IS	UVM100217-01	1	1
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SS	UVM100203-02	1	1	1
SS				

S/MS	W9VM100310-02/03			5+5
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BFB	UVM100203-02				1
-----	--------------	--	--	--	---

PORT	W9VM100310-04	5	5
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N/A				
-----	--	--	--	--

Purge Amount

5 Water Purge Vol:

5.0g Soil Purge Wt.

X Mid level ext. MeOH Vol:

$$\frac{V/A}{u^l}$$

N/A Methanol Lot #

X Heated Purge

Analysis			Accepta											
Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil.	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Accepta ble(O/X)	Comments
3/10/2010	9:04	9C301.D	W9VM100310-01	-----	BFB/CCV	5ml	1	-----	1	w / s	RXY1	N/A	O	MIX[A]UVM100106-07E/UVM100222-07B
3/10/2010	9:32	9C302.D	W9VM100310-02	-----	LCS	5ml	1	-----	2	w	RXY1	N/A	O	MIX[A]UVM100220-01E/UVM100308-01
3/10/2010	10:01	9C303.D	W9VM100310-03	-----	LCS	5g	1	-----	3	s	RXY1	N/A	O	MIX[A]UVM100220-01E/UVM100308-01 SOIL
3/10/2010	10:31	9C304.D	W9VM100310-04	-----	CCV/LCS	5g	1	-----	4	s	RXY1	N/A	O	MIX[B]UVM100215-06B SOIL
3/10/2010	11:00	9C305.D	1202-----	GEL	BLANK	5ml	1	n/a	5	w	RXY1	N/A	O	
3/10/2010	11:30	9C306.D	1202-----	GEL	BLANK	5g	1	n/a	6	s	RXY1	N/A	O	SOIL
3/10/2010	12:00	9C307.D	1202063334	GEL	963668	500ul	10	n/a	7	w	RXY1	N/A	O	TB 961957/963668
3/10/2010	12:31	9C308.D	1202063718	GEL	963669	500ul	10	n/a	8	w	RXY1	N/A	O	TB 962116/963669
3/10/2010	13:02	9C309.D	247813001	LANL	963668	500ul	10	n/a	9	w	RXY1	N/A	O	
3/10/2010	13:33	9C310.D	248369003	BY12	963669	500ul	10	n/a	10	w	RXY1	N/A	O	
3/10/2010	14:04	9C311.D	248369012	BY12	963669	500ul	10	n/a	11	w	RXY1	N/A	O	
3/10/2010	14:35	9C312.D	248369013	BY12	963669	500ul	10	n/a	12	w	RXY1	N/A	O	
3/10/2010	15:06	9C313.D	1202067408	LANL	963668	500ul	10	n/a	13	w	RXY1	N/A	O	MIX[A] MS 247813001
3/10/2010	15:37	9C314.D	1202067409	LANL	963668	500ul	10	n/a	14	w	RXY1	N/A	O	MIX[A] MSD 247813001
3/10/2010	16:08	9C315.D	1202067417	BY12	963669	500ul	10	n/a	15	w	RXY1	N/A	O	MIX[A] MS 248369003
3/10/2010	16:39	9C316.D	1202067418	BY12	963669	500ul	10	n/a	16	w	RXY1	N/A	O	MIX[A] MSD 248369003
3/10/2010	17:10	9C317.D	1202065141	LANL	962617	5.0g	1	n/a	17	s	RXY1	N/A	O	MIX[A] MS 248373001 SOIL
3/10/2010	17:41	9C318.D	1202065142	LANL	962617	5.0g	1	n/a	18	s	RXY1	N/A	O	MIX[A] MSD 248373001 SOIL
3/10/2010	18:11	9C319.D	1202-----	GEL	BLANK	5ml	1	n/a	19	w	RXY1	N/A	X	Instrument blank
3/10/2010	18:42	9C320.D	1202-----	GEL	BLANK	5ml	1	n/a	20	w	RXY1	N/A	X	Instrument blank
3/10/2010	19:13	9C321.D	248634004	BRKL	961784	5ml	1	pH2	21	w	RXY1	N	O	
3/10/2010	19:42	9C322.D	248629003	BOSH	961784	5ml	1	pH7	22	w	RXY1	N	O	
3/10/2010	20:12	9C323.D	1202062966	BRKL	961784	5ml	1	pH2	23	w	RXY1	N	O	
3/10/2010	20:41	9C324.D	1202-----	GEL	BLANK	5ml	1	n/a	24	w	RXY1	N/A	X	MIX[A] MS 248634002

DATA EXCEPTION REPORT

Mo.Day Yr. 16-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: VOA GC/MS	Test / Method: SW846 8260B	Matrix Type: Solid	Client Code: LANL
Batch ID: 962617	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 248373(10-2154)			
Application Issues: Other Failed Recovery for LCS/LCSD Failed Yield for Surrogates			
Specification and Requirements Exception Description:		DER Disposition:	
<p>1. The LCS 1202065143 did not meet the acceptable recovery criteria for Ethylbenzene and 1,2-Dibromoethane.</p> <p>Ethylbenzene recovered at 70.7%. The limits are 74%-120%.</p> <p>1,2-Dibromoethane recovered at 78.1%. The limits are 79%-120%.</p> <p>2. The following samples 248373-004, 008, and 015 did not meet the acceptance criteria for Bromofluorobenzene:</p> <p>248373-004 recovered at 1334%.</p> <p>248373-008 recovered at 133%.</p> <p>248373-015 recovered at 135%.</p> <p>The limits are 65%-130%.</p> <p>3. The samples 248373-002, 003, 004, 005, 006, 007, 008, 010, and 015 did not meet acceptance criteria for internal standard recovery.</p>		<p>1. The biased low LCS recoveries were less than 5% of the total requested compound list; therefore, the client's criteria was satisfied. The data were reported.</p> <p>2/3. Sample reanalysis confirmed the poor surrogate and internal standard recoveries; therefore, matrix interference was demonstrated. The data were reported.</p>	

Originator's Name:

Ramona Yarbrough 16-MAR-10

Data Validator/Group Leader:

Kelle Bellamy 29-MAR-10

GC/MS Semivolatile Analysis

**Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2154**

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:	961922
Prep Batch Number:	961921

Sample Analysis

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

Sample ID	Client ID
248373001	RE36-10-7494
248373002	RE36-10-7493
248373003	RE36-10-7492
248373004	RE36-10-7491
248373005	RE36-10-7496
248373006	RE36-10-7499
248373007	RE36-10-7497
248373008	RE36-10-7495
248373009	RE36-10-7498
248373010	RE36-10-7500
248373011	RE36-10-7523
248373014	RE36-10-7522
248373015	RE36-10-7521
1202063250	Method Blank (MB)
1202063251	Laboratory Control Sample (LCS)
1202063252	248373001(RE36-10-7494) Matrix Spike (MS)
1202063253	248373001(RE36-10-7494) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

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

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

Calibration Information

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

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

Initial calibration and continuing calibration requirements may not be satisfied for all requested target analytes analyzed according to Method 8270D. However, the method allows for a designated number of outliers dependent on the requested analyte list. Please see the Initial Calibration and/or CCV Requirements Section of the case narrative for any samples impacted by calibration failures.

When calibrations are performed for Appendix IX compounds some of the compounds may not be calibrated exactly according to the criteria in Method 8270C. If the %RSD is greater than 15% or the correlation coefficient is less than 0.99 then the analyte is quantitated using the response factor. If the analyte is detected then the sample is re-analyzed for that analyte on an instrument that is compliant with the criteria of the method.

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

Initial Calibration

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

CCV Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 248373001 (RE36-10-7494) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement

The MS failed recovery for 3,3'-Dichlorobenzidine. Please see the spike recovery report for the specific recovery. The MSD displayed a similar low but passing recovery for that analyte. Therefore, the MS failure was attributed to sample matrix interference and the data have been reported.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD values failed for multiple target analytes. Please see the spike recovery report for the specific values. Since the individual MS and MSD recoveries passed for all analytes (except for 3,3'-Dichlorobenzidine; see item #1 above), the data were reported.

Internal Standard (ISTD) Acceptance

The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

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

The following DER was generated for this SDG: 807609. It is located in the Miscellaneous Section of the data report.

Manual Integrations

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

Additional Comments

Additional comments were not required for this SDG.

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

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

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD8.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: Don Beacham Date: 3-29-10

Roadmap for LANL 10-2154 SVOA

This roadmap was analyzed by nat00999 on 03-22-2010, 14:33.

This roadmap was packaged by CHA01131 on 03-29-2010, 11:17.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2109.d	248373001	21-MAR-2010	11:58	10-2154.sub	RE36-10-7494	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2112.d	248373002	21-MAR-2010	13:27	10-2154.sub	RE36-10-7493	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2113.d	248373003	21-MAR-2010	13:56	10-2154.sub	RE36-10-7492	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2114.d	248373004	21-MAR-2010	14:26	10-2154.sub	RE36-10-7491	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2115.d	248373005	21-MAR-2010	14:56	10-2154.sub	RE36-10-7496	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2116.d	248373006	21-MAR-2010	15:26	10-2154.sub	RE36-10-7499	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2117.d	248373007	21-MAR-2010	15:56	10-2154.sub	RE36-10-7497	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2118.d	248373008	21-MAR-2010	16:26	10-2154.sub	RE36-10-7495	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2119.d	248373009	21-MAR-2010	16:56	10-2154.sub	RE36-10-7498	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2120.d	248373010	21-MAR-2010	17:25	10-2154.sub	RE36-10-7500	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2121.d	248373011	21-MAR-2010	17:56	10-2154.sub	RE36-10-7523	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2122.d	248373014	21-MAR-2010	18:25	10-2154.sub	RE36-10-7522	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2123.d	248373015	21-MAR-2010	18:55	10-2154.sub	RE36-10-7521	1	961922	<input type="text"/>

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2106.d	1202063250	mb	21-MAR-2010	10:29	10-2154.sub	SBLK01	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2107.d	1202063251	lcs	21-MAR-2010	10:59	10-2154.sub	SBLK01LCS	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2110.d	1202063252	ms	21-MAR-2010	12:28	10-2154.sub	RE36-10-7494MS	1	961922	<input type="text"/>
<input type="checkbox"/>	N	/chem/MSD8.i/s032110.b/s8c2111.d	1202063253	msd	21-MAR-2010	12:57	10-2154.sub	RE36-10-7494MSD	1	961922	failed C90

Sample Data Summary

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
Client ID: RE36-10-7491	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 14:26	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2114.d	Aliquot: 30.18 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	512	ug/kg	102	512
108-95-2	Phenol	U	512	ug/kg	102	512
95-57-8	2-Chlorophenol	U	512	ug/kg	102	512
106-46-7	1,4-Dichlorobenzene	U	512	ug/kg	102	512
621-64-7	N-Nitrosodipropylamine	U	512	ug/kg	102	512
59-50-7	4-Chloro-3-methylphenol	U	512	ug/kg	102	512
83-32-9	Acenaphthene	U	51.2	ug/kg	16.9	51.2
121-14-2	2,4-Dinitrotoluene	U	512	ug/kg	51.2	512
100-02-7	4-Nitrophenol	U	512	ug/kg	169	512
87-86-5	Pentachlorophenol	U	512	ug/kg	128	512
129-00-0	Pyrene	J	16.0	ug/kg	15.3	51.2
110-86-1	Pyridine	U	512	ug/kg	102	512
62-53-3	Aniline	U	512	ug/kg	153	512
111-44-4	bis(2-Chloroethyl) ether	U	512	ug/kg	102	512
541-73-1	1,3-Dichlorobenzene	U	512	ug/kg	102	512
100-51-6	Benzyl alcohol	U	512	ug/kg	153	512
95-50-1	1,2-Dichlorobenzene	U	512	ug/kg	102	512
108-60-1	bis(2-Chloroisopropyl)ether	U	512	ug/kg	102	512
95-48-7	o-Cresol	U	512	ug/kg	102	512
65794-96-9	m,p-Cresols	U	512	ug/kg	153	512
67-72-1	Hexachloroethane	U	512	ug/kg	102	512
98-95-3	Nitrobenzene	U	512	ug/kg	102	512
78-59-1	Isophorone	U	512	ug/kg	102	512
88-75-5	2-Nitrophenol	U	512	ug/kg	102	512
105-67-9	2,4-Dimethylphenol	U	512	ug/kg	179	512
111-91-1	bis(2-Chloroethoxy)methane	U	512	ug/kg	102	512
120-83-2	2,4-Dichlorophenol	U	512	ug/kg	102	512
65-85-0	Benzoic acid	U	1020	ug/kg	256	1020
91-20-3	Naphthalene	U	51.2	ug/kg	15.3	51.2
106-47-8	4-Chloroaniline	U	512	ug/kg	102	512
87-68-3	Hexachlorobutadiene	U	512	ug/kg	102	512
91-57-6	2-Methylnaphthalene	U	51.2	ug/kg	10.2	51.2
77-47-4	Hexachlorocyclopentadiene	U	512	ug/kg	102	512
88-06-2	2,4,6-Trichlorophenol	U	512	ug/kg	102	512
95-95-4	2,4,5-Trichlorophenol	U	512	ug/kg	102	512
91-58-7	2-Chloronaphthalene	U	51.2	ug/kg	16.9	51.2
88-74-4	2-Nitroaniline	U	512	ug/kg	102	512
99-09-2	3-Nitroaniline	U	512	ug/kg	102	512

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7491	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 14:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s8c2114.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	512	ug/kg	102	512
606-20-2	2,6-Dinitrotoluene	U	512	ug/kg	51.2	512
208-96-8	Acenaphthylene	U	51.2	ug/kg	15.3	51.2
51-28-5	2,4-Dinitrophenol	U	1020	ug/kg	194	1020
132-64-9	Dibenzofuran	U	512	ug/kg	102	512
84-66-2	Diethylphthalate	U	512	ug/kg	102	512
86-73-7	Fluorene	U	51.2	ug/kg	15.3	51.2
7005-72-3	4-Chlorophenylphenylether	U	512	ug/kg	102	512
534-52-1	2-Methyl-4,6-dinitrophenol	U	512	ug/kg	102	512
100-01-6	4-Nitroaniline	U	512	ug/kg	153	512
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	512	ug/kg	102	512
122-66-7	Azobenzene	U	512	ug/kg	102	512
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	512	ug/kg	102	512
118-74-1	Hexachlorobenzene	U	512	ug/kg	102	512
85-01-8	Phenanthrene	U	51.2	ug/kg	15.3	51.2
120-12-7	Anthracene	U	51.2	ug/kg	10.2	51.2
84-74-2	Di-n-butylphthalate	U	512	ug/kg	102	512
206-44-0	Fluoranthene	J	18.0	ug/kg	15.3	51.2
85-68-7	Butylbenzylphthalate	U	512	ug/kg	102	512
56-55-3	Benzo(a)anthracene	U	51.2	ug/kg	15.3	51.2
91-94-1	3,3'-Dichlorobenzidine	U	512	ug/kg	153	512
218-01-9	Chrysene	U	51.2	ug/kg	15.3	51.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	512	ug/kg	102	512
117-84-0	Di-n-octylphthalate	U	512	ug/kg	102	512
205-99-2	Benzo(b)fluoranthene	U	51.2	ug/kg	15.3	51.2
207-08-9	Benzo(k)fluoranthene	U	51.2	ug/kg	15.3	51.2
50-32-8	Benzo(a)pyrene	U	51.2	ug/kg	15.3	51.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	51.2	ug/kg	15.3	51.2
53-70-3	Dibenzo(a,h)anthracene	U	51.2	ug/kg	15.3	51.2
191-24-2	Benzo(ghi)perylene	U	51.2	ug/kg	15.3	51.2
120-82-1	1,2,4-Trichlorobenzene	U	512	ug/kg	102	512

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.69	884	ug/kg	97	NJ
495-61-4	Cyclohexene, 1-methyl-4-(5-methyl-1-meth	7.45	307	ug/kg	97	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373004

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
57-10-3	n-Hexadecanoic acid	9.6	503	ug/kg	98	NJ
2091-29-4	9-Hexadecenoic acid	10.36	653	ug/kg	91	NJ
	Unknown	10.5	254	ug/kg		J
25491-20-7	1H-3a,7-Methanoazulene, octahydro-1,4,9,	10.93	239	ug/kg	84	NJ
	Unknown	11.16	458	ug/kg		J
506-30-9	Eicosanoic acid	11.23	309	ug/kg	99	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	330	ug/kg	97	NJ
	Unknown	11.31	459	ug/kg		J
	Unknown	11.35	407	ug/kg		J
	Unknown	11.48	463	ug/kg		J
	Unknown	11.56	2610	ug/kg		J
	Unknown	11.63	439	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.68	2970	ug/kg	91	NJ
	Unknown	11.73	498	ug/kg		J
	Unknown	11.77	399	ug/kg		J
4630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	11.83	734	ug/kg	94	NJ
112-85-6	Docosanoic acid	12	632	ug/kg	93	NJ
	Unknown	12.04	225	ug/kg		J
	Unknown	12.06	465	ug/kg		J
	Unknown	12.1	297	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.12	398	ug/kg	91	NJ
629-78-7	Heptadecane	12.55	406	ug/kg	96	NJ
557-59-5	Tetracosanoic acid	12.89	512	ug/kg	98	NJ
	Unknown	14.21	1010	ug/kg		J
	Unknown	15.1	2860	ug/kg		J
83-46-5	.beta.-Sitosterol	16.85	1410	ug/kg	97	NJ
1058-61-3	Stigmast-4-en-3-one	17.28	1320	ug/kg	94	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373003	Date Received: 03/02/2010 08:50	%Moisture: 21.1
Client ID: RE36-10-7492	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 13:56	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2113.d	Aliquot: 30.12 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	421	ug/kg	84.2	421
108-95-2	Phenol	U	421	ug/kg	84.2	421
95-57-8	2-Chlorophenol	U	421	ug/kg	84.2	421
106-46-7	1,4-Dichlorobenzene	U	421	ug/kg	84.2	421
621-64-7	N-Nitrosodipropylamine	U	421	ug/kg	84.2	421
59-50-7	4-Chloro-3-methylphenol	U	421	ug/kg	84.2	421
83-32-9	Acenaphthene	U	42.1	ug/kg	13.9	42.1
121-14-2	2,4-Dinitrotoluene	U	421	ug/kg	42.1	421
100-02-7	4-Nitrophenol	U	421	ug/kg	139	421
87-86-5	Pentachlorophenol	U	421	ug/kg	105	421
129-00-0	Pyrene	U	42.1	ug/kg	12.6	42.1
110-86-1	Pyridine	U	421	ug/kg	84.2	421
62-53-3	Aniline	U	421	ug/kg	126	421
111-44-4	bis(2-Chloroethyl) ether	U	421	ug/kg	84.2	421
541-73-1	1,3-Dichlorobenzene	U	421	ug/kg	84.2	421
100-51-6	Benzyl alcohol	U	421	ug/kg	126	421
95-50-1	1,2-Dichlorobenzene	U	421	ug/kg	84.2	421
108-60-1	bis(2-Chloroisopropyl)ether	U	421	ug/kg	84.2	421
95-48-7	o-Cresol	U	421	ug/kg	84.2	421
65794-96-9	m,p-Cresols	U	421	ug/kg	126	421
67-72-1	Hexachloroethane	U	421	ug/kg	84.2	421
98-95-3	Nitrobenzene	U	421	ug/kg	84.2	421
78-59-1	Isophorone	U	421	ug/kg	84.2	421
88-75-5	2-Nitrophenol	U	421	ug/kg	84.2	421
105-67-9	2,4-Dimethylphenol	U	421	ug/kg	147	421
111-91-1	bis(2-Chloroethoxy)methane	U	421	ug/kg	84.2	421
120-83-2	2,4-Dichlorophenol	U	421	ug/kg	84.2	421
65-85-0	Benzoic acid	U	842	ug/kg	211	842
91-20-3	Naphthalene	U	42.1	ug/kg	12.6	42.1
106-47-8	4-Chloroaniline	U	421	ug/kg	84.2	421
87-68-3	Hexachlorobutadiene	U	421	ug/kg	84.2	421
91-57-6	2-Methylnaphthalene	U	42.1	ug/kg	8.42	42.1
77-47-4	Hexachlorocyclopentadiene	U	421	ug/kg	84.2	421
88-06-2	2,4,6-Trichlorophenol	U	421	ug/kg	84.2	421
95-95-4	2,4,5-Trichlorophenol	U	421	ug/kg	84.2	421
91-58-7	2-Chloronaphthalene	U	42.1	ug/kg	13.9	42.1
88-74-4	2-Nitroaniline	U	421	ug/kg	84.2	421
99-09-2	o-Nitroaniline	U	421	ug/kg	84.2	421
	3-Nitroaniline					

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373003	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7492	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 13:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s8c2113.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	421	ug/kg	84.2	421
606-20-2	2,6-Dinitrotoluene	U	421	ug/kg	42.1	421
208-96-8	Acenaphthylene	U	42.1	ug/kg	12.6	42.1
51-28-5	2,4-Dinitrophenol	U	842	ug/kg	160	842
132-64-9	Dibenzofuran	U	421	ug/kg	84.2	421
84-66-2	Diethylphthalate	U	421	ug/kg	84.2	421
86-73-7	Fluorene	U	42.1	ug/kg	12.6	42.1
7005-72-3	4-Chlorophenylphenylether	U	421	ug/kg	84.2	421
534-52-1	2-Methyl-4,6-dinitrophenol	U	421	ug/kg	84.2	421
100-01-6	4-Nitroaniline	U	421	ug/kg	126	421
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	421	ug/kg	84.2	421
122-66-7	Azobenzene	U	421	ug/kg	84.2	421
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	421	ug/kg	84.2	421
118-74-1	Hexachlorobenzene	U	421	ug/kg	84.2	421
85-01-8	Phenanthrene	U	42.1	ug/kg	12.6	42.1
120-12-7	Anthracene	U	42.1	ug/kg	8.42	42.1
84-74-2	Di-n-butylphthalate	U	421	ug/kg	84.2	421
206-44-0	Fluoranthene	U	42.1	ug/kg	12.6	42.1
85-68-7	Butylbenzylphthalate	U	421	ug/kg	84.2	421
56-55-3	Benzo(a)anthracene	U	42.1	ug/kg	12.6	42.1
91-94-1	3,3'-Dichlorobenzidine	U	421	ug/kg	126	421
218-01-9	Chrysene	U	42.1	ug/kg	12.6	42.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	421	ug/kg	84.2	421
117-84-0	Di-n-octylphthalate	U	421	ug/kg	84.2	421
205-99-2	Benzo(b)fluoranthene	U	42.1	ug/kg	12.6	42.1
207-08-9	Benzo(k)fluoranthene	U	42.1	ug/kg	12.6	42.1
50-32-8	Benzo(a)pyrene	U	42.1	ug/kg	12.6	42.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.1	ug/kg	12.6	42.1
53-70-3	Dibenzo(a,h)anthracene	U	42.1	ug/kg	12.6	42.1
191-24-2	Benzo(ghi)perylene	U	42.1	ug/kg	12.6	42.1
120-82-1	1,2,4-Trichlorobenzene	U	421	ug/kg	84.2	421

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.71	763	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.69	1710	ug/kg	97	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373003

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7492
Batch ID: 961922
Run Date: 03/21/2010 13:56
Prep Date: 03/07/2010 12:04
Data File: s8c2113.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.25	556	ug/kg	97	NJ
1120-21-4	Undecane	4.85	246	ug/kg	90	NJ
1000130-90-8	Z-7-Hexadecenoic acid	9.52	196	ug/kg	98	NJ
57-10-3	n-Hexadecanoic acid	9.59	627	ug/kg	98	NJ
	Unknown	10.15	180	ug/kg		J
593-39-5	6-Octadecenoic acid, (Z)-	10.36	1270	ug/kg	91	NJ
	Unknown	10.92	170	ug/kg		J
	Unknown	11.16	245	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	211	ug/kg	98	NJ
	Unknown	11.3	318	ug/kg		J
	Unknown	11.35	201	ug/kg		J
	Unknown	11.55	871	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.66	1600	ug/kg	90	NJ
112-85-6	Docosanoic acid	11.99	258	ug/kg	99	NJ
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.2	186	ug/kg	91	NJ
112-95-8	Eicosane	12.69	194	ug/kg	95	NJ
557-59-5	Tetracosanoic acid	12.89	255	ug/kg	98	NJ
55320-06-4	Heneicosane, 11-decyl-	12.92	447	ug/kg	83	NJ
1599-67-3	1-Docosene	13.17	352	ug/kg	96	NJ
	Unknown	13.7	477	ug/kg		J
4860-03-1	Hexadecane, 1-chloro-	13.96	274	ug/kg	86	NJ
	Unknown	15.32	380	ug/kg		J
	Unknown	16.08	400	ug/kg		J
	Unknown	17.01	338	ug/kg		J
	Unknown	17.27	760	ug/kg		J

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

SDG Number: 10-2154
Lab Sample ID: 248373002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 25.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7493
Batch ID: 961922
Run Date: 03/21/2010 13:27
Prep Date: 03/07/2010 12:04
Data File: s8c2112.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	445	ug/kg	89.1	445
108-95-2	Phenol	U	445	ug/kg	89.1	445
95-57-8	2-Chlorophenol	U	445	ug/kg	89.1	445
106-46-7	1,4-Dichlorobenzene	U	445	ug/kg	89.1	445
621-64-7	N-Nitrosodipropylamine	U	445	ug/kg	89.1	445
59-50-7	4-Chloro-3-methylphenol	U	445	ug/kg	89.1	445
83-32-9	Acenaphthene	U	44.5	ug/kg	14.7	44.5
121-14-2	2,4-Dinitrotoluene	U	445	ug/kg	44.5	445
100-02-7	4-Nitrophenol	U	445	ug/kg	147	445
87-86-5	Pentachlorophenol	U	445	ug/kg	111	445
129-00-0	Pyrene	J	29.8	ug/kg	13.4	44.5
110-86-1	Pyridine	U	445	ug/kg	89.1	445
62-53-3	Aniline	U	445	ug/kg	134	445
111-44-4	bis(2-Chloroethyl) ether	U	445	ug/kg	89.1	445
541-73-1	1,3-Dichlorobenzene	U	445	ug/kg	89.1	445
100-51-6	Benzyl alcohol	U	445	ug/kg	134	445
95-50-1	1,2-Dichlorobenzene	U	445	ug/kg	89.1	445
108-60-1	bis(2-Chloroisopropyl)ether	U	445	ug/kg	89.1	445
95-48-7	o-Cresol	U	445	ug/kg	89.1	445
65794-96-9	m,p-Cresols	U	445	ug/kg	134	445
67-72-1	Hexachloroethane	U	445	ug/kg	89.1	445
98-95-3	Nitrobenzene	U	445	ug/kg	89.1	445
78-59-1	Isophorone	U	445	ug/kg	89.1	445
88-75-5	2-Nitrophenol	U	445	ug/kg	89.1	445
105-67-9	2,4-Dimethylphenol	U	445	ug/kg	156	445
111-91-1	bis(2-Chloroethoxy)methane	U	445	ug/kg	89.1	445
120-83-2	2,4-Dichlorophenol	U	445	ug/kg	89.1	445
65-85-0	Benzoic acid	U	891	ug/kg	223	891
91-20-3	Naphthalene	U	44.5	ug/kg	13.4	44.5
106-47-8	4-Chloroaniline	U	445	ug/kg	89.1	445
87-68-3	Hexachlorobutadiene	U	445	ug/kg	89.1	445
91-57-6	2-Methylnaphthalene	U	44.5	ug/kg	8.91	44.5
77-47-4	Hexachlorocyclopentadiene	U	445	ug/kg	89.1	445
88-06-2	2,4,6-Trichlorophenol	U	445	ug/kg	89.1	445
95-95-4	2,4,5-Trichlorophenol	U	445	ug/kg	89.1	445
91-58-7	2-Chloronaphthalene	U	44.5	ug/kg	14.7	44.5
88-74-4	2-Nitroaniline	U	445	ug/kg	89.1	445
99-09-2	3-Nitroaniline	U	445	ug/kg	89.1	445

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373002	Date Received: 03/02/2010 08:50	%Moisture: 25.5
Client ID: RE36-10-7493	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 13:27	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2112.d	Aliquot: 30.13 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	445	ug/kg	89.1	445
606-20-2	2,6-Dinitrotoluene	U	445	ug/kg	44.5	445
208-96-8	Acenaphthylene	U	44.5	ug/kg	13.4	44.5
51-28-5	2,4-Dinitrophenol	U	891	ug/kg	169	891
132-64-9	Dibenzofuran	U	445	ug/kg	89.1	445
84-66-2	Diethylphthalate	U	445	ug/kg	89.1	445
86-73-7	Fluorene	U	44.5	ug/kg	13.4	44.5
7005-72-3	4-Chlorophenylphenylether	U	445	ug/kg	89.1	445
534-52-1	2-Methyl-4,6-dinitrophenol	U	445	ug/kg	89.1	445
100-01-6	4-Nitroaniline	U	445	ug/kg	134	445
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	445	ug/kg	89.1	445
122-66-7	Azobenzene	U	445	ug/kg	89.1	445
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	445	ug/kg	89.1	445
118-74-1	Hexachlorobenzene	U	445	ug/kg	89.1	445
85-01-8	Phenanthrene		112	ug/kg	13.4	44.5
120-12-7	Anthracene	U	44.5	ug/kg	8.91	44.5
84-74-2	Di-n-butylphthalate	U	445	ug/kg	89.1	445
206-44-0	Fluoranthene	J	35.9	ug/kg	13.4	44.5
85-68-7	Butylbenzylphthalate	U	445	ug/kg	89.1	445
56-55-3	Benzo(a)anthracene	U	44.5	ug/kg	13.4	44.5
91-94-1	3,3'-Dichlorobenzidine	U	445	ug/kg	134	445
218-01-9	Chrysene	J	33.7	ug/kg	13.4	44.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	445	ug/kg	89.1	445
117-84-0	Di-n-octylphthalate	U	445	ug/kg	89.1	445
205-99-2	Benzo(b)fluoranthene	J	23.2	ug/kg	13.4	44.5
207-08-9	Benzo(k)fluoranthene	U	44.5	ug/kg	13.4	44.5
50-32-8	Benzo(a)pyrene	J	17.3	ug/kg	13.4	44.5
193-39-5	Indeno(1,2,3-cd)pyrene	J	19.7	ug/kg	13.4	44.5
53-70-3	Dibenzo(a,h)anthracene	J	16.9	ug/kg	13.4	44.5
191-24-2	Benzo(ghi)perylene	J	23.4	ug/kg	13.4	44.5
120-82-1	1,2,4-Trichlorobenzene	U	445	ug/kg	89.1	445

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	496	ug/kg		J
112-85-6	Docosanoic acid	11.99	179	ug/kg	99	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373002	Date Received: 03/02/2010 08:50	%Moisture: 25.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7493	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 13:27	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2112.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown	12.28	422	ug/kg		J
593-49-7	Heptacosane	12.55	436	ug/kg	98	NJ
	Unknown	13.02	181	ug/kg		J
62951-96-6	1,5,9-Undecatriene, 2,6,10-trimethyl-, (	13.13	425	ug/kg	83	NJ
629-96-9	1-Eicosanol	13.19	234	ug/kg	93	NJ
14811-95-1	1,19-Eicosadiene	13.23	530	ug/kg	97	NJ
	Unknown	13.31	298	ug/kg		J
7225-66-3	Tridecane, 7-hexyl-	13.53	1050	ug/kg	95	NJ
	Unknown	14.12	325	ug/kg		J
	Unknown	14.35	265	ug/kg		J
112-95-8	Eicosane	14.68	386	ug/kg	97	NJ
	Unknown	16.38	302	ug/kg		J
	Unknown	16.84	183	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	17.27	683	ug/kg	92	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.J
Analyst: NAG1
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7494
Batch ID: 961922
Run Date: 03/21/2010 11:58
Prep Date: 03/07/2010 12:04
Data File: s8c2109.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	378	ug/kg	75.6	378
108-95-2	Phenol	U	378	ug/kg	75.6	378
95-57-8	2-Chlorophenol	U	378	ug/kg	75.6	378
106-46-7	1,4-Dichlorobenzene	U	378	ug/kg	75.6	378
621-64-7	N-Nitrosodipropylamine	U	378	ug/kg	75.6	378
59-50-7	4-Chloro-3-methylphenol	U	378	ug/kg	75.6	378
83-32-9	Acenaphthene	U	37.8	ug/kg	12.5	37.8
121-14-2	2,4-Dinitrotoluene	U	378	ug/kg	37.8	378
100-02-7	4-Nitrophenol	U	378	ug/kg	125	378
87-86-5	Pentachlorophenol	U	378	ug/kg	94.5	378
129-00-0	Pyrene	U	37.8	ug/kg	11.3	37.8
110-86-1	Pyridine	U	378	ug/kg	75.6	378
62-53-3	Aniline	U	378	ug/kg	113	378
111-44-4	bis(2-Chloroethyl) ether	U	378	ug/kg	75.6	378
541-73-1	1,3-Dichlorobenzene	U	378	ug/kg	75.6	378
100-51-6	Benzyl alcohol	U	378	ug/kg	113	378
95-50-1	1,2-Dichlorobenzene	U	378	ug/kg	75.6	378
108-60-1	bis(2-Chloroisopropyl) ether	U	378	ug/kg	75.6	378
95-48-7	o-Cresol	U	378	ug/kg	75.6	378
65794-96-9	m,p-Cresols	U	378	ug/kg	113	378
67-72-1	Hexachloroethane	U	378	ug/kg	75.6	378
98-95-3	Nitrobenzene	U	378	ug/kg	75.6	378
78-59-1	Isophorone	U	378	ug/kg	75.6	378
88-75-5	2-Nitrophenol	U	378	ug/kg	75.6	378
105-67-9	2,4-Dimethylphenol	U	378	ug/kg	132	378
111-91-1	bis(2-Chloroethoxy)methane	U	378	ug/kg	75.6	378
120-83-2	2,4-Dichlorophenol	U	378	ug/kg	75.6	378
65-85-0	Benzoic acid	U	756	ug/kg	189	756
91-20-3	Naphthalene	U	37.8	ug/kg	11.3	37.8
106-47-8	4-Chloroaniline	U	378	ug/kg	75.6	378
87-68-3	Hexachlorobutadiene	U	378	ug/kg	75.6	378
91-57-6	2-Methylnaphthalene	U	37.8	ug/kg	7.56	37.8
77-47-4	Hexachlorocyclopentadiene	U	378	ug/kg	75.6	378
88-06-2	2,4,6-Trichlorophenol	U	378	ug/kg	75.6	378
95-95-4	2,4,5-Trichlorophenol	U	378	ug/kg	75.6	378
91-58-7	2-Chloronaphthalene	U	37.8	ug/kg	12.5	37.8
88-74-4	2-Nitroaniline	U	378	ug/kg	75.6	378
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	378	ug/kg	75.6	378

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

SDG Number: 10-2154
Lab Sample ID: 248373001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	378	ug/kg	75.6	378
606-20-2	2,6-Dinitrotoluene	U	378	ug/kg	37.8	378
208-96-8	Acenaphthylene	U	37.8	ug/kg	11.3	37.8
51-28-5	2,4-Dinitrophenol	U	756	ug/kg	144	756
132-64-9	Dibenzofuran	U	378	ug/kg	75.6	378
84-66-2	Diethylphthalate	U	378	ug/kg	75.6	378
86-73-7	Fluorene	U	37.8	ug/kg	11.3	37.8
7005-72-3	4-Chlorophenylphenylether	U	378	ug/kg	75.6	378
534-52-1	2-Methyl-4,6-dinitrophenol	U	378	ug/kg	75.6	378
100-01-6	4-Nitroaniline	U	378	ug/kg	113	378
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	378	ug/kg	75.6	378
122-66-7	Azobenzene	U	378	ug/kg	75.6	378
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	378	ug/kg	75.6	378
118-74-1	Hexachlorobenzene	U	378	ug/kg	75.6	378
85-01-8	Phenanthrene	U	37.8	ug/kg	11.3	37.8
120-12-7	Anthracene	U	37.8	ug/kg	7.56	37.8
84-74-2	Di-n-butylphthalate	U	378	ug/kg	75.6	378
206-44-0	Fluoranthene	U	37.8	ug/kg	11.3	37.8
85-68-7	Butylbenzylphthalate	U	378	ug/kg	75.6	378
56-55-3	Benzo(a)anthracene	U	37.8	ug/kg	11.3	37.8
91-94-1	3,3'-Dichlorobenzidine	U	378	ug/kg	113	378
218-01-9	Chrysene	U	37.8	ug/kg	11.3	37.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	378	ug/kg	75.6	378
117-84-0	Di-n-octylphthalate	U	378	ug/kg	75.6	378
205-99-2	Benzo(b)fluoranthene	U	37.8	ug/kg	11.3	37.8
207-08-9	Benzo(k)fluoranthene	U	37.8	ug/kg	11.3	37.8
50-32-8	Benzo(a)pyrene	U	37.8	ug/kg	11.3	37.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.8	ug/kg	11.3	37.8
53-70-3	Dibenzo(a,h)anthracene	U	37.8	ug/kg	11.3	37.8
191-24-2	Benzo(ghi)perylene	U	37.8	ug/kg	11.3	37.8
120-82-1	1,2,4-Trichlorobenzene	U	378	ug/kg	75.6	378

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.73	2690	ug/kg		J
13287-24-6	Nonadecane, 9-methyl-	13.53	212	ug/kg	93	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373008

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 27.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	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	J	40.3	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	3-Nitroaniline	U	457	ug/kg	91.5	457

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373008	Date Received: 03/02/2010 08:50	%Moisture: 27.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7495	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 16:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.06 g	Final Volume: 1 mL
Data File: s8c2118.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	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
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	457	ug/kg	91.5	457
122-66-7	Azobenzene	U	457	ug/kg	91.5	457
	<i>1,2-Diphenylhydrazine</i>					
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		114	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	J	38.3	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	J	32.7	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	J	22.1	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
495-61-4	Cyclohexene, 1-methyl-4-(5-methyl-1-meth	7.45	503	ug/kg	94	NJ
57-10-3	n-Hexadecanoic acid	9.6	728	ug/kg	98	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373008

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 27.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	10.38	501	ug/kg	91	NJ
	Unknown	10.51	225	ug/kg		J
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	11.15	289	ug/kg	92	NJ
	Unknown	11.47	194	ug/kg		J
	Unknown	11.58	1510	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.67	511	ug/kg	95	NJ
4860-03-1	Hexadecane, 1-chloro-	11.73	208	ug/kg	94	NJ
118625-56-2	1-Hexadecene, 16-bromo-	11.93	394	ug/kg	93	NJ
112-85-6	Docosanoic acid	12.01	464	ug/kg	95	NJ
4860-03-1	Hexadecane, 1-chloro-	12.12	183	ug/kg	93	NJ
	Unknown	12.39	235	ug/kg		J
62016-76-6	Nonadecane, 1-chloro-	12.55	332	ug/kg	90	NJ
1599-67-3	1-Docosene	12.81	301	ug/kg	96	NJ
	Unknown	14.98	4200	ug/kg		J
83-47-6	.gamma.-Sitosterol	16.71	4130	ug/kg	94	NJ
1058-61-3	Stigmast-4-en-3-one	17.29	1510	ug/kg	93	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7496
Batch ID: 961922
Run Date: 03/21/2010 14:56
Prep Date: 03/07/2010 12:04
Data File: s8c2115.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	74.9	375
108-95-2	Phenol	U	375	ug/kg	74.9	375
95-57-8	2-Chlorophenol	U	375	ug/kg	74.9	375
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	74.9	375
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	74.9	375
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	74.9	375
83-32-9	Acenaphthene	U	37.5	ug/kg	12.4	37.5
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375
87-86-5	Pentachlorophenol	U	375	ug/kg	93.7	375
129-00-0	Pyrene	J	12.6	ug/kg	11.2	37.5
110-86-1	Pyridine	U	375	ug/kg	74.9	375
62-53-3	Aniline	U	375	ug/kg	112	375
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	74.9	375
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	74.9	375
100-51-6	Benzyl alcohol	U	375	ug/kg	112	375
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	74.9	375
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	74.9	375
95-48-7	o-Cresol	U	375	ug/kg	74.9	375
65794-96-9	m,p-Cresols	U	375	ug/kg	112	375
67-72-1	Hexachloroethane	U	375	ug/kg	74.9	375
98-95-3	Nitrobenzene	U	375	ug/kg	74.9	375
78-59-1	Isophorone	U	375	ug/kg	74.9	375
88-75-5	2-Nitrophenol	U	375	ug/kg	74.9	375
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	74.9	375
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	74.9	375
65-85-0	Benzoic acid	U	749	ug/kg	187	749
91-20-3	Naphthalene	U	37.5	ug/kg	11.2	37.5
106-47-8	4-Chloroaniline	U	375	ug/kg	74.9	375
87-68-3	Hexachlorobutadiene	U	375	ug/kg	74.9	375
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.49	37.5
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	74.9	375
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	74.9	375
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	74.9	375
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5
88-74-4	2-Nitroaniline	U	375	ug/kg	74.9	375
99-09-2	3-Nitroaniline	U	375	ug/kg	74.9	375

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

SDG Number: 10-2154
Lab Sample ID: 248373005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7496
Batch ID: 961922
Run Date: 03/21/2010 14:56
Prep Date: 03/07/2010 12:04
Data File: s8c2115.d

CAS No.	Parmname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	375	ug/kg	74.9	375
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.2	37.5
51-28-5	2,4-Dinitrophenol	U	749	ug/kg	142	749
132-64-9	Dibenzofuran	U	375	ug/kg	74.9	375
84-66-2	Diethylphthalate	U	375	ug/kg	74.9	375
86-73-7	Fluorene	U	37.5	ug/kg	11.2	37.5
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	74.9	375
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	74.9	375
100-01-6	4-Nitroaniline	U	375	ug/kg	112	375
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	375	ug/kg	74.9	375
122-66-7	Azobenzene	U	375	ug/kg	74.9	375
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	74.9	375
118-74-1	Hexachlorobenzene	U	375	ug/kg	74.9	375
85-01-8	Phenanthrene	U	37.5	ug/kg	11.2	37.5
120-12-7	Anthracene	U	37.5	ug/kg	7.49	37.5
84-74-2	Di-n-butylphthalate	U	375	ug/kg	74.9	375
206-44-0	Fluoranthene	J	15.2	ug/kg	11.2	37.5
85-68-7	Butylbenzylphthalate	U	375	ug/kg	74.9	375
56-55-3	Benzo(a)anthracene	U	37.5	ug/kg	11.2	37.5
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	112	375
218-01-9	Chrysene	U	37.5	ug/kg	11.2	37.5
117-81-7	bis(2-Ethylhexyl)phthalate		604	ug/kg	74.9	375
117-84-0	Di-n-octylphthalate	U	375	ug/kg	74.9	375
205-99-2	Benzo(b)fluoranthene	U	37.5	ug/kg	11.2	37.5
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.2	37.5
50-32-8	Benzo(a)pyrene	U	37.5	ug/kg	11.2	37.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.5	ug/kg	11.2	37.5
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.2	37.5
191-24-2	Benzo(ghi)perylene	U	37.5	ug/kg	11.2	37.5
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	74.9	375

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.71	2030	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.69	360	ug/kg	97	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373005	Date Received: 03/02/2010 08:50	%Moisture: 11.4
Client ID: RE36-10-7496	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 14:56	Inst: MSD8J	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2115.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.25	446	ug/kg	97	NJ
593-39-5	6-Octadecenoic acid, (Z)-	10.35	225	ug/kg	95	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	153	ug/kg	98	NJ
	Unknown	11.3	222	ug/kg		J
	Unknown	11.46	162	ug/kg		J
	Unknown	11.52	310	ug/kg		J
	Unknown	11.55	471	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.65	549	ug/kg	94	NJ
629-78-7	Heptadecane	11.72	224	ug/kg	95	NJ
112-85-6	Docosanoic acid	11.99	196	ug/kg	98	NJ
	Unknown	12.04	289	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.1	219	ug/kg	89	NJ
62016-76-6	Nonadecane, 1-chloro-	12.12	208	ug/kg	98	NJ
	Unknown	12.55	217	ug/kg		J
557-59-5	Tetracosanoic acid	12.89	291	ug/kg	98	NJ
1599-67-3	1-Docosene	12.98	603	ug/kg	99	NJ
	Unknown	13.02	698	ug/kg		J
7683-64-9	Squalene	13.13	251	ug/kg	81	NJ
	Unknown	13.36	248	ug/kg		J
112-95-8	Eicosane	13.53	474	ug/kg	96	NJ
	Unknown	14.24	239	ug/kg		J
	Unknown	16.08	295	ug/kg		J
1000111-66-9	4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	16.85	857	ug/kg	80	NJ
	Unknown	17.28	252	ug/kg		J

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

SDG Number: 10-2154
Lab Sample ID: 248373007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.15 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7497
Batch ID: 961922
Run Date: 03/21/2010 15:56
Prep Date: 03/07/2010 12:04
Data File: s8c2117.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	491	ug/kg	98.2	491
108-95-2	Phenol	U	491	ug/kg	98.2	491
95-57-8	2-Chlorophenol	U	491	ug/kg	98.2	491
106-46-7	1,4-Dichlorobenzene	U	491	ug/kg	98.2	491
621-64-7	N-Nitrosodipropylamine	U	491	ug/kg	98.2	491
59-50-7	4-Chloro-3-methylphenol	U	491	ug/kg	98.2	491
83-32-9	Acenaphthene	U	49.1	ug/kg	16.2	49.1
121-14-2	2,4-Dinitrotoluene	U	491	ug/kg	49.1	491
100-02-7	4-Nitrophenol	U	491	ug/kg	162	491
87-86-5	Pentachlorophenol	U	491	ug/kg	123	491
129-00-0	Pyrene	U	49.1	ug/kg	14.7	49.1
110-86-1	Pyridine	U	491	ug/kg	98.2	491
62-53-3	Aniline	U	491	ug/kg	147	491
111-44-4	bis(2-Chloroethyl) ether	U	491	ug/kg	98.2	491
541-73-1	1,3-Dichlorobenzene	U	491	ug/kg	98.2	491
100-51-6	Benzyl alcohol	U	491	ug/kg	147	491
95-50-1	1,2-Dichlorobenzene	U	491	ug/kg	98.2	491
108-60-1	bis(2-Chloroisopropyl)ether	U	491	ug/kg	98.2	491
95-48-7	o-Cresol	U	491	ug/kg	98.2	491
65794-96-9	m,p-Cresols	U	491	ug/kg	147	491
67-72-1	Hexachloroethane	U	491	ug/kg	98.2	491
98-95-3	Nitrobenzene	U	491	ug/kg	98.2	491
78-59-1	Isophorone	U	491	ug/kg	98.2	491
88-75-5	2-Nitrophenol	U	491	ug/kg	98.2	491
105-67-9	2,4-Dimethylphenol	U	491	ug/kg	172	491
111-91-1	bis(2-Chloroethoxy)methane	U	491	ug/kg	98.2	491
120-83-2	2,4-Dichlorophenol	U	491	ug/kg	98.2	491
65-85-0	Benzoic acid	U	982	ug/kg	246	982
91-20-3	Naphthalene	U	49.1	ug/kg	14.7	49.1
106-47-8	4-Chloroaniline	U	491	ug/kg	98.2	491
87-68-3	Hexachlorobutadiene	U	491	ug/kg	98.2	491
91-57-6	2-Methylnaphthalene	U	49.1	ug/kg	9.82	49.1
77-47-4	Hexachlorocyclopentadiene	U	491	ug/kg	98.2	491
88-06-2	2,4,6-Trichlorophenol	U	491	ug/kg	98.2	491
95-95-4	2,4,5-Trichlorophenol	U	491	ug/kg	98.2	491
91-58-7	2-Chloronaphthalene	U	49.1	ug/kg	16.2	49.1
88-74-4	2-Nitroaniline	U	491	ug/kg	98.2	491
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	491	ug/kg	98.2	491

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

SDG Number: 10-2154
Lab Sample ID: 248373007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.15 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7497
Batch ID: 961922
Run Date: 03/21/2010 15:56
Prep Date: 03/07/2010 12:04
Data File: s8c2117.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	491	ug/kg	98.2	491
606-20-2	2,6-Dinitrotoluene	U	491	ug/kg	49.1	491
208-96-8	Acenaphthylene	U	49.1	ug/kg	14.7	49.1
51-28-5	2,4-Dinitrophenol	U	982	ug/kg	187	982
132-64-9	Dibenzofuran	U	491	ug/kg	98.2	491
84-66-2	Diethylphthalate	U	491	ug/kg	98.2	491
86-73-7	Fluorene	U	49.1	ug/kg	14.7	49.1
7005-72-3	4-Chlorophenylphenylether	U	491	ug/kg	98.2	491
534-52-1	2-Methyl-4,6-dinitrophenol	U	491	ug/kg	98.2	491
100-01-6	4-Nitroaniline	U	491	ug/kg	147	491
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	491	ug/kg	98.2	491
122-66-7	Azobenzene	U	491	ug/kg	98.2	491
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	491	ug/kg	98.2	491
118-74-1	Hexachlorobenzene	U	491	ug/kg	98.2	491
85-01-8	Phenanthrene	U	49.1	ug/kg	14.7	49.1
120-12-7	Anthracene	U	49.1	ug/kg	9.82	49.1
84-74-2	Di-n-butylphthalate	U	491	ug/kg	98.2	491
206-44-0	Fluoranthene	U	49.1	ug/kg	14.7	49.1
85-68-7	Butylbenzylphthalate	U	491	ug/kg	98.2	491
56-55-3	Benzo(a)anthracene	U	49.1	ug/kg	14.7	49.1
91-94-1	3,3'-Dichlorobenzidine	U	491	ug/kg	147	491
218-01-9	Chrysene	U	49.1	ug/kg	14.7	49.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	491	ug/kg	98.2	491
117-84-0	Di-n-octylphthalate	U	491	ug/kg	98.2	491
205-99-2	Benzo(b)fluoranthene	U	49.1	ug/kg	14.7	49.1
207-08-9	Benzo(k)fluoranthene	U	49.1	ug/kg	14.7	49.1
50-32-8	Benzo(a)pyrene	U	49.1	ug/kg	14.7	49.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	49.1	ug/kg	14.7	49.1
53-70-3	Dibenzo(a,h)anthracene	U	49.1	ug/kg	14.7	49.1
191-24-2	Benzo(ghi)perylene	U	49.1	ug/kg	14.7	49.1
120-82-1	1,2,4-Trichlorobenzene	U	491	ug/kg	98.2	491

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	3.69	3100	ug/kg		J
13466-78-9	3-Carene	4.25	770	ug/kg	96	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373007	Date Received: 03/02/2010 08:50	%Moisture: 32.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7497	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 15:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.15 g	Final Volume: 1 mL
Data File: s8c2117.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary				Estimated		
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.02	3140	ug/kg	99	NJ
11028-42-5	Cedrene	7.04	1040	ug/kg	90	NJ
470-40-6	Thujopsene	7.14	650	ug/kg	90	NJ
	Unknown	7.22	1310	ug/kg		J
67650-90-2	Bicyclogermacrene	7.31	733	ug/kg	83	NJ
	Unknown Aldol Condensate	7.34	955	ug/kg		J
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	7.52	357	ug/kg	99	NJ
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	7.54	624	ug/kg	83	NJ
639-99-6	Cyclohexanemethanol, 4-ethenyl-.alpha.,.	7.72	478	ug/kg	94	NJ
	Unknown	8.34	617	ug/kg		J
	Unknown	8.4	720	ug/kg		J
	Unknown	8.87	3510	ug/kg		J
	Unknown	10.47	1330	ug/kg		J
25246-27-9	1H-Cycloprop[e]azulene, decahydro-1,1,7-	11.02	402	ug/kg	91	NJ
	Unknown	11.1	425	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.2	4800	ug/kg	97	NJ
	Unknown	11.25	592	ug/kg		J
	Unknown	11.34	894	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.44	536	ug/kg	83	NJ
	Unknown	11.54	695	ug/kg		J
	Unknown	11.72	1230	ug/kg		J
	Unknown	11.81	343	ug/kg		J
	Unknown	11.99	531	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	12.12	579	ug/kg	96	NJ
	Unknown	14.89	2200	ug/kg		J
	Unknown	15.06	818	ug/kg		J
	Unknown	15.7	1550	ug/kg		J
	Unknown	16.8	797	ug/kg		J

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

SDG Number: 10-2154
Lab Sample ID: 248373009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	429	ug/kg	85.9	429
108-95-2	Phenol	U	429	ug/kg	85.9	429
95-57-8	2-Chlorophenol	U	429	ug/kg	85.9	429
106-46-7	1,4-Dichlorobenzene	U	429	ug/kg	85.9	429
621-64-7	N-Nitrosodipropylamine	U	429	ug/kg	85.9	429
59-50-7	4-Chloro-3-methylphenol	U	429	ug/kg	85.9	429
83-32-9	Acenaphthene	U	42.9	ug/kg	14.2	42.9
121-14-2	2,4-Dinitrotoluene	U	429	ug/kg	42.9	429
100-02-7	4-Nitrophenol	U	429	ug/kg	142	429
87-86-5	Pentachlorophenol	U	429	ug/kg	107	429
129-00-0	Pyrene	U	42.9	ug/kg	12.9	42.9
110-86-1	Pyridine	U	429	ug/kg	85.9	429
62-53-3	Aniline	U	429	ug/kg	129	429
111-44-4	bis(2-Chloroethyl) ether	U	429	ug/kg	85.9	429
541-73-1	1,3-Dichlorobenzene	U	429	ug/kg	85.9	429
100-51-6	Benzyl alcohol	U	429	ug/kg	129	429
95-50-1	1,2-Dichlorobenzene	U	429	ug/kg	85.9	429
108-60-1	bis(2-Chloroisopropyl)ether	U	429	ug/kg	85.9	429
95-48-7	o-Cresol	U	429	ug/kg	85.9	429
65794-96-9	m,p-Cresols	U	429	ug/kg	129	429
67-72-1	Hexachloroethane	U	429	ug/kg	85.9	429
98-95-3	Nitrobenzene	U	429	ug/kg	85.9	429
78-59-1	Isophorone	U	429	ug/kg	85.9	429
88-75-5	2-Nitrophenol	U	429	ug/kg	85.9	429
105-67-9	2,4-Dimethylphenol	U	429	ug/kg	150	429
111-91-1	bis(2-Chloroethoxy)methane	U	429	ug/kg	85.9	429
120-83-2	2,4-Dichlorophenol	U	429	ug/kg	85.9	429
65-85-0	Benzoic acid	U	859	ug/kg	215	859
91-20-3	Naphthalene	U	42.9	ug/kg	12.9	42.9
106-47-8	4-Chloroaniline	U	429	ug/kg	85.9	429
87-68-3	Hexachlorobutadiene	U	429	ug/kg	85.9	429
91-57-6	2-Methylnaphthalene	U	42.9	ug/kg	8.59	42.9
77-47-4	Hexachlorocyclopentadiene	U	429	ug/kg	85.9	429
88-06-2	2,4,6-Trichlorophenol	U	429	ug/kg	85.9	429
95-95-4	2,4,5-Trichlorophenol	U	429	ug/kg	85.9	429
91-58-7	2-Chloronaphthalene	U	42.9	ug/kg	14.2	42.9
88-74-4	2-Nitroaniline	U	429	ug/kg	85.9	429
99-09-2	<i>o</i> -Nitroaniline	U	429	ug/kg	85.9	429
	3-Nitroaniline					

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

SDG Number: 10-2154
Lab Sample ID: 248373009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7498
Batch ID: 961922
Run Date: 03/21/2010 16:56
Prep Date: 03/07/2010 12:04
Data File: s8c2119.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	429	ug/kg	85.9	429
606-20-2	2,6-Dinitrotoluene	U	429	ug/kg	42.9	429
208-96-8	Acenaphthylene	U	42.9	ug/kg	12.9	42.9
51-28-5	2,4-Dinitrophenol	U	859	ug/kg	163	859
132-64-9	Dibenzofuran	U	429	ug/kg	85.9	429
84-66-2	Diethylphthalate	U	429	ug/kg	85.9	429
86-73-7	Fluorene	U	42.9	ug/kg	12.9	42.9
7005-72-3	4-Chlorophenylphenylether	U	429	ug/kg	85.9	429
534-52-1	2-Methyl-4,6-dinitrophenol	U	429	ug/kg	85.9	429
100-01-6	4-Nitroaniline	U	429	ug/kg	129	429
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	429	ug/kg	85.9	429
122-66-7	Azobenzene	U	429	ug/kg	85.9	429
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	429	ug/kg	85.9	429
118-74-1	Hexachlorobenzene	U	429	ug/kg	85.9	429
85-01-8	Phenanthrene	U	42.9	ug/kg	12.9	42.9
120-12-7	Anthracene	U	42.9	ug/kg	8.59	42.9
84-74-2	Di-n-butylphthalate	U	429	ug/kg	85.9	429
206-44-0	Fluoranthene	U	42.9	ug/kg	12.9	42.9
85-68-7	Butylbenzylphthalate	U	429	ug/kg	85.9	429
56-55-3	Benzo(a)anthracene	U	42.9	ug/kg	12.9	42.9
91-94-1	3,3'-Dichlorobenzidine	U	429	ug/kg	129	429
218-01-9	Chrysene	U	42.9	ug/kg	12.9	42.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	429	ug/kg	85.9	429
117-84-0	Di-n-octylphthalate	U	429	ug/kg	85.9	429
205-99-2	Benzo(b)fluoranthene	U	42.9	ug/kg	12.9	42.9
207-08-9	Benzo(k)fluoranthene	U	42.9	ug/kg	12.9	42.9
50-32-8	Benzo(a)pyrene	U	42.9	ug/kg	12.9	42.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.9	ug/kg	12.9	42.9
53-70-3	Dibenzo(a,h)anthracene	U	42.9	ug/kg	12.9	42.9
191-24-2	Benzo(ghi)perylene	U	42.9	ug/kg	12.9	42.9
120-82-1	1,2,4-Trichlorobenzene	U	429	ug/kg	85.9	429

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	384	ug/kg		J
	Unknown Aldol Condensate	2.93	229	ug/kg		JA

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

SDG Number: 10-2154
Lab Sample ID: 248373009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7498
Batch ID: 961922
Run Date: 03/21/2010 16:56
Prep Date: 03/07/2010 12:04
Data File: s8c2119.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.02	1150	ug/kg	99	NJ
11028-42-5	Cedrene	7.03	606	ug/kg	95	NJ
470-40-6	Thujopsene	7.14	303	ug/kg	93	NJ
1000151-28-9	Cyclohexene, 1,3-diisopropenyl-6-methyl-	7.22	524	ug/kg	87	NJ
	Unknown	7.3	315	ug/kg		J
	Unknown	7.34	370	ug/kg		J
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	7.54	304	ug/kg	95	NJ
	Unknown	8.35	221	ug/kg		J
1000196-17-7	2,2,6.beta.,7-Tetramethylbicyclo[4.3.0]n	8.39	182	ug/kg	89	NJ
17351-34-7	14-Pentadecenoic acid	10.35	210	ug/kg	93	NJ
	Unknown	10.47	258	ug/kg		J
	Unknown	10.6	356	ug/kg		J
	Unknown	11.09	265	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.2	2540	ug/kg	98	NJ
	Unknown	11.24	508	ug/kg		J
112-95-8	Eicosane	11.72	210	ug/kg	97	NJ
	Unknown	14.69	276	ug/kg		J
	Unknown	15.02	400	ug/kg		J
	Unknown	15.03	385	ug/kg		J
83-46-5	.beta.-Sitosterol	16.73	417	ug/kg	93	NJ
	Unknown	17.28	430	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373006	Date Received: 03/02/2010 08:50	%Moisture: 27
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7499	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 15:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s8c2116.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	456	ug/kg	91.1	456
108-95-2	Phenol	U	456	ug/kg	91.1	456
95-57-8	2-Chlorophenol	U	456	ug/kg	91.1	456
106-46-7	1,4-Dichlorobenzene	U	456	ug/kg	91.1	456
621-64-7	N-Nitrosodipropylamine	U	456	ug/kg	91.1	456
59-50-7	4-Chloro-3-methylphenol	U	456	ug/kg	91.1	456
83-32-9	Acenaphthene	U	45.6	ug/kg	15.0	45.6
121-14-2	2,4-Dinitrotoluene	U	456	ug/kg	45.6	456
100-02-7	4-Nitrophenol	U	456	ug/kg	150	456
87-86-5	Pentachlorophenol	U	456	ug/kg	114	456
129-00-0	Pyrene	U	45.6	ug/kg	13.7	45.6
110-86-1	Pyridine	U	456	ug/kg	91.1	456
62-53-3	Aniline	U	456	ug/kg	137	456
111-44-4	bis(2-Chloroethyl) ether	U	456	ug/kg	91.1	456
541-73-1	1,3-Dichlorobenzene	U	456	ug/kg	91.1	456
100-51-6	Benzyl alcohol	U	456	ug/kg	137	456
95-50-1	1,2-Dichlorobenzene	U	456	ug/kg	91.1	456
108-60-1	bis(2-Chloroisopropyl)ether	U	456	ug/kg	91.1	456
95-48-7	o-Cresol	U	456	ug/kg	91.1	456
65794-96-9	m,p-Cresols	U	456	ug/kg	137	456
67-72-1	Hexachloroethane	U	456	ug/kg	91.1	456
98-95-3	Nitrobenzene	U	456	ug/kg	91.1	456
78-59-1	Isophorone	U	456	ug/kg	91.1	456
88-75-5	2-Nitrophenol	U	456	ug/kg	91.1	456
105-67-9	2,4-Dimethylphenol	U	456	ug/kg	159	456
111-91-1	bis(2-Chloroethoxy)methane	U	456	ug/kg	91.1	456
120-83-2	2,4-Dichlorophenol	U	456	ug/kg	91.1	456
65-85-0	Benzoic acid	U	911	ug/kg	228	911
91-20-3	Naphthalene	U	45.6	ug/kg	13.7	45.6
106-47-8	4-Chloroaniline	U	456	ug/kg	91.1	456
87-68-3	Hexachlorobutadiene	U	456	ug/kg	91.1	456
91-57-6	2-Methylnaphthalene	U	45.6	ug/kg	9.11	45.6
77-47-4	Hexachlorocyclopentadiene	U	456	ug/kg	91.1	456
88-06-2	2,4,6-Trichlorophenol	U	456	ug/kg	91.1	456
95-95-4	2,4,5-Trichlorophenol	U	456	ug/kg	91.1	456
91-58-7	2-Chloronaphthalene	U	45.6	ug/kg	15.0	45.6
88-74-4	2-Nitroaniline	U	456	ug/kg	91.1	456
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	456	ug/kg	91.1	456

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373006	Date Received: 03/02/2010 08:50	%Moisture: 27
Client ID: RE36-10-7499	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 15:26	Inst: MSD8.1	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2116.d	Aliquot: 30.07 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	456	ug/kg	91.1	456
606-20-2	2,6-Dinitrotoluene	U	456	ug/kg	45.6	456
208-96-8	Acenaphthylene	U	45.6	ug/kg	13.7	45.6
51-28-5	2,4-Dinitrophenol	U	911	ug/kg	173	911
132-64-9	Dibenzofuran	U	456	ug/kg	91.1	456
84-66-2	Diethylphthalate	U	456	ug/kg	91.1	456
86-73-7	Fluorene	U	45.6	ug/kg	13.7	45.6
7005-72-3	4-Chlorophenylphenylether	U	456	ug/kg	91.1	456
534-52-1	2-Methyl-4,6-dinitrophenol	U	456	ug/kg	91.1	456
100-01-6	4-Nitroaniline	U	456	ug/kg	137	456
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	456	ug/kg	91.1	456
122-66-7	Azobenzene	U	456	ug/kg	91.1	456
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	456	ug/kg	91.1	456
118-74-1	Hexachlorobenzene	U	456	ug/kg	91.1	456
85-01-8	Phenanthrene	U	45.6	ug/kg	13.7	45.6
120-12-7	Anthracene	U	45.6	ug/kg	9.11	45.6
84-74-2	Di-n-butylphthalate	U	456	ug/kg	91.1	456
206-44-0	Fluoranthene	U	45.6	ug/kg	13.7	45.6
85-68-7	Butylbenzylphthalate	U	456	ug/kg	91.1	456
56-55-3	Benzo(a)anthracene	U	45.6	ug/kg	13.7	45.6
91-94-1	3,3'-Dichlorobenzidine	U	456	ug/kg	137	456
218-01-9	Chrysene	U	45.6	ug/kg	13.7	45.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	456	ug/kg	91.1	456
117-84-0	Di-n-octylphthalate	U	456	ug/kg	91.1	456
205-99-2	Benzo(b)fluoranthene	U	45.6	ug/kg	13.7	45.6
207-08-9	Benzo(k)fluoranthene	U	45.6	ug/kg	13.7	45.6
50-32-8	Benzo(a)pyrene	U	45.6	ug/kg	13.7	45.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.6	ug/kg	13.7	45.6
53-70-3	Dibenzo(a,h)anthracene	U	45.6	ug/kg	13.7	45.6
191-24-2	Benzo(ghi)perylene	U	45.6	ug/kg	13.7	45.6
120-82-1	1,2,4-Trichlorobenzene	U	456	ug/kg	91.1	456

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
7785-70-8	1R- α -Pinene	3.69	878	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	4.25	581	ug/kg	97	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373006	Date Received: 03/02/2010 08:50	%Moisture: 27
Client ID: RE36-10-7499	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 15:26	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2116.d	Aliquot: 30.07 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.86	460	ug/kg		J
	Unknown	10.34	360	ug/kg		J
	Unknown	10.69	941	ug/kg		J
	Unknown	10.92	376	ug/kg		J
	Unknown	11.04	224	ug/kg		J
	Unknown	11.16	370	ug/kg		J
	Unknown	11.29	309	ug/kg		J
1000159-38-2	Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	11.35	591	ug/kg	80	NJ
	Unknown	11.38	801	ug/kg		J
	Unknown	11.45	404	ug/kg		J
	Unknown	11.58	7040	ug/kg		J
	Unknown	11.61	4740	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.71	5160	ug/kg	96	NJ
	Unknown	11.75	614	ug/kg		J
	Unknown	11.79	285	ug/kg		J
	Unknown	11.81	370	ug/kg		J
	Unknown	12.01	347	ug/kg		J
	Unknown	12.04	522	ug/kg		J
	Unknown	12.08	371	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.13	1530	ug/kg	93	NJ
	Unknown	12.27	217	ug/kg		J
	Unknown	12.36	225	ug/kg		J
	Unknown	13.36	541	ug/kg		J
	Unknown	14.24	561	ug/kg		J
	Unknown	15.09	519	ug/kg		J

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373010	Date Received: 03/02/2010 08:50	%Moisture: 21.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7500	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 17:25	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s8c2120.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	424	ug/kg	84.8	424
108-95-2	Phenol	U	424	ug/kg	84.8	424
95-57-8	2-Chlorophenol	U	424	ug/kg	84.8	424
106-46-7	1,4-Dichlorobenzene	U	424	ug/kg	84.8	424
621-64-7	N-Nitrosodipropylamine	U	424	ug/kg	84.8	424
59-50-7	4-Chloro-3-methylphenol	U	424	ug/kg	84.8	424
83-32-9	Acenaphthene	U	42.4	ug/kg	14.0	42.4
121-14-2	2,4-Dinitrotoluene	U	424	ug/kg	42.4	424
100-02-7	4-Nitrophenol	U	424	ug/kg	140	424
87-86-5	Pentachlorophenol	U	424	ug/kg	106	424
129-00-0	Pyrene	U	42.4	ug/kg	12.7	42.4
110-86-1	Pyridine	U	424	ug/kg	84.8	424
62-53-3	Aniline	U	424	ug/kg	127	424
111-44-4	bis(2-Chloroethyl) ether	U	424	ug/kg	84.8	424
541-73-1	1,3-Dichlorobenzene	U	424	ug/kg	84.8	424
100-51-6	Benzyl alcohol	U	424	ug/kg	127	424
95-50-1	1,2-Dichlorobenzene	U	424	ug/kg	84.8	424
108-60-1	bis(2-Chloroisopropyl) ether	U	424	ug/kg	84.8	424
95-48-7	o-Cresol	U	424	ug/kg	84.8	424
65794-96-9	m,p-Cresols	U	424	ug/kg	127	424
67-72-1	Hexachloroethane	U	424	ug/kg	84.8	424
98-95-3	Nitrobenzene	U	424	ug/kg	84.8	424
78-59-1	Isophorone	U	424	ug/kg	84.8	424
88-75-5	2-Nitrophenol	U	424	ug/kg	84.8	424
105-67-9	2,4-Dimethylphenol	U	424	ug/kg	148	424
111-91-1	bis(2-Chloroethoxy)methane	U	424	ug/kg	84.8	424
120-83-2	2,4-Dichlorophenol	U	424	ug/kg	84.8	424
65-85-0	Benzoic acid	U	848	ug/kg	212	848
91-20-3	Naphthalene	U	42.4	ug/kg	12.7	42.4
106-47-8	4-Chloroaniline	U	424	ug/kg	84.8	424
87-68-3	Hexachlorobutadiene	U	424	ug/kg	84.8	424
91-57-6	2-Methylnaphthalene	U	42.4	ug/kg	8.48	42.4
77-47-4	Hexachlorocyclopentadiene	U	424	ug/kg	84.8	424
88-06-2	2,4,6-Trichlorophenol	U	424	ug/kg	84.8	424
95-95-4	2,4,5-Trichlorophenol	U	424	ug/kg	84.8	424
91-58-7	2-Chloronaphthalene	U	42.4	ug/kg	14.0	42.4
88-74-4	2-Nitroaniline	U	424	ug/kg	84.8	424
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	424	ug/kg	84.8	424

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373010	Date Received: 03/02/2010 08:50	%Moisture: 21.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7500	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.1	Dilution: 1
Run Date: 03/21/2010 17:25	Analyst: NAGJ	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s8c2120.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	424	ug/kg	84.8	424
606-20-2	2,6-Dinitrotoluene	U	424	ug/kg	42.4	424
208-96-8	Acenaphthylene	U	42.4	ug/kg	12.7	42.4
51-28-5	2,4-Dinitrophenol	U	848	ug/kg	161	848
132-64-9	Dibenzofuran	U	424	ug/kg	84.8	424
84-66-2	Diethylphthalate	U	424	ug/kg	84.8	424
86-73-7	Fluorene	U	42.4	ug/kg	12.7	42.4
7005-72-3	4-Chlorophenylphenylether	U	424	ug/kg	84.8	424
534-52-1	2-Methyl-4,6-dinitrophenol	U	424	ug/kg	84.8	424
100-01-6	4-Nitroaniline	U	424	ug/kg	127	424
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	424	ug/kg	84.8	424
122-66-7	Azobenzene	U	424	ug/kg	84.8	424
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	424	ug/kg	84.8	424
118-74-1	Hexachlorobenzene	U	424	ug/kg	84.8	424
85-01-8	Phenanthrene	U	42.4	ug/kg	12.7	42.4
120-12-7	Anthracene	U	42.4	ug/kg	8.48	42.4
84-74-2	Di-n-butylphthalate	U	424	ug/kg	84.8	424
206-44-0	Fluoranthene	U	42.4	ug/kg	12.7	42.4
85-68-7	Butylbenzylphthalate	U	424	ug/kg	84.8	424
56-55-3	Benzo(a)anthracene	U	42.4	ug/kg	12.7	42.4
91-94-1	3,3'-Dichlorobenzidine	U	424	ug/kg	127	424
218-01-9	Chrysene	U	42.4	ug/kg	12.7	42.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	424	ug/kg	84.8	424
117-84-0	Di-n-octylphthalate	U	424	ug/kg	84.8	424
205-99-2	Benzo(b)fluoranthene	U	42.4	ug/kg	12.7	42.4
207-08-9	Benzo(k)fluoranthene	U	42.4	ug/kg	12.7	42.4
50-32-8	Benzo(a)pyrene	U	42.4	ug/kg	12.7	42.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.4	ug/kg	12.7	42.4
53-70-3	Dibenzo(a,h)anthracene	U	42.4	ug/kg	12.7	42.4
191-24-2	Benzo(ghi)perylene	U	42.4	ug/kg	12.7	42.4
120-82-1	1,2,4-Trichlorobenzene	U	424	ug/kg	84.8	424

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R- α -Pinene	3.69	693	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.01	387	ug/kg	99	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7500
Batch ID: 961922
Run Date: 03/21/2010 17:25
Prep Date: 03/07/2010 12:04
Data File: s8c2120.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQI/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
593-39-5	6-Octadecenoic acid, (Z)-	10.36	236	ug/kg	93	NJ
	Unknown	10.47	227	ug/kg		J
242794-76-9	Bicyclo[5.2.0]nonane, 2-methylene-4,8,8-	10.93	196	ug/kg	90	NJ
112-95-8	Eicosane	10.98	196	ug/kg	97	NJ
	Unknown	11.16	240	ug/kg		J
	Unknown	11.24	299	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	251	ug/kg	86	NJ
	Unknown	11.3	219	ug/kg		J
	Unknown	11.33	177	ug/kg		J
	Unknown	11.35	357	ug/kg		J
	Unknown	11.45	246	ug/kg		J
	Unknown	11.54	933	ug/kg		J
	Unknown	11.61	199	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.66	1100	ug/kg	93	NJ
	Unknown	11.72	398	ug/kg		J
	Unknown	11.76	283	ug/kg		J
1000099-24-3	(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	11.83	624	ug/kg	89	NJ
	Unknown	11.96	270	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12	362	ug/kg	90	NJ
	Unknown	12.04	243	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	12.12	381	ug/kg	95	NJ
	Unknown	12.36	228	ug/kg		J
	Unknown	12.4	254	ug/kg		J
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	12.45	242	ug/kg	92	NJ
629-78-7	Heptadecane	12.55	415	ug/kg	94	NJ
	Unknown	14.98	1520	ug/kg		J
83-47-6	.gamma.-Sitosterol	16.73	1560	ug/kg	93	NJ
1058-61-3	Stigmast-4-en-3-one	17.29	694	ug/kg	94	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7521	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8J	Dilution: 1
Run Date: 03/21/2010 18:55	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.1 g	Final Volume: 1 mL
Data File: s8c2123.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	431	ug/kg	86.2	431
108-95-2	Phenol	U	431	ug/kg	86.2	431
95-57-8	2-Chlorophenol	U	431	ug/kg	86.2	431
106-46-7	1,4-Dichlorobenzene	U	431	ug/kg	86.2	431
621-64-7	N-Nitrosodipropylamine	U	431	ug/kg	86.2	431
59-50-7	4-Chloro-3-methylphenol	U	431	ug/kg	86.2	431
83-32-9	Acenaphthene	U	43.1	ug/kg	14.2	43.1
121-14-2	2,4-Dinitrotoluene	U	431	ug/kg	43.1	431
100-02-7	4-Nitrophenol	U	431	ug/kg	142	431
87-86-5	Pentachlorophenol	U	431	ug/kg	108	431
129-00-0	Pyrene	J	14.6	ug/kg	12.9	43.1
110-86-1	Pyridine	U	431	ug/kg	86.2	431
62-53-3	Aniline	U	431	ug/kg	129	431
111-44-4	bis(2-Chloroethyl) ether	U	431	ug/kg	86.2	431
541-73-1	1,3-Dichlorobenzene	U	431	ug/kg	86.2	431
100-51-6	Benzyl alcohol	U	431	ug/kg	129	431
95-50-1	1,2-Dichlorobenzene	U	431	ug/kg	86.2	431
108-60-1	bis(2-Chloroisopropyl)ether	U	431	ug/kg	86.2	431
95-48-7	o-Cresol	U	431	ug/kg	86.2	431
65794-96-9	m,p-Cresols	U	431	ug/kg	129	431
67-72-1	Hexachloroethane	U	431	ug/kg	86.2	431
98-95-3	Nitrobenzene	U	431	ug/kg	86.2	431
78-59-1	Isophorone	U	431	ug/kg	86.2	431
88-75-5	2-Nitrophenol	U	431	ug/kg	86.2	431
105-67-9	2,4-Dimethylphenol	U	431	ug/kg	151	431
111-91-1	bis(2-Chloroethoxy)methane	U	431	ug/kg	86.2	431
120-83-2	2,4-Dichlorophenol	U	431	ug/kg	86.2	431
65-85-0	Benzoic acid	U	862	ug/kg	215	862
91-20-3	Naphthalene	U	43.1	ug/kg	12.9	43.1
106-47-8	4-Chloroaniline	U	431	ug/kg	86.2	431
87-68-3	Hexachlorobutadiene	U	431	ug/kg	86.2	431
91-57-6	2-Methylnaphthalene	U	43.1	ug/kg	8.62	43.1
77-47-4	Hexachlorocyclopentadiene	U	431	ug/kg	86.2	431
88-06-2	2,4,6-Trichlorophenol	U	431	ug/kg	86.2	431
95-95-4	2,4,5-Trichlorophenol	U	431	ug/kg	86.2	431
91-58-7	2-Chloronaphthalene	U	43.1	ug/kg	14.2	43.1
88-74-4	2-Nitroaniline	U	431	ug/kg	86.2	431
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	431	ug/kg	86.2	431

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7521	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 18:55	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.1 g	Final Volume: 1 mL
Data File: s8c2123.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	431	ug/kg	86.2	431
606-20-2	2,6-Dinitrotoluene	U	431	ug/kg	43.1	431
208-96-8	Acenaphthylene	U	43.1	ug/kg	12.9	43.1
51-28-5	2,4-Dinitrophenol	U	862	ug/kg	164	862
132-64-9	Dibenzofuran	U	431	ug/kg	86.2	431
84-66-2	Diethylphthalate	U	431	ug/kg	86.2	431
86-73-7	Fluorene	U	43.1	ug/kg	12.9	43.1
7005-72-3	4-Chlorophenylphenylether	U	431	ug/kg	86.2	431
534-52-1	2-Methyl-4,6-dinitrophenol	U	431	ug/kg	86.2	431
100-01-6	4-Nitroaniline	U	431	ug/kg	129	431
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	431	ug/kg	86.2	431
122-66-7	Azobenzene	U	431	ug/kg	86.2	431
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	431	ug/kg	86.2	431
118-74-1	Hexachlorobenzene	U	431	ug/kg	86.2	431
85-01-8	Phenanthrene	U	43.1	ug/kg	12.9	43.1
120-12-7	Anthracene	U	43.1	ug/kg	8.62	43.1
84-74-2	Di-n-butylphthalate	U	431	ug/kg	86.2	431
206-44-0	Fluoranthene	U	43.1	ug/kg	12.9	43.1
85-68-7	Butylbenzylphthalate	U	431	ug/kg	86.2	431
56-55-3	Benzo(a)anthracene	U	43.1	ug/kg	12.9	43.1
91-94-1	3,3'-Dichlorobenzidine	U	431	ug/kg	129	431
218-01-9	Chrysene	U	43.1	ug/kg	12.9	43.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	431	ug/kg	86.2	431
117-84-0	Di-n-octylphthalate	U	431	ug/kg	86.2	431
205-99-2	Benzo(b)fluoranthene	U	43.1	ug/kg	12.9	43.1
207-08-9	Benzo(k)fluoranthene	U	43.1	ug/kg	12.9	43.1
50-32-8	Benzo(a)pyrene	U	43.1	ug/kg	12.9	43.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.1	ug/kg	12.9	43.1
53-70-3	Dibenzo(a,h)anthracene	U	43.1	ug/kg	12.9	43.1
191-24-2	Benzo(ghi)perylene	U	43.1	ug/kg	12.9	43.1
120-82-1	1,2,4-Trichlorobenzene	U	431	ug/kg	86.2	431

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
2437-95-8	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	3.69	3620	ug/kg	97	NJ
	Unknown	9.97	1500	ug/kg		J

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
Client ID: RE36-10-7521	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 18:55	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2123.d	Aliquot: 30.1 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown	10.16	2060	ug/kg		J
	Unknown	10.35	1500	ug/kg		J
	Unknown	10.93	746	ug/kg		J
	Unknown	11.11	689	ug/kg		J
	Unknown	11.17	560	ug/kg		J
	Unknown	11.33	750	ug/kg		J
	Unknown	11.36	463	ug/kg		J
	Unknown	11.39	471	ug/kg		J
	Unknown	11.41	553	ug/kg		J
19402-34-7	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.47	1270	ug/kg	90	NJ
	Unknown	11.59	2920	ug/kg		J
	Unknown	11.63	737	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.69	1860	ug/kg	95	NJ
	Unknown	11.73	3740	ug/kg		J
	Unknown	11.82	513	ug/kg		J
	Unknown	11.85	831	ug/kg		J
	Unknown	11.98	503	ug/kg		J
112-85-6	Docosanoic acid	12.02	975	ug/kg	94	NJ
	Unknown	12.09	737	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.14	1530	ug/kg	89	NJ
	Unknown	12.33	679	ug/kg		J
	Unknown	12.39	561	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	12.56	763	ug/kg	96	NJ
	Unknown	12.65	463	ug/kg		J
1599-67-3	1-Docosene	12.77	1150	ug/kg	95	NJ
	Unknown	12.9	2140	ug/kg		J
	Unknown	14.93	4380	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	17.3	1880	ug/kg	86	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7522
Batch ID: 961922
Run Date: 03/21/2010 18:25
Prep Date: 03/07/2010 12:04
Data File: s8c2122.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	374	ug/kg	74.8	374
108-95-2	Phenol	U	374	ug/kg	74.8	374
95-57-8	2-Chlorophenol	U	374	ug/kg	74.8	374
106-46-7	1,4-Dichlorobenzene	U	374	ug/kg	74.8	374
621-64-7	N-Nitrosodipropylamine	U	374	ug/kg	74.8	374
59-50-7	4-Chloro-3-methylphenol	U	374	ug/kg	74.8	374
83-32-9	Acenaphthene	U	37.4	ug/kg	12.3	37.4
121-14-2	2,4-Dinitrotoluene	U	374	ug/kg	37.4	374
100-02-7	4-Nitrophenol	U	374	ug/kg	123	374
87-86-5	Pentachlorophenol	U	374	ug/kg	93.5	374
129-00-0	Pyrene	U	37.4	ug/kg	11.2	37.4
110-86-1	Pyridine	U	374	ug/kg	74.8	374
62-53-3	Aniline	U	374	ug/kg	112	374
111-44-4	bis(2-Chloroethyl) ether	U	374	ug/kg	74.8	374
541-73-1	1,3-Dichlorobenzene	U	374	ug/kg	74.8	374
100-51-6	Benzyl alcohol	U	374	ug/kg	112	374
95-50-1	1,2-Dichlorobenzene	U	374	ug/kg	74.8	374
108-60-1	bis(2-Chloroisopropyl)ether	U	374	ug/kg	74.8	374
95-48-7	o-Cresol	U	374	ug/kg	74.8	374
65794-96-9	m,p-Cresols	U	374	ug/kg	112	374
67-72-1	Hexachloroethane	U	374	ug/kg	74.8	374
98-95-3	Nitrobenzene	U	374	ug/kg	74.8	374
78-59-1	Isophorone	U	374	ug/kg	74.8	374
88-75-5	2-Nitrophenol	U	374	ug/kg	74.8	374
105-67-9	2,4-Dimethylphenol	U	374	ug/kg	131	374
111-91-1	bis(2-Chloroethoxy)methane	U	374	ug/kg	74.8	374
120-83-2	2,4-Dichlorophenol	U	374	ug/kg	74.8	374
65-85-0	Benzoic acid	U	748	ug/kg	187	748
91-20-3	Naphthalene	U	37.4	ug/kg	11.2	37.4
106-47-8	4-Chloroaniline	U	374	ug/kg	74.8	374
87-68-3	Hexachlorobutadiene	U	374	ug/kg	74.8	374
91-57-6	2-Methylnaphthalene	U	37.4	ug/kg	7.48	37.4
77-47-4	Hexachlorocyclopentadiene	U	374	ug/kg	74.8	374
88-06-2	2,4,6-Trichlorophenol	U	374	ug/kg	74.8	374
95-95-4	2,4,5-Trichlorophenol	U	374	ug/kg	74.8	374
91-58-7	2-Chloronaphthalene	U	37.4	ug/kg	12.3	37.4
88-74-4	2-Nitroaniline	U	374	ug/kg	74.8	374
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	374	ug/kg	74.8	374

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373014	Date Received: 03/02/2010 08:50	%Moisture: 11.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7522	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 18:25	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s8c2122.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	374	ug/kg	74.8	374
606-20-2	2,6-Dinitrotoluene	U	374	ug/kg	37.4	374
208-96-8	Acenaphthylene	U	37.4	ug/kg	11.2	37.4
51-28-5	2,4-Dinitrophenol	U	748	ug/kg	142	748
132-64-9	Dibenzofuran	U	374	ug/kg	74.8	374
84-66-2	Diethylphthalate	U	374	ug/kg	74.8	374
86-73-7	Fluorene	U	37.4	ug/kg	11.2	37.4
7005-72-3	4-Chlorophenylphenylether	U	374	ug/kg	74.8	374
534-52-1	2-Methyl-4,6-dinitrophenol	U	374	ug/kg	74.8	374
100-01-6	4-Nitroaniline	U	374	ug/kg	112	374
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	374	ug/kg	74.8	374
122-66-7	Azobenzene	U	374	ug/kg	74.8	374
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	374	ug/kg	74.8	374
118-74-1	Hexachlorobenzene	U	374	ug/kg	74.8	374
85-01-8	Phenanthrene	U	37.4	ug/kg	11.2	37.4
120-12-7	Anthracene	U	37.4	ug/kg	7.48	37.4
84-74-2	Di-n-butylphthalate	U	374	ug/kg	74.8	374
206-44-0	Fluoranthene	U	37.4	ug/kg	11.2	37.4
85-68-7	Butylbenzylphthalate	U	374	ug/kg	74.8	374
56-55-3	Benzo(a)anthracene	U	37.4	ug/kg	11.2	37.4
91-94-1	3,3'-Dichlorobenzidine	U	374	ug/kg	112	374
218-01-9	Chrysene	U	37.4	ug/kg	11.2	37.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	374	ug/kg	74.8	374
117-84-0	Di-n-octylphthalate	U	374	ug/kg	74.8	374
205-99-2	Benzo(b)fluoranthene	U	37.4	ug/kg	11.2	37.4
207-08-9	Benzo(k)fluoranthene	U	37.4	ug/kg	11.2	37.4
50-32-8	Benzo(a)pyrene	U	37.4	ug/kg	11.2	37.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.4	ug/kg	11.2	37.4
53-70-3	Dibenzo(a,h)anthracene	U	37.4	ug/kg	11.2	37.4
191-24-2	Benzo(ghi)perylene	U	37.4	ug/kg	11.2	37.4
120-82-1	1,2,4-Trichlorobenzene	U	374	ug/kg	74.8	374

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.71	2500	ug/kg		J
	Unknown Aldol Condensate	2.93	205	ug/kg		JA

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373014	Date Received: 03/02/2010 08:50	%Moisture: 11.3
Client ID: RE36-10-7522	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 18:25	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2122.d	Aliquot: 30.12 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	13.36	473	ug/kg		J
70038-20-9	7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	14.24	606	ug/kg	90	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 15.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7523
Batch ID: 961922
Run Date: 03/21/2010 17:56
Prep Date: 03/07/2010 12:04
Data File: s8c2121.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	394	ug/kg	78.9	394
108-95-2	Phenol	U	394	ug/kg	78.9	394
95-57-8	2-Chlorophenol	U	394	ug/kg	78.9	394
106-46-7	1,4-Dichlorobenzene	U	394	ug/kg	78.9	394
621-64-7	N-Nitrosodipropylamine	U	394	ug/kg	78.9	394
59-50-7	4-Chloro-3-methylphenol	U	394	ug/kg	78.9	394
83-32-9	Acenaphthene	U	39.4	ug/kg	13.0	39.4
121-14-2	2,4-Dinitrotoluene	U	394	ug/kg	39.4	394
100-02-7	4-Nitrophenol	U	394	ug/kg	130	394
87-86-5	Pentachlorophenol	U	394	ug/kg	98.6	394
129-00-0	Pyrene	U	39.4	ug/kg	11.8	39.4
110-86-1	Pyridine	U	394	ug/kg	78.9	394
62-53-3	Aniline	U	394	ug/kg	118	394
111-44-4	bis(2-Chloroethyl) ether	U	394	ug/kg	78.9	394
541-73-1	1,3-Dichlorobenzene	U	394	ug/kg	78.9	394
100-51-6	Benzyl alcohol	U	394	ug/kg	118	394
95-50-1	1,2-Dichlorobenzene	U	394	ug/kg	78.9	394
108-60-1	bis(2-Chloroisopropyl)ether	U	394	ug/kg	78.9	394
95-48-7	o-Cresol	U	394	ug/kg	78.9	394
65794-96-9	m,p-Cresols	U	394	ug/kg	118	394
67-72-1	Hexachloroethane	U	394	ug/kg	78.9	394
98-95-3	Nitrobenzene	U	394	ug/kg	78.9	394
78-59-1	Isophorone	U	394	ug/kg	78.9	394
88-75-5	2-Nitrophenol	U	394	ug/kg	78.9	394
105-67-9	2,4-Dimethylphenol	U	394	ug/kg	138	394
111-91-1	bis(2-Chloroethoxy)methane	U	394	ug/kg	78.9	394
120-83-2	2,4-Dichlorophenol	U	394	ug/kg	78.9	394
65-85-0	Benzoic acid	U	789	ug/kg	197	789
91-20-3	Naphthalene	U	39.4	ug/kg	11.8	39.4
106-47-8	4-Chloroaniline	U	394	ug/kg	78.9	394
87-68-3	Hexachlorobutadiene	U	394	ug/kg	78.9	394
91-57-6	2-Methylnaphthalene	U	39.4	ug/kg	7.89	39.4
77-47-4	Hexachlorocyclopentadiene	U	394	ug/kg	78.9	394
88-06-2	2,4,6-Trichlorophenol	U	394	ug/kg	78.9	394
95-95-4	2,4,5-Trichlorophenol	U	394	ug/kg	78.9	394
91-58-7	2-Chloronaphthalene	U	39.4	ug/kg	13.0	39.4
88-74-4	2-Nitroaniline	U	394	ug/kg	78.9	394
99-09-2	<i>o</i> -Nitroaniline	U	394	ug/kg	78.9	394
	3-Nitroaniline					

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

SDG Number: 10-2154
Lab Sample ID: 248373011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 15.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7523
Batch ID: 961922
Run Date: 03/21/2010 17:56
Prep Date: 03/07/2010 12:04
Data File: s8c2121.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	394	ug/kg	78.9	394
606-20-2	2,6-Dinitrotoluene	U	394	ug/kg	39.4	394
208-96-8	Acenaphthylene	U	39.4	ug/kg	11.8	39.4
51-28-5	2,4-Dinitrophenol	U	789	ug/kg	150	789
132-64-9	Dibenzofuran	U	394	ug/kg	78.9	394
84-66-2	Diethylphthalate	U	394	ug/kg	78.9	394
86-73-7	Fluorene	U	39.4	ug/kg	11.8	39.4
7005-72-3	4-Chlorophenylphenylether	U	394	ug/kg	78.9	394
534-52-1	2-Methyl-4,6-dinitrophenol	U	394	ug/kg	78.9	394
100-01-6	4-Nitroaniline	U	394	ug/kg	118	394
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	394	ug/kg	78.9	394
122-66-7	Azobenzene	U	394	ug/kg	78.9	394
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	394	ug/kg	78.9	394
118-74-1	Hexachlorobenzene	U	394	ug/kg	78.9	394
85-01-8	Phenanthrene	U	39.4	ug/kg	11.8	39.4
120-12-7	Anthracene	U	39.4	ug/kg	7.89	39.4
84-74-2	Di-n-butylphthalate	U	394	ug/kg	78.9	394
206-44-0	Fluoranthene	U	39.4	ug/kg	11.8	39.4
85-68-7	Butylbenzylphthalate	U	394	ug/kg	78.9	394
56-55-3	Benzo(a)anthracene	U	39.4	ug/kg	11.8	39.4
91-94-1	3,3'-Dichlorobenzidine	U	394	ug/kg	118	394
218-01-9	Chrysene	U	39.4	ug/kg	11.8	39.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	394	ug/kg	78.9	394
117-84-0	Di-n-octylphthalate	U	394	ug/kg	78.9	394
205-99-2	Benzo(b)fluoranthene	U	39.4	ug/kg	11.8	39.4
207-08-9	Benzo(k)fluoranthene	U	39.4	ug/kg	11.8	39.4
50-32-8	Benzo(a)pyrene	U	39.4	ug/kg	11.8	39.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.4	ug/kg	11.8	39.4
53-70-3	Dibenzo(a,h)anthracene	U	39.4	ug/kg	11.8	39.4
191-24-2	Benzo(ghi)perylene	U	39.4	ug/kg	11.8	39.4
120-82-1	1,2,4-Trichlorobenzene	U	394	ug/kg	78.9	394

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.73	4760	ug/kg		J
4630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	7.01	251	ug/kg	99	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373011	Date Received: 03/02/2010 08:50	%Moisture: 15.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7523	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 17:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2121.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown	11.54	166	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.65	199	ug/kg	87	NJ
	Unknown	13.36	180	ug/kg		J
	Unknown	14.25	278	ug/kg		J
83-46-5	.beta.-Sitosterol	16.73	273	ug/kg	93	NJ
83-47-6	.gamma.-Sitosterol	16.74	163	ug/kg	92	NJ
	Unknown	16.79	300	ug/kg		J
	Unknown	17.28	198	ug/kg		J

QC Summary

Semi-Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-2154

Matrix Type: SOLID

CAP Column (1) : J&W DB-SMS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1202063250	MB for batch 961921	77	76	74	65	63	84
1202063251	LCS for batch 961921	79	76	76	67	73	79
248373001	RE36-10-7494	74	73	71	62	58	78
1202063252	RE36-10-7494MS	55	56	54	46	46	56
1202063253	RE36-10-7494MSD	79	80	76	66	68	75
248373002	RE36-10-7493	79	79	76	67	69	85
248373003	RE36-10-7492	71	70	68	60	60	80
248373004	RE36-10-7491	77	78	74	66	72	88
248373005	RE36-10-7496	64	65	61	56	61	72
248373006	RE36-10-7499	78	78	72	66	69	87
248373007	RE36-10-7497	79	78	73	66	72	90
248373008	RE36-10-7495	70	70	65	59	64	87
248373009	RE36-10-7498	76	74	72	64	70	90
248373010	RE36-10-7500	74	73	71	62	68	84
248373011	RE36-10-7523	60	60	57	49	55	68
248373014	RE36-10-7522	77	73	73	64	69	87
248373015	RE36-10-7521	72	72	68	61	67	84

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: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961921

Matrix: SOIL

Lab Sample ID: 1202063251

Instrument: MSD8.I

Analysis Date: 03/21/2010 10:59

Dilution: 1

Analyst: NAG1

Preo Batch ID: 961921

Inj. Vol: .5 uL

Batch ID: 961922

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	1200	72	22-114
108-95-2	LCS Phenol	1670	0.0	1290	77	39-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1340	80	40-107
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1190	72	33-108
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1440	86	34-113
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1290	78	42-114
83-32-9	LCS Acenaphthene	1670	0.0	1130	68	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1260	76	49-112
100-02-7	LCS 4-Nitrophenol	1670	0.0	1020	61	24-113
87-86-5	LCS Pentachlorophenol	1670	0.0	1400	84	27-116
129-00-0	LCS Pyrene	1670	0.0	1140	68	42-113
110-86-1	LCS Pyridine	1670	0.0	1500	90	8-125
62-53-3	LCS Aniline	1670	0.0	904	54	18-126
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1360	81	32-103
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1210	73	32-108
100-51-6	LCS Benzyl alcohol	1670	0.0	736	44	27-108
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1250	75	35-111
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1420	85	28-117
95-48-7	LCS o-Cresol	1670	0.0	1250	75	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1420	85	45-121
67-72-1	LCS Hexachloroethane	1670	0.0	1270	76	30-109
98-95-3	LCS Nitrobenzene	1670	0.0	1300	78	33-116

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961921

Matrix: SOIL

Lab Sample ID: 1202063251

Instrument: MSD8.I

Analysis Date: 03/21/2010 10:59

Dilution: 1

Analyst: NAG1

Preo Batch ID: 961921

Inj. Vol: .5 uL

Batch ID: 961922

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	1400	84	35-113
88-75-5	LCS 2-Nitrophenol	1670	0.0	1280	77	31-117
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1250	75	32-112
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1390	83	34-110
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1290	77	34-116
65-85-0	LCS Benzoic acid	3330	0.0	2560	77	22-138
91-20-3	LCS Naphthalene	1670	0.0	1270	76	35-103
106-47-8	LCS 4-Chloroaniline	1670	0.0	760	46	20-118
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1160	70	31-117
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1320	79	38-115
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1030	62	22-140
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1230	74	40-110
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	1150	69	43-113
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	1170	70	37-111
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	1210	73	41-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	933	56	34-125
131-11-3	LCS Dimethylphthalate	1670	0.0	1410	85	48-122
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1310	79	47-107
208-96-8	LCS Acenaphthylene	1670	0.0	1220	73	44-110
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	1080	65	18-127
132-64-9	LCS Dibenzofuran	1670	0.0	1180	71	49-115
84-66-2	LCS Diethylphthalate	1670	0.0	1420	85	51-126

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961921

Matrix: SOIL

Lab Sample ID: 1202063251

Instrument: MSD8.I

Analysis Date: 03/21/2010 10:59

Dilution: 1

Analyst: NAG1

Pre Batch ID: 961921

Inj. Vol: .5 uL

Batch ID: 961922

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	1170	70	43-109
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1170	70	45-115
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1210	73	32-117
100-01-6	LCS 4-Nitroaniline <i>p</i> -Nitroaniline	1670	0.0	1220	73	33-148
122-39-4	LCS Diphenylamine	1670	0.0	1430	86	46-114
122-66-7	LCS Azobenzene <i>1,2</i> -Diphenylhydrazine	1670	0.0	1540	92	38-123
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1280	77	40-119
118-74-1	LCS Hexachlorobenzene	1670	0.0	1260	76	43-111
85-01-8	LCS Phenanthrene	1670	0.0	1270	76	46-107
120-12-7	LCS Anthracene	1670	0.0	1180	71	46-110
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1700	102	52-132
206-44-0	LCS Fluoranthene	1670	0.0	1310	78	51-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1690	102	47-137
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1200	72	50-108
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1040	62	36-103
218-01-9	LCS Chrysene	1670	0.0	1330	80	48-111
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	1790	107	48-139
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1640	99	42-141
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1280	77	49-114
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1280	77	50-116
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1330	80	54-114
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1290	77	53-120

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 4

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961921

Matrix: SOIL

Lab Sample ID:1202063251

Instrument: MSD8.I

Analysis Date: 03/21/2010 10:59

Dilution: 1

Analyst: NAG1

Pren Batch II 961921

Inj. Vol: .5 uL

Batch ID: 961922

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	1580	95	53-121
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1450	87	50-121
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1170	70	32-114

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Matrix Spike

Client ID: RE36-10-7494MS

Matrix: R

Lab Sample ID: 1202063252

%Moisture: 12.3

Instrument: MSD8.I

Analysis Date: 03/21/2010 12:28

Dilution: 1

Analyst: NAG1

Pren Batch ID: 961921

Inj. Vol: .5 uL

Batch ID: 961922

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS N-Methyl-N-nitrosomethylam	1900	0.00 U	950	50	27-98
108-95-2	MS Phenol	1900	0.00 U	1040	55	33-94
95-57-8	MS 2-Chlorophenol	1900	0.00 U	1070	56	29-96
106-46-7	MS 1,4-Dichlorobenzene	1900	0.00 U	959	50	27-96
621-64-7	MS N-Nitrosodipropylamine	1900	0.00 U	1160	61	29-102
59-50-7	MS 4-Chloro-3-methylphenol	1900	0.00 U	1050	55	29-110
83-32-9	MS Acenaphthene	1900	0.00 U	890	47	17-109
121-14-2	MS 2,4-Dinitrotoluene	1900	0.00 U	990	52	33-107
100-02-7	MS 4-Nitrophenol	1900	0.00 U	911	48	15-110
87-86-5	MS Pentachlorophenol	1900	0.00 U	1100	58	23-110
129-00-0	MS Pyrene	1900	0.00 U	960	50	24-118
110-86-1	MS Pyridine	1900	0.00 U	858	45	25-102
62-53-3	MS Aniline	1900	0.00 U	697	37	18-109
111-44-4	MS bis(2-Chloroethyl) ether	1900	0.00 U	1080	57	29-96
541-73-1	MS 1,3-Dichlorobenzene	1900	0.00 U	987	52	26-97
100-51-6	MS Benzyl alcohol	1900	0.00 U	437	23	19-112
95-50-1	MS 1,2-Dichlorobenzene	1900	0.00 U	993	52	30-97
108-60-1	MS bis(2-Chloroisopropyl)ether	1900	0.00 U	1130	60	28-103
95-48-7	MS o-Cresol	1900	0.00 U	1110	59	32-107
65794-96-9	MS m,p-Cresols	1900	0.00 U	1270	67	33-115
67-72-1	MS Hexachloroethane	1900	0.00 U	1000	53	25-100
98-95-3	MS Nitrobenzene	1900	0.00 U	1070	56	27-106

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 8

SDG Number: 10-2154

Sample Type: Matrix Spike

Client ID: RE36-10-7494MS

Matrix: R

Lab Sample ID: 1202063252

%Moisture: 12.3

Instrument: MSD8.I

Analysis Date: 03/21/2010 12:28

Dilution: 1

Analyst: NAG1

Pre Batch ID: 961921

Inj. Vol: .5 uL

Batch ID: 961922

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	1900	0.00 U	1110	58	29-104
88-75-5	MS 2-Nitrophenol	1900	0.00 U	1090	57	26-102
105-67-9	MS 2,4-Dimethylphenol	1900	0.00 U	910	48	22-104
111-91-1	MS bis(2-Chloroethoxy)methane	1900	0.00 U	1130	59	27-101
120-83-2	MS 2,4-Dichlorophenol	1900	0.00 U	1040	55	26-103
65-85-0	MS Benzoic acid	3800	0.00 U	2420	64	13-131
91-20-3	MS Naphthalene	1900	0.00 U	1040	55	23-103
106-47-8	MS 4-Chloroaniline	1900	0.00 U	642	34	26-103
87-68-3	MS Hexachlorobutadiene	1900	0.00 U	913	48	28-101
91-57-6	MS 2-Methylnaphthalene	1900	0.00 U	1060	56	27-106
77-47-4	MS Hexachlorocyclopentadiene	1900	0.00 U	826	43	24-117
88-06-2	MS 2,4,6-Trichlorophenol	1900	0.00 U	957	50	26-105
95-95-4	MS 2,4,5-Trichlorophenol	1900	0.00 U	943	50	30-110
91-58-7	MS 2-Chloronaphthalene	1900	0.00 U	989	52	28-102
88-74-4	MS 2-Nitroaniline <i>o</i> -Nitroaniline	1900	0.00 U	1020	54	33-106
99-09-2	MS 3-Nitroaniline <i>m</i> -Nitroaniline	1900	0.00 U	765	40	33-116
131-11-3	MS Dimethylphthalate	1900	0.00 U	1100	58	38-113
606-20-2	MS 2,6-Dinitrotoluene	1900	0.00 U	1030	54	29-107
208-96-8	MS Acenaphthylene	1900	0.00 U	961	51	25-108
51-28-5	MS 2,4-Dinitrophenol	1900	0.00 U	1060	56	14-102
132-64-9	MS Dibenzofuran	1900	0.00 U	960	51	35-112
84-66-2	MS Diethylphthalate	1900	0.00 U	1090	57	36-122

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Matrix Spike

Client ID: RE36-10-7494MS

Matrix: R

Lab Sample ID: 1202063252

%Moisture: 12.3

Instrument: MSD8.I

Analysis Date: 03/21/2010 12:28

Dilution: 1

Analyst: NAG1

Prep Batch II 961921

Inj. Vol: .5 uL

Batch ID: 961922

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	1900	0.00 U	906	48	33-105
7005-72-3	MS 4-Chlorophenylphenylether	1900	0.00 U	921	48	30-110
534-52-1	MS 2-Methyl-4,6-dinitrophenol	1900	0.00 U	1060	56	26-97
100-01-6	MS 4-Nitroaniline <i>p-Nitroaniline</i>	1900	0.00 U	859	45	28-135
122-39-4	MS Diphenylamine	1900	0.00 U	1150	60	33-109
122-66-7	MS Azobenzene <i>1,2-Diphenylhydrazine</i>	1900	0.00 U	1230	65	31-113
101-55-3	MS 4-Bromophenylphenylether	1900	0.00 U	1010	53	31-109
118-74-1	MS Hexachlorobenzene	1900	0.00 U	965	51	37-99
85-01-8	MS Phenanthrene	1900	0.00 U	1010	53	29-109
120-12-7	MS Anthracene	1900	0.00 U	923	49	19-118
84-74-2	MS Di-n-butylphthalate	1900	0.00 U	1290	68	39-123
206-44-0	MS Fluoranthene	1900	0.00 U	953	50	33-114
85-68-7	MS Butylbenzylphthalate	1900	0.00 U	1450	76	35-131
56-55-3	MS Benzo(a)anthracene	1900	0.00 U	937	49	30-111
91-94-1	MS 3,3'-Dichlorobenzidine	1900	0.00 U	431	23 *	30-124
218-01-9	MS Chrysene	1900	0.00 U	1040	55	32-108
117-81-7	MS bis(2-Ethylhexyl)phthalate	1900	0.00 U	1500	79	37-129
117-84-0	MS Di-n-octylphthalate	1900	0.00 U	1660	87	31-143
205-99-2	MS Benzo(b)fluoranthene	1900	0.00 U	1050	55	29-118
207-08-9	MS Benzo(k)fluoranthene	1900	0.00 U	1060	56	32-118
50-32-8	MS Benzo(a)pyrene	1900	0.00 U	1030	54	33-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	1900	0.00 U	970	51	29-114

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 8

SDG Number: 10-2154

Client ID: RE36-10-7494MS

Lab Sample ID:1202063252

Instrument: MSD8.I

Analyst: NAG1

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 12.3

Analysis Date: 03/21/2010 12:28

Dilution: 1

Pren Batch II 961921

Batch ID: 961922

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS Dibenzo(a,h)anthracene	1900	0.00 U	999	53	27-119
191-24-2	MS Benzo(ghi)perylene	1900	0.00 U	888	47	28-112
120-82-1	MS 1,2,4-Trichlorobenzene	1900	0.00 U	963	51	28-99

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2154

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-7494MSD

Matrix: R

Lab Sample ID: 1202063253

%Moisture: 12.3

Instrument: MSD8.I

Analysis Date: 03/21/2010 12:57

Dilution: 1

Analyst: NAG1

Pren Batch II 961921

Inj. Vol: .5 uL

Batch ID: 961922

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	U	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1900	0.00	U	1310	69	27-98	32 *	0-30
108-95-2	MSD Phenol	1900	0.00	U	1480	78	33-94	35 *	0-30
95-57-8	MSD 2-Chlorophenol	1900	0.00	U	1520	80	29-96	35 *	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1900	0.00	U	1330	70	27-96	32 *	0-30
621-64-7	MSD N-Nitrosodipropylamine	1900	0.00	U	1610	85	29-102	33 *	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1900	0.00	U	1470	78	29-110	33 *	0-30
83-32-9	MSD Acenaphthene	1900	0.00	U	1230	65	17-109	32 *	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1900	0.00	U	1400	74	33-107	35 *	0-30
100-02-7	MSD 4-Nitrophenol	1900	0.00	U	1410	74	15-110	43 *	0-30
87-86-5	MSD Pentachlorophenol	1900	0.00	U	1500	79	23-110	31 *	0-30
129-00-0	MSD Pyrene	1900	0.00	U	1230	65	24-118	25	0-30
110-86-1	MSD Pyridine	1900	0.00	U	1030	54	25-102	18	0-30
62-53-3	MSD Aniline	1900	0.00	U	1220	64	18-109	55 *	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1900	0.00	U	1520	80	29-96	34 *	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1900	0.00	U	1360	72	26-97	32 *	0-30
100-51-6	MSD Benzyl alcohol	1900	0.00	U	711	37	19-112	48 *	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1900	0.00	U	1370	72	30-97	32 *	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1900	0.00	U	1560	82	28-103	32 *	0-30
95-48-7	MSD o-Cresol	1900	0.00	U	1510	79	32-107	30	0-30
65794-96-9	MSD m,p-Cresols	1900	0.00	U	1830	96	33-115	36 *	0-30
67-72-1	MSD Hexachloroethane	1900	0.00	U	1380	73	25-100	31 *	0-30
98-95-3	MSD Nitrobenzene	1900	0.00	U	1480	78	27-106	32 *	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 6 of 8

SDG Number: 10-2154

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-7494MSD

Matrix: R

Lab Sample ID: 1202063253

% Moisture: 12.3

Instrument: MSD8.I

Analysis Date: 03/21/2010 12:57

Dilution: 1

Analyst: NAG1

Pren Batch II 961921

Inj. Vol: .5 uL

Batch ID: 961922

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1900	0.00 U	1540	81	29-104	33 *	0-30
88-75-5	MSD 2-Nitrophenol	1900	0.00 U	1530	81	26-102	34 *	0-30
105-67-9	MSD 2,4-Dimethylphenol	1900	0.00 U	1270	67	22-104	33 *	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1900	0.00 U	1540	81	27-101	31 *	0-30
120-83-2	MSD 2,4-Dichlorophenol	1900	0.00 U	1470	78	26-103	34 *	0-30
65-85-0	MSD Benzoic acid	3790	0.00 U	3350	88	13-131	32 *	0-30
91-20-3	MSD Naphthalene	1900	0.00 U	1400	74	23-103	30	0-30
106-47-8	MSD 4-Chloroaniline	1900	0.00 U	931	49	26-103	37 *	0-30
87-68-3	MSD Hexachlorobutadiene	1900	0.00 U	1240	65	28-101	31 *	0-30
91-57-6	MSD 2-Methylnaphthalene	1900	0.00 U	1470	78	27-106	33 *	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1900	0.00 U	1130	60	24-117	32 *	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1900	0.00 U	1380	73	26-105	36 *	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1900	0.00 U	1320	70	30-110	33 *	0-30
91-58-7	MSD 2-Chloronaphthalene	1900	0.00 U	1340	71	28-102	31 *	0-30
88-74-4	MSD 2-Nitroaniline <i>o</i> -Nitroaniline	1900	0.00 U	1480	78	33-106	36 *	0-30
99-09-2	MSD 3-Nitroaniline <i>m</i> -Nitroaniline	1900	0.00 U	1230	65	33-116	46 *	0-30
131-11-3	MSD Dimethylphthalate	1900	0.00 U	1510	80	38-113	32 *	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1900	0.00 U	1440	76	29-107	33 *	0-30
208-96-8	MSD Acenaphthylene	1900	0.00 U	1350	71	25-108	34 *	0-30
51-28-5	MSD 2,4-Dinitrophenol	1900	0.00 U	1390	73	14-102	27	0-30
132-64-9	MSD Dibenzofuran	1900	0.00 U	1350	71	35-112	33 *	0-30
84-66-2	MSD Diethylphthalate	1900	0.00 U	1490	79	36-122	31 *	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 7 of 8

SDG Number: 10-2154

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-7494MSD

Matrix: R

Lab Sample ID: 1202063253

%Moisture: 12.3

Instrument: MSD8.I

Analysis Date: 03/21/2010 12:57

Dilution: 1

Analyst: NAG1

Prep Batch ID: 961921

Inj. Vol: .5 uL

Batch ID: 961922

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD Fluorene	1900	0.00 U	1280	68	33-105	34 *	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1900	0.00 U	1300	68	30-110	34 *	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1900	0.00 U	1410	74	26-97	28	0-30
100-01-6	MSD 4-Nitroaniline <i>p-Nitroaniline</i>	1900	0.00 U	1390	73	28-135	47 *	0-30
122-39-4	MSD Diphenylamine	1900	0.00 U	1640	86	33-109	35 *	0-30
122-66-7	MSD Azobenzene <i>1,2-Diphenylhydrazine</i>	1900	0.00 U	1700	90	31-113	32 *	0-30
101-55-3	MSD 4-Bromophenylphenylether	1900	0.00 U	1390	74	31-109	32 *	0-30
118-74-1	MSD Hexachlorobenzene	1900	0.00 U	1310	69	37-99	30	0-30
85-01-8	MSD Phenanthrene	1900	0.00 U	1360	72	29-109	30	0-30
120-12-7	MSD Anthracene	1900	0.00 U	1300	68	19-118	34 *	0-30
84-74-2	MSD Di-n-butylphthalate	1900	0.00 U	1760	93	39-123	31 *	0-30
206-44-0	MSD Fluoranthene	1900	0.00 U	1300	69	33-114	31 *	0-30
85-68-7	MSD Butylbenzylphthalate	1900	0.00 U	1850	97	35-131	24	0-30
56-55-3	MSD Benzo(a)anthracene	1900	0.00 U	1260	67	30-111	30	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1900	0.00 U	648	34	30-124	40 *	0-30
218-01-9	MSD Chrysene	1900	0.00 U	1370	72	32-108	28	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1900	0.00 U	1930	102	37-129	25	0-30
117-84-0	MSD Di-n-octylphthalate	1900	0.00 U	2010	106	31-143	19	0-30
205-99-2	MSD Benzo(b)fluoranthene	1900	0.00 U	1400	74	29-118	29	0-30
207-08-9	MSD Benzo(k)fluoranthene	1900	0.00 U	1380	73	32-118	26	0-30
50-32-8	MSD Benzo(a)pyrene	1900	0.00 U	1390	74	33-115	30	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1900	0.00 U	1390	73	29-114	36 *	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 8 of 8

SDG Number: 10-2154

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-7494MSD

Matrix: R

Lab Sample ID: 1202063253

% Moisture: 12.3

Instrument: MSD8.I

Analysis Date: 03/21/2010 12:57

Dilution: 1

Analyst: NAG1

Prep Batch ID: 961921

Inj. Vol: .5 uL

Batch ID: 961922

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1900	0.00 U	1470	77	27-119	38 *	0-30
191-24-2	MSD Benzo(ghi)perylene	1900	0.00 U	1290	68	28-112	37 *	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1900	0.00 U	1320	69	28-99	31 *	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-2154	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 961921	Instrument ID:	MSD8.I	Data File:	s8c2106.d
Lab Sample ID:	1202063250	Prep Date:	03/07/2010 12:04	Analyzed:	03/21/10 10:29
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 961921	1202063251	s8c2107.d	03/21/10	1059
02 RE36-10-7494	248373001	s8c2109.d	03/21/10	1158
03 RE36-10-7494MS	1202063252	s8c2110.d	03/21/10	1228
04 RE36-10-7494MSD	1202063253	s8c2111.d	03/21/10	1257
05 RE36-10-7493	248373002	s8c2112.d	03/21/10	1327
06 RE36-10-7492	248373003	s8c2113.d	03/21/10	1356
07 RE36-10-7491	248373004	s8c2114.d	03/21/10	1426
08 RE36-10-7496	248373005	s8c2115.d	03/21/10	1456
09 RE36-10-7499	248373006	s8c2116.d	03/21/10	1526
10 RE36-10-7497	248373007	s8c2117.d	03/21/10	1556
11 RE36-10-7495	248373008	s8c2118.d	03/21/10	1626
12 RE36-10-7498	248373009	s8c2119.d	03/21/10	1656
13 RE36-10-7500	248373010	s8c2120.d	03/21/10	1725
14 RE36-10-7523	248373011	s8c2121.d	03/21/10	1756
15 RE36-10-7522	248373014	s8c2122.d	03/21/10	1825
16 RE36-10-7521	248373015	s8c2123.d	03/21/10	1855

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2154

Instrument ID: MSD8.I

Injection Date/Time: 20-FEB-10 12:04

Column Description: J & W DB-5MS

Lab File ID /chem/MSD8.i/s022010.b/s8b2001.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.9
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	40.3
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	49.9
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	24.3
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	76.5
442	Greater than 40% of mass 198	61.7
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
MEGAICAL	WBN100215-08	s8b2003.d	20-FEB-10 12:55
MEGAICAL	WBN100215-07	s8b2004.d	20-FEB-10 13:30
MEGAICAL	WBN100215-06	s8b2005.d	20-FEB-10 14:05
MEGAICAL	WBN100215-05.1	s8b2006.d	20-FEB-10 14:40
MEGAICAL	WBN100215-04	s8b2007.d	20-FEB-10 15:14
MEGAICAL	WBN100215-03	s8b2008.d	20-FEB-10 15:50
MEGAICAL	WBN100215-02	s8b2009.d	20-FEB-10 16:25
MEGAICAL	WBN100215-01	s8b2010.d	20-FEB-10 16:59
MEGAICV	WBN100215-05.1	s8b2012.d	20-FEB-10 18:09

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2154

Instrument ID: MSD8.I

Injection Date/Time: 21-FEB-10 08:35

Column Description: J & W DB-5MS

Lab File ID /chem/MSD8.i/s022010.b/s8b2013.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	40.5
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	38.9
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.8
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	25.3
365	Greater than 1% of mass 198	2.8
441	Present, but less than mass 443	76.6
442	Greater than 40% of mass 198	61.7
443	17 - 23% of mass 442	19.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
APICAL	WBN100218-01	s8b2015.d	21-FEB-10 09:21
APICAL	WBN100218-02	s8b2016.d	21-FEB-10 09:52
APICAL	WBN100218-03.1	s8b2017.d	21-FEB-10 10:23
APICAL	WBN100218-04	s8b2018.d	21-FEB-10 10:54
APICAL	WBN100218-05	s8b2019.d	21-FEB-10 11:26
APICAL	WBN100218-06	s8b2020.d	21-FEB-10 11:59
APICAL	WBN100218-07	s8b2021.d	21-FEB-10 12:30
APICV	WBN100218-08.1	s8b2035.d	21-FEB-10 19:53

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2154

Instrument ID: MSD8.I

Injection Date/Time: 21-MAR-10 08:14

Column Description: J & W DB-5MS

Lab File ID /chem/MSD8.i/s032110.b/s8c2101.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.6
68	Less than 2% of mass 69	0.2
69	Mass 69 Relative Abundance	42.2
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	52.5
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	26.5
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	86.2
442	Greater than 40% of mass 198	64.6
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	WBN100309-05.3	s8c2102.d	21-MAR-10 08:30
API2CVS	WBN100312-03.3	s8c2103.d	21-MAR-10 09:01
SBLK01	1202063250	s8c2106.d	21-MAR-10 10:29
SBLK01LCS	1202063251	s8c2107.d	21-MAR-10 10:59
RE36-10-7494	248373001	s8c2109.d	21-MAR-10 11:58
RE36-10-7494MS	1202063252	s8c2110.d	21-MAR-10 12:28
RE36-10-7494MSD	1202063253	s8c2111.d	21-MAR-10 12:57
RE36-10-7493	248373002	s8c2112.d	21-MAR-10 13:27
RE36-10-7492	248373003	s8c2113.d	21-MAR-10 13:56
RE36-10-7491	248373004	s8c2114.d	21-MAR-10 14:26
RE36-10-7496	248373005	s8c2115.d	21-MAR-10 14:56
RE36-10-7499	248373006	s8c2116.d	21-MAR-10 15:26
RE36-10-7497	248373007	s8c2117.d	21-MAR-10 15:56
RE36-10-7495	248373008	s8c2118.d	21-MAR-10 16:26
RE36-10-7498	248373009	s8c2119.d	21-MAR-10 16:56
RE36-10-7500	248373010	s8c2120.d	21-MAR-10 17:25

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2154

Instrument ID: MSD8.I

Injection Date/Time: 21-MAR-10 08:14

Column Description: J & W DB-5MS

Lab File ID /chem/MSD8.i/s032110.b/s8c2101.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.6
68	Less than 2% of mass 69	0.2
69	Mass 69 Relative Abundance	42.2
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	52.5
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	26.5
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	86.2
442	Greater than 40% of mass 198	64.6
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
RE36-10-7523	248373011	s8c2121.d	21-MAR-10 17:56
RE36-10-7522	248373014	s8c2122.d	21-MAR-10 18:25
RE36-10-7521	248373015	s8c2123.d	21-MAR-10 18:55

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2154

Instrument: MSD8.I

STD Analysis Time: 21-MAR-10 08:30

GC Column: J&W DB-5MS

Data File: s8c2102.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	359153		4.3	1404681		5.56	820358		7.41	1360532		9	1134351		11.9	840427		13.9
Upper Limit	718306		4.8	2809362		6.06	1640716		7.91	2721064		9.5	2268702		12.4	1680854		14.4
Lower Limit	179577		3.8	702341		5.06	410179		6.91	680266		8.5	567176		11.4	420214		13.4
Sample ID																		
BLK01	395869		4.3	1533745		5.55	892920		7.4	1490827		8.99	1226984		11.9	891145		13.9
BLK01LCS	333279		4.3	1298598		5.55	778979		7.4	1326792		9	1267267		11.9	936791		13.9
RE36-10-7494	416312		4.3	1634578		5.55	948624		7.4	1566677		9	1241843		11.9	784201		13.9
RE36-10-7494MS	407406		4.3	1587987		5.55	923863		7.4	1546277		9	1273334		11.9	772638		13.9
RE36-10-7494MSD	370402		4.3	1469390		5.55	858138		7.4	1449868		9	1283709		11.9	814235		13.9
RE36-10-7493	386498		4.3	1521069		5.55	895053		7.4	1518276		8.99	1270928		11.9	806287		13.9
RE36-10-7492	314757		4.3	1245301		5.55	751097		7.4	1213393		8.99	925922		11.9	588583		13.9
RE36-10-7491	455718		4.3	1791608		5.55	1041244		7.4	1836252		9	1483065		11.9	694559		13.9
RE36-10-7496	354181		4.3	1406742		5.55	845010		7.4	1469909		9	1260228		11.9	798867		13.9
RE36-10-7499	295508		4.3	1199157		5.55	713116		7.4	1161142		9	911694		11.9	549563		13.9
RE36-10-7497	335504		4.3	1336169		5.55	796113		7.41	1326337		9	1012587		11.9	624379		13.9
RE36-10-7495	399068		4.3	1609885		5.55	957863		7.41	1671422		9	1166456		11.9	440000		13.9
RE36-10-7498	345395		4.3	1352556		5.55	824661		7.41	1370062		9	1052151		11.9	605796		13.9
RE36-10-7500	451303		4.3	1773378		5.55	1052185		7.41	1797321		9	1362762		11.9	833110		13.9
RE36-10-7523	499681		4.31	1991508		5.55	1213342		7.41	2093740		9	1594071		11.9	890153		13.9
RE36-10-7522	316155		4.3	1244727		5.55	749286		7.4	1257420		9	961441		11.9	595746		13.9
RE36-10-7521	424337		4.31	1673429		5.56	995443		7.41	1765835		9	1305176		11.9	514952		13.9

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: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7491	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.1	Dilution: 1
Run Date: 03/21/2010 14:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s8c2114.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	512	ug/kg	102	512
108-95-2	Phenol	U	512	ug/kg	102	512
95-57-8	2-Chlorophenol	U	512	ug/kg	102	512
106-46-7	1,4-Dichlorobenzene	U	512	ug/kg	102	512
621-64-7	N-Nitrosodipropylamine	U	512	ug/kg	102	512
59-50-7	4-Chloro-3-methylphenol	U	512	ug/kg	102	512
83-32-9	Acenaphthene	U	51.2	ug/kg	16.9	51.2
121-14-2	2,4-Dinitrotoluene	U	512	ug/kg	51.2	512
100-02-7	4-Nitrophenol	U	512	ug/kg	169	512
87-86-5	Pentachlorophenol	U	512	ug/kg	128	512
129-00-0	Pyrene	J	16.0	ug/kg	15.3	51.2
110-86-1	Pyridine	U	512	ug/kg	102	512
62-53-3	Aniline	U	512	ug/kg	153	512
111-44-4	bis(2-Chloroethyl) ether	U	512	ug/kg	102	512
541-73-1	1,3-Dichlorobenzene	U	512	ug/kg	102	512
100-51-6	Benzyl alcohol	U	512	ug/kg	153	512
95-50-1	1,2-Dichlorobenzene	U	512	ug/kg	102	512
108-60-1	bis(2-Chloroisopropyl)ether	U	512	ug/kg	102	512
95-48-7	o-Cresol	U	512	ug/kg	102	512
65794-96-9	m,p-Cresols	U	512	ug/kg	153	512
67-72-1	Hexachloroethane	U	512	ug/kg	102	512
98-95-3	Nitrobenzene	U	512	ug/kg	102	512
78-59-1	Isophorone	U	512	ug/kg	102	512
88-75-5	2-Nitrophenol	U	512	ug/kg	102	512
105-67-9	2,4-Dimethylphenol	U	512	ug/kg	179	512
111-91-1	bis(2-Chloroethoxy)methane	U	512	ug/kg	102	512
120-83-2	2,4-Dichlorophenol	U	512	ug/kg	102	512
65-85-0	Benzoic acid	U	1020	ug/kg	256	1020
91-20-3	Naphthalene	U	51.2	ug/kg	15.3	51.2
106-47-8	4-Chloroaniline	U	512	ug/kg	102	512
87-68-3	Hexachlorobutadiene	U	512	ug/kg	102	512
91-57-6	2-Methylnaphthalene	U	51.2	ug/kg	10.2	51.2
77-47-4	Hexachlorocyclopentadiene	U	512	ug/kg	102	512
88-06-2	2,4,6-Trichlorophenol	U	512	ug/kg	102	512
95-95-4	2,4,5-Trichlorophenol	U	512	ug/kg	102	512
91-58-7	2-Chloronaphthalene	U	51.2	ug/kg	16.9	51.2
88-74-4	2-Nitroaniline	U	512	ug/kg	102	512
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	512	ug/kg	102	512

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7491	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 14:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s8c2114.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	512	ug/kg	102	512
606-20-2	2,6-Dinitrotoluene	U	512	ug/kg	51.2	512
208-96-8	Acenaphthylene	U	51.2	ug/kg	15.3	51.2
51-28-5	2,4-Dinitrophenol	U	1020	ug/kg	194	1020
132-64-9	Dibenzofuran	U	512	ug/kg	102	512
84-66-2	Diethylphthalate	U	512	ug/kg	102	512
86-73-7	Fluorene	U	51.2	ug/kg	15.3	51.2
7005-72-3	4-Chlorophenylphenylether	U	512	ug/kg	102	512
534-52-1	2-Methyl-4,6-dinitrophenol	U	512	ug/kg	102	512
100-01-6	4-Nitroaniline	U	512	ug/kg	153	512
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	512	ug/kg	102	512
122-66-7	Azobenzene	U	512	ug/kg	102	512
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	512	ug/kg	102	512
118-74-1	Hexachlorobenzene	U	512	ug/kg	102	512
85-01-8	Phenanthrene	U	51.2	ug/kg	15.3	51.2
120-12-7	Anthracene	U	51.2	ug/kg	10.2	51.2
84-74-2	Di-n-butylphthalate	U	512	ug/kg	102	512
206-44-0	Fluoranthene	J	18.0	ug/kg	15.3	51.2
85-68-7	Butylbenzylphthalate	U	512	ug/kg	102	512
56-55-3	Benzo(a)anthracene	U	51.2	ug/kg	15.3	51.2
91-94-1	3,3'-Dichlorobenzidine	U	512	ug/kg	153	512
218-01-9	Chrysene	U	51.2	ug/kg	15.3	51.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	512	ug/kg	102	512
117-84-0	Di-n-octylphthalate	U	512	ug/kg	102	512
205-99-2	Benzo(b)fluoranthene	U	51.2	ug/kg	15.3	51.2
207-08-9	Benzo(k)fluoranthene	U	51.2	ug/kg	15.3	51.2
50-32-8	Benzo(a)pyrene	U	51.2	ug/kg	15.3	51.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	51.2	ug/kg	15.3	51.2
53-70-3	Dibenzo(a,h)anthracene	U	51.2	ug/kg	15.3	51.2
191-24-2	Benzo(ghi)perylene	U	51.2	ug/kg	15.3	51.2
120-82-1	1,2,4-Trichlorobenzene	U	512	ug/kg	102	512

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R- α -Pinene	3.69	884	ug/kg	97	NJ
495-61-4	Cyclohexene, 1-methyl-4-(5-methyl-1-meth	7.45	307	ug/kg	97	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373004	Date Received: 03/02/2010 08:50	%Moisture: 35.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7491	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 14:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s8c2114.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
57-10-3	n-Hexadecanoic acid	9.6	503	ug/kg	98	NJ
2091-29-4	9-Hexadecenoic acid	10.36	653	ug/kg	91	NJ
	Unknown	10.5	254	ug/kg		J
25491-20-7	1H-3a,7-Methanoazulene, octahydro-1,4,9,	10.93	239	ug/kg	84	NJ
	Unknown	11.16	458	ug/kg		J
506-30-9	Eicosanoic acid	11.23	309	ug/kg	99	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	330	ug/kg	97	NJ
	Unknown	11.31	459	ug/kg		J
	Unknown	11.35	407	ug/kg		J
	Unknown	11.48	463	ug/kg		J
	Unknown	11.56	2610	ug/kg		J
	Unknown	11.63	439	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.68	2970	ug/kg	91	NJ
	Unknown	11.73	498	ug/kg		J
	Unknown	11.77	399	ug/kg		J
4630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	11.83	734	ug/kg	94	NJ
112-85-6	Docosanoic acid	12	632	ug/kg	93	NJ
	Unknown	12.04	225	ug/kg		J
	Unknown	12.06	465	ug/kg		J
	Unknown	12.1	297	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.12	398	ug/kg	91	NJ
629-78-7	Heptadecane	12.55	406	ug/kg	96	NJ
557-59-5	Tetracosanoic acid	12.89	512	ug/kg	98	NJ
	Unknown	14.21	1010	ug/kg		J
	Unknown	15.1	2860	ug/kg		J
83-46-5	.beta.-Sitosterol	16.85	1410	ug/kg	97	NJ
1058-61-3	Stigmast-4-en-3-one	17.28	1320	ug/kg	94	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2114.d
Lab Smp Id: 248373004 Client Smp ID: RE36-10-7491
Inj Date : 21-MAR-2010 14:26
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248373004|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	35.22710	% 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	4.301	4.301	(1.000)	455718	40.0000	
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1791608	40.0000	
* 46 Acenaphthene-d10	164	7.401	7.406	(1.000)	1041244	40.0000	
* 67 Phenanthrene-d10	188	8.996	8.997	(1.000)	1836252	40.0000	
* 91 Chrysene-d12	240	11.873	11.868	(1.000)	1483065	40.0000	
* 98 Perylene-d12	264	13.882	13.878	(1.000)	694559	40.0000	
\$ 3 2-Fluorophenol	112	3.173	3.158	(0.738)	829370	77.0870	3940
\$ 5 Phenol-d5	99	3.934	3.930	(0.915)	1048123	78.1159	4000
\$ 20 Nitrobenzene-d5	82	4.825	4.830	(0.869)	474362	37.2460	1900
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.903)	1015683	33.1393	1700
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.115)	249125	72.3785	3700
\$ 81 p-Terphenyl-d14	244	10.711	10.706	(0.902)	1180557	44.2146	2260

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	10.539	10.544	(0.888)	14528	0.31375	16.0(a)
76 Fluoranthene	202	10.296	10.297	(1.145)	16397	0.35092	18.0(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s8c2114.d

Report Date: 03/22/2010 07:16

Lab. ID: 248373004

SampleType: SAMPLE

Injection Date: 21-MAR-2010 14:26

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373004|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	51716	3.93	4.00	80-120	100	(T)
93	54080	3.98	4.00	213-273	105	(Q)

6	Phenol	CAS#: 108-95-2				
94	31103	4.04	3.94	80-120	100	(T)
66	6049	4.04	3.94	13- 73	19	(T)
65	17192	4.04	3.94	3- 63	55	(T)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	64491	4.82	4.68	80-120	100	(T)
42	34565	4.82	4.68	31- 91	54	(T)

27	Benzoic acid	CAS#: 65-85-0				
105	3260	5.30	5.28	80-120	100	()
122	26660	5.25	5.28	64-124	818	(Q)
77	3789	5.29	5.28	47-107	116	(Q)

30	Naphthalene	CAS#: 91-20-3				
128	1140	5.57	5.58	80-120	100	()
129	170	5.57	5.58	0- 41	15	()
127	170	5.57	5.58	0- 43	15	()

34	2-Methylnaphthalene	CAS#: 91-57-6				
142	604	6.29	6.30	80-120	100	()
141	691	6.30	6.30	56-116	114	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	2029	6.81	6.81	80-120	100	()
164	301	6.80	6.81	3- 63	15	()
127	604	6.81	6.81	7- 67	30	()

42 o-Nitroaniline				CAS#: 88-74-4		
65	29575	7.01	6.92	80-120	100	(T)
92	34282	7.01	6.92	33- 93	116	(QT)
138	2569	7.01	6.92	76-136	9	(QT)

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	135335	7.40	7.18	80-120	100	(T)
63	1796	7.40	7.18	32- 92	1	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	135335	7.40	7.61	80-120	100	(T)
89	1731	7.40	7.61	47-107	1	(QT)
63	1796	7.40	7.61	26- 86	1	(QT)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	939	8.25	8.04	80-120	100	(T)
105	2584	8.24	8.04	14- 74	275	(QT)
51	1990	8.24	8.04	26- 86	212	(QT)

68 Phenanthrene				CAS#: 85-01-8		
178	9790	9.02	9.02	80-120	100	()
179	1357	9.02	9.02	0- 45	14	()
176	2793	9.02	9.02	0- 49	29	()

69 Anthracene				CAS#: 120-12-7		
178	9790	9.02	9.08	80-120	100	()
179	1357	9.02	9.08	0- 45	14	()
176	2793	9.02	9.08	0- 48	29	()

76 Fluoranthene				CAS#: 206-44-0		
202	16397	10.30	10.30	80-120	100	()
203	2960	10.30	10.30	0- 47	18	()
101	2667	10.29	10.30	0- 43	16	()

79 Pyrene				CAS#: 129-00-0		
202	14528	10.54	10.54	80-120	100	()
200	3054	10.54	10.54	0- 50	21	()
101	3417	10.54	10.54	0- 46	24	()

85 Butylbenzylphthalate				CAS#: 85-68-7		
149	70772	11.33	11.23	80-120	100	(T)
91	98906	11.33	11.23	40-100	140	(QT)
206	260	11.33	11.23	0- 48	0	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
92	Chrysene		CAS#: 218-01-9			
228	6015	11.90	11.90	80-120	100	()
229	2967	11.89	11.90	0- 49	49	(Q)
226	2500	11.90	11.90	0- 59	42	()

94	Di-n-octylphthalate		CAS#: 117-84-0			
149	2253	12.79	12.73	80-120	100	(T)
43	31009	12.69	12.73	0- 41	1376	(Q)

Q qualifier indicates ion failed ratio requirement						

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2114.d
 Lab Smp Id: 248373004 Client Smp ID: RE36-10-7491
 Inj Date : 21-MAR-2010 14:26
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |248373004|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 14
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	35.22710	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.301	2765043	40.000
* 46 Acenaphthene-d10	7.401	4502538	40.000
* 67 Phenanthrene-d10	8.996	4798332	40.000
* 91 Chrysene-d12	11.873	5624796	40.000
* 98 Perylene-d12	13.882	2115708	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.692	1194858	17.2851963	884	97	NIST05.L	15188	10
Cyclohexene, 1-methyl-4-(5-methyl-1-meth					CAS #: 495-61-4		
7.449	675546	6.00146648	307	97	NIST05.L	59931	46
n-Hexadecanoic acid					CAS #: 57-10-3		
9.596	1178933	9.82785678	503	98	NIST05.L	96235	67
9-Hexadecenoic acid					CAS #: 2091-29-4		
10.358	1530344	12.7573025	652	91	NIST05.L	94742	67
Unknown					CAS #:		
10.501	697163	4.95778242	254	0		0	91
1H-3a,7-Methanoazulene, octahydro-1,4,9,					CAS #: 25491-20-7		
10.925	656744	4.67034940	239	84	NIST05.L	61560	91
Unknown					CAS #:		
11.163	1258532	8.94988764	458	0		0	91
Eicosanoic acid					CAS #: 506-30-9		
11.235	850334	6.04703757	309	99	NIST05.L	132301	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
11.258	906014	6.44300205	330	97	NIST05.L	133618	91
Unknown					CAS #:		
11.306	1262918	8.98107226	459	0		0	91
Unknown					CAS #:		
11.354	1118334	7.95288638	407	0		0	91
Unknown					CAS #:		
11.477	1273158	9.05389830	463	0		0	91
Unknown					CAS #:		
11.563	7171042	50.9959220	2610	0		0	91
Unknown					CAS #:		
11.630	1206120	8.57716145	439	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 5155-70-4		
11.677	8153759	57.9843825	2970	91	NIST05.L	125035	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
11.725	1367882	9.72751400	498	0		0	91
Unknown					CAS #:		
11.768	1096283	7.79606988	399	0		0	91
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-					CAS #: 4630-07-3		
11.835	2018300	14.3528727	734	94	NIST05.L	60047	91
Docosanoic acid					CAS #: 112-85-6		
12.001	1737226	12.3540505	632	93	NIST05.L	147936	91
Unknown					CAS #:		
12.039	619182	4.40323093	225	0		0	91
Unknown					CAS #:		
12.058	1278935	9.09497437	465	0		0	91
Unknown					CAS #:		
12.101	816606	5.80718714	297	0		0	91
1,2-Benzisothiazole, 3-(hexahydro-1H-aze					CAS #: 309735-29-3		
12.120	1093596	7.77696060	398	91	NIST05.L	101019	91
Heptadecane					CAS #: 629-78-7		
12.554	1115495	7.93269268	406	96	NIST05.L	85524	91
Tetracosanoic acid					CAS #: 557-59-5		
12.892	528917	9.99980214	512	98	NIST05.L	160633	98
Unknown					CAS #:		
14.206	1043663	19.7317018	1010	0		0	98
Unknown					CAS #:		
15.097	2956241	55.8912690	2860	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
16.854	1461207	27.6258626	1410	97	NIST05.L	174400	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
17.282	1366408	25.8335696	1320	94	NIST05.L	173936	98

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20

Y (x10⁶)

Min

2-Fluorophenol

-Phenol-d5

-1,4-Dichlorobenzene-d4

-Nitrobenzene-d5

Naphthalene-d8

-2-Fluorobiphenyl

Acenaphthene-d10

-2,4,6-Tribromophenol

Phenanthrene-d10

Fluoranthene

Pyrene

p-Terphenyl-d14

Chrysene-d12

-Perylene-d12

/chem/MSD8.i/5032110.b/s802114.d

Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: I248373004196192211SVMI11LANL

Volume Injected (uL): 0.5

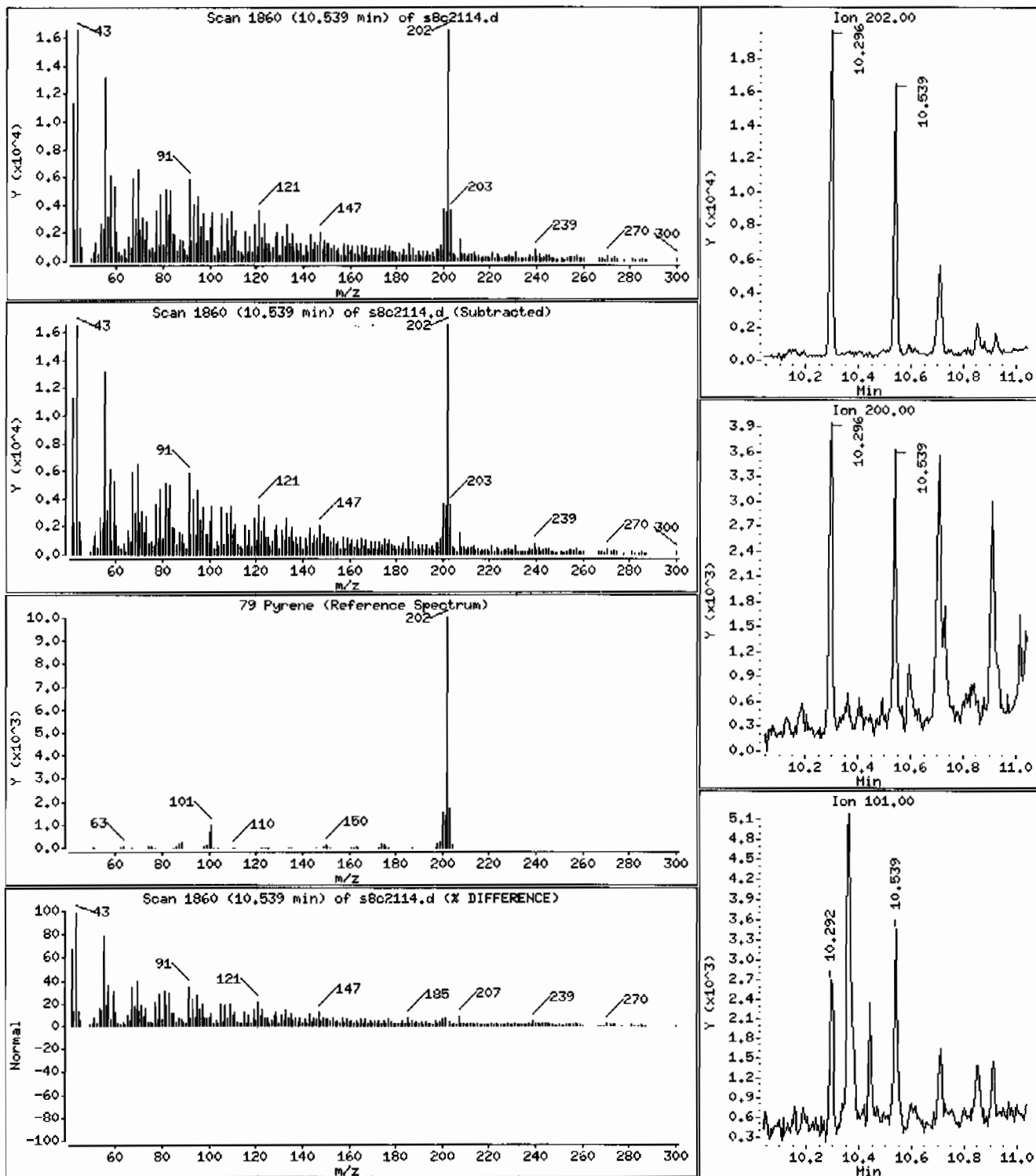
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 16.0 ug/Kg



Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.1

Sample Info: I248373004196192211SVH111LANL

Volume Injected (uL): 0.5

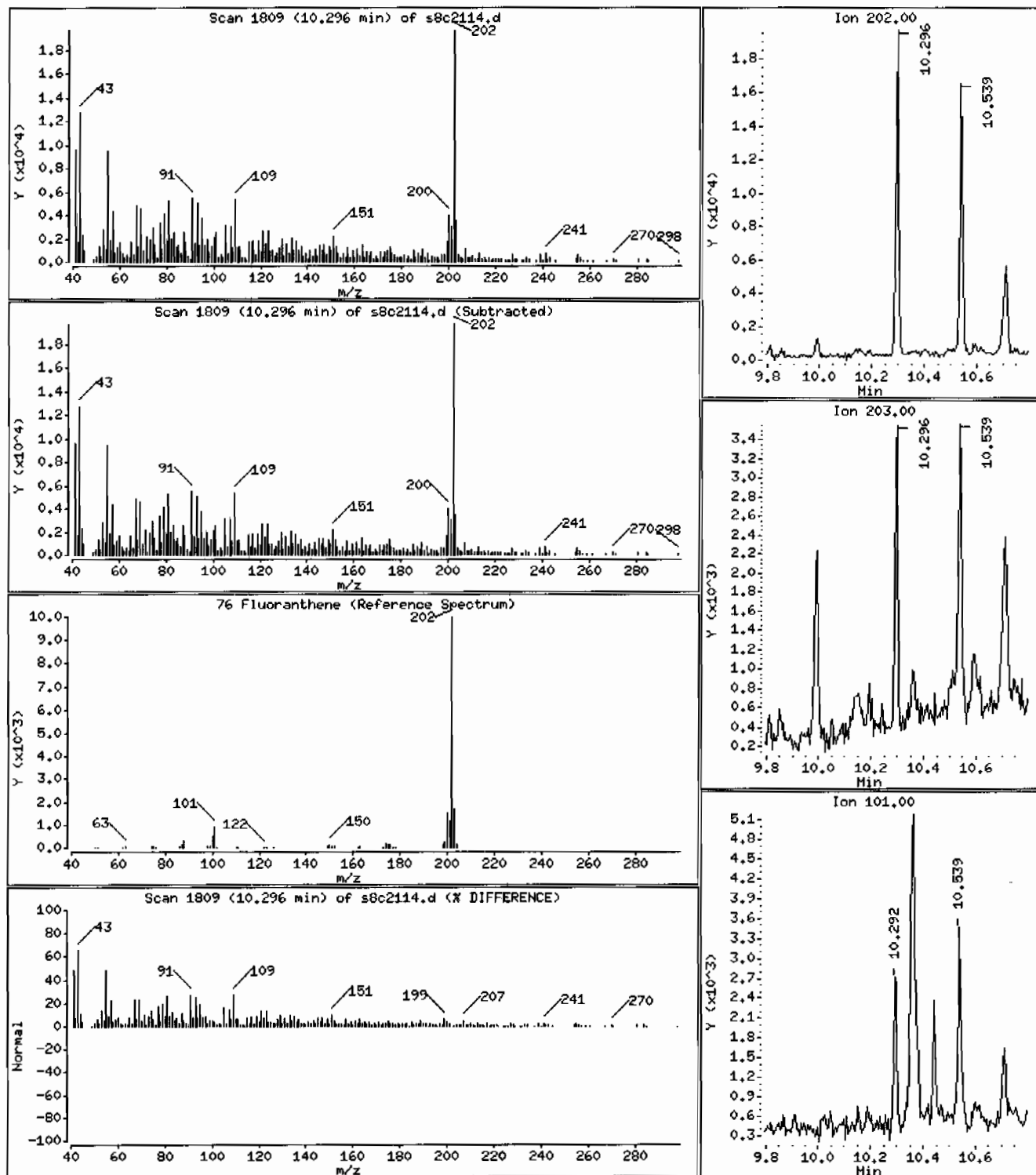
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 18.0 ug/Kg



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVH11LANL

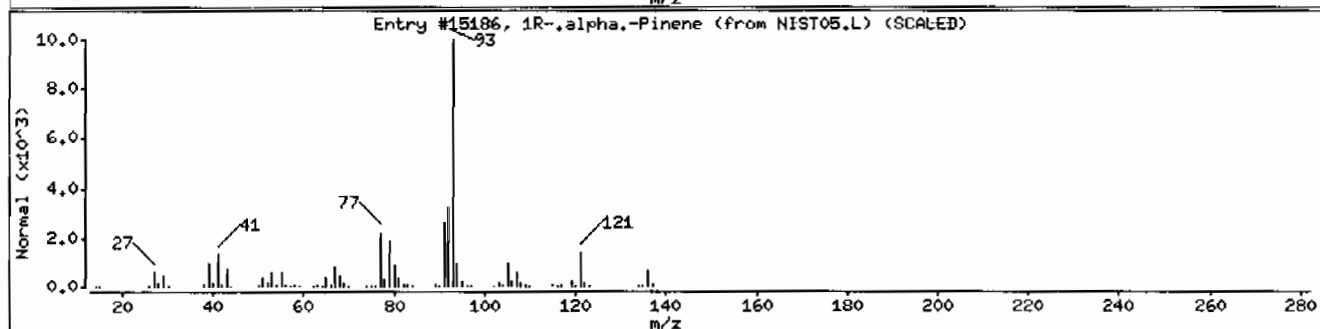
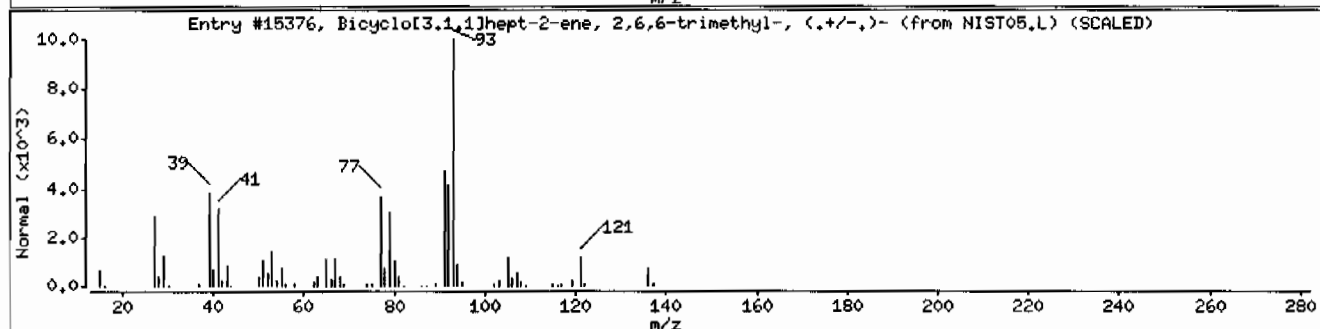
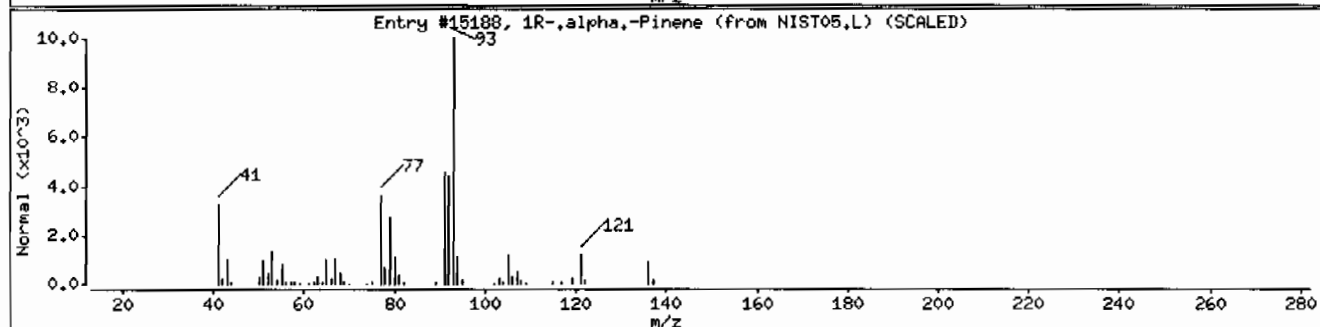
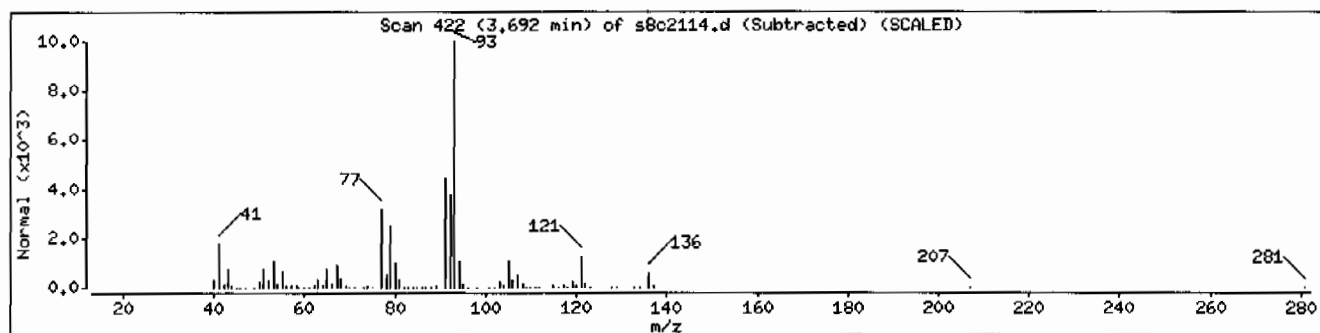
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

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



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: HSD8.i

Sample Info: 1248373004196192211SVH111LANL

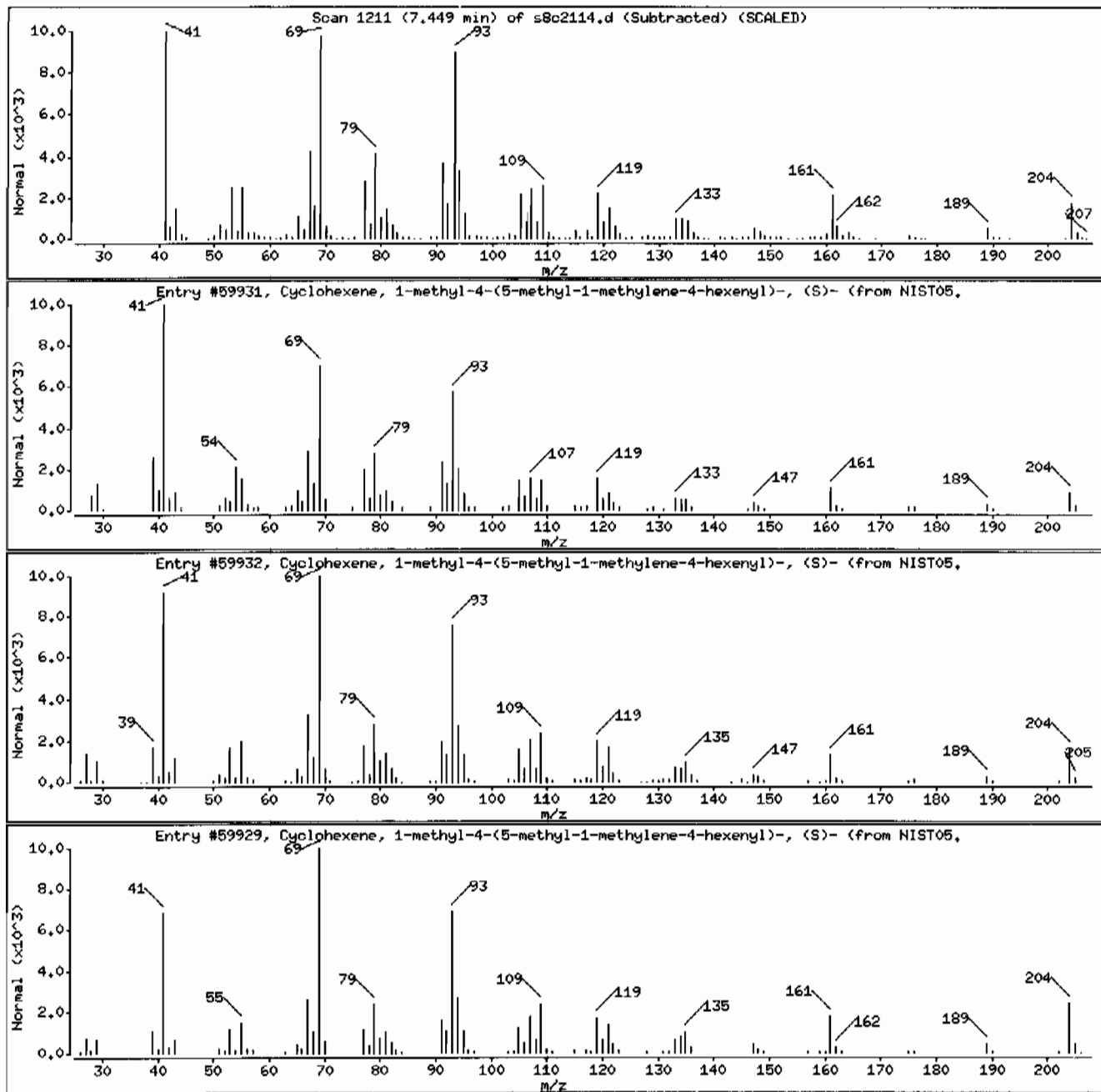
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 1-methyl-4-(5-methyl-1-meth	495-61-4	NIST05.L	59931	97	C15H24	204
Cyclohexene, 1-methyl-4-(5-methyl-1-meth	495-61-4	NIST05.L	59932	93	C15H24	204
Cyclohexene, 1-methyl-4-(5-methyl-1-meth	495-61-4	NIST05.L	59929	91	C15H24	204



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: HSD8.i

Sample Info: 12483730041961922111SVMI11LANL

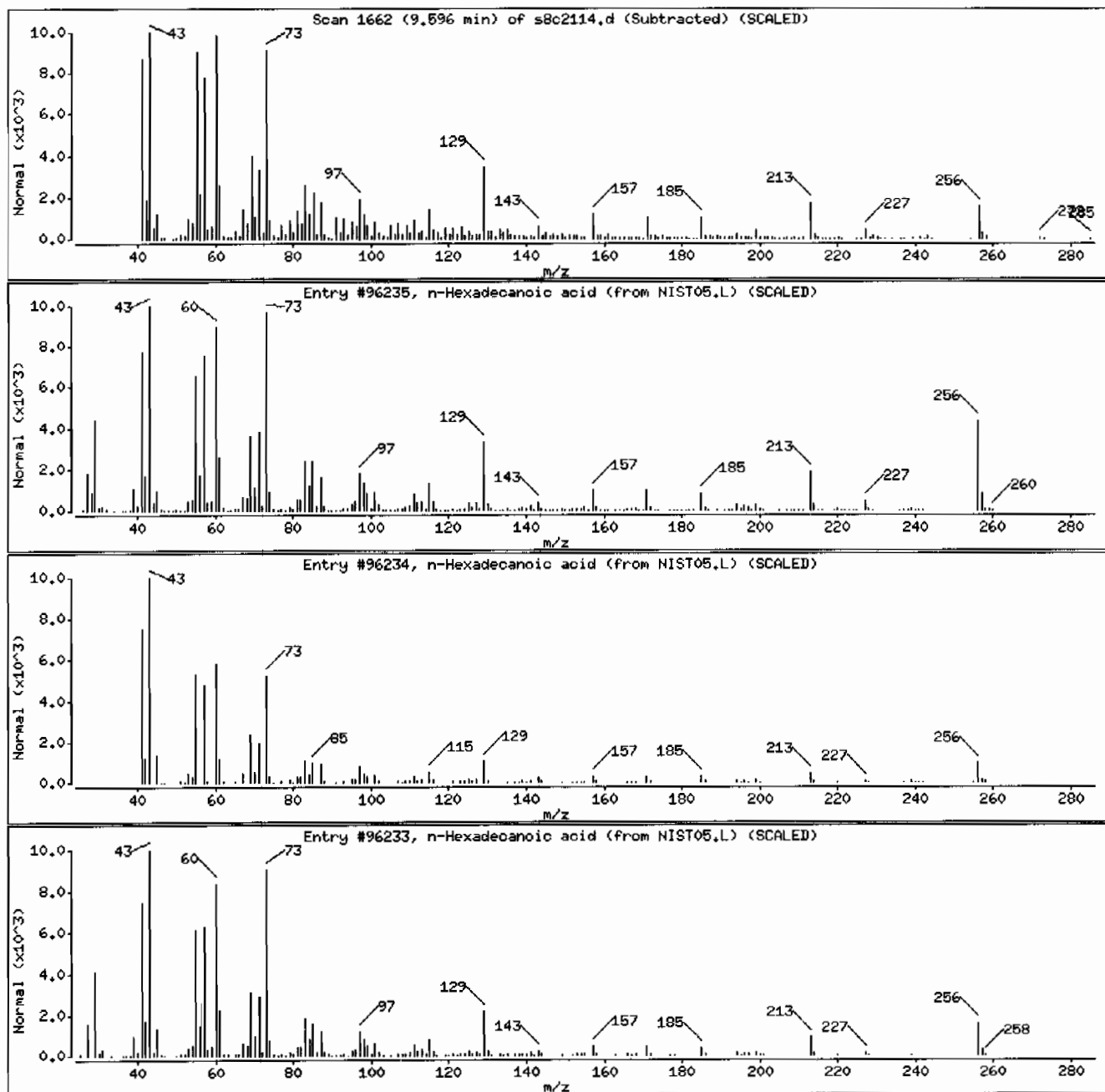
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	98	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	96	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96233	95	C16H32O2	256



Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVMI1ILANL

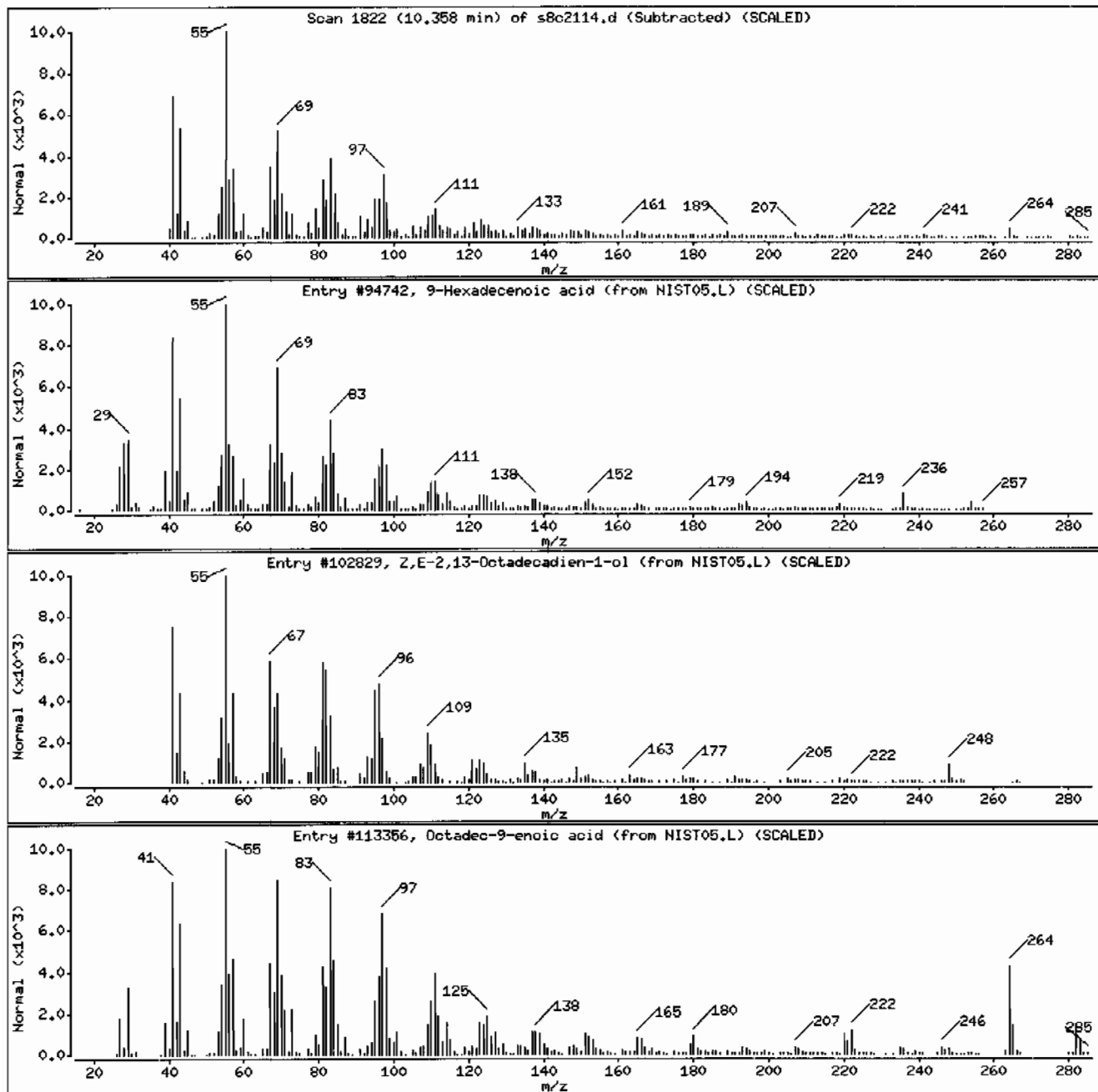
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Hexadecenoic acid	2091-29-4	NIST05.L	94742	91	C ₁₆ H ₃₀ O ₂	254
Z,E-2,13-Octadecadien-1-ol	1000131-10-3	NIST05.L	102829	83	C ₁₈ H ₃₄ O	266
Octadec-9-enoic acid	1000190-13-7	NIST05.L	113356	83	C ₁₈ H ₃₄ O ₂	282



Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVH111LANL

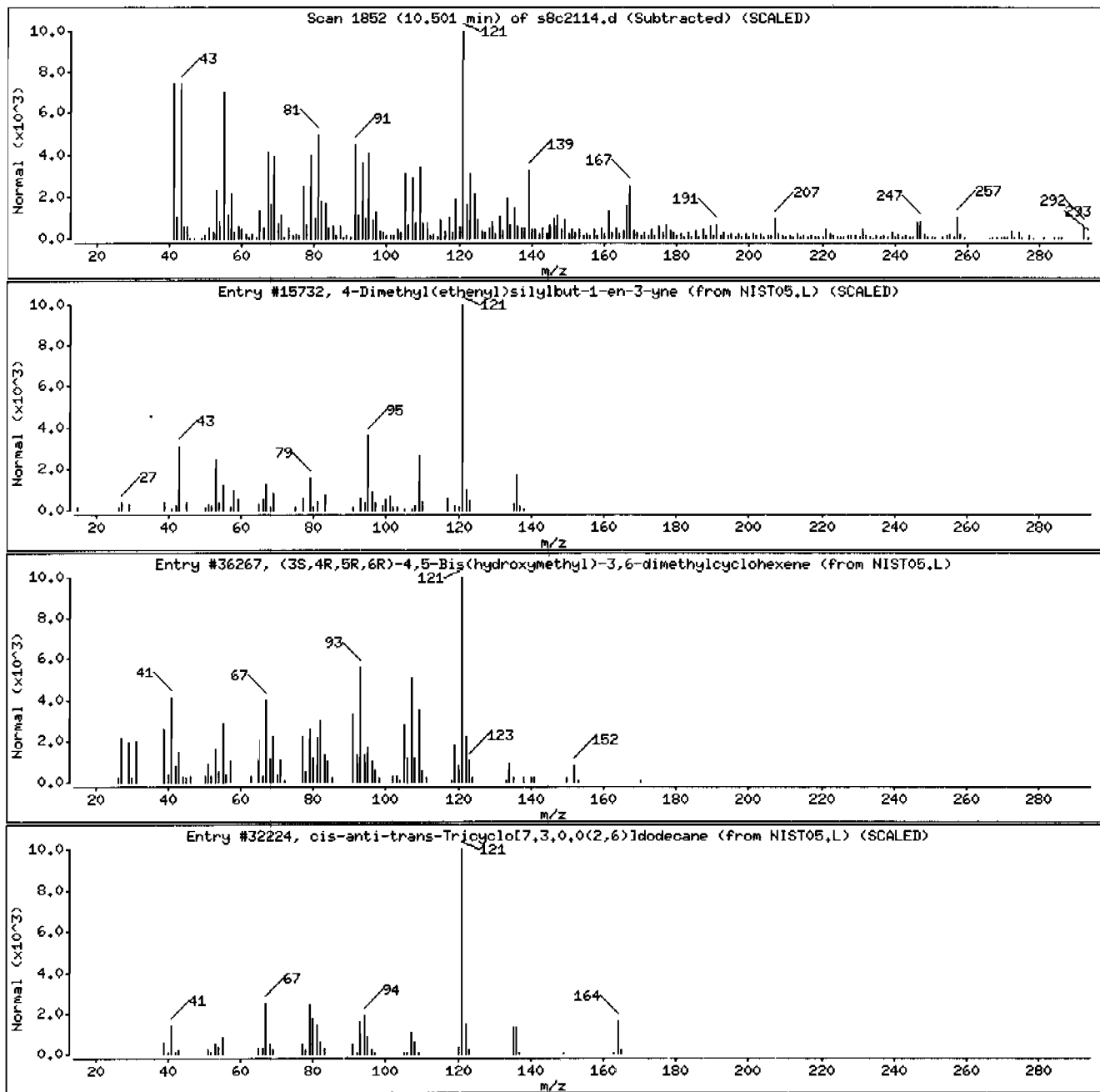
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-Dimethyl(ethenyl)silylbut-1-en-3-yne	18292-17-6	NIST05.L	15732	50	C ₈ H ₁₂ Si	136
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	1000099-24-3	NIST05.L	36267	42	C ₁₀ H ₁₈ O ₂	170
cis-anti-trans-Tricyclo[7.3.0.0(2,6)]dod	30159-13-8	NIST05.L	32224	35	C ₁₂ H ₂₀	164



Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVH11ILANL

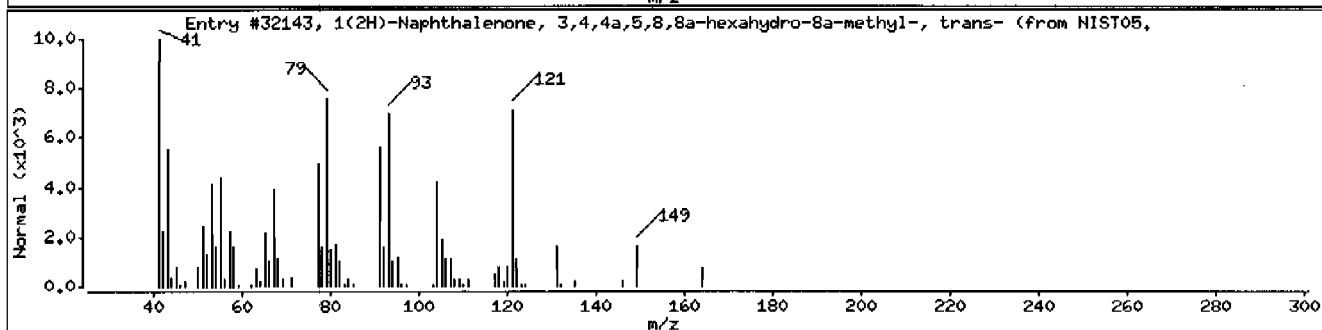
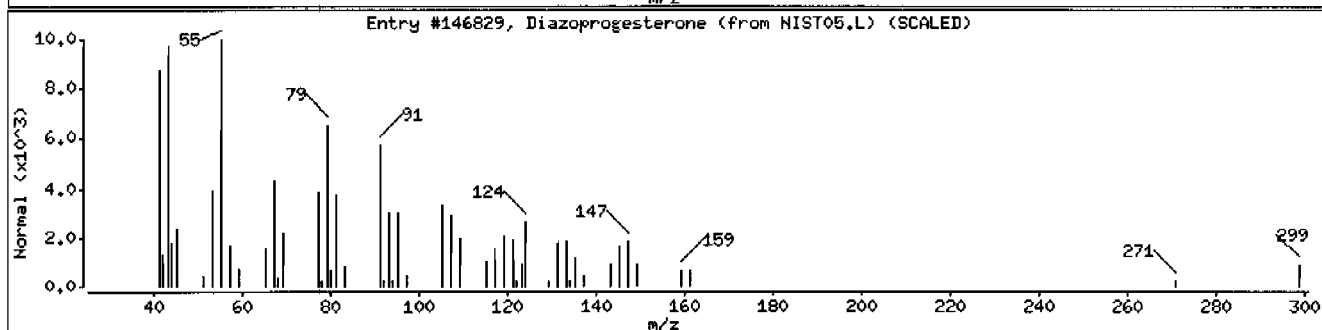
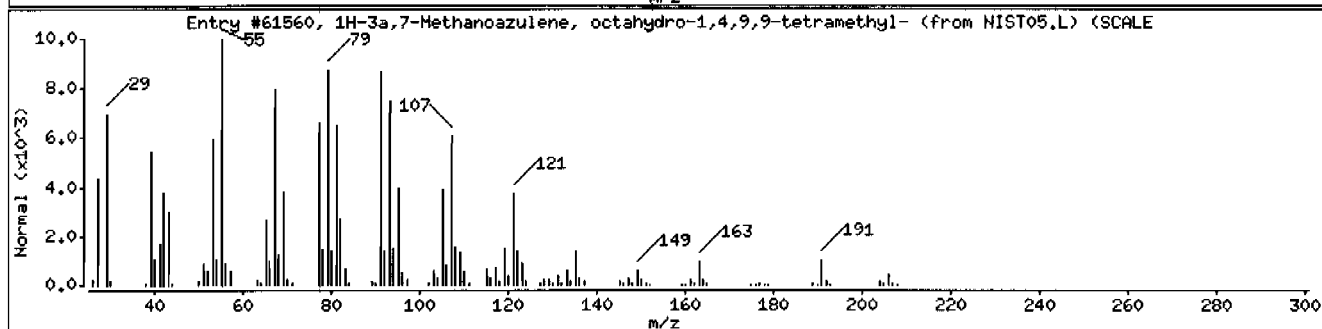
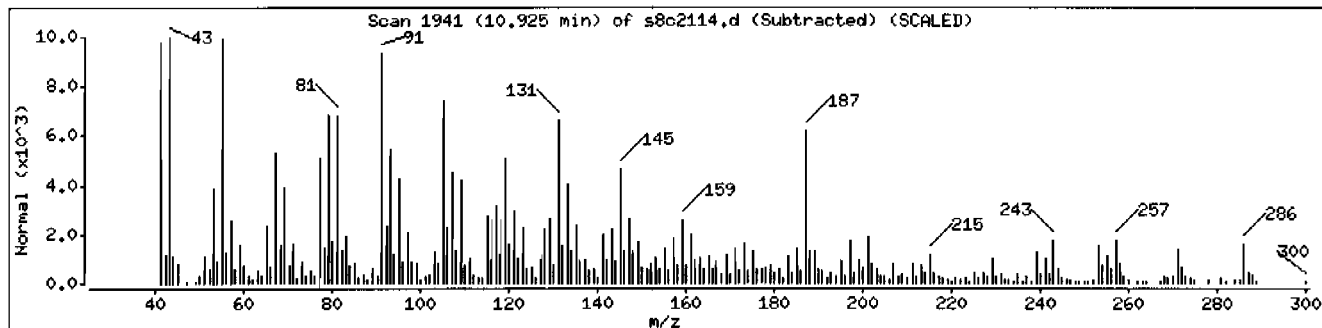
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-3a,7-Methanoazulene, octahydro-1,4,9,	25491-20-7	NIST05.L	61560	84	C15H26	206
Diazoprogestrone	1000255-30-9	NIST05.L	146829	47	C21H30N4	338
1(2H)-Naphthalenone, 3,4,4a,5,8,8a-hexah	21841-29-2	NIST05.L	32143	38	C11H16O	164



Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVH111LANL

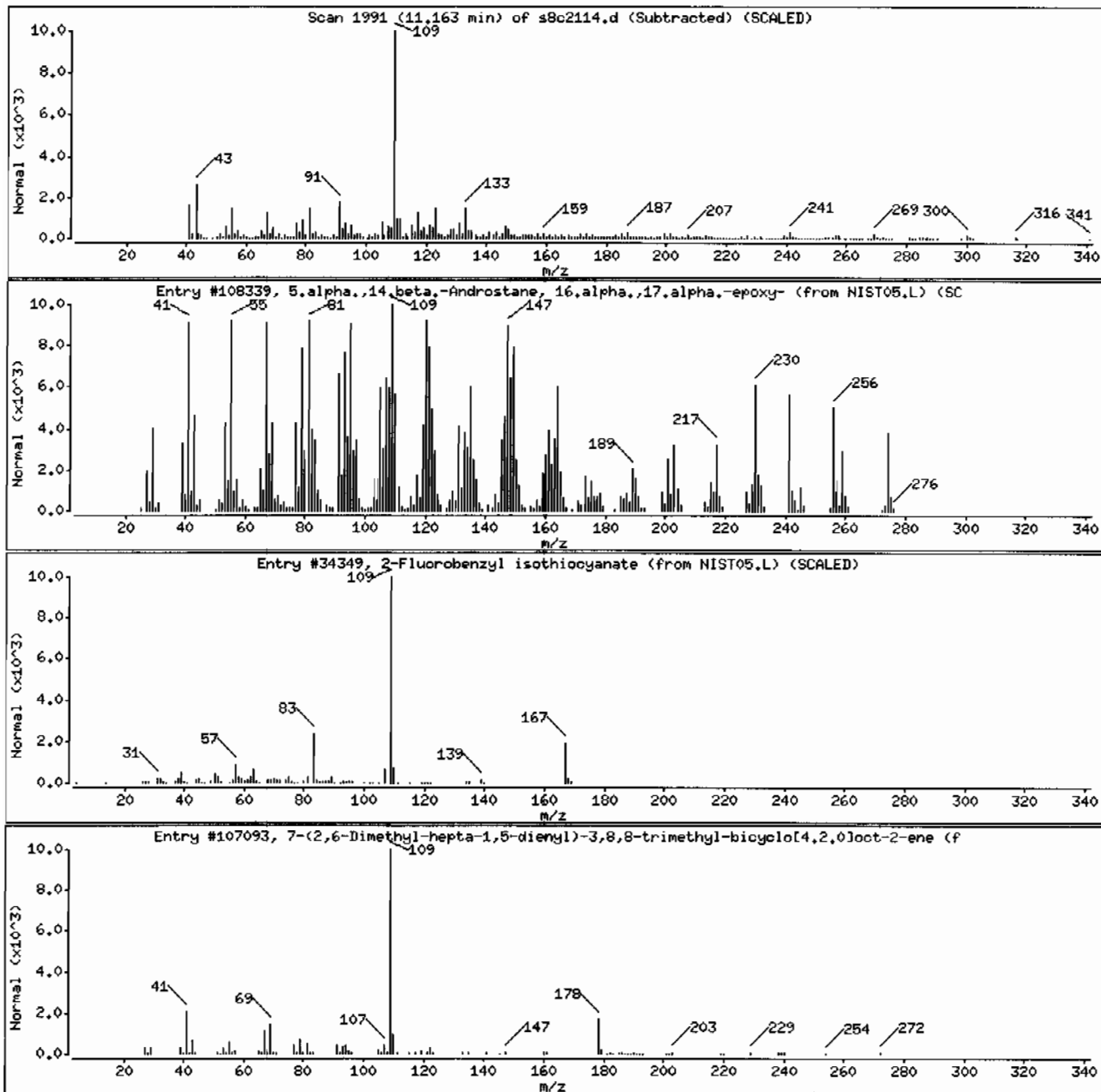
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5.alpha.,14.beta.-Androstane, 16.alpha.,	24174-26-2	NIST05.L	108339	53	C19H30O	274
2-Fluorobenzyl isothiocyanate	64382-80-5	NIST05.L	34349	49	C8H6FNS	167
7-(2,6-Dimethyl-hepta-1,5-dienyl)-3,8,8-	1000190-62-8	NIST05.L	107093	49	C20H32	272



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVH11ILANL

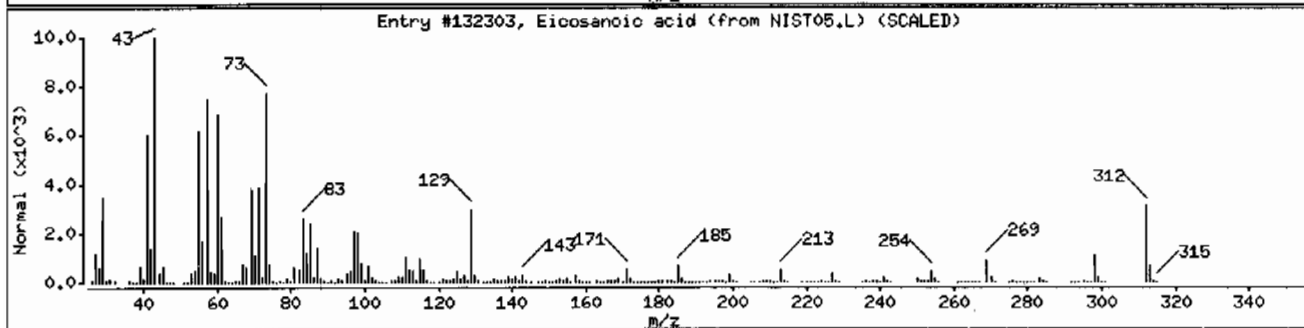
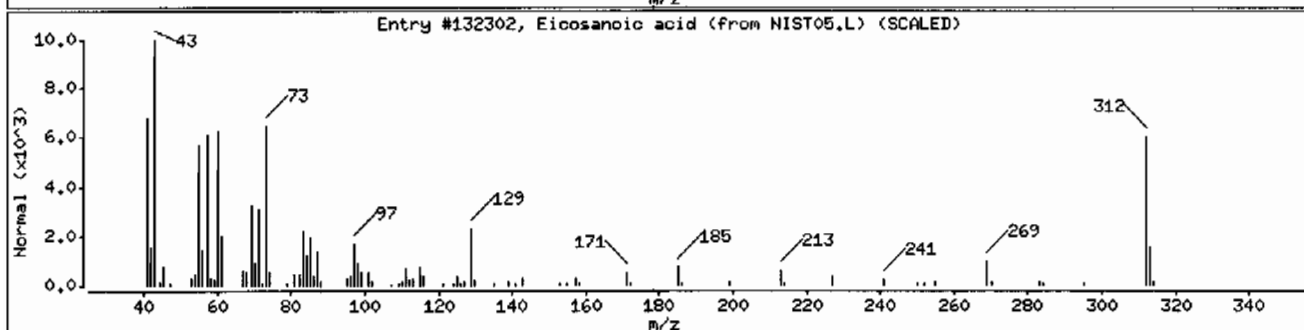
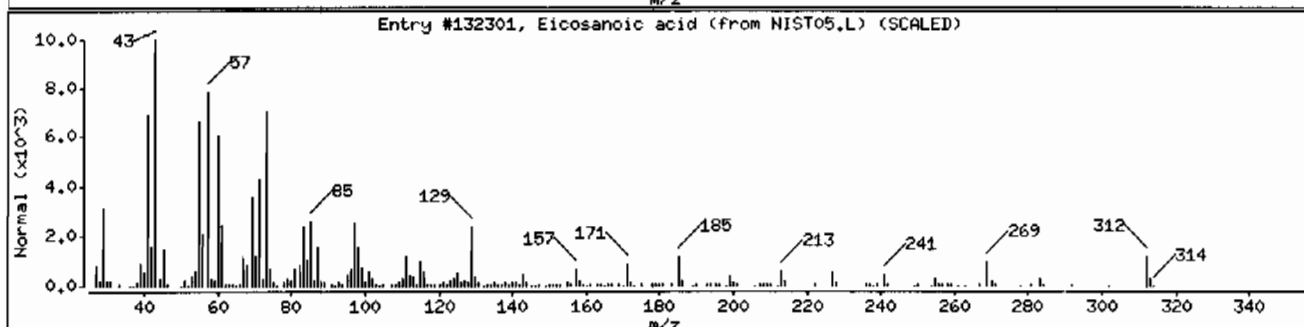
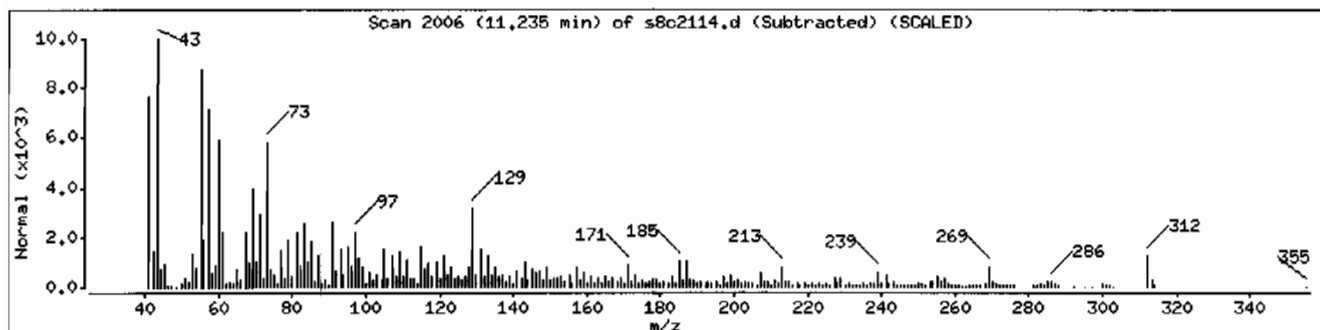
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosanoic acid	506-30-9	NIST05.L	132301	99	C20H40O2	312
Eicosanoic acid	506-30-9	NIST05.L	132302	98	C20H40O2	312
Eicosanoic acid	506-30-9	NIST05.L	132303	91	C20H40O2	312



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Client ID: RE36-10-7491

Instrument: HSD8.i

Sample Info: I2483730041961922111SVH111LANL

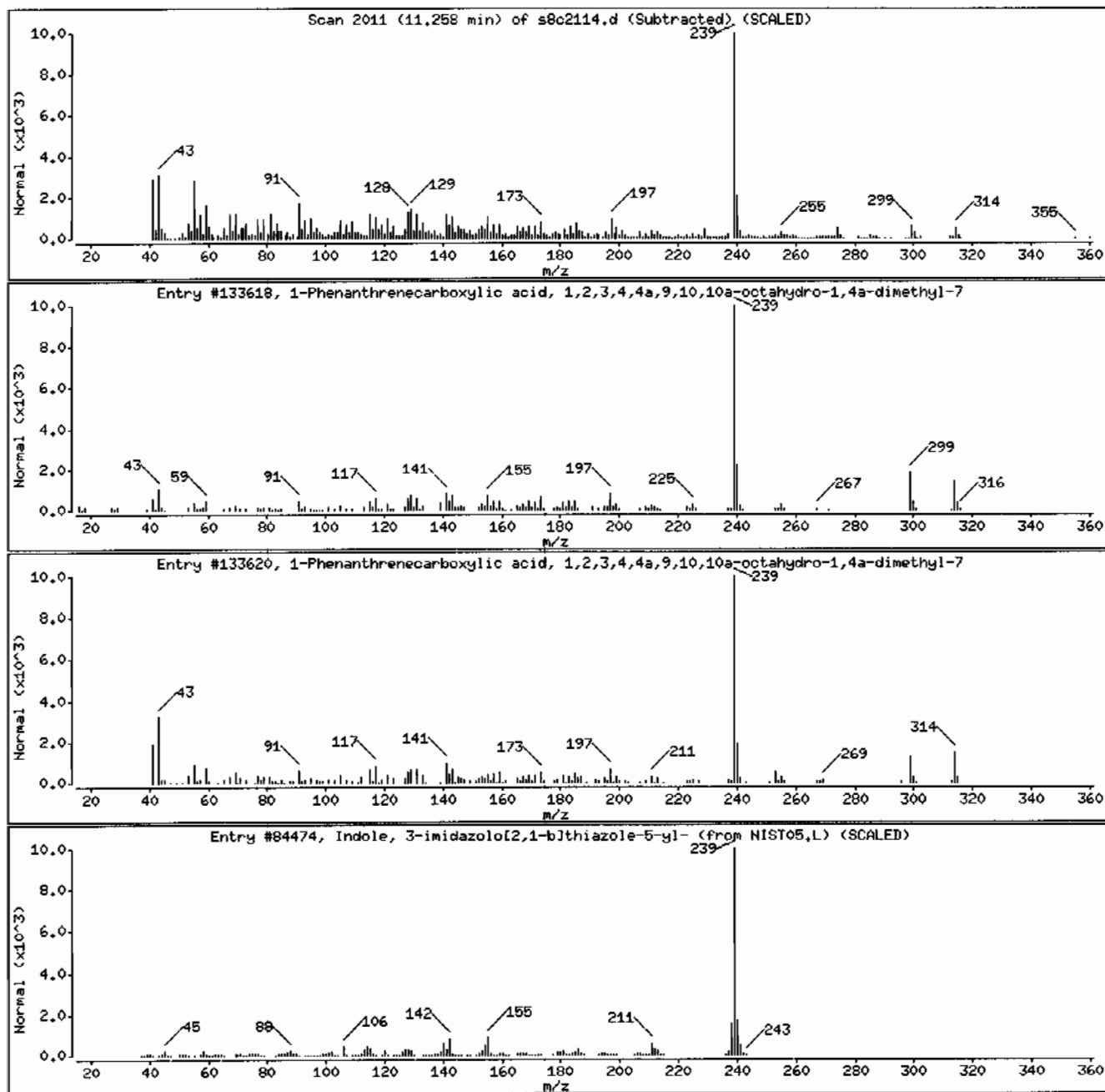
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	97	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314
Indole, 3-imidazolo[2,1-b]thiazole-5-yl-	292855-05-1	NIST05.L	84474	52	C13H9N3S	239



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVMI11LANL

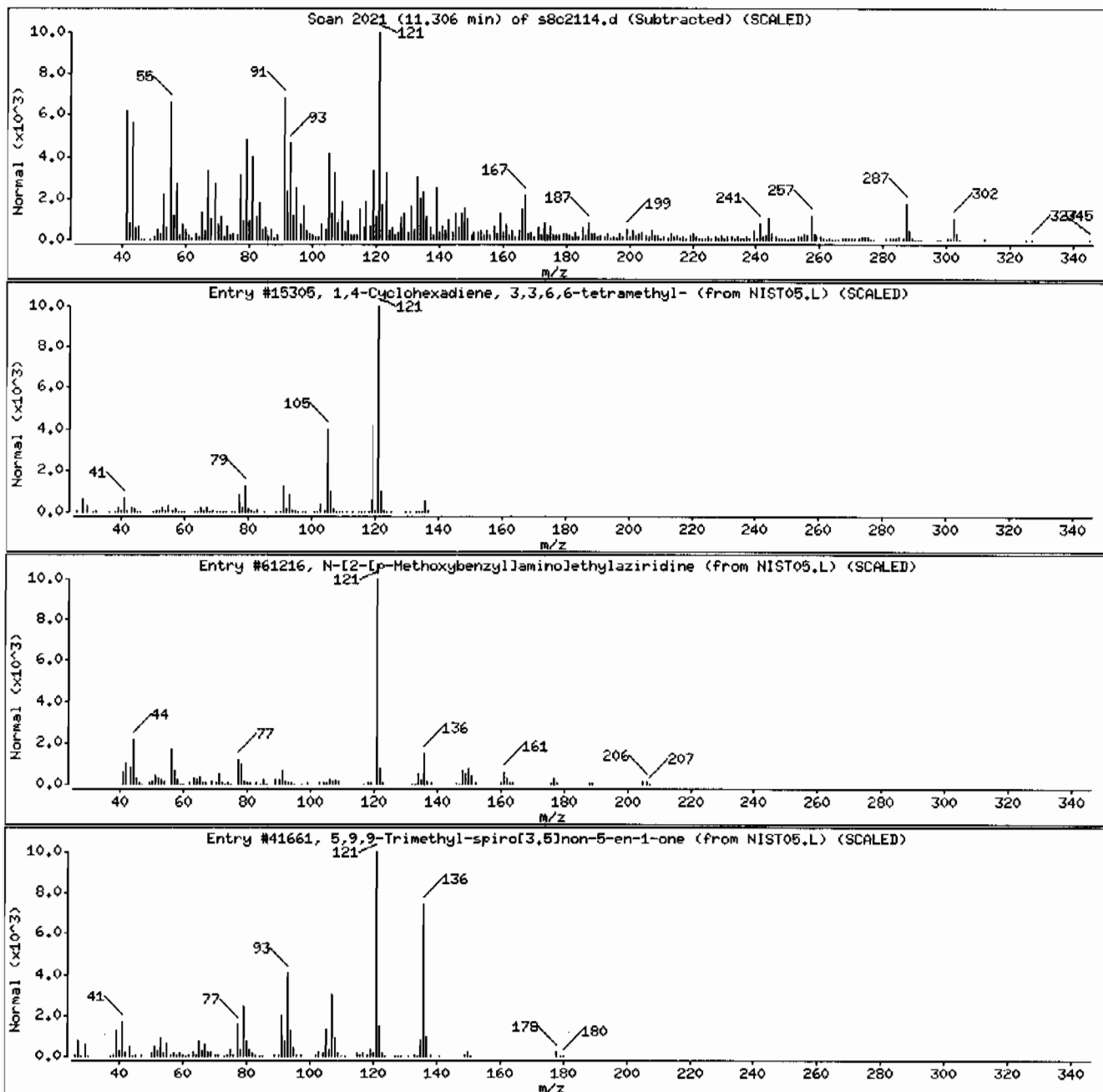
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	38	C10H16	136
N-[2-[p-Methoxybenzyl]amino]ethylaziridi	1000254-78-1	NIST05.L	61216	30	C12H18N2O	206
5,9,9-Trimethyl-spiro[3.5]non-5-en-1-one	1000185-13-4	NIST05.L	41661	25	C12H18O	178



Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: HSD8.i

Sample Info: 12483730041961922111SVH111LANL

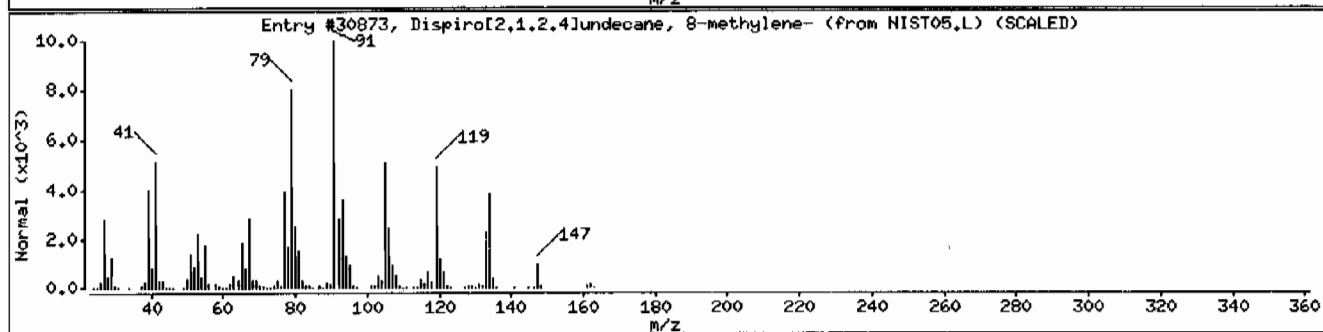
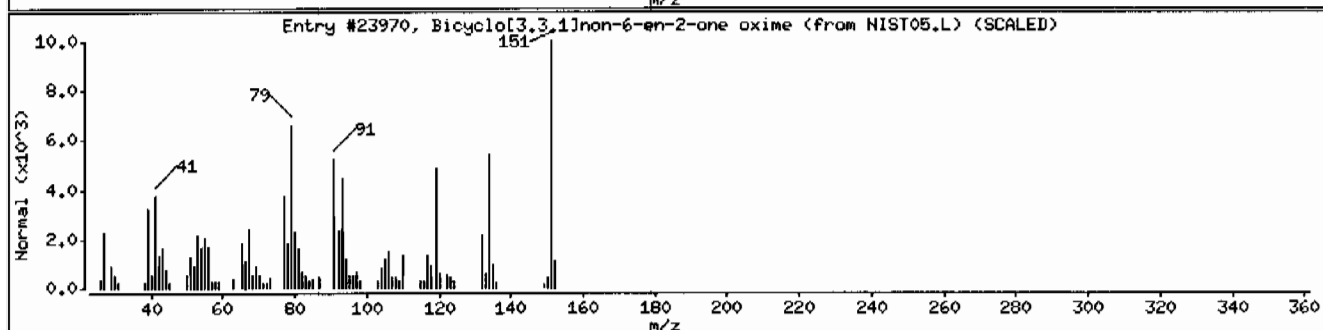
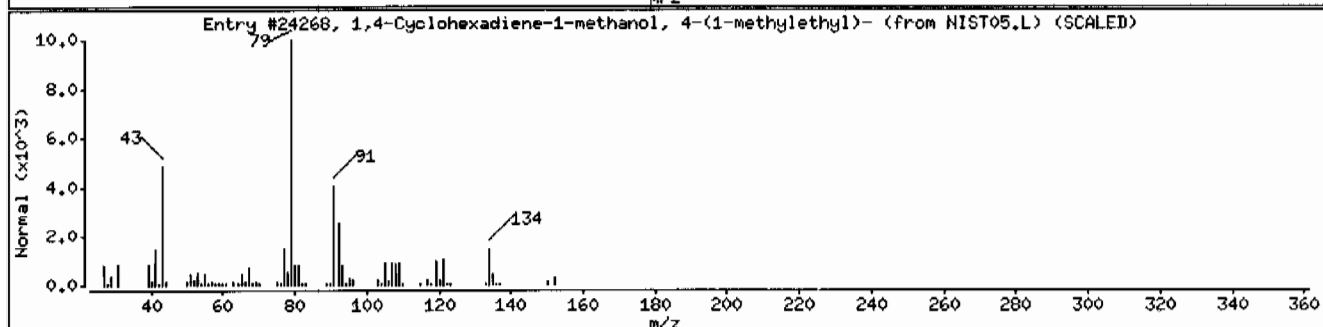
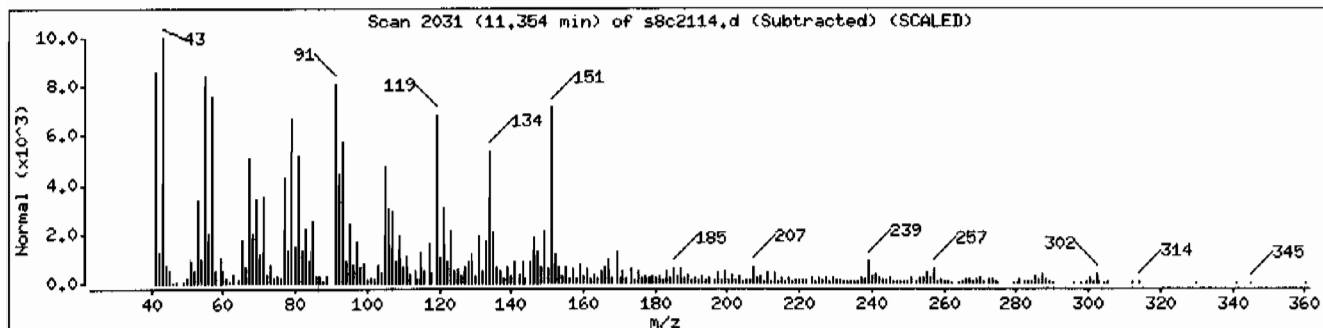
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Cyclohexadiene-1-methanol, 4-(1-methylethyl)-	22539-72-6	NIST05.L	24268	43	C10H16O	152
Bicyclo[3.3.1]non-6-en-2-one oxime	1000186-04-7	NIST05.L	23970	43	C9H13NO	151
Dispiro[2.1.2.4]undecane, 8-methylene-	51567-08-9	NIST05.L	30873	41	C12H18	162



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Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVH11ILANL

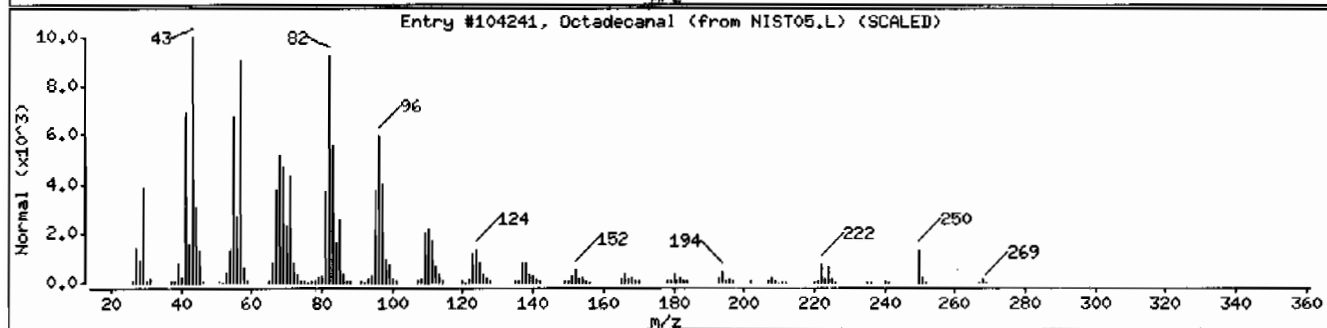
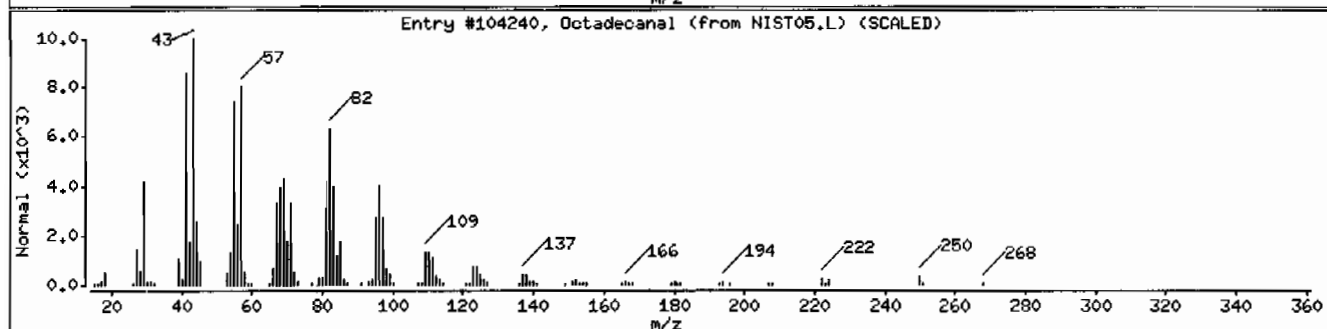
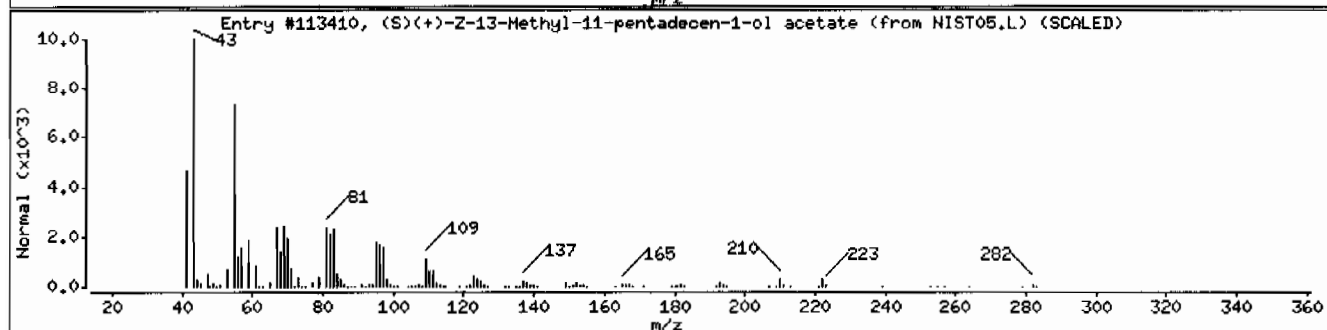
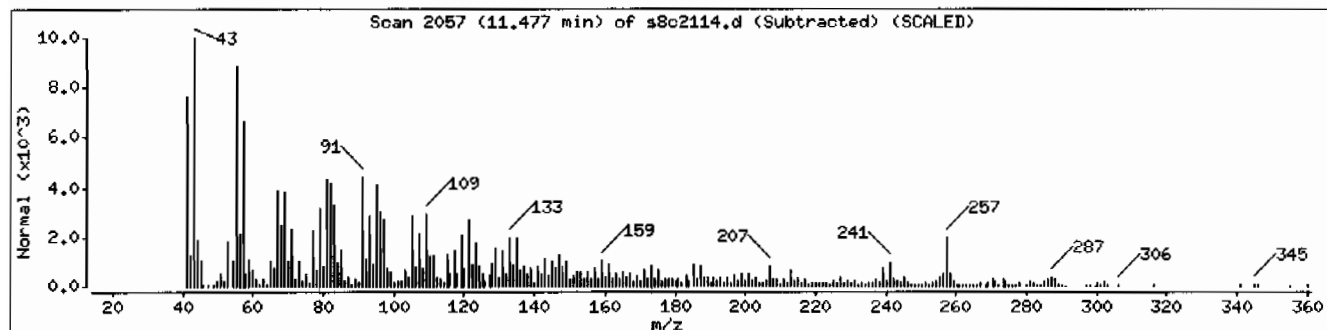
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(S)(+)-Z-13-Methyl-11-pentadecen-1-ol ac	1000130-84-8	NIST05.L	113410	70	C18H34O2	282
Octadecanal	638-66-4	NIST05.L	104240	55	C18H36O	268
Octadecanal	638-66-4	NIST05.L	104241	52	C18H36O	268



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Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: I248373004196192211SVH11LANL

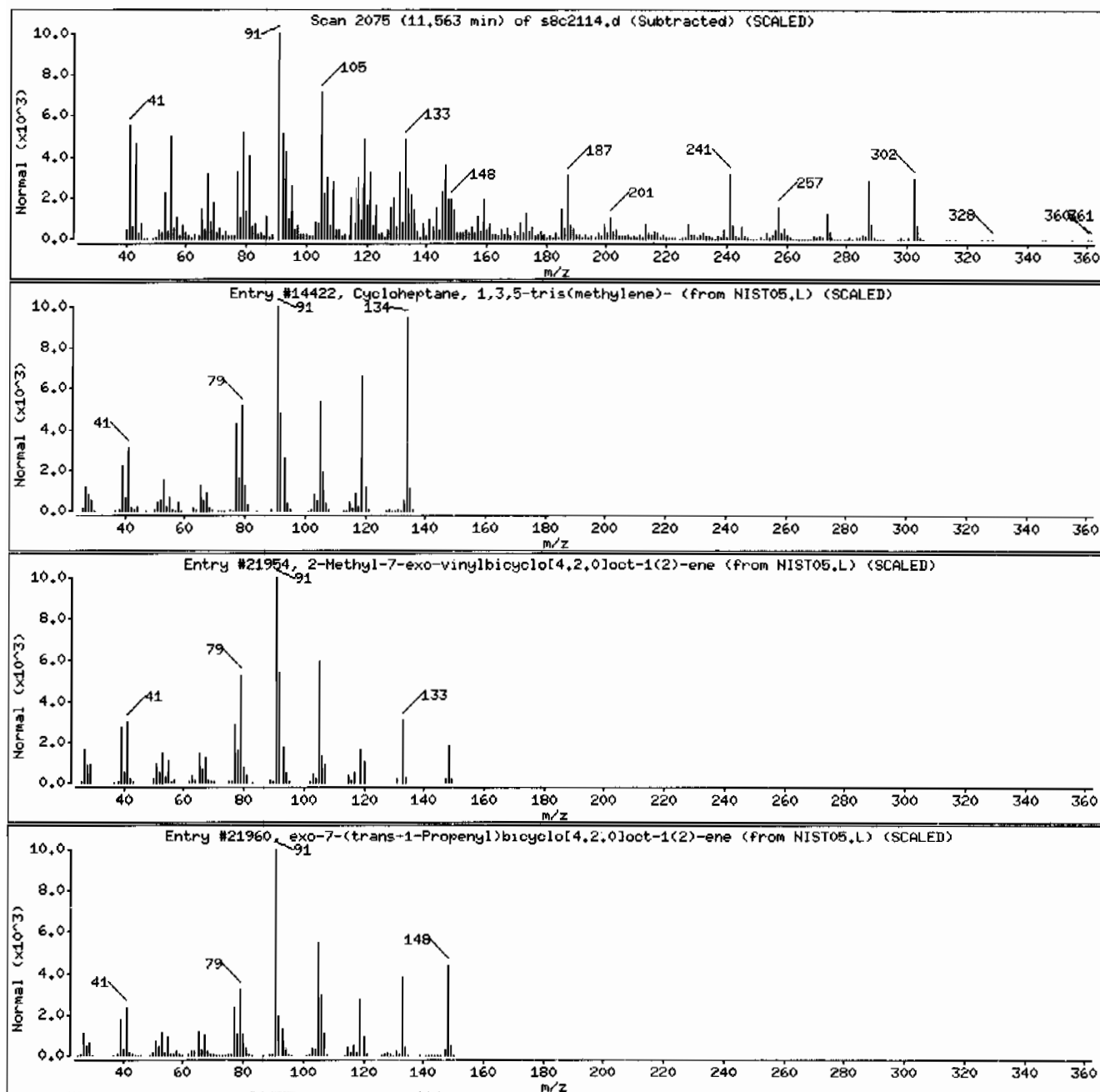
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14422	35	C10H14	134
2-Methyl-7-exo-vinylbicyclo[4.2.0]oct-1(	107914-89-6	NIST05.L	21954	30	C11H16	148
exo-7-(trans-1-Propenyl)bicyclo[4.2.0]oc	107983-42-6	NIST05.L	21960	27	C11H16	148



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Instrument: MSD8.i

Sample Info: 1248373004196192211SVH111LANL

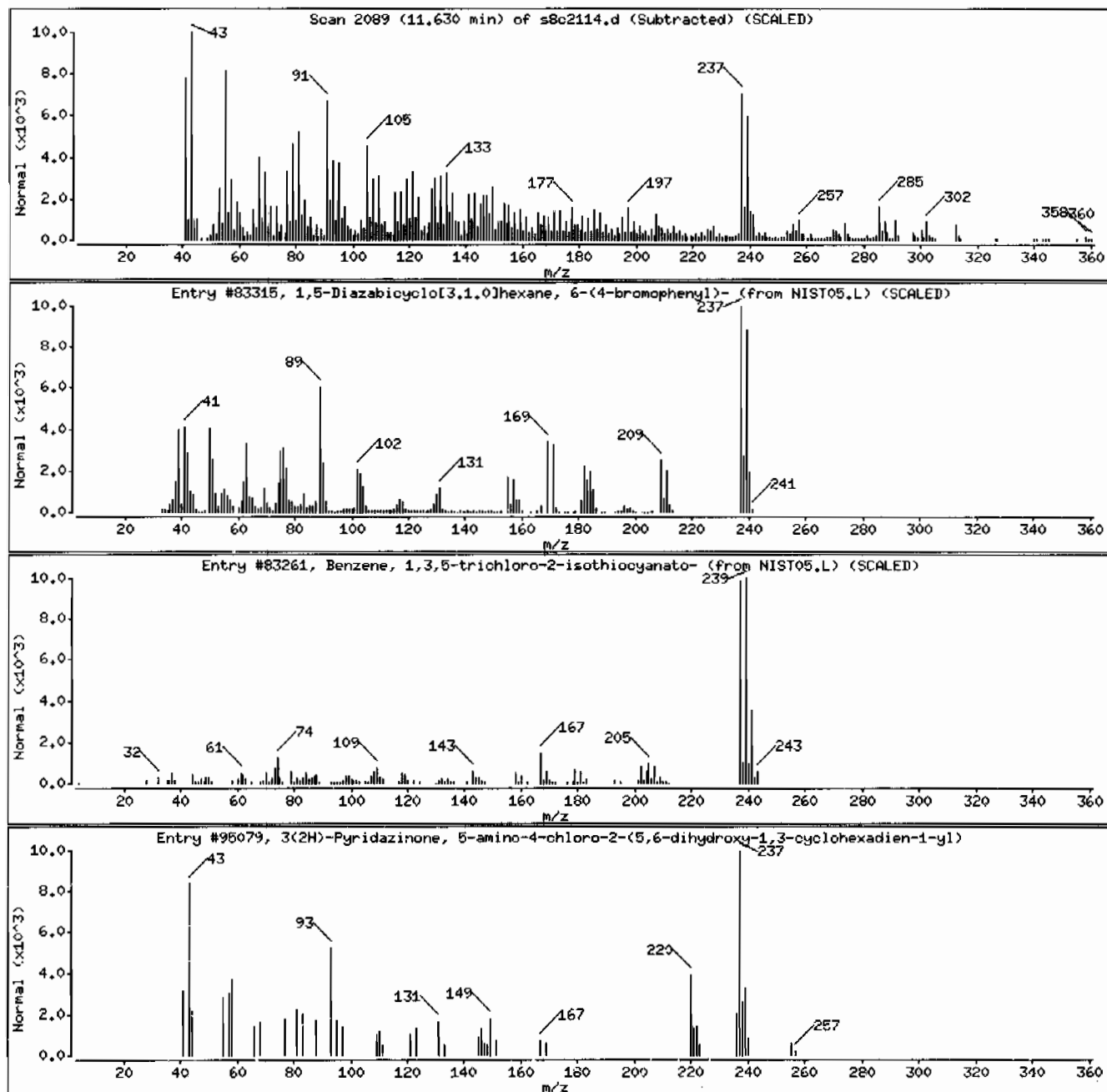
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,5-Diazabicyclo[3,1,0]hexane, 6-(4-brom	1000277-66-7	NIST05.L	83315	41	C10H11BrN2	238
Benzene, 1,3,5-trichloro-2-isothiocyanat	22134-07-2	NIST05.L	83261	30	C7H2Cl3NS	237
3(2H)-Pyridazinone, 5-amino-4-chloro-2-(	41088-75-9	NIST05.L	95079	30	C10H10ClN3O3	255



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8,i

Sample Info: 12483730041961922111SVM111LANL

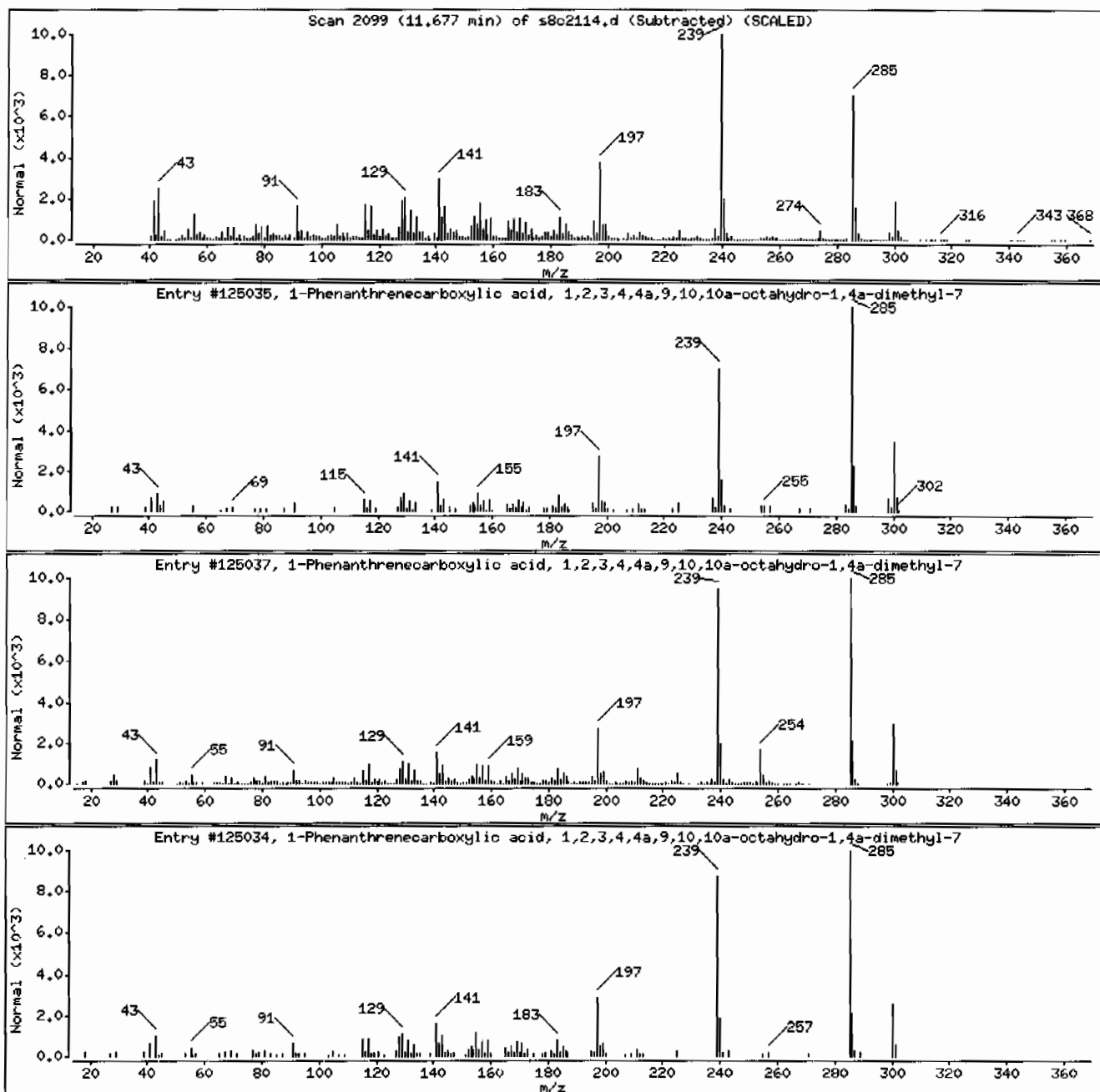
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	91	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	90	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	90	C20H28O2	300



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 12483730041961922111SVMI11LANL

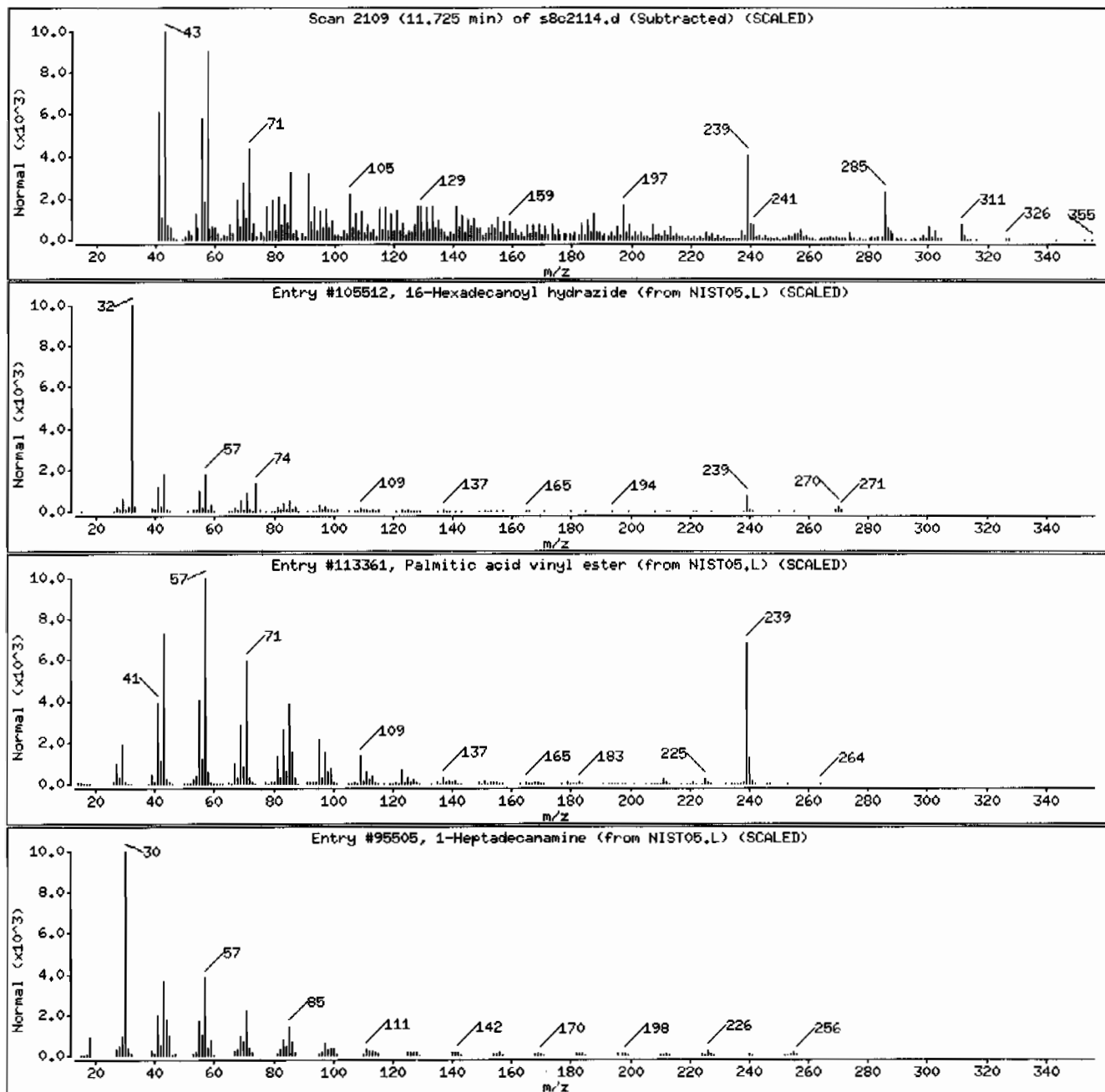
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
16-Hexadecanoyl hydrazide	2619-88-7	NIST05.L	105512	58	C16H34N2O	270
Palmitic acid vinyl ester	693-38-9	NIST05.L	113361	50	C18H34O2	282
1-Heptadecanamine	4200-95-7	NIST05.L	95505	42	C17H37N	255



Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVH11LANL

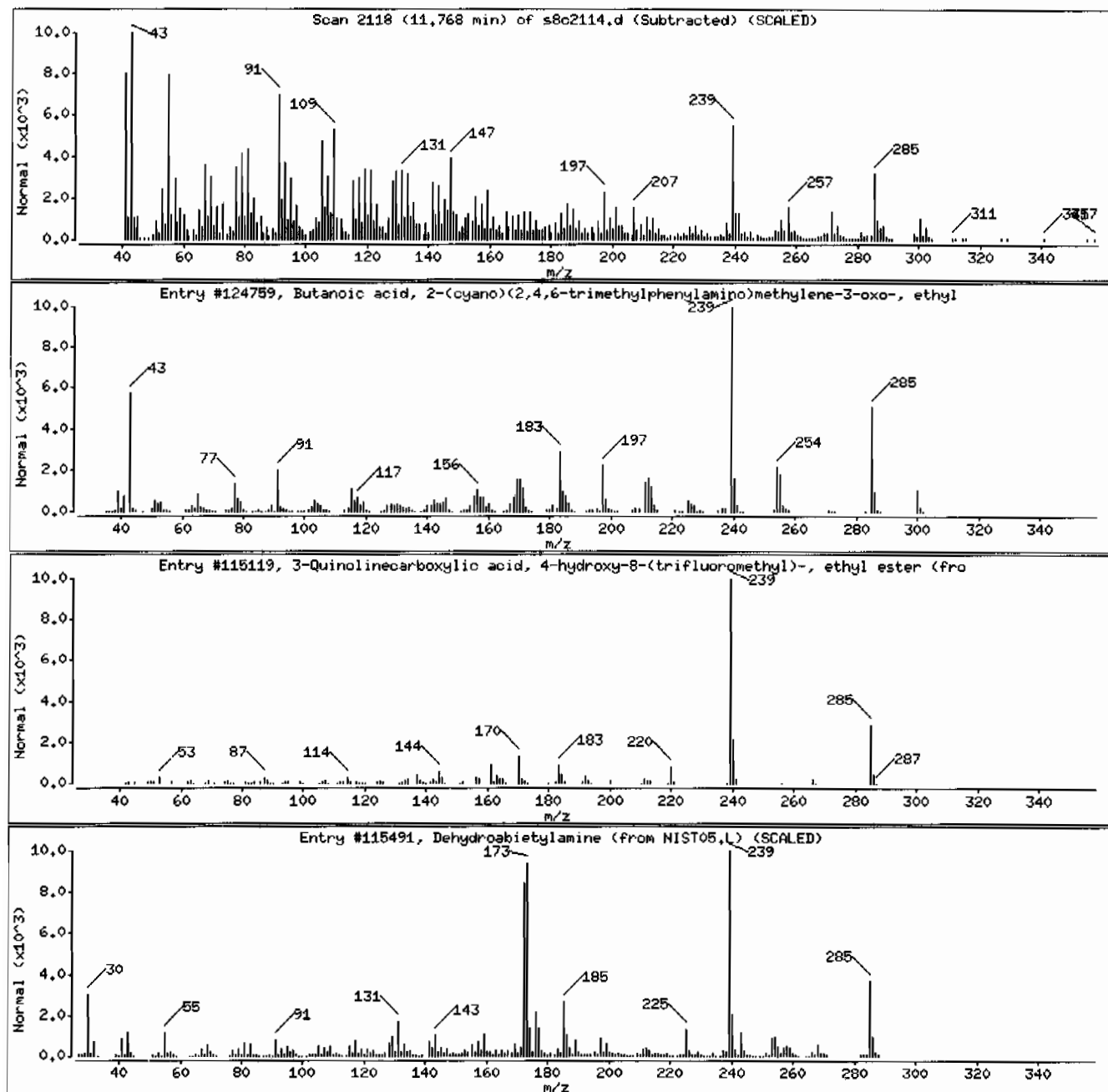
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	50	C17H20N2O3	300
3-Quinolincarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	25	C13H10F3NO3	285
Dehydroabietylamine	1446-61-3	NIST05.L	115491	22	C20H31N	285



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: HSD8.i

Sample Info: I248373004196192211SVH11ILANL

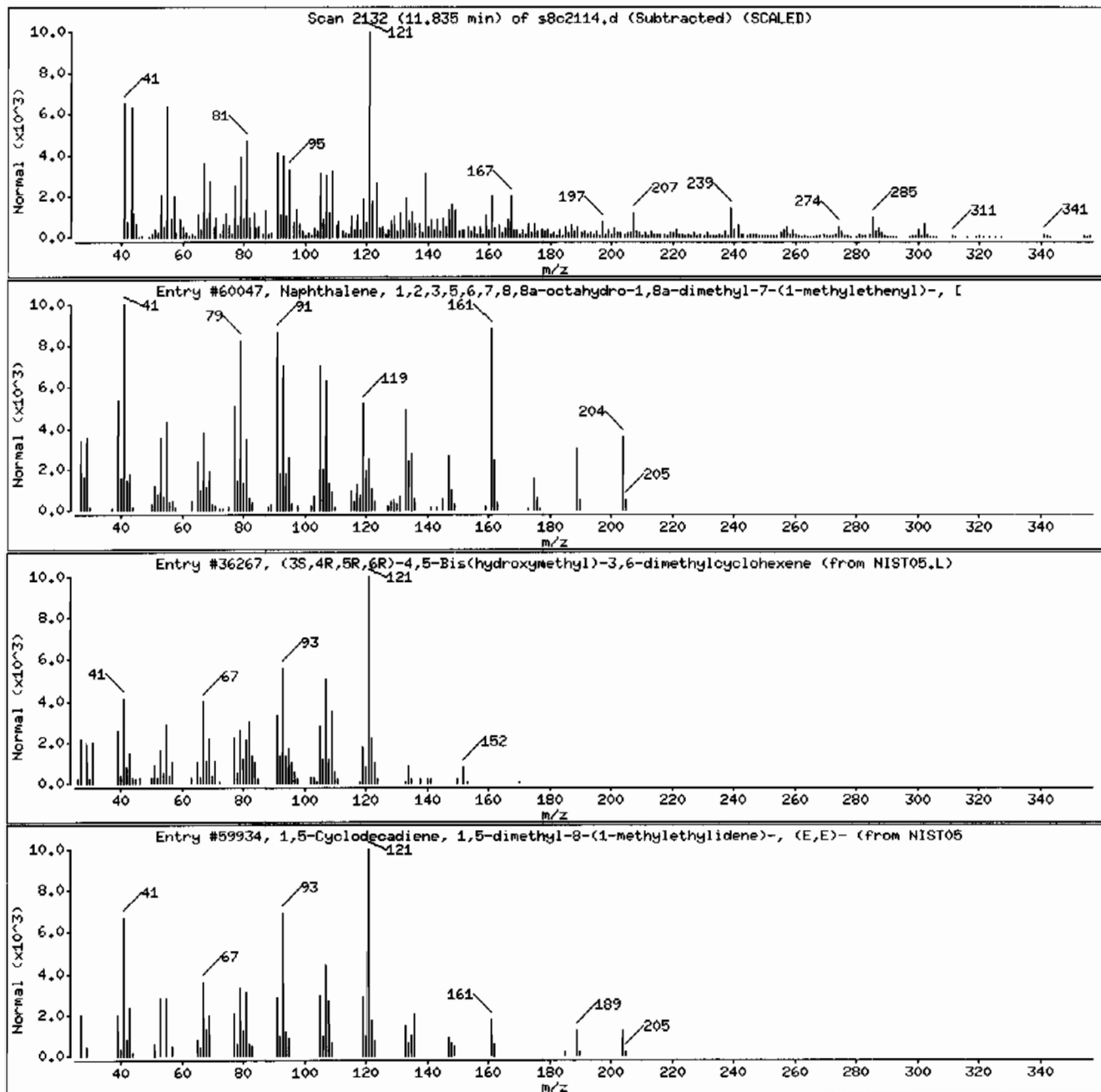
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	94	C15H24	204
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	1000099-24-3	NIST05.L	36267	87	C10H18O2	170
1,5-Cyclodecadiene, 1,5-dimethyl-8-(1-me	15423-57-1	NIST05.L	59934	64	C15H24	204



Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211ISVH111LANL

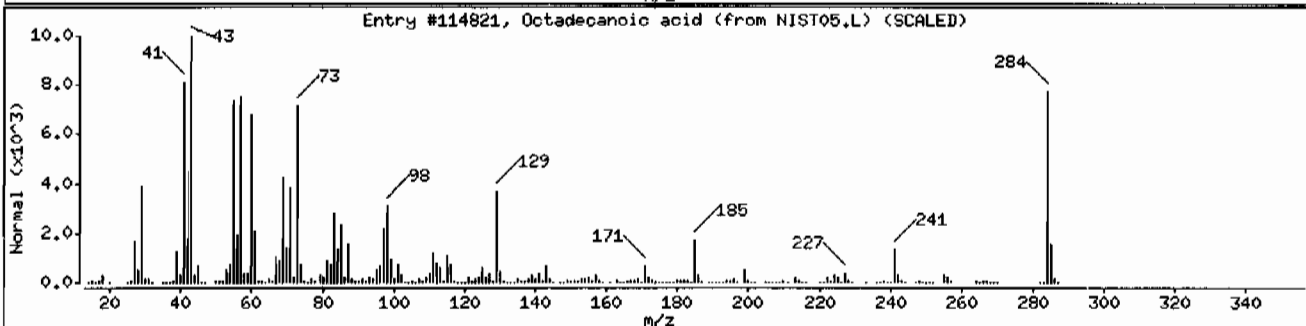
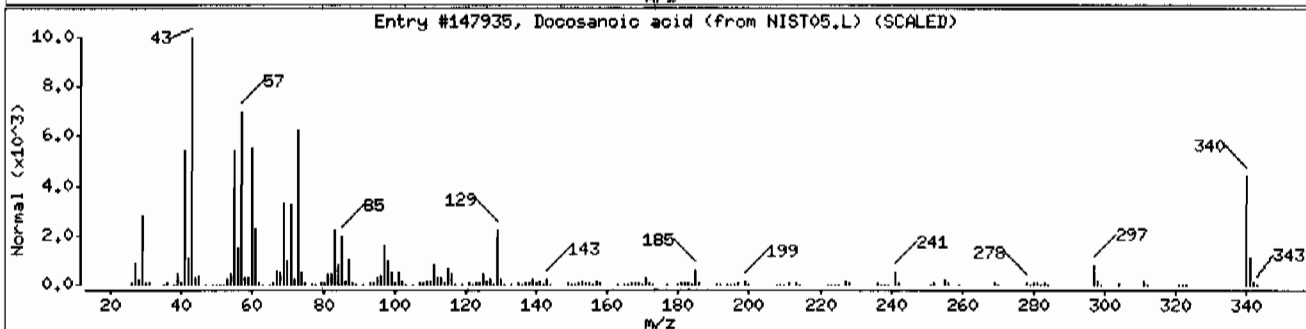
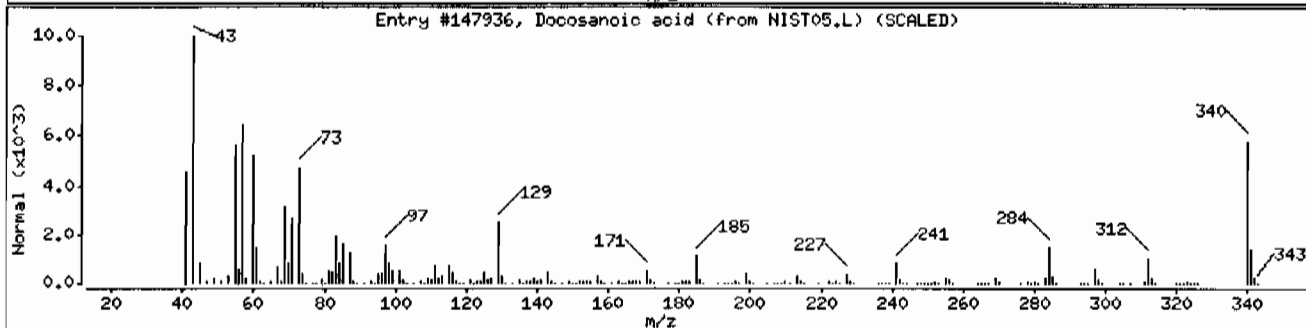
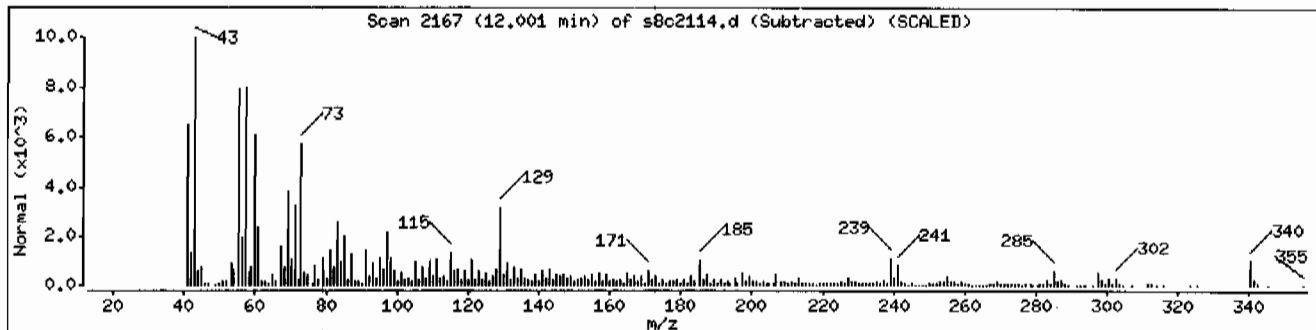
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Docosanoic acid	112-85-6	NIST05.L	147936	93	C22H44O2	340
Docosanoic acid	112-85-6	NIST05.L	147935	68	C22H44O2	340
Octadecanoic acid	57-11-4	NIST05.L	114821	68	C18H36O2	284



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Client ID: RE36-10-7491

Instrument: MSD8,i

Sample Info: 1248373004196192211ISVMI11LANL

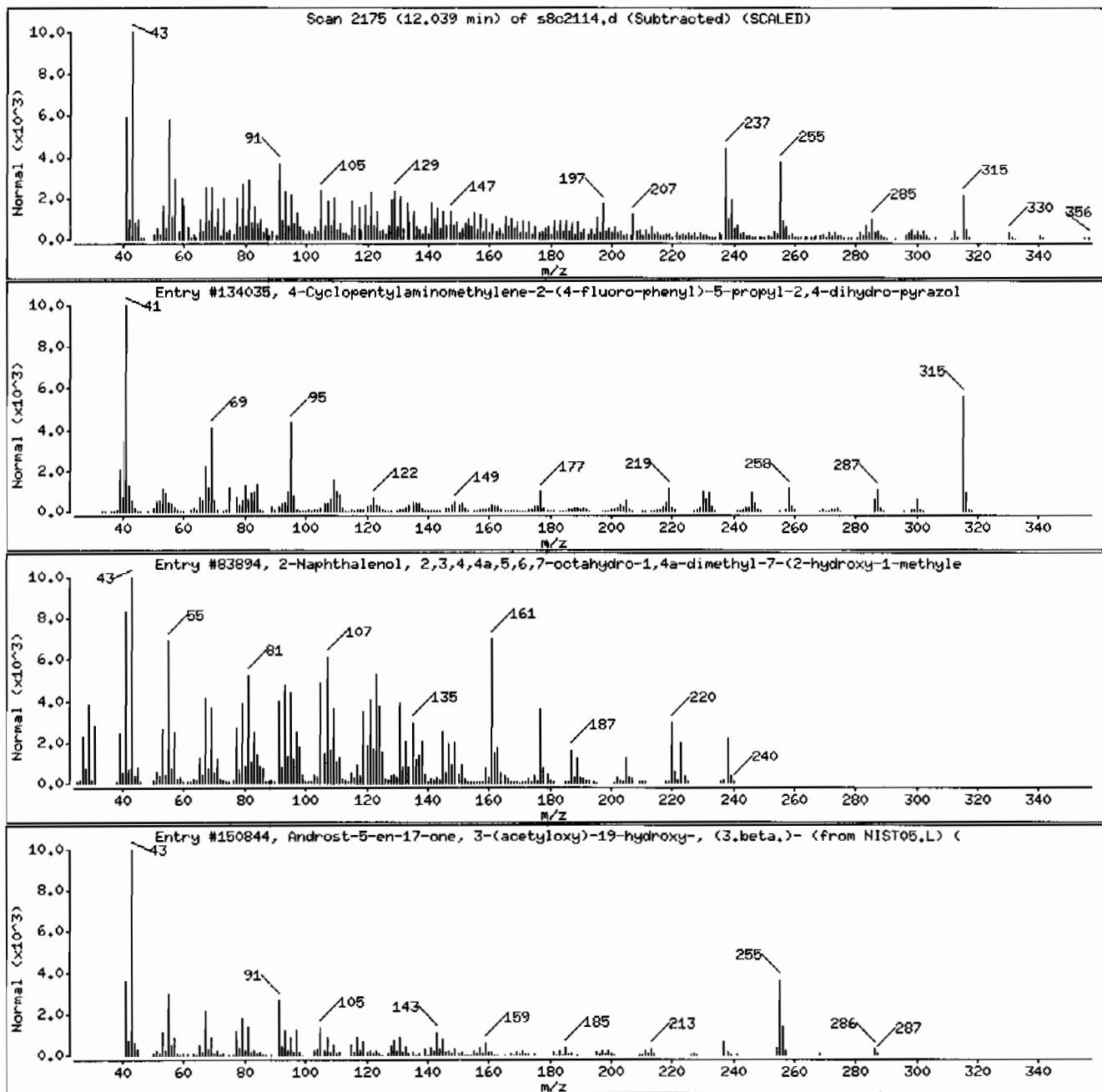
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-Cyclopentylaminomethylene-2-(4-fluoro-	1000296-93-5	NIST05.L	134035	42	C18H22FN3O	315
2-Naphthalenol, 2,3,4,4a,5,6,7-octahydro	1000197-43-8	NIST05.L	83894	18	C15H26O2	238
Androst-5-en-17-one, 3-(acetoxy)-19-hy	2857-42-3	NIST05.L	150844	10	C21H30O4	346



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Instrument: MSD8.i

Sample Info: 1248373004196192211SVH111LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

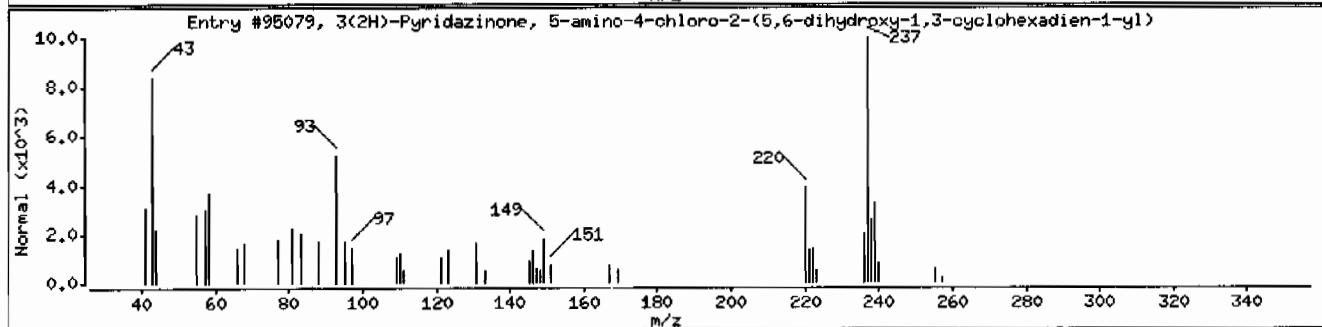
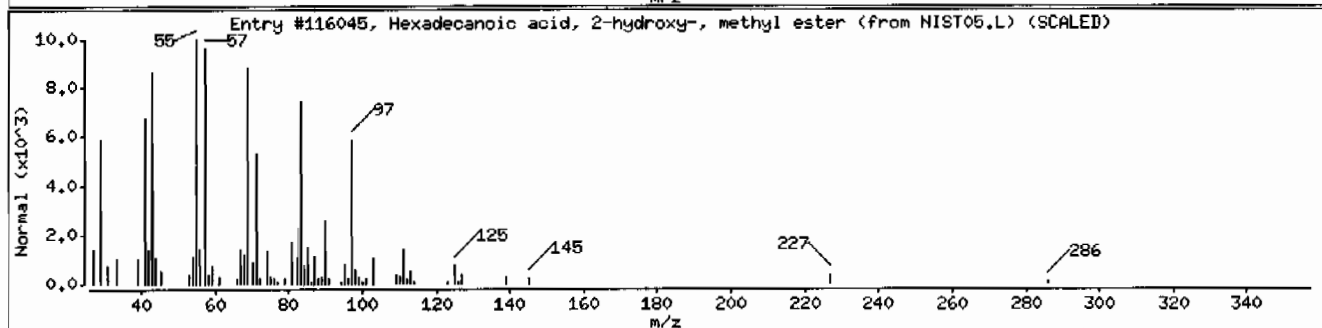
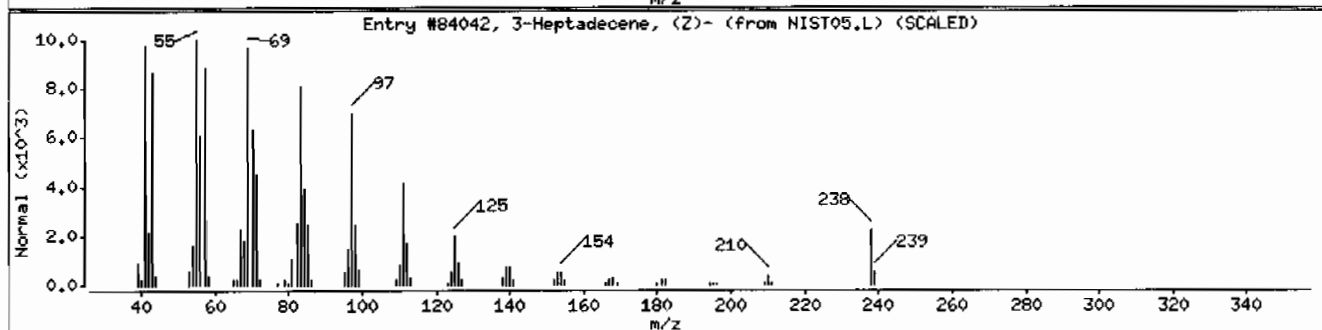
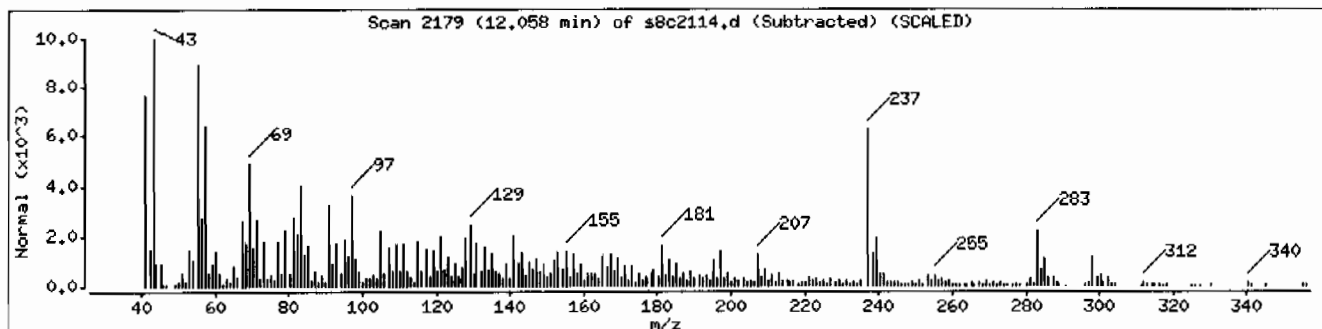
Unknown

3-Heptadecene, (Z)-

CAS Number	Library	Entry	Quality	Formula	Weight
1000141-67-3	NIST05.L	84042	38	C17H34	238
16742-51-1	NIST05.L	116045	35	C17H34O3	286
41088-75-9	NIST05.L	95079	30	C10H10C1N3O3	255

Hexadecanoic acid, 2-hydroxy-, methyl es

3(2H)-Pyridazinone, 5-amino-4-chloro-2-(



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Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: I248373004I961922I1ISVM11ILANL

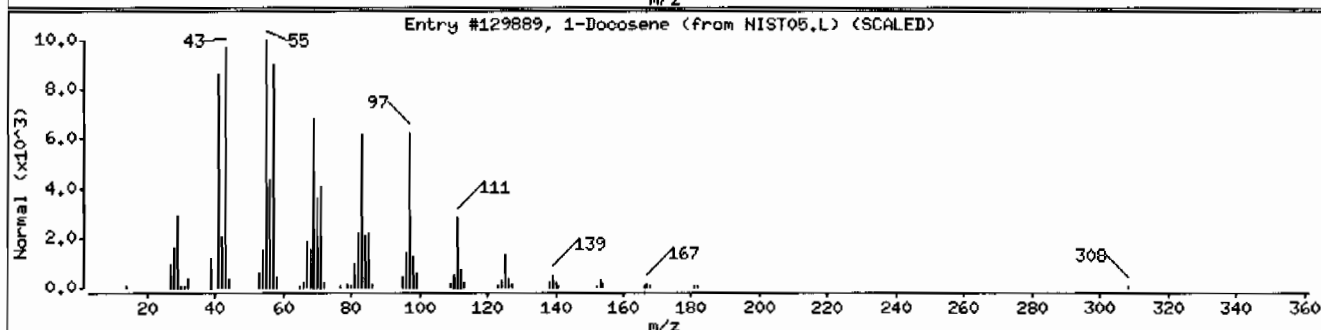
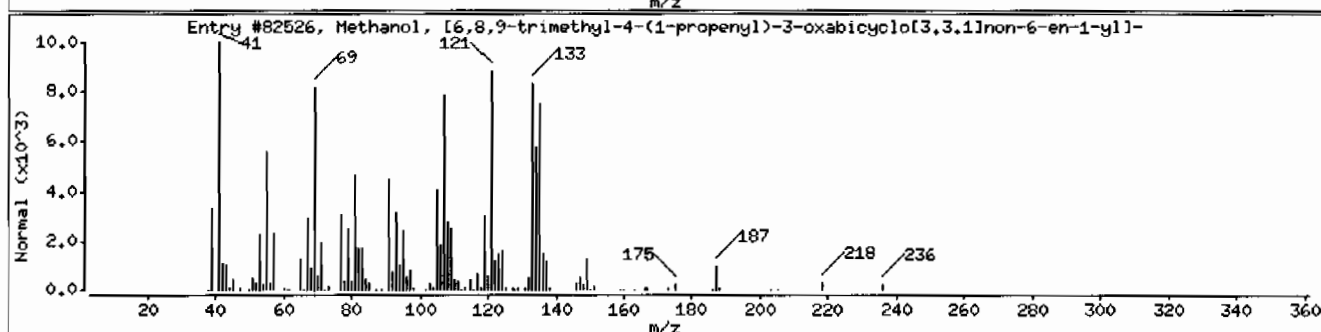
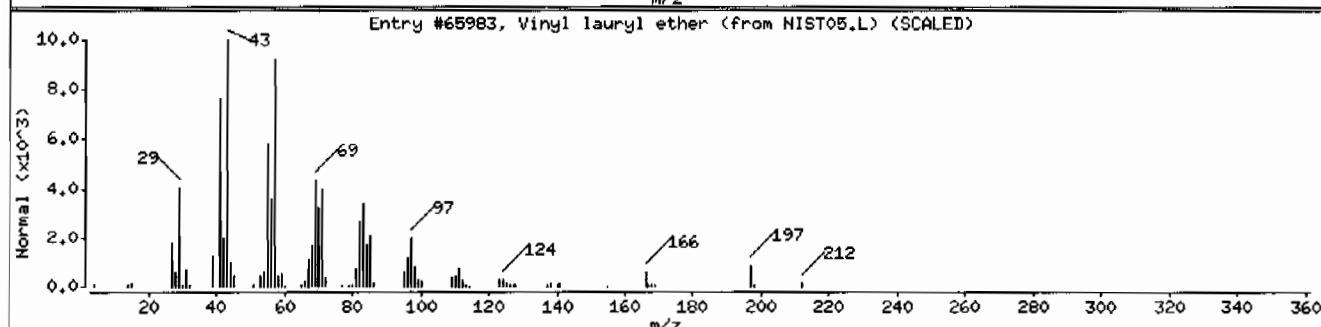
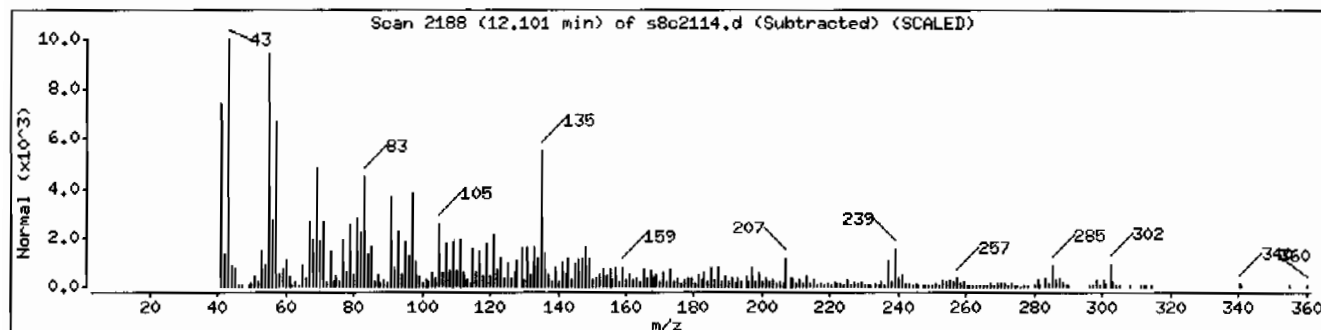
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Vinyl lauryl ether	765-14-0	NIST05.L	65983	59	C14H28O	212
Methanol, [6,8,9-trimethyl-4-(1-propenyl	1000277-60-9	NIST05.L	82526	45	C15H24O2	236
1-Docosene	1599-67-3	NIST05.L	129889	38	C22H44	308



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: HSD8.i

Sample Info: 1248373004196192211SVMI11LANL

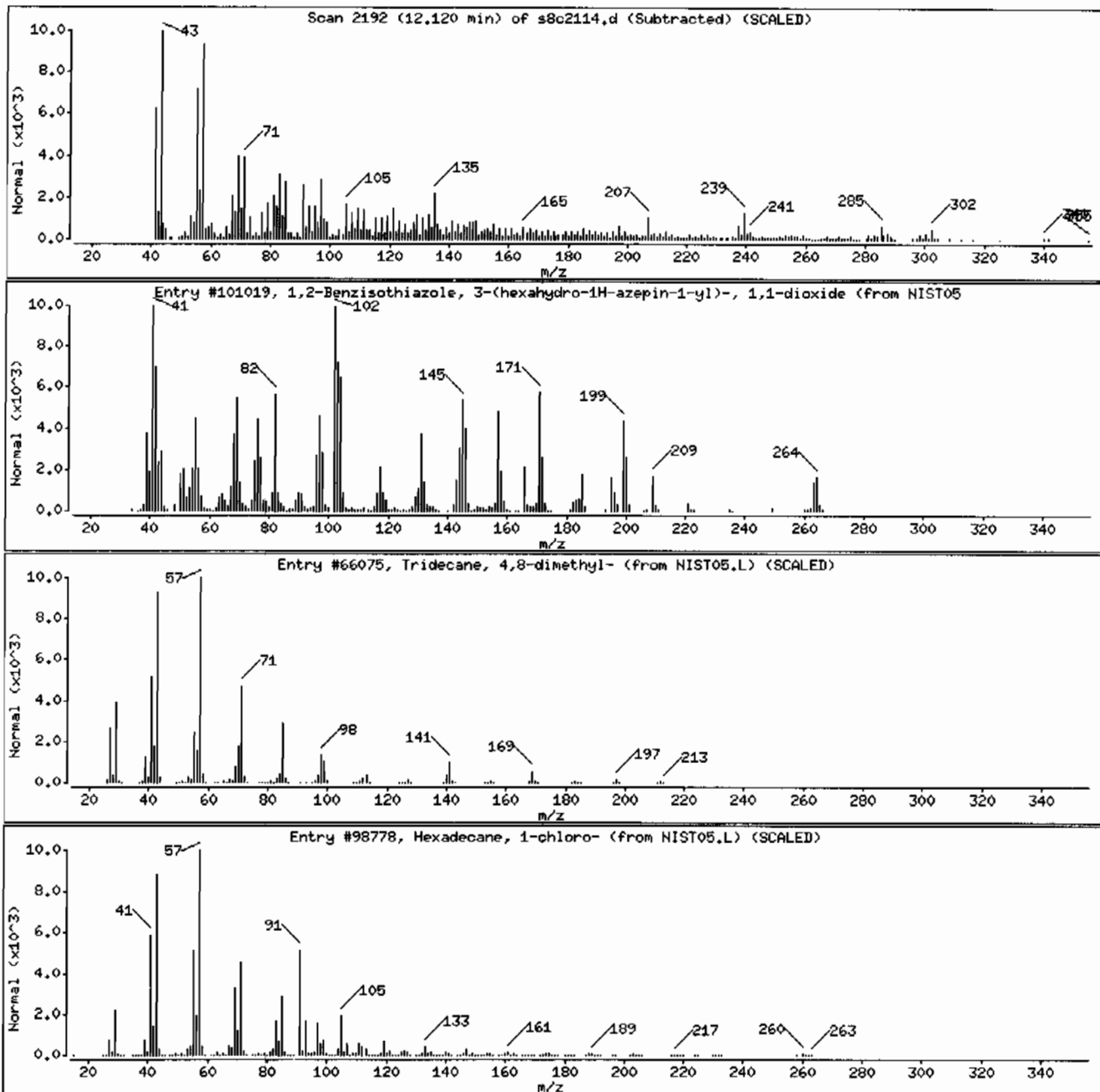
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-	309735-29-3	NIST05.L	101019	91	C13H16N2OS	264
Tridecane, 4,8-dimethyl-	55030-62-1	NIST05.L	66075	86	C15H32	212
Hexadecane, 1-chloro-	4860-03-1	NIST05.L	98778	64	C16H33Cl	260



Date : 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 12483730041961922111SVMI11LANL

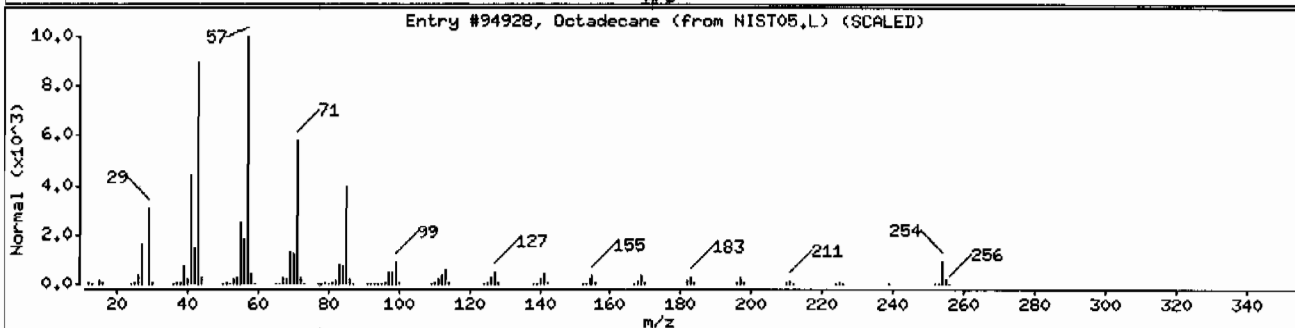
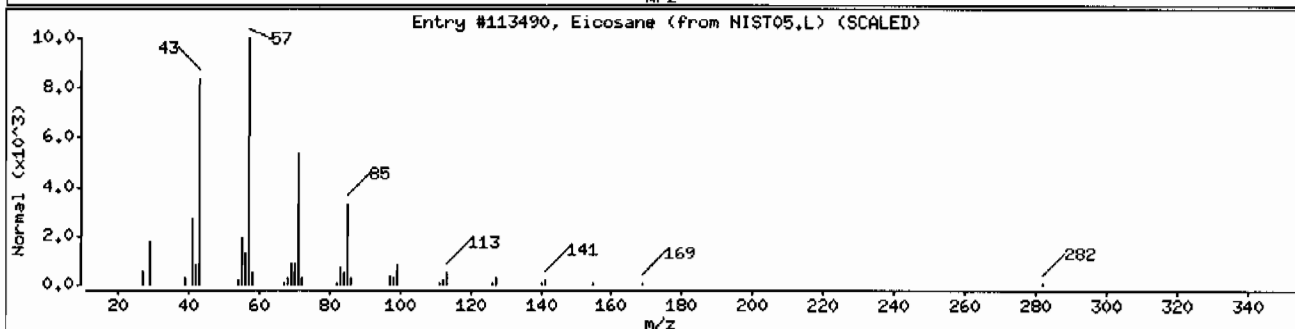
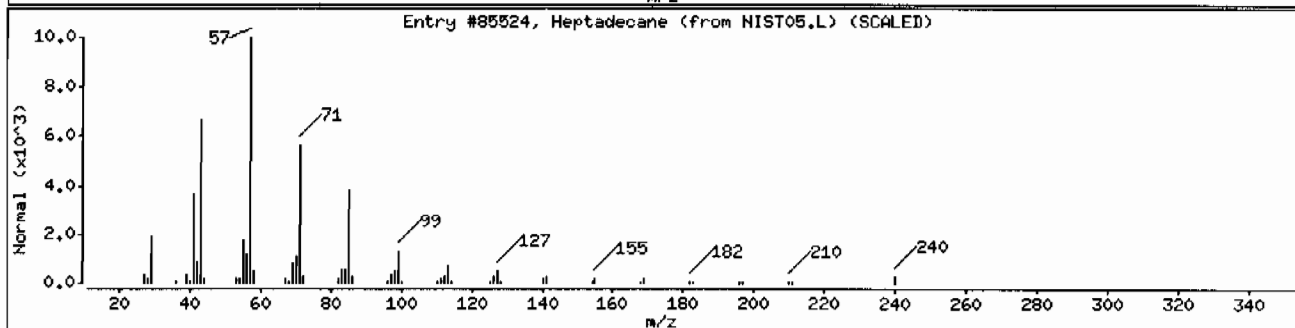
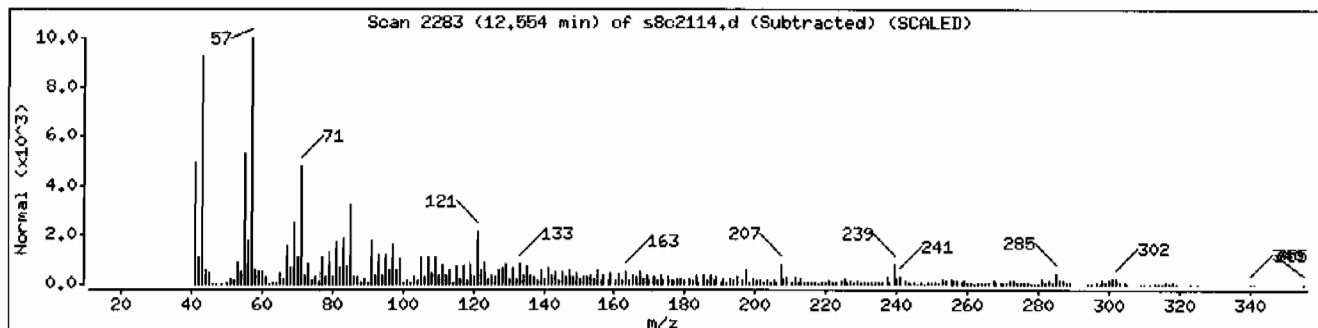
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane	629-78-7	NIST05.L	85524	96	C ₁₇ H ₃₆	240
Eicosane	112-95-8	NIST05.L	113490	95	C ₂₀ H ₄₂	282
Octadecane	593-45-3	NIST05.L	94928	93	C ₁₈ H ₃₈	254



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Instrument: MSD8.i

Sample Info: 1248373004196192211SVMI11LANL

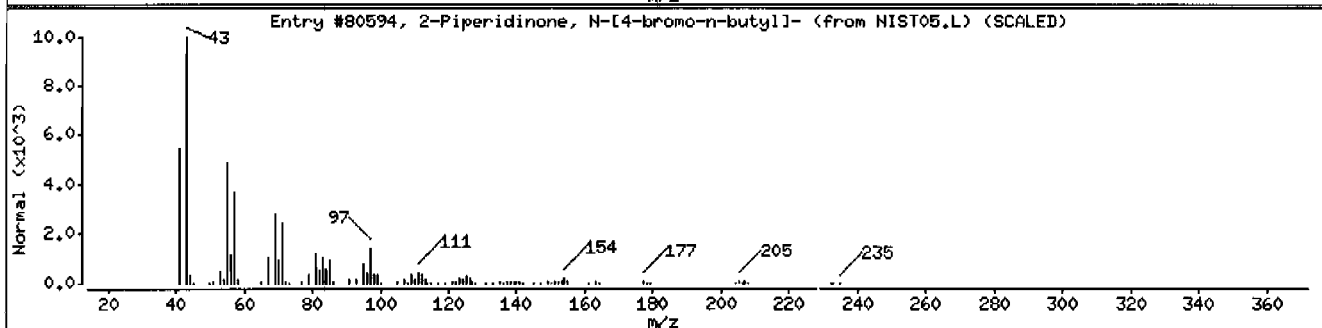
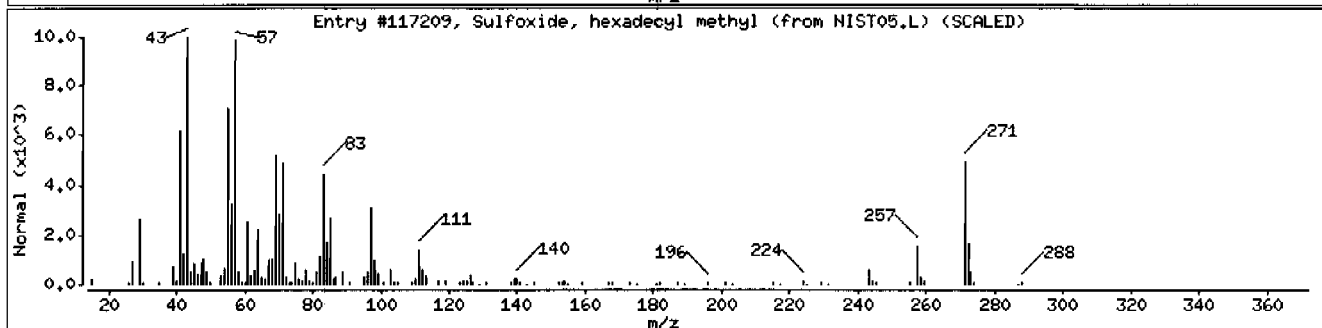
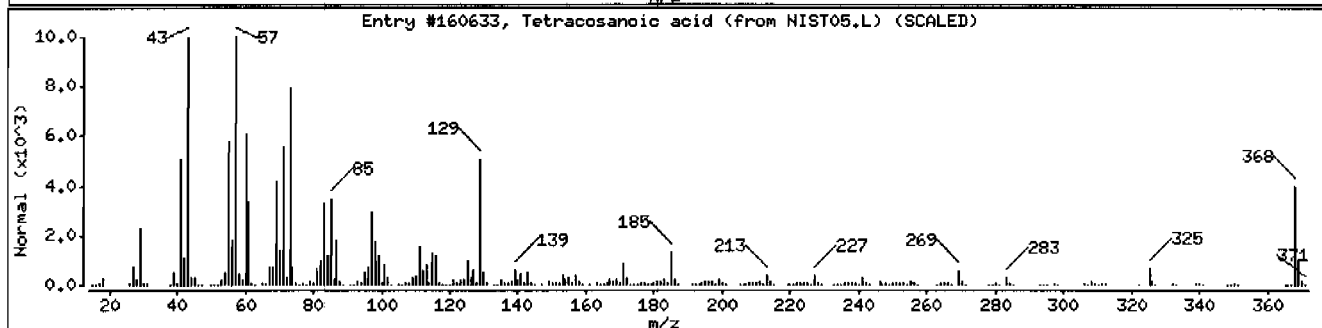
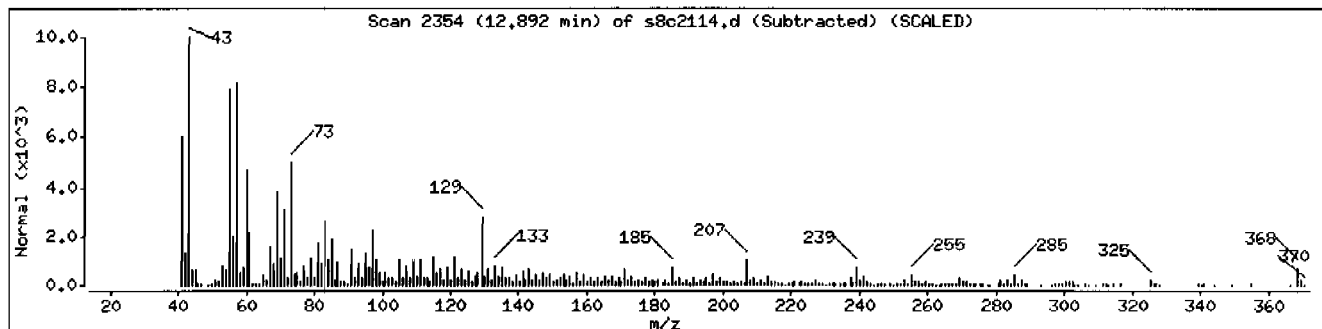
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetracosanoic acid	557-59-5	NIST05.L	160633	98	C ₂₄ H ₄₈ O ₂	368
Sulfoxide, hexadecyl methyl	3079-32-1	NIST05.L	117209	56	C ₁₇ H ₃₆ O _S	288
2-Piperidinone, N-[4-bromo-n-butyl]-	195194-80-0	NIST05.L	80594	52	C ₉ H ₁₆ BrNO	233



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Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVH111LANL

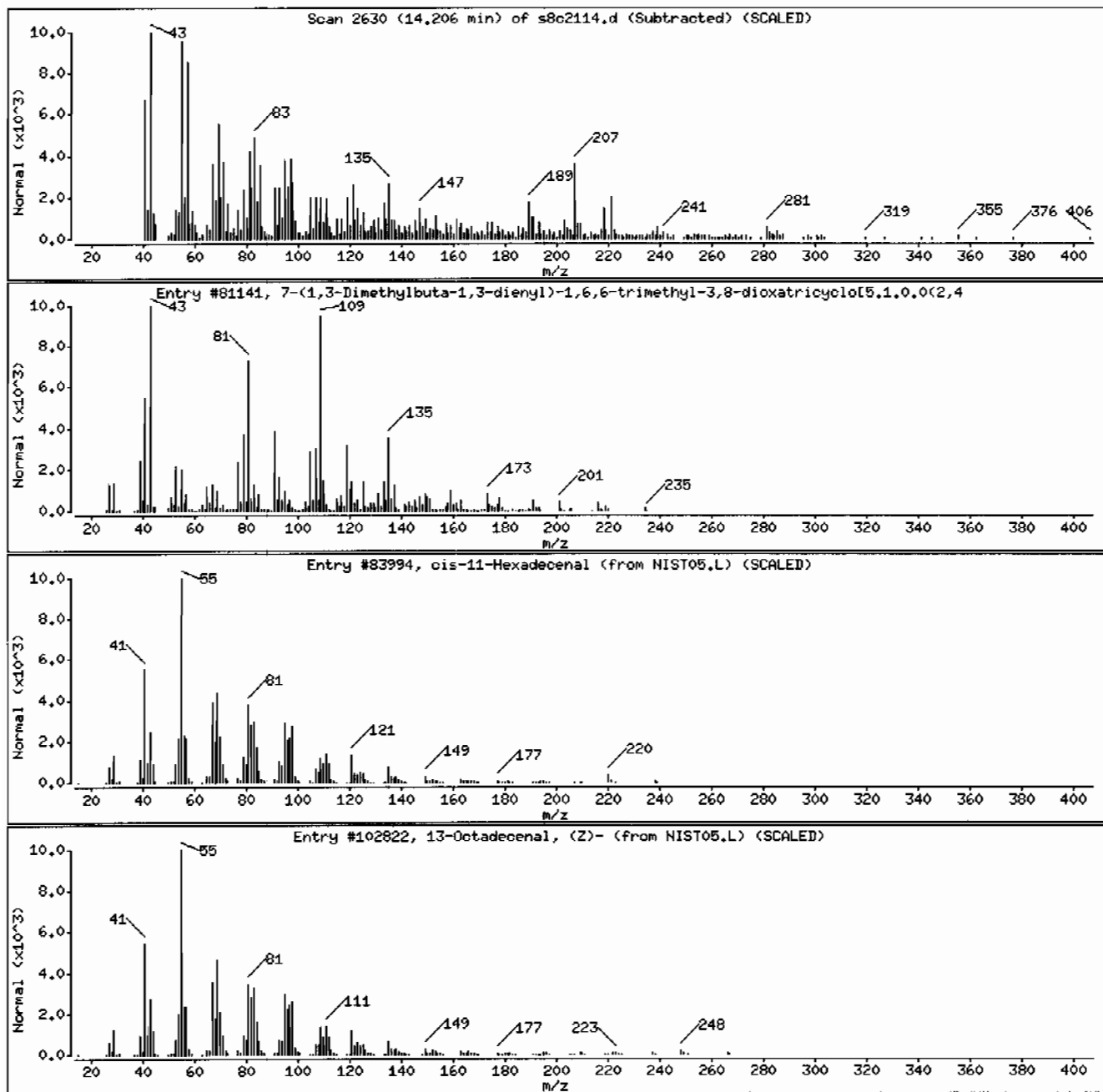
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-(1,3-Dimethylbuta-1,3-dienyl)-1,6,6-tr	1000190-22-7	NIST05.L	81141	62	C15H22O2	234
cis-11-Hexadecenal	53939-28-9	NIST05.L	83994	60	C16H30O	238
13-Octadecenal, (Z)-	58594-48-9	NIST05.L	102822	56	C18H34O	266



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Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: I248373004I961922I1ISVMH1ILANL

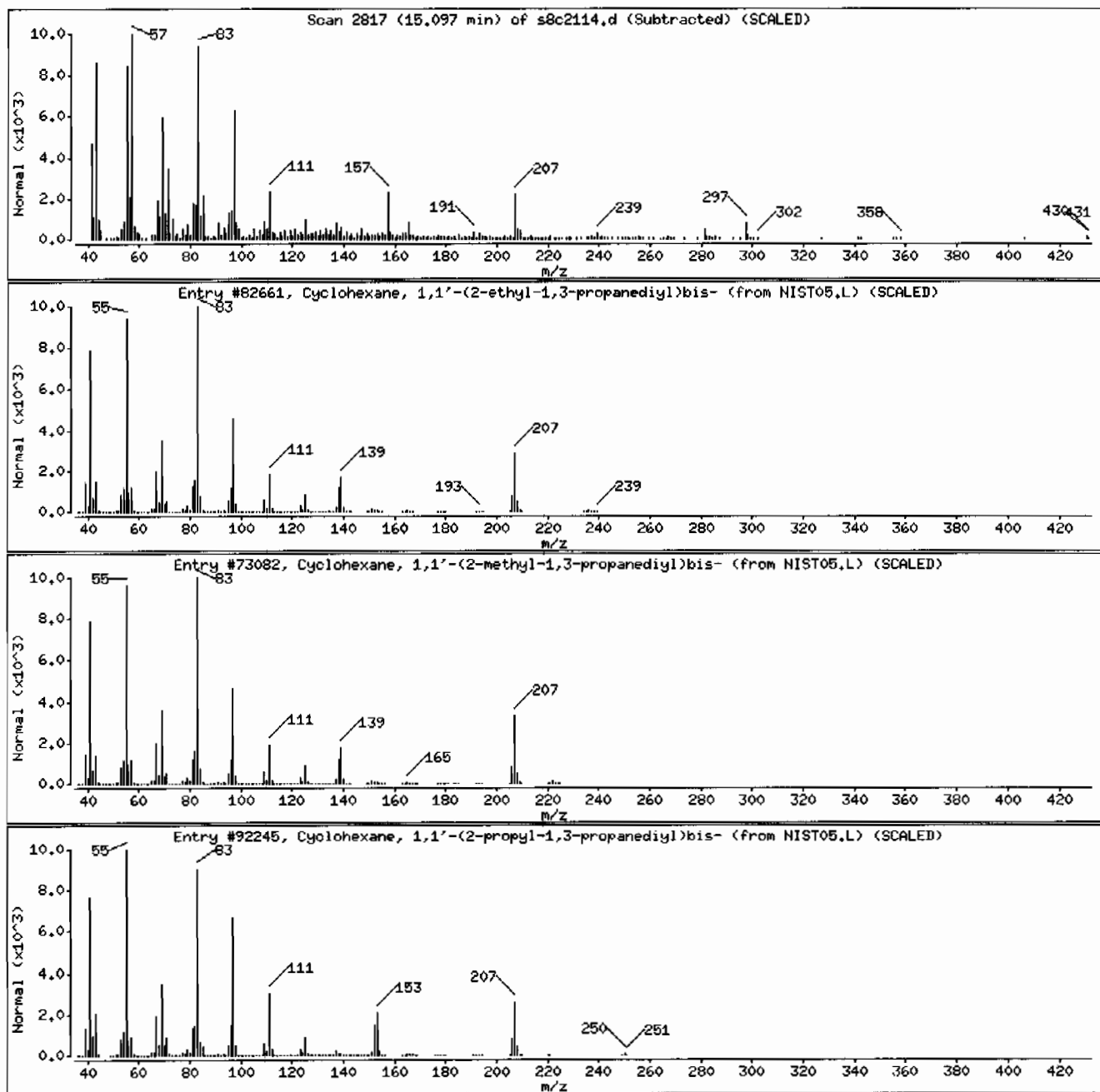
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	54833-34-0	NIST05.L	82661	76	C17H32	236
Cyclohexane, 1,1'-(2-methyl-1,3-propanedi	2883-08-1	NIST05.L	73082	76	C16H30	222
Cyclohexane, 1,1'-(2-propyl-1,3-propanedi	55030-21-2	NIST05.L	92245	64	C18H34	250



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: HSD8.i

Sample Info: 1248373004196192211SVH111LANL

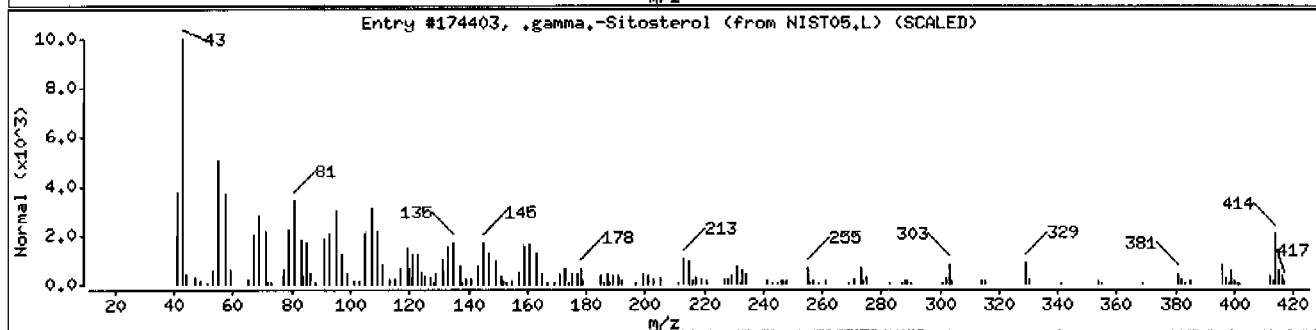
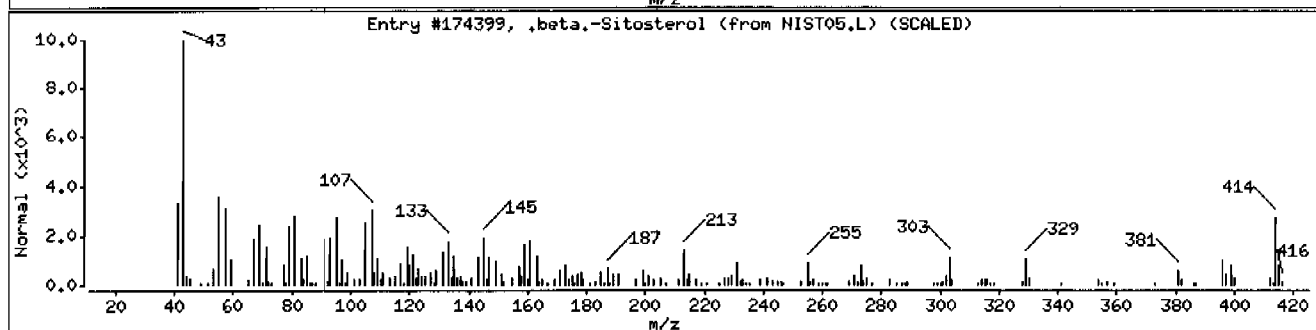
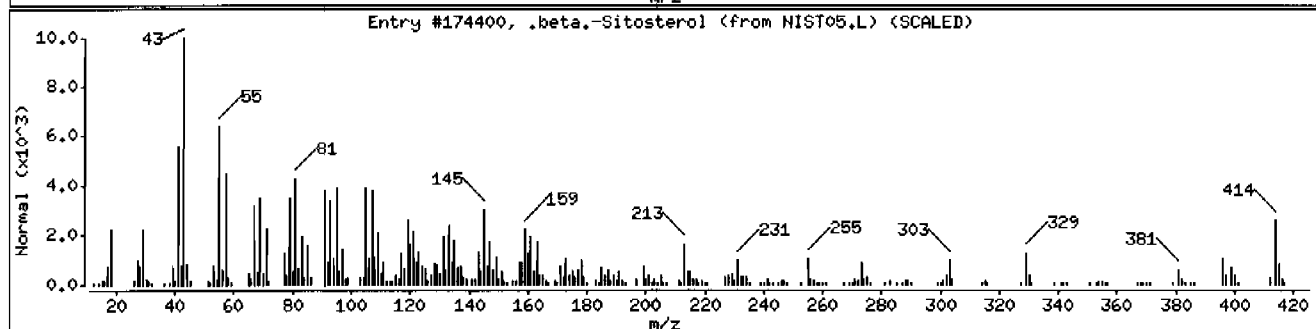
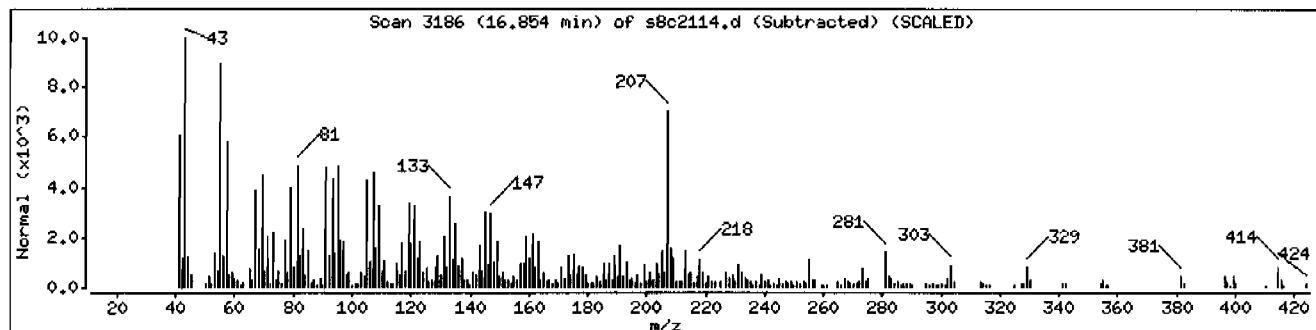
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	97	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	89	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	64	C29H50O	414



Date: 21-MAR-2010 14:26

Client ID: RE36-10-7491

Instrument: MSD8.i

Sample Info: 1248373004196192211SVH111LANL

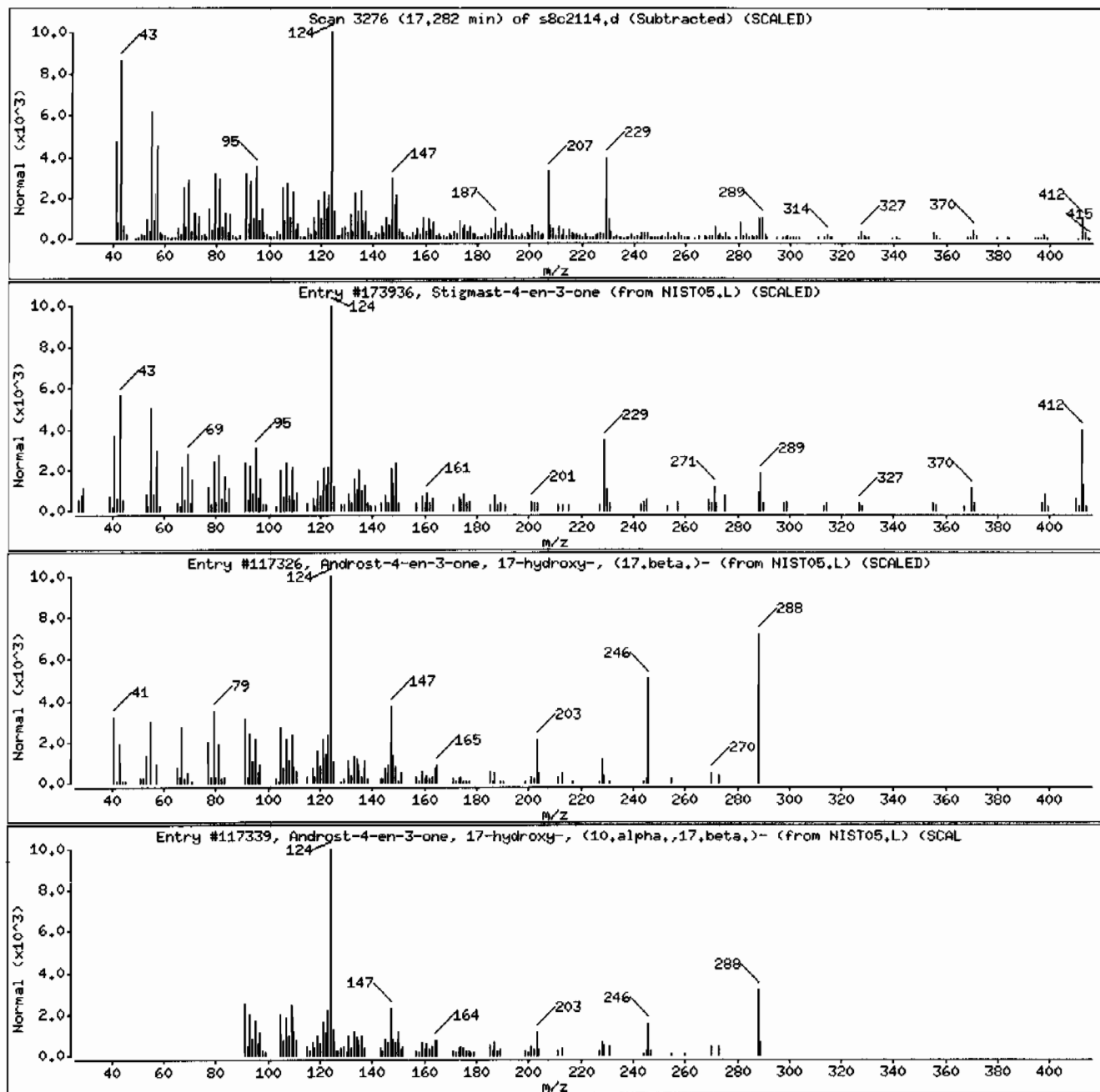
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	94	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117326	60	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (10.alp	604-39-7	NIST05.L	117339	55	C19H28O2	288



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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373003	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7492	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 13:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s8c2113.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	421	ug/kg	84.2	421
108-95-2	Phenol	U	421	ug/kg	84.2	421
95-57-8	2-Chlorophenol	U	421	ug/kg	84.2	421
106-46-7	1,4-Dichlorobenzene	U	421	ug/kg	84.2	421
621-64-7	N-Nitrosodipropylamine	U	421	ug/kg	84.2	421
59-50-7	4-Chloro-3-methylphenol	U	421	ug/kg	84.2	421
83-32-9	Acenaphthene	U	42.1	ug/kg	13.9	42.1
121-14-2	2,4-Dinitrotoluene	U	421	ug/kg	42.1	421
100-02-7	4-Nitrophenol	U	421	ug/kg	139	421
87-86-5	Pentachlorophenol	U	421	ug/kg	105	421
129-00-0	Pyrene	U	42.1	ug/kg	12.6	42.1
110-86-1	Pyridine	U	421	ug/kg	84.2	421
62-53-3	Aniline	U	421	ug/kg	126	421
111-44-4	bis(2-Chloroethyl) ether	U	421	ug/kg	84.2	421
541-73-1	1,3-Dichlorobenzene	U	421	ug/kg	84.2	421
100-51-6	Benzyl alcohol	U	421	ug/kg	126	421
95-50-1	1,2-Dichlorobenzene	U	421	ug/kg	84.2	421
108-60-1	bis(2-Chloroisopropyl)ether	U	421	ug/kg	84.2	421
95-48-7	o-Cresol	U	421	ug/kg	84.2	421
65794-96-9	m,p-Cresols	U	421	ug/kg	126	421
67-72-1	Hexachloroethane	U	421	ug/kg	84.2	421
98-95-3	Nitrobenzene	U	421	ug/kg	84.2	421
78-59-1	Isophorone	U	421	ug/kg	84.2	421
88-75-5	2-Nitrophenol	U	421	ug/kg	84.2	421
105-67-9	2,4-Dimethylphenol	U	421	ug/kg	147	421
111-91-1	bis(2-Chloroethoxy)methane	U	421	ug/kg	84.2	421
120-83-2	2,4-Dichlorophenol	U	421	ug/kg	84.2	421
65-85-0	Benzoic acid	U	842	ug/kg	211	842
91-20-3	Naphthalene	U	42.1	ug/kg	12.6	42.1
106-47-8	4-Chloroaniline	U	421	ug/kg	84.2	421
87-68-3	Hexachlorobutadiene	U	421	ug/kg	84.2	421
91-57-6	2-Methylnaphthalene	U	42.1	ug/kg	8.42	42.1
77-47-4	Hexachlorocyclopentadiene	U	421	ug/kg	84.2	421
88-06-2	2,4,6-Trichlorophenol	U	421	ug/kg	84.2	421
95-95-4	2,4,5-Trichlorophenol	U	421	ug/kg	84.2	421
91-58-7	2-Chloronaphthalene	U	42.1	ug/kg	13.9	42.1
88-74-4	2-Nitroaniline	U	421	ug/kg	84.2	421
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	421	ug/kg	84.2	421

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

SDG Number: 10-2154
Lab Sample ID: 248373003

Client ID: RE36-10-7492
Batch ID: 961922
Run Date: 03/21/2010 13:56
Prep Date: 03/07/2010 12:04
Data File: s8c2113.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	421	ug/kg	84.2	421
606-20-2	2,6-Dinitrotoluene	U	421	ug/kg	42.1	421
208-96-8	Acenaphthylene	U	42.1	ug/kg	12.6	42.1
51-28-5	2,4-Dinitrophenol	U	842	ug/kg	160	842
132-64-9	Dibenzofuran	U	421	ug/kg	84.2	421
84-66-2	Diethylphthalate	U	421	ug/kg	84.2	421
86-73-7	Fluorene	U	42.1	ug/kg	12.6	42.1
7005-72-3	4-Chlorophenylphenylether	U	421	ug/kg	84.2	421
534-52-1	2-Methyl-4,6-dinitrophenol	U	421	ug/kg	84.2	421
100-01-6	4-Nitroaniline	U	421	ug/kg	126	421
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	421	ug/kg	84.2	421
122-66-7	Azobenzene	U	421	ug/kg	84.2	421
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	421	ug/kg	84.2	421
118-74-1	Hexachlorobenzene	U	421	ug/kg	84.2	421
85-01-8	Phenanthrene	U	42.1	ug/kg	12.6	42.1
120-12-7	Anthracene	U	42.1	ug/kg	8.42	42.1
84-74-2	Di-n-butylphthalate	U	421	ug/kg	84.2	421
206-44-0	Fluoranthene	U	42.1	ug/kg	12.6	42.1
85-68-7	Butylbenzylphthalate	U	421	ug/kg	84.2	421
56-55-3	Benzo(a)anthracene	U	42.1	ug/kg	12.6	42.1
91-94-1	3,3'-Dichlorobenzidine	U	421	ug/kg	126	421
218-01-9	Chrysene	U	42.1	ug/kg	12.6	42.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	421	ug/kg	84.2	421
117-84-0	Di-n-octylphthalate	U	421	ug/kg	84.2	421
205-99-2	Benzo(b)fluoranthene	U	42.1	ug/kg	12.6	42.1
207-08-9	Benzo(k)fluoranthene	U	42.1	ug/kg	12.6	42.1
50-32-8	Benzo(a)pyrene	U	42.1	ug/kg	12.6	42.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.1	ug/kg	12.6	42.1
53-70-3	Dibenzo(a,h)anthracene	U	42.1	ug/kg	12.6	42.1
191-24-2	Benzo(ghi)perylene	U	42.1	ug/kg	12.6	42.1
120-82-1	1,2,4-Trichlorobenzene	U	421	ug/kg	84.2	421

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.71	763	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.69	1710	ug/kg	97	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373003	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7492	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 13:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s8c2113.d	Column: J&W DB-5MS	Level: LOW

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

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.25	556	ug/kg	97	NJ
1120-21-4	Undecane	4.85	246	ug/kg	90	NJ
1000130-90-8	Z-7-Hexadecenoic acid	9.52	196	ug/kg	98	NJ
57-10-3	n-Hexadecanoic acid	9.59	627	ug/kg	98	NJ
	Unknown	10.15	180	ug/kg		J
593-39-5	6-Octadecenoic acid, (Z)-	10.36	1270	ug/kg	91	NJ
	Unknown	10.92	170	ug/kg		J
	Unknown	11.16	245	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	211	ug/kg	98	NJ
	Unknown	11.3	318	ug/kg		J
	Unknown	11.35	201	ug/kg		J
	Unknown	11.55	871	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.66	1600	ug/kg	90	NJ
112-85-6	Docosanoic acid	11.99	258	ug/kg	99	NJ
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.2	186	ug/kg	91	NJ
112-95-8	Eicosane	12.69	194	ug/kg	95	NJ
557-59-5	Tetracosanoic acid	12.89	255	ug/kg	98	NJ
55320-06-4	Heneicosane, 11-decyl-	12.92	447	ug/kg	83	NJ
1599-67-3	1-Docosene	13.17	352	ug/kg	96	NJ
	Unknown	13.7	477	ug/kg		J
4860-03-1	Hexadecane, 1-chloro-	13.96	274	ug/kg	86	NJ
	Unknown	15.32	380	ug/kg		J
	Unknown	16.08	400	ug/kg		J
	Unknown	17.01	338	ug/kg		J
	Unknown	17.27	760	ug/kg		J

Data File: /chem/MSD8.i/s032110.b/s8c2113.d
Report Date: 22-Mar-2010 09:37

Page 1

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2113.d
Lab Smp Id: 248373003 Client Smp ID: RE36-10-7492
Inj Date : 21-MAR-2010 13:56
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248373003|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	21.13930	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	4.301	4.301	(1.000)	314757	40.0000	
* 29 Naphthalene-d8		136	5.554	5.558	(1.000)	1245301	40.0000	
* 46 Acenaphthene-d10		164	7.401	7.406	(1.000)	751097	40.0000	
* 67 Phenanthrene-d10		188	8.992	8.997	(1.000)	1213393	40.0000	
* 91 Chrysene-d12		240	11.863	11.868	(1.000)	925922	40.0000	
* 98 Perylene-d12		264	13.873	13.878	(1.000)	588583	40.0000	
\$ 3 2-Fluorophenol		112	3.168	3.158	(0.736)	528205	71.0815	2990
\$ 5 Phenol-d5		99	3.935	3.930	(0.915)	650731	70.2181	2960
\$ 20 Nitrobenzene-d5		82	4.825	4.830	(0.869)	301773	34.0894	1440
\$ 39 2-Fluorebiphenyl		172	6.677	6.682	(0.902)	665983	30.1235	1270
\$ 60 2,4,6-Tribromophenol		329	8.244	8.244	(1.114)	148747	59.9097	2520
\$ 81 p-Terphenyl-d14		244	10.706	10.706	(0.902)	668272	40.0883	1690

ION RATIO REPORT

SV REPORT

Data file: s8c2113.d

Report Date: 03/22/2010 07:16

Lab. ID: 248373003

SampleType: SAMPLE

Injection Date: 21-MAR-2010 13:56

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373003|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	32997	3.93	4.00	80-120	100	(T)
93	24002	3.98	4.00	213-273	73	(Q)

6 Phenol		CAS#: 108-95-2				
94	35146	4.04	3.94	80-120	100	(T)
66	6714	4.04	3.94	13- 73	19	(T)
65	19530	4.04	3.94	3- 63	56	(T)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	40773	4.83	4.68	80-120	100	(T)
42	21213	4.83	4.68	31- 91	52	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	20217	5.23	5.28	80-120	100	()
122	14899	5.23	5.28	64-124	74	()
77	11741	5.23	5.28	47-107	58	()

30 Naphthalene		CAS#: 91-20-3				
128	497	5.57	5.58	80-120	100	()
129	115	5.55	5.58	0- 41	23	()
127	0	0.00	5.58	0- 43	0	(T)

34 2-Methylnaphthalene		CAS#: 91-57-6				
142	232	6.30	6.30	80-120	100	()
141	164	6.30	6.30	56-116	71	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	1083	6.81	6.81	80-120	100	()
164	106	6.77	6.81	3- 63	10	()
127	264	6.80	6.81	7- 67	24	()

42 o-Nitroaniline				CAS#: 88-74-4		
65	15799	7.01	6.92	80-120	100	(T)
92	17008	7.01	6.92	33- 93	108	(QT)
138	1767	7.01	6.92	76-136	11	(QT)

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	96291	7.40	7.18	80-120	100	(T)
63	1901	7.40	7.18	32- 92	2	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	96291	7.40	7.61	80-120	100	(T)
89	1609	7.40	7.61	47-107	2	(QT)
63	1901	7.40	7.61	26- 86	2	(QT)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	502	8.24	8.04	80-120	100	(T)
105	1731	8.24	8.04	14- 74	344	(QT)
51	1016	8.24	8.04	26- 86	202	(QT)

68 Phenanthrene				CAS#: 85-01-8		
178	2603	9.02	9.02	80-120	100	()
179	379	9.02	9.02	0- 45	15	()
176	634	9.02	9.02	0- 49	24	()

85 Butylbenzylphthalate				CAS#: 85-68-7		
149	45296	11.32	11.23	80-120	100	(T)
91	63548	11.32	11.23	40-100	140	(QT)
206	365	11.32	11.23	0- 48	1	(T)

92 Chrysene				CAS#: 218-01-9		
228	1700	11.89	11.90	80-120	100	()
229	1044	11.89	11.90	0- 49	61	(Q)
226	731	11.90	11.90	0- 59	43	()

94 Di-n-octylphthalate				CAS#: 117-84-0		
149	316	12.78	12.73	80-120	100	()
43	20198	12.78	12.73	0- 41	6389	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2113.d
Lab Smp Id: 248373003 Client Smp ID: RE36-10-7492
Inj Date : 21-MAR-2010 13:56
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248373003|961922|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	21.13930	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.301	1922709	40.000
* 67 Phenanthrene-d10	8.992	3141001	40.000
* 91 Chrysene-d12	11.863	2992960	40.000
* 98 Perylene-d12	13.873	1676687	40.000

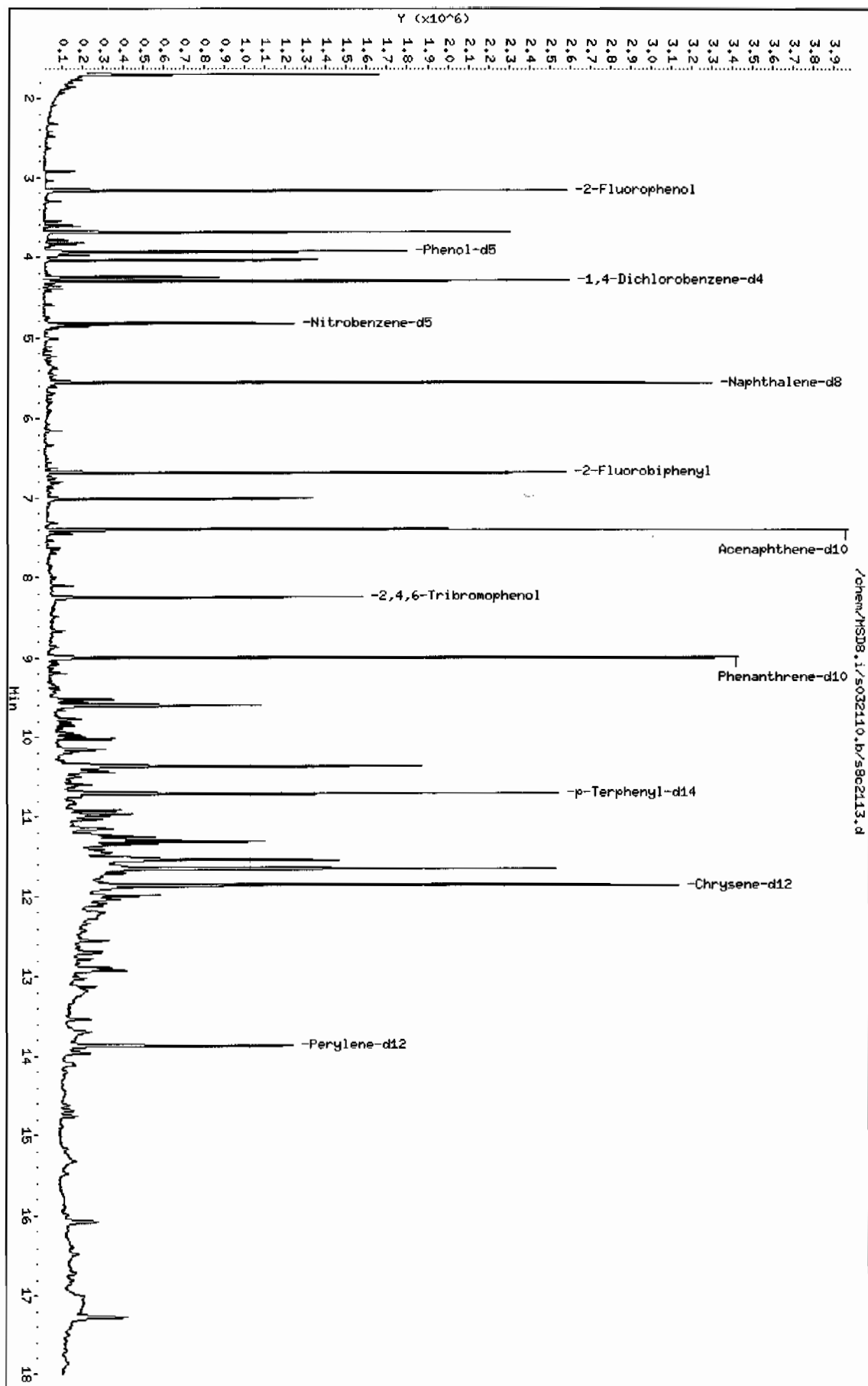
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.706	871518	18.1310505	763	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.687	1955844	40.6893365	1710	97	NIST05.L	15188	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
4.254	634556	13.2012954	556	97	NIST05.L	15369	10
Undecane					CAS #: 1120-21-4		
4.854	280506	5.83564175	246	90	NIST05.L	27236	10
Z-7-Hexadecenoic acid					CAS #: 1000130-90-8		
9.516	364896	4.64687853	196	98	NIST05.L	94744	67
n-Hexadecanoic acid					CAS #: 57-10-3		
9.592	1169231	14.8899096	627	98	NIST05.L	96233	67
Unknown					CAS #:		
10.149	335074	4.26709565	180	0		0	67
6-Octadecenoic acid, (Z)-					CAS #: 593-39-5		
10.363	2366772	30.1403513	1270	91	NIST05.L	113359	67
Unknown					CAS #:		
10.920	301654	4.03151756	170	0		0	91
Unknown					CAS #:		
11.158	435530	5.82072573	245	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
11.258	375269	5.01536170	211	98	NIST05.L	133618	91
Unknown					CAS #:		
11.297	565406	7.55647911	318	0		0	91
Unknown					CAS #:		
11.349	357020	4.77146340	201	0		0	91
Unknown					CAS #:		
11.549	1548849	20.6998913	871	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
11.663	2851632	38.1111985	1600	90	NIST05.L	125037	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Docosanoic acid					CAS #: 112-85-6		
11.992	457667	6.11657752	258	99	NIST05.L	147935	91
1,2-Benzisothiazole, 3-(hexahydro-1H-aze					CAS #: 309735-29-3		
12.201	330840	4.42157951	186	91	NIST05.L	101019	91
Eicosane					CAS #: 112-95-8		
12.692	345662	4.61966739	194	95	NIST05.L	113490	91
Tetracosanoic acid					CAS #: 557-59-5		
12.887	253467	6.04684550	254	98	NIST05.L	160633	98
Heptacosane, 11-decyl-					CAS #: 55320-06-4		
12.920	444946	10.6148849	447	83	NIST05.L	178194	98
1-Docosene					CAS #: 1599-67-3		
13.173	350813	8.36918080	352	96	NIST05.L	129889	98
Unknown					CAS #:		
13.697	475200	11.3366426	477	0		0	98
Hexadecane, 1-chloro-					CAS #: 4860-03-1		
13.963	273017	6.51324984	274	86	NIST05.L	98777	98
Unknown					CAS #:		
15.320	378718	9.03491829	380	0		0	98
Unknown					CAS #:		
16.078	397900	9.49252831	400	0		0	98
Unknown					CAS #:		
17.006	336989	8.03939868	338	0		0	98
Unknown					CAS #:		
17.273	756889	18.0567610	760	0		0	98

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 Date: 21-MAR-2010 13:56
 Client ID: RE36-10-7492
 Sample Info: 1248373003196192211SVH11LALHL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: MSD8.i
 Operator: nag1
 Column diameter: 0.20



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.1

Sample Info: 12483730031961922111SVMI11LANL

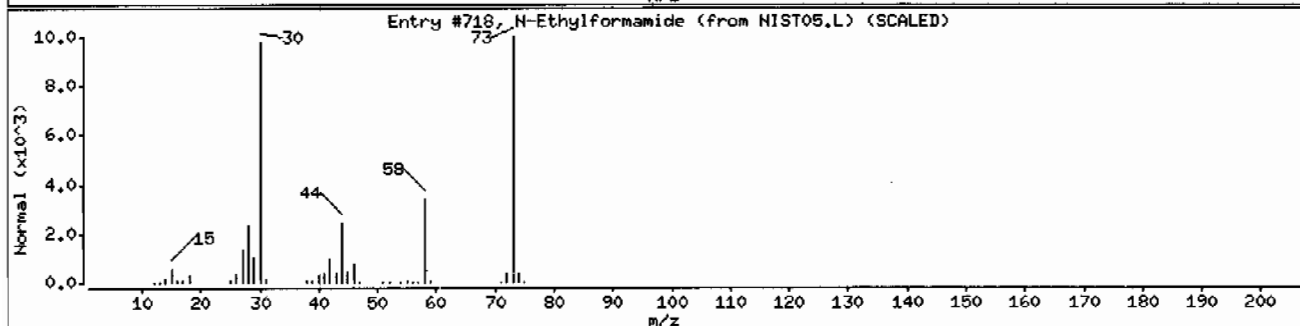
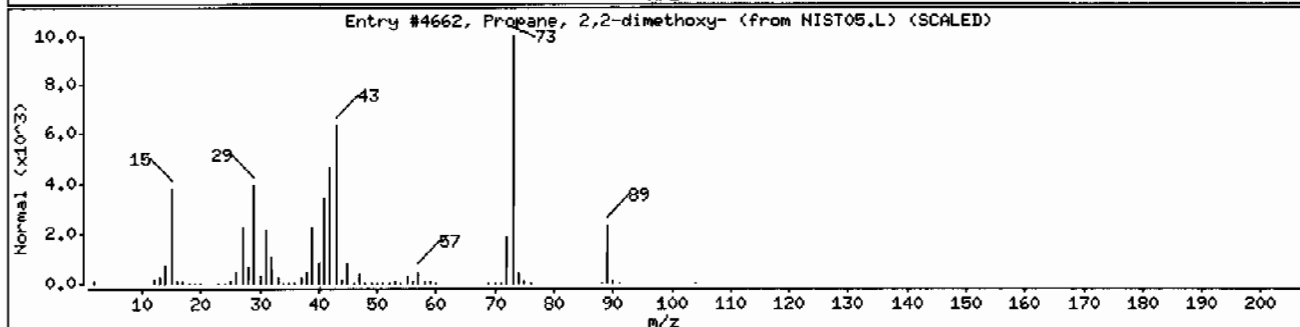
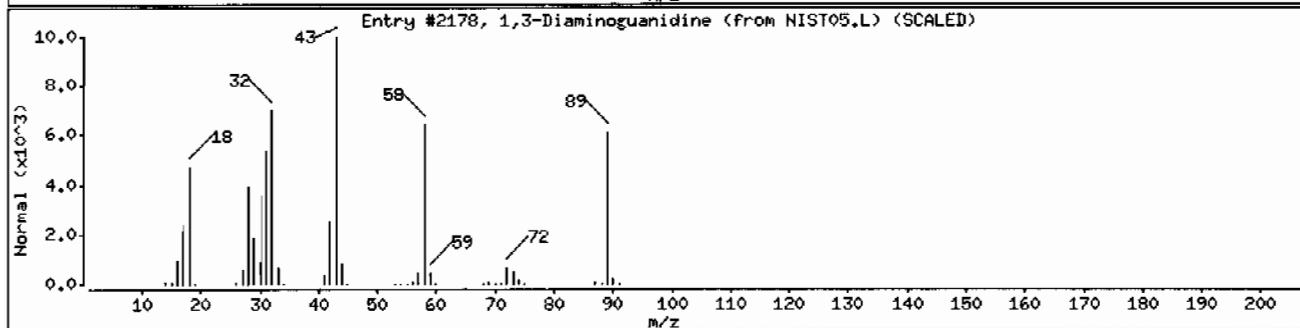
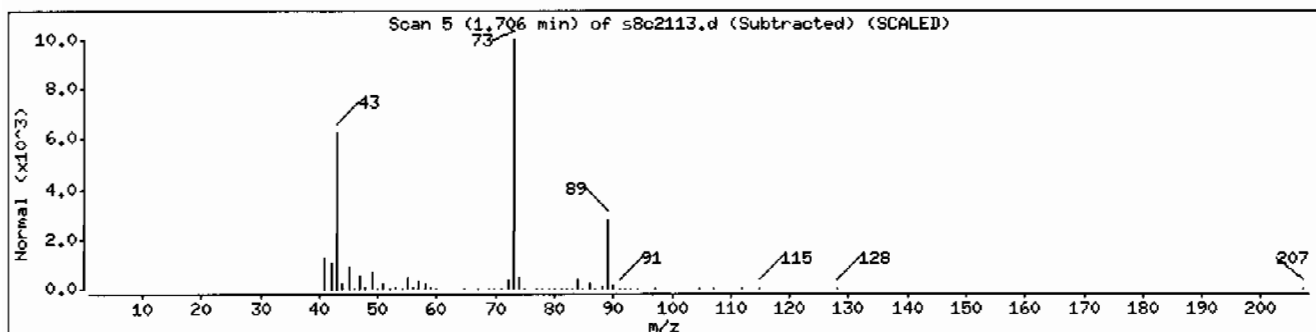
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	38	CH7N5	89
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	37	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	25	C3H7NO	73



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: HSD8.i

Sample Info: 1248373003196192211ISVH111LANL

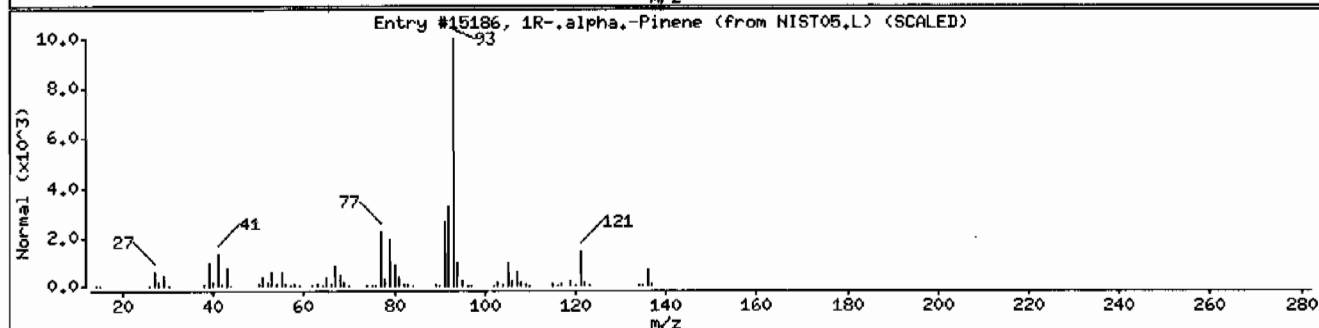
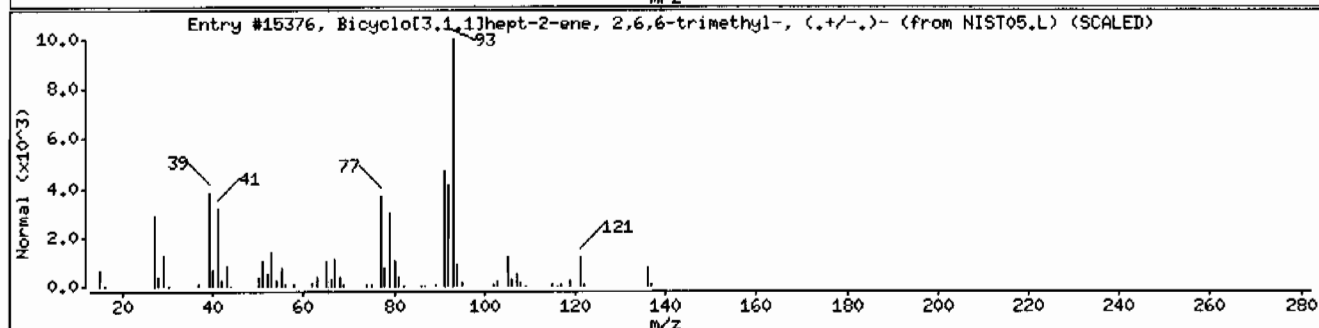
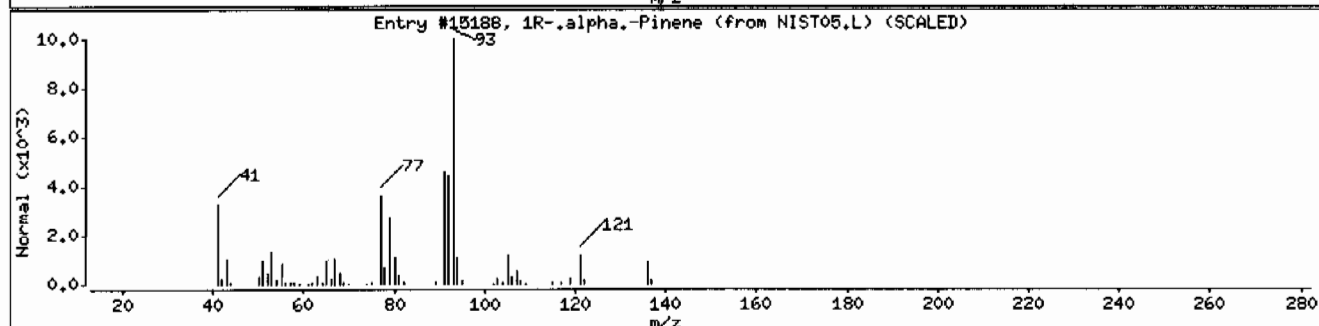
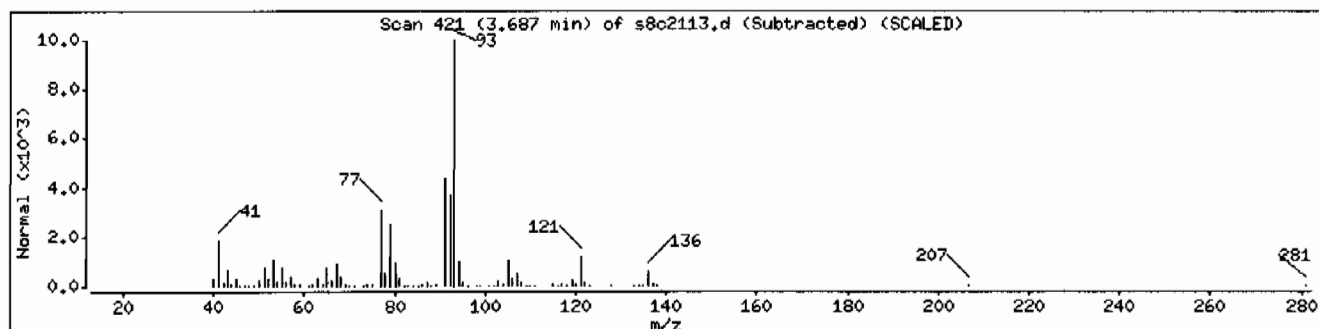
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

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



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: HSD8.i

Sample Info: I248373003196192211SVMI1ILANL

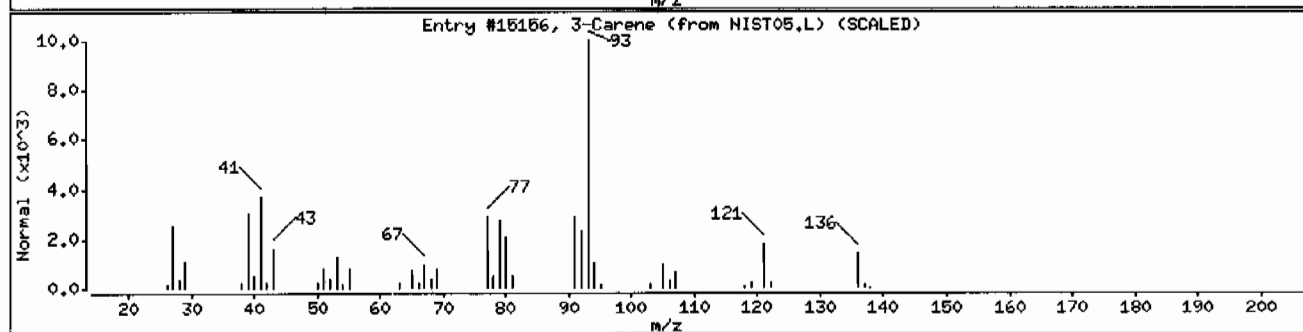
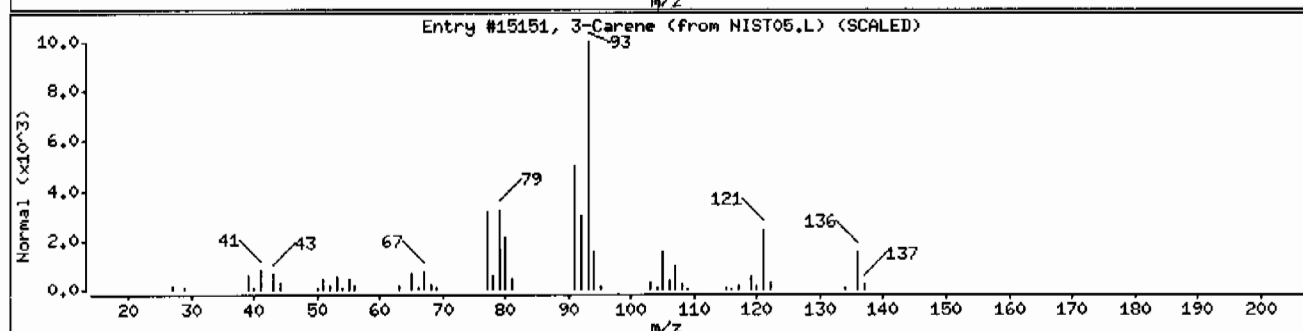
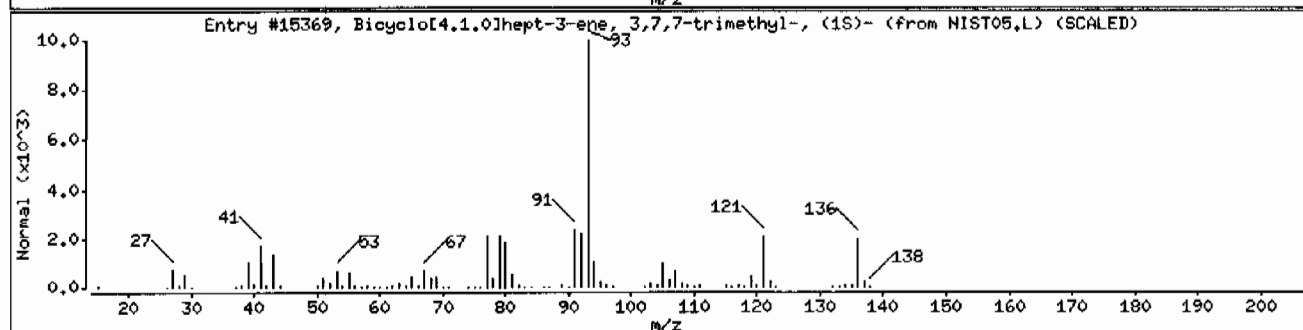
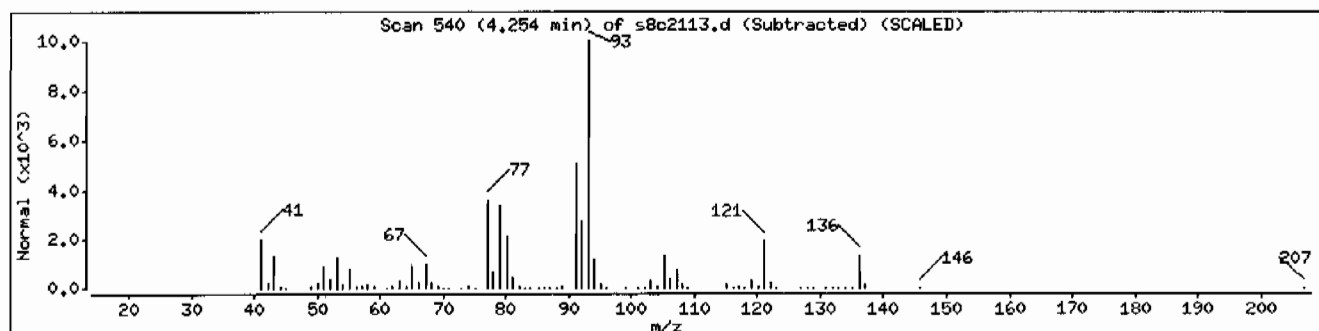
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

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



Date: 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003196192211SVMI11LANL

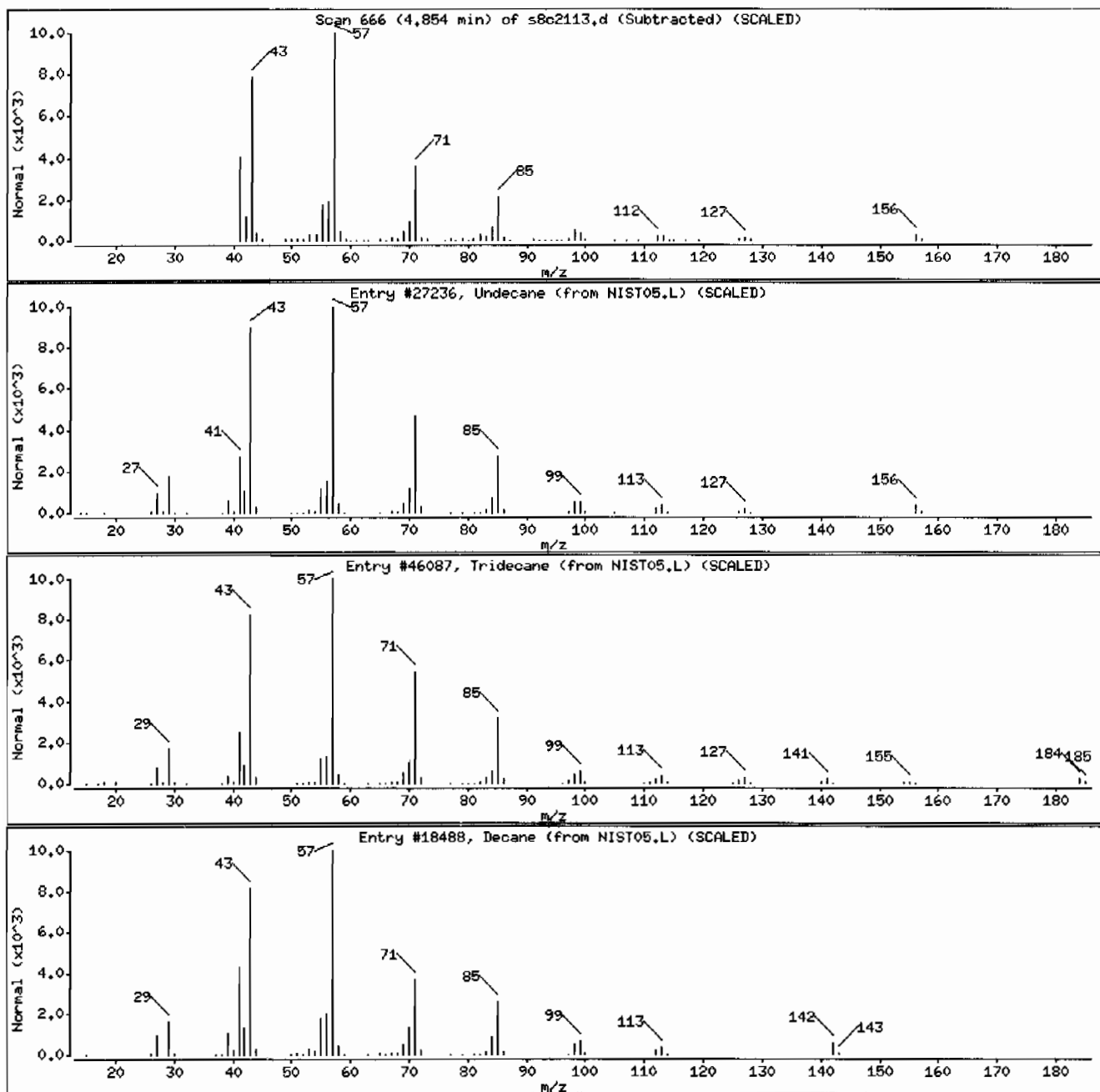
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Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Undecane	1120-21-4	NIST05.L	27236	90	C ₁₁ H ₂₄	156
Tridecane	629-50-5	NIST05.L	46087	83	C ₁₃ H ₂₈	184
Decane	124-18-5	NIST05.L	18488	83	C ₁₀ H ₂₂	142



Date: 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003196192211SVH111LANL

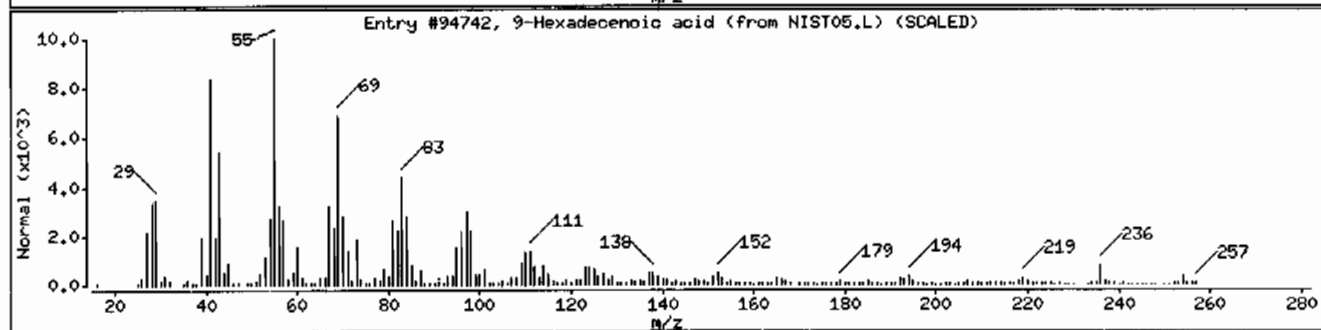
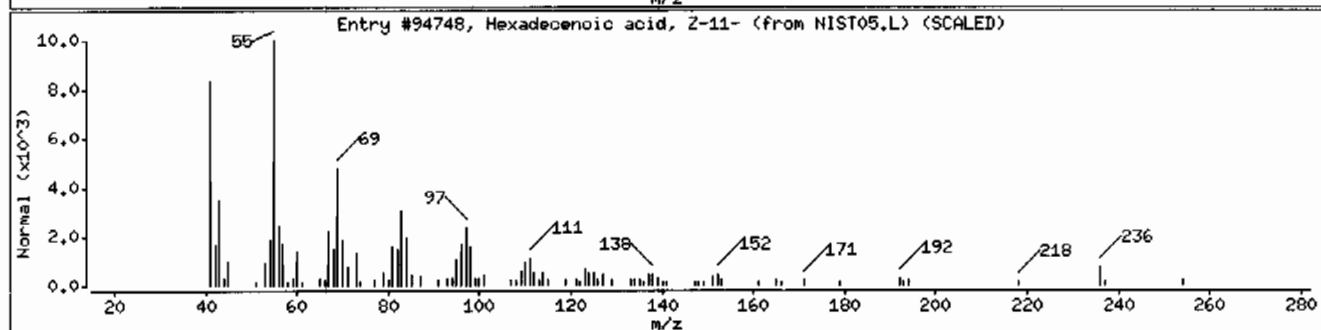
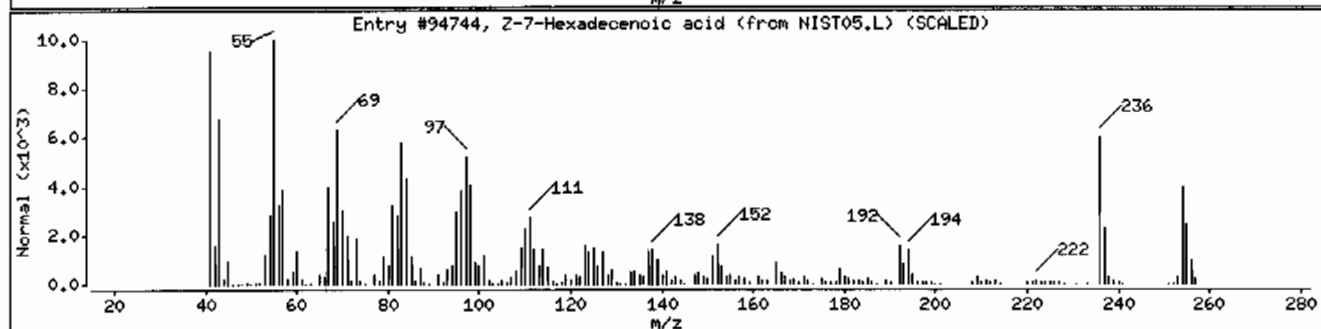
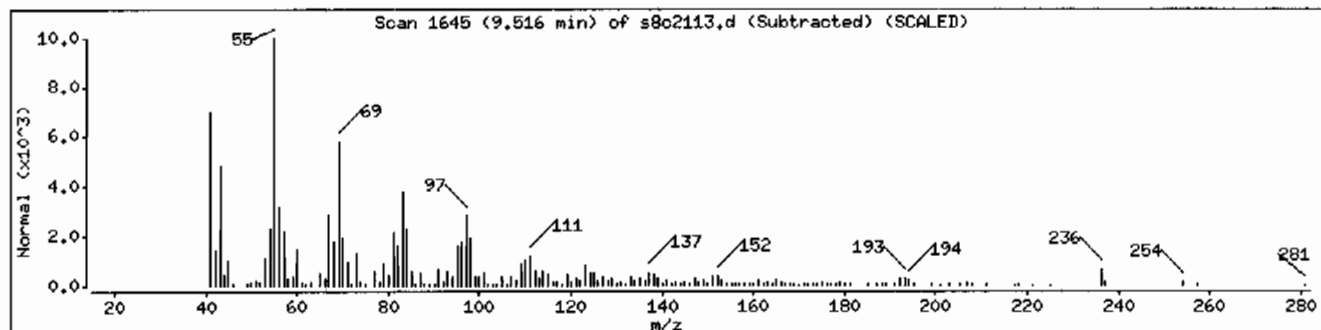
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Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Z-7-Hexadecenoic acid	1000130-90-8	NIST05.L	94744	98	C16H30O2	254
Hexadecenoic acid, Z-11-	2416-20-8	NIST05.L	94748	95	C16H30O2	254
9-Hexadecenoic acid	2091-29-4	NIST05.L	94742	93	C16H30O2	254



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 12483730031961922111SVH111LANL

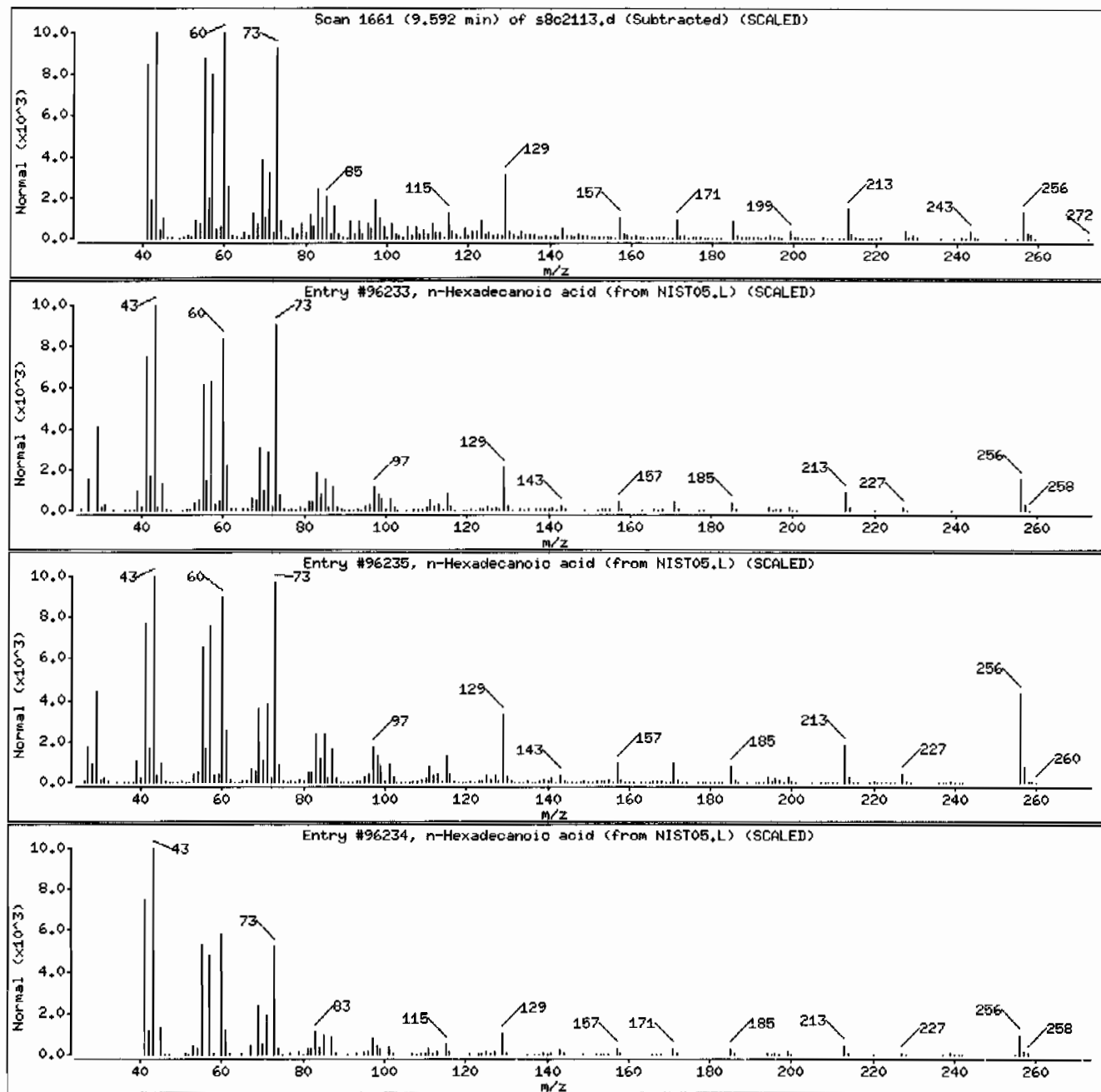
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Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST05.L	96233	98	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	94	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	91	C16H32O2	256



Date: 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

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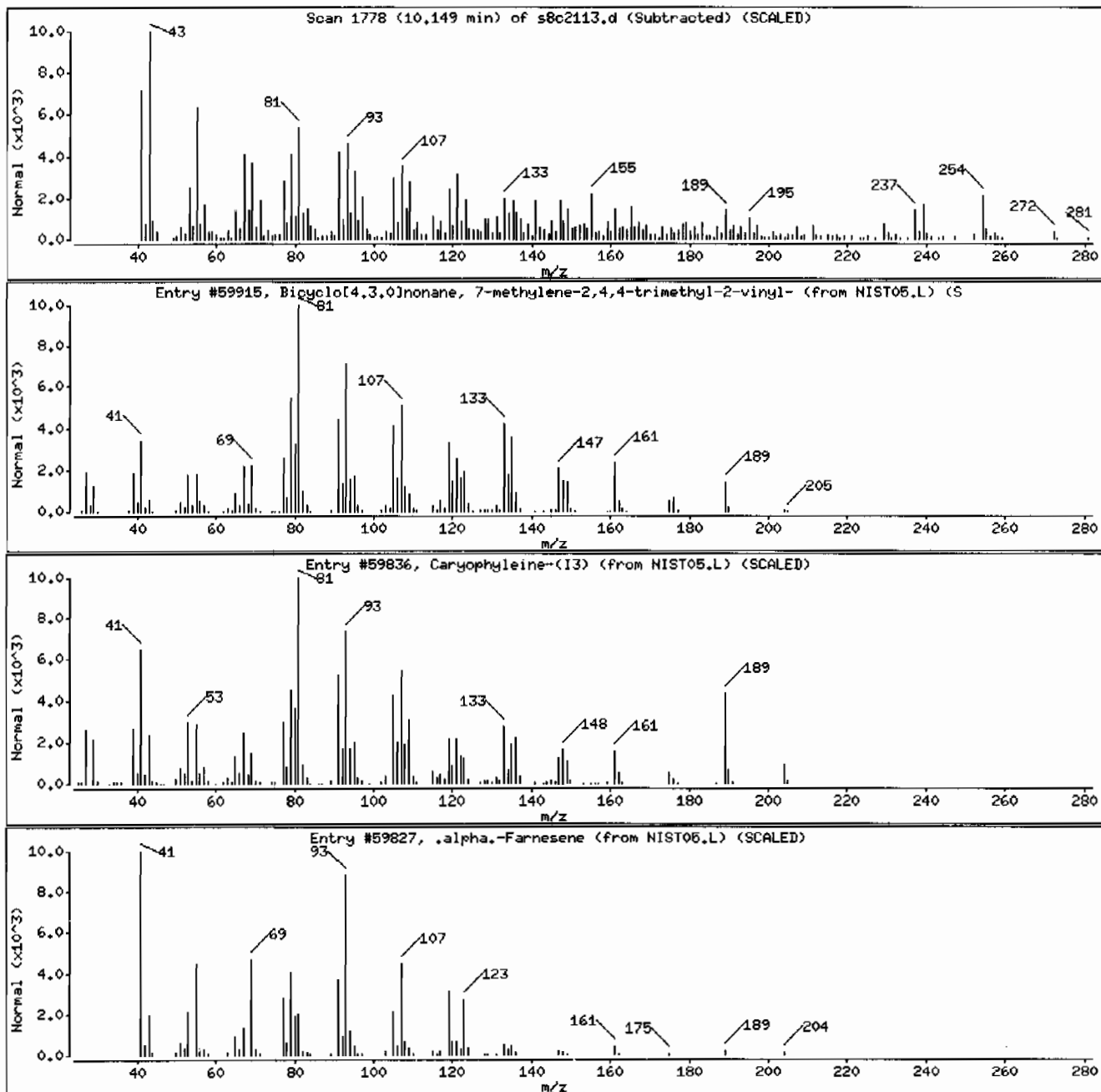
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Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	48	C15H24	204
Caryophyllene-(13)	136296-37-2	NIST05.L	59836	43	C15H24	204
.alpha.-Farnesene	502-61-4	NIST05.L	59827	42	C15H24	204



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.1

Sample Info: I248373003196192211SVH11ILANL

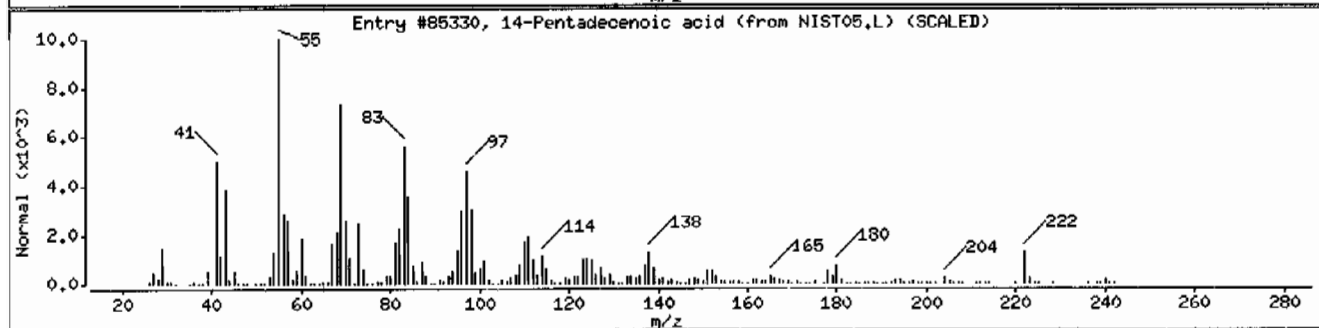
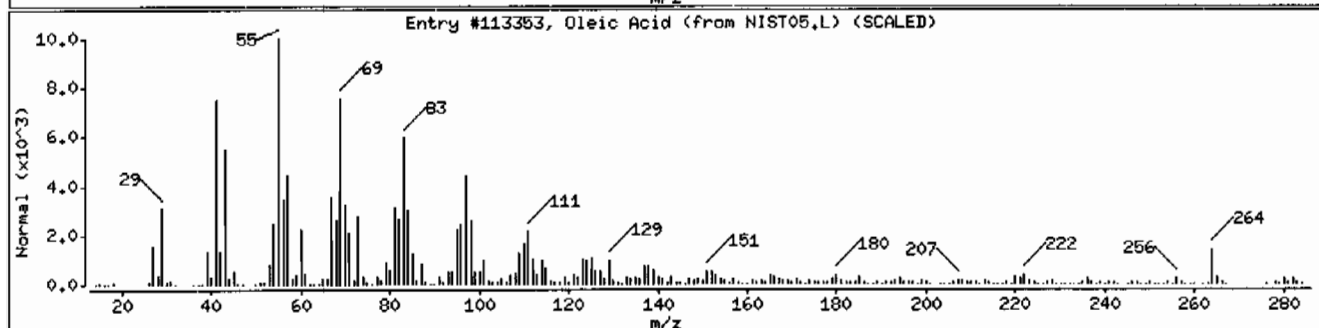
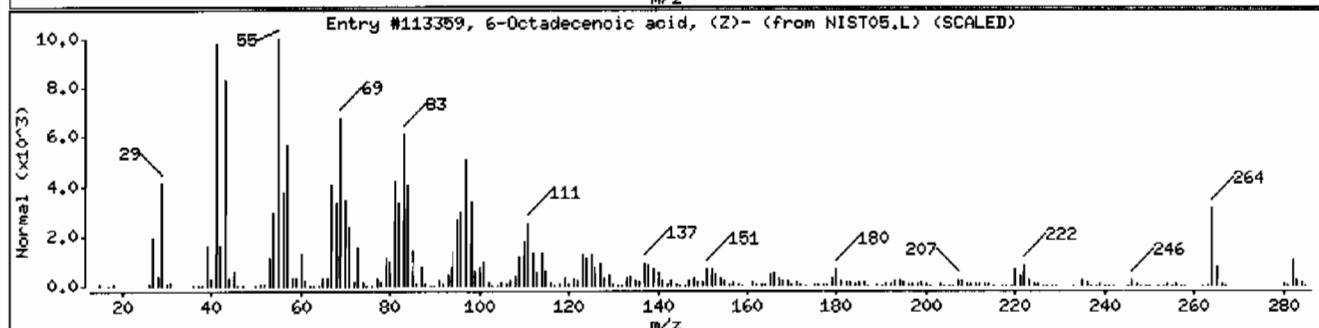
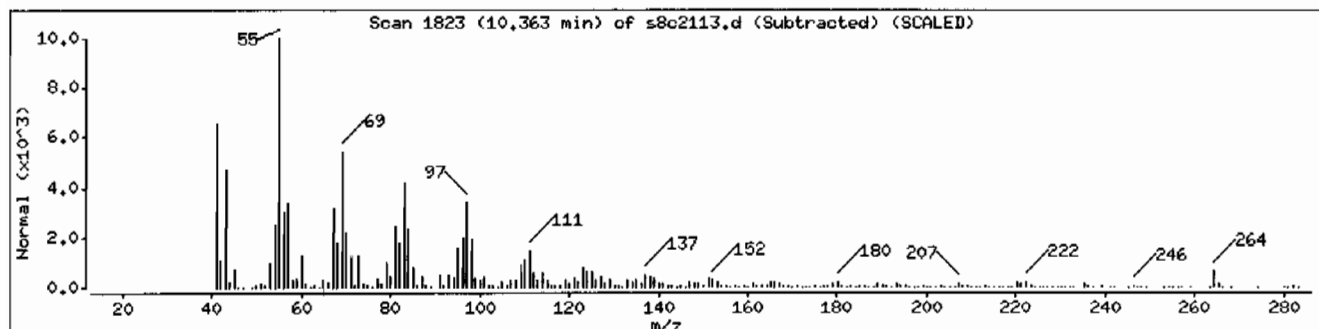
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
6-Octadecenoic acid, (Z)-	593-39-5	NIST05.L	113359	91	C18H34O2	282
Oleic Acid	112-80-1	NIST05.L	113353	90	C18H34O2	282
14-Pentadecenoic acid	17351-34-7	NIST05.L	85330	87	C15H28O2	240



Date: 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003196192211SVH111LANL

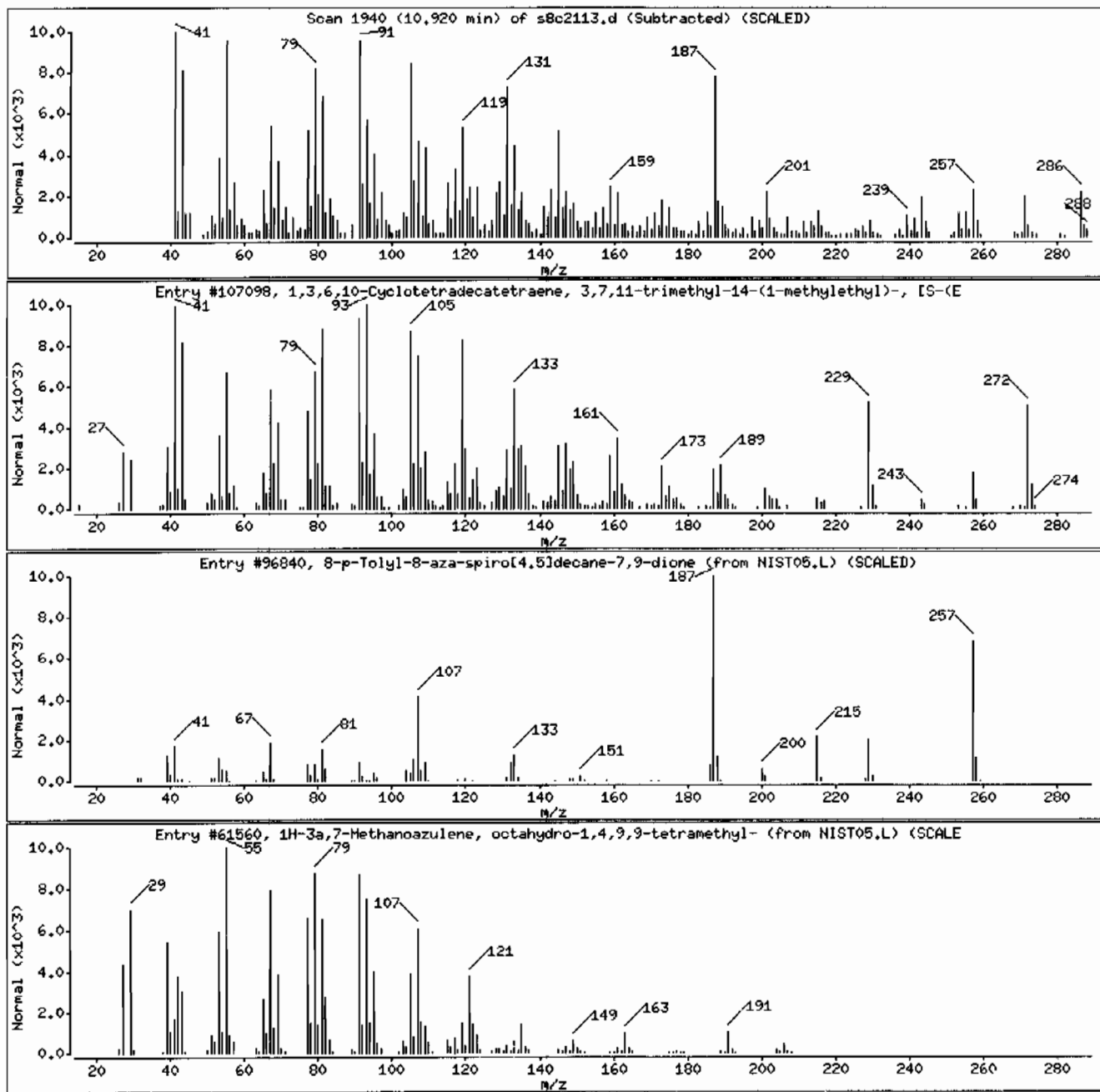
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3,6,10-Cyclotetradecatetraene, 3,7,11-	1898-13-1	NIST05.L	107098	43	C20H32	272
8-p-Tolyl-8-aza-spiro[4.5]decane-7,9-dio	1000318-33-1	NIST05.L	96840	41	C16H19NO2	257
1H-3a,7-Methanoazulene, octahydro-1,4,9,	25491-20-7	NIST05.L	61560	30	C15H26	206



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Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: I248373003I9619221I1SVH11LANL

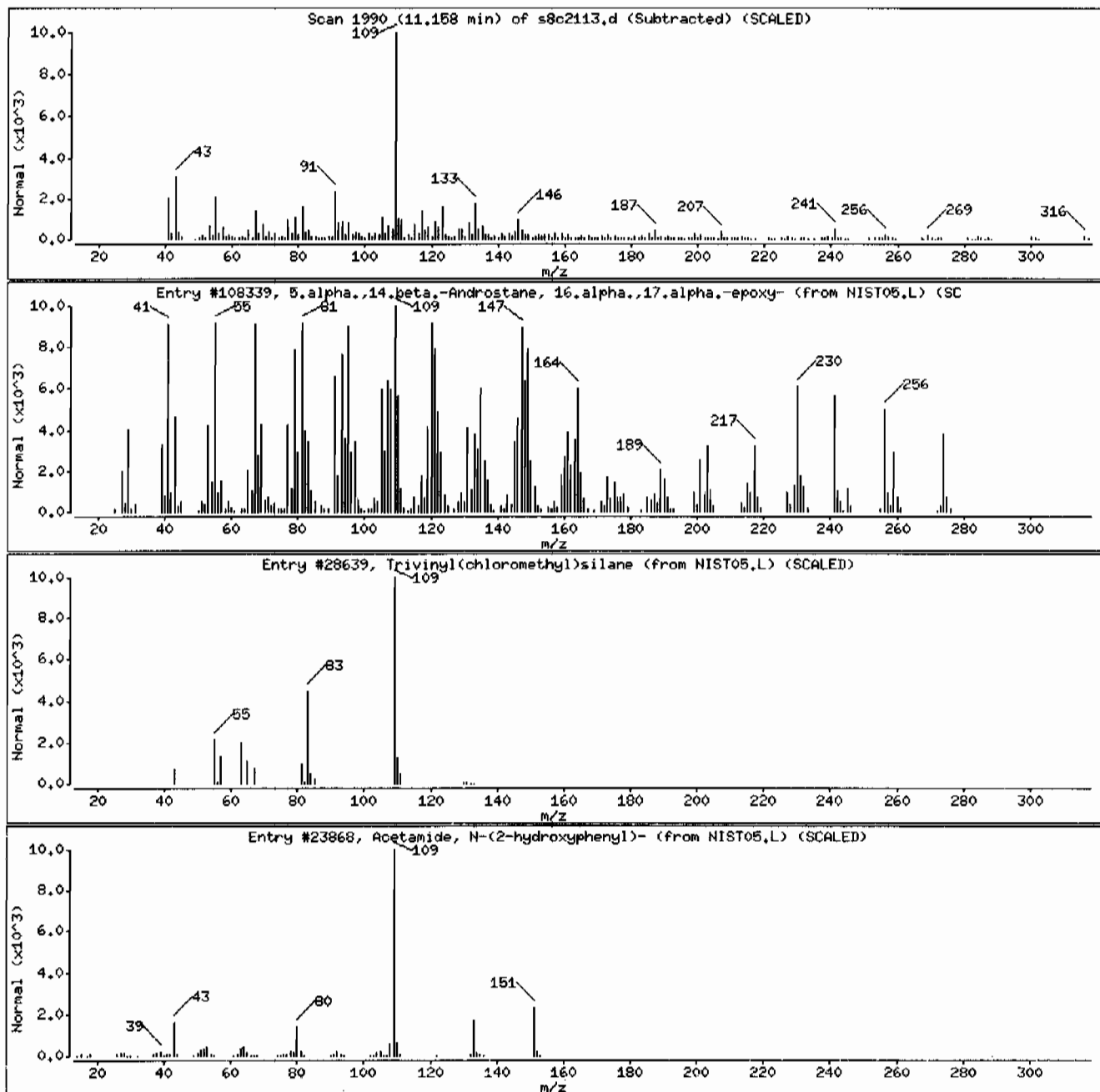
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Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5.alpha.,14.beta.-Androstane, 16.alpha.,	24174-25-2	NIST05.L	108339	56	C19H30O	274
Trivinyl(chloromethyl)silane	25202-05-5	NIST05.L	28639	50	C7H11ClSi	158
Acetamide, N-(2-hydroxyphenyl)-	614-80-2	NIST05.L	23868	50	C8H9NO2	151



Date: 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003196192211SVH11ILANL

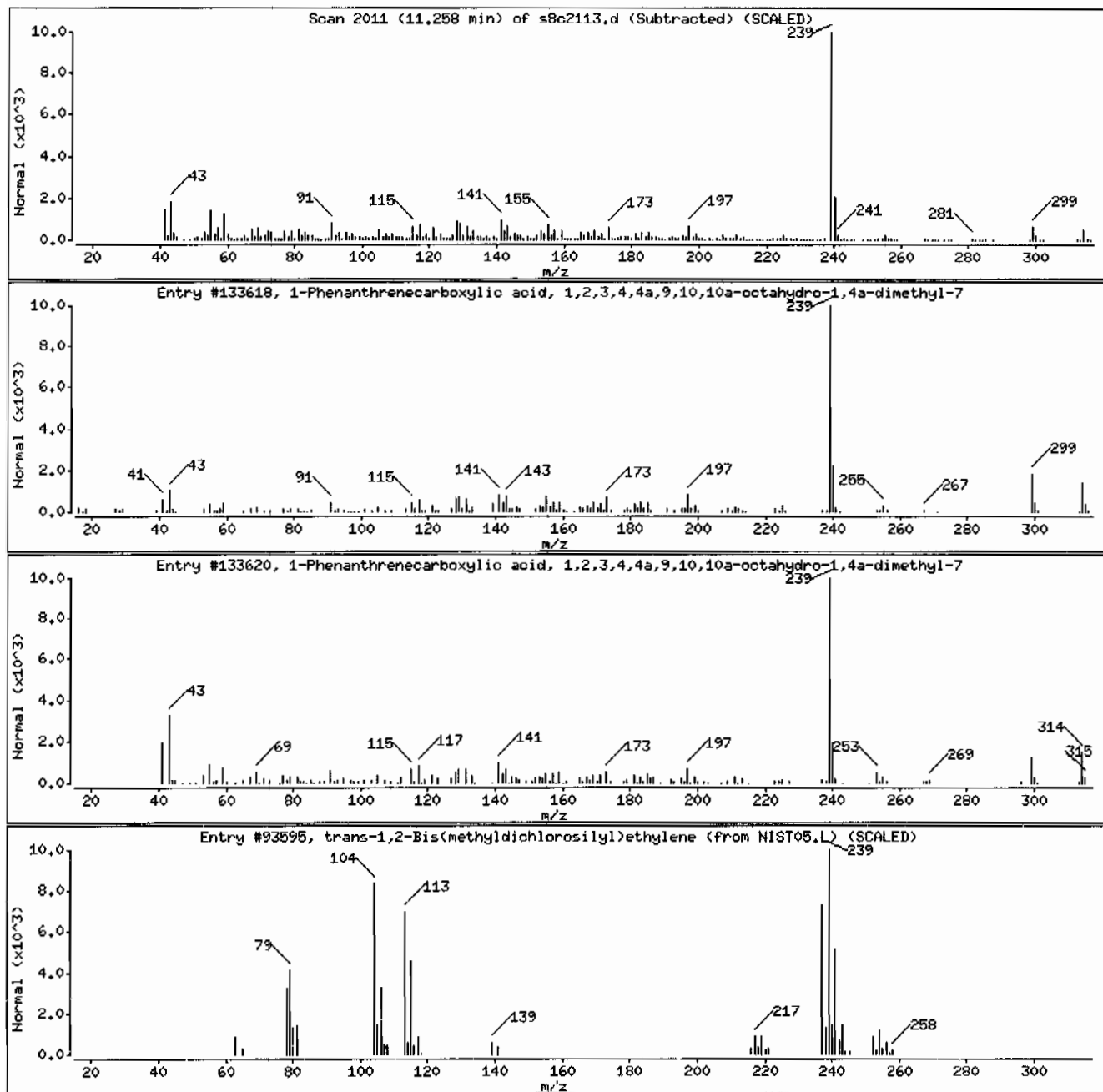
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314
trans-1,2-Bis(methyldichlorosilyl)ethylene	65899-10-7	NIST05.L	93595	90	C4H8Cl2Si2	252



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: HSD8.i

Sample Info: I248373003I961922I11SVMI1I/LANL

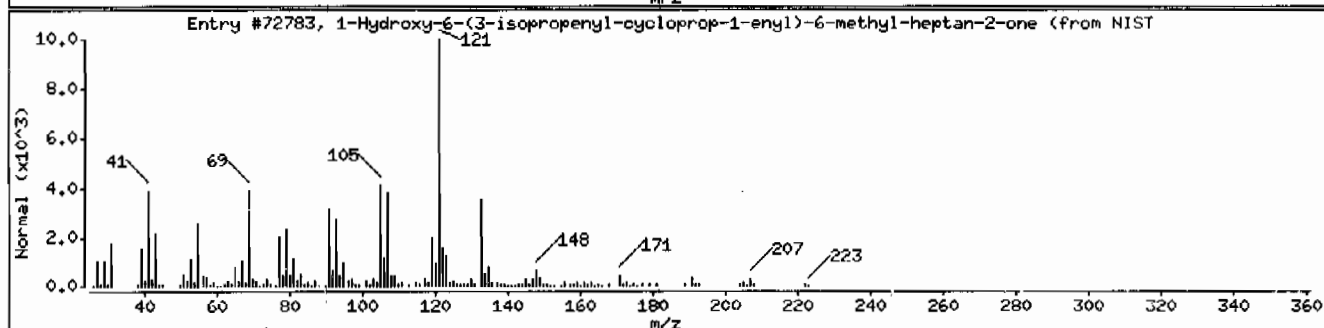
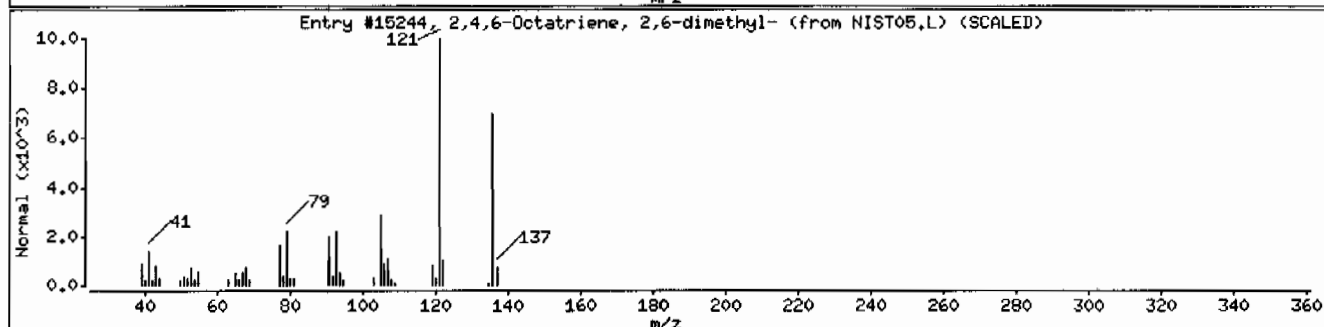
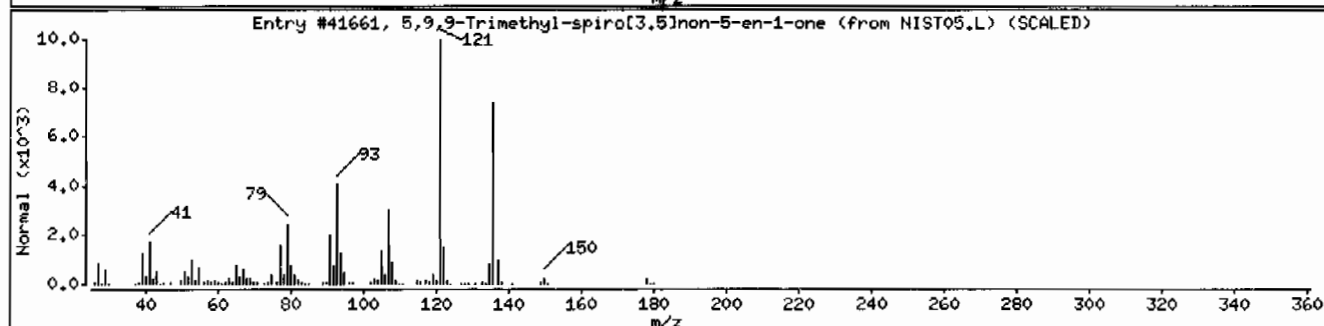
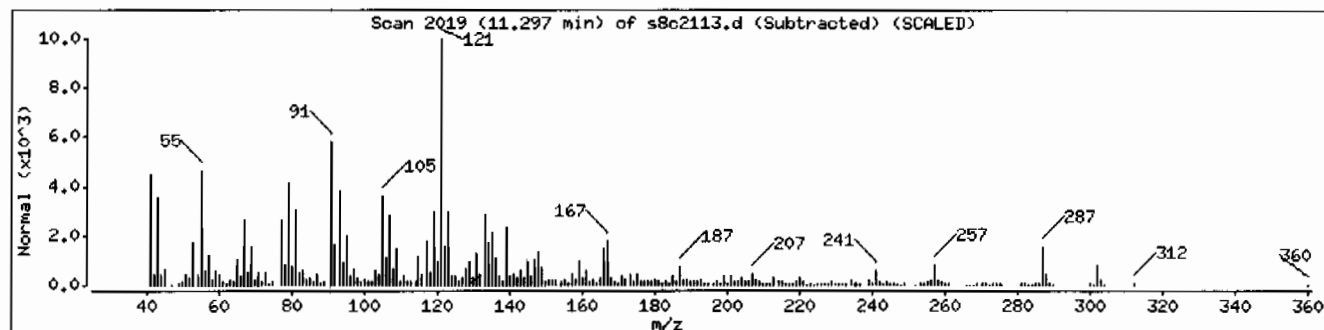
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Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5,9,9-Trimethyl-spiro[3.5]non-5-en-1-one	1000185-13-4	NIST05.L	41661	46	C ₁₂ H ₁₈ O	178
2,4,6-Octatriene, 2,6-dimethyl-	673-84-7	NIST05.L	15244	45	C ₁₀ H ₁₆	136
1-Hydroxy-6-(3-isopropenyl-cycloprop-1-en-1-yl)-6-methyl-heptan-2-one	1000189-14-9	NIST05.L	72783	43	C ₁₄ H ₂₂ O ₂	222



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Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 12483730031961922111SVH111LANL

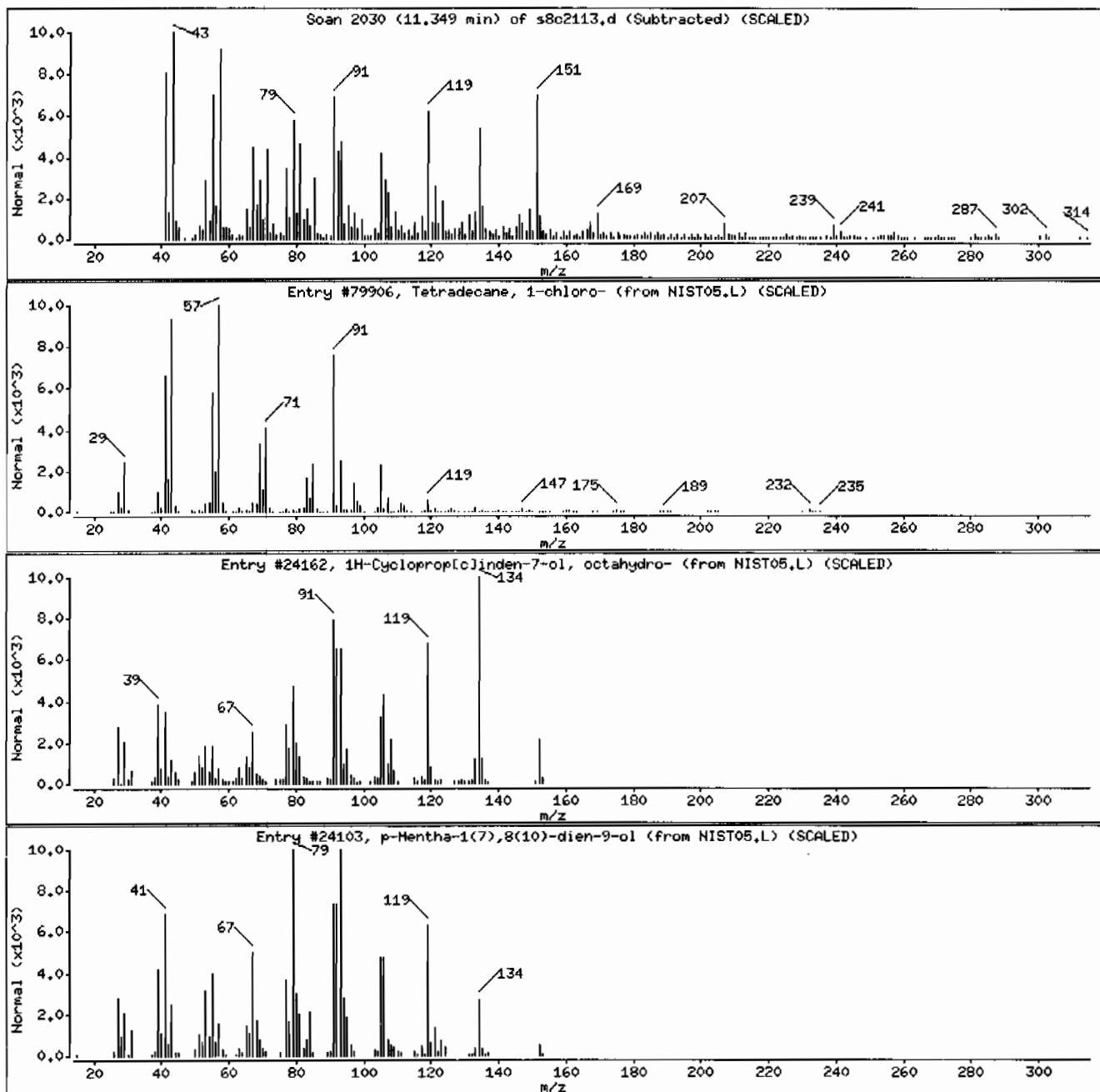
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetradecane, 1-chloro-	2425-54-9	NIST05.L	79906	59	C ₁₄ H ₂₉ Cl	232
1H-Cycloprop[clinden-7-ol, octahydro-	94216-05-4	NIST05.L	24162	55	C ₁₀ H ₁₆ O	152
p-Mentha-1(7),8(10)-dien-9-ol	29548-13-8	NIST05.L	24103	46	C ₁₀ H ₁₆ O	152



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003196192211SVH111LANL

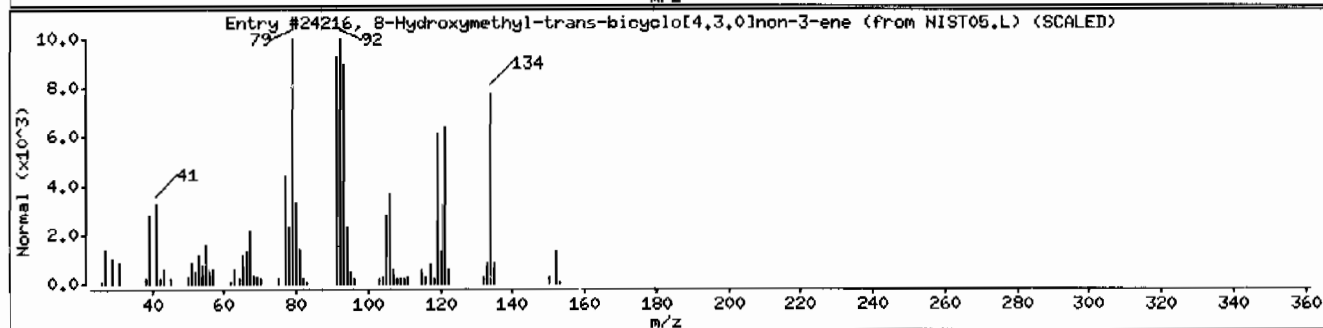
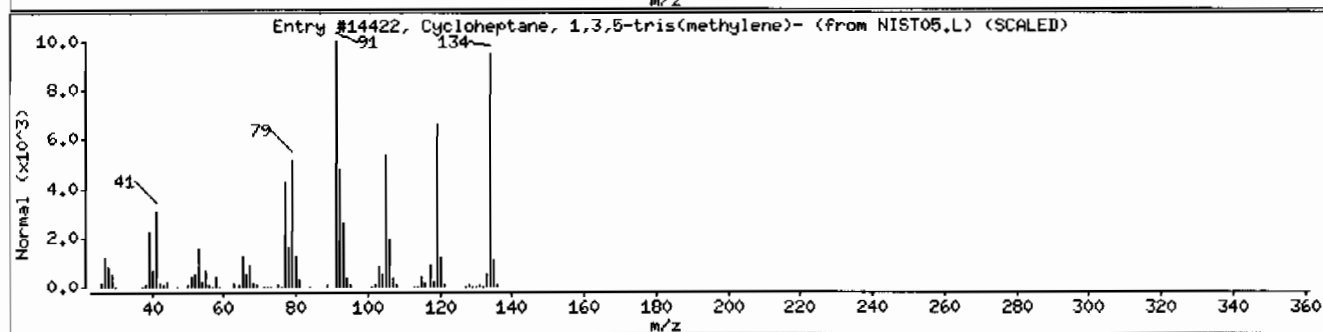
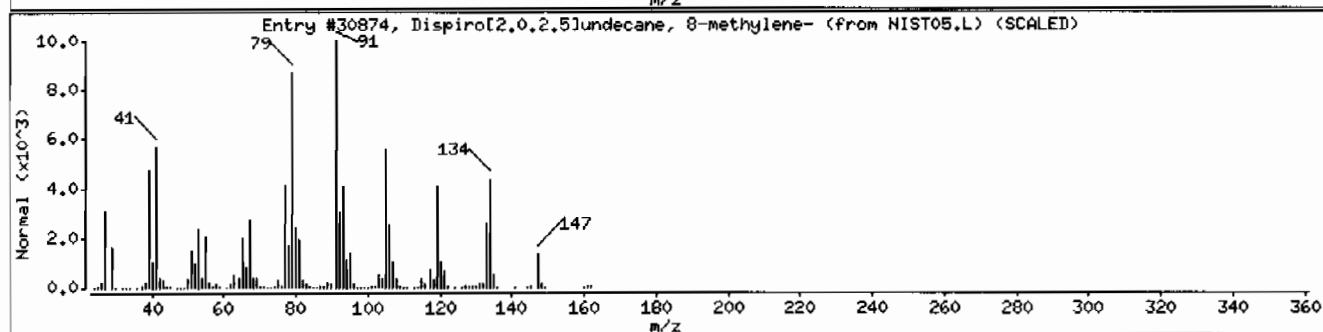
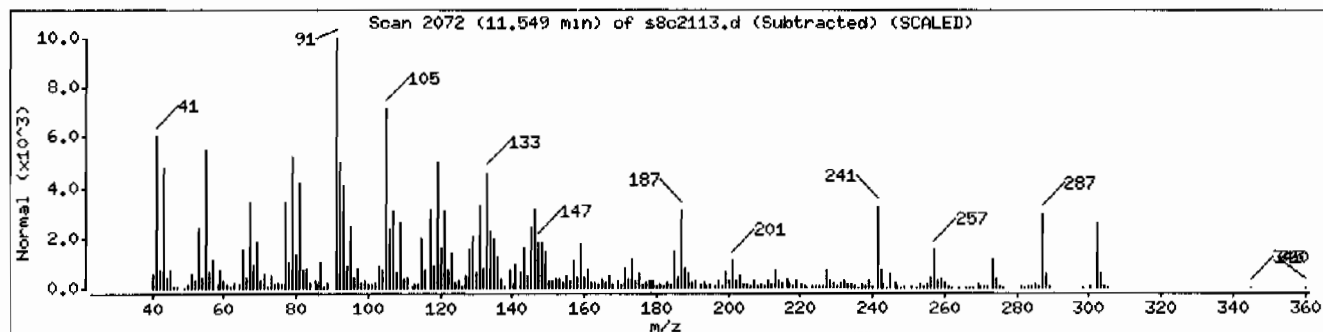
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dispiro[2.0.2.5]undecane, 8-methylene-	51567-09-0	NIST05.L	30874	35	C12H18	162
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14422	35	C10H14	134
8-Hydroxymethyl-trans-bicyclo[4.3.0]non-	1000099-21-8	NIST05.L	24216	15	C10H16O	152



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: HSD8.i

Sample Info: I248373003I9619221I1SVH11ILANL

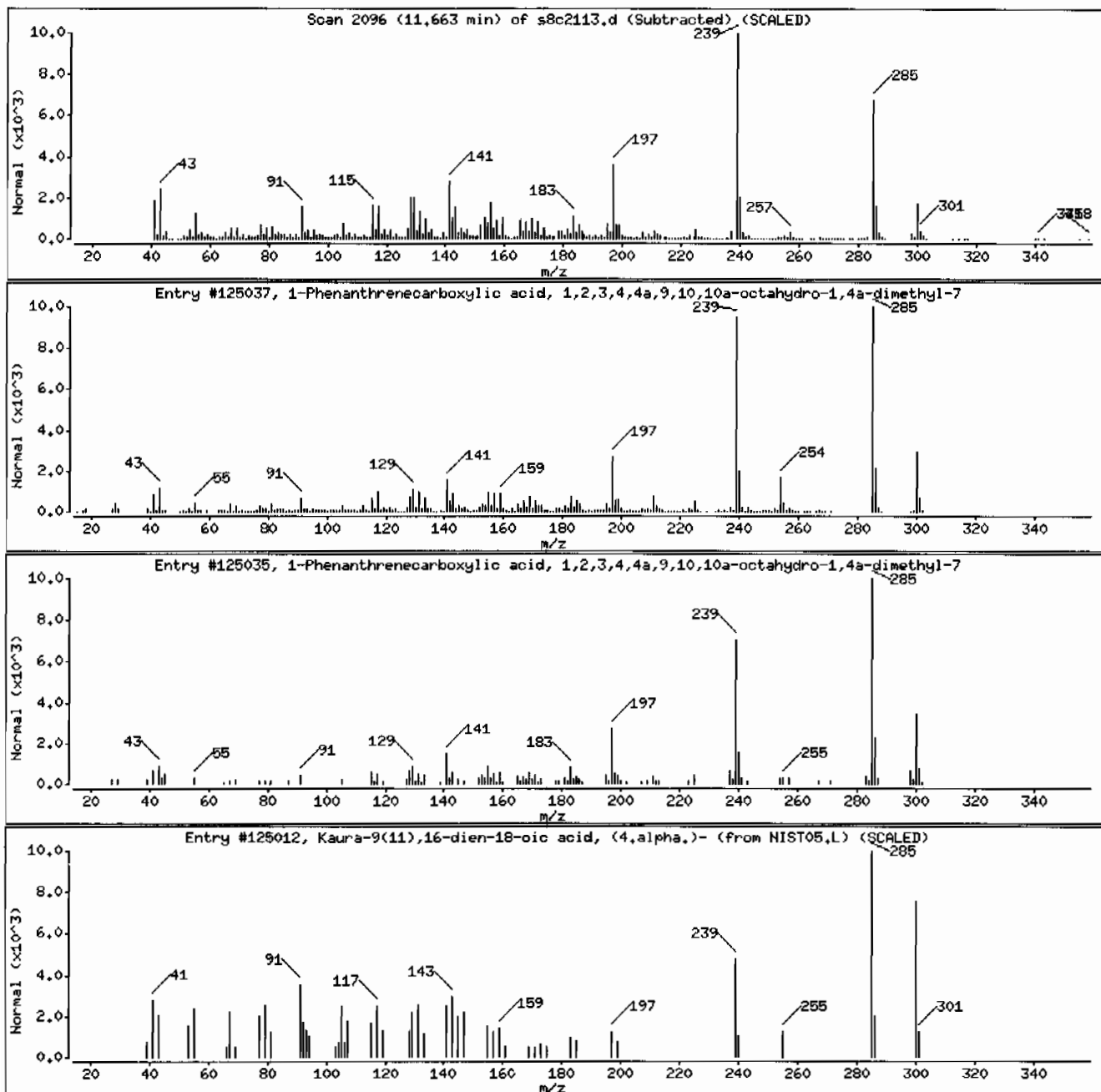
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	90	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	89	C20H28O2	300
Kaura-9(11),16-dien-18-oic acid, (4.alpha	22338-67-6	NIST05.L	125012	78	C20H28O2	300



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003196192211SVMI1ILANL

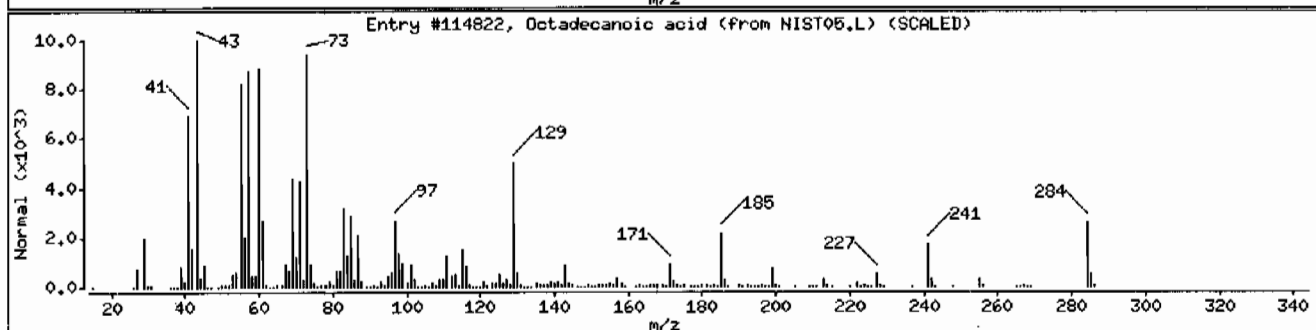
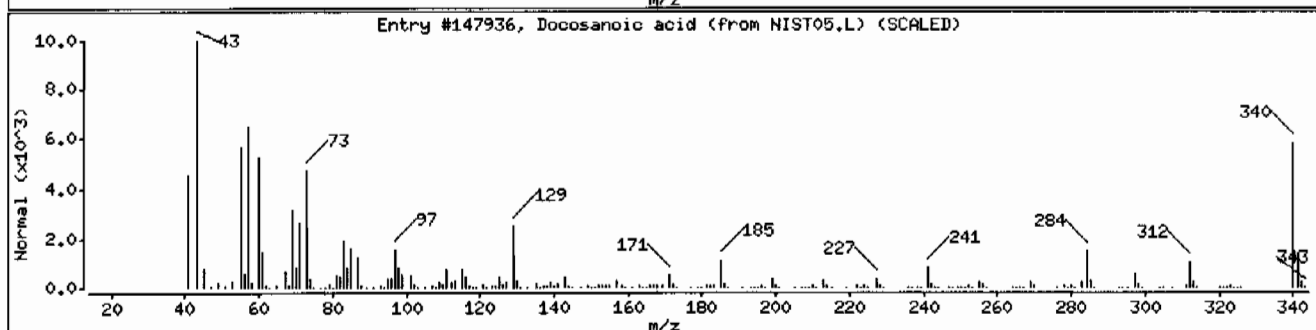
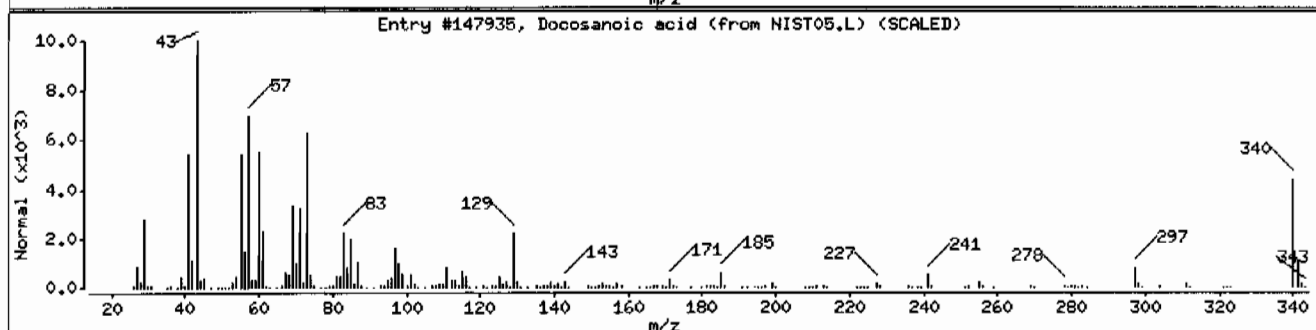
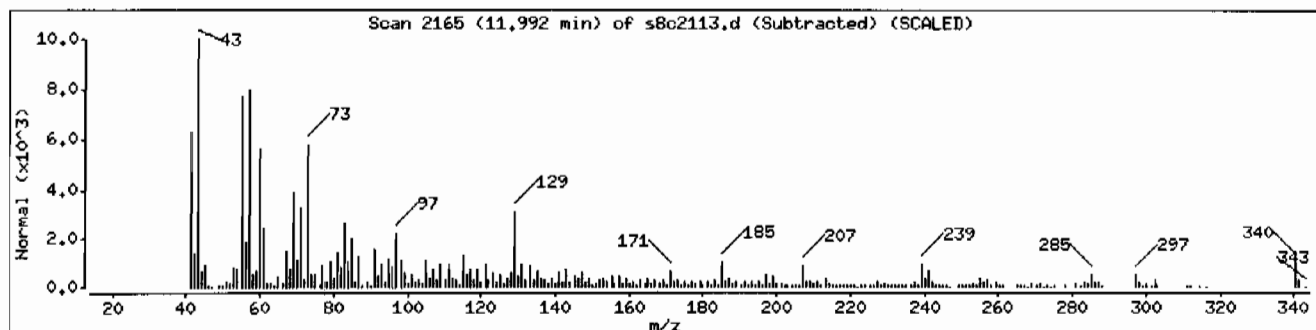
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Docosanoic acid	112-85-6	NIST05.L	147935	99	C22H44O2	340
Docosanoic acid	112-85-6	NIST05.L	147936	89	C22H44O2	340
Octadecanoic acid	57-11-4	NIST05.L	114822	68	C18H36O2	284



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: I248373003I961922I1ISVMI1ILANL

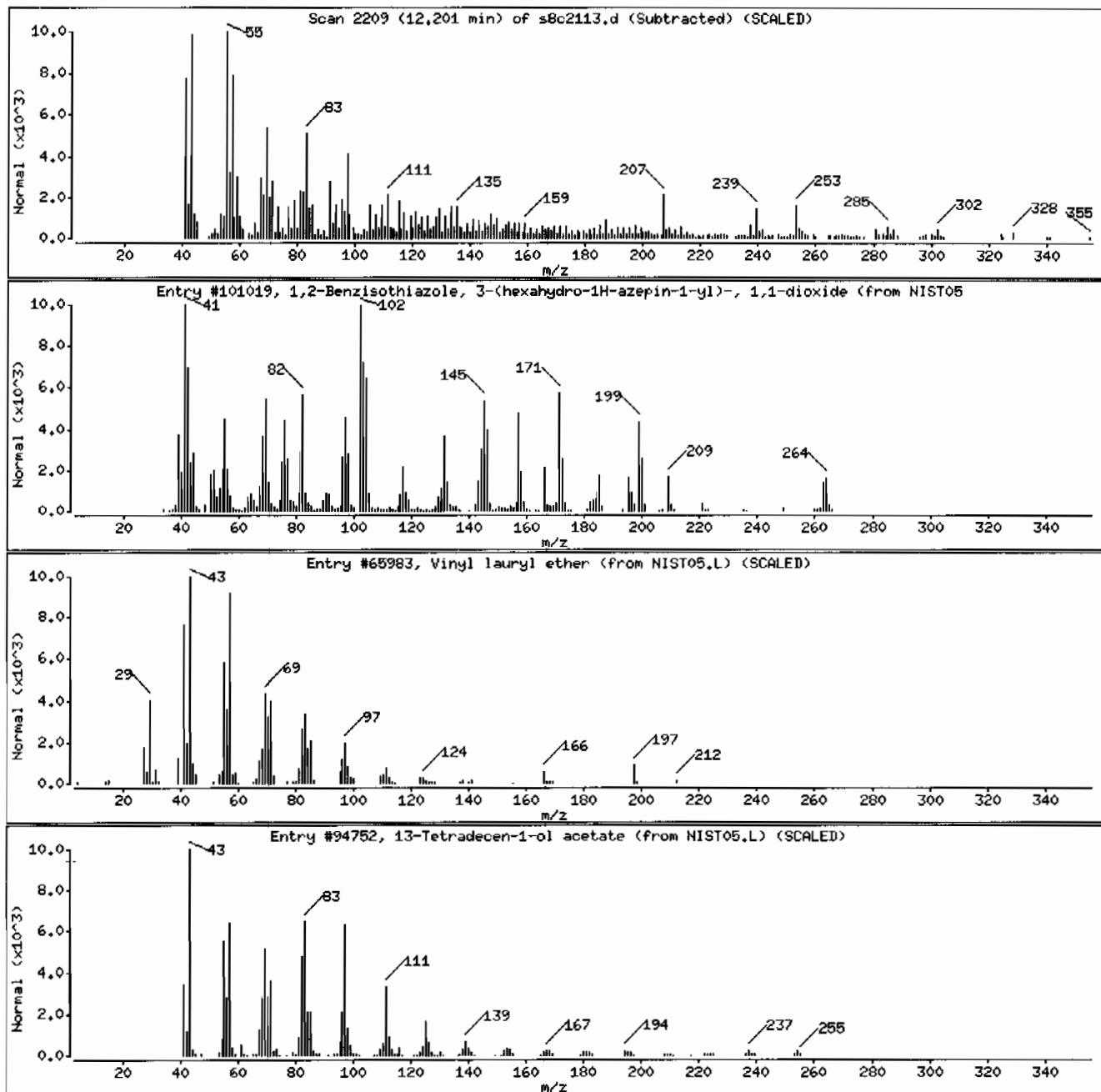
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-	309735-29-3	NIST05.L	101019	91	C13H16N2OS	264
Vinyl lauryl ether	765-14-0	NIST05.L	65983	90	C14H28O	212
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	90	C16H30O2	254



Date: 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.1

Sample Info: 12483730031961922111SVH111/LANL

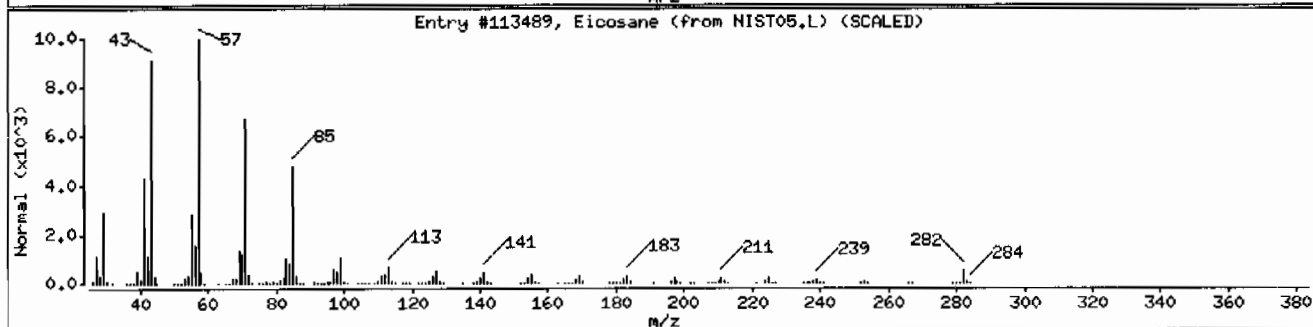
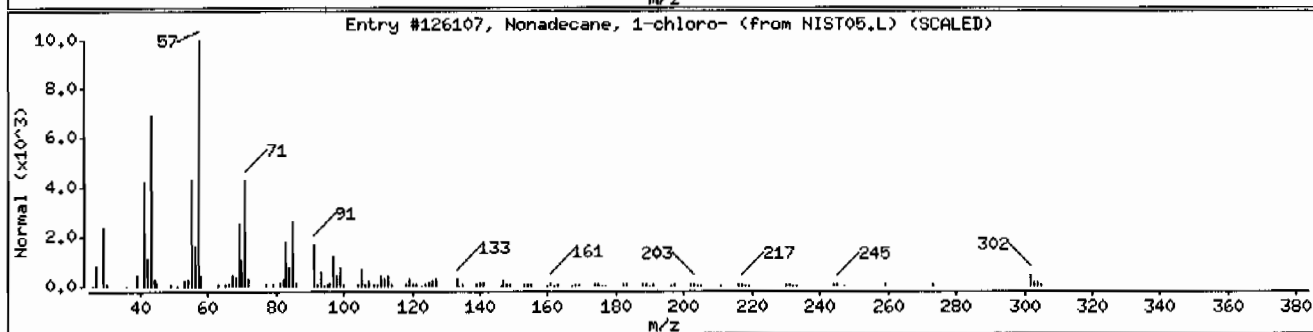
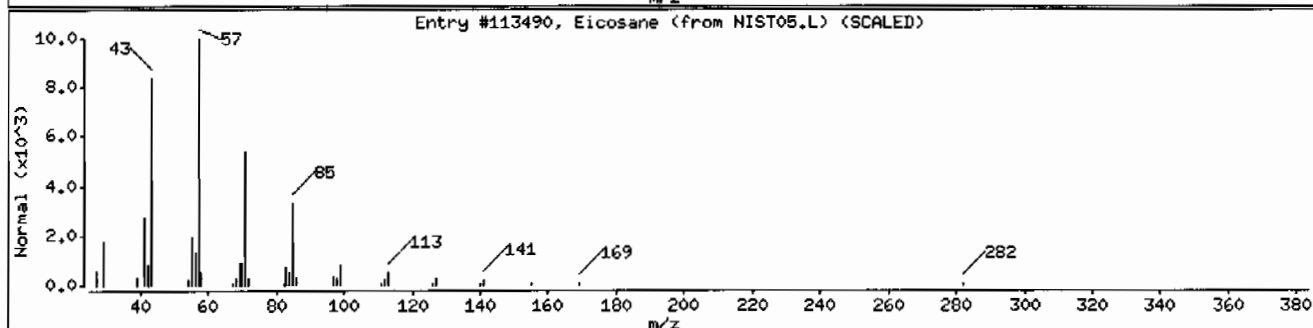
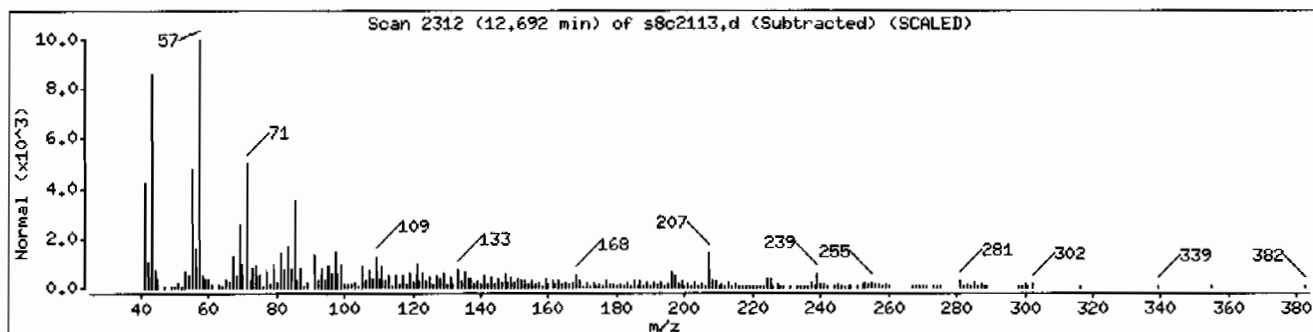
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	95	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	95	C19H39Cl	302
Eicosane	112-95-8	NIST05.L	113489	91	C20H42	282



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003|96192211|SVH11|LANL

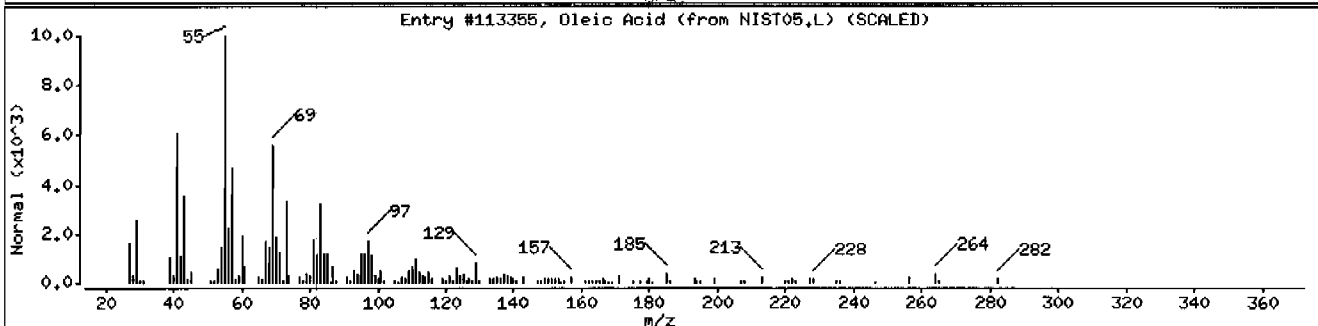
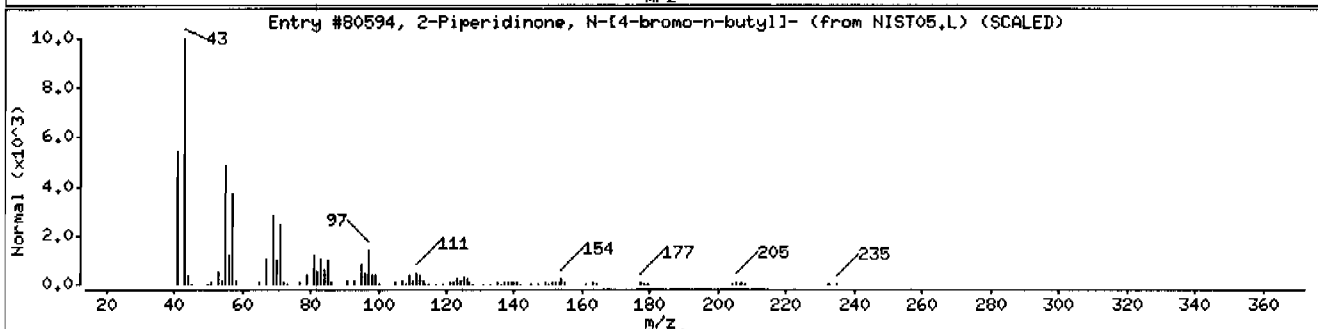
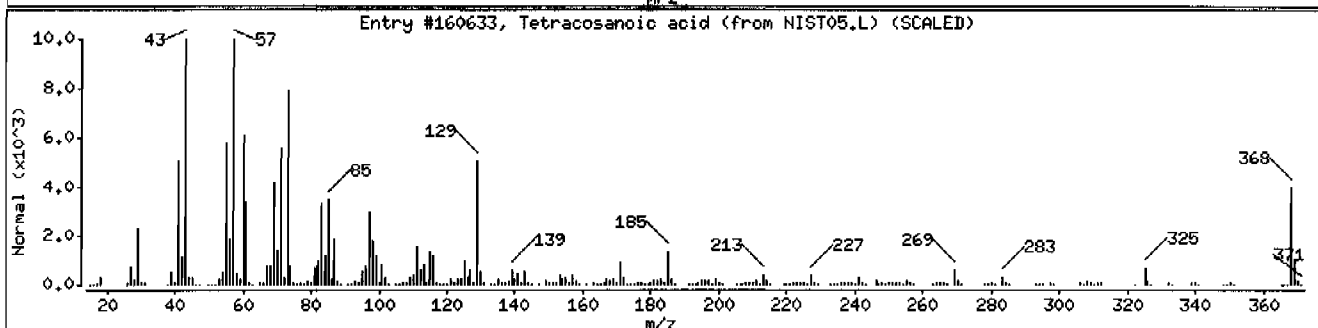
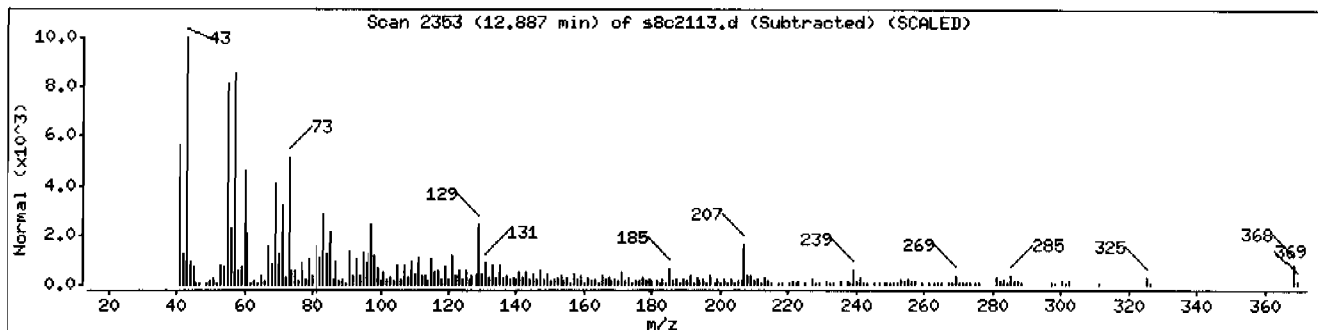
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetracosanoic acid	557-59-5	NIST05.L	160633	98	C ₂₄ H ₄₈ O ₂	368
2-Piperidinone, N-[4-bromo-n-butyl]-	195194-80-0	NIST05.L	80594	45	C ₉ H ₁₆ BrNO	233
Oleic Acid	112-80-1	NIST05.L	113355	44	C ₁₈ H ₃₄ O ₂	282



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: I248373003I961922I1ISVM11ILANL

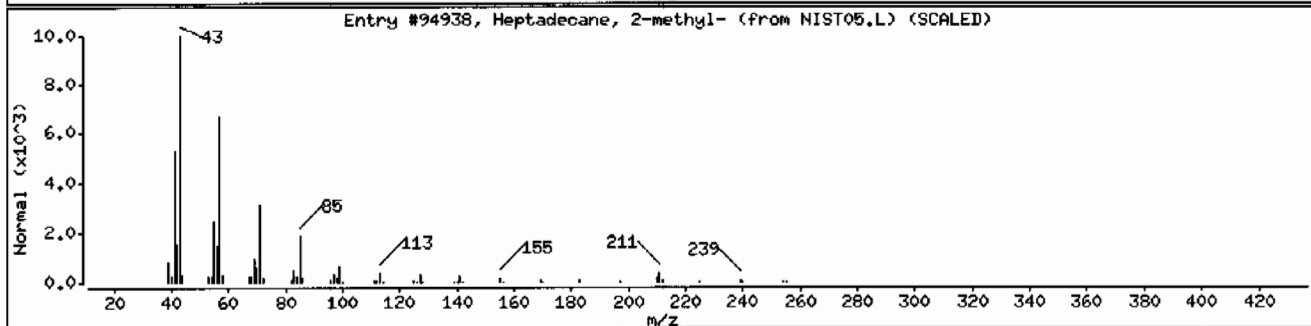
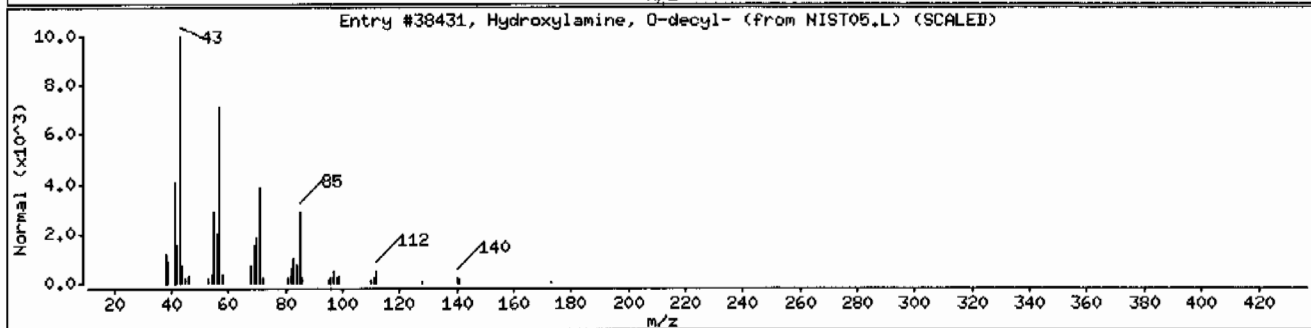
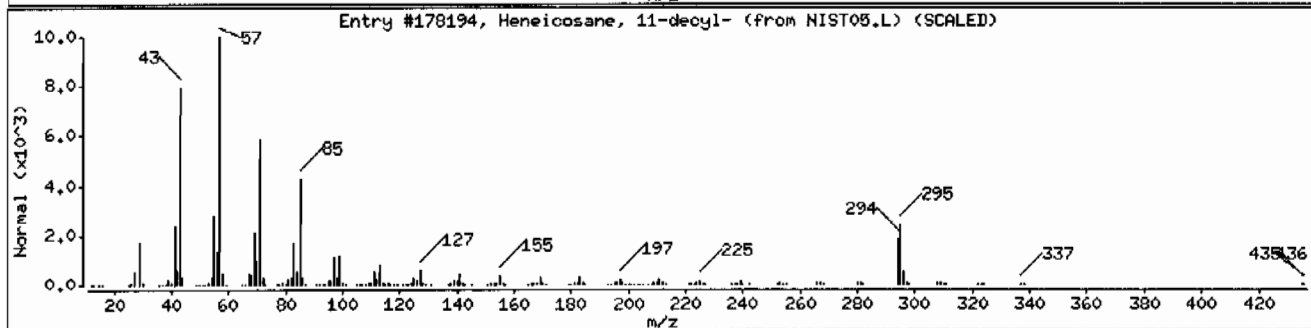
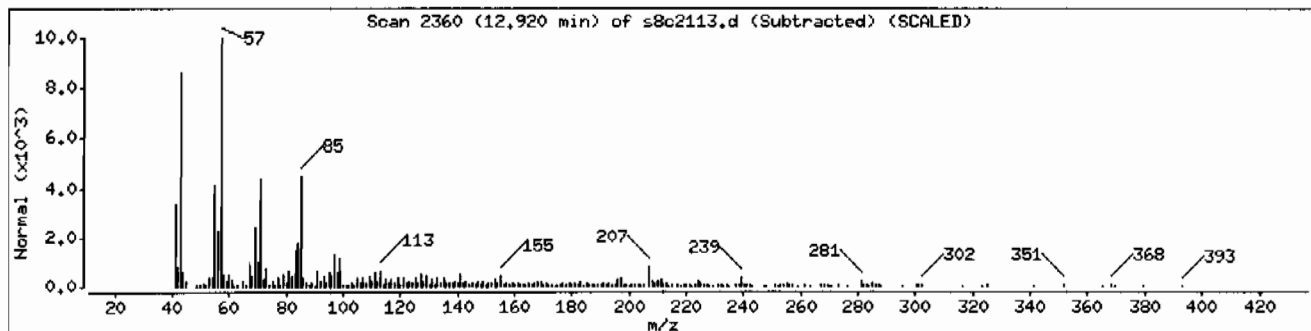
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heneicosane, 11-decyl-	55320-06-4	NIST05.L	178194	83	C ₃₁ H ₆₄	437
Hydroxylamine, O-decyl-	29812-79-1	NIST05.L	38431	80	C ₁₀ H ₂₃ NO	173
Heptadecane, 2-methyl-	1560-89-0	NIST05.L	94938	76	C ₁₈ H ₃₈	254



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003196192211ISVH11ILANL

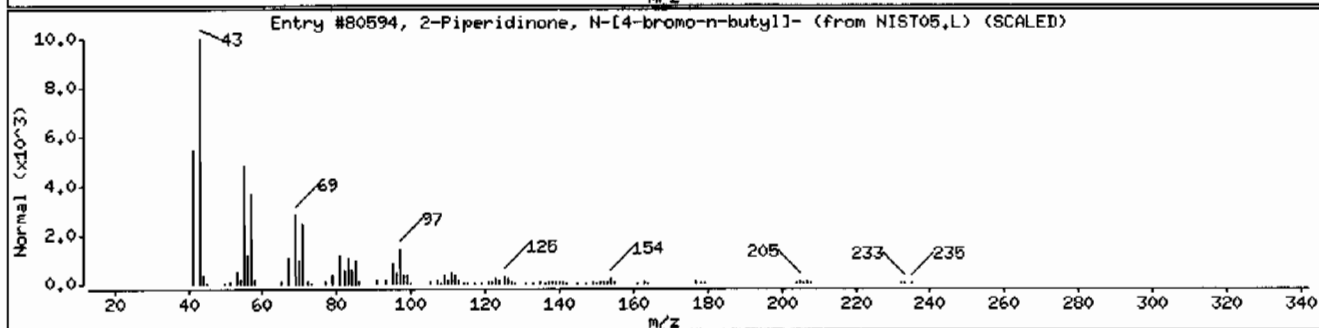
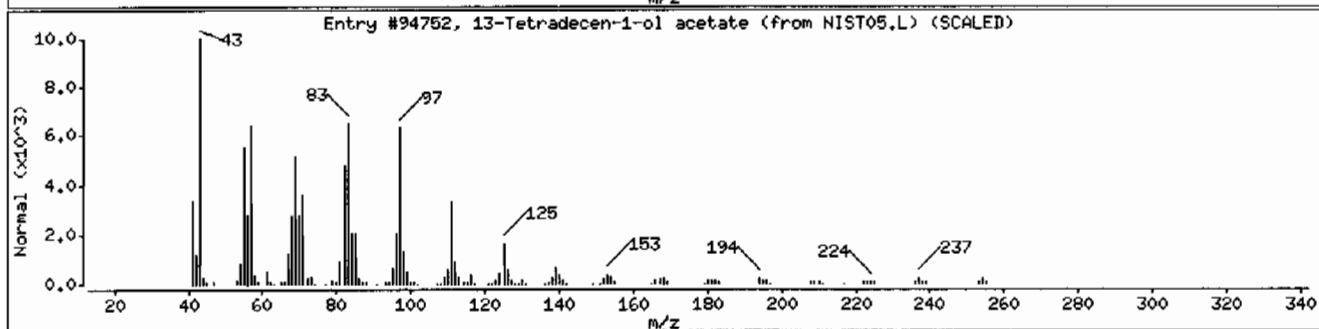
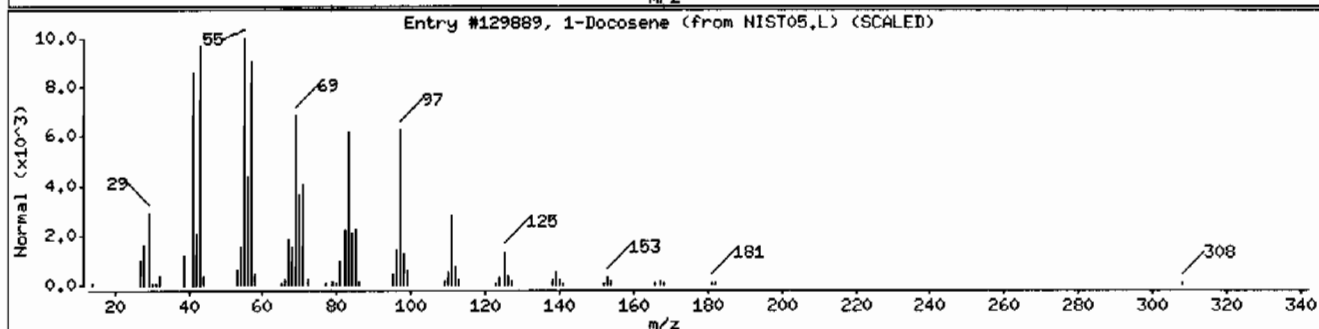
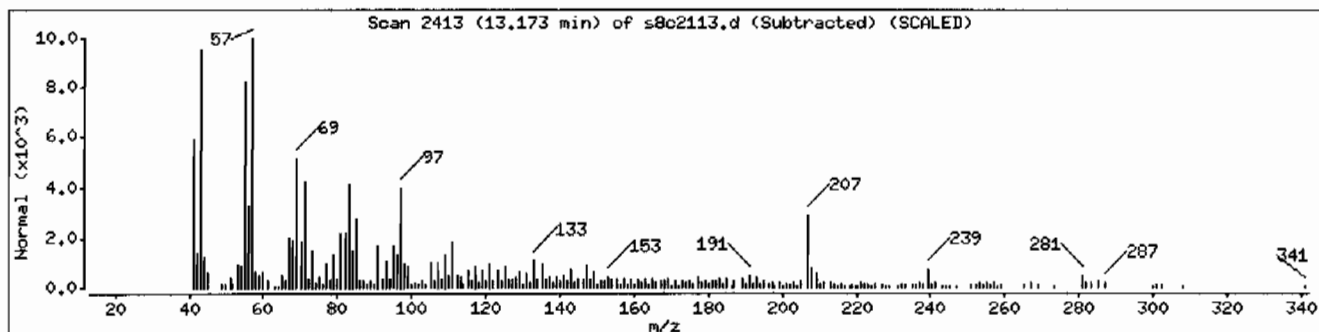
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	96	C22H44	308
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	86	C16H30O2	254
2-Piperidinone, N-[4-bromo-n-butyl]-	195194-80-0	NIST05.L	80594	78	C9H16BrNO	233



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003196192211SVMI11LANL

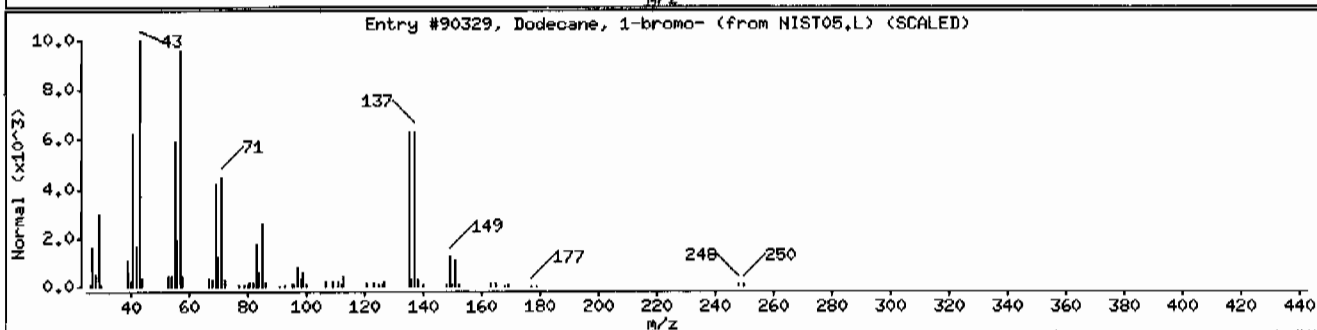
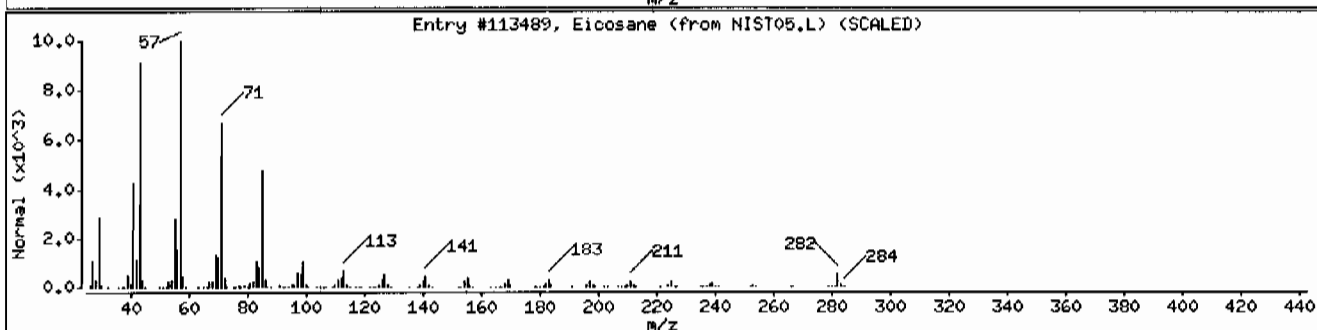
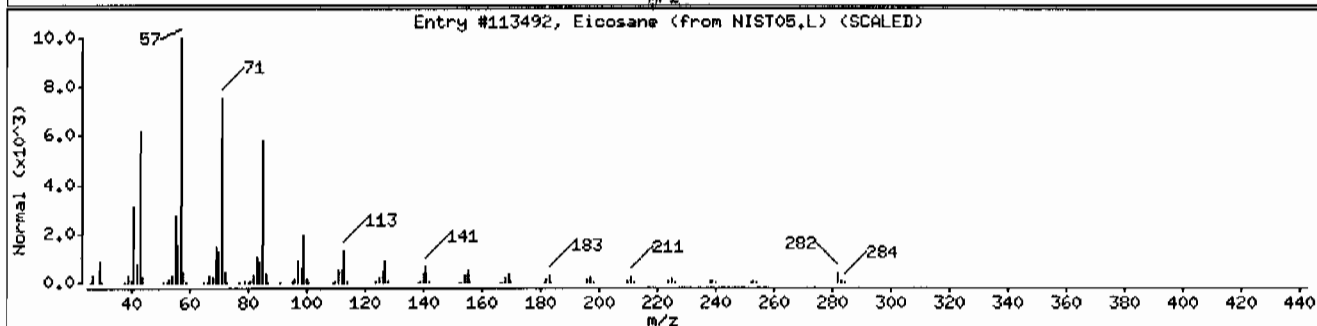
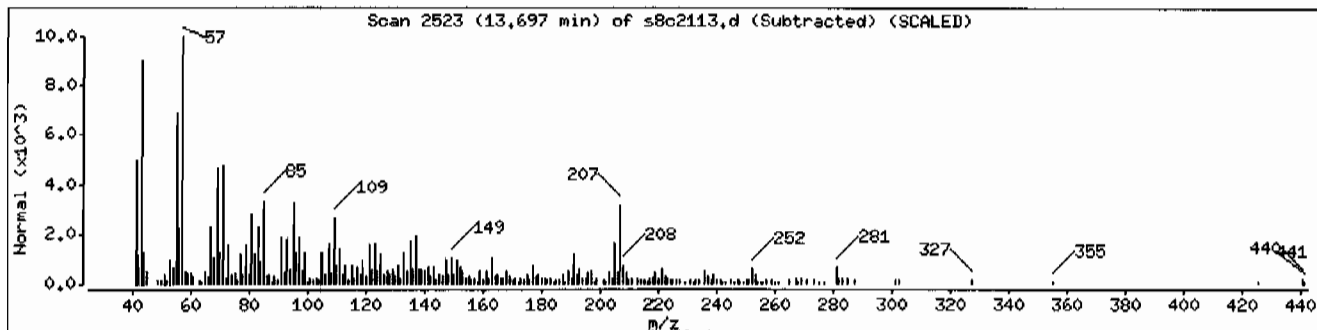
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113492	92	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	72	C ₂₀ H ₄₂	282
Dodecane, 1-bromo-	143-15-7	NIST05.L	90329	55	C ₁₂ H ₂₅ Br	248



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: HSD8.i

Sample Info: I248373003I961922I1ISVM11ILANL

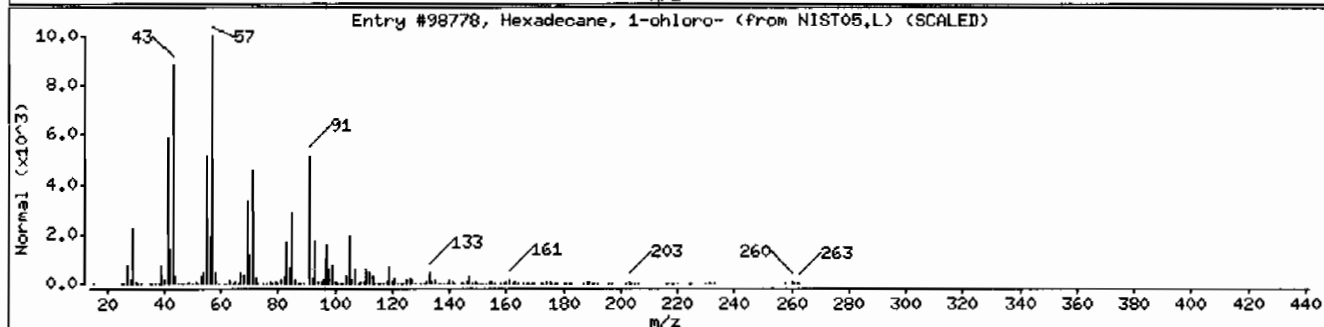
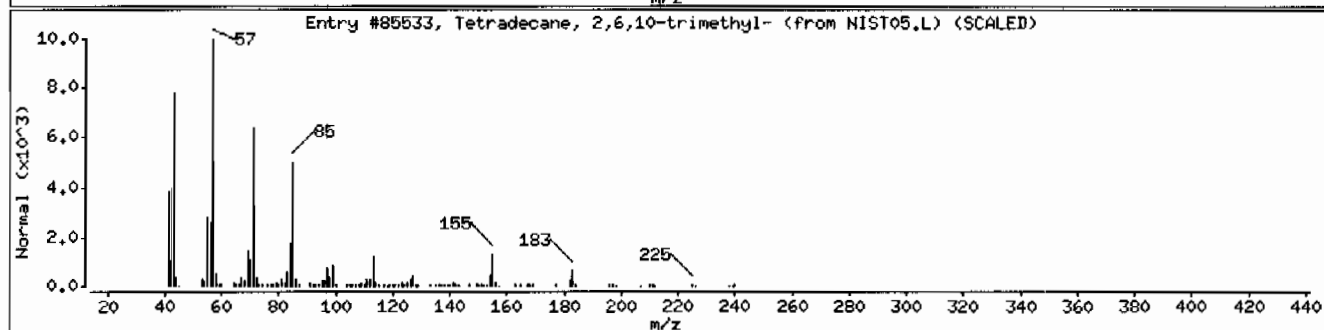
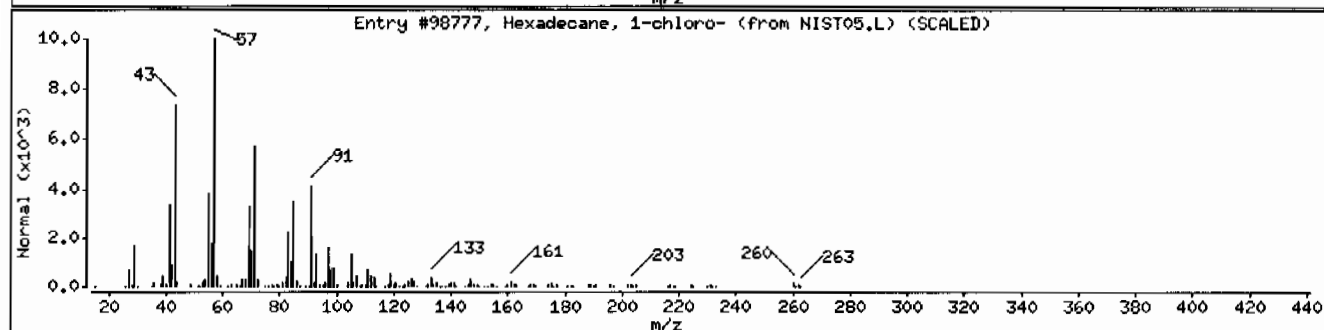
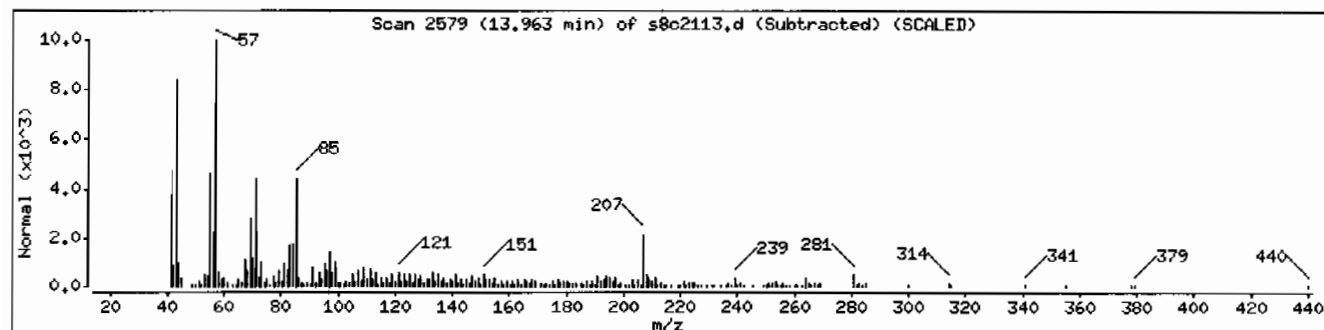
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecane, 1-chloro-	4860-03-1	NIST05.L	98777	86	C16H33Cl	260
Tetradecane, 2,6,10-trimethyl-	14905-56-7	NIST05.L	85533	78	C17H36	240
Hexadecane, 1-chloro-	4860-03-1	NIST05.L	98778	64	C16H33Cl	260



Date: 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: I248373003196192211SVH111LANL

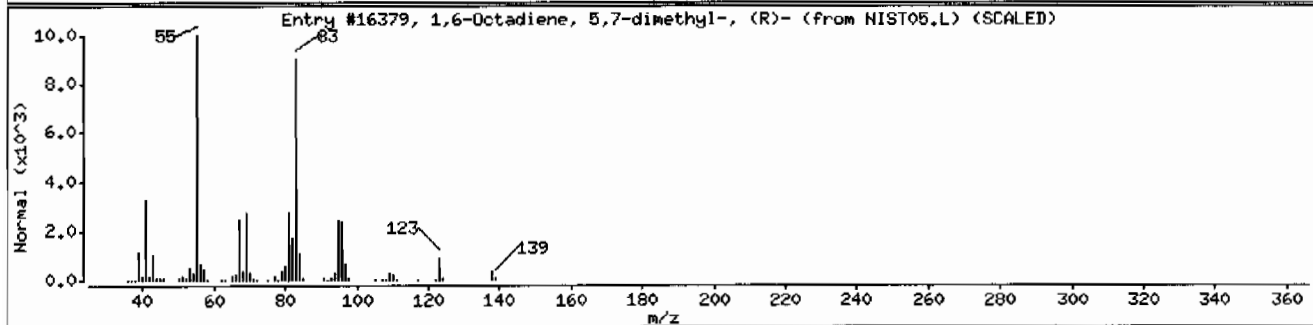
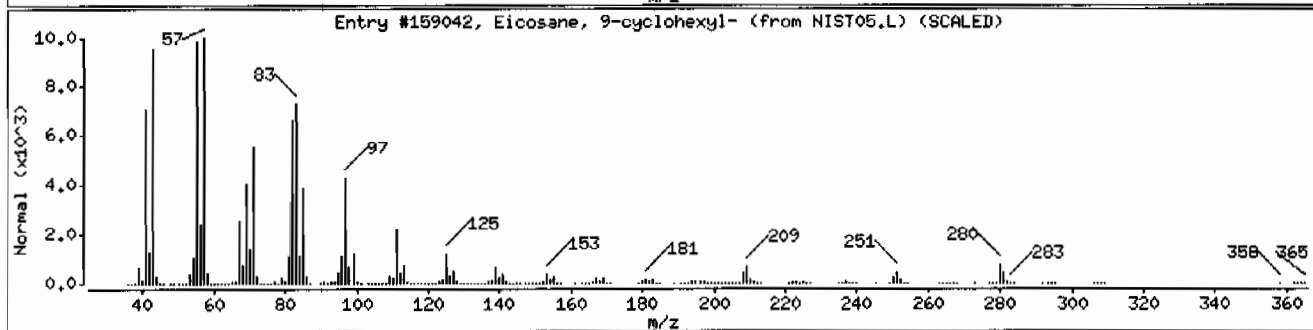
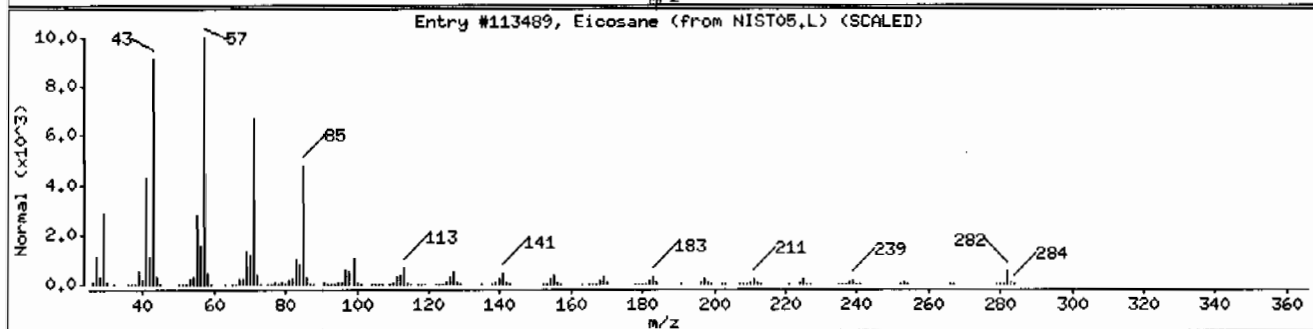
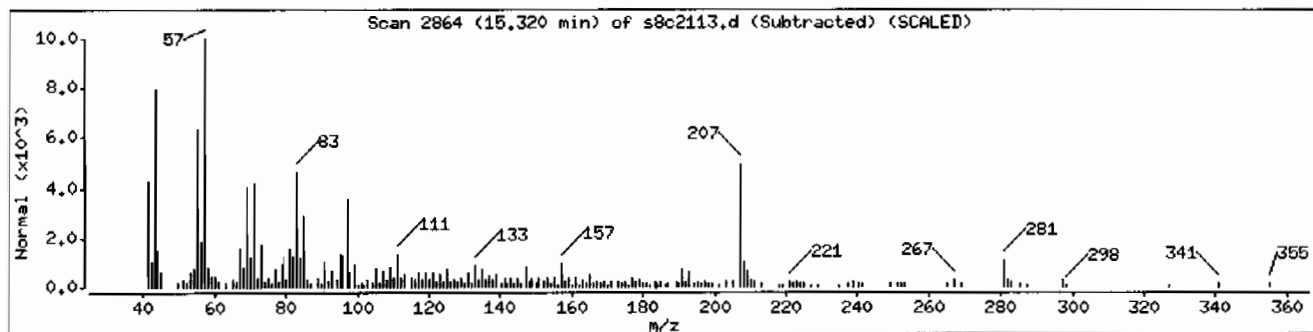
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113489	64	C20H42	282
Eicosane, 9-cyclohexyl-	4443-61-2	NIST05.L	159042	58	C26H52	364
1,6-Octadiene, 5,7-dimethyl-, (R)-	85006-04-8	NIST05.L	16379	56	C10H18	138



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 1248373003196192211SVMI11LANL

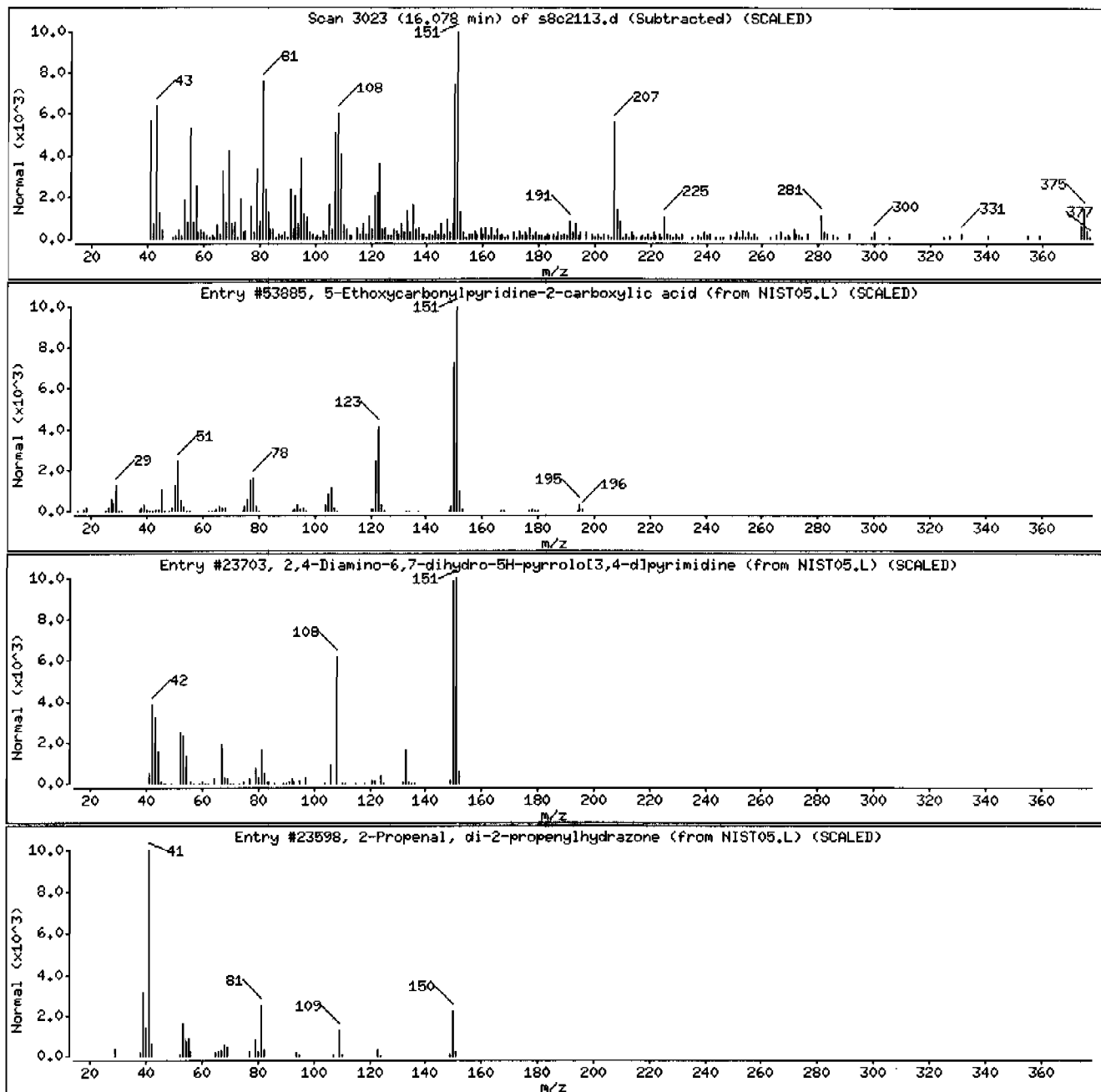
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Ethoxycarbonylpyridine-2-carboxylic ac	17880-34-1	NIST05.L	53885	38	C ₉ H ₉ N ₀ O ₄	195
2,4-Diamino-6,7-dihydro-5H-pyrrolo[3,4-d	1854-47-3	NIST05.L	23703	38	C ₆ H ₉ N ₅	151
2-Propenal, di-2-propenylhydrazone	18491-20-8	NIST05.L	23598	35	C ₉ H ₁₄ N ₂	150



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: HSD8,i

Sample Info: 1248373003196192211SVH111LANL

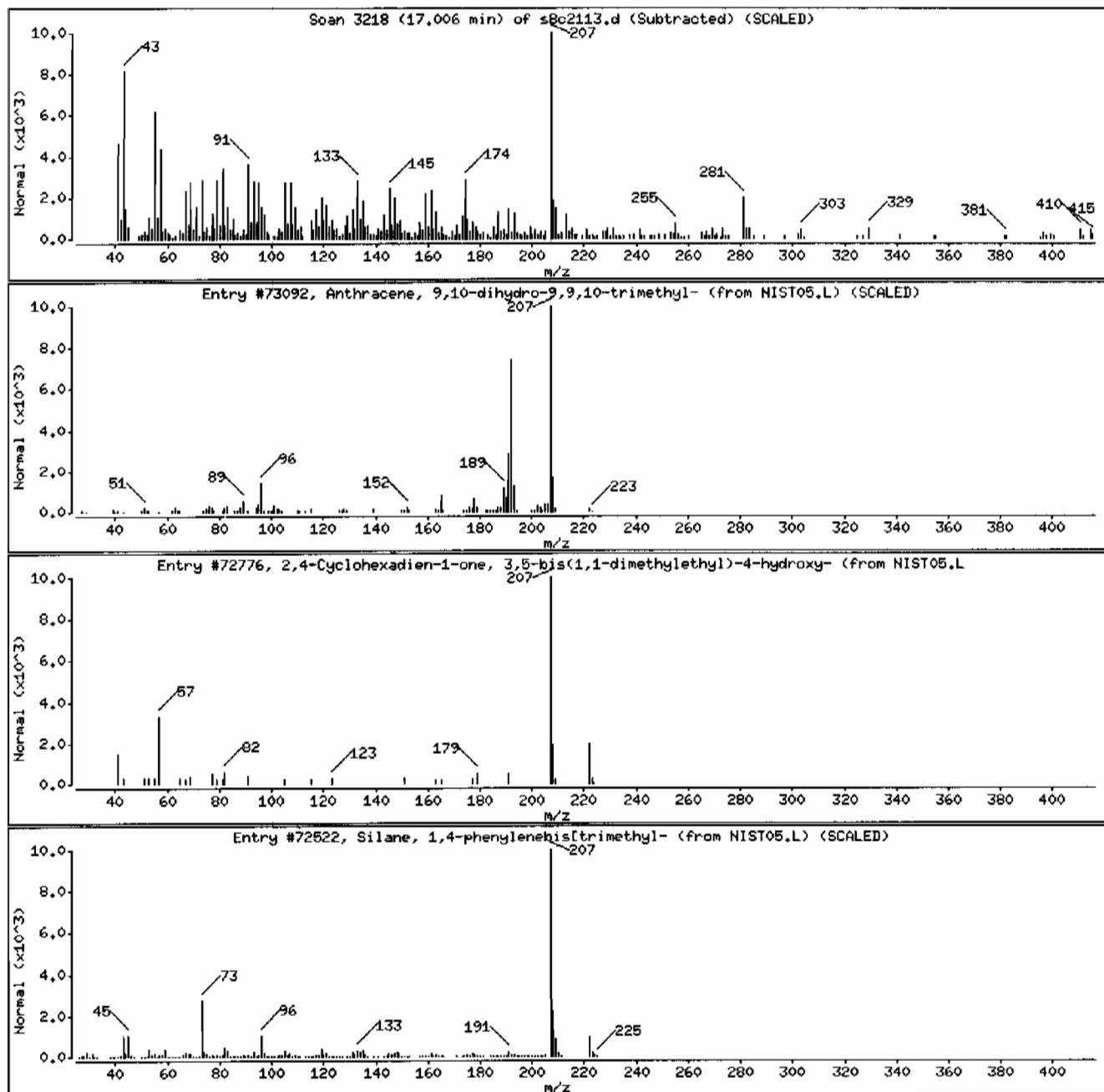
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	42	C17H18	222
2,4-Cyclohexadien-1-one, 3,5-bis(1,1-dimethyl-)	54965-43-4	NIST05.L	72776	38	C14H22O2	222
Silane, 1,4-phenylenebis(trimethyl-)	13183-70-5	NIST05.L	72522	35	C12H22Si2	222



Date : 21-MAR-2010 13:56

Client ID: RE36-10-7492

Instrument: MSD8.i

Sample Info: 12483730031961922111SVMI11LANL

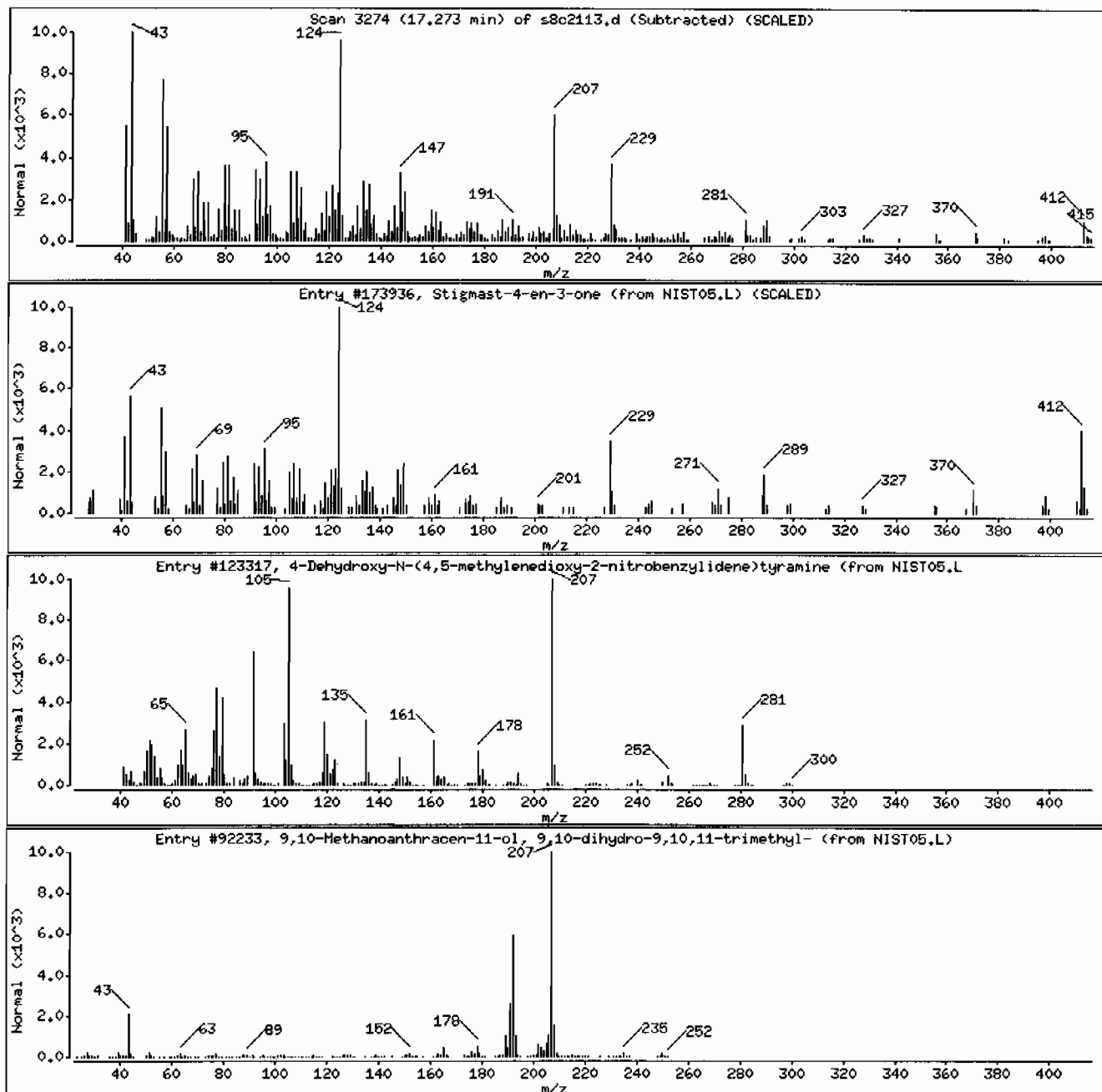
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	78	C29H48O	412
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	35	C16H14N2O4	298
9,10-Methanoanthracen-11-ol, 9,10-dihydr	126615-74-5	NIST05.L	92233	25	C18H18O	250



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

SDG Number: 10-2154
Lab Sample ID: 248373002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 25.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	445	ug/kg	89.1	445
108-95-2	Phenol	U	445	ug/kg	89.1	445
95-57-8	2-Chlorophenol	U	445	ug/kg	89.1	445
106-46-7	1,4-Dichlorobenzene	U	445	ug/kg	89.1	445
621-64-7	N-Nitrosodipropylamine	U	445	ug/kg	89.1	445
59-50-7	4-Chloro-3-methylphenol	U	445	ug/kg	89.1	445
83-32-9	Acenaphthene	U	44.5	ug/kg	14.7	44.5
121-14-2	2,4-Dinitrotoluene	U	445	ug/kg	44.5	445
100-02-7	4-Nitrophenol	U	445	ug/kg	147	445
87-86-5	Pentachlorophenol	U	445	ug/kg	111	445
129-00-0	Pyrene	J	29.8	ug/kg	13.4	44.5
110-86-1	Pyridine	U	445	ug/kg	89.1	445
62-53-3	Aniline	U	445	ug/kg	134	445
111-44-4	bis(2-Chloroethyl) ether	U	445	ug/kg	89.1	445
541-73-1	1,3-Dichlorobenzene	U	445	ug/kg	89.1	445
100-51-6	Benzyl alcohol	U	445	ug/kg	134	445
95-50-1	1,2-Dichlorobenzene	U	445	ug/kg	89.1	445
108-60-1	bis(2-Chloroisopropyl)ether	U	445	ug/kg	89.1	445
95-48-7	o-Cresol	U	445	ug/kg	89.1	445
65794-96-9	m,p-Cresols	U	445	ug/kg	134	445
67-72-1	Hexachloroethane	U	445	ug/kg	89.1	445
98-95-3	Nitrobenzene	U	445	ug/kg	89.1	445
78-59-1	Isophorone	U	445	ug/kg	89.1	445
88-75-5	2-Nitrophenol	U	445	ug/kg	89.1	445
105-67-9	2,4-Dimethylphenol	U	445	ug/kg	156	445
111-91-1	bis(2-Chloroethoxy)methane	U	445	ug/kg	89.1	445
120-83-2	2,4-Dichlorophenol	U	445	ug/kg	89.1	445
65-85-0	Benzoic acid	U	891	ug/kg	223	891
91-20-3	Naphthalene	U	44.5	ug/kg	13.4	44.5
106-47-8	4-Chloroaniline	U	445	ug/kg	89.1	445
87-68-3	Hexachlorobutadiene	U	445	ug/kg	89.1	445
91-57-6	2-Methylnaphthalene	U	44.5	ug/kg	8.91	44.5
77-47-4	Hexachlorocyclopentadiene	U	445	ug/kg	89.1	445
88-06-2	2,4,6-Trichlorophenol	U	445	ug/kg	89.1	445
95-95-4	2,4,5-Trichlorophenol	U	445	ug/kg	89.1	445
91-58-7	2-Chloronaphthalene	U	44.5	ug/kg	14.7	44.5
88-74-4	2-Nitroaniline	U	445	ug/kg	89.1	445
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	445	ug/kg	89.1	445

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373002	Date Received: 03/02/2010 08:50	%Moisture: 25.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7493	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 13:27	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2112.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	445	ug/kg	89.1	445
606-20-2	2,6-Dinitrotoluene	U	445	ug/kg	44.5	445
208-96-8	Acenaphthylene	U	44.5	ug/kg	13.4	44.5
51-28-5	2,4-Dinitrophenol	U	891	ug/kg	169	891
132-64-9	Dibenzofuran	U	445	ug/kg	89.1	445
84-66-2	Diethylphthalate	U	445	ug/kg	89.1	445
86-73-7	Fluorene	U	44.5	ug/kg	13.4	44.5
7005-72-3	4-Chlorophenylphenylether	U	445	ug/kg	89.1	445
534-52-1	2-Methyl-4,6-dinitrophenol	U	445	ug/kg	89.1	445
100-01-6	4-Nitroaniline	U	445	ug/kg	134	445
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	445	ug/kg	89.1	445
122-66-7	Azobenzene	U	445	ug/kg	89.1	445
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	445	ug/kg	89.1	445
118-74-1	Hexachlorobenzene	U	445	ug/kg	89.1	445
85-01-8	Phenanthrene		112	ug/kg	13.4	44.5
120-12-7	Anthracene	U	44.5	ug/kg	8.91	44.5
84-74-2	Di-n-butylphthalate	U	445	ug/kg	89.1	445
206-44-0	Fluoranthene	J	35.9	ug/kg	13.4	44.5
85-68-7	Butylbenzylphthalate	U	445	ug/kg	89.1	445
56-55-3	Benzo(a)anthracene	U	44.5	ug/kg	13.4	44.5
91-94-1	3,3'-Dichlorobenzidine	U	445	ug/kg	134	445
218-01-9	Chrysene	J	33.7	ug/kg	13.4	44.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	445	ug/kg	89.1	445
117-84-0	Di-n-octylphthalate	U	445	ug/kg	89.1	445
205-99-2	Benzo(b)fluoranthene	J	23.2	ug/kg	13.4	44.5
207-08-9	Benzo(k)fluoranthene	U	44.5	ug/kg	13.4	44.5
50-32-8	Benzo(a)pyrene	J	17.3	ug/kg	13.4	44.5
193-39-5	Indeno(1,2,3-cd)pyrene	J	19.7	ug/kg	13.4	44.5
53-70-3	Dibenzo(a,h)anthracene	J	16.9	ug/kg	13.4	44.5
191-24-2	Benzo(ghi)perylene	J	23.4	ug/kg	13.4	44.5
120-82-1	1,2,4-Trichlorobenzene	U	445	ug/kg	89.1	445

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	496	ug/kg		J
112-85-6	Docosanoic acid	11.99	179	ug/kg	99	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373002	Date Received: 03/02/2010 08:50	%Moisture: 25.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7493	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 13:27	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2112.d	Column: J&W DB-5MS	Level: LOW

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

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown	12.28	422	ug/kg		J
593-49-7	Heptacosane	12.55	436	ug/kg	98	NJ
	Unknown	13.02	181	ug/kg		J
62951-96-6	1,5,9-Undecatriene, 2,6,10-trimethyl-, (	13.13	425	ug/kg	83	NJ
629-96-9	1-Eicosanol	13.19	234	ug/kg	93	NJ
14811-95-1	1,19-Eicosadiene	13.23	530	ug/kg	97	NJ
	Unknown	13.31	298	ug/kg		J
7225-66-3	Tridecane, 7-hexyl-	13.53	1050	ug/kg	95	NJ
	Unknown	14.12	325	ug/kg		J
	Unknown	14.35	265	ug/kg		J
112-95-8	Eicosane	14.68	386	ug/kg	97	NJ
	Unknown	16.38	302	ug/kg		J
	Unknown	16.84	183	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	17.27	683	ug/kg	92	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2112.d
Lab Smp Id: 248373002 Client Smp ID: RE36-10-7493
Inj Date : 21-MAR-2010 13:27
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248373002|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	25.49910	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	4.301	4.301	(1.000)	386498	40.0000	
* 29 Naphthalene-d8		136	5.554	5.558	(1.000)	1521069	40.0000	
* 46 Acenaphthene-d10		164	7.401	7.406	(1.000)	895053	40.0000	
* 67 Phenanthrene-d10		188	8.992	8.997	(1.000)	1518276	40.0000	
* 91 Chrysene-d12		240	11.863	11.868	(1.000)	1270928	40.0000	
* 98 Perylene-d12		264	13.873	13.878	(1.000)	806287	40.0000	
\$ 3 2-Fluorophenol		112	3.168	3.158	(0.736)	719450	78.8465	3510
\$ 5 Phenol-d5		99	3.935	3.930	(0.915)	897229	78.8459	3510
\$ 20 Nitrobenzene-d5		82	4.825	4.830	(0.869)	411637	38.0696	1700
\$ 39 2-Fluorobiphenyl		172	6.678	6.682	(0.902)	885047	33.5935	1500
\$ 60 2,4,6-Tribromophenol		329	8.244	8.244	(1.114)	203316	68.7176	3060
\$ 81 p-Terphenyl-d14		244	10.706	10.706	(0.902)	969772	42.3826	1890

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	10.539	10.544	(0.888)	26559	0.66931	29.8(a)
68 Phenanthrene	178	9.016	9.020	(1.003)	20655	2.51627	112
76 Fluoranthene	202	10.292	10.297	(1.145)	31131	0.80578	35.9(a)
92 Chrysene	228	11.892	11.897	(1.002)	11116	0.75715	33.7(a)
95 Benzo(b)fluoranthene	252	13.282	13.292	(0.957)	11917	0.52132	23.2(a)
97 Benzo(a)pyrene	252	13.782	13.787	(0.993)	7480	0.38797	17.3(a)
99 Indeno(1,2,3-cd)pyrene	276	15.635	15.644	(1.127)	7073	0.44247	19.7(a)
100 Dibenzo(a,h)anthracene	278	15.678	15.682	(1.130)	4686	0.37931	16.9(a)
101 Benzo(ghi)perylene	276	16.097	16.101	(1.160)	6934	0.52428	23.4(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s8c2112.d

Report Date: 03/22/2010 07:15

Lab. ID: 248373002

SampleType: SAMPLE

Injection Date: 21-MAR-2010 13:27

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373002|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	45724	3.93	4.00	80-120	100	(T)
93	2828	3.98	4.00	213-273	6	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	55576	4.83	4.68	80-120	100	(T)
42	30129	4.83	4.68	31- 91	54	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	16234	5.23	5.28	80-120	100	()
122	11461	5.23	5.28	64-124	71	()
77	9753	5.23	5.28	47-107	60	()

30 Naphthalene		CAS#: 91-20-3				
128	1012	5.57	5.58	80-120	100	()
129	119	5.56	5.58	0- 41	12	()
127	0	0.00	5.58	0- 43	0	(T)

34 2-Methylnaphthalene		CAS#: 91-57-6				
142	398	6.29	6.30	80-120	100	()
141	412	6.29	6.30	56-116	104	()

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	114759	7.40	7.18	80-120	100	(T)
63	1969	7.40	7.18	32- 92	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	114759	7.40	7.61	80-120	100	(T)
89	1721	7.40	7.61	47-107	1	(QT)
63	1969	7.40	7.61	26- 86	2	(QT)

55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	628	8.24	8.04	80-120	100	(T)
105	1604	8.24	8.04	14- 74	255	(QT)
51	1301	8.24	8.04	26- 86	207	(QT)

68	Phenanthrene			CAS#: 85-01-8		
178	20655	9.02	9.02	80-120	100	()
179	3197	9.02	9.02	0- 45	15	()
176	3900	9.02	9.02	0- 49	19	()

69	Anthracene			CAS#: 120-12-7		
178	20655	9.02	9.08	80-120	100	(T)
179	3197	9.02	9.08	0- 45	15	(T)
176	3900	9.02	9.08	0- 48	19	(T)

76	Fluoranthene			CAS#: 206-44-0		
202	31131	10.29	10.30	80-120	100	()
203	5636	10.29	10.30	0- 47	18	()
101	4267	10.29	10.30	0- 43	14	()

79	Pyrene			CAS#: 129-00-0		
202	26559	10.54	10.54	80-120	100	()
200	5603	10.54	10.54	0- 50	21	()
101	5177	10.54	10.54	0- 46	19	()

89	Benzo(a)anthracene			CAS#: 56-55-3		
228	15604	11.85	11.85	80-120	100	()
226	3220	11.85	11.85	0- 56	21	()
229	4225	11.85	11.85	0- 51	27	()

92	Chrysene			CAS#: 218-01-9		
228	11116	11.89	11.90	80-120	100	()
229	2927	11.89	11.90	0- 49	26	()
226	3611	11.89	11.90	0- 59	32	()

94	Di-n-octylphthalate			CAS#: 117-84-0		
149	1016	12.72	12.73	80-120	100	()
43	2572	12.74	12.73	0- 41	253	(Q)

95	Benzo(b)fluoranthene			CAS#: 205-99-2		
252	11917	13.28	13.29	80-120	100	()
253	2694	13.28	13.29	0- 52	23	()
125	3967	13.29	13.29	0- 43	33	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	11917	13.28	13.33	80-120	100	()
253	2694	13.28	13.33	0- 52	23	()
125	4750	13.29	13.33	0- 44	40	()

97 Benzo(a)pyrene				CAS#: 50-32-8		
252	7480	13.78	13.79	80-120	100	()
253	2014	13.78	13.79	0- 52	27	()
125	1860	13.78	13.79	0- 42	25	()

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	7073	15.63	15.64	80-120	100	()
138	3289	15.63	15.64	0- 52	47	()

100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	4686	15.68	15.68	80-120	100	()
139	575	15.67	15.68	0- 48	12	()

101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	6934	16.10	16.10	80-120	100	()
138	774	16.10	16.10	0- 54	11	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2112.d
 Lab Smp Id: 248373002 Client Smp ID: RE36-10-7493
 Inj Date : 21-MAR-2010 13:27
 Operator : nag1 Inst ID: MSD8.i
 Smp Info : |248373002|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	25.49910	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.301	2300088	40.000
* 91 Chrysene-d12	11.863	3758546	40.000
* 98 Perylene-d12	13.873	2407849	40.000

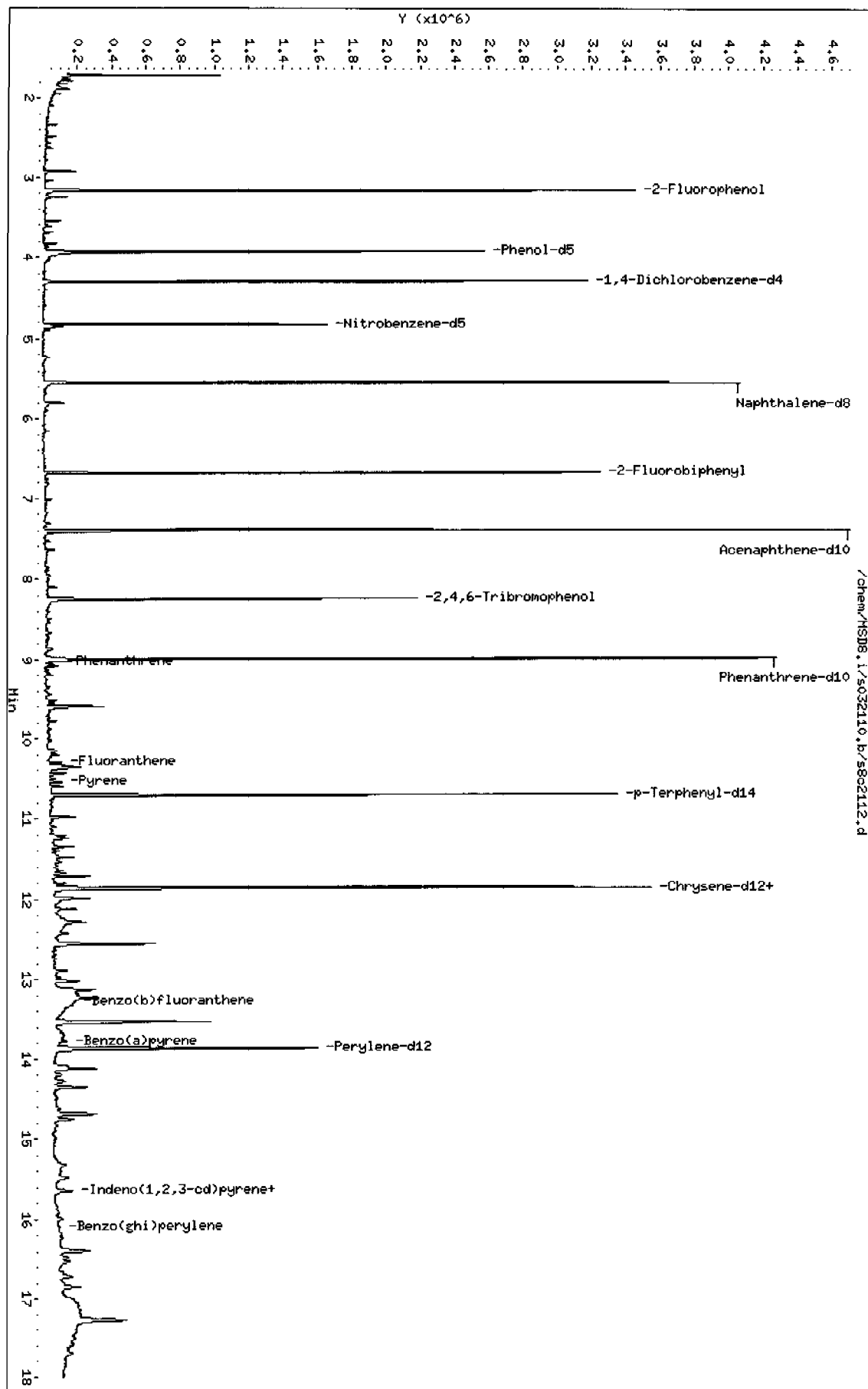
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	=====	=====	=====	=====

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.720	639655	11.1240014	496	0		0	10
Docosanoic acid					CAS #: 112-85-6		
11.987	376584	4.00775983	178	99	NIST05.L	147935	91
Unknown					CAS #:		
12.282	890297	9.47491046	422	0		0	91
Heptacosane					CAS #: 593-49-7		
12.554	920495	9.79628180	436	98	NIST05.L	165301	91
Unknown					CAS #:		
13.020	244655	4.06429363	181	0		0	98
1,5,9-Undecatriene, 2,6,10-trimethyl-, (					CAS #: 62951-96-6		
13.125	573999	9.53545731	425	83	NIST05.L	51370	98
1-Eicosanol					CAS #: 629-96-9		
13.187	316051	5.25034313	234	93	NIST05.L	123792	98
1,19-Eicosadiene					CAS #: 14811-95-1		
13.235	716563	11.9037794	530	97	NIST05.L	110850	98
Unknown					CAS #:		
13.311	403220	6.69842662	298	0		0	98
Tridecane, 7-hexyl-					CAS #: 7225-66-3		
13.535	1421654	23.6169954	1050	95	NIST05.L	104273	98
Unknown					CAS #:		
14.120	438563	7.28555368	324	0		0	98
Unknown					CAS #:		
14.354	358169	5.95002640	265	0		0	98
Eicosane					CAS #: 112-95-8		
14.682	521471	8.66284602	386	97	NIST05.L	113490	98
Unknown					CAS #:		
16.382	408023	6.77821293	302	0		0	98
Unknown					CAS #:		
16.844	247675	4.11446552	183	0		0	98

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LJB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Stigmast-4-en-3-one					CAS #: 1058-61-3		
17.273	922620	15.3268679	683	92	NIST05.L	173936	98

Data File: /chem/MSDB.i/s032110.b/s802112.d
 Date: 21-Mar-2010 13:27
 Client ID: RE36-10-7493
 Sample Info: 1248373002196192211SVH11.LANL
 Volume Injected (uL): 0.5
 Column phase: 3M DB-5MS

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



Data File: /chem/MSD8.i/s032110.b/s8c2112.d

Page 2

Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211SVMI11LANL

Volume Injected (uL): 0.5

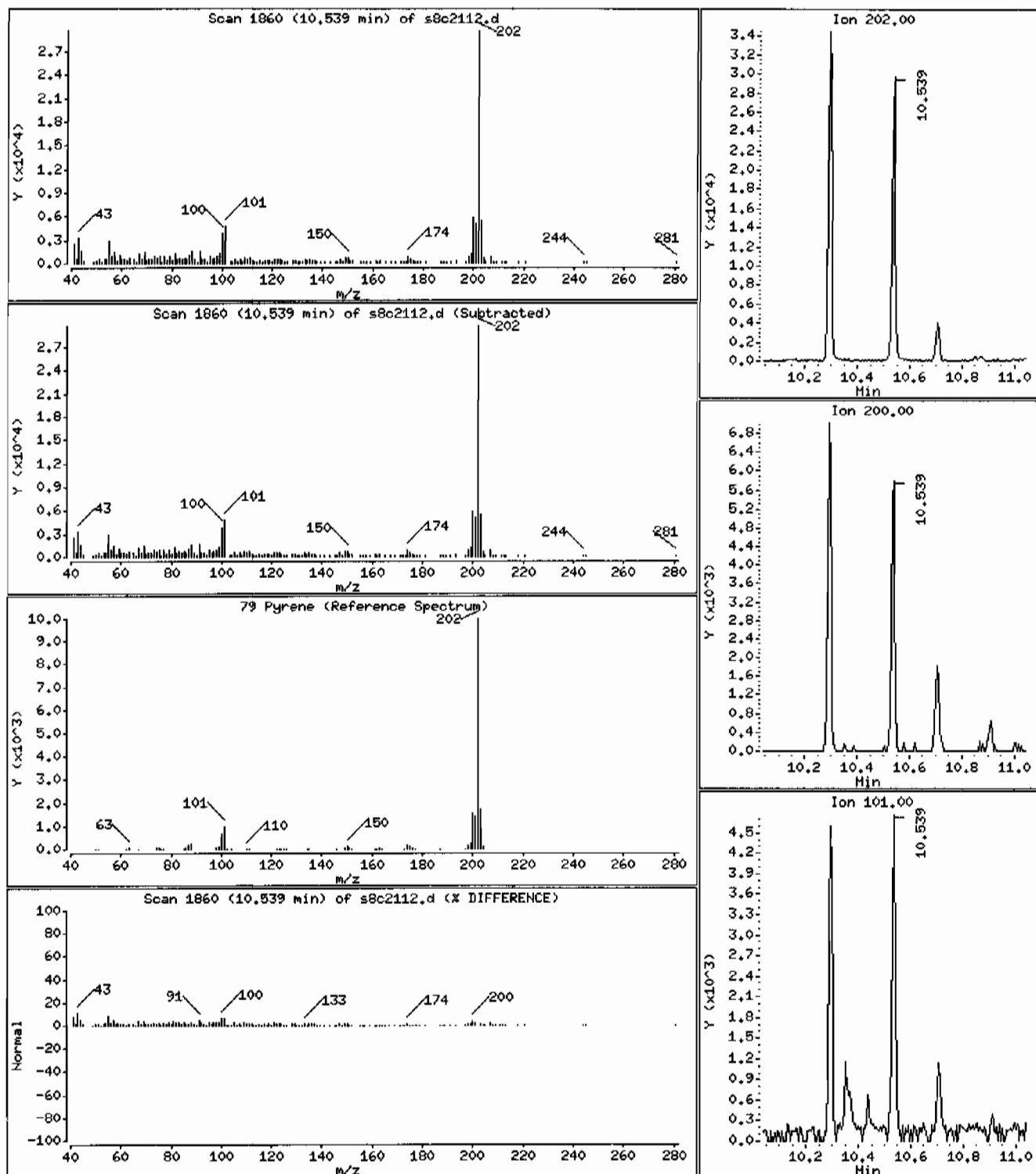
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 29.8 ug/Kg



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 12483730021961922111SVH111LANL

Volume Injected (uL): 0.5

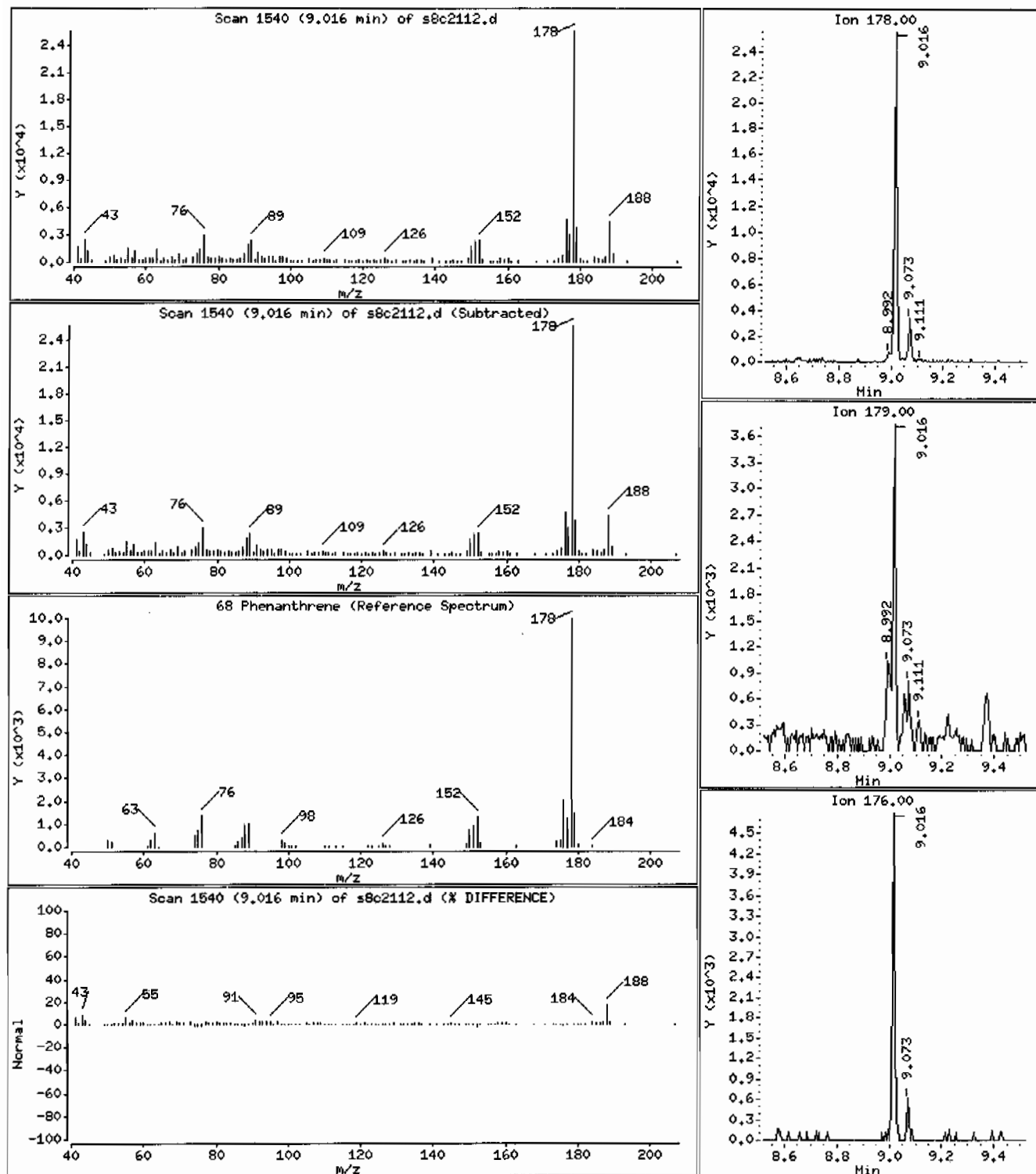
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 112 ug/Kg



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: I248373002I961922I1ISVM11ILANL

Volume Injected (uL): 0.5

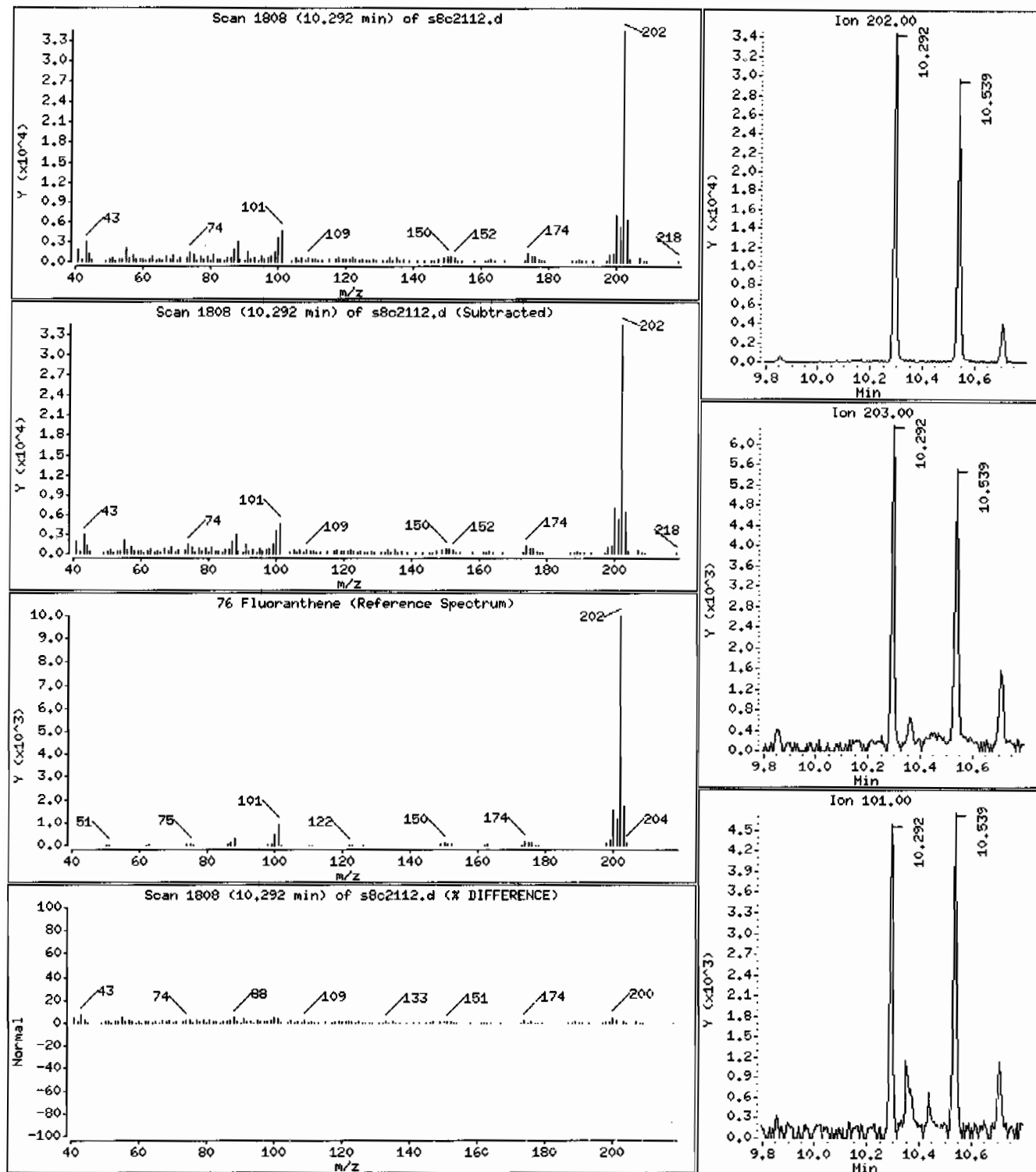
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 35.9 ug/Kg



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211SVMI1ILANL

Volume Injected (uL): 0.5

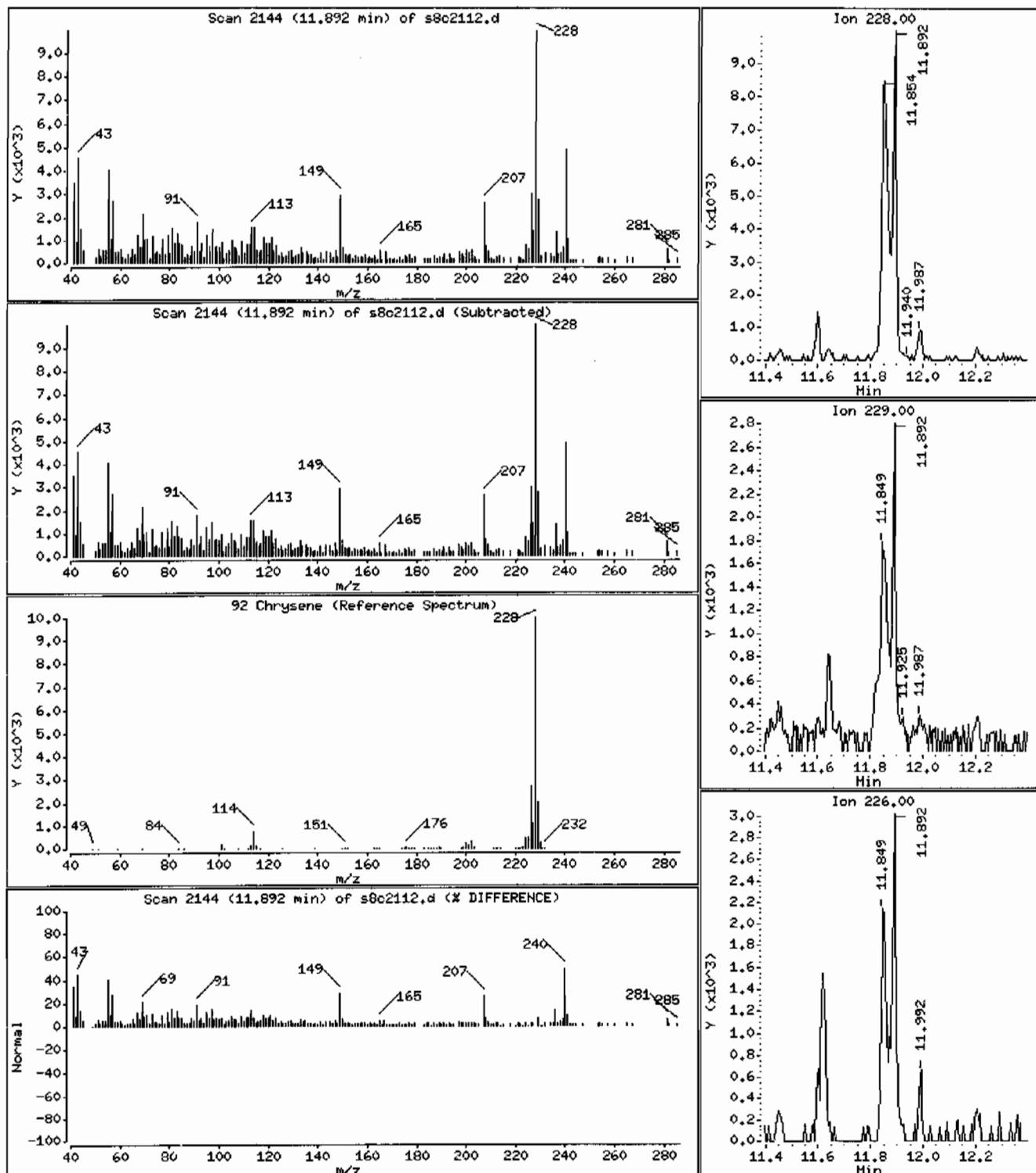
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 33.7 ug/Kg



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211SVH111LANL

Volume Injected (uL): 0.5

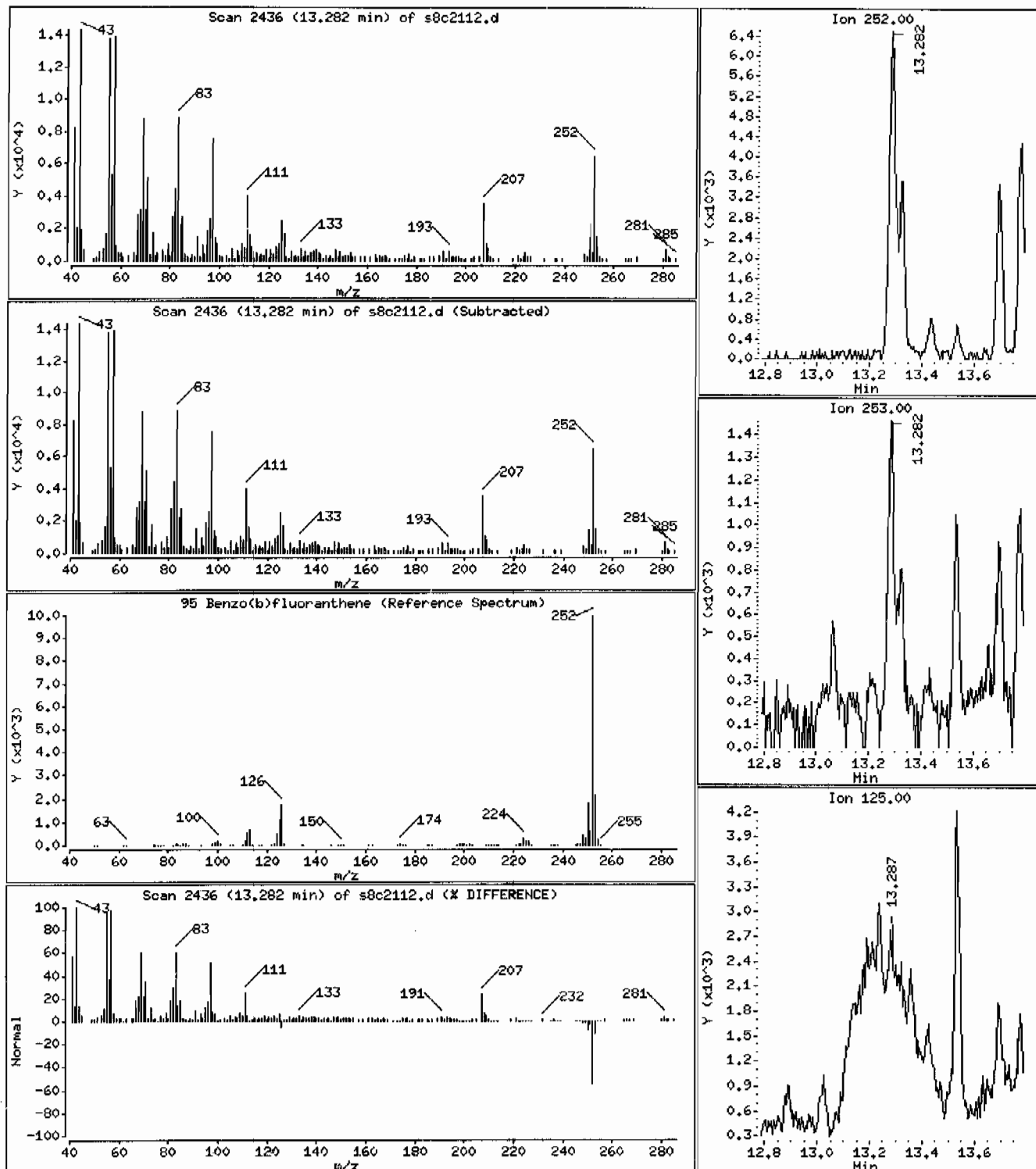
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 23.2 ug/Kg



Date: 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211SVMI11LANL

Volume Injected (uL): 0.5

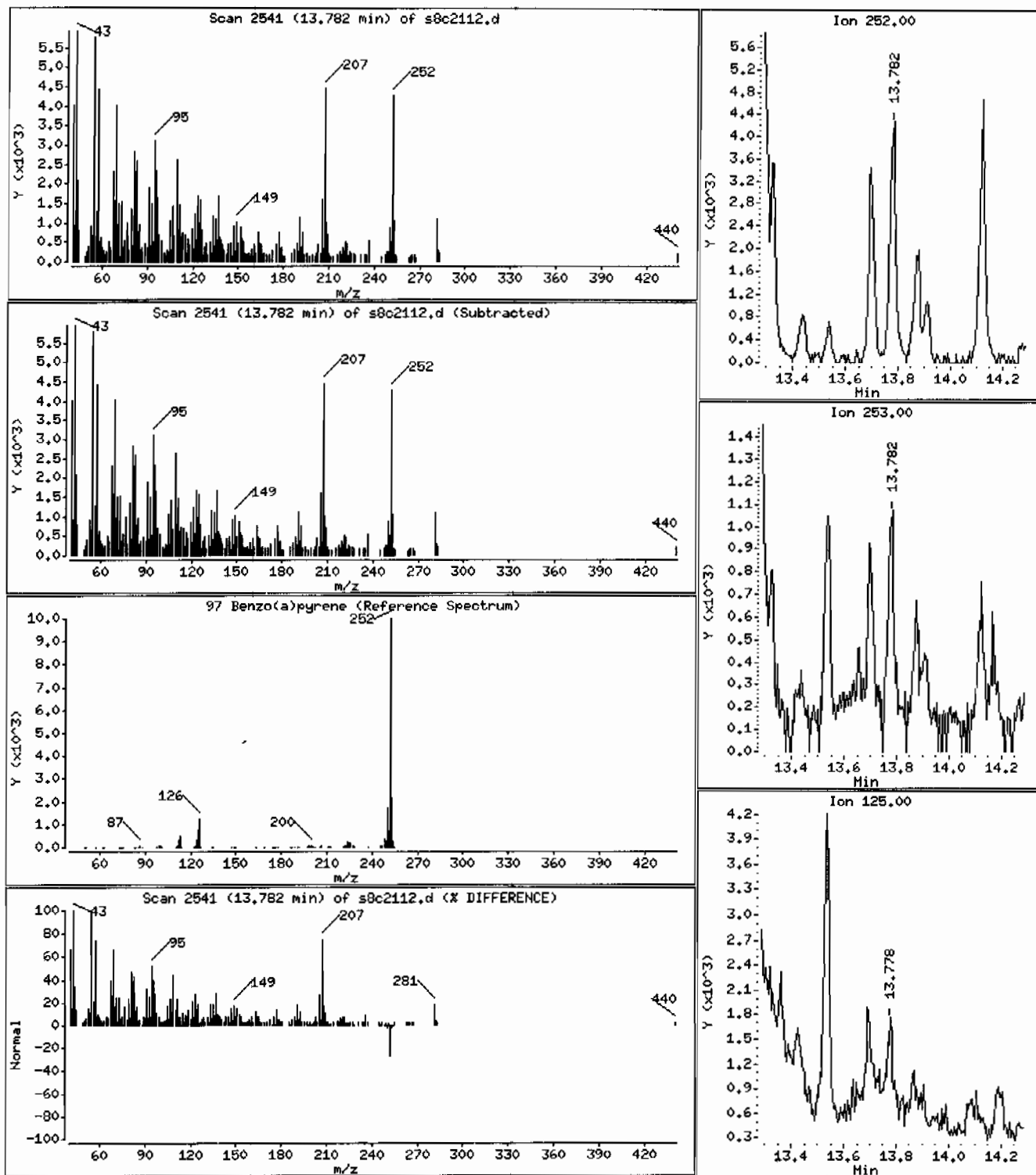
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 17.3 ug/Kg



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: I248373002196192211SVMI11LANL

Volume Injected (uL): 0.5

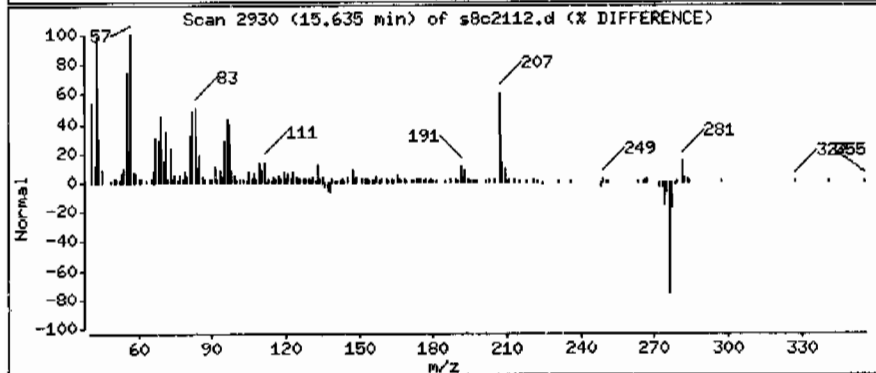
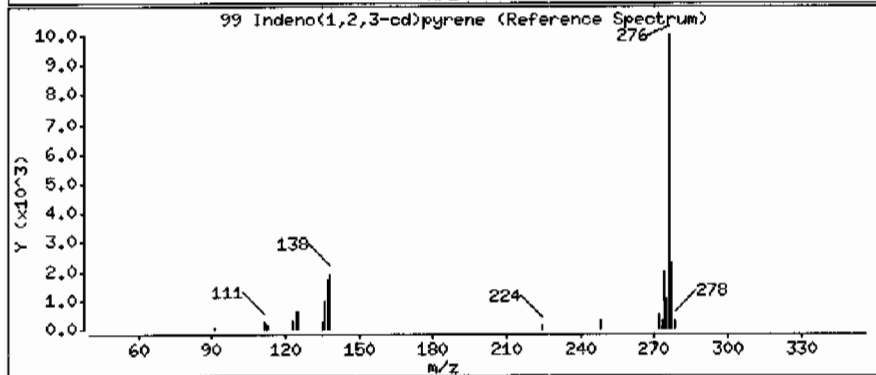
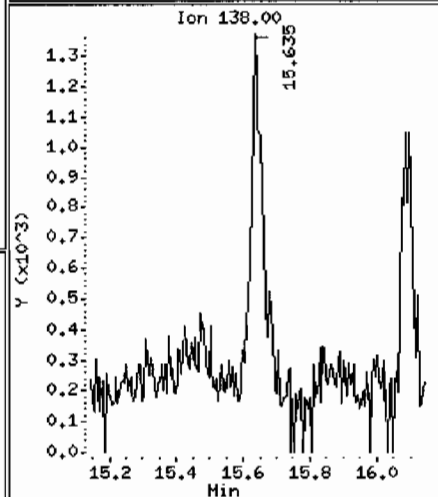
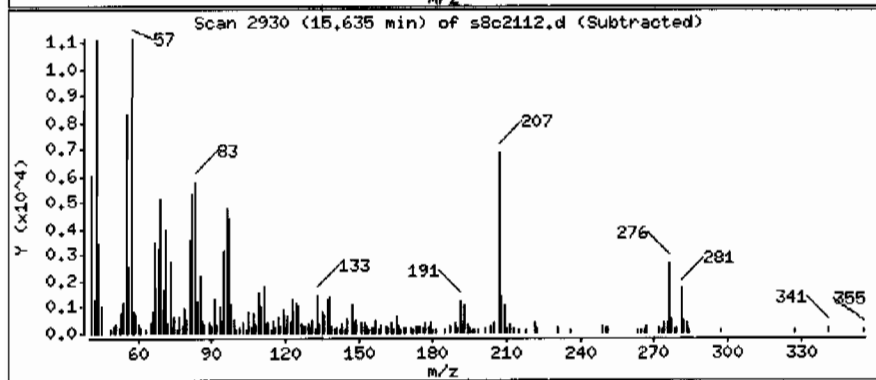
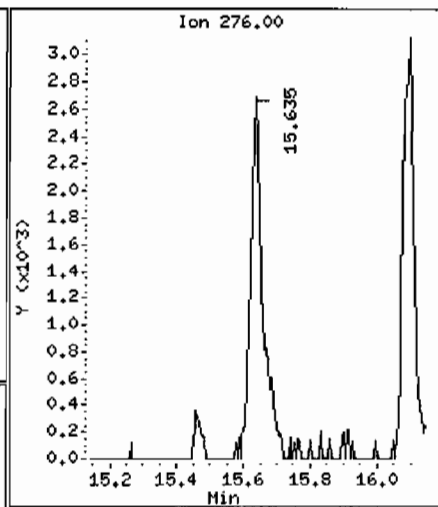
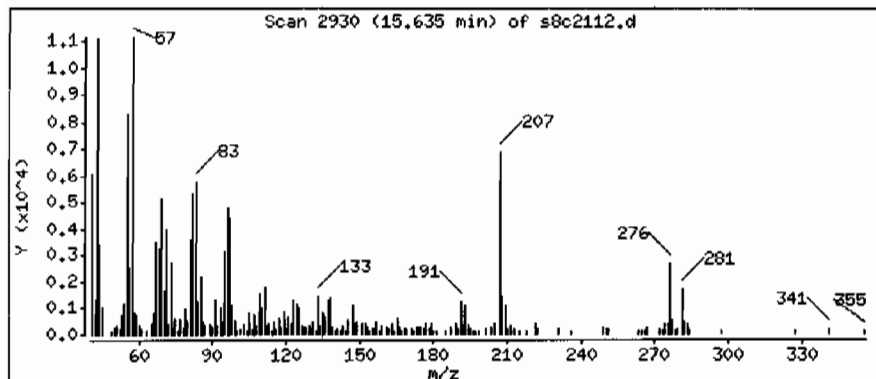
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 19.7 ug/Kg



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211SVMI1ILANL

Volume Injected (uL): 0.5

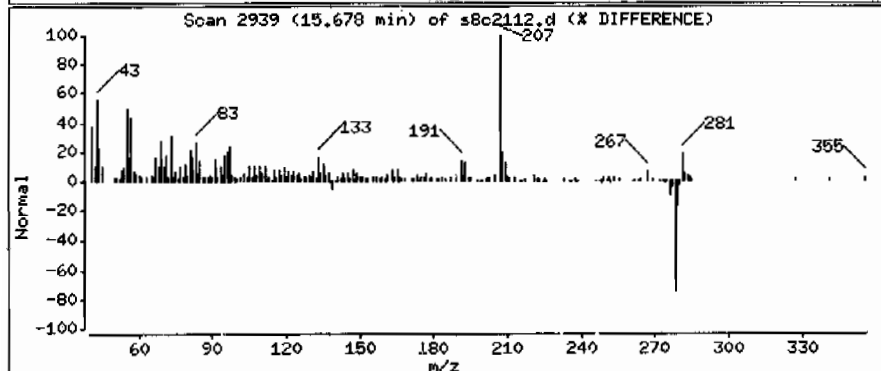
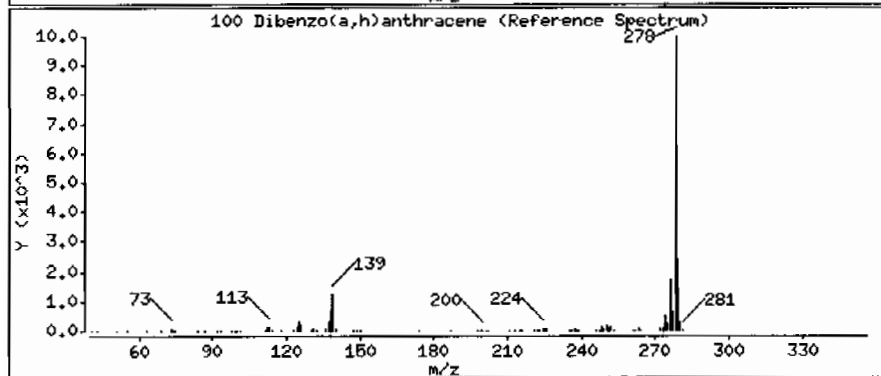
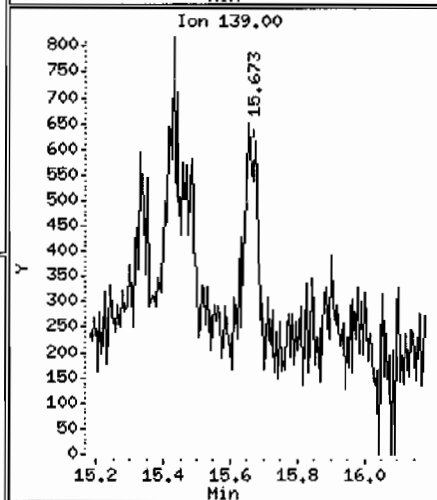
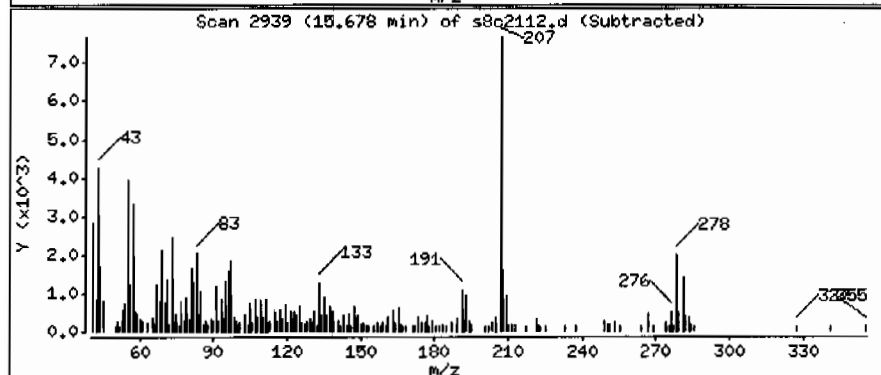
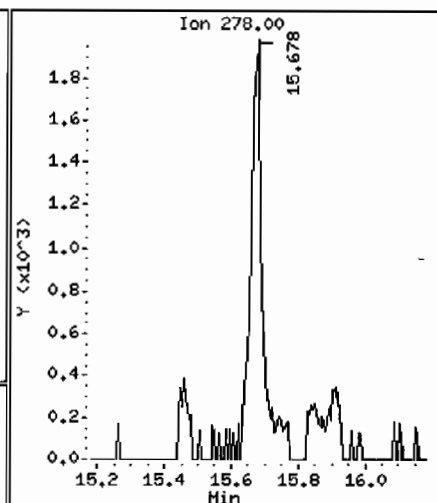
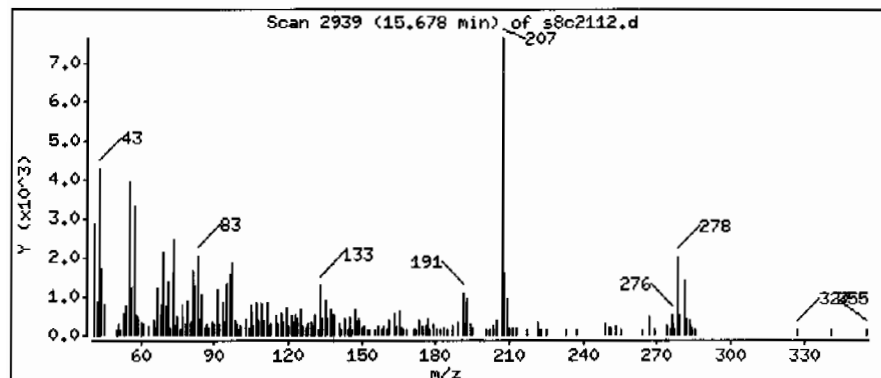
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

100 Dibenzo(a,h)anthracene

Concentration: 16.9 ug/Kg



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: HSD8.i

Sample Info: 1248373002196192211|SVH11|LANL

Volume Injected (uL): 0.5

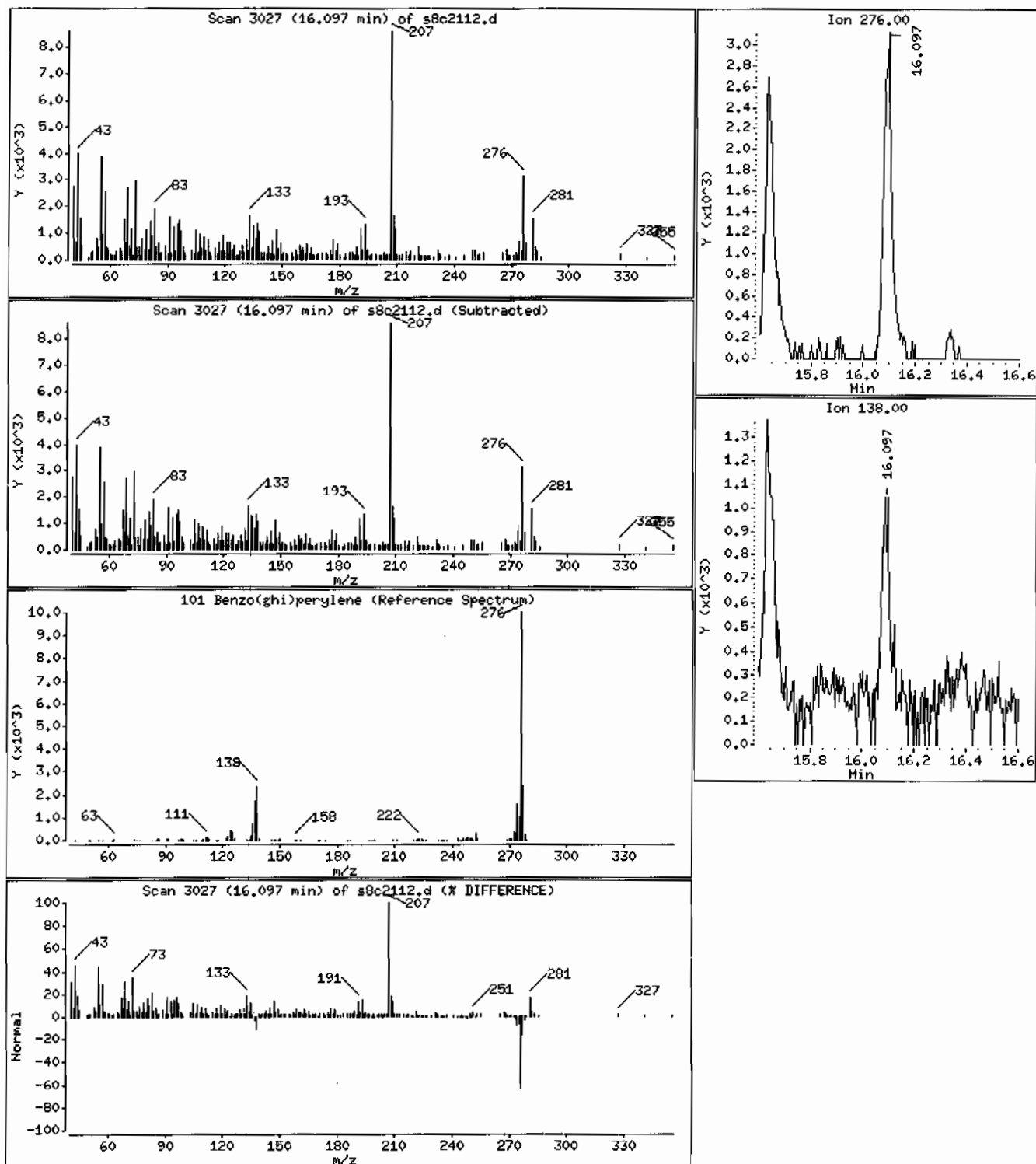
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 23.4 ug/Kg



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: I248373002I9619221IISVHI1ILANL

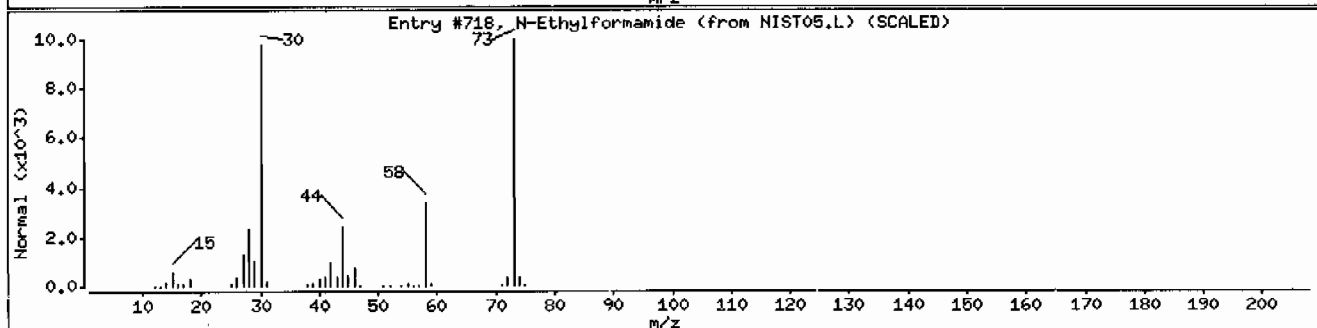
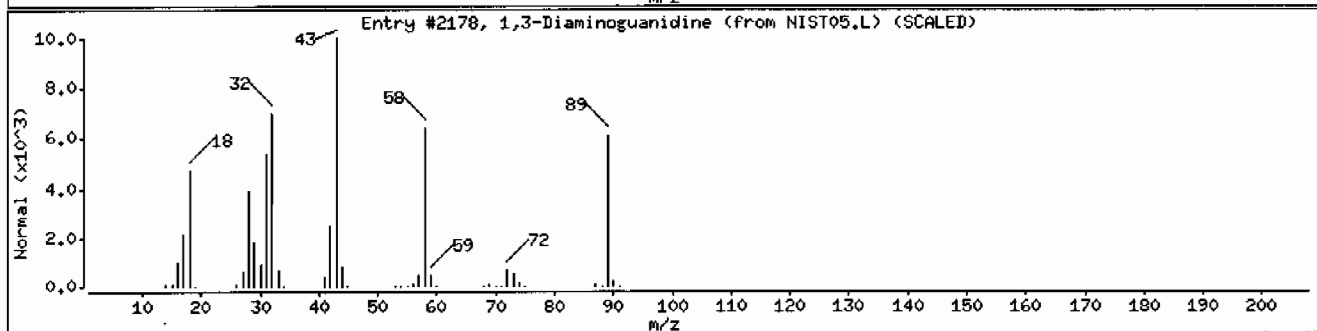
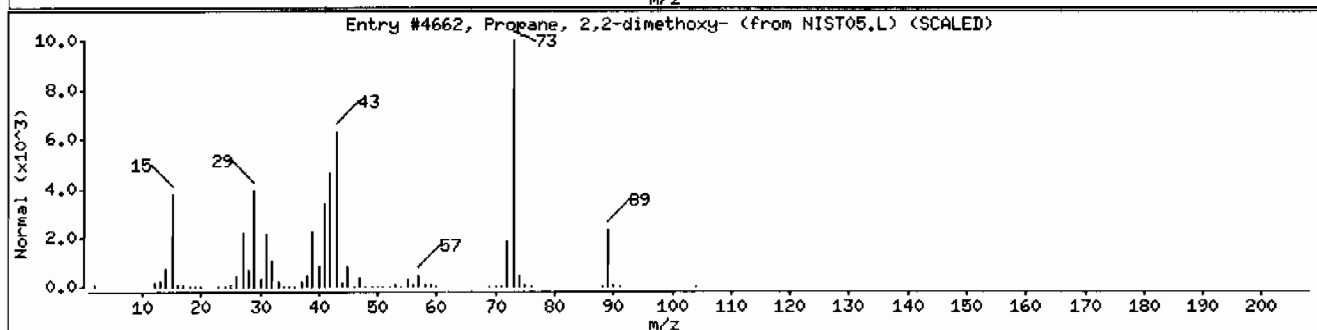
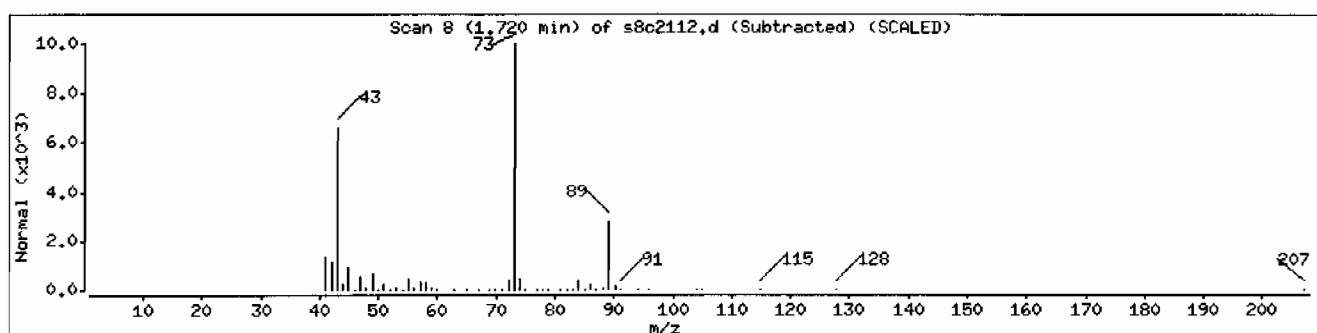
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	37	C5H12O2	104
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	23	CH7N5	89
N-Ethylformamide	627-45-2	NIST05.L	718	17	C3H7NO	73



Date: 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: I248373002196192211SVMI1ILANL

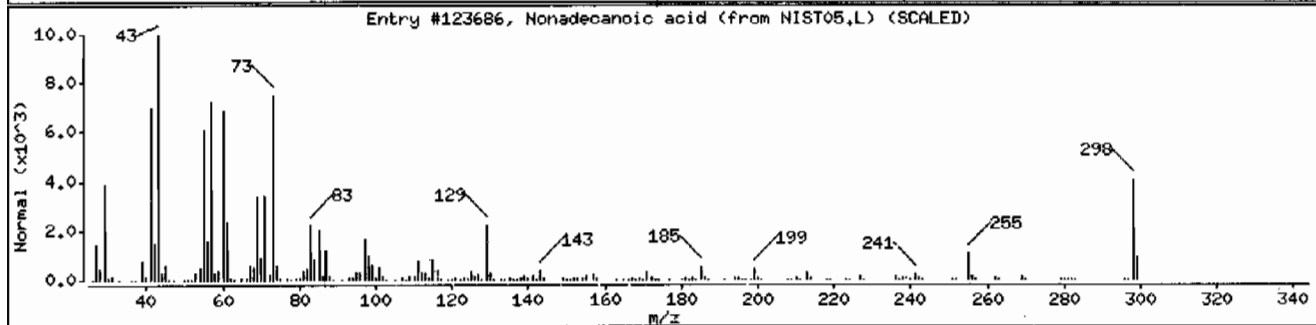
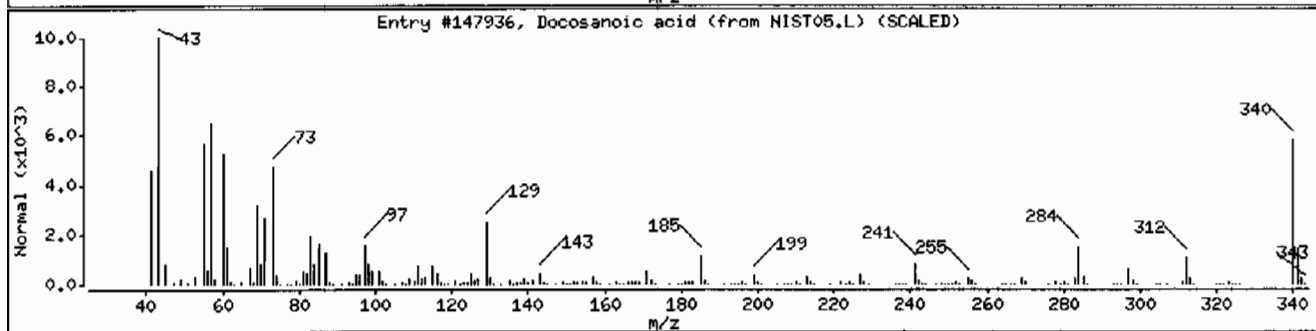
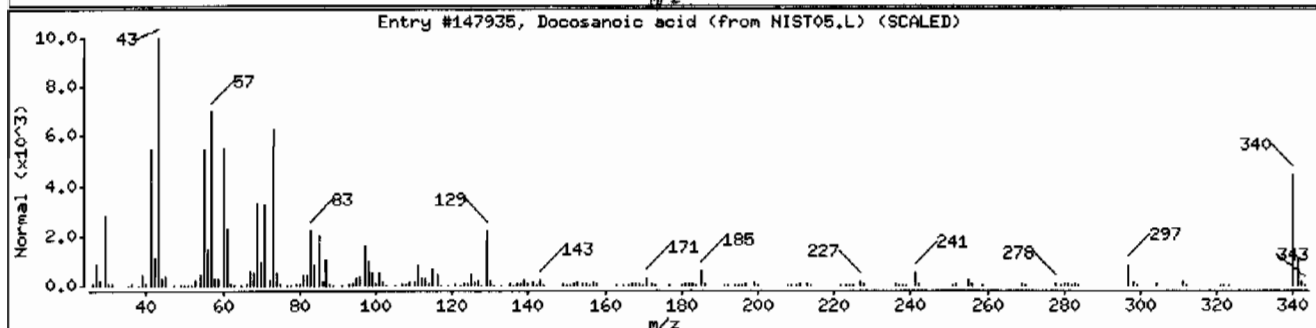
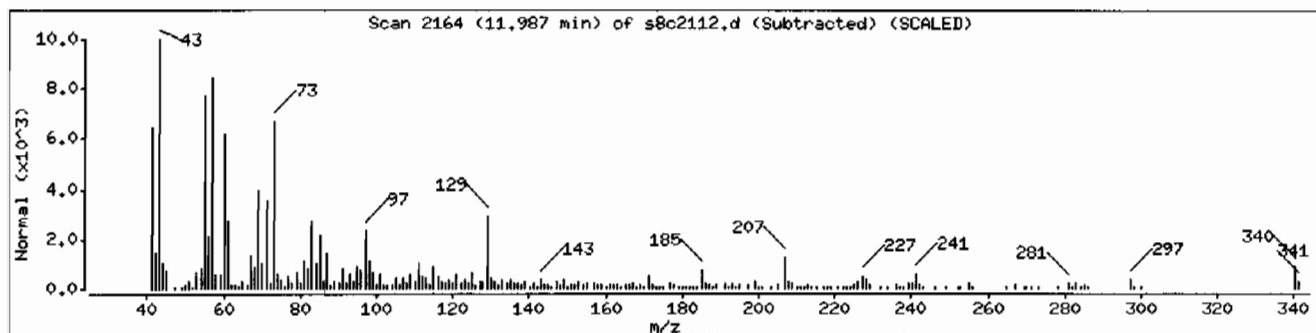
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Docosanoic acid	112-85-6	NIST05.L	147935	99	C22H44O2	340
Docosanoic acid	112-85-6	NIST05.L	147936	76	C22H44O2	340
Nonadecanoic acid	646-30-0	NIST05.L	123686	68	C19H38O2	298



Date: 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 12483730021961922111SVH111LANL

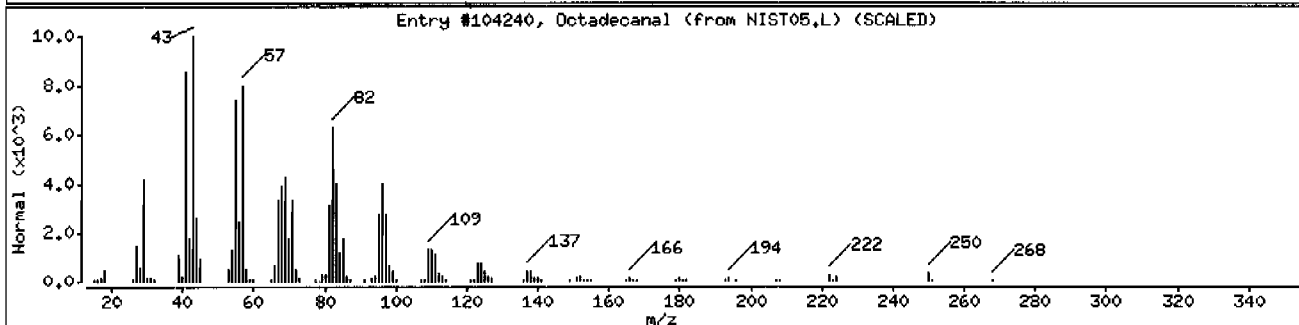
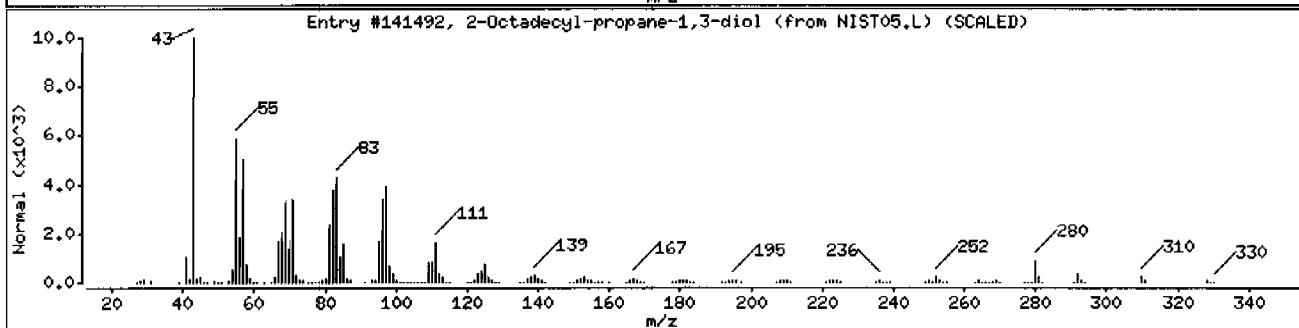
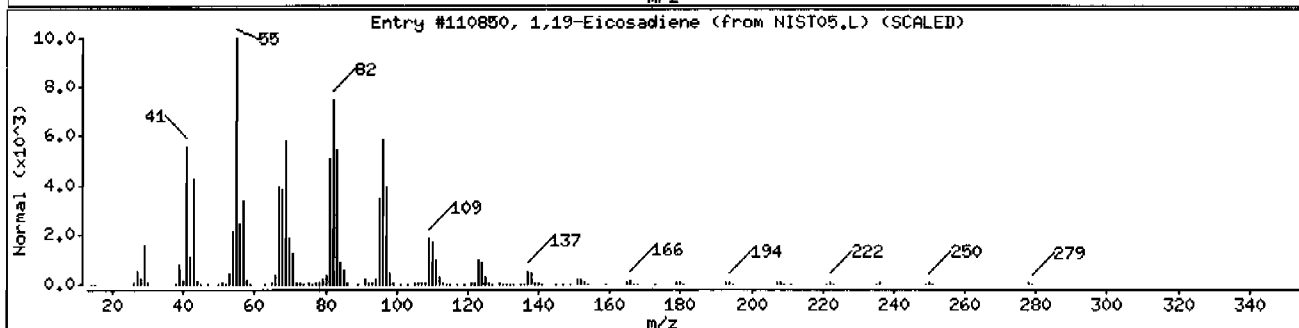
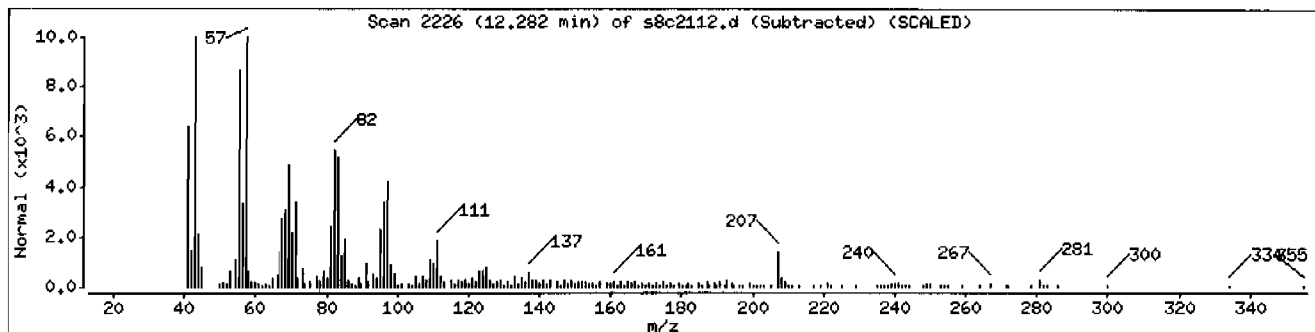
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,19-Eicosadiene	14811-95-1	NIST05.L	110850	92	C ₂₀ H ₃₈	278
2-Octadecyl-propane-1,3-diol	5337-61-1	NIST05.L	141492	90	C ₂₁ H ₄₄ O ₂	328
Octadecanal	638-66-4	NIST05.L	104240	62	C ₁₈ H ₃₆ O	268



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: HSD8.i

Sample Info: 1248373002196192211SVH111LANL

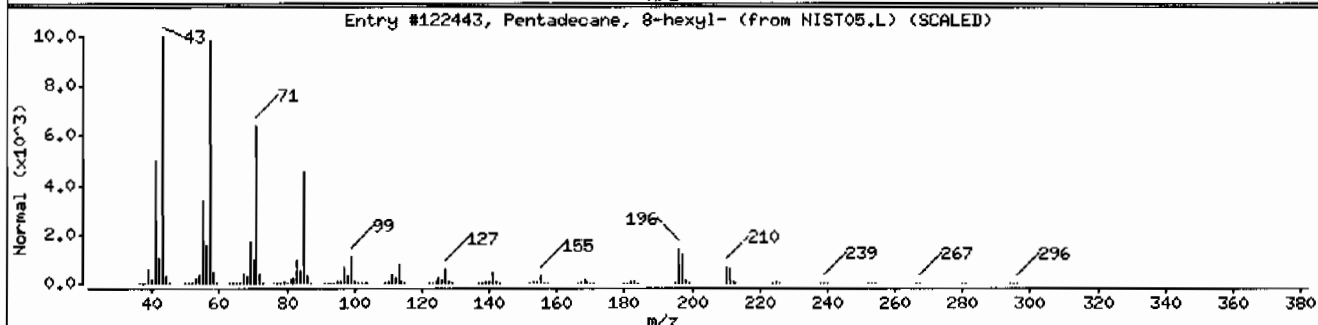
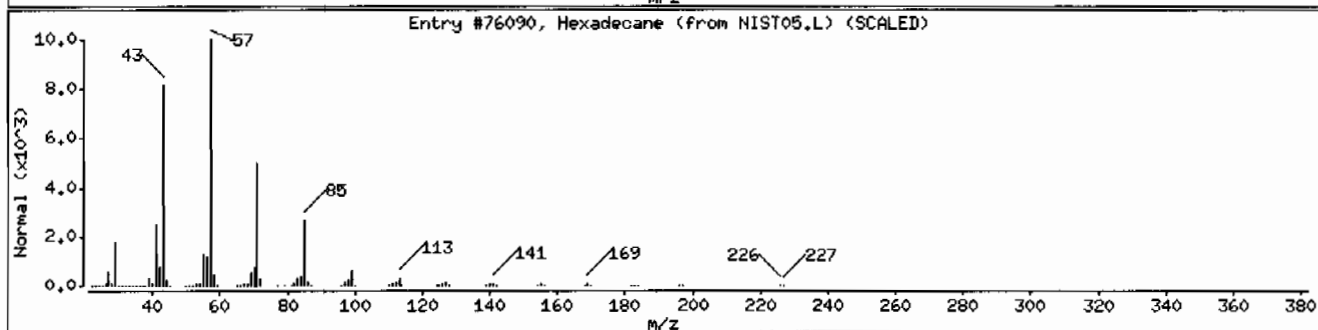
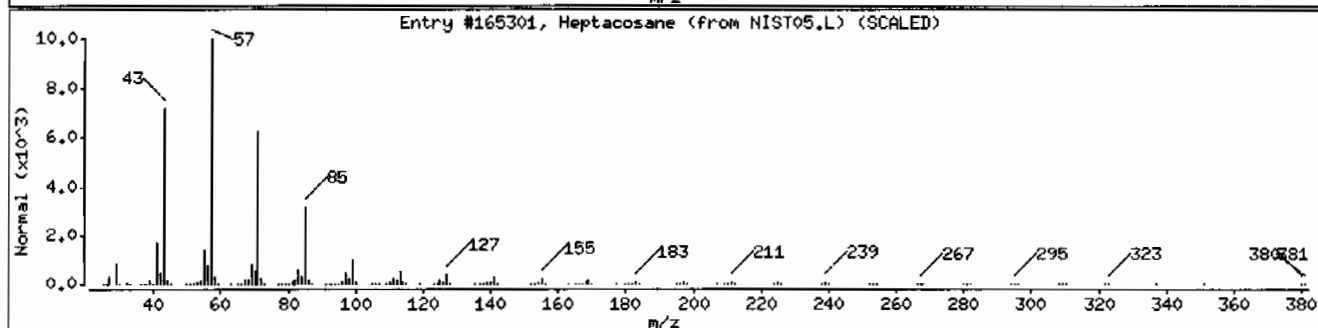
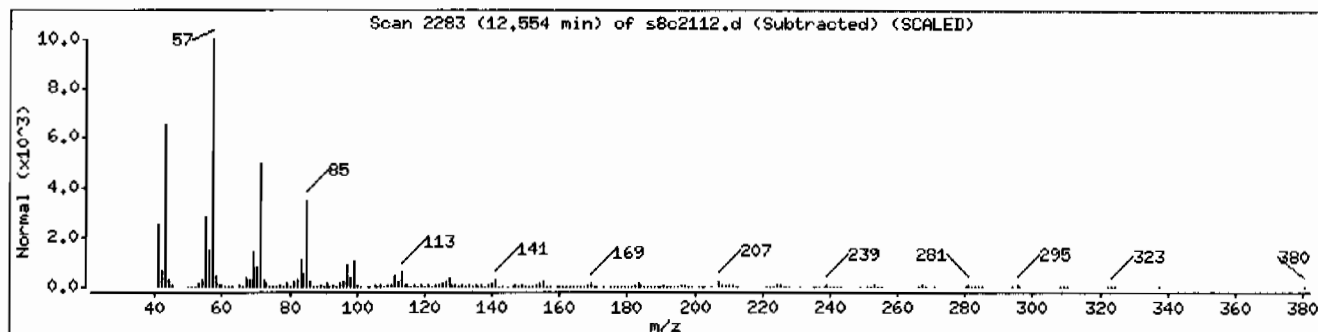
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptacosane	593-49-7	NIST05.L	165301	98	C27H56	380
Hexadecane	544-76-3	NIST05.L	76090	93	C16H34	226
Pentadecane, 8-hexyl-	13475-75-7	NIST05.L	122443	91	C21H44	296



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211SVH11ILANL

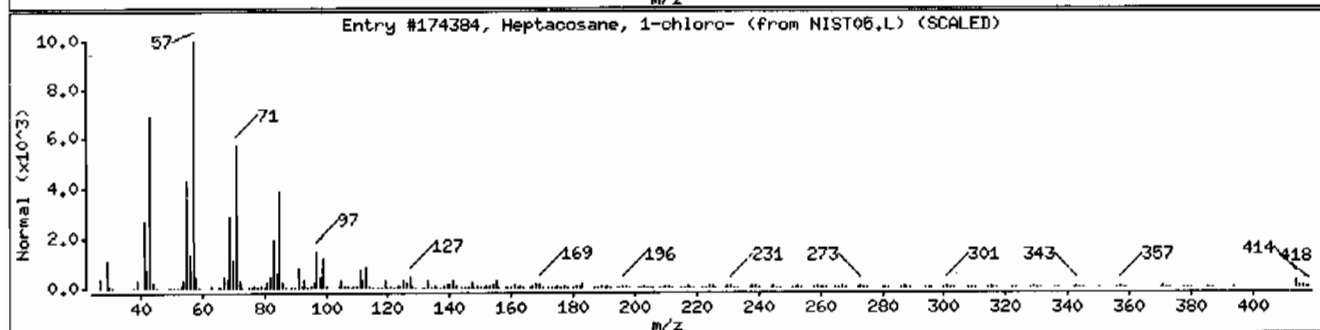
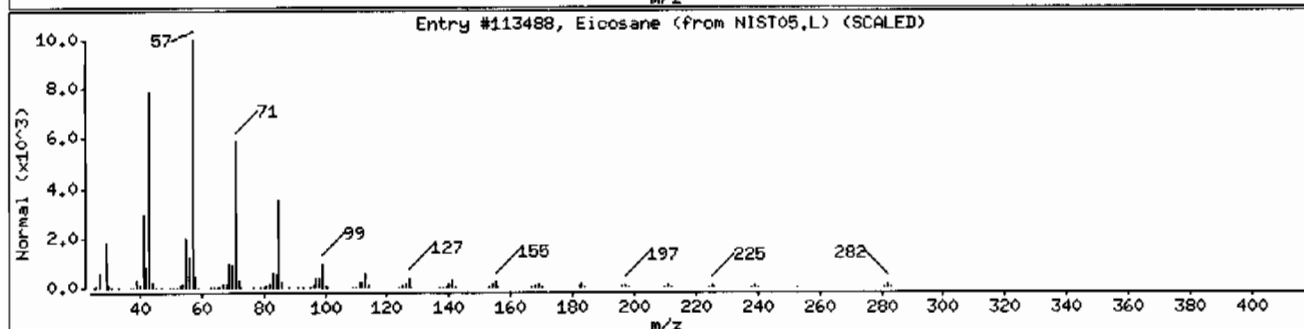
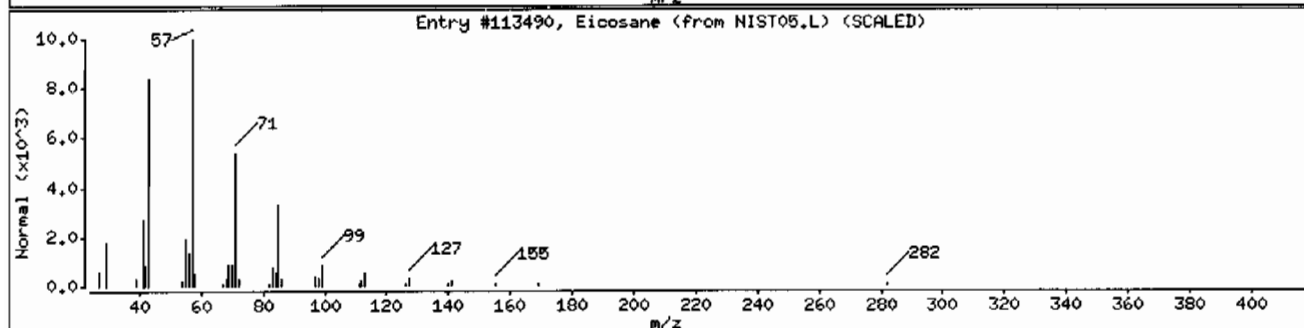
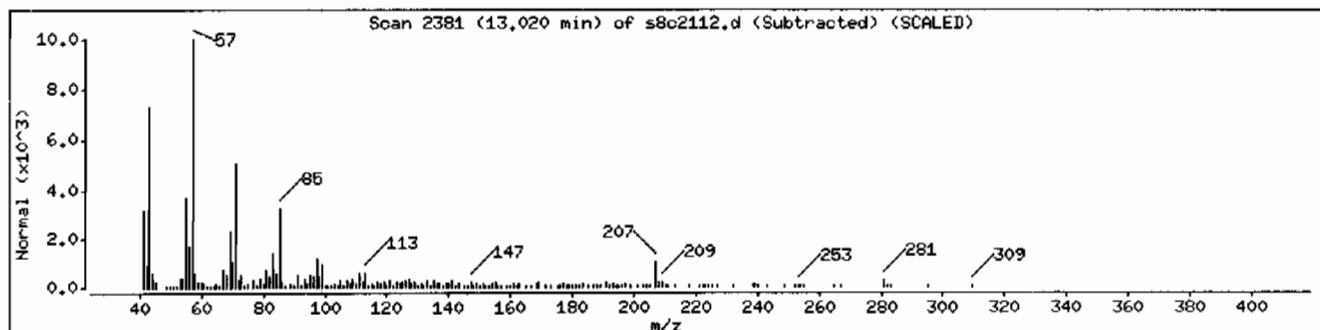
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	95	C20H42	282
Heptacosane, 1-chloro-	62016-79-9	NIST05.L	174384	87	C27H55Cl	414



Date: 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211SVH11ILANL

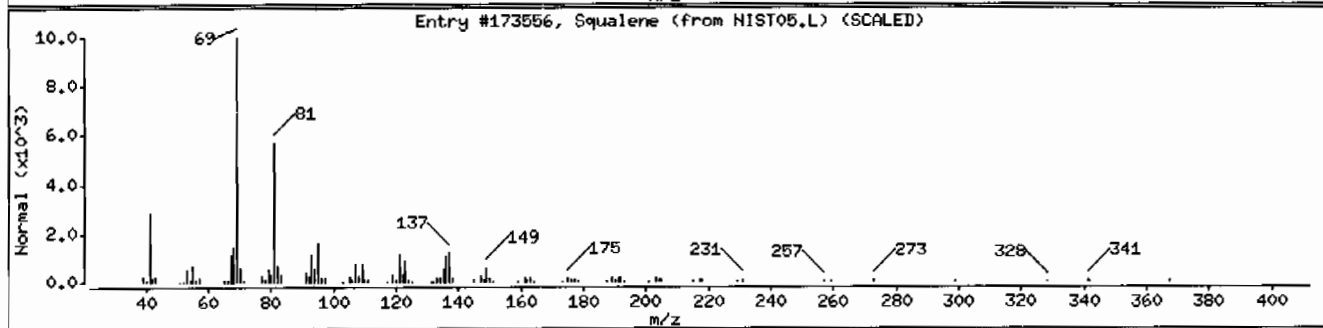
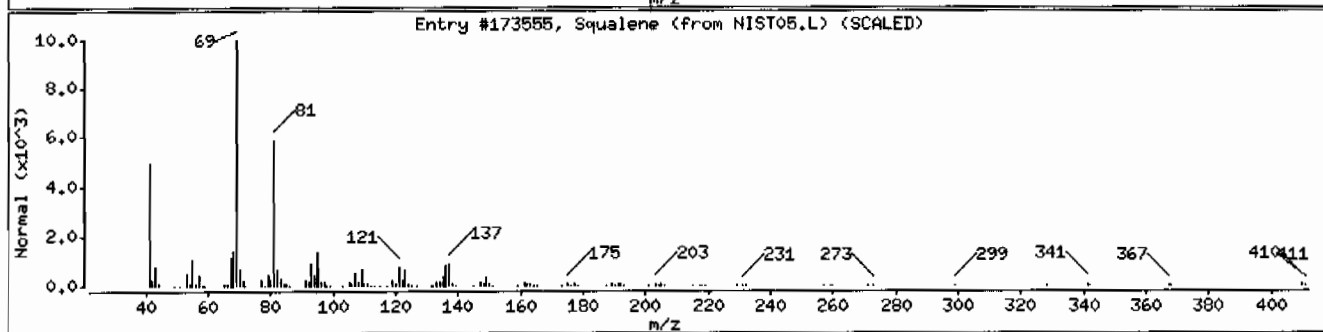
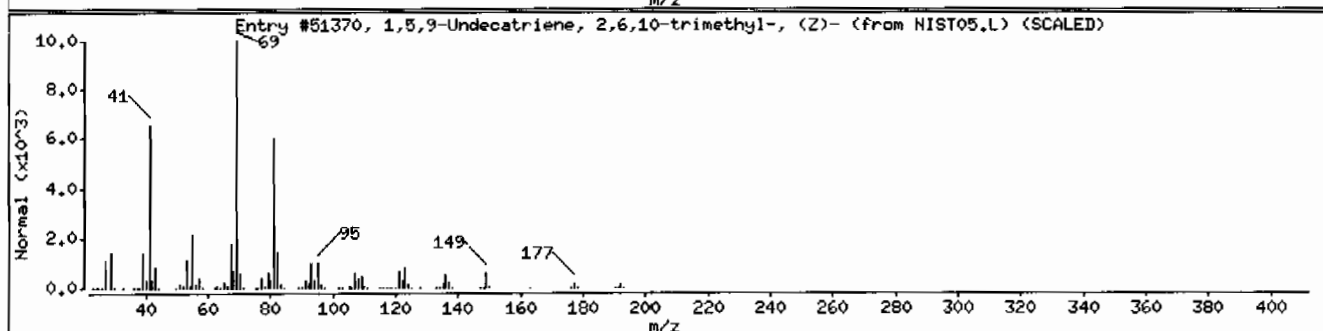
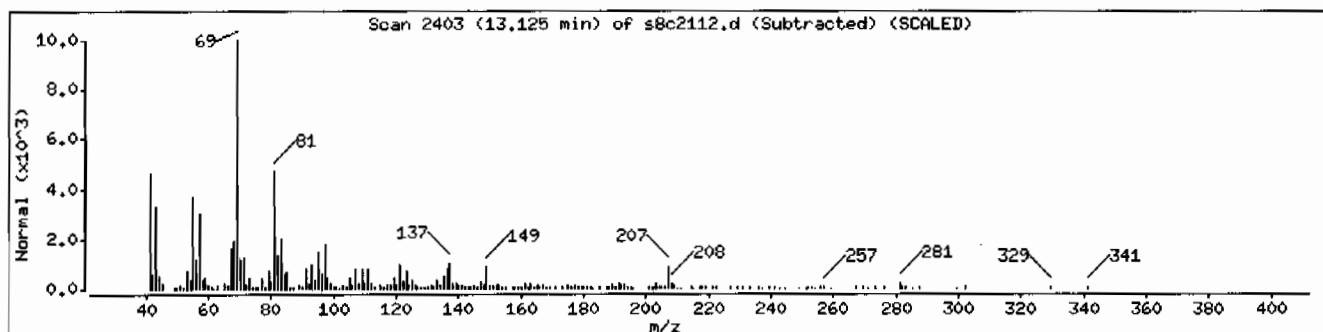
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,5,9-Undecatriene, 2,6,10-trimethyl-, (	62951-96-6	NIST05.L	51370	83	C14H24	192
Squalene	7683-64-9	NIST05.L	173555	62	C30H50	410
Squalene	7683-64-9	NIST05.L	173556	62	C30H50	410



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: I248373002I961922I1ISVM11ILANL

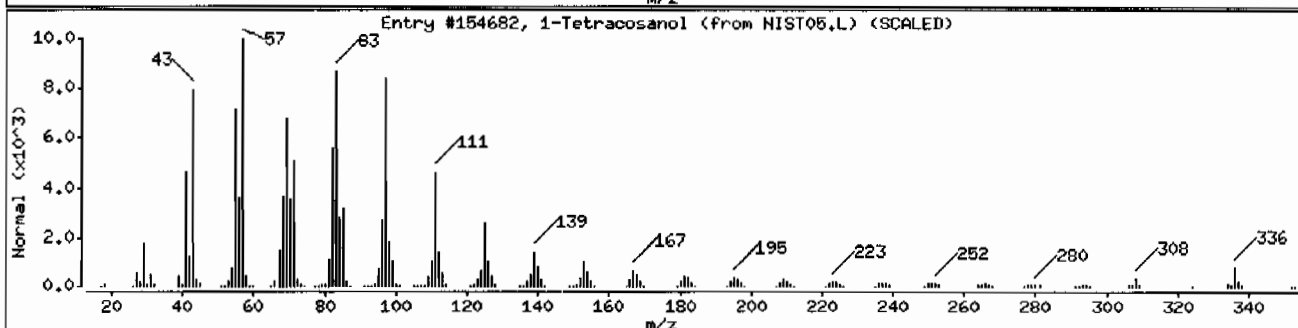
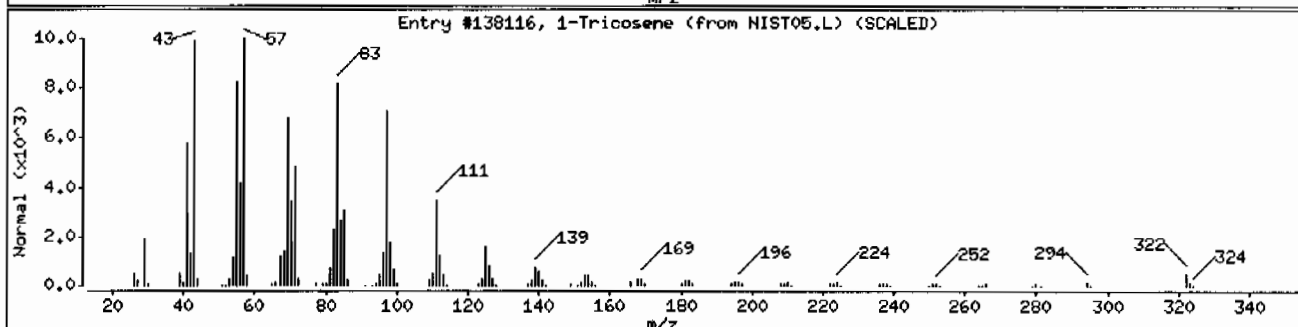
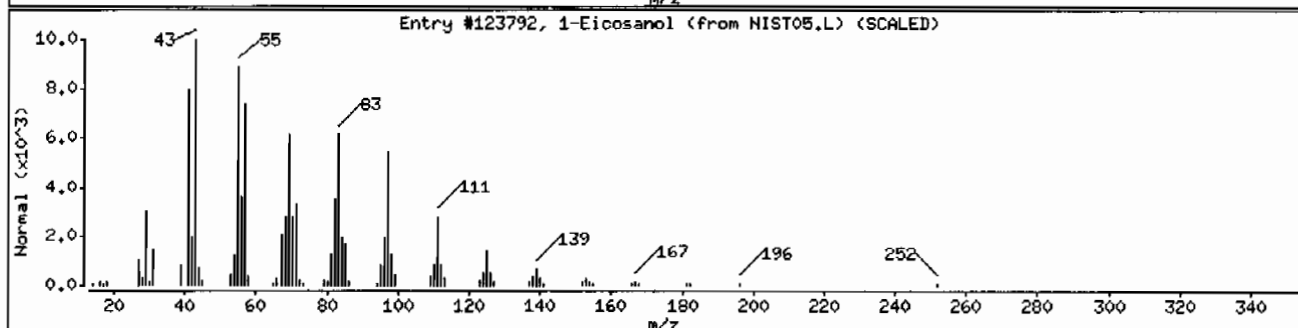
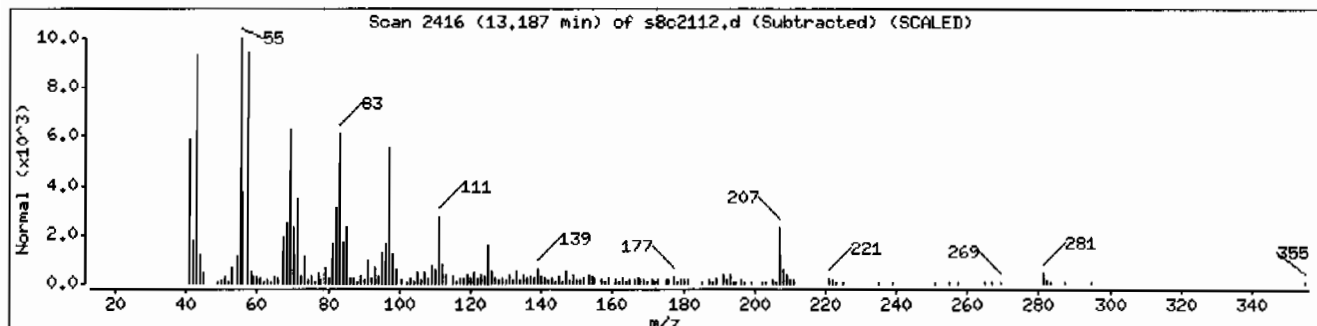
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Eicosanol	629-96-9	NIST05.L	123792	93	C20H42O	298
1-Tricosene	18835-32-0	NIST05.L	138116	81	C23H46	322
1-Tetracosanol	506-51-4	NIST05.L	154682	81	C24H50O	354



Date: 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: HSD8.i

Sample Info: 1248373002196192211SVH11ILANL

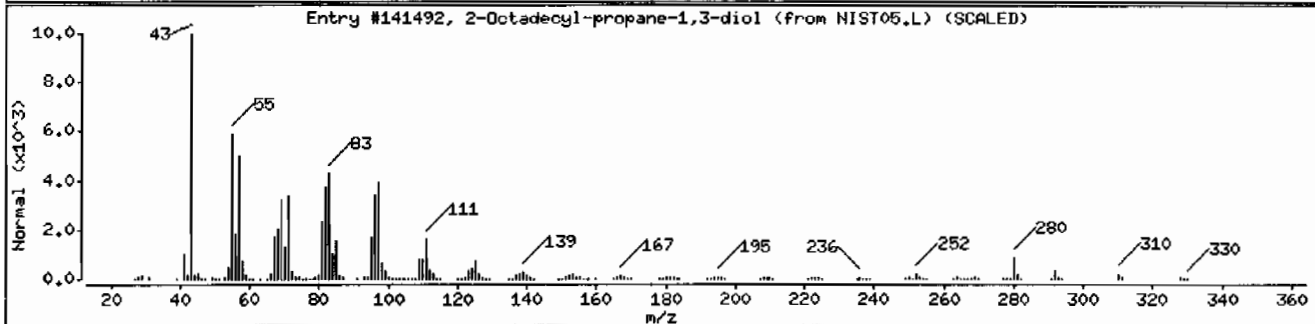
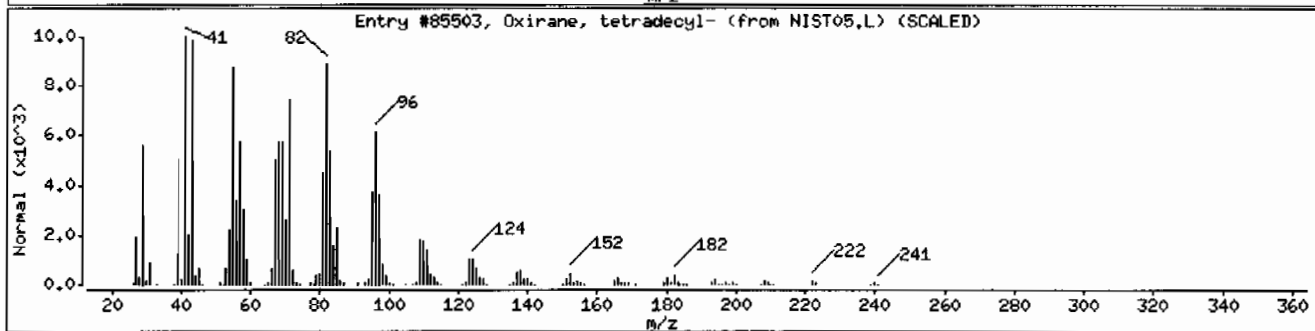
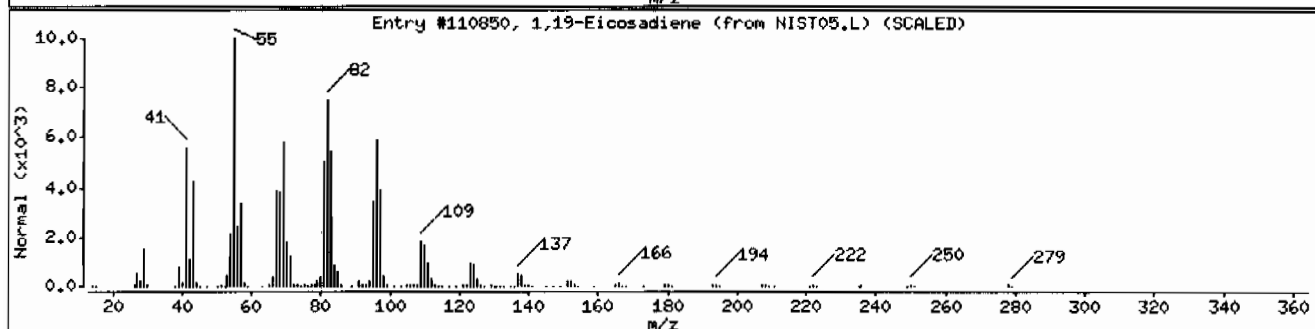
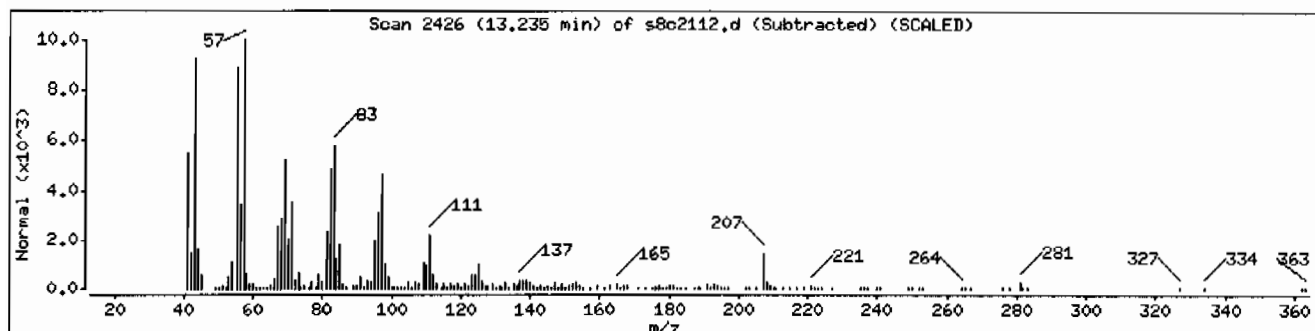
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,19-Eicosadiene	14811-95-1	NIST05.L	110850	97	C20H38	278
Oxirane, tetradecyl-	7320-37-8	NIST05.L	85503	95	C16H32O	240
2-Octadecyl-propane-1,3-diol	5337-61-1	NIST05.L	141492	90	C21H44O2	328



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: HSD8.i

Sample Info: 1248373002196192211SVH111LANL

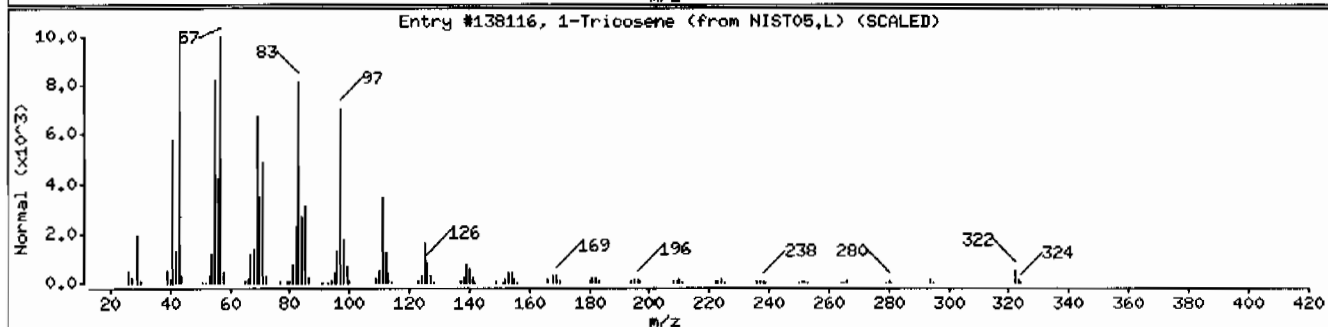
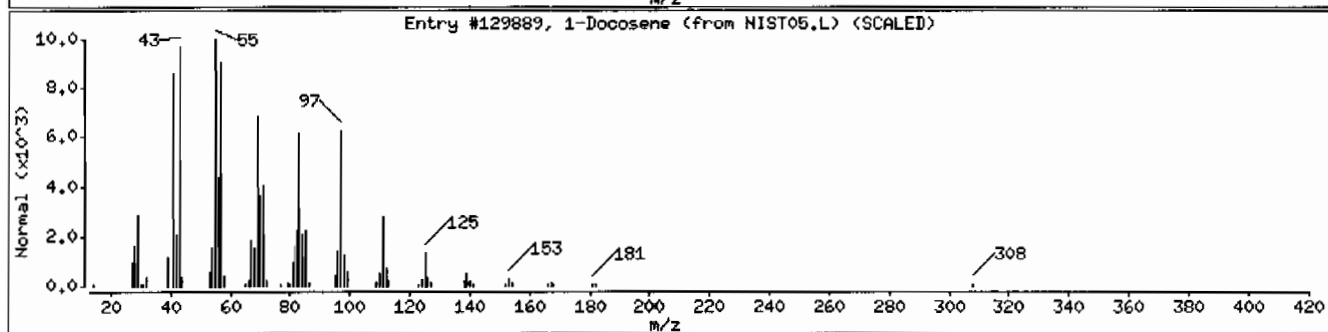
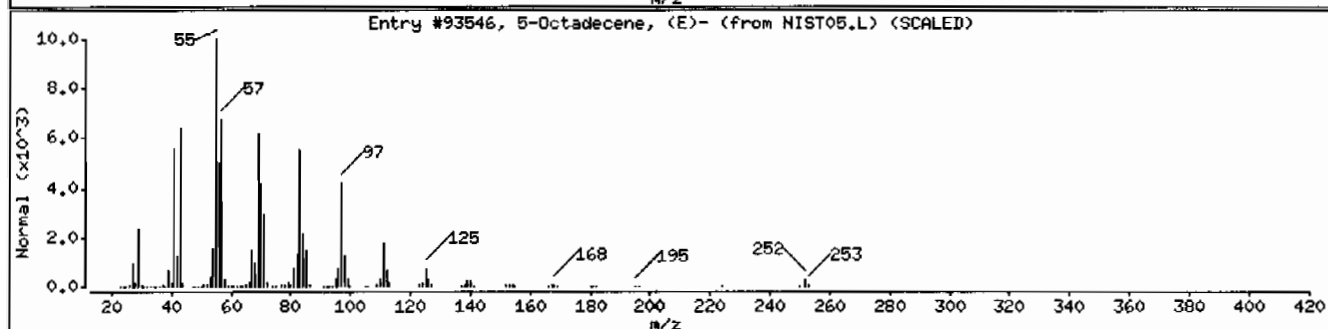
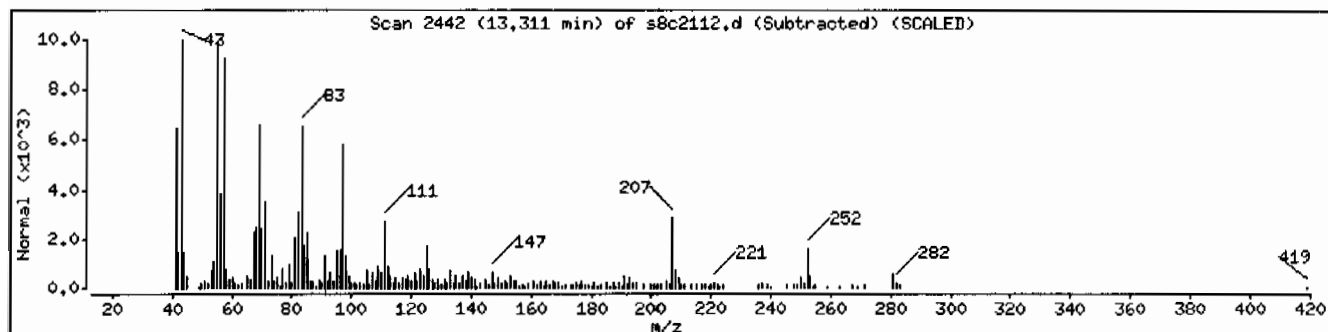
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Octadecene, (E)-	7206-21-5	NIST05.L	93546	78	C18H36	252
1-Docosene	1599-67-3	NIST05.L	129889	76	C22H44	308
1-Tricosene	18835-32-0	NIST05.L	138116	76	C23H46	322



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211ISVH111LANL

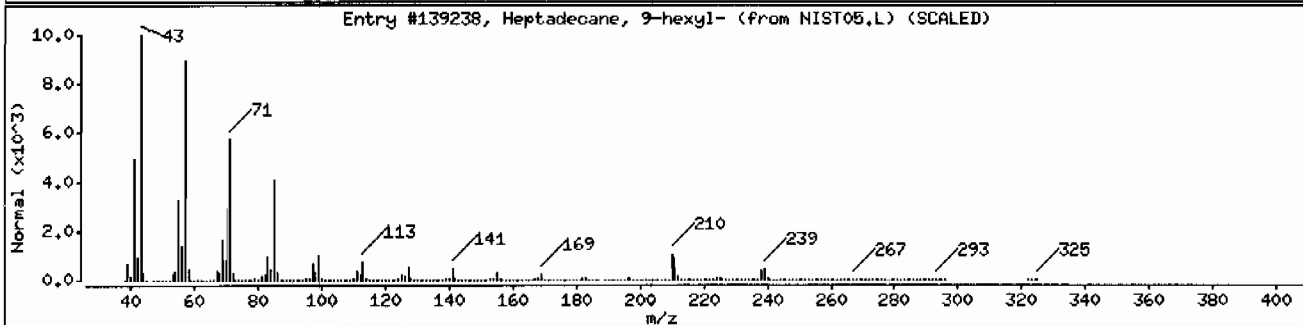
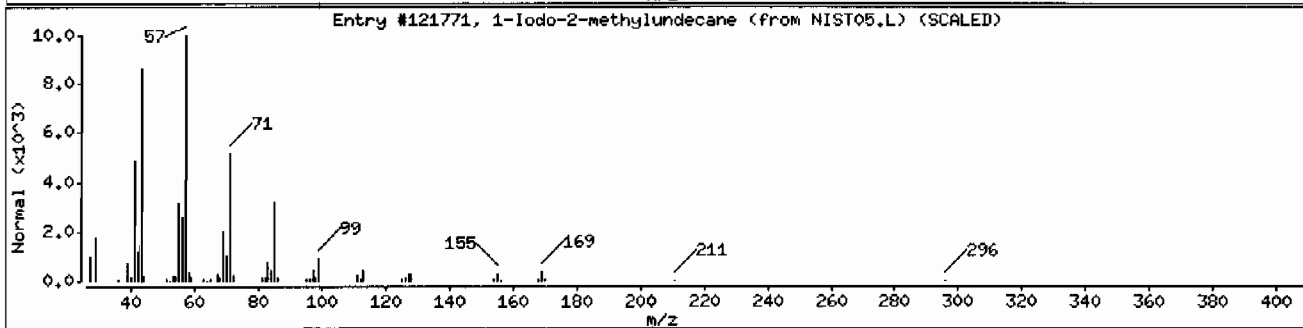
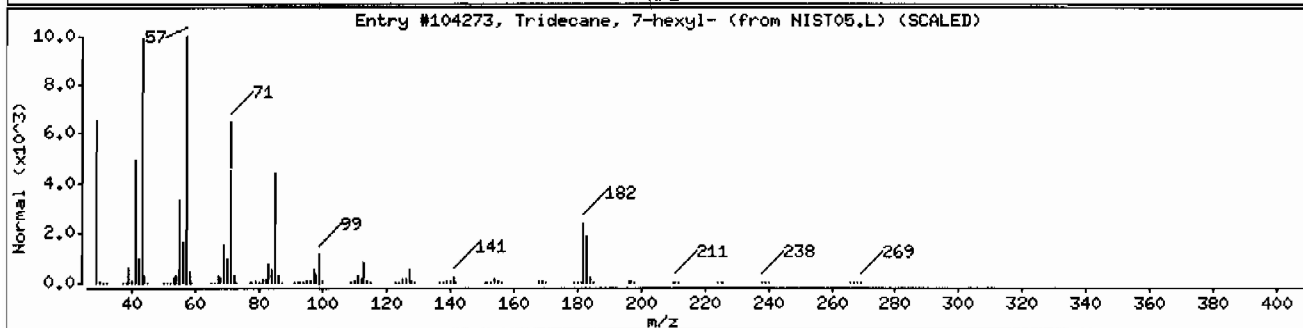
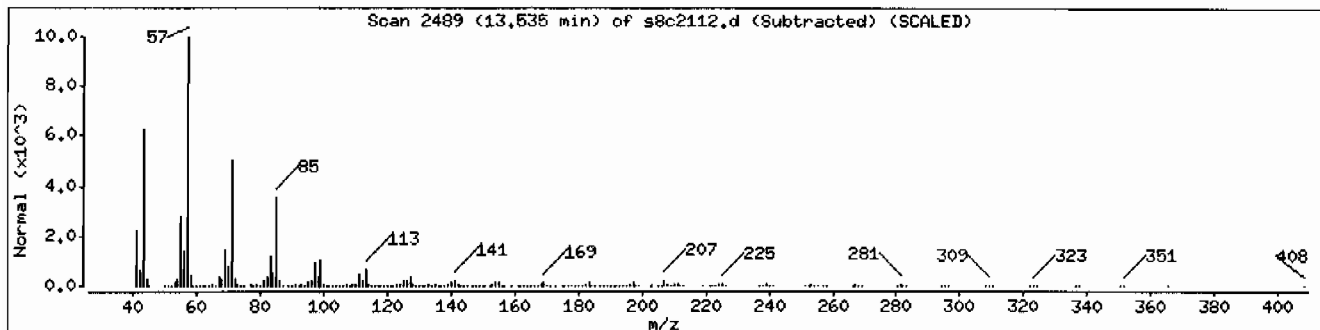
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tridecane, 7-hexyl-	7225-66-3	NIST05.L	104273	95	C19H40	268
1-Iodo-2-methylundecane	73105-67-6	NIST05.L	121771	91	C12H25I	296
Heptadecane, 9-hexyl-	55124-79-3	NIST05.L	139238	90	C23H48	324



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 12483730021961922111SVMI11/LANL

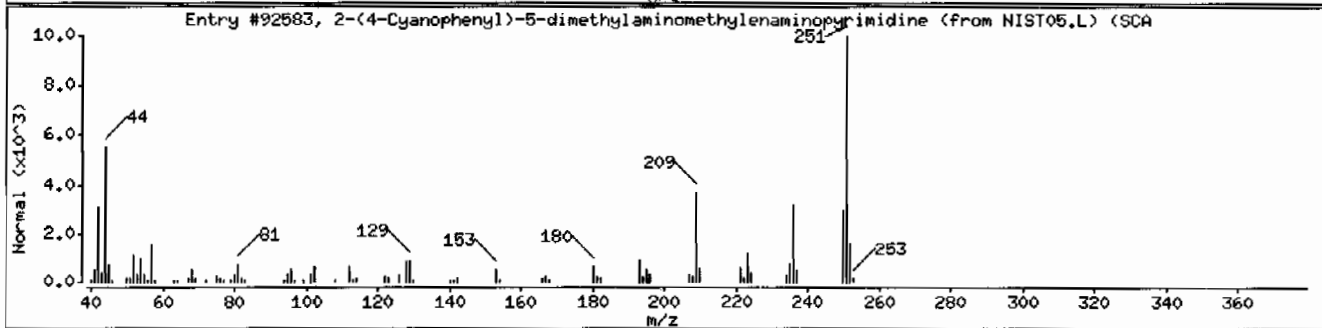
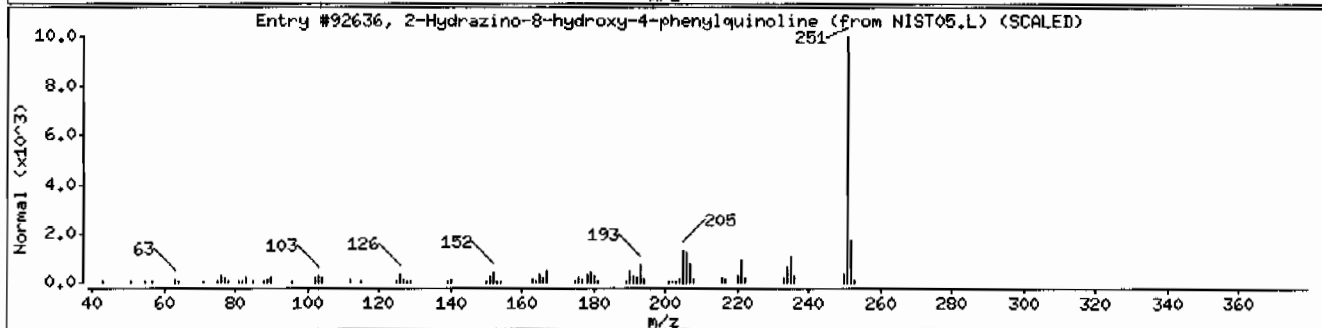
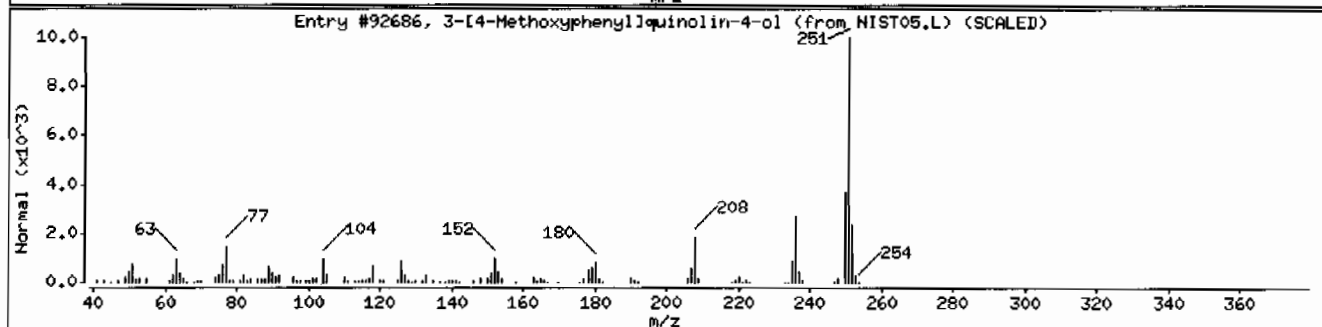
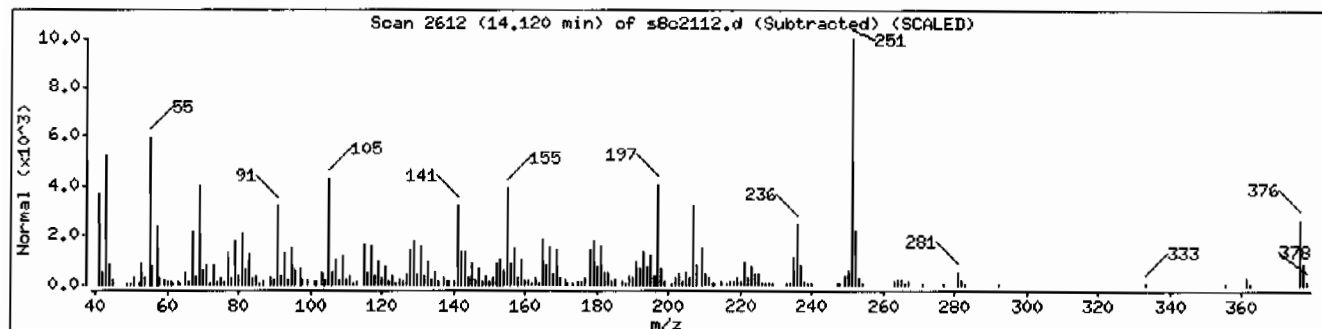
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-[4-Methoxyphenyl]quinolin-4-ol	1000254-66-9	NIST05.L	92686	43	C ₁₆ H ₁₃ N ₂ O ₂	251
2-Hydrazino-8-hydroxy-4-phenylquinoline	104926-86-4	NIST05.L	92636	42	C ₁₅ H ₁₃ N ₃ O	251
2-(4-Cyanophenyl)-5-dimethylaminomethyle	150405-58-6	NIST05.L	92583	38	C ₁₄ H ₁₃ N ₅	251



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211ISVM11ILANL

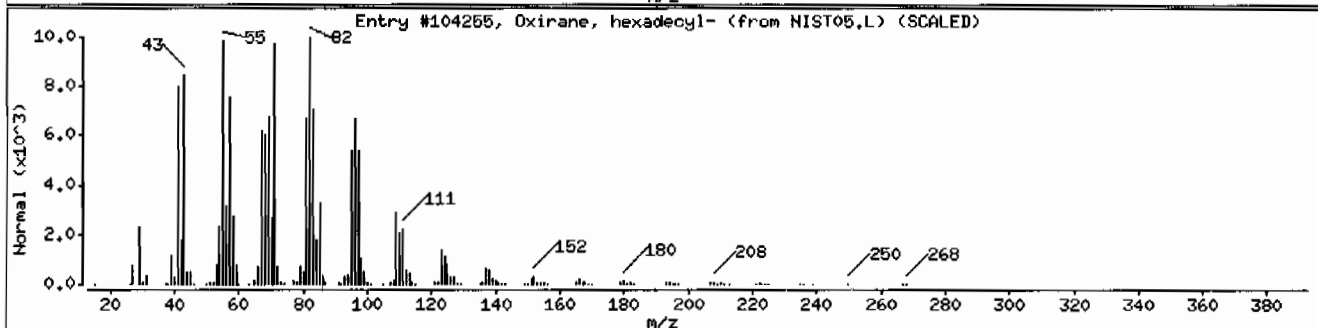
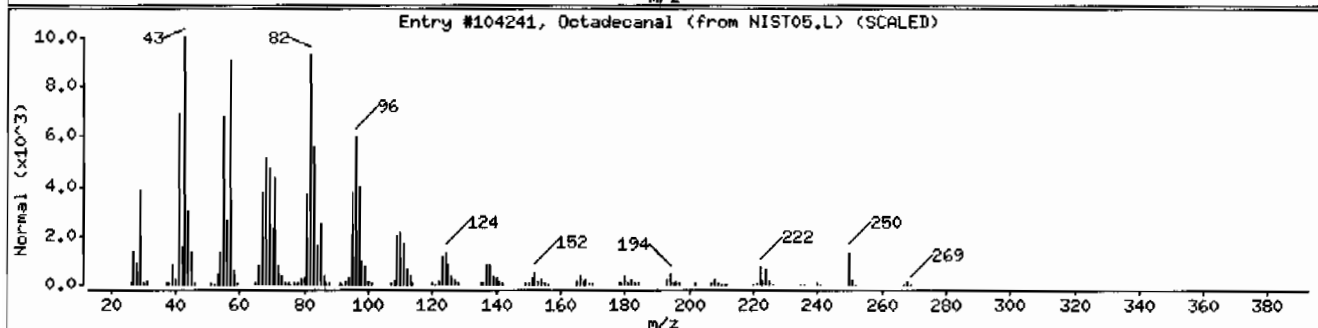
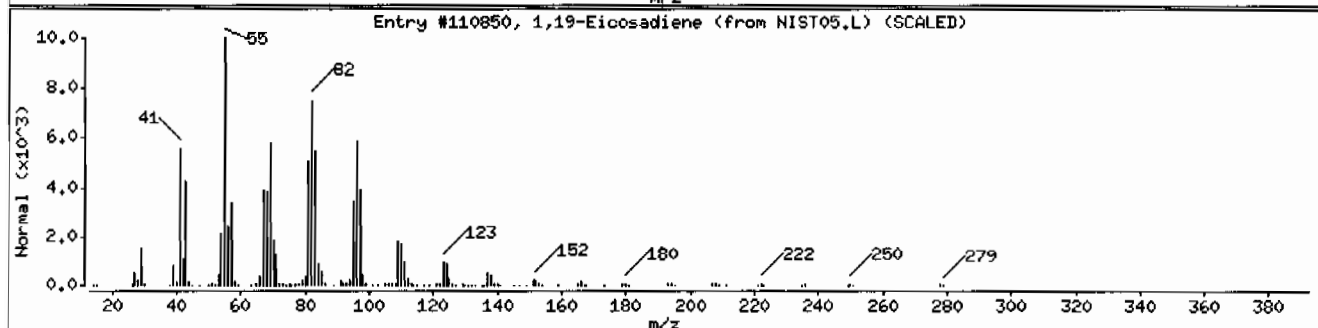
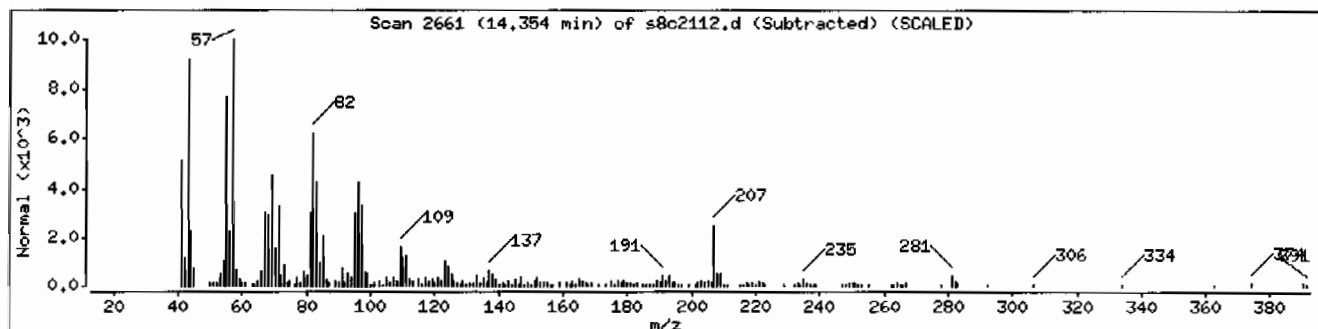
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,19-Eicosadiene	14811-95-1	NIST05.L	110850	95	C20H38	278
Octadecanal	638-66-4	NIST05.L	104241	87	C18H36O	268
Oxirane, hexadecyl-	7390-81-0	NIST05.L	104255	83	C18H36O	268



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: 1248373002196192211ISVH11LANL

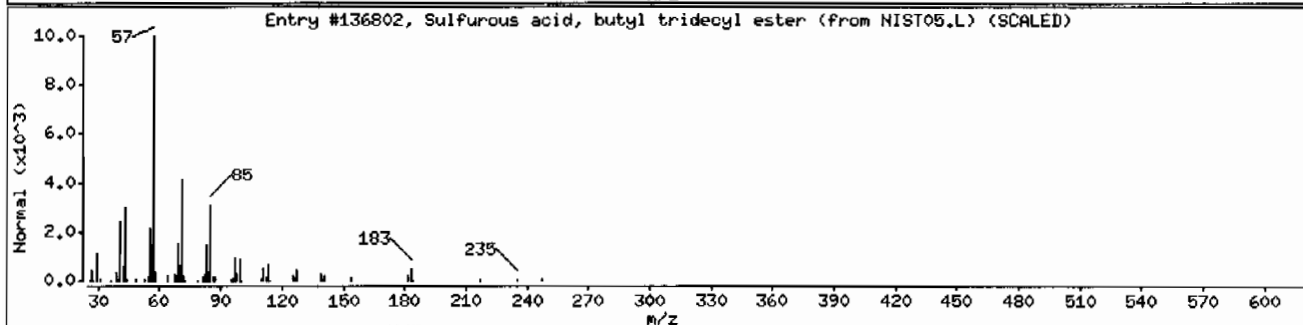
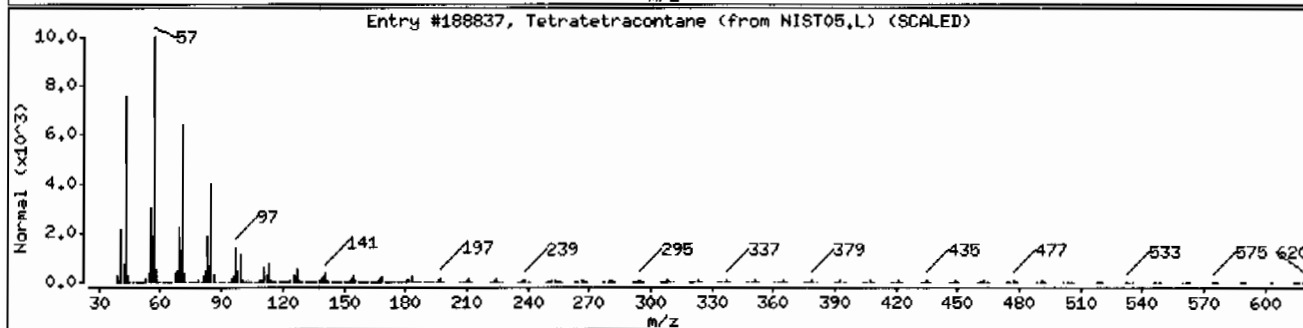
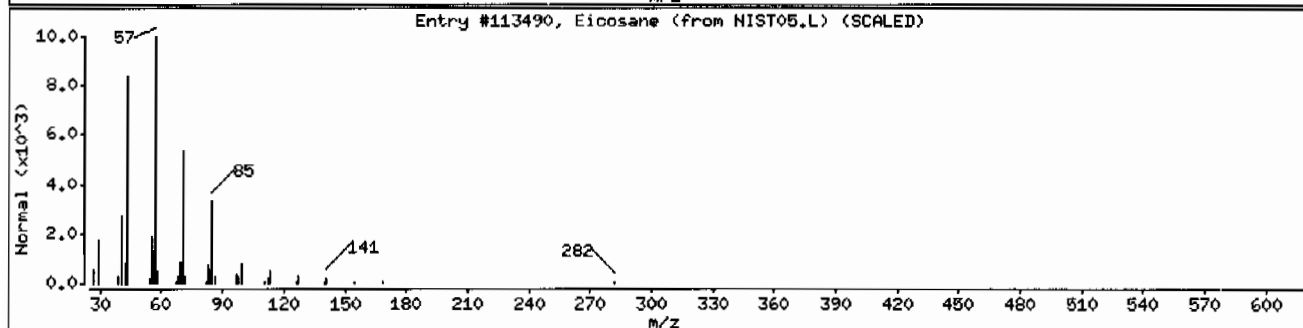
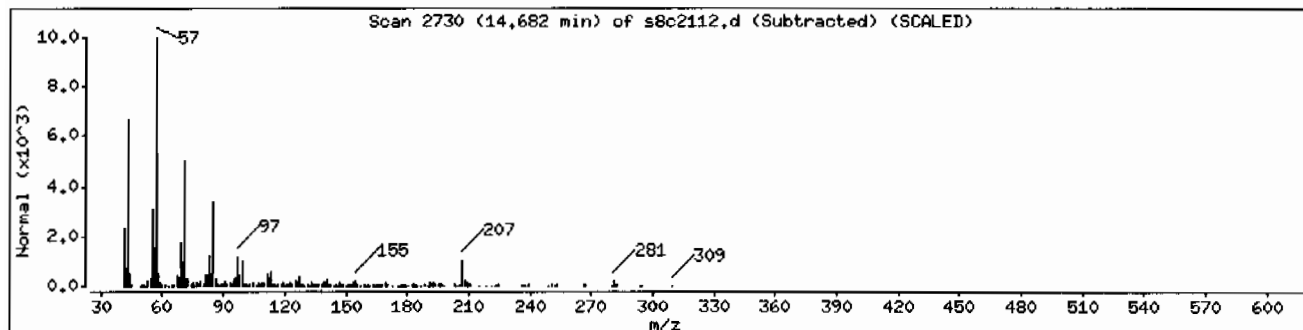
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	97	C20H42	282
Tetratetracontane	7098-22-8	NIST05.L	188837	87	C44H90	619
Sulfurous acid, butyl tridecyl ester	1000309-18-0	NIST05.L	136802	83	C17H36O3S	320



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: HSD8.i

Sample Info: 1248373002196192211SVH11/LANL

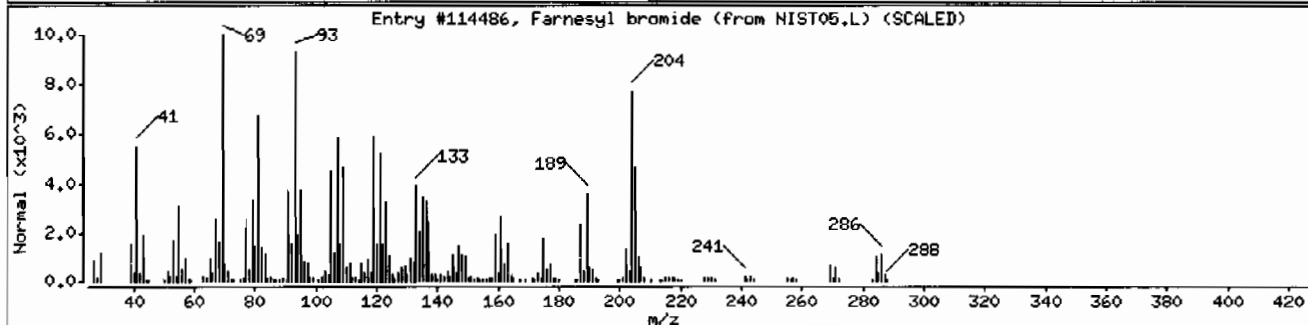
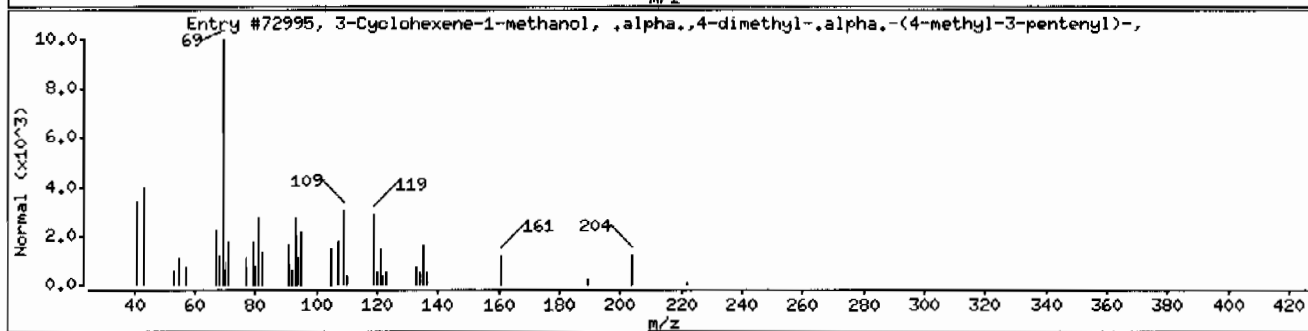
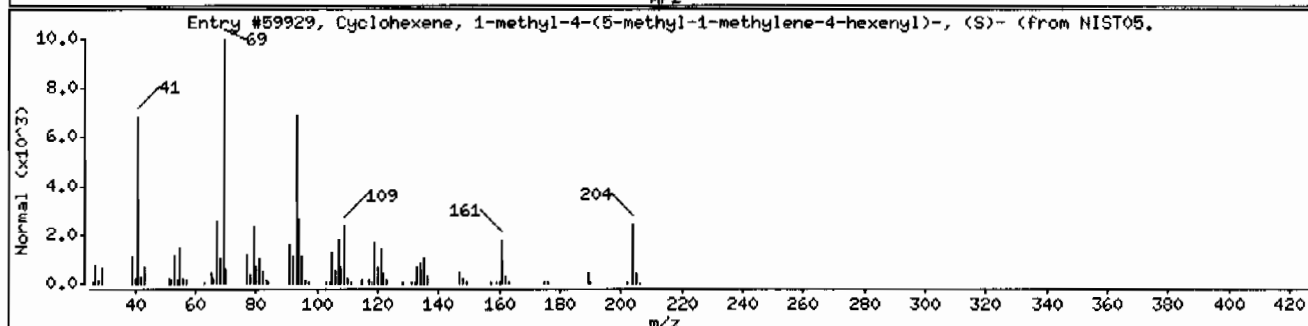
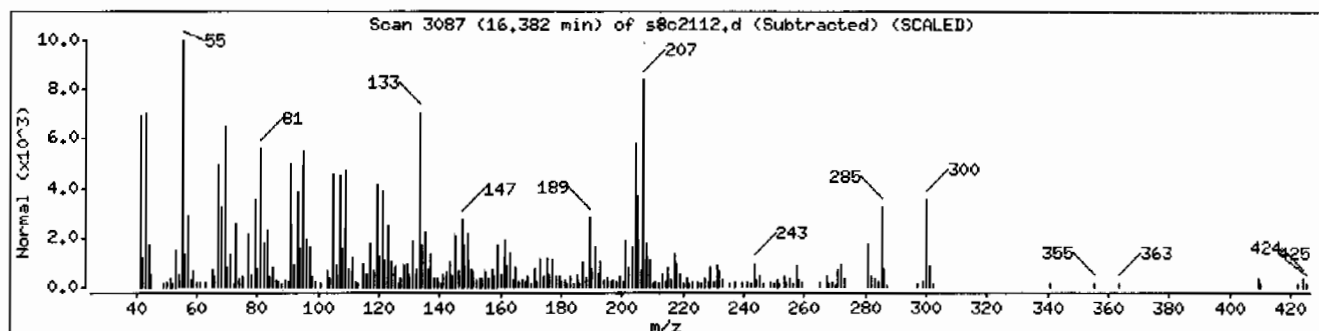
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexene, 1-methyl-4-(5-methyl-1-meth	495-61-4	NIST05.L	59929	45	C15H24	204
3-Cyclohexene-1-methanol, .alpha.,4-dime	23178-88-3	NIST05.L	72995	38	C15H26O	222
Farnesyl bromide	6874-67-5	NIST05.L	114486	38	C15H25Br	284



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: I249373002I961922I1ISVM11ILANL

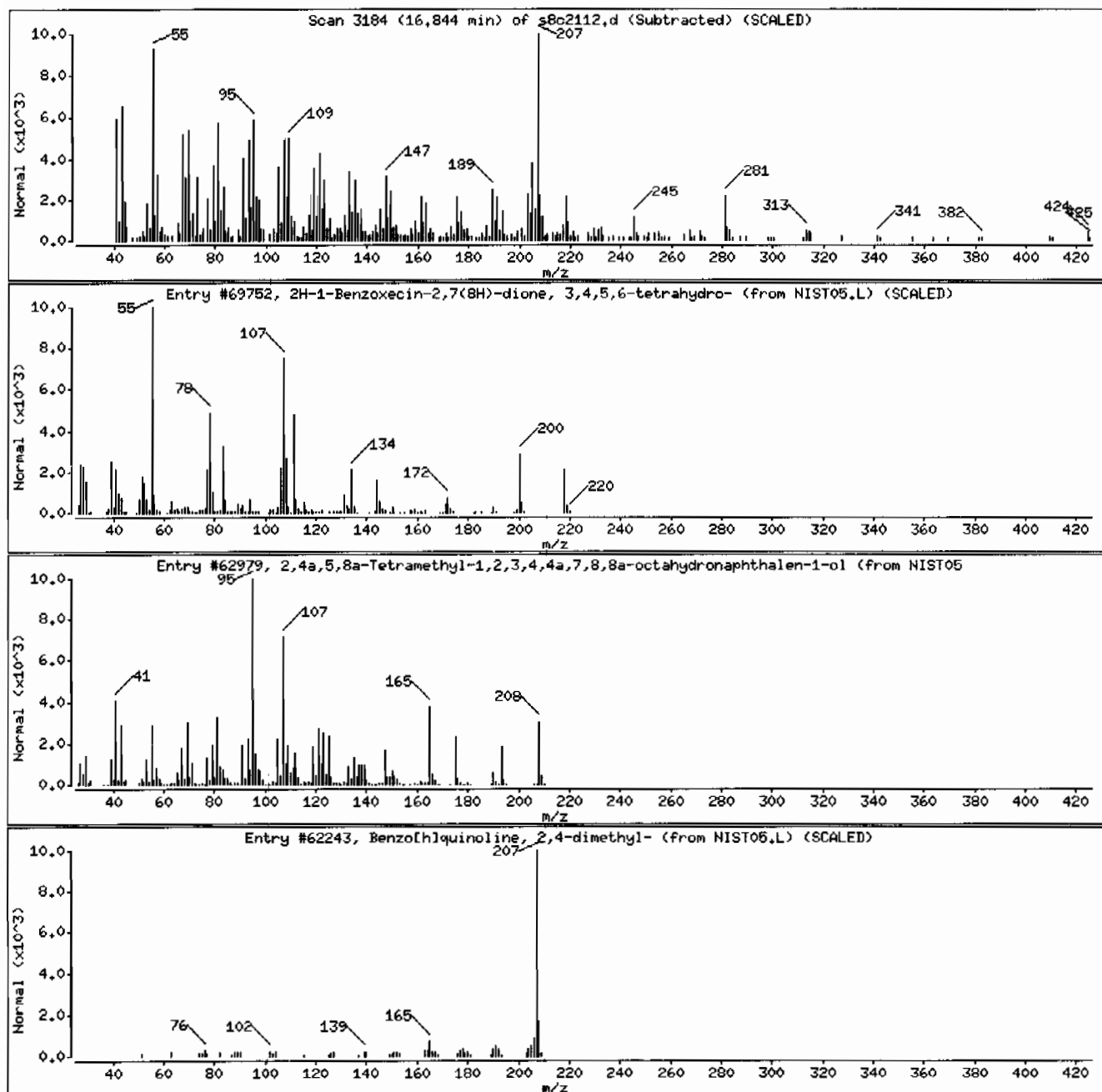
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2H-1-Benzoxecin-2,7(8H)-dione, 3,4,5,6-t	59528-94-8	NIST05.L	69752	25	C13H14O3	218
2,4a,5,8a-Tetramethyl-1,2,3,4,4a,7,8,8a-	20558-22-9	NIST05.L	62979	22	C14H24O	208
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	20	C15H13N	207



Date : 21-MAR-2010 13:27

Client ID: RE36-10-7493

Instrument: MSD8.i

Sample Info: I248373002196192211ISVH11LANL

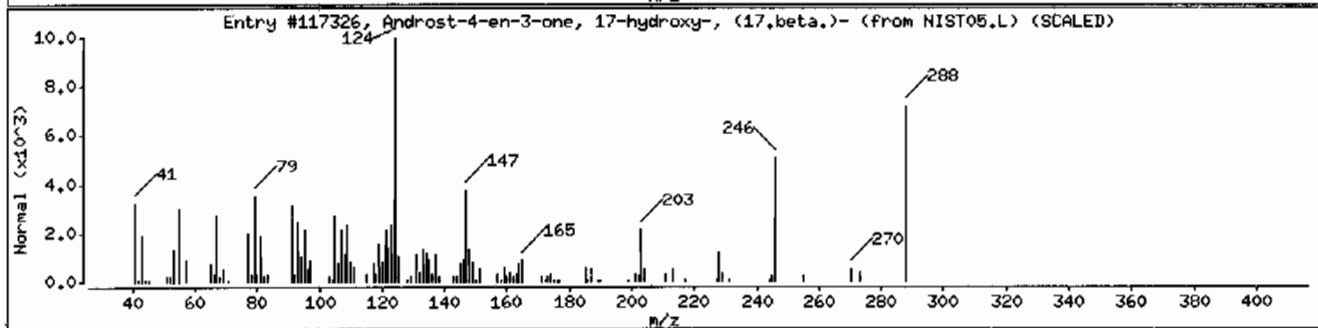
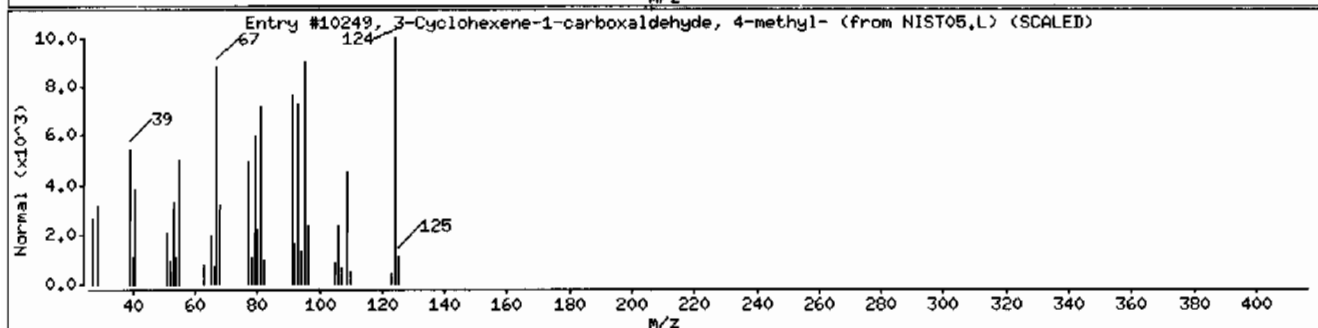
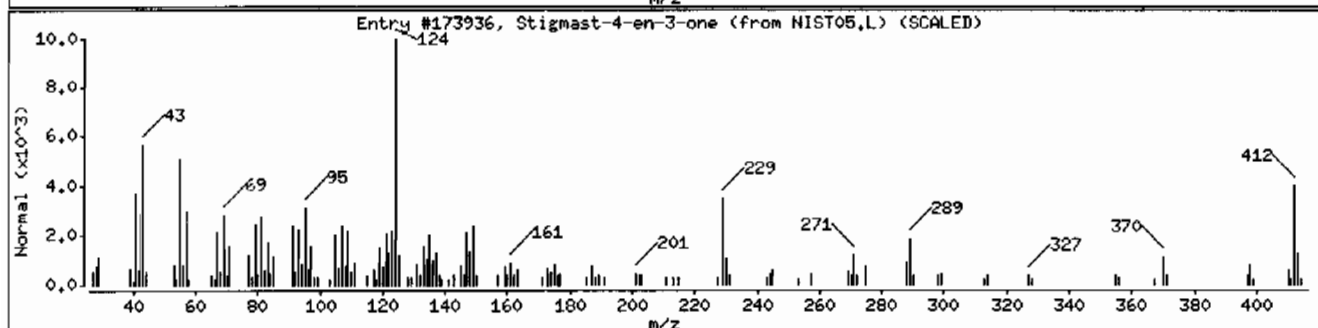
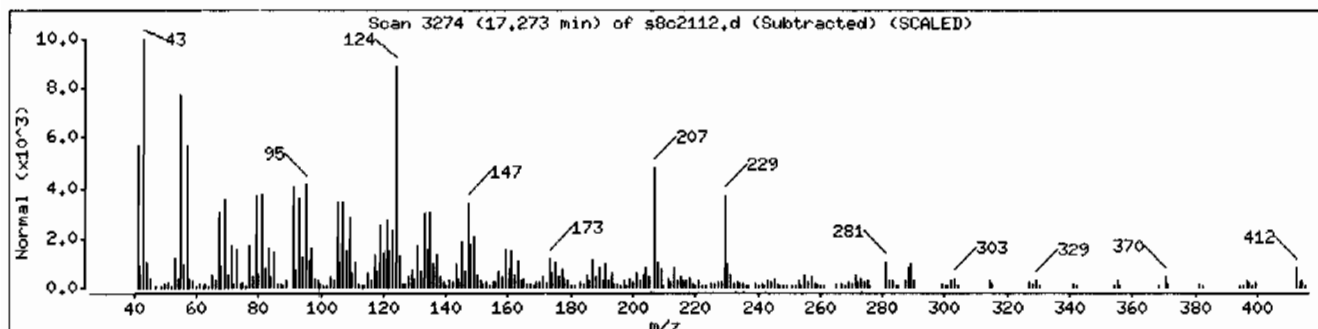
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1068-61-3	NIST05.L	173936	92	C29H48O	412
3-Cyclohexene-1-carboxaldehyde, 4-methyl	7560-64-7	NIST05.L	10249	87	C8H12O	124
Androst-4-en-3-one, 17-hydroxy-, (17.β)	58-22-0	NIST05.L	117326	80	C19H28O2	288



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

SDG Number: 10-2154
Lab Sample ID: 248373001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	378	ug/kg	75.6	378
108-95-2	Phenol	U	378	ug/kg	75.6	378
95-57-8	2-Chlorophenol	U	378	ug/kg	75.6	378
106-46-7	1,4-Dichlorobenzene	U	378	ug/kg	75.6	378
621-64-7	N-Nitrosodipropylamine	U	378	ug/kg	75.6	378
59-50-7	4-Chloro-3-methylphenol	U	378	ug/kg	75.6	378
83-32-9	Acenaphthene	U	37.8	ug/kg	12.5	37.8
121-14-2	2,4-Dinitrotoluene	U	378	ug/kg	37.8	378
100-02-7	4-Nitrophenol	U	378	ug/kg	125	378
87-86-5	Pentachlorophenol	U	378	ug/kg	94.5	378
129-00-0	Pyrene	U	37.8	ug/kg	11.3	37.8
110-86-1	Pyridine	U	378	ug/kg	75.6	378
62-53-3	Aniline	U	378	ug/kg	113	378
111-44-4	bis(2-Chloroethyl) ether	U	378	ug/kg	75.6	378
541-73-1	1,3-Dichlorobenzene	U	378	ug/kg	75.6	378
100-51-6	Benzyl alcohol	U	378	ug/kg	113	378
95-50-1	1,2-Dichlorobenzene	U	378	ug/kg	75.6	378
108-60-1	bis(2-Chloroisopropyl)ether	U	378	ug/kg	75.6	378
95-48-7	o-Cresol	U	378	ug/kg	75.6	378
65794-96-9	m,p-Cresols	U	378	ug/kg	113	378
67-72-1	Hexachloroethane	U	378	ug/kg	75.6	378
98-95-3	Nitrobenzene	U	378	ug/kg	75.6	378
78-59-1	Isophorone	U	378	ug/kg	75.6	378
88-75-5	2-Nitrophenol	U	378	ug/kg	75.6	378
105-67-9	2,4-Dimethylphenol	U	378	ug/kg	132	378
111-91-1	bis(2-Chloroethoxy)methane	U	378	ug/kg	75.6	378
120-83-2	2,4-Dichlorophenol	U	378	ug/kg	75.6	378
65-85-0	Benzoic acid	U	756	ug/kg	189	756
91-20-3	Naphthalene	U	37.8	ug/kg	11.3	37.8
106-47-8	4-Chloroaniline	U	378	ug/kg	75.6	378
87-68-3	Hexachlorobutadiene	U	378	ug/kg	75.6	378
91-57-6	2-Methylnaphthalene	U	37.8	ug/kg	7.56	37.8
77-47-4	Hexachlorocyclopentadiene	U	378	ug/kg	75.6	378
88-06-2	2,4,6-Trichlorophenol	U	378	ug/kg	75.6	378
95-95-4	2,4,5-Trichlorophenol	U	378	ug/kg	75.6	378
91-58-7	2-Chloronaphthalene	U	37.8	ug/kg	12.5	37.8
88-74-4	2-Nitroaniline	U	378	ug/kg	75.6	378
99-09-2	<i>o</i> -Nitroaniline	U	378	ug/kg	75.6	378
	3-Nitroaniline					

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

SDG Number: 10-2154
Lab Sample ID: 248373001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline	U	378	ug/kg	75.6	378
606-20-2	Dimethylphthalate	U	378	ug/kg	37.8	378
208-96-8	2,6-Dinitrotoluene	U	37.8	ug/kg	11.3	37.8
51-28-5	Acenaphthylene	U	756	ug/kg	144	756
132-64-9	2,4-Dinitrophenol	U	378	ug/kg	75.6	378
84-66-2	Dibenzofuran	U	378	ug/kg	75.6	378
86-73-7	Diethylphthalate	U	37.8	ug/kg	11.3	37.8
7005-72-3	Fluorene	U	378	ug/kg	75.6	378
534-52-1	4-Chlorophenylphenylether	U	378	ug/kg	75.6	378
100-01-6	2-Methyl-4,6-dinitrophenol	U	378	ug/kg	113	378
122-39-4	4-Nitroaniline	U	378	ug/kg	75.6	378
122-66-7	<i>p</i> -Nitroaniline	U	378	ug/kg	75.6	378
101-55-3	Diphenylamine	U	378	ug/kg	75.6	378
118-74-1	Azobenzene	U	378	ug/kg	75.6	378
85-01-8	<i>1,2</i> -Diphenylhydrazine	U	378	ug/kg	75.6	378
120-12-7	4-Bromophenylphenylether	U	37.8	ug/kg	11.3	37.8
84-74-2	Hexachlorobenzene	U	37.8	ug/kg	7.56	37.8
206-44-0	Phenanthrene	U	378	ug/kg	75.6	378
85-68-7	Anthracene	U	378	ug/kg	11.3	37.8
56-55-3	Di-n-butylphthalate	U	378	ug/kg	75.6	378
91-94-1	Fluoranthene	U	378	ug/kg	11.3	37.8
218-01-9	Butylbenzylphthalate	U	378	ug/kg	11.3	37.8
117-81-7	Benzo(a)anthracene	U	378	ug/kg	11.3	37.8
117-84-0	3,3'-Dichlorobenzidine	U	378	ug/kg	11.3	37.8
205-99-2	Chrysene	U	378	ug/kg	11.3	37.8
207-08-9	bis(2-Ethylhexyl)phthalate	U	378	ug/kg	11.3	37.8
50-32-8	Di-n-octylphthalate	U	37.8	ug/kg	11.3	37.8
193-39-5	Benzo(b)fluoranthene	U	37.8	ug/kg	11.3	37.8
53-70-3	Benzo(k)fluoranthene	U	37.8	ug/kg	11.3	37.8
191-24-2	Benzo(a)pyrene	U	37.8	ug/kg	11.3	37.8
120-82-1	Indeno(1,2,3-cd)pyrene	U	37.8	ug/kg	11.3	37.8
	Dibenzo(a,h)anthracene	U	37.8	ug/kg	11.3	37.8
	Benzo(ghi)perylene	U	37.8	ug/kg	11.3	37.8
	1,2,4-Trichlorobenzene	U	378	ug/kg	75.6	378

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.73	2690	ug/kg		J
13287-24-6	Nonadecane, 9-methyl-	13.53	212	ug/kg	93	NJ

Data File: /chem/MSD8.i/s032110.b/s8c2109.d
Report Date: 22-Mar-2010 07:14

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GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2109.d
Lab Smp Id: 248373001 Client Smp ID: RE36-10-7494
Inj Date : 21-MAR-2010 11:58
Operator : nagl Inst ID: MSD8.i
Smp Info : |248373001|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	12.33800	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301	(1.000)	416312	40.0000
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1634578	40.0000
* 46 Acenaphthene-d10	164	7.401	7.406	(1.000)	948624	40.0000
* 67 Phenanthrene-d10	188	8.996	8.997	(1.000)	1566677	40.0000
* 91 Chrysene-d12	240	11.863	11.868	(1.000)	1241843	40.0000
* 98 Perylene-d12	264	13.873	13.878	(1.000)	784201	40.0000
\$ 3 2-Fluorophenol	112	3.168	3.158	(0.736)	729538	74.2264
\$ 5 Phenol-d5	99	3.935	3.930	(0.915)	900803	73.4910
\$ 20 Nitrobenzene-d5	82	4.825	4.830	(0.869)	413699	35.6034
\$ 39 2-Fluorobiphenyl	172	6.677	6.682	(0.902)	872179	31.2355
\$ 60 2,4,6-Tribromophenol	329	8.244	8.244	(1.114)	183095	58.3885
\$ 81 p-Terphenyl-d14	244	10.706	10.706	(0.902)	869528	38.8916

ION RATIO REPORT

SV REPORT

Data file: s8c2109.d

Report Date: 03/22/2010 07:12

Lab. ID: 248373001

SampleType: SAMPLE

Injection Date: 21-MAR-2010 11:58

Operator: nag1

Instrument: MSD8.i

Sample Info: |248373001|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	45458	3.93	4.00	80-120	100	(T)
93	851	3.98	4.00	213-273	2	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	55825	4.83	4.68	80-120	100	(T)
42	29878	4.83	4.68	31- 91	54	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	760	5.32	5.28	80-120	100	()
122	484	5.33	5.28	64-124	64	(Q)
77	887	5.32	5.28	47-107	117	(Q)

30 Naphthalene		CAS#: 91-20-3				
128	259	5.57	5.58	80-120	100	()
129	101	5.55	5.58	0- 41	39	()
127	0	0.00	5.58	0- 43	0	(T)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	122795	7.40	7.18	80-120	100	(T)
63	1730	7.40	7.18	32- 92	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	122795	7.40	7.61	80-120	100	(T)
89	1604	7.40	7.61	47-107	1	(QT)
63	1730	7.40	7.61	26- 86	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	654	8.24	8.04	80-120	100	(T)
105	1331	8.24	8.04	14- 74	203	(QT)
51	1199	8.24	8.04	26- 86	183	(QT)

68 Phenanthrene				CAS#: 85-01-8		
178	1309	9.02	9.02	80-120	100	()
179	255	9.02	9.02	0- 45	20	()
176	204	9.02	9.02	0- 49	16	()

92 Chrysene				CAS#: 218-01-9		
228	726	11.89	11.90	80-120	100	()
229	241	11.89	11.90	0- 49	33	()
226	165	11.89	11.90	0- 59	23	()

94 Di-n-octylphthalate				CAS#: 117-84-0		
149	294	12.73	12.73	80-120	100	()
43	2967	12.63	12.73	0- 41	1008	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD8.i/s032110.b/s8c2109.d
 Report Date: 22-Mar-2010 07:14

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GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2109.d
 Lab Smp Id: 248373001 Client Smp ID: RE36-10-7494
 Inj Date : 21-MAR-2010 11:58
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |248373001|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	12.33800	% moisture

Cpnd Variable

Local Compound Variable

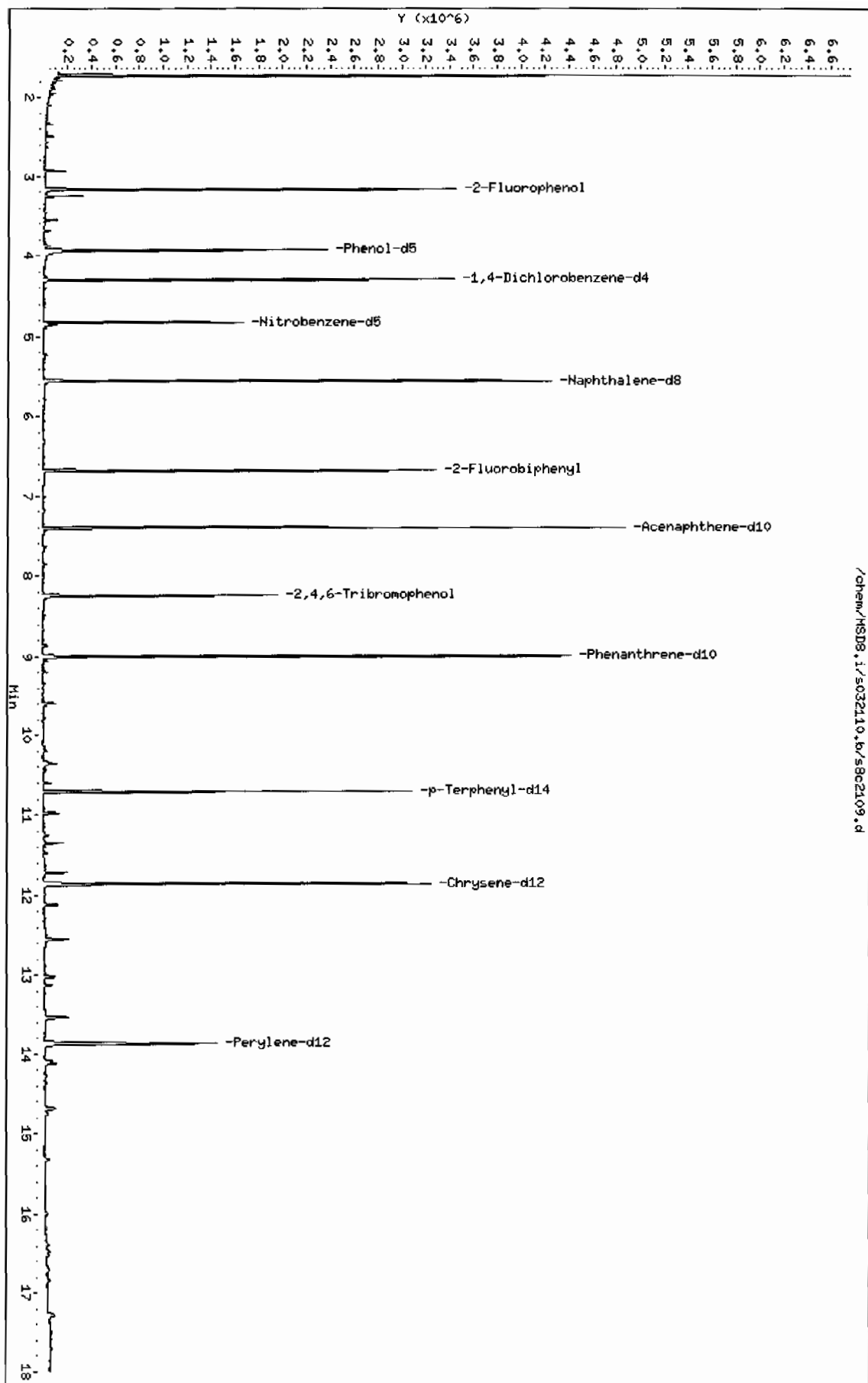
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.301	2481032	40.000
* 98 Perylene-d12	13.873	2271498	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.730	4405443	71.0259679	2680	0		0	10

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Nonadecane, 9-methyl-					CAS #: 13287-24-6		
13.535	318421	5.60724483	212	93	NIST05.L	113498	98

Data File: /chem/MSDB.i/s032110.b/s8c2109.d
Date: 21-MAR-2010 11:58
Client ID: RE36-10-7494
Sample Info: 124837300196192211SVH11LNL
Volume Injected (uL): 0.5
Column phase: JMW DB-SHS

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



Date : 21-MAR-2010 11:58

Client ID: RE36-10-7494

Instrument: MSD8.i

Sample Info: 12483730011961922111SVMI11LANL

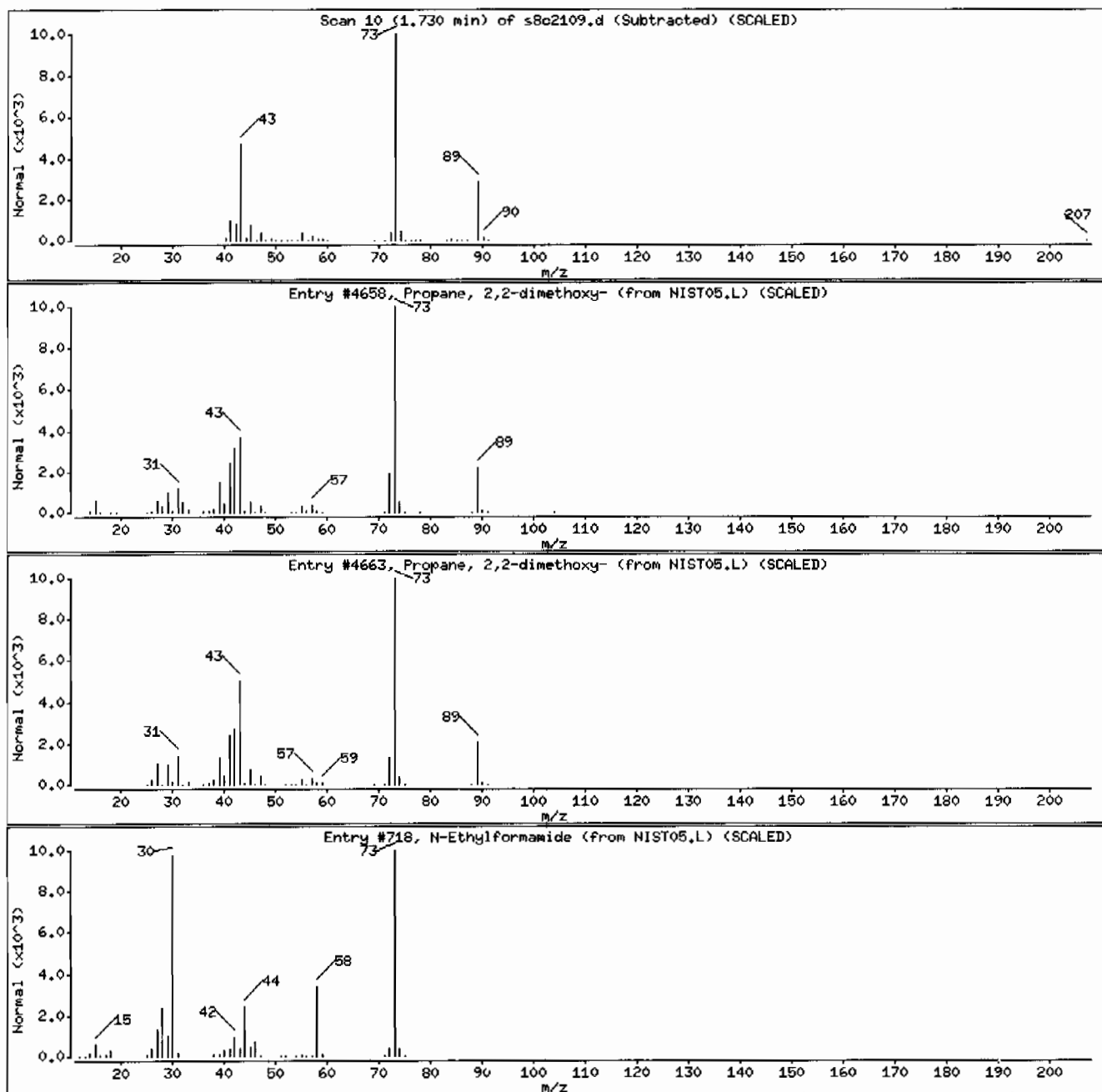
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	56	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	39	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	25	C3H7NO	73



Date : 21-MAR-2010 11:58

Client ID: RE36-10-7494

Instrument: MSD8.i

Sample Info: 124837300196192211SVMI11LANL

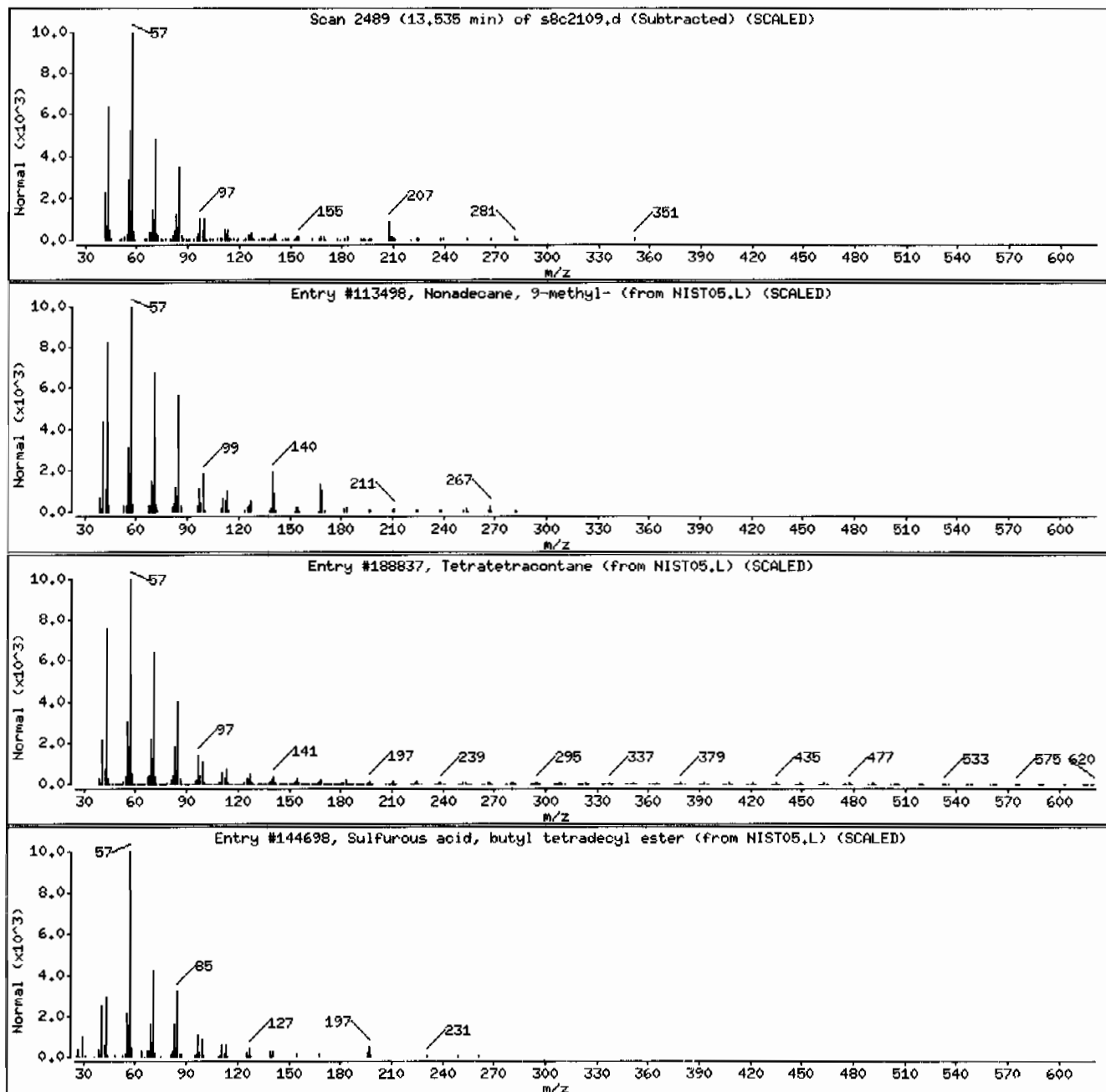
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nonadecane, 9-methyl-	13287-24-6	NIST05.L	113498	93	C20H42	282
Tetratetracontane	7098-22-8	NIST05.L	188837	90	C44H90	619
Sulfurous acid, butyl tetradecyl ester	1000309-18-1	NIST05.L	144698	87	C18H38O3S	334



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

SDG Number: 10-2154
Lab Sample ID: 248373008

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 27.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	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	J	40.3	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	3-Nitroaniline	U	457	ug/kg	91.5	457

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373008	Date Received: 03/02/2010 08:50	%Moisture: 27.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7495	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 16:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.06 g	Final Volume: 1 mL
Data File: s8c2118.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	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
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	457	ug/kg	91.5	457
122-66-7	Azobenzene	U	457	ug/kg	91.5	457
	<i>1,2</i> -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		114	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	J	38.3	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	J	32.7	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	J	22.1	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
495-61-4	Cyclohexene, 1-methyl-4-(5-methyl-1-meth	7.45	503	ug/kg	94	NJ
57-10-3	n-Hexadecanoic acid	9.6	728	ug/kg	98	NJ

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

SDG Number: 10-2154
Lab Sample ID: 248373008

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 27.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7495
Batch ID: 961922
Run Date: 03/21/2010 16:26
Prep Date: 03/07/2010 12:04
Data File: s8c2118.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	10.38	501	ug/kg	91	NJ
	Unknown	10.51	225	ug/kg		J
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	11.15	289	ug/kg	92	NJ
	Unknown	11.47	194	ug/kg		J
	Unknown	11.58	1510	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.67	511	ug/kg	95	NJ
4860-03-1	Hexadecane, 1-chloro-	11.73	208	ug/kg	94	NJ
118625-56-2	1-Hexadecene, 16-bromo-	11.93	394	ug/kg	93	NJ
112-85-6	Docosanoic acid	12.01	464	ug/kg	95	NJ
4860-03-1	Hexadecane, 1-chloro-	12.12	183	ug/kg	93	NJ
	Unknown	12.39	235	ug/kg		J
62016-76-6	Nonadecane, 1-chloro-	12.55	332	ug/kg	90	NJ
1599-67-3	1-Docosene	12.81	301	ug/kg	96	NJ
	Unknown	14.98	4200	ug/kg		J
83-47-6	.gamma.-Sitosterol	16.71	4130	ug/kg	94	NJ
1058-61-3	Stigmast-4-en-3-one	17.29	1510	ug/kg	93	NJ

Data File: /chem/MSD8.i/s032110.b/s8c2118.d
Report Date: 22-Mar-2010 09:51

Page 1

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2118.d
Lab Smp Id: 248373008 Client Smp ID: RE36-10-7495
Inj Date : 21-MAR-2010 16:26
Operator : nagl Inst ID: MSD8.i
Smp Info : |248373008|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	27.27890	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301	(1.000)	399068		40.0000	
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1609885		40.0000	
* 46 Acenaphthene-d10	164	7.406	7.406	(1.000)	957863		40.0000	
* 67 Phenanthrene-d10	188	8.997	8.997	(1.000)	1671422		40.0000	
* 91 Chrysene-d12	240	11.873	11.868	(1.000)	1166456		40.0000	
* 98 Perylene-d12	264	13.887	13.878	(1.000)	440000		40.0000	
\$ 3 2-Fluorophenol	112	3.173	3.158	(0.738)	662824		70.3527	3220
\$ 5 Phenol-d5	99	3.939	3.930	(0.916)	827543		70.4315	3220
\$ 20 Nitrobenzene-d5	82	4.830	4.830	(0.870)	374066		32.6864	1500
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.902)	835145		29.6208	1360
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.114)	201873		63.7558	2920
\$ 91 p-Terphenyl-d14	244	10.711	10.706	(0.902)	914078		43.5241	1990

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	10.544	10.544	(0.888)	32082	0.88090	40.3(a)
68 Phenanthrene	178	9.020	9.020	(1.003)	22034	2.49921	114
76 Fluoranthene	202	10.297	10.297	(1.145)	35622	0.83754	38.3(a)
95 Benzo(b)fluoranthene	252	13.297	13.292	(0.957)	8920	0.71506	32.7(aH)
97 Benzo(a)pyrene	252	13.792	13.787	(0.993)	5079	0.48274	22.1(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- H - Operator selected an alternate compound hit.

ION RATIO REPORT

SV REPORT

Data file: s8c2118.d

Report Date: 03/22/2010 07:18

Lab. ID: 248373008

SampleType: SAMPLE

Injection Date: 21-MAR-2010 16:26

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373008|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	42965	3.94	4.00	80-120	100	()
93	111642	3.98	4.00	213-273	260	()

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	51008	4.83	4.68	80-120	100	(T)
42	31545	4.83	4.68	31- 91	62	(T)

27	Benzoic acid	CAS#: 65-85-0				
105	4107	5.31	5.28	80-120	100	()
122	1569	5.31	5.28	64-124	38	(Q)
77	3260	5.31	5.28	47-107	79	()

30	Naphthalene	CAS#: 91-20-3				
128	1467	5.57	5.58	80-120	100	()
129	276	5.58	5.58	0- 41	19	()
127	313	5.58	5.58	0- 43	21	()

34	2-Methylnaphthalene	CAS#: 91-57-6				
142	414	6.30	6.30	80-120	100	()
141	582	6.30	6.30	56-116	141	(Q)

40	2-Chloronaphthalene	CAS#: 91-58-7				
162	3362	6.81	6.81	80-120	100	()
164	426	6.78	6.81	3- 63	13	()
127	388	6.82	6.81	7- 67	12	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	124022	7.41	7.18	80-120	100	(T)
63	2594	7.41	7.18	32- 92	2	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	124022	7.41	7.61	80-120	100	(T)
89	2416	7.40	7.61	47-107	2	(QT)
63	2594	7.41	7.61	26- 86	2	(QT)

55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	687	8.25	8.04	80-120	100	(T)
105	3854	8.25	8.04	14- 74	561	(QT)
51	2337	8.24	8.04	26- 86	340	(QT)

68	Phenanthrene			CAS#: 85-01-8		
178	22034	9.02	9.02	80-120	100	()
179	3174	9.02	9.02	0- 45	14	()
176	4940	9.02	9.02	0- 49	22	()

69	Anthracene			CAS#: 120-12-7		
178	22034	9.02	9.08	80-120	100	()
179	3054	9.02	9.08	0- 45	14	()
176	4940	9.02	9.08	0- 48	22	()

76	Fluoranthene			CAS#: 206-44-0		
202	35622	10.30	10.30	80-120	100	()
203	7251	10.30	10.30	0- 47	20	()
101	5254	10.30	10.30	0- 43	15	()

79	Pyrene			CAS#: 129-00-0		
202	32082	10.54	10.54	80-120	100	()
200	7090	10.54	10.54	0- 50	22	()
101	5837	10.54	10.54	0- 46	18	()

89	Benzo(a)anthracene			CAS#: 56-55-3		
228	18352	11.86	11.85	80-120	100	()
226	3836	11.86	11.85	0- 56	21	()
229	8560	11.86	11.85	0- 51	47	()

92	Chrysene			CAS#: 218-01-9		
228	11584	11.90	11.90	80-120	100	()
229	3979	11.90	11.90	0- 49	34	()
226	3710	11.90	11.90	0- 59	32	()

93	bis(2-Ethylhexyl)phthalate			CAS#: 117-81-7		
149	83598	11.86	11.88	80-120	100	()
167	155316	11.86	11.88	0- 57	186	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
94 Di-n-octylphthalate				CAS#: 117-84-0		
149	4488	12.72	12.73	80-120	100	()
43	57034	12.70	12.73	0- 41	1271	(Q)

95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	8920	13.30	13.29	80-120	100	()
253	1080	13.29	13.29	0- 52	12	()
125	876	13.30	13.29	0- 43	10	()

96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	8921	13.30	13.33	80-120	100	()
253	1080	13.29	13.33	0- 52	12	()
125	866	13.30	13.33	0- 44	10	()

97 Benzo(a)pyrene				CAS#: 50-32-8		
252	5079	13.79	13.79	80-120	100	()
253	1184	13.80	13.79	0- 52	23	()
125	721	13.72	13.79	0- 42	14	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2118.d
 Lab Smp Id: 248373008 Client Smp ID: RE36-10-7495
 Inj Date : 21-MAR-2010 16:26
 Operator : nag1 Inst ID: MSD8.i
 Smp Info : |248373008|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	27.27890	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 46 Acenaphthene-d10	7.406	4234866	40.000
* 67 Phenanthrene-d10	8.997	4079011	40.000
* 91 Chrysene-d12	11.873	15411787	40.000
* 98 Perylene-d12	13.887	1326585	40.000

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

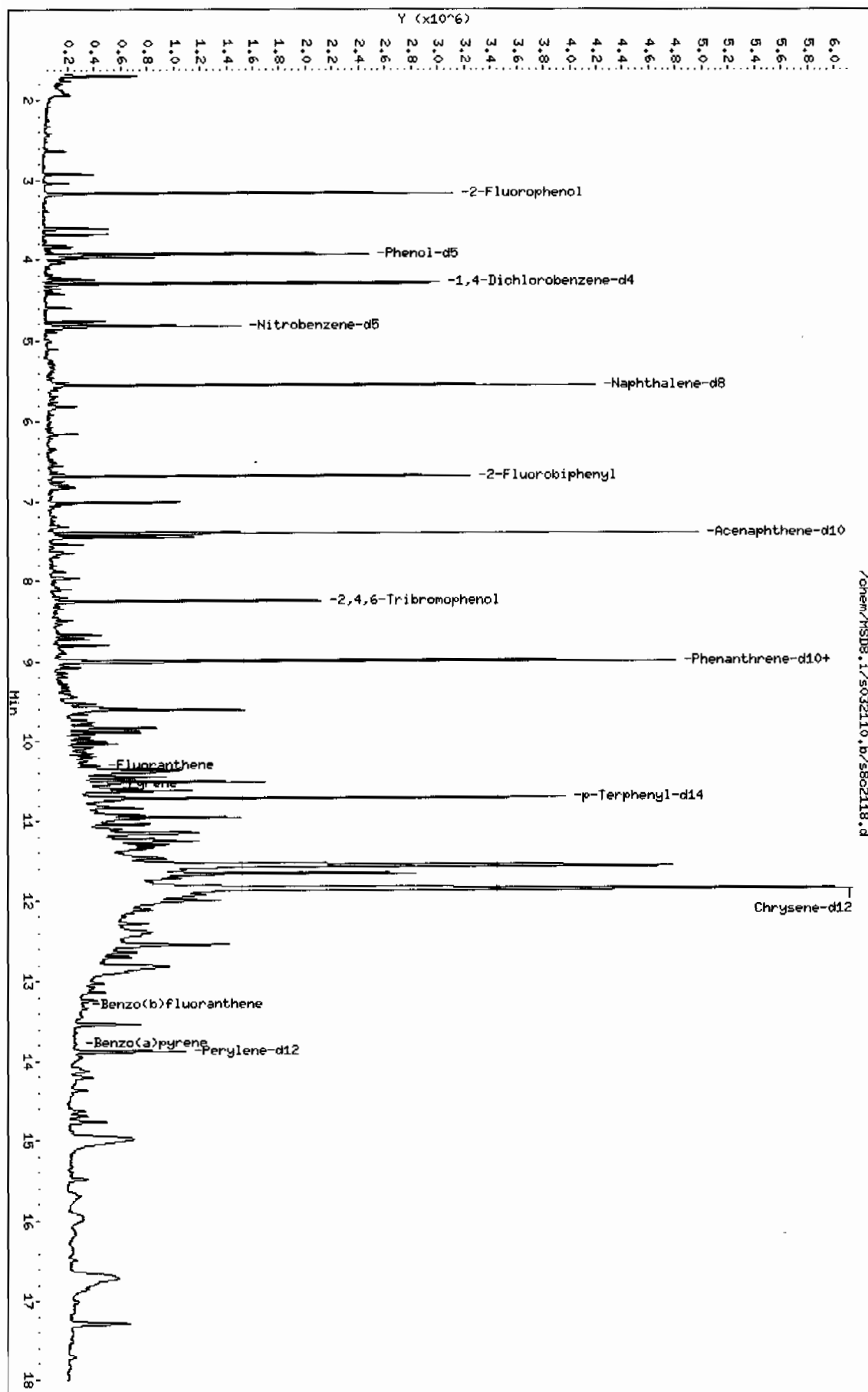
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclohexene, 1-methyl-4-(5-methyl-1-meth					CAS #: 495-61-4		
7.454	1165076	11.0046050	503	94	NIST05.L	59932	46
n-Hexadecanoic acid					CAS #: 57-10-3		
9.601	1622968	15.9153113	728	98	NIST05.L	96235	67
1,2-Benzisothiazole, 3-(hexahydro-1H-aze					CAS #: 309735-29-3		
10.382	1116976	10.9534045	501	91	NIST05.L	101019	67
Unknown					CAS #:		
10.511	1892908	4.91288250	225	0		0	91
1-Phenanthrenecarboxylic acid, 7-ethenyl					CAS #: 1686-62-0		
11.149	2434182	6.31771432	289	92	NIST05.L	134785	91
Unknown					CAS #:		
11.468	1635849	4.24570794	194	0		0	91
Unknown					CAS #:		
11.578	12747034	33.0838550	1510	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
11.673	4305371	11.1742289	511	95	NIST05.L	125036	91
Hexadecane, 1-chloro-					CAS #: 4860-03-1		
11.725	1749076	4.53958091	208	94	NIST05.L	98778	91
1-Hexadecene, 16-bromo-					CAS #: 118625-56-2		
11.935	3322015	8.62201150	394	93	NIST05.L	125925	91
Docosanoic acid					CAS #: 112-85-6		
12.006	3906902	10.1400369	464	95	NIST05.L	147935	91
Hexadecane, 1-chloro-					CAS #: 4860-03-1		
12.120	1544145	4.00769782	183	93	NIST05.L	98777	91
Unknown					CAS #:		
12.392	1981506	5.14283306	235	0		0	91
Nonadecane, 1-chloro-					CAS #: 62016-76-6		
12.549	2799767	7.26655885	332	90	NIST05.L	126107	91
1-Docosene					CAS #: 1599-67-3		
12.811	2539201	6.59028299	301	96	NIST05.L	129889	91

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown				CAS #:			
14.978	3044022	91.7851681	4200	0		0	98
.gamma.-Sitosterol				CAS #: 83-47-6			
16.711	2995008	90.3072672	4130	94	NIST05.L	174402	98
Stigmast-4-en-3-one				CAS #: 1058-61-3			
17.287	1091985	32.9261792	1510	93	NIST05.L	173936	98

Data File: /chem/HSD8.i/s032110.b/s0c2118.d
Date : 21-MAR-2010 16:26
Client ID: RE36-10-7495
Sample Info: 1248373008196192211SWH11LNL
Volume Injected (uL): 0.5
Column phase: JSM DB-SHS

Instrument: HSD8.i
Operator: nag1
Column diameter: 0.20

Page 1



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVH11ILANL

Volume Injected (uL): 0.5

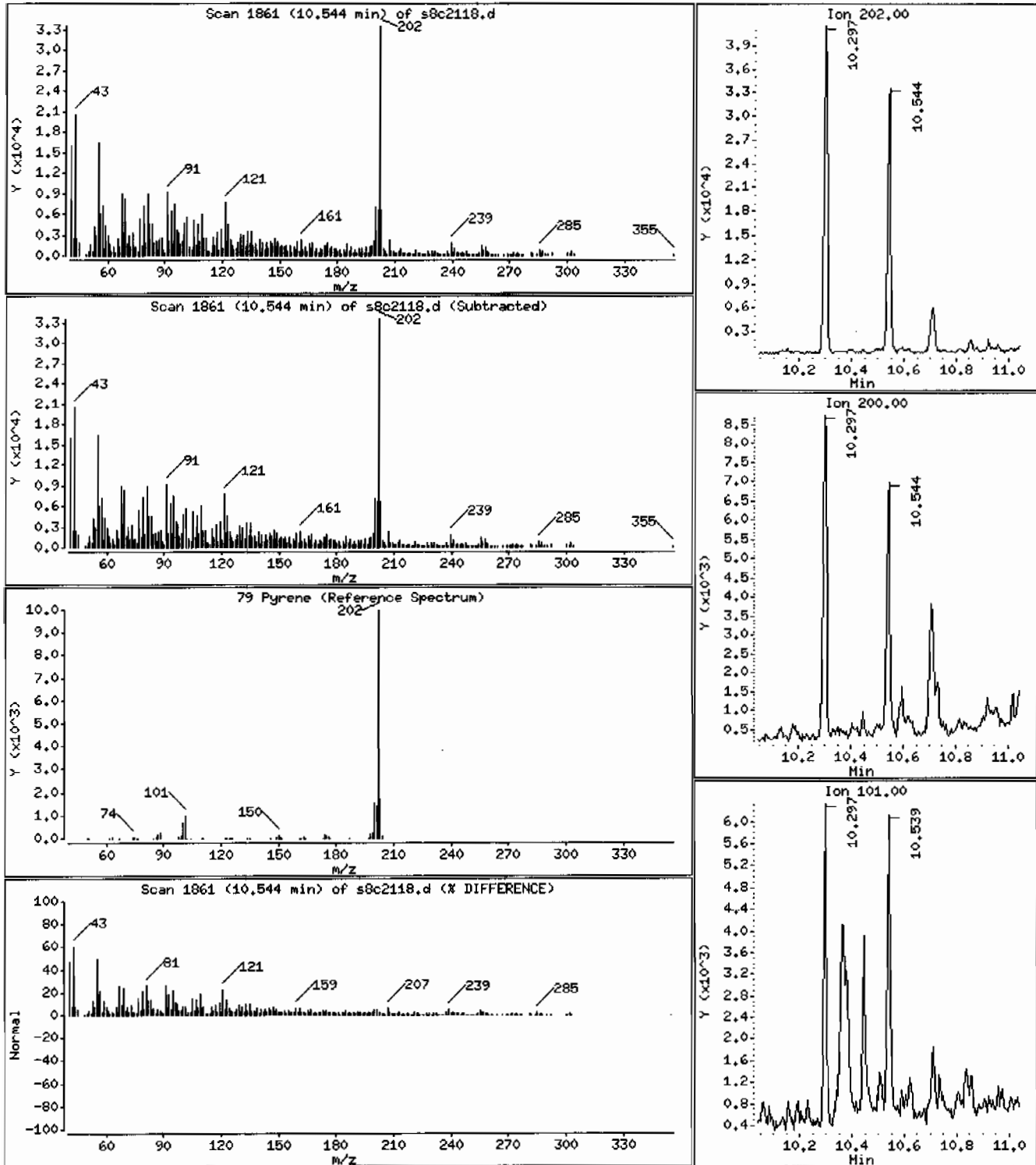
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 40.3 ug/Kg



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI11LANL

Volume Injected (uL): 0.5

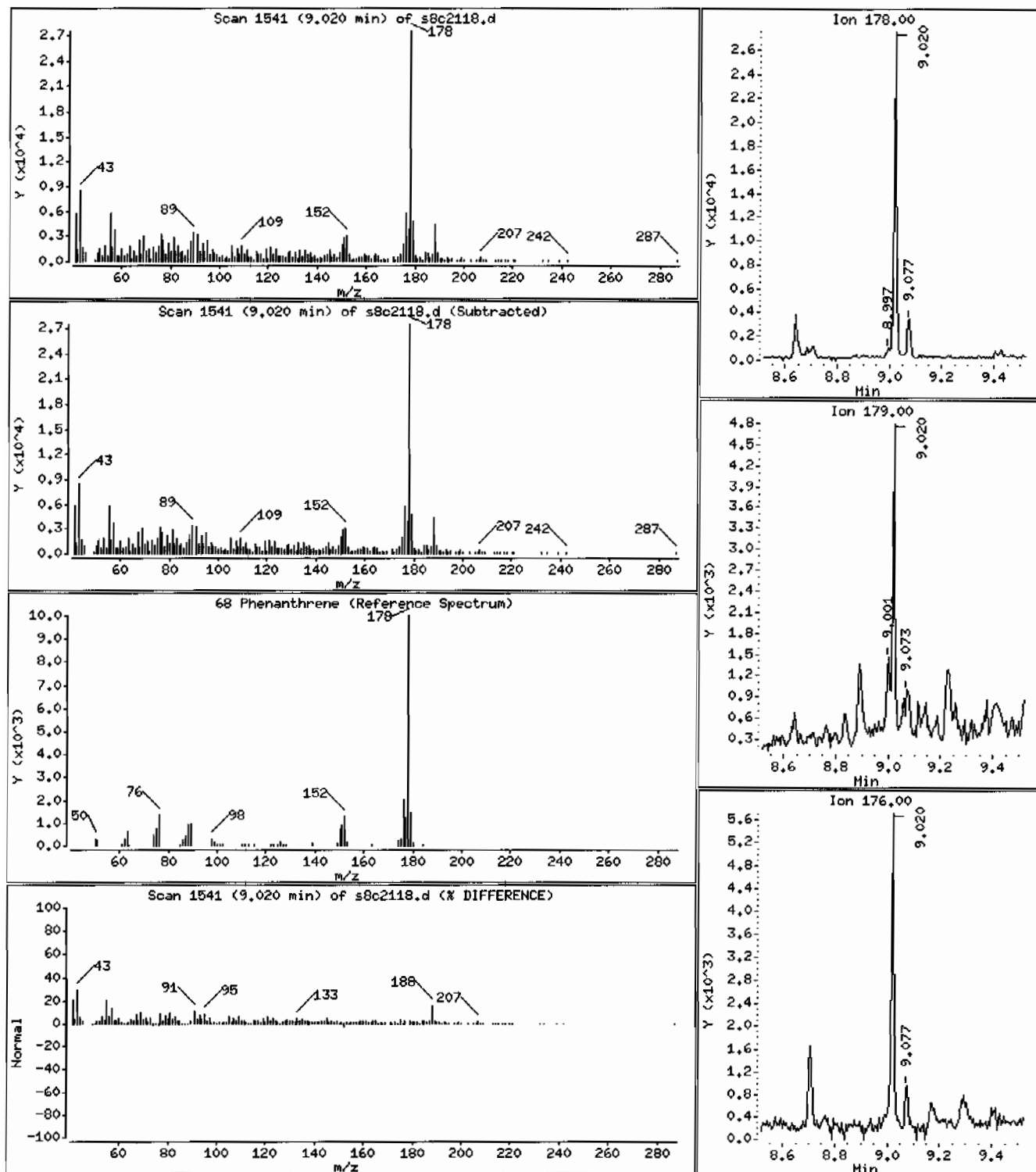
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 114 ug/Kg



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8,i

Sample Info: 1248373008196192211ISVH11ILANL

Volume Injected (uL): 0.5

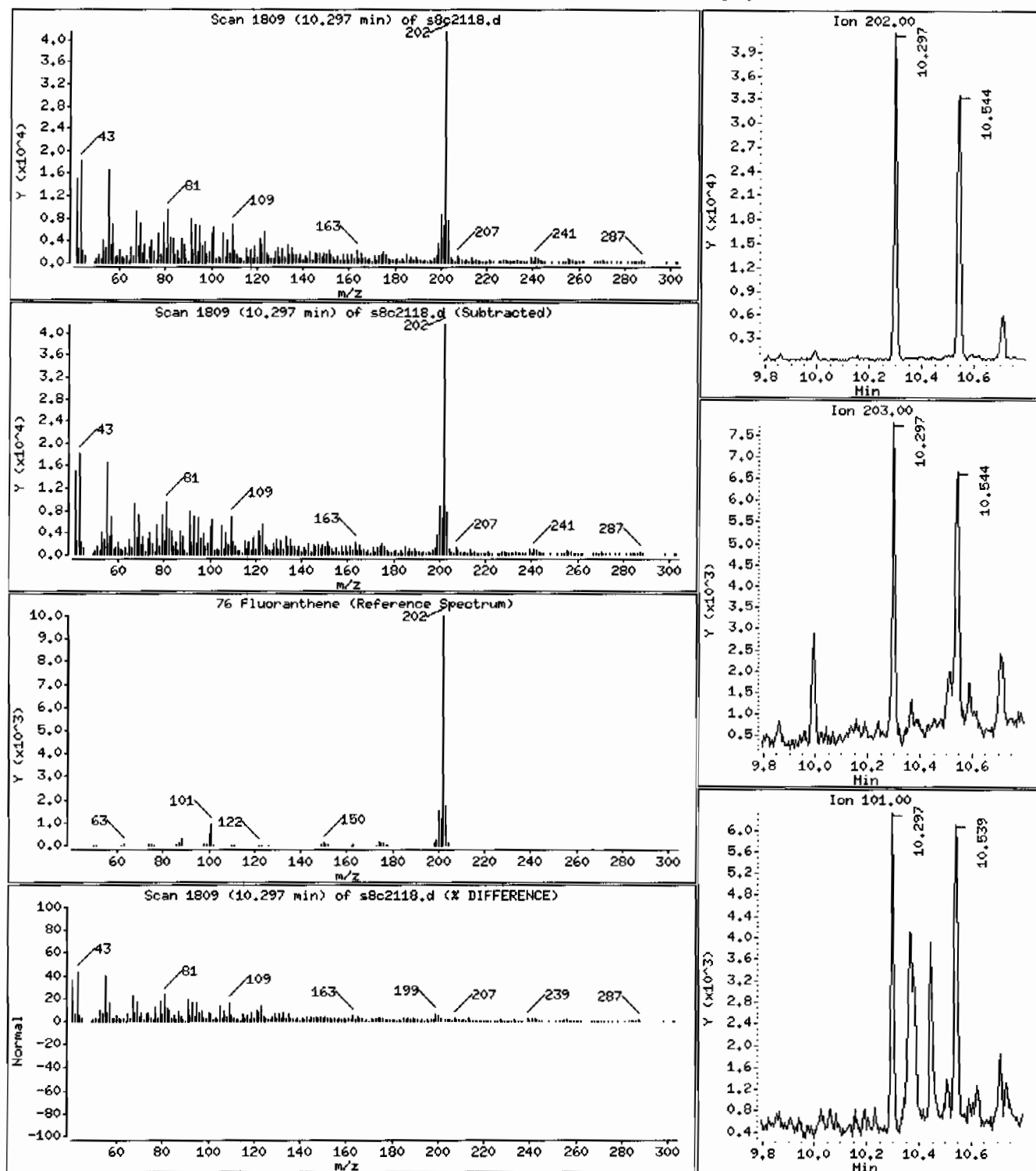
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 38,3 ug/Kg



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI11LANL

Volume Injected (uL): 0.5

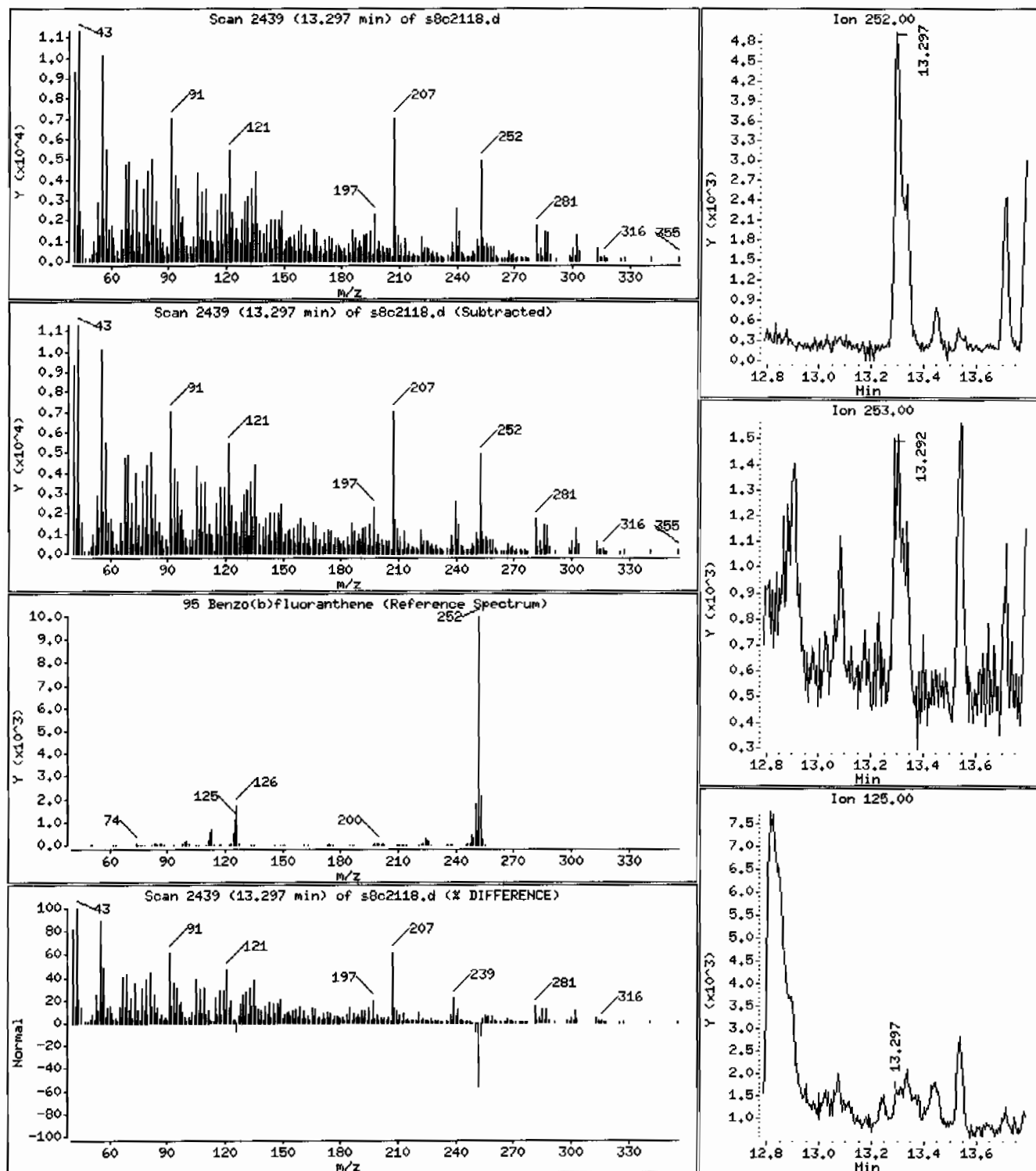
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 32.7 ug/Kg



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI11LANL

Volume Injected (uL): 0.5

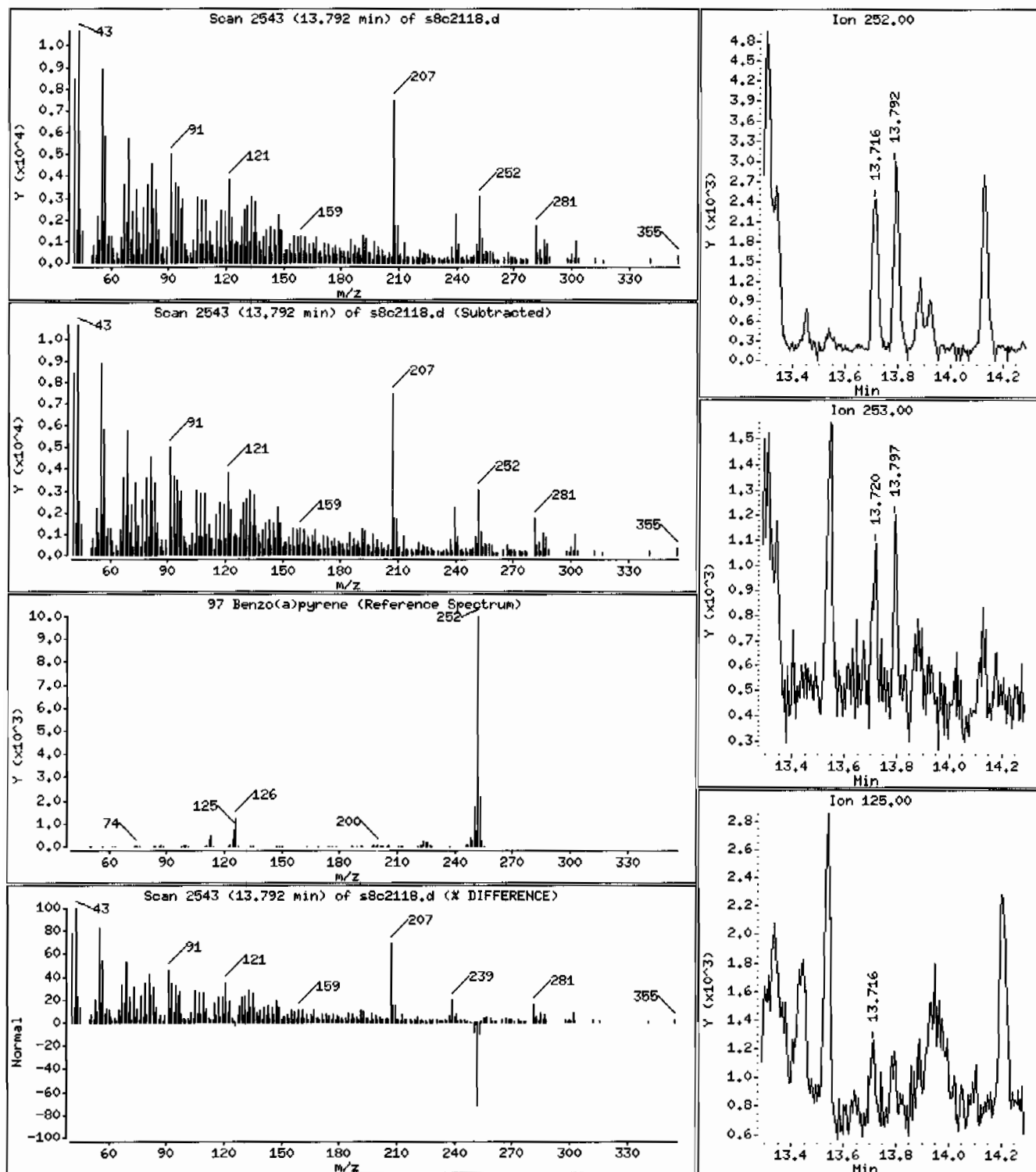
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 22.1 ug/Kg



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: I248373008196192211SVH11LANL

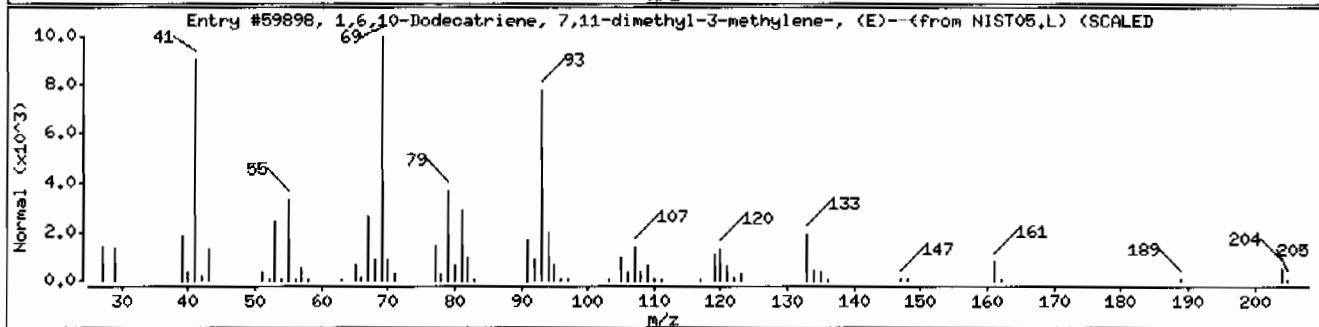
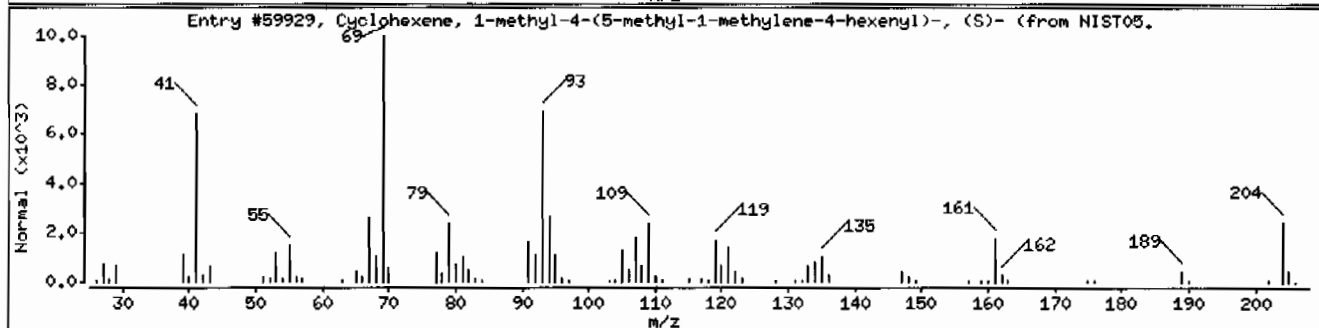
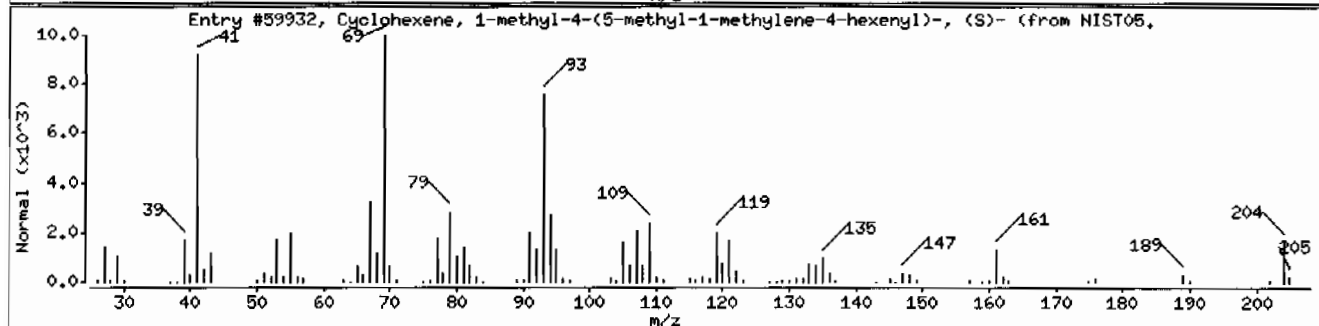
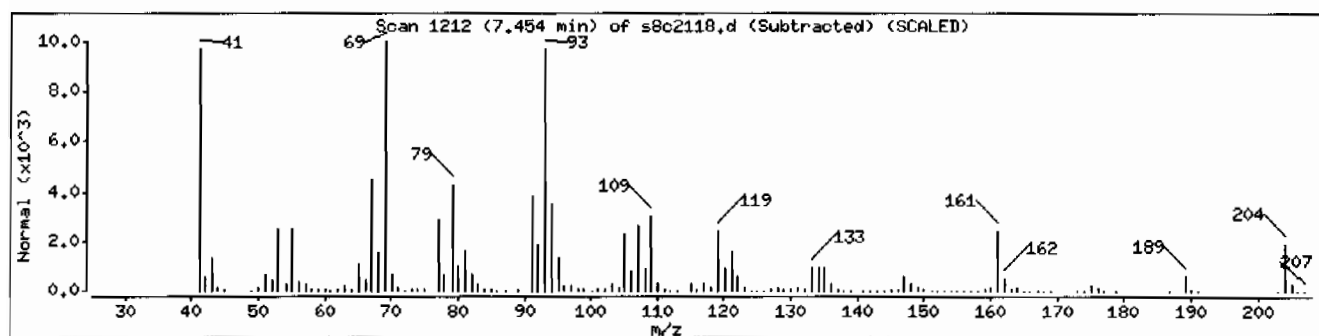
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 1-methyl-4-(5-methyl-1-meth	495-61-4	NIST05.L	59932	94	C15H24	204
Cyclohexene, 1-methyl-4-(5-methyl-1-meth	495-61-4	NIST05.L	59929	93	C15H24	204
1,6,10-Dodecatriene, 7,11-dimethyl-3-met	18794-84-8	NIST05.L	59898	93	C15H24	204



Date: 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI11LANL

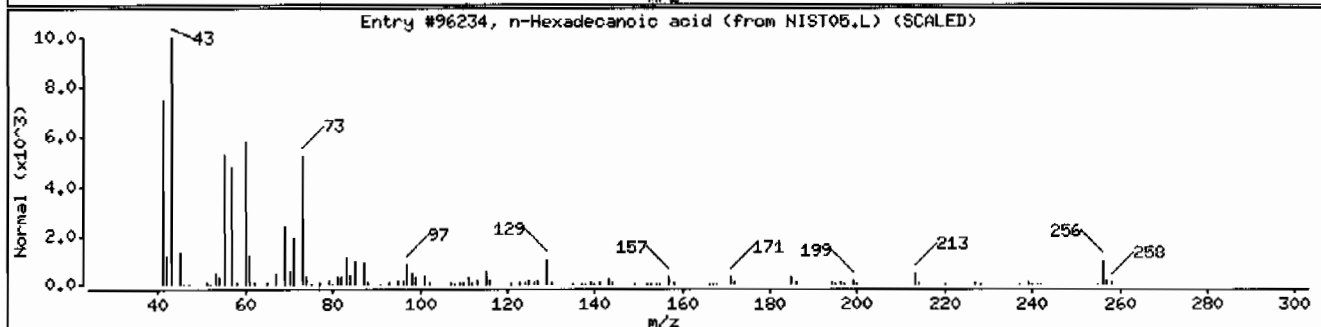
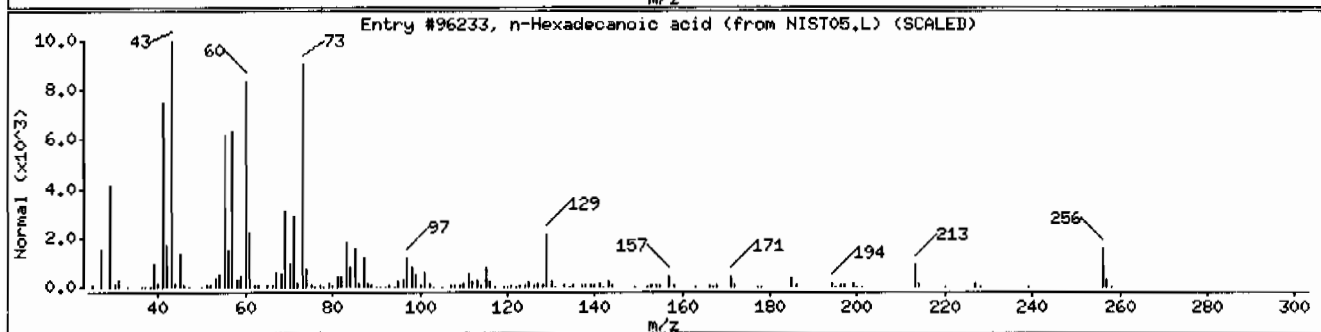
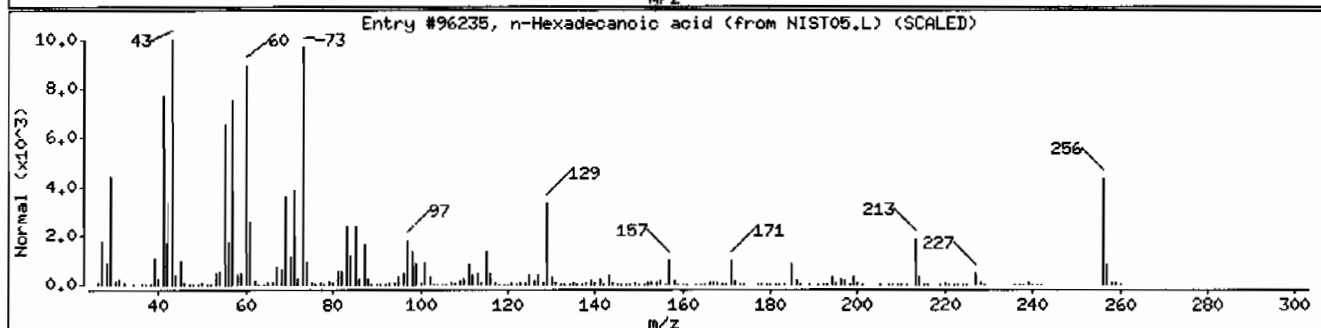
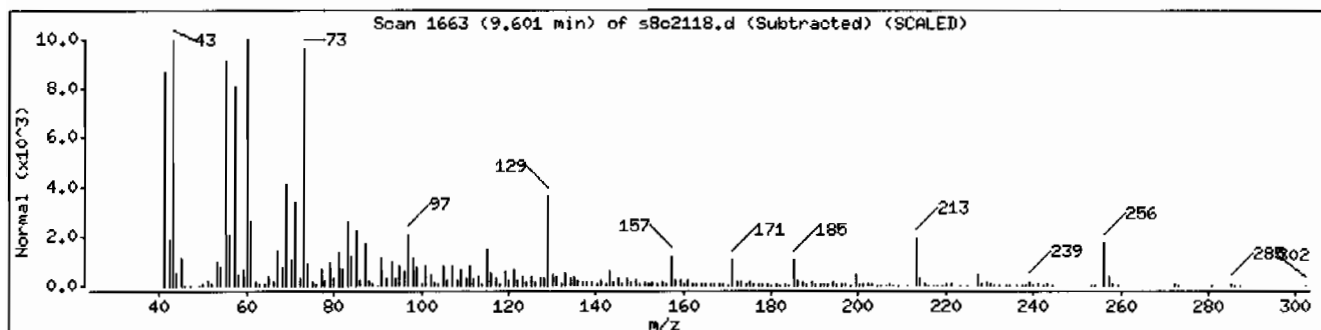
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	98	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96233	98	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	96	C16H32O2	256



Date: 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI1ILANL

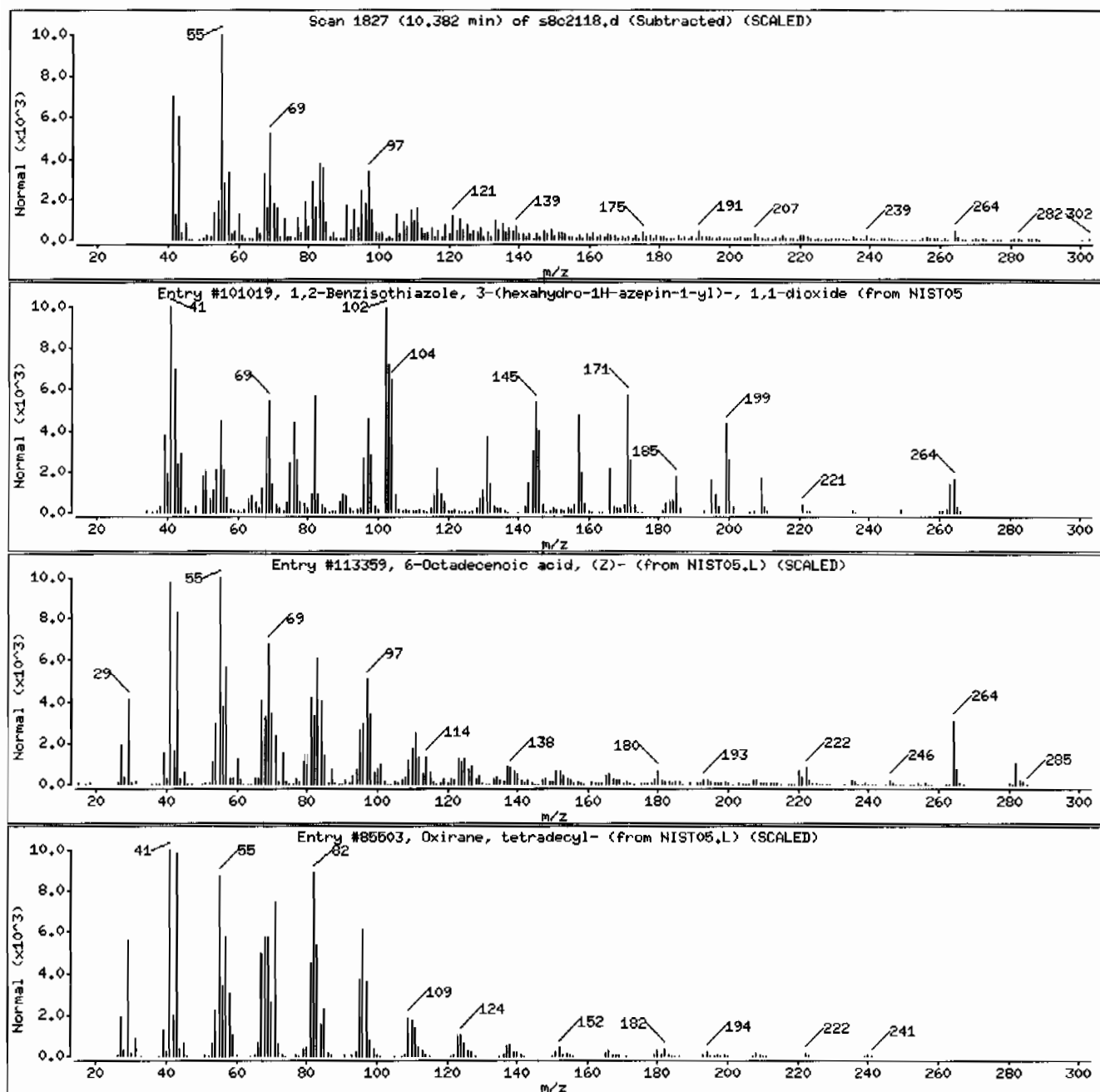
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-	309735-29-3	NIST05.L	101019	91	C13H16N2O2S	264
6-Octadecenoic acid, (Z)-	593-39-5	NIST05.L	113359	86	C18H34O2	282
Oxirane, tetradecyl-	7320-37-8	NIST05.L	85503	70	C16H32O	240



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVH11ILANL

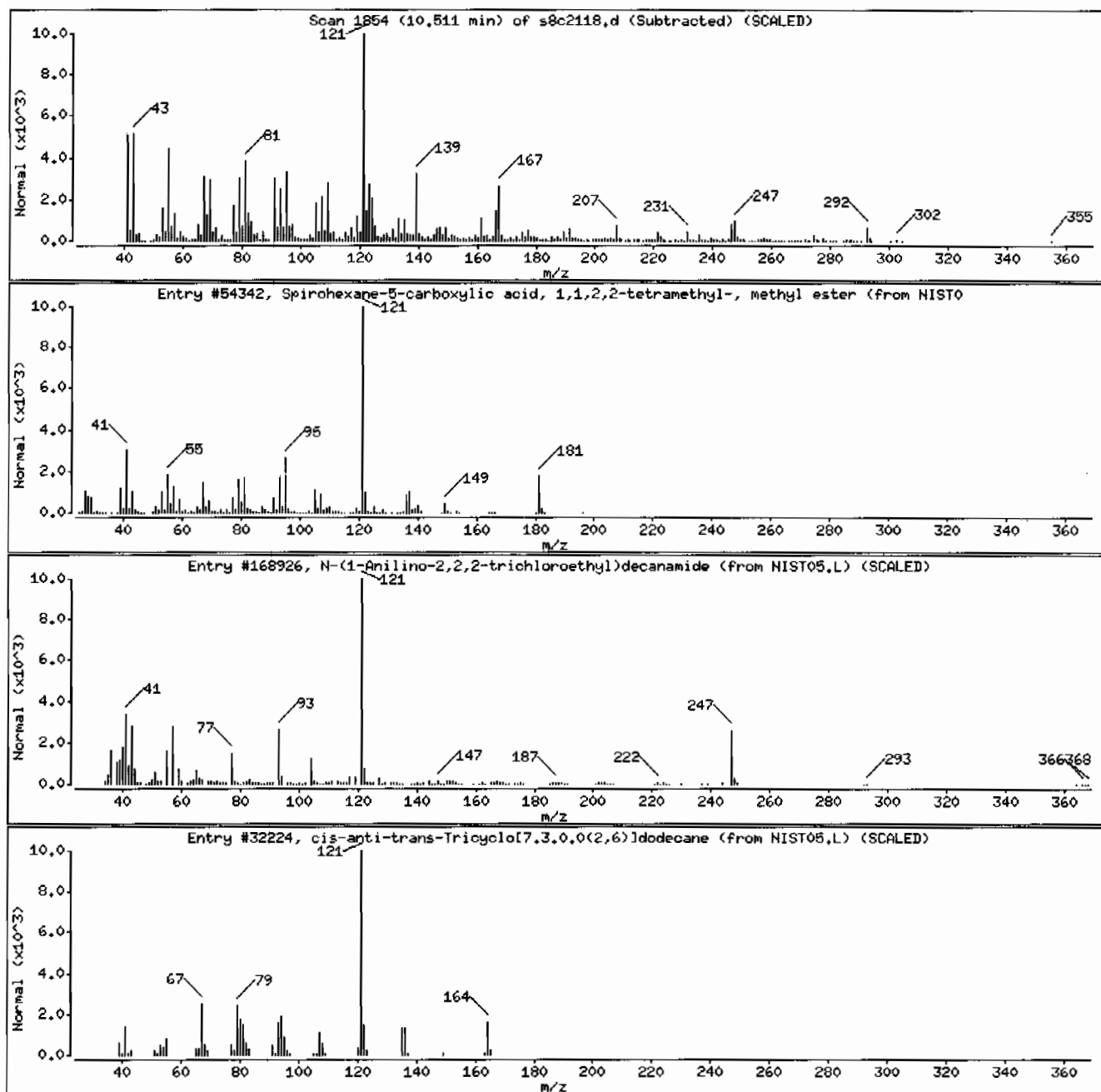
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Spirohexane-5-carboxylic acid, 1,1,2,2-t	74646-32-5	NIST05.L	54342	35	C12H20O2	196
N-(1-Anilino-2,2,2-trichloroethyl)decana	302954-41-2	NIST05.L	168926	27	C18H27Cl3N2O	392
cis-anti-trans-Tricyclo[7.3.0.0(2,6)]dode	30159-13-8	NIST05.L	32224	27	C12H20	164



Date: 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI11LANL

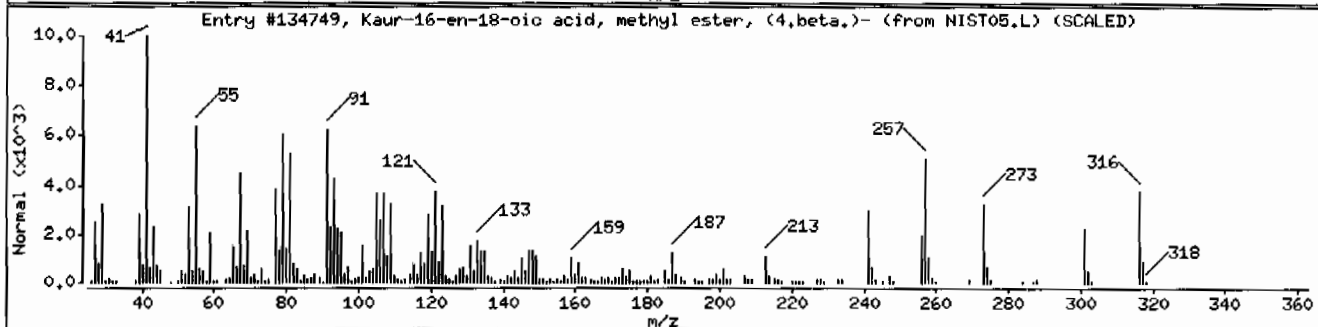
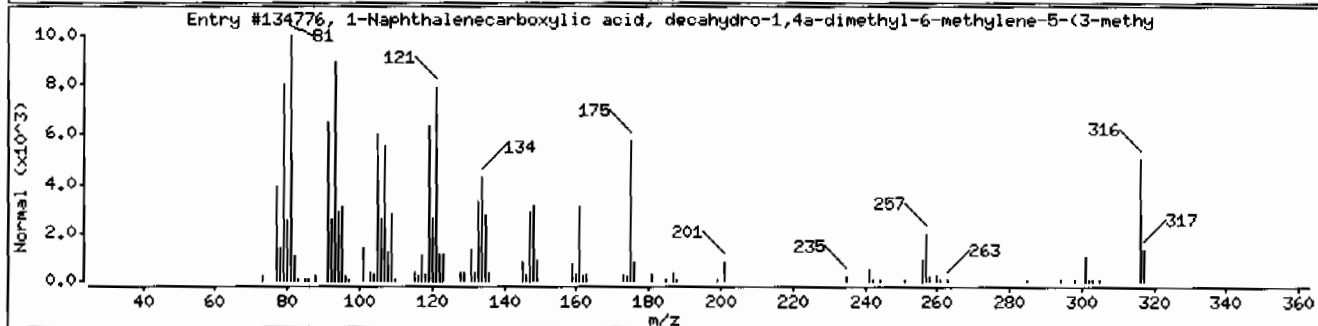
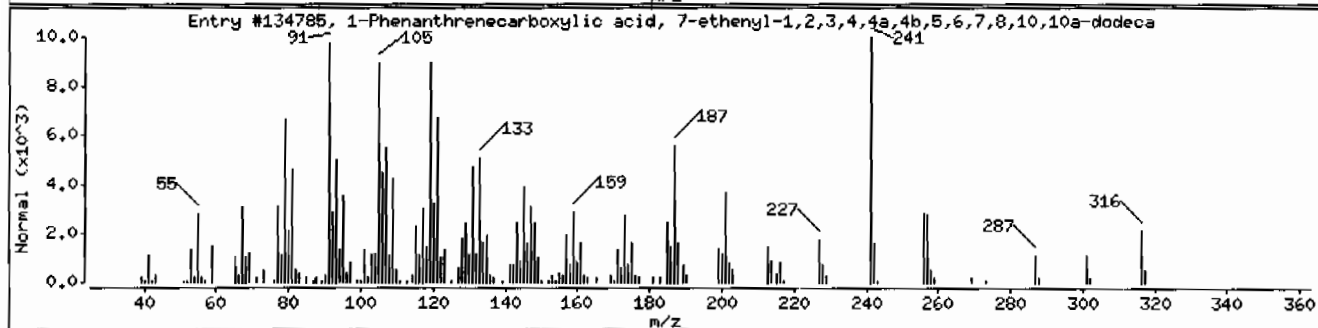
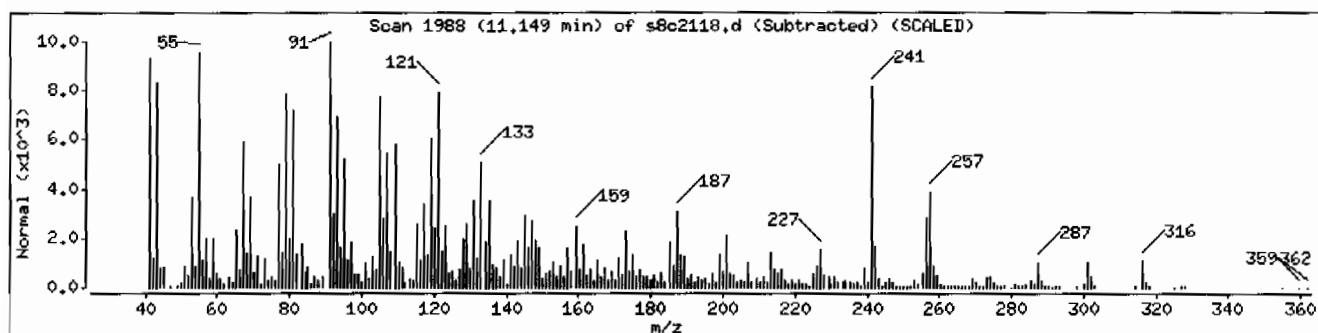
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 7-ethenyl	1696-62-0	NIST05.L	134785	92	C ₂₁ H ₃₂ O ₂	316
1-Naphthalenecarboxylic acid, decahydro-	15798-13-7	NIST05.L	134776	58	C ₂₁ H ₃₂ O ₂	316
Kaur-16-en-18-oic acid, methyl ester, (4	5524-25-4	NIST05.L	134749	50	C ₂₁ H ₃₂ O ₂	316



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: I248373008I961922I1ISVM11ILANL

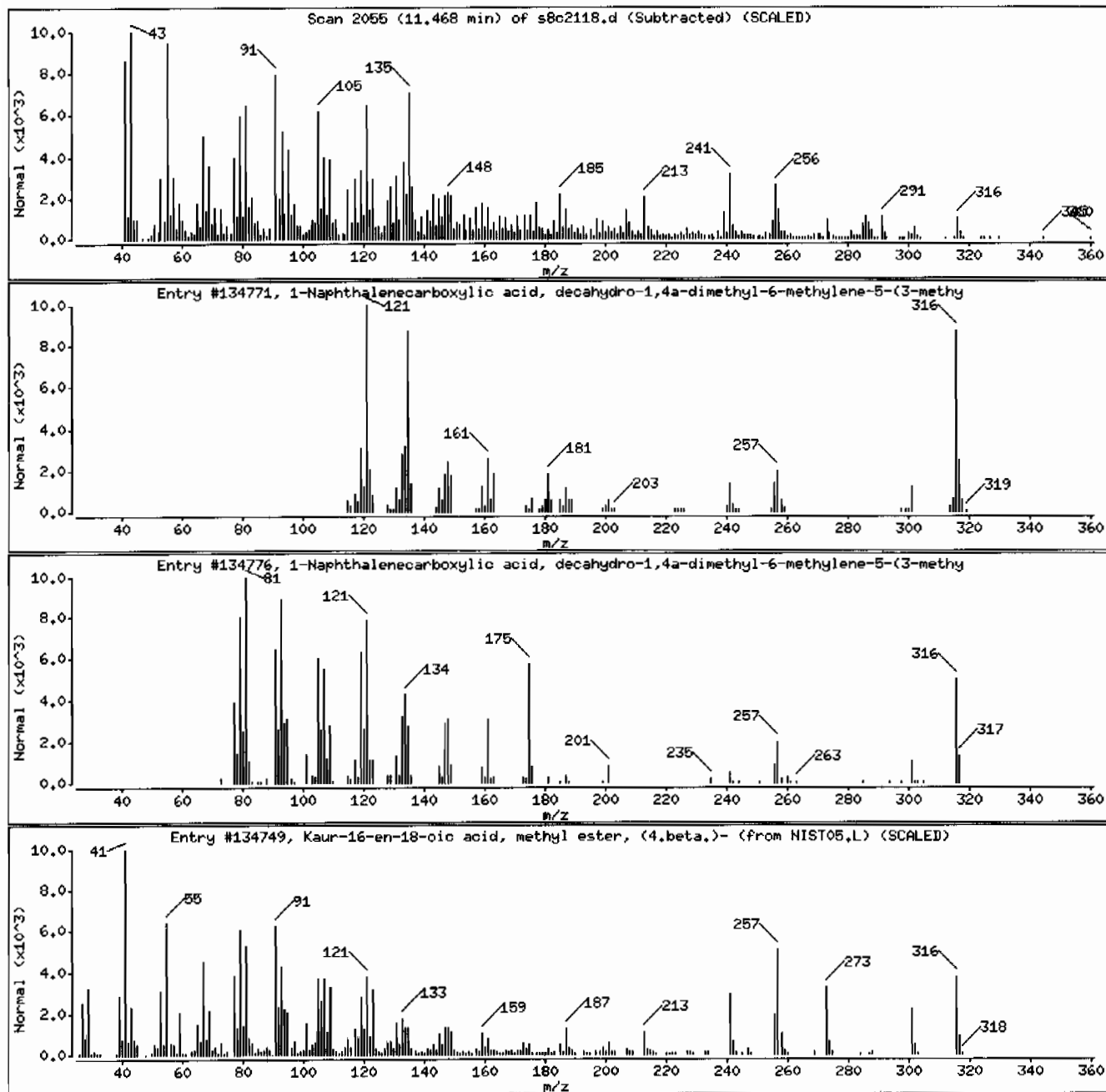
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Naphthalenecarboxylic acid, decahydro-	1235-39-8	NIST05.L	134771	49	C21H32O2	316
1-Naphthalenecarboxylic acid, decahydro-	15798-13-7	NIST05.L	134776	46	C21H32O2	316
Kaur-16-en-18-oic acid, methyl ester, (4	5524-25-4	NIST05.L	134749	43	C21H32O2	316



Date: 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVH11LANL

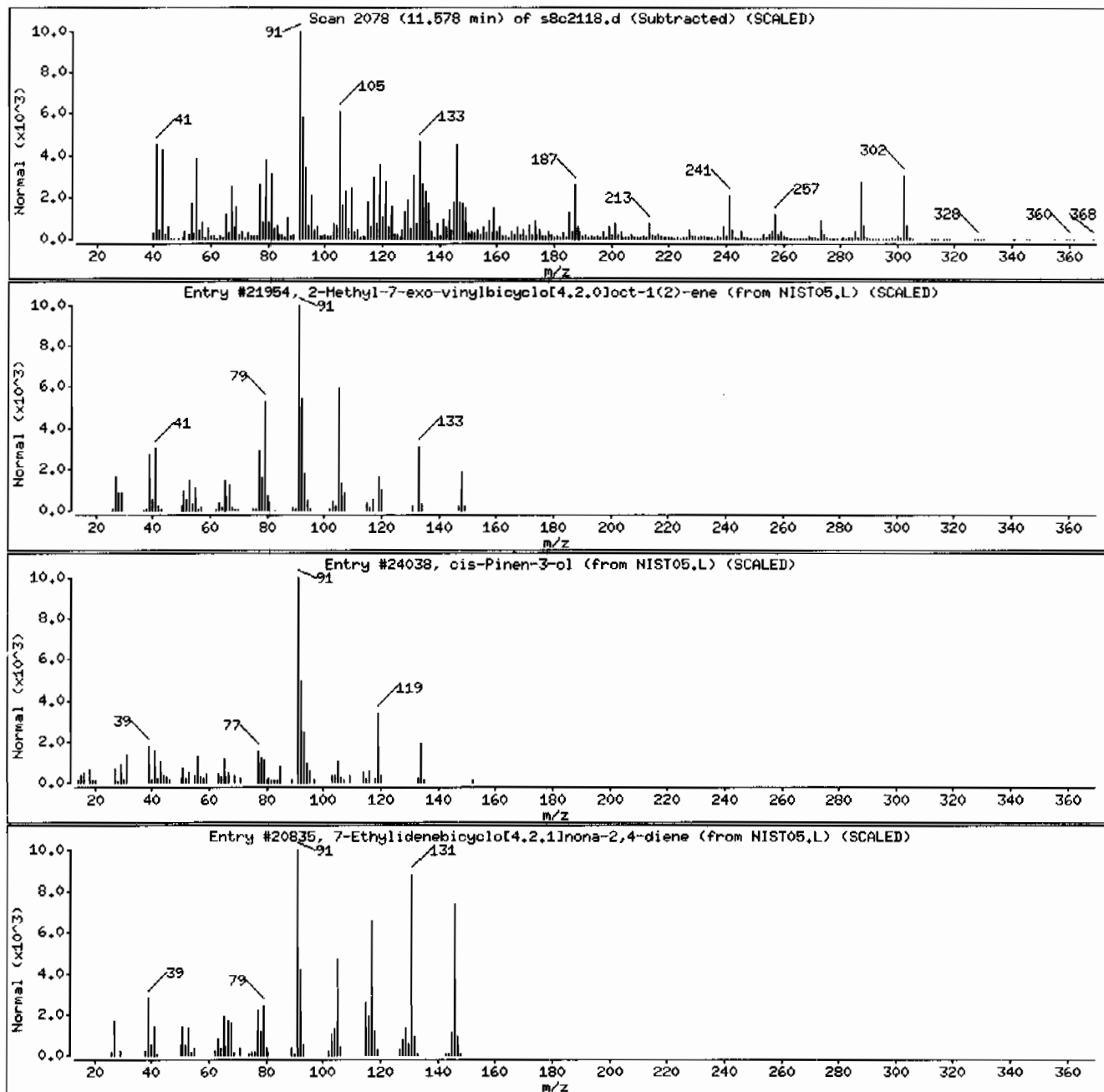
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-7-exo-vinylbicyclo[4.2.0]oct-1(	107914-89-6	NIST05.L	21954	35	C11H16	148
cis-Pinen-3-ol	1000292-85-2	NIST05.L	24038	25	C10H16O	152
7-Ethylidenebicyclo[4.2.1]nona-2,4-diene	94400-10-9	NIST05.L	20835	20	C11H14	146



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVH11LANL

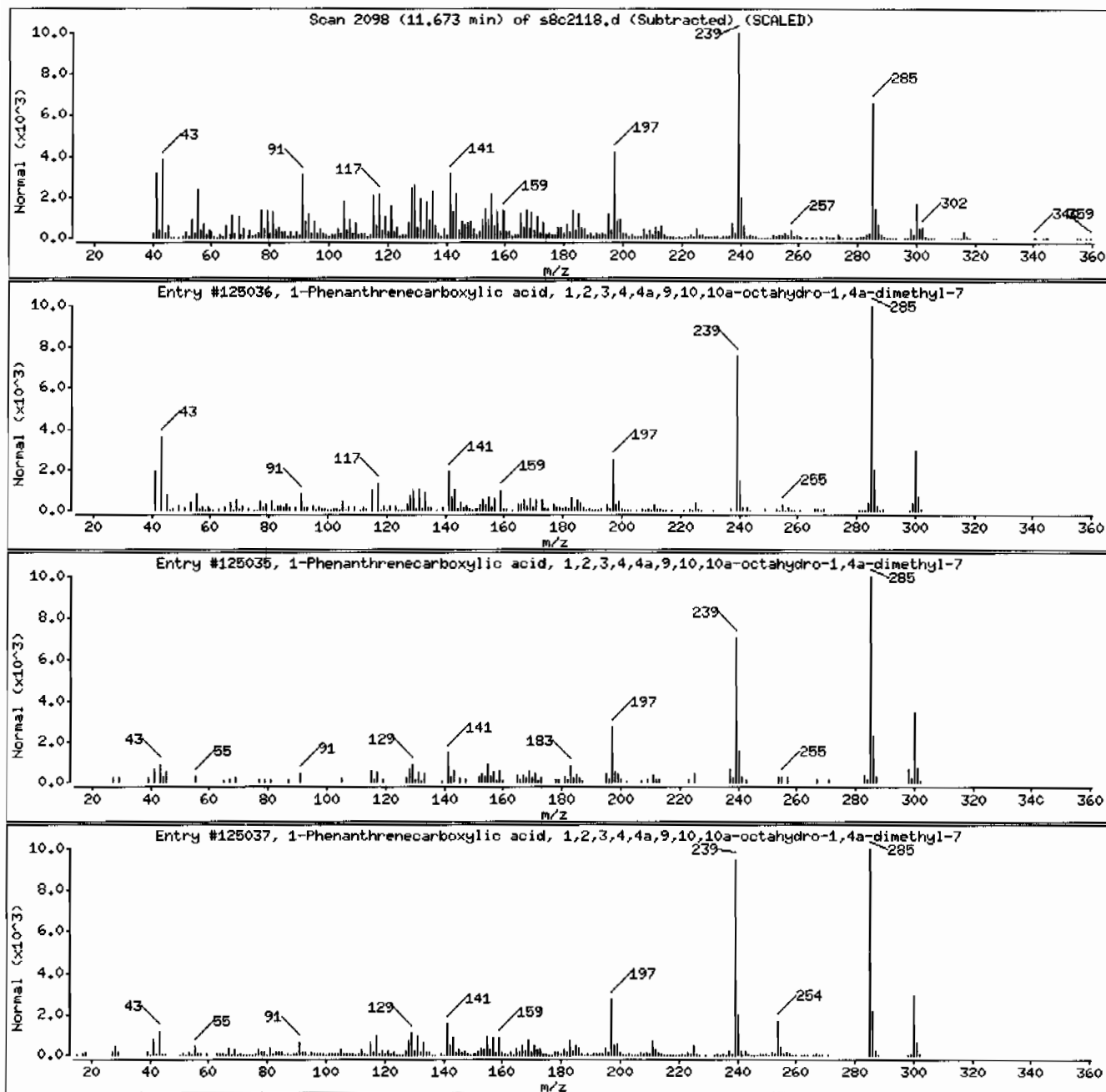
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	95	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	94	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	90	C20H28O2	300



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: I249373008I961922I1ISVM11ILANL

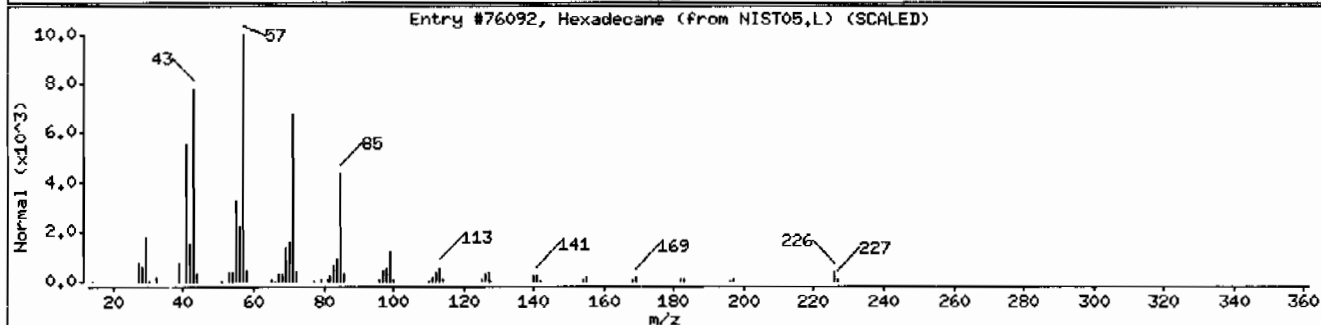
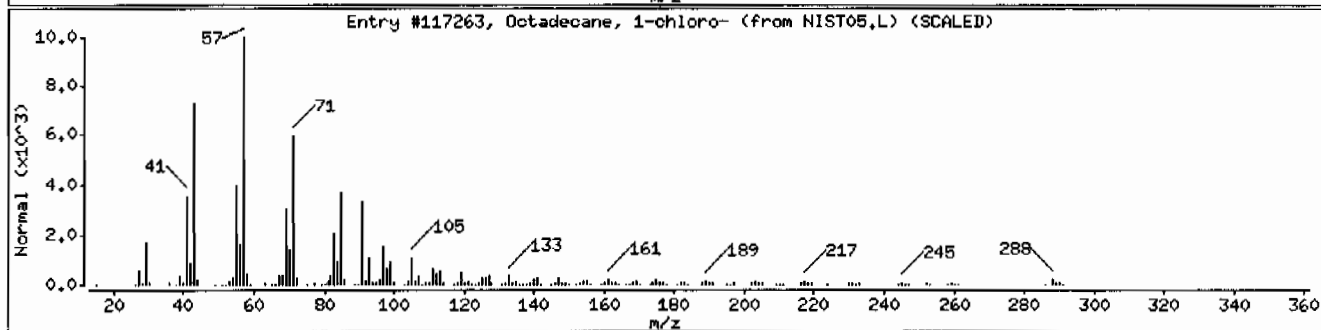
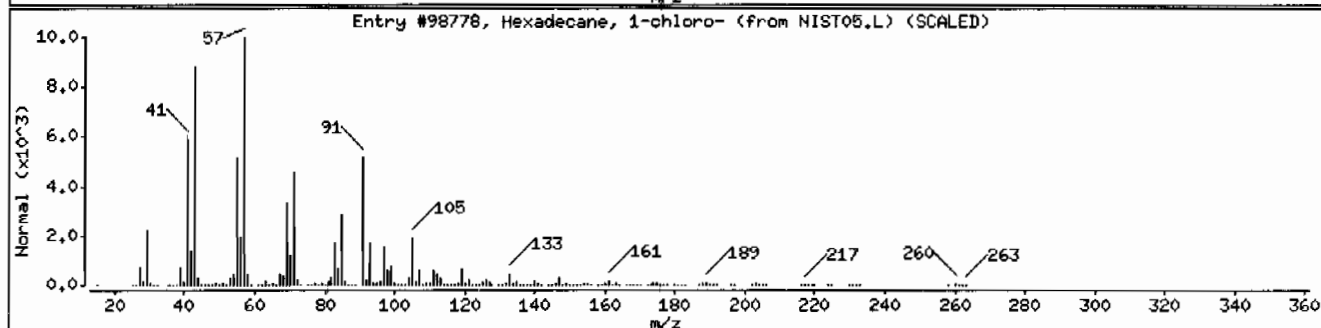
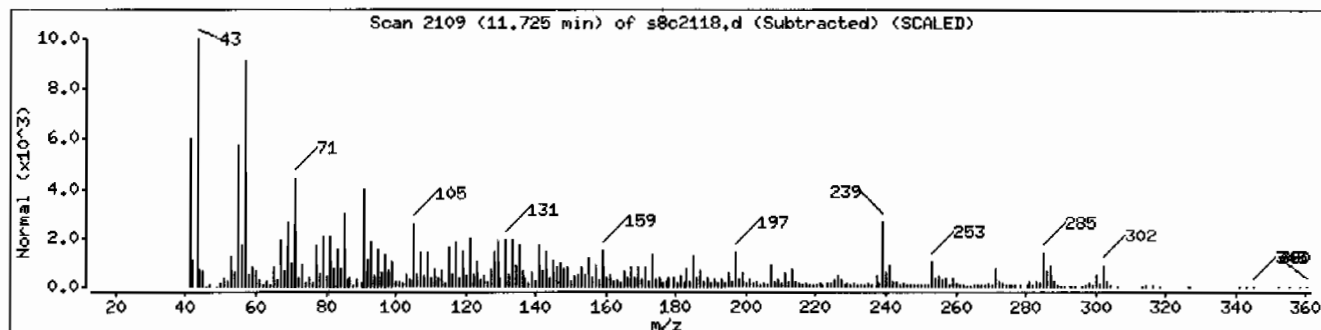
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecane, 1-chloro-	4860-03-1	NIST05.L	98778	94	C16H33Cl	260
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117263	94	C18H37Cl	288
Hexadecane	544-76-3	NIST05.L	76092	89	C16H34	226



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: HSD8.i

Sample Info: I248373008196192211SVMI11LANL

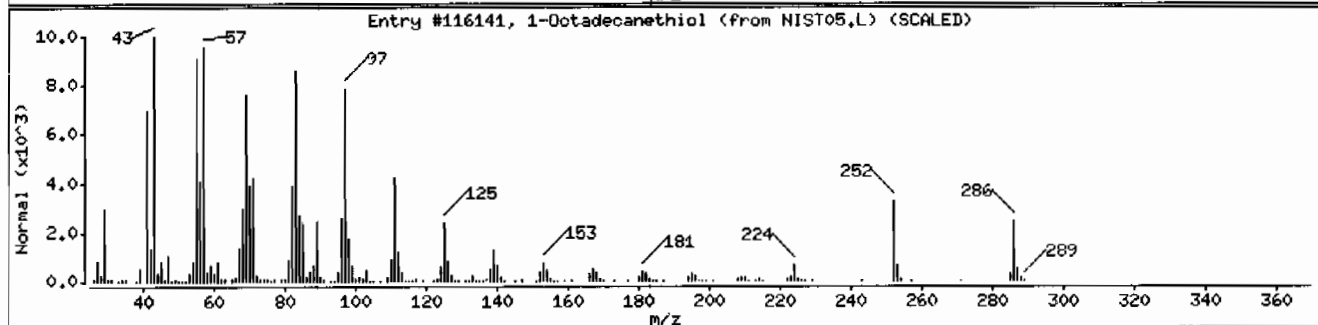
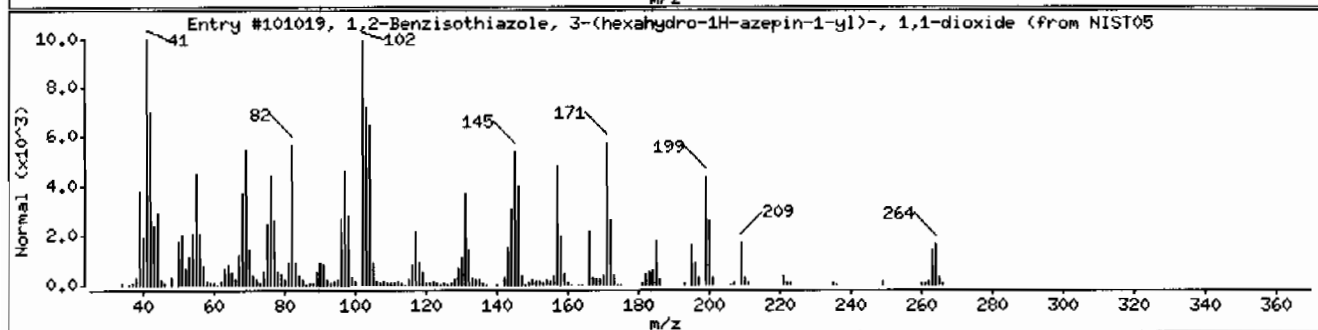
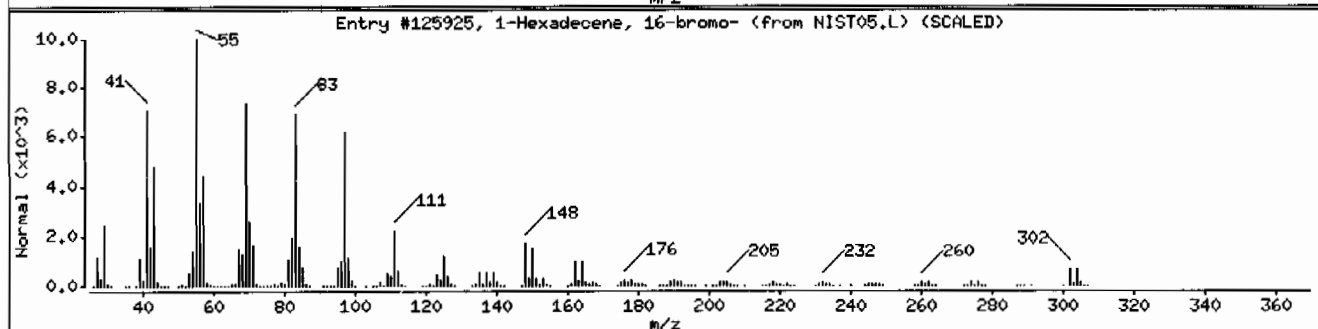
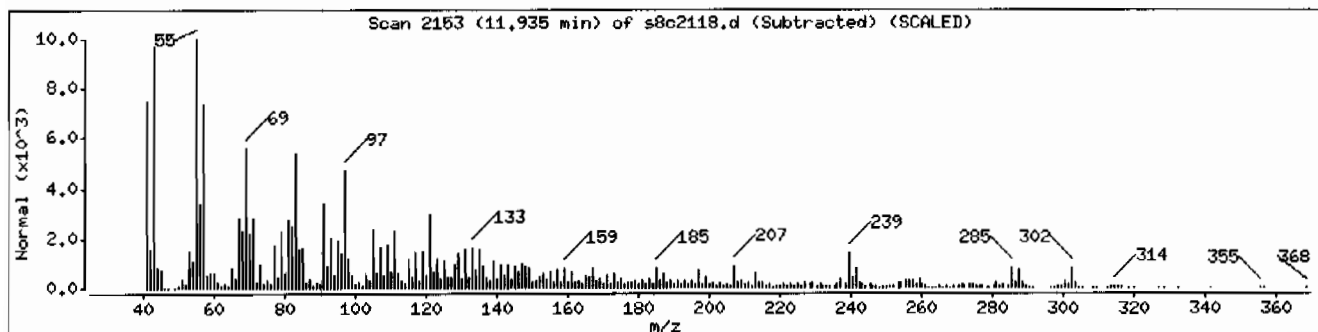
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Hexadecene, 16-bromo-	118625-56-2	NIST05.L	125925	93	C16H31Br	302
1,2-Benzisothiazole, 3-(hexahydro-1H-aze	309735-29-3	NIST05.L	101019	92	C13H16N2O2S	264
1-Octadecanethiol	2885-00-9	NIST05.L	116141	91	C18H38S	286



Date: 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI1ILANL

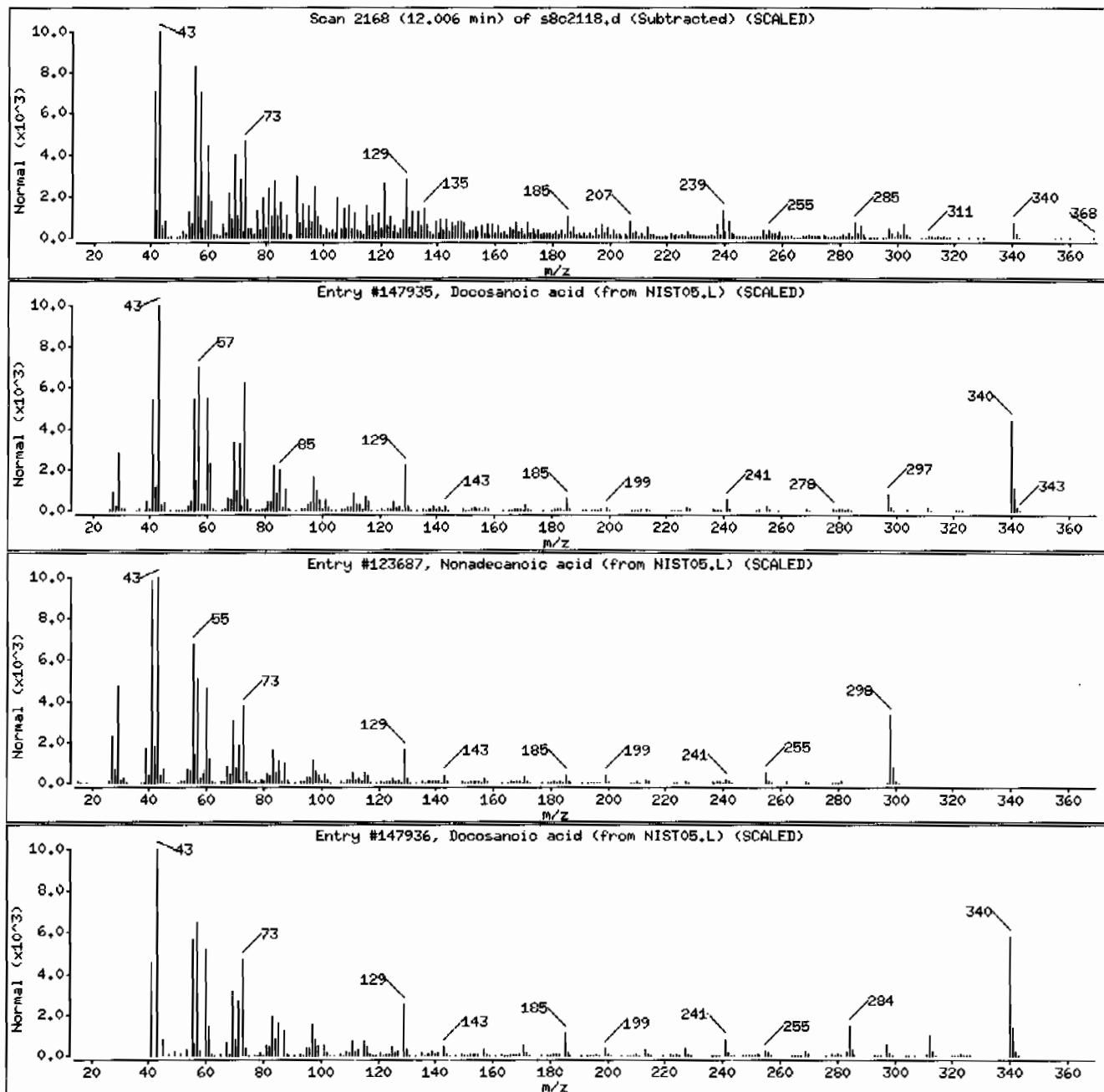
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Docosanoic acid	112-85-6	NIST05.L	147935	95	C22H44O2	340
Nonadecanoic acid	646-30-0	NIST05.L	123687	92	C19H38O2	298
Docosanoic acid	112-85-6	NIST05.L	147936	86	C22H44O2	340



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI1ILANL

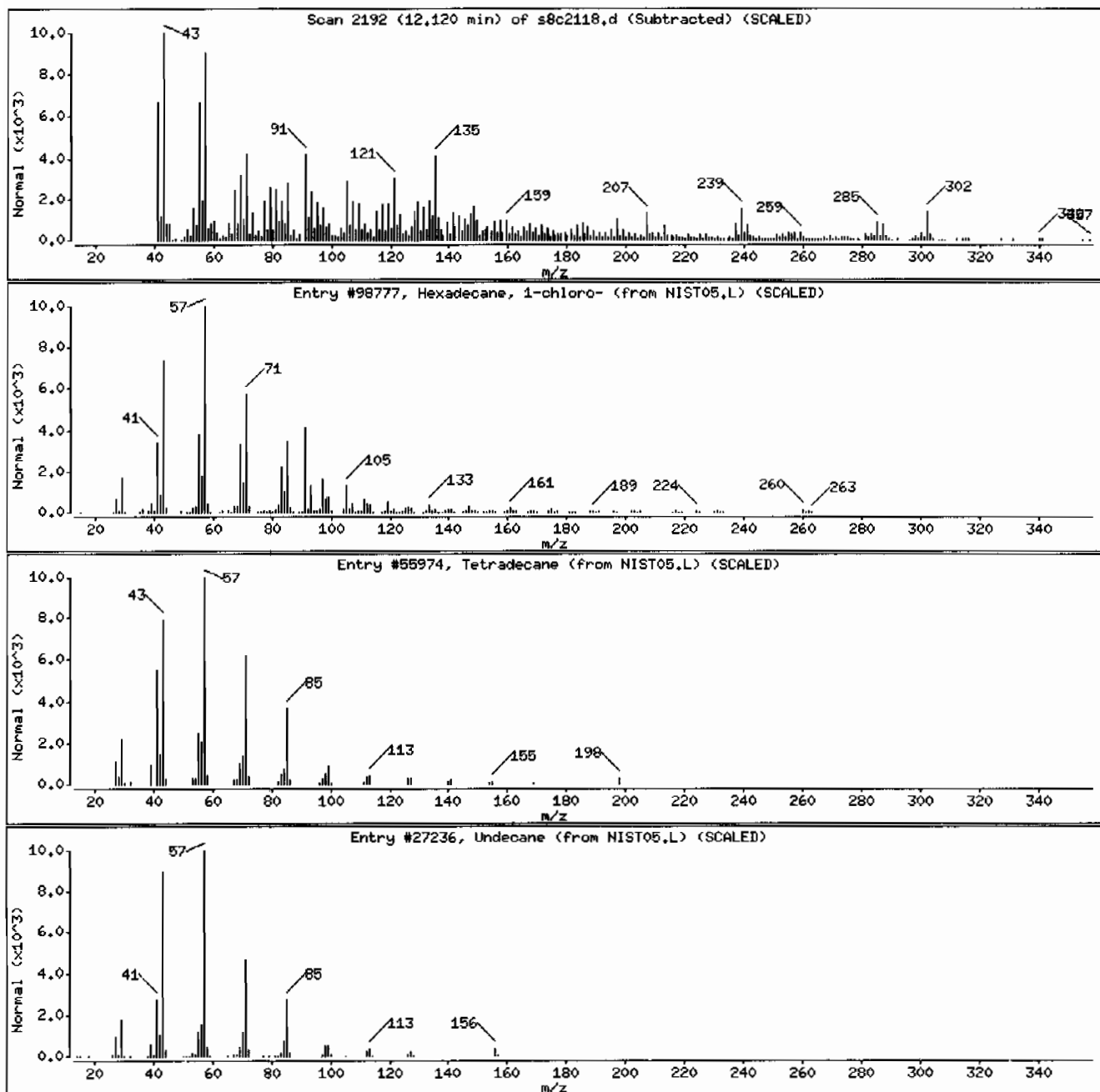
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecane, 1-chloro-	4860-03-1	NIST05.L	98777	93	C16H33Cl	260
Tetradecane	629-59-4	NIST05.L	55974	78	C14H30	198
Undecane	1120-21-4	NIST05.L	27236	74	C11H24	156



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: I248373008196192211SVMI1|LANL

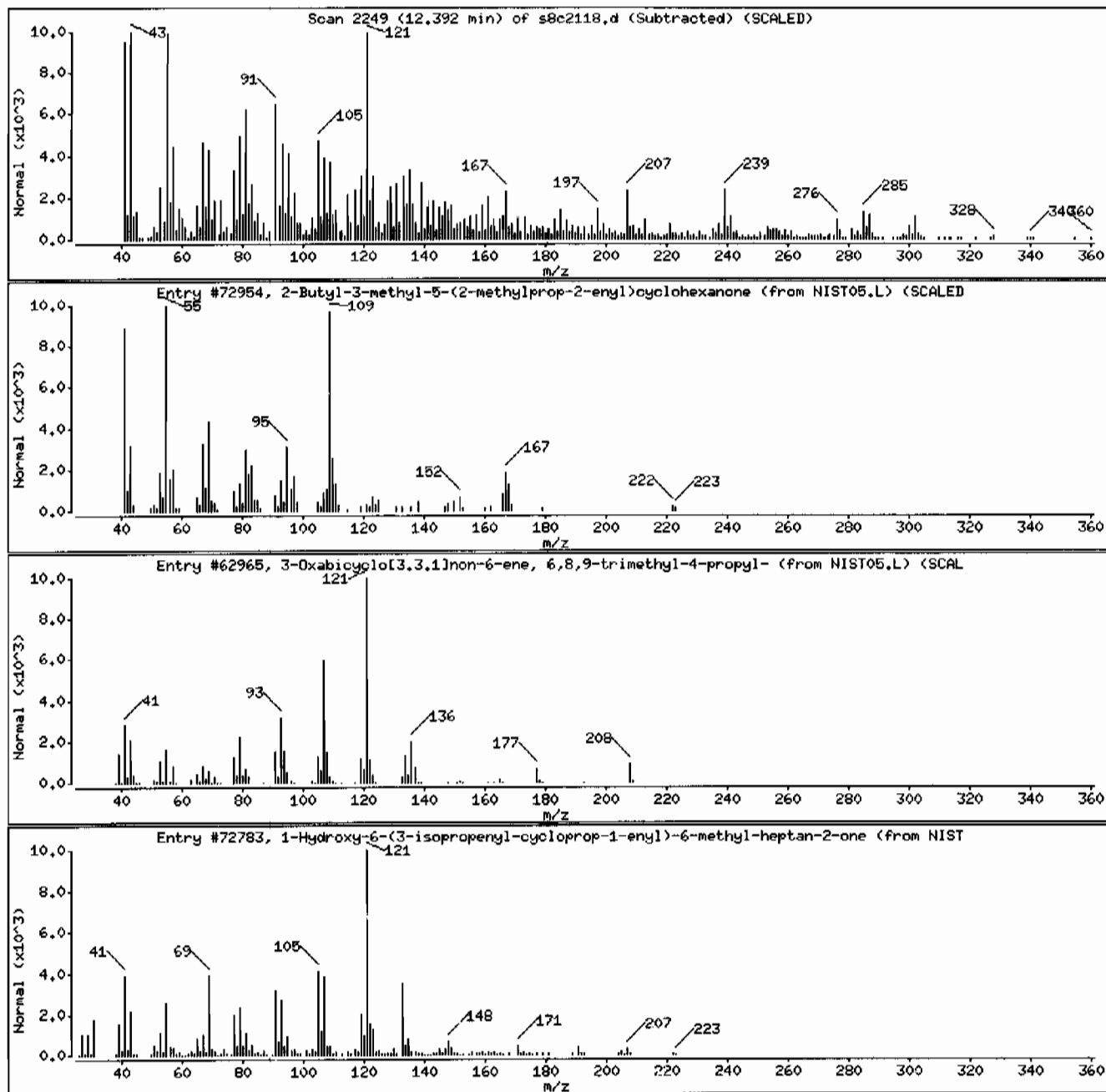
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butyl-3-methyl-5-(2-methylprop-2-enyl)	1000281-10-7	NIST05.L	72954	55	C15H26O	222
3-Oxabicyclo[3.3.1]non-6-ene, 6,8,9-trim	1000277-07-8	NIST05.L	62965	46	C14H24O	208
1-Hydroxy-6-(3-isopropenyl-cycloprop-1-e	1000189-14-9	NIST05.L	72783	46	C14H22O2	222



Date: 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI1ILANL

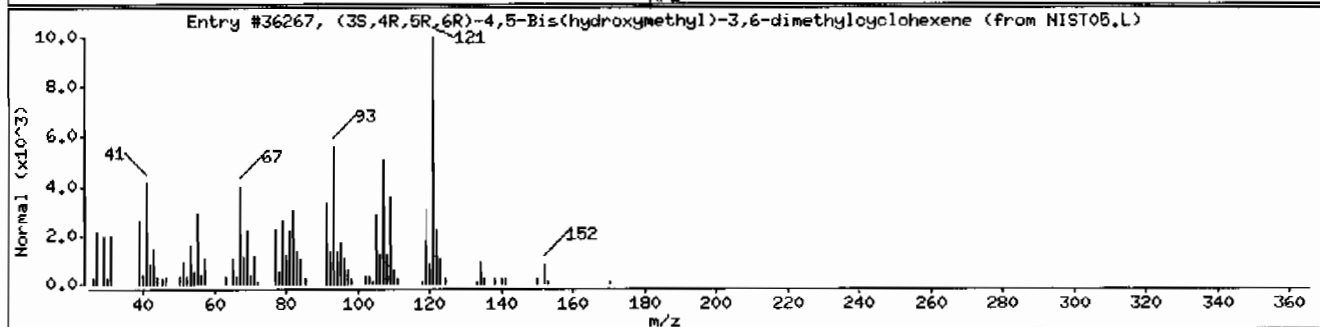
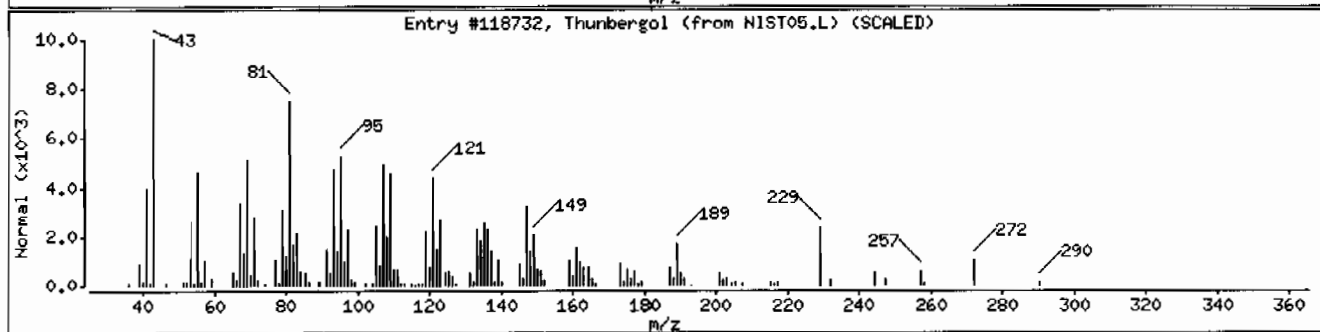
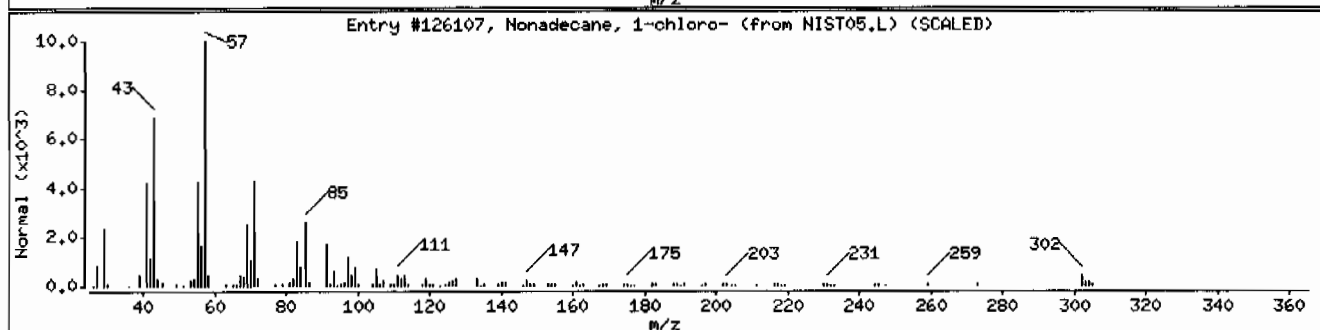
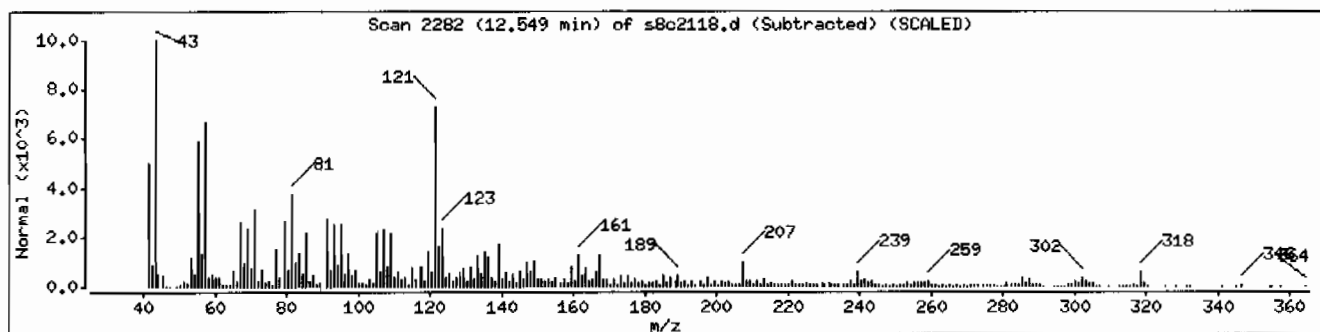
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	90	C19H39Cl	302
Thunbergol	25269-17-4	NIST05.L	118732	83	C20H34O	290
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	1000099-24-3	NIST05.L	36267	72	C10H18O2	170



Date: 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI11LANL

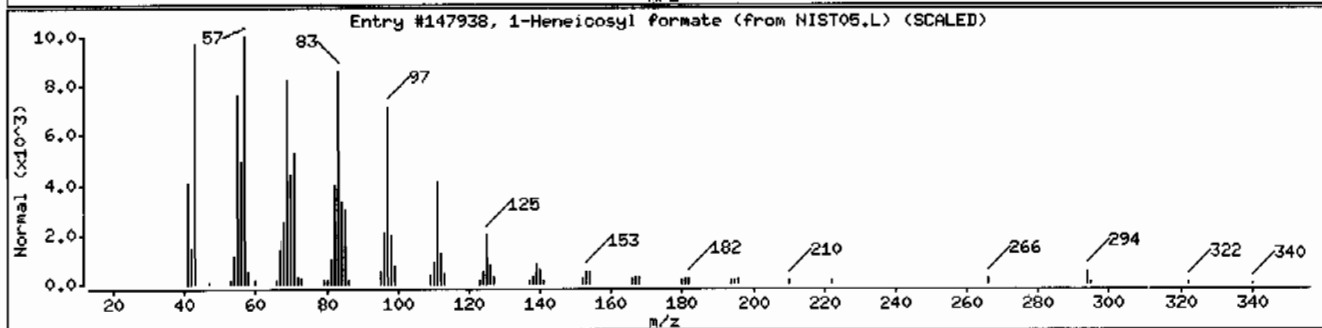
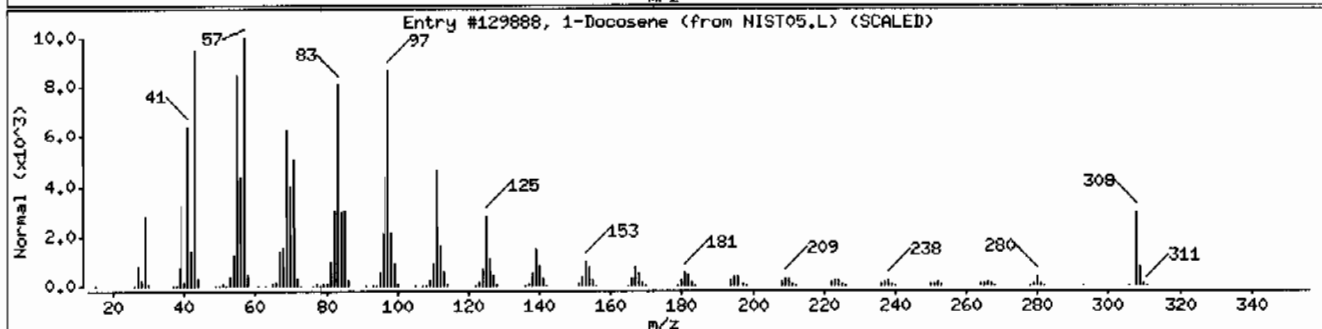
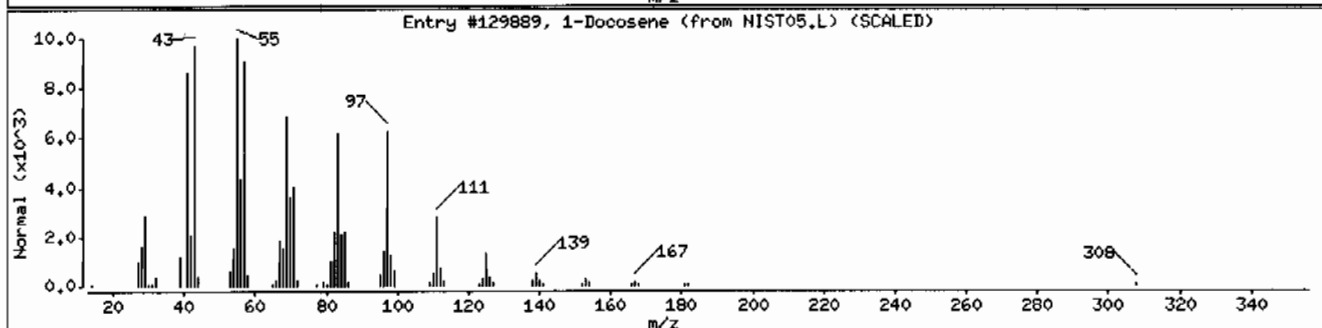
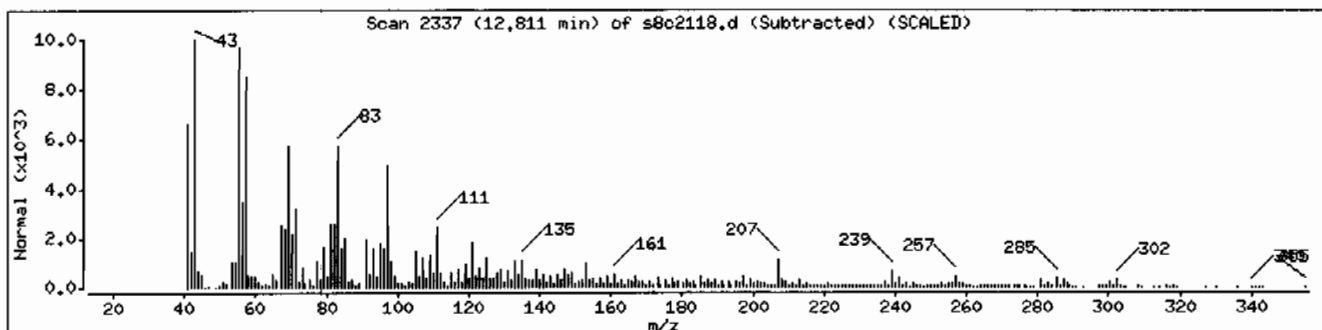
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	96	C22H44	308
1-Docosene	1599-67-3	NIST05.L	129888	95	C22H44	308
1-Heneicosyl formate	77899-03-7	NIST05.L	147938	70	C22H44O2	340



Date : 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: MSD8.i

Sample Info: 1248373008196192211SVMI1ILANL

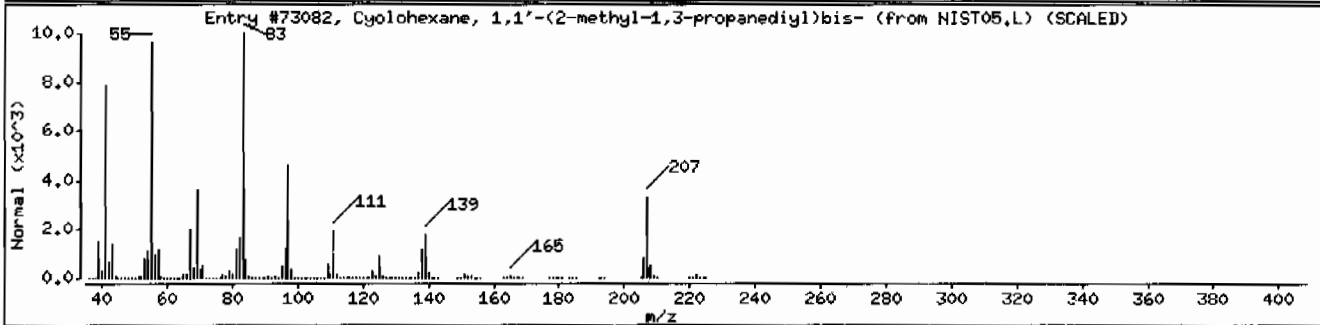
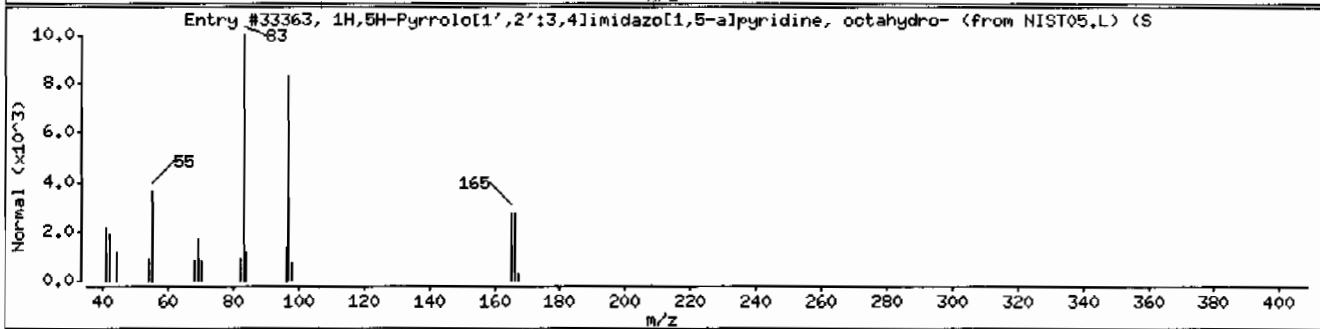
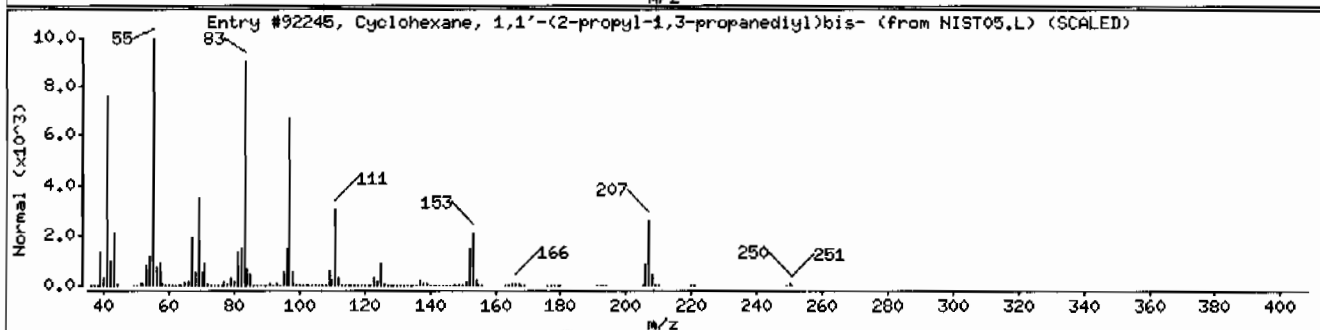
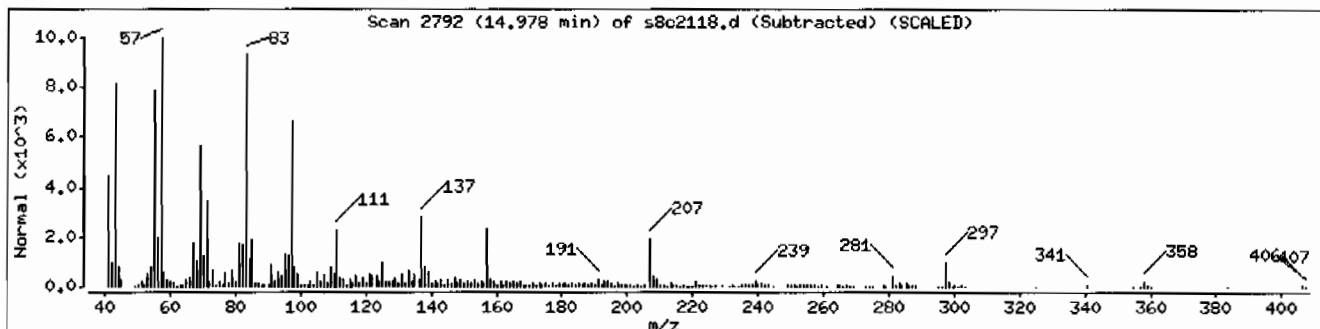
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1,1'-(2-propyl-1,3-propanediyl)bis-	55030-21-2	NIST05.L	92245	52	C18H34	250
1H,5H-Pyrrolo[1',2':3,4]imidazo[1,5-a]py	54966-11-9	NIST05.L	33363	45	C10H18N2	166
Cyclohexane, 1,1'-(2-methyl-1,3-propanediyl)bis-	2883-08-1	NIST05.L	73082	44	C16H30	222



Date: 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: HSD8.i

Sample Info: 1248373008196192211SVH111LANL

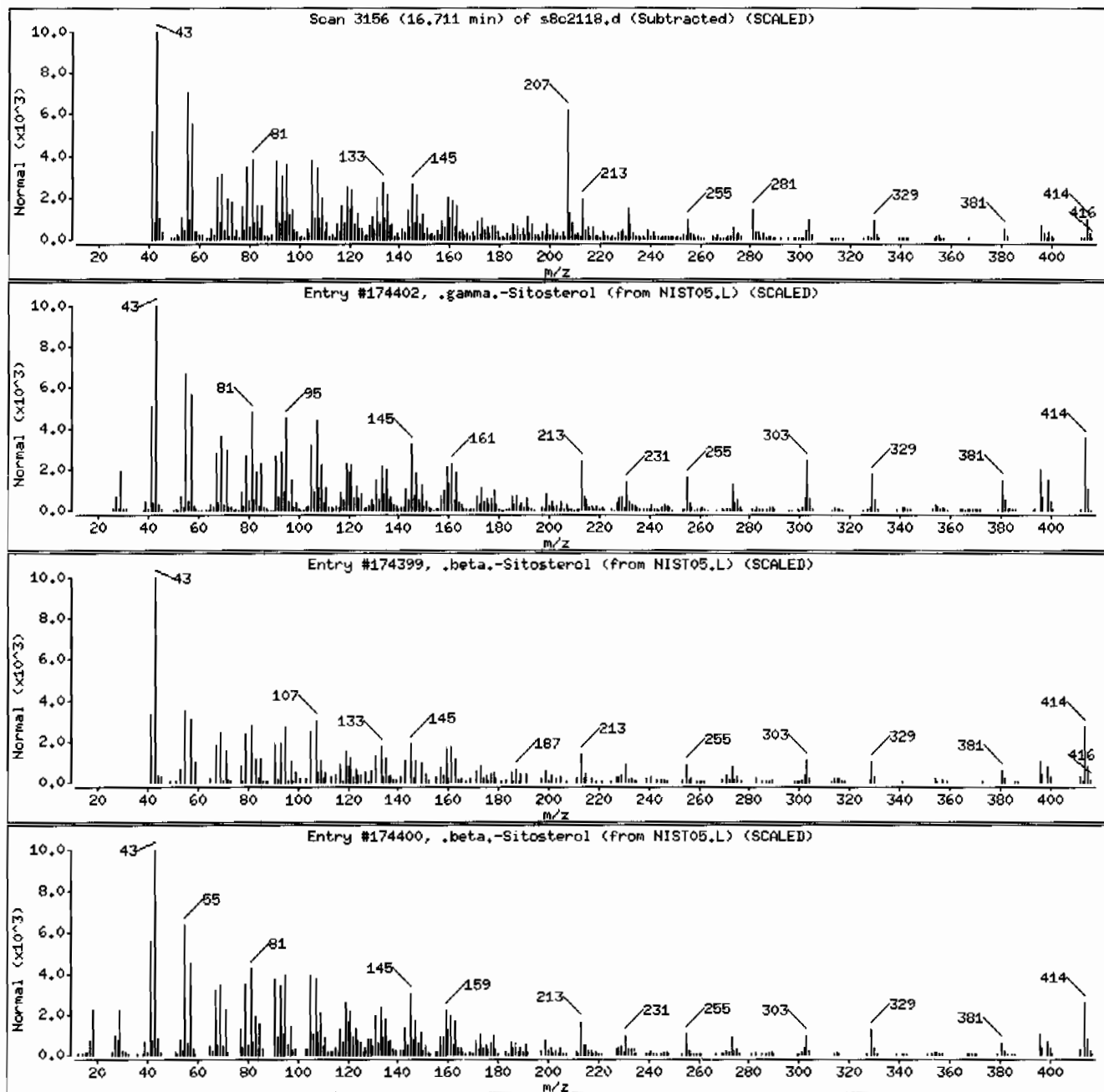
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	94	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	92	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	60	C ₂₉ H ₅₀ O	414



Date: 21-MAR-2010 16:26

Client ID: RE36-10-7495

Instrument: HSD8.i

Sample Info: 1248373008196192211SVH111LANL

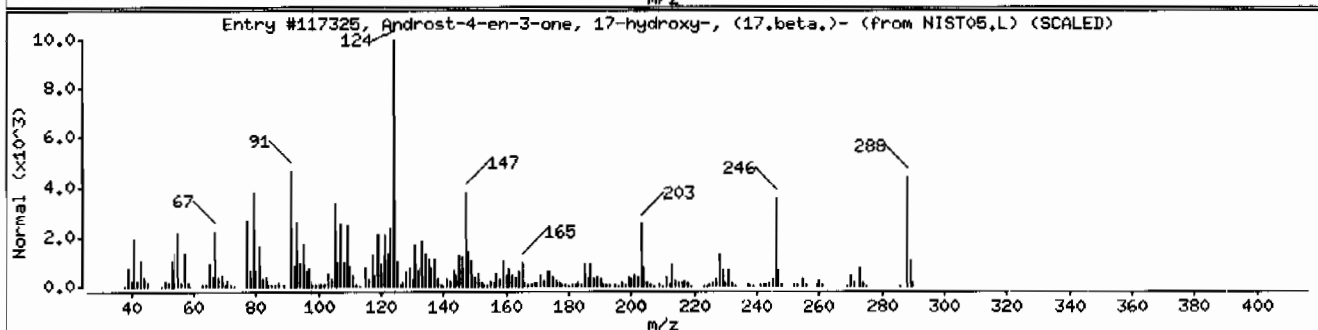
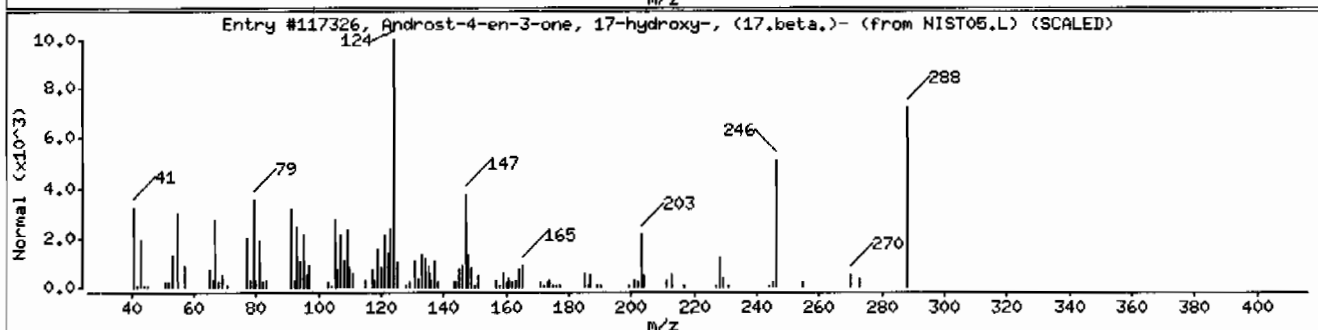
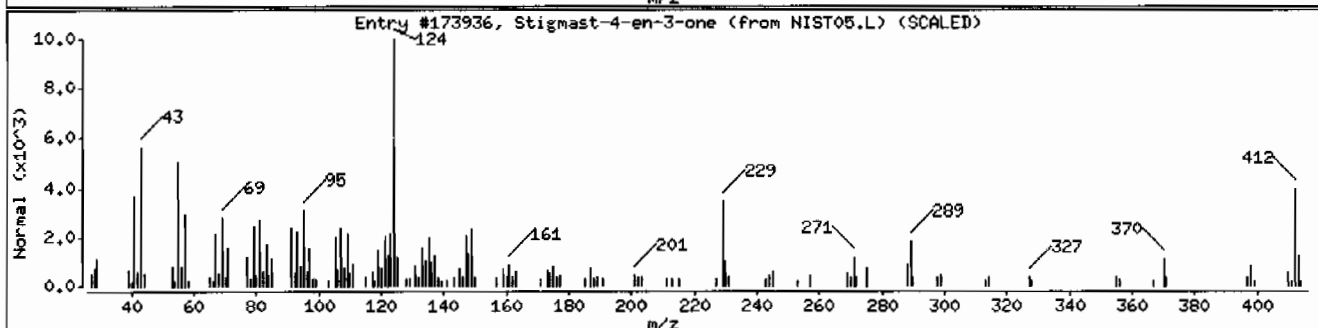
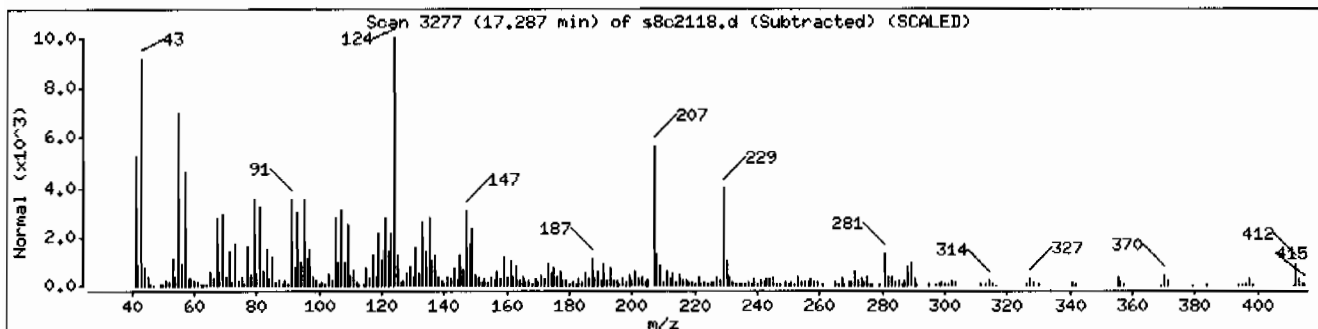
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	93	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17 β)	58-22-0	NIST05.L	117326	80	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17 β)	58-22-0	NIST05.L	117325	58	C19H28O2	288



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

SDG Number: 10-2154
Lab Sample ID: 248373005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	375	ug/kg	74.9	375
108-95-2	Phenol	U	375	ug/kg	74.9	375
95-57-8	2-Chlorophenol	U	375	ug/kg	74.9	375
106-46-7	1,4-Dichlorobenzene	U	375	ug/kg	74.9	375
621-64-7	N-Nitrosodipropylamine	U	375	ug/kg	74.9	375
59-50-7	4-Chloro-3-methylphenol	U	375	ug/kg	74.9	375
83-32-9	Acenaphthene	U	37.5	ug/kg	12.4	37.5
121-14-2	2,4-Dinitrotoluene	U	375	ug/kg	37.5	375
100-02-7	4-Nitrophenol	U	375	ug/kg	124	375
87-86-5	Pentachlorophenol	U	375	ug/kg	93.7	375
129-00-0	Pyrene	J	12.6	ug/kg	11.2	37.5
110-86-1	Pyridine	U	375	ug/kg	74.9	375
62-53-3	Aniline	U	375	ug/kg	112	375
111-44-4	bis(2-Chloroethyl) ether	U	375	ug/kg	74.9	375
541-73-1	1,3-Dichlorobenzene	U	375	ug/kg	74.9	375
100-51-6	Benzyl alcohol	U	375	ug/kg	112	375
95-50-1	1,2-Dichlorobenzene	U	375	ug/kg	74.9	375
108-60-1	bis(2-Chloroisopropyl)ether	U	375	ug/kg	74.9	375
95-48-7	o-Cresol	U	375	ug/kg	74.9	375
65794-96-9	m,p-Cresols	U	375	ug/kg	112	375
67-72-1	Hexachloroethane	U	375	ug/kg	74.9	375
98-95-3	Nitrobenzene	U	375	ug/kg	74.9	375
78-59-1	Isophorone	U	375	ug/kg	74.9	375
88-75-5	2-Nitrophenol	U	375	ug/kg	74.9	375
105-67-9	2,4-Dimethylphenol	U	375	ug/kg	131	375
111-91-1	bis(2-Chloroethoxy)methane	U	375	ug/kg	74.9	375
120-83-2	2,4-Dichlorophenol	U	375	ug/kg	74.9	375
65-85-0	Benzoic acid	U	749	ug/kg	187	749
91-20-3	Naphthalene	U	37.5	ug/kg	11.2	37.5
106-47-8	4-Chloroaniline	U	375	ug/kg	74.9	375
87-68-3	Hexachlorobutadiene	U	375	ug/kg	74.9	375
91-57-6	2-Methylnaphthalene	U	37.5	ug/kg	7.49	37.5
77-47-4	Hexachlorocyclopentadiene	U	375	ug/kg	74.9	375
88-06-2	2,4,6-Trichlorophenol	U	375	ug/kg	74.9	375
95-95-4	2,4,5-Trichlorophenol	U	375	ug/kg	74.9	375
91-58-7	2-Chloronaphthalene	U	37.5	ug/kg	12.4	37.5
88-74-4	2-Nitroaniline	U	375	ug/kg	74.9	375
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	375	ug/kg	74.9	375

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

SDG Number: 10-2154
Lab Sample ID: 248373005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7496
Batch ID: 961922
Run Date: 03/21/2010 14:56
Prep Date: 03/07/2010 12:04
Data File: s8c2115.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	375	ug/kg	74.9	375
606-20-2	2,6-Dinitrotoluene	U	375	ug/kg	37.5	375
208-96-8	Acenaphthylene	U	37.5	ug/kg	11.2	37.5
51-28-5	2,4-Dinitrophenol	U	749	ug/kg	142	749
132-64-9	Dibenzofuran	U	375	ug/kg	74.9	375
84-66-2	Diethylphthalate	U	375	ug/kg	74.9	375
86-73-7	Fluorene	U	37.5	ug/kg	11.2	37.5
7005-72-3	4-Chlorophenylphenylether	U	375	ug/kg	74.9	375
534-52-1	2-Methyl-4,6-dinitrophenol	U	375	ug/kg	74.9	375
100-01-6	4-Nitroaniline	U	375	ug/kg	112	375
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	375	ug/kg	74.9	375
122-66-7	Azobenzene	U	375	ug/kg	74.9	375
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	375	ug/kg	74.9	375
118-74-1	Hexachlorobenzene	U	375	ug/kg	74.9	375
85-01-8	Phenanthrene	U	37.5	ug/kg	11.2	37.5
120-12-7	Anthracene	U	37.5	ug/kg	7.49	37.5
84-74-2	Di-n-butylphthalate	U	375	ug/kg	74.9	375
206-44-0	Fluoranthene	J	15.2	ug/kg	11.2	37.5
85-68-7	Butylbenzylphthalate	U	375	ug/kg	74.9	375
56-55-3	Benzo(a)anthracene	U	37.5	ug/kg	11.2	37.5
91-94-1	3,3'-Dichlorobenzidine	U	375	ug/kg	112	375
218-01-9	Chrysene	U	37.5	ug/kg	11.2	37.5
117-81-7	bis(2-Ethylhexyl)phthalate		604	ug/kg	74.9	375
117-84-0	Di-n-octylphthalate	U	375	ug/kg	74.9	375
205-99-2	Benzo(b)fluoranthene	U	37.5	ug/kg	11.2	37.5
207-08-9	Benzo(k)fluoranthene	U	37.5	ug/kg	11.2	37.5
50-32-8	Benzo(a)pyrene	U	37.5	ug/kg	11.2	37.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.5	ug/kg	11.2	37.5
53-70-3	Dibenzo(a,h)anthracene	U	37.5	ug/kg	11.2	37.5
191-24-2	Benzo(ghi)perylene	U	37.5	ug/kg	11.2	37.5
120-82-1	1,2,4-Trichlorobenzene	U	375	ug/kg	74.9	375

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.71	2030	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.69	360	ug/kg	97	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373005	Date Received: 03/02/2010 08:50	%Moisture: 11.4
Client ID: RE36-10-7496	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 14:56	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2115.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.25	446	ug/kg	97	NJ
593-39-5	6-Octadecenoic acid, (Z)-	10.35	225	ug/kg	95	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	153	ug/kg	98	NJ
	Unknown	11.3	222	ug/kg		J
	Unknown	11.46	162	ug/kg		J
	Unknown	11.52	310	ug/kg		J
	Unknown	11.55	471	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.65	549	ug/kg	94	NJ
629-78-7	Heptadecane	11.72	224	ug/kg	95	NJ
112-85-6	Docosanoic acid	11.99	196	ug/kg	98	NJ
	Unknown	12.04	289	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.1	219	ug/kg	89	NJ
62016-76-6	Nonadecane, 1-chloro-	12.12	208	ug/kg	98	NJ
	Unknown	12.55	217	ug/kg		J
557-59-5	Tetracosanoic acid	12.89	291	ug/kg	98	NJ
1599-67-3	1-Docosene	12.98	603	ug/kg	99	NJ
	Unknown	13.02	698	ug/kg		J
7683-64-9	Squalene	13.13	251	ug/kg	81	NJ
	Unknown	13.36	248	ug/kg		J
112-95-8	Eicosane	13.53	474	ug/kg	96	NJ
	Unknown	14.24	239	ug/kg		J
	Unknown	16.08	295	ug/kg		J
1000111-66-9	4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	16.85	857	ug/kg	80	NJ
	Unknown	17.28	252	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2115.d
Lab Smp Id: 248373005 Client Smp ID: RE36-10-7496
Inj Date : 21-MAR-2010 14:56
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248373005|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	11.44670	% 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	4.301	4.301	(1.000)	354181	40.0000	
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1406742	40.0000	
* 46 Acenaphthene-d10	164	7.401	7.406	(1.000)	845010	40.0000	
* 67 Phenanthrene-d10	188	8.996	8.997	(1.000)	1469909	40.0000	
* 91 Chrysene-d12	240	11.868	11.868	(1.000)	1260228	40.0000	
* 98 Perylene-d12	264	13.877	13.878	(1.000)	798867	40.0000	
\$ 3 2-Fluorophenol	112	3.173	3.158	(0.738)	538718	64.4266	2410
\$ 5 Phenol-d5	99	3.934	3.930	(0.915)	680726	65.2785	2440
\$ 20 Nitrobenzene-d5	82	4.825	4.830	(0.869)	303044	30.3043	1140
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.903)	701649	28.2095	1060
\$ 60 2,4,6-Tribromophenol	329	8.244	8.244	(1.114)	170058	60.8808	2280
\$ 81 p-Terphenyl-d14	244	10.711	10.706	(0.902)	817621	36.0365	1350

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====		=====	=====
79 Pyrene	202	10.539	10.544	(0.888)	13220		0.33598	12.6(a)
76 Fluoranthene	202	10.296	10.297	(1.145)	15129		0.40448	15.2(a)
93 bis(2-Ethylhexyl)phthalate	149	11.877	11.878	(1.001)	310300		16.1150	604

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s8c2115.d

Report Date: 03/22/2010 07:17

Lab. ID: 248373005

SampleType: SAMPLE

Injection Date: 21-MAR-2010 14:56

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373005|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL

4 Aniline		CAS#: 62-53-3				
66	34563	3.93	4.00	80-120	100	(T)
93	13405	3.98	4.00	213-273	39	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	40928	4.82	4.68	80-120	100	(T)
42	22149	4.82	4.68	31- 91	54	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	5050	5.23	5.28	80-120	100	()
122	3815	5.23	5.28	64-124	76	()
77	4236	5.23	5.28	47-107	84	()

30 Naphthalene		CAS#: 91-20-3				
128	584	5.57	5.58	80-120	100	()
129	204	5.56	5.58	0- 41	35	()
127	142	5.67	5.58	0- 43	24	(T)

34 2-Methylnaphthalene		CAS#: 91-57-6				
142	263	6.30	6.30	80-120	100	()
141	252	6.30	6.30	56-116	96	()

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	593	6.80	6.81	80-120	100	()
164	103	6.86	6.81	3- 63	18	()
127	2648	6.68	6.81	7- 67	447	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
42 o-Nitroaniline		CAS#: 88-74-4				
65	15629	7.01	6.92	80-120	100	(T)
92	18031	7.01	6.92	33- 93	115	(QT)
138	1452	7.02	6.92	76-136	9	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	108912	7.40	7.18	80-120	100	(T)
63	2003	7.40	7.18	32- 92	2	(QT)

48 2,4-Dinitrophenol		CAS#: 51-28-5				
184	231	7.46	7.47	80-120	100	()
154	699	7.43	7.47	23- 83	302	(Q)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	108912	7.40	7.61	80-120	100	(T)
89	1805	7.40	7.61	47-107	2	(QT)
63	2003	7.40	7.61	26- 86	2	(QT)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	595	8.24	8.04	80-120	100	(T)
105	1567	8.24	8.04	14- 74	263	(QT)
51	1299	8.24	8.04	26- 86	218	(QT)

68 Phenanthrene		CAS#: 85-01-8				
178	11012	9.02	9.02	80-120	100	()
179	2011	9.02	9.02	0- 45	18	()
176	2078	9.02	9.02	0- 49	19	()

69 Anthracene		CAS#: 120-12-7				
178	11012	9.02	9.08	80-120	100	()
179	2011	9.02	9.08	0- 45	18	()
176	2078	9.02	9.08	0- 48	19	()

76 Fluoranthene		CAS#: 206-44-0				
202	15129	10.30	10.30	80-120	100	()
203	2855	10.30	10.30	0- 47	19	()
101	2587	10.30	10.30	0- 43	17	()

79 Pyrene		CAS#: 129-00-0				
202	13220	10.54	10.54	80-120	100	()
200	3036	10.54	10.54	0- 50	23	()
101	2771	10.54	10.54	0- 46	21	()

85 Butylbenzylphthalate		CAS#: 85-68-7				
149	27829	11.33	11.23	80-120	100	(T)
91	36217	11.32	11.23	40-100	130	(QT)
206	408	11.34	11.23	0- 48	1	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
92	Chrysene		CAS#:	218-01-9		
228	6028	11.89	11.90	80-120	100	()
229	1591	11.89	11.90	0- 49	26	()
226	2141	11.90	11.90	0- 59	36	()

93	bis(2-Ethylhexyl)phthalate		CAS#:	117-81-7		
149	310300	11.88	11.88	80-120	100	()
167	87020	11.88	11.88	0- 57	28	()

94	Di-n-octylphthalate		CAS#:	117-84-0		
149	6121	12.73	12.73	80-120	100	()
43	14897	12.69	12.73	0- 41	243	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2115.d
Lab Smp Id: 248373005 Client Smp ID: RE36-10-7496
Inj Date : 21-MAR-2010 14:56
Operator : nagl Inst ID: MSD8.i
Smp Info : |248373005|961922|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	11.44670	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.301	2118431	40.000
* 67 Phenanthrene-d10	8.996	3708524	40.000
* 91 Chrysene-d12	11.868	5635962	40.000
* 98 Perylene-d12	13.877	2464757	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
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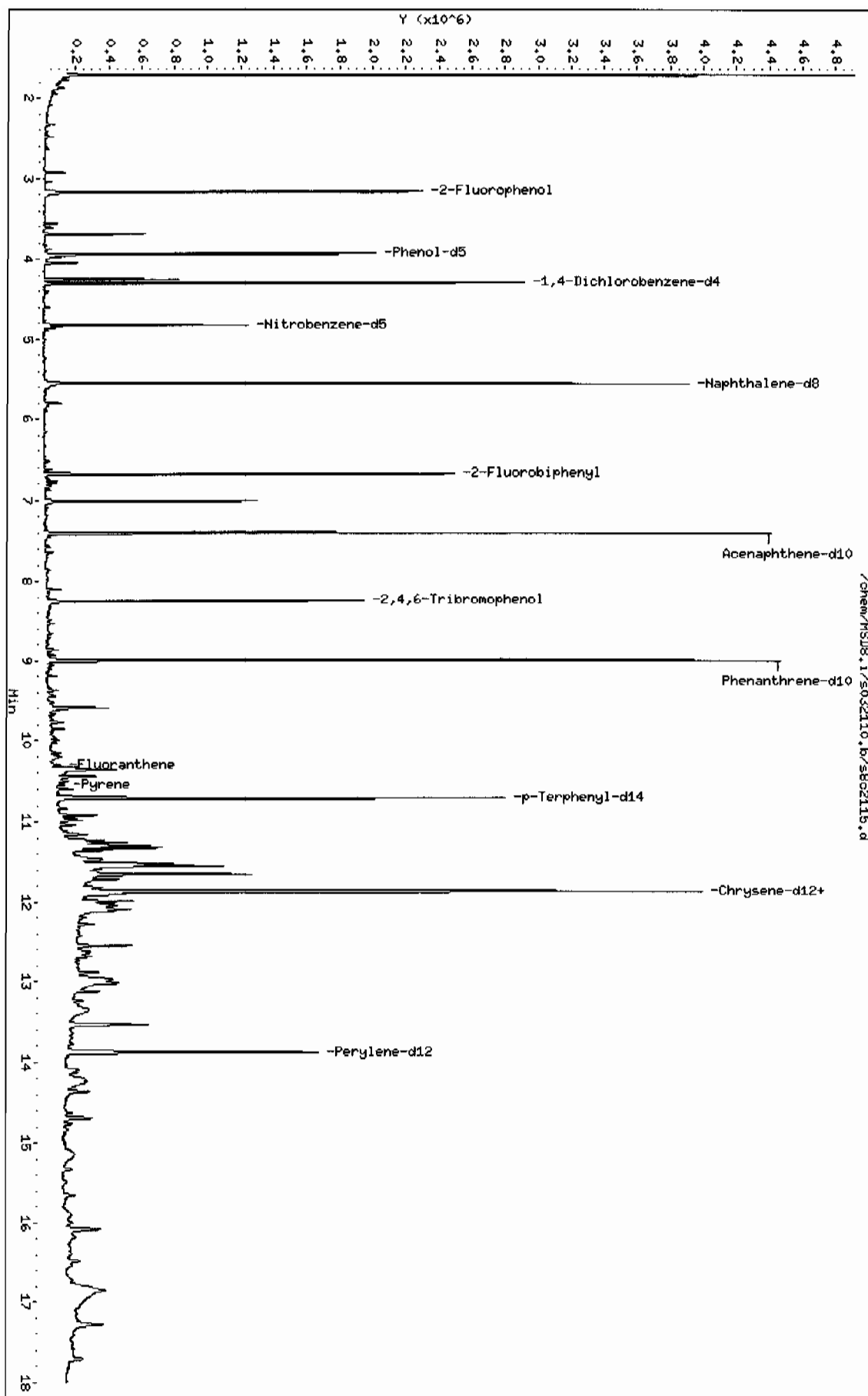
RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.711	2868503	54.1627653	2030	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.692	509311	9.61676166	360	97	NIST05.L	15188	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
4.254	629999	11.8955682	446	97	NIST05.L	15369	10
6-Octadecenoic acid, (Z)-					CAS #: 593-39-5		
10.354	556041	5.99744010	225	95	NIST05.L	113359	67
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
11.258	576837	4.09397031	153	98	NIST05.L	133618	91
Unknown					CAS #:		
11.296	836213	5.93483891	222	0		0	91
Unknown					CAS #:		
11.463	610911	4.33580451	162	0		0	91
Unknown					CAS #:		
11.520	1166469	8.27875954	310	0		0	91
Unknown					CAS #:		
11.554	1772354	12.5788891	471	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
11.654	2065882	14.6621397	549	94	NIST05.L	125034	91
Heptadecane					CAS #: 629-78-7		
11.720	843559	5.98697060	224	95	NIST05.L	85523	91
Docosanoic acid					CAS #: 112-85-6		
11.992	737542	5.23454471	196	98	NIST05.L	147935	91
Unknown					CAS #:		
12.039	1087823	7.72058701	289	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 471-77-2		
12.097	822822	5.83979649	219	89	NIST05.L	126183	91
Nonadecane, 1-chloro-					CAS #: 62016-76-6		
12.120	784046	5.56459669	208	98	NIST05.L	126107	91

RT	CONCENTRATIONS				QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	
Unknown					CAS #:		
12.554	815450	5.78747862	217	0		0	91
Tetracosanoic acid					CAS #: 557-59-5		
12.887	478449	7.76463572	291	98	NIST05.L	160633	98
1-Docosene					CAS #: 1599-67-3		
12.977	992230	16.1026803	603	99	NIST05.L	129889	98
Unknown					CAS #:		
13.020	1148351	18.6363371	698	0		0	98
Squalene					CAS #: 7683-64-9		
13.125	413298	6.70732072	251	81	NIST05.L	173556	98
Unknown					CAS #:		
13.363	408458	6.62877879	248	0		0	98
Eicosane					CAS #: 112-95-8		
13.535	780019	12.6587621	474	96	NIST05.L	113490	98
Unknown					CAS #:		
14.244	393036	6.37848818	239	0		0	98
Unknown					CAS #:		
16.078	485566	7.88014028	295	0		0	98
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitrophenyl)acetamide					CAS #: 1000111-66-9		
16.849	1409640	22.8767410	857	80	NIST05.L	123317	98
Unknown					CAS #:		
17.278	414561	6.72782534	252	0		0	98

Data File: /chem/MSD8.1/s032110.b/s8c2115.d
Date: 21-MAR-2010 14:56
Client ID: RES6-10-7496
Sample Info: 1248373005196192211SYN11ILANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.1
Operator: nag1
Column diameter: 0.20

Page 1



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVMI1ILANL

Volume Injected (uL): 0.5

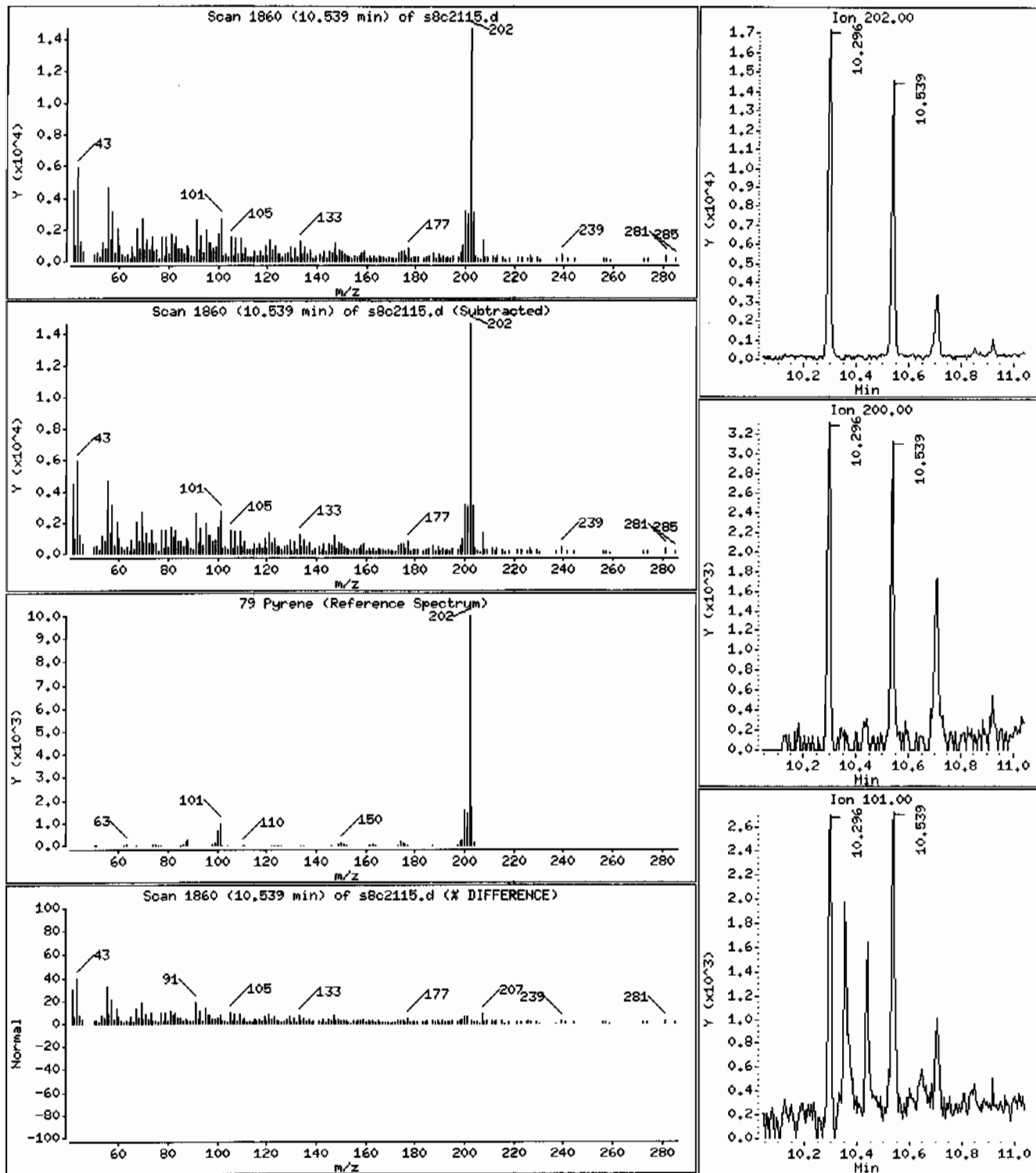
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 12.6 ug/Kg



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.1

Sample Info: I248373005I961922I1ISVH11ILANL

Volume Injected (uL): 0.5

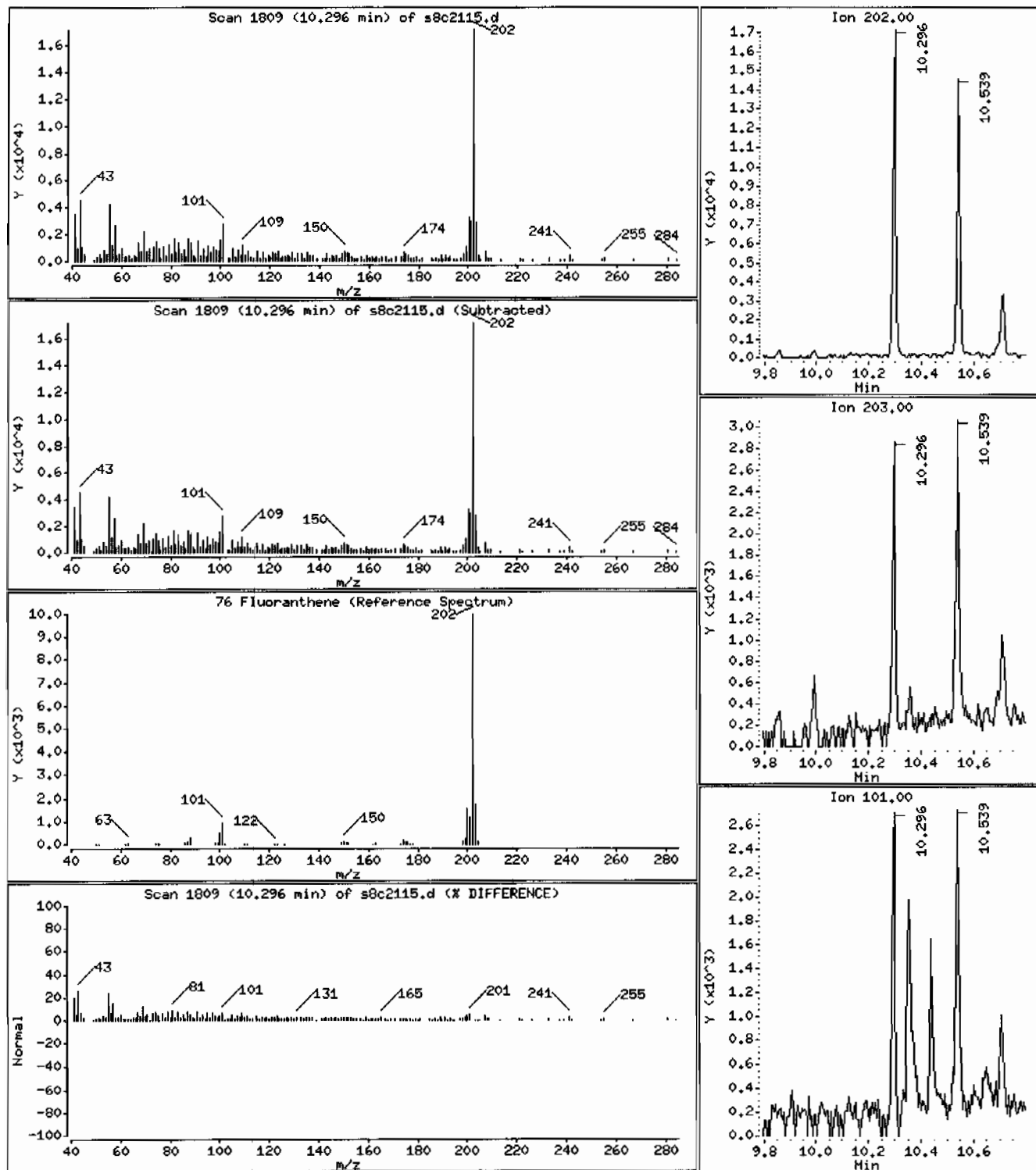
Operator: nagi

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 15.2 ug/Kg



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVMI11LANL

Volume Injected (uL): 0.5

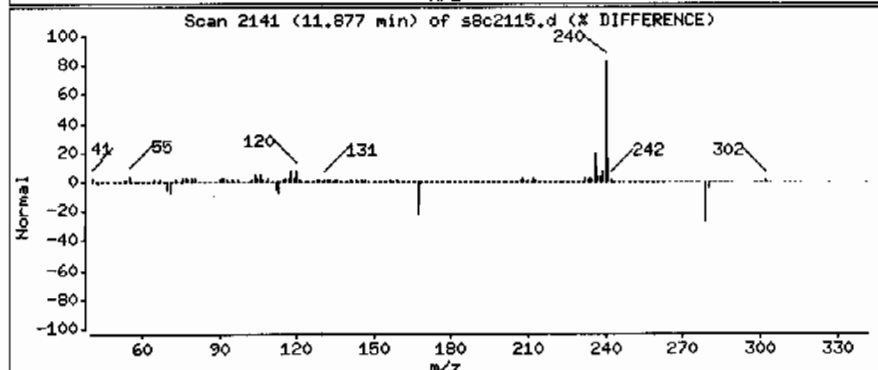
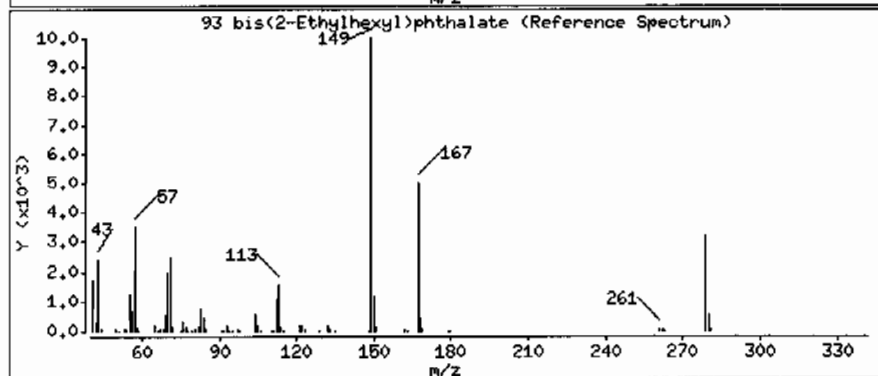
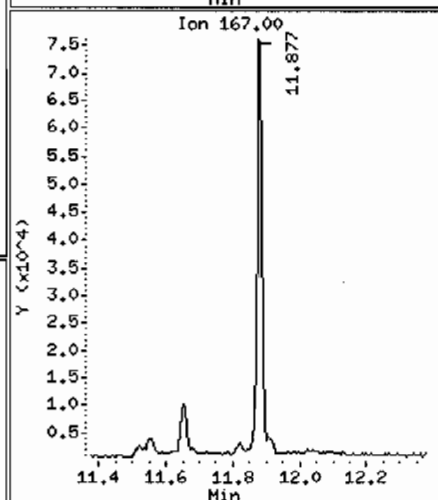
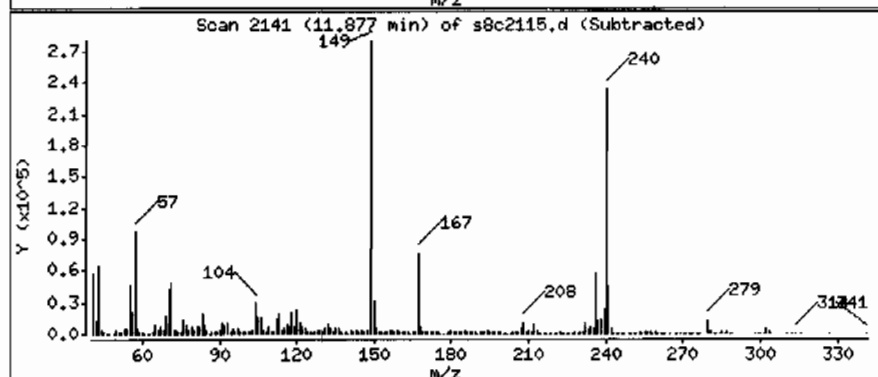
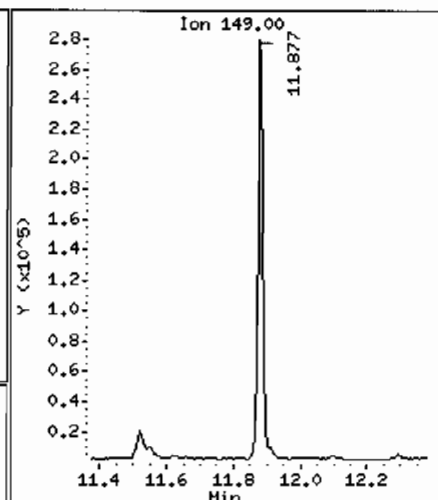
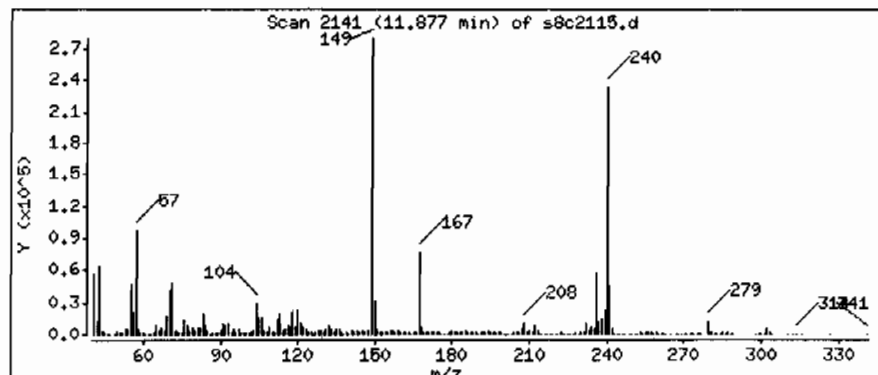
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

93 bis(2-Ethylhexyl)phthalate

Concentration: 604 ug/Kg



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 12483730051961922111SVH111LANL

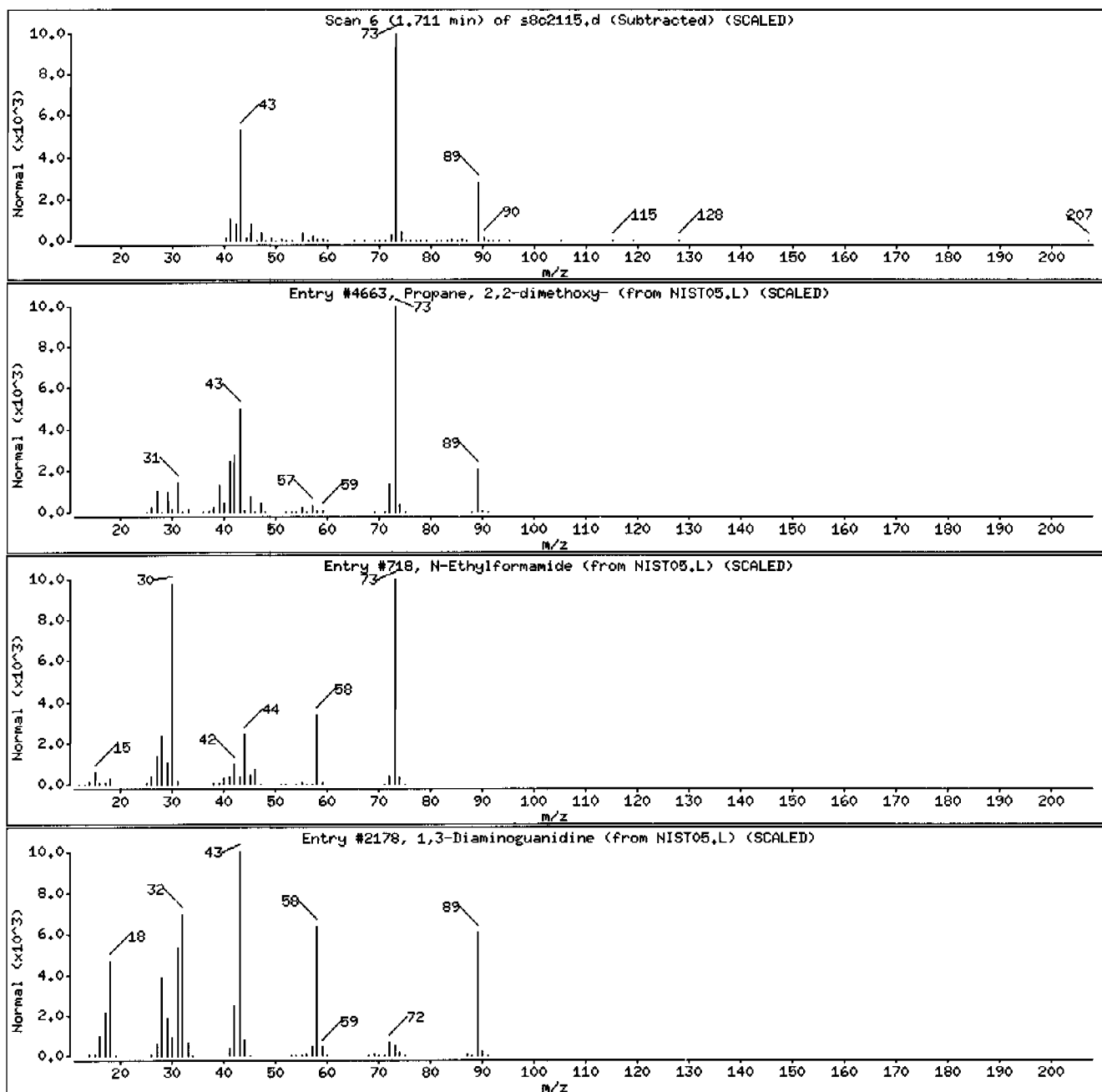
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	39	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	25	C3H7NO	73
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	9	CH7N5	89



Date: 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: HSD8.i

Sample Info: 1248373005196192211SVH11LANL

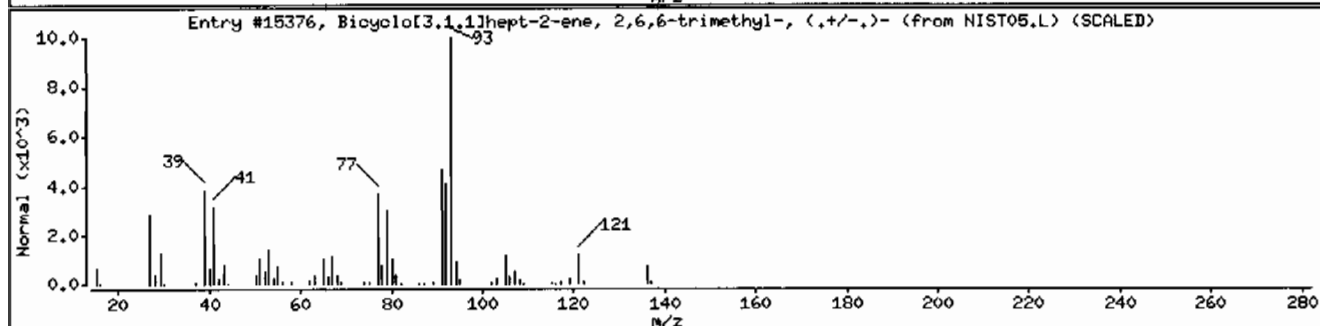
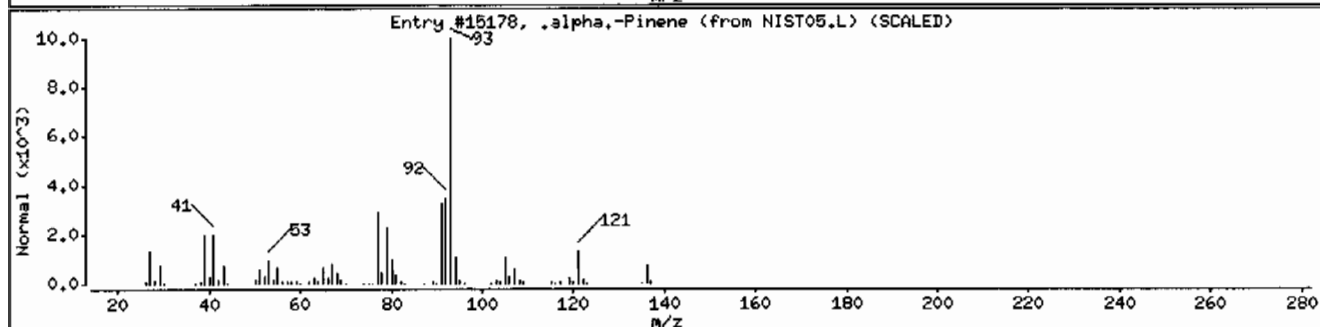
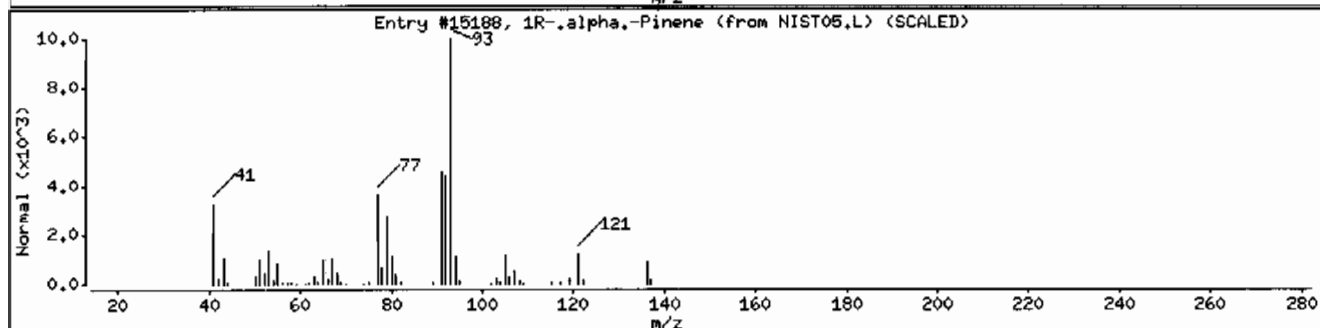
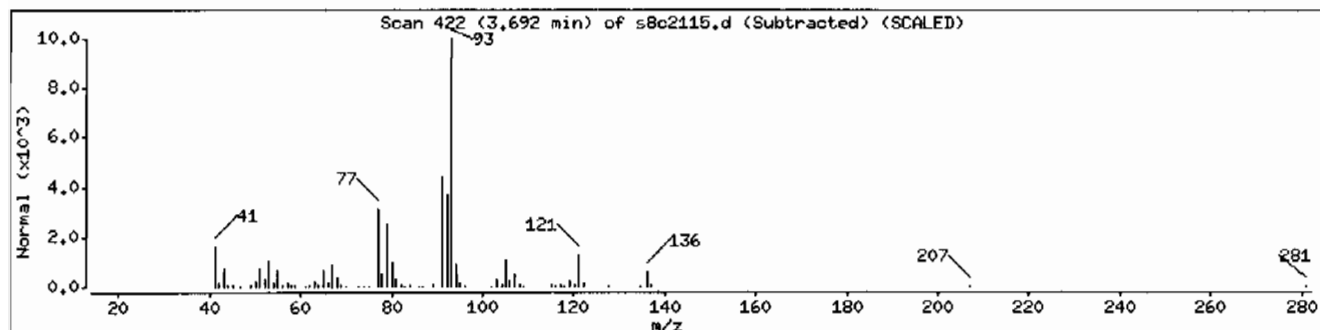
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

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



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: I248373005196192211SVMI11LANL

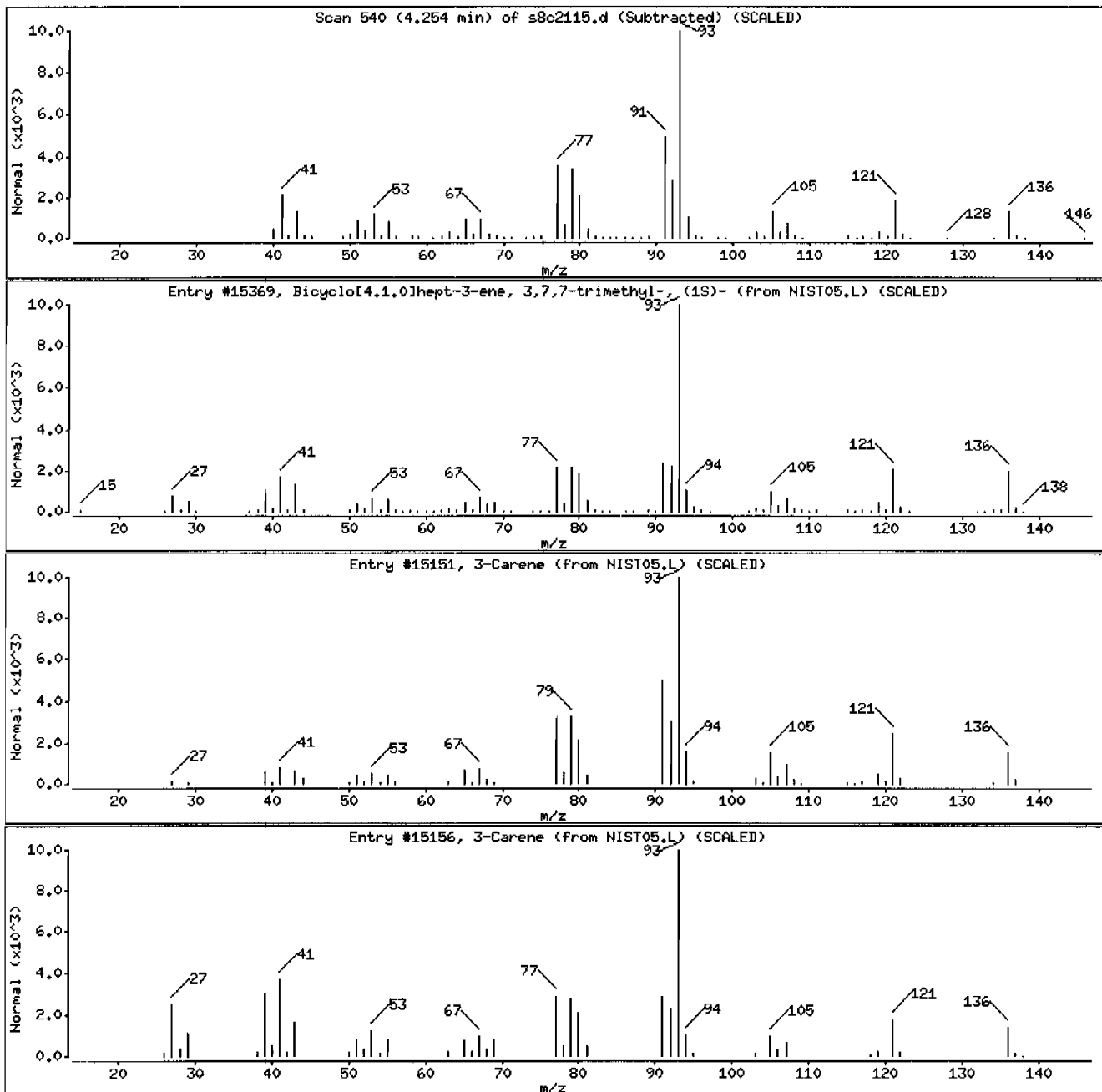
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

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



Date: 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: HSD8.i

Sample Info: 1248373005196192211SVH11ILANL

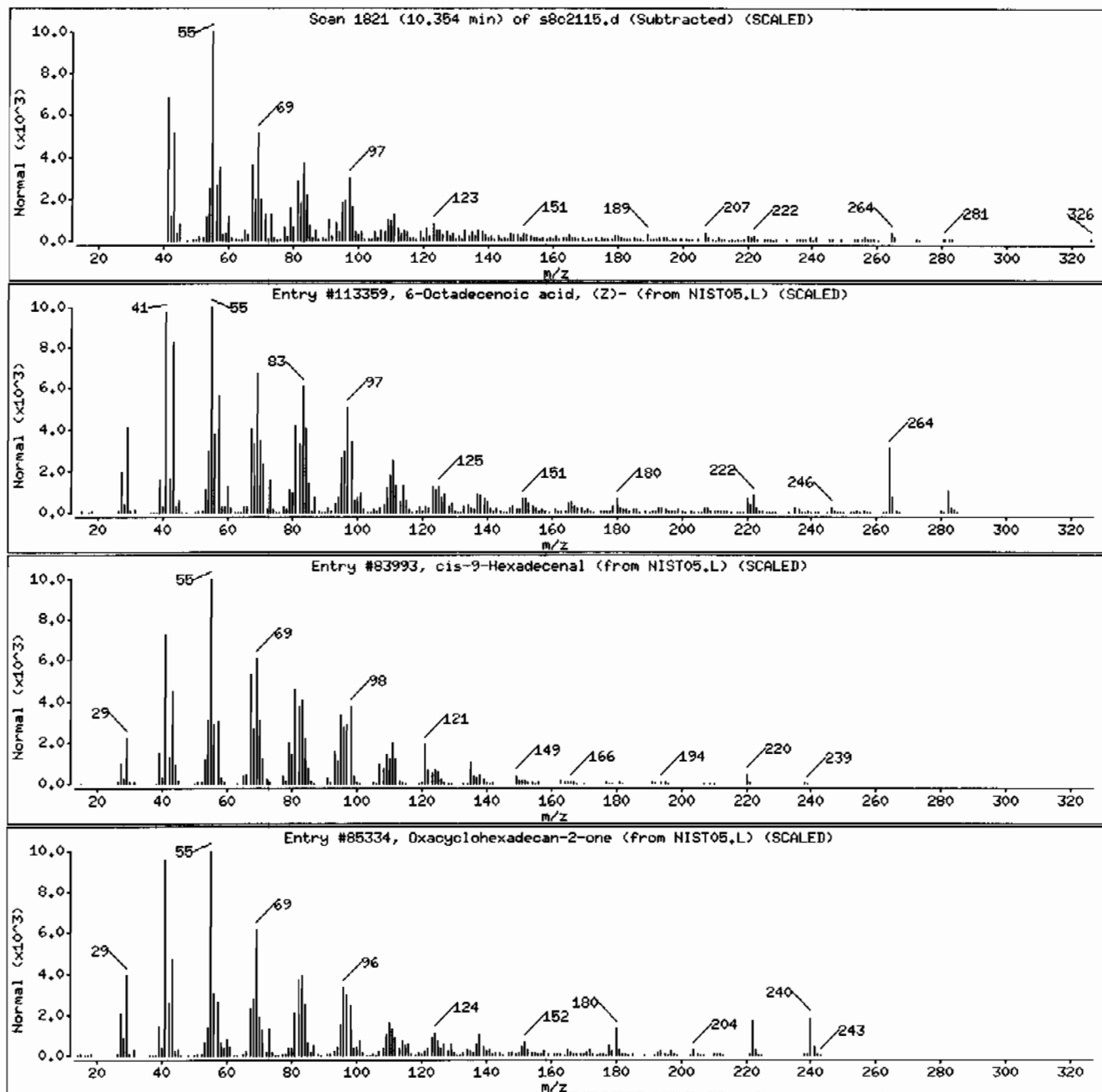
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
6-Octadecenoic acid, (Z)-	593-39-5	NIST05.L	113359	95	C18H34O2	282
cis-9-Hexadecenal	56219-04-6	NIST05.L	83993	91	C16H30O	238
Oxacyclohexadecan-2-one	106-02-5	NIST05.L	85334	90	C15H28O2	240



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: I248373006I961922I1ISVM11LANL

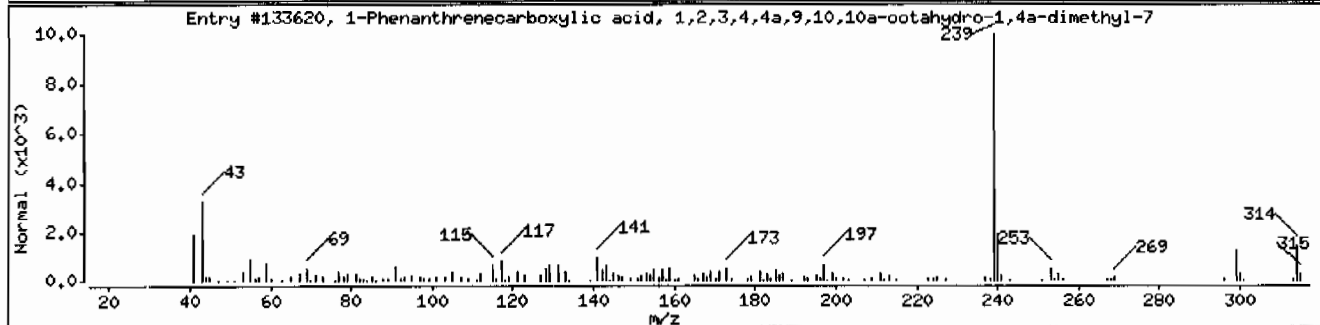
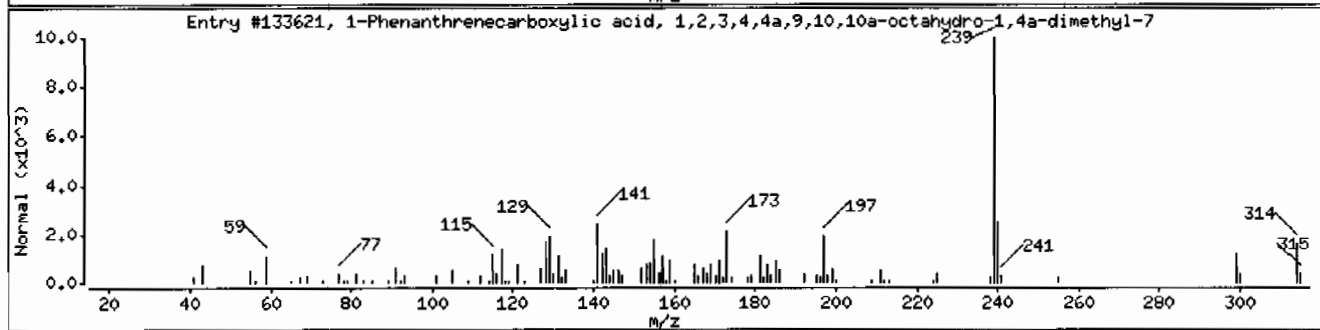
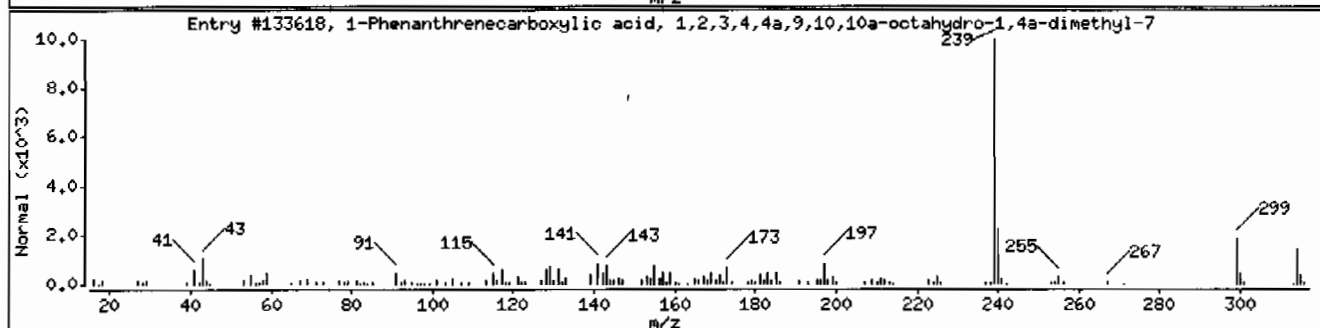
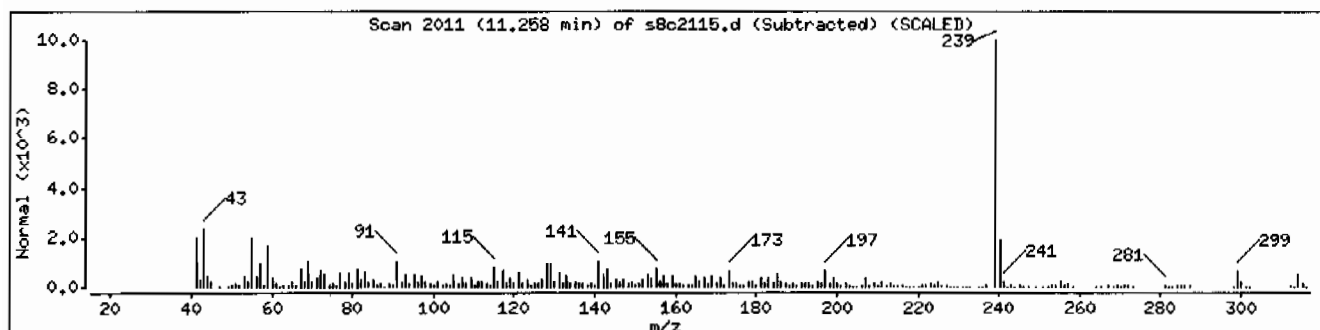
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	96	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314



Date: 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVH11ILANL

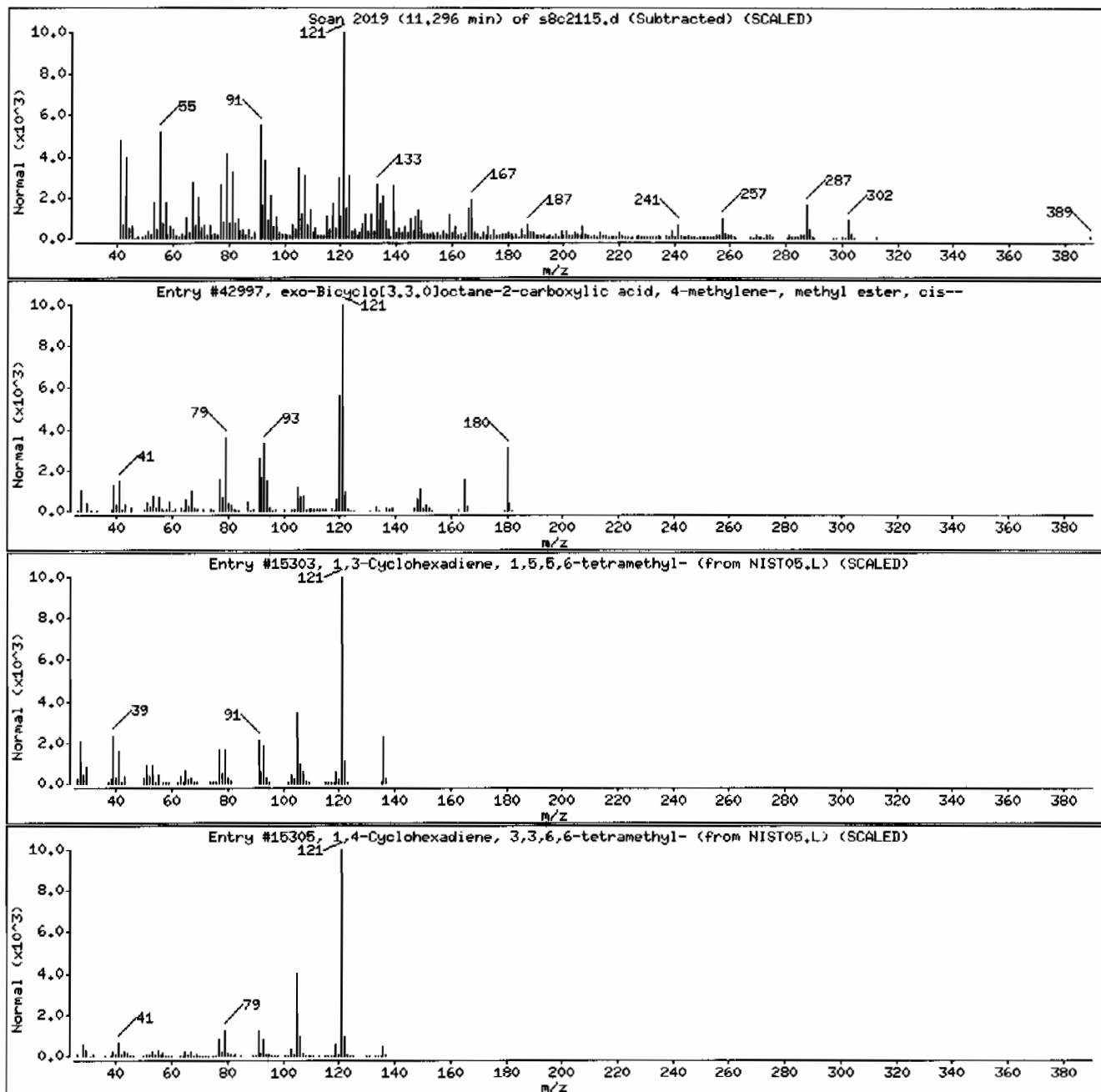
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
exo-Bicyclo[3.3.0]octane-2-carboxylic ac	176753-44-9	NIST05.L	42997	38	C11H16O2	180
1,3-Cyclohexadiene, 1,5,5,6-tetramethyl-	614-94-3	NIST05.L	15303	38	C10H16	136
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	38	C10H16	136



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: I248373005I961922I1ISVM1I1LANL

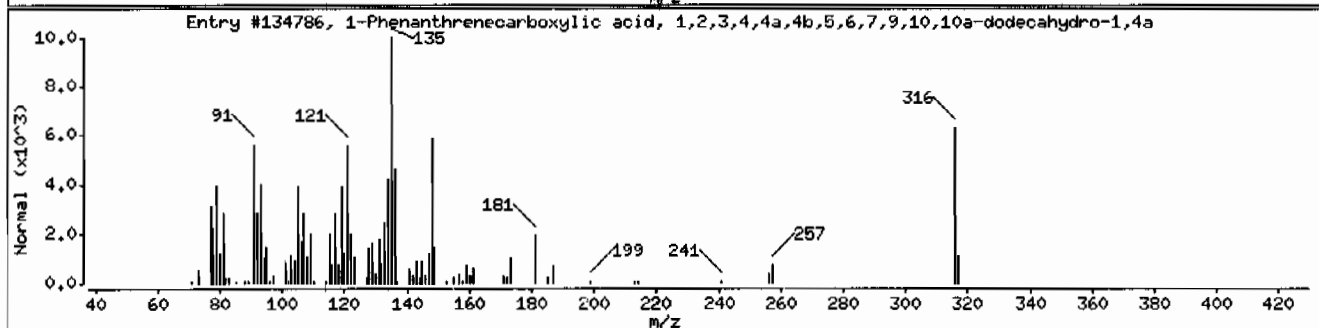
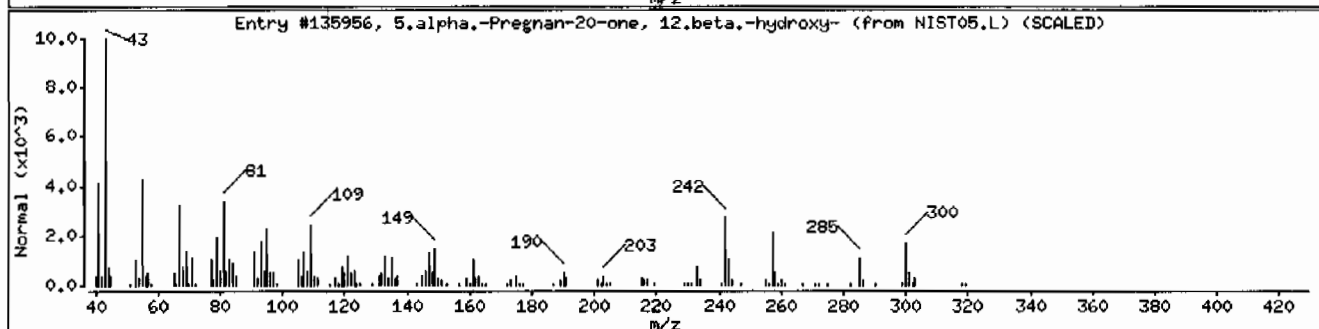
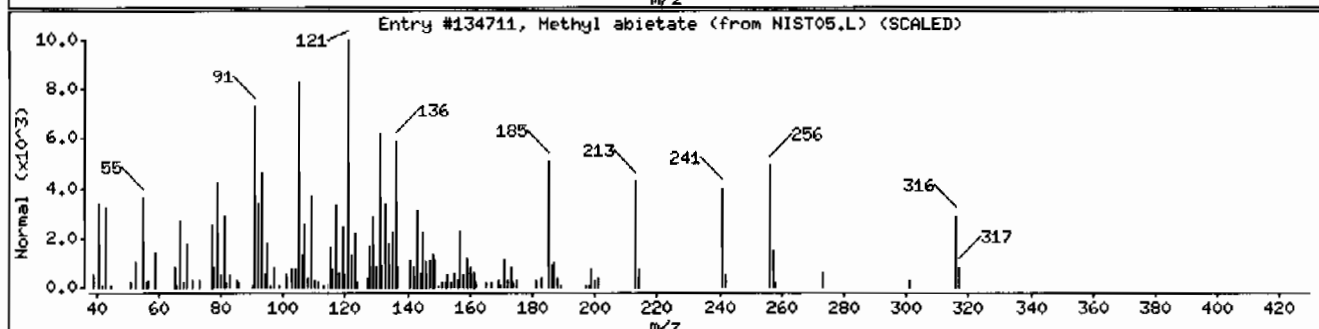
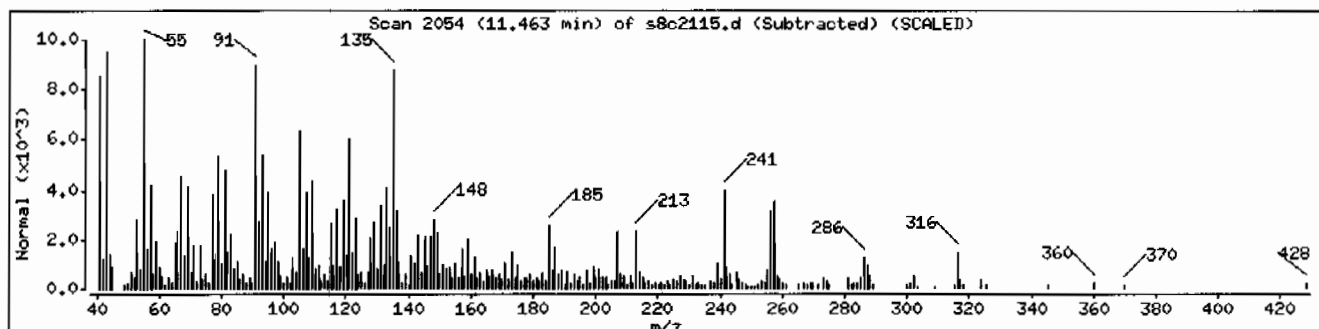
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyl abietate	127-25-3	NIST05.L	134711	56	C21H32O2	316
5.alpha.-Pregnan-20-one, 12.beta.-hydrox	5618-22-4	NIST05.L	135956	38	C21H34O2	318
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	3310-97-2	NIST05.L	134786	38	C21H32O2	316



Date: 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVH111LANL

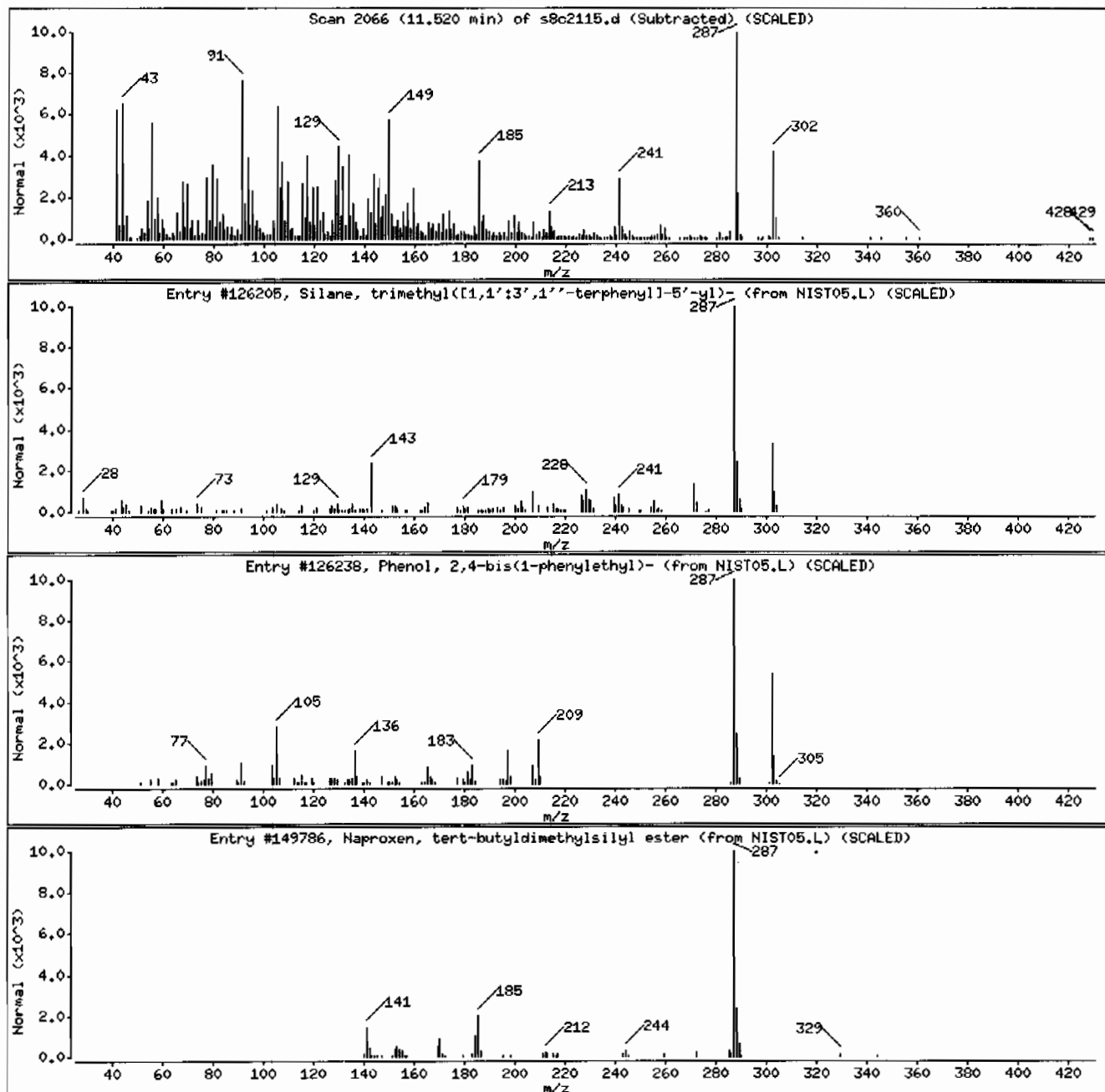
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, trimethyl([1,1':3',1''-terphenyl	128388-53-4	NIST05.L	126205	46	C21H22Si	302
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	35	C22H22O	302
Naproxen, tert-butyl dimethylsilyl ester	1000314-43-3	NIST05.L	149786	32	C20H28O3Si	344



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: HSD8.i

Sample Info: 1248373005196192211SVH11/LANL

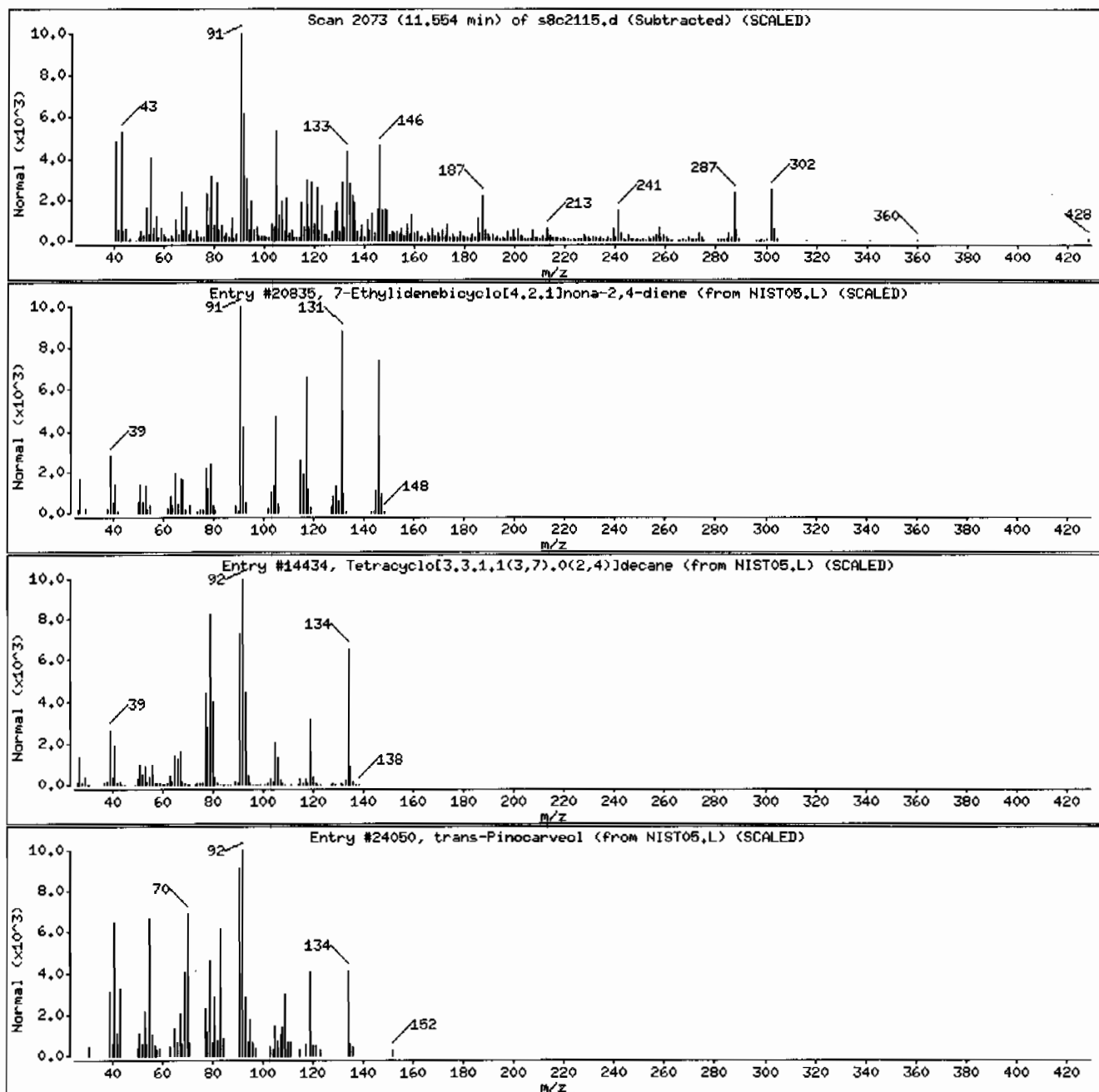
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Ethylidenebicyclo[4.2.1]nona-2,4-diene	94400-10-9	NIST05.L	20835	35	C ₁₁ H ₁₄	146
Tetracyclo[3.3.1.1(3,7).0(2,4)]decane	10501-16-3	NIST05.L	14434	35	C ₁₀ H ₁₄	134
trans-Pinocarveol	1000292-85-4	NIST05.L	24050	18	C ₁₀ H ₁₆ O	152



Date: 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: HSD8.i

Sample Info: 1248373005196192211SVH111LANL

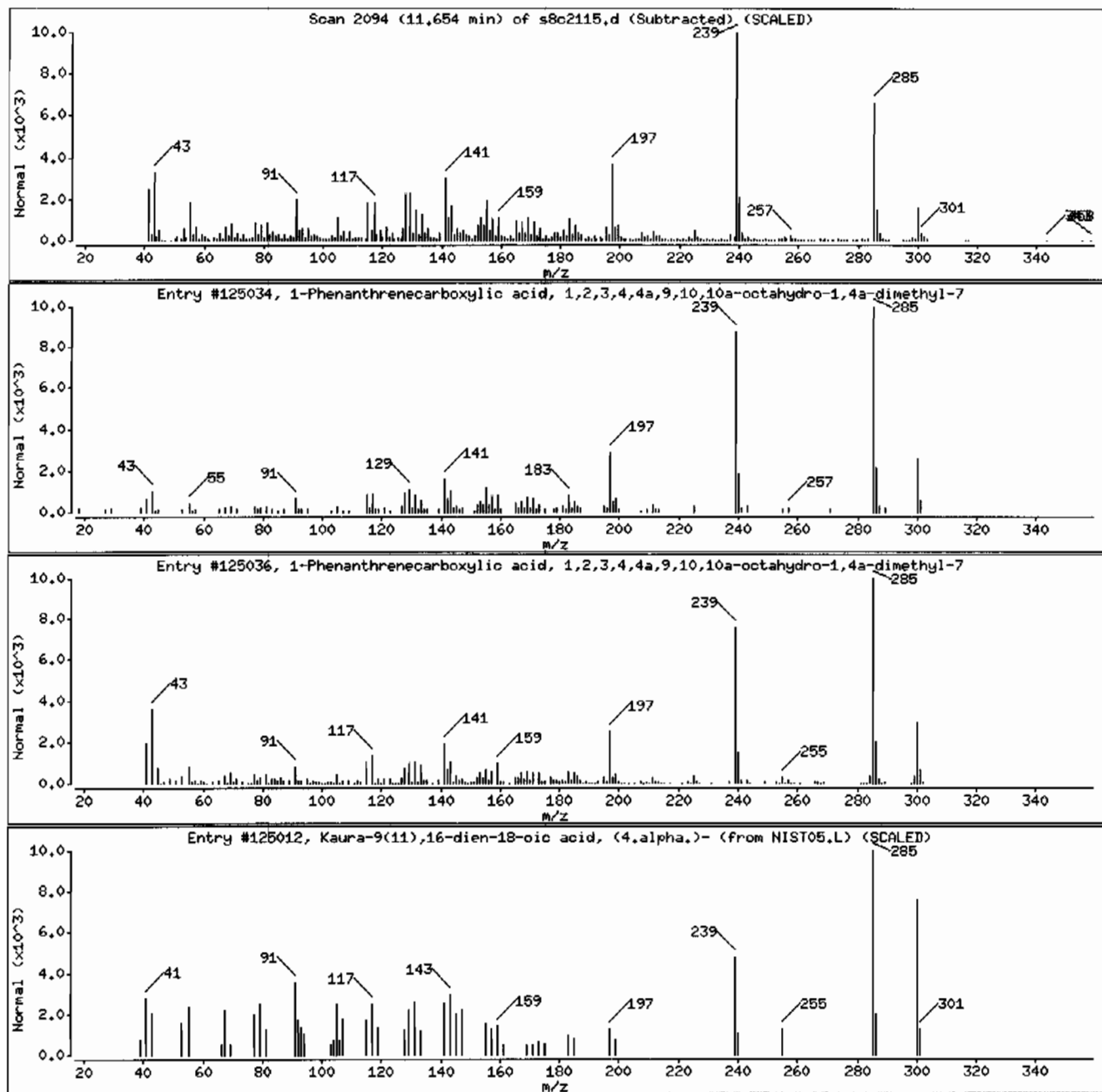
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	94	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	93	C20H28O2	300
Kaura-9(11),16-dien-18-oic acid, (4.alpha.)	22338-67-6	NIST05.L	125012	78	C20H28O2	300



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVMI11LANL

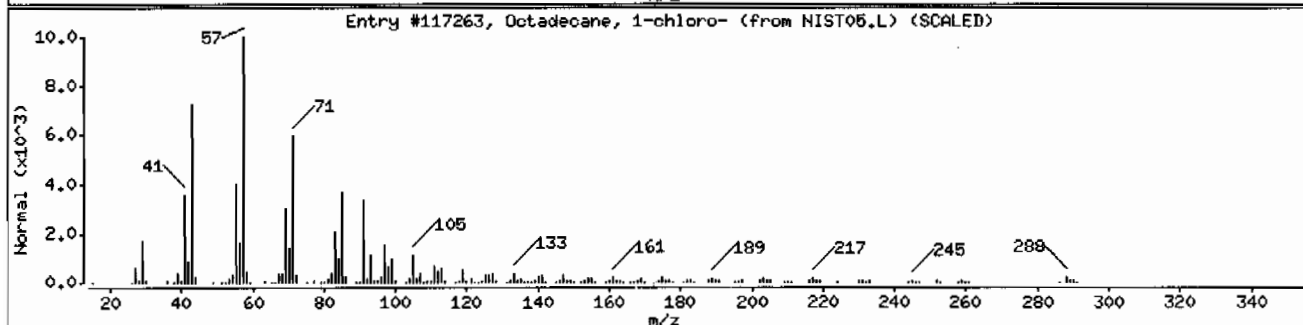
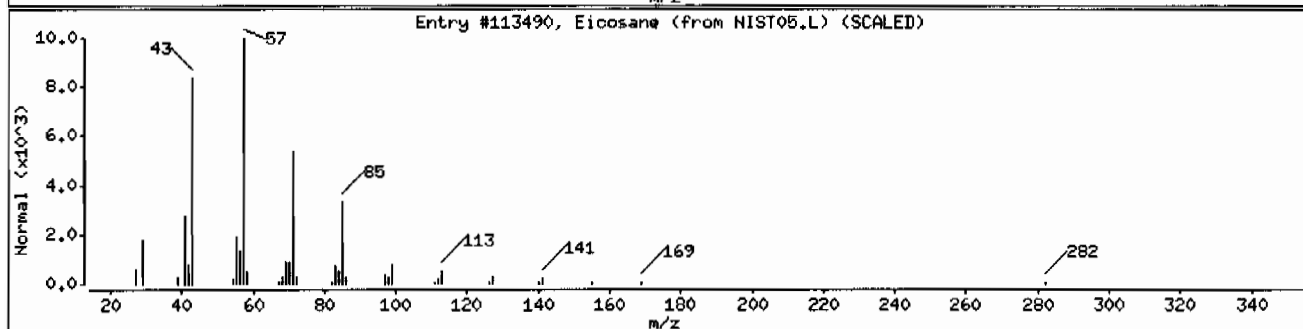
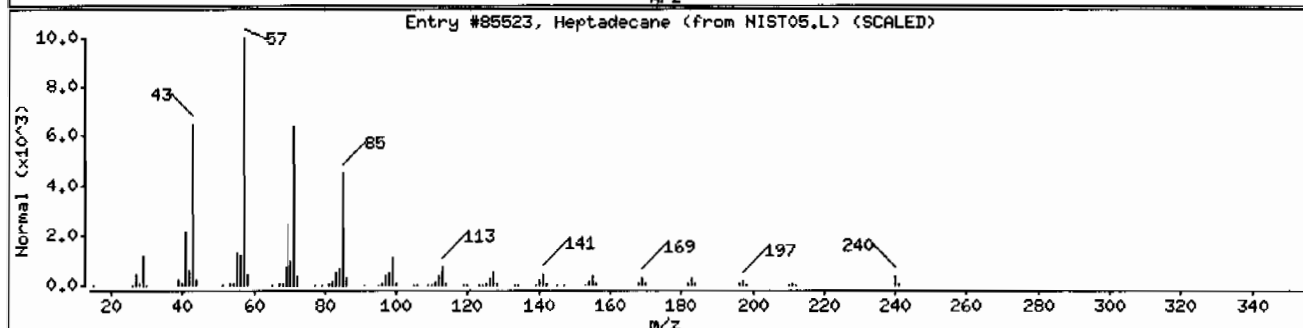
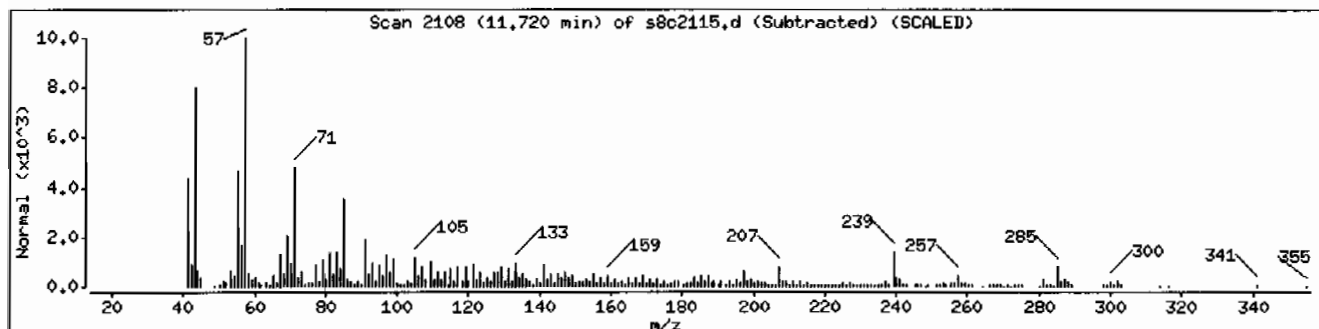
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane	629-78-7	NIST05.L	85523	95	C17H36	240
Eicosane	112-95-8	NIST05.L	113490	95	C20H42	282
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117263	92	C18H37Cl	288



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: I248373005I9619221ISVM11ILANL

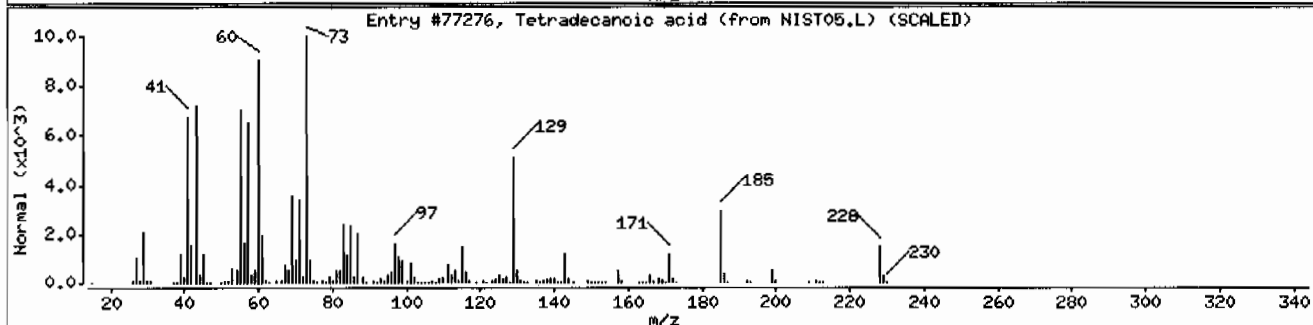
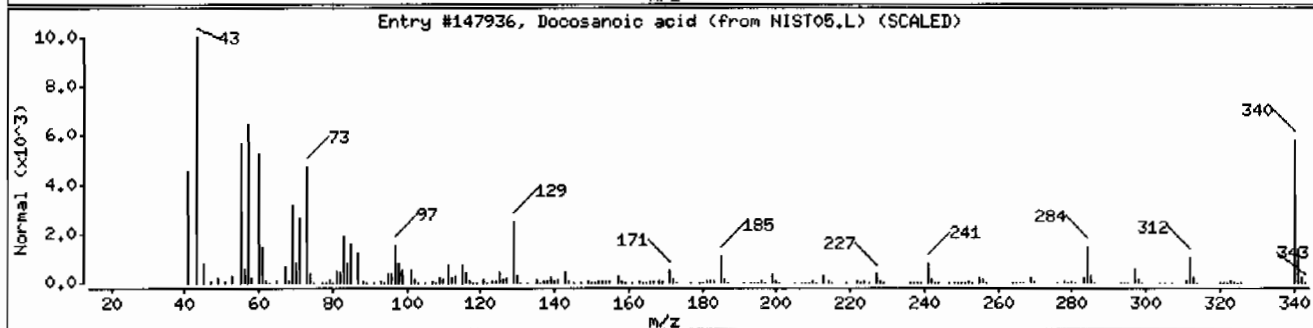
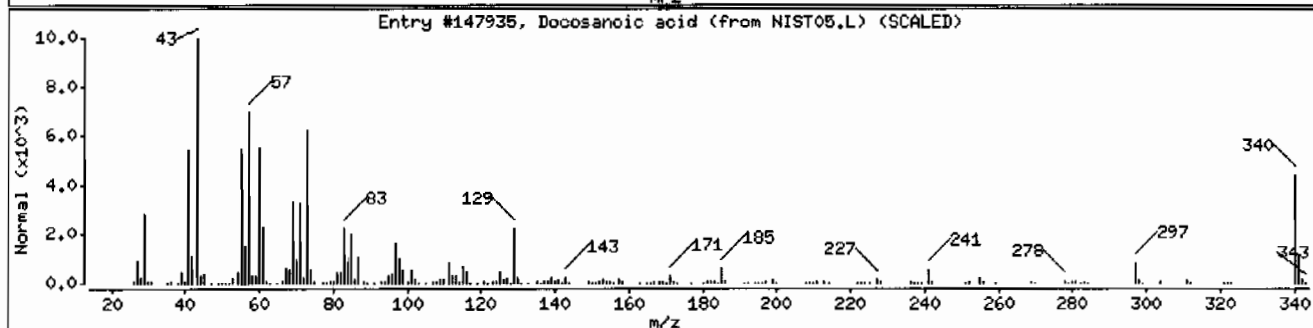
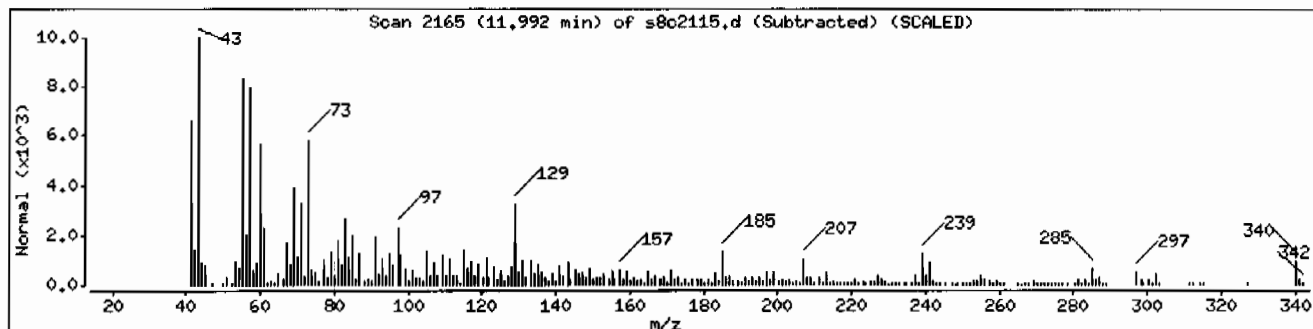
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Docosanoic acid	112-85-6	NIST05.L	147935	98	C22H44O2	340
Docosanoic acid	112-85-6	NIST05.L	147936	97	C22H44O2	340
Tetradecanoic acid	544-63-8	NIST05.L	77276	83	C14H28O2	228



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: I248373005I961922I1ISVM11ILANL

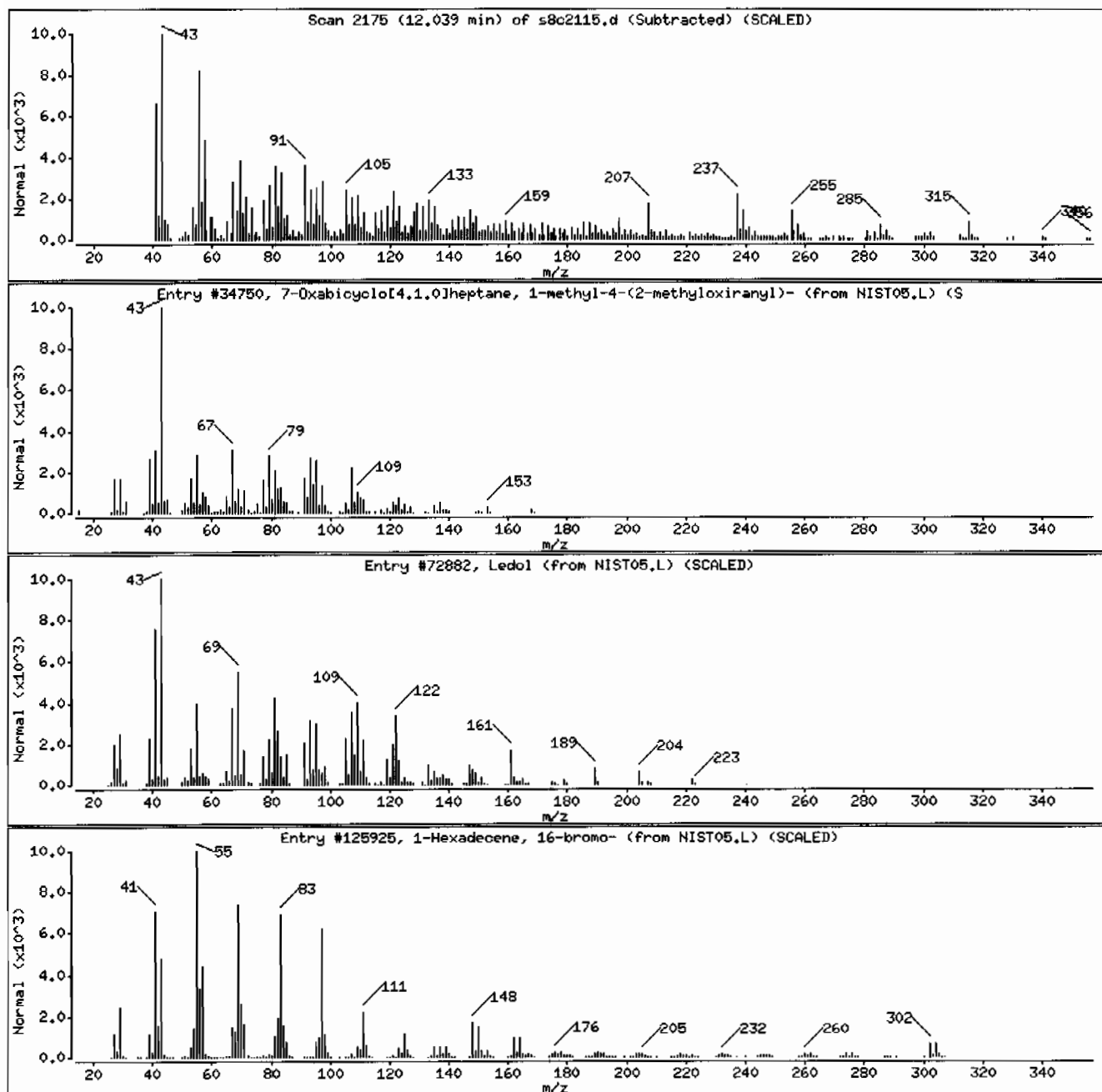
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(	96-08-2	NIST05.L	34750	46	C10H16O2	168
Ledol	577-27-5	NIST05.L	72882	46	C15H26O	222
1-Hexadecene, 16-bromo-	118625-56-2	NIST05.L	125925	45	C16H31Br	302



Date: 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVH111LANL

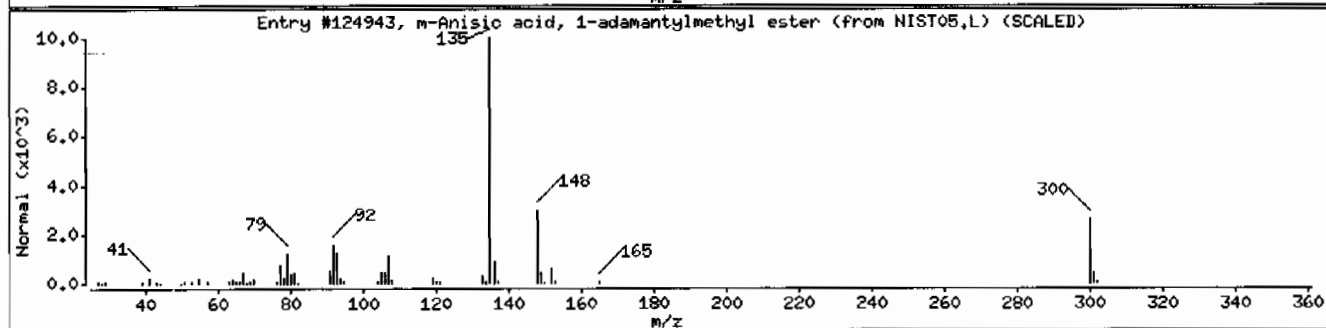
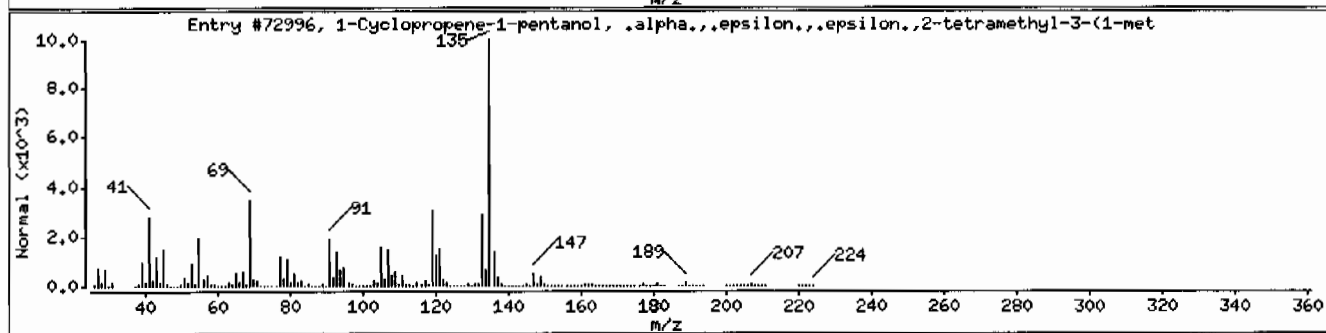
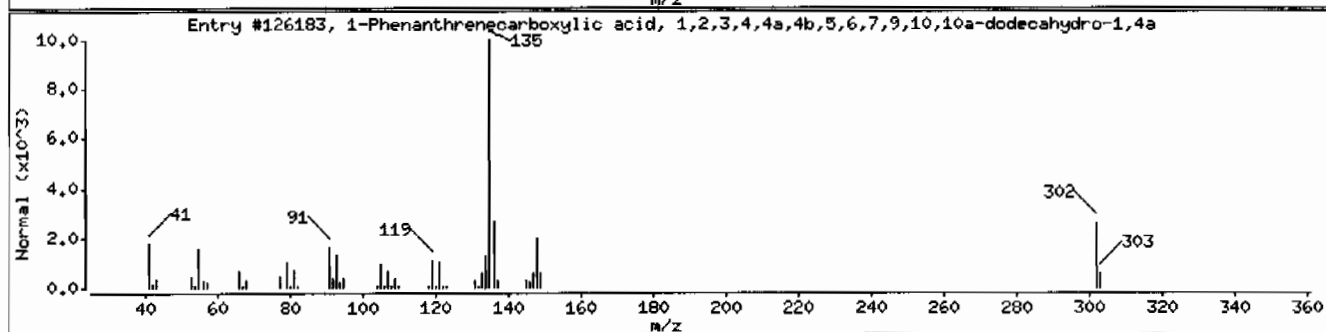
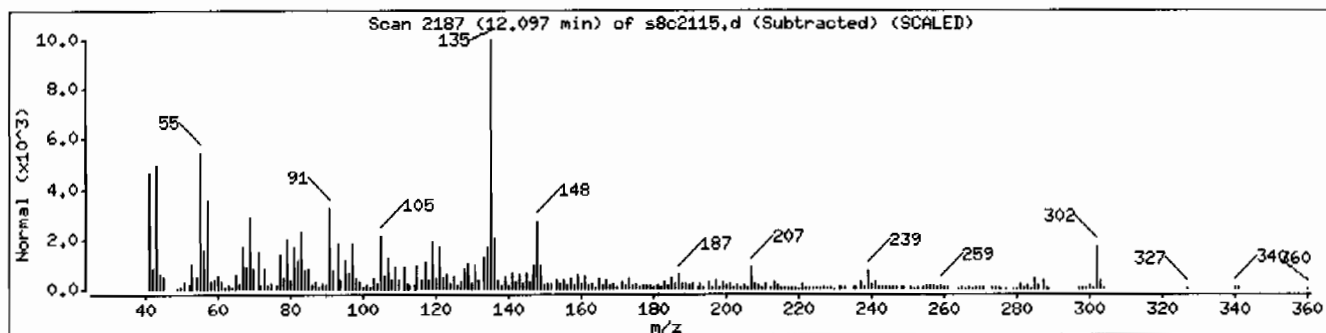
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	471-77-2	NIST05.L	126183	89	C20H30O2	302
1-Cyclopropene-1-pentanol, .alpha.,.epsi	90165-06-3	NIST05.L	72996	55	C15H26O	222
m-Anisic acid, 1-adamantylmethyl ester	1000292-25-3	NIST05.L	124943	46	C19H24O3	300



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVMI11LANL

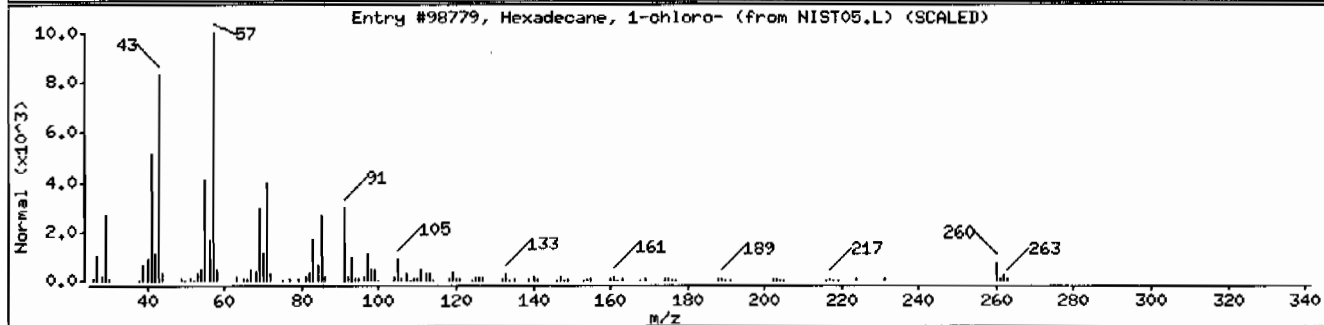
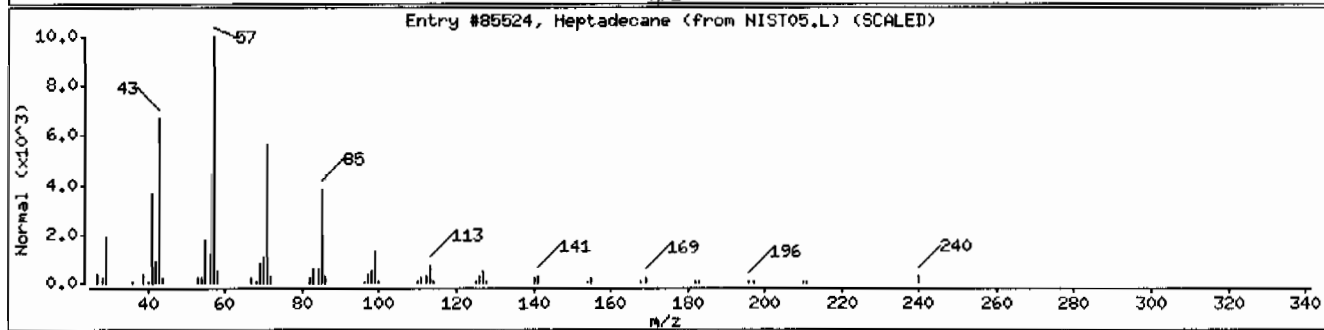
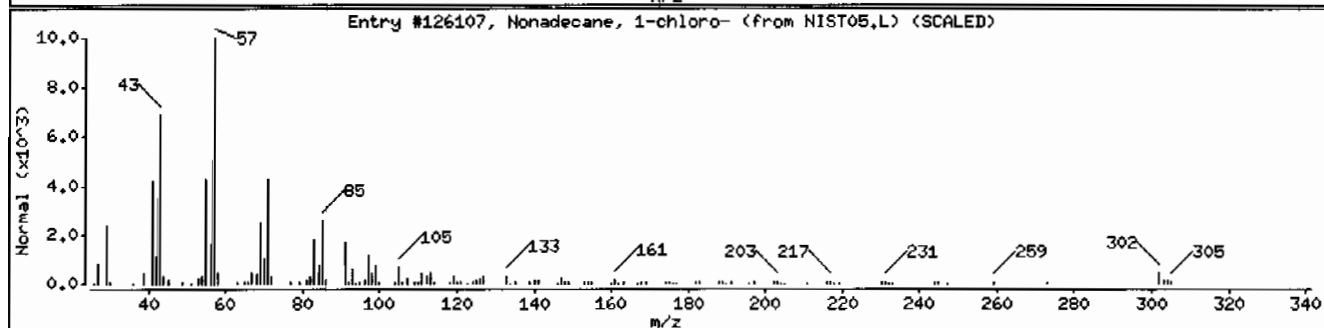
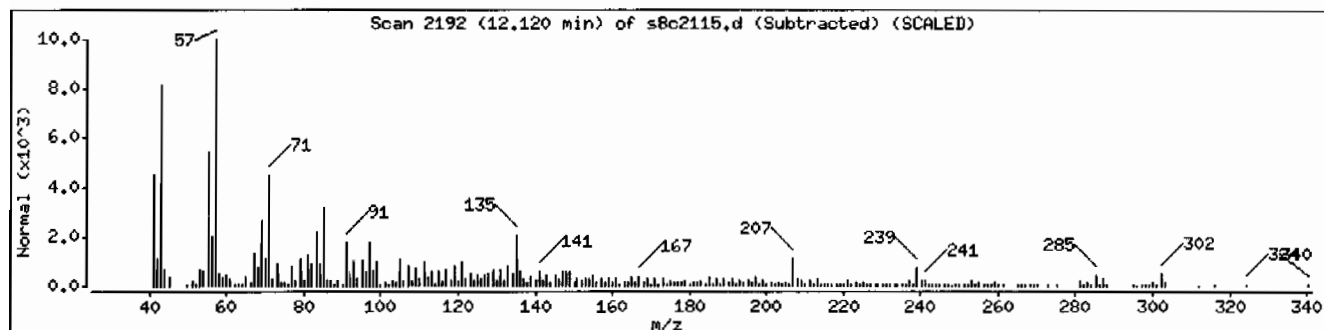
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	98	C19H39Cl	302
Heptadecane	629-78-7	NIST05.L	85524	95	C17H36	240
Hexadecane, 1-chloro-	4860-03-1	NIST05.L	98779	91	C16H33Cl	260



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: HSD8.i

Sample Info: 12483730051961922111SVH111LANL

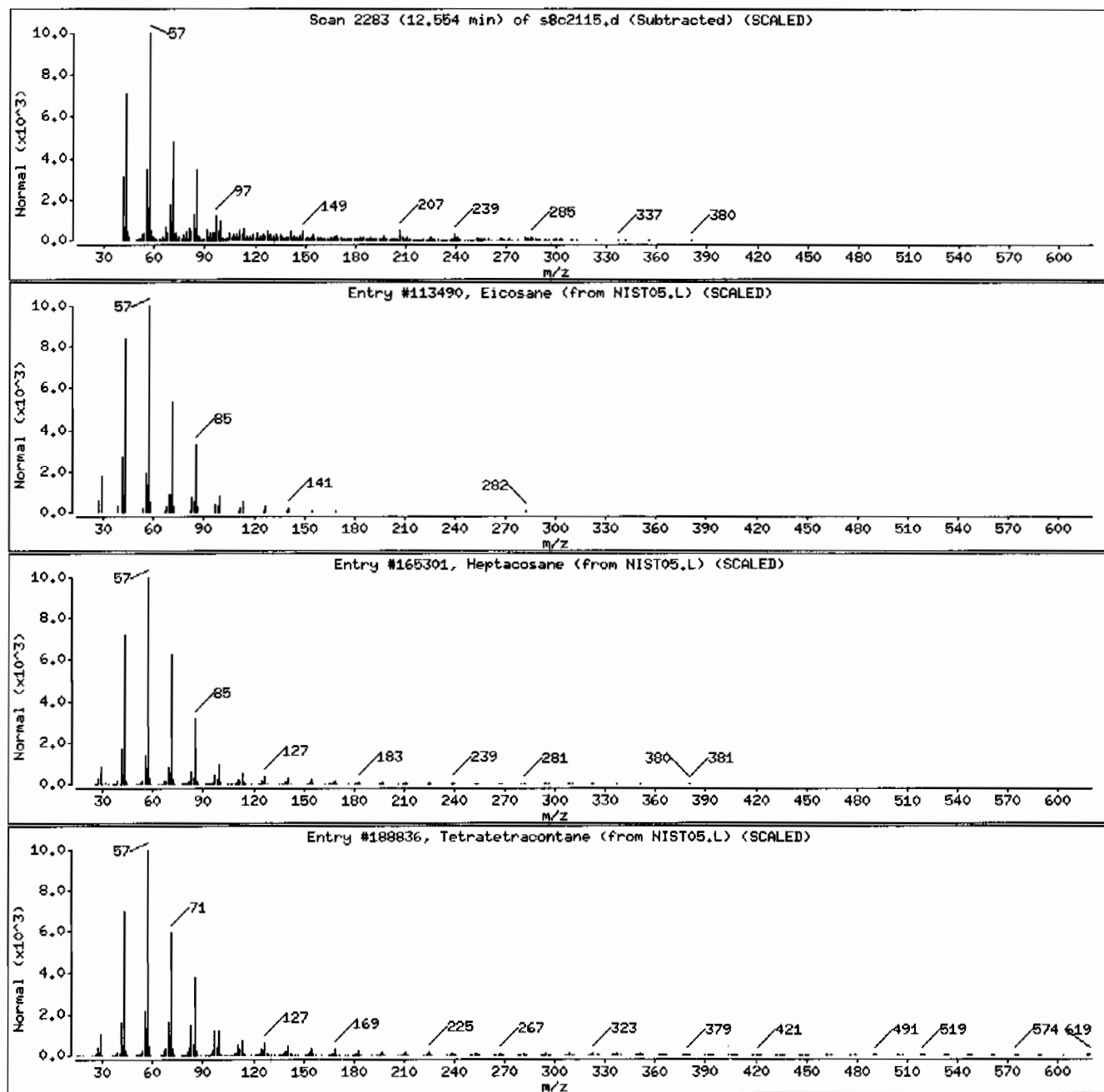
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	95	C ₂₀ H ₄₂	282
Heptacosane	593-49-7	NIST05.L	165301	87	C ₂₇ H ₅₆	380
Tetratetracontane	7098-22-8	NIST05.L	188836	87	C ₄₄ H ₉₀	619



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVH111LANL

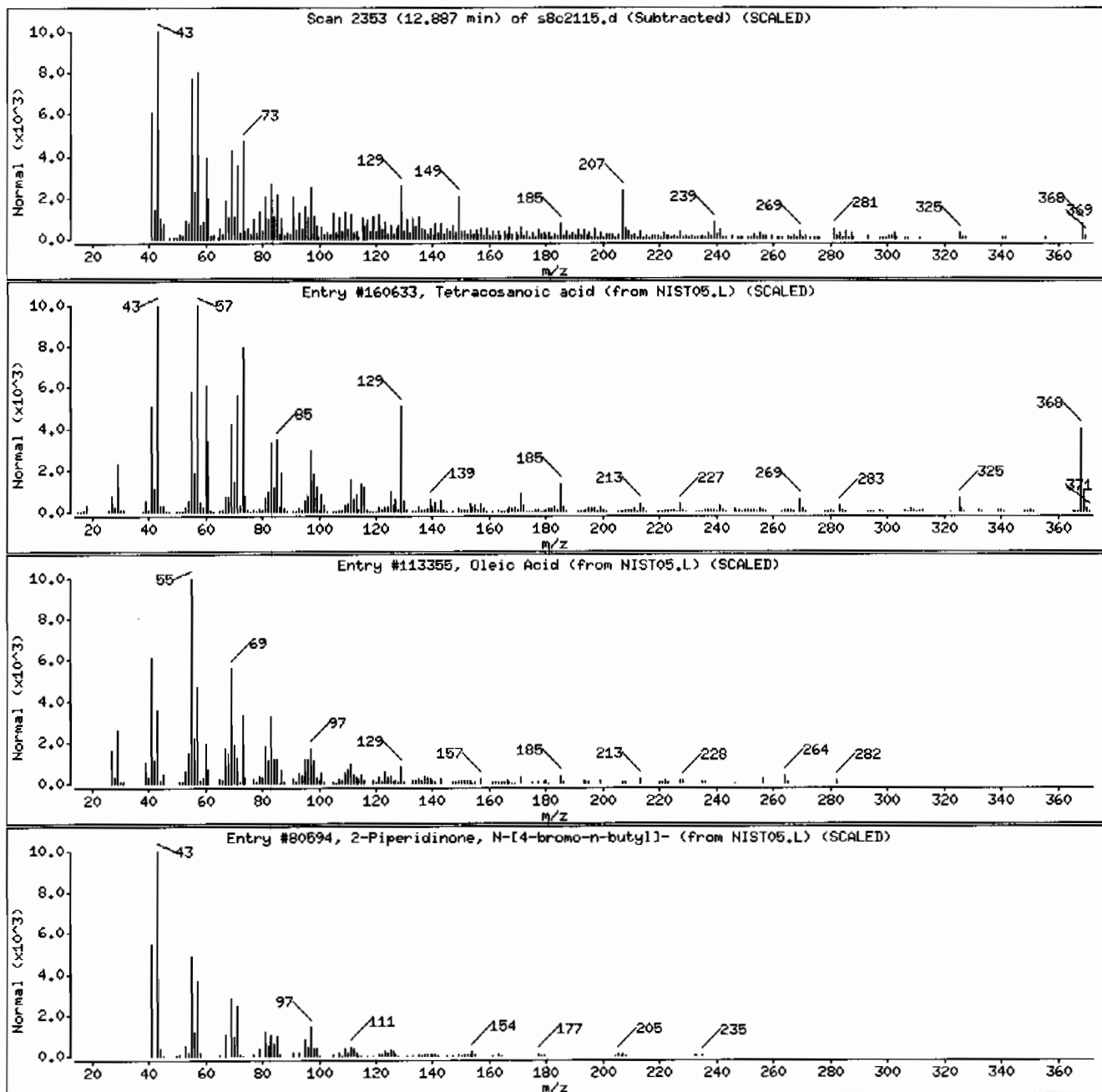
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetracosanoic acid	557-59-5	NIST05.L	160633	98	C ₂₄ H ₄₈ O ₂	368
Oleic Acid	112-80-1	NIST05.L	113355	53	C ₁₈ H ₃₄ O ₂	282
2-Piperidinone, N-[4-bromo-n-butyl]-	195194-80-0	NIST05.L	80594	46	C ₉ H ₁₆ BrNO	233



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: HSD8.i

Sample Info: I248373005I961922I1ISVMI1ILANL

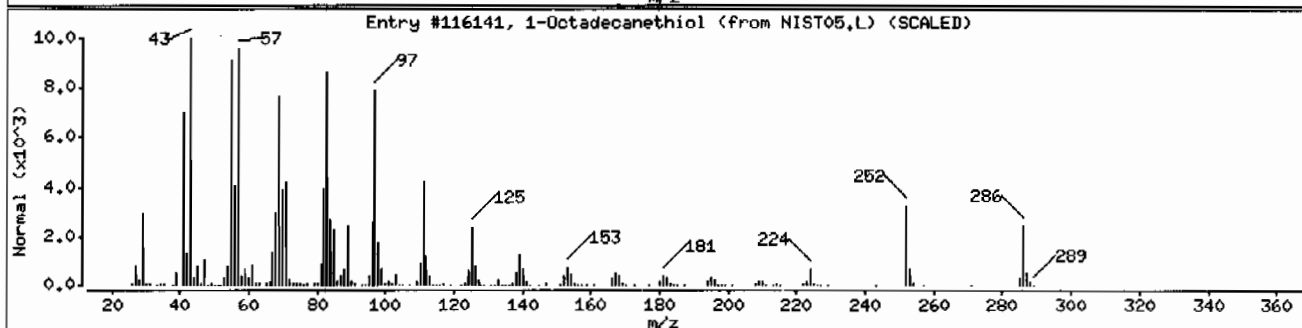
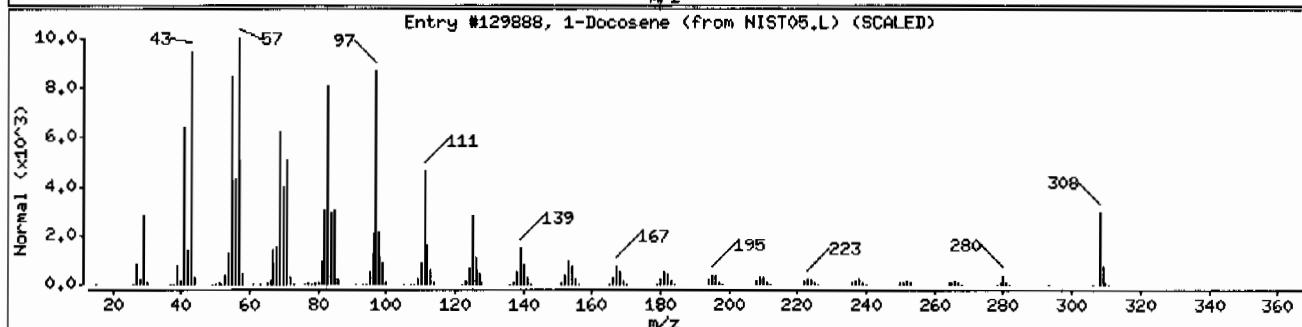
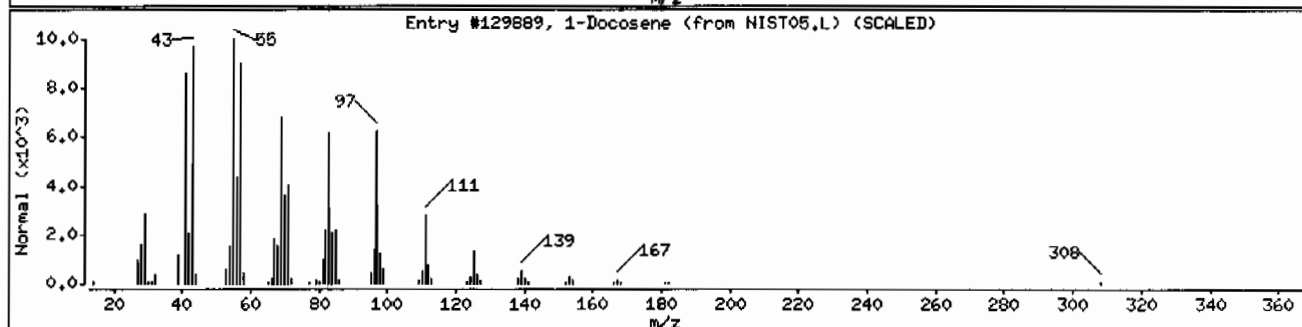
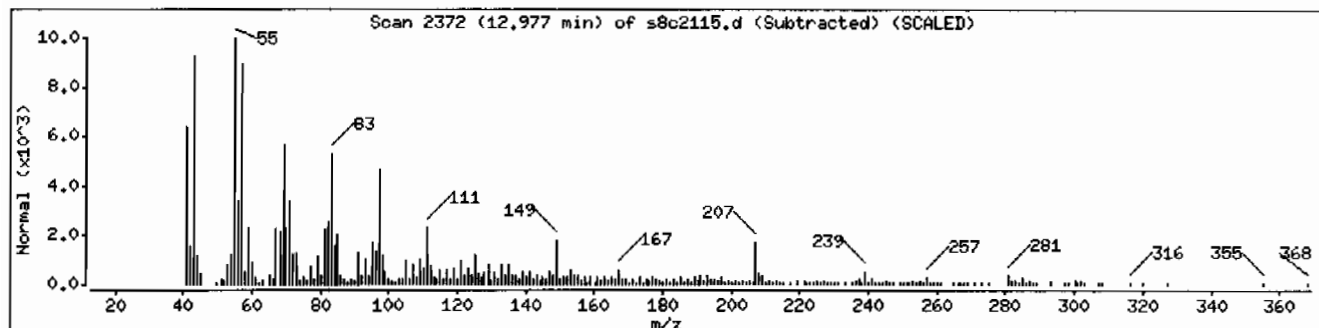
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	99	C22H44	308
1-Docosene	1599-67-3	NIST05.L	129888	99	C22H44	308
1-Octadecanethiol	2885-00-9	NIST05.L	116141	91	C18H38S	286



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: HSD8.i

Sample Info: 12483730051961922111SVM111LANL

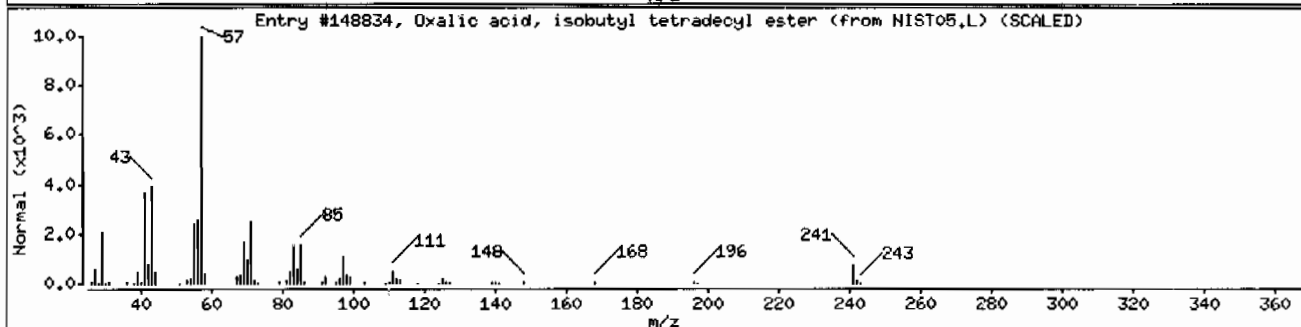
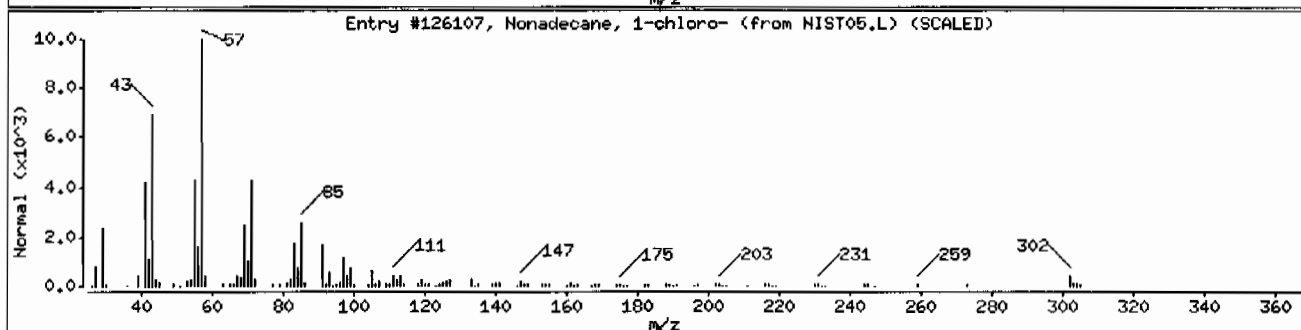
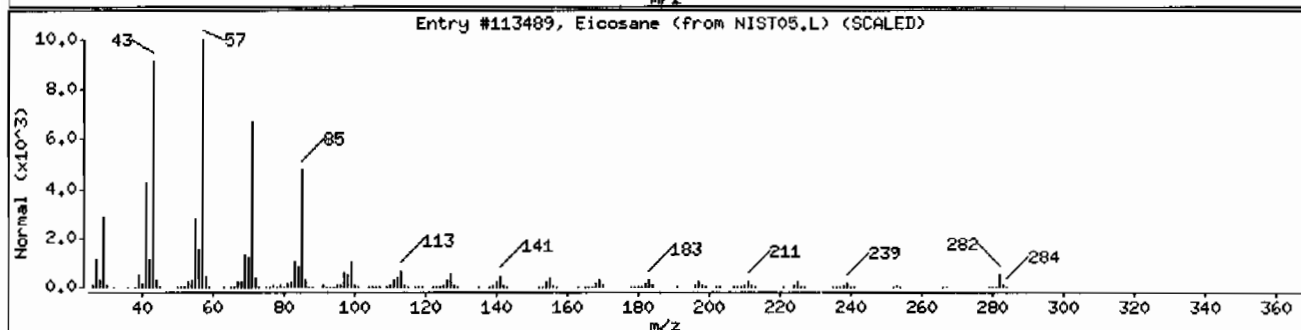
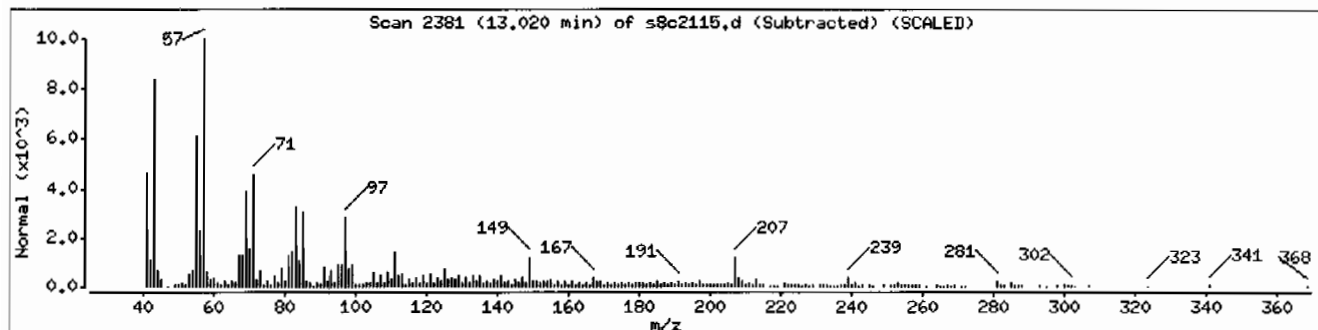
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113489	91	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	89	C19H39Cl	302
Oxalic acid, isobutyl tetradecyl ester	1000309-37-9	NIST05.L	148834	83	C20H38O4	342



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 12483730051961922111SVH111LANL

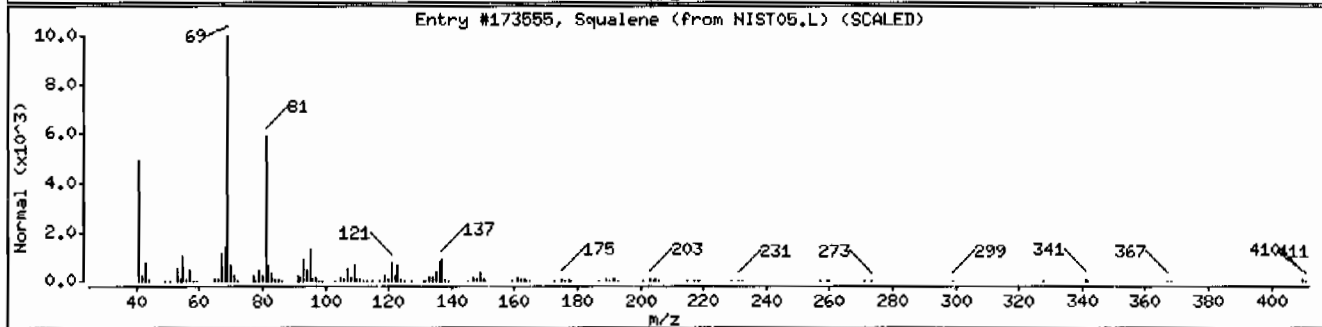
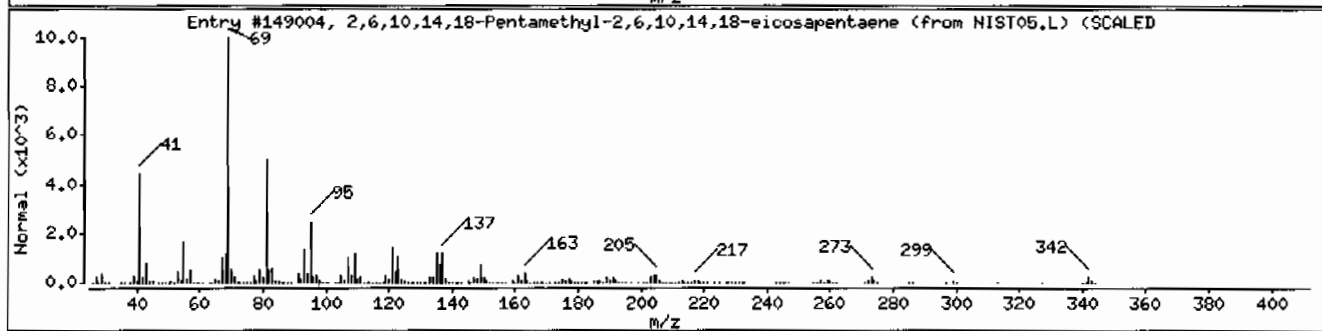
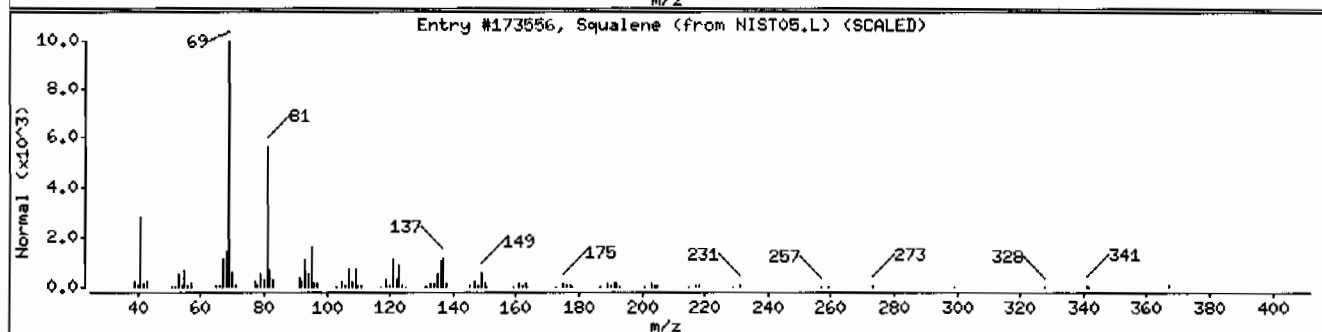
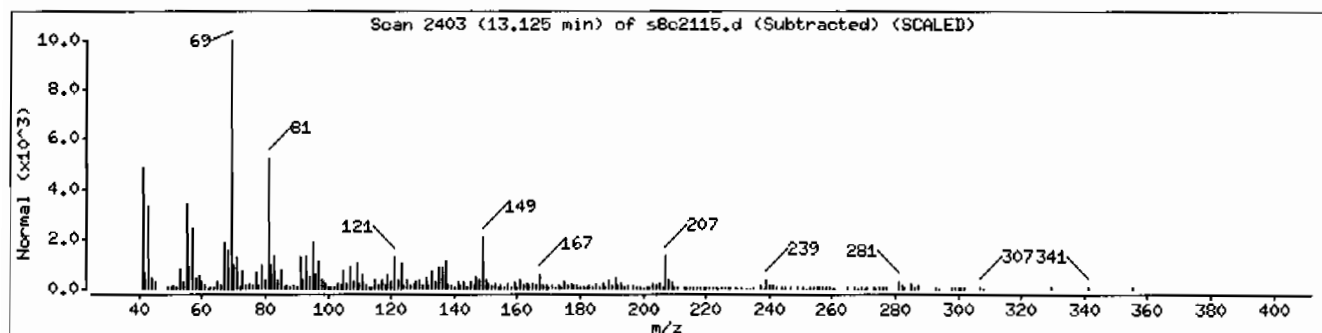
Volume Injected (uL): 0.5

Operator: nagi

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Squalene	7683-64-9	NIST05.L	173556	81	C30H50	410
2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	75581-03-2	NIST05.L	149004	74	C25H42	342
Squalene	7683-64-9	NIST05.L	173555	64	C30H50	410



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVH11LANL

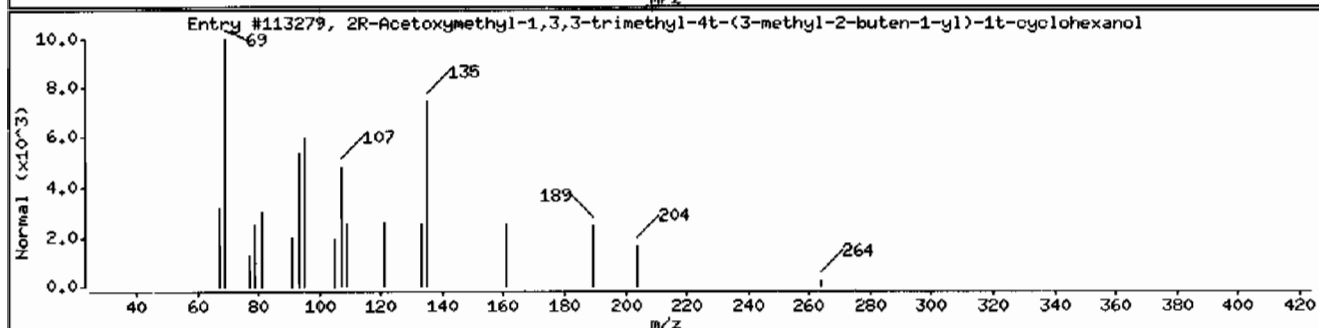
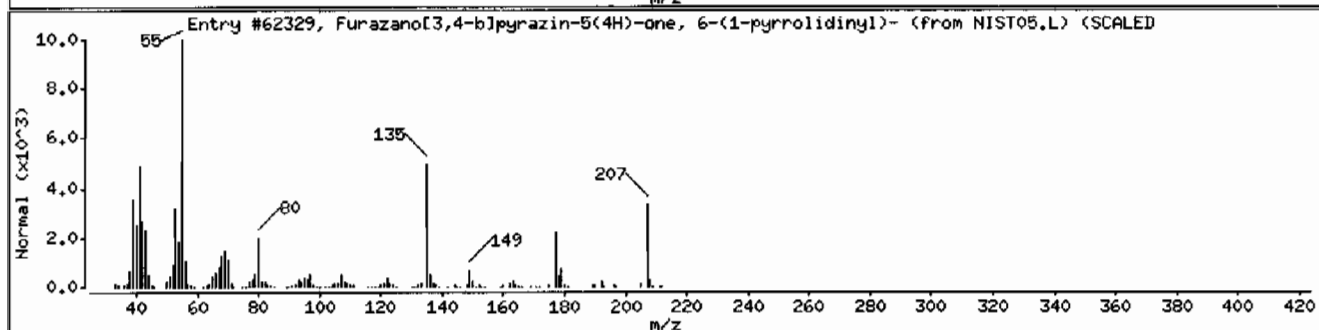
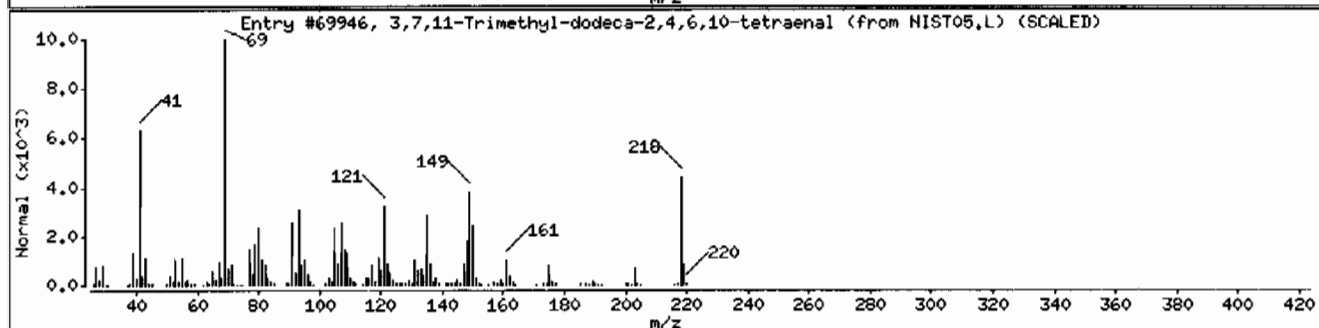
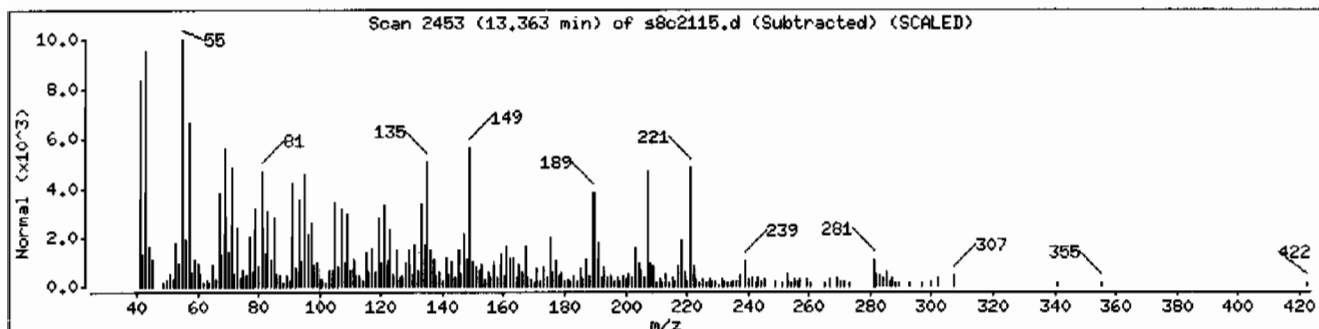
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3,7,11-Trimethyl-dodeca-2,4,6,10-tetraen	13832-89-8	NIST05.L	69946	20	C15H22O	218
Furazano[3,4-b]pyrazin-5(4H)-one, 6-(1-p	332099-72-6	NIST05.L	62329	14	C8H9N5O2	207
2R-Acetoxyethyl-1,3,3-trimethyl-4t-(3-m	1000144-12-4	NIST05.L	113279	14	C17H30O3	282



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211ISVH11ILANL

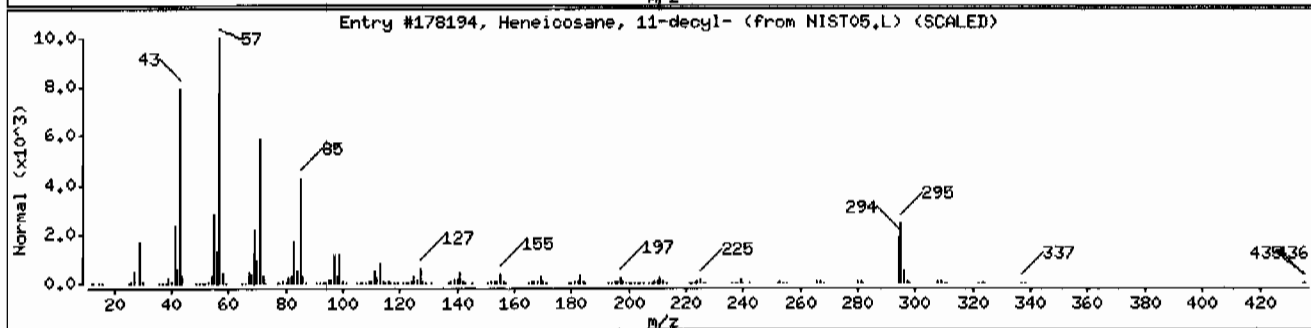
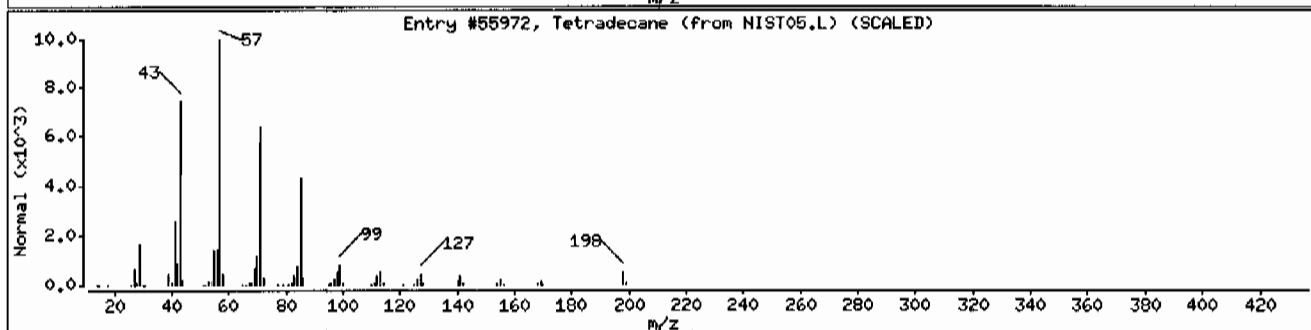
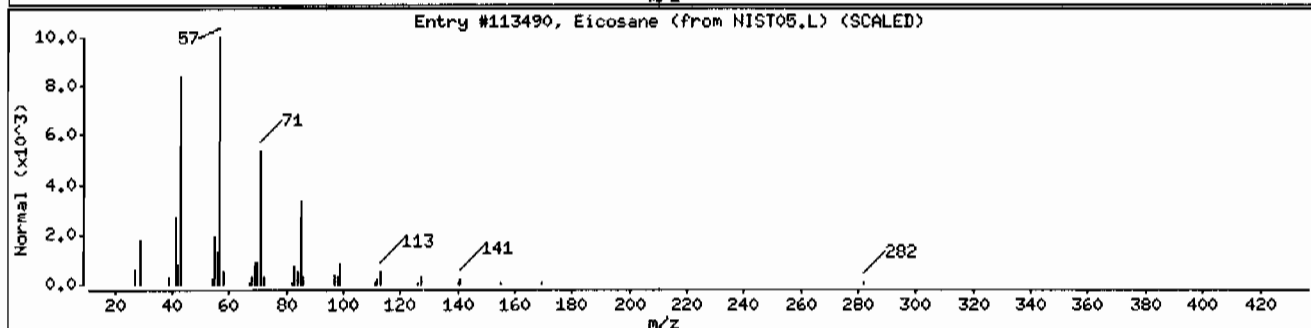
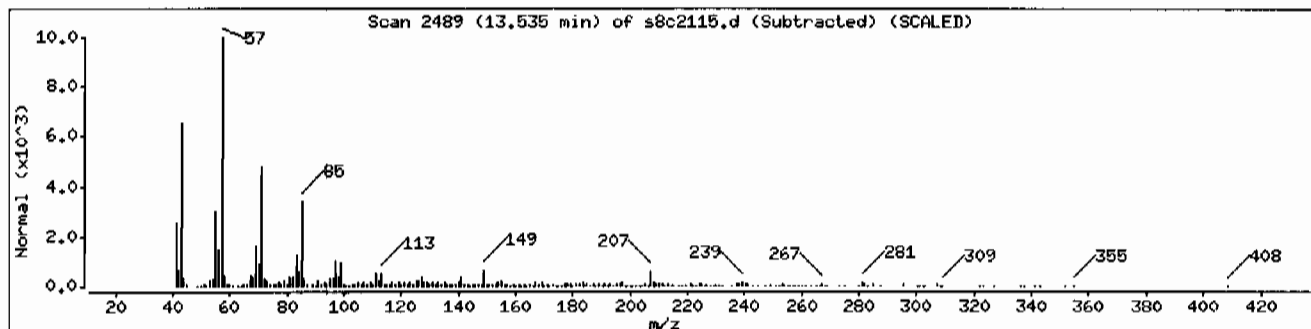
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	96	C ₂₀ H ₄₂	282
Tetradecane	629-59-4	NIST05.L	55972	94	C ₁₄ H ₃₀	198
Heneicosane, 11-decyl-	55320-06-4	NIST05.L	178194	87	C ₃₁ H ₆₄	437



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVH111LANL

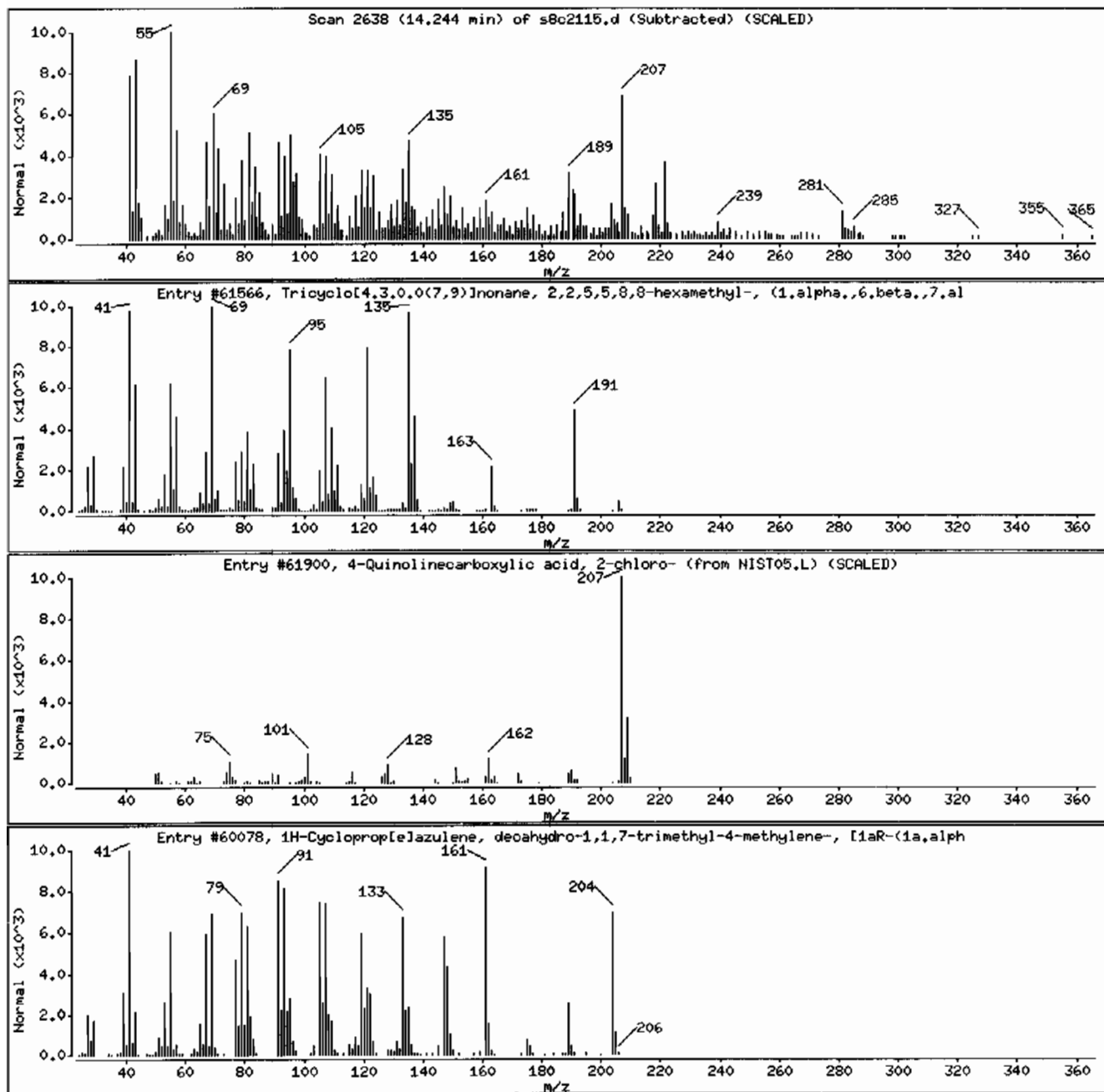
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[4.3.0.0(7,9)]nonane, 2,2,5,5,8,8-hexamethyl-, (1.alpha.,6.beta.,7.alpha.)	54832-82-5	NIST05.L	61566	64	C15H26	206
4-Quinolinecarboxylic acid, 2-chloro-	5467-57-2	NIST05.L	61900	44	C10H6ClNO2	207
1H-Cycloprop[elazulene, decahydro-1,1,7-trimethyl-4-methylene-, [1aR-(1a,alp	489-39-4	NIST05.L	60078	25	C15H24	204



Date : 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: HSD8.i

Sample Info: 1248373005196192211SVH111LANL

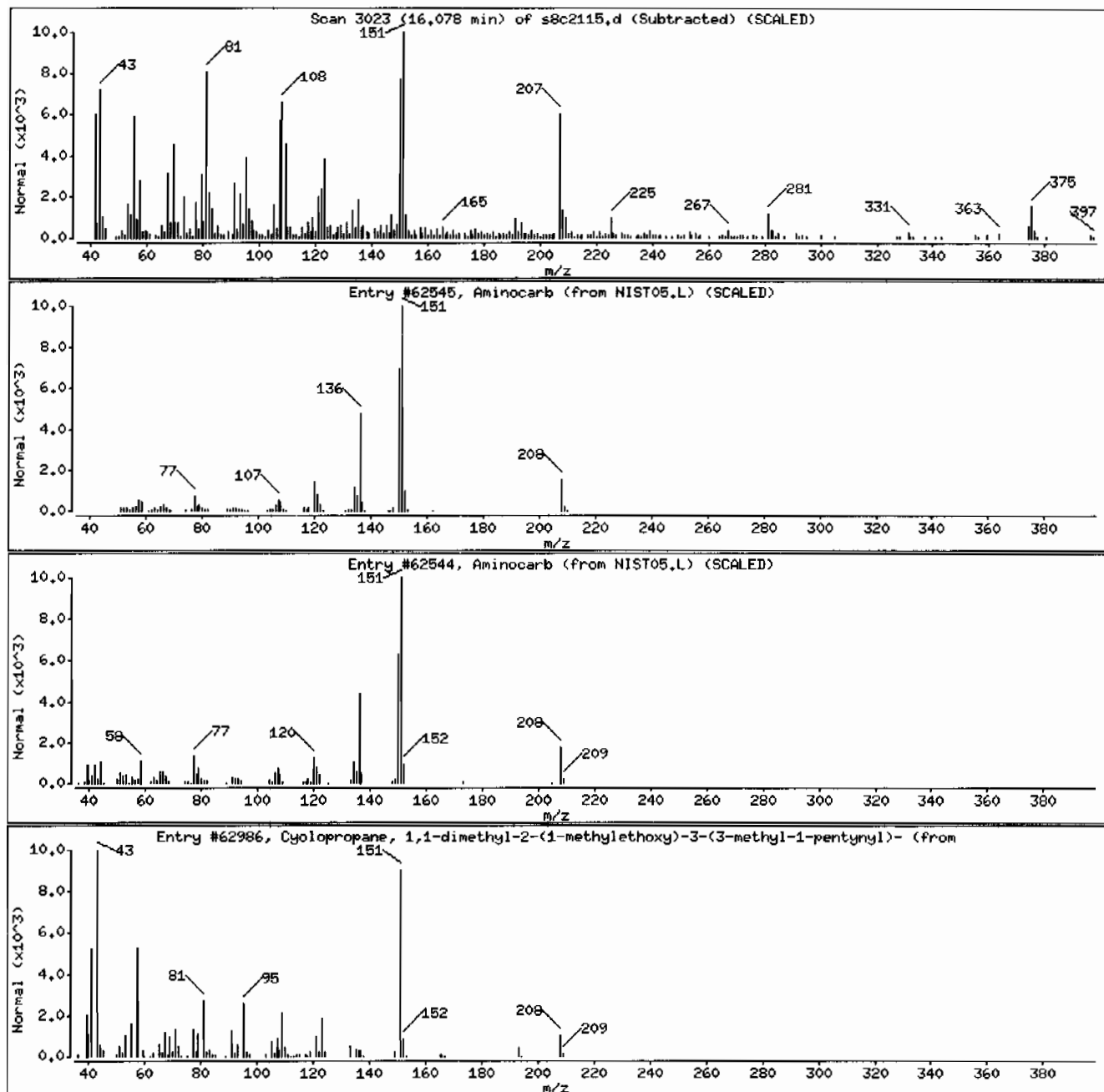
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Aminocarb	2032-59-9	NIST05.L	62545	25	C11H16N2O2	208
Aminocarb	2032-59-9	NIST05.L	62544	25	C11H16N2O2	208
Cyclopropane, 1,1-dimethyl-2-(1-methylet	1000271-77-9	NIST05.L	62986	25	C14H24O	208



Date: 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: MSD8.i

Sample Info: 1248373005196192211SVH111LANL

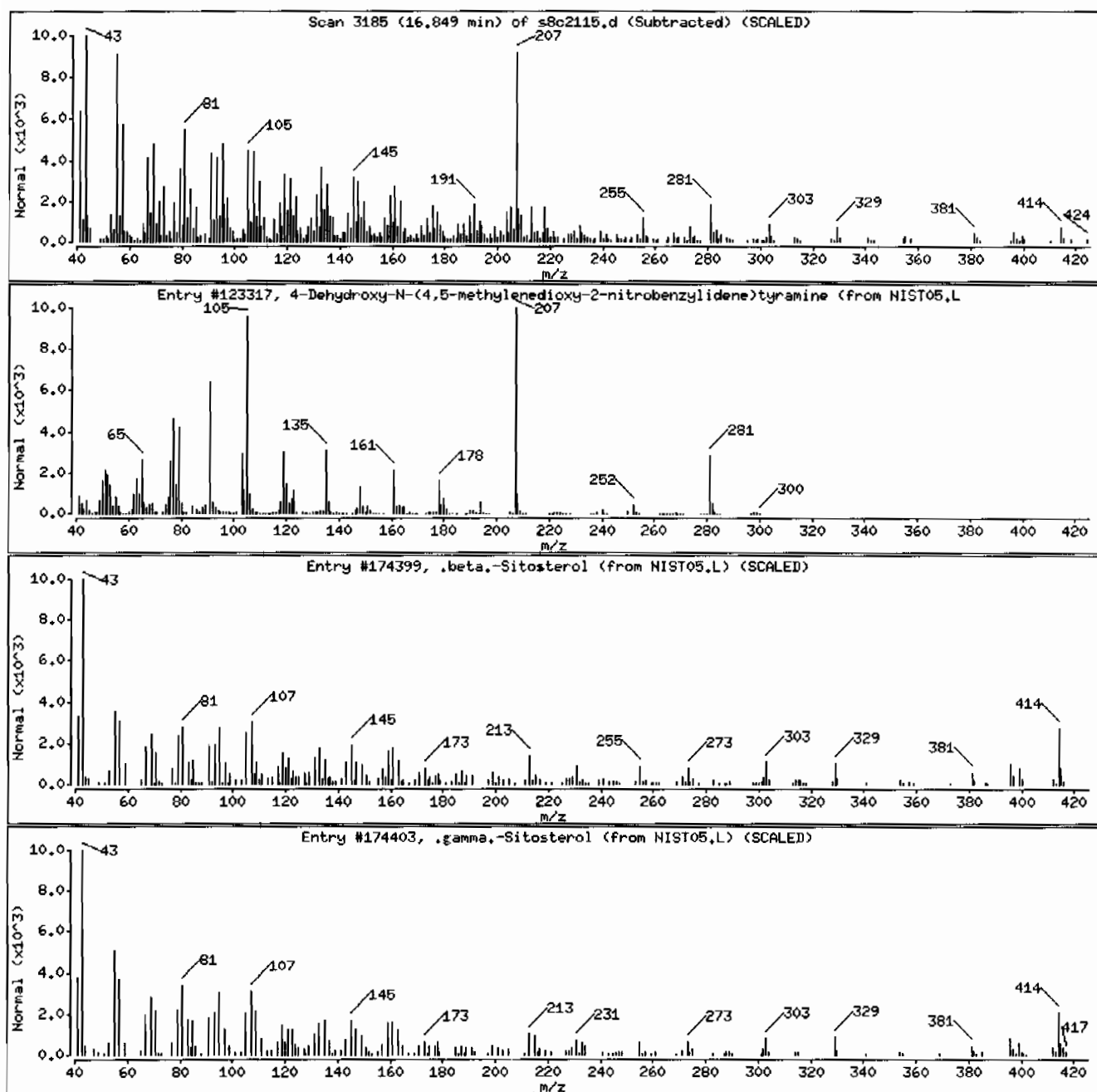
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitro	1000111-66-9	NIST05.L	123317	80	C16H14N2O4	298
.beta.-Sitosterol	83-46-5	NIST05.L	174399	70	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	70	C29H50O	414



Date: 21-MAR-2010 14:56

Client ID: RE36-10-7496

Instrument: HSD8.i

Sample Info: 1248373005196192211SVH111LANL

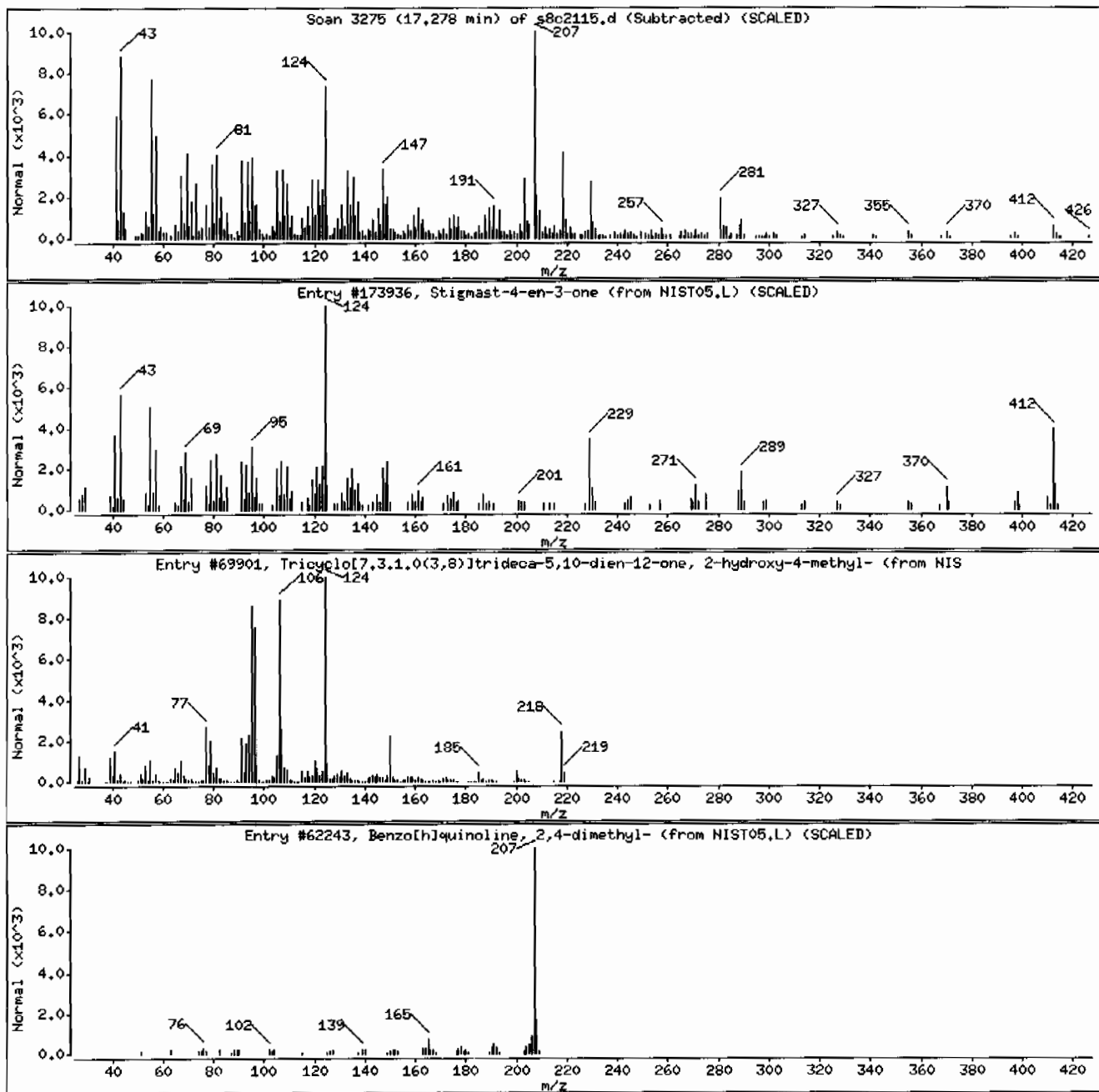
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	42	C ₂₉ H ₄₈ O	412
Tricyclo[7.3.1.0(3,8)]trideca-5,10-dien-	1000157-63-5	NIST05.L	69901	41	C ₁₄ H ₁₈ O ₂	218
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	35	C ₁₅ H ₁₃ N	207



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

SDG Number: 10-2154
Lab Sample ID: 248373007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8J
Analyst: NAG1
Aliquot: 30.15 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	491	ug/kg	98.2	491
108-95-2	Phenol	U	491	ug/kg	98.2	491
95-57-8	2-Chlorophenol	U	491	ug/kg	98.2	491
106-46-7	1,4-Dichlorobenzene	U	491	ug/kg	98.2	491
621-64-7	N-Nitrosodipropylamine	U	491	ug/kg	98.2	491
59-50-7	4-Chloro-3-methylphenol	U	491	ug/kg	98.2	491
83-32-9	Acenaphthene	U	49.1	ug/kg	16.2	49.1
121-14-2	2,4-Dinitrotoluene	U	491	ug/kg	49.1	491
100-02-7	4-Nitrophenol	U	491	ug/kg	162	491
87-86-5	Pentachlorophenol	U	491	ug/kg	123	491
129-00-0	Pyrene	U	49.1	ug/kg	14.7	49.1
110-86-1	Pyridine	U	491	ug/kg	98.2	491
62-53-3	Aniline	U	491	ug/kg	147	491
111-44-4	bis(2-Chloroethyl) ether	U	491	ug/kg	98.2	491
541-73-1	1,3-Dichlorobenzene	U	491	ug/kg	98.2	491
100-51-6	Benzyl alcohol	U	491	ug/kg	147	491
95-50-1	1,2-Dichlorobenzene	U	491	ug/kg	98.2	491
108-60-1	bis(2-Chloroisopropyl)ether	U	491	ug/kg	98.2	491
95-48-7	o-Cresol	U	491	ug/kg	98.2	491
65794-96-9	m,p-Cresols	U	491	ug/kg	147	491
67-72-1	Hexachloroethane	U	491	ug/kg	98.2	491
98-95-3	Nitrobenzene	U	491	ug/kg	98.2	491
78-59-1	Isophorone	U	491	ug/kg	98.2	491
88-75-5	2-Nitrophenol	U	491	ug/kg	98.2	491
105-67-9	2,4-Dimethylphenol	U	491	ug/kg	172	491
111-91-1	bis(2-Chloroethoxy)methane	U	491	ug/kg	98.2	491
120-83-2	2,4-Dichlorophenol	U	491	ug/kg	98.2	491
65-85-0	Benzoic acid	U	982	ug/kg	246	982
91-20-3	Naphthalene	U	49.1	ug/kg	14.7	49.1
106-47-8	4-Chloroaniline	U	491	ug/kg	98.2	491
87-68-3	Hexachlorobutadiene	U	491	ug/kg	98.2	491
91-57-6	2-Methylnaphthalene	U	49.1	ug/kg	9.82	49.1
77-47-4	Hexachlorocyclopentadiene	U	491	ug/kg	98.2	491
88-06-2	2,4,6-Trichlorophenol	U	491	ug/kg	98.2	491
95-95-4	2,4,5-Trichlorophenol	U	491	ug/kg	98.2	491
91-58-7	2-Chloronaphthalene	U	49.1	ug/kg	16.2	49.1
88-74-4	2-Nitroaniline	U	491	ug/kg	98.2	491
99-09-2	<i>o</i> -Nitroaniline	U	491	ug/kg	98.2	491
	3-Nitroaniline					

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

SDG Number: 10-2154
Lab Sample ID: 248373007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.15 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	491	ug/kg	98.2	491
606-20-2	2,6-Dinitrotoluene	U	491	ug/kg	49.1	491
208-96-8	Acenaphthylene	U	49.1	ug/kg	14.7	49.1
51-28-5	2,4-Dinitrophenol	U	982	ug/kg	187	982
132-64-9	Dibenzofuran	U	491	ug/kg	98.2	491
84-66-2	Diethylphthalate	U	491	ug/kg	98.2	491
86-73-7	Fluorene	U	49.1	ug/kg	14.7	49.1
7005-72-3	4-Chlorophenylphenylether	U	491	ug/kg	98.2	491
534-52-1	2-Methyl-4,6-dinitrophenol	U	491	ug/kg	98.2	491
100-01-6	4-Nitroaniline	U	491	ug/kg	147	491
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	491	ug/kg	98.2	491
122-66-7	Azobenzene	U	491	ug/kg	98.2	491
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	491	ug/kg	98.2	491
118-74-1	Hexachlorobenzene	U	491	ug/kg	98.2	491
85-01-8	Phenanthrene	U	49.1	ug/kg	14.7	49.1
120-12-7	Anthracene	U	49.1	ug/kg	9.82	49.1
84-74-2	Di-n-butylphthalate	U	491	ug/kg	98.2	491
206-44-0	Fluoranthene	U	49.1	ug/kg	14.7	49.1
85-68-7	Butylbenzylphthalate	U	491	ug/kg	98.2	491
56-55-3	Benzo(a)anthracene	U	49.1	ug/kg	14.7	49.1
91-94-1	3,3'-Dichlorobenzidine	U	491	ug/kg	147	491
218-01-9	Chrysene	U	49.1	ug/kg	14.7	49.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	491	ug/kg	98.2	491
117-84-0	Di-n-octylphthalate	U	491	ug/kg	98.2	491
205-99-2	Benzo(b)fluoranthene	U	49.1	ug/kg	14.7	49.1
207-08-9	Benzo(k)fluoranthene	U	49.1	ug/kg	14.7	49.1
50-32-8	Benzo(a)pyrene	U	49.1	ug/kg	14.7	49.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	49.1	ug/kg	14.7	49.1
53-70-3	Dibenzo(a,h)anthracene	U	49.1	ug/kg	14.7	49.1
191-24-2	Benzo(ghi)perylene	U	49.1	ug/kg	14.7	49.1
120-82-1	1,2,4-Trichlorobenzene	U	491	ug/kg	98.2	491

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	3.69	3100	ug/kg		J
13466-78-9	3-Carene	4.25	770	ug/kg	96	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373007	Date Received: 03/02/2010 08:50	%Moisture: 32.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7497	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 15:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.15 g	Final Volume: 1 mL
Data File: s8c2117.d	Column: J&W DB-5MS	Level: LOW

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

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.02	3140	ug/kg	99	NJ
11028-42-5	Cedrene	7.04	1040	ug/kg	90	NJ
470-40-6	Thujopsene	7.14	650	ug/kg	90	NJ
	Unknown	7.22	1310	ug/kg		J
67650-90-2	Bicyclogermacrene	7.31	733	ug/kg	83	NJ
	Unknown Aldol Condensate	7.34	955	ug/kg		J
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	7.52	357	ug/kg	99	NJ
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcyclo	7.54	624	ug/kg	83	NJ
639-99-6	Cyclohexanemethanol, 4-ethenyl-, alpha..	7.72	478	ug/kg	94	NJ
	Unknown	8.34	617	ug/kg		J
	Unknown	8.4	720	ug/kg		J
	Unknown	8.87	3510	ug/kg		J
	Unknown	10.47	1330	ug/kg		J
25246-27-9	1H-Cycloprop[e]azulene, decahydro-1,1,7-	11.02	402	ug/kg	91	NJ
	Unknown	11.1	425	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.2	4800	ug/kg	97	NJ
	Unknown	11.25	592	ug/kg		J
	Unknown	11.34	894	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.44	536	ug/kg	83	NJ
	Unknown	11.54	695	ug/kg		J
	Unknown	11.72	1230	ug/kg		J
	Unknown	11.81	343	ug/kg		J
	Unknown	11.99	531	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	12.12	579	ug/kg	96	NJ
	Unknown	14.89	2200	ug/kg		J
	Unknown	15.06	818	ug/kg		J
	Unknown	15.7	1550	ug/kg		J
	Unknown	16.8	797	ug/kg		J

Data File: /chem/MSD8.i/s032110.b/s8c2117.d
Report Date: 22-Mar-2010 09:49

Page 1

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2117.d
Lab Smp Id: 248373007 Client Smp ID: RE36-10-7497
Inj Date : 21-MAR-2010 15:56
Operator : nagl Inst ID: MSD8.i
Smp Info : |248373007|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	32.48340	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301	(1.000)	335504	40.0000	
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1336169	40.0000	
* 46 Acenaphthene-d10	164	7.406	7.406	(1.000)	796113	40.0000	
* 67 Phenanthrene-d10	188	8.997	8.997	(1.000)	1326337	40.0000	
* 91 Chrysene-d12	240	11.868	11.868	(1.000)	1012587	40.0000	
* 98 Perylene-d12	264	13.878	13.878	(1.000)	624379	40.0000	
\$ 3 2-Fluorophenol	112	3.173	3.158	(0.738)	624716	78.8704	3870
\$ 5 Phenol-d5	99	3.939	3.930	(0.916)	771486	78.1004	3840
\$ 20 Nitrobenzene-d5	82	4.825	4.830	(0.869)	346694	36.5004	1790
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.902)	775978	33.1141	1630
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.114)	190601	72.4261	3560
\$ 81 p-Terphenyl-d14	244	10.711	10.706	(0.902)	818405	44.8926	2200

ION RATIO REPORT

SV REPORT

Data file: s8c2117.d

Report Date: 03/22/2010 07:18

Lab. ID: 248373007

SampleType: SAMPLE

Injection Date: 21-MAR-2010 15:56

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373007|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	39979	3.94	4.00	80-120	100	()
93	120256	3.98	4.00	213-273	301	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	46773	4.83	4.68	80-120	100	(T)
42	25002	4.83	4.68	31- 91	53	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	3648	5.23	5.28	80-120	100	()
122	3659	5.24	5.28	64-124	100	()
77	3127	5.23	5.28	47-107	86	()

30	Naphthalene		CAS#: 91-20-3			
128	515	5.58	5.58	80-120	100	()
129	297	5.55	5.58	0- 41	58	(Q)
127	0	0.00	5.58	0- 43	0	(T)

40	2-Chloronaphthalene		CAS#: 91-58-7			
162	1861	6.80	6.81	80-120	100	()
164	108	6.74	6.81	3- 63	6	(T)
127	1018	6.78	6.81	7- 67	55	()

42	o-Nitroaniline		CAS#: 88-74-4			
65	39962	6.95	6.92	80-120	100	()
92	32964	6.95	6.92	33- 93	82	()
138	6668	7.02	6.92	76-136	17	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	103026	7.41	7.18	80-120	100	(T)
63	2293	7.41	7.18	32- 92	2	(QT)
<hr/>						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	103026	7.41	7.61	80-120	100	(T)
89	2099	7.41	7.61	47-107	2	(QT)
63	2486	7.41	7.61	26- 86	2	(QT)
<hr/>						
53	Fluorene			CAS#: 86-73-7		
166	15102	8.13	7.99	80-120	100	(T)
165	47561	8.13	7.99	63-123	315	(QT)
167	3995	8.13	7.99	0- 43	26	(T)
<hr/>						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	608	8.25	8.04	80-120	100	(T)
105	17011	8.23	8.04	14- 74	2797	(QT)
51	2261	8.25	8.04	26- 86	372	(QT)
<hr/>						
58	1,2-Diphenylhydrazine			CAS#: 122-66-7		
77	97694	8.13	8.16	80-120	100	()
105	89898	8.13	8.16	0- 45	92	(Q)
182	152	8.18	8.16	0- 56	0	()
<hr/>						
68	Phenanthrene			CAS#: 85-01-8		
178	2029	9.02	9.02	80-120	100	()
179	905	9.00	9.02	0- 45	45	()
176	789	9.02	9.02	0- 49	39	()
<hr/>						
92	Chrysene			CAS#: 218-01-9		
228	1929	11.90	11.90	80-120	100	()
229	8405	11.90	11.90	0- 49	436	(Q)
226	620	11.90	11.90	0- 59	32	()
<hr/>						
94	Di-n-octylphthalate			CAS#: 117-84-0		
149	714	12.72	12.73	80-120	100	()
43	7211	12.69	12.73	0- 41	1009	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2117.d
 Lab Smp Id: 248373007 Client Smp ID: RE36-10-7497
 Inj Date : 21-MAR-2010 15:56
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |248373007|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	32.48340	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.301	2031618	40.000
* 46 Acenaphthene-d10	7.406	3899268	40.000
* 67 Phenanthrene-d10	8.997	3403790	40.000
* 91 Chrysene-d12	11.868	3606130	40.000
* 98 Perylene-d12	13.878	1807979	40.000

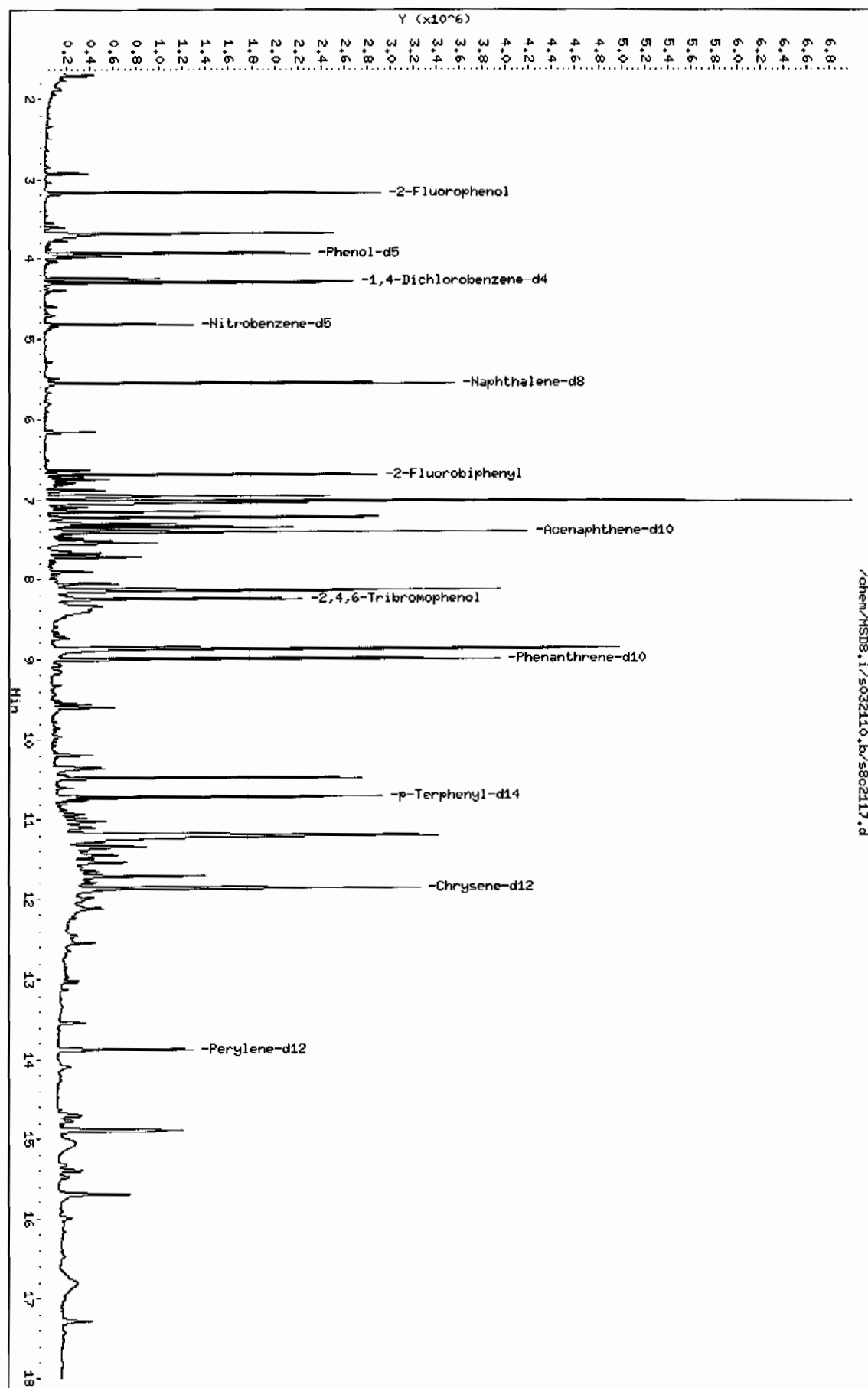
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CFND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
3.687	3207368	63.1490117	3100	0		0	10
3-Carene					CAS #: 13466-78-9		
4.254	795948	15.6712055	770	96	NIST05.L	15156	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
7.016	6240117	64.0132101	3140	99	NIST05.L	60018	46
Cedrene					CAS #: 11028-42-5		
7.039	2069823	21.2329373	1040	90	NIST05.L	59777	46
Thujopsene					CAS #: 470-40-6		
7.144	1289356	13.2266439	650	90	NIST05.L	59785	46
Unknown					CAS #:		
7.220	2600832	26.6802075	1310	0		0	46
Bicyclogermacrene					CAS #: 67650-90-2		
7.306	1453885	14.9144337	733	83	NIST05.L	59828	46
Unknown Aldol Condensate					CAS #:		
7.344	1894749	19.4369727	955	0		0	46
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6					CAS #: 5989-08-2		
7.516	707793	7.26077560	357	99	NIST05.L	59907	46
Benzene, 1-methyl-4-(1,2,2-trimethylcycl					CAS #: 16982-00-6		
7.539	1238139	12.7012450	624	83	NIST05.L	58541	46
Cyclohexanemethanol, 4-ethenyl-.alpha.,-					CAS #: 639-99-6		
7.716	947841	9.72327050	478	94	NIST05.L	73014	46
Unknown					CAS #:		
8.339	1068163	12.5526362	617	0		0	67
Unknown					CAS #:		
8.401	1246771	14.6515645	720	0		0	67
Unknown					CAS #:		
8.868	6076274	71.4059808	3510	0		0	67
Unknown					CAS #:		
10.473	2435397	27.0139613	1330	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
1H-Cycloprop[elazulene, decahydro-1,1,7-					CAS #: 25246-27-9		
11.020	737435	8.17979021	402	91	NIST05.L	60076	91
Unknown					CAS #:		
11.101	779382	8.64508116	425	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
11.201	8817208	97.8024236	4800	97	NIST05.L	116239	91
Unknown					CAS #:		
11.254	1085771	12.0436128	592	0		0	91
Unknown					CAS #:		
11.339	1640166	18.1930881	894	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 471-77-2		
11.444	983978	10.9145039	536	83	NIST05.L	126183	91
Unknown					CAS #:		
11.540	1276174	14.1556090	695	0		0	91
Unknown					CAS #:		
11.720	2256931	25.0343821	1230	0		0	91
Unknown					CAS #:		
11.806	629315	6.98050262	343	0		0	91
Unknown					CAS #:		
11.992	974101	10.8049419	531	0		0	91
Octadecane, 1-chloro-					CAS #: 3386-33-2		
12.120	1061678	11.7763653	578	96	NIST05.L	117264	91
Unknown					CAS #:		
14.892	2023974	44.7786973	2200	0		0	98
Unknown					CAS #:		
15.063	752579	16.6501794	818	0		0	98
Unknown					CAS #:		
15.697	1422445	31.4703849	1540	0		0	98
Unknown					CAS #:		
16.797	733577	16.2297599	797	0		0	98

Data File: /chem/MSD8.i/s032110.b/s602117.d
Date: 21-MAR-2010 15:56
Client ID: RE36-10-7497
Sample Info: 1248373007196492211SVN11L1L1NL
Volume Injected (uL): 0.5
Column phase: 3M DB-SHS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 12483730071961922111SVM111LANL

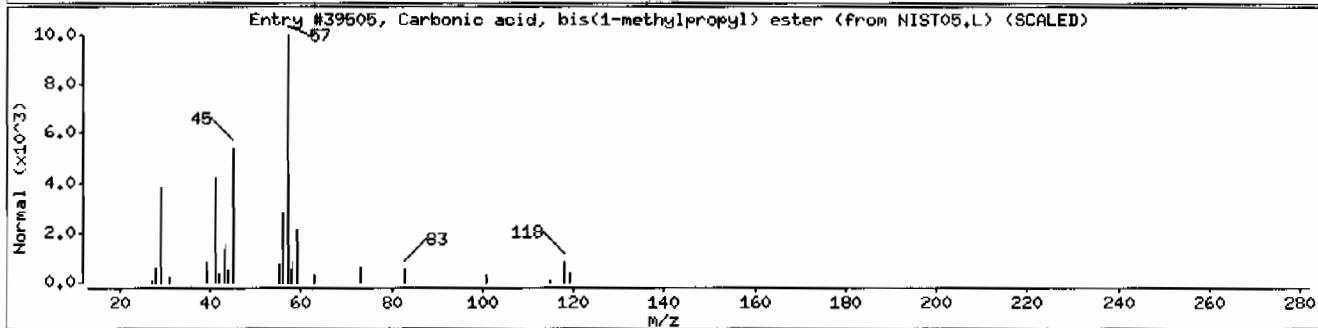
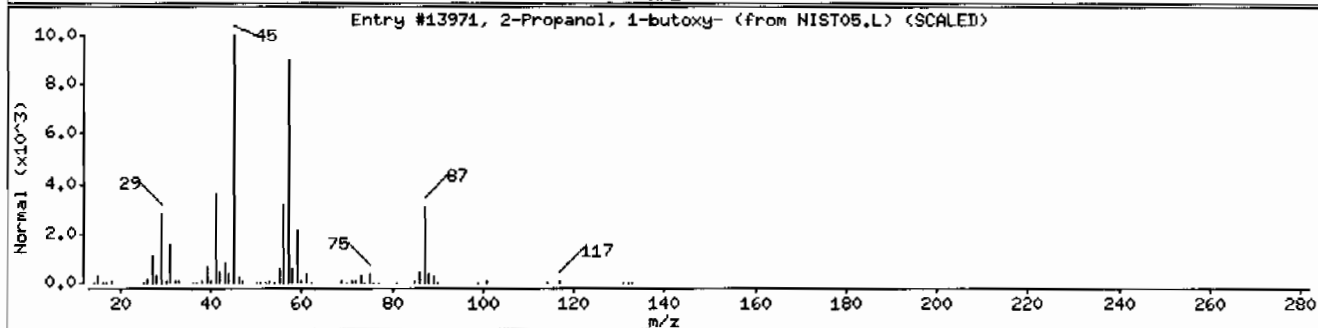
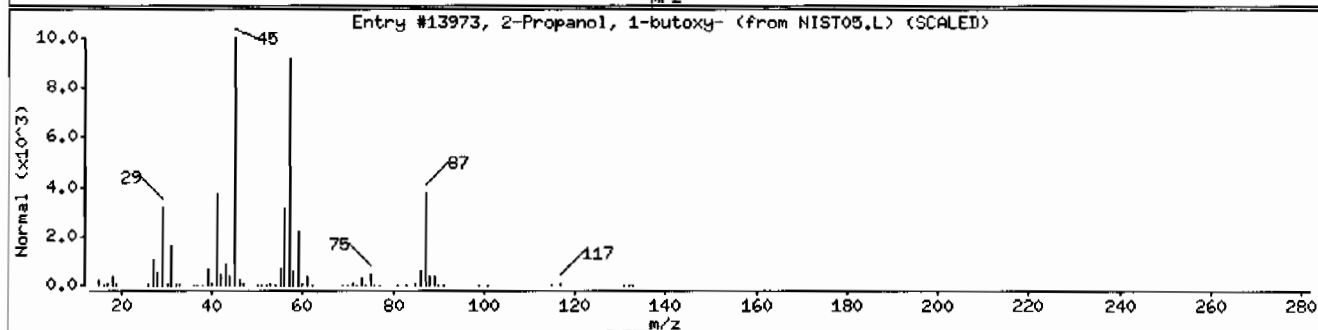
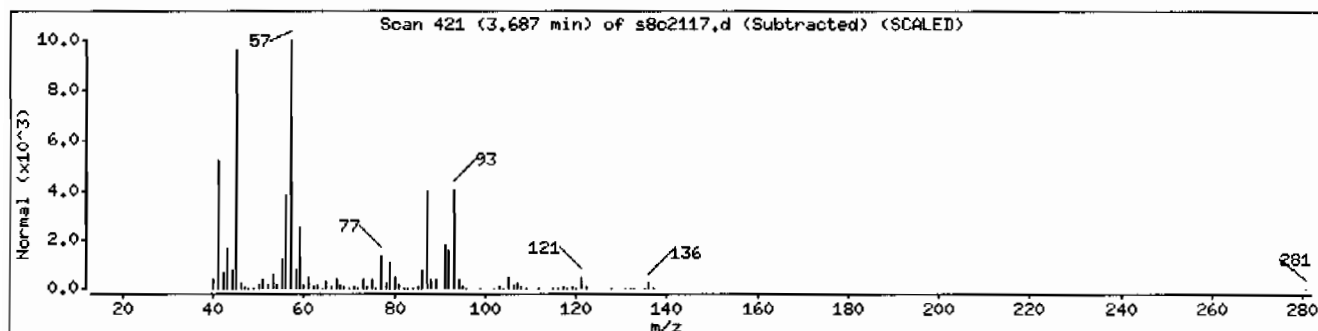
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13973	64	C7H16O2	132
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13971	64	C7H16O2	132
Carbonic acid, bis(1-methylpropyl) ester	623-63-2	NIST05.L	39505	47	C9H18O3	174



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 12483730071961922111SVH111LANL

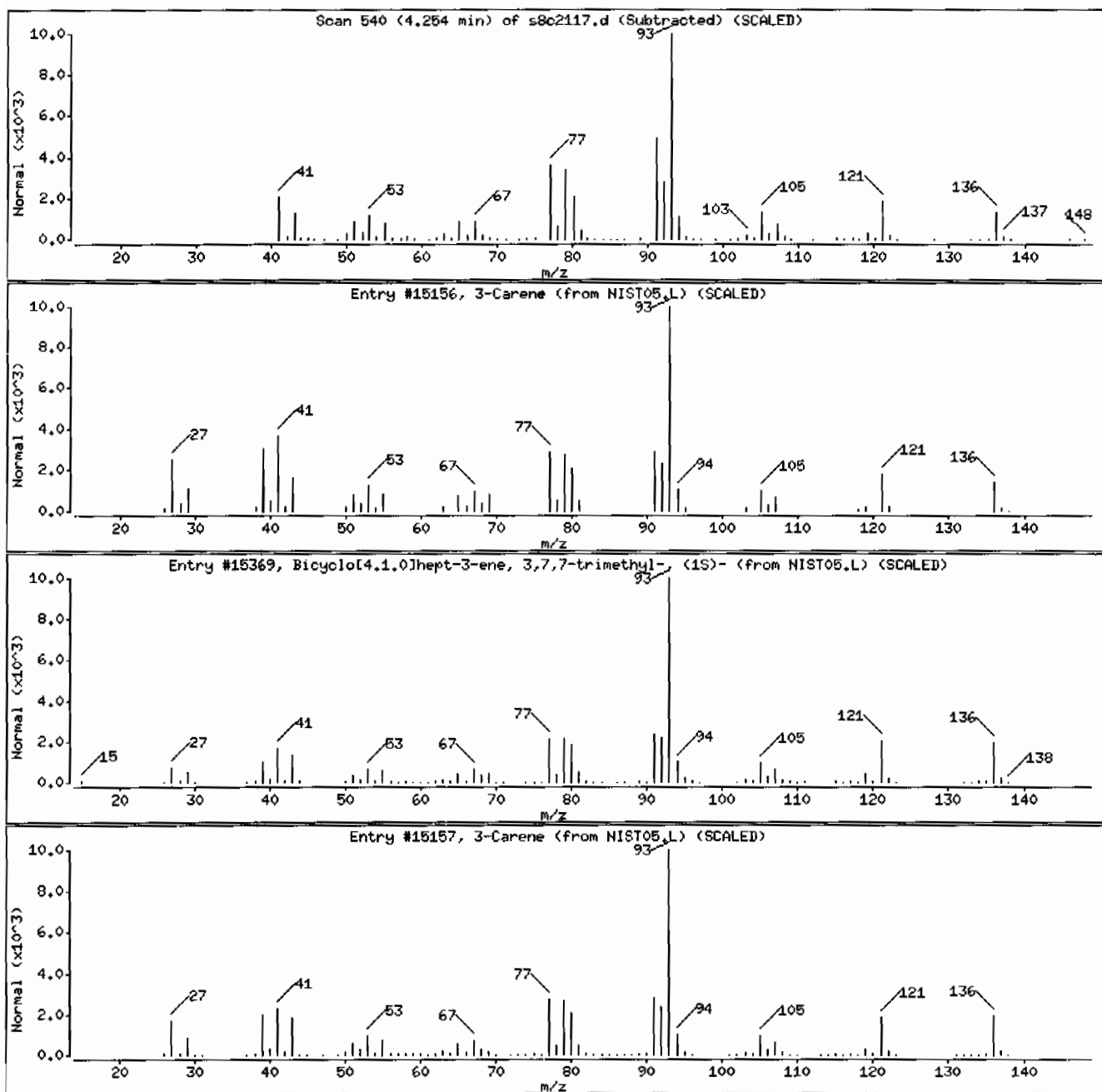
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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	95	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: HSD8.i

Sample Info: 1248373007196192211SVH111LANL

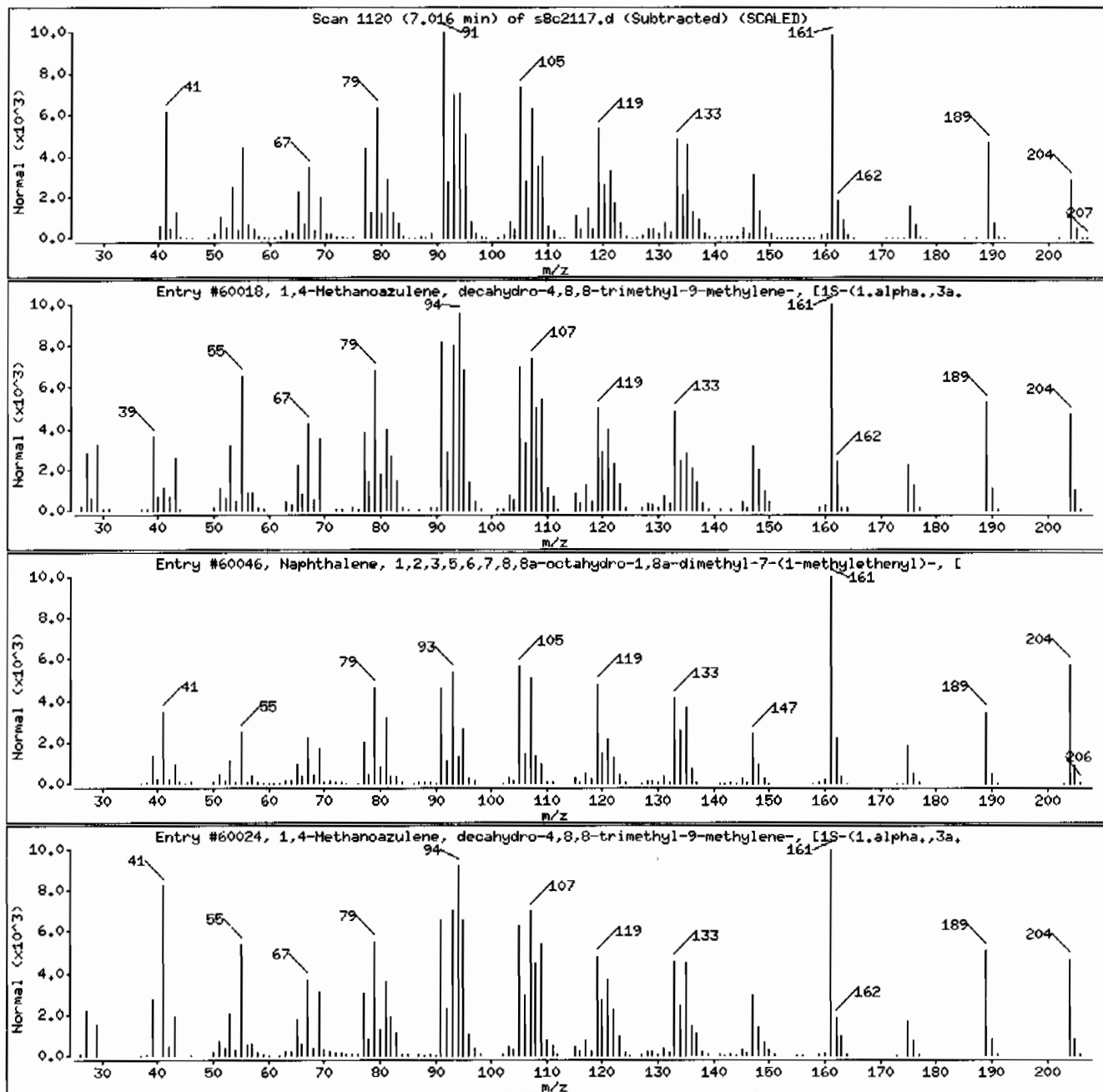
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	96	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	94	C15H24	204



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 12483730071961922111SVH111LANL

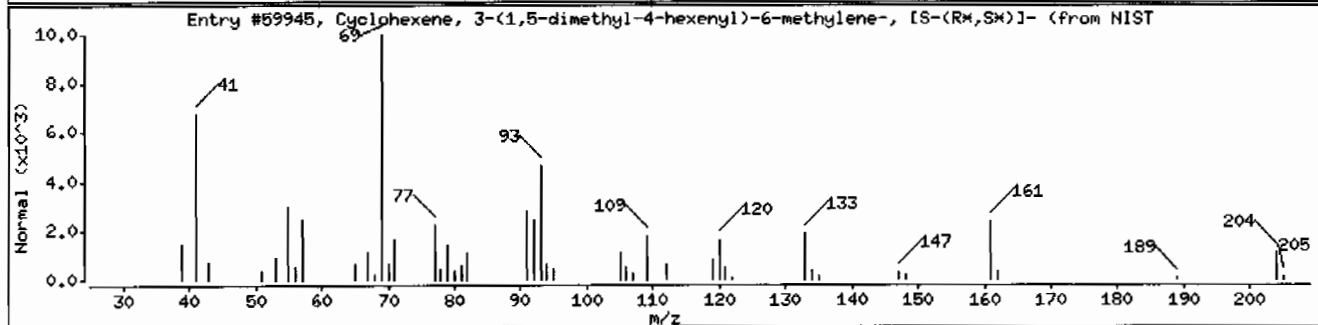
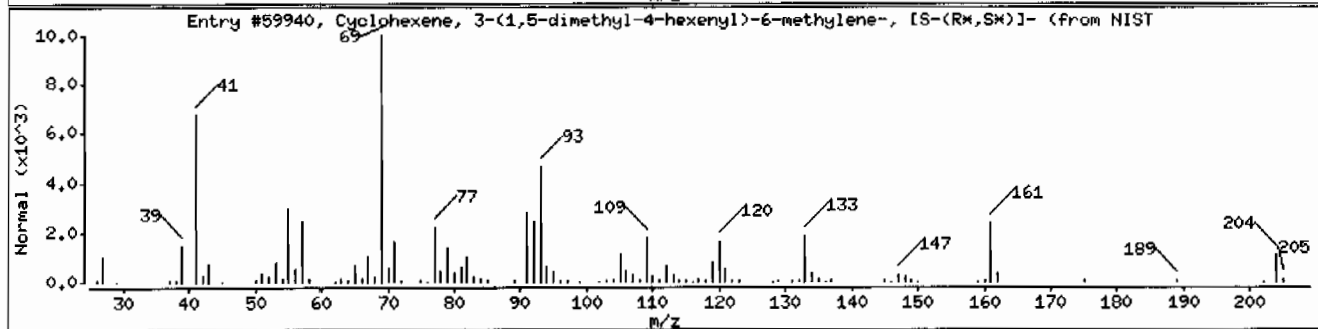
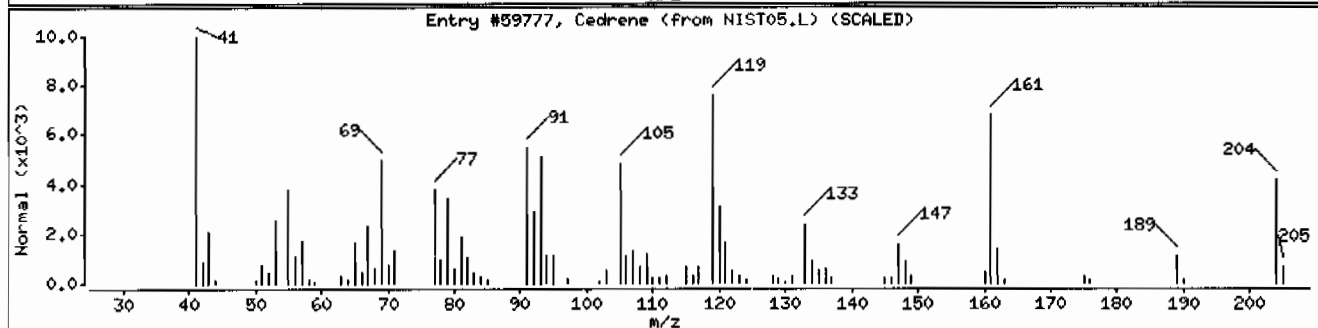
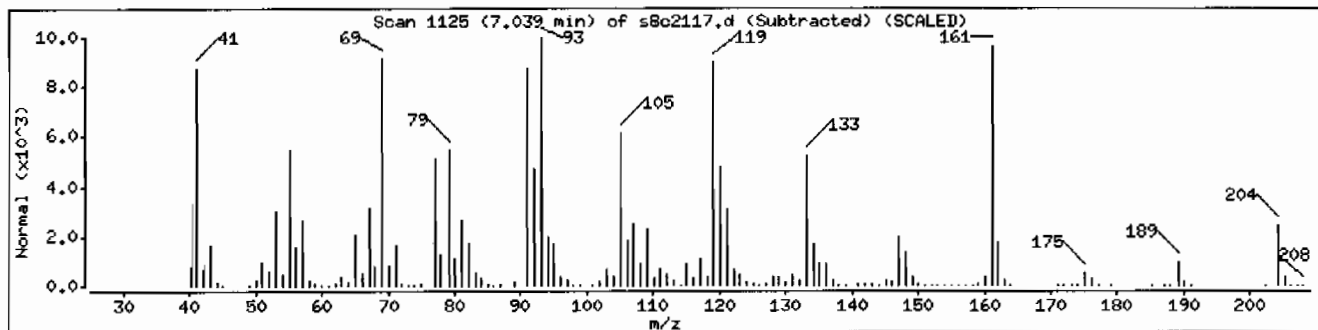
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrene	11028-42-5	NIST05.L	59777	90	C ₁₅ H ₂₄	204
Cyclohexene, 3-(1,5-dimethyl-4-hexenyl)-	20307-83-9	NIST05.L	59940	81	C ₁₅ H ₂₄	204
Cyclohexene, 3-(1,5-dimethyl-4-hexenyl)-	20307-83-9	NIST05.L	59945	74	C ₁₅ H ₂₄	204



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211ISVM111LANL

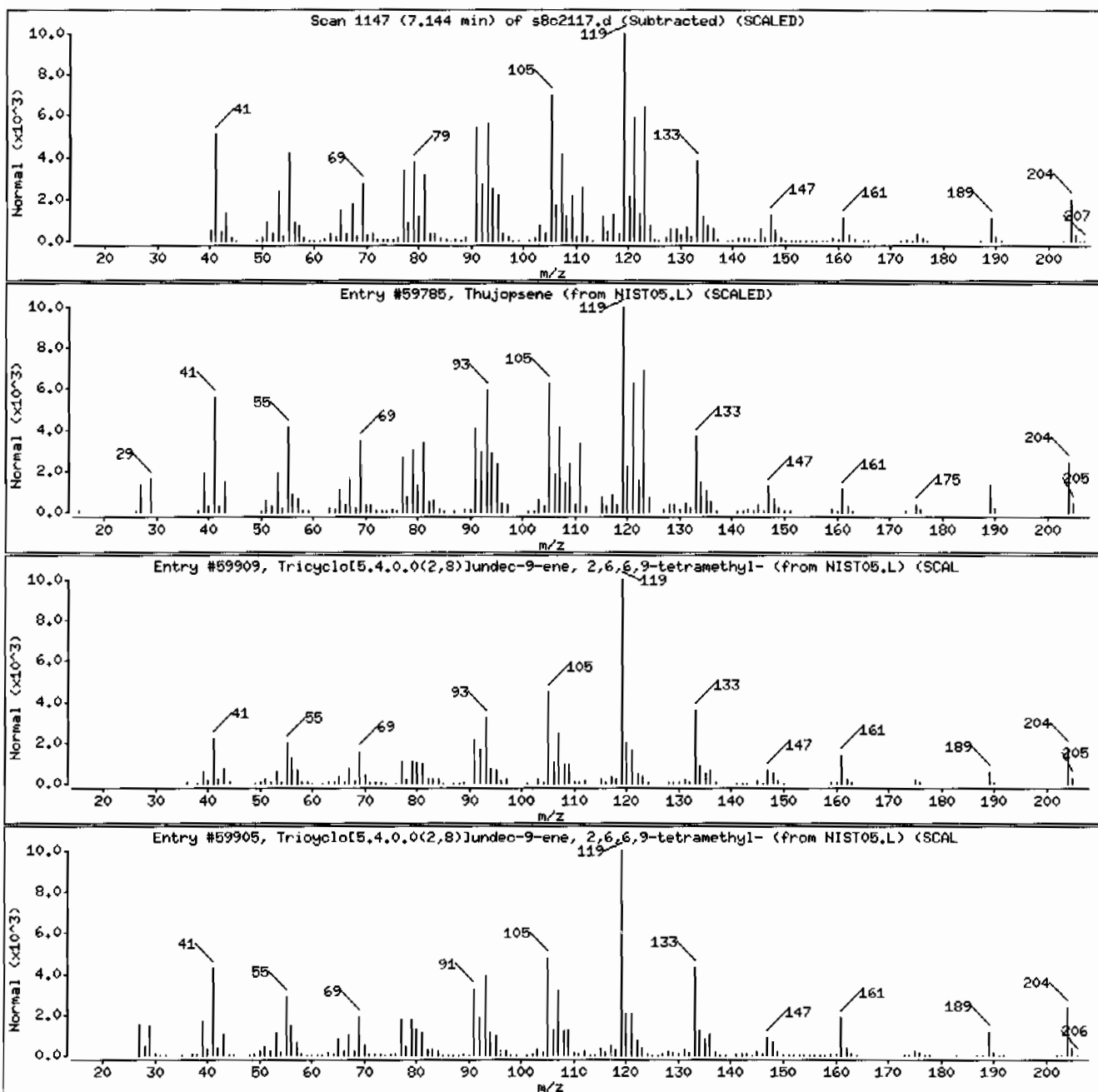
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Thujopsene	470-40-6	NIST05.L	59785	90	C ₁₅ H ₂₄	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	87	C ₁₅ H ₂₄	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59905	86	C ₁₅ H ₂₄	204



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: HSD8.i

Sample Info: 12483730071961922111SVH111LANL

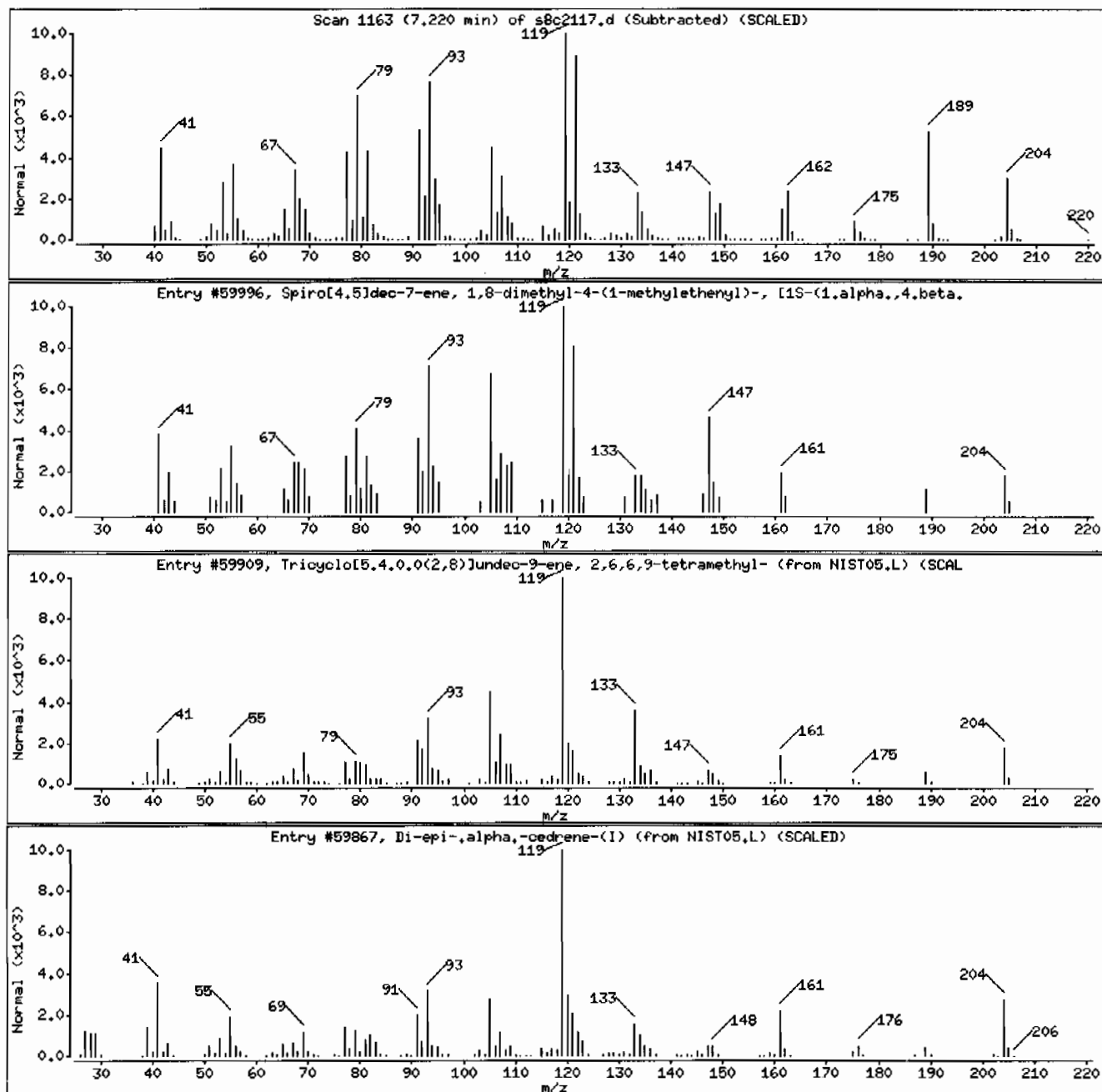
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	24048-44-0	NIST05.L	59996	72	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	60	C15H24	204
Di-epi-,alpha.-cedrene-(I)	21996-77-0	NIST05.L	59867	50	C15H24	204



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: I248373007196192211SVMI11LANL

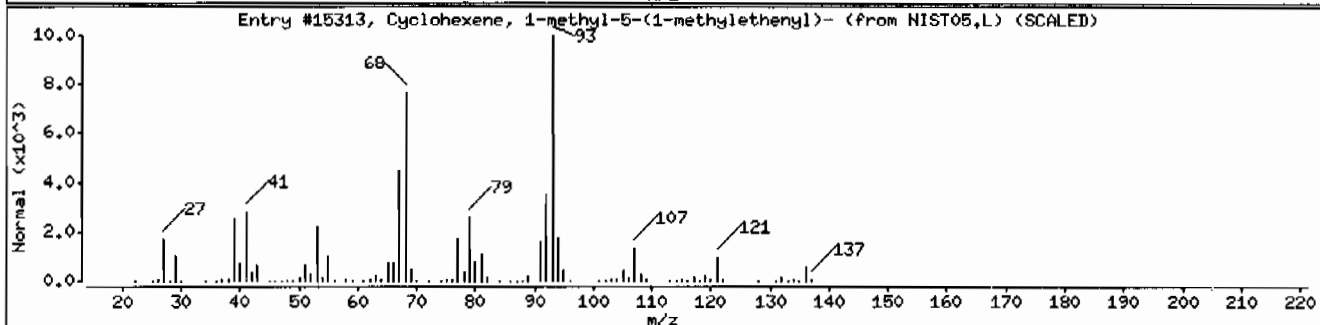
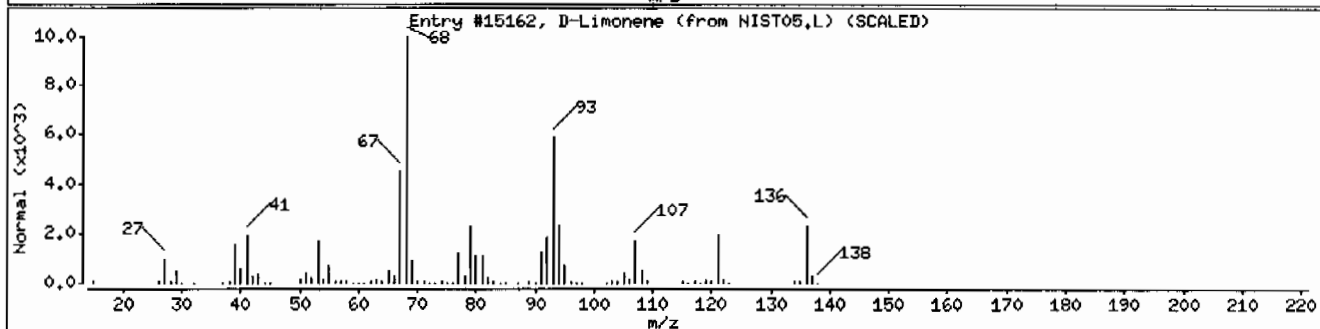
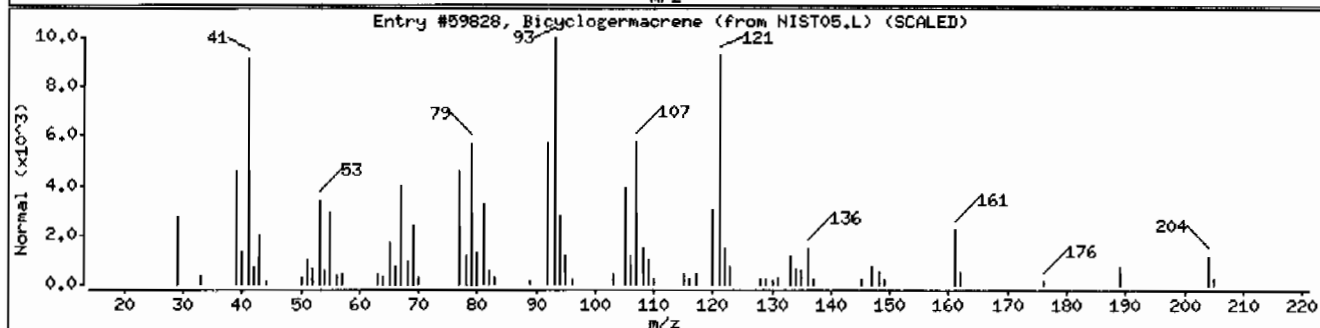
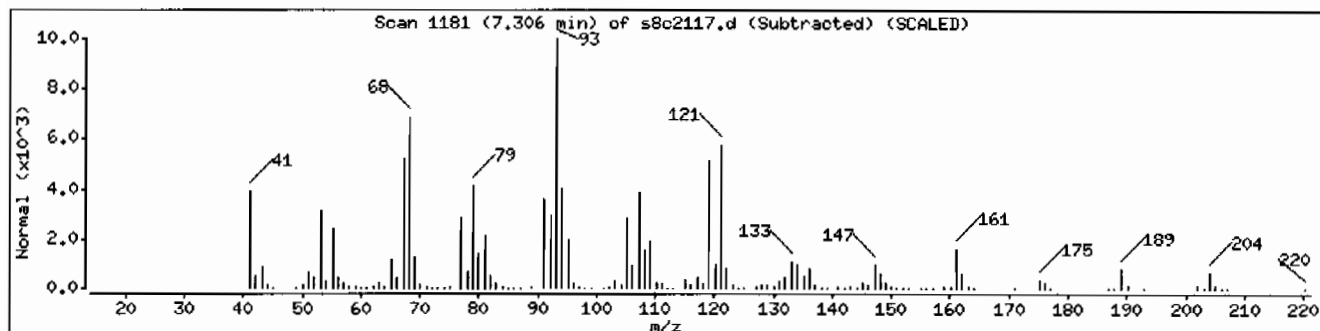
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclogermacrene	67650-90-2	NIST05.L	59828	83	C ₁₅ H ₂₄	204
D-Limonene	5989-27-5	NIST05.L	15162	76	C ₁₀ H ₁₆	136
Cyclohexene, 1-methyl-5-(1-methylethenyl)	13898-73-2	NIST05.L	15313	49	C ₁₀ H ₁₆	136



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVH111LANL

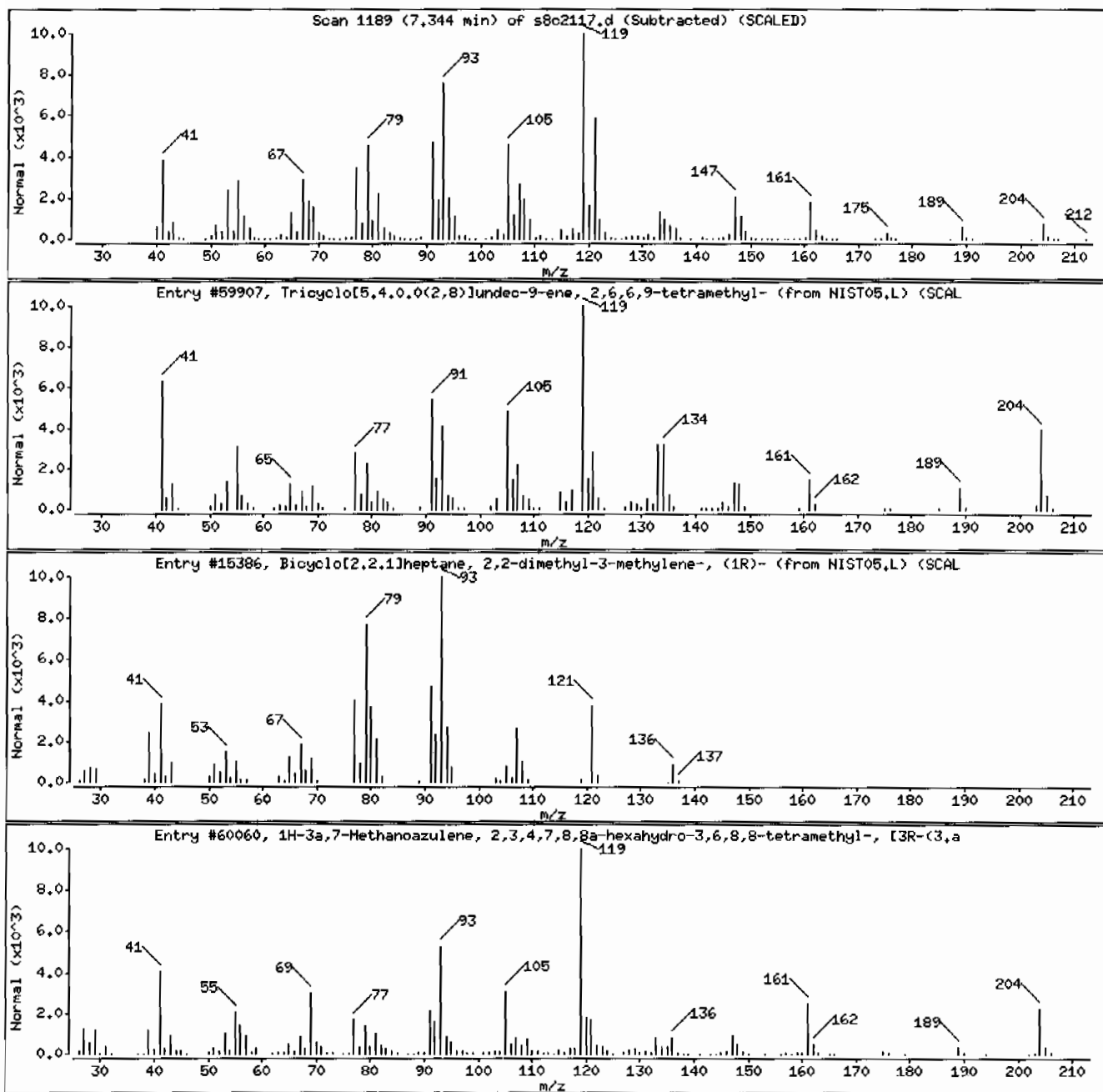
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59907	72	C15H24	204
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5794-03-6	NIST05.L	15386	55	C10H16	136
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60060	53	C15H24	204



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211ISVM11ILANL

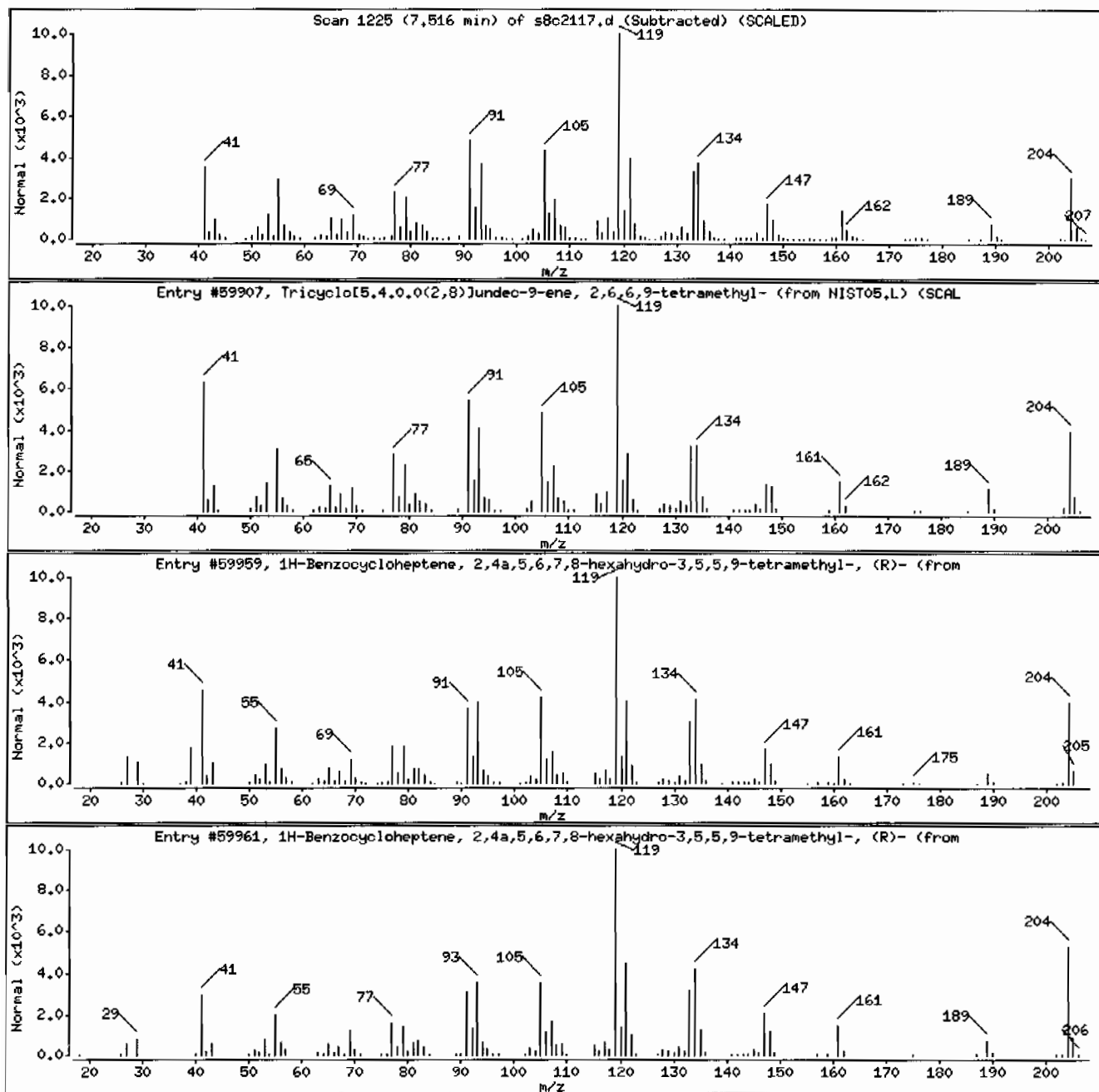
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59907	99	C ₁₅ H ₂₄	204
1H-Benzocycloheptene, 2,4a,5,6,7,8-hexah	1461-03-6	NIST05.L	59959	99	C ₁₅ H ₂₄	204
1H-Benzocycloheptene, 2,4a,5,6,7,8-hexah	1461-03-6	NIST05.L	59961	97	C ₁₅ H ₂₄	204



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: I248373007196192211SVMI1ILANL

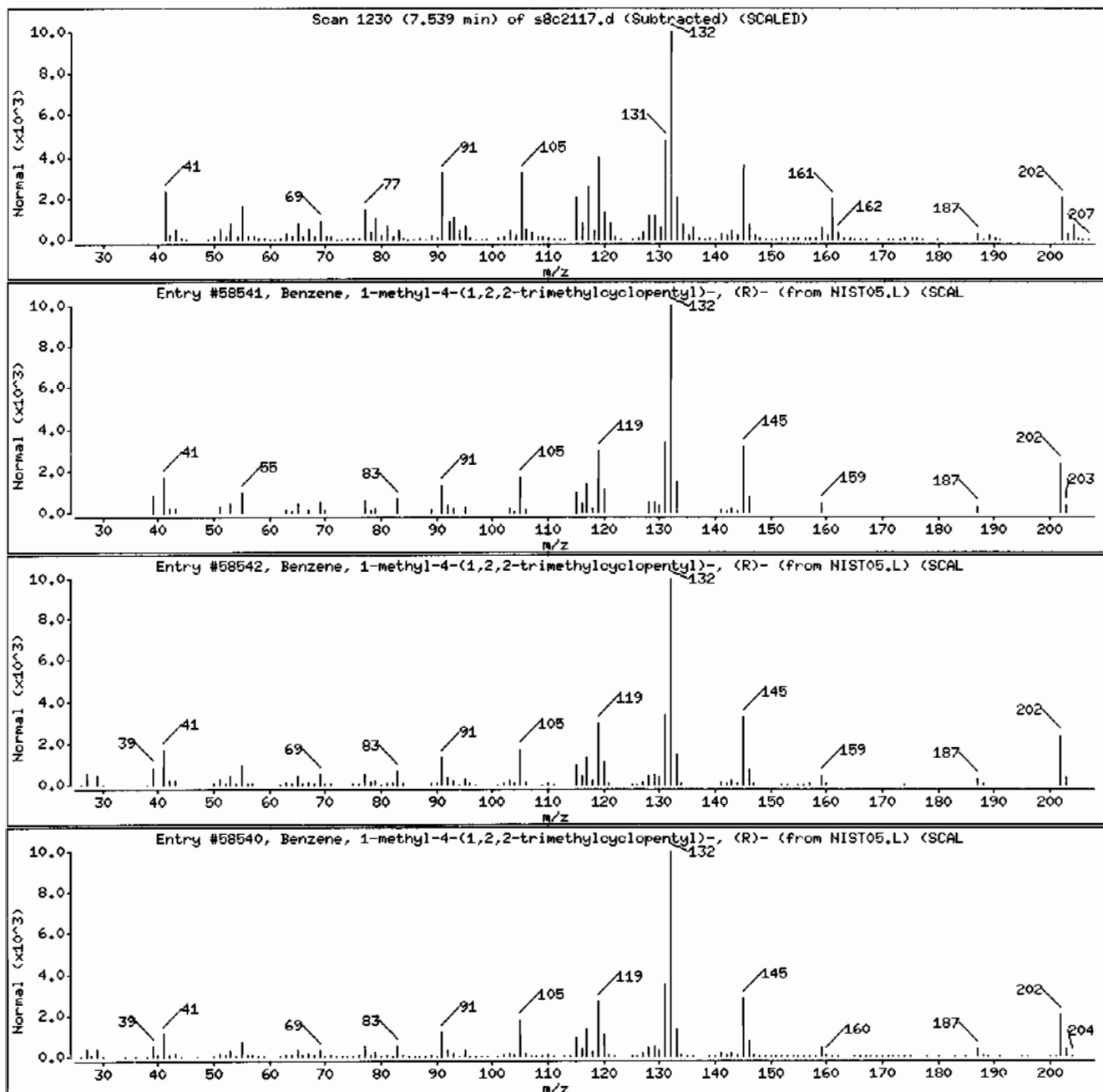
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58541	83	C ₁₅ H ₂₂	202
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58542	76	C ₁₅ H ₂₂	202
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58540	68	C ₁₅ H ₂₂	202



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 12483730071961922111SVH111LANL

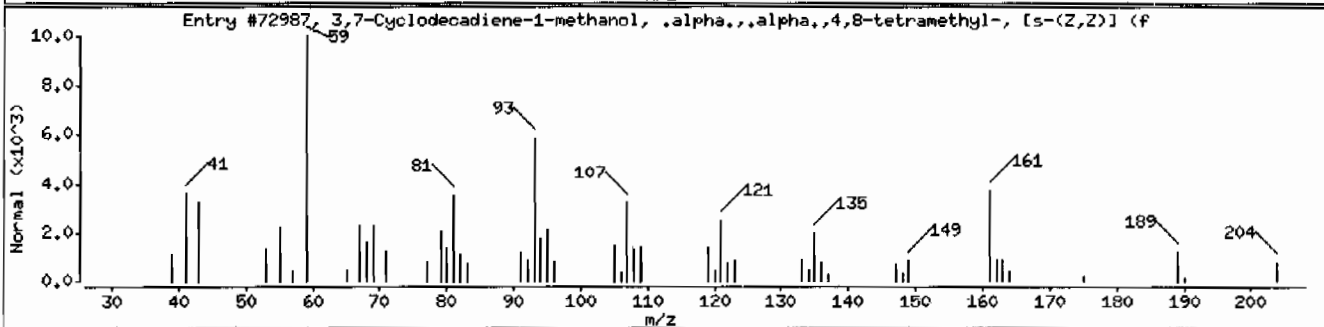
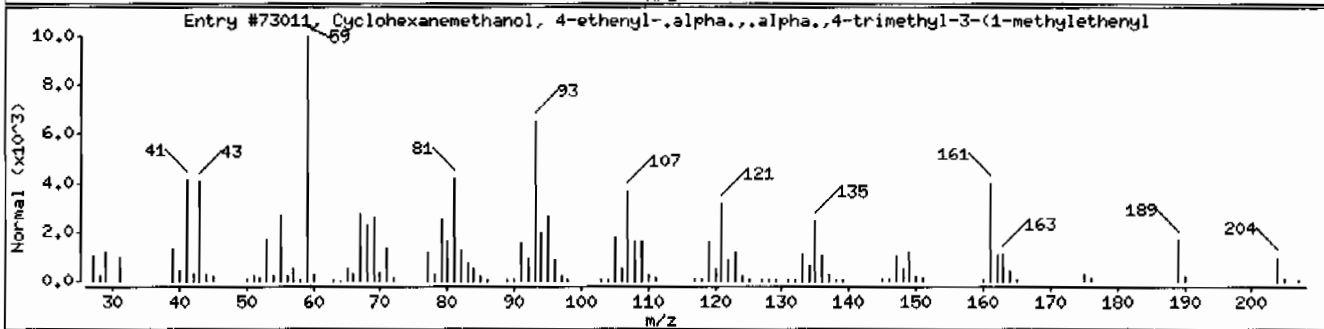
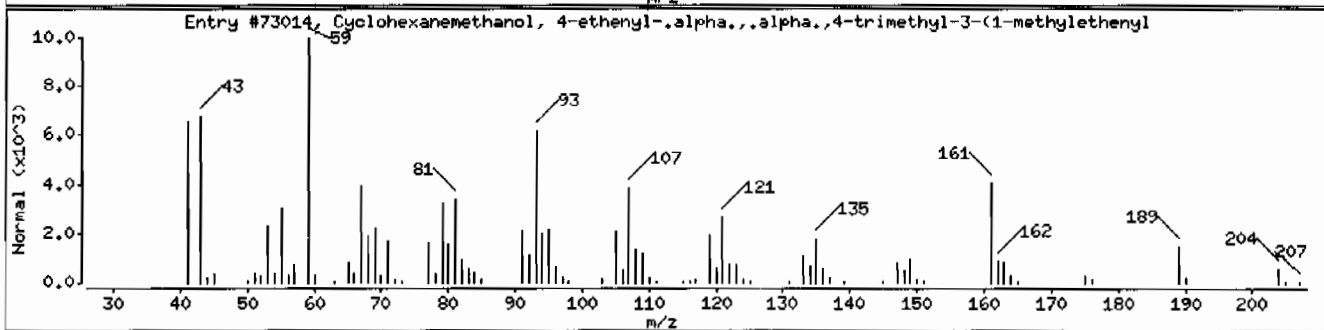
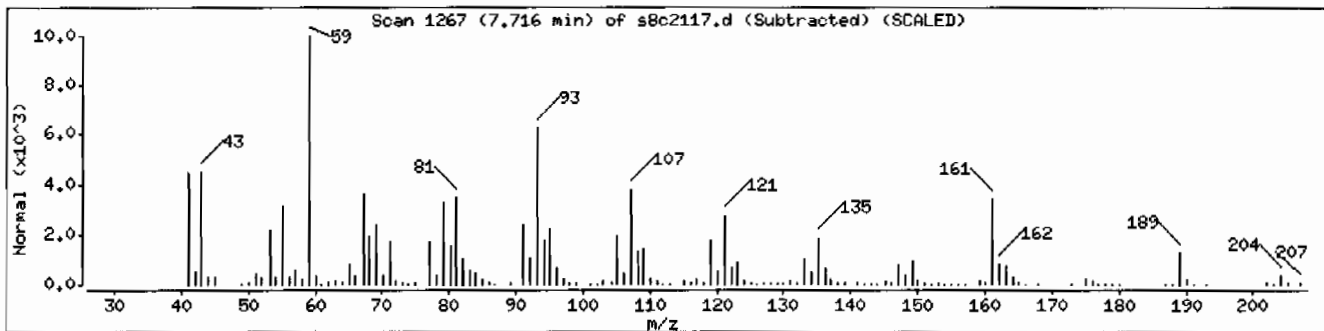
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexanemethanol, 4-ethenyl-,alpha.,.	639-99-6	NIST05.L	73014	94	C15H26O	222
Cyclohexanemethanol, 4-ethenyl-,alpha.,.	639-99-6	NIST05.L	73011	91	C15H26O	222
3,7-Cyclodecadiene-1-methanol, .alpha.,.	21657-90-9	NIST05.L	72987	91	C15H26O	222



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVH11ILANL

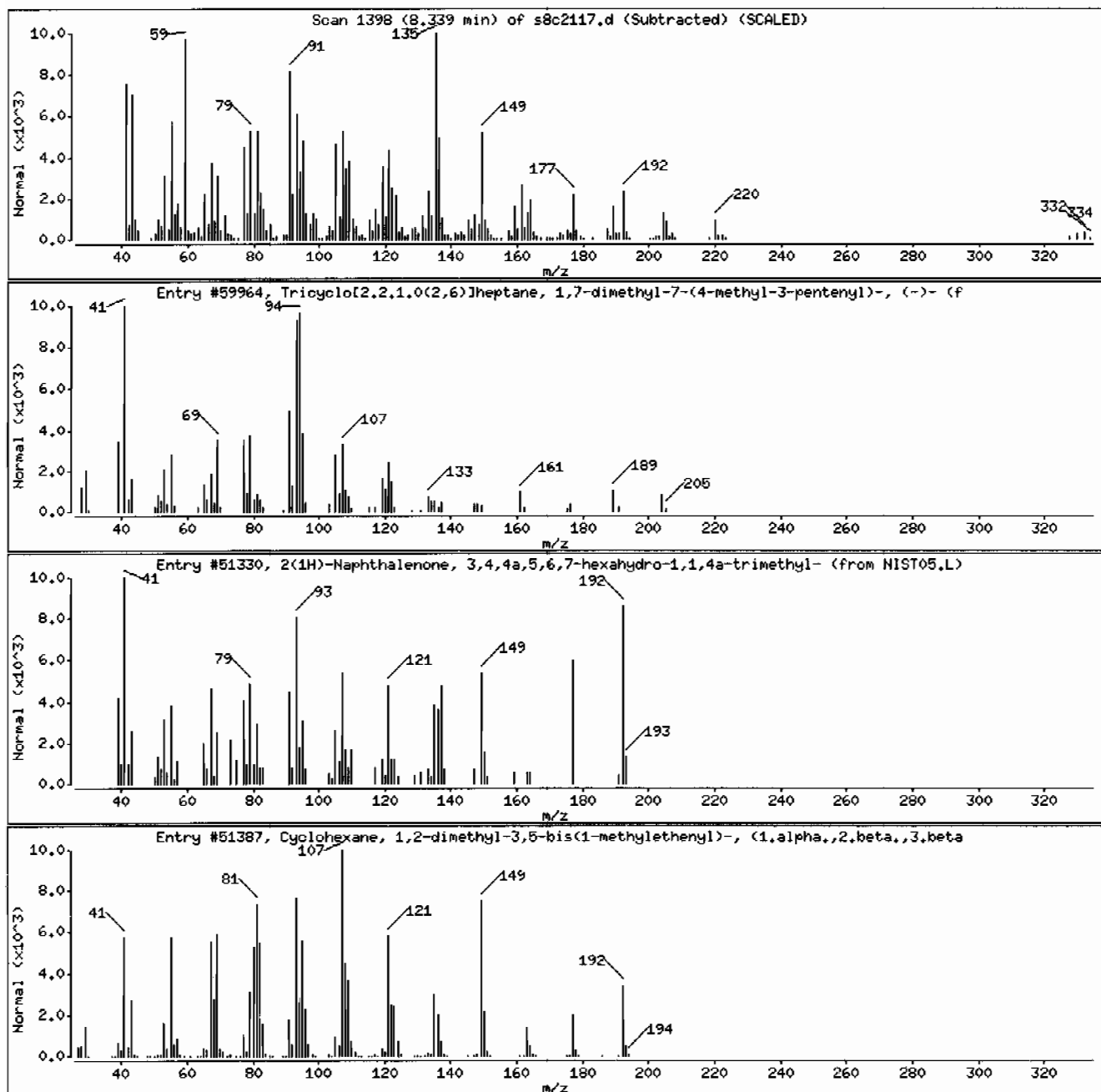
Volume Injected (UL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[2.2.1.0(2,6)]heptane, 1,7-dimet	512-61-8	NIST05.L	59964	44	C15H24	204
2(1H)-Naphthalenone, 3,4,4a,5,6,7-hexahy	4668-61-5	NIST05.L	51330	38	C13H20O	192
Cyclohexane, 1,2-dimethyl-3,5-bis(1-meth	74806-56-7	NIST05.L	51387	30	C14H24	192



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 12483730071961922111SVH111LANL

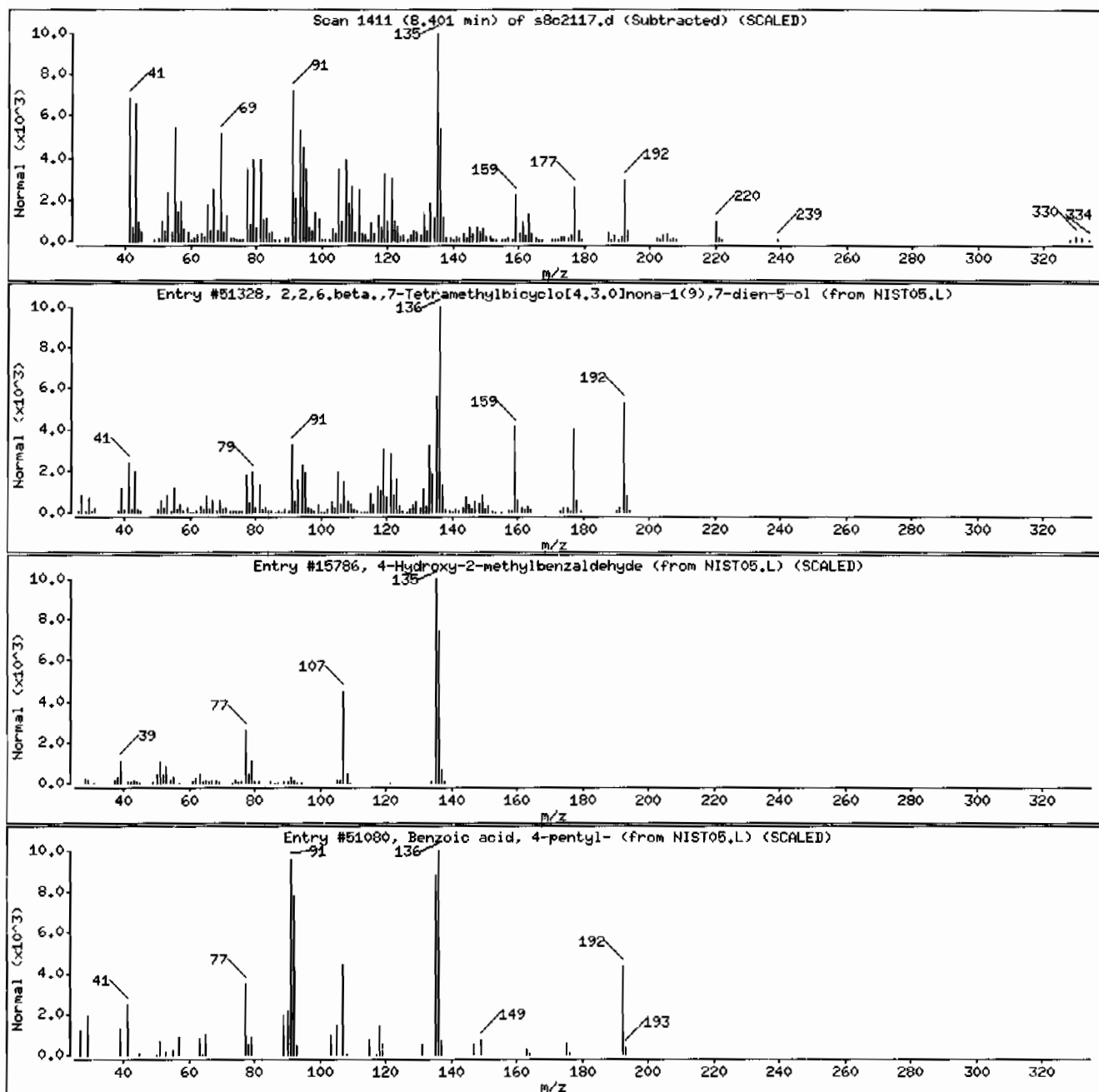
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,2,6,6-tetra,7-Tetramethylbicyclo[4.3.0]n	1000196-17-7	NIST05.L	51328	46	C13H20O	192
4-Hydroxy-2-methylbenzaldehyde	41438-18-0	NIST05.L	15786	43	C8H8O2	136
Benzoic acid, 4-pentyl-	26311-45-5	NIST05.L	51080	38	C12H16O2	192



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVH11LANL

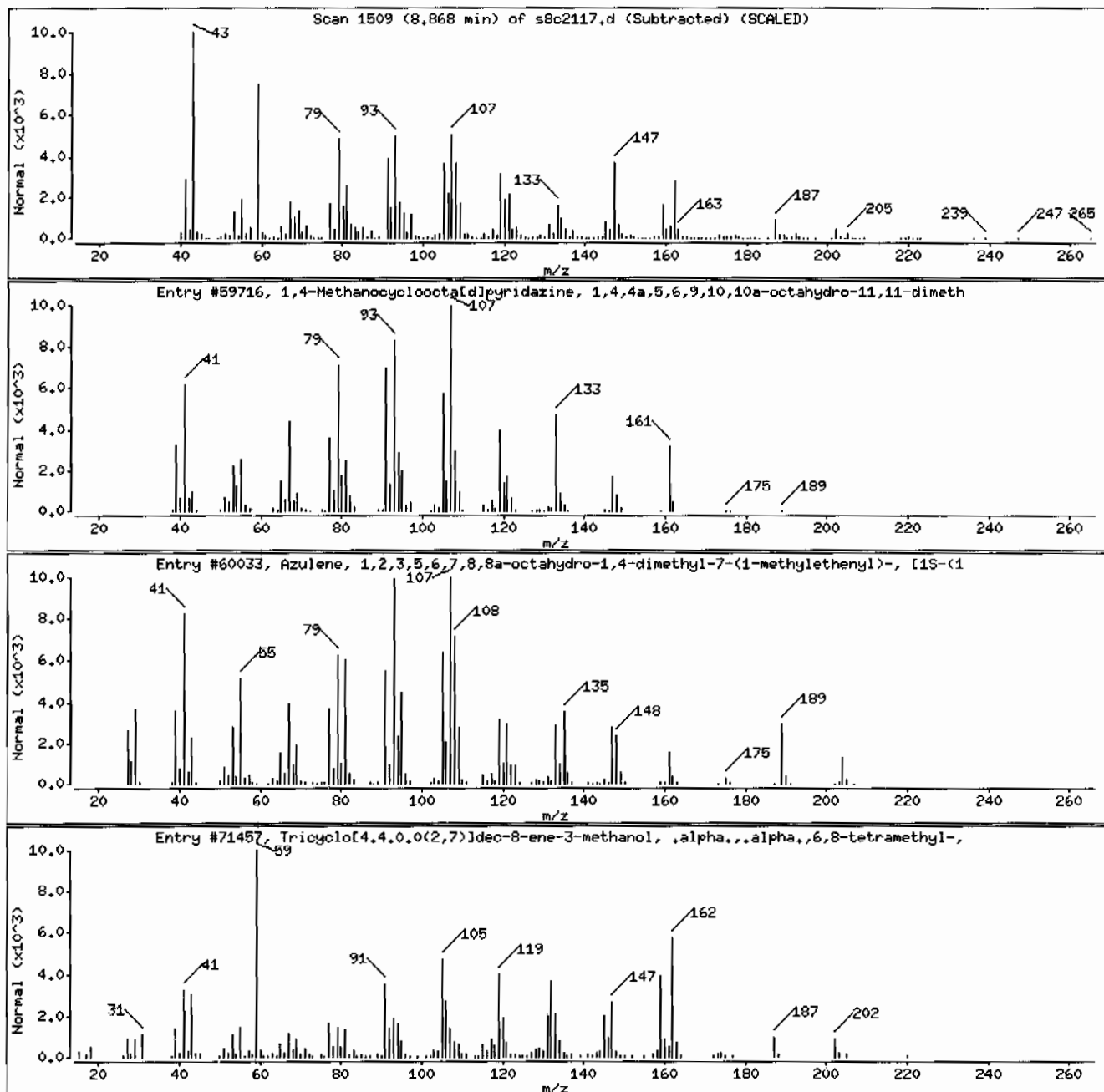
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Methanocycloocta[d]pyridazine, 1,4,4	1000221-85-9	NIST05.L	59716	35	C13H20N2	204
Azulene, 1,2,3,5,6,7,8,8a-octahydro-1,4-	3691-11-0	NIST05.L	60033	25	C15H24	204
Tricyclo[4.4.0.0(2,7)]dec-8-ene-3-methan	41370-56-3	NIST05.L	71457	18	C15H24O	220



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: I248373007196192211ISVH11ILANL

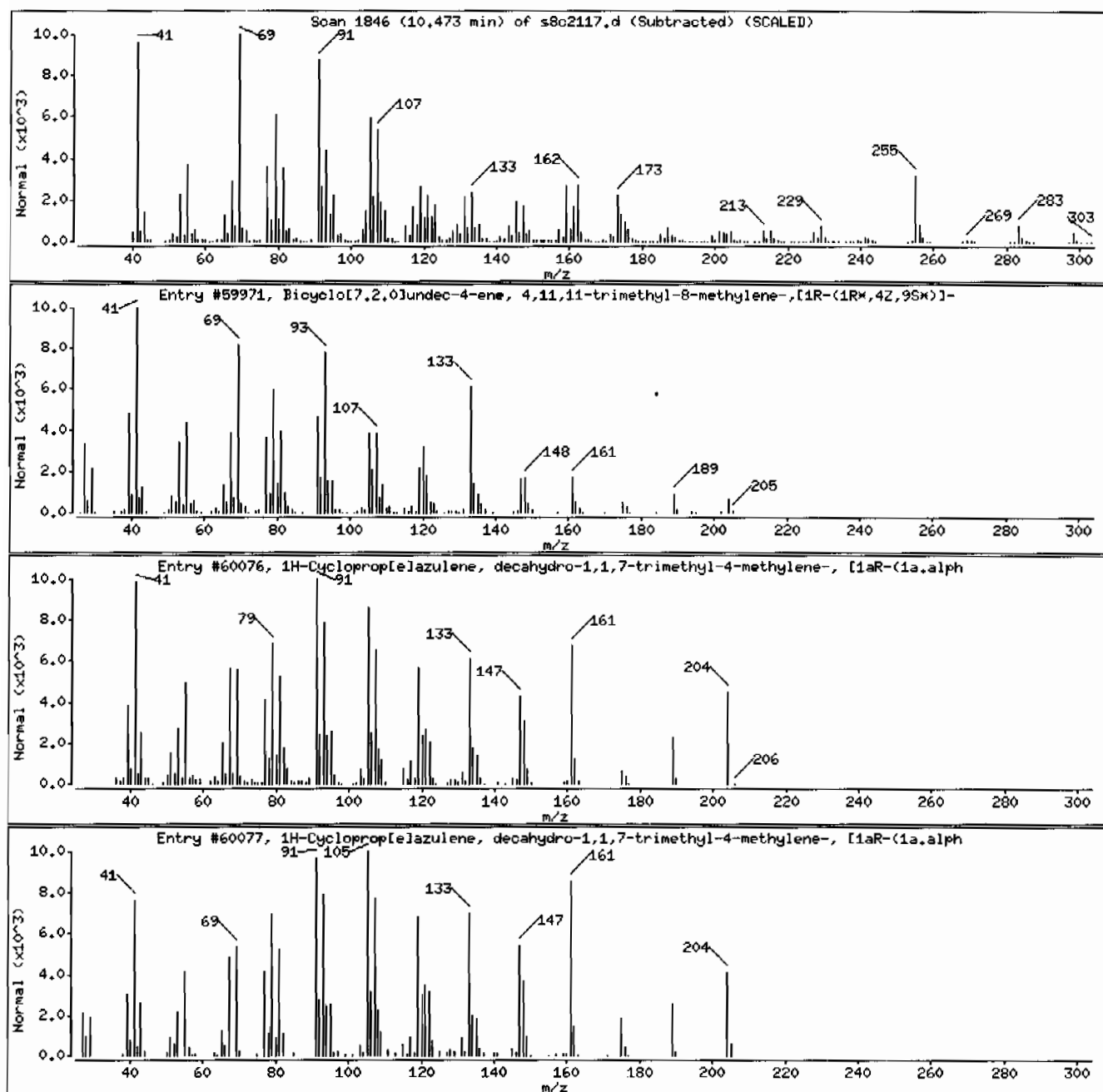
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime	118-65-0	NIST05.L	59971	43	C15H24	204
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60076	40	C15H24	204
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60077	40	C15H24	204



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.1

Sample Info: I248373007196192211SVMI11LANL

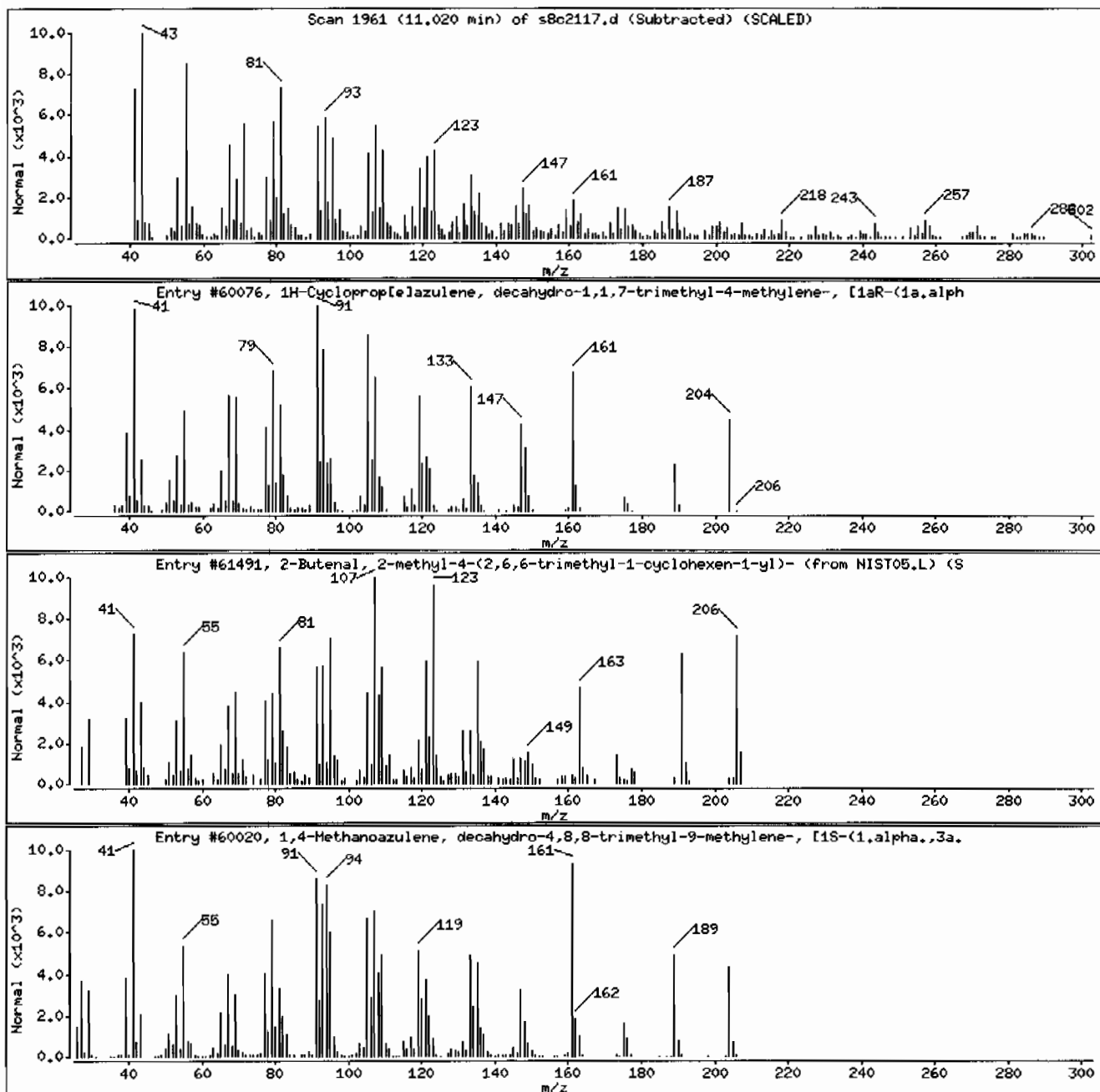
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60076	91	C15H24	204
2-Butenal, 2-methyl-4-(2,6,6-trimethyl-1	3155-71-3	NIST05.L	61491	78	C14H20	206
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	70	C15H24	204



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: HSD8.i

Sample Info: 1248373007196192211SVH111LANL

Volume Injected (uL): 0.5

Operator: nag1

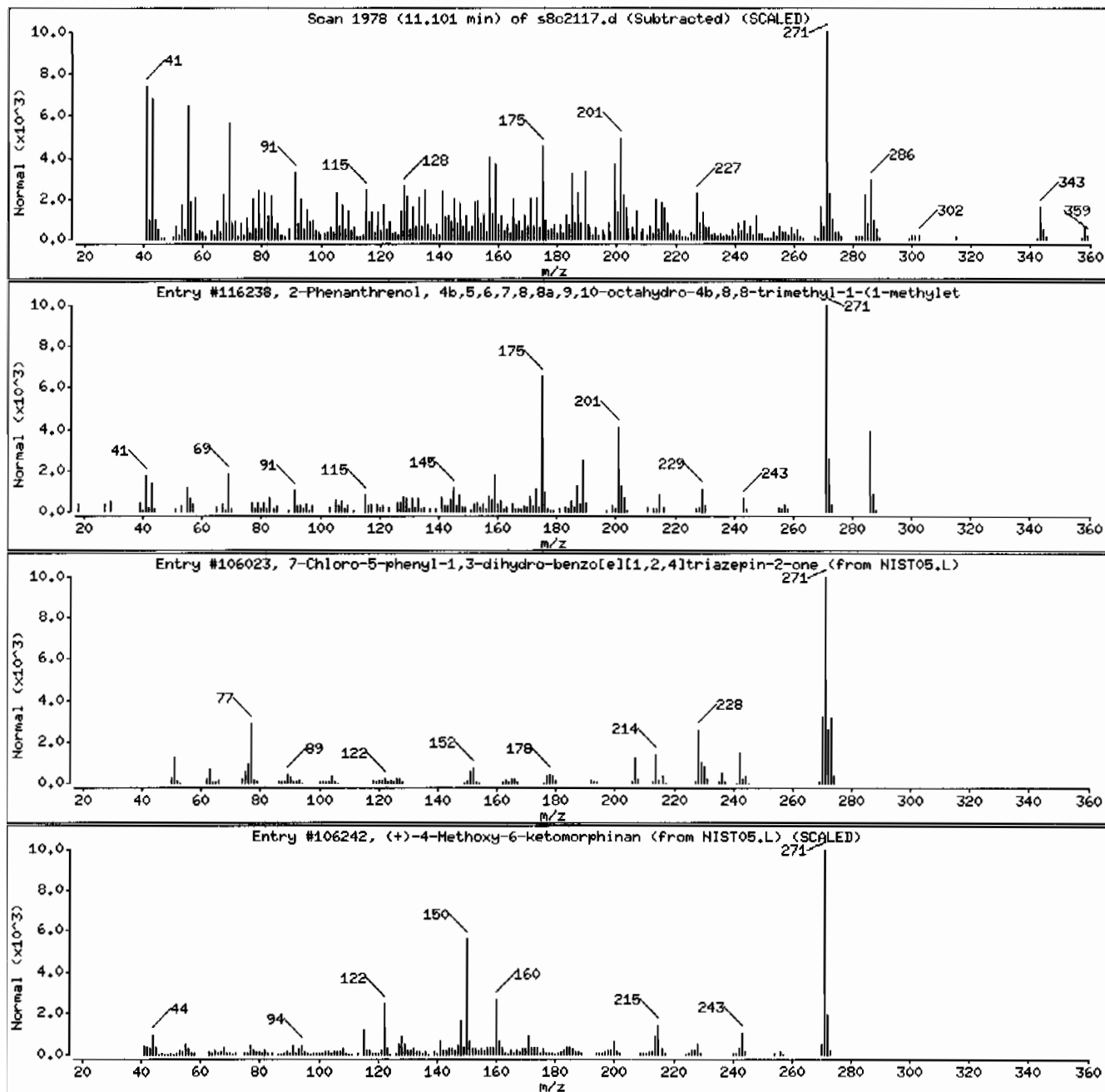
Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	91	C20H30O	286
7-Chloro-5-phenyl-1,3-dihydro-benzofel[1	2855-58-5	NIST05.L	106023	51	C14H10ClN3O	271
(+)-4-Methoxy-6-ketomorphinan	1000129-08-5	NIST05.L	106242	51	C17H21NO2	271



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211/SVMI1/LANL

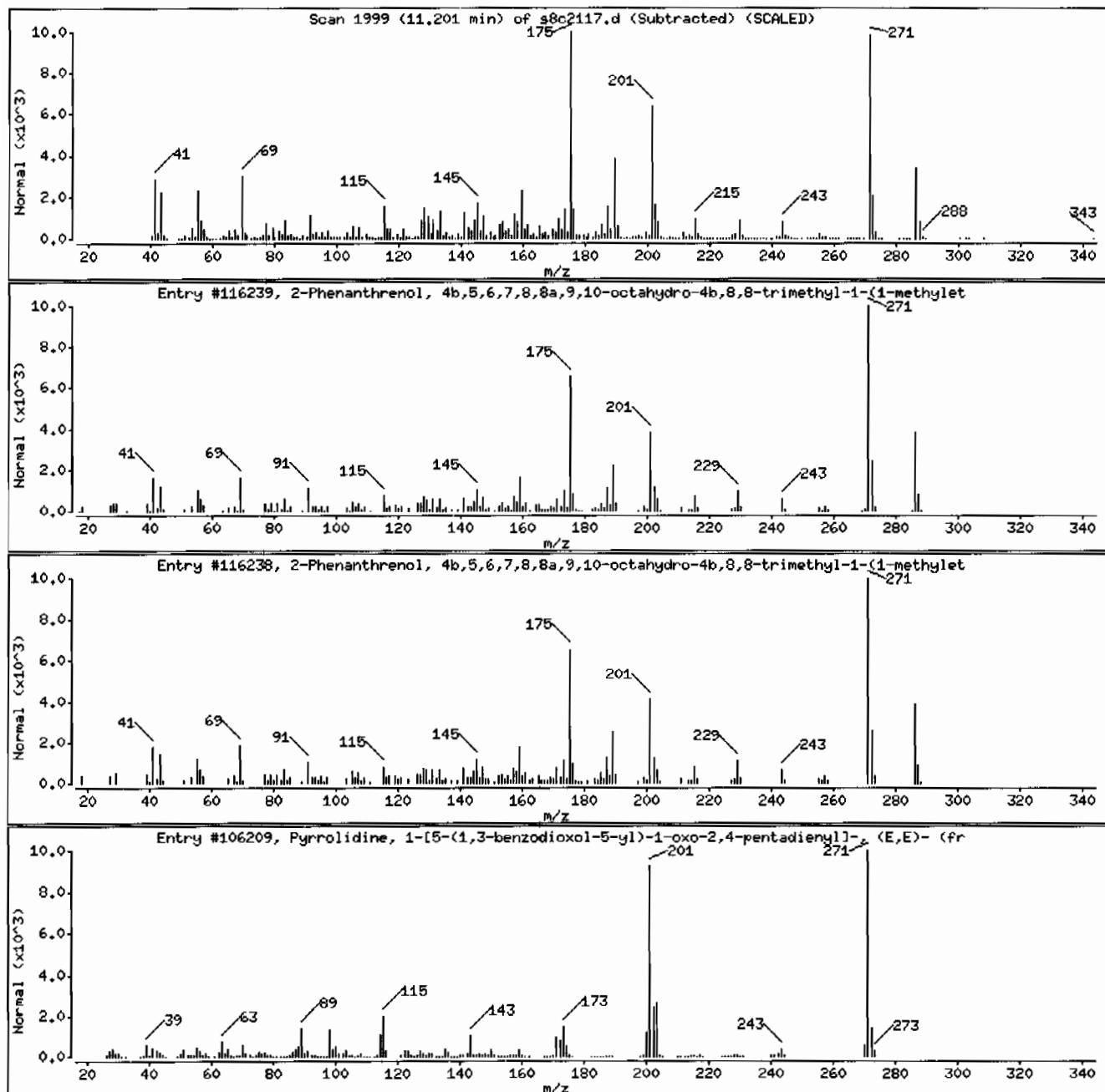
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	97	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	93	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)]	25924-78-1	NIST05.L	106209	41	C16H17NO3	271



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: HSD8.i

Sample Info: 1248373007196192211SVMI11LANL

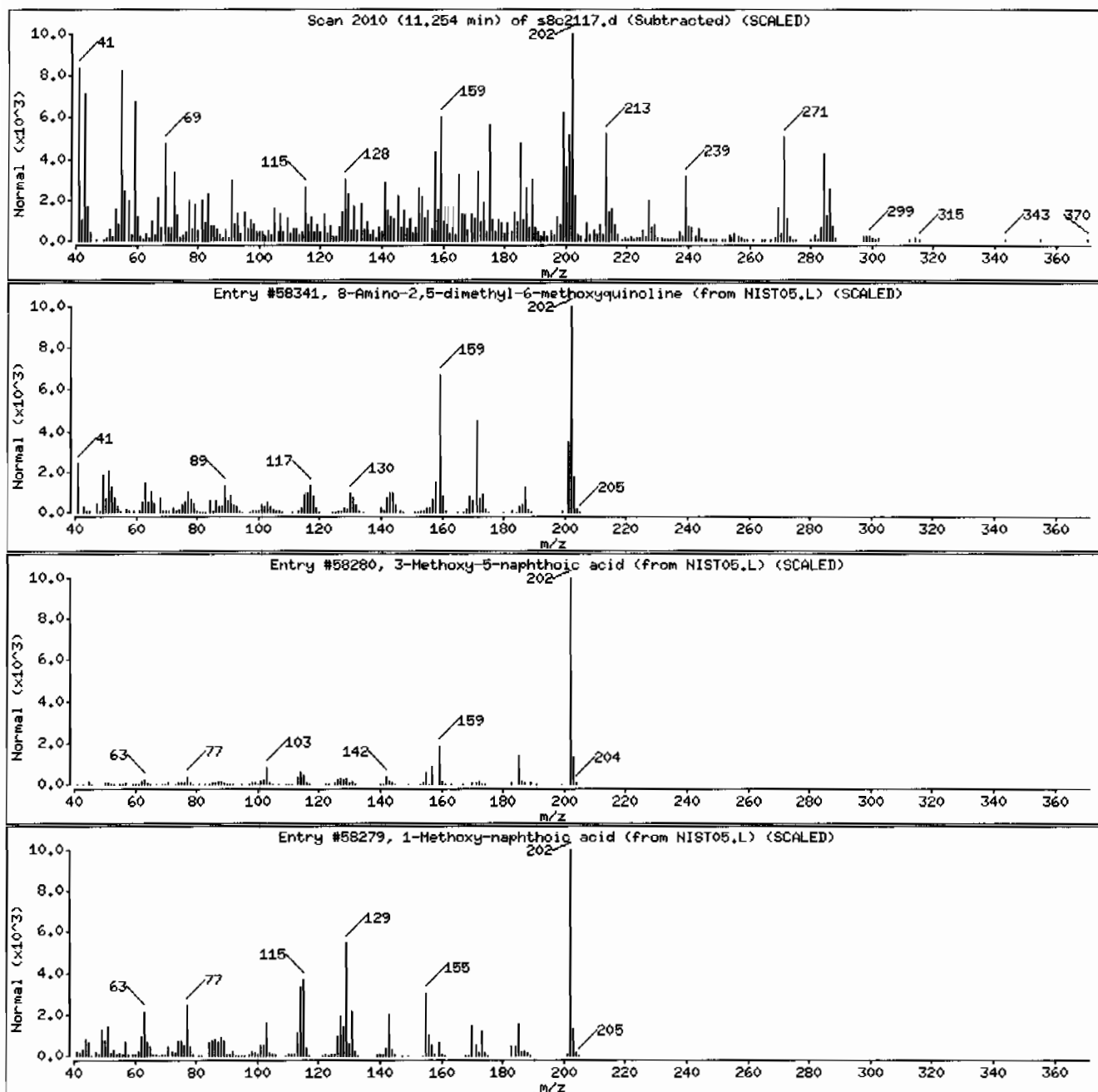
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
8-Amino-2,5-dimethyl-6-methoxyquinoline	1000214-69-9	NIST05.L	58341	35	C ₁₂ H ₁₄ N ₂ O	202
3-Methoxy-5-naphthoic acid	7498-58-0	NIST05.L	58280	25	C ₁₂ H ₁₀ O ₃	202
1-Methoxy-naphthoic acid	883-21-6	NIST05.L	58279	25	C ₁₂ H ₁₀ O ₃	202



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: HSD8.i

Sample Info: 1248373007196192211SVMI1ILANL

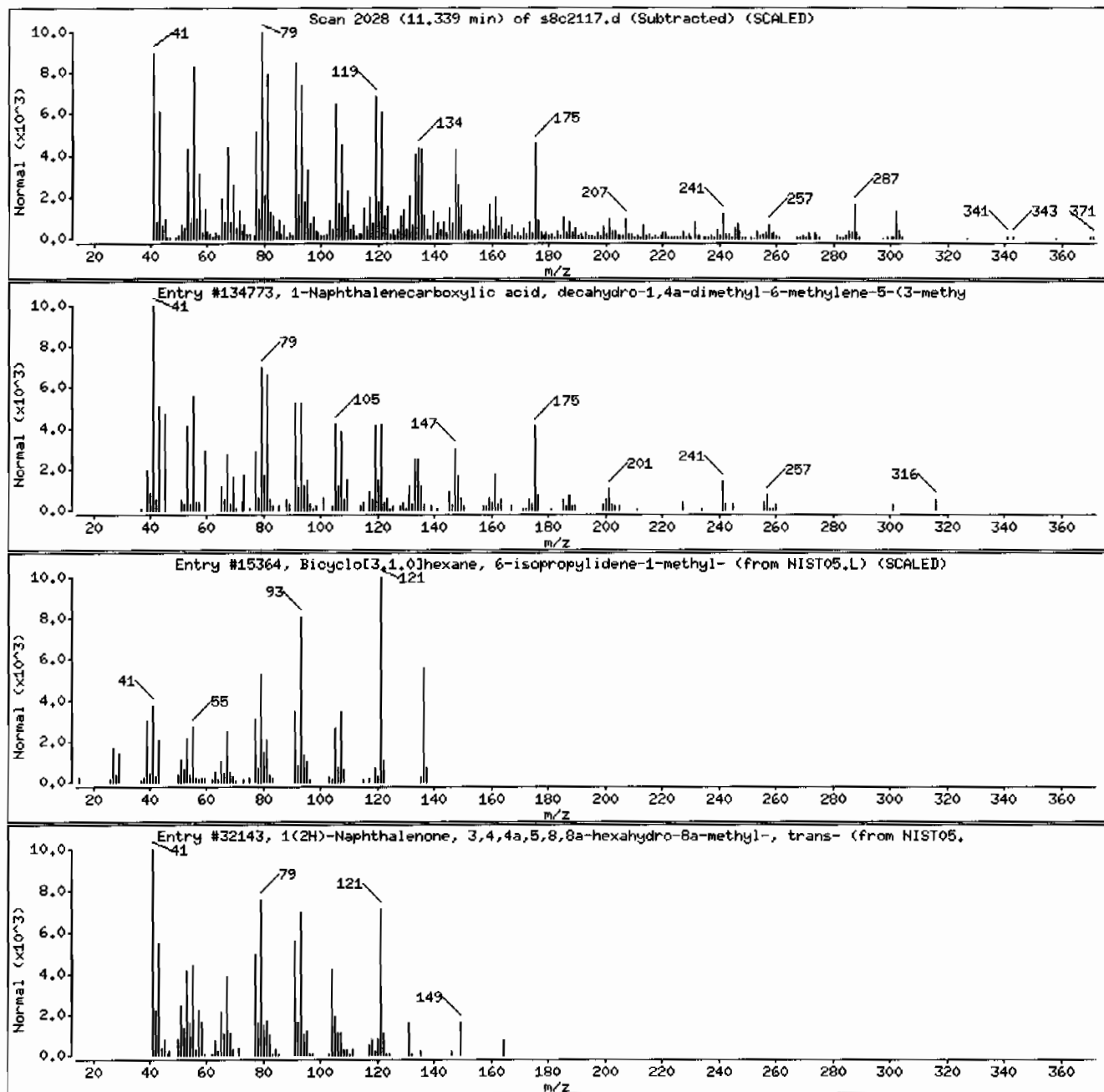
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Naphthalenecarboxylic acid, decahydro-	10178-35-5	NIST05.L	134773	76	C21H32O2	316
Bicyclo[3.1.0]hexane, 6-isopropylidene-1	24524-57-0	NIST05.L	15364	42	C10H16	136
1(2H)-Naphthalenone, 3,4,4a,5,8,8a-hexah	21841-29-2	NIST05.L	32143	42	C11H16O	164



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Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVH111LANL

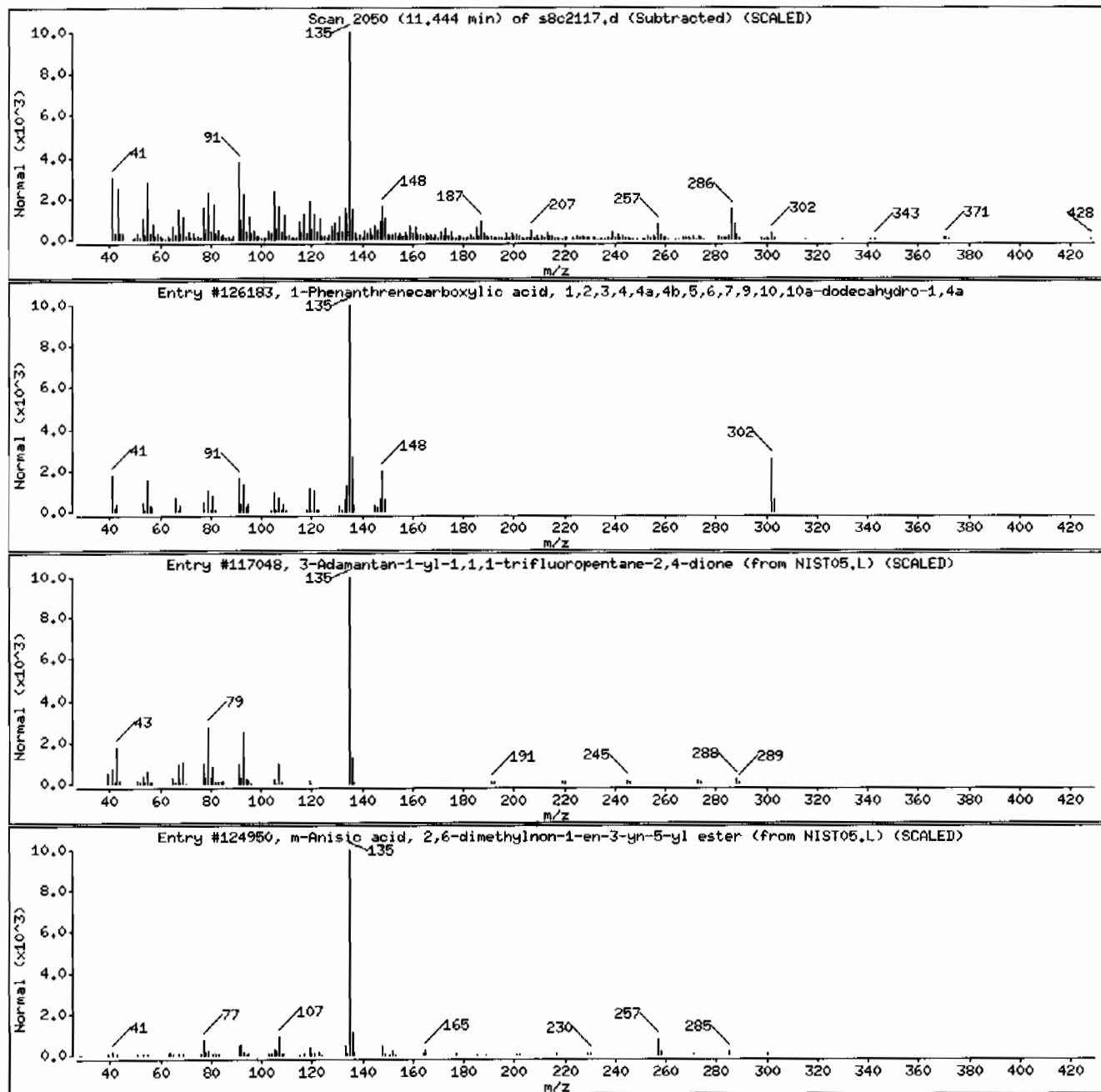
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	471-77-2	NIST05.L	126183	83	C20H30O2	302
3-Adamantan-1-yl-1,1,1-trifluoropentane-	1000311-44-8	NIST05.L	117048	70	C15H19F3O2	288
m-Anisic acid, 2,6-dimethylnon-1-en-3-yn	1000292-59-7	NIST05.L	124950	60	C19H24O3	300



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVH111LANL

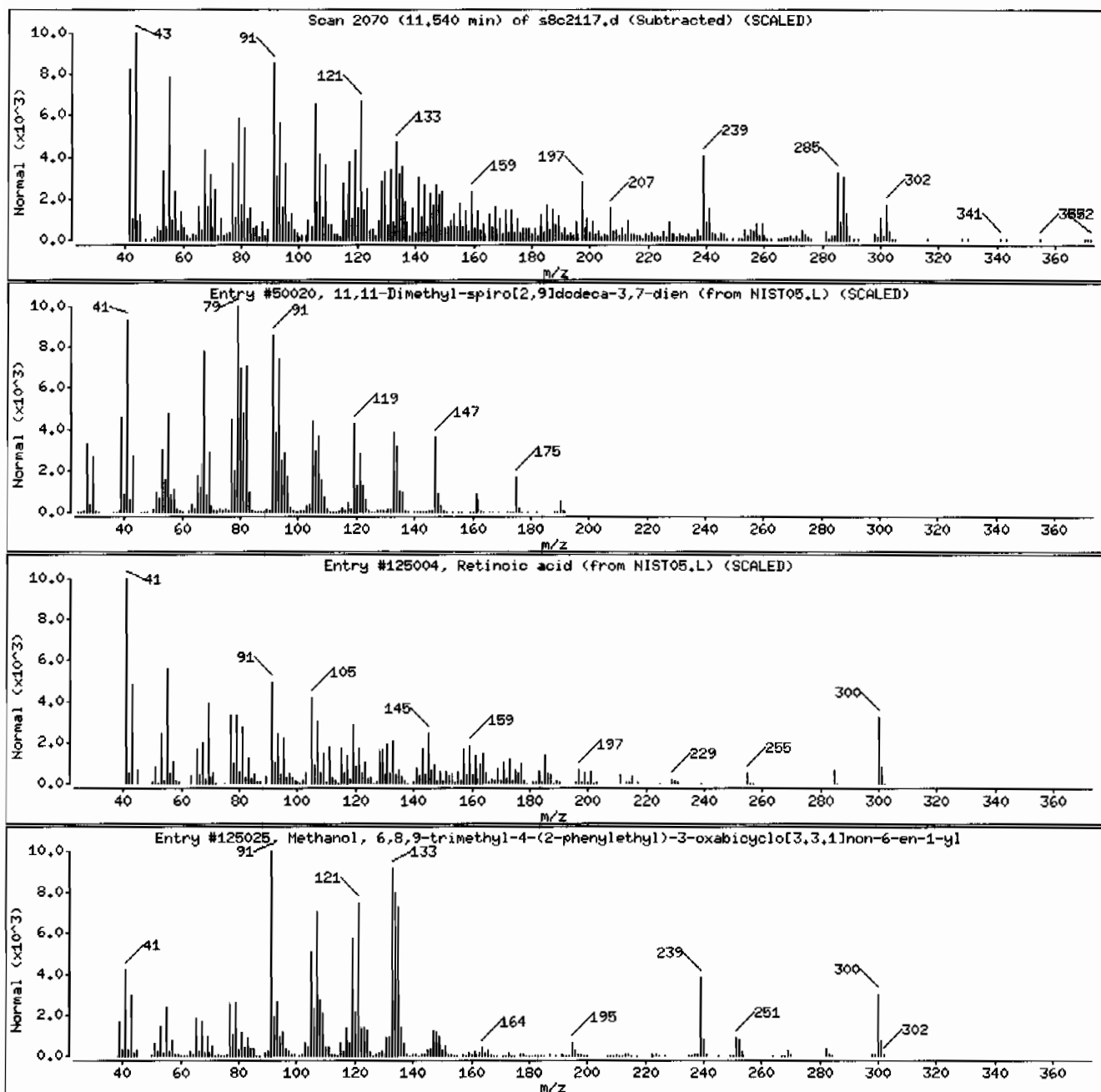
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
11,11-Dimethyl-spiro[2,9]dodeca-3,7-dien	1000062-28-4	NIST05.L	50020	45	C14H22	190
Retinoic acid	302-79-4	NIST05.L	125004	38	C20H28O2	300
Methanol, 6,8,9-trimethyl-4-(2-phenyleth	1000277-01-1	NIST05.L	125025	30	C20H28O2	300



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 12483730071961922111SVH111LANL

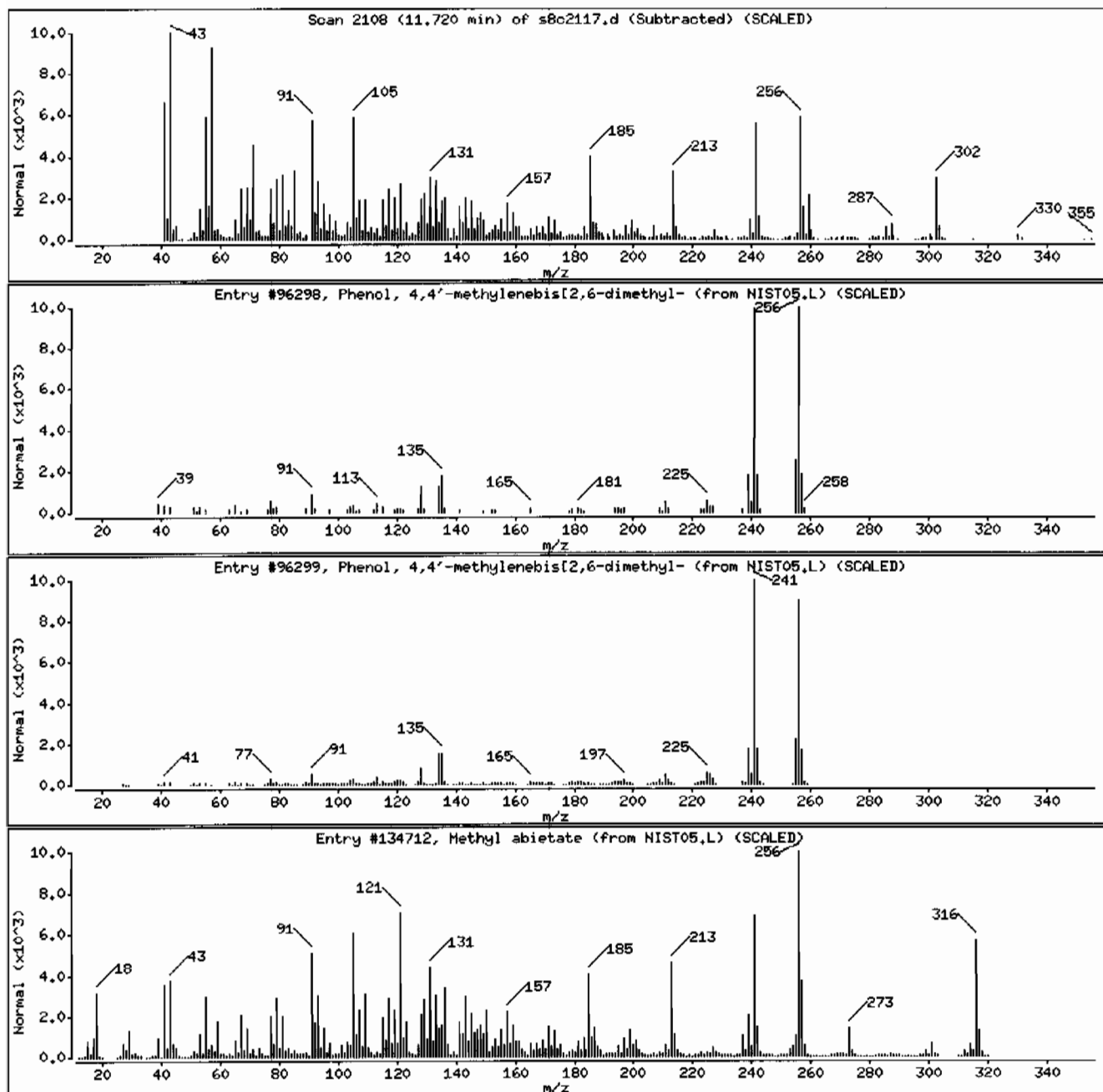
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenol, 4,4'-methylenebis[2,6-dimethyl-	5384-21-4	NIST05.L	96298	50	C17H20O2	256
Phenol, 4,4'-methylenebis[2,6-dimethyl-	5384-21-4	NIST05.L	96299	48	C17H20O2	256
Methyl abietate	127-25-3	NIST05.L	134712	38	C21H32O2	316



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVH111LANL

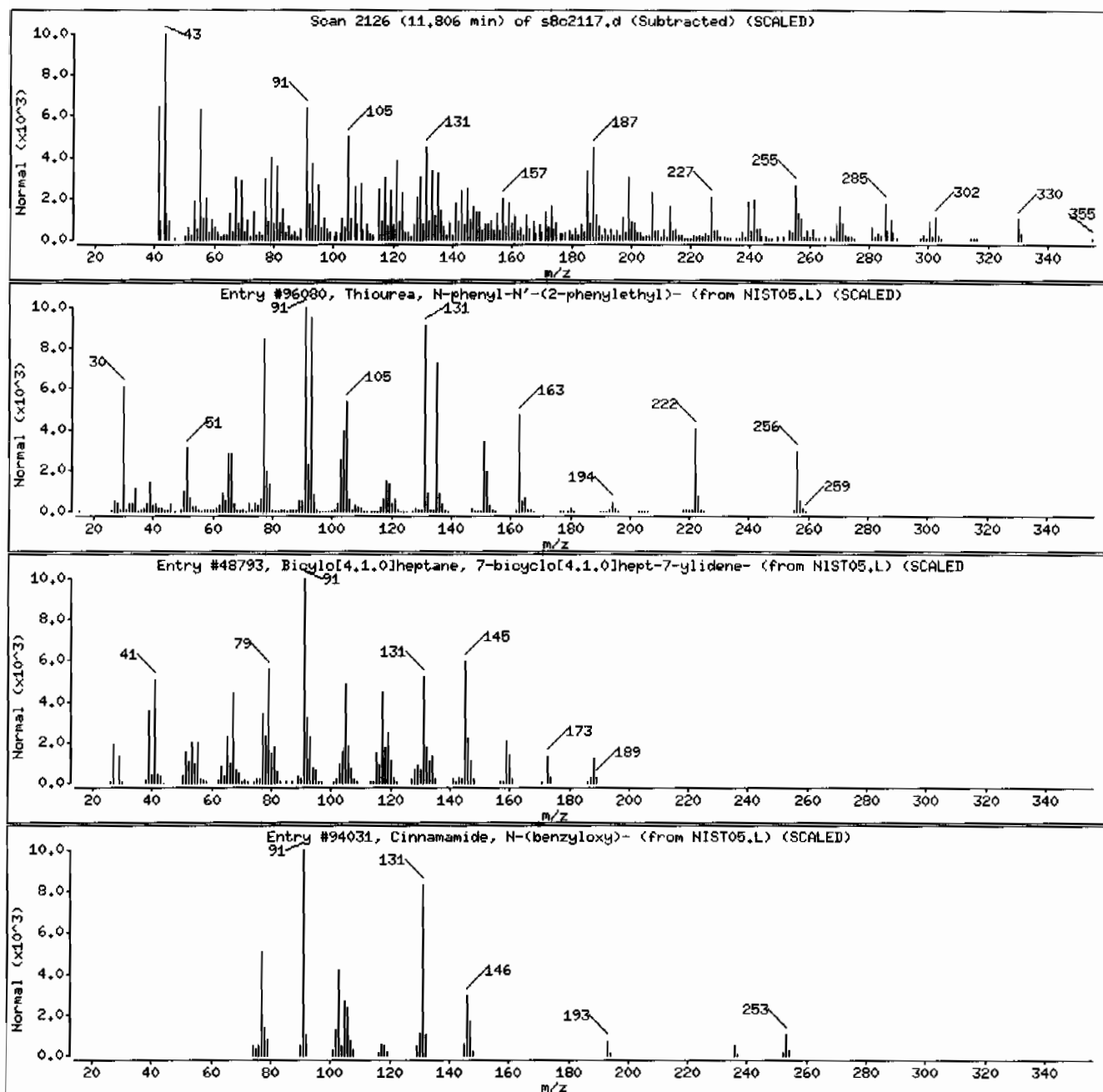
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thiourea, N-phenyl-N'-(2-phenylethyl)-	15093-42-2	NIST05.L	96080	25	C15H16N2S	256
Bicyclo[4.1.0]heptane, 7-bicyclo[4.1.0]he	1000152-39-9	NIST05.L	48793	15	C14H20	188
Cinnamamide, N-(benzyloxy)-	22472-17-9	NIST05.L	94031	10	C16H15NO2	253



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVH111LANL

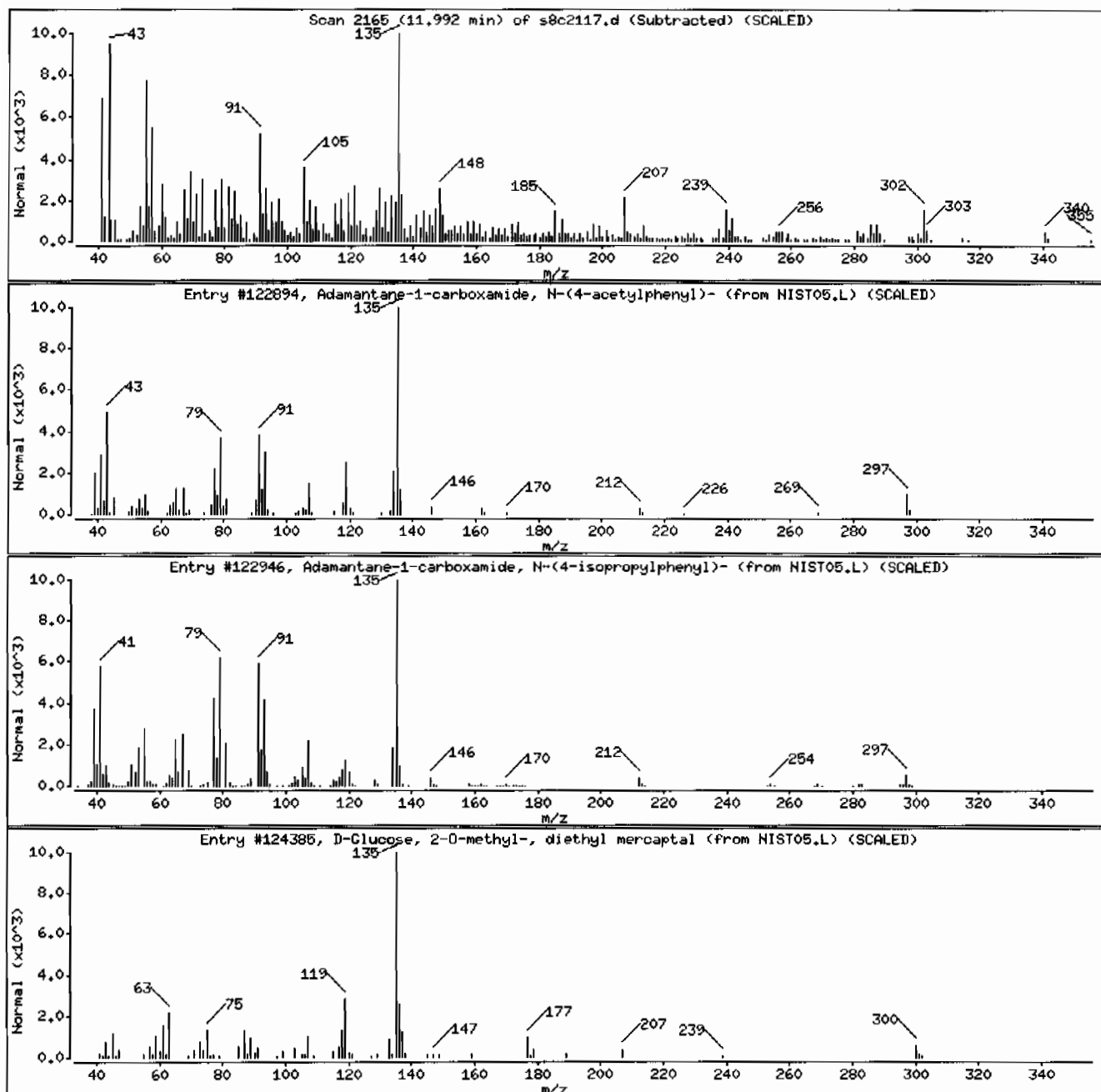
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Adamantane-1-carboxamide, N-(4-acetylphenyl)	307524-60-3	NIST05.L	122894	50	C ₁₉ H ₂₃ N ₂ O ₂	297
Adamantane-1-carboxamide, N-(4-isopropylphenyl)	306743-34-0	NIST05.L	122946	46	C ₂₀ H ₂₇ N ₂ O	297
D-Glucose, 2-O-methyl-, diethyl mercapta	3767-34-8	NIST05.L	124385	43	C ₁₁ H ₂₄ O ₅ S ₂	300



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVMI11LANL

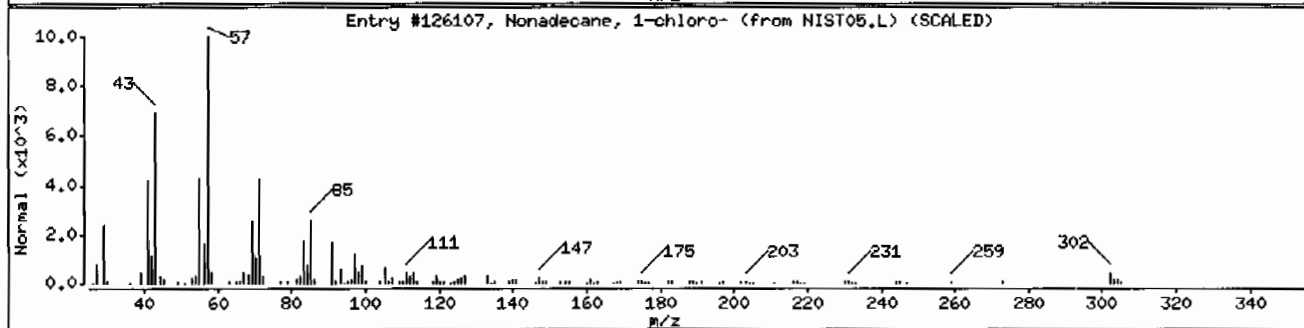
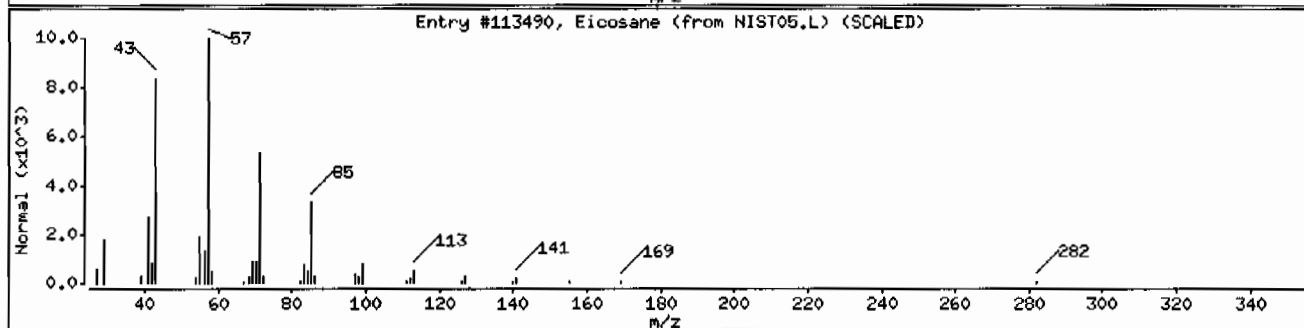
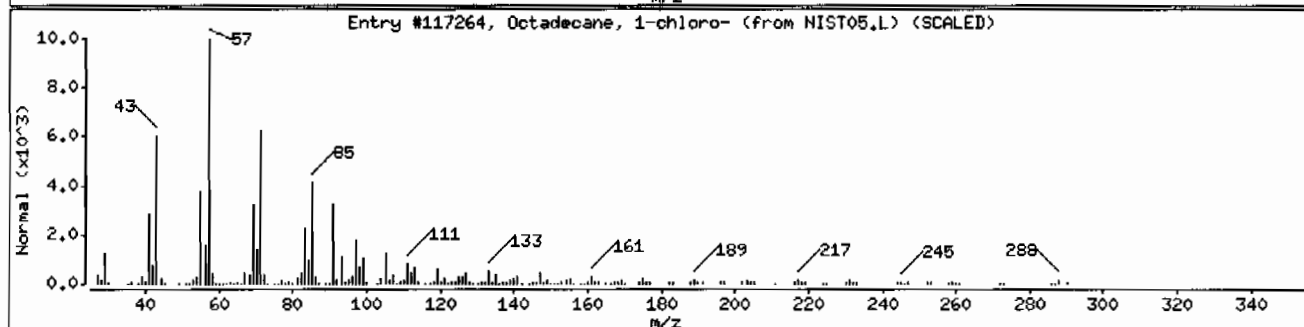
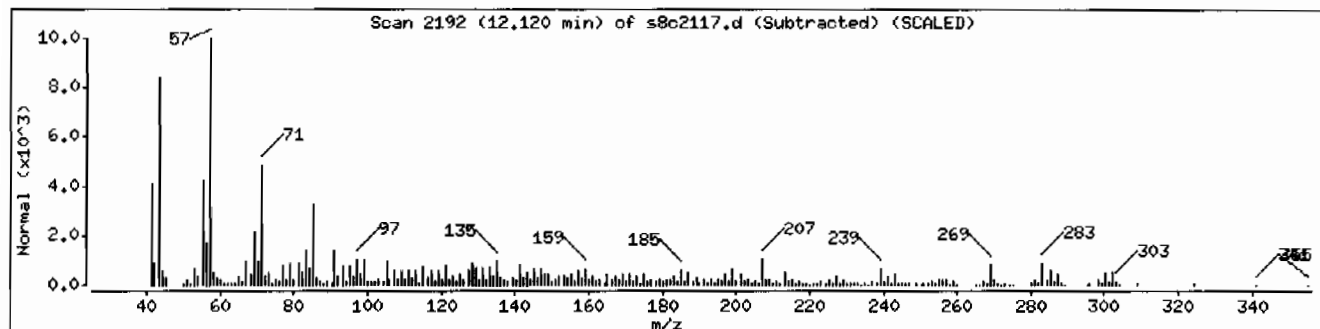
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	96	C18H37Cl	288
Eicosane	112-95-8	NIST05.L	113490	96	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	93	C19H39Cl	302



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVMI1ILANL

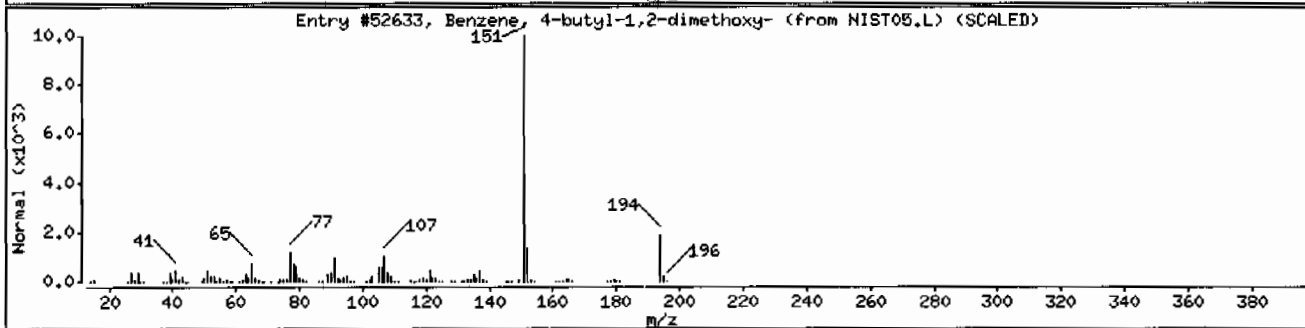
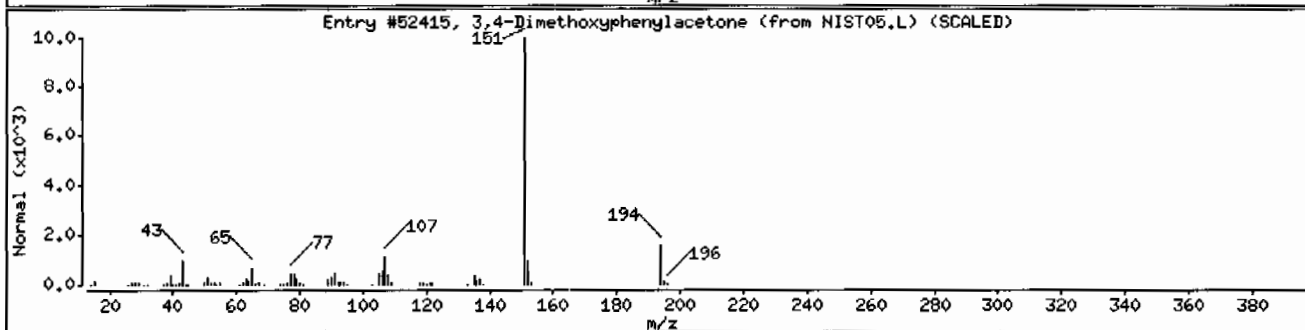
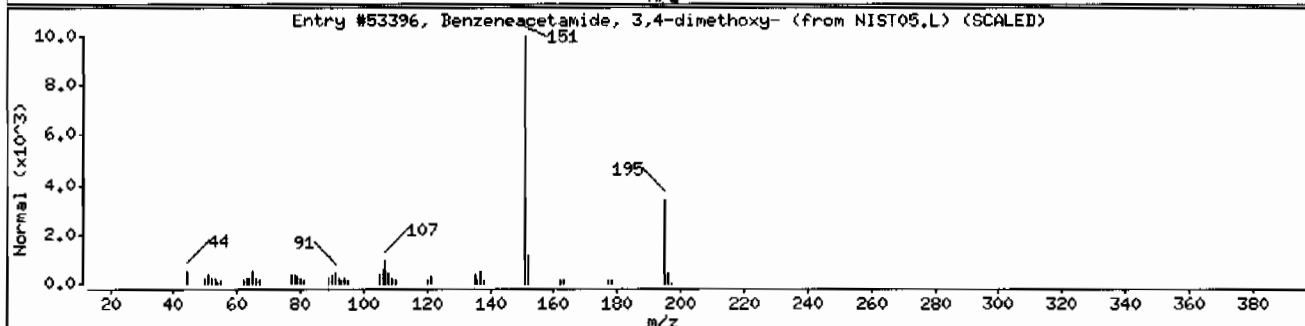
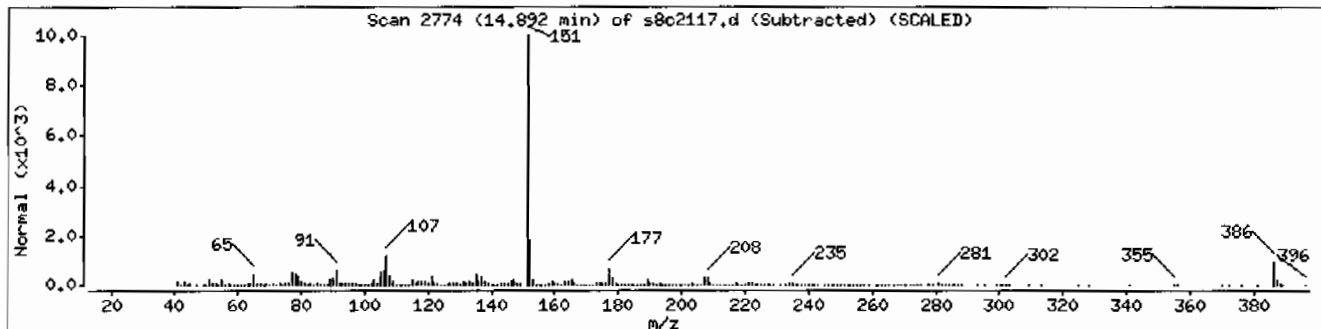
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzeneacetamide, 3,4-dimethoxy-	5663-56-9	NIST05.L	53396	72	C10H13NO3	195
3,4-Dimethoxyphenylacetone	776-99-8	NIST05.L	52415	72	C11H14O3	194
Benzene, 4-butyl-1,2-dimethoxy-	59056-76-7	NIST05.L	52633	72	C12H18O2	194



Date : 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVH111LANL

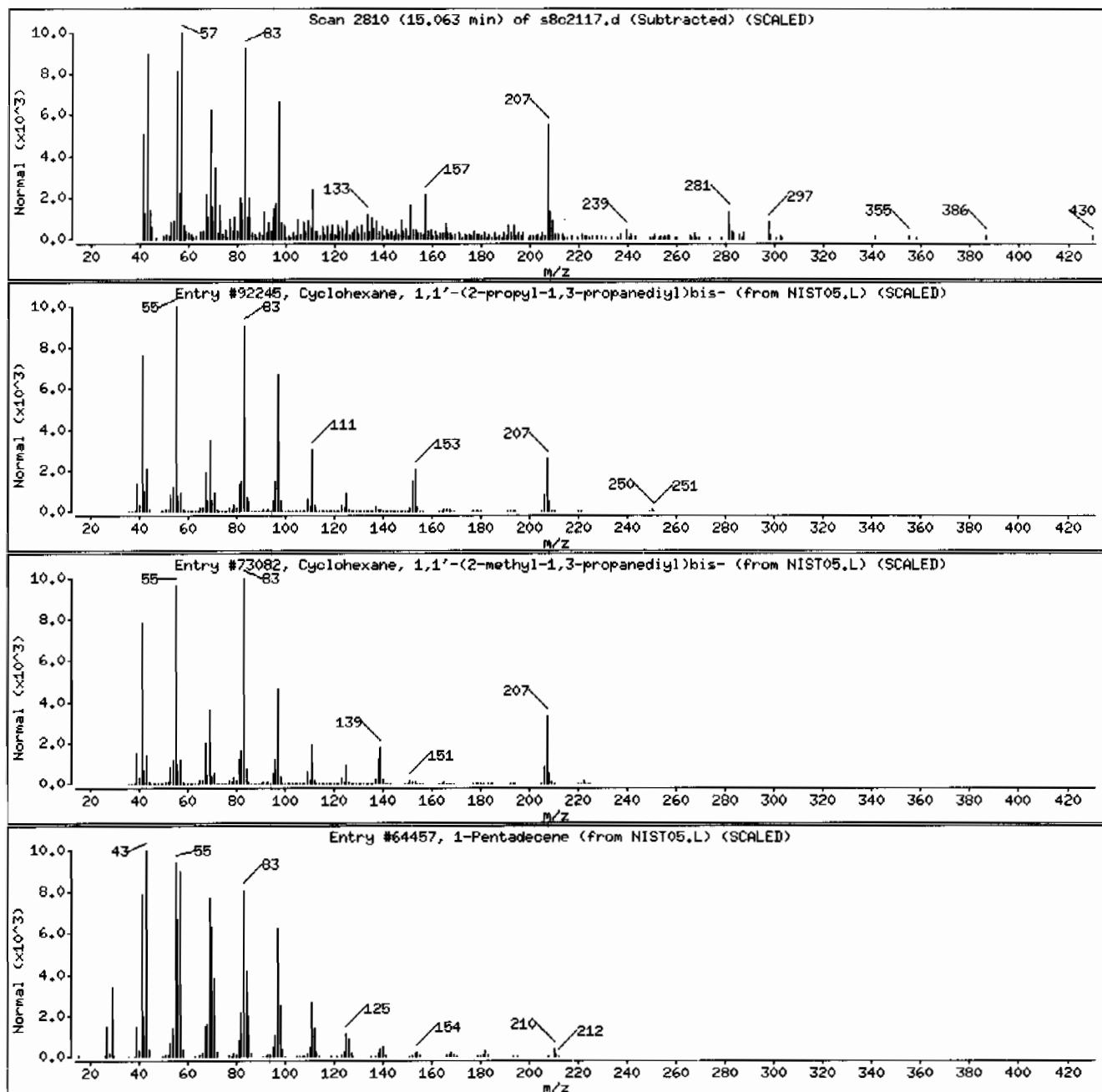
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1,1'-(2-propyl-1,3-propanediol)bis-	55030-21-2	NIST05.L	92245	60	C18H34	250
Cyclohexane, 1,1'-(2-methyl-1,3-propanediol)bis-	2883-08-1	NIST05.L	73082	58	C16H30	222
1-Pentadecene	13360-61-7	NIST05.L	64457	52	C15H30	210



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSD8.i

Sample Info: 1248373007196192211SVH111LANL

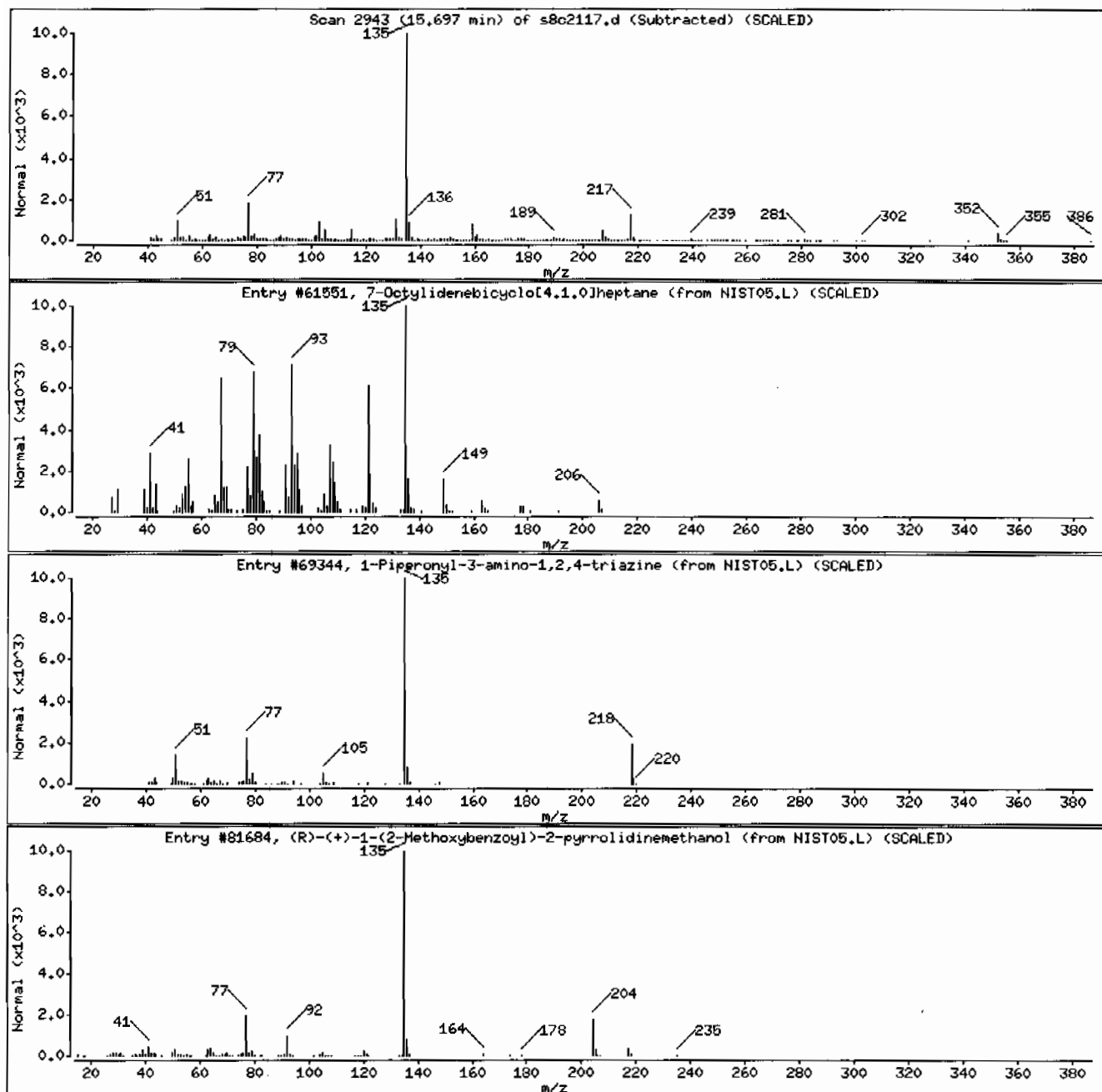
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Octylidenebicyclo[4.1.0]heptane	82253-11-0	NIST05.L	61551	60	C15H26	206
1-Piperonyl-3-amino-1,2,4-triazine	31127-32-9	NIST05.L	69344	60	C10H10N4O2	218
(R)-(+)-1-(2-Methoxybenzoyl)-2-pyrrolidin	1000117-97-4	NIST05.L	81684	52	C13H17NO3	235



Date: 21-MAR-2010 15:56

Client ID: RE36-10-7497

Instrument: MSDB.i

Sample Info: 1248373007196192211SVMI11LANL

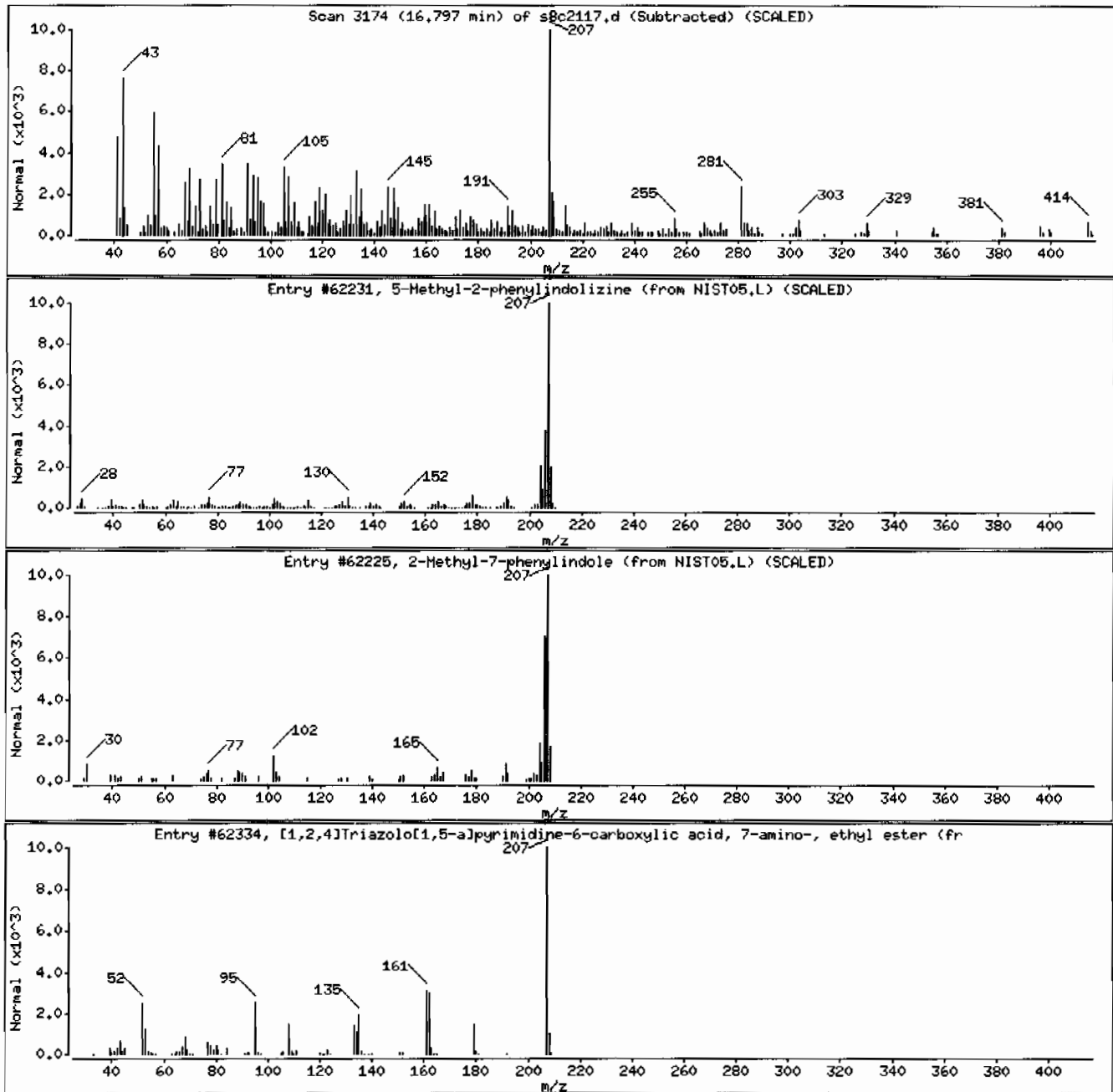
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	38	C15H13N	207
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	38	C15H13N	207
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo	1000316-75-8	NIST05.L	62334	38	C8H9N5O2	207



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

SDG Number: 10-2154
Lab Sample ID: 248373009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	429	ug/kg	85.9	429
108-95-2	Phenol	U	429	ug/kg	85.9	429
95-57-8	2-Chlorophenol	U	429	ug/kg	85.9	429
106-46-7	1,4-Dichlorobenzene	U	429	ug/kg	85.9	429
621-64-7	N-Nitrosodipropylamine	U	429	ug/kg	85.9	429
59-50-7	4-Chloro-3-methylphenol	U	429	ug/kg	85.9	429
83-32-9	Acenaphthene	U	42.9	ug/kg	14.2	42.9
121-14-2	2,4-Dinitrotoluene	U	429	ug/kg	42.9	429
100-02-7	4-Nitrophenol	U	429	ug/kg	142	429
87-86-5	Pentachlorophenol	U	429	ug/kg	107	429
129-00-0	Pyrene	U	42.9	ug/kg	12.9	42.9
110-86-1	Pyridine	U	429	ug/kg	85.9	429
62-53-3	Aniline	U	429	ug/kg	129	429
111-44-4	bis(2-Chloroethyl) ether	U	429	ug/kg	85.9	429
541-73-1	1,3-Dichlorobenzene	U	429	ug/kg	85.9	429
100-51-6	Benzyl alcohol	U	429	ug/kg	129	429
95-50-1	1,2-Dichlorobenzene	U	429	ug/kg	85.9	429
108-60-1	bis(2-Chloroisopropyl)ether	U	429	ug/kg	85.9	429
95-48-7	o-Cresol	U	429	ug/kg	85.9	429
65794-96-9	m,p-Cresols	U	429	ug/kg	129	429
67-72-1	Hexachloroethane	U	429	ug/kg	85.9	429
98-95-3	Nitrobenzene	U	429	ug/kg	85.9	429
78-59-1	Isophorone	U	429	ug/kg	85.9	429
88-75-5	2-Nitrophenol	U	429	ug/kg	85.9	429
105-67-9	2,4-Dimethylphenol	U	429	ug/kg	150	429
111-91-1	bis(2-Chloroethoxy)methane	U	429	ug/kg	85.9	429
120-83-2	2,4-Dichlorophenol	U	429	ug/kg	85.9	429
65-85-0	Benzoic acid	U	859	ug/kg	215	859
91-20-3	Naphthalene	U	42.9	ug/kg	12.9	42.9
106-47-8	4-Chloroaniline	U	429	ug/kg	85.9	429
87-68-3	Hexachlorobutadiene	U	429	ug/kg	85.9	429
91-57-6	2-Methylnaphthalene	U	42.9	ug/kg	8.59	42.9
77-47-4	Hexachlorocyclopentadiene	U	429	ug/kg	85.9	429
88-06-2	2,4,6-Trichlorophenol	U	429	ug/kg	85.9	429
95-95-4	2,4,5-Trichlorophenol	U	429	ug/kg	85.9	429
91-58-7	2-Chloronaphthalene	U	42.9	ug/kg	14.2	42.9
88-74-4	2-Nitroaniline	U	429	ug/kg	85.9	429
99-09-2	<i>o</i> -Nitroaniline	U	429	ug/kg	85.9	429
	3-Nitroaniline					

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

SDG Number: 10-2154
Lab Sample ID: 248373009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	429	ug/kg	85.9	429
606-20-2	2,6-Dinitrotoluene	U	429	ug/kg	42.9	429
208-96-8	Acenaphthylene	U	42.9	ug/kg	12.9	42.9
51-28-5	2,4-Dinitrophenol	U	859	ug/kg	163	859
132-64-9	Dibenzofuran	U	429	ug/kg	85.9	429
84-66-2	Diethylphthalate	U	429	ug/kg	85.9	429
86-73-7	Fluorene	U	42.9	ug/kg	12.9	42.9
7005-72-3	4-Chlorophenylphenylether	U	429	ug/kg	85.9	429
534-52-1	2-Methyl-4,6-dinitrophenol	U	429	ug/kg	85.9	429
100-01-6	4-Nitroaniline	U	429	ug/kg	129	429
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	429	ug/kg	85.9	429
122-66-7	Azobenzene	U	429	ug/kg	85.9	429
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	429	ug/kg	85.9	429
118-74-1	Hexachlorobenzene	U	429	ug/kg	85.9	429
85-01-8	Phenanthrene	U	42.9	ug/kg	12.9	42.9
120-12-7	Anthracene	U	42.9	ug/kg	8.59	42.9
84-74-2	Di-n-butylphthalate	U	429	ug/kg	85.9	429
206-44-0	Fluoranthene	U	42.9	ug/kg	12.9	42.9
85-68-7	Butylbenzylphthalate	U	429	ug/kg	85.9	429
56-55-3	Benzo(a)anthracene	U	42.9	ug/kg	12.9	42.9
91-94-1	3,3'-Dichlorobenzidine	U	429	ug/kg	129	429
218-01-9	Chrysene	U	42.9	ug/kg	12.9	42.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	429	ug/kg	85.9	429
117-84-0	Di-n-octylphthalate	U	429	ug/kg	85.9	429
205-99-2	Benzo(b)fluoranthene	U	42.9	ug/kg	12.9	42.9
207-08-9	Benzo(k)fluoranthene	U	42.9	ug/kg	12.9	42.9
50-32-8	Benzo(a)pyrene	U	42.9	ug/kg	12.9	42.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.9	ug/kg	12.9	42.9
53-70-3	Dibenzo(a,h)anthracene	U	42.9	ug/kg	12.9	42.9
191-24-2	Benzo(ghi)perylene	U	42.9	ug/kg	12.9	42.9
120-82-1	1,2,4-Trichlorobenzene	U	429	ug/kg	85.9	429

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	384	ug/kg		J
	Unknown Aldol Condensate	2.93	229	ug/kg		JA

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

SDG Number: 10-2154
Lab Sample ID: 248373009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.13 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 22.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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	7.02	1150	ug/kg	99	NJ
11028-42-5	Cedrene	7.03	606	ug/kg	95	NJ
470-40-6	Thujopsene	7.14	303	ug/kg	93	NJ
1000151-28-9	Cyclohexene, 1,3-diisopropenyl-6-methyl-	7.22	524	ug/kg	87	NJ
	Unknown	7.3	315	ug/kg		J
	Unknown	7.34	370	ug/kg		J
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	7.54	304	ug/kg	95	NJ
	Unknown	8.35	221	ug/kg		J
1000196-17-7	2,2,6.beta.,7-Tetramethylbicyclo[4.3.0]n	8.39	182	ug/kg	89	NJ
17351-34-7	14-Pentadecenoic acid	10.35	210	ug/kg	93	NJ
	Unknown	10.47	258	ug/kg		J
	Unknown	10.6	356	ug/kg		J
	Unknown	11.09	265	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.2	2540	ug/kg	98	NJ
	Unknown	11.24	508	ug/kg		J
112-95-8	Eicosane	11.72	210	ug/kg	97	NJ
	Unknown	14.69	276	ug/kg		J
	Unknown	15.02	400	ug/kg		J
	Unknown	15.03	385	ug/kg		J
83-46-5	.beta.-Sitosterol	16.73	417	ug/kg	93	NJ
	Unknown	17.28	430	ug/kg		J

Data File: /chem/MSD8.i/s032110.b/s8c2119.d
Report Date: 22-Mar-2010 09:53

Page 1

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2119.d
Lab Smp Id: 248373009 Client Smp ID: RE36-10-7498
Inj Date : 21-MAR-2010 16:56
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248373009|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	22.69220	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN	FINAL
	=====	==	=====	=====	(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301 (1.000)	345395	40.0000	
* 29 Naphthalene-d8	136	5.554	5.558 (1.000)	1352556	40.0000	
* 46 Acenaphthene-d10	164	7.406	7.406 (1.000)	824661	40.0000	
* 67 Phenanthrene-d10	188	8.996	8.997 (1.000)	1370062	40.0000	
* 91 Chrysene-d12	240	11.868	11.868 (1.000)	1052151	40.0000	
* 98 Perylene-d12	264	13.878	13.878 (1.000)	605796	40.0000	
\$ 3 2-Fluorophenol	112	3.173	3.158 (0.738)	616663	75.6242	3250
\$ 5 Phenol-d5	99	3.939	3.930 (0.916)	757464	74.4850	3200
\$ 20 Nitrobenzene-d5	82	4.825	4.830 (0.869)	346454	36.0333	1550
\$ 39 2-Fluorobiphenyl	172	6.682	6.682 (0.902)	776923	32.0066	1370
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244 (1.114)	191981	70.4251	3020
\$ 81 p-Terphenyl-d14	244	10.711	10.706 (0.902)	847936	44.7635	1920

ION RATIO REPORT

SV REPORT

Data file: s8c2119.d

Report Date: 03/22/2010 07:19

Lab. ID: 248373009

SampleType: SAMPLE

Injection Date: 21-MAR-2010 16:56

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373009|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	38973	3.94	4.00	80-120	100	()
93	21617	3.98	4.00	213-273	55	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	46109	4.83	4.68	80-120	100	(T)
42	27485	4.83	4.68	31- 91	60	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	957	5.28	5.28	80-120	100	()
122	788	5.27	5.28	64-124	82	()
77	1223	5.24	5.28	47-107	128	(Q)

30 Naphthalene		CAS#: 91-20-3				
128	282	5.57	5.58	80-120	100	()
129	211	5.55	5.58	0- 41	75	(Q)
127	0	0.00	5.58	0- 43	0	(T)

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	900	6.80	6.81	80-120	100	()
164	109	6.87	6.81	3- 63	12	()
127	428	6.82	6.81	7- 67	48	()

42 o-Nitroaniline		CAS#: 88-74-4				
65	20411	6.95	6.92	80-120	100	()
92	15292	6.95	6.92	33- 93	75	()
138	2628	7.02	6.92	76-136	13	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	106656	7.41	7.18	80-120	100	(T)
63	2149	7.40	7.18	32- 92	2	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	106656	7.41	7.61	80-120	100	(T)
89	2003	7.40	7.61	47-107	2	(QT)
63	2263	7.40	7.61	26- 86	2	(QT)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	607	8.25	8.04	80-120	100	(T)
105	3022	8.24	8.04	14- 74	498	(QT)
51	1719	8.24	8.04	26- 86	283	(QT)

58 1,2-Diphenylhydrazine				CAS#: 122-66-7		
77	45571	8.13	8.16	80-120	100	()
105	40970	8.13	8.16	0- 45	90	(Q)
182	132	8.17	8.16	0- 56	0	()

68 Phenanthrene				CAS#: 85-01-8		
178	677	9.02	9.02	80-120	100	()
179	927	9.00	9.02	0- 45	137	(Q)
176	419	9.02	9.02	0- 49	62	(Q)

92 Chrysene				CAS#: 218-01-9		
228	301	11.90	11.90	80-120	100	()
229	2705	11.90	11.90	0- 49	896	(Q)
226	222	11.83	11.90	0- 59	74	(QT)

94 Di-n-octylphthalate				CAS#: 117-84-0		
149	931	12.73	12.73	80-120	100	()
43	7186	12.64	12.73	0- 41	772	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2119.d
 Lab Smp Id: 248373009 Client Smp ID: RE36-10-7498
 Inj Date : 21-MAR-2010 16:56
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |248373009|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	22.69220	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.301	2065776	40.000
* 46 Acenaphthene-d10	7.406	3729636	40.000
* 67 Phenanthrene-d10	8.996	3411206	40.000
* 91 Chrysene-d12	11.868	3172196	40.000
* 98 Perylene-d12	13.878	1769061	40.000

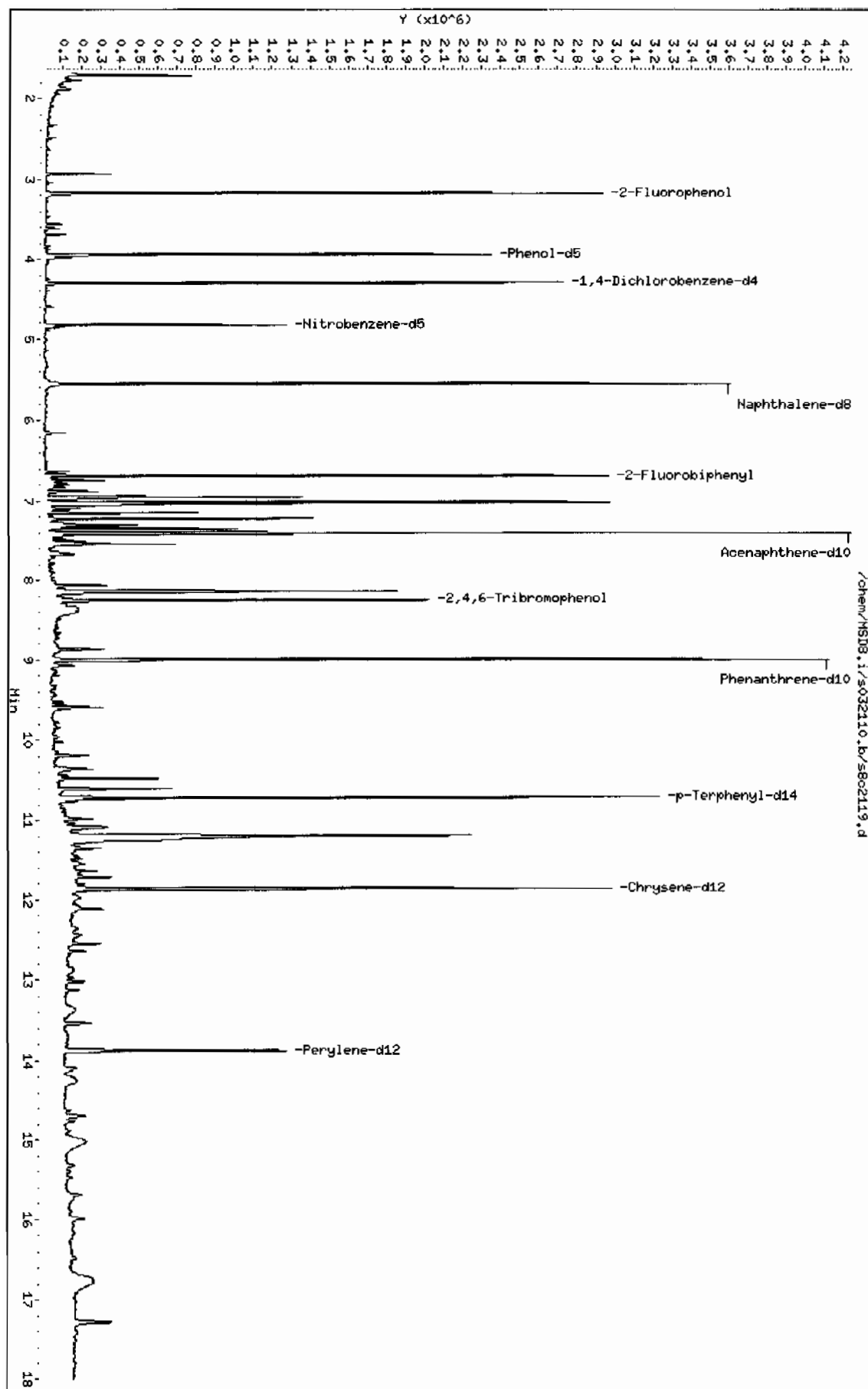
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown					CAS #:		
1.715	461637	8.93875923	384	0		0	10
Unknown Aldol Condensate					CAS #:		
2.930	275644	5.33735394	229	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
7.016	2501459	26.8279066	1150	99	NIST05.L	60024	46
Cedrene					CAS #: 11028-42-5		
7.035	1316308	14.1172828	606	95	NIST05.L	59777	46
Thujopsene					CAS #: 470-40-6		
7.144	657191	7.04830989	302	93	NIST05.L	59787	46
Cyclohexene, 1,3-diisopropenyl-6-methyl-					CAS #: 1000151-28-9		
7.220	1138142	12.2064643	524	87	NIST05.L	40377	46
Unknown					CAS #:		
7.301	683458	7.33002240	315	0		0	46
Unknown					CAS #:		
7.344	803892	8.62166259	370	0		0	46
Benzene, 1-methyl-4-(1,2,2-trimethylcycl					CAS #: 16982-00-6		
7.539	660880	7.08787653	304	95	NIST05.L	58542	46
Unknown					CAS #:		
8.349	439554	5.15423792	221	0		0	67
2,2,6.beta.,7-Tetramethylbicyclo[4.3.0]n					CAS #: 1000196-17-7		
8.392	361710	4.24143562	182	89	NIST05.L	51328	67
14-Pentadecenoic acid					CAS #: 17351-34-7		
10.354	417486	4.89546398	210	93	NIST05.L	85330	67
Unknown					CAS #:		
10.468	476640	6.01022560	258	0		0	91
Unknown					CAS #:		
10.601	657246	8.28758539	356	0		0	91
Unknown					CAS #:		
11.087	489243	6.16913506	265	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
11.197	4695071	59.2027706	2540	98	NIST05.L	116238	91
Unknown					CAS #:		
11.244	939125	11.8419506	508	0		0	91
Eicosane					CAS #: 112-95-8		
11.720	388823	4.90288780	210	97	NIST05.L	113490	91
Unknown					CAS #:		
14.692	284346	6.42931134	276	0		0	98
Unknown					CAS #:		
15.016	411776	9.31060490	400	0		0	98
Unknown					CAS #:		
15.030	397019	8.97694752	385	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
16.730	430039	9.72354047	417	93	NIST05.L	174400	98
Unknown					CAS #:		
17.278	443308	10.0235763	430	0		0	98

Data File: /chem/HSD8.i/s032110.b/s802119.d
 Date: 21-MAR-2010 16:56
 Client ID: RE36-10-7498
 Sample Info: 1248373009196192211SVH11LNL
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-5MS

Instrument: HSD8.1
 Operator: nagl
 Column diameter: 0.20



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 12483730091961922111SVMI11LANL

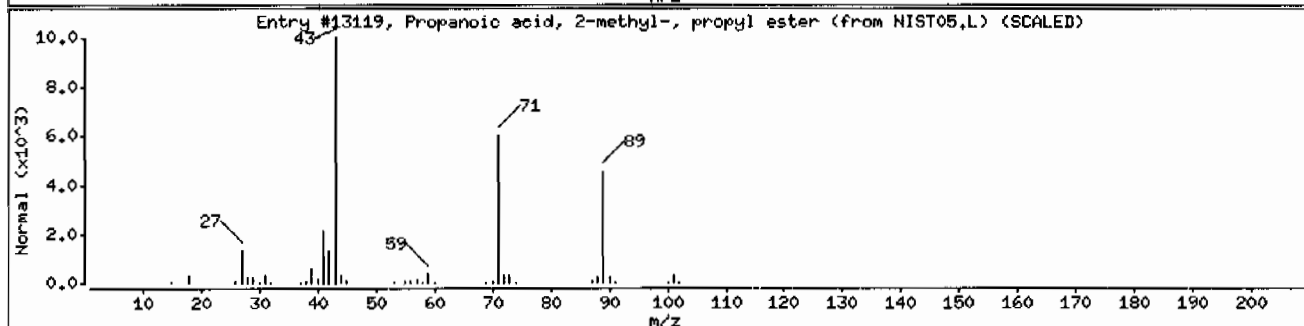
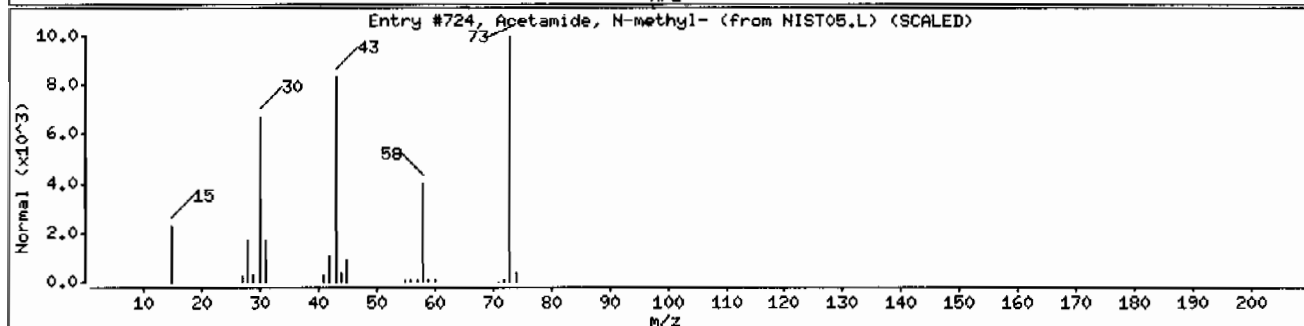
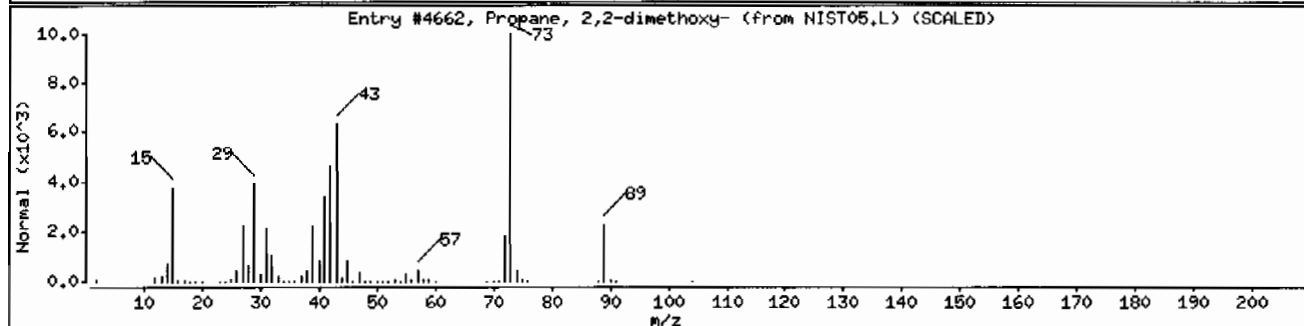
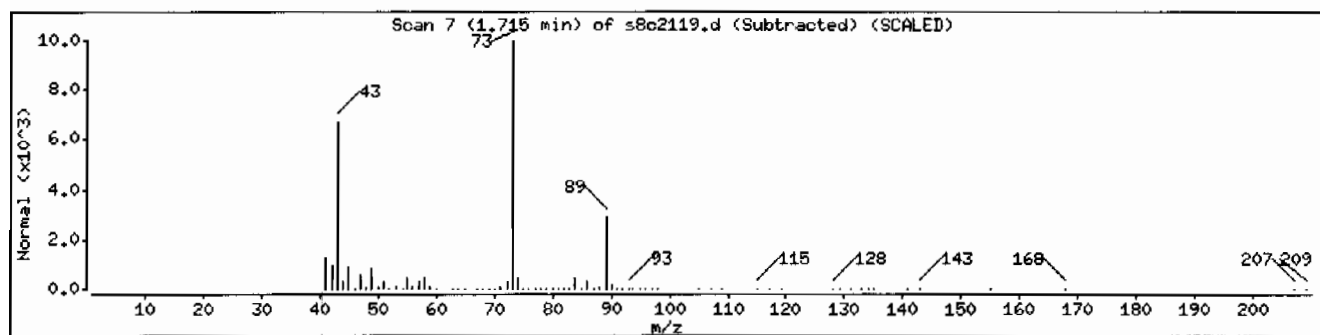
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	40	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	724	25	C3H7NO	73
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	25	C7H14O2	130



Date: 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009196192211SVH11ILANL

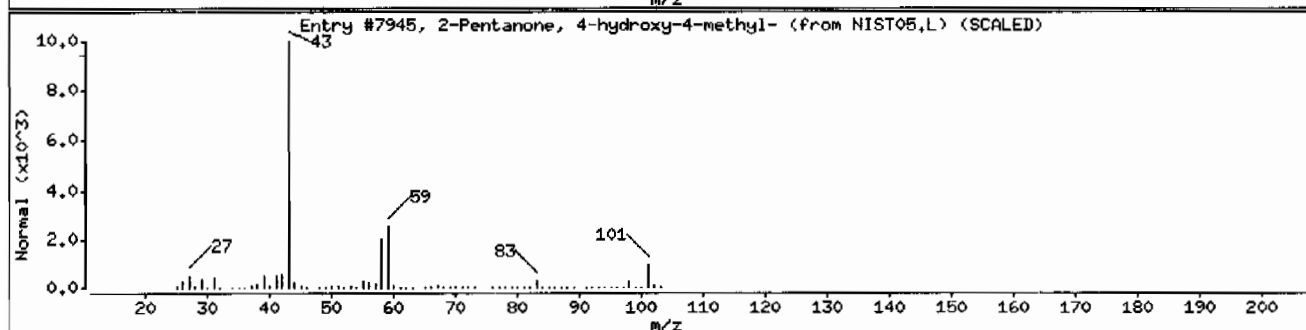
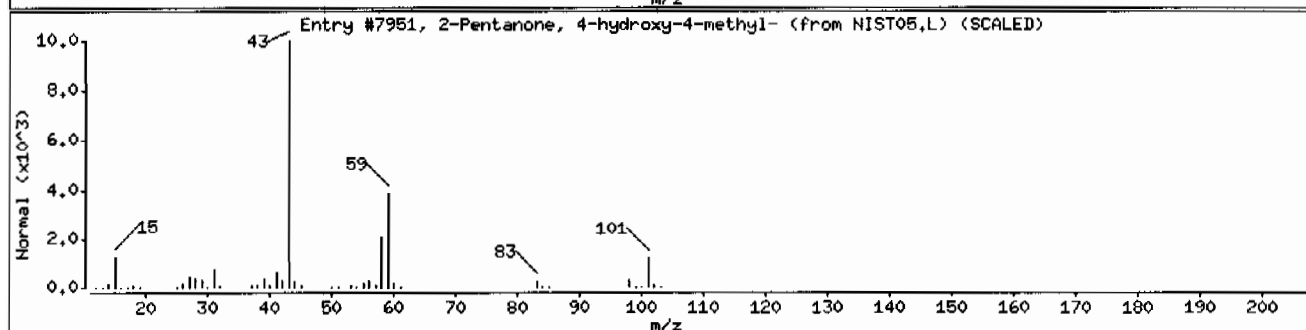
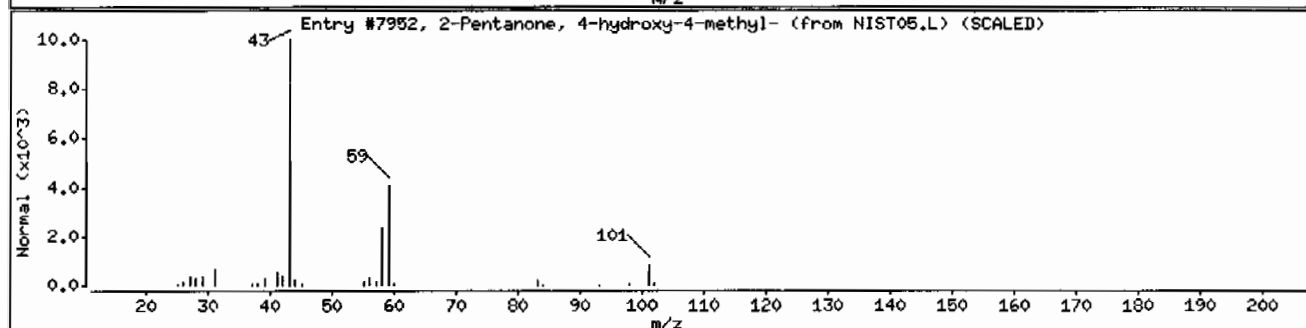
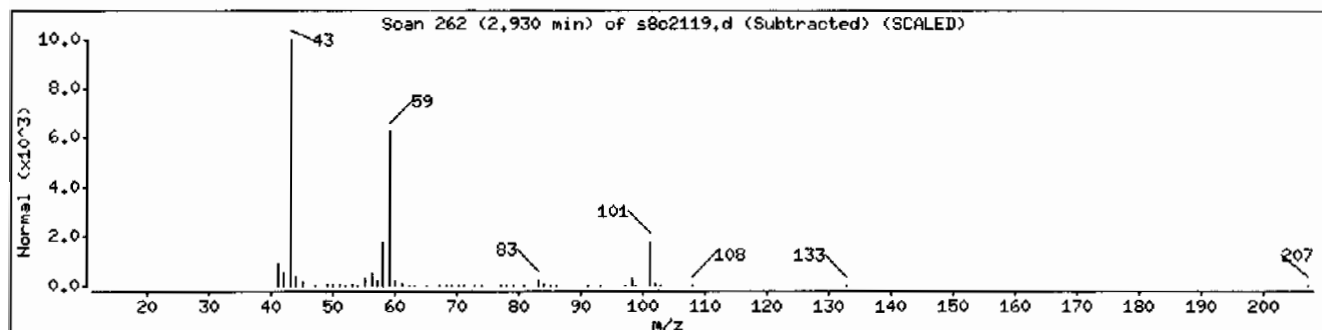
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown 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	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	42	C6H12O2	116



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: HSD8.i

Sample Info: I248373009I961922I1ISVM1I1LANL

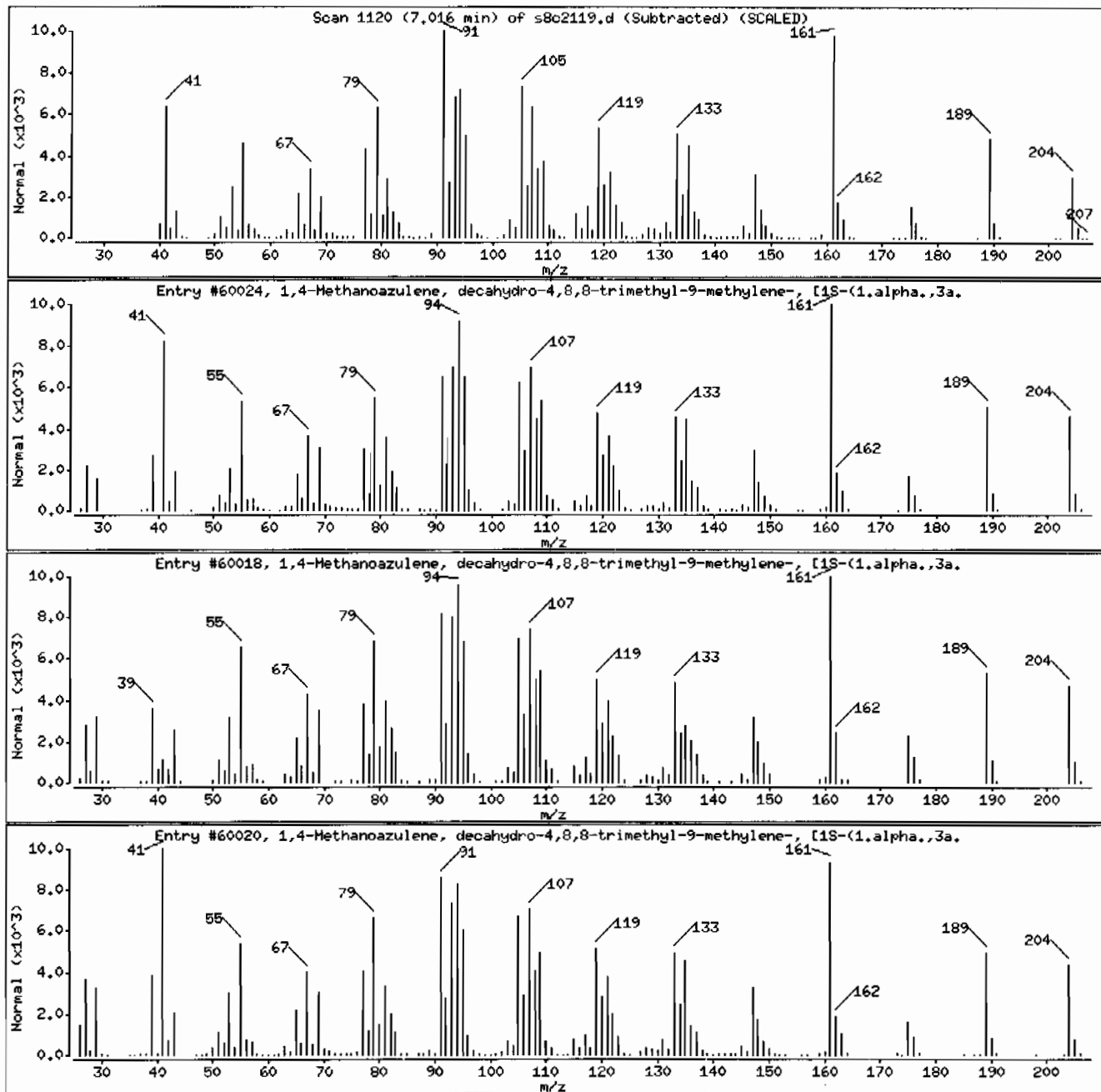
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	99	C ₁₅ H ₂₄	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	98	C ₁₅ H ₂₄	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	98	C ₁₅ H ₂₄	204



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009196192211ISVH111LANL

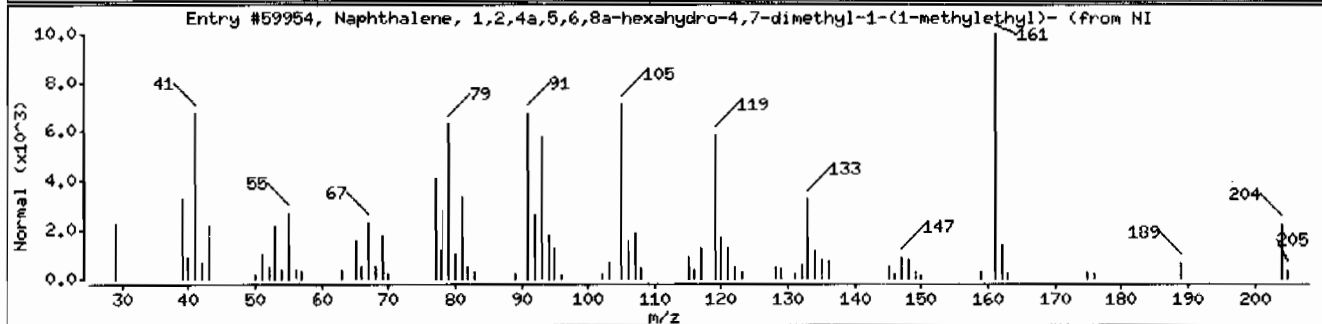
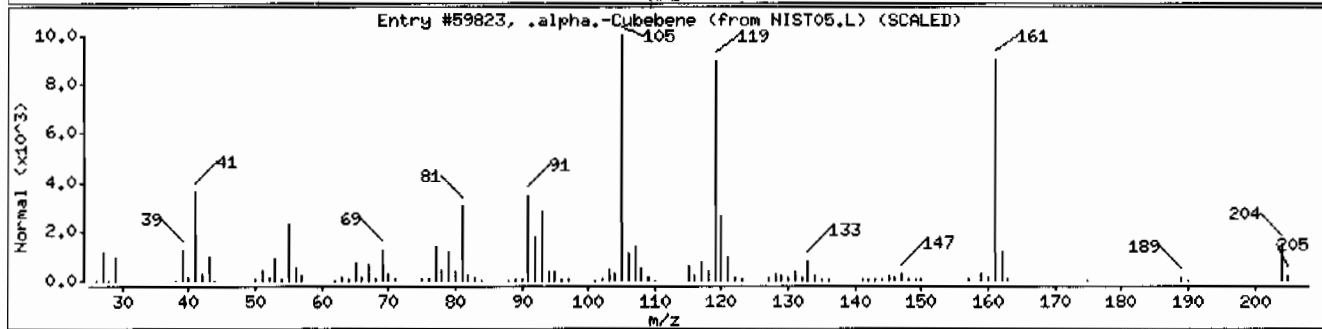
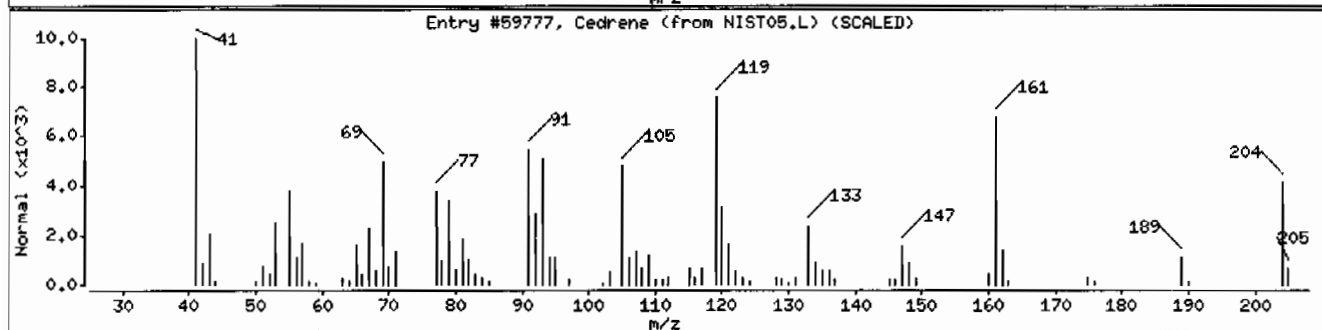
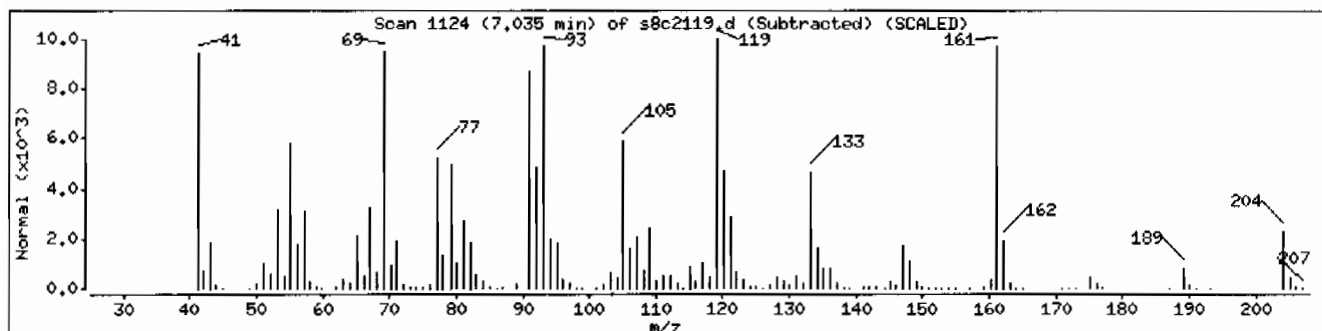
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Hatch	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrene	11028-42-5	NIST05.L	59777	95	C15H24	204
.alpha.-Cubebene	17699-14-8	NIST05.L	59823	64	C15H24	204
Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7	483-75-0	NIST05.L	59954	64	C15H24	204



Date: 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009196192211SVH11LANL

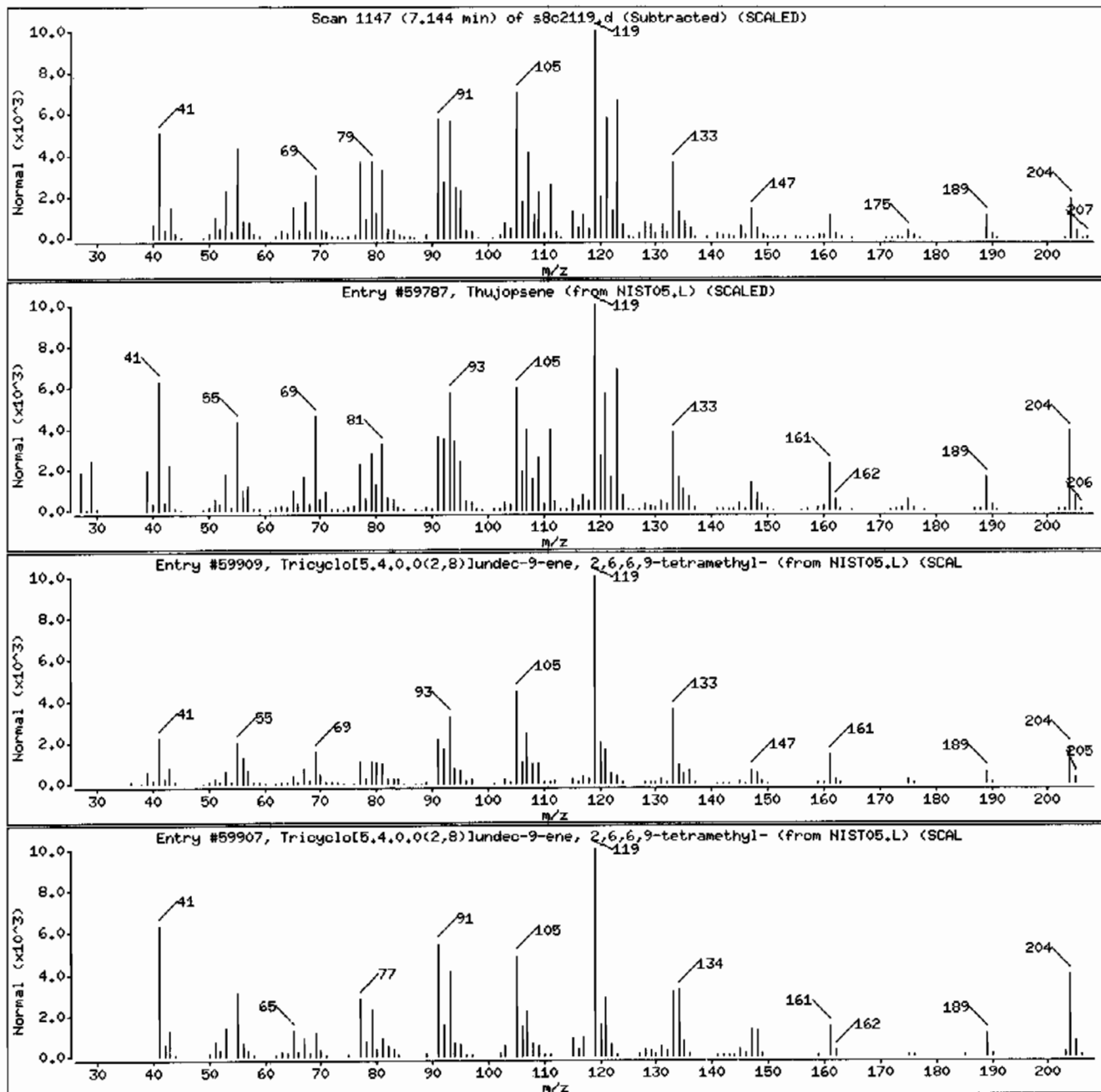
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Thujopsene	470-40-6	NIST05.L	59787	93	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	90	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59907	86	C15H24	204



Date: 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 12483730091961922111SVH111LANL

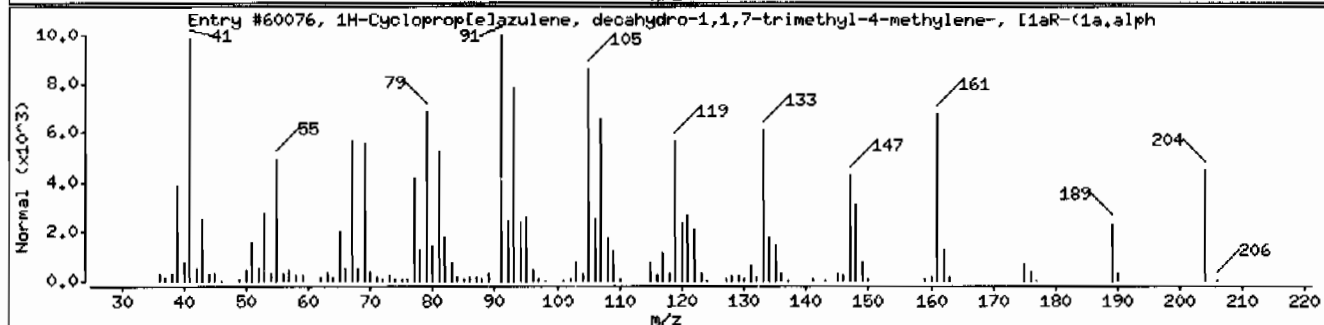
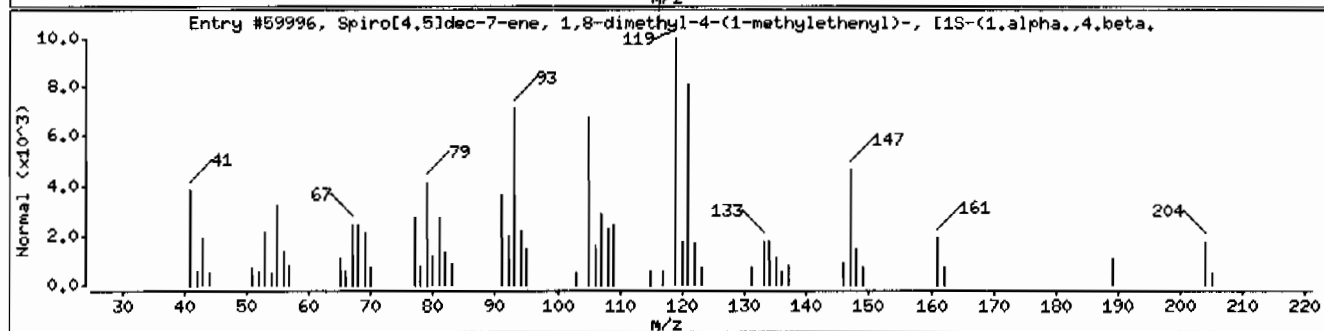
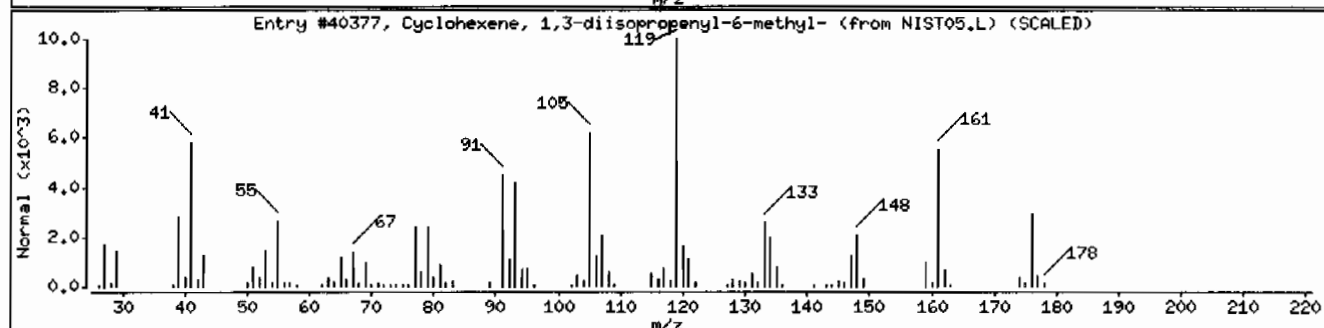
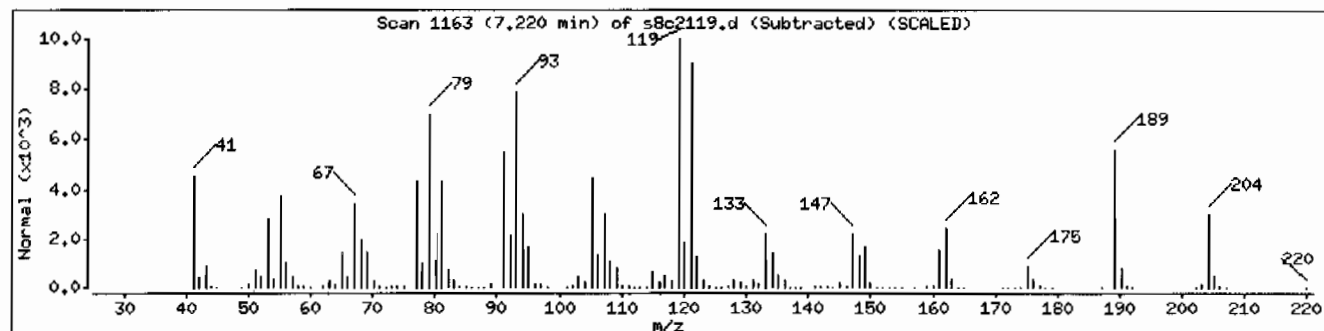
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 1,3-diisopropenyl-6-methyl-	1000151-28-9	NIST05.L	40377	87	C13H20	176
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	24048-44-0	NIST05.L	59996	81	C15H24	204
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60076	62	C15H24	204



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009196192211SVH111LANL

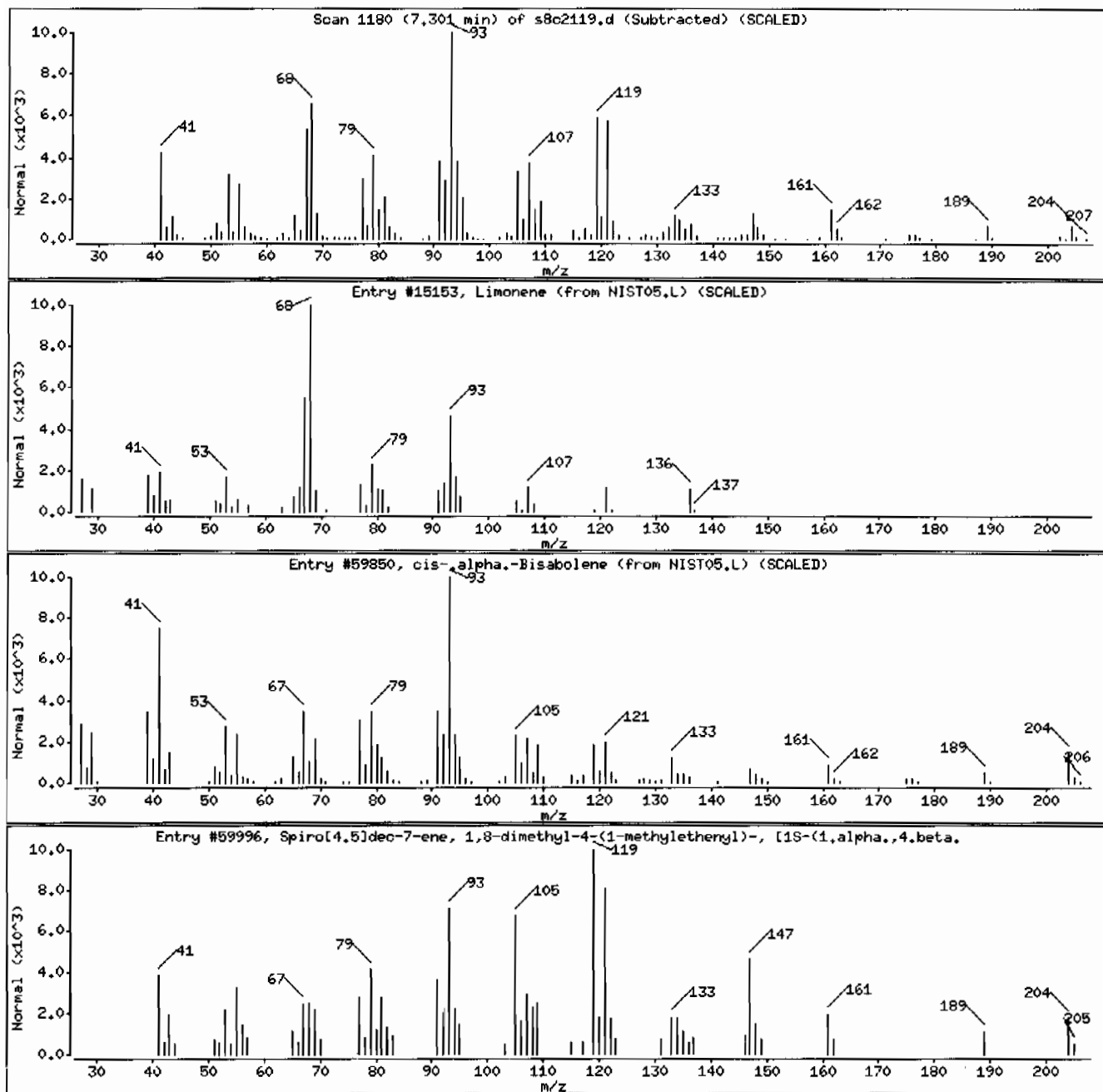
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Limonene	138-86-3	NIST05.L	15153	58	C10H16	136
cis-.alpha.-Bisabolene	29837-07-8	NIST05.L	59850	49	C15H24	204
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	24048-44-0	NIST05.L	59996	46	C15H24	204



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 12483730091961922111SVH111LANL

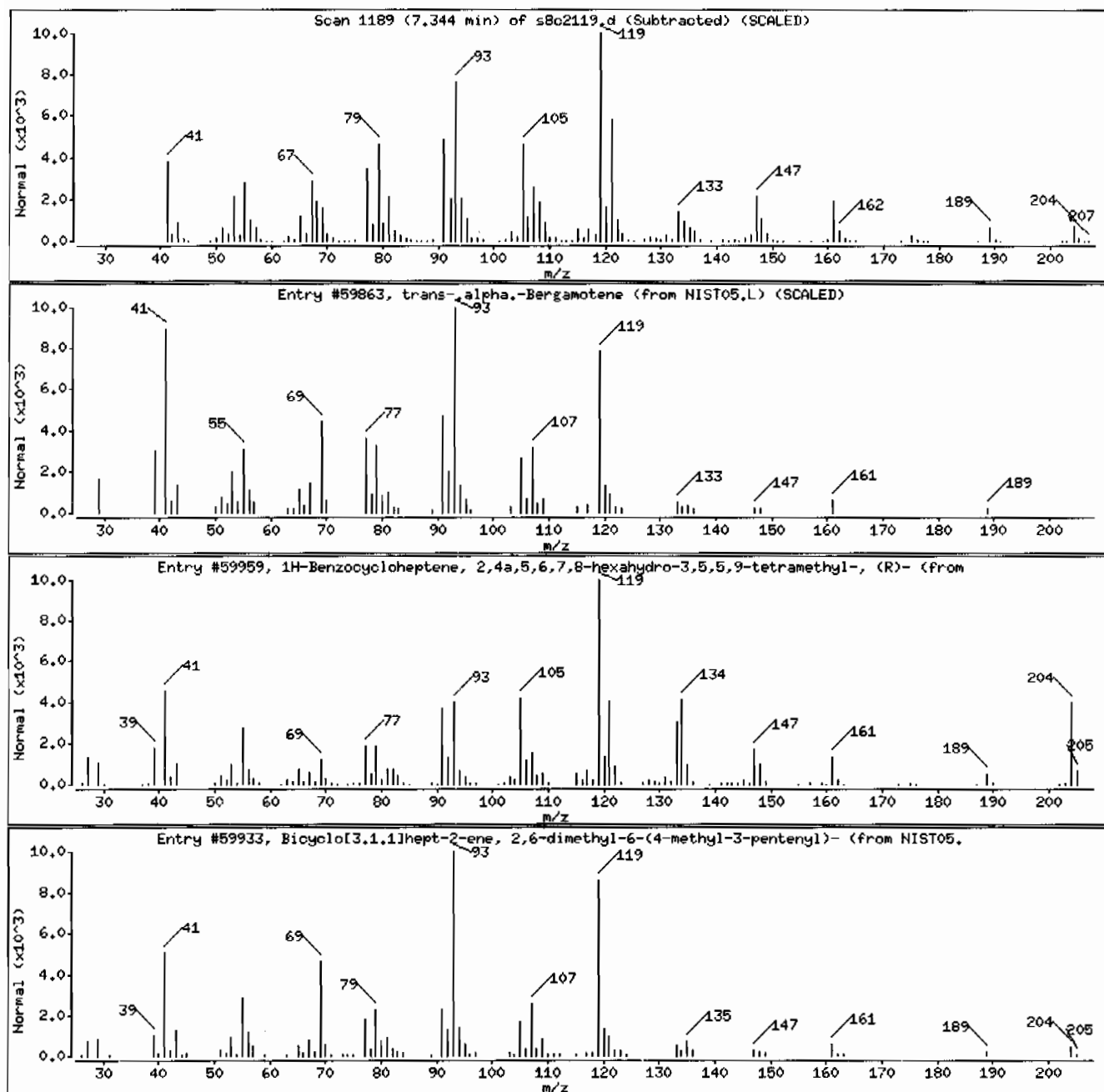
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
trans-,alpha.-Bergamotene	1000293-01-5	NIST05.L	59863	64	C15H24	204
1H-Benzocycloheptene, 2,4a,5,6,7,8-hexah	1461-03-6	NIST05.L	59959	53	C15H24	204
Bicyclo[3.1.1]hept-2-ene, 2,6-dimethyl-6	17699-05-7	NIST05.L	59933	43	C15H24	204



Date: 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009196192211SVMI11LANL

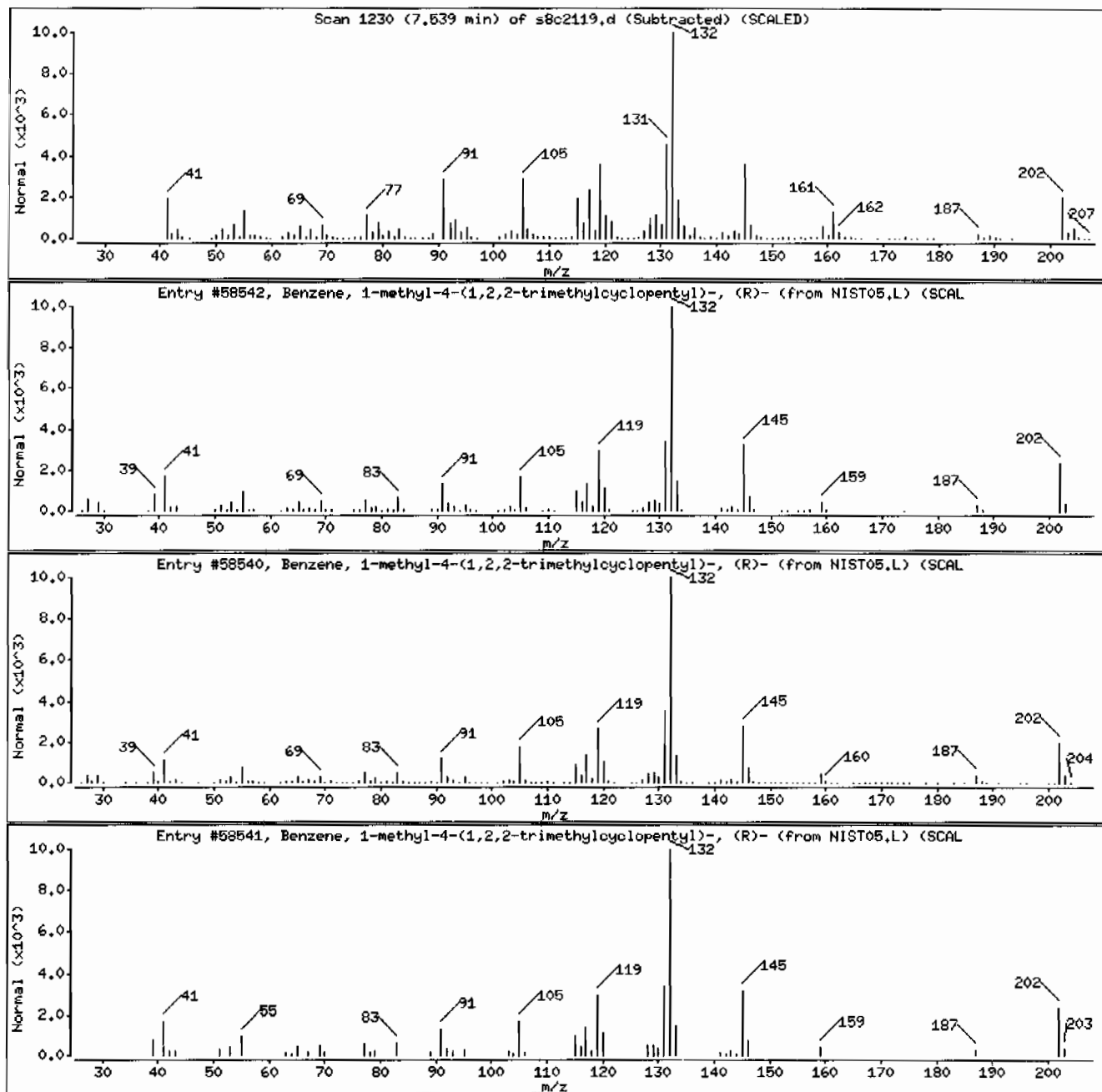
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58542	95	C15H22	202
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58540	93	C15H22	202
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58541	90	C15H22	202



Date: 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009196192211SVMI1ILANL

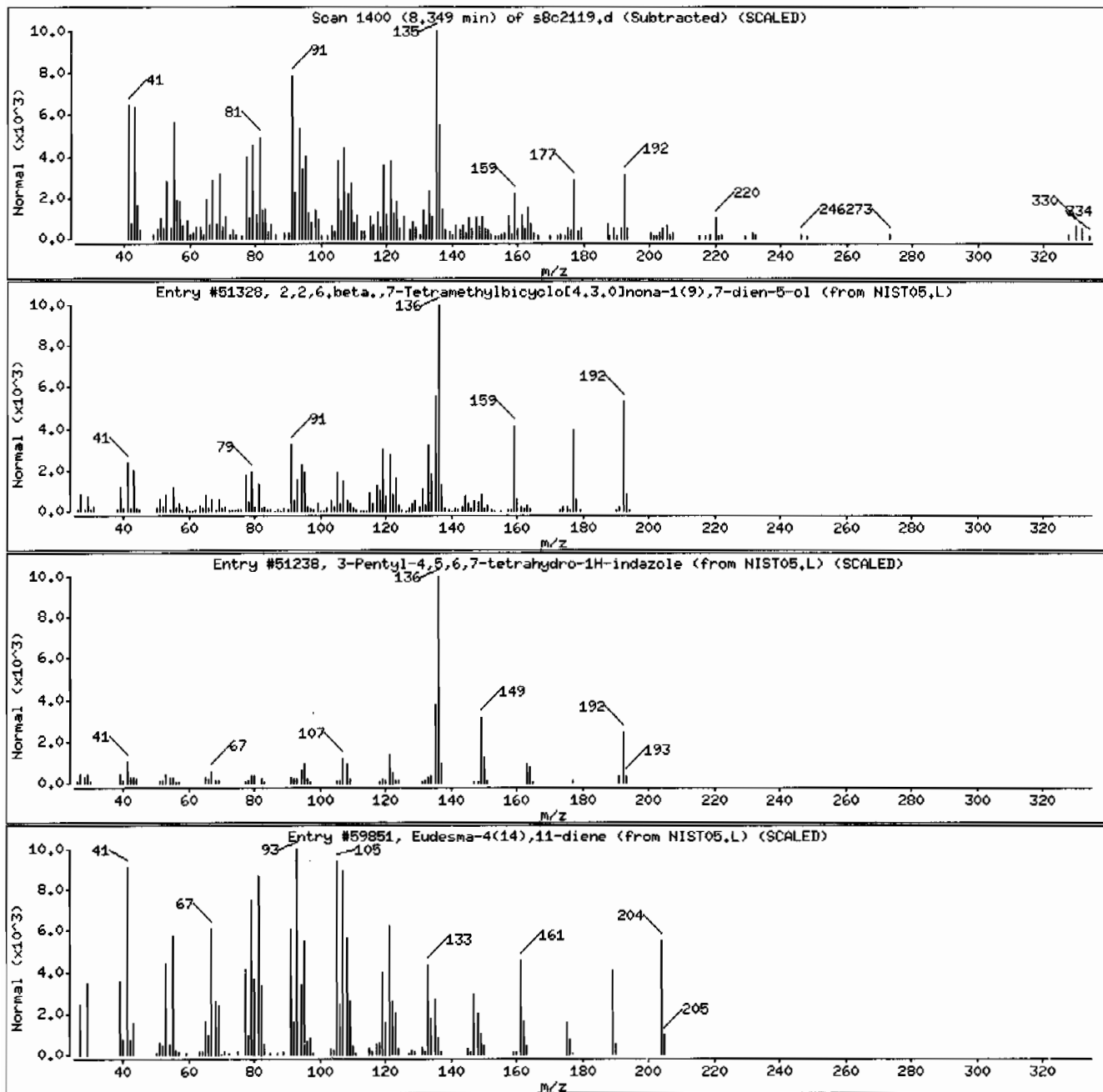
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,2,6,6,7-Tetramethylbicyclo[4.3.0]n	1000196-17-7	NIST05.L	51328	86	C13H20O	192
3-Pentyl-4,5,6,7-tetrahydro-1H-indazole	22122-91-4	NIST05.L	51238	83	C12H20N2	192
Eudesma-4(14),11-diene	1000152-04-3	NIST05.L	59851	55	C15H24	204



Date: 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.1

Sample Info: 12483730091961922111SVH111LANL

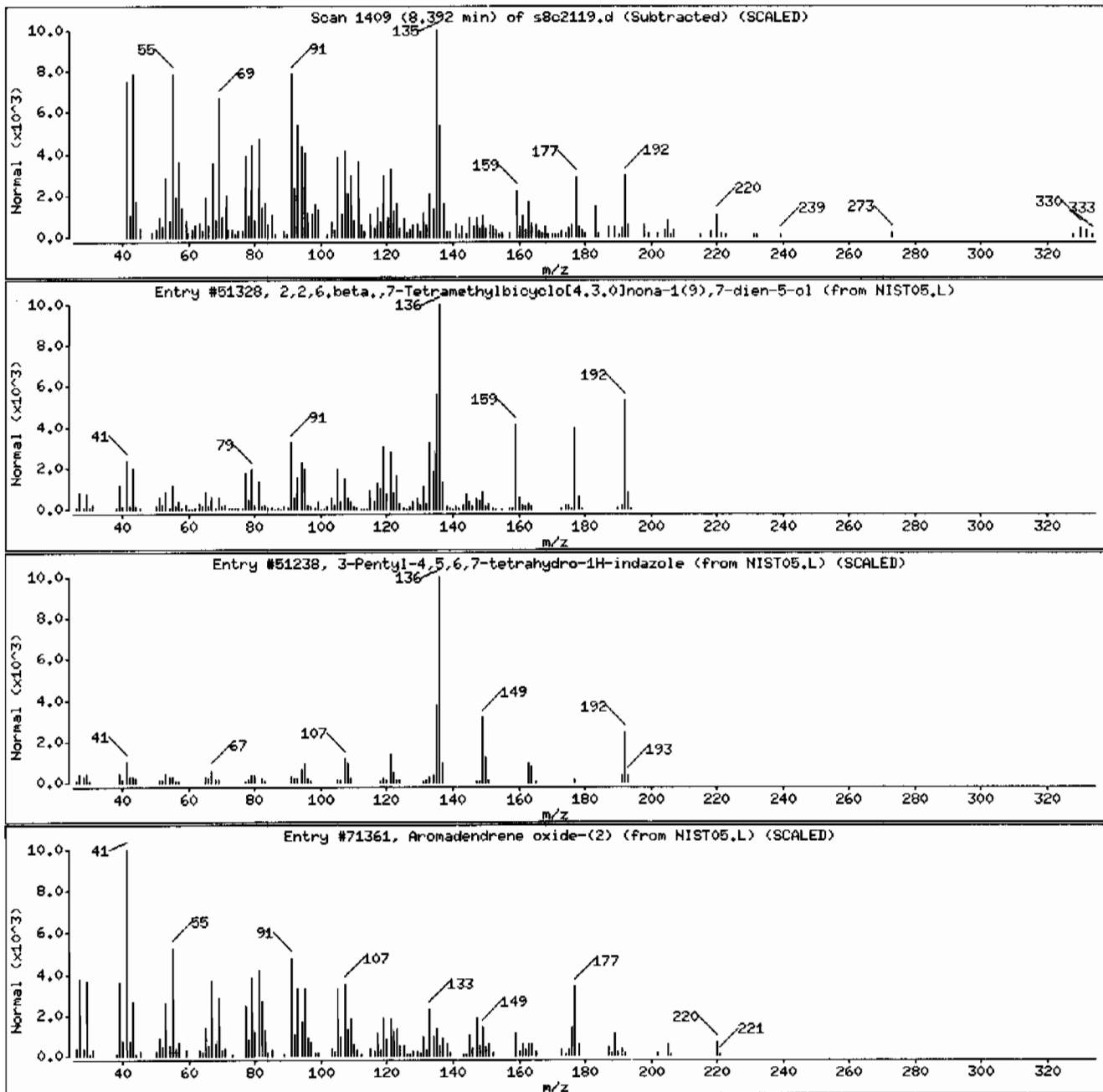
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,2,6,6,7-Tetramethylbicyclo[4.3.0]n	1000196-17-7	NIST05.L	51328	89	C13H20O	192
3-Pentyl-4,5,6,7-tetrahydro-1H-indazole	22122-91-4	NIST05.L	51238	46	C12H20N2	192
Aromadendrene oxide-(2)	1000151-98-6	NIST05.L	71361	42	C15H24O	220



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.1

Sample Info: I248373009I9619221I1SVMI1ILANL

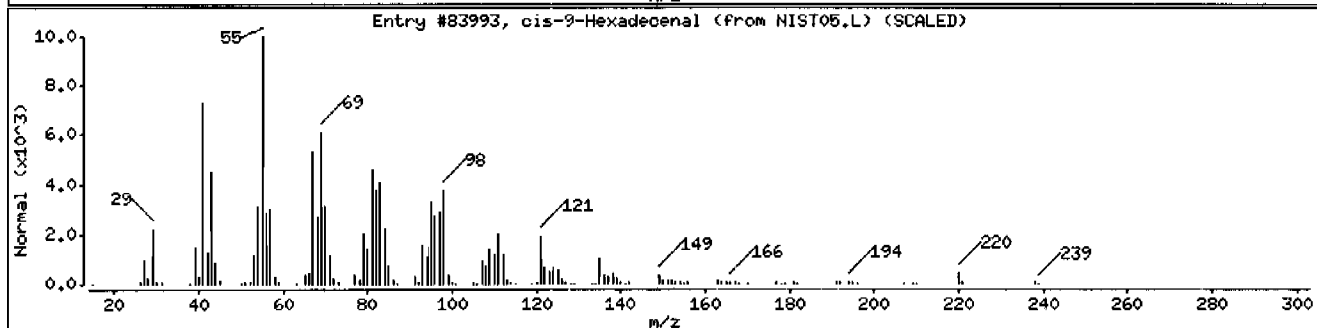
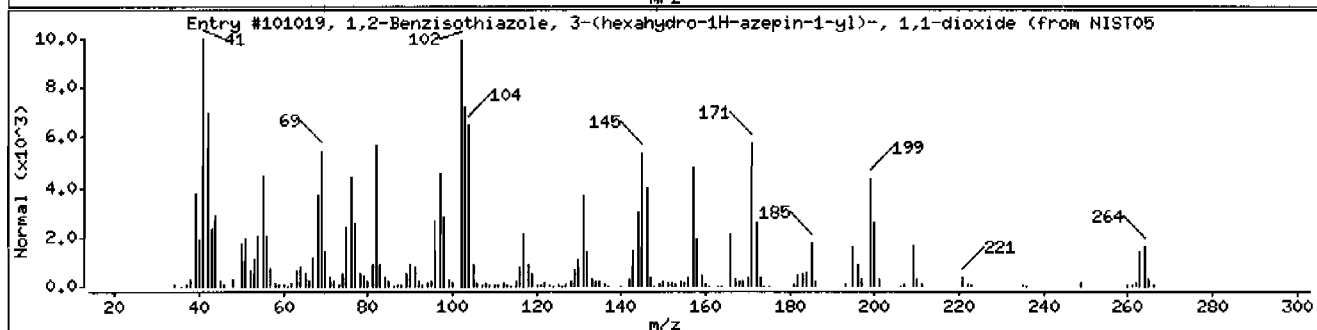
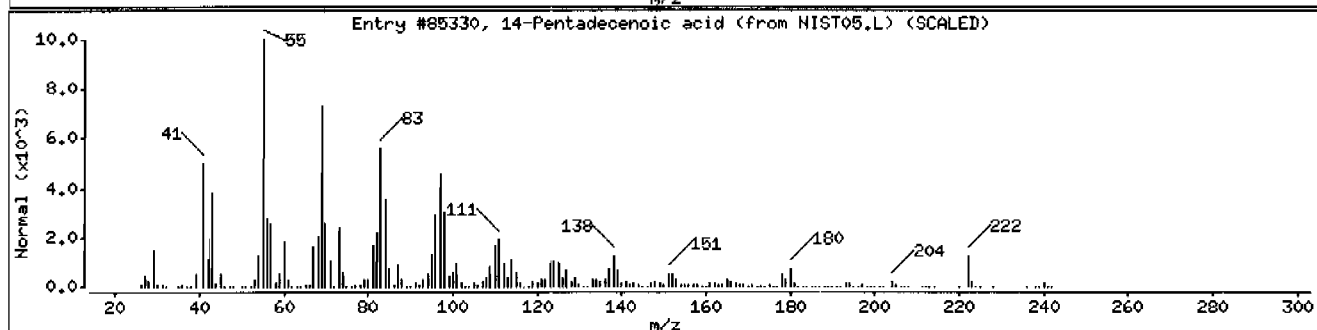
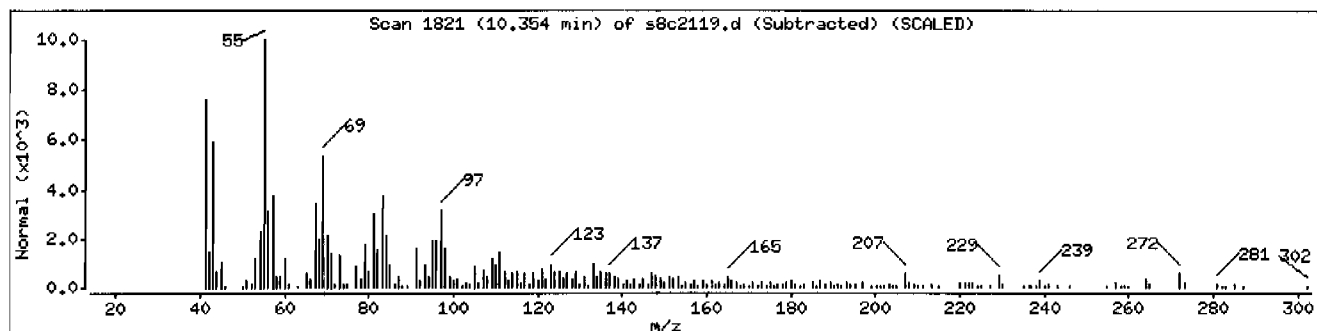
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
14-Pentadecenoic acid	17351-34-7	NIST05.L	85330	93	C15H28O2	240
1,2-Benzisothiazole, 3-(hexahydro-1H-aze	309735-29-3	NIST05.L	101019	91	C13H16N2O2S	264
cis-9-Hexadecenal	56219-04-6	NIST05.L	83993	80	C16H30O	238



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: HSD8.i

Sample Info: 1248373009196192211SVH11LANL

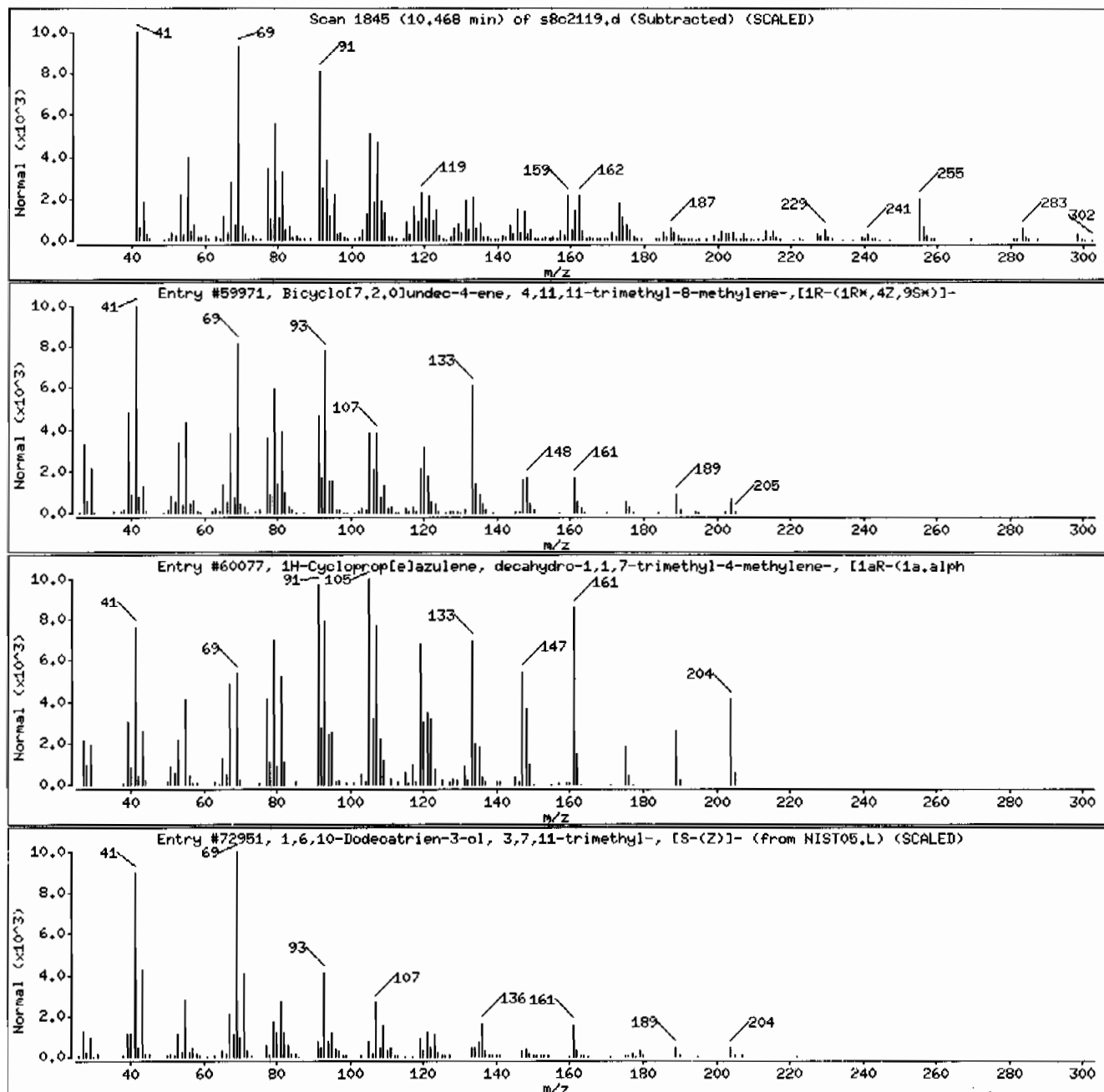
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime	118-65-0	NIST05.L	59971	43	C15H24	204
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60077	40	C15H24	204
1,6,10-Dodecatrien-3-ol, 3,7,11-trimethy	142-50-7	NIST05.L	72951	38	C15H26O	222



Date: 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009196192211ISVMI1ILANL

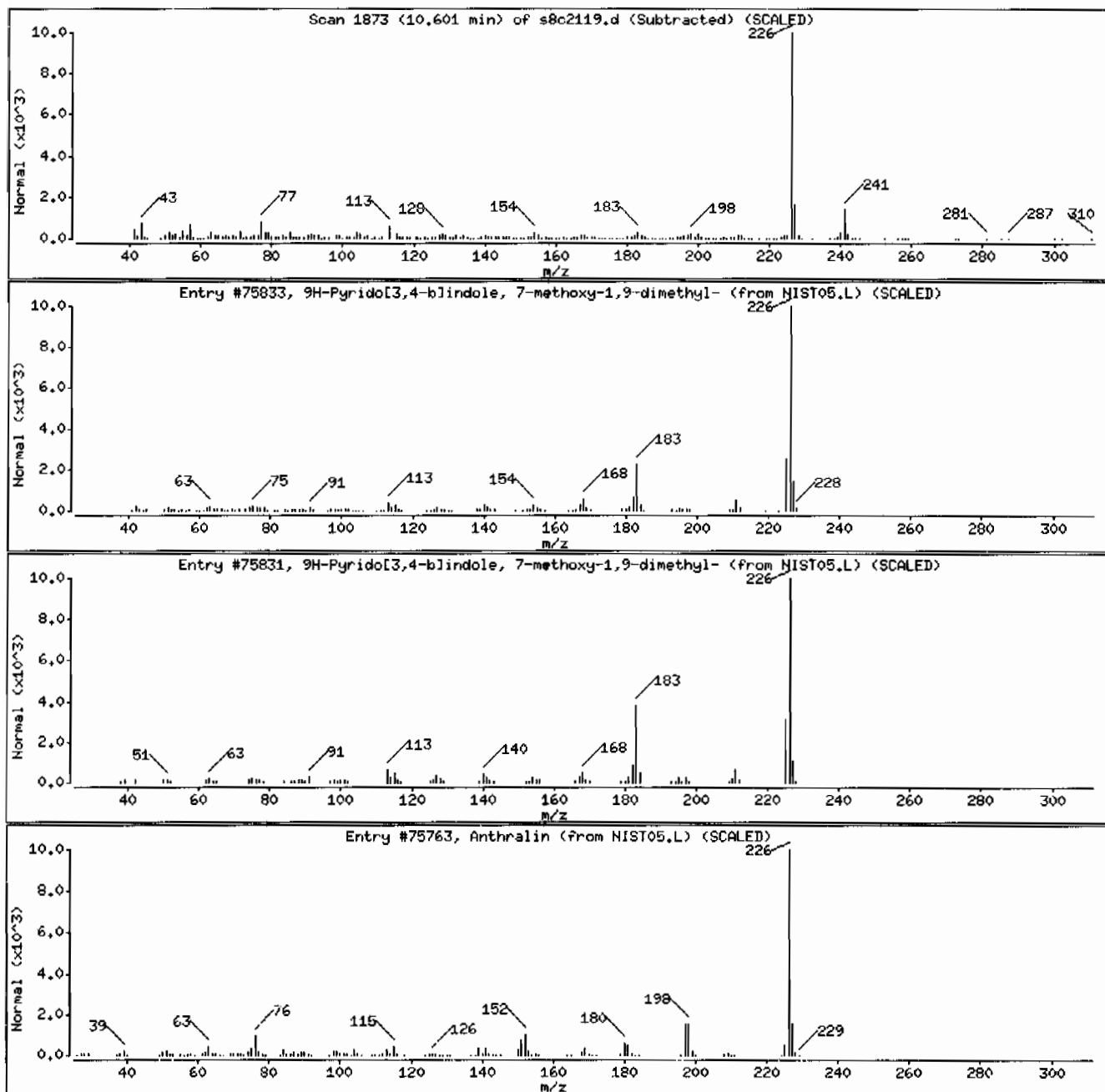
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9H-Pyrido[3,4-b]indole, 7-methoxy-1,9-di	143502-37-8	NIST05.L	75833	72	C14H14N2O	226
9H-Pyrido[3,4-b]indole, 7-methoxy-1,9-di	143502-37-8	NIST05.L	75831	64	C14H14N2O	226
Anthralin	480-22-8	NIST05.L	75763	59	C14H10O3	226



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009196192211SVH111LANL

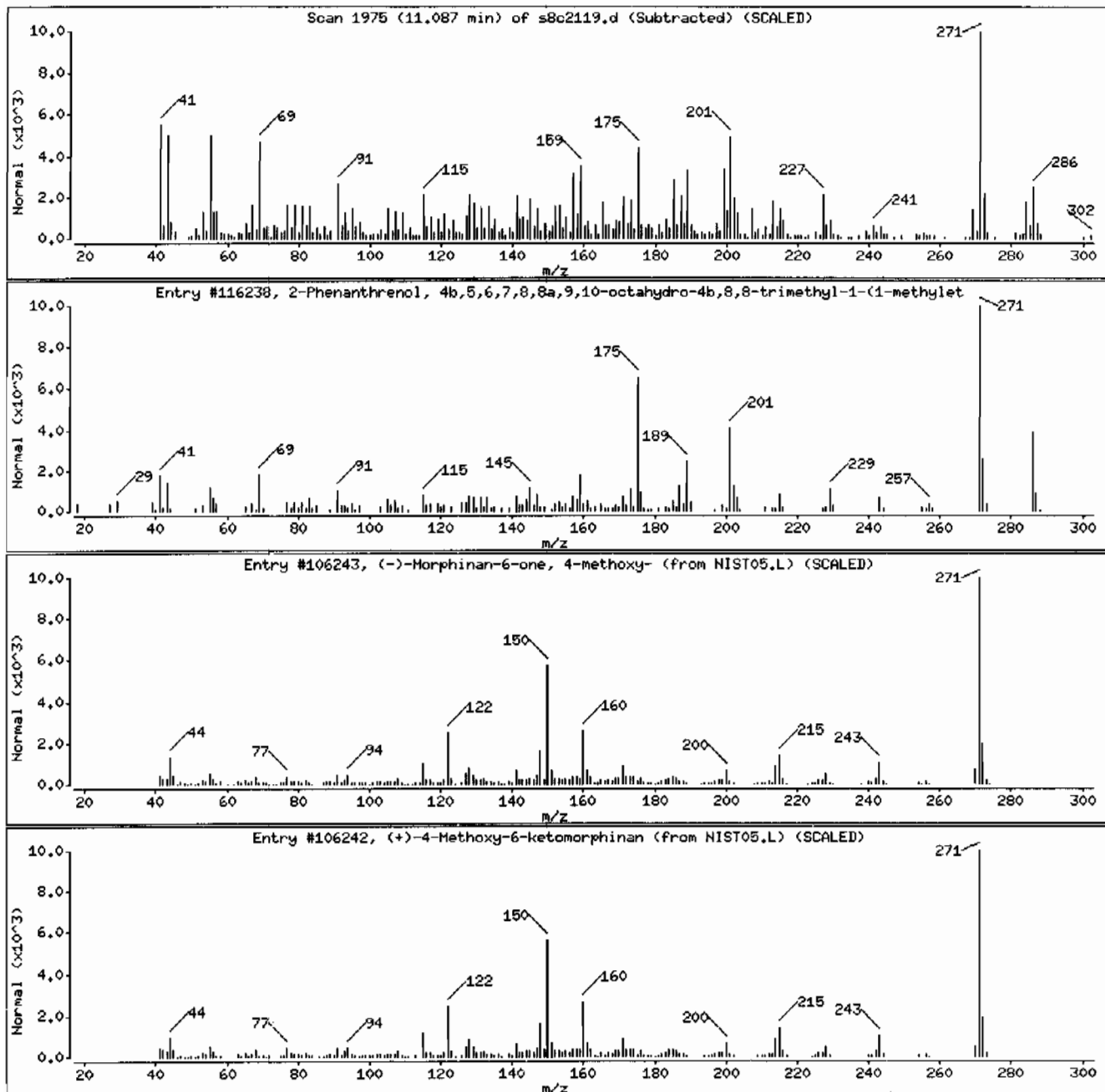
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	64	C20H30O	286
(-)-Morphinan-6-one, 4-methoxy-	1000129-09-1	NIST05.L	106243	47	C17H21NO2	271
(+)-4-Methoxy-6-ketomorphinan	1000129-08-5	NIST05.L	106242	47	C17H21NO2	271



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: I248373009I96192211SVMI1ILANL

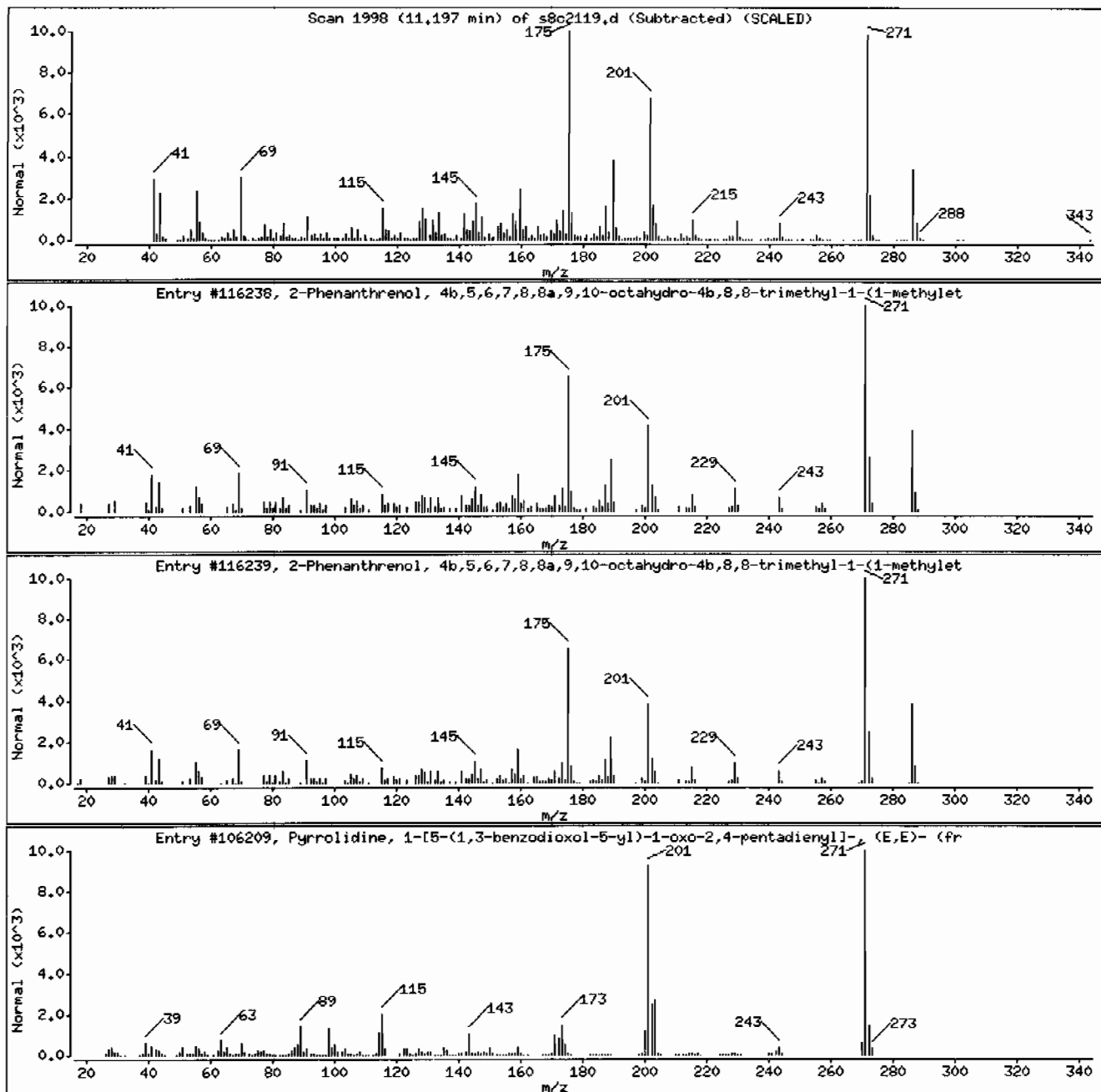
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	98	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	97	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	38	C16H17NO3	271



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSDS.i

Sample Info: I248373009196192211ISVM11LANL

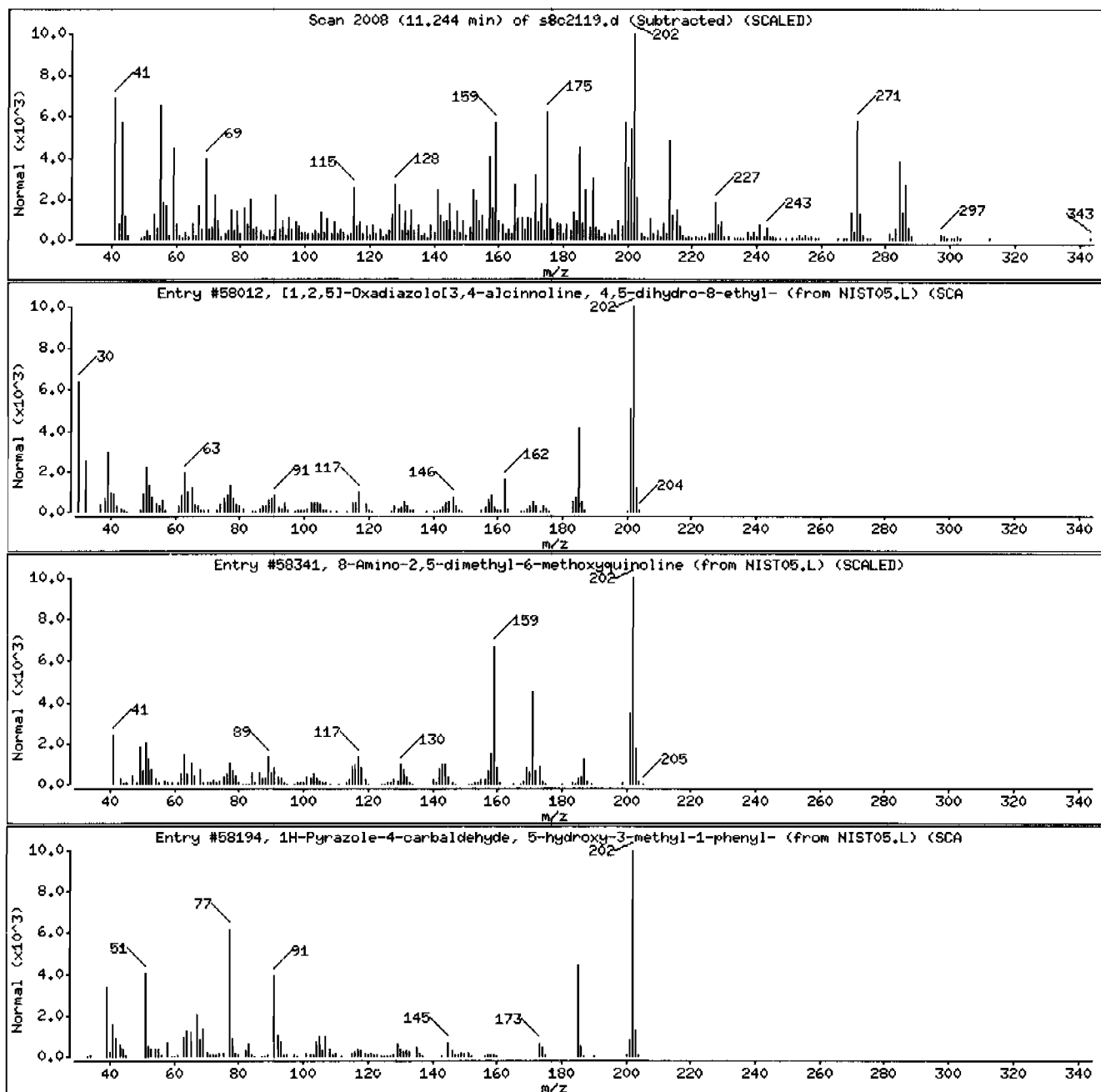
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2,5]-Oxadiazolo[3,4-a]cinnoline, 4,5-	1000260-59-4	NIST05.L	58012	22	C10H10N4O	202
8-Amino-2,5-dimethyl-6-methoxyquinoline	1000214-69-9	NIST05.L	58341	20	C12H14N2O	202
1H-Pyrazole-4-carbaldehyde, 5-hydroxy-3-	1000302-68-8	NIST05.L	58194	18	C11H10N2O2	202



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: HSD8.i

Sample Info: 1248373009196192211SVH11ILANL

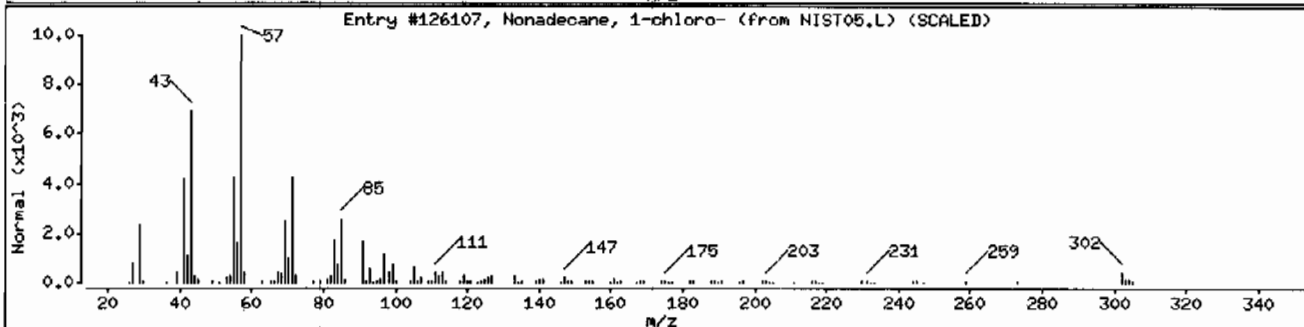
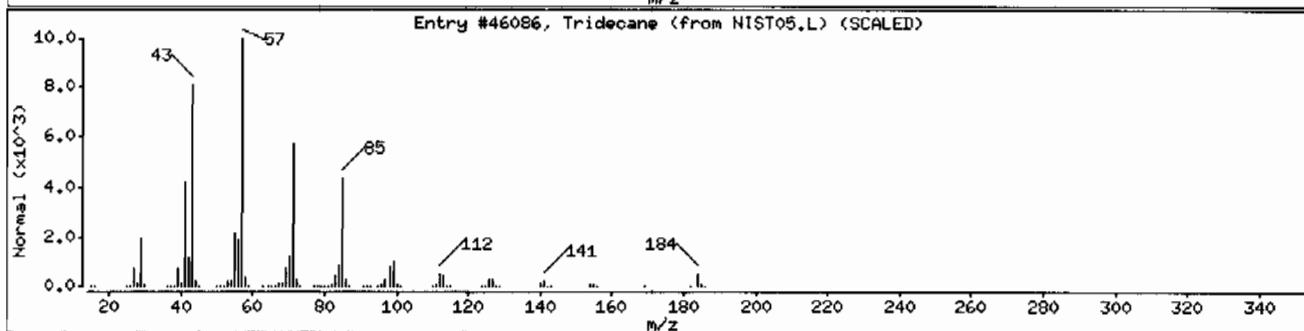
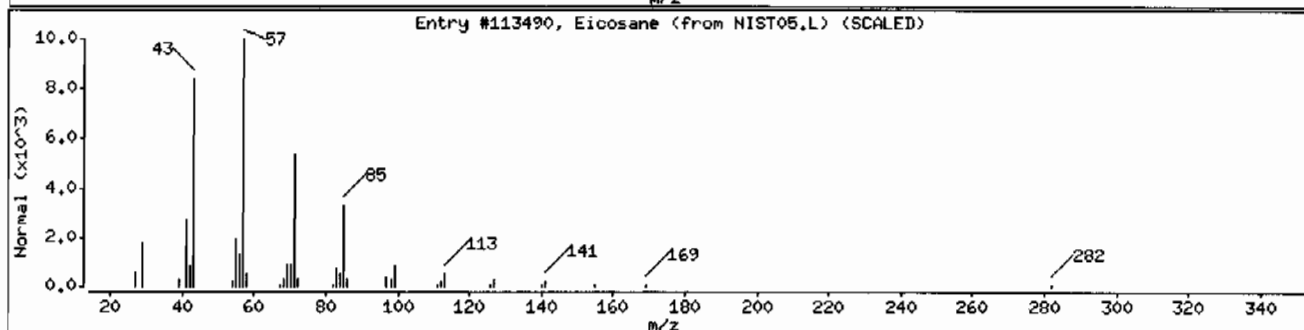
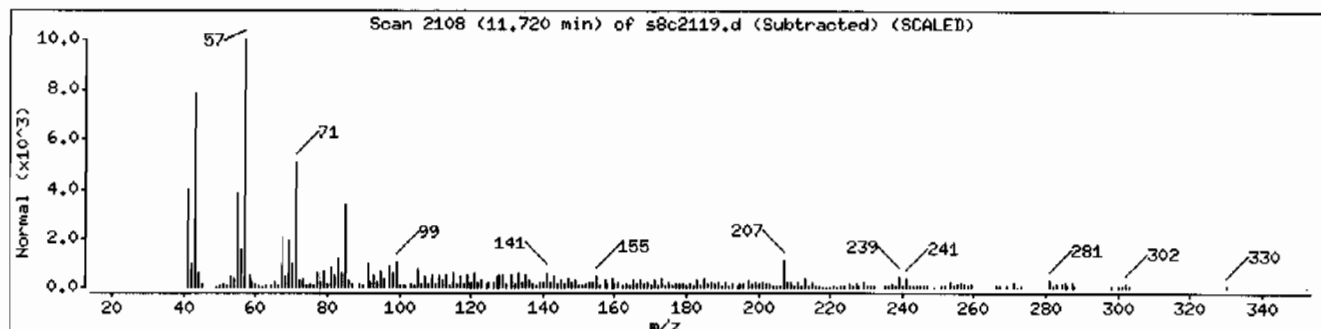
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	97	C ₂₀ H ₄₂	282
Tridecane	629-50-5	NIST05.L	46086	93	C ₁₃ H ₂₈	184
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	90	C ₁₉ H ₃₉ Cl	302



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: HSD8,i

Sample Info: 1248373009196192211ISVM11ILANL

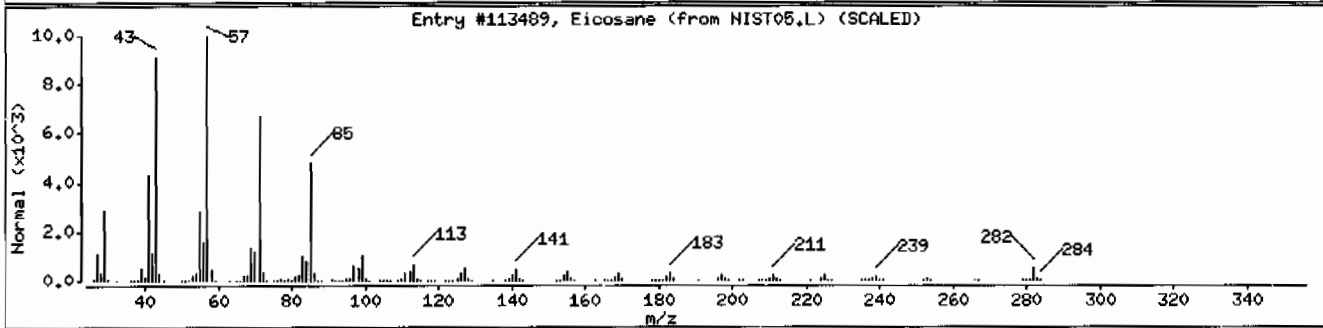
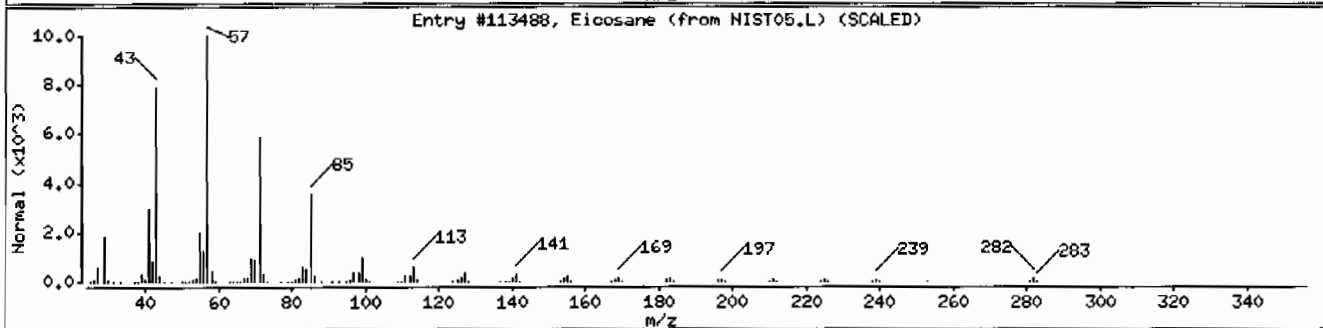
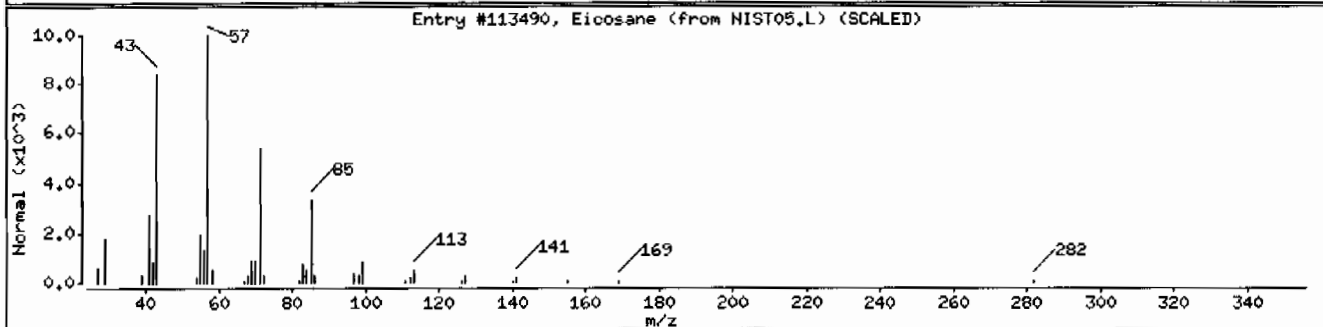
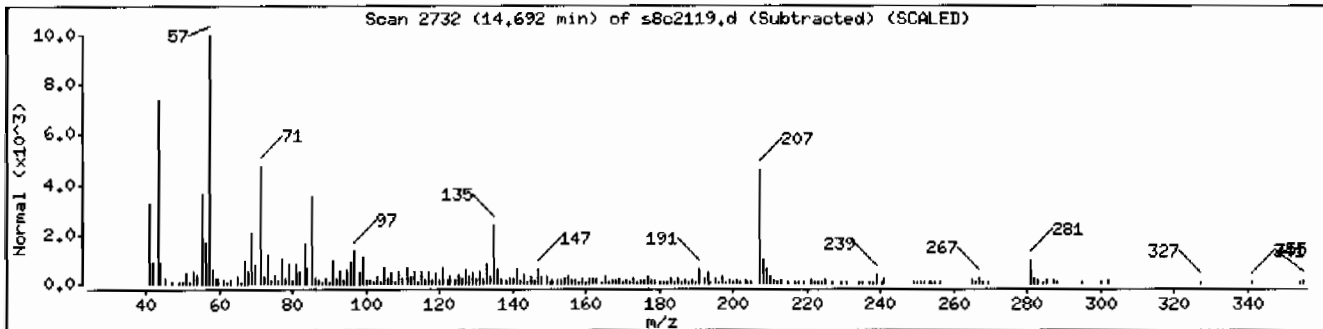
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	89	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	86	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	86	C20H42	282



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: HSD8.i

Sample Info: 1248373009196192211SVH111LANL

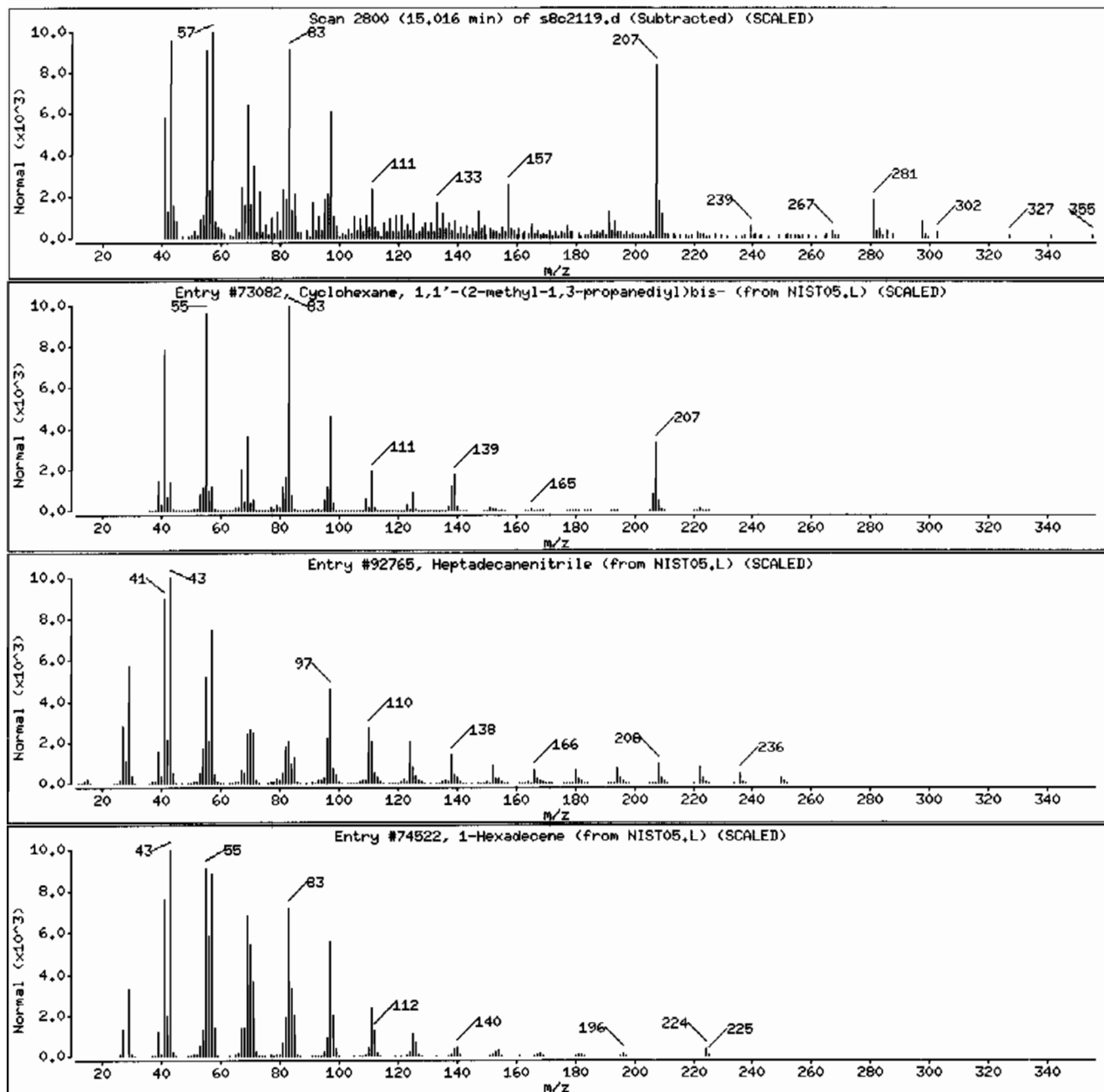
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1,1'-(2-methyl-1,3-propanediol)bis-	2883-08-1	NIST05.L	73082	55	C16H30	222
Heptadecanenitrile	5399-02-0	NIST05.L	92765	52	C17H33N	251
1-Hexadecene	629-73-2	NIST05.L	74522	43	C16H32	224



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: HSD8.i

Sample Info: 1248373009196192211ISVM111LANL

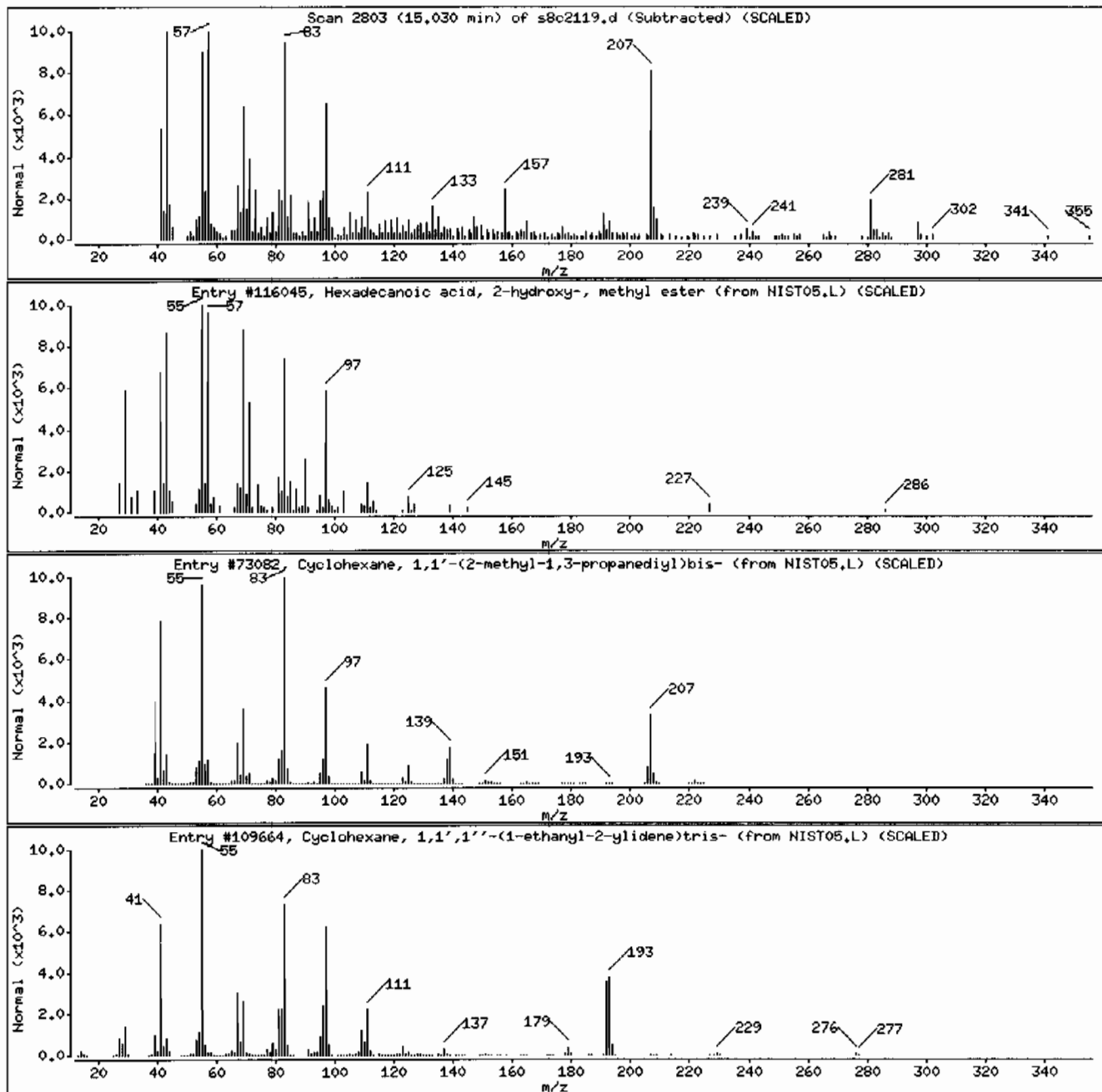
Volume injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Hexadecanoic acid, 2-hydroxy-, methyl es	16742-51-1	NIST05.L	116045	50	C17H34O3	286
Cyclohexane, 1,1'-(2-methyl-1,3-propanedi	2883-08-1	NIST05.L	73082	49	C16H30	222
Cyclohexane, 1,1',1''-(1-ethanyl-2-ylide	55682-86-5	NIST05.L	109664	43	C20H36	276



Date: 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009|96192211|SVH11|LANL

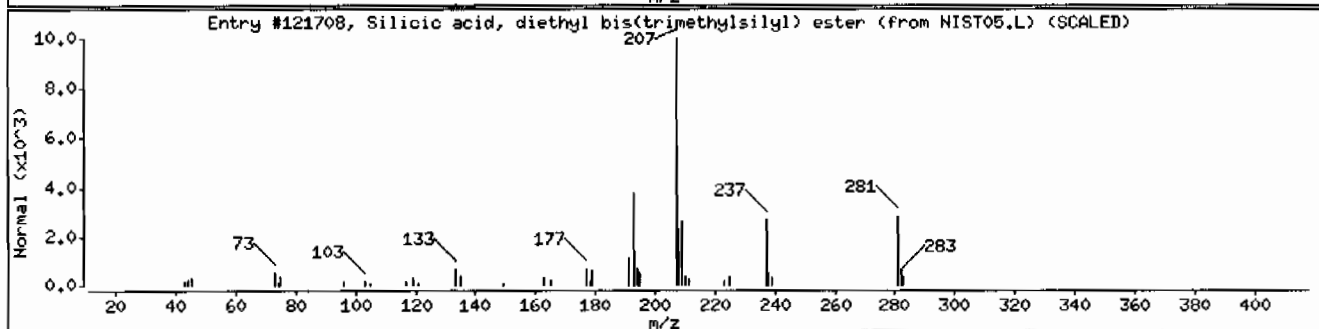
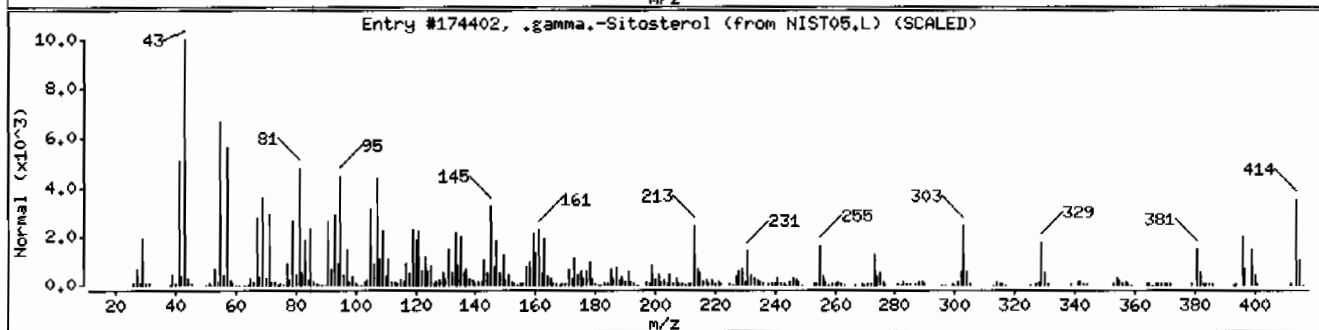
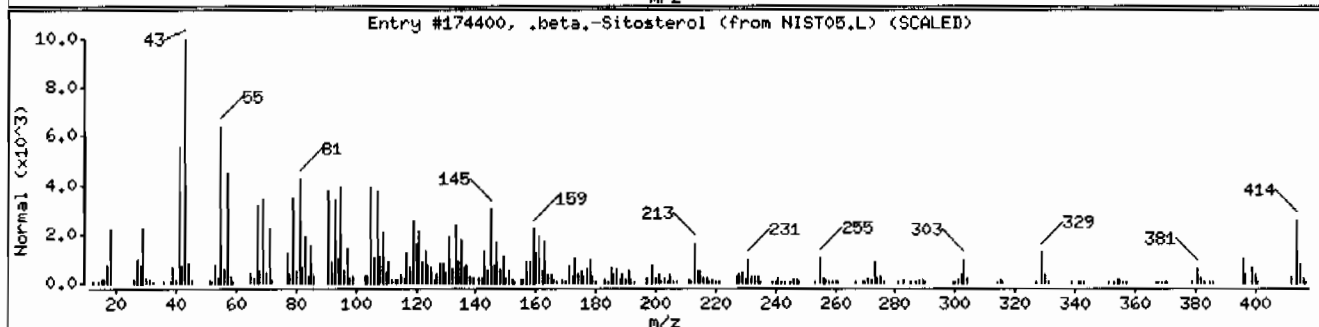
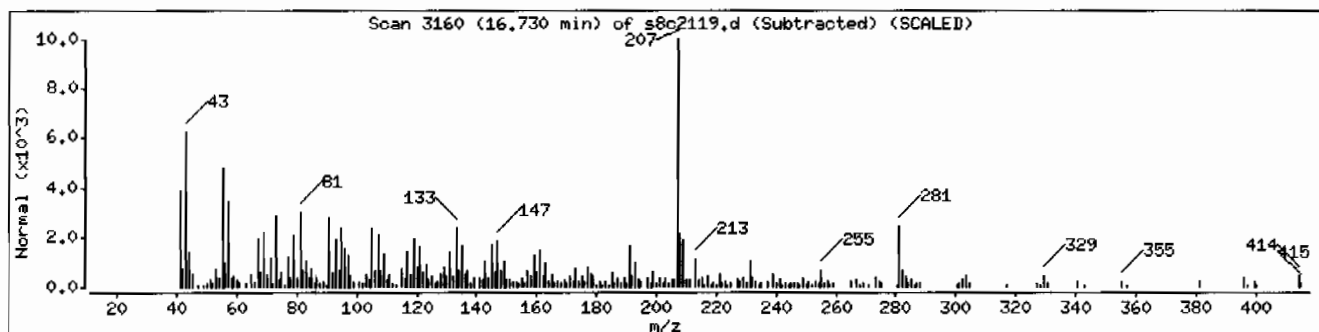
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	93	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	59	C ₂₉ H ₅₀ O	414
Silicic acid, diethyl bis(trimethylsilyl)	3555-45-1	NIST05.L	121708	46	C ₁₀ H ₂₈ O ₄ Si ₃	296



Date : 21-MAR-2010 16:56

Client ID: RE36-10-7498

Instrument: MSD8.i

Sample Info: 1248373009196192211SVMI1ILANL

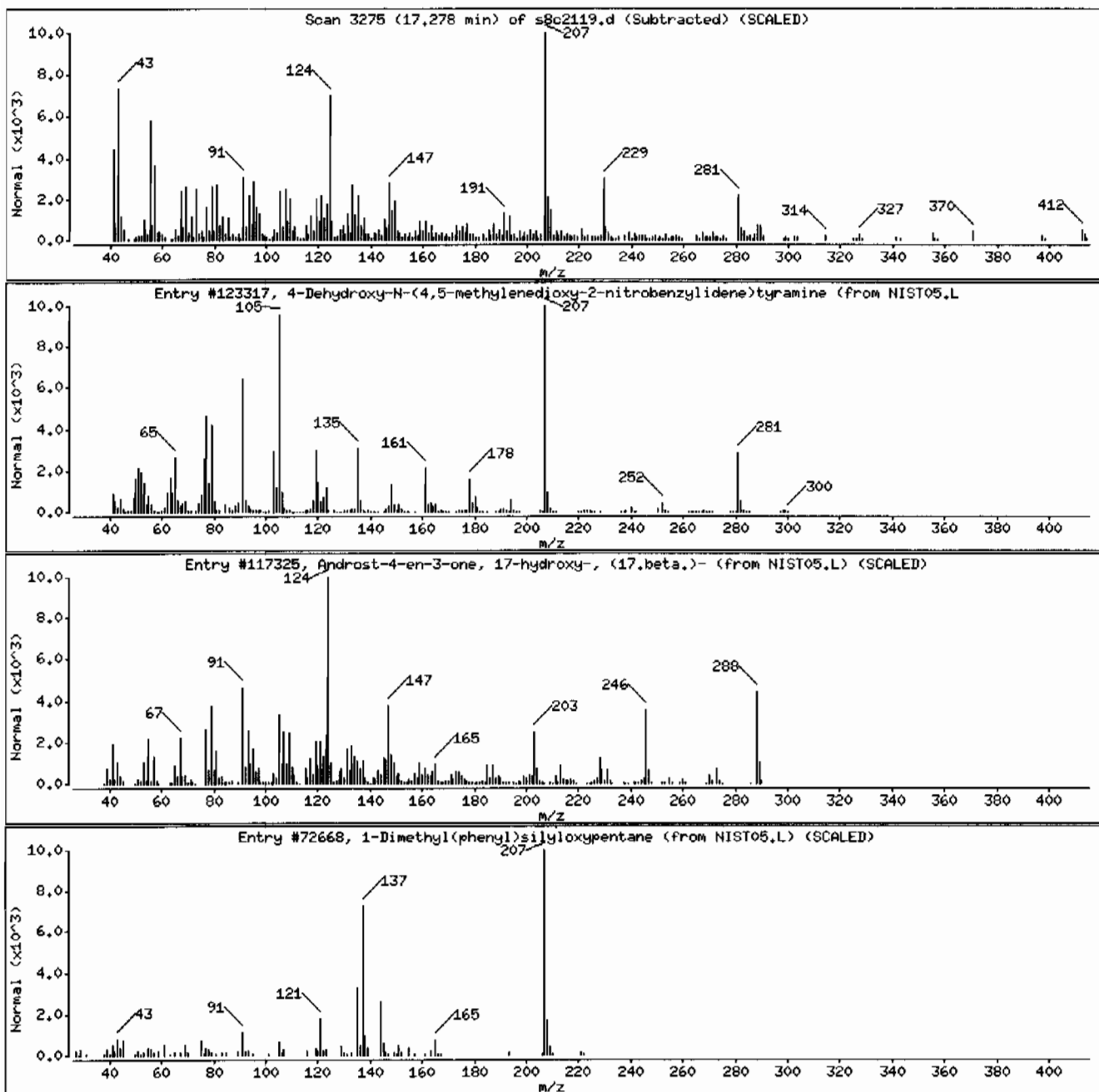
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitro	1000111-66-9	NIST05.L	123317	46	C16H14N2O4	298
Androst-4-en-3-one, 17-hydroxy-, (17.β)	58-22-0	NIST05.L	117325	43	C19H28O2	288
1-Dimethyl(phenyl)silyloxy-pentane	1000280-41-7	NIST05.L	72668	35	C13H22OSi	222



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

SDG Number: 10-2154
Lab Sample ID: 248373006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8J
Analyst: NAG1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 27
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	456	ug/kg	91.1	456
108-95-2	Phenol	U	456	ug/kg	91.1	456
95-57-8	2-Chlorophenol	U	456	ug/kg	91.1	456
106-46-7	1,4-Dichlorobenzene	U	456	ug/kg	91.1	456
621-64-7	N-Nitrosodipropylamine	U	456	ug/kg	91.1	456
59-50-7	4-Chloro-3-methylphenol	U	456	ug/kg	91.1	456
83-32-9	Acenaphthene	U	45.6	ug/kg	15.0	45.6
121-14-2	2,4-Dinitrotoluene	U	456	ug/kg	45.6	456
100-02-7	4-Nitrophenol	U	456	ug/kg	150	456
87-86-5	Pentachlorophenol	U	456	ug/kg	114	456
129-00-0	Pyrene	U	45.6	ug/kg	13.7	45.6
110-86-1	Pyridine	U	456	ug/kg	91.1	456
62-53-3	Aniline	U	456	ug/kg	137	456
111-44-4	bis(2-Chloroethyl) ether	U	456	ug/kg	91.1	456
541-73-1	1,3-Dichlorobenzene	U	456	ug/kg	91.1	456
100-51-6	Benzyl alcohol	U	456	ug/kg	137	456
95-50-1	1,2-Dichlorobenzene	U	456	ug/kg	91.1	456
108-60-1	bis(2-Chloroisopropyl)ether	U	456	ug/kg	91.1	456
95-48-7	o-Cresol	U	456	ug/kg	91.1	456
65794-96-9	m,p-Cresols	U	456	ug/kg	137	456
67-72-1	Hexachloroethane	U	456	ug/kg	91.1	456
98-95-3	Nitrobenzene	U	456	ug/kg	91.1	456
78-59-1	Isophorone	U	456	ug/kg	91.1	456
88-75-5	2-Nitrophenol	U	456	ug/kg	91.1	456
105-67-9	2,4-Dimethylphenol	U	456	ug/kg	159	456
111-91-1	bis(2-Chloroethoxy)methane	U	456	ug/kg	91.1	456
120-83-2	2,4-Dichlorophenol	U	456	ug/kg	91.1	456
65-85-0	Benzoic acid	U	911	ug/kg	228	911
91-20-3	Naphthalene	U	45.6	ug/kg	13.7	45.6
106-47-8	4-Chloroaniline	U	456	ug/kg	91.1	456
87-68-3	Hexachlorobutadiene	U	456	ug/kg	91.1	456
91-57-6	2-Methylnaphthalene	U	45.6	ug/kg	9.11	45.6
77-47-4	Hexachlorocyclopentadiene	U	456	ug/kg	91.1	456
88-06-2	2,4,6-Trichlorophenol	U	456	ug/kg	91.1	456
95-95-4	2,4,5-Trichlorophenol	U	456	ug/kg	91.1	456
91-58-7	2-Chloronaphthalene	U	45.6	ug/kg	15.0	45.6
88-74-4	2-Nitroaniline	U	456	ug/kg	91.1	456
99-09-2	<i>o</i> -Nitroaniline	U	456	ug/kg	91.1	456
	3-Nitroaniline					

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373006	Date Received: 03/02/2010 08:50	%Moisture: 27
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7499	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 15:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s8c2116.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	456	ug/kg	91.1	456
606-20-2	2,6-Dinitrotoluene	U	456	ug/kg	45.6	456
208-96-8	Acenaphthylene	U	45.6	ug/kg	13.7	45.6
51-28-5	2,4-Dinitrophenol	U	911	ug/kg	173	911
132-64-9	Dibenzofuran	U	456	ug/kg	91.1	456
84-66-2	Diethylphthalate	U	456	ug/kg	91.1	456
86-73-7	Fluorene	U	45.6	ug/kg	13.7	45.6
7005-72-3	4-Chlorophenylphenylether	U	456	ug/kg	91.1	456
534-52-1	2-Methyl-4,6-dinitrophenol	U	456	ug/kg	91.1	456
100-01-6	4-Nitroaniline	U	456	ug/kg	137	456
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	456	ug/kg	91.1	456
122-66-7	Azobenzene	U	456	ug/kg	91.1	456
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	456	ug/kg	91.1	456
118-74-1	Hexachlorobenzene	U	456	ug/kg	91.1	456
85-01-8	Phenanthrene	U	45.6	ug/kg	13.7	45.6
120-12-7	Anthracene	U	45.6	ug/kg	9.11	45.6
84-74-2	Di-n-butylphthalate	U	456	ug/kg	91.1	456
206-44-0	Fluoranthene	U	45.6	ug/kg	13.7	45.6
85-68-7	Butylbenzylphthalate	U	456	ug/kg	91.1	456
56-55-3	Benzo(a)anthracene	U	45.6	ug/kg	13.7	45.6
91-94-1	3,3'-Dichlorobenzidine	U	456	ug/kg	137	456
218-01-9	Chrysene	U	45.6	ug/kg	13.7	45.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	456	ug/kg	91.1	456
117-84-0	Di-n-octylphthalate	U	456	ug/kg	91.1	456
205-99-2	Benzo(b)fluoranthene	U	45.6	ug/kg	13.7	45.6
207-08-9	Benzo(k)fluoranthene	U	45.6	ug/kg	13.7	45.6
50-32-8	Benzo(a)pyrene	U	45.6	ug/kg	13.7	45.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.6	ug/kg	13.7	45.6
53-70-3	Dibenzo(a,h)anthracene	U	45.6	ug/kg	13.7	45.6
191-24-2	Benzo(ghi)perylene	U	45.6	ug/kg	13.7	45.6
120-82-1	1,2,4-Trichlorobenzene	U	456	ug/kg	91.1	456

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.69	878	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	4.25	581	ug/kg	97	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373006	Date Received: 03/02/2010 08:50	%Moisture: 27
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7499	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 15:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s8c2116.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
1000159-38-2	Unknown	8.86	460	ug/kg		J
	Unknown	10.34	360	ug/kg		J
	Unknown	10.69	941	ug/kg		J
	Unknown	10.92	376	ug/kg		J
	Unknown	11.04	224	ug/kg		J
	Unknown	11.16	370	ug/kg		J
	Unknown	11.29	309	ug/kg		J
	Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	11.35	591	ug/kg	80	NJ
	Unknown	11.38	801	ug/kg		J
	Unknown	11.45	404	ug/kg		J
1740-19-8	Unknown	11.58	7040	ug/kg		J
	Unknown	11.61	4740	ug/kg		J
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.71	5160	ug/kg	96	NJ
	Unknown	11.75	614	ug/kg		J
	Unknown	11.79	285	ug/kg		J
	Unknown	11.81	370	ug/kg		J
	Unknown	12.01	347	ug/kg		J
471-77-2	Unknown	12.04	522	ug/kg		J
	Unknown	12.08	371	ug/kg		J
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.13	1530	ug/kg	93	NJ
	Unknown	12.27	217	ug/kg		J
	Unknown	12.36	225	ug/kg		J
	Unknown	13.36	541	ug/kg		J
	Unknown	14.24	561	ug/kg		J
	Unknown	15.09	519	ug/kg		J

Data File: /chem/MSD8.i/s032110.b/s8c2116.d
 Report Date: 22-Mar-2010 09:43

Page 1

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2116.d
 Lab Smp Id: 248373006 Client Smp ID: RE36-10-7499
 Inj Date : 21-MAR-2010 15:26
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |248373006|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 16
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	26.99740	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
	=====	==	=====	=====	=====	(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301	(1.000)	295508	40.0000	
* 29 Naphthalene-d8	136	5.553	5.558	(1.000)	1199157	40.0000	
* 46 Acenaphthene-d10	164	7.401	7.406	(1.000)	713116	40.0000	
* 67 Phenanthrene-d10	188	8.996	8.997	(1.000)	1161142	40.0000	
* 91 Chrysene-d12	240	11.873	11.868	(1.000)	911694	40.0000	
* 98 Perylene-d12	264	13.887	13.878	(1.000)	549563	40.0000	
\$ 3 2-Fluorophenol	112	3.172	3.158	(0.738)	542330	77.7362	3540
\$ 5 Phenol-d5	99	3.934	3.930	(0.915)	680301	78.1907	3560
\$ 20 Nitrobenzene-d5	82	4.825	4.830	(0.869)	308033	36.1355	1650
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.903)	692647	32.9981	1500
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.115)	163555	69.3823	3160
\$ 81 p-Terphenyl-d14	244	10.711	10.706	(0.902)	713451	43.4664	1980

ION RATIO REPORT

SV REPORT

Data file: s8c2116.d

Report Date: 03/22/2010 07:17

Lab. ID: 248373006

SampleType: SAMPLE

Injection Date: 21-MAR-2010 15:26

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373006|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	34958	3.93	4.00	80-120	100	(T)
93	43199	3.98	4.00	213-273	124	(Q)

6 Phenol		CAS#: 108-95-2				
94	50645	4.04	3.94	80-120	100	(T)
66	9565	4.04	3.94	13- 73	19	(T)
65	27511	4.04	3.94	3- 63	54	(T)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	41788	4.82	4.68	80-120	100	(T)
42	22723	4.82	4.68	31- 91	54	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	2154	5.31	5.28	80-120	100	()
122	2845	5.38	5.28	64-124	132	(QT)
77	3369	5.31	5.28	47-107	156	(Q)

30 Naphthalene		CAS#: 91-20-3				
128	500	5.57	5.58	80-120	100	()
129	180	5.56	5.58	0- 41	36	()
127	0	0.00	5.58	0- 43	0	(T)

34 2-Methylnaphthalene		CAS#: 91-57-6				
142	107	6.40	6.30	80-120	100	(T)
141	110	6.40	6.30	56-116	103	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	1032	6.81	6.81	80-120	100	()
164	250	6.87	6.81	3- 63	24	()
127	304	6.80	6.81	7- 67	29	()

42	o-Nitroaniline			CAS#: 88-74-4		
65	44690	7.02	6.92	80-120	100	(T)
92	52790	7.02	6.92	33- 93	118	(QT)
138	3742	7.02	6.92	76-136	8	(QT)

44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	92714	7.40	7.18	80-120	100	(T)
63	1553	7.40	7.18	32- 92	2	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	92714	7.40	7.61	80-120	100	(T)
89	1541	7.40	7.61	47-107	2	(QT)
63	1553	7.40	7.61	26- 86	2	(QT)

55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	589	8.24	8.04	80-120	100	(T)
105	1883	8.24	8.04	14- 74	319	(QT)
51	1280	8.24	8.04	26- 86	217	(QT)

68	Phenanthrene			CAS#: 85-01-8		
178	2064	9.02	9.02	80-120	100	()
179	714	9.02	9.02	0- 45	35	()
176	957	9.02	9.02	0- 49	46	()

85	Butylbenzylphthalate			CAS#: 85-68-7		
149	31104	11.32	11.23	80-120	100	(T)
91	217502	11.32	11.23	40-100	699	(QT)
206	10400	11.32	11.23	0- 48	33	(T)

92	Chrysene			CAS#: 218-01-9		
228	2750	11.90	11.90	80-120	100	()
229	1721	11.90	11.90	0- 49	63	(Q)
226	2999	11.91	11.90	0- 59	109	(Q)

93	bis(2-Ethylhexyl)phthalate			CAS#: 117-81-7		
149	38830	11.90	11.88	80-120	100	()
167	25188	11.91	11.88	0- 57	65	(Q)

94	Di-n-octylphthalate			CAS#: 117-84-0		
149	4707	12.64	12.73	80-120	100	(T)
43	27936	12.64	12.73	0- 41	593	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2116.d
 Lab Smp Id: 248373006 Client Smp ID: RE36-10-7499
 Inj Date : 21-MAR-2010 15:26
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |248373006|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 16
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	26.99740	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.301	1808905	40.000
* 67 Phenanthrene-d10	8.996	3096670	40.000
* 91 Chrysene-d12	11.873	5202178	40.000
* 98 Perylene-d12	13.887	1691062	40.000

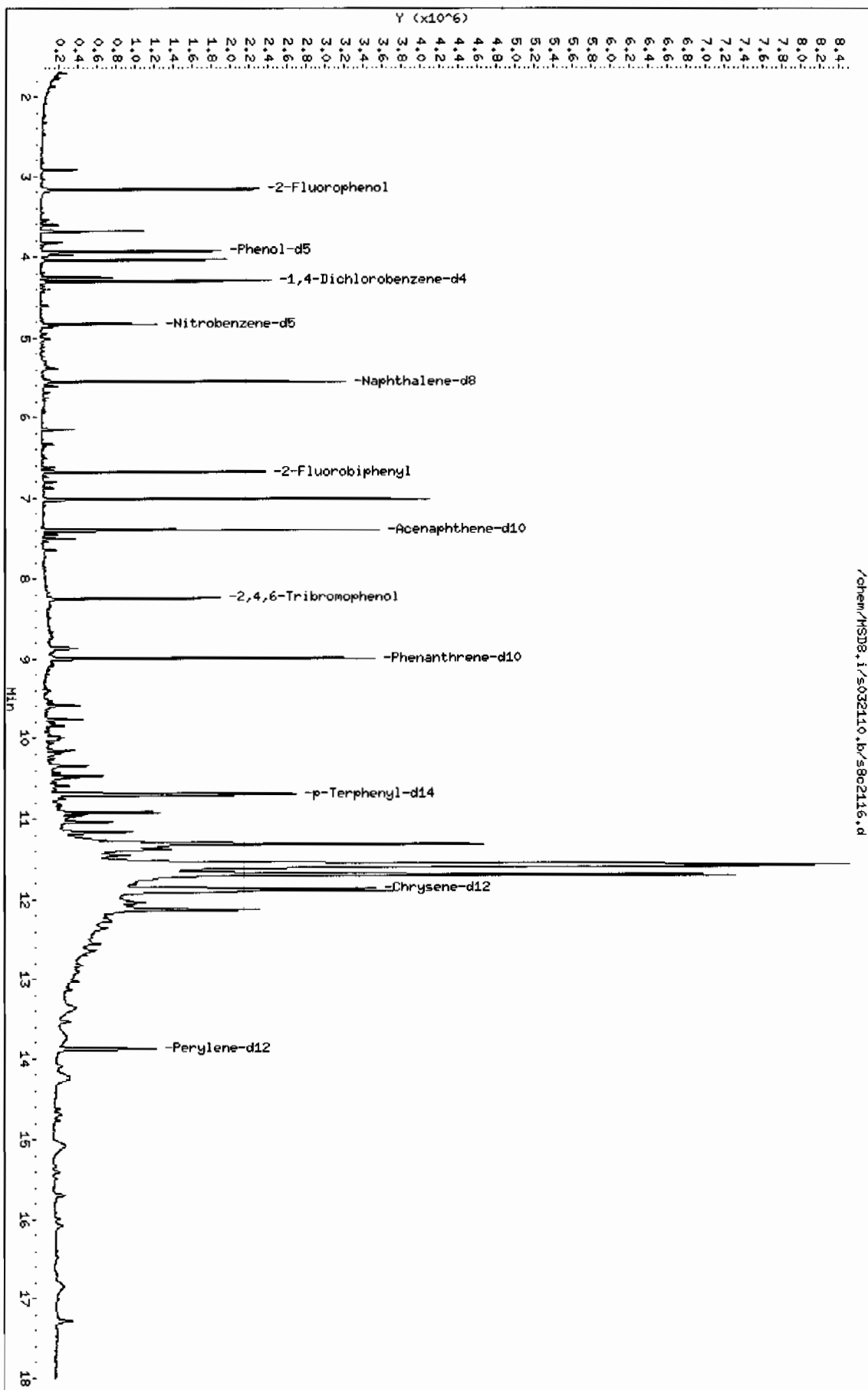
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.687	871499	19.2712932	878	97	NIST05.L	15188	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
4.253	576314	12.7439259	580	97	NIST05.L	15369	10
Unknown					CAS #:		
8.863	782194	10.1036800	460	0		0	67
Unknown					CAS #:		
10.344	612599	7.91300346	360	0		0	67
Unknown					CAS #:		
10.692	2685398	20.6482583	941	0		0	91
Unknown					CAS #:		
10.925	1072276	8.24482436	376	0		0	91
Unknown					CAS #:		
11.039	640031	4.92125125	224	0		0	91
Unknown					CAS #:		
11.163	1055049	8.11236684	370	0		0	91
Unknown					CAS #:		
11.287	883417	6.79266725	309	0		0	91
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-					CAS #: 1000159-38-2		
11.349	1687665	12.9766010	591	80	NIST05.L	59916	91
Unknown					CAS #:		
11.382	2286191	17.5787227	801	0		0	91
Unknown					CAS #:		
11.454	1154821	8.87952071	404	0		0	91
Unknown					CAS #:		
11.577	20099822	154.549277	7040	0		0	91
Unknown					CAS #:		
11.606	13530855	104.039916	4740	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
11.706	14717417	113.163496	5160	96	NIST05.L	125034	91

RT	CONCENTRATIONS			QUAL	QUANT		CFND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
11.754	1752544	13.4754630	614	0		0	91
Unknown					CAS #:		
11.792	813567	6.25558582	285	0		0	91
Unknown					CAS #:		
11.811	1055147	8.11311758	370	0		0	91
Unknown					CAS #:		
12.011	989992	7.61213208	347	0		0	91
Unknown					CAS #:		
12.044	1490632	11.4616015	522	0		0	91
Unknown					CAS #:		
12.082	1060527	8.15448510	371	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 471-77-2		
12.135	4364781	33.5611804	1530	93	NIST05.L	126183	91
Unknown					CAS #:		
12.273	620682	4.77247521	217	0		0	91
Unknown					CAS #:		
12.363	642995	4.94404158	225	0		0	91
Unknown					CAS #:		
13.363	502266	11.8804850	541	0		0	98
Unknown					CAS #:		
14.239	520360	12.3084659	561	0		0	98
Unknown					CAS #:		
15.087	481632	11.3924135	519	0		0	98

Data File: /chem/HSD8.i/s032110.b/s8c2116.d
Date: 21-MAR-2010 15:26
Client ID: RE36-10-7499
Sample Info: 1248373006|96192211|SM11|LANL
Volume Injected (uL): 0.5
Column Phase: J&W DB-SHS

Instrument: HSD8.i
Operator: nag1
Column diameter: 0.20



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: I248373006196192211SVH111LANL

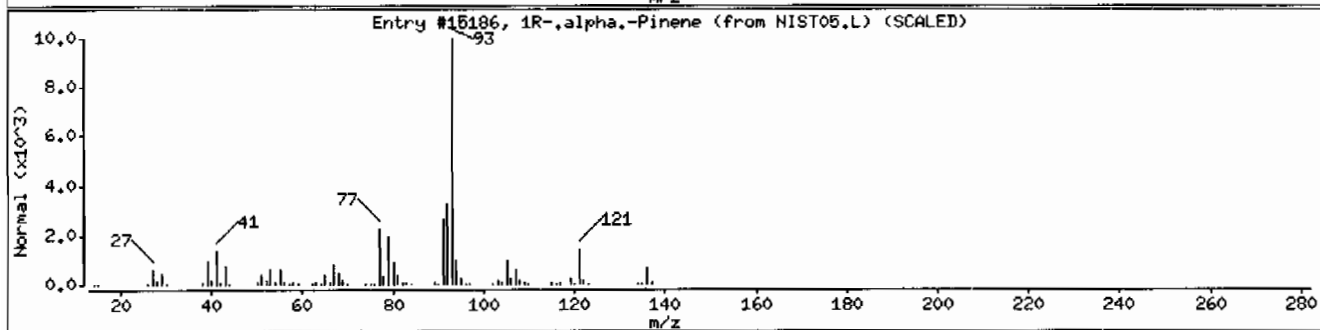
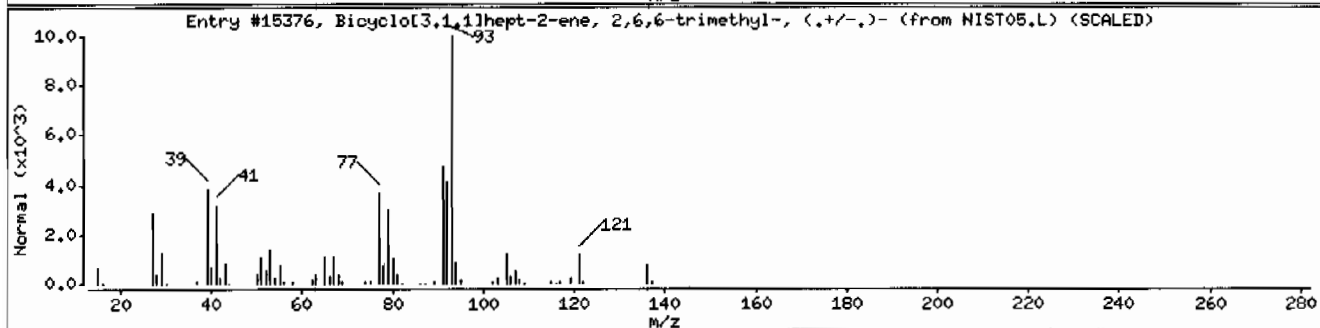
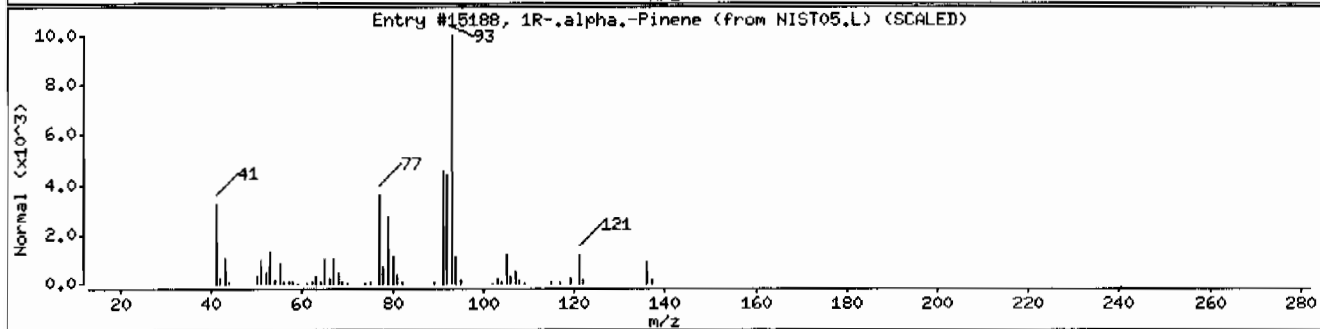
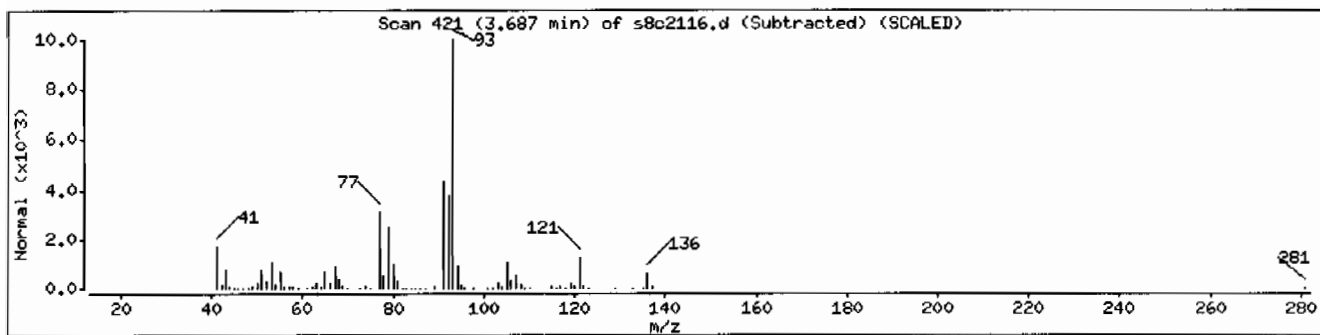
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

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



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.1

Sample Info: 1248373006196192211SVH111LANL

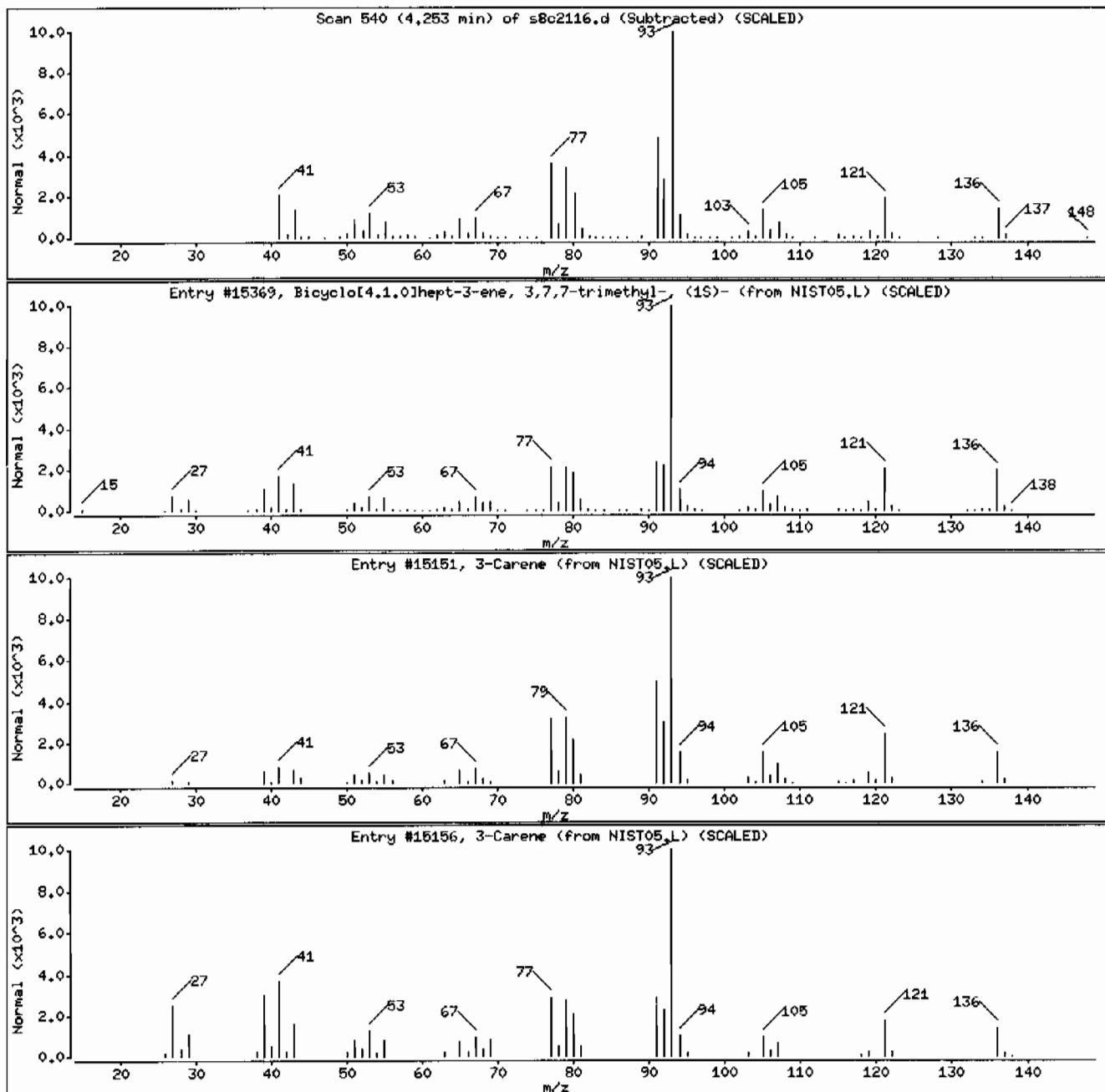
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

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



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211SVH111LANL

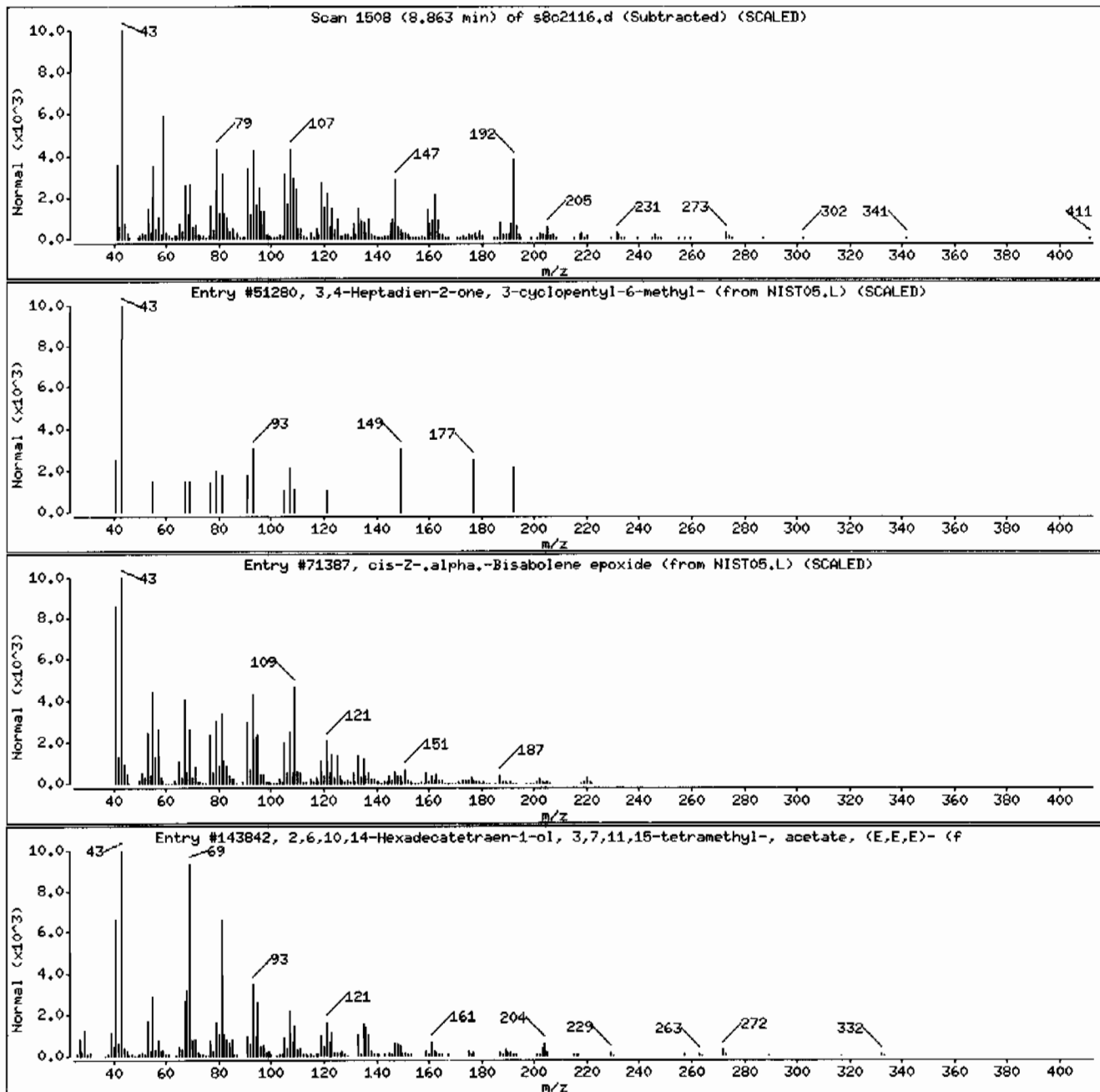
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3,4-Heptadien-2-one, 3-cyclopentyl-6-met	63922-50-9	NIST05.L	51280	38	C13H20O	192
cis-2-.alpha.-Bisabolene epoxide	1000131-71-2	NIST05.L	71387	25	C15H24O	220
2,6,10,14-Hexadecatetraen-1-ol, 3,7,11,1	61691-98-3	NIST05.L	143842	14	C22H36O2	332



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211SVH111LANL

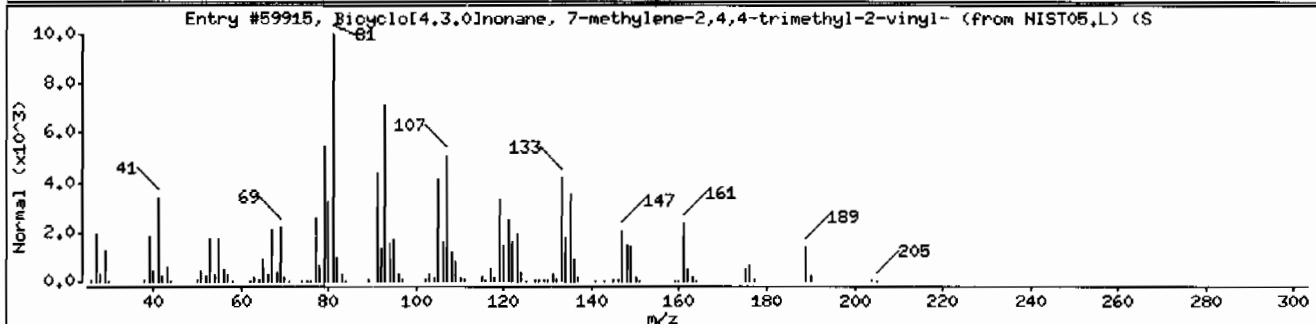
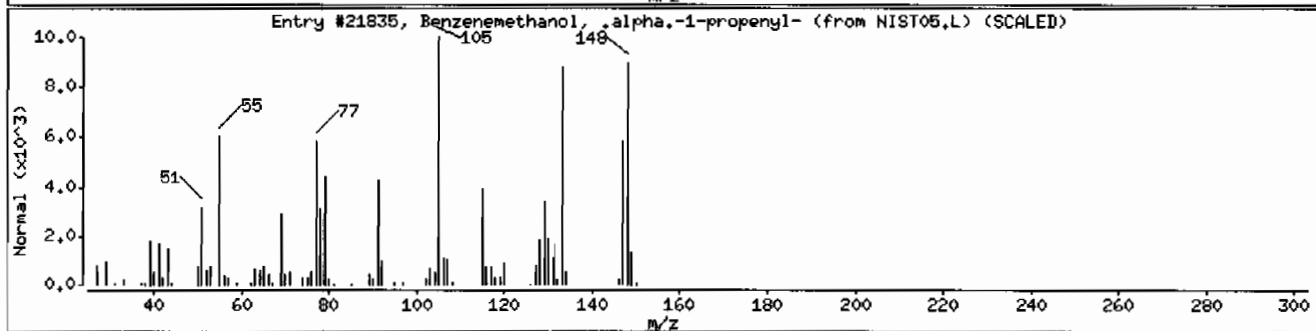
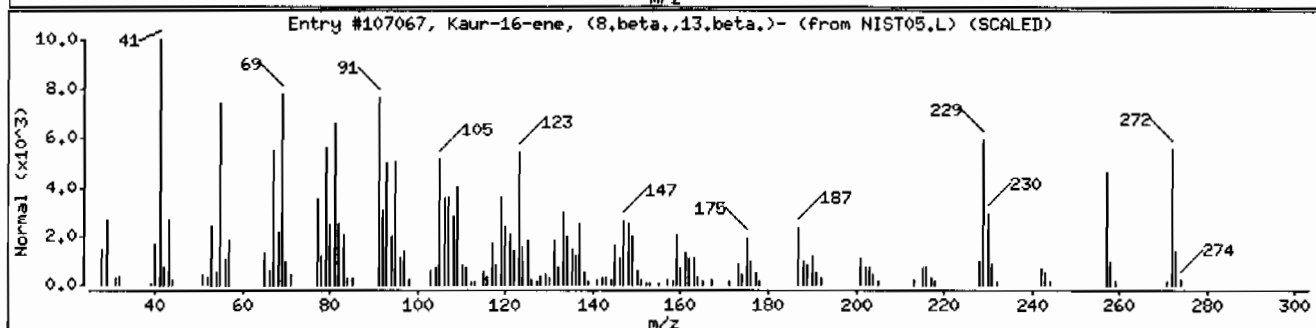
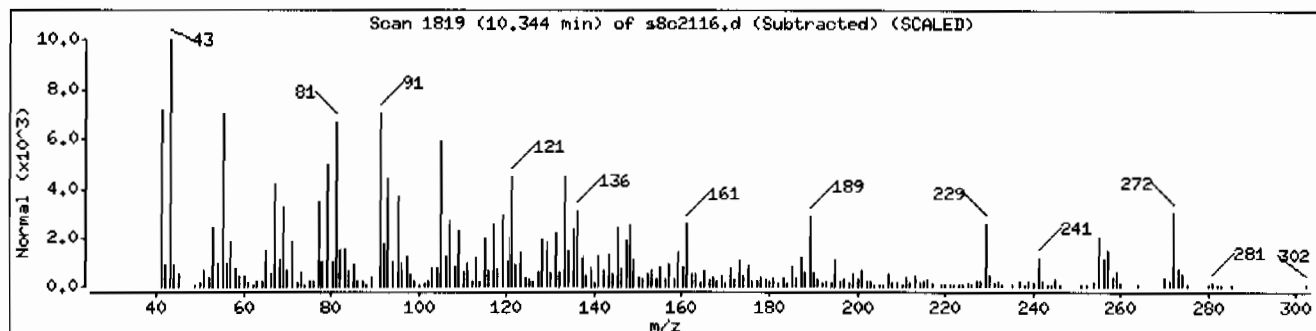
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Kaur-16-ene, (8,beta.,13,beta.)-	20070-61-5	NIST05.L	107067	44	C20H32	272
Benzenemethanol, .alpha.-1-propenyl-	3347-57-7	NIST05.L	21835	30	C10H12O	148
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	27	C15H24	204



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: HSD8.i

Sample Info: 1248373006196192211SVMI1|LANL

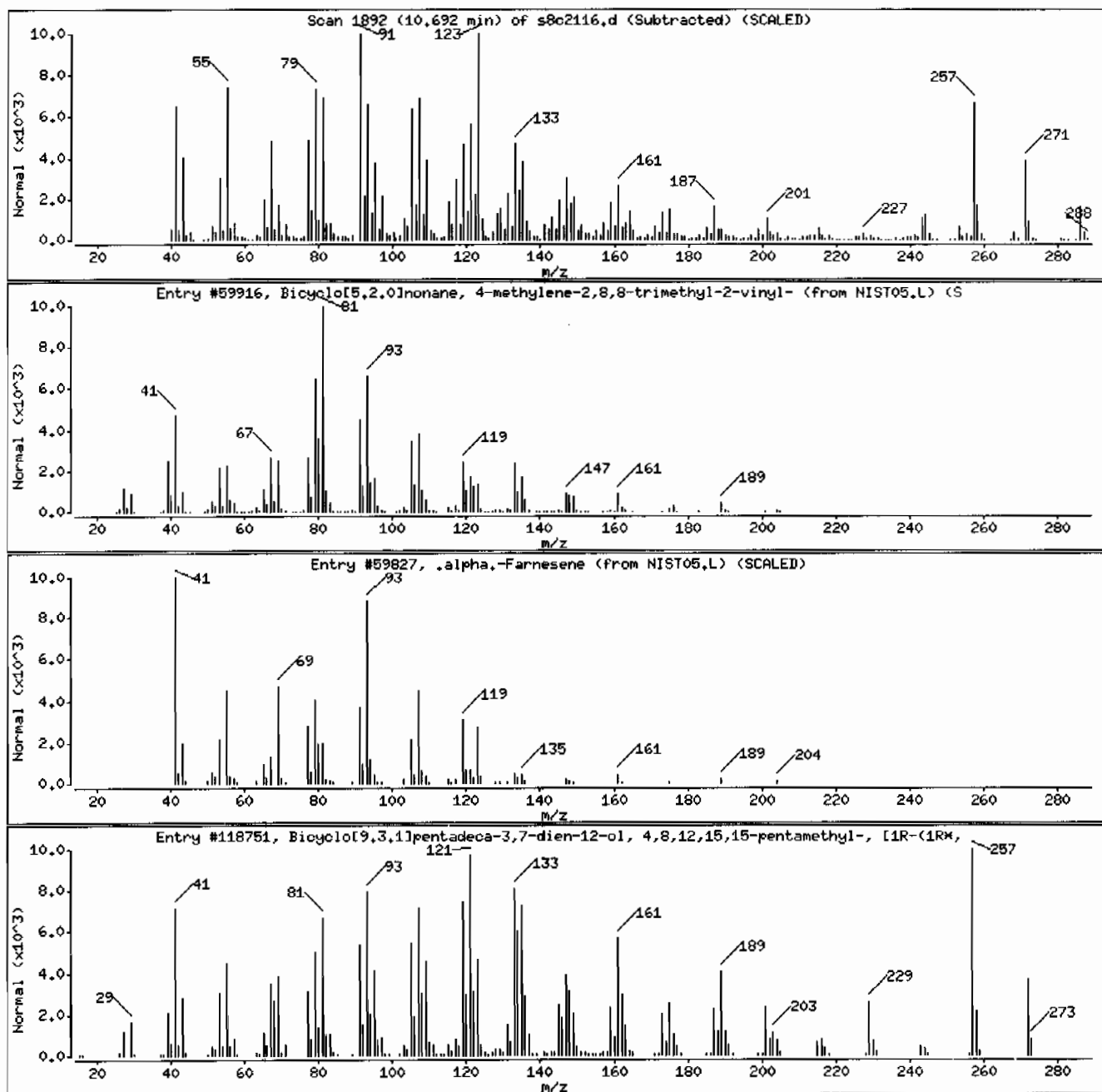
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	55	C15H24	204
.alpha.-Farnesene	502-61-4	NIST05.L	59827	30	C15H24	204
Bicyclo[9.3.1]pentadeca-3,7-dien-12-ol,	70000-19-0	NIST05.L	118751	27	C20H34O	290



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 12483730061961922111SVH111LANL

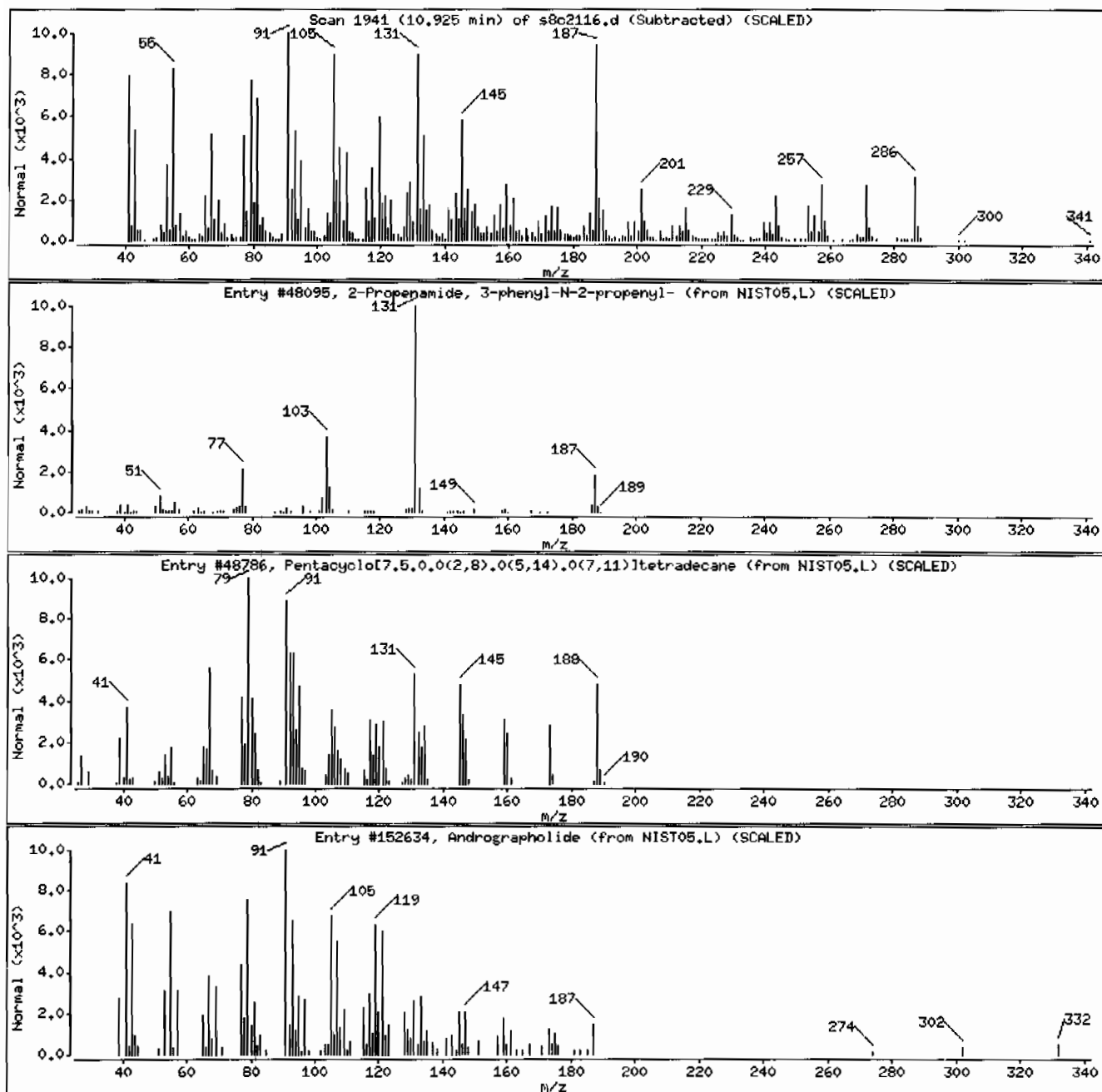
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Propenamide, 3-phenyl-N-2-propenyl-	41041-34-3	NIST05.L	48095	27	C12H13NO	187
Pentacyclo[7.5.0.0(2,8).0(5,14).0(7,11)]	79772-15-9	NIST05.L	48786	25	C14H20	188
Andrographolide	5508-58-7	NIST05.L	152634	22	C20H30O5	350



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: HSD8.i

Sample Info: 1248373006196192211SVH111LANL

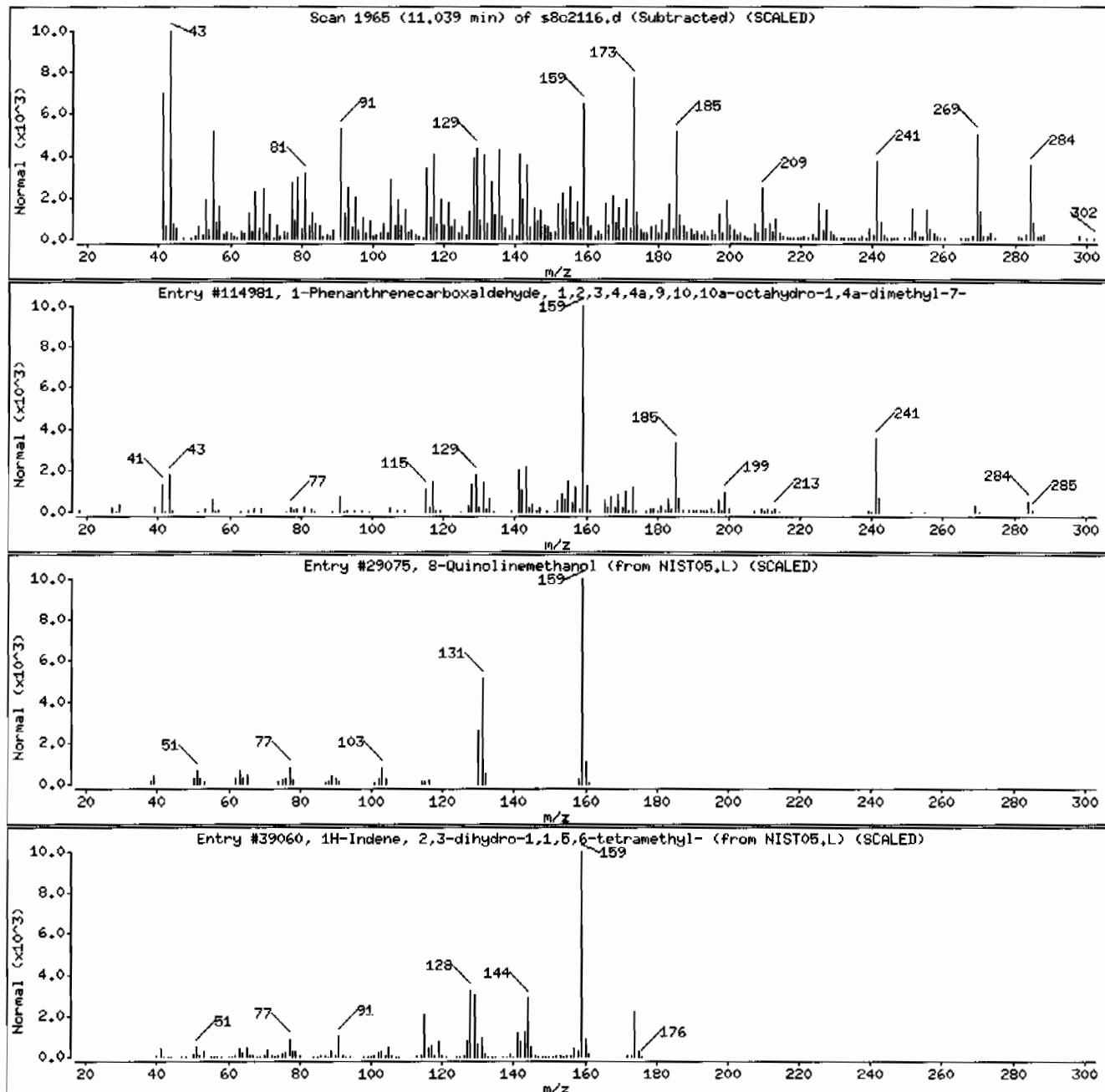
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxaldehyde, 1,2,3,4,4a	24035-50-5	NIST05.L	114981	25	C20H28O	284
8-Quinolinemethanol	16032-35-2	NIST05.L	29075	25	C10H9NO	159
1H-Indene, 2,3-dihydro-1,1,5,6-tetrameth	942-43-8	NIST05.L	39060	20	C13H18	174



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: HSD8,i

Sample Info: 1248373006196192211SVH111LANL

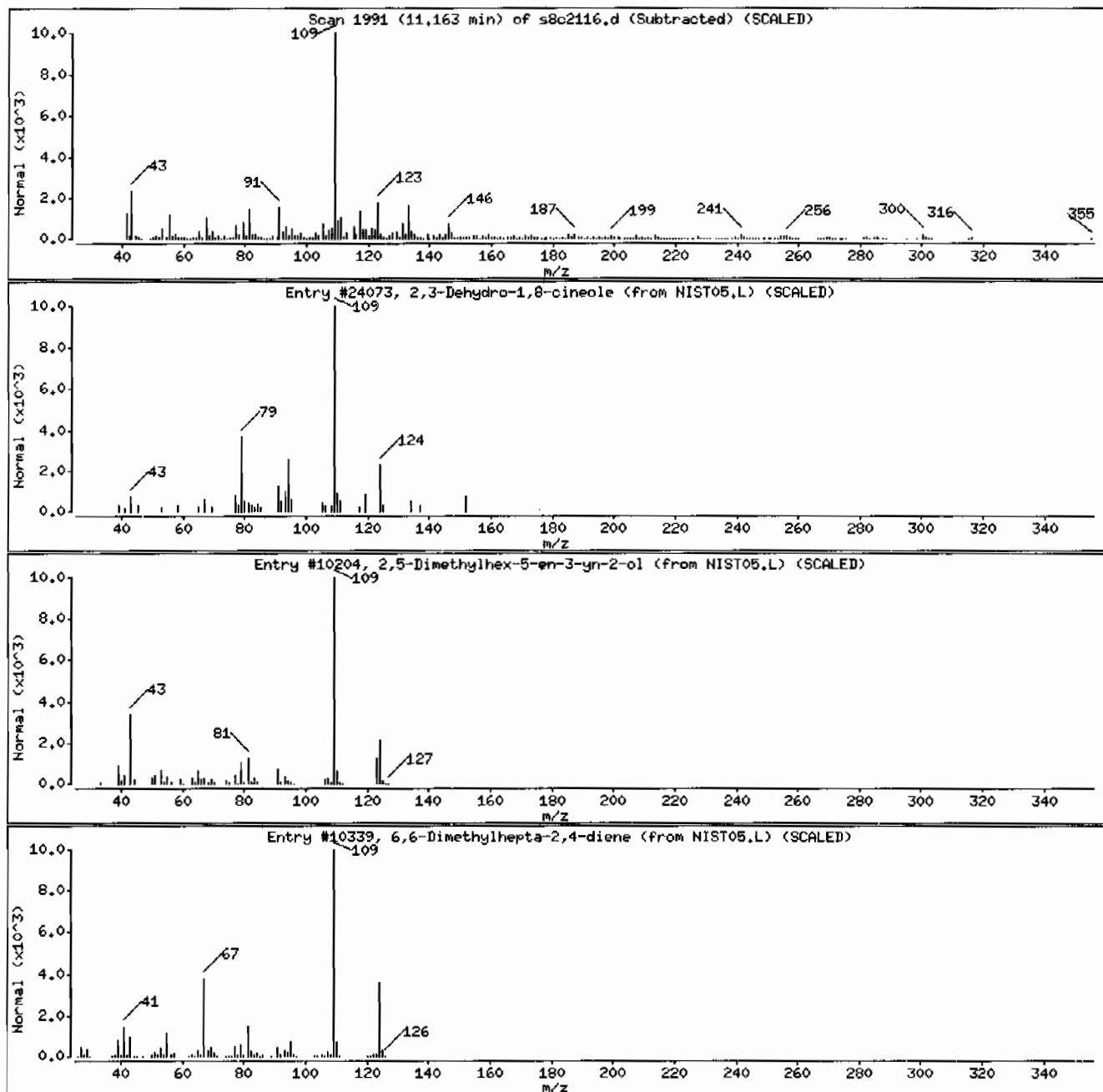
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3-Dehydro-1,8-cineole	92760-25-3	NIST05.L	24073	50	C10H16O	152
2,5-Dimethylhex-5-en-3-yn-2-ol	1000302-74-9	NIST05.L	10204	47	C8H12O	124
6,6-Dimethylhepta-2,4-diene	1000195-03-3	NIST05.L	10339	46	C9H16	124



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: HSD8.i

Sample Info: 1248373006196192211SVH111LANL

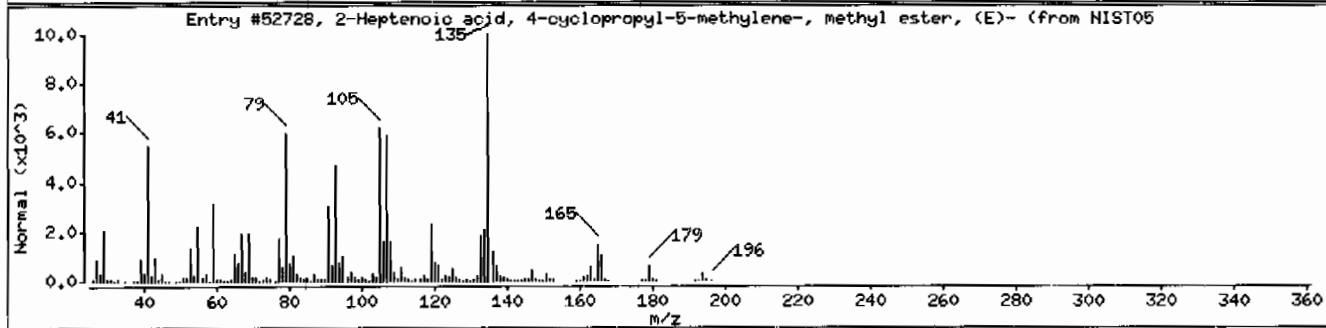
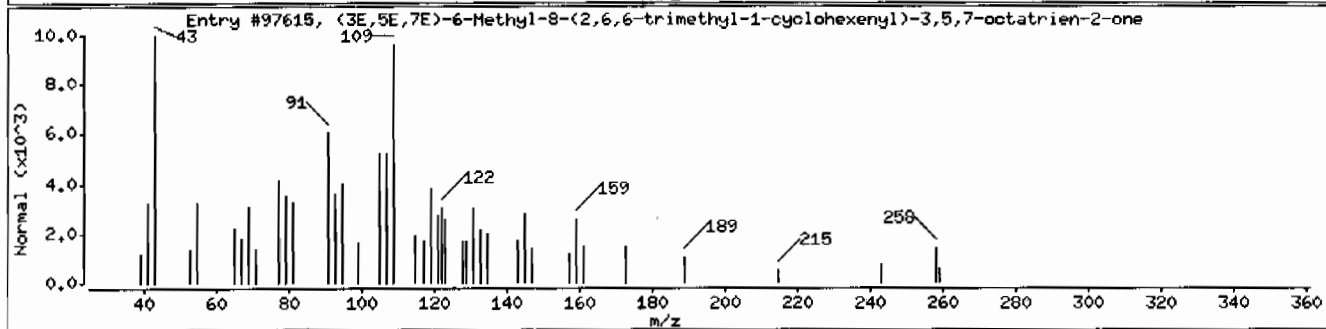
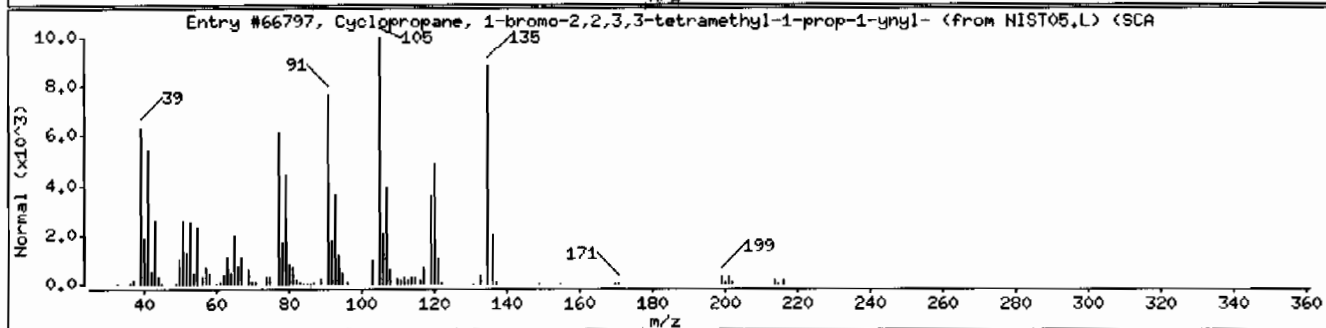
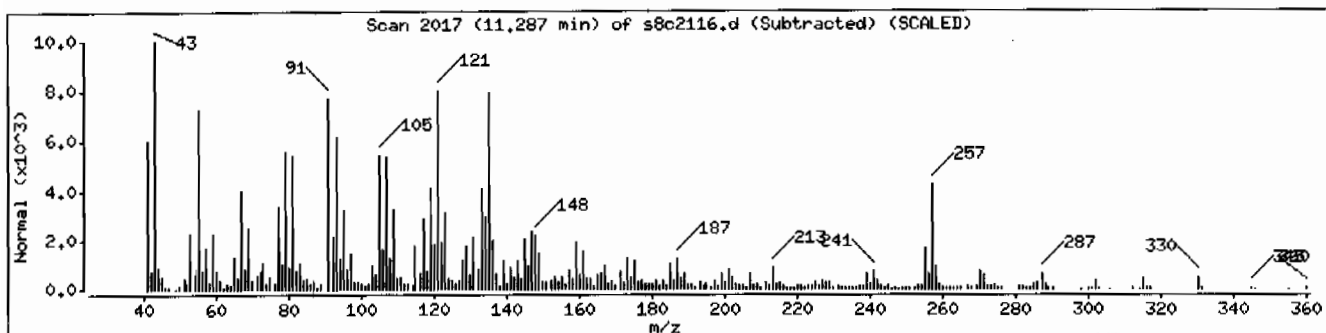
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopropane, 1-bromo-2,2,3,3-tetramethyl	138777-60-3	NIST05.L	66797	47	C10H15Br	214
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	46	C18H26O	258
2-Heptenoic acid, 4-cyclopropyl-5-methyl	74793-23-0	NIST05.L	52728	30	C12H18O2	194



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211SVH11ILANL

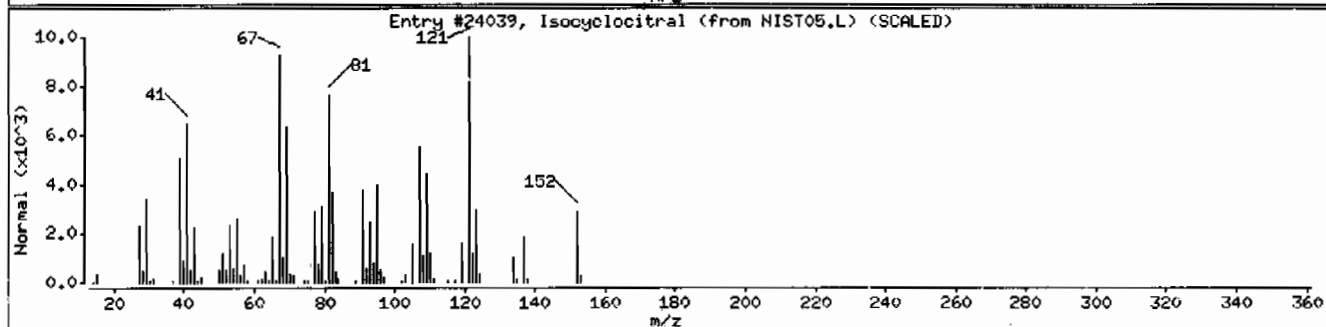
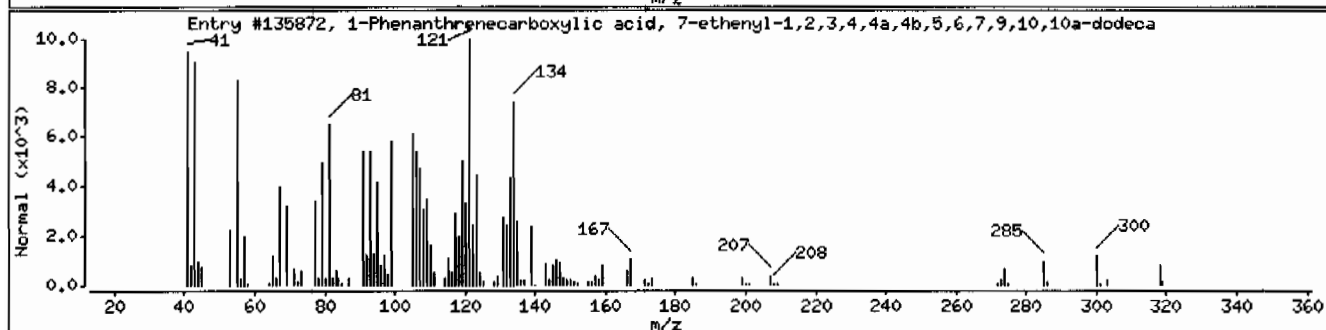
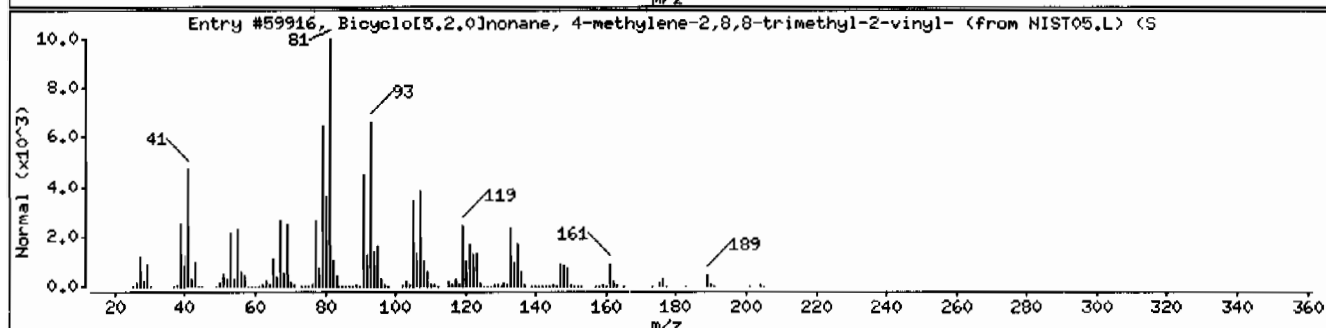
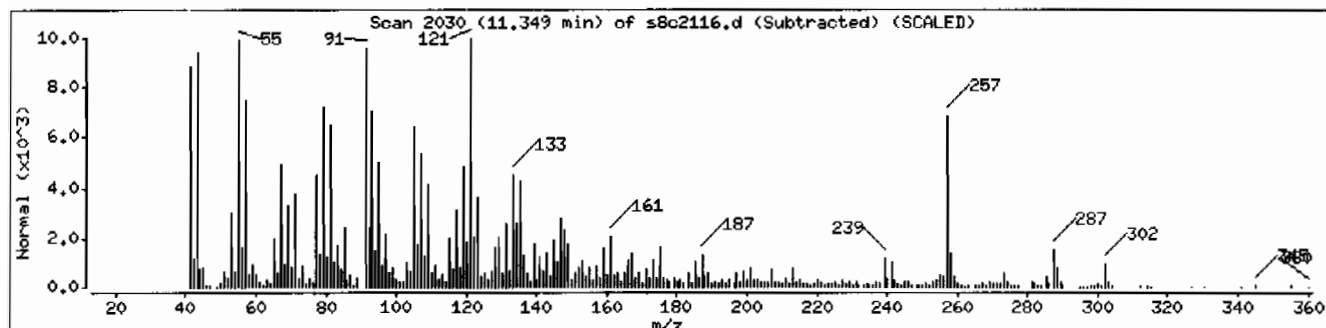
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	80	C15H24	204
1-Phenanthrenecarboxylic acid, 7-ethenyl	56051-66-2	NIST05.L	135872	64	C20H30O3	318
Isocyclocitral	1335-66-6	NIST05.L	24039	55	C10H16O	152



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211SVH11LANL

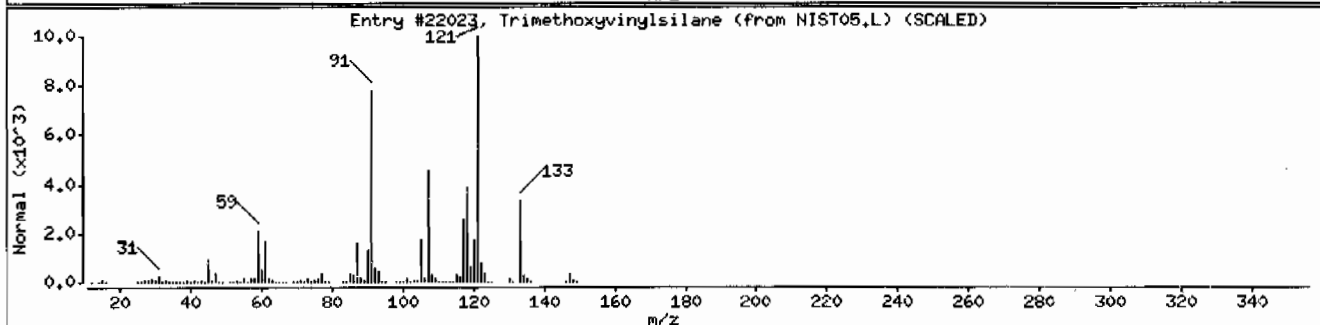
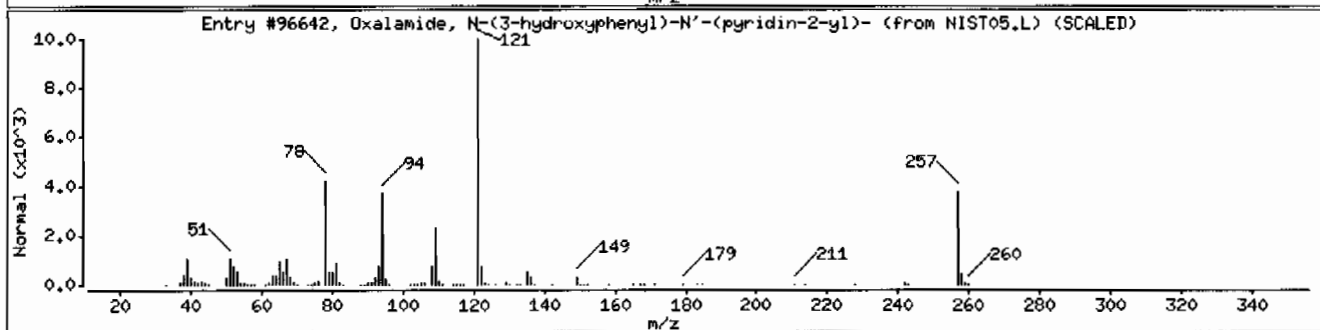
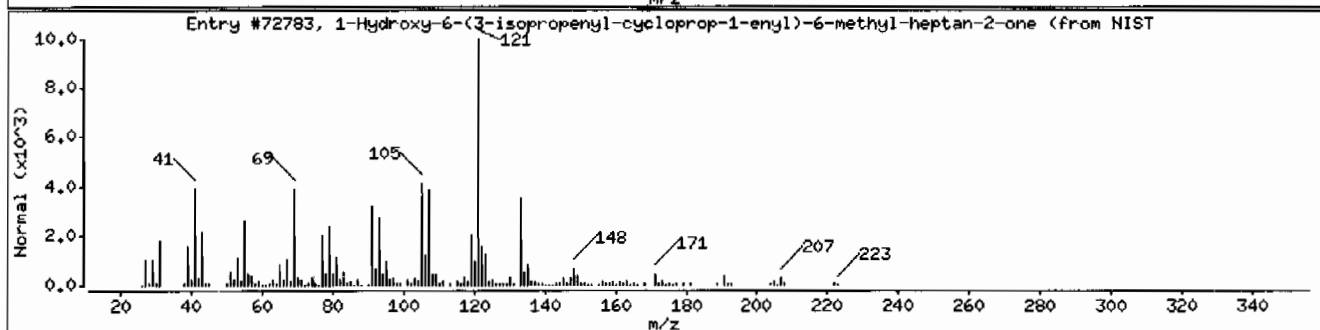
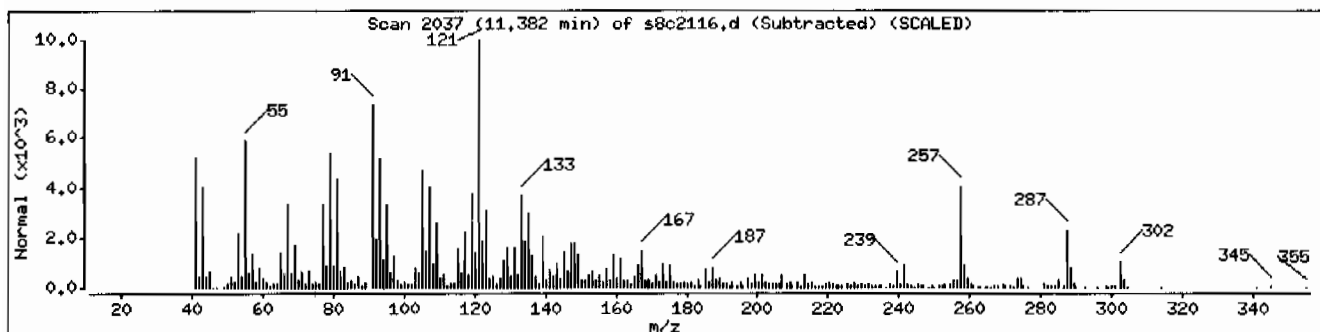
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Hydroxy-6-(3-isopropenyl-cycloprop-1-yl)-6-methyl-heptan-2-one	1000189-14-9	NIST05.L	72783	43	C ₁₄ H ₂₂ O ₂	222
Oxalamide, N-(3-hydroxyphenyl)-N'-(pyridin-2-yl)-	1000310-99-6	NIST05.L	96642	38	C ₁₃ H ₁₁ N ₃ O ₃	257
Trimethoxyvinylsilane	2768-02-7	NIST05.L	22023	35	C ₅ H ₁₂ O ₃ Si	148



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211SVH11/LANL

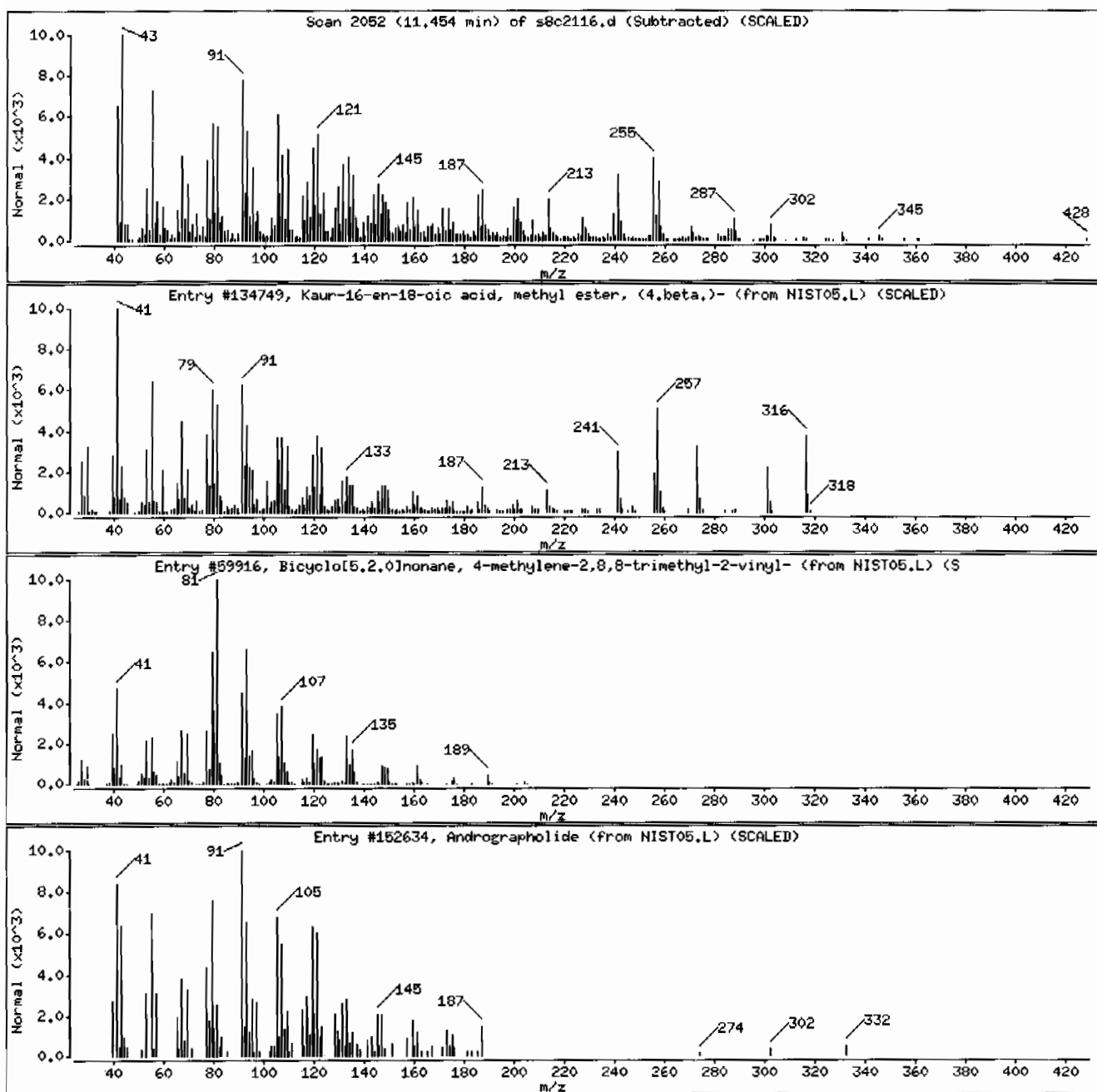
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Kaur-16-en-18-oic acid, methyl ester, (4	5524-25-4	NIST05.L	134749	38	C21H32O2	316
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	30	C15H24	204
Andrographolide	5508-58-7	NIST05.L	152634	22	C20H30O5	350



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211|SVM11|LANL

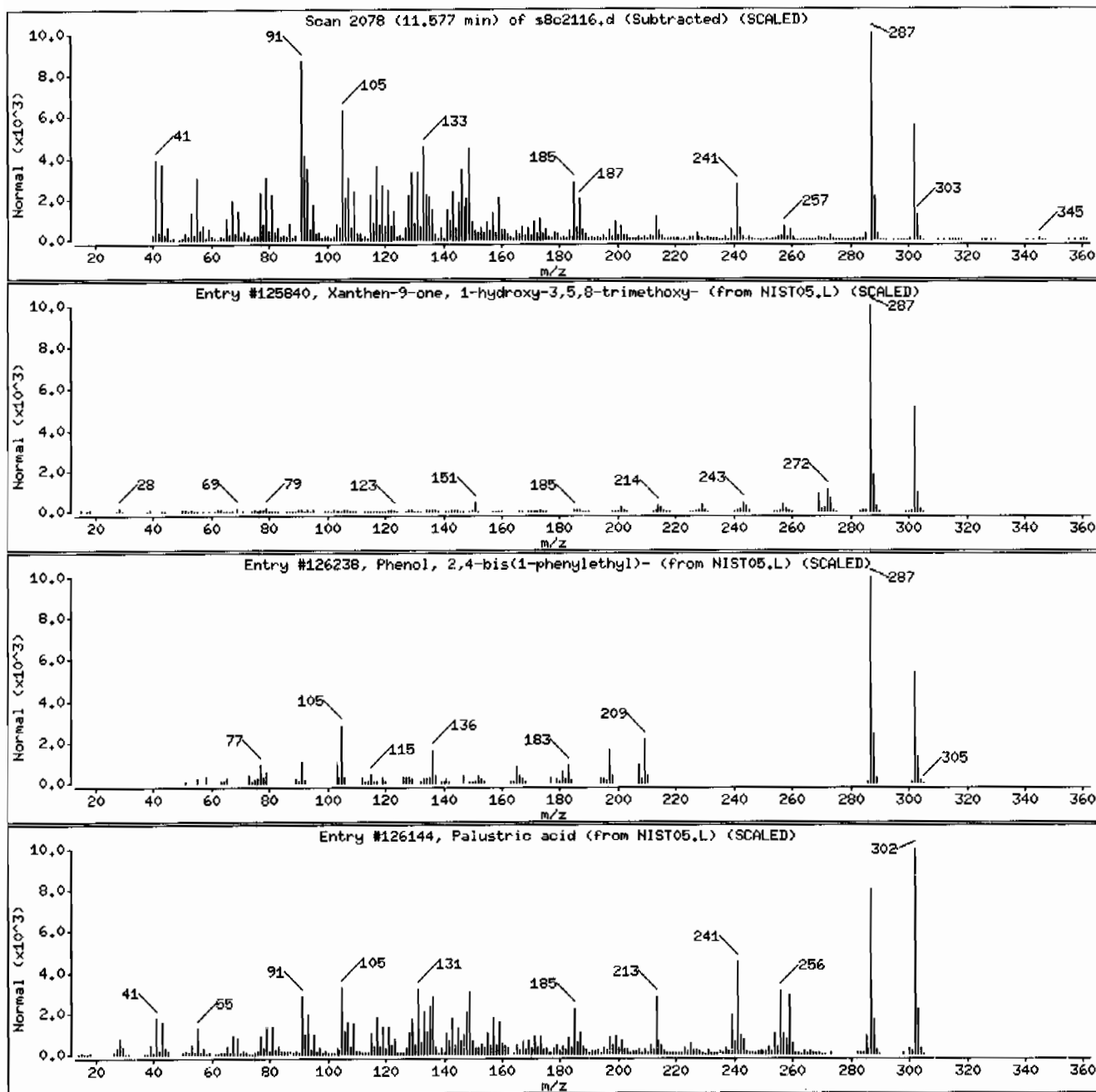
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	49599-09-9	NIST05.L	125840	46	C ₁₆ H ₁₄ O ₆	302
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	43	C ₂₂ H ₂₂ O	302
Palustic acid	1945-53-5	NIST05.L	126144	38	C ₂₀ H ₃₀ O ₂	302



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 12483730061961922111SVH111LANL

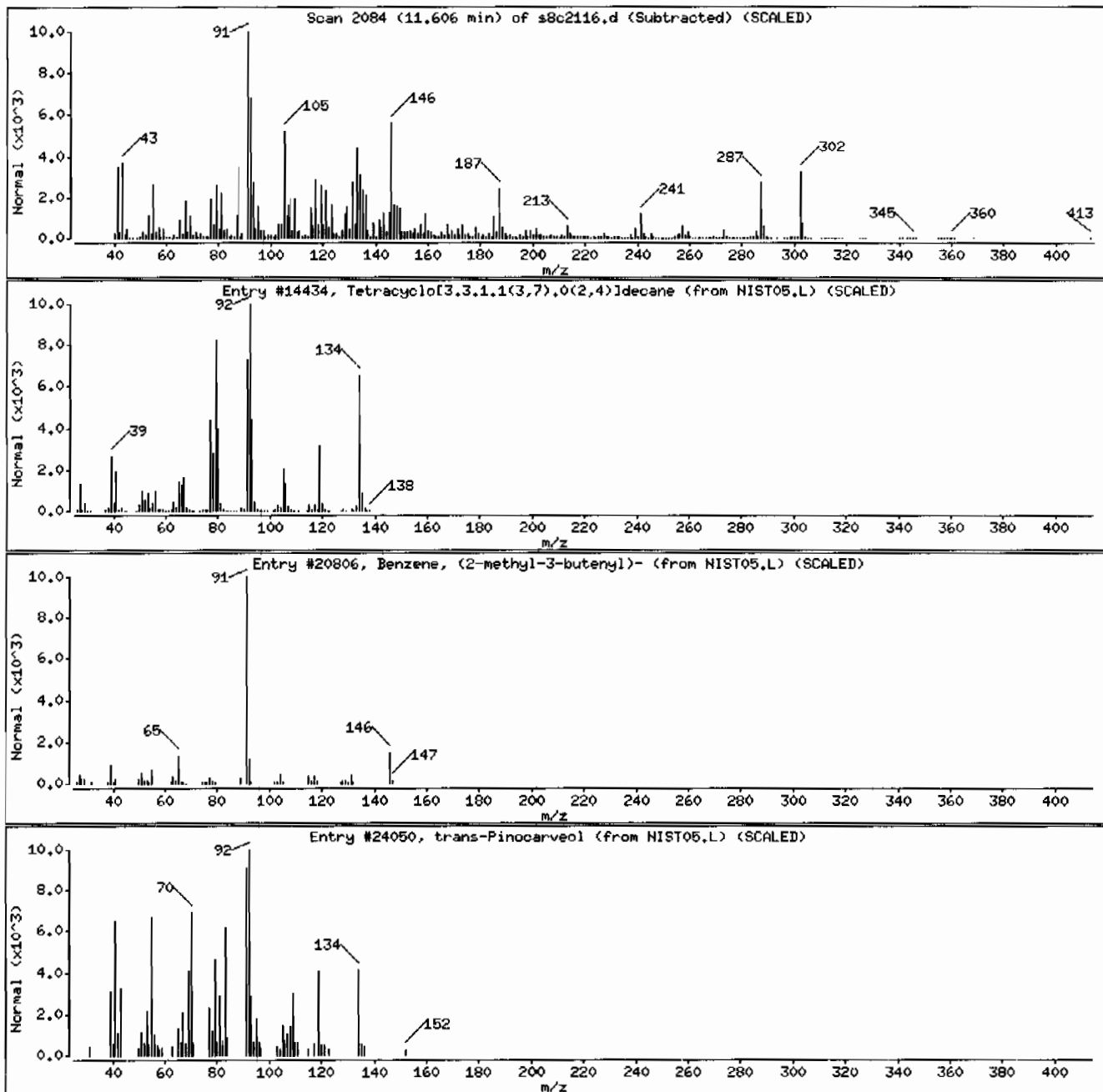
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetracyclo[3.3.1.1(3,7).0(2,4)]decane	10501-16-3	NIST05.L	14434	25	C10H14	134
Benzene, (2-methyl-3-butenyl)-	1647-06-9	NIST05.L	20806	22	C11H14	146
trans-Pinocarveol	1000292-85-4	NIST05.L	24050	15	C10H16O	152



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 12483730061961922111SVH111LANL

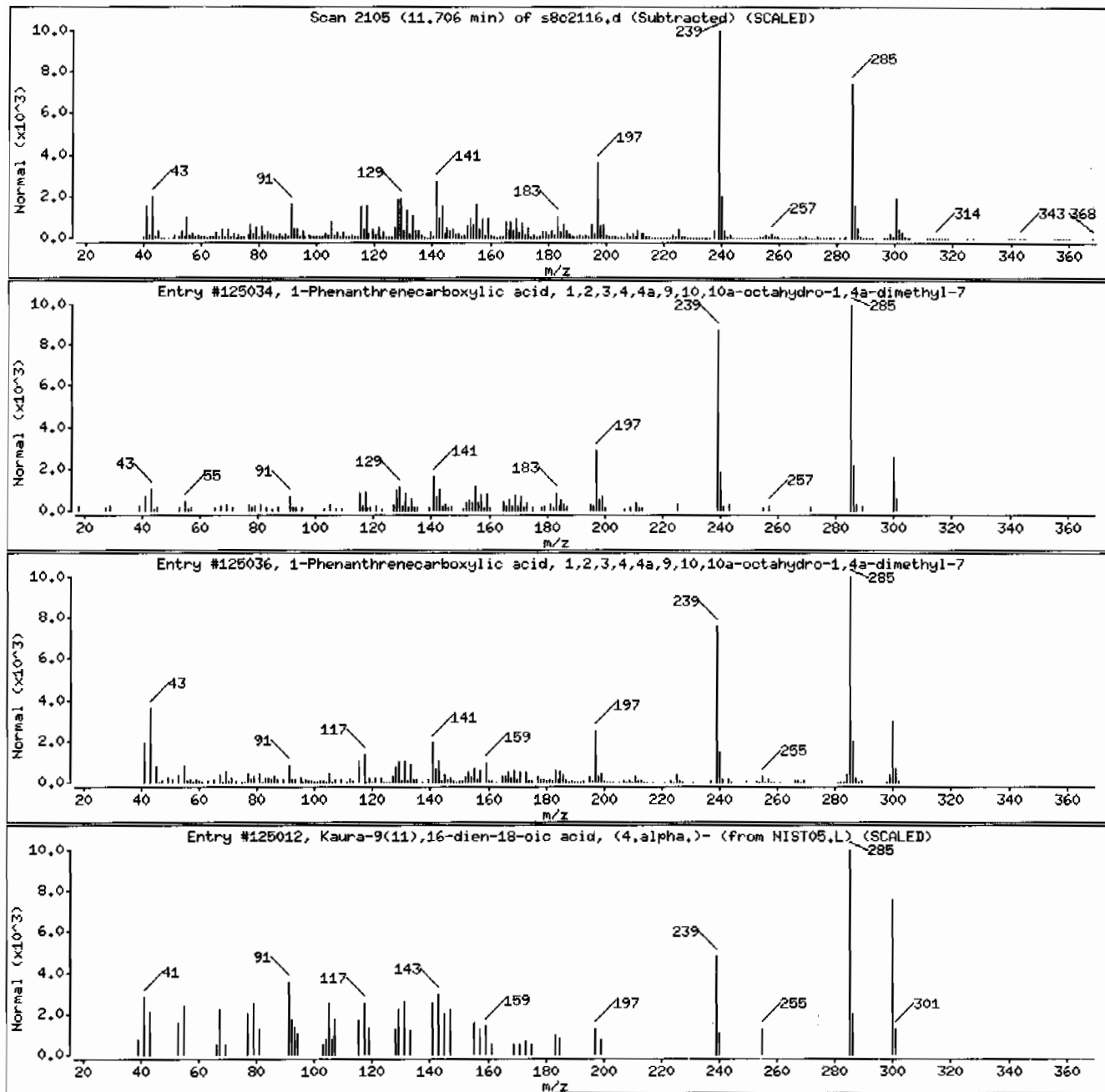
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	96	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	94	C20H28O2	300
Kaura-9(11),16-dien-18-oic acid, (4.alpha	22338-67-6	NIST05.L	125012	83	C20H28O2	300



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211SVH111LANL

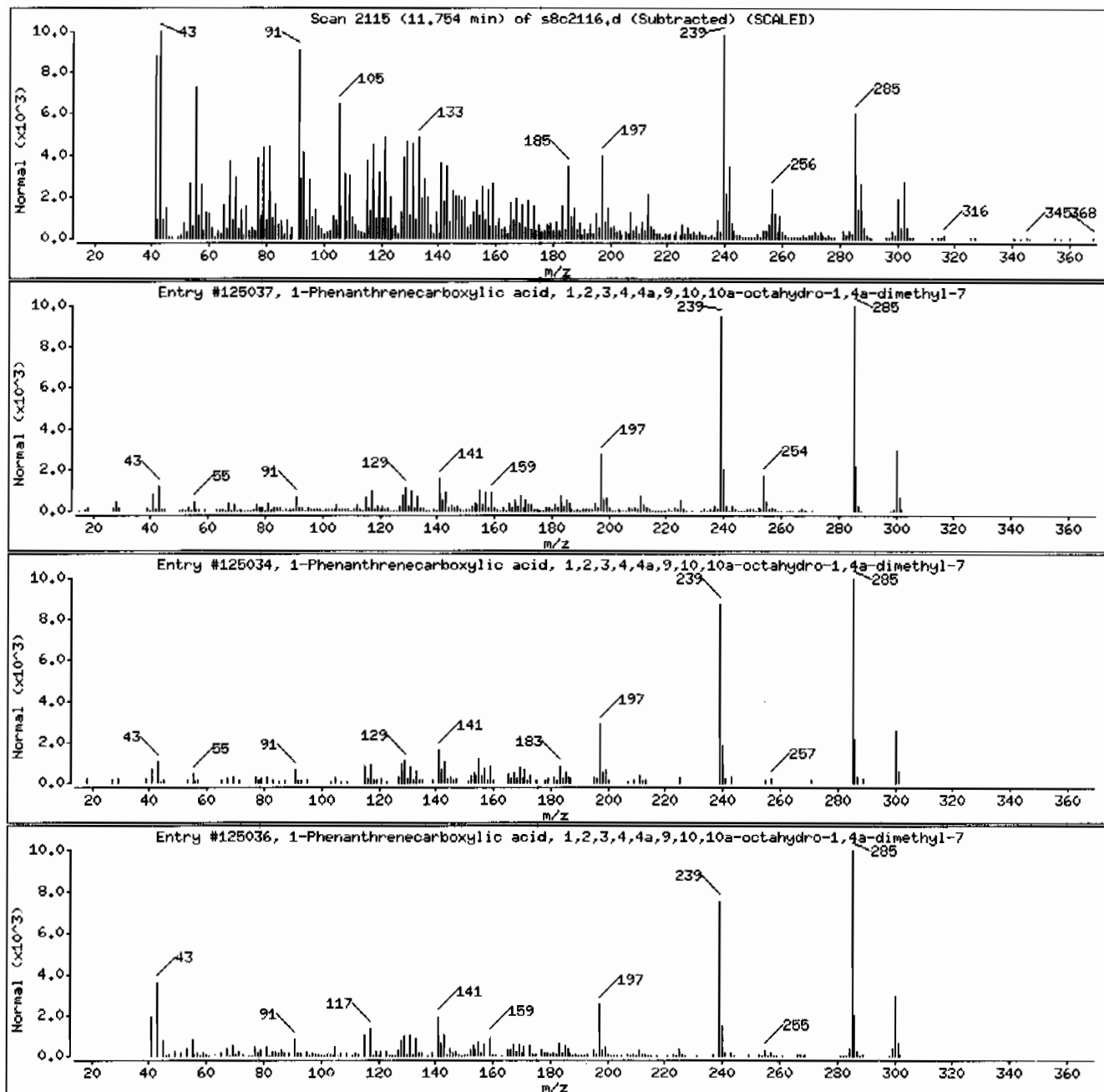
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	89	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	55	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	46	C20H28O2	300



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211SVH11ILANL

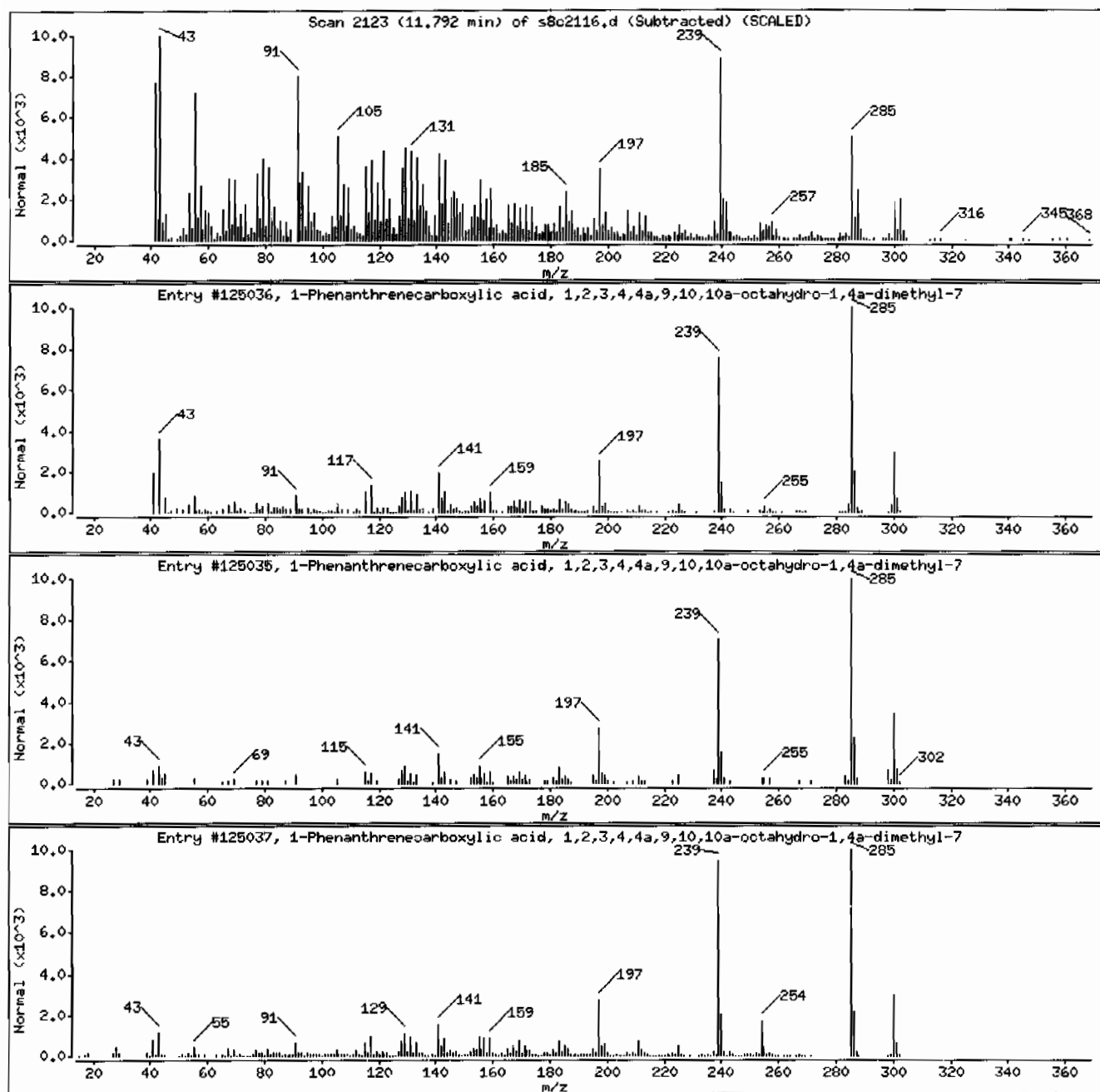
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	92	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	86	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	60	C20H28O2	300



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: HSD8.1

Sample Info: I248373006I96192211SVH11ILANL

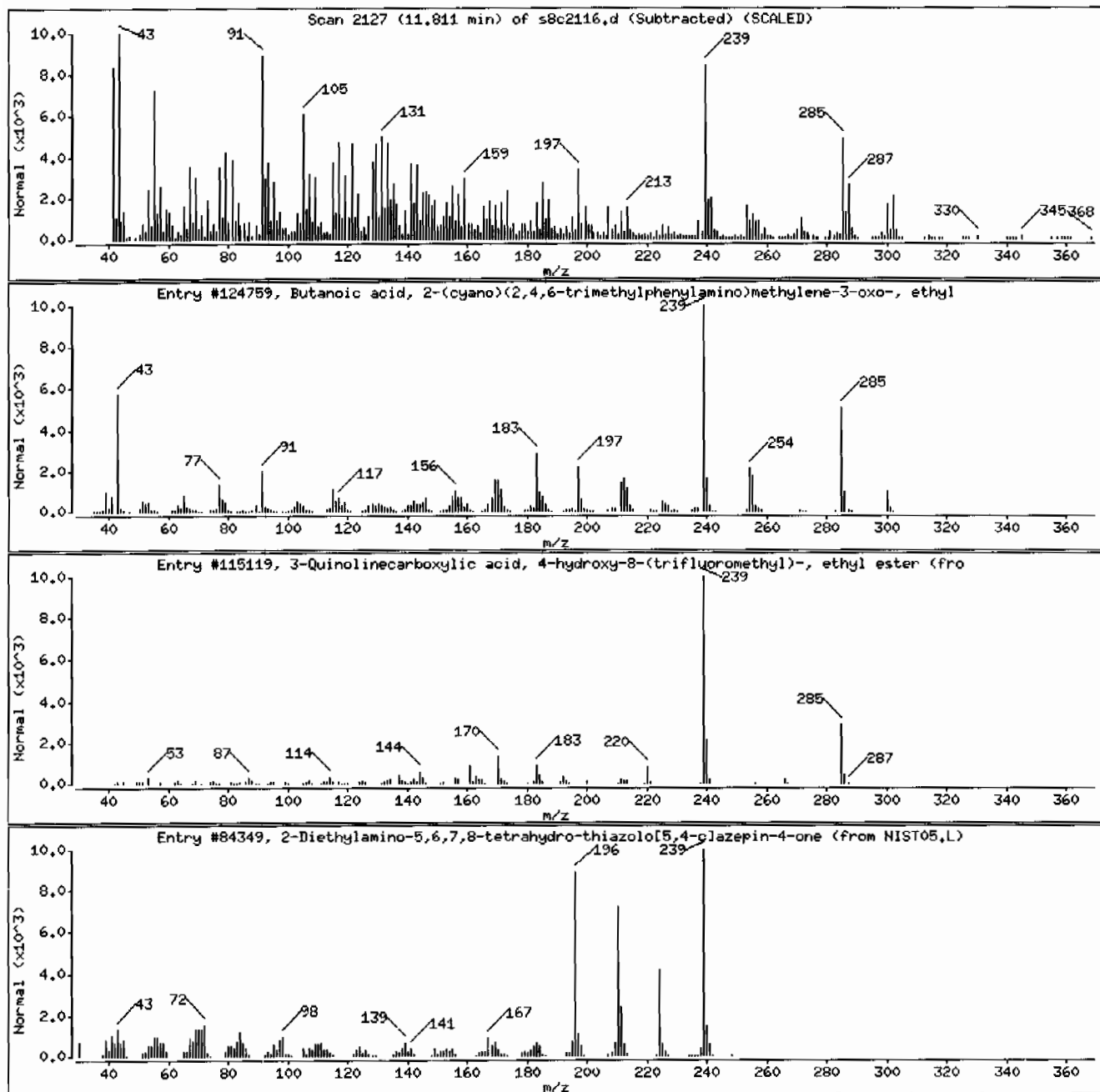
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	38	C17H20N2O3	300
3-Quinolinecarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	30	C13H10F3N03	285
2-Diethylamino-5,6,7,8-tetrahydro-thiazo	1000317-47-5	NIST05.L	84349	25	C11H17N3OS	239



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 12483730061961922111SVH111LANL

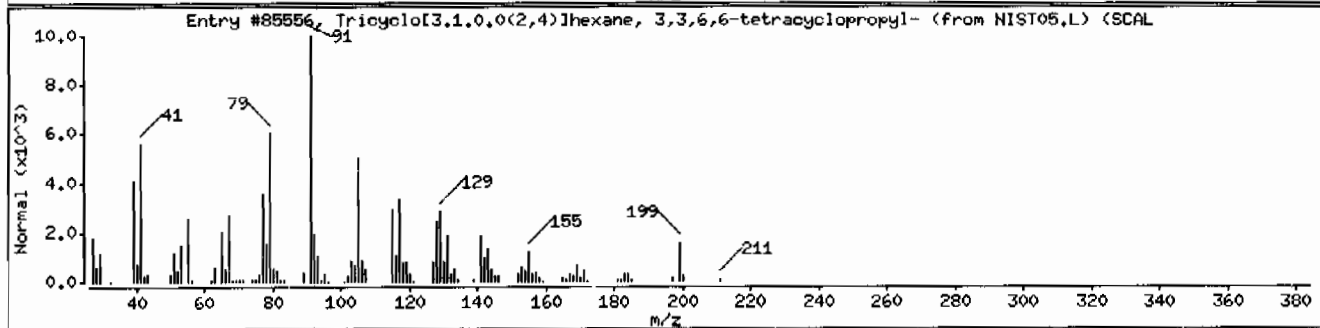
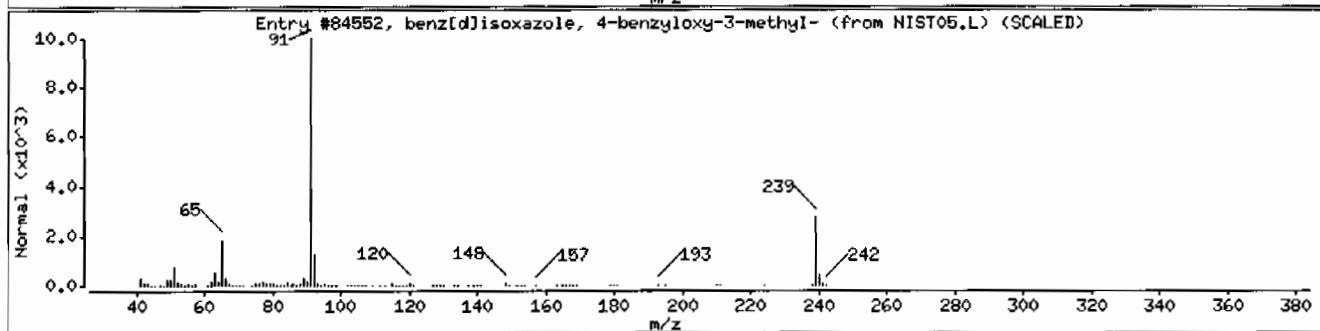
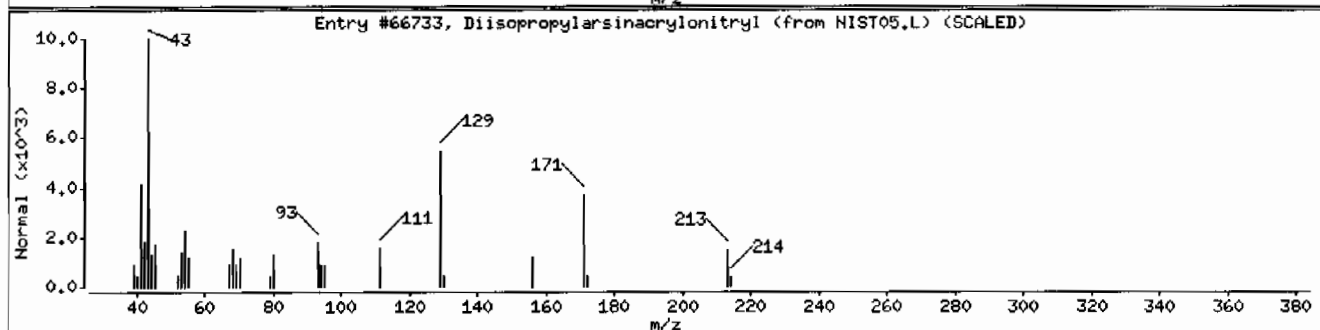
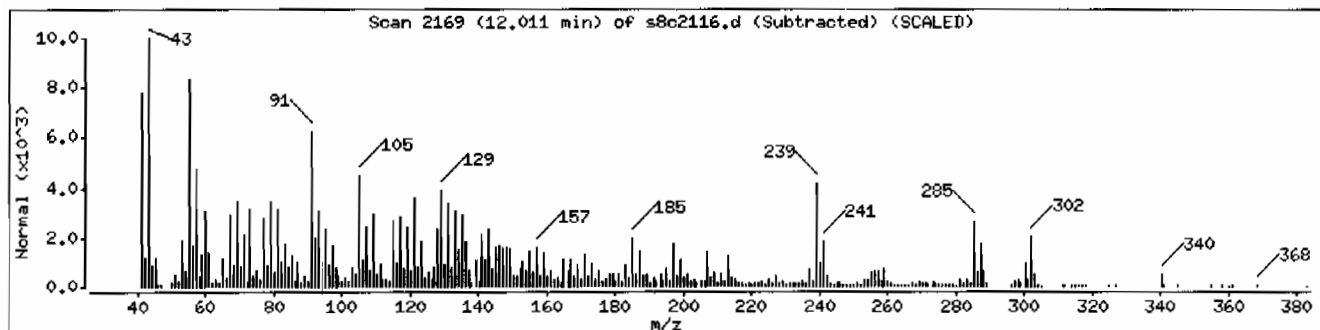
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Diisopropylarsinacrylonitril	77376-96-6	NIST05.L	66733	11	C ₉ H ₁₆ AsN	213
benz[d]isoxazole, 4-benzyloxy-3-methyl-	1000131-49-9	NIST05.L	84552	10	C ₁₅ H ₁₃ N ₂ O	239
Tricyclo[3.1.0.0(2,4)]hexane, 3,3,6,6-te	1000221-90-7	NIST05.L	85556	10	C ₁₀ H ₁₆	140



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211ISVM11ILANL

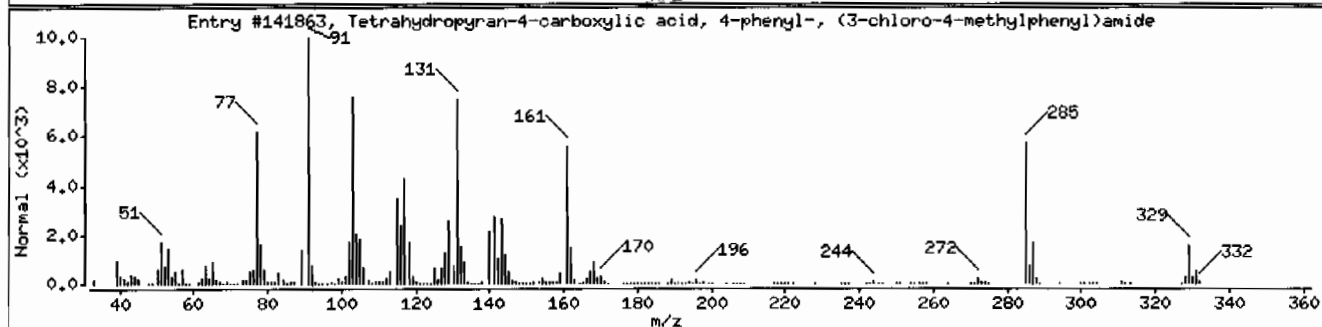
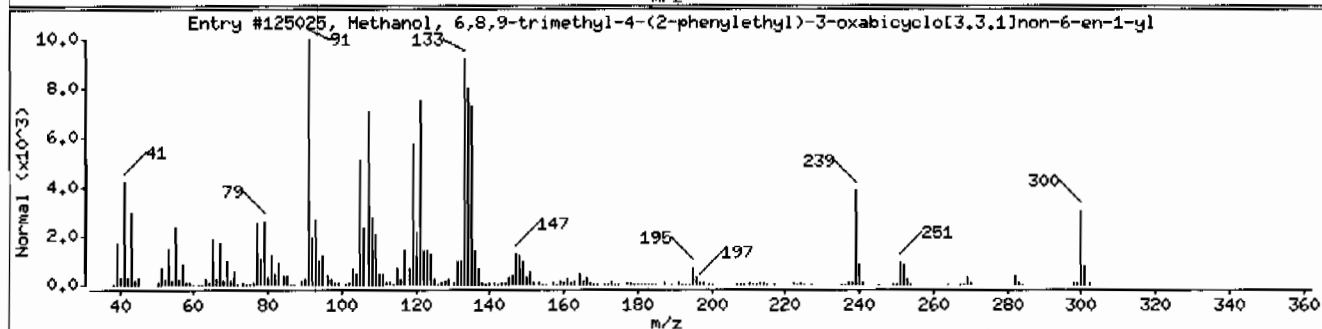
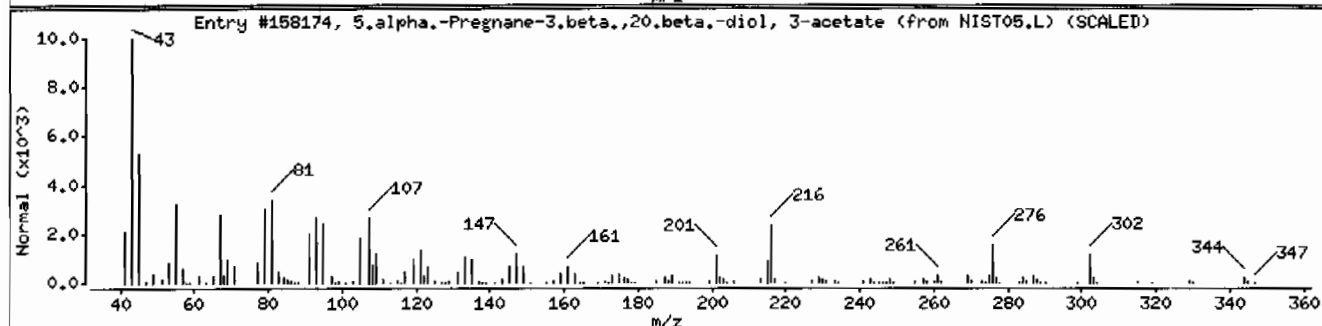
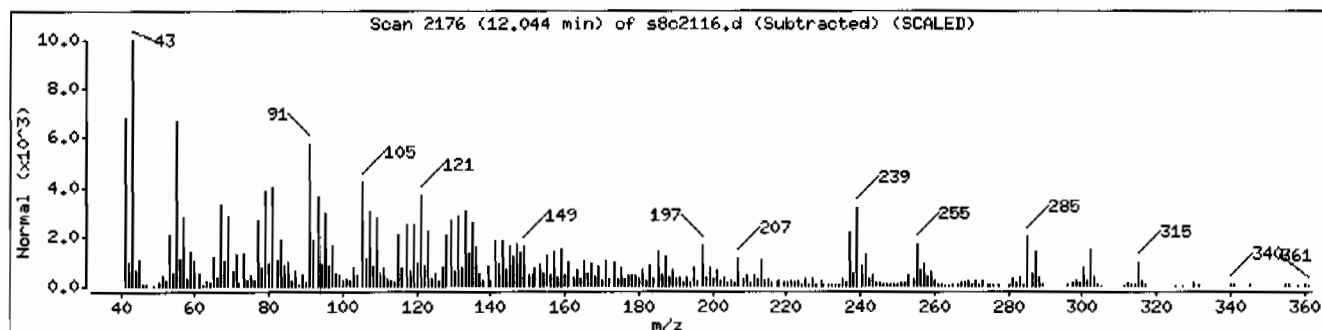
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5.alpha.-Pregnane-3.beta.,20.beta.-diol,	17182-23-9	NIST05.L	158174	9	C23H38O3	362
Methanol, 6,8,9-trimethyl-4-(2-phenyleth	1000277-01-1	NIST05.L	125025	8	C20H28O2	300
Tetrahydropyran-4-carboxylic acid, 4-phe	1000305-72-1	NIST05.L	141863	8	C19H20ClNO2	329



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: HSD8.i

Sample Info: I248373006196192211SVMI11LANL

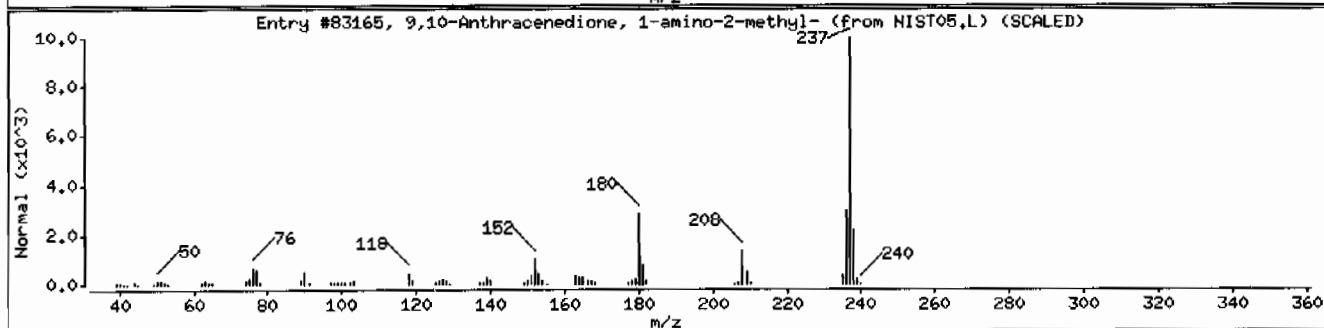
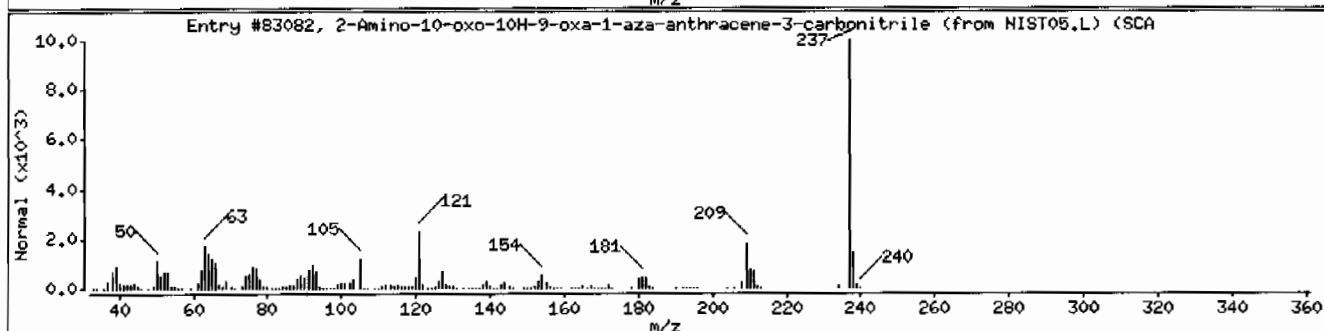
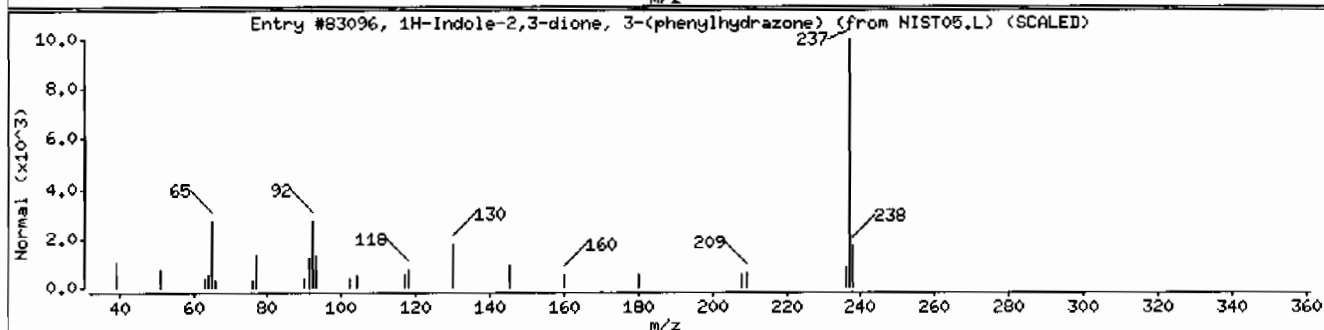
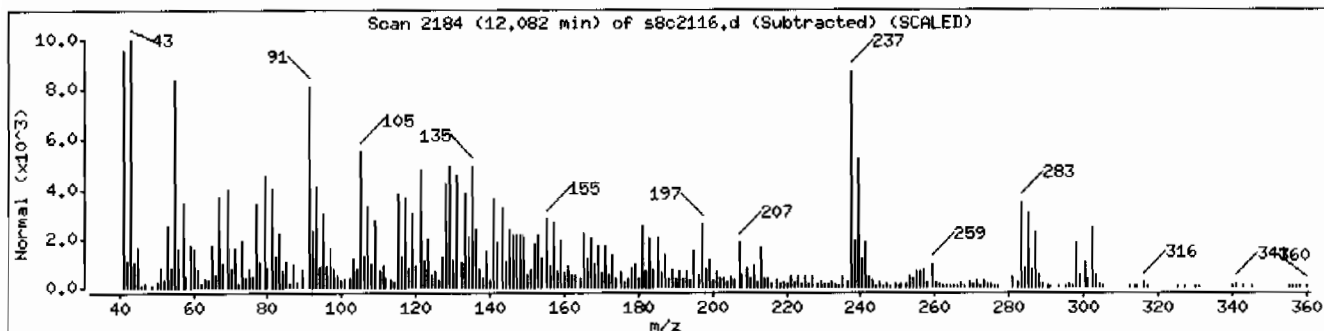
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indole-2,3-dione, 3-(phenylhydrazone)	17310-26-8	NIST05.L	83096	25	C14H11N3O	237
2-Amino-10-oxo-10H-9-oxa-1-aza-anthracen	61424-81-5	NIST05.L	83082	25	C13H7N3O2	237
9,10-Anthracenedione, 1-amino-2-methyl-	82-28-0	NIST05.L	83165	20	C15H11NO2	237



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: I248373006I961922I1SVMI1ILANL

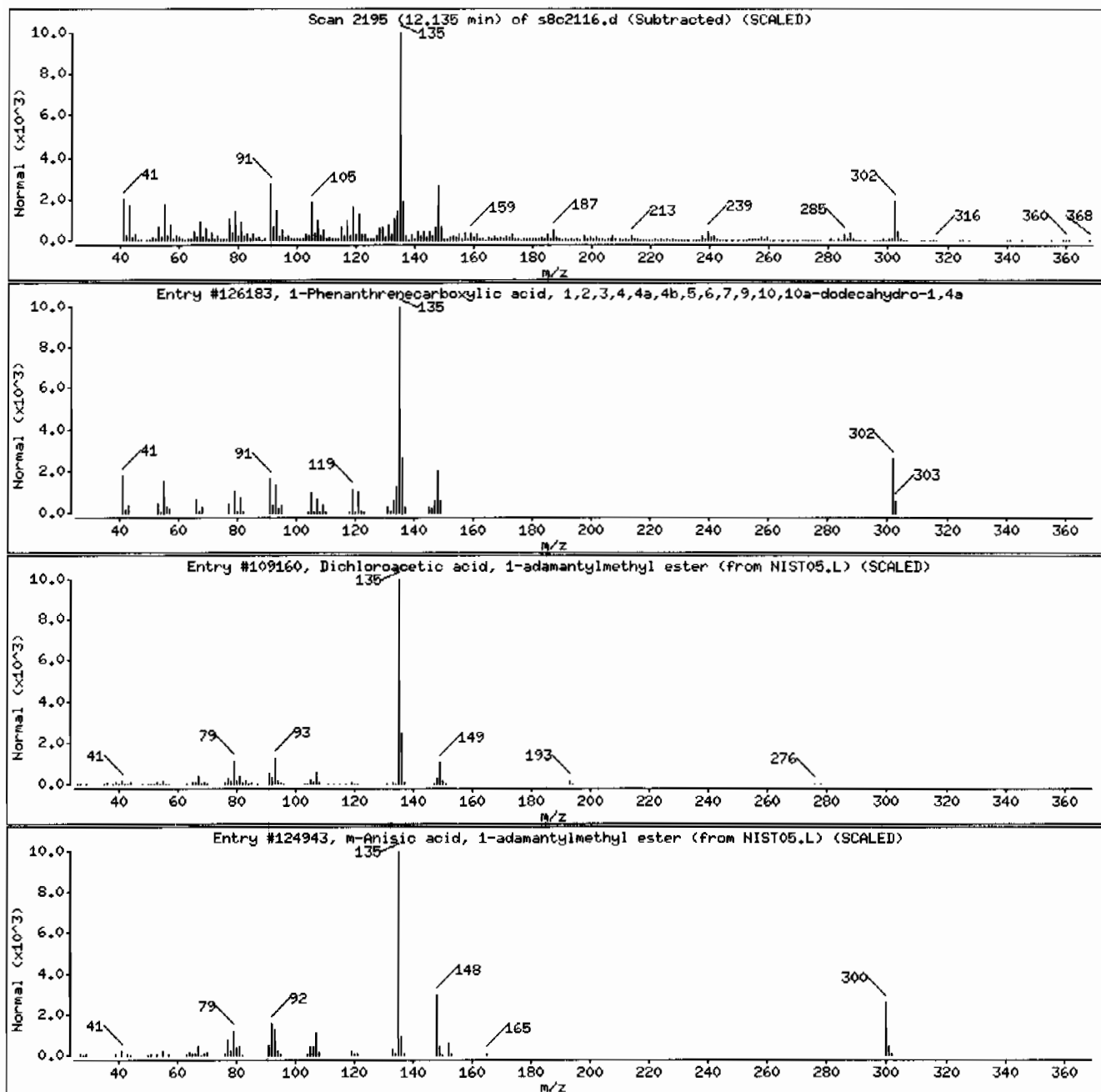
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	471-77-2	NIST05.L	126183	93	C20H30O2	302
Dichloroacetic acid, 1-adamantylmethyl e	1000282-97-7	NIST05.L	109160	89	C13H18Cl2O2	276
m-Anisic acid, 1-adamantylmethyl ester	1000292-25-3	NIST05.L	124943	53	C19H24O3	300



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: HSD8.i

Sample Info: I248373006I96192211ISVMI11LANL

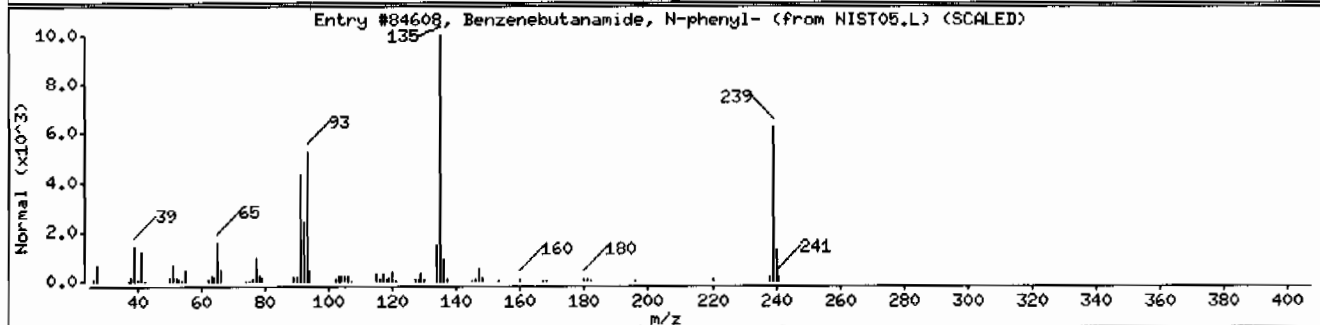
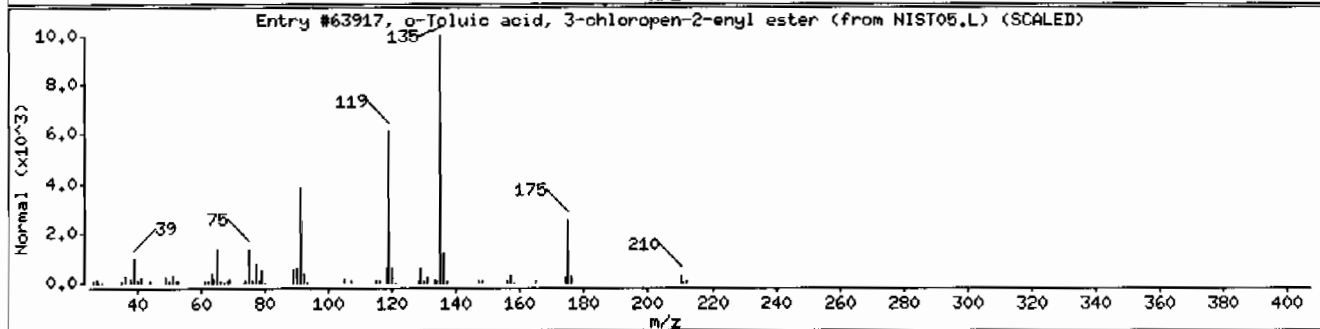
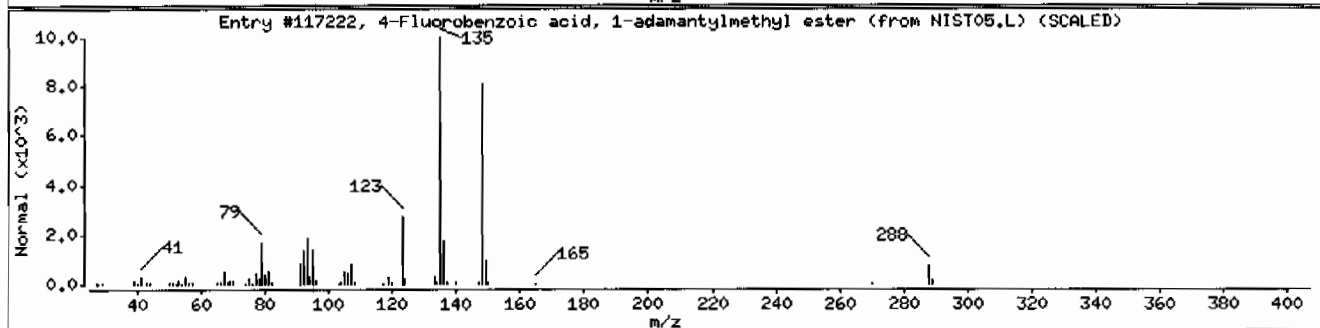
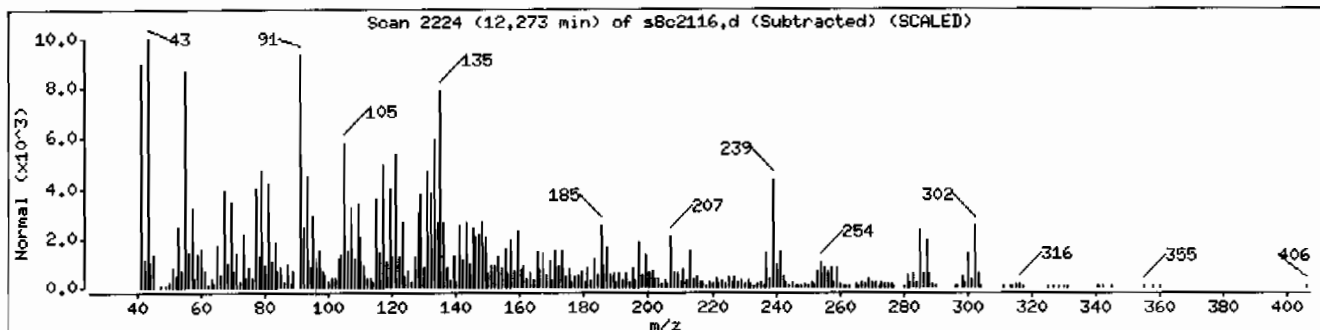
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-Fluorobenzoic acid, 1-adamantylmethyl	1000282-99-5	NIST05.L	117222	25	C18H21F02	288
o-Toluic acid, 3-chloropen-2-enyl ester	1000292-51-8	NIST05.L	63917	25	C11H11Cl02	210
Benzenebutanamide, N-phenyl-	3056-71-1	NIST05.L	84608	25	C16H17NO	239



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 1248373006196192211SVH11ILANL

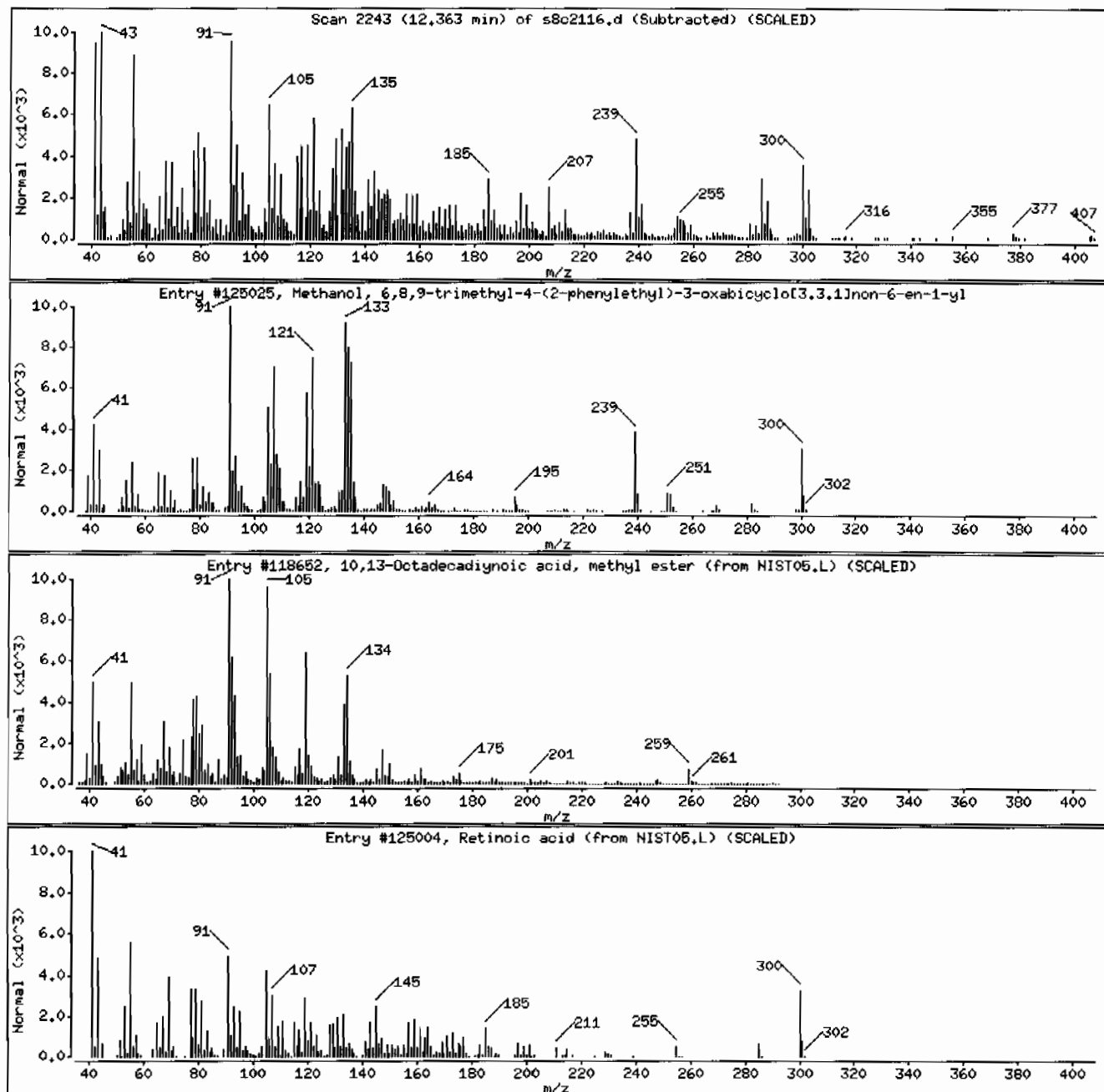
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methanol, 6,8,9-trimethyl-4-(2-phenylethyl	1000277-01-1	NIST05.L	125025	35	C20H28O2	300
10,13-Octadecadienoic acid, methyl ester	18202-24-9	NIST05.L	118652	35	C19H30O2	290
Retinoic acid	302-79-4	NIST05.L	125004	25	C20H28O2	300



Date : 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 12483730061961922111SVH111LANL

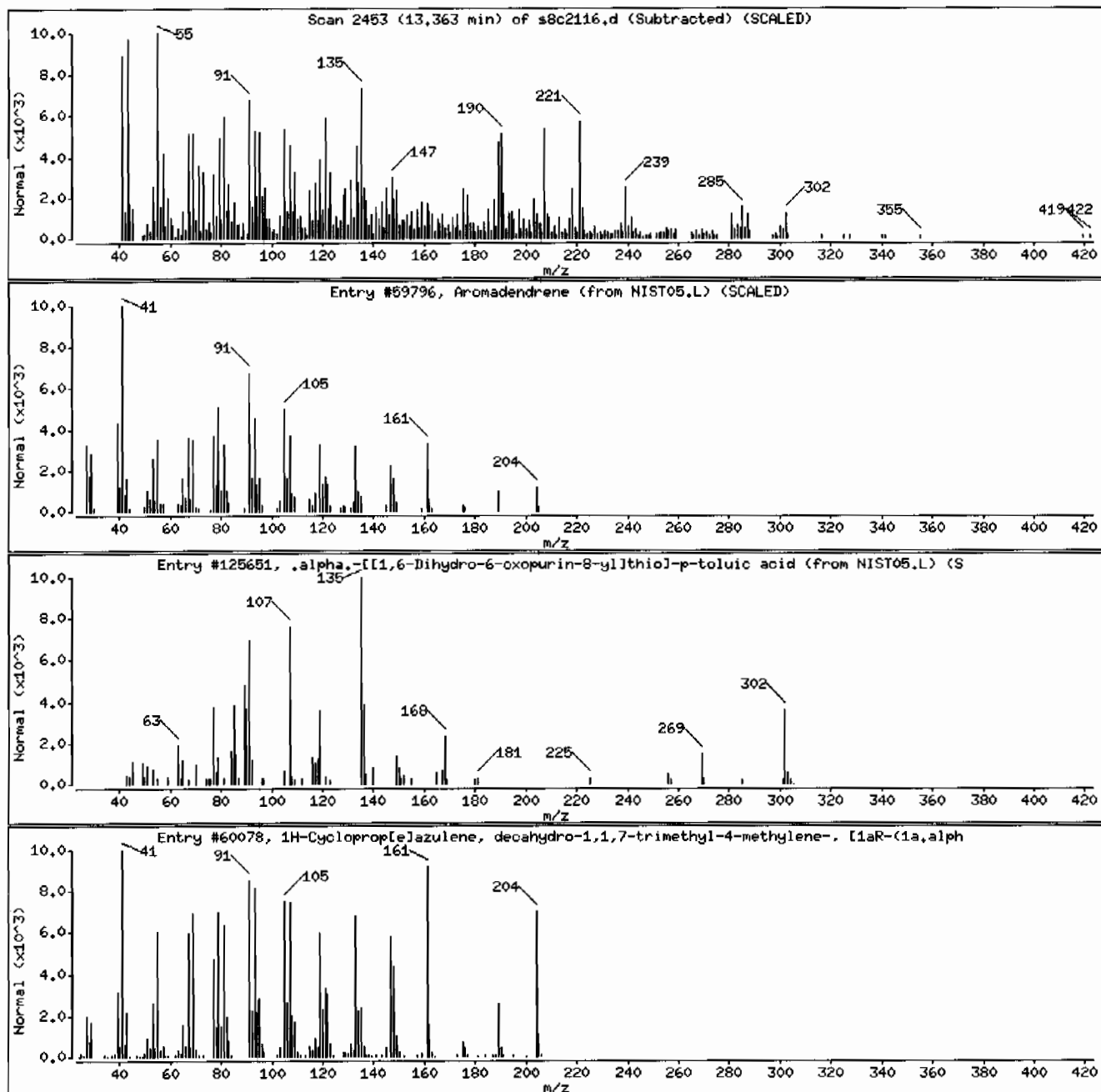
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Aromadendrene	109119-91-7	NIST05.L	59796	55	C15H24	204
.alpha.-[[1,6-Dihydro-6-oxopurin-8-yl]thio]-p-toluic acid	1000213-14-9	NIST05.L	125651	51	C13H10N4O3S	302
1H-Cyclopropylazulene, decahydro-1,1,7-	489-39-4	NIST05.L	60078	50	C15H24	204



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.1

Sample Info: 1248373006196192211SVH111LANL

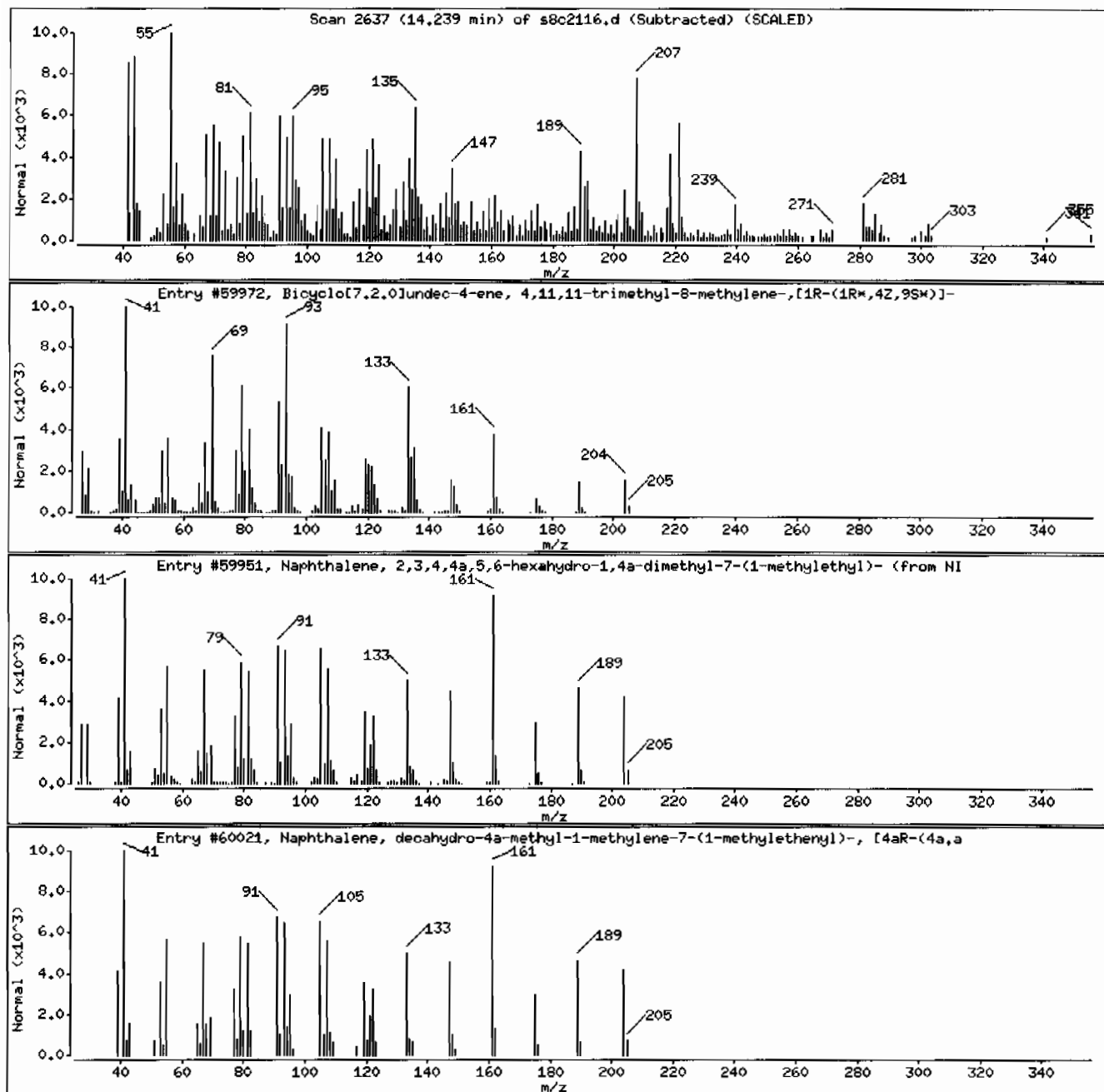
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trimethyl-8-methylene-, [1R-(1R*,4Z,9S*)]-	118-65-0	NIST05.L	59972	53	C15H24	204
Naphthalene, 2,3,4,4a,5,6-hexahydro-1,4a-dimethyl-7-(1-methylethyl)- (from NI	473-14-3	NIST05.L	59951	50	C15H24	204
Naphthalene, decahydro-4a-methyl-1-methylene-7-(1-methylethenyl)-, [4aR-(4a,a	17066-67-0	NIST05.L	60021	50	C15H24	204



Date: 21-MAR-2010 15:26

Client ID: RE36-10-7499

Instrument: MSD8.i

Sample Info: 12483730061961922111SVH111LANL

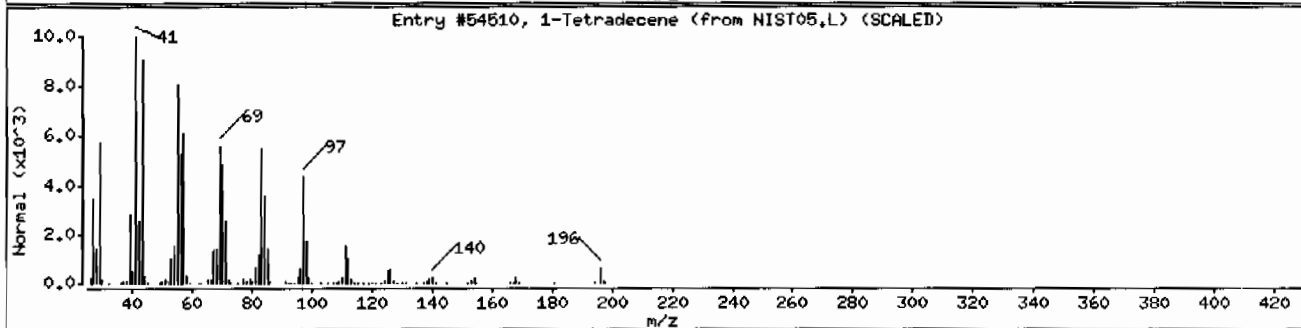
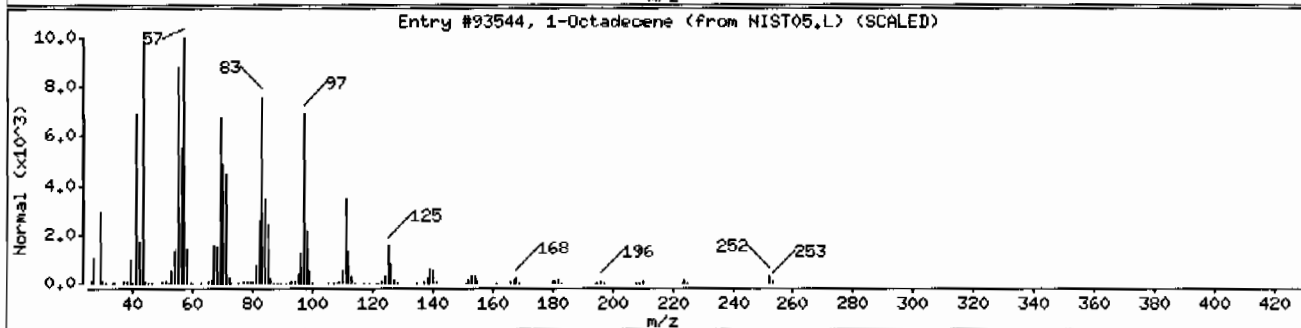
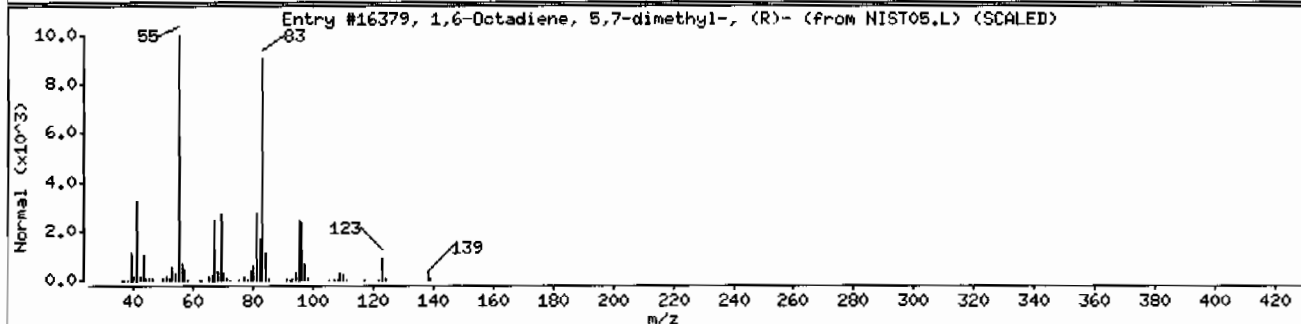
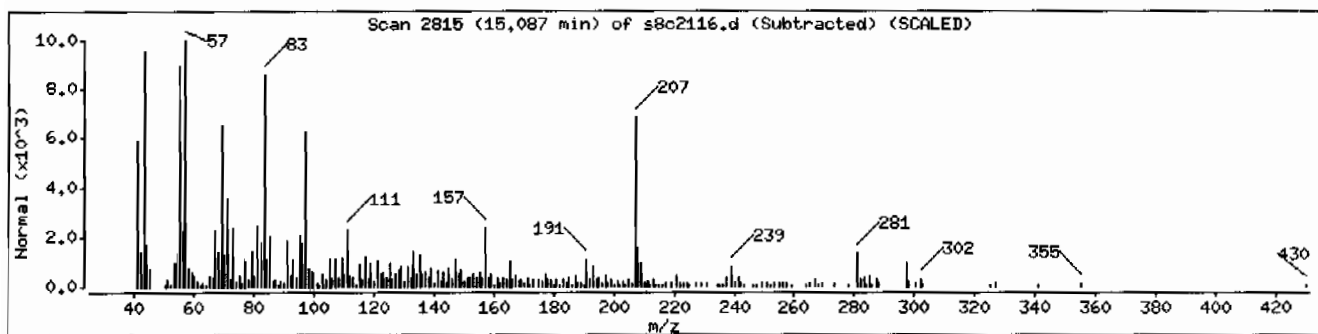
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,6-Octadiene, 5,7-dimethyl-, (R)-	85006-04-8	NIST05.L	16379	70	C ₁₀ H ₁₈	138
1-Octadecene	112-88-9	NIST05.L	93544	53	C ₁₈ H ₃₆	252
1-Tetradecene	1120-36-1	NIST05.L	54510	53	C ₁₄ H ₂₈	196



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

Page 1 of 3

SDG Number: 10-2154
Lab Sample ID: 248373010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7500
Batch ID: 961922
Run Date: 03/21/2010 17:25
Prep Date: 03/07/2010 12:04
Data File: s8c2120.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	424	ug/kg	84.8	424
108-95-2	Phenol	U	424	ug/kg	84.8	424
95-57-8	2-Chlorophenol	U	424	ug/kg	84.8	424
106-46-7	1,4-Dichlorobenzene	U	424	ug/kg	84.8	424
621-64-7	N-Nitrosodipropylamine	U	424	ug/kg	84.8	424
59-50-7	4-Chloro-3-methylphenol	U	424	ug/kg	84.8	424
83-32-9	Acenaphthene	U	42.4	ug/kg	14.0	42.4
121-14-2	2,4-Dinitrotoluene	U	424	ug/kg	42.4	424
100-02-7	4-Nitrophenol	U	424	ug/kg	140	424
87-86-5	Pentachlorophenol	U	424	ug/kg	106	424
129-00-0	Pyrene	U	42.4	ug/kg	12.7	42.4
110-86-1	Pyridine	U	424	ug/kg	84.8	424
62-53-3	Aniline	U	424	ug/kg	127	424
111-44-4	bis(2-Chloroethyl) ether	U	424	ug/kg	84.8	424
541-73-1	1,3-Dichlorobenzene	U	424	ug/kg	84.8	424
100-51-6	Benzyl alcohol	U	424	ug/kg	127	424
95-50-1	1,2-Dichlorobenzene	U	424	ug/kg	84.8	424
108-60-1	bis(2-Chloroisopropyl)ether	U	424	ug/kg	84.8	424
95-48-7	o-Cresol	U	424	ug/kg	84.8	424
65794-96-9	m,p-Cresols	U	424	ug/kg	127	424
67-72-1	Hexachloroethane	U	424	ug/kg	84.8	424
98-95-3	Nitrobenzene	U	424	ug/kg	84.8	424
78-59-1	Isophorone	U	424	ug/kg	84.8	424
88-75-5	2-Nitrophenol	U	424	ug/kg	84.8	424
105-67-9	2,4-Dimethylphenol	U	424	ug/kg	148	424
111-91-1	bis(2-Chloroethoxy)methane	U	424	ug/kg	84.8	424
120-83-2	2,4-Dichlorophenol	U	424	ug/kg	84.8	424
65-85-0	Benzoic acid	U	848	ug/kg	212	848
91-20-3	Naphthalene	U	42.4	ug/kg	12.7	42.4
106-47-8	4-Chloroaniline	U	424	ug/kg	84.8	424
87-68-3	Hexachlorobutadiene	U	424	ug/kg	84.8	424
91-57-6	2-Methylnaphthalene	U	42.4	ug/kg	8.48	42.4
77-47-4	Hexachlorocyclopentadiene	U	424	ug/kg	84.8	424
88-06-2	2,4,6-Trichlorophenol	U	424	ug/kg	84.8	424
95-95-4	2,4,5-Trichlorophenol	U	424	ug/kg	84.8	424
91-58-7	2-Chloronaphthalene	U	42.4	ug/kg	14.0	42.4
88-74-4	2-Nitroaniline	U	424	ug/kg	84.8	424
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	424	ug/kg	84.8	424

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

SDG Number: 10-2154
Lab Sample ID: 248373010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.1
Analyst: NAG1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	424	ug/kg	84.8	424
606-20-2	2,6-Dinitrotoluene	U	424	ug/kg	42.4	424
208-96-8	Acenaphthylene	U	42.4	ug/kg	12.7	42.4
51-28-5	2,4-Dinitrophenol	U	848	ug/kg	161	848
132-64-9	Dibenzofuran	U	424	ug/kg	84.8	424
84-66-2	Diethylphthalate	U	424	ug/kg	84.8	424
86-73-7	Fluorene	U	42.4	ug/kg	12.7	42.4
7005-72-3	4-Chlorophenylphenylether	U	424	ug/kg	84.8	424
534-52-1	2-Methyl-4,6-dinitrophenol	U	424	ug/kg	84.8	424
100-01-6	4-Nitroaniline	U	424	ug/kg	127	424
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	424	ug/kg	84.8	424
122-66-7	Azobenzene	U	424	ug/kg	84.8	424
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	424	ug/kg	84.8	424
118-74-1	Hexachlorobenzene	U	424	ug/kg	84.8	424
85-01-8	Phenanthrene	U	42.4	ug/kg	12.7	42.4
120-12-7	Anthracene	U	42.4	ug/kg	8.48	42.4
84-74-2	Di-n-butylphthalate	U	424	ug/kg	84.8	424
206-44-0	Fluoranthene	U	42.4	ug/kg	12.7	42.4
85-68-7	Butylbenzylphthalate	U	424	ug/kg	84.8	424
56-55-3	Benzo(a)anthracene	U	42.4	ug/kg	12.7	42.4
91-94-1	3,3'-Dichlorobenzidine	U	424	ug/kg	127	424
218-01-9	Chrysene	U	42.4	ug/kg	12.7	42.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	424	ug/kg	84.8	424
117-84-0	Di-n-octylphthalate	U	424	ug/kg	84.8	424
205-99-2	Benzo(b)fluoranthene	U	42.4	ug/kg	12.7	42.4
207-08-9	Benzo(k)fluoranthene	U	42.4	ug/kg	12.7	42.4
50-32-8	Benzo(a)pyrene	U	42.4	ug/kg	12.7	42.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.4	ug/kg	12.7	42.4
53-70-3	Dibenzo(a,h)anthracene	U	42.4	ug/kg	12.7	42.4
191-24-2	Benzo(ghi)perylene	U	42.4	ug/kg	12.7	42.4
120-82-1	1,2,4-Trichlorobenzene	U	424	ug/kg	84.8	424

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.69	693	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.01	387	ug/kg	99	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373010	Date Received: 03/02/2010 08:50	%Moisture: 21.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7500	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 17:25	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s8c2120.d	Column: J&W DB-5MS	Level: LOW

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

Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual	
593-39-5	6-Octadecenoic acid, (Z)-	10.36	236	ug/kg	93	NJ	
	Unknown	10.47	227	ug/kg		J	
242794-76-9	Bicyclo[5.2.0]nonane, 2-methylene-4,8,8-	10.93	196	ug/kg	90	NJ	
112-95-8	Eicosane	10.98	196	ug/kg	97	NJ	
	Unknown	11.16	240	ug/kg		J	
	Unknown	11.24	299	ug/kg		J	
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.26	251	ug/kg	86	NJ	
	Unknown	11.3	219	ug/kg		J	
	Unknown	11.33	177	ug/kg		J	
	Unknown	11.35	357	ug/kg		J	
	Unknown	11.45	246	ug/kg		J	
	Unknown	11.54	933	ug/kg		J	
	Unknown	11.61	199	ug/kg		J	
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.66	1100	ug/kg	93	NJ	
	Unknown	11.72	398	ug/kg		J	
	Unknown	11.76	283	ug/kg		J	
1000099-24-3	(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	11.83	624	ug/kg	89	NJ	
	Unknown	11.96	270	ug/kg		J	
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12	362	ug/kg	90	NJ	
	Unknown	12.04	243	ug/kg		J	
3386-33-2	Octadecane, 1-chloro-	12.12	381	ug/kg	95	NJ	
	Unknown	12.36	228	ug/kg		J	
	Unknown	12.4	254	ug/kg		J	
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	12.45	242	ug/kg	92	NJ	
629-78-7	Heptadecane	12.55	415	ug/kg	94	NJ	
	Unknown	14.98	1520	ug/kg		J	
83-47-6	.gamma.-Sitosterol	16.73	1560	ug/kg	93	NJ	
1058-61-3	Stigmast-4-en-3-one	17.29	694	ug/kg	94	NJ	

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2120.d
 Lab Smp Id: 248373010 Client Smp ID: RE36-10-7500
 Inj Date : 21-MAR-2010 17:25
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |248373010|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	21.84130	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301	(1.000)	451303	40.0000
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1773378	40.0000
* 46 Acenaphthene-d10	164	7.406	7.406	(1.000)	1052185	40.0000
* 67 Phenanthrene-d10	188	8.996	8.997	(1.000)	1797321	40.0000
* 91 Chrysene-d12	240	11.873	11.868	(1.000)	1362762	40.0000
* 98 Perylene-d12	264	13.882	13.878	(1.000)	833110	40.0000
\$ 3 2-Fluorophenol	112	3.177	3.158	(0.739)	789604	74.1089
\$ 5 Phenol-d5	99	3.939	3.930	(0.916)	975948	73.4483
\$ 20 Nitrobenzene-d5	82	4.830	4.830	(0.870)	449195	35.6325
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.902)	961522	31.0459
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.114)	235000	67.5648
\$ 81 p-Terphenyl-d14	244	10.711	10.706	(0.902)	1024629	41.7624

ION RATIO REPORT

SV REPORT

Data file: s8c2120.d

Report Date: 03/22/2010 07:19

Lab. ID: 248373010

SampleType: SAMPLE

Injection Date: 21-MAR-2010 17:25

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373010|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	50496	3.94	4.00	80-120	100	()
93	95142	3.98	4.00	213-273	188	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	59669	4.83	4.68	80-120	100	(T)
42	35260	4.82	4.68	31- 91	59	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	5343	5.32	5.28	80-120	100	()
122	1516	5.32	5.28	64-124	28	(Q)
77	14727	5.35	5.28	47-107	276	(QT)

30 Naphthalene		CAS#: 91-20-3				
128	552	5.58	5.58	80-120	100	()
129	385	5.56	5.58	0- 41	70	(Q)
127	240	5.82	5.58	0- 43	44	(QT)

34 2-Methylnaphthalene		CAS#: 91-57-6				
142	172	6.29	6.30	80-120	100	()
141	259	6.29	6.30	56-116	150	(Q)

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	1113	6.81	6.81	80-120	100	()
164	216	6.77	6.81	3- 63	19	()
127	324	6.81	6.81	7- 67	29	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	135641	7.41	7.18	80-120	100	(T)
63	2112	7.41	7.18	32- 92	2	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	135641	7.41	7.61	80-120	100	(T)
89	2343	7.41	7.61	47-107	2	(QT)
63	2112	7.41	7.61	26- 86	2	(QT)

55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	737	8.25	8.04	80-120	100	(T)
105	2970	8.25	8.04	14- 74	403	(QT)
51	1686	8.24	8.04	26- 86	229	(QT)

68	Phenanthrene			CAS#: 85-01-8		
178	2645	9.02	9.02	80-120	100	()
179	421	9.02	9.02	0- 45	16	()
176	636	9.02	9.02	0- 49	24	()

92	Chrysene			CAS#: 218-01-9		
228	2072	11.90	11.90	80-120	100	()
229	1533	11.90	11.90	0- 49	74	(Q)
226	598	11.90	11.90	0- 59	29	()

94	Di-n-octylphthalate			CAS#: 117-84-0		
149	2400	12.70	12.73	80-120	100	()
43	26444	12.69	12.73	0- 41	1102	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2120.d
 Lab Smp Id: 248373010 Client Smp ID: RE36-10-7500
 Inj Date : 21-MAR-2010 17:25
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |248373010|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	21.84130	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.301	2776902	40.000
* 46 Acenaphthene-d10	7.406	4513285	40.000
* 67 Phenanthrene-d10	8.996	4485092	40.000
* 91 Chrysene-d12	11.873	5379357	40.000
* 98 Perylene-d12	13.882	2410066	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
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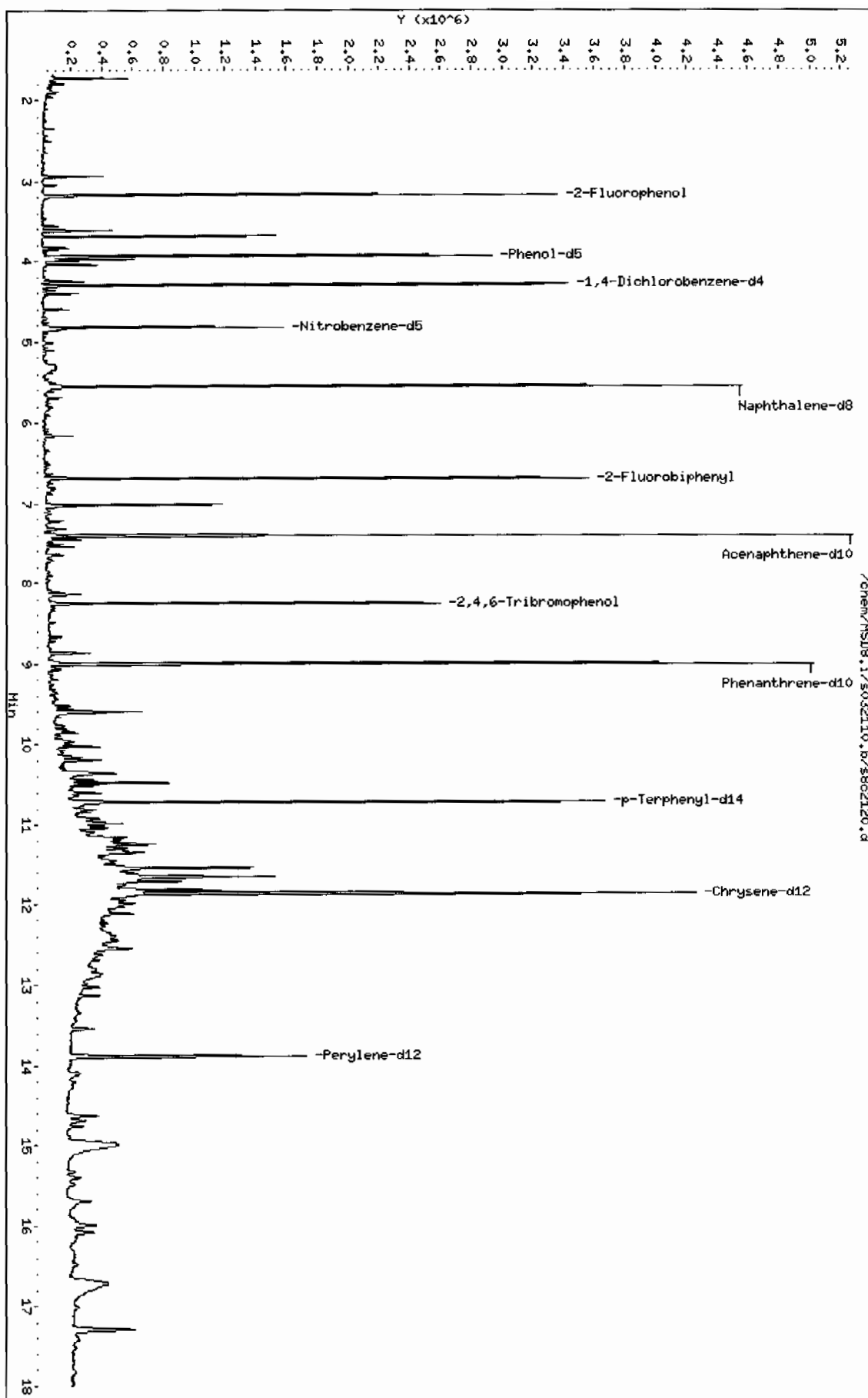
RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIE ENTRY	
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.692	1135250	16.3527528	693	97	NIST05.L	15188	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
7.011	1030651	9.13437381	387	99	NIST05.L	60023	46
6-Octadecenoic acid, (Z)-					CAS #: 593-39-5		
10.358	624659	5.57097523	236	93	NIST05.L	113359	67
Unknown					CAS #:		
10.473	718896	5.34559176	227	0		0	91
Bicyclo[5.2.0]nonane, 2-methylene-4,8,8-					CAS #: 242794-76-9		
10.925	621099	4.61839118	196	90	NIST05.L	59917	91
Eicosane					CAS #: 112-95-8		
10.982	623077	4.63309776	196	97	NIST05.L	113490	91
Unknown					CAS #:		
11.163	761124	5.65958662	240	0		0	91
Unknown					CAS #:		
11.239	949638	7.06134830	299	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
11.258	796880	5.92546250	251	86	NIST05.L	133618	91
Unknown					CAS #:		
11.296	694783	5.16628836	219	0		0	91
Unknown					CAS #:		
11.325	562904	4.18566123	177	0		0	91
Unknown					CAS #:		
11.354	1131688	8.41504152	357	0		0	91
Unknown					CAS #:		
11.454	781132	5.80836349	246	0		0	91
Unknown					CAS #:		
11.544	2960082	22.0106690	933	0		0	91
Unknown					CAS #:		
11.606	629872	4.68361966	198	0		0	91

RT	CONCENTRATIONS		QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)		LIBRARY	LIB ENTRY	
1-Phenanthrenecarboxylic acid, 1,2,3,4,4				CAS #: 1740-19-8		
11.663	3504692	26.0603004	1100	93	NIST05.L 125036	91
Unknown				CAS #:		
11.720	1263036	9.39172096	398	0	0	91
Unknown				CAS #:		
11.763	899216	6.68641533	283	0	0	91
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6				CAS #: 1000099-24-3		
11.825	1979615	14.7200838	624	89	NIST05.L 36267	91
Unknown				CAS #:		
11.963	857569	6.37673946	270	0	0	91
1,2-Benzisothiazole, 3-(hexahydro-1H-aze				CAS #: 309735-29-3		
11.996	1147613	8.53345721	362	90	NIST05.L 101019	91
Unknown				CAS #:		
12.039	770370	5.72834491	243	0	0	91
Octadecane, 1-chloro-				CAS #: 3386-33-2		
12.120	1209970	8.99712991	381	95	NIST05.L 117263	91
Unknown				CAS #:		
12.363	724177	5.38486143	228	0	0	91
Unknown				CAS #:		
12.396	806143	5.99434522	254	0	0	91
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he				CAS #: 511-05-7		
12.454	766581	5.70017035	242	92	NIST05.L 125029	91
Heptadecane				CAS #: 629-78-7		
12.554	1315068	9.77862682	414	94	NIST05.L 85524	91
Unknown				CAS #:		
14.982	2155427	35.7737473	1520	0	0	98
.gamma.-Sitosterol				CAS #: 83-47-6		
16.725	2223391	36.9017409	1560	93	NIST05.L 174402	98
Stigmast-4-en-3-one				CAS #: 1058-61-3		
17.287	986480	16.3726586	694	94	NIST05.L 173936	98

Data File: /chem/MSD8.1/s032110.b/s02120.d
Date: 21-MAR-2010 17:25
Client ID: RE36-10-7500
Sample Info: 1248373010%1292211SVH11LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-SMS

Instrument: MSD8.1
Operator: nag1
Column diameter: 0.20

Page 1



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 12483730101961922111SVM111LANL

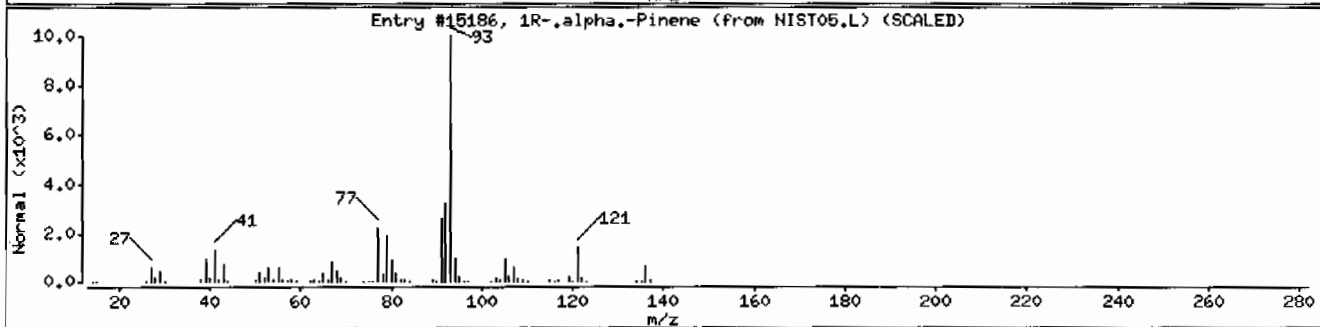
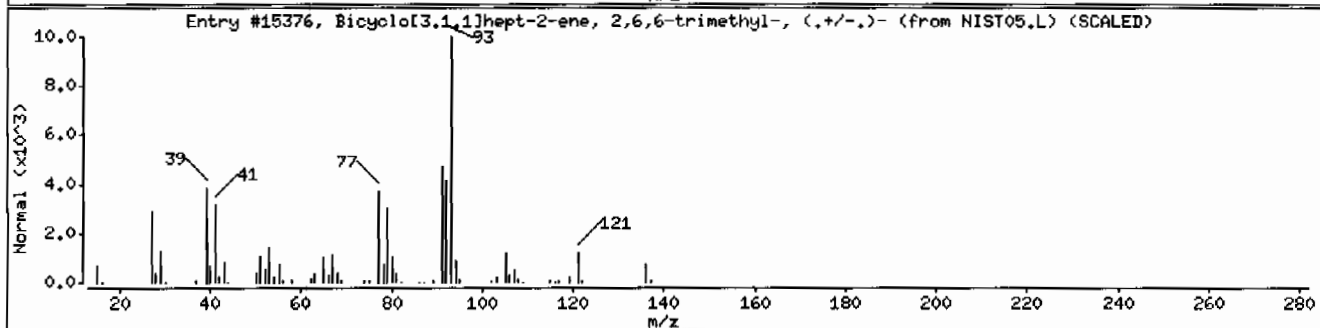
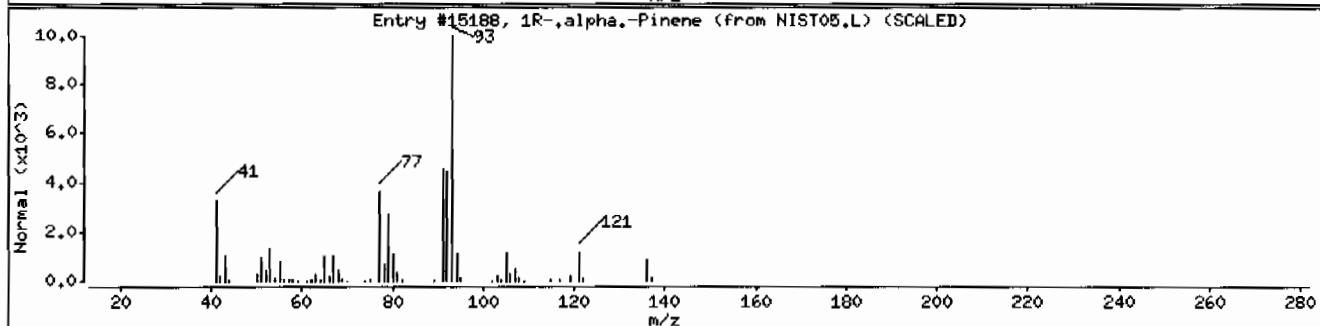
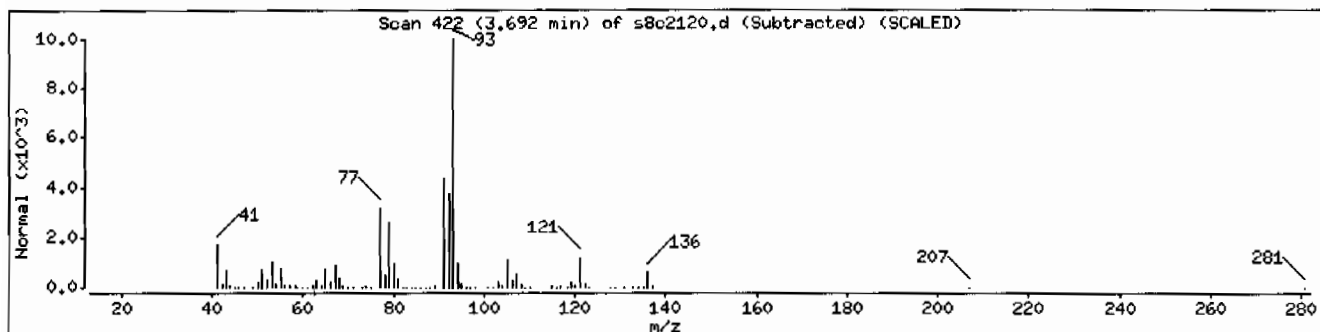
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

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



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: HSD8.i

Sample Info: 12483730101961922111SVH111LANL

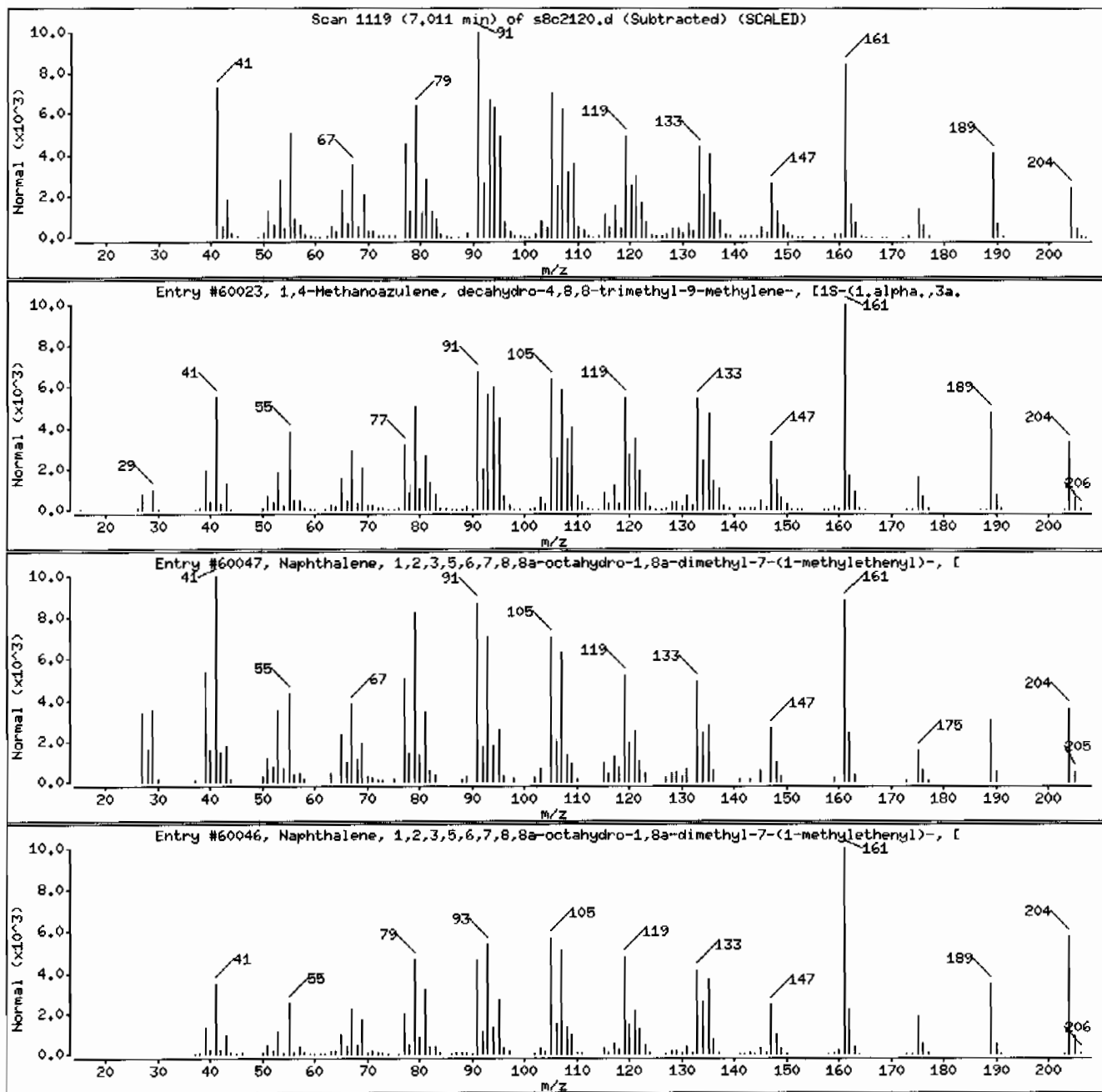
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60023	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	97	C15H24	204



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 12483730101961922111SVMI11LANL

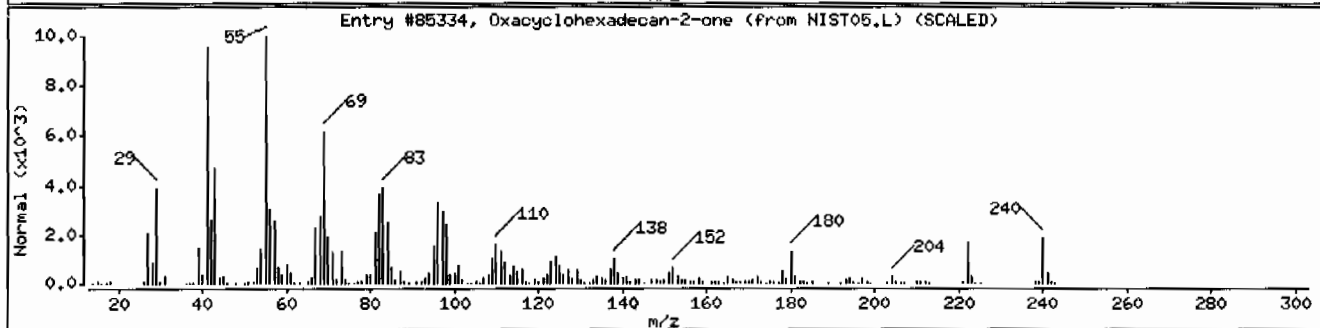
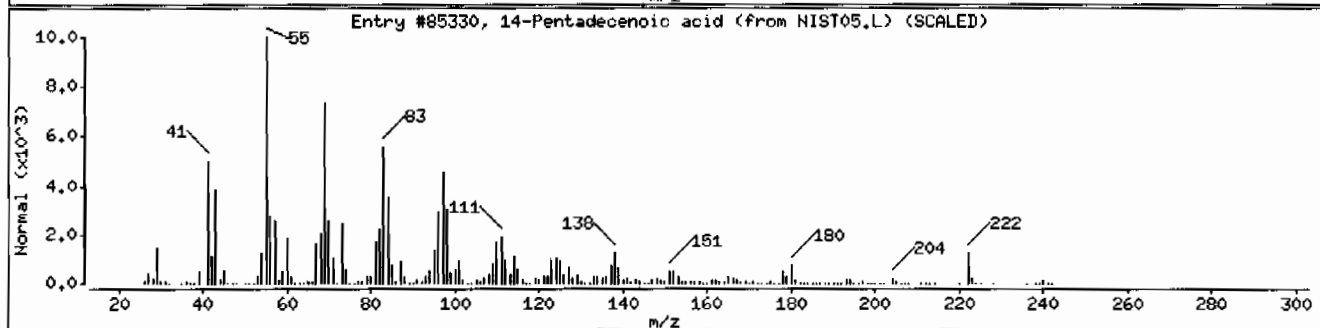
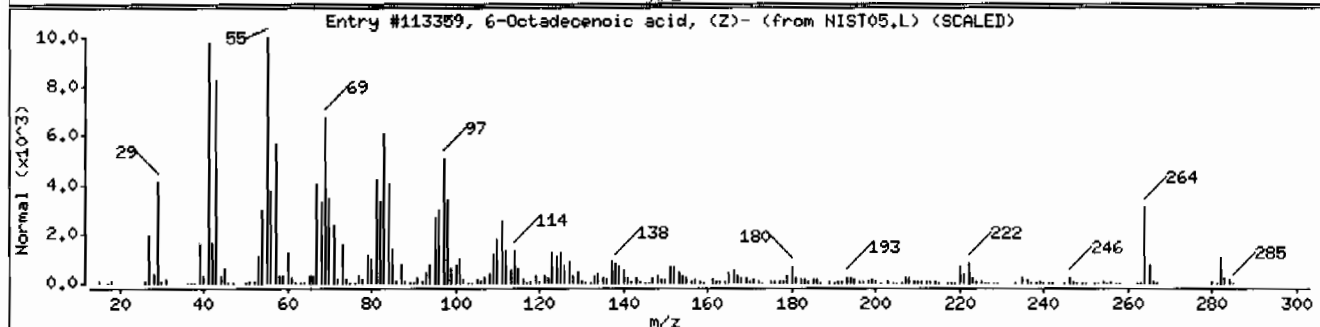
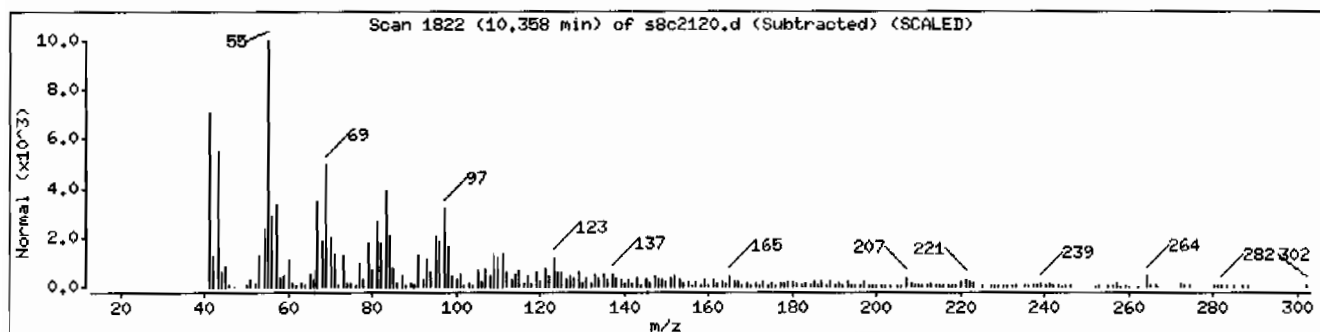
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
6-Octadecenoic acid, (Z)-	593-39-5	NIST05.L	113359	93	C18H34O2	282
14-Pentadecenoic acid	17351-34-7	NIST05.L	85330	93	C15H28O2	240
Oxacyclohexadecan-2-one	106-02-5	NIST05.L	85334	93	C15H28O2	240



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVMI1ILANL

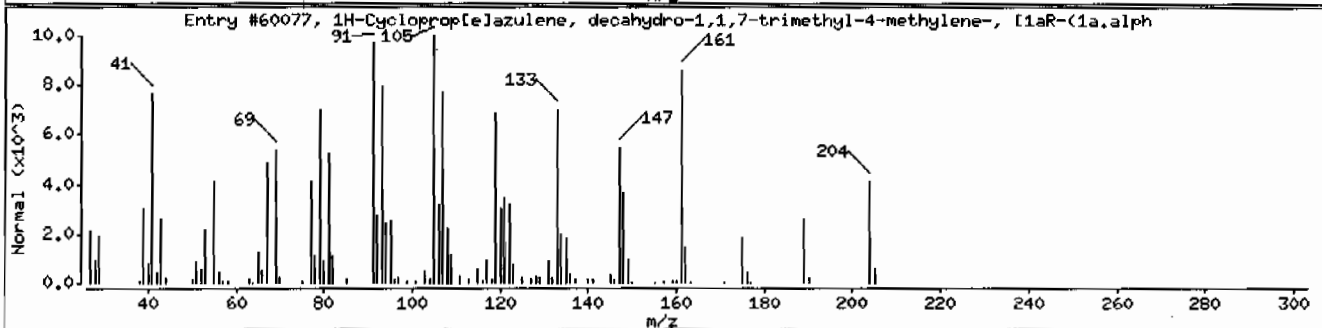
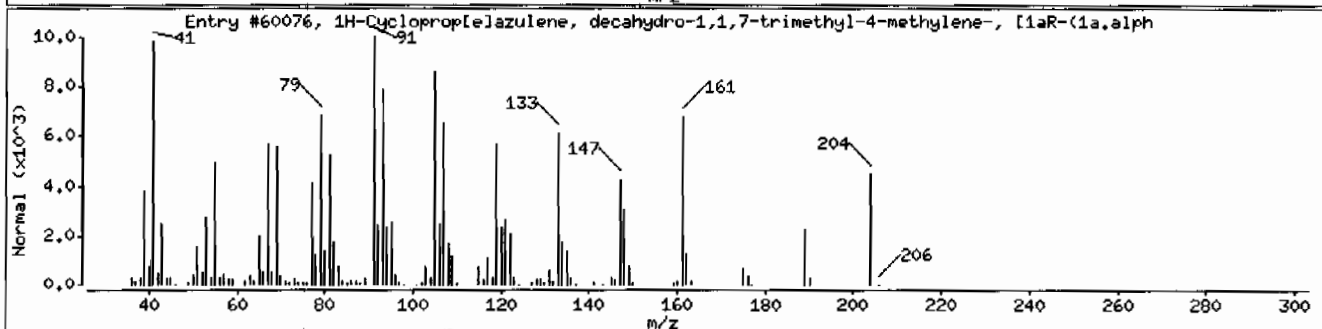
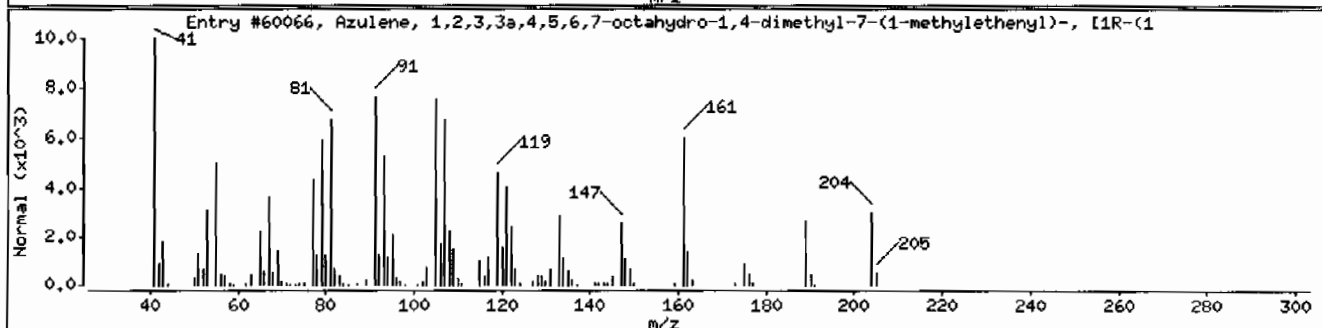
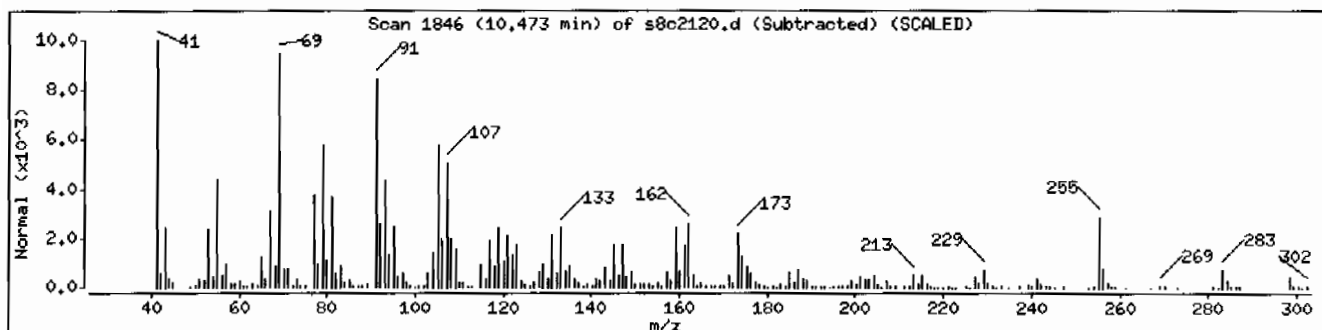
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Azulene, 1,2,3,3a,4,5,6,7-octahydro-1,4-	22567-17-5	NIST05.L	60066	47	C15H24	204
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60076	45	C15H24	204
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60077	44	C15H24	204



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVMI1ILANL

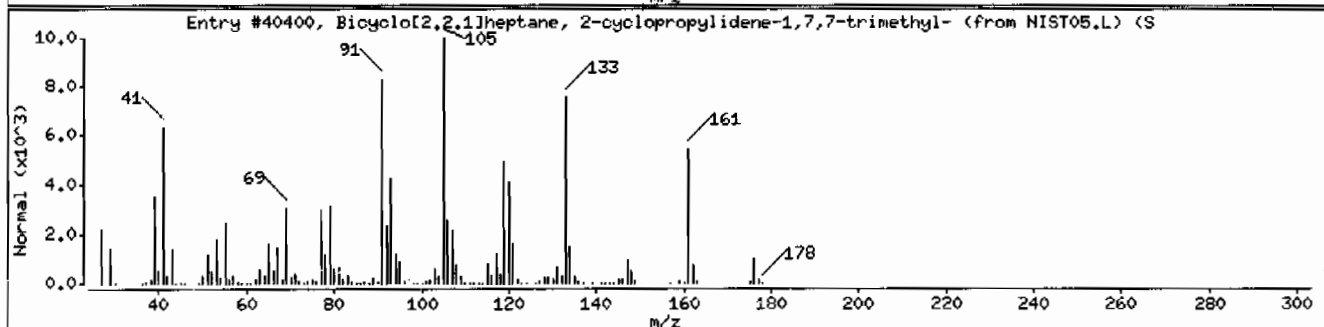
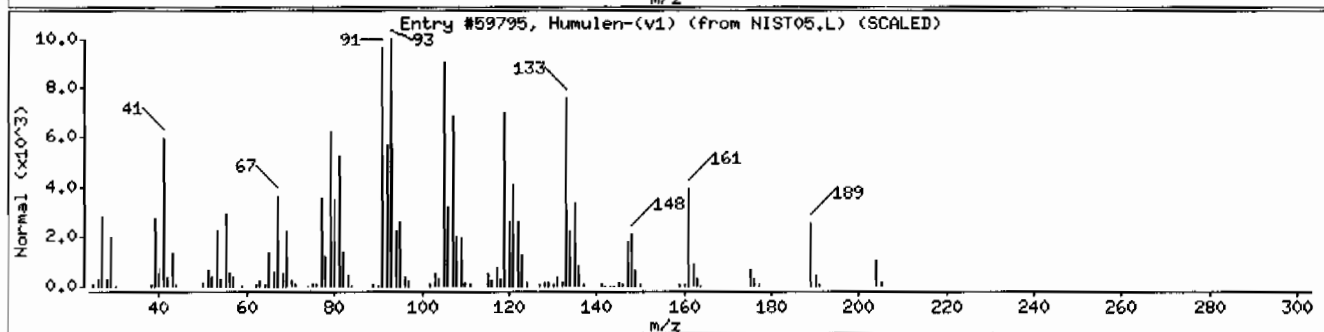
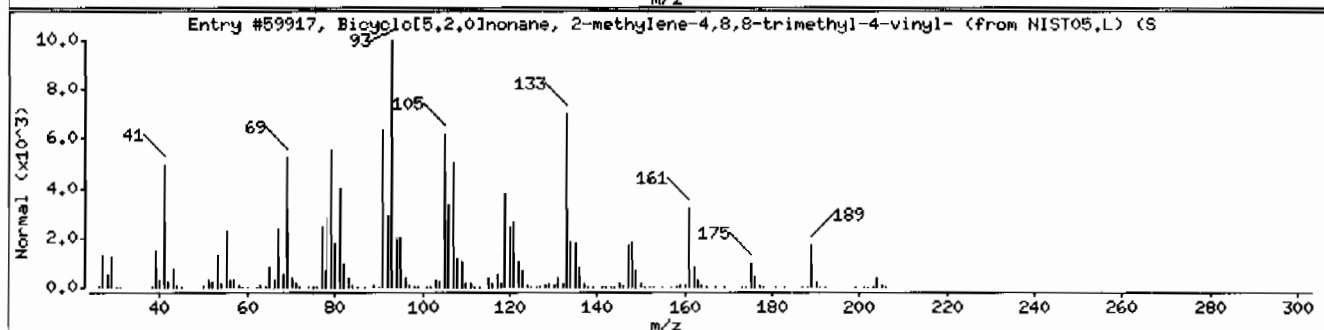
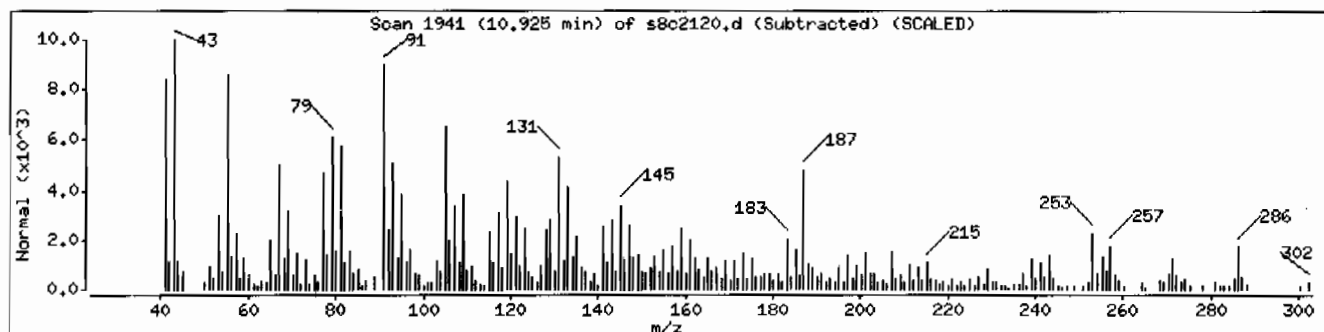
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[5.2.0]nonane, 2-methylene-4,8,8-	242794-76-9	NIST05.L	59917	90	C15H24	204
Humulen-(v1)	1000159-39-4	NIST05.L	59795	40	C15H24	204
Bicyclo[2.2.1]heptane, 2-cyclopropyliden	1000159-45-7	NIST05.L	40400	30	C13H20	176



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Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH11LANL

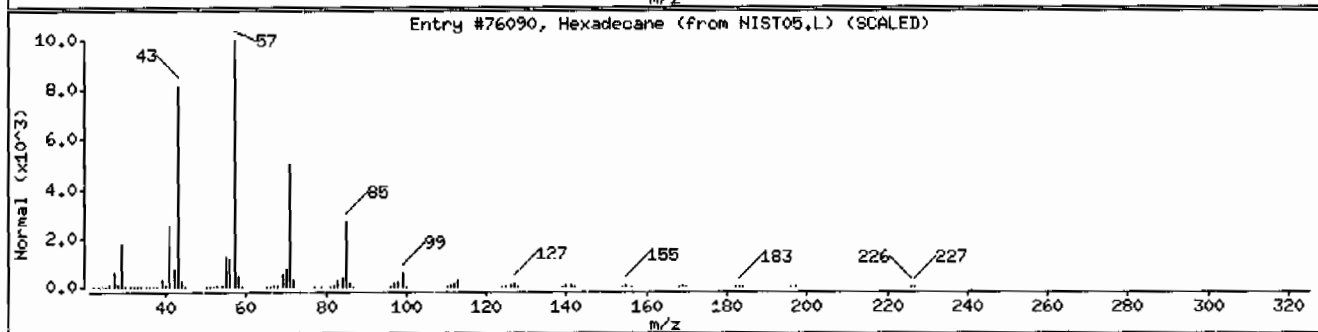
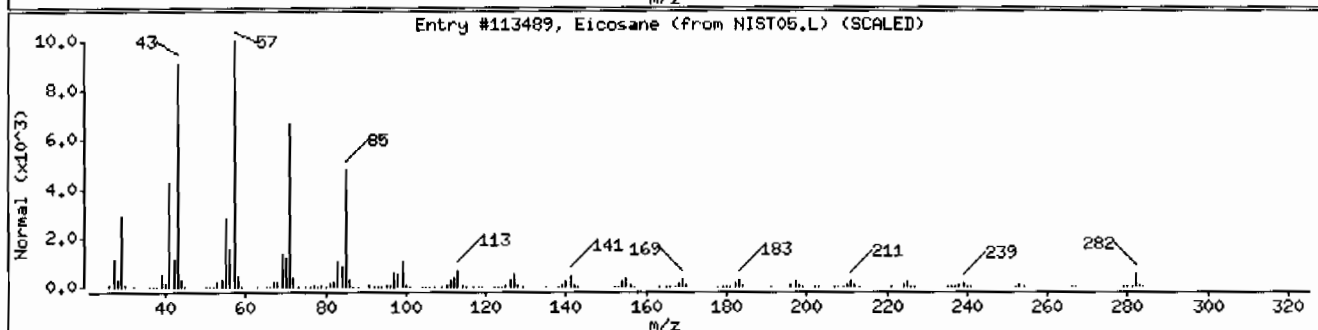
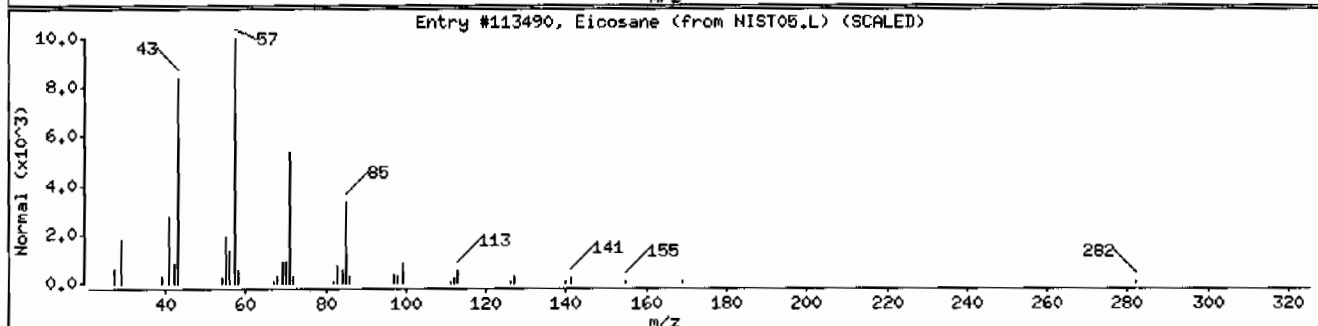
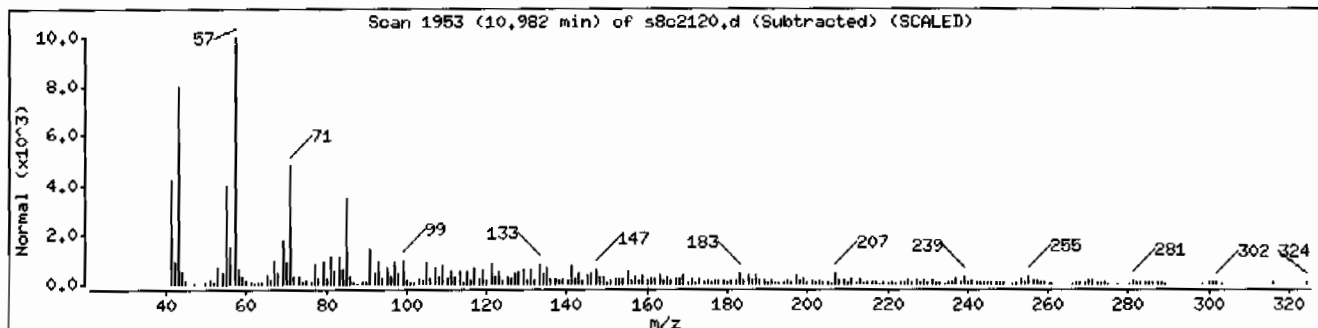
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	97	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	96	C ₂₀ H ₄₂	282
Hexadecane	544-76-3	NIST05.L	76090	95	C ₁₆ H ₃₄	226



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Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH111LANL

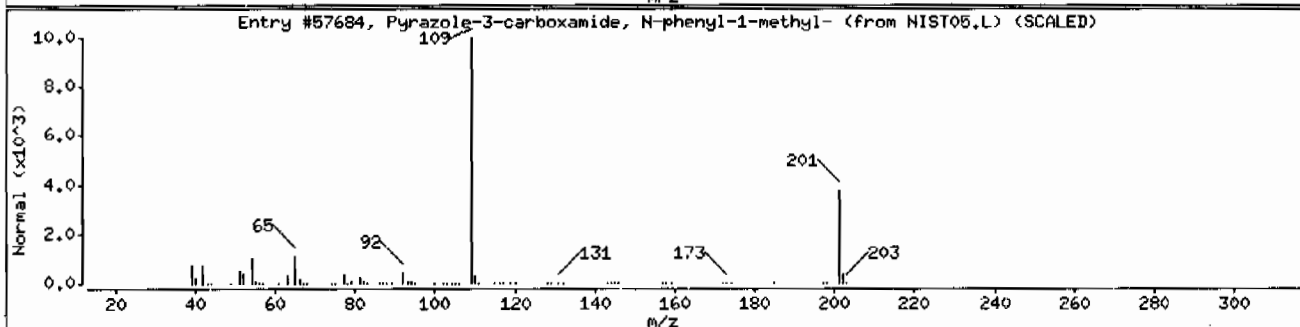
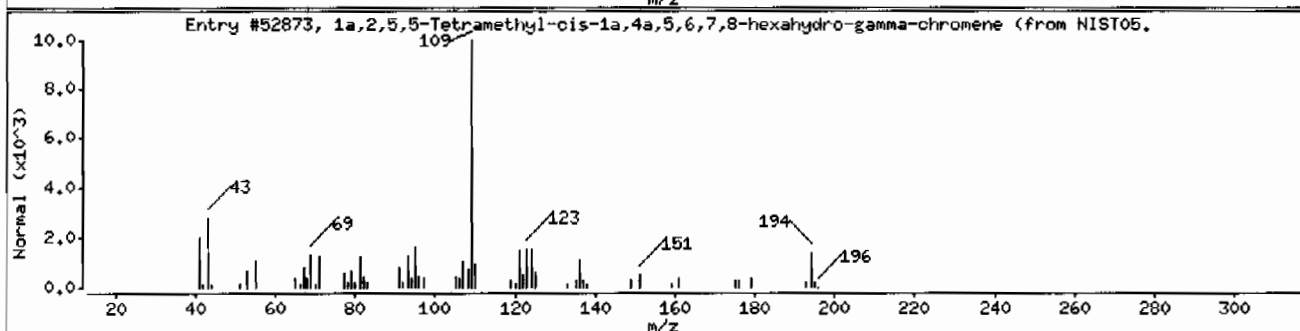
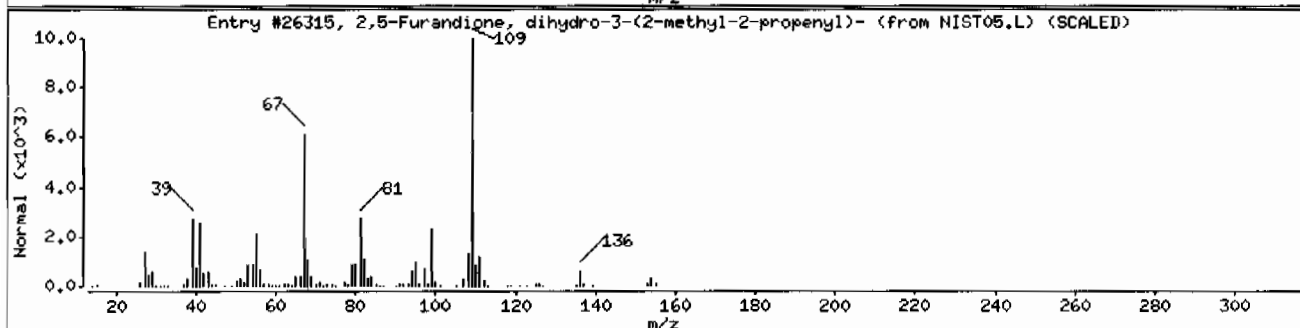
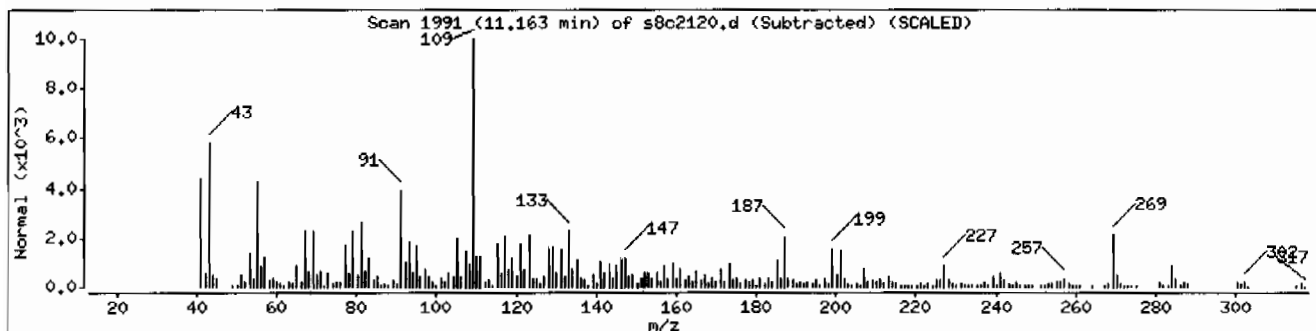
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,5-Furandione, dihydro-3-(2-methyl-2-pr	18908-20-8	NIST05.L	26315	30	C8H10O3	154
1a,2,5,5-Tetramethyl-cis-1a,4a,5,6,7,8-h	1000215-77-7	NIST05.L	52873	27	C13H22O	194
Pyrazole-3-carboxamide, N-phenyl-1-methy	89202-82-4	NIST05.L	57684	27	C11H11N3O	201



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Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVMI11LANL

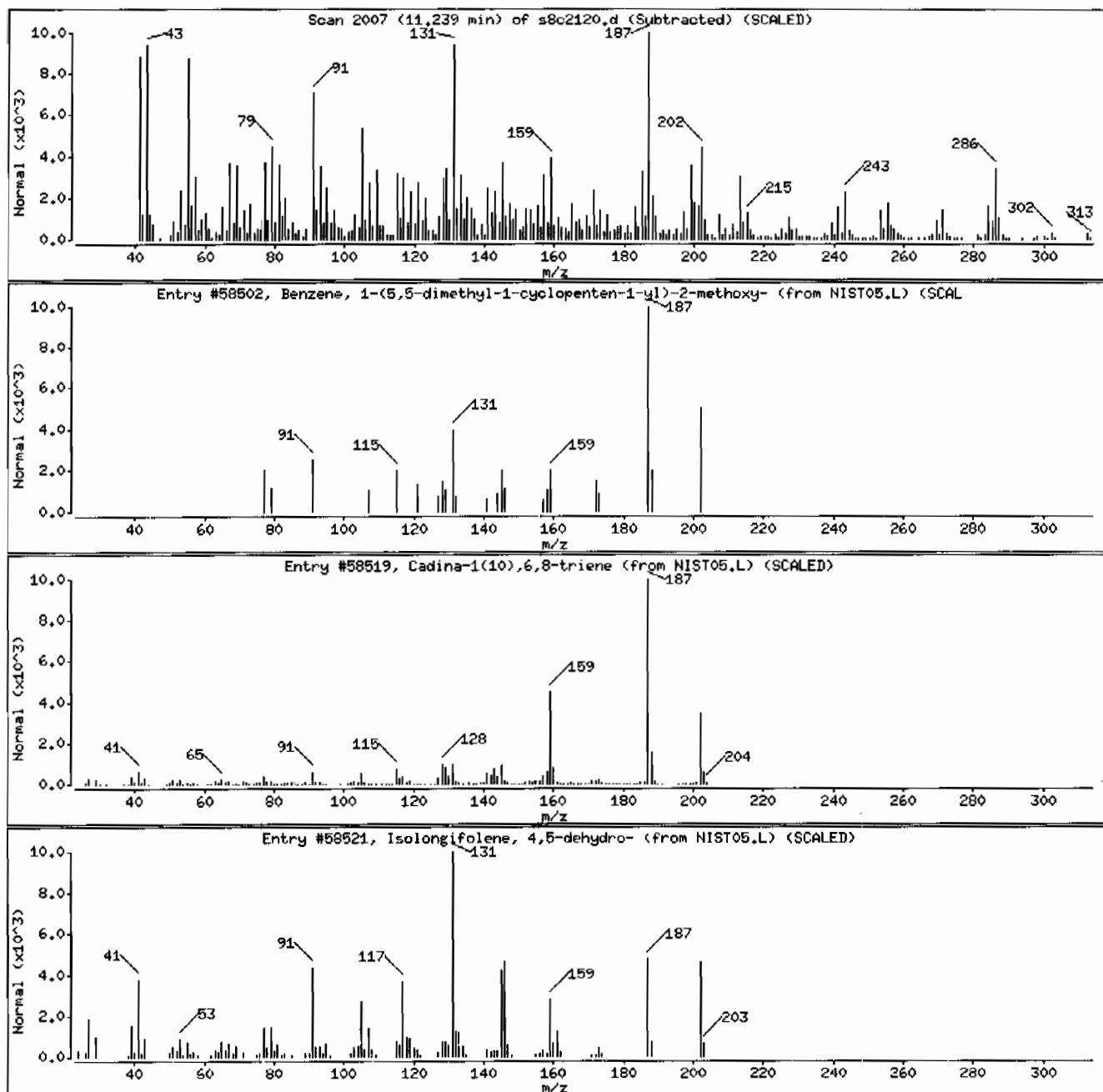
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 1-(5,5-dimethyl-1-cyclopenten-1	39877-93-5	NIST05.L	58502	68	C14H18O	202
Cadina-1(10),6,8-triene	1460-96-4	NIST05.L	58519	55	C15H22	202
Isolongifolene, 4,5-dehydro-	1000152-07-1	NIST05.L	58521	46	C15H22	202



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: HSD8.i

Sample Info: I248373010196192211ISVM11ILANL

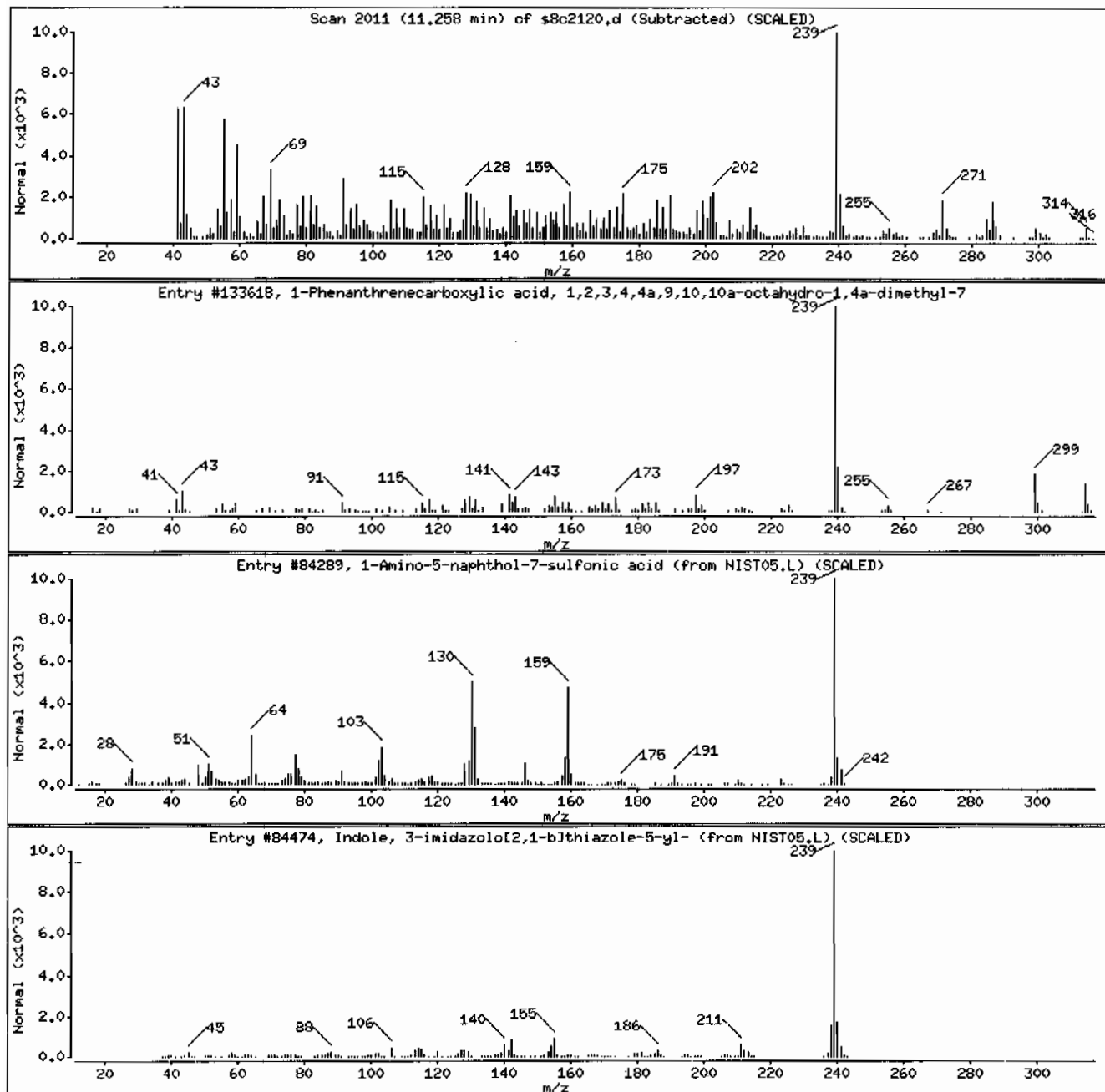
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	86	C21H30O2	314
1-Amino-5-naphthol-7-sulfonic acid	489-78-1	NIST05.L	84289	42	C10H9NO4S	239
Indole, 3-imidazolo[2,1-b]thiazole-5-yl-	292855-05-1	NIST05.L	84474	38	C13H9N3S	239



Date: 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH111LANL

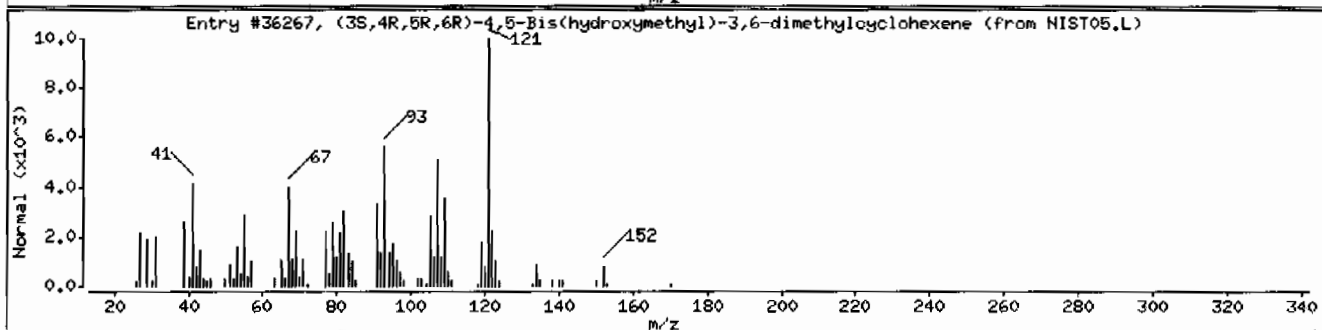
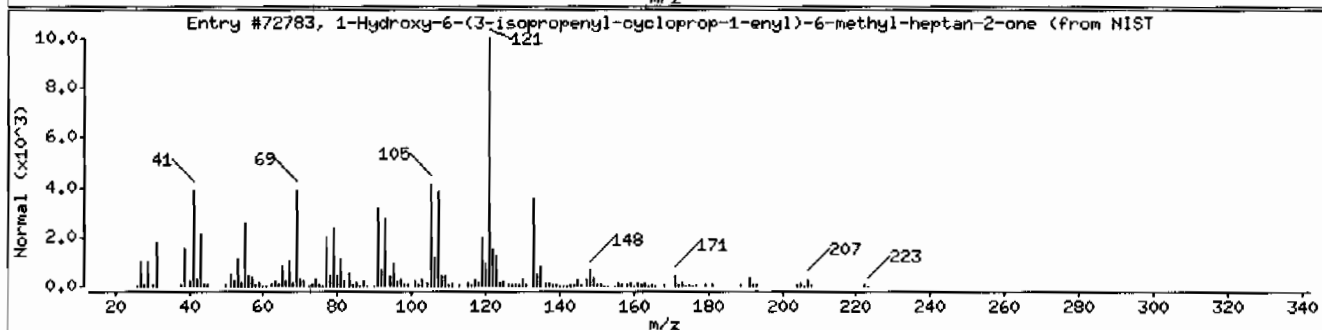
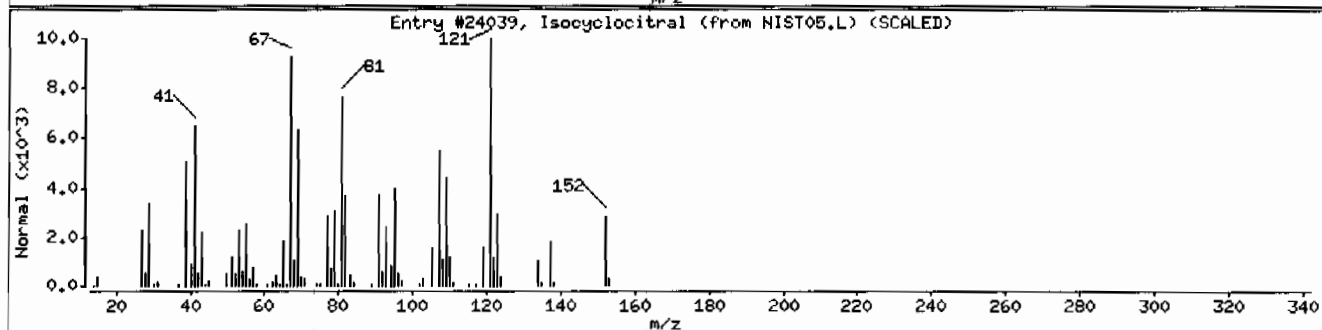
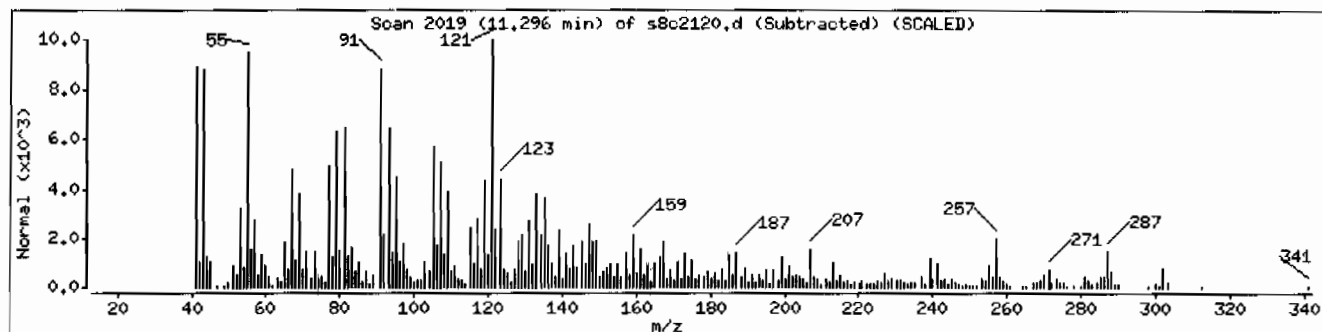
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Isocyclocitral	1335-66-6	NIST05.L	24039	53	C10H16O	152
1-Hydroxy-6-(3-isopropenyl-cycloprop-1-yl)-6-methyl-heptan-2-one	1000189-14-9	NIST05.L	72783	49	C14H22O2	222
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	1000099-24-3	NIST05.L	36267	43	C10H18O2	170



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Client ID: RE36-10-7500

Instrument: HSD8.i

Sample Info: 12483730101961922111SVH111LANL

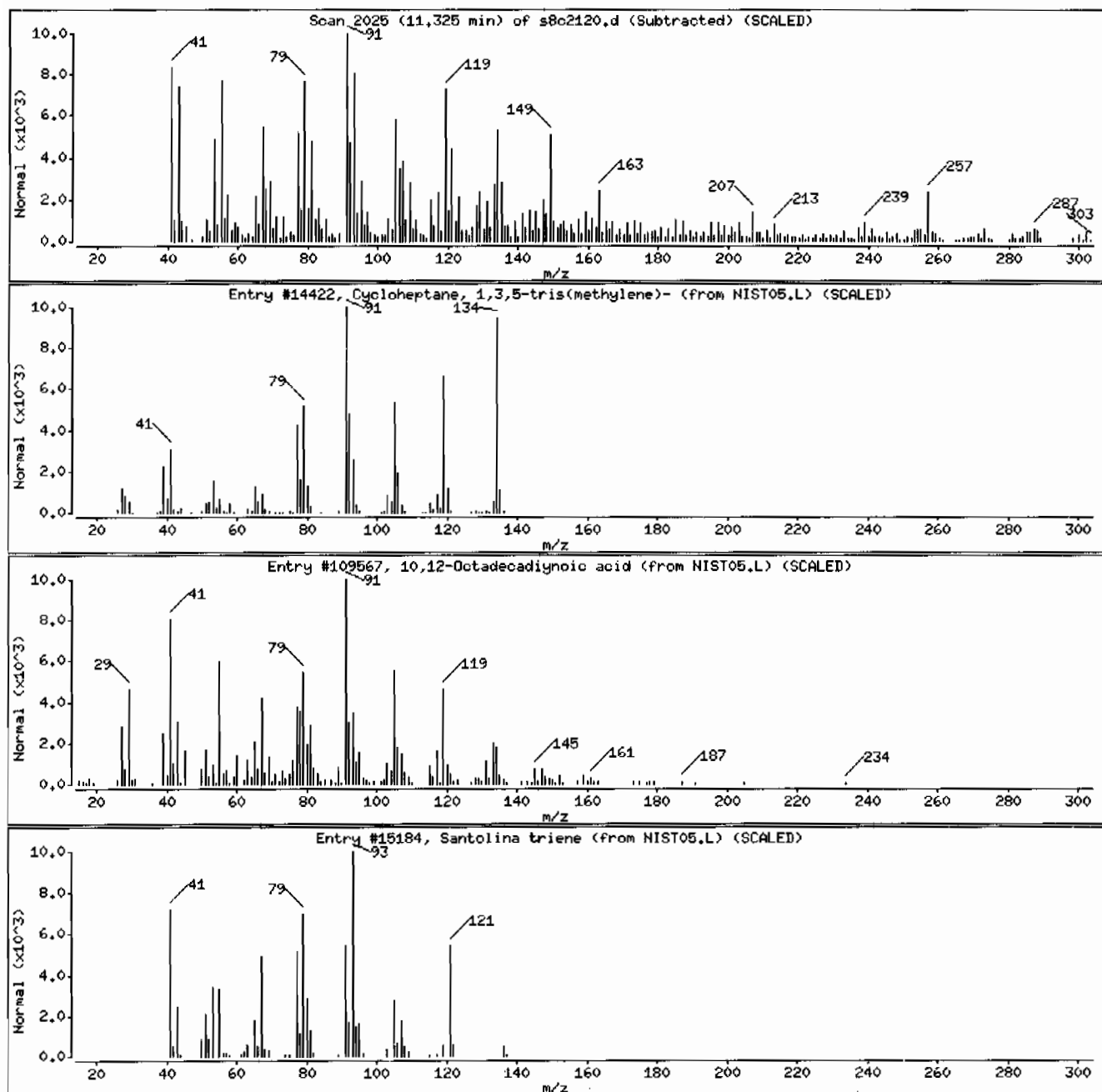
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14422	38	C10H14	134
10,12-Octadecadiynoic acid	7333-25-7	NIST05.L	109567	30	C18H28O2	276
Santolina triene	2153-66-4	NIST05.L	15184	25	C10H16	136



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Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVMI11LANL

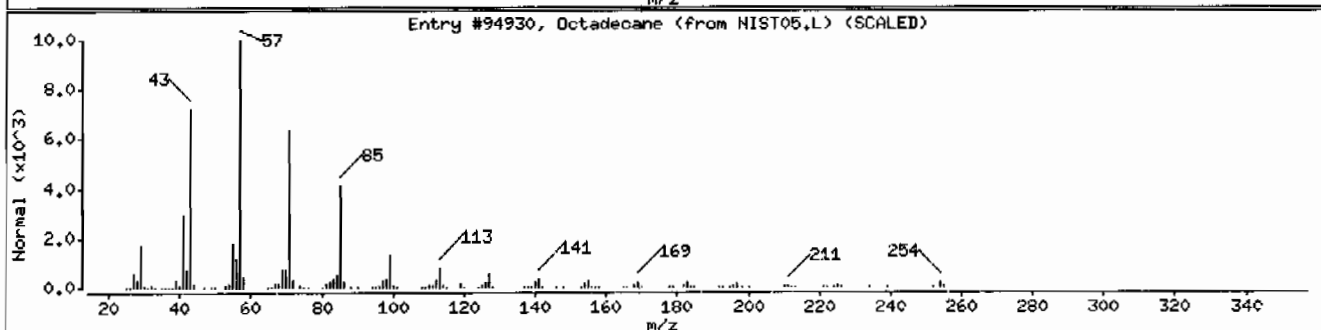
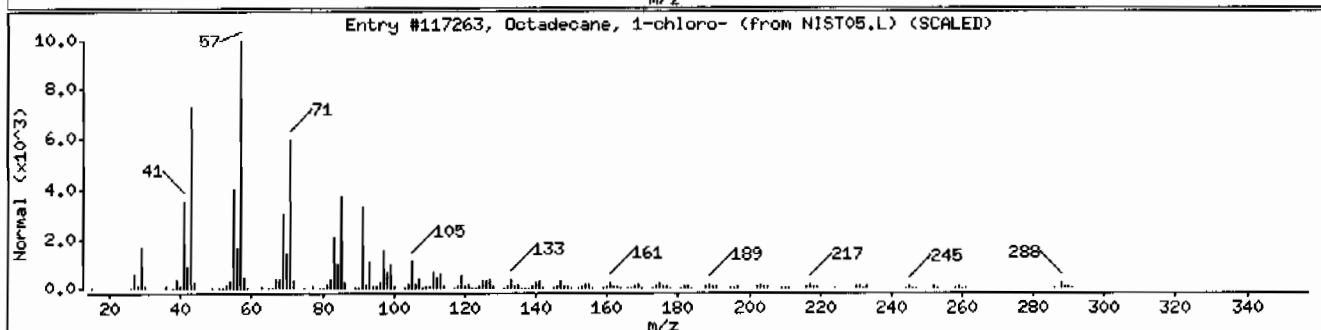
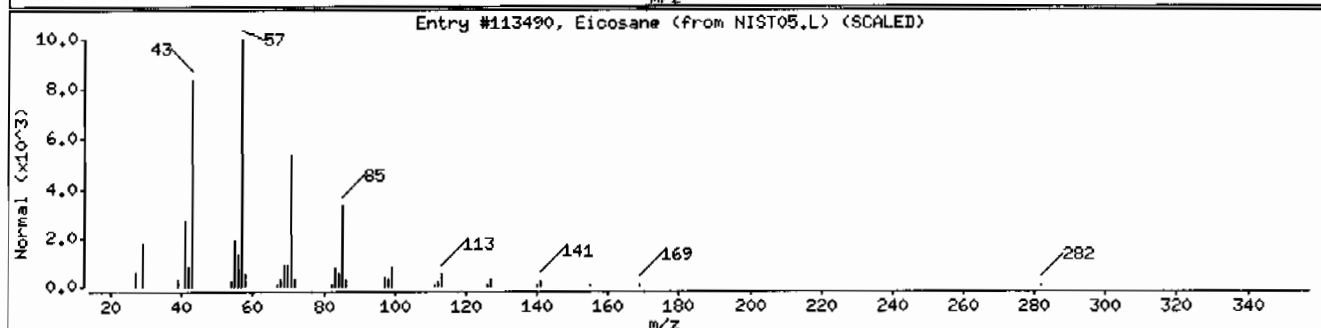
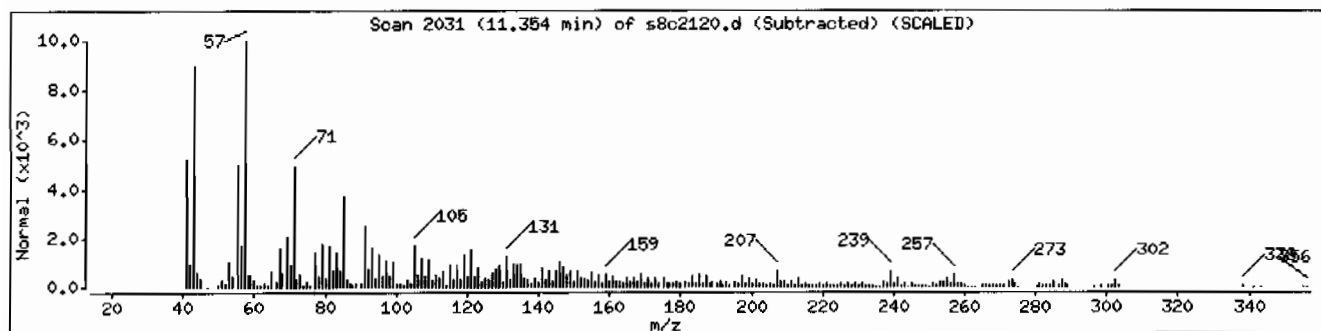
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	93	C20H42	282
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117263	83	C18H37Cl	288
Octadecane	593-45-3	NIST05.L	94930	83	C18H38	254



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Client ID: RE36-10-7500

Instrument: HSD8.i

Sample Info: 1248373010!96192211!SVH11!LANL

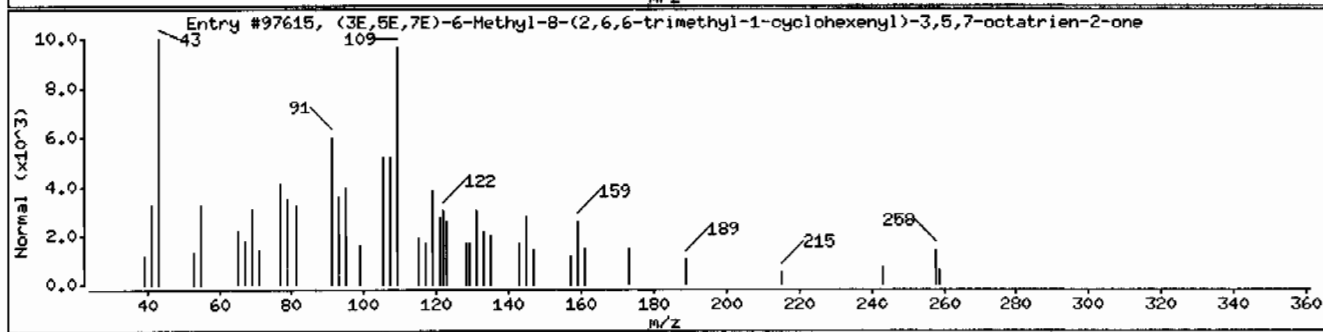
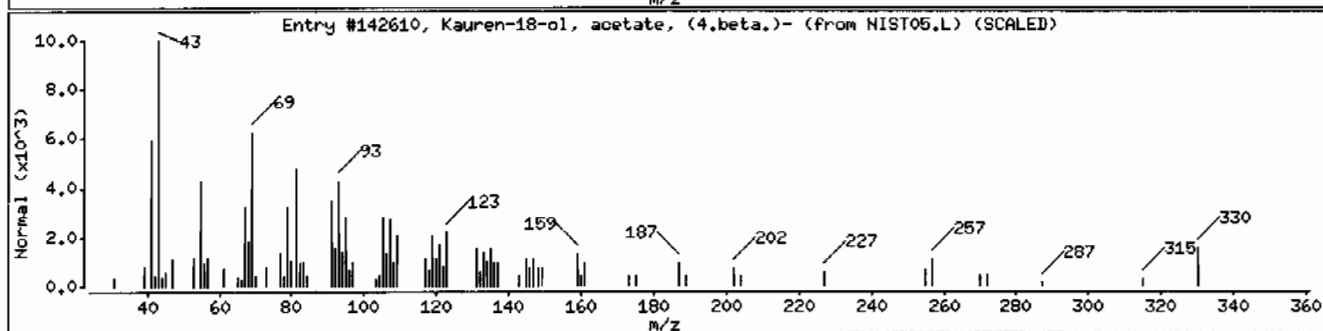
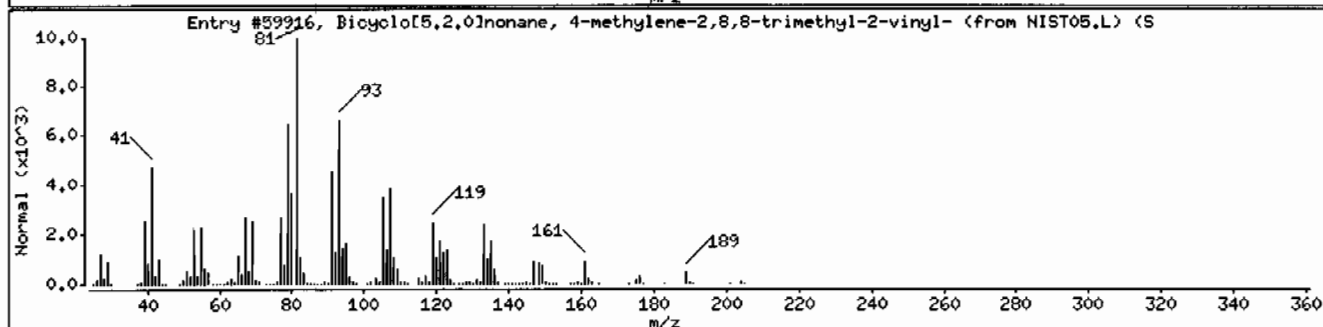
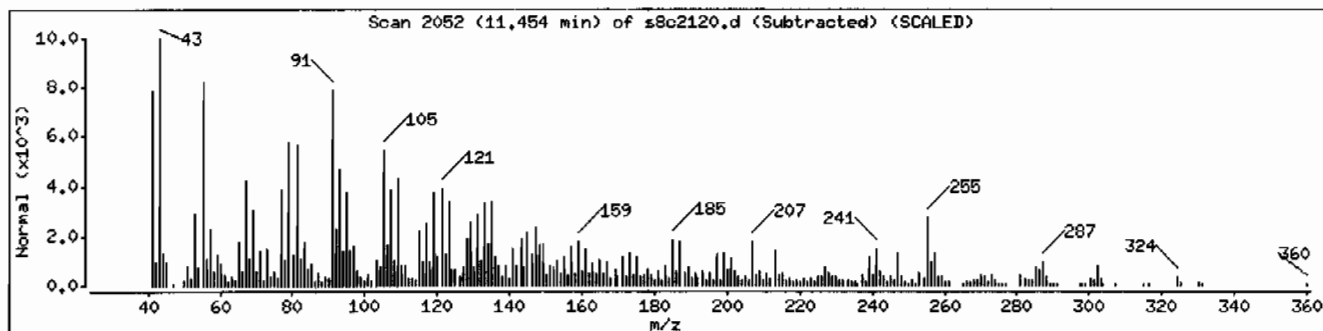
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	50	C15H24	204
Kauren-18-ol, acetate, (4.beta.)-	72150-74-4	NIST05.L	142610	46	C22H34O2	330
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1-	17974-57-1	NIST05.L	97615	35	C18H26O	258



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Client ID: RE36-10-7500

Instrument: MSD8.1

Sample Info: 1248373010196192211SVH111LANL

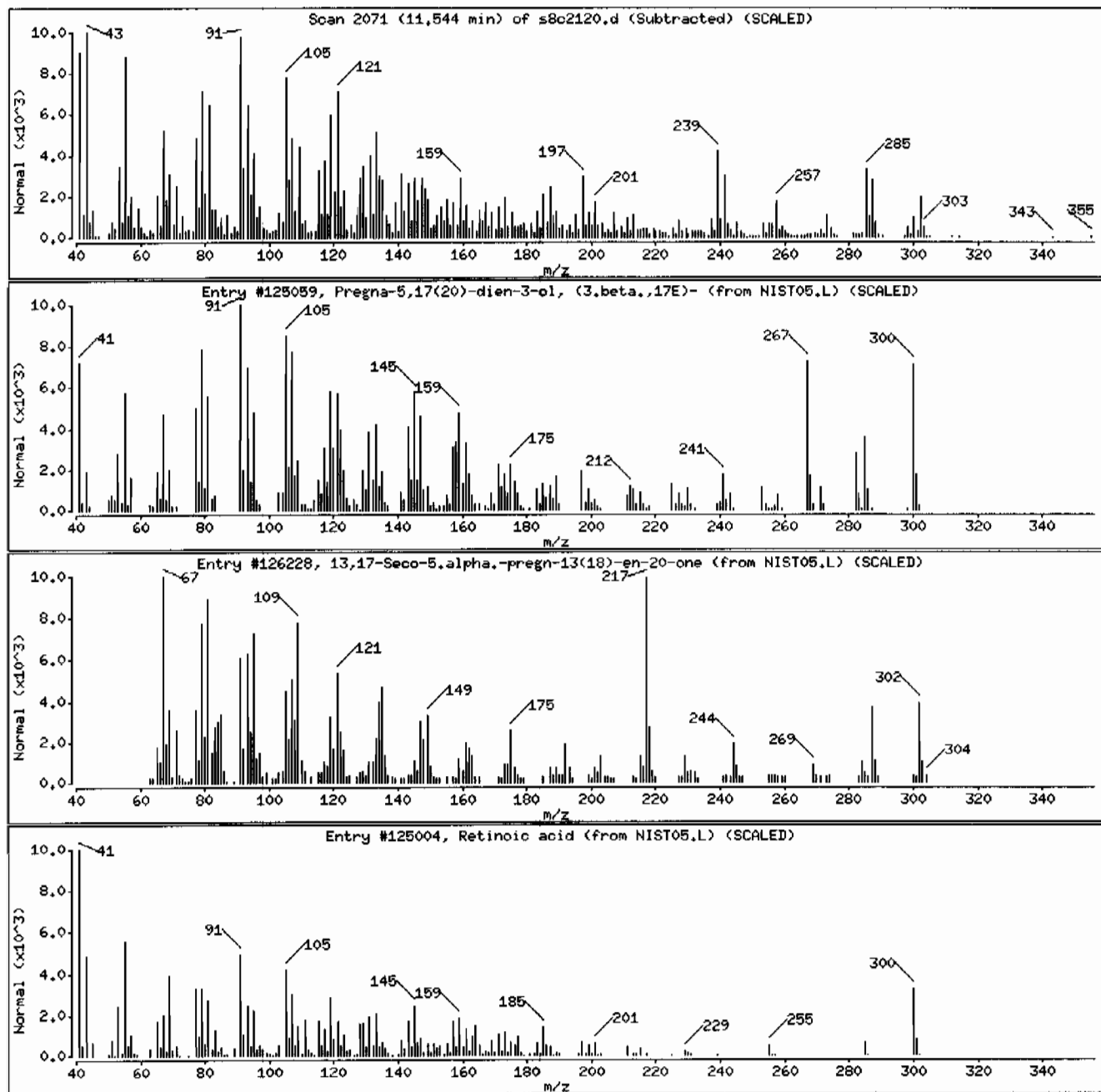
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pregna-5,17(20)-dien-3-ol, (3.beta.,17E)	1159-25-7	NIST05.L	125059	58	C21H32O	300
13,17-Seco-5.alpha.-pregn-13(18)-en-20-one	31239-27-7	NIST05.L	126228	50	C21H34O	302
Retinoic acid	302-79-4	NIST05.L	125004	49	C20H28O2	300



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH111LANL

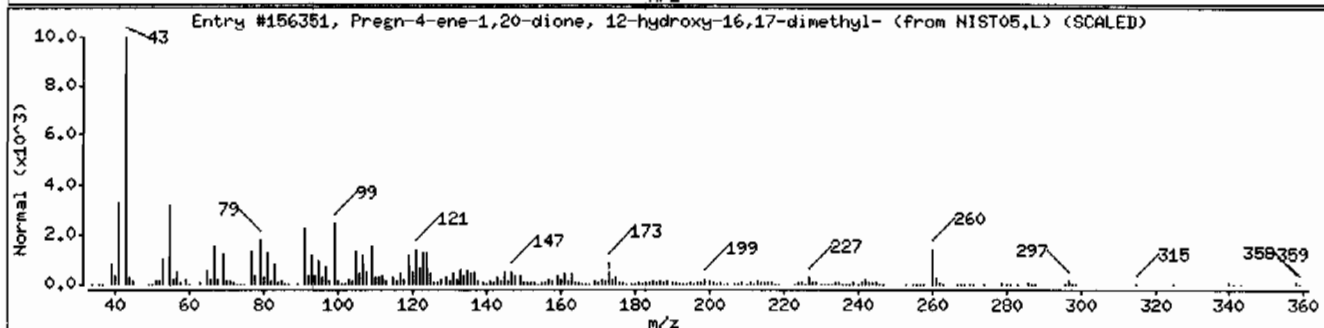
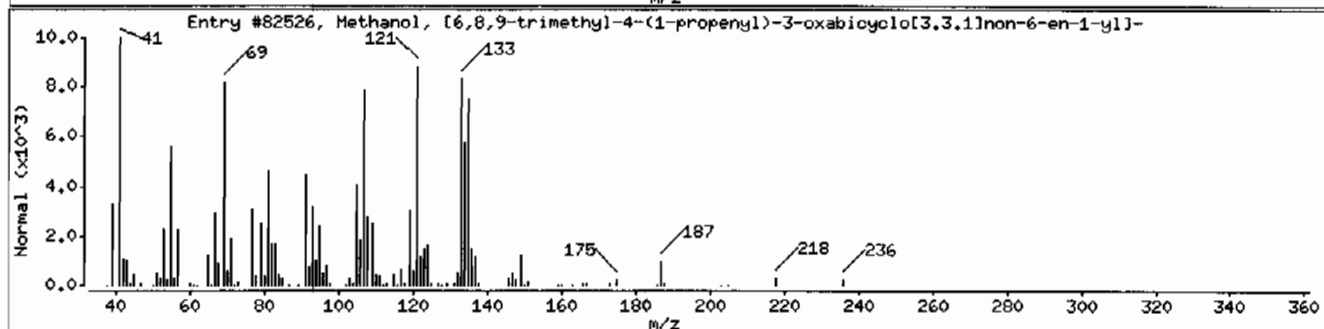
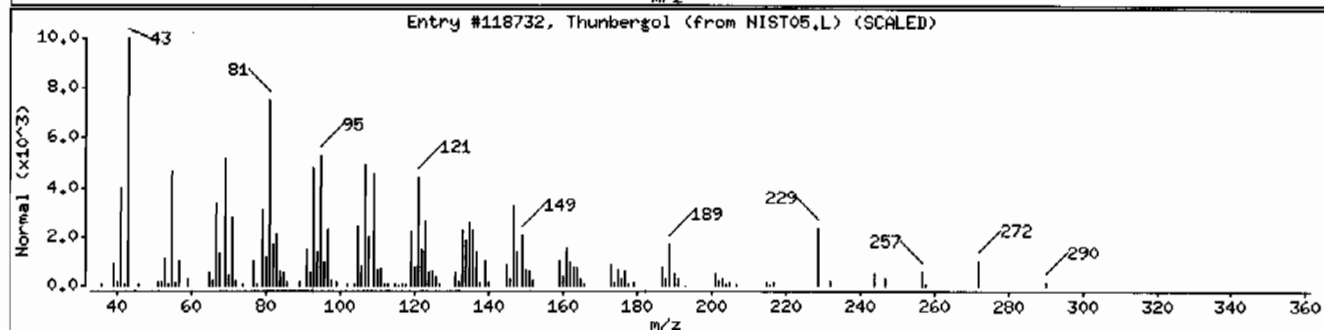
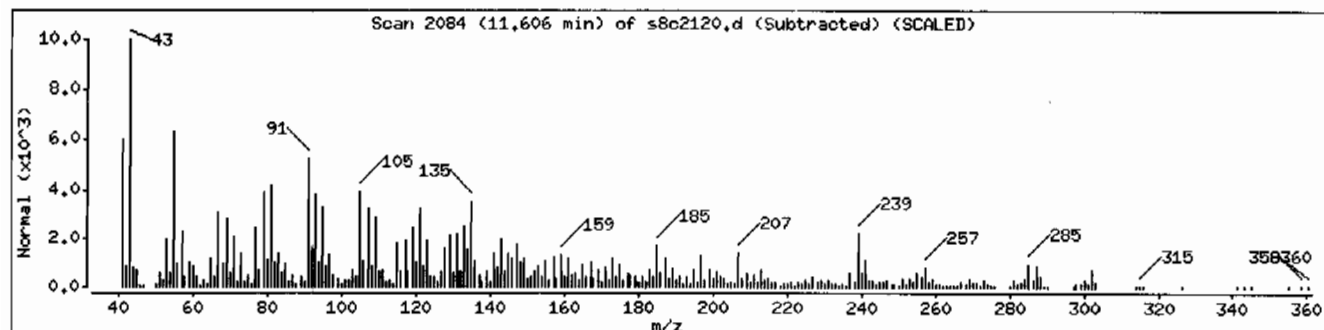
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thunbergol	25269-17-4	NIST05.L	118732	59	C20H34O	290
Methanol, [6,8,9-trimethyl-4-(1-propenyl	1000277-60-9	NIST05.L	82526	38	C15H24O2	236
Pregn-4-ene-1,20-dione, 12-hydroxy-16,17	1000259-74-7	NIST05.L	156351	38	C23H34O3	358



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH111LANL

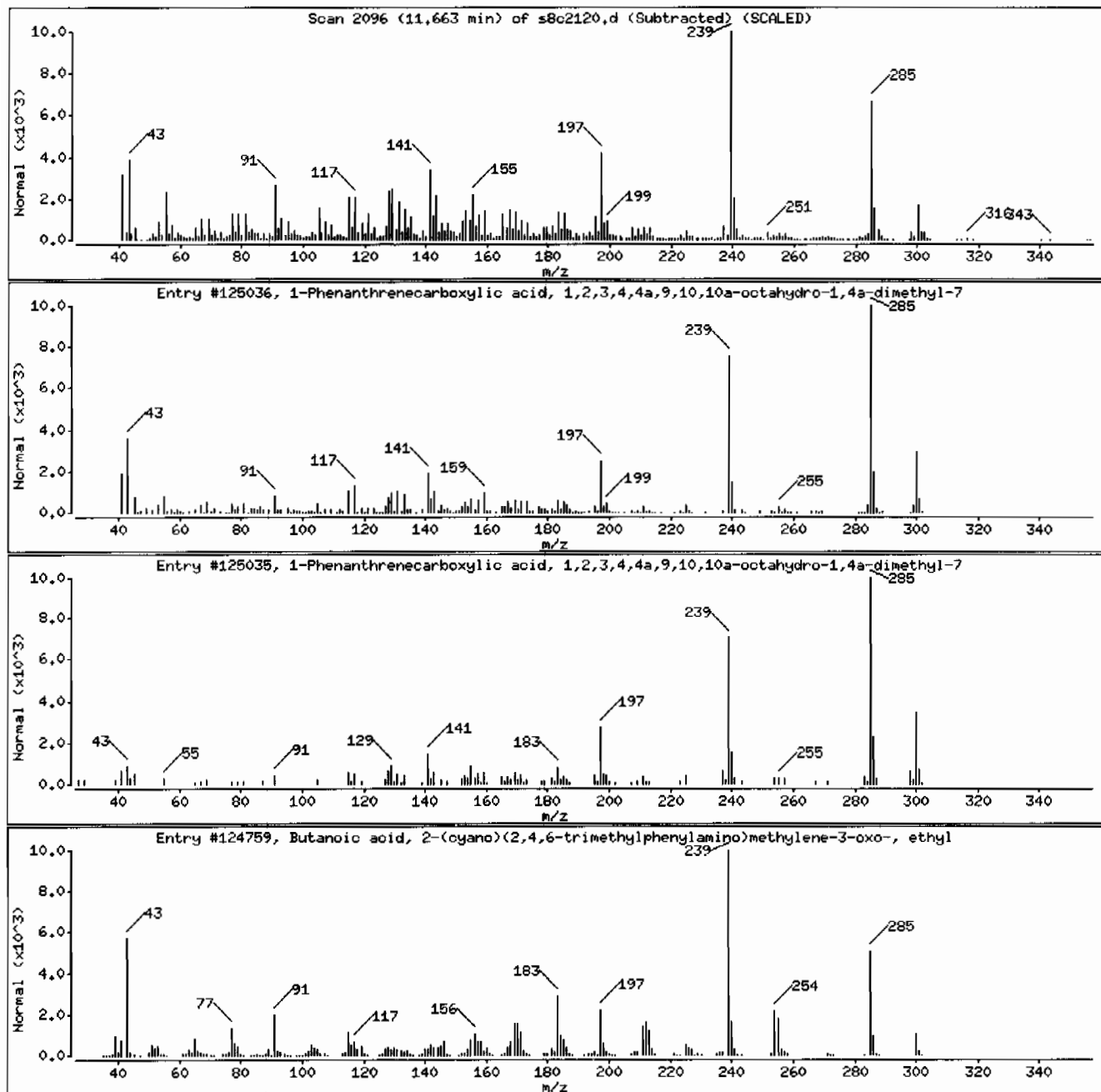
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	93	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	89	C20H28O2	300
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	49	C17H20N2O3	300



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Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH11ILANL

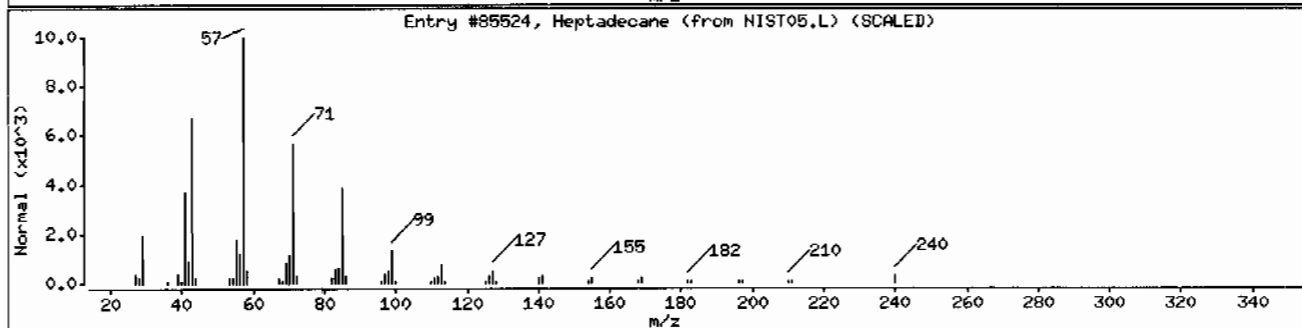
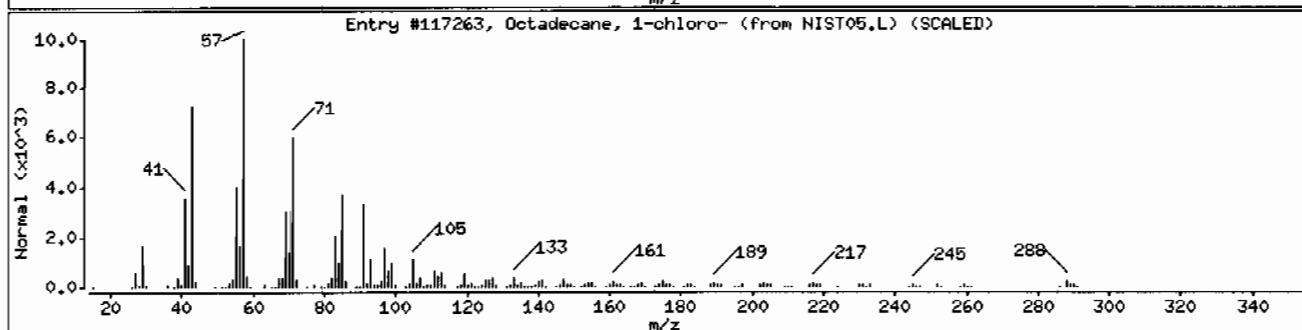
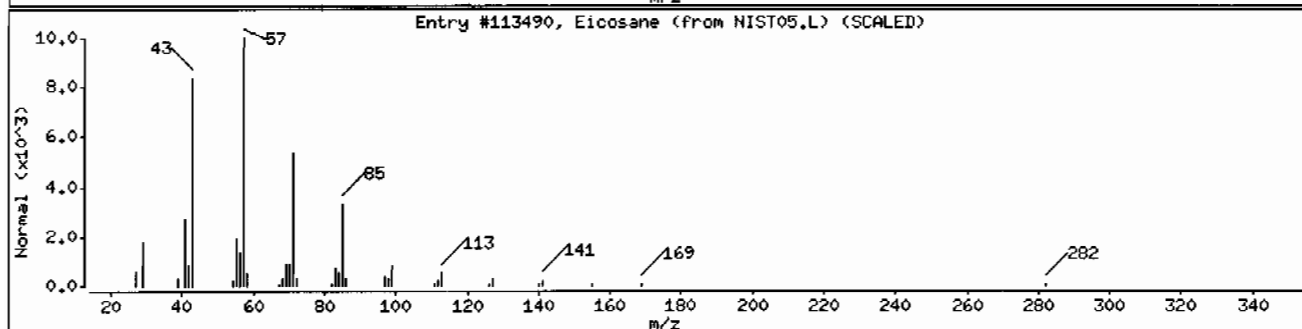
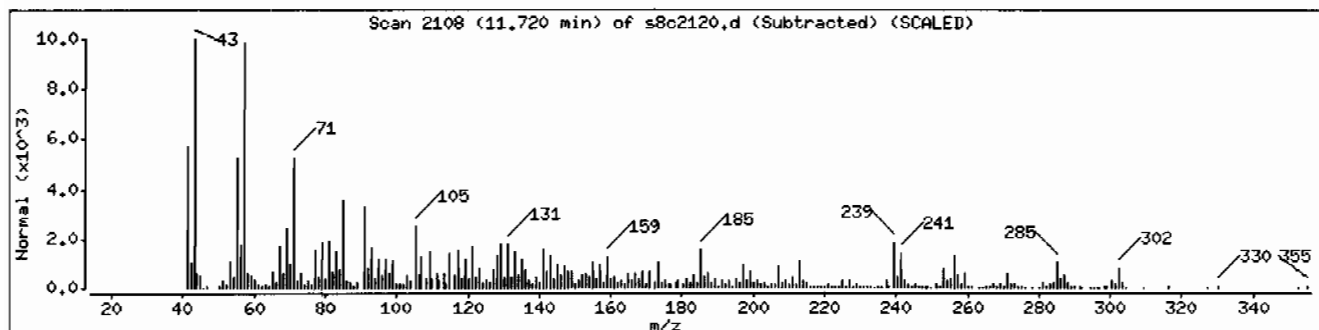
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	96	C ₂₀ H ₄₂	282
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117263	95	C ₁₈ H ₃₇ Cl	288
Heptadecane	629-78-7	NIST05.L	85524	91	C ₁₇ H ₃₆	240



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Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH11LANL

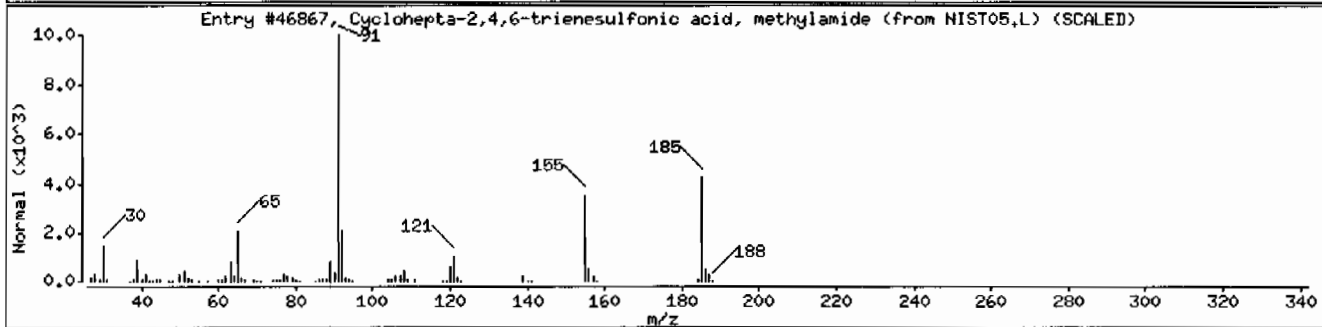
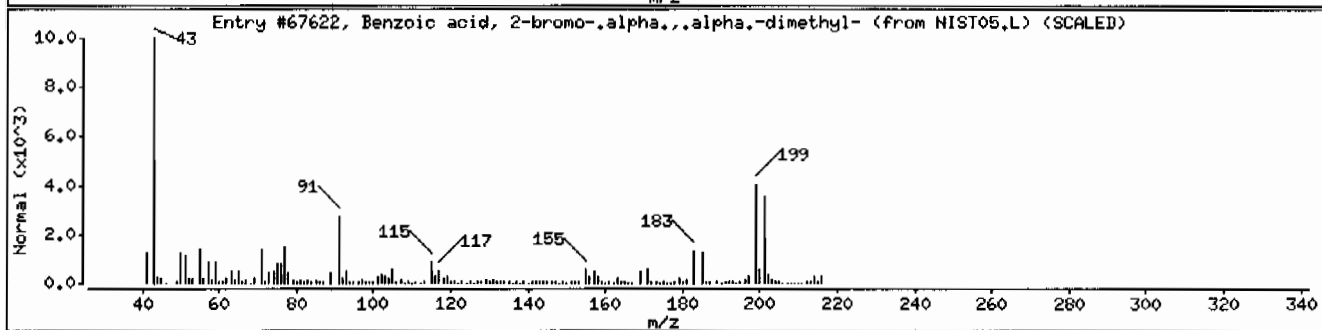
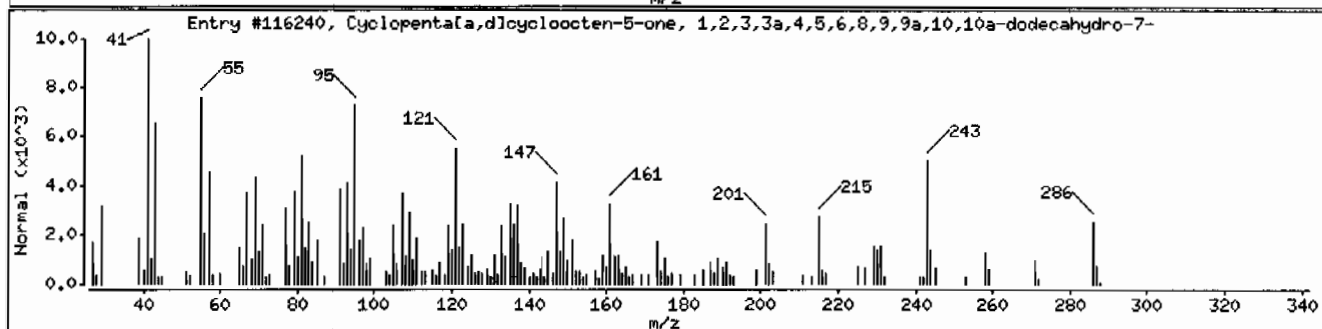
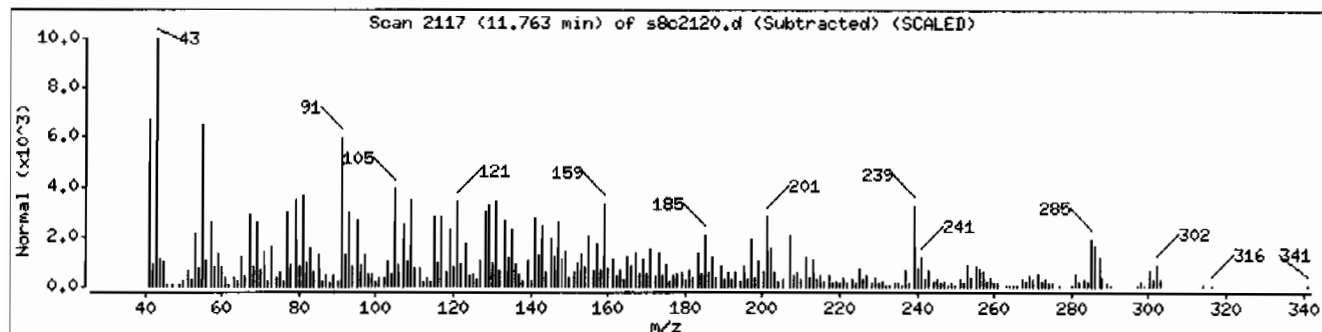
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopent[a,d]cycloocten-5-one, 1,2,3,3	1000197-98-9	NIST05.L	116240	11	C20H30O	286
Benzoic acid, 2-bromo-,alpha,.,alpha,-di	7073-69-0	NIST05.L	67622	11	C9H11BrO	214
Cyclohepta-2,4,6-trienesulfonic acid, me	1000187-28-7	NIST05.L	46867	11	C8H11NO2S	185



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Client ID: RE36-10-7500

Instrument: MSD8.1

Sample Info: 12483730101961922111SVH111LANL

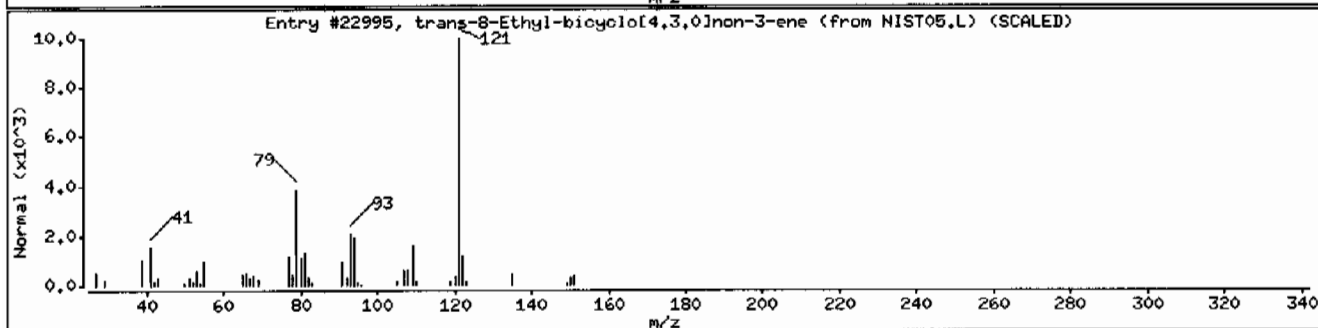
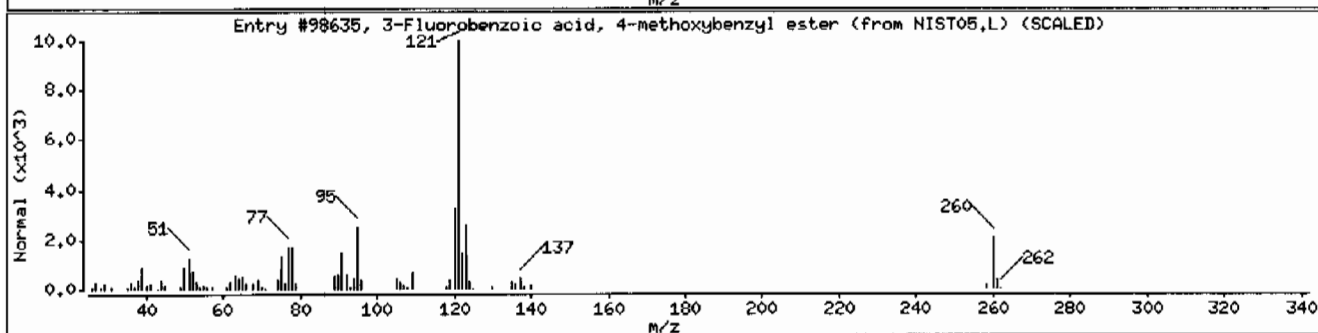
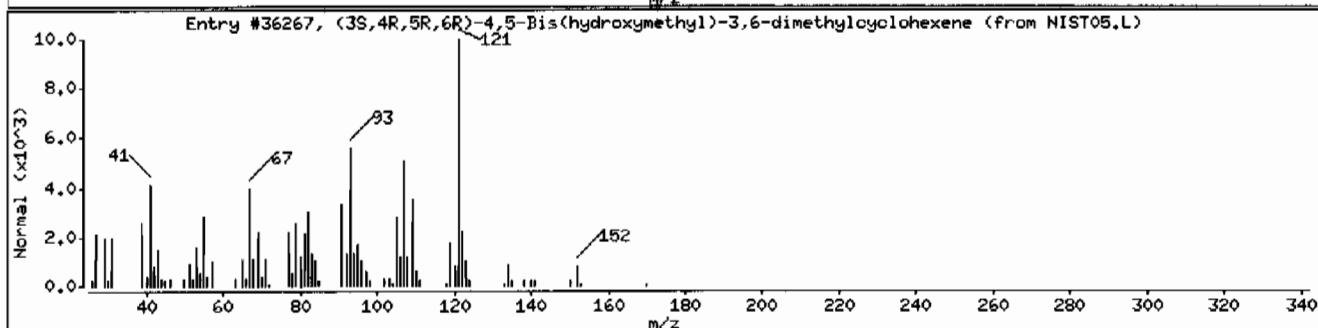
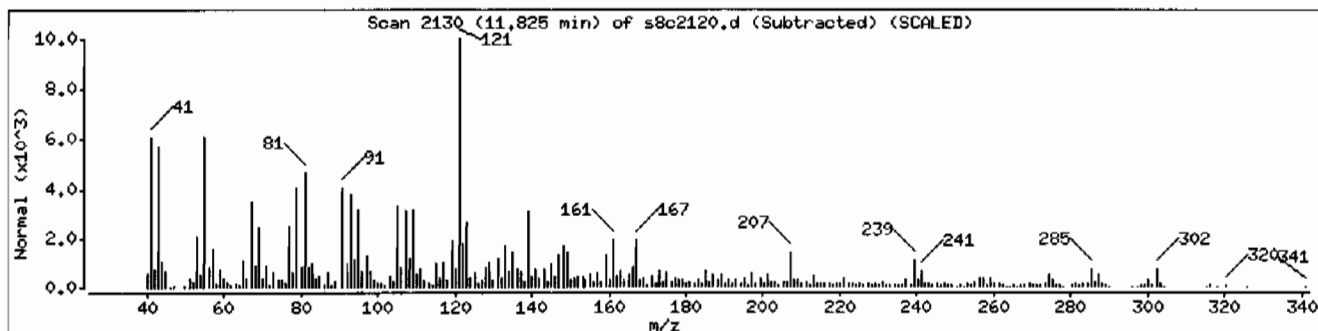
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(3S,4R,5R,6R)-4,5-Bis(hydroxymethyl)-3,6	1000099-24-3	NIST05.L	36267	89	C10H18O2	170
3-Fluorobenzoic acid, 4-methoxybenzyl es	1000279-93-0	NIST05.L	98635	45	C15H13FO3	260
trans-8-Ethyl-bicyclo[4.3.0]non-3-ene	1000145-84-8	NIST05.L	22995	43	C11H18	150



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Client ID: RE36-10-7500

Instrument: MSD8,i

Sample Info: 12483730101961922111SVH111LANL

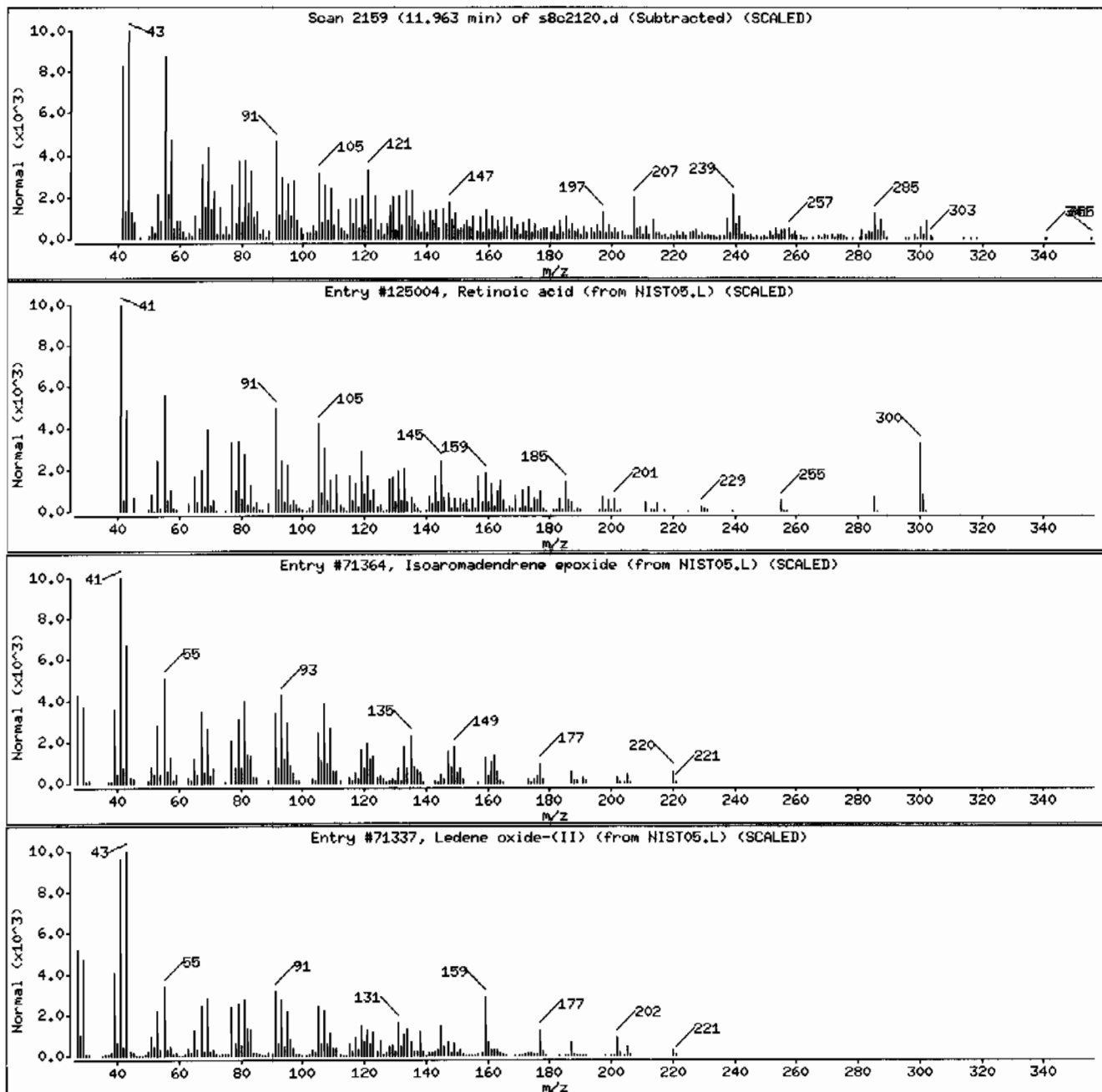
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinoic acid	302-79-4	NIST05.L	125004	40	C20H28O2	300
Isoaromadendrene epoxide	1000159-36-6	NIST05.L	71364	15	C15H24O	220
Ledene oxide-(II)	1000159-36-7	NIST05.L	71337	14	C15H24O	220



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Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVMI1ILANL

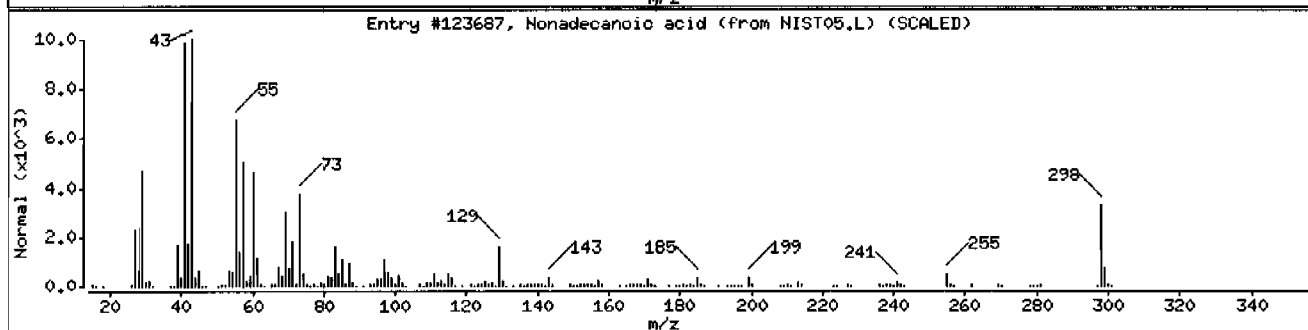
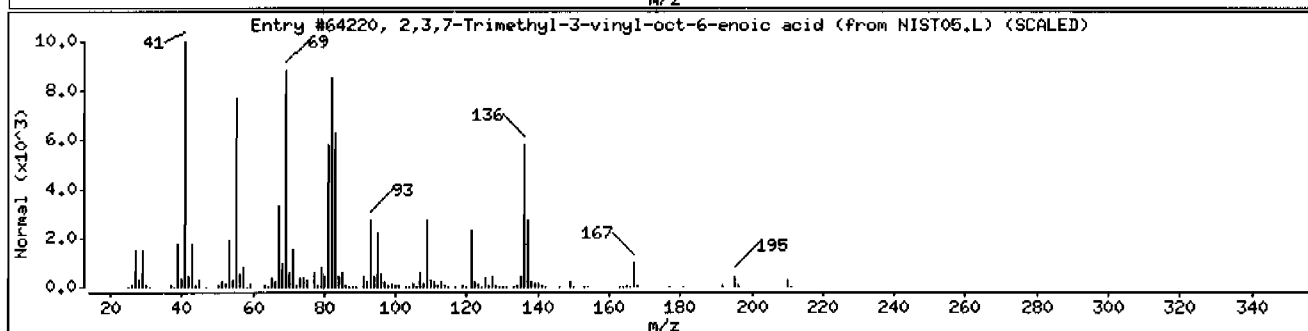
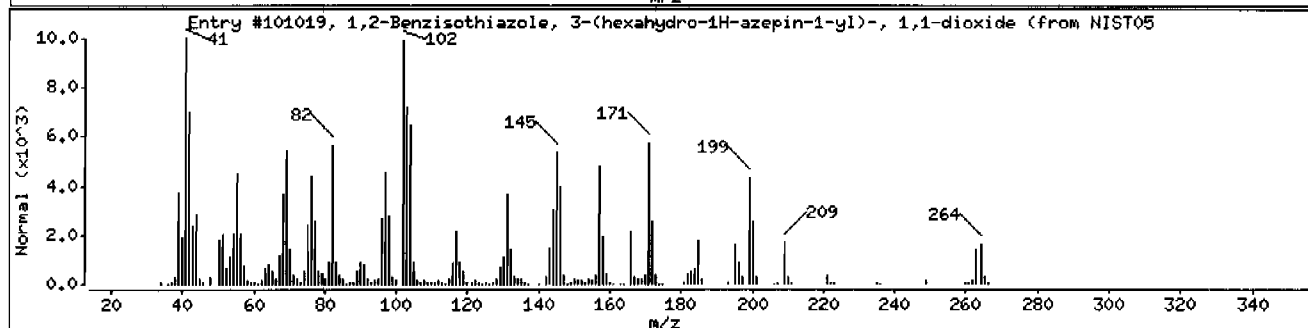
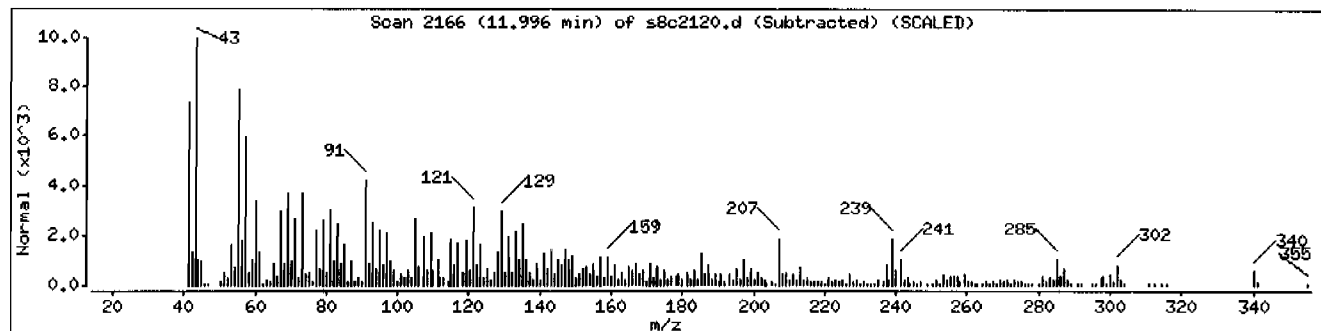
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-, 1,1-dioxide	309735-29-3	NIST05.L	101019	90	C13H16N2O2S	264
2,3,7-Trimethyl-3-vinyl-oct-6-enoic acid	1000194-95-8	NIST05.L	64220	41	C13H22O2	210
Nonadecanoic acid	646-30-0	NIST05.L	123687	35	C19H38O2	298



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Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH111LANL

Volume Injected (uL): 0.5

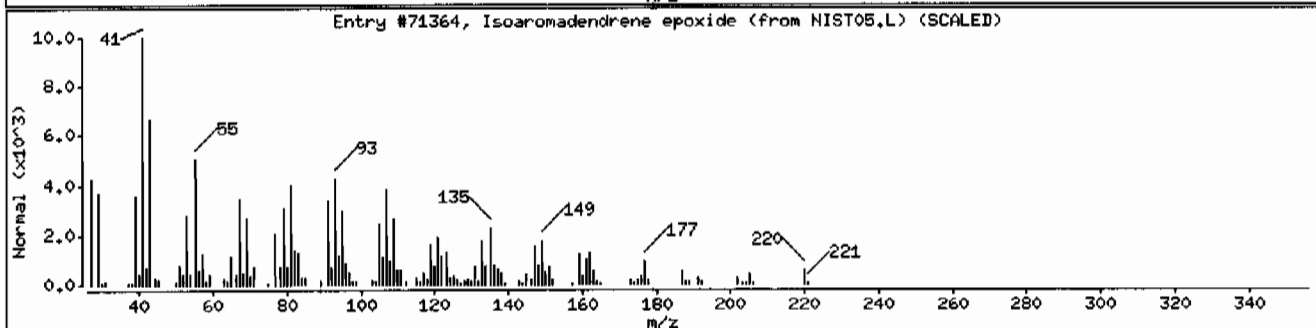
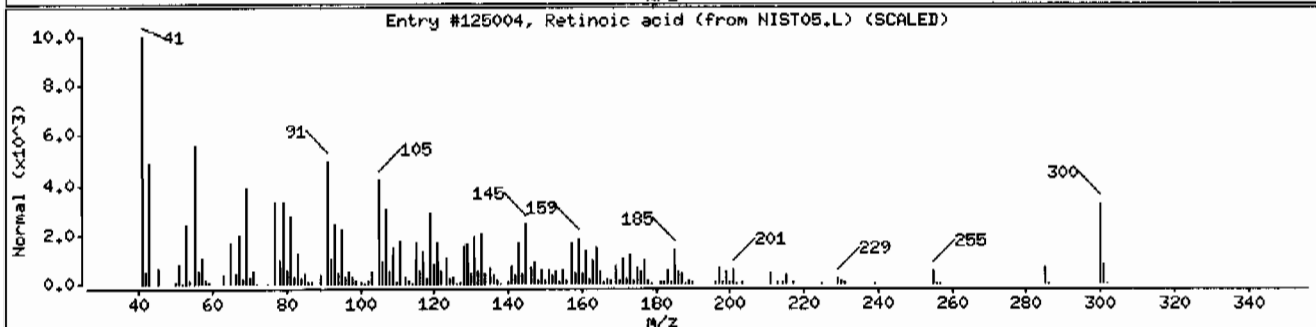
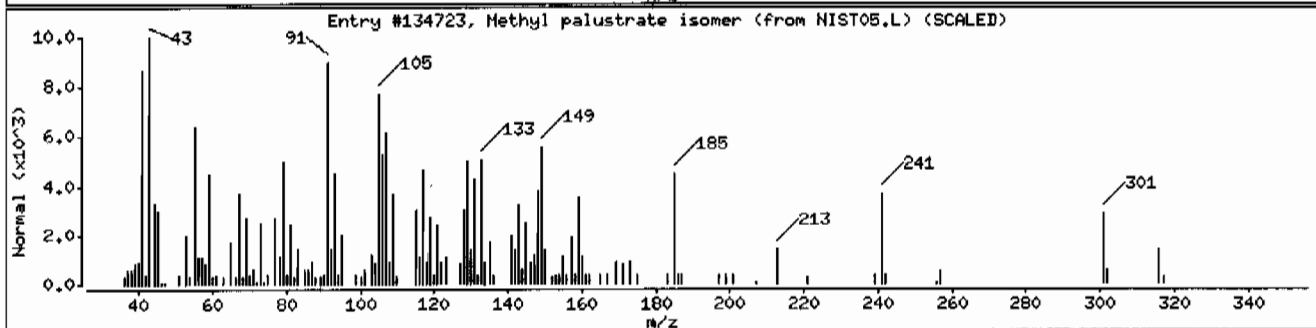
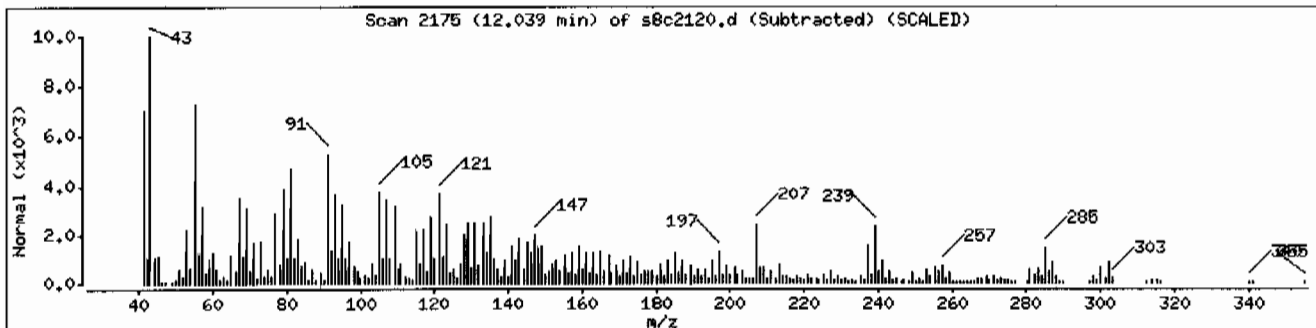
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyl palustrate isomer	3310-94-9	NIST05.L	134723	38	C21H32O2	316
Retinoic acid	302-79-4	NIST05.L	125004	25	C20H28O2	300
Isoaromadendrene epoxide	1000159-36-6	NIST05.L	71364	25	C15H24O	220



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211|SVH11|LANL

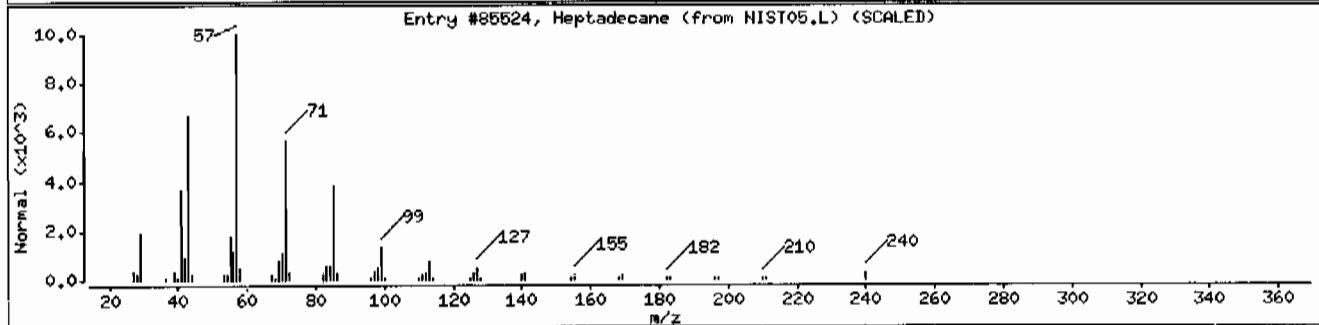
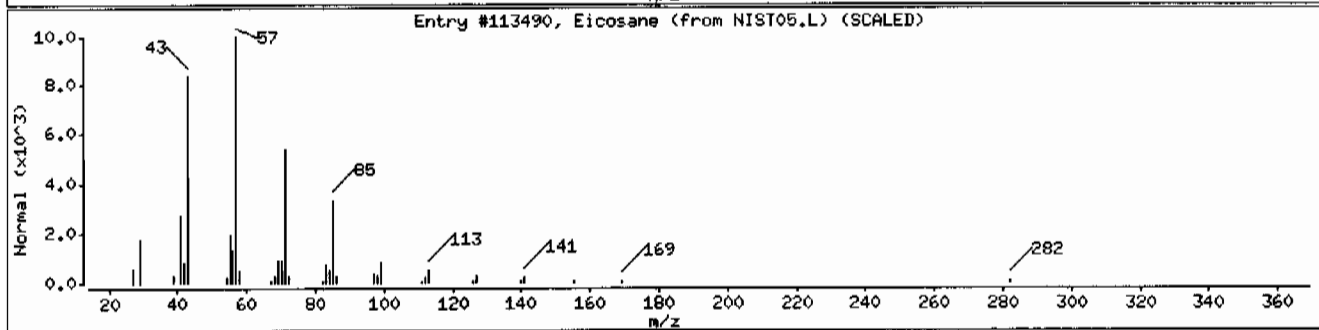
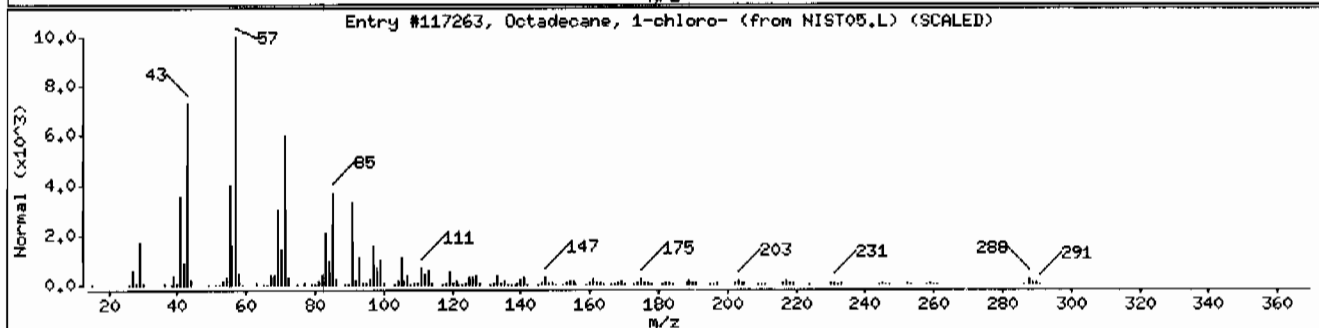
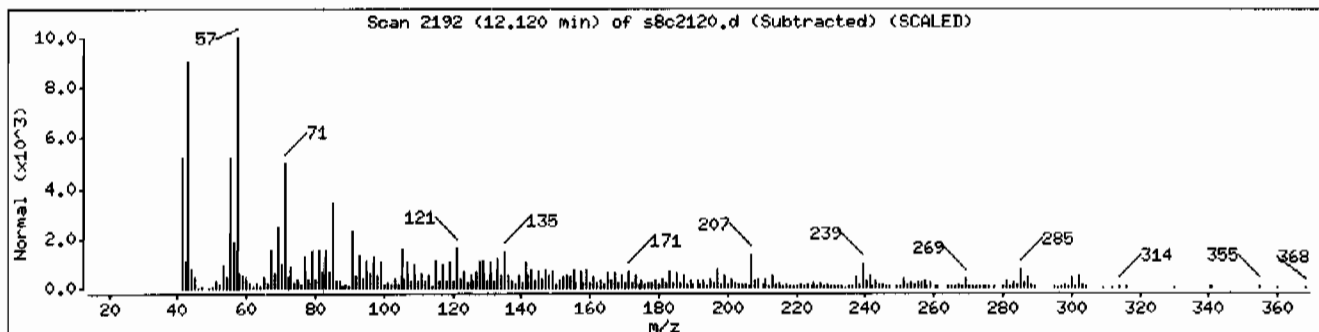
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117263	95	C18H37Cl	288
Eicosane	112-95-8	NIST05.L	113490	91	C20H42	282
Heptadecane	629-78-7	NIST05.L	85524	91	C17H36	240



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: HSD8,i

Sample Info: 1248373010196192211SVH111LANL

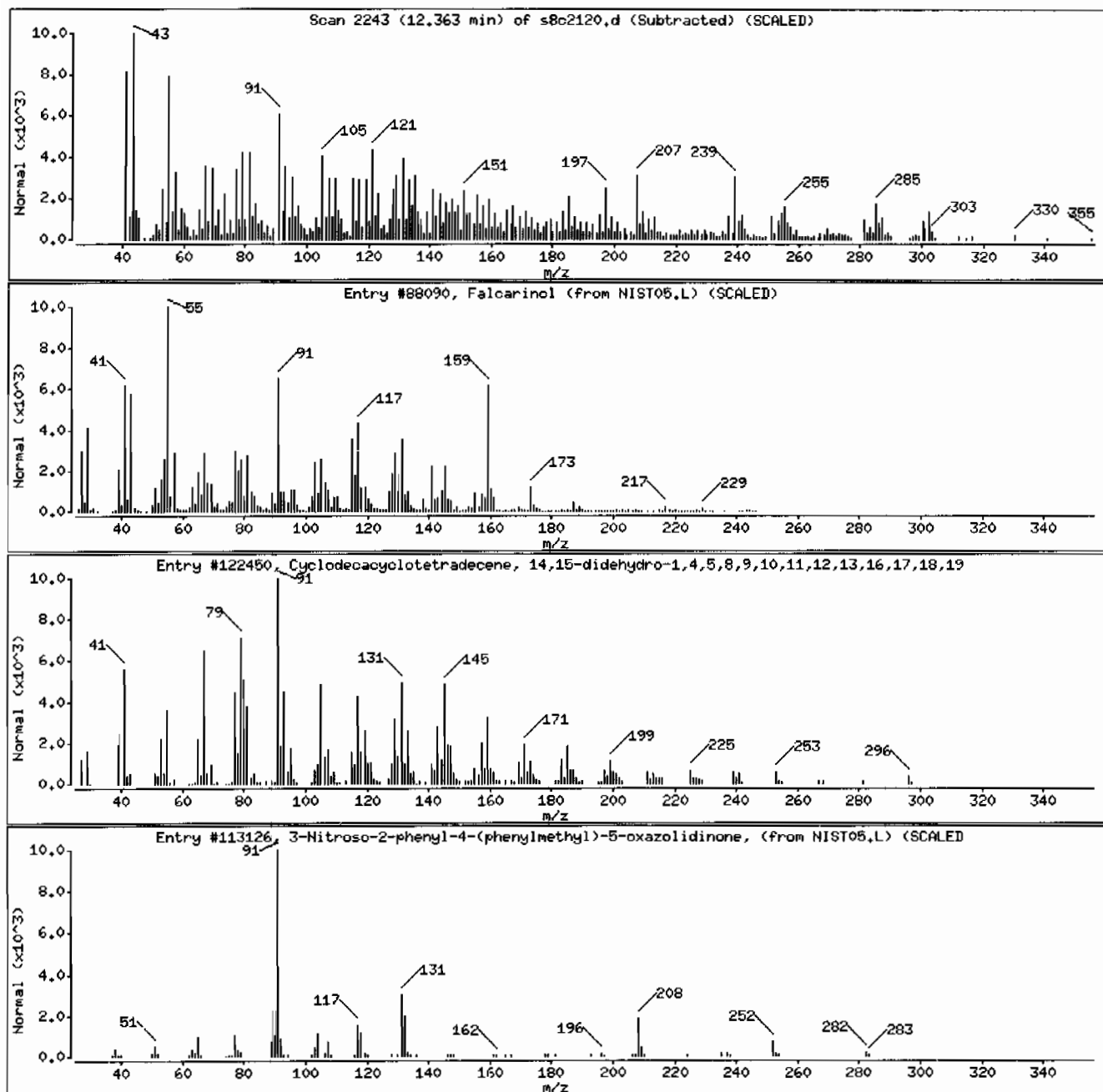
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Falcarinol	81203-57-8	NIST05.L	88090	15	C17H24O	244
Cyclodecacyclotetradecene, 14,15-didehyd	14113-61-2	NIST05.L	122450	11	C22H32	296
3-Nitroso-2-phenyl-4-(phenylmethyl)-5-ox	1000284-89-8	NIST05.L	113126	11	C16H14N2O3	282



Date: 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH11ILANL

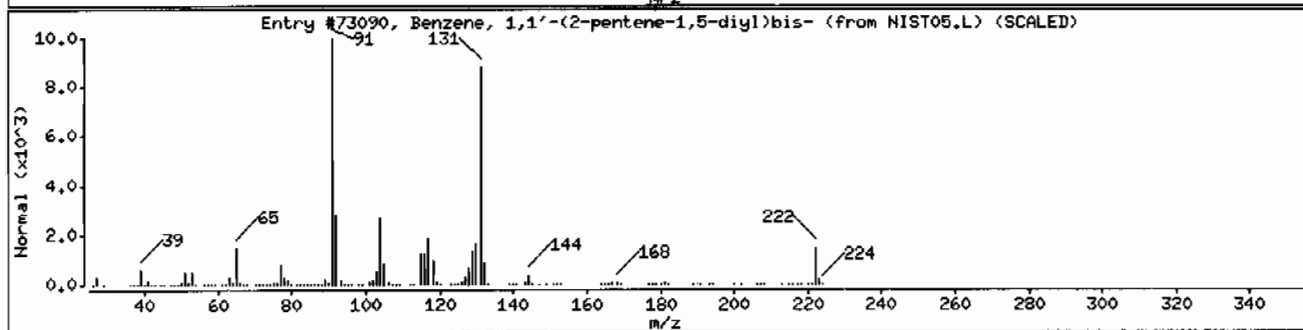
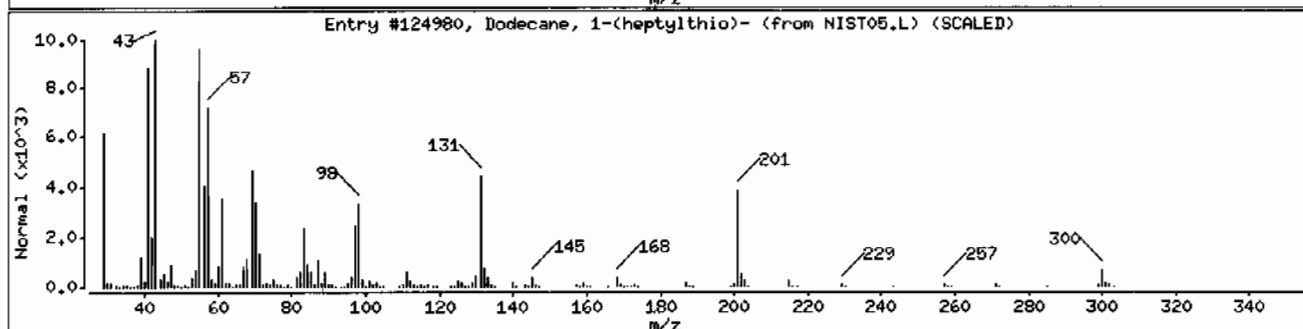
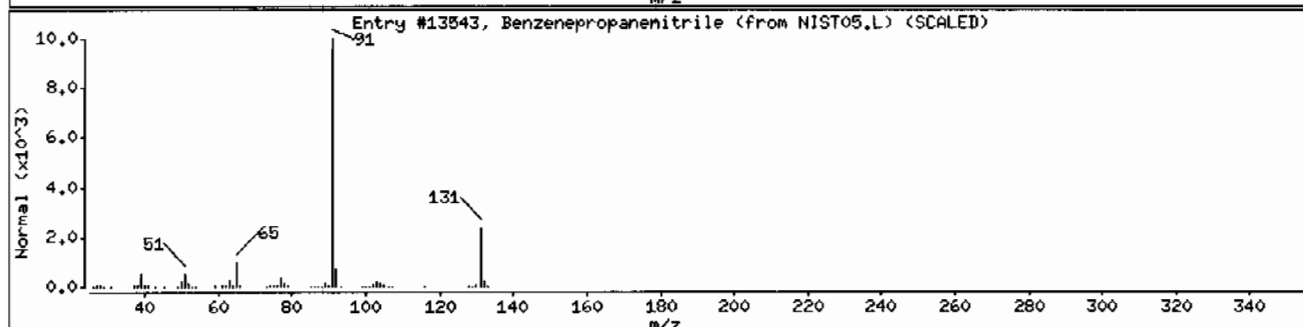
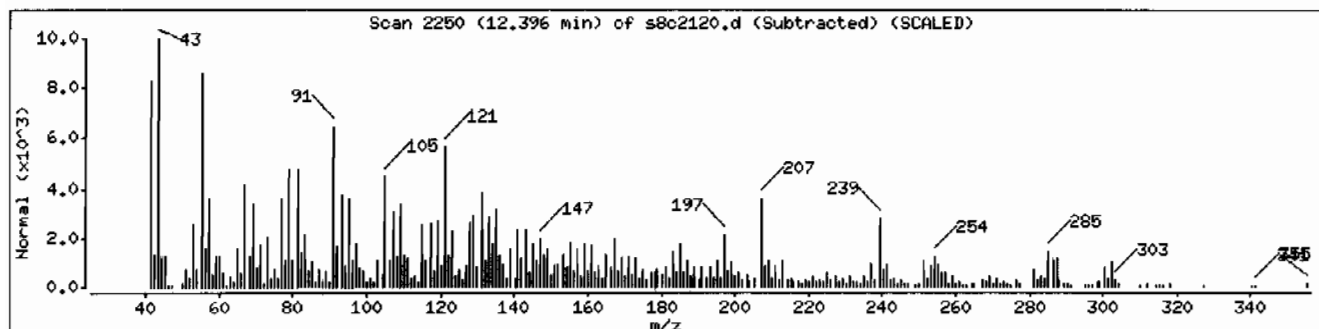
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenepropanenitrile	646-59-0	NIST05.L	13543	11	C9H9N	131
Dodecane, 1-(heptylthio)-	54934-53-1	NIST05.L	124980	11	C19H40S	300
Benzene, 1,1'-(2-pentene-1,5-diyl)bis-	40939-59-1	NIST05.L	73090	11	C17H18	222



Date: 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211SVH111LANL

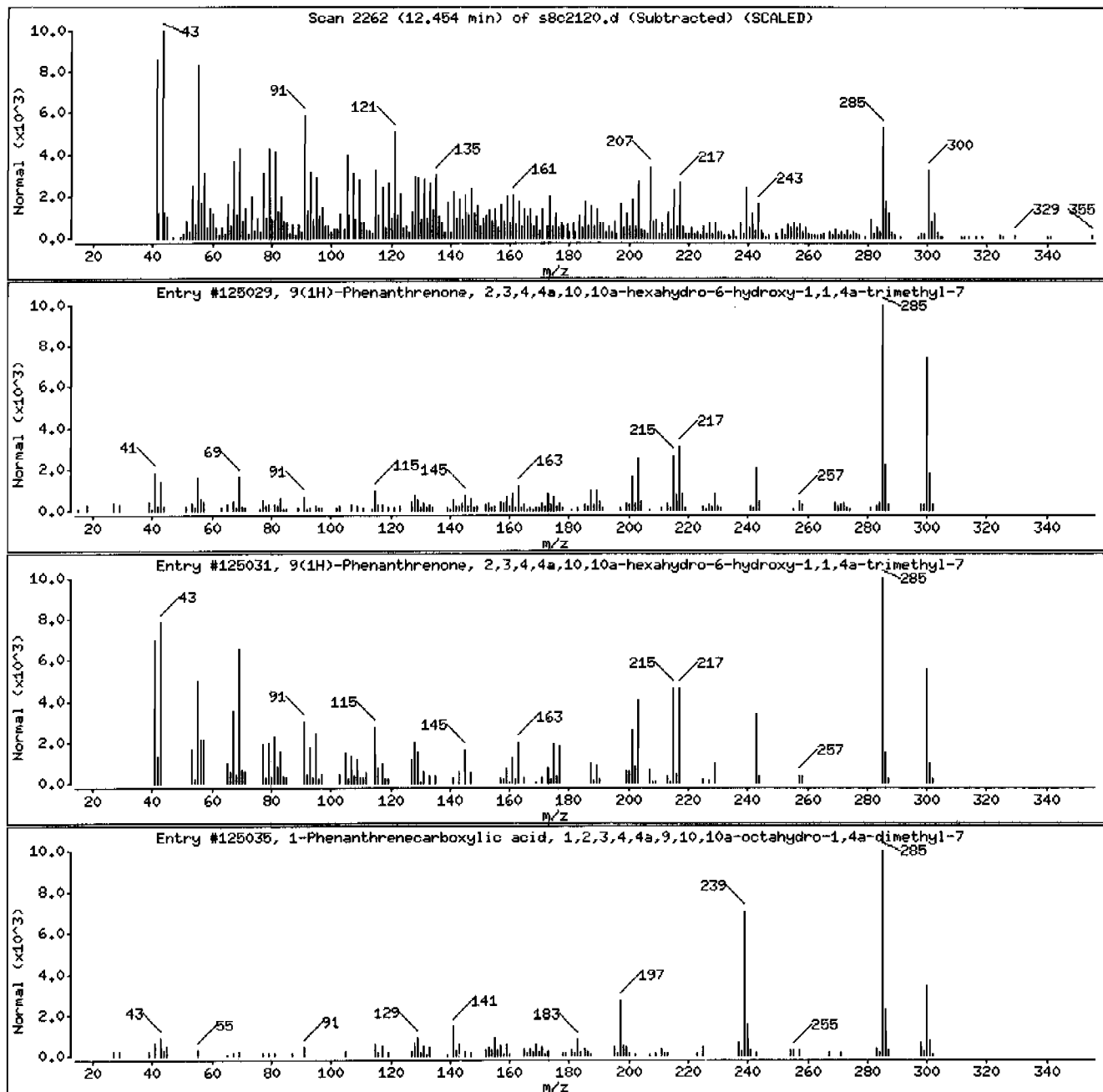
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	511-05-7	NIST05.L	125029	92	C20H28O2	300
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	511-05-7	NIST05.L	125031	83	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	52	C20H28O2	300



Date: 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: HSD8.i

Sample Info: 12483730101961922111SVH111LANL

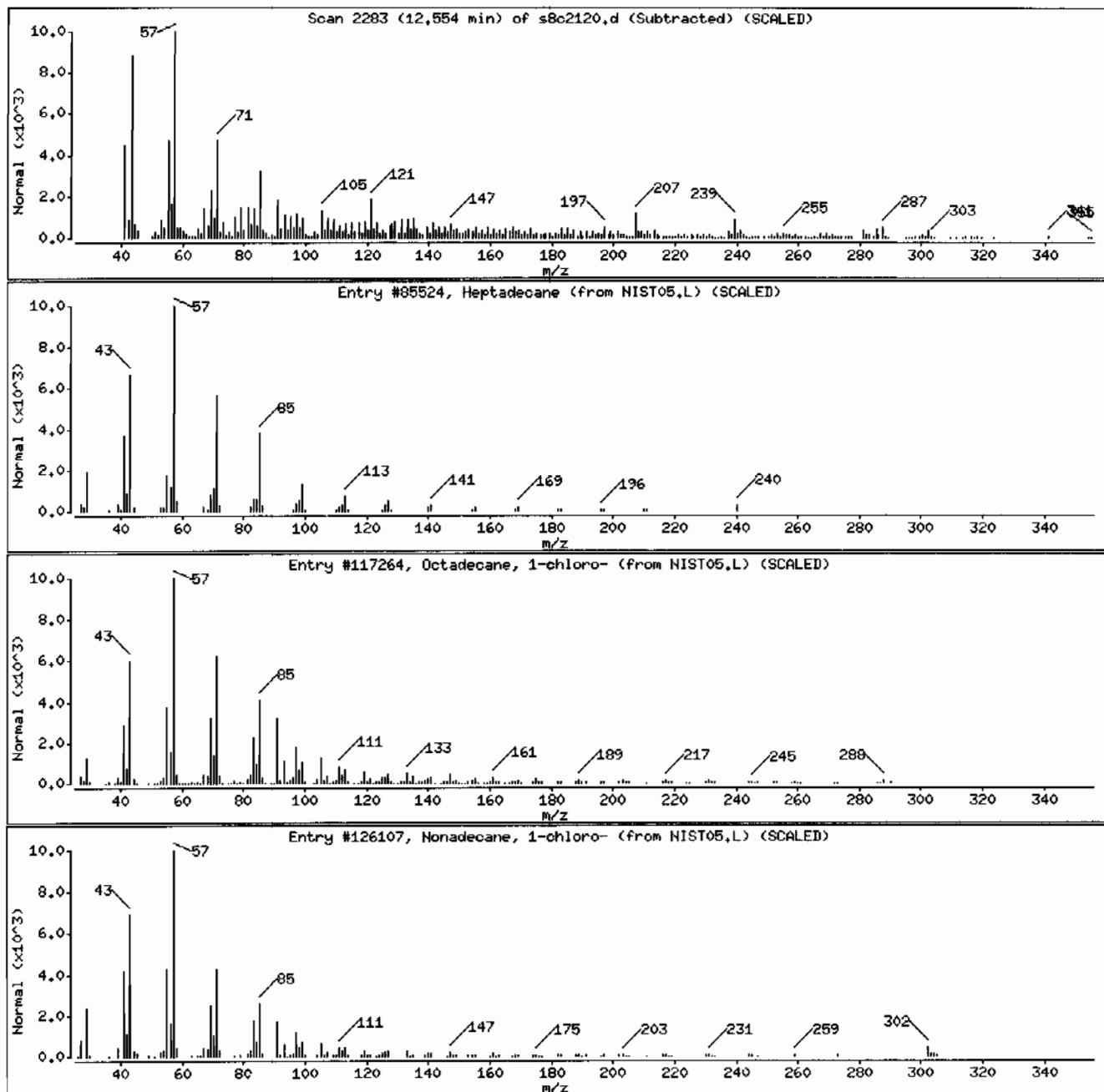
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane	629-78-7	NIST05.L	85524	94	C17H36	240
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	90	C18H37Cl	288
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	87	C19H39Cl	302



Date: 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 12483730101961922111SVH111LANL

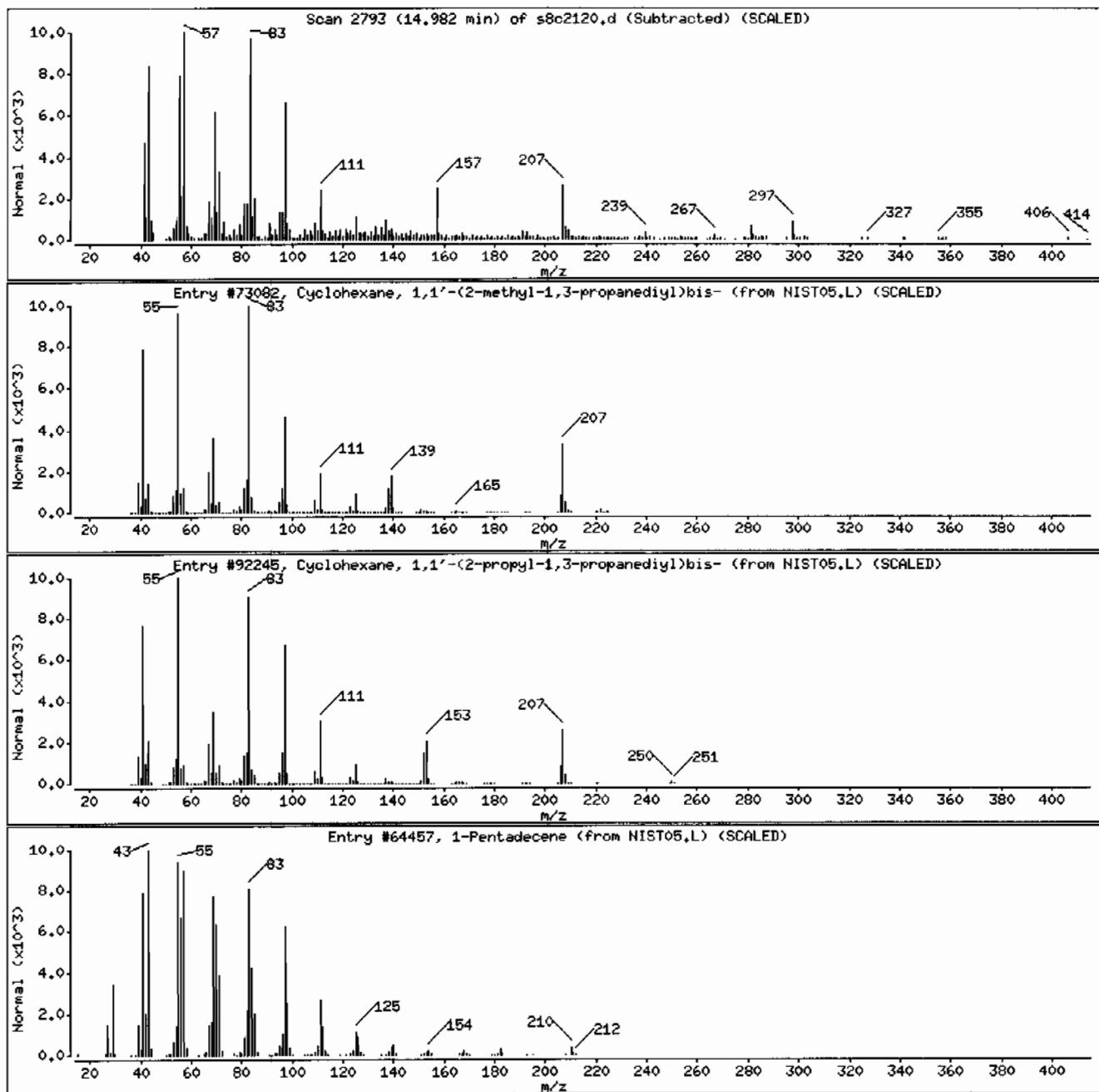
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1,1'-(2-methyl-1,3-propanediyl)bis-	2883-08-1	NIST05.L	73082	78	C16H30	222
Cyclohexane, 1,1'-(2-propyl-1,3-propanediyl)bis-	55030-21-2	NIST05.L	92245	68	C18H34	250
1-Pentadecene	13360-61-7	NIST05.L	64457	58	C15H30	210



Date: 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 1248373010196192211|SVH11|LANL

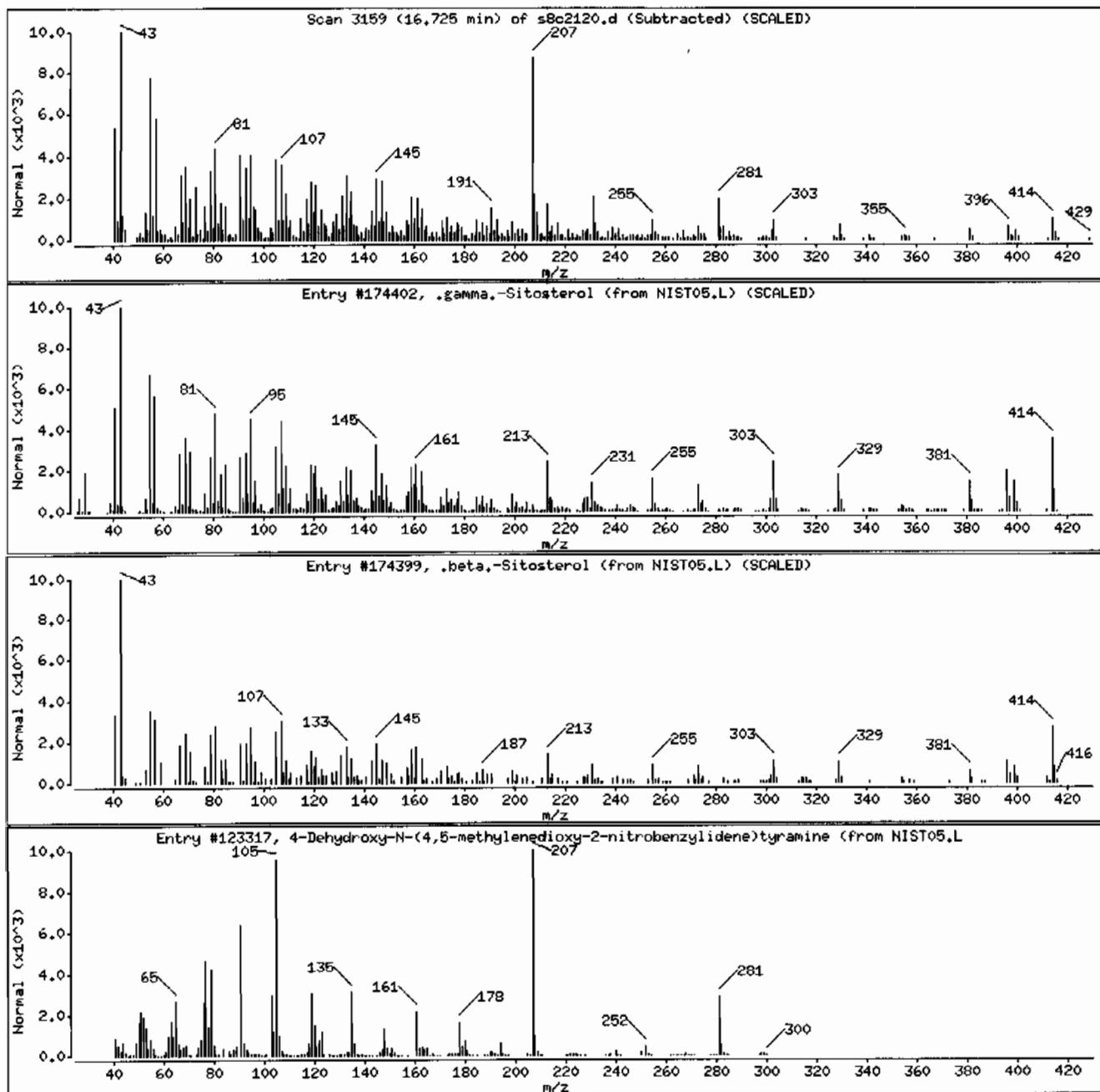
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
,gamma,-Sitosterol	83-47-6	NIST05.L	174402	93	C29H50O	414
,beta,-Sitosterol	83-46-5	NIST05.L	174399	93	C29H50O	414
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	64	C16H14N2O4	298



Date : 21-MAR-2010 17:25

Client ID: RE36-10-7500

Instrument: MSD8.i

Sample Info: 12483730101961922111SVH111LANL

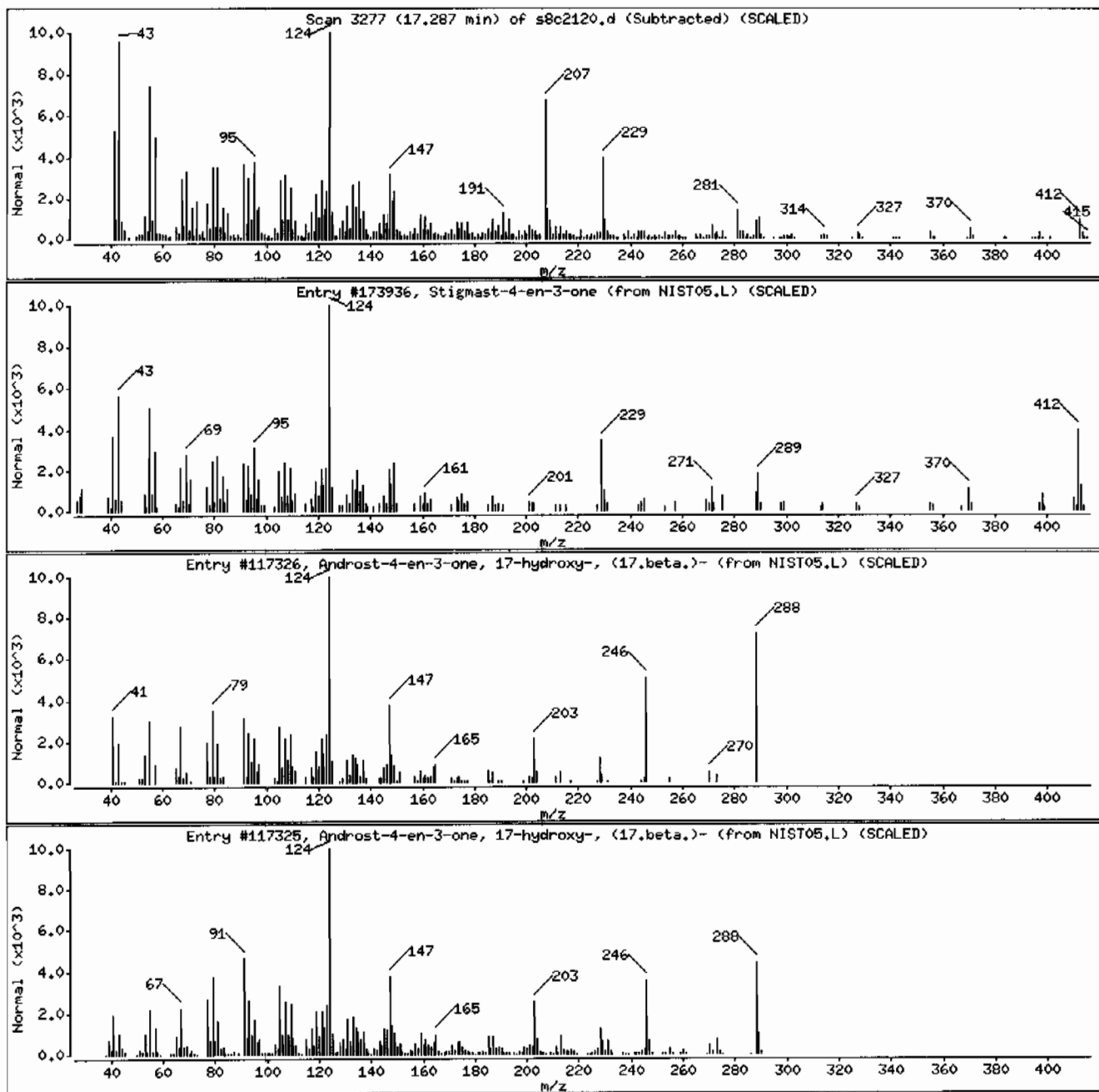
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	94	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17.β)	58-22-0	NIST05.L	117326	70	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17.β)	58-22-0	NIST05.L	117325	55	C19H28O2	288



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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
Client ID: RE36-10-7521	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 18:55	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2123.d	Aliquot: 30.1 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	431	ug/kg	86.2	431
108-95-2	Phenol	U	431	ug/kg	86.2	431
95-57-8	2-Chlorophenol	U	431	ug/kg	86.2	431
106-46-7	1,4-Dichlorobenzene	U	431	ug/kg	86.2	431
621-64-7	N-Nitrosodipropylamine	U	431	ug/kg	86.2	431
59-50-7	4-Chloro-3-methylphenol	U	431	ug/kg	86.2	431
83-32-9	Acenaphthene	U	43.1	ug/kg	14.2	43.1
121-14-2	2,4-Dinitrotoluene	U	431	ug/kg	43.1	431
100-02-7	4-Nitrophenol	U	431	ug/kg	142	431
87-86-5	Pentachlorophenol	U	431	ug/kg	108	431
129-00-0	Pyrene	J	14.6	ug/kg	12.9	43.1
110-86-1	Pyridine	U	431	ug/kg	86.2	431
62-53-3	Aniline	U	431	ug/kg	129	431
111-44-4	bis(2-Chloroethyl) ether	U	431	ug/kg	86.2	431
541-73-1	1,3-Dichlorobenzene	U	431	ug/kg	86.2	431
100-51-6	Benzyl alcohol	U	431	ug/kg	129	431
95-50-1	1,2-Dichlorobenzene	U	431	ug/kg	86.2	431
108-60-1	bis(2-Chloroisopropyl) ether	U	431	ug/kg	86.2	431
95-48-7	o-Cresol	U	431	ug/kg	86.2	431
65794-96-9	m,p-Cresols	U	431	ug/kg	129	431
67-72-1	Hexachloroethane	U	431	ug/kg	86.2	431
98-95-3	Nitrobenzene	U	431	ug/kg	86.2	431
78-59-1	Isophorone	U	431	ug/kg	86.2	431
88-75-5	2-Nitrophenol	U	431	ug/kg	86.2	431
105-67-9	2,4-Dimethylphenol	U	431	ug/kg	151	431
111-91-1	bis(2-Chloroethoxy)methane	U	431	ug/kg	86.2	431
120-83-2	2,4-Dichlorophenol	U	431	ug/kg	86.2	431
65-85-0	Benzoic acid	U	862	ug/kg	215	862
91-20-3	Naphthalene	U	43.1	ug/kg	12.9	43.1
106-47-8	4-Chloroaniline	U	431	ug/kg	86.2	431
87-68-3	Hexachlorobutadiene	U	431	ug/kg	86.2	431
91-57-6	2-Methylnaphthalene	U	43.1	ug/kg	8.62	43.1
77-47-4	Hexachlorocyclopentadiene	U	431	ug/kg	86.2	431
88-06-2	2,4,6-Trichlorophenol	U	431	ug/kg	86.2	431
95-95-4	2,4,5-Trichlorophenol	U	431	ug/kg	86.2	431
91-58-7	2-Chloronaphthalene	U	43.1	ug/kg	14.2	43.1
88-74-4	2-Nitroaniline	U	431	ug/kg	86.2	431
99-09-2	3-Nitroaniline	U	431	ug/kg	86.2	431

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
Client ID: RE36-10-7521	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 18:55	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2123.d	Aliquot: 30.1 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<i>m-Nitroaniline</i>						
131-11-3	Dimethylphthalate	U	431	ug/kg	86.2	431
606-20-2	2,6-Dinitrotoluene	U	431	ug/kg	43.1	431
208-96-8	Acenaphthylene	U	43.1	ug/kg	12.9	43.1
51-28-5	2,4-Dinitrophenol	U	862	ug/kg	164	862
132-64-9	Dibenzofuran	U	431	ug/kg	86.2	431
84-66-2	Diethylphthalate	U	431	ug/kg	86.2	431
86-73-7	Fluorene	U	43.1	ug/kg	12.9	43.1
7005-72-3	4-Chlorophenylphenylether	U	431	ug/kg	86.2	431
534-52-1	2-Methyl-4,6-dinitrophenol	U	431	ug/kg	86.2	431
100-01-6	4-Nitroaniline	U	431	ug/kg	129	431
<i>p-Nitroaniline</i>						
122-39-4	Diphenylamine	U	431	ug/kg	86.2	431
122-66-7	Azobenzene	U	431	ug/kg	86.2	431
<i>1,2-Diphenylhydrazine</i>						
101-55-3	4-Bromophenylphenylether	U	431	ug/kg	86.2	431
118-74-1	Hexachlorobenzene	U	431	ug/kg	86.2	431
85-01-8	Phenanthrene	U	43.1	ug/kg	12.9	43.1
120-12-7	Anthracene	U	43.1	ug/kg	8.62	43.1
84-74-2	Di-n-butylphthalate	U	431	ug/kg	86.2	431
206-44-0	Fluoranthene	U	43.1	ug/kg	12.9	43.1
85-68-7	Butylbenzylphthalate	U	431	ug/kg	86.2	431
56-55-3	Benzo(a)anthracene	U	43.1	ug/kg	12.9	43.1
91-94-1	3,3'-Dichlorobenzidine	U	431	ug/kg	129	431
218-01-9	Chrysene	U	43.1	ug/kg	12.9	43.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	431	ug/kg	86.2	431
117-84-0	Di-n-octylphthalate	U	431	ug/kg	86.2	431
205-99-2	Benzo(b)fluoranthene	U	43.1	ug/kg	12.9	43.1
207-08-9	Benzo(k)fluoranthene	U	43.1	ug/kg	12.9	43.1
50-32-8	Benzo(a)pyrene	U	43.1	ug/kg	12.9	43.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.1	ug/kg	12.9	43.1
53-70-3	Dibenzo(a,h)anthracene	U	43.1	ug/kg	12.9	43.1
191-24-2	Benzo(ghi)perylene	U	43.1	ug/kg	12.9	43.1
120-82-1	1,2,4-Trichlorobenzene	U	431	ug/kg	86.2	431

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
2437-95-8	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	3.69	3620	ug/kg	97	NJ
	Unknown	9.97	1500	ug/kg		J

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373015	Date Received: 03/02/2010 08:50	%Moisture: 22.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7521	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.1	Dilution: 1
Run Date: 03/21/2010 18:55	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.1 g	Final Volume: 1 mL
Data File: s8c2123.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.16	2060	ug/kg		J
	Unknown	10.35	1500	ug/kg		J
	Unknown	10.93	746	ug/kg		J
	Unknown	11.11	689	ug/kg		J
	Unknown	11.17	560	ug/kg		J
	Unknown	11.33	750	ug/kg		J
	Unknown	11.36	463	ug/kg		J
	Unknown	11.39	471	ug/kg		J
	Unknown	11.41	553	ug/kg		J
19402-34-7	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.47	1270	ug/kg	90	NJ
	Unknown	11.59	2920	ug/kg		J
	Unknown	11.63	737	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.69	1860	ug/kg	95	NJ
	Unknown	11.73	3740	ug/kg		J
	Unknown	11.82	513	ug/kg		J
	Unknown	11.85	831	ug/kg		J
	Unknown	11.98	503	ug/kg		J
112-85-6	Docosanoic acid	12.02	975	ug/kg	94	NJ
	Unknown	12.09	737	ug/kg		J
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.14	1530	ug/kg	89	NJ
	Unknown	12.33	679	ug/kg		J
	Unknown	12.39	561	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	12.56	763	ug/kg	96	NJ
	Unknown	12.65	463	ug/kg		J
1599-67-3	1-Docosene	12.77	1150	ug/kg	95	NJ
	Unknown	12.9	2140	ug/kg		J
	Unknown	14.93	4380	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	17.3	1880	ug/kg	86	NJ

Data File: /chem/MSD8.i/s032110.b/s8c2123.d
Report Date: 22-Mar-2010 09:59

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GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2123.d
Lab Smp Id: 248373015 Client Smp ID: RE36-10-7521
Inj Date : 21-MAR-2010 18:55
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248373015|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.10000	weight of sample
M	22.91360	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.306	4.301	(1.000)	424337	40.0000		
* 29 Naphthalene-d8	136	5.558	5.558	(1.000)	1673429	40.0000		
* 46 Acenaphthene-d10	164	7.406	7.406	(1.000)	995443	40.0000		
* 67 Phenanthrene-d10	188	9.001	8.997	(1.000)	1765835	40.0000		
* 91 Chrysene-d12	240	11.882	11.868	(1.000)	1305176	40.0000		
* 98 Perylene-d12	264	13.892	13.878	(1.000)	514952	40.0000		
\$ 3 2-Fluorophenol	112	3.173	3.158	(0.737)	722911	72.1611	3110	
\$ 5 Phenol-d5	99	3.944	3.930	(0.916)	902520	72.2386	3110	
\$ 20 Nitrobenzene-d5	82	4.830	4.830	(0.869)	405355	34.0754	1470	
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.902)	899355	30.6939	1320	
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.114)	219268	66.6352	2870	
\$ 81 p-Terphenyl-d14	244	10.716	10.706	(0.902)	990826	42.1665	1820	

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
=====	=====	----	=====	=====	=====	=====	=====	
79 Pyrene	202	10.544	10.544	(0.887)	13831	0.33941	14.6(a)	

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s8c2123.d

Report Date: 03/22/2010 07:21

Lab. ID: 248373015

SampleType: SAMPLE

Injection Date: 21-MAR-2010 18:55

Operator: nag1

Instrument: MSD8.i

Sample Info: |248373015|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	23188	4.04	4.00	80-120	100	()
93	955088	4.04	4.00	213-273	4119	(Q)

6 Phenol		CAS#: 108-95-2				
94	50715	3.98	3.94	80-120	100	()
66	10316	3.98	3.94	13- 73	20	()
65	36863	3.98	3.94	3- 63	73	(Q)

7 bis(2-Chloroethyl) ether		CAS#: 111-44-4				
63	22039	4.04	4.04	80-120	100	()
93	954333	4.04	4.04	91-151	4330	(Q)
95	20155	4.04	4.04	9- 69	91	(Q)

12 Benzyl alcohol		CAS#: 100-51-6				
108	52032	4.41	4.42	80-120	100	()
79	324971	4.41	4.42	109-169	625	(Q)
77	191487	4.41	4.42	57-117	368	(Q)

15 o-Cresol		CAS#: 95-48-7				
107	179472	4.41	4.51	80-120	100	(T)
108	52032	4.41	4.51	87-147	29	(QT)
77	192259	4.41	4.51	17- 77	107	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	54829	4.83	4.68	80-120	100	(T)
42	34269	4.83	4.68	31- 91	63	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
25 bis(2-Chloroethoxy)methane				CAS#: 111-91-1		
93	28233	5.30	5.29	80-120	100	()
123	3758	5.31	5.29	0- 43	13	()
95	31670	5.30	5.29	2- 62	112	(Q)

27 Benzoic acid				CAS#: 65-85-0		
105	18592	5.31	5.28	80-120	100	()
122	5424	5.31	5.28	64-124	29	(Q)
77	39794	5.31	5.28	47-107	214	(Q)

30 Naphthalene				CAS#: 91-20-3		
128	1992	5.58	5.58	80-120	100	()
129	402	5.58	5.58	0- 41	20	()
127	384	5.57	5.58	0- 43	19	()

34 2-Methylnaphthalene				CAS#: 91-57-6		
142	876	6.29	6.30	80-120	100	()
141	1043	6.30	6.30	56-116	119	(Q)

40 2-Chloronaphthalene				CAS#: 91-58-7		
162	3955	6.81	6.81	80-120	100	()
164	605	6.78	6.81	3- 63	15	()
127	513	6.74	6.81	7- 67	13	(T)

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	128186	7.41	7.18	80-120	100	(T)
63	2607	7.40	7.18	32- 92	2	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	128186	7.41	7.61	80-120	100	(T)
89	1857	7.41	7.61	47-107	1	(QT)
63	2607	7.40	7.61	26- 86	2	(QT)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	830	8.25	8.04	80-120	100	(T)
105	3601	8.25	8.04	14- 74	434	(QT)
51	2075	8.25	8.04	26- 86	250	(QT)

68 Phenanthrene				CAS#: 85-01-8		
178	8985	9.02	9.02	80-120	100	()
179	1577	9.02	9.02	0- 45	18	()
176	2896	9.02	9.02	0- 49	32	()

69 Anthracene				CAS#: 120-12-7		
178	8985	9.02	9.08	80-120	100	()
179	1577	9.02	9.08	0- 45	18	()
176	2896	9.02	9.08	0- 48	32	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
76 Fluoranthene			CAS#: 206-44-0			
202	13870	10.54	10.30	80-120	100	(T)
203	2659	10.54	10.30	0- 47	19	(T)
101	2689	10.54	10.30	0- 43	19	(T)

79 Pyrene			CAS#: 129-00-0			
202	13831	10.54	10.54	80-120	100	()
200	3874	10.55	10.54	0- 50	28	()
101	2689	10.54	10.54	0- 46	19	()

85 Butylbenzylphthalate			CAS#: 85-68-7			
149	40925	11.24	11.23	80-120	100	()
91	526681	11.26	11.23	40-100	1287	(Q)
206	6952	11.24	11.23	0- 48	17	()

89 Benzo(a)anthracene			CAS#: 56-55-3			
228	12173	11.88	11.85	80-120	100	()
226	774	11.86	11.85	0- 56	6	()
229	14278	11.91	11.85	0- 51	117	(Q)

92 Chrysene			CAS#: 218-01-9			
228	10056	11.91	11.90	80-120	100	()
229	15278	11.91	11.90	0- 49	152	(Q)
226	6546	11.91	11.90	0- 59	65	(Q)

93 bis(2-Ethylhexyl)phthalate			CAS#: 117-81-7			
149	97017	11.93	11.88	80-120	100	()
167	52124	11.92	11.88	0- 57	54	()

94 Di-n-octylphthalate			CAS#: 117-84-0			
149	22499	12.73	12.73	80-120	100	()
43	86245	12.70	12.73	0- 41	383	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2123.d
Lab Smp Id: 248373015 Client Smp ID: RE36-10-7521
Inj Date : 21-MAR-2010 18:55
Operator : nagl Inst ID: MSD8.i
Smp Info : |248373015|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.10000	weight of sample
M	22.91360	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.306	2704608	40.000
* 67 Phenanthrene-d10	9.001	4568672	40.000
* 91 Chrysene-d12	11.882	9298073	40.000
* 98 Perylene-d12	13.892	2261017	40.000

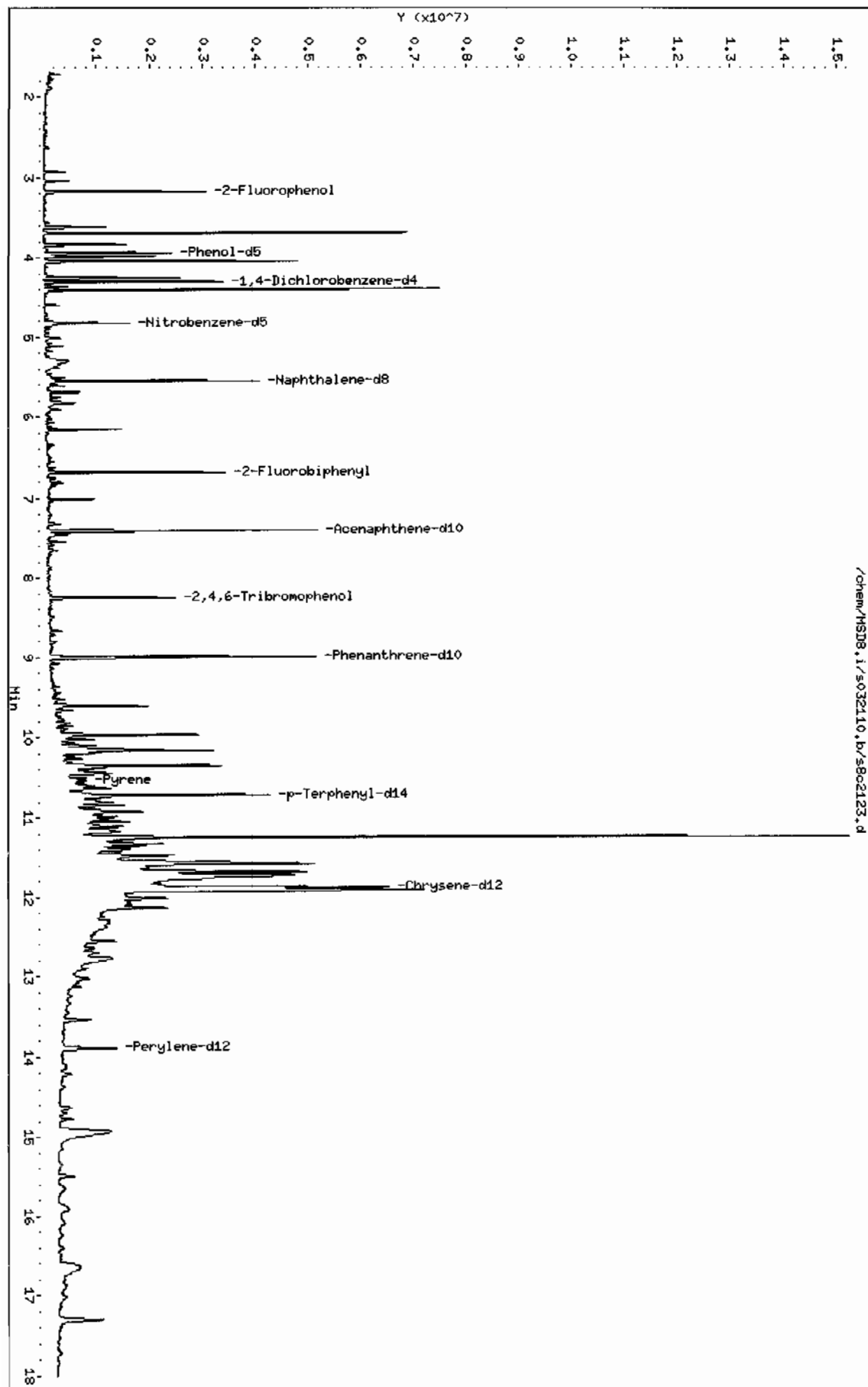
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy					CAS #: 2437-95-8		
3.692	5686677	84.1035235	3620	97	NIST05.L	15376	10
Unknown					CAS #:		
9.968	3976713	34.8172264	1500	0		0	67
Unknown					CAS #:		
10.163	5457363	47.7807267	2060	0		0	67
Unknown					CAS #:		
10.349	3972548	34.7807579	1500	0		0	67
Unknown					CAS #:		
10.925	4025991	17.3196802	746	0		0	91
Unknown					CAS #:		
11.111	3717272	15.9915774	689	0		0	91
Unknown					CAS #:		
11.173	3022676	13.0034502	560	0		0	91
Unknown					CAS #:		
11.330	4043365	17.3944214	750	0		0	91
Unknown					CAS #:		
11.358	2498052	10.7465366	463	0		0	91
Unknown					CAS #:		
11.392	2538859	10.9220866	471	0		0	91
Unknown					CAS #:		
11.406	2980637	12.8225995	553	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 19402-34-7		
11.473	6871440	29.5607045	1270	90	NIST05.L	134779	91
Unknown					CAS #:		
11.587	15774906	67.8631160	2920	0		0	91
Unknown					CAS #:		
11.635	3976173	17.1053623	737	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
11.687	10038115	43.1836357	1860	95	NIST05.L	125036	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
11.725	20165728	86.7522836	3740	0		0	91
Unknown				CAS #:			
11.816	2764535	11.8929382	512	0		0	91
Unknown				CAS #:			
11.849	4483360	19.2872643	831	0		0	91
Unknown				CAS #:			
11.982	2713268	11.6723879	503	0		0	91
Docosanoic acid				CAS #: 112-85-6			
12.020	5259151	22.6246925	975	94	NIST05.L	147935	91
Unknown				CAS #:			
12.092	3974406	17.0977607	737	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4				CAS #: 471-77-2			
12.139	8244109	35.4658810	1530	89	NIST05.L	126183	91
Unknown				CAS #:			
12.330	3663956	15.7622162	679	0		0	91
Unknown				CAS #:			
12.387	3027693	13.0250327	561	0		0	91
Octadecane, 1-chloro-				CAS #: 3386-33-2			
12.558	4115647	17.7053754	763	96	NIST05.L	117264	91
Unknown				CAS #:			
12.649	2498521	10.7485521	463	0		0	91
1-Docosene				CAS #: 1599-67-3			
12.773	6226180	26.7848186	1150	95	NIST05.L	129888	91
Unknown				CAS #:			
12.897	2809277	49.6993294	2140	0		0	98
Unknown				CAS #:			
14.935	5742841	101.597454	4380	0		0	98
Stigmast-4-en-3-one				CAS #: 1058-61-3			
17.297	2462537	43.5651031	1880	86	NIST05.L	173936	98

Data File: /chem/MSD8.1/s032110.b/s802123.d
Date: 21-MAR-2010 18:55
Client ID: RE36-10-7521
Sample Info: 1248373015196492211SVH11.LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-SMS

Instrument: MSD8.1
Operator: nag1
Column diameter: 0.20



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 1248373015196192211SVMI11LANL

Volume Injected (uL): 0,5

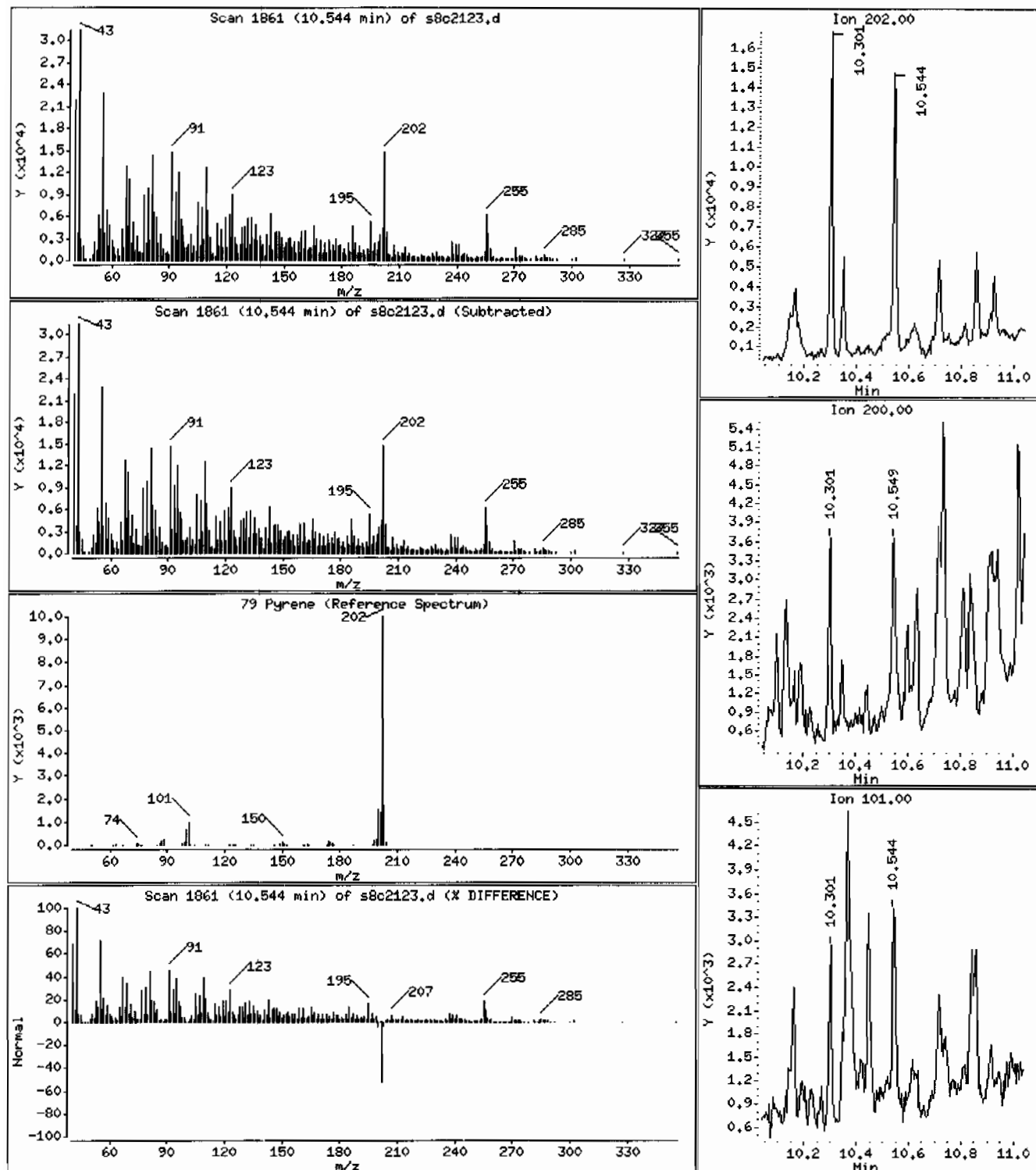
Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0,20

79 Pyrene

Concentration: 14,6 ug/Kg



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: I248373015196192211SVH11:LANL

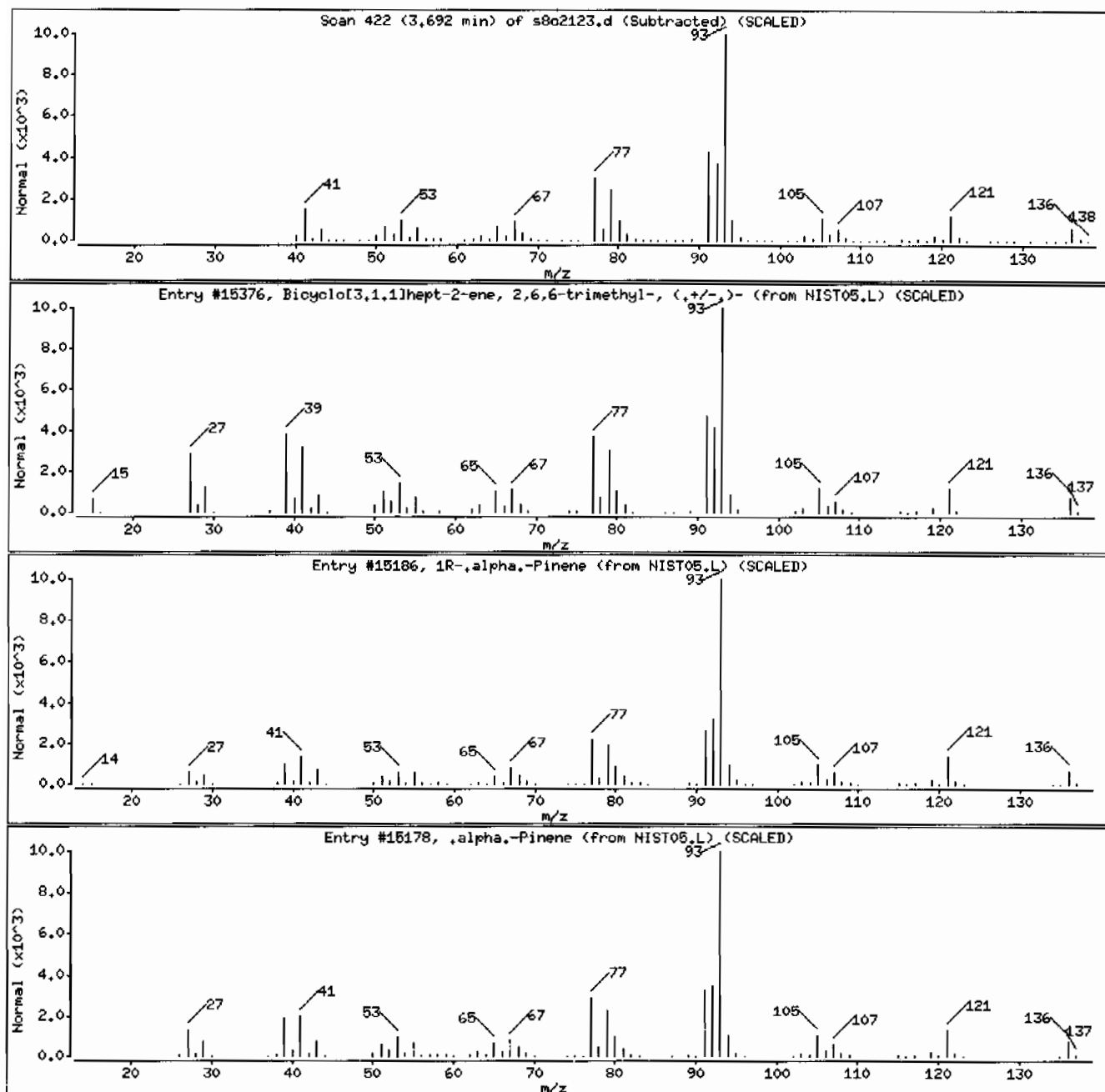
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3,1,1]hept-2-ene, 2,6,6-trimethyl-	2437-95-8	NIST05.L	15376	97	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.1

Sample Info: 12483730151961922111SVH111LANL

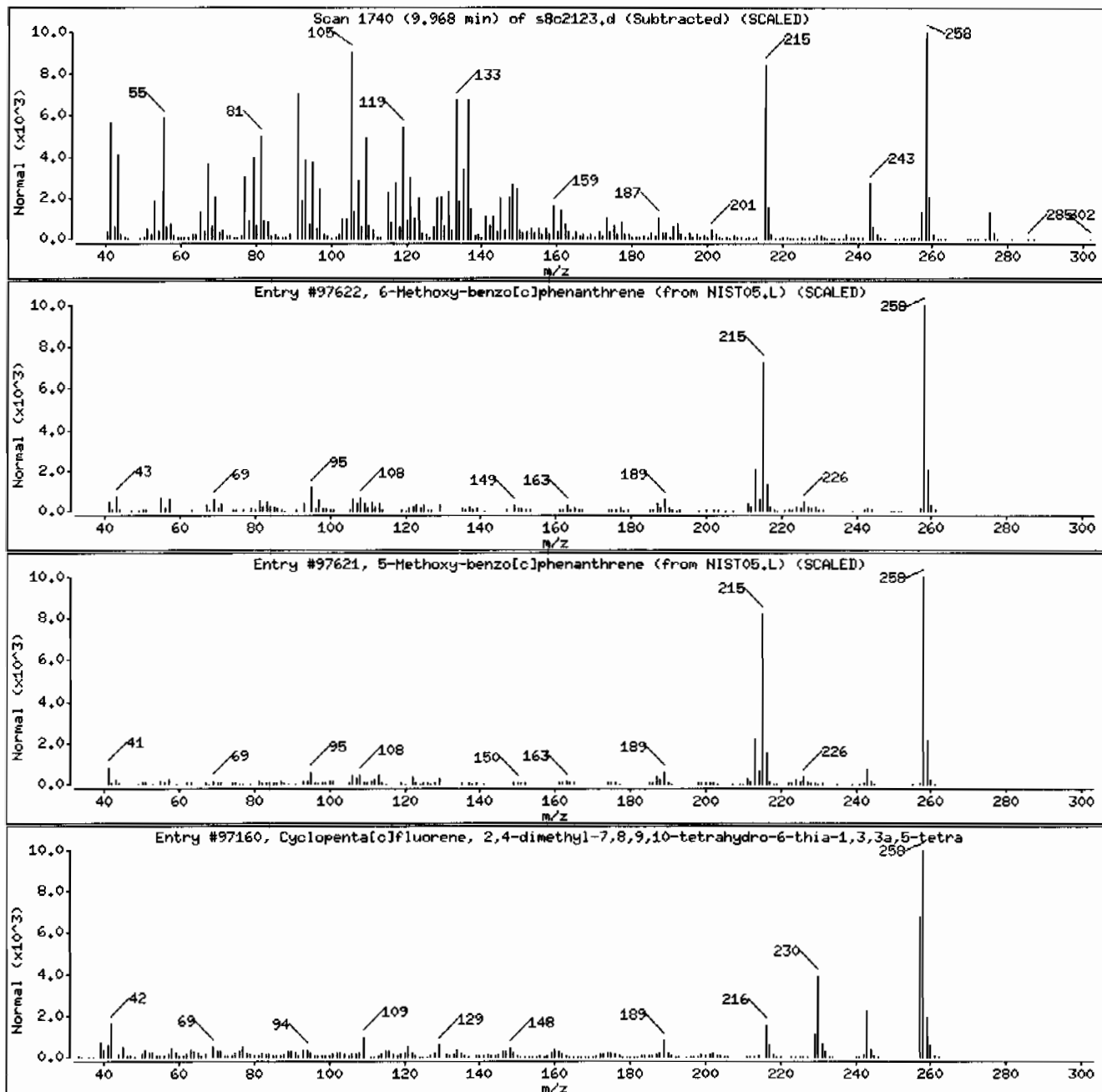
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
6-Methoxy-benzo[c]phenanthrene	4176-37-8	NIST05.L	97622	50	C19H14O	258
5-Methoxy-benzo[c]phenanthrene	4235-03-4	NIST05.L	97621	45	C19H14O	258
Cyclopenta[c]fluorene, 2,4-dimethyl-7,8,	1000304-26-5	NIST05.L	97160	25	C13H14N4S	258



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: I248373015196192211ISVH11ILANL

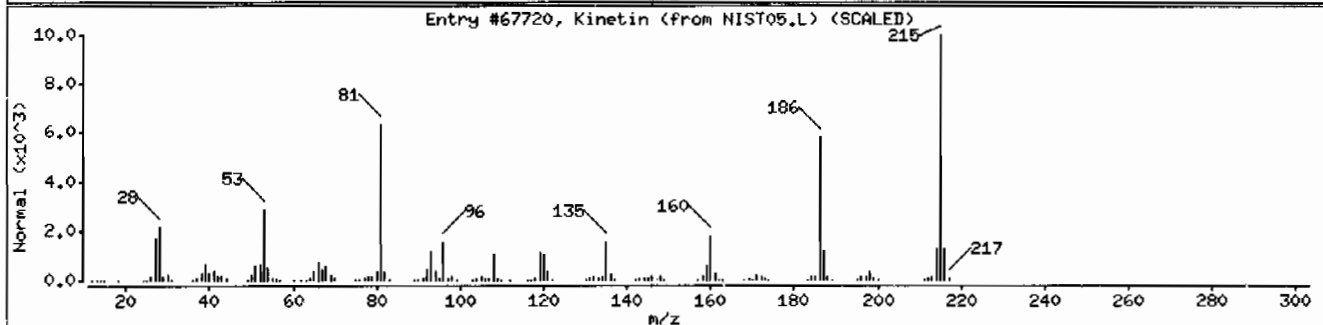
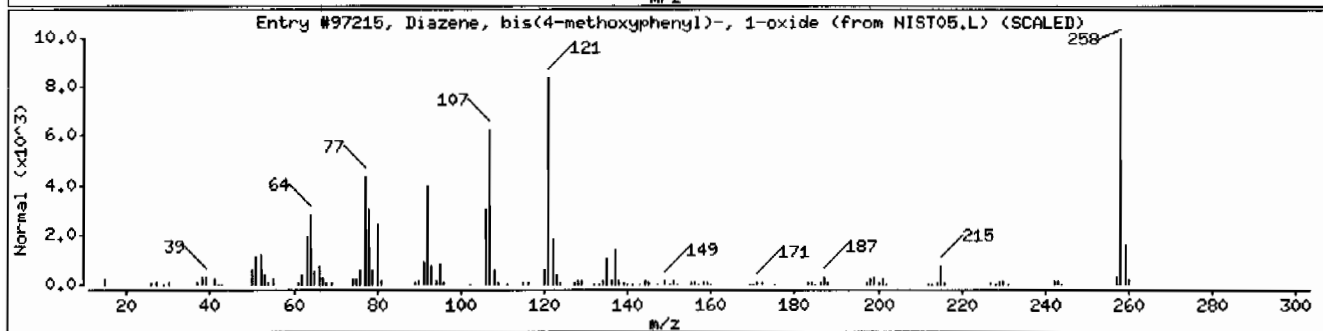
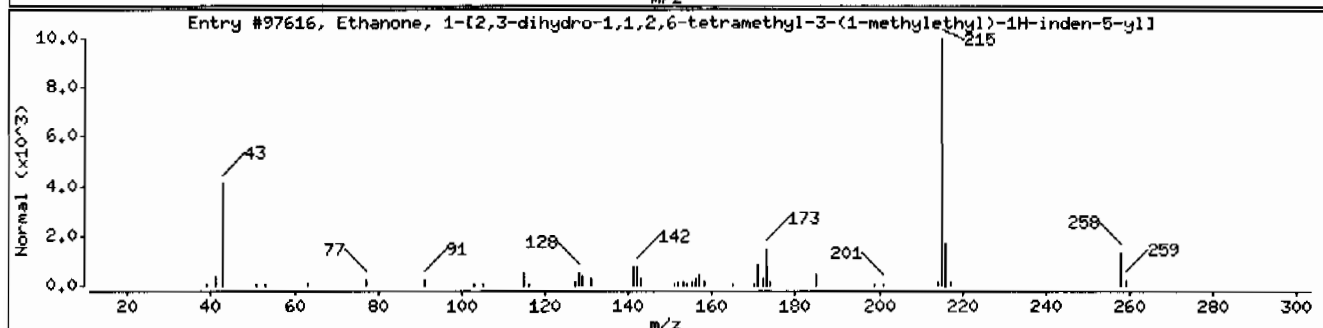
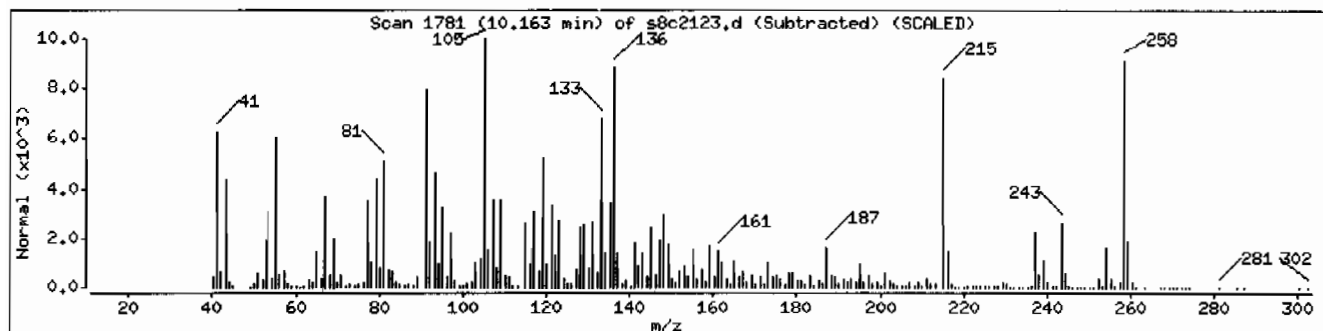
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethanone, 1-[2,3-dihydro-1,1,2,6-tetrame	68140-48-7	NIST05.L	97616	66	C18H26O	258
Diazene, bis(4-methoxyphenyl)-, 1-oxide	1562-94-3	NIST05.L	97215	25	C14H14N2O3	258
Kinetin	525-79-1	NIST05.L	67720	25	C10H9N5O	215



Date: 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 1248373015196192211SVH111LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androst-5-en-4-one	13583-72-7	NIST05.L	107036	52	C19H28O	272
Androst-5,16-diene-3,β,α-ol	1224-94-8	NIST05.L	107038	46	C19H28O	272
Kaur-16-ene, (8,β,α,,13,β,α,)-	20070-61-5	NIST05.L	107067	45	C20H32	272

Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: 1248373015196192211SVH11/LANL

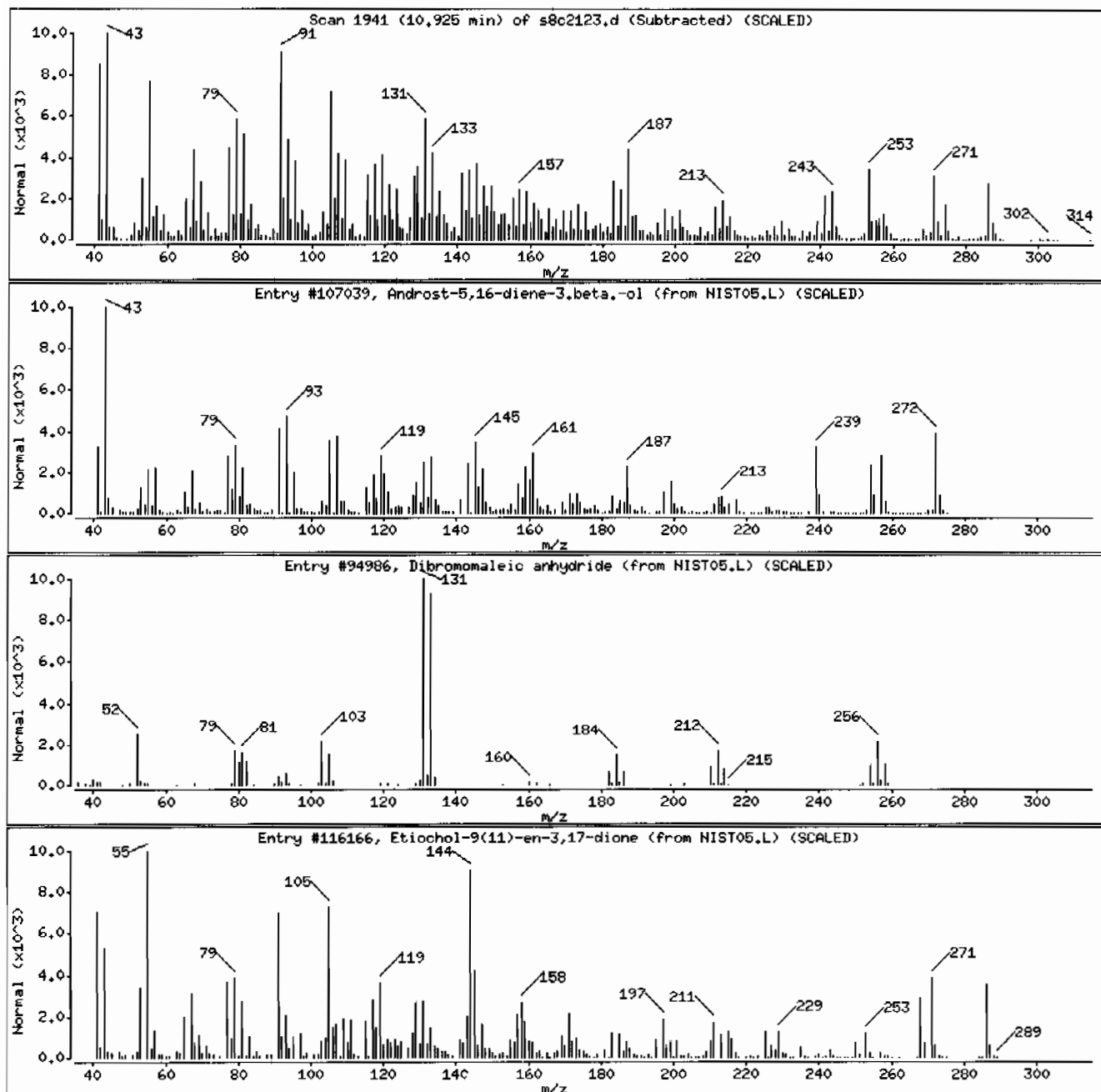
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androst-5,16-diene-3,β-ol	1224-94-8	NIST05.L	107039	55	C19H28O	272
Dibromomaleic anhydride	1122-12-9	NIST05.L	94986	25	C4Br2O3	254
Etiocol-9(11)-en-3,17-dione	1000128-32-7	NIST05.L	116166	25	C19H26O2	286



Date: 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: I248373015196192211SVMI11LANL

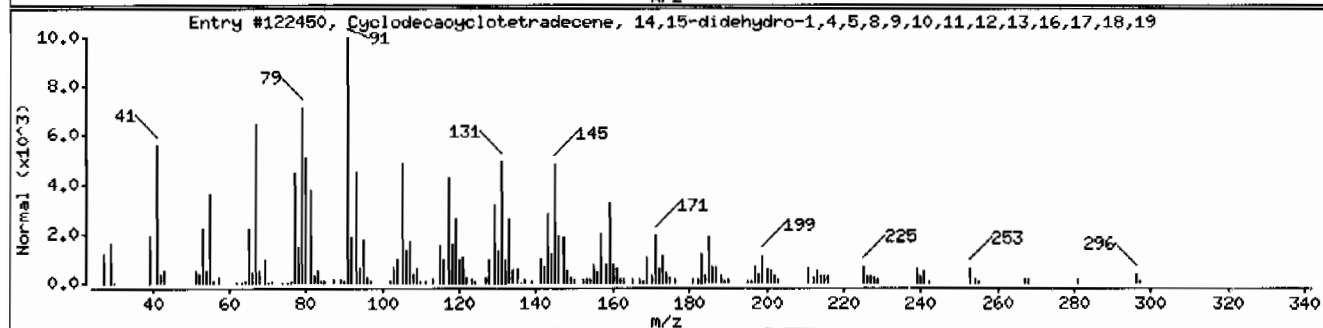
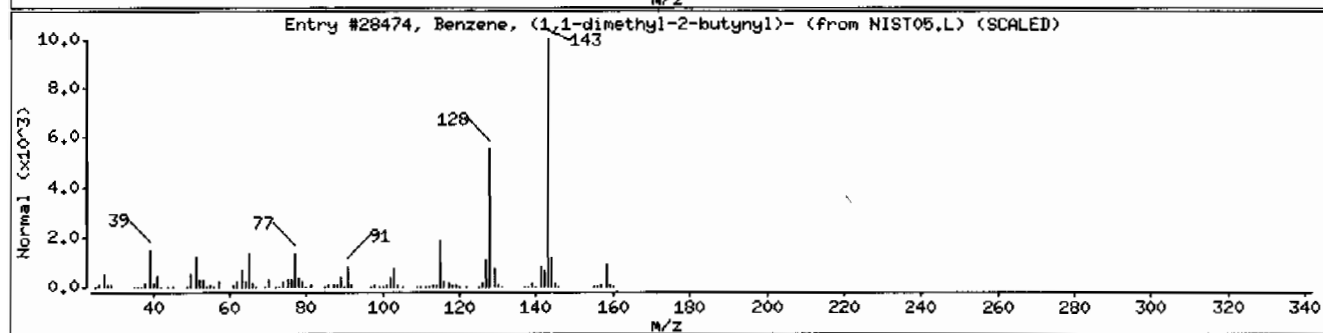
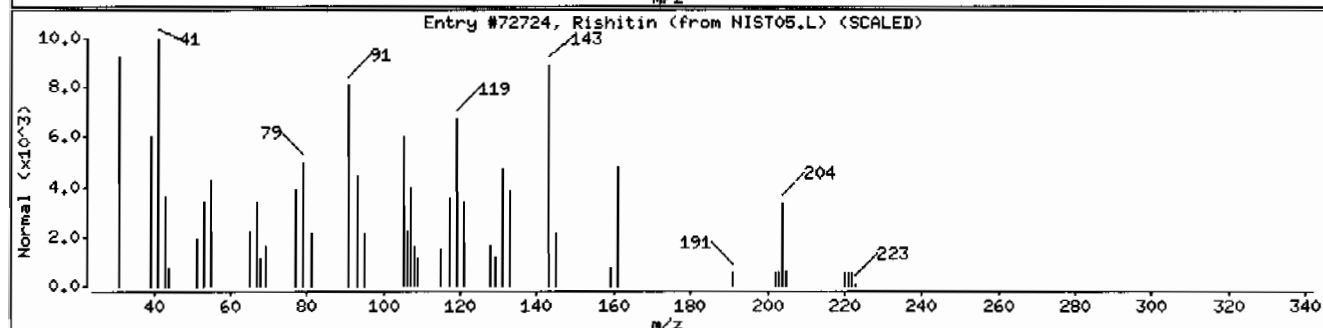
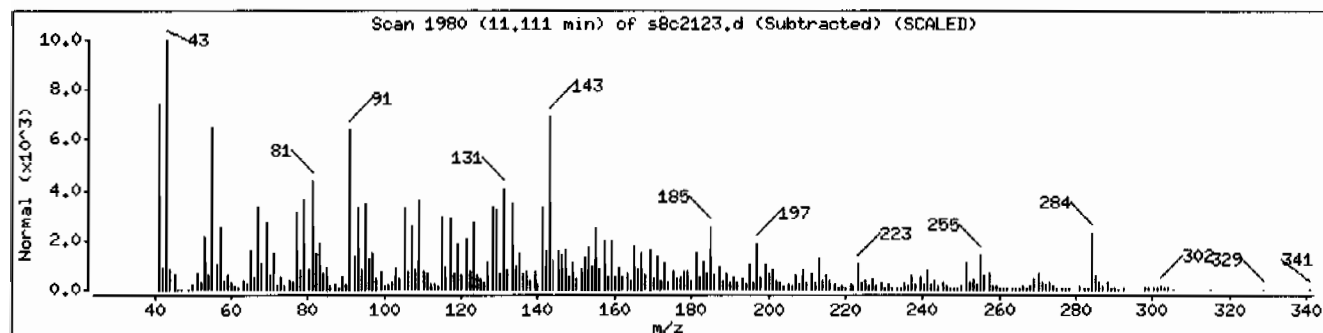
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Rishitin	18178-54-6	NIST05.L	72724	27	C14H22O2	222
Benzene, (1,1-dimethyl-2-butynyl)-	1007-91-6	NIST05.L	28474	25	C12H14	158
Cyclodecacyclotetradecene, 14,15-didehyd	14113-61-2	NIST05.L	122450	20	C22H32	296



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 12483730151961922111SVH111LANL

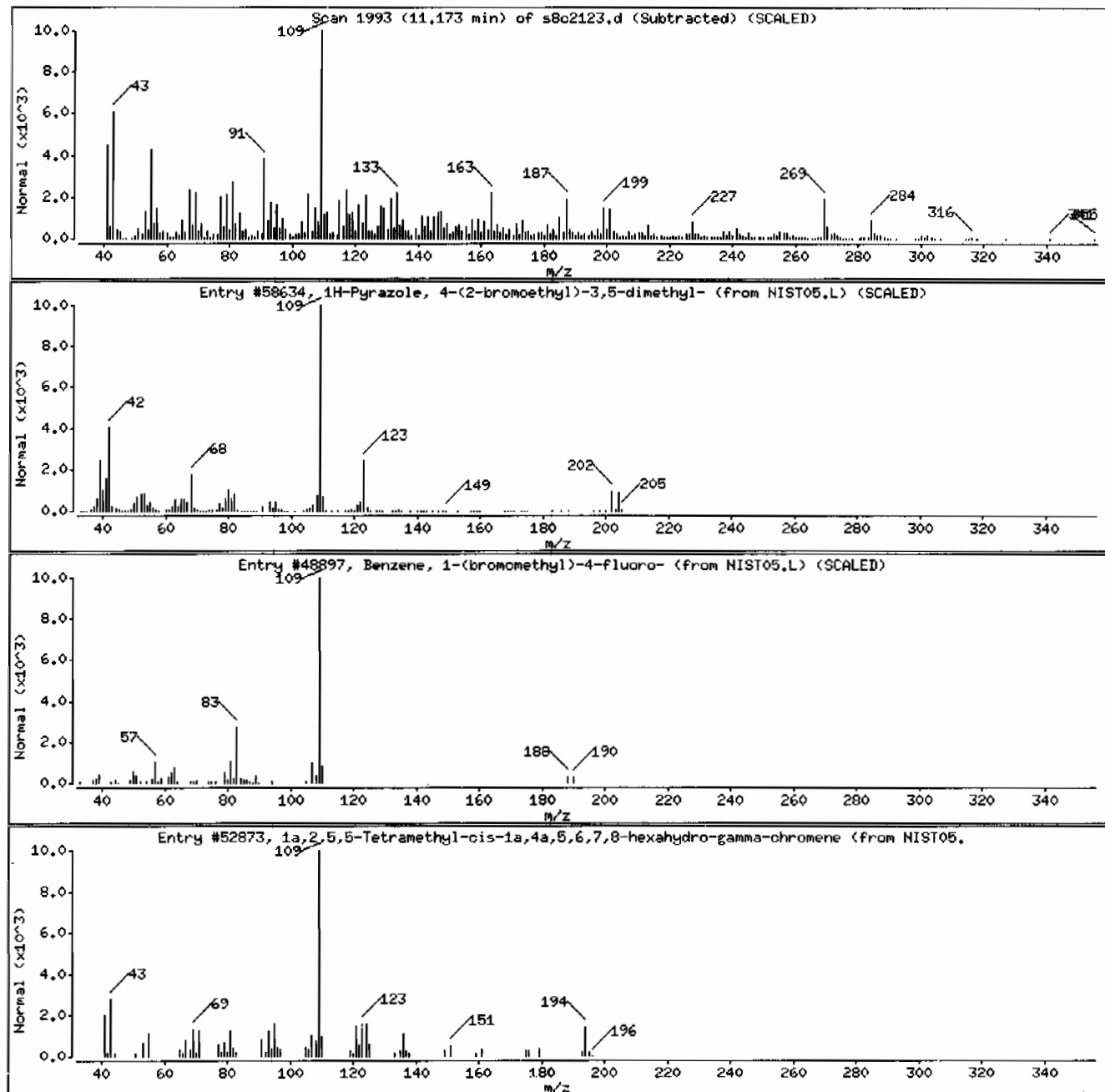
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Pyrazole, 4-(2-bromoethyl)-3,5-dimeth	83467-28-1	NIST05.L	58634	35	C7H11BrN2	202
Benzene, 1-(bromomethyl)-4-fluoro-	459-46-1	NIST05.L	48897	30	C7H6BrF	188
1a,2,5,5-Tetramethyl-cis-1a,4a,5,6,7,8-h	1000215-77-7	NIST05.L	52873	30	C13H22O	194



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: I248373015196192211ISVM11ILANL

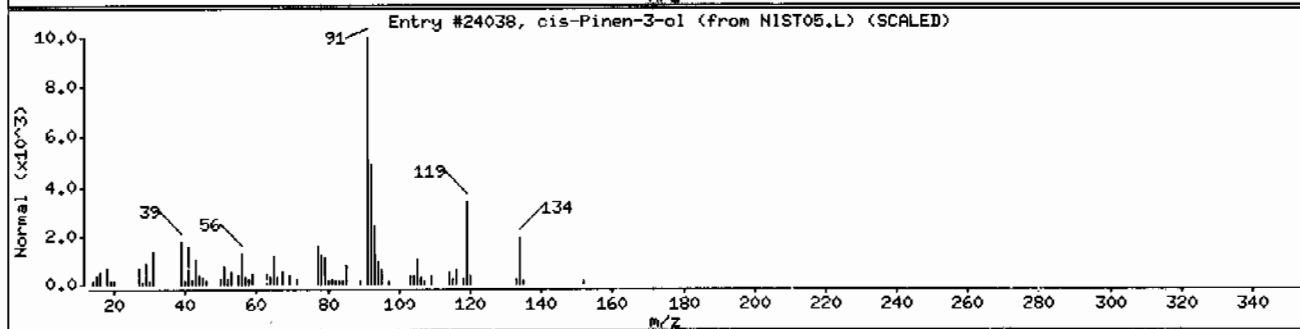
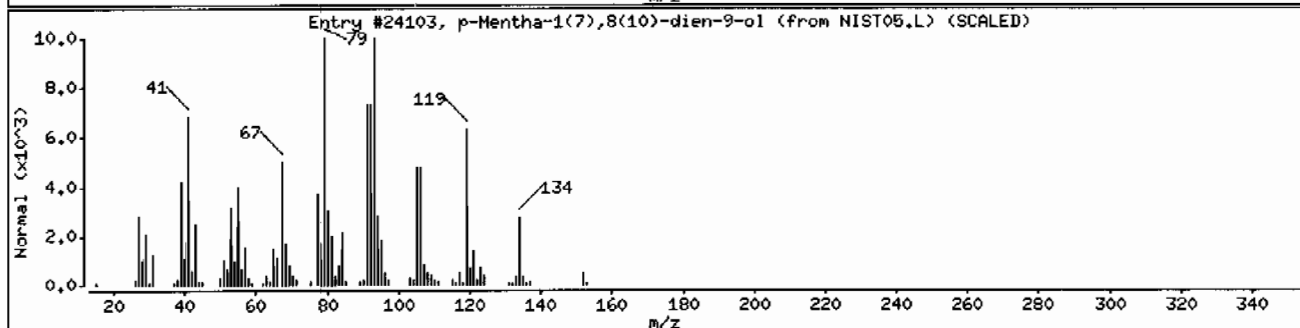
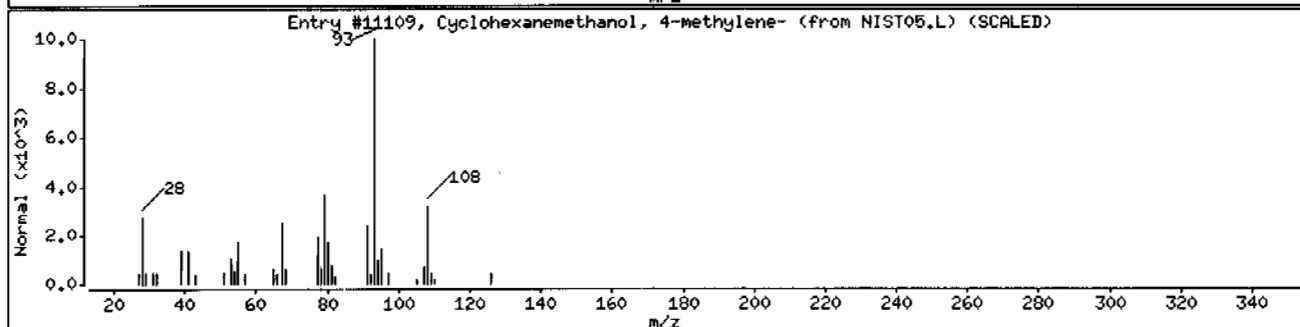
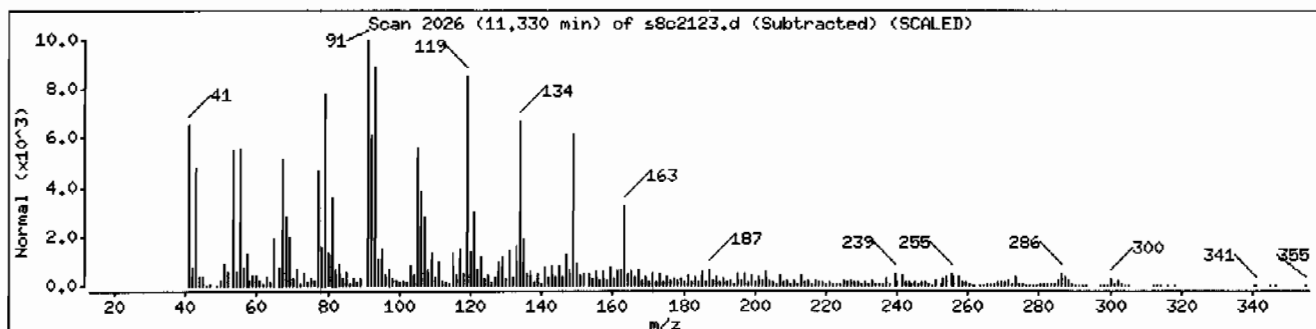
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexanemethanol, 4-methylene-	1004-24-6	NIST05.L	11109	46	C8H14O	126
p-Mentha-1(7),8(10)-dien-9-ol	29548-13-8	NIST05.L	24103	38	C10H16O	152
cis-Pinen-3-ol	1000292-85-2	NIST05.L	24038	35	C10H16O	152



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: I248373015196192211SVMI11LANL

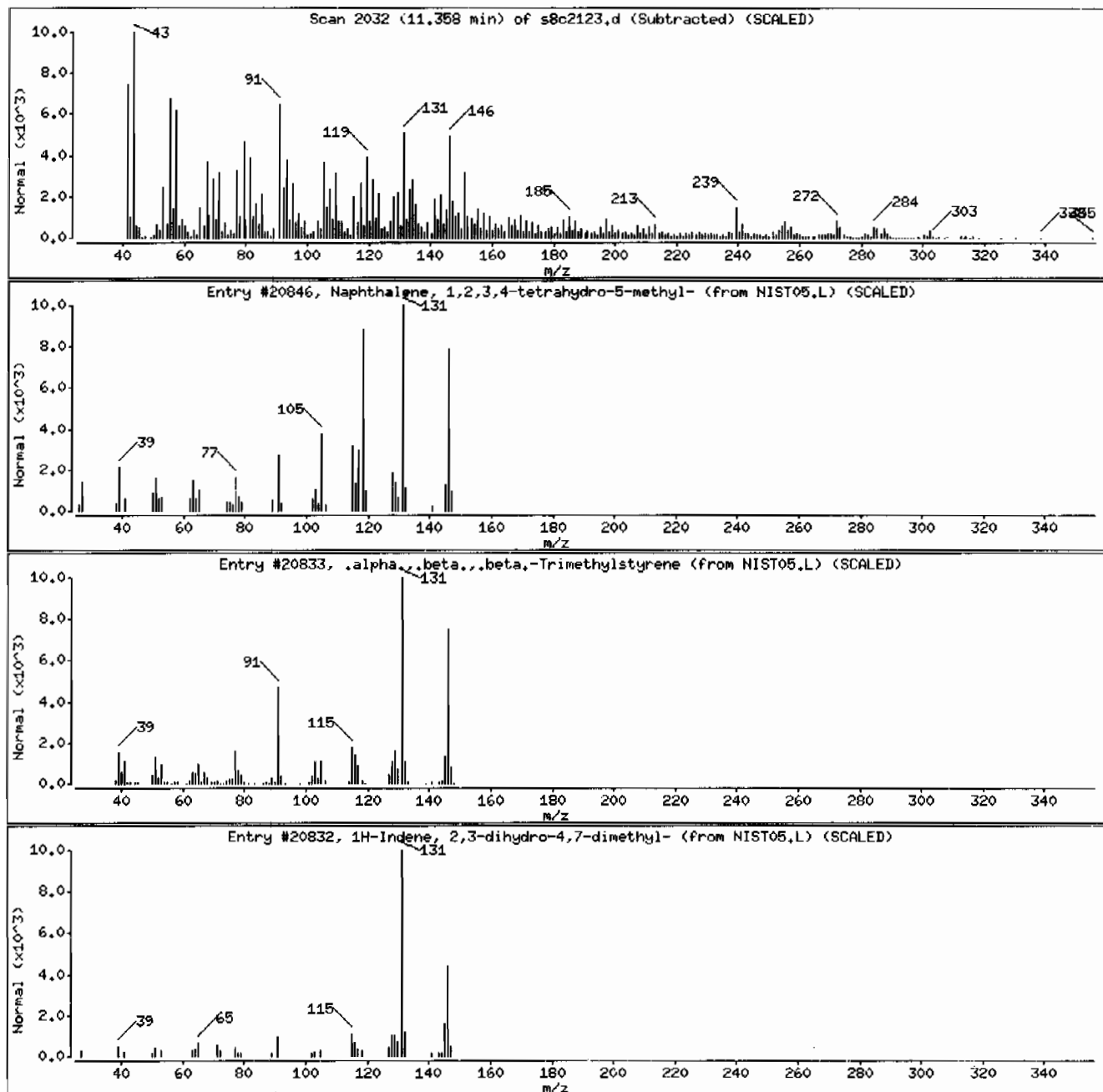
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Naphthalene, 1,2,3,4-tetrahydro-5-methyl	2809-64-5	NIST05.L	20846	30	C11H14	146
.alpha.,.beta.,.beta.-Trimethylstyrene	769-57-3	NIST05.L	20833	30	C11H14	146
1H-Indene, 2,3-dihydro-4,7-dimethyl-	6682-71-9	NIST05.L	20832	25	C11H14	146



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: 1248373015196192211SVH111LANL

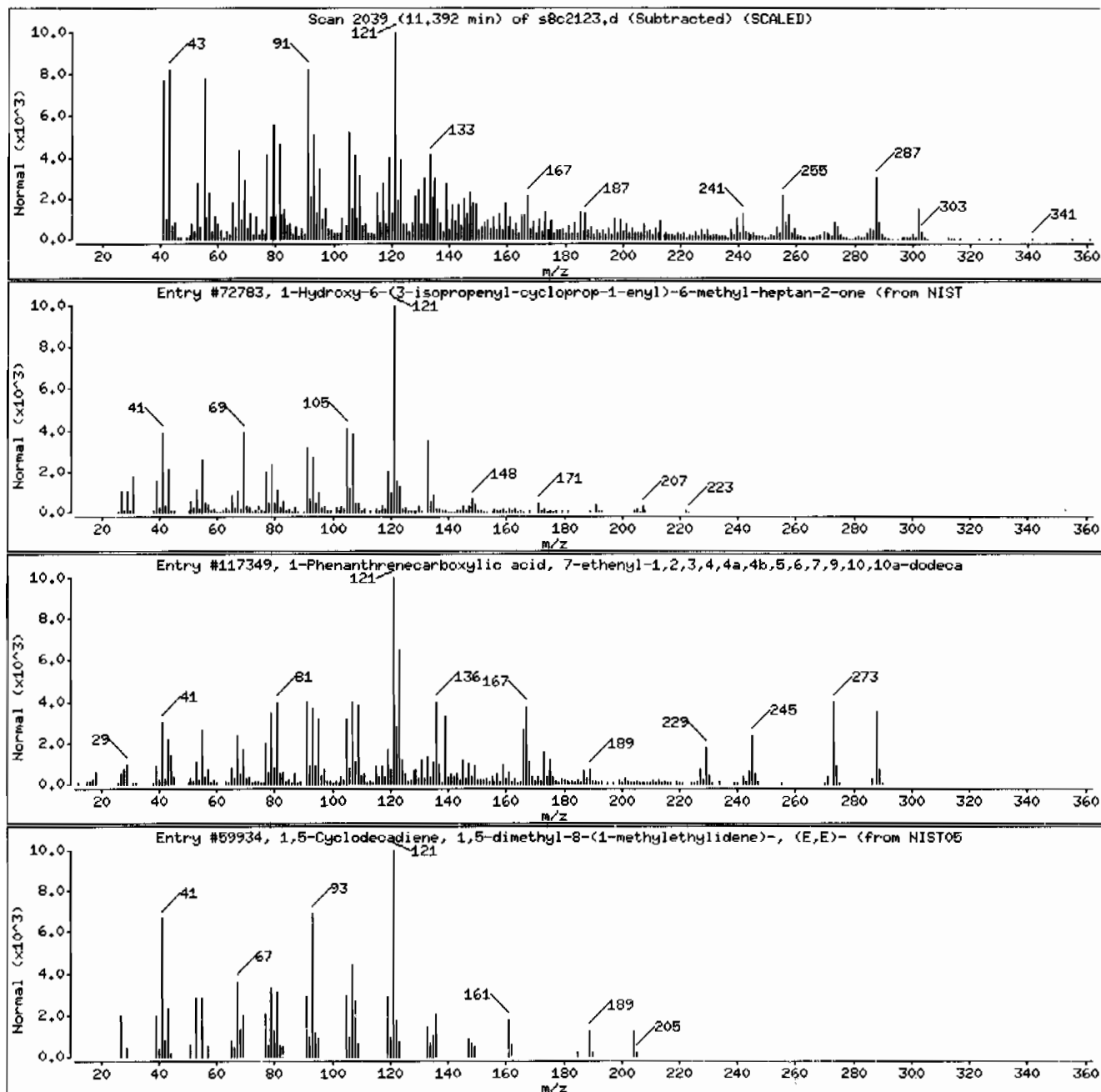
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Hydroxy-6-(3-isopropenyl-cycloprop-1-enyl)-6-methyl-heptan-2-one	1000189-14-9	NIST05.L	72783	55	C14H22O2	222
1-Phenanthrenecarboxylic acid, 7-ethenyl	57289-55-1	NIST05.L	117349	50	C19H28O2	288
1,5-Cyclodecadiene, 1,5-dimethyl-8-(1-methyl-ethylidene)-, (E,E)-	15423-57-1	NIST05.L	59934	49	C15H24	204



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: 12483730151961922111SVH111LANL

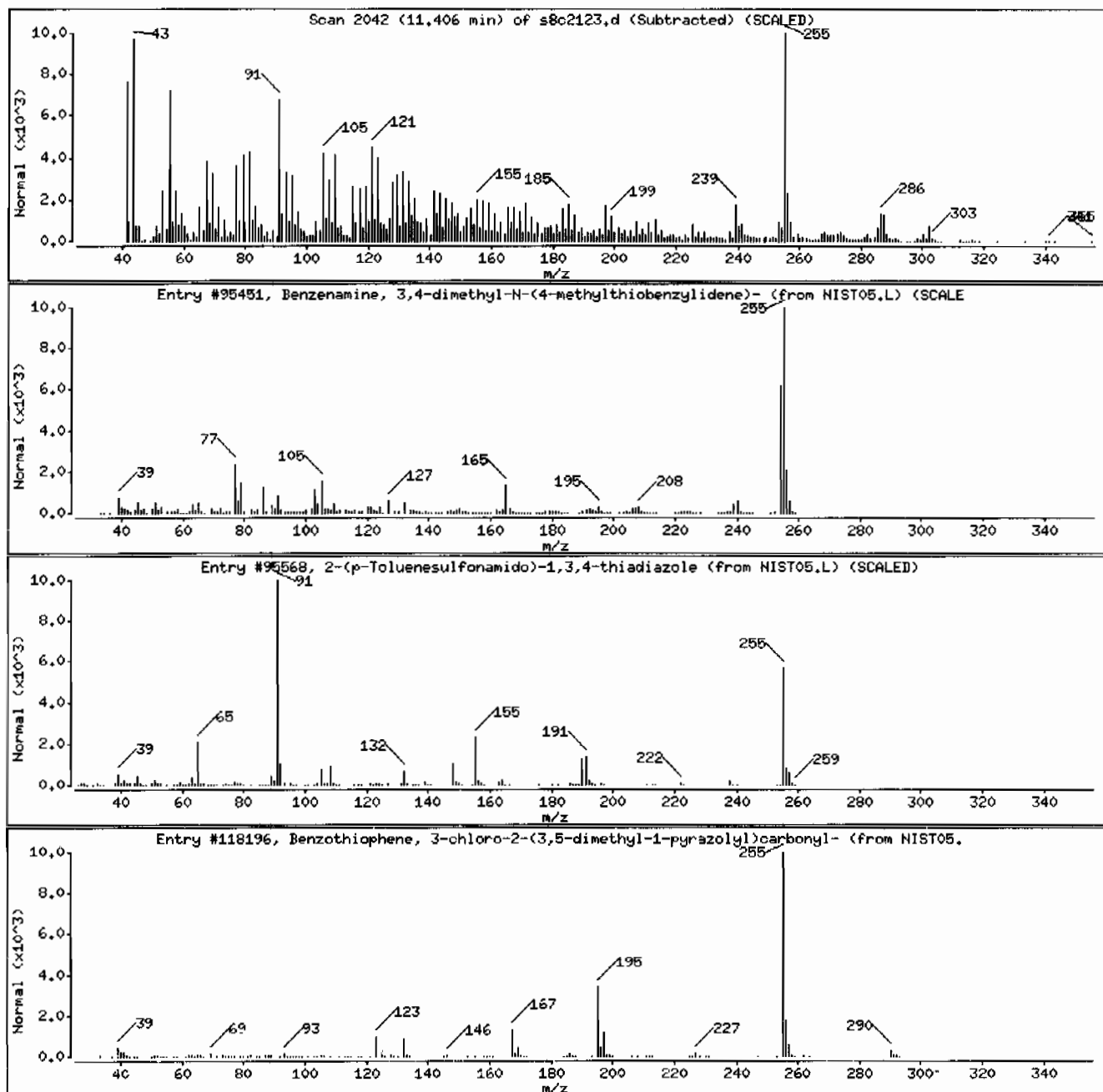
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenamine, 3,4-dimethyl-N-(4-methylthi	315670-90-7	NIST05.L	95451	52	C16H17NS	255
2-(p-Toluenesulfonamido)-1,3,4-thiadiaz	90349-32-9	NIST05.L	95568	42	C9H9N3O2S2	255
Benzothiophene, 3-chloro-2-(3,5-dimethyl	78154-95-7	NIST05.L	118196	32	C14H11ClN2OS	290



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: I248373015196192211ISVM11ILANL

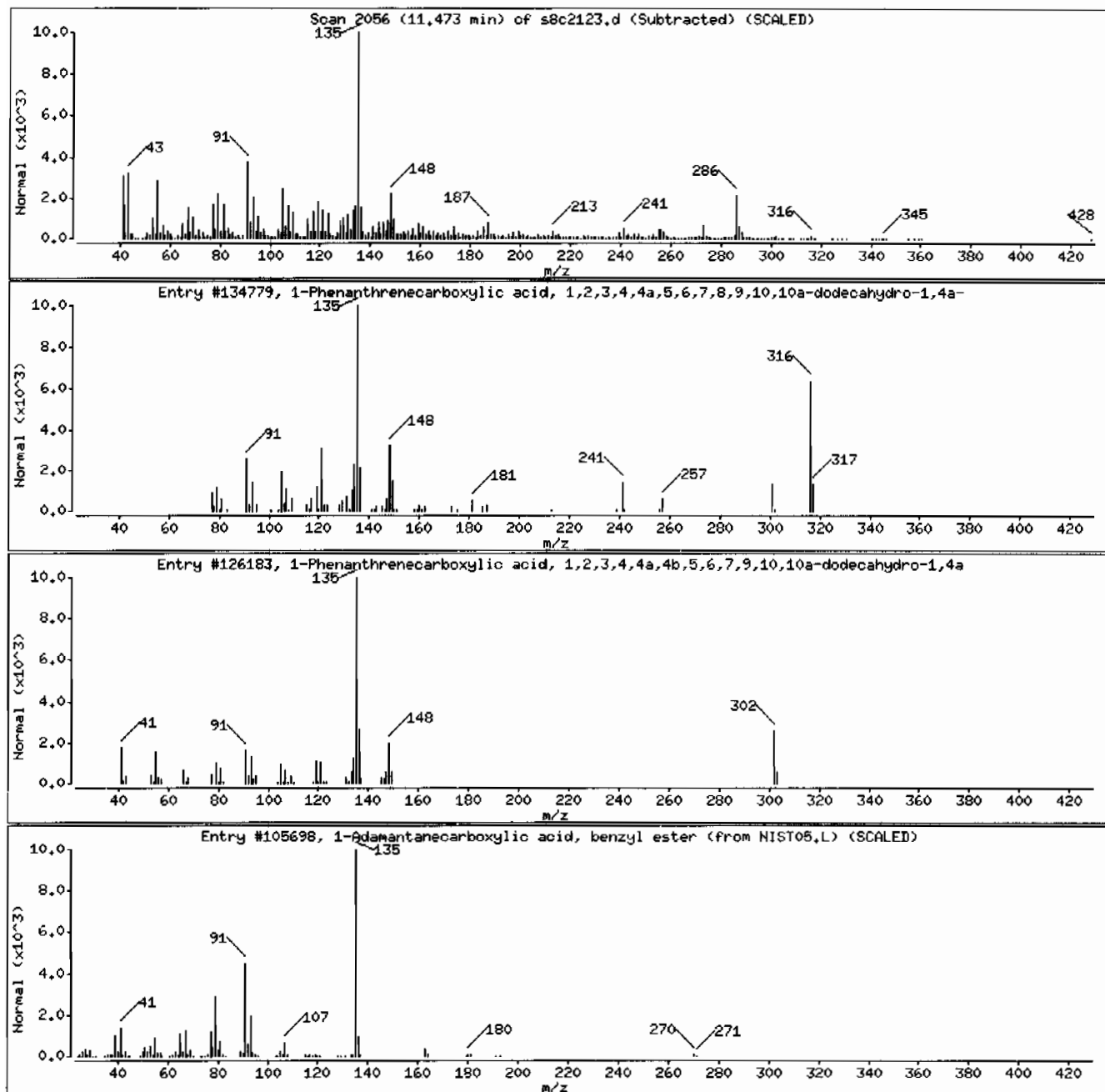
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	19402-34-7	NIST05.L	134779	90	C21H32O2	316
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	471-77-2	NIST05.L	126183	86	C20H30O2	302
1-Adamantanecarboxylic acid, benzyl este	168139-28-4	NIST05.L	105698	83	C18H22O2	270



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 12483730151961922111SVH111LANL

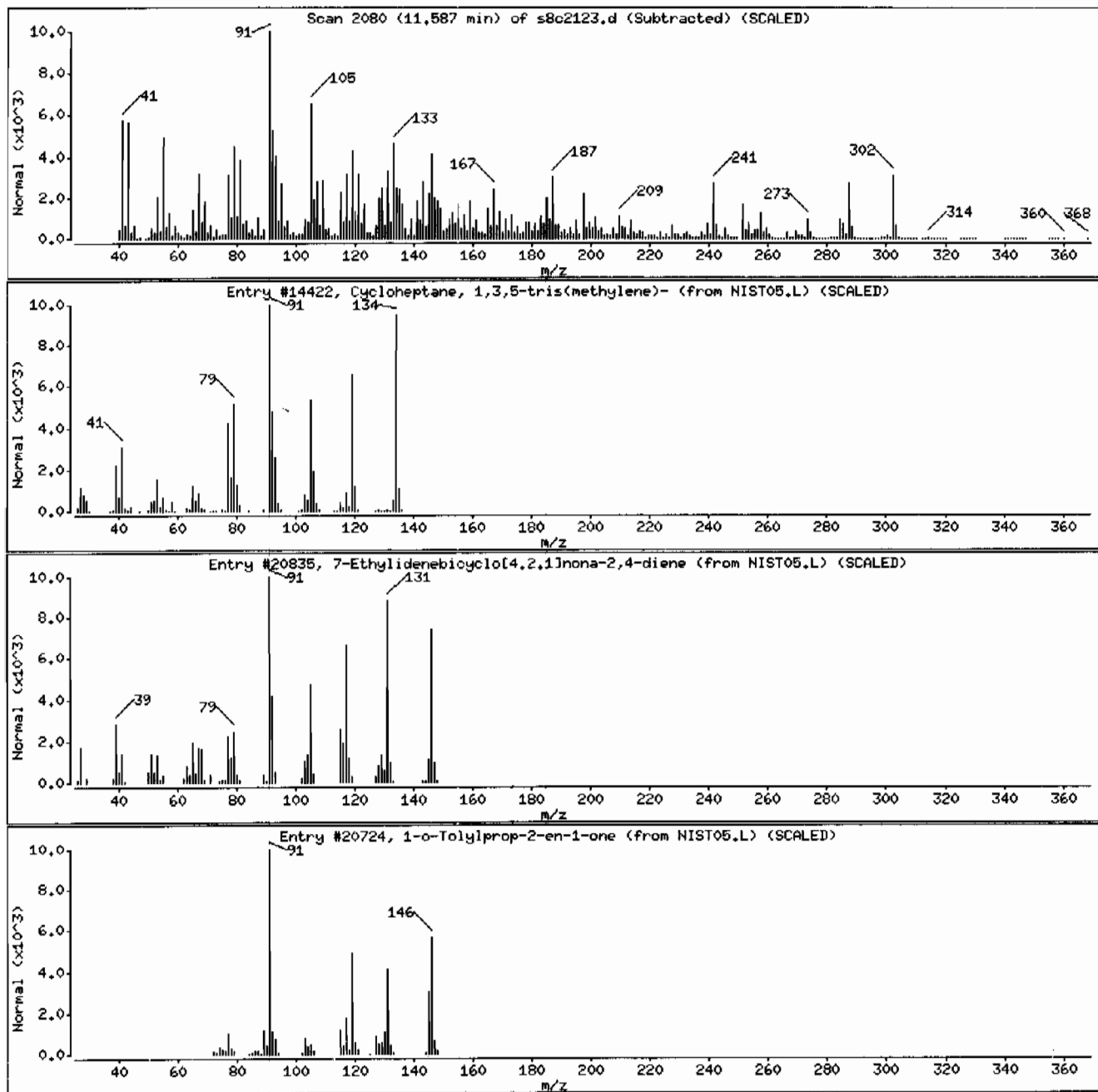
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14422	35	C10H14	134
7-Ethylidenebicyclo[4.2.1]nona-2,4-diene	94400-10-9	NIST05.L	20835	35	C11H14	146
1-o-Tolylprop-2-en-1-one	39627-60-6	NIST05.L	20724	18	C10H10O	146



Date: 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: I248373015196192211SVMI1ILANL

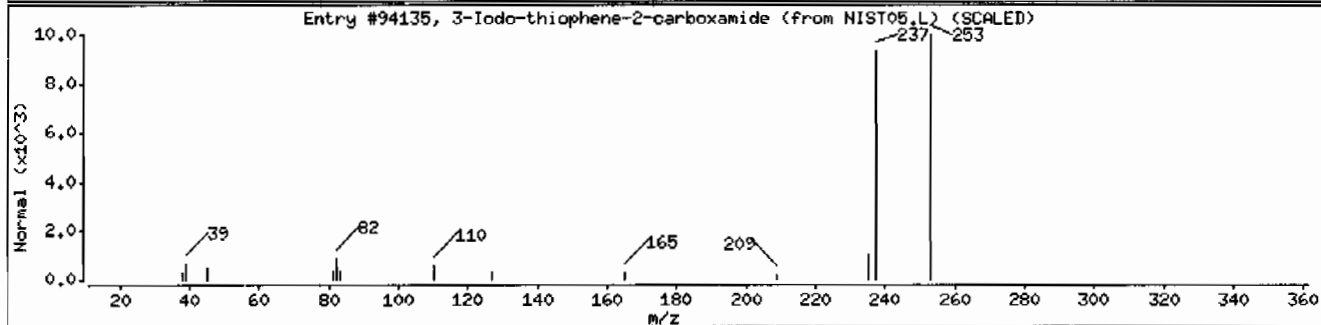
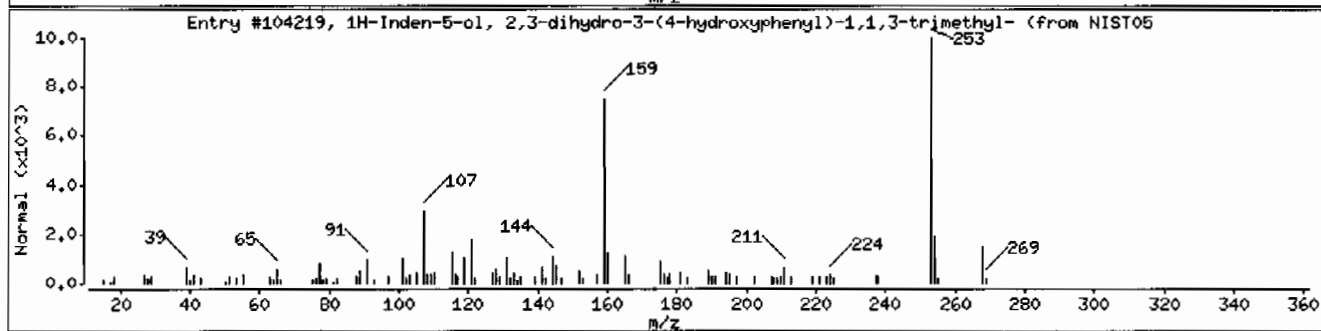
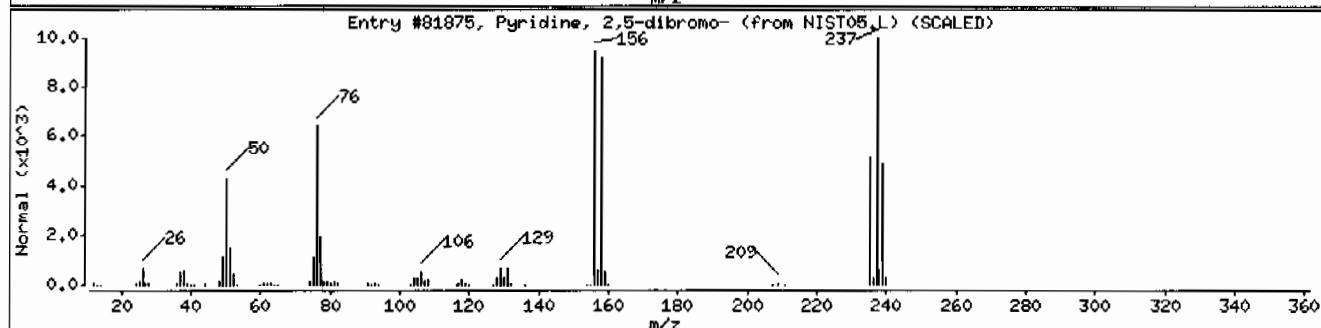
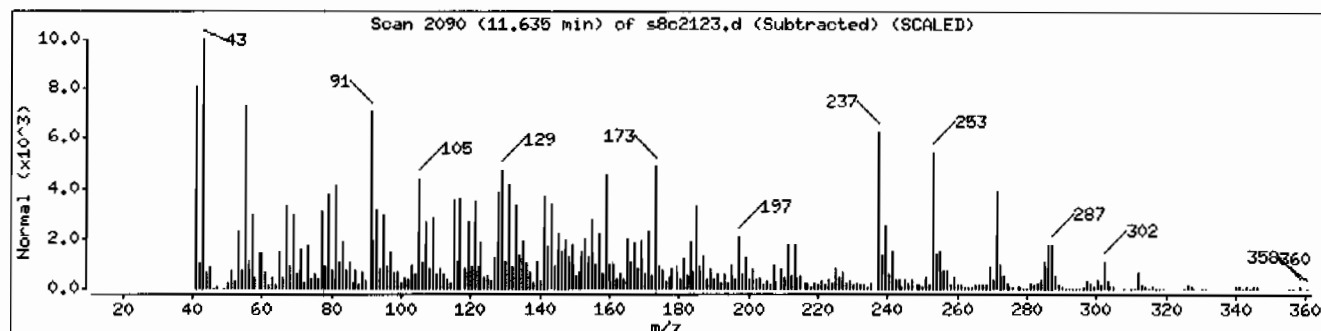
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyridine, 2,5-dibromo-	624-28-2	NIST05.L	81875	11	C5H3Br2N	235
1H-Inden-5-ol, 2,3-dihydro-3-(4-hydroxyp	10527-11-4	NIST05.L	104219	10	C18H20O2	268
3-Iodo-thiophene-2-carboxamide	18800-03-8	NIST05.L	94135	10	C5H4INOS	253



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSDB.i

Sample Info: 1248373015196192211SVH111LANL

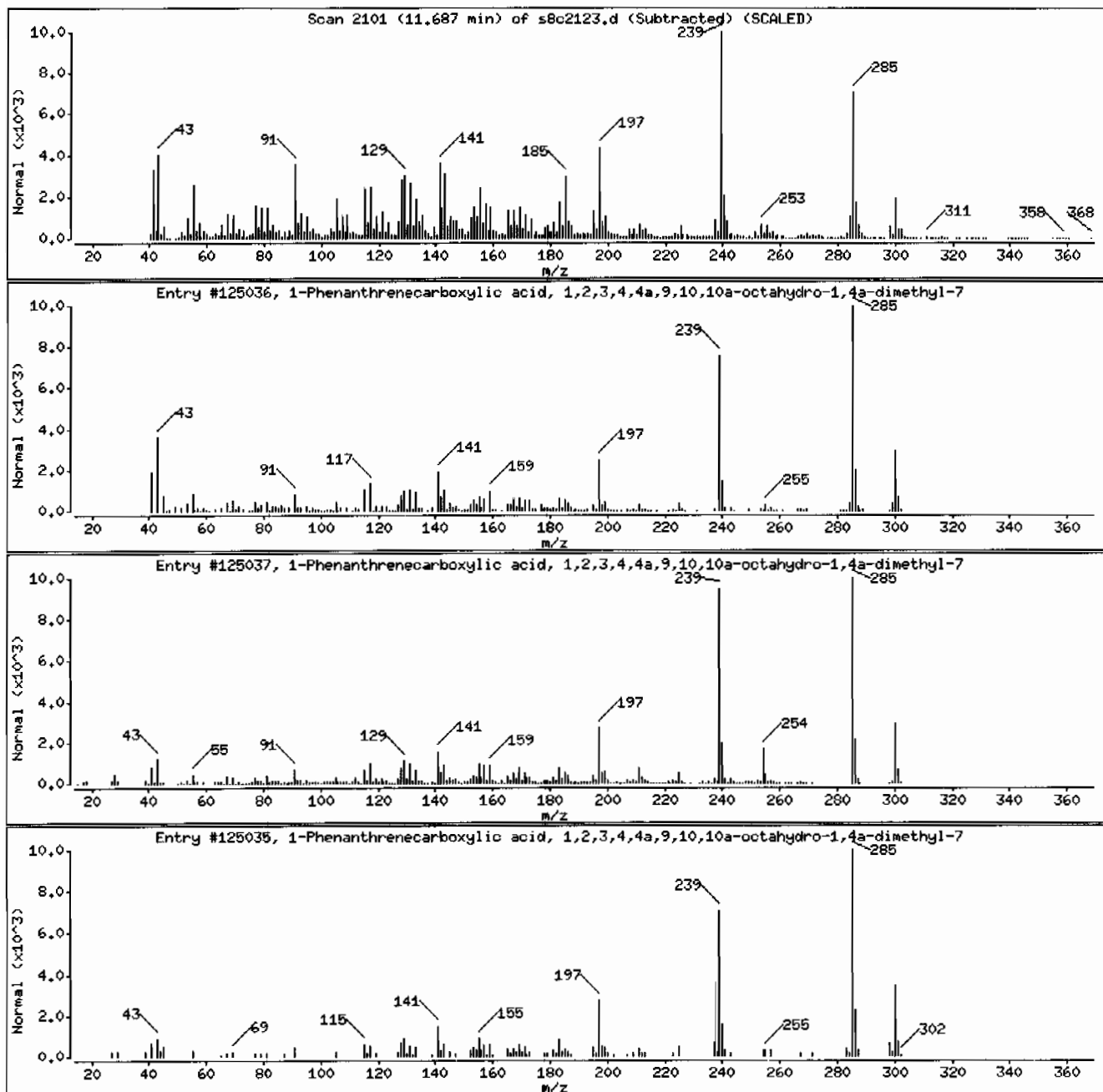
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	95	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	90	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	58	C20H28O2	300



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 12483730151961922111SVH111LANL

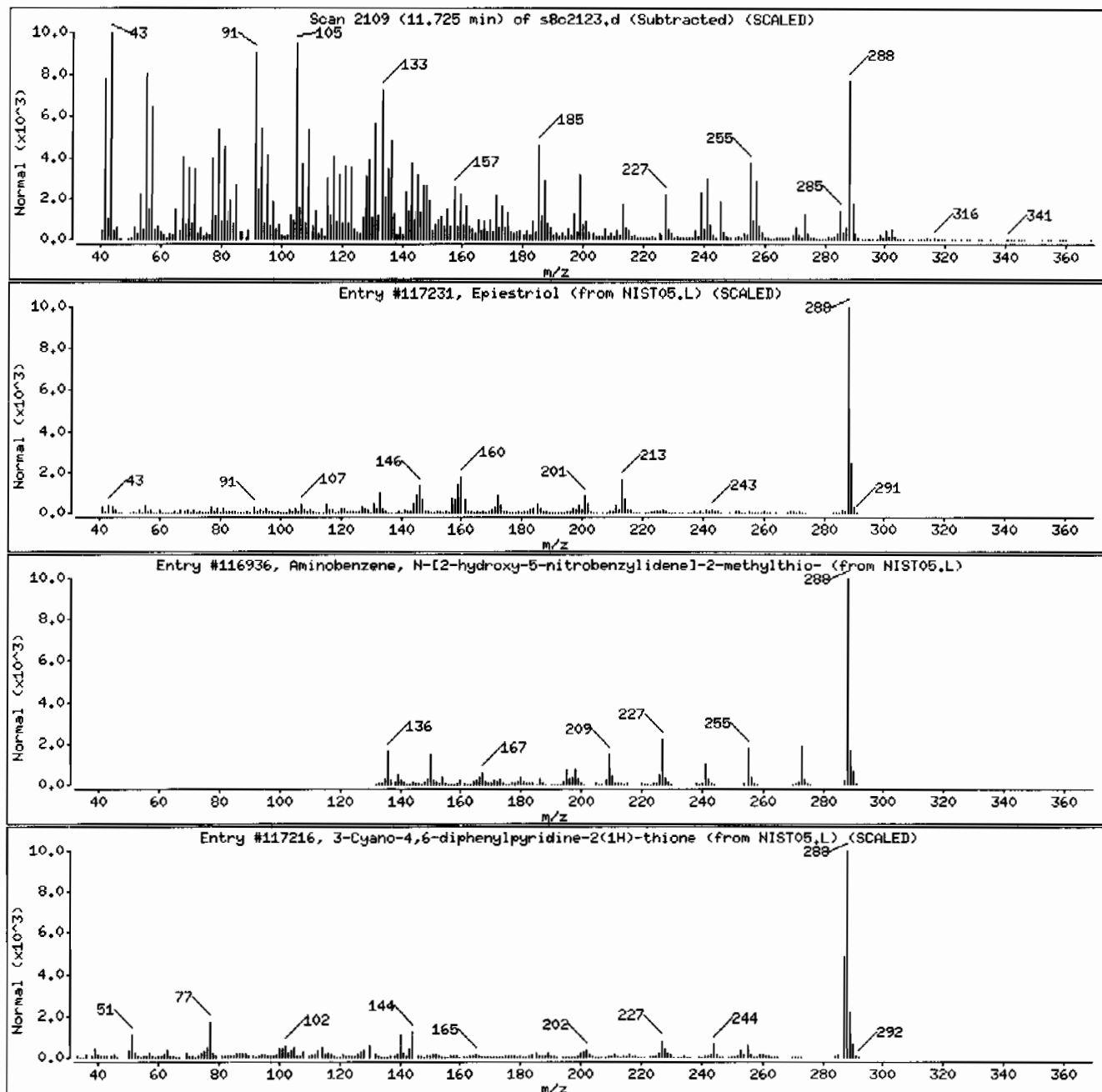
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Epiestriol	547-81-9	NIST05.L	117231	44	C18H24O3	288
Aminobenzene, N-[2-hydroxy-5-nitrobenzyl	1000128-60-9	NIST05.L	116936	38	C14H12N2O3S	288
3-Cyano-4,6-diphenylpyridine-2(1H)-thion	58327-74-5	NIST05.L	117216	25	C18H12N2S	288



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 1248373015196192211SVH111LANL

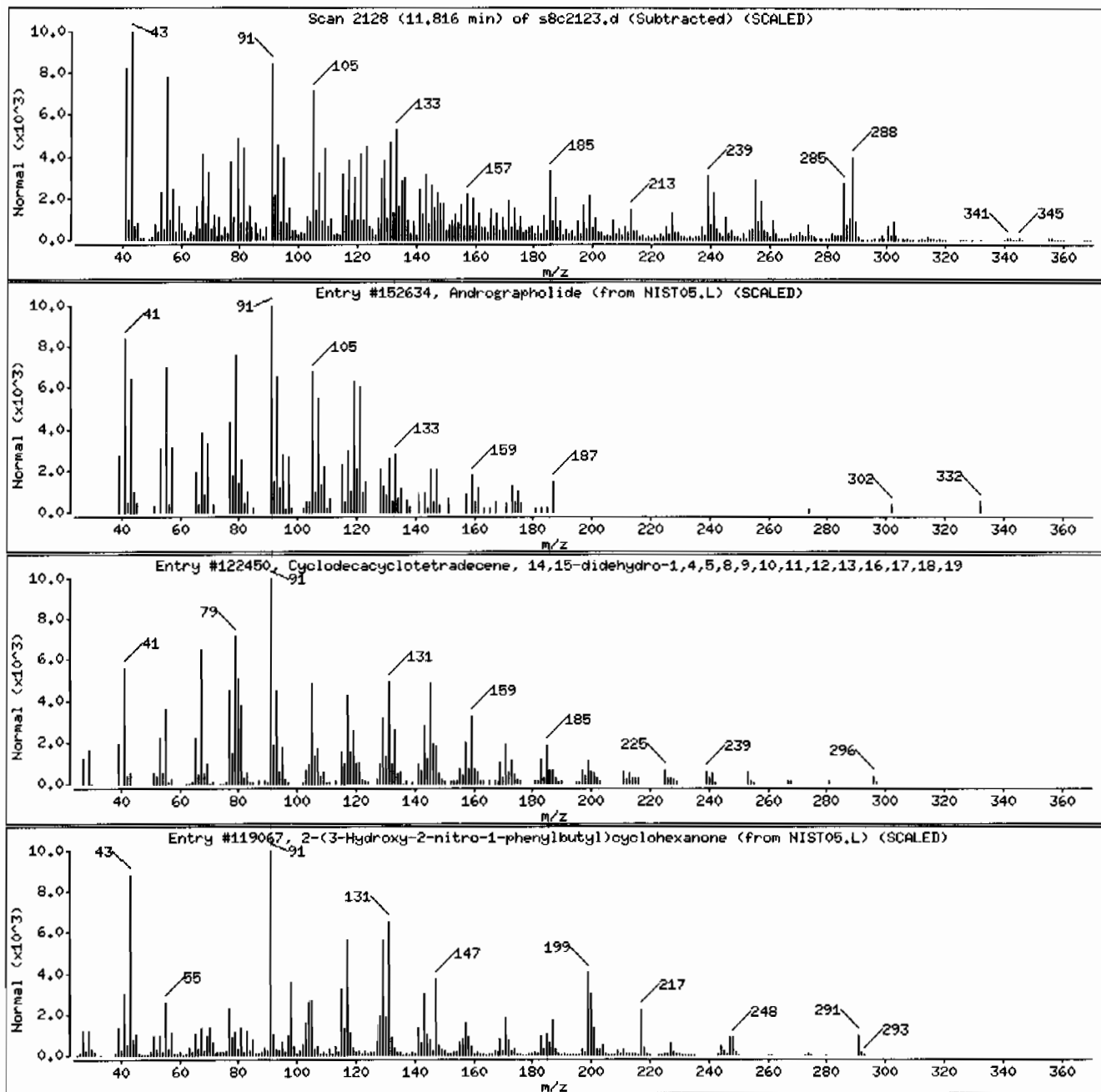
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Andrographolide	5508-58-7	NIST05.L	152634	27	C20H30O5	350
Cyclodecacyclotetradecene, 14,15-didehyd	14113-61-2	NIST05.L	122450	12	C22H32	296
2-(3-Hydroxy-2-nitro-1-phenylbutyl)cyclo	1000194-55-1	NIST05.L	119067	12	C16H21NO4	291



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.1

Sample Info: 1248373015196192211SVH11LANL

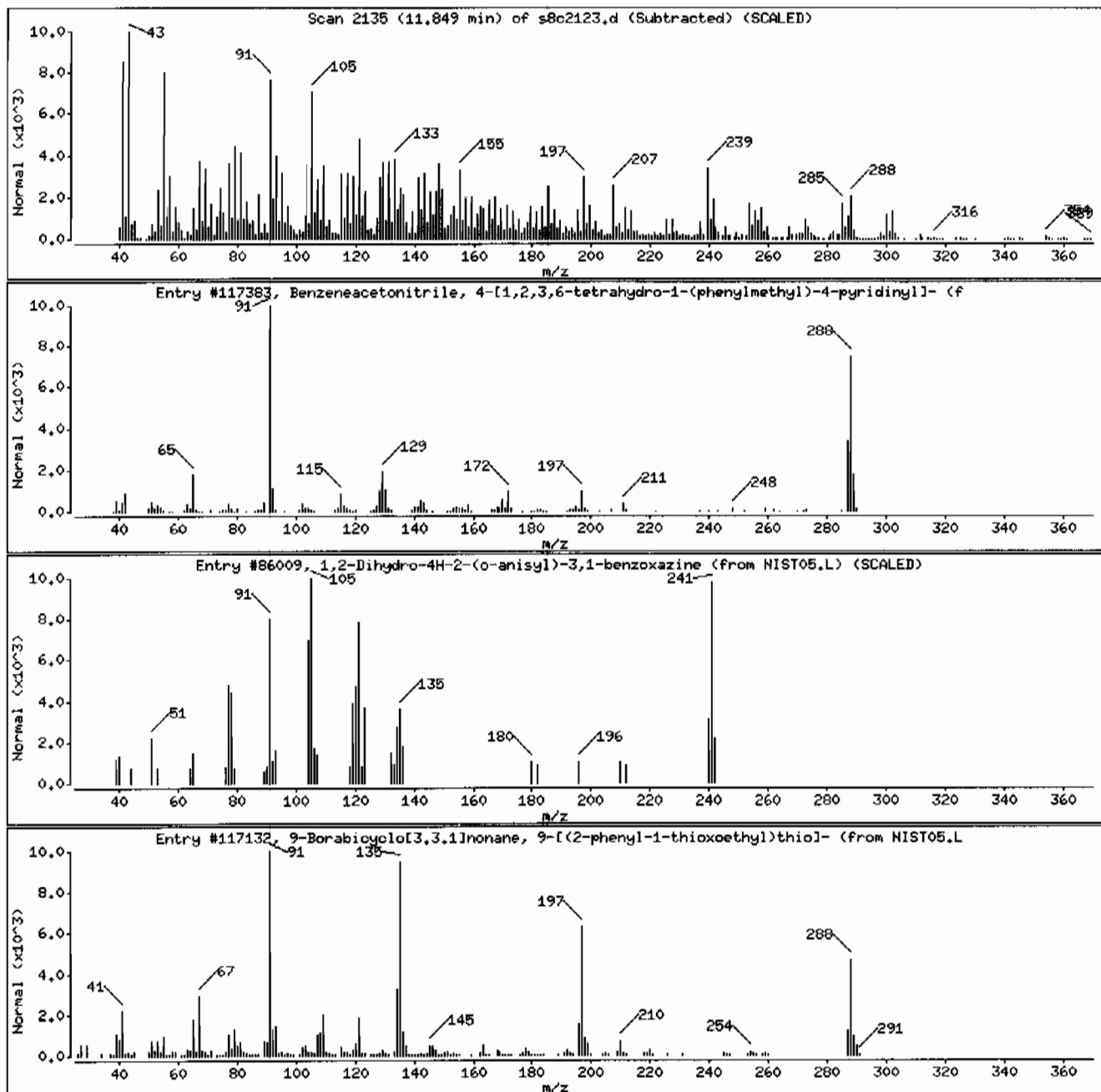
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzeneacetonitrile, 4-[1,2,3,6-tetrahyd	1000115-52-9	NIST05.L	117383	35	C20H20N2	288
1,2-Dihydro-4H-2-(o-anisyl)-3,1-benzoxaz	90284-41-6	NIST05.L	86009	15	C15H15N02	241
9-Borabicyclo[3.3.1]nonane, 9-[1(2-phenyl	139759-19-6	NIST05.L	117132	15	C16H21BS2	288



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8,i

Sample Info: 1248373015196192211SVMI11LANL

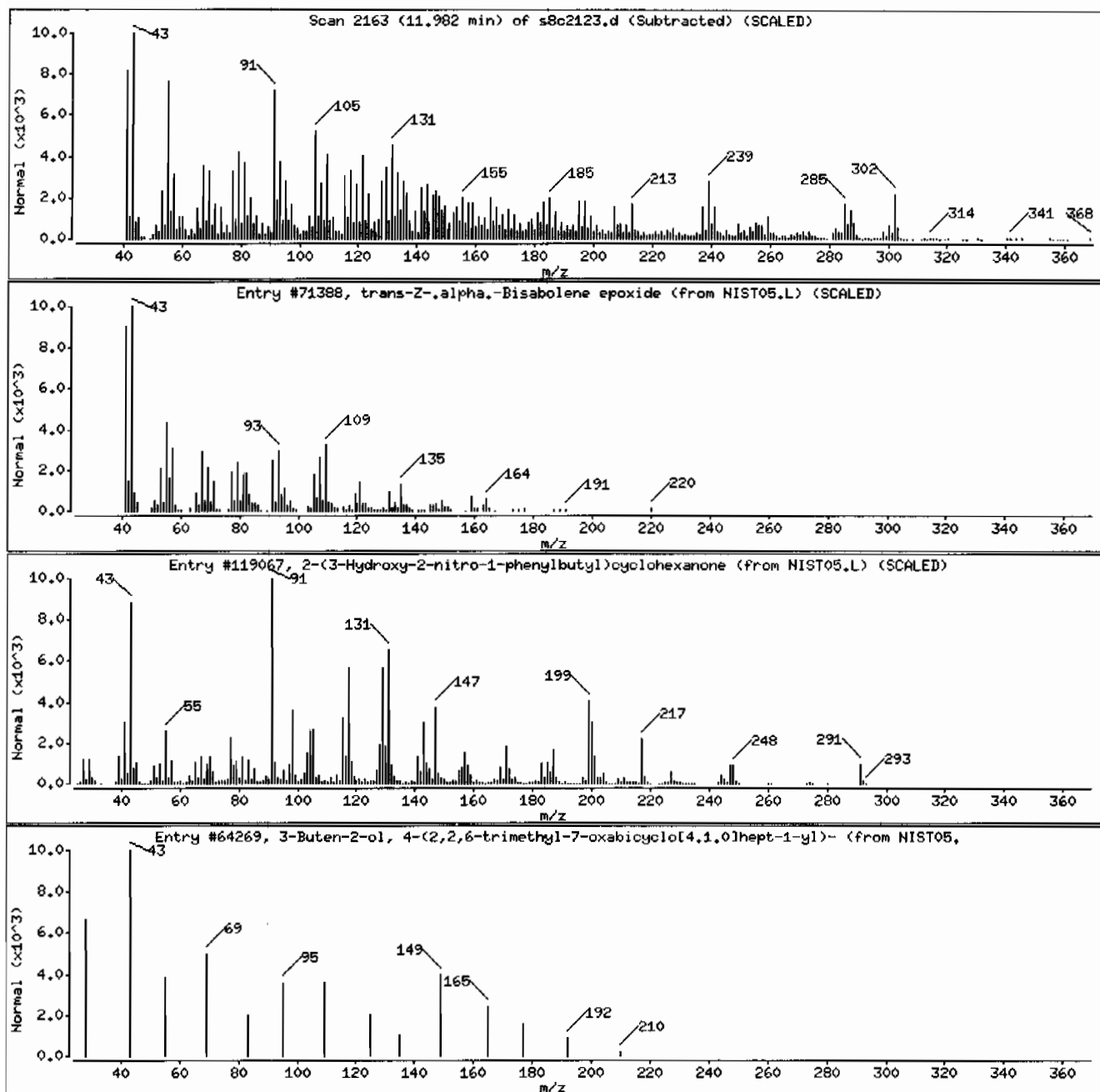
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
trans-Z,-alpha,-Bisabolene epoxide	1000131-71-1	NIST05.L	71388	11	C15H24O	220
2-(3-Hydroxy-2-nitro-1-phenylbutyl)cyclo	1000194-65-1	NIST05.L	119067	10	C16H21NO4	291
3-Buten-2-ol, 4-(2,2,6-trimethyl-7-oxabi	51138-08-0	NIST05.L	64269	10	C13H22O2	210



Date: 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 1248373015196192211SVH11ILANL

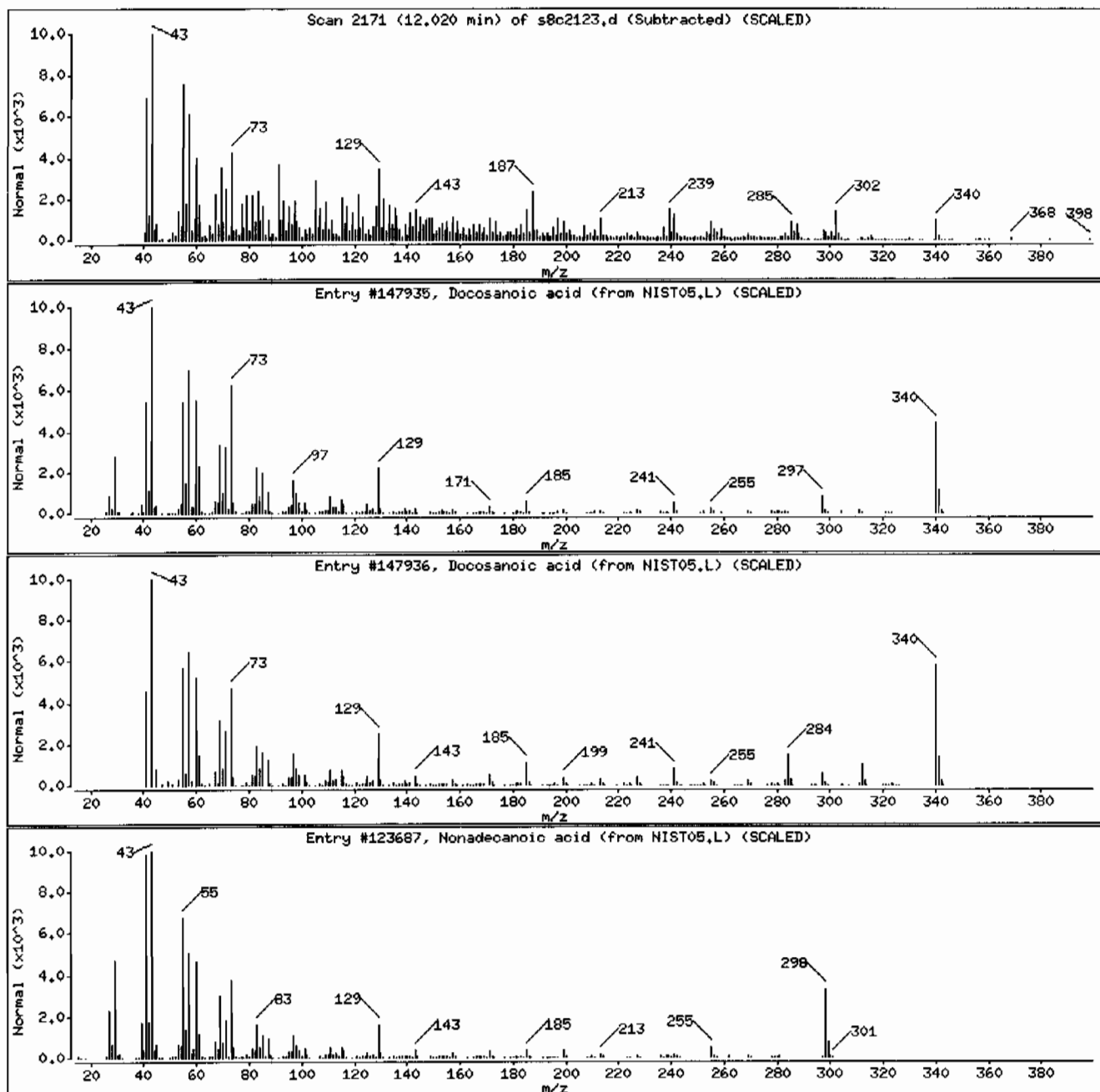
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Docosanoic acid	112-85-6	NIST05.L	147935	94	C22H44O2	340
Docosanoic acid	112-85-6	NIST05.L	147936	38	C22H44O2	340
Nonadecanoic acid	646-30-0	NIST05.L	123687	38	C19H38O2	298



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSDB.i

Sample Info: 1248373015196192211SVHI11LANL

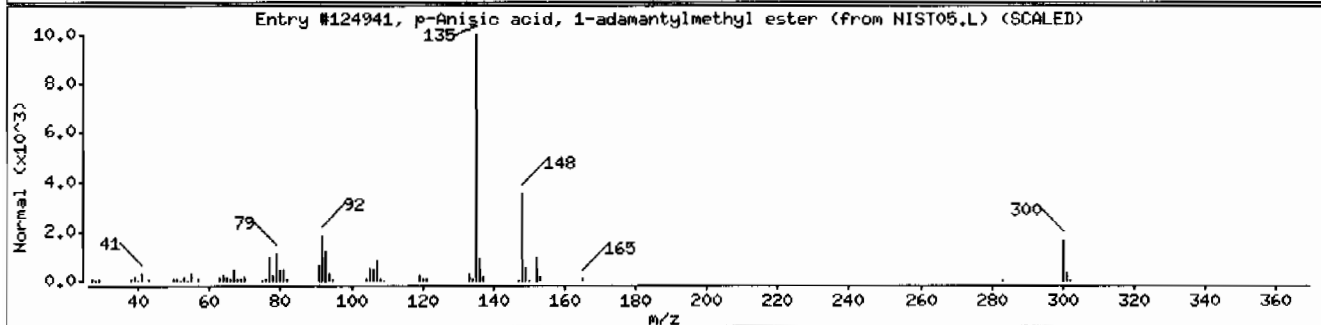
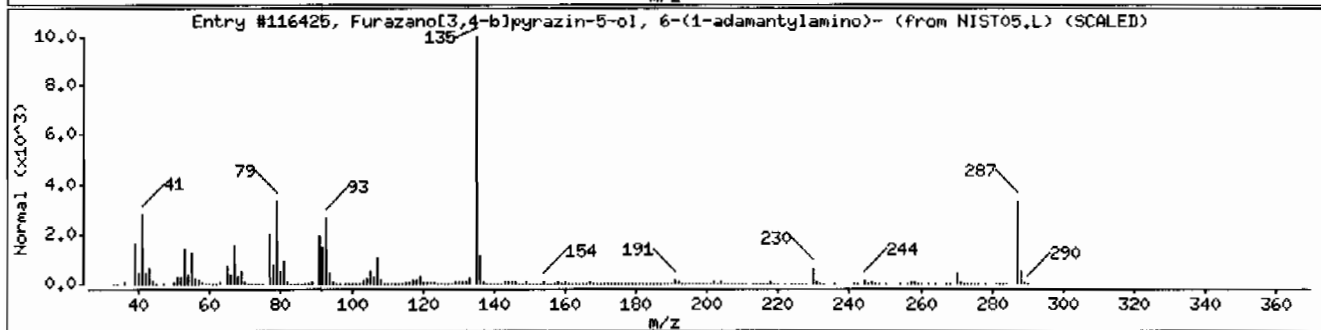
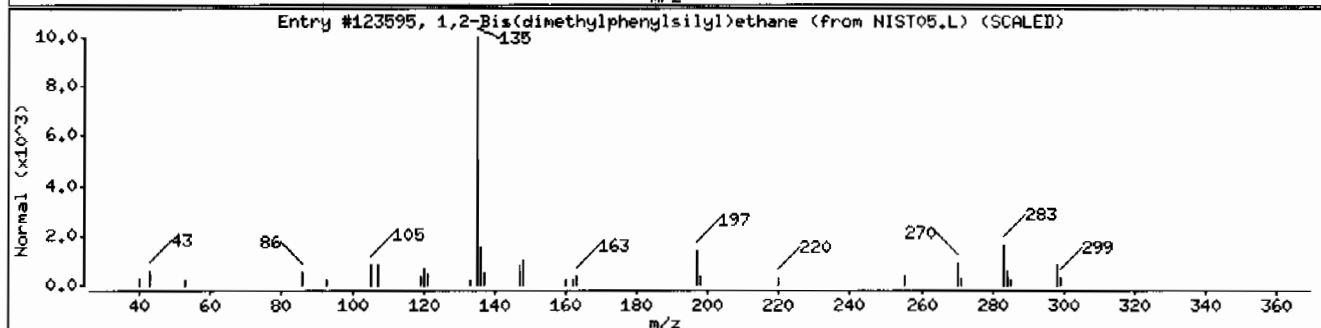
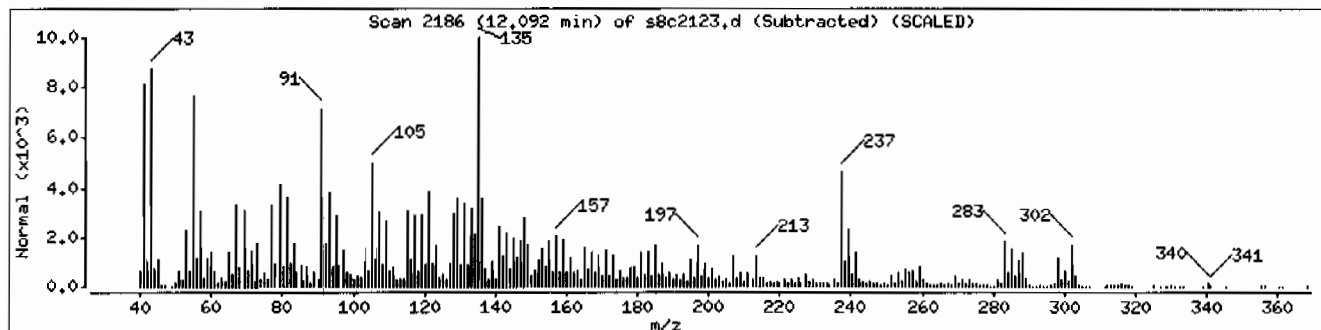
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(dimethylphenylsilyl)ethane	15527-45-4	NIST05.L	123595	42	C18H26Si2	298
Furazano[3,4-b]pyrazin-5-ol, 6-(1-adaman	1000263-25-7	NIST05.L	116425	42	C14H17N5O2	287
p-Anisic acid, 1-adamantylmethyl ester	1000292-45-9	NIST05.L	124941	38	C19H24O3	300



Date: 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: 1248373015196192211SVH11/LANL

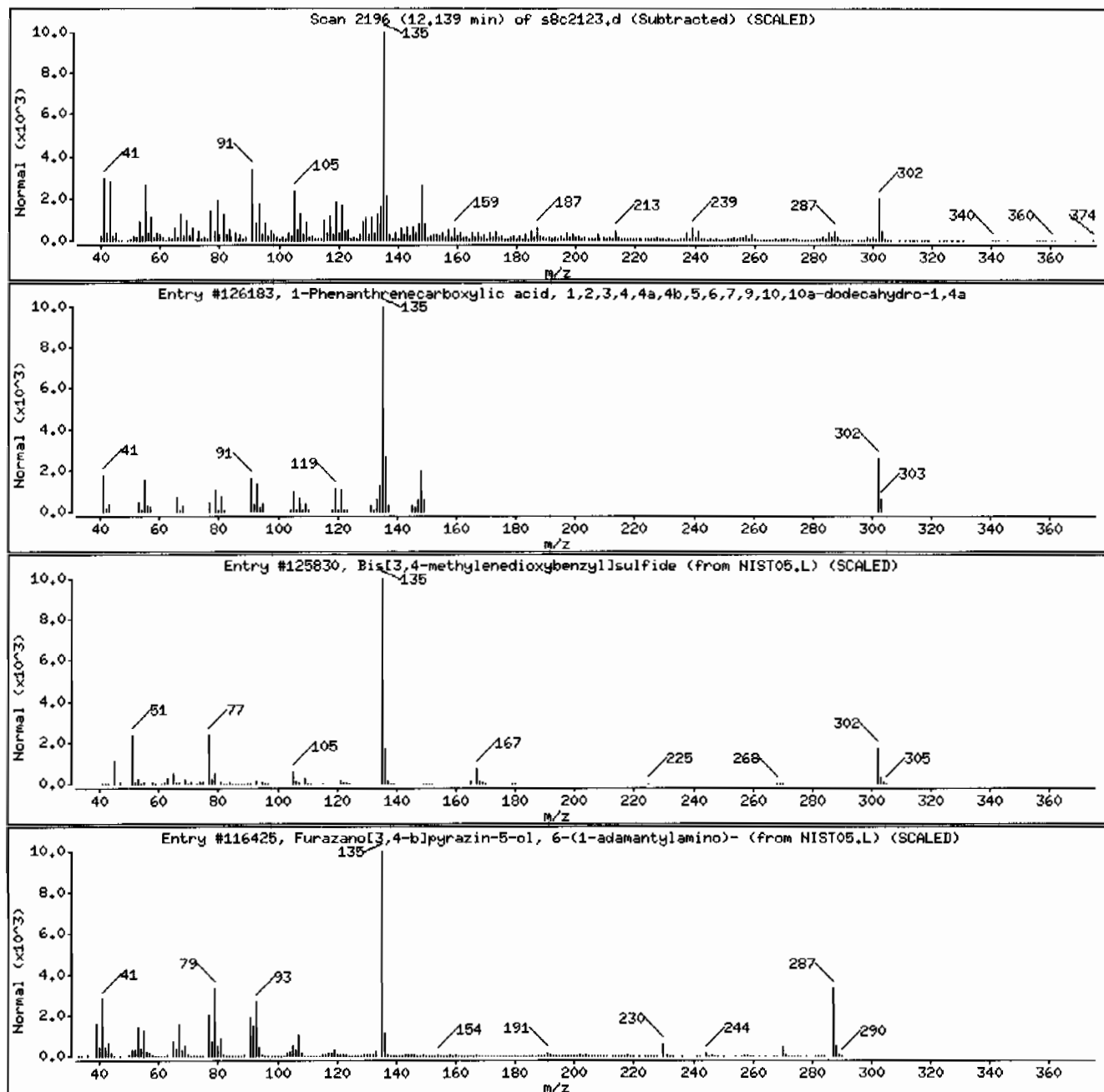
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	471-77-2	NIST05.L	126183	89	C20H30O2	302
Bis[3,4-methylenedioxybenzyl]sulfide	49647-48-5	NIST05.L	125830	52	C16H14O4S	302
Furazano[3,4-b]pyrazin-5-ol, 6-(1-adaman	1000263-25-7	NIST05.L	116425	50	C14H17N5O2	287



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: 1248373015196192211SVMI11LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

1H-Dibenzo[a,i]fluorene, eicosahydro-

CAS Number

Library

Entry

Quality

Formula

Weight

55256-24-1

NIST05.L

116264

25

C21H34

286

6,9-Octadecadienoic acid, methyl ester

56847-03-1

NIST05.L

118643

15

C19H30O2

290

Androst-5-en-3-ol, 4,4-dimethyl-, (3 β ,bet

7673-17-8

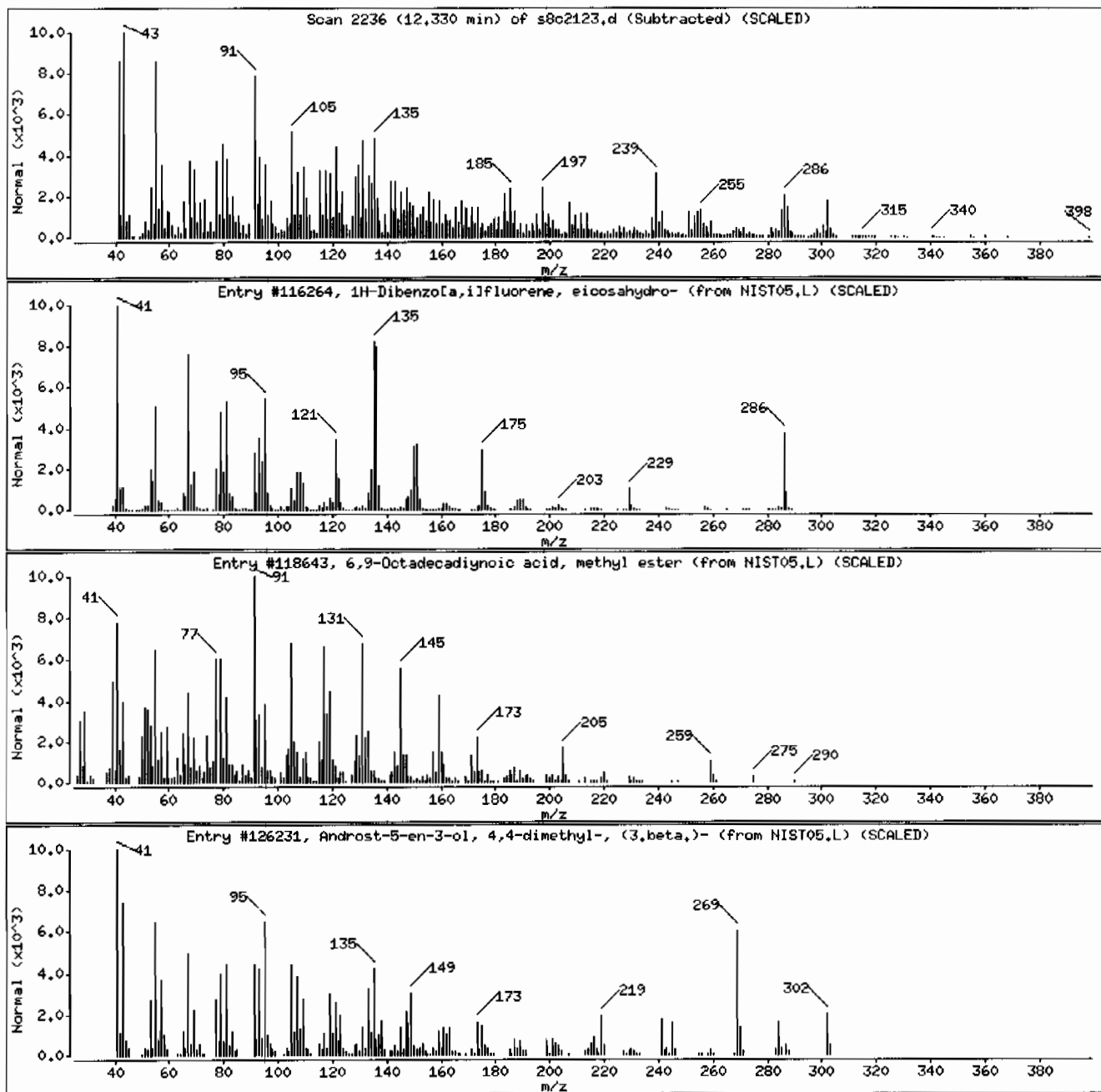
NIST05.L

126231

15

C21H34O

302



Date: 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 1248373015196192211SVH111LANL

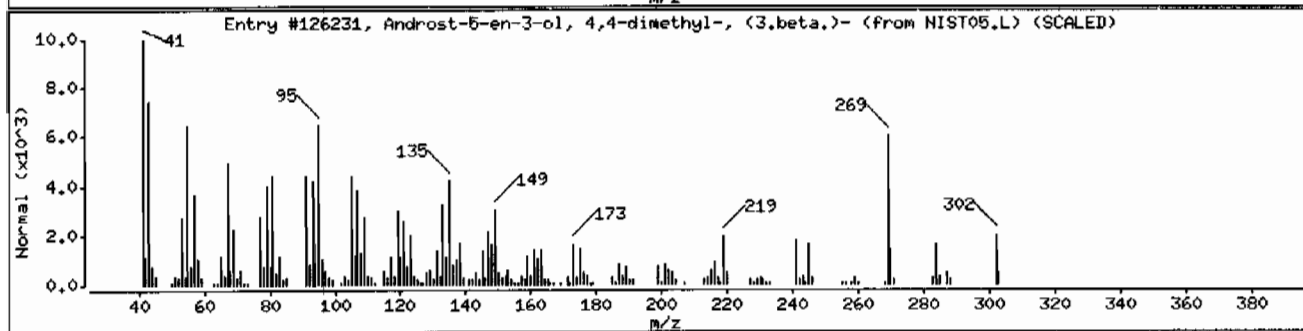
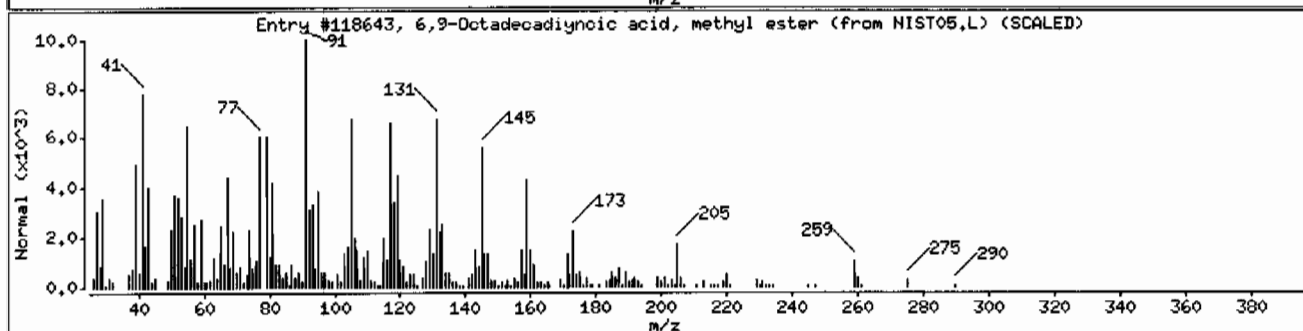
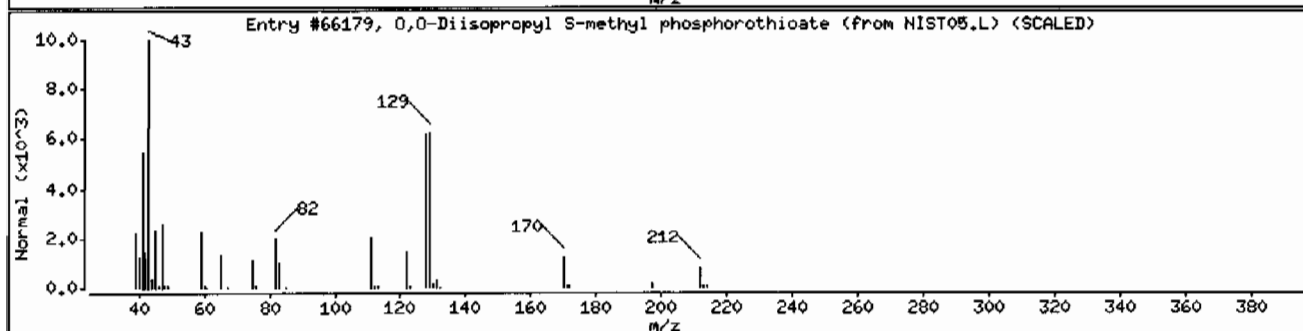
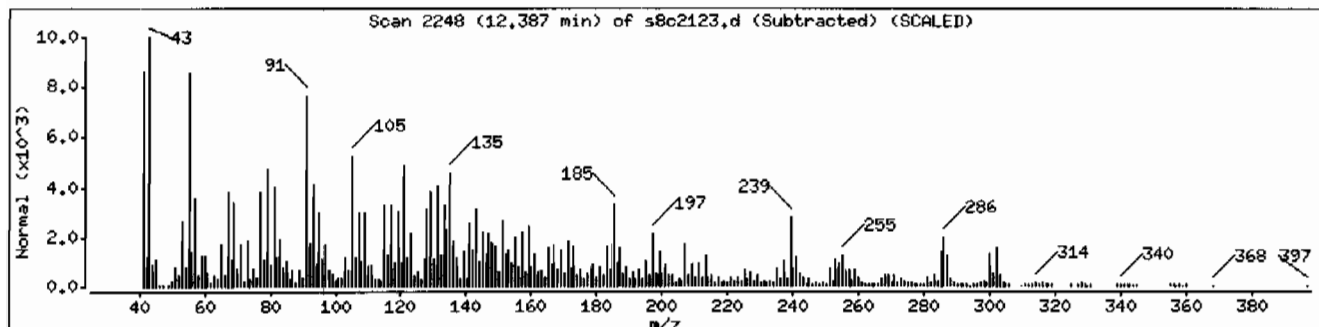
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
0,0-Diisopropyl S-methyl phosphorothioat	1000306-07-2	NIST05.L	66179	53	C7H17O3PS	212
6,9-Octadecadienoic acid, methyl ester	56847-03-1	NIST05.L	118643	42	C19H30O2	290
Androst-5-en-3-ol, 4,4-dimethyl-, (3,bet	7673-17-8	NIST05.L	126231	41	C21H34O	302



Date: 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 1248373015196192211SVH11LANL

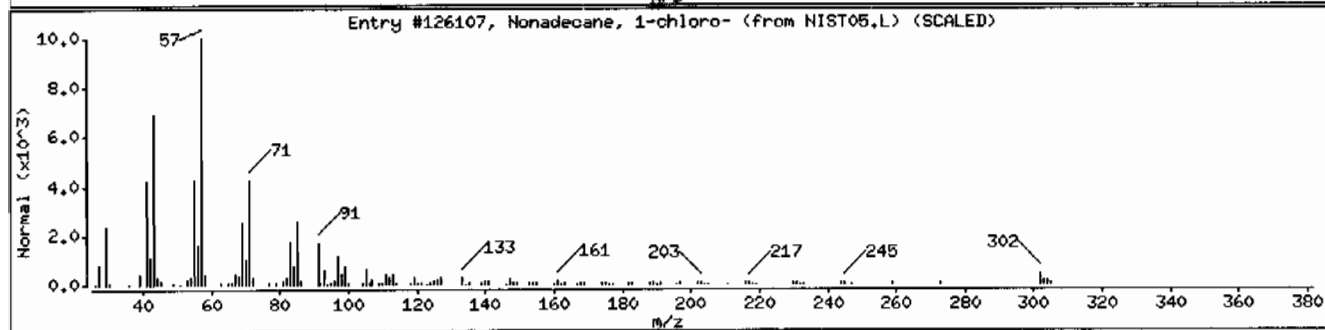
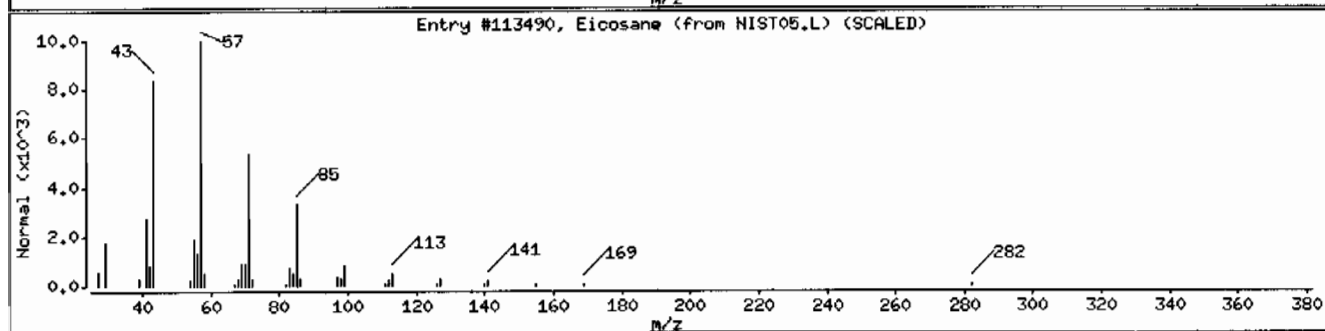
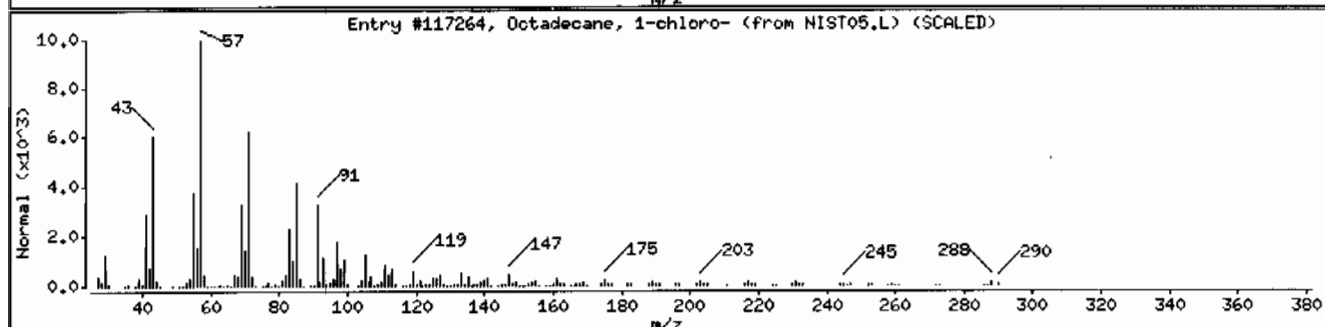
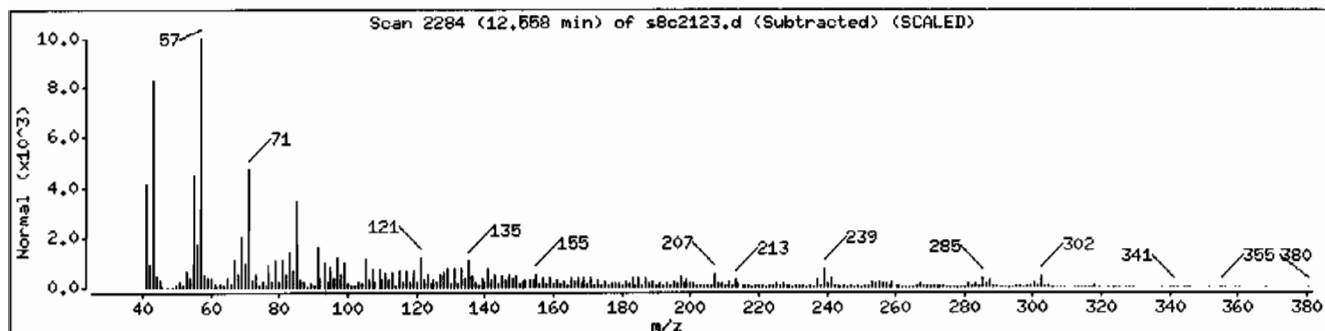
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	96	C18H37Cl	288
Eicosane	112-95-8	NIST05.L	113490	96	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	94	C19H39Cl	302



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 1248373015196192211SVH111LANL

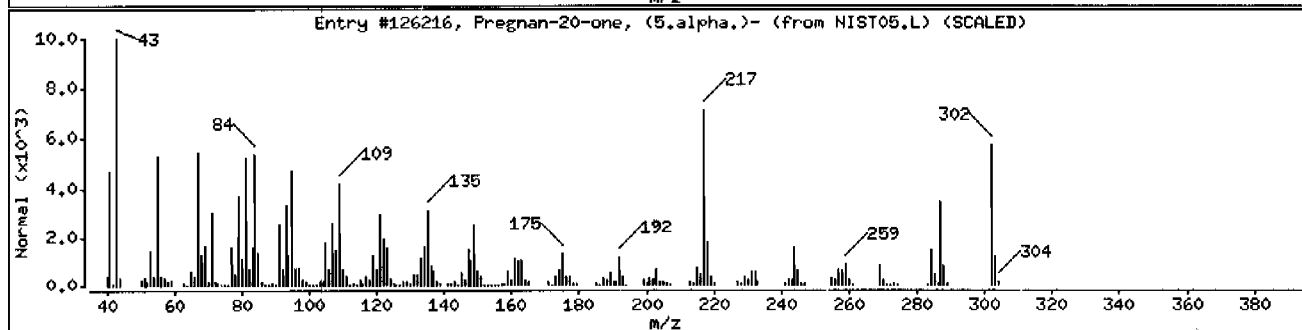
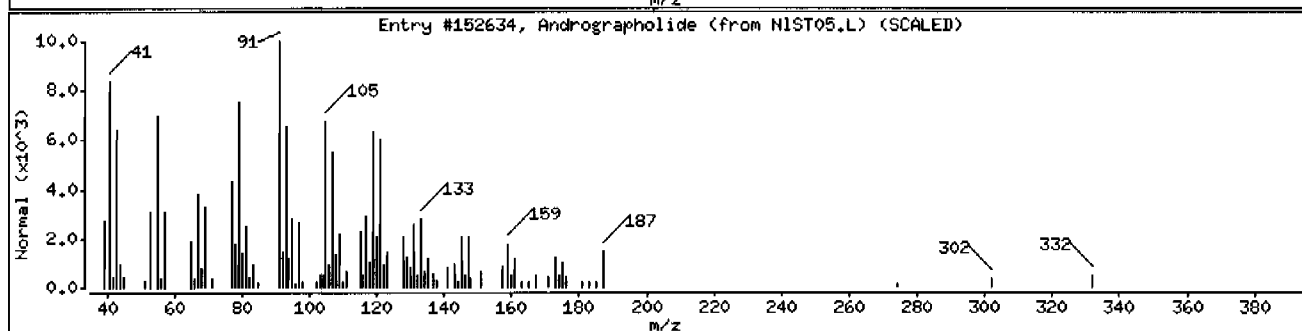
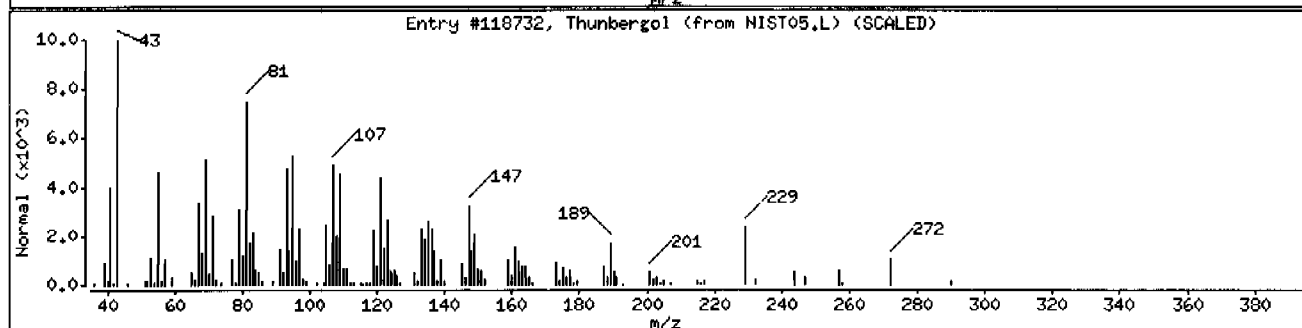
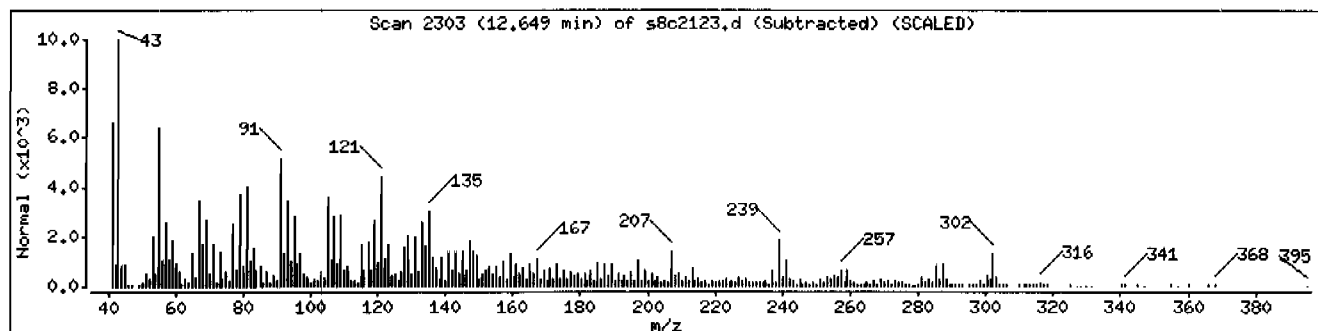
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thunbergol	25269-17-4	NIST05.L	118732	60	C20H34O	290
Andrographolide	5508-58-7	NIST05.L	152634	46	C20H30O5	350
Pregnan-20-one, (5.alpha.)-	848-62-4	NIST05.L	126216	46	C21H34O	302



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: 1248373015196192211SVH111LANL

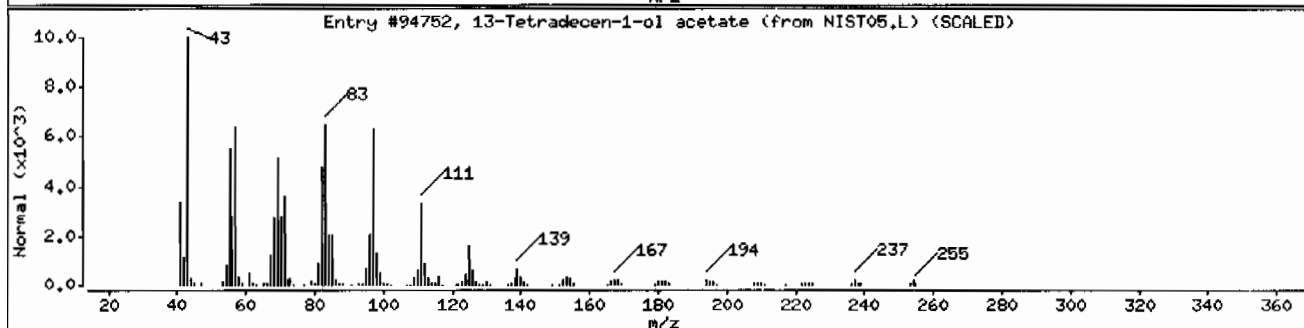
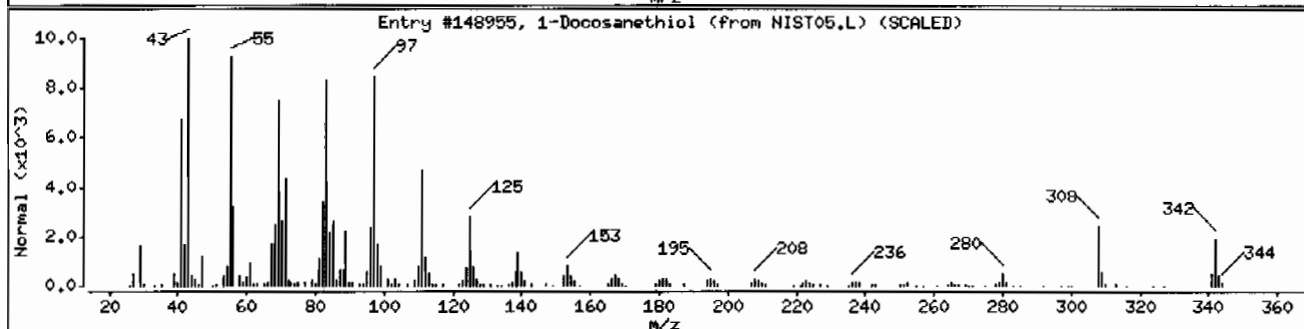
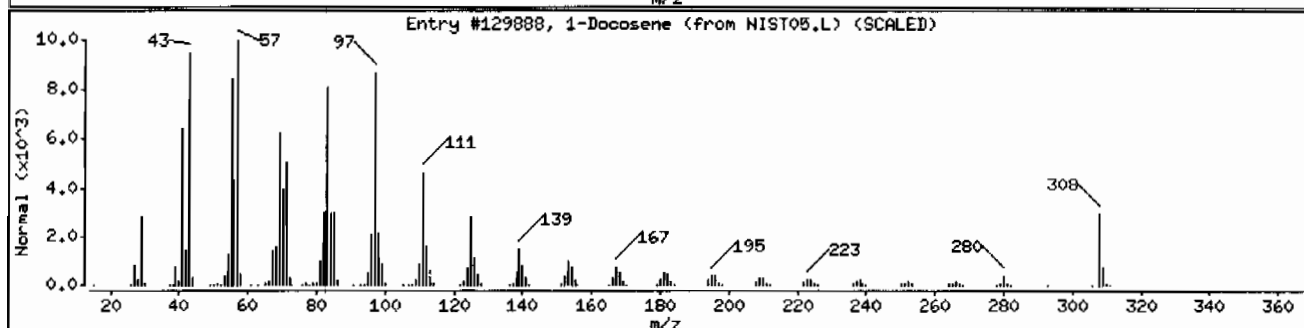
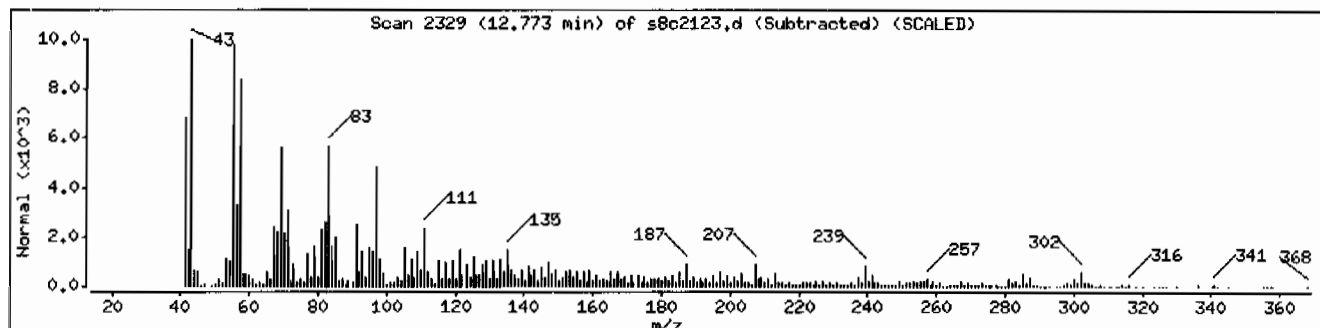
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129888	95	C22H44	308
1-Docosanethiol	7773-83-3	NIST05.L	148955	93	C22H46S	342
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	90	C16H30O2	254



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 1248373015196192211SVH11ILANL

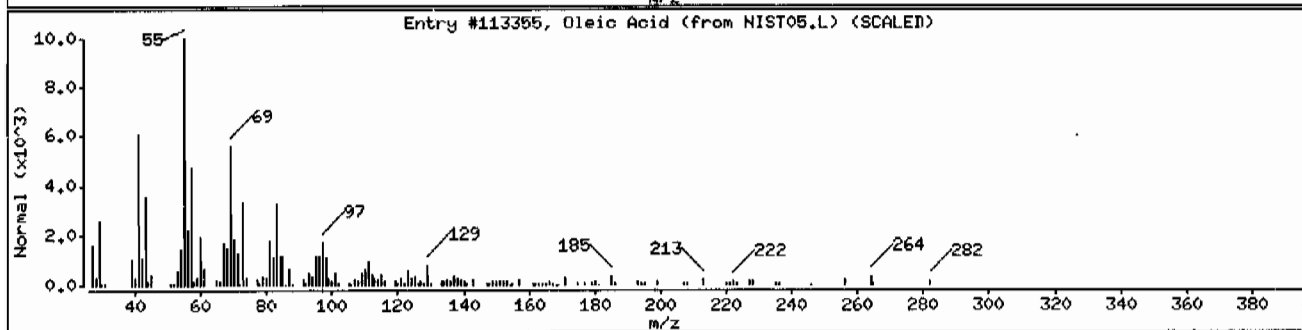
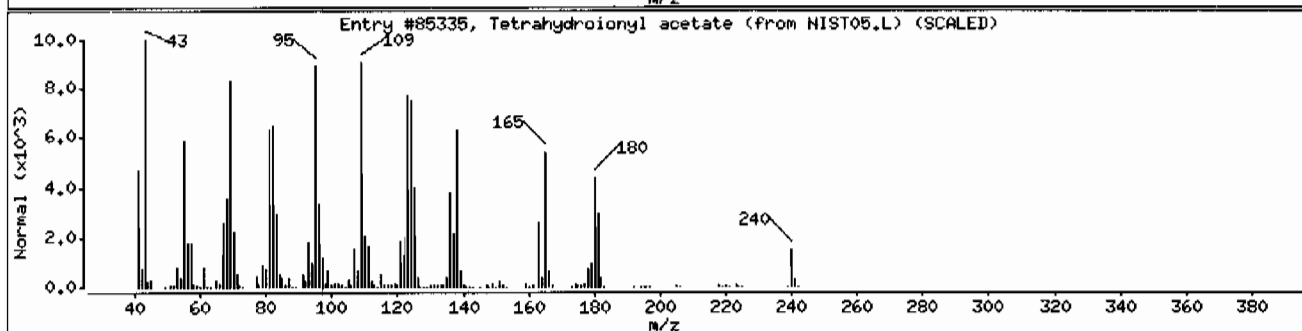
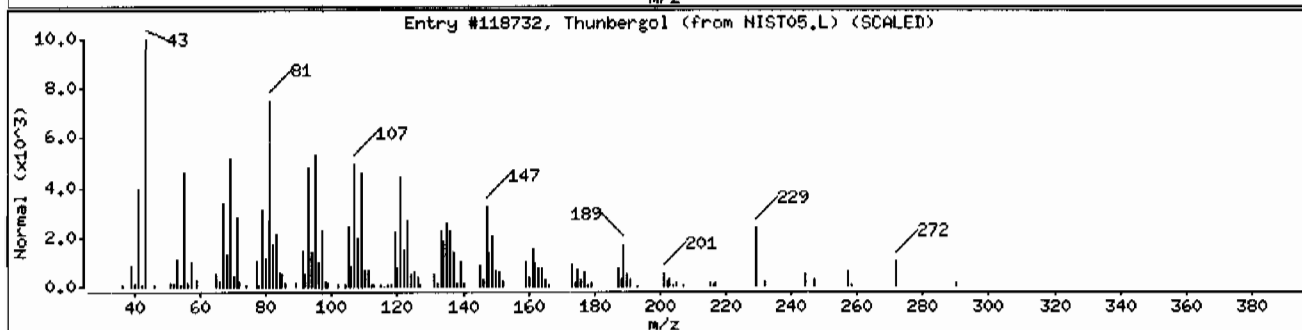
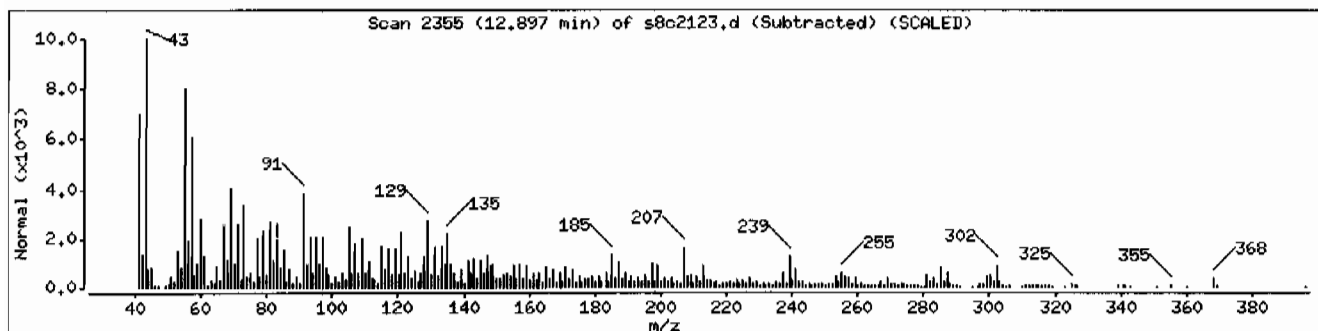
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thunbergol	25269-17-4	NIST05.L	118732	60	C20H34O	290
Tetrahydroionyl acetate	68555-59-9	NIST05.L	85335	53	C15H28O2	240
Oleic Acid	112-80-1	NIST05.L	113355	47	C18H34O2	282



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: HSD8.i

Sample Info: I248373015196192211SVH111LANL

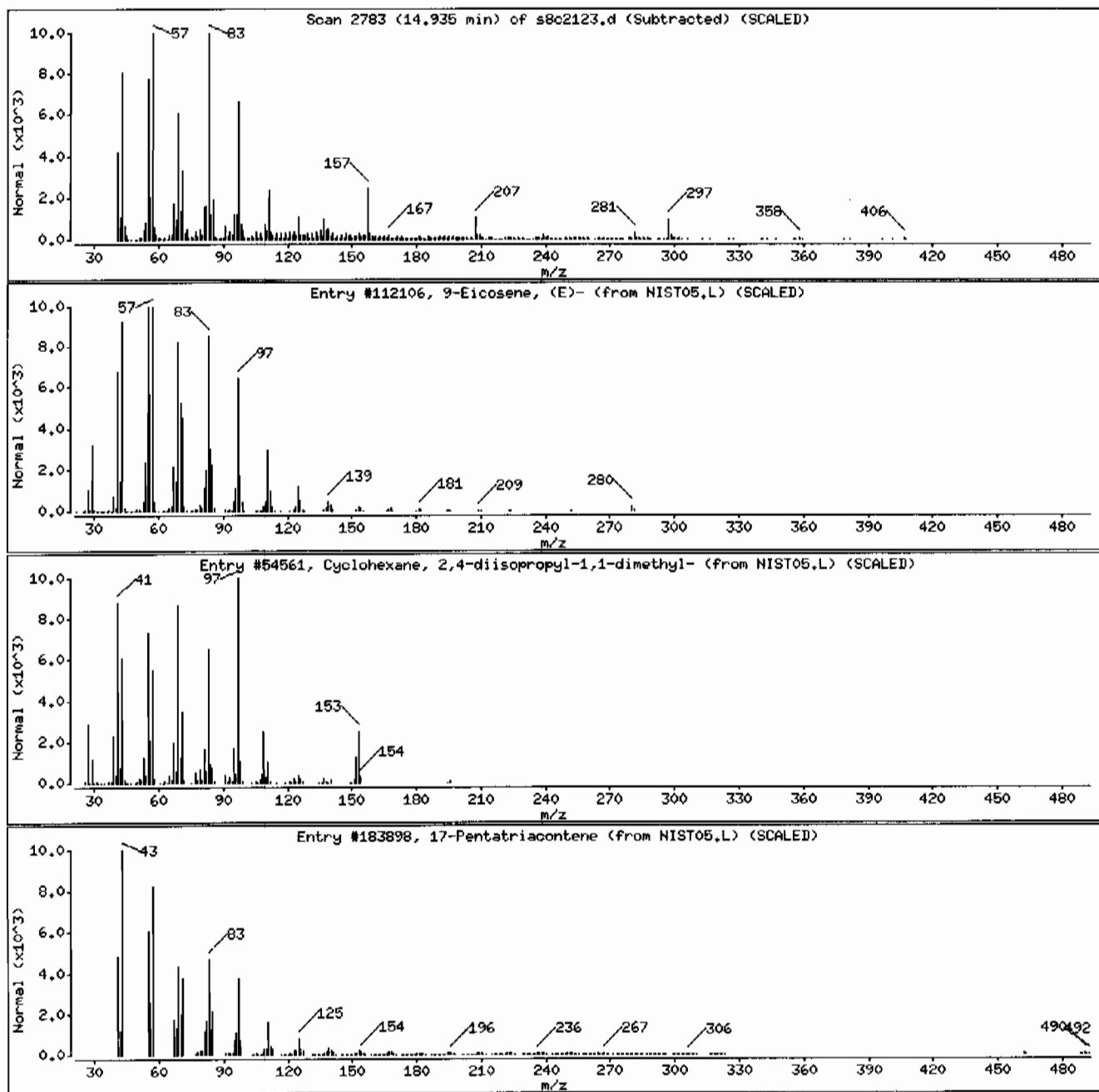
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Eicosene, (E)-	74685-29-3	NIST05.L	112106	53	C ₂₀ H ₄₀	280
Cyclohexane, 2,4-diisopropyl-1,1-dimethyl	1000149-60-5	NIST05.L	54561	38	C ₁₄ H ₂₈	196
17-Pentatriacontene	6971-40-0	NIST05.L	183898	38	C ₃₅ H ₇₀	491



Date : 21-MAR-2010 18:55

Client ID: RE36-10-7521

Instrument: MSD8.i

Sample Info: 1248373015196192211SVH111LANL

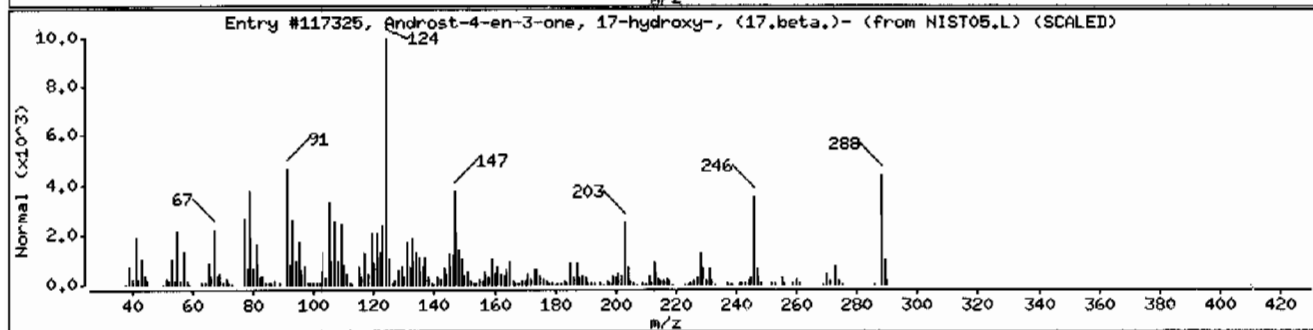
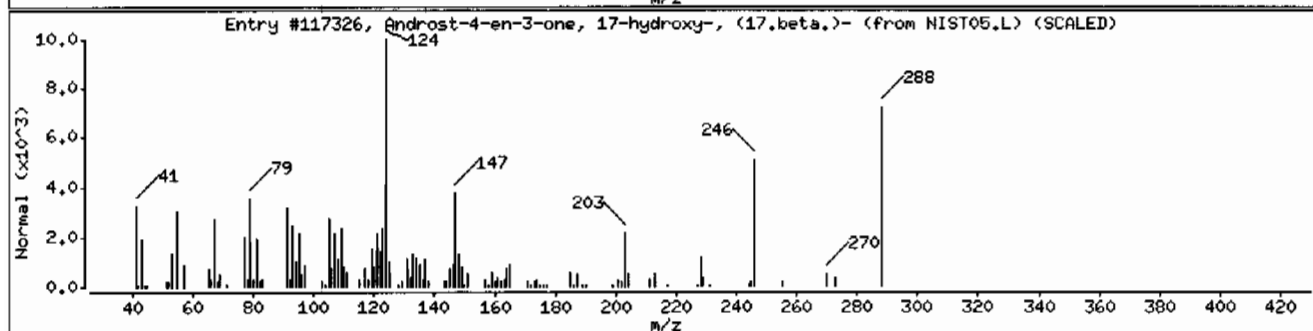
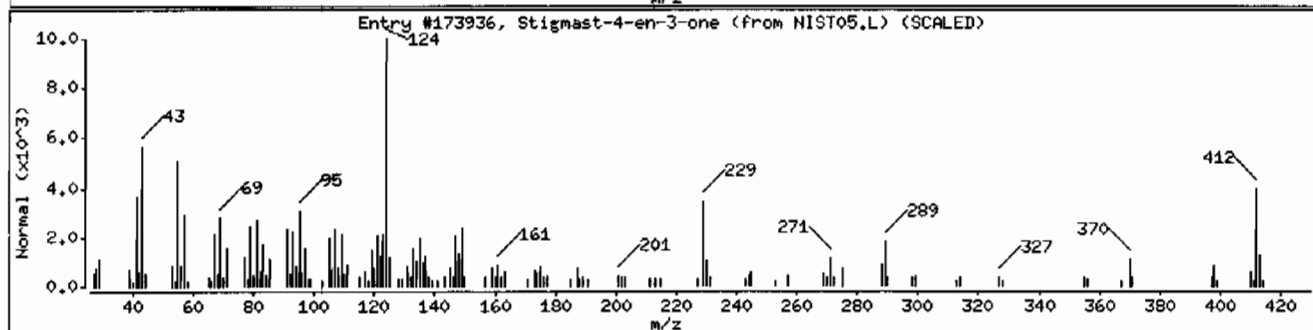
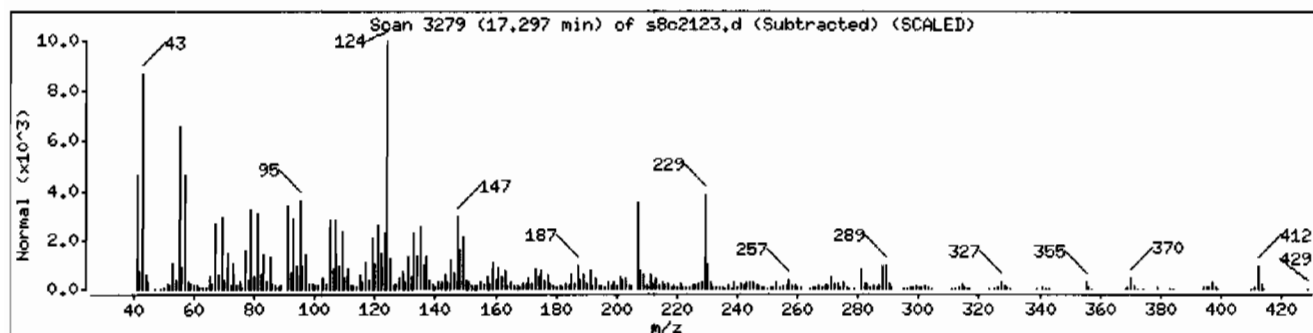
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	86	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17 β)	58-22-0	NIST05.L	117326	83	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17 β)	58-22-0	NIST05.L	117325	66	C19H28O2	288



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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373014	Date Received: 03/02/2010 08:50	%Moisture: 11.3
Client ID: RE36-10-7522	Client: LANL010	Project: LANL01004
Batch ID: 961922	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 18:25	Inst: MSD8.I	Dilution: 1
Prep Date: 03/07/2010 12:04	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s8c2122.d	Aliquot: 30.12 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	374	ug/kg	74.8	374
108-95-2	Phenol	U	374	ug/kg	74.8	374
95-57-8	2-Chlorophenol	U	374	ug/kg	74.8	374
106-46-7	1,4-Dichlorobenzene	U	374	ug/kg	74.8	374
621-64-7	N-Nitrosodipropylamine	U	374	ug/kg	74.8	374
59-50-7	4-Chloro-3-methylphenol	U	374	ug/kg	74.8	374
83-32-9	Acenaphthene	U	37.4	ug/kg	12.3	37.4
121-14-2	2,4-Dinitrotoluene	U	374	ug/kg	37.4	374
100-02-7	4-Nitrophenol	U	374	ug/kg	123	374
87-86-5	Pentachlorophenol	U	374	ug/kg	93.5	374
129-00-0	Pyrene	U	37.4	ug/kg	11.2	37.4
110-86-1	Pyridine	U	374	ug/kg	74.8	374
62-53-3	Aniline	U	374	ug/kg	112	374
111-44-4	bis(2-Chloroethyl) ether	U	374	ug/kg	74.8	374
541-73-1	1,3-Dichlorobenzene	U	374	ug/kg	74.8	374
100-51-6	Benzyl alcohol	U	374	ug/kg	112	374
95-50-1	1,2-Dichlorobenzene	U	374	ug/kg	74.8	374
108-60-1	bis(2-Chloroisopropyl)ether	U	374	ug/kg	74.8	374
95-48-7	o-Cresol	U	374	ug/kg	74.8	374
65794-96-9	m,p-Cresols	U	374	ug/kg	112	374
67-72-1	Hexachloroethane	U	374	ug/kg	74.8	374
98-95-3	Nitrobenzene	U	374	ug/kg	74.8	374
78-59-1	Isophorone	U	374	ug/kg	74.8	374
88-75-5	2-Nitrophenol	U	374	ug/kg	74.8	374
105-67-9	2,4-Dimethylphenol	U	374	ug/kg	131	374
111-91-1	bis(2-Chloroethoxy)methane	U	374	ug/kg	74.8	374
120-83-2	2,4-Dichlorophenol	U	374	ug/kg	74.8	374
65-85-0	Benzoic acid	U	748	ug/kg	187	748
91-20-3	Naphthalene	U	37.4	ug/kg	11.2	37.4
106-47-8	4-Chloroaniline	U	374	ug/kg	74.8	374
87-68-3	Hexachlorobutadiene	U	374	ug/kg	74.8	374
91-57-6	2-Methylnaphthalene	U	37.4	ug/kg	7.48	37.4
77-47-4	Hexachlorocyclopentadiene	U	374	ug/kg	74.8	374
88-06-2	2,4,6-Trichlorophenol	U	374	ug/kg	74.8	374
95-95-4	2,4,5-Trichlorophenol	U	374	ug/kg	74.8	374
91-58-7	2-Chloronaphthalene	U	37.4	ug/kg	12.3	37.4
88-74-4	2-Nitroaniline	U	374	ug/kg	74.8	374
	<i>o-Nitroaniline</i>					
99-09-2	3-Nitroaniline	U	374	ug/kg	74.8	374

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

SDG Number: 10-2154
Lab Sample ID: 248373014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7522
Batch ID: 961922
Run Date: 03/21/2010 18:25
Prep Date: 03/07/2010 12:04
Data File: s8c2122.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	374	ug/kg	74.8	374
606-20-2	2,6-Dinitrotoluene	U	374	ug/kg	37.4	374
208-96-8	Acenaphthylene	U	37.4	ug/kg	11.2	37.4
51-28-5	2,4-Dinitrophenol	U	748	ug/kg	142	748
132-64-9	Dibenzofuran	U	374	ug/kg	74.8	374
84-66-2	Diethylphthalate	U	374	ug/kg	74.8	374
86-73-7	Fluorene	U	37.4	ug/kg	11.2	37.4
7005-72-3	4-Chlorophenylphenylether	U	374	ug/kg	74.8	374
534-52-1	2-Methyl-4,6-dinitrophenol	U	374	ug/kg	74.8	374
100-01-6	4-Nitroaniline	U	374	ug/kg	112	374
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	374	ug/kg	74.8	374
122-66-7	Azobenzene	U	374	ug/kg	74.8	374
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	374	ug/kg	74.8	374
118-74-1	Hexachlorobenzene	U	374	ug/kg	74.8	374
85-01-8	Phenanthrene	U	37.4	ug/kg	11.2	37.4
120-12-7	Anthracene	U	37.4	ug/kg	7.48	37.4
84-74-2	Di-n-butylphthalate	U	374	ug/kg	74.8	374
206-44-0	Fluoranthene	U	37.4	ug/kg	11.2	37.4
85-68-7	Butylbenzylphthalate	U	374	ug/kg	74.8	374
56-55-3	Benzo(a)anthracene	U	37.4	ug/kg	11.2	37.4
91-94-1	3,3'-Dichlorobenzidine	U	374	ug/kg	112	374
218-01-9	Chrysene	U	37.4	ug/kg	11.2	37.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	374	ug/kg	74.8	374
117-84-0	Di-n-octylphthalate	U	374	ug/kg	74.8	374
205-99-2	Benzo(b)fluoranthene	U	37.4	ug/kg	11.2	37.4
207-08-9	Benzo(k)fluoranthene	U	37.4	ug/kg	11.2	37.4
50-32-8	Benzo(a)pyrene	U	37.4	ug/kg	11.2	37.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.4	ug/kg	11.2	37.4
53-70-3	Dibenzo(a,h)anthracene	U	37.4	ug/kg	11.2	37.4
191-24-2	Benzo(ghi)perylene	U	37.4	ug/kg	11.2	37.4
120-82-1	1,2,4-Trichlorobenzene	U	374	ug/kg	74.8	374

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.71	2500	ug/kg		J
	Unknown Aldol Condensate	2.93	205	ug/kg		JA

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373014	Date Received: 03/02/2010 08:50	%Moisture: 11.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7522	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.1	Dilution: 1
Run Date: 03/21/2010 18:25	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s8c2122.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	13.36	473	ug/kg		J
70038-20-9	7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	14.24	606	ug/kg	90	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2122.d
Lab Smp Id: 248373014 Client Smp ID: RE36-10-7522
Inj Date : 21-MAR-2010 18:25
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248373014|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	11.25430	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301	(1.000)	316155	40.0000	
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1244727	40.0000	
* 46 Acenaphthene-d10	164	7.401	7.406	(1.000)	749286	40.0000	
* 67 Phenanthrene-d10	188	8.997	8.997	(1.000)	1257420	40.0000	
* 91 Chrysene-d12	240	11.868	11.868	(1.000)	961441	40.0000	
* 98 Perylene-d12	264	13.878	13.878	(1.000)	595746	40.0000	
\$ 3 2-Fluorophenol	112	3.173	3.158	(0.738)	572645	76.7211	2870
\$ 5 Phenol-d5	99	3.939	3.930	(0.916)	684139	73.4966	2750
\$ 20 Nitrobenzene-d5	82	4.825	4.830	(0.869)	321026	36.2810	1360
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.903)	700940	31.7812	1190
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.115)	170237	68.7308	2570
\$ 81 p-Terphenyl-d14	244	10.711	10.706	(0.902)	755645	43.6550	1630

ION RATIO REPORT

SV REPORT

Data file: s8c2122.d

Report Date: 03/22/2010 07:20

Lab. ID: 248373014

SampleType: SAMPLE

Injection Date: 21-MAR-2010 18:25

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373014|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	35473	3.94	4.00	80-120	100	()
93	179	3.94	4.00	213-273	1	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	41951	4.83	4.68	80-120	100	(T)
42	22788	4.83	4.68	31- 91	54	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	655	5.31	5.28	80-120	100	()
122	626	5.35	5.28	64-124	96	(T)
77	618	5.33	5.28	47-107	94	()

30	Naphthalene		CAS#: 91-20-3			
128	220	5.58	5.58	80-120	100	()
129	135	5.56	5.58	0- 41	61	(Q)
127	0	0.00	5.58	0- 43	0	(T)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	97383	7.40	7.18	80-120	100	(T)
63	1485	7.40	7.18	32- 92	2	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	97383	7.40	7.61	80-120	100	(T)
89	1327	7.41	7.61	47-107	1	(QT)
63	1485	7.40	7.61	26- 86	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	540	8.25	8.04	80-120	100	(T)
105	1469	8.24	8.04	14- 74	272	(QT)
51	1261	8.24	8.04	26- 86	233	(QT)

68 Phenanthrene				CAS#: 85-01-8		
178	828	9.02	9.02	80-120	100	()
179	279	9.02	9.02	0- 45	34	()
176	107	9.02	9.02	0- 49	13	()

92 Chrysene				CAS#: 218-01-9		
228	401	11.89	11.90	80-120	100	()
229	227	11.90	11.90	0- 49	57	(Q)
226	138	11.85	11.90	0- 59	35	()

94 Di-n-octylphthalate				CAS#: 117-84-0		
149	372	12.73	12.73	80-120	100	()
43	908	12.73	12.73	0- 41	244	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD8.i/s032110.b/s8c2122.d
Report Date: 22-Mar-2010 09:56

Page 1

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2122.d
Lab Smp Id: 248373014 Client Smp ID: RE36-10-7522
Inj Date : 21-MAR-2010 18:25
Operator : nagl Inst ID: MSD8.i
Smp Info : |248373014|961922|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	11.25430	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.301	1899038	40.000
* 98 Perylene-d12	13.878	1734489	40.000

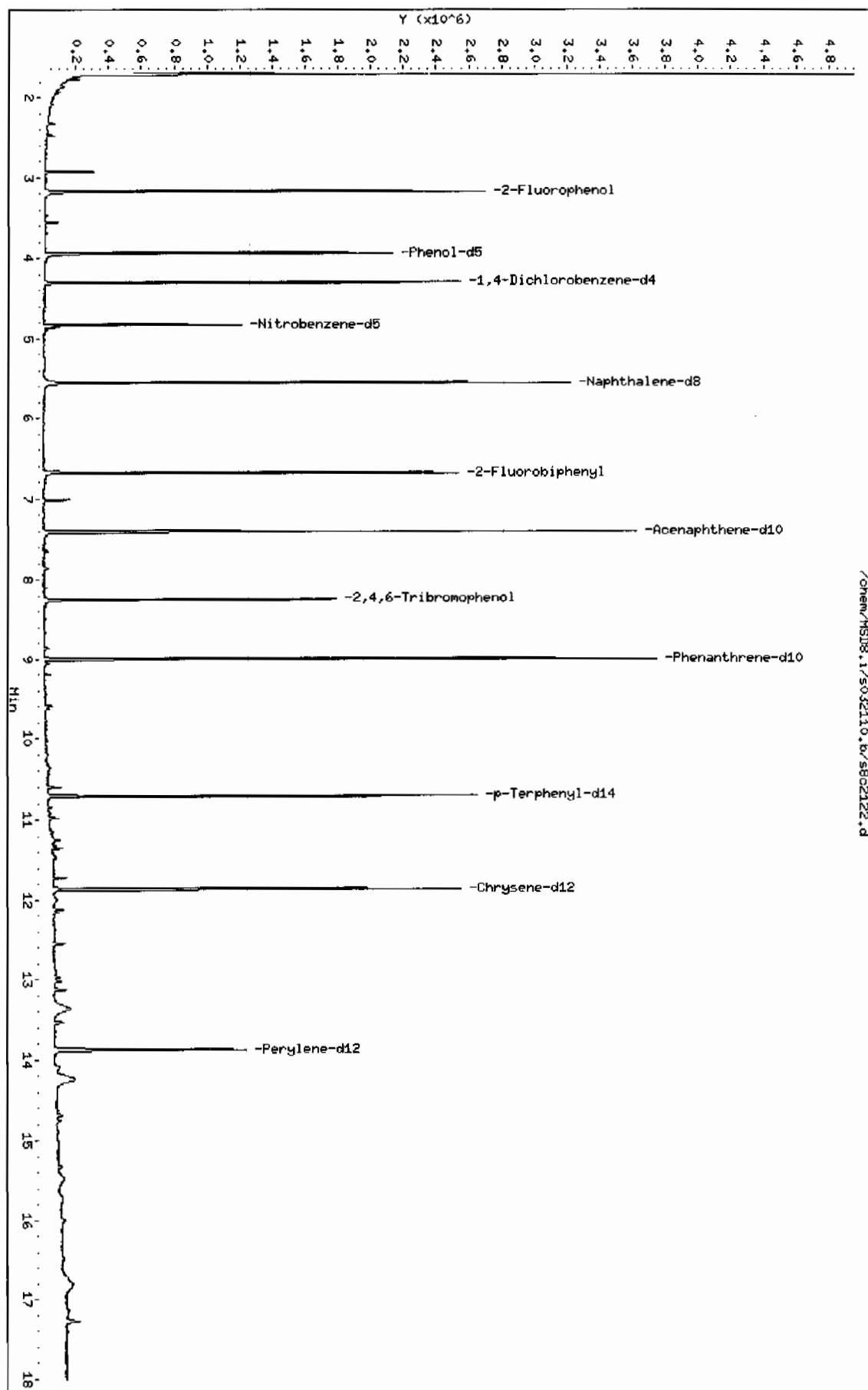
CONCENTRATIONS				QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY CPND #
=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:		
1.706	3167841	66.7251459	2500	0		0 10

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.930	259585	5.46771712	204	0		0	10
Unknown					CAS #:		
13.363	548569	12.6508456	473	0		0	98
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet					CAS #: 70038-20-9		
14.244	702560	16.2021259	606	90	NIST05.L	69982	98

Data File: /chem/MSD8.i/s032110.b/s02122.d
Date: 21-MAR-2010 18:25
Client ID: RE36-10-7522
Sample Info: 12483730141961922111SVH11.LANL
Volume Injected (uL): 0.5
Column phase: JSM DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20

/chem/MSD8.i/s032110.b/s02122.d



Date: 21-MAR-2010 18:25

Client ID: RE36-10-7522

Instrument: MSD8.i

Sample Info: 12483730141961922111SVH111LANL

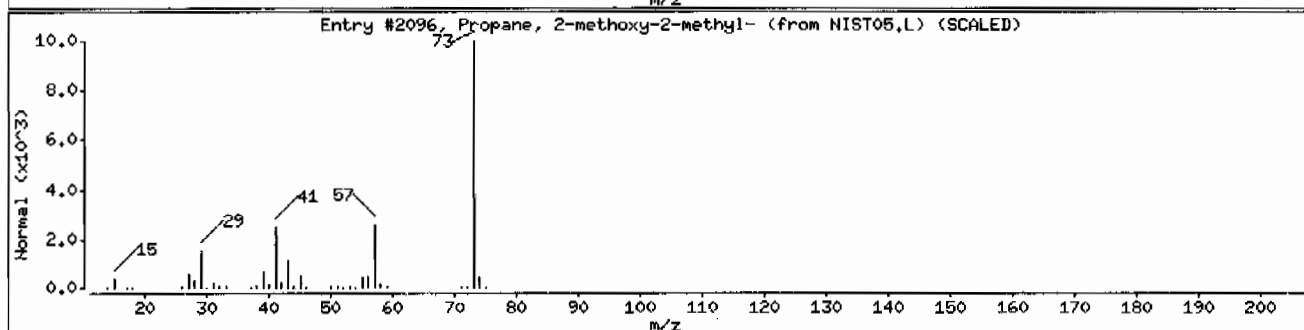
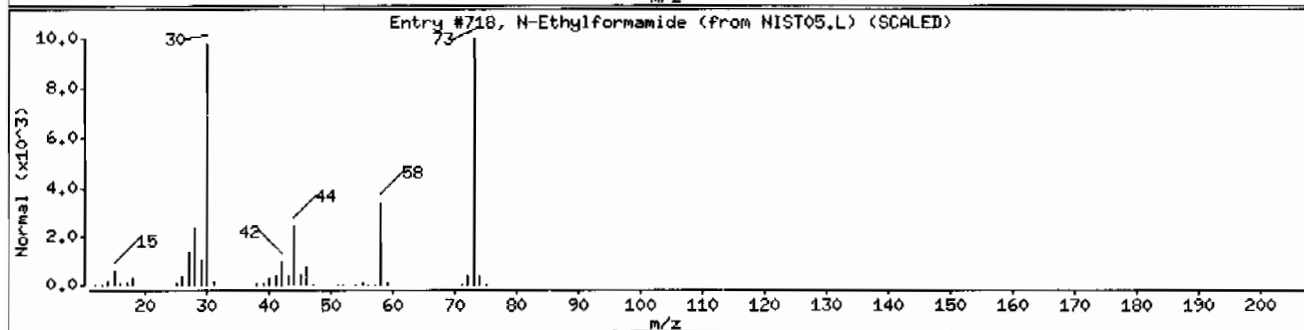
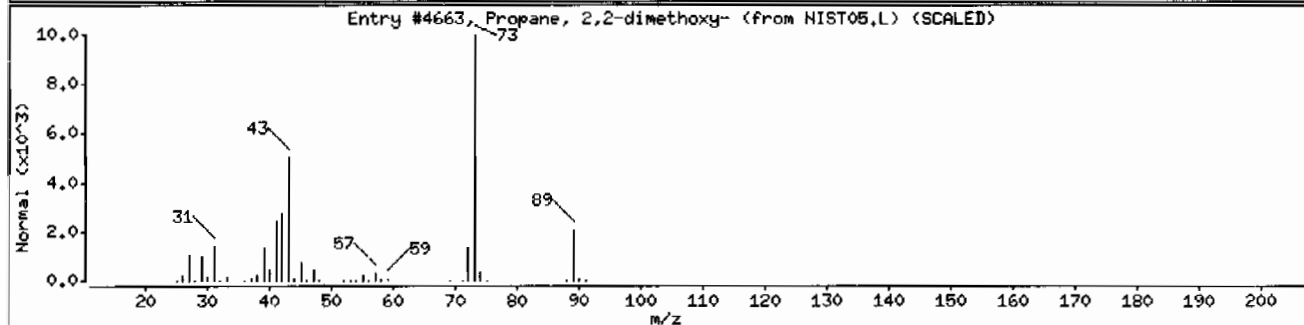
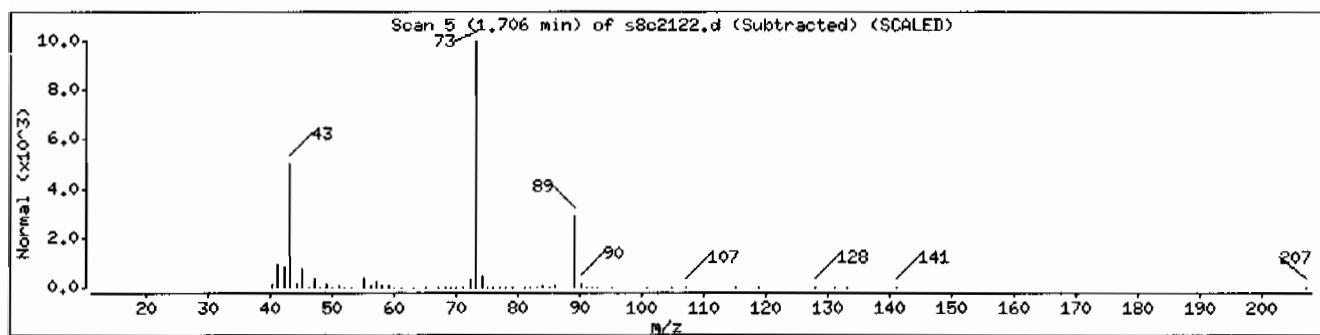
Volume Injected (uL): 0.8

Operator: nag1

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	38	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	25	C3H7NO	73
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2096	9	C5H12O	88



Date : 21-MAR-2010 18:25

Client ID: RE36-10-7522

Instrument: MSD8.i

Sample Info: 1248373014196192211ISVM11ILANL

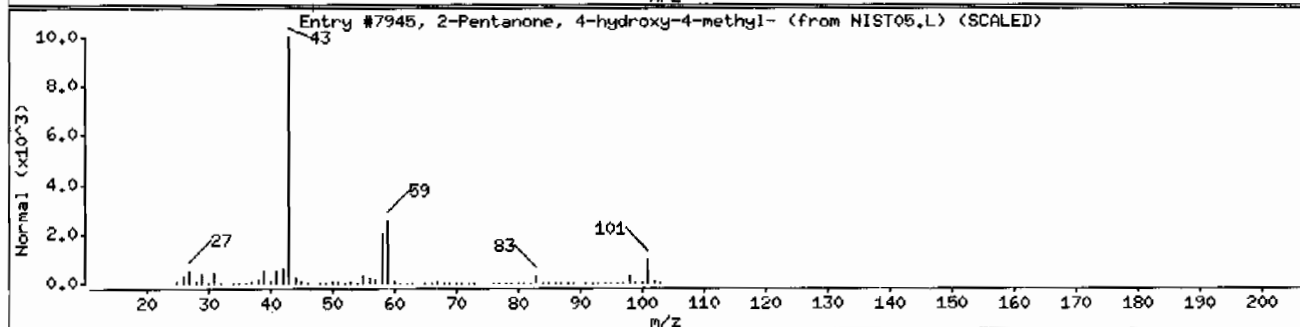
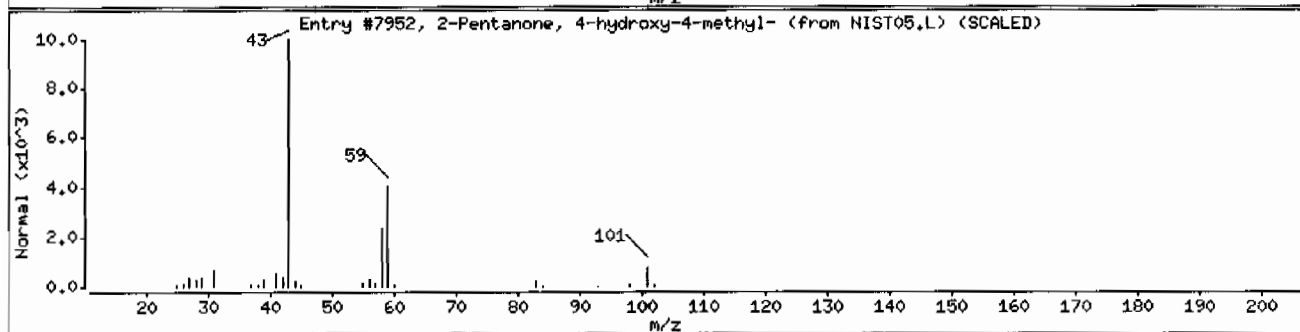
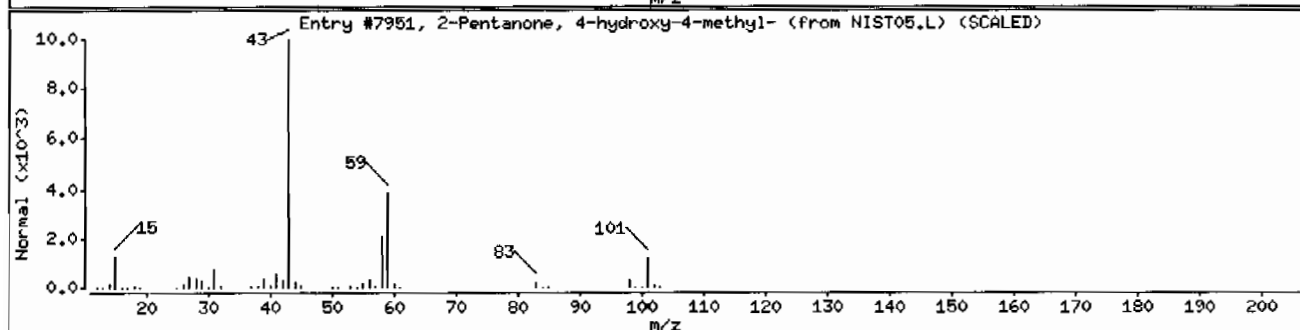
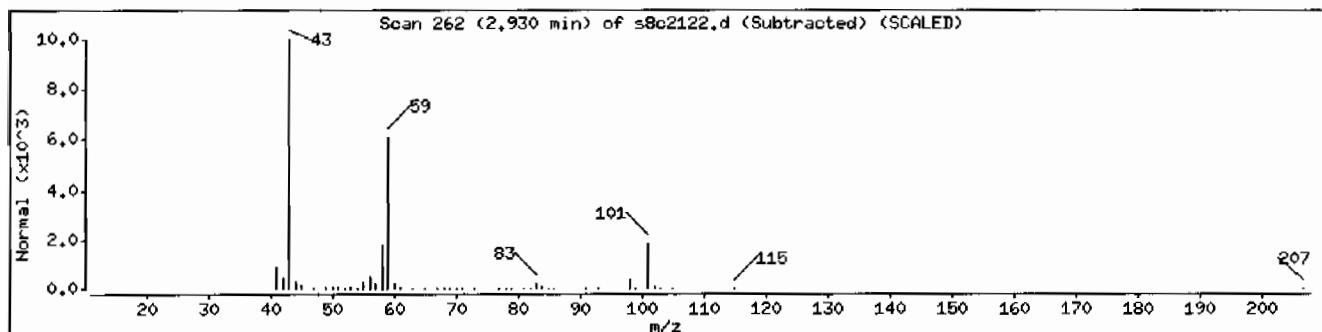
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	40	C6H12O2	116



Date: 21-MAR-2010 18:25

Client ID: RE36-10-7522

Instrument: MSD8.i

Sample Info: 12483730141961922111SVH111LANL

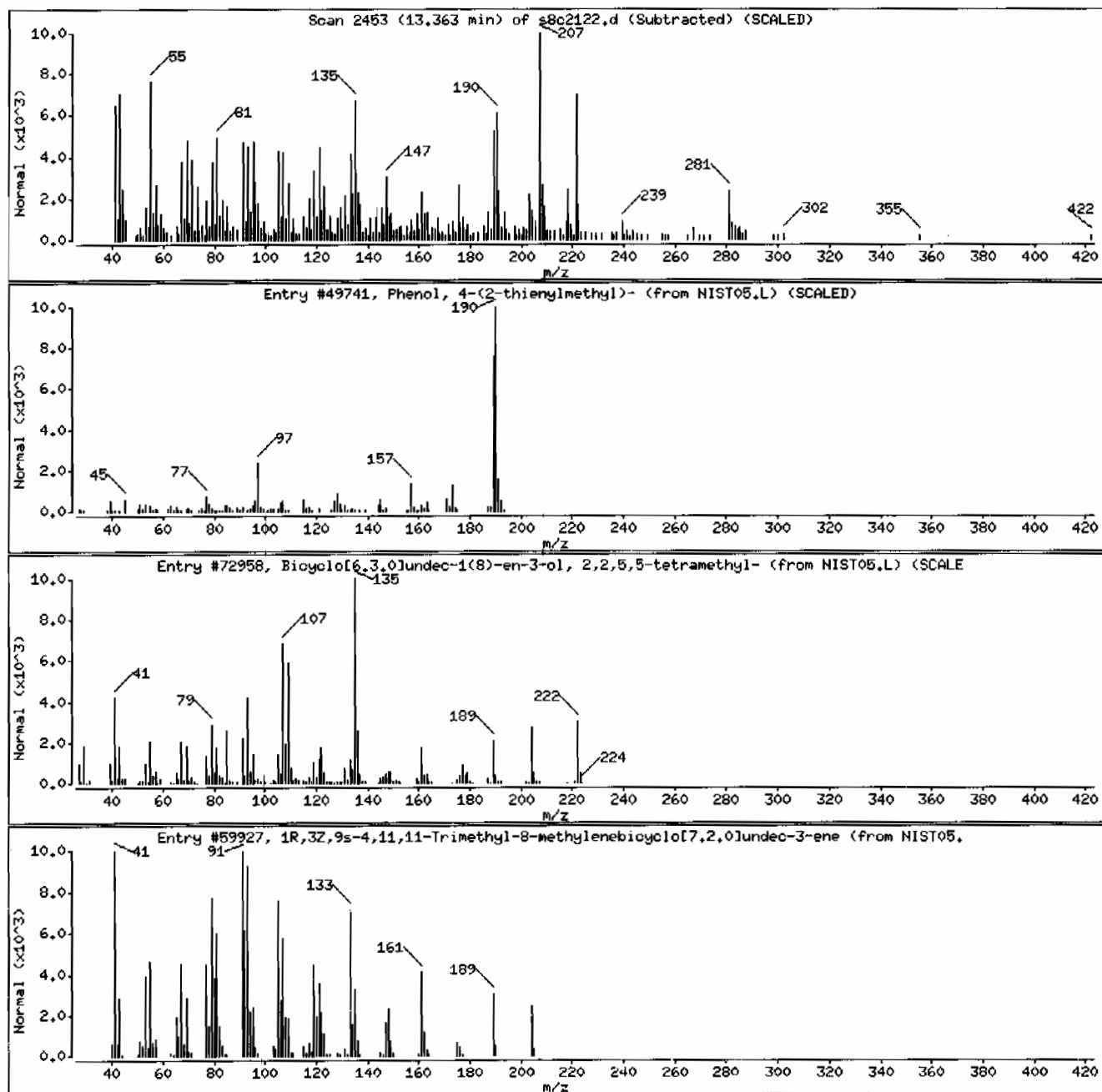
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenol, 4-(2-thienylmethyl)-	91680-55-6	NIST05.L	49741	25	C11H10O8	190
Bicyclo[6.3.0]undec-1(8)-en-3-ol, 2,2,5,1R,3Z,9s-4,11,11-Trimethyl-8-methylenebi	1000164-02-6	NIST05.L	72958	25	C15H26O	222
	1000140-07-3	NIST05.L	59927	25	C15H24	204



Date : 21-MAR-2010 18:25

Client ID: RE36-10-7522

Instrument: MSD8.i

Sample Info: I2483730141961922111SVMI11LANL

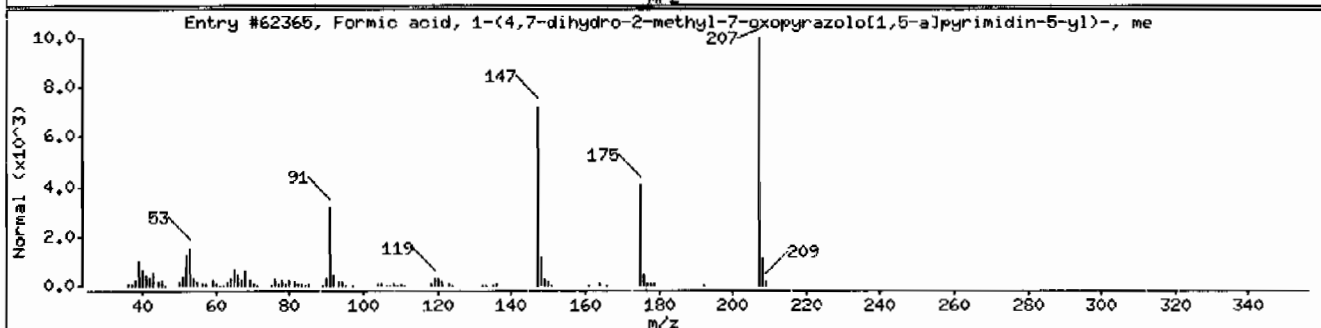
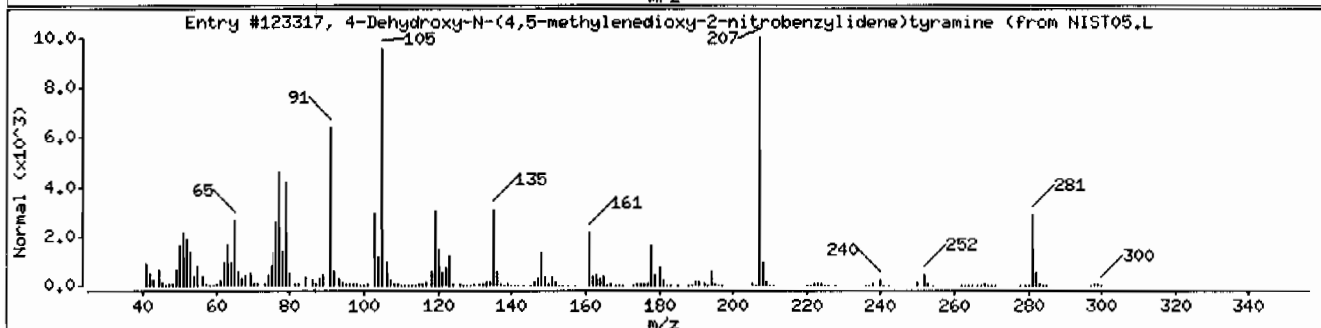
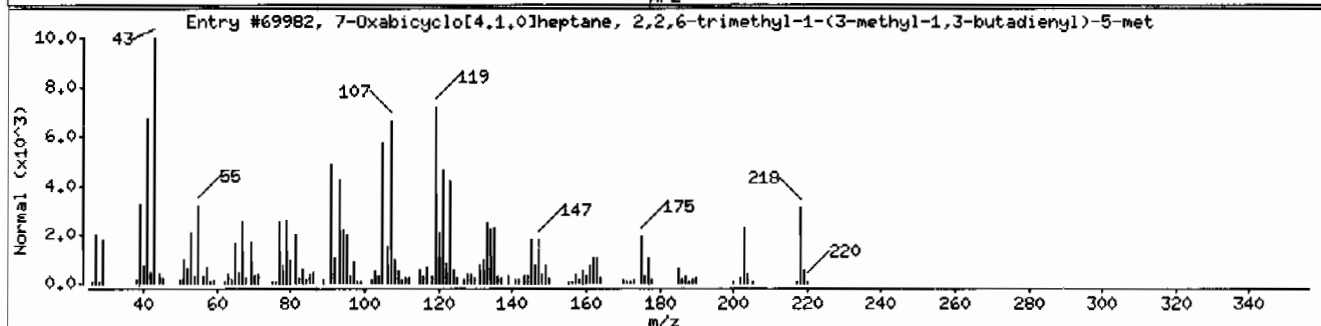
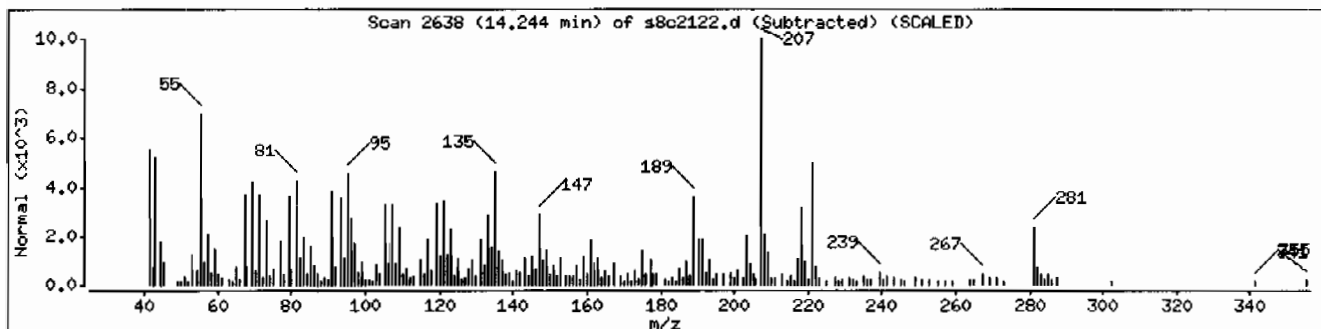
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	90	C15H22O	218
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	27	C16H14N2O4	298
Formic acid, 1-(4,7-dihydro-2-methyl-7-o	1000267-28-6	NIST05.L	62365	22	C9H9N3O3	207



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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373011	Date Received: 03/02/2010 08:50	%Moisture: 15.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7523	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.1	Dilution: 1
Run Date: 03/21/2010 17:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2121.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	394	ug/kg	78.9	394
108-95-2	Phenol	U	394	ug/kg	78.9	394
95-57-8	2-Chlorophenol	U	394	ug/kg	78.9	394
106-46-7	1,4-Dichlorobenzene	U	394	ug/kg	78.9	394
621-64-7	N-Nitrosodipropylamine	U	394	ug/kg	78.9	394
59-50-7	4-Chloro-3-methylphenol	U	394	ug/kg	78.9	394
83-32-9	Acenaphthene	U	39.4	ug/kg	13.0	39.4
121-14-2	2,4-Dinitrotoluene	U	394	ug/kg	39.4	394
100-02-7	4-Nitrophenol	U	394	ug/kg	130	394
87-86-5	Pentachlorophenol	U	394	ug/kg	98.6	394
129-00-0	Pyrene	U	39.4	ug/kg	11.8	39.4
110-86-1	Pyridine	U	394	ug/kg	78.9	394
62-53-3	Aniline	U	394	ug/kg	118	394
111-44-4	bis(2-Chloroethyl) ether	U	394	ug/kg	78.9	394
541-73-1	1,3-Dichlorobenzene	U	394	ug/kg	78.9	394
100-51-6	Benzyl alcohol	U	394	ug/kg	118	394
95-50-1	1,2-Dichlorobenzene	U	394	ug/kg	78.9	394
108-60-1	bis(2-Chloroisopropyl)ether	U	394	ug/kg	78.9	394
95-48-7	o-Cresol	U	394	ug/kg	78.9	394
65794-96-9	m,p-Cresols	U	394	ug/kg	118	394
67-72-1	Hexachloroethane	U	394	ug/kg	78.9	394
98-95-3	Nitrobenzene	U	394	ug/kg	78.9	394
78-59-1	Isophorone	U	394	ug/kg	78.9	394
88-75-5	2-Nitrophenol	U	394	ug/kg	78.9	394
105-67-9	2,4-Dimethylphenol	U	394	ug/kg	138	394
111-91-1	bis(2-Chloroethoxy)methane	U	394	ug/kg	78.9	394
120-83-2	2,4-Dichlorophenol	U	394	ug/kg	78.9	394
65-85-0	Benzoic acid	U	789	ug/kg	197	789
91-20-3	Naphthalene	U	39.4	ug/kg	11.8	39.4
106-47-8	4-Chloroaniline	U	394	ug/kg	78.9	394
87-68-3	Hexachlorobutadiene	U	394	ug/kg	78.9	394
91-57-6	2-Methylnaphthalene	U	39.4	ug/kg	7.89	39.4
77-47-4	Hexachlorocyclopentadiene	U	394	ug/kg	78.9	394
88-06-2	2,4,6-Trichlorophenol	U	394	ug/kg	78.9	394
95-95-4	2,4,5-Trichlorophenol	U	394	ug/kg	78.9	394
91-58-7	2-Chloronaphthalene	U	39.4	ug/kg	13.0	39.4
88-74-4	2-Nitroaniline	U	394	ug/kg	78.9	394
99-09-2	o-Nitroaniline	U	394	ug/kg	78.9	394
	3-Nitroaniline					

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373011	Date Received: 03/02/2010 08:50	%Moisture: 15.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7523	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 17:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2121.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	394	ug/kg	78.9	394
606-20-2	2,6-Dinitrotoluene	U	394	ug/kg	39.4	394
208-96-8	Acenaphthylene	U	39.4	ug/kg	11.8	39.4
51-28-5	2,4-Dinitrophenol	U	789	ug/kg	150	789
132-64-9	Dibenzofuran	U	394	ug/kg	78.9	394
84-66-2	Diethylphthalate	U	394	ug/kg	78.9	394
86-73-7	Fluorene	U	39.4	ug/kg	11.8	39.4
7005-72-3	4-Chlorophenylphenylether	U	394	ug/kg	78.9	394
534-52-1	2-Methyl-4,6-dinitrophenol	U	394	ug/kg	78.9	394
100-01-6	4-Nitroaniline	U	394	ug/kg	118	394
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	394	ug/kg	78.9	394
122-66-7	Azobenzene	U	394	ug/kg	78.9	394
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	394	ug/kg	78.9	394
118-74-1	Hexachlorobenzene	U	394	ug/kg	78.9	394
85-01-8	Phenanthrene	U	39.4	ug/kg	11.8	39.4
120-12-7	Anthracene	U	39.4	ug/kg	7.89	39.4
84-74-2	Di-n-butylphthalate	U	394	ug/kg	78.9	394
206-44-0	Fluoranthene	U	39.4	ug/kg	11.8	39.4
85-68-7	Butylbenzylphthalate	U	394	ug/kg	78.9	394
56-55-3	Benzo(a)anthracene	U	39.4	ug/kg	11.8	39.4
91-94-1	3,3'-Dichlorobenzidine	U	394	ug/kg	118	394
218-01-9	Chrysene	U	39.4	ug/kg	11.8	39.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	394	ug/kg	78.9	394
117-84-0	Di-n-octylphthalate	U	394	ug/kg	78.9	394
205-99-2	Benzo(b)fluoranthene	U	39.4	ug/kg	11.8	39.4
207-08-9	Benzo(k)fluoranthene	U	39.4	ug/kg	11.8	39.4
50-32-8	Benzo(a)pyrene	U	39.4	ug/kg	11.8	39.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.4	ug/kg	11.8	39.4
53-70-3	Dibenzo(a,h)anthracene	U	39.4	ug/kg	11.8	39.4
191-24-2	Benzo(ghi)perylene	U	39.4	ug/kg	11.8	39.4
120-82-1	1,2,4-Trichlorobenzene	U	394	ug/kg	78.9	394

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.73	4760	ug/kg		J
4630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	7.01	251	ug/kg	99	NJ

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248373011	Date Received: 03/02/2010 08:50	%Moisture: 15.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7523	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 17:56	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s8c2121.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	11.54	166	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.65	199	ug/kg	87	NJ
	Unknown	13.36	180	ug/kg		J
	Unknown	14.25	278	ug/kg		J
83-46-5	.beta.-Sitosterol	16.73	273	ug/kg	93	NJ
83-47-6	.gamma.-Sitosterol	16.74	163	ug/kg	92	NJ
	Unknown	16.79	300	ug/kg		J
	Unknown	17.28	198	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2121.d
 Lab Smp Id: 248373011 Client Smp ID: RE36-10-7523
 Inj Date : 21-MAR-2010 17:56
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |248373011|961922|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 21
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	15.84240	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.306	4.301	(1.000)	499681	40.0000	
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1991508	40.0000	
* 46 Acenaphthene-d10	164	7.406	7.406	(1.000)	1213342	40.0000	
* 67 Phenanthrene-d10	188	9.001	8.997	(1.000)	2093740	40.0000	
* 91 Chrysene-d12	240	11.873	11.868	(1.000)	1594071	40.0000	
* 98 Perylene-d12	264	13.882	13.878	(1.000)	890153	40.0000	
\$ 3 2-Fluorophenol	112	3.177	3.158	(0.738)	705196	59.7787	2360
\$ 5 Phenol-d5	99	3.939	3.930	(0.915)	877647	59.6555	2350
\$ 20 Nitrobenzene-d5	82	4.825	4.830	(0.869)	404184	28.5503	1120
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.902)	880069	24.6417	972
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.114)	221321	55.1803	2180
\$ 81 p-Terphenyl-d14	244	10.711	10.706	(0.902)	979117	34.1166	1340

ION RATIO REPORT

SV REPORT

Data file: s8c2121.d

Report Date: 03/22/2010 07:20

Lab. ID: 248373011

SampleType: SAMPLE

Injection Date: 21-MAR-2010 17:56

Operator: nagl

Instrument: MSD8.i

Sample Info: |248373011|961922|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100319-01

Comment:

Method used: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2154

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	45078	3.94	4.00	80-120	100	()
93	10277	3.98	4.00	213-273	23	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	53812	4.83	4.68	80-120	100	(T)
42	28708	4.83	4.68	31- 91	53	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	14299	5.24	5.28	80-120	100	()
122	10154	5.24	5.28	64-124	71	()
77	11552	5.24	5.28	47-107	81	()

30 Naphthalene		CAS#: 91-20-3				
128	370	5.58	5.58	80-120	100	()
129	300	5.56	5.58	0- 41	81	(Q)
127	199	5.67	5.58	0- 43	54	(QT)

34 2-Methylnaphthalene		CAS#: 91-57-6				
142	154	6.14	6.30	80-120	100	(T)
141	136	6.29	6.30	56-116	88	()

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	280	6.80	6.81	80-120	100	()
164	583	7.01	6.81	3- 63	208	(QT)
127	3218	6.68	6.81	7- 67	1147	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	157738	7.41	7.18	80-120	100	(T)
63	2553	7.41	7.18	32- 92	2	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	157738	7.41	7.61	80-120	100	(T)
89	2154	7.41	7.61	47-107	1	(QT)
63	2553	7.41	7.61	26- 86	2	(QT)

55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	771	8.24	8.04	80-120	100	(T)
105	1594	8.24	8.04	14- 74	207	(QT)
51	1519	8.24	8.04	26- 86	197	(QT)

68	Phenanthrene			CAS#: 85-01-8		
178	1106	9.02	9.02	80-120	100	()
179	260	9.02	9.02	0- 45	24	()
176	339	9.02	9.02	0- 49	31	()

92	Chrysene			CAS#: 218-01-9		
228	670	11.90	11.90	80-120	100	()
229	644	11.90	11.90	0- 49	96	(Q)
226	363	11.91	11.90	0- 59	54	()

94	Di-n-octylphthalate			CAS#: 117-84-0		
149	496	12.73	12.73	80-120	100	()
43	7582	12.69	12.73	0- 41	1527	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2121.d
Lab Smp Id: 248373011 Client Smp ID: RE36-10-7523
Inj Date : 21-MAR-2010 17:56
Operator : nagl Inst ID: MSD8.i
Smp Info : |248373011|961922|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	15.84240	% moisture

Cpnd Variable

Local Compound Variable

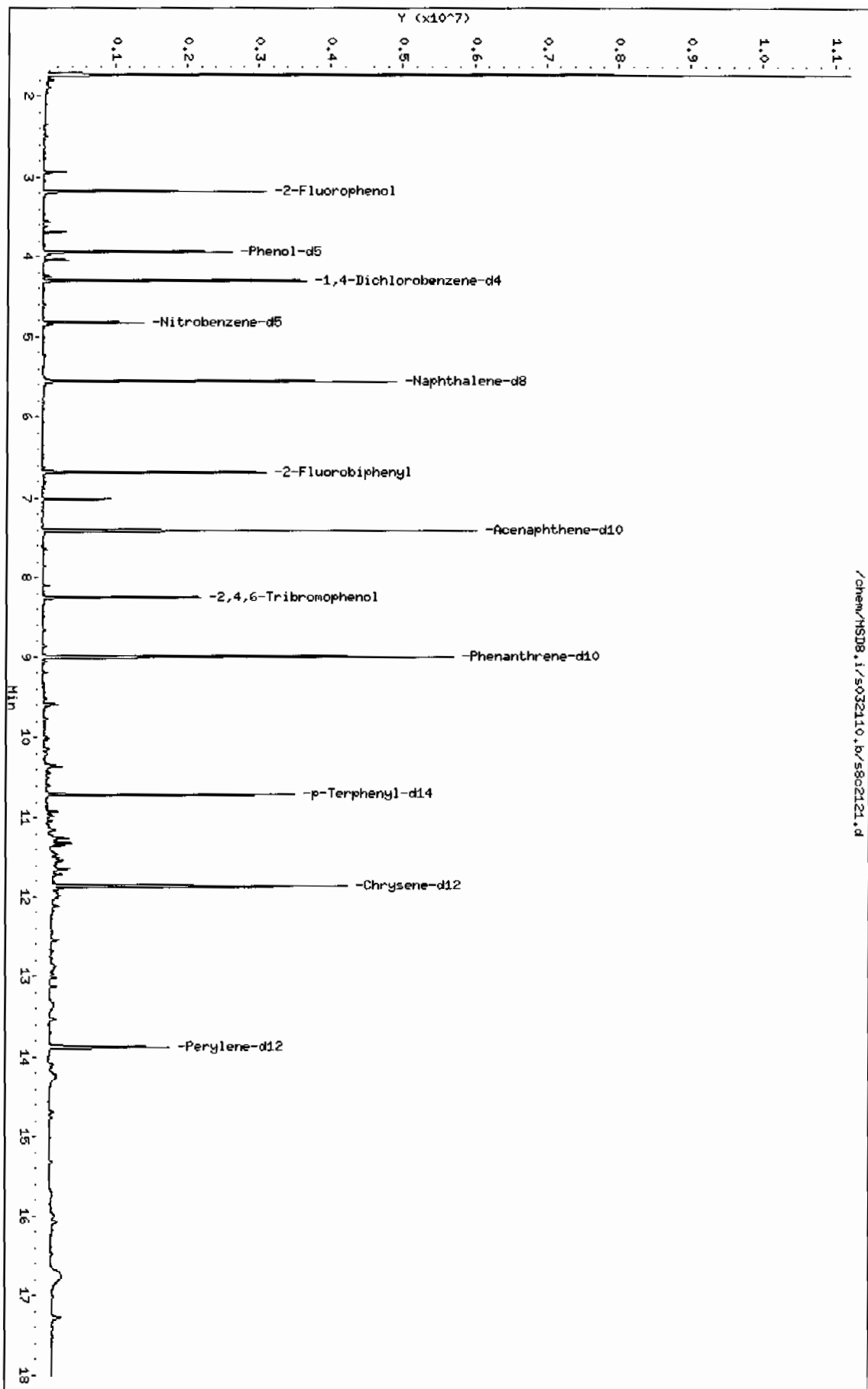
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.306	2960110	40.000
* 46 Acenaphthene-d10	7.406	5141673	40.000
* 91 Chrysene-d12	11.873	4556725	40.000
* 98 Perylene-d12	13.882	2591683	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.735	8938471	120.785623	4760	0		0	10
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-					CAS #: 4630-07-3		
7.011	818588	6.36826112	251	99	NIST05.L	60047	46
Unknown					CAS #:		
11.544	479869	4.21240394	166	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
11.649	574331	5.04160750	199	87	NIST05.L	125037	91
Unknown					CAS #:		
13.363	296066	4.56948056	180	0		0	98
Unknown					CAS #:		
14.249	456833	7.05075906	278	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
16.725	447939	6.91348585	273	93	NIST05.L	174400	98
.gamma.-Sitosterol					CAS #: 83-47-6		
16.744	268429	4.14292348	163	92	NIST05.L	174402	98
Unknown					CAS #:		
16.787	493470	7.61620776	300	0		0	98
Unknown					CAS #:		
17.278	324591	5.00973388	198	0		0	98

Data File: /chem/MSD8.i/s032110.b/s802121.d
Date: 21-MAR-2010 17:56
Client ID: RE36-10-7523
Sample Info: 124837301196192211SVH11L1L9HL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20



Date : 21-MAR-2010 17:56

Client ID: RE36-10-7523

Instrument: MSD8.i

Sample Info: 12483730111961922111SVMI11LANL

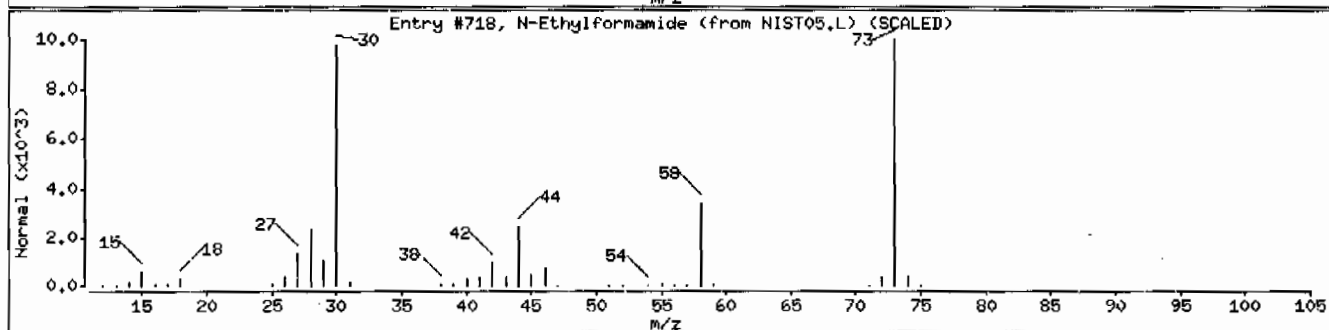
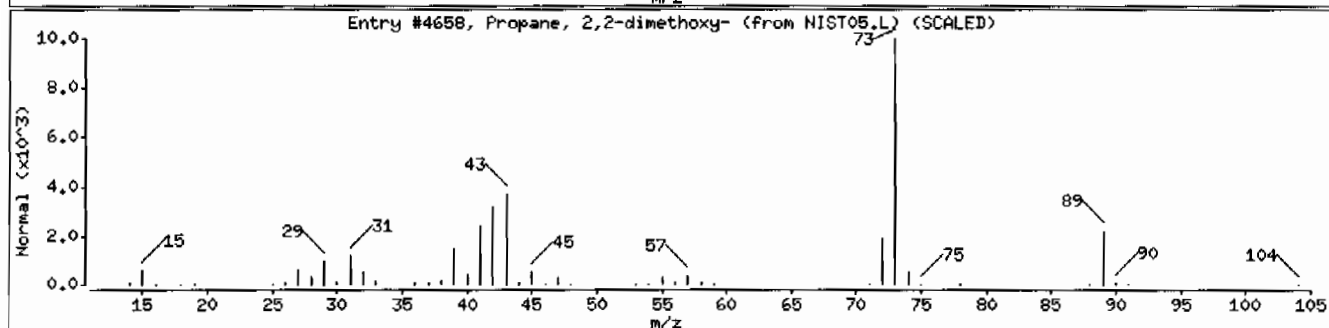
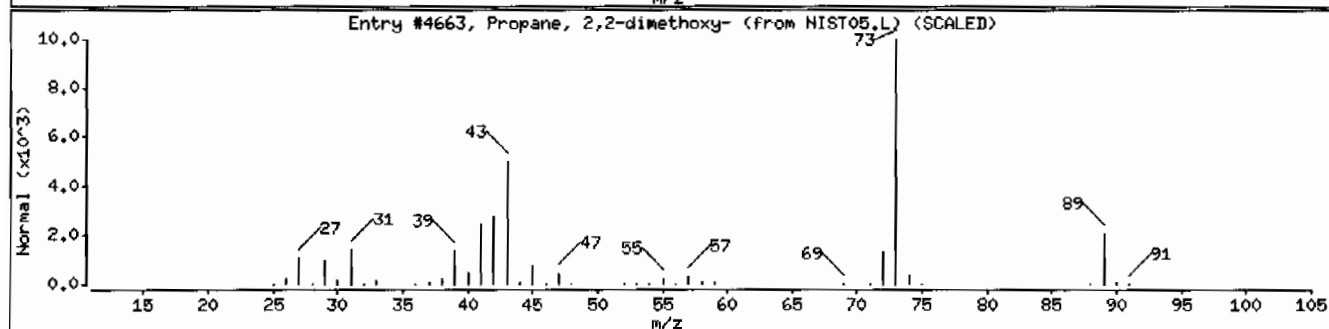
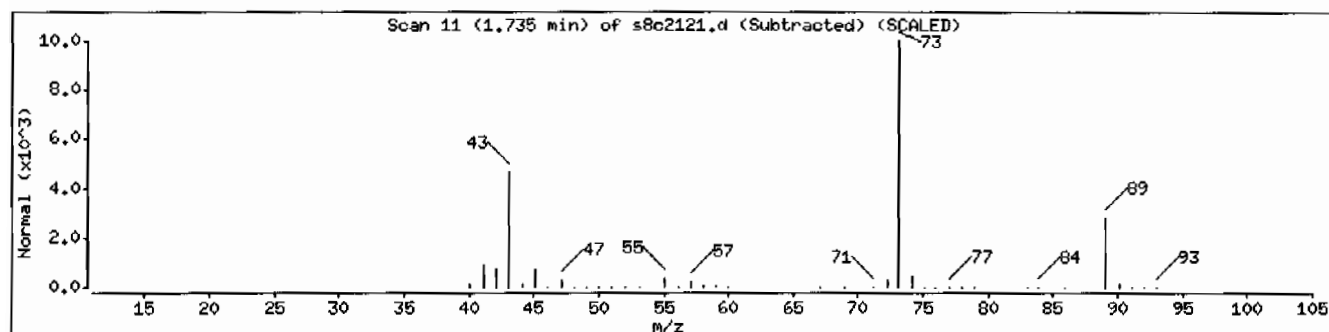
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	56	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	56	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	9	C3H7NO	73



Date : 21-MAR-2010 17:56

Client ID: RE36-10-7523

Instrument: MSD8.i

Sample Info: I248373011196192211SVMI11LANL

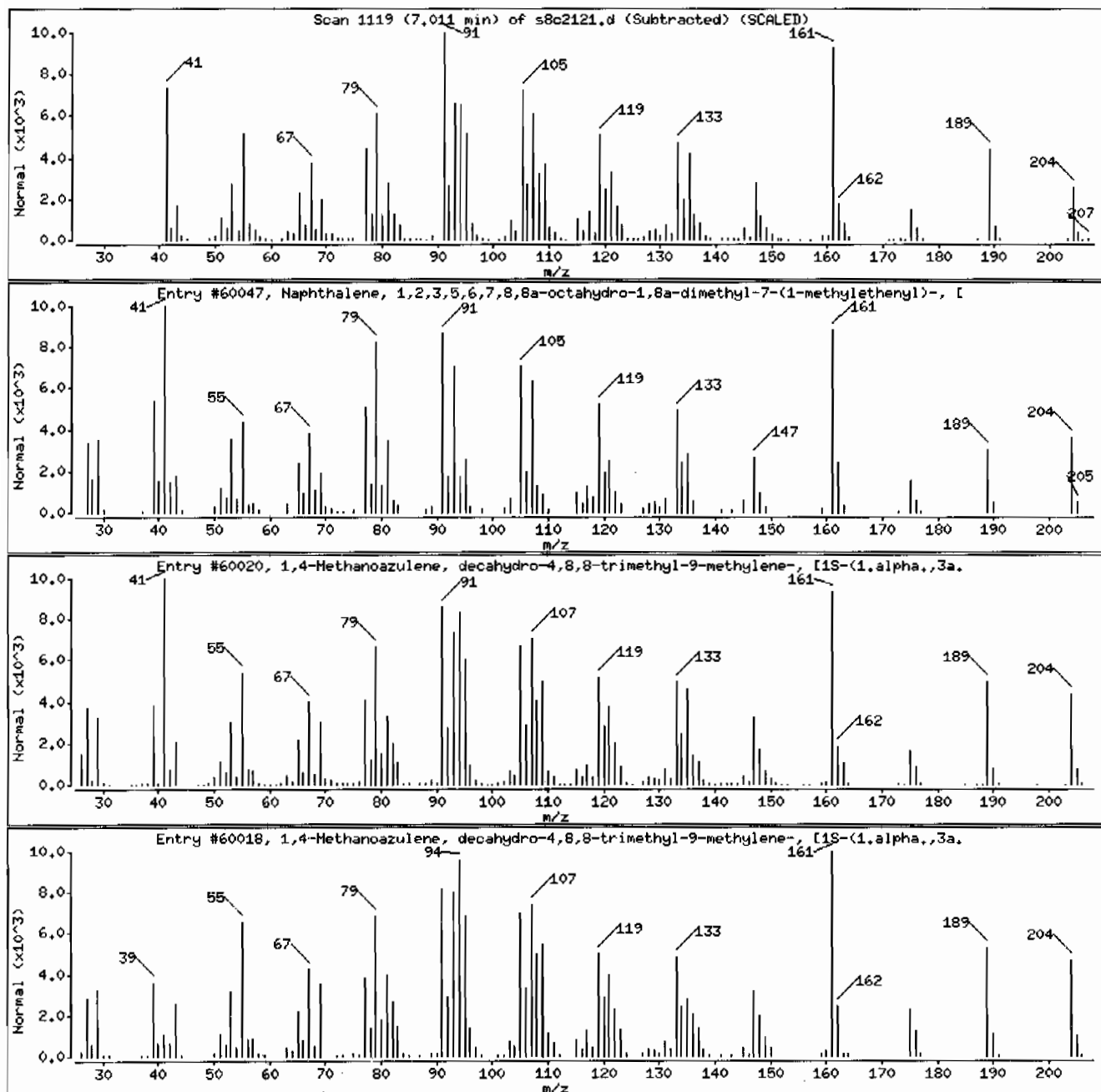
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	98	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	98	C15H24	204



Date : 21-MAR-2010 17:56

Client ID: RE36-10-7523

Instrument: MSD8.i

Sample Info: I248373011196192211SVH111LANL

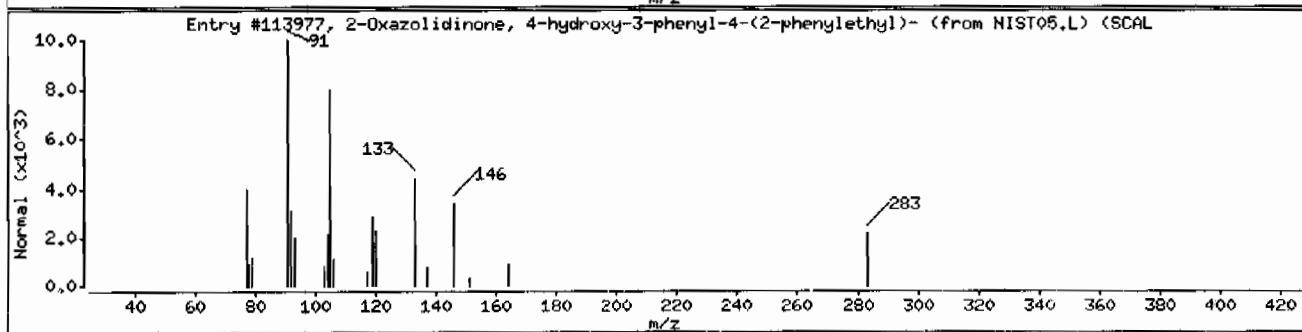
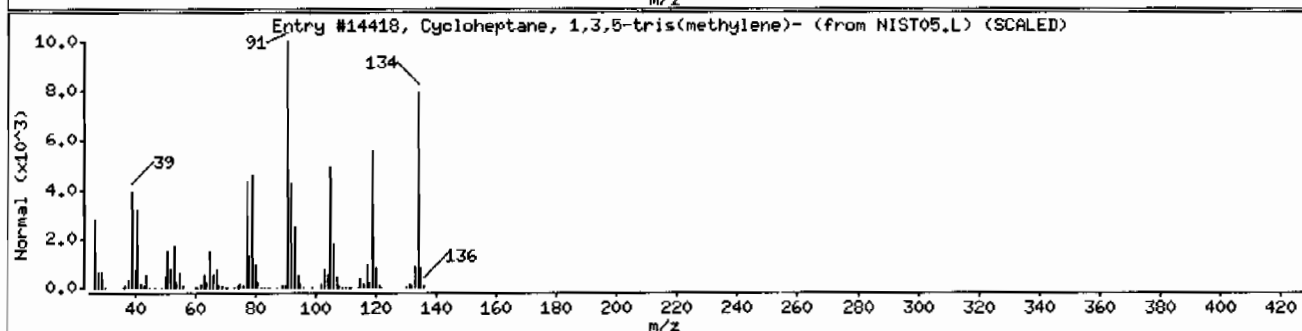
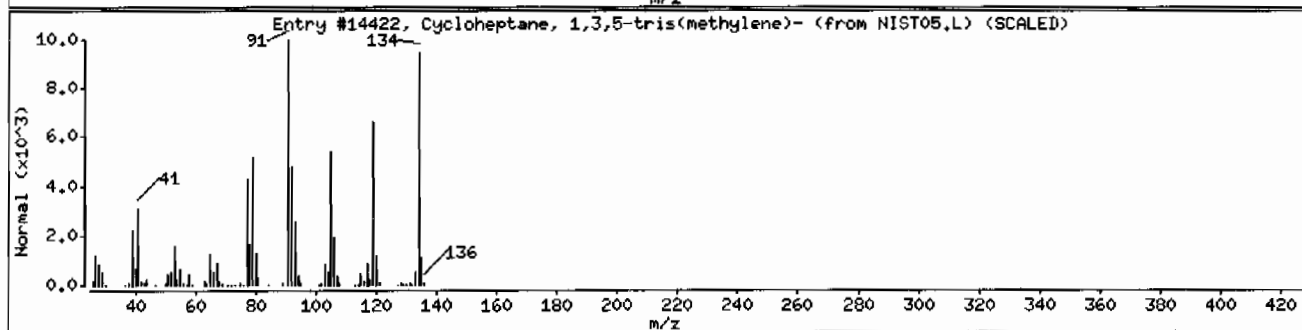
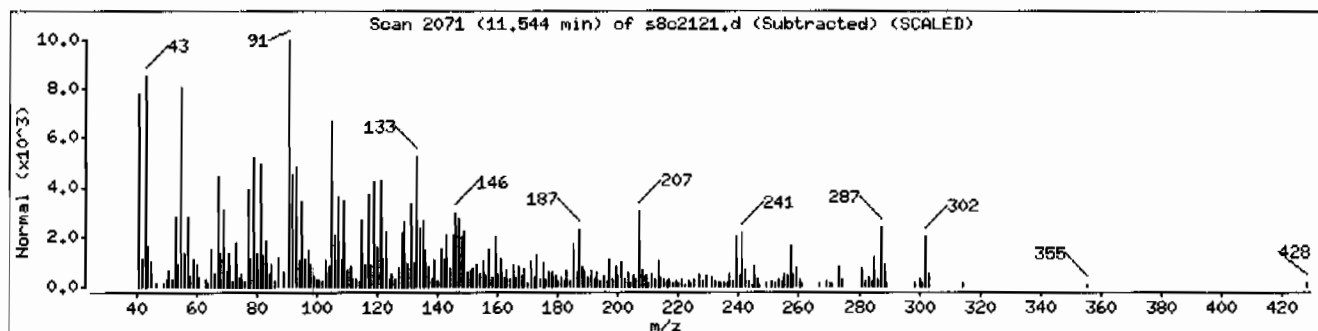
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14422	35	C10H14	134
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14418	20	C10H14	134
2-Oxazolidinone, 4-hydroxy-3-phenyl-4-(2	52512-35-3	NIST05.L	113977	15	C17H17NO3	283



Date : 21-MAR-2010 17:56

Client ID: RE36-10-7523

Instrument: MSD8.i

Sample Info: 12483730111961922111SVH111LANL

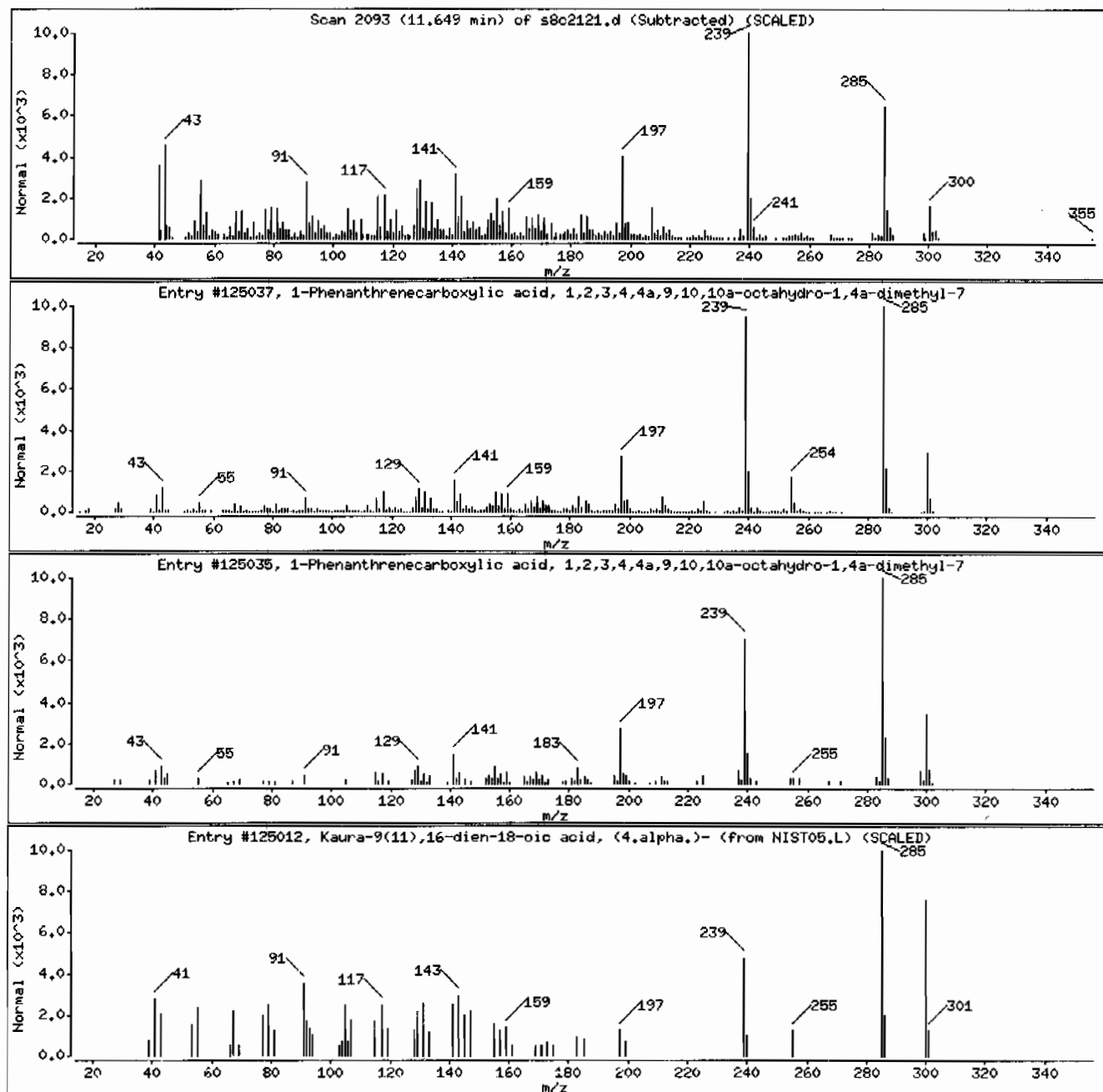
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	87	C ₂₀ H ₂₈ O ₂	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	70	C ₂₀ H ₂₈ O ₂	300
Kaura-9(11),16-dien-18-oic acid, (4.alpha.	22338-67-6	NIST05.L	125012	58	C ₂₀ H ₂₈ O ₂	300



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Client ID: RE36-10-7523

Instrument: HSD8.i

Sample Info: 1248373011196192211SVH11ILANL

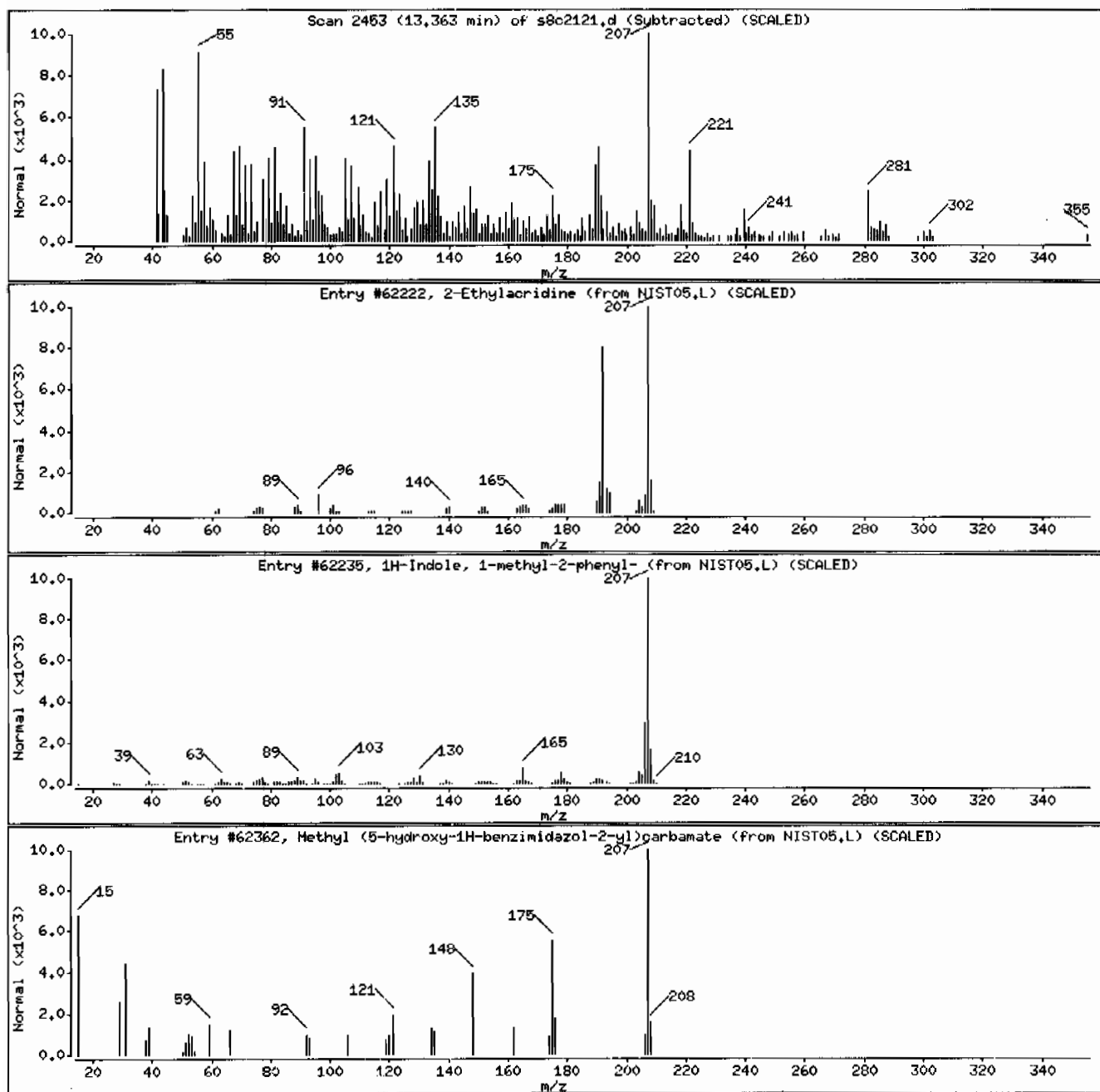
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207
1H-Indole, 1-methyl-2-phenyl-	3558-24-5	NIST05.L	62235	20	C15H13N	207
Methyl (5-hydroxy-1H-benzimidazol-2-yl)c	22769-68-2	NIST05.L	62362	18	C9H9N3O3	207



Date: 21-MAR-2010 17:56

Client ID: RE36-10-7523

Instrument: MSD8.1

Sample Info: 1248373011196192211SVMI11LANL

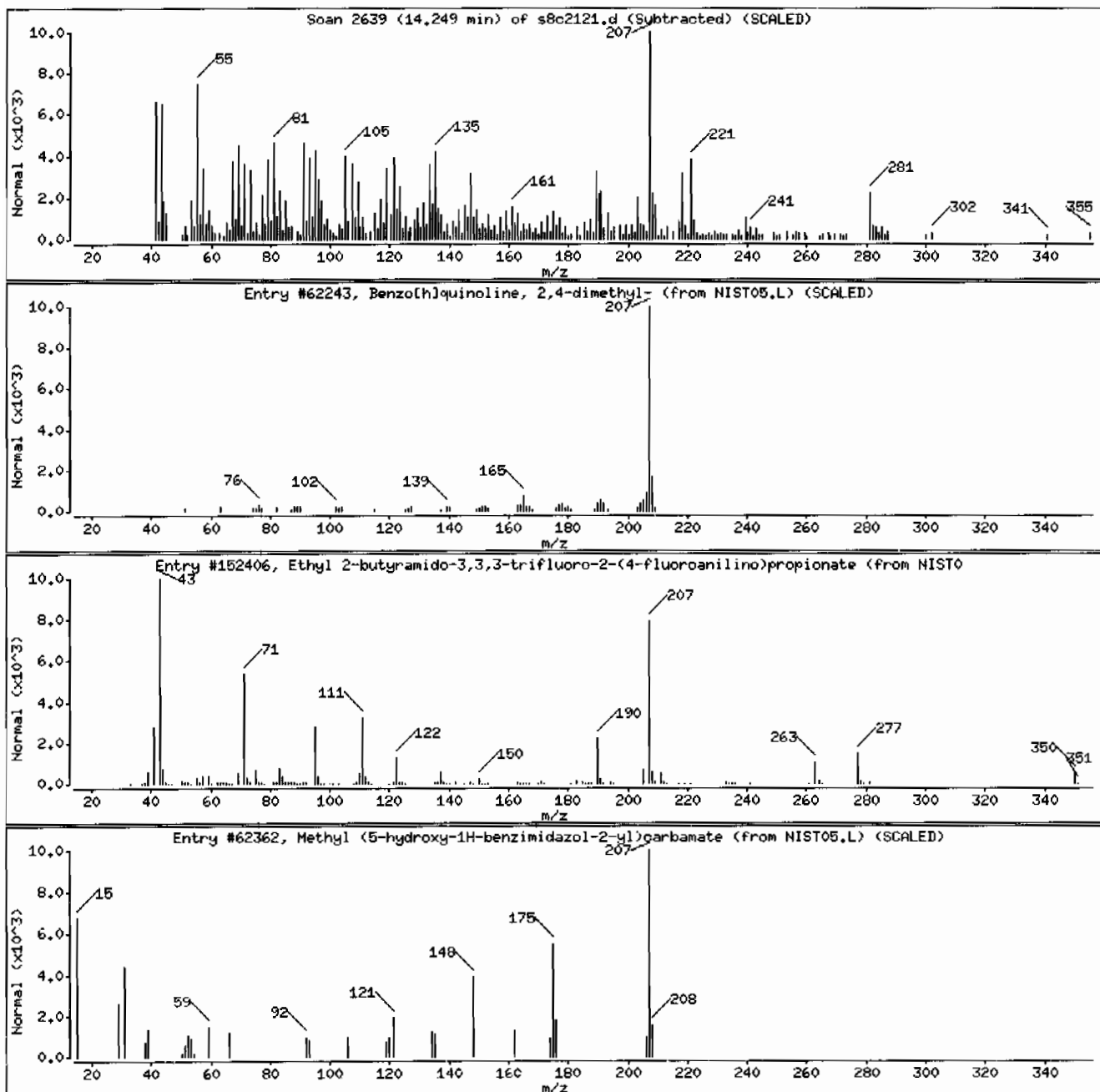
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	30	C15H13N	207
Ethyl 2-butynamido-3,3,3-trifluoro-2-(4-	1000224-16-2	NIST05.L	152406	27	C15H18F4N2O3	350
Methyl (5-hydroxy-1H-benzimidazol-2-yl)c	22769-68-2	NIST05.L	62362	25	C9H9N3O3	207



Date : 21-MAR-2010 17:56

Client ID: RE36-10-7523

Instrument: MSD8.i

Sample Info: 1248373011196192211SVMI1/LANL

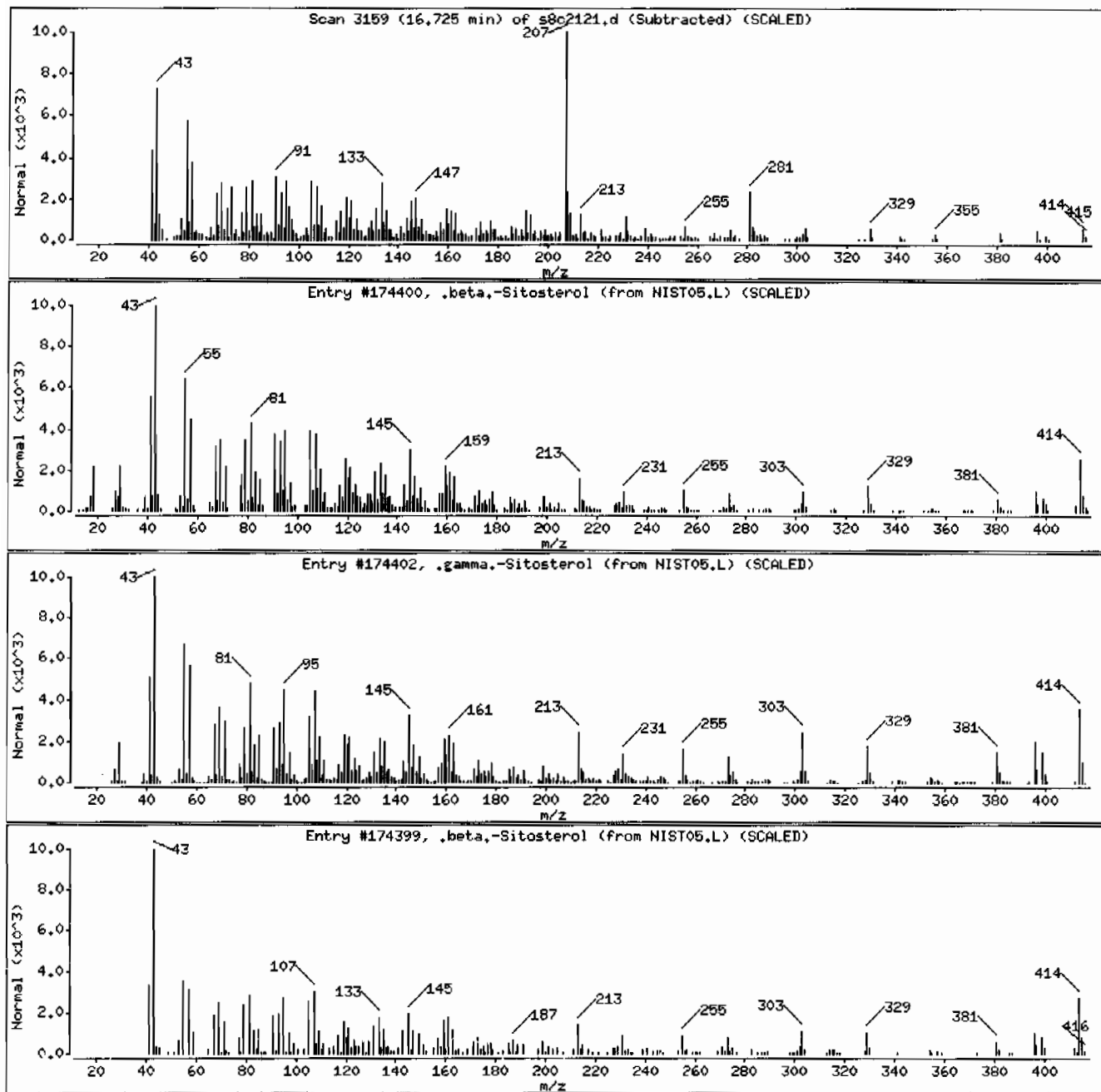
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	93	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	90	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	40	C29H50O	414



Date : 21-MAR-2010 17:56

Client ID: RE36-10-7523

Instrument: MSD8.1

Sample Info: 1248373011|96192211|SVH11|LANL

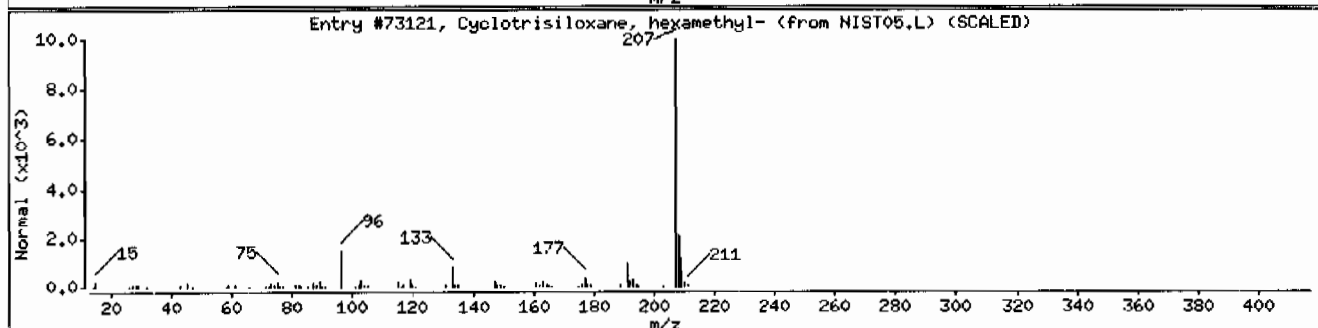
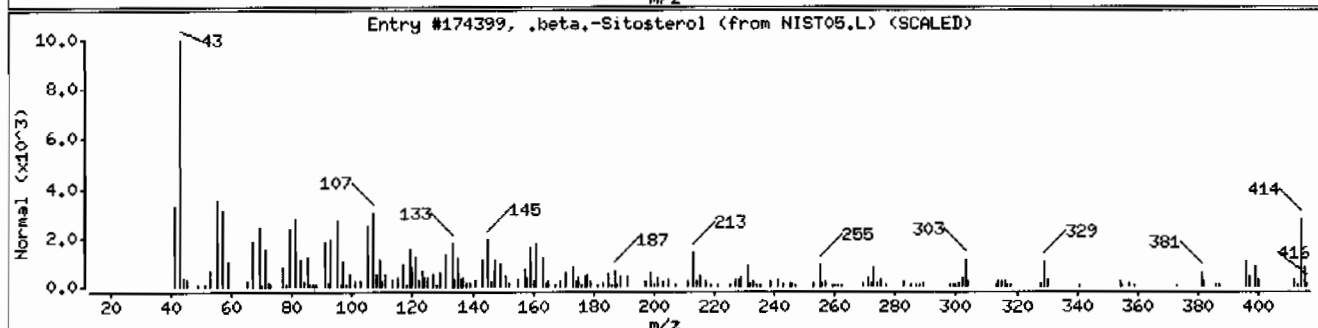
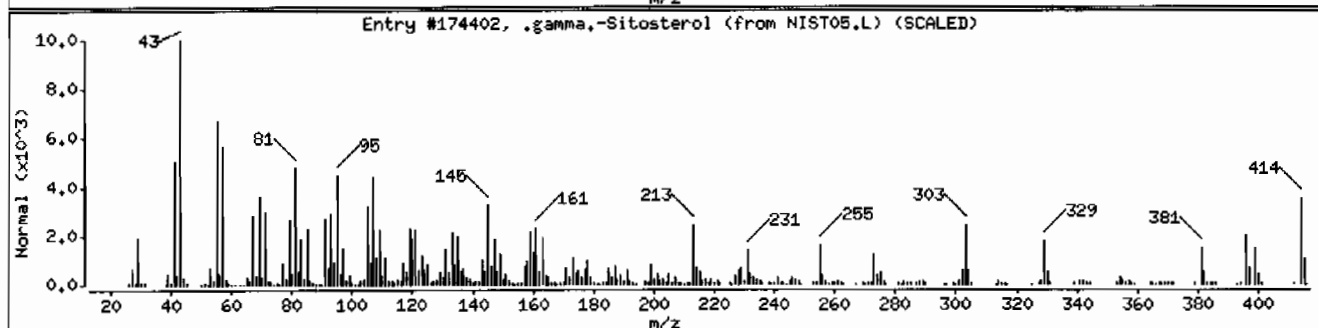
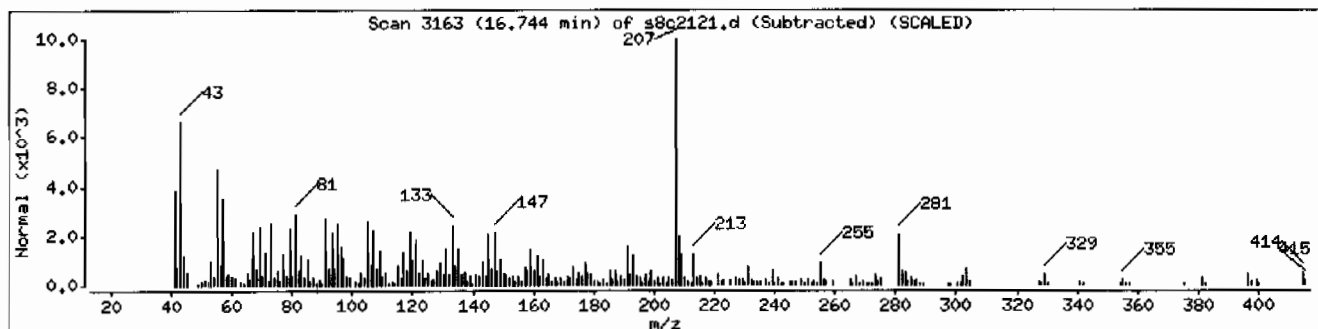
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	92	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	90	C ₂₉ H ₅₀ O	414
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C ₆ H ₁₈ O ₃ Si ₃	222



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Client ID: RE36-10-7523

Instrument: MSD8.i

Sample Info: 124837301196192211SVMI11LANL

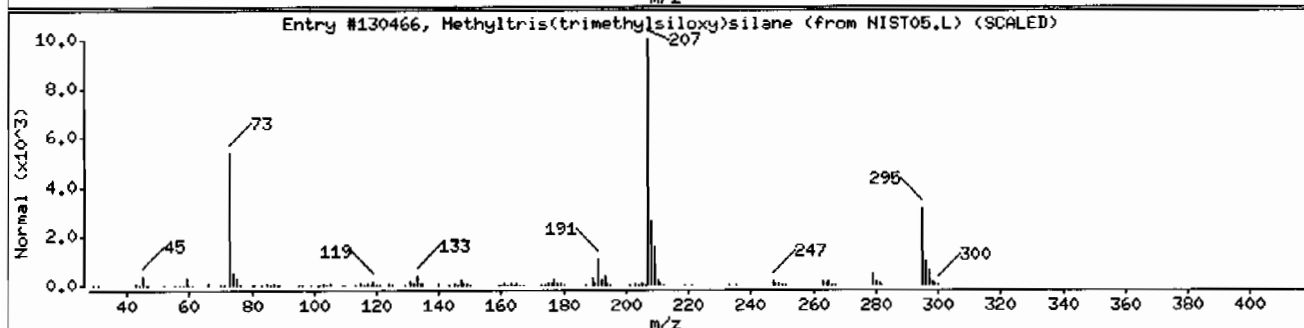
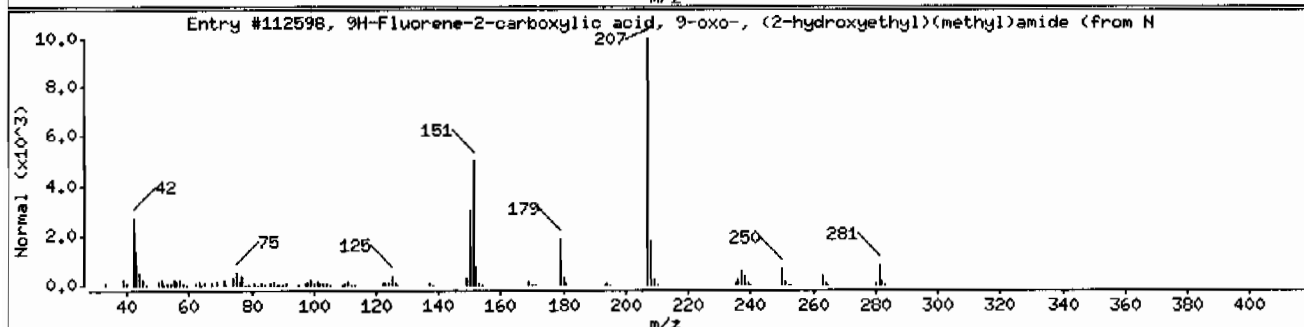
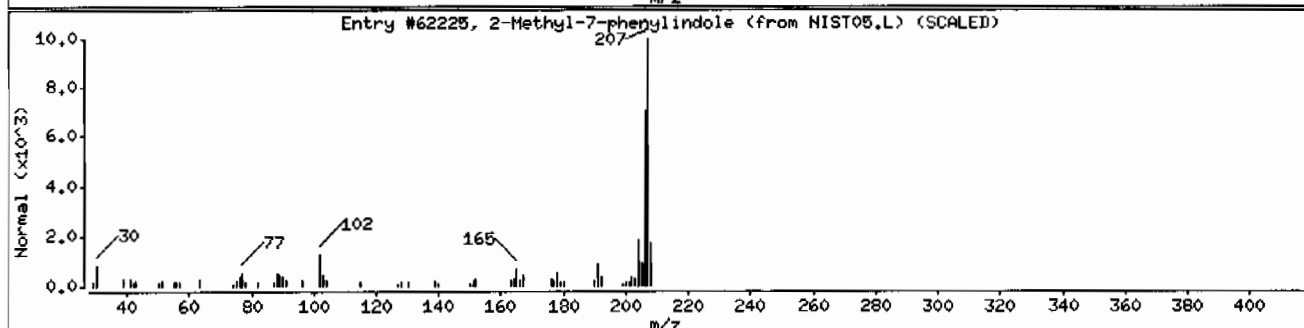
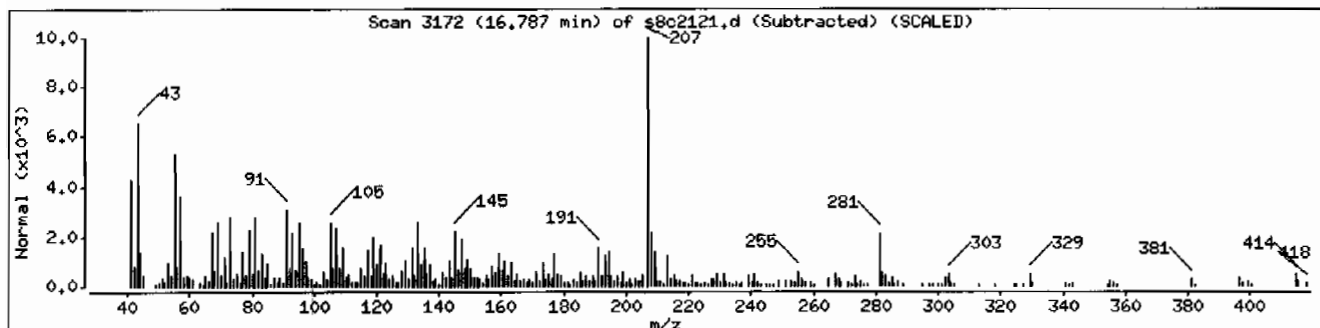
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	38	C15H13N	207
9H-Fluorene-2-carboxylic acid, 9-oxo-, (	1000316-02-1	NIST05.L	112598	38	C17H15NO3	281
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	35	C10H30O3Si4	310



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Client ID: RE36-10-7523

Instrument: MSD8.i

Sample Info: 12483730111961922111SVM111LANL

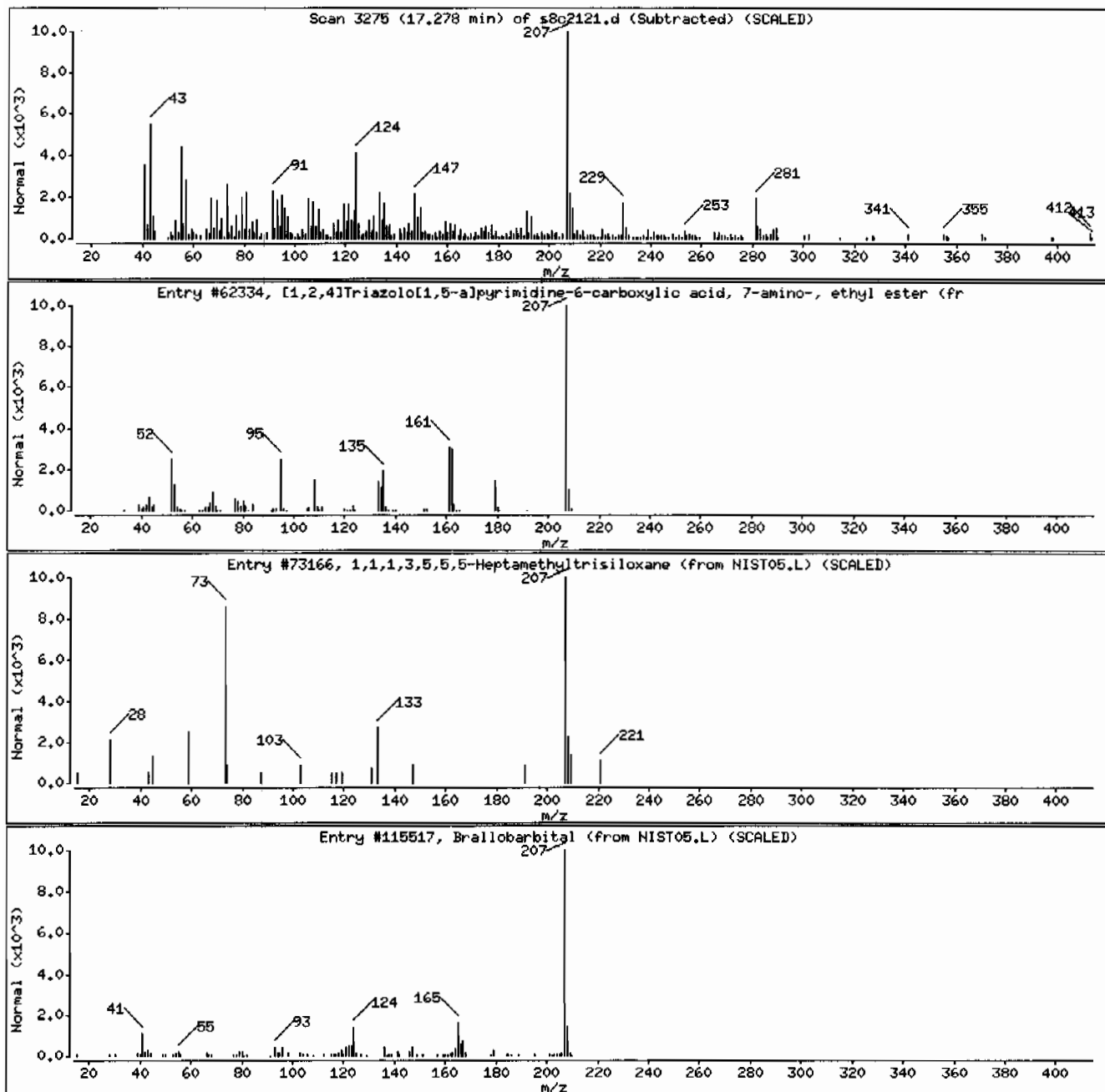
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2,4]Triazolol[1,5-a]pyrimidine-6-carbo	1000316-75-8	NIST05.L	62334	38	C8H9N5O2	207
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	37	C7H22O2Si3	222
Brallobarbitol	561-86-4	NIST05.L	115517	35	C10H11BrN2O3	286



Standard Data

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine	1**	10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1**	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120

1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1**	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1**	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
4-Bromophenyl phenylether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1**	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1**	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1**	10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

p-Benzoquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625

Calibration Standard Concentration Levels*

AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
3,3'-Dichlorobenzidine		10	20	40	50	80	100	120
1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethylphenethylamine		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120

SW846 8270/EPA 625

Calibration Standard Concentration Levels*

AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate		10	20	40	50	80	100	120
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
4-Aminobiphenyl		10	20	40	50	80	100	120

Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone	1**	10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorophene		500	1000	1250	1500	1750	2000	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Tributylphosphate		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
Dimethoate		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothioanisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone	10	20	40	50	80	100	120
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SW846 8270C/8270D/EPA 625								
Calibration Standard Concentration Levels*								
BJCO MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1-Hexanol	10	20	40	50	80	100	120	
Quinoline	10	20	40	50	80	100	120	
2,4-Toluene diisocyanate	10	20	40	50	80	100	120	
1-Nitropyrene	10	20	40	50	80	100	120	
5-Methylchrysene	10	20	40	50	80	100	120	
Benzo(i)fluoranthene	10	20	40	50	80	100	120	
Dibenzo(a,h)pyrene	10	20	40	50	80	100	120	
Dibenzo(a,h)acridine	10	20	40	50	80	100	120	
Dibenzo(a,j)acridine	10	20	40	50	80	100	120	
Dibenzo(a,i)pyrene	10	20	40	50	80	100	120	
Dibenzo(a,l)pyrene	10	20	40	50	80	100	120	
7H-Dibenzo(c,g)carbazole	10	20	40	50	80	10	120	

All values are mg/L without the prep factor.

Indicates the calibration verification concentration level used

* Usual calibration levels using SCAN methodology

** This analyte included in this level at special client request.

(0210/Full list)

Report Date: 22-Mar-2010 06:42

Calibration History

Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

Start Cal Date: 20-FEB-2010 12:55

End Cal Date : 22-FEB-2010 01:19

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
20-FEB-2010 12:55	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2003.d
Cal Level: 2 , Cal Amount: 10.00000		
21-FEB-2010 22:13	NEV	/chem/MSD8.i/s022010.b/s8b2040.d
21-FEB-2010 16:44	HEX	/chem/MSD8.i/s022010.b/s8b2029.d
21-FEB-2010 13:02	PEST	/chem/MSD8.i/s022010.b/s8b2022.d
21-FEB-2010 09:21	AP12	/chem/MSD8.i/s022010.b/s8b2015.d
20-FEB-2010 13:30	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2004.d
Cal Level: 3 , Cal Amount: 20.00000		
21-FEB-2010 22:45	NEV	/chem/MSD8.i/s022010.b/s8b2041.d
21-FEB-2010 17:16	HEX	/chem/MSD8.i/s022010.b/s8b2030.d
21-FEB-2010 13:33	PEST	/chem/MSD8.i/s022010.b/s8b2023.d
21-FEB-2010 09:52	AP12	/chem/MSD8.i/s022010.b/s8b2016.d
20-FEB-2010 14:05	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2005.d
Cal Level: 4 , Cal Amount: 40.00000		
21-FEB-2010 23:15	NEV	/chem/MSD8.i/s022010.b/s8b2042.d
21-FEB-2010 17:48	HEX	/chem/MSD8.i/s022010.b/s8b2031.d
21-FEB-2010 14:05	PEST	/chem/MSD8.i/s022010.b/s8b2024.d
21-FEB-2010 10:23	AP12	/chem/MSD8.i/s022010.b/s8b2017.d
20-FEB-2010 14:40	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2006.d
Cal Level: 5 , Cal Amount: 50.00000		
21-FEB-2010 23:46	NEV	/chem/MSD8.i/s022010.b/s8b2043.d
21-FEB-2010 18:19	HEX	/chem/MSD8.i/s022010.b/s8b2032.d
21-FEB-2010 14:37	PEST	/chem/MSD8.i/s022010.b/s8b2025.d
21-FEB-2010 10:54	AP12	/chem/MSD8.i/s022010.b/s8b2018.d
20-FEB-2010 15:14	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2007.d
Cal Level: 6 , Cal Amount: 80.00000		
22-FEB-2010 00:17	NEV	/chem/MSD8.i/s022010.b/s8b2044.d
21-FEB-2010 18:51	HEX	/chem/MSD8.i/s022010.b/s8b2033.d
21-FEB-2010 15:09	PEST	/chem/MSD8.i/s022010.b/s8b2026.d
21-FEB-2010 11:26	AP12	/chem/MSD8.i/s022010.b/s8b2019.d
20-FEB-2010 15:50	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2008.d
Cal Level: 7 , Cal Amount: 100.00000		

22-FEB-2010 00:48	NEV	/chem/MSD8.i/s022010.b/s8b2045.d
21-FEB-2010 19:22	HEX	/chem/MSD8.i/s022010.b/s8b2034.d
21-FEB-2010 15:40	PEST	/chem/MSD8.i/s022010.b/s8b2027.d
21-FEB-2010 11:59	AP12	/chem/MSD8.i/s022010.b/s8b2020.d
20-FEB-2010 16:25	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2009.d

Cal Level: 8 , Cal Amount: 120.00000

22-FEB-2010 01:19	NEV	/chem/MSD8.i/s022010.b/s8b2046.d
21-FEB-2010 16:12	PEST	/chem/MSD8.i/s022010.b/s8b2028.d
21-FEB-2010 12:30	AP12	/chem/MSD8.i/s022010.b/s8b2021.d
20-FEB-2010 16:59	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2010.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 10:00	NEV	/chem/MSD8.i/s032110.b/s8c2105.d
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Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 09:30	PEST	/chem/MSD8.i/s032110.b/s8c2104.d
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Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 09:01	AP12	/chem/MSD8.i/s032110.b/s8c2103.d
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Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 08:30	MEGAIICARE	/chem/MSD8.i/s032110.b/s8c2102.d
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GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
 End Cal Date : 22-FEB-2010 01:19
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Cal Date : 21-Mar-2010 10:17 nat00999

Calibration File Names:

Level 1: /chem/MSD8.i/s022010.b/s8b2003.d
 Level 2: /chem/MSD8.i/s022010.b/s8b2040.d
 Level 3: /chem/MSD8.i/s022010.b/s8b2041.d
 Level 4: /chem/MSD8.i/s022010.b/s8b2042.d
 Level 5: /chem/MSD8.i/s022010.b/s8b2043.d
 Level 6: /chem/MSD8.i/s022010.b/s8b2044.d
 Level 7: /chem/MSD8.i/s022010.b/s8b2045.d
 Level 8: /chem/MSD8.i/s022010.b/s8b2046.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
1 N-Methyl-N-nitrosomethylamine	++++ 0.57992	0.61951 0.59593	0.63665	0.62571	0.60931	0.60758	AVRG		0.60923		3.37337
2 Pyridine	++++ 0.87607	0.89446 0.87582	0.93458	0.90790	0.87786	0.88941	AVRG				
4 Aniline	++++ 0.54402	0.55291 0.56183	0.56486	0.55215	0.55460	0.55759	AVRG		0.89373		2.40541
209 Benzaldehyde	++++ 0.82905	0.88461 0.77335	0.93065	0.82979	0.84335	0.81229	AVRG		0.55542		1.23562
6 Phenol	++++ 1.19022	1.21439 1.21801	1.26753	1.22620	1.19992	1.19696	AVRG		0.84330		6.04219
							AVRG		1.21617		2.13674

GEL Laboratories LLC

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 Cal Date : 21-Mar-2010 10:17 nat00999

Compound	1	10	20	40	50	80	Curve	b	Coeficients m1	m2	%RSD or R^2
7 bis(2-Chloroethyl) ether	++++ 0.79428	0.86875 0.80161	0.87510 0.84552	0.82182	0.81301	AVRG			0.83144		3.86597
8 2-Chlorophenol	++++ 1.03335	1.03978 1.06466	1.08408	1.07215	1.04534	1.05301	AVRG		1.05605		1.73871
203 n-Decane	++++ 0.94466	1.27851 0.91988	1.24822	1.15740	1.07516	1.00264	AVRG		1.08949		13.14312
9 1,3-Dichlorobenzene	++++ 1.22581	1.28111 1.26112	1.28796	1.25869	1.21836	1.23373	AVRG		1.25240		2.16688
11 1,4-Dichlorobenzene	++++ 1.27786	1.29450 1.32204	1.32850	1.27510	1.26337	1.28372	AVRG		1.29215		1.89951
12 Benzyl alcohol	++++ 0.65441	0.63823 0.66840	0.66891	0.66923	0.65483	0.66997	AVRG		0.66357		1.81681
13 1,2-Dichlorobenzene	++++ 1.16994	1.23246 1.20670	1.24228	1.20302	1.17789	1.18128	AVRG		1.20194		2.30652
14 bis(2-Chloroisopropyl)ether	++++ 1.49862	1.75891 1.49146	1.77869	1.68785	1.62858	1.56724	AVRG		1.63019		7.19167
15 o-Cresol	++++ 0.83195	0.83685 0.85253	0.86246	0.86097	0.83301	0.83522	AVRG		0.84463		1.63879

GEL Laboratories LLC

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 Cal Date : 21-Mar-2010 10:17 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
	Level 7	Level 8									
16 Acetophenone	++++ 1.20314	1.22382 1.15394	1.29124	1.18127	1.20711	1.16108	AVRG		1.20309		3.85004
17 N-Nitrosodipropylamine	++++ 0.76559	0.77291 0.77632	0.78775	0.78533	0.78242	0.77484	AVRG		0.77788		0.99721
18 m,p-Cresols	++++ 1.06572	1.04493 1.08557	1.08669	1.06836	1.05918	1.0718	AVRG		1.06890		1.36774
19 Hexachloroethane	++++ 0.48126	0.48582 0.49008	0.49574	0.48975	0.48187	0.48407	AVRG		0.48694		1.06899
21 Nitrobenzene	++++ 0.29496	0.29364 0.29467	0.29812	0.29008	0.28855	0.29311	AVRG		0.29331		1.08619
22 Isophorone	++++ 0.54707	0.54198 0.54526	0.54074	0.53290	0.53134	0.54066	AVRG		0.53999		1.09041
23 2-Nitrophenol	++++ 0.13936	0.13002 0.13958	0.13039	0.13172	0.13404	0.13721	AVRG		0.13462		3.05487
24 2,4-Dimethylphenol	++++ 0.24421	0.23868 0.24544	0.23567	0.23285	0.23796	0.24044	AVRG		0.23932		1.86969
25 bis(2-Chloroethoxy)methane	++++ 0.30408	0.31326 0.30594	0.30893	0.29561	0.29347	0.29853	AVRG		0.30282		2.39356

GEL Laboratories LLC
INITIAL CALIBRATION DATA

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 Method file : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Cal Date : 21-Mar-2010 10:17 nat00999

Compound	1	10	20	40	50	80	Curve	b	Coeficients m1 m2	%RSD or R^2
26 2,4-Dichlorophenol	++++ 0.22351	0.20745 0.22510	0.21497	0.21364	0.21276	0.21836	AVRG		0.21654	2.87770
27 Benzoic acid	++++ 779305	++++ 996763	83893	215984	333227	600127	LINR	0.37420	0.17210	0.99460
28 1,2,4-Trichlorobenzene	++++ 0.29534	0.30108 0.29975	0.29237	0.28234	0.27990	0.28748	AVRG		0.29118	2.83696
30 Naphthalene	59622 482958	408591 5952102	879341	1743176	2453204	3915424	LINR	0.05011	0.91806	0.99772
204 alpha-Terpineol	++++ 0.21504	0.23629 0.21341	0.23584	0.22166	0.22004	0.21591	AVRG		0.22259	4.31595
31 4-Chloroaniline	++++ 0.28493	0.27947 0.28604	0.29236	0.29508	0.28109	0.28200	AVRG		0.28585	2.05307
189 Caprolactam	++++ 0.07008	0.05934 0.06871	0.06750	0.06559	0.06739	0.06727	AVRG		0.06655	5.20909
32 Hexachlorobutadiene	++++ 0.18360	0.18359 0.18593	0.18107	0.17811	0.17478	0.18060	AVRG		0.18110	2.07689
33 4-Chloro-3-methylphenol	++++ 0.24180	0.22447 0.24455	0.23171	0.23125	0.22996	0.23628	AVRG		0.23429	3.00125

GEL Laboratories LLC

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 Cal Date : 21-Mar-2010 10:17 nat00999

Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R^2
34 2-Methylnaphthalene	Level 1 3185761	Level 2 2759631 3911554	Level 3 6003381	Level 4 11984381	Level 5 16513501	Level 6 25748861	LINR	0.032681	0.601141		0.998531
35 1-Methyl-naphthalene	385761 31391531	2716651 38237501	5946411	11758441	16162341	25068141	LINR	0.030941	0.588351		0.998351
36 Hexachlorocyclopentadiene	++++ 0.251151	0.218771 0.267661	0.251381	0.247561	0.253111	0.248241	AVRG		0.248271		5.901141
208 1,1'-Biphenyl-	++++ 1.254751	1.222471 1.227311	1.291271	1.179871	1.198981	1.180701	AVRG		1.222191		3.325261
205 2,3-Dichloroaniline	++++ 0.551281	0.512701 0.575351	0.514801	0.498711	0.510911	0.532481	AVRG		0.528031		5.106591
37 2,4,6-Trichlorophenol	++++ 0.333851	0.279241 0.349031	0.291041	0.288761	0.299781	0.315711	AVRG		0.308191		8.345501
38 2,4,5-Trichlorophenol	++++ 0.341691	0.294401 0.359901	0.320761	0.319471	0.315651	0.337881	AVRG		0.327111		6.489071
40 2-Chloronaphthalene	364491 30396311	2682511 37029031	5829751	11557951	15822281	24697551	LINR	0.036551	1.026651		0.997601
42 o-Nitroaniline	++++ 3.281971	0.255721 0.288841	0.269981	0.269461	0.273641	0.277831	AVRG		0.273921		3.855931

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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 Method file : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Cal Date : 21-Mar-2010 10:17 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
41 m-Nitroaniline	++++ 0.20505	0.18519 0.21482	0.21448	0.21492	0.21737	0.20957	AVRG	0.20877	5.36018		
43 Dimethylphthalate	++++ 1.12375	1.12648 1.14118	1.14453	1.10613	1.09173	1.11237	AVRG	1.12088	1.68894		
44 2,6-Dinitrotoluene	++++ 0.24733	0.25896 0.25426	0.26346	0.25342	0.24949	0.24696	AVRG	0.25341	2.42391		
45 Acenaphthylene	2.18976 1.65612	1.59988 1.68189	1.58469	1.52835	1.53064	1.56415	AVRG	1.66068	13.20366		
47 Acenaphthene	1.41358 1.02939	1.00028 1.07707	0.99778	0.98187	0.99926	1.00432	AVRG	1.06294	13.61052		
48 2,4-Dinitrophenol	++++ 320377	412311	38021	93310	146622	245403	AVRG	0.35935	0.12672	0.99075	
49 Dibenzoofuran	++++ 1.41726	1.40644 1.49580	1.40820	1.32867	1.33815	1.36798	AVRG	1.39464	4.06888		
50 2,4-Dinitrotoluene	++++ 0.33142	0.31049 0.34814	0.32653	0.32098	0.31786	0.31902	AVRG	0.32492	3.75316		
51 Diethylphthalate	++++ 1.18165	1.16273 1.21522	1.19006	1.14803	1.15696	1.15712	AVRG	1.17311	2.02529		

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
 End Cal Date : 22-FEB-2010 01:19
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Cal Date : 21-Mar-2010 10:17 nat00999

Compound	1	10	20	40	50	80	Curve	b	Coeficients m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
52 4-Nitrophenol	++++ 0.14797	0.10359 0.15374	0.13187	0.13545	0.14163	0.14151	AVRG		0.13654		11.90490
53 Fluorene	1.69412 1.29401	1.18564 1.36155	1.18324	1.16123	1.18593	1.26226	AVRG		1.29100		13.69804
54 4-Chlorophenylphenylether	++++ 0.64896	0.59987 0.68125	0.60491	0.58500	0.59564	0.63651	AVRG		0.62173		5.60755
220 Hydroquinone	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
55 2-Methyl-4,6-dinitrophenol	++++ 489102	26409 612903	78471	169233	248477	398816	LINR	0.16815	0.09594		0.99736
56 p-Nitroaniline	++++ 0.19726	0.13756 0.20537	0.16571	0.18963	0.20209	0.19373	AVRG		0.18448		13.23346
133 Diphenylamine	++++ 0.52558	0.48702 0.53844	0.48634	0.48646	0.49672	0.51765	AVRG		0.50546		4.26163
58 1,2-Diphenylhydrazine	++++ 0.59206	0.58322 0.60379	0.59673	0.58464	0.59299	0.60280	AVRG		0.59375		1.35599
59 Tributylphosphate	++++ 0.98996	0.85316 1.00565	0.98848	0.99919	0.98562	0.99554	AVRG		0.97394		5.51372

GEL Laboratories LLC

INITIAL CALIBRATION DATA

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 Method file : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Cal Date : 21-Mar-2010 10:17 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
61 4-Bromophenylphenylether	++++ 0.19629	0.18589 0.20338	0.18897	0.18392	0.18630	0.19322	AVRG		0.19114		3.62682
63 Hexachlorobenzene	++++ 0.20365	0.19642 0.21337	0.19554	0.19003	0.19110	0.20055	AVRG		0.19866		4.06498
207 Atazaine	++++ 0.03441	0.03758 0.03072	0.04062	0.03420	0.03665	0.03302	AVRG		0.03531		9.21662
65 Pentachlorophenol	++++ 0.09718	0.06388 0.00035	0.08247	0.08843	0.09083	0.09630	AVRG		0.08849		14.32887
206 n-Octadecane	++++ 0.37111	0.41912 0.36735	0.42264	0.40756	0.40012	0.39129	AVRG		0.39703		5.48958
68 Phenanthrene	65568 5370346	486199 6608324	1015060	2006630	2809308	4284140	AVRG		0.39703		0.99753
69 Anthracene	1.26726 0.95537	0.89621 1.00675	0.90633	0.88074	0.91241	0.94159	ILINR	0.04915	0.98874		13.00076
72 Di-n-butylphthalate	++++ 1.04405	0.94663 1.06383	0.99271	0.99656	1.01616	1.04338	AVRG		0.97083		3.93061
76 Fluoranthene	1.27400 1.01627	0.97604 1.03676	0.96078	0.93382	0.96161	0.98359	AVRG		1.01476		10.65772

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 Method file : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Cal Date : 21-Mar-2010 10:17 nat00999

Compound	1	10	20	40	50	80	Curve	b	ml	m2	%RSD or R^2
77 Benzidine	++++	114948	240488	575469	576881	1632421					
	1879386	2370317					LINR	0.20503	0.37744		0.99275
79 Pyrene	1.59200	1.13341	1.18323	1.21007	1.19482	1.23234					
	1.21785	1.22742					AVRG		1.24889		11.38418
85 Butylbenzylphthalate	++++	0.37478	0.43005	0.45705	0.44937	0.45125					
	0.44474	0.44980					AVRG		0.43672		6.54417
89 Benzo(a)anthracene	1.38070	0.96707	0.98220	0.96802	0.98013	1.02003					
	1.04657	1.07617					AVRG		1.05261		13.14311
90 3,3'-Dichlorobenzidine	++++	0.19682	0.23362	0.24165	0.24177	0.26523					
	0.27999	0.27551					AVRG		0.24780		11.62921
92 Chrysene	56779	460630	913811	1690536	2342194	3398164					
	4593832	5526812					LINR	0.00950	0.92743		0.99892
93 bis(2-Ethylhexyl)phthalate	0.56666	0.53374	0.59392	0.62267	0.62324	0.64211					
	0.64575	0.66128					AVRG		0.61117		7.0990
94 Di-n-octylphthalate	++++	368592	834860	1605441	2216889	3330642					
	4377445	++++					LINR	0.13246	1.42322		0.99630
95 Benzo(b)fluoranthene	1.19103	0.97573	1.06659	1.08748	1.13194	1.14428					
	1.17803	1.29729					AVRG		1.13405		8.41332

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m ₁	m ₂	%RSD or R ²
	100	120									
	Level 7	Level 8									
96 Benzo(k)fluoranthene	1.26573	1.00893	1.07939	1.10364	1.13551	1.12361	AVRG		1.14008		7.11278
	1.19513	1.20870									
97 Benzo(a)pyrene	0.91365	0.85418	0.92377	0.94122	0.96804	0.99011	AVRG		0.95647		6.41651
	1.01342	1.04734									
99 Indeno(1,2,3-cd)pyrene	0.79917	0.81532	0.80541	0.77792	0.75613	0.85605	AVRG		0.79303		4.41296
	0.74498	0.78923									
100 Dibenzo(a,h)anthracene	0.61288	0.61866	0.60233	0.58469	0.57198	0.65233	AVRG		0.61288		4.28662
	0.63604	0.62414									
101 Benzo(ghi)perylene	0.75516	0.69322	0.66528	0.62680	0.59234	0.66873	AVRG		0.65613		8.07863
	0.64840	0.59909									
102 1,4-Dioxane	++++	0.35084	0.36273	0.32344	0.32306	0.29885	AVRG		0.32319		7.90081
	0.30758	0.29584									
103 Methyl methacrylate	++++	0.17778	0.18944	0.16410	0.16994	0.15571	AVRG		0.16817		7.11952
	0.16230	0.15788									
104 Ethyl methacrylate	++++	0.70693	0.75062	0.67894	0.68905	0.63812	AVRG		0.67963		6.10805
	0.66413	0.62961									
105 2-Picoline	++++	1.12830	1.19020	1.07957	1.10232	1.04185	AVRG		1.09294		4.88732
	1.07041	1.03794									

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Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	Level 7	Level 8									
106 N-Nitrosomethylethylamine	++++ 0.44409	0.44779 0.42146	0.46529	0.43489	0.44140	0.42410	AVRG		0.43986		3.39928
107 Methyl methanesulfonate	++++ 0.49978	0.52524 0.46508	0.54520	0.49099	0.48678	0.48343	AVRG		0.49950		5.43906
108 N-Nitrosodiethylamine	++++ 0.45963	0.46217 0.43541	0.49395	0.44813	0.46428	0.44274	AVRG		0.45804		4.17302
109 Ethyl Methanesulfonate	++++ 0.61342	0.62189 0.58197	0.65375	0.60074	0.60188	0.58949	AVRG		0.60902		3.91897
110 Pentachloroethane	++++ 0.32132	0.32386 0.30635	0.34717	0.31621	0.32412	0.30740	AVRG		0.32092		4.26755
111 N-Nitrosopyrrolidine	++++ 0.49612	0.47922 0.48073	0.51794	0.48306	0.49257	0.48446	AVRG		0.49059		2.76402
113 N-Nitrosomorpholine	++++ 0.65152	0.68559 0.61465	0.71997	0.66306	0.66815	0.64403	AVRG		0.66385		4.99866
114 o-Toluidine	++++ 1.62224	1.63357 1.57015	1.73837	1.58287	1.64173	1.56389	AVRG		1.62183		3.70471
115 N-Nitrosopiperidine	++++ 0.12371	0.12360 0.12009	0.13377	0.12334	0.12644	0.11963	AVRG		0.12437		3.81963

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Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R ²
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
100	120										
Level 7	Level 8										
116 a,a-Dimethylphenethylamine	++++	0.64589	0.73902	0.73378	0.77250	0.75528	AVRG		0.74304		6.29693
	0.78780	0.76698									
117 Triethylphosphorothioate	++++	0.12776	0.13008	0.12715	0.12802	0.12765	AVRG		0.12828		0.97777
	0.12726	0.13005									
118 2,6-Dichlorophenol	++++	0.19213	0.20693	0.19910	0.19955	0.20082	AVRG		0.20154		2.79228
	0.20928	0.20299									
119 Hexachloropropene	++++	0.11005	0.12087	0.12529	0.11800	0.12775	AVRG		0.12360		6.37831
	0.13255	0.13069									
120 p-Phenylenediamine	++++	0.20097	0.22012	0.20890	0.19933	0.19552	AVRG		0.19655		8.57847
	0.18199	0.16903									
121 N-Nitrosodi-n-butylamine	++++	0.22009	0.23358	0.22059	0.22594	0.19498	AVRG		0.21161		8.26915
	0.19691	0.18916									
122 Saffrole	++++	0.19404	0.20590	0.18988	0.19335	0.18710	AVRG		0.19334		3.19019
	0.19409	0.18904									
123 1,2,4,5-Tetrachlorobenzene	++++	0.48179	0.50127	0.46416	0.46968	0.45641	AVRG		0.47582		3.07832
	0.48299	0.47441									
124 Isosafrole	++++	0.31959	0.34105	0.31534	0.32095	0.31245	AVRG		0.32130		2.96333
	0.32391	0.31581									

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Compound	1	10	20	40	50	80	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	b		
	100	120							
	Level 7	Level 8							
125 1,4-Naphthoquinone	++++ 0.23046	0.32816 ++++	0.34621	0.30613	0.30795	0.25958	AVRG 0.29641		14.64421
126 m-Dinitrobenzene	++++ 0.16004	0.15594 ++++	0.16628	0.16332	0.16381	0.16032	AVRG 0.16162		2.24564
127 Pentachlorobenzene	++++ 0.44346	0.43767 0.43799	0.45121	0.42030	0.42682	0.42210	AVRG 0.43422		2.65150
128 1-Naphthylamine	++++ 0.87214	0.82239 0.85263	0.86814	0.82529	0.81386	0.84167	AVRG 0.84230		2.72431
129 2-Naphthylamine	++++ 0.94061	0.87494 0.91680	0.84477	0.88369	0.86051	0.89209	AVRG 0.88763		3.68720
130 2,3,4,6-Tetrachlorophenol	++++ 0.29224	0.25022 0.30421	0.26956	0.27043	0.27312	0.29194	AVRG 0.27739		6.29089
131 5-Nitro-o-toluidine	++++ 0.25619	0.21312 0.25185	0.24508	0.24080	0.23259	0.24890	AVRG 0.24122		6.04443
132 Thionazin	++++ 0.14438	0.13437 0.14610	0.14473	0.14728	0.14423	0.14621	AVRG 0.14390		3.02307
134 Sulfotepp	++++ 0.08119	0.07479 0.08666	0.07643	0.07911	0.08209	0.08186	AVRG 0.08016		5.01325

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
135 Phorate	++++ 0.29242	0.29874 0.29307	0.30476	0.30486	0.31798	0.30102	AVRG	0.30183			2.88237
136 1,3,5-Trinitrobenzene	++++ 0.10131	0.07415 0.09994	0.09175	0.09919	0.09673	0.10189	AVRG	0.09499			10.32629
137 Phenacetin	++++ 0.23865	0.19206 0.22853	0.20988	0.21406	0.21650	0.22859	AVRG	0.21690			8.45110
138 Diallyl	++++ 0.20258	0.20463 0.19294	0.21020	0.19892	0.21153	0.19343	AVRG	0.20203			3.67352
139 Dimethoate	++++ 0.16740	0.14043 0.16949	0.15915	0.16697	0.17200	0.17406	AVRG	0.16422			7.00813
140 4-Aminobiphenyl	++++ 0.58751	0.43217 0.58243	0.48080	0.49774	0.49087	0.54937	AVRG	0.51727			11.12235
141 Pentachloronitrobenzene	++++ 0.08047	0.07756 0.07668	0.08234	0.07796	0.08272	0.07781	AVRG	0.07936			3.09424
142 Pronamide	++++ 0.26196	0.24165 0.25418	0.25727	0.24493	0.25850	0.24762	AVRG	0.25230			3.02507
143 Dinoseb	++++ 749359	36739 959224	110780	253153	360839	582168	LINR	0.21574	0.15018		0.99408

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m	m2	%RSD or R ²
144 Disulfoton	++++ 0.22925	0.26489 0.23314	0.24948	0.24076	0.24841	0.23789	AVRG		0.24340		4.93796
145 Methyl parathion	++++ 0.16709	0.12612 0.17055	0.15136	0.15938	0.16288	0.16711	AVRG		0.15779		9.71146
146 4-Nitroquinoline-l-oxide	++++ ++++	0.02056 ++++	0.02288	0.01846	0.01666	0.01679	AVRG		0.01907		13.89367
147 Methapyrilene	++++ 0.28225	0.29694 0.26103	0.32659	0.28898	0.30536	0.28186	AVRG		0.29186		7.08529
148 Isodrin	++++ 0.10901	0.10688 0.10550	0.11119	0.10398	0.11043	0.10326	AVRG		0.10718		2.91403
149 Aramite	++++ 0.03486	0.03161 0.03195	0.03603	0.03415	0.03476	0.03379	AVRG		0.03388		4.71492
150 Kepone	++++ 0.07875	0.07589 0.07575	0.08420	0.07666	0.07796	0.07644	AVRG		0.07795		3.80313
151 p-(Dimethylamino)azobenzene	++++ 0.27510	0.22465 0.26877	0.25205	0.24804	0.27799	0.25995	AVRG		0.25808		7.17705
152 Chlorobenzilate	++++ 0.28069	0.22654 0.27880	0.24955	0.24660	0.29801	0.25875	AVRG		0.26271		9.30544

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
153 3,3'-Dimethylbenzidine	++++ 0.52259	0.37150 0.50844	0.43396	0.42299	0.44074	0.48724	AVRG		0.45535		11.7259
154 Famphur	++++ 0.36897	0.29682 0.38152	0.32000	0.33232	0.36789	0.37506	AVRG		0.34894		9.31134
155 2-Acetylaminofluorene	++++ 1402952	77941 1690573	174270	466888	454874	1169522	LINR	0.16495	0.26994		0.99689
157 7,12Dimethylbenz(a)anthracene	++++ 0.56747	0.44428 0.57419	0.53077	0.50095	0.52555	0.52043	AVRG		0.51909		8.50027
158 3-Methylcholanthrene	++++ 0.39268	0.31873 0.38502	0.35613	0.36783	0.37459	0.37965	AVRG		0.36780		6.70304
26 Phthalic anhydride	++++ 723533	35664 893615	121861	249075	381828	594958	LINR	0.12971	0.14328		0.99917
173 Carbazole	0.89649	0.61077	0.58409	0.64323	0.66829	0.69364	AVRG		0.69337		13.94742
174 Hexachlorophene	++++ 7386241	935628 ++++	3163522	4273678	5413416	6917749	LINR	6.19705	0.07687		0.99449
179 Dibenzo(a,e)pyrene	++++ 0.27252	0.28462 0.23457	0.26044	0.26698	0.22397	0.28475	AVRG		0.26112		9.56299

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Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R^2
185 (2,3-Dibromopropyl)phosphate	++++ Level 7	++++ Level 8	++++ Level 8	++++ Level 8	++++ Level 8	++++ Level 8	AVRG		0.000e+00		0.000e+00
184 p-Benzoquinone	++++ 265584	13412 310038	38094	103028	141046	214307	LINEAR	0.07963	0.20135		0.99786
191 Parathion	++++ 0.05609	0.04141 0.05831	0.04946	0.05375	0.05525	0.05615	AVRG		0.05291		10.91556
192 Methoxychlor	++++ 0.60937	0.47370 0.59064	0.56446	0.59238	0.57838	0.60702	AVRG		0.57371		8.15235
210 m-Toluidine	++++ 1.58280	1.23929 1.66243	1.38356	1.46111	1.48802	1.58621	AVRG		1.48620		9.61503
211 p-Toluidine	++++ 1.10329	1.14906 1.09804	1.18370	1.16691	1.19548	1.08736	AVRG		1.14055		3.86703
212 Cis Diallate	++++ 0.19989	0.20120 0.19195	0.20767	0.19674	0.21346	0.19409	AVRG		0.20071		3.79541
213 Trans Diallate	++++ 0.23833	0.24074 0.22699	0.24730	0.23402	0.24886	0.22756	AVRG		0.23769		3.67352
214 1,4-Dinitrobenzene	++++ 0.18015	0.14712 0.18546	0.16526	0.16942	0.17547	0.17667	AVRG		0.17136		7.34157

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Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
215 2-Ethoxyethanol	++++	0.586761	0.602031	0.594831	0.555651	0.573741	AVRG		0.573741		3.773181
	0.558221	0.544941									
216 Methylenebis(2-chloroaniline)	++++	364551	872851	1928081	3052351	4764311	LINR	0.185811	0.139971		0.998221
	6479151	7791201									
229 2,2'-Dichlorobenzil	++++	0.530141	0.548821	0.572181	0.568131	0.553631	AVRG		0.573651		6.233151
	0.630911	0.611721									
230 4-Chloroethioanisole	++++	0.231271	0.229981	0.247071	0.254591	0.252341	AVRG		0.247411		4.998271
	0.253901	0.262751									
231 4-Chlorothiophenol	++++	695101	1561011	4094101	5381001	9058211	LINR	0.1150901	0.214471		0.998841
	11305951	15405221									
232 bis(p-Chlorophenyl)sulfone	++++	0.323321	0.322741	0.325221	0.320411	0.308181	AVRG		0.326111		3.812981
	0.347921	0.334961									
233 bis(p-Chlorophenyl)disulfide	++++	0.113821	0.110541	0.120511	0.119291	0.115511	AVRG		0.119061		5.460071
	0.129781	0.123941									
234 Diphenyl disulfide	++++	0.192021	0.191861	0.197371	0.199581	0.192881	AVRG		0.196421		2.108071
	0.202051	0.199171									
235 Diphenyl sulfide	++++	0.766041	0.759161	0.775591	0.801381	0.793061	AVRG		0.792851		3.596221
	0.815791	0.838971									

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Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
236 Phenyl sulfone	++++ 0.35788	0.34800 0.36394	0.34646	0.34913	0.35609	0.34394	AVRG		0.35221		2.05193
237 Hydroxymethyl phthalimide	++++ 0.09932	0.11562 0.08725	0.12919	0.11505	0.10331	0.08699	AVRG		0.10525		14.88762
238 Phthalic acid	++++ 592112	2002 841517	61221	192852	247836	445405	LINR	0.27721	0.11935		0.99378
239 Thiophenol	++++ 1.06962	0.72136 1.11441	0.86680	1.01677	1.07339	1.08115	AVRG		0.99193		14.55784
240 bis(Chloromethyl)ether	++++ 0.72897	0.73330 0.73156	0.72927	0.75420	0.77531	0.76257	AVRG		0.74502		2.53135
241 Octachlorostyrene	++++ 0.07686	0.06930 0.07691	0.06943	0.07008	0.07083	0.07166	AVRG		0.07215		4.62127
IM 222 Trichlorophenols	++++ 0.33777	0.28677 0.35446	0.30590	0.30411	0.30771	0.32680	AVRG		0.31765		7.28968
IM 223 Tetrachlorophenols	++++ 0.29224	0.25022 0.30421	0.26956	0.27043	0.27312	0.28194	AVRG		0.27739		6.29089
IM 224 Benzo(b,k)fluoranthene	1.22838 1.18658	0.99233 1.25299	1.07299	1.09556	1.13372	1.13395	AVRG		1.13706		7.50876

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
 End Cal Date : 22-FEB-2010 01:19
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Cal Date : 21-Mar-2010 10:17 nat00999

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
	Level 7	Level 8									
	100	120									
IM 225 TIO Sum Semivolatiles	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
	++++	++++									
\$ 3 2-Fluorophenol	++++	0.92659	0.96919	0.96650	0.94036	0.93281					
	0.93098	0.94400					AVRG		0.94435		1.80921
\$ 5 Phenol-d5	++++	1.15492	1.20808	1.18961	1.17093	1.17303					
	1.15725	1.19013					AVRG		1.17771		1.63471
\$ 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	++++	0.28463	0.28610	0.28272	0.27867	0.28386					
	0.28720	0.28733					AVRG		0.28435		1.06265
\$ 39 2-Fluorobiphenyl	++++	1.17351	1.17042	1.12460	1.11619	1.18499					
	1.20400	1.26805					AVRG		1.17740		4.32813
\$ 60 2,4,6-Tribromopheno.	++++	0.12711	0.13347	0.12836	0.12619	0.12779					
	0.13893	0.14371					AVRG		0.13223		5.12665
\$ 81 p-Terphenyl-d14	++++	0.67083	0.69230	0.71233	0.71339	0.73658					
	0.74530	0.77029					AVRG		0.72015		4.65100

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Cal Date : 21-Mar-2010 10:17 nat00999

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

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 20-FEB-2010 18:09
Lab File ID: s8b2012.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100215-05.1 Quant Type: ISTD
Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	0.94435	0.91252	0.91252	0.000	-3.36963	60.00000	Averaged
5 Phenol-d5	1.17771	1.11967	1.11967	0.000	-4.92793	60.00000	Averaged
20 Nitrobenzene-d5	0.28435	0.28445	0.28445	0.000	0.03513	60.00000	Averaged
39 2-Fluorobiphenyl	1.17740	1.10971	1.10971	0.000	-5.74835	60.00000	Averaged
60 2,4,6-Tribromophenol	0.13223	0.12031	0.12031	0.000	-9.01194	60.00000	Averaged
81 p-Terphenyl-d14	0.72015	0.73651	0.73651	0.000	2.27163	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.60923	0.57218	0.57218	0.000	-6.08077	60.00000	Averaged
2 Pyridine	0.89373	0.67690	0.67690	0.000	-24.26051	60.00000	Averaged
4 Aniline	0.55542	0.50332	0.50332	0.000	-9.38073	60.00000	Averaged
6 Phenol	1.21617	1.17309	1.17309	0.001	-3.54259	20.00000	Averaged|ccc
7 bis(2-Chloroethyl) ether	0.83144	0.74294	0.74294	0.000	-10.64430	60.00000	Averaged
8 2-Chlorophenol	1.05605	1.02399	1.02399	0.000	-3.03618	60.00000	Averaged
203 n-Decane	1.08949	1.10768	1.10768	0.000	1.66910	60.00000	Averaged
9 1,3-Dichlorobenzene	1.25240	1.20785	1.20785	0.000	-3.55721	60.00000	Averaged
11 1,4-Dichlorobenzene	1.29215	1.21176	1.21176	0.001	-6.22171	20.00000	Averaged|ccc
13 1,2-Dichlorobenzene	1.20194	1.13600	1.13600	0.000	-5.48562	60.00000	Averaged
14 bis(2-Chloroisopropyl) ether	1.63019	1.56683	1.56683	0.000	-3.88699	60.00000	Averaged
12 Benzyl alcohol	0.66057	0.64188	0.64188	0.000	-2.82972	60.00000	Averaged
15 o-Cresol	0.84463	0.81254	0.81254	0.000	-3.79849	60.00000	Averaged
18 m,p-Cresols	1.06890	1.06346	1.06346	0.000	-0.50838	60.00000	Averaged
17 N-Nitrosodipropylamine	0.77788	0.74120	0.74120	0.050	-4.71529	60.00000	Averaged|spcc
19 Hexachloroethane	0.48694	0.45665	0.45665	0.000	-6.22059	60.00000	Averaged
21 Nitrobenzene	0.29331	0.27681	0.27681	0.000	-5.62390	60.00000	Averaged
22 Isophorone	0.53999	0.49377	0.49377	0.000	-8.55934	60.00000	Averaged
23 2-Nitrophenol	0.13462	0.13301	0.13301	0.001	-1.19474	20.00000	Averaged|ccc
24 2,4-Dimethylphenol	0.23932	0.22527	0.22527	0.000	-5.87154	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.30282	0.26637	0.26637	0.000	-12.03559	60.00000	Averaged
26 2,4-Dichlorophenol	0.21654	0.20901	0.20901	0.001	-3.47894	20.00000	Averaged|ccc
27 Benzoic acid	41.94960	40.00000	0.11609	0.000	4.87400	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.29118	0.26506	0.26506	0.000	-8.96931	60.00000	Averaged
30 Naphthalene	35.39177	40.00000	0.76629	0.000	-11.52057	60.00000	Linear
204 alpha-Terpineol	0.22259	0.20059	0.20059	0.000	-9.88109	60.00000	Averaged
31 4-Chloroaniline	0.28585	0.27423	0.27423	0.000	-4.06642	60.00000	Averaged
32 Hexachlorobutadiene	0.18110	0.17017	0.17017	0.001	-6.03393	20.00000	Averaged|ccc
33 4-Chloro-3-methylphenol	0.23429	0.22644	0.22644	0.001	-3.34816	20.00000	Averaged|ccc
34 2-Methylnaphthalene	37.56535	40.00000	0.54491	0.000	-6.08662	60.00000	Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 20-FEB-2010 18:09
Lab File ID: s8b2012.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100215-05.1 Quant Type: ISTD
Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	M1N RRF %D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	36.14060	40.00000	0.51338	0.000	-9.64851	60.00000 Linear
36 Hexachlorocyclopentadiene	0.24827	0.20951	0.20951	0.050	-15.61096	60.00000 Averaged|spcc
205 2,3-Dichloroaniline	0.52803	0.47281	0.47281	0.000	-10.45916	60.00000 Averaged
37 2,4,6-Trichlorophenol	0.30819	0.28652	0.28652	0.001	-7.02903	20.00000 Averaged|ccc
38 2,4,5-Trichlorophenol	0.32711	0.32121	0.32121	0.000	-1.80308	60.00000 Averaged
40 2-Chloronaphthalene	36.94398	40.00000	0.91069	0.000	-7.64006	60.00000 Linear
42 o-Nitroaniline	0.27392	0.25926	0.25926	0.000	-5.35118	60.00000 Averaged
41 m-Nitroaniline	0.20877	0.20131	0.20131	0.000	-3.57417	60.00000 Averaged
43 Dimethylphthalate	1.12088	1.03748	1.03748	0.000	-7.44016	60.00000 Averaged
44 2,6-Dinitrotoluene	0.25341	0.23417	0.23417	0.000	-7.59187	60.00000 Averaged
50 2,4-Dinitrotoluene	0.32492	0.29882	0.29882	0.000	-8.03184	60.00000 Averaged
45 Acenaphthylene	1.66068	1.47808	1.47808	0.000	-10.99555	60.00000 Averaged
47 Acenaphthene	1.06294	0.89925	0.89925	0.001	-15.39975	20.00000 Averaged|ccc
48 2,4-Dinitrophenol	42.02206	40.00000	0.08759	0.050	5.05516	60.00000 Linear|spcc
49 Dibenzofuran	1.39464	1.27908	1.27908	0.000	-8.28625	60.00000 Averaged
51 Diethylphthalate	1.17311	1.07200	1.07200	0.000	-8.61955	60.00000 Averaged
52 4-Nitrophenol	0.13654	0.14391	0.14391	0.050	5.40043	60.00000 Averaged|spcc
53 Fluorene	1.29100	1.07540	1.07540	0.000	-16.69989	60.00000 Averaged
54 4-Chlorophenylphenylether	0.62173	0.54162	0.54162	0.000	-12.88500	60.00000 Averaged
55 2-Methyl-4,6-dinitrophenol	48.66926	40.00000	0.10060	0.000	21.67316	60.00000 Linear
56 p-Nitroaniline	0.18448	0.18495	0.18495	0.000	0.25453	60.00000 Averaged
133 Diphenylamine	0.50546	0.46520	0.46520	0.001	-7.96469	20.00000 Averaged|ccc
58 1,2-Diphenylhydrazine	0.59375	0.56532	0.56532	0.000	-4.78833	60.00000 Averaged
61 4-Bromophenylphenylether	0.19114	0.16319	0.16319	0.000	-14.62019	60.00000 Averaged
63 Hexachlorobenzene	0.19866	0.17428	0.17428	0.000	-12.27477	60.00000 Averaged
65 Pentachlorophenol	0.08849	0.08776	0.08776	0.001	-0.83218	20.00000 Averaged|ccc
206 n-Octadecane	0.39703	0.39262	0.39262	0.000	-1.10928	60.00000 Averaged
68 Phenanthrene	35.36562	40.00000	0.82559	0.000	-11.58594	60.00000 Linear
69 Anthracene	0.97083	0.82497	0.82497	0.000	-15.02413	60.00000 Averaged
72 Di-n-butylphthalate	1.01476	0.94515	0.94515	0.000	-6.85986	60.00000 Averaged
76 Fluoranthene	1.01786	0.89285	0.89285	0.001	-12.28130	20.00000 Averaged|ccc
79 Pyrene	1.24889	1.05447	1.05447	0.000	-15.56774	60.00000 Averaged
85 Butylbenzylphthalate	0.43672	0.42071	0.42071	0.000	-3.66508	60.00000 Averaged
89 Benzo(a)anthracene	1.05261	0.90191	0.90191	0.000	-14.31645	60.00000 Averaged
92 Chrysene	36.32073	40.00000	0.83331	0.000	-9.19818	60.00000 Linear
93 bis(2-Ethylhexyl)phthalate	0.61117	0.58944	0.58944	0.000	-3.55520	60.00000 Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 20-FEB-2010 18:09
 Lab File ID: s8b2012.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
 Analysis Type: Init. Cal. Times: 12:55 01:19
 Lab Sample ID: WBN100215-05.1 Quant Type: ISTD
 Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	39.76021	40.00000	1.22616	0.001	-0.59948	20.00000	Linear|ccc
95 Benzo(b)fluoranthene	1.13405	1.05298	1.05298	0.000	-7.14838	60.00000	Averaged
96 Benzo(k)fluoranthene	1.14008	1.04465	1.04465	0.000	-8.37069	60.00000	Averaged
97 Benzo(a)pyrene	0.95647	0.89169	0.89169	0.001	-6.77277	20.00000	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	0.79303	0.69287	0.69287	0.000	-12.62907	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.61288	0.52486	0.52486	0.000	-14.36175	60.00000	Averaged
101 Benzo(ghi)perylene	0.65613	0.54043	0.54043	0.000	-17.63270	60.00000	Averaged
126 m-Dinitrobenzene	0.16162	0.15617	0.15617	0.000	-3.37054	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.27739	0.25140	0.25140	0.000	-9.36867	60.00000	Averaged
143 Dinoseb	39.33235	40.00000	0.11528	0.000	-1.66914	60.00000	Linear
173 Carbazole	0.69337	0.64707	0.64707	0.000	-6.67637	60.00000	Averaged
184 p-Benzoquinone	26.23116	40.00000	0.11601	0.000	-34.42209	60.00000	Linear
192 Methoxychlor	0.57371	0.53574	0.53574	0.000	-6.61792	60.00000	Averaged
211 p-Toluidine	1.14055	0.88750	0.88750	0.000	-22.18641	60.00000	Averaged
210 m-Toluidine	1.48620	1.44197	1.44197	0.000	-2.97629	60.00000	Averaged
26 Phthalic anhydride	53.94737	40.00000	0.17465	0.000	34.86844	60.00000	Linear
179 Dibenzo(a,e)pyrene	0.26112	0.15069	0.15069	0.000	-42.29332	60.00000	Averaged
214 1,4-Dinitrobenzene	0.17136	0.17062	0.17062	0.000	-0.43576	60.00000	Averaged
215 2-Ethoxyethanol	0.57374	0.58779	0.58779	0.000	2.44852	60.00000	Averaged
216 Methylenebis(2-chloroanilin	41.74874	40.00000	0.12008	0.000	4.37185	60.00000	Linear
M 222 Trichlorophenols	0.31765	0.30387	0.30387	0.000	-4.33823	60.00000	Averaged
M 223 Tetrachlorophenols	0.27739	0.25140	0.25140	0.000	-9.36867	60.00000	Averaged
M 224 Benzo(b,k)fluoranthene	1.13706	1.04881	1.04881	0.000	-7.76116	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD8.i/s022010.b/s8b2012.d
 Lab Smp Id: WBN100215-05.1 Client Smp ID: MEGAICV
 Inj Date : 20-FEB-2010 18:09
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |WBN100215-05.1|40 PPM|1|SVM|1|MEGAICV
 Misc Info : |MSD8270|WBN100217-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m
 Meth Date : 23-Feb-2010 13:25 nat00999 Quant Type: ISTD
 Cal Date : 22-FEB-2010 01:19 Cal File: s8b2046.d
 Als bottle: 11 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: MEGAICARE.sub
 Target Version: 3.50
 Processing Host: hpc1p1

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.530	4.530	(1.000)	613599		40.0000	
* 29 Naphthalene-d8	136	5.797	5.797	(1.000)	2473544		40.0000	
* 46 Acenaphthene-d10	164	7.663	7.663	(1.000)	1402775		40.0000	
* 67 Phenanthrene-d10	188	9.263	9.263	(1.000)	2635307		40.0000	
* 91 Chrysene-d12	240	12.197	12.197	(1.000)	2302220		40.0000	
* 98 Perylene-d12	264	14.354	14.354	(1.000)	1521193		40.0000	
\$ 3 2-Fluorophenol	112	3.368	3.368	(0.743)	559924		40.0000	38.6
\$ 5 Phenol-d5	99	4.149	4.149	(0.916)	687028		40.0000	38.0
\$ 20 Nitrobenzene-d5	82	5.063	5.063	(0.873)	703589		40.0000	40.0
\$ 39 2-Fluorobiphenyl	172	6.925	6.925	(0.904)	1556680		40.0000	37.7
\$ 60 2,4,6-Tribromophenol	329	8.506	8.506	(1.110)	168767		40.0000	36.4
\$ 81 p-Terphenyl-d14	244	10.978	10.978	(0.900)	1695598		40.0000	40.9
1 N-Methyl-N-nitrosomethylamine	74	2.382	2.382	(0.526)	351092		40.0000	37.6
2 Pyridine	79	2.420	2.420	(0.534)	415348		40.0000	30.3
4 Aniline	66	4.220	4.220	(0.932)	308837		40.0000	36.2
6 Phenol	94	4.163	4.163	(0.919)	719807		40.0000	38.6(Q)
7 bis(2-Chloroethyl) ether	63	4.263	4.263	(0.941)	455867		40.0000	35.7
8 2-Chlorophenol	128	4.335	4.335	(0.957)	628318		40.0000	38.8
203 n-Decane	43	4.354	4.354	(0.961)	679671		40.0000	40.7
9 1,3-Dichlorobenzene	146	4.477	4.477	(0.988)	741134		40.0000	38.6
11 1,4-Dichlorobenzene	146	4.549	4.549	(1.004)	743535		40.0000	37.5
13 1,2-Dichlorobenzene	146	4.692	4.692	(1.036)	697051		40.0000	37.8
14 bis(2-Chloroisopropyl)ether	45	4.768	4.768	(1.053)	961403		40.0000	38.4
12 Benzyl alcohol	108	4.644	4.644	(1.025)	393855		40.0000	38.9(H)
15 o-Cresol	107	4.735	4.735	(1.045)	498576		40.0000	38.5
18 m,p-Cresols	107	4.887	4.887	(1.079)	652539		40.0000	39.8

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	4.906	4.906	(1.063)	454801	40.0000	38.1
19 Hexachloroethane	117	5.025	5.025	(1.109)	280201	40.0000	37.5
21 Nitrobenzene	77	5.082	5.082	(0.877)	684707	40.0000	37.8
22 Isophorone	82	5.320	5.320	(0.918)	1221372	40.0000	36.6
23 2-Nitrophenol	139	5.397	5.397	(0.931)	329005	40.0000	39.5
24 2,4-Dimethylphenol	122	5.420	5.420	(0.935)	557217	40.0000	37.6
25 bis(2-Chloroethoxy)methane	93	5.525	5.525	(0.953)	658886	40.0000	35.2
26 2,4-Dichlorophenol	162	5.644	5.644	(0.974)	516992	40.0000	38.6
27 Benzoic acid	105	5.539	5.539	(0.956)	287142	40.0000	41.9
28 1,2,4-Trichlorobenzene	180	5.735	5.735	(0.989)	655648	40.0000	36.4
30 Naphthalene	128	5.820	5.820	(1.004)	1895442	40.0000	35.4
204 alpha-Terpineol	59	5.816	5.816	(1.003)	496172	40.0000	36.0
31 4-Chloroaniline	127	5.863	5.863	(1.012)	678318	40.0000	38.4
32 Hexachlorobutadiene	225	5.939	5.939	(1.025)	420920	40.0000	37.6
33 4-Chloro-3-methylphenol	107	6.354	6.354	(1.096)	560118	40.0000	38.7
34 2-Methylnaphthalene	142	6.539	6.539	(1.128)	1347856	40.0000	37.6
35 1-Methylnaphthalene	142	6.649	6.649	(1.147)	1269859	40.0000	36.1
36 Hexachlorocyclopentadiene	237	6.706	6.706	(0.875)	293896	40.0000	33.8
205 2,3-Dichloroaniline	161	6.835	6.835	(0.892)	663240	40.0000	35.8
37 2,4,6-Trichlorophenol	196	6.835	6.835	(0.892)	401928	40.0000	37.2
38 2,4,5-Trichlorophenol	196	6.873	6.873	(0.897)	450584	40.0000	39.3
40 2-Chloronaphthalene	162	7.063	7.063	(0.922)	1277487	40.0000	36.9
42 o-Nitroaniline	65	7.163	7.163	(0.935)	363688	40.0000	37.8
41 m-Nitroaniline	138	7.606	7.606	(0.993)	282391	40.0000	38.6
43 Dimethylphthalate	163	7.363	7.363	(0.961)	1455357	40.0000	37.0
44 2,6-Dinitrotoluene	165	7.425	7.425	(0.969)	328490	40.0000	37.0
50 2,4-Dinitrotoluene	165	7.854	7.854	(1.025)	419181	40.0000	36.8
45 Acenaphthylene	152	7.511	7.511	(0.980)	2073418	40.0000	35.6
47 Acenaphthene	154	7.697	7.697	(1.004)	1261448	40.0000	33.8
48 2,4-Dinitrophenol	184	7.711	7.711	(1.006)	122866	40.0000	42.0
49 Dibenzofuran	168	7.878	7.878	(1.028)	1794261	40.0000	36.7
51 Diethylphthalate	149	8.111	8.111	(1.058)	1503769	40.0000	36.6
52 4-Nitrophenol	139	7.768	7.768	(1.014)	201873	40.0000	42.2
53 Fluorene	166	8.249	8.249	(1.076)	1508548	40.0000	33.3
54 4-Chlorophenylphenylether	204	8.239	8.239	(1.075)	759775	40.0000	34.8
55 2-Methyl-4,6-dinitrophenol	198	8.297	8.297	(0.896)	265115	40.0000	48.7
56 p-Nitroaniline	138	8.263	8.263	(1.078)	259438	40.0000	40.1
133 Diphenylamine	169	8.368	8.368	(0.903)	1225948	40.0000	36.8
58 1,2-Diphenylhydrazine	77	8.416	8.416	(0.908)	1489780	40.0000	38.1
61 4-Bromophenylphenylether	248	8.768	8.768	(0.947)	430063	40.0000	34.2
63 Hexachlorobenzene	284	8.839	8.839	(0.954)	459277	40.0000	35.1
65 Pentachlorophenol	266	9.049	9.049	(0.977)	231262	40.0000	39.7
206 n-Octadecane	57	9.125	9.125	(0.985)	1034683	40.0000	39.6
68 Phenanthrene	178	9.292	9.292	(1.003)	2175678	40.0000	35.4
69 Anthracene	178	9.344	9.344	(1.009)	2174061	40.0000	34.0
72 Di-n-butylphthalate	149	9.873	9.873	(1.066)	2490757	40.0000	37.2
76 Fluoranthene	202	10.573	10.573	(1.141)	2352940	40.0000	35.1

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	====	==	=====	=====	=====	=====	=====
79 Pyrene	202	10.820	10.820	(0.887)	2427617	40.0000	33.8
85 Butylbenzylphthalate	149	11.497	11.497	(0.943)	968576	40.0000	38.5
89 Benzo(a)anthracene	228	12.178	12.178	(0.998)	2076405	40.0000	34.3
92 Chrysene	228	12.230	12.230	(1.003)	1918472	40.0000	36.3
93 bis(2-Ethylhexyl)phthalate	149	12.182	12.182	(0.999)	1357026	40.0000	38.6
94 Di-n-octylphthalate	149	13.097	13.097	(0.912)	1865222	40.0000	39.8
95 Benzo(b)fluoranthene	252	13.720	13.720	(0.956)	1601785	40.0000	37.1 (H)
96 Benzo(k)fluoranthene	252	13.768	13.768	(0.959)	1589110	40.0000	36.6
97 Benzo(a)pyrene	252	14.254	14.254	(0.993)	1356428	40.0000	37.3
99 Indeno(1,2,3-cd)pyrene	276	16.220	16.220	(1.130)	1053996	40.0000	34.9
100 Dibenzo(a,h)anthracene	278	16.254	16.254	(1.132)	798414	40.0000	34.2
101 Benzo(ghi)perylene	276	16.701	16.701	(1.164)	822104	40.0000	32.9
126 m-Dinitrobenzene	168	7.392	7.392	(0.965)	219071	40.0000	38.6
130 2,3,4,6-Tetrachlorophenol	232	8.001	8.001	(1.044)	352660	40.0000	36.2
143 Dinoseb	211	9.239	9.239	(0.997)	303786	40.0000	39.3
173 Carbazole	167	9.511	9.511	(1.027)	1705240	40.0000	37.3
184 p-Benzoquinone	54	3.787	3.787	(0.836)	71181	40.0000	26.2
192 Methoxychlor	227	12.078	12.078	(0.990)	1233392	40.0000	37.4
211 p-Toluidine	106	4.949	4.949	(1.093)	544571	40.0000	31.1
210 m-Toluidine	106	4.982	4.982	(1.100)	884790	40.0000	38.8
26 Phthalic anhydride	104	6.597	6.597	(1.138)	432011	40.0000	53.9
179 Dibenzo(a,e)pyrene	302	19.925	19.925	(1.388)	229221	40.0000	23.1
214 1,4-Dinitrobenzene	75	7.311	7.311	(0.954)	239338	40.0000	39.8
215 2-Ethoxyethanol	59	2.177	2.177	(0.481)	360665	40.0000	41.0
216 Methylenebis(2-chloroaniline)	231	12.135	12.135	(0.995)	276453	40.0000	41.7 (Q)
M 222 Trichlorophenols	196				852512	80.0000	76.5
M 223 Tetrachlorophenols	232				352660	40.0000	36.2
M 224 Benzo(b,k)fluoranthene	252				3190895	80.0000	73.8

QC Flag Legend

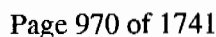
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Page 1

Instrument: MSD8.1

Operator: nag1
Column diameter: 0.20

/chem/MSD8.i/s0222010.b/s8b2012.d



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 21-FEB-2010 19:53
Lab File ID: s8b2035.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100218-08.1 Quant Type: ISTD
Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.84330	0.69688	0.69688	0.000	-17.36320	60.00000	Averaged
16 Acetophenone	1.20309	1.14109	1.14109	0.000	-5.15283	60.00000	Averaged
189 Caprolactam	0.06655	0.06831	0.06831	0.000	2.63428	60.00000	Averaged
208 1,1'-Biphenyl	1.22219	1.19703	1.19703	0.000	-2.05853	60.00000	Averaged
207 Atrazine	0.03531	0.03806	0.03806	0.000	7.78782	60.00000	Averaged
77 Benzidine	41.98033	40.00000	0.31874	0.000	4.95082	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.24780	0.27320	0.27320	0.000	10.24947	60.00000	Averaged
102 1,4-Dioxane	0.32319	0.37708	0.37708	0.000	16.67521	60.00000	Averaged
103 Methyl methacrylate	0.16817	0.19675	0.19675	0.000	16.99914	60.00000	Averaged
104 Ethyl methacrylate	0.67963	0.79943	0.79943	0.000	17.62812	60.00000	Averaged
105 2-Picoline	1.09294	1.07981	1.07981	0.000	-1.20157	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43986	0.46246	0.46246	0.000	5.13741	60.00000	Averaged
107 Methyl methanesulfonate	0.49950	0.54492	0.54492	0.000	9.09235	60.00000	Averaged
108 N-Nitrosodiethylamine	0.45804	0.47767	0.47767	0.000	4.28449	60.00000	Averaged
109 Ethyl Methanesulfonate	0.60902	0.73730	0.73730	0.000	21.06290	60.00000	Averaged
110 Pentachloroethane	0.32092	0.43327	0.43327	0.000	35.01075	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.49059	0.49284	0.49284	0.000	0.45905	60.00000	Averaged
113 N-Nitrosomorpholine	0.66385	0.70342	0.70342	0.000	5.95974	60.00000	Averaged
114 o-Toluidine	1.62183	1.64404	1.64404	0.000	1.36960	60.00000	Averaged
115 N-Nitrosopiperidine	0.12437	0.12589	0.12589	0.000	1.22448	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.74304	0.77809	0.77809	0.000	4.71795	60.00000	Averaged
118 2,6-Dichlorophenol	0.20154	0.20467	0.20467	0.000	1.55320	60.00000	Averaged
119 Hexachloropropene	0.12360	0.18944	0.18944	0.000	53.26602	60.00000	Averaged
120 p-Phenylenediamine	0.19655	0.20159	0.20159	0.000	2.56438	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21161	0.22736	0.22736	0.000	7.44405	60.00000	Averaged
122 Safrole	0.19334	0.21416	0.21416	0.000	10.76780	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.47582	0.48716	0.48716	0.000	2.38273	60.00000	Averaged
124 Isosafrole	0.32130	0.41354	0.41354	0.000	28.70739	60.00000	Averaged
125 1,4-Naphthoquinone	0.29641	0.29356	0.29356	0.000	-0.96298	60.00000	Averaged
127 Pentachlorobenzene	0.43422	0.41984	0.41984	0.000	-3.31212	60.00000	Averaged
128 1-Naphthylamine	0.84230	0.87716	0.87716	0.000	4.13822	60.00000	Averaged
129 2-Naphthylamine	0.88763	0.93442	0.93442	0.000	5.27090	60.00000	Averaged
131 5-Nitro-o-toluidine	0.24122	0.24992	0.24992	0.000	3.60687	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.09499	0.13160	0.13160	0.000	38.54101	60.00000	Averaged
137 Phenacetin	0.21690	0.22945	0.22945	0.000	5.79020	60.00000	Averaged
138 Diallate	0.20203	0.19101	0.19101	0.000	-5.45490	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 21-FEB-2010 19:53
 Lab File ID: s8b2035.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
 Analysis Type: Init. Cal. Times: 12:55 01:19
 Lab Sample ID: WBN100218-08.1 Quant Type: ISTD
 Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.20071	0.25770	0.25770	0.000	28.39010	60.00000	Averaged
213 Trans Diallate	0.23769	0.22472	0.22472	0.000	-5.45490	60.00000	Averaged
140 4-Aminobiphenyl	0.51727	0.55152	0.55152	0.000	6.62074	60.00000	Averaged
141 Pentachloronitrobenzene	0.07936	0.08310	0.08310	0.000	4.70392	60.00000	Averaged
142 Pronamide	0.25230	0.26699	0.26699	0.000	5.82308	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01907	0.01438	0.01438	0.000	-24.58503	60.00000	Averaged
147 Methapyrilene	0.29186	0.32275	0.32275	0.000	10.58368	60.00000	Averaged
148 Isodrin	0.10718	0.09605	0.09605	0.000	-10.38226	60.00000	Averaged
149 Aramite	0.03388	0.03359	0.03359	0.000	-0.86154	60.00000	Averaged
150 Kepone	0.07795	0.07692	0.07692	0.000	-1.31942	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25808	0.27705	0.27705	0.000	7.35059	60.00000	Averaged
152 Chlorobenzilate	0.26271	0.28217	0.28217	0.000	7.40895	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.45535	0.49139	0.49139	0.000	7.91309	60.00000	Averaged
155 2-Acetylaminofluorene	42.39036	40.00000	0.24154	0.000	5.97589	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.51909	0.49026	0.49026	0.000	-5.55329	60.00000	Averaged
158 3-Methylcholanthrene	0.36780	0.40291	0.40291	0.000	9.54489	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD8.i/s022010.b/s8b2035.d
Lab Smp Id: WBN100218-08.1 Client Smp ID: APICV
Inj Date : 21-FEB-2010 19:53
Operator : nag1 Inst ID: MSD8.i
Smp Info : |WBN100218-08.1|40 PPM|1|SVM|1|APICV
Misc Info : |MSD8270|WBN100217-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m
Meth Date : 23-Feb-2010 13:31 nat00999 Quant Type: ISTD
Cal Date : 22-FEB-2010 00:48 Cal File: s8b2045.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.530	4.530	(1.000)	649861	40.0000	
* 29 Naphthalene-d8	136	5.796	5.796	(1.000)	2469894	40.0000	
* 46 Acenaphthene-d10	164	7.658	7.658	(1.000)	1465298	40.0000	
* 67 Phenanthrene-d10	188	9.263	9.263	(1.000)	2747481	40.0000	
* 91 Chrysene-d12	240	12.192	12.192	(1.000)	2214467	40.0000	
* 98 Perylene-d12	264	14.349	14.349	(1.000)	1648118	40.0000	
209 Benzaldehyde	77	4.125	4.125	(0.911)	452872	40.0000	33.0
16 Acetophenone	105	4.906	4.906	(1.083)	741552	40.0000	37.9
189 Caprolactam	113	6.225	6.225	(1.074)	168712	40.0000	41.0 (H)
208 1,1'-Biphenyl	154	7.034	7.034	(0.919)	1754011	40.0000	39.2
207 Atrazine	173	8.939	8.939	(0.965)	104582	40.0000	43.1
77 Benzidine	184	10.706	10.706	(0.878)	705844	40.0000	42.0
90 3,3'-Dichlorobenzidine	252	12.130	12.130	(0.995)	604986	40.0000	44.1
102 1,4-Dioxane	88	2.177	2.177	(0.481)	245052	40.0000	46.7
103 Methyl methacrylate	100	2.177	2.177	(0.481)	127862	40.0000	46.8
104 Ethyl methacrylate	69	2.692	2.692	(0.594)	519520	40.0000	47.0
105 2-Picoline	93	2.939	2.939	(0.649)	701726	40.0000	39.5
106 N-Nitrosomethylethylamine	88	3.011	3.011	(0.665)	300533	40.0000	42.0
107 Methyl methanesulfonate	80	3.239	3.239	(0.715)	354120	40.0000	43.6
108 N-Nitrosodiethylamine	102	3.568	3.568	(0.788)	310419	40.0000	41.7
109 Ethyl Methanesulfonate	79	3.806	3.806	(0.840)	479140	40.0000	48.4
110 Pentachloroethane	167	4.268	4.268	(0.942)	281568	40.0000	54.0
111 N-Nitrosopyrrolidine	100	4.887	4.887	(1.079)	320276	40.0000	40.2 (Q)
113 N-Nitrosomorpholine	56	4.925	4.925	(1.087)	457122	40.0000	42.4
114 o-Toluidine	106	4.944	4.944	(1.091)	1068400	40.0000	40.5
115 N-Nitrosopiperidine	114	5.230	5.230	(0.902)	310940	40.0000	40.5

Compounds	QUANT SIG					AMOUNTS	
	MASS	R1	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.630	5.630	(0.971)	1921805	40.0000	41.9
118 2,6-Dichlorophenol	162	5.872	5.872	(1.013)	505519	40.0000	40.6
119 Hexachloropropene	213	5.906	5.906	(1.019)	467897	40.0000	61.3
120 p-Phenylenediamine	108	6.230	6.230	(1.075)	497912	40.0000	41.0
121 N-Nitrosodi-n-butylamine	84	6.211	6.211	(1.071)	561557	40.0000	43.0
122 Safrole	162	6.439	6.439	(1.111)	528955	40.0000	44.3
123 1,2,4,5-Tetrachlorobenzene	216	6.715	6.715	(0.877)	713829	40.0000	41.0
124 Isosafrole	162	6.992	6.992	(0.913)	605957	40.0000	51.5
125 1,4-Naphthoquinone	158	7.244	7.244	(0.946)	430153	40.0000	39.6
127 Pentachlorobenzene	250	7.830	7.830	(1.022)	615188	40.0000	38.7
128 1-Naphthylamine	143	7.958	7.958	(1.039)	1285298	40.0000	41.6
129 2-Naphthylamine	143	8.044	8.044	(1.050)	1369199	40.0000	42.1
131 5-Nitro-o-toluidine	152	8.249	8.249	(1.077)	366207	40.0000	41.4
136 1,3,5-Trinitrobenzene	75	8.634	8.634	(0.932)	361581	40.0000	55.4
137 Phenacetin	108	8.701	8.701	(0.939)	630422	40.0000	42.3(Q)
138 Diallate	86	8.673	8.673	(0.936)	524804	40.0000	37.8
212 Cis Diallate	86	8.768	8.768	(0.947)	106203	6.00000	7.7
213 Trans Diallate	86	8.673	8.673	(0.936)	524804	34.0000	32.1
140 4-Aminobiphenyl	169	9.049	9.049	(0.977)	1515283	40.0000	42.6
141 Pentachloronitrobenzene	237	9.063	9.063	(0.978)	228304	40.0000	41.9(Q)
142 Pronamide	173	9.106	9.106	(0.983)	733556	40.0000	42.3
146 4-Nitroquinoline-1-oxide	101	10.111	10.111	(1.091)	39509	40.0000	30.2
147 Methapyrilene	58	10.192	10.192	(1.100)	886744	40.0000	44.2
148 Isodrin	193	10.411	10.411	(1.124)	263898	40.0000	35.8
149 Aramite	185	10.944	10.944	(1.181)	92281	40.0000	39.6
150 Kepone	272	11.563	11.563	(1.248)	211334	40.0000	39.5
151 p-(Dimethylamino)azobenzene	120	11.125	11.125	(0.912)	613518	40.0000	42.9
152 Chlorobenzilate	251	11.173	11.173	(0.916)	624855	40.0000	43.0
153 3,3'-Dimethylbenzidine	212	11.487	11.487	(0.942)	1088156	40.0000	43.2
155 2-Acetylaminofluorene	181	11.782	11.782	(0.966)	534890	40.0000	42.4
157 7,12Dimethylbenz(a)anthracene	256	13.706	13.706	(0.955)	808013	40.0000	37.8
158 3-Methylcholanthrene	268	14.849	14.849	(1.035)	664045	40.0000	43.8(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSDB.i/s022010.b/s02035.d

Date: 21-FEB-2010 19:53

Client ID: APICV

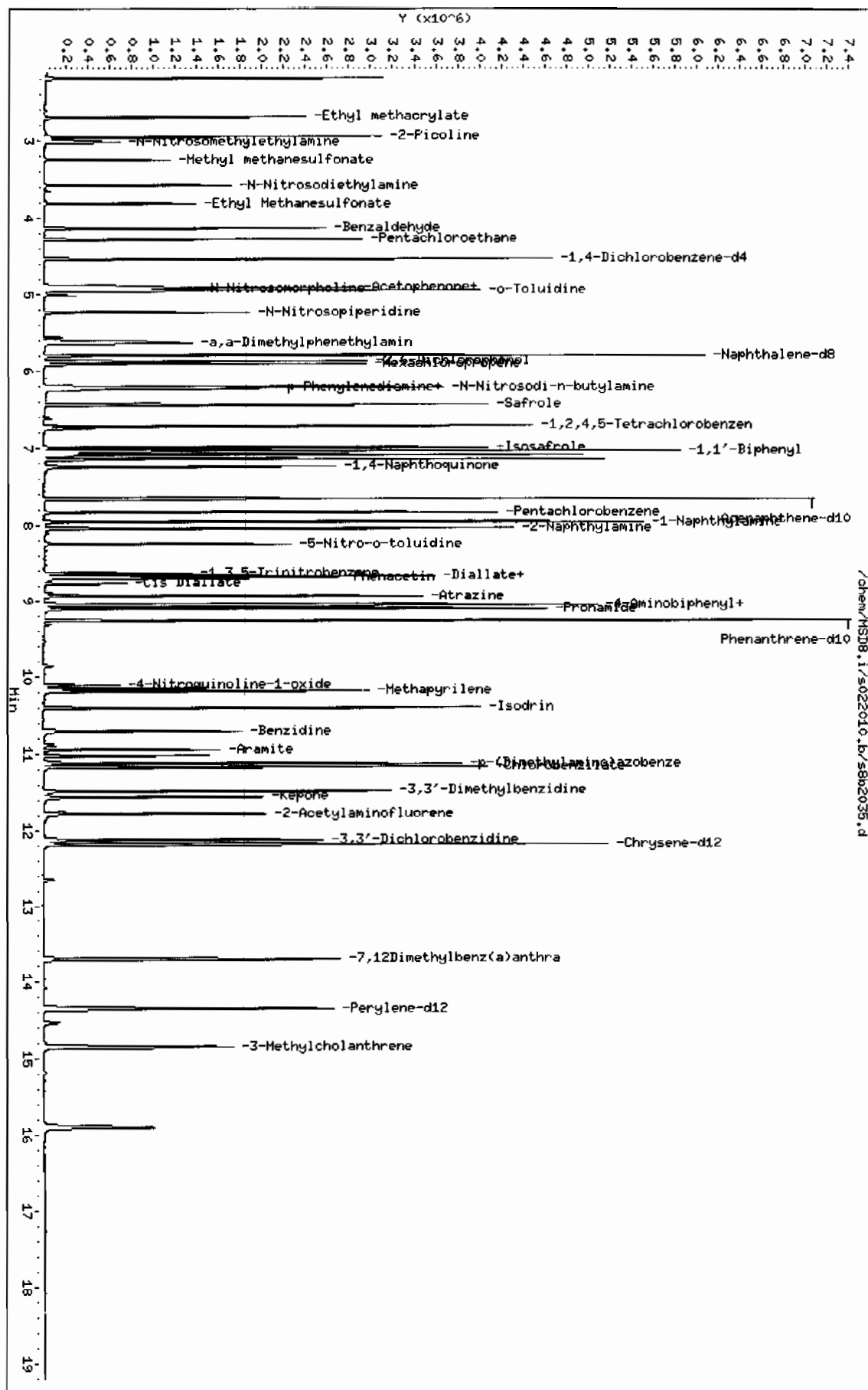
Sample Info: IWBNI00218-08.1140 PPHILISW11APICV

Column phase: 38M DB-SHS

Instrument: MSDB.i

Operator: nagl

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 21-MAR-2010 08:30
Lab File ID: s8c2102.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100309-05.3 Quant Type: ISTD
Method: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	0.94435	0.90742	0.90742	0.000	-3.91003	60.00000	Averaged
5 Phenol-d5	1.17771	1.17332	1.17332	0.000	-0.37250	60.00000	Averaged
20 Nitrobenzene-d5	0.28435	0.26854	0.26854	0.000	-5.55918	60.00000	Averaged
39 2-Fluorobiphenyl	1.17740	1.03629	1.03629	0.000	-11.98463	60.00000	Averaged
60 2,4,6-Tribromophenol	0.13223	0.11000	0.11000	0.000	-16.80911	60.00000	Averaged
81 p-Terphenyl-d14	0.72015	0.62825	0.62825	0.000	-12.76020	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.60923	0.60711	0.60711	0.000	-0.34781	60.00000	Averaged
2 Pyridine	0.89373	0.81483	0.81483	0.000	-8.82843	60.00000	Averaged
4 Aniline	0.55542	0.51694	0.51694	0.000	-6.92943	60.00000	Averaged
6 Phenol	1.21617	1.16566	1.16566	0.001	-4.15315	20.00000	Averaged|ccc
7 bis(2-Chloroethyl) ether	0.83144	0.83554	0.83554	0.000	0.49315	60.00000	Averaged
8 2-Chlorophenol	1.05605	1.01430	1.01430	0.000	-3.95379	60.00000	Averaged
203 n-Decane	1.08949	1.11092	1.11092	0.000	1.96699	60.00000	Averaged
9 1,3-Dichlorobenzene	1.25240	1.17276	1.17276	0.000	-6.35845	60.00000	Averaged
11 1,4-Dichlorobenzene	1.29215	1.20077	1.20077	0.001	-7.07251	20.00000	Averaged|ccc
13 1,2-Dichlorobenzene	1.20194	1.12845	1.12845	0.000	-6.11440	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.63019	1.56860	1.56860	0.000	-3.77825	60.00000	Averaged
12 Benzyl alcohol	0.66057	0.48458	0.48458	0.000	-26.64219	60.00000	Averaged
15 o-Cresol	0.84463	0.78740	0.78740	0.000	-6.77509	60.00000	Averaged
18 m,p-Cresols	1.06890	0.97469	0.97469	0.000	-8.81307	60.00000	Averaged
17 N-Nitrosodipropylamine	0.77788	0.75739	0.75739	0.050	-2.63426	60.00000	Averaged|spcc
19 Hexachloroethane	0.48694	0.47483	0.47483	0.000	-2.48721	60.00000	Averaged
21 Nitrobenzene	0.29331	0.27359	0.27359	0.000	-6.72141	60.00000	Averaged
22 Isophorone	0.53999	0.53865	0.53865	0.000	-0.24803	60.00000	Averaged
23 2-Nitrophenol	0.13462	0.12952	0.12952	0.001	-3.78814	20.00000	Averaged|ccc
24 2,4-Dimethylphenol	0.23932	0.21981	0.21981	0.000	-8.15474	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.30282	0.30758	0.30758	0.000	1.57121	60.00000	Averaged
26 2,4-Dichlorophenol	0.21654	0.19469	0.19469	0.001	-10.08981	20.00000	Averaged|ccc
27 Benzoic acid	39.60730	40.00000	0.10601	0.000	-0.98176	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.29118	0.25971	0.25971	0.000	-10.80681	60.00000	Averaged
30 Naphthalene	37.87797	40.00000	0.82335	0.000	-5.30507	60.00000	Linear
204 alpha-Terpineol	0.22259	0.24805	0.24805	0.000	11.44001	60.00000	Averaged
31 4-Chloroaniline	0.28585	0.26956	0.26956	0.000	-5.70154	60.00000	Averaged
32 Hexachlorobutadiene	0.18110	0.15409	0.15409	0.001	-14.91147	20.00000	Averaged|ccc
33 4-Chloro-3-methylphenol	0.23429	0.21408	0.21408	0.001	-8.62587	20.00000	Averaged|ccc
34 2-Methylnaphthalene	37.13556	40.00000	0.53845	0.000	-7.16111	60.00000	Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 21-MAR-2010 08:30
Lab File ID: s8c2102.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100309-05.3 Quant Type: ISTD
Method: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX		CURVE TYPE
			RRF40	RRF	%D / %DRIFT	%D / %DRIFT	
35 1-Methylnaphthalene	38.02642	40.00000	0.54111	0.000	-4.93394	60.00000	Linear
36 Hexachlorocyclopentadiene	0.24827	0.18763	0.18763	0.050	-24.42263	60.00000	Averaged|spcc
205 2,3-Dichloroaniline	0.52803	0.48011	0.48011	0.000	-9.07657	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.30819	0.27276	0.27276	0.001	-11.49613	20.00000	Averaged|ccc
38 2,4,5-Trichlorophenol	0.32711	0.26868	0.26868	0.000	-17.86055	60.00000	Averaged
40 2-Chloronaphthalene	35.22621	40.00000	0.86660	0.000	-11.93447	60.00000	Linear
42 o-Nitroaniline	0.27392	0.25514	0.25514	0.000	-6.85562	60.00000	Averaged
41 m-Nitroaniline	0.20877	0.17249	0.17249	0.000	-17.37797	60.00000	Averaged
43 Dimethylphthalate	1.12088	1.05147	1.05147	0.000	-6.19228	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25341	0.23578	0.23578	0.000	-6.95571	60.00000	Averaged
50 2,4-Dinitrotoluene	0.32492	0.28241	0.28241	0.000	-13.08251	60.00000	Averaged
45 Acenaphthylene	1.66068	1.42132	1.42132	0.000	-14.41384	60.00000	Averaged
47 Acenaphthene	1.06294	0.88937	0.88937	0.001	-16.32974	20.00000	Averaged|ccc
48 2,4-Dinitrophenol	36.58187	40.00000	0.07035	0.050	-8.54532	60.00000	Linear|spcc
49 Dibenzofuran	1.39464	1.19114	1.19114	0.000	-14.59145	60.00000	Averaged
51 Diethylphthalate	1.17311	1.08211	1.08211	0.000	-7.75766	60.00000	Averaged
52 4-Nitrophenol	0.13654	0.12268	0.12268	0.050	-10.15062	60.00000	Averaged|spcc
53 Fluorene	1.29100	1.07740	1.07740	0.000	-16.54515	60.00000	Averaged
54 4-Chlorophenylphenylether	0.62173	0.50928	0.50928	0.000	-18.08782	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	36.35265	40.00000	0.07106	0.000	-9.11837	60.00000	Linear
56 p-Nitroaniline	0.18448	0.12840	0.12840	0.000	-30.40034	60.00000	Averaged
133 Diphenylamine	0.50546	0.46626	0.46626	0.001	-7.75560	20.00000	Averaged|ccc
58 1,2-Diphenylhydrazine	0.59375	0.58903	0.58903	0.000	-0.79369	60.00000	Averaged
61 4-Bromophenylphenylether	0.19114	0.17552	0.17552	0.000	-8.16868	60.00000	Averaged
63 Hexachlorobenzene	0.19866	0.17950	0.17950	0.000	-9.64473	60.00000	Averaged
65 Pentachlorophenol	0.08849	0.08062	0.08062	0.001	-8.89294	20.00000	Averaged|ccc
206 n-Octadecane	0.39703	0.47756	0.47756	0.000	20.28430	60.00000	Averaged
68 Phenanthrene	35.55001	40.00000	0.83015	0.000	-11.12497	60.00000	Linear
69 Anthracene	0.97083	0.82019	0.82019	0.000	-15.51671	60.00000	Averaged
72 Di-n-butylphthalate	1.01476	1.09106	1.09106	0.000	7.51904	60.00000	Averaged
76 Fluoranthene	1.01786	0.85275	0.85275	0.001	-16.22151	20.00000	Averaged|ccc
79 Pyrene	1.24889	1.07101	1.07101	0.000	-14.24350	60.00000	Averaged
85 Butylbenzylphthalate	0.43672	0.49373	0.49373	0.000	13.05510	60.00000	Averaged
89 Benzo(a)anthracene	1.05261	0.87831	0.87831	0.000	-16.55855	60.00000	Averaged
92 Chrysene	36.75659	40.00000	0.84342	0.000	-8.10852	60.00000	Linear
93 bis(2-Ethylhexyl)phthalate	0.61117	0.73608	0.73608	0.000	20.43770	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 21-MAR-2010 08:30
Lab File ID: s8c2102.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100309-05.3 Quant Type: ISTD
Method: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
94 Di-n-octylphthalate	44.25429	40.00000	1.38606	0.001	10.63572	Linear|ccc
95 Benzo(b)fluoranthene	1.13405	0.98521	0.98521	0.000	-13.12419	Averaged|
96 Benzo(k)fluoranthene	1.14008	0.99339	0.99339	0.000	-12.86670	Averaged|
97 Benzo(a)pyrene	0.95647	0.86155	0.86155	0.001	-9.92374	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	0.79303	0.76466	0.76466	0.000	-3.57742	Averaged|
100 Dibenzo(a,h)anthracene	0.61288	0.61918	0.61918	0.000	1.02749	Averaged|
101 Benzo(ghi)perylene	0.65613	0.60542	0.60542	0.000	-7.72786	Averaged|
126 m-Dinitrobenzene	0.16162	0.14064	0.14064	0.000	-12.98188	Averaged|
130 2,3,4,6-Tetrachlorophenol	0.27739	0.23122	0.23122	0.000	-16.64477	Averaged|
143 Dinoseb	37.61456	40.00000	0.10883	0.000	-5.96360	Linear|
173 Carbazole	0.69337	0.49628	0.49628	0.000	-28.42474	Averaged|
184 p-Benzoquinone	17.58185	40.00000	0.07247	0.000	-56.04538	Linear|
192 Methoxychlor	0.57371	0.59762	0.59762	0.000	4.16803	Averaged|
211 p-Toluidine	1.14055	0.99696	0.99696	0.000	-12.58960	Averaged|
210 m-Toluidine	1.48620	1.14817	1.14817	0.000	-22.74441	Averaged|
26 Phthalic anhydride	27.10429	40.00000	0.07850	0.000	-32.23928	Linear|
179 Dibenzo(a,e)pyrene	0.26112	0.25800	0.25800	0.000	-1.19672	Averaged|
214 1,4-Dinitrobenzene	0.17136	0.14904	0.14904	0.000	-13.02535	Averaged|
215 2-Ethoxyethanol	0.57374	0.58213	0.58213	0.000	1.46183	Averaged|
216 Methylenebis(2-chloroanilin	21.11836	40.00000	0.04789	0.000	-47.20411	Linear|
IM 222 Trichlorophenols	0.31765	0.27072	0.27072	0.000	-14.77311	Averaged|
IM 223 Tetrachlorophenols	0.27739	0.23122	0.23122	0.000	-16.64477	Averaged|
IM 224 Benzo(b,k)fluoranthene	1.13706	0.98930	0.98930	0.000	-12.99510	Averaged

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Data file : /chem/MSD8.i/s032110.b/s8c2102.d
Lab Smp Id: WBN100309-05.3 Client Smp ID: MEGACVS
Inj Date : 21-MAR-2010 08:30
Operator : nag1 Inst ID: MSD8.i
Smp Info : |WBN100309-05.3|CCV|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAICARE.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4		152	4.301	4.301	(1.000)	359153	40.0000	
* 29 Naphthalene-d8		136	5.558	5.558	(1.000)	1404681	40.0000	
* 46 Acenaphthene-d10		164	7.406	7.406	(1.000)	820358	40.0000	
* 67 Phenanthrene-d10		188	8.997	8.997	(1.000)	1360532	40.0000	
* 91 Chrysene-d12		240	11.868	11.868	(1.000)	1134351	40.0000	
* 98 Perylene-d12		264	13.878	13.878	(1.000)	840427	40.0000	
\$ 3 2-Fluorophenol		112	3.158	3.158	(0.734)	325903	40.0000	38.4
\$ 5 Phenol-d5		99	3.930	3.930	(0.914)	421401	40.0000	39.8
\$ 20 Nitrobenzene-d5		82	4.830	4.830	(0.869)	377211	40.0000	37.8
\$ 39 2-Fluorobiphenyl		172	6.682	6.682	(0.902)	850128	40.0000	35.2
\$ 60 2,4,6-Tribromophenol		329	8.244	8.244	(1.113)	90239	40.0000	33.3
\$ 81 p-Terphenyl-d14		244	10.706	10.706	(0.902)	712661	40.0000	34.9
1 N-Methyl-N-nitrosomethylamine		74	2.206	2.206	(0.513)	218046	40.0000	39.9
2 Pyridine		79	2.239	2.239	(0.521)	292647	40.0000	36.5
4 Aniline		66	3.996	3.996	(0.929)	185659	40.0000	37.2
6 Phenol		94	3.944	3.944	(0.917)	418652	40.0000	38.3
7 bis(2-Chloroethyl) ether		63	4.044	4.044	(0.940)	300087	40.0000	40.2
8 2-Chlorophenol		128	4.106	4.106	(0.955)	364288	40.0000	38.4
203 n-Decane		43	4.130	4.130	(0.960)	398992	40.0000	40.8
9 1,3-Dichlorobenzene		146	4.249	4.249	(0.988)	421202	40.0000	37.4
11 1,4-Dichlorobenzene		146	4.316	4.316	(1.003)	431259	40.0000	37.2
13 1,2-Dichlorobenzene		146	4.458	4.458	(1.037)	405285	40.0000	37.6
14 bis(2-Chloroisopropyl)ether		45	4.544	4.544	(1.056)	563367	40.0000	38.5
12 Benzyl alcohol		108	4.415	4.415	(1.027)	174038	40.0000	29.3
15 o-Cresol		107	4.511	4.511	(1.049)	282798	40.0000	37.3
18 m,p-Cresols		107	4.663	4.663	(1.084)	350064	40.0000	36.5

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	4.677	4.677	(1.087)	272019	40.0000	38.9
19 Hexachloroethane	117	4.787	4.787	(1.113)	170537	40.0000	39.0
21 Nitrobenzene	77	4.849	4.849	(0.872)	384311	40.0000	37.3
22 Isophorone	82	5.087	5.087	(0.915)	756638	40.0000	39.9
23 2-Nitrophenol	139	5.163	5.163	(0.929)	181932	40.0000	38.5
24 2,4-Dimethylphenol	122	5.192	5.192	(0.934)	308758	40.0000	36.7
25 bis(2-Chloroethoxy)methane	93	5.292	5.292	(0.952)	432048	40.0000	40.6
26 2,4-Dichlorophenol	162	5.406	5.406	(0.973)	273482	40.0000	36.0
27 Benzoic acid	105	5.282	5.282	(0.950)	148907	40.0000	39.6
28 1,2,4-Trichlorobenzene	180	5.492	5.492	(0.988)	364815	40.0000	35.7
30 Naphthalene	128	5.577	5.577	(1.003)	1156541	40.0000	37.9
204 alpha-Terpineol	59	5.582	5.582	(1.004)	348430	40.0000	44.6
31 4-Chloroaniline	127	5.625	5.625	(1.012)	378639	40.0000	37.7
32 Hexachlorobutadiene	225	5.696	5.696	(1.025)	216450	40.0000	34.0
33 4-Chloro-3-methylphenol	107	6.116	6.116	(1.100)	300712	40.0000	36.5
34 2-Methylnaphthalene	142	6.296	6.296	(1.133)	756350	40.0000	37.1
35 1-Methylnaphthalene	142	6.401	6.401	(1.152)	760093	40.0000	38.0
36 Hexachlorocyclopentadiene	237	6.458	6.458	(0.872)	153927	40.0000	30.2
205 2,3-Dichloroaniline	161	6.592	6.592	(0.890)	393859	40.0000	36.4
37 2,4,6-Trichlorophenol	196	6.587	6.587	(0.889)	223758	40.0000	35.4
38 2,4,5-Trichlorophenol	196	6.625	6.625	(0.895)	220417	40.0000	32.8
40 2-Chloronaphthalene	162	6.811	6.811	(0.920)	710920	40.0000	35.2
42 o-Nitroaniline	65	6.916	6.916	(0.934)	209308	40.0000	37.2
41 m-Nitroaniline	138	7.354	7.354	(0.993)	141504	40.0000	33.0
43 Dimethylphthalate	163	7.116	7.116	(0.961)	862583	40.0000	37.5
44 2,6-Dinitrotoluene	165	7.177	7.177	(0.969)	193427	40.0000	37.2
50 2,4-Dinitrotoluene	165	7.606	7.606	(1.027)	231679	40.0000	34.8
45 Acenaphthylene	152	7.254	7.254	(0.979)	1165988	40.0000	34.2
47 Acenaphthene	154	7.439	7.439	(1.004)	729599	40.0000	33.5
48 2,4-Dinitrophenol	184	7.468	7.468	(1.008)	57715	40.0000	36.6
49 Dibenzofuran	168	7.625	7.625	(1.030)	977165	40.0000	34.2
51 Diethylphthalate	149	7.868	7.868	(1.062)	887715	40.0000	36.9
52 4-Nitrophenol	139	7.525	7.525	(1.016)	100639	40.0000	35.9
53 Fluorene	166	7.992	7.992	(1.079)	883854	40.0000	33.4
54 4-Chlorophenylphenylether	204	7.987	7.987	(1.078)	417788	40.0000	32.8
55 2-Methyl-4,6-dinitrophenol	198	8.044	8.044	(0.894)	96679	40.0000	36.4
56 p-Nitroaniline	138	8.006	8.006	(1.081)	105330	40.0000	27.8
133 Diphenylamine	169	8.116	8.116	(0.902)	634359	40.0000	36.9
58 1,2-Diphenylhydrazine	77	8.158	8.158	(0.907)	801399	40.0000	39.7
61 4-Bromophenylphenylether	248	8.516	8.516	(0.947)	238806	40.0000	36.7
63 Hexachlorobenzene	284	8.577	8.577	(0.953)	244220	40.0000	36.1
65 Pentachlorophenol	266	8.787	8.787	(0.977)	109689	40.0000	36.4
206 n-Octadecane	57	8.877	8.877	(0.987)	649738	40.0000	48.1
68 Phenanthrene	178	9.020	9.020	(1.003)	1129440	40.0000	35.6
69 Anthracene	178	9.077	9.077	(1.009)	1115898	40.0000	33.8
72 Di-n-butylphthalate	149	9.620	9.620	(1.069)	1484422	40.0000	43.0
76 Fluoranthene	202	10.297	10.297	(1.145)	1160189	40.0000	33.5

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	10.544	10.544	(0.888)	1214897	40.0000	34.3
85 Butylbenzylphthalate	149	11.235	11.235	(0.947)	560068	40.0000	45.2
89 Benzo(a)anthracene	228	11.854	11.854	(0.999)	996316	40.0000	33.4
92 Chrysene	228	11.897	11.897	(1.002)	956734	40.0000	36.8
93 bis(2-Ethylhexyl)phthalate	149	11.878	11.878	(1.001)	834973	40.0000	48.2
94 Di-n-octylphthalate	149	12.730	12.730	(0.917)	1164881	40.0000	44.2
95 Benzo(b)fluoranthene	252	13.292	13.292	(0.958)	827998	40.0000	34.8
96 Benzo(k)fluoranthene	252	13.335	13.335	(0.961)	834871	40.0000	34.8
97 Benzo(a)pyrene	252	13.787	13.787	(0.993)	724069	40.0000	36.0
99 Indeno(1,2,3-cd)pyrene	276	15.644	15.644	(1.127)	642638	40.0000	38.6
100 Dibenzo(a,h)anthracene	278	15.682	15.682	(1.130)	520374	40.0000	40.4
101 Benzo(ghi)perylene	276	16.101	16.101	(1.160)	508813	40.0000	36.9
126 m-Dinitrobenzene	168	7.149	7.149	(0.965)	115372	40.0000	34.8
130 2,3,4,6-Tetrachlorophenol	232	7.749	7.749	(1.046)	189682	40.0000	33.3
143 Dinoseb	211	8.987	8.987	(0.999)	148061	40.0000	37.6
173 Carbazole	167	9.244	9.244	(1.028)	675203	40.0000	28.6
184 p-Benzoquinone	54	3.577	3.577	(0.832)	26027	40.0000	17.6
192 Methoxychlor	227	11.773	11.773	(0.992)	677911	40.0000	41.7
211 p-Toluidine	106	4.720	4.720	(1.097)	358061	40.0000	35.0
210 m-Toluidine	106	4.754	4.754	(1.105)	412370	40.0000	30.9
26 Phthalic anhydride	104	6.354	6.354	(1.143)	110270	40.0000	27.1
179 Dibenzo(a,e)pyrene	302	19.030	19.030	(1.371)	216828	40.0000	39.5
214 1,4-Dinitrobenzene	75	7.068	7.068	(0.954)	122269	40.0000	34.8
215 2-Ethoxyethanol	59	2.006	2.006	(0.466)	209072	40.0000	40.6
216 Methylenebis(2-chloroaniline)	231	11.825	11.825	(0.996)	54325	40.0000	21.1
M 222 Trichlorophenols	196				444175	80.0000	68.2
M 223 Tetrachlorophenols	232				189682	40.0000	33.3
M 224 Benzo(b,k)fluoranthene	252				1662869	80.0000	69.6

Data File: /chem/MSDB.i/s032110.b/s02102.d

Date: 21-MAR-2010 08:30

Client ID: MECACVS

Sample Info: IWBH100309-05.31CCV11.SW111.MECACVS

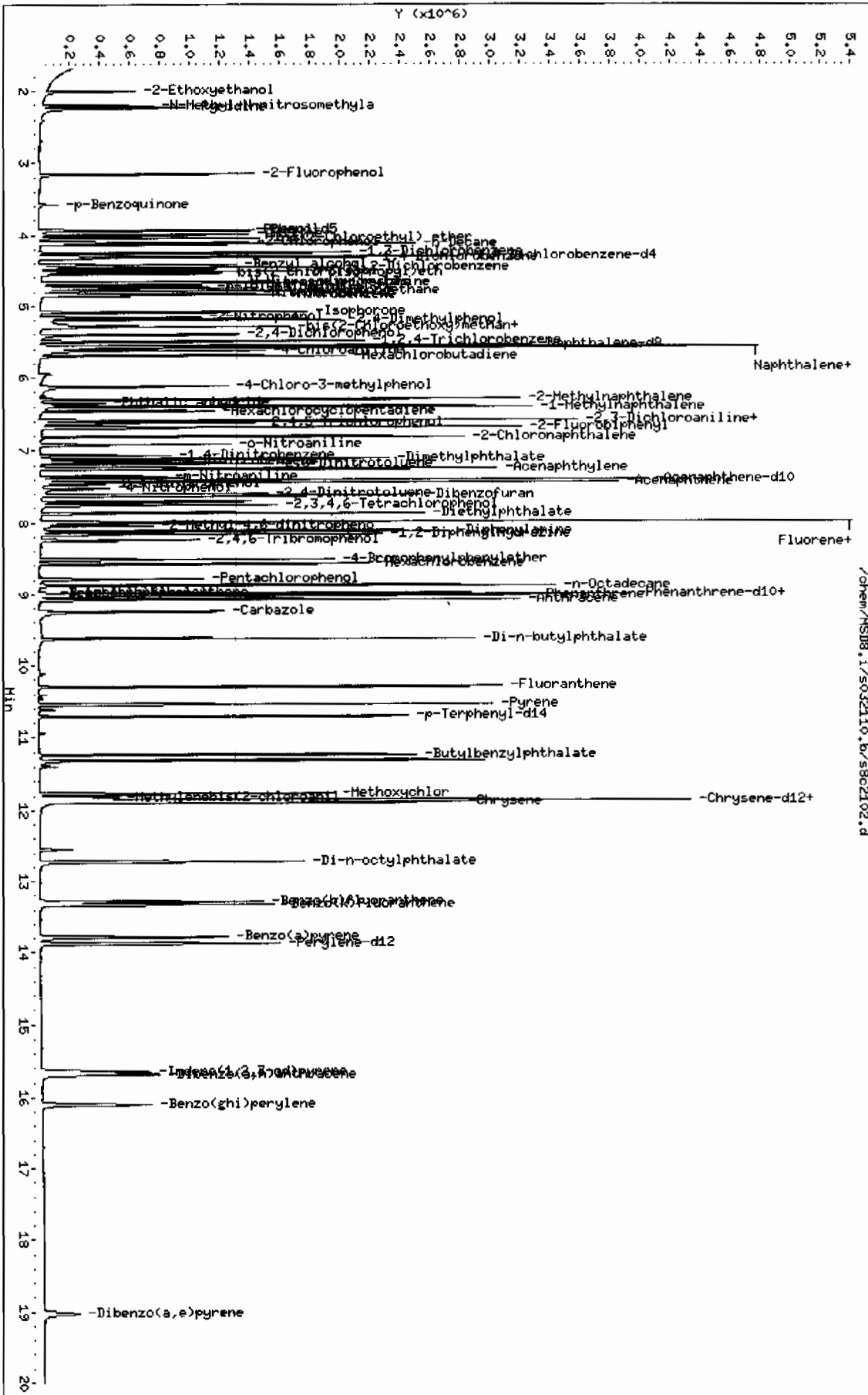
Column phase: J&W DB-5HS

Instrument: MSD8.i

Operator: nagl

Column diameter: 0.20

Page 1



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 21-MAR-2010 09:01
Lab File ID: s8c2103.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100312-03.3 Quant Type: ISTD
Method: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.84330	0.81154	0.81154	0.000	-3.76653	60.00000	Averaged
16 Acetophenone	1.20309	1.06971	1.06971	0.000	-11.08614	60.00000	Averaged
189 Caprolactam	0.06655	0.06593	0.06593	0.000	-0.93924	60.00000	Averaged
208 1,1'-Biphenyl	1.22219	1.09713	1.09713	0.000	-10.23257	60.00000	Averaged
207 Atrazine	0.03531	0.03993	0.03993	0.000	13.06996	60.00000	Averaged
77 Benzidine	28.42269	40.00000	0.19081	0.000	-28.94327	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.24780	0.21856	0.21856	0.000	-11.80015	60.00000	Averaged
102 1,4-Dioxane	0.32319	0.32402	0.32402	0.000	0.25593	60.00000	Averaged
103 Methyl methacrylate	0.16817	0.17287	0.17287	0.000	2.79802	60.00000	Averaged
104 Ethyl methacrylate	0.67963	0.67261	0.67261	0.000	-1.03309	60.00000	Averaged
105 2-Picoline	1.09294	1.09013	1.09013	0.000	-0.25771	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43986	0.41949	0.41949	0.000	-4.63056	60.00000	Averaged
107 Methyl methanesulfonate	0.49950	0.46370	0.46370	0.000	-7.16676	60.00000	Averaged
108 N-Nitrosodiethylamine	0.45804	0.44406	0.44406	0.000	-3.05233	60.00000	Averaged
109 Ethyl Methanesulfonate	0.60902	0.58774	0.58774	0.000	-3.49400	60.00000	Averaged
110 Pentachloroethane	0.32092	0.30343	0.30343	0.000	-5.44901	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.49059	0.45947	0.45947	0.000	-6.34270	60.00000	Averaged
113 N-Nitrosomorpholine	0.66385	0.62938	0.62938	0.000	-5.19335	60.00000	Averaged
114 o-Toluidine	1.62183	1.50131	1.50131	0.000	-7.43134	60.00000	Averaged
115 N-Nitrosopiperidine	0.12437	0.11524	0.11524	0.000	-7.34160	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.74304	0.64576	0.64576	0.000	-13.09120	60.00000	Averaged
118 2,6-Dichlorophenol	0.20154	0.18655	0.18655	0.000	-7.43900	60.00000	Averaged
119 Hexachloropropene	0.12360	0.10135	0.10135	0.000	-18.00026	60.00000	Averaged
120 p-Phenylenediamine	0.19655	0.18973	0.18973	0.000	-3.47174	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21161	0.21325	0.21325	0.000	0.77751	60.00000	Averaged
122 Safrole	0.19334	0.17306	0.17306	0.000	-10.49219	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.47582	0.40666	0.40666	0.000	-14.53441	60.00000	Averaged
124 Isosafrole	0.32130	0.27973	0.27973	0.000	-12.93980	60.00000	Averaged
125 1,4-Naphthoquinone	0.29641	0.29629	0.29629	0.000	-0.04232	60.00000	Averaged
127 Pentachlorobenzene	0.43422	0.34961	0.34961	0.000	-19.48440	60.00000	Averaged
128 1-Naphthylamine	0.84230	0.76623	0.76623	0.000	-9.03150	60.00000	Averaged
129 2-Naphthylamine	0.88763	0.78678	0.78678	0.000	-11.36220	60.00000	Averaged
131 5-Nitro-o-toluidine	0.24122	0.20651	0.20651	0.000	-14.38931	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.09499	0.10075	0.10075	0.000	6.05643	60.00000	Averaged
137 Phenacetin	0.21690	0.20666	0.20666	0.000	-4.71779	60.00000	Averaged
138 Diallate	0.20203	0.22847	0.22847	0.000	13.08666	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 21-MAR-2010 09:01
Lab File ID: s8c2103.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100312-03.3 Quant Type: ISTD
Method: /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
212 Cis Diallate	0.20071	0.22136	0.22136	0.000	10.28766	Averaged
213 Trans Diallate	0.23769	0.26879	0.26879	0.000	13.08666	Averaged
140 4-Aminobiphenyl	0.51727	0.42327	0.42327	0.000	-18.17314	Averaged
141 Pentachloronitrobenzene	0.07936	0.07036	0.07036	0.000	-11.33919	Averaged
142 Pronamide	0.25230	0.26180	0.26180	0.000	3.76363	Averaged
146 4-Nitroquinoline-1-oxide	0.01907	0.01970	0.01970	0.000	3.33989	Averaged
147 Methapyrilene	0.29186	0.45121	0.45121	0.000	54.59865	Averaged
148 Isodrin	0.10718	0.10701	0.10701	0.000	-0.15933	Averaged
149 Aramite	0.03388	0.03063	0.03063	0.000	-9.60304	Averaged
150 Kepone	0.07795	0.07078	0.07078	0.000	-9.19670	Averaged
151 p-(Dimethylamino)azobenzene	0.25808	0.27052	0.27052	0.000	4.81983	Averaged
152 Chlorobenzilate	0.26271	0.29237	0.29237	0.000	11.29072	Averaged
153 3,3'-Dimethylbenzidine	0.45535	0.40912	0.40912	0.000	-10.15391	Averaged
155 2-Acetylaminofluorene	40.70658	40.00000	0.23018	0.000	1.76645	Linear
157 7,12Dimethylbenz(a)anthrace	0.51909	0.48900	0.48900	0.000	-5.79688	Averaged
158 3-Methylcholanthrene	0.36780	0.35577	0.35577	0.000	-3.27135	Averaged

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2103.d
 Lab Smp Id: WBN100312-03.3 Client Smp ID: AP12CVS
 Inj Date : 21-MAR-2010 09:01
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |WBN100312-03.3|CCV|1|SVM|1|AP12CVS
 Misc Info : |MSD8270|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:43 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 3 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: AP12.sub
 Target Version: 3.50
 Processing Host: hpc1p1

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4		152	4.301	4.301	(1.000)	448154	40.0000	
* 29 Naphthalene-d8		136	5.553	5.553	(1.000)	1703346	40.0000	
* 46 Acenaphthene-d10		164	7.401	7.401	(1.000)	982095	40.0000	
* 67 Phenanthrene-d10		188	8.996	8.996	(1.000)	1600474	40.0000	
* 91 Chrysene-d12		240	11.863	11.863	(1.000)	1247955	40.0000	
* 98 Perylene-d12		264	13.873	13.873	(1.000)	868561	40.0000	
209 Benzaldehyde		77	3.906	3.906	(0.908)	363693	40.0000	38.5
16 Acetophenone		105	4.677	4.677	(1.087)	479395	40.0000	35.6
189 Caprolactam		113	5.982	5.982	(1.077)	112300	40.0000	39.6
208 1,1'-Biphenyl		154	6.787	6.787	(0.917)	1077487	40.0000	35.9
207 Atrazine		173	8.692	8.692	(0.966)	63907	40.0000	45.2
77 Benzidine		184	10.439	10.439	(0.880)	238124	40.0000	28.4
90 3,3'-Dichlorobenzidine		252	11.820	11.820	(0.996)	272751	40.0000	35.3
102 1,4-Dioxane		88	2.011	2.011	(0.467)	145210	40.0000	40.1
103 Methyl methacrylate		100	2.011	2.011	(0.467)	77473	40.0000	41.1
104 Ethyl methacrylate		69	2.501	2.501	(0.581)	301431	40.0000	39.6
105 2-Picoline		93	2.744	2.744	(0.638)	488544	40.0000	39.9
106 N-Nitrosomethylethylamine		88	2.815	2.815	(0.655)	187997	40.0000	38.1
107 Methyl methanesulfonate		80	3.039	3.039	(0.707)	207810	40.0000	37.1
108 N-Nitrosodiethylamine		102	3.358	3.358	(0.781)	199009	40.0000	38.8
109 Ethyl Methanesulfonate		79	3.596	3.596	(0.836)	263398	40.0000	38.6
110 Pentachloroethane		167	4.044	4.044	(0.940)	135984	40.0000	37.8
111 N-Nitrosopyrrolidine		100	4.658	4.658	(1.083)	205913	40.0000	37.5(Q)
113 N-Nitrosomorpholine		56	4.692	4.692	(1.091)	282057	40.0000	37.9
114 o-Toluidine		106	4.711	4.711	(1.095)	672817	40.0000	37.0
115 N-Nitrosopiperidine		114	4.996	4.996	(0.900)	196291	40.0000	37.1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	5.368	5.368	(0.967)	1099959	40.0000	34.8
118 2,6-Dichlorophenol	162	5.634	5.634	(1.015)	317758	40.0000	37.0
119 Hexachloropropene	213	5.663	5.663	(1.020)	172640	40.0000	32.8
120 p-Phenylenediamine	108	5.992	5.992	(1.079)	323173	40.0000	38.6
121 N-Nitrosodi-n-butylamine	84	5.973	5.973	(1.075)	363245	40.0000	40.3
122 Safrole	162	6.201	6.201	(1.117)	294775	40.0000	35.8
123 1,2,4,5-Tetrachlorobenzene	216	6.473	6.473	(0.875)	399380	40.0000	34.2
124 Isosafrole	162	6.749	6.749	(0.912)	274717	40.0000	34.8
125 1,4-Naphthoquinone	158	6.996	6.996	(0.945)	290984	40.0000	40.0
127 Pentachlorobenzene	250	7.577	7.577	(1.024)	343355	40.0000	32.2
128 1-Naphthylamine	143	7.701	7.701	(1.041)	752510	40.0000	36.4
129 2-Naphthylamine	143	7.787	7.787	(1.052)	772689	40.0000	35.4
131 5-Nitro-o-toluidine	152	7.996	7.996	(1.080)	202812	40.0000	34.2
136 1,3,5-Trinitrobenzene	75	8.396	8.396	(0.933)	161242	40.0000	42.4
137 Phenacetin	108	8.449	8.449	(0.939)	330759	40.0000	38.1 (Q)
138 Diallate	86	8.420	8.420	(0.936)	365665	40.0000	45.2
212 Cis Diallate	86	8.520	8.520	(0.947)	53143	6.00000	6.6
213 Trans Diallate	86	8.420	8.420	(0.936)	365665	34.0000	38.4
140 4-Aminobiphenyl	169	8.796	8.796	(0.978)	677426	40.0000	32.7
141 Pentachloronitrobenzene	237	8.801	8.801	(0.978)	112615	40.0000	35.5 (Q)
142 Pronamide	173	8.858	8.858	(0.985)	418998	40.0000	41.5
146 4-Nitroquinoline-1-oxide	101	9.849	9.849	(1.095)	31537	40.0000	41.3
147 Methapyrilene	58	9.930	9.930	(1.104)	722149	40.0000	61.8
148 Isodrin	193	10.134	10.134	(1.127)	171263	40.0000	39.9
149 Aramite	185	10.687	10.687	(1.188)	49016	40.0000	36.2
150 Kepone	272	11.273	11.273	(1.253)	113280	40.0000	36.3
151 p-(Dimethylamino)azobenzene	120	10.858	10.858	(0.915)	337595	40.0000	41.9
152 Chlorobenzilate	251	10.911	10.911	(0.920)	364861	40.0000	44.5
153 3,3'-Dimethylbenzidine	212	11.220	11.220	(0.946)	510559	40.0000	35.9
155 2-Acetylaminofluorene	181	11.487	11.487	(0.968)	287255	40.0000	40.7
157 7,12Dimethylbenz(a)anthracene	256	13.273	13.273	(0.957)	424726	40.0000	37.7
158 3-Methylcholanthrene	268	14.344	14.344	(1.034)	309010	40.0000	38.7 (Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSDB.i/s032110.b/s062103.d

Date: 21-MAR-2010 09:04

Client ID: AP12CVS

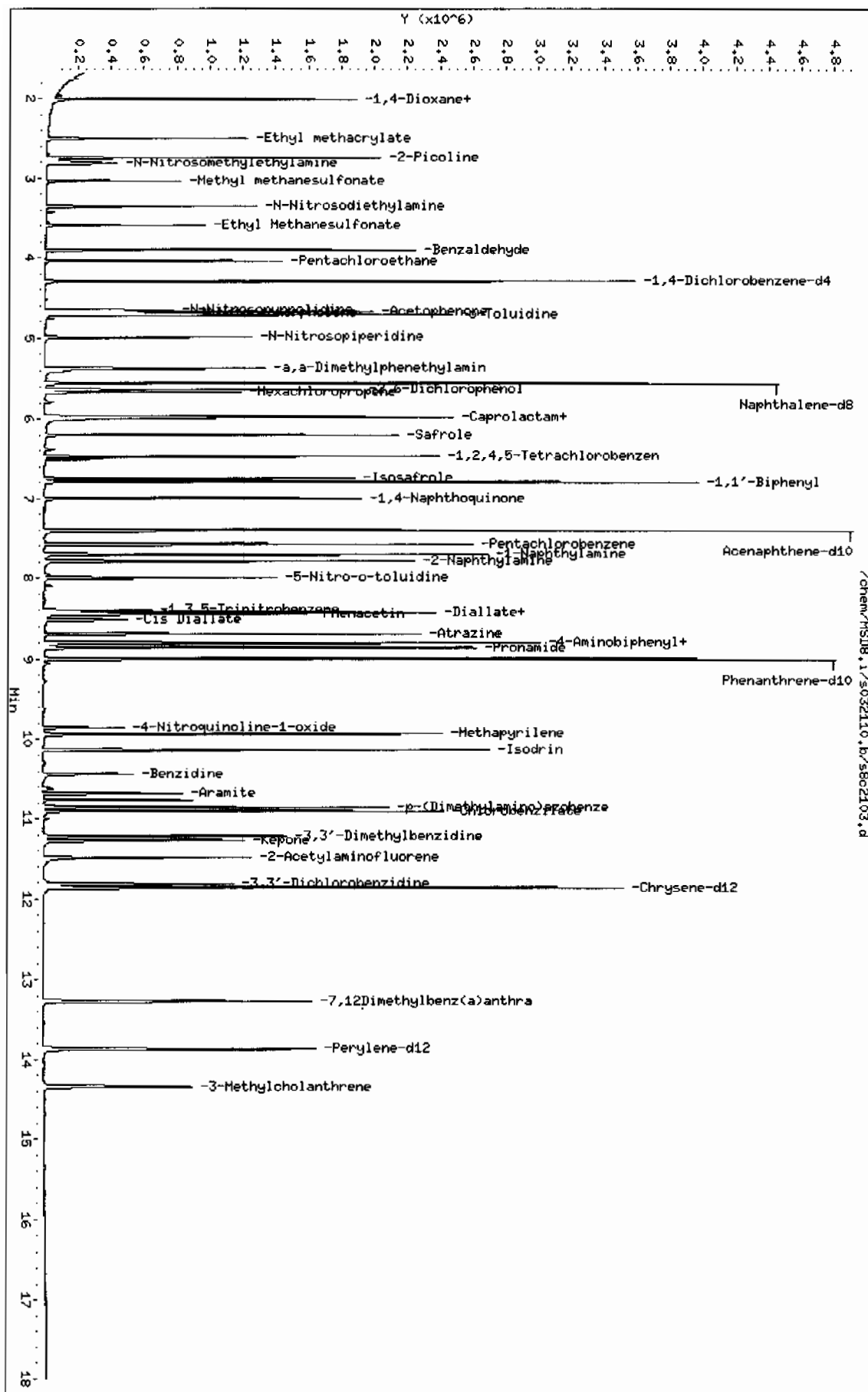
Sample Info: IABN100312-03.3ICV111SVH11AP12CVS

Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nag1

Column diameter: 0.20



QC Data

Data File: /chem/MSD8.i/s022010,b/s8b2001.d

Page 1

Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: MSD8.i

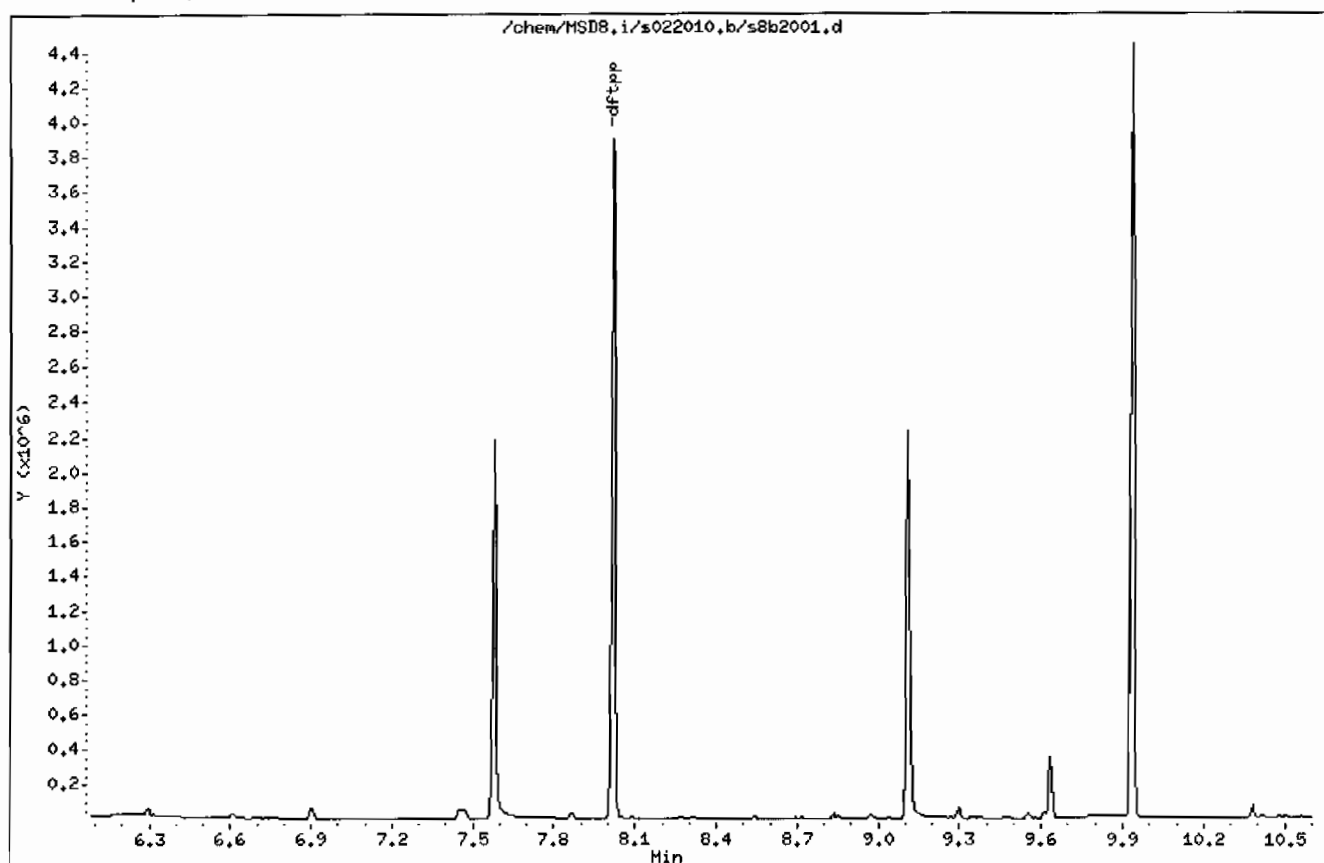
Sample Info: IWBH100207-01150 PPH111SVHF111DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20



Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBH100207-01150 PPH111SVMF111DFTPP

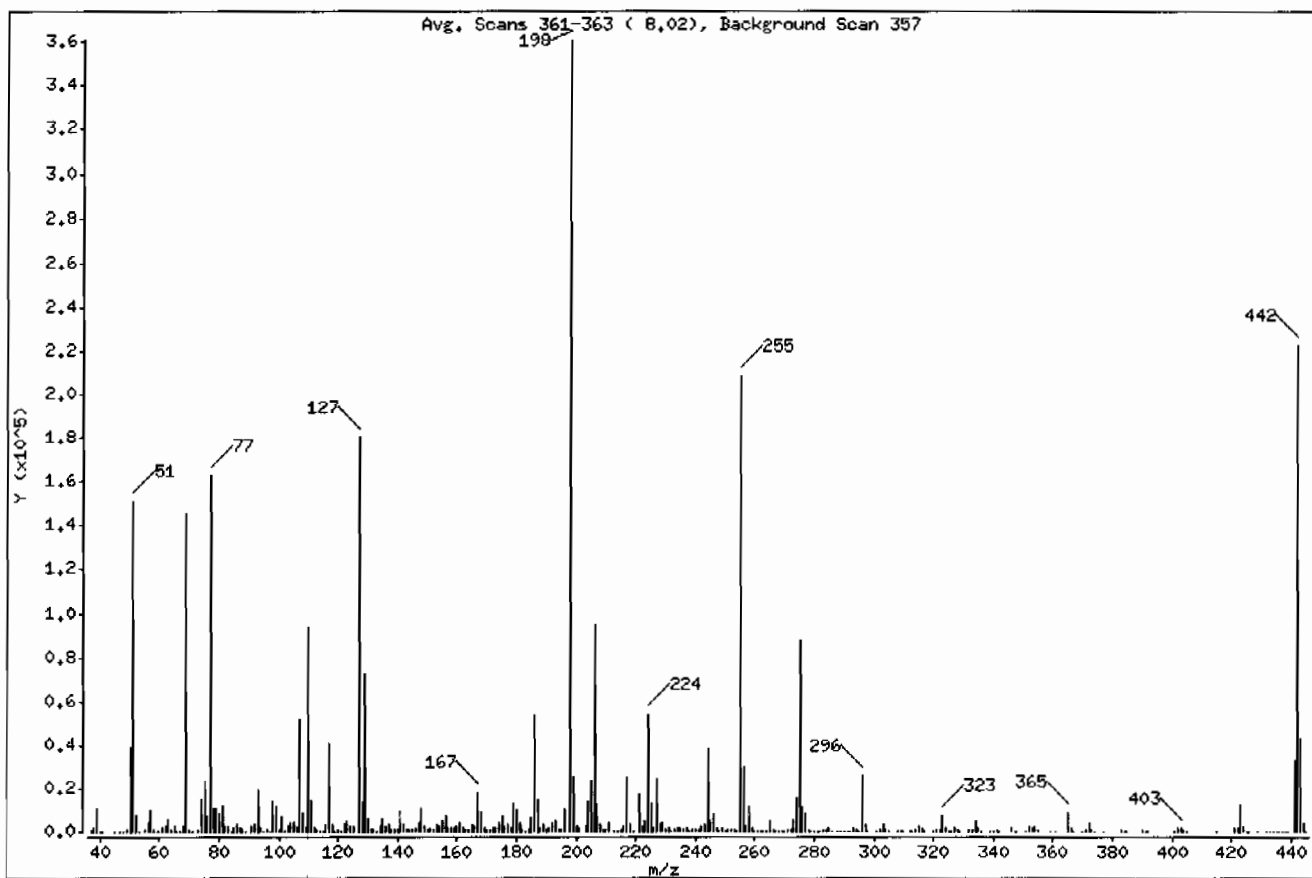
Volume Injected (UL): 1.0

Operator: nag1

Column phase: J & W DB-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	41.91
68	Less than 2.00% of mass 69	0.76 (1.89)
69	Mass 69 relative abundance	40.27
70	Less than 2.00% of mass 69	0.22 (0.56)
127	40.00 - 60.00% of mass 198	49.86
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.79
275	10.00 - 30.00% of mass 198	24.30
365	Greater than 1.00% of mass 198	2.63
441	Present, but less than mass 443	9.09
442	Greater than 40.00% of mass 198	61.67
443	17.00 - 23.00% of mass 442	11.88 (19.27)

Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: MSDB.i

Sample Info: IWBH100207-01150 PPH11SVHF111DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8b2001.d

Spectrum: Avg. Scans 361-363 (8,02), Background Scan 357

Location of Maximum: 198.00

Number of points: 333

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	636	129.00	72112	216.00	2111	304.00	793
38.00	1805	130.00	6198	217.00	25088	305.00	96
39.00	10515	131.00	1179	218.00	3223	308.00	368
40.00	135	132.00	719	219.00	274	309.00	231
41.00	281	133.00	246	221.00	17016	310.00	352
45.00	296	134.00	2094	222.00	2240	312.00	71
47.00	79	135.00	5474	223.00	5388	313.00	267
48.00	100	136.00	2273	224.00	53856	314.00	1186
49.00	1097	137.00	2986	225.00	13496	315.00	2886
50.00	38736	138.00	704	226.00	1520	316.00	1494
51.00	151296	139.00	433	227.00	24000	317.00	272
52.00	7819	140.00	888	228.00	3311	320.00	103
53.00	348	141.00	9408	229.00	4563	321.00	882
55.00	755	142.00	3186	230.00	691	322.00	424
56.00	4473	143.00	1904	231.00	1920	323.00	7824
57.00	10066	144.00	664	232.00	303	324.00	1477
58.00	547	145.00	475	233.00	448	325.00	190
59.00	111	146.00	1633	234.00	1560	326.00	188
60.00	164	147.00	4413	235.00	1679	327.00	1444
61.00	1759	148.00	10596	236.00	1024	328.00	743
62.00	2153	149.00	2303	237.00	1900	329.00	97
63.00	6125	150.00	612	238.00	252	332.00	590
64.00	883	151.00	1360	239.00	942	333.00	759
65.00	2765	152.00	728	240.00	677	334.00	5028
66.00	317	153.00	2923	241.00	1231	335.00	1370
67.00	157	154.00	2190	242.00	2711	336.00	167
68.00	2746	155.00	5079	243.00	3008	339.00	122
69.00	145408	156.00	7633	244.00	38520	340.00	144
70.00	809	157.00	1609	245.00	5292	341.00	1027
71.00	66	158.00	1859	246.00	8553	342.00	229
73.00	1006	159.00	1245	247.00	1526	346.00	1715
74.00	14753	160.00	2882	248.00	404	347.00	313
75.00	23536	161.00	4229	249.00	1334	348.00	34
76.00	7856	162.00	1249	250.00	237	351.00	95
77.00	162688	163.00	420	251.00	454	352.00	2254

Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: MSDB.i

Sample Info: IWBNI00207-01150 PPH11SVMF11IDFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8b2001.d
Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357
Location of Maximum: 198.00
Number of points: 333

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	11164	164.00	482	252.00	526	353.00	1685
79.00	11063	165.00	3411	253.00	1014	354.00	2374
80.00	8318	166.00	2886	254.00	246	355.00	442
81.00	11755	167.00	18128	255.00	208576	359.00	131
82.00	2698	168.00	8989	256.00	29864	361.00	41
83.00	2563	169.00	1693	257.00	2335	365.00	9500
84.00	292	170.00	689	258.00	11889	366.00	1267
85.00	2016	171.00	811	259.00	1946	367.00	41
86.00	3161	172.00	1827	260.00	327	370.00	143
87.00	1709	173.00	1985	261.00	323	371.00	544
88.00	611	174.00	3761	262.00	91	372.00	4073
89.00	242	175.00	7387	263.00	105	373.00	967
91.00	2732	176.00	2369	264.00	245	374.00	36
92.00	2924	177.00	3691	265.00	4904	377.00	41
93.00	18696	178.00	1264	266.00	660	383.00	924
94.00	1352	179.00	13514	267.00	81	384.00	271
95.00	383	180.00	9564	268.00	48	385.00	83
96.00	815	181.00	4172	269.00	46	390.00	495
97.00	300	182.00	737	270.00	217	391.00	390
98.00	14288	183.00	389	271.00	458	392.00	149
99.00	11396	184.00	1158	272.00	683	401.00	249
100.00	988	185.00	6644	273.00	6165	402.00	1263
101.00	6504	186.00	53976	274.00	16175	403.00	1933
102.00	385	187.00	15120	275.00	87720	404.00	757
103.00	2407	188.00	1626	276.00	11586	405.00	99
104.00	4126	189.00	3449	277.00	8344	415.00	104
105.00	3848	190.00	678	278.00	1175	421.00	1862
106.00	1319	191.00	1548	279.00	270	422.00	1706
107.00	51688	192.00	4531	280.00	40	423.00	12077
108.00	8074	193.00	4921	281.00	26	424.00	2784
109.00	1707	194.00	960	282.00	153	425.00	353
110.00	94192	195.00	585	283.00	954	426.00	35
111.00	14368	196.00	10955	284.00	633	429.00	49
112.00	1773	198.00	361024	285.00	1386	432.00	53
113.00	552	199.00	24520	286.00	247	433.00	99

Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: HSD8.i

Sample Info: IWBNI00207-01150 PPMI1SVMF11IDFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8b2001.d

Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357

Location of Maximum: 198.00

Number of points: 333

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	137	200.00	2077	288.00	81	434.00	73
115.00	242	201.00	1683	289.00	256	435.00	109
116.00	2914	203.00	2421	290.00	281	436.00	130
117.00	40800	204.00	13892	291.00	185	437.00	215
118.00	3050	205.00	22864	292.00	403	438.00	351
119.00	350	206.00	94712	293.00	1882	439.00	245
120.00	773	207.00	12092	294.00	526	441.00	32832
121.00	290	208.00	3333	295.00	44	442.00	222592
122.00	3559	209.00	1153	296.00	25992	443.00	42896
123.00	5240	210.00	891	297.00	3524	444.00	3896
124.00	2349	211.00	3877	298.00	302	445.00	219
125.00	2177	213.00	294	301.00	317		
127.00	179968	214.00	128	302.00	514		
128.00	13270	215.00	1136	303.00	3030		

Data File: /chem/MSDS.i/s022010.b/s8b2013.d

Page 1

Date : 21-FEB-2010 08:35

Client ID: DFTPP

Instrument: MSD8.i

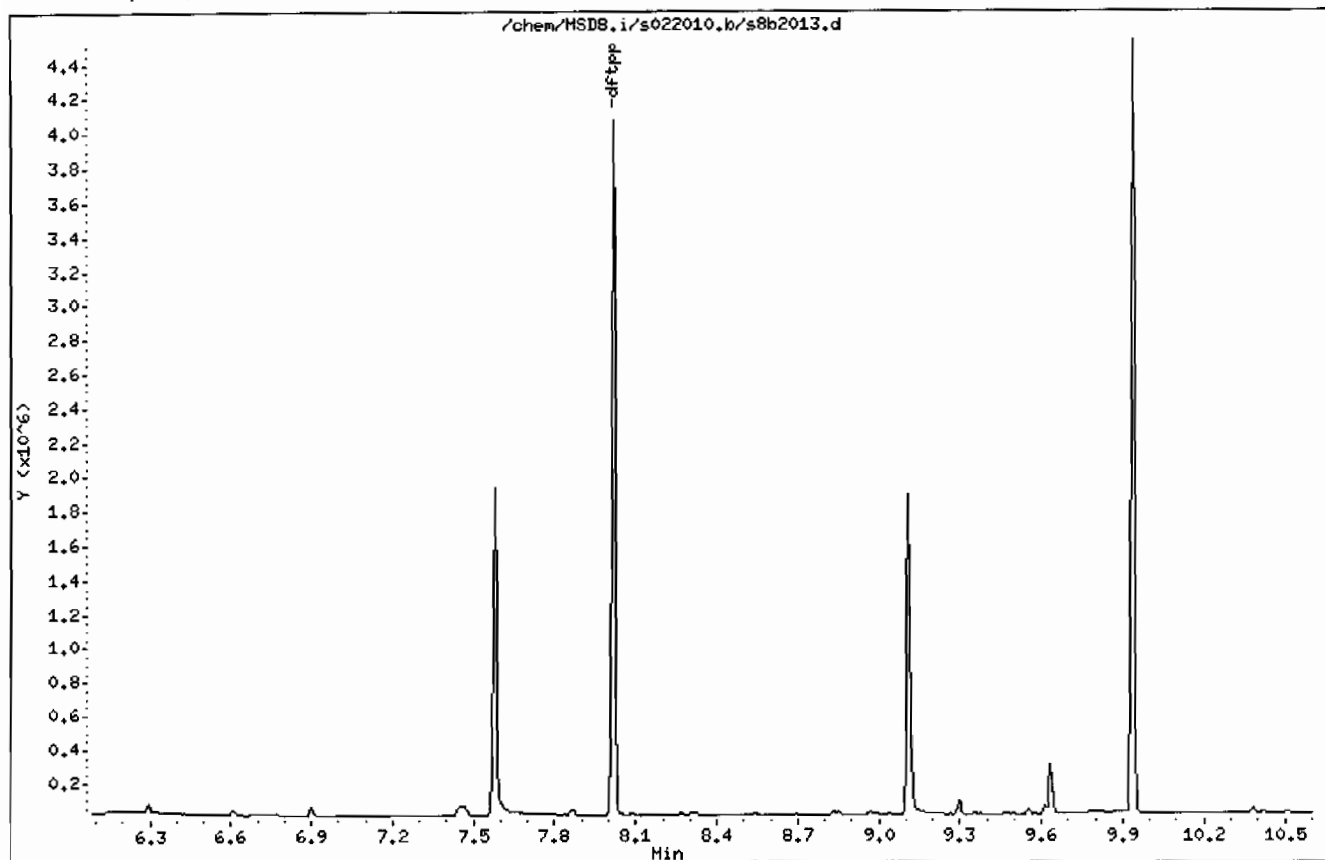
Sample Info: IWBH100207-01150 PPH11|SVHF11|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20



Date : 21-FEB-2010 08:35

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBNI00207-01150 PPH11SVMF11IDFTPP

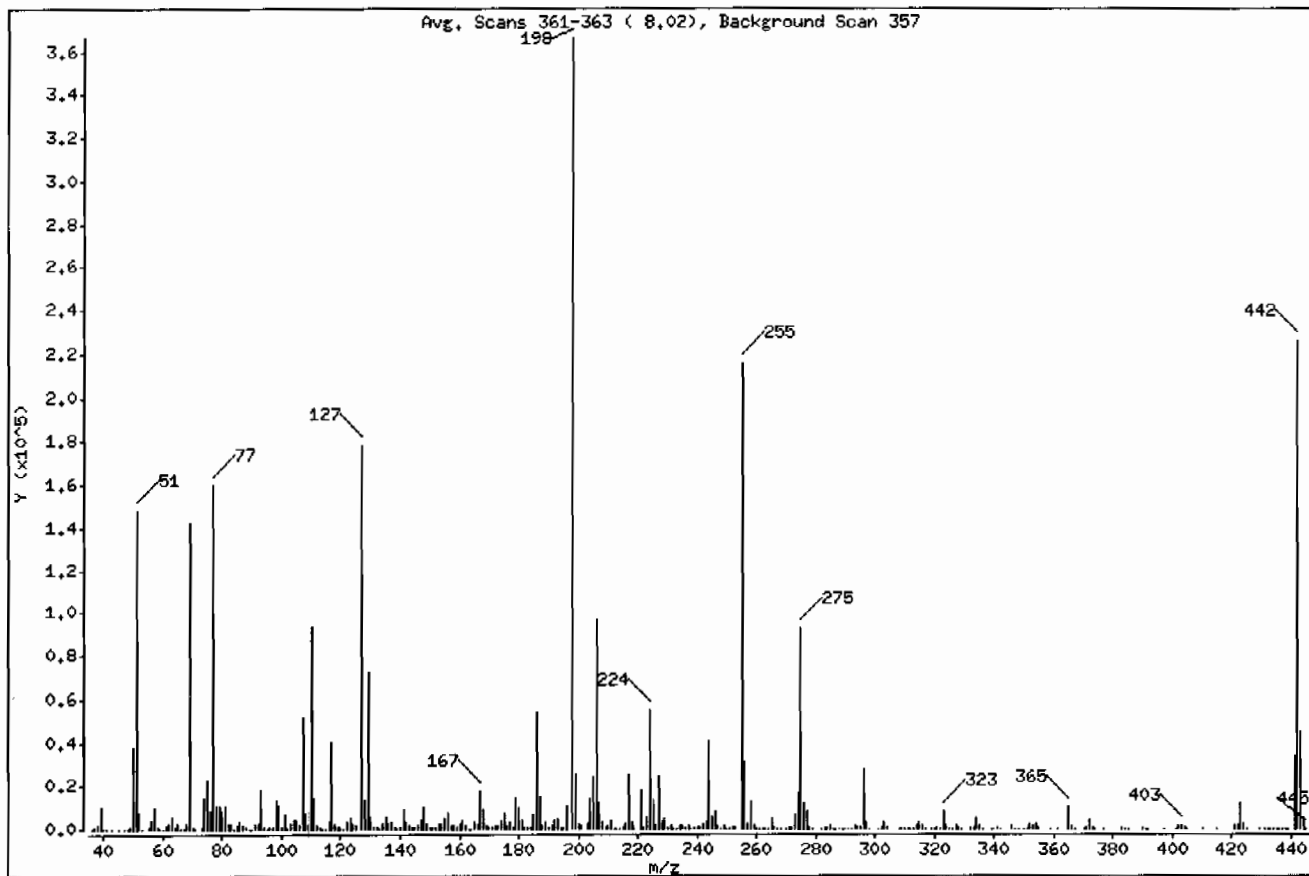
Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-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	40.53
68	Less than 2.00% of mass 69	0.71 (1.84)
69	Mass 69 relative abundance	38.91
70	Less than 2.00% of mass 69	0.22 (0.56)
127	40.00 - 60.00% of mass 198	48.75
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.82
275	10.00 - 30.00% of mass 198	25.27
365	Greater than 1.00% of mass 198	2.78
441	Present, but less than mass 443	9.31
442	Greater than 40.00% of mass 198	61.67
443	17.00 - 23.00% of mass 442	12.15 (19.71)

Date : 21-FEB-2010 08:35

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBNI00207-01150 PPM11SVHF11IDFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8b2013.d

Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	56	127.00	178624	214.00	46	309.00	256
37.00	622	128.00	13701	215.00	1055	310.00	391
38.00	1670	129.00	72120	216.00	2351	311.00	40
39.00	10227	130.00	6084	217.00	25672	312.00	66
40.00	276	131.00	1249	218.00	3337	313.00	215

41.00	148	132.00	676	219.00	394	314.00	1282
43.00	81	133.00	345	221.00	17360	315.00	2979
45.00	175	134.00	2137	222.00	784	316.00	1571
47.00	75	135.00	5764	223.00	5854	317.00	345
48.00	135	136.00	2291	224.00	54384	319.00	39

49.00	1152	137.00	3163	225.00	13504	320.00	89
50.00	38328	138.00	613	226.00	1516	321.00	844
51.00	148480	139.00	305	227.00	24384	322.00	237
52.00	7983	140.00	874	228.00	3450	323.00	8074
53.00	379	141.00	9200	229.00	5126	324.00	1548

55.00	654	142.00	3293	230.00	654	325.00	173
56.00	4225	143.00	2051	231.00	1887	326.00	144
57.00	9800	144.00	620	232.00	354	327.00	1551
58.00	460	145.00	527	233.00	399	328.00	753
59.00	146	146.00	1802	234.00	1541	329.00	186

60.00	207	147.00	4607	235.00	1773	332.00	625
61.00	1930	148.00	10337	236.00	1054	333.00	892
62.00	2234	149.00	2168	237.00	1872	334.00	4922
63.00	5775	150.00	592	238.00	323	335.00	1472
64.00	828	151.00	1245	239.00	1019	336.00	124

65.00	2791	152.00	804	240.00	727	339.00	168
66.00	273	153.00	2889	241.00	1258	340.00	43
67.00	294	154.00	2254	242.00	2657	341.00	971
68.00	2618	155.00	4976	243.00	3024	342.00	281
69.00	142528	156.00	7917	244.00	40320	346.00	1742

70.00	801	157.00	1591	245.00	5613	347.00	411
71.00	110	158.00	1797	246.00	8746	348.00	42
73.00	982	159.00	1200	247.00	1601	350.00	100
74.00	14686	160.00	2833	248.00	402	351.00	114
75.00	23056	161.00	3964	249.00	1347	352.00	2446

Date : 21-FEB-2010 08:35

Client ID: DFTPP

Instrument: MSDB.i

Sample Info: INBN100207-01150 PPH11|SVHF11|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8b2013.d

Spectrum: Avg. Scans 361-363 (8,02), Background Scan 357

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y

76.00	8112	162.00	1292	250.00	297	353.00	1664
77.00	159808	163.00	370	251.00	407	354.00	2324
78.00	10752	164.00	418	252.00	537	355.00	613
79.00	10806	165.00	3457	253.00	973	359.00	188
80.00	8432	166.00	2678	255.00	216000	361.00	35

81.00	11175	167.00	17744	256.00	30888	365.00	10172
82.00	2848	168.00	9666	257.00	2348	366.00	1571
83.00	2358	169.00	1555	258.00	12794	367.00	123
84.00	380	170.00	598	259.00	1933	370.00	198
85.00	1937	171.00	742	260.00	364	371.00	652

86.00	3300	172.00	1586	261.00	405	372.00	4000
87.00	1567	173.00	2096	262.00	34	373.00	950
88.00	607	174.00	3829	263.00	99	374.00	88
89.00	261	175.00	7675	264.00	325	377.00	56
90.00	99	176.00	2028	265.00	5206	383.00	1037

91.00	2533	177.00	3616	266.00	733	384.00	350
92.00	2877	178.00	1241	267.00	130	385.00	59
93.00	18624	179.00	14050	268.00	1	390.00	434
94.00	1132	180.00	10302	270.00	314	391.00	386
95.00	384	181.00	4359	271.00	454	392.00	247

96.00	852	182.00	801	272.00	611	397.00	36
97.00	507	183.00	425	273.00	6575	401.00	218
98.00	13725	184.00	1104	274.00	16896	402.00	1420
99.00	11316	185.00	7010	275.00	92592	403.00	2003
100.00	984	186.00	53560	276.00	12112	404.00	730

101.00	6416	187.00	15376	277.00	8831	405.00	147
102.00	398	188.00	1621	278.00	1259	410.00	36
103.00	2271	189.00	3344	279.00	291	415.00	89
104.00	4172	190.00	507	282.00	228	421.00	1948
105.00	3955	191.00	1461	283.00	887	422.00	1783

106.00	1360	192.00	4556	284.00	657	423.00	12054
107.00	51416	193.00	5226	285.00	1565	424.00	2758
108.00	7732	194.00	1074	286.00	264	425.00	311
109.00	1415	195.00	648	287.00	35	429.00	89
110.00	93200	196.00	11299	288.00	114	431.00	91

Date : 21-FEB-2010 08:35

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBNI00207-01150 PPHI11SVHF11IDFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s0b2013.d

Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357

Location of Maximum: 198.00

Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	14005	198.00	366464	289.00	359	432.00	75
112.00	1777	199.00	26008	290.00	221	433.00	42
113.00	565	200.00	2149	291.00	192	434.00	133
114.00	156	201.00	1762	292.00	407	435.00	174
115.00	309	203.00	2677	293.00	1828	436.00	69
116.00	2977	204.00	14145	294.00	475	437.00	142
117.00	40696	205.00	24104	295.00	609	438.00	145
118.00	2826	206.00	97072	296.00	27600	439.00	257
119.00	441	207.00	12482	297.00	3606	441.00	34104
120.00	684	208.00	3467	298.00	227	442.00	225984
121.00	249	209.00	1206	301.00	394	443.00	44536
122.00	3382	210.00	1778	302.00	459	444.00	4167
123.00	5335	211.00	3877	303.00	3092	445.00	202
124.00	2445	212.00	196	304.00	889		
125.00	2106	213.00	321	308.00	309		

Data File: /chem/MSD8.i/s032110.b/s8c2101.d

Page 1

Date : 21-MAR-2010 08:14

Client ID: DFTPP

Instrument: MSD8.i

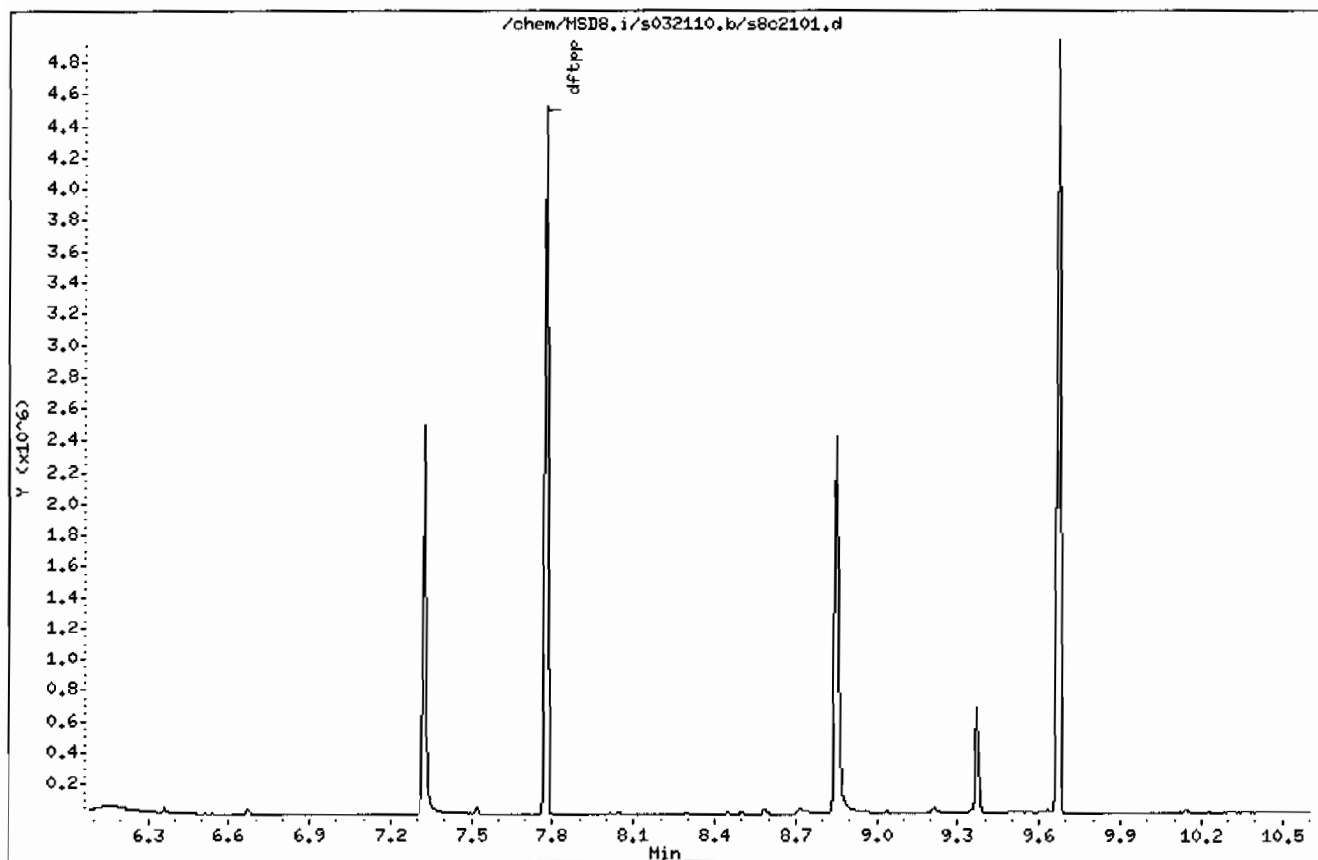
Sample Info: IWBNI00306-01.2IDFTPP11|SVH11|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20



Date : 21-MAR-2010 08:14

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBNI00306-01.21DFTPP11ISVH111DFTPP

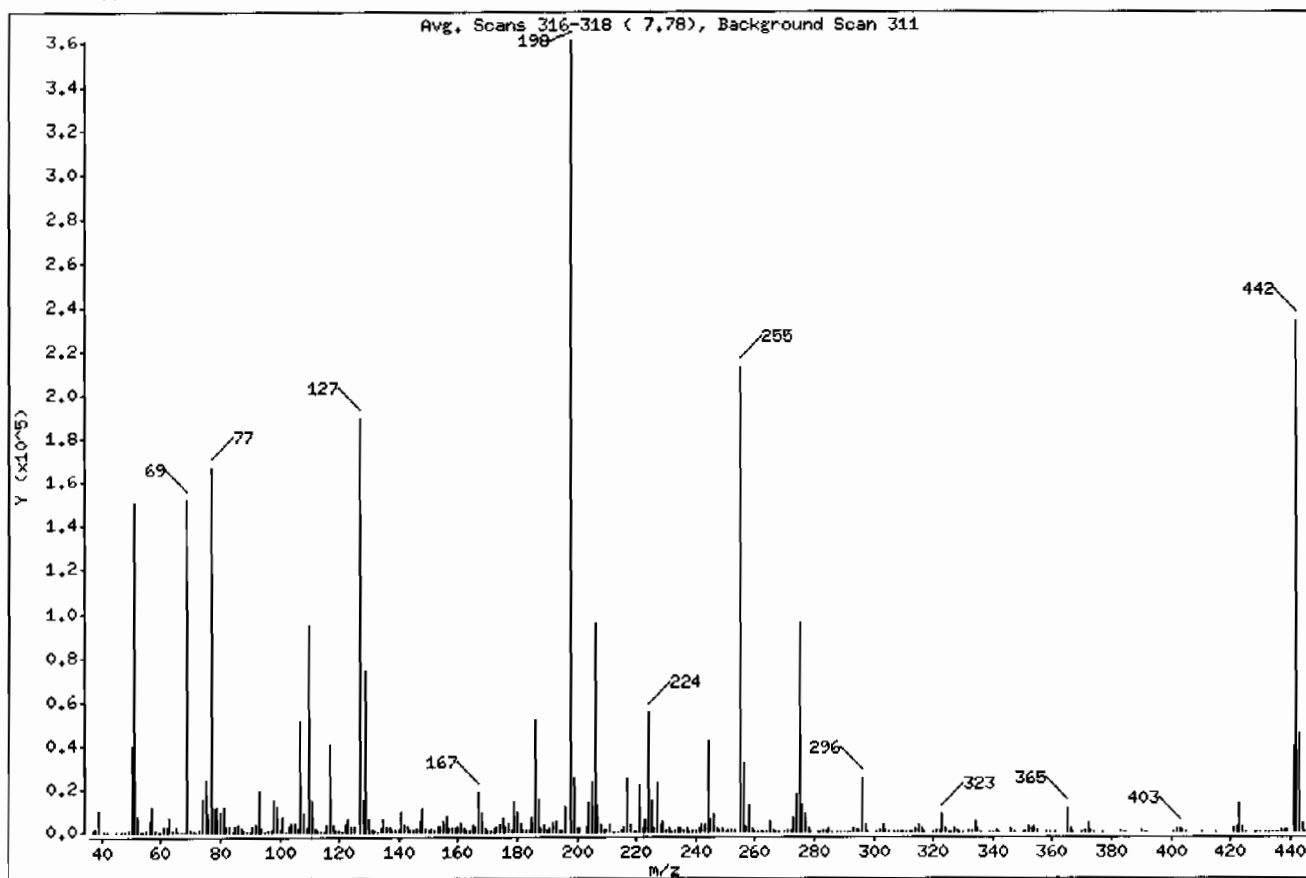
Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-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	41.56
68	Less than 2.00% of mass 69	0.09 (0.22)
69	Mass 69 relative abundance	42.18
70	Less than 2.00% of mass 69	0.22 (0.53)
127	40.00 - 60.00% of mass 198	52.51
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.90
275	10.00 - 30.00% of mass 198	26.47
365	Greater than 1.00% of mass 198	2.89
441	Present, but less than mass 443	10.75
442	Greater than 40.00% of mass 198	64.60
443	17.00 - 23.00% of mass 442	12.48 (19.32)

Date : 21-MAR-2010 08:14

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBNI00306-01,21DFTPP|11SVMI11DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8c2101.d

Spectrum: Avg. Scans 316-318 (7.78), Background Scan 311

Location of Maximum: 198.00

Number of points: 341

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	617	128.00	14746	216.00	2237	309.00	233
38.00	1669	129.00	74176	217.00	25240	310.00	267
39.00	10100	130.00	6138	218.00	3319	311.00	91
41.00	187	131.00	1218	219.00	364	312.00	41
42.00	49	132.00	830	220.00	161	313.00	247
45.00	255	133.00	313	221.00	21240	314.00	1251
47.00	41	134.00	2026	222.00	1316	315.00	2939
48.00	135	135.00	5814	223.00	6008	316.00	1517
49.00	841	136.00	2256	224.00	54768	317.00	266
50.00	39864	137.00	2816	225.00	13812	320.00	85
51.00	150080	138.00	633	226.00	1467	321.00	736
52.00	7602	139.00	418	227.00	22512	322.00	526
53.00	364	140.00	948	228.00	3257	323.00	8295
54.00	42	141.00	9018	229.00	4825	324.00	1452
55.00	807	142.00	3055	230.00	687	325.00	162
56.00	4813	143.00	2131	231.00	2012	326.00	182
57.00	11238	144.00	585	232.00	400	327.00	1467
58.00	498	145.00	574	233.00	429	328.00	689
59.00	233	146.00	1699	234.00	1446	329.00	183
60.00	213	147.00	5057	235.00	1662	330.00	37
61.00	2139	148.00	10402	236.00	1200	332.00	497
62.00	2478	149.00	2008	237.00	1708	333.00	740
63.00	6338	150.00	690	238.00	273	334.00	5306
64.00	876	151.00	1283	239.00	846	335.00	1269
65.00	2899	152.00	657	240.00	727	336.00	160
66.00	222	153.00	2782	241.00	1424	339.00	100
67.00	320	154.00	2228	242.00	3010	340.00	81
68.00	333	155.00	5219	243.00	3239	341.00	917
69.00	152320	156.00	7609	244.00	41744	342.00	286
70.00	802	157.00	1575	245.00	5691	346.00	1628
71.00	98	158.00	1708	246.00	8036	347.00	317
72.00	57	159.00	1400	247.00	1813	350.00	43
73.00	1092	160.00	2801	248.00	460	351.00	153
74.00	14839	161.00	4258	249.00	1476	352.00	2287
75.00	23960	162.00	1307	250.00	312	353.00	1616

Date : 21-MAR-2010 08:14

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBNI00306-01.21DFTPP11ISVMI11DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8c2101.d

Spectrum: Avg. Scans 316-318 (7.78), Background Scan 311

Location of Maximum: 198.00

Number of points: 341

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	8621	163.00	433	251.00	420	354.00	2329
77.00	167296	164.00	592	252.00	542	355.00	431
78.00	11163	165.00	3448	253.00	1084	358.00	38
79.00	11463	166.00	2793	255.00	212288	359.00	156
80.00	8853	167.00	18384	256.00	31376	361.00	60
81.00	11496	168.00	8727	257.00	2489	365.00	10432
82.00	2775	169.00	1596	258.00	12304	366.00	1404
83.00	2771	170.00	680	259.00	2010	367.00	59
84.00	196	171.00	757	260.00	392	370.00	260
85.00	2278	172.00	1641	261.00	397	371.00	610
86.00	3468	173.00	2228	262.00	33	372.00	3789
87.00	1482	174.00	3715	263.00	188	373.00	1055
88.00	502	175.00	6817	264.00	321	374.00	86
89.00	381	176.00	2367	265.00	4898	377.00	34
90.00	144	177.00	3826	266.00	593	383.00	876
91.00	2662	178.00	1095	267.00	117	384.00	338
92.00	3383	179.00	13707	268.00	103	385.00	34
93.00	18936	180.00	9480	270.00	318	390.00	493
94.00	1435	181.00	4133	271.00	523	391.00	354
95.00	371	182.00	720	272.00	690	392.00	230
96.00	916	183.00	516	273.00	6449	401.00	271
97.00	465	184.00	1219	274.00	17384	402.00	1505
98.00	14909	185.00	6996	275.00	95600	403.00	1872
99.00	11554	186.00	51672	276.00	12457	404.00	679
100.00	1084	187.00	14704	277.00	8063	405.00	36
101.00	6534	188.00	1380	278.00	1325	410.00	35
102.00	382	189.00	3450	279.00	275	415.00	95
103.00	2432	190.00	541	281.00	49	421.00	1723
104.00	4426	191.00	1534	282.00	203	422.00	2111
105.00	4095	192.00	4404	283.00	912	423.00	12921
106.00	1500	193.00	5120	284.00	551	424.00	2570
107.00	50280	194.00	999	285.00	1368	425.00	293
108.00	8120	195.00	691	286.00	289	428.00	35
109.00	1848	196.00	11866	288.00	83	429.00	35
110.00	94744	198.00	361216	289.00	286	430.00	53

Date : 21-MAR-2010 08:14

Client ID: DFTPP

Instrument: MSD8,i

Sample Info: IWBNI00306-01,2IDFTPP11SVMI1IDFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8c2101.d

Spectrum: Avg, Scans 316-318 (7,78), Background Scan 311

Location of Maximum: 198.00

Number of points: 341

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	14242	199.00	24912	290.00	219	432.00	105
112.00	1840	200.00	1897	291.00	164	433.00	191
113.00	625	201.00	2059	292.00	337	434.00	69
114.00	203	203.00	2887	293.00	1826	435.00	189
115.00	332	204.00	13395	294.00	448	436.00	358
116.00	3026	205.00	23120	295.00	697	437.00	433
117.00	40336	206.00	95872	296.00	24648	438.00	459
118.00	3013	207.00	12240	297.00	3394	439.00	559
119.00	435	208.00	3412	298.00	266	441.00	38832
120.00	627	209.00	1066	301.00	355	442.00	233344
121.00	347	210.00	877	302.00	459	443.00	45072
122.00	3725	211.00	3673	303.00	2914	444.00	4248
123.00	5487	212.00	371	304.00	769	445.00	295
124.00	2602	213.00	325	305.00	46		
125.00	2225	214.00	57	307.00	49		
127.00	189632	215.00	1179	308.00	375		

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

SDG Number: 10-2154

Matrix: SOIL

Lab Sample ID: 1202063250

Client Sample: QC for batch 961921

Client: LANL010

Project: QC

Client ID: MB for batch 961921

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 961922

Inst: MSD8.J

Dilution: 1

Run Date: 03/21/2010 10:29

Analyst: NAG1

Inj. Vol: .5 uL

Prep Date: 03/07/2010 12:04

Aliquot: 30 g

Final Volume: 1 mL

Data File: s8c2106.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
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

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

SDG Number: 10-2154		Matrix: SOIL
Lab Sample ID: 1202063250		
Client Sample: QC for batch 961921	Client: LANL010	Project: QC
Client ID: MB for batch 961921	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 10:29	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30 g	Final Volume: 1 mL
Data File: s8c2106.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	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	1.72	328	ug/kg		J

Data File: /chem/MSD8.i/s032110.b/s8c2106.d
Report Date: 22-Mar-2010 07:12

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Data file : /chem/MSD8.i/s032110.b/s8c2106.d
Lab Smp Id: 1202063250 Client Smp ID: SBLK01
Inj Date : 21-MAR-2010 10:29
Operator : nagl Inst ID: MSD8.i
Smp Info : |1202063250|961922|1|SVM|1|SBLK01
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301	(1.000)	395869	40.0000
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1533745	40.0000
* 46 Acenaphthene-d10	164	7.401	7.406	(1.000)	892920	40.0000
* 67 Phenanthrene-d10	188	8.992	8.997	(1.000)	1490827	40.0000
* 91 Chrysene-d12	240	11.863	11.868	(1.000)	1226984	40.0000
* 98 Perylene-d12	264	13.873	13.878	(1.000)	891145	40.0000
\$ 3 2-Fluorophenol	112	3.168	3.158	(0.736)	723640	77.4284 2580
\$ 5 Phenol-d5	99	3.930	3.930	(0.914)	882425	75.7093 2520
\$ 20 Nitrobenzene-d5	82	4.825	4.830	(0.869)	403533	37.0117 1230
\$ 39 2-Fluorobiphenyl	172	6.678	6.682	(0.902)	859201	32.6904 1090
\$ 60 2,4,6-Tribromophenol	329	8.244	8.244	(1.114)	185107	62.7127 2090
\$ 81 p-Terphenyl-d14	244	10.706	10.706	(0.902)	923033	41.7847 1390

Data File: /chem/MSD8.i/s032110.b/s8c2106.d
 Report Date: 22-Mar-2010 07:12

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Data file : /chem/MSD8.i/s032110.b/s8c2106.d
 Lab Smp Id: 1202063250 Client Smp ID: SBLK01
 Inj Date : 21-MAR-2010 10:29
 Operator : nagl Inst ID: MSD8.i
 Smp Info : |1202063250|961922|1|SVM|1|SBLK01
 Misc Info : |MSD8270_S|WBN100319-01
 Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
 Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
 Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
 Als bottle: 6 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2154.sub
 Target Version: 3.50
 Processing Host: hpc1p1

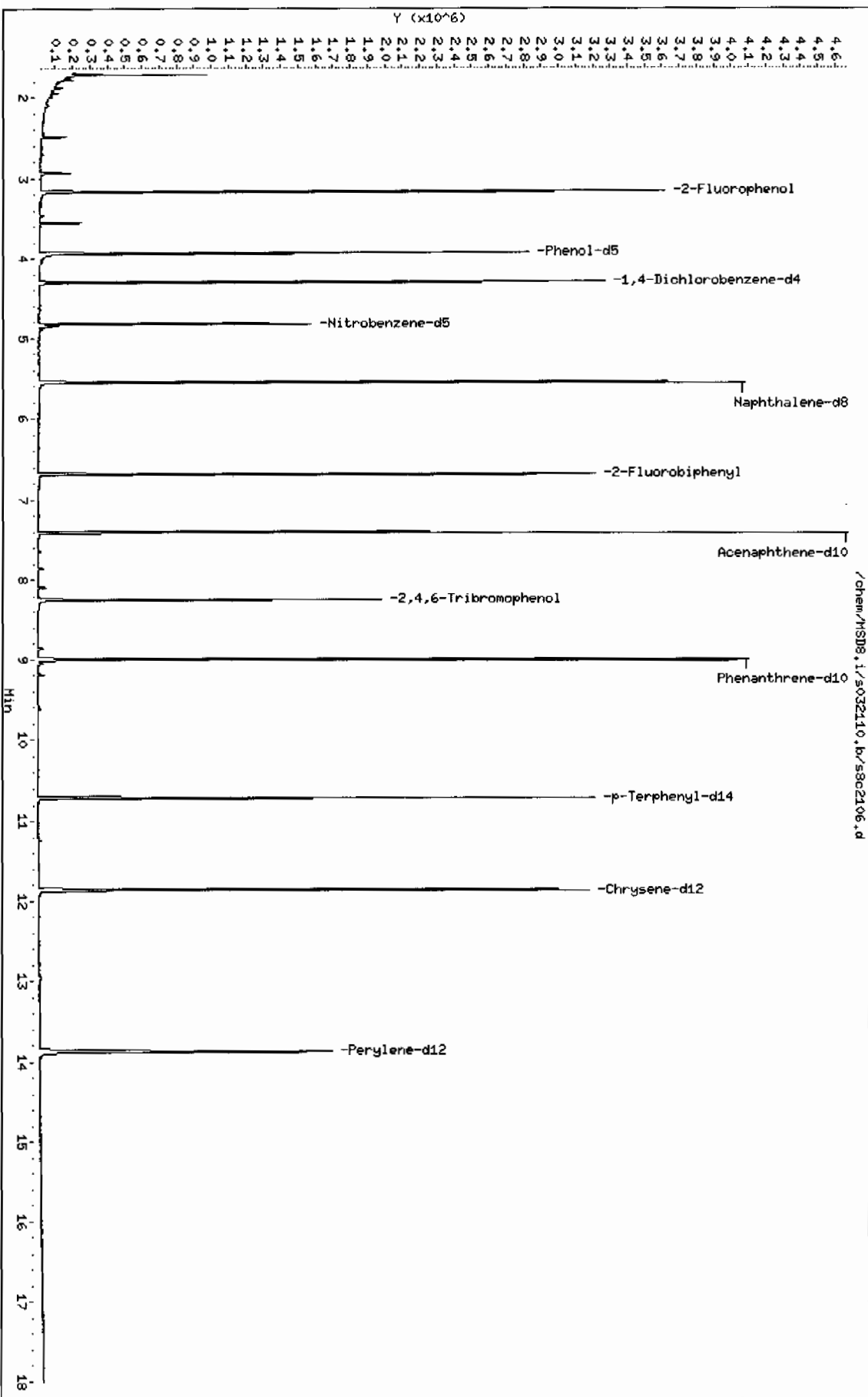
Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

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

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.301	2351937	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
1.720	578908	9.84563507	328	0		0	10



Data File: /chem/MSD8.i/s032110.b/s8c2106.d
Date: 21-MAR-2010 10:29
Client ID: SBLK01
Sample Info: 14202063250196192211SVH11SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-SHS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20

Date: 21-MAR-2010 10:29

Client ID: SBLK01

Instrument: MSD8.i

Sample Info: I12020632501961922111SVH111SBLK01

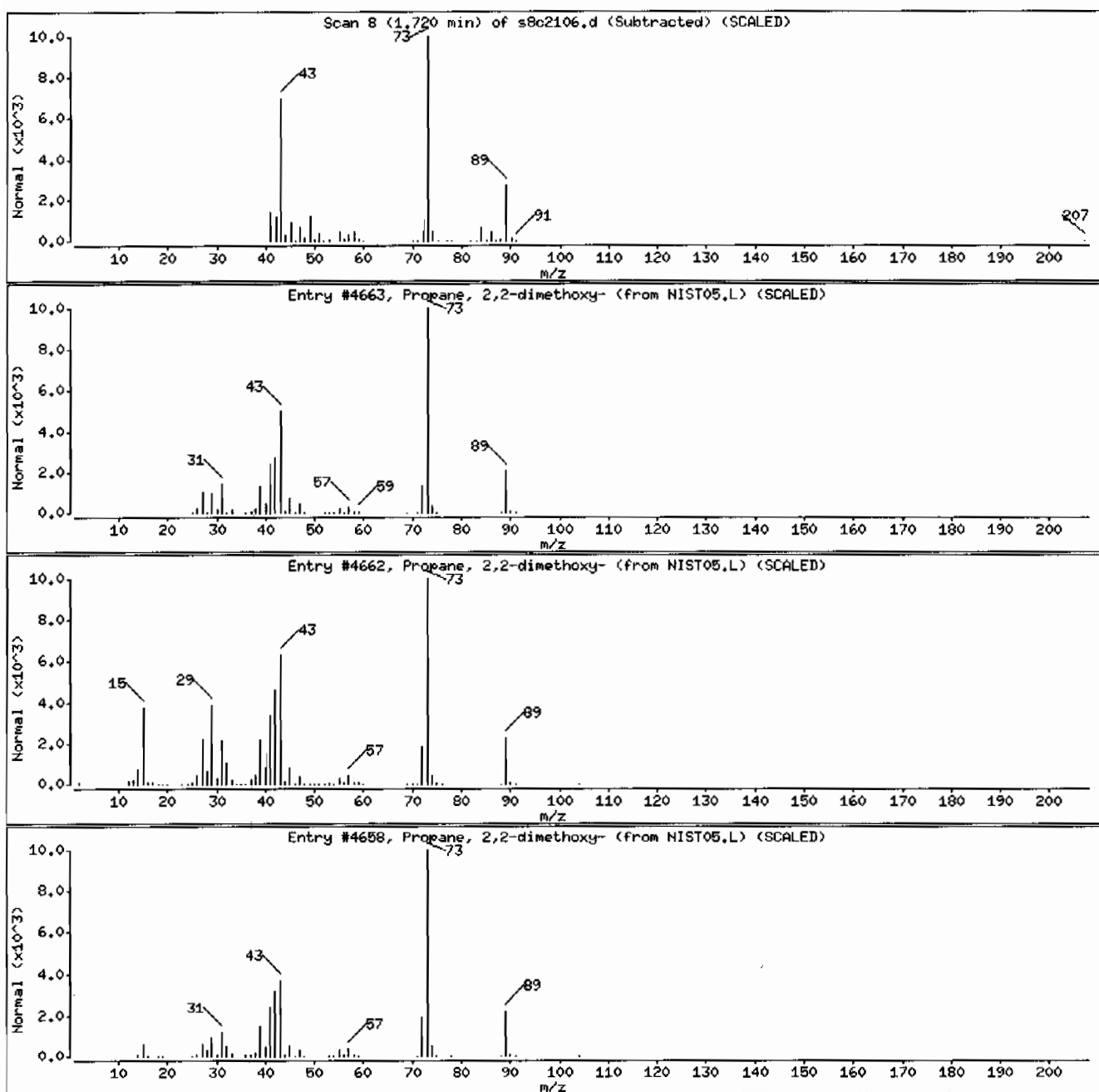
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	38	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	38	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	25	C5H12O2	104



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

SDG Number: 10-2154
Lab Sample ID: 1202063251
Client Sample: QC for batch 961921
Client ID: LCS for batch 961921
Batch ID: 961922
Run Date: 03/21/2010 10:59
Prep Date: 03/07/2010 12:04
Data File: s8c2107.d

Client: LANL010
Method: SW846 8270C
Inst: MSD8.I
Analyst: NAG1
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: SOIL
Project: QC
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1200	ug/kg	66.7	333
108-95-2	Phenol		1290	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1340	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1190	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1440	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1290	ug/kg	66.7	333
83-32-9	Acenaphthene		1130	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1260	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1020	ug/kg	110	333
87-86-5	Pentachlorophenol		1400	ug/kg	83.3	333
129-00-0	Pyrene		1140	ug/kg	10.0	33.3
110-86-1	Pyridine		1500	ug/kg	66.7	333
62-53-3	Aniline		904	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1360	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1210	ug/kg	66.7	333
100-51-6	Benzyl alcohol		736	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1250	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1420	ug/kg	66.7	333
95-48-7	o-Cresol		1250	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1420	ug/kg	100	333
67-72-1	Hexachloroethane		1270	ug/kg	66.7	333
98-95-3	Nitrobenzene		1300	ug/kg	66.7	333
78-59-1	Isophorone		1400	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1280	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1250	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1390	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1290	ug/kg	66.7	333
65-85-0	Benzoic acid		2560	ug/kg	167	667
91-20-3	Naphthalene		1270	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		760	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1160	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1320	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1030	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1230	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1150	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1170	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1210	ug/kg	66.7	333
99-09-2	o-Nitroaniline					
	3-Nitroaniline		933	ug/kg	66.7	333

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

SDG Number: 10-2154		Matrix: SOIL
Lab Sample ID: 1202063251		
Client Sample: QC for batch 961921	Client: LANL010	Project: QC
Client ID: LCS for batch 961921	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 10:59	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30 g	Final Volume: 1 mL
Data File: s8c2107.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate		1410	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1310	ug/kg	33.3	333
208-96-8	Acenaphthylene		1220	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1080	ug/kg	127	667
132-64-9	Dibenzofuran		1180	ug/kg	66.7	333
84-66-2	Diethylphthalate		1420	ug/kg	66.7	333
86-73-7	Fluorene		1170	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1170	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1210	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1220	ug/kg	100	333
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine		1430	ug/kg	66.7	333
122-66-7	Azobenzene		1540	ug/kg	66.7	333
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether		1280	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1260	ug/kg	66.7	333
85-01-8	Phenanthrene		1270	ug/kg	10.0	33.3
120-12-7	Anthracene		1180	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1700	ug/kg	66.7	333
206-44-0	Fluoranthene		1310	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1690	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1200	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1040	ug/kg	100	333
218-01-9	Chrysene		1330	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1790	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1640	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1280	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1280	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1330	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1290	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1580	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1450	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1170	ug/kg	66.7	333

Data File: /chem/MSD8.i/s032110.b/s8c2107.d
Report Date: 22-Mar-2010 07:12

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Data file : /chem/MSD8.i/s032110.b/s8c2107.d
Lab Smp Id: 1202063251 Client Smp ID: SBLK01LCS
Inj Date : 21-MAR-2010 10:59
Operator : nag1 Inst ID: MSD8.i
Smp Info : |1202063251|961922|1|SVM|1|SBLK01LCS
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1p1

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	4.301	4.301	(1.000)	333279	40.0000	
* 29 Naphthalene-d8		136	5.554	5.558	(1.000)	1298598	40.0000	
* 46 Acenaphthene-d10		164	7.401	7.406	(1.000)	778979	40.0000	
* 67 Phenanthrene-d10		188	8.997	8.997	(1.000)	1326792	40.0000	
* 91 Chrysene-d12		240	11.868	11.868	(1.000)	1267267	40.0000	
* 98 Perylene-d12		264	13.878	13.878	(1.000)	936791	40.0000	
\$ 3 2-Fluorophenol		112	3.168	3.158	(0.736)	622616	79.1301	2640
\$ 5 Phenol-d5		99	3.935	3.930	(0.915)	749441	76.3753	2540
\$ 20 Nitrobenzene-d5		82	4.830	4.830	(0.870)	349398	37.8494	1260
\$ 39 2-Fluorobiphenyl		172	6.682	6.682	(0.903)	771946	33.6666	1120
\$ 60 2,4,6-Tribromophenol		329	8.249	8.244	(1.115)	188963	73.3831	2450
\$ 81 p-Terphenyl-d14		244	10.706	10.706	(0.902)	898967	39.4017	1310

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.949	3.944	(0.918)	392197	38.7044	1290
8 2-Chlorophenol	128	4.106	4.106	(0.955)	352414	40.0516	1340
11 1,4-Dichlorobenzene	146	4.320	4.316	(1.004)	385713	35.8263	1190
17 N-Nitrosodipropylamine	70	4.677	4.677	(1.087)	279282	43.0905	1440 (Q)
28 1,2,4-Trichlorobenzene	180	5.492	5.492	(0.989)	333185	35.2458	1170
33 4-Chloro-3-methylphenol	107	6.125	6.116	(1.103)	294990	38.7831	1290
47 Acenaphthene	154	7.439	7.439	(1.005)	699076	33.7714	1120
50 2,4-Dinitrotoluene	165	7.606	7.606	(1.028)	238887	37.7529	1260
52 4-Nitrophenol	139	7.530	7.525	(1.017)	80976	30.4539	1020
65 Pentachlorophenol	266	8.787	8.787	(0.977)	123569	42.0983	1400
79 Pyrene	202	10.544	10.544	(0.888)	1352939	34.1936	1140
2 Pyridine	79	2.249	2.239	(0.523)	334960	44.9821	1500
4 Aniline	66	3.997	3.996	(0.929)	125528	27.1249	904
7 bis(2-Chloroethyl) ether	63	4.044	4.044	(0.940)	282002	40.7074	1360
9 1,3-Dichlorobenzene	146	4.254	4.249	(0.989)	379457	36.3641	1210
12 Benzyl alcohol	108	4.420	4.415	(1.028)	121568	22.0878	736
13 1,2-Dichlorobenzene	146	4.463	4.458	(1.038)	374719	37.4176	1250
14 bis(2-Chloroisopropyl) ether	45	4.544	4.544	(1.056)	577264	42.4999	1420
15 o-Cresol	107	4.516	4.511	(1.050)	264467	37.5802	1250
18 m,p-Cresols	107	4.658	4.663	(1.063)	378936	42.5483	1420
19 Hexachloroethane	117	4.787	4.787	(1.113)	154401	38.0561	1270
21 Nitrobenzene	77	4.849	4.849	(0.873)	371122	38.9743	1300
22 Isophorone	82	5.082	5.087	(0.915)	737812	42.0864	1400
23 2-Nitrophenol	139	5.163	5.163	(0.930)	167680	38.3675	1280
24 2,4-Dimethylphenol	122	5.192	5.192	(0.935)	290221	37.3534	1240
25 bis(2-Chloroethoxy)methane	93	5.292	5.292	(0.953)	410023	41.7071	1390
26 2,4-Dichlorophenol	162	5.406	5.406	(0.973)	271411	38.6074	1290
27 Benzoic acid	105	5.306	5.282	(0.955)	345125	76.7399	2560
30 Naphthalene	128	5.577	5.577	(1.004)	1079843	38.2351	1270
31 4-Chloroaniline	127	5.625	5.625	(1.013)	211496	22.7900	760
32 Hexachlorobutadiene	225	5.697	5.696	(1.026)	204807	34.8354	1160
34 2-Methylnaphthalene	142	6.297	6.296	(1.134)	747900	39.6294	1320
36 Hexachlorocyclopentadiene	237	6.458	6.458	(0.873)	149040	30.8260	1030
37 2,4,6-Trichlorophenol	196	6.592	6.587	(0.891)	221619	36.9257	1230
38 2,4,5-Trichlorophenol	196	6.630	6.625	(0.896)	220032	34.5406	1150
40 2-Chloronaphthalene	162	6.811	6.811	(0.920)	674717	35.2090	1170
42 o-Nitroaniline	65	6.916	6.916	(0.934)	193584	36.2892	1210
41 m-Nitroaniline	138	7.354	7.354	(0.994)	113844	28.0011	933
43 Dimethylphthalate	163	7.111	7.116	(0.961)	922301	42.2521	1410
44 2,6-Dinitrotoluene	165	7.178	7.177	(0.970)	194319	39.3755	1310
45 Acenaphthylene	152	7.254	7.254	(0.980)	1184147	36.6145	1220
48 2,4-Dinitrophenol	184	7.463	7.468	(1.008)	44315	32.3316	1080
49 Dibenzofuran	168	7.620	7.625	(1.030)	963532	35.4762	1180
51 Diethylphthalate	149	7.868	7.868	(1.063)	970207	42.4677	1420
53 Fluorene	166	7.987	7.992	(1.079)	878814	34.9547	1160
54 4-Chlorophenylphenylether	204	7.987	7.987	(1.079)	425973	35.1813	1170
55 2-Methyl-4,6-dinitrophenol	198	8.039	8.044	(0.894)	94443	36.4034	1210

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====	=====
56 p-Nitroaniline		138	8.006	8.006	(1.082)	131333	36.5567	1220
133 Diphenylamine		169	8.116	8.116	(0.902)	719089	42.8897	1430
58 1,2-Diphenylhydrazine		77	8.158	8.158	(0.907)	907006	46.0539	1540
61 4-Bromophenylphenylether		248	8.511	8.516	(0.946)	243251	38.3677	1280
63 Hexachlorobenzene		284	8.578	8.577	(0.953)	249467	37.8574	1260
68 Phenanthrene		178	9.020	9.020	(1.003)	1183114	38.0406	1270
69 Anthracene		178	9.078	9.077	(1.009)	1140262	35.4093	1180
72 Di-n-butylphthalate		149	9.620	9.620	(1.069)	1712583	50.8798	1700
76 Fluoranthene		202	10.297	10.297	(1.145)	1323218	39.1923	1310
85 Butylbenzylphthalate		149	11.235	11.235	(0.947)	702313	50.7597	1690
89 Benzo(a)anthracene		228	11.854	11.854	(0.999)	1199851	35.9792	1200
90 3,3'-Dichlorobenzidine		252	11.820	11.820	(0.996)	245000	31.2075	1040
92 Chrysene		228	11.901	11.897	(1.003)	1159752	39.8507	1330
93 bis(2-Ethylhexyl)phthalate		149	11.878	11.878	(1.001)	1037543	53.5840	1790
94 Di-n-octylphthalate		149	12.730	12.730	(0.917)	1467311	49.3205	1640
95 Benzo(b)fluoranthene		252	13.292	13.292	(0.958)	1018216	38.3378	1280
96 Benzo(k)fluoranthene		252	13.335	13.335	(0.961)	1029032	38.5399	1280
97 Benzo(a)pyrene		252	13.787	13.787	(0.993)	894562	39.9354	1330
99 Indeno(1,2,3-cd)pyrene		276	15.644	15.644	(1.127)	719134	38.7204	1290
100 Dibenzo(a,h)anthracene		278	15.682	15.682	(1.130)	681813	47.5014	1580
101 Benzo(ghi)perylene		276	16.106	16.101	(1.161)	667651	43.4489	1450
1 N-Methyl-N-nitrosomethylamine		74	2.211	2.206	(0.514)	182717	35.9956	1200

QC Flag Legend

Q - Qualifier signal failed the ratio test.

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202063252	Date Received: 03/02/2010 08:50	%Moisture: 12.3
Client Sample: QC for batch 961921	Client: LANL010	Project: QC
Client ID: RE36-10-7494MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 12:28	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s8c2110.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		950	ug/kg	76.0	380
108-95-2	Phenol		1040	ug/kg	76.0	380
95-57-8	2-Chlorophenol		1070	ug/kg	76.0	380
106-46-7	1,4-Dichlorobenzene		959	ug/kg	76.0	380
621-64-7	N-Nitrosodipropylamine		1160	ug/kg	76.0	380
59-50-7	4-Chloro-3-methylphenol		1050	ug/kg	76.0	380
83-32-9	Acenaphthene		890	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene		990	ug/kg	38.0	380
100-02-7	4-Nitrophenol		911	ug/kg	125	380
87-86-5	Pentachlorophenol		1100	ug/kg	95.0	380
129-00-0	Pyrene		960	ug/kg	11.4	38.0
110-86-1	Pyridine		858	ug/kg	76.0	380
62-53-3	Aniline		697	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether		1080	ug/kg	76.0	380
541-73-1	1,3-Dichlorobenzene		987	ug/kg	76.0	380
100-51-6	Benzyl alcohol		437	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene		993	ug/kg	76.0	380
108-60-1	bis(2-Chloroisopropyl)ether		1130	ug/kg	76.0	380
95-48-7	o-Cresol		1110	ug/kg	76.0	380
65794-96-9	m,p-Cresols		1270	ug/kg	114	380
67-72-1	Hexachloroethane		1000	ug/kg	76.0	380
98-95-3	Nitrobenzene		1070	ug/kg	76.0	380
78-59-1	Isophorone		1110	ug/kg	76.0	380
88-75-5	2-Nitrophenol		1090	ug/kg	76.0	380
105-67-9	2,4-Dimethylphenol		910	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane		1130	ug/kg	76.0	380
120-83-2	2,4-Dichlorophenol		1040	ug/kg	76.0	380
65-85-0	Benzoic acid		2420	ug/kg	190	760
91-20-3	Naphthalene		1040	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline		642	ug/kg	76.0	380
87-68-3	Hexachlorobutadiene		913	ug/kg	76.0	380
91-57-6	2-Methylnaphthalene		1060	ug/kg	7.60	38.0
77-47-4	Hexachlorocyclopentadiene		826	ug/kg	76.0	380
88-06-2	2,4,6-Trichlorophenol		957	ug/kg	76.0	380
95-95-4	2,4,5-Trichlorophenol		943	ug/kg	76.0	380
91-58-7	2-Chloronaphthalene		989	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline		1020	ug/kg	76.0	380
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		765	ug/kg	76.0	380

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202063252	Date Received: 03/02/2010 08:50	%Moisture: 12.3
Client Sample: QC for batch 961921	Client: LANL010	Project: QC
Client ID: RE36-10-7494MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 12:28	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s8c2110.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate		1100	ug/kg	76.0	380
606-20-2	2,6-Dinitrotoluene		1030	ug/kg	38.0	380
208-96-8	Acenaphthylene		961	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol		1060	ug/kg	144	760
132-64-9	Dibenzofuran		960	ug/kg	76.0	380
84-66-2	Diethylphthalate		1090	ug/kg	76.0	380
86-73-7	Fluorene		906	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether		921	ug/kg	76.0	380
534-52-1	2-Methyl-4,6-dinitrophenol		1060	ug/kg	76.0	380
100-01-6	4-Nitroaniline		859	ug/kg	114	380
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1150	ug/kg	76.0	380
122-66-7	Azobenzene		1230	ug/kg	76.0	380
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1010	ug/kg	76.0	380
118-74-1	Hexachlorobenzene		965	ug/kg	76.0	380
85-01-8	Phenanthrene		1010	ug/kg	11.4	38.0
120-12-7	Anthracene		923	ug/kg	7.60	38.0
84-74-2	Di-n-butylphthalate		1290	ug/kg	76.0	380
206-44-0	Fluoranthene		953	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate		1450	ug/kg	76.0	380
56-55-3	Benzo(a)anthracene		937	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine		431	ug/kg	114	380
218-01-9	Chrysene		1040	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate		1500	ug/kg	76.0	380
117-84-0	Di-n-octylphthalate		1660	ug/kg	76.0	380
205-99-2	Benzo(b)fluoranthene		1050	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene		1060	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene		1030	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene		970	ug/kg	11.4	38.0
53-70-3	Dibenzo(a,h)anthracene		999	ug/kg	11.4	38.0
191-24-2	Benzo(ghi)perylene		888	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene		963	ug/kg	76.0	380

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2110.d
Lab Smp Id: 1202063252 Client Smp ID: RE36-10-7494MS
Inj Date : 21-MAR-2010 12:28
Operator : nag1 Inst ID: MSD8.i
Smp Info : |1202063252|961922|1|SVM|1|MS
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	12.33800	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301	(1.000)	407406	40.0000
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1587987	40.0000
* 46 Acenaphthene-d10	164	7.401	7.406	(1.000)	923863	40.0000
* 67 Phenanthrene-d10	188	8.997	8.997	(1.000)	1546277	40.0000
* 91 Chrysene-d12	240	11.868	11.868	(1.000)	1273334	40.0000
* 98 Perylene-d12	264	13.873	13.878	(1.000)	772638	40.0000
\$ 3 2-Fluorophenol	112	3.168	3.158	(0.736)	530882	55.1950 2100
\$ 5 Phenol-d5	99	3.935	3.930	(0.915)	666271	55.5452 2110
\$ 20 Nitrobenzene-d5	82	4.825	4.830	(0.869)	302788	26.8228 1020
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.903)	627545	23.0768 877
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.115)	140380	45.9666 1750
\$ 81 p-Terphenyl-d14	244	10.706	10.706	(0.902)	642120	28.0100 1060

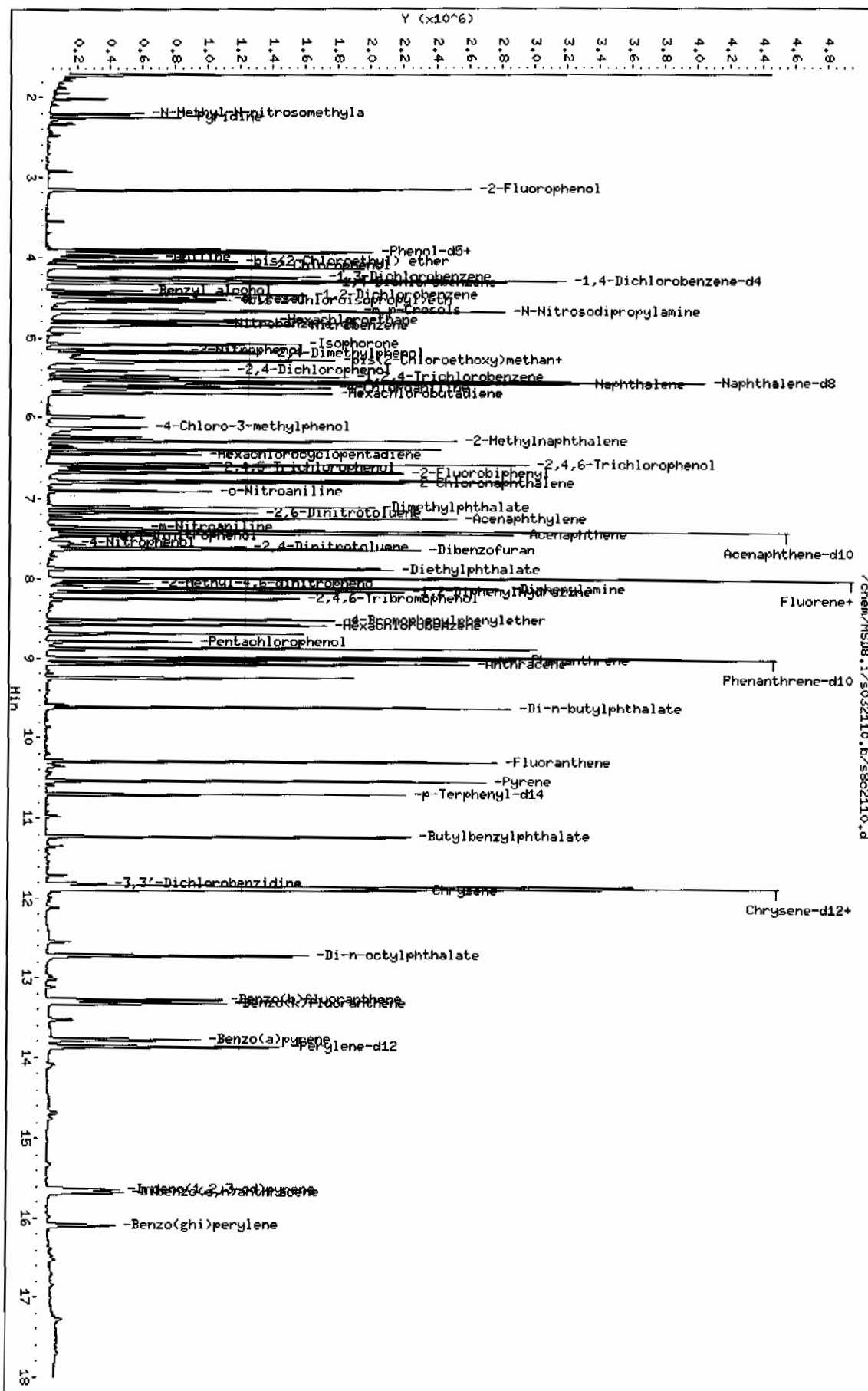
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.949	3.944	(0.918)	339970	27.4459	1040
8 2-Chlorophenol	128	4.106	4.106	(0.955)	302021	28.0792	1070
11 1,4-Dichlorobenzene	146	4.320	4.316	(1.004)	332147	25.2376	959
17 N-Nitrosodipropylamine	70	4.673	4.677	(1.086)	241846	30.5252	1160 (Q)
28 1,2,4-Trichlorobenzene	180	5.492	5.492	(0.989)	292731	25.3232	962
33 4-Chloro-3-methylphenol	107	6.125	6.116	(1.103)	258013	27.7399	1050
47 Acenaphthene	154	7.439	7.439	(1.005)	574544	23.4027	890
50 2,4-Dinitrotoluene	165	7.606	7.606	(1.028)	195468	26.0467	990
52 4-Nitrophenol	139	7.539	7.525	(1.019)	75587	23.9691	911
65 Pentachlorophenol	266	8.787	8.787	(0.977)	98585	28.8192	1100
79 Pyrene	202	10.539	10.544	(0.888)	1003726	25.2469	960
2 Pyridine	79	2.258	2.239	(0.525)	205542	22.5802	858
4 Aniline	66	3.997	3.996	(0.929)	103657	18.3234	696 (Q)
7 bis(2-Chloroethyl) ether	63	4.044	4.044	(0.940)	240894	28.4464	1080
9 1,3-Dichlorobenzene	146	4.249	4.249	(0.988)	331157	25.9612	987
12 Benzyl alcohol	108	4.416	4.415	(1.027)	77312	11.4911	437
13 1,2-Dichlorobenzene	146	4.458	4.458	(1.037)	319792	26.1227	993
14 bis(2-Chloroisopropyl) ether	45	4.544	4.544	(1.056)	494204	29.7646	1130
15 o-Cresol	107	4.511	4.511	(1.049)	251996	29.2928	1110
18 m,p-Cresols	107	4.658	4.663	(1.083)	363814	33.4177	1270
19 Hexachloroethane	117	4.787	4.787	(1.113)	130982	26.4099	1000
21 Nitrobenzene	77	4.849	4.849	(0.873)	328306	28.1948	1070
22 Isophorone	82	5.082	5.087	(0.915)	625807	29.1920	1110
23 2-Nitrophenol	139	5.163	5.163	(0.930)	153036	28.6354	1090
24 2,4-Dimethylphenol	122	5.192	5.192	(0.935)	227575	23.9527	910
25 bis(2-Chloroethoxy) methane	93	5.292	5.292	(0.953)	355917	29.6059	1120
26 2,4-Dichlorophenol	162	5.406	5.406	(0.973)	236127	27.4673	1040
27 Benzoic acid	105	5.311	5.282	(0.956)	333266	63.7471	2420
30 Naphthalene	128	5.577	5.577	(1.004)	925227	27.3903	1040
31 4-Chloroaniline	127	5.625	5.625	(1.013)	191575	16.8814	642
32 Hexachlorobutadiene	225	5.697	5.696	(1.026)	172591	24.0061	912
34 2-Methylnaphthalene	142	6.297	6.296	(1.134)	632896	27.8268	1060
36 Hexachlorocyclopentadiene	237	6.458	6.458	(0.873)	124536	21.7184	826
37 2,4,6-Trichlorophenol	196	6.587	6.587	(0.890)	179206	25.1763	957
38 2,4,5-Trichlorophenol	196	6.630	6.625	(0.896)	187357	24.7989	943
40 2-Chloronaphthalene	162	6.811	6.811	(0.920)	582299	26.0191	989
42 o-Nitroaniline	65	6.916	6.916	(0.934)	170427	26.9380	1020
41 m-Nitroaniline	138	7.354	7.354	(0.994)	97068	20.1307	765
43 Dimethylphthalate	163	7.111	7.116	(0.961)	747323	28.8670	1100
44 2,6-Dinitrotoluene	165	7.178	7.177	(0.970)	158146	27.0201	1030
45 Acenaphthylene	152	7.249	7.254	(0.979)	969328	25.2718	961
48 2,4-Dinitrophenol	184	7.463	7.468	(1.008)	39569	27.8938	1060
49 Dibenzofuran	168	7.620	7.625	(1.030)	813655	25.2598	960
51 Diethylphthalate	149	7.868	7.868	(1.063)	778224	28.7222	1090
53 Fluorene	166	7.987	7.992	(1.079)	710832	23.8393	906
54 4-Chlorophenylphenylether	204	7.987	7.987	(1.079)	347746	24.2165	920
55 2-Methyl-4,6-dinitrophenol	198	8.039	8.044	(0.894)	78585	27.9151	1060

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
56 p-Nitroaniline		138	8.006	8.006	(1.082)	96310	22.6038	859
133 Diphenylamine		169	8.116	8.116	(0.902)	588994	30.1437	1140
58 1,2-Diphenylhydrazine		77	8.158	8.158	(0.907)	743226	32.3812	1230
61 4-Bromophenylphenylether		248	8.511	8.516	(0.946)	196425	26.5842	1010
63 Hexachlorobenzene		284	8.578	8.577	(0.953)	194917	25.3807	965
68 Phenanthrene		178	9.020	9.020	(1.003)	940473	26.5718	1010
69 Anthracene		178	9.078	9.077	(1.009)	911227	24.2803	923
72 Di-n-butylphthalate		149	9.620	9.620	(1.069)	1332687	33.9733	1290
76 Fluoranthene		202	10.297	10.297	(1.145)	986106	25.0616	953
85 Butylbenzylphthalate		149	11.235	11.235	(0.947)	528730	38.0319	1440
89 Benzo(a)anthracene		228	11.854	11.854	(0.999)	826212	24.6571	937
90 3,3'-Dichlorobenzidine		252	11.816	11.820	(0.996)	89461	11.3410	431 (R)
92 Chrysene		228	11.897	11.897	(1.002)	793367	27.2526	1040
93 bis(2-Ethylhexyl)phthalate		149	11.878	11.878	(1.001)	769782	39.5661	1500
94 Di-n-octylphthalate		149	12.725	12.730	(0.917)	1055214	43.6829	1660
95 Benzo(b)fluoranthene		252	13.287	13.292	(0.958)	606716	27.6974	1050
96 Benzo(k)fluoranthene		252	13.325	13.335	(0.961)	612365	27.8073	1060
97 Benzo(a)pyrene		252	13.782	13.787	(0.993)	502818	27.2161	1030
99 Indeno(1,2,3-cd)pyrene		276	15.635	15.644	(1.127)	390994	25.5250	970
100 Dibenzo(a,h)anthracene		278	15.678	15.682	(1.130)	311182	26.2859	999
101 Benzo(ghi)perylene		276	16.097	16.101	(1.160)	296194	23.3707	888
1 N-Methyl-N-nitrosomethylamine		74	2.216	2.206	(0.515)	155146	25.0030	950

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

```
Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20
```



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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202063253	Date Received: 03/02/2010 08:50	%Moisture: 12.3
Client Sample: QC for batch 961921	Client: LANL010	Project: QC
Client ID: RE36-10-7494MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 12:57	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s8c2111.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1310	ug/kg	75.8	379
108-95-2	Phenol		1480	ug/kg	75.8	379
95-57-8	2-Chlorophenol		1520	ug/kg	75.8	379
106-46-7	1,4-Dichlorobenzene		1330	ug/kg	75.8	379
621-64-7	N-Nitrosodipropylamine		1610	ug/kg	75.8	379
59-50-7	4-Chloro-3-methylphenol		1470	ug/kg	75.8	379
83-32-9	Acenaphthene		1230	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene		1400	ug/kg	37.9	379
100-02-7	4-Nitrophenol		1410	ug/kg	125	379
87-86-5	Pentachlorophenol		1500	ug/kg	94.8	379
129-00-0	Pyrene		1230	ug/kg	11.4	37.9
110-86-1	Pyridine		1030	ug/kg	75.8	379
62-53-3	Aniline		1220	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether		1520	ug/kg	75.8	379
541-73-1	1,3-Dichlorobenzene		1360	ug/kg	75.8	379
100-51-6	Benzyl alcohol		711	ug/kg	114	379
95-50-1	1,2-Dichlorobenzene		1370	ug/kg	75.8	379
108-60-1	bis(2-Chloroisopropyl)ether		1560	ug/kg	75.8	379
95-48-7	o-Cresol		1510	ug/kg	75.8	379
65794-96-9	m,p-Cresols		1830	ug/kg	114	379
67-72-1	Hexachloroethane		1380	ug/kg	75.8	379
98-95-3	Nitrobenzene		1480	ug/kg	75.8	379
78-59-1	Isophorone		1540	ug/kg	75.8	379
88-75-5	2-Nitrophenol		1530	ug/kg	75.8	379
105-67-9	2,4-Dimethylphenol		1270	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane		1540	ug/kg	75.8	379
120-83-2	2,4-Dichlorophenol		1470	ug/kg	75.8	379
65-85-0	Benzoic acid		3350	ug/kg	190	758
91-20-3	Naphthalene		1400	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline		931	ug/kg	75.8	379
87-68-3	Hexachlorobutadiene		1240	ug/kg	75.8	379
91-57-6	2-Methylnaphthalene		1470	ug/kg	7.58	37.9
77-47-4	Hexachlorocyclopentadiene		1130	ug/kg	75.8	379
88-06-2	2,4,6-Trichlorophenol		1380	ug/kg	75.8	379
95-95-4	2,4,5-Trichlorophenol		1320	ug/kg	75.8	379
91-58-7	2-Chloronaphthalene		1340	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline		1480	ug/kg	75.8	379
99-09-2	o-Nitroaniline					
	3-Nitroaniline		1230	ug/kg	75.8	379

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

SDG Number: 10-2154	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202063253	Date Received: 03/02/2010 08:50	%Moisture: 12.3
Client Sample: QC for batch 961921	Client: LANL010	Project: QC
Client ID: RE36-10-7494MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961922	Inst: MSD8.I	Dilution: 1
Run Date: 03/21/2010 12:57	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/07/2010 12:04	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s8c2111.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate		1510	ug/kg	75.8	379
606-20-2	2,6-Dinitrotoluene		1440	ug/kg	37.9	379
208-96-8	Acenaphthylene		1350	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol		1390	ug/kg	144	758
132-64-9	Dibenzofuran		1350	ug/kg	75.8	379
84-66-2	Diethylphthalate		1490	ug/kg	75.8	379
86-73-7	Fluorene		1280	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether		1300	ug/kg	75.8	379
534-52-1	2-Methyl-4,6-dinitrophenol		1410	ug/kg	75.8	379
100-01-6	4-Nitroaniline		1390	ug/kg	114	379
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1640	ug/kg	75.8	379
122-66-7	Azobenzene		1700	ug/kg	75.8	379
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1390	ug/kg	75.8	379
118-74-1	Hexachlorobenzene		1310	ug/kg	75.8	379
85-01-8	Phenanthrene		1360	ug/kg	11.4	37.9
120-12-7	Anthracene		1300	ug/kg	7.58	37.9
84-74-2	Di-n-butylphthalate		1760	ug/kg	75.8	379
206-44-0	Fluoranthene		1300	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate		1850	ug/kg	75.8	379
56-55-3	Benzo(a)anthracene		1260	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine		648	ug/kg	114	379
218-01-9	Chrysene		1370	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate		1930	ug/kg	75.8	379
117-84-0	Di-n-octylphthalate		2010	ug/kg	75.8	379
205-99-2	Benzo(b)fluoranthene		1400	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene		1380	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene		1390	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene		1390	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene		1470	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene		1290	ug/kg	11.4	37.9
120-82-1	1,2,4-Trichlorobenzene		1320	ug/kg	75.8	379

Data File: /chem/MSD8.i/s032110.b/s8c2111.d
Report Date: 22-Mar-2010 07:13

Page 1

GEL Laboratories LLC

Data file : /chem/MSD8.i/s032110.b/s8c2111.d
Lab Smp Id: 1202063253 Client Smp ID: RE36-10-7494MSD
Inj Date : 21-MAR-2010 12:57
Operator : nagl Inst ID: MSD8.i
Smp Info : |1202063253|961922|1|SVM|1|MSD
Misc Info : |MSD8270_S|WBN100319-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s032110.b/MSD8-8270AQA-022010.m
Meth Date : 22-Mar-2010 06:44 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 11 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2154.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	12.33800	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.301	4.301	(1.000)	370402	40.0000		
* 29 Naphthalene-d8	136	5.554	5.558	(1.000)	1469390	40.0000		
* 46 Acenaphthene-d10	164	7.401	7.406	(1.000)	858138	40.0000		
* 67 Phenanthrene-d10	188	8.997	8.997	(1.000)	1449868	40.0000		
* 91 Chrysene-d12	240	11.868	11.868	(1.000)	1283709	40.0000		
* 98 Perylene-d12	264	13.878	13.878	(1.000)	814235	40.0000		
\$ 3 2-Fluorophenol	112	3.168	3.158	(0.736)	690346	78.9446	2990	
\$ 5 Phenol-d5	99	3.939	3.930	(0.916)	868325	79.6218	3020	
\$ 20 Nitrobenzene-d5	82	4.830	4.830	(0.870)	394659	37.7831	1430	
\$ 39 2-Fluorobiphenyl	172	6.682	6.682	(0.903)	834243	33.0273	1250	
\$ 60 2,4,6-Tribromophenol	329	8.249	8.244	(1.115)	193517	68.2192	2590	
\$ 81 p-Terphenyl-d14	244	10.706	10.706	(0.902)	865455	37.4470	1420	

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
6 Phenol		94	3.949	3.944	(0.918)	439479	39.0237	1480
8 2-Chlorophenol		128	4.106	4.106	(0.955)	393183	40.2065	1520
11 1,4-Dichlorobenzene		146	4.320	4.316	(1.004)	418698	34.9923	1330
17 N-Nitrosodipropylamine		70	4.677	4.677	(1.087)	306358	42.5307	1610 (Q)
28 1,2,4-Trichlorobenzene		180	5.492	5.492	(0.989)	371460	34.7274	1320
33 4-Chloro-3-methylphenol		107	6.130	6.116	(1.104)	333599	38.7613	1470
47 Acenaphthene		154	7.439	7.439	(1.005)	742015	32.5391	1230
50 2,4-Dinitrotoluene		165	7.606	7.606	(1.028)	258080	37.0238	1400
52 4-Nitrophenol		139	7.539	7.525	(1.019)	108924	37.1859	1410
65 Pentachlorophenol		266	8.787	8.787	(0.977)	126515	39.4431	1500
79 Pyrene		202	10.544	10.544	(0.888)	1302195	32.4896	1230
2 Pyridine		79	2.254	2.239	(0.524)	223889	27.0529	1020
4 Aniline		66	3.997	3.996	(0.929)	165416	32.1618	1220
7 bis(2-Chloroethyl) ether		63	4.044	4.044	(0.940)	307877	39.9883	1520
9 1,3-Dichlorobenzene		146	4.249	4.249	(0.988)	416028	35.8729	1360
12 Benzyl alcohol		108	4.420	4.415	(1.028)	114610	18.7366	710
13 1,2-Dichlorobenzene		146	4.463	4.458	(1.038)	401481	36.0720	1370
14 bis(2-Chloroisopropyl)ether		45	4.544	4.544	(1.056)	620322	41.0927	1560
15 o-Cresol		107	4.516	4.511	(1.050)	310624	39.7152	1510
18 m,p-Cresols		107	4.658	4.663	(1.083)	476917	48.1830	1830
19 Hexachloroethane		117	4.787	4.787	(1.113)	163528	36.2661	1380
21 Nitrobenzene		77	4.849	4.849	(0.873)	419695	38.9523	1480
22 Isophorone		82	5.082	5.087	(0.915)	807737	40.7196	1540
23 2-Nitrophenol		139	5.163	5.163	(0.930)	199079	40.2574	1530
24 2,4-Dimethylphenol		122	5.192	5.192	(0.935)	294940	33.5485	1270
25 bis(2-Chloroethoxy)methane		93	5.292	5.292	(0.953)	451261	40.5665	1540
26 2,4-Dichlorophenol		162	5.406	5.406	(0.973)	309132	38.8620	1470
27 Benzoic acid		105	5.325	5.282	(0.959)	463191	88.2356	3350
30 Naphthalene		128	5.577	5.577	(1.004)	1181389	37.0350	1400
31 4-Chloroaniline		127	5.625	5.625	(1.013)	257758	24.5466	931
32 Hexachlorobutadiene		225	5.697	5.696	(1.026)	217671	32.7201	1240
34 2-Methylnaphthalene		142	6.297	6.296	(1.134)	827668	38.7873	1470
36 Hexachlorocyclopentadiene		237	6.458	6.458	(0.873)	159350	29.9182	1130
37 2,4,6-Trichlorophenol		196	6.592	6.587	(0.891)	239970	36.2950	1380
38 2,4,5-Trichlorophenol		196	6.630	6.625	(0.896)	243914	34.7576	1320
40 2-Chloronaphthalene		162	6.811	6.811	(0.920)	748765	35.4580	1340
42 o-Nitroaniline		65	6.916	6.916	(0.934)	228922	38.9551	1480
41 m-Nitroaniline		138	7.354	7.354	(0.994)	144779	32.3250	1220
43 Dimethylphthalate		163	7.111	7.116	(0.961)	960572	39.9461	1510
44 2,6-Dinitrotoluene		165	7.178	7.177	(0.970)	206178	37.9246	1440
45 Acenaphthylene		152	7.254	7.254	(0.980)	1267993	35.5904	1350
48 2,4-Dinitrophenol		184	7.468	7.468	(1.009)	60378	36.5837	1390
49 Dibenzofuran		168	7.620	7.625	(1.030)	1061676	35.4839	1340
51 Diethylphthalate		149	7.868	7.868	(1.063)	990364	39.3512	1490
53 Fluorene		166	7.987	7.992	(1.079)	935125	33.7635	1280
54 4-Chlorophenylphenylether		204	7.987	7.987	(1.079)	456288	34.2088	1300
55 2-Methyl-4,6-dinitrophenol		198	8.044	8.044	(0.894)	106056	37.2236	1410

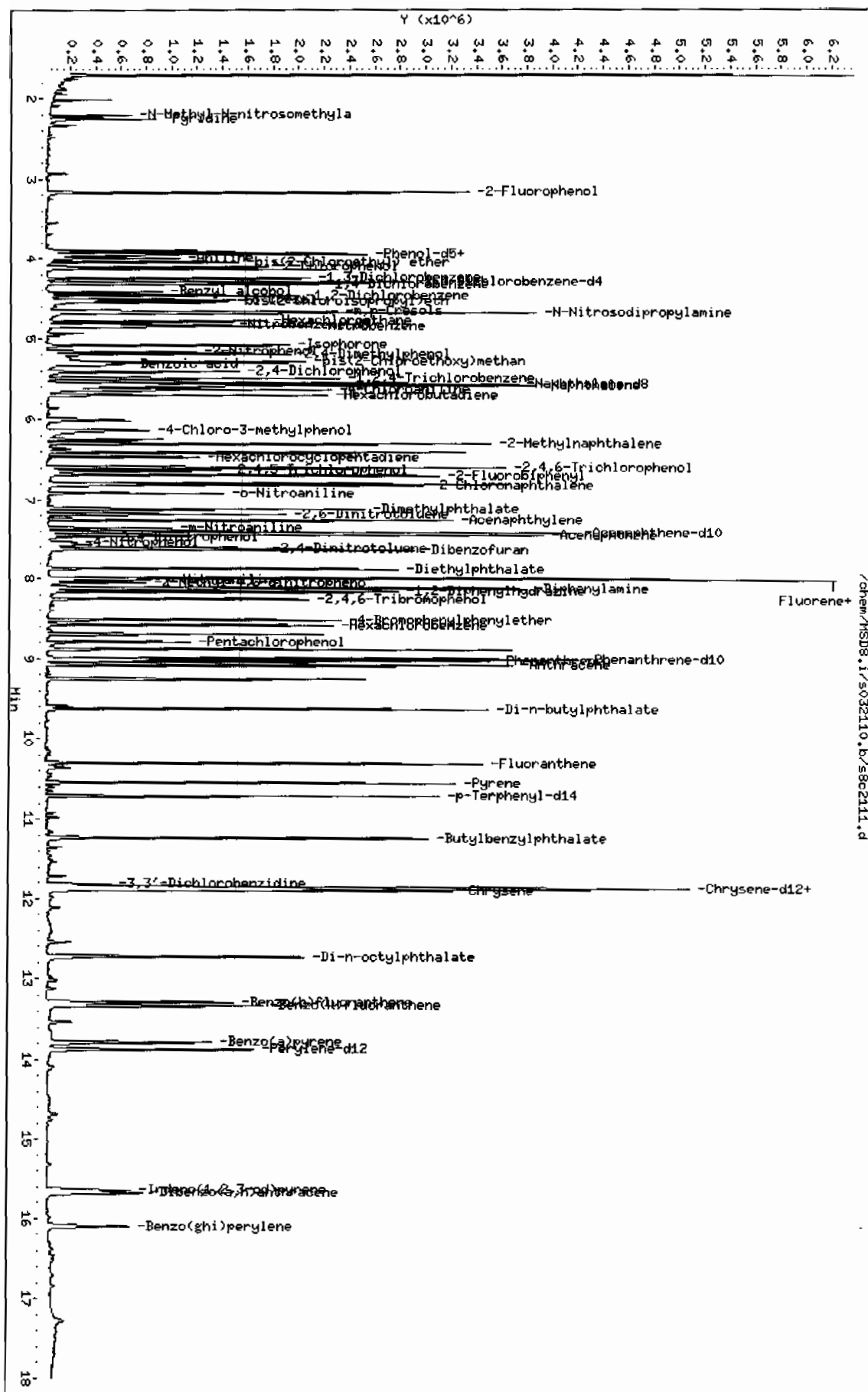
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
56 p-Nitroaniline		138	8.006	8.006	(1.082)	145201	36.6886	1390
133 Diphenylamine		169	8.116	8.116	(0.902)	791012	43.1746	1640
58 1,2-Diphenylhydrazine		77	8.158	8.158	(0.907)	964408	44.8117	1700
61 4-Bromophenylphenylether		248	8.511	8.516	(0.946)	254845	36.7843	1390
63 Hexachlorobenzene		284	8.578	8.577	(0.953)	248720	34.5401	1310
68 Phenanthrene		178	9.020	9.020	(1.003)	1217433	35.9359	1360
69 Anthracene		178	9.078	9.077	(1.009)	1203149	34.1905	1300
72 Di-n-butylphthalate		149	9.620	9.620	(1.069)	1705473	46.3674	1760
76 Fluoranthene		202	10.297	10.297	(1.145)	1269529	34.4102	1300
85 Butylbenzylphthalate		149	11.235	11.235	(0.947)	682808	48.7179	1850
89 Benzo(a)anthracene		228	11.854	11.854	(0.999)	1125403	33.3145	1260
90 3,3'-Dichlorobenzidine		252	11.820	11.820	(0.996)	135865	17.0845	648
92 Chrysene		228	11.897	11.897	(1.002)	1061949	36.0592	1370
93 bis(2-Ethylhexyl)phthalate		149	11.878	11.878	(1.001)	999438	50.9550	1930
94 Di-n-octylphthalate		149	12.730	12.730	(0.917)	1381049	52.9690	2010
95 Benzo(b)fluoranthene		252	13.292	13.292	(0.958)	854580	37.0197	1400
96 Benzo(k)fluoranthene		252	13.330	13.335	(0.961)	843427	36.3431	1380
97 Benzo(a)pyrene		252	13.787	13.787	(0.993)	715577	36.7534	1390
99 Indeno(1,2,3-cd)pyrene		276	15.644	15.644	(1.127)	591729	36.6560	1390
100 Dibenzo(a,h)anthracene		278	15.678	15.682	(1.130)	482407	38.6677	1470
101 Benzo(ghi)perylene		276	16.101	16.101	(1.160)	453422	33.9489	1290
1 N-Methyl-N-nitrosomethylamine		74	2.216	2.206	(0.515)	195504	34.6546	1310

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD8.1/s032110.b/s8c2111.d
 Date: 21-MAR-2010 12:57
 Client ID: RE36-10-7494MSD
 Sample Info: 112020632531961922111SVH11MSD
 Volume Injected (uL): 0.5
 Column Phase: 38M DB-SMS

Instrument: MSD8.1
 Operator: nag1
 Column diameter: 0.20



Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 961921 Verified by: _____
 Analyst: Alberto Velasco Lab SOP: GL-OA-E-010 REV# 18
 Method: SW846 3550B Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)	Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
1202063250 MB	07-MAR-2010 12:04:00	30	1	0.03333	LCS	1202063251	BNA LCS w/o Benzidine 50ppm	UE100302-15	1	mL	Verified By: AAW
1202063251 LCS	07-MAR-2010 12:04:00	30	1	0.03333	LCS	1202063251	BENZIDINE LCS	UE100302-22	1	mL	Final Solvent: CH2Cl2
248373001	07-MAR-2010 12:04:00	30.17	1	0.03315	MS	1202063252	BNA LCS w/o Benzidine 50ppm	UE100302-15	1	mL	
1202063252 MS (248373001)	07-MAR-2010 12:04:00	30.01	1	0.03332	MS	1202063252	BENZIDINE LCS	UE100302-22	1	mL	
1202063253 MSD (248373001)	07-MAR-2010 12:04:00	30.08	1	0.03324	MSD	1202063253	BNA LCS w/o Benzidine 50ppm	UE100302-15	1	mL	
248373002	07-MAR-2010 12:04:00	30.13	1	0.03319	MSD	1202063253	BENZIDINE LCS	UE100302-22	1	mL	
248373003	07-MAR-2010 12:04:00	30.12	1	0.0332	SURR	All	BNA for all Surrogate	UE100301-10	1	mL	
248373004	07-MAR-2010 12:04:00	30.18	1	0.03313	REGNT	All	Methylene Chloride	100301-D	150	mL	
248373005	07-MAR-2010 12:04:00	30.14	1	0.03318	REGNT	All	Acetone	1273823-B1	150	mL	
248373006	07-MAR-2010 12:04:00	30.07	1	0.03326	SOURC	All	SODIUM SULFATE	1274910	30	g	
248373007	07-MAR-2010 12:04:00	30.15	1	0.03317							
248373008	07-MAR-2010 12:04:00	30.06	1	0.03327							
248373009	07-MAR-2010 12:04:00	30.13	1	0.03319							
248373010	07-MAR-2010 12:04:00	30.18	1	0.03313							
248373011	07-MAR-2010 12:04:00	30.13	1	0.03319							
248373014	07-MAR-2010 12:04:00	30.12	1	0.0332							
248373015	07-MAR-2010 12:04:00	30.1	1	0.03322							

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD8

DATE: 02/20/2010 METHOD: See raw data OPERATOR: NAG REVIEWED BY: _____ DATE: _____
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT 1239699-D
Multiplier Voltage: 1094mv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100217-01
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/MSD8.i/s022010.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
Isb2001-D.d	WBN100207-01	inag1	120-FEB-2010 12:04	150 PPM	Is022010	1	1.0|DFTPP	
Isb2001.d	WBN100207-01	inag1	120-FEB-2010 12:04	150 PPM	Is022010	1	1.0|DFTPP	
Isb2002.d	Inst blk	inag1	120-FEB-2010 12:21	1	Is022010	1	1.0|INST BLK	
Isb2003.d	WBN100215-08	inag1	120-FEB-2010 12:55	11 PPM	Is022010	1	1.0|MEGAICAL	Naphthalene/1-Methy-naphthalene failed SC
Isb2004-linear.d	WBN100215-07	inag1	120-FEB-2010 13:30	110 PPM	Is022010	1	1.0|MEGAICAL	
s8b2004.d	WBN100215-07	inag1	120-FEB-2010 13:30	110 PPM	Is022010	1	1.0|MEGAICAL	
Isb2005-linear.d	WBN100215-06	inag1	120-FEB-2010 14:05	120 PPM	Is022010	1	1.0|MEGAICAL	
Isb2005.d	WBN100215-06	inag1	120-FEB-2010 14:05	120 PPM	Is022010	1	1.0|MEGAICAL	
Isb2006.d	WBN100215-05.1	inag1	120-FEB-2010 14:40	140 PPM	Is022010	1	1.0|MEGAICAL	
Isb2007.d	WBN100215-04	inag1	120-FEB-2010 15:14	150 PPM	Is022010	1	1.0|MEGAICAL	
s8b2008.d	WBN100215-03	inag1	120-FEB-2010 15:50	180 PPM	Is022010	1	1.0|MEGAICAL	
Isb2009.d	WBN100215-02	inag1	120-FEB-2010 16:25	1100 PPM	Is022010	1	1.0 MEGAICAL	
Isb2010.d	WBN100215-01	inag1	120-FEB-2010 16:59	1120 PPM	Is022010	1	1.0|MEGAICAL	
Isb2011.d	Inst blk	inag1	120-FEB-2010 17:34	1	Is022010	1	1.0|INST BLK	
Isb2012-0.d	WBN100215-05.1	inag1	120-FEB-2010 18:09	140 PPM	Is022010	1	1.0|MEGAICAL	82700
Isb2012.d	WBN100215-05.1	inag1	120-FEB-2010 18:09	140 PPM	Is022010	1	1.0|MEGAICAL	
s8b2013-D.d	WBN100207-01	inag1	121-FEB-2010 08:35	150 PPM	Is022010	1	1.0|DFTPP	
Isb2013.d	WBN100207-01	inag1	121-FEB-2010 08:35	150 PPM	Is022010	1	1.0|DFTPP	
Isb2014.d	Inst blk	inag1	121-FEB-2010 08:51	1	Is022010	1	1.0|INST BLK	

1s8b2015.d	WBN100218-01	1nag1	121-FEB-2010 09:21	110 PPM	1s022010	1	1.0|APICAL	1
1s8b2016.d	WBN100218-02	1nag1	121-FEB-2010 09:52	120 PPM	1s022010	1	1.0|APICAL	1
1s8b2017.d	WBN100218-03.1	1nag1	121-FEB-2010 10:23	140 PPM	1s022010	1	1.0|APICAL	1
1s8b2018.d	WBN100218-04	1nag1	121-FEB-2010 10:54	150 PPM	1s022010	1	1.0|APICAL	1
1s8b2019.d	WBN100218-05	1nag1	121-FEB-2010 11:26	180 PPM	1s022010	1	1.0-APICAL	1
1s8b2020.d	WBN100218-06	1nag1	121-FEB-2010 11:59	1100 PPM	1s022010	1	1.0|APICAL	1
1s8b2021.d	WBN100218-07	1nag1	121-FEB-2010 12:30	1120 PPM	1s022010	1	1.0|APICAL	1
1s8b2022.d	WBN100205-25	1nag1	121-FEB-2010 13:02	110 PPM	1s022010	1	1.0|PESTICAL	1
1s8b2023.d	WBN100205-24	1nag1	121-FEB-2010 13:33	20 PPM	1s022010	1	1.0|PESTICAL	1
1s8b2024.d	WBN100205-23.1	1nag1	121-FEB-2010 14:05	140 PPM	1s022010	1	1.0|PESTICAL	1
1s8b2025.d	WBN100205-22	1nag1	121-FEB-2010 14:37	150 PPM	1s022010	1	1.0|PESTICAL	1
1s8b2026.d	WBN100205-21	1nag1	121-FEB-2010 15:09	180 PPM	1s022010	1	1.0|PESTICAL	1
1s8b2027.d	WBN100205-20	1nag1	121-FEB-2010 15:40	1100 PPM	1s022010	1	1.0|PESTICAL	1
1s8b2028.d	WBN100205-19	1nag1	121-FEB-2010 16:12	1120 PPM	1s022010	1	1.0|PESTICAL	1
1s8b2029-linear.d	WBN100120-16	1nag1	121-FEB-2010 16:44	1500 PPM	1s022010	1	1.0|HEXICAL	1
1s8b2029.d	WBN100120-16	1nag1	121-FEB-2010 16:44	1500 PPM	1s022010	1	1.0|HEXICAL	1
1s8b2030.d	WBN100120-15	1nag1	121-FEB-2010 17:16	11000 PPM	1s022010	1	1.0|HEXICAL	1
1s8b2031.d	WBN100120-14	1nag1	121-FEB-2010 17:48	11250 PPM	1s022010	1	1.0-HEXICAL	1
1s8b2032.d	WBN100120-13	1nag1	121-FEB-2010 18:19	11500 PPM	1s022010	1	1.0|HEXICAL	1
1s8b2033.d	WBN100120-12	1nag1	121-FEB-2010 18:51	11750 PPM	1s022010	1	1.0|HEXICAL	1
1s8b2034.d	IOBN090828-02.10	1nag1	121-FEB-2010 19:22	12000 PPM	1s022010	1	1.0|HEXICAL	1
1s8b2035-D.d	WBN100218-08.1	1nag1	121-FEB-2010 19:53	140 PPM	1s022010	1	1.0|APICV	18270D
1s8b2035.d	WBN100218-08.1	1nag1	121-FEB-2010 19:53	140 PPM	1s022010	1	1.0|APICV	1
1s8b2036-D.d	WBN100205-26.1	1nag1	121-FEB-2010 20:25	140 PPM	1s022010	1	1.0-PESTICV	18270D
1s8b2036.d	WBN100205-26.1	1nag1	121-FEB-2010 20:25	140 PPM	1s022010	1	1.0|PESTICV	1
1s8b2037.d	WBN091016-10.1	1nag1	121-FEB-2010 20:55	11250 PPM	1s022010	1	1.0-HEXICV	1DUSE
1s8b2038-D.d	WBN100207-01	1nag1	121-FEB-2010 21:26	150 PPM	1s022010	1	1.0-DFTPP	1

|	|s8b2038.d	|WBNI00127-01	|naq1	|21-FEB-2010 21:26	|50 PPM	|s022010	|	|1.0|DFTPP	|
|	|s8b2039.d	|inst blk	|naq1	|21-FEB-2010 21:43	|-----|	|s022010	|	|1.0|INST BLK	|
|	|s8b2040.d	|WBNI00127-01	|naq1	|21-FEB-2010 22:13	|10 PPM	|s022010	|	|1.0|NEVICAL	|
|	|s8b2041.d	|WBNI00127-02	|naq1	|21-FEB-2010 22:45	|20 PPM	|s022010	|	|1.0|NEVICAL	|
|	|s8b2042.d	|WBNI00127-03	|naq1	|21-FEB-2010 23:15	|40 PPM	|s022010	|	|1.0|NEVICAL	|
|	|s8b2043.d	|WBNI00127-04	|naq1	|21-FEB-2010 23:46	|50 PPM	|s022010	|	|1.0|NEVICAL	|
|	|s8b2044.d	|WBNI00127-05	|naq1	|22-FEB-2010 00:17	|80 PPM	|s022010	|	|1.0|NEVICAL	|
|	|s8b2045.d	|WBNI00127-06	|naq1	|22-FEB-2010 00:48	|100 PPM	|s022010	|	|1.0|NEVICAL	|
|	|s8b2046.d	|WBN-.00127-07	|naq1	|22-FEB-2010 01:19	|120 PPM	|s022010	|	|1.0|NEVICAL	|
|	|s8b2047-D.d	|WBNI00103-10.2	|naq1	|22-FEB-2010 08:59	|1250 PPM|	|s022010	|	|1.0|HEXICV	|8270D
|	|s8b2047.d	|WBNI00103-10.2	|naq1	|22-FEB-2010 08:59	|1250 PPM|	|s022010	|	|1.0|HEXICV	|
|	|s10HInstrument Batch: /chem/MSD8.i/s022010.b								
|	Page: 2								

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD8

DATE: 03/21/2010

METHOD: See raw data

OPERATOR: NAG

REVIEWED BY:

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1
Multiplier Voltage: 1176mv
DFTPP Solution ID: WBN100306-01.2 Extr. Injection Volume: 0.5, 1.0 ul
Calibration & QC Information Internal Std ID: WBN100319-01
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

DATE:

1266705-D

Sequence Number: /chem/MSD8.i/s032110.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s8c2101.d	WBN100306-01.2	nag1	21-MAR-2010 08:14	DFTPP	s032110	1.0	DFTPP	
s8c2102.d	WBN100309-05.3	nag1	21-MAR-2010 08:30	CCV	s032110	1.0	MEGACVS	359153
s8c2103.d	WBN100312-03.3	nag1	21-MAR-2010 09:01	CCV	s032110	1.0	API2CVS	
s8c2104.d	WBN100304-23.3	nag1	21-MAR-2010 09:30	CCV	s032110	1.0	PESTCVS	
s8c2105.d	WBN100127-008.1	nag1	21-MAR-2010 10:00	CCV	s032110	1.0	NEVCVS	
s8c2106.d	1202063250	nag1	21-MAR-2010 10:29	961922	10-2154	1.0	SBLK01	
s8c2107.d	1202063251	nag1	21-MAR-2010 10:59	961922	10-2154	1.0	SBLK01CS	
s8c2108.d	249062009	nag1	21-MAR-2010 11:29	966724	1249062	1.0	BRCM	USE - 12 of s8c2019
s8c2109.d	248373001	nag1	21-MAR-2010 11:58	961922	10-2154	1.0	LANL	
s8c2110.d	1202063252	nag1	21-MAR-2010 12:28	961922	10-2154	1.0	MS	
s8c2111.d	1202063253	nag1	21-MAR-2010 12:57	961922	10-2154	1.0	MSD	Failed C90
s8c2112.d	248373002	nag1	21-MAR-2010 13:27	961922	10-2154	1.0	LANL	
s8c2113.d	248373003	nag1	21-MAR-2010 13:56	961922	10-2154	1.0	LANL	
s8c2114.d	248373004	nag1	21-MAR-2010 14:26	961922	10-2154	1.0	LANL	
s8c2115.d	248373005	nag1	21-MAR-2010 14:56	961922	10-2154	1.0	LANL	
s8c2116.d	248373006	nag1	21-MAR-2010 15:26	961922	10-2154	1.0	LANL	
s8c2117.d	248373007	nag1	21-MAR-2010 15:56	961922	10-2154	1.0	LANL	
s8c2118.d	248373008	nag1	21-MAR-2010 16:26	961922	10-2154	1.0	LANL	
s8c2119.d	248373009	nag1	21-MAR-2010 16:56	961922	10-2154	1.0	LANL	

is8c2120.d	1248373010	inag1	21-MAR-2010 17:25	1961922	110-2154	1.0	LANL	
is8c2121.d	1248373011	inag1	21-MAR-2010 17:56	1961922	110-2154	1.0	LANL	
is8c2122.d	1248373014	inag1	21-MAR-2010 18:25	1961922	110-2154	1.0	LANL	
is8c2123.d	1248373015	inag1	21-MAR-2010 18:55	1961922	110-2154	1.0	LANL	

Instrument Batch: /chem/MSD8.i/s032110.b Page: 1

DATA EXCEPTION REPORT

Mo.Day Yr. 22-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: SEMIOVA GC/MS	Test / Method: SW846 8270C	Matrix Type: Solid	Client Code: LANL
Batch ID: 961922	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 248373(10-2154)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Specification and Requirements

Exception Description:

1. The MS failed recovery for 3,3'-Dichlorobenzidine. Please see the spike recovery report for the specific recovery.
2. The MS/MSD RPD values failed for multiple target analytes. Please see the spike recovery report for the specific values.

DER Disposition:

1. The MSD displayed a similar low but passing recovery for that analyte. Therefore, the MS failure was attributed to sample matrix interference and the data have been reported.
2. Since the individual MS and MSD recoveries passed for all analytes (except for 3,3'-Dichlorobenzidine; see item #1 above), the data were reported.

Originator's Name:

Nathan Greene 22-MAR-10

Data Validator/Group Leader:

Daniel Beacham 29-MAR-10

LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2154**

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: 960307

Prep Batch Number: 960306

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
248373001	RE36-10-7494
248373002	RE36-10-7493
248373003	RE36-10-7492
248373004	RE36-10-7491
248373005	RE36-10-7496
248373006	RE36-10-7499
248373007	RE36-10-7497
248373008	RE36-10-7495
248373009	RE36-10-7498
248373010	RE36-10-7500
248373011	RE36-10-7523
248373014	RE36-10-7522
248373015	RE36-10-7521
1202059812	Method Blank (MB)
1202059813	Laboratory Control Sample (LCS)
1202059814	248373001(RE36-10-7494) Matrix Spike (MS)
1202059815	248373001(RE36-10-7494) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 12.

Primary Analyte Analysis

Calibration Information

Initial Calibration

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

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

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

CRI Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

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

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS recovered Tetryl at 5.90%. The recovery limits are 51-112%. Since the samples exceed twice the hold time required for re-extraction, the data are reported. Please see data exception report 818638.

QC Sample Designation

Sample 248373001 (RE36-10-7494) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recovered Tetryl at 5.49%. The recovery limits are 36-124%. Since the samples exceed twice the hold time required for re-extraction, the data are reported. Please see data exception report 818638.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recovered Tetryl at 2.02%. The recovery limits are 36-124%. Since the samples exceed twice the hold time required for re-extraction, the data are

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD for Tetryl was 92.5%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported. Please see data exception report 818638.

Internal Standard (ISTD) Acceptance

Sample 248373015 (RE36-10-7521) failed ISTD acceptance criteria. It was re-analyzed and confirmed the failure. Please see the Form 8 in the data package for the exact recoveries. The re-analysis data are reported. The confirmation raw data are located in the Miscellaneous Section. Please see data exception report 818638.

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

Sample 248373004 (RE36-10-7491) failed ISTD acceptance criteria. It was re-analyzed and passed acceptance criteria. The re-analysis is reported.

Sample 248373015 (RE36-10-7521) failed ISTD acceptance criteria. It was re-analyzed and confirmed the failure. Please see the Form 8 in the data package for the exact recoveries. The re-analysis data are reported. The confirmation raw data are located in the Miscellaneous Section. Please see data exception report 818638.

Secondary Analyte Analysis

Calibration Information

Initial Calibration

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

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

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

CRI Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

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

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries were within the established acceptance limits.

QC Sample Designation

Sample 248373001 (RE36-10-7494) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance

The internal standards were not added to the secondary analyte extracts.

Technical Information**Holding Time Specifications**

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

Data exception report 818638 was generated for this SDG.

The LCS recovered Tetryl at 5.90%. The recovery limits are 51-112%. Since the samples exceed twice the hold time required for re-extraction, the data are reported.

The MS recovered Tetryl at 5.49%. The MSD recovered Tetryl at 2.02%. The recovery limits are 36-124%. Since the samples exceed twice the hold time required for re-extraction, the data are reported.

The MS/MSD RPD for Tetryl was 92.5%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported.

Sample 248373015 (RE36-10-7521) failed ISTD acceptance criteria. It was re-analyzed and confirmed the failure. Please see the Form 8 in the data package for the exact recoveries. The re-analysis data are reported. The confirmation raw data are located in the Miscellaneous Section.

Manual Integrations

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

Flagging Convention

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

Additional Comments

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

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

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

System Configuration

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

Chromatographic Columns

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

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

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

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

Certification Statement

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

Review Validation:

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

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

Reviewer: *Deborah Mauer* Date: 04/20/10

SAMPLE DATA SUMMARY

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373001

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412206a

Date Analyzed: 16-APR-10 20:29

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373001

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080018.wiff

Date Analyzed: 08-APR-10 21:16

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7493

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373002

Sample Amount 2

Moisture: 25.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412209a

Date Analyzed: 16-APR-10 21:57

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7493

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373002

Sample Amount 2

Moisture: 25.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080021.wiff

Date Analyzed: 08-APR-10 22:03

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7492

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373003

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412210a

Date Analyzed: 16-APR-10 22:27

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7492

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373003

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080022.wiff

Date Analyzed: 08-APR-10 22:19

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7491

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373004

Sample Amount 2

Moisture: 35.2

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0418028a

Date Analyzed: 19-APR-10 03:02

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7491

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373004

Sample Amount 2

Moisture: 35.2

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080023.wiff

Date Analyzed: 08-APR-10 22:35

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7496

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373005

Sample Amount 2

Moisture: 11.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412212a

Date Analyzed: 16-APR-10 23:26

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7496

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373005

Sample Amount 2

Moisture: 11.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080027.wiff

Date Analyzed: 08-APR-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 =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7499

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373006

Sample Amount 2

Moisture: 27.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412213a

Date Analyzed: 16-APR-10 23:55

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7499

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373006

Sample Amount 2

Moisture: 27.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080028.wiff

Date Analyzed: 08-APR-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 =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7497

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373007

Sample Amount 2

Moisture: 32.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412217a

Date Analyzed: 17-APR-10 01:53

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7497

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373007

Sample Amount 2

Moisture: 32.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080029.wiff

Date Analyzed: 09-APR-10 00:09

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7495

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373008

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412218a

Date Analyzed: 17-APR-10 02:23

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7495

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373008

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080030.wiff

Date Analyzed: 09-APR-10 00:25

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7498

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373009

Sample Amount 2

Moisture: 22.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412219a

Date Analyzed: 17-APR-10 02:52

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7498

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373009

Sample Amount 2

Moisture: 22.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080031.wiff

Date Analyzed: 09-APR-10 00:40

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7500

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373010

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412220a

Date Analyzed: 17-APR-10 03:22

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7500

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373010

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080032.wiff

Date Analyzed: 09-APR-10 00:56

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7523

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373011

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412221a

Date Analyzed: 17-APR-10 03:51

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7523

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373011

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080033.wiff

Date Analyzed: 09-APR-10 01:12

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7522

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373014

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412222a

Date Analyzed: 17-APR-10 04:21

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7522

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373014

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080034.wiff

Date Analyzed: 09-APR-10 01:28

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7521

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373015

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0418029a

Date Analyzed: 19-APR-10 03:30

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7521

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373015

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080035.wiff

Date Analyzed: 09-APR-10 01:43

Units: ug/kg

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

*Concentration =

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

QUALITY CONTROL SUMMARY

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
248373001	RE36-10-7494	106	70 - 144	
248373001	RE36-10-7494	94.8	70 - 144	
248373002	RE36-10-7493	105	70 - 144	
248373002	RE36-10-7493	91.6	70 - 144	
248373003	RE36-10-7492	102	70 - 144	
248373003	RE36-10-7492	90.8	70 - 144	
248373004	RE36-10-7491	101	70 - 144	
248373004	RE36-10-7491	90.4	70 - 144	
248373005	RE36-10-7496	113	70 - 144	
248373005	RE36-10-7496	93.6	70 - 144	
248373006	RE36-10-7499	106	70 - 144	
248373006	RE36-10-7499	94.4	70 - 144	
248373007	RE36-10-7497	101	70 - 144	
248373007	RE36-10-7497	94.8	70 - 144	
248373008	RE36-10-7495	99.6	70 - 144	
248373008	RE36-10-7495	93.6	70 - 144	
248373009	RE36-10-7498	107	70 - 144	
248373009	RE36-10-7498	95.2	70 - 144	
248373010	RE36-10-7500	104	70 - 144	
248373010	RE36-10-7500	90	70 - 144	
248373011	RE36-10-7523	102	70 - 144	
248373011	RE36-10-7523	93.2	70 - 144	
248373014	RE36-10-7522	102	70 - 144	
248373014	RE36-10-7522	94.4	70 - 144	
248373015	RE36-10-7521	90.7	70 - 144	
248373015	RE36-10-7521	96.4	70 - 144	
1202059812	MB for batch 960306	97.3	70 - 144	
1202059812	MB for batch 960306	95.6	70 - 144	
1202059813	LCS for batch 960306	101	70 - 144	
1202059813	LCS for batch 960306	89.6	70 - 144	
1202059814	RE36-10-7494(248373001MS)	91.1	70 - 144	
1202059814	RE36-10-7494(248373001MS)	92	70 - 144	
1202059815	RE36-10-7494(248373001MSD)	99.9	70 - 144	
1202059815	RE36-10-7494(248373001MSD)	89.6	70 - 144	

DNT = 3,4-Dinitrotoluene

3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-2154

Extract Batch Code: 960306

Date Extracted: 10-MAR-10

GEL LCS ID: 1202059813

GEL LCSDUP ID:

Analysis Date/Time: 16-APR-10 19:59

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	3450	69	*							69 - 126
2,4,6-Trinitrotoluene	5000	5270	105								73 - 149
2,4-Dinitrotoluene	5000	5320	106								87 - 137
2,6-Dinitrotoluene	5000	4680	93.6								89 - 120
2-Amino-4,6-dinitrotoluene	5000	5070	101								90 - 130
4-Amino-2,6-dinitrotoluene	5000	4820	96.5								84 - 130
HMX	5000	5830	117								58 - 138
Nitrobenzene	5000	4290	85.9								71 - 122
PETN	5000	5460	109								64 - 137
RDX	5000	5580	112								81 - 137
Tetryl	5000	295	5.9	*							51 - 112
m-Dinitrobenzene	5000	4760	95.3								83 - 122
m-Nitrotoluene	5000	4440	88.9								73 - 118
o-Nitrotoluene	5000	3760	75.2								72 - 119
p-Nitrotoluene	5000	4240	84.9								67 - 131

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

* Values outside of QC limits

3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-2154

Extract Batch Code: 960306

Date Extracted: 10-MAR-10

GEL LCS ID: 1202059813

GEL LCSDUP ID:

Analysis Date/Time: 08--APR-10 21:00

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	4360	87.2					52 - 114
2,6-Diamino-4-nitrotoluene	5000	4550	91					64 - 122
3,5-Dinitroaniline	5000	4680	93.6					70 - 127
tris(o-cresyl) phosphate	5000	4980	99.6					84 - 119
TATB	5000	5910	118					28 - 162

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

* Values outside of QC limits

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE36-10-7494

Lab Code: GEL

GEL Job No (SDG) 10-2154

Extract Batch Code: 960306

Date Extracted: 10-MAR-10

GEL Spike ID: 1202059814

GEL SpikeDup ID: 1202059815

Analysis Date/Time: 16-APR-10 20:58

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
1,3,5-Trinitrobenzene	5000	0	3780	75.6	3420	68.5	9.86	30	50 - 140
2,4,6-Trinitrotoluene	5000	0	4920	98.4	4930	98.5	.174	30	76 - 144
2,4-Dinitrotoluene	5000	0	4740	94.9	5460	109	14.1	30	86 - 135
2,6-Dinitrotoluene	5000	0	4880	97.6	4890	97.7	.165	30	90 - 118
2-Amino-4,6-dinitrotoluene	5000	0	4800	95.9	5110	102	6.28	30	85 - 137
4-Amino-2,6-dinitrotoluene	5000	0	4350	87	4840	96.9	10.7	30	72 - 143
HMX	5000	0	4770	95.5	5030	101	5.19	30	51 - 144
Nitrobenzene	5000	0	4380	87.7	3920	78.3	11.3	30	70 - 122
PETN	5000	0	4570	91.4	5410	108	16.8	30	60 - 140
RDX	5000	0	5140	103	5360	107	4.21	30	59 - 152
Tetryl	5000	0	275	5.49 *	101	2.02 *	92.5 *	30	36 - 124
m-Dinitrobenzene	5000	0	4920	98.4	4700	94	4.6	30	85 - 118
m-Nitrotoluene	5000	0	3700	74	4200	84.1	12.8	30	70 - 120
o-Nitrotoluene	5000	0	3520	70.4	3700	73.9	4.9	30	69 - 123
p-Nitrotoluene	5000	0	4300	86	4180	83.5	2.96	30	65 - 133

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

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE36--10-7494

Lab Code: GEL

GEL Job No (SDG) 10-2154

Extract Batch Code: 960306

Date Extracted: 10-MAR-10

GEL Spike ID: 1202059814

GEL SpikeDup ID: 1202059815

Analysis Date/Time: 08-APR-10 21:32

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
2,6-Diamino-4-nitrotoluene	5000	0	4260	85.2	4180	83.6	1.9	30	55 - 130
3,5-Dinitroaniline	5000	0	4660	93.2	4340	86.8	7.11	30	73 - 129
TATB	5000	0	6580	132	5660	113	15	30	29 - 155
2,4-Diamino-6-nitrotoluene	5000	0	3350	67	3670	73.4	9.12	26	34 - 135
tris(o-cresyl) phosphate	5000	61.4	5000	98.8	5010	99	.2	30	72 - 127

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

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 12-APR-10 15:40

GEL Data File: EXP0412001a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	440.355
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	475.584
2-Amino-4,6-dinitrotoluene	0	0

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\041210expa.mdb, Time: Tue Apr 13 09:03:30 2010
Calibration: Untitled, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412001a

Date: 12-Apr-2010

Time: 15:40:40

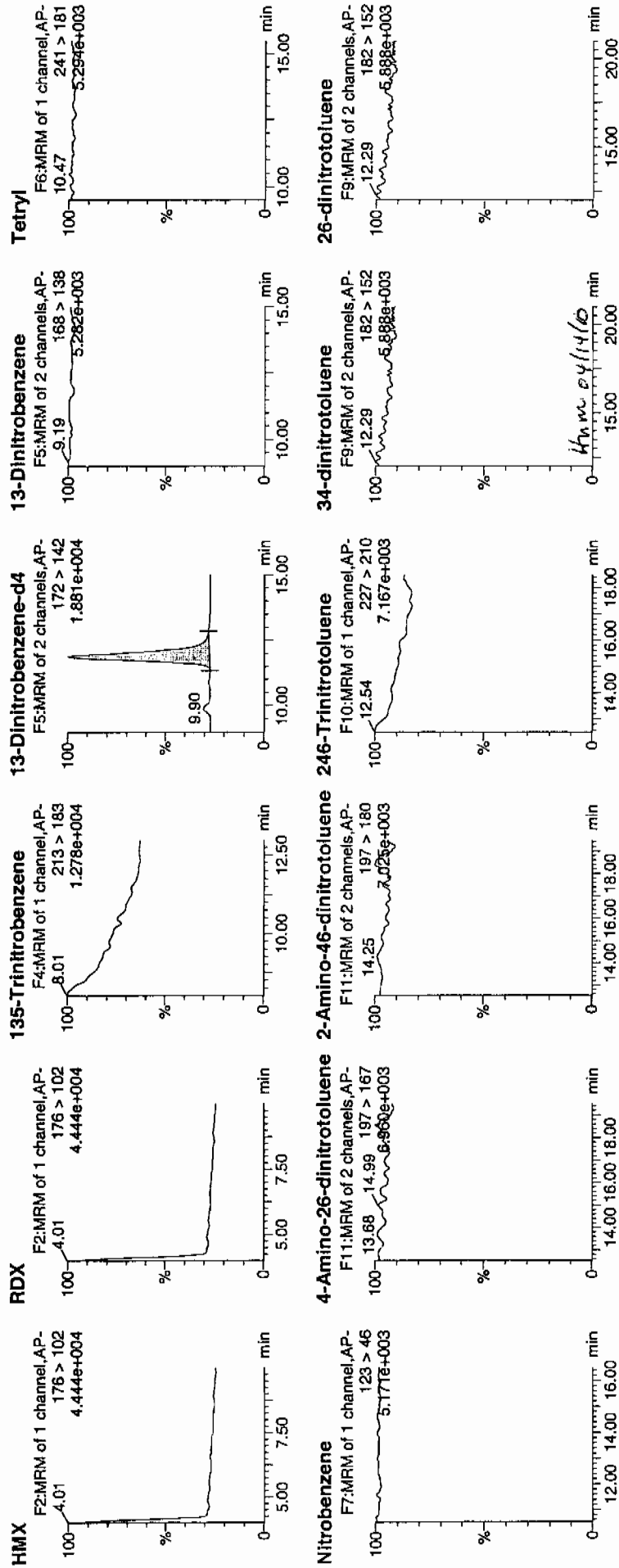
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Vial: 1:1,A

Page 1077 of 1741

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MT
4/13/10

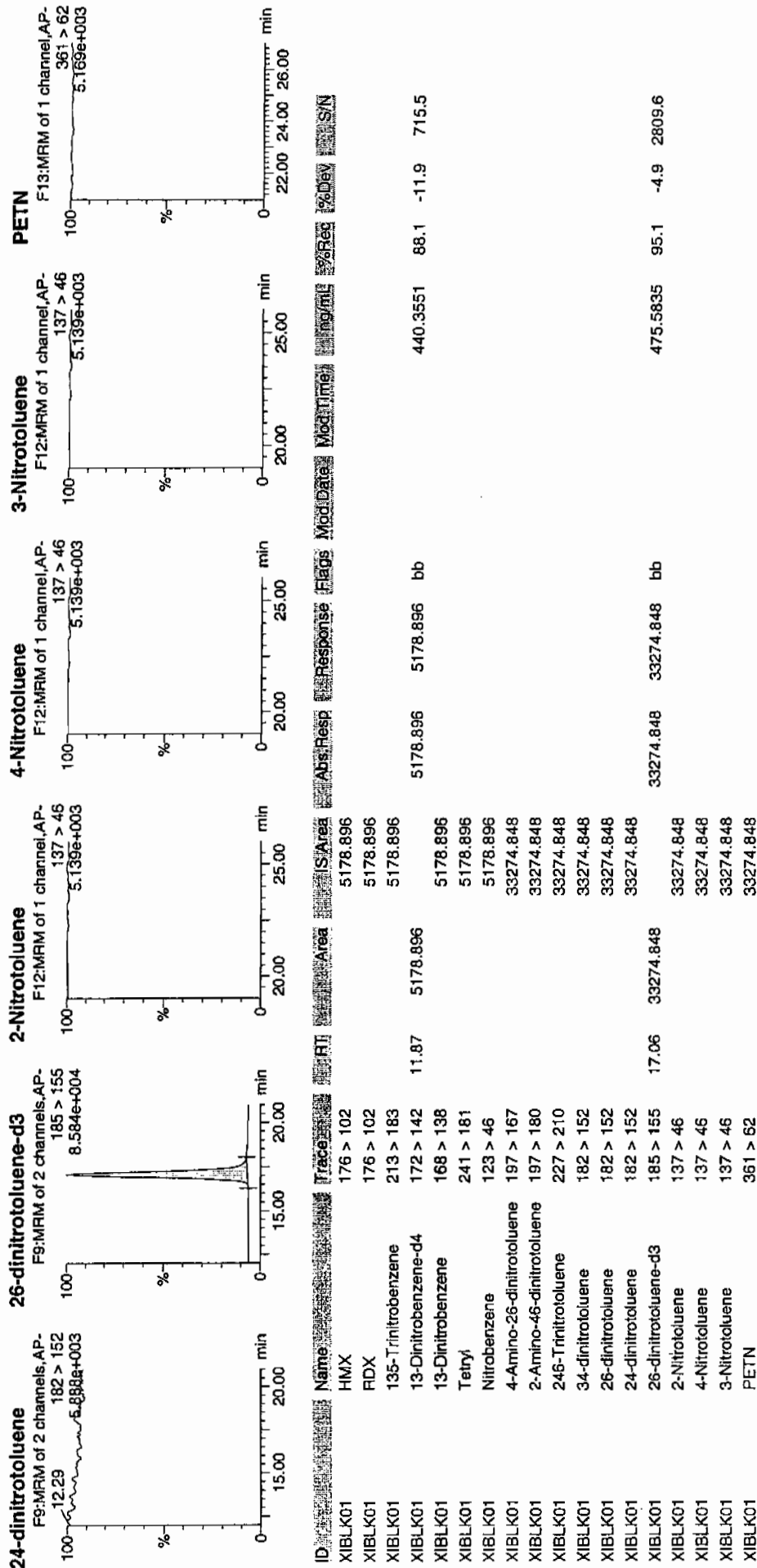


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 2 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qtd, Time: Tue Apr 13 11:12:22 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 12-APR-10 16:10

GEL Data File: EXP0412002a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	473.054
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	498.176
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

Printed: Tue Apr 13 11:14:26 2010, Page 3 of 77

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

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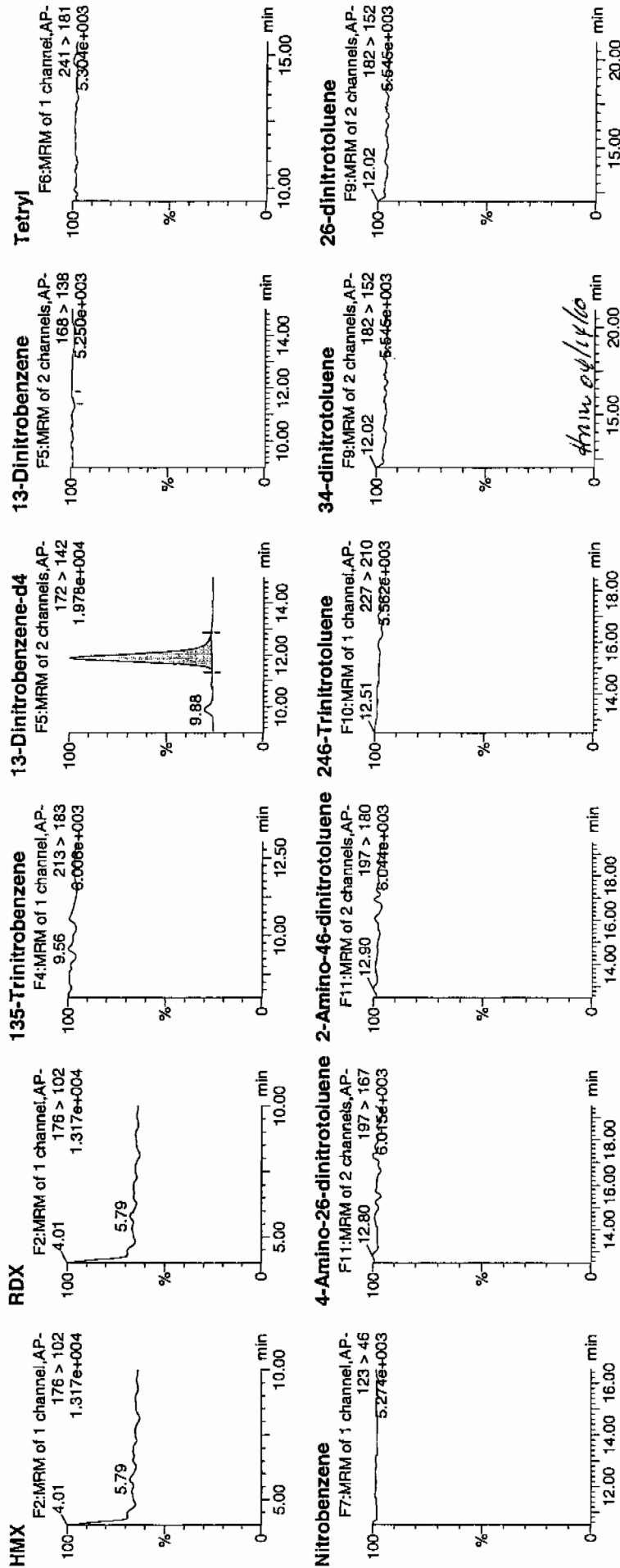
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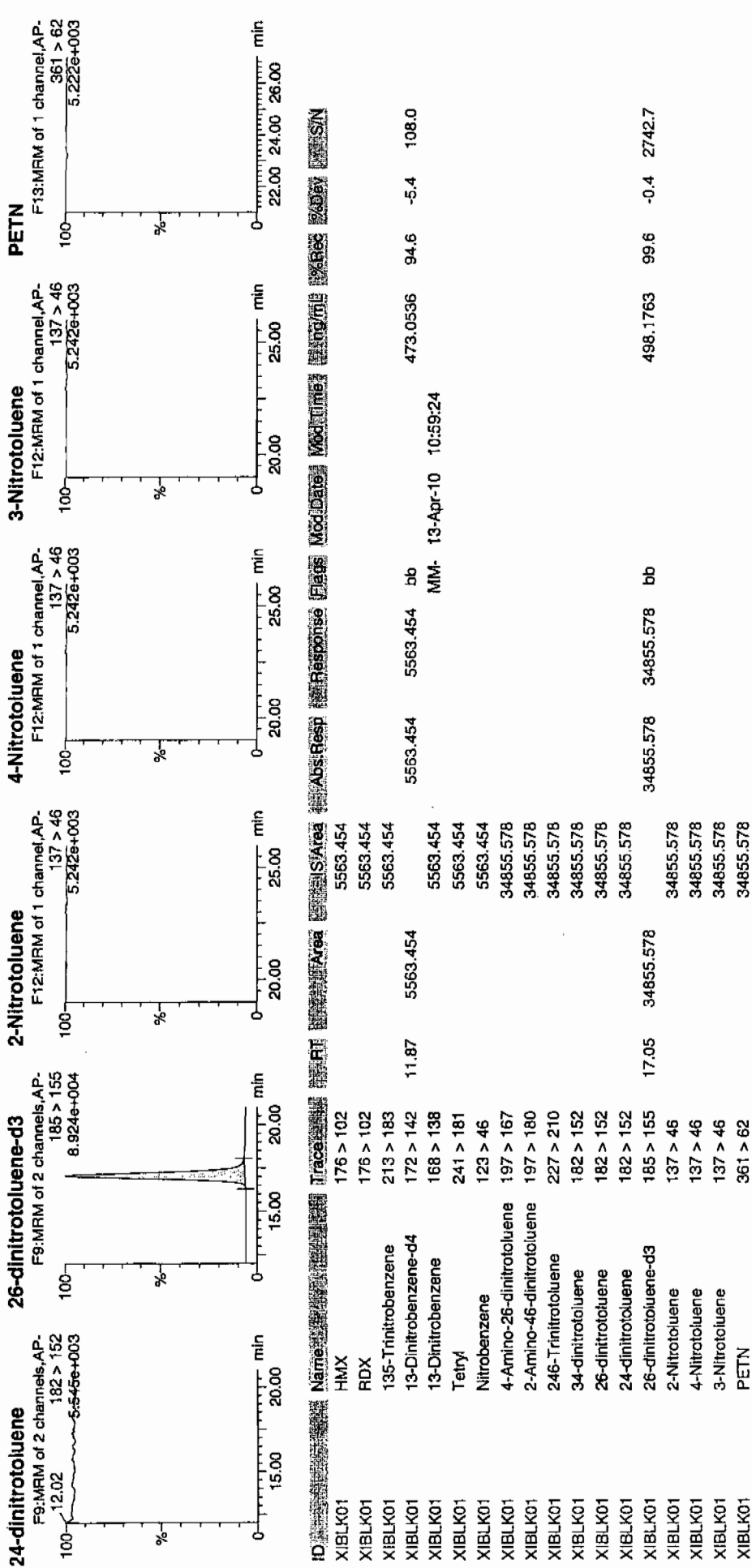
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Vial: 1:1,A

4/13/10



Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA.qtd, Time: Tue Apr 13 11:12:22 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 18-APR-10 14:12

GEL Data File: EXP0418001a

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	475.558
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	441.536
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qtd, Time: Mon Apr 19 12:15:39 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\041810expa.mdb, Time: Mon Apr 19 10:02:54 2010

Calibration: Untitled, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418001a

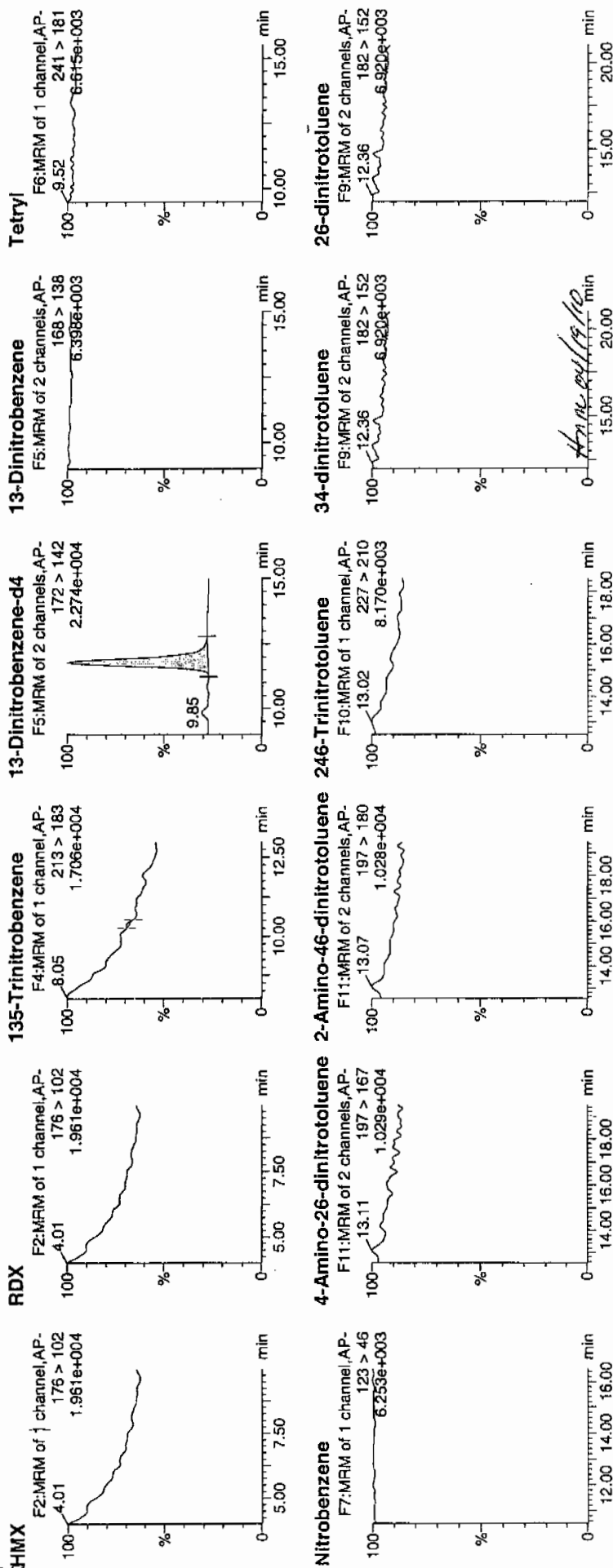
Date: 18-Apr-2010

Time: 14:12:42

ID: XIBLK01

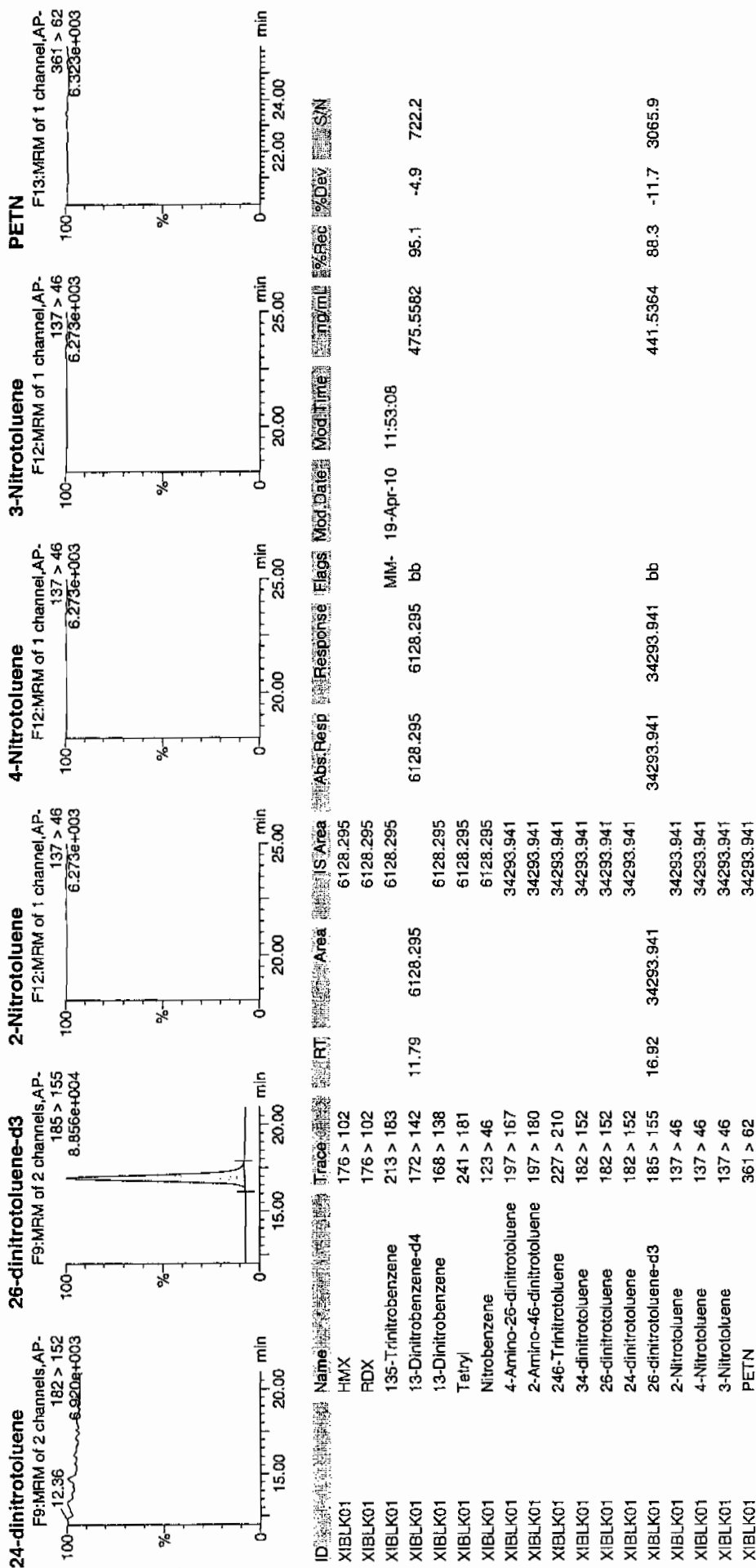
Vial: 1:1,A

with
dilution



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

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 18-APR-10 14:41

GEL Data File: EXP0418002a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	466.907
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	484.45

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qtd, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418002a

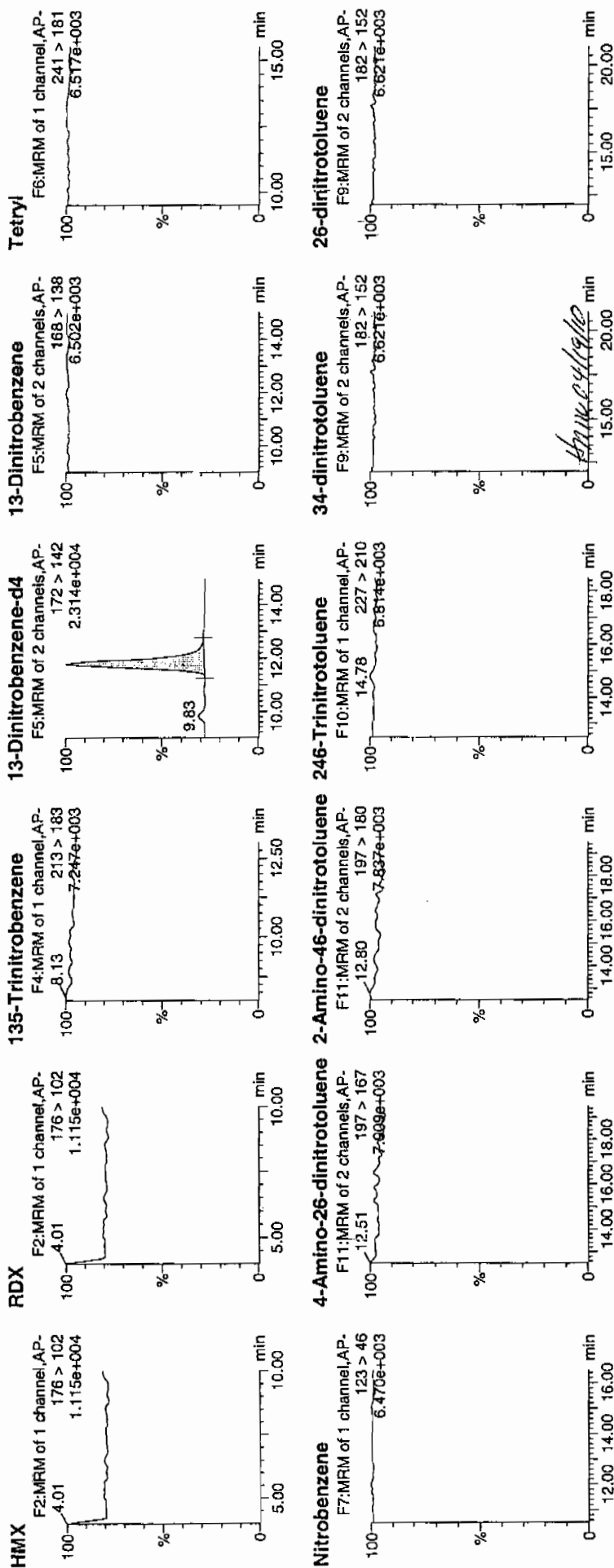
Date: 18-Apr-2010

Time: 14:41:12

ID: XIBLK01

Vial: 1:1,A

with
4/19/10

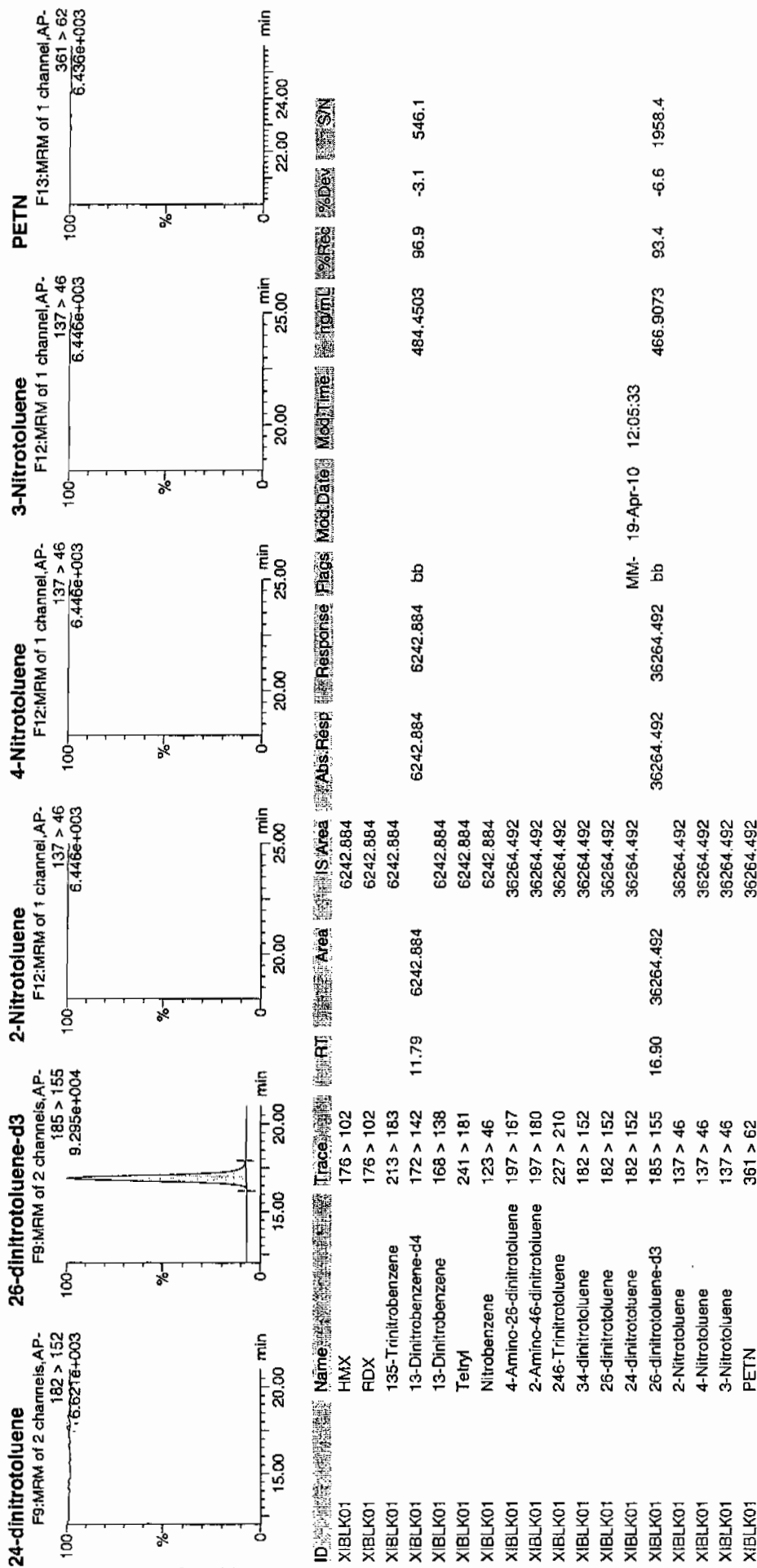


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 4 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 08-APR-10 16:49

GEL Data File: EXS04080001.wiff

Instrument ID: LCMSMS

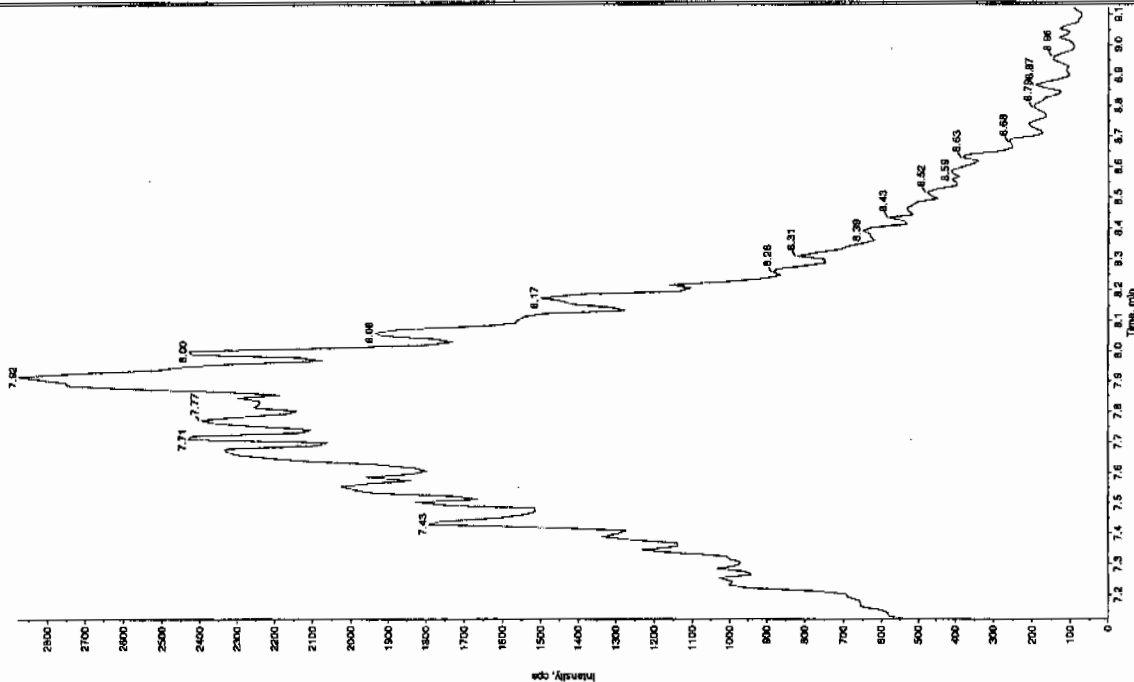
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.1
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 4/12/10

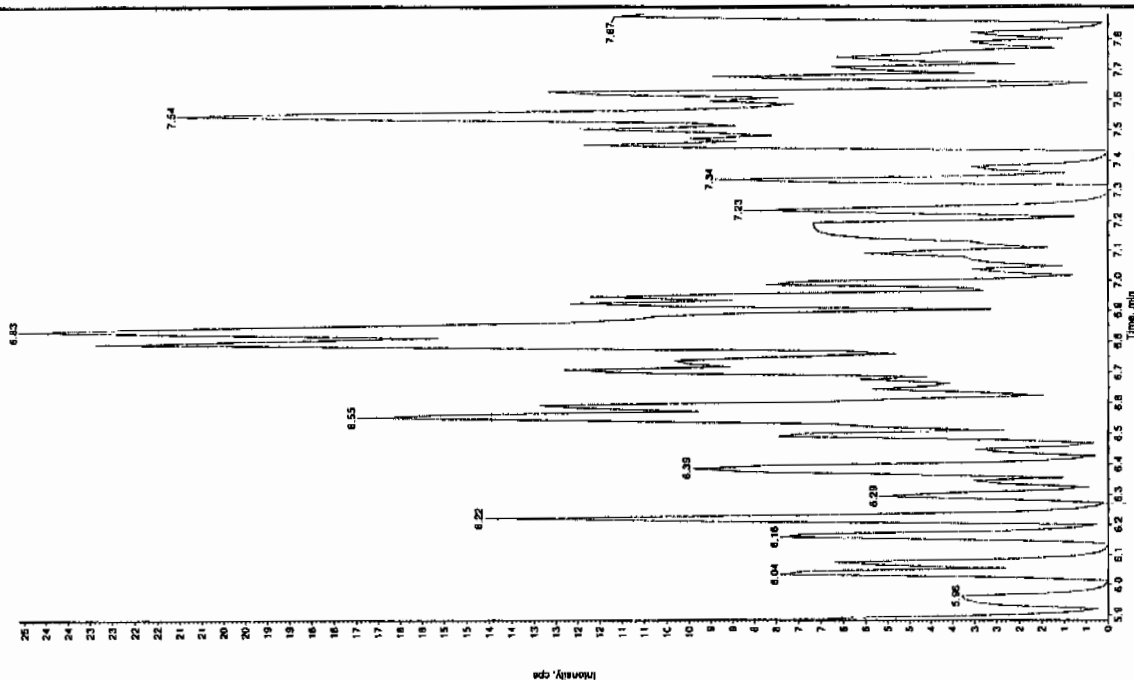
Sample Name: "XIBLK01" Sample ID: "111111" File: "EXS04080001.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.045.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentrated Conc: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 4:49:32 PM
 Modified: No



Sample Name: "XIBLK01" Sample ID: "111111" File: "EXS04080001.wif"
 Peak Name: "1ATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

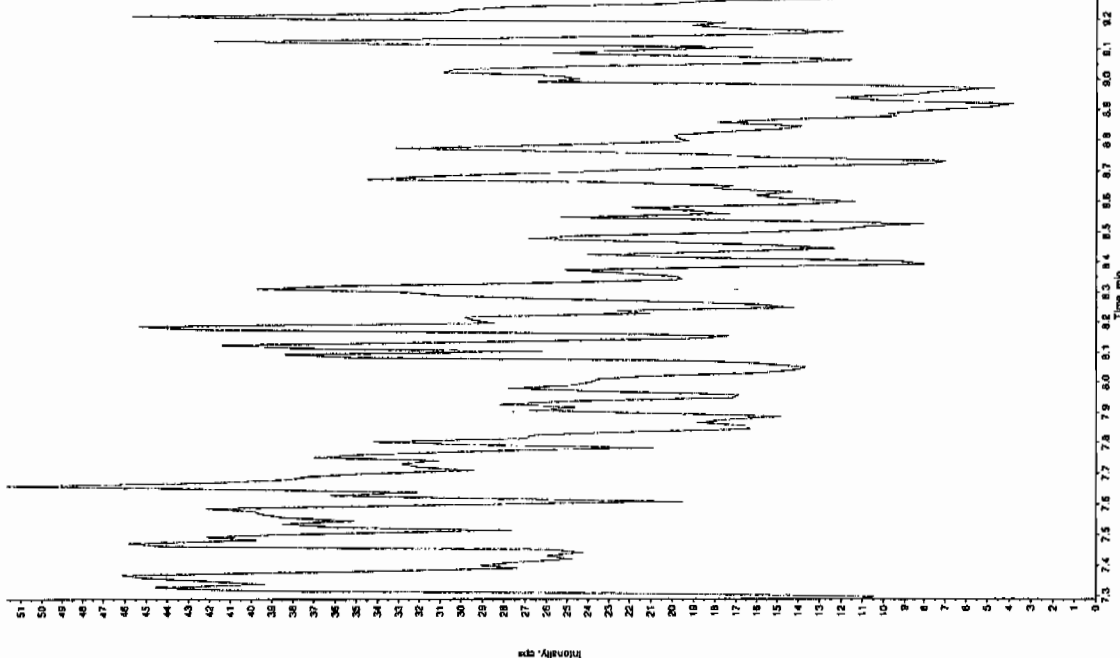
Sample Index: 1
 Sample Type: Unknown
 Concentrated Conc: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 4:49:32 PM
 Modified: No



See 4/12/10

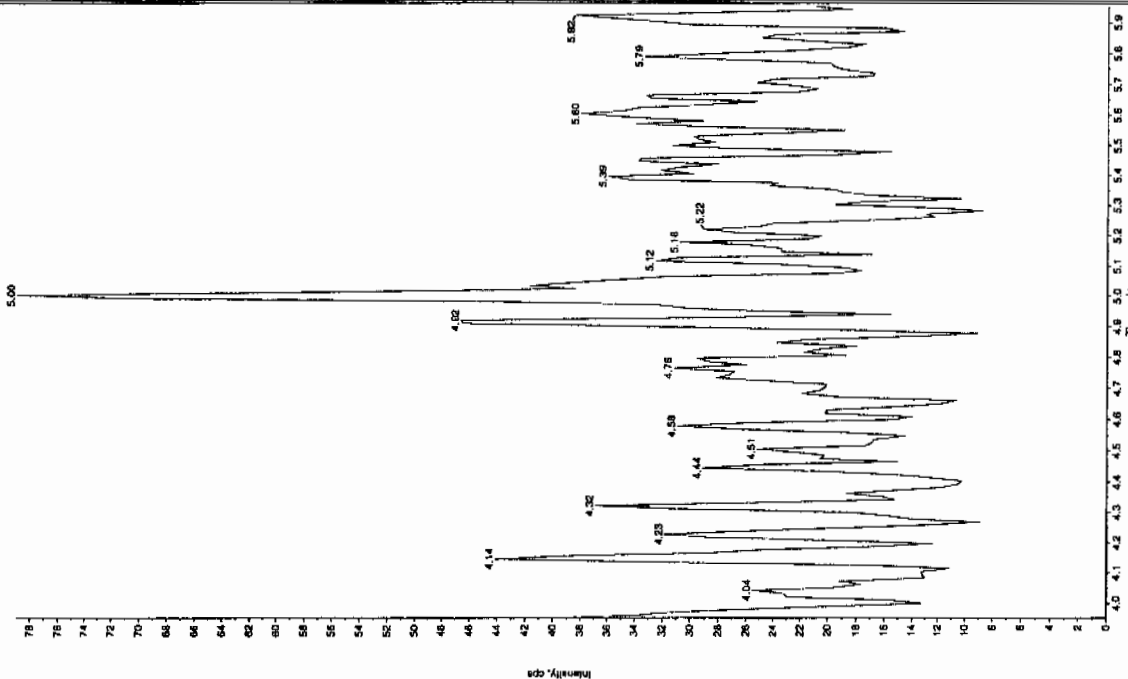
Sample Name: "XIBLK01" Sample ID: "JILER" File: "EXS04080001.wiff"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17/151.9 amu"
 Comment: "LCMSXP_25" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 4:49:32 PM
 Modified: No



Sample Name: "XIBLK01" Sample ID: "JILER" File: "EXS04080001.wiff"
 Peak Name: "25-Dinitro-4-nitrotoluene" Mass(es): "166.04/65.0 amu"
 Comment: "LCMSXP_3" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 4:49:32 PM
 Modified: No



Sample Name: 'YIBLK01' Sample ID: '11LER' File: 'EX04080001.wif'
 Peak Name: '4-Hydroxy-6-methylphenol' Mass(es): '168.0460 amu'
 Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 4:49:32 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

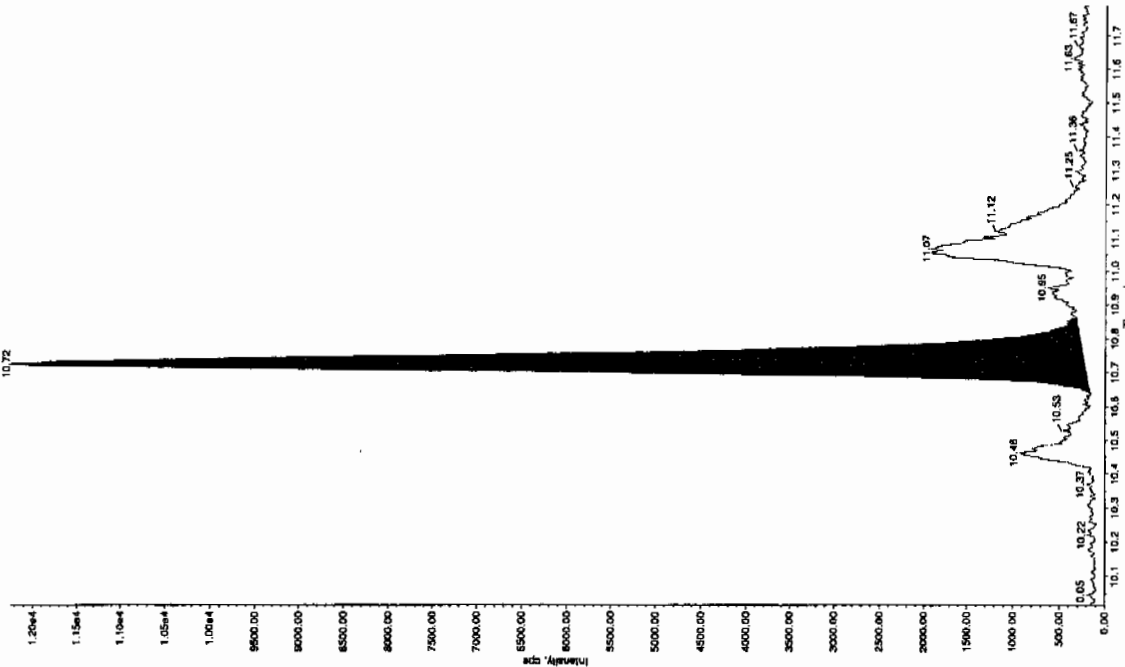
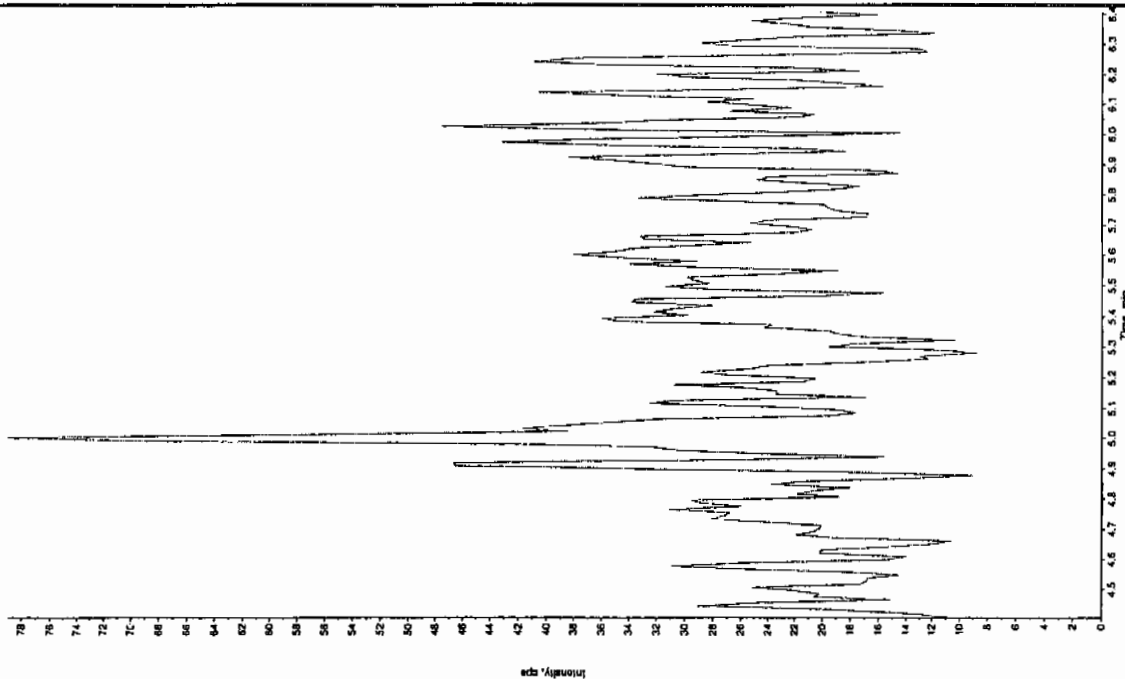
Int. Type: Valley
 Retention Time: 10.7 min
 Peak Height: 4.59e+06 cps
 Start Time: 12024.648 min
 End Time: 10.6 min

Sample Name: 'YIBLK01' Sample ID: '11LER' File: 'EX04080001.wif'
 Peak Name: '4-Hydroxy-6-methylphenol' Mass(es): '168.0460 amu'
 Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 4:49:32 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: 10.7 min
 Peak Height: 4.59e+06 cps
 Start Time: 12024.648 min
 End Time: 10.6 min



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 08-APR-10 17:05

GEL Data File: EXS04080002.wiff

Instrument ID: LCMSMS

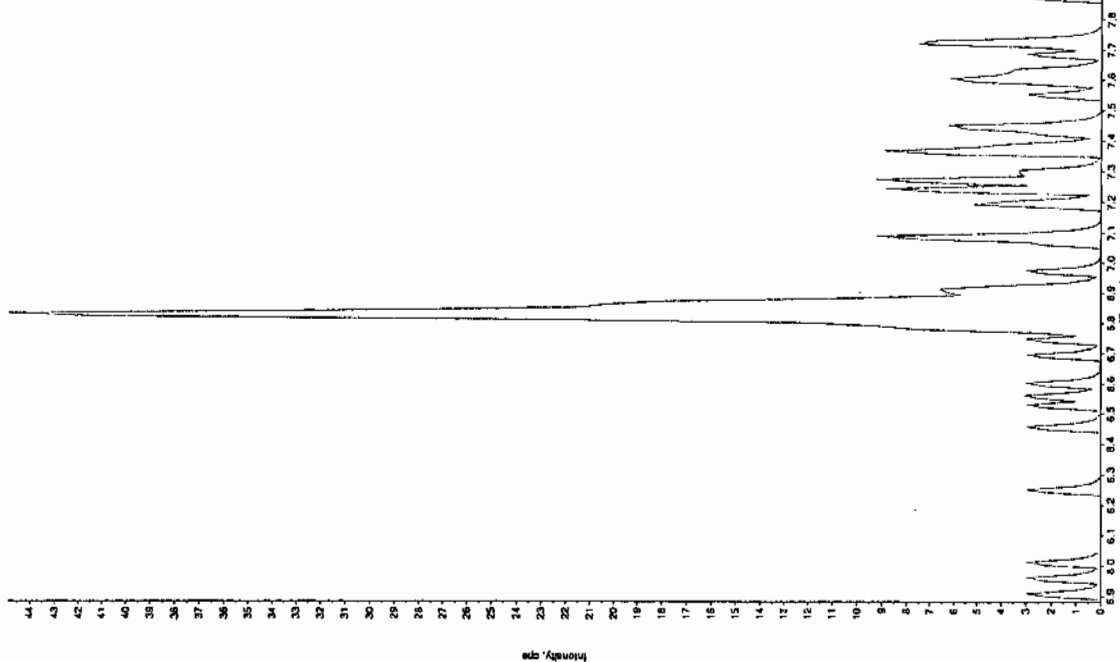
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.96
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Ken 4/12/10

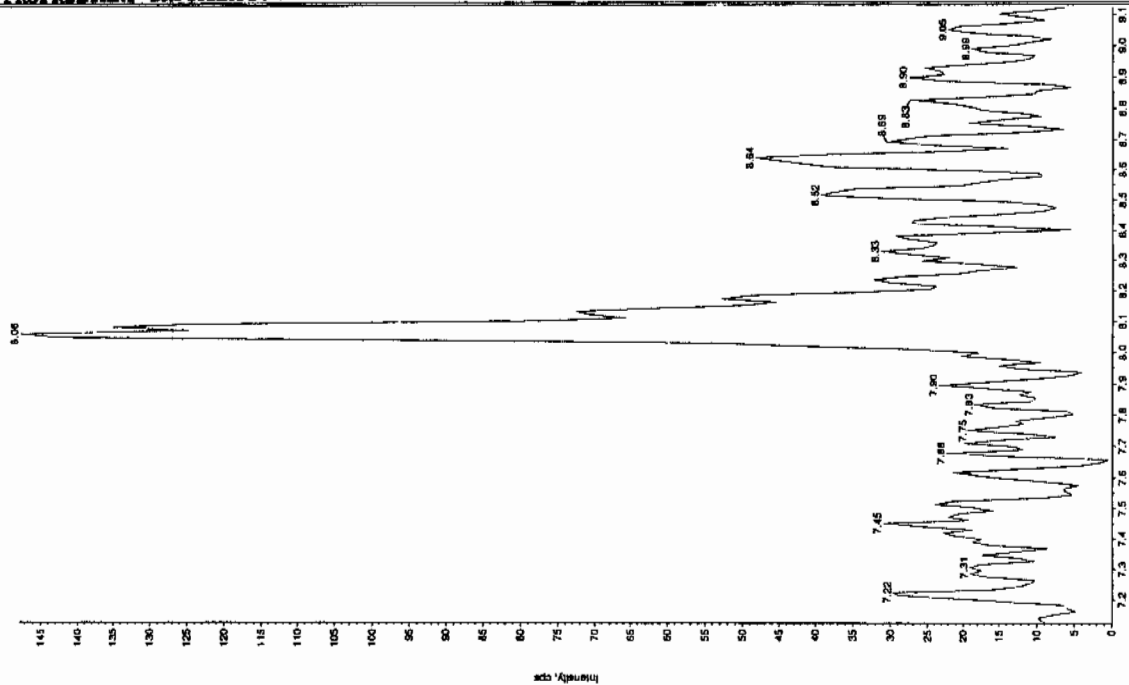
Sample Name: "XIBLK01" Sample ID: "JILR" File: "EX504060002.wif"
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 5:05:19 PM
 Modified: No



Sample Name: "XIBLK01" Sample ID: "JILR" File: "EX504060002.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

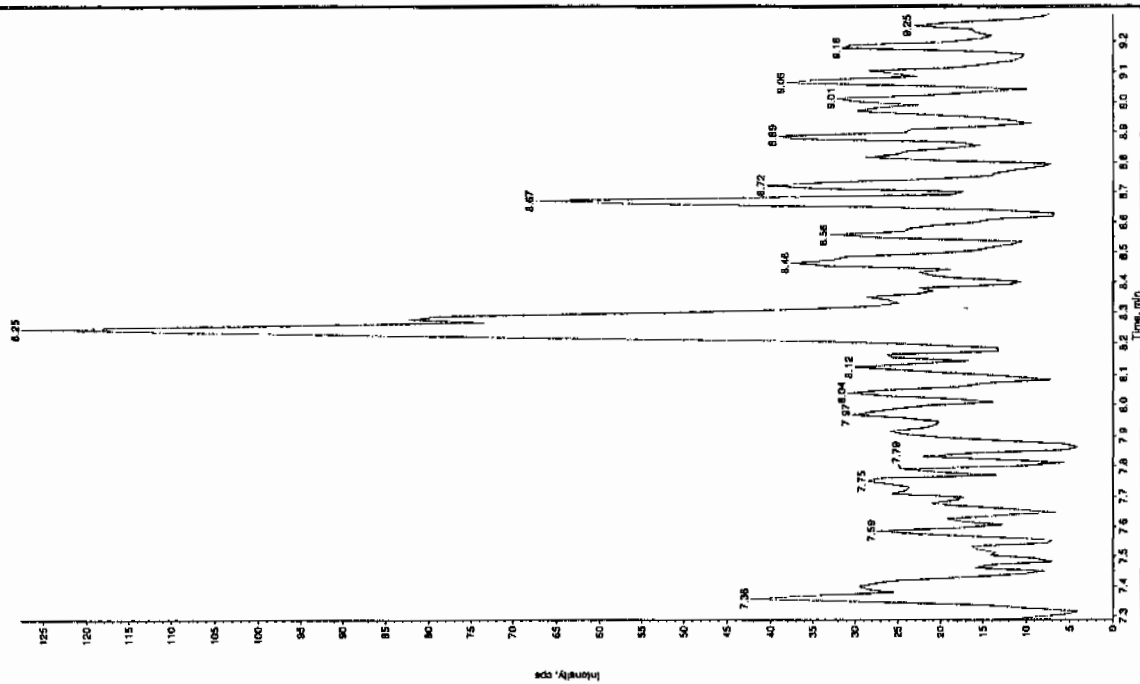
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 5:05:19 PM
 Modified: No



Ken 4/12/10

Sample Name: "XIBLX01" Sample ID: "111ER" File: "EX504080002.wif"
 Peak Name: "25-Diamino-4-nitrobenzene" Mass(es): "166.0/46.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/8/2010
 Acq. Time: 5:05:19 PM
 Modified: No



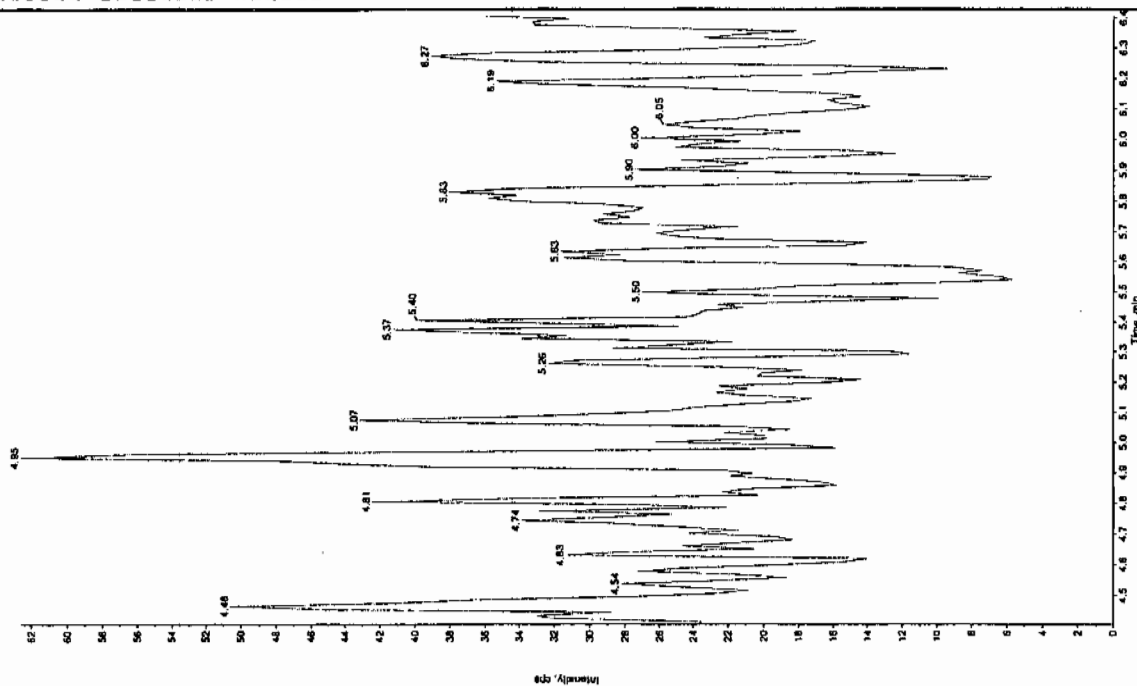
Sample Name: "XIBLX01" Sample ID: "111ER" File: "EX504080002.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1/151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/8/2010
 Acq. Time: 5:05:19 PM
 Modified: No



Sample Name: "XIBLK01" Sample ID: "1111ER" File: "EXSD04080002.wif"
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "355.191.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 156 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 5:05:19 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: 10.7 min
 Area: 4.30e+004 counts
 Height: 11247.588 cps
 Start Time: 10.6 min
 End Time: 10.9 min



Sample Name: "XIBLK01" Sample ID: "1111ER" File: "EXSD04080002.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "185.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 5:05:19 PM
 Modified: No

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 12-APR-10 19:36

GEL Data File: EXP0412009a

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	566.025
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	597.817
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412009a

Date: 12-Apr-2010

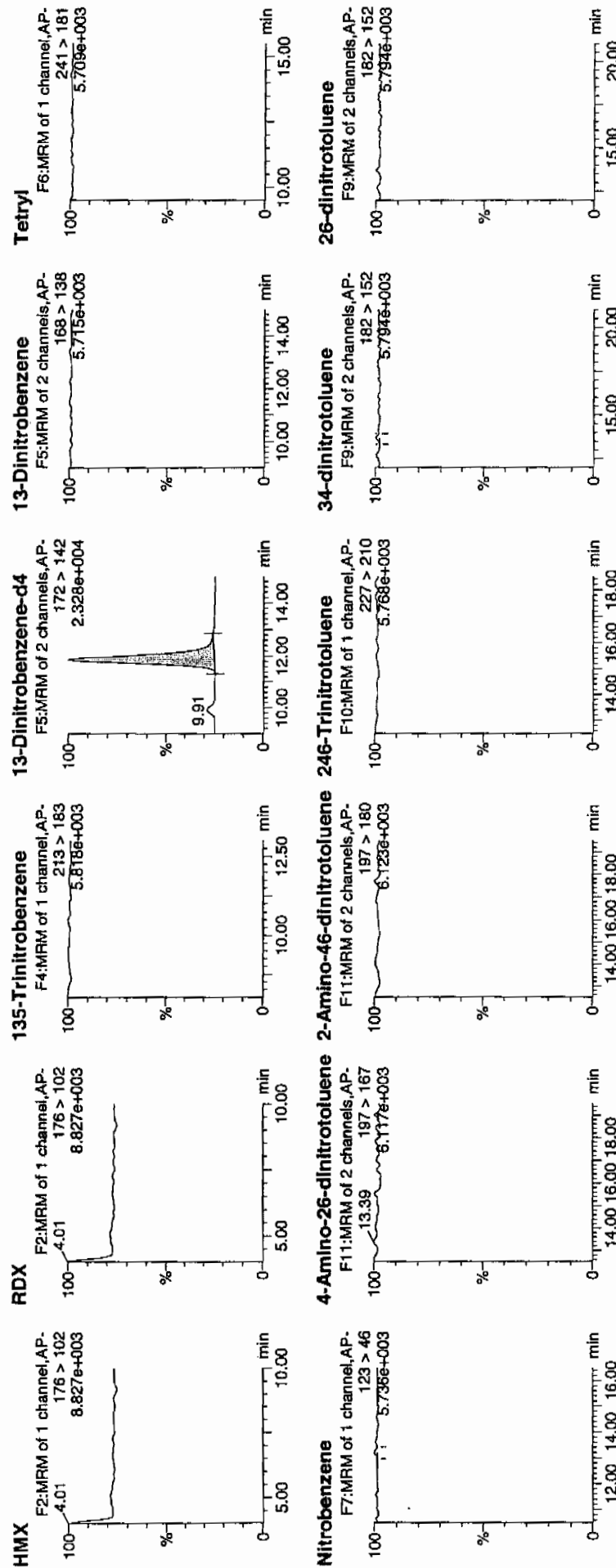
Time: 19:36:32

ID: XIBLK02

Vial: 1:1,A

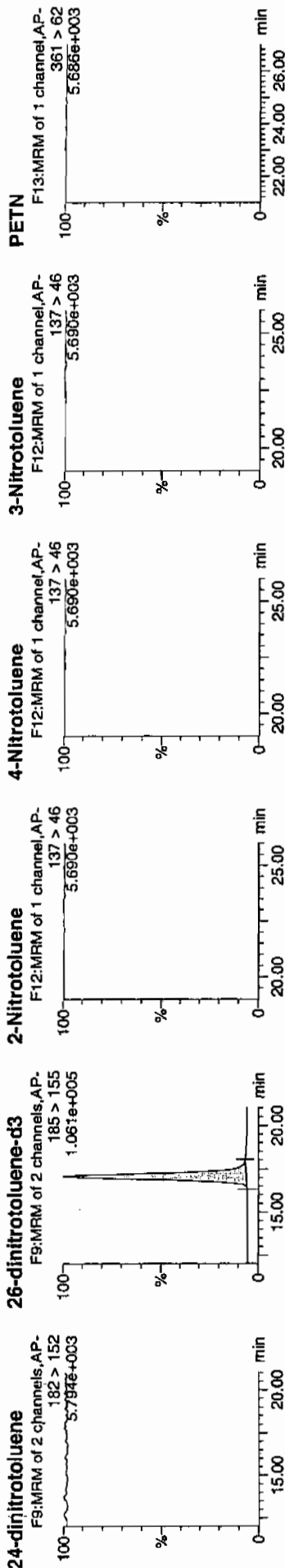
WAT
-1.0/1.0

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amine 04/16/10

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



ID	Name	RT	Area	S:Area	Abundance	Response	Flags	Mod Date	Mod Time	Integ.mt	%Rec	Label	S/N
XIBLK02	HMX	176 > 102		6656.868									
XIBLK02	RDX	176 > 102		6656.868									
XIBLK02	135-Trinitrobenzene	213 > 183		6656.868									
XIBLK02	13-Dinitrobenzene-d4	172 > 142	11.87	6656.868									
XIBLK02	13-Dinitrobenzene	188 > 138		6656.868									
XIBLK02	Tetryl	241 > 181		6656.868									
XIBLK02	Nitrobenzene	123 > 46		6656.868									
XIBLK02	4-Amino-26-dinitrotoluene	197 > 167		41827.098					MM-	13-Apr-10	11:00:12		
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180		41827.098									
XIBLK02	246-Trinitrotoluene	227 > 210		41827.098									
XIBLK02	34-dinitrotoluene	182 > 152		41827.098									
XIBLK02	26-dinitrotoluene	182 > 152		41827.098									
XIBLK02	24-dinitrotoluene	182 > 152		41827.098									
XIBLK02	26-dinitrotoluene-d3	185 > 155	17.05	41827.098									
XIBLK02	2-Nitrotoluene	137 > 46		41827.098									
XIBLK02	4-Nitrotoluene	137 > 46		41827.098									
XIBLK02	3-Nitrotoluene	137 > 46		41827.098									
XIBLK02	PETN	361 > 62		41827.098									
					6656.868	6656.868	bb			566.0252	113.2	13.2	258.0
					41827.098	41827.098	bb			597.8173	119.6	19.6	1486.5

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 12-APR-10 20:35

GEL Data File: EXP0412011a

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	547.706
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	578.822
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\041210expA.qtd, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412011a

Date: 12-Apr-2010

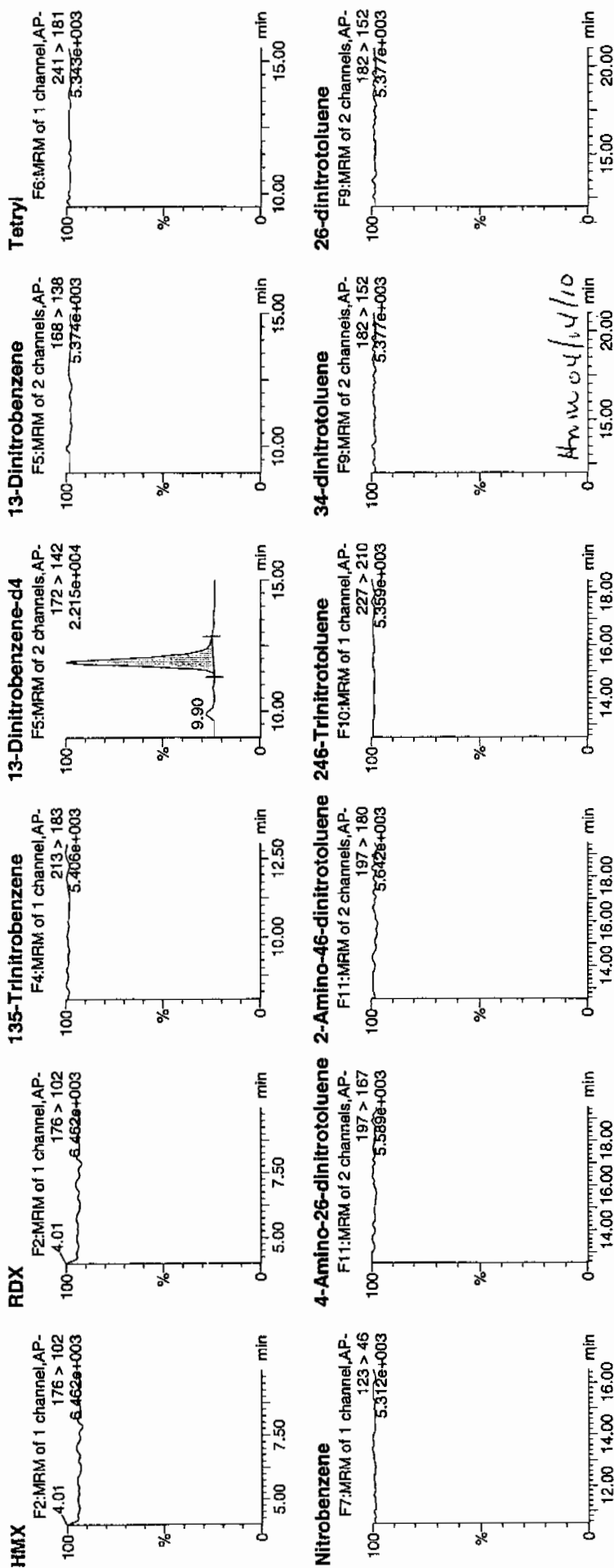
Time: 20:35:28

ID: XIBLK03

Vial: 1:1,A

9/13/10

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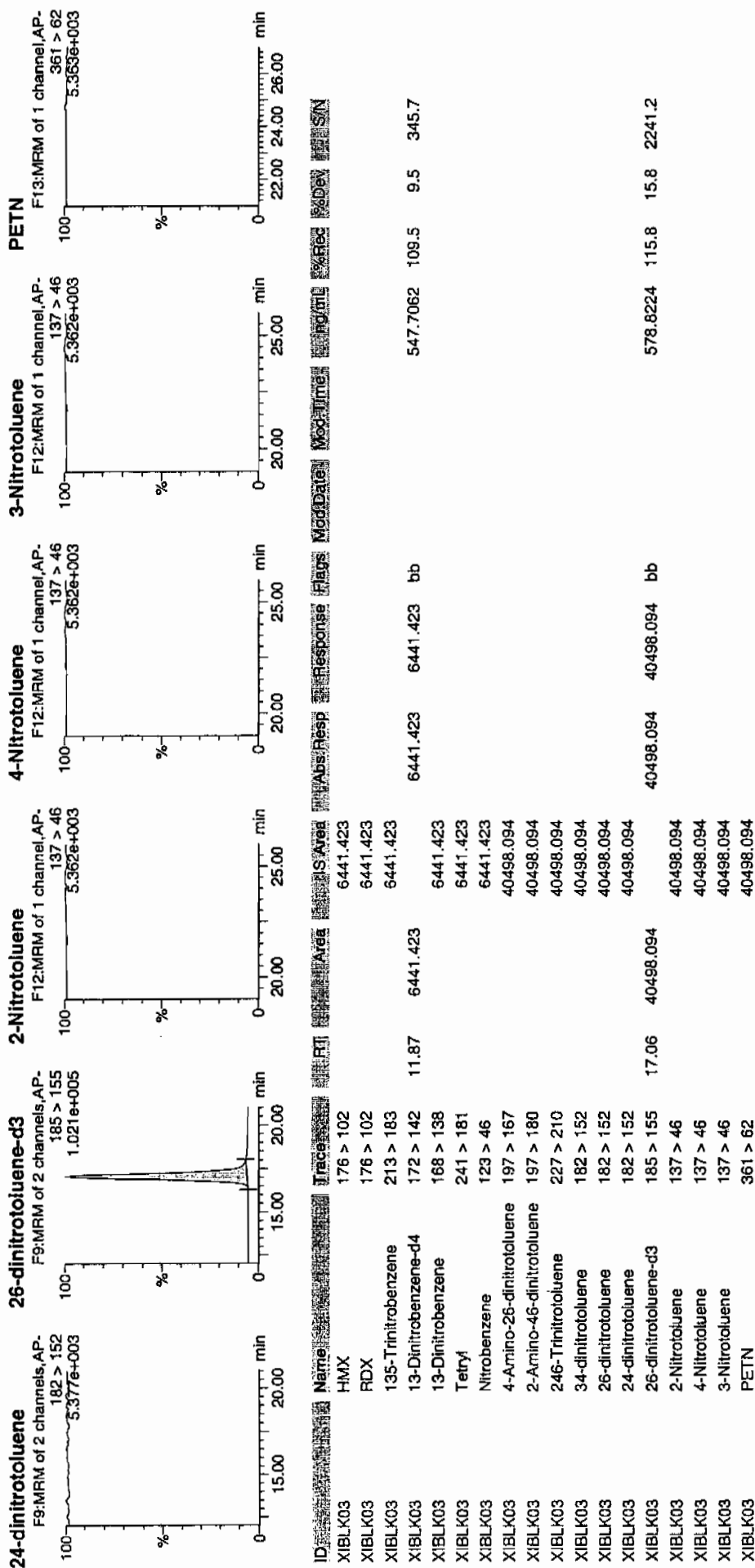


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 13-APR-10 02:58

GEL Data File: EXP0412024a

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	493.141
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	499.061
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412024a

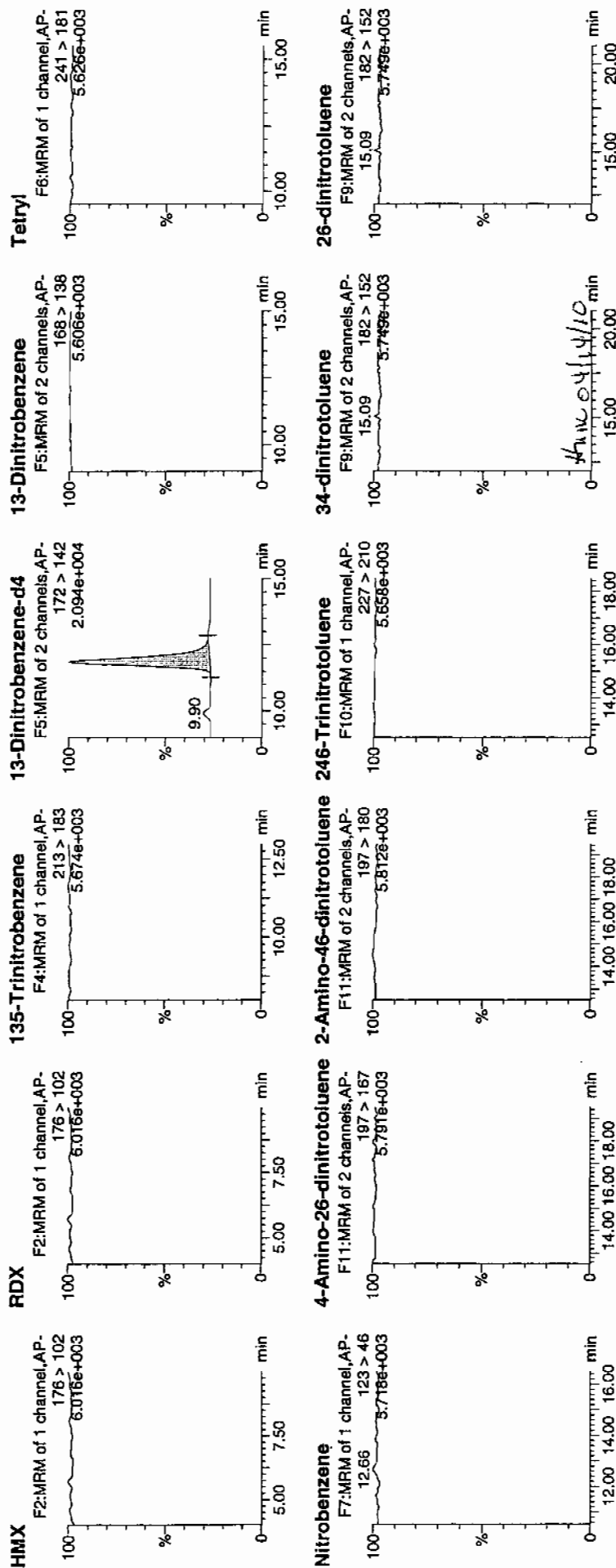
Date: 13-Apr-2010

Time: 02:58:51

ID: XIBLK04

Vial: 1:1,A

1077
4/13/10

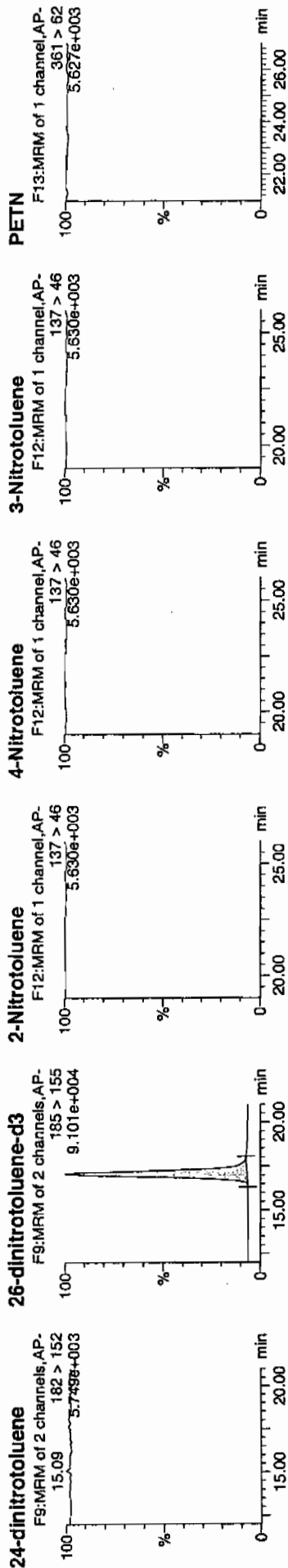


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 48 of 77

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Integr	% Rec	% Dev	S/N
XIBLK04	HMX	176 > 102			5799.697									
XIBLK04	RDX	176 > 102			5799.697									
XIBLK04	135-Trinitrobenzene	213 > 183			5799.697									
XIBLK04	13-Dinitrobenzene-d4	172 > 142	11.86	5799.697		5799.697	5799.697	bb			493.1410	98.6	-1.4	818.5
XIBLK04	13-Dinitrobenzene	168 > 138			5799.697									
XIBLK04	Tetryl	241 > 181			5799.697									
XIBLK04	Nitrobenzene	123 > 46			5799.697									
XIBLK04	4-Amino-26-dinitrotoluene	197 > 167			34917.508									
XIBLK04	2-Amino-46-dinitrotoluene	197 > 180			34917.508									
XIBLK04	246-Trinitrotoluene	227 > 210			34917.508									
XIBLK04	34-dinitrotoluene	182 > 152			34917.508									
XIBLK04	26-dinitrotoluene	182 > 152			34917.508									
XIBLK04	24-dinitrotoluene	182 > 152			34917.508									
XIBLK04	26-dinitrotoluene-d3	185 > 155	17.06	34917.508		34917.508	34917.508	bb			499.0614	99.8	-0.2	4328.2
XIBLK04	2-Nitrotoluene	137 > 46			34917.508									
XIBLK04	4-Nitrotoluene	137 > 46			34917.508									
XIBLK04	3-Nitrotoluene	137 > 46			34917.508									
XIBLK04	PETN	361 > 62			34917.508									

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 13-APR-10 09:22

GEL Data File: EXP0412037a

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	510.743
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	501.204
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 73 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412037a

Date: 13-Apr-2010

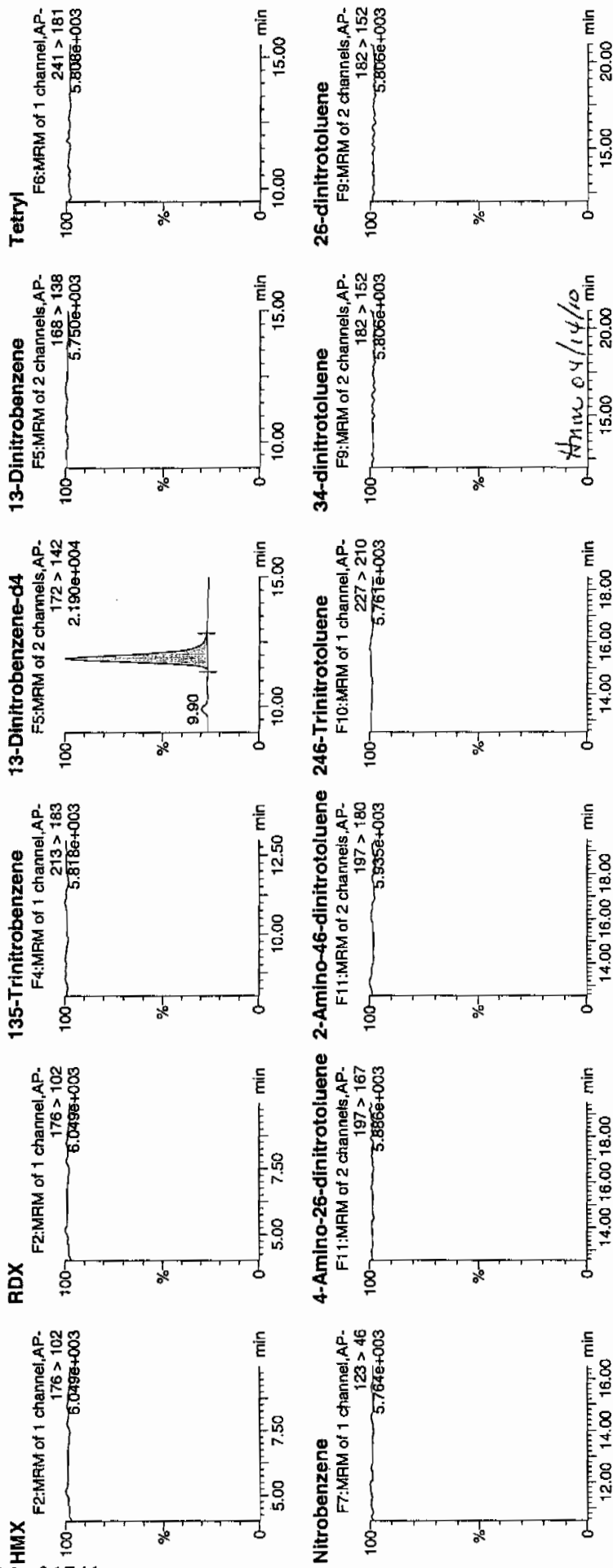
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Page ID: XIBLK05

Vial: 1:1,A

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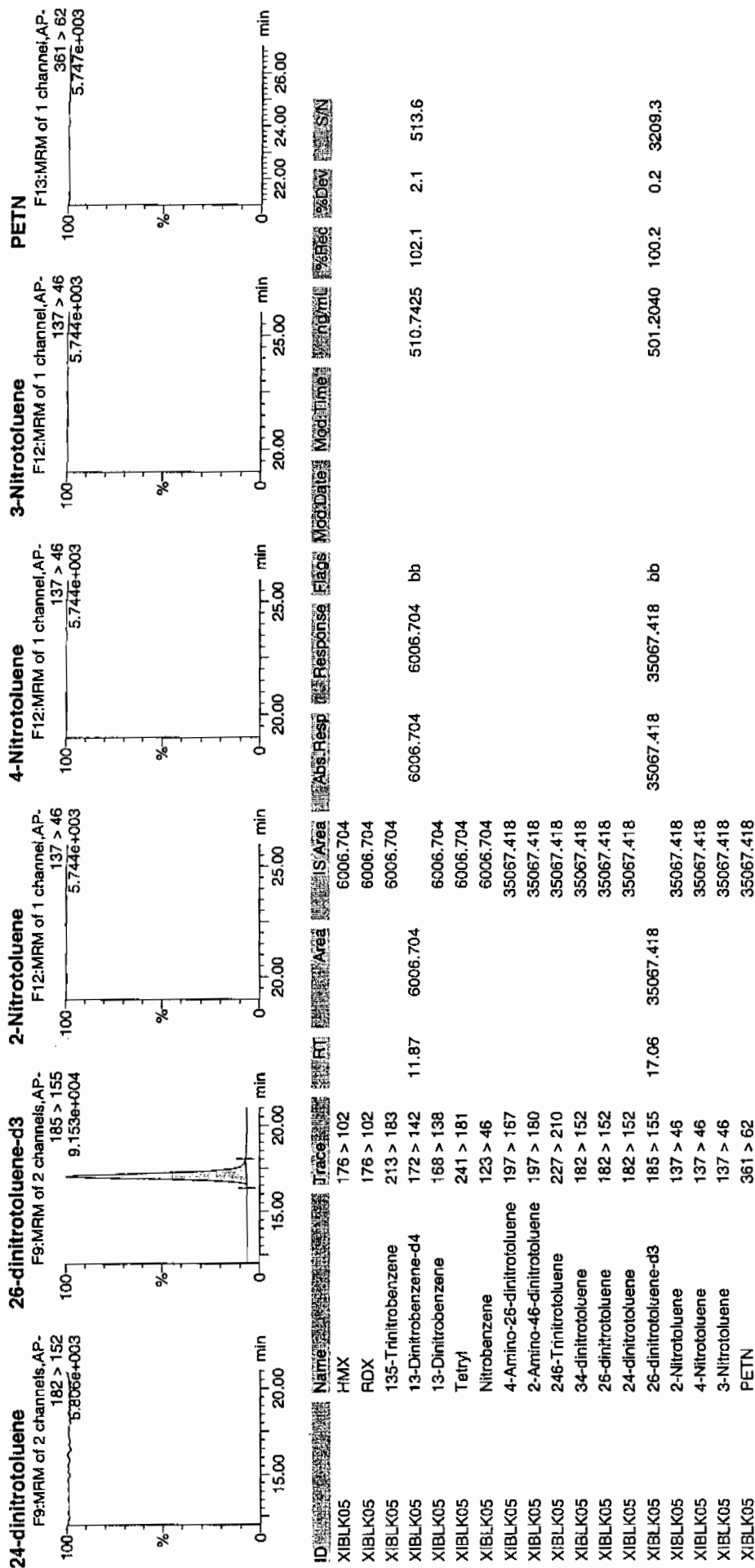


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 74 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 13-APR-10 11:20

GEL Data File: EXP0412041a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	648.08
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	519.054
2-Amino-4,6-dinitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412041a

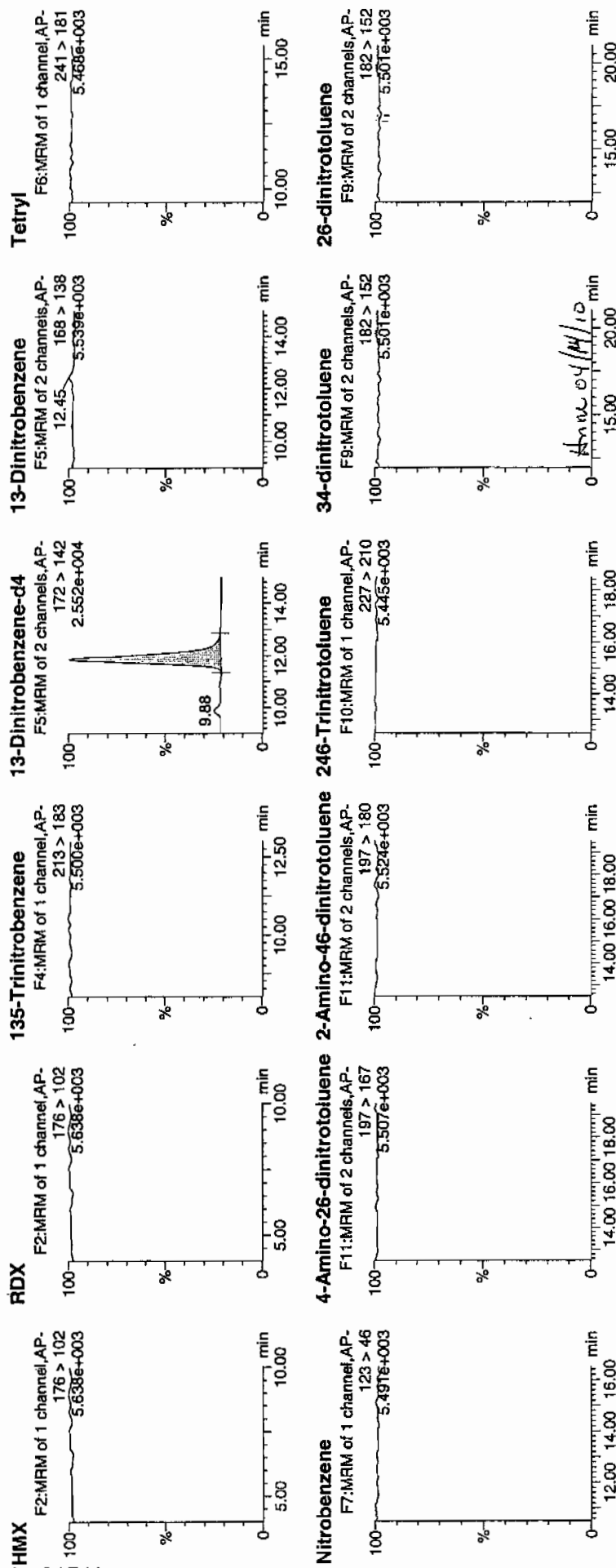
Date: 13-Apr-2010

Time: 11:20:19

ID: XIBLK06

Vial: 1:1,A

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upside

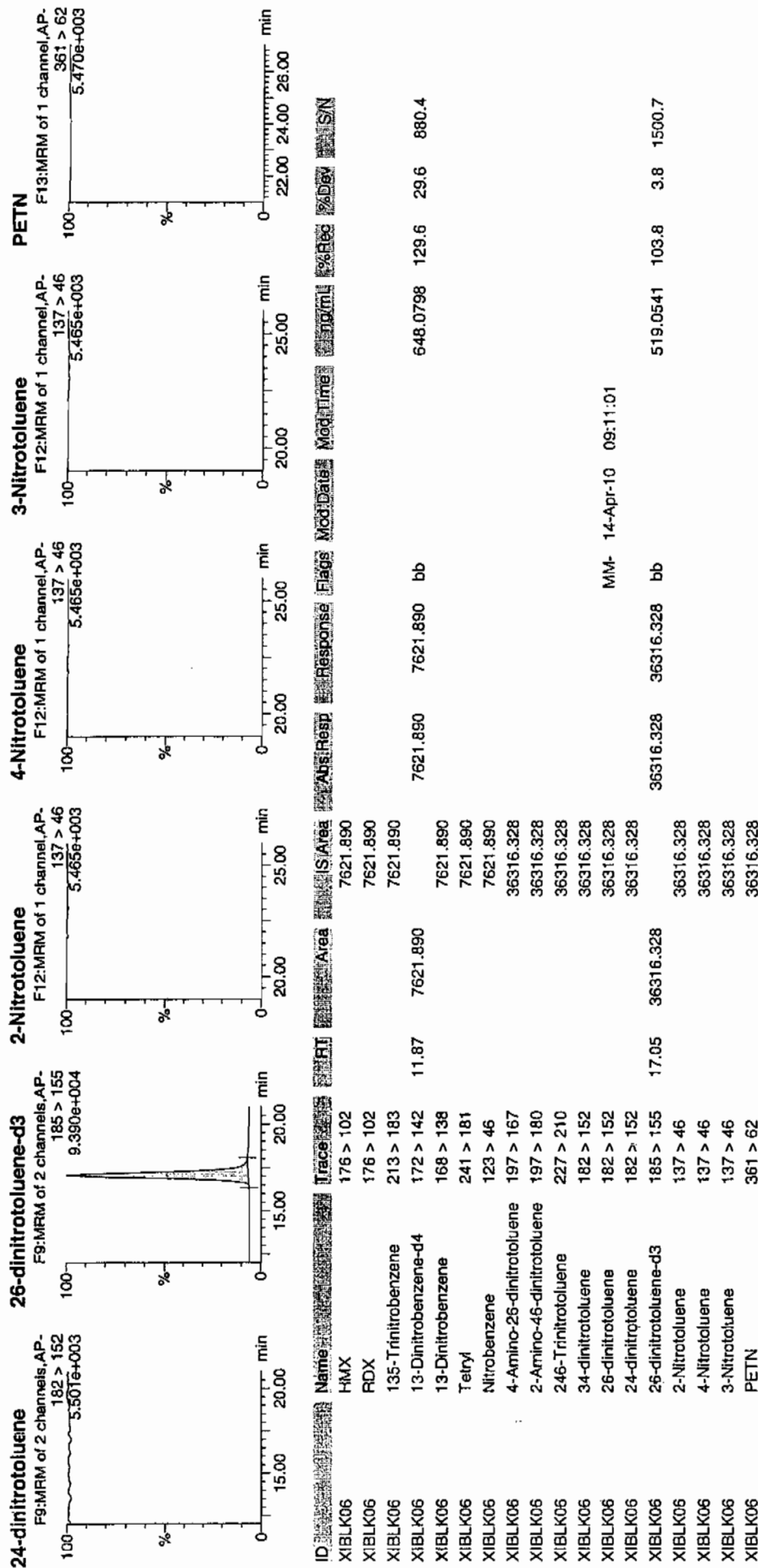


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 6 of 75

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 13-APR-10 15:46

GEL Data File: EXP0412050a

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	555.622
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	595.796
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412050a

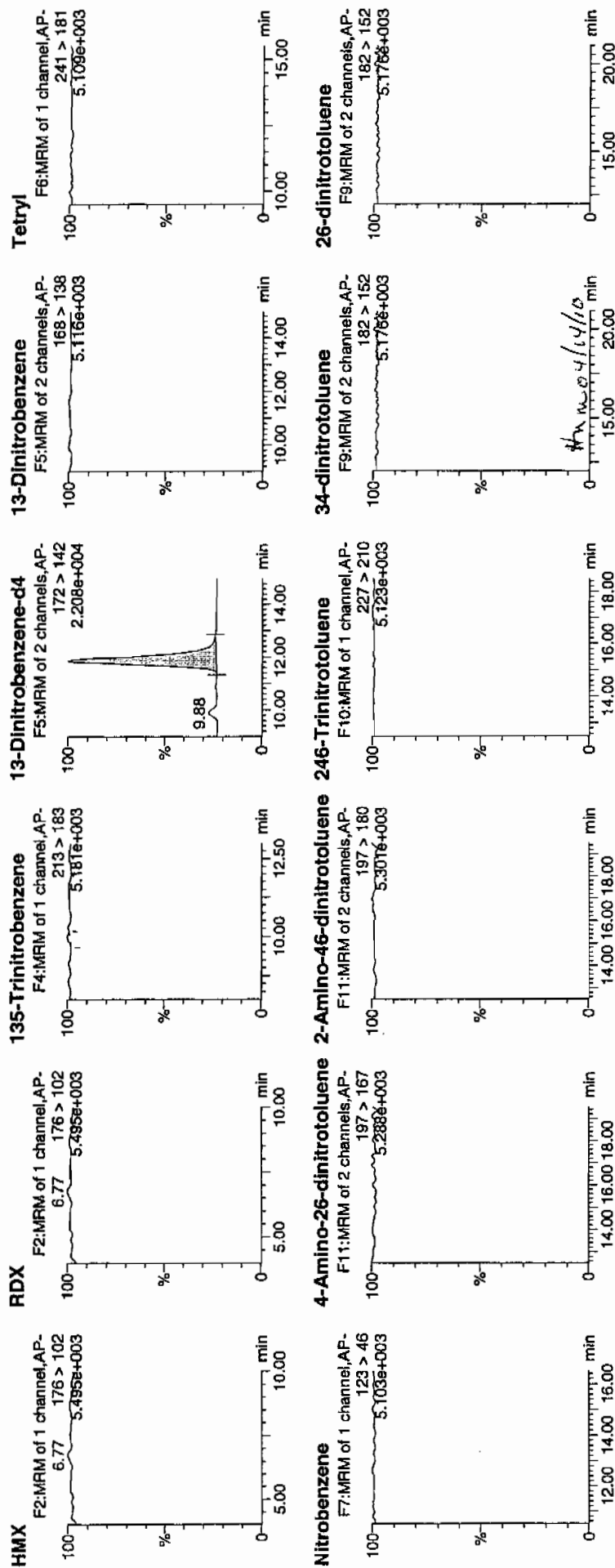
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Time: 15:46:11

Page ID: XIBLK07

Vial: 1:1,A

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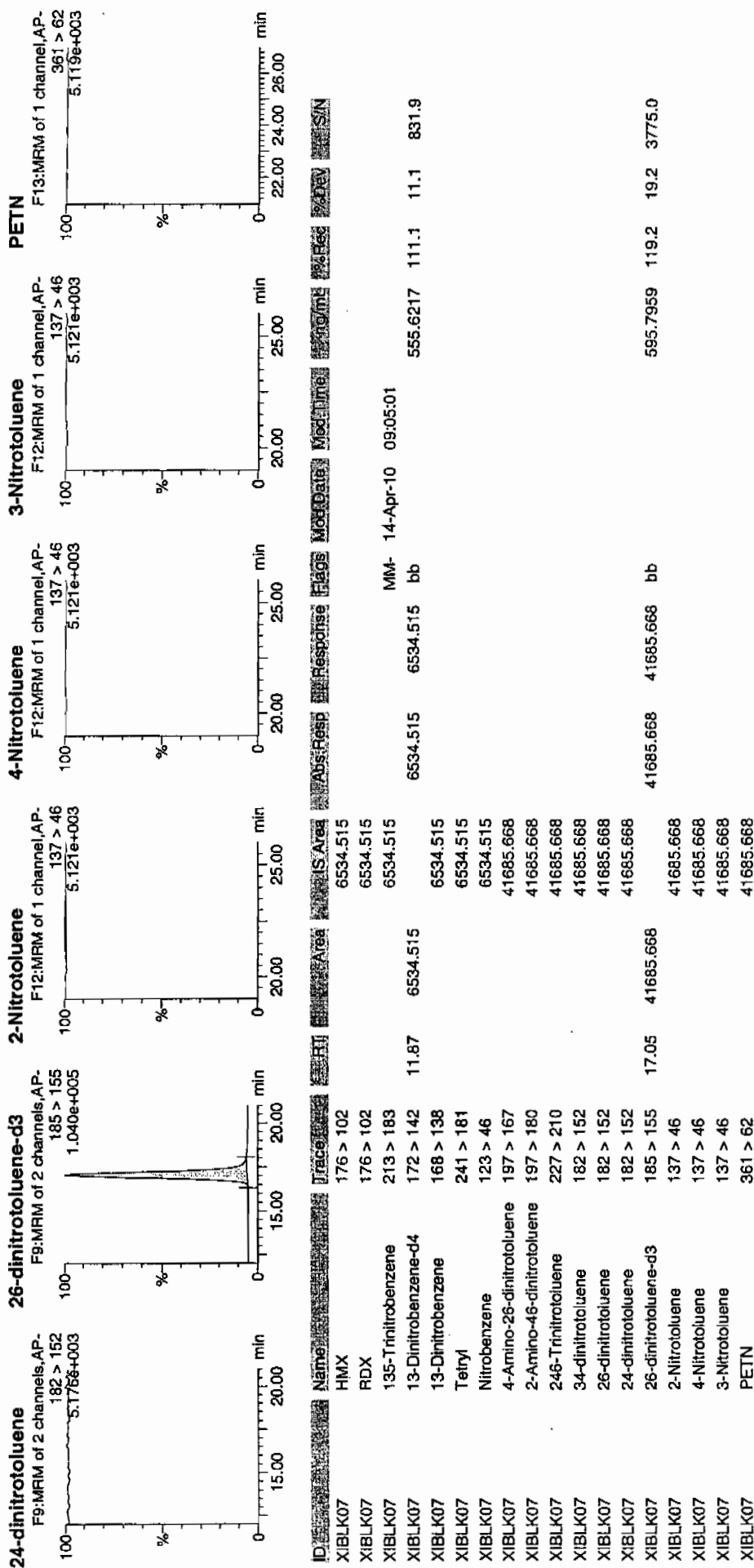


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 24 of 75

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 13-APR-10 21:10

GEL Data File: EXP0412061a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	563.322
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	531.786

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412061a

Date: 13-Apr-2010

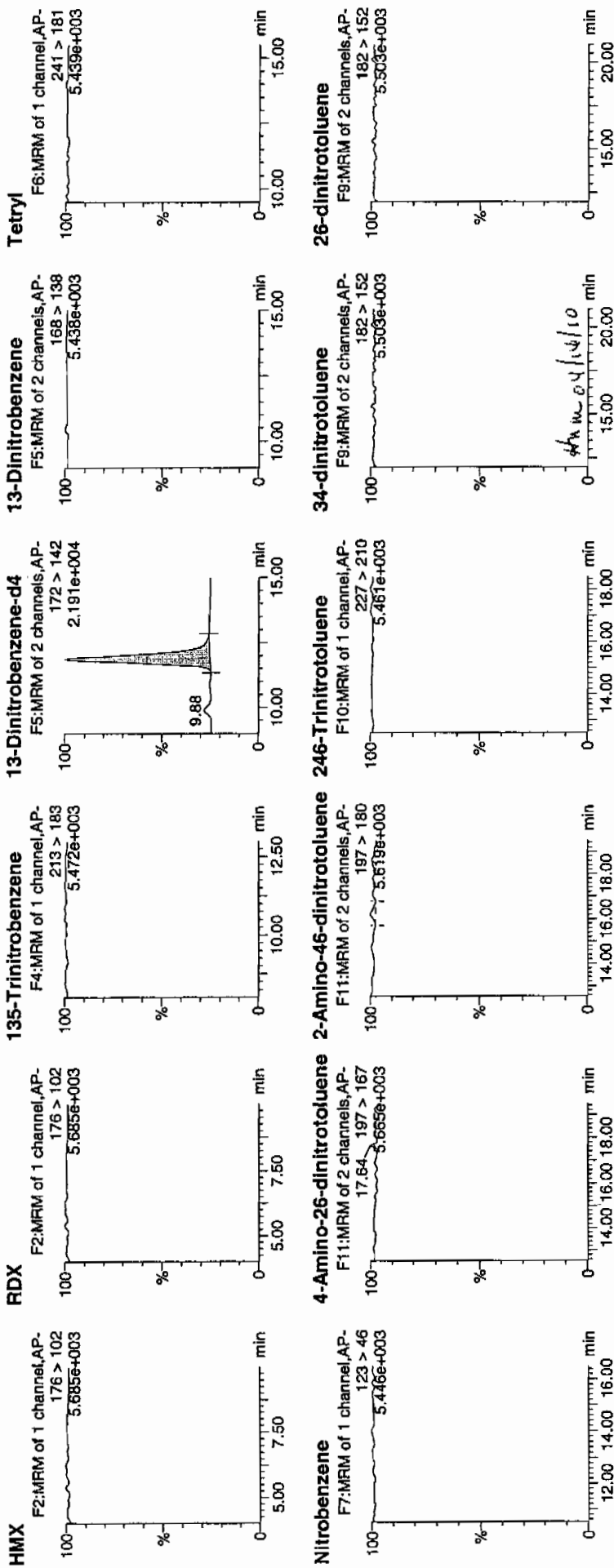
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ID: XIBLK08

Vial: 1:1,A

1357
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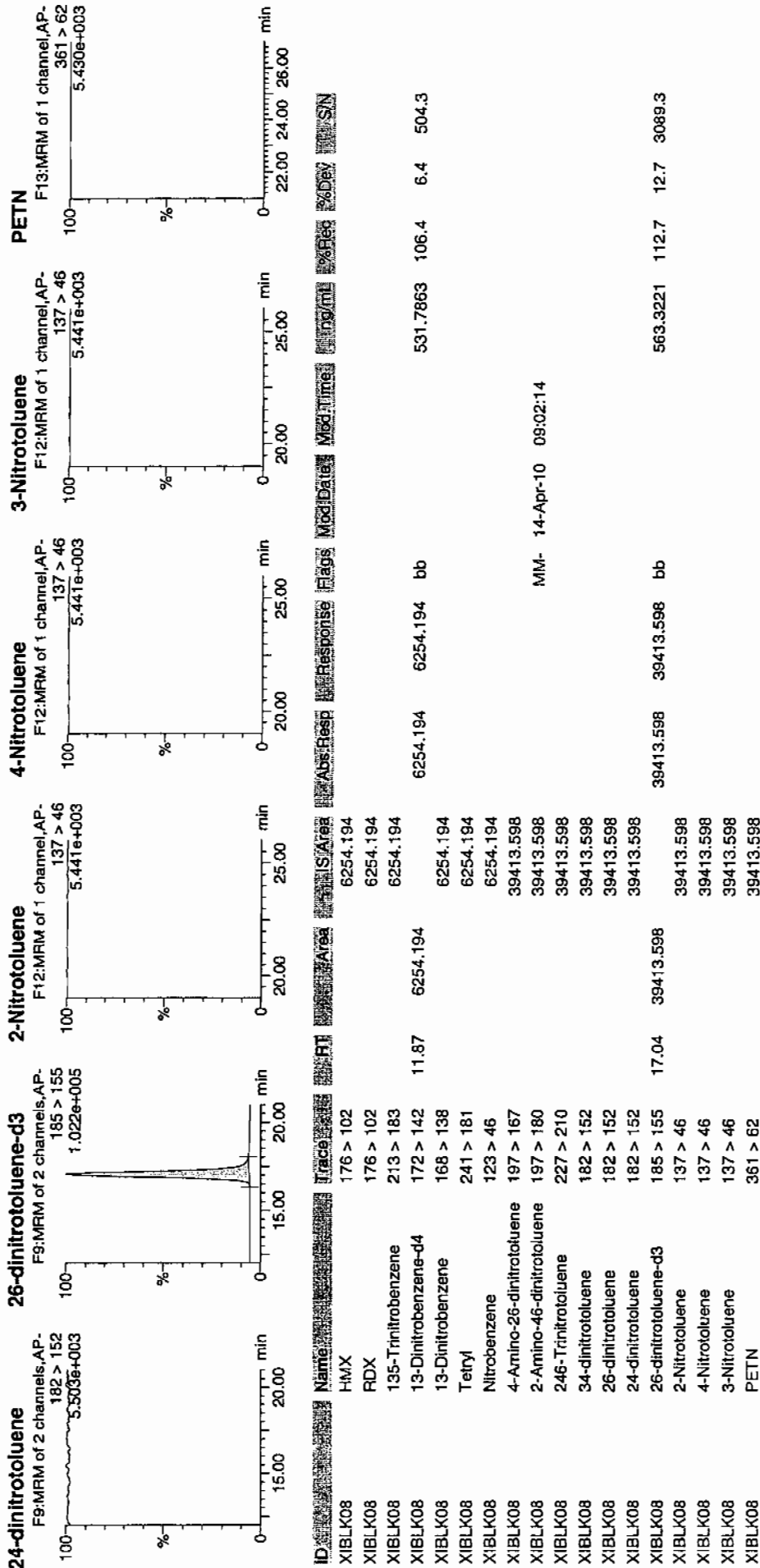


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 46 of 75

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 14-APR-10 03:34

GEL Data File: EXP0412074a

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	496.797
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	587.81
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412074a

Date: 14-Apr-2010

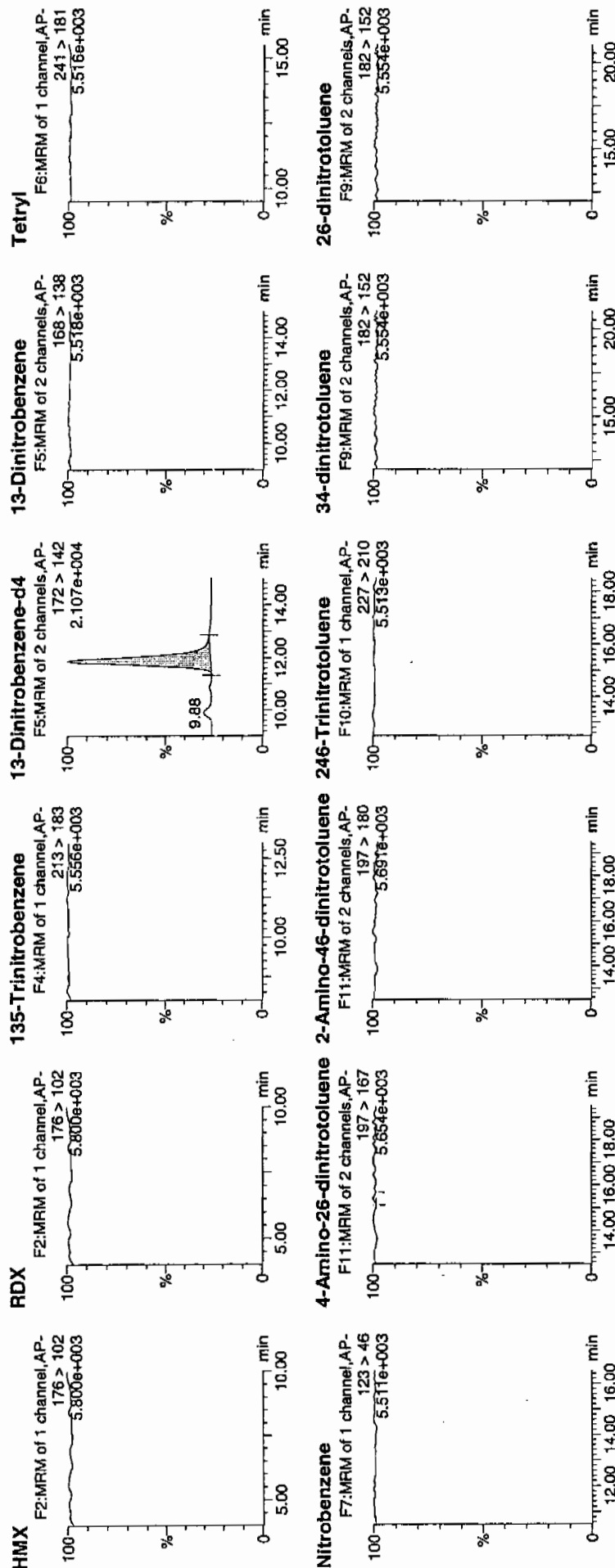
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ID: XIBLK09

Vial: 1:1,A

NOT
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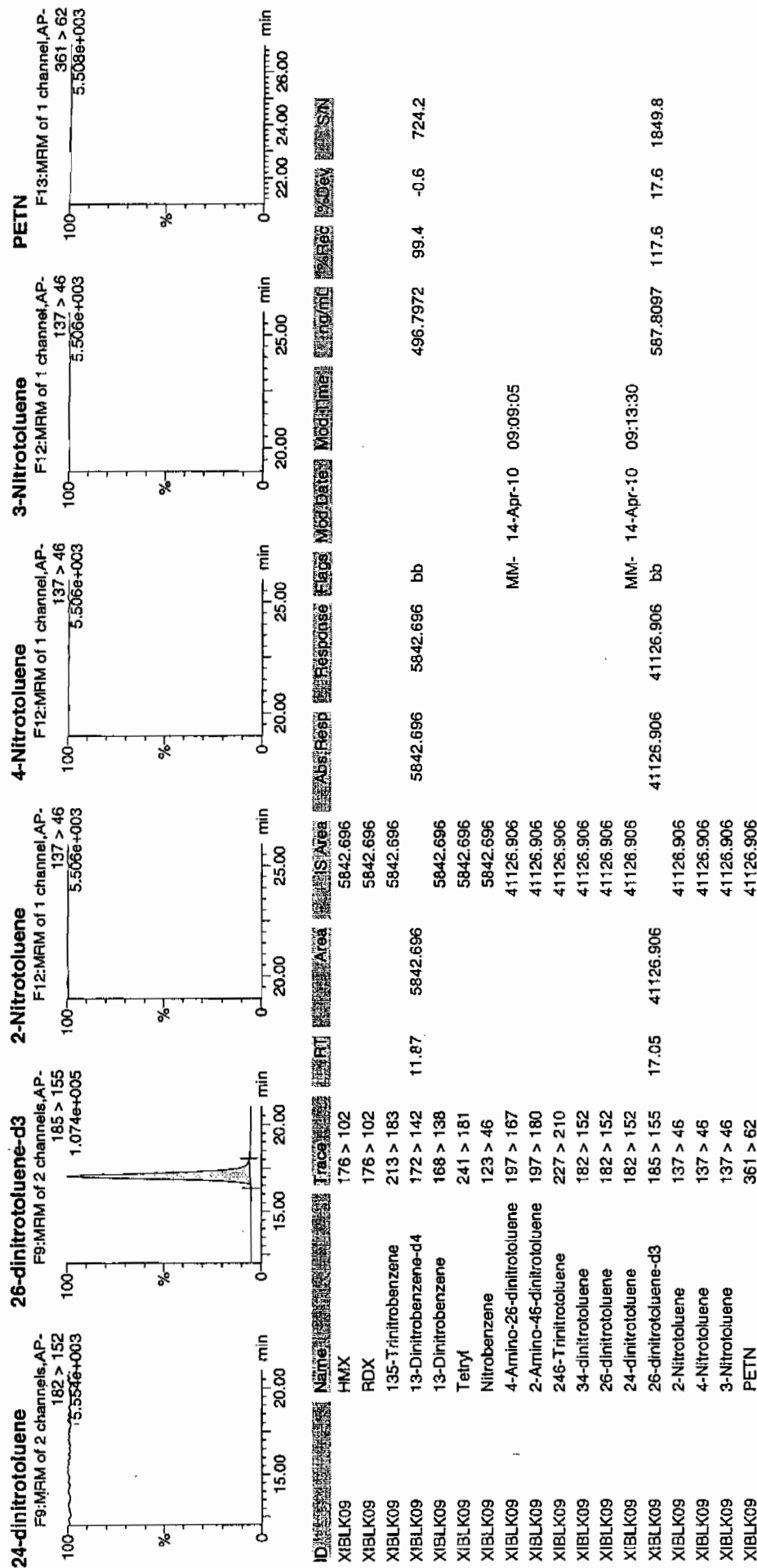
Amw 04/14/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 72 of 75

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: X1BLK10

Analysis Date: 14-APR-10 07:30

GEL Data File: EXP0412082a

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	517.729
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	520.204
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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412082a

Date: 14-Apr-2010

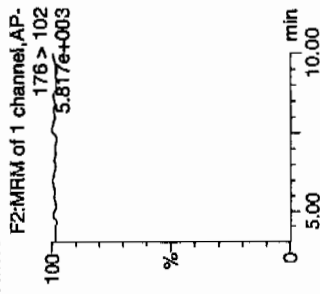
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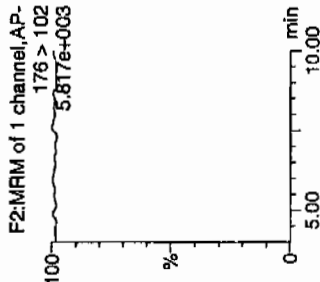
Vial: 1:1,F

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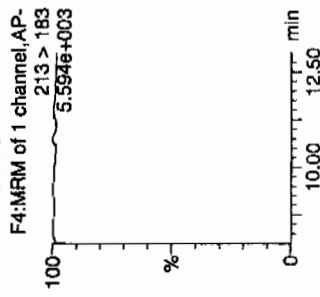
HMX



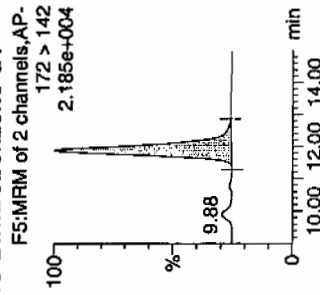
RDX



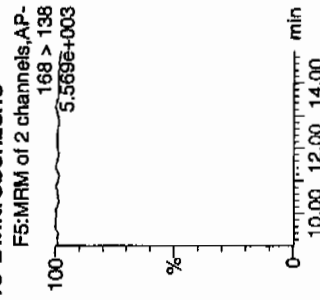
135-Trinitrobenzene



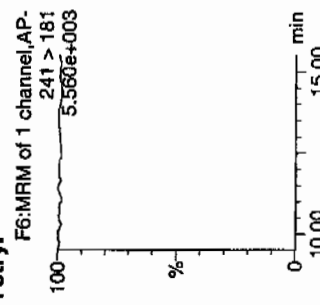
13-Dinitrobenzene-d4



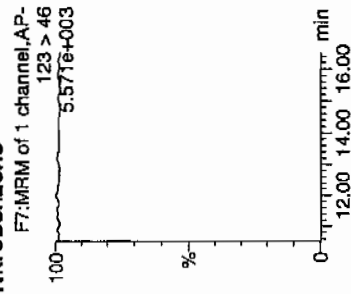
13-Dinitrobenzene



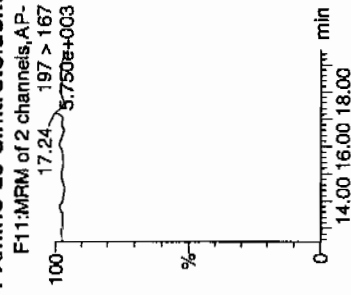
Tetryl



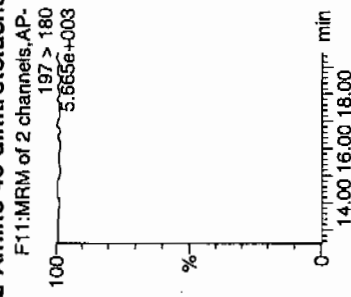
Nitrobenzene



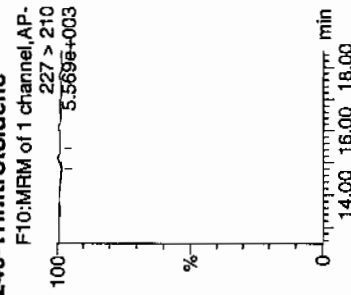
4-Amino-26-dinitrotoluene



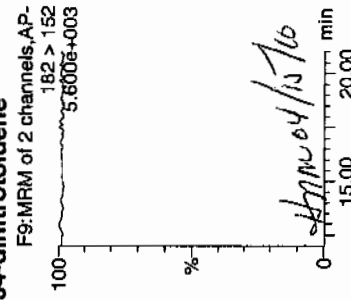
2-Amino-46-dinitrotoluene



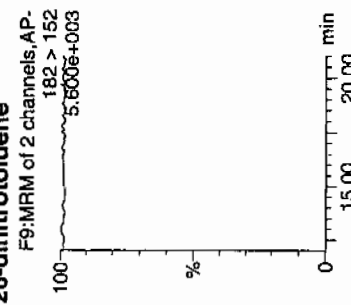
246-Trinitrotoluene



34-dinitrotoluene



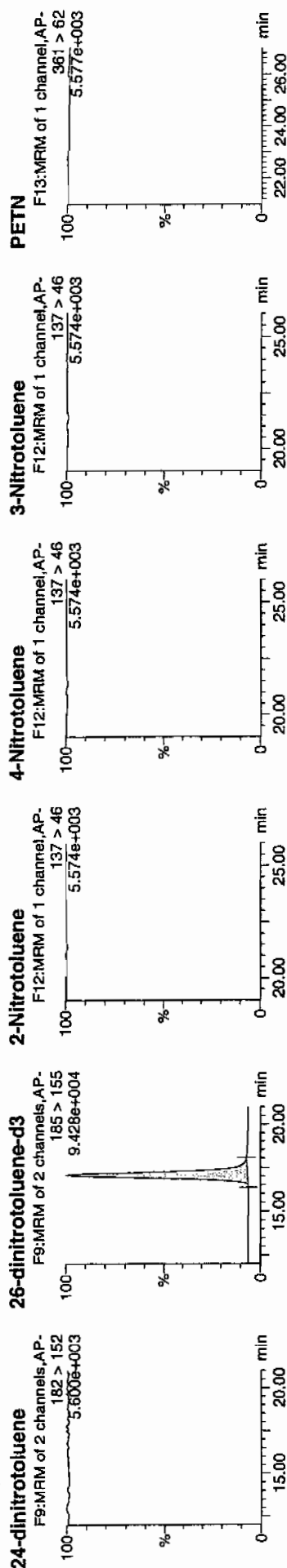
26-dinitrotoluene



Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 14-APR-10 08:58

GEL Data File: EXP0412085a

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	553.174
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	549.729
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\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0412085a

Date: 14-Apr-2010

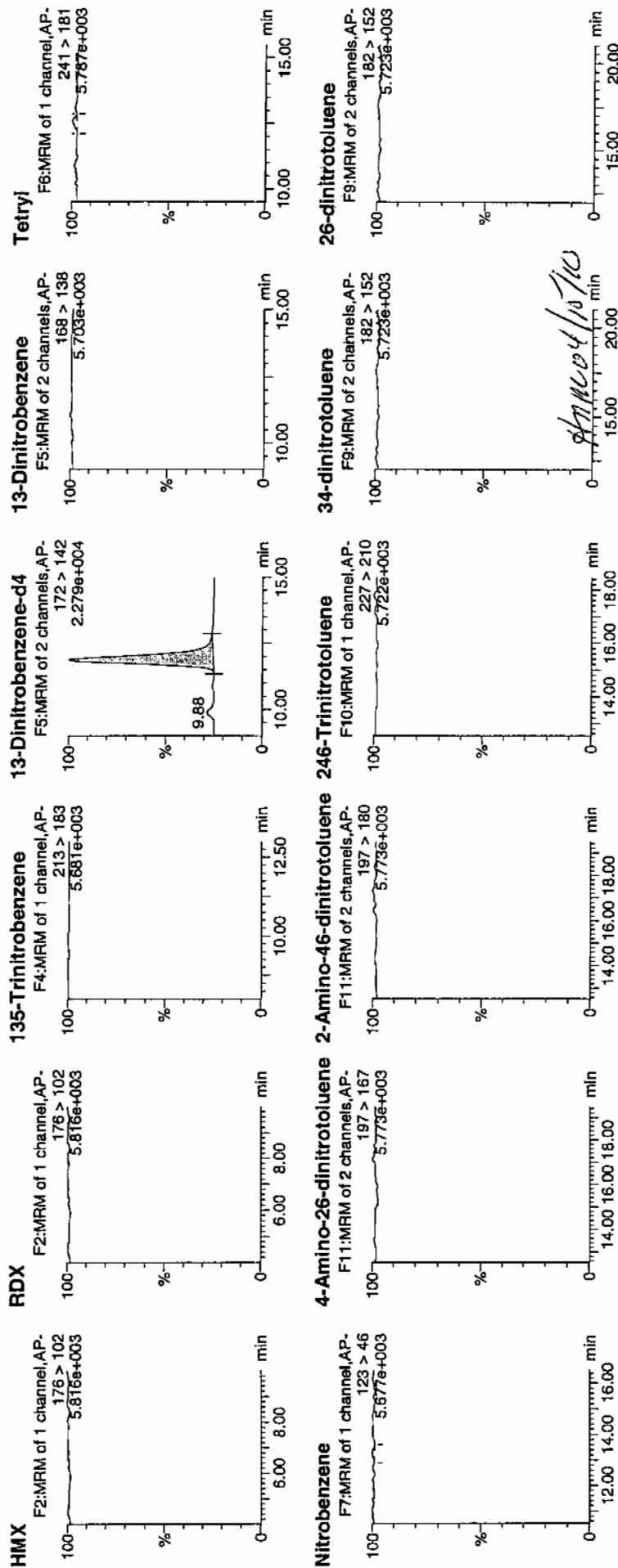
Time: 08:58:45

ID: XIBLK11

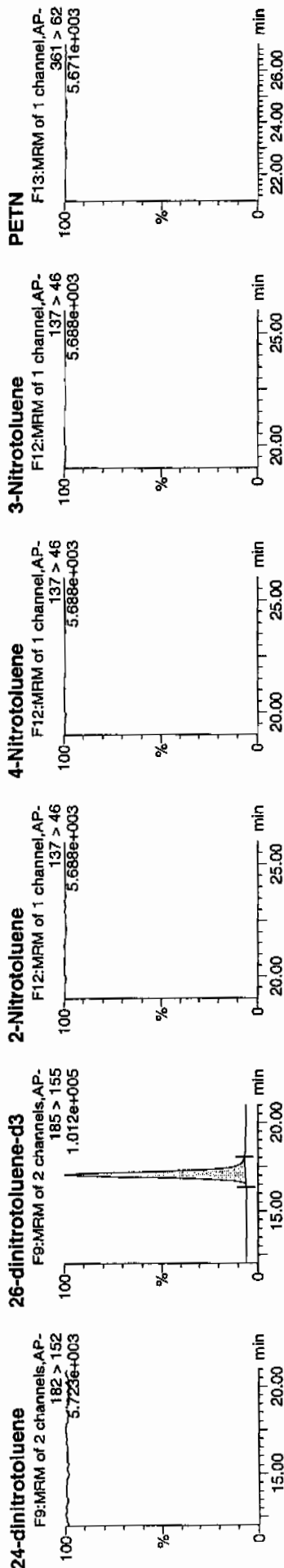
Vial: 1:1,F

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Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 14-APR-10 09:57

GEL Data File: EXP0412087a

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	561.908
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	512.757
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYN\New_Exp.PRO\041210expA2.qtd, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYN\NEW_EXP.PRO\Data\EXP0412087a

Date: 14-Apr-2010

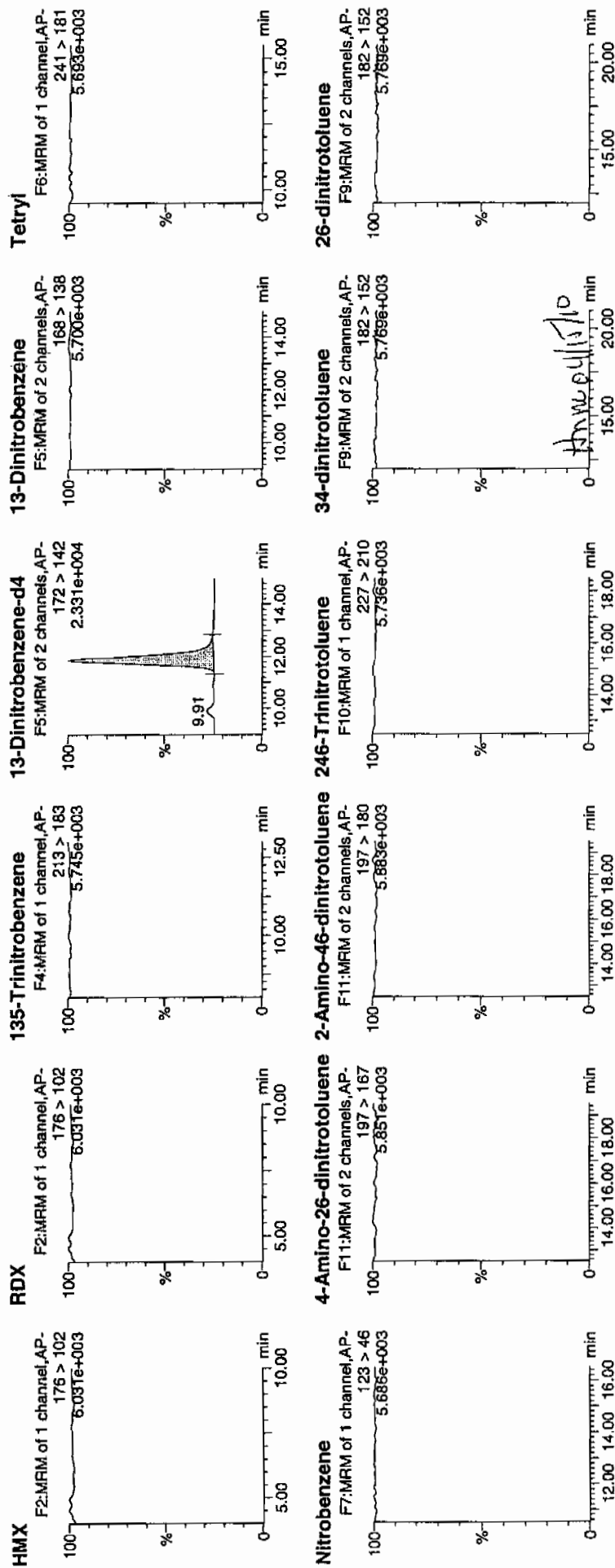
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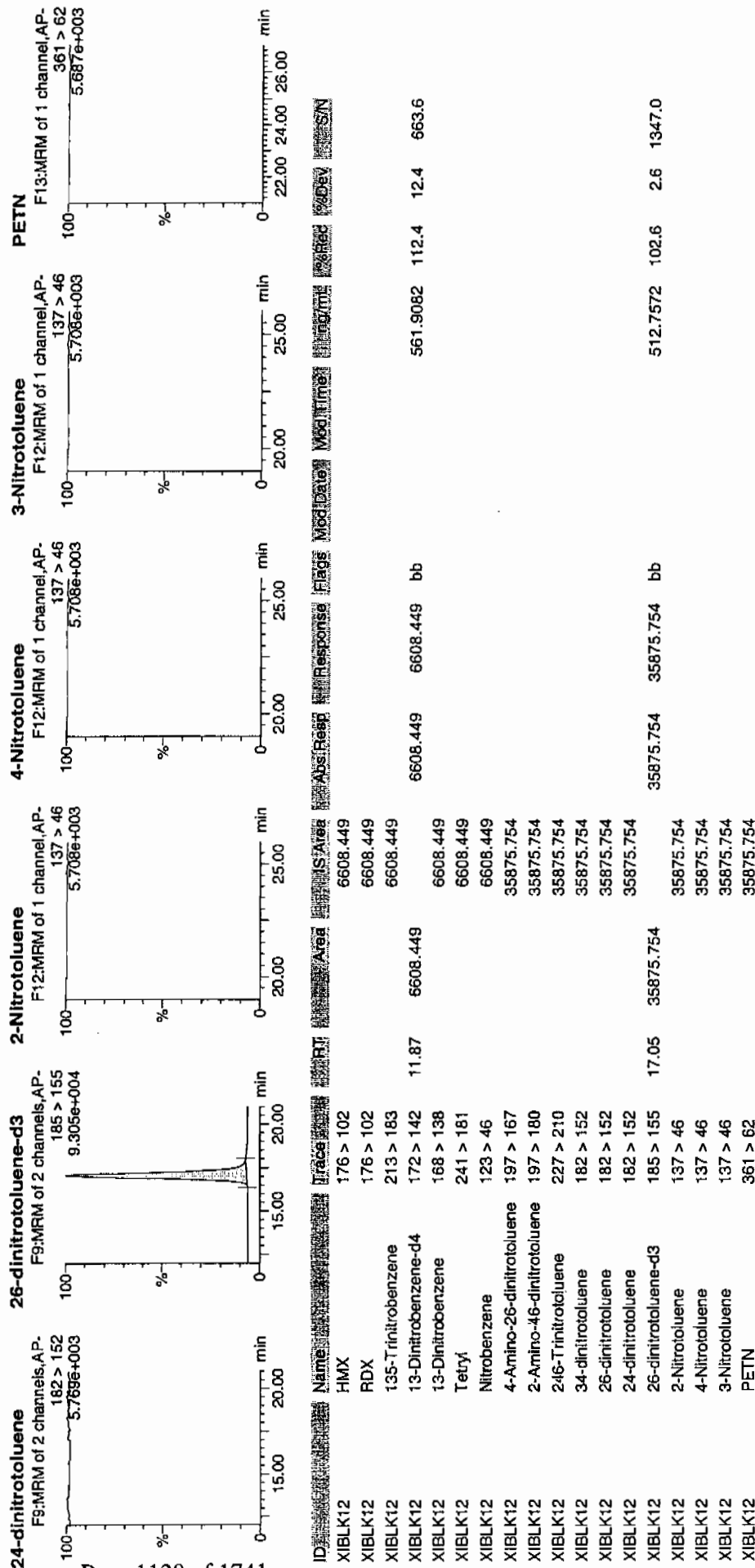
Vial: 1:1,A

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Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 14-APR-10 11:55

GEL Data File: EXP0412091a

Instrument ID: LCMSMS

Column: Phenomenex Ultra[®]carb 5u ODS(20)

Compound	True	Found (ug/L)
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	597.515
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	554.34
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

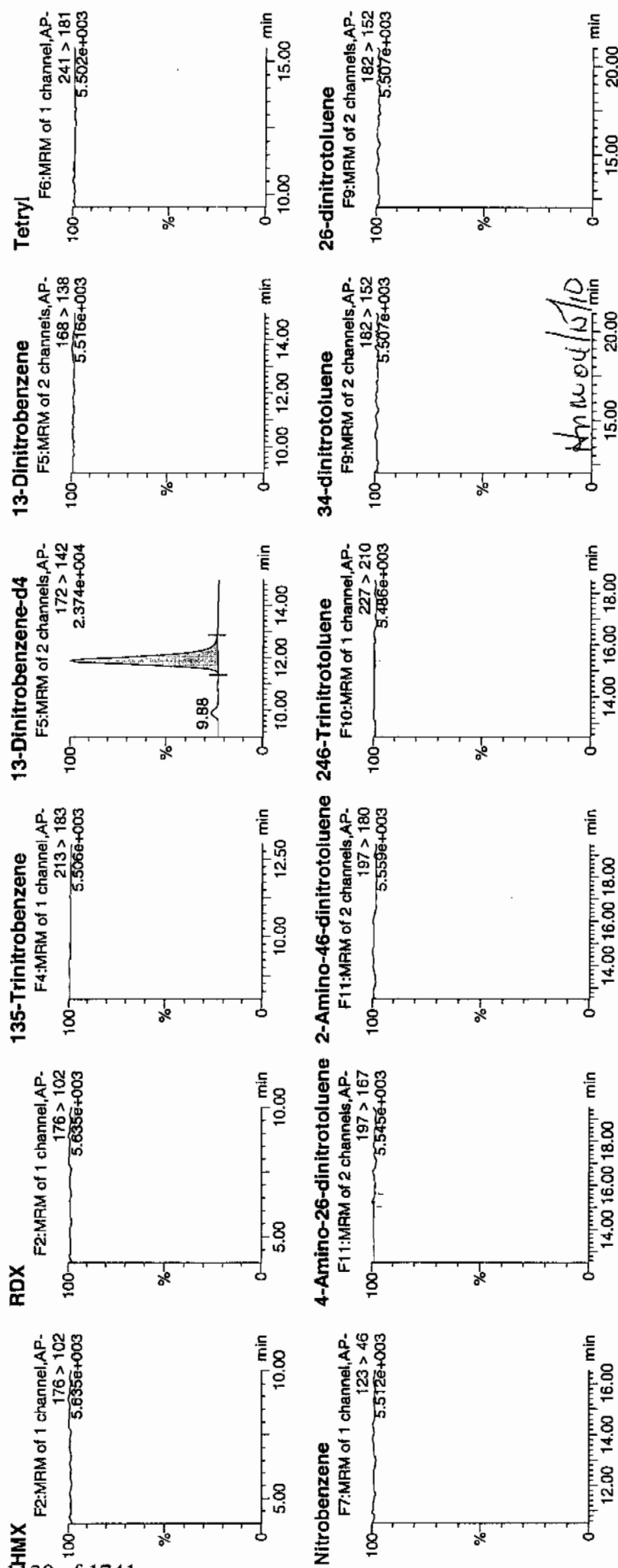
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Date: 14-Apr-2010

Time: 11:55:46

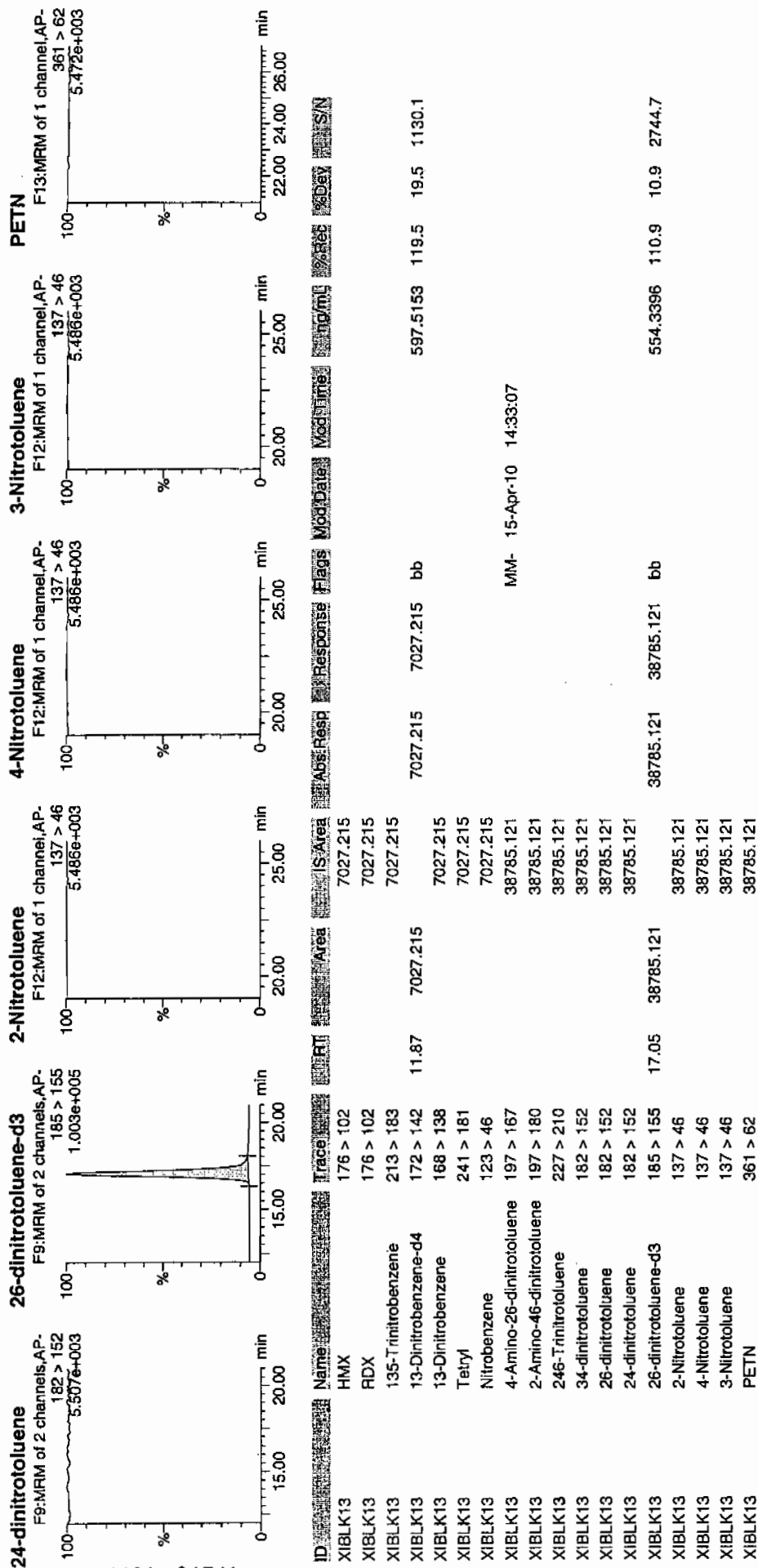
ID: XIBLK13

Vial: 1:1,F



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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 14-APR-10 15:22

GEL Data File: EXP0412098a

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	482.542
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	530.198
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412098a

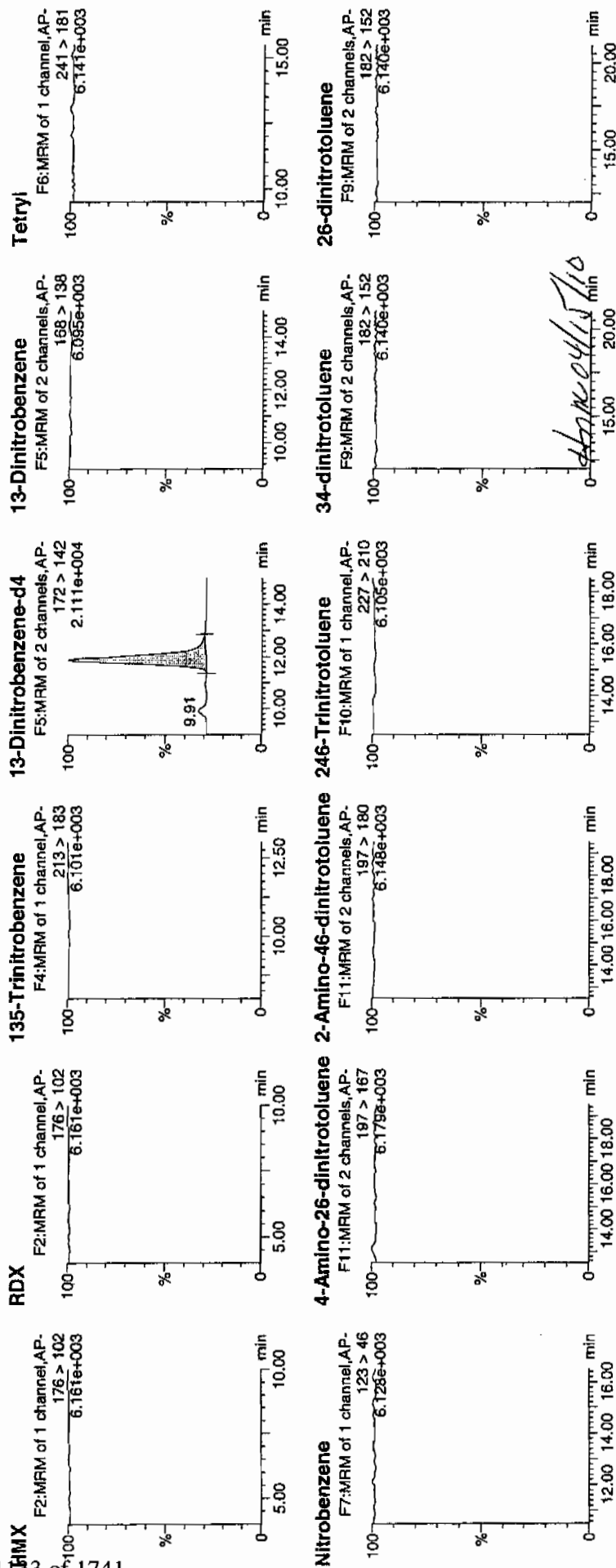
Date: 14-Apr-2010

Time: 15:22:16

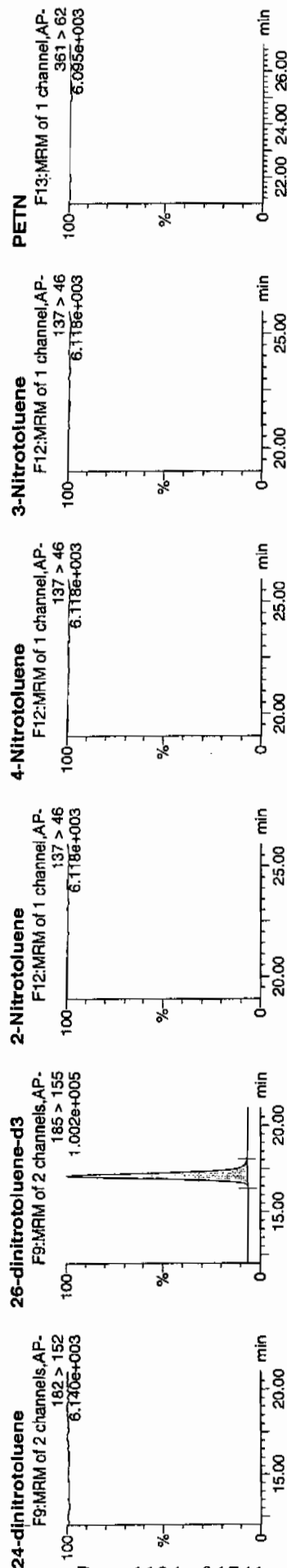
ID: XIBLK14

Vial: 1:1,F

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Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod:Time	Mod:Date	Mod:User	Mod:Sys
XIBLK14	HMx	176 > 102			5675.048							
XIBLK14	RDX	176 > 102			5675.048							
XIBLK14	135-Trinitrobenzene	213 > 183			5675.048							
XIBLK14	13-Dinitrobenzene-d4	172 > 142	11.87	5675.048		5675.048	5675.048	bb	482.5423	96.5	-3.5	195.2
XIBLK14	13-Dinitrobenzene	168 > 138			5675.048							
XIBLK14	Tetryl	241 > 181			5675.048							
XIBLK14	Nitrobenzene	123 > 46			5675.048							
XIBLK14	4-Amino-26-dinitrotoluene	197 > 167			37096.008							
XIBLK14	2-Amino-46-dinitrotoluene	197 > 180			37096.008							
XIBLK14	246-Trinitrotoluene	227 > 210			37096.008							
XIBLK14	34-dinitrotoluene	182 > 152			37096.008							
XIBLK14	26-dinitrotoluene	182 > 152			37096.008							
XIBLK14	26-dinitrotoluene-d3	185 > 155	17.07	37096.008		37096.008	37096.008	bb	530.1978	106.0	6.0	2912.1
XIBLK14	2-Nitrotoluene	137 > 46			37096.008							
XIBLK14	4-Nitrotoluene	137 > 46			37096.008							
XIBLK14	3-Nitrotoluene	137 > 46			37096.008							
XIBLK14	PETN	361 > 62			37096.008							

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 14-APR-10 16:21

GEL Data File: EXP0412100a

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	528.222
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	547.698
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\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412100a

Date: 14-Apr-2010

Time: 16:21:17

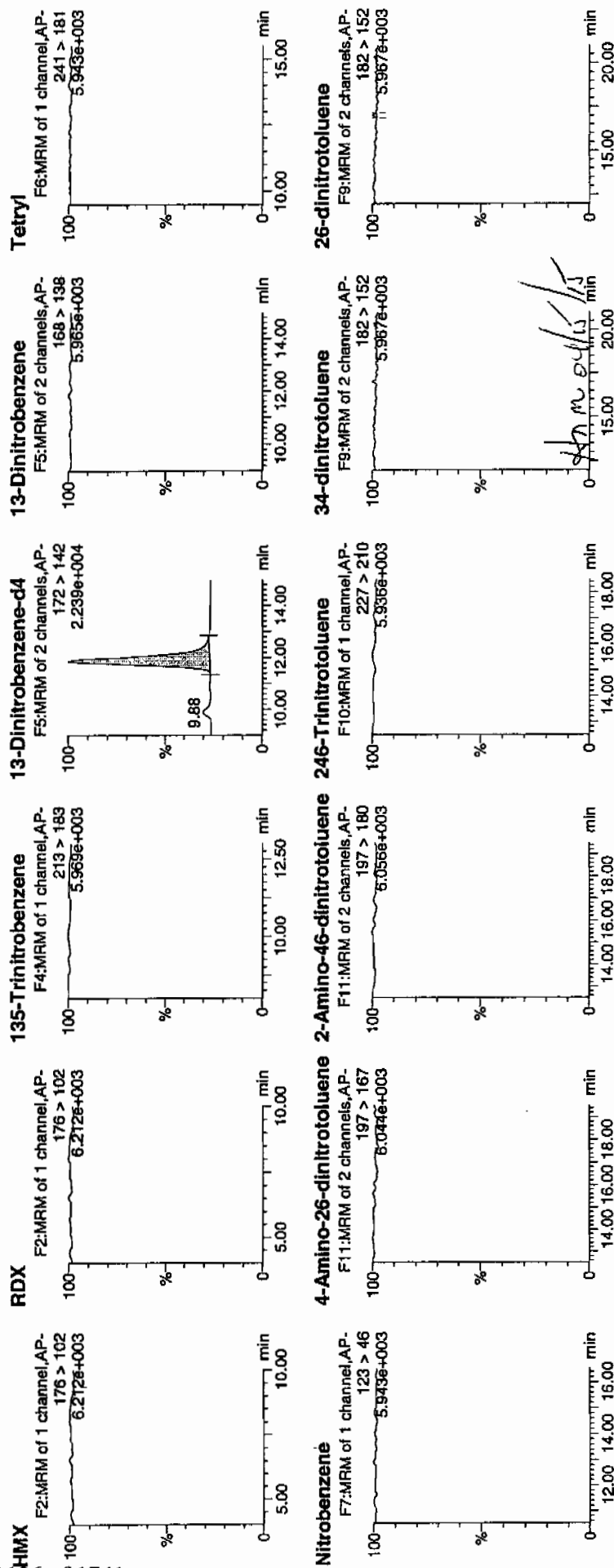
ID: XIBLK15

Vial: 1:1,A

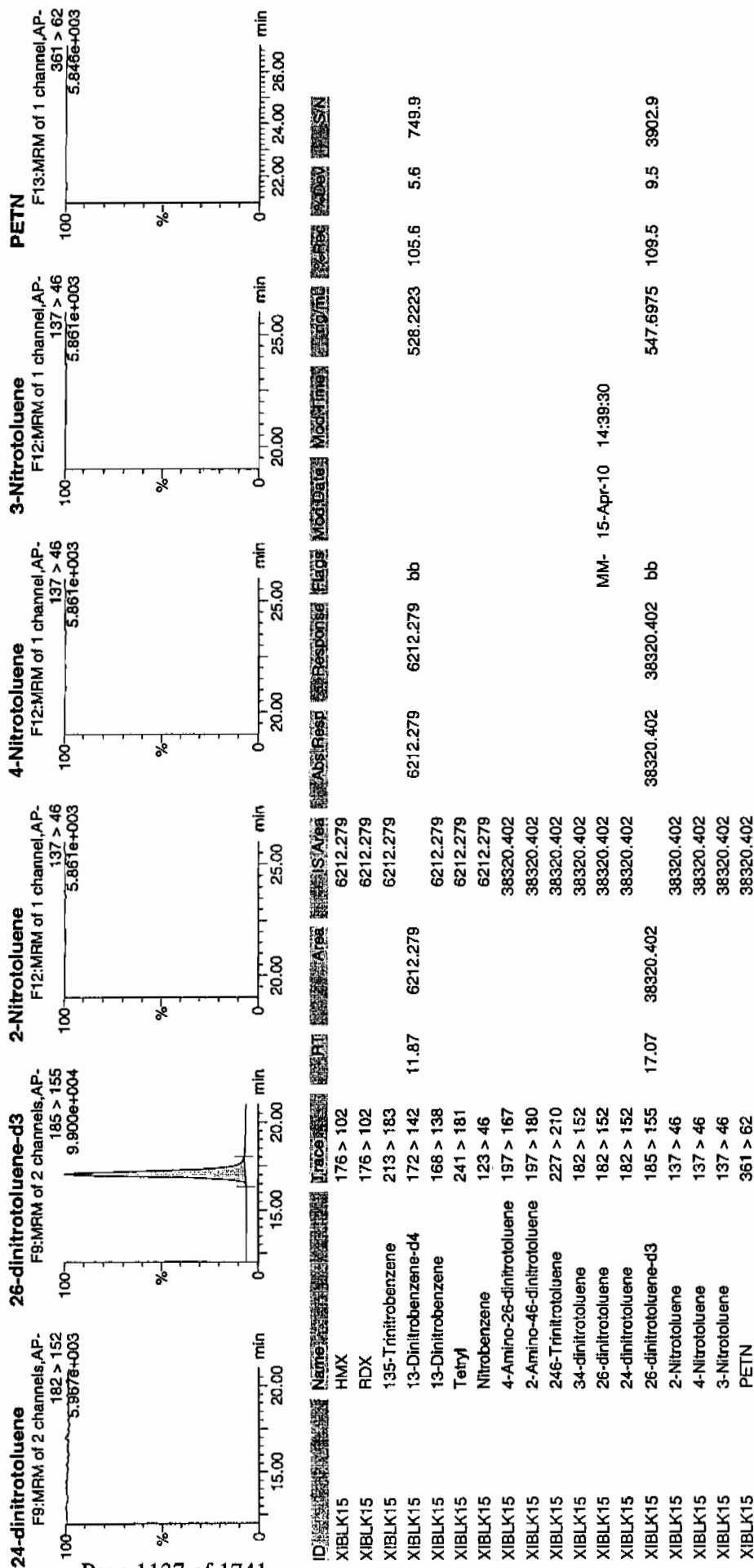
4/15/10

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Dataset: C:\MASSLYNX\New_Exp\PRO1041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 14-APR-10 21:45

GEL Data File: EXP0412111a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	585.843
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	578.061
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0412111a

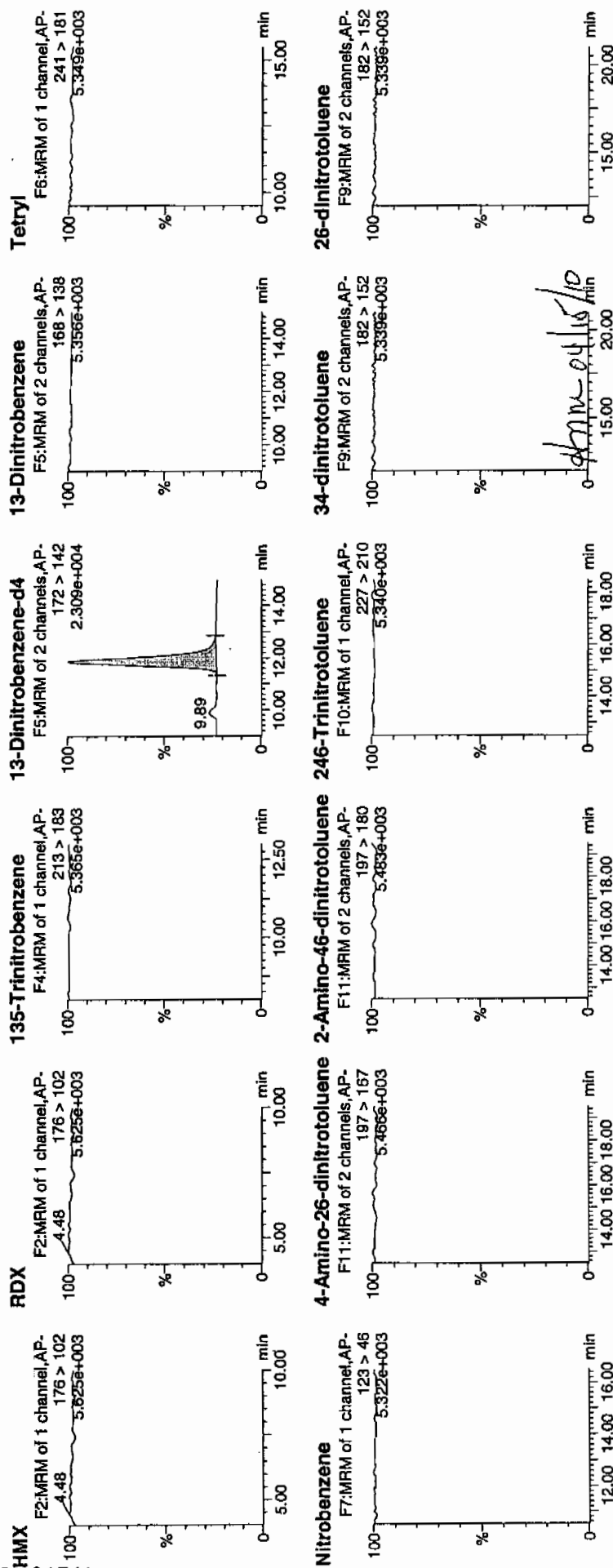
Date: 14-Apr-2010

Time: 21:45:50

ID: XIBLK16

Vial: 1:1,A

MR
4/15/10

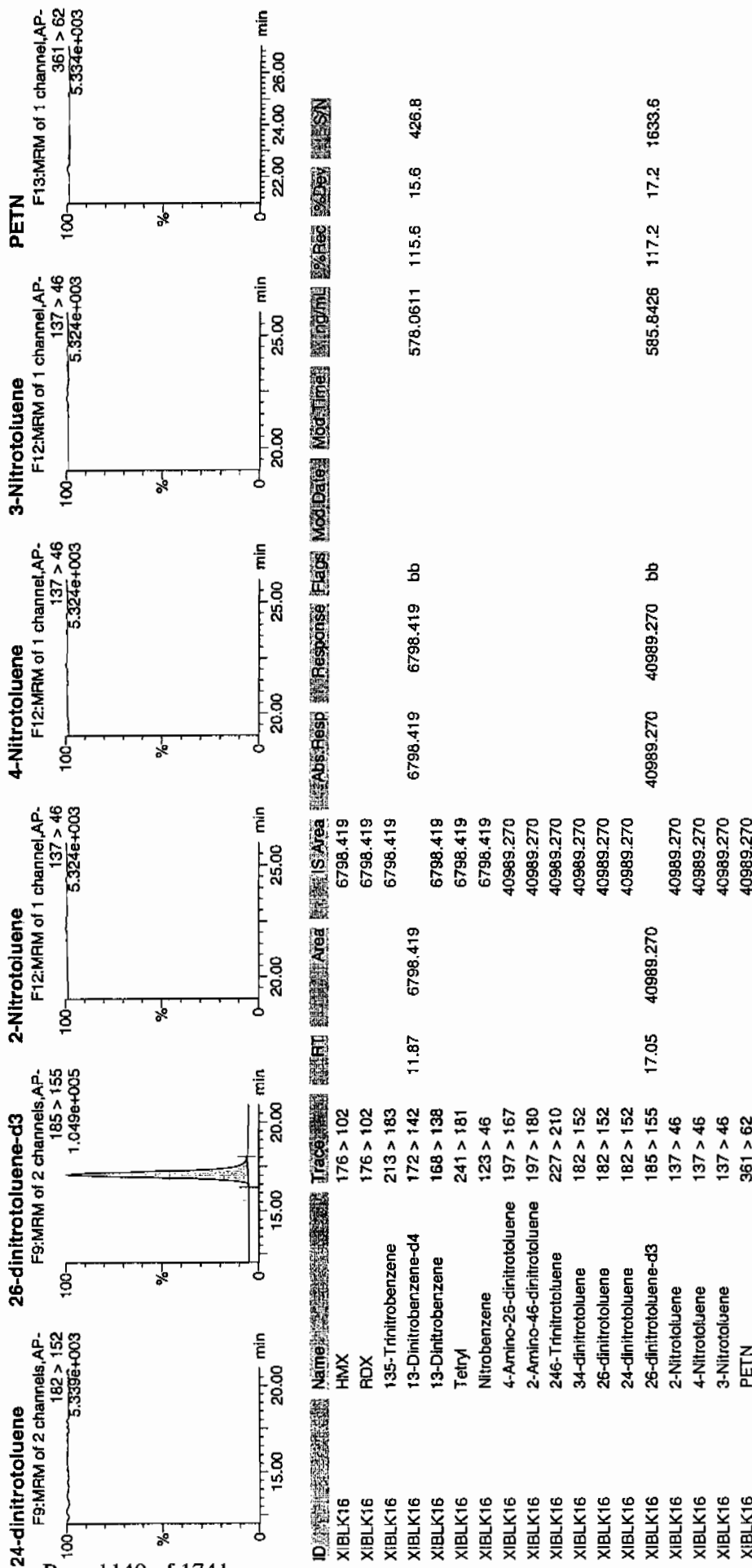


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 72 of 137

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 15-APR-10 04:09

GEL Data File: EXP0412124a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	558.188
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	556.693
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYN\NEW_EXP_PRO\Data\EXP0412124a

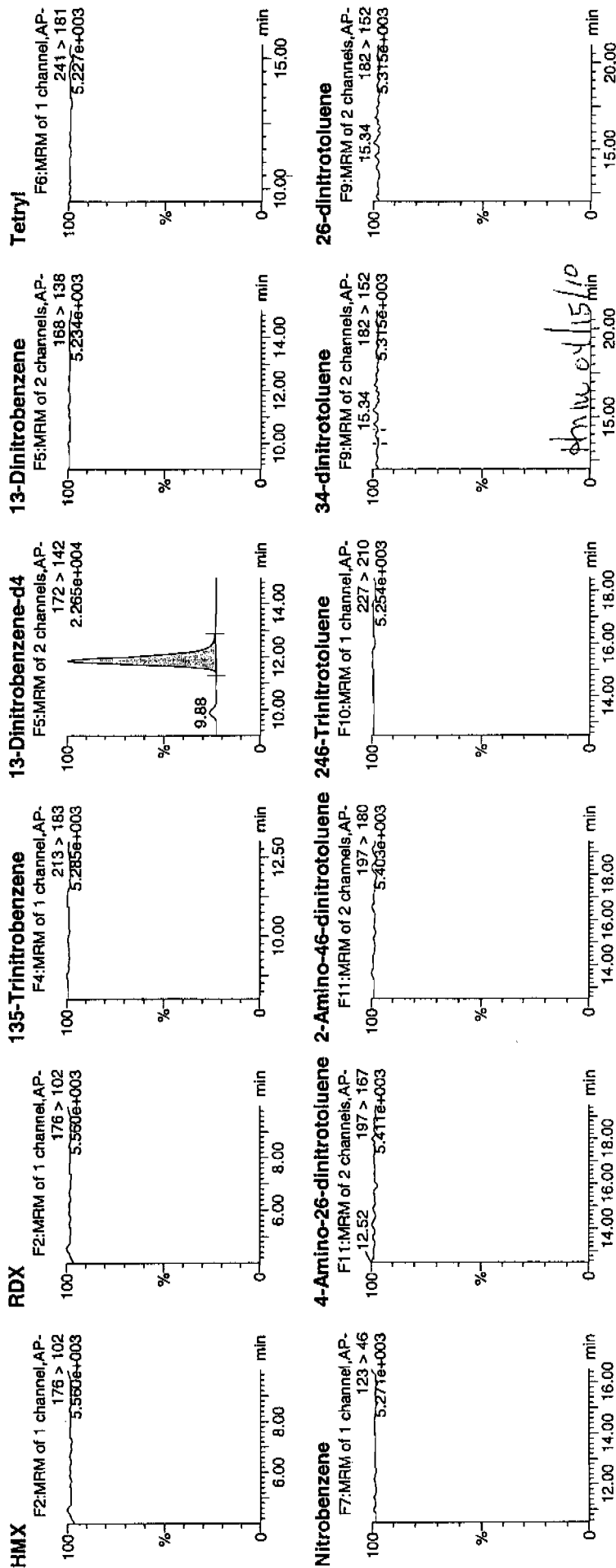
Date: 15-Apr-2010

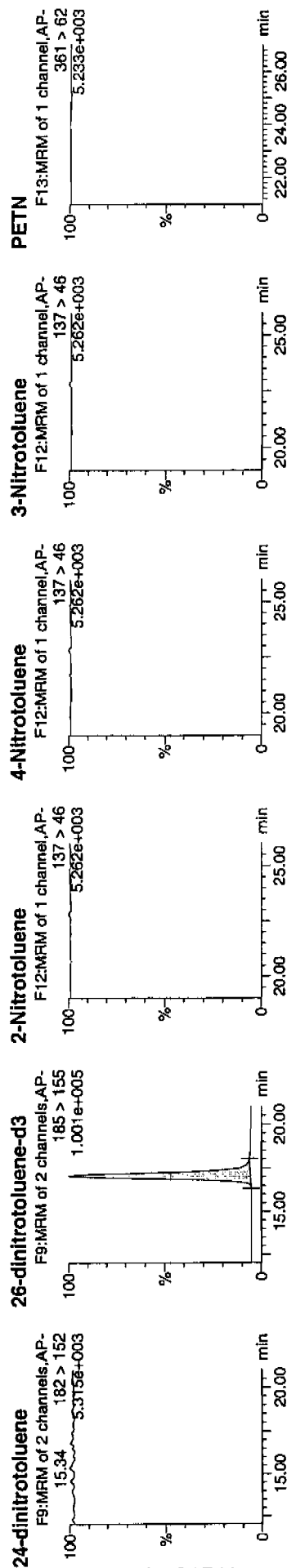
Time: 04:09:26

ID: XIBLK17

Vial: 1:1,A

15/15/10





ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Inj mL	% Rec	% Dev	SN
XIBLK17	HMx	176 > 102			6564.699									
XIBLK17	RDX	176 > 102			6564.699									
XIBLK17	135-Trinitrobenzene	213 > 183			6564.699									
XIBLK17	13-Dinitrobenzene-d4	172 > 142	11.87	6564.699		6564.699	6564.699	bb			558.1882	111.6	11.6	601.1
XIBLK17	13-Dinitrobenzene	168 > 138			6564.699									
XIBLK17	Tetryl	241 > 181			6564.699									
XIBLK17	Nitrobenzene	123 > 46			6564.699									
XIBLK17	4-Amino-26-dinitrotoluene	197 > 167			38949.785									
XIBLK17	2-Amino-46-dinitrotoluene	197 > 180			38949.785									
XIBLK17	246-Trinitrotoluene	227 > 210			38949.785									
XIBLK17	34-dinitrotoluene	182 > 152			38949.785				MM-	15-Apr-10	14:37:19			
XIBLK17	26-dinitrotoluene	182 > 152			38949.785									
XIBLK17	24-dinitrotoluene	182 > 152			38949.785									
XIBLK17	26-dinitrotoluene-d3	185 > 155	17.05	38949.785		38949.785	38949.785	bb			556.6931	111.3	11.3	2195.8
XIBLK17	2-Nitrotoluene	137 > 46			38949.785									
XIBLK17	4-Nitrotoluene	137 > 46			38949.785									
XIBLK17	3-Nitrotoluene	137 > 46			38949.785									
XIBLK17	PETN	361 > 62			38949.785									

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK18

Analysis Date: 15-APR-10 10:03

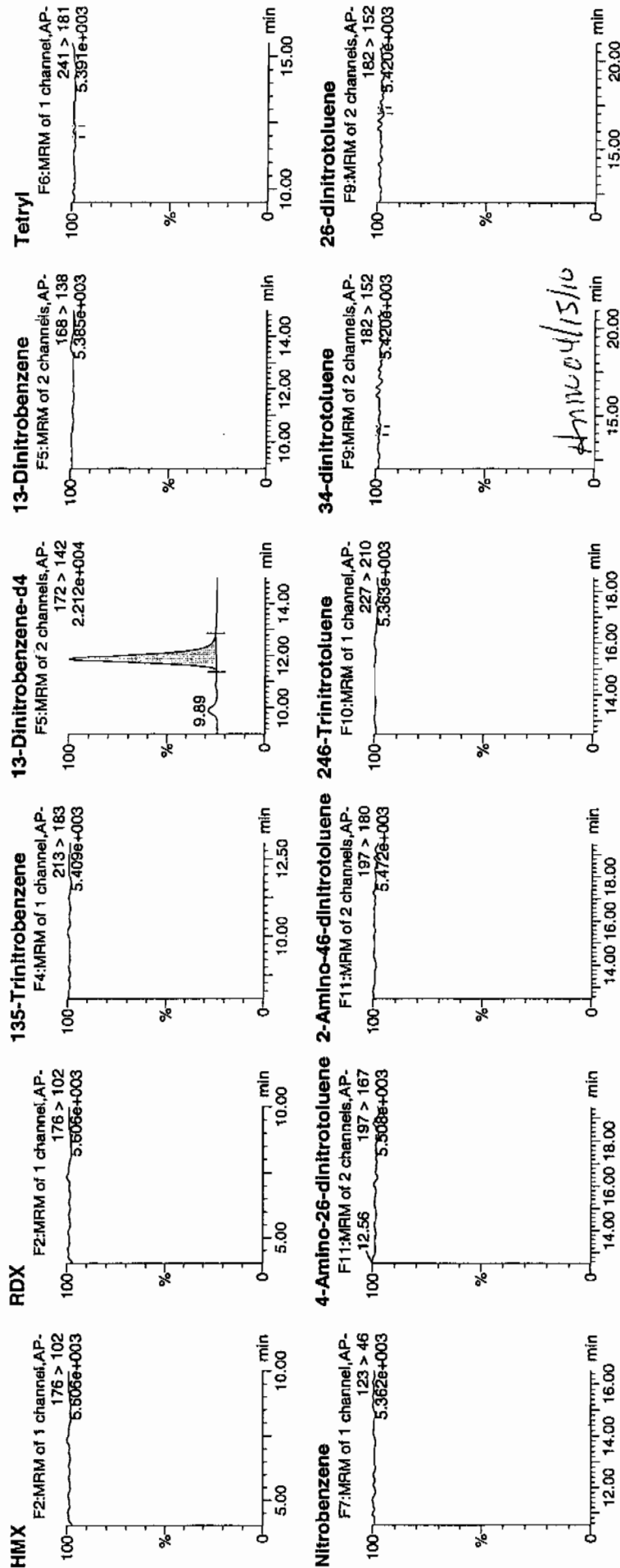
GEL Data File: EXP0412136a

Instrument ID: LCMSMS

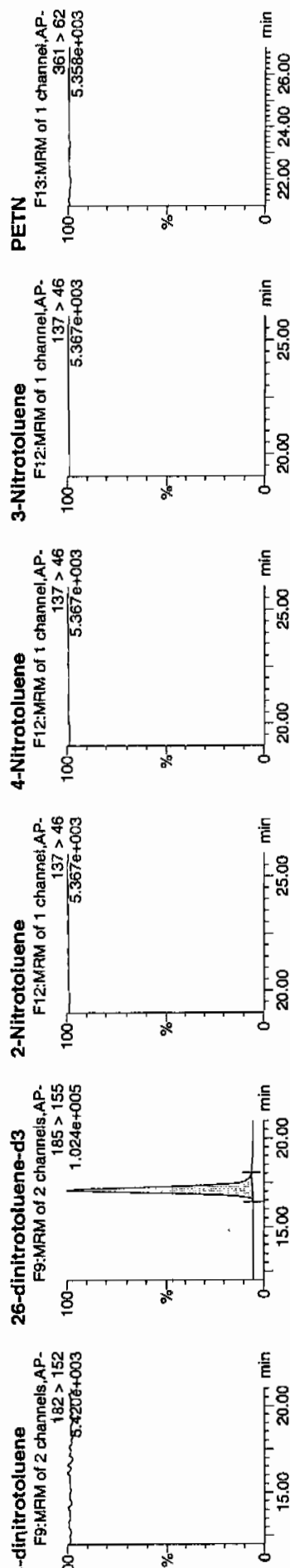
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	541.68
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	563.838
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

WAT
4/15/10



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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK19

Analysis Date: 15-APR-10 13:00

GEL Data File: EXP0412142a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	473.748
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	449.474
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0412142a

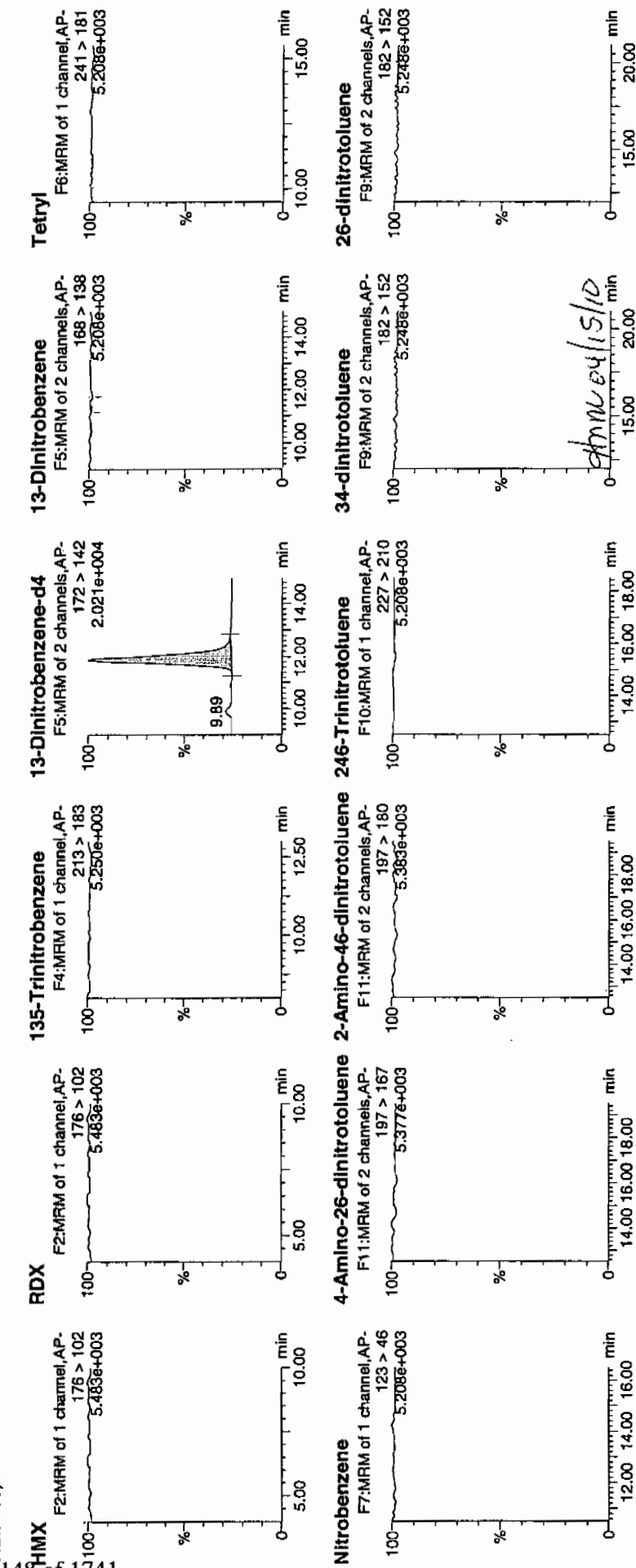
Date: 15-Apr-2010

Time: 13:00:42

ID: XIBLK19

Vial: 1:1,A

Handwritten: 1/15/10

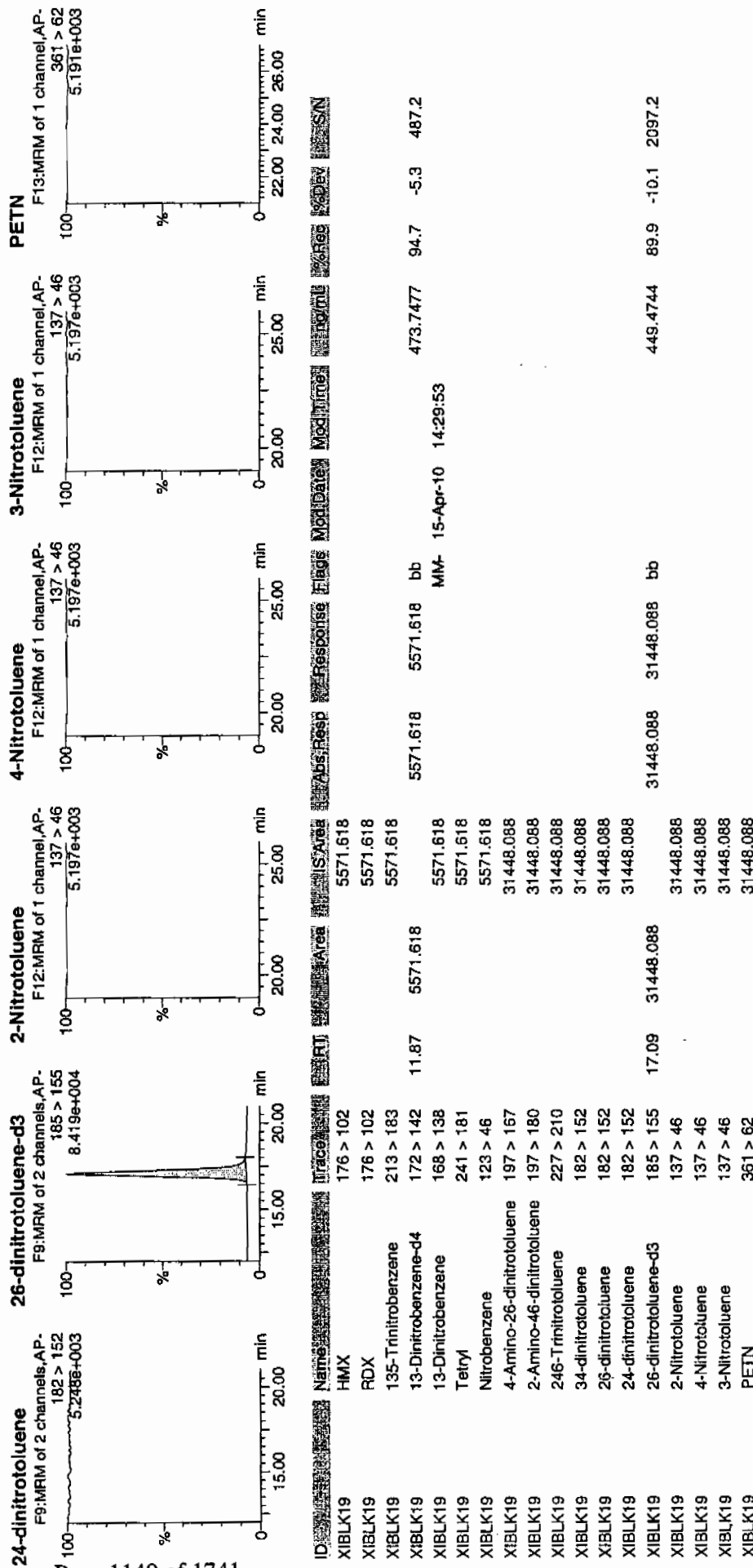


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 134 of 137

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK20

Analysis Date: 15-APR-10 19:24

GEL Data File: EXP0412155a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	526.718
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	604.661
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\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412155a

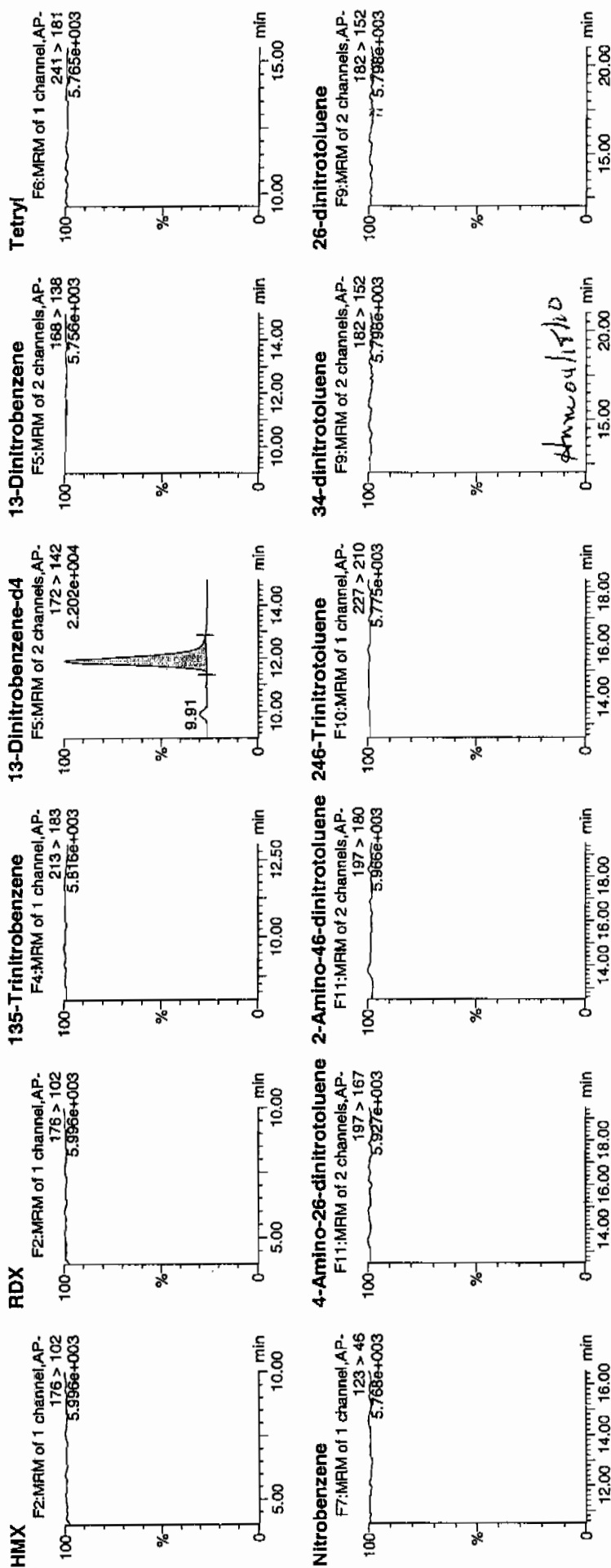
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Time: 19:24:15

ID: XIBLK20

Vial: 1:1,A

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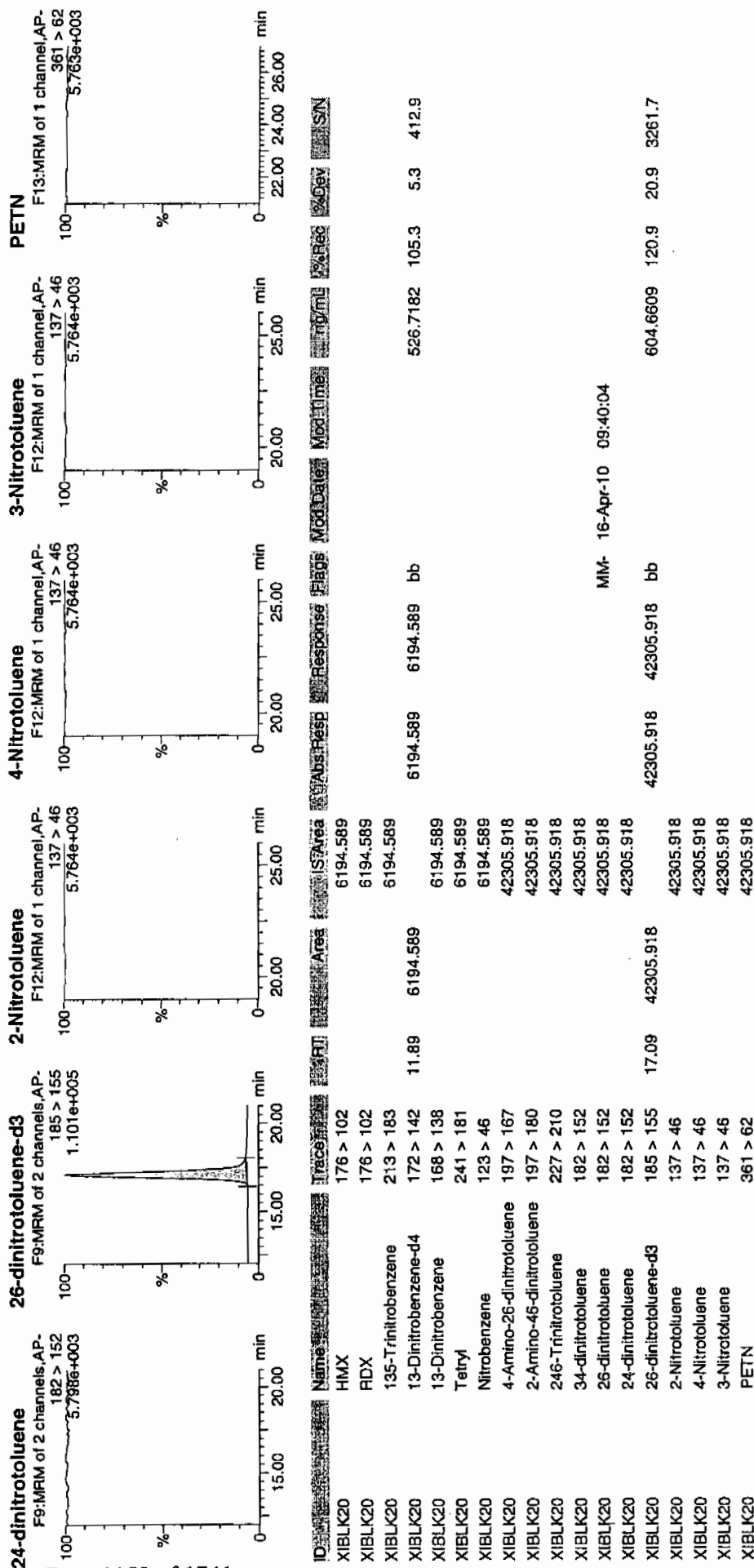


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 24 of 71

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK21

Analysis Date: 15-APR-10 23:49

GEL Data File: EXP0412164a

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	552.7
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	545.776
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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412164a

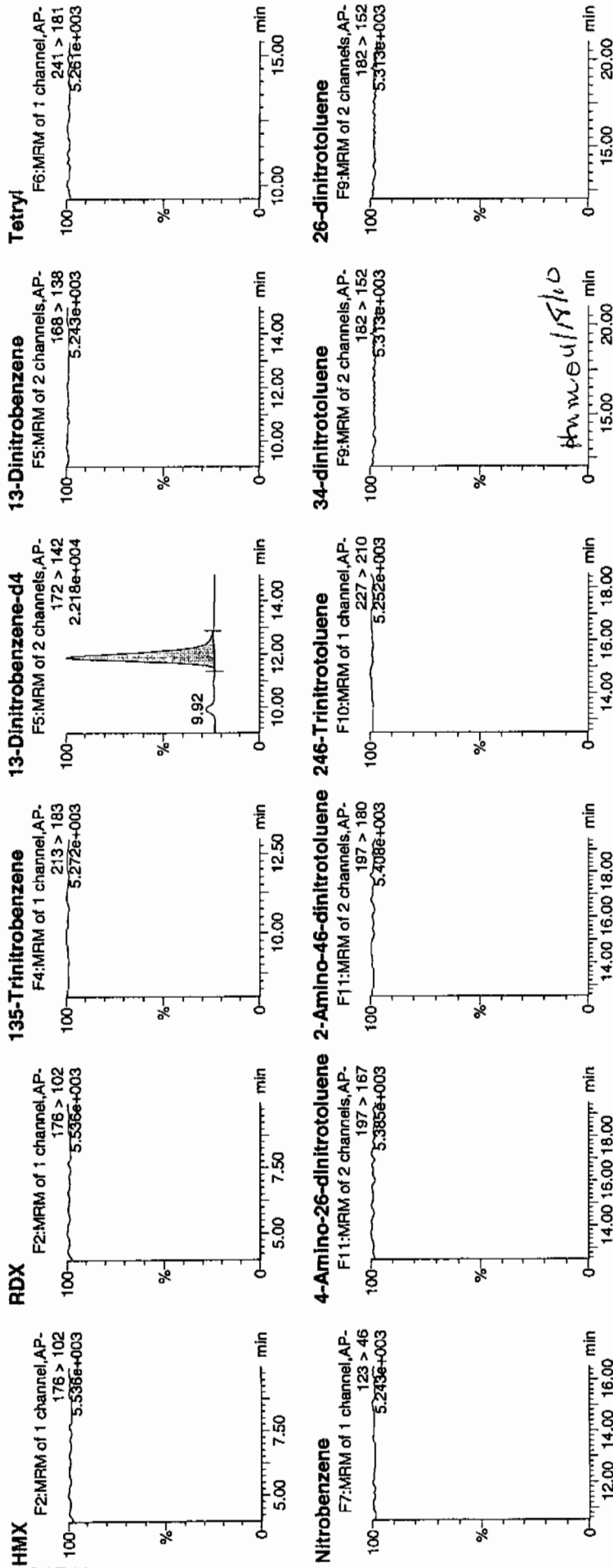
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Time: 23:49:43

ID: XIBLK21

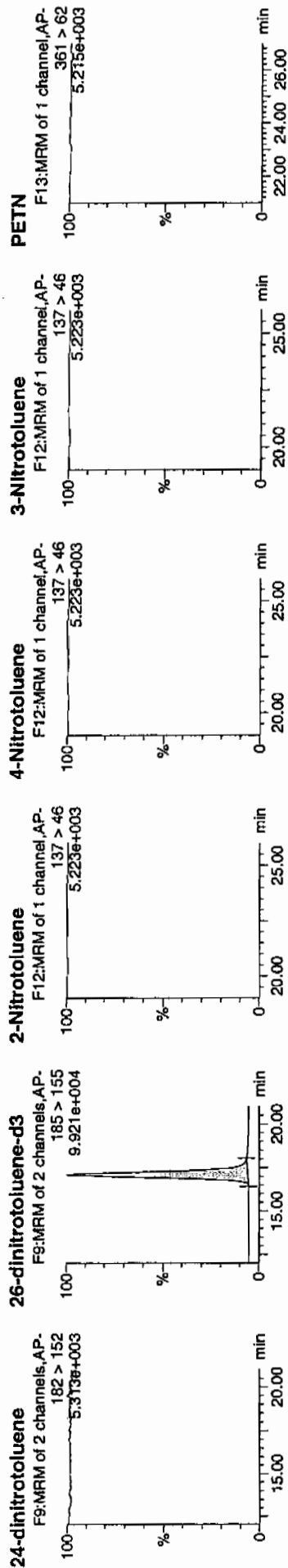
Vial: 1:1,A

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int/m	%Rec	%Dev	S/N
XIBLK21	HMX	176 > 102			6500.154									
XIBLK21	RDX	176 > 102			6500.154									
XIBLK21	135-Trinitrobenzene	213 > 183			6500.154									
XIBLK21	13-Dinitrobenzene-d4	172 > 142	11.87	6500.154			6500.154	bb			552.7000	110.5	10.5	411.5
XIBLK21	13-Dinitrobenzene	168 > 138			6500.154									
XIBLK21	Tetryl	241 > 181			6500.154									
XIBLK21	Nitrobenzene	123 > 46			6500.154									
XIBLK21	4-Amino-26-dinitrotoluene	197 > 167			38185.949									
XIBLK21	2-Amino-46-dinitrotoluene	197 > 180			38185.949									
XIBLK21	246-Trinitrotoluene	227 > 210			38185.949									
XIBLK21	34-dinitrotoluene	182 > 152			38185.949									
XIBLK21	26-dinitrotoluene	182 > 152			38185.949									
XIBLK21	24-dinitrotoluene	182 > 152			38185.949									
XIBLK21	26-dinitrotoluene-d3	185 > 155	17.09	38185.949			38185.949	bb	MM- 16-Apr-10	09:43:37	545.7759	109.2	9.2	2984.5
XIBLK21	2-Nitrotoluene	137 > 46			38185.949									
XIBLK21	4-Nitrotoluene	137 > 46			38185.949									
XIBLK21	3-Nitrotoluene	137 > 46			38185.949									
XIBLK21	PETN	361 > 62			38185.949									

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK22

Analysis Date: 16-APR-10 06:13

GEL Data File: EXP0412177a

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	535.916
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	541.912
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0412177a

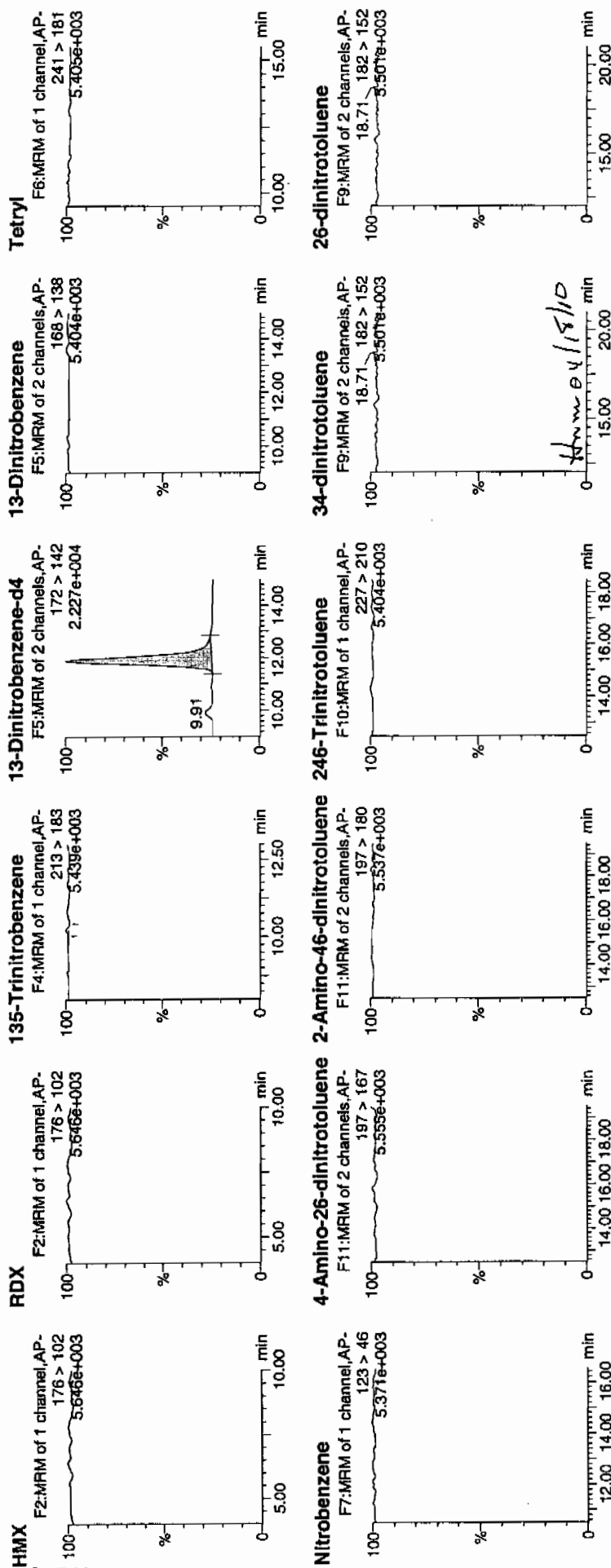
Date: 16-Apr-2010

Time: 06:13:19

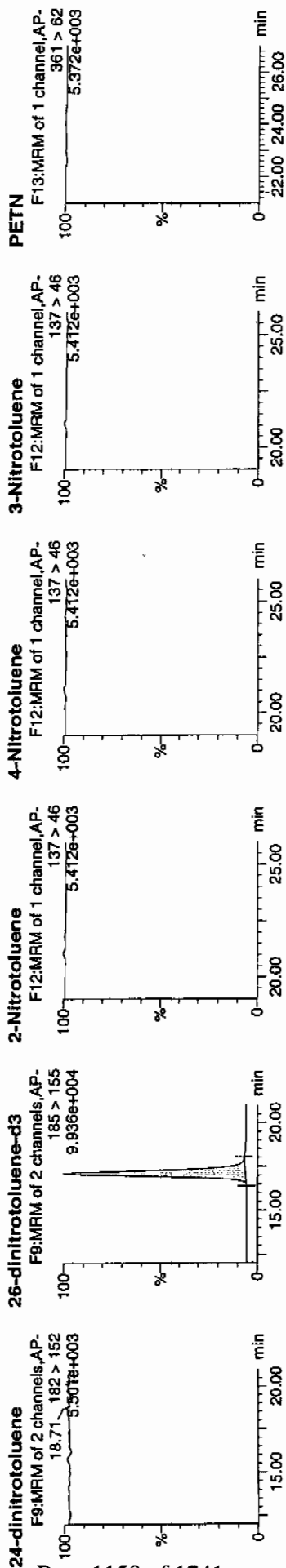
ID: XIBLK22

Vial: 1:1,A

WAT
4/16/10



Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



ID	Name	Trace	RT	Area	Area	Abs Resp	Response	Flags	Mod Date	Mod Time	20Sec	%Dev	SN
XIBLK22	HMZ	176 > 102			6302.765								
XIBLK22	RDX	176 > 102			6302.765								
XIBLK22	135-Trinitrobenzene	213 > 183			6302.765								
XIBLK22	13-Dinitrobenzene-d4	172 > 142	11.87	6302.765					MM-	16-Apr-10	09:36:23		
XIBLK22	13-Dinitrobenzene	168 > 138			6302.765								
XIBLK22	Tetryl	241 > 181			6302.765								
XIBLK22	Nitrobenzene	123 > 46			6302.765								
XIBLK22	4-Amino-26-dinitrotoluene	197 > 167			37915.594								
XIBLK22	2-Amino-46-dinitrotoluene	197 > 180			37915.594								
XIBLK22	246-Trinitrotoluene	227 > 210			37915.594								
XIBLK22	34-dinitrotoluene	182 > 152			37915.594								
XIBLK22	26-dinitrotoluene	182 > 152			37915.594								
XIBLK22	24-dinitrotoluene	182 > 152			37915.594								
XIBLK22	26-dinitrotoluene-d3	185 > 155	17.09	37915.594									
XIBLK22	2-Nitrotoluene	137 > 46			37915.594								
XIBLK22	4-Nitrotoluene	137 > 46			37915.594								
XIBLK22	3-Nitrotoluene	137 > 46			37915.594								
XIBLK22	PETN	361 > 62			37915.594								
						37915.594	37915.594	bb			541.9118	108.4	8.4
						6302.765	6302.765	bb			535.9162	107.2	7.2
													702.1

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK23

Analysis Date: 16-APR-10 12:36

GEL Data File: EXP0412190a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	574.526
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	581.418
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412190a

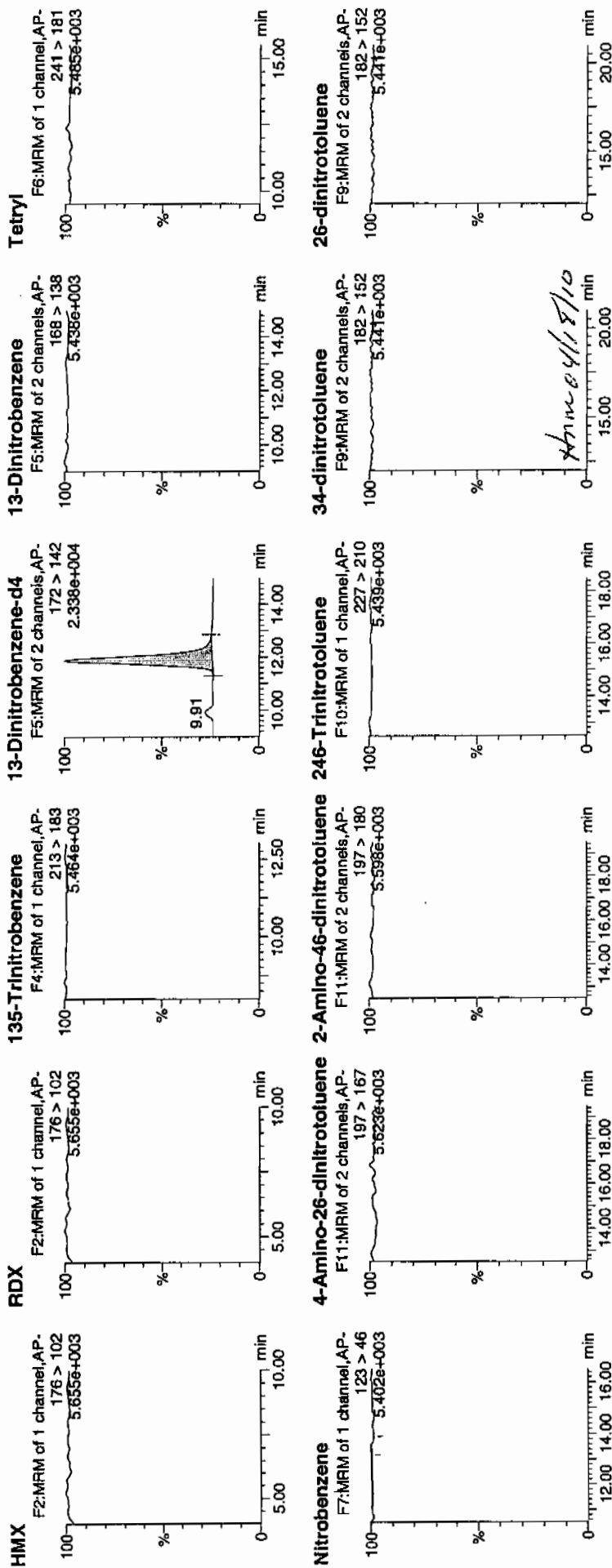
Date: 16-Apr-2010

Time: 12:36:57

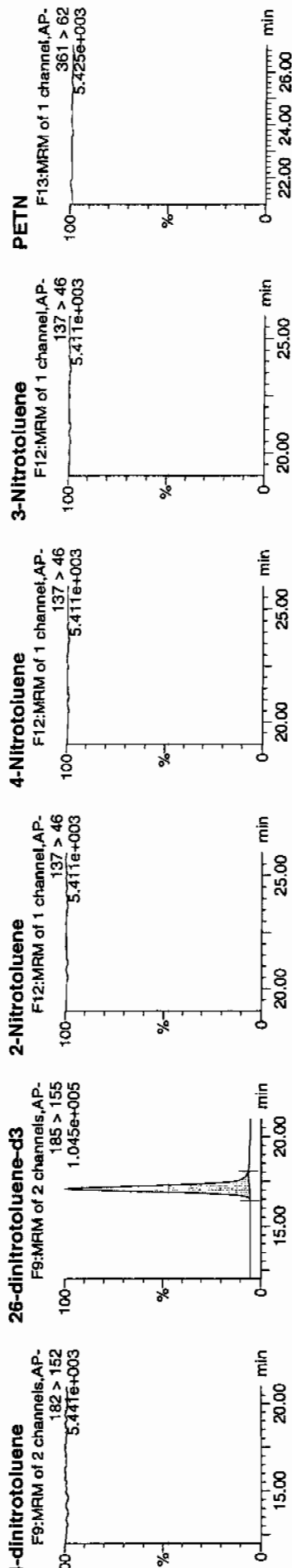
ID: XIBLK23

Vial: 1:1,A

NOT
4/17/10



Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



ID	Name	Trace	RT	Area	IS Area	Abundance	Response	Flags	Mod Date	Mod Time	Int. Unit	% Rec	Day	File	S/N
XIBLK23	HMX		176 > 102		6756.844										
XIBLK23	RDX		176 > 102		6756.844										
XIBLK23	135-Trinitrobenzene		213 > 183		6756.844										
XIBLK23	13-Dinitrobenzene-d4		172 > 142	11.87	6756.844		6756.844	bb		574.5260	114.9	14.9	387.0		
XIBLK23	13-Dinitrobenzene		168 > 138		6756.844										
XIBLK23	Tetryl		241 > 181		6756.844										
XIBLK23	Nitrobenzene		123 > 46		6756.844										
XIBLK23	4-Amino-26-dinitrotoluene		197 > 167		40679.703										
XIBLK23	2-Amino-46-dinitrotoluene		197 > 180		40679.703										
XIBLK23	246-Trinitrotoluene		227 > 210		40679.703										
XIBLK23	34-dinitrotoluene		182 > 152		40679.703										
XIBLK23	26-dinitrotoluene		182 > 152		40679.703										
XIBLK23	24-dinitrotoluene		182 > 152		40679.703										
XIBLK23	26-dinitrotoluene-d3		185 > 155	17.10	40679.703		40679.703	bb		581.4180	116.3	16.3	2559.0		
XIBLK23	2-Nitrotoluene		137 > 46		40679.703										
XIBLK23	4-Nitrotoluene		137 > 46		40679.703										
XIBLK23	3-Nitrotoluene		137 > 46		40679.703										
XIBLK23	PETN		361 > 62		40679.703										

MM- 17-Apr-10 10:32:29

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK24

Analysis Date: 16-APR-10 18:31

GEL Data File: EXP0412202a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	536.291
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	570.22

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

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412202a

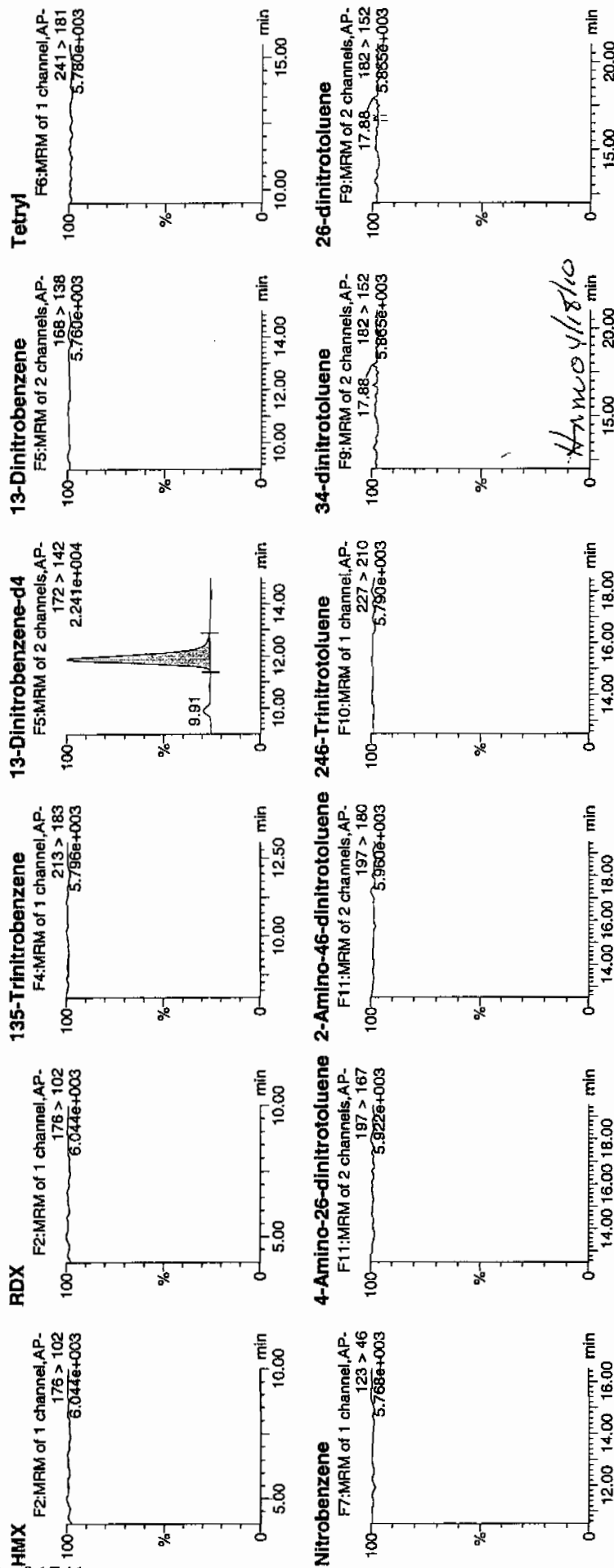
Date: 16-Apr-2010

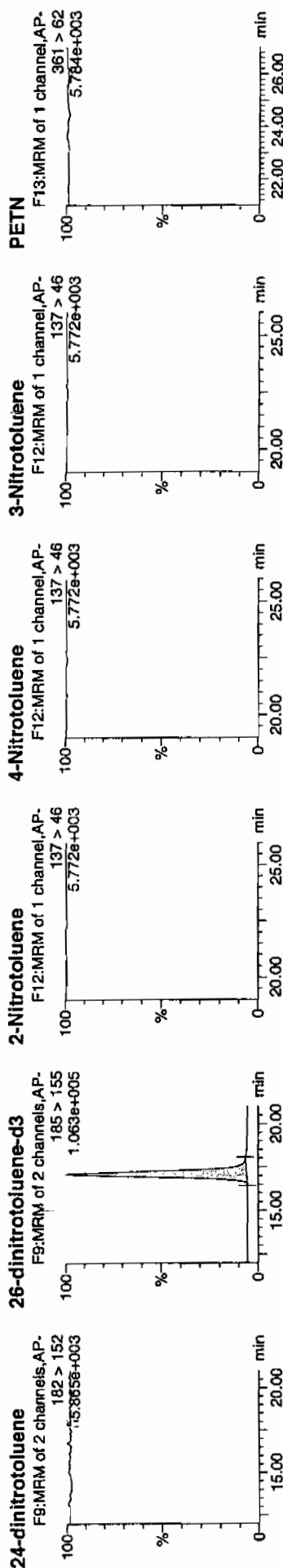
Time: 18:31:06

ID: XIBLK24

Vial: 1:1,A

WAT
4/17/10





ID	Name	Trace	HTI	Area	SA Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	mg/ml	%Rec	%Dev	SN
XIBLK24	HMx	176 > 102			6307.174									
XIBLK24	RDX	176 > 102			6307.174									
XIBLK24	135-Trinitrobenzene	213 > 183			6307.174									
XIBLK24	13-Dinitrobenzene-d4	172 > 142	11.87	6307.174		6307.174	6307.174	bb			536.2911	107.3	7.3	671.2
XIBLK24	13-Dinitrobenzene	168 > 138			6307.174									
XIBLK24	Tetryl	241 > 181			6307.174									
XIBLK24	Nitrobenzene	123 > 46			6307.174									
XIBLK24	4-Amino-26-dinitrotoluene	197 > 167			39896.191									
XIBLK24	2-Amino-46-dinitrotoluene	197 > 180			39896.191									
XIBLK24	246-Trinitrotoluene	227 > 210			39896.191									
XIBLK24	34-dinitrotoluene	182 > 152			39896.191									
XIBLK24	26-dinitrotoluene	182 > 152			39896.191									
XIBLK24	24-dinitrotoluene	182 > 152			39896.191									
XIBLK24	26-dinitrotoluene-d3	185 > 155	17.09	39896.191		39896.191	39896.191	bb	MM- 17-Apr-10	10:37:09				
XIBLK24	2-Nitrotoluene	137 > 46			39896.191									
XIBLK24	4-Nitrotoluene	137 > 46			39896.191									
XIBLK24	3-Nitrotoluene	137 > 46			39896.191									
XIBLK24	PETN	361 > 62			39896.191									
											570.2196	114.0	14.0	1862.7

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK25

Analysis Date: 17-APR-10 00:54

GEL Data File: EXP0412215a

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	573.564
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	571.674
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 73 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412215a

Date: 17-Apr-2010

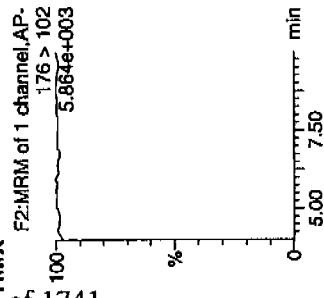
Time: 00:54:46

ID: XIBLK25

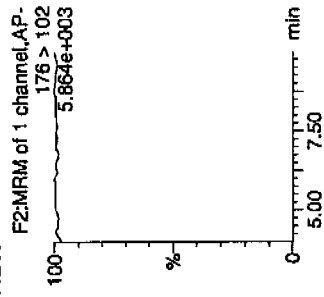
Vial: 1:1,A

Handwritten:
17/4/10

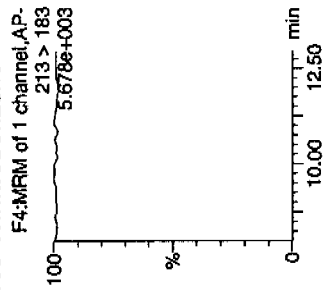
CHMX



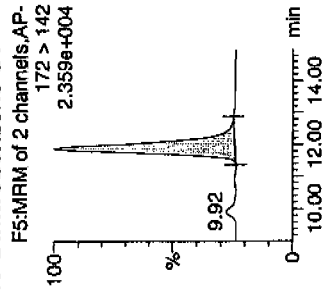
RDX



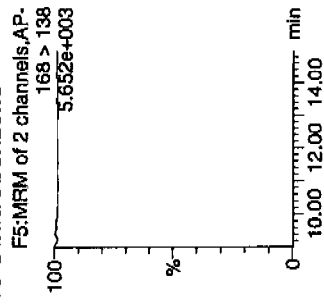
135-Trinitrobenzene



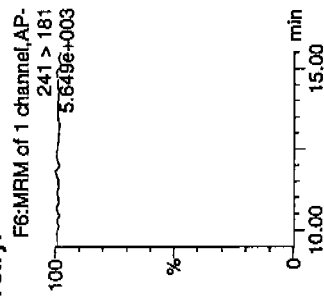
13-Dinitrobenzene-d4



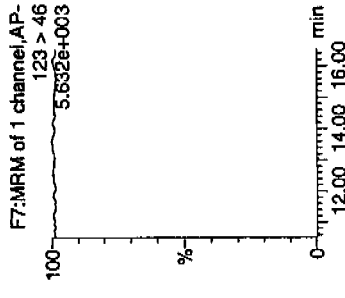
13-Dinitrobenzene



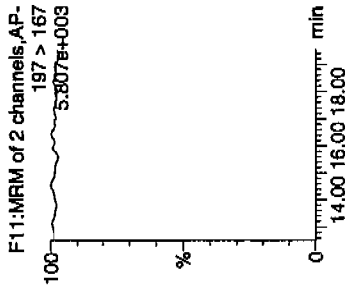
Tetryl



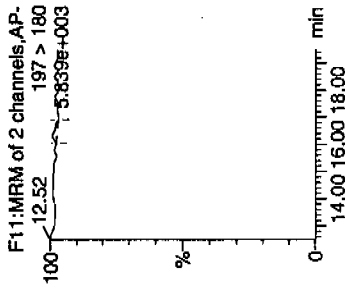
Nitrobenzene



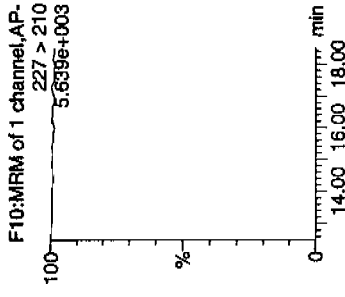
4-Amino-26-dinitrotoluene



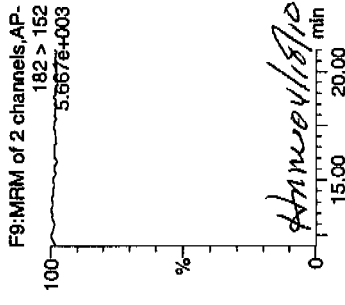
2-Amino-46-dinitrotoluene



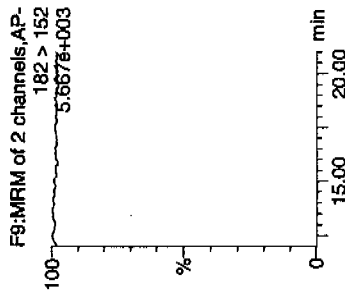
246-Trinitrotoluene



34-dinitrotoluene

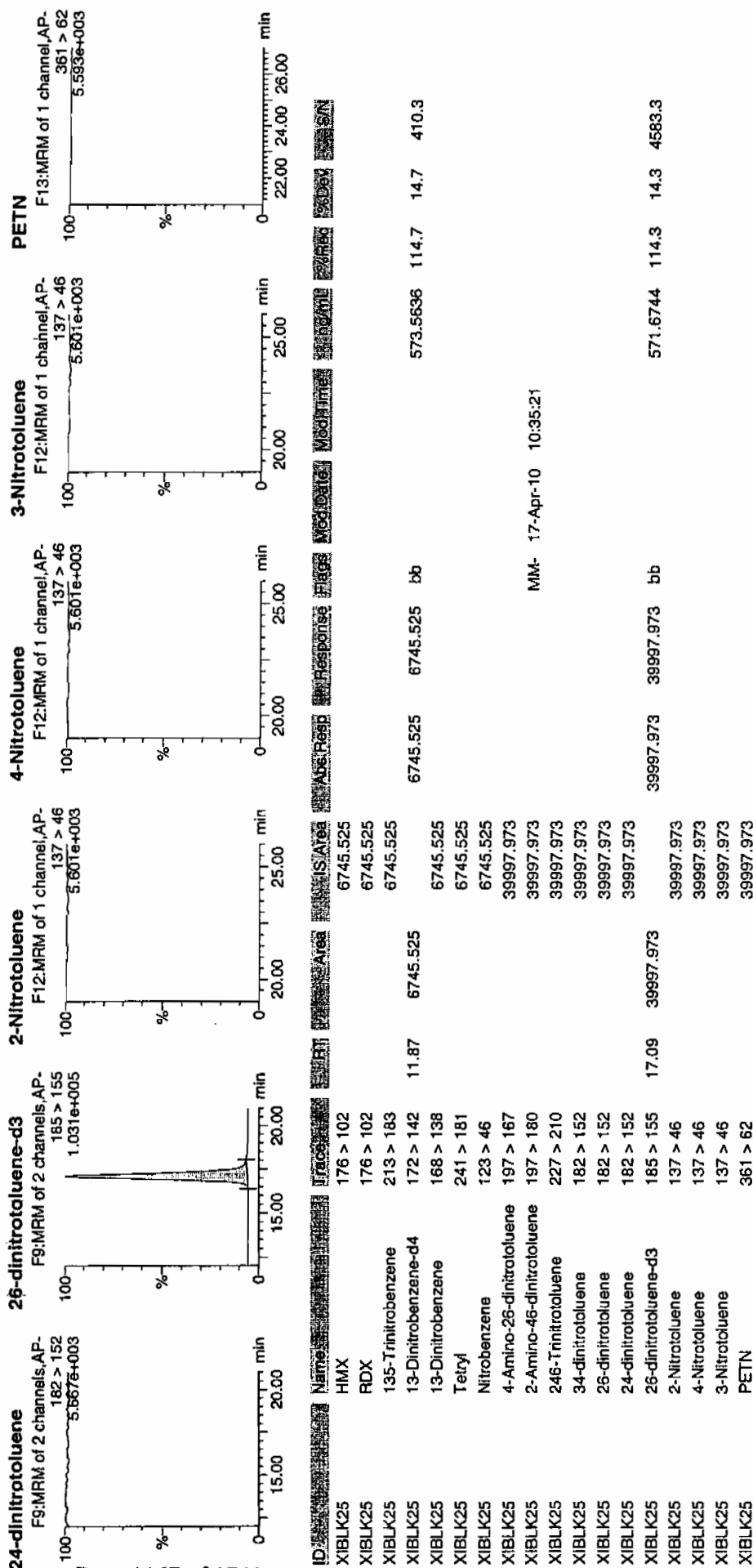


26-dinitrotoluene



Handwritten:
5.667e+003

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK26

Analysis Date: 17-APR-10 05:49

GEL Data File: EXP0412225a

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	648.389
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	660.891
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\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412225a

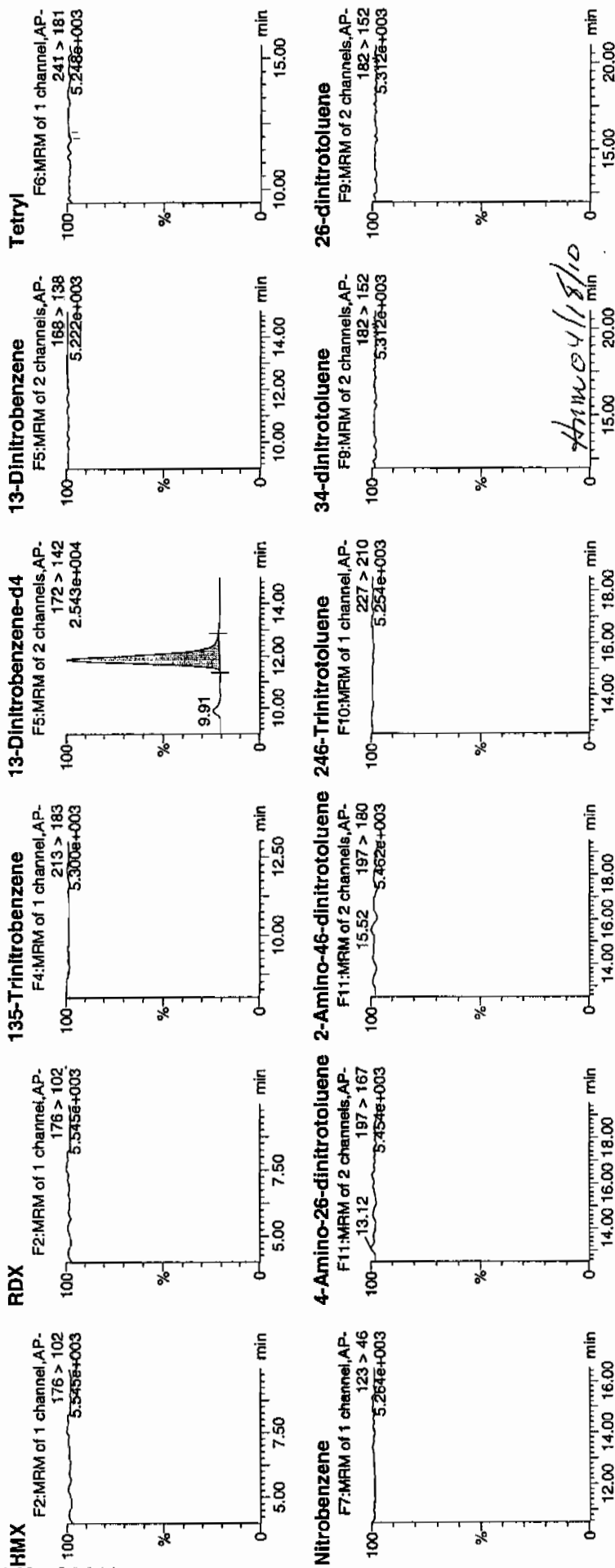
Date: 17-Apr-2010

Time: 05:49:43

ID: XIBLK26

Vial: 1:1,A

Page 1169 of 1741

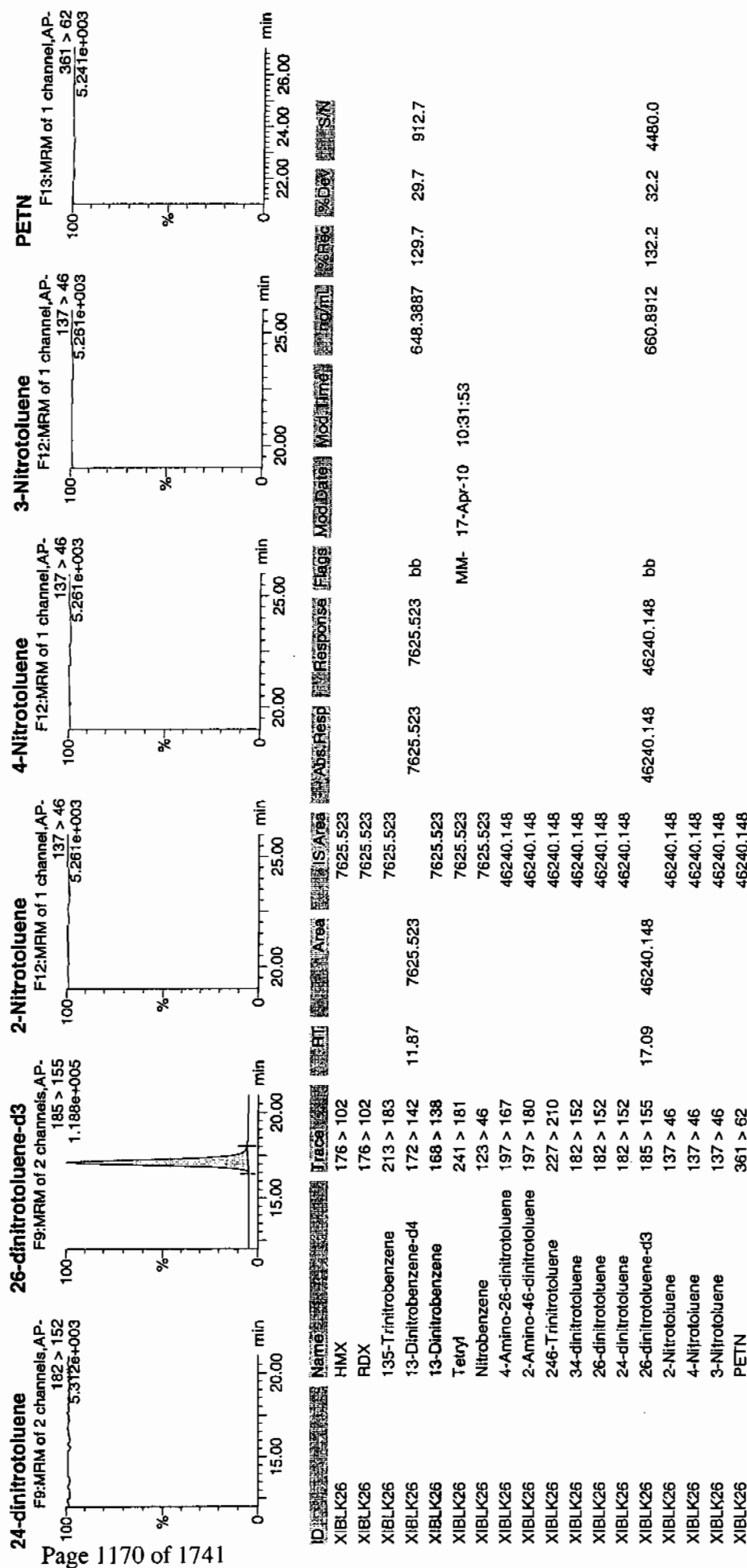


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 94 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 18-APR-10 18:00

GEL Data File: EXP0418009a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	473.095
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	475.662
2-Amino-4,6-dinitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418009a

Date: 18-Apr-2010

Time: 18:00:46

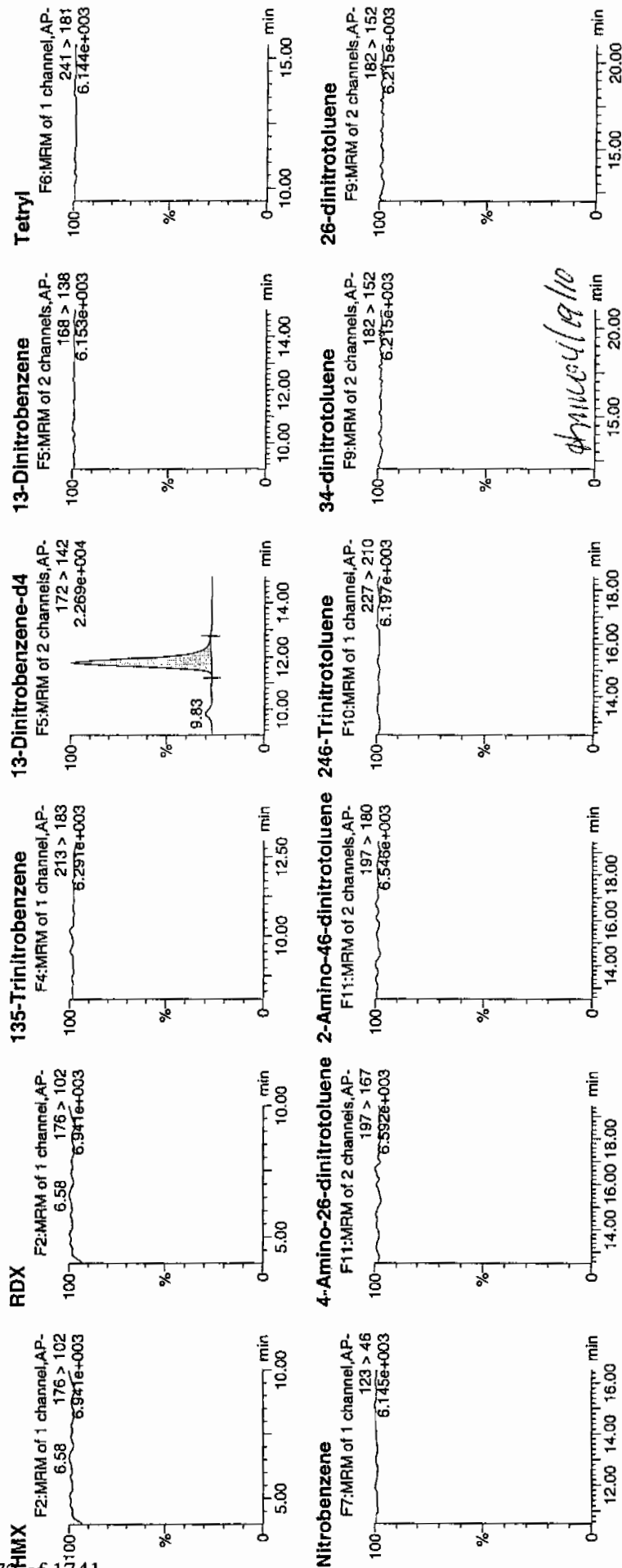
ID: XIBLK02

Vial: 1:1,A

1/1/10

17 of 141

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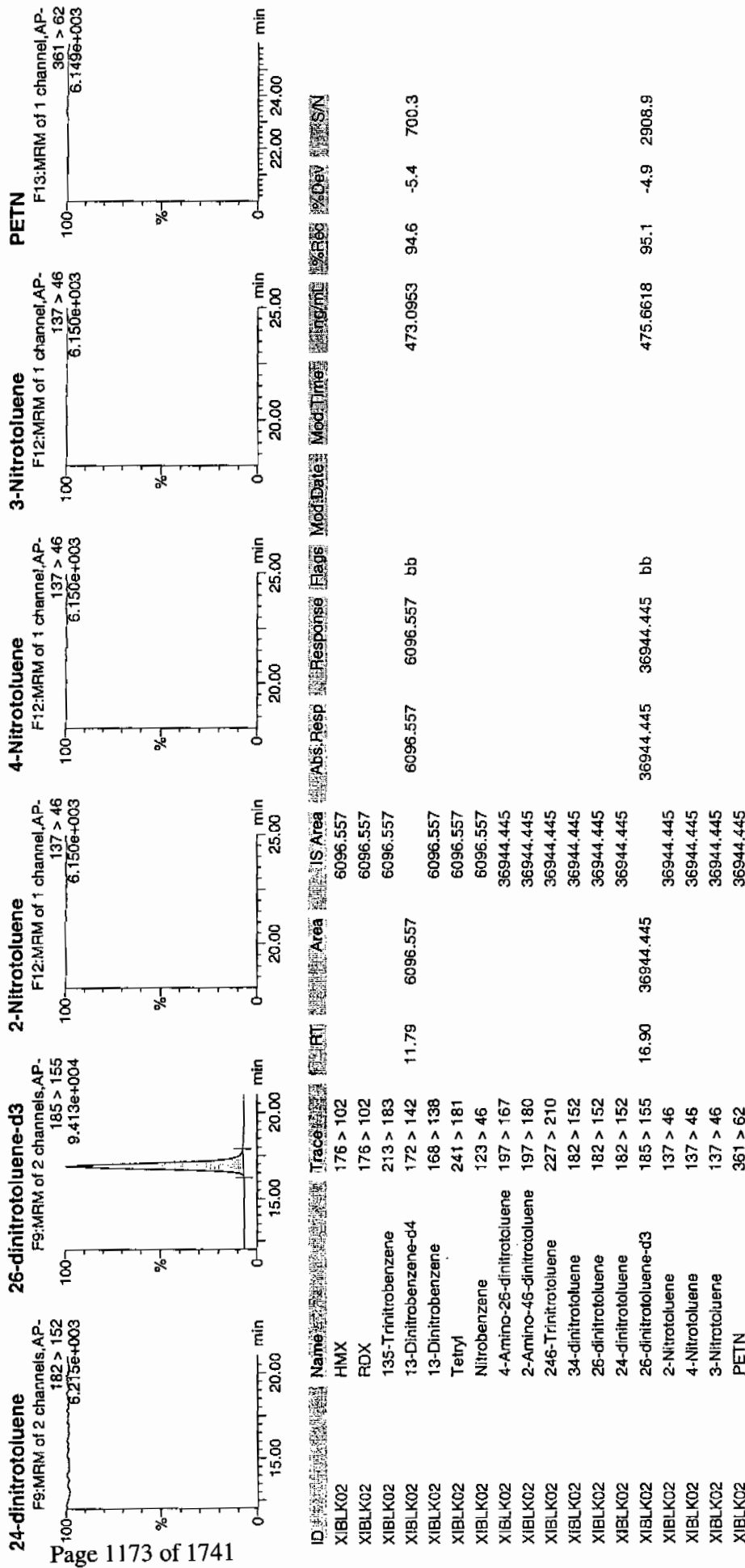


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 18 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 18-APR-10 18:57

GEL Data File: EXP0418011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	609.666
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	673.751
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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418011a

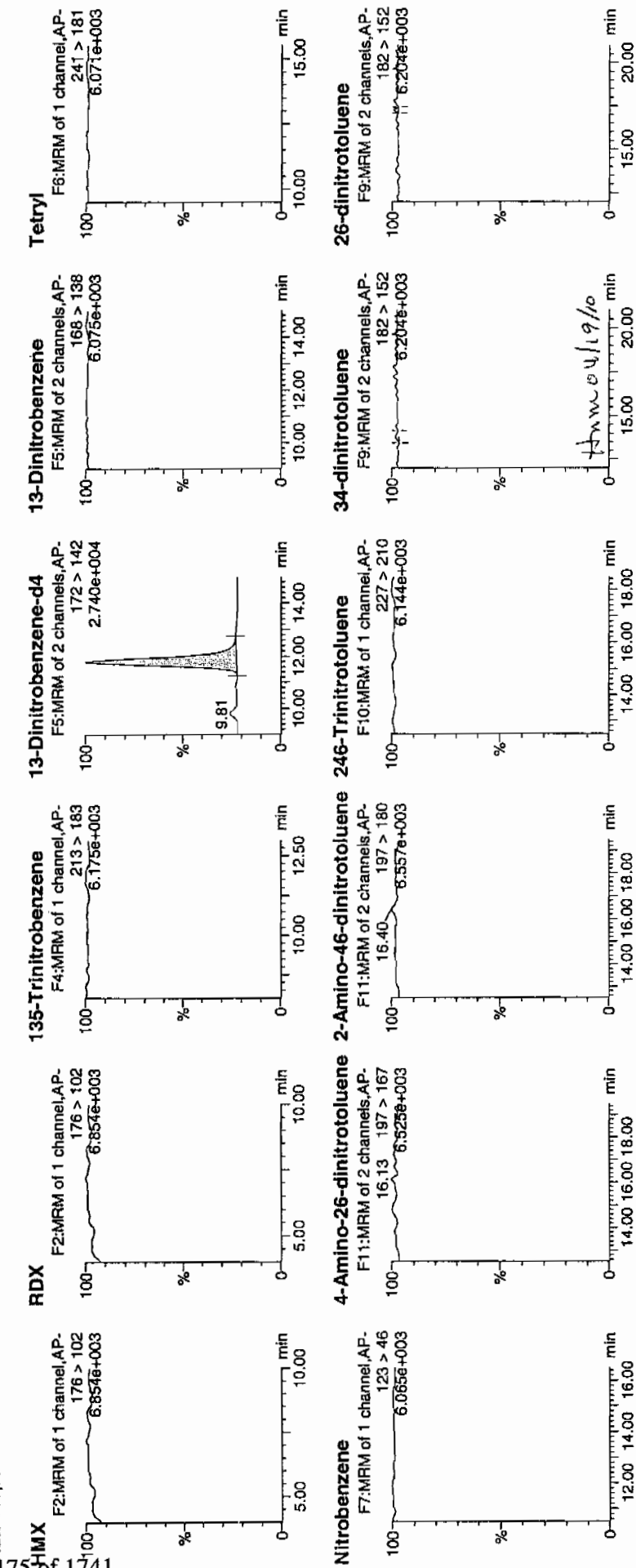
Date: 18-Apr-2010

Time: 18:57:43

ID: XIBLK03

Yial: 1:1,A

175 of 1741

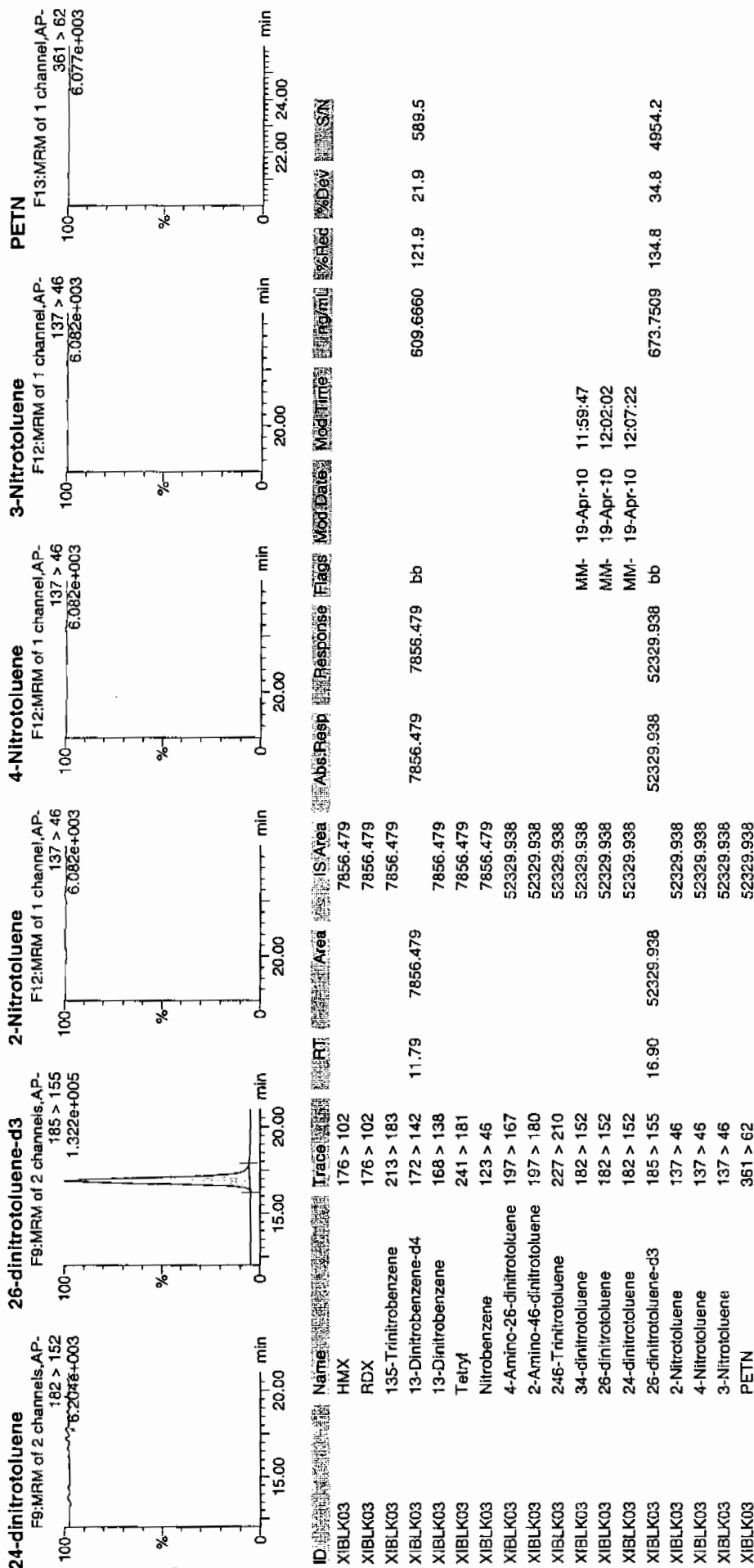


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 22 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 19-APR-10 00:11

GEL Data File: EXP0418022a

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	565.464
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	558.039
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418022a

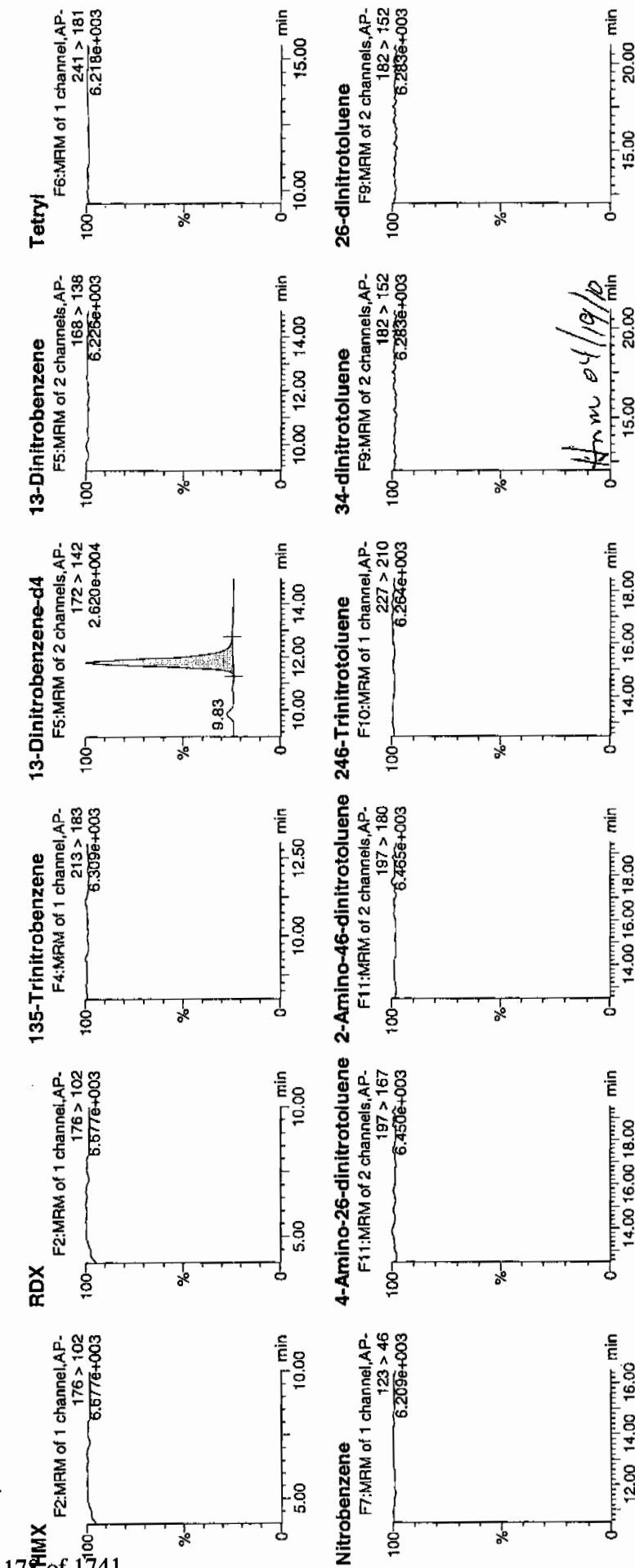
Date: 19-Apr-2010

Time: 00:11:25

ID: XIBLK04

Vial: 1:1,A

NOT
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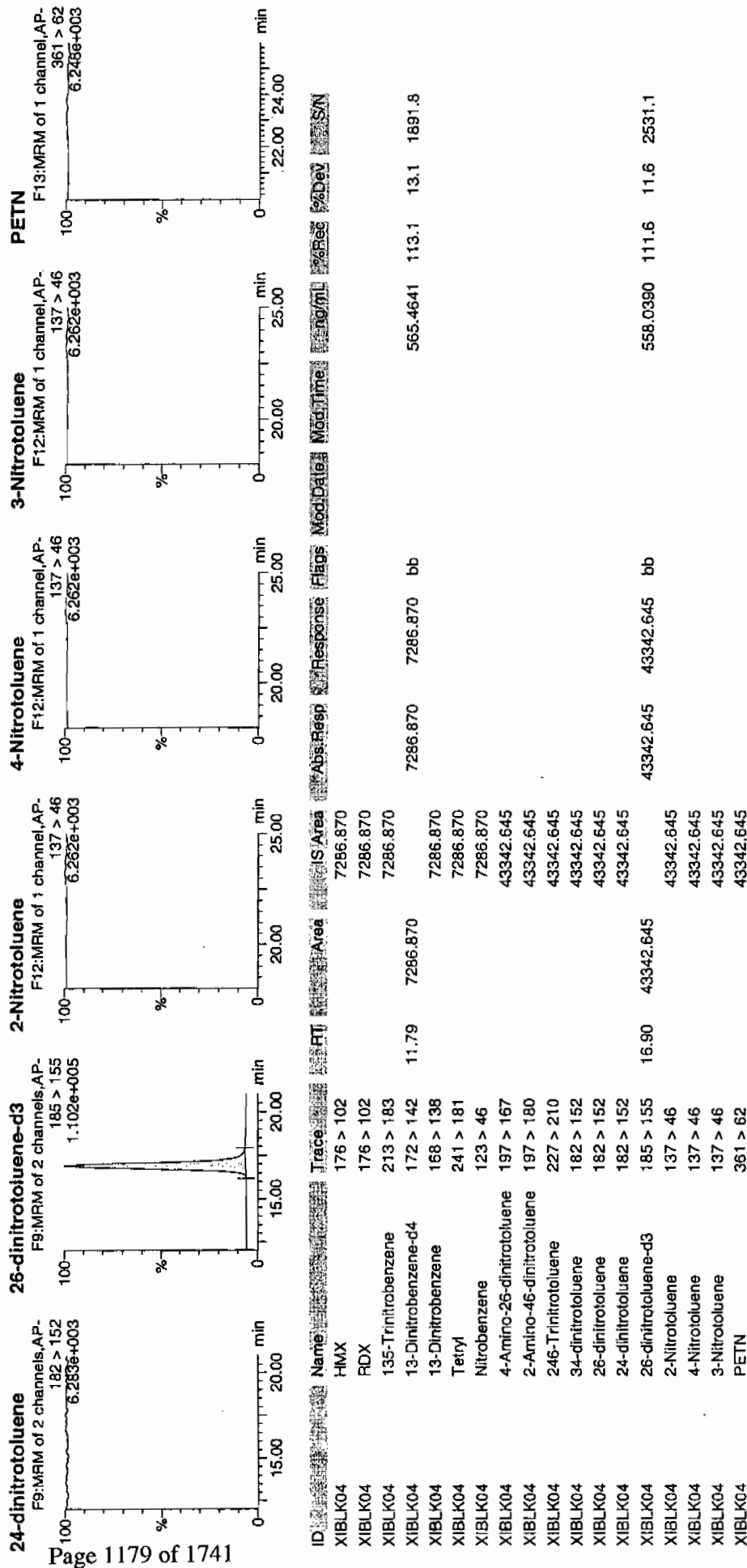


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 44 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 19-APR-10 02:33

GEL Data File: EXP0418027a

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	623.93
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	614.729
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\041810expA.qid, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418027a

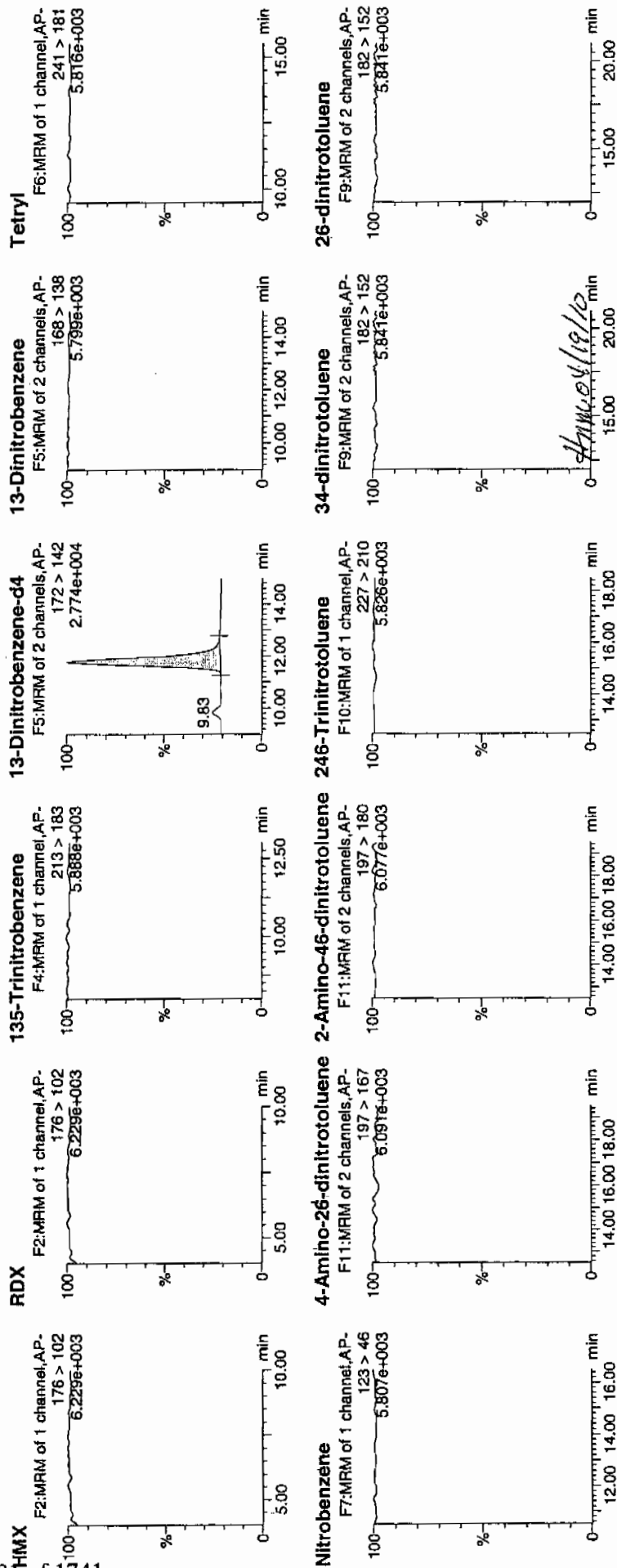
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Time: 02:33:52

ID: XIBLK05

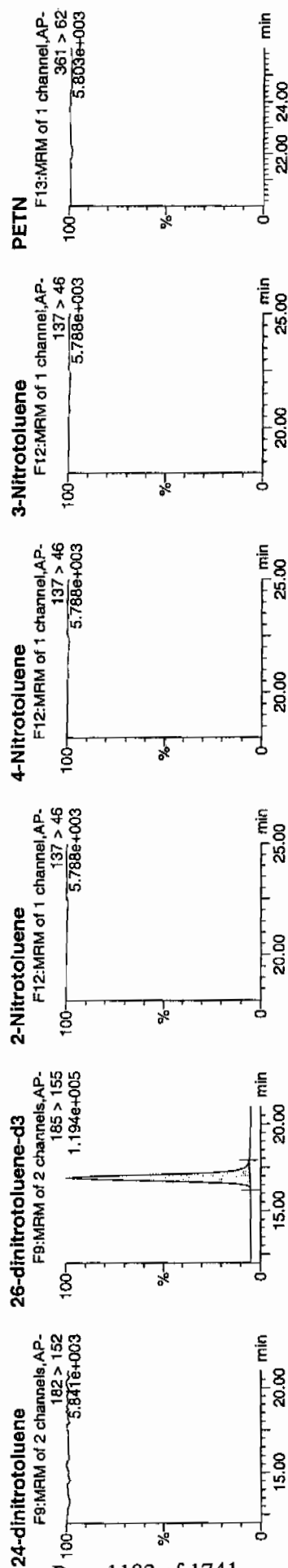
Vial: 1:1,A

WAT
all lab



Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 19-APR-10 04:27

GEL Data File: EXP0418031a

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	629.475
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	618.232
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\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0418031a

Date: 19-Apr-2010

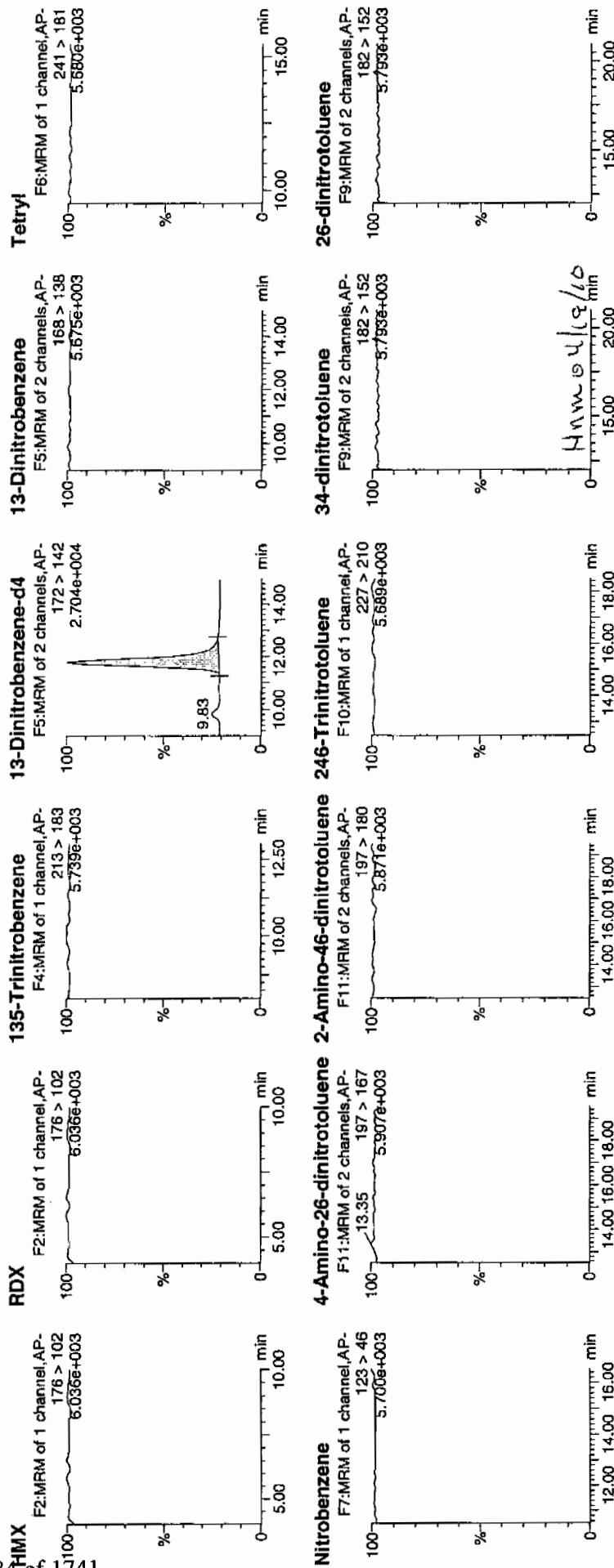
Time: 04:27:48

ID: XIBLK06

Vial: 1:1,A

WAT
4/19/10

184 of 1741

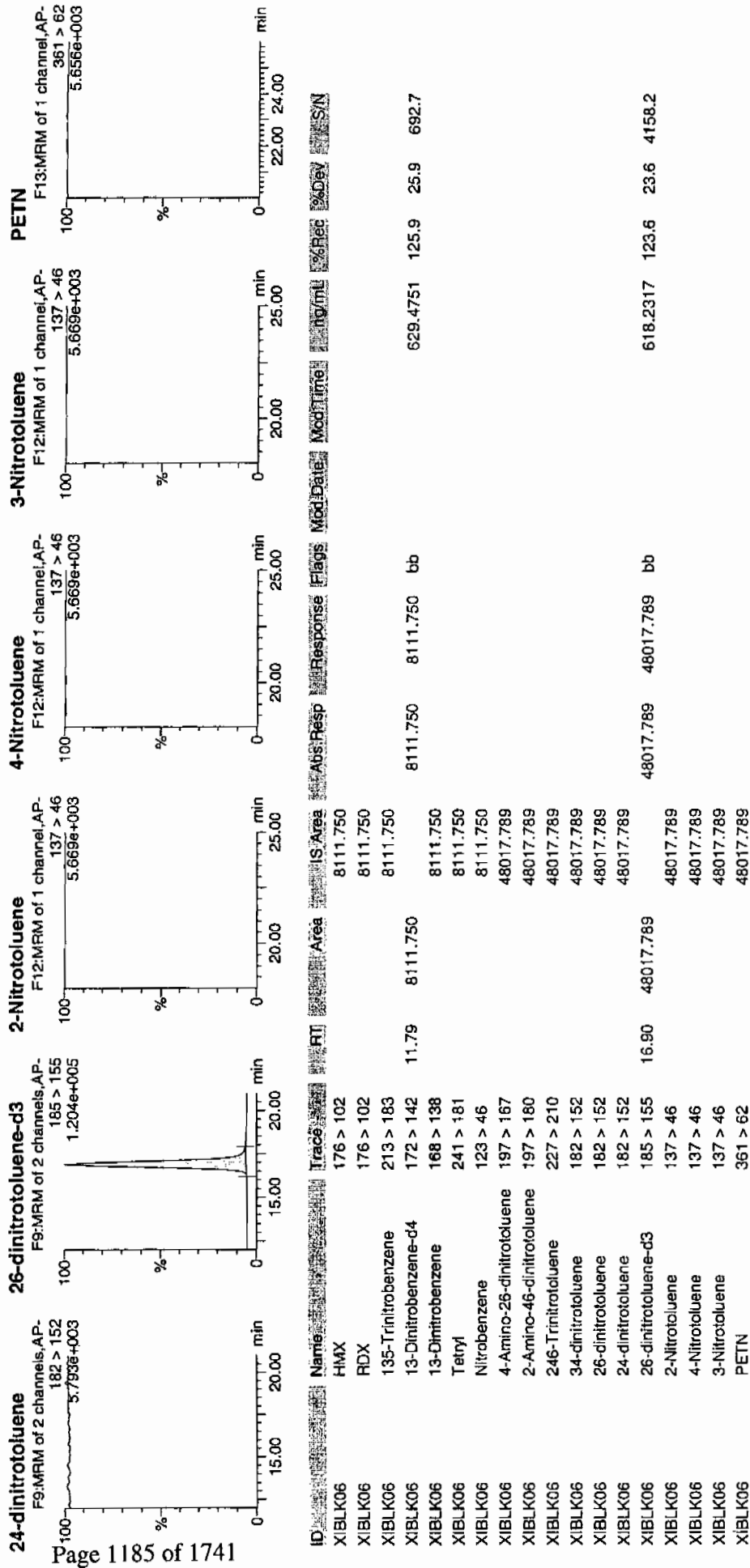


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 62 of 91

Dataset: C:\MASSLYNX\New_Exp_PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 08-APR-10 19:11

GEL Data File: EXS04080010.wiff

Instrument ID: LCMSMS

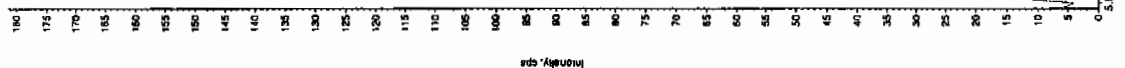
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	12.7
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 4/12/10

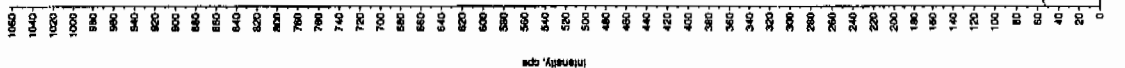
Sample Name: "XIBL02" Sample ID: "11LER" File: "EXS04080010.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 4/8/2010
 Acq. Time: 7:11:01 PM
 Modified: No



Sample Name: "XIBL02" Sample ID: "11LER" File: "EXS04080010.wif"
 Peak Name: "35-Dinitrobenzyl" Mass(es): "182.0460 amu"
 Comment: "LCMSEXP_B" Annotation: "

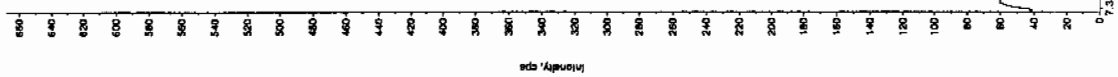
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 4/8/2010
 Acq. Time: 7:11:01 PM
 Modified: No



See 4/12/10

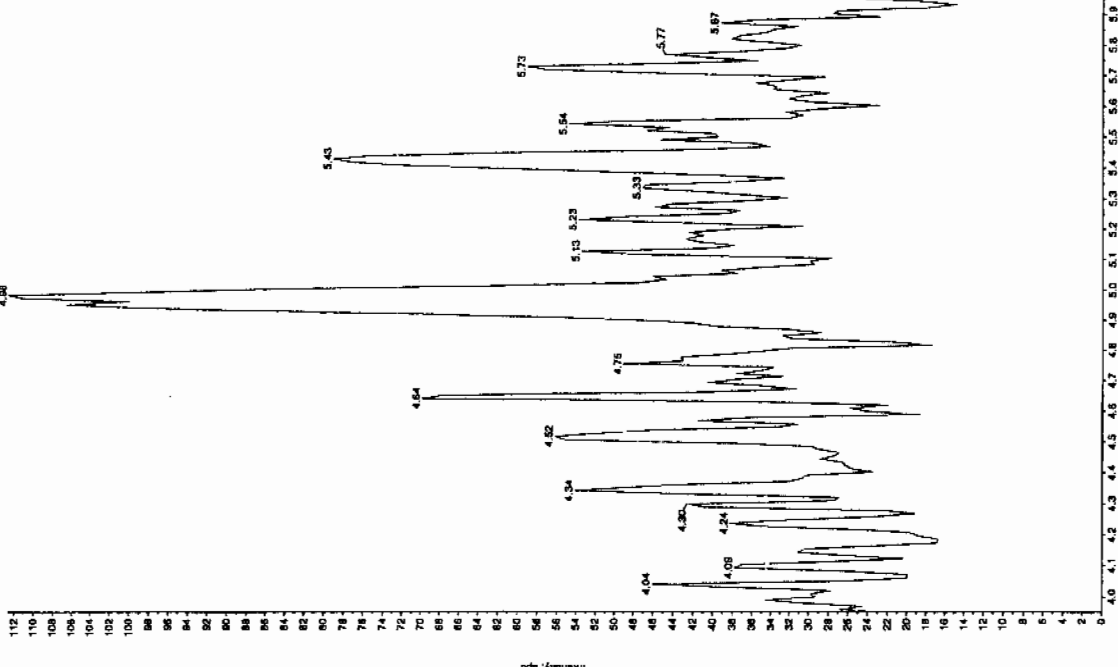
Sample Name: "XIBLK02" Sample ID: "111ER" File: "EXSG080010.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1715.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/8/2010
 Acq. Time: 7:11:01 PM
 Modified: No



Sample Name: "XIBLK02" Sample ID: "111ER" File: "EXSG080010.wif"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/8/2010
 Acq. Time: 7:11:01 PM
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 08-APR-10 19:42

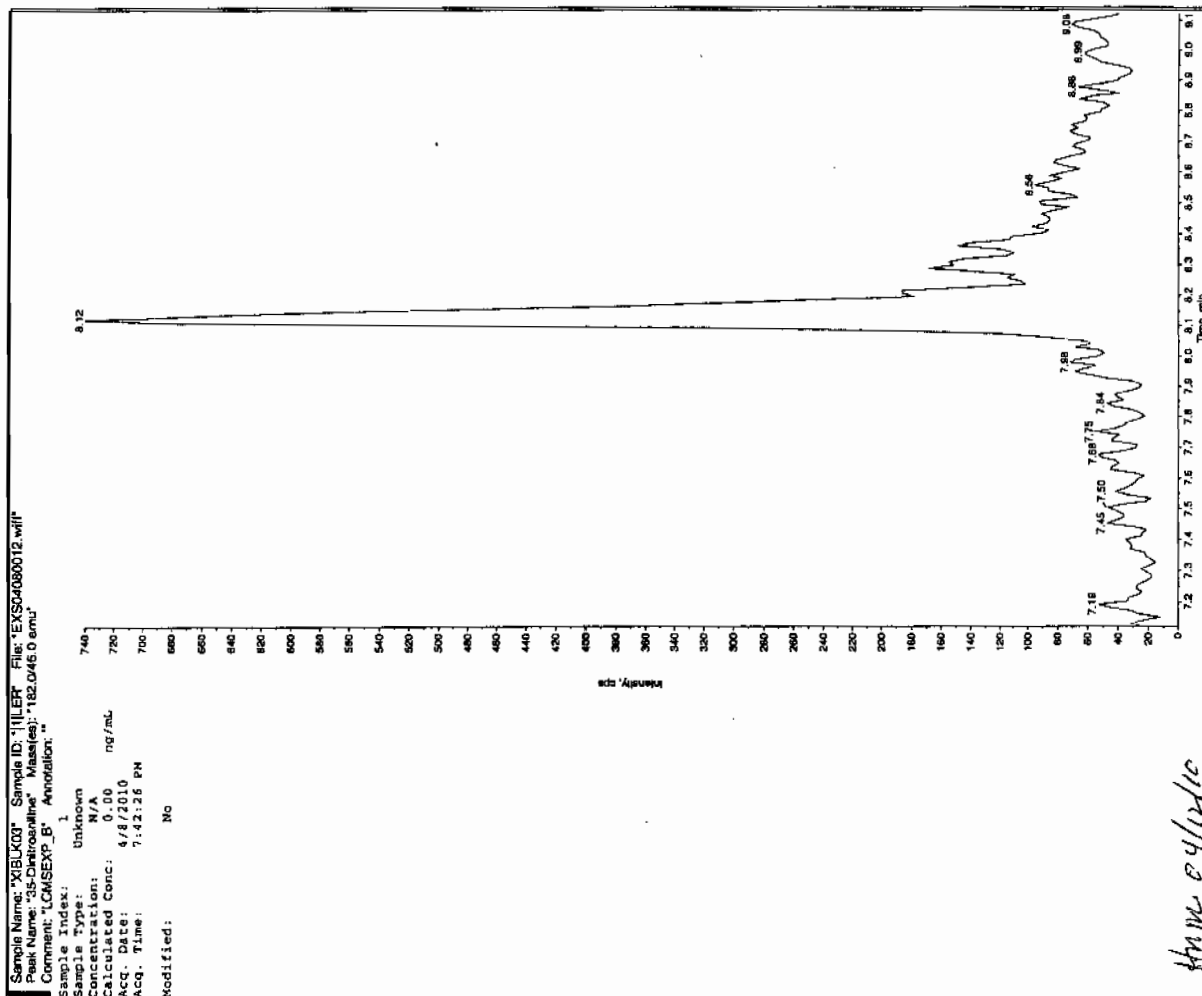
GEL Data File: EXS04080012.wiff

Instrument ID: LCMSMS

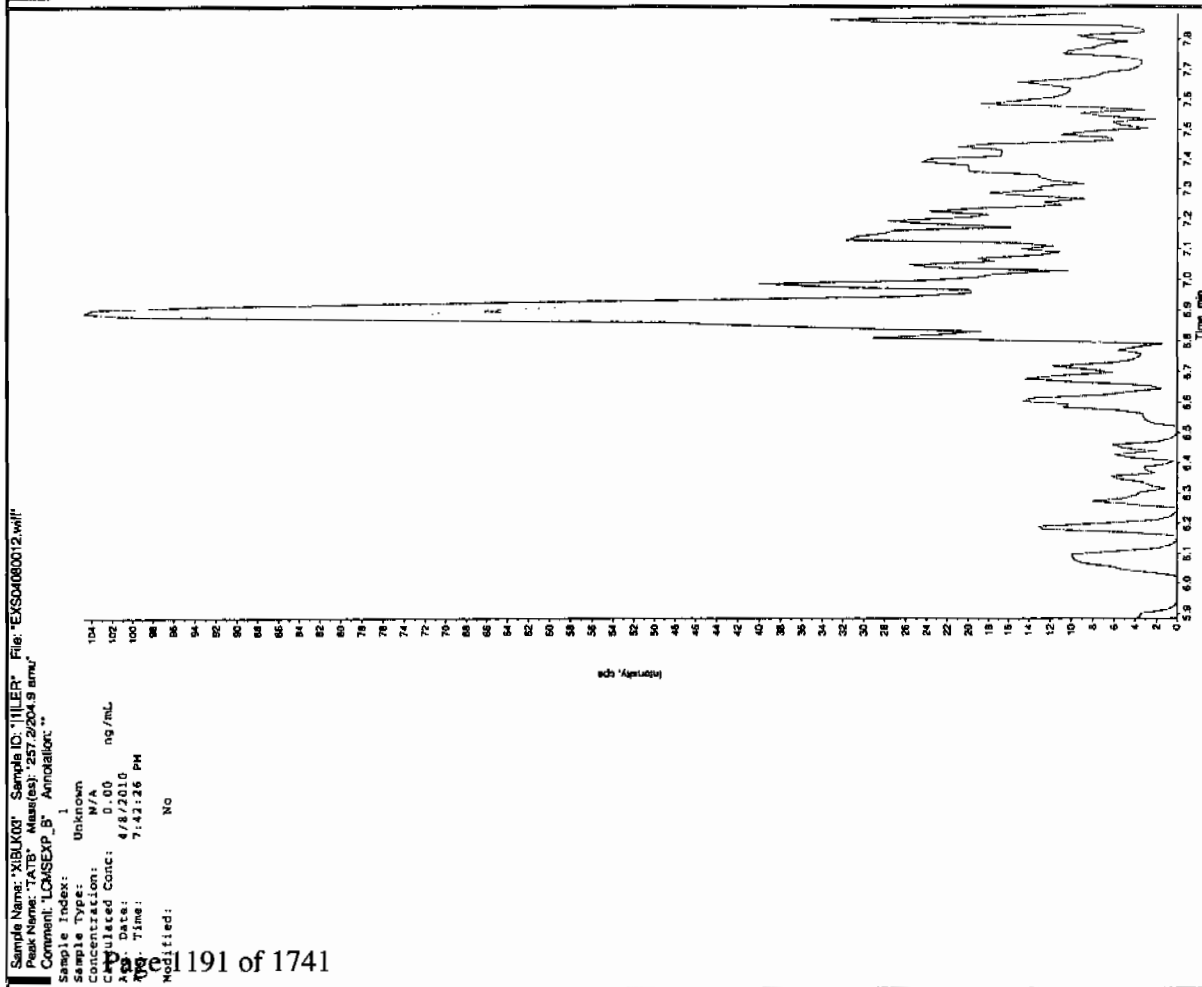
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	8.19
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 4/12/10

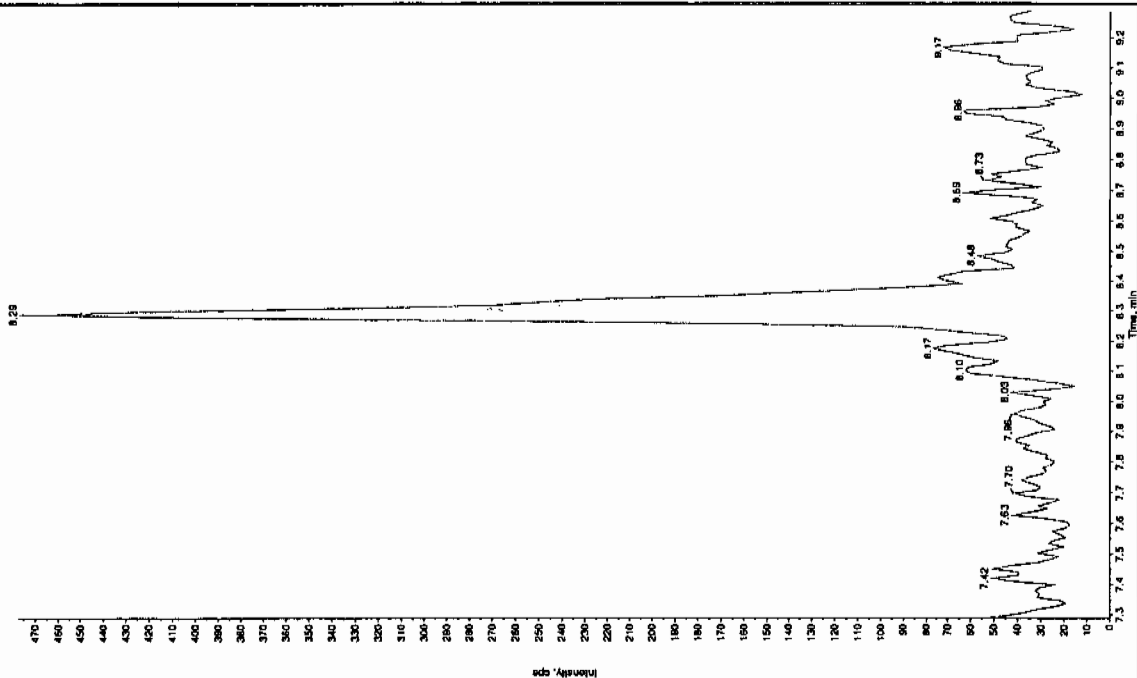


Jan 4/12/10



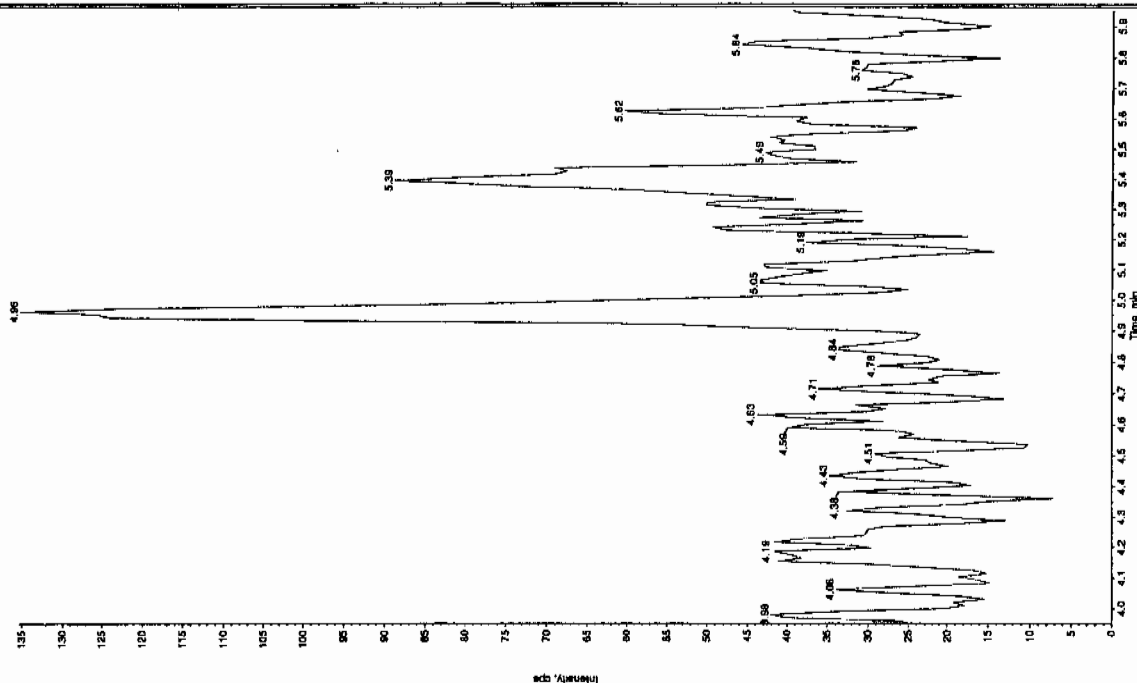
Sample Name: "XBLUG3" Sample ID: "11LER" File: "EXSD008012.wif"
 Peak Name: 28-Hydroxy-4-hydroxybenzoic acid Mass(es): 162.17515 amu
 Comment: "LONSEXP_B" Annotation: "

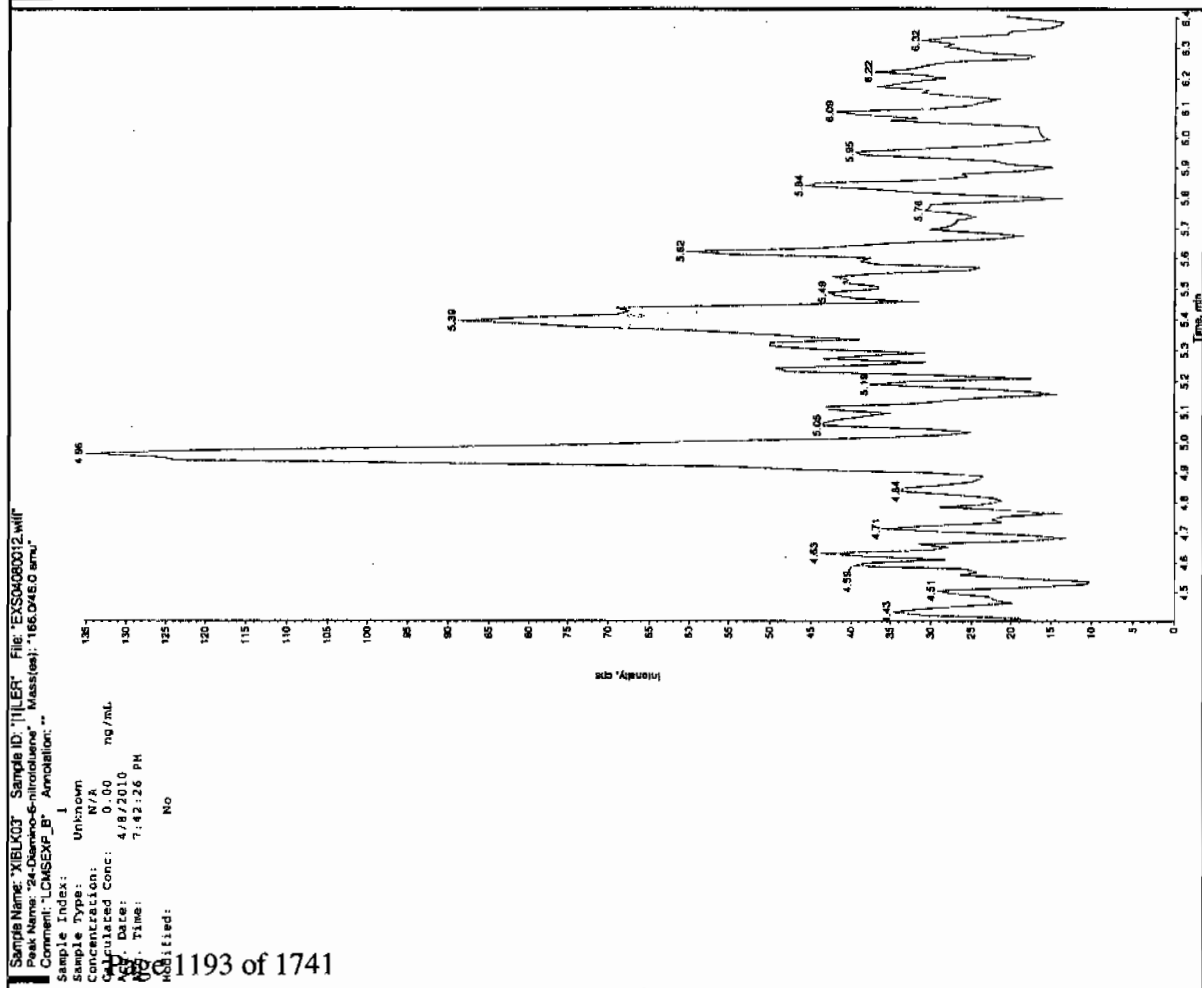
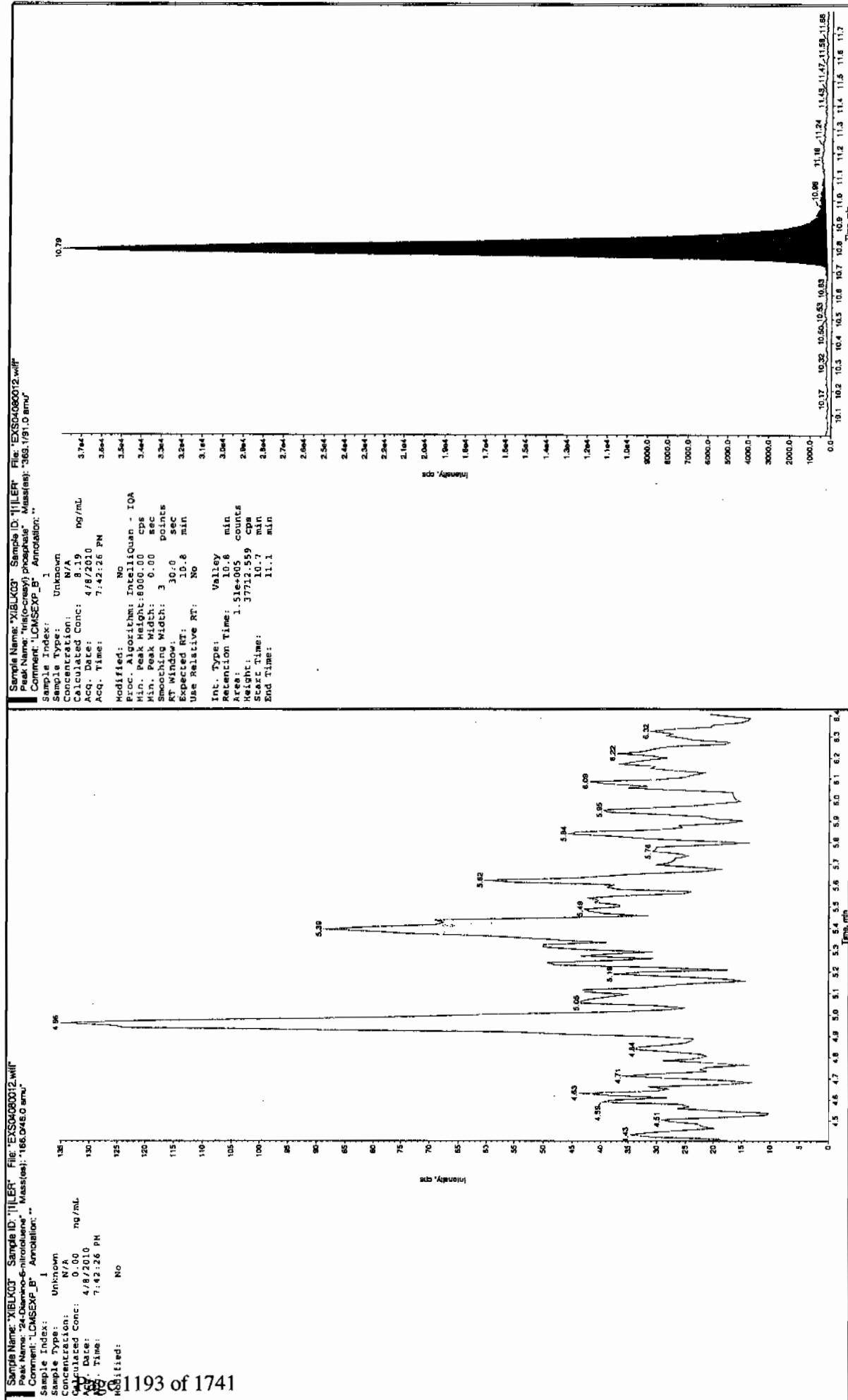
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/8/2010
 Acq. Time: 7:42:26 PM
 Modified: No



Sample Name: "XBLUG3" Sample ID: "11LER" File: "EXSD008012.wif"
 Peak Name: 28-Hydroxy-4-hydroxybenzoic acid Mass(es): 160.0460 amu
 Comment: "LONSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/8/2010
 Acq. Time: 7:42:26 PM
 Modified: No





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XTBLK04

Analysis Date: 08-APR-10 23:06

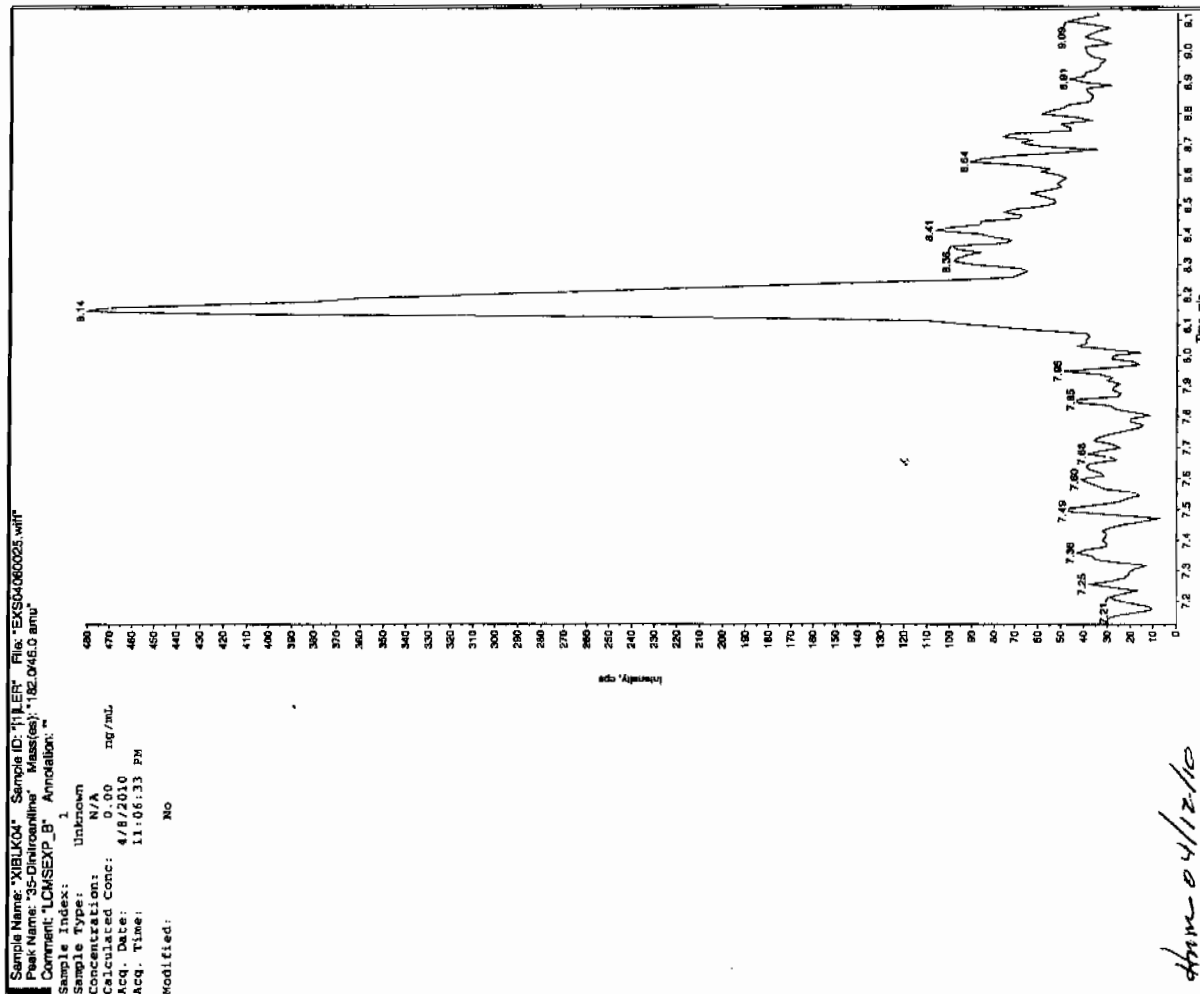
GEL Data File: EXS04080025.wiff

Instrument ID: LCMSMS

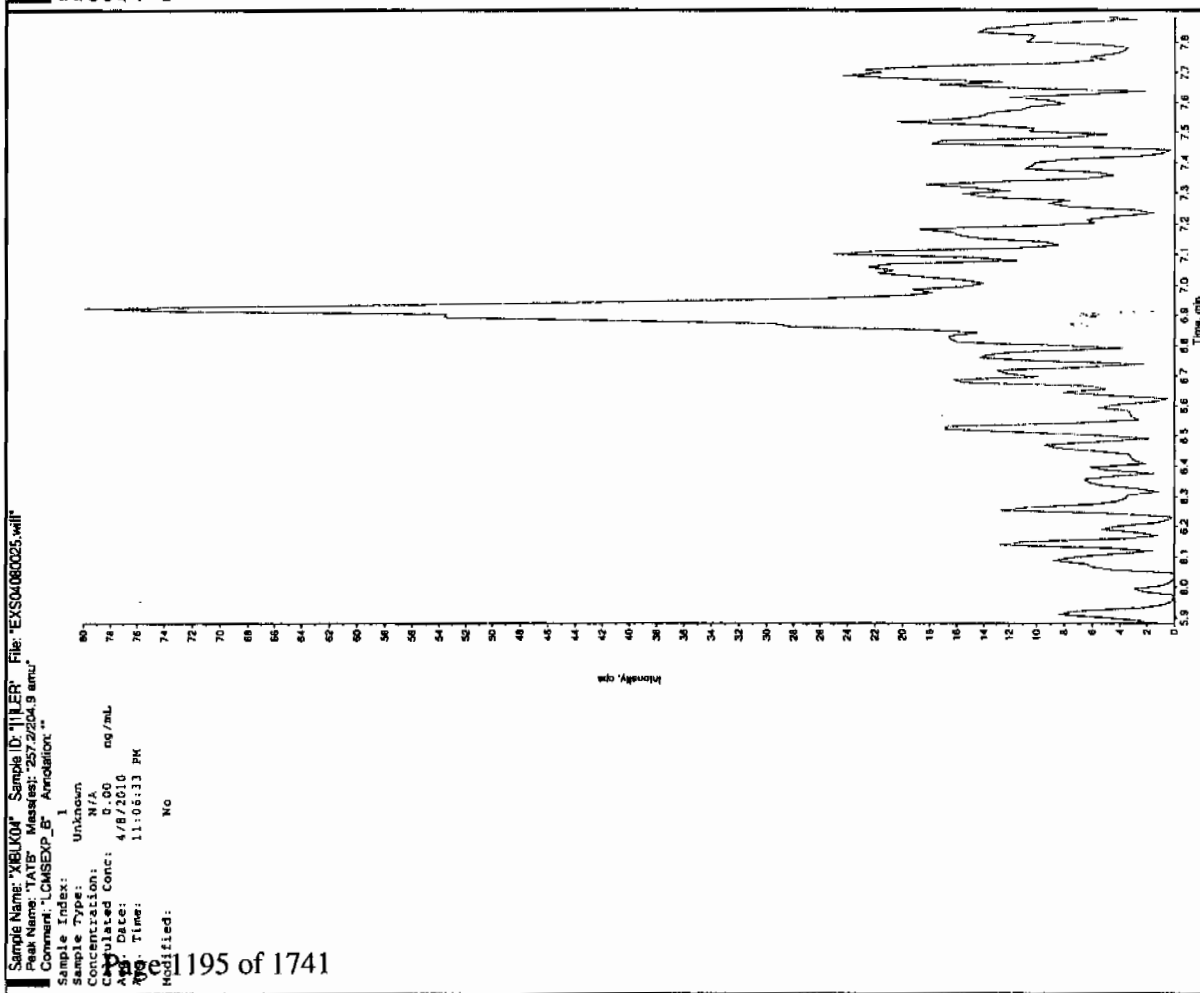
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	6.05
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

for 4/12/10

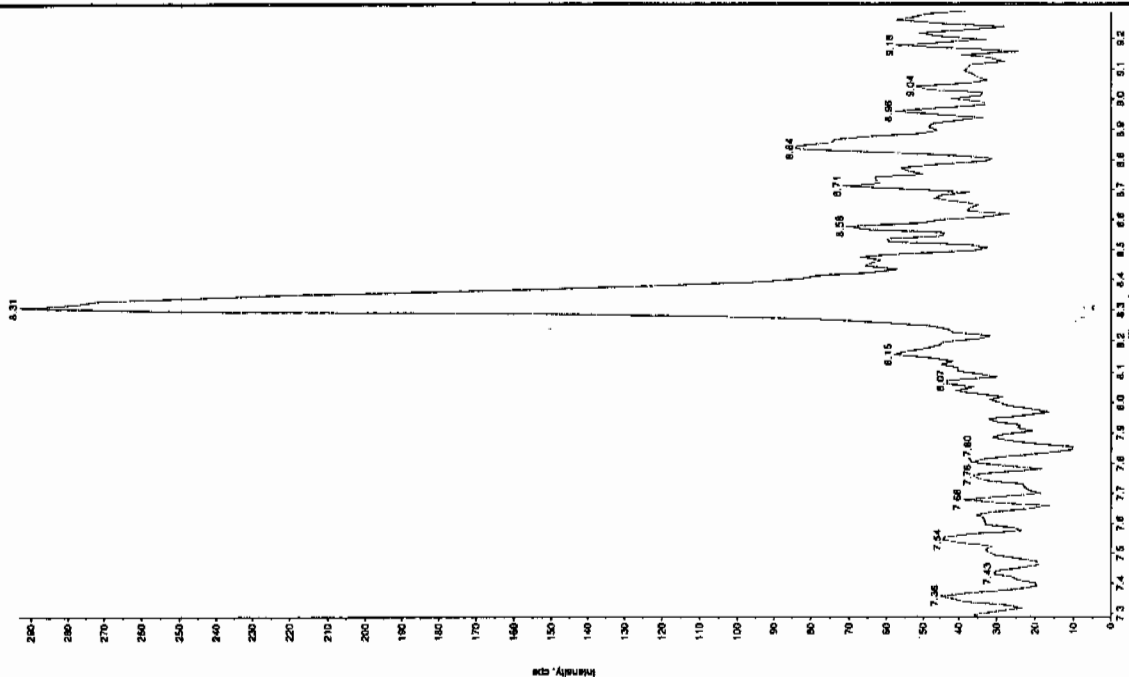


for 4/12/10



Sample Name: YBLK04 Sample ID: 11111111 File: EXS04080025.wif
 Peak Name: 25-Dinitro-4-nitrofluorene Mass(es): 166.046.0 amu
 Comment: LCMSEXP_B Annotation: ..

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/8/2010
 Acq. Date: 11:06:33 PM
 Acq. Time: 11:06:33 PM
 Modified: No

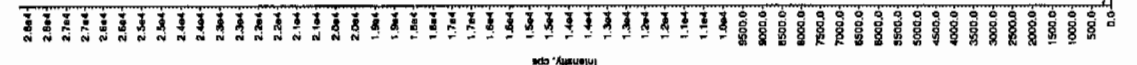
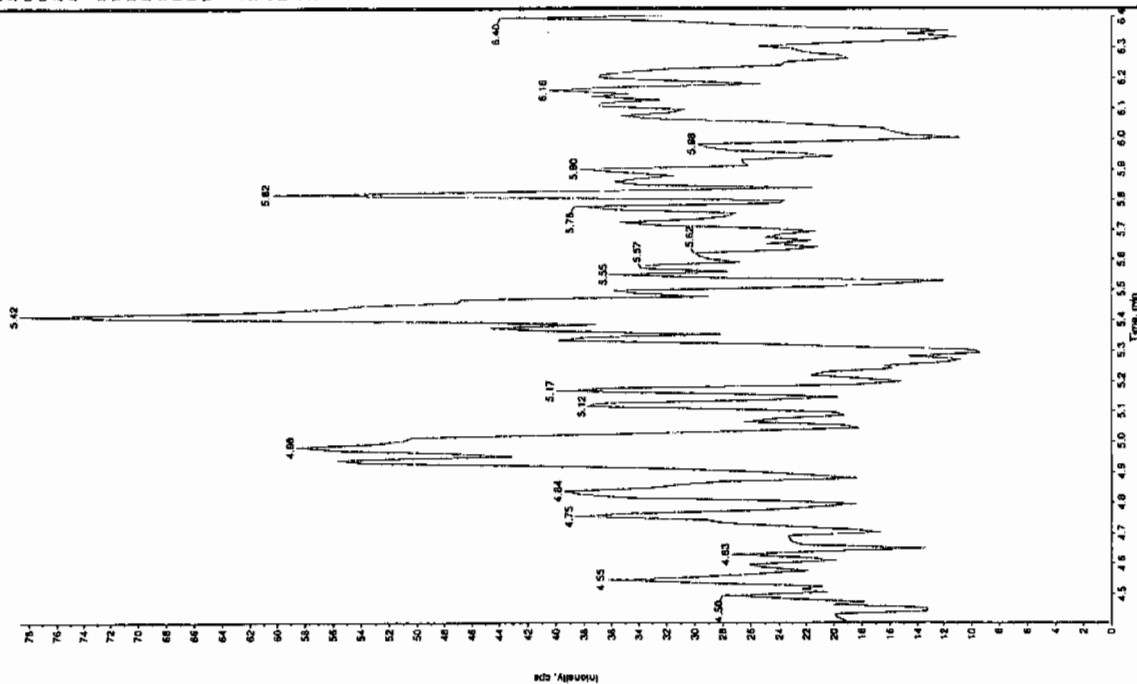


Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/8/2010
 Acq. Date: 11:06:33 PM
 Acq. Time: 11:06:33 PM
 Modified: No

Sample Name: "XBLU04" Sample ID: "11LER" File: "EXS04080025.wif"
 Peak Name: "24-Dienho-e-rotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 11:06:33 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 10.7 min
 Area: 1.07e+005 counts
 Height: 27960.196 cps
 Start Time: 10.7 min
 End Time: 11.0 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2154

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 09-APR-10 02:15

GEL Data File: EXS04080037.wiff

Instrument ID: LCMSMS

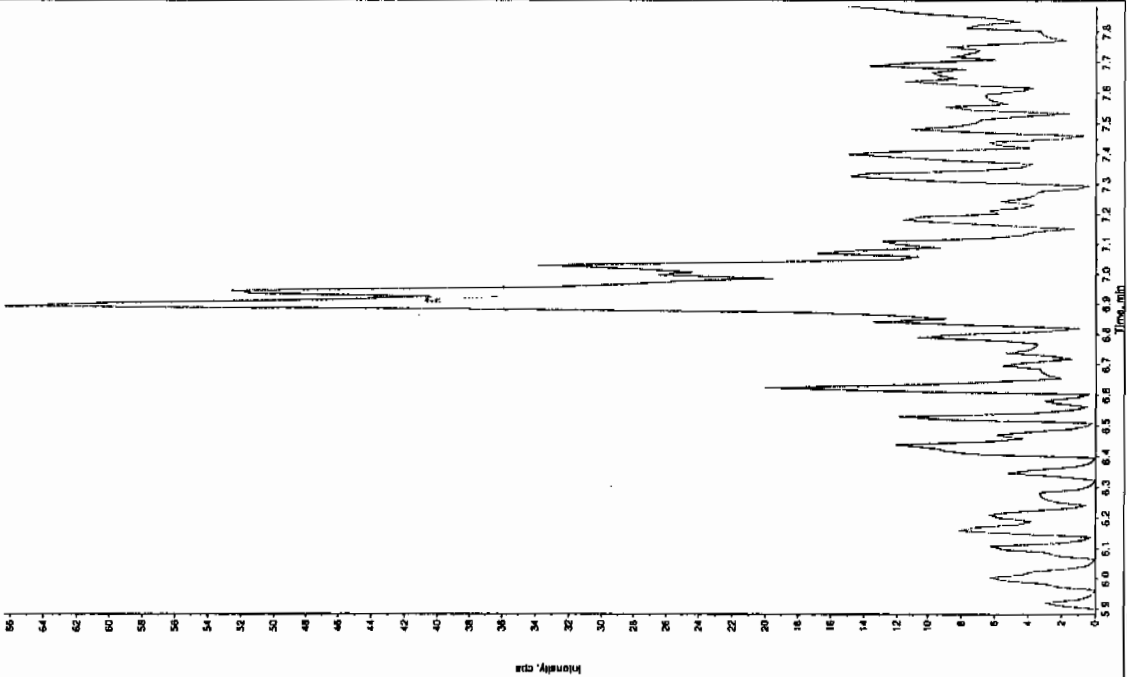
Column: Phenomenex Ultracarb 5u ODS(20)

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	5.32
TATB	0	0

Rec 4/12/10

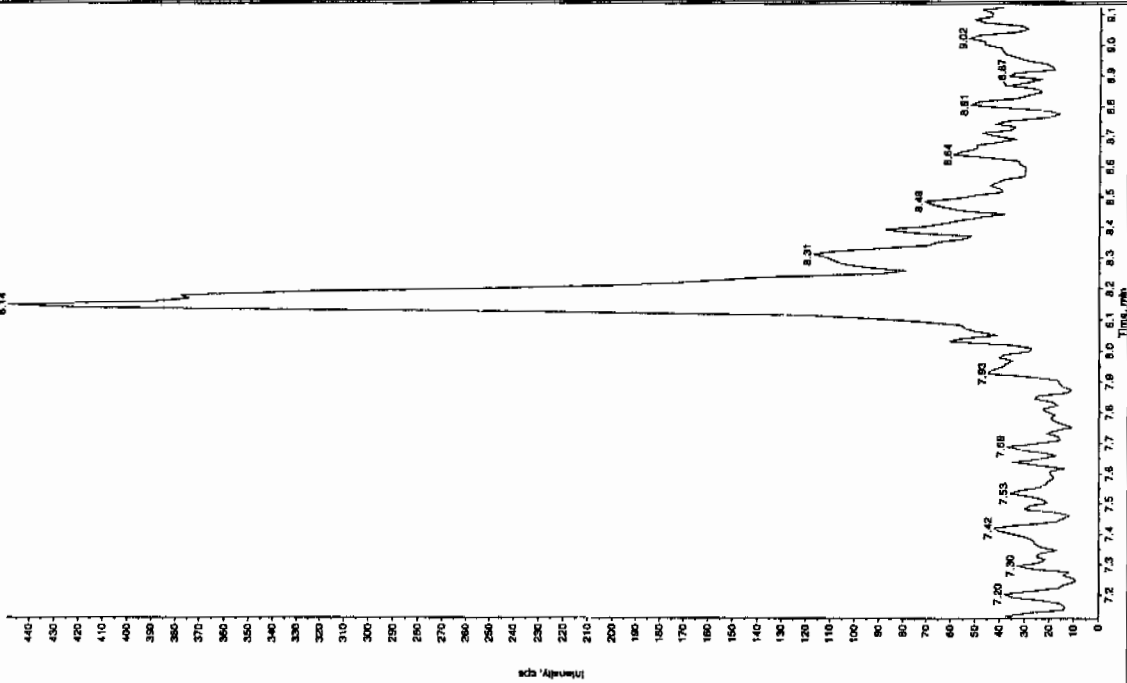
Sample Name: "XIBUK05" Sample ID: "111ER" File: "EXSD080037.wif"
 Peak Name: "YATE" Mass(es): "257.2/254.9 amu"
 Comment: "LONSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 2:15:08 AM
 Modified: No



Sample Name: "XIBUK05" Sample ID: "111ER" File: "EXSD080037.wif"
 Peak Name: "35-Dinitrobenzidine" Mass(es): "182.0/180.0 amu"
 Comment: "LONSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 2:15:08 AM
 Modified: No



4/12/2010

Sample Name: "XIBLK05" Sample ID: "111ER" File: "EXS04080037.wif"

Peak Name: "34-Dinitrofluorene" Mass(es): "182.1751.9 amu"

Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

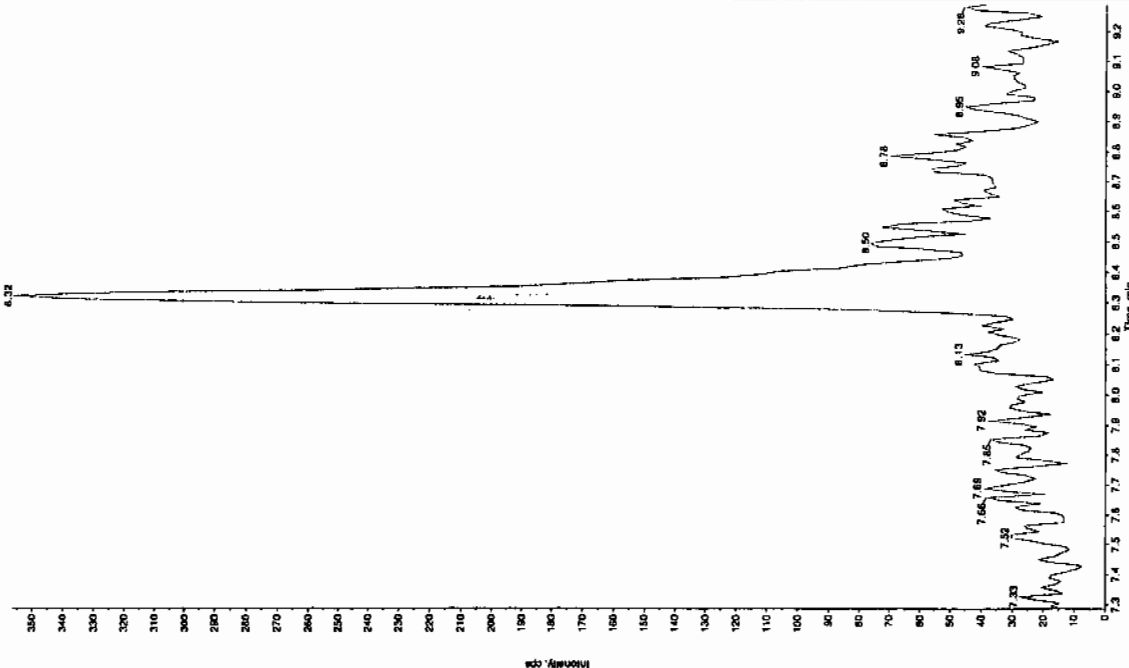
Concentration: 0.00 ng/mL

Calculated Conc: 0.00

Acq. Date: 4/9/2010

Acq. Time: 2:15:08 AM

Modified: No



Sample Name: "XIBLK05" Sample ID: "111ER" File: "EXS04080037.wif"

Peak Name: "28-Diamino-4-nitrofluorene" Mass(es): "165.0461.0 amu"

Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

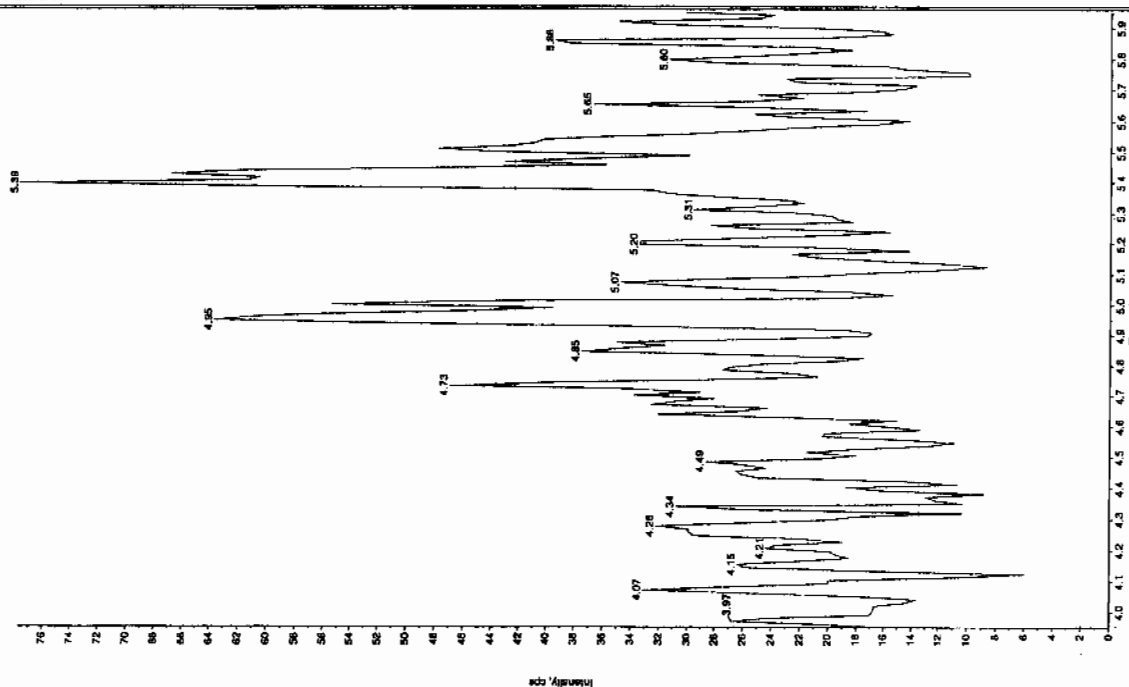
Concentration: 0.00 ng/mL

Calculated Conc: 0.00

Acq. Date: 4/9/2010

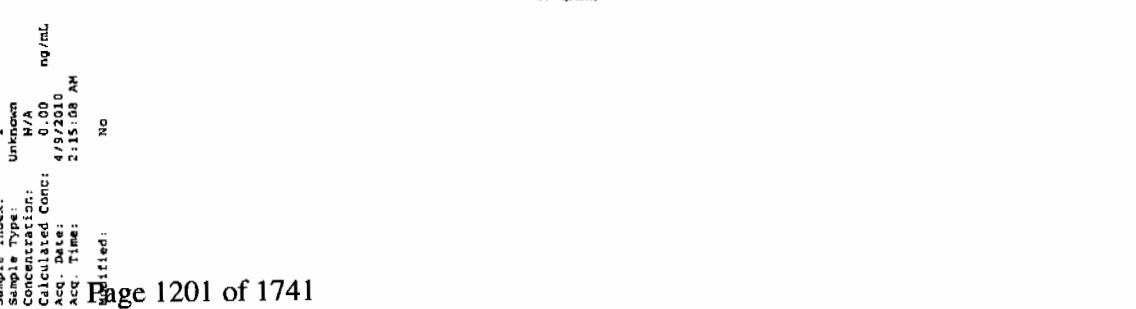
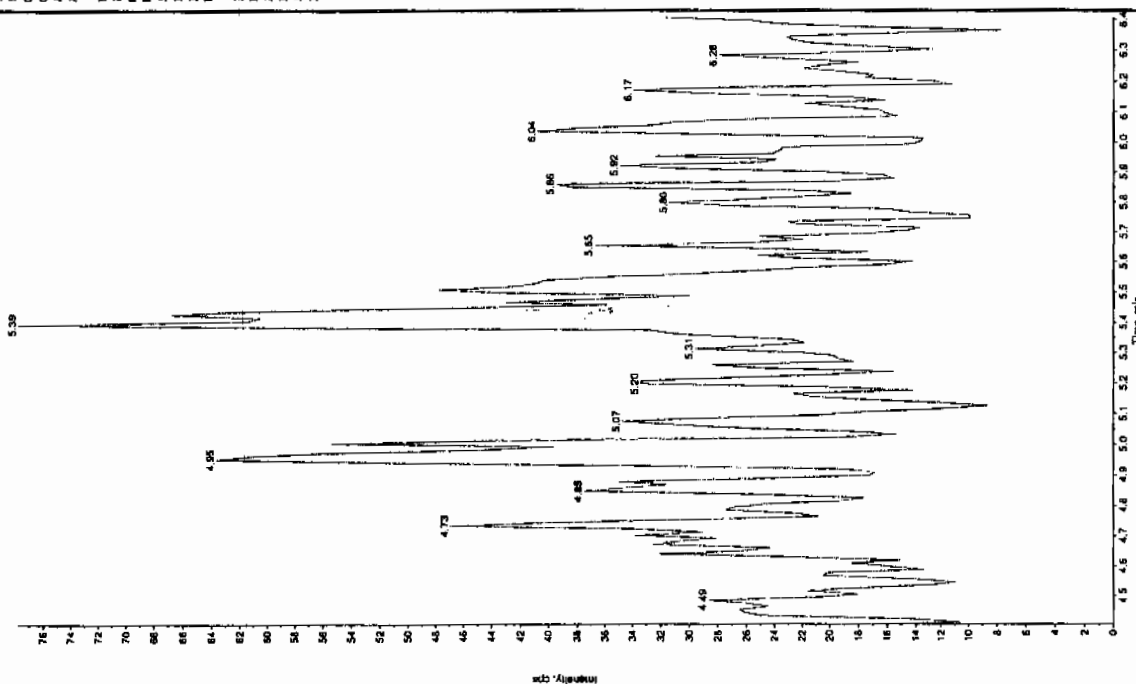
Acq. Time: 2:15:08 AM

Modified: No



Sample Name: "XBLK05" Sample ID: "111ER" File: "EX504080037.wif"
 Peak Name: "tris(cresyl) phosphate" Mass(es): "359.1/91.0 amu"
 Comment: "LONSEXP_B" Annotation: "-"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.02 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 2:15:08 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: 10.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 9.18e+016 counts
 Mass: 2189.016 cps
 Start Time: 10.7 min
 End Time: 11.1 min



Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

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

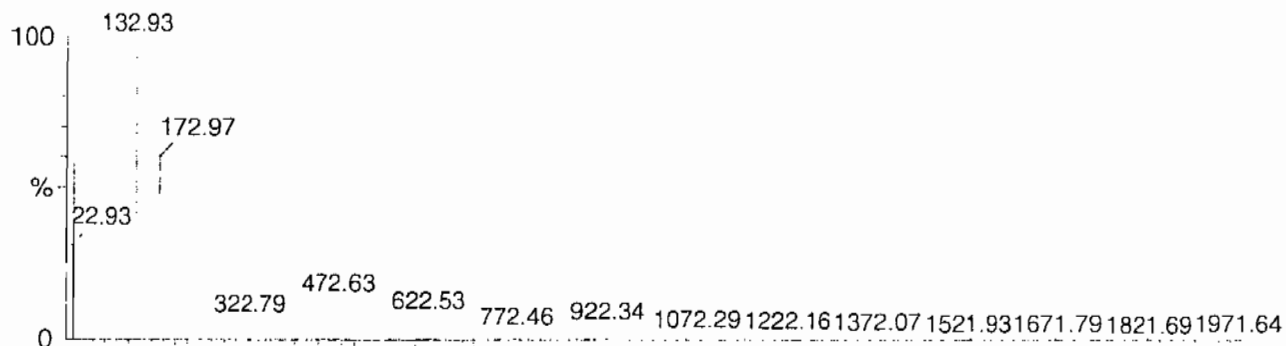
Calibration Report - MS1 Static

Page 1 of 1

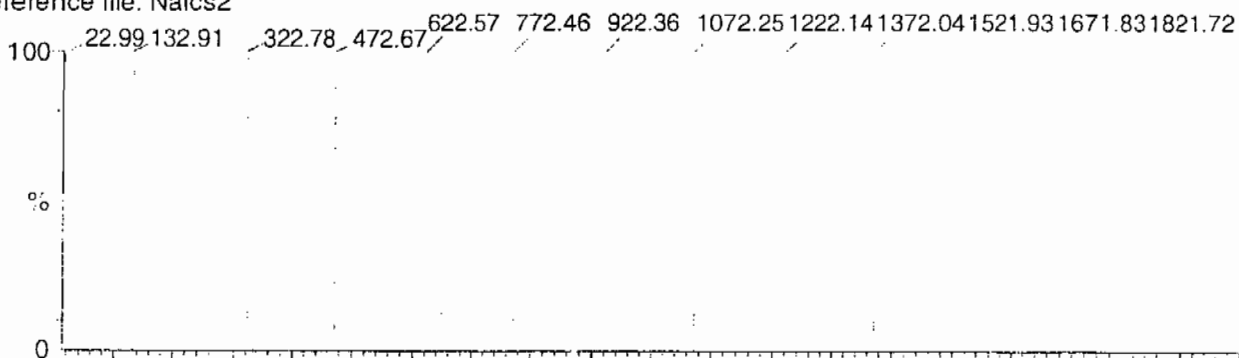
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

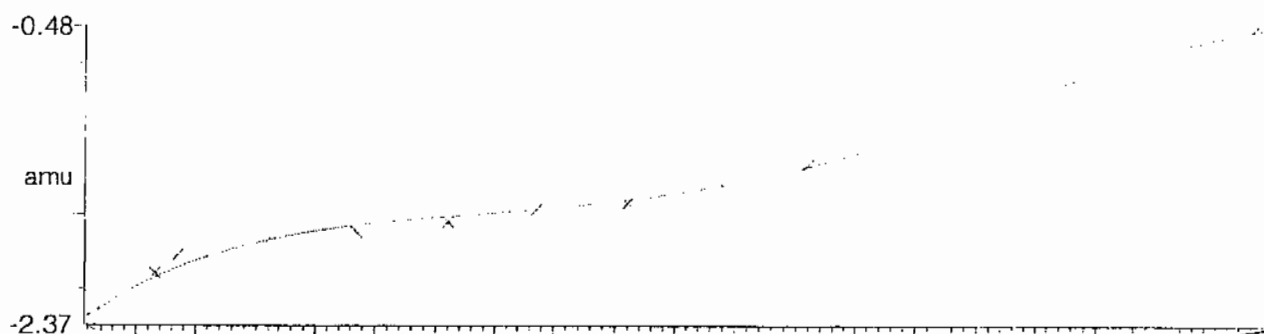
15 matches of 15 tested references



Reference file: Naics2

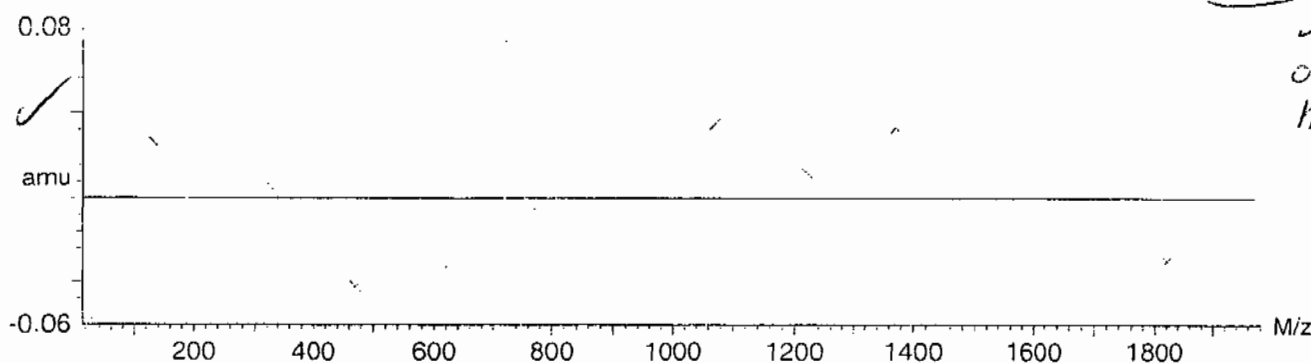


Mass difference (Raw - Ref mass)



Residuals

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



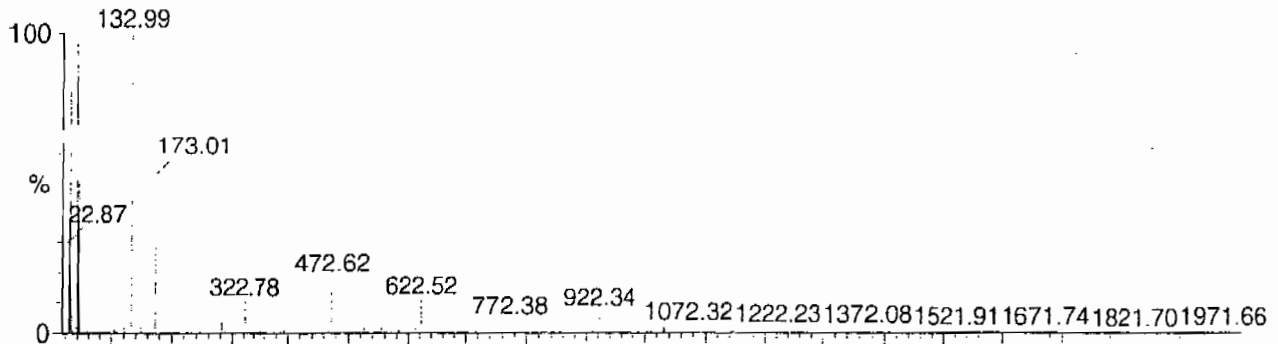
Calibration Report - MS1 Scanning

Page 1 of 1

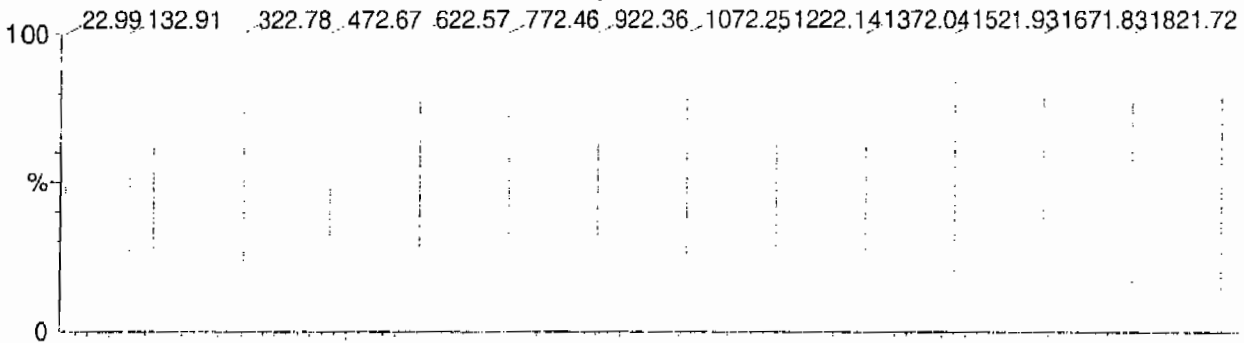
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

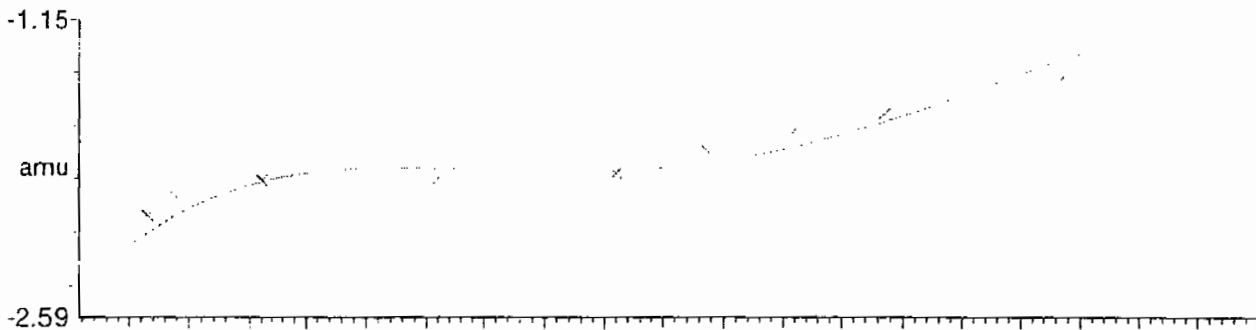
15 matches of 15 tested references



Reference file: Naics2

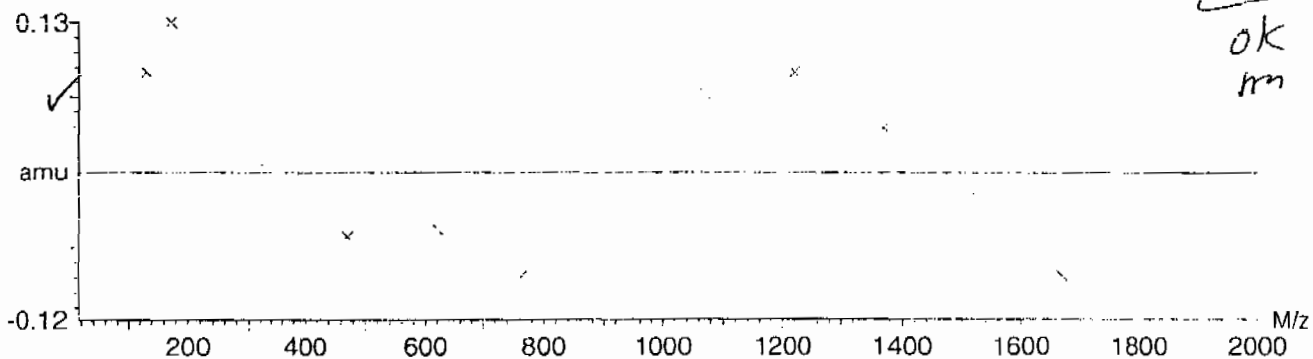


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-5.432715e-9 \pm 0.069858$



ok
rm

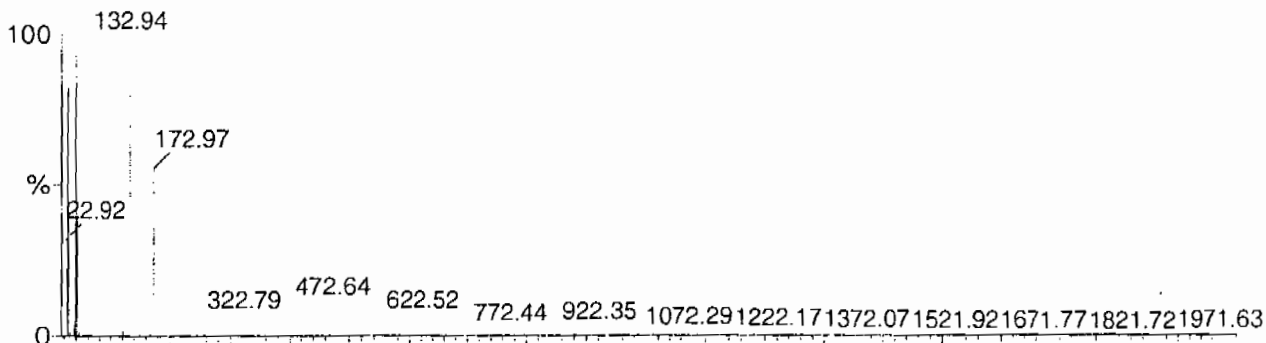
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

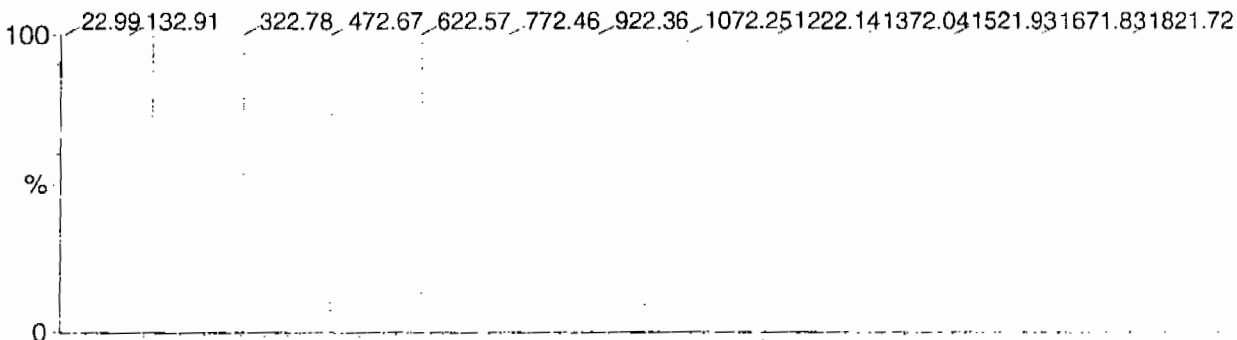
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

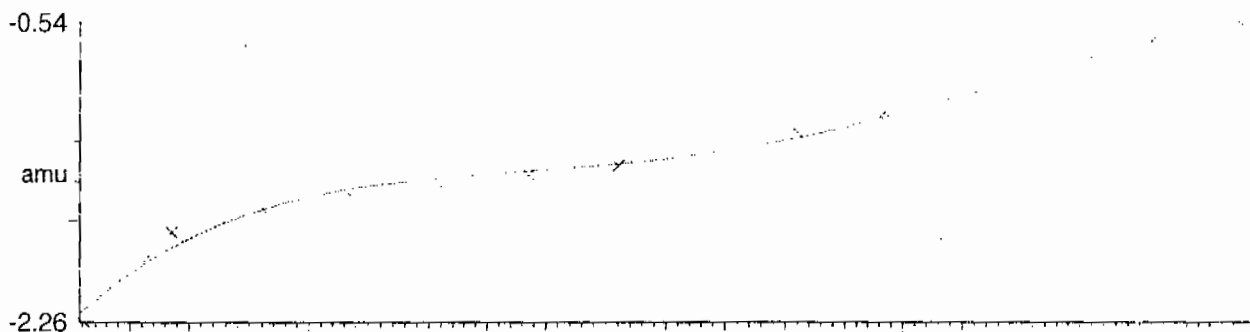
15 matches of 15 tested references



Reference file: Naics2

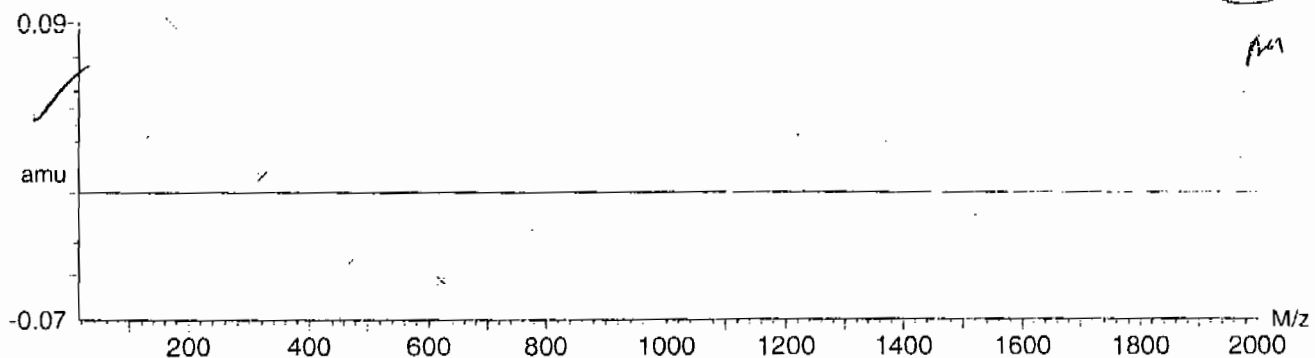


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.486639×10^{-4} 0.040487



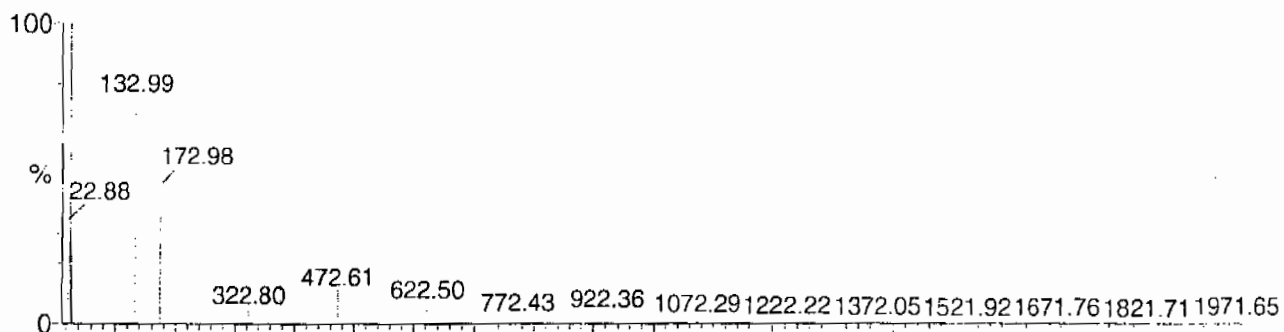
Calibration Report - MS2 Static

Page 1 of 1

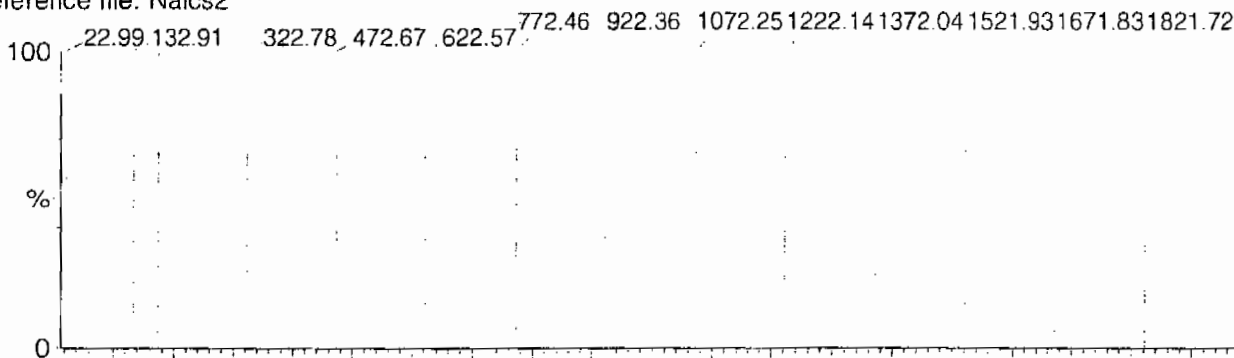
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

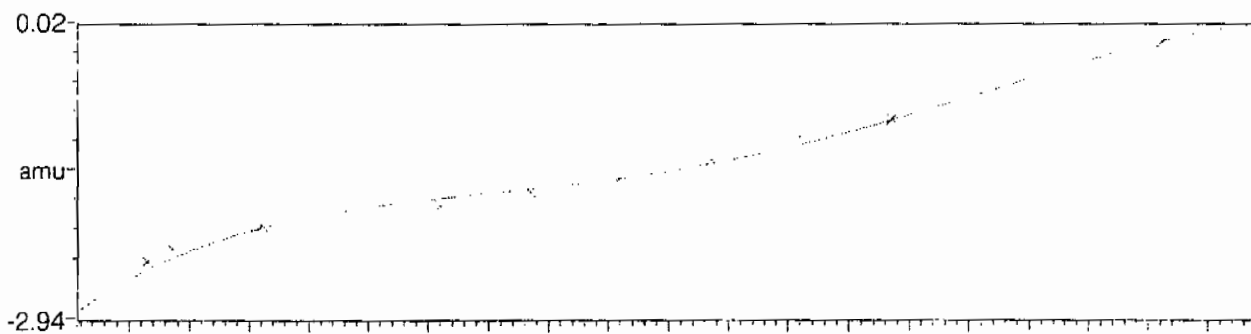
15 matches of 15 tested references



Reference file: Naics2

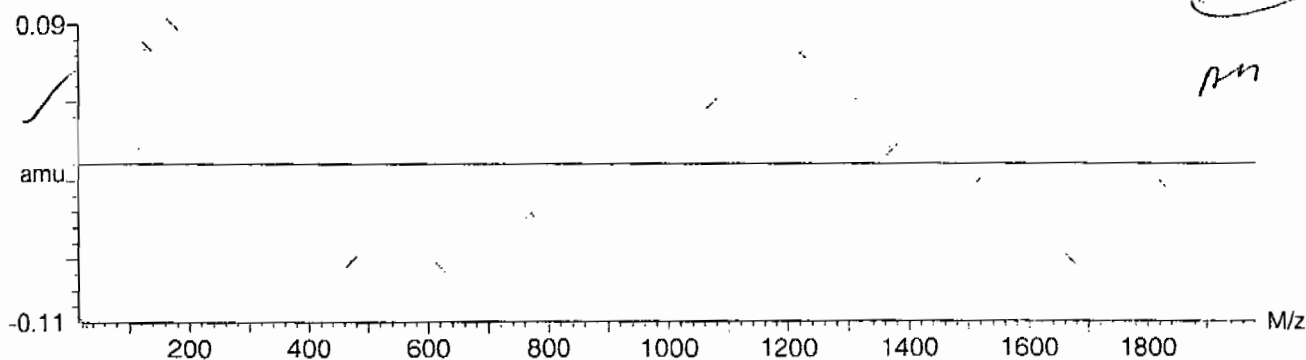


Mass difference (Raw - Ref mass)



Residuals

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



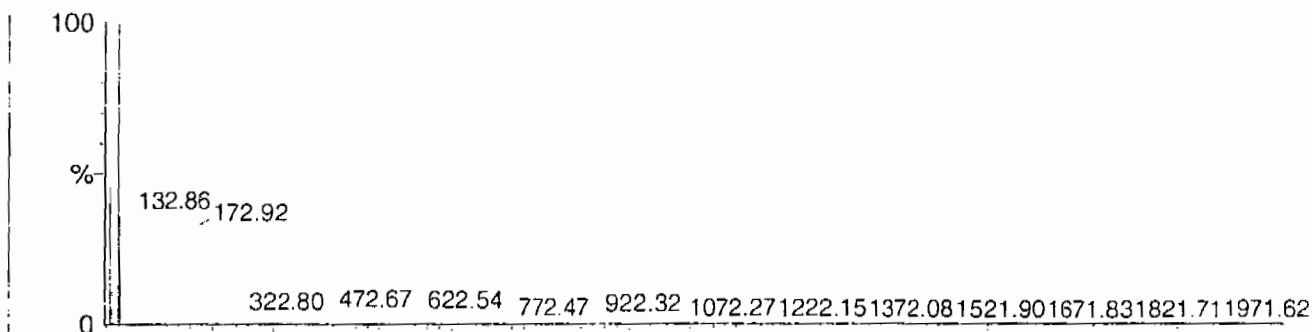
Calibration Report - MS2 Scanning

Page 1 of 1

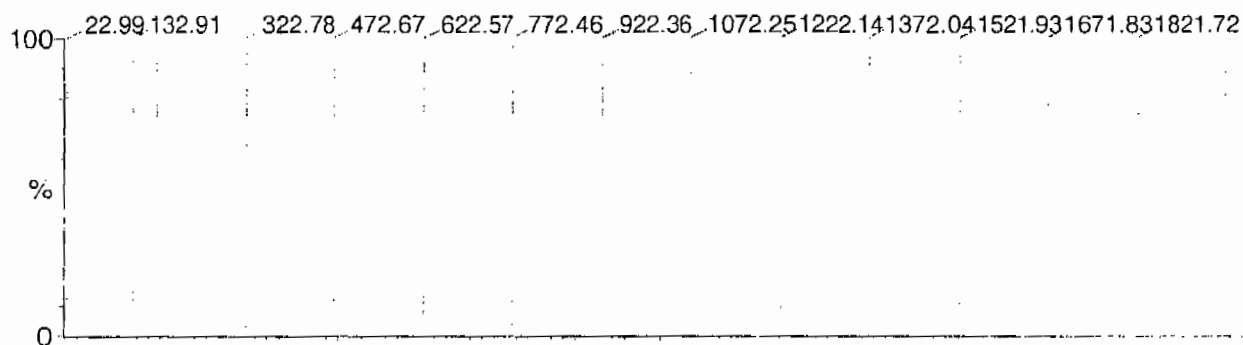
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

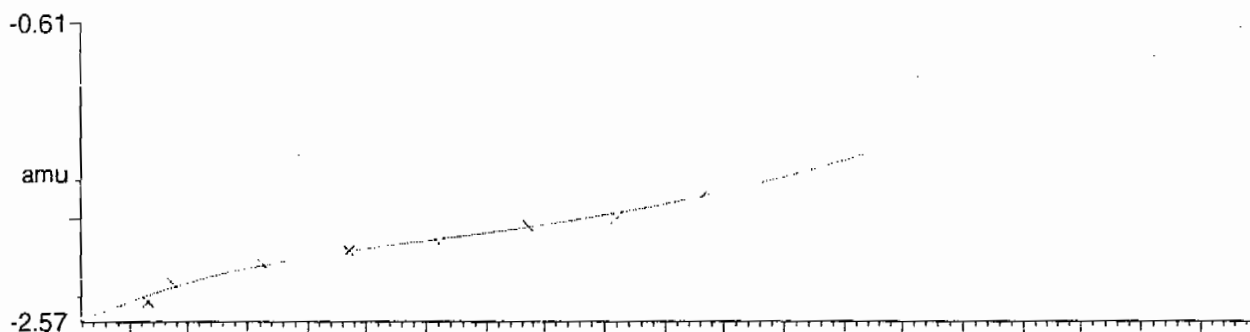
14 matches of 15 tested references



Reference file: Naics2

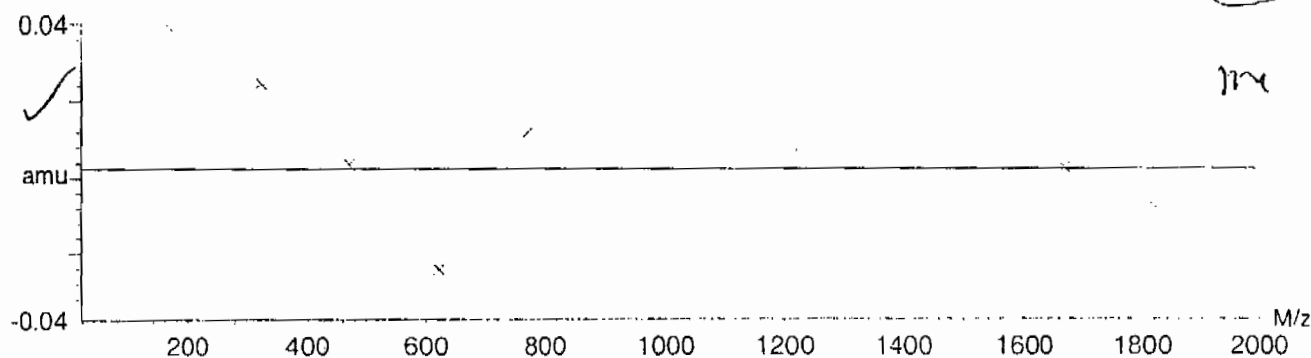


Mass difference (Raw - Ref mass)



Residuals

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



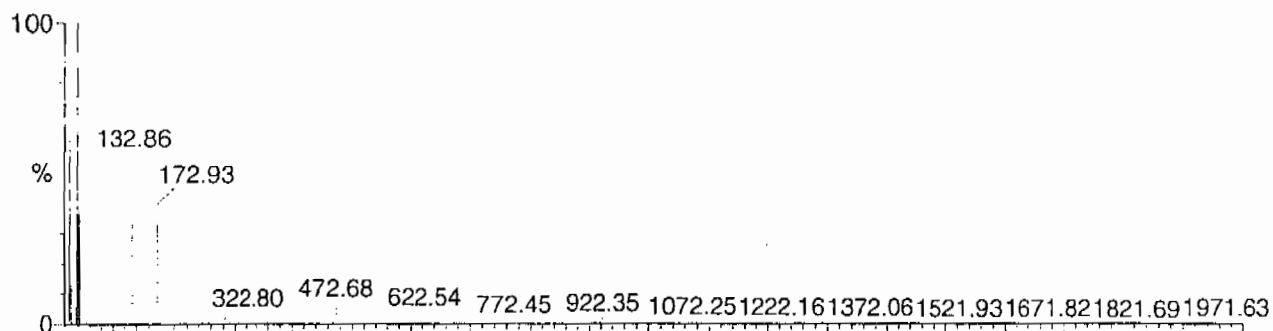
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

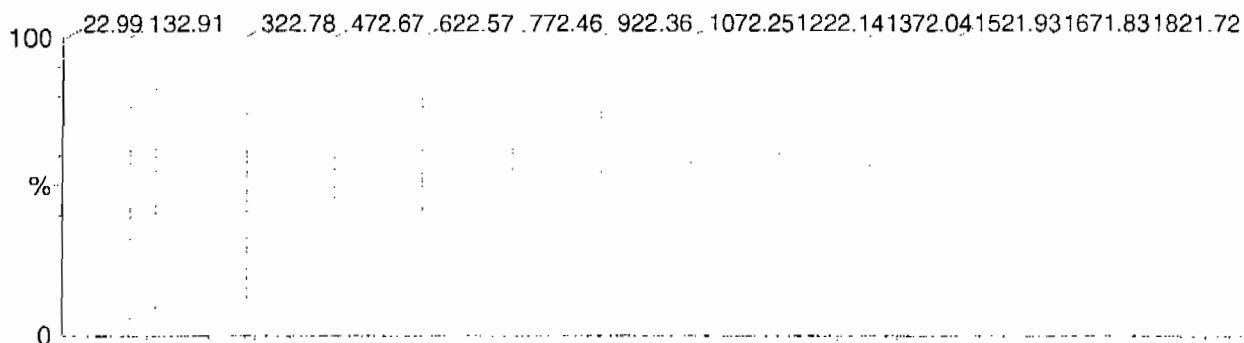
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

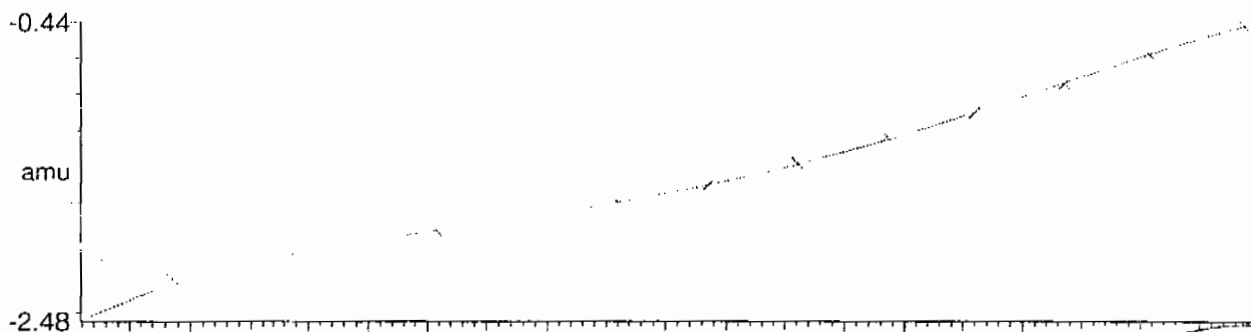
14 matches of 15 tested references



Reference file: Naics2

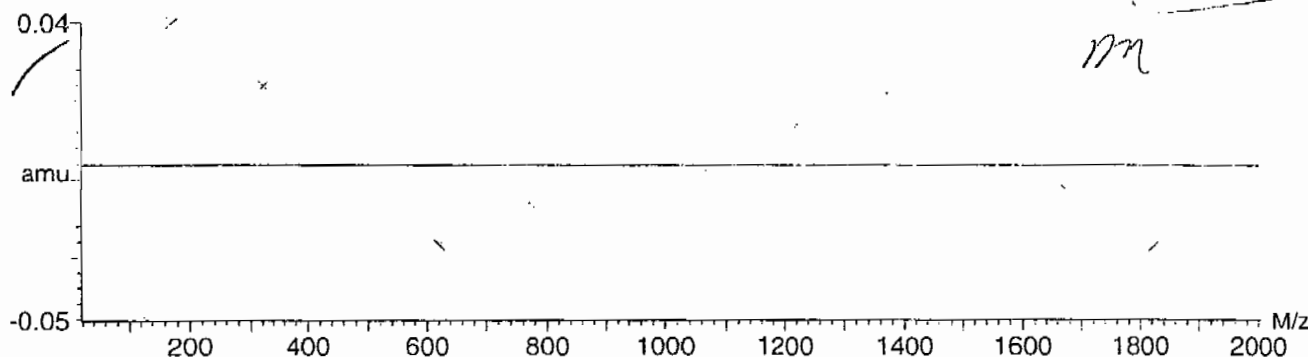


Mass difference (Raw - Ref mass)



Residuals

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

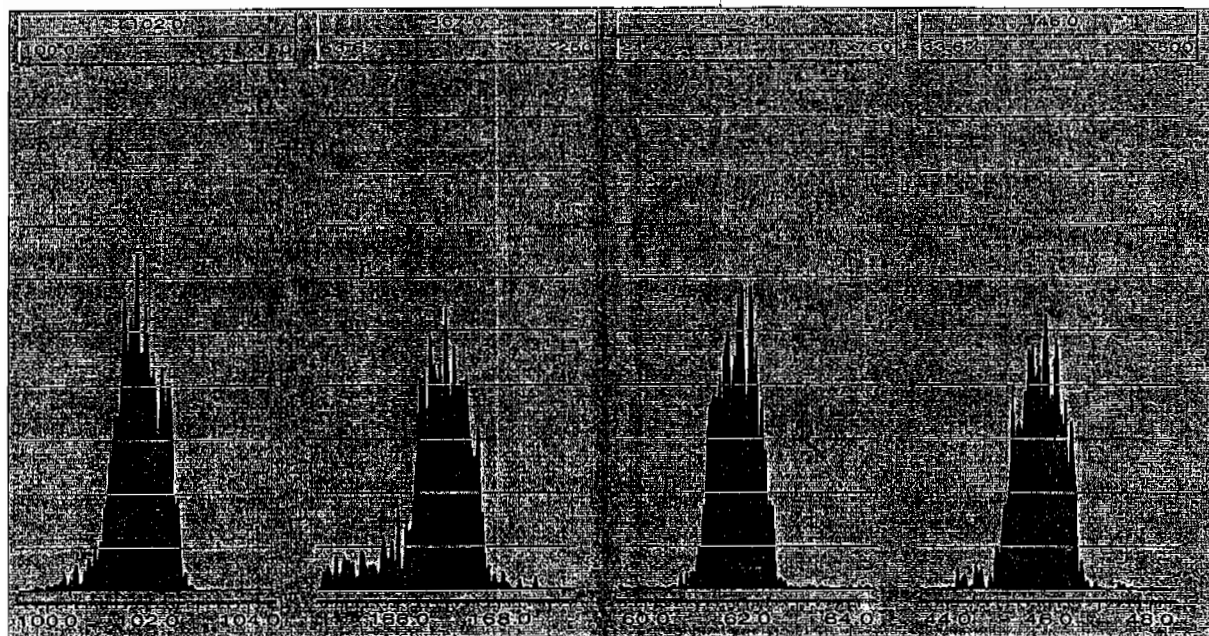


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Mon Apr 12 14:40:37 2010

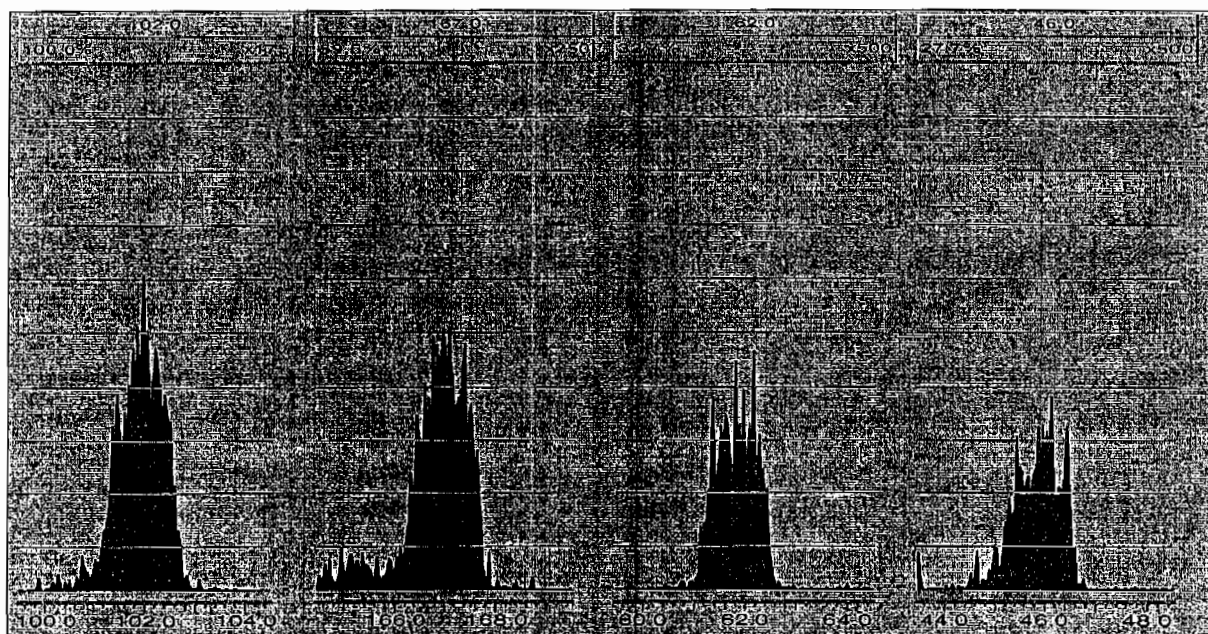


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Sun Apr 18 14:11:50 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

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) #
			5880.363	11.868	34983.183	17.054
Upper Limit			7644.4719	12.368	45478.1379	17.554
Lower Limit			4116.2541	11.368	24488.2281	16.554
MB for batch 960306	16-apr-10 19:30	EXP0412204a	7440.09	11.873	40627.6	17.095
LCS for batch 960306	16-apr-10 19:59	EXP0412205a	6147.54	11.894	36625.8	17.091
RE36-10-7494	16-apr-10 20:29	EXP0412206a	6074.45	11.894	35078.9	17.091
RE36-10-7494(248373001MS)	16-apr-10 20:58	EXP0412207a	7000.05	11.869	45220.9	17.092
RE36-10-7494(248373001MSD)	16-apr-10 21:28	EXP0412208a	6958.09	11.868	38624.1	17.094
RE36-10-7493	16-apr-10 21:57	EXP0412209a	6552.5	11.894	37306.7	17.095
RE36-10-7492	16-apr-10 22:27	EXP0412210a	6664.31	11.894	41095	17.094
RE36-10-7496	16-apr-10 23:26	EXP0412212a	7490.25	11.894	41376.8	17.095
RE36-10-7499	16-apr-10 23:55	EXP0412213a	6520.6	11.868	38854.7	17.094
RE36-10-7497	17-apr-10 01:53	EXP0412217a	6878.88	11.868	44168	17.095
RE36-10-7495	17-apr-10 02:23	EXP0412218a	6971.15	11.871	41581.6	17.094
RE36-10-7498	17-apr-10 02:52	EXP0412219a	7225.16	11.874	42508.2	17.093
RE36-10-7500	17-apr-10 03:22	EXP0412220a	7061.09	11.868	41239.9	17.095
RE36-10-7523	17-apr-10 03:51	EXP0412221a	6495.65	11.868	42991.6	17.095
RE36-10-7522	17-apr-10 04:21	EXP0412222a	6573.85	11.869	41043.4	17.091
	Analysis Date/Time	GEL Data File	IS1 (DNB) (Area) #	RT (min) #	IS2 (DNT) (Area) #	RT2 (min) #
			6443.263	11.789	38834.783	16.902
Upper Limit			8376.2419	12.289	50485.2179	17.402
Lower Limit			4510.2841	11.289	27184.3481	16.402
RE36-10-7491	19-apr-10 03:02	EXP0418028a	7580.22	11.789	46269.3	16.903
RE36-10-7521	19-apr-10 03:30	EXP0418029a	8224.33	11.789	53085.5 *	16.902

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

High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

IS1 (DNB) = 1,3-Dinitrobenzene-d4

IS2 (DNT) = 2,6-Dinitrotoluene-d3

Area Upper Limit = + 30% of average IS area from multipoint calibration

Area Lower Limit = - 30% of average IS area from multipoint calibration

RT Upper Limit = +0.5 of average multipoint RT

RT Lower Limit = -0.5 of average multipoint RT

Column used to flag values outside QC limits with an asterisk

* Values outside of QC limits

SAMPLE DATA

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373001

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412206a

Date Analyzed: 16-APR-10 20:29

Units: ug/kg

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

*Concentration =

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

Printed: Sat Apr 17 10:45:10 2010, Page 55 of 97

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

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0412206a

Date: 16-Apr-2010

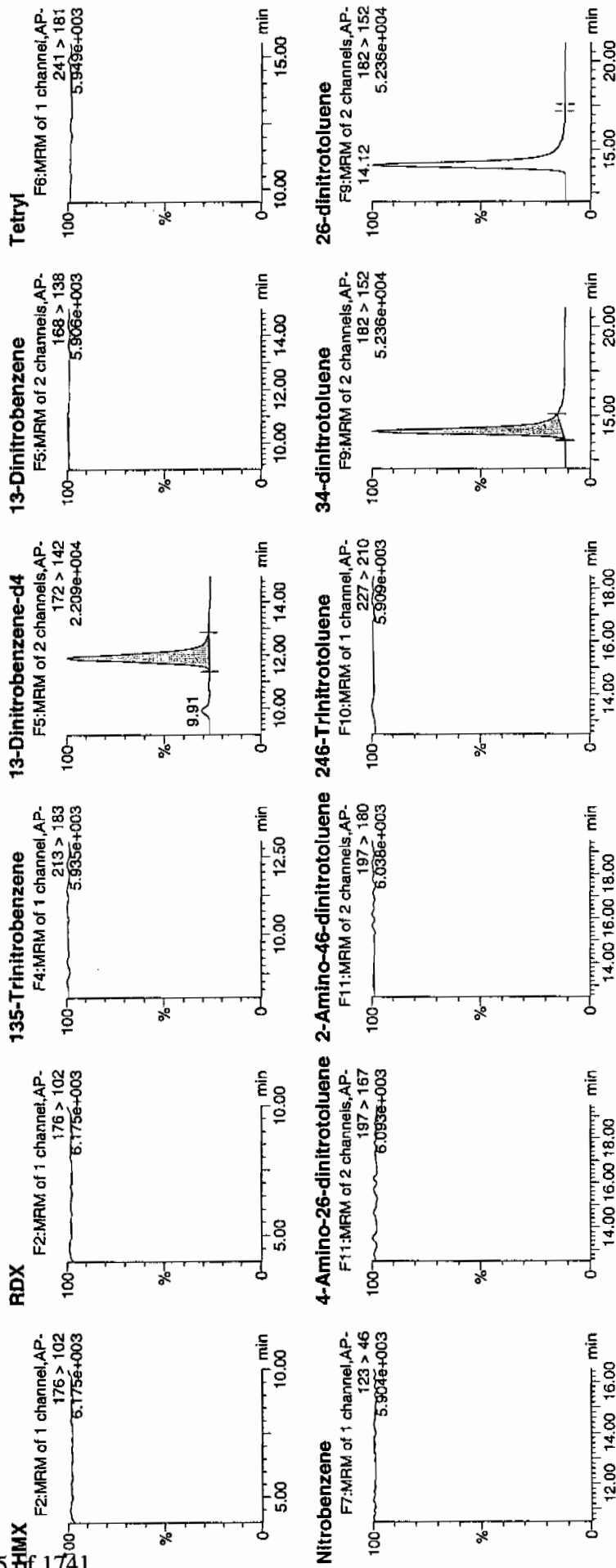
Time: 20:29:08

ID: 248373001

Vial: 2:1,C

4477
4/17/10

WAV 960307 / 8022 / 21



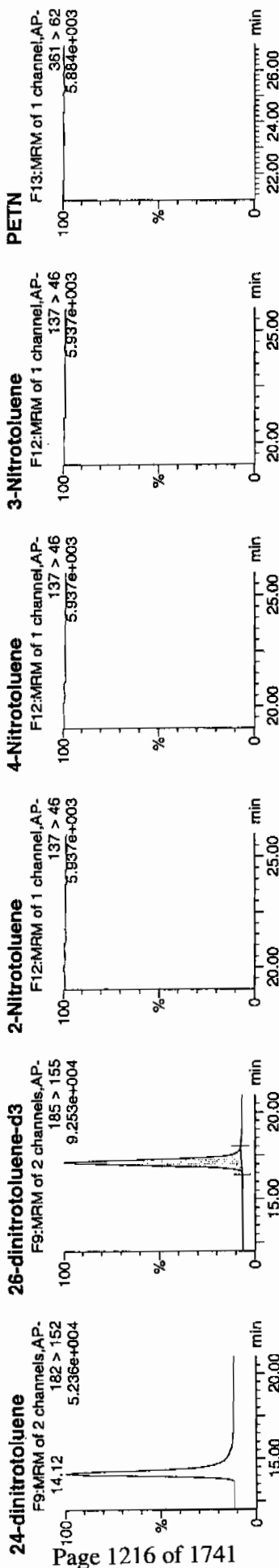
4477
4/17/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 56 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



ID	Name	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc (ng/mL)	% Rec	% Dev	SN
248373001	HMX	176 > 102		6074.454									
248373001	RDX	176 > 102		6074.454									
248373001	135-Trinitrobenzene	213 > 183		6074.454									
248373001	13-Dinitrobenzene-d4	172 > 142	11.89	6074.454	6074.454	6074.454	bb			516.5032	103.3	3.3	925.2
248373001	13-Dinitrobenzene	168 > 138		6074.454									
248373001	Tetryl	241 > 181		6074.454									
248373001	Nitrobenzene	123 > 46		6074.454									
248373001	4-Amino-26-dinitrotoluene	197 > 157		35078.934									
248373001	2-Amino-46-dinitrotoluene	197 > 180		35078.934									
248373001	246-Trinitrotoluene	227 > 210		35078.934									
248373001	34-dinitrotoluene	182 > 152	14.12	19107.143	19107.143	272.345	bb	17-Apr-10	10:37:31	264.1234	105.6	5.6	796.9
248373001	26-dinitrotoluene	182 > 152		35078.934									
248373001	24-dinitrotoluene	182 > 152		35078.934									
248373001	26-dinitrotoluene-d3	185 > 155	17.09	35078.934	35078.934	35078.934	bb			501.3686	100.3	0.3	2748.9
248373001	2-Nitrotoluene	137 > 46		35078.934									
248373001	4-Nitrotoluene	137 > 46		35078.934									
248373001	3-Nitrotoluene	137 > 46		35078.934									
248373001	PETN	361 > 62		35078.934									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373001

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080018.wiff

Date Analyzed: 08-APR-10 21:16

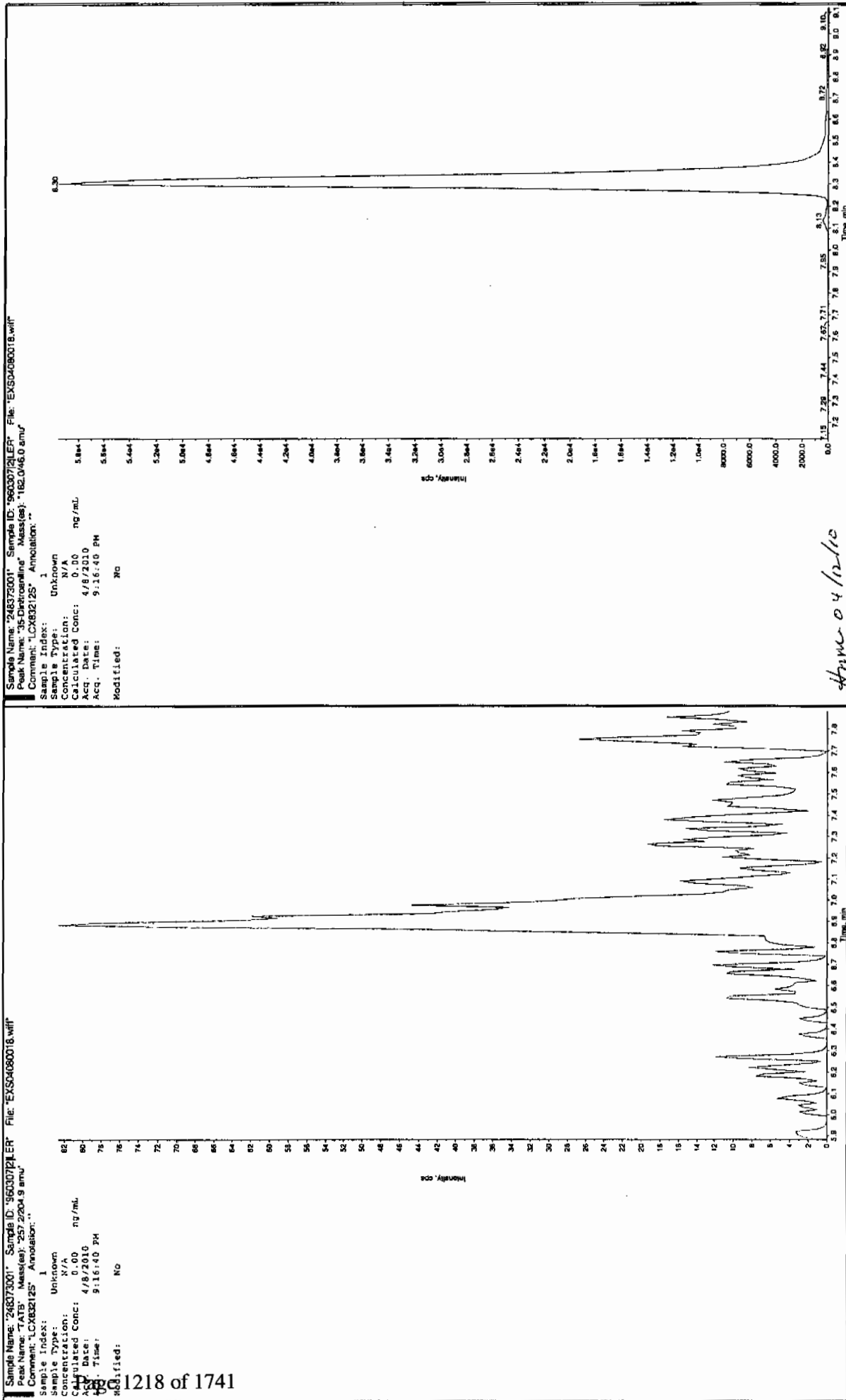
Units: ug/kg

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

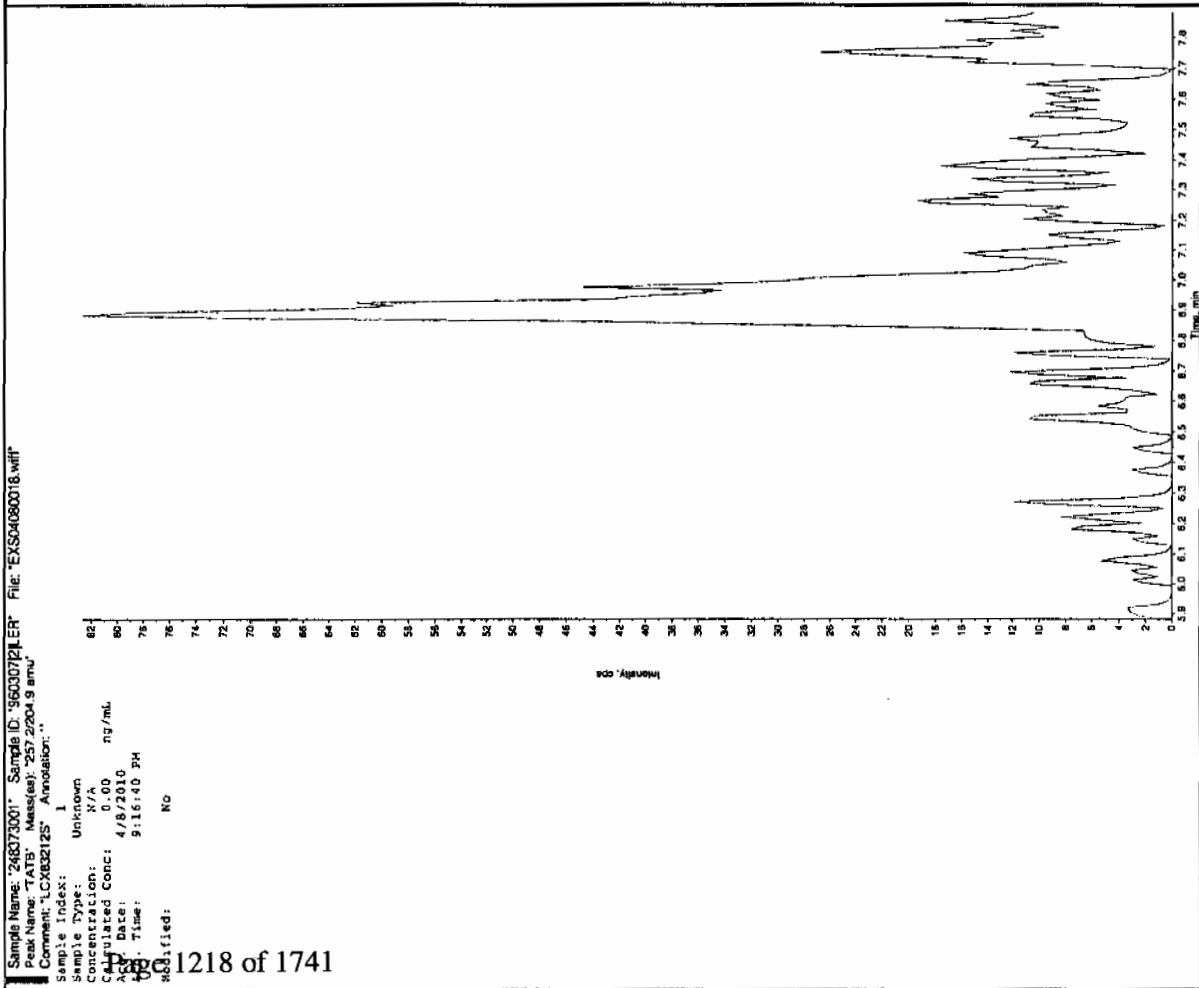
*Concentration =

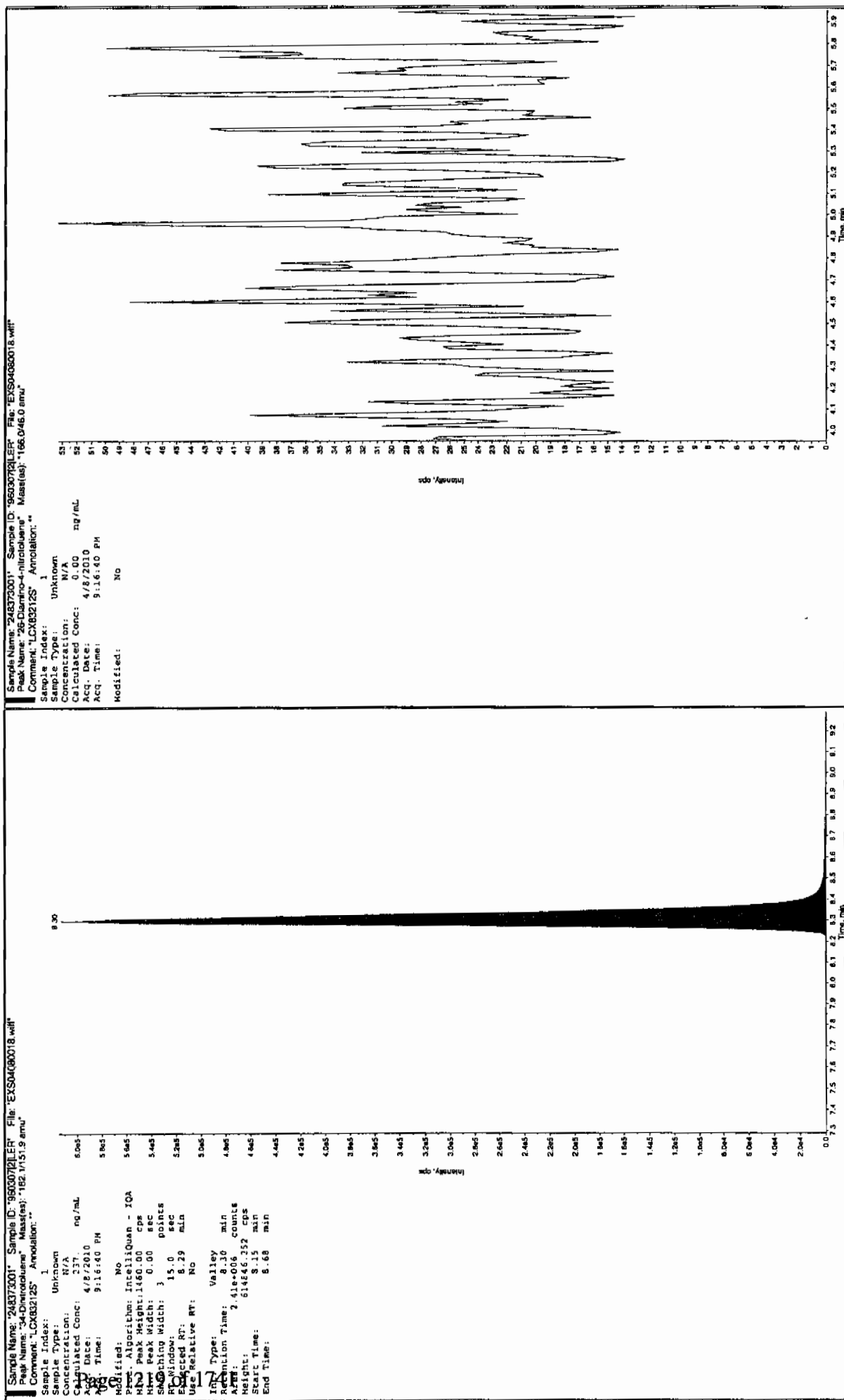
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

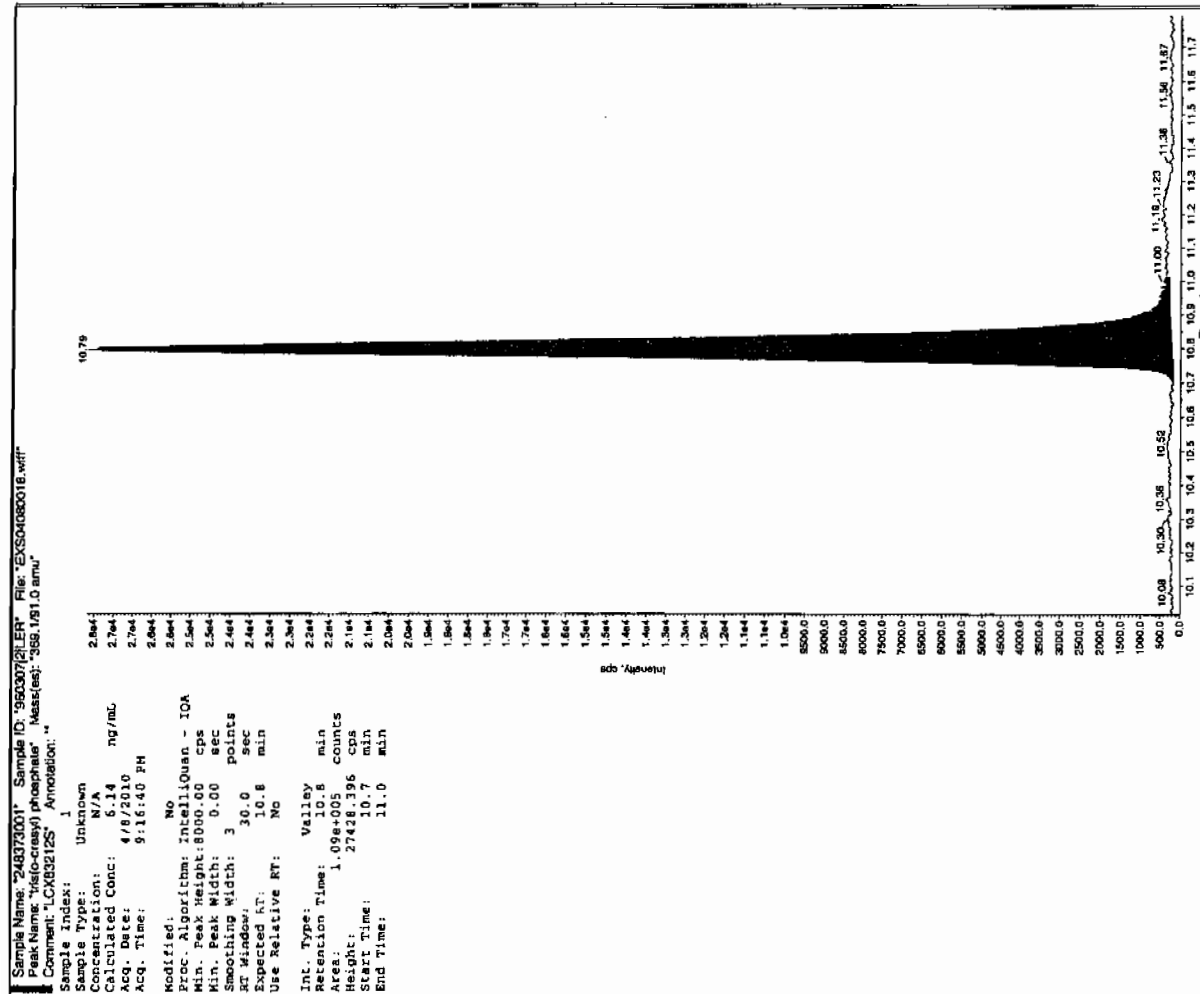
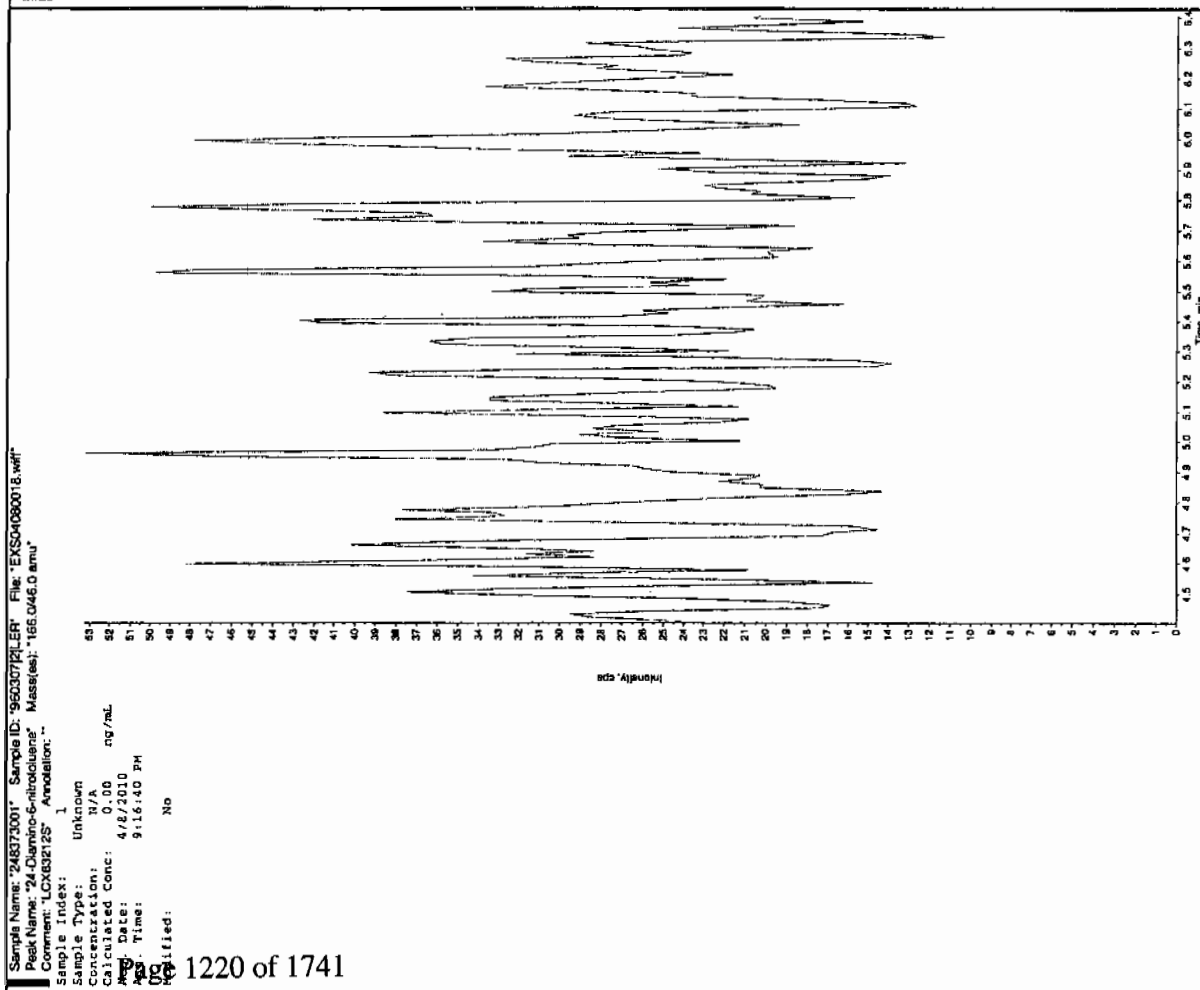
See 4/12/10



4/12/10







1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7493

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373002

Sample Amount 2

Moisture: 25.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412209a

Date Analyzed: 16-APR-10 21:57

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

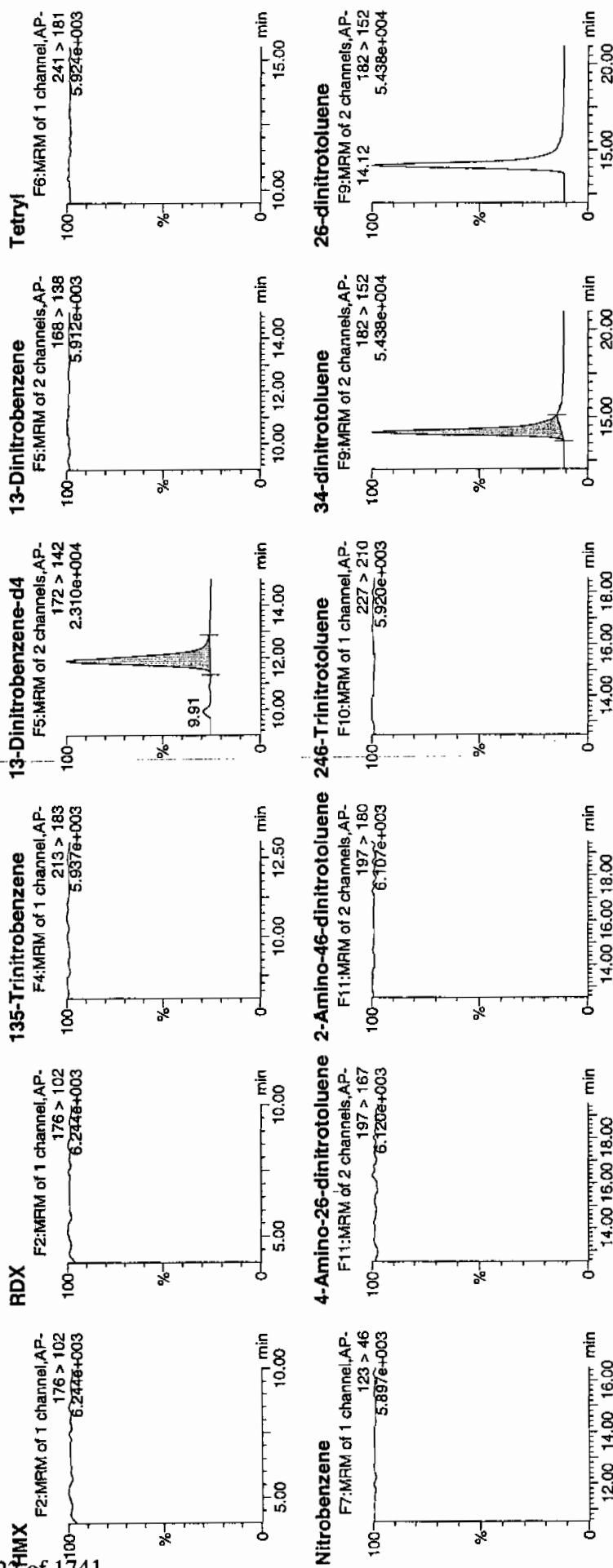
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Date: 16-Apr-2010

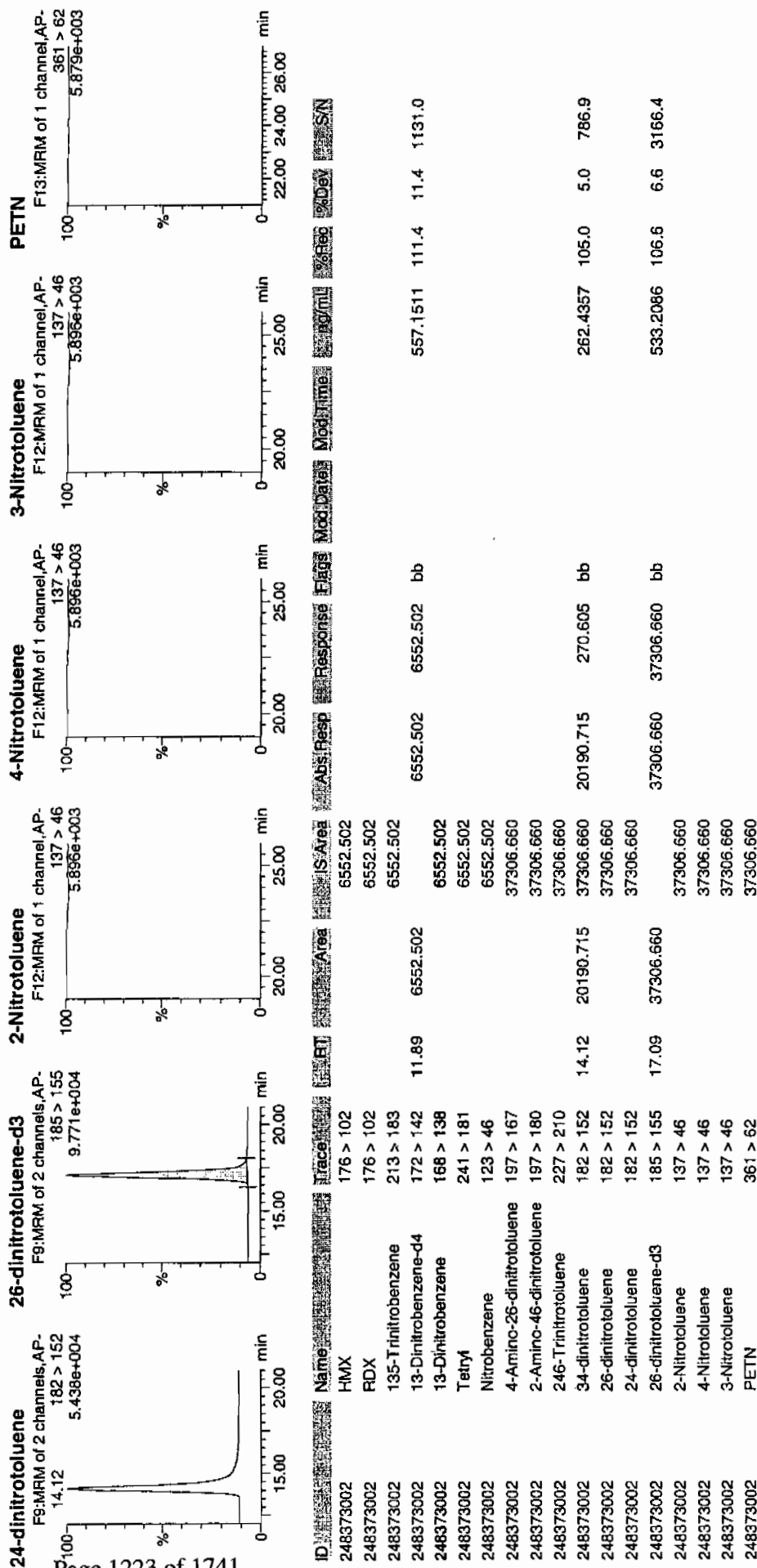
Time: 21:57:31

Time: 21:57:31
ID: 248373002
Vial: 2:1,F

07/11/15
4507



01/23/76



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7493

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373002

Sample Amount 2

Moisture: 25.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080021.wiff

Date Analyzed: 08-APR-10 22:03

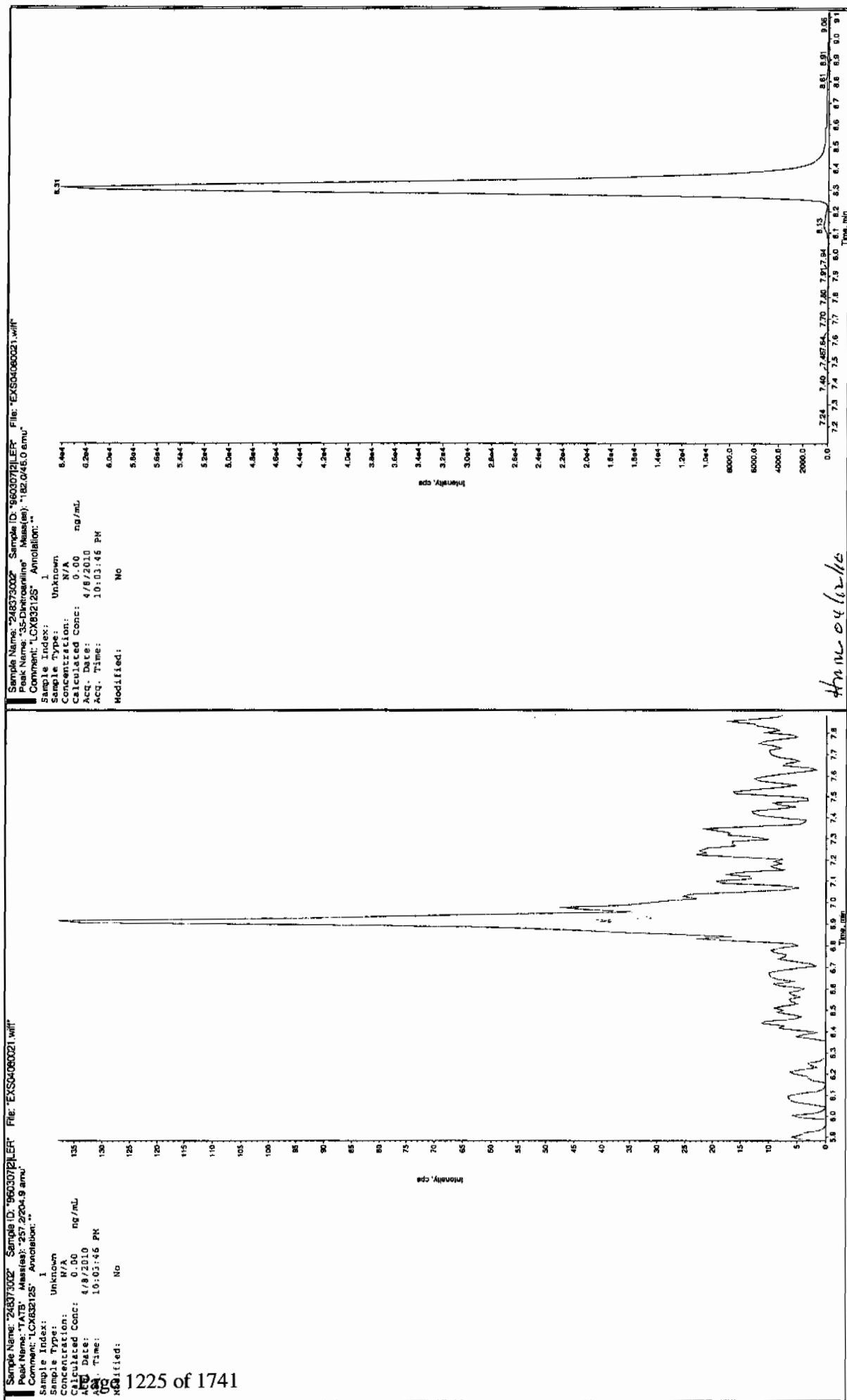
Units: ug/kg

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

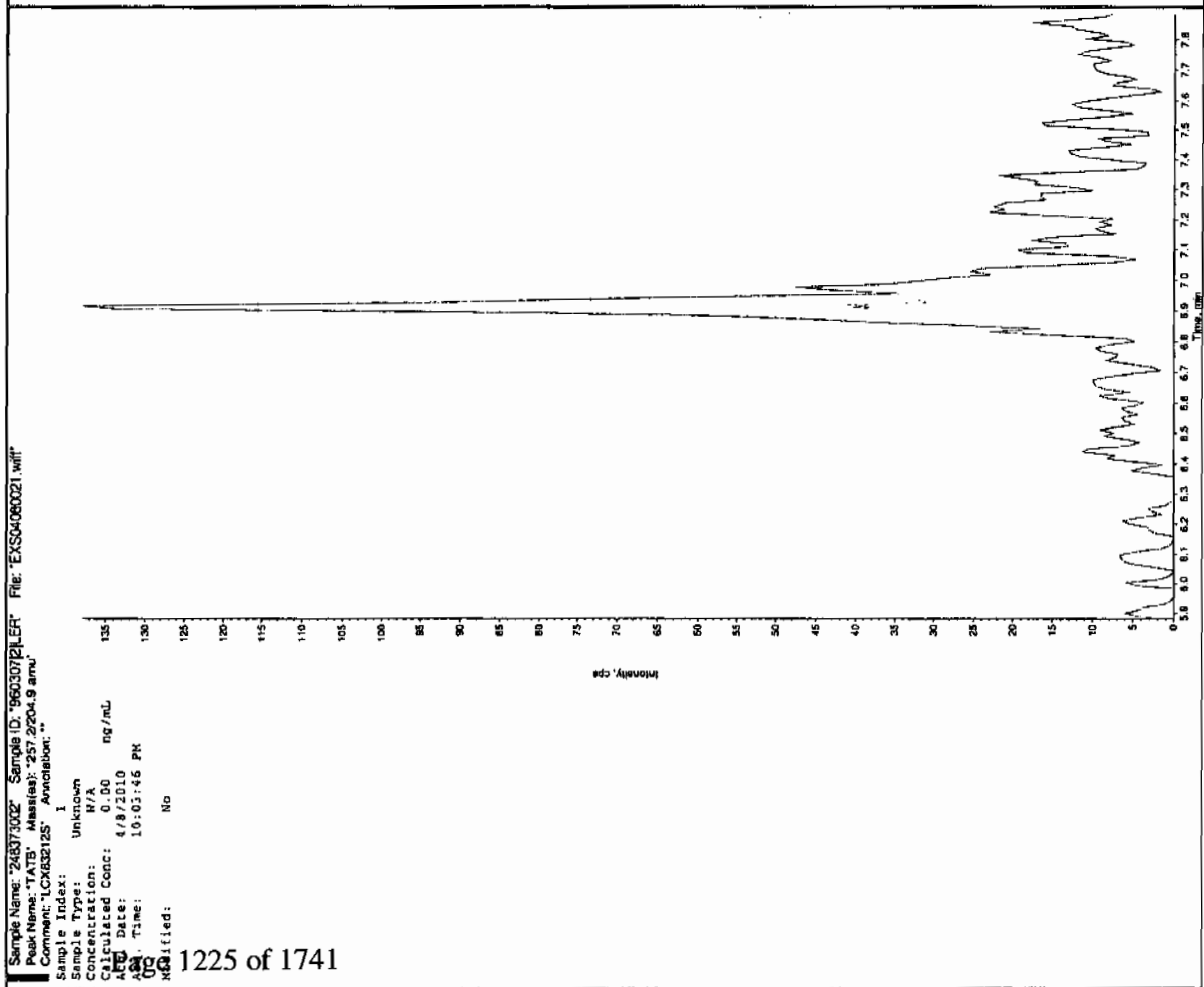
*Concentration =

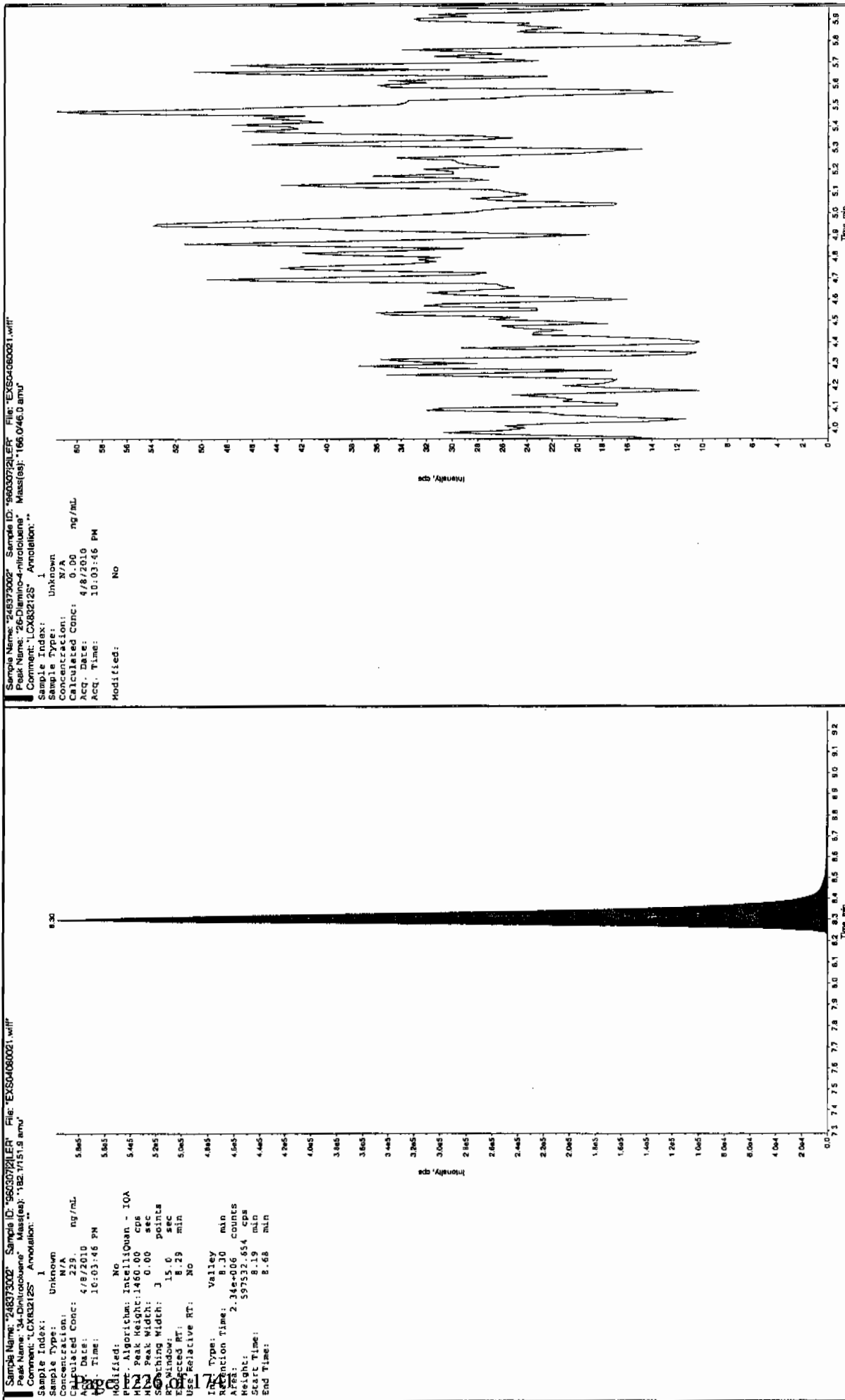
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

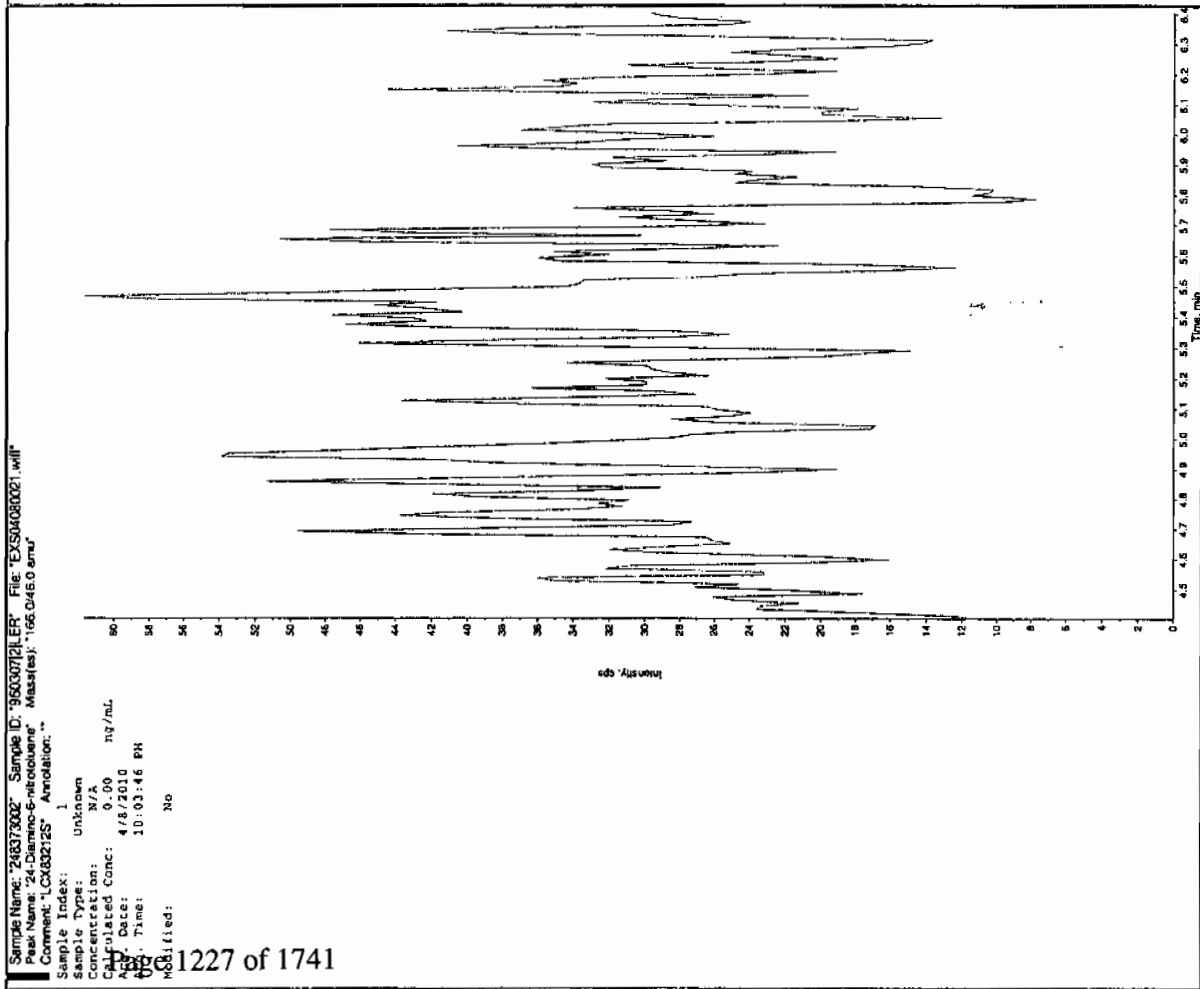
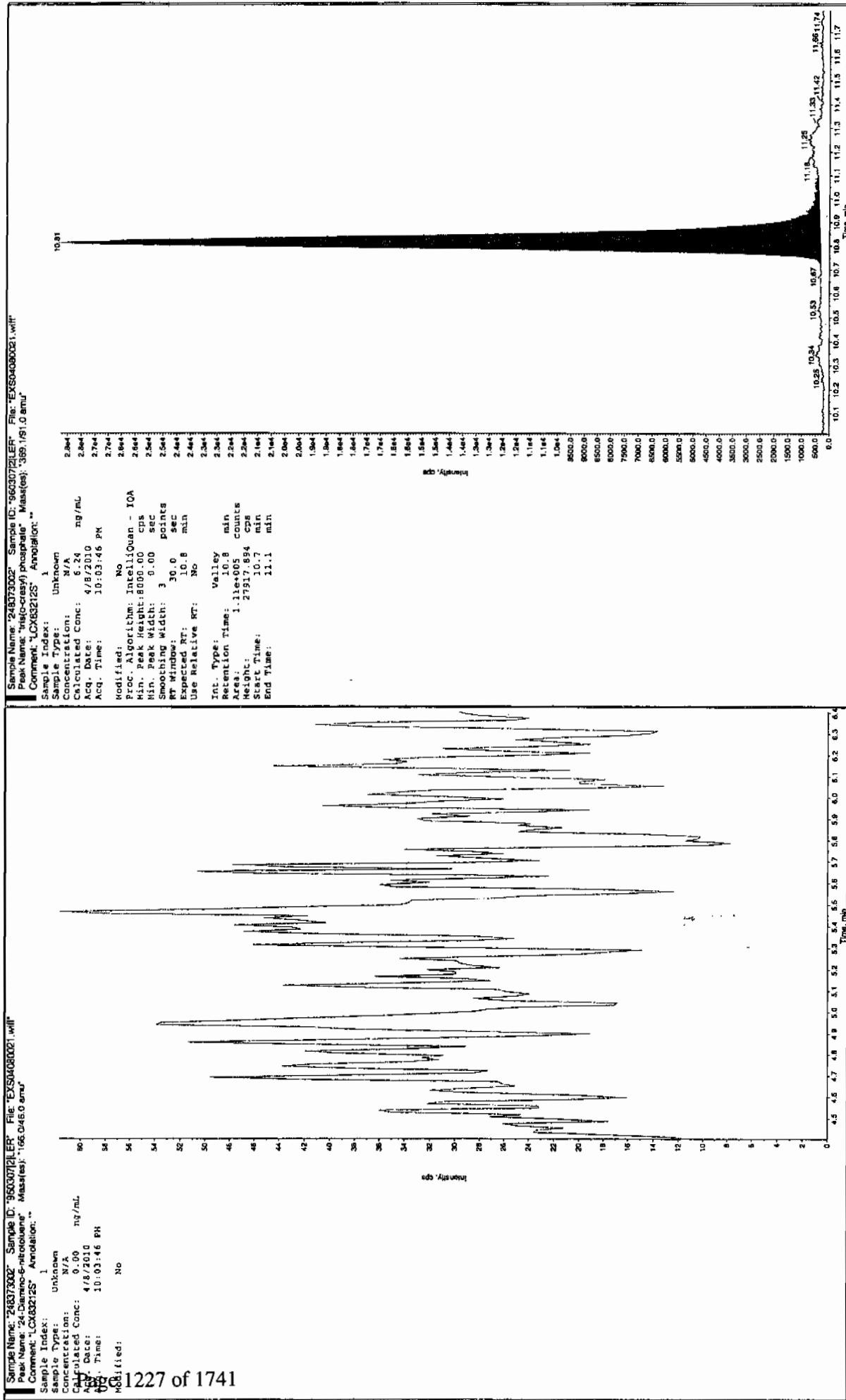
See 4/12/10



See 04/12/10







1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7492

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373003

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412210a

Date Analyzed: 16-APR-10 22:27

Units: ug/kg

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

*Concentration =

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412210a

Date: 16-Apr-2010

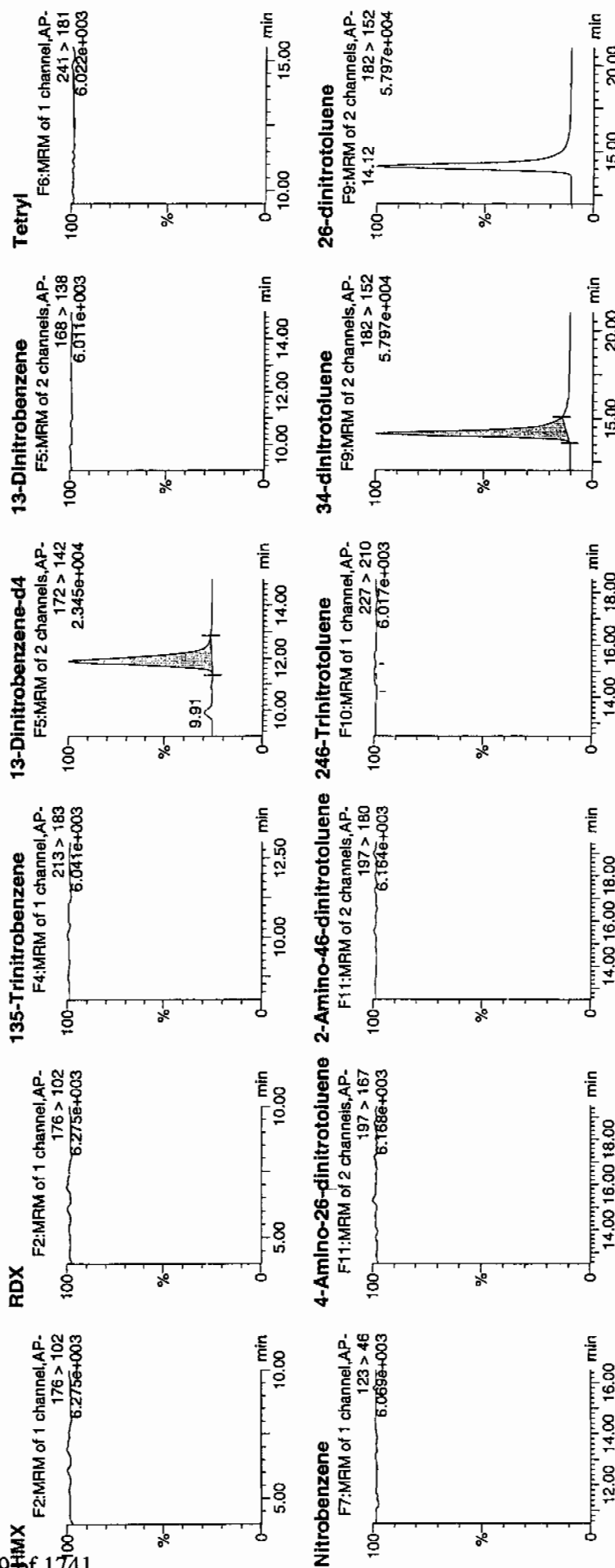
Time: 22:27:14

ID: 248373003

Vial: 2:2,A

4/17/10

LAUL 960307 (SOL) 21



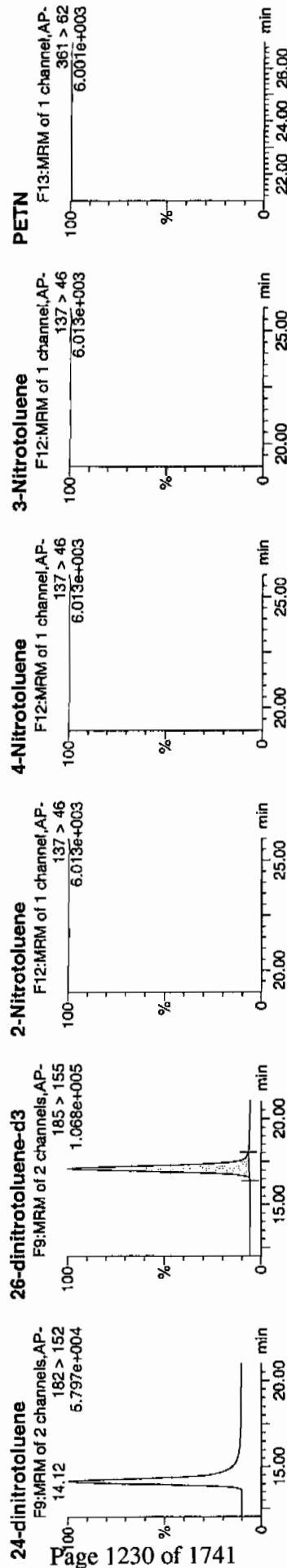
4/17/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 64 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



ID	Name	Trace	Area	S:Area	Abs:Resp	Response	Flags	Mod	Date	Mod	Time	%Rec	%Dev	SN
248373003	HMx	175 > 102		6664.313										
248373003	RDX	175 > 102		6664.313										
248373003	135-Trinitrobenzene	213 > 183		6664.313										
248373003	13-Dinitrobenzene-d4	172 > 142	11.89	6664.313										
248373003	13-Dinitrobenzene	168 > 138		6664.313										
248373003	Tetryl	241 > 181		6664.313										
248373003	Nitrobenzene	123 > 46		6664.313										
248373003	4-Amino-26-dinitrotoluene	197 > 167		6664.313										
248373003	2-Amino-46-dinitrotoluene	197 > 180		41095.043										
248373003	246-Trinitrotoluene	227 > 210		41095.043										
248373003	34-dinitrotoluene	182 > 152	14.12	21669.486										
248373003	26-dinitrotoluene	182 > 152		41095.043										
248373003	24-dinitrotoluene	182 > 152		41095.043										
248373003	26-dinitrotoluene-d3	185 > 155	17.09	41095.043										
248373003	2-Nitrotoluene	137 > 46		41095.043										
248373003	4-Nitrotoluene	137 > 46		41095.043										
248373003	3-Nitrotoluene	137 > 46		41095.043										
248373003	PETN	361 > 62		41095.043										

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7492

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373003

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080022.wiff

Date Analyzed: 08-APR-10 22:19

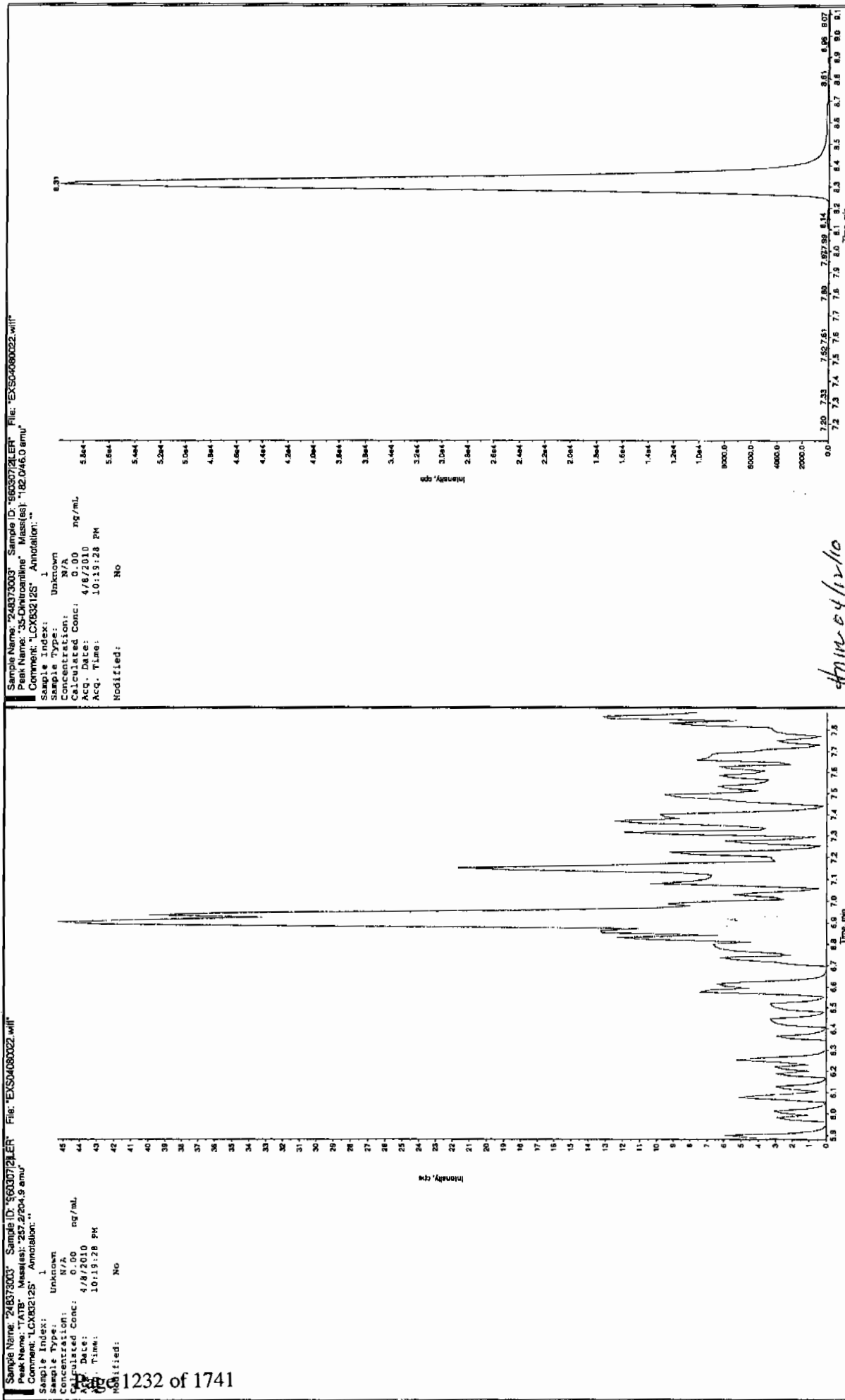
Units: ug/kg

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

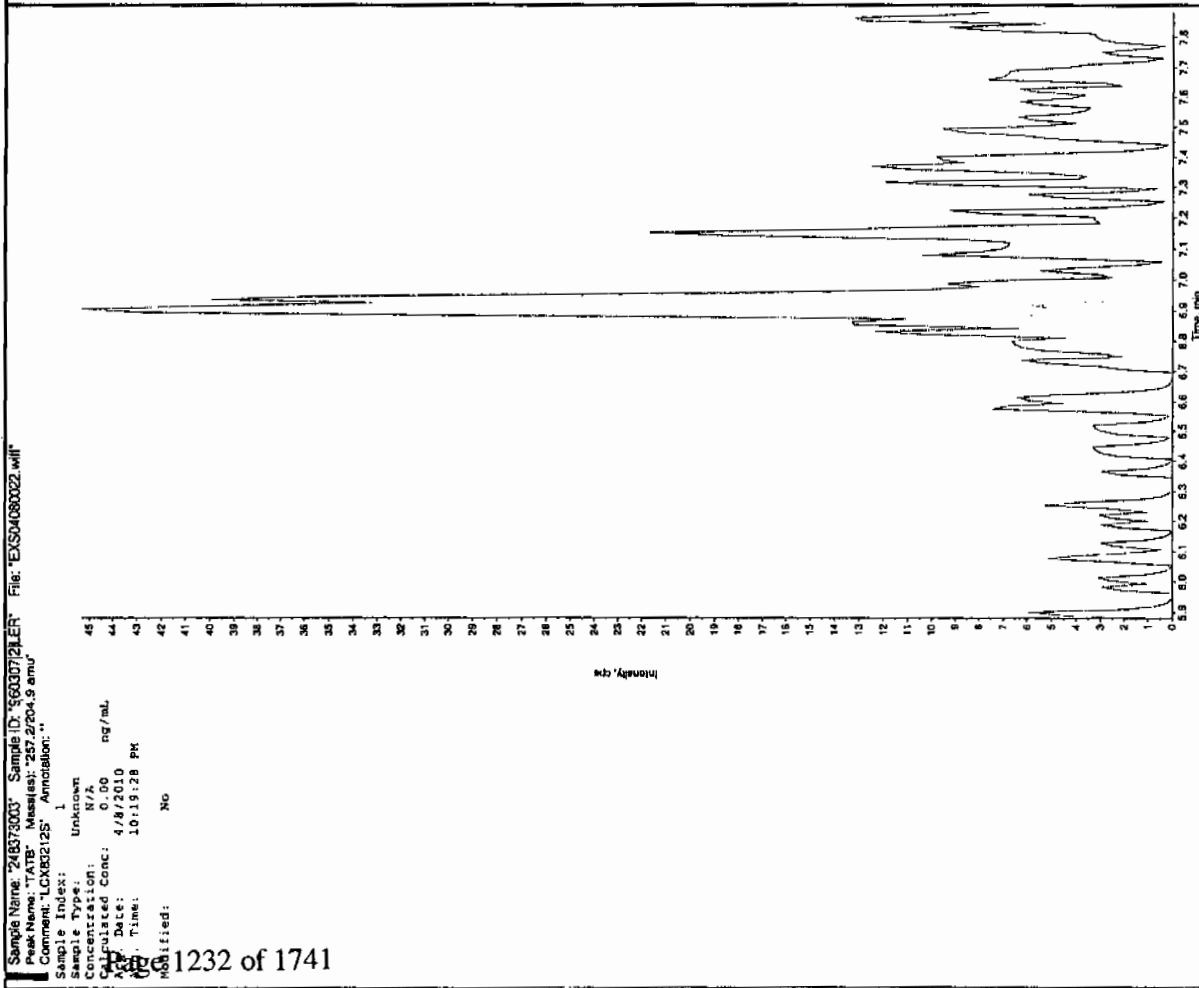
*Concentration =

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

2010-04-04

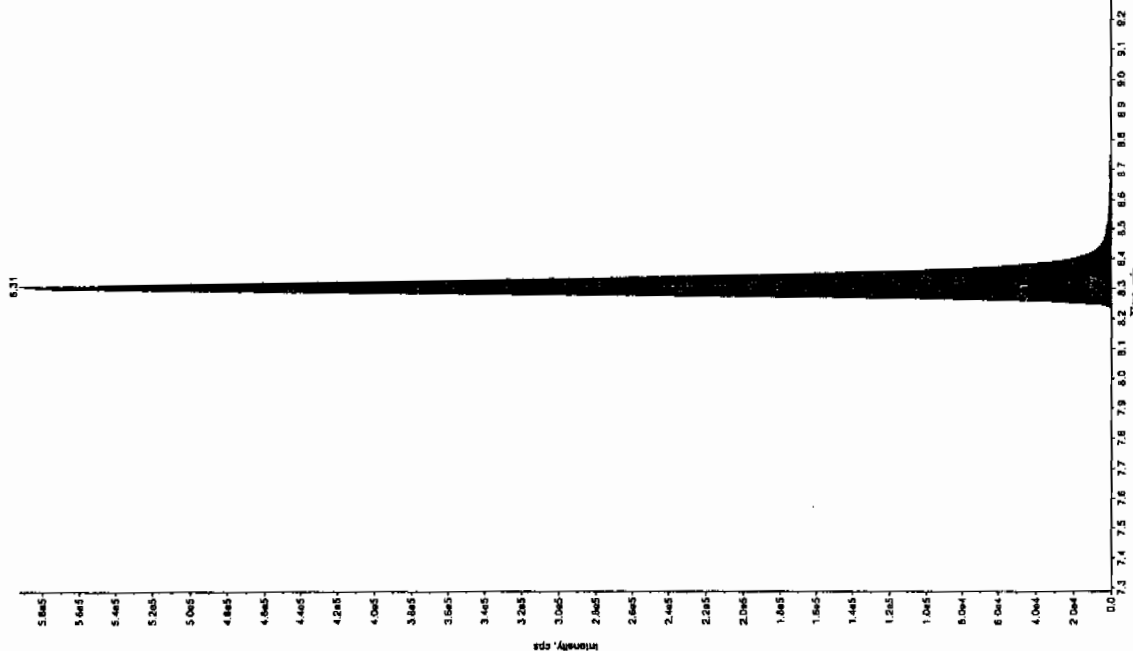


2010-04-04



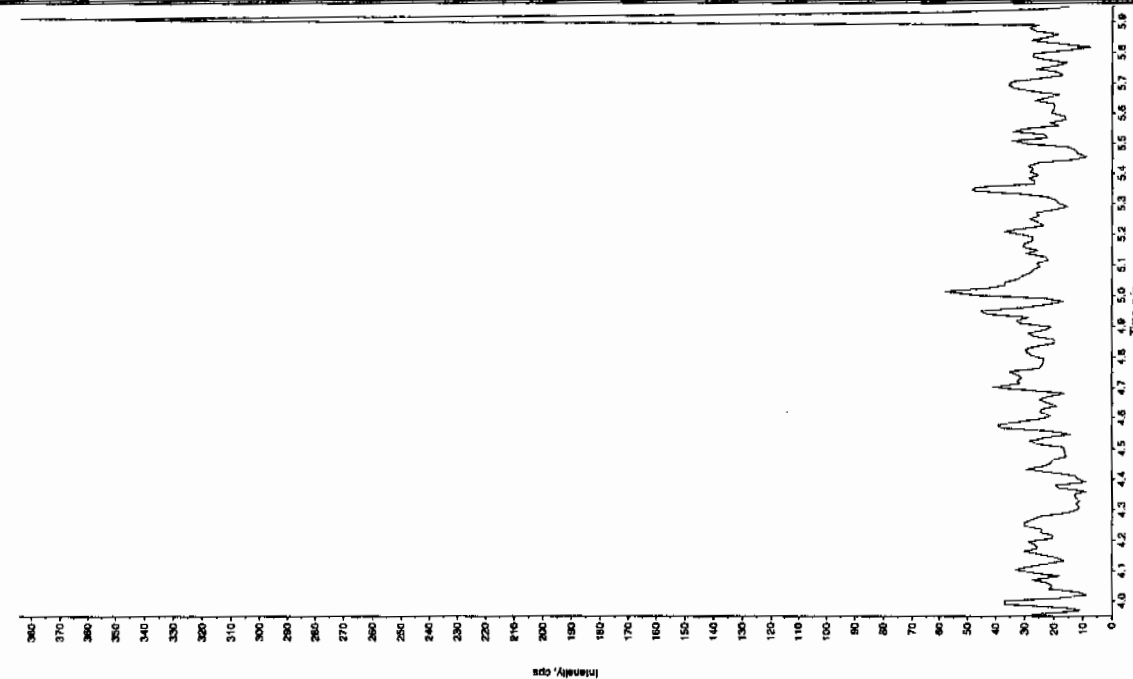
Sample Name: '248373003' Sample ID: '960307121ER' File: 'EXS04080022.wif'
 Peak Name: '34-Diamino-4-nitrofluorene' Mass(es): '182.1751.9 amu'
 Comment: 'LCX832125' Annotation: '-'

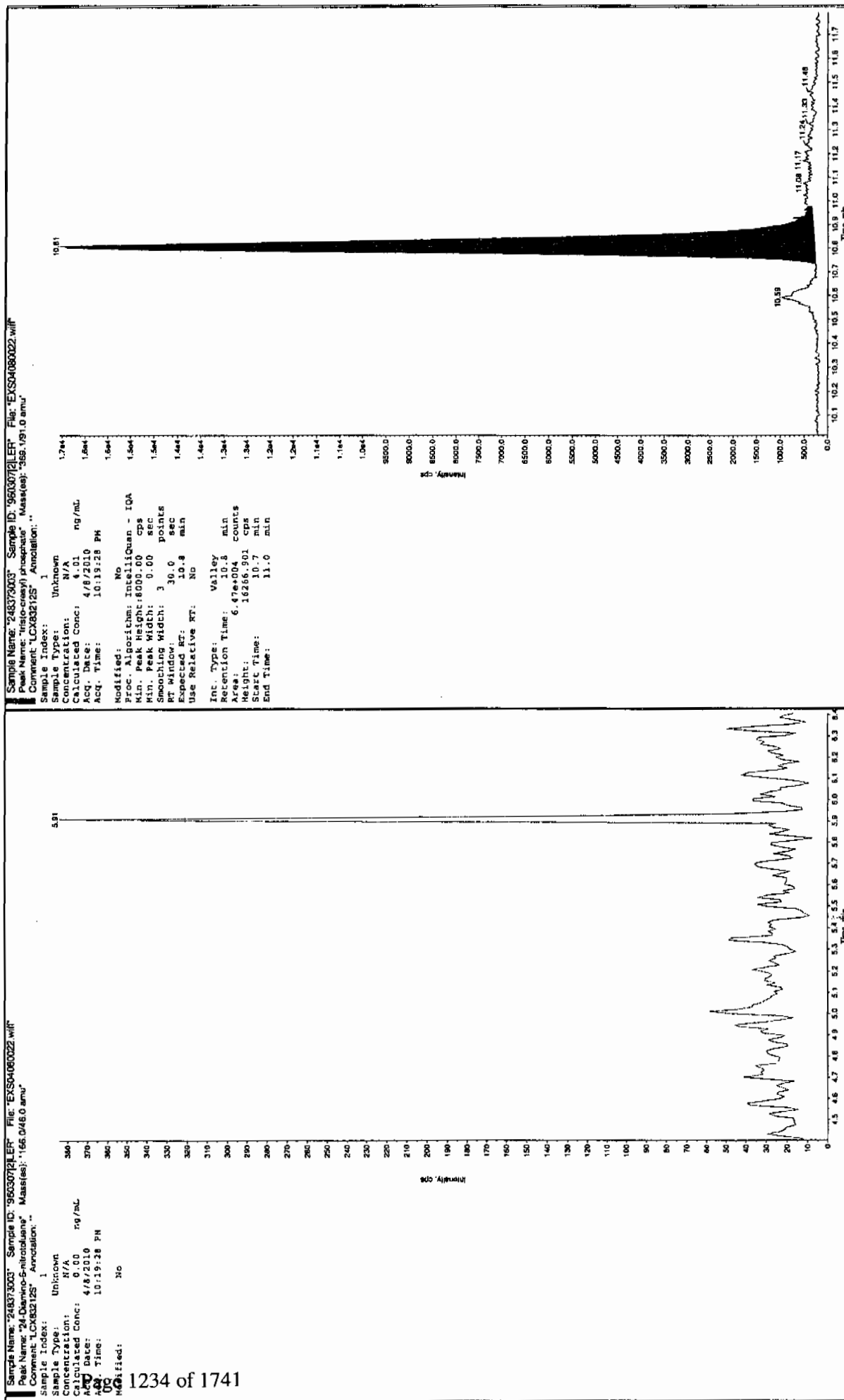
Sample Index: 1
 Sample Type: Unknown
 Concentration: 227 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 10:19:28 PM
 Modified: No
 Peak: Algorithm: IntelliQuan - IQA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Swept Width: 3 points
 Window: 15.0 sec
 Expected RT: 8.29 min
 Use Relative RT: No
 RT Type: Valley
 Retention Time: 8.31 min
 Area: 2.31e+006 counts
 Height: 592634.096 cps
 Start Time: 8.25 min
 End Time: 8.57 min



Sample Name: '248373003' Sample ID: '960307121ER' File: 'EXS04080022.wif'
 Peak Name: '26-Diamino-4-nitrofluorene' Mass(es): '156.046.0 amu'
 Comment: 'LCX832125' Annotation: '-'

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 10:19:28 PM
 Modified: No





1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7491

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373004

Sample Amount 2

Moisture: 35.2

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0418028a

Date Analyzed: 19-APR-10 03:02

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 55 of 91

Dataset: C:\MASSLYNX\New_Exp\PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0418028a

Date: 19-Apr-2010

Time: 03:02:20

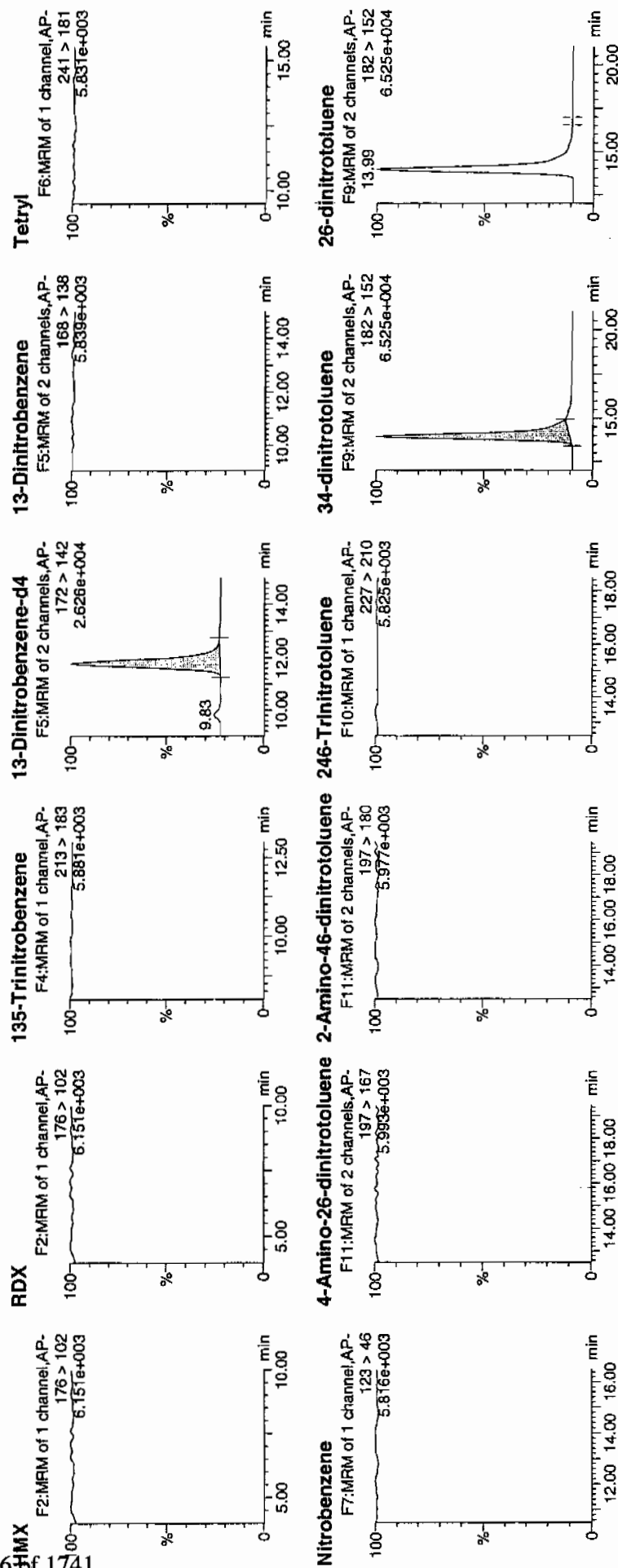
ID: 248373004

Vial: 1:3,A

100%
4/19/10

WAW 960302 / 2003 / 21

236 of 1741



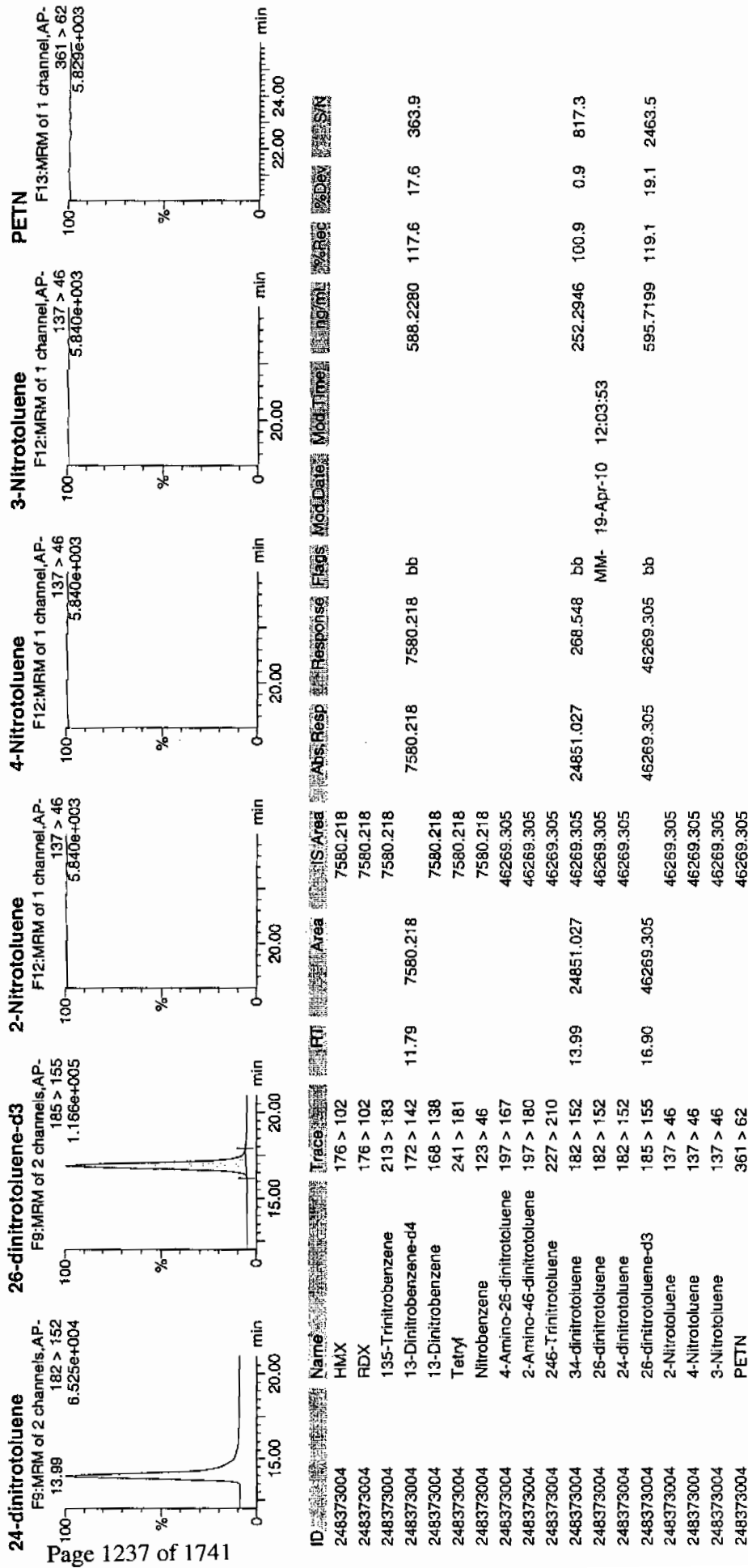
4/19/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 56 of 91

Dataset: C:\MASSLYNX\New_Exp\PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7491

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373004

Sample Amount 2

Moisture: 35.2

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080023.wiff

Date Analyzed: 08-APR-10 22:35

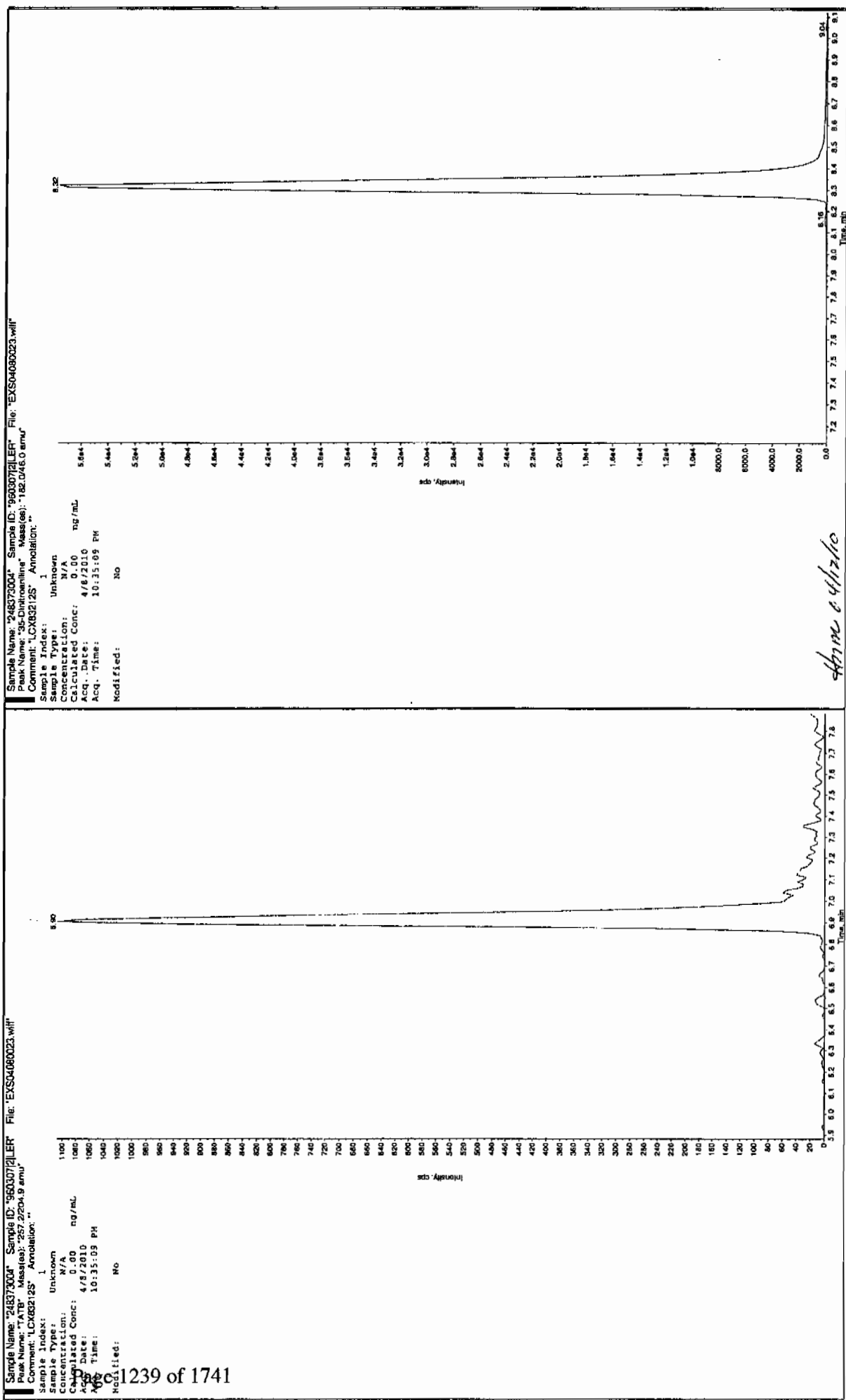
Units: ug/kg

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

*Concentration =

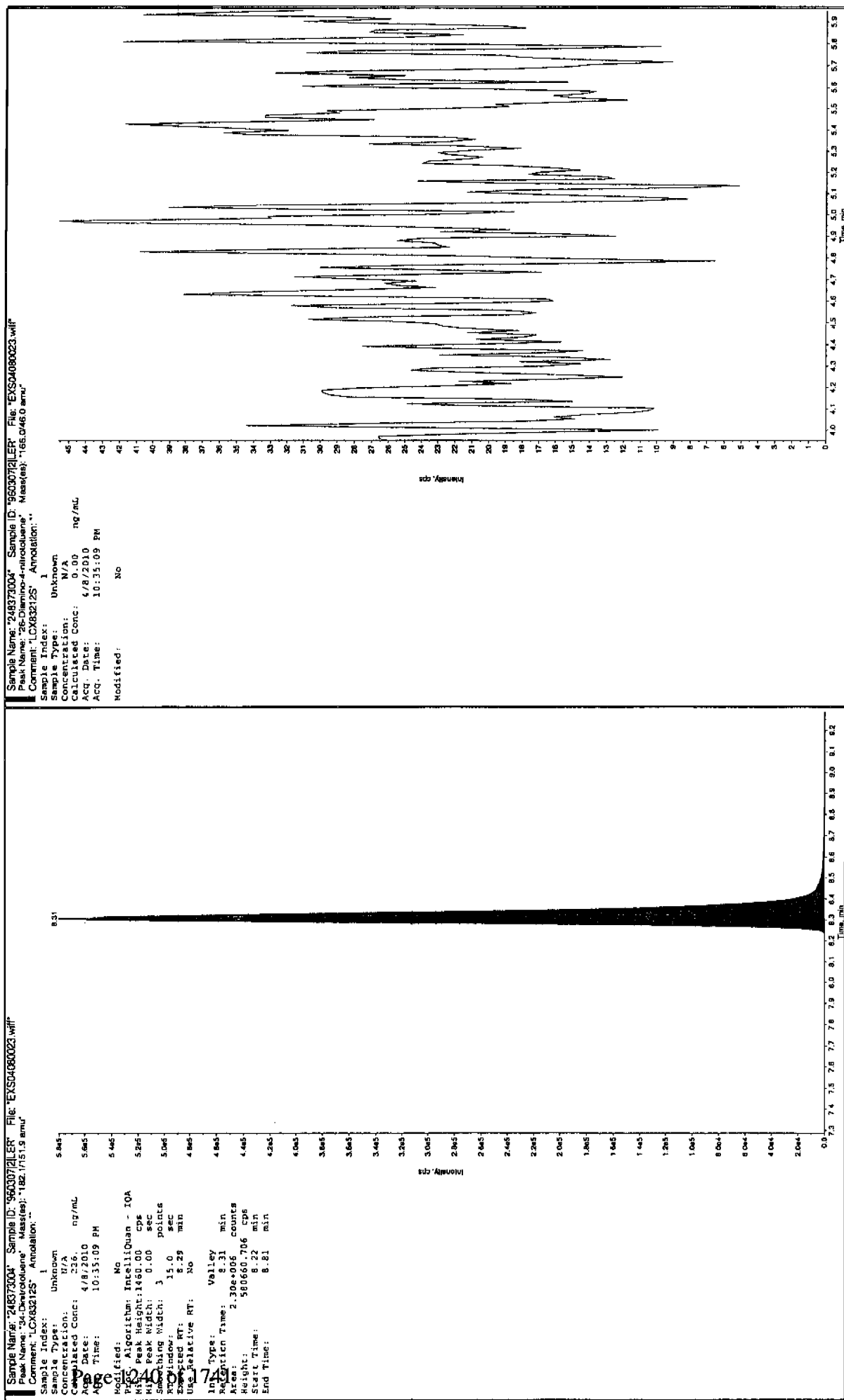
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Dec 4/12/10

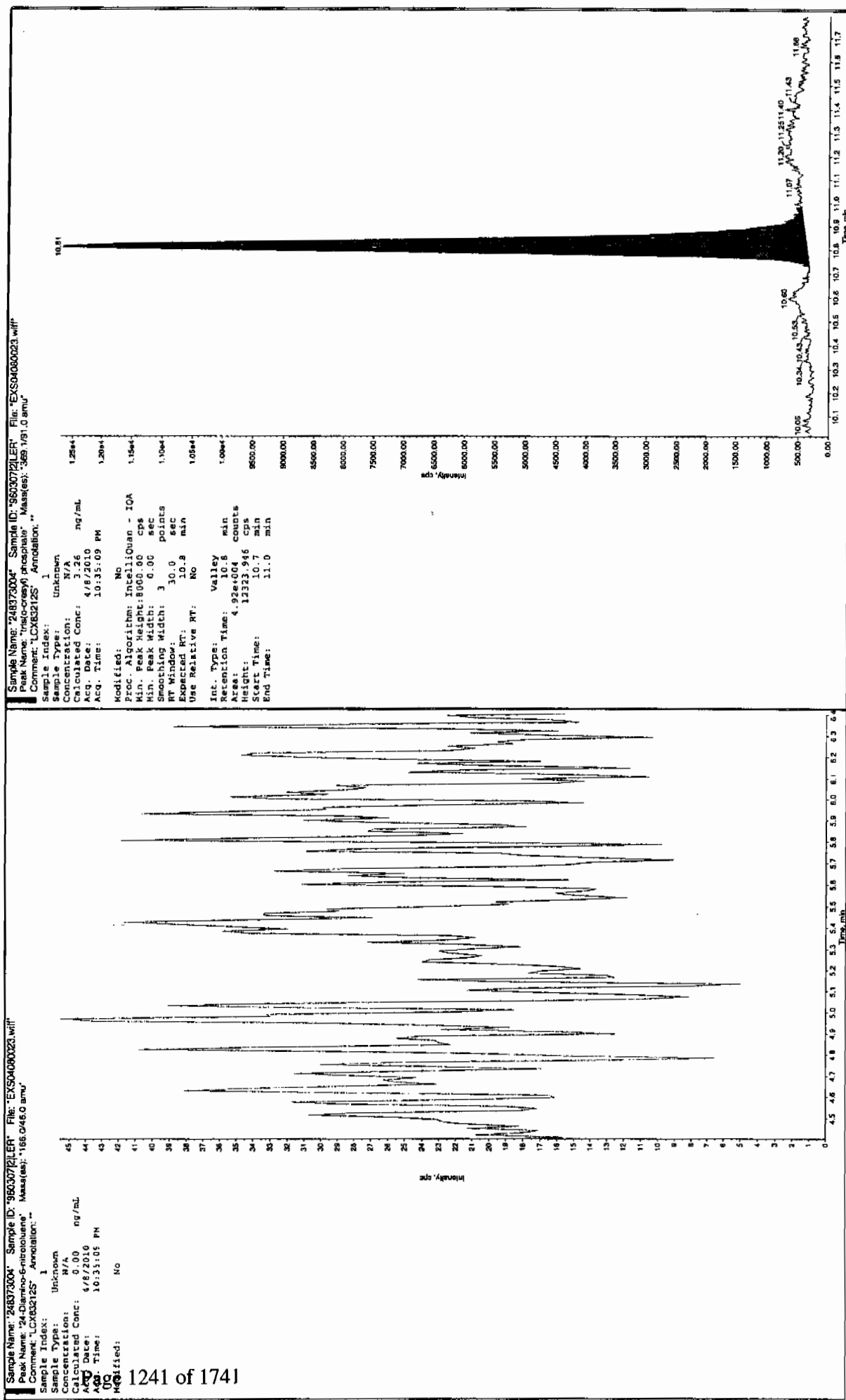


Dec 4/12/10

Dec 1239 of 1741



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



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7496

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373005

Sample Amount 2

Moisture: 11.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412212a

Date Analyzed: 16-APR-10 23:26

Units: ug/kg

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

*Concentration =

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412212a

Date: 16-Apr-2010

Time: 23:26:13

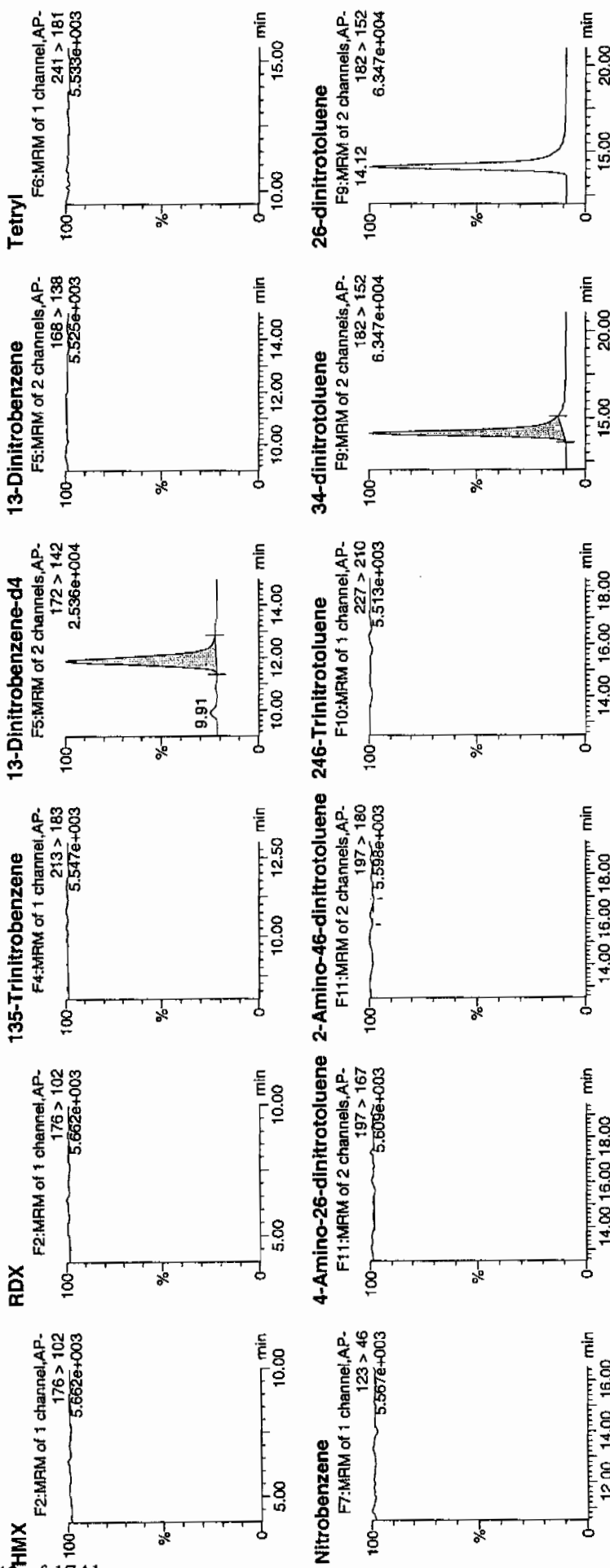
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Vial: 2-2,C

4/17/10

WAX 960307 / 8022 / 2

Page 1243 of 1741



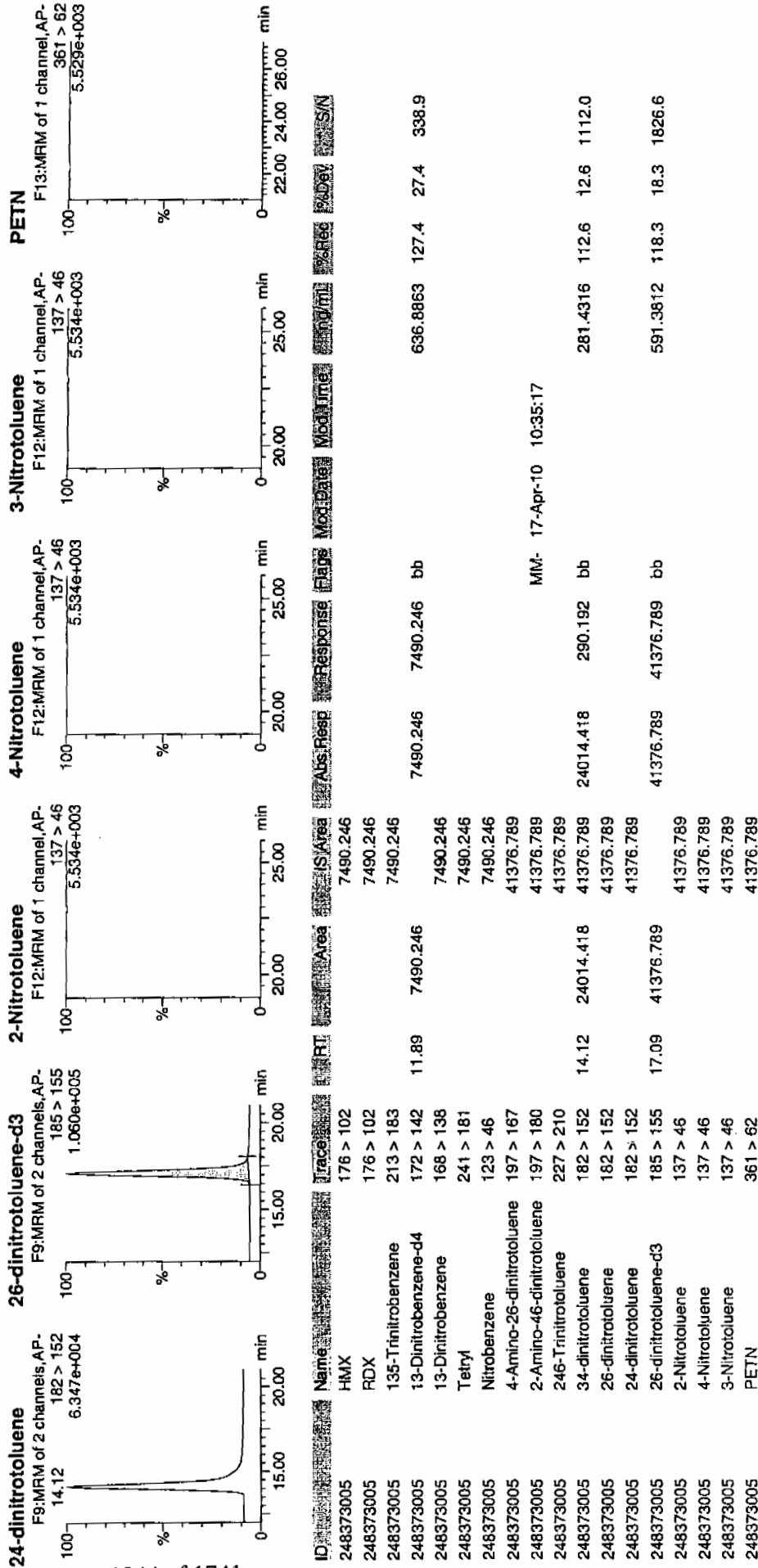
AMW
 8/19/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 68 of 97

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7496

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373005

Sample Amount 2

Moisture: 11.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080027.wiff

Date Analyzed: 08-APR-10 23:37

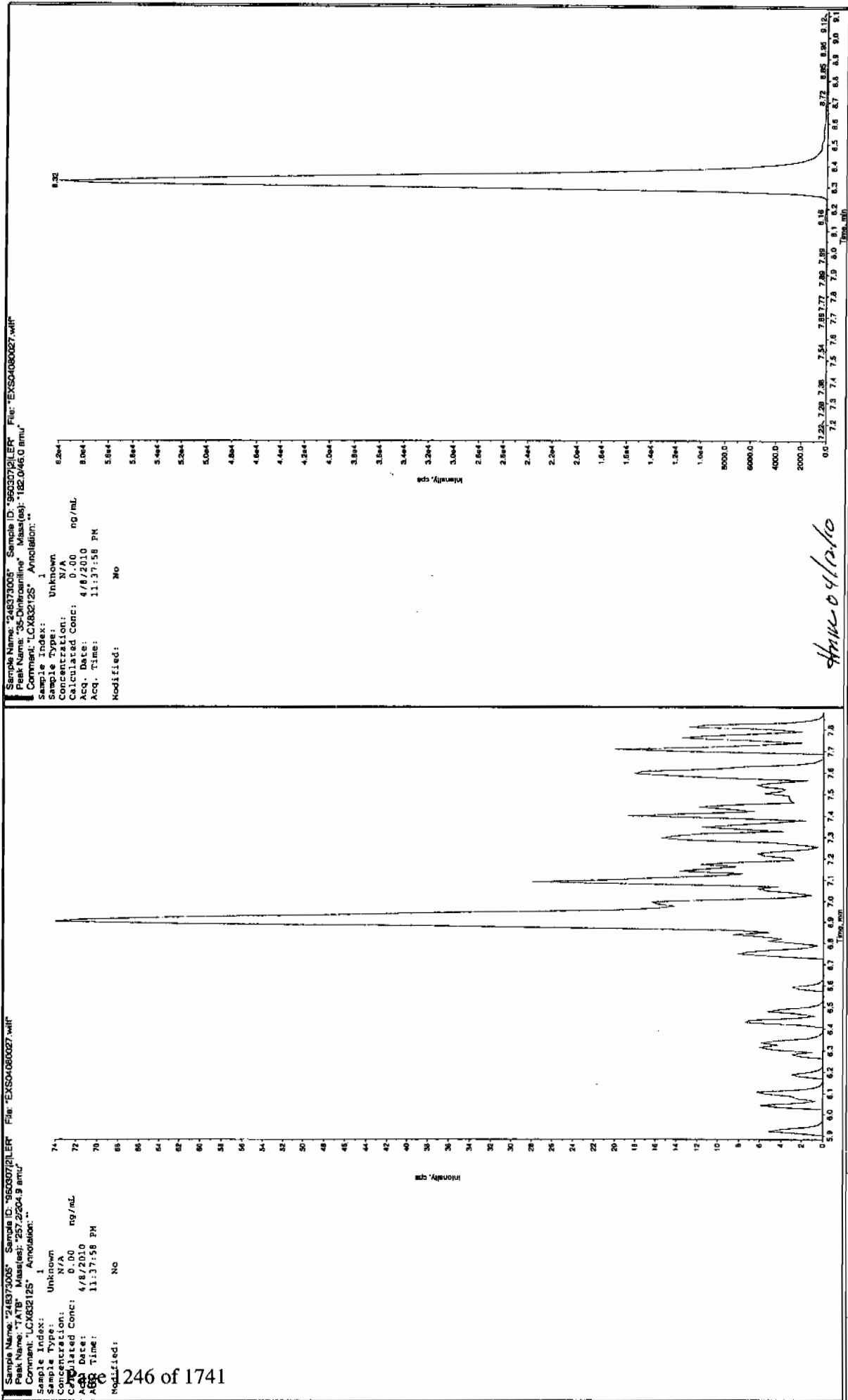
Units: ug/kg

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

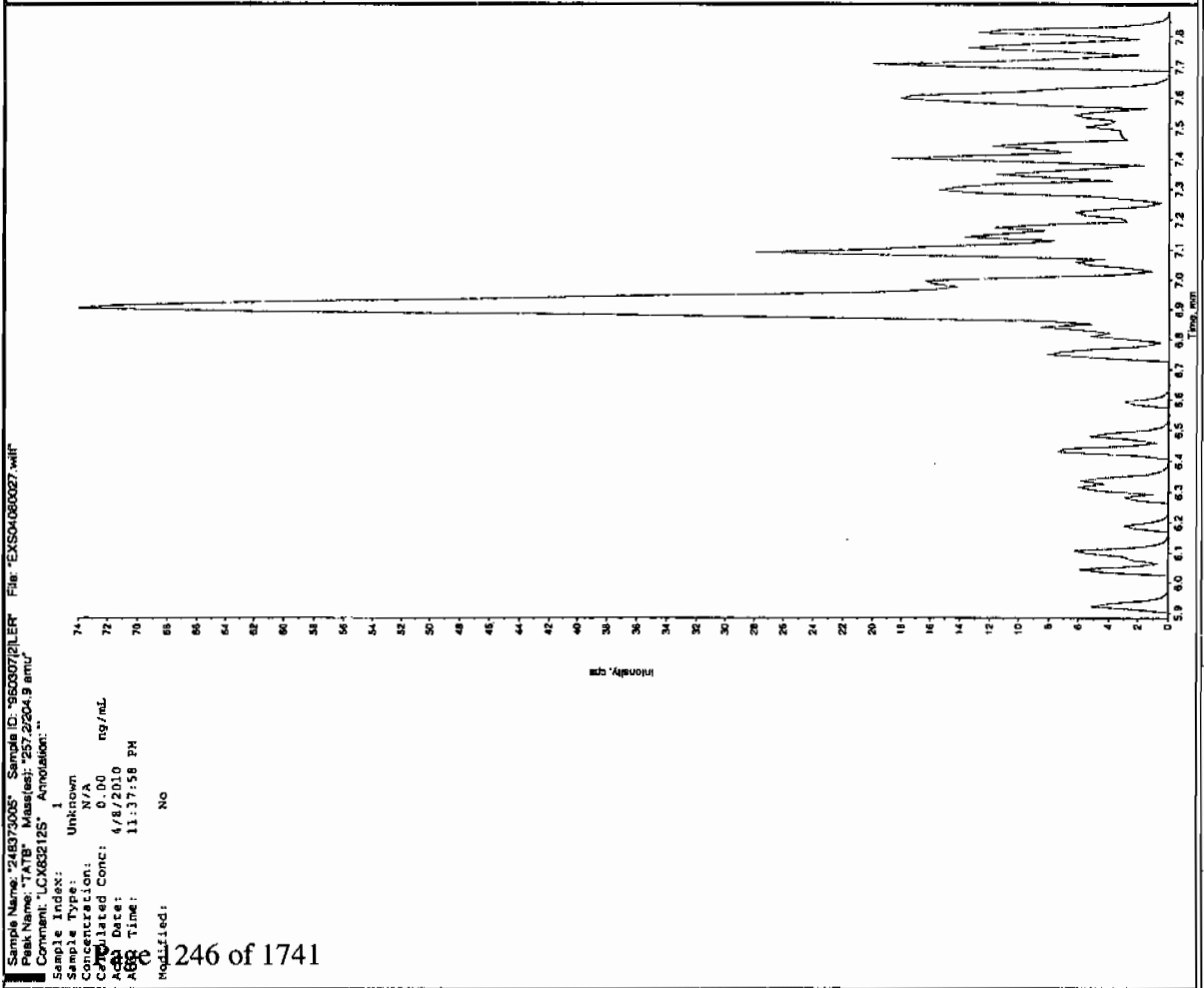
*Concentration =

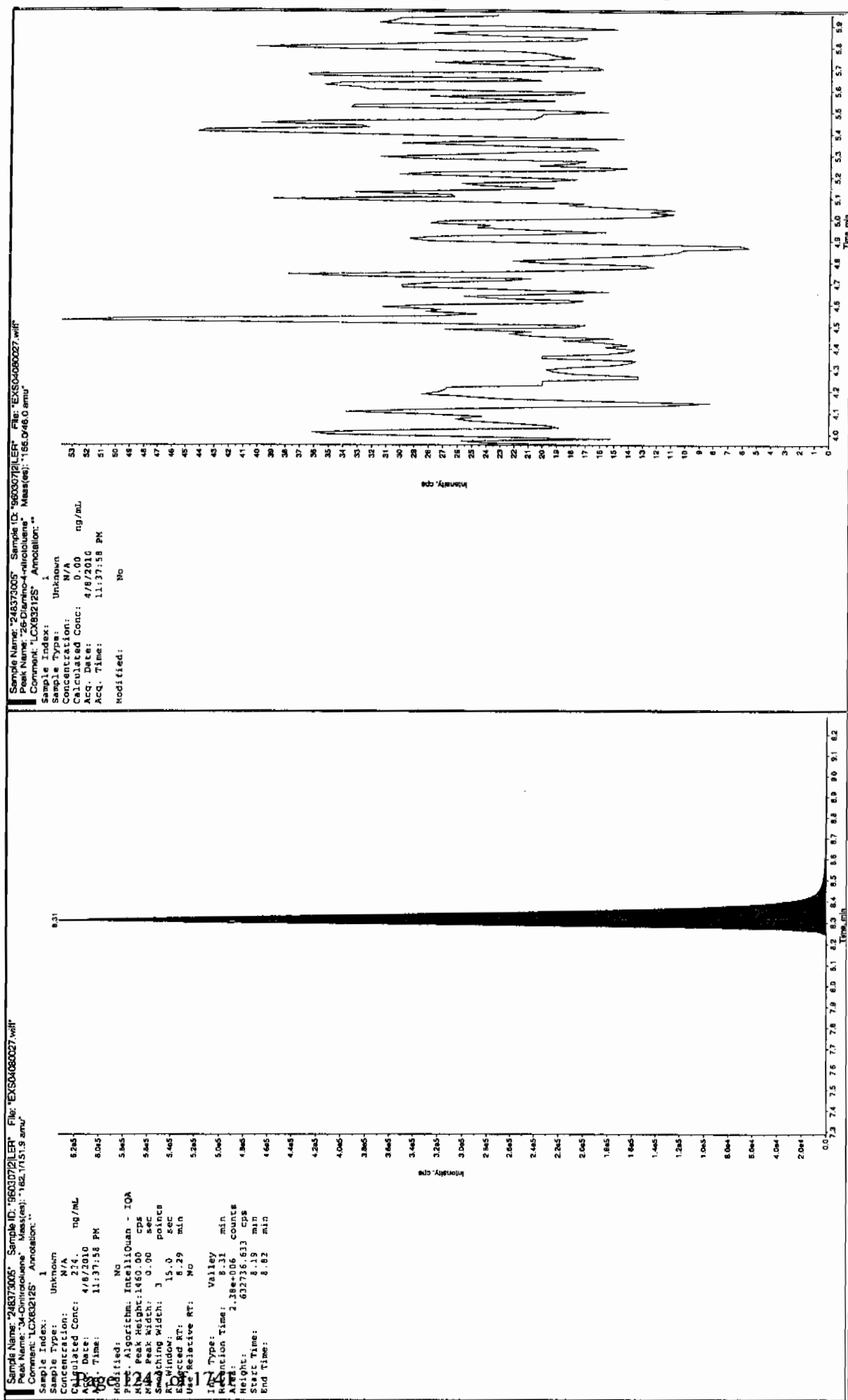
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

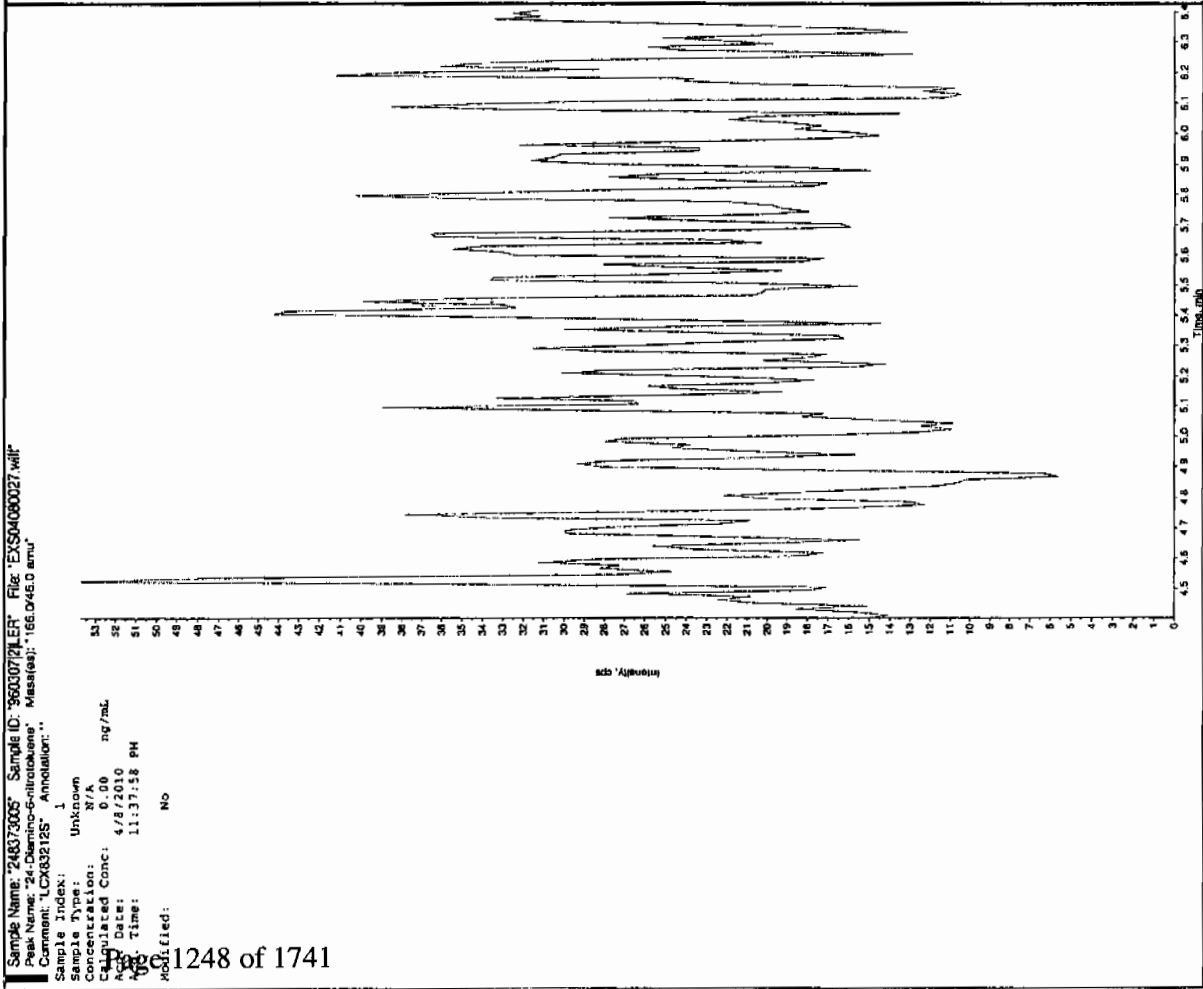
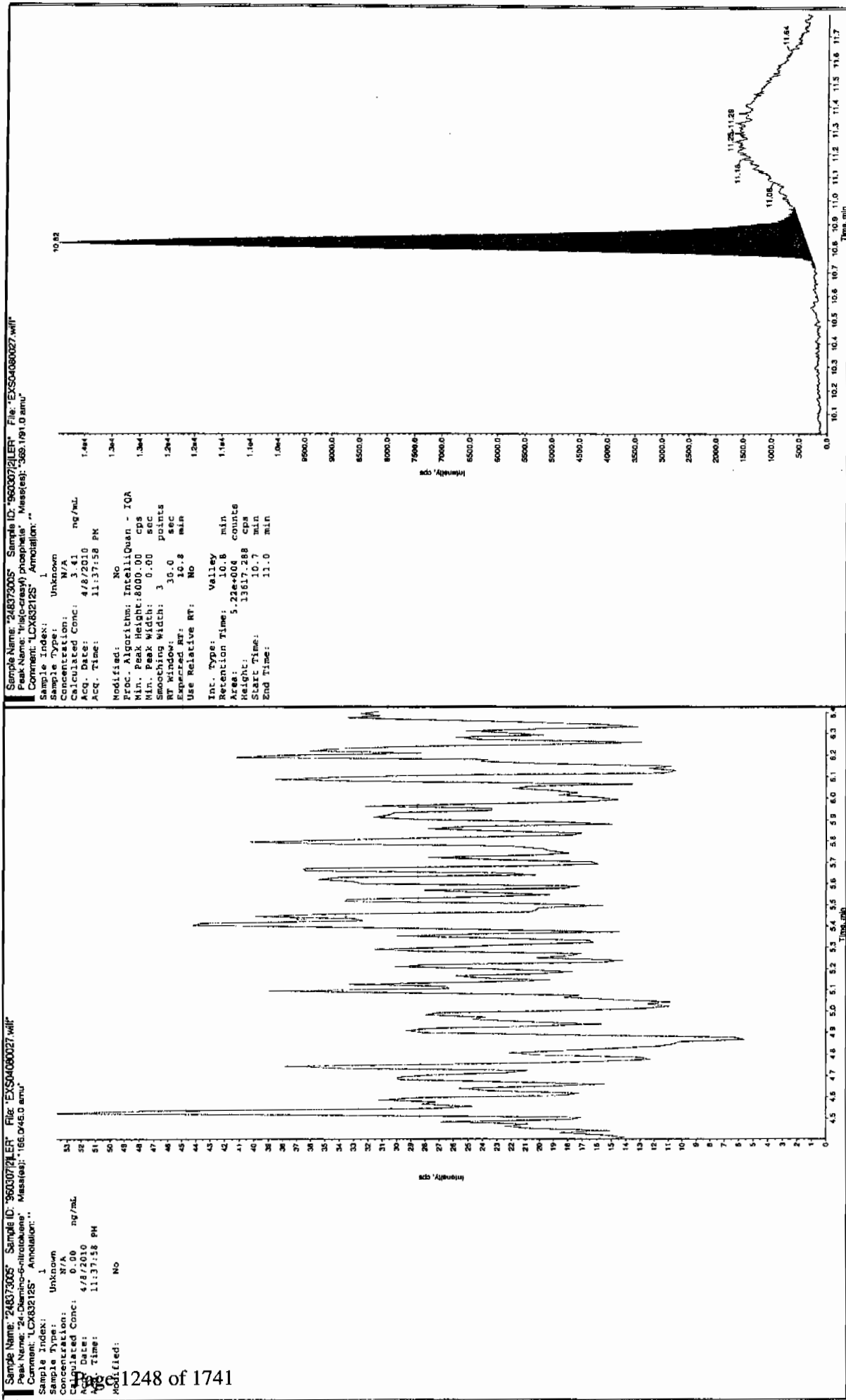
San 4/12/10



San 4/12/10







1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7499

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373006

Sample Amount 2

Moisture: 27.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412213a

Date Analyzed: 16-APR-10 23:55

Units: ug/kg

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

*Concentration =

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412213a

Date: 16-Apr-2010

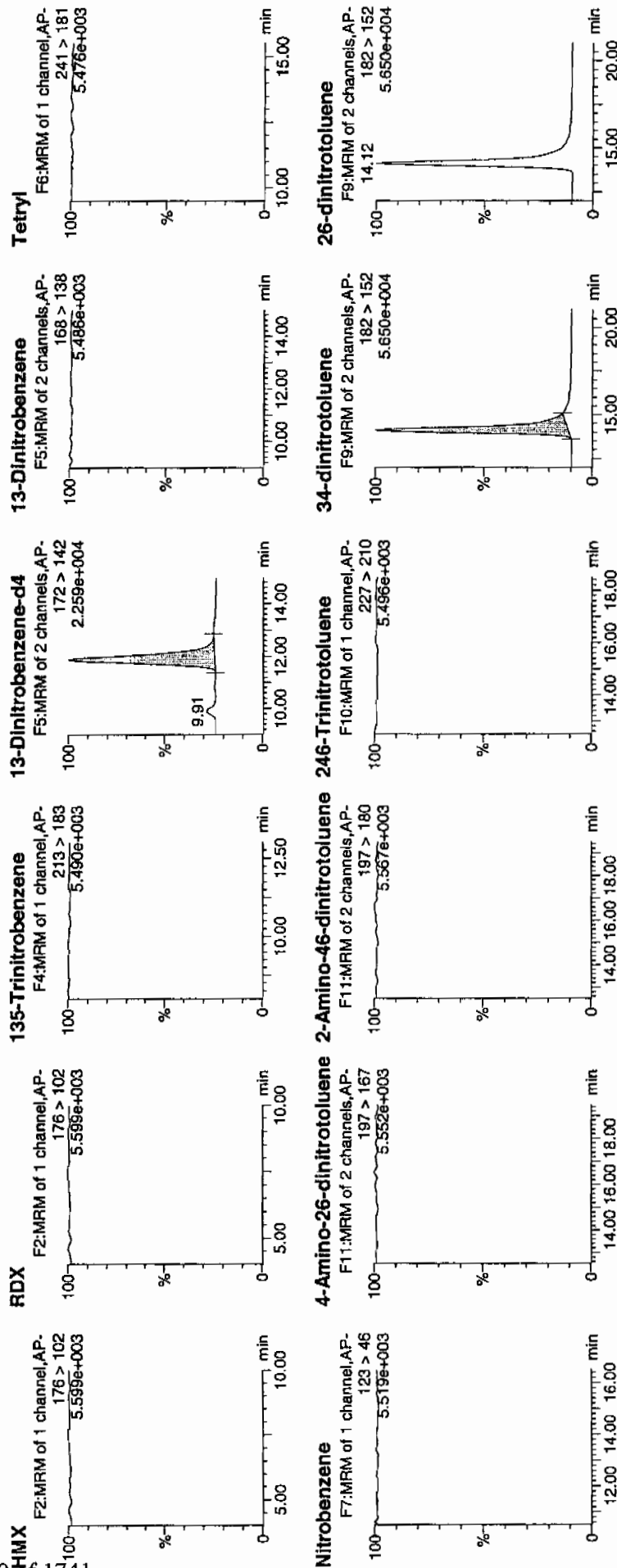
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ID: 248373006

Vial: 2:2,D

1007
4/17/10

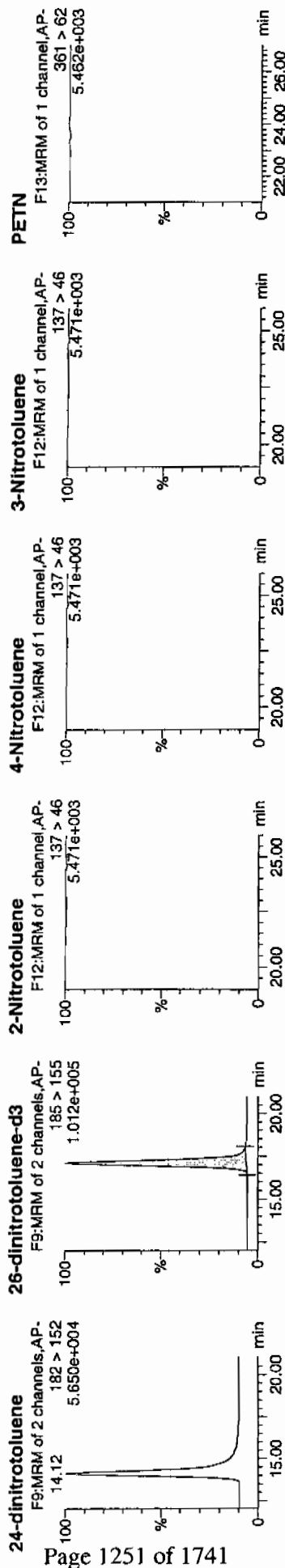
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Handwritten: *Handwritten signature and date 4/16/10*

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

Dataset: C:\WASSLYN\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



ID	Name	Trace	RT	Area	S Area	Abs:Resp	Response	Flags	Mod:Data	Mod:Time	%Rec	%Day	%SN
248373006	HMX	176 > 102		6520.604									
248373006	RDX	176 > 102		6520.604									
248373006	135-Trinitrobenzene	213 > 183		6520.604									
248373006	13-Dinitrobenzene-d4	172 > 142	11.87	6520.604									
248373006	13-Dinitrobenzene	168 > 138		6520.604									
248373006	Tetryl	241 > 181		6520.604									
248373006	Nitrobenzene	123 > 46		6520.604									
248373006	4-Amino-26-dinitrotoluene	197 > 167		6520.604									
248373006	2-Amino-46-dinitrotoluene	197 > 180		38854.711									
248373006	246-Trinitrotoluene	227 > 210		38854.711									
248373006	34-dinitrotoluene	182 > 152	14.12	21188.949									
248373006	26-dinitrotoluene	182 > 152		38854.711									
248373006	24-dinitrotoluene	182 > 152		38854.711									
248373006	26-dinitrotoluene-d3	185 > 155	17.09	38854.711									
248373006	2-Nitrotoluene	137 > 46		38854.711									
248373006	4-Nitrotoluene	137 > 46		38854.711									
248373006	3-Nitrotoluene	137 > 46		38854.711									
248373006	PETN	361 > 62		38854.711									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7499

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373006

Sample Amount 2

Moisture: 27.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080028.wiff

Date Analyzed: 08-APR-10 23:53

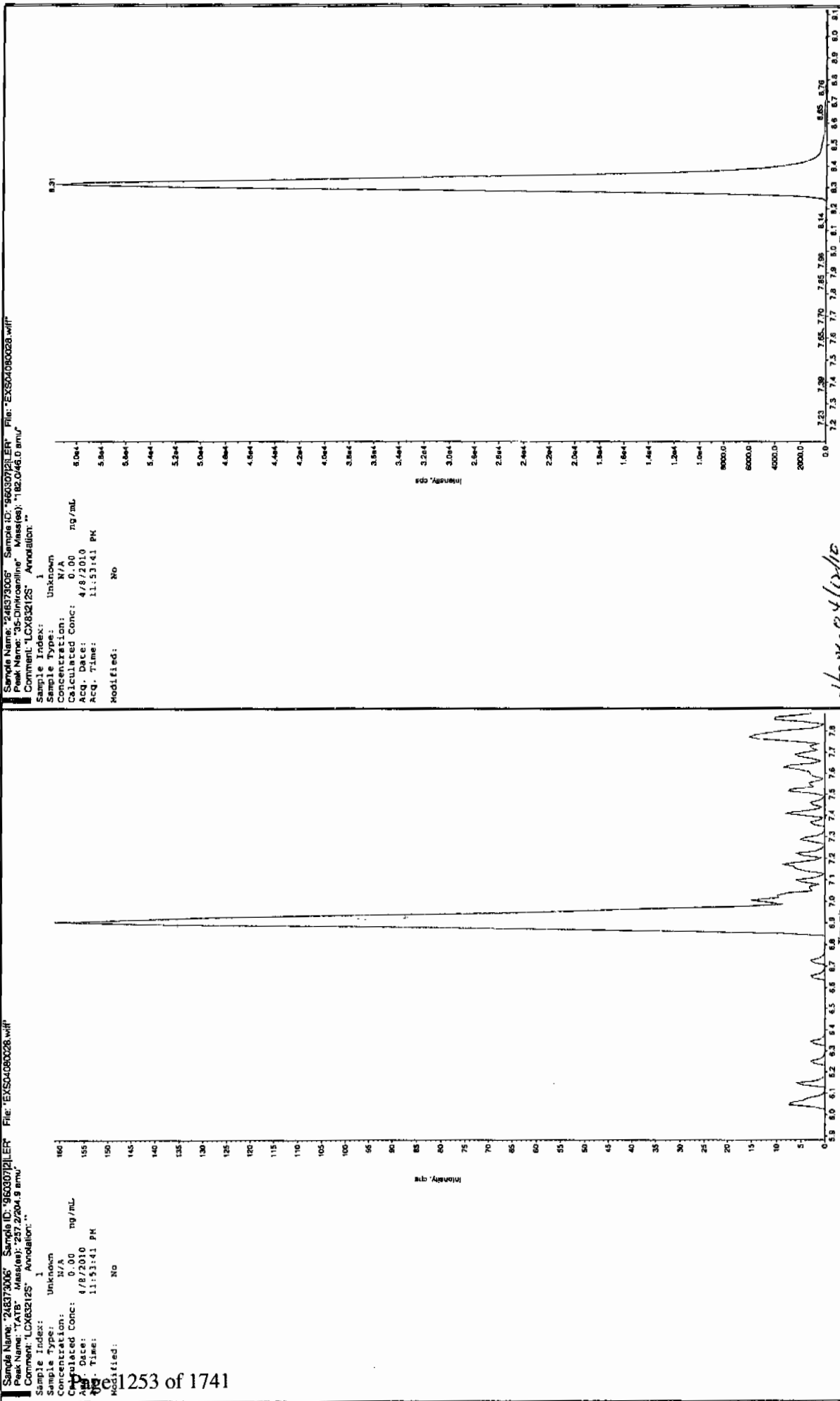
Units: ug/kg

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

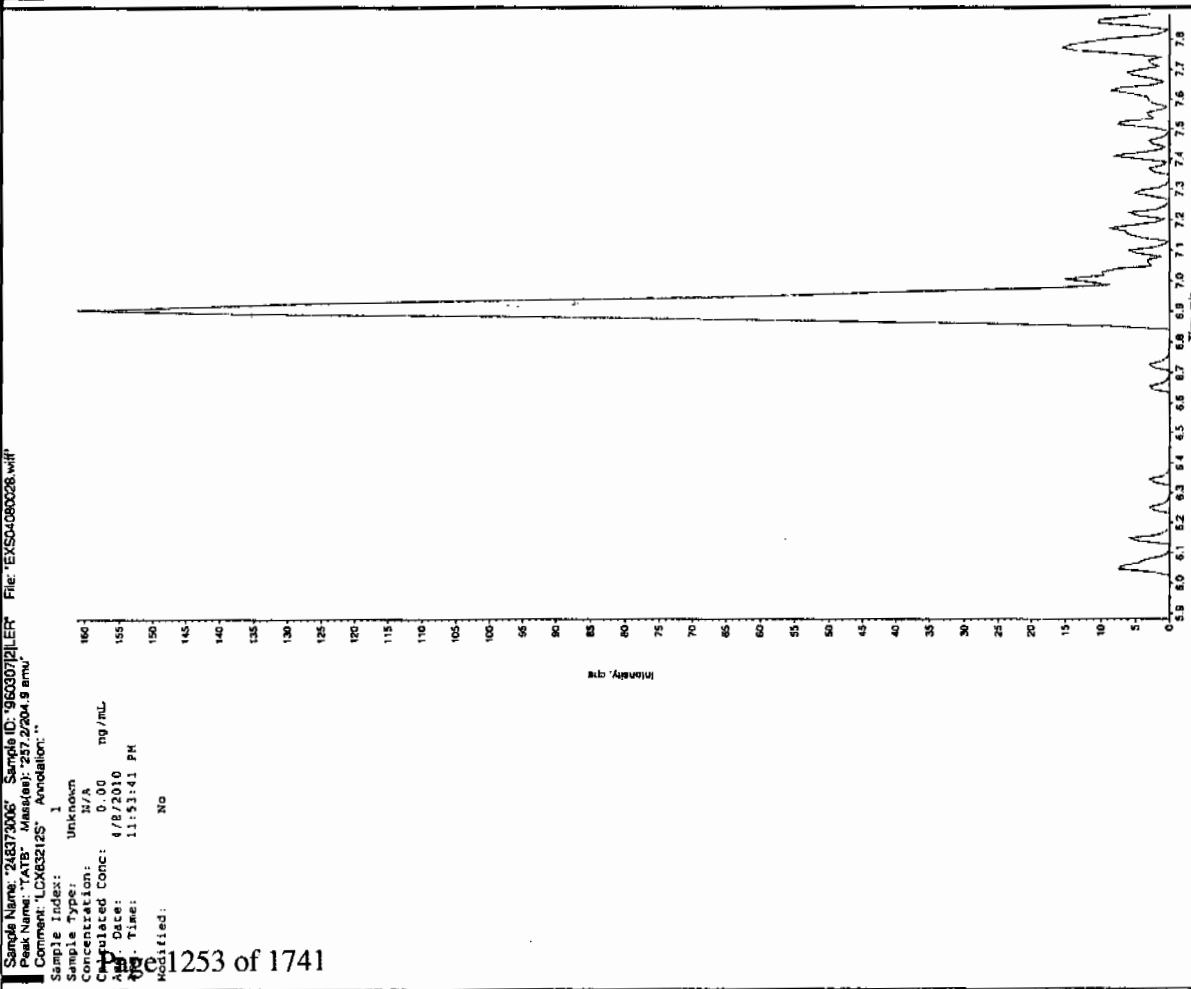
*Concentration =

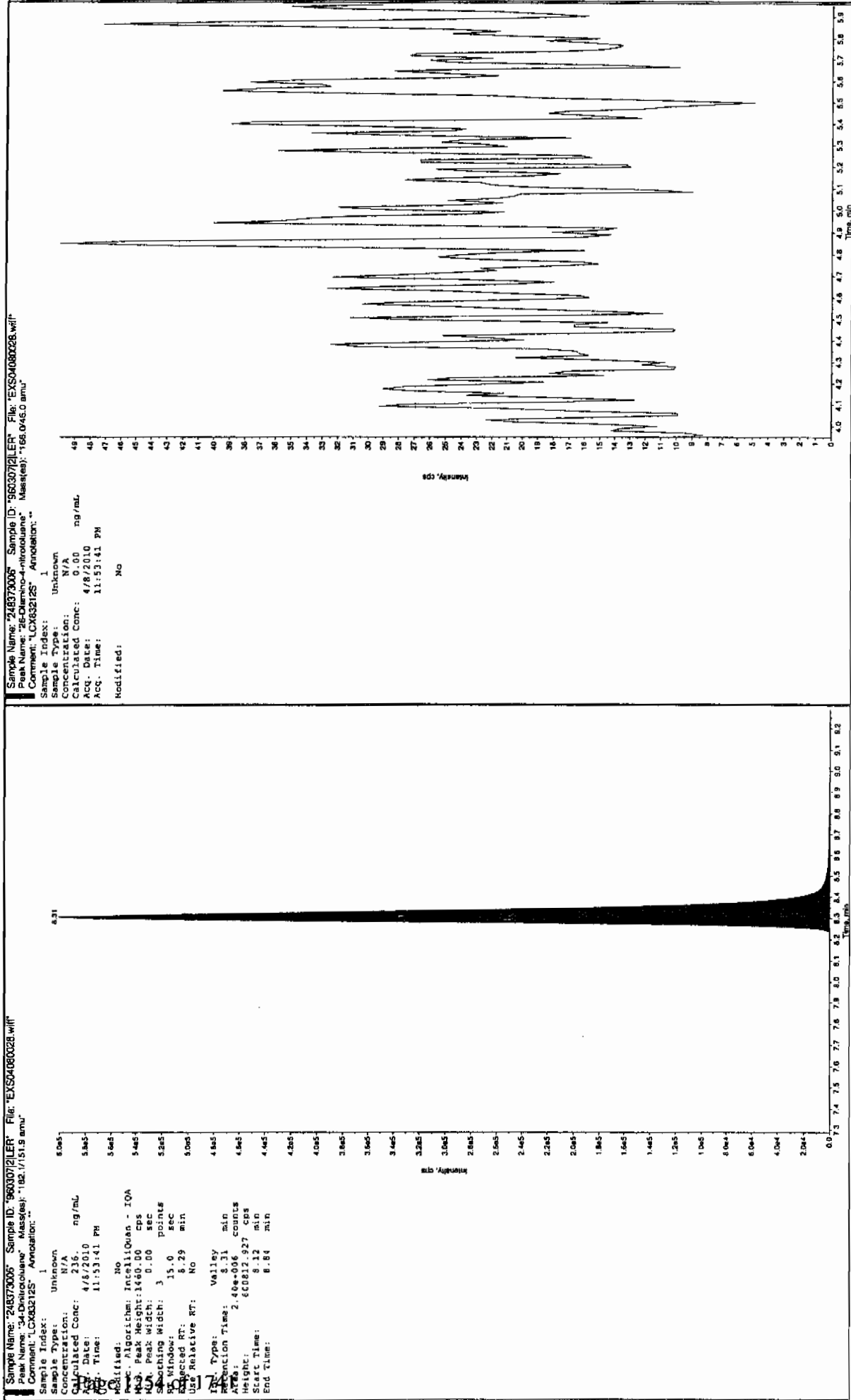
Instrument X Concentrated Extract Volume X Dilution
Value Sample Amoun Factor

Ken 4/12/10



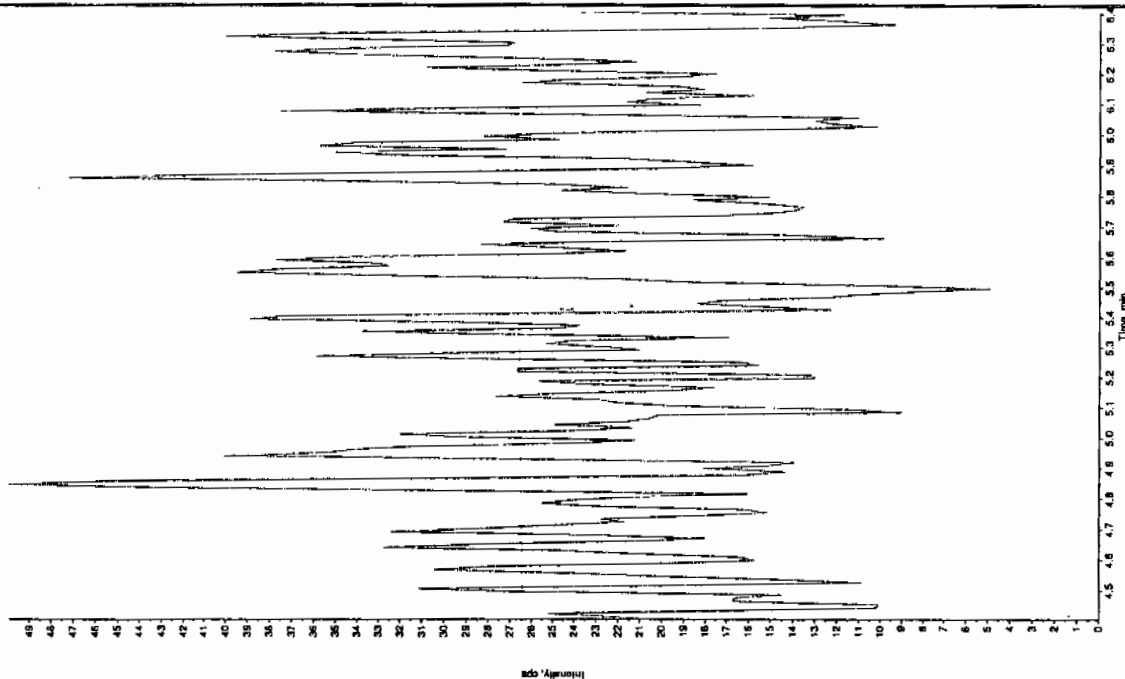
Ken 4/12/10





Sample Name: "248373005" Sample ID: "960307121ER" File: "EXS04080028.wif"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "165.046.0 amu"
 Comment: "LCX832125" Annotation: ""

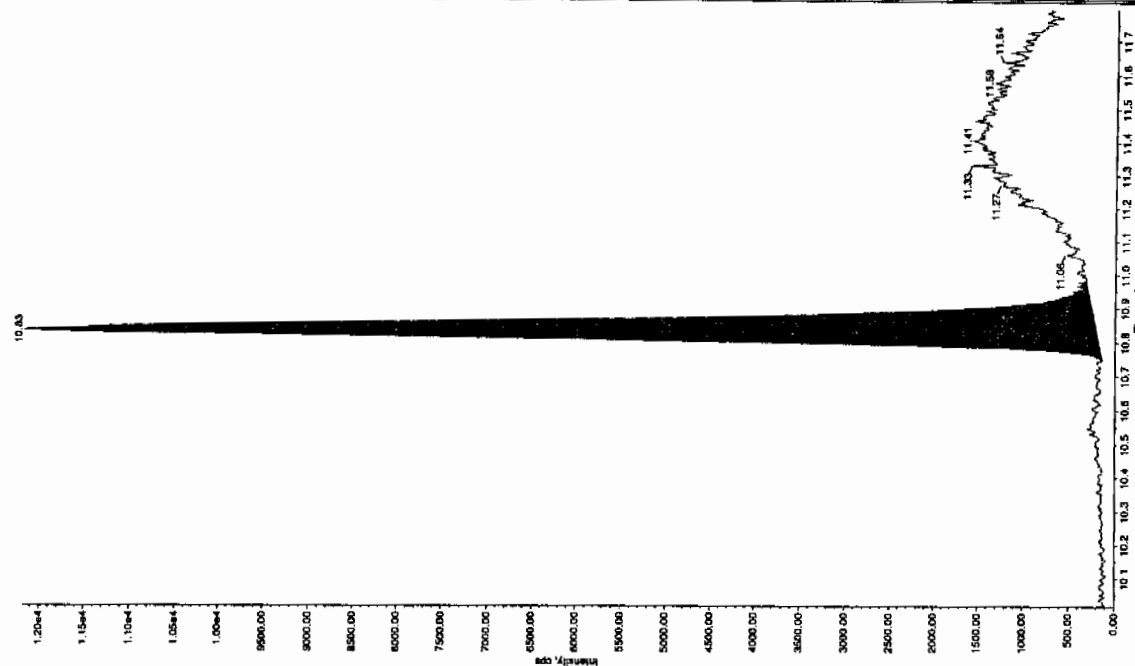
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 11:53:41 PM
 Modified: No



Sample Name: "248373005" Sample ID: "960307121ER" File: "EXS04080028.wif"
 Peak Name: "Tri(o-cresyl) phosphate" Mass(es): "389.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 3.16 ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 11:53:41 PM
 Modified: No

Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 Retention RT: 30.0 sec
 Expected RT: 30.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 4.72e-004 counts
 Height: 11977.601 cps
 Start Time: 10.7 min
 End Time: 11.0 min



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7497

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373007

Sample Amount 2

Moisture: 32.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412217a

Date Analyzed: 17-APR-10 01:53

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 77 of 97

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412217a

Date: 17-Apr-2010

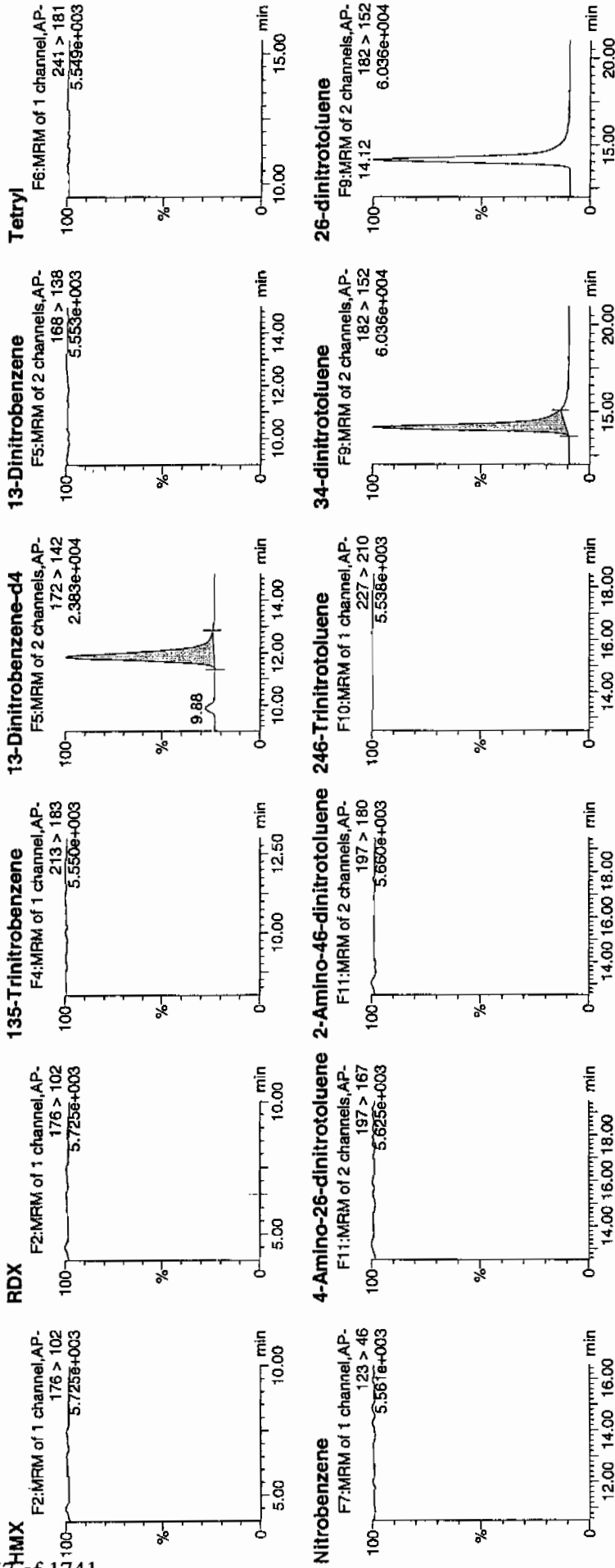
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ID: 248373007

Vial: 2:2,E

1257 of 1741

Handwritten notes: *Handwritten signature and date 4/17/10*



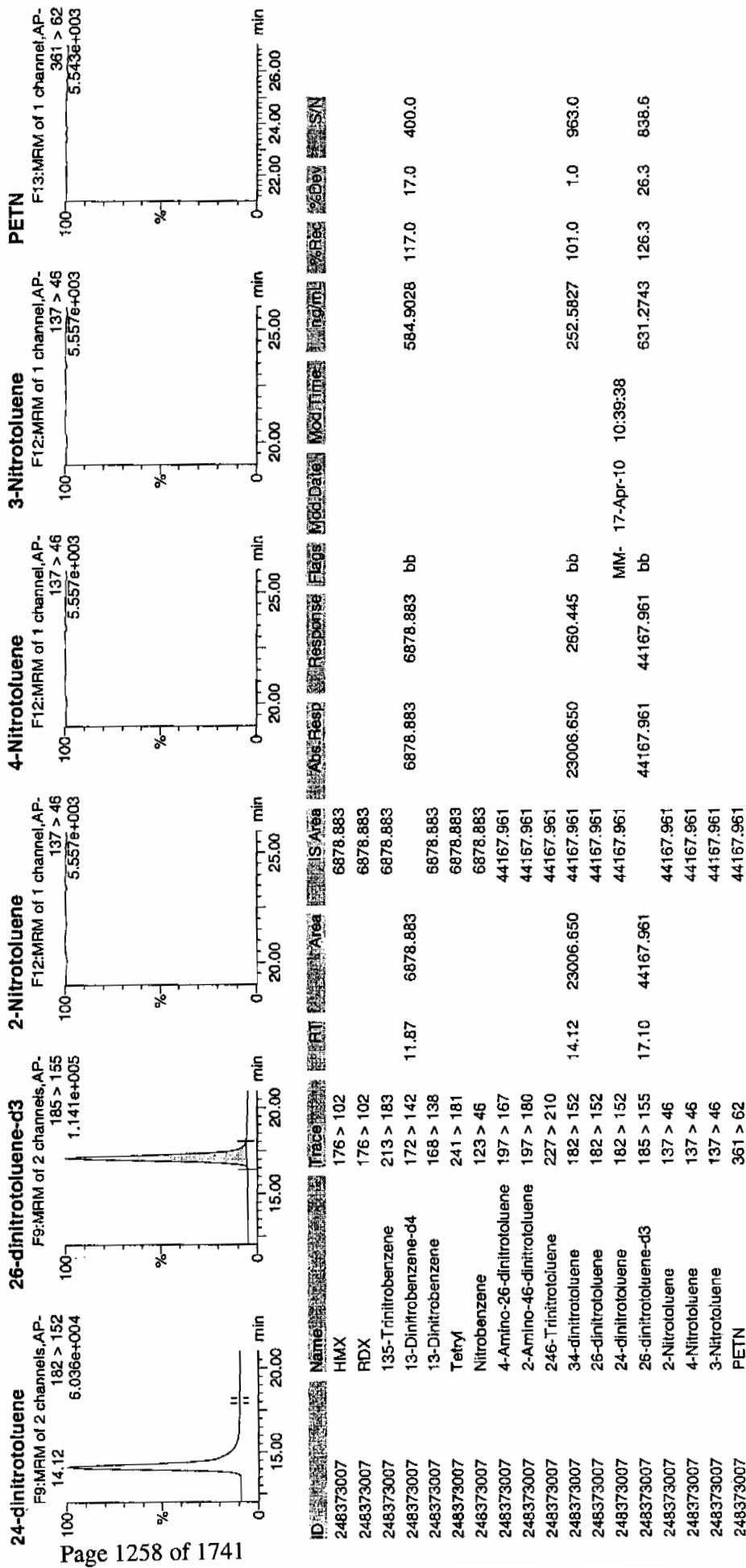
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Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 78 of 97

Dataset: C:\MASSLYNX\New_Exp\PROV041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7497

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373007

Sample Amount 2

Moisture: 32.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080029.wiff

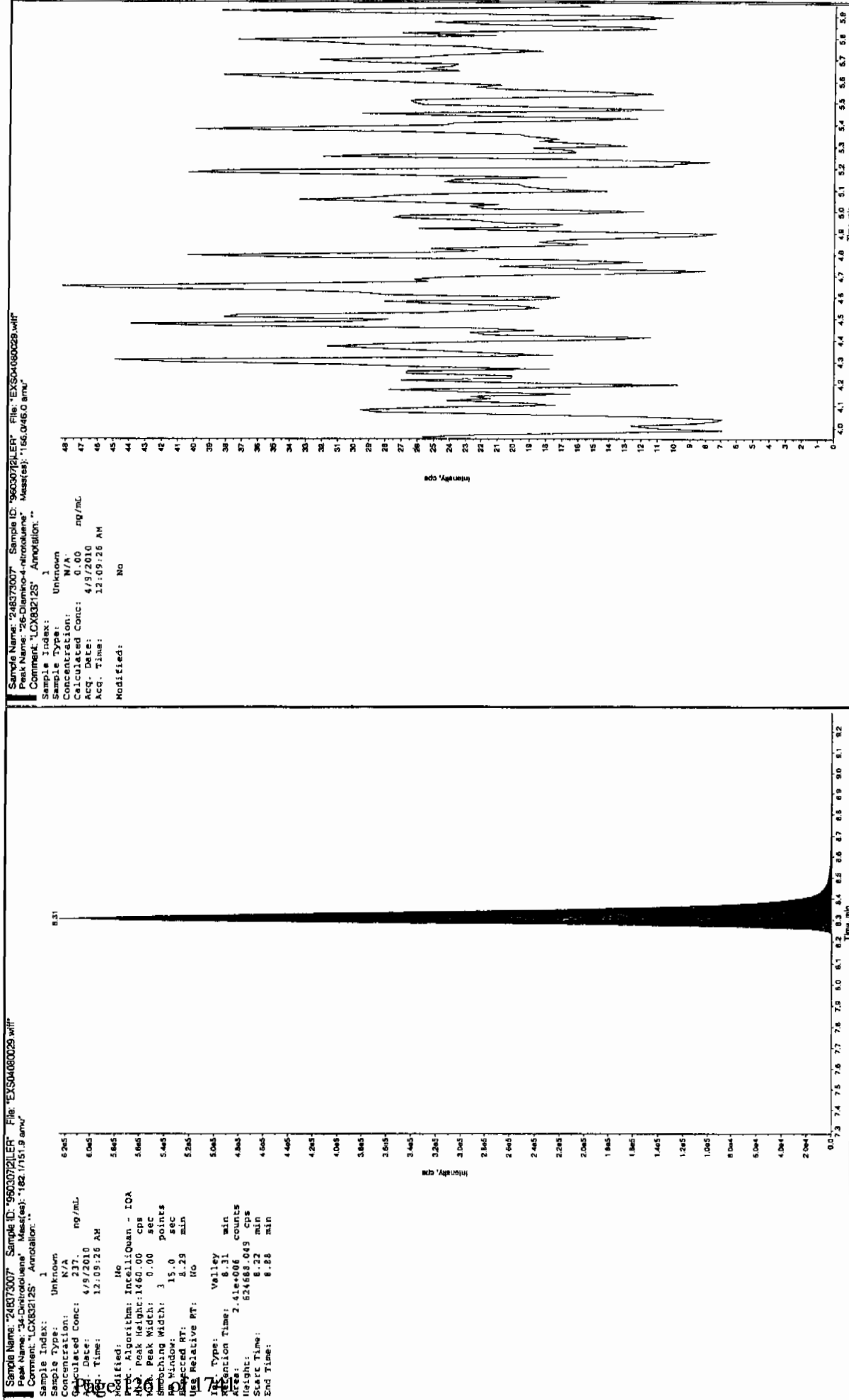
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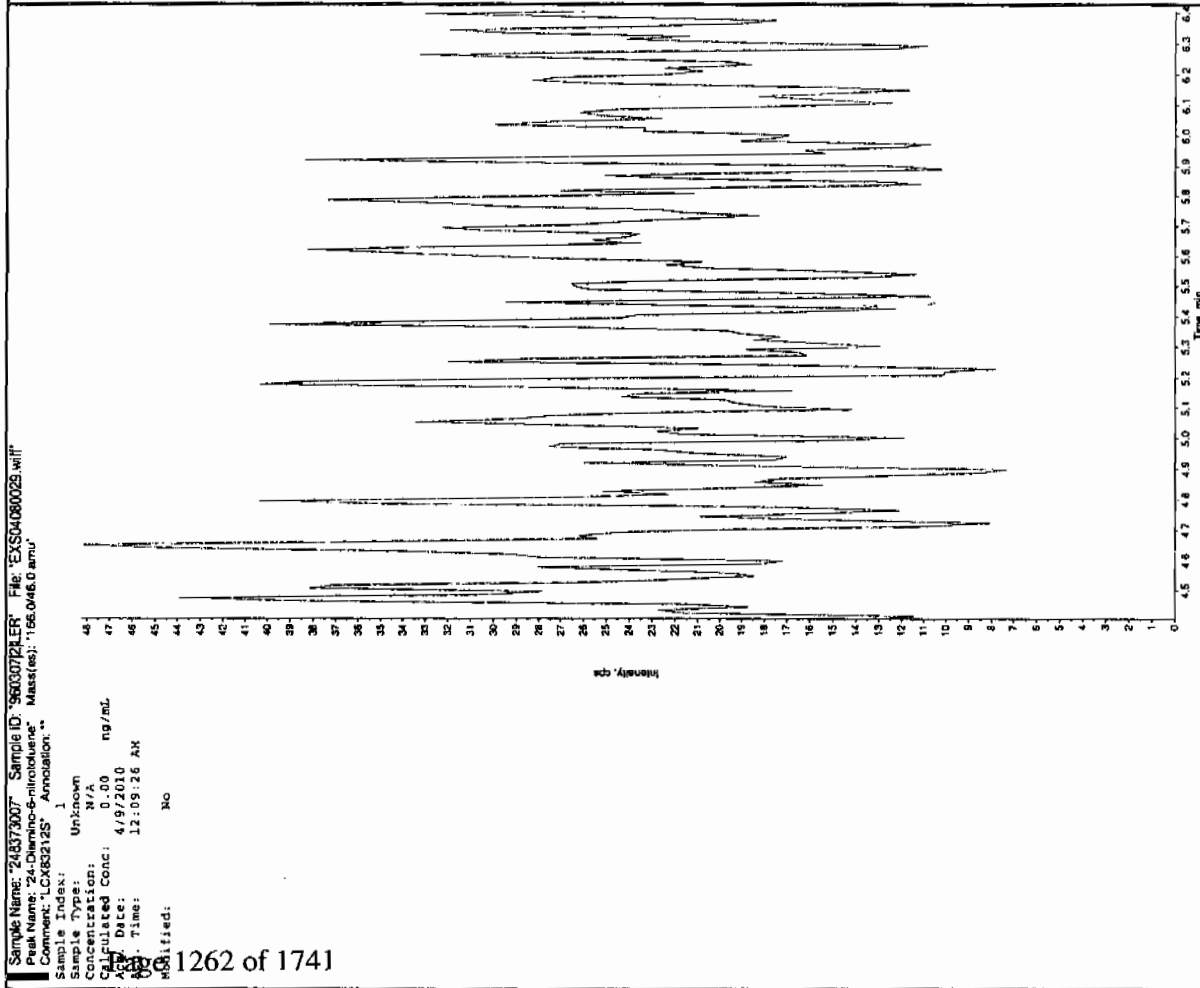
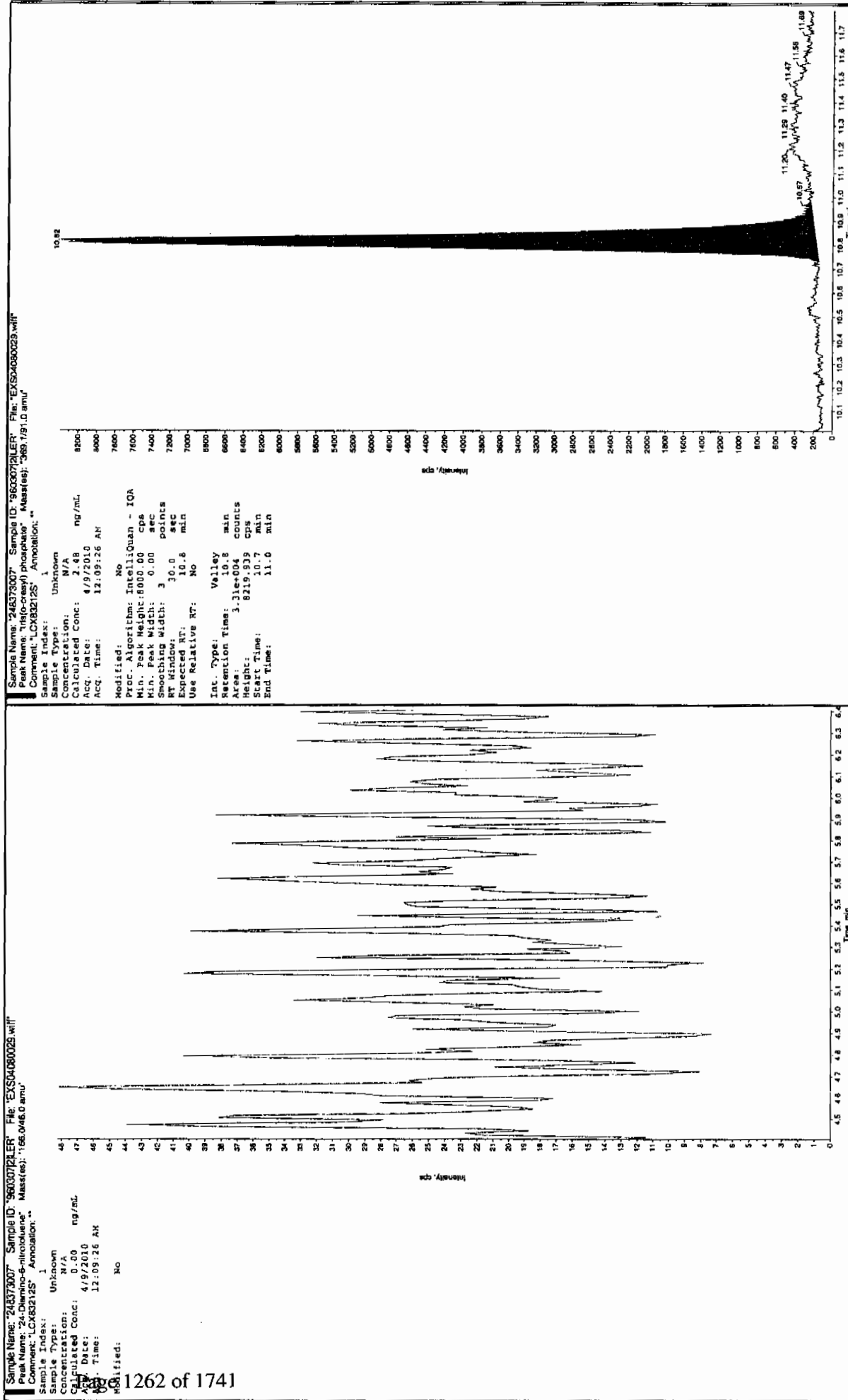
Units: ug/kg

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

*Concentration =

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





1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7495

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373008

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412218a

Date Analyzed: 17-APR-10 02:23

Units: ug/kg

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

*Concentration =

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

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Time: 02:23:14

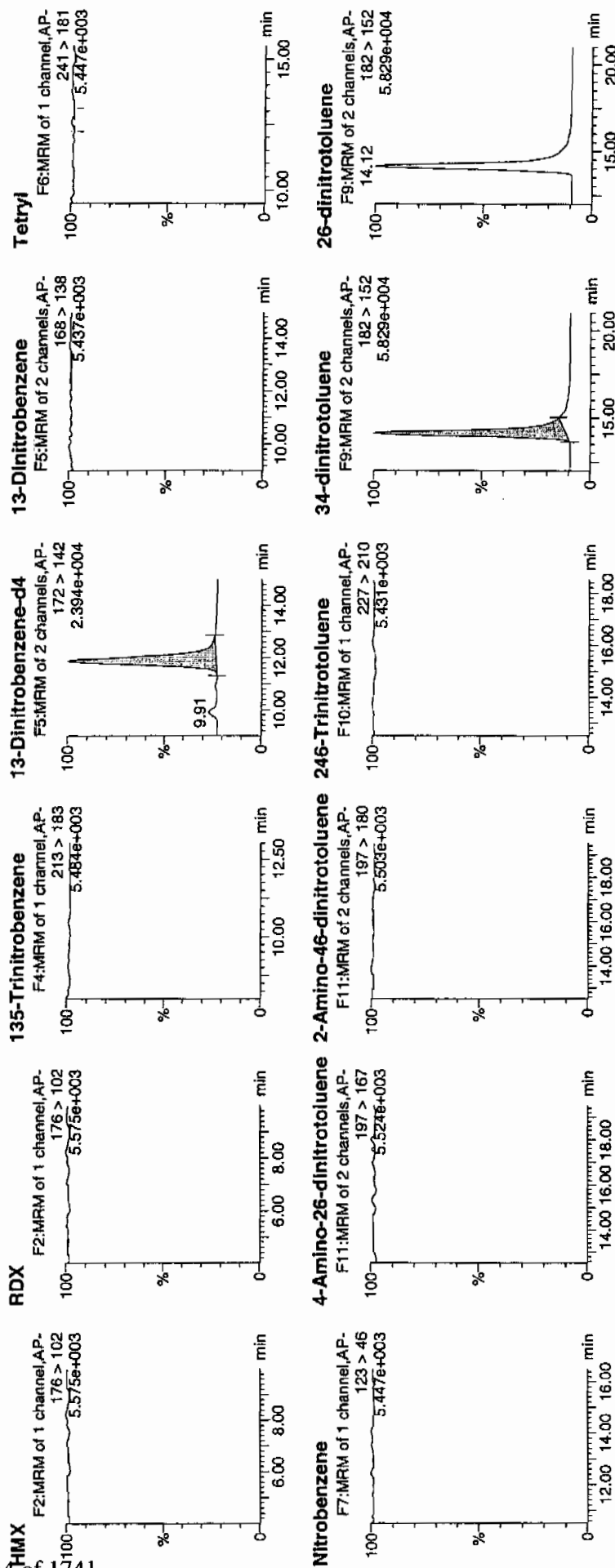
ID: 248373008

Vial: 2:2,F

4/17/10

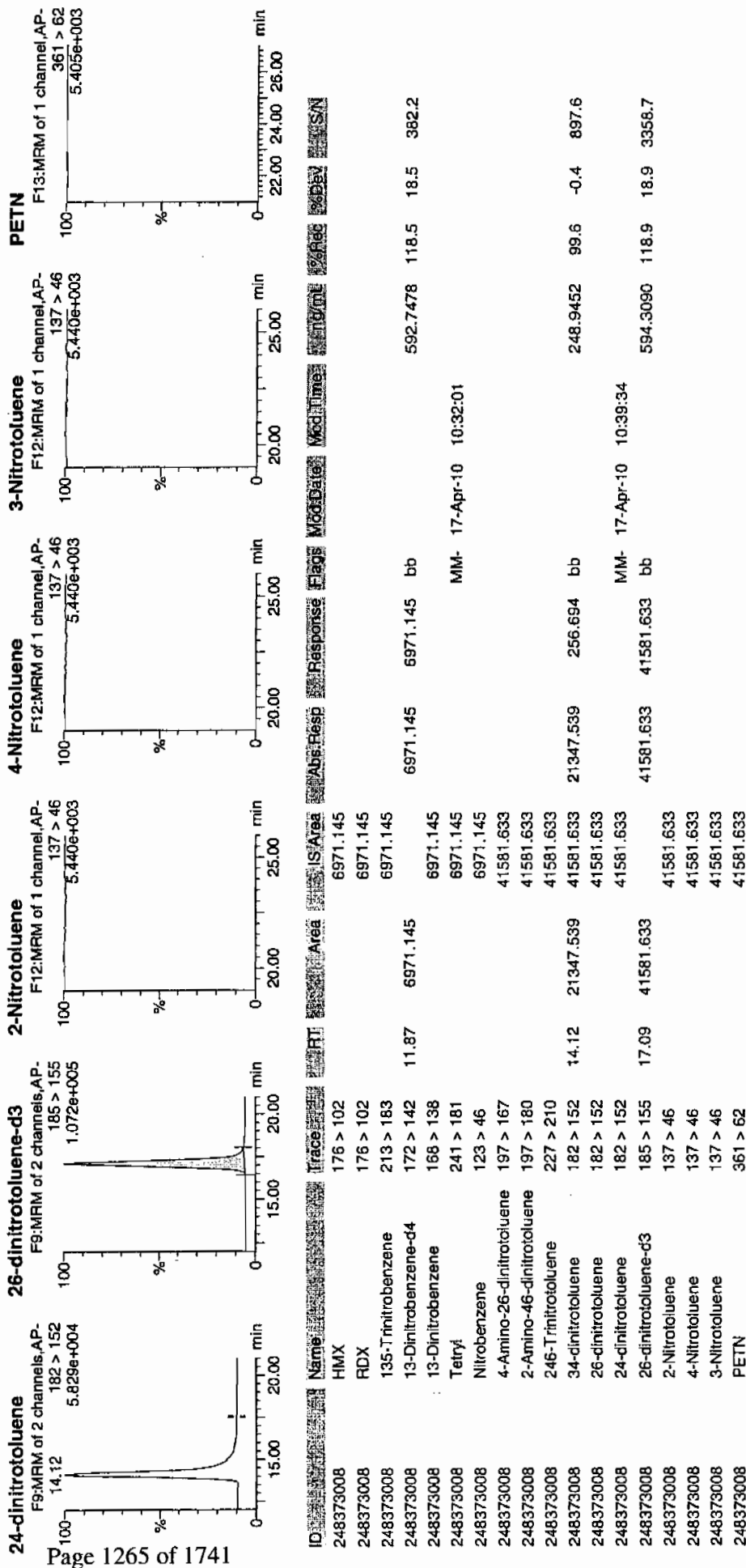
960307 / 2 /

1264 of 141



done 4/19/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7495

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373008

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080030.wiff

Date Analyzed: 09-APR-10 00:25

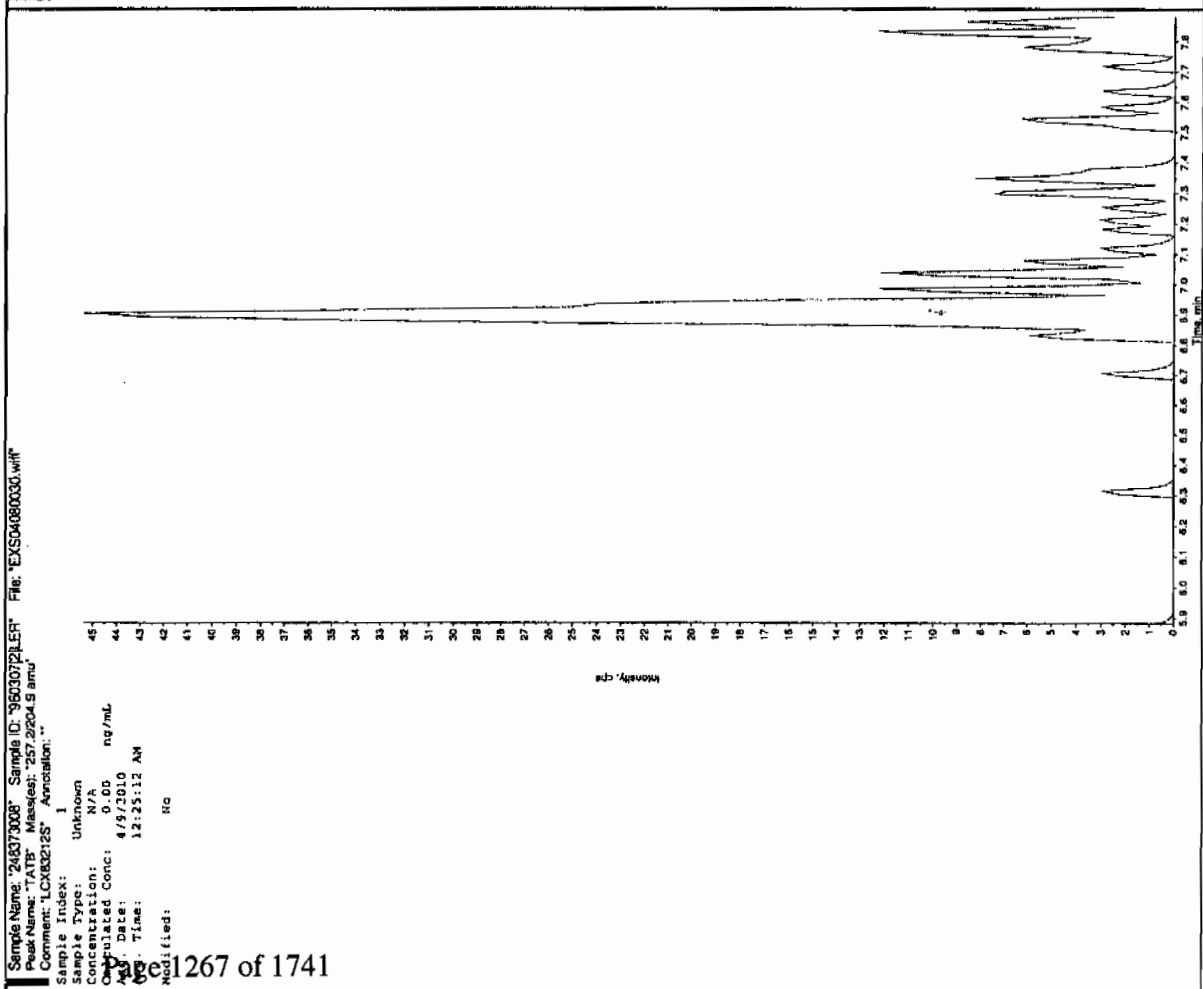
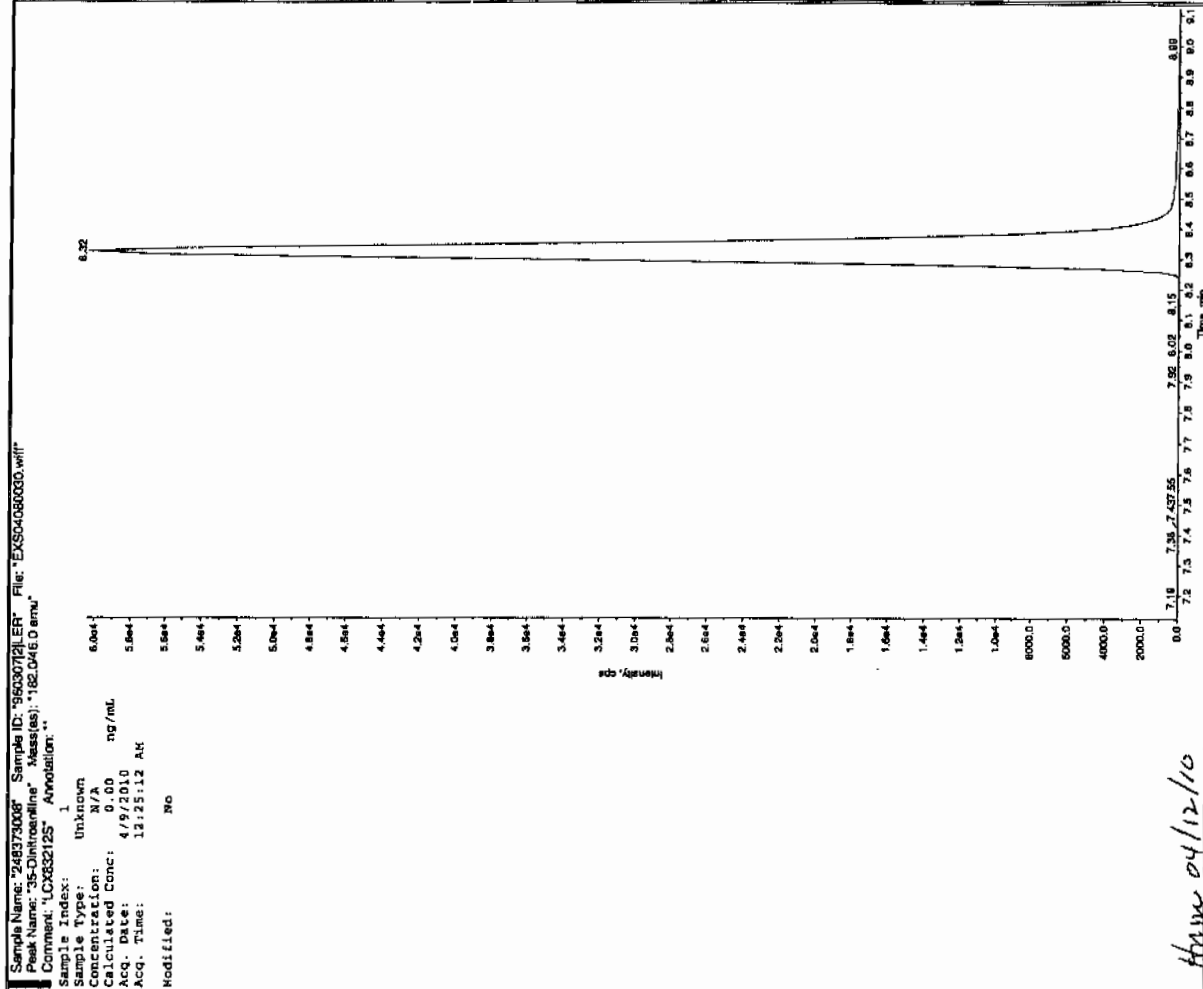
Units: ug/kg

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

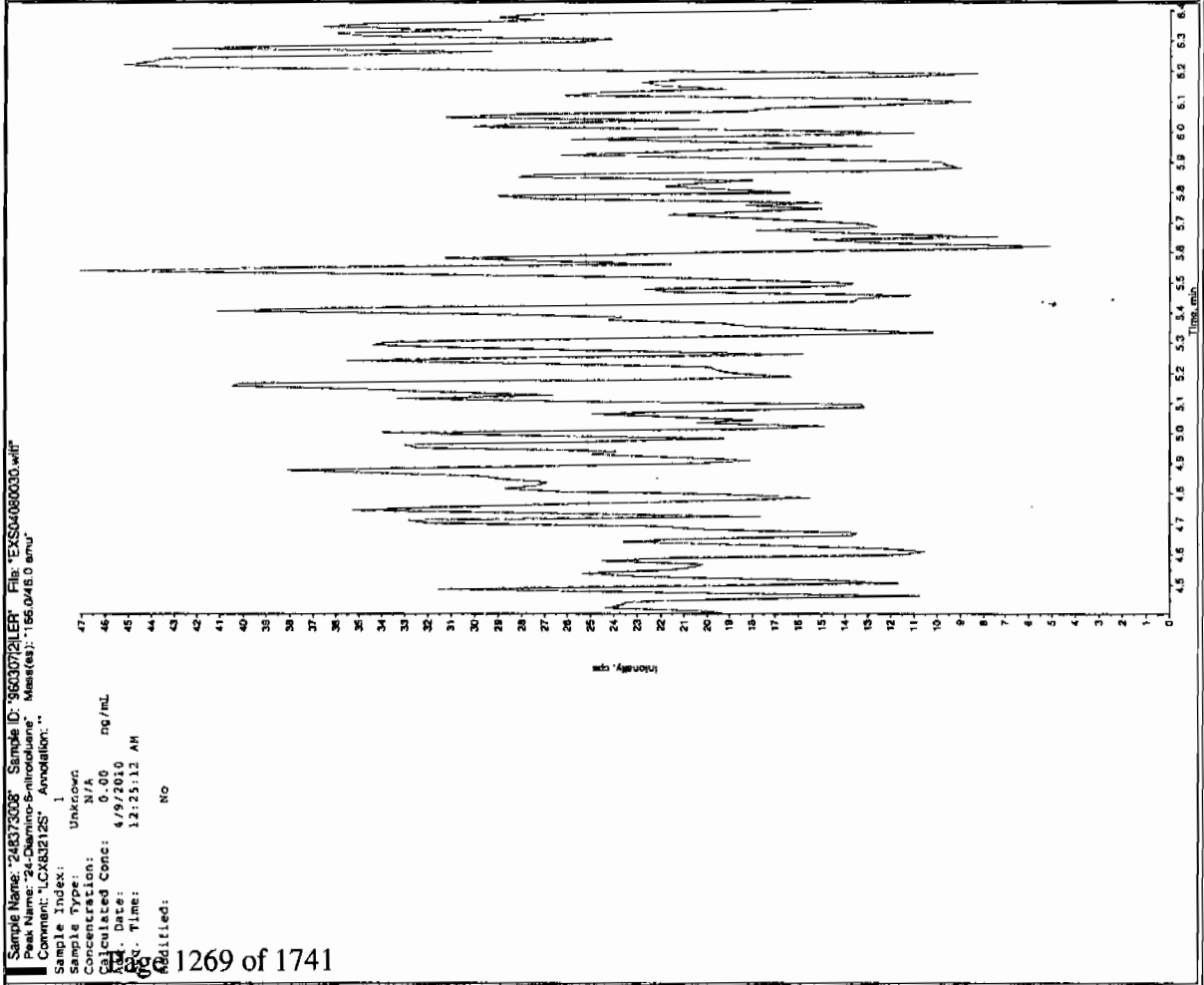
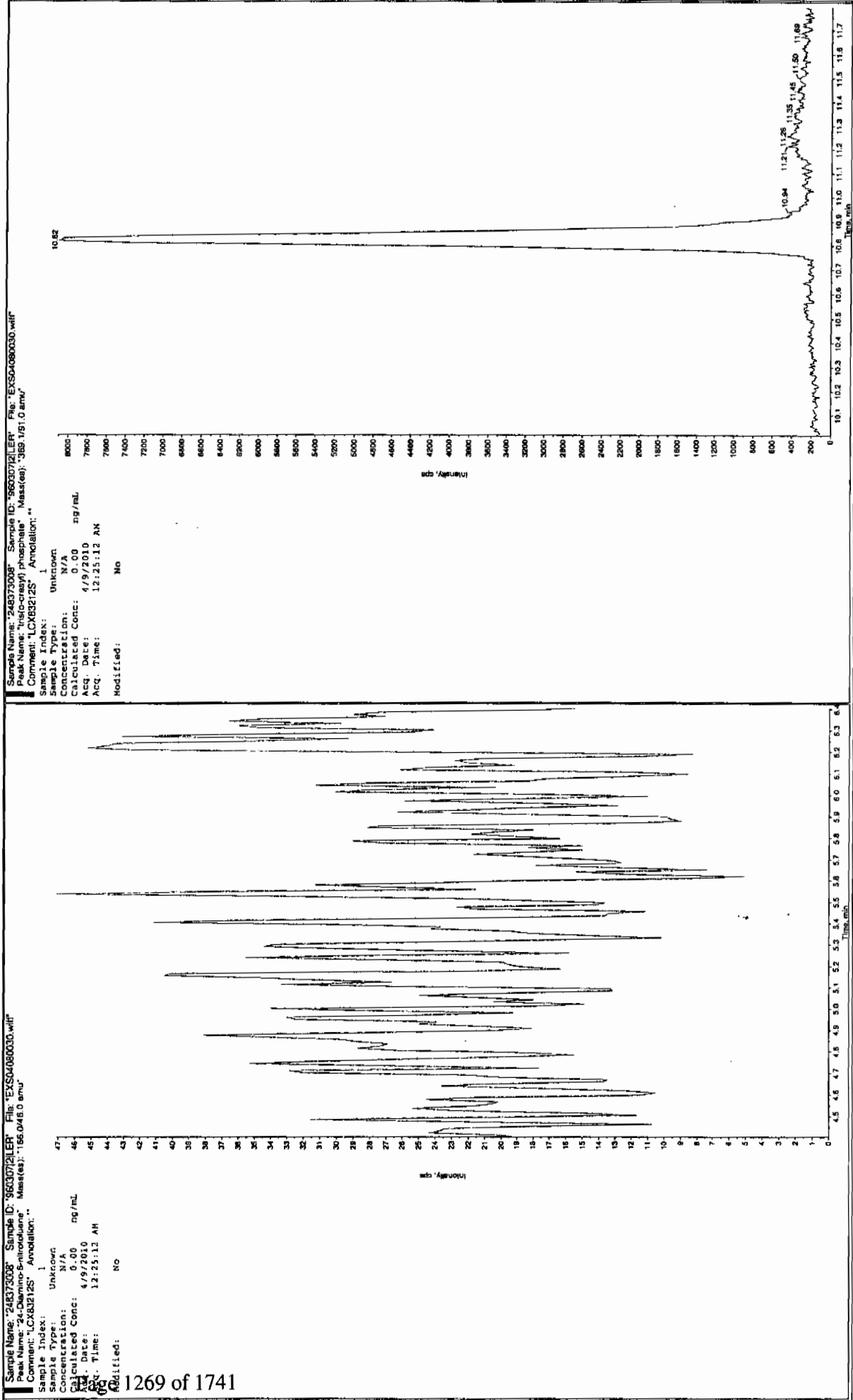
*Concentration =

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

Run 4/12/10







1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7498

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373009

Sample Amount 2

Moisture: 22.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412219a

Date Analyzed: 17-APR-10 02:52

Units: ug/kg

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

*Concentration =

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412219a

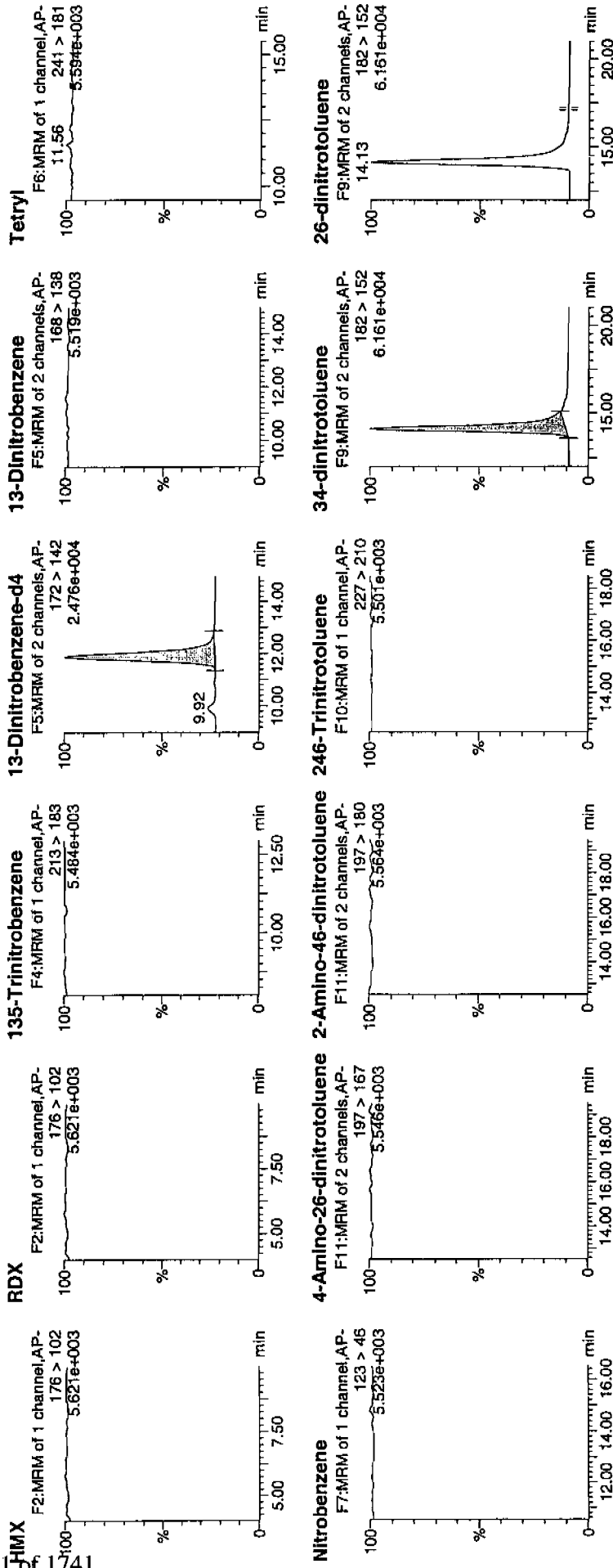
Date: 17-Apr-2010

Time: 02:52:42

ID: 248373009

Vial: 2:3,A

Handwritten notes: *1-677*, *4/17/10*, *WAV/960307/Scan/21*



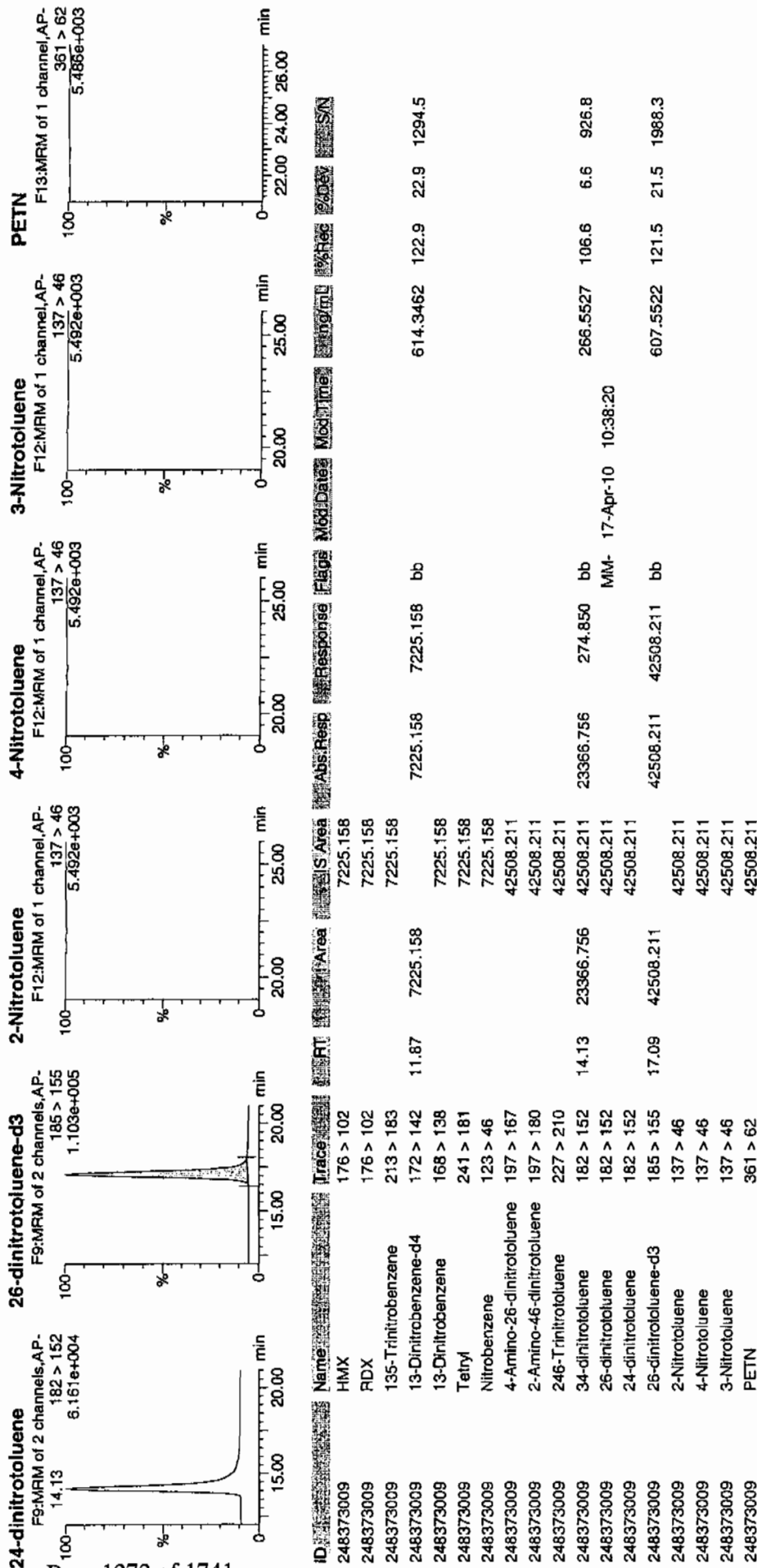
Handwritten signature: *AMC 4/19/10*

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 82 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7498

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373009

Sample Amount 2

Moisture: 22.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080031.wiff

Date Analyzed: 09-APR-10 00:40

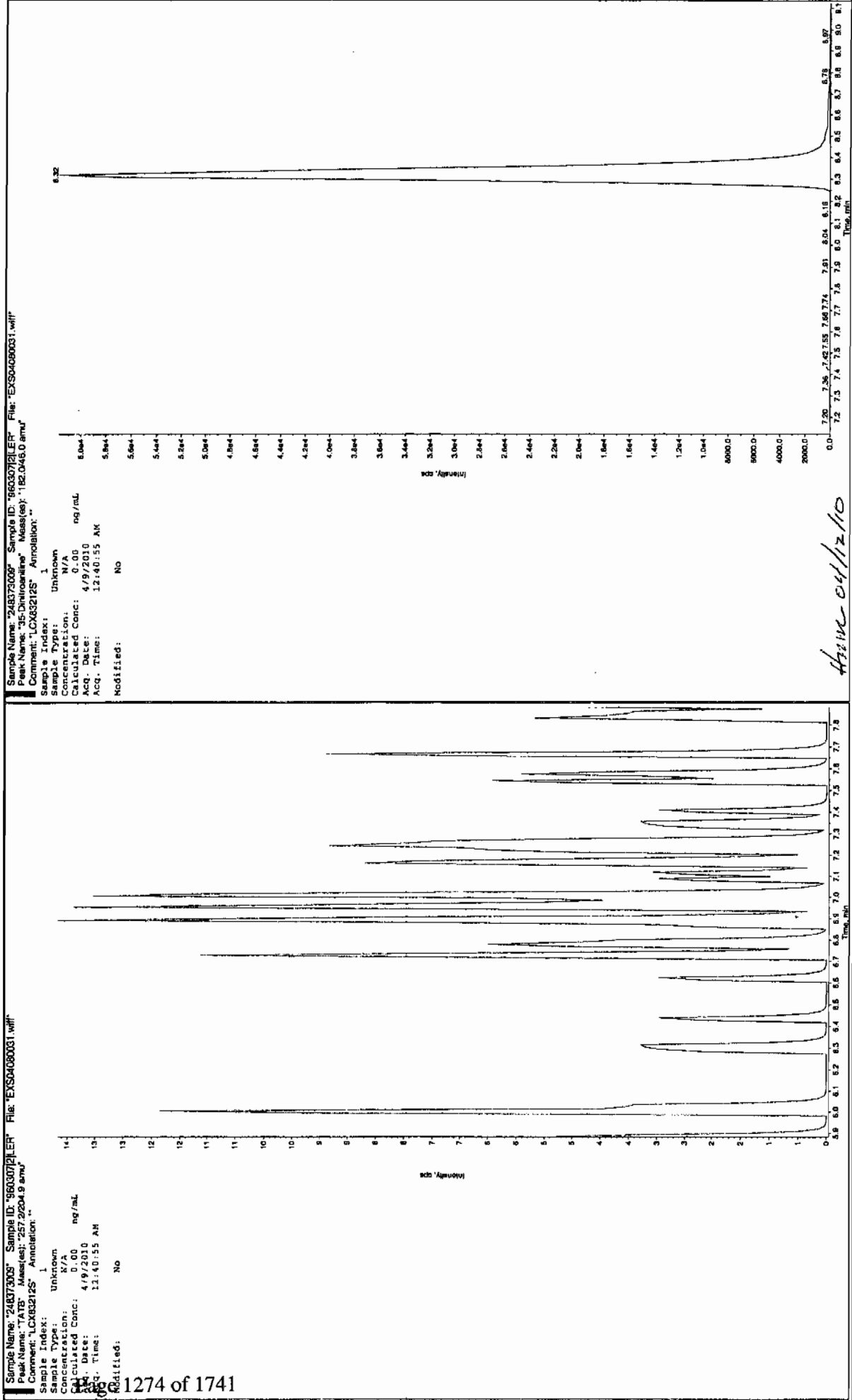
Units: ug/kg

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

*Concentration =

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

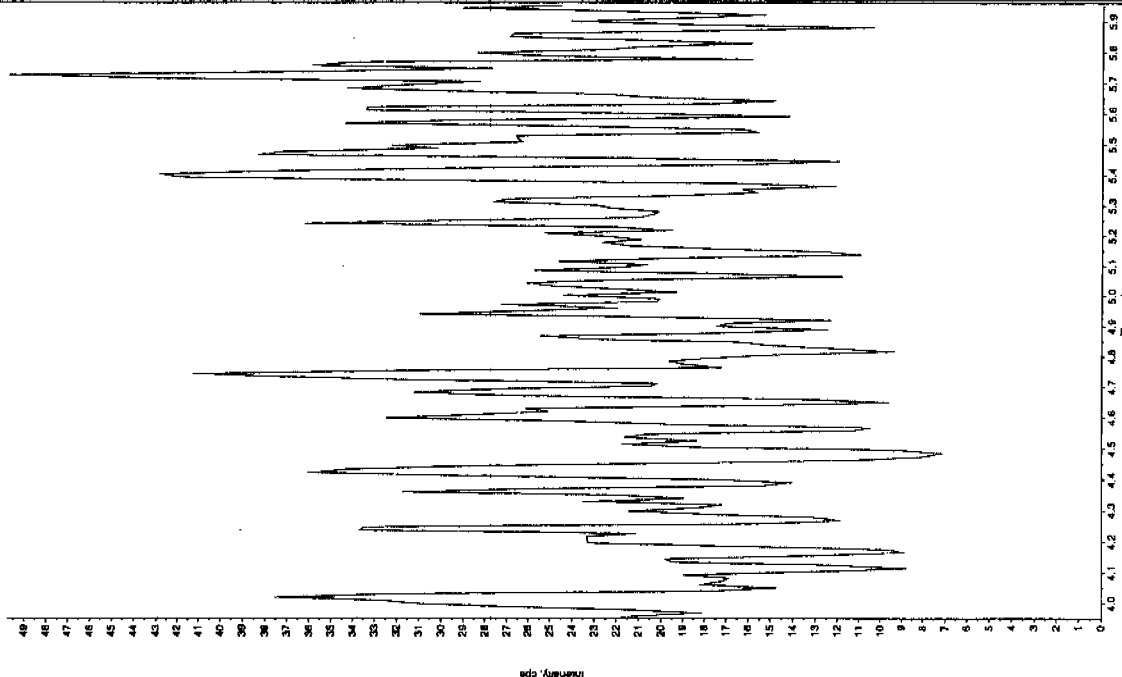
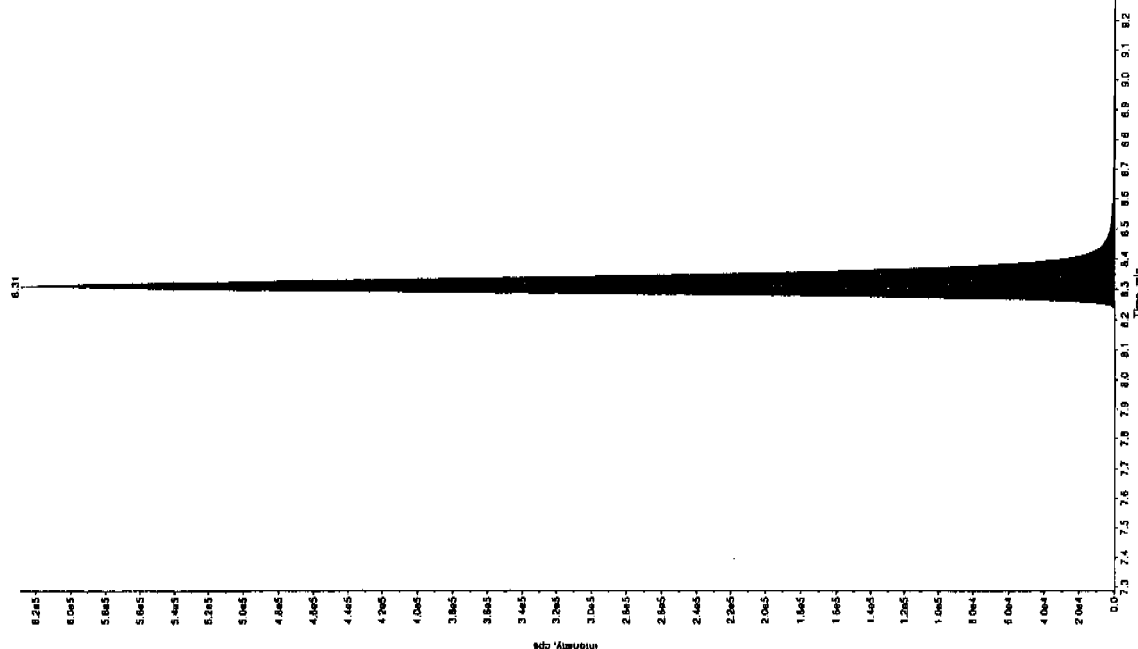
Scan 4/12/10

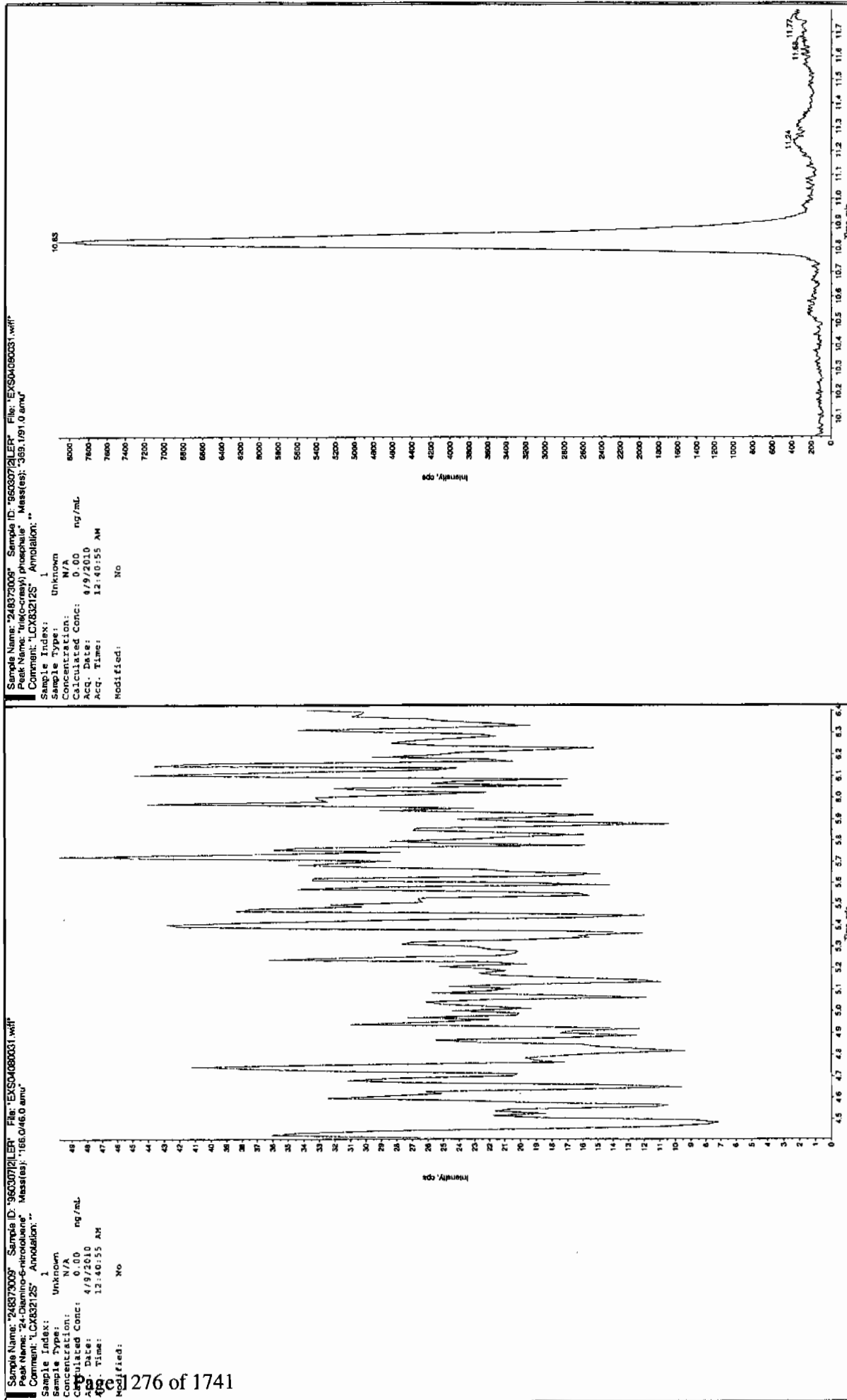


Sample Name: "248373009" Sample ID: "9603072JLER" File: "EXS04060031.wiff"
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/L
Acq. Date:	4/9/2010
Acq. Time:	12:40:55 AM
Modified:	Na

Sample Index:	1	Annotation:
Comment:	LCX832125	
Sample Name:	Unknown	
Sample Type:	N/A	
Concentration:	236	ng/mL
Calculated Conc:	236	
Acq Date:	4/9/2010	
Acq Time:	12:40:55	AH
File Name:	124055	
Modified:	NO	
Spec. Algorithm:	IntelliQuan - IQA	
Peak Weight:	1460.00	cps
Peak Width:	3.00	points
Smoothing Width:	3	points
Integration Window:	15.0	sec
Integration Time:	15.0	min
Accepted RT:	8.29	min
Relative RT:	NO	
Valley		
Retention Time:	8.31	min
Weight:	1.42e+031	Counts
Start Time:	8.22	min
End Time:	8.75	min





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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7500

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373010

Sample Amount 2

Molsture: 21.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412220a

Date Analyzed: 17-APR-10 03:22

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 83 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412220a

Date: 17-Apr-2010

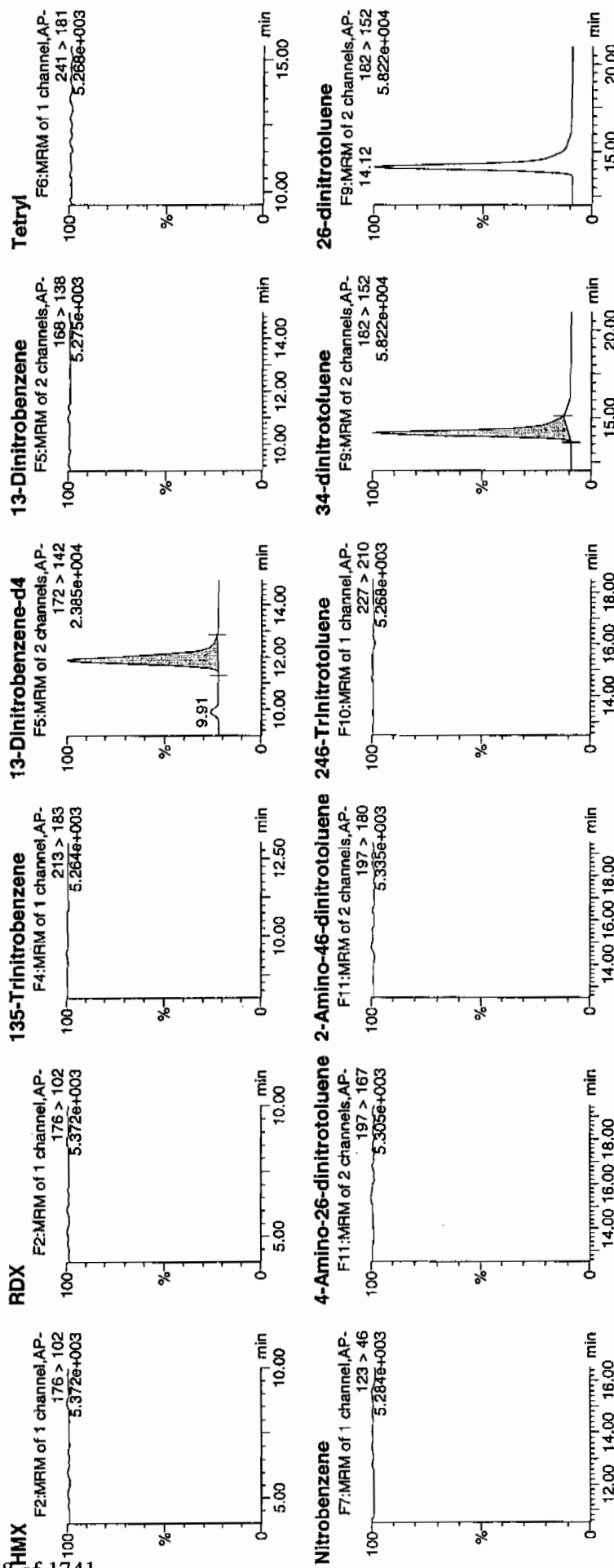
Time: 03:22:12

ID: 248373010

Vial: 2:3,B

1677
4/2/10

WAV 960307 | 8023 | 21



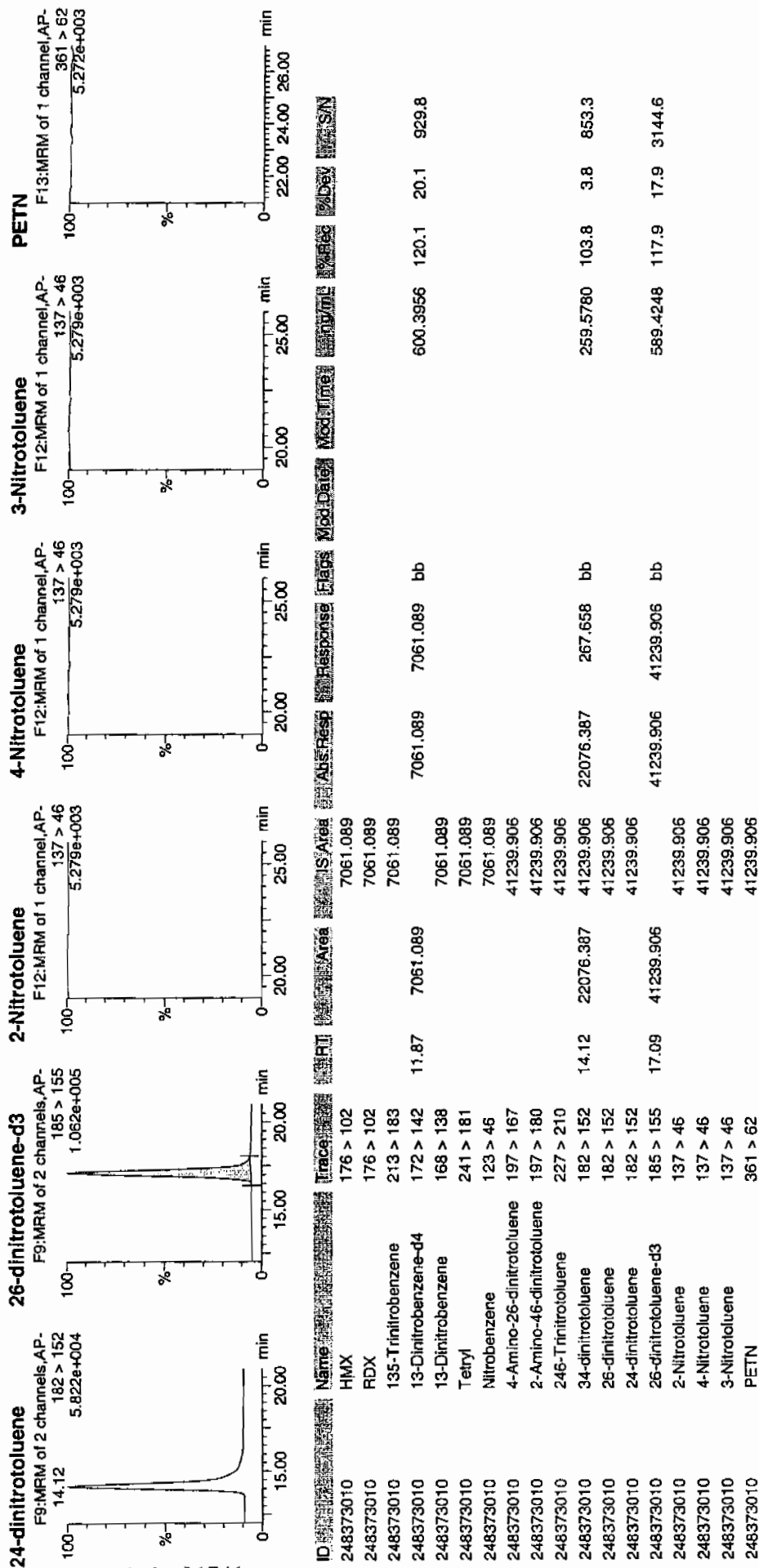
4/19/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 84 of 97

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7500

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373010

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080032.wiff

Date Analyzed: 09-APR-10 00:56

Units: ug/kg

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

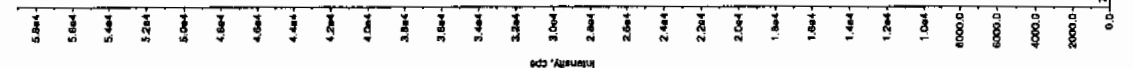
*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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See 4/12/10

Sample Name: "248373010" Sample ID: "960307121.ER" File: "EXS04080032.wif"
 Peak Name: "35-Dinitroanthracene" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: ""

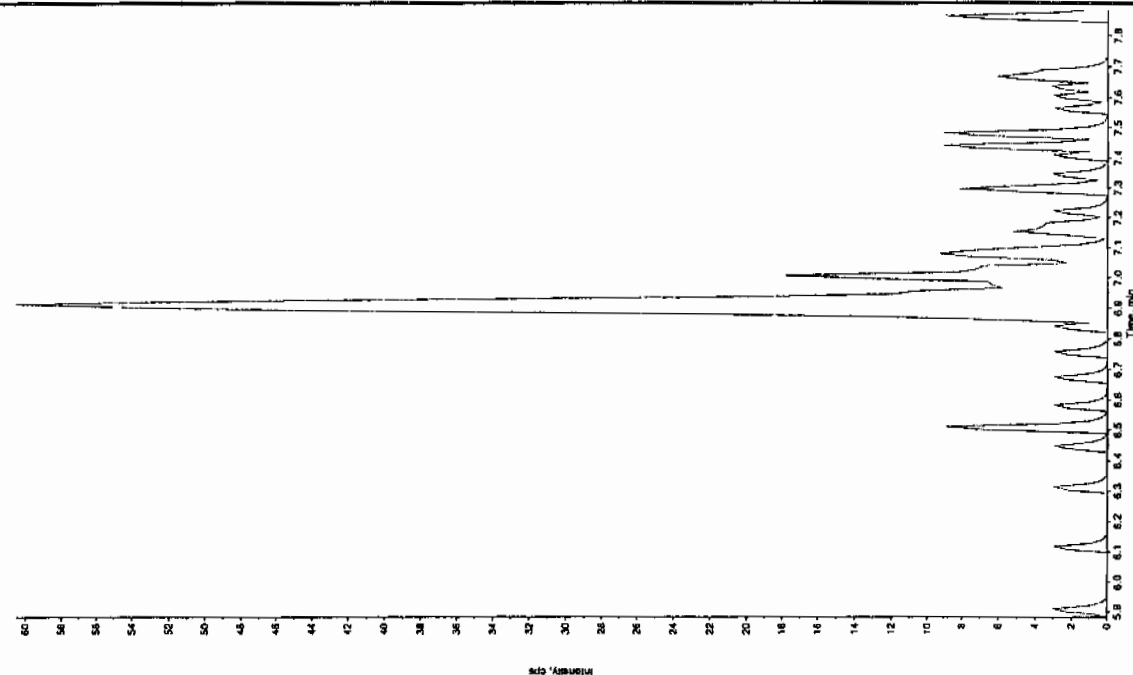
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 12:56:37 AM
 Modified: No



See 4/12/10

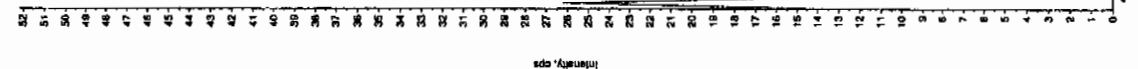
Sample Name: "248373010" Sample ID: "960307121.ER" File: "EXS04080032.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 12:56:37 AM
 Modified: No



Sample Name: "248373010" Sample ID: "960307121" File: "EXS04080032.wif"
 Peak Name: "25-Diamino-4-nitrobluene" Mass(es): "166.0/166.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentrated: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 12:56:37 AM
 Modified: No



Sample Name: "248373010" Sample ID: "960307121" File: "EXS04080032.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/181.9 amu"
 Comment: "LCX832125" Annotation: ""

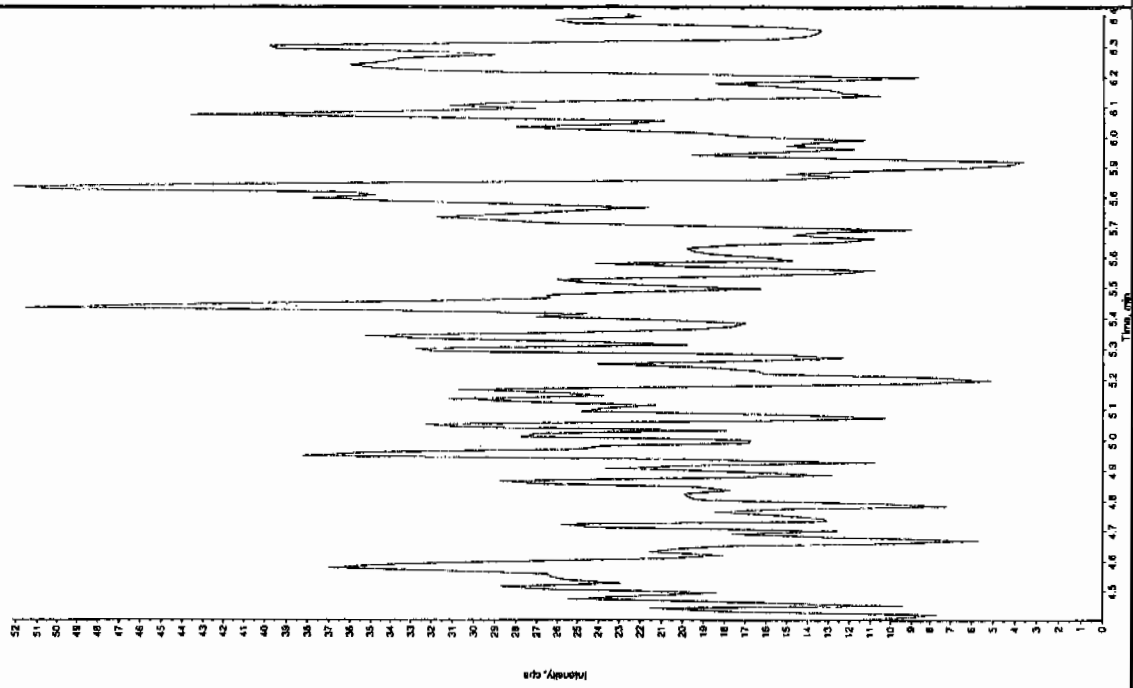
Sample Index: 1
 Sample Type: Unknown
 Concentrated: N/A
 Calculated Conc: 225. ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 12:56:37 AM
 Modified: No



Peak: 1
 Name: 34-Dinitrofluorene
 Retention Time: 8.31 min
 Area: 2.39e+006 counts
 Height: 589538.330 cps
 Start Time: 8.20 min
 End Time: 8.82 min
 Peak Width: 0.00 sec
 Peak Width: 3 points
 Peak Window: 15.0 sec
 Selected RT: 8.29 min
 Used Relative RT: No

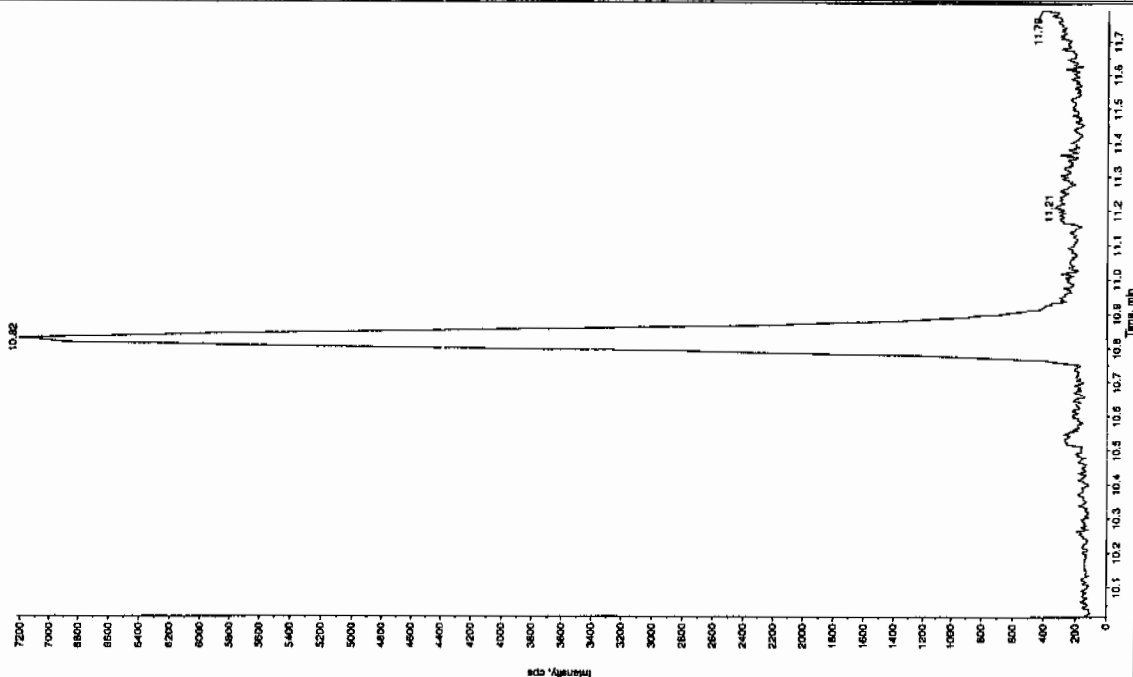
Sample Name: "248373010" Sample ID: "95030721.ER" File: "EX504080032.wif"
 Peak Name: "248373010" Peak Name: "5-nitrobenzyl phosphatidylcholine" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 12:56:37 AM
 Modified: No



Sample Name: "248373010" Sample ID: "95030721.ER" File: "EX504080032.wif"
 Peak Name: "248373010" Peak Name: "5-nitrobenzyl phosphatidylcholine" Mass(es): "353.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 12:56:37 AM
 Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7523

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373011

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412221a

Date Analyzed: 17-APR-10 03:51

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 85 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qtd, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412221a

Date: 17-Apr-2010

Time: 03:51:41

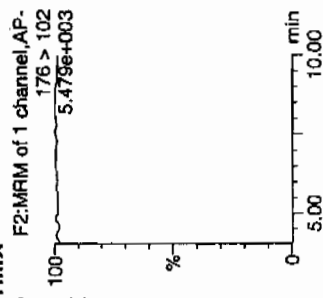
ID: 248373011

Vial: 2:3,C

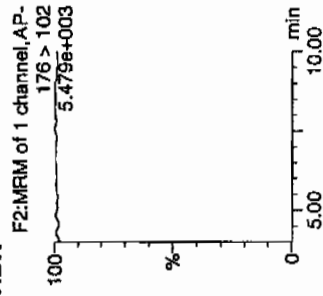
4/17/10

WAL 760307 / Soles / 21

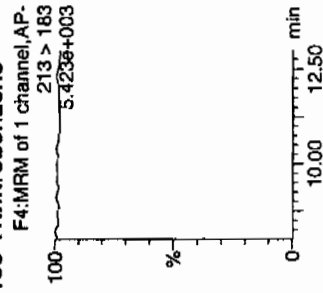
HMx



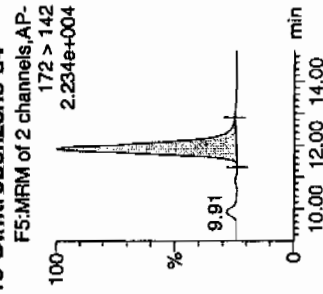
RDX



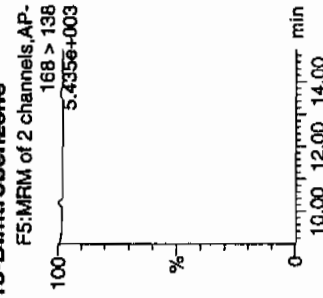
135-Trinitrobenzene



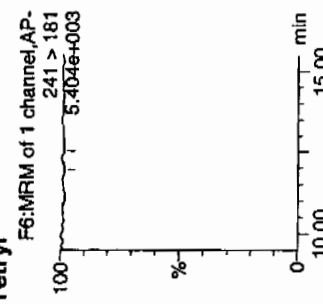
13-Dinitrobenzene-d4



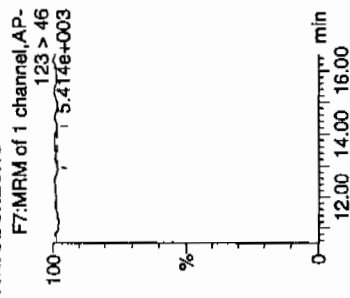
13-Dinitrobenzene



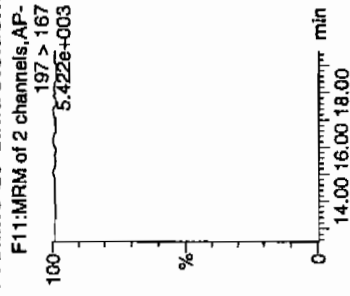
Tetryl



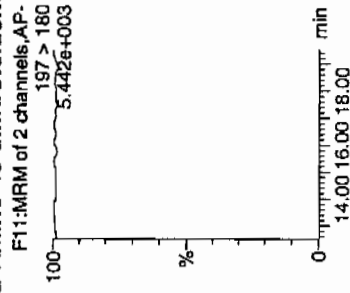
Nitrobenzene



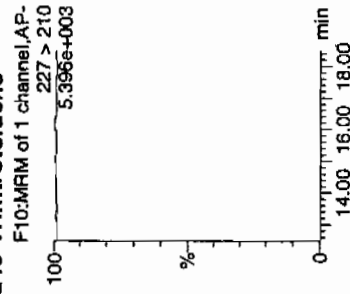
4-Amino-26-dinitrotoluene



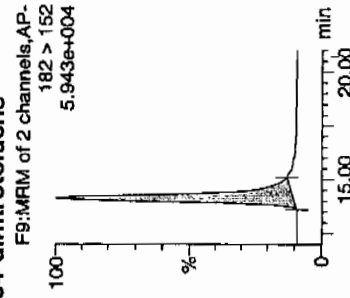
2-Amino-46-dinitrotoluene



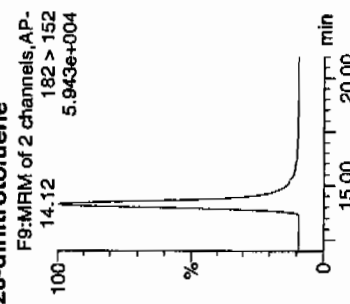
246-Trinitrotoluene



34-dinitrotoluene



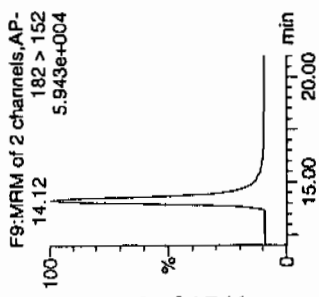
26-dinitrotoluene



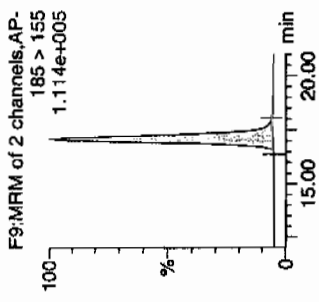
done 4/19/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

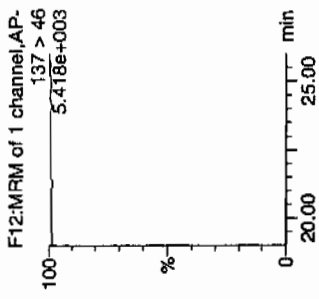
2,4-dinitrotoluene



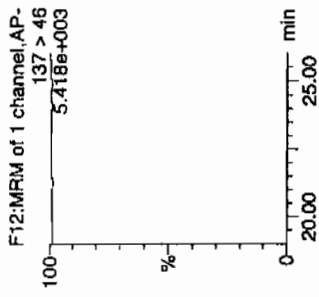
26-dinitrotoluene-d3



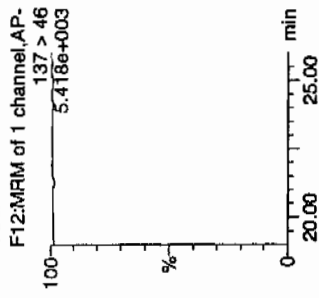
2-Nitrotoluene



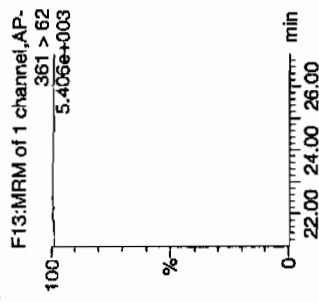
4-Nitrotoluene



3-Nitrotoluene



PETN

[illegible]

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7523

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373011

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080033.wiff

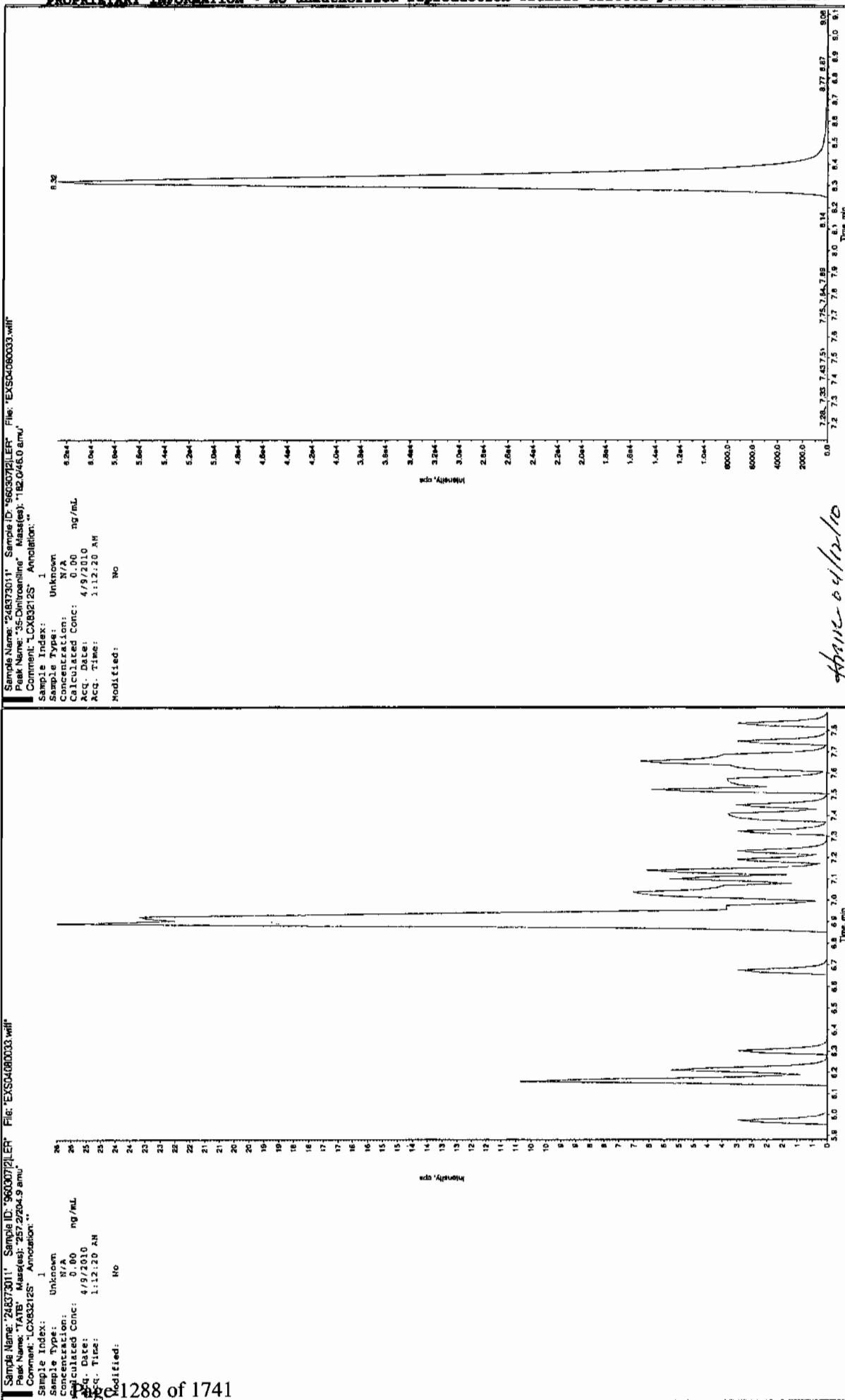
Date Analyzed: 09-APR-10 01:12

Units: ug/kg

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

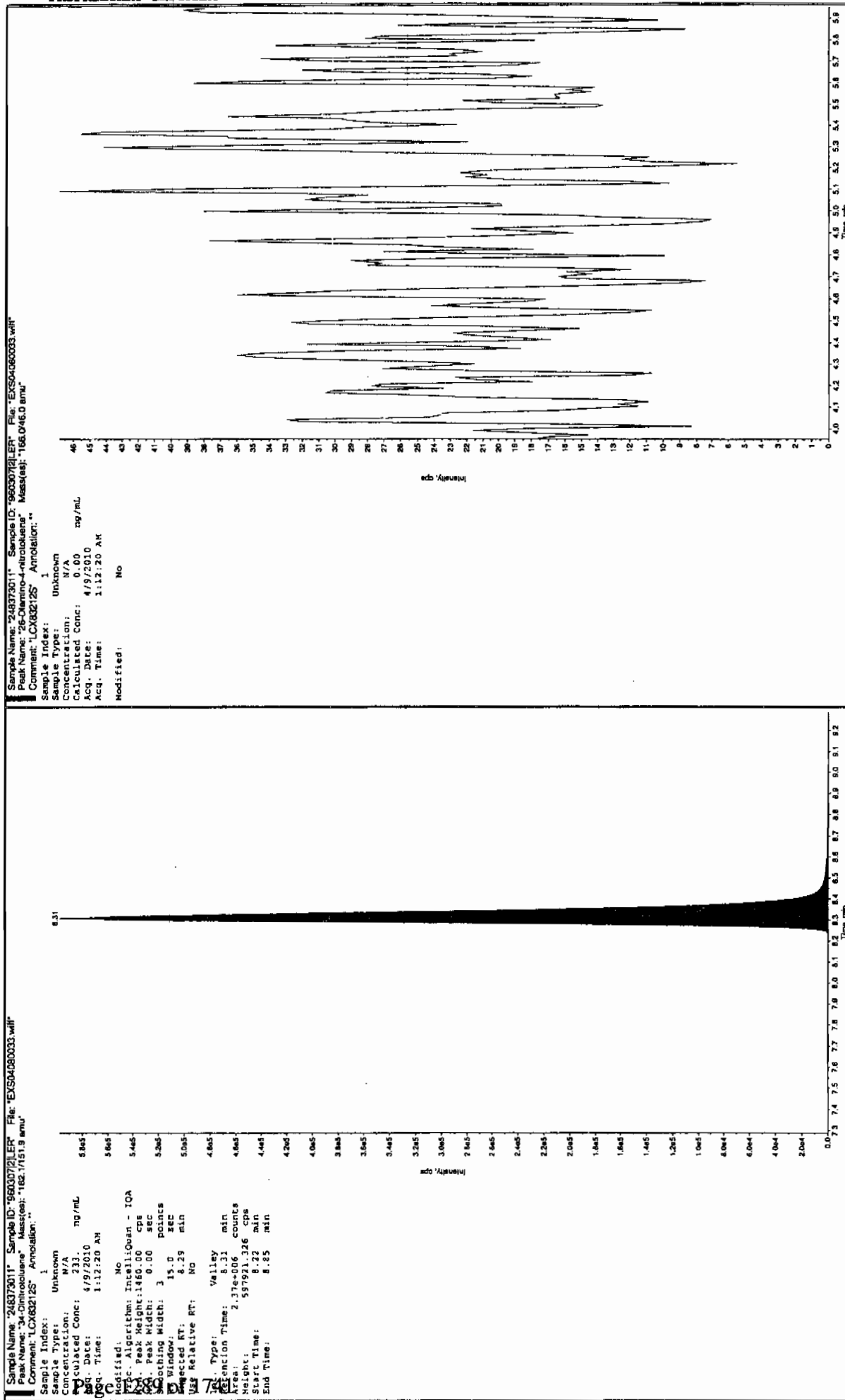
*Concentration =

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



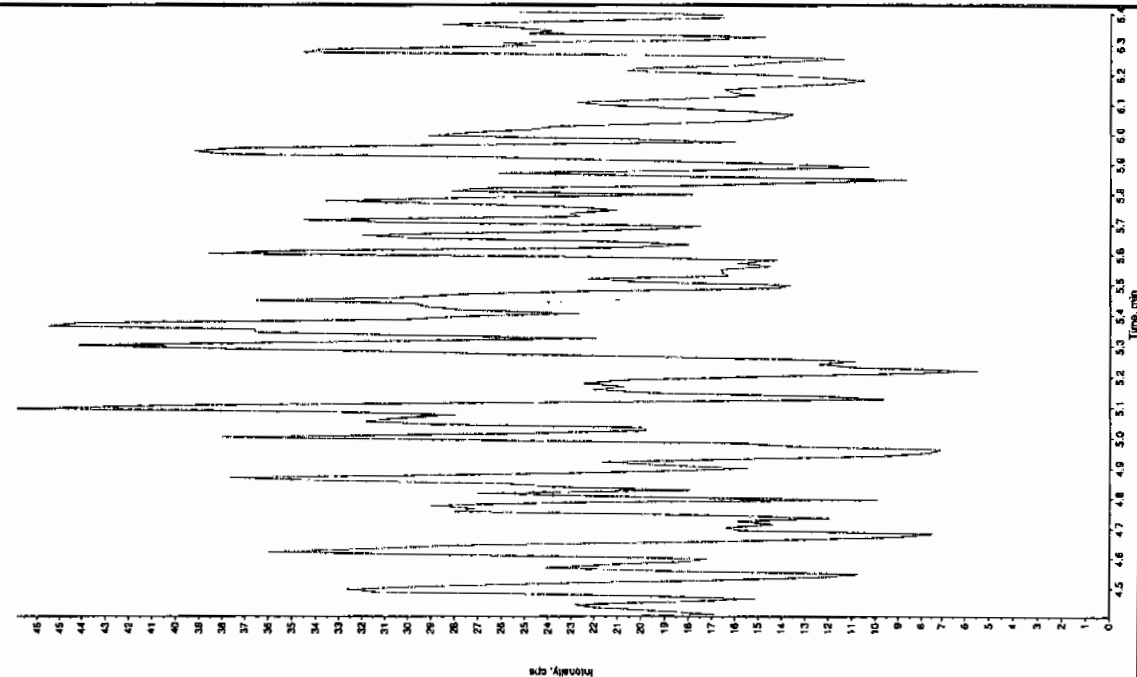
Scan 4/12/10

Have 04/12/10

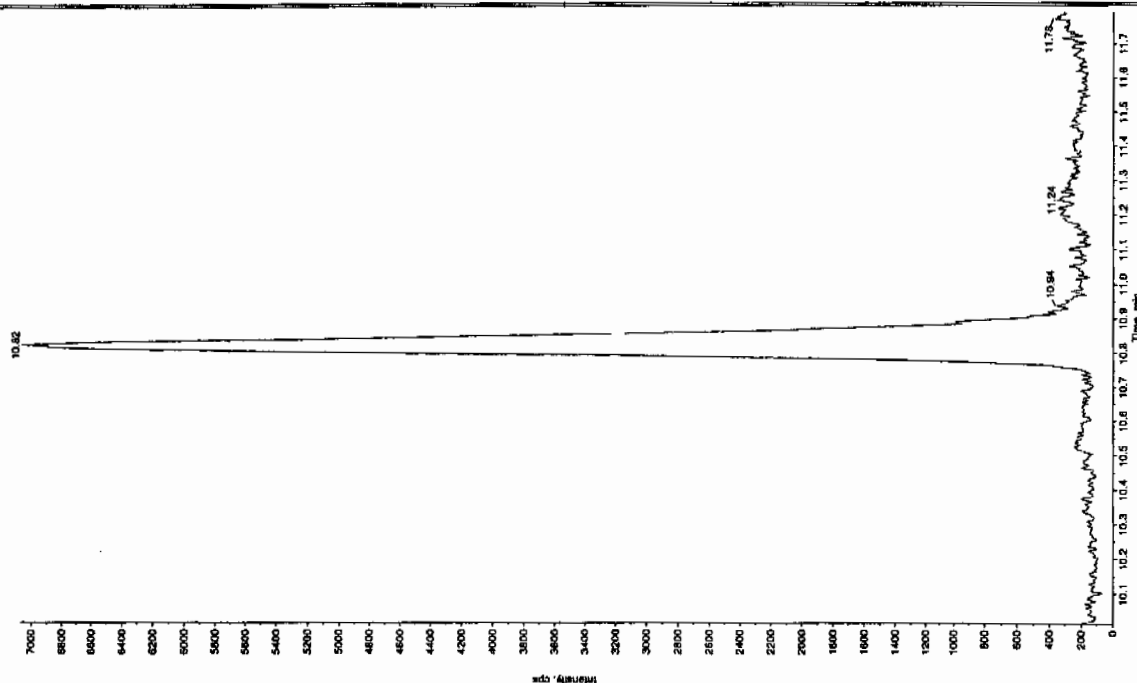


Sample Name: "248372011" Sample ID: "9503072121" File: "EXS04080033.wif"
 Peak Name: "bis(2-ethylhexyl) phosphate" Mass(es): "389.191.0 amu"
 Comment: "LCX03212S" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/9/2010
 Acq. Time: 1:12:20 AM
 Modified: No



Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/9/2010
 Acq. Time: 1:12:20 AM
 Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7522

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373014

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412222a

Date Analyzed: 17-APR-10 04:21

Units: ug/kg

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

*Concentration =

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412222a

Date: 17-Apr-2010

Time: 04:21:10

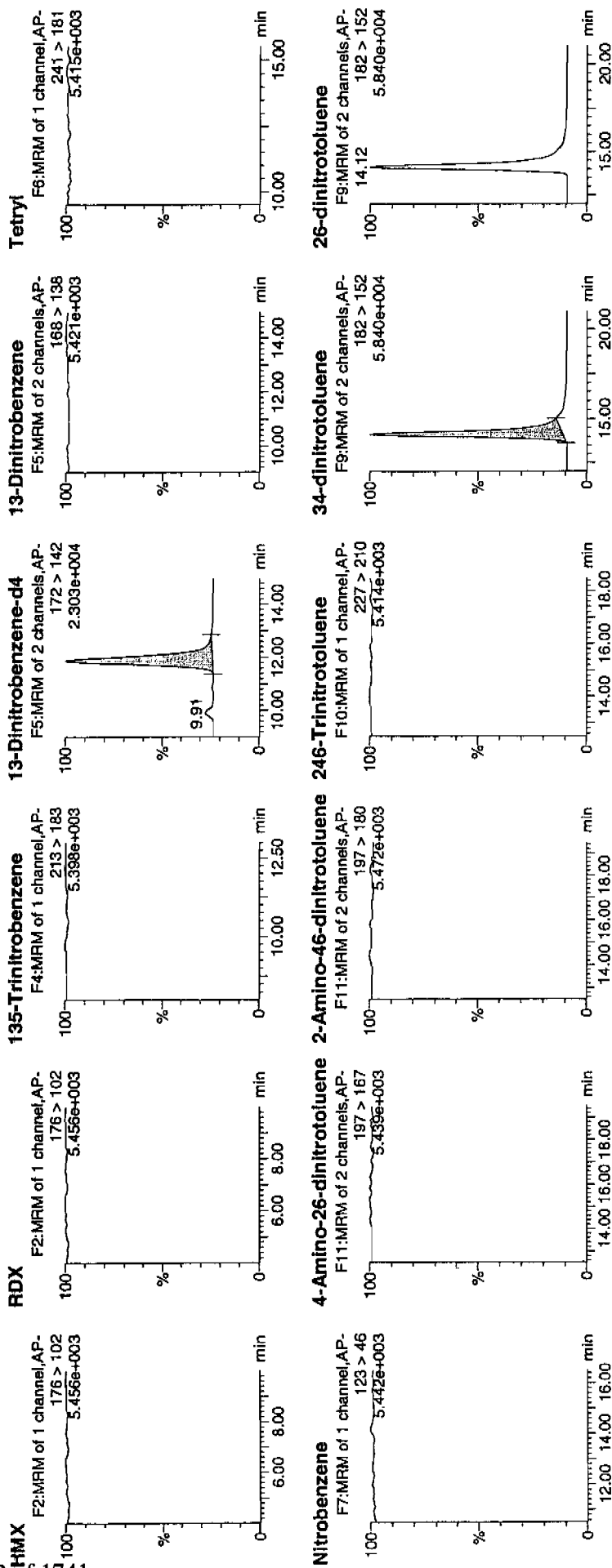
ID: 248373014

Vial: 2:3,D

4/17/10

LAU 960307 8022 121

292 of 1741



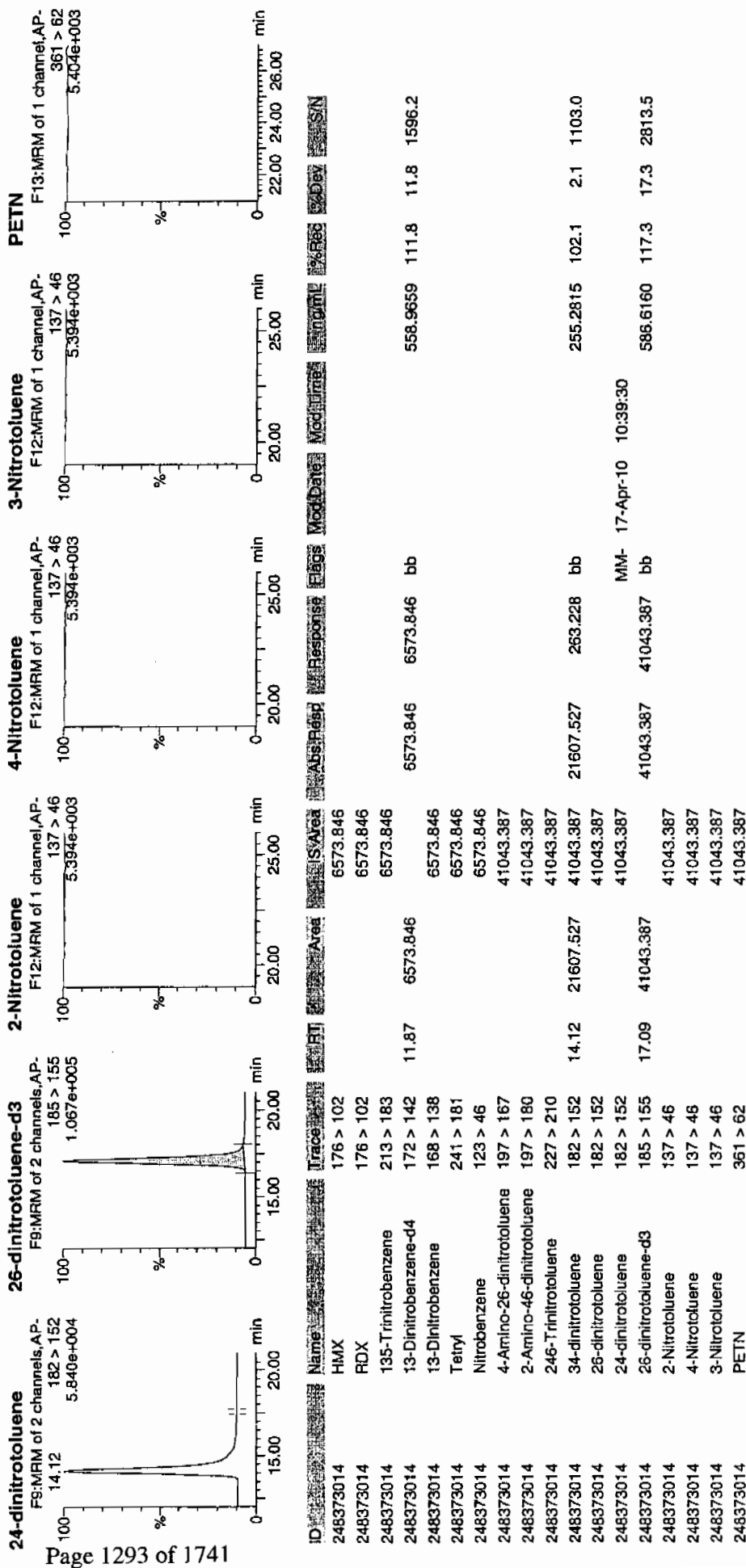
MM 4/19/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 88 of 97

Dataset: C:\MASSLYN\New_Exp\PRO1041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7522

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373014

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080034.wiff

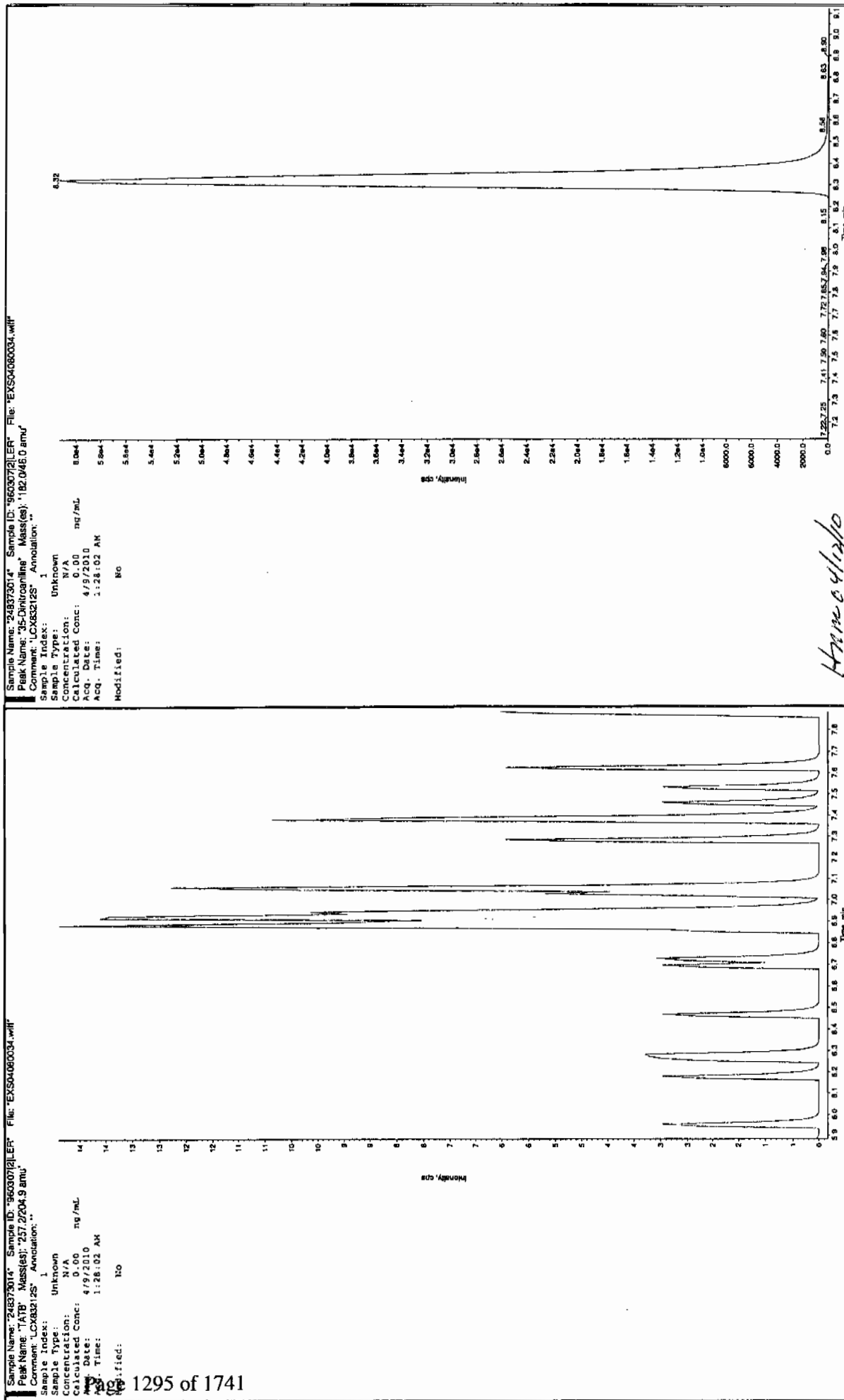
Date Analyzed: 09-APR-10 01:28

Units: ug/kg

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

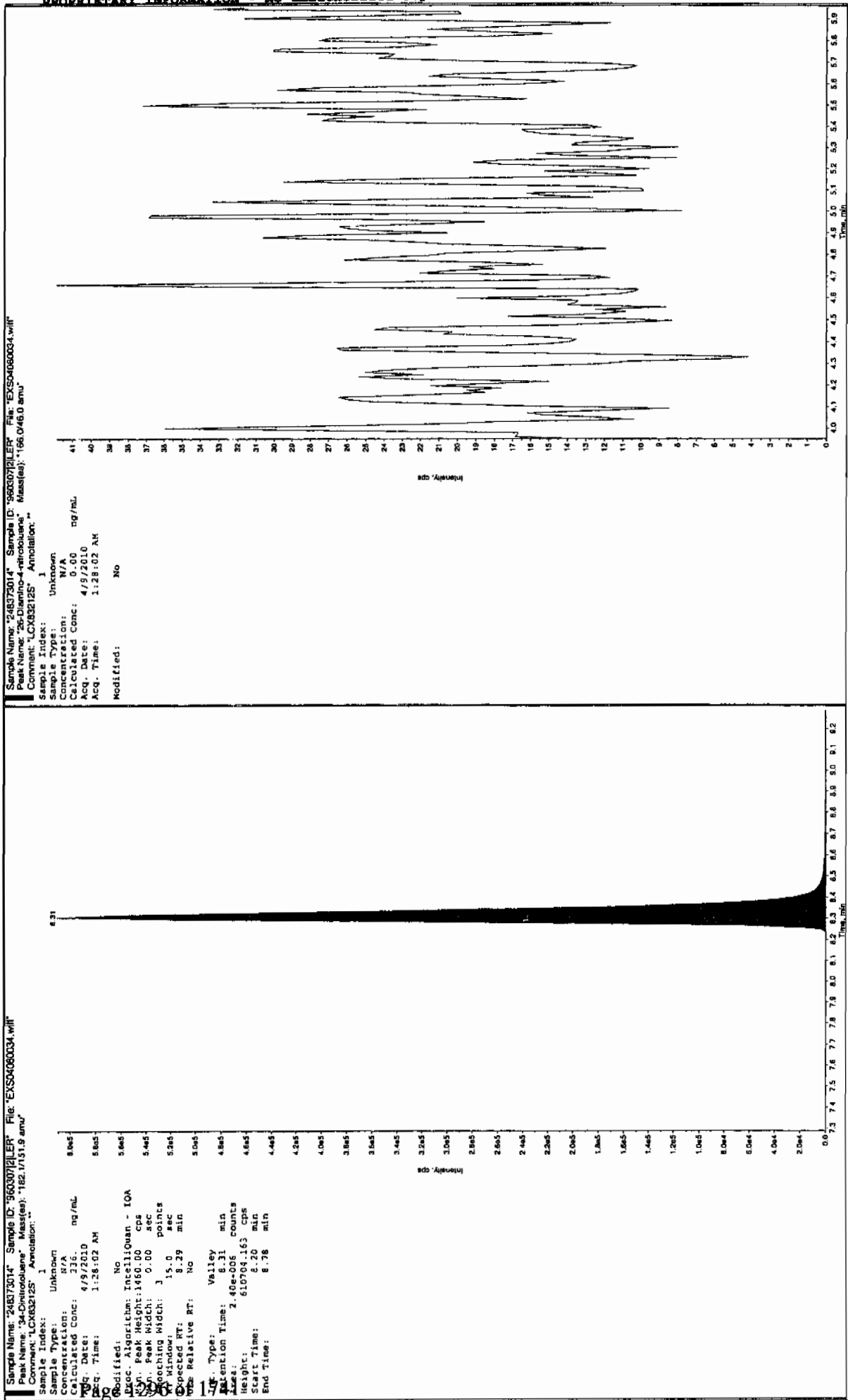
*Concentration =

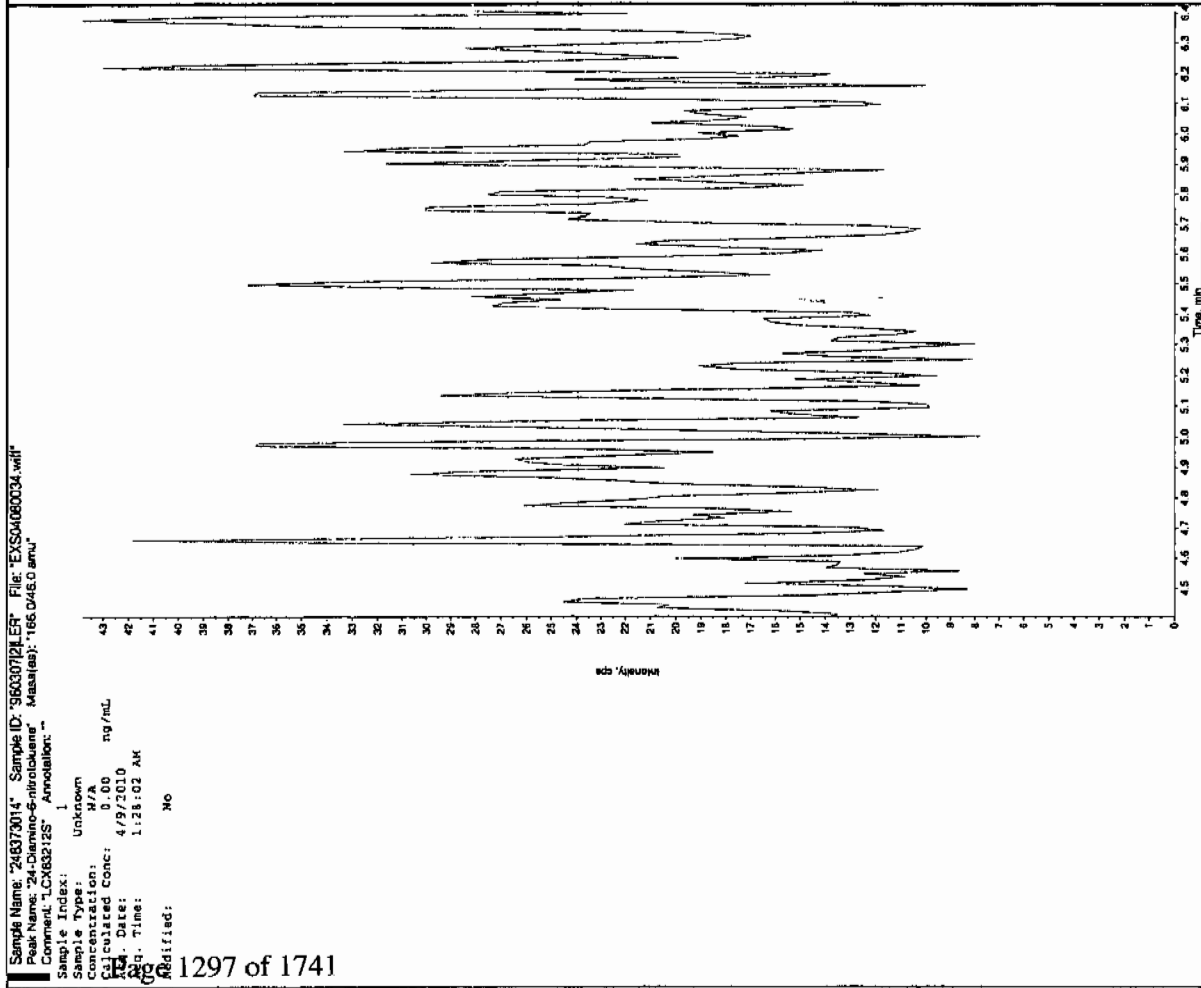
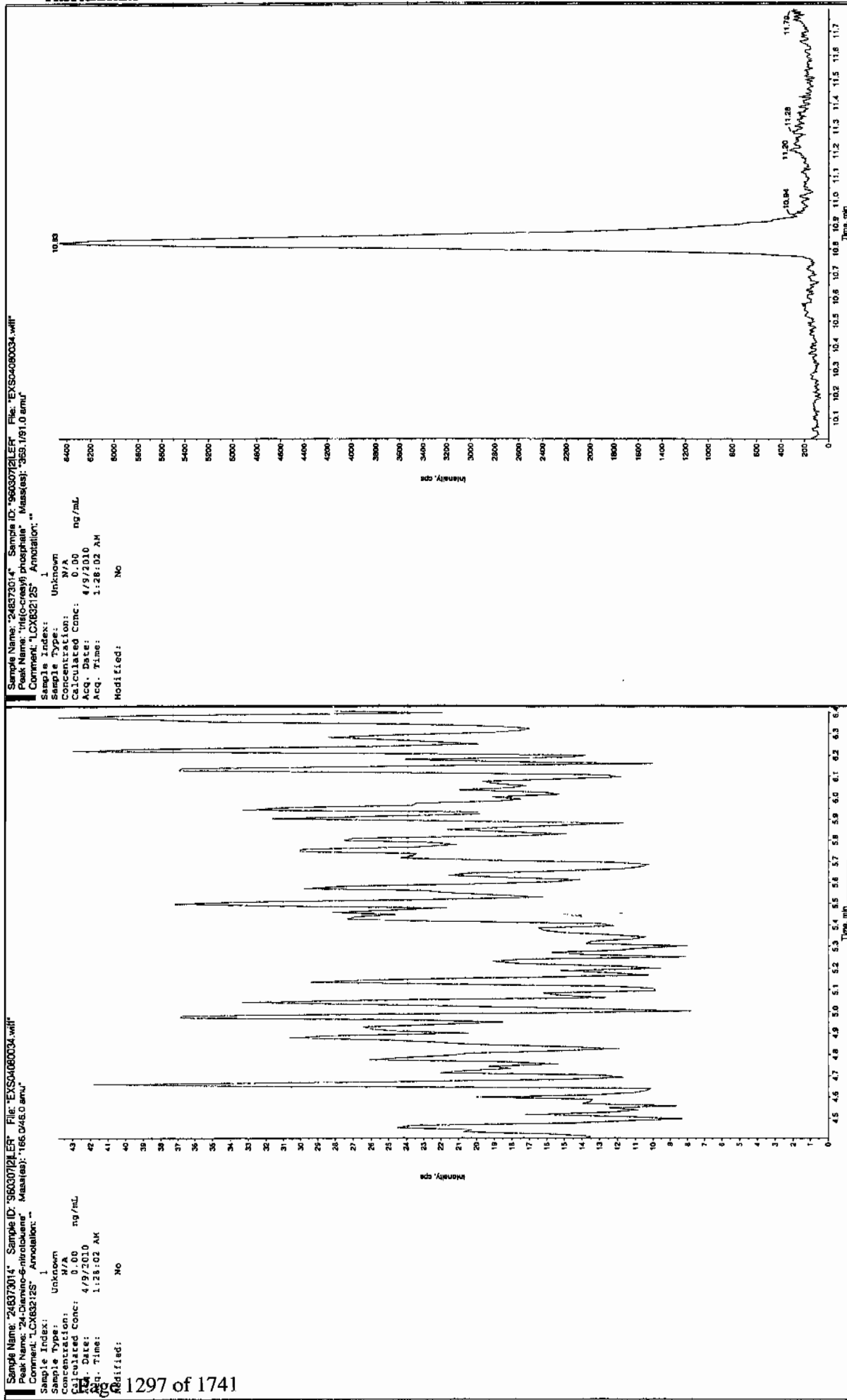
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor



Scan 4/13/10

Home 4/13/10





1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7521

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373015

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0418029a

Date Analyzed: 19-APR-10 03:30

Units: ug/kg

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

*Concentration =

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

Quantity Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 57 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qtd, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418029a

Date: 19-Apr-2010

Time: 03:30:49

ID: 248373015

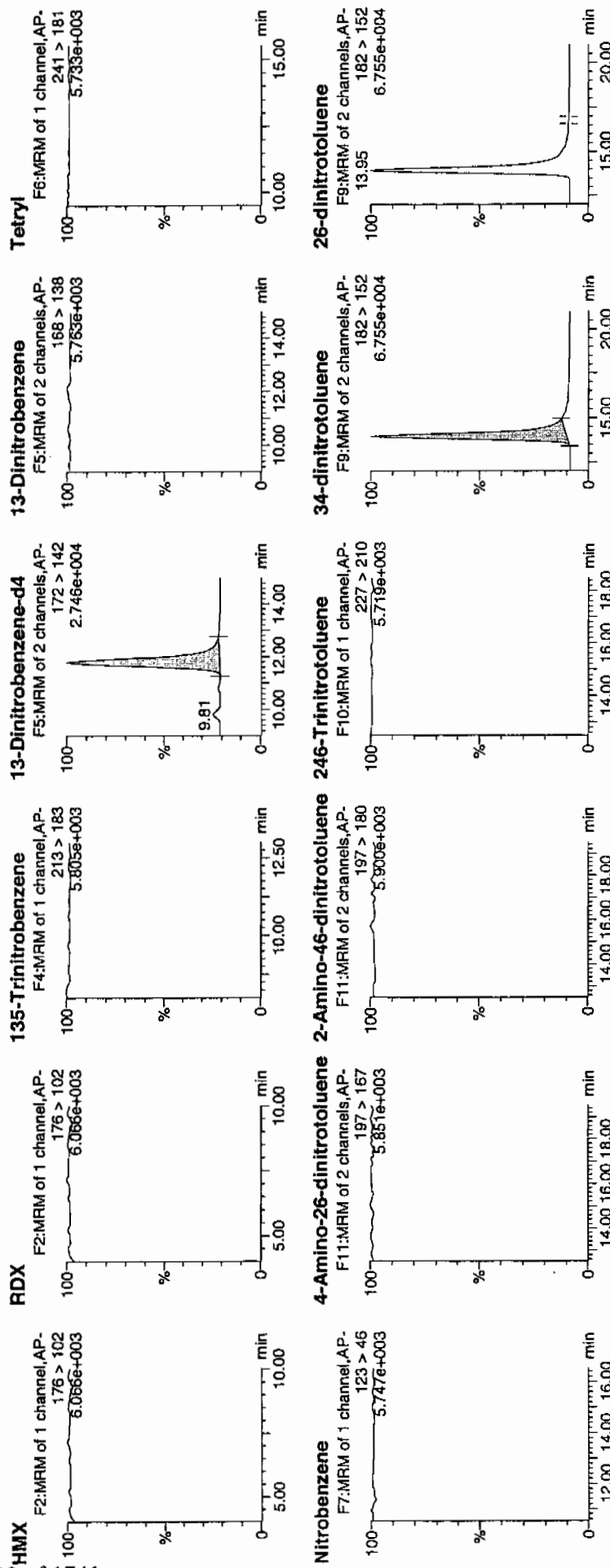
Vial: 1:3,B

4/19/10

P2842

XC: EXP0412223a

1960307 / 8000 / 21



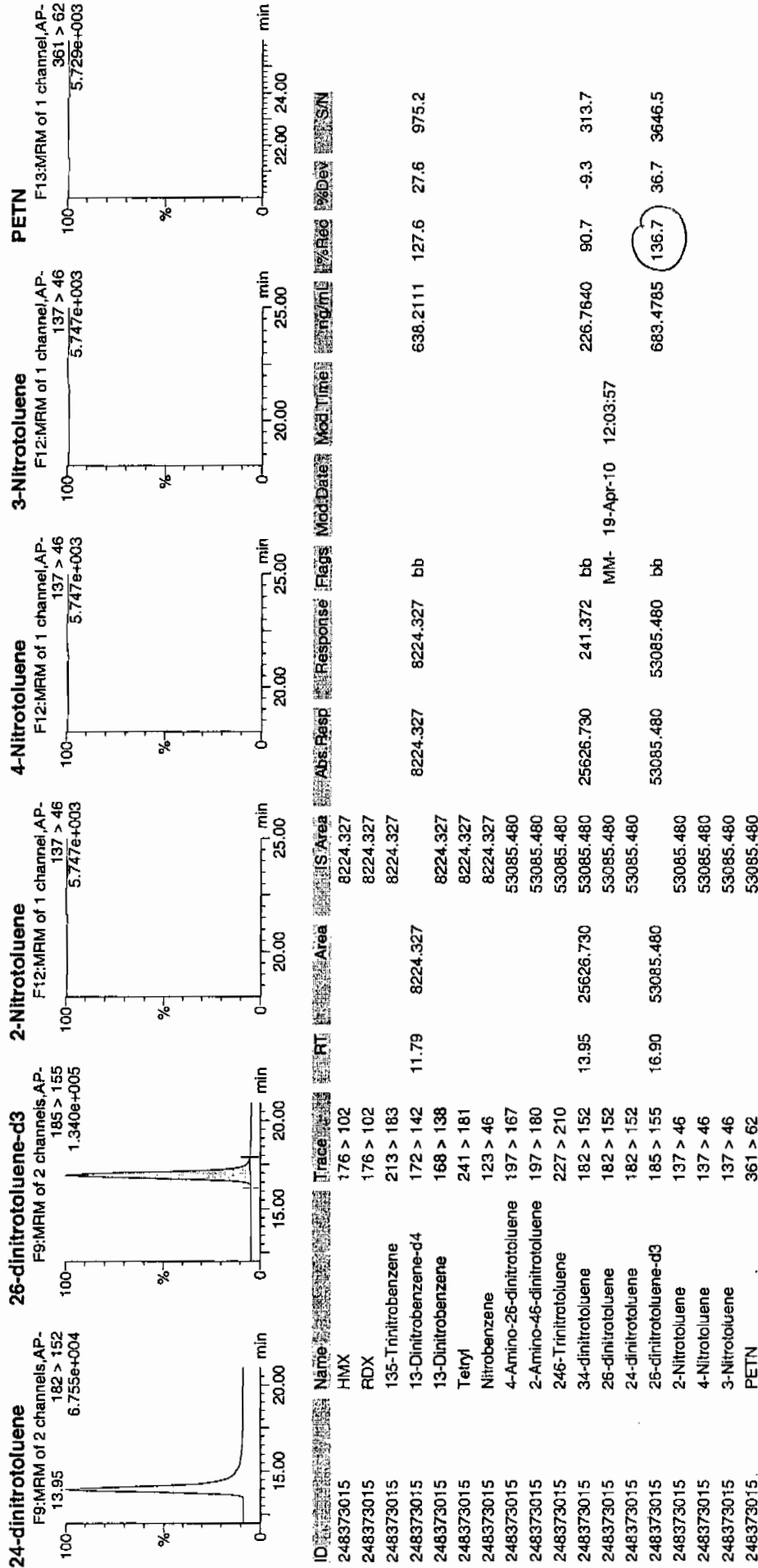
4/19/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 58 of 91

Dataset: C:\MASSLYNX\New_Exp_PROV041810expA.qld, Time: Mon Apr 19 12:15:39 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7521

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 248373015

Sample Amount 2

Moisture: 22.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080035.wiff

Date Analyzed: 09-APR-10 01:43

Units: ug/kg

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

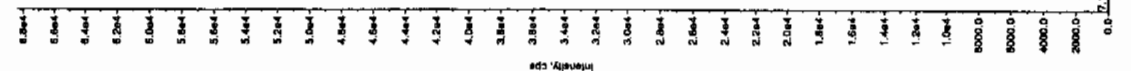
*Concentration =

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

Run 4/13/10

Sample Name: "248372015" Sample ID: "860307121.ER" File: "EXS04080035.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0460 amu"
 Comment: "LCX832125" Annotation: ""

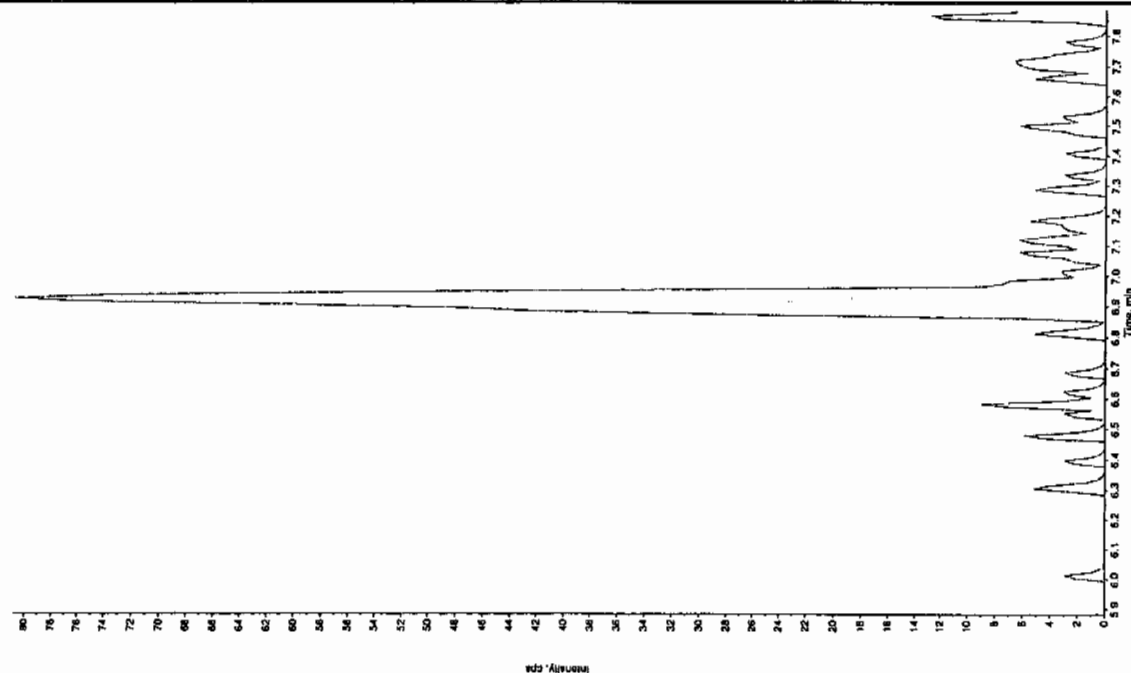
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 1:43:44 AM
 Modified: No

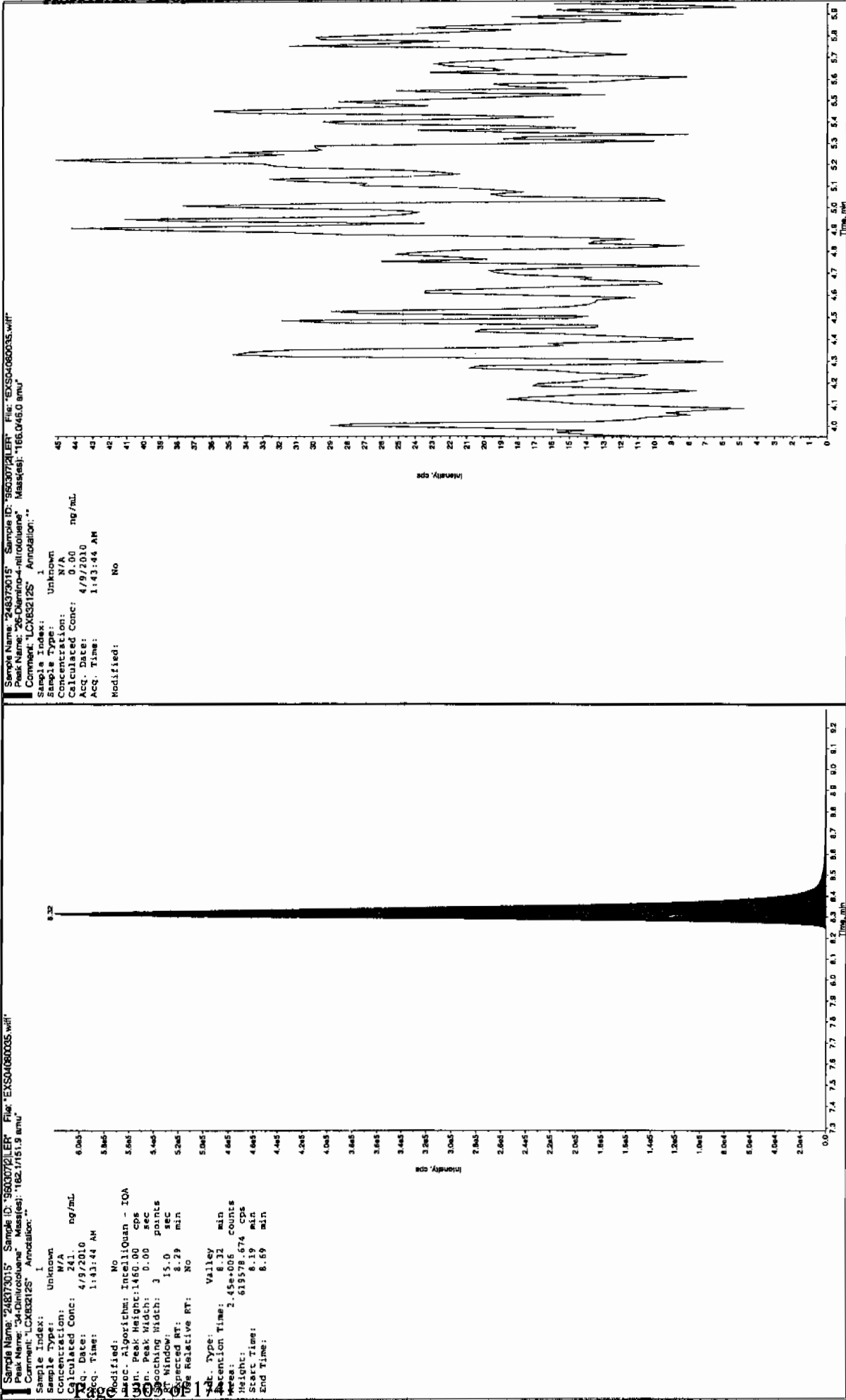


Run 04/12/10

Sample Name: "248372015" Sample ID: "860307121.ER" File: "EXS04080035.wif"
 Peak Name: "TAIB" Mass(es): "257.22048 amu"
 Comment: "LCX832125" Annotation: ""

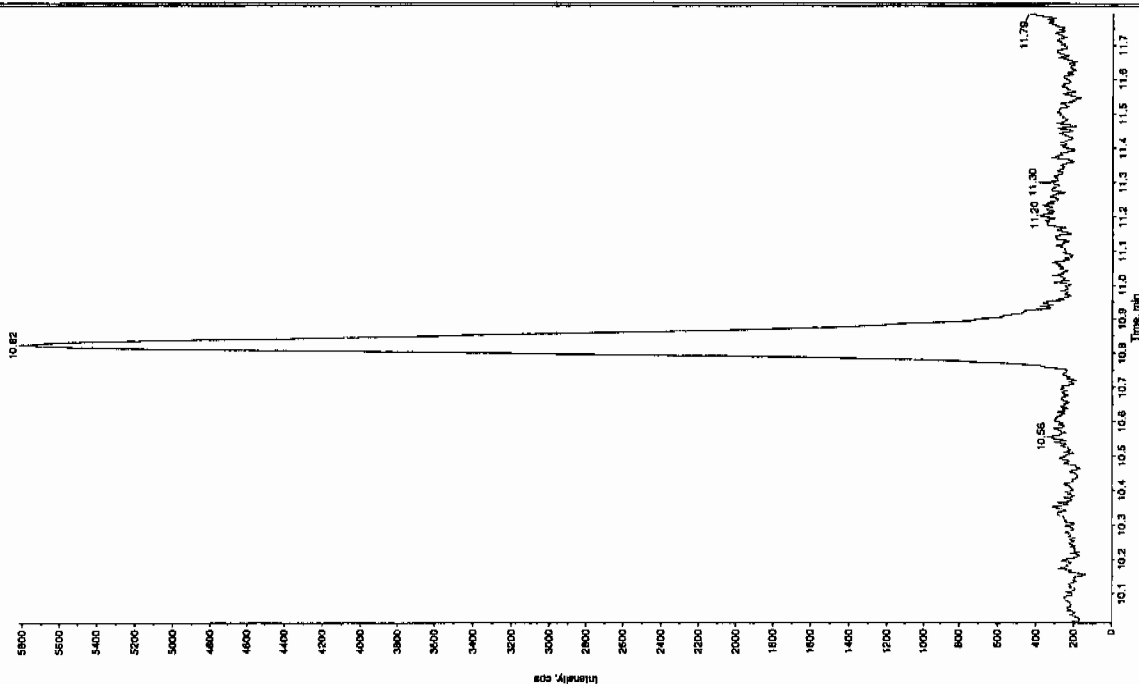
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 1:43:44 AM
 Modified: No





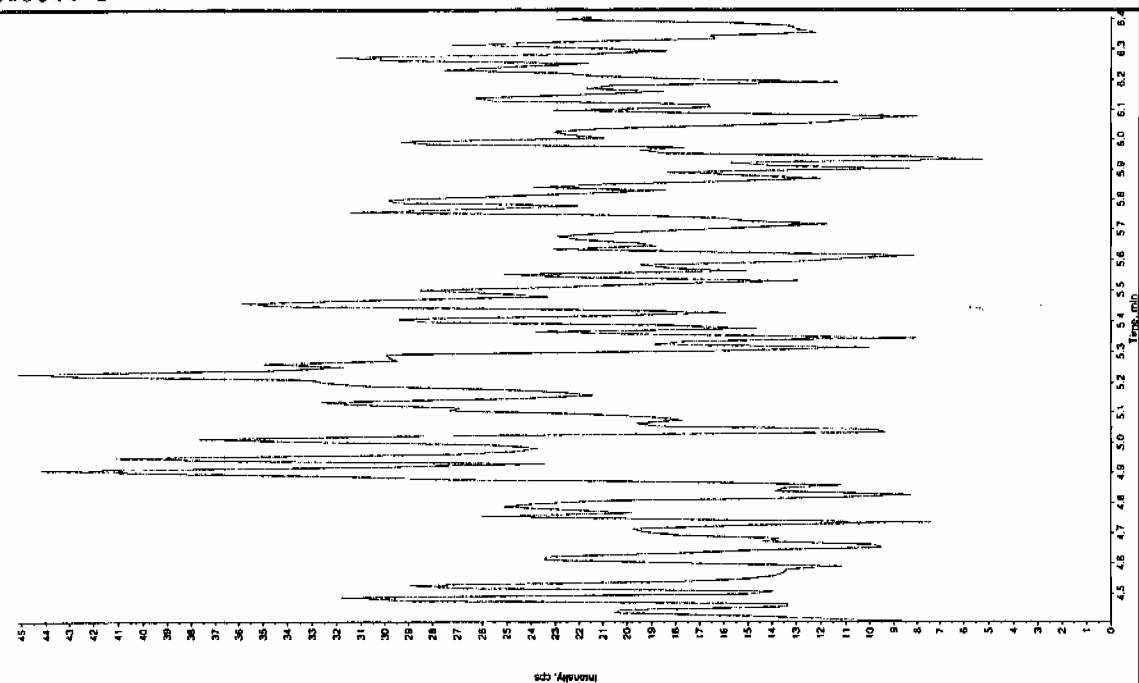
Sample Name: "24873015" Sample ID: "96207211.ER" File: "EX504080035.wif"
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 1:43:44 AM
 Modified: No



Sample Name: "24873015" Sample ID: "96207211.ER" File: "EX504080035.wif"
 Peak Name: "24-Damino-5-nitrochloride" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 1:43:44 AM
 Modified: No



STANDARDS DATA

SW846 8321A Modified-Explosives
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
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
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	na	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
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)

Calibration Levels 8321A-Modified-EXPL.xls

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2154

Lab Code: GEL

Run Date: 08-APR-10.12-APR-10.18-APR-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:		EXP0412003a	EXP0412004a	EXP0412005a	EXP0412006a	EXP0412007a	EXP0412008a			
Parname										
1,3,5-Trinitrobenzene		4.711	4.33	4.184	4.118	4.135	4.46	4.323	5.342	
1,3-Dinitrobenzene-d4		11.467	12.345	11.86	12.536	12.341	10.015	11.761	7.996	
2,4,6-Trinitrotoluene		.41	.394	.427	.449	.461	.469	0.435	6.752	
2,4-Dinitrotoluene		.262	.241	.266	.256	.262	.279	0.261	4.785	
2,6-Dinitrotoluene		1.228	1.123	1.137	1.19	1.203	1.22	1.184	3.683	
2,6-Dinitrotoluene-d3		63.991	74.817	73.595	74.921	70.943	61.531	69.966	8.311	
2-Amino-4,6-dinitrotoluene		.484	.481	.503	.515	.535	.556	0.512	5.686	
3,4-Dinitrotoluene		1.117	.974	.984	1.041	1.027	1.044	1.031	4.983	
4-Amino-2,6-dinitrotoluene		.361	.326	.32	.335	.34	.344	0.338	4.22	
HMX		3.896	4.064	4.283	4.375	4.325	4.489	4.239	5.149	
Nitrobenzene		.565	.604	.633	.662	.625	.674	0.627	6.339	
RDX		2.18	2.427	3.051	3.081	3.073	3.36	2.862	15.868	
Tetryl		1.226	1.243	1.421	1.278	1.24	1.37	1.296	6.198	
m-Dinitrobenzene		1.304	1.349	1.33	1.336	1.312	1.391	1.337	2.342	
m-Nitrotoluene		.055	.071	.054	.053	.061	.056	0.058	11.551	
o-Nitrotoluene		.105	.086	.078	.084	.079	.088	0.087	11.254	
p-Nitrotoluene		.042	.041	.038	.043	.042	.044	0.042	5.194	

Q column used to flag RSD values outside of Limit (>20%)

* Values outside of QC Limit

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2154

Lab Code: GEL

Run Date: 08-APR-10.12-APR-10.18-APR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Calibration Level:											
Data File:	EXP0412003a	EXP0412004a	EXP0412005a	EXP0412006a	EXP0412007a	EXP0412008a					
Parname:											
PETN	2009.76	4470.27	14910.6	28870.8	46927.1	49397.1	1.007	-.00022	9.637	.9994	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

Quantify Calibration Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 1 of 9

Dataset: C:\MASSLYNX\New_Exp\PROV041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Method: C:\MASSLYNX\New_Exp\PROV041210expA.qld, Time: Tue Apr 13 09:03:30 2010

Calibration: Untitled, Time: Tue Apr 13 11:12:22 2010

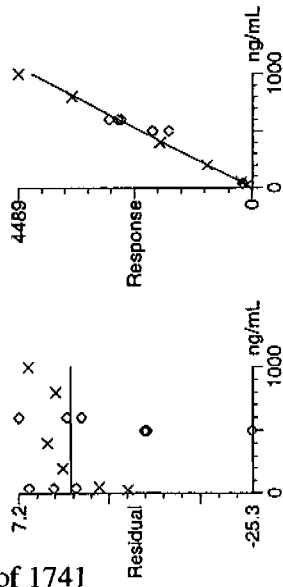
Compound name: HMX

Response Factor: 4.23867

RRF SD: 0.218263, % Relative SD: 5.14933

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

Curve type: RF



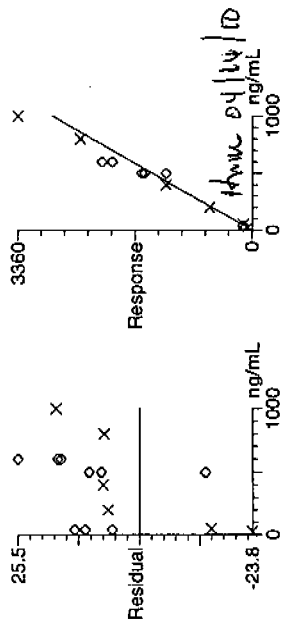
Compound name: RDX

Response Factor: 2.8622

RRF SD: 0.454164, % Relative SD: 15.8676

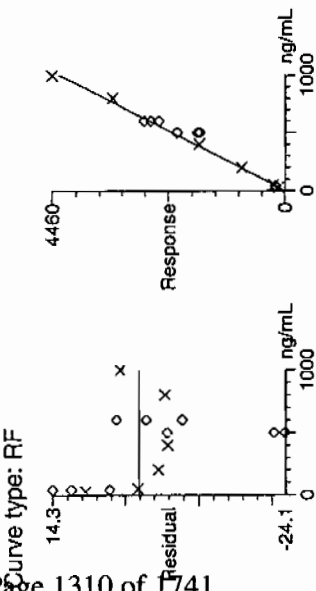
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

Curve type: RF

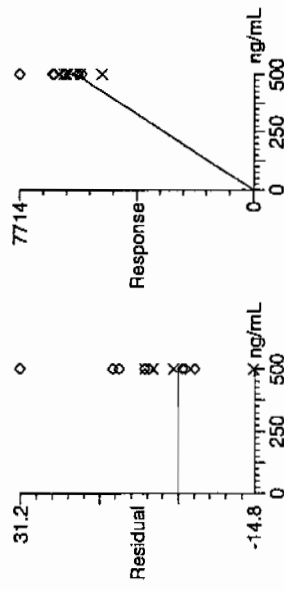


Dataset: C:\MASSLYN\New_Exp\PRO041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 135-Trinitrobenzene
 Response Factor: 4.32298
 RRF SD: 0.230915, % Relative SD: 5.34157
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF

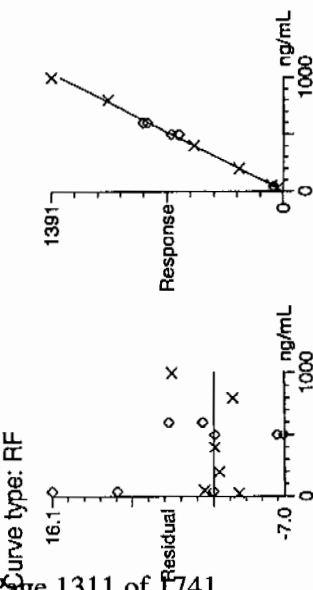


Compound name: 13-Dinitrobenzene-d4
 Response Factor: 11.7607
 RRF SD: 0.940441, % Relative SD: 7.99645
 Response type: External Std, Area
 Curve type: RF

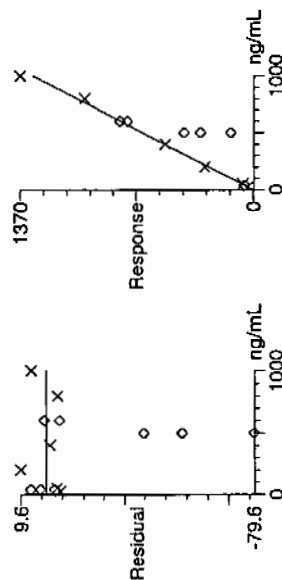


Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 13-Dinitrobenzene
Response Factor: 1.33707
RRF SD: 0.0313205, % Relative SD: 2.34247
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: Tetra
Response Factor: 1.29627
RRF SD: 0.0803478, % Relative SD: 6.19837
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Quantify Calibration Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

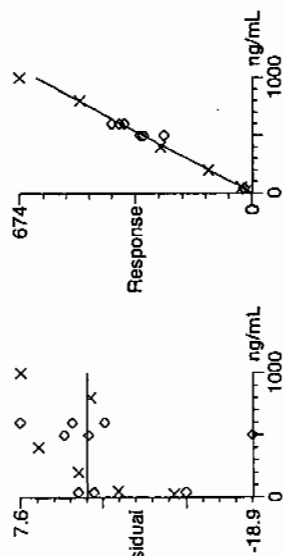
Compound name: Nitrobenzene

Response Factor: 0.627297

RRF SD: 0.0397666, % Relative SD: 6.33936

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

Curve type: RF



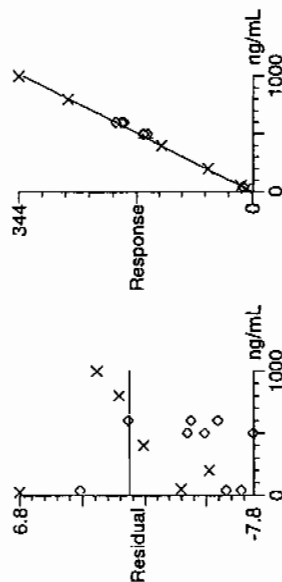
Compound name: 4-Amino-26-dinitrotoluene

Response Factor: 0.337763

RRF SD: 0.014254, % Relative SD: 4.22013

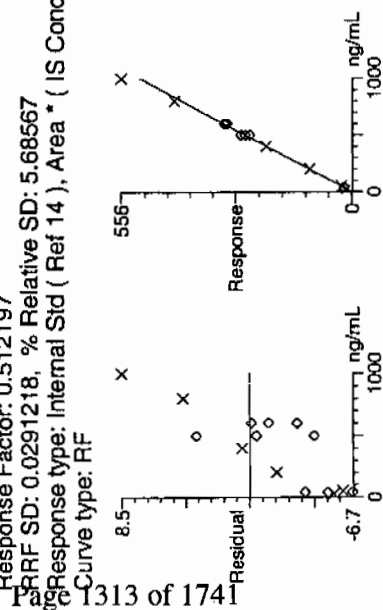
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)

Curve type: RF

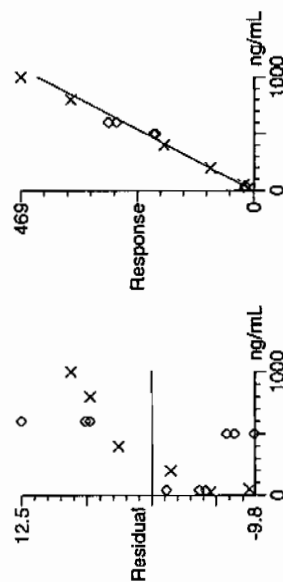


Dataset: C:\MASSLYN\New_Exp_PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 2-Amino-46-dinitrotoluene
 Response Factor: 0.512197
 RRF SD: 0.0291218, % Relative SD: 5.68567
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: 246-Trinitrotoluene
 Response Factor: 0.435033
 RRF SD: 0.0293746, % Relative SD: 6.75226
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF

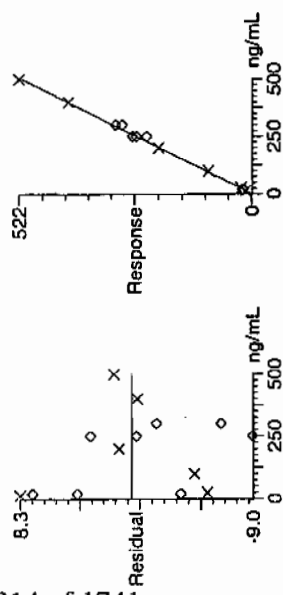


Quantify Calibration Report

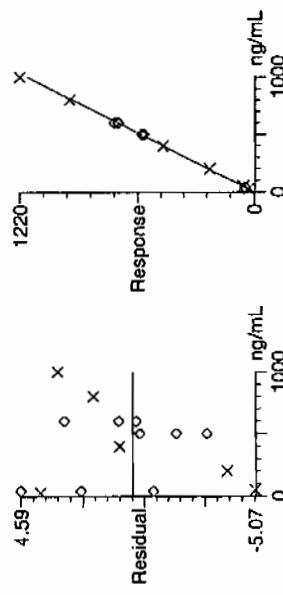
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 34-dinitrotoluene
 Response Factor: 1.03113
 RRF SD: 0.0513762, % Relative SD: 4.98253
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



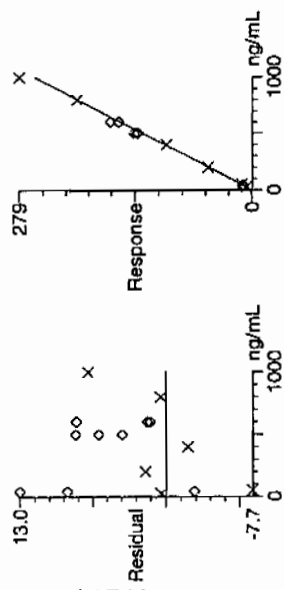
Compound name: 26-dinitrotoluene
 Response Factor: 1.18354
 RRF SD: 0.0435946, % Relative SD: 3.68342
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



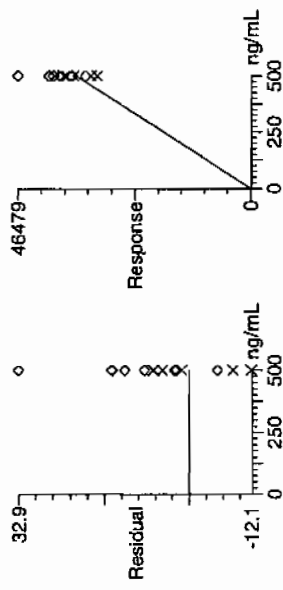
Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 24-dinitrotoluene
Response Factor: 0.261004
RRF SD: 0.0124888, % Relative SD: 4.7849
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



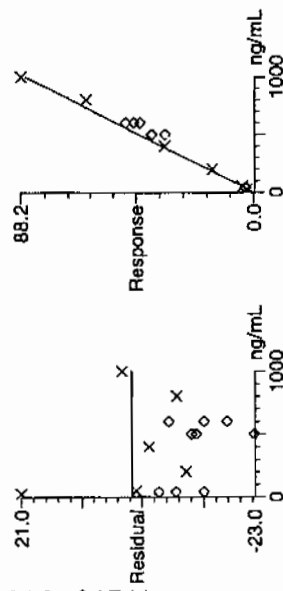
Compound name: 26-dinitrotoluene-d3
Response Factor: 69.9664
RRF SD: 5.81467, % Relative SD: 8.31066
Response type: External Std, Area
Curve type: RF



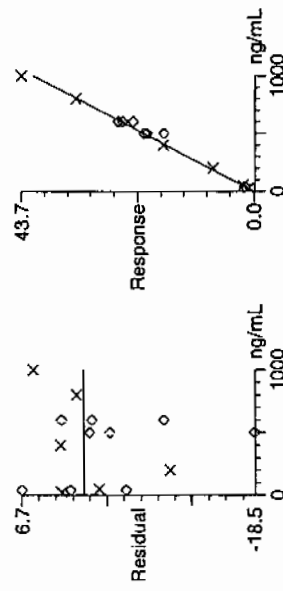
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 2-Nitrotoluene
Response Factor: 0.0865882
RRF SD: 0.00974436, % Relative SD: 11.2537
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



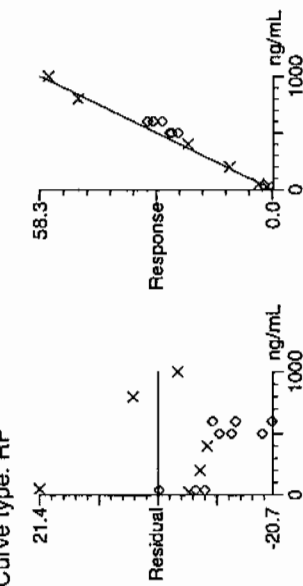
Compound name: 4-Nitrotoluene
Response Factor: 0.0414794
RRF SD: 0.00215463, % Relative SD: 5.19445
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



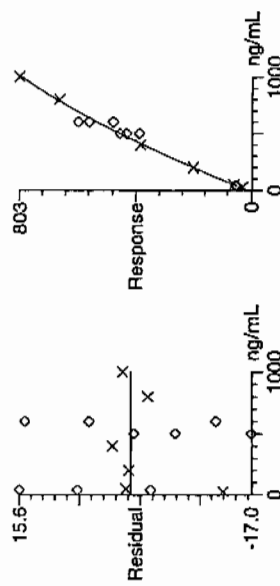
Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 3-Nitrotoluene
Response Factor: 0.058302
RRF SD: 0.00673426, % Relative SD: 11.5507
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: PETN
Coefficient of Determination: 0.999447
Calibration curve: $-0.000220026 * x^2 + 1.0065 * x + 9.6373$
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0412010a

Analysis Date: 12-APR-10 20:06

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	593.013	99	
1,3-Dinitrobenzene-d4	500	528.009	106	
2,4,6-Trinitrotoluene	600	674.734	112	
2,4-Dinitrotoluene	600	608.204	101	
2,6-Dinitrotoluene	600	599.148	100	
2,6-Dinitrotoluene-d3	500	574.331	115	
2-Amino-4,6-dinitrotoluene	600	592.511	99	
3,4-Dinitrotoluene	300	280.228	93	
4-Amino-2,6-dinitrotoluene	600	600.345	100	
HMX	600	642.971	107	
Nitrobenzene	600	610.074	102	
PETN	600	527.609	88	
RDX	600	753.124	126	*
Tetryl	600	604.19	101	
m-Dinitrobenzene	600	606.979	101	
m-Nitrotoluene	600	475.553	79	*
o-Nitrotoluene	600	492.414	82	
p-Nitrotoluene	600	547.628	91	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412010a

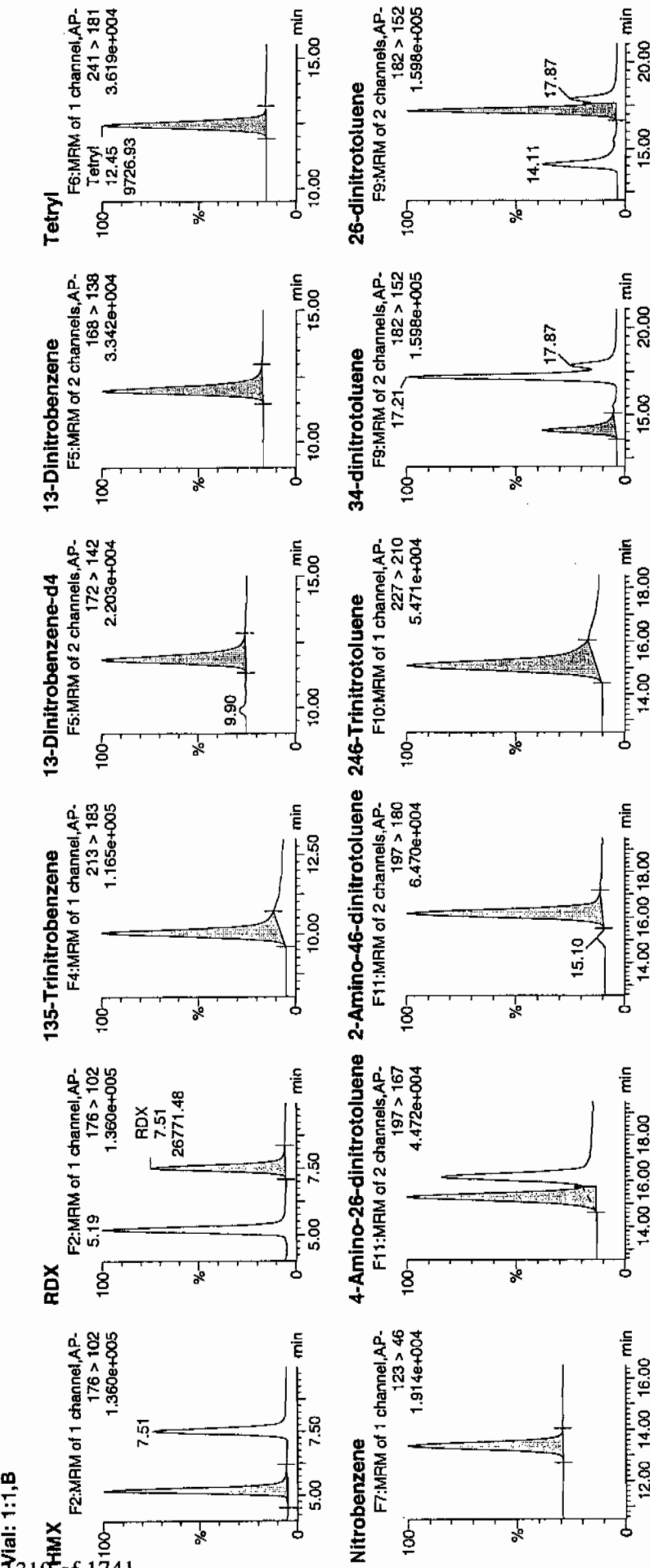
Date: 12-Apr-2010

Time: 20:06:00

ID: WXX100412-07ICV

Vial: 1:1,B

10/13/10
u/13/10



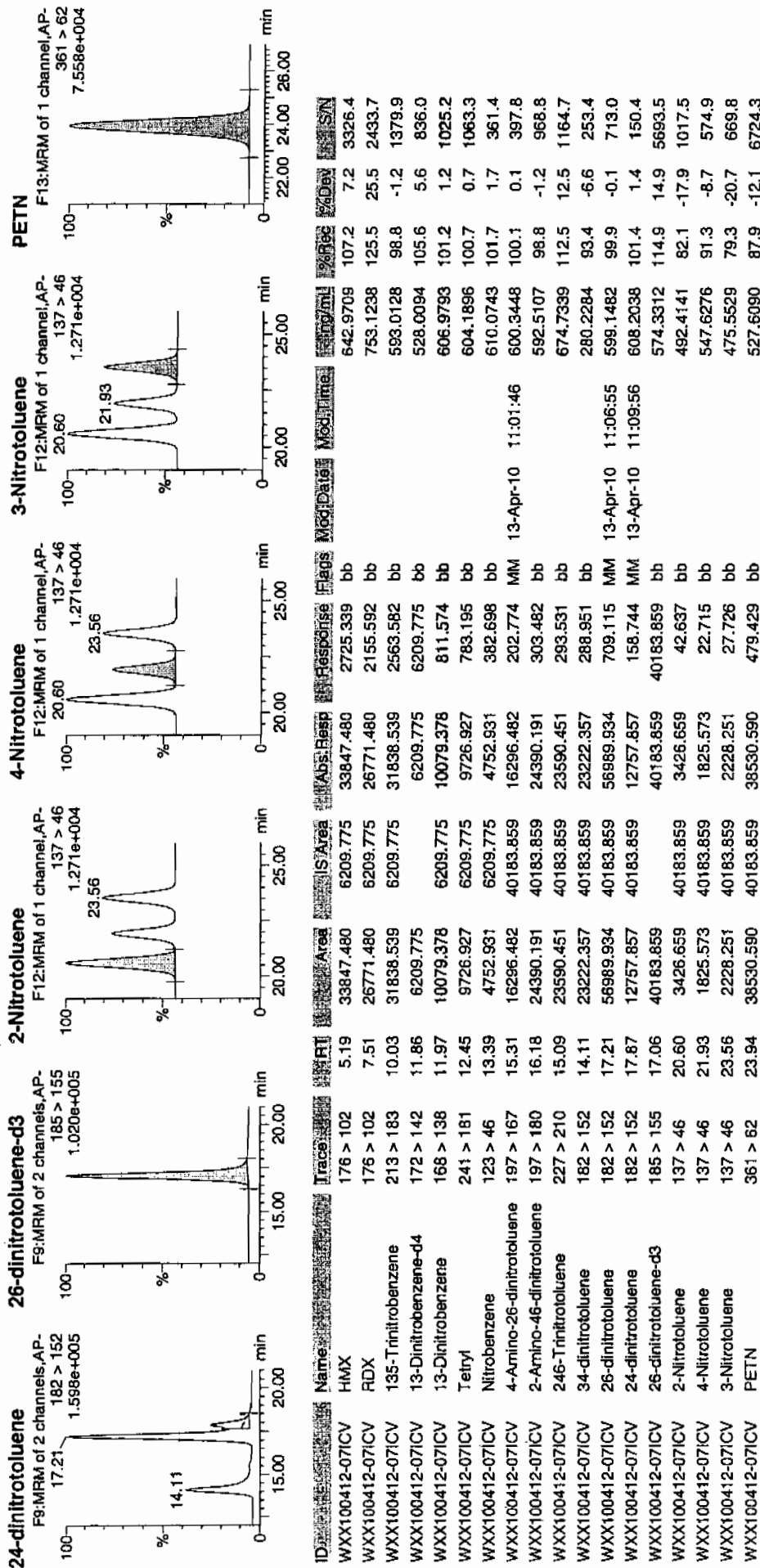
4/13/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 20 of 77

Dataset: C:\MASSLYNX\New_Exp_PROV041210expA.qld, Time: Tue Apr 13 11:12:22 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/12/10
 Time of Injection: 2006
 Standard Number: WXX100412-07ICV
 Data File: EXP0412010a

HMX	107.2
RDX	125.5
135-TNB	98.8
13-DNB	101.2
Tetryl	100.7
Nitrobenzene	101.7
4A-26-DNT	100.1
2A-46-DNT	98.8
246-TNT	112.5
34-DNT(surr)	93.4
26-DNT	99.9
24-DNT	101.4
2-NT	82.1
4-NT	91.3
3-NT	79.3
PETN	87.9

WXX
4/13/10

Total 1581.8

Average 98.9

Amie 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC GEL Job No: 10-2154 Run Date: 08-APR-10.12-APR-10.18-APR-10 HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Lab Code: GEL Method: 8321A Modified

LCMSMS Instrument ID: LCMSMS

Calibration Type: Average RF

Parname	1	2	3	4	5	6	Ave RF	RSD	Q
Calibration Level:	EXP0418003a	EXP0418004a	EXP0418005a	EXP0418006a	EXP0418007a	EXP0418008a			
Data File:									
1,3,5-Trinitrobenzene	5.228	4.362	4.106	4.089	4.399	4.155	4.390	9.823	
1,3-Dinitrobenzene-d4	13.089	14.134	13.487	12.759	12.412	11.438	12.887	7.195	
2,4,6-Trinitrotoluene	.511	.543	.475	.472	.494	.504	0.500	5.245	
2,4-Dinitrotoluene	.292	.306	.253	.271	.323	.274	0.287	8.877	
2,6-Dinitrotoluene	1.214	1.156	1.145	1.128	1.167	1.16	1.162	2.494	
2,6-Dinitrotoluene-d3	81.896	77.288	83.851	79.234	76.063	67.685	77.670	7.304	
2-Amino-4,6-dinitrotoluene	.516	.512	.463	.475	.508	.521	0.499	4.835	
3,4-Dinitrotoluene	1.096	1.129	1.041	1.015	1.048	1.057	1.064	3.872	
4-Amino-2,6-dinitrotoluene	.344	.349	.314	.324	.346	.351	0.338	4.504	
HMX	3.101	3.194	3.283	3.261	3.397	3.395	3.272	3.525	
RDX	2.238	2.202	2.463	2.495	2.684	2.583	2.444	7.786	
Tetryl	1.282	1.546	1.315	1.372	1.391	1.346	1.375	6.704	
m-Dinitrobenzene	1.358	1.384	1.256	1.32	1.343	1.316	1.330	3.311	
m-Nitrotoluene	.034	.041	.042	.039	.037	.04	0.039	7.395	
o-Nitrotoluene	.064	.056	.057	.052	.057	.056	0.057	6.985	
p-Nitrotoluene	.035	.035	.031	.026	.028	.03	0.031	11.552	

Q column used to flag RSD values outside of Limit (>20%)
 * Values outside of QC Limit

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2154

Lab Code: GEL

Run Date: 08-APR-10.12-APR-10.18-APR-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:	EXP0418003a	EXP0418004a	EXP0418005a	EXP0418006a	EXP0418007a	EXP0418008a				
Parname										
Nitrobenzene	222.808	385.06	1356.43	2350.23	4835.91	5577.4	.483	1.71	.9993	

Linear fit: $Y = mx + b$
 where b is Intercept and m is slope
 COD is Coefficient of Determination
 Q column used to flag COD values outside of Limit (<0.990)
 * Values outside of QC Limit

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC GEL Job No: 10-2154
 Lab Code: GEL Run Date: 08-APR-10.12-APR-10.18-APR-10
 LCMSMS Instrument ID: LCMSMS Method: 8321A Modified HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Calibration Level:											
Data File:	EXP0418003a	EXP0418004a	EXP0418005a	EXP0418006a	EXP0418007a	EXP0418008a					
Parname:											
PETN	2684.4	4854.73	15310.3	26224	43738.3	49180.8	.792	-.0000967	21.576	.9985	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

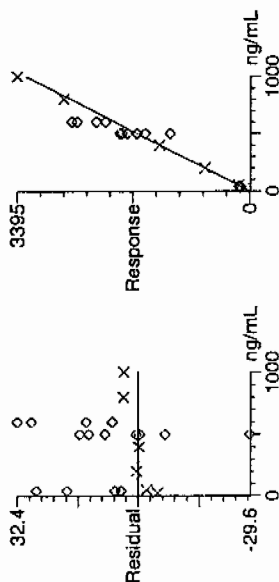
COD is Coefficient of Determination
 Q column used to flag COD outside of Limit (<0.990)
 * Values outside of QC Limit

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

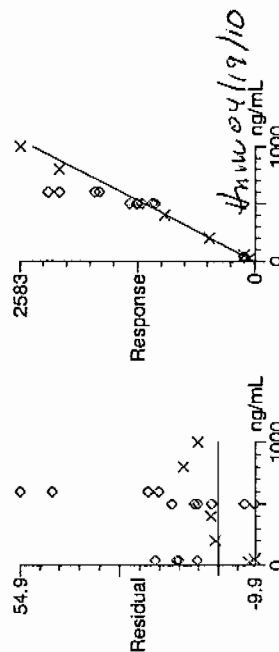
Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\041810expa.mdb, Time: Mon Apr 19 10:02:54 2010
 Calibration: Untitled, Time: Mon Apr 19 12:15:39 2010

Compound name: HMX
 Response Factor: 3.27167
 RRF SD: 0.11533, % Relative SD: 3.52511
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



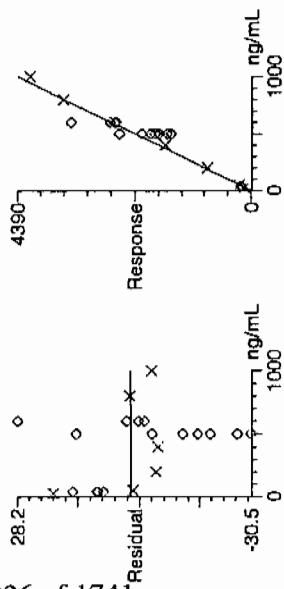
Compound name: RDX
 Response Factor: 2.44402
 RRF SD: 0.190284, % Relative SD: 7.78569
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



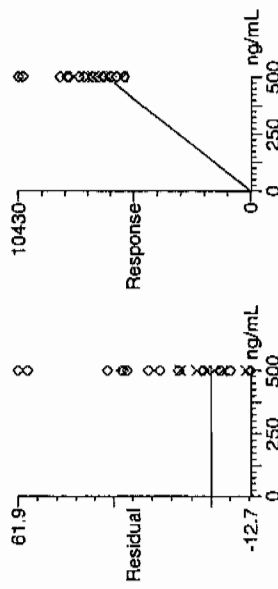
Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Compound name: 135-Trinitrobenzene
 Response Factor: 4.38961
 RRF SD: 0.431192, % Relative SD: 9.82301
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



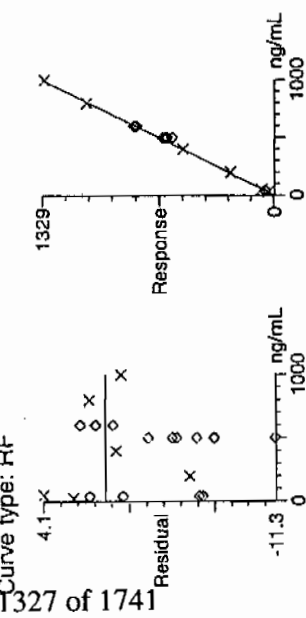
Compound name: 13-Dinitrobenzene-d4
 Response Factor: 12.8865
 RRF SD: 0.927177, % Relative SD: 7.19493
 Response type: External Std, Area
 Curve type: RF



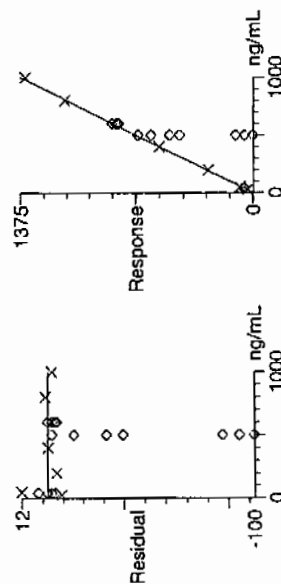
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Compound name: 13-Dinitrobenzene
 Response Factor: 1.32932
 RRF SD: 0.0440189, % Relative SD: 3.31138
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



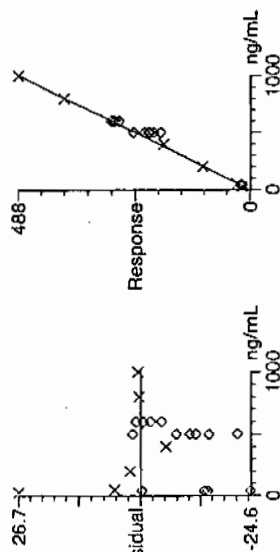
Compound name: Tetraol
 Response Factor: 1.37535
 RRF SD: 0.092203, % Relative SD: 6.70395
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



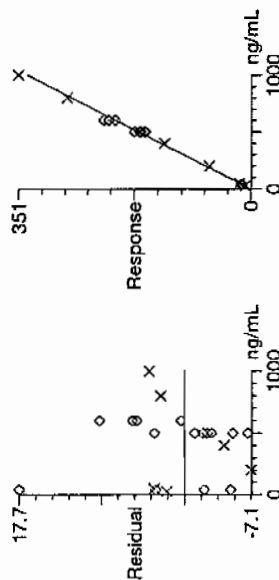
Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSL\YXX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Compound name: Nitrobenzene
 Correlation coefficient: $r = 0.999628$, $r^2 = 0.999256$
 Calibration curve: $0.483242 \cdot x + 1.70983$
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: Linear, Origin: Exclude, Weighting: Null, Axis trans: None



Compound name: 4-Amino-26-dinitrotoluene
 Response Factor: 0.338052
 RRF SD: 0.015225, % Relative SD: 4.50375
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



Quantify Calibration Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

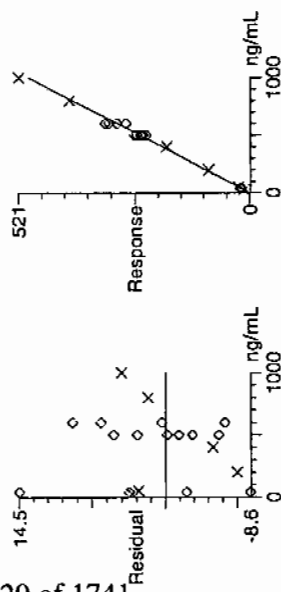
Compound name: 2-Amino-46-dinitrotoluene

Response Factor: 0.499077

RRF SD: 0.0241292, % Relative SD: 4.83476

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

Curve type: RF



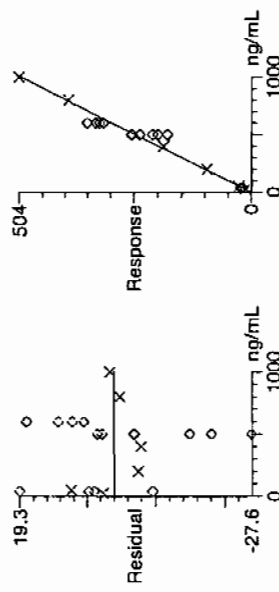
Compound name: 246-Trinitrotoluene

Response Factor: 0.499713

RRF SD: 0.0262076, % Relative SD: 5.24452

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

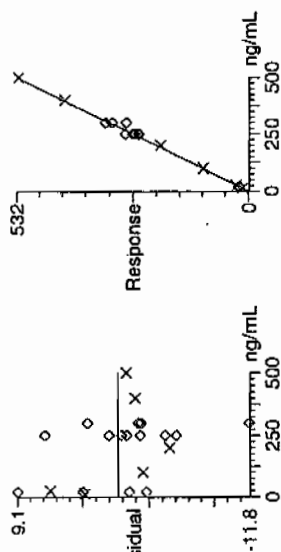
Curve type: RF



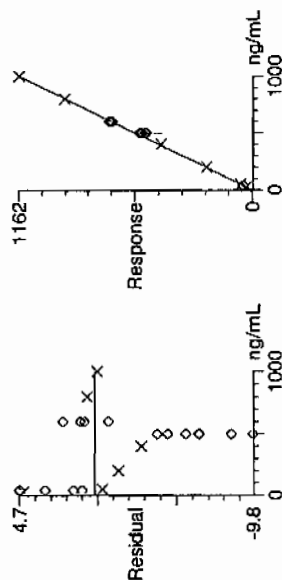
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Compound name: 34-dinitrotoluene
 Response Factor: 1.06442
 RRF SD: 0.0412153, % Relative SD: 3.87209
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



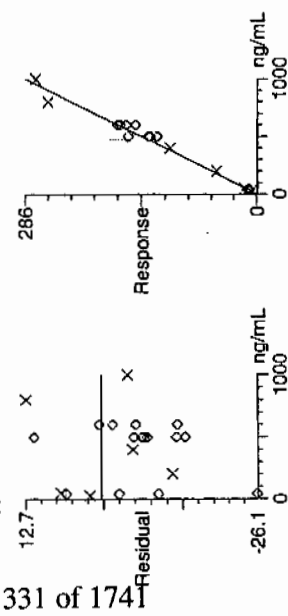
Compound name: 26-dinitrotoluene
 Response Factor: 1.16152
 RRF SD: 0.0289722, % Relative SD: 2.49435
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



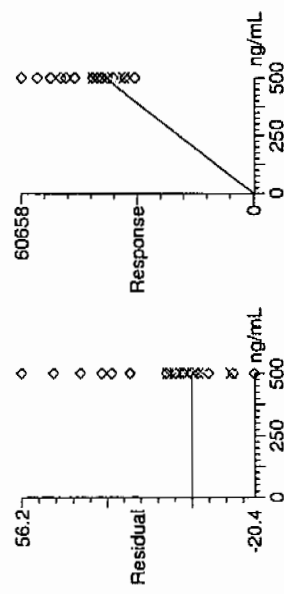
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Compound name: 24-dinitrotoluene
Response Factor: 0.286379
RRF SD: 0.025422, % Relative SD: 8.87703
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



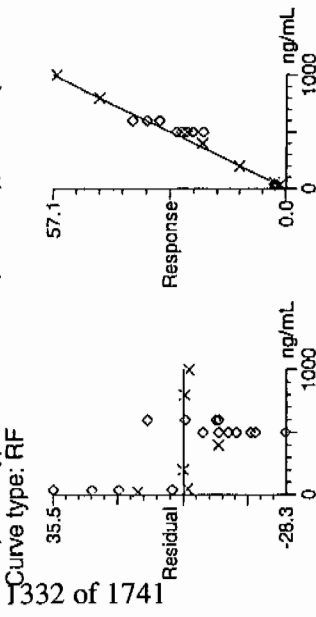
Compound name: 26-dinitrotoluene-d3
Response Factor: 77.6696
RRF SD: 5.67325, % Relative SD: 7.30434
Response type: External Std, Area
Curve type: RF



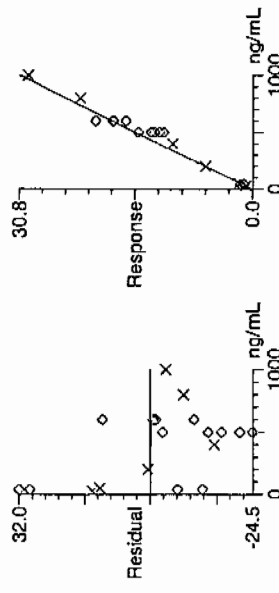
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Compound name: 2-Nitrotoluene
 Response Factor: 0.0571072
 RRF SD: 0.00398875, % Relative SD: 6.98468
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



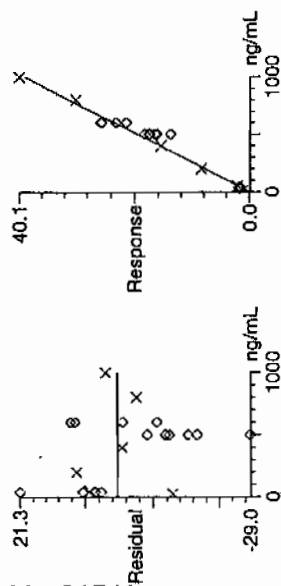
Compound name: 4-Nitrotoluene
 Response Factor: 0.0307645
 RRF SD: 0.0035538, % Relative SD: 11.5516
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



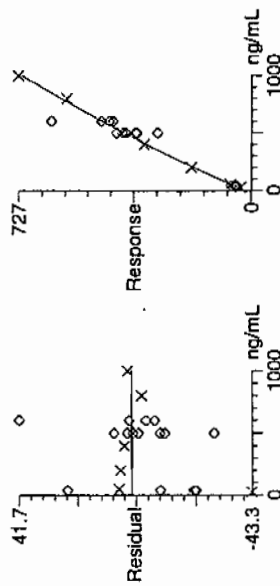
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Compound name: 3-Nitrotoluene
Response Factor: 0.0390896
RRF SD: 0.00289076, % Relative SD: 7.39522
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: PETN
Coefficient of Determination: 0.998464
Calibration curve: $-9.66781e-005 * x^2 + 0.791726 * x + 21.5762$
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0418010a

Analysis Date: 18-APR-10 18:29

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	769.228	128	*
1,3-Dinitrobenzene-d4	500	468.546	94	
2,4,6-Trinitrotoluene	600	707.708	118	
2,4-Dinitrotoluene	600	524.999	87	
2,6-Dinitrotoluene	600	612.152	102	
2,6-Dinitrotoluene-d3	500	490.955	98	
2-Amino-4,6-dinitrotoluene	600	563.925	94	
3,4-Dinitrotoluene	300	264.462	88	
4-Amino-2,6-dinitrotoluene	600	629.916	105	
HMX	600	771.708	129	*
Nitrobenzene	600	586.923	98	
PETN	600	569.288	95	
RDX	600	876.154	146	*
Tetryl	600	572.724	95	
m-Dinitrobenzene	600	604.011	101	
m-Nitrotoluene	600	654.098	109	
o-Nitrotoluene	600	546.924	91	
p-Nitrotoluene	600	596.352	99	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 19 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418010a

Date: 18-Apr-2010

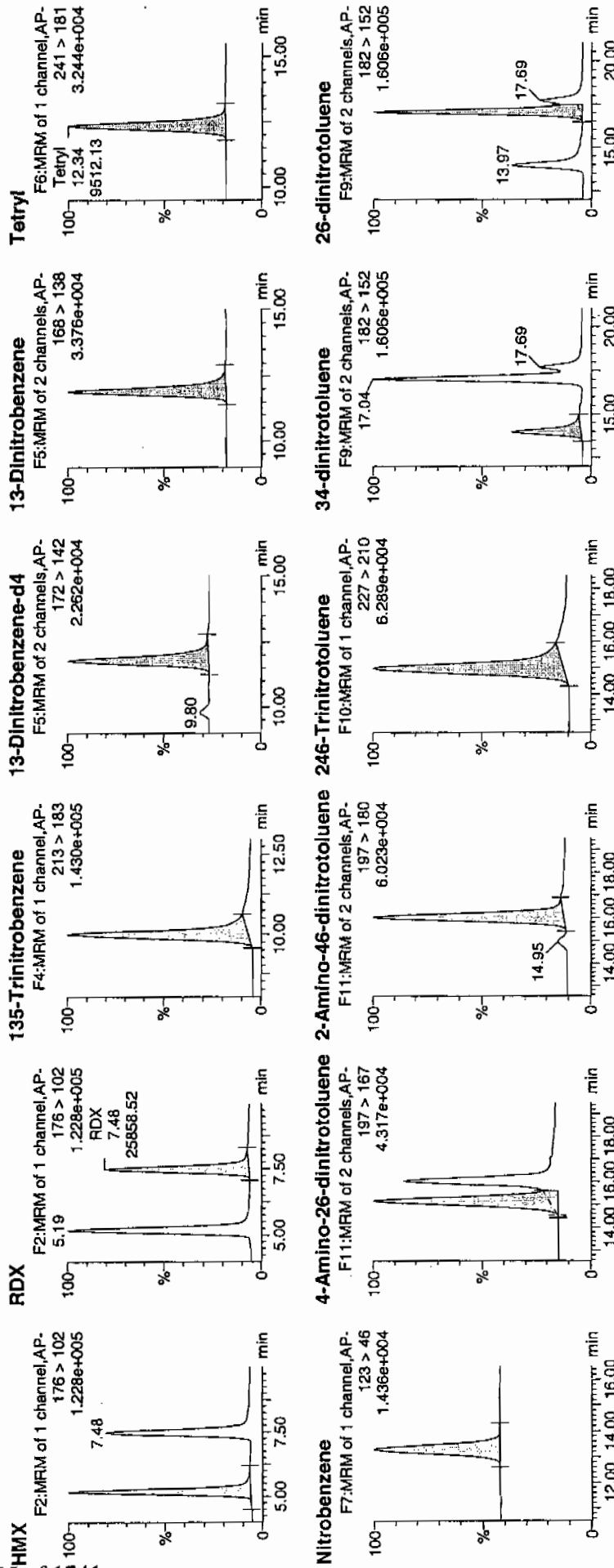
Time: 18:29:15

ID: WXX100418-07ICV

Vial: 1:1,B

Handwritten: 1741
4/18/10

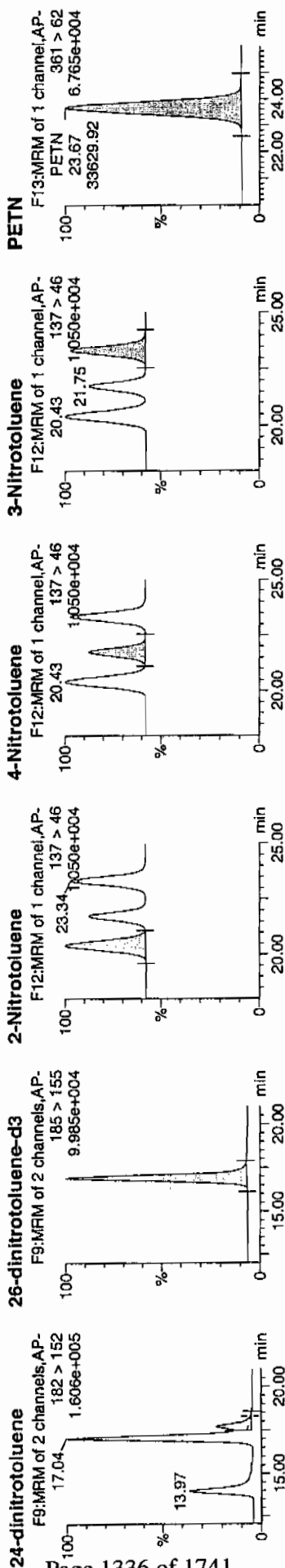
Page 1335 of 1741



Handwritten: 4/18/10

Dataset: C:\MASSLYNX\New_Exp\PROV041810expA.qld, Time: Mon Apr 19 12:15:39 2010

ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Area	%Rec	%Dev	SN
WXX100418-07ICV	HMV	176 > 102	5.19	30488.771	6037.929	30488.771	2524.771	bb			771.7080	128.6	28.6	3543.7
WXX100418-07ICV	RDX	176 > 102	7.48	25858.520	6037.929	25858.520	2141.340	bb			876.1543	146.0	46.0	2803.9
WXX100418-07ICV	135-Trinitrobenzene	213 > 183	10.00	40775.523	6037.929	40775.523	3376.615	bb			769.2282	128.2	28.2	2035.8
WXX100418-07ICV	13-Dinitrobenzene-d4	172 > 142	11.79	6037.929	6037.929	6037.929	6037.929	bb			468.5457	93.7	-6.3	385.0
WXX100418-07ICV	13-Dinitrobenzene	168 > 138	11.92	9696.013	6037.929	9696.013	802.925	bb			604.0115	100.7	0.7	1806.6
WXX100418-07ICV	Tetryl	241 > 181	12.34	9512.126	6037.929	9512.126	787.698	bb			572.7244	95.5	-4.5	1103.1
WXX100418-07ICV	Nitrobenzene	123 > 46	13.31	3445.674	6037.929	3445.674	285.336	bb			586.9233	97.8	-2.2	373.1
WXX100418-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.17	16240.122	38132.281	16240.122	212.945	MM	19-Apr-10	11:56:26	629.9164	105.0	5.0	341.8
WXX100418-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.03	21464.047	38132.281	21464.047	281.442	bb			563.9250	94.0	-6.0	829.4
WXX100418-07ICV	246-Trinitrotoluene	227 > 210	14.98	26971.041	38132.281	26971.041	353.651	bb			707.7076	118.0	18.0	1631.6
WXX100418-07ICV	34-dinitrotoluene	182 > 152	13.97	21468.418	38132.281	21468.418	281.499	bb			264.4623	88.2	-11.8	580.2
WXX100418-07ICV	26-dinitrotoluene	182 > 152	17.04	54225.996	38132.281	54225.996	711.025	MM	19-Apr-10	12:01:55	612.1522	102.0	2.0	1733.4
WXX100418-07ICV	24-dinitrotoluene	182 > 152	17.69	11466.292	38132.281	11466.292	150.349	MM	19-Apr-10	12:07:16	524.9991	87.5	-12.5	326.5
WXX100418-07ICV	26-dinitrotoluene-d3	185 > 155	16.92	38132.281	38132.281	38132.281	38132.281	bb			490.9552	98.2	-1.8	1925.3
WXX100418-07ICV	2-Nitrotoluene	137 > 46	20.43	2381.994	38132.281	2381.994	31.233	bb			546.9245	91.2	-8.8	288.1
WXX100418-07ICV	4-Nitrotoluene	137 > 46	21.75	1399.184	38132.281	1399.184	18.346	bb			596.3519	99.4	-0.6	203.6
WXX100418-07ICV	3-Nitrotoluene	137 > 46	23.34	1949.966	38132.281	1949.966	25.568	bb			654.0983	109.0	9.0	267.2
WXX100418-07ICV	PETN	361 > 62	23.67	33629.922	38132.281	33629.922	440.964	bb			569.2883	94.9	-5.1	6666.4



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/18/10
 Time of Injection: 1829
 Standard Number: WXX100418-07ICV
 Data File: EXP0418010a

HMX	128.6
RDX	146.0
135-TNB	128.2
13-DNB	100.7
Tetryl	95.5
Nitrobenzene	97.8
4A-26-DNT	105.0
2A-46-DNT	94.0
246-TNT	118.0
34-DNT(surr)	88.2
26-DNT	102.0
24-DNT	87.5
2-NT	91.2
4-NT	99.4
3-NT	109.0
PETN	94.9

4/18/10

Total 1686.0

Average 105.4

4/18/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2154

Lab Code: GEL

Run Date: 08-APR-10.12-APR-10.18-APR-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8Q

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS04080003.wif	EXS04080004.wif	EXS04080005.wif	EXS04080006.wif	EXS04080007.wif	EXS04080008.wif	EXS04080009.wif					
Parname:												
2,4-Diamino-6-nitrotoluene	114000	240000	563000	1230000	1990000	2490000	5020000	-36000	2610	-.042	.9996	
2,6-Diamino-4-nitrotoluene	162000	303000	760000	1490000	2590000	3340000	6470000	-65700	3480	-.104	.9993	
3,4-Dinitrotoluene	242000	462000	1140000	2410000	3720000	4590000	8480000	-75000	11100	-2.56	.997	
3,5-Dinitroaniline	415000	799000	2060000	3870000	5460000	7140000	12500000	53800	7930	-.844	.9999	
TATB	39300	81300	212000	394000	662000	880000	1820000	-6670	845	.036	.9997	
tris(o-cresyl) phosphate	1080000	2090000	5010000	9220000	13400000	17700000	27800000	-18500	20800	-3.42	.9997	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

040810ICAL

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

Fit	Quadratic	Weighting	None	Iterate No
a0	-6.67e+003			
a1	845			
a2	0.0355			
Correlation coefficient 0.9997				
Use Area				

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

Fit	Quadratic	Weighting	None	Iterate No
a0	5.38e+004			
a1	7.93e+003			
a2	-0.844			
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	-7.5e+004			
a1	1.11e+004			
a2	-2.56			
Correlation coefficient 0.9970				
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	-6.57e+004			
a1	3.48e+003			
a2	-0.104			
Correlation coefficient 0.9993				
Use Area				

Handwritten: 11/12/10

Handwritten: HMM 11/12/10

040810ICAL

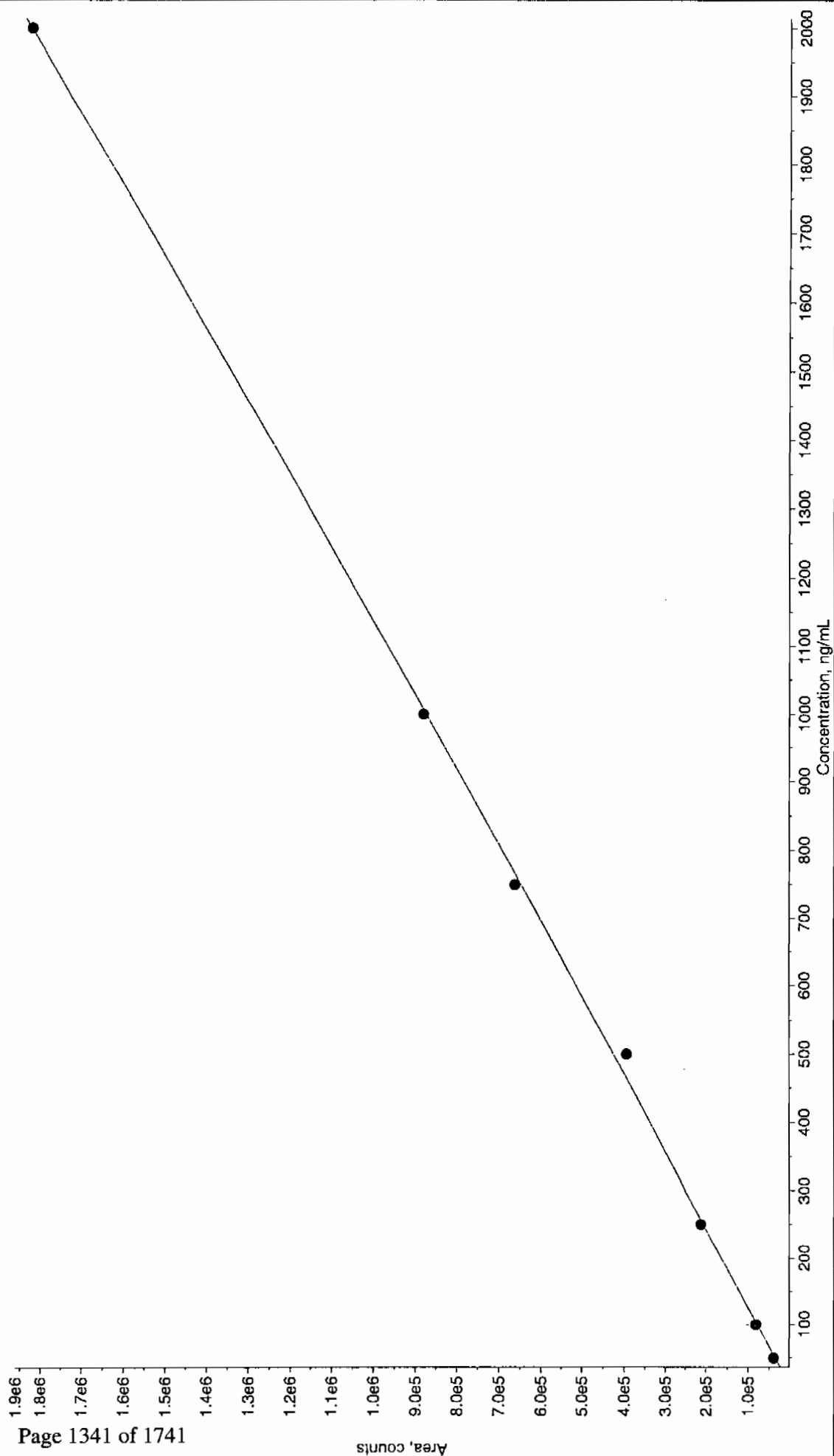
Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-3.6e+004			
a1	2.61e+003			
a2	-0.0415			
Correlation coefficient 0.9996				
Use Area				

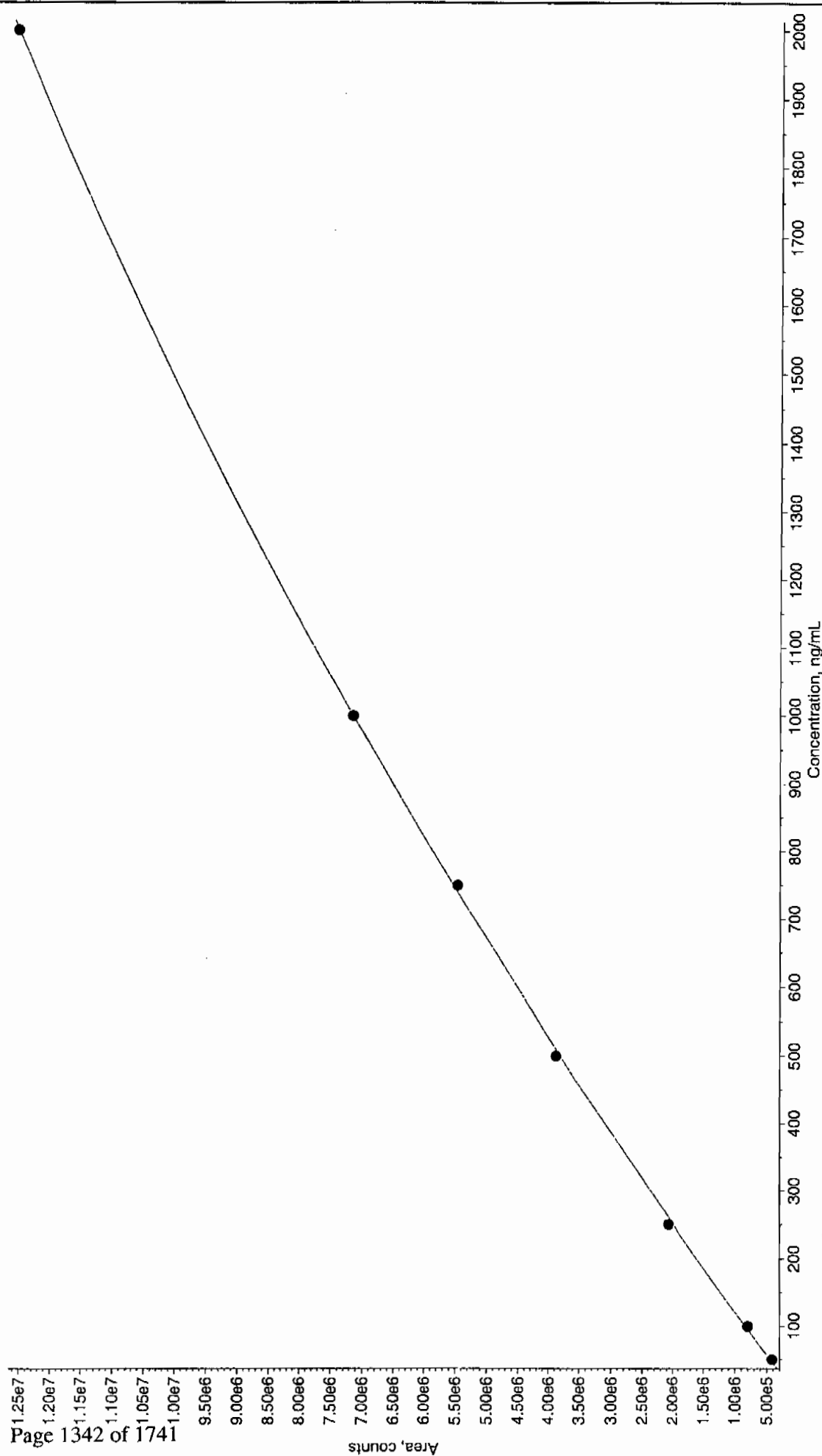
Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

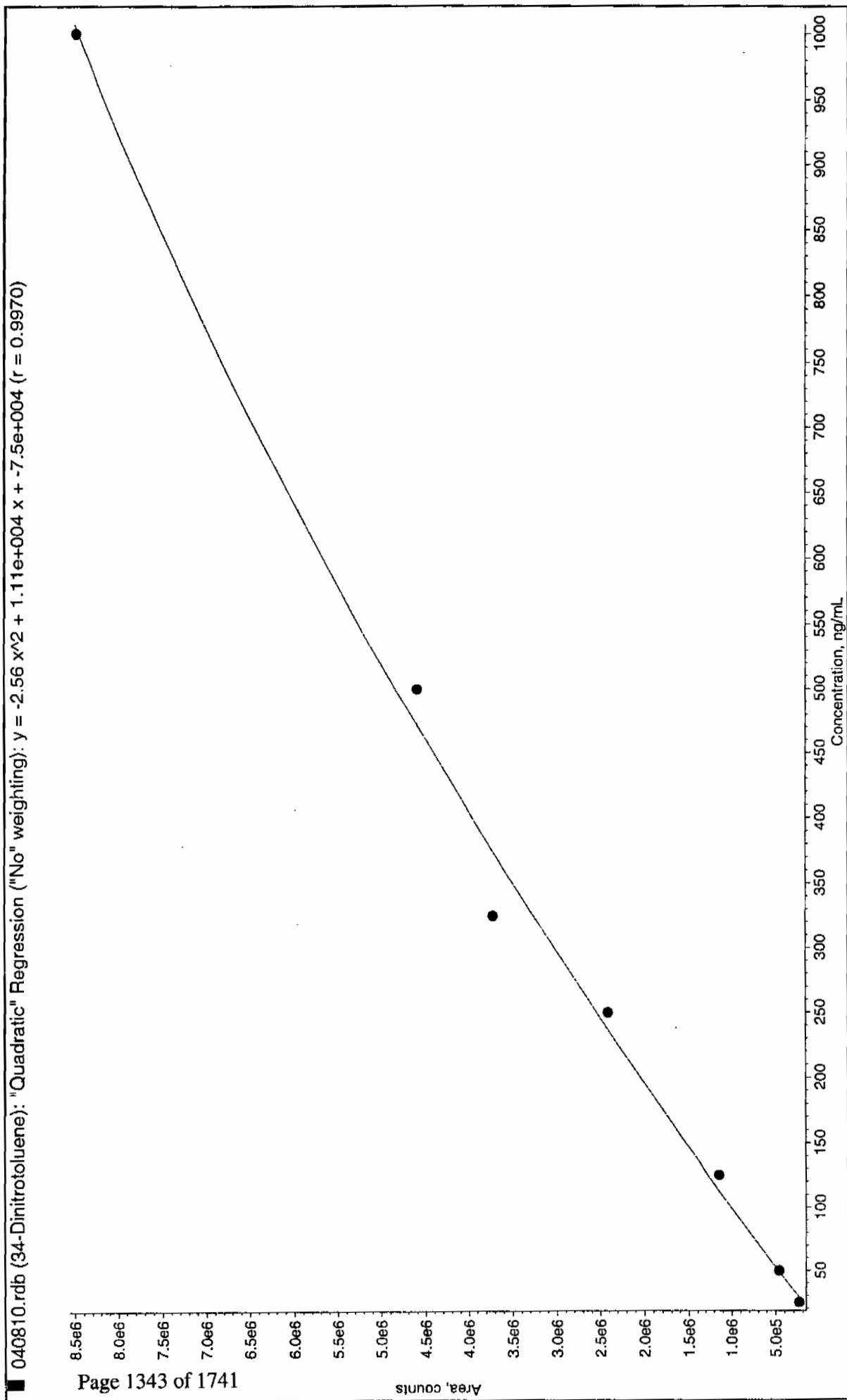
Fit	Quadratic	Weighting	None	Iterate No
a0	-1.85e+004			
a1	2.08e+004			
a2	-3.42			
Correlation coefficient 0.9997				
Use Area				

040810.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = 0.0355 x^2 + 845 x + -6.67e+003$ ($r = 0.9997$)

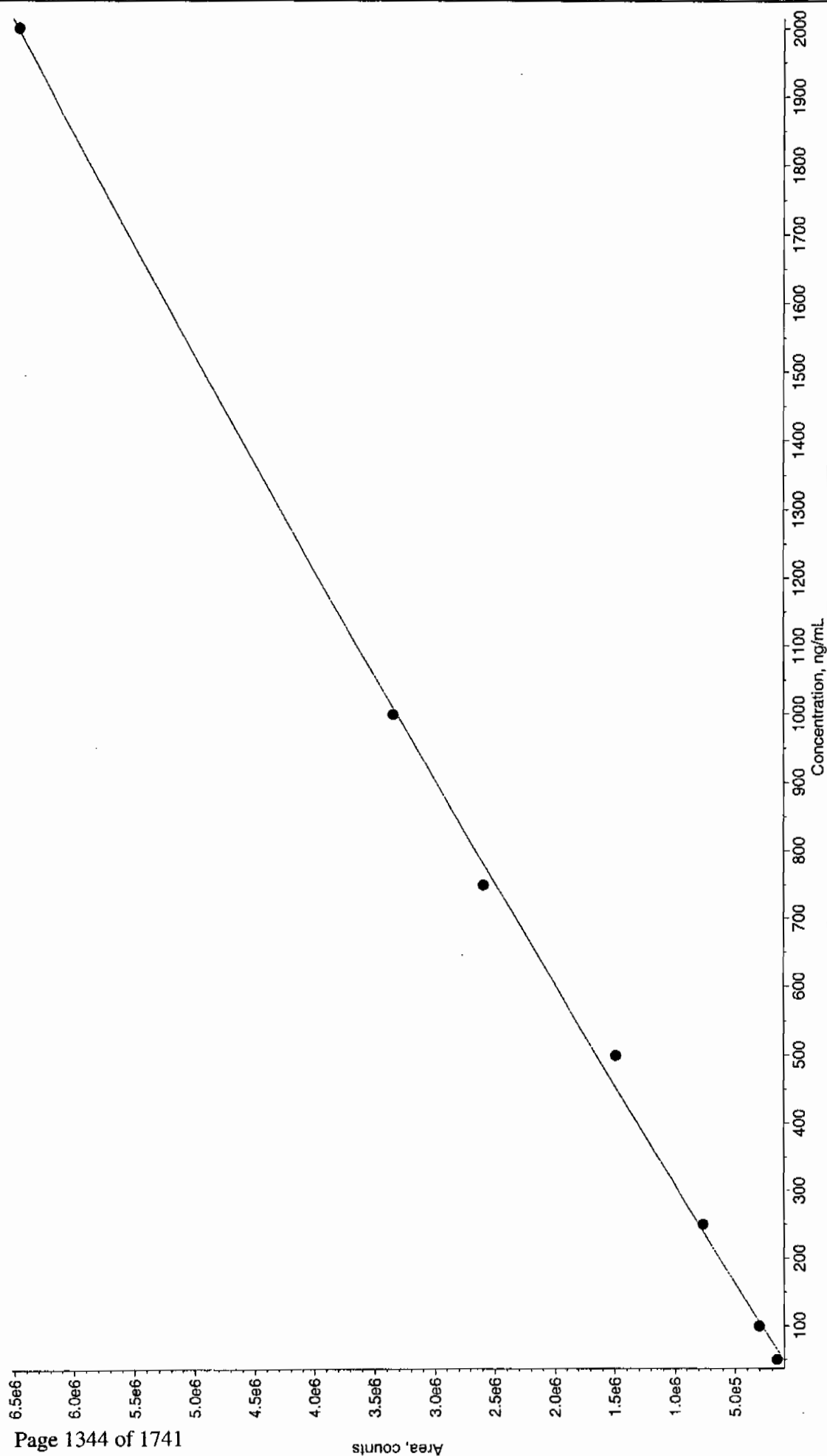


040810.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -0.844 x^2 + 7.93e+003 x + 5.38e+004$ ($r = 0.9999$)

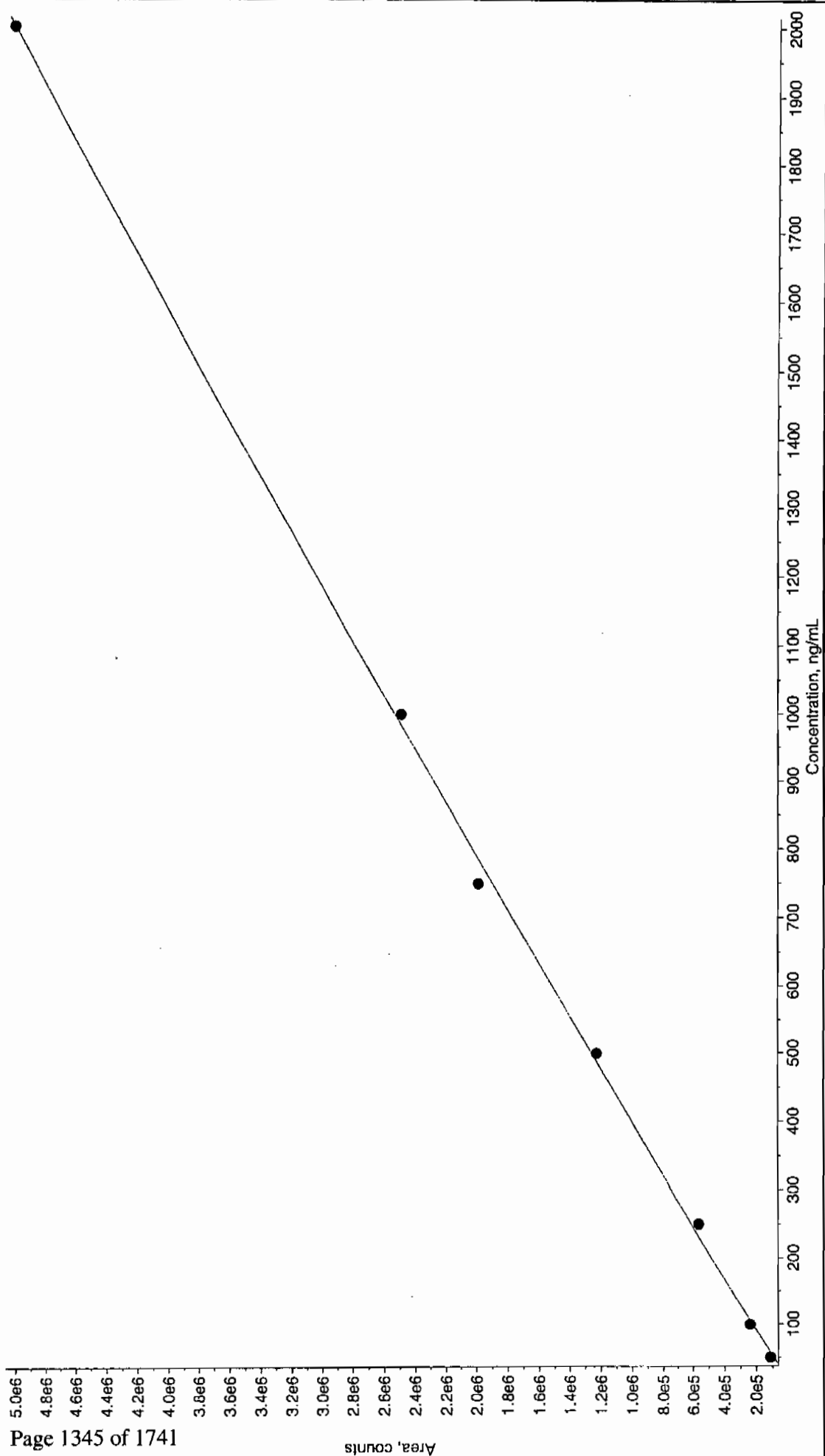




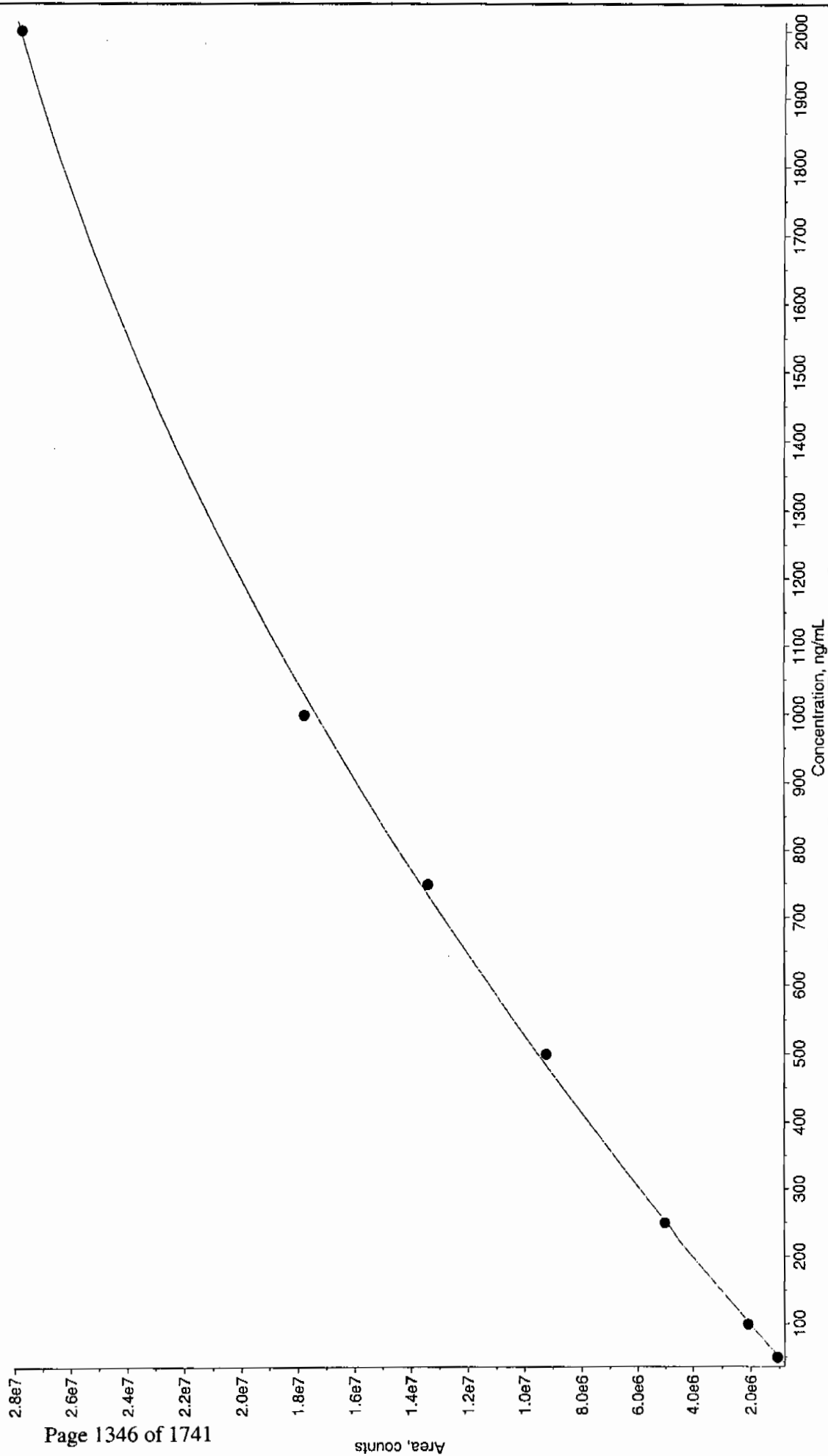
040810.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.104 x^2 + 3.48e+003 x + -6.57e+004$ ($r = 0.9993$)



040810.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.0415 x^2 + 2.61e+003 x + -3.6e+004$ ($r = 0.9996$)



040810.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -3.42 x^2 + 2.08e+004 x + -1.85e+004$ ($r = 0.9997$)



7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS04080011.wiff

Analysis Date: 08-APR-10 19:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	480	96	
2,6-Diamino-4-nitrotoluene	500	449	90	
3,4-Dinitrotoluene	250	227	91	
3,5-Dinitroaniline	500	468	94	
TATB	500	525	105	
tris(o-cresyl) phosphate	500	496	99	

Recovery Limits:

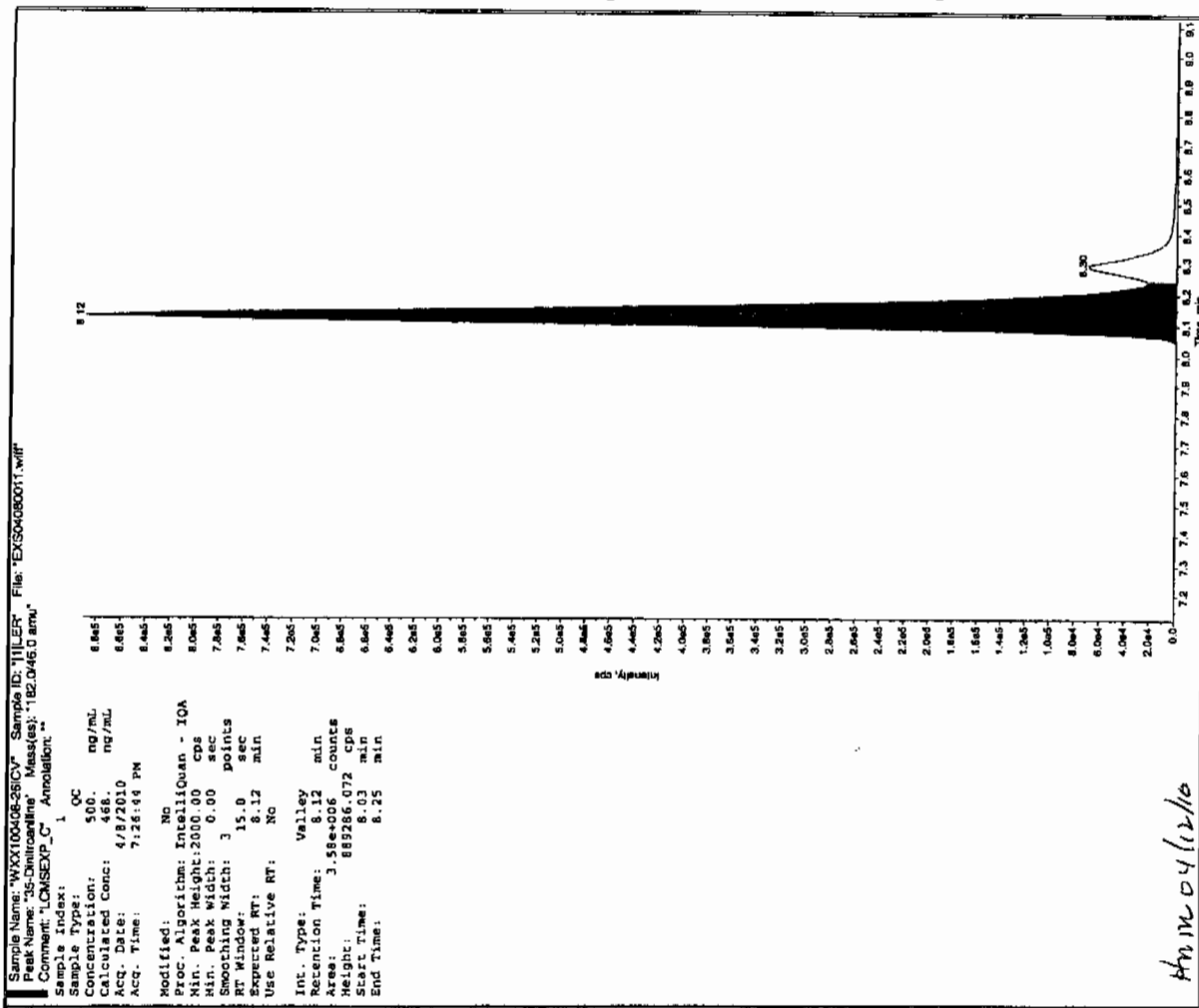
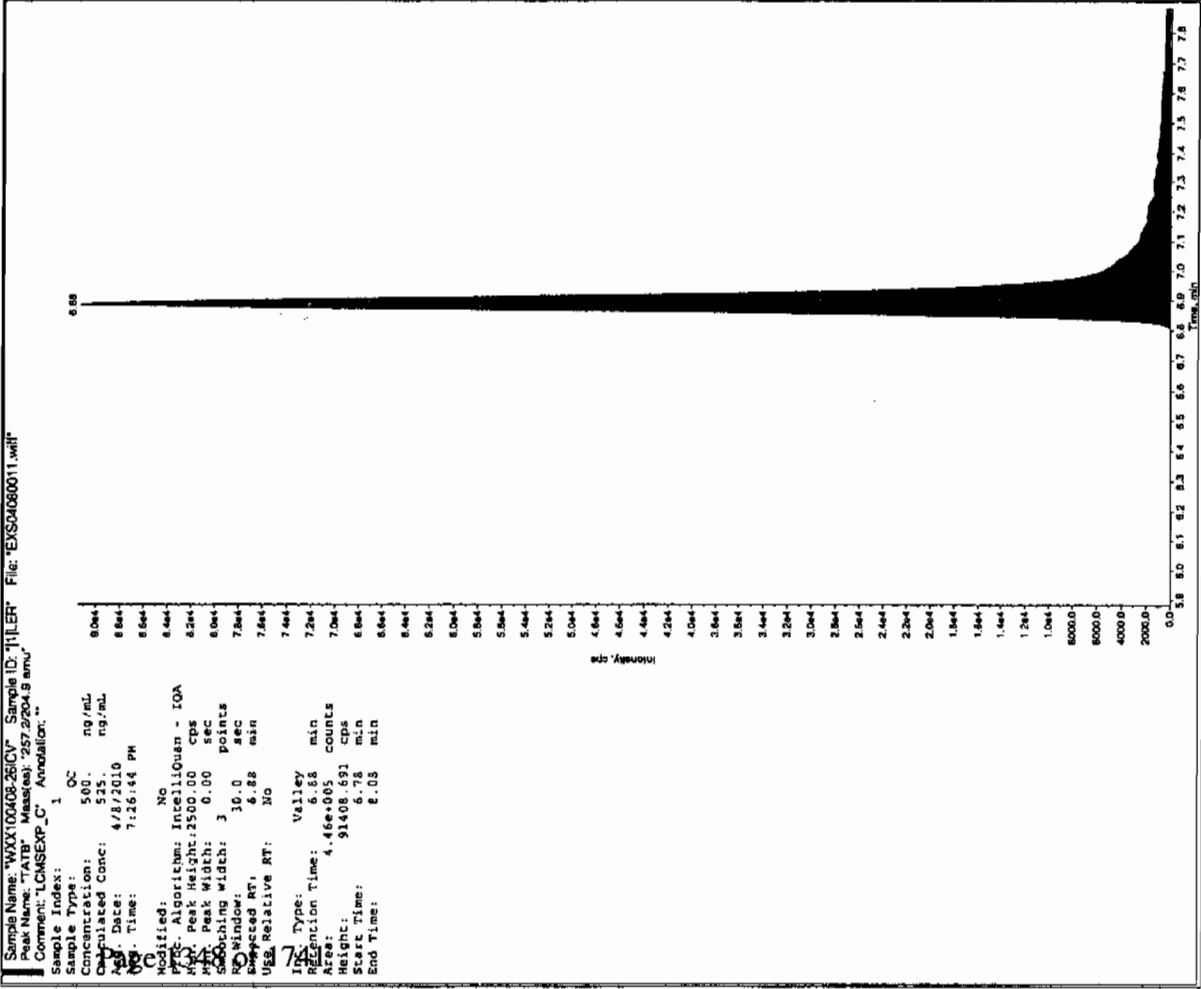
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

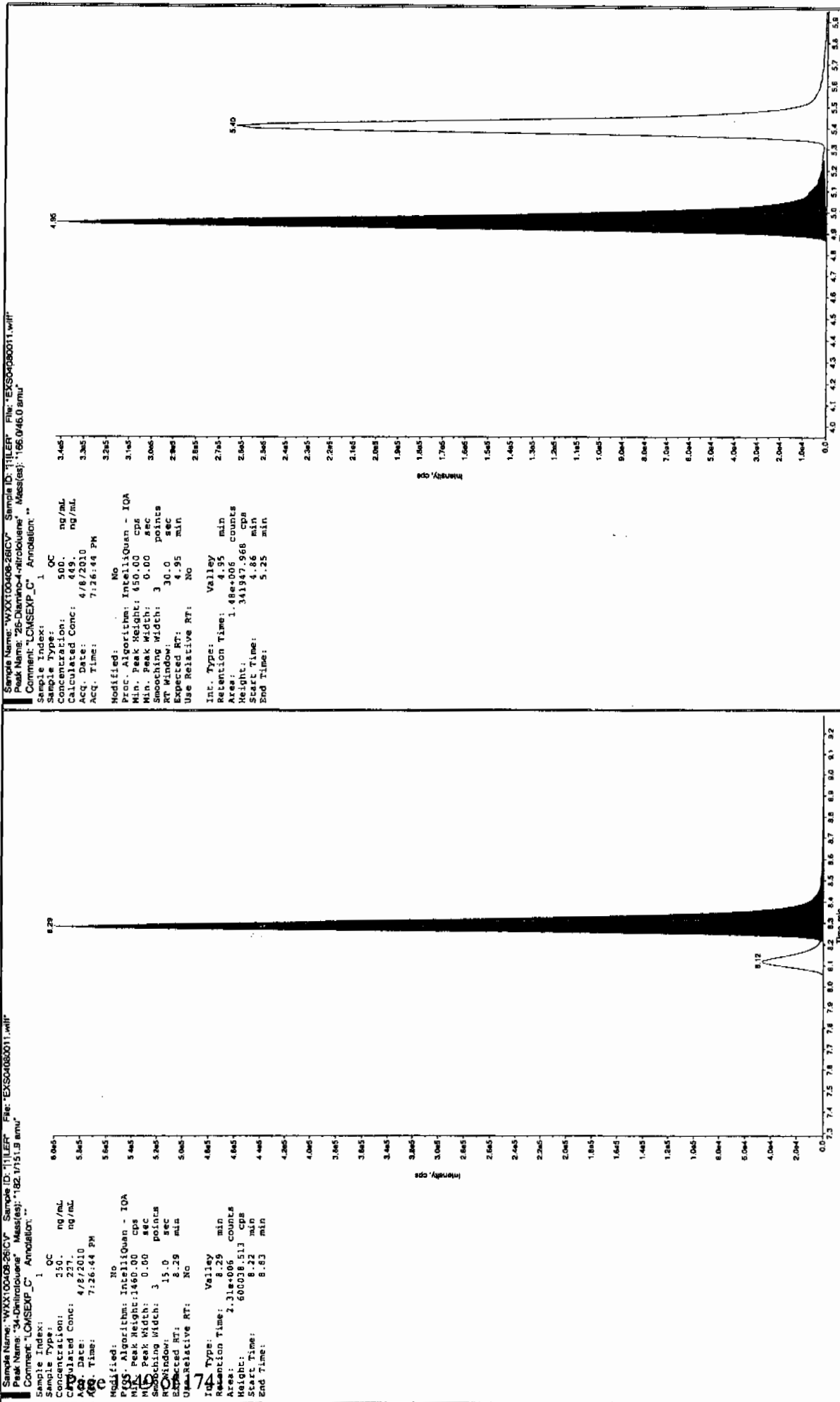
Column used to flag Recovery outside of Limits

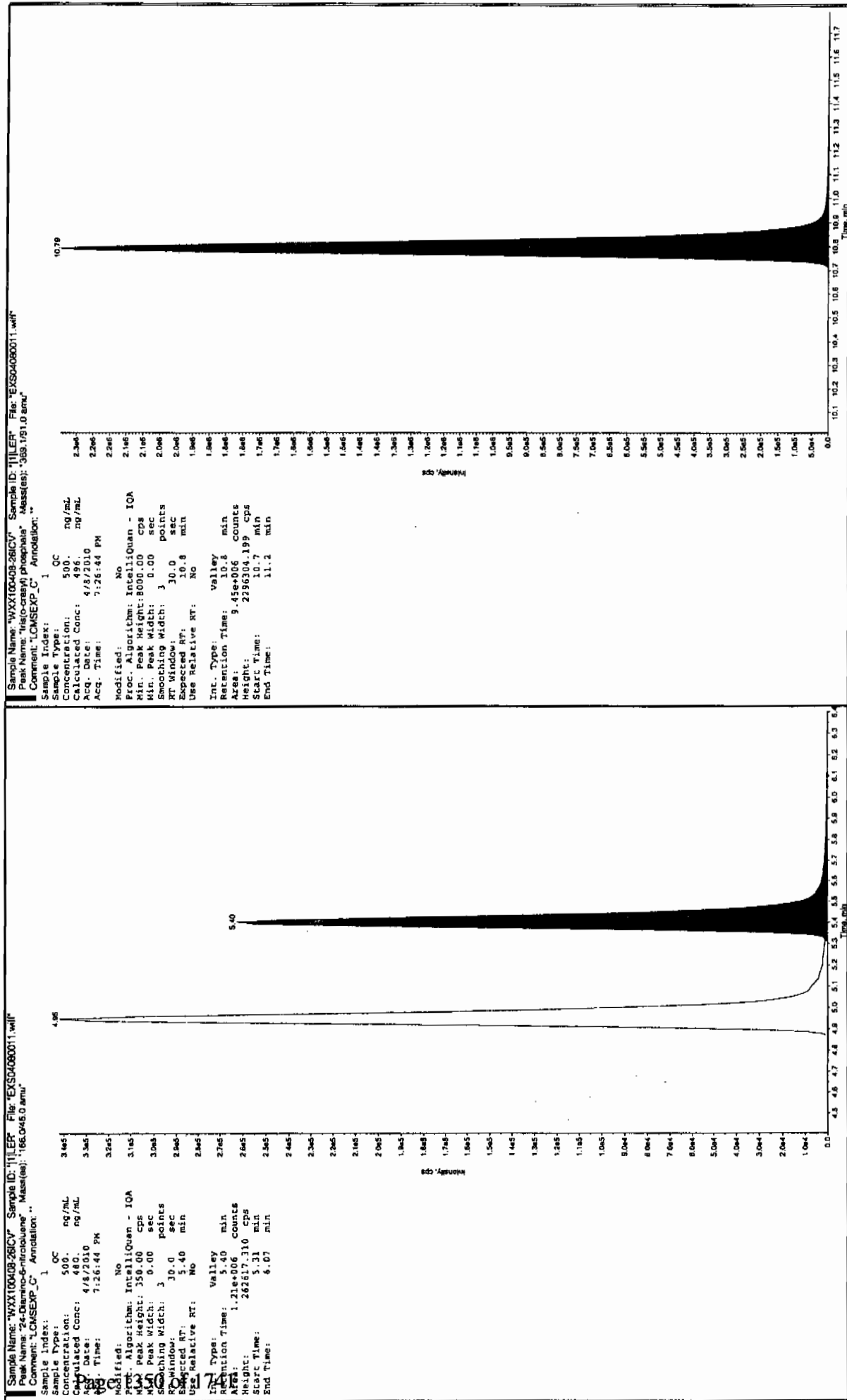
* Value outside of Recovery Limits

Scan 412/110



Scan 0412/110





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412012a

Analysis Date: 12-APR-10 21:04

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	42.014	105	
1,3-Dinitrobenzene-d4	500	533.484	107	
2,4,6-Trinitrotoluene	40	37.92	95	
2,4-Dinitrotoluene	40	39.009	98	
2,6-Dinitrotoluene	40	41.835	105	
2,6-Dinitrotoluene-d3	500	543.299	109	
2-Amino-4,6-dinitrotoluene	40	37.957	95	
3,4-Dinitrotoluene	20	20.822	104	
4-Amino-2,6-dinitrotoluene	40	41.22	103	
HMX	40	40.936	102	
Nitrobenzene	40	40.412	101	
PETN	40	38.904	97	
RDX	40	42.279	106	
Tetryl	40	38.735	97	
m-Dinitrobenzene	40	40.013	100	
m-Nitrotoluene	40	37.251	93	
o-Nitrotoluene	40	34.615	87	
p-Nitrotoluene	40	40.573	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%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412012a

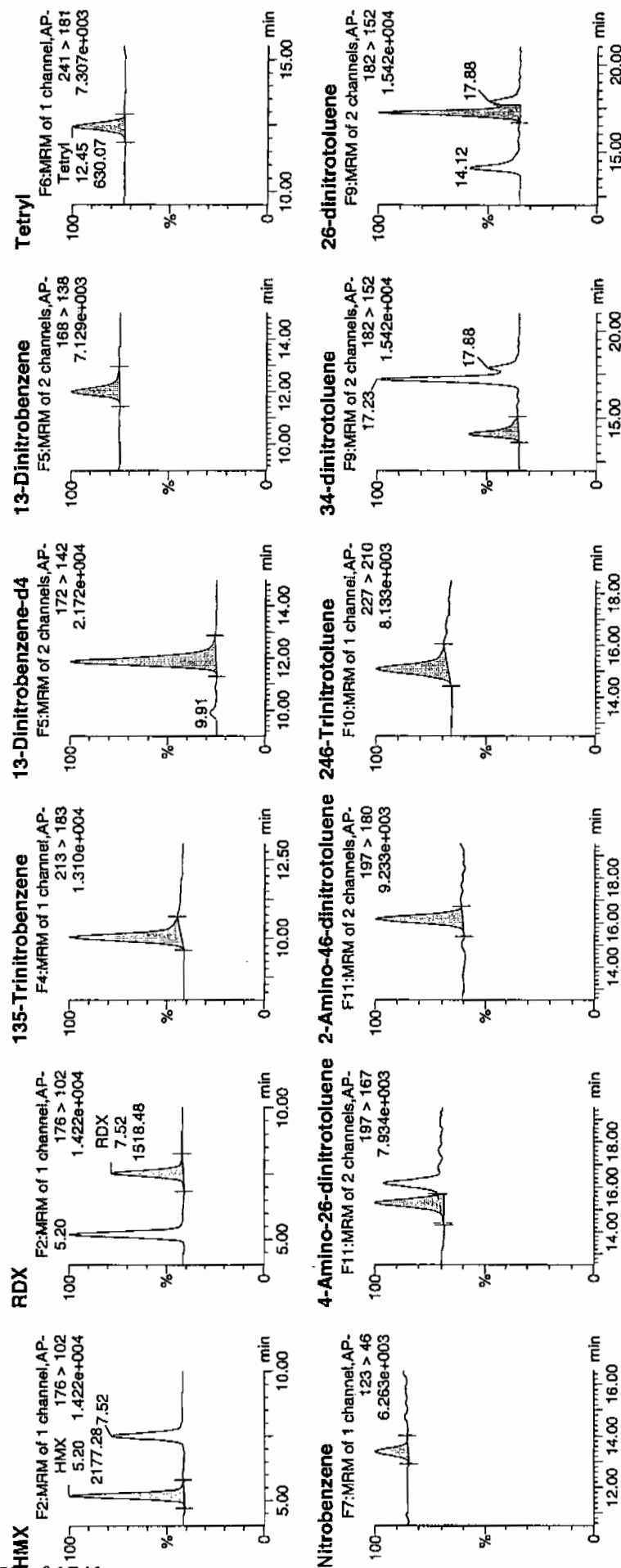
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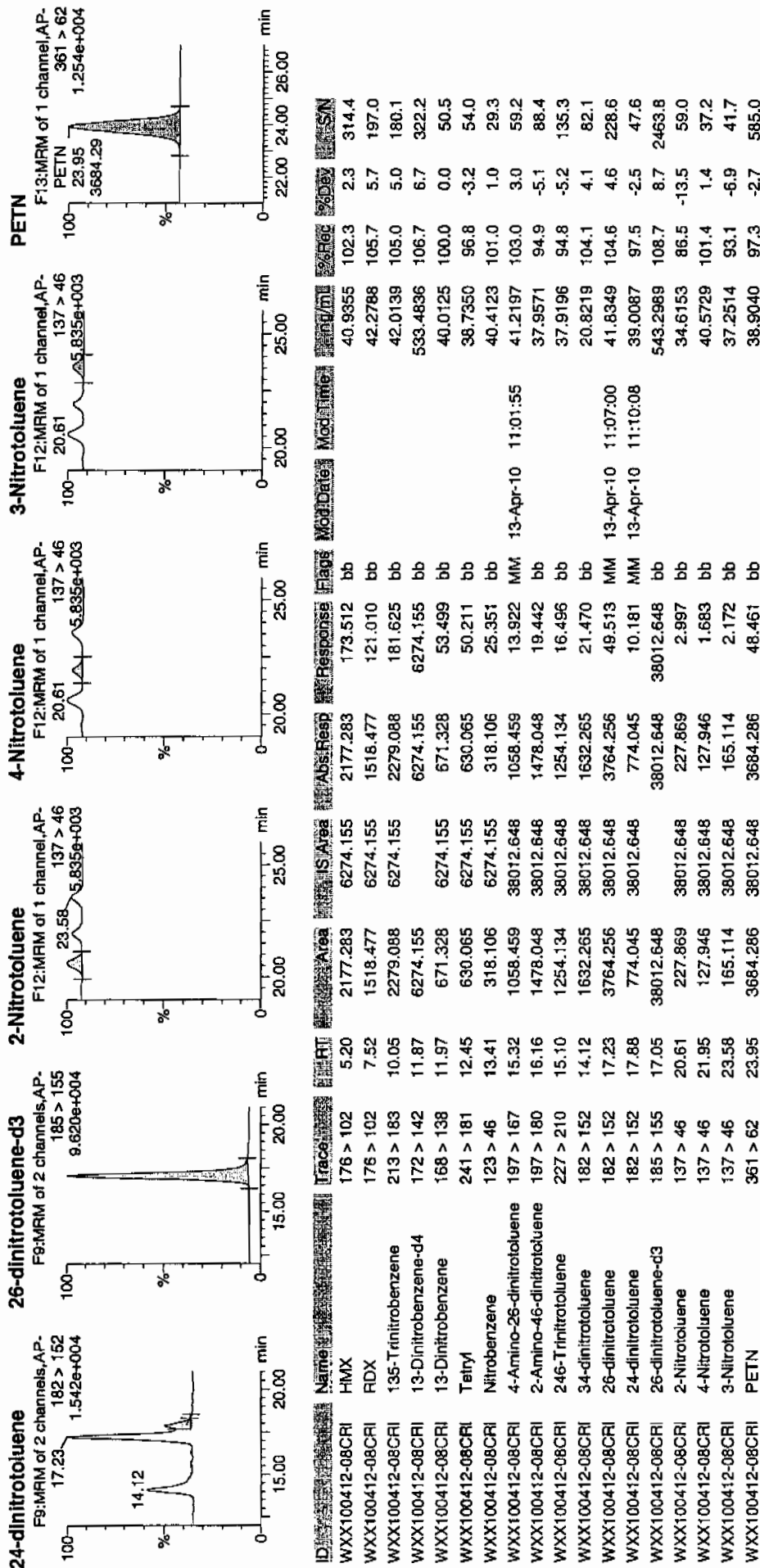
Vial: 1:1,C

11/13/10



from 4/14/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/12/10
 Time of Injection 2104
 Standard Number WXX100412-08CRI
 Data File EXP0412012a

HMX	102.3
RDX	105.7
135-TNB	105.0
13-DNB	100.0
Tetryl	96.8
Nitrobenzene	101.0
4A-26-DNT	103.0
2A-46-DNT	94.9
246-TNT	94.8
34-DNT(surr)	104.1
26-DNT	104.6
24-DNT	97.5
2-NT	86.5
4-NT	101.4
3-NT	93.1
PETN	97.3

MT
4/13/10

Total 1588.0

Average 99.3

Handwritten 04/14/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412023a

Analysis Date: 13-APR-10 02:29

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	557.713	93	
1,3-Dinitrobenzene-d4	500	483.478	97	
2,4,6-Trinitrotoluene	600	638.191	106	
2,4-Dinitrotoluene	600	647.757	108	
2,6-Dinitrotoluene	600	603.464	101	
2,6-Dinitrotoluene-d3	500	472.429	94	
2-Amino-4,6-dinitrotoluene	600	581.719	97	
3,4-Dinitrotoluene	300	294.567	98	
4-Amino-2,6-dinitrotoluene	600	565.953	94	
HMX	600	591.074	99	
Nitrobenzene	600	587.411	98	
PETN	600	688.871	115	
RDX	600	698.421	116	
Tetryl	600	569.67	95	
m-Dinitrobenzene	600	606.197	101	
m-Nitrotoluene	600	540.313	90	
o-Nitrotoluene	600	558.159	93	
p-Nitrotoluene	600	614.491	102	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 45 of 77

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Date: 13-Apr-2010

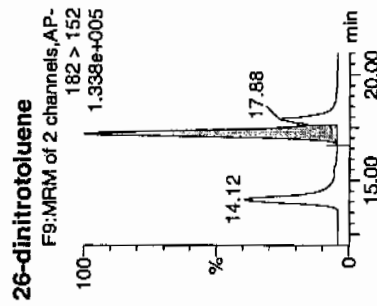
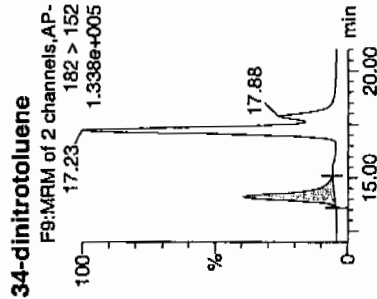
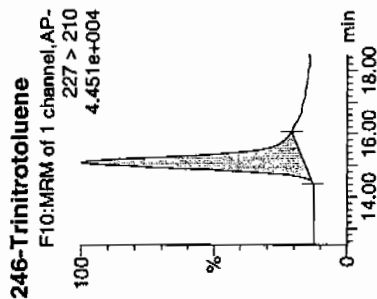
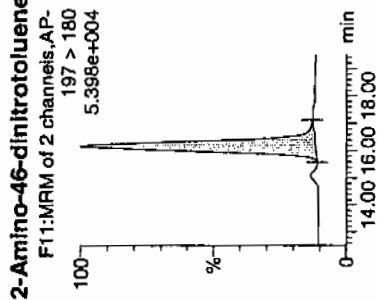
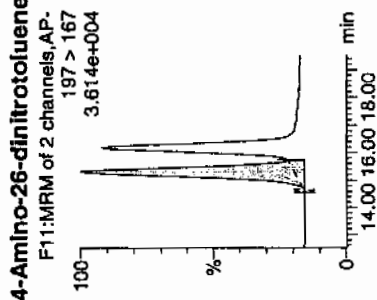
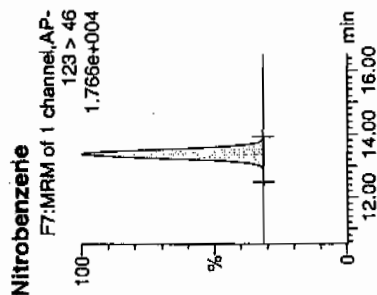
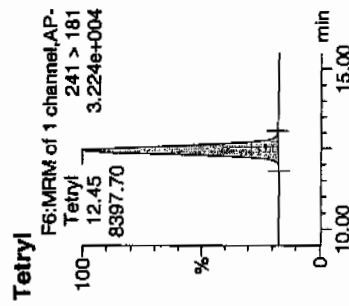
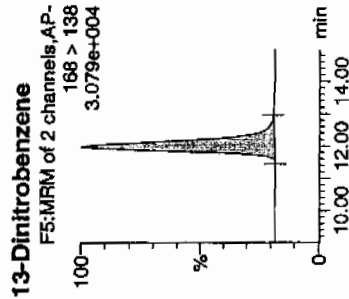
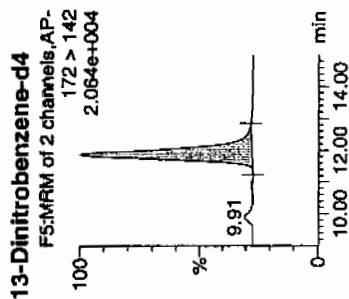
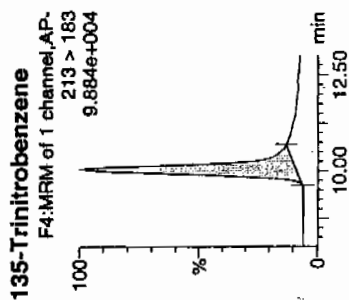
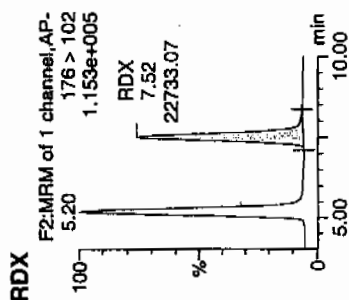
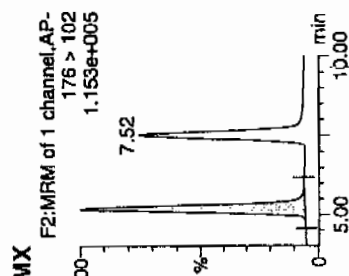
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ID: WXX100412-07CCV

Vial: 1:1,B

WXX
4/13/10

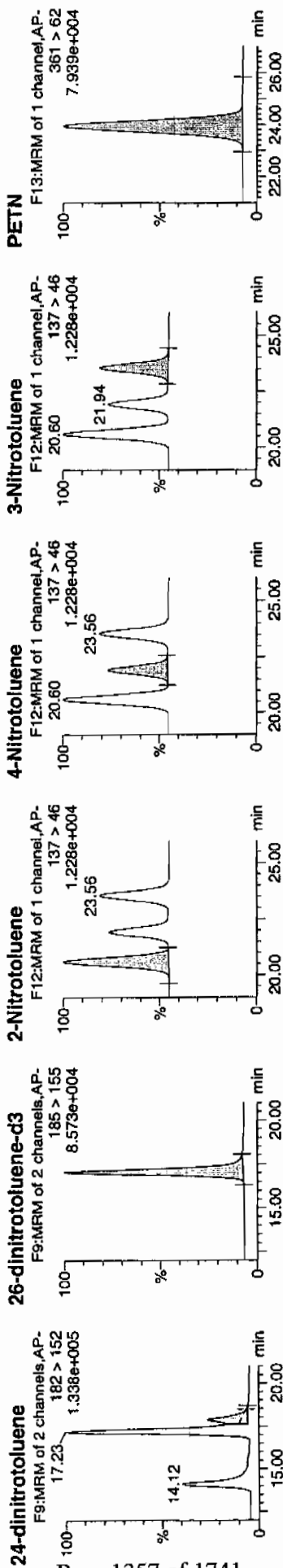
135 of 1741



WXX 04/14/10

Dataset: C:\MASSLYN\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

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ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Time	Info URL	% Rec	% Dev	SN
WXX100412-07CCV	HMX	176 > 102	5.20	28491.268	5686.049	28491.268	2505.366	bb	591,0742	98.5	-1.5	2424.2	
WXX100412-07CCV	RDX	176 > 102	7.52	22733.072	5686.049	22733.072	1999.022	bb	698.4212	116.4	16.4	1800.1	
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	27417.908	5686.049	27417.908	2410.981	bb	557.7127	93.0	-7.0	985.8	
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5686.049	5686.049	5686.049	5686.049	bb	483.4777	96.7	-3.3	419.8	
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	9217.395	5686.049	9217.395	810.527	bb	606.1968	101.0	1.0	1027.7	
WXX100412-07CCV	Tetryl	241 > 181	12.45	8397.697	5686.049	8397.697	738.447	bd	569.6696	94.9	-5.1	1109.4	
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	4190.401	5686.049	4190.401	368.481	bd	587.4110	97.9	-2.1	482.0	
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.32	12637.104	33054.137	12637.104	191.158	MM	565.9529	94.3	-5.7	550.6	
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	19697.299	33054.137	19697.299	297.955	bb	581.7193	97.0	-3.0	507.4	
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	18353.908	33054.137	18353.908	277.634	bb	638.1909	106.4	6.4	574.4	
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.12	20079.451	33054.137	20079.451	303.736	bb	294.5666	98.2	-1.8	472.2	
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.23	47216.063	33054.137	47216.063	714.223	MM	603.4644	100.6	0.6	1300.6	
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.88	11176.726	33054.137	11176.726	169.067	MM	647.7566	108.0	8.0	280.1	
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	33054.137	33054.137	33054.137	33054.137	bb	472.4290	94.5	-5.5	2808.6	
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.60	3195.010	33054.137	3195.010	48.330	bb	558.1587	93.0	-7.0	343.3	
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.94	1685.013	33054.137	1685.013	25.489	bb	614.4905	102.4	2.4	193.2	
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.56	2082.501	33054.137	2082.501	31.501	bb	540.3134	90.1	-9.9	224.9	
WXX100412-07CCV	PETN	361 > 62	23.94	39570.852	33054.137	39570.852	598.576	bb	688.8709	114.8	14.8	6418.5	

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/13/10
 Time of Injection: 0229
 Standard Number: WXX100412-07CCV
 Data File: EXP0412023a

HMX	98.5
RDX	116.4
135-TNB	93.0
13-DNB	101.0
Tetryl	94.9
Nitrobenzene	97.9
4A-26-DNT	94.3
2A-46-DNT	97.0
246-TNT	106.4
34-DNT(surr)	98.2
26-DNT	100.6
24-DNT	108.0
2-NT	93.0
4-NT	102.4
3-NT	90.1
PETN	114.8

WAT
4/13/10

Total 1606.5

WAT-0 4/14/10

Average 100.4

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412025a

Analysis Date: 13-APR-10 03:28

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.517	111	
1,3-Dinitrobenzene-d4	500	492.919	99	
2,4,6-Trinitrotoluene	40	39.436	99	
2,4-Dinitrotoluene	40	43.525	109	
2,6-Dinitrotoluene	40	39.656	99	
2,6-Dinitrotoluene-d3	500	514.01	103	
2-Amino-4,6-dinitrotoluene	40	37.309	93	
3,4-Dinitrotoluene	20	19.281	96	
4-Amino-2,6-dinitrotoluene	40	37.529	94	
HMX	40	42.31	106	
Nitrobenzene	40	35.496	89	
PETN	40	42.974	107	
RDX	40	45.439	114	
Tetryl	40	42.386	106	
m-Dinitrobenzene	40	46.427	116	
m-Nitrotoluene	40	39.933	100	
o-Nitrotoluene	40	37.946	95	
p-Nitrotoluene	40	42.692	107	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

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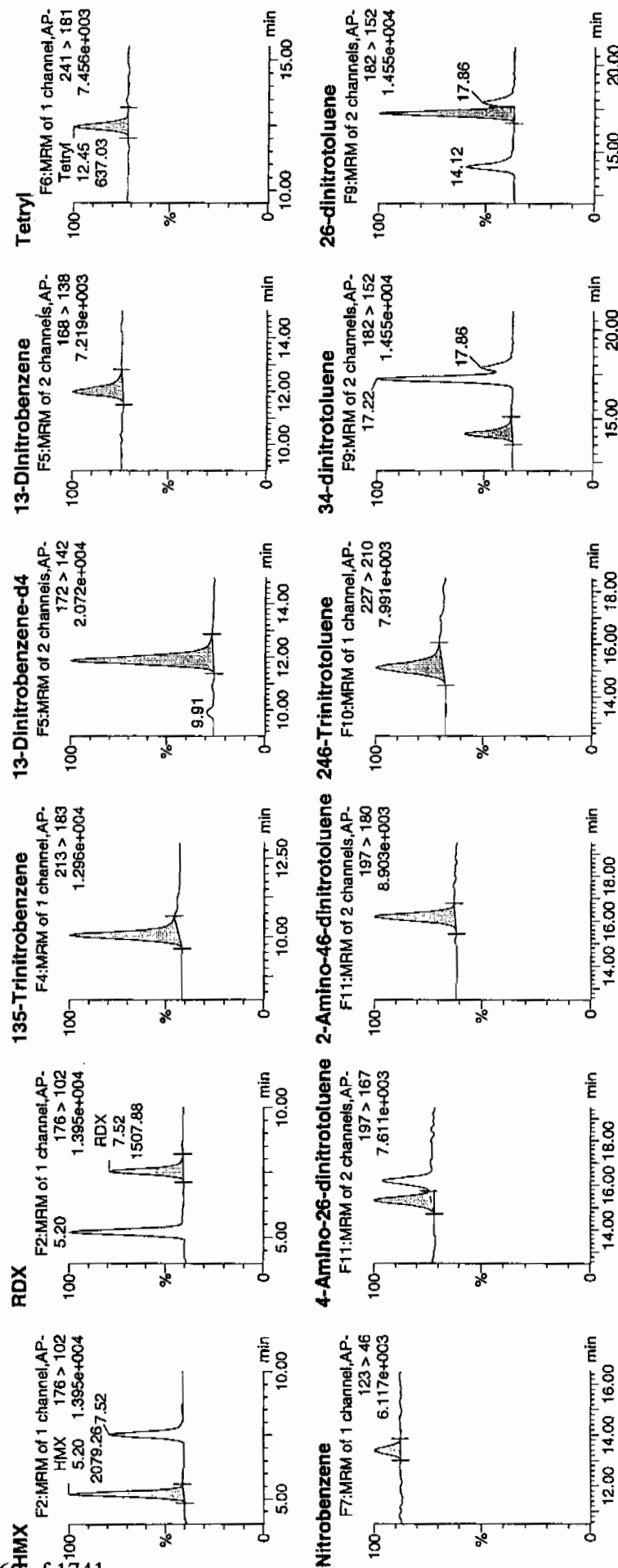
Date: 13-Apr-2010

Time: 03:28:21

ID: WXX100412-08CRI

Vial: 1:1,C

137
u13133

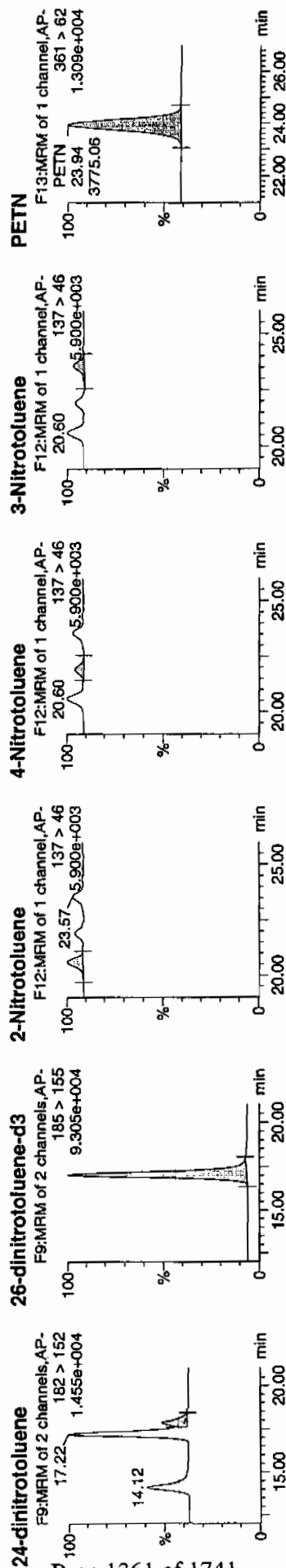


HMZ 04/14/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc (µg/ml)	Varied	%Dev	SN
WXX100412-08C1	HMX	176 > 102	5.20	2079.264	5797.090	2079.264	179.337	bb			42.3097	105.8	5.8	348.3
WXX100412-08C1	RDX	176 > 102	7.52	1507.880	5797.090	1507.880	130.055	bb			45.4388	113.6	13.6	225.5
WXX100412-08C1	135-Trinitrobenzene	213 > 183	10.05	2231.265	5797.090	2231.265	192.447	bb			44.5172	111.3	11.3	130.5
WXX100412-08C1	13-Dinitrobenzene-d4	172 > 142	11.87	5787.090		5797.090	5787.090	bb			492.9193	98.6	-1.4	771.9
WXX100412-08C1	13-Dinitrobenzene	168 > 138	11.97	719.725	5797.090	719.725	62.076	bb			46.4272	116.1	16.1	67.2
WXX100412-08C1	Tetryl	241 > 181	12.45	637.032	5797.090	637.032	54.944	bb			42.3862	106.0	6.0	45.1
WXX100412-08C1	Nitrobenzene	123 > 46	13.41	258.161	5797.090	258.161	22.266	bb			35.4959	88.7	-11.3	32.0
WXX100412-08C1	4-Amino-26-dinitrotoluene	197 > 167	15.32	911.734	35963.441	911.734	12.676	MM	13-Apr-10	11:02:58	37.5289	93.8	-6.2	44.8
WXX100412-08C1	2-Amino-46-dinitrotoluene	197 > 180	16.19	1374.488	35963.441	1374.488	19.110	bb			37.3089	93.3	-6.7	102.4
WXX100412-08C1	246-Trinitrotoluene	227 > 210	15.10	1233.959	35963.441	1233.959	17.156	bb			39.4355	98.6	-1.4	52.3
WXX100412-08C1	34-dinitrotoluene	182 > 152	14.12	1430.000	35963.441	1430.000	19.881	bb			19.2811	96.4	-3.6	68.9
WXX100412-08C1	26-dinitrotoluene	182 > 152	17.22	3375.872	35963.441	3375.872	46.935	MM	13-Apr-10	11:08:02	39.6563	99.1	-0.9	198.4
WXX100412-08C1	24-dinitrotoluene	182 > 152	17.86	817.109	35963.441	817.109	11.360	MM	13-Apr-10	11:10:56	43.5253	108.8	8.8	43.1
WXX100412-08C1	26-dinitrotoluene-d3	185 > 155	17.05	35963.441		35963.441	35963.441	bb			514.0105	102.8	2.8	1763.8
WXX100412-08C1	2-Nitrotoluene	137 > 46	20.60	236.329	35963.441	236.329	3.286	bb			37.9461	94.9	-5.1	26.8
WXX100412-08C1	4-Nitrotoluene	137 > 46	21.92	127.371	35963.441	127.371	1.771	bb			42.6921	106.7	6.7	14.4
WXX100412-08C1	3-Nitrotoluene	137 > 46	23.57	167.459	35963.441	167.459	2.328	bb			39.9332	99.8	-0.2	17.3
WXX100412-08C1	PETN	361 > 62	23.94	3775.057	35963.441	3775.057	52.485	bb			42.9742	107.4	7.4	1684.5

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/13/10
 Time of Injection 0328
 Standard Number WXX100412-08CRI
 Data File EXP0412025a

HMX	105.8
RDX	113.6
135-TNB	111.3
13-DNB	116.1
Tetryl	106.0
Nitrobenzene	88.7
4A-26-DNT	93.8
2A-46-DNT	93.3
246-TNT	98.6
34-DNT(surr)	96.4
26-DNT	99.1
24-DNT	108.8
2-NT	94.9
4-NT	106.7
3-NT	99.8
PETN	107.4

*WTF
4/13/10*

Total 1640.3

Average 102.5

Handwritten: 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412036a

Analysis Date: 13-APR-10 08:52

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	622.986	104	
1,3-Dinitrobenzene-d4	500	495.434	99	
2,4,6-Trinitrotoluene	600	635.68	106	
2,4-Dinitrotoluene	600	609.665	102	
2,6-Dinitrotoluene	600	616.741	103	
2,6-Dinitrotoluene-d3	500	514.162	103	
2-Amino-4,6-dinitrotoluene	600	599.331	100	
3,4-Dinitrotoluene	300	294.405	98	
4-Amino-2,6-dinitrotoluene	600	576.117	96	
HMX	600	602.928	100	
Nitrobenzene	600	645.578	108	
PETN	600	634.783	106	
RDX	600	702.566	117	
Tetryl	600	604.875	101	
m-Dinitrobenzene	600	626.308	104	
m-Nitrotoluene	600	515.069	86	
o-Nitrotoluene	600	519.467	87	
p-Nitrotoluene	600	594.454	99	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

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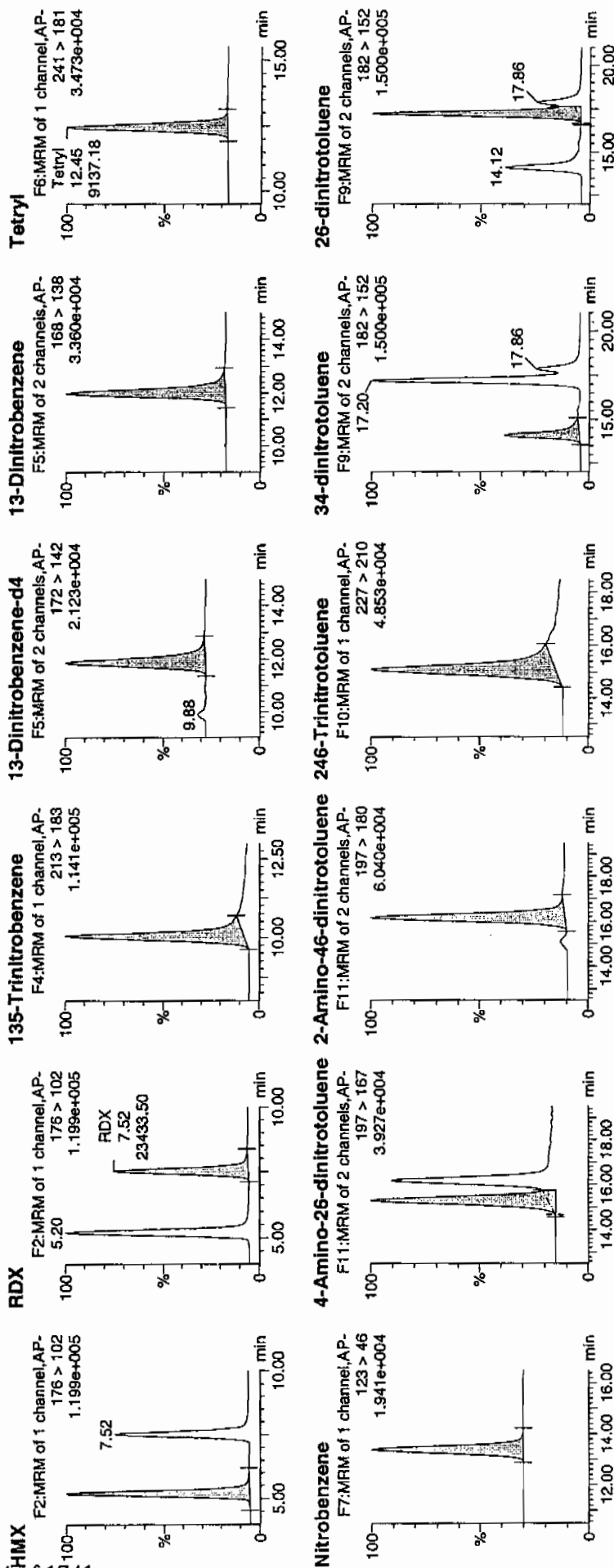
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Time: 08:52:42

ID: WXX100408-07CCV

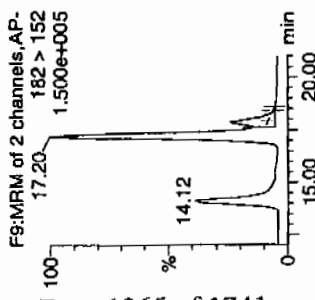
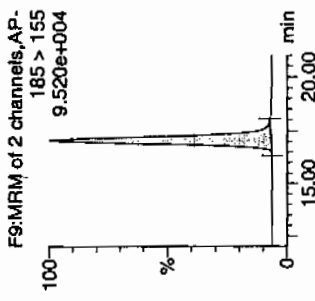
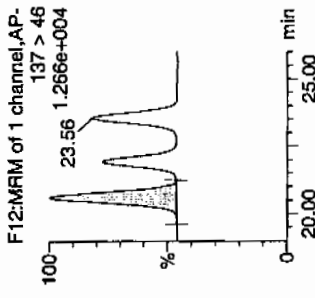
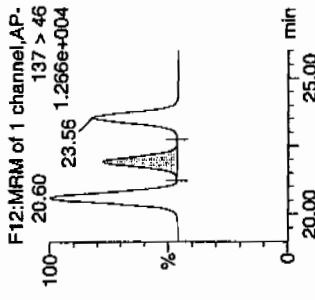
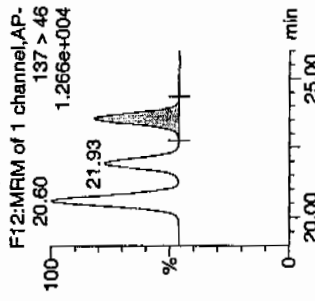
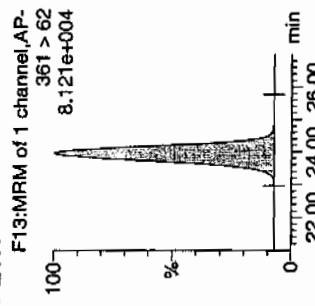
Vial: 1:1,B

100%
11/13/10



from 6/14/10

Dataset: C:\MASSLYNX\New_Exp\PRO1041210expA.qld, Time: Tue Apr 13 11:12:22 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	Int	Rec	%Dev	SN
WXX100408-07CCV	HMX	176 > 102	5.20	29781.385	5826.664	29781.385	2555.612	bb			602.9284	100.5	0.5	621.5
WXX100408-07CCV	RDX	176 > 102	7.52	23433.498	5826.664	23433.498	2010.885	bb			702.5658	117.1	17.1	454.8
WXX100408-07CCV	135-Trinitrobenzene	213 > 183	10.05	31384.221	5826.664	31384.221	2693.155	bb			622.9859	103.8	3.8	1221.3
WXX100408-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5826.664	5826.664	5826.664	5826.664	bb			495.4340	99.1	-0.9	856.5
WXX100408-07CCV	13-Dinitrobenzene	168 > 138	11.97	9758.702	5826.664	9758.702	837.418	bb			626.3082	104.4	4.4	1223.2
WXX100408-07CCV	Tetryl	241 > 181	12.45	9137.179	5826.664	9137.179	784.083	bb			504.8749	100.8	0.8	997.4
WXX100408-07CCV	Nitrobenzene	123 > 46	13.37	4719.232	5826.664	4719.232	404.969	bb			645.5776	107.6	7.6	430.6
WXX100408-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.29	14000.422	35974.031	14000.422	194.591	MM	13-Apr-10	11:03:12	576.1169	96.0	-4.0	564.0
WXX100408-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	22086.311	35974.031	22086.311	306.976	bb			599.3310	99.9	-0.1	644.5
WXX100408-07CCV	248-Trinitrotoluene	227 > 210	15.10	19896.646	35974.031	19896.646	276.542	bb			635.6802	105.9	5.9	463.0
WXX100408-07CCV	34-dinitrotoluene	182 > 152	14.12	21841.178	35974.031	21841.178	303.569	bb			294.4045	98.1	-1.9	603.2
WXX100408-07CCV	26-dinitrotoluene	182 > 152	17.20	52517.492	35974.031	52517.492	729.936	MM	13-Apr-10	11:08:37	616.7407	102.8	2.8	1677.9
WXX100408-07CCV	24-dinitrotoluene	182 > 152	17.86	11448.733	35974.031	11448.733	159.125	MM	13-Apr-10	11:11:06	609.6651	101.6	1.6	331.4
WXX100408-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	35974.031	35974.031	35974.031	35974.031	bb			514.1618	102.8	2.8	2057.8
WXX100408-07CCV	2-Nitrotoluene	137 > 46	20.60	3236.203	35974.031	3236.203	44.980	bb			519.4669	86.6	-13.4	654.9
WXX100408-07CCV	4-Nitrotoluene	137 > 46	21.93	1774.065	35974.031	1774.065	24.658	bb			594.4539	99.1	-0.9	382.8
WXX100408-07CCV	3-Nitrotoluene	137 > 46	23.56	2160.571	35974.031	2160.571	30.030	bb			515.0694	85.8	-14.2	438.3
WXX100408-07CCV	PETN	361 > 62	23.94	40282.918	35974.031	40282.918	559.889	bb			634.7825	105.8	5.8	10168.9

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/13/10
 Time of Injection: 0852
 Standard Number: WXX100412-07CCV
 Data File: EXP0412036a

HMX	100.5
RDX	117.1
135-TNB	103.8
13-DNB	104.4
Tetryl	100.8
Nitrobenzene	107.6
4A-26-DNT	96.0
2A-46-DNT	99.9
246-TNT	105.9
34-DNT(surr)	98.1
26-DNT	102.8
24-DNT	101.6
2-NT	86.6
4-NT	99.1
3-NT	85.8
PETN	105.8

*WAF
4/13/10*

Total 1615.8

Sum 04/14/10

Average 101.0

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412038a

Analysis Date: 13-APR-10 09:51

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	45.739	114	
1,3-Dinitrobenzene-d4	500	533	107	
2,4,6-Trinitrotoluene	40	38.169	95	
2,4-Dinitrotoluene	40	45.21	113	
2,6-Dinitrotoluene	40	40.851	102	
2,6-Dinitrotoluene-d3	500	511.74	102	
2-Amino-4,6-dinitrotoluene	40	38.558	96	
3,4-Dinitrotoluene	20	21.488	107	
4-Amino-2,6-dinitrotoluene	40	37.158	93	
HMX	40	39.698	99	
Nitrobenzene	40	39.676	99	
PETN	40	46.251	116	
RDX	40	44.563	111	
Tetryl	40	40.879	102	
m-Dinitrobenzene	40	43.824	110	
m-Nitrotoluene	40	36.581	91	
o-Nitrotoluene	40	36.682	92	
p-Nitrotoluene	40	38.153	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%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412038a

Date: 13-Apr-2010

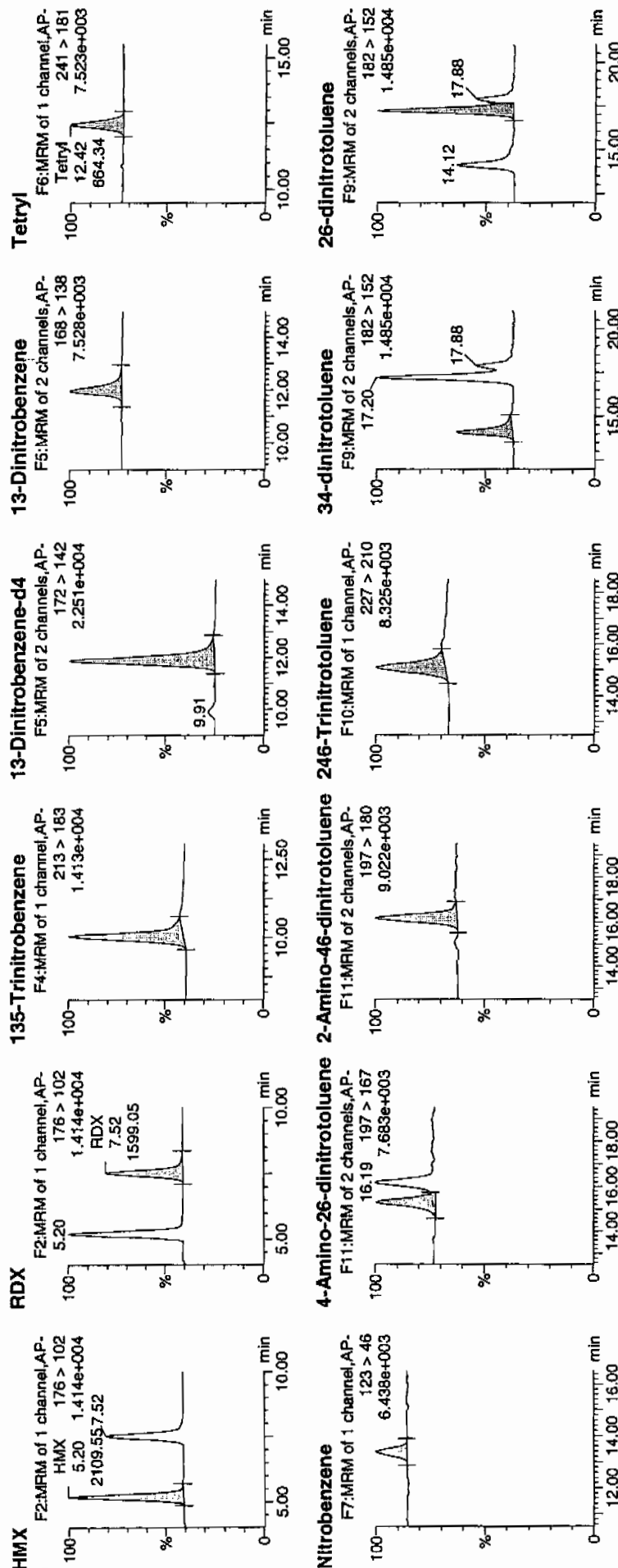
Time: 09:51:47

ID: WXX100408-08CRI

Vial: 1:1,C

purify
4/13/10

1368 of 1741



Handwritten: 4/14/10

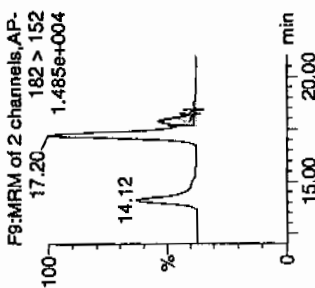
Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

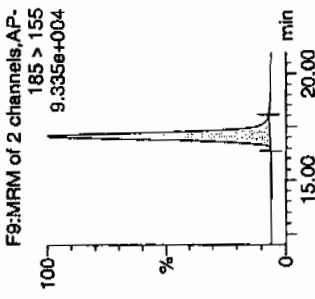
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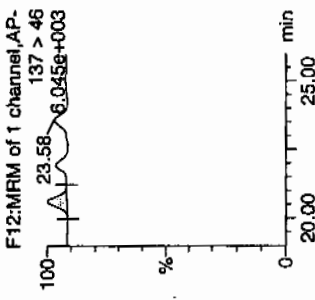
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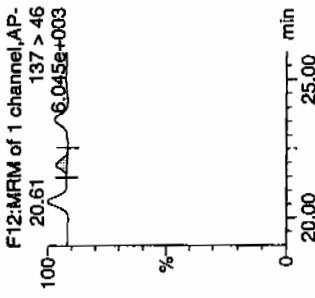
26-dinitrotoluene-d3



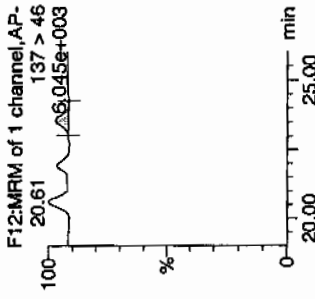
2-Nitrotoluene



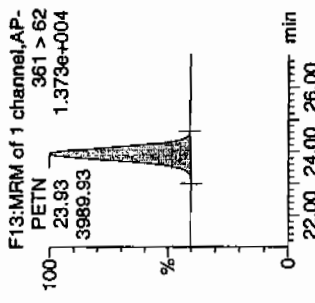
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int	Rec	%Dev	S/N
WXX100408-08CRI	HMX	176 > 102	5.20	2109.553	6268.472	2109.553	168.267	bb			39.6981	99.2	-0.8	344.7
WXX100408-08CRI	RDX	176 > 102	7.52	1599.046	6268.472	1599.046	127.547	bb			44.5625	111.4	11.4	232.6
WXX100408-08CRI	135-Trinitrobenzene	213 > 183	10.05	2478.890	6268.472	2478.890	197.727	bb			45.7385	114.3	14.3	445.4
WXX100408-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6268.472		6268.472		bb			533.0004	106.6	6.6	316.8
WXX100408-08CRI	13-Dinitrobenzene	168 > 138	11.97	734.612	6268.472	734.612	58.596	bb			43.8240	109.6	9.6	56.6
WXX100408-08CRI	Tetryl	241 > 181	12.42	664.339	6268.472	664.339	52.991	bb			40.8791	102.2	2.2	77.0
WXX100408-08CRI	Nitrobenzene	123 > 46	13.37	312.027	6268.472	312.027	24.889	bb			39.6760	99.2	-0.8	26.2
WXX100408-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.32	898.733	35804.613	898.733	12.551	MM	13-Apr-10	11:03:18	37.1578	92.9	-7.1	46.5
WXX100408-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1414.235	35804.613	1414.235	19.749	bb			38.5581	96.4	-3.6	64.1
WXX100408-08CRI	246-Trinitrotoluene	227 > 210	15.10	1189.063	35804.613	1189.063	16.605	bb			38.1693	95.4	-4.6	105.0
WXX100408-08CRI	34-dinitrotoluene	182 > 152	14.12	1586.630	35804.613	1586.630	22.157	bb			21.4879	107.4	7.4	45.9
WXX100408-08CRI	26-dinitrotoluene	182 > 152	17.20	3462.203	35804.613	3462.203	48.349	MM	13-Apr-10	11:08:46	40.8509	102.1	2.1	112.8
WXX100408-08CRI	24-dinitrotoluene	182 > 152	17.88	844.966	35804.613	844.966	11.800	MM	13-Apr-10	11:11:14	45.2099	113.0	13.0	28.2
WXX100408-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	35804.613		35804.613		bb			511.7404	102.3	2.3	2742.4
WXX100408-08CRI	2-Nitrotoluene	137 > 46	20.61	227.450	35804.613	227.450	3.176	bb			36.6824	91.7	-8.3	42.8
WXX100408-08CRI	4-Nitrotoluene	137 > 46	21.94	113.326	35804.613	113.326	1.583	bb			38.1530	95.4	-4.6	23.5
WXX100408-08CRI	3-Nitrotoluene	137 > 46	23.58	152.725	35804.613	152.725	2.133	bb			36.5812	91.5	-8.5	27.1
WXX100408-08CRI	PETN	361 > 62	23.93	3989.934	35804.613	3989.934	55.718	bb			46.2507	115.6	15.6	239.5

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/13/10
 Time of Injection 0951
 Standard Number WXX100412-08CRI
 Data File EXP0412038a

HMX	99.2
RDX	111.4
135-TNB	114.3
13-DNB	109.6
Tetryl	102.2
Nitrobenzene	99.2
4A-26-DNT	92.9
2A-46-DNT	96.4
246-TNT	95.4
34-DNT(surr)	107.4
26-DNT	102.1
24-DNT	113.0
2-NT	91.7
4-NT	95.4
3-NT	91.5
PETN	115.6

*mtf
4/13/10*

Total 1637.3

Average 102.3

HPM 04/14/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412049a

Analysis Date: 13-APR-10 15:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	571.573	95	
1,3-Dinitrobenzene-d4	500	506.928	101	
2,4,6-Trinitrotoluene	600	673.095	112	
2,4-Dinitrotoluene	600	690.861	115	
2,6-Dinitrotoluene	600	617.582	103	
2,6-Dinitrotoluene-d3	500	498.886	100	
2-Amino-4,6-dinitrotoluene	600	607.095	101	
3,4-Dinitrotoluene	300	303.099	101	
4-Amino-2,6-dinitrotoluene	600	604.473	101	
HMX	600	617.414	103	
Nitrobenzene	600	582.952	97	
PETN	600	664.135	111	
RDX	600	727.871	121	*
Tetryl	600	602.021	100	
m-Dinitrobenzene	600	604.378	101	
m-Nitrotoluene	600	551.203	92	
o-Nitrotoluene	600	525.761	88	
p-Nitrotoluene	600	663.98	111	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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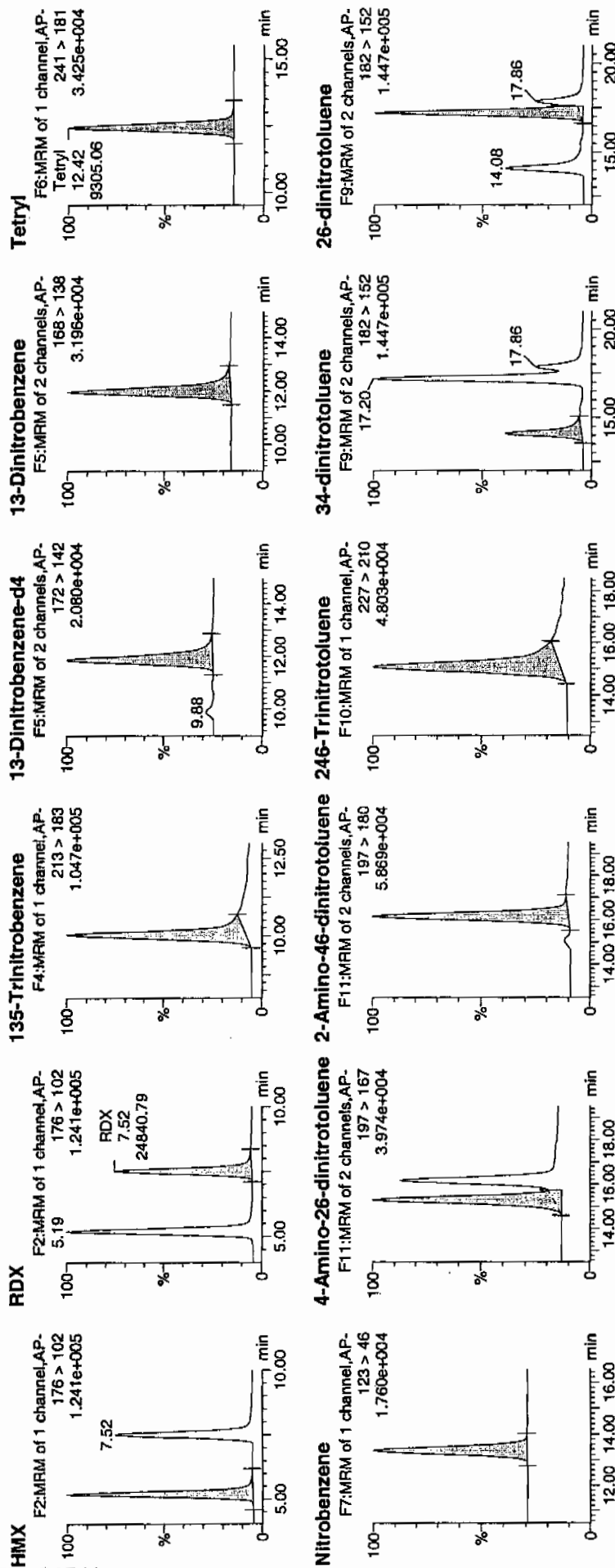
Date: 13-Apr-2010

Time: 15:16:35

ID: WXX100412-07CCV

Vial: 1:1,B

11/10
4/14/10



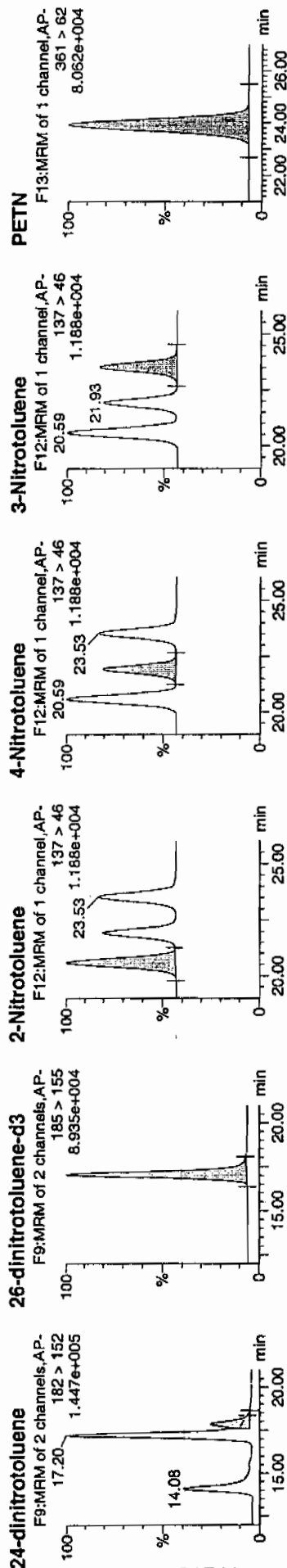
4/14/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 22 of 75

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



ID	Name	Trace	RT	Area	Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Norm	Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.19	31204.445	5961.844	31204.445	2617.013	bb			617.4143	102.9	2.9	5202.5
WXX100412-07CCV	RDX	176 > 102	7.52	24840.789	5961.844	24840.789	2083.314	bb			727.8714	121.3	21.3	3835.8
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	29462.223	5961.844	29462.223	2470.899	bb			571.5730	95.3	-4.7	761.1
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.84	5961.844		5961.844	5961.844	bb			506.9282	101.4	1.4	721.9
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	9635.484	5961.844	9635.484	808.096	bb			604.3784	100.7	0.7	772.5
WXX100412-07CCV	Tetryl	241 > 181	12.42	9305.055	5961.844	9305.055	780.384	bb			602.0212	100.3	0.3	1125.5
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	4360.299	5961.844	4360.299	365.684	bb			582.9519	97.2	-2.8	615.4
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.28	14253.106	34905.266	14253.106	204.188	MM	14-Apr-10	09:10:21	604.4733	100.7	0.7	347.8
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	21707.760	34905.266	21707.760	310.953	bb			607.0951	101.2	1.2	960.5
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	20441.820	34905.266	20441.820	292.819	bb			673.0952	112.2	12.2	677.4
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.08	21818.158	34905.266	21818.158	312.534	bb			303.0991	101.0	1.0	485.6
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.20	51026.781	34905.266	51026.781	730.992	MM	14-Apr-10	09:11:45	617.5825	102.9	2.9	1319.3
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.86	12588.055	34905.266	12588.055	180.317	MM	14-Apr-10	09:15:38	690.8611	115.1	15.1	286.1
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	34905.266		34905.266	34905.266	bb			498.8864	99.8	-0.2	2214.7
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.59	3178.106	34905.266	3178.106	45.525	bb			525.7614	87.6	-12.4	666.3
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.93	1922.686	34905.266	1922.686	27.541	bb			663.9803	110.7	10.7	437.1
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.53	2243.447	34905.266	2243.447	32.136	bb			551.2025	91.9	-8.1	464.9
WXX100412-07CCV	PETN	361 > 62	23.92	40562.969	34905.266	40562.969	581.044	bb			664.1354	110.7	10.7	10315.8

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/13/10
 Time of Injection: 1516
 Standard Number: WXX100412-07CCV
 Data File: EXP0412049a

HMX	102.9
RDX	121.3
135-TNB	95.3
13-DNB	100.7
Tetryl	100.3
Nitrobenzene	97.2
4A-26-DNT	100.7
2A-46-DNT	101.2
246-TNT	112.2
34-DNT(surr)	101.0
26-DNT	102.9
24-DNT	115.1
2-NT	87.6
4-NT	110.7
3-NT	91.9
PETN	110.7

*MTT
4/14/10*

Total 1651.7

Average 103.2

Handwritten: 4/14/10

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412051a

Analysis Date: 13-APR-10 16:15

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	43.445	109	
1,3-Dinitrobenzene-d4	500	578.682	116	
2,4,6-Trinitrotoluene	40	41.977	105	
2,4-Dinitrotoluene	40	41.352	103	
2,6-Dinitrotoluene	40	41.013	103	
2,6-Dinitrotoluene-d3	500	540.214	108	
2-Amino-4,6-dinitrotoluene	40	38.681	97	
3,4-Dinitrotoluene	20	22.076	110	
4-Amino-2,6-dinitrotoluene	40	40.59	101	
HMX	40	38.797	97	
Nitrobenzene	40	39.951	100	
PETN	40	48.006	120	
RDX	40	40.505	101	
Tetryl	40	40.745	102	
m-Dinitrobenzene	40	41.507	104	
m-Nitrotoluene	40	38.882	97	
o-Nitrotoluene	40	38.71	97	
p-Nitrotoluene	40	41.261	103	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

Printed: Wed Apr 14 09:18:04 2010, Page 25 of 75

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

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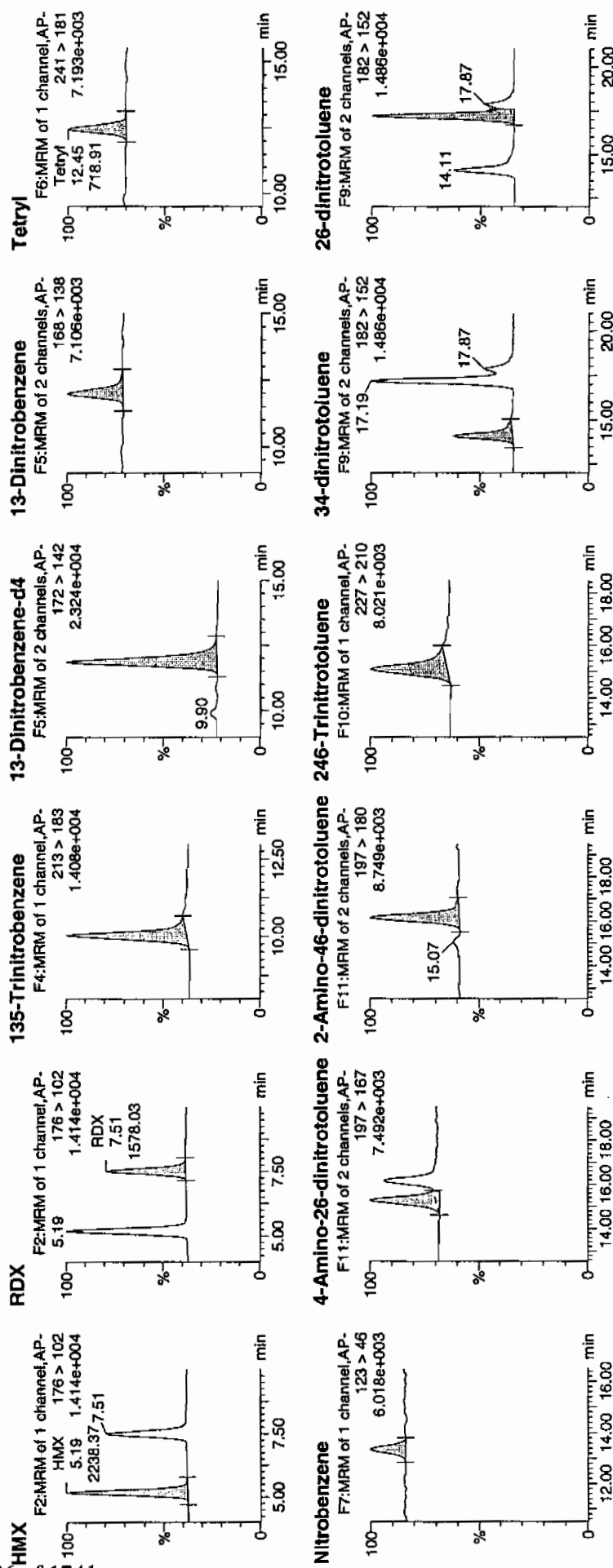
Date: 13-Apr-2010

Time: 16:15:40

ID: WXX100412-08CRI

Vial: 1:1,C

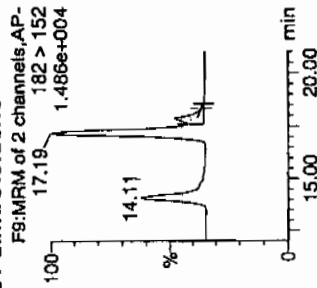
4/14/10



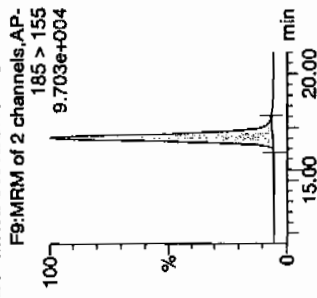
4/14/10

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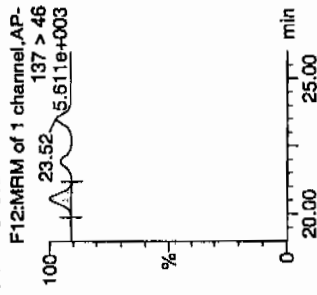
24-dinitrotoluene



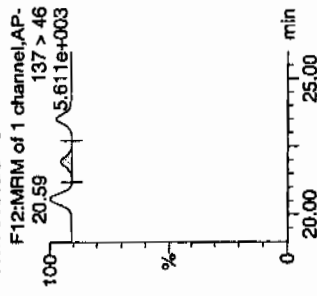
26-dinitrotoluene-d3



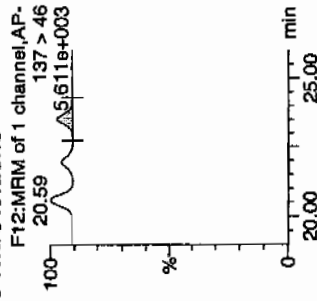
2-Nitrotoluene



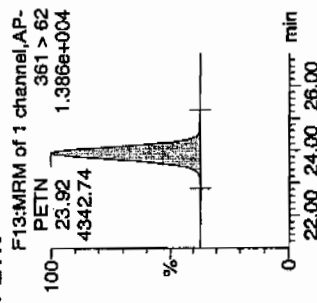
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	Is Area	Abs Resp	Response	Flags	Mod Data	Mod Time	Inj Vol	% Rec	Day	SN
WXX100412-08CRI	HMX	176 > 102	5.19	2238.372	6805.720	2238.372	164.448	bb			38.7971	97.0	-3.0	208.5
WXX100412-08CRI	RDX	176 > 102	7.51	1578.030	6805.720	1578.030	115.934	bb			40.5052	101.3	1.3	135.5
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.03	2556.376	6805.720	2556.376	187.811	bb			43.4448	108.6	8.6	179.0
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6805.720		6805.720	6805.720	bb			578.6819	115.7	15.7	507.4
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	755.409	6805.720	755.409	55.498	bb			41.5073	103.8	3.8	74.5
WXX100412-08CRI	Tetryl	241 > 181	12.45	718.910	6805.720	718.910	52.817	bb			40.7450	101.9	1.9	73.1
WXX100412-08CRI	Nitrobenzene	123 > 46	13.35	341.116	6805.720	341.116	25.061	bb			39.9508	99.9	-0.1	27.5
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.27	1036.367	37796.773	1036.367	13.710	MM	14-Apr-10	09:10:14	40.5898	101.5	1.5	59.1
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.15	1497.691	37796.773	1497.691	19.812	bb			38.6812	96.7	-3.3	67.3
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.09	1380.441	37796.773	1380.441	18.261	bb			41.9770	104.9	4.9	85.1
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.11	1720.770	37796.773	1720.770	22.763	bb			22.0763	110.4	10.4	91.2
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.19	9669.359	37796.773	3669.359	48.541	MM	14-Apr-10	09:11:53	41.0132	102.5	2.5	216.3
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.87	815.884	37796.773	815.884	10.793	MM	14-Apr-10	09:15:28	41.3520	103.4	3.4	43.1
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.04	37796.773		37796.773	37796.773	bb			540.2135	108.0	8.0	1682.3
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.59	253.376	37796.773	253.376	3.352	bb			38.7099	96.8	-3.2	70.2
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.96	129.377	37796.773	129.377	1.711	bb			41.2510	103.2	3.2	35.2
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.52	171.362	37796.773	171.362	2.267	bb			38.8818	97.2	-2.8	48.1
WXX100412-08CRI	PETN	361 > 62	23.92	4342.742	37796.773	4342.742	57.449	bb			48.0061	120.0	20.0	1612.5

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/13/10
 Time of Injection 1615
 Standard Number WXX100412-08CRI
 Data File EXP0412051a

HMX	97.0
RDX	101.3
135-TNB	108.6
13-DNB	103.8
Tetryl	101.9
Nitrobenzene	99.9
4A-26-DNT	101.5
2A-46-DNT	96.7
246-TNT	104.9
34-DNT(surr)	110.4
26-DNT	102.5
24-DNT	103.4
2-NT	96.8
4-NT	103.2
3-NT	97.2
PETN	120.0

Handwritten:
 1007
 4/14/10

Total 1649.1

Average 103.1

Handwritten: 4/14/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412060a

Analysis Date: 13-APR-10 20:41

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	599.334	100	
1,3-Dinitrobenzene-d4	500	499.969	100	
2,4,6-Trinitrotoluene	600	660.453	110	
2,4-Dinitrotoluene	600	684.197	114	
2,6-Dinitrotoluene	600	612.271	102	
2,6-Dinitrotoluene-d3	500	510.451	102	
2-Amino-4,6-dinitrotoluene	600	614.276	102	
3,4-Dinitrotoluene	300	313.494	104	
4-Amino-2,6-dinitrotoluene	600	595.541	99	
HMX	600	611.301	102	
Nitrobenzene	600	608.894	101	
PETN	600	646.401	108	
RDX	600	735.804	123	*
Tetryl	600	668.888	111	
m-Dinitrobenzene	600	610.208	102	
m-Nitrotoluene	600	514.808	86	
o-Nitrotoluene	600	527.178	88	
p-Nitrotoluene	600	571.151	95	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 43 of 75

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

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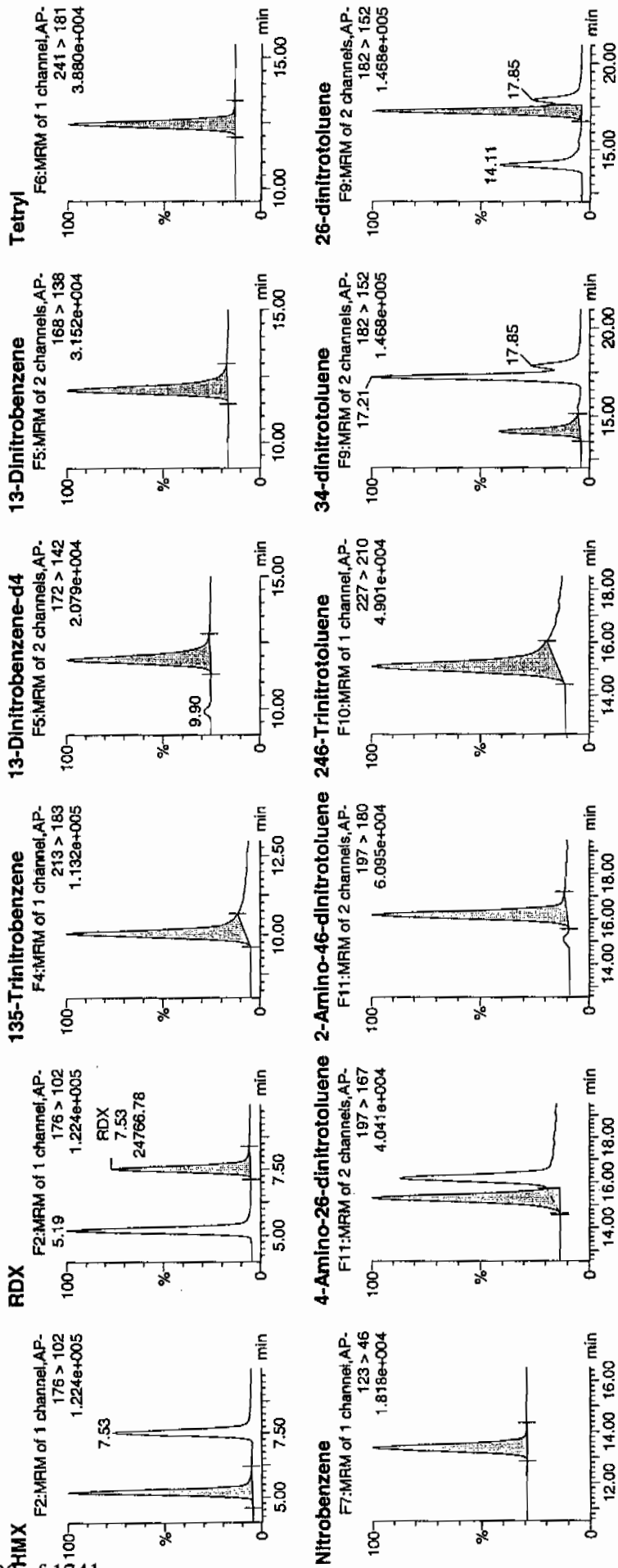
Date: 13-Apr-2010

Time: 20:41:14

ID: WXX100412-07CCV

Vial: 1:1,B

WAT
4/14/10



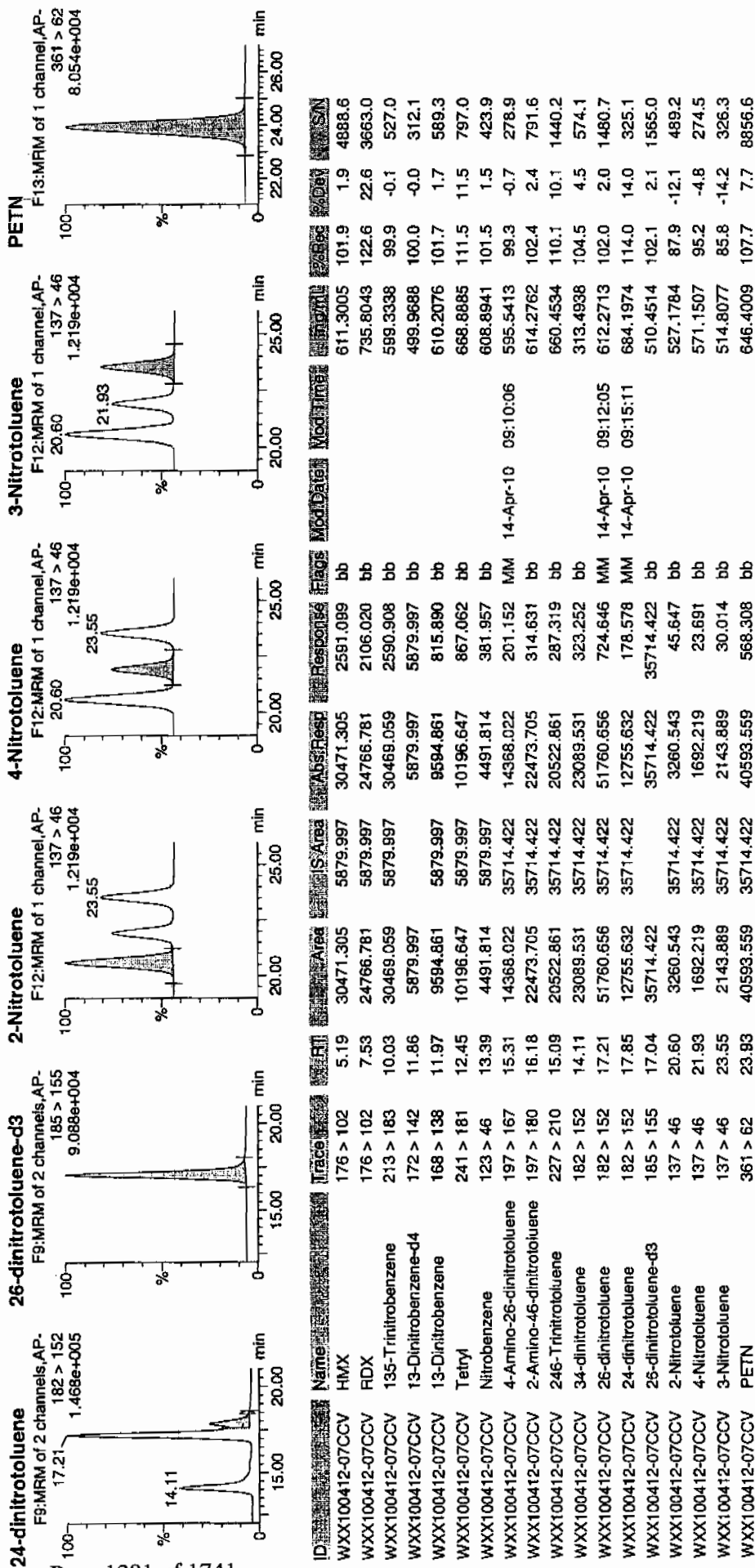
WAT
4/14/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 44 of 75

Dataset: C:\MASSLYNX\New_Exp\PRO1041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/13/10
 Time of Injection: 2041
 Standard Number: WXX100412-07CCV
 Data File: EXP0412060a

HMX	101.9
RDX	122.6
135-TNB	99.9
13-DNB	101.7
Tetryl	111.5
Nitrobenzene	101.5
4A-26-DNT	99.3
2A-46-DNT	102.4
246-TNT	110.1
34-DNT(surr)	104.5
26-DNT	102.0
24-DNT	114.0
2-NT	87.9
4-NT	95.2
3-NT	85.8
PETN	107.7

*not
9/14/10*

Total 1648.0

Average 103.0

ANAL 04/14/10

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412062a

Analysis Date: 13-APR-10 21:40

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.068	110	
1,3-Dinitrobenzene-d4	500	557.026	111	
2,4,6-Trinitrotoluene	40	47.263	118	
2,4-Dinitrotoluene	40	43.24	108	
2,6-Dinitrotoluene	40	42.432	106	
2,6-Dinitrotoluene-d3	500	543.492	109	
2-Amino-4,6-dinitrotoluene	40	41.373	103	
3,4-Dinitrotoluene	20	20.458	102	
4-Amino-2,6-dinitrotoluene	40	42.964	107	
HMX	40	45.559	114	
Nitrobenzene	40	43.255	108	
PETN	40	44.881	112	
RDX	40	44.011	110	
Tetryl	40	38.121	95	
m-Dinitrobenzene	40	42.827	107	
m-Nitrotoluene	40	31.848	80	
o-Nitrotoluene	40	44.099	110	
p-Nitrotoluene	40	40.569	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%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 47 of 75

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

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Date: 13-Apr-2010

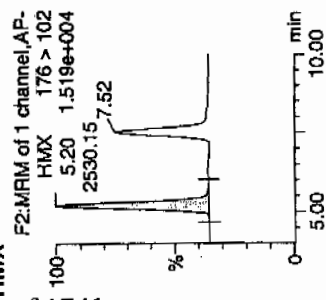
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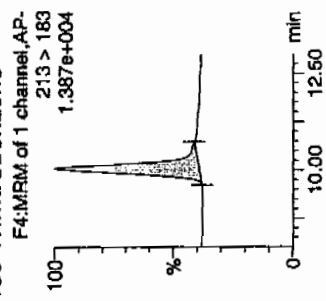
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1384 of 1741

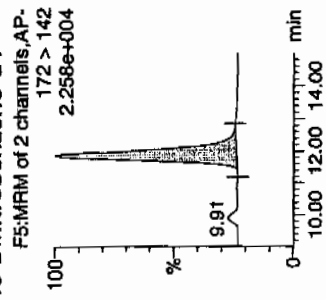
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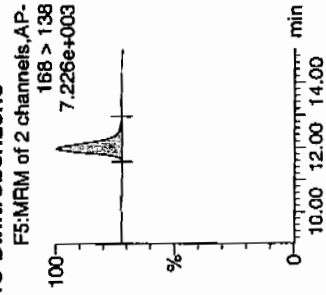
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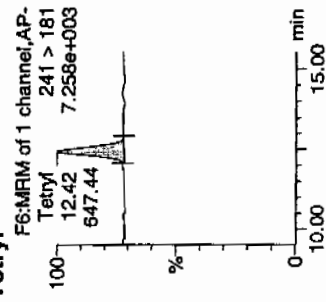
13-Dinitrobenzene-d4



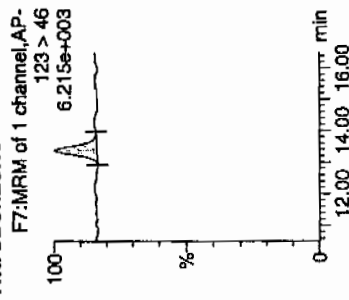
13-Dinitrobenzene



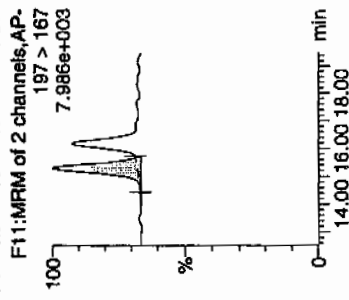
Tetryl



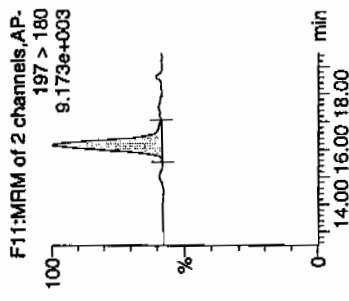
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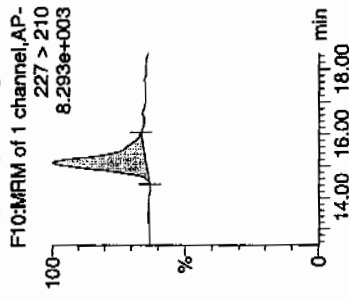
4-Amino-26-dinitrotoluene



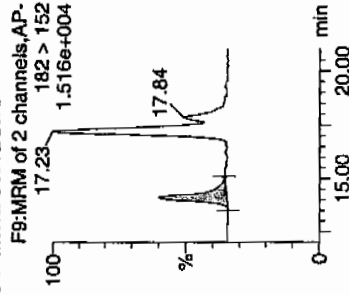
2-Amino-46-dinitrotoluene



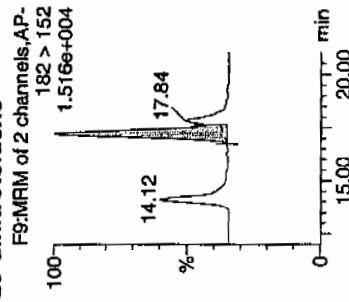
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



1384 of 1741

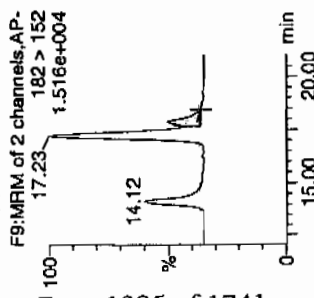
Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

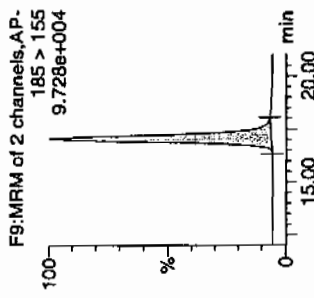
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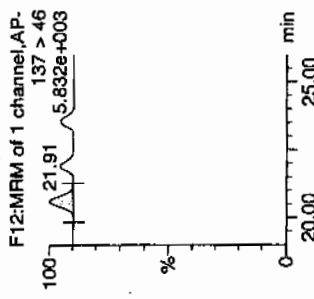
24-dinitrotoluene



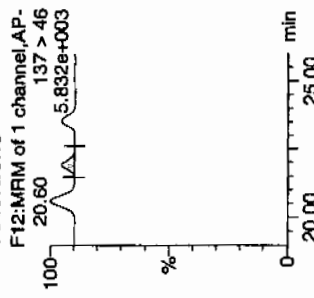
26-dinitrotoluene-d3



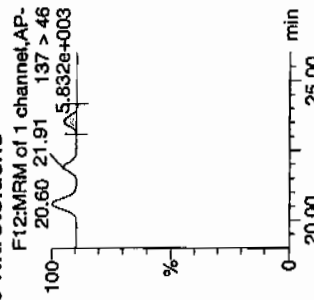
2-Nitrotoluene



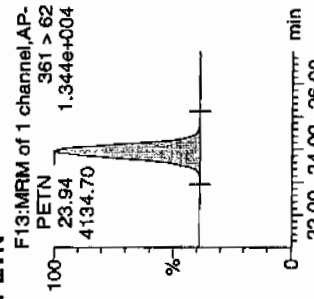
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc/mL	%Rec	StdDev	SN
WXX100412-08CRI	HMX	176 > 102	5.20	2530.148	6551.026	2530.148	193.111	bb	14-Apr-10	09:09:52	45.5593	113.9	13.9	260.0
WXX100412-08CRI	RDX	176 > 102	7.52	1650.456	6551.026	1650.456	125.969	bb			44.0113	110.0	10.0	158.1
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2495.999	6551.026	2495.999	190.504	bb			44.0679	110.2	10.2	102.3
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6551.026	6551.026	6551.026	6551.026	bb			557.0256	111.4	11.4	567.3
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	750.260	6551.026	750.260	57.263	bb			42.8271	107.1	7.1	65.8
WXX100412-08CRI	Tetryl	241 > 181	12.42	647.438	6551.026	647.438	49.415	db			38.1208	95.3	4.7	95.8
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	355.510	6551.026	355.510	27.134	bb			43.2553	108.1	8.1	41.0
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.28	1103.634	38026.156	1103.634	14.512	MM	14-Apr-10	09:09:52	42.9637	107.4	7.4	52.5
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1611.644	38026.156	1611.644	21.191	bb			41.3732	103.4	3.4	158.1
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1563.702	38026.156	1563.702	20.561	bb			47.2628	118.2	18.2	189.3
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.12	1604.344	38026.156	1604.344	21.095	bb			20.4584	102.3	2.3	75.6
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.23	3819.371	38026.156	3819.371	50.220	MM	14-Apr-10	09:12:11	42.4324	106.1	6.1	195.8
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.84	858.314	38026.156	858.314	11.286	MM	14-Apr-10	09:14:59	43.2401	108.1	8.1	43.5
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	38026.156	38026.156	38026.156	38026.156	bb			543.4920	108.7	8.7	2125.4
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.60	290.400	38026.156	290.400	3.818	bb			44.0987	110.2	10.2	85.6
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.91	127.979	38026.156	127.979	1.883	bb			40.5690	101.4	1.4	45.5
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.55	141.213	38026.156	141.213	1.857	bb			31.8477	79.6	-20.4	45.1
WXX100412-08CRI	PETN	361 > 62	23.94	4134.703	38026.156	4134.703	54.367	bb			44.8806	112.2	12.2	1420.3

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/13/10
 Time of Injection 2140
 Standard Number WXX100412-08CRI
 Data File EXP0412062a

HMX	113.9
RDX	110.0
135-TNB	100.2
13-DNB	107.1
Tetryl	95.3
Nitrobenzene	108.1
4A-26-DNT	107.4
2A-46-DNT	103.4
246-TNT	118.2
34-DNT(surr)	102.3
26-DNT	106.1
24-DNT	108.1
2-NT	110.2
4-NT	101.4
3-NT	79.6
PETN	112.2

*MAF
4/14/10*

Total 1683.5

Average 105.2

Have 04/14/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412073a

Analysis Date: 14-APR-10 03:04

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	472.089	79	*
1,3-Dinitrobenzene-d4	500	626.494	125	*
2,4,6-Trinitrotoluene	600	708.507	118	
2,4-Dinitrotoluene	600	663.973	111	
2,6-Dinitrotoluene	600	597.091	100	
2,6-Dinitrotoluene-d3	500	580.114	116	
2-Amino-4,6-dinitrotoluene	600	639.825	107	
3,4-Dinitrotoluene	300	311.029	104	
4-Amino-2,6-dinitrotoluene	600	618.565	103	
HMX	600	509.641	85	
Nitrobenzene	600	538.682	90	
PETN	600	487.21	81	
RDX	600	549.332	92	
Tetryl	600	547.985	91	
m-Dinitrobenzene	600	597.924	100	
m-Nitrotoluene	600	459.65	77	*
o-Nitrotoluene	600	486.57	81	
p-Nitrotoluene	600	543.675	91	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 69 of 75

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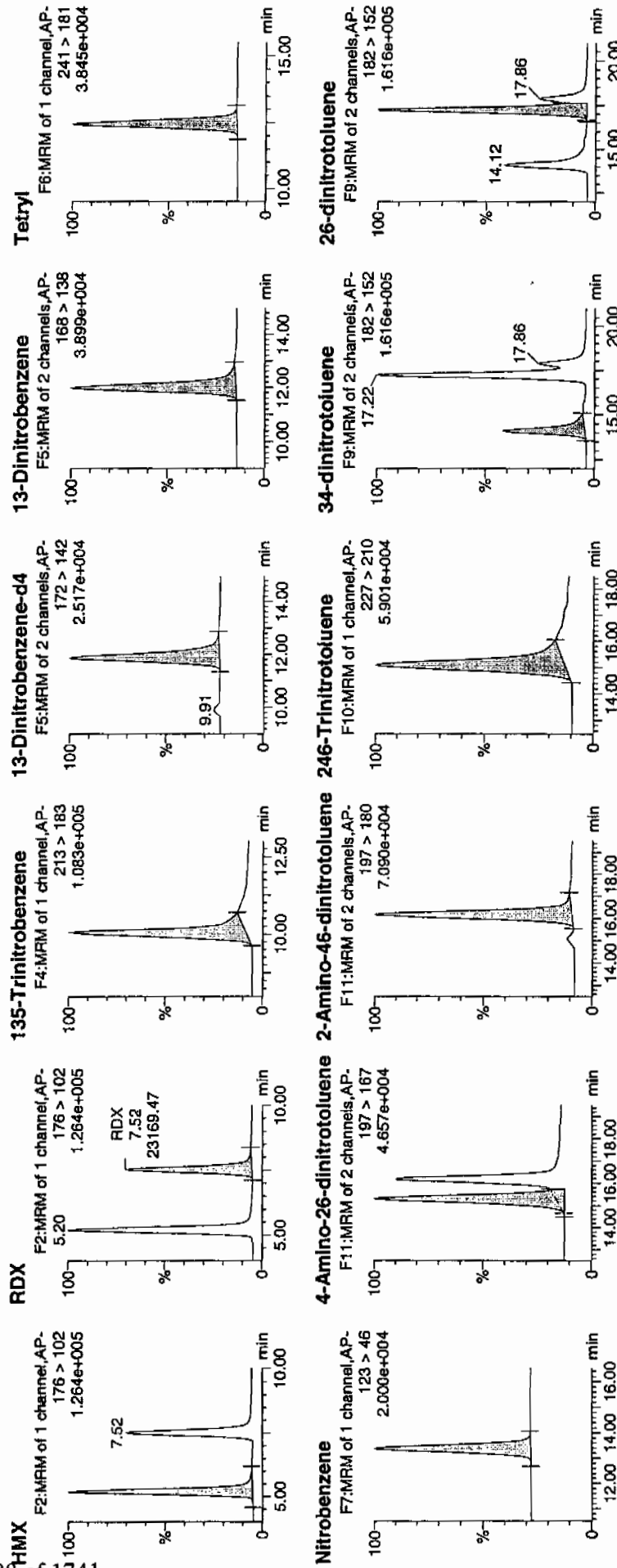
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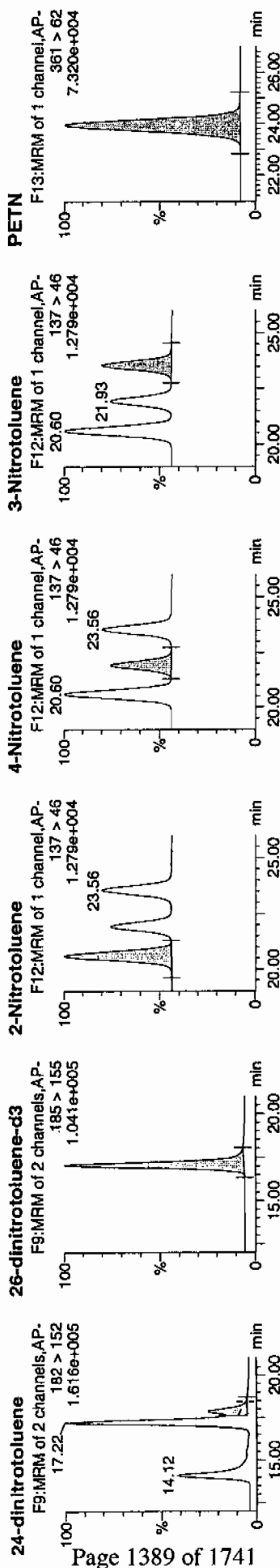
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138
1741



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Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



ID	Name	Trace	RT	Area	Std Area	Area Ratio	Response	Flag	Mod Date	Mod Time	Mod User	SA
WXX100412-07CCV	HMX	176 > 102	5.20	31832.770	7368.023	31832.770	2160.198	bb	509.6409	84.9	-15.1	1916.2
WXX100412-07CCV	RDX	176 > 102	7.52	23169.469	7368.023	23169.469	1572.299	bb	549.3321	91.6	-8.4	1306.0
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	30073.756	7368.023	30073.756	2040.829	bb	472.0886	78.7	-21.3	986.1
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	7368.023		7368.023	7368.023	bb	626.4938	125.3	25.3	1409.6
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	11780.970	7368.023	11780.970	799.466	bb	597.9242	99.7	-0.3	1288.9
WXX100412-07CCV	Tetryl	241 > 181	12.45	10467.578	7368.023	10467.578	710.338	bb	547.9850	91.3	-8.7	772.4
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	4979.505	7368.023	4979.505	337.913	bb	538.6818	89.8	-10.2	292.9
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.32	16960.145	40588.496	16960.145	208.928	MM	618.5647	103.1	3.1	633.7
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	26603.059	40588.496	26603.059	327.717	bb	639.8251	106.6	6.6	986.9
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	25020.701	40588.496	25020.701	308.224	bb	708.5074	118.1	18.1	796.5
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.12	26034.324	40588.496	26034.324	320.711	bb	311.0290	103.7	3.7	890.6
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.22	57366.180	40588.496	57366.180	706.680	MM	597.0912	99.5	-0.5	2275.1
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.86	14067.942	40588.496	14067.942	173.300	MM	663.9733	110.7	10.7	492.2
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	40588.496		40588.496	40588.496	bb	580.1145	116.0	16.0	2359.9
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.60	3420.089	40588.496	3420.089	42.131	bb	486.5704	81.1	-18.9	455.8
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.93	1830.648	40588.496	1830.648	22.551	bb	543.6754	90.6	-9.4	255.7
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.56	2175.422	40588.496	2175.422	26.799	bb	459.6496	76.6	-23.4	292.3
WXX100412-07CCV	PETN	361 > 62	23.94	36350.066	40588.496	36350.066	447.788	bb	487.2104	81.2	-18.8	8314.8

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/14/10
 Time of Injection: 0304
 Standard Number: WXX100412-07CCV
 Data File: EXP0412073a

HMX	84.9
RDX	91.6
135-TNB	78.7
13-DNB	99.7
Tetryl	91.3
Nitrobenzene	89.8
4A-26-DNT	103.1
2A-46-DNT	106.6
246-TNT	118.1
34-DNT(surr)	103.7
26-DNT	99.5
24-DNT	110.7
2-NT	81.1
4-NT	90.6
3-NT	76.6
PETN	81.2

WXX
4/14/10

Total 1507.2

Average 94.2

WXX 04/14/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412075a

Analysis Date: 14-APR-10 04:03

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	45.32	113	
1,3-Dinitrobenzene-d4	500	496.282	99	
2,4,6-Trinitrotoluene	40	44.024	110	
2,4-Dinitrotoluene	40	41.479	104	
2,6-Dinitrotoluene	40	42.183	105	
2,6-Dinitrotoluene-d3	500	507.877	102	
2-Amino-4,6-dinitrotoluene	40	34.458	86	
3,4-Dinitrotoluene	20	20.138	101	
4-Amino-2,6-dinitrotoluene	40	39.725	99	
HMX	40	43.75	109	
Nitrobenzene	40	38.532	96	
PETN	40	44.475	111	
RDX	40	45.796	114	
Tetryl	40	45.012	113	
m-Dinitrobenzene	40	43.704	109	
m-Nitrotoluene	40	41.256	103	
o-Nitrotoluene	40	41.975	105	
p-Nitrotoluene	40	32.405	81	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

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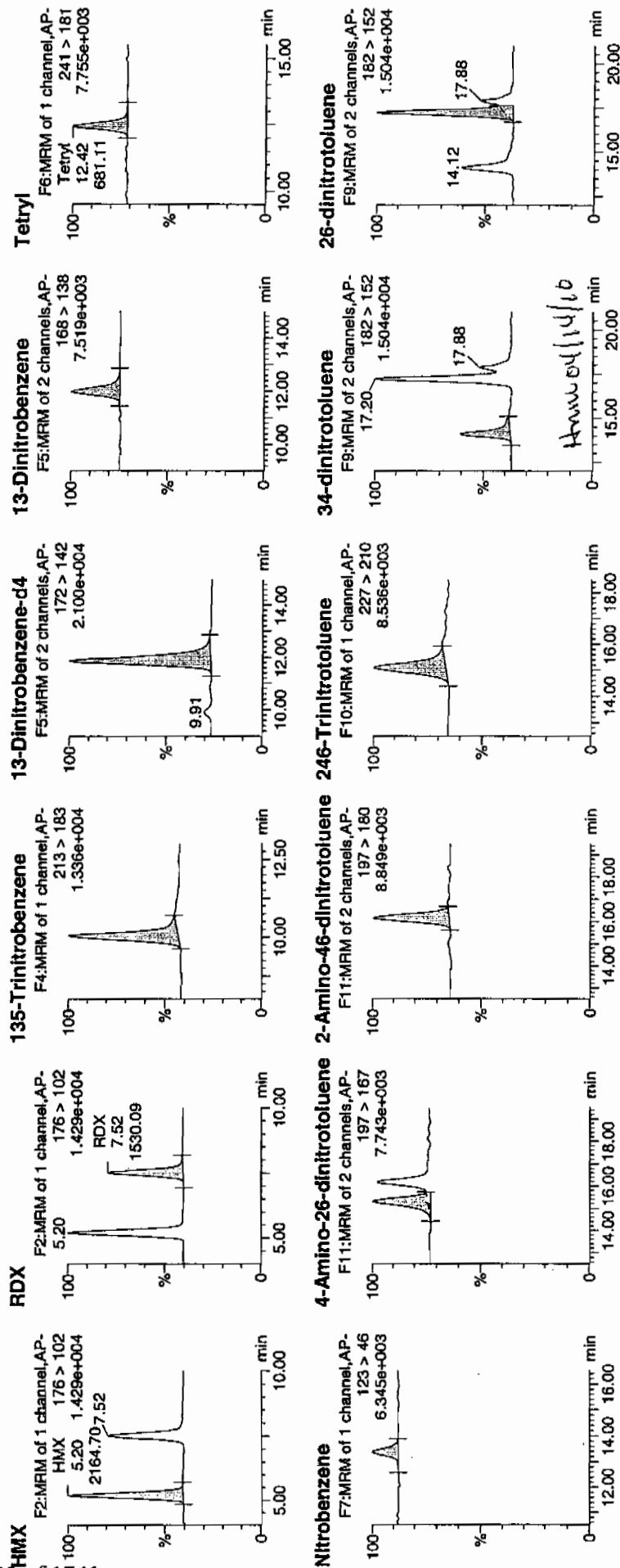
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ID: WXX100412-08CRI

Vial: 1:1,C

4/14/10
M.A.P.



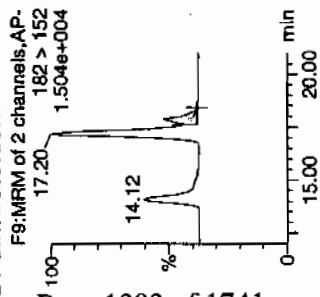
Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

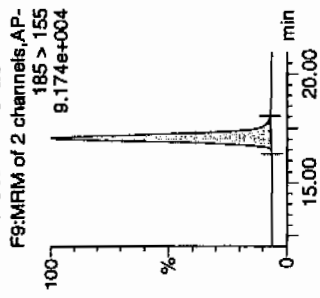
Printed: Wed Apr 14 09:18:04 2010, Page 74 of 75

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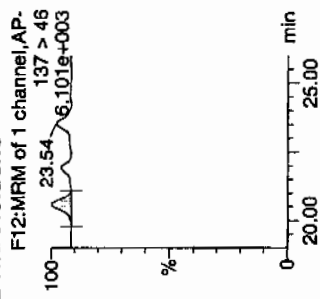
24-dinitrotoluene



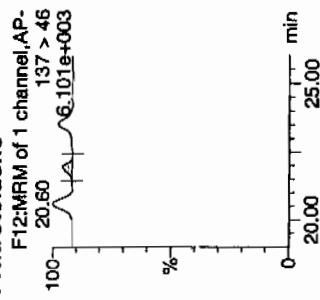
26-dinitrotoluene-d3



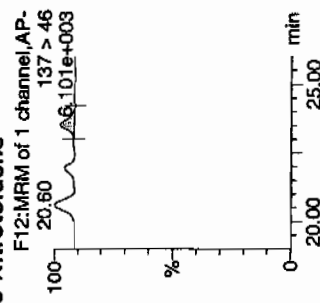
2-Nitrotoluene



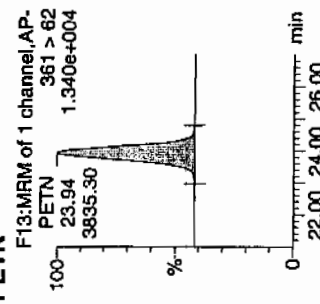
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	SA Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int Time	Area	%Dev	SN
WXX100412-08CRI	HMX	176 > 102	5.20	2164.698	5836.638	2164.698	185.440	bb				43.7497	109.4	9.4
WXX100412-08CRI	RD	176 > 102	7.52	1530.086	5836.638	1530.086	131.076	bb				45.7955	114.5	146.7
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2287.016	5836.638	2287.016	195.919	bb				45.3204	113.3	203.2
WXX100412-08CRI	13-Dinitrobenzene	172 > 142	11.87	5836.638	5836.638	5836.638	5836.638	bb				496.2820	99.3	-0.7
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	5836.638	5836.638	5836.638	5836.638	bb				43.7035	109.3	9.3
WXX100412-08CRI	Tetryl	241 > 181	12.42	681.107	5836.638	681.107	58.348	bb				45.0118	112.5	12.5
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	282.153	5836.638	282.153	24.171	bb				38.5318	96.3	-3.7
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.32	953.577	35534.277	953.577	13.418	MM	14-Apr-10	09:09:02		39.7253	99.3	-0.7
WXX100412-08CRI	2-Amino-48-dinitrotoluene	197 > 180	16.16	1254.325	35534.277	1254.325	17.650	bb				34.4584	86.1	-13.9
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1361.084	35534.277	1361.084	19.152	bb				44.0236	110.1	10.1
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.12	1475.733	35534.277	1475.733	20.765	bb				20.1381	100.7	0.7
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.20	3548.120	35534.277	3548.120	49.925	MM	14-Apr-10	09:13:15		42.1831	105.5	5.5
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.88	769.393	35534.277	769.393	10.826	MM	14-Apr-10	09:13:26		41.4786	103.7	3.7
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	35534.277	35534.277	35534.277	35534.277	bb				507.8766	101.6	1.6
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.60	258.301	35534.277	258.301	3.635	bb				41.9749	104.9	4.9
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.97	95.525	35534.277	95.525	1.344	bb				32.4046	81.0	-19.0
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.54	170.943	35534.277	170.943	2.405	bb				41.2563	103.1	3.1
WXX100412-08CRI	PETN	361 > 62	23.94	3835.305	35534.277	3835.305	53.966	bb				44.4749	111.2	11.2

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/14/10
 Time of Injection 0403
 Standard Number WXX100412-08CRI
 Data File EXP0412075a

HMX	109.4
RDX	114.5
135-TNB	113.3
13-DNB	109.3
Tetryl	112.5
Nitrobenzene	96.3
4A-26-DNT	99.3
2A-46-DNT	86.1
246-TNT	110.1
34-DNT(surr)	100.7
26-DNT	105.5
24-DNT	103.7
2-NT	104.9
4-NT	81.0
3-NT	103.1
PETN	111.2

*MTT
4/14/10*

Total 1660.9

Average 103.8

Time 04/14/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412086a

Analysis Date: 14-APR-10 09:28

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	640.11	107	
1,3-Dinitrobenzene-d4	500	503.847	101	
2,4,6-Trinitrotoluene	600	719.661	120	
2,4-Dinitrotoluene	600	682.456	114	
2,6-Dinitrotoluene	600	634.981	106	
2,6-Dinitrotoluene-d3	500	526.626	105	
2-Amino-4,6-dinitrotoluene	600	583.91	97	
3,4-Dinitrotoluene	300	338.999	113	
4-Amino-2,6-dinitrotoluene	600	625.449	104	
HMX	600	728.534	121	*
Nitrobenzene	600	648.848	108	
PETN	600	598.437	100	
RDX	600	758.439	126	*
Tetryl	600	659.961	110	
m-Dinitrobenzene	600	630.18	105	
m-Nitrotoluene	600	494.168	82	
o-Nitrotoluene	600	509.293	85	
p-Nitrotoluene	600	568.664	95	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412086a

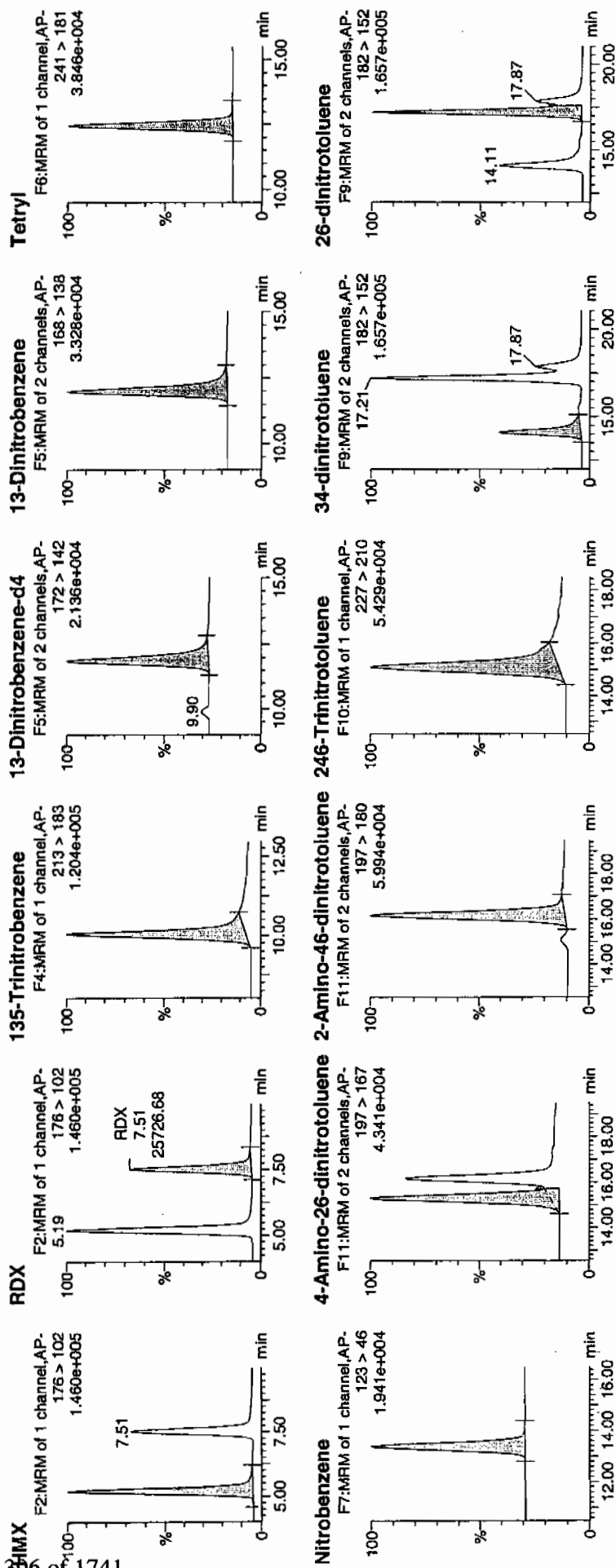
Date: 14-Apr-2010

Time: 09:28:18

ID: WXX100412-07CCV

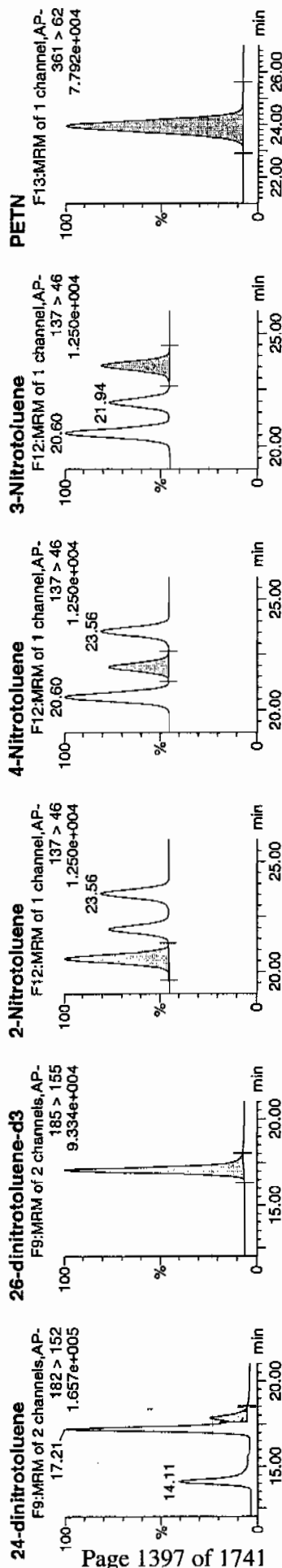
Vial: 1:1, B

MT
4/15/10



Amw
84/15/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Day	SN
WXX100412-07CCV	HMV	176 > 102	5.19	36596.680	5925.609	36596.680	3088.010	bb	728.5335	121.4	21.4	5141.8
WXX100412-07CCV	RDV	176 > 102	7.51	25726.684	5925.609	25726.684	2170.805	bb	758.4390	126.4	26.4	3364.9
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	32794.504	5925.609	32794.504	2767.184	bb	640.1104	106.7	6.7	351.3
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5925.609		5925.609	5925.609	bb	503.8471	100.8	0.8	575.0
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	9985.775	5925.609	9985.775	842.595	bb	630.1803	105.0	5.0	1402.5
WXX100412-07CCV	Tetyl	241 > 181	12.45	10138.589	5925.609	10138.589	855.489	bb	659.9605	110.0	10.0	994.9
WXX100412-07CCV	Nitrobenzene	123 > 46	13.39	4823.688	5925.609	4823.688	407.020	bb	648.8485	108.1	8.1	584.8
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.31	15567.705	36846.086	15567.705	211.253	MM	625.4488	104.2	4.2	264.7
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.18	22039.658	36846.086	22039.658	299.077	bb	583.9103	97.3	-2.7	285.8
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.09	23071.260	36846.086	23071.260	313.076	bb	719.6608	119.9	19.9	213.5
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.11	25759.158	36846.086	25759.158	349.551	bb	338.9985	113.0	13.0	733.1
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.21	55381.418	36846.086	55381.418	751.524	MM	634.9806	105.8	5.8	1901.5
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.87	13126.327	36846.086	13126.327	178.124	MM	682.4564	113.7	13.7	382.3
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.06	36846.086		36846.086	36846.086	bb	526.6258	105.3	5.3	2600.7
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.60	3249.737	36846.086	3249.737	44.099	bb	509.2935	84.9	-15.1	1231.5
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.94	1738.239	36846.086	1738.239	23.588	bb	568.6642	94.8	-5.2	705.7
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.56	2123.145	36846.086	2123.145	28.811	bb	494.1680	82.4	-17.6	802.7
WXX100412-07CCV	PETN	361 > 62	23.94	39290.367	36846.086	39290.367	533.169	bb	598.4368	99.7	-0.3	10176.7

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/14/10
 Time of Injection: 0928
 Standard Number: WXX100412-07CCV
 Data File: EXP0412086a

HMX	121.4
RDX	126.4
135-TNB	106.7
13-DNB	105.0
Tetryl	110.0
Nitrobenzene	108.1
4A-26-DNT	104.2
2A-46-DNT	97.3
246-TNT	119.9
34-DNT(surr)	113.0
26-DNT	105.8
24-DNT	113.7
2-NT	84.9
4-NT	94.8
3-NT	82.4
PETN	99.7

4/15/10

Total 1693.3

4/15/10

Average 105.8

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412088a

Analysis Date: 14-APR-10 10:27

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	45.309	113	
1,3-Dinitrobenzene-d4	500	561.881	112	
2,4,6-Trinitrotoluene	40	39.504	99	
2,4-Dinitrotoluene	40	44.534	111	
2,6-Dinitrotoluene	40	41.071	103	
2,6-Dinitrotoluene-d3	500	564.12	113	
2-Amino-4,6-dinitrotoluene	40	40.361	101	
3,4-Dinitrotoluene	20	19.605	98	
4-Amino-2,6-dinitrotoluene	40	41.914	105	
HMX	40	44.962	112	
Nitrobenzene	40	41.366	103	
PETN	40	43.945	110	
RDX	40	46.716	117	
Tetryl	40	42.195	105	
m-Dinitrobenzene	40	43.864	110	
m-Nitrotoluene	40	39.461	99	
o-Nitrotoluene	40	36.318	91	
p-Nitrotoluene	40	34.986	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%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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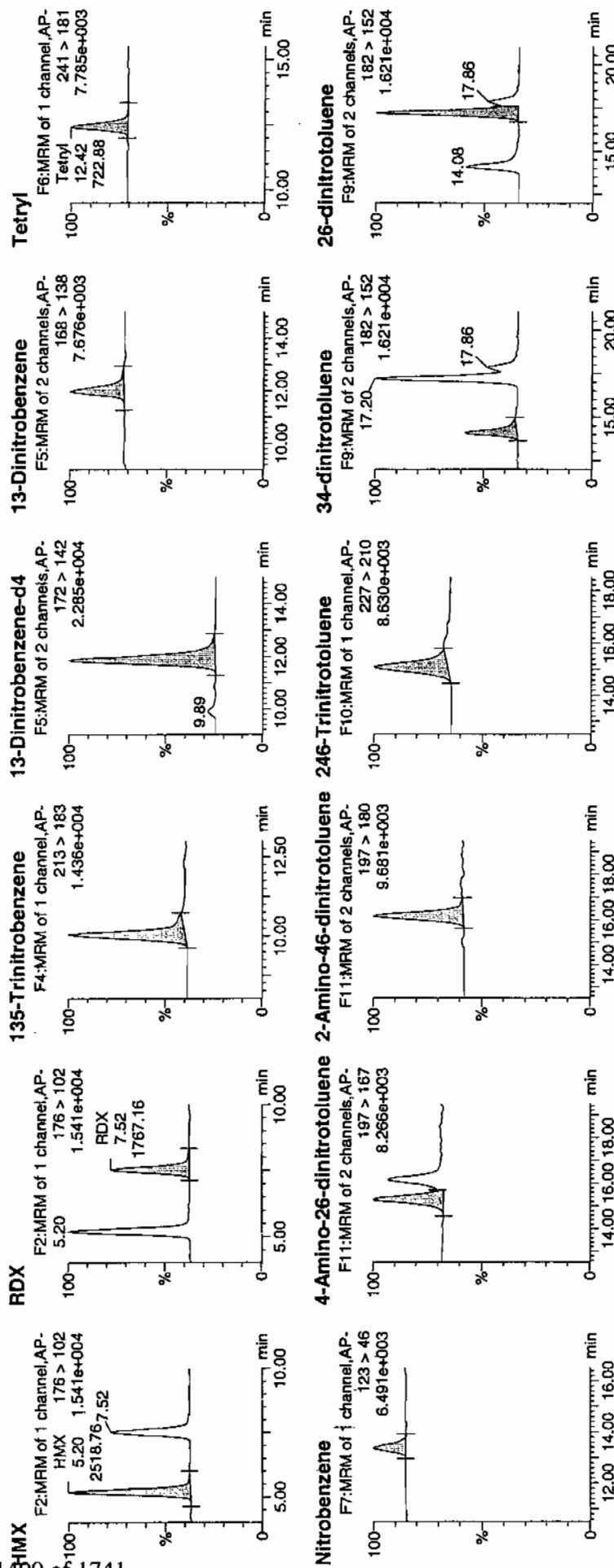
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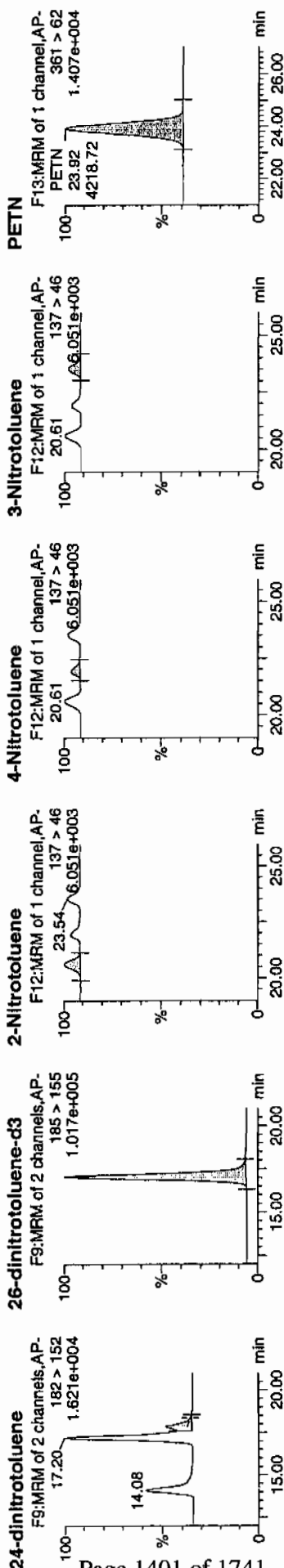
ID: WXX100412-08CRI

Sample: 1:1,C

WXX
4/15/10



done
4/15/10



ID	Name	Trace	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int	Rec	Exp	SN	
WXX100412-08CRI	HMx	176 > 102	5.20	2518.764	6608.135	2518.764	190.581	bb		44.9624	112.4	12.4	168.1	
WXX100412-08CRI	RDX	176 > 102	7.52	1767.162	6608.135	1767.162	133.711	bb		46.7162	116.8	16.8	107.7	
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2588.661	6608.135	2588.661	195.869	bb		45.3089	113.3	13.3	259.5	
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6608.135	6608.135	6608.135	6608.135	bb		561.8815	112.4	12.4	525.5	
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	775.124	6608.135	775.124	58.649	bb		43.8640	109.7	9.7	102.3	
WXX100412-08CRI	Tetryl	241 > 181	12.42	722.880	6608.135	722.880	54.696	bb		42.1950	105.5	5.5	76.9	
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	342.945	6608.135	342.945	25.949	bb		41.3659	103.4	3.4	36.3	
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.29	1117.541	39469.445	1117.541	14.157	MM	15-Apr-10	14:32:49	41.9142	104.8	4.8	44.4
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1631.894	39469.445	1631.894	20.673	bb		40.3612	100.9	0.9	143.7	
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1356.600	39469.445	1356.600	17.185	bb		39.5038	98.8	-1.2	106.5	
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.08	1595.757	39469.445	1595.757	20.215	bb		19.6048	98.0	-2.0	27.8	
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.20	3837.149	39469.445	3837.149	48.609	MM	15-Apr-10	14:39:01	41.0710	102.7	2.7	77.6
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.86	917.556	39469.445	917.556	11.624	MM	15-Apr-10	14:46:47	44.5343	111.3	11.3	16.1
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	39469.445	39469.445	39469.445	39469.445	bb		564.1203	112.8	12.8	3837.3	
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.61	248.237	39469.445	248.237	3.145	bb		36.3176	90.8	-9.2	34.5	
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.93	114.557	39469.445	114.557	1.451	bb		34.9863	87.5	-12.5	18.2	
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.54	181.611	39469.445	181.611	2.301	bb		39.4609	98.7	-1.3	25.6	
WXX100412-08CRI	PETN	361 > 62	23.92	4218.715	39469.445	4218.715	53.443	bb		43.9446	109.9	9.9	1434.9	

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/14/10
 Time of Injection 1027
 Standard Number WXX100412-08CRI
 Data File EXP0412088a

HMX	112.4
RDX	116.8
135-TNB	113.3
13-DNB	109.7
Tetryl	105.5
Nitrobenzene	103.4
4A-26-DNT	104.8
2A-46-DNT	100.9
246-TNT	98.8
34-DNT(surr)	98.0
26-DNT	102.7
24-DNT	111.3
2-NT	90.8
4-NT	87.5
3-NT	98.7
PETN	109.9

1447
4/15/10

Total 1664.5

Average 104.0

1447 4/15/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412099a

Analysis Date: 14-APR-10 15:51

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	587.126	98	
1,3-Dinitrobenzene-d4	500	491.595	98	
2,4,6-Trinitrotoluene	600	674.619	112	
2,4-Dinitrotoluene	600	626.903	104	
2,6-Dinitrotoluene	600	553.103	92	
2,6-Dinitrotoluene-d3	500	536.906	107	
2-Amino-4,6-dinitrotoluene	600	667.633	111	
3,4-Dinitrotoluene	300	312.147	104	
4-Amino-2,6-dinitrotoluene	600	540.22	90	
HMX	600	594.344	99	
Nitrobenzene	600	585.337	98	
PETN	600	591.137	99	
RDX	600	696.633	116	
Tetryl	600	580.157	97	
m-Dinitrobenzene	600	589.943	98	
m-Nitrotoluene	600	455.366	76	*
o-Nitrotoluene	600	473.586	79	*
p-Nitrotoluene	600	537.354	90	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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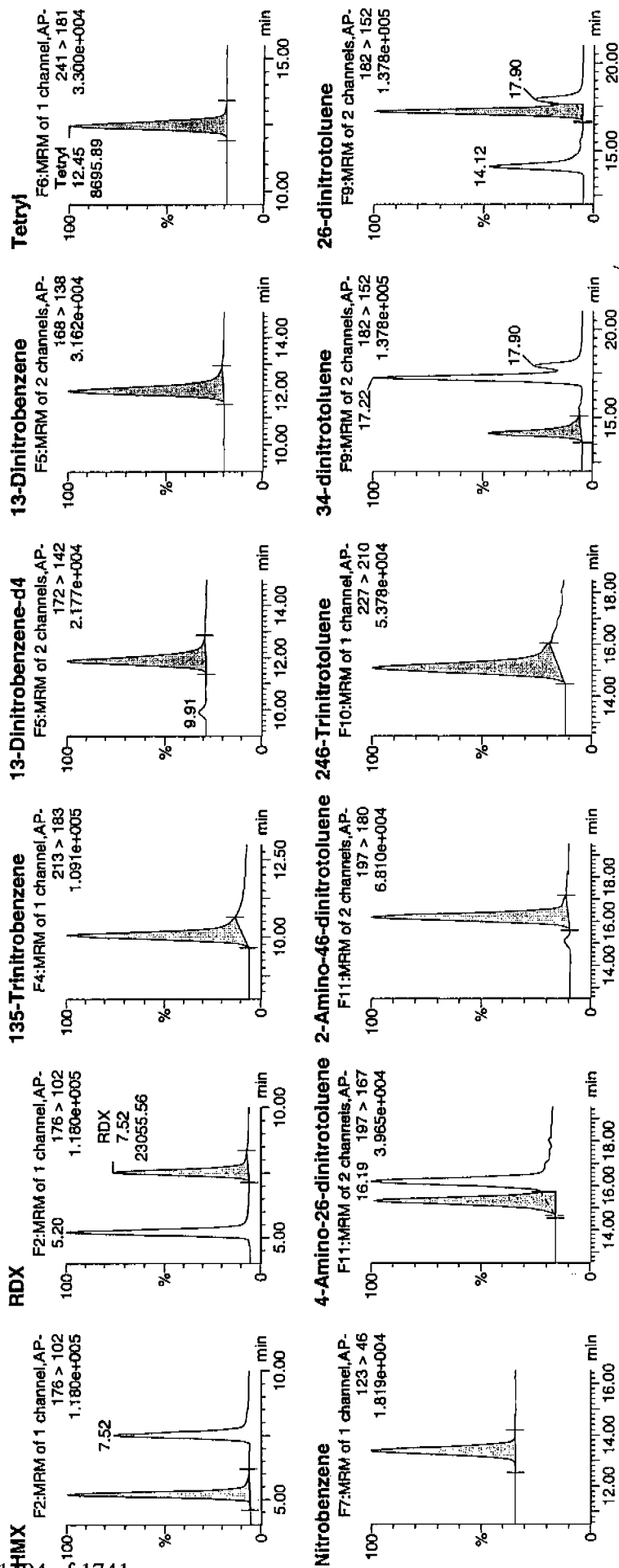
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Time: 15:51:48

ID: WXX100412-07CCV

Vial: 1:1,B

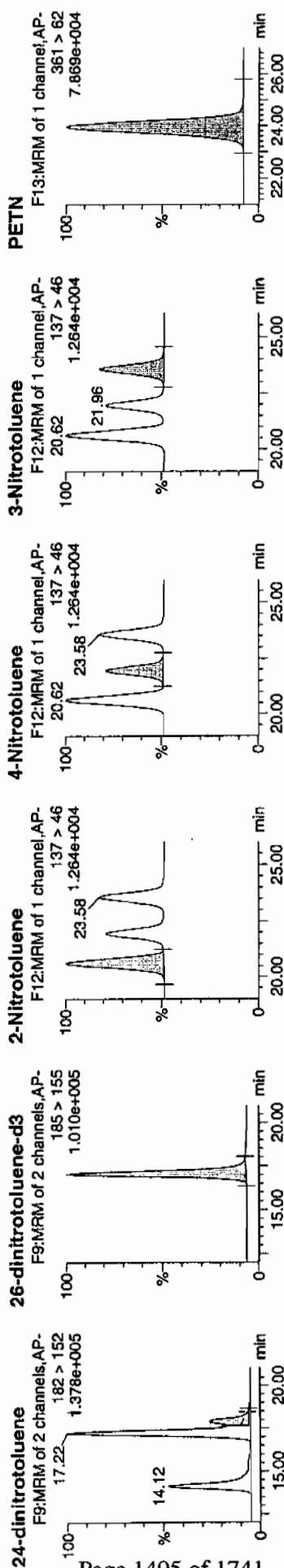
WXX
4/15/10



Handwritten signature/initials.

Dataset: C:\MASSLYN\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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Name	Trace	RT	S Area	S Area	Abs Resp	Response	Flags	ModTime	In/Out	%Rec	Prob	ASN
HMx	176 > 102	5.20	29129.906	5781.517	29129.906	2519.227	bb		594.3443	99.1	-0.9	3427.6
RDX	176 > 102	7.52	23055.561	5781.517	23055.561	1993.902	bb		696.6325	116.1	16.1	2523.6
135-Trinitrobenzene	213 > 183	10.05	29348.527	5781.517	29348.527	2538.134	bb		587.1260	97.9	-2.1	1074.2
13-Dinitrobenzene-d4	172 > 142	11.87	5781.517		5781.517		bb		491.5952	98.3	-1.7	444.6
13-Dinitrobenzene	168 > 138	12.00	9120.854	5781.517	9120.854	788.794	bb		589.9426	98.3	-1.7	565.8
Tetryl	241 > 181	12.45	8695.887	5781.517	8695.887	752.042	bb		580.1570	96.7	-3.3	395.8
Nitrobenzene	123 > 46	13.41	4245.711	5781.517	4245.711	367.180	bb		585.3966	97.6	-2.4	461.0
4-Amino-26-dinitrotoluene	197 > 167	15.32	13708.783	37565.328	13708.783	182.466	MM	15-Apr-10 14:33:18	540.2195	90.0	-10.0	331.8
2-Amino-46-dinitrotoluene	197 > 180	16.19	25691.676	37565.328	25691.676	341.960	bb		667.6332	111.3	11.3	921.1
246-Trinitrotoluene	227 > 210	15.10	22049.445	37565.328	22049.445	293.481	bb		674.6187	112.4	12.4	708.4
34-dinitrotoluene	182 > 152	14.12	24181.838	37565.328	24181.838	321.864	bb		312.1473	104.0	4.0	291.1
26-dinitrotoluene	182 > 152	17.22	49181.945	37565.328	49181.945	654.619	MM	15-Apr-10 14:39:26	553.1033	92.2	-7.8	650.3
24-dinitrotoluene	182 > 152	17.90	12293.182	37565.328	12293.182	163.624	MM	15-Apr-10 14:46:34	626.9027	104.5	4.5	142.2
26-dinitrotoluene-d3	185 > 155	17.05	37565.328		37565.328		bb		536.9056	107.4	7.4	2208.7
2-Nitrotoluene	137 > 46	20.62	3080.883	37565.328	3080.883	41.007	bb		473.5865	78.9	-21.1	632.2
4-Nitrotoluene	137 > 46	21.96	1674.595	37565.328	1674.595	22.289	bb		537.3538	89.6	-10.4	366.5
3-Nitrotoluene	137 > 46	23.58	1994.627	37565.328	1994.627	26.549	bb		455.3662	75.9	-24.1	410.8
PETN	361 > 62	23.95	39648.863	37565.328	39648.863	527.732	bb		591.1370	98.5	-1.5	6825.7

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/14/10
 Time of Injection: 1551
 Standard Number: WXX100412-07CCV
 Data File: EXP0412099a

HMX	99.1
RDX	116.1
135-TNB	97.9
13-DNB	98.3
Tetryl	96.7
Nitrobenzene	97.6
4A-26-DNT	90.0
2A-46-DNT	111.3
246-TNT	112.4
34-DNT(surr)	104.0
26-DNT	92.2
24-DNT	104.5
2-NT	78.9
4-NT	89.6
3-NT	75.9
PETN	98.5

Handwritten: 4/14/10

Total 1563.0

Handwritten: Done 04/14/10

Average 97.7

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412101a

Analysis Date: 14-APR-10 16:50

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.986	112	
1,3-Dinitrobenzene-d4	500	543.053	109	
2,4,6-Trinitrotoluene	40	43.225	108	
2,4-Dinitrotoluene	40	42.315	106	
2,6-Dinitrotoluene	40	41.752	104	
2,6-Dinitrotoluene-d3	500	539.814	108	
2-Amino-4,6-dinitrotoluene	40	41.883	105	
3,4-Dinitrotoluene	20	22.167	111	
4-Amino-2,6-dinitrotoluene	40	43.721	109	
HMX	40	42.86	107	
Nitrobenzene	40	41.08	103	
PETN	40	51.56	129	
RDX	40	45.378	113	
Tetryl	40	42.124	105	
m-Dinitrobenzene	40	42.925	107	
m-Nitrotoluene	40	44.02	110	
o-Nitrotoluene	40	38.263	96	
p-Nitrotoluene	40	43.808	110	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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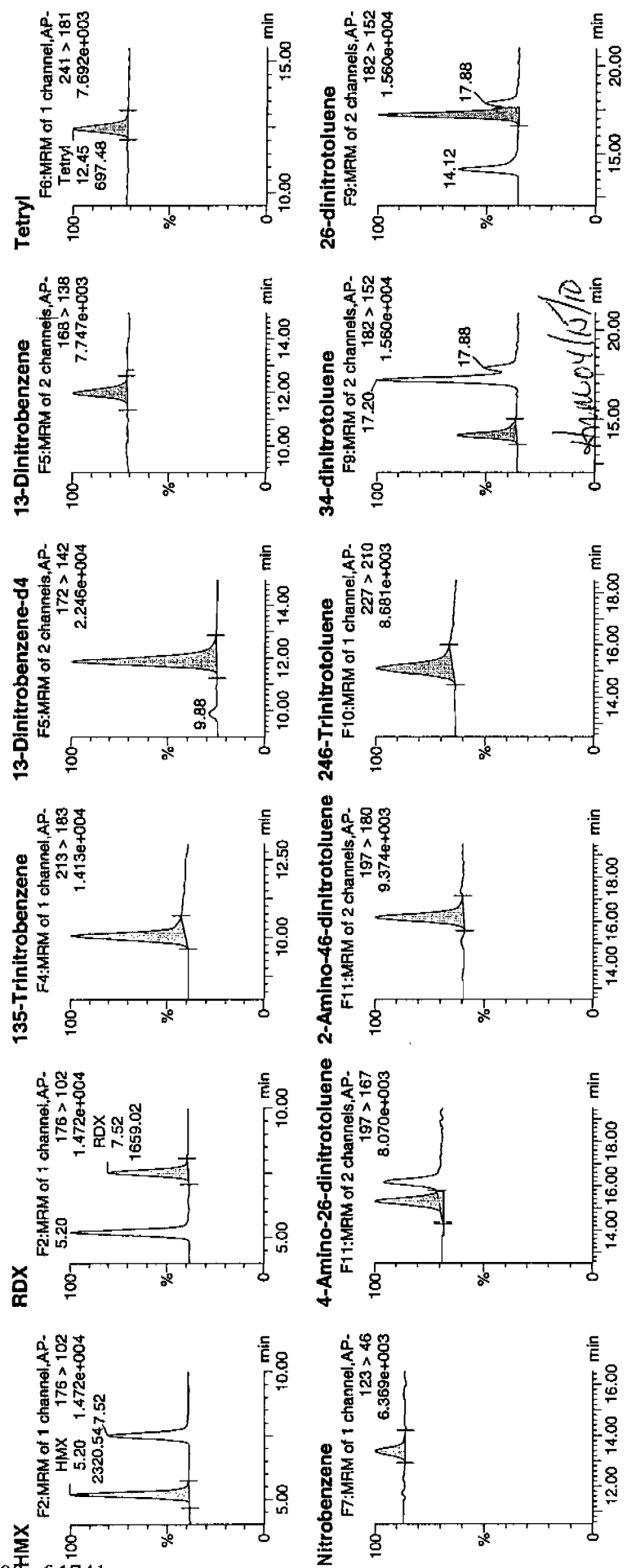
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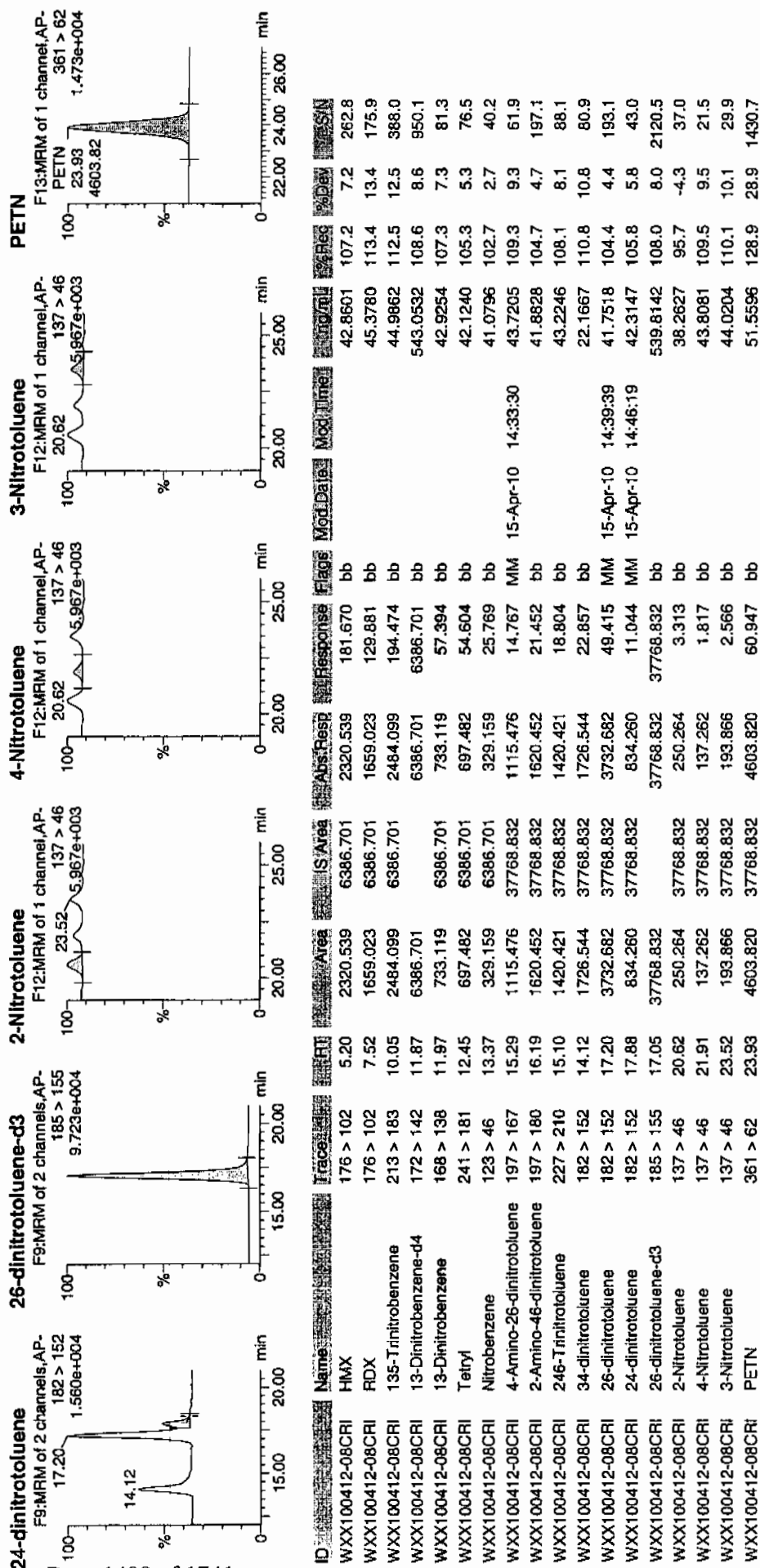
Time: 16:50:52

ID: WXX100412-08CRI

Vial: 1:1,C

WXX
4/15/10





GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/14/10
 Time of Injection 1650
 Standard Number WXX100412-08CRI
 Data File EXP0412101a

HMX	107.2
RDX	113.4
135-TNB	112.5
13-DNB	107.3
Tetryl	105.3
Nitrobenzene	102.7
4A-26-DNT	109.3
2A-46-DNT	104.7
246-TNT	108.1
34-DNT(surr)	110.8
26-DNT	104.4
24-DNT	105.8
2-NT	95.7
4-NT	109.5
3-NT	110.1
PETN	128.9

Met
4/15/10

Total 1735.7

Average 108.5

Handwritten: 108.5

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412110a

Analysis Date: 14-APR-10 21:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	622.706	104	
1,3-Dinitrobenzene-d4	500	590.309	118	
2,4,6-Trinitrotoluene	600	734.878	122	*
2,4-Dinitrotoluene	600	625.592	104	
2,6-Dinitrotoluene	600	616.066	103	
2,6-Dinitrotoluene-d3	500	623.79	125	*
2-Amino-4,6-dinitrotoluene	600	702.949	117	
3,4-Dinitrotoluene	300	328.505	110	
4-Amino-2,6-dinitrotoluene	600	656.808	109	
HMX	600	703.603	117	
Nitrobenzene	600	604.039	101	
PETN	600	560.884	93	
RDX	600	812.713	135	*
Tetryl	600	586.004	98	
m-Dinitrobenzene	600	583.764	97	
m-Nitrotoluene	600	456.606	76	*
o-Nitrotoluene	600	533.736	89	
p-Nitrotoluene	600	563.245	94	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412110a

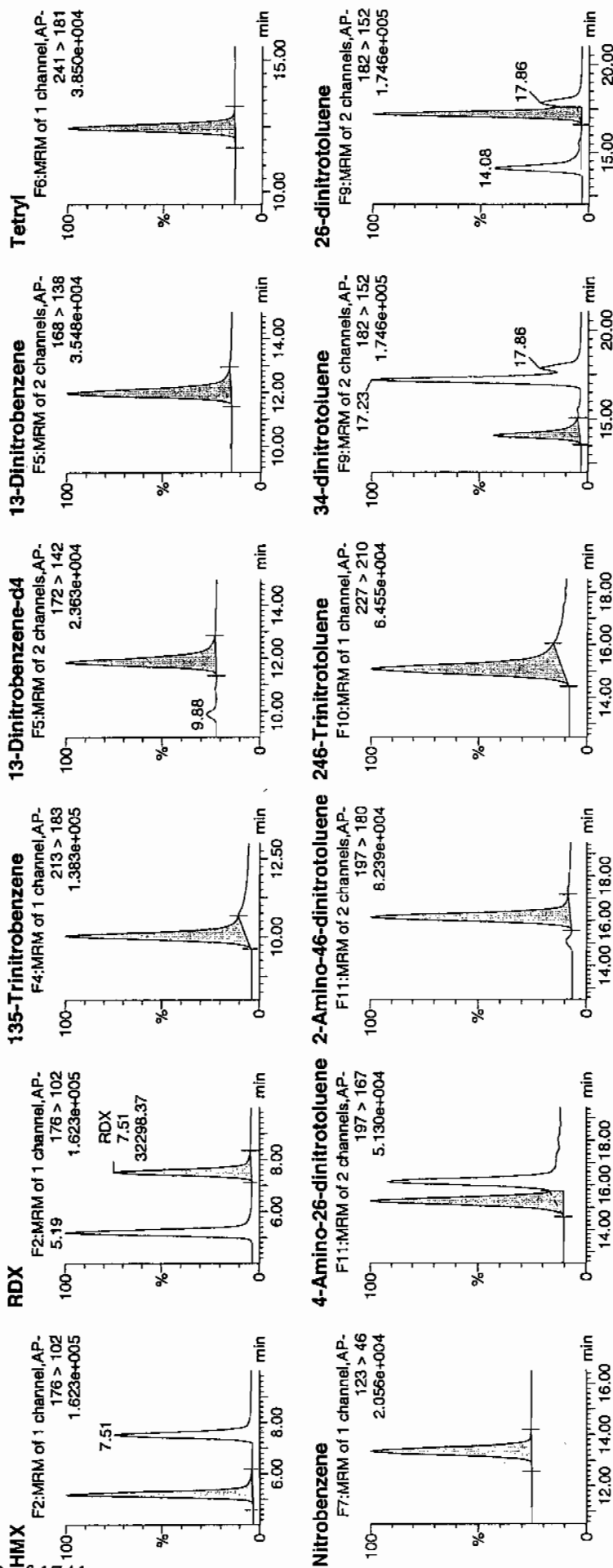
Date: 14-Apr-2010

Time: 21:16:17

ID: WXX100412-07CCV

Vial: 1:1,B

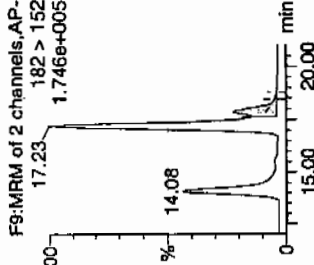
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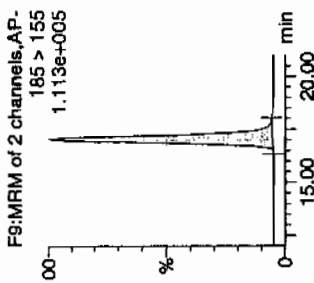
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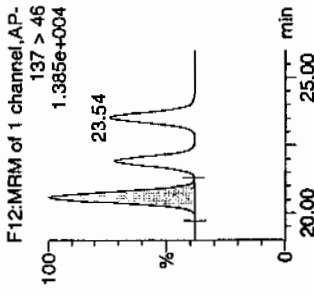
2,4-dinitrotoluene



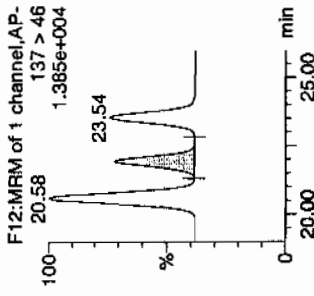
26-dinitrotoluene-d3



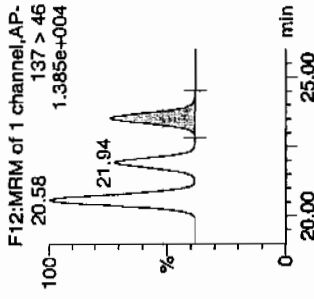
2-Nitrotoluene



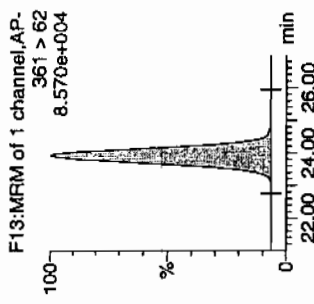
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Int. Conc	Area Conc	Recovery	SN
WXX100412-07CCV	HMx	176 > 102	5.19	41409.535	6942.459	41409.535	2982.339	bb			703.6033	117.3	17.3	8996.4
WXX100412-07CCV	RDX	176 > 102	7.51	32298.371	6942.459	32298.371	2326.148	bb			812.7129	135.5	35.5	6607.2
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.04	37377.461	6942.459	37377.461	2691.947	bb			622.7063	103.8	3.8	2663.3
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.84	6942.459		6942.459	6942.459	bb			590.3086	118.1	18.1	545.1
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	10837.637	6942.459	10837.637	780.533	bb			583.7640	97.3	-2.7	452.4
WXX100412-07CCV	Tetryl	241 > 181	12.45	10547.282	6942.459	10547.282	759.621	bb			586.0041	97.7	-2.3	739.6
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	5261.153	6942.459	5261.153	378.911	bb			604.0386	100.7	0.7	377.3
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.29	19364.578	43644.344	19364.578	221.845	MM	15-Apr-10	14:33:43	656.8083	109.5	9.5	721.6
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	31428.164	43644.344	31428.164	360.049	bb			702.9488	117.2	17.2	2126.6
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	27905.869	43644.344	27905.869	319.696	bb			734.8784	122.5	22.5	1188.2
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.08	29567.379	43644.344	29567.379	338.731	bb			328.5053	109.5	9.5	608.2
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.23	63645.477	43644.344	63645.477	729.138	MM	15-Apr-10	14:39:56	616.0861	102.7	2.7	1489.8
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.86	14252.675	43644.344	14252.675	163.282	MM	15-Apr-10	14:46:00	625.5924	104.3	4.3	283.7
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	43644.344		43644.344	43644.344	bb			623.7904	124.8	24.8	2498.6
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.58	4034.070	43644.344	4034.070	46.215	bb			533.7363	89.0	-11.0	242.6
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.94	2039.331	43644.344	2039.331	23.363	bb			563.2452	93.9	-6.1	130.8
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.54	2323.716	43644.344	2323.716	26.621	bb			456.6058	76.1	-23.9	139.2
WXX100412-07CCV	PETN	361 > 62	23.92	44076.492	43644.344	44076.492	504.951	bb			560.8840	93.5	-6.5	10425.8

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/14/10
 Time of Injection: 2116
 Standard Number: WXX100412-07CCV
 Data File: EXP0412110a

HMX	117.3
RDX	135.5
135-TNB	103.8
13-DNB	97.3
Tetryl	97.7
Nitrobenzene	100.7
4A-26-DNT	109.5
2A-46-DNT	117.2
246-TNT	122.5
34-DNT(surr)	109.5
26-DNT	102.7
24-DNT	104.3
2-NT	89.0
4-NT	93.9
3-NT	76.1
PETN	93.5

*not
4/15/10*

Total 1670.5

Average 104.4

HMM 4/15/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412112a

Analysis Date: 14-APR-10 22:15

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.545	126	
1,3-Dinitrobenzene-d4	500	569.204	114	
2,4,6-Trinitrotoluene	40	41.909	105	
2,4-Dinitrotoluene	40	39.806	100	
2,6-Dinitrotoluene	40	41.957	105	
2,6-Dinitrotoluene-d3	500	594.929	119	
2-Amino-4,6-dinitrotoluene	40	38.529	96	
3,4-Dinitrotoluene	20	23.661	118	
4-Amino-2,6-dinitrotoluene	40	40.463	101	
HMX	40	53.023	133	*
Nitrobenzene	40	40.392	101	
PETN	40	47.454	119	
RDX	40	44.101	110	
Tetryl	40	46.996	117	
m-Dinitrobenzene	40	43.619	109	
m-Nitrotoluene	40	40.451	101	
o-Nitrotoluene	40	32.28	81	
p-Nitrotoluene	40	35.73	89	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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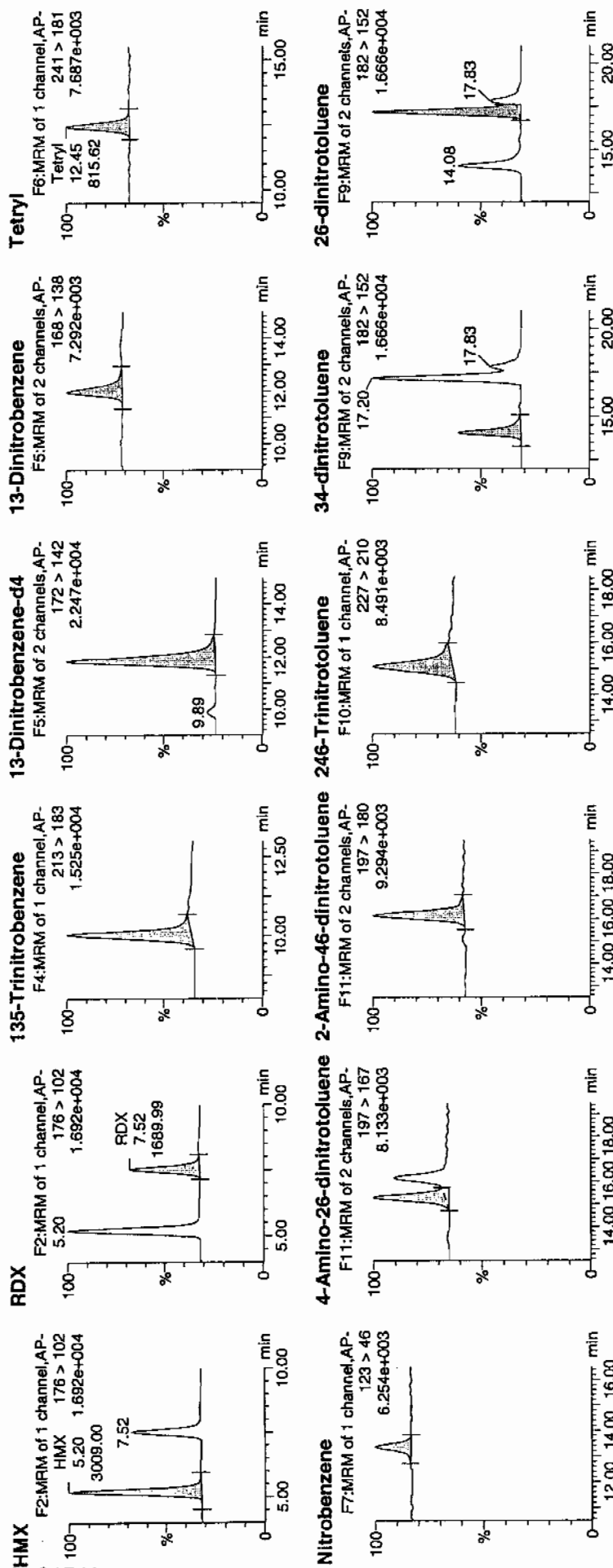
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Time: 22:15:20

ID: WXX100412-08CRI

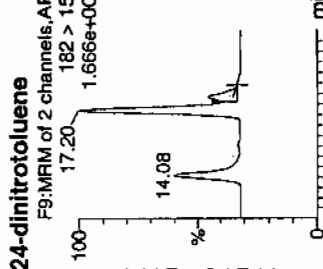
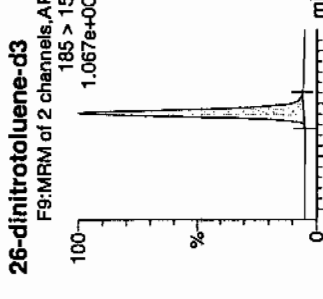
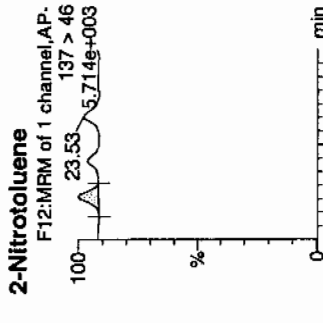
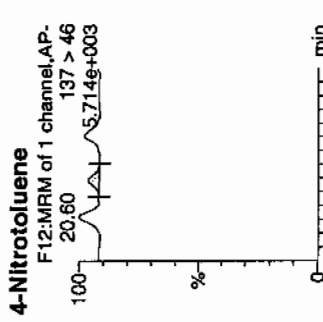
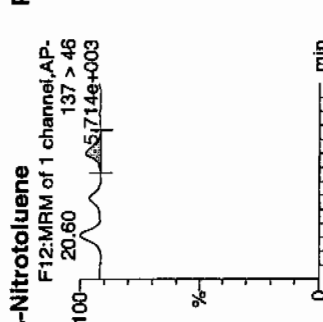
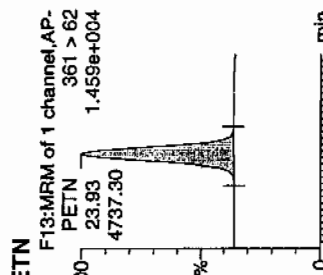
Vial: 1:1,C

WXX
4/15/10



WXX
4/15/10

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

24-dinitrotoluene		26-dinitrotoluene-d3		2-Nitrotoluene		4-Nitrotoluene		3-Nitrotoluene		PETN				
F9:MRM of 2 channels, AP- 182 > 152 1.666e+004		F9:MRM of 2 channels, AP- 185 > 155 1.067e+005		F12:MRM of 1 channel, AP- 137 > 46 5.714e+003		F12:MRM of 1 channel, AP- 137 > 46 5.714e+003		F12:MRM of 1 channel, AP- 137 > 46 5.714e+003		F13:MRM of 1 channel, AP- 361 > 62 1.459e+004				
														
ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Area	Ratio	SN	
WXX100412-08CRI	HMZ	176 > 102	5.20	3008.998	6694.257	3008.998	224.745	bb			53.0225	132.6	32.6	341.7
WXX100412-08CRI	RDX	176 > 102	7.52	1689.986	6694.257	1689.986	126.227	bb			44.1012	110.3	10.3	179.6
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.06	2925.460	6694.257	2925.460	218.505	bb			50.5450	126.4	26.4	401.0
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6694.257	6694.257	6694.257	5694.257	bb			569.2043	113.8	13.8	934.1
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	780.833	6694.257	780.833	58.321	bb			43.6186	109.0	9.0	42.5
WXX100412-08CRI	Tetryl	241 > 181	12.45	815.616	6694.257	815.616	60.919	bb			46.9956	117.5	17.5	56.1
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	339.236	6694.257	339.236	25.338	bb			40.3921	101.0	1.0	33.7
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.29	1137.767	41625.012	1137.767	13.667	MM	15-Apr-10	14:33:52	40.4629	101.2	1.2	61.9
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1642.879	41625.012	1642.879	19.734	bb			38.5287	96.3	-3.7	88.8
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.11	1517.791	41625.012	1517.791	18.232	bb			41.9088	104.8	4.8	83.3
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.08	2031.087	41625.012	2031.087	24.397	bb			23.6609	118.3	18.3	72.8
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.20	4134.027	41625.012	4134.027	49.658	MM	15-Apr-10	14:40:05	41.9572	104.9	4.9	174.5
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.83	864.924	41625.012	864.924	10.389	MM	15-Apr-10	14:45:45	39.8058	99.5	-0.5	32.4
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.07	41625.012	41625.012	41625.012	41625.012	bb			594.9290	119.0	19.0	2267.7
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.60	232.688	41625.012	232.688	2.795	bb			32.2798	80.7	-19.3	85.6
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.93	123.380	41625.012	123.380	1.482	bb			35.7296	89.3	-10.7	47.2
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.53	196.334	41625.012	196.334	2.358	bb			40.4508	101.1	1.1	65.1
WXX100412-08CRI	PETN	361 > 62	23.93	4737.299	41625.012	4737.299	56.904	bb			47.4540	118.6	18.6	2105.4

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/14/10
 Time of Injection 2215
 Standard Number WXX100412-08CRI
 Data File EXP0412112a

HMX	132.6	✓
RDX	110.3	✓
135-TNB	126.4	✓
13-DNB	109.0	
Tetryl	117.5	
Nitrobenzene	101.0	
4A-26-DNT	101.2	
2A-46-DNT	96.3	
246-TNT	104.8	
34-DNT(surr)	118.3	
26-DNT	104.9	
24-DNT	99.5	
2-NT	80.7	
4-NT	89.3	
3-NT	101.1	
PETN	118.6	

118.7
4/15/10

Total 1711.5

Average 107.0

Handwritten: 04/15/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412123a

Analysis Date: 15-APR-10 03:39

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	608.031	101	
1,3-Dinitrobenzene-d4	500	550.38	110	
2,4,6-Trinitrotoluene	600	708.613	118	
2,4-Dinitrotoluene	600	665.37	111	
2,6-Dinitrotoluene	600	586.777	98	
2,6-Dinitrotoluene-d3	500	551.957	110	
2-Amino-4,6-dinitrotoluene	600	641.691	107	
3,4-Dinitrotoluene	300	300.233	100	
4-Amino-2,6-dinitrotoluene	600	616.042	103	
HMX	600	655.933	109	
Nitrobenzene	600	586.609	98	
PETN	600	677.162	113	
RDX	600	767.694	128	*
Tetryl	600	610.361	102	
m-Dinitrobenzene	600	620.601	103	
m-Nitrotoluene	600	525.023	88	
o-Nitrotoluene	600	538.018	90	
p-Nitrotoluene	600	583.964	97	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

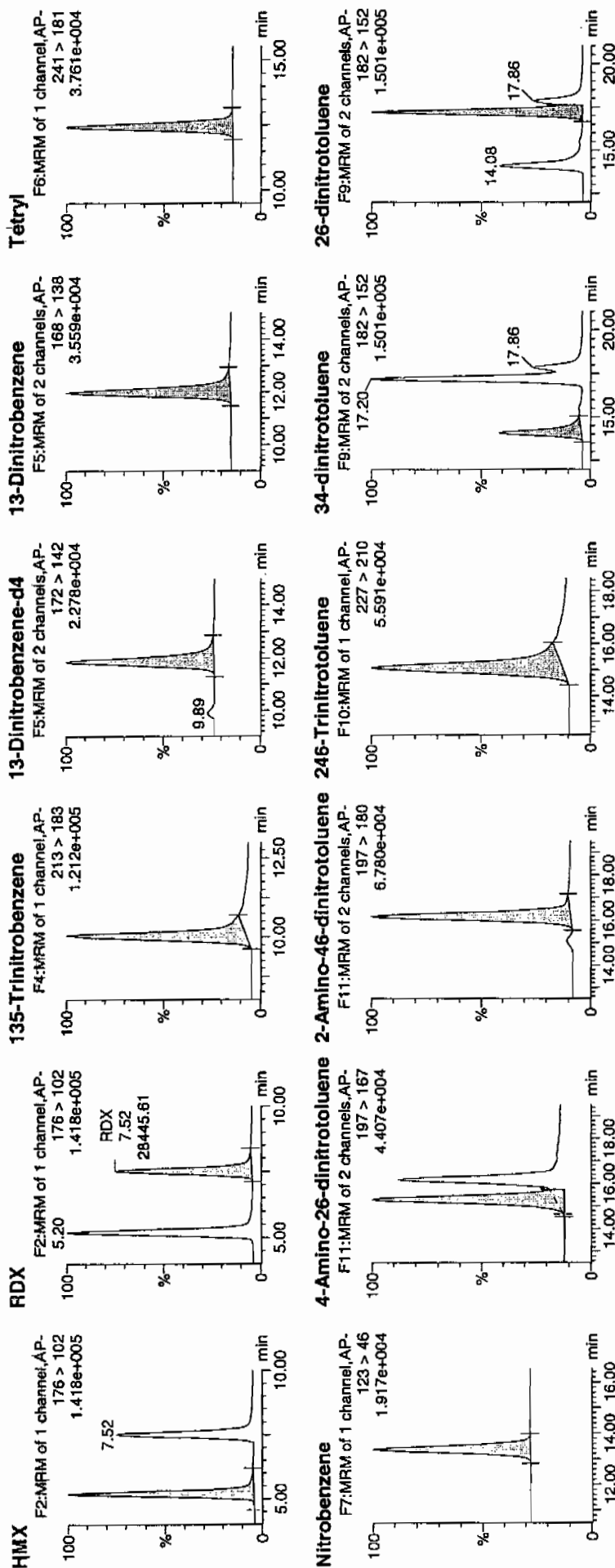
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Date: 15-Apr-2010

Time: 03:39:53

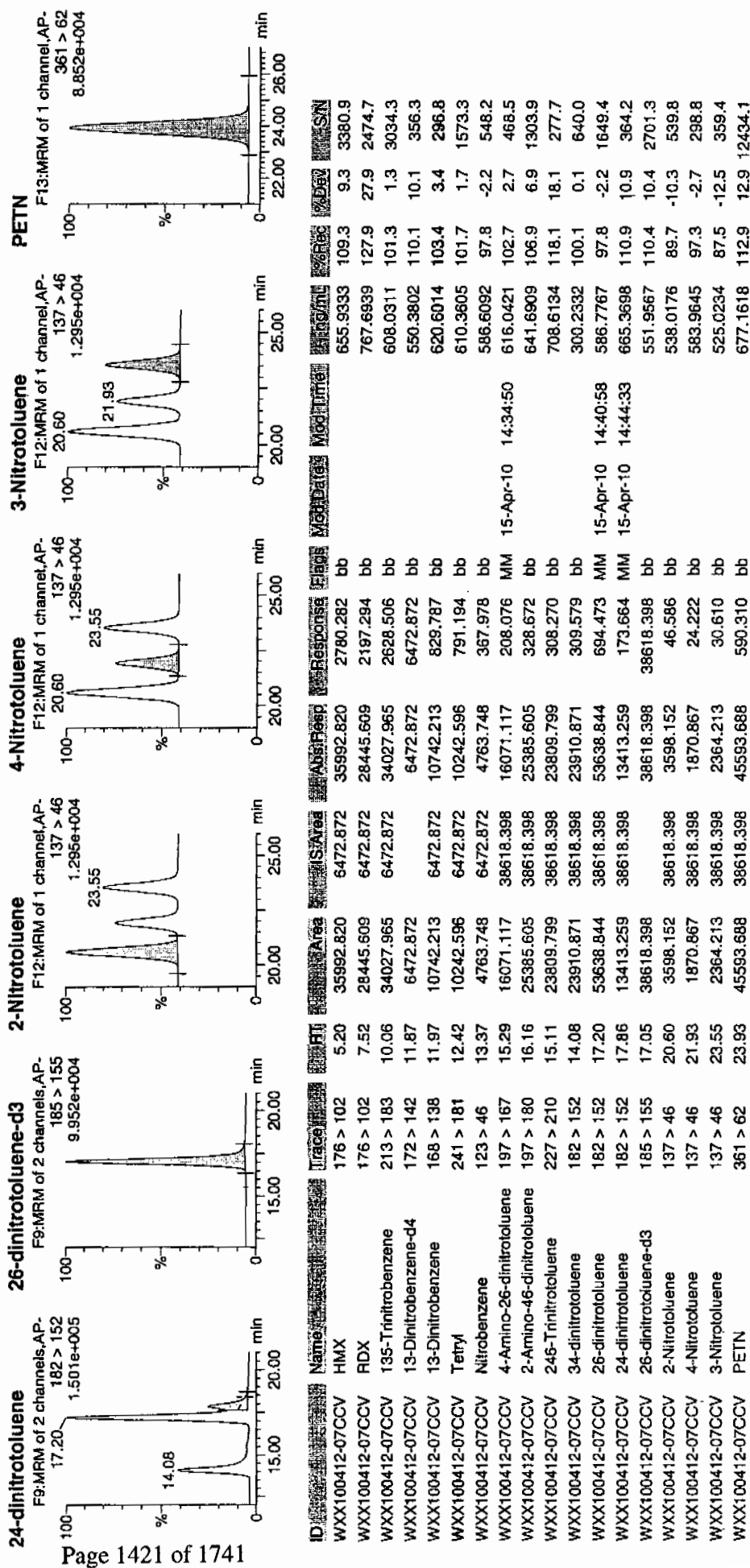
IP: WXX100412-07CCV

Vial: 1:1,B



2/21/2010

Dataset: C:\MASSL\YNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/15/10
 Time of Injection: 0339
 Standard Number: WXX100412-07CCV
 Data File: EXP0412123a

HMX	109.3
RDX	127.9
135-TNB	101.3
13-DNB	103.4
Tetryl	101.7
Nitrobenzene	97.8
4A-26-DNT	102.7
2A-46-DNT	106.9
246-TNT	118.1
34-DNT(surr)	100.1
26-DNT	97.8
24-DNT	110.9
2-NT	89.7
4-NT	97.3
3-NT	87.5
PETN	112.9

Handwritten: 100.1
4/15/10

Total 1665.3

Handwritten: 04/15/10

Average 104.1

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412125a

Analysis Date: 15-APR-10 04:38

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	43.213	108	
1,3-Dinitrobenzene-d4	500	564.409	113	
2,4,6-Trinitrotoluene	40	45.284	113	
2,4-Dinitrotoluene	40	46.283	116	
2,6-Dinitrotoluene	40	40.418	101	
2,6-Dinitrotoluene-d3	500	573.452	115	
2-Amino-4,6-dinitrotoluene	40	39.776	99	
3,4-Dinitrotoluene	20	20.678	103	
4-Amino-2,6-dinitrotoluene	40	39.446	99	
HMX	40	48.201	121	
Nitrobenzene	40	40.808	102	
PETN	40	53.641	134	*
RDX	40	49.515	124	
Tetryl	40	39.748	99	
m-Dinitrobenzene	40	40.378	101	
m-Nitrotoluene	40	41.837	105	
o-Nitrotoluene	40	40.859	102	
p-Nitrotoluene	40	46.373	116	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 99 of 137

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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Date: 15-Apr-2010

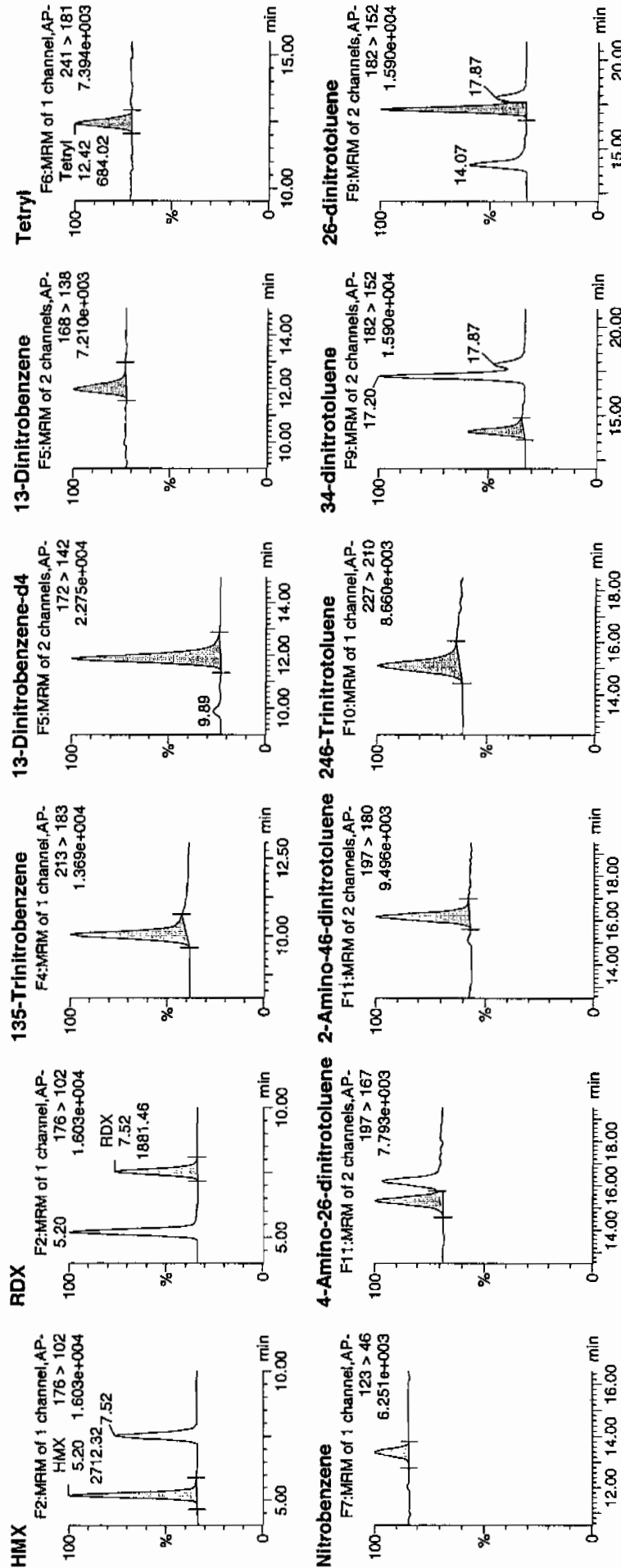
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ID: WXX100412-08CRI

Vial: 1:1,C

WXX
4/15/10

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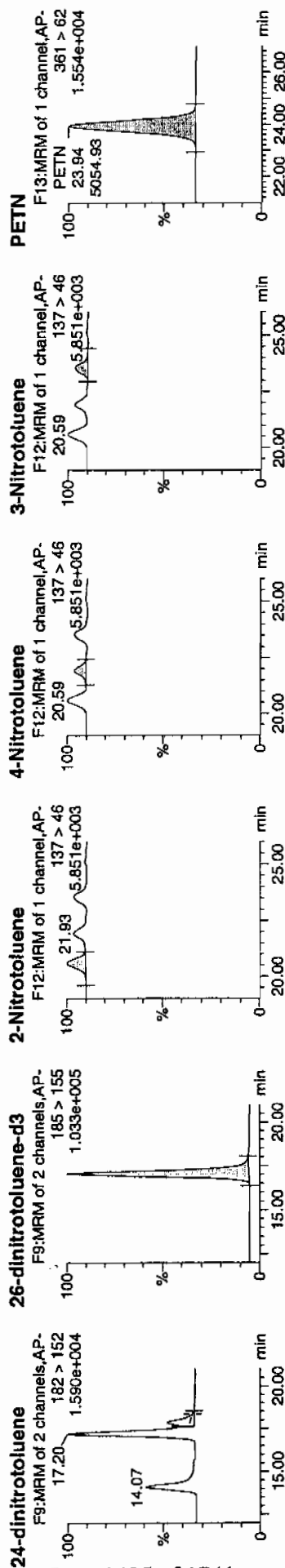
WXX
4/15/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 100 of 137

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	IS Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Int:ml	%Rec	%Dev	SN
WXX100412-08CRI	HMX	176 > 102	5.20	2712.320	6637.863	2712.320	204.307	bb			48.2007	120.5	20.5	522.9
WXX100412-08CRI	RDX	176 > 102	7.52	1881.459	6637.863	1881.459	141.722	bb			49.5149	123.8	23.8	334.7
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.06	2480.006	6637.863	2480.006	186.808	bb			43.2127	108.0	8.0	276.9
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6637.863		6637.863	6637.863	bb			564.4092	112.9	12.9	521.3
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	716.740	6637.863	716.740	53.989	bb			40.3784	100.9	0.9	73.2
WXX100412-08CRI	Tetryl	241 > 181	12.42	684.017	6637.863	684.017	51.524	bb			39.7477	99.4	-0.6	81.6
WXX100412-08CRI	Nitrobenzene	123 > 46	13.40	339.842	6637.863	339.842	25.599	bb			40.8080	102.0	2.0	40.0
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.31	1069.130	40122.352	1069.130	13.323	MM	15-Apr-10	14:35:03	39.4460	98.6	-1.4	34.8
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.15	1634.844	40122.352	1634.844	20.373	bb			39.7761	99.4	-0.6	97.1
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1580.818	40122.352	1580.818	19.700	bb			45.2839	113.2	13.2	112.4
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.07	1710.958	40122.352	1710.958	21.322	bb			20.6781	103.4	3.4	45.5
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.20	3838.616	40122.352	3838.616	47.836	MM	15-Apr-10	14:41:07	40.4181	101.0	1.0	119.0
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.87	969.351	40122.352	969.351	12.080	MM	15-Apr-10	14:44:22	46.2826	115.7	15.7	24.8
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.04	40122.352		40122.352	40122.352	bb			573.4521	114.7	14.7	3832.5
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.59	283.899	40122.352	283.899	3.538	bb			40.8591	102.1	2.1	47.0
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.93	154.352	40122.352	154.352	1.924	bb			46.3728	115.9	15.9	28.5
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.57	195.733	40122.352	195.733	2.439	bb			41.8373	104.6	4.6	30.6
WXX100412-08CRI	PETN	361 > 62	23.94	5054.932	40122.352	5054.932	62.994	bb			53.6409	134.1	34.1	237.2

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/15/10
 Time of Injection 0438
 Standard Number WXX100412-08CRI
 Data File EXP0412125a

HMX	120.5
RDX	123.8
135-TNB	108.0
13-DNB	100.9
Tetryl	99.4
Nitrobenzene	102.0
4A-26-DNT	98.6
2A-46-DNT	99.4
246-TNT	113.2
34-DNT(surr)	103.4
26-DNT	101.0
24-DNT	115.7
2-NT	102.1
4-NT	115.9
3-NT	104.6
PETN	134.1

Handwritten: 11/15/10

Total 1742.6

Average 108.9

Handwritten: 11/15/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEI

GEL Sample ID: WXXCCV

GEL Data File EXP0412135a

Analysis Date: 15-APR-10 09:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	616.486	103	
1,3-Dinitrobenzene-d4	500	520.494	104	
2,4,6-Trinitrotoluene	600	719.64	120	
2,4-Dinitrotoluene	600	646.864	108	
2,6-Dinitrotoluene	600	604.45	101	
2,6-Dinitrotoluene-d3	500	525.317	105	
2-Amino-4,6-dinitrotoluene	600	629.05	105	
3,4-Dinitrotoluene	300	298.104	99	
4-Amino-2,6-dinitrotoluene	600	610.274	102	
HMX	600	685.286	114	
Nitrobenzene	600	598.926	100	
PETN	600	756.299	126	*
RDX	600	771.167	129	*
Tetryl	600	580.474	97	
m-Dinitrobenzene	600	616.334	103	
m-Nitrotoluene	600	526.908	88	
o-Nitrotoluene	600	559.377	93	
p-Nitrotoluene	600	606.103	101	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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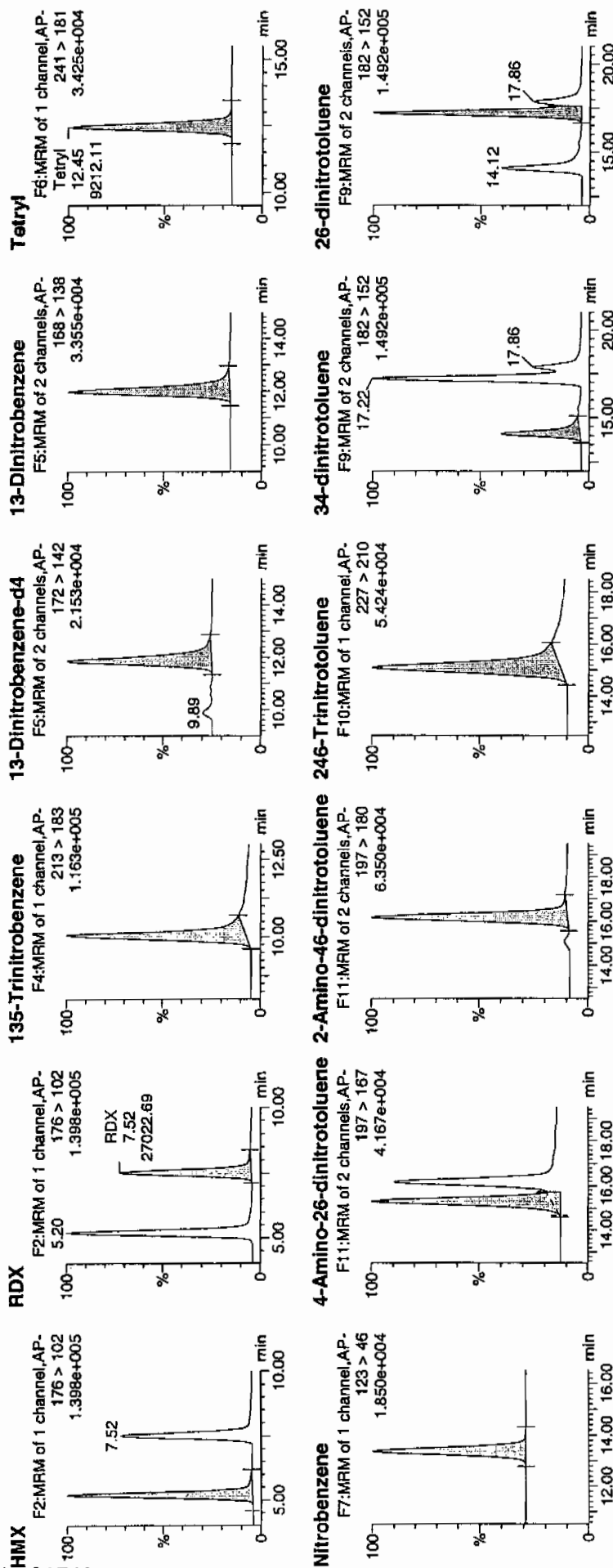
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Time: 09:33:59

ID: WXX100412-07CCV

Vial: 1:1,B

10/15/10



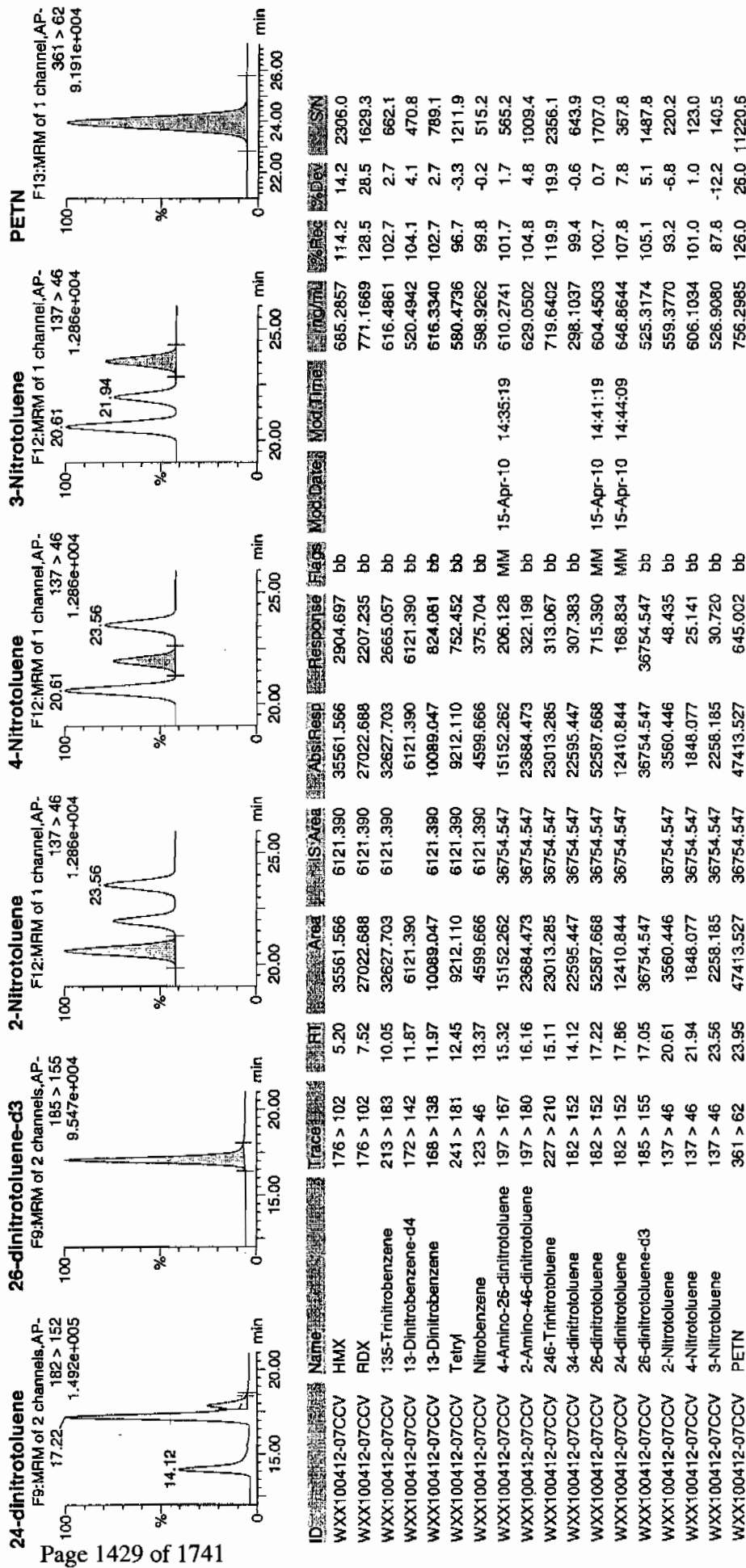
10/15/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\WASSLYN\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Printed: Thu Apr 15 14:53:43 2010, Page 120 of 137



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/15/10
 Time of Injection: 0933
 Standard Number: WXX100412-07CCV
 Data File: EXP0412135a

HMX	114.2
RDX	128.5
135-TNB	102.7
13-DNB	102.7
Tetryl	96.7
Nitrobenzene	99.8
4A-26-DNT	101.7
2A-46-DNT	104.8
246-TNT	119.9
34-DNT(surr)	99.4
26-DNT	100.7
24-DNT	107.8
2-NT	93.2
4-NT	101.0
3-NT	87.8
PETN	126.0

*WXX
4/15/10*

Total 1686.9

Average 105.4

Sum 04/15/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412137a

Analysis Date: 15-APR-10 10:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.831	112	
1,3-Dinitrobenzene-d4	500	564.306	113	
2,4,6-Trinitrotoluene	40	45.122	113	
2,4-Dinitrotoluene	40	42.425	106	
2,6-Dinitrotoluene	40	41.26	103	
2,6-Dinitrotoluene-d3	500	570.792	114	
2-Amino-4,6-dinitrotoluene	40	41.382	103	
3,4-Dinitrotoluene	20	22.164	111	
4-Amino-2,6-dinitrotoluene	40	38.604	97	
HMX	40	48.451	121	
Nitrobenzene	40	42.762	107	
PETN	40	54.612	137	*
RDX	40	48.712	122	
Tetryl	40	36.564	91	
m-Dinitrobenzene	40	41.195	103	
m-Nitrotoluene	40	32.225	81	
o-Nitrotoluene	40	41.864	105	
p-Nitrotoluene	40	40.289	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%
Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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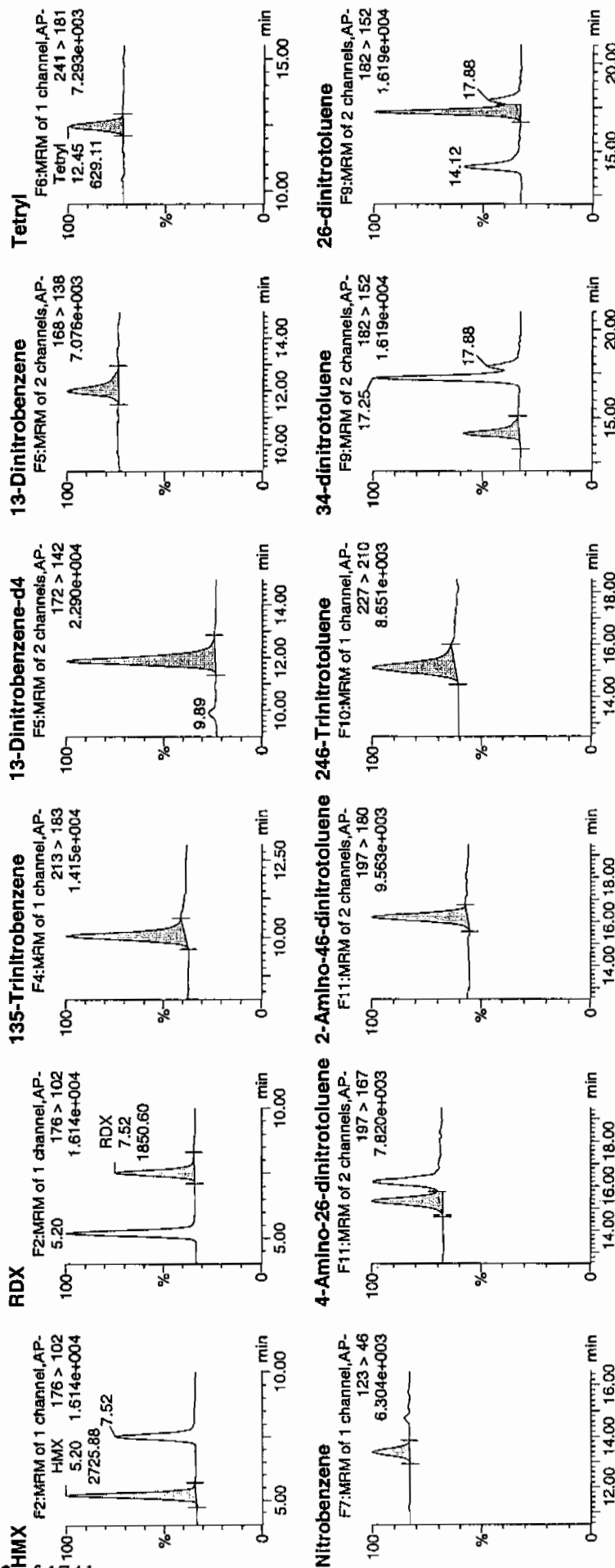
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Time: 10:33:01

ID: WXX100412-08CRI

Vial: 1:1,C

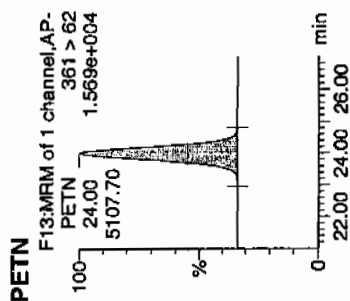
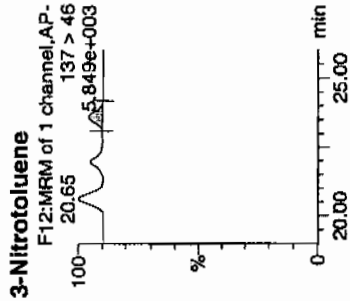
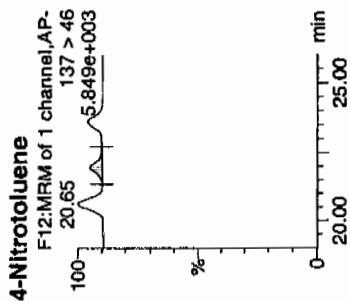
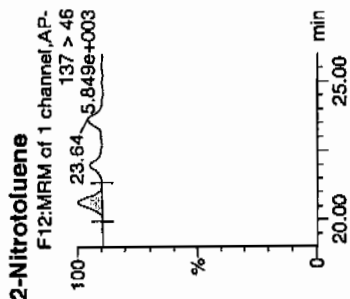
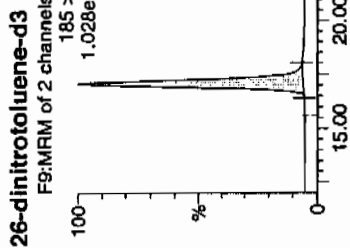
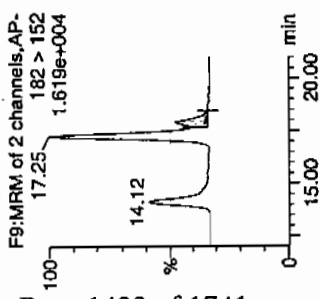
4/15/10



4/15/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

2,4-dinitrotoluene



ID	Name	Trace	RT	Area	S'Area	Abs'Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN
WXX100412-08CRI	HMX	176 > 102	5.20	2725.878	6636.648	2725.878	205.366	bb			48.4505	121.1	21.1	288.6
WXX100412-08CRI	RDX	176 > 102	7.52	1850.595	6636.648	1850.595	139.422	bb			48.7116	121.8	21.8	177.2
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2572.424	6636.648	2572.424	193.804	bb			44.8312	112.1	12.1	55.1
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6636.648		6636.648	6636.648	bb			564.3059	112.9	12.9	507.2
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	12.00	731.096	6636.648	731.096	55.080	bb			41.1947	103.0	3.0	42.3
WXX100412-08CRI	Tetryl	241 > 181	12.45	629.112	6636.648	629.112	47.397	bb			36.5639	81.4	-8.6	67.4
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	356.051	6636.648	356.051	26.825	bb			42.7622	106.9	6.9	29.8
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.32	1041.444	39936.227	1041.444	13.039	MM	15-Apr-10	14:35:28	38.6036	96.5	-3.5	61.7
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.19	1692.963	39936.227	1692.963	21.196	bb			41.3822	103.5	3.5	83.9
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.11	1567.852	39936.227	1567.852	19.629	bb			45.1217	112.8	12.8	116.8
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.12	1825.399	39936.227	1825.399	22.854	bb			22.1640	110.8	10.8	60.4
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.25	3900.405	39936.227	3900.405	48.833	MM	15-Apr-10	14:41:32	41.2601	103.2	3.2	155.3
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.88	884.425	39936.227	884.425	11.073	MM	15-Apr-10	14:43:59	42.4245	106.1	6.1	32.8
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.09	39936.227		39936.227	39936.227	bb			570.7919	114.2	14.2	3666.8
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.65	289.533	39936.227	289.533	3.625	bb			41.8642	104.7	4.7	22.9
WXX100412-08CRI	4-Nitrotoluene	137 > 46	22.00	133.481	39936.227	133.481	1.671	bb			40.2893	100.7	0.7	10.8
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.64	150.063	39936.227	150.063	1.879	bb			32.2250	80.6	-19.4	12.6
WXX100412-08CRI	PETN	361 > 62	24.00	5107.696	39936.227	5107.696	63.948	bb			54.6119	136.5	36.5	1627.1

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/15/10
 Time of Injection 1033
 Standard Number WXX100412-08CRI
 Data File EXP0412137a

HMX	121.1
RDX	121.8
135-TNB	112.1
13-DNB	103.0
Tetryl	91.4
Nitrobenzene	106.9
4A-26-DNT	96.5
2A-46-DNT	103.5
246-TNT	112.8
34-DNT(surr)	110.8
26-DNT	103.2
24-DNT	106.1
2-NT	104.7
4-NT	100.7
3-NT	80.6
PETN	136.5

4/15/10

Total 1711.7

Average 107.0

Handwritten signature

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412141a

Analysis Date: 15-APR-10 12:31

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	600.513	100	
1,3-Dinitrobenzene-d4	500	548.523	110	
2,4,6-Trinitrotoluene	600	671.418	112	
2,4-Dinitrotoluene	600	681.875	114	
2,6-Dinitrotoluene	600	582.15	97	
2,6-Dinitrotoluene-d3	500	517.845	104	
2-Amino-4,6-dinitrotoluene	600	620.832	103	
3,4-Dinitrotoluene	300	295.616	99	
4-Amino-2,6-dinitrotoluene	600	603.436	101	
HMX	600	656.436	109	
Nitrobenzene	600	554.89	92	
PETN	600	656.88	109	
RDX	600	783.263	131	*
Tetryl	600	575.56	96	
m-Dinitrobenzene	600	568.157	95	
m-Nitrotoluene	600	472.105	79	*
o-Nitrotoluene	600	520.007	87	
p-Nitrotoluene	600	554.035	92	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 131 of 137

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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Date: 15-Apr-2010

Time: 12:31:08

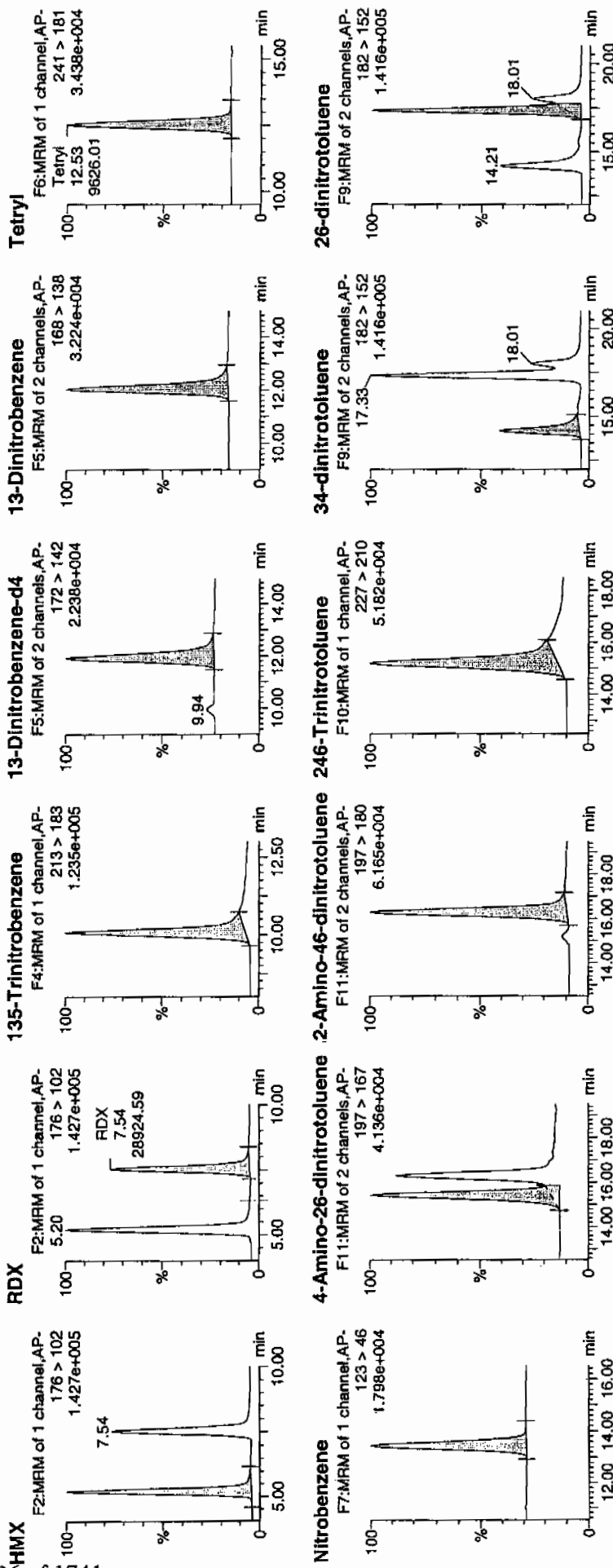
ID: WXX100415-07CCV

Vial: 1:1,B

MTT
4/15/10

1430

of 1741



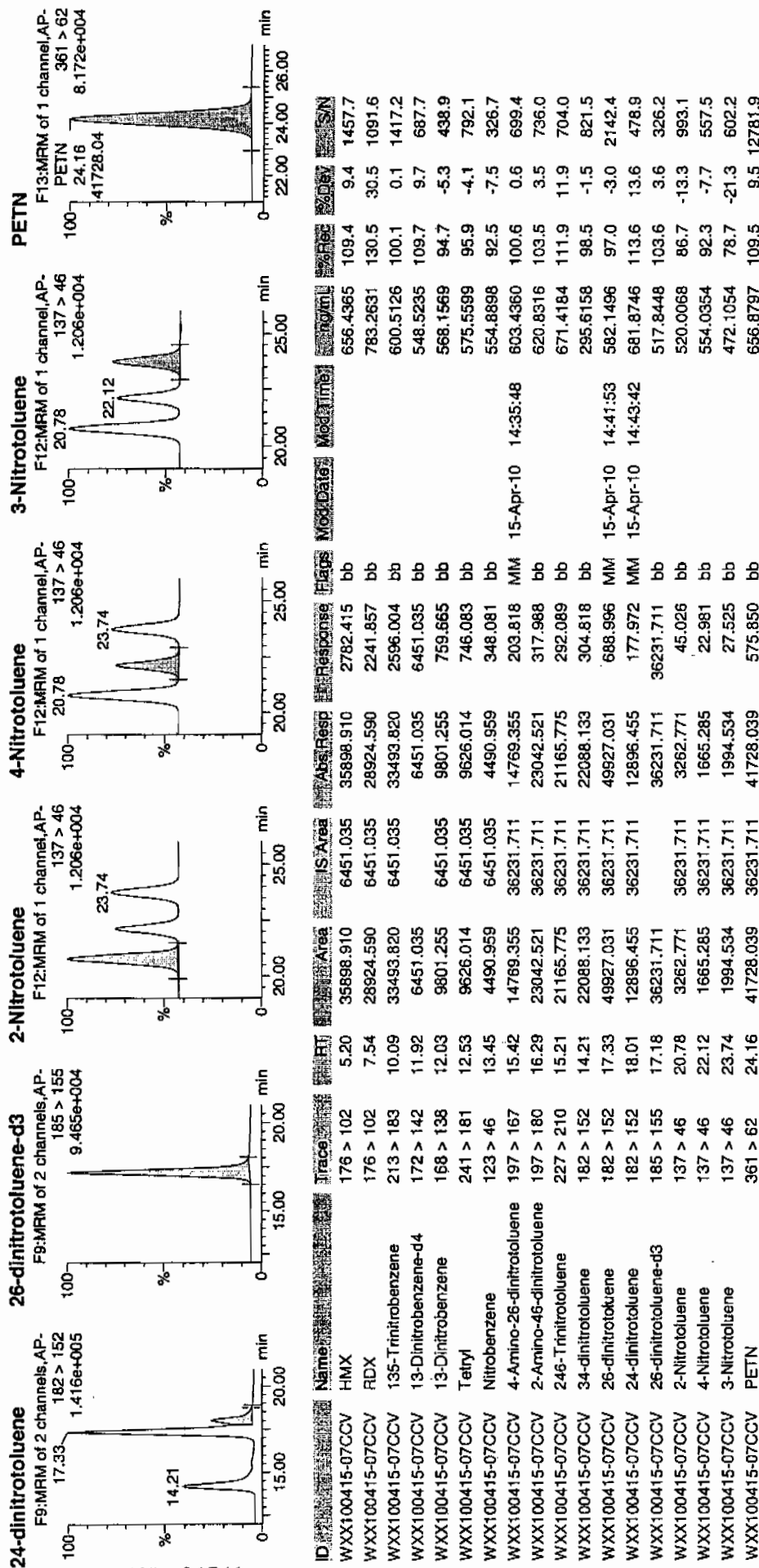
4/15/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 132 of 137

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/15/10
 Time of Injection: 1231
 Standard Number: WXX100415-07CCV
 Data File: EXP0412141a

HMX	109.4
RDX	130.5
135-TNB	100.1
13-DNB	94.7
Tetryl	95.9
Nitrobenzene	92.5
4A-26-DNT	100.6
2A-46-DNT	103.5
246-TNT	111.9
34-DNT(surr)	98.5
26-DNT	97.0
24-DNT	113.6
2-NT	86.7
4-NT	92.3
3-NT	78.7
PETN	109.5

*MAP
4/15/10*

Total 1615.4

Average 101.0

Handwritten: 04/15/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412143a

Analysis Date: 15-APR-10 13:30

LCMSMS ID: 203

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	45.257	113	
1,3-Dinitrobenzene-d4	500	536.662	107	
2,4,6-Trinitrotoluene	40	45.682	114	
2,4-Dinitrotoluene	40	45.008	113	
2,6-Dinitrotoluene	40	38.476	96	
2,6-Dinitrotoluene-d3	500	533.5	107	
2-Amino-4,6-dinitrotoluene	40	39.37	98	
3,4-Dinitrotoluene	20	20.83	104	
4-Amino-2,6-dinitrotoluene	40	42.325	106	
HMX	40	47.44	119	
Nitrobenzene	40	39.473	99	
PETN	40	51.284	128	
RDX	40	48.05	120	
Tetryl	40	51.38	128	
m-Dinitrobenzene	40	39.893	100	
m-Nitrotoluene	40	33.98	85	
o-Nitrotoluene	40	30.284	76	
p-Nitrotoluene	40	44.578	111	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0412143a

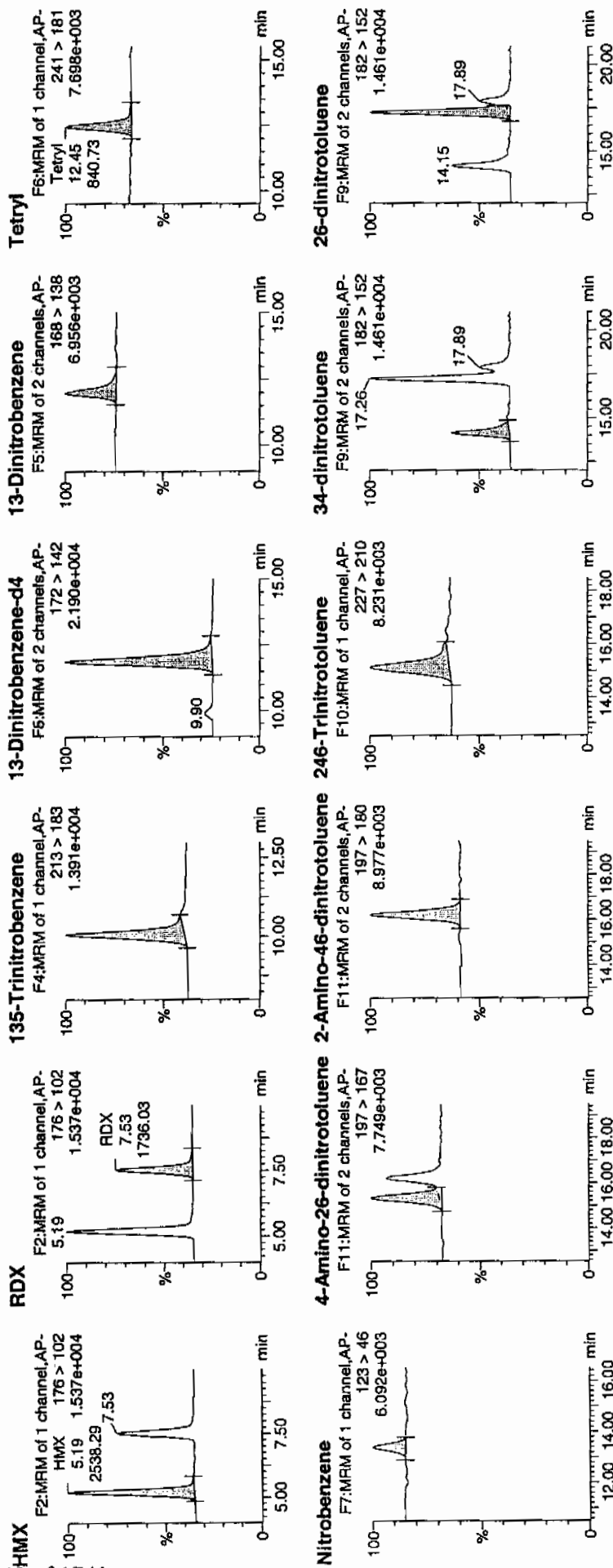
Date: 15-Apr-2010

Time: 13:30:11

Sample ID: WXX100415-08CRI

Injection Volume: 1:1,C

Handwritten: 11/1/10



Handwritten: 11/1/10

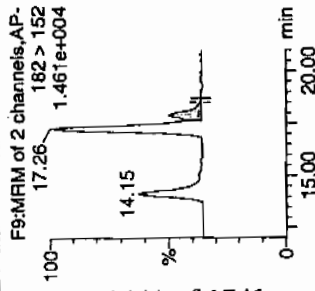
Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

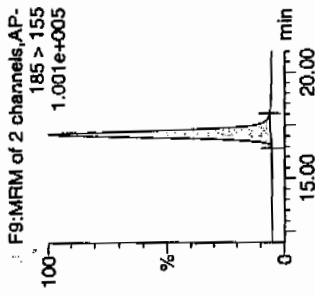
Printed: Thu Apr 15 14:53:43 2010, Page 136 of 137

Dataset: C:\MASSLYNX\New_Exp\PROV041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

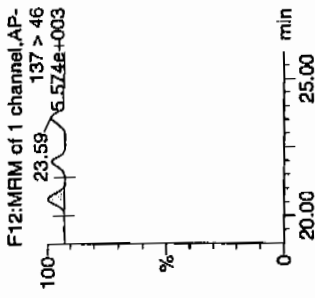
24-dinitrotoluene



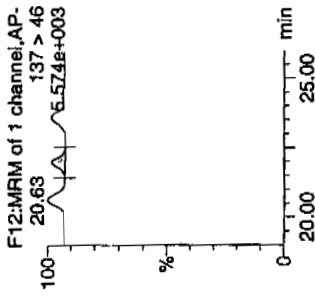
26-dinitrotoluene-d3



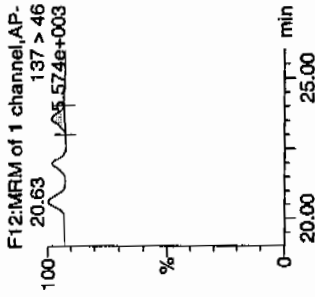
2-Nitrotoluene



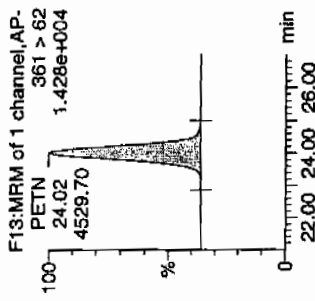
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	SN
WXX100415-08CRI	HMx	176 > 102	5.19	2538.290	6311.535	2538.290	201.083	bb	47.4403	118.6	18.6	411.3	
WXX100415-08CRI	RDX	176 > 102	7.53	1736.029	6311.535	1736.029	137.528	bb	48.0498	120.1	20.1	251.2	
WXX100415-08CRI	135-Trinitrobenzene	213 > 183	10.05	2469.656	6311.535	2469.656	195.646	bb	45.2573	113.1	13.1	582.8	
WXX100415-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6311.535		6311.535	6311.535	bb	536.6619	107.3	7.3	648.0	
WXX100415-08CRI	13-Dinitrobenzene	168 > 138	12.00	673.316		673.316	53.340	bb	39.8933	99.7	-0.3	35.1	
WXX100415-08CRI	Tetryl	241 > 181	12.45	840.732		840.732	66.603	bb	51.3802	128.5	28.5	89.9	
WXX100415-08CRI	Nitrobenzene	123 > 46	13.39	312.562		312.562	24.761	bb	39.4728	98.7	-1.3	43.0	
WXX100415-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.34	1067.238		1067.238	14.296	MM	42.3249	105.8	5.8	69.5	
WXX100415-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.21	1505.416		1505.416	20.165	bb	39.3700	98.4	-1.6	69.8	
WXX100415-08CRI	246-Trinitrotoluene	227 > 210	15.13	1483.628		1483.628	19.873	bb	45.6824	114.2	14.2	83.4	
WXX100415-08CRI	34-dinitrotoluene	182 > 152	14.15	1603.458		1603.458	21.479	bb	20.8301	104.2	4.2	64.6	
WXX100415-08CRI	26-dinitrotoluene	182 > 152	17.26	3399.561		3399.561	45.538	MM	38.4757	96.2	-3.8	154.2	
WXX100415-08CRI	24-dinitrotoluene	182 > 152	17.89	876.982		876.982	11.747	MM	45.0080	112.5	12.5	33.6	
WXX100415-08CRI	26-dinitrotoluene-d3	185 > 155	17.08	37327.039		37327.039	37327.039	bb	533.4998	106.7	6.7	3239.6	
WXX100415-08CRI	2-Nitrotoluene	137 > 46	20.63	195.758		195.758	2.622	bb	30.2836	75.7	-24.3	24.5	
WXX100415-08CRI	4-Nitrotoluene	137 > 46	22.00	138.041		138.041	1.849	bb	44.5782	111.4	11.4	19.9	
WXX100415-08CRI	3-Nitrotoluene	137 > 46	23.59	147.899		147.899	1.981	bb	33.9804	85.0	-15.0	19.3	
WXX100415-08CRI	PETN	361 > 62	24.02	4529.698		4529.698	60.676	bb	51.2837	128.2	28.2	1485.1	

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/15/10
 Time of Injection 1330
 Standard Number WXX100415-08CRI
 Data File EXP0412143a

HMX	118.6
RDX	120.1
135-TNB	113.1
13-DNB	99.7
Tetryl	128.5
Nitrobenzene	98.7
4A-26-DNT	105.8
2A-46-DNT	98.4
246-TNT	114.2
34-DNT(surr)	104.2
26-DNT	96.2
24-DNT	112.5
2-NT	75.7
4-NT	111.4
3-NT	85.0
PETN	128.2

Total 1710.3

Average 106.9

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

*not
4/15/10*

Handwritten signature

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412154a

Analysis Date: 15-APR-10 18:54

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	622.031	104	
1,3-Dinitrobenzene-d4	500	482.209	96	
2,4,6-Trinitrotoluene	600	688.009	115	
2,4-Dinitrotoluene	600	646.547	108	
2,6-Dinitrotoluene	600	591.24	99	
2,6-Dinitrotoluene-d3	500	492.34	98	
2-Amino-4,6-dinitrotoluene	600	618.715	103	
3,4-Dinitrotoluene	300	299.256	100	
4-Amino-2,6-dinitrotoluene	600	584.477	97	
HMX	600	639.699	107	
Nitrobenzene	600	535.275	89	
PETN	600	659.267	110	
RDX	600	834.012	139	*
Tetryl	600	608.585	101	
m-Dinitrobenzene	600	599.64	100	
m-Nitrotoluene	600	471.246	79	*
o-Nitrotoluene	600	459.486	77	*
p-Nitrotoluene	600	519.824	87	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412154a

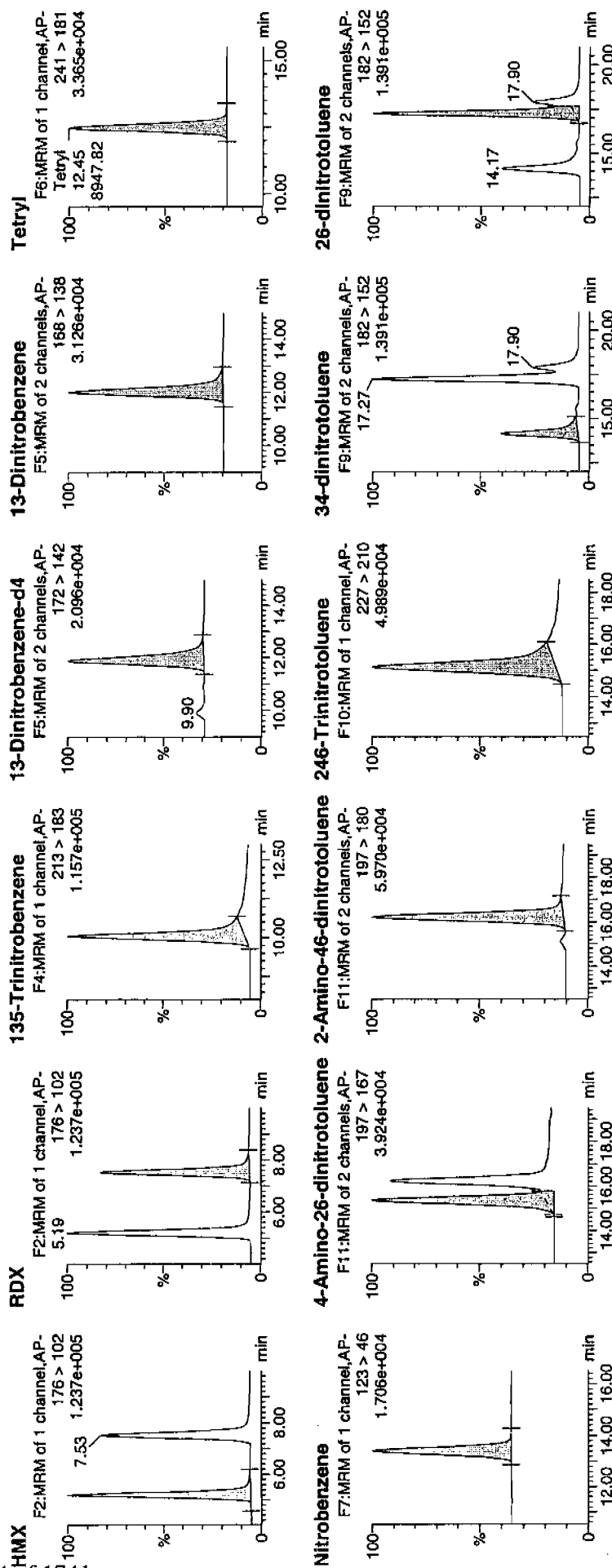
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ID: WXX100415-07CCV

Vial: 1:1,B

4/16/10



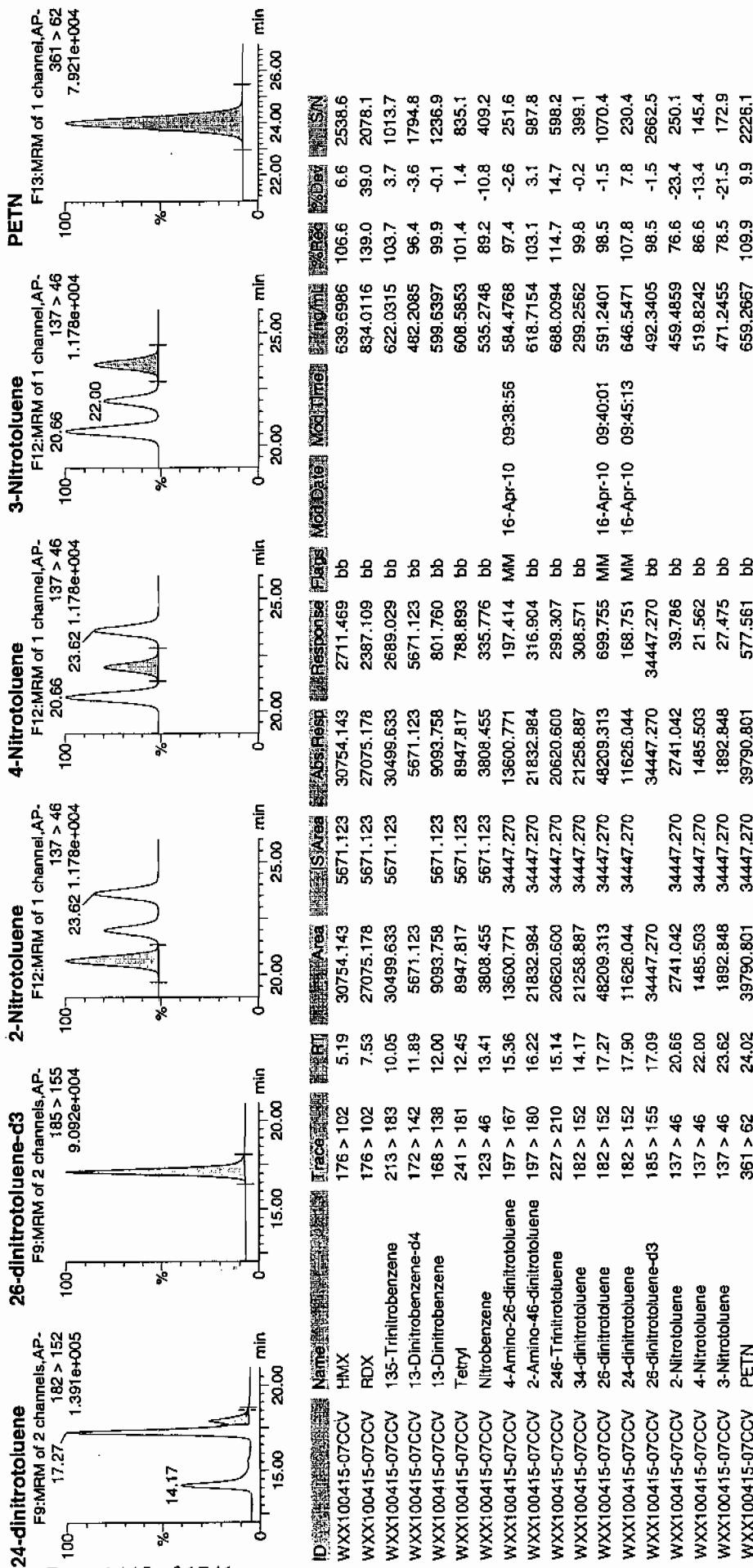
4/18/10

Quantity Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 22 of 71

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/15/10
 Time of Injection: 1854
 Standard Number: WXX100415-07CCV
 Data File: EXP0412154a

HMX	106.6
RDX	139.0
135-TNB	103.7
13-DNB	99.9
Tetryl	101.4
Nitrobenzene	89.4
4A-26-DNT	97.4
2A-46-DNT	103.1
246-TNT	114.7
34-DNT(surr)	99.8
26-DNT	98.5
24-DNT	107.8
2-NT	76.6
4-NT	86.6
3-NT	78.5
PETN	109.9

*not
4/16/10*

Total 1612.9

Average 100.8

Done 04/15/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412156a

Analysis Date: 15-APR-10 19:53

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	49.576	124	
1,3-Dinitrobenzene-d4	500	577.189	115	
2,4,6-Trinitrotoluene	40	53.889	135	*
2,4-Dinitrotoluene	40	42.732	107	
2,6-Dinitrotoluene	40	42.479	106	
2,6-Dinitrotoluene-d3	500	591.283	118	
2-Amino-4,6-dinitrotoluene	40	46.888	117	
3,4-Dinitrotoluene	20	26.443	132	*
4-Amino-2,6-dinitrotoluene	40	51.546	129	
HMX	40	43.601	109	
Nitrobenzene	40	47.518	119	
PETN	40	45.529	114	
RDX	40	47.308	118	
Tetryl	40	42.163	105	
m-Dinitrobenzene	40	37.522	94	
m-Nitrotoluene	40	28.998	72	
o-Nitrotoluene	40	35.664	89	
p-Nitrotoluene	40	34.471	86	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 25 of 71

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Date: 15-Apr-2010

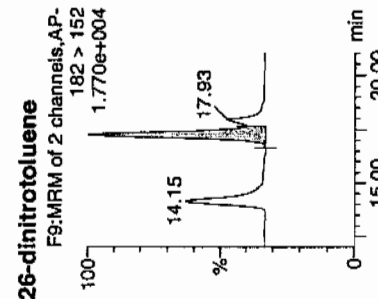
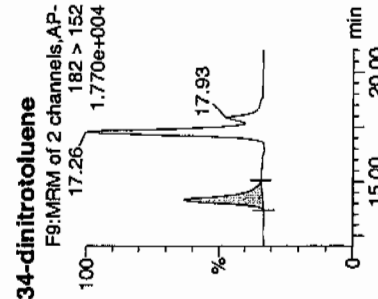
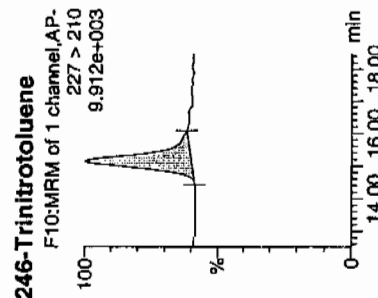
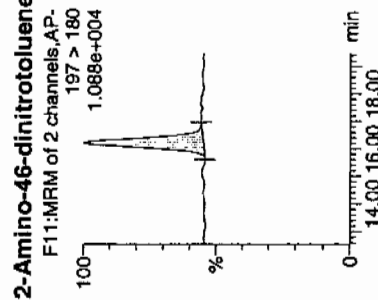
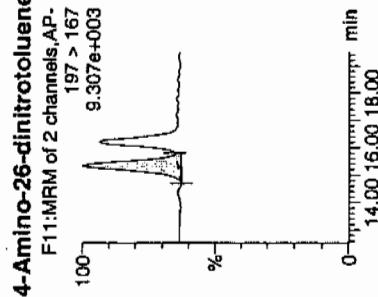
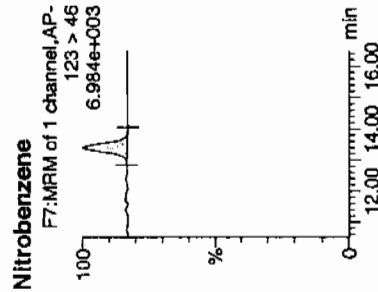
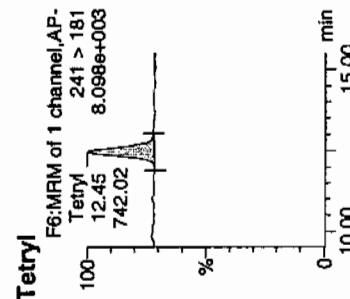
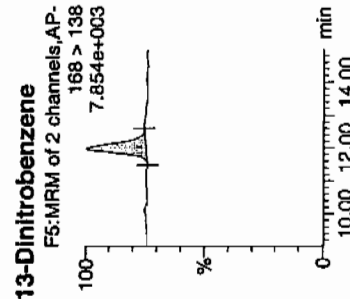
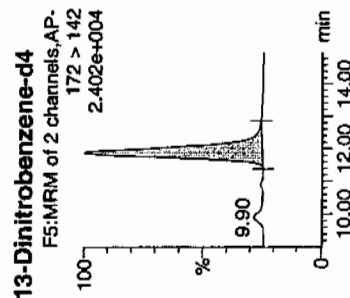
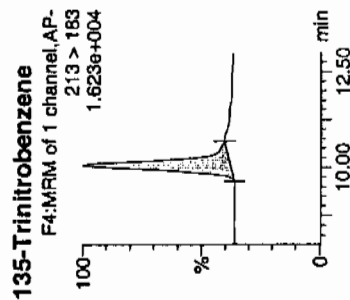
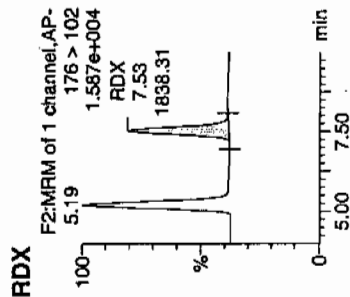
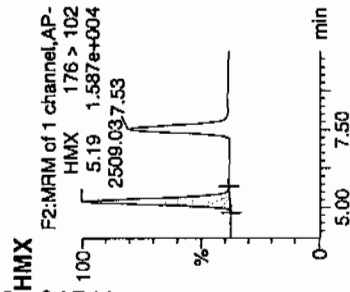
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ID: WXX100415-08CRI

Vial: 1:1,C

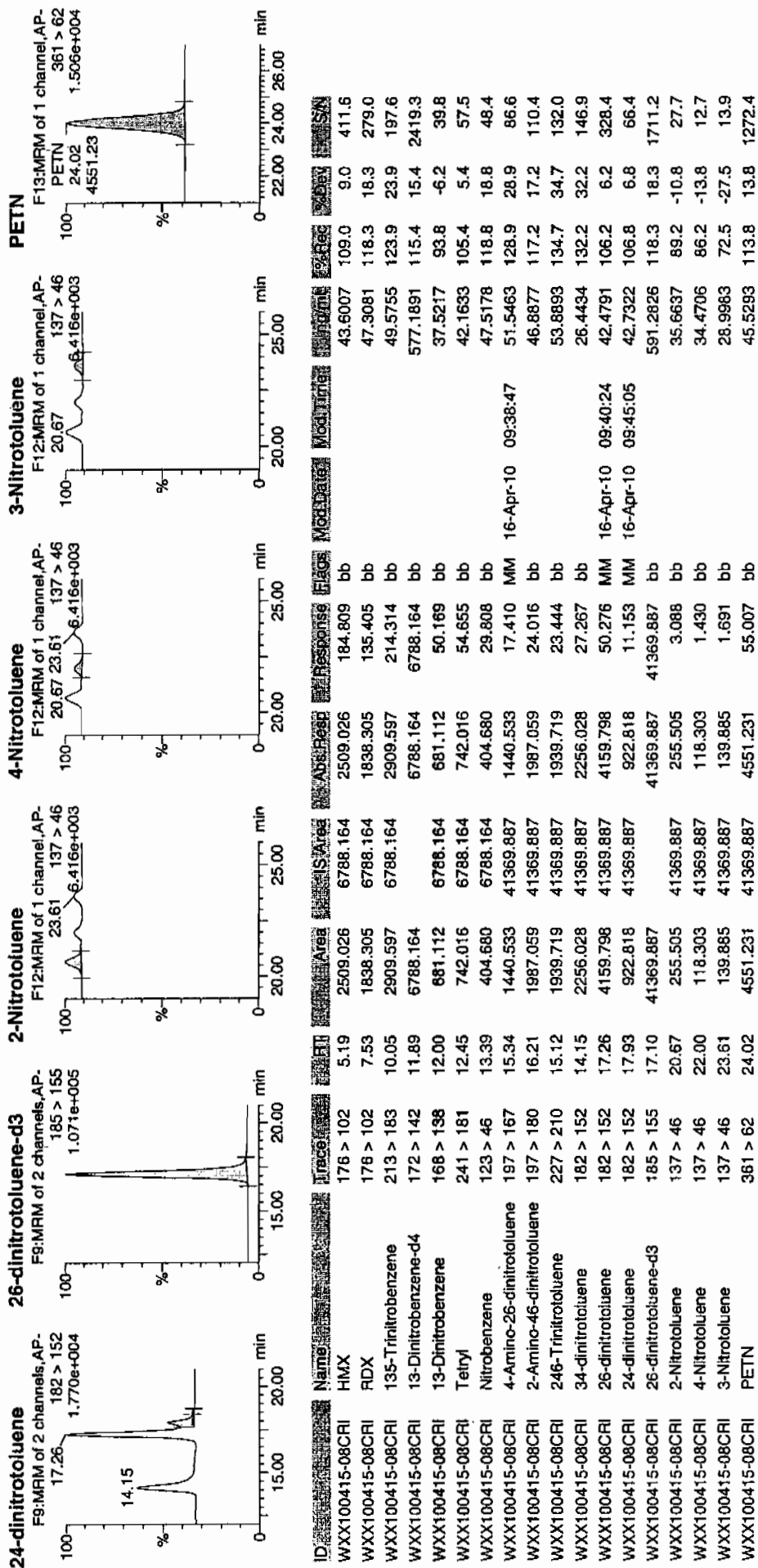
MT
4/16/10

HM



chem
04/18/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/15/10
 Time of Injection 1953
 Standard Number WXX100415-08CRI
 Data File EXP0412156a

HMX	109.0
RDX	118.3
135-TNB	123.9
13-DNB	93.8
Tetryl	105.4
Nitrobenzene	118.8
4A-26-DNT	128.9
2A-46-DNT	117.2
246-TNT	134.7
34-DNT(surr)	132.2
26-DNT	106.2
24-DNT	106.8
2-NT	89.2
4-NT	86.2
3-NT	72.5
PETN	113.8

Total 1756.9

Average 109.8

MA
4/16/10

done 4/15/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412163a

Analysis Date: 15-APR-10 23:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	579.712	97	
1,3-Dinitrobenzene-d4	500	553.483	111	
2,4,6-Trinitrotoluene	600	651.215	109	
2,4-Dinitrotoluene	600	599.098	100	
2,6-Dinitrotoluene	600	585.441	98	
2,6-Dinitrotoluene-d3	500	535.557	107	
2-Amino-4,6-dinitrotoluene	600	610.969	102	
3,4-Dinitrotoluene	300	292.991	98	
4-Amino-2,6-dinitrotoluene	600	562.866	94	
HMX	600	678.203	113	
Nitrobenzene	600	510.803	85	
PETN	600	600.382	100	
RDx	600	757.906	126	*
Tetryl	600	567.854	95	
m-Dinitrobenzene	600	595.705	99	
m-Nitrotoluene	600	425.74	71	*
o-Nitrotoluene	600	455.835	76	*
p-Nitrotoluene	600	482.872	80	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 39 of 71

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

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Date: 15-Apr-2010

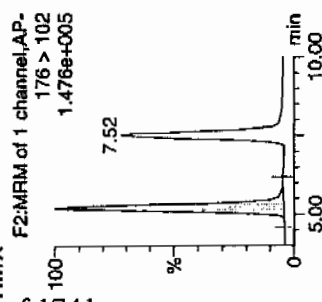
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ID: WXX100415-07CCV

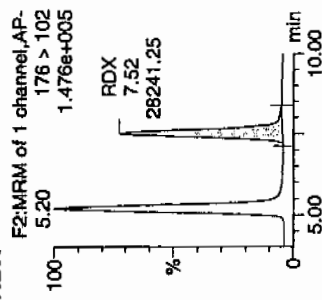
Vial: 1:1,B

MTT
4/16/10

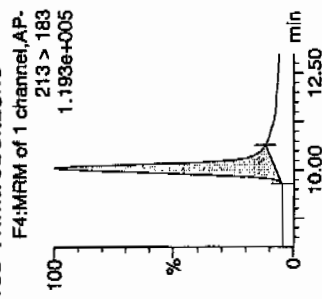
HMx



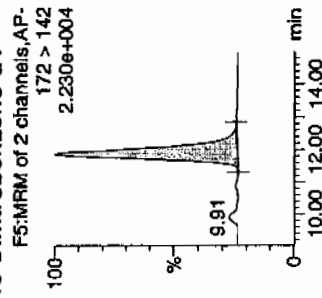
RDX



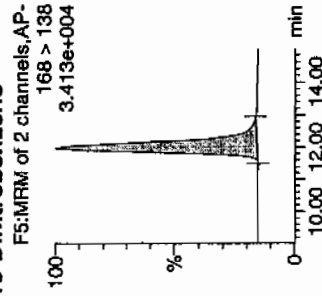
135-Trinitrobenzene



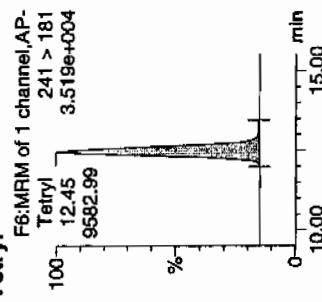
13-Dinitrobenzene-d4



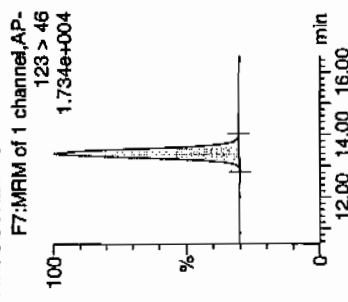
13-Dinitrobenzene



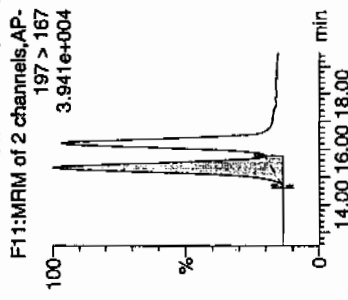
Tetryl



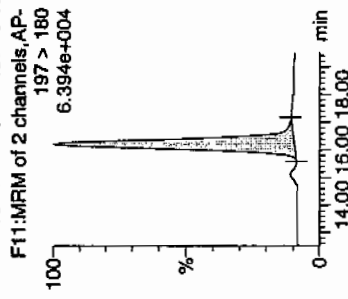
Nitrobenzene



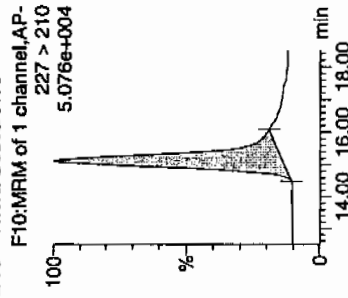
4-Amino-26-dinitrotoluene



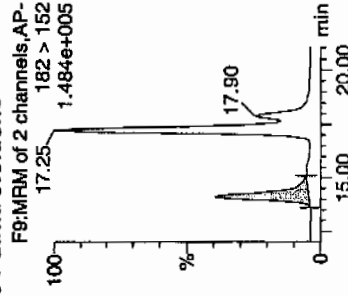
2-Amino-46-dinitrotoluene



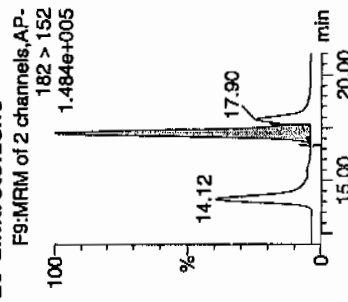
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



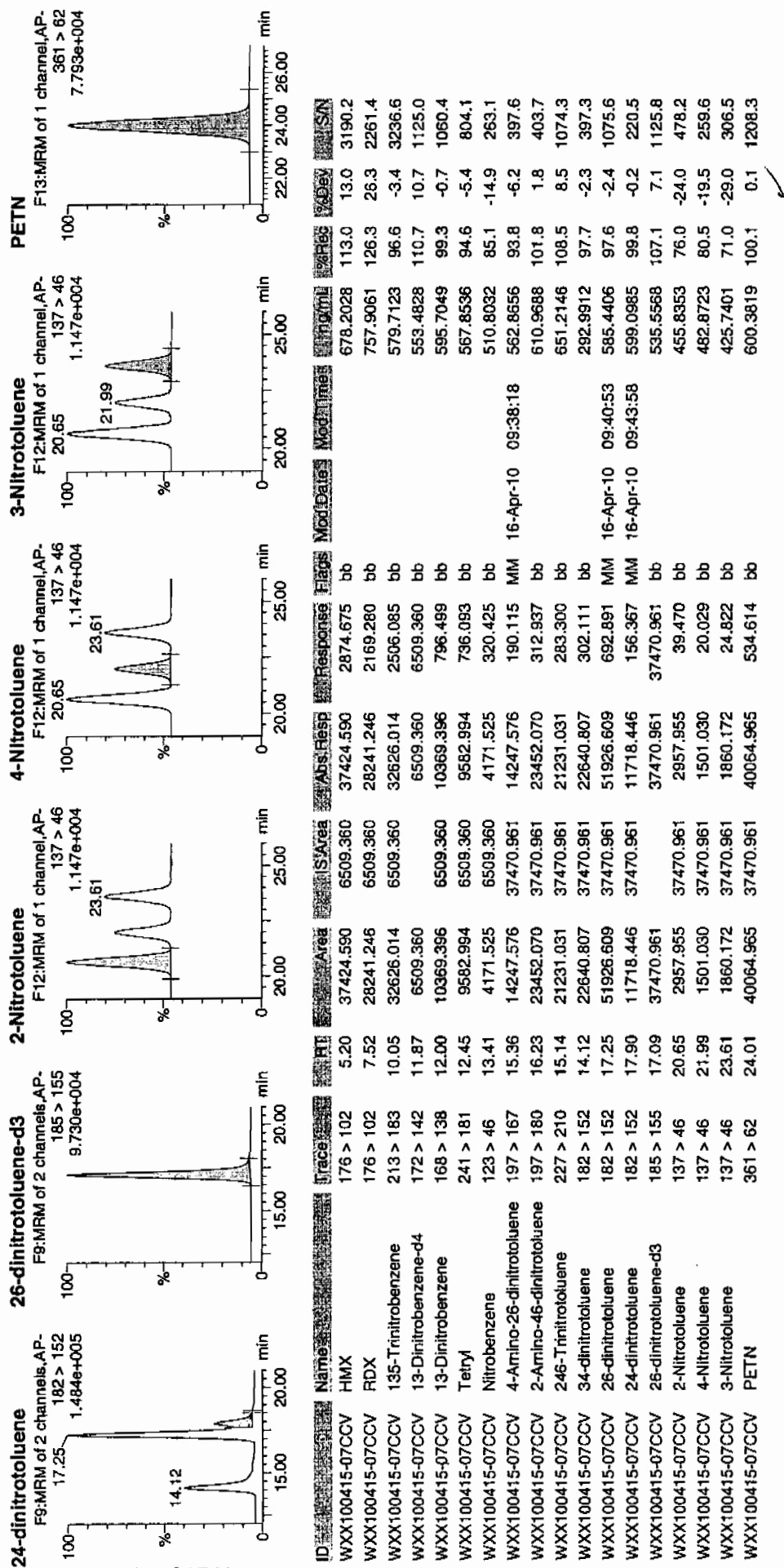
4/16/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 40 of 71

Dataset: C:\MASSLYNX\New_Exp\PROV041210expA3.qtd, Time: Fri Apr 16 09:45:39 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/15/10
 Time of Injection: 2320
 Standard Number: WXX100415-07CCV
 Data File: EXP0412163a

HMX	113.0
RDX	126.3
135-TNB	96.6
13-DNB	99.3
Tetryl	94.6
Nitrobenzene	85.1
4A-26-DNT	93.8
2A-46-DNT	101.8
246-TNT	108.5
34-DNT(surr)	97.7
26-DNT	97.6
24-DNT	99.8
2-NT	76.0
4-NT	80.5
3-NT	71.0
PETN	100.1

*WXX
4/16/10*

Total 1541.7

WXX 04/15/10

Average 96.4

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412165a

Analysis Date: 16-APR-10 00:19

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.062	125	
1,3-Dinitrobenzene-d4	500	605.441	121	
2,4,6-Trinitrotoluene	40	46.388	116	
2,4-Dinitrotoluene	40	46.587	116	
2,6-Dinitrotoluene	40	41.89	105	
2,6-Dinitrotoluene-d3	500	552.799	111	
2-Amino-4,6-dinitrotoluene	40	40.251	101	
3,4-Dinitrotoluene	20	21.003	105	
4-Amino-2,6-dinitrotoluene	40	34.553	86	
HMX	40	54.973	137	*
Nitrobenzene	40	33.701	84	
PETN	40	53.483	134	*
RDX	40	56.813	142	*
Tetryl	40	39.601	99	
m-Dinitrobenzene	40	43.11	108	
m-Nitrotoluene	40	32.11	80	
o-Nitrotoluene	40	32.239	81	
p-Nitrotoluene	40	37.87	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%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412165a

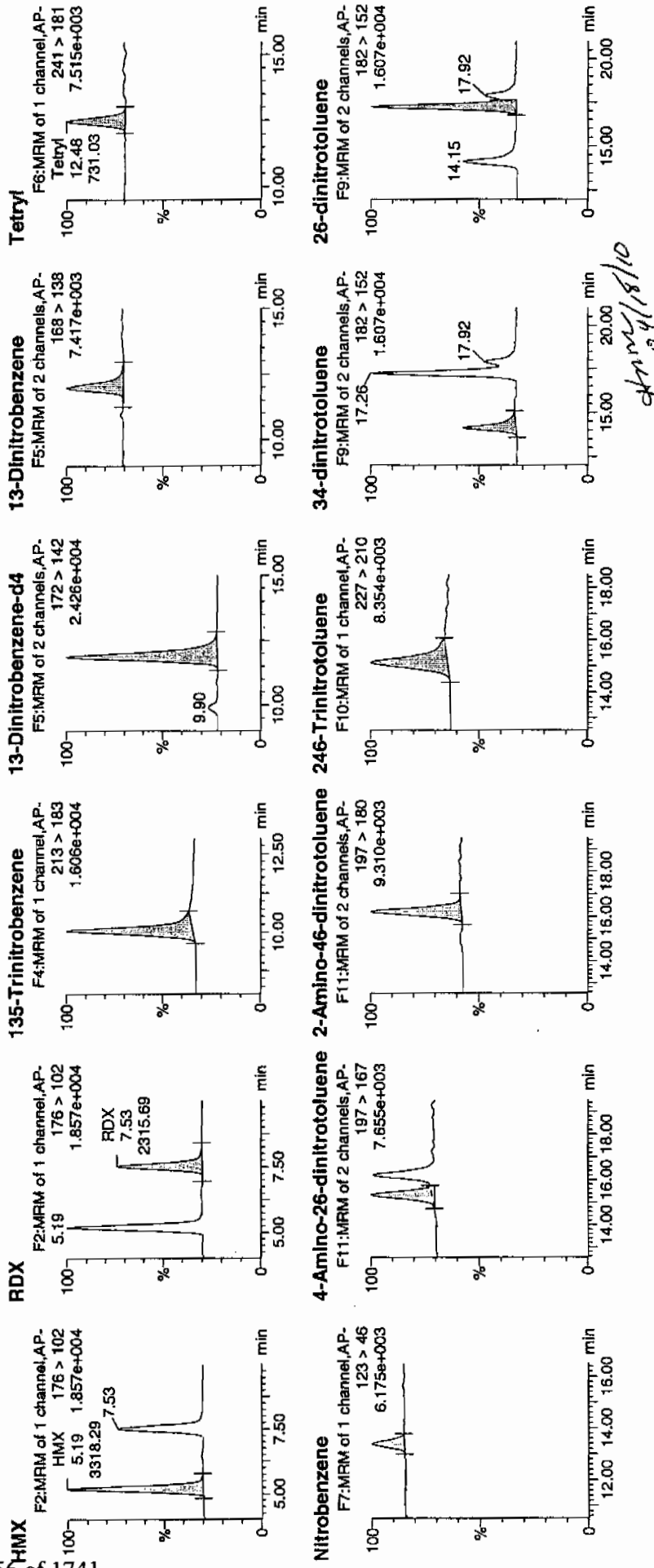
Date: 16-Apr-2010

Time: 00:19:13

ID: WXX100415-08CRI

Vial: 1:1,C

Handwritten:
1741
1456

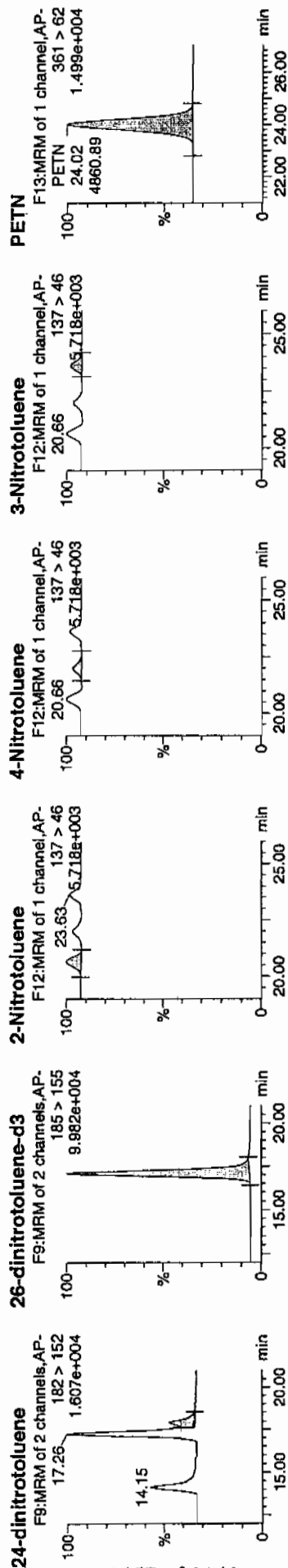


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 44 of 71

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



ID	Name	Trace	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int/mg	% Rec	SN
WXX100415-08CRI	HMX	176 > 102	5.19	3318.288	7120.432	233.012	bb	54.9729	137.4	37.4	446.4	
WXX100415-08CRI	RD	176 > 102	7.53	2315.688	7120.432	162.609	bb	56.8125	142.0	42.0	280.0	
WXX100415-08CRI	135-Trinitrobenzene	213 > 183	10.05	3081.971	7120.432	216.417	bb	50.0621	125.2	25.2	368.4	
WXX100415-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	7120.432	7120.432	7120.432	bb	605.4414	121.1	21.1	500.1	
WXX100415-08CRI	13-Dinitrobenzene	168 > 138	11.97	820.854	7120.432	820.854	bb	43.1098	107.8	7.8	67.6	
WXX100415-08CRI	Tetryl	241 > 181	12.48	731.028	7120.432	731.028	bb	39.6095	99.0	-1.0	92.4	
WXX100415-08CRI	Nitrobenzene	123 > 46	13.39	301.059	7120.432	301.059	bb	33.7010	84.3	-15.7	42.7	
WXX100415-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.34	902.786	38677.328	902.786	MM	34.5531	88.4	-13.6	42.8	
WXX100415-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.21	1594.779	38677.328	1594.779	bb	40.2510	100.6	0.6	83.0	
WXX100415-08CRI	246-Trinitrotoluene	227 > 210	15.13	1561.035	38677.328	1561.035	bb	46.3878	116.0	16.0	72.6	
WXX100415-08CRI	34-dinitrotoluene	182 > 152	14.15	1675.250	38677.328	1675.250	bb	21.0030	105.0	5.0	52.2	
WXX100415-08CRI	26-dinitrotoluene	182 > 152	17.26	3835.119	38677.328	3835.119	MM	41.8900	104.7	4.7	144.8	
WXX100415-08CRI	24-dinitrotoluene	182 > 152	17.92	940.578	38677.328	940.578	MM	46.5866	116.5	16.5	29.5	
WXX100415-08CRI	26-dinitrotoluene-d3	185 > 155	17.09	38677.328	38677.328	38677.328	bb	552.7989	110.6	10.6	3143.7	
WXX100415-08CRI	2-Nitrotoluene	137 > 46	20.66	215.936	38677.328	215.936	bb	32.2389	80.6	-19.4	38.4	
WXX100415-08CRI	4-Nitrotoluene	137 > 46	22.00	121.509	38677.328	121.509	bb	37.8695	94.7	-5.3	21.6	
WXX100415-08CRI	3-Nitrotoluene	137 > 46	23.63	144.812	38677.328	144.812	bb	32.1096	80.3	-19.7	27.7	
WXX100415-08CRI	PETN	361 > 62	24.02	4860.889	38677.328	4860.889	bb	53.4832	133.7	33.7	1024.1	

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/16/10
 Time of Injection 0019
 Standard Number WXX100415-08CRI
 Data File EXP0412165a

HMX	137.4
RDX	142.0
135-TNB	125.2
13-DNB	107.8
Tetryl	99.0
Nitrobenzene	84.3
4A-26-DNT	86.4
2A-46-DNT	100.6
246-TNT	116.0
34-DNT(surr)	105.0
26-DNT	104.7
24-DNT	116.5
2-NT	80.6
4-NT	94.7
3-NT	80.3
PETN	133.7

NOT
4/16/10

Total 1714.2

Average 107.1

4/16/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412176a

Analysis Date: 16-APR-10 05:43

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	598.513	100	
1,3-Dinitrobenzene-d4	500	468.403	94	
2,4,6-Trinitrotoluene	600	689.221	115	
2,4-Dinitrotoluene	600	643.829	107	
2,6-Dinitrotoluene	600	591.674	99	
2,6-Dinitrotoluene-d3	500	472.742	95	
2-Amino-4,6-dinitrotoluene	600	618.059	103	
3,4-Dinitrotoluene	300	299.863	100	
4-Amino-2,6-dinitrotoluene	600	596.024	99	
HMX	600	662.319	110	
Nitrobenzene	600	529.758	88	
PETN	600	736.789	123	*
RDX	600	768.839	128	*
Tetryl	600	598.943	100	
m-Dinitrobenzene	600	616.623	103	
m-Nitrotoluene	600	476.64	79	*
o-Nitrotoluene	600	478.487	80	*
p-Nitrotoluene	600	539.18	90	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

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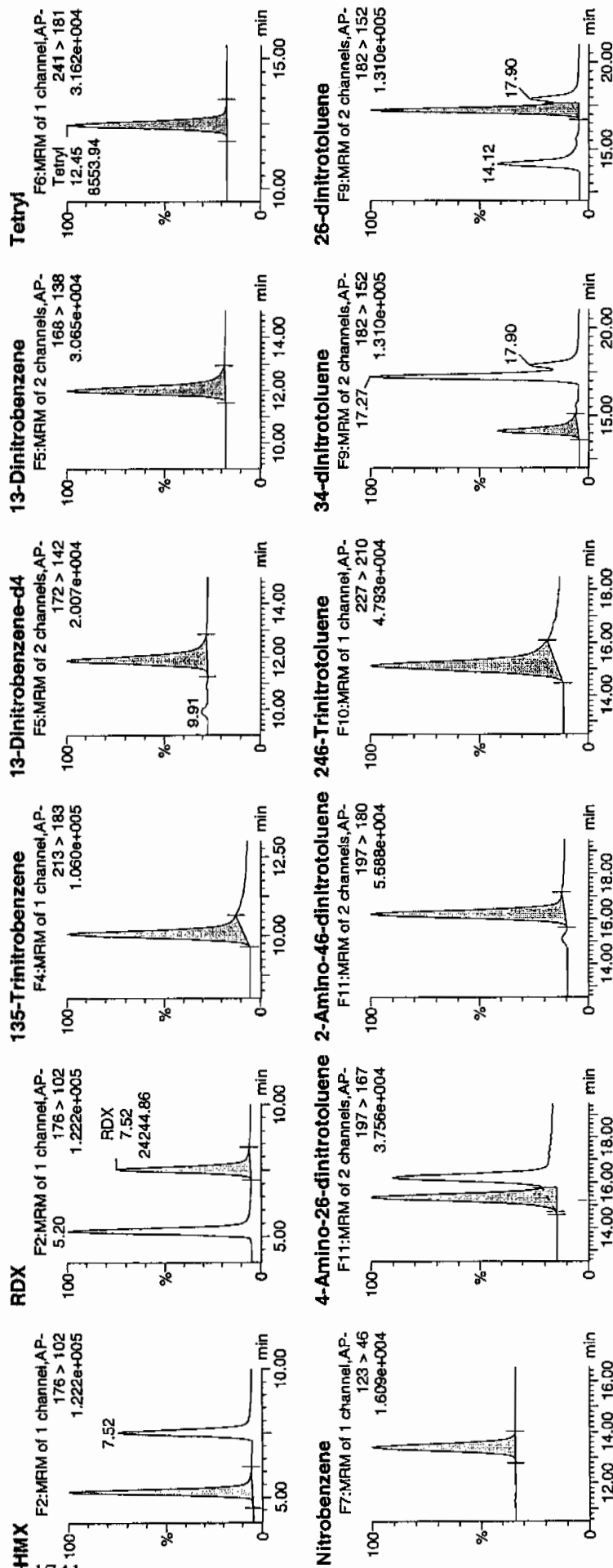
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Time: 05:43:47

ID: WXX100415-07CCV

Vial: 1:1,B

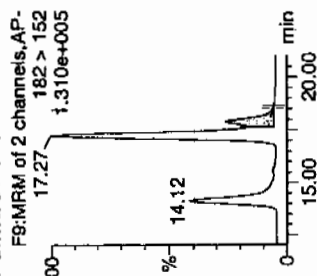
10/17
-1/10/10



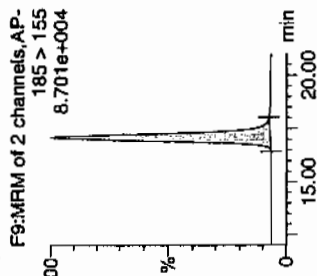
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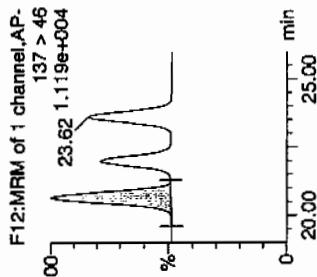
24-dinitrotoluene



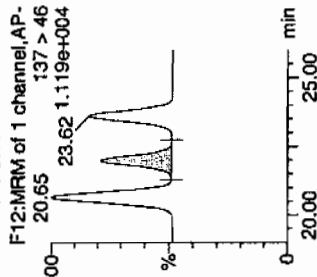
26-dinitrotoluene-d3



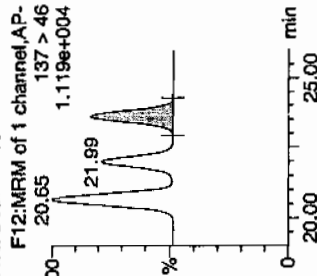
2-Nitrotoluene



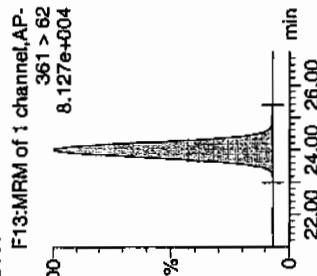
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc	Area	SN
WXX100415-07CCV	HMX	176 > 102	5.20	30930.020	5508.762	30930.020	2807.348	bb			662.3187	110.4	3372.1
WXX100415-07CCV	RDX	176 > 102	7.52	24244.863	5508.762	24244.863	2200.573	bb			788.8393	128.1	2460.5
WXX100415-07CCV	135-Trinitrobenzene	213 > 183	10.05	28506.281	5508.762	28506.281	2587.358	bb			598.5127	99.8	-0.2
WXX100415-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5508.762	5508.762	5508.762	5508.762	bb			468.4032	93.7	-6.3
WXX100415-07CCV	13-Dinitrobenzene	168 > 138	12.00	9083.593	5508.762	9083.593	824.468	bb			616.6229	102.8	2.8
WXX100415-07CCV	Tetryl	241 > 181	12.45	8553.938	5508.762	8553.938	776.394	bb			598.9430	99.8	-0.2
WXX100415-07CCV	Nitrobenzene	123 > 46	13.41	3661.291	5508.762	3661.291	332.315	bb			529.7577	88.3	-11.7
WXX100415-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.35	13317.382	33076.070	13317.382	201.314	MM	16-Apr-10	09:37:25	596.0237	99.3	-0.7
WXX100415-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.22	20941.652	33076.070	20941.652	316.568	bb			618.0586	103.0	3.0
WXX100415-07CCV	246-Trinitrotoluene	227 > 210	15.14	19834.639	33076.070	19834.639	299.834	bb			689.2207	114.9	14.9
WXX100415-07CCV	34-dinitrotoluene	182 > 152	14.12	20454.080	33076.070	20454.080	309.198	bb			299.8635	100.0	-0.0
WXX100415-07CCV	26-dinitrotoluene	182 > 152	17.27	46324.242	33076.070	46324.242	700.268	MM	16-Apr-10	09:41:53	591.6735	98.6	-1.4
WXX100415-07CCV	24-dinitrotoluene	182 > 152	17.90	11116.332	33076.070	11116.332	168.042	MM	16-Apr-10	09:42:23	643.8292	107.3	7.3
WXX100415-07CCV	26-dinitrotoluene-d3	185 > 155	17.09	33076.070	33076.070	33076.070	33076.070	bb			472.7425	94.5	-5.5
WXX100415-07CCV	2-Nitrotoluene	137 > 46	20.65	2740.770	33076.070	2740.770	41.431	bb			478.4868	79.7	-20.3
WXX100415-07CCV	4-Nitrotoluene	137 > 46	21.99	1479.483	33076.070	1479.483	22.365	bb			539.1801	89.9	-10.1
WXX100415-07CCV	3-Nitrotoluene	137 > 46	23.62	1838.308	33076.070	1838.308	27.789	bb			476.6402	79.4	-20.6
WXX100415-07CCV	PETN	361 > 62	24.02	41793.250	33076.070	41793.250	631.775	bb			736.7886	122.8	22.8

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/16/10
 Time of Injection: 0543
 Standard Number: WXX100415-07CCV
 Data File: EXP0412176a

HMX	110.4
RDX	128.1
135-TNB	99.8
13-DNB	102.8
Tetryl	99.8
Nitrobenzene	88.3
4A-26-DNT	99.3
2A-46-DNT	103.0
246-TNT	114.9
34-DNT(surr)	100.0
26-DNT	98.6
24-DNT	107.3
2-NT	79.7
4-NT	89.9
3-NT	79.4
PETN	122.8

Handwritten: 110.4
4/16/10

Total 1624.1

Handwritten: 1624.1

Average 101.5

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412178a

Analysis Date: 16-APR-10 06:42

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.611	122	
1,3-Dinitrobenzene-d4	500	507.923	102	
2,4,6-Trinitrotoluene	40	45.832	115	
2,4-Dinitrotoluene	40	44.52	111	
2,6-Dinitrotoluene	40	40.668	102	
2,6-Dinitrotoluene-d3	500	533.943	107	
2-Amino-4,6-dinitrotoluene	40	42.838	107	
3,4-Dinitrotoluene	20	21.251	106	
4-Amino-2,6-dinitrotoluene	40	42.982	107	
HMX	40	46.716	117	
Nitrobenzene	40	34.698	87	
PETN	40	52.564	131	*
RDX	40	56.146	140	*
Tetryl	40	46.059	115	
m-Dinitrobenzene	40	44.37	111	
m-Nitrotoluene	40	35.332	88	
o-Nitrotoluene	40	30.954	77	
p-Nitrotoluene	40	45.51	114	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

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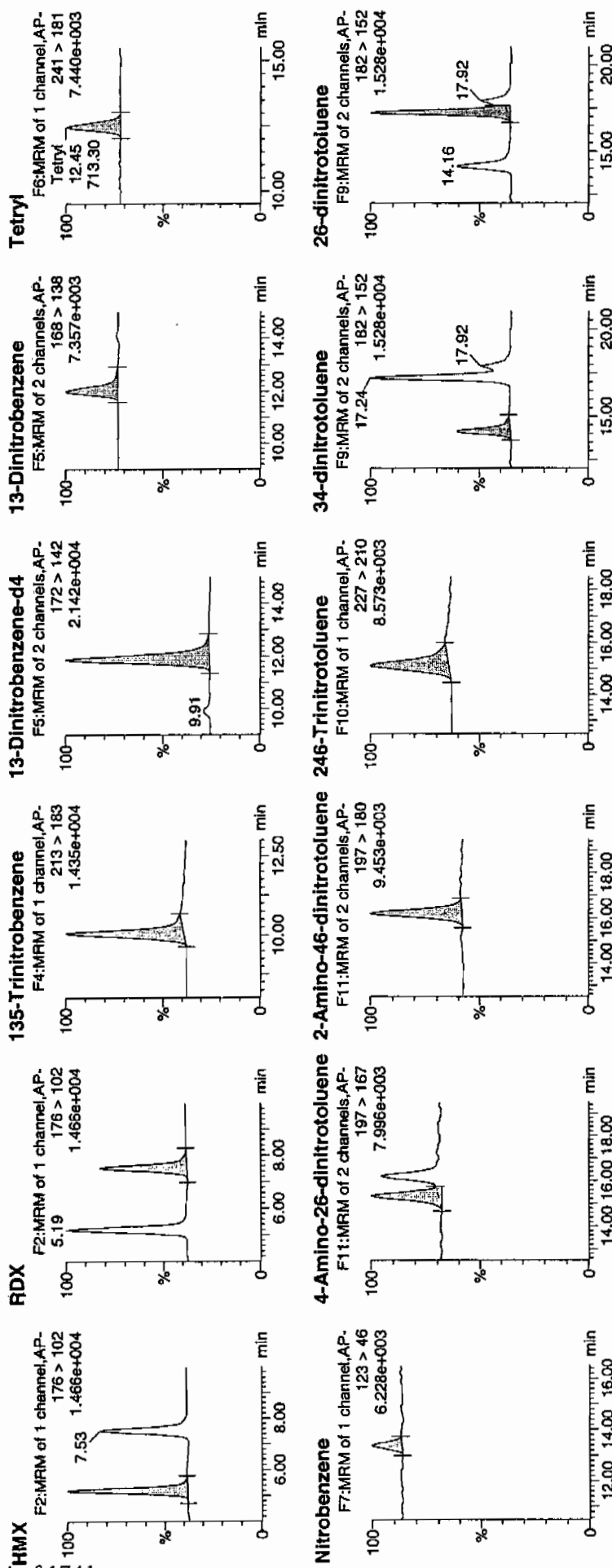
Date: 16-Apr-2010

Time: 06:42:49

ID: WXX100415-08CRI

Vial: 1:1,C

177
11/10



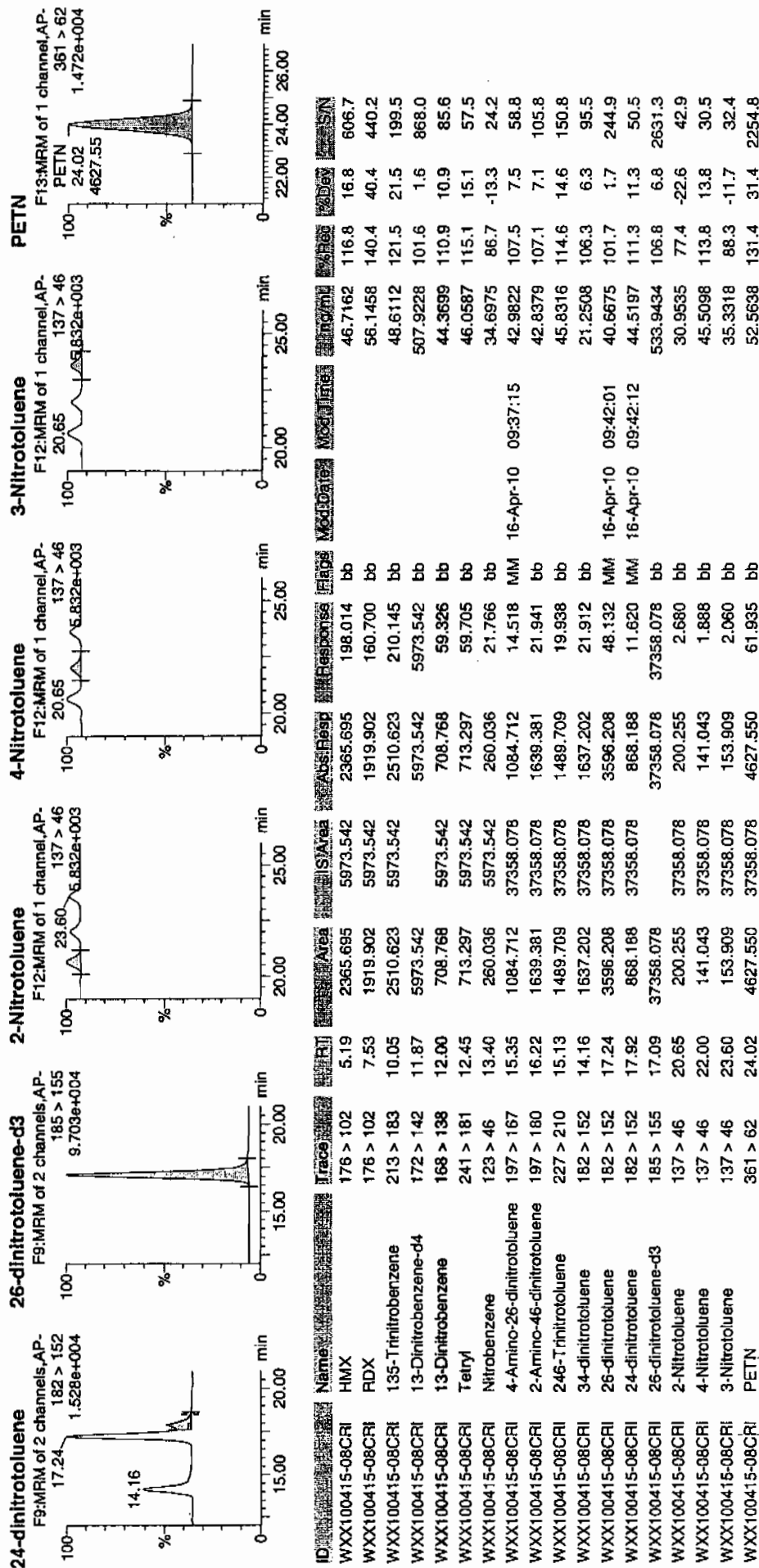
drawn 4/18/10

Quantity Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 70 of 71

Dataset: C:\MASSLYNX\New_Exp\PRO1041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/16/10
 Time of Injection 0642
 Standard Number WXX100415-08CRI
 Data File EXP0412178a

HMX	116.8
RDX	140.4
135-TNB	121.5
13-DNB	110.9
Tetryl	115.1
Nitrobenzene	86.7
4A-26-DNT	107.5
2A-46-DNT	107.1
246-TNT	114.6
34-DNT(surr)	106.3
26-DNT	101.7
24-DNT	111.3
2-NT	77.4
4-NT	113.8
3-NT	88.3
PETN	131.4

WPP
4/16/10

Total 1750.8

Average 109.4

Am 04/18/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412189a

Analysis Date: 16-APR-10 12:07

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	594.161	99	
1,3-Dinitrobenzene-d4	500	526.245	105	
2,4,6-Trinitrotoluene	600	696.001	116	
2,4-Dinitrotoluene	600	686.989	114	
2,6-Dinitrotoluene	600	582.08	97	
2,6-Dinitrotoluene-d3	500	530.172	106	
2-Amino-4,6-dinitrotoluene	600	624.722	104	
3,4-Dinitrotoluene	300	294.835	98	
4-Amino-2,6-dinitrotoluene	600	602.218	100	
HMX	600	608.688	101	
Nitrobenzene	600	477.361	80	*
PETN	600	646.883	108	
RDX	600	716.933	119	
Tetryl	600	569.427	95	
m-Dinitrobenzene	600	577.006	96	
m-Nitrotoluene	600	474.743	79	*
o-Nitrotoluene	600	440.848	73	*
p-Nitrotoluene	600	477.383	80	*

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 21 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412189a

Date: 16-Apr-2010

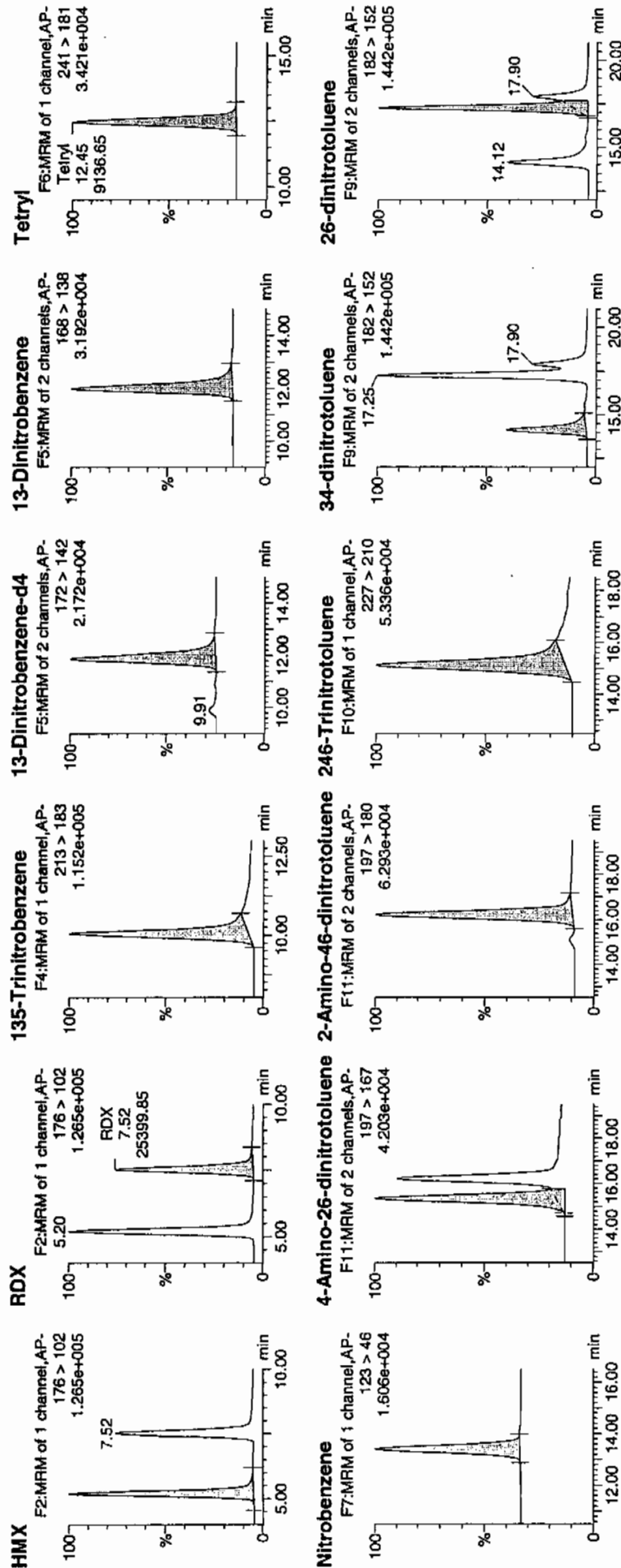
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ID: WXX100415-07CCV

Vial: 1:1,B

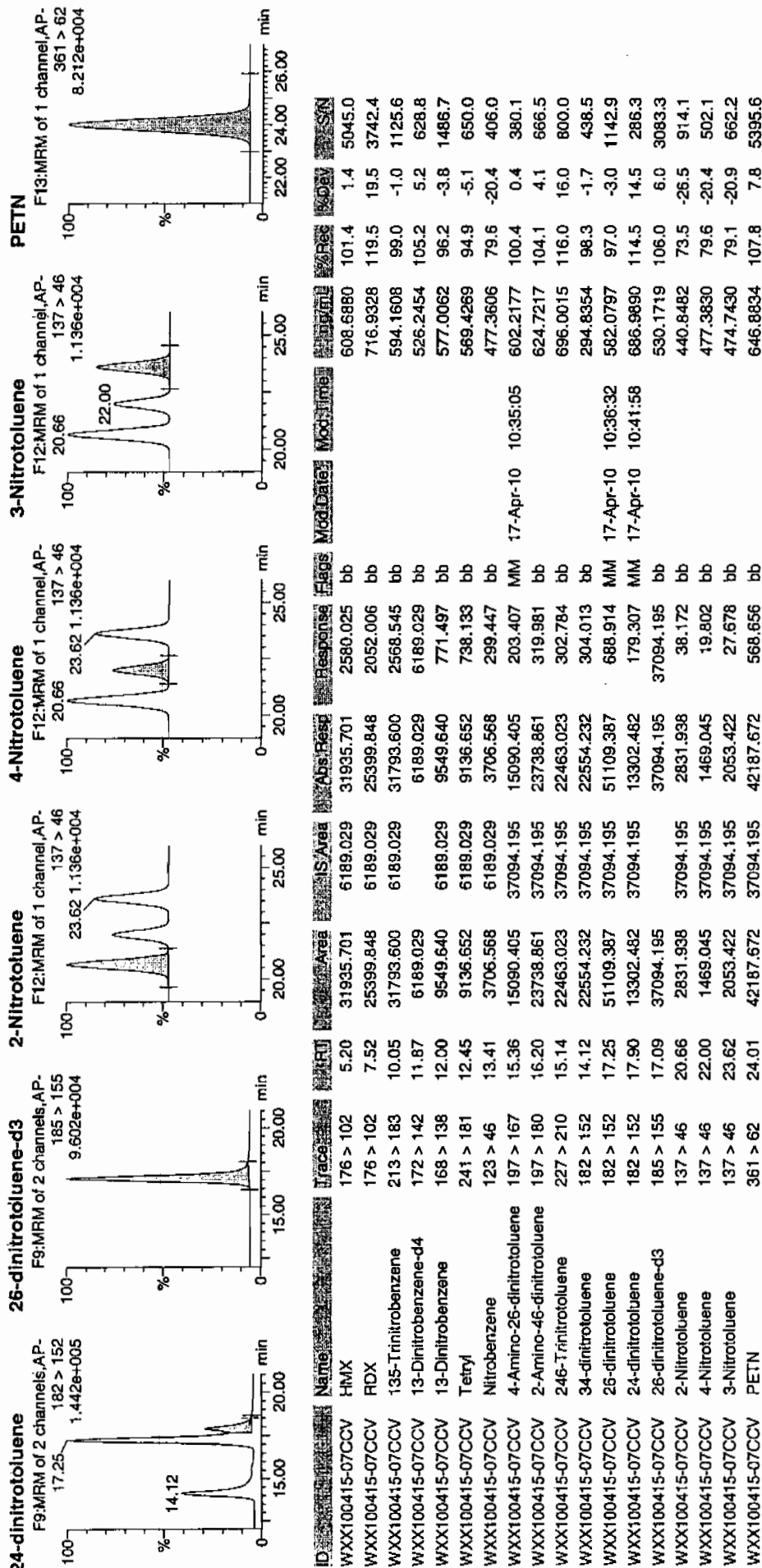
Handwritten: MHT 4/17/10

Page 1468 of 1741



Handwritten: dnmw 04/18/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/16/10
 Time of Injection: 1207
 Standard Number: WXX100415-07CCV
 Data File: EXP0412189a

HMX		101.4	✓
RDX		119.5	✓
135-TNB		99.0	✓
13-DNB		96.2	
Tetryl		94.9	
Nitrobenzene		79.6	
4A-26-DNT		100.4	
2A-46-DNT		104.1	
246-TNT		116.0	
34-DNT(surr)		98.3	
26-DNT		97.0	
24-DNT		114.5	
2-NT		73.5	
4-NT		79.6	
3-NT		79.1	
PETN		107.8	

Handwritten: 100%
4/16/10

Total 1560.9

Average 97.6

Handwritten: HMM 04/18/10

ICV Limits 85-115%

✓ CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412191a

Analysis Date: 16-APR-10 13:06

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	46.372	116	
1,3-Dinitrobenzene-d4	500	558.99	112	
2,4,6-Trinitrotoluene	40	48.911	122	
2,4-Dinitrotoluene	40	42.024	105	
2,6-Dinitrotoluene	40	41.491	104	
2,6-Dinitrotoluene-d3	500	540.276	108	
2-Amino-4,6-dinitrotoluene	40	50.953	127	
3,4-Dinitrotoluene	20	21.209	106	
4-Amino-2,6-dinitrotoluene	40	46.62	117	
HMX	40	43.604	109	
Nitrobenzene	40	38.159	95	
PETN	40	56.911	142	*
RDX	40	46.041	115	
Tetryl	40	41.108	103	
m-Dinitrobenzene	40	41.719	104	
m-Nitrotoluene	40	36.968	92	
o-Nitrotoluene	40	30.379	76	
p-Nitrotoluene	40	35.109	88	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412191a

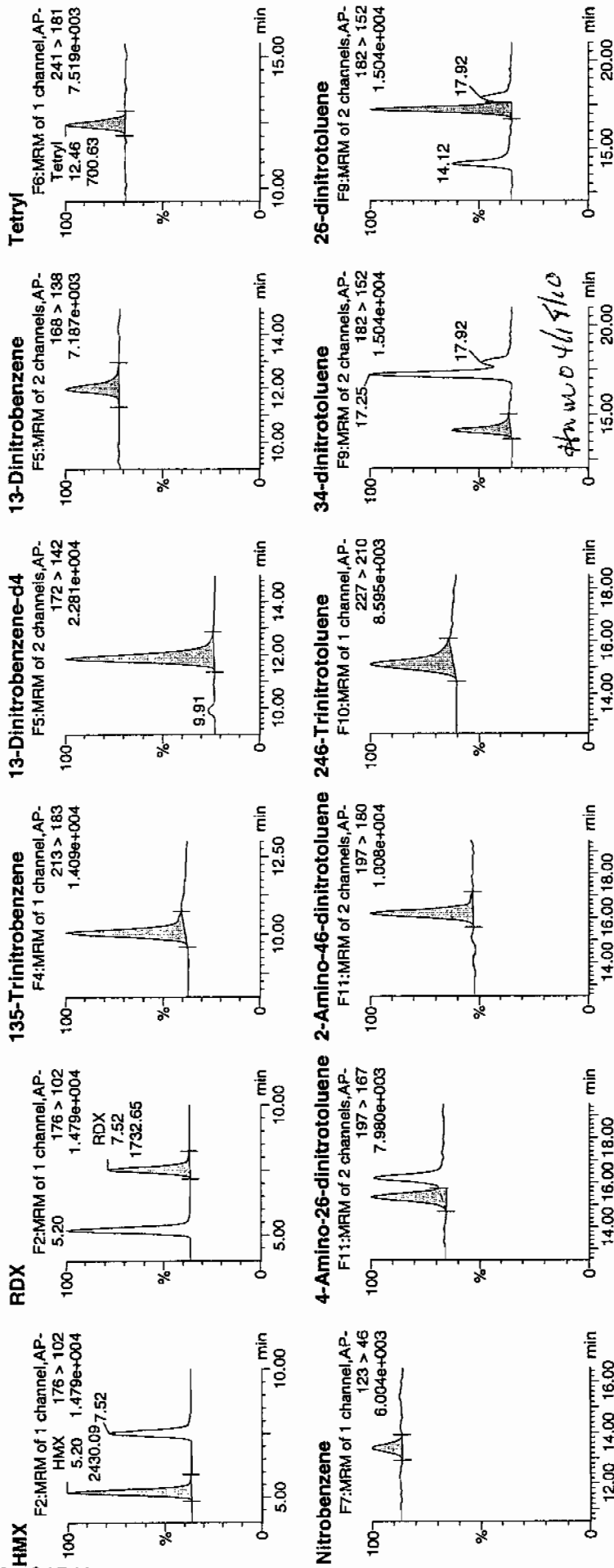
Date: 16-Apr-2010

Time: 13:06:33

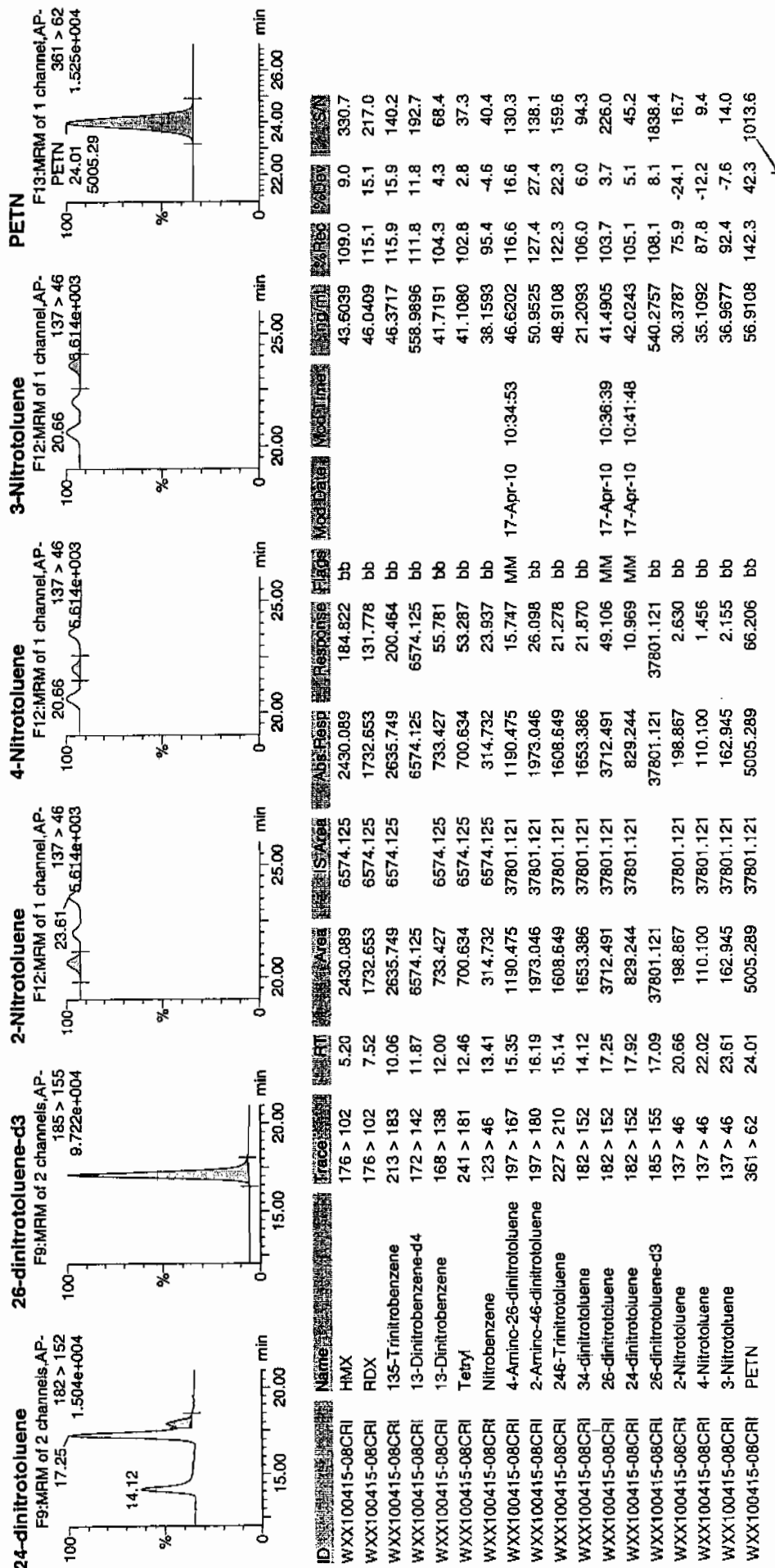
ID: WXX100415-08CRI

Vial: 1:1,C

4/17/10



Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/16/10
 Time of Injection 1306
 Standard Number WXX100415-08CRI
 Data File EXP0412191a

HMX	109.0
RDX	115.1
135-TNB	115.9
13-DNB	104.3
Tetryl	102.8
Nitrobenzene	95.4
4A-26-DNT	116.6
2A-46-DNT	127.4
246-TNT	122.3
34-DNT(surr)	106.0
26-DNT	103.7
24-DNT	105.1
2-NT	75.9
4-NT	87.8
3-NT	92.4
PETN	142.3

Handwritten: 4/17/10

Total 1722.0

Handwritten: 4/17/10

Average 107.6

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412201a

Analysis Date: 16-APR-10 18:01

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	587.578	98	
1,3-Dinitrobenzene-d4	500	504.505	101	
2,4,6-Trinitrotoluene	600	644.055	107	
2,4-Dinitrotoluene	600	617.761	103	
2,6-Dinitrotoluene	600	553.71	92	
2,6-Dinitrotoluene-d3	500	523.209	105	
2-Amino-4,6-dinitrotoluene	600	592.725	99	
3,4-Dinitrotoluene	300	280.462	93	
4-Amino-2,6-dinitrotoluene	600	558.591	93	
HMX	600	646.479	108	
Nitrobenzene	600	519.544	87	
PETN	600	628.387	105	
RDX	600	680.578	113	
Tetryl	600	547.905	91	
m-Dinitrobenzene	600	577.419	96	
m-Nitrotoluene	600	461.5	77	*
o-Nitrotoluene	600	426.861	71	*
p-Nitrotoluene	600	468.599	78	*

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412201a

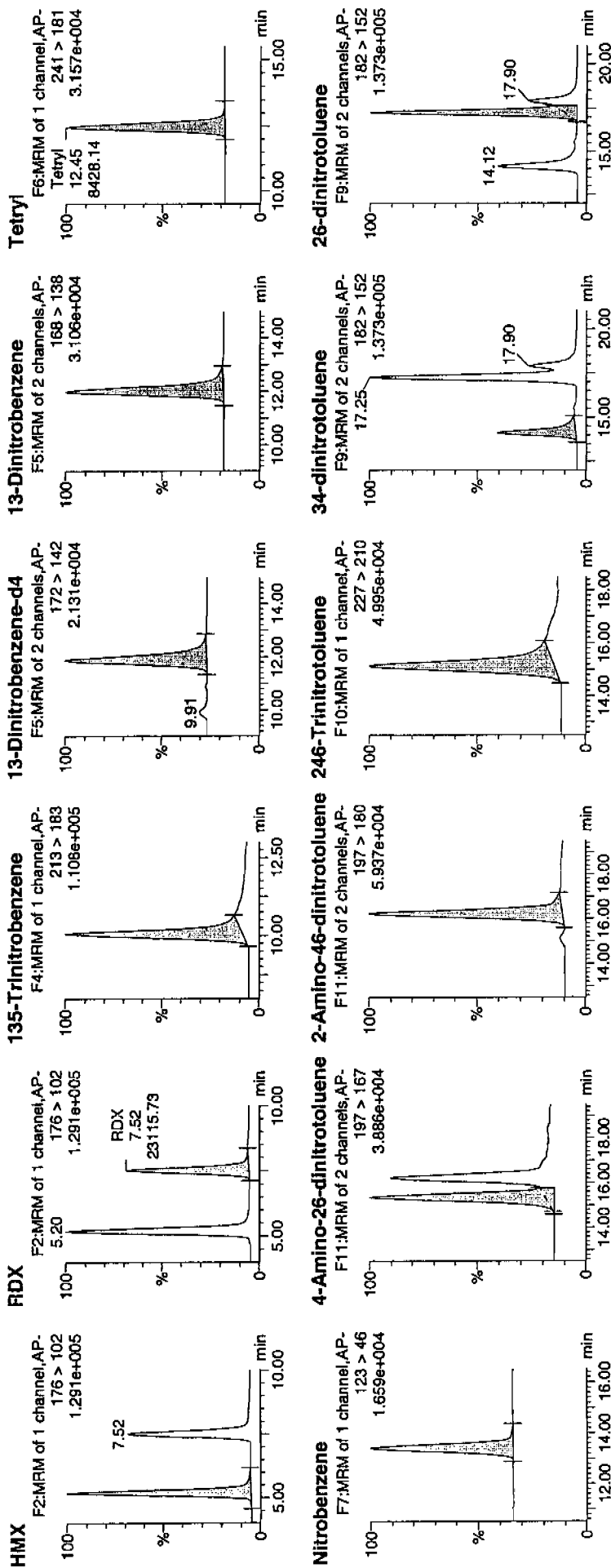
Date: 16-Apr-2010

Time: 18:01:34

ID: WXX100415-07CCV

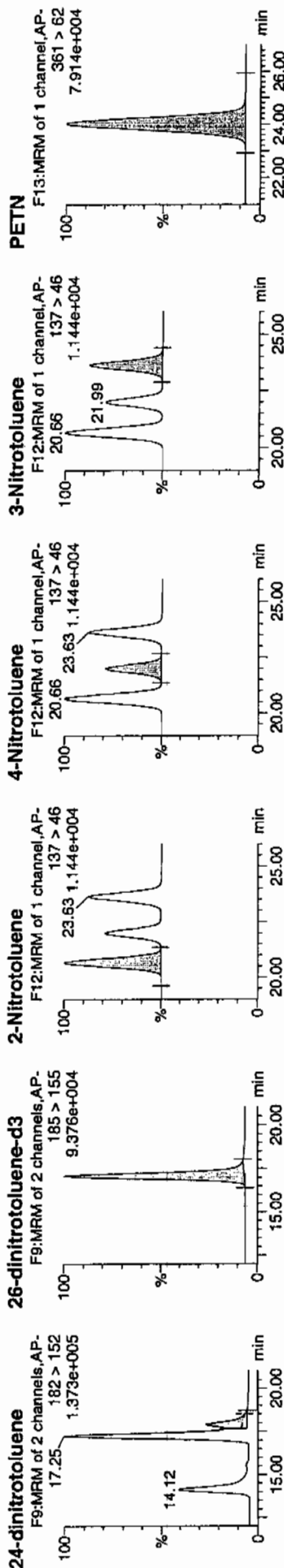
Vial: 1:1,B

MT
4/17/10



dim 4/18/10

Dataset: C:\MASSLYNX\New_Exp\PRO1041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



ID	Name	Trace	RT	Area	IS Area	Abundance	Response	Flags	Mod Date	Mod Time	Area	Mod Dev	SN
WXX100415-07CCV	HMx	176 > 102	5.20	32517.174	5933.344	32517.174	2740.206	bb			646.4785	107.7	7.7
WXX100415-07CCV	RDX	176 > 102	7.52	23115.730	5933.344	23115.730	1947.951	bb			680.5781	113.4	13.4
WXX100415-07CCV	135-Trinitrobenzene	213 > 183	10.05	30142.449	5933.344	30142.449	2540.089	bb			587.5784	97.9	-2.1
WXX100415-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5933.344	5933.344	5933.344	5933.344	bb			504.5048	100.9	0.9
WXX100415-07CCV	13-Dinitrobenzene	168 > 138	12.00	9161.674	5933.344	9161.674	772.050	bb			577.4193	96.2	-3.8
WXX100415-07CCV	Tetryl	241 > 181	12.45	8428.140	5933.344	8428.140	710.235	bb			547.9055	91.3	-8.7
WXX100415-07CCV	Nitrobenzene	123 > 46	13.41	3867.448	5933.344	3867.448	325.908	bb			519.5436	86.6	-13.4
WXX100415-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.36	13813.359	36607.000	13813.359	188.671	MM	17-Apr-10	10:34:32	558.5907	93.1	-6.9
WXX100415-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.20	22227.217	36607.000	22227.217	303.592	bb			592.7255	98.8	-1.2
WXX100415-07CCV	246-Trinitrotoluene	227 > 210	15.14	20513.486	36607.000	20513.486	280.185	bb			644.0554	107.3	7.3
WXX100415-07CCV	34-dinitrotoluene	182 > 152	14.12	21172.928	36607.000	21172.928	289.192	bb			280.4622	93.5	-6.5
WXX100415-07CCV	26-dinitrotoluene	182 > 152	17.25	47979.848	36607.000	47979.848	655.337	MM	17-Apr-10	10:37:05	553.7101	92.3	-7.7
WXX100415-07CCV	24-dinitrotoluene	182 > 152	17.90	11804.882	36607.000	11804.882	161.238	MM	17-Apr-10	10:41:16	617.7611	103.0	3.0
WXX100415-07CCV	26-dinitrotoluene-d3	185 > 155	17.07	36607.000	36607.000	36607.000	36607.000	bb			523.2086	104.6	4.6
WXX100415-07CCV	2-Nitrotoluene	137 > 46	20.66	2706.072	36607.000	2706.072	36.961	bb			426.8610	71.1	-28.9
WXX100415-07CCV	4-Nitrotoluene	137 > 46	21.99	1423.074	36607.000	1423.074	19.437	bb			468.5987	78.1	-21.9
WXX100415-07CCV	3-Nitrotoluene	137 > 46	23.63	1969.926	36607.000	1969.926	26.906	bb			461.5004	76.9	-23.1
WXX100415-07CCV	PETN	361 > 62	24.02	40650.574	36607.000	40650.574	555.230	bb			628.3874	104.7	4.7

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/16/10
 Time of Injection: 1801
 Standard Number: WXX100415-07CCV
 Data File: EXP0412201a

HMX	107.7
RDX	113.4
135-TNB	97.9
13-DNB	96.2
Tetryl	91.3
Nitrobenzene	86.6
4A-26-DNT	93.1
2A-46-DNT	98.8
246-TNT	107.3
34-DNT(surr)	93.5
26-DNT	92.3
24-DNT	103.0
2-NT	71.1
4-NT	78.1
3-NT	76.9
PETN	104.7
Total	1511.9

*MTT
4/17/10*

Average

94.5

done 04/18/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412203a

Analysis Date: 16-APR-10 19:00

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	49.947	125	
1,3-Dinitrobenzene-d4	500	512.579	103	
2,4,6-Trinitrotoluene	40	38.989	97	
2,4-Dinitrotoluene	40	41.706	104	
2,6-Dinitrotoluene	40	40.891	102	
2,6-Dinitrotoluene-d3	500	575.067	115	
2-Amino-4,6-dinitrotoluene	40	46.944	117	
3,4-Dinitrotoluene	20	20.231	101	
4-Amino-2,6-dinitrotoluene	40	32.371	81	
HMX	40	50.356	126	
Nitrobenzene	40	43.303	108	
PETN	40	47.143	118	
RDX	40	51.133	128	
Tetryl	40	43.462	109	
m-Dinitrobenzene	40	41.14	103	
m-Nitrotoluene	40	32.606	82	
o-Nitrotoluene	40	35.3	88	
p-Nitrotoluene	40	33.454	84	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412203a

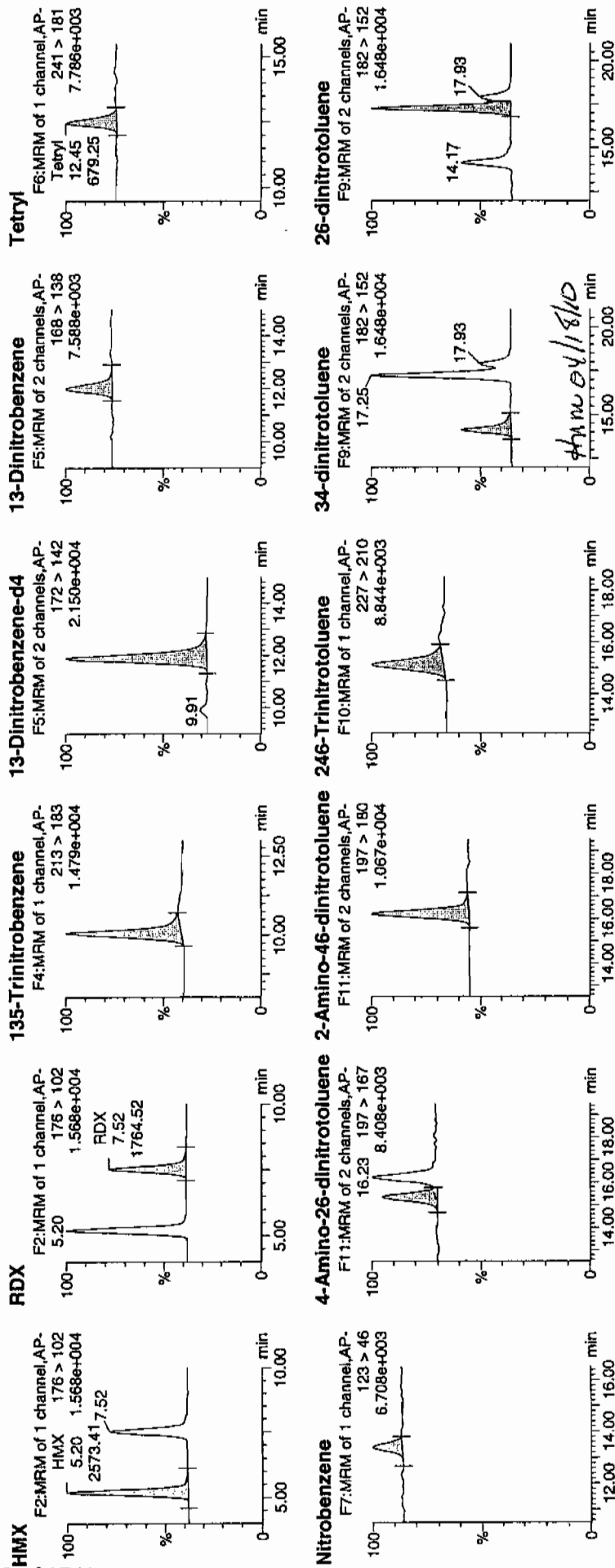
Date: 16-Apr-2010

Time: 19:00:36

ID: WXX100415-08CRI

Vial: 1:1,C

MR
4/17/10

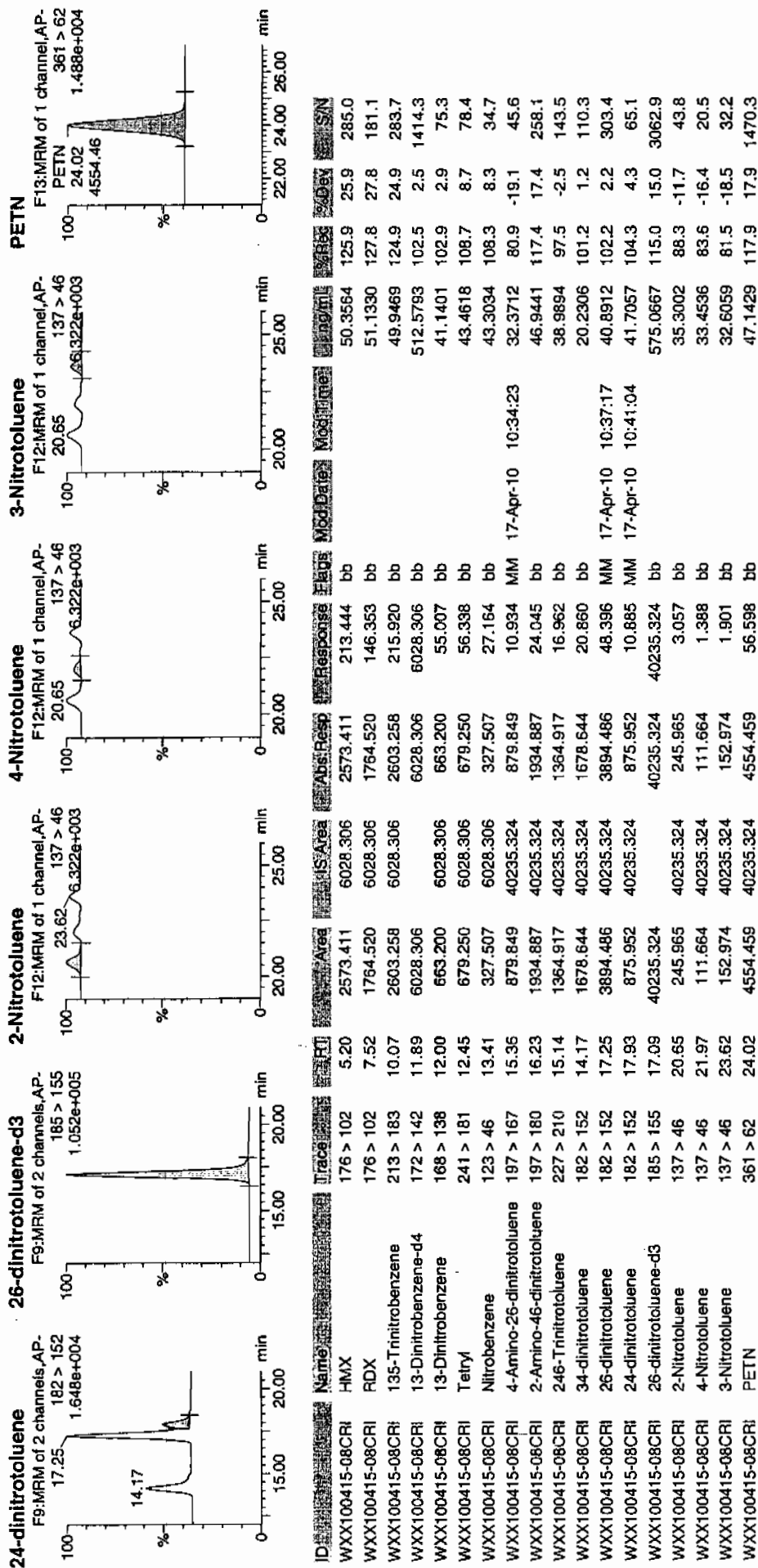


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 50 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/16/10
 Time of Injection 1900
 Standard Number WXX100415-08CRI
 Data File EXP0412203a

HMX	125.9
RDX	127.8
135-TNB	124.9
13-DNB	102.9
Tetryl	108.7
Nitrobenzene	108.3
4A-26-DNT	80.9
2A-46-DNT	117.4
246-TNT	97.5
34-DNT(surr)	101.2
26-DNT	102.2
24-DNT	104.3
2-NT	88.3
4-NT	83.6
3-NT	81.5
PETN	117.9

ACTP
4/19/10

Total 1673.3

Average 104.6

Handwritten signature

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412214a

Analysis Date: 17-APR-10 00:25

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	556.752	93	
1,3-Dinitrobenzene-d4	500	540.213	108	
2,4,6-Trinitrotoluene	600	696.135	116	
2,4-Dinitrotoluene	600	633.013	106	
2,6-Dinitrotoluene	600	584.668	97	
2,6-Dinitrotoluene-d3	500	589.251	118	
2-Amino-4,6-dinitrotoluene	600	611.2	102	
3,4-Dinitrotoluene	300	297.228	99	
4-Amino-2,6-dinitrotoluene	600	587.252	98	
HMX	600	613.772	102	
Nitrobenzene	600	564.768	94	
PETN	600	555.26	93	
RDX	600	671.153	112	
Tetryl	600	547.22	91	
m-Dinitrobenzene	600	591.655	99	
m-Nitrotoluene	600	399.451	67	*
o-Nitrotoluene	600	394.349	66	*
p-Nitrotoluene	600	459.938	77	*

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412214a

Date: 17-Apr-2010

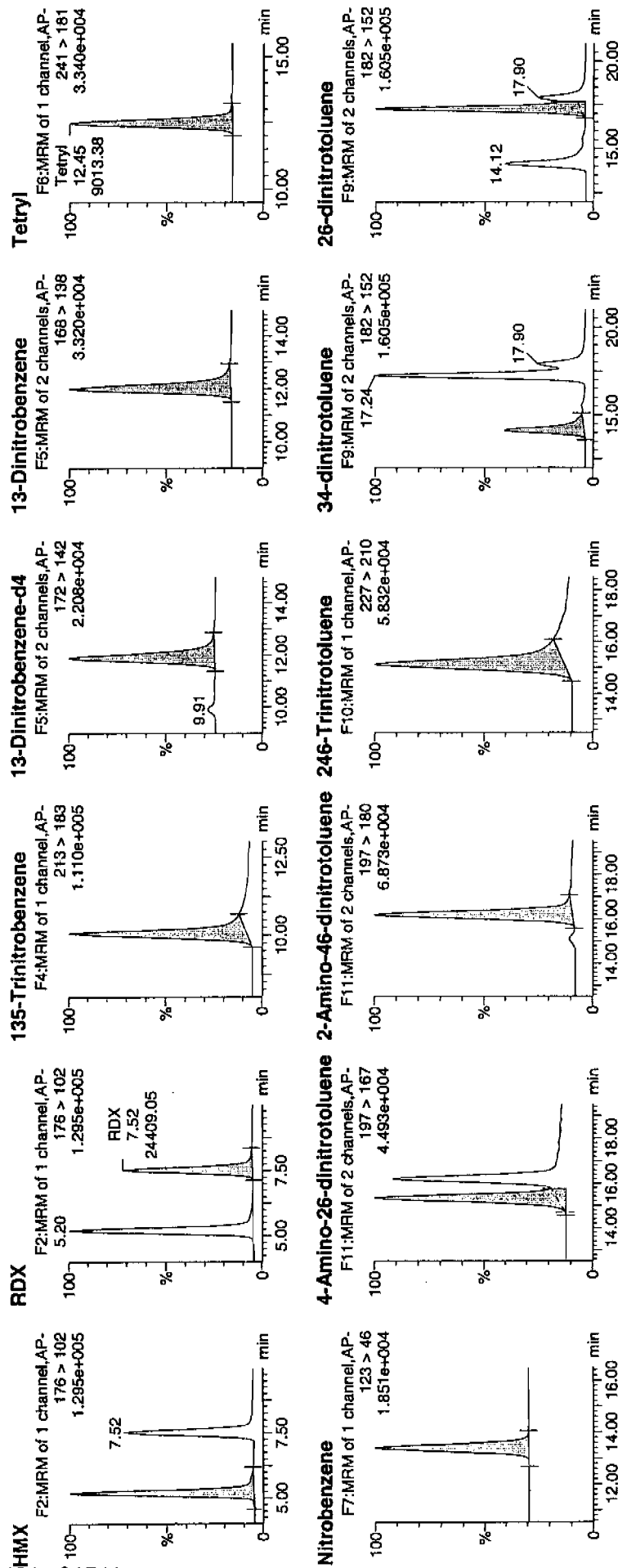
Time: 00:25:10

ID: WXX100415-07CCV

Vial: 1:1,B

WXX
4/17/10

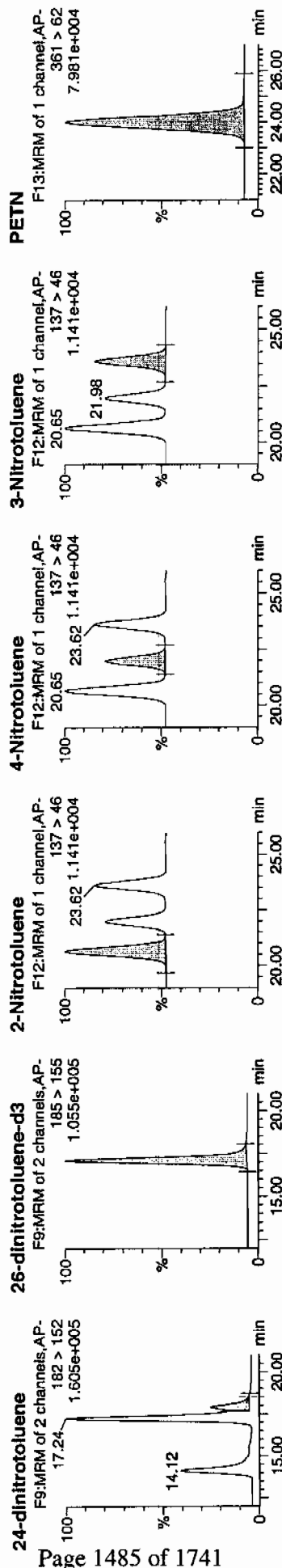
Page 1464 of 1741



4/17/10

Dataset: C:\MASSLYN\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

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ID	Name	Trace	RT	Area	Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Form	Area	Conv	SN
WX100415-07CCV	HMx	176 > 102	5.20	33057.156	6353.299	33057.156	2801.574	bb	613.7719	102.3	2.3	1868.3		
WX100415-07CCV	RDX	176 > 102	7.52	24409.053	6353.299	24409.053	1920.975	bb	671.1529	111.9	11.9	1304.7		
135-Trinitrobenzene		213 > 183	10.05	30582.584	6353.299	30582.584	2406.827	bb	556.7519	92.8	-7.2	720.5		
13-Dinitrobenzene-d4		172 > 142	11.87	6353.299		6353.299	6353.299	bb	540.2131	108.0	8.0	898.4		
13-Dinitrobenzene		168 > 138	12.00	10051.990	6353.299	10051.990	791.084	bb	591.6553	98.6	-1.4	1311.9		
WX100415-07CCV	Tetryl	241 > 181	12.45	9013.379	6353.299	9013.379	709.346	bb	547.2198	91.2	-8.8	560.6		
WX100415-07CCV	Nitrobenzene	123 > 46	13.40	4501.654	6353.299	4501.654	354.277	bb	564.7678	94.1	-5.9	498.6		
WX100415-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.35	16355.192	41227.758	16355.192	198.352	MM	587.2520	97.9	-2.1	930.5		
WX100415-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.19	25813.100	41227.758	25813.100	313.055	bb	611.1996	101.9	1.9	876.8		
248-Trinitrotoluene		227 > 210	15.13	24970.971	41227.758	24970.971	302.842	bb	696.1352	116.0	16.0	701.2		
34-dinitrotoluene		182 > 152	14.12	25270.957	41227.758	25270.957	306.480	bb	297.2278	99.1	-0.9	205.0		
26-dinitrotoluene		182 > 152	17.24	57057.352	41227.758	57057.352	691.977	MM	584.6684	97.4	-2.6	536.6		
WX100415-07CCV	26-dinitrotoluene	182 > 152	17.90	13623.216	41227.758	13623.216	165.219	MM	633.0135	105.5	5.5	114.3		
WX100415-07CCV	26-dinitrotoluene-d3	185 > 155	17.09	41227.758		41227.758	41227.758	bb	589.2512	117.9	17.9	1540.4		
WX100415-07CCV	2-Nitrotoluene	137 > 46	20.65	2815.521	41227.758	2815.521	34.146	bb	394.3486	65.7	-34.3	168.4		
WX100415-07CCV	4-Nitrotoluene	137 > 46	21.98	1573.081	41227.758	1573.081	19.078	bb	459.9378	76.7	-23.3	99.3		
WX100415-07CCV	3-Nitrotoluene	137 > 46	23.62	1920.289	41227.758	1920.289	23.289	bb	399.4507	66.6	-33.4	116.7		
WX100415-07CCV	PETN	361 > 62	24.00	41283.090	41227.758	41283.090	500.671	bb	555.2596	92.5	-7.5	9698.5		

04/5/2018

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/17/10
 Time of Injection: 0025
 Standard Number: WXX100415-07CCV
 Data File: EXP0412214a

HMX	102.3
RDX	111.9
135-TNB	92.8
13-DNB	98.6
Tetryl	91.2
Nitrobenzene	94.1
4A-26-DNT	97.9
2A-46-DNT	101.9
246-TNT	116.0
34-DNT(surr)	99.1
26-DNT	97.4
24-DNT	105.5
2-NT	65.7
4-NT	76.7
3-NT	66.6
PETN	92.5

*WXX
4/17/10*

Total 1510.2

Average 94.4

Hmm 04/18/10

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412216a

Analysis Date: 17-APR-10 01:24

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	45.271	113	
1,3-Dinitrobenzene-d4	500	617.106	123	
2,4,6-Trinitrotoluene	40	45.393	113	
2,4-Dinitrotoluene	40	42.201	106	
2,6-Dinitrotoluene	40	41.777	104	
2,6-Dinitrotoluene-d3	500	624.009	125	
2-Amino-4,6-dinitrotoluene	40	44.781	112	
3,4-Dinitrotoluene	20	20.76	104	
4-Amino-2,6-dinitrotoluene	40	41.416	104	
HMX	40	48.771	122	
Nitrobenzene	40	37.567	94	
PETN	40	46.44	116	
RDX	40	51.255	128	
Tetryl	40	38.522	96	
m-Dinitrobenzene	40	42.558	106	
m-Nitrotoluene	40	29.057	73	
o-Nitrotoluene	40	34.16	85	
p-Nitrotoluene	40	32.822	82	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412216a

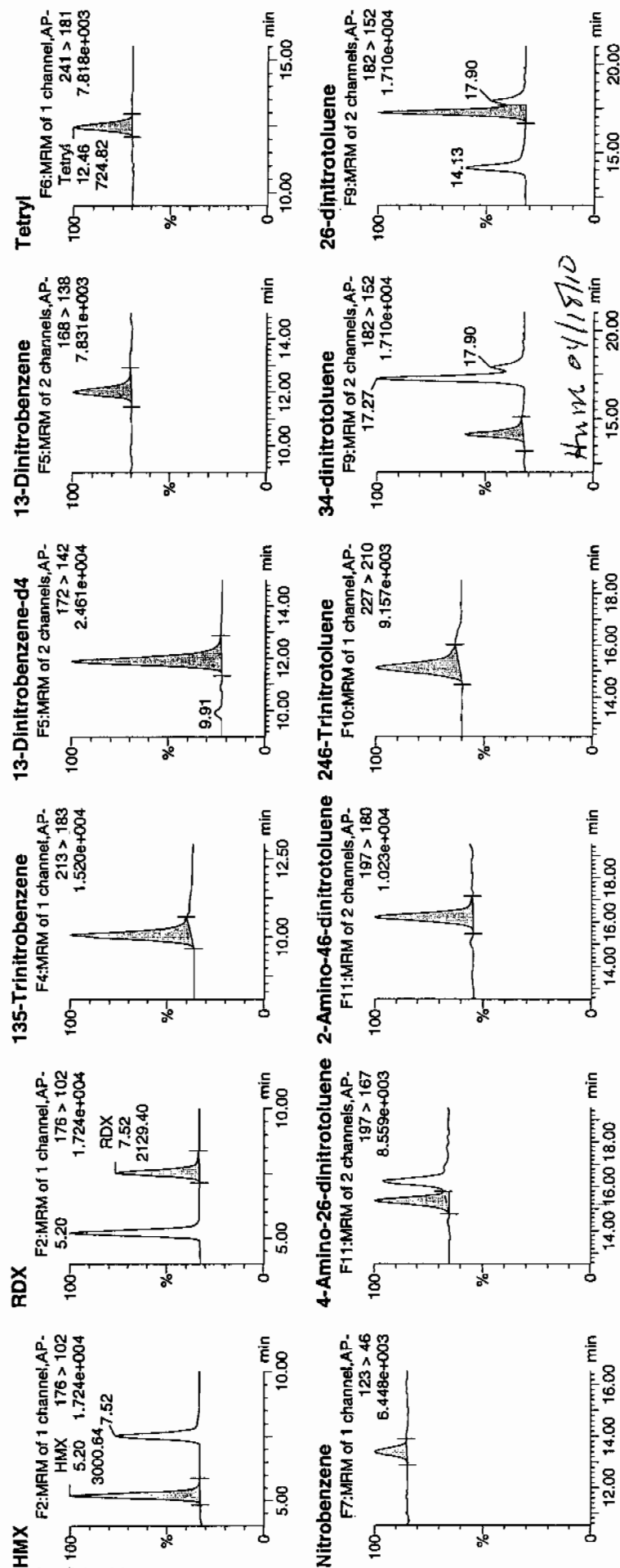
Date: 17-Apr-2010

Time: 01:24:14

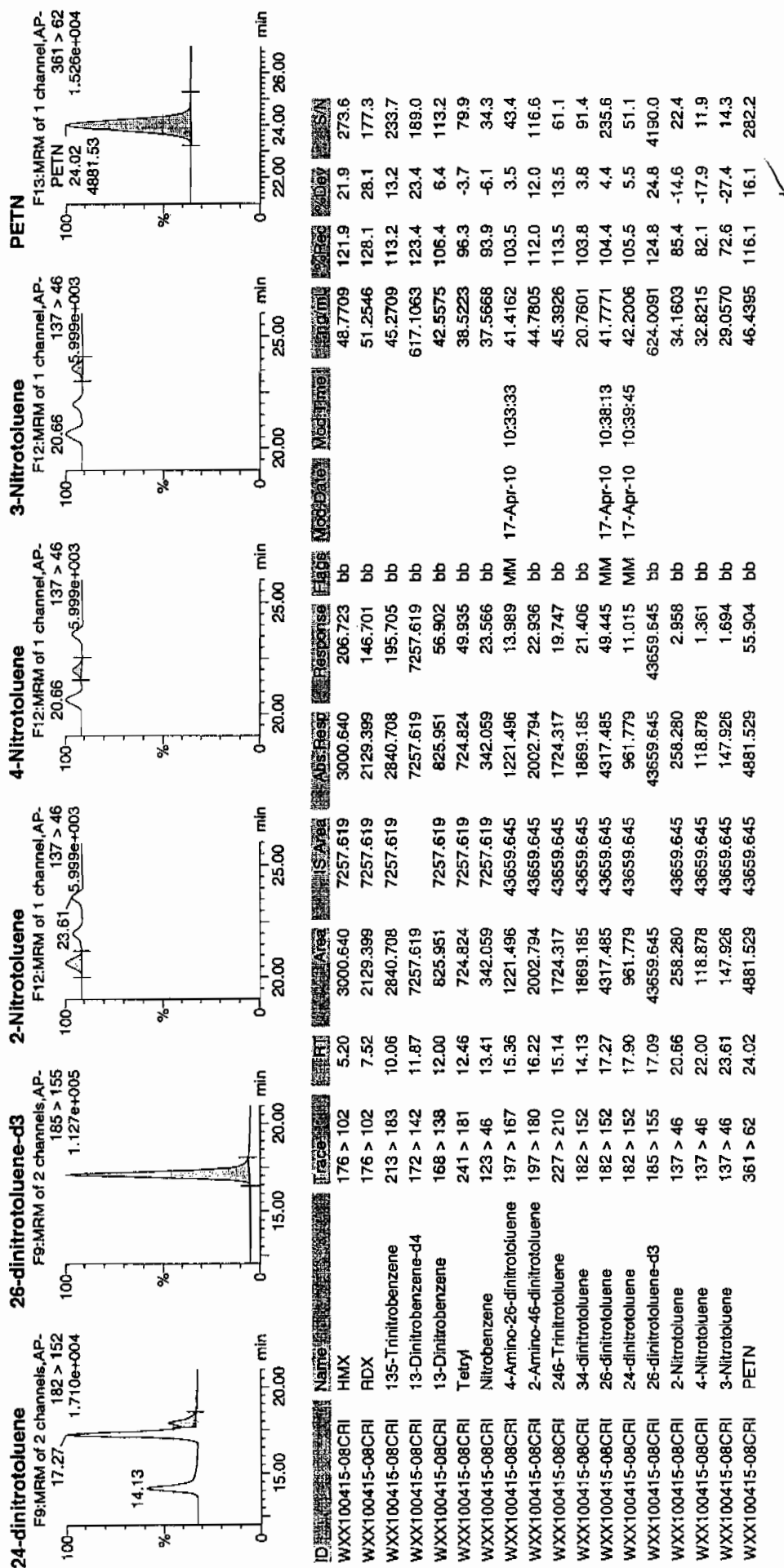
ID: WXX100415-08CRI

ag Vial: 1:1,C

Handwritten: 4/17/10



Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/17/10
 Time of Injection 0124
 Standard Number WXX100415-08CRI
 Data File EXP0412216a

HMX	121.9
RDX	128.1
135-TNB	113.2
13-DNB	106.4
Tetryl	96.3
Nitrobenzene	93.9
4A-26-DNT	103.5
2A-46-DNT	112.0
246-TNT	113.5
34-DNT(surr)	103.8
26-DNT	104.4
24-DNT	105.5
2-NT	85.4
4-NT	82.1
3-NT	72.6
PETN	116.1

*MTT
4/17/10*

Total 1658.7

Average 103.7

HTM-04/18/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412224a

Analysis Date: 17-APR-10 05:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	622.731	104	
1,3-Dinitrobenzene-d4	500	556.2	111	
2,4,6-Trinitrotoluene	600	599.03	100	
2,4-Dinitrotoluene	600	641.56	107	
2,6-Dinitrotoluene	600	596.569	99	
2,6-Dinitrotoluene-d3	500	634.433	127	*
2-Amino-4,6-dinitrotoluene	600	635.34	106	
3,4-Dinitrotoluene	300	272.645	91	
4-Amino-2,6-dinitrotoluene	600	533.967	89	
HMX	600	719.965	120	
Nitrobenzene	600	525.466	88	
PETN	600	512.04	85	
RDX	600	803.416	134	*
Tetryl	600	548.004	91	
m-Dinitrobenzene	600	589.344	98	
m-Nitrotoluene	600	425.309	71	*
o-Nitrotoluene	600	445.165	74	*
p-Nitrotoluene	600	475.651	79	*

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412224a

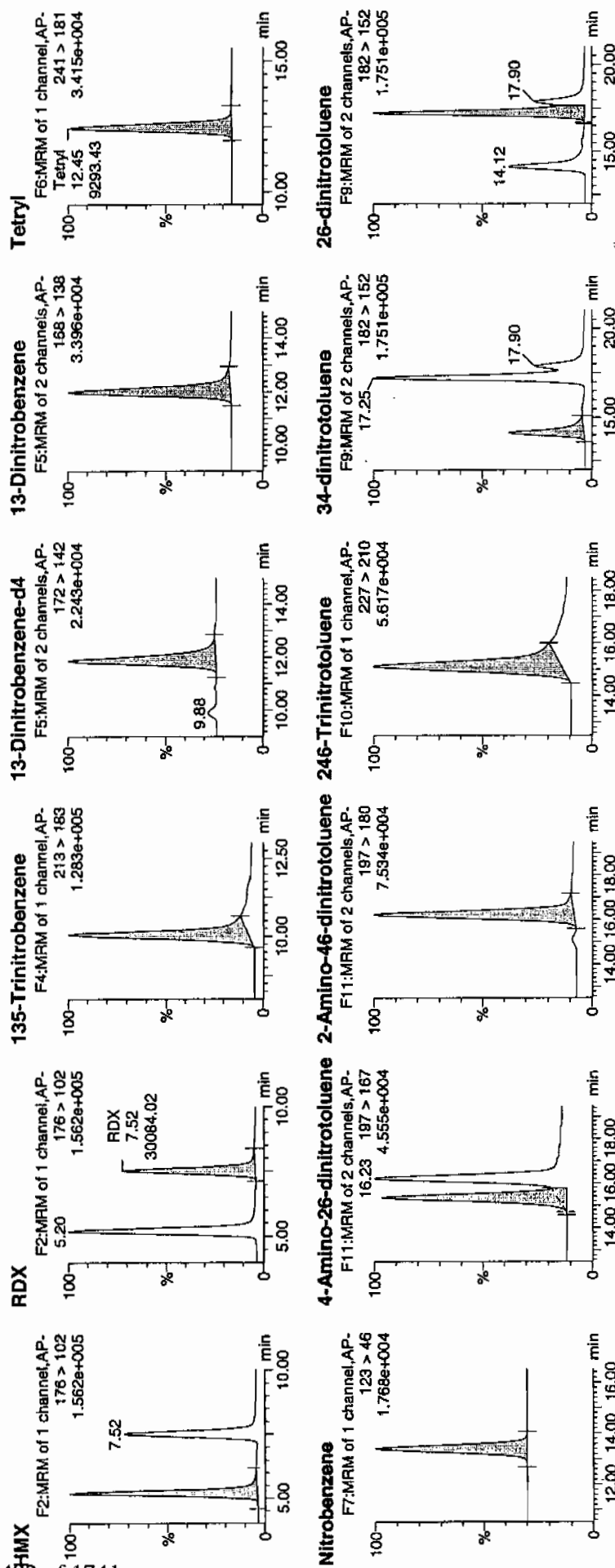
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ID: WXX100415-07CCV

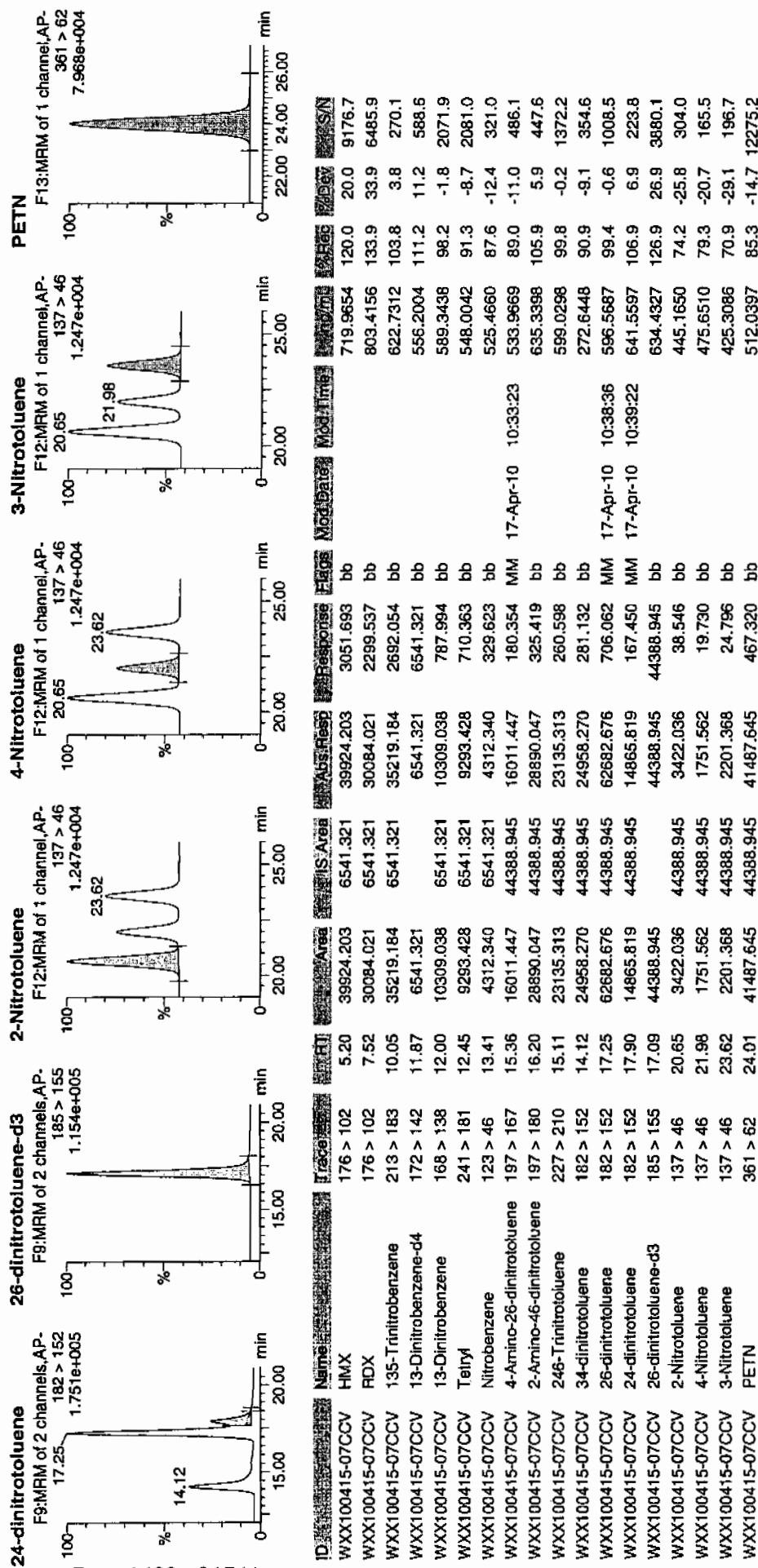
Vial: 1:1,B

Handwritten: N/A 4/17/10



Handwritten: 4/17/10

Dataset: C:\MASSLYNX\New_Exp\PRO041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/17/10
 Time of Injection: 0520
 Standard Number: WXX100415-07CCV
 Data File: EXP0412224a

HMX	120.0
RDX	133.9
135-TNB	103.8
13-DNB	98.2
Tetryl	91.3
Nitrobenzene	87.6
4A-26-DNT	89.0
2A-46-DNT	105.9
246-TNT	99.8
34-DNT(surr)	90.9
26-DNT	99.4
24-DNT	106.9
2-NT	74.2
4-NT	79.3
3-NT	70.9
PETN	85.3

Handwritten:
 4/17/10

Total 1536.4

Handwritten: HMC 04/18/10

Average 96.0

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412226a

Analysis Date: 17-APR-10 06:19

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	49.068	123	
1,3-Dinitrobenzene-d4	500	522.308	104	
2,4,6-Trinitrotoluene	40	46.471	116	
2,4-Dinitrotoluene	40	46.611	117	
2,6-Dinitrotoluene	40	40.51	101	
2,6-Dinitrotoluene-d3	500	508.217	102	
2-Amino-4,6-dinitrotoluene	40	43.889	110	
3,4-Dinitrotoluene	20	22.639	113	
4-Amino-2,6-dinitrotoluene	40	44.07	110	
HMX	40	48.973	122	
Nitrobenzene	40	38.845	97	
PETN	40	58.524	146	*
RDX	40	49.914	125	
Tetryl	40	39.235	98	
m-Dinitrobenzene	40	42.427	106	
m-Nitrotoluene	40	39.141	98	
o-Nitrotoluene	40	29.629	74	
p-Nitrotoluene	40	39.82	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%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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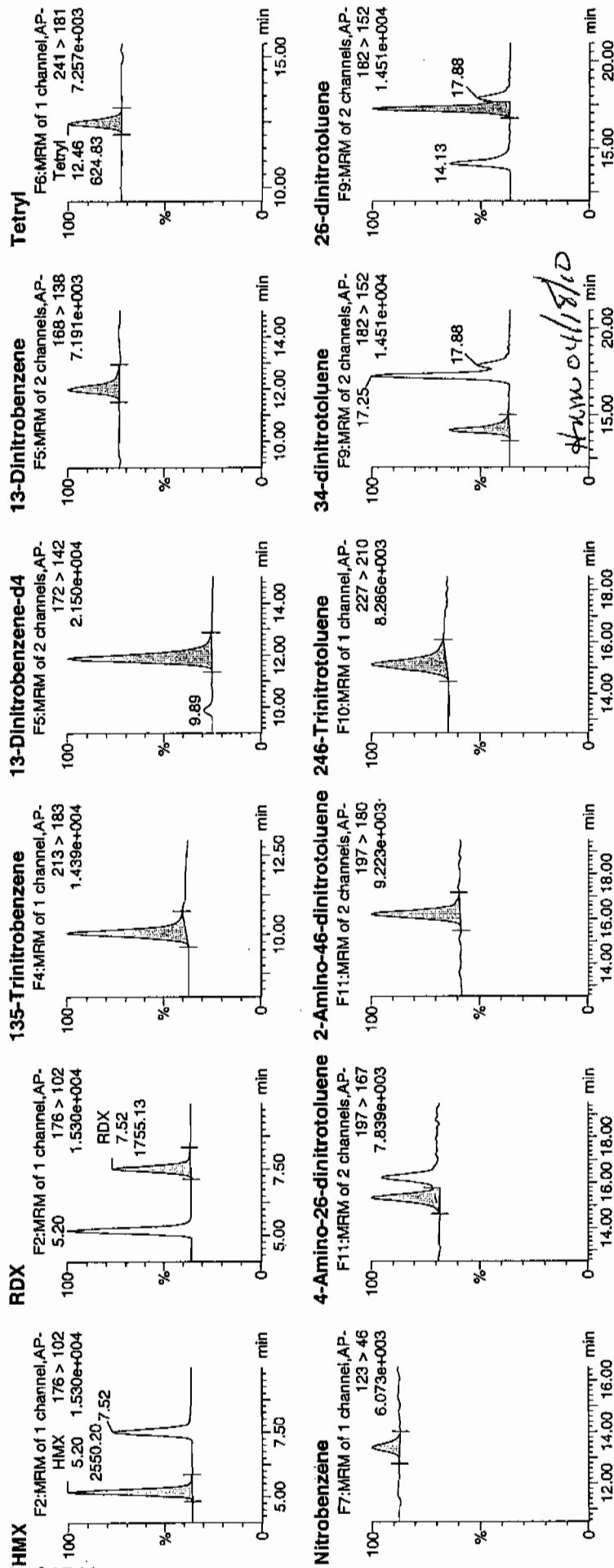
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Time: 06:19:12

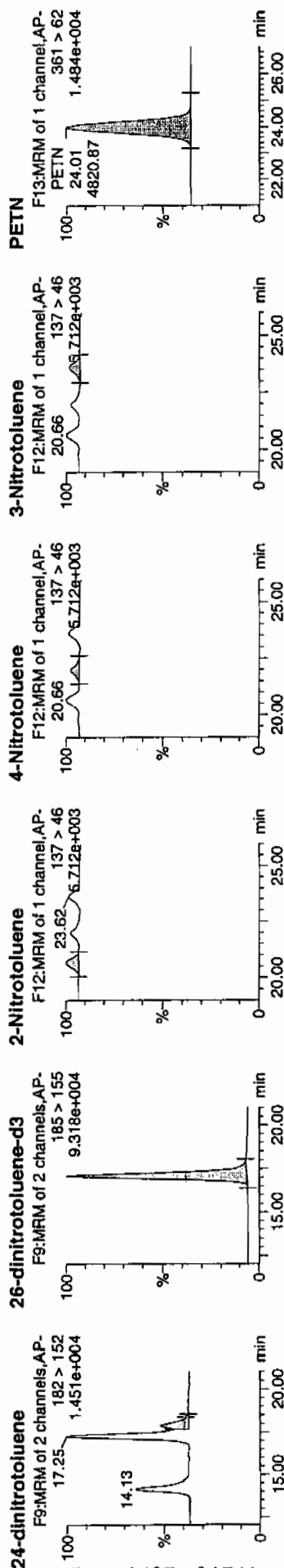
ID: WXX100415-08CRI

Vial: 1:1,C

17
11/10



Dataset: C:\MASSLYN\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Info:Unit	Area	Ratio	Ratio	Ratio
WXX100415-08CRI	HMX	176 > 102	5.20	2550.196	6142.719	2550.196	207.579	bb				48.9727	122.4	22.4	1060.3
WXX100415-08CRI	RDX	176 > 102	7.52	1755.132	6142.719	1755.132	142.863	bb				49.9136	124.8	24.8	673.4
WXX100415-08CRI	135-Trinitrobenzene	213 > 183	10.06	2606.007	6142.719	2606.007	212.122	bb				49.0684	122.7	22.7	318.8
WXX100415-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6142.719		6142.719	6142.719	bb				522.3077	104.5	4.5	446.2
WXX100415-08CRI	13-Dinitrobenzene	168 > 138	12.00	696.926	6142.719	696.926	56.728	bb				42.4270	106.1	6.1	136.2
WXX100415-08CRI	Tetryl	241 > 181	12.46	624.829	6142.719	624.829	50.859	bb				39.2350	98.1	-1.9	149.8
WXX100415-08CRI	Nitrobenzene	123 > 46	13.41	299.362	6142.719	299.362	24.367	bb				38.8448	97.1	-2.9	19.8
WXX100415-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.32	1058.584	35558.117	1058.584	14.885	MM	17-Apr-10	10:32:59		44.0702	110.2	10.2	45.3
WXX100415-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.22	1598.680	35558.117	1598.680	22.480	bb				43.8890	109.7	9.7	103.3
WXX100415-08CRI	246-Trinitrotoluene	227 > 210	15.14	1437.722	35558.117	1437.722	20.217	bb				46.4712	116.2	16.2	188.5
WXX100415-08CRI	34-dinitrotoluene	182 > 152	14.13	1660.090	35558.117	1660.090	23.343	bb				22.6386	113.2	13.2	93.4
WXX100415-08CRI	26-dinitrotoluene	182 > 152	17.25	3409.691	35558.117	3409.691	47.945	MM	17-Apr-10	10:38:44		40.5102	101.3	1.3	215.0
WXX100415-08CRI	24-dinitrotoluene	182 > 152	17.88	865.167	35558.117	865.167	12.166	MM	17-Apr-10	10:39:01		46.6105	116.5	16.5	49.3
WXX100415-08CRI	26-dinitrotoluene-d3	185 > 155	17.09	35558.117		35558.117	35558.117	bb				508.2174	101.6	1.6	2588.5
WXX100415-08CRI	2-Nitrotoluene	137 > 46	20.66	182.447	35558.117	182.447	2.565	bb				29.6285	74.1	-25.9	41.9
WXX100415-08CRI	4-Nitrotoluene	137 > 46	22.00	117.464	35558.117	117.464	1.652	bb				39.8202	99.6	-0.4	27.9
WXX100415-08CRI	3-Nitrotoluene	137 > 46	23.62	162.287	35558.117	162.287	2.282	bb				39.1409	97.9	-2.1	34.9
WXX100415-08CRI	PETN	361 > 62	24.01	4820.868	35558.117	4820.868	67.789	bb				58.5243	146.3	46.3	847.0

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/17/10
 Time of Injection 0619
 Standard Number WXX100415-08CRI
 Data File EXP0412226a

HMX	122.4
RDX	124.8
135-TNB	122.7
13-DNB	106.1
Tetryl	98.1
Nitrobenzene	97.1
4A-26-DNT	110.2
2A-46-DNT	109.7
246-TNT	116.2
34-DNT(surr)	113.2
26-DNT	101.3
24-DNT	116.5
2-NT	74.1
4-NT	99.6
3-NT	97.9
PETN	146.3

*MTT
4/17/10*

Total 1756.2

Wm 04/18/10

Average 109.8

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0418012a

Analysis Date: 18-APR-10 19:26

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	43.326	108	
1,3-Dinitrobenzene-d4	500	484.059	97	
2,4,6-Trinitrotoluene	40	36.902	92	
2,4-Dinitrotoluene	40	29.553	74	
2,6-Dinitrotoluene	40	41.258	103	
2,6-Dinitrotoluene-d3	500	472.874	95	
2-Amino-4,6-dinitrotoluene	40	41.448	104	
3,4-Dinitrotoluene	20	19.81	99	
4-Amino-2,6-dinitrotoluene	40	41.218	103	
HMX	40	42.54	106	
Nitrobenzene	40	34.313	86	
PETN	40	35.824	90	
RDX	40	44.469	111	
Tetryl	40	40.086	100	
m-Dinitrobenzene	40	37.524	94	
m-Nitrotoluene	40	42.921	107	
o-Nitrotoluene	40	54.204	136	*
p-Nitrotoluene	40	37.398	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 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 23 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418012a

Date: 18-Apr-2010

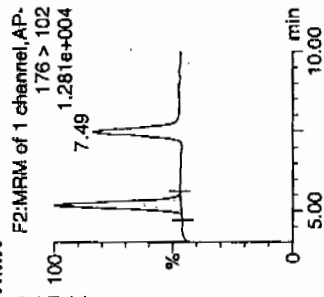
Time: 19:26:12

ID: WXX100418-08CRI

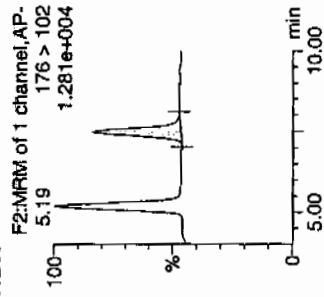
Vial: 1:1,C

1500
4/19/10

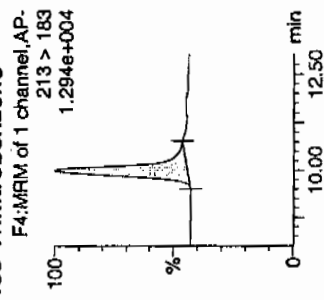
HMX



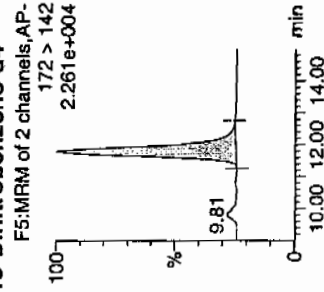
RDX



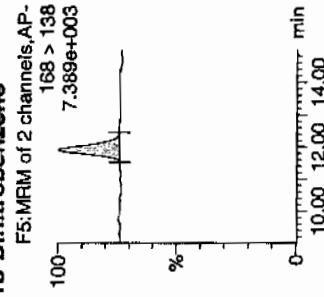
135-Trinitrobenzene



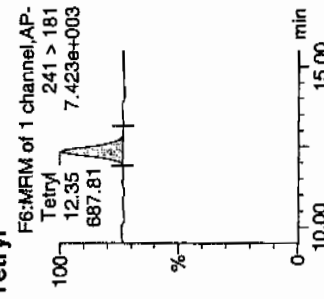
13-Dinitrobenzene-d4



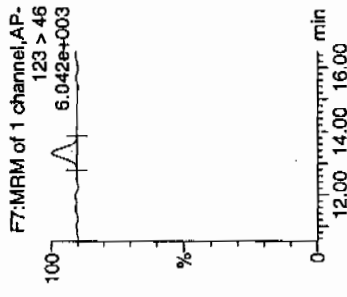
13-Dinitrobenzene



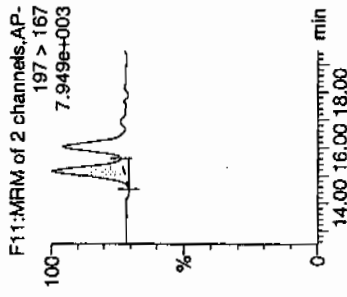
Tetryl



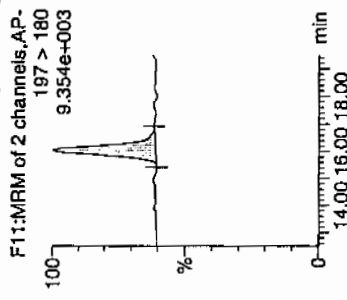
Nitrobenzene



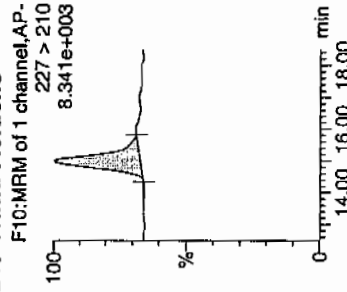
4-Amino-26-dinitrotoluene



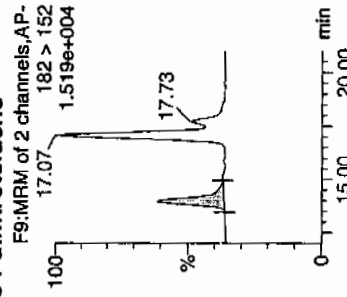
2-Amino-46-dinitrotoluene



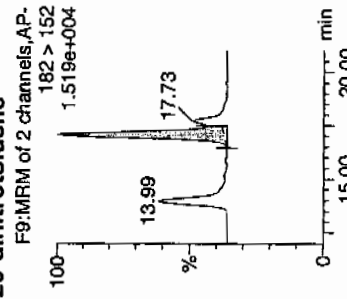
246-Trinitrotoluene



34-dinitrotoluene

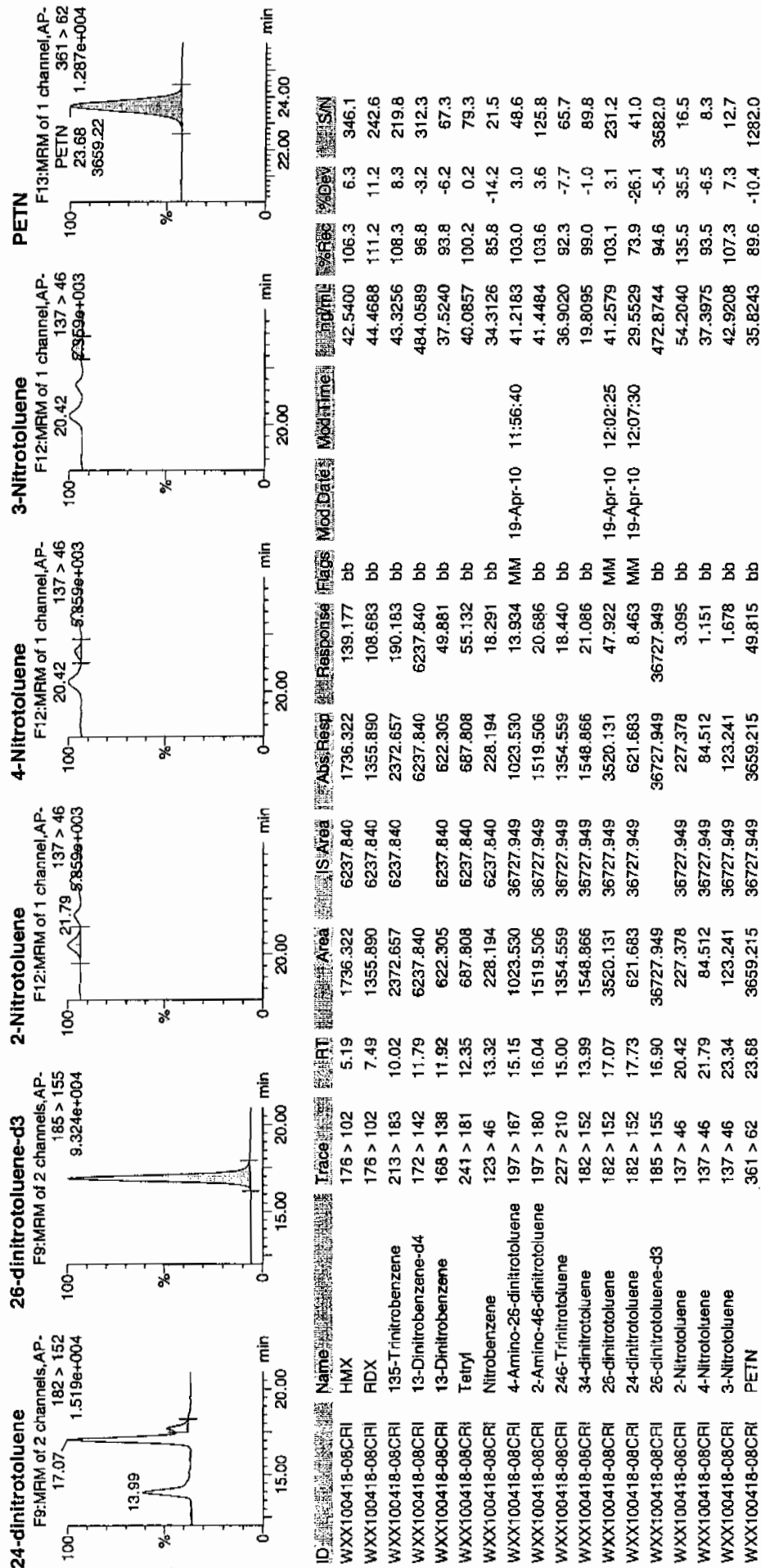


26-dinitrotoluene



4/19/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/18/10
 Time of Injection 1926
 Standard Number WXX100418-08CRI
 Data File EXP0418012a

HMX	106.3
RDX	111.2
135-TNB	108.3
13-DNB	93.8
Tetryl	100.2
Nitrobenzene	85.9
4A-26-DNT	103.0
2A-46-DNT	103.6
246-TNT	92.3
34-DNT(surr)	99.0
26-DNT	103.1
24-DNT	73.9
2-NT	135.5
4-NT	93.5
3-NT	107.3
PETN	89.6

*met
4/19/10*

Total 1606.5

Average 100.4

Handwritten: 4/19/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0418021a

Analysis Date: 18-APR-10 23:42

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	605.679	101	
1,3-Dinitrobenzene-d4	500	551.498	110	
2,4,6-Trinitrotoluene	600	651.41	109	
2,4-Dinitrotoluene	600	601.941	100	
2,6-Dinitrotoluene	600	605.556	101	
2,6-Dinitrotoluene-d3	500	526.284	105	
2-Amino-4,6-dinitrotoluene	600	655.023	109	
3,4-Dinitrotoluene	300	308.135	103	
4-Amino-2,6-dinitrotoluene	600	653.969	109	
HMX	600	641.956	107	
Nitrobenzene	600	597.039	100	
PETN	600	550.338	92	
RDX	600	700.416	117	
Tetryl	600	588.245	98	
m-Dinitrobenzene	600	597.012	100	
m-Nitrotoluene	600	593.028	99	
o-Nitrotoluene	600	597.267	100	
p-Nitrotoluene	600	592.006	99	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 41 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

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Date: 18-Apr-2010

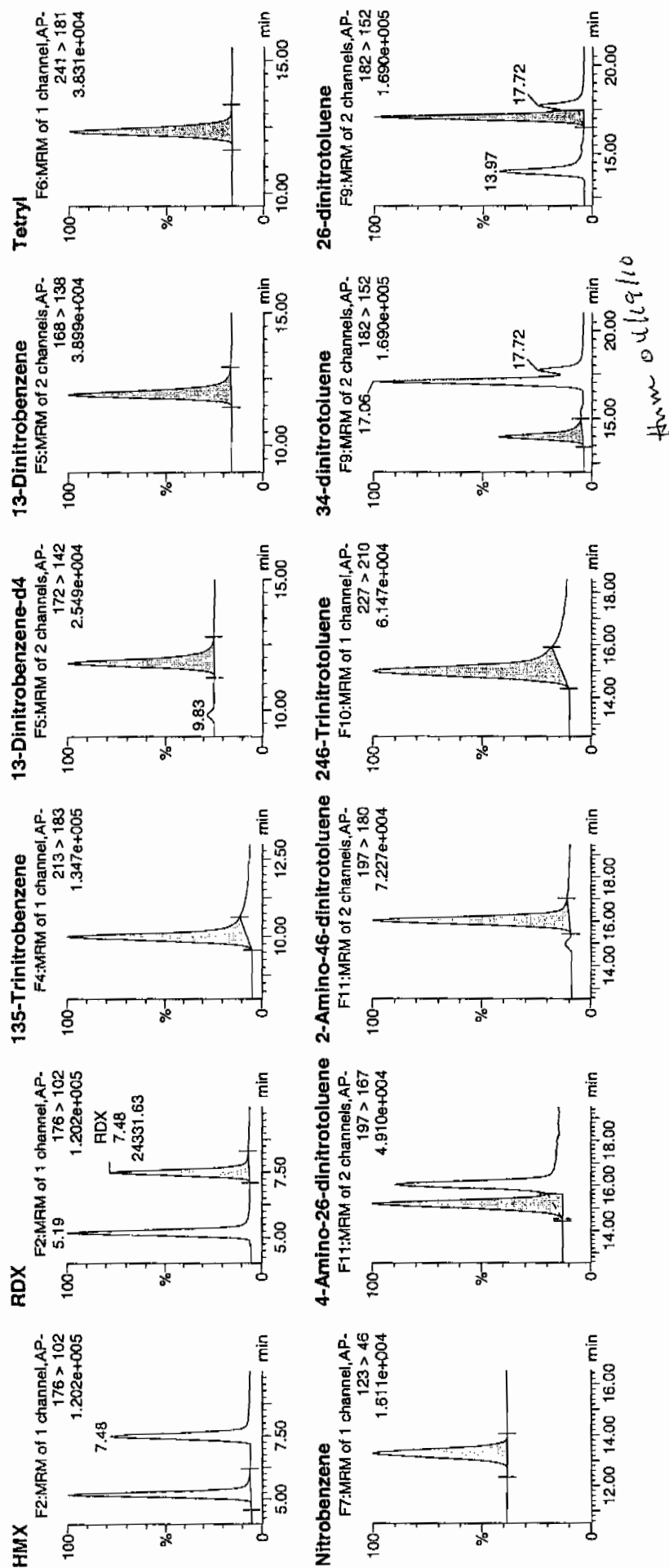
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ID: WXX100418-07CCV

Vial: 1:1,B

Handwritten: 1/1/10

Page 1504 of 1741

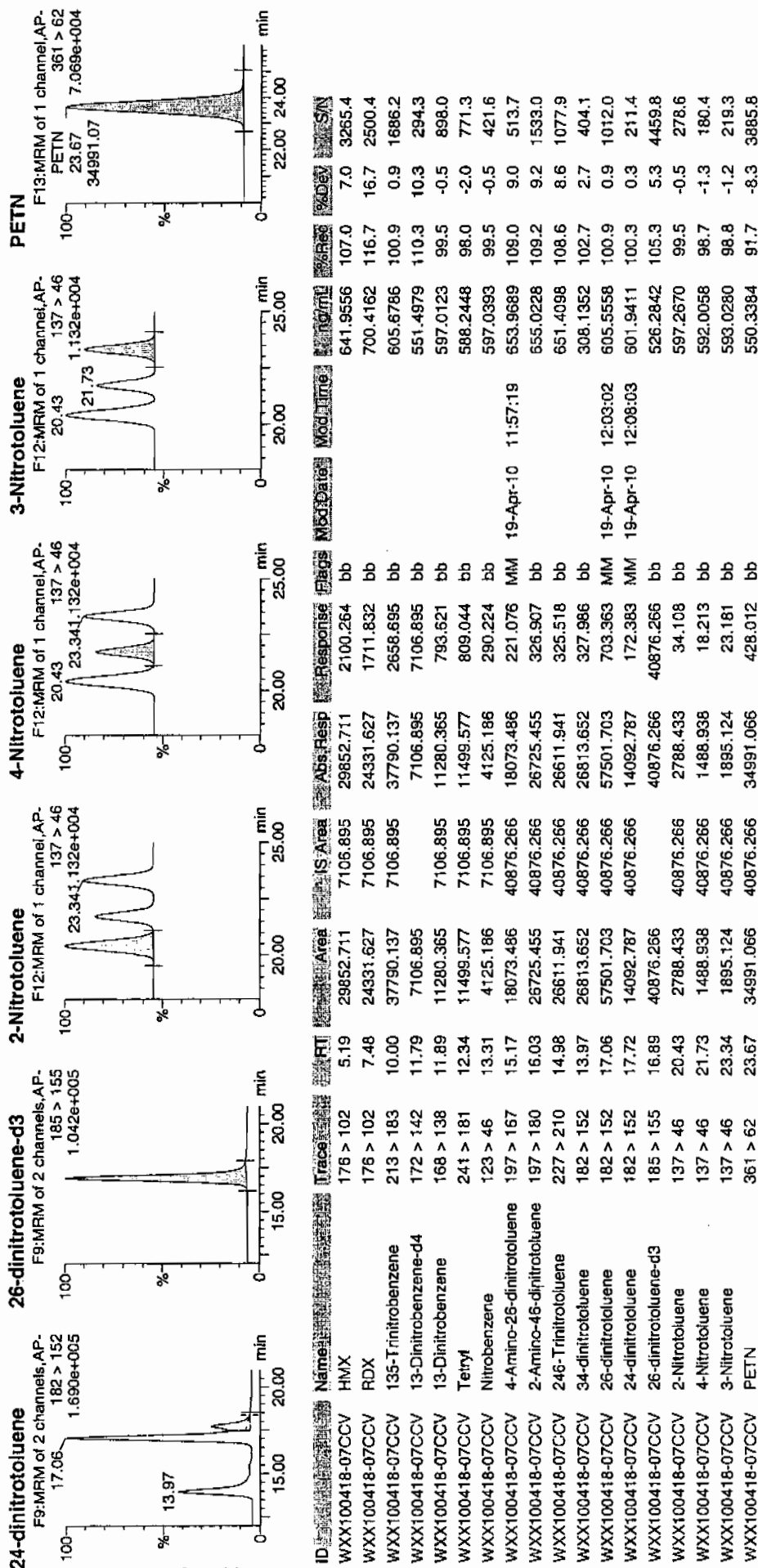


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 42 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/18/10
 Time of Injection: 2342
 Standard Number: WXX100418-07CCV
 Data File: EXP0418021a

HMX	107.0
RDX	116.7
135-TNB	100.9
13-DNB	99.5
Tetryl	98.0
Nitrobenzene	99.5
4A-26-DNT	109.0
2A-46-DNT	109.2
246-TNT	108.6
34-DNT(surr)	102.7
26-DNT	100.9
24-DNT	100.3
2-NT	99.5
4-NT	98.7
3-NT	98.8
PETN	91.7

*MAP
4/19/10*

Total 1641.0

Average 102.6

Handwritten: 4/18/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

**7B
Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0418023a

Analysis Date: 19-APR-10 00:39

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u OPS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	42.66	107	
1,3-Dinitrobenzene-d4	500	515	103	
2,4,6-Trinitrotoluene	40	42.054	105	
2,4-Dinitrotoluene	40	36.232	91	
2,6-Dinitrotoluene	40	41.887	105	
2,6-Dinitrotoluene-d3	500	513.294	103	
2-Amino-4,6-dinitrotoluene	40	36.561	91	
3,4-Dinitrotoluene	20	19.499	97	
4-Amino-2,6-dinitrotoluene	40	38.061	95	
HMX	40	41.828	105	
Nitrobenzene	40	34.014	85	
PETN	40	30.972	77	
RDX	40	42.349	106	
Tetryl	40	38.582	96	
m-Dinitrobenzene	40	40.419	101	
m-Nitrotoluene	40	41.884	105	
o-Nitrotoluene	40	41.19	103	
p-Nitrotoluene	40	34.997	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%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 45 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418023a

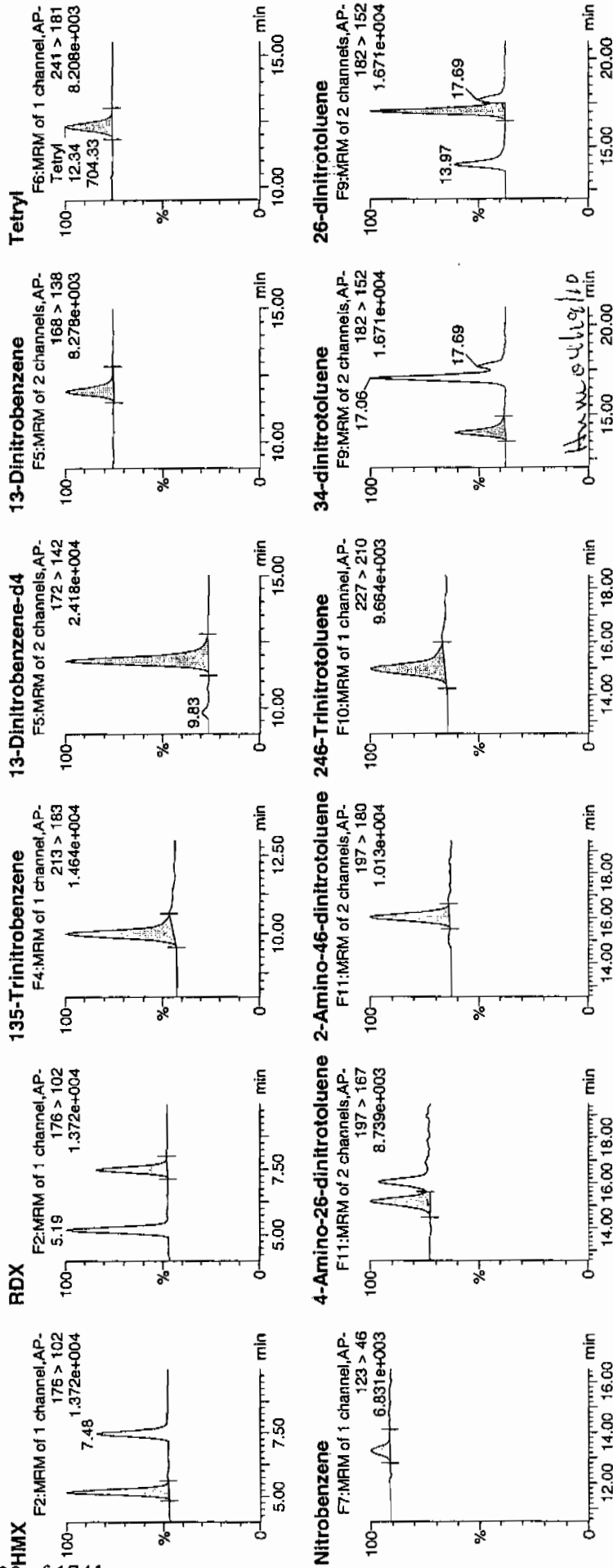
Date: 19-Apr-2010

Time: 00:39:53

ID: WXX100418-08CRI

Vial: 1:1,C

MT
4/19/10



Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 46 of 91

Dataset: C:\MASSLYN\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

24-dinitrotoluene				26-dinitrotoluene-d3				2-Nitrotoluene				4-Nitrotoluene				3-Nitrotoluene				PETN				
F9:MRM of 2 channels,AP-182 > 152				F9:MRM of 2 channels,AP-185 > 155				F12:MRM of 1 channel,AP-137 > 46				F12:MRM of 1 channel,AP-137 > 46				F12:MRM of 1 channel,AP-137 > 46				F13:MRM of 1 channel,AP-361 > 62				
ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc (ng/mL)	% Rec	% Dev	S/N										
WXX100418-08CRI	HMX	176 > 102	5.19	1816.404	6636.562	1816.404	136.848	bb			41.8283	104.6	4.6	168.1										
WXX100418-08CRI	RDX	176 > 102	7.48	1373.790	6636.562	1373.790	103.502	bb			42.3489	105.9	5.9	117.0										
WXX100418-08CRI	135-Trinitrobenzene	213 > 183	10.00	2485.544	6636.562	2485.544	187.261	bb			42.6601	106.7	6.7	44.7										
WXX100418-08CRI	13-Dinitrobenzene-d4	172 > 142	11.79	6636.562		6636.562	6636.562	bb			514.9999	103.0	3.0	618.4										
WXX100418-08CRI	13-Dinitrobenzene	168 > 138	11.92	713.154	6636.562	713.154	53.729	bb			40.4185	101.0	1.0	72.5										
WXX100418-08CRI	Tetryl	241 > 181	12.34	704.325	6636.562	704.325	53.054	bb			38.5821	96.5	-3.5	110.3										
WXX100418-08CRI	Nitrobenzene	123 > 46	13.31	240.867	6636.562	240.867	18.147	bb			34.0143	85.0	-15.0	26.9										
WXX100418-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.17	1025.915	39867.324	1025.915	12.867	MM	19-Apr-10	11:57:34	38.0610	95.2	-4.8	112.4										
WXX100418-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.03	1454.884	39867.324	1454.884	18.247	bb			36.5606	91.4	-8.6	71.6										
WXX100418-08CRI	246-Trinitrotoluene	227 > 210	14.98	1675.627	39867.324	1675.627	21.015	bb			42.0542	105.1	5.1	186.6										
WXX100418-08CRI	34-dinitrotoluene	182 > 152	13.97	1654.881	39867.324	1654.881	20.755	bb			19.4987	97.5	-2.5	103.3										
WXX100418-08CRI	26-dinitrotoluene	182 > 152	17.06	3879.313	39867.324	3879.313	48.653	MM	19-Apr-10	12:03:10	41.8873	104.7	4.7	273.7										
WXX100418-08CRI	24-dinitrotoluene	182 > 152	17.69	827.323	39867.324	827.323	10.376	MM	19-Apr-10	12:08:15	36.2315	90.6	-9.4	55.7										
WXX100418-08CRI	26-dinitrotoluene-d3	185 > 155	16.92	39867.324		39867.324	39867.324	bb			513.2940	102.7	2.7	3069.8										
WXX100418-08CRI	2-Nitrotoluene	137 > 46	20.42	187.557	39867.324	187.557	2.352	bb			41.1904	103.0	3.0	30.7										
WXX100418-08CRI	4-Nitrotoluene	137 > 46	21.73	85.847	39867.324	85.847	1.077	bb			34.9968	87.5	-12.5	20.5										
WXX100418-08CRI	3-Nitrotoluene	137 > 46	23.31	130.545	39867.324	130.545	1.637	bb			41.8844	104.7	4.7	23.5										
WXX100418-08CRI	PETN	361 > 62	23.66	3668.167	39867.324	3668.167	46.005	bb			30.9719	77.4	-22.6	850.3										

Handwritten signature: HANW 4/19/10

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/19/10
 Time of Injection 0039
 Standard Number WXX100418-08CRI
 Data File EXP0418023a

HMX	104.6
RDX	105.9
135-TNB	106.7
13-DNB	101.0
Tetryl	96.5
Nitrobenzene	85.0
4A-26-DNT	95.2
2A-46-DNT	91.4
246-TNT	105.1
34-DNT(surr)	97.5
26-DNT	104.7
24-DNT	90.6
2-NT	103.0
4-NT	87.5
3-NT	104.7
PETN	77.4

Handwritten: 4/19/10

Total 1556.8

Average 97.3

Handwritten: Hmx 04/19/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0418030a

Analysis Date: 19-APR-10 03:59

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	587.943	98	
1,3-Dinitrobenzene-d4	500	511.568	102	
2,4,6-Trinitrotoluene	600	668.754	111	
2,4-Dinitrotoluene	600	588.791	98	
2,6-Dinitrotoluene	600	594.911	99	
2,6-Dinitrotoluene-d3	500	513.982	103	
2-Amino-4,6-dinitrotoluene	600	638.405	106	
3,4-Dinitrotoluene	300	293.925	98	
4-Amino-2,6-dinitrotoluene	600	633.011	106	
HMX	600	684.671	114	
Nitrobenzene	600	606.025	101	
PETN	600	605.905	101	
RDX	600	718.594	120	
Tetryl	600	601.078	100	
m-Dinitrobenzene	600	609.95	102	
m-Nitrotoluene	600	548.825	91	
o-Nitrotoluene	600	542.566	90	
p-Nitrotoluene	600	537.292	90	

Recovery Limits:

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

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 59 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418030a

Date: 19-Apr-2010

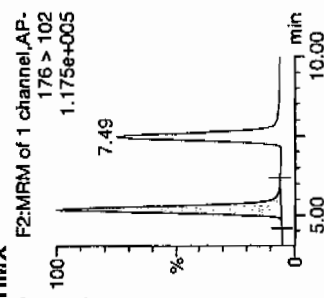
Time: 03:59:19

ID: WXX100418-07CCV

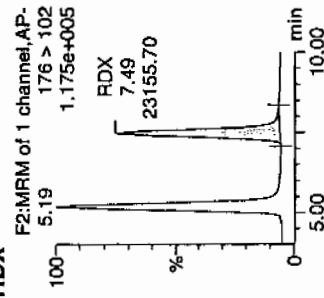
Vial: 1:1,B

10/11/10
4/16/10

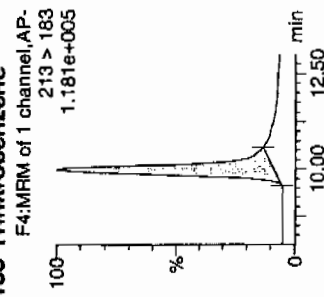
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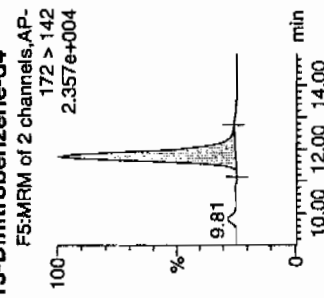
RDX



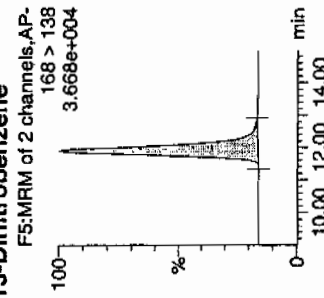
135-Trinitrobenzene



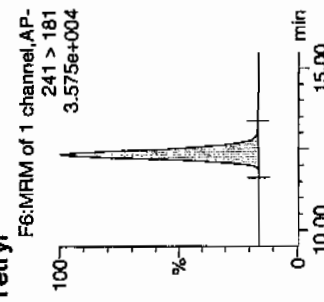
13-Dinitrobenzene-d4



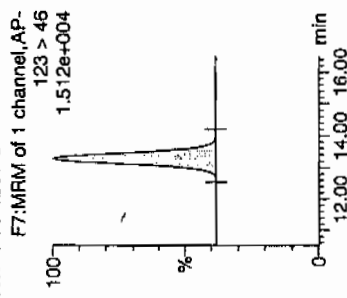
13-Dinitrobenzene



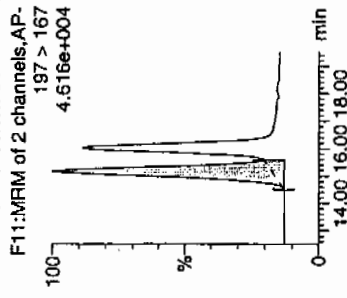
Tetryl



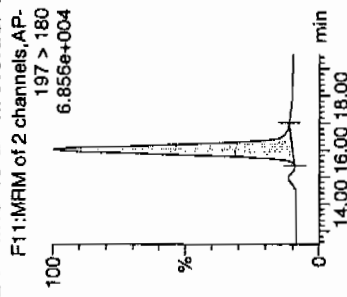
Nitrobenzene



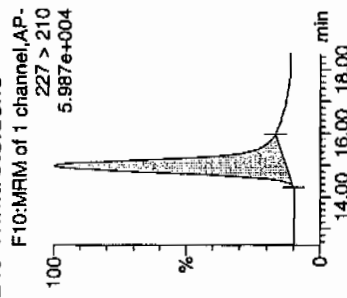
4-Amino-26-dinitrotoluene



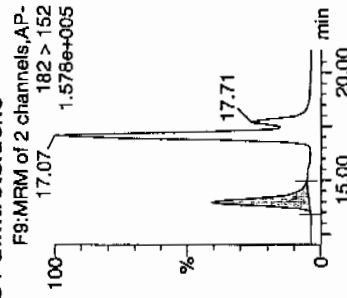
2-Amino-46-dinitrotoluene



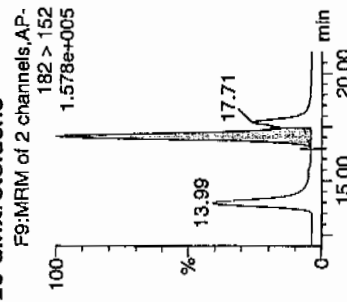
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



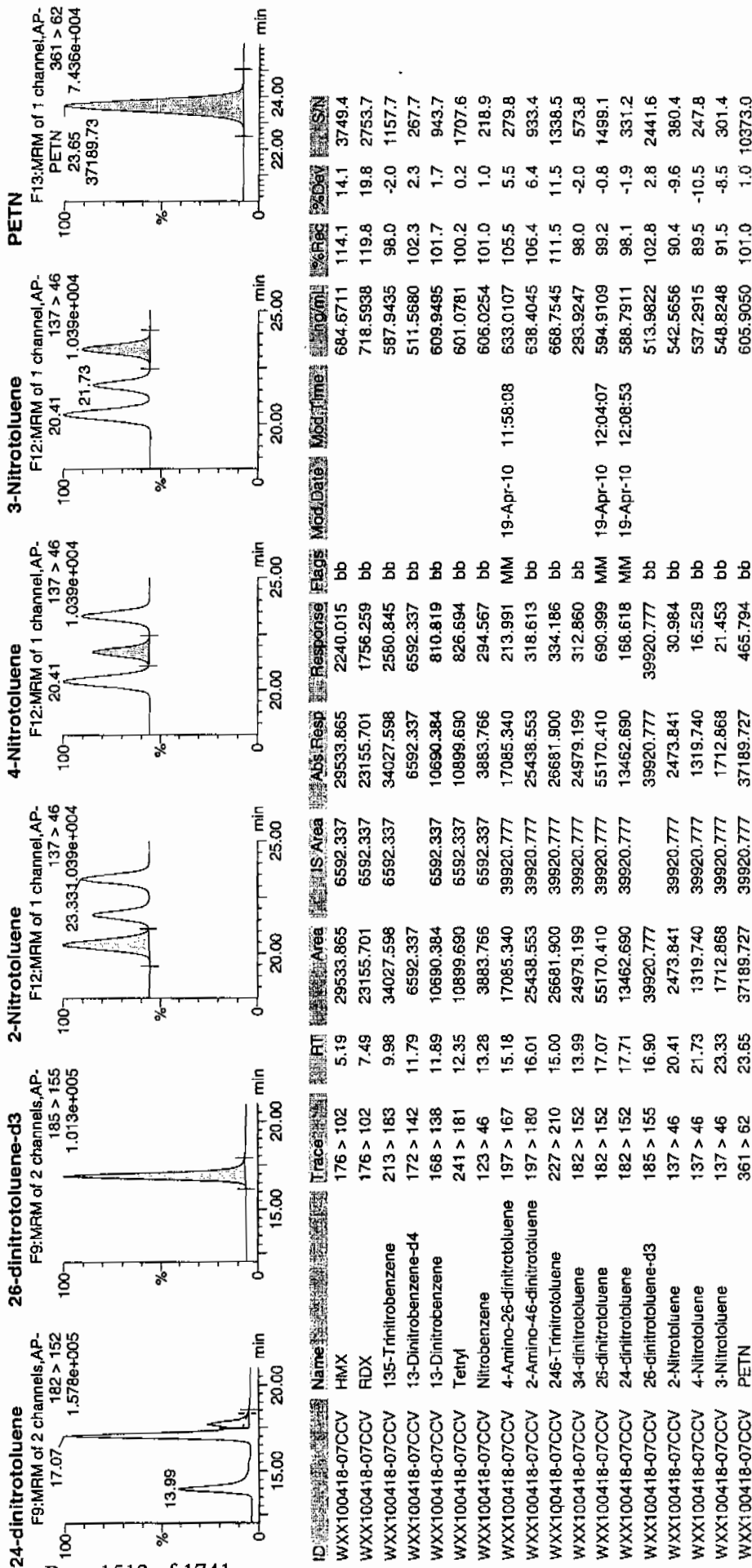
HNW 4/19/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 60 of 91

Dataset: C:\MASSLYNX\New_Exp\PRO041810expA.qld, Time: Mon Apr 19 12:15:39 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/19/10
 Time of Injection: 0359
 Standard Number: WXX100418-07CCV
 Data File: EXP0418030a

HMX	114.1
RDX	119.8
135-TNB	98.0
13-DNB	101.7
Tetryl	100.2
Nitrobenzene	101.0
4A-26-DNT	105.5
2A-46-DNT	106.4
246-TNT	111.5
34-DNT(surr)	98.0
26-DNT	99.2
24-DNT	98.1
2-NT	90.4
4-NT	89.5
3-NT	91.5
PETN	101.0

*MTT
4/19/10*

Total 1625.9

Handwritten: 4/19/10

Average 101.6

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0418032a

Analysis Date: 19-APR-10 04:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	43.212	108	
1,3-Dinitrobenzene-d4	500	580.676	116	
2,4,6-Trinitrotoluene	40	47.727	119	
2,4-Dinitrotoluene	40	38.831	97	
2,6-Dinitrotoluene	40	40.553	101	
2,6-Dinitrotoluene-d3	500	542.188	108	
2-Amino-4,6-dinitrotoluene	40	45.814	115	
3,4-Dinitrotoluene	20	21.816	109	
4-Amino-2,6-dinitrotoluene	40	47.061	118	
HMX	40	47.7	119	
Nitrobenzene	40	30.169	75	
PETN	40	30.66	77	
RDX	40	44.73	112	
Tetryl	40	39.249	98	
m-Dinitrobenzene	40	39.542	99	
m-Nitrotoluene	40	41.37	103	
o-Nitrotoluene	40	49.9	125	
p-Nitrotoluene	40	51.784	129	

Recovery Limits:

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

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qid, Time: Mon Apr 19 12:15:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0418032a

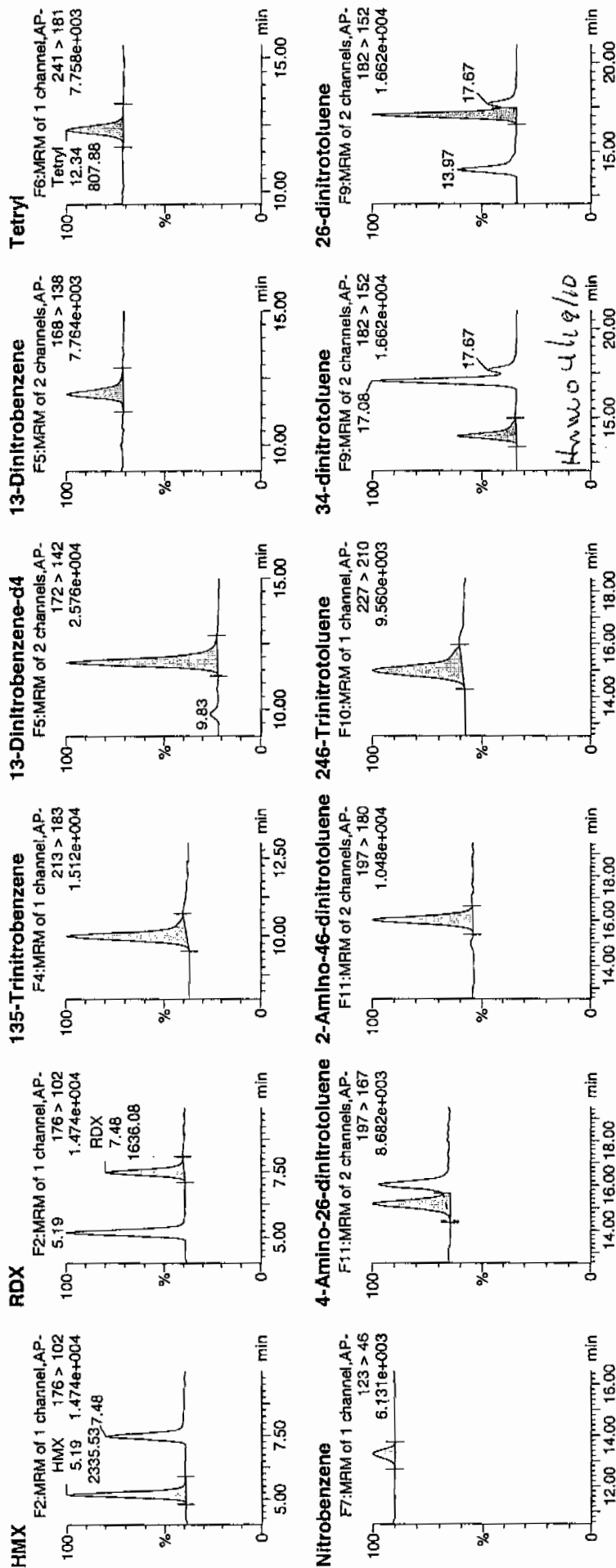
Date: 19-Apr-2010

Time: 04:56:16

ID: WXX100418-08CRI

Vial: 1:1,C

WXX
4/19/10

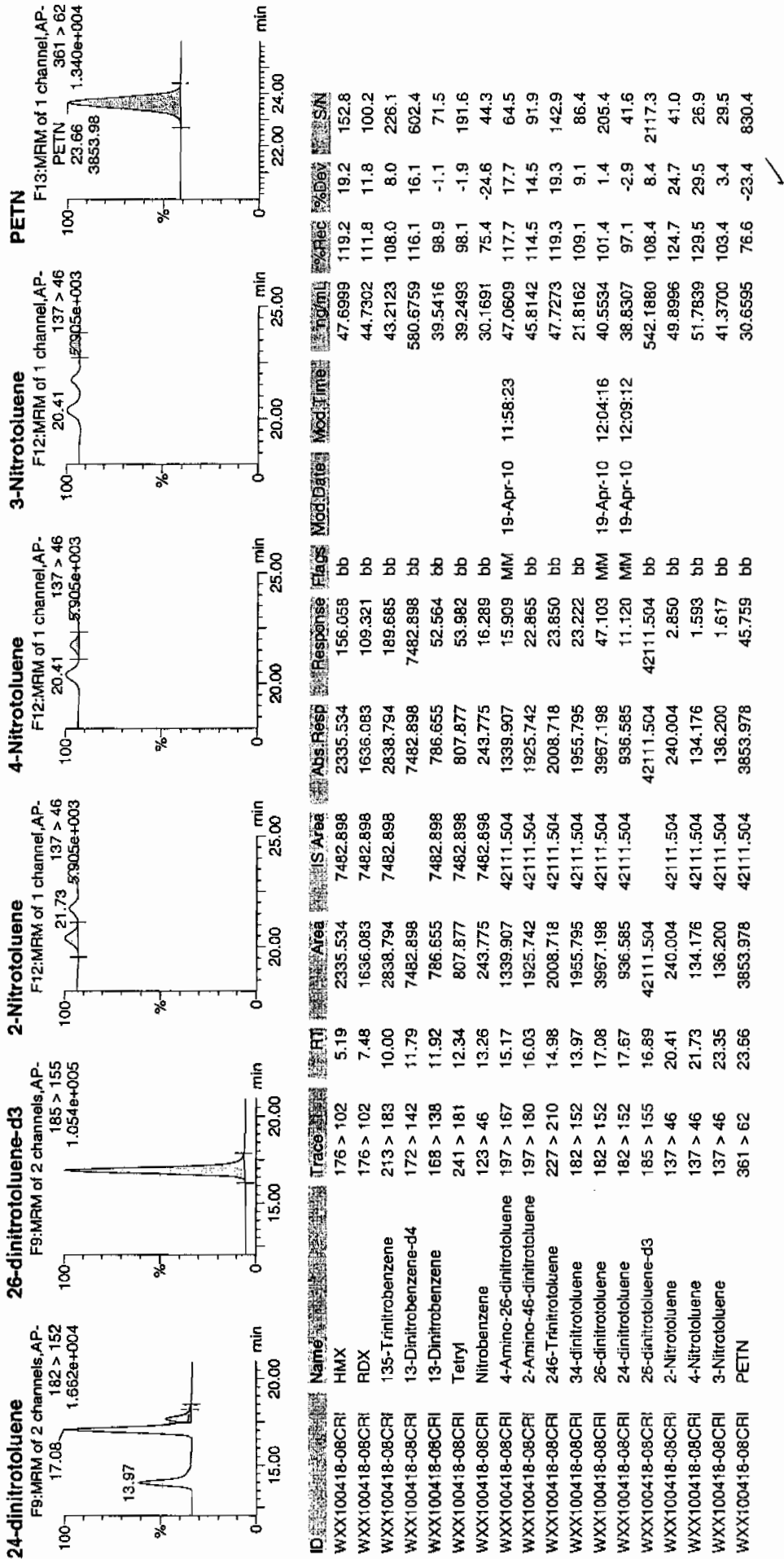


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Mon Apr 19 12:16:27 2010, Page 64 of 91

Dataset: C:\MASSLYNX\New_Exp.PRO\041810expA.qld, Time: Mon Apr 19 12:15:39 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/19/10
 Time of Injection 0456
 Standard Number WXX100418-08CRI
 Data File EXP0418032a

HMX	119.2
RDX	111.8
135-TNB	108.0
13-DNB	98.9
Tetryl	98.1
Nitrobenzene	75.4
4A-26-DNT	117.7
2A-46-DNT	114.5
246-TNT	119.3
34-DNT(surr)	109.1
26-DNT	101.4
24-DNT	97.1
2-NT	124.7
4-NT	129.5
3-NT	103.4
PETN	76.6
Total	1704.7

WPP
4/19/10

Average

106.5

HPW 04/19/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04080013.wiff

Analysis Date: 08-APR-10 19:58

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	101	101	
2,6-Diamino-4-nitrotoluene	100	106	106	
3,4-Dinitrotoluene	50	48.1	96	
3,5-Dinitroaniline	100	89.4	89	
TATB	100	97.8	98	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

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

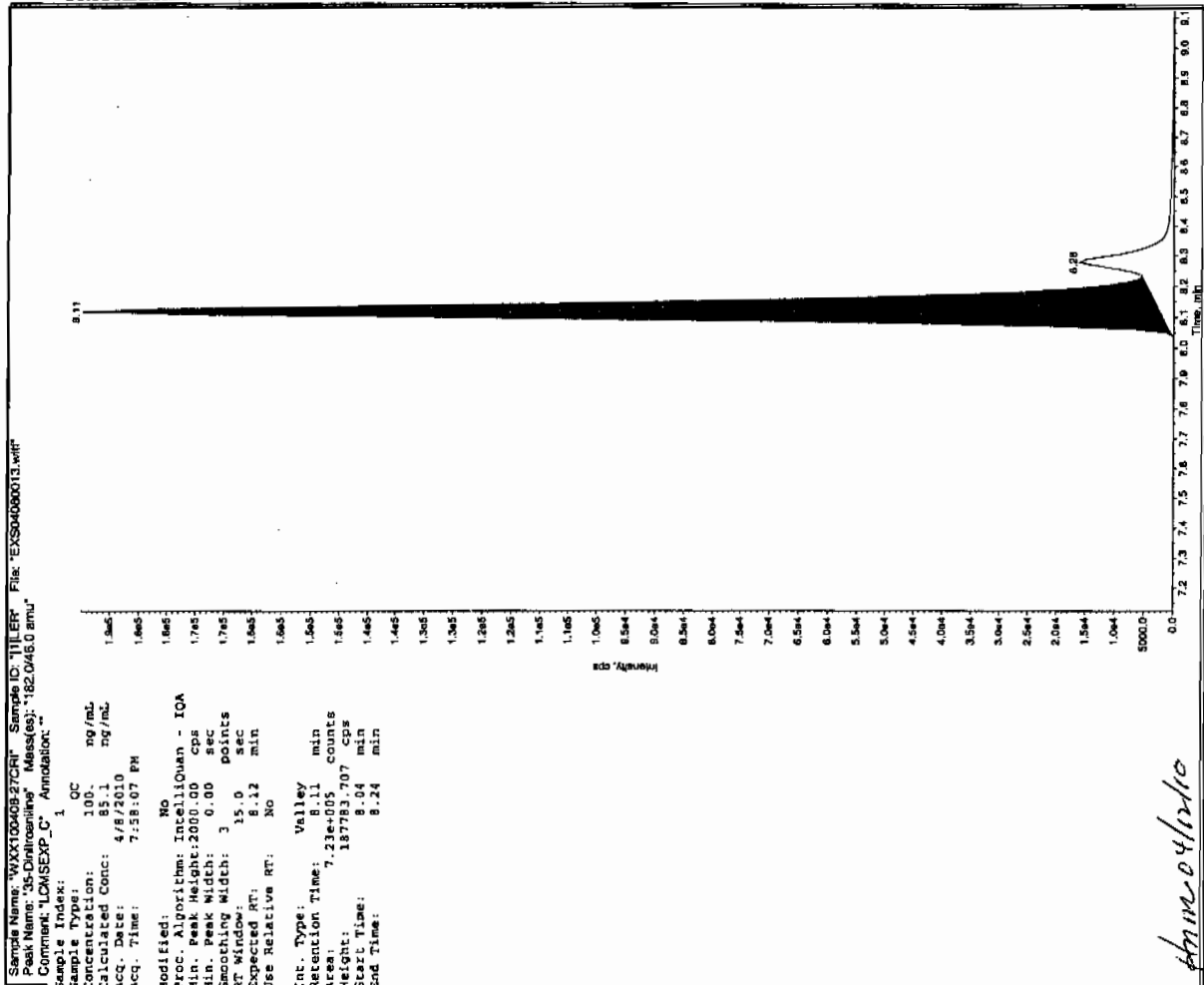
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

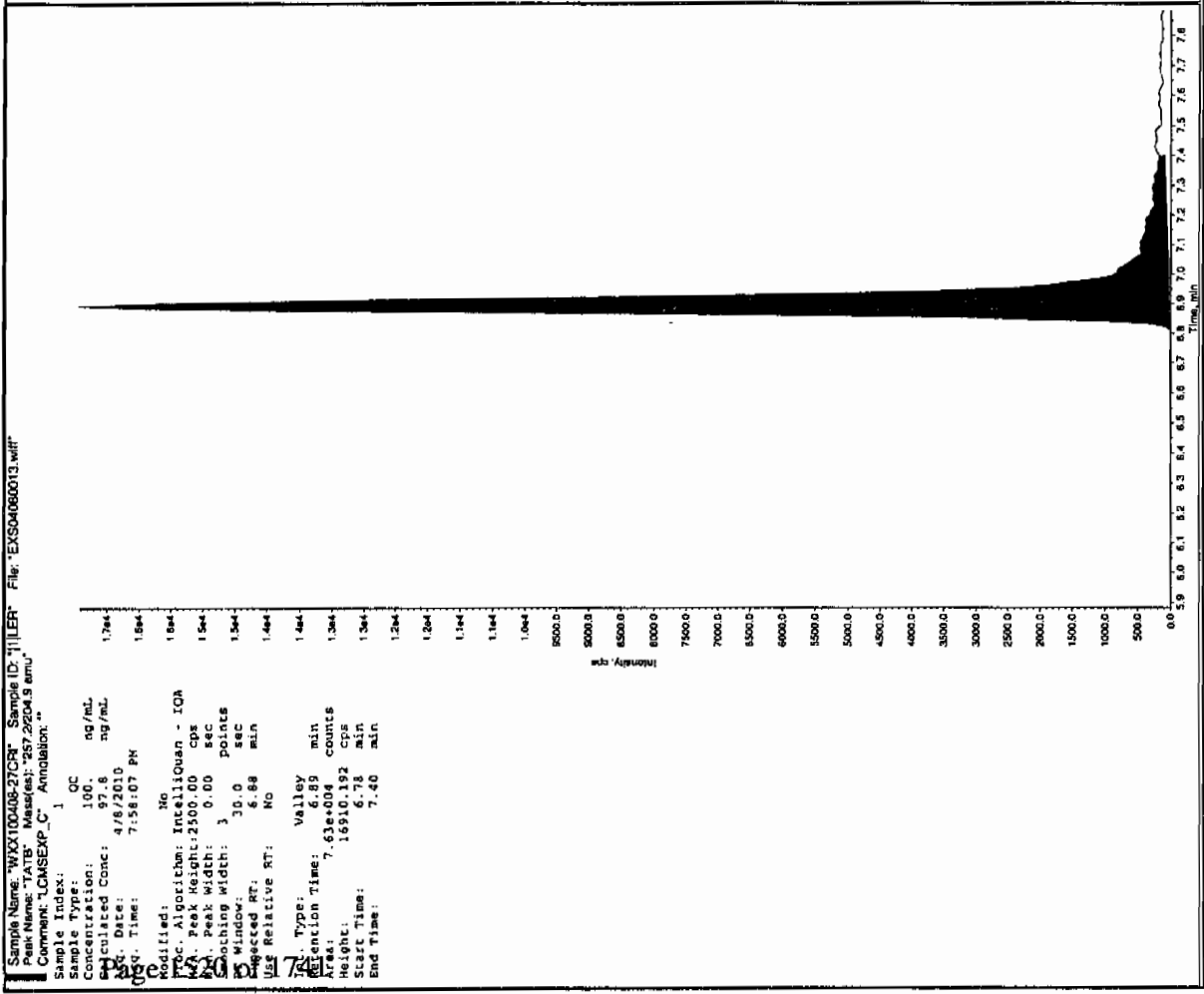
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

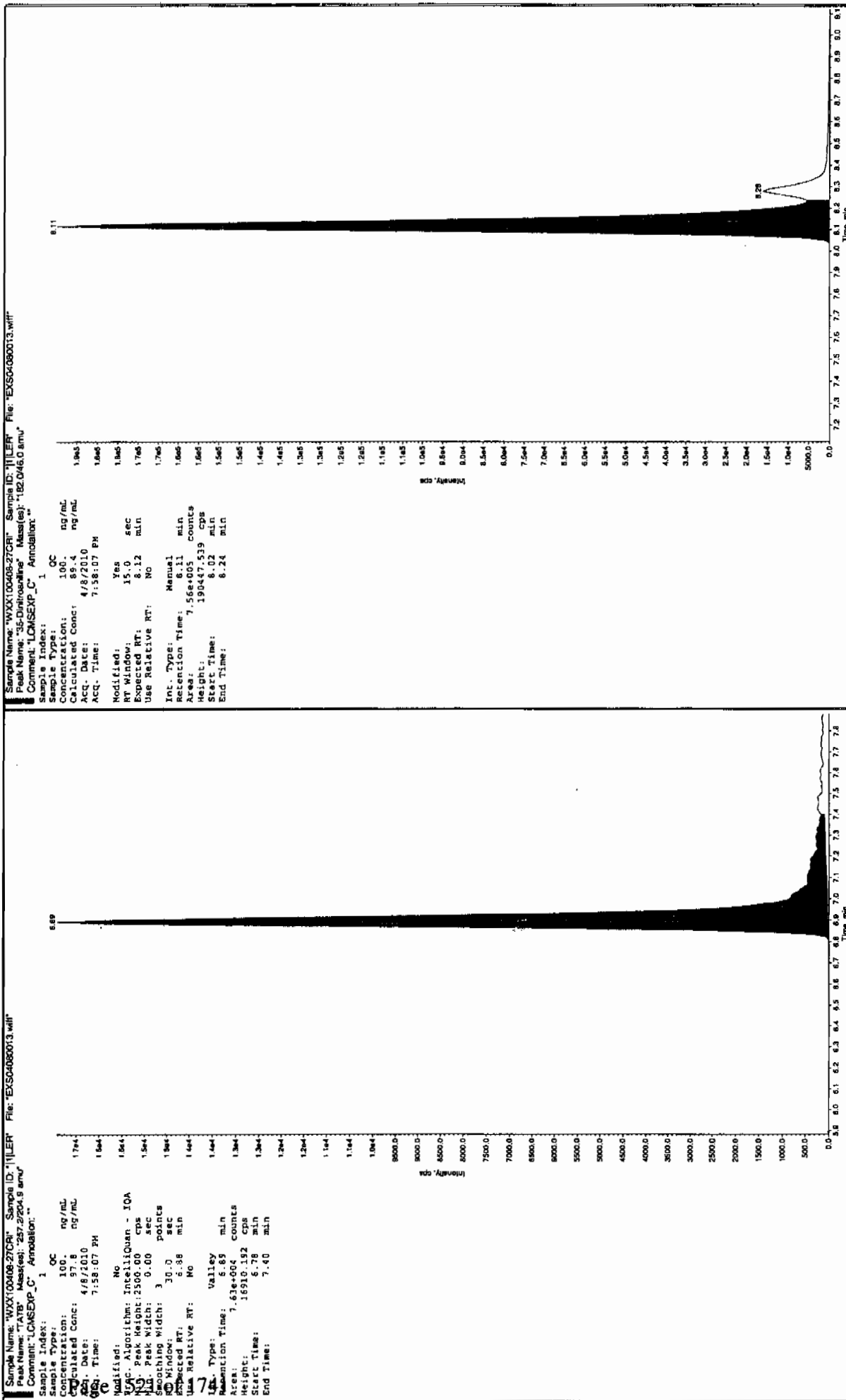
Before Jan 4/12/10

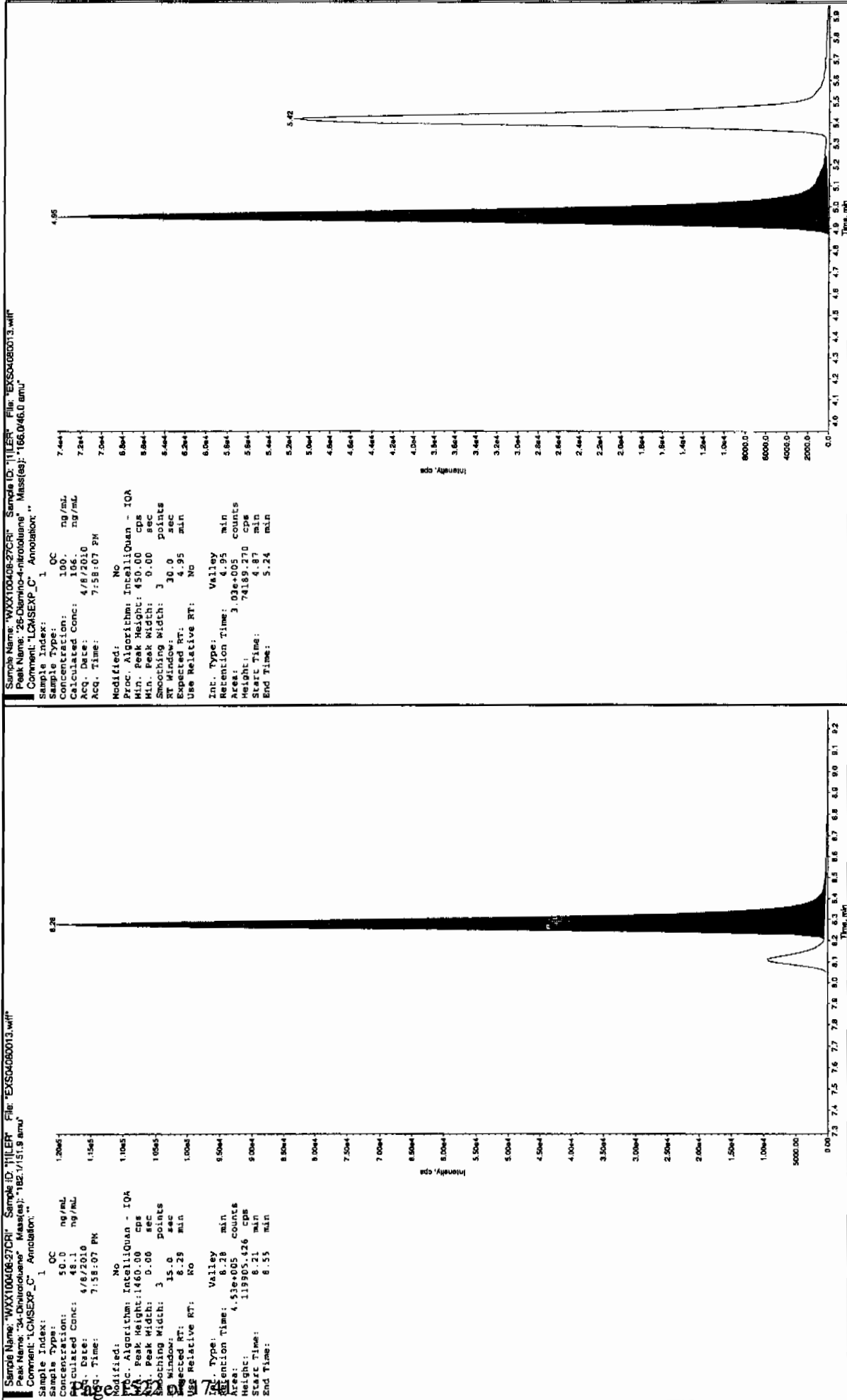


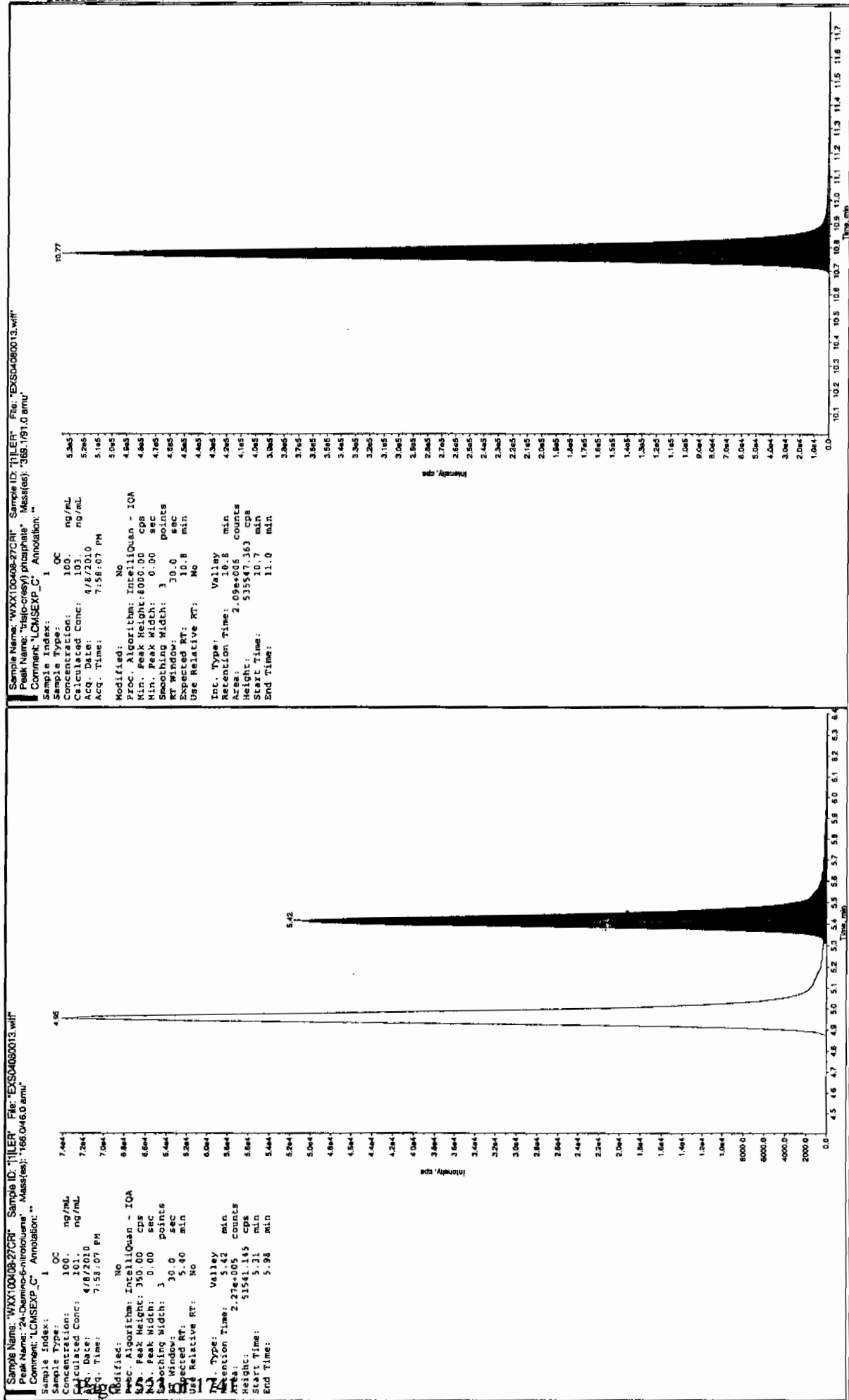
After Jan 4/12/10



after Dec 4/12/10







7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04080024.wiff

Analysis Date: 08-APR-10 22:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	460	92	
2,6-Diamino-4-nitrotoluene	500	466	93	
3,4-Dinitrotoluene	250	212	85	
3,5-Dinitroaniline	500	462	92	
TATB	500	534	107	
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 ,

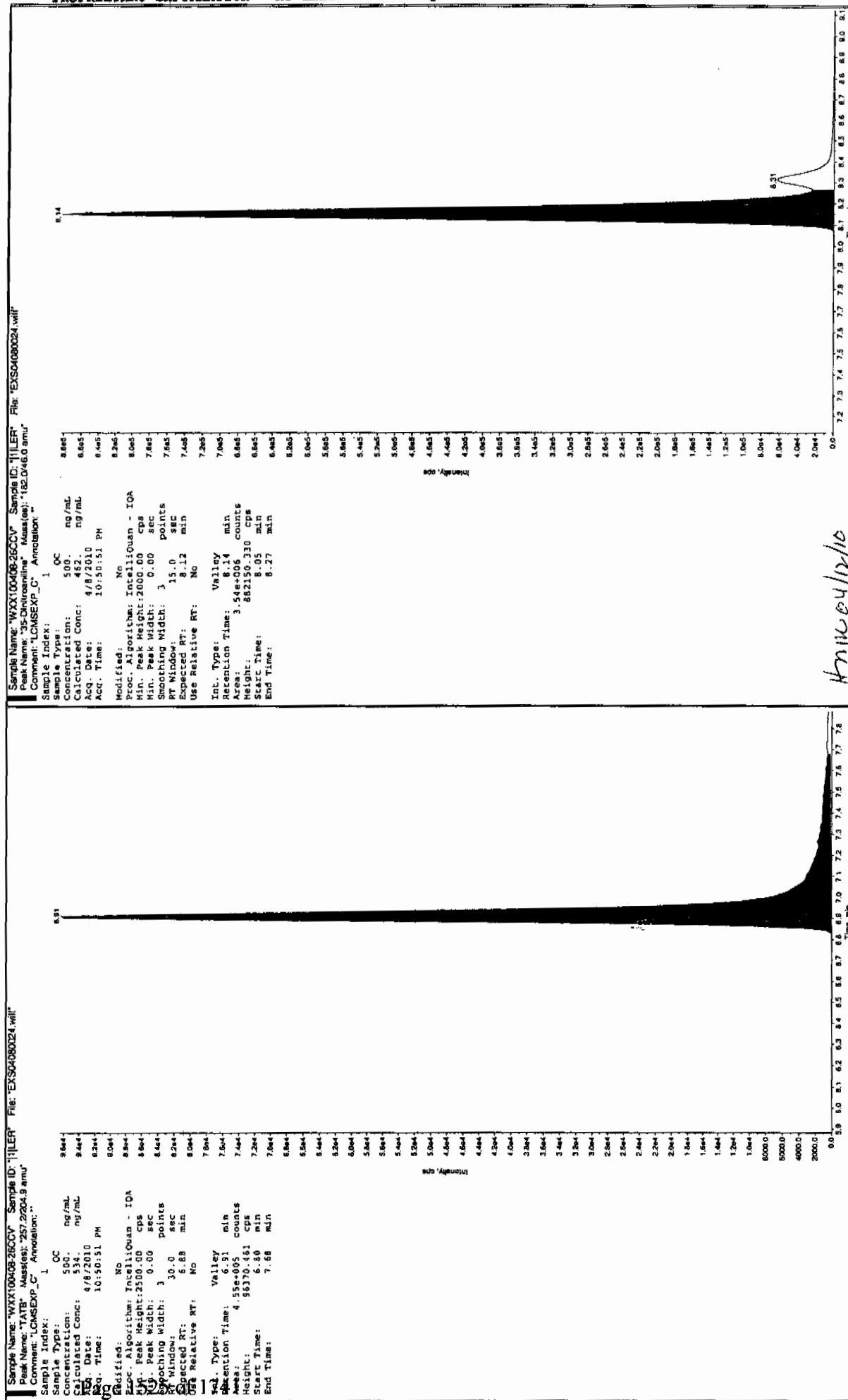
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

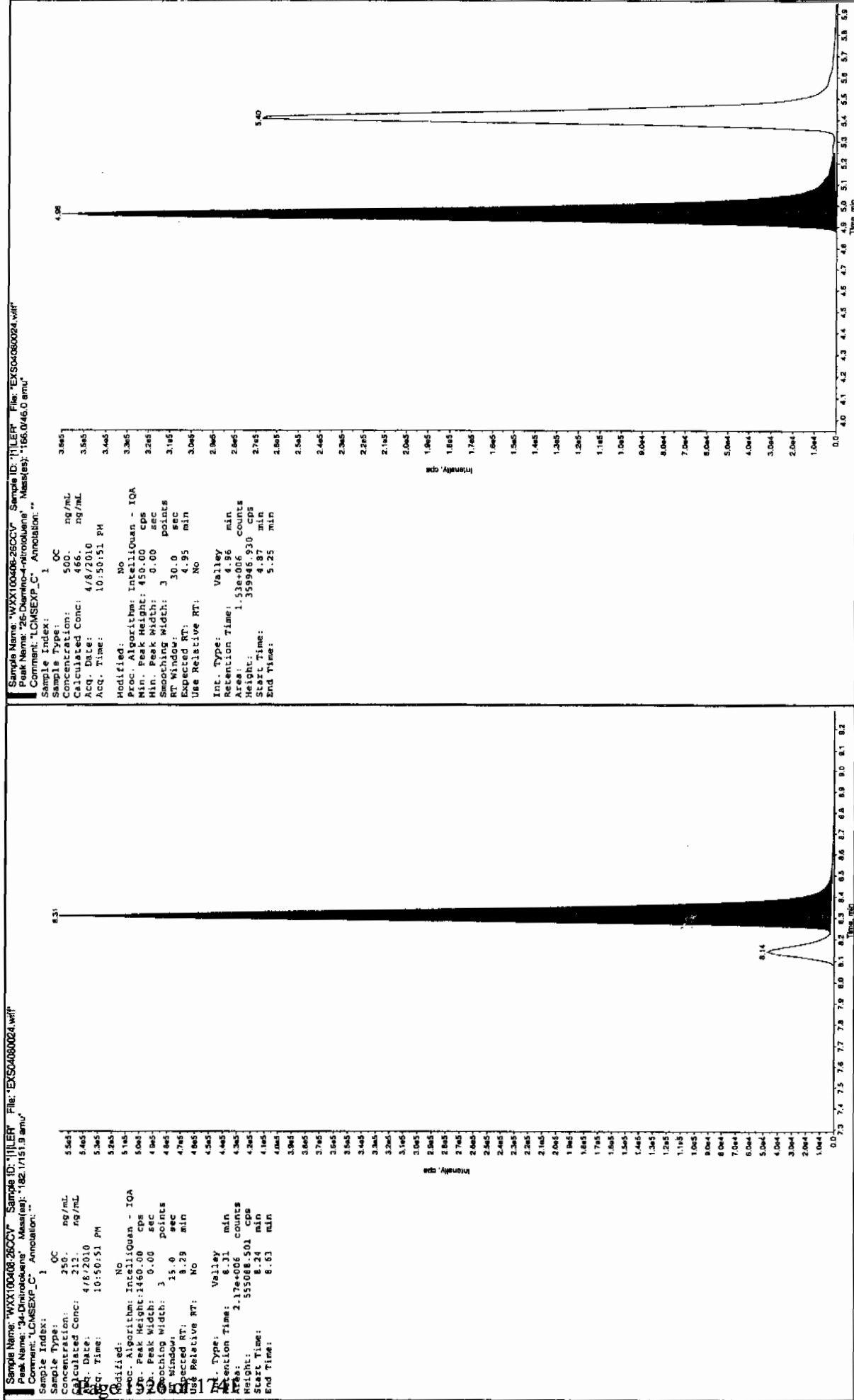
Column used to flag Recovery outside of Limits

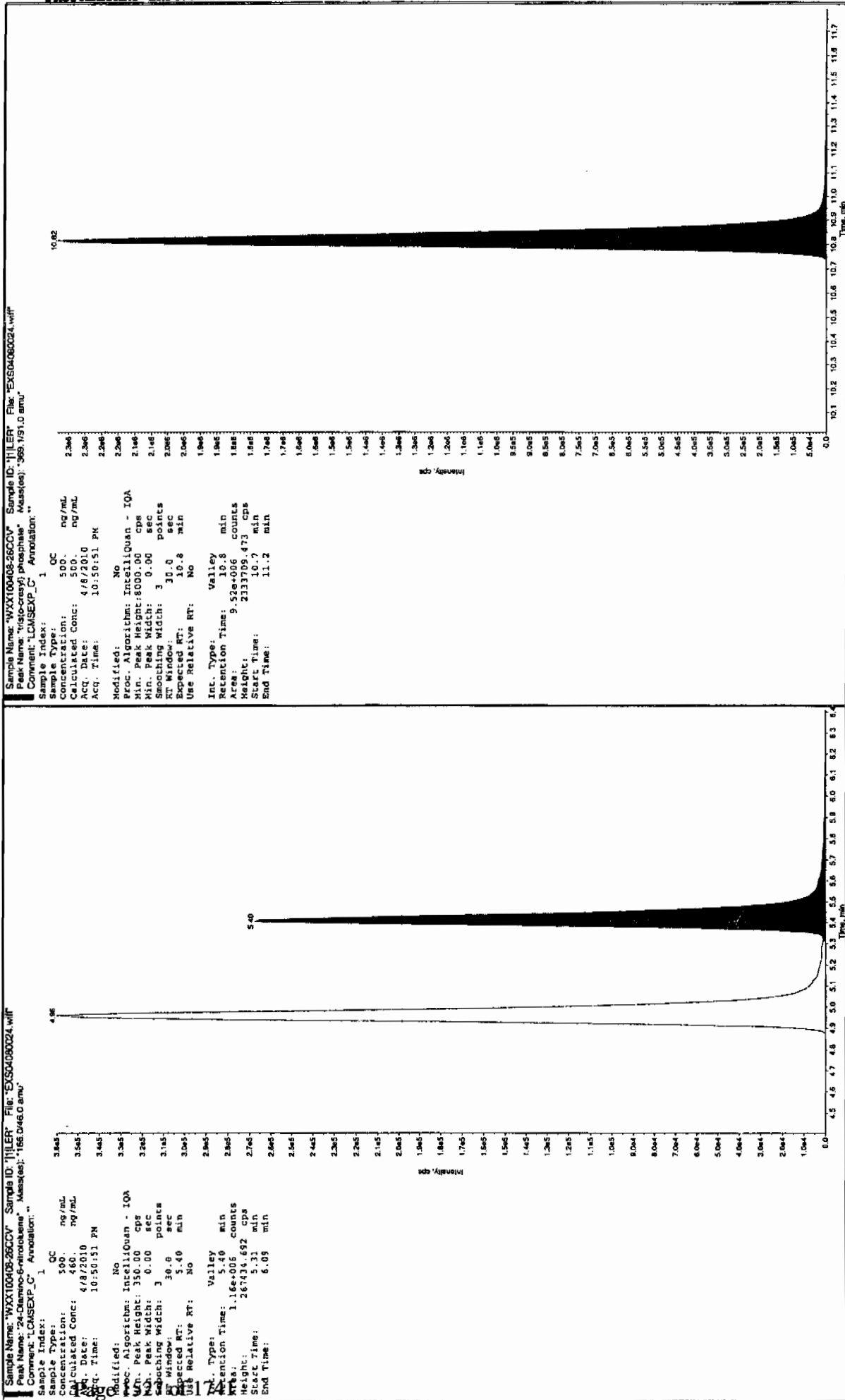
* Value outside of Recovery Limits

San 4/12/10



San 4/12/10





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04080026.wiff

Analysis Date: 08-APR-10 23:22

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	103	103	
2,6-Diamino-4-nitrotoluene	100	101	101	
3,4-Dinitrotoluene	50	46.3	93	
3,5-Dinitroaniline	100	83.8	84	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	103	103	

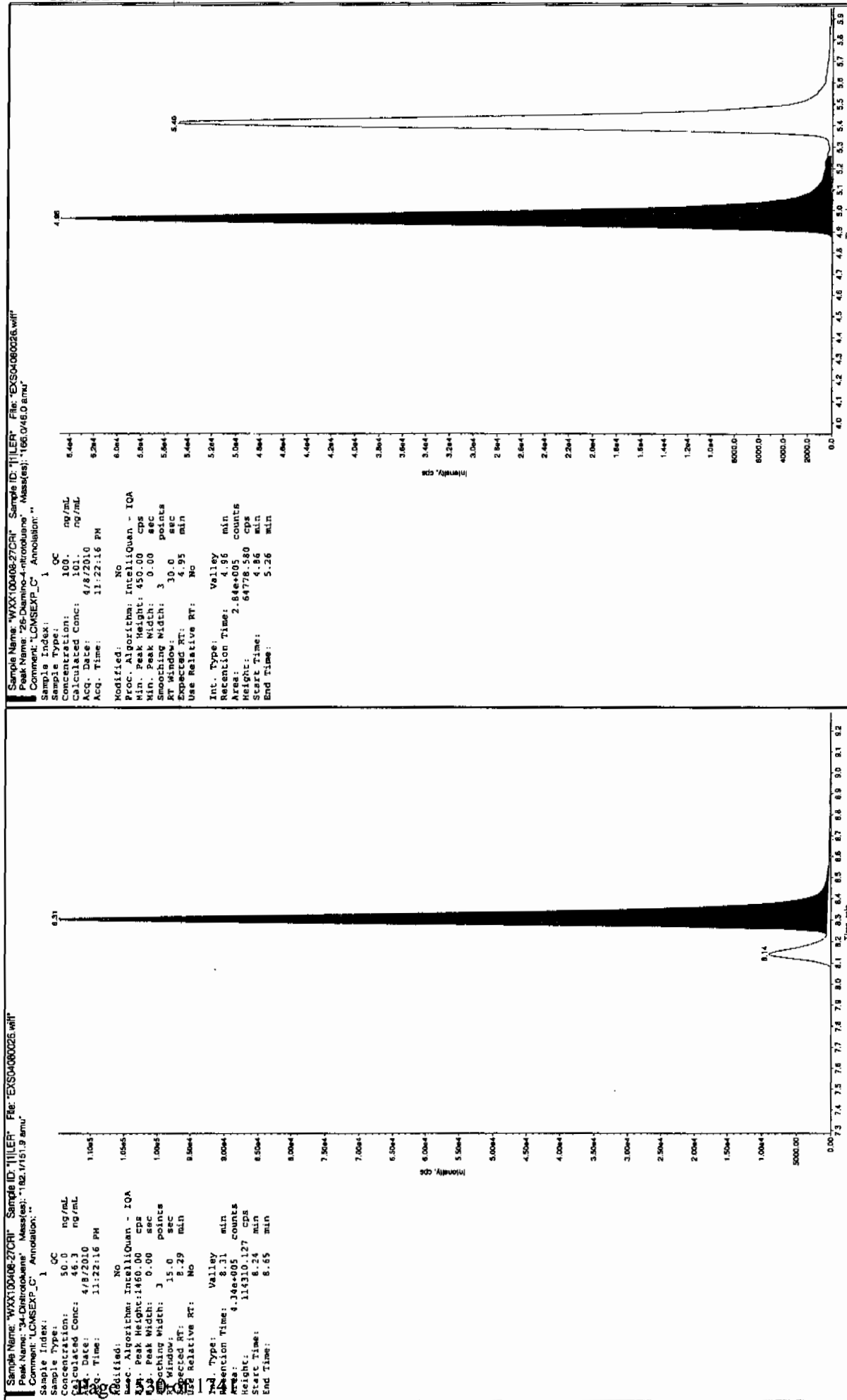
Recovery Limits:

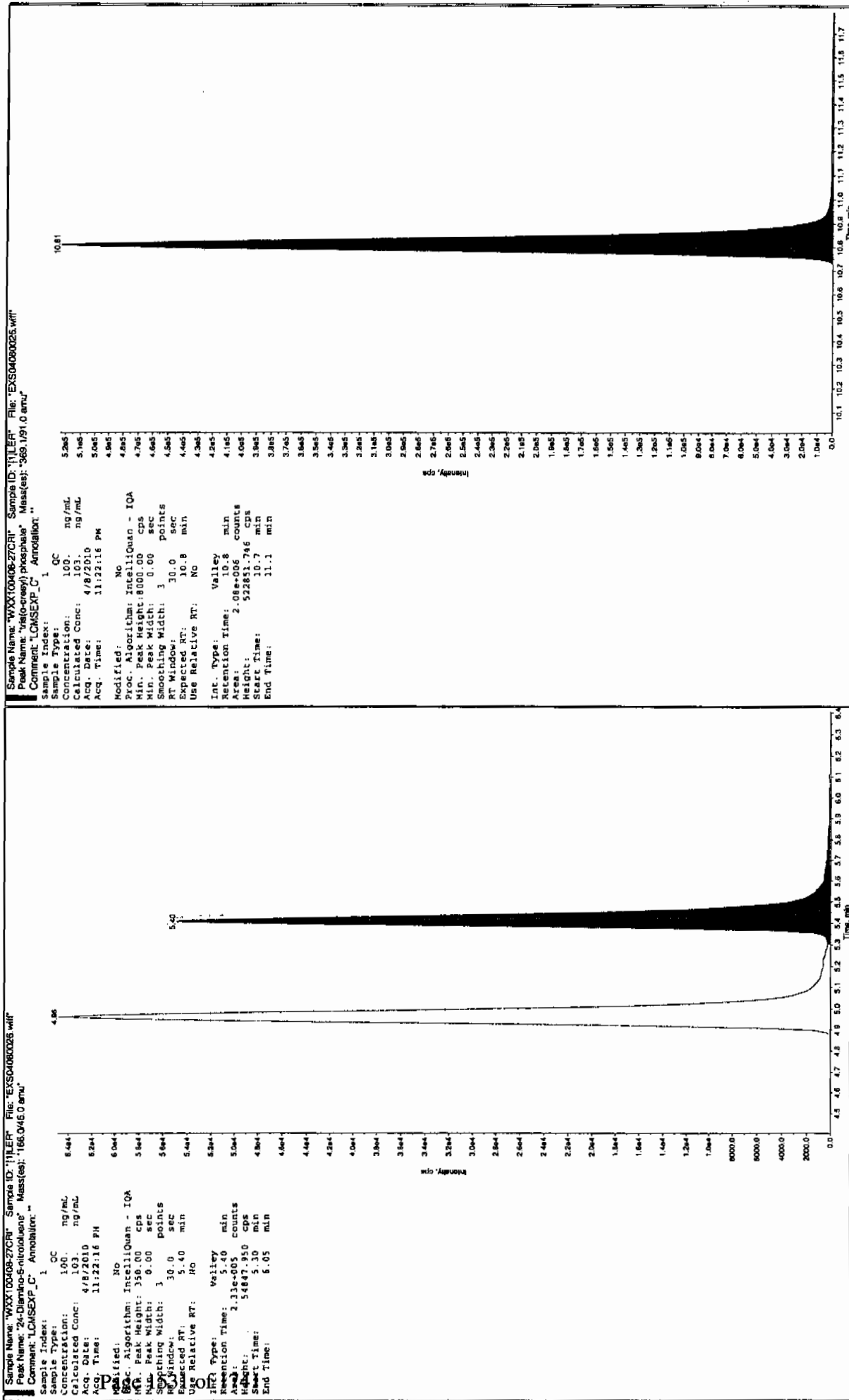
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04080036.wiff

Analysis Date: 09-APR-10 01:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	442	88	
2,6-Diamino-4-nitrotoluene	500	420	84	
3,4-Dinitrotoluene	250	209	84	
3,5-Dinitroaniline	500	454	91	
TATB	500	538	108	
tris(o-cresyl) phosphate	500	486	97	

Recovery Limits:

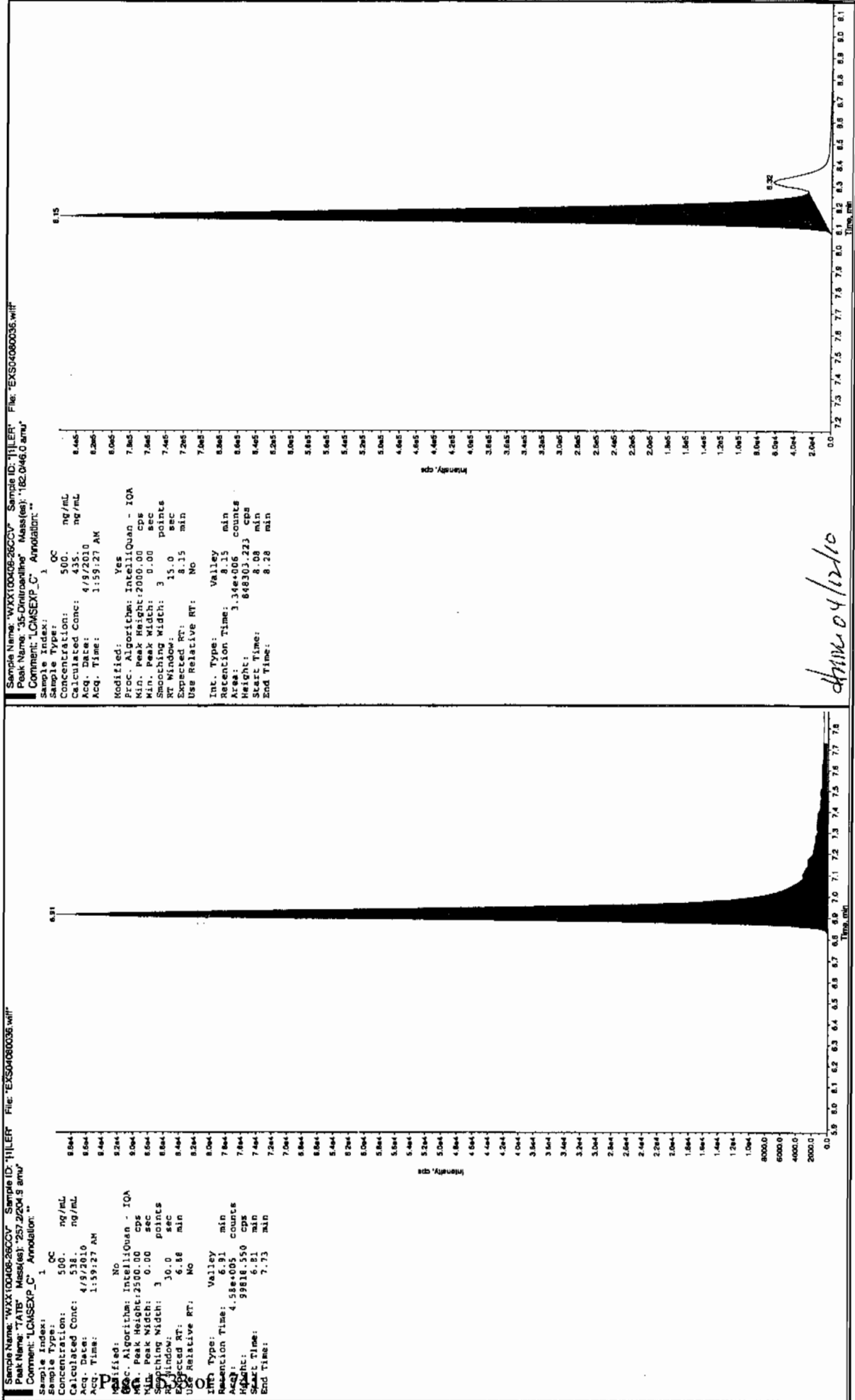
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

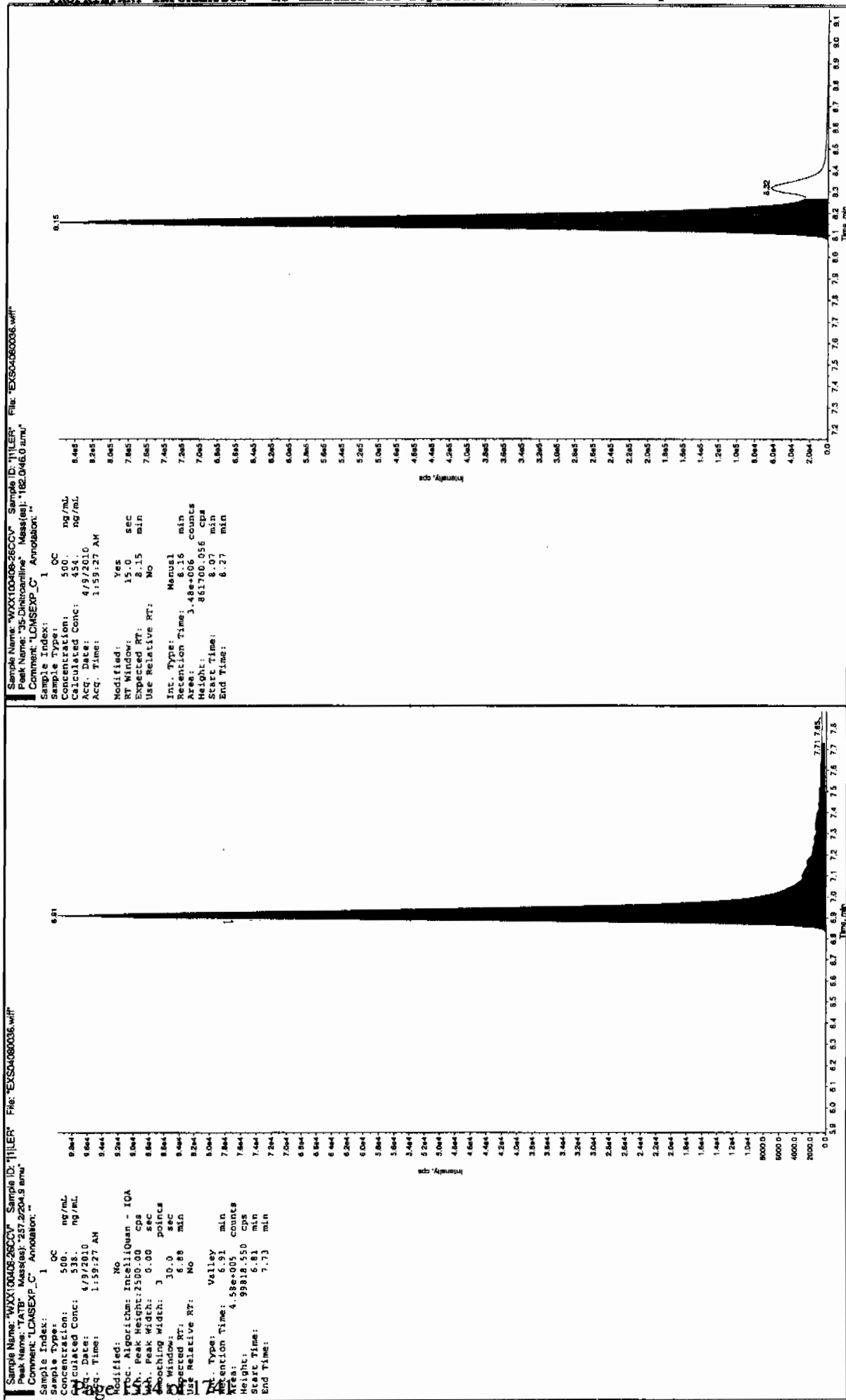
* Value outside of Recovery Limits

Before Scan 4/12/10



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

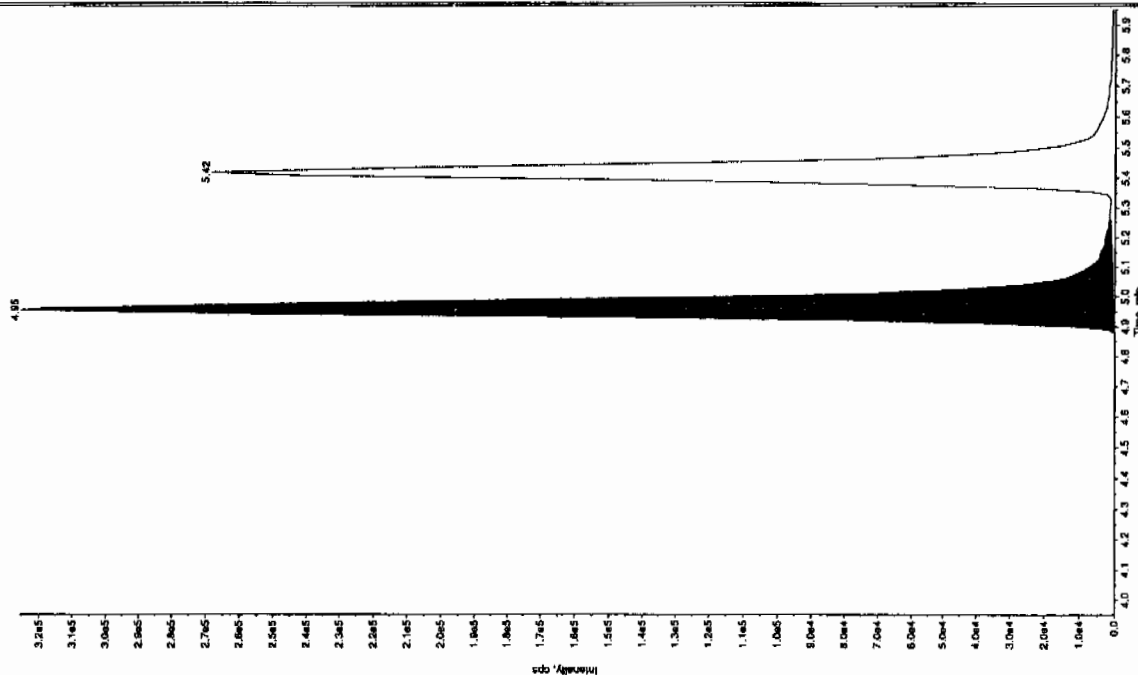
after Jan 4/12/10



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

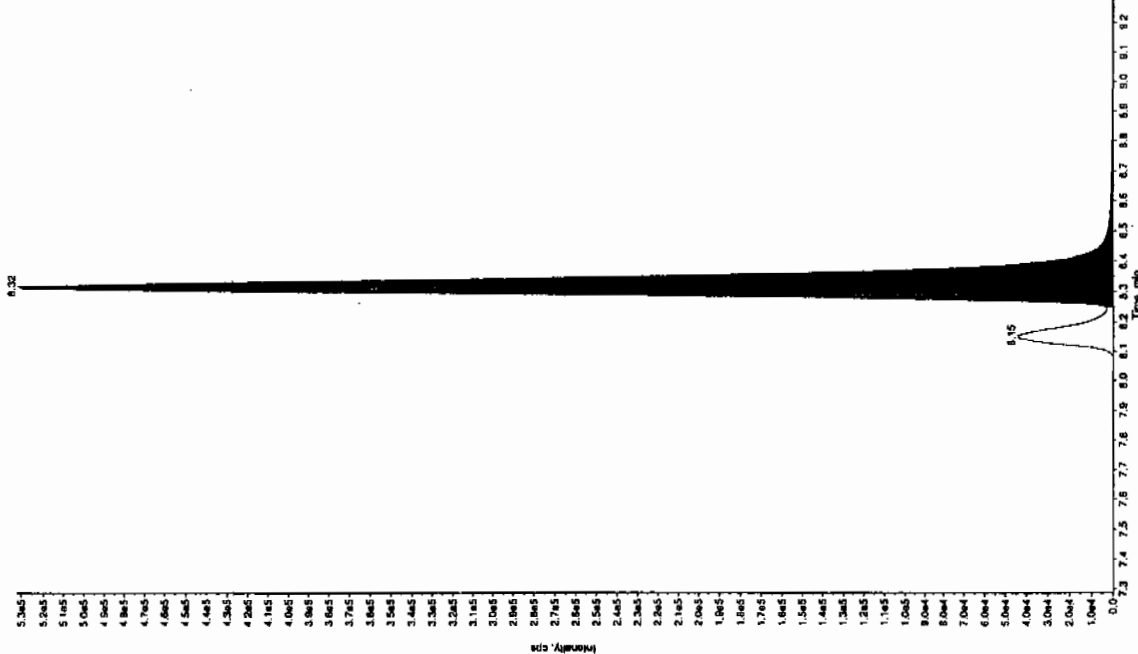
Sample Name: "WXX100406-26C0V" Sample ID: "H1LER" File: "EX504080036.wif"
 Peak Name: "26-Dienino-4-nitrobenzene" Mass(es): "186.046.0 amu"
 Comment: "LONSEXP_C" Annotation: "

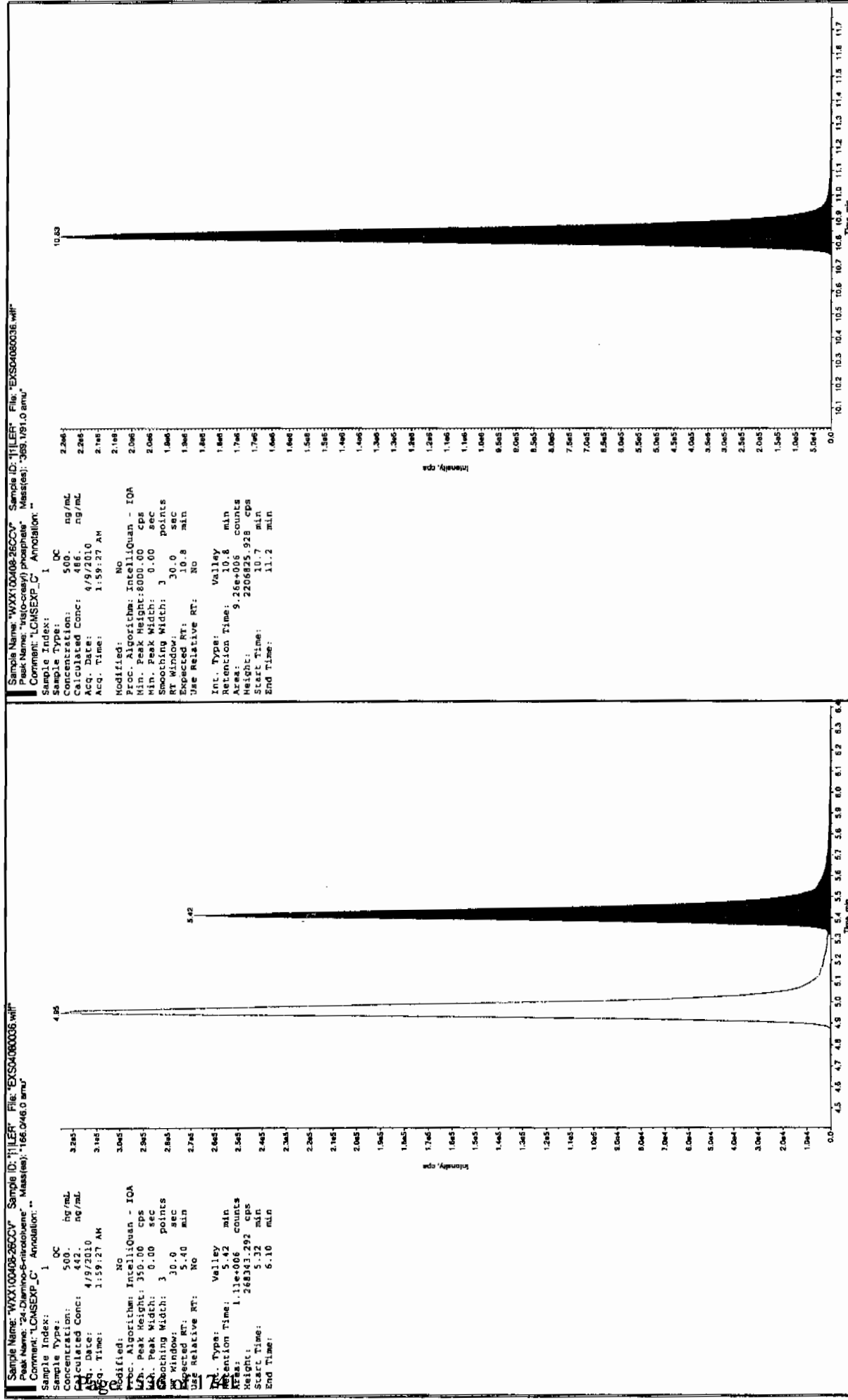
Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 120. ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 1:59:27 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.95 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.95 min
 Area: 1.36e+006 counts
 Height: 325127.106 cps
 Start Time: 4.87 min
 End Time: 5.06 min



Sample Name: "WXX100406-26C0V" Sample ID: "H1LER" File: "EX504080036.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.071.9 amu"
 Comment: "LONSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 100. ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 1:59:27 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.29 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.32 min
 Area: 2.13e+006 counts
 Height: 531936.726 cps
 Start Time: 8.13 min
 End Time: 8.52 min





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2154

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04080038.wiff

Analysis Date: 09-APR-10 02:30

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	99.8	100	
2,6-Diamino-4-nitrotoluene	100	103	103	
3,4-Dinitrotoluene	50	47.1	94	
3,5-Dinitroaniline	100	88.5	89	
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 ,

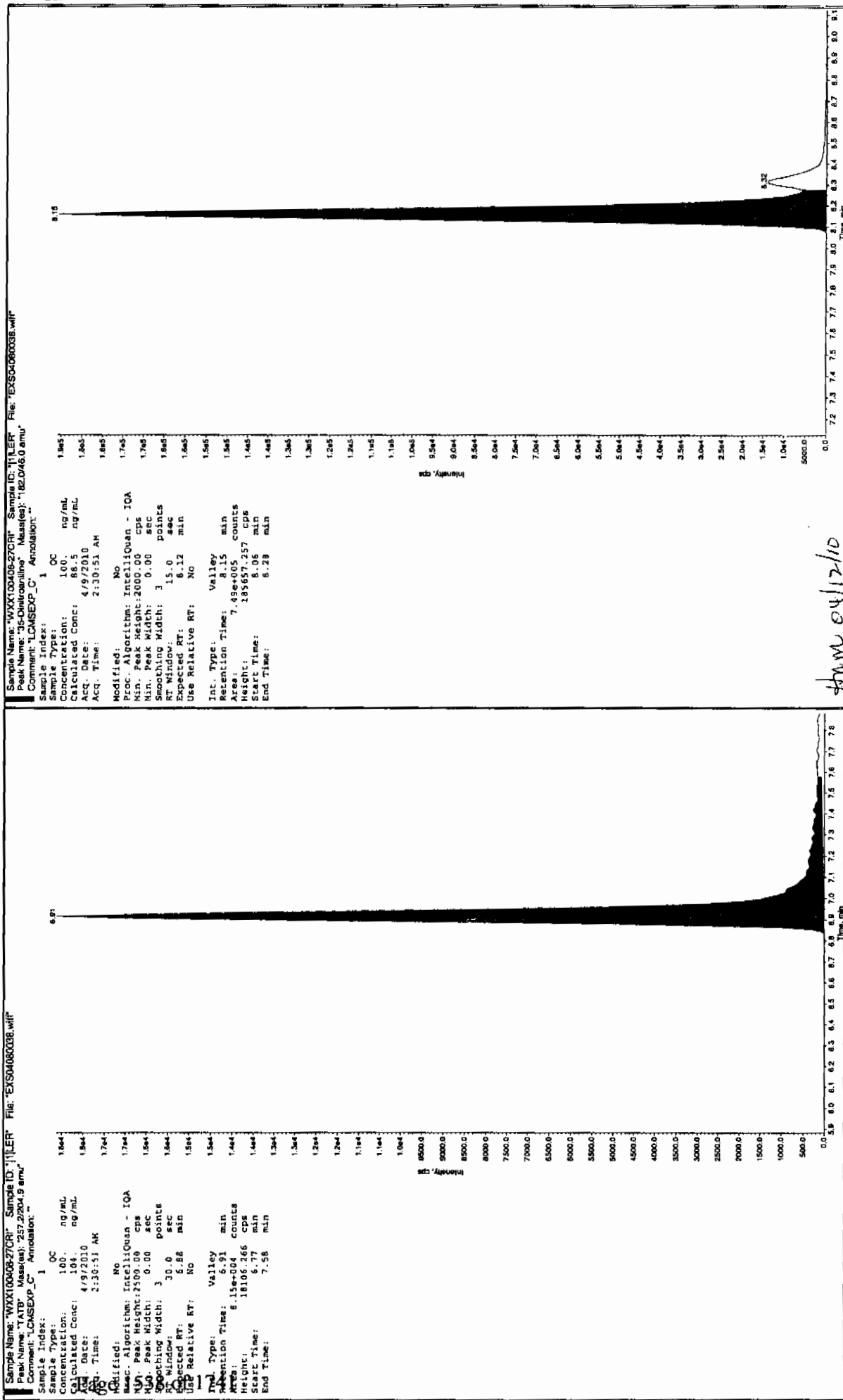
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

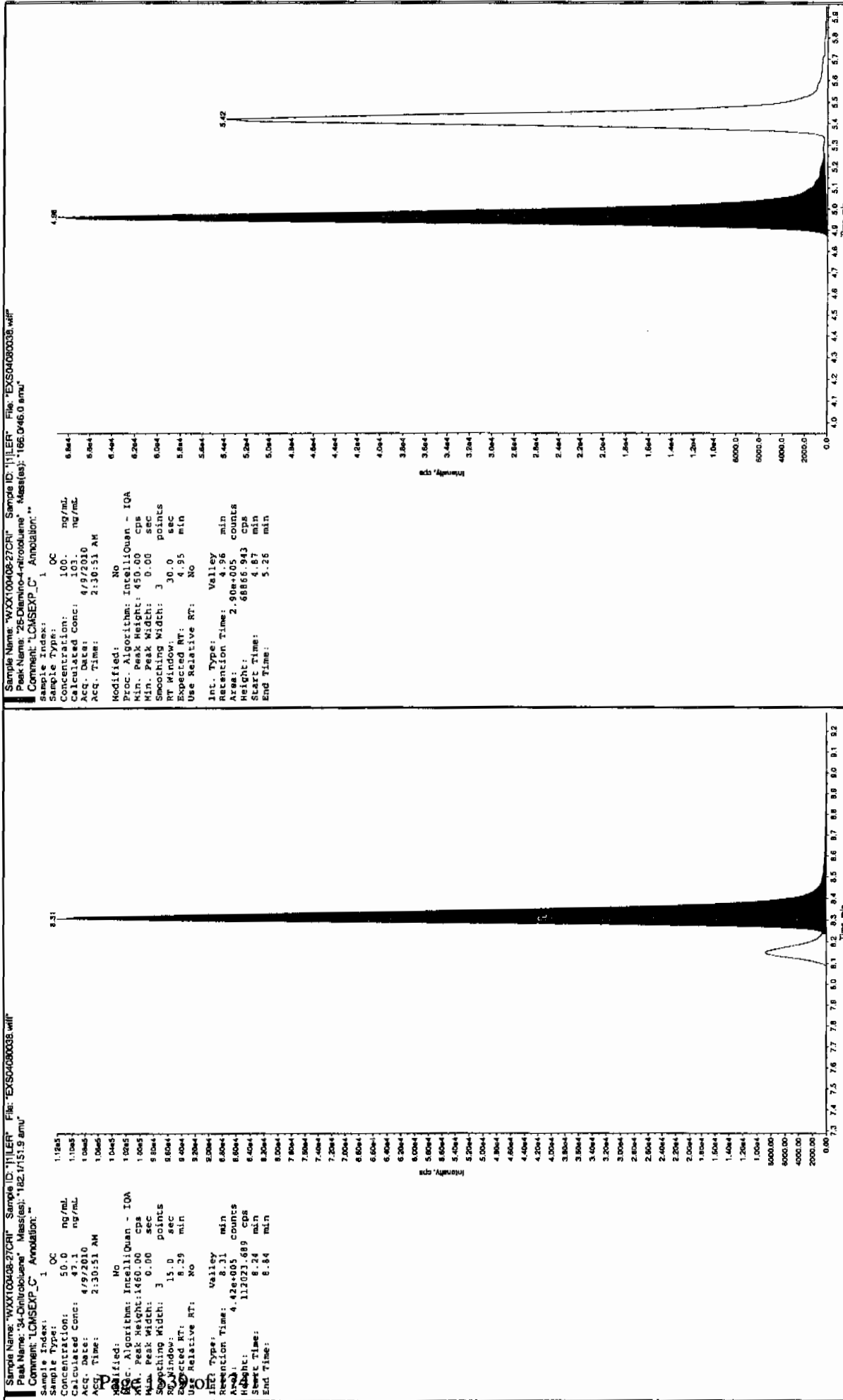
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Scan 4/12/10



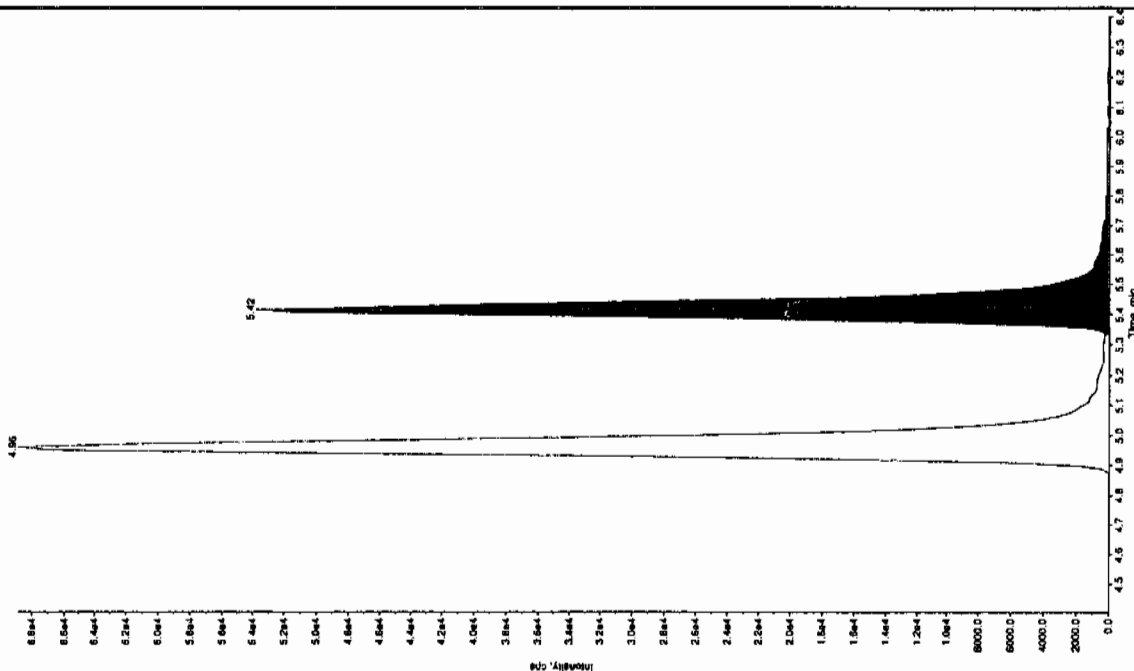
Scan 04/12/10



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

Sample Name: "WXX100408-270R" Sample ID: "111ER" File: "EXS04080038.wiff"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "156.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 101. ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 2:30:51 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Peak Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 2.05e+006 counts
 Height: 522389.771 cps
 Start Time: 10.7 min
 End Time: 11.2 min



Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 99.2 ng/mL
 Acq. Date: 4/9/2010
 Acq. Time: 2:30:51 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Peak Window: 30.0 sec
 Expected RT: 5.40 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.42 min
 Area: 2.24e+005 counts
 Height: 53738.983 cps
 Start Time: 5.33 min
 End Time: 5.91 min

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

QUALITY CONTROL DATA

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 960306

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 1202059812

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412204a

Date Analyzed: 16-APR-10 19:30

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 51 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412204a

Date: 16-Apr-2010

Time: 19:30:06

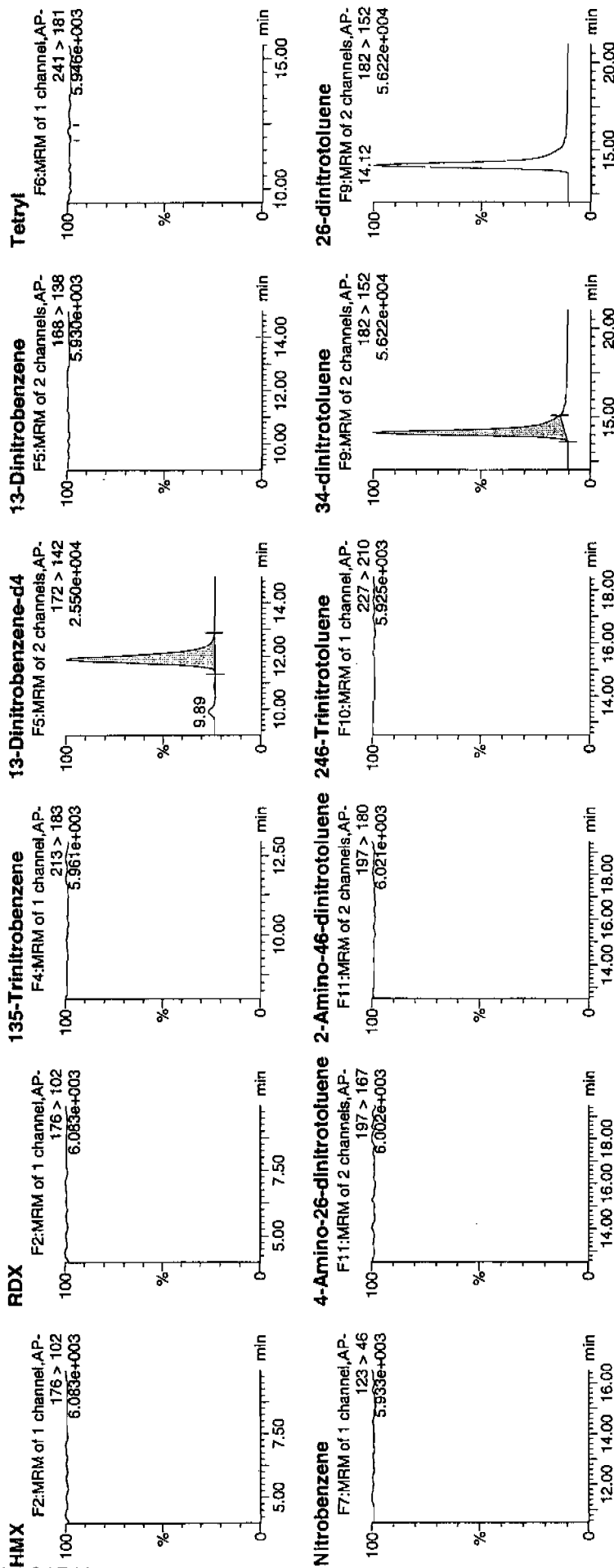
ID: 1202059812

Vial: 2:1.A

4/17/10

LAUW 960307 / Sewa / 12 / 12

Page 1543 of 1741

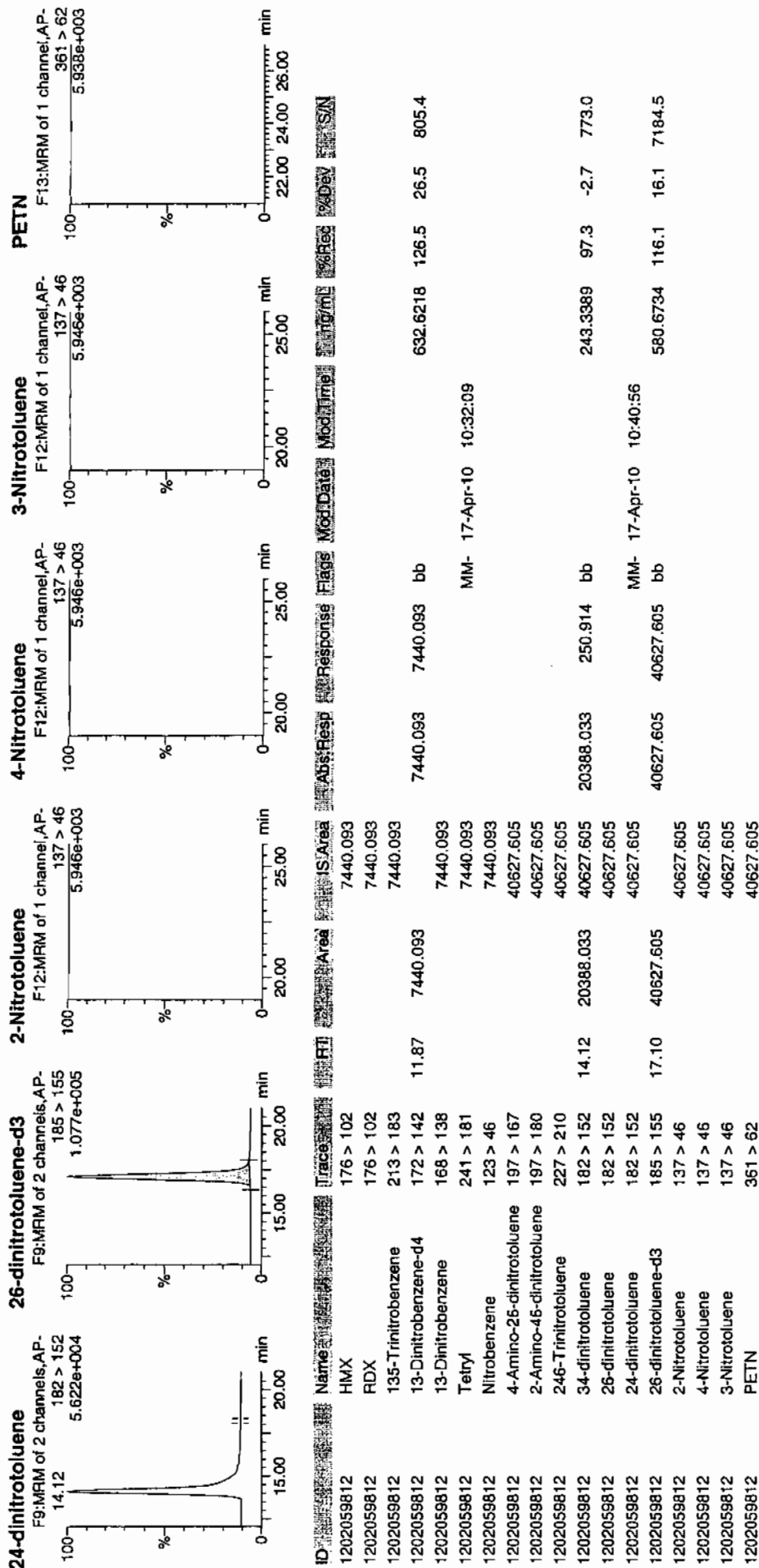


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Printed: Sat Apr 17 10:45:10 2010, Page 52 of 97



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 960306

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 1202059812

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080016.wiff

Date Analyzed: 08-APR-10 20:45

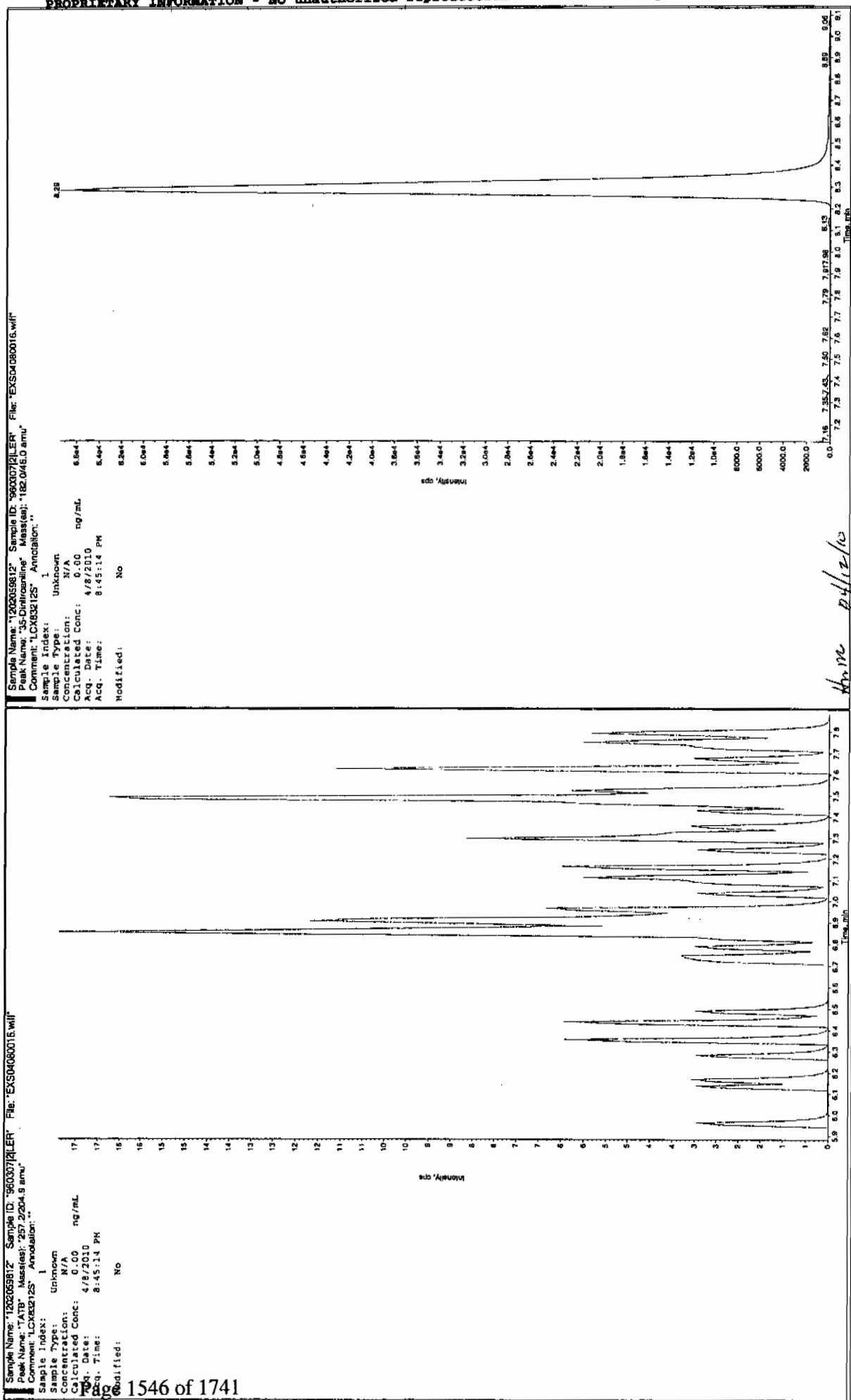
Units: ug/kg

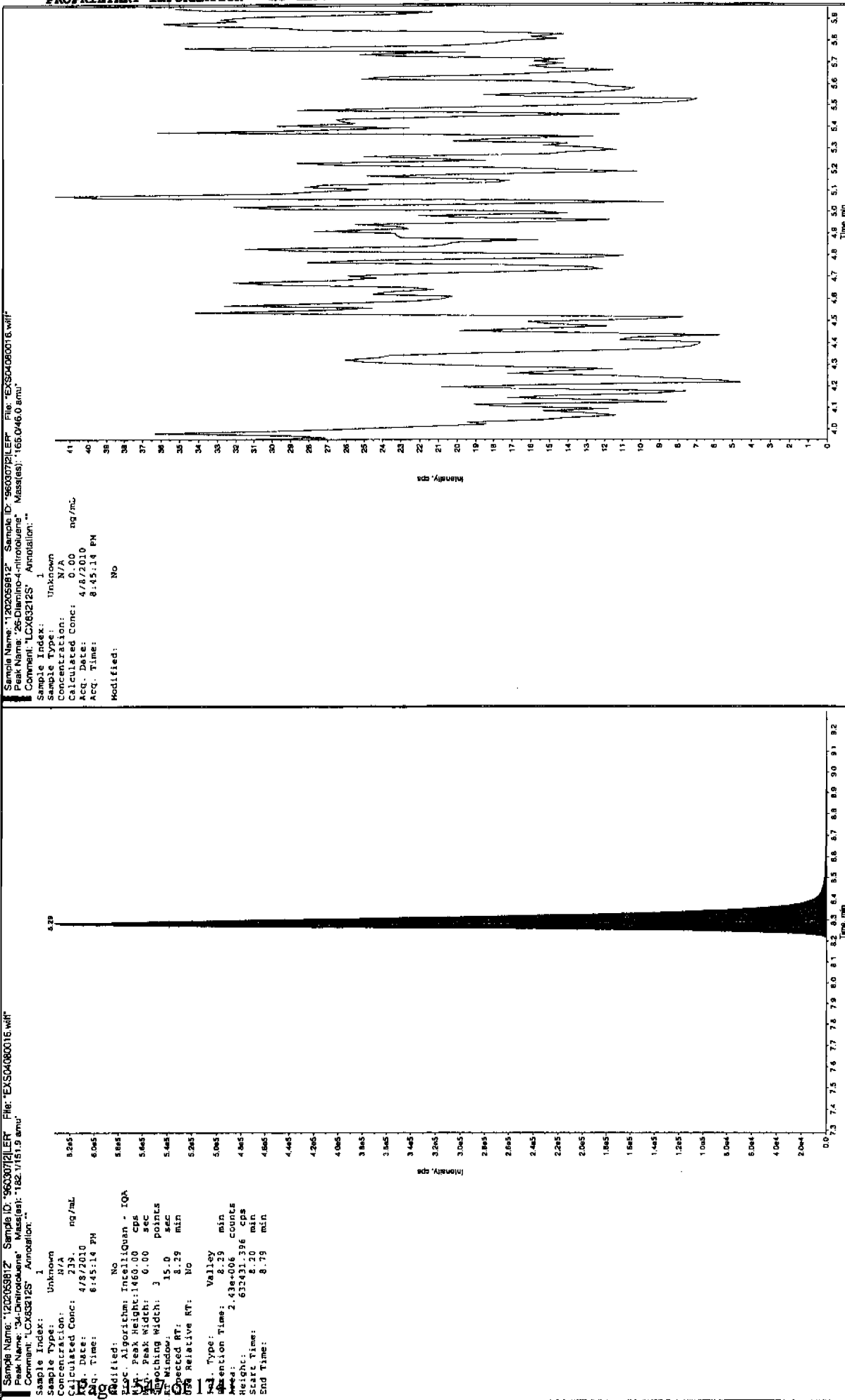
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

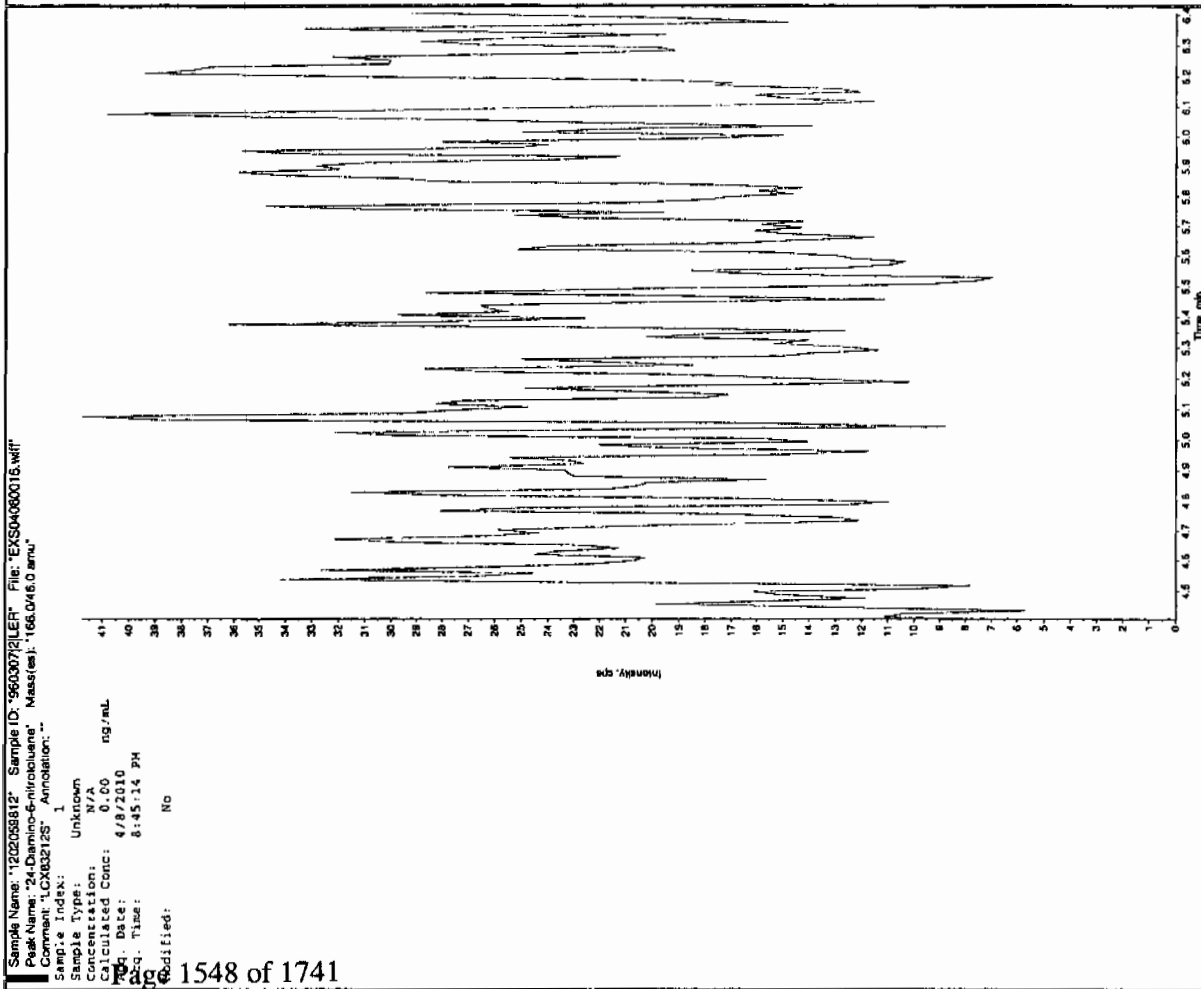
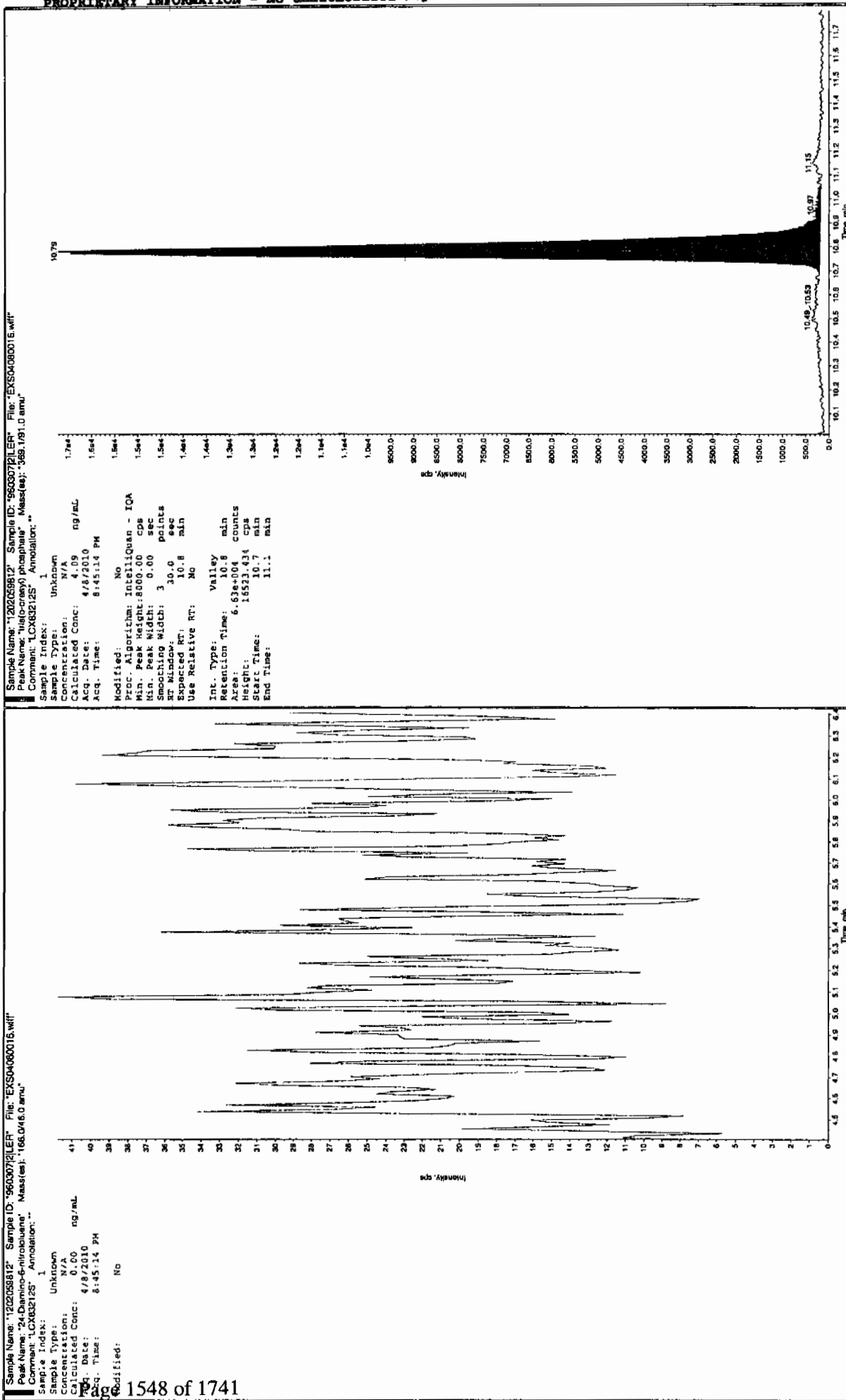
*Concentration =

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

See 4/12/10







1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 960306

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 1202059813

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412205a

Date Analyzed: 16-APR-10 19:59

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5270	
121-14-2	2,4-Dinitrotoluene	5320	
121-82-4	RDX	5580	
19406-51-0	4-Amino-2,6-dinitrotoluene	4820	
2691-41-0	HMX	5830	
35572-78-2	2-Amino-4,6-dinitrotoluene	5070	
479-45-8	Tetryl	295	J
606-20-2	2,6-Dinitrotoluene	4680	
78-11-5	PETN	5460	
88-72-2	o-Nitrotoluene	3760	
98-95-3	Nitrobenzene	4290	
99-08-1	m-Nitrotoluene	4440	
99-35-4	1,3,5-Trinitrobenzene	3450	
99-65-0	m-Dinitrobenzene	4760	
99-99-0	p-Nitrotoluene	4240	

*Concentration =

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412205a

Date: 16-Apr-2010

Time: 19:59:39

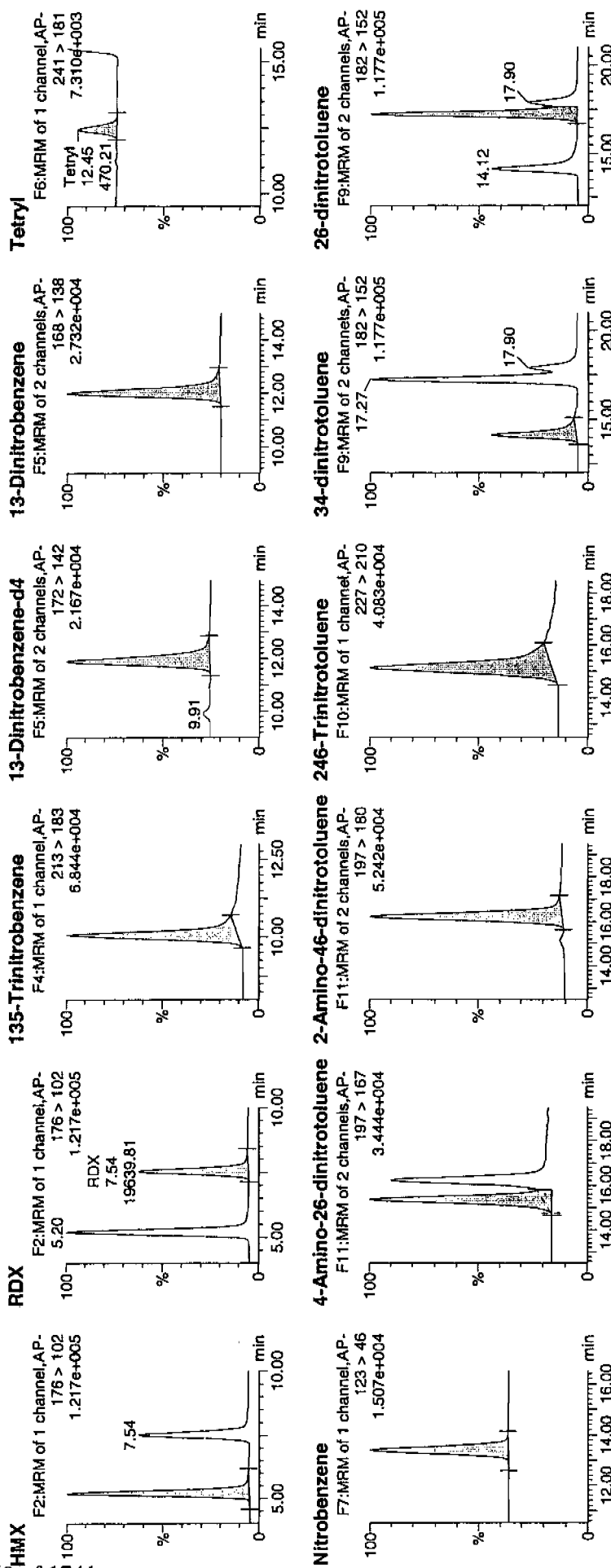
ID: 1202059813

Vial: 2:1,B

WAV 960307 | 8022 | 12 | 108 |

1477
4/13/10

↓ Tetrayl



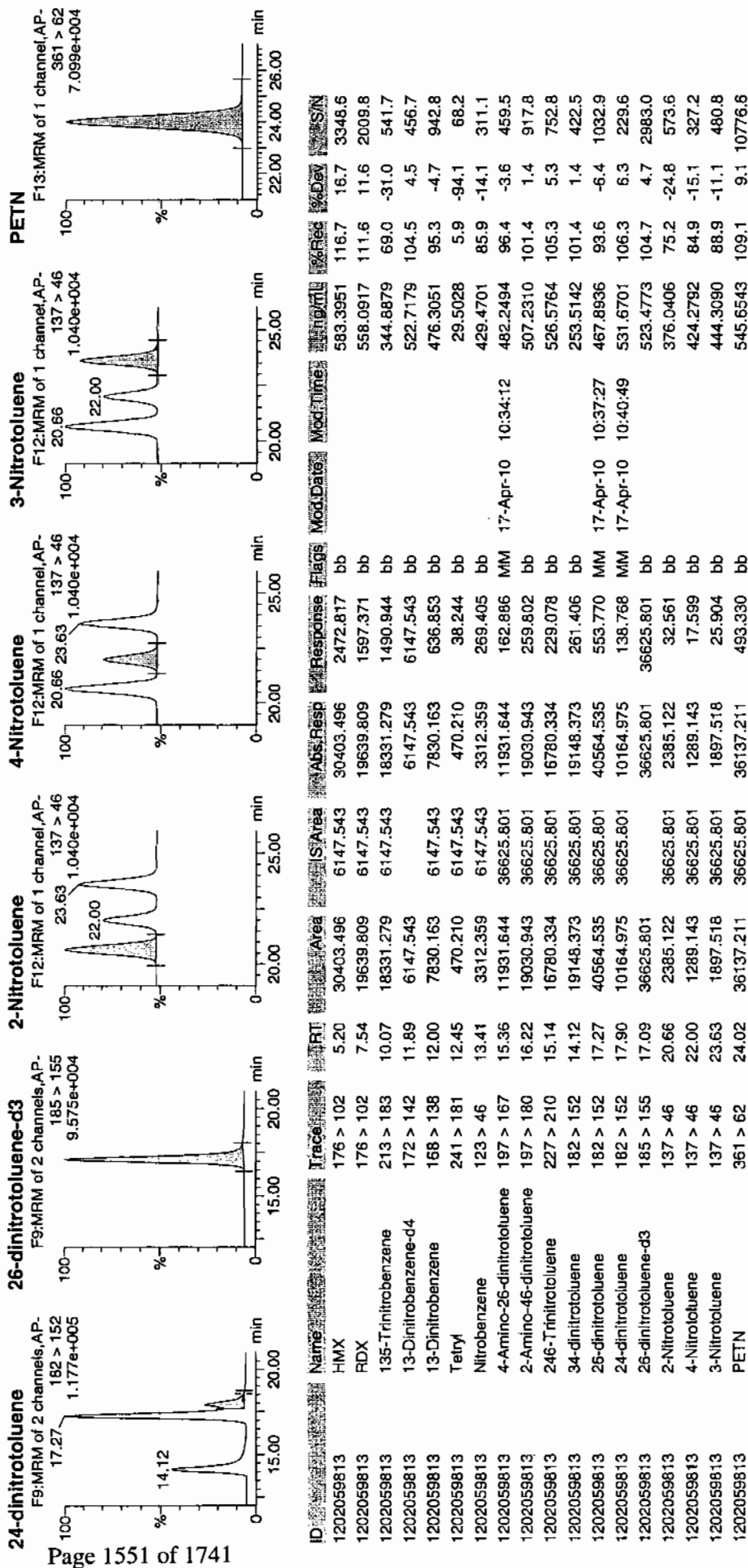
dmw 04/19/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 54 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 960306

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 1202059813

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080017.wiff

Date Analyzed: 08-APR-10 21:00

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5910	
59229-75-3	2,6-Diamino-4-nitrotoluene	4550	
618-87-1	3,5-Dinitroaniline	4680	
6629-29-4	2,4-Diamino-6-nitrotoluene	4360	
78-30-8	tris(o-cresyl) phosphate	4980	

*Concentration =

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

Lat 4/12/10

Sample Name: "120205913" Sample ID: "9603072121.ER" File: "EX04080017.wif"
 Peak Name: "ATB" Mass(es): "257.2/204.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 4/8/2010

Acq. Date: 9:00:57 PM

Acq. Time: 9:00:57 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: 6.88 min

Use Relative RT: No

Int. Type: Valley

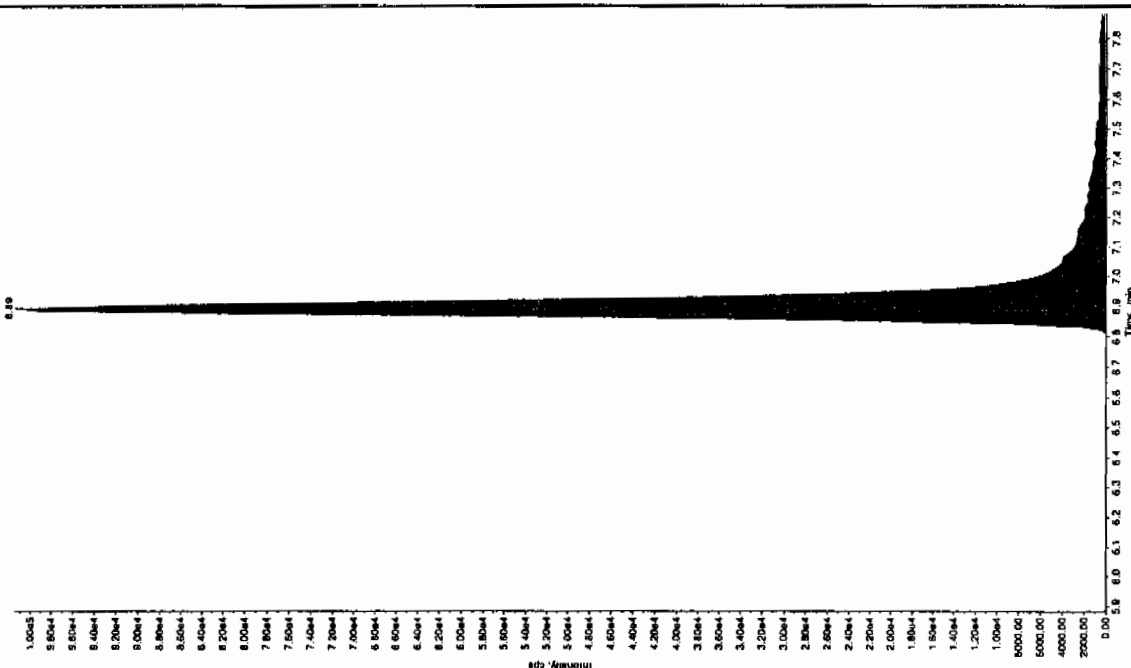
Retention Time: 6.89 min

Area: 5.05e-005 counts

Height: 101515.900 cps

Start Time: 6.79 min

End Time: 7.87 min



Sample Name: "120205913" Sample ID: "9603072121.ER" File: "EX04080017.wif"
 Peak Name: "3S-Dinitroaniline" Mass(es): "182.04/6.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 4/8/2010

Acq. Date: 9:00:57 PM

Acq. Time: 9:00:57 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: 8.12 min

Use Relative RT: No

Int. Type: Valley

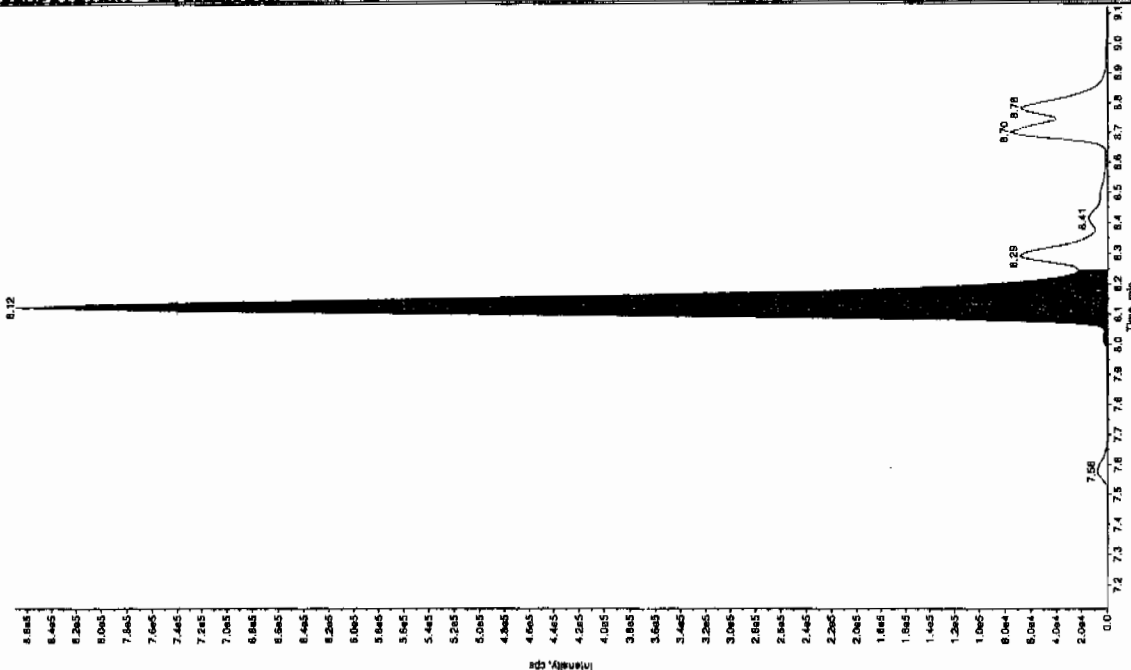
Retention Time: 8.12 min

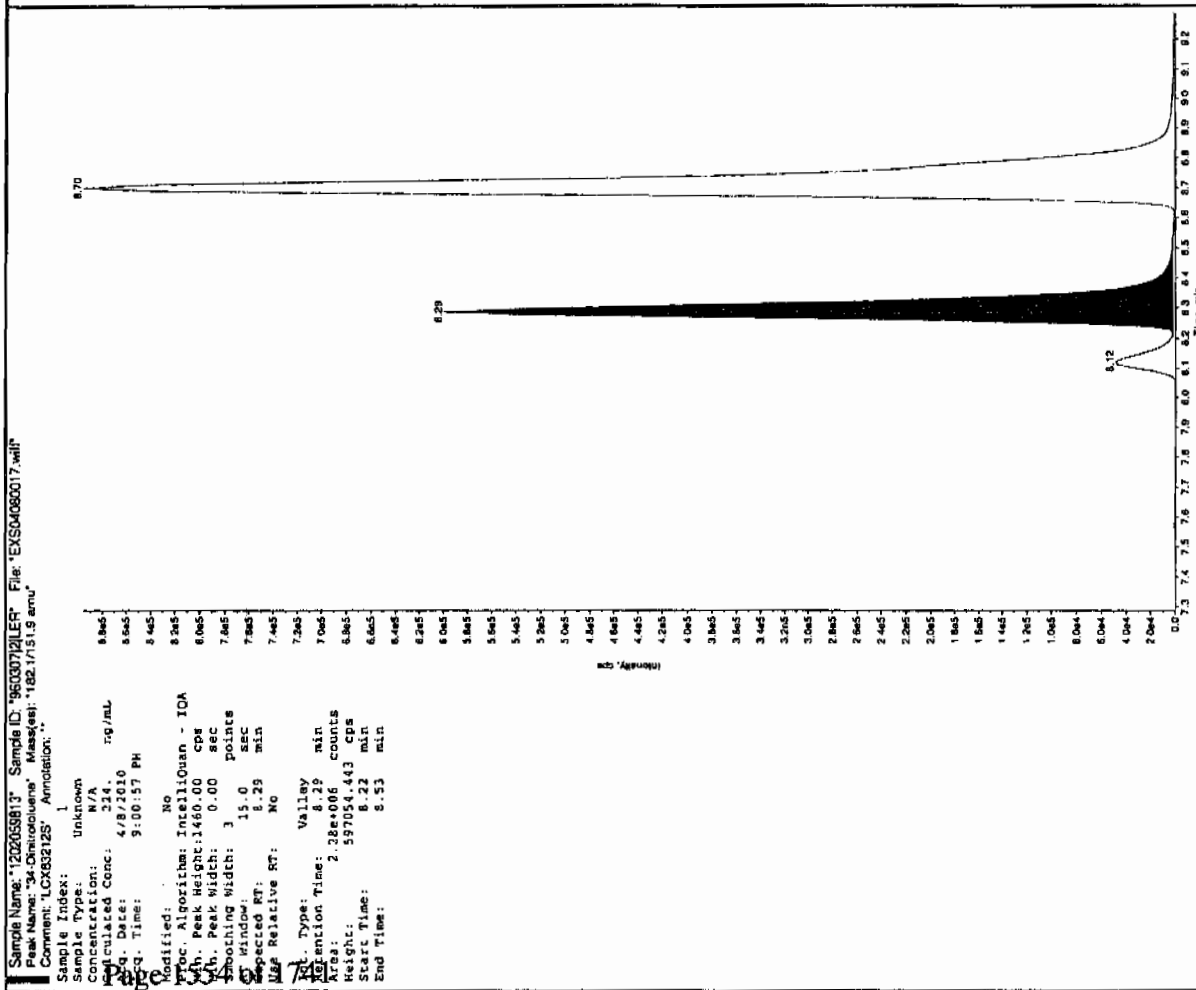
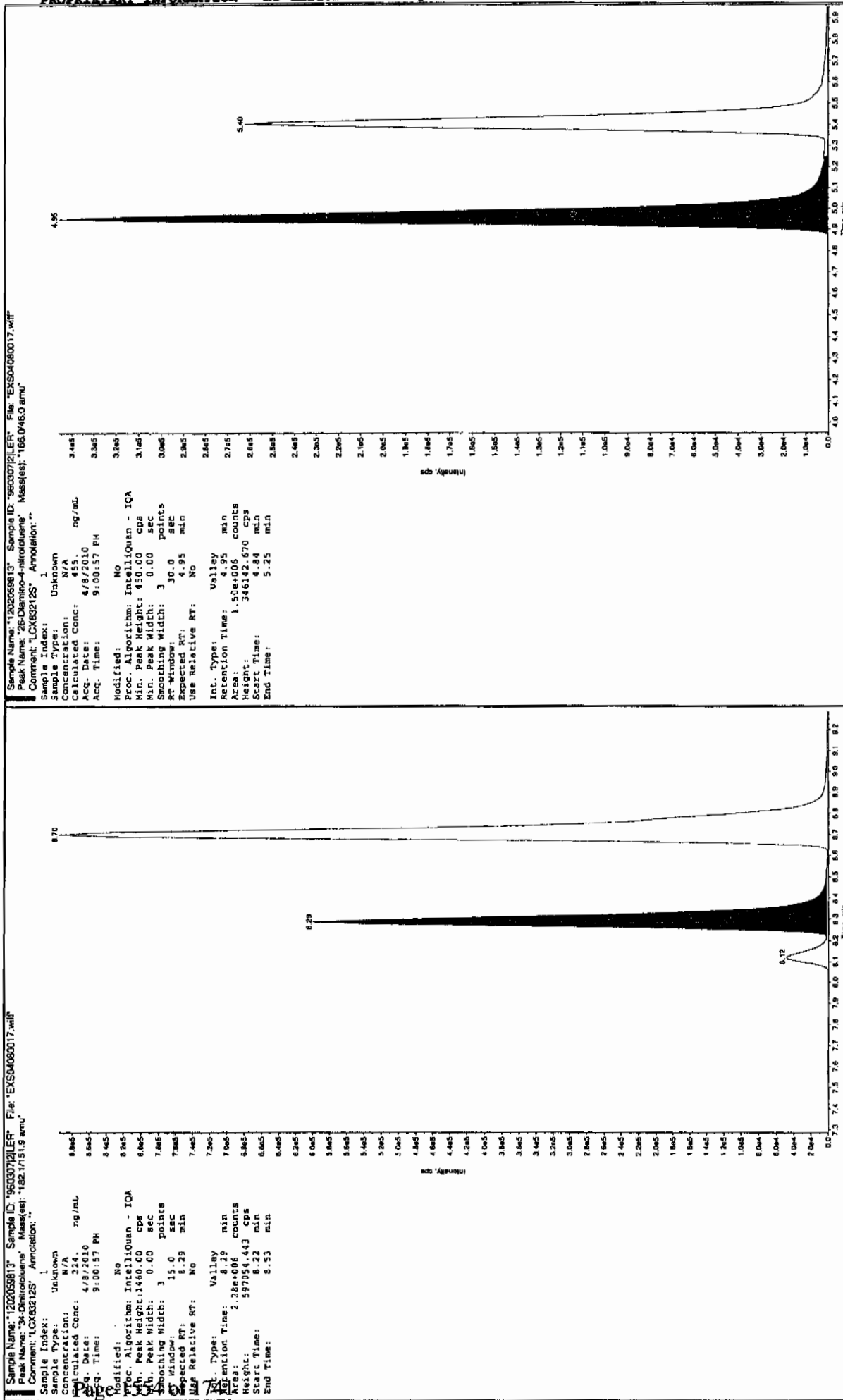
Area: 3.58e+006 counts

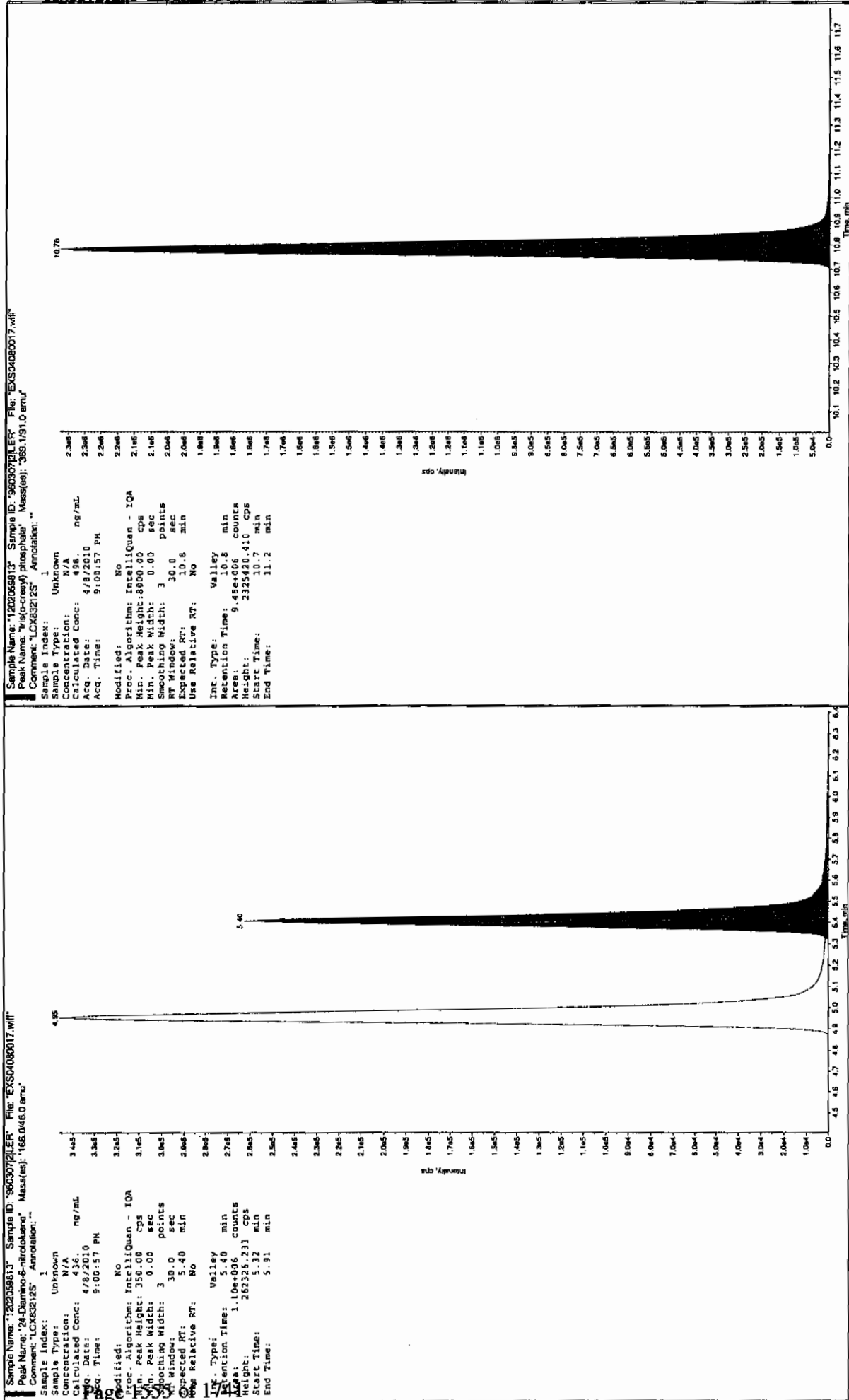
Height: 869219.360 cps

Start Time: 7.96 min

End Time: 8.25 min







1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494(248373001MS)

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 1202059814

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412207a

Date Analyzed: 16-APR-10 20:58

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4920	
121-14-2	2,4-Dinitrotoluene	4740	
121-82-4	RDX	5140	
19406-51-0	4-Amino-2,6-dinitrotoluene	4350	
2691-41-0	HMX	4770	
35572-78-2	2-Amino-4,6-dinitrotoluene	4800	
479-45-8	Tetryl	275	J
606-20-2	2,6-Dinitrotoluene	4880	
78-11-5	PETN	4570	
88-72-2	o-Nitrotoluene	3520	
98-95-3	Nitrobenzene	4380	
99-08-1	m-Nitrotoluene	3700	
99-35-4	1,3,5-Trinitrobenzene	3780	
99-65-0	m-Dinitrobenzene	4920	
99-99-0	p-Nitrotoluene	4300	

*Concentration =

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412207a

Date: 16-Apr-2010

Time: 20:58:36

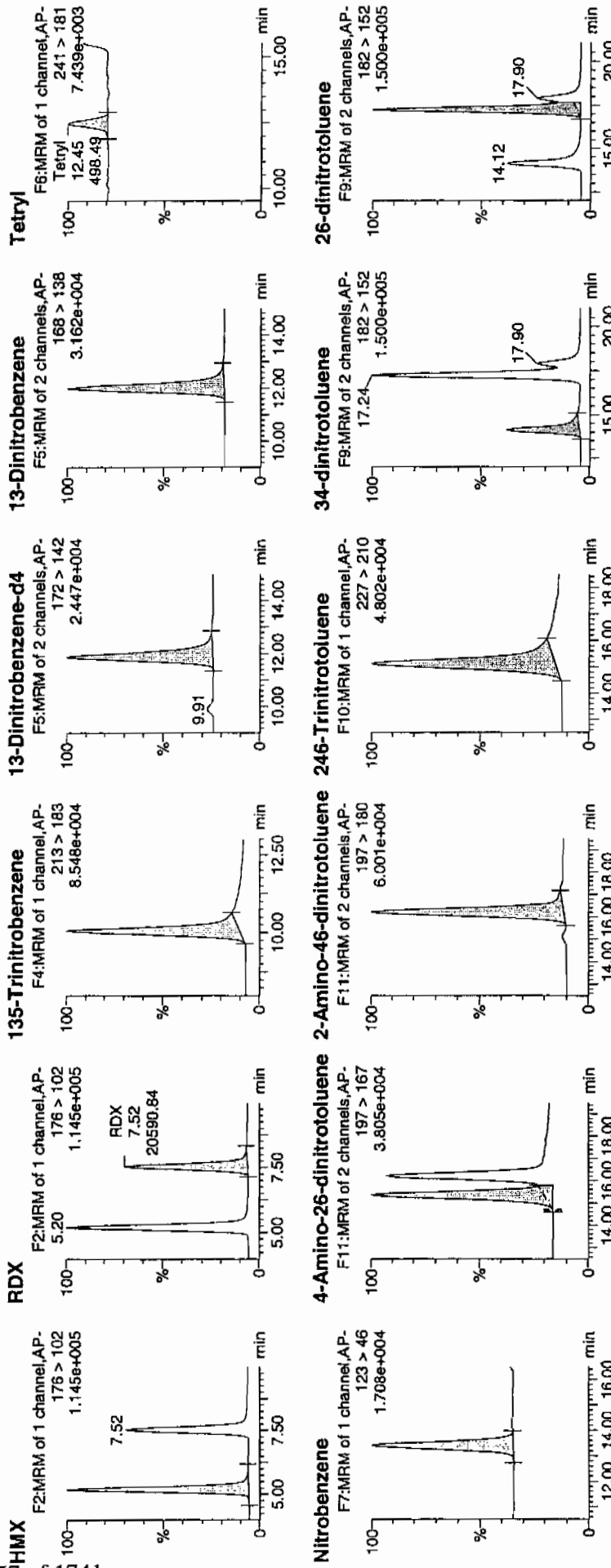
ID: 1202059814

Vial: 2:1,D

WAV 960307 | Source | 248373001 us | 2-1

WAV 4/17/10

4 Tetraol



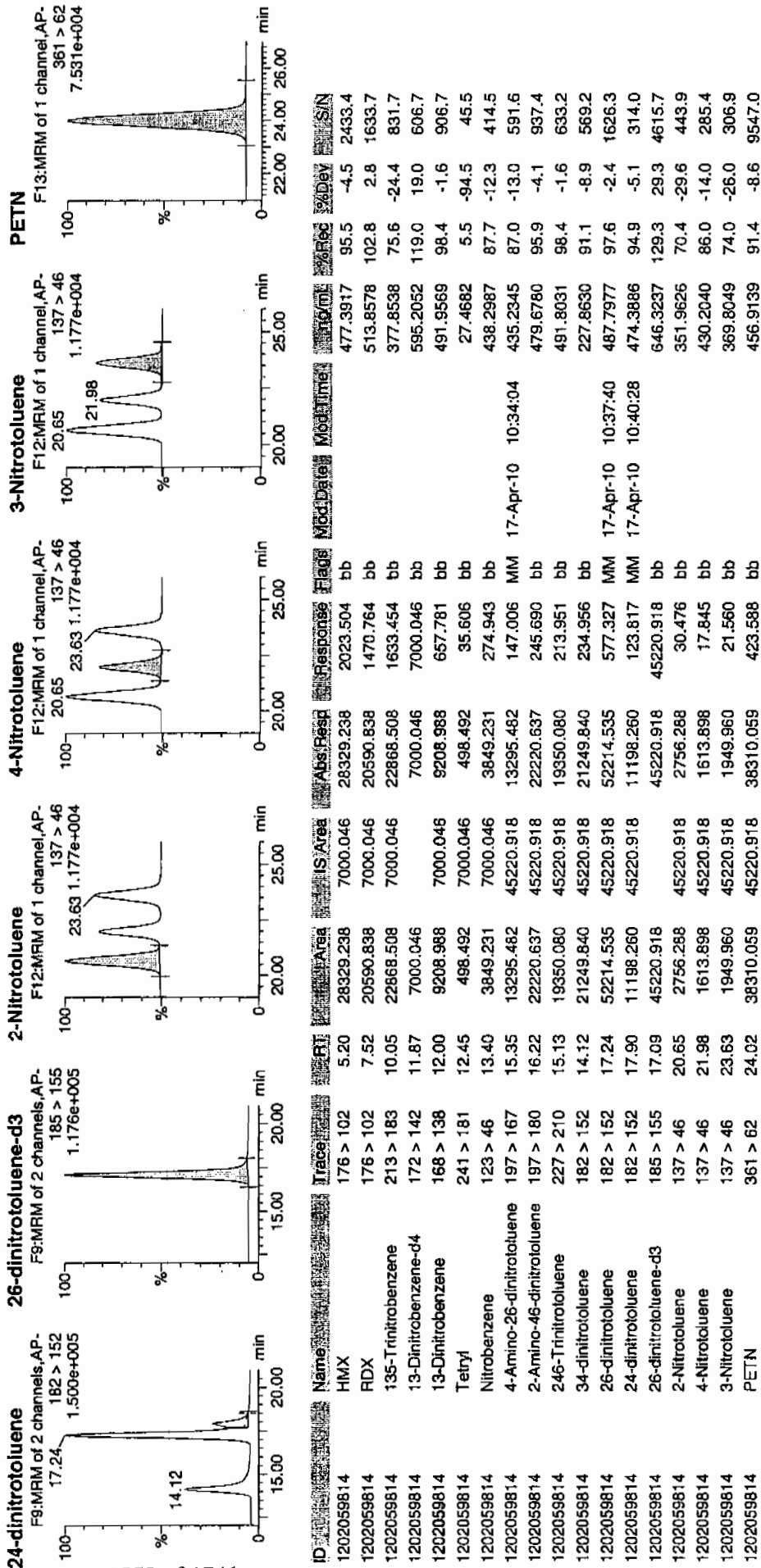
done 4/16/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 58 of 97

Dataset: C:\MASSLYN\New_Exp_PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494(248373001MS)

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 1202059814

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080019.wiff

Date Analyzed: 08-APR-10 21:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6580	
59229-75-3	2,6-Diamino-4-nitrotoluene	4260	
618-87-1	3,5-Dinitroaniline	4660	
6629-29-4	2,4-Diamino-6-nitrotoluene	3350	
78-30-8	tris(o-cresyl) phosphate	5000	

*Concentration =

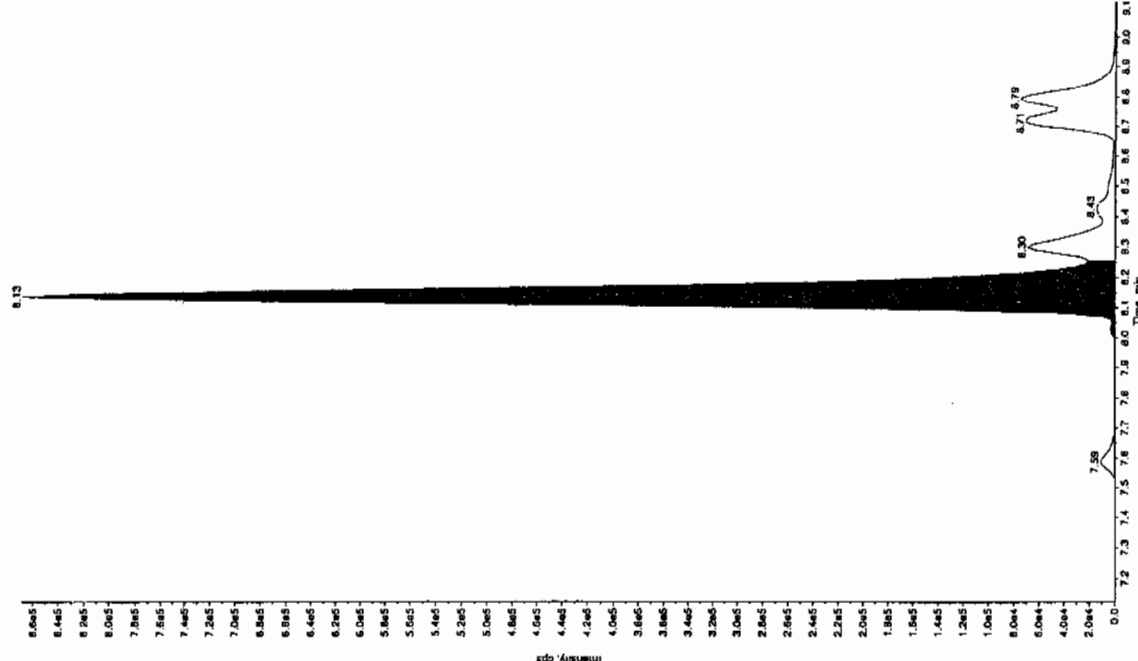
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LCM 4/12/10

Sample Name: "120205814" Sample ID: "96030721ER" File: "EX504080019.wif"
 Peak Name: "35-Dinitroamine" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 466. ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 9:32:22 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 AC Window: 15.0 sec
 Expected RT: 8.12 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.13 min
 Area: 3.57e+006 counts
 Height: 868747.192 cps
 Start Time: 7.95 min
 End Time: 8.26 min



4/12/10

Sample Name: "120205814" Sample ID: "96030721ER" File: "EX504080019.wif"
 Peak Name: "35-Dinitroamine" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: ""

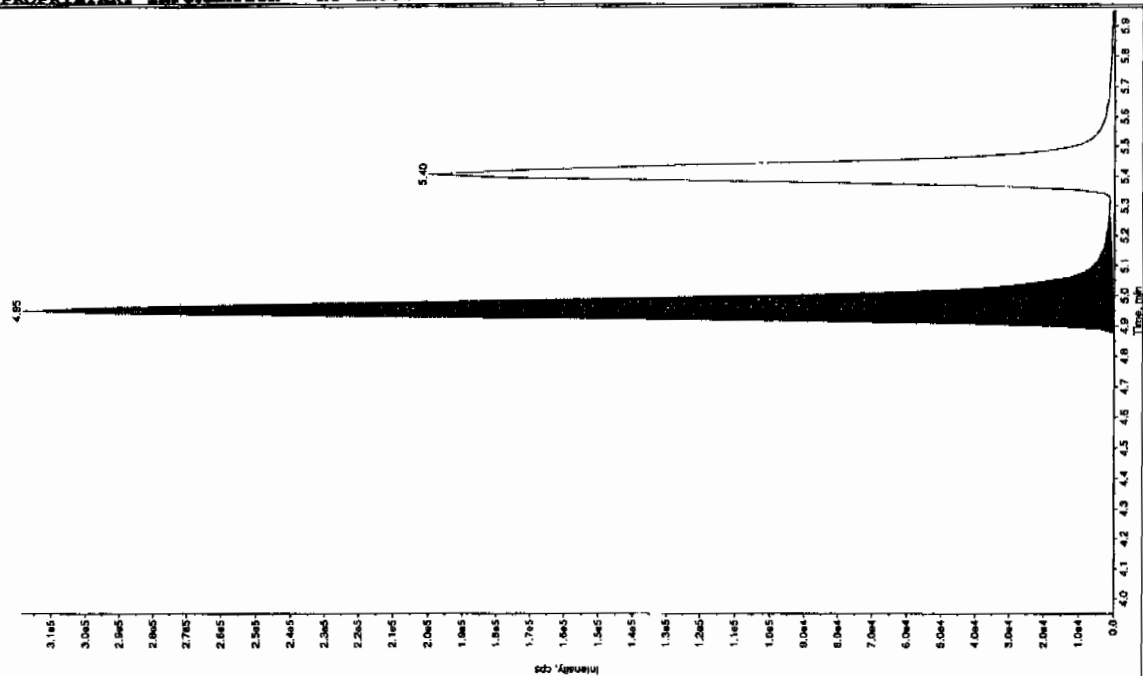
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 656. ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 9:32:22 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 AC Window: 30.0 sec
 Expected RT: 6.98 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.90 min
 Area: 5.64e+005 counts
 Height: 114096.603 cps
 Start Time: 6.80 min
 End Time: 7.90 min



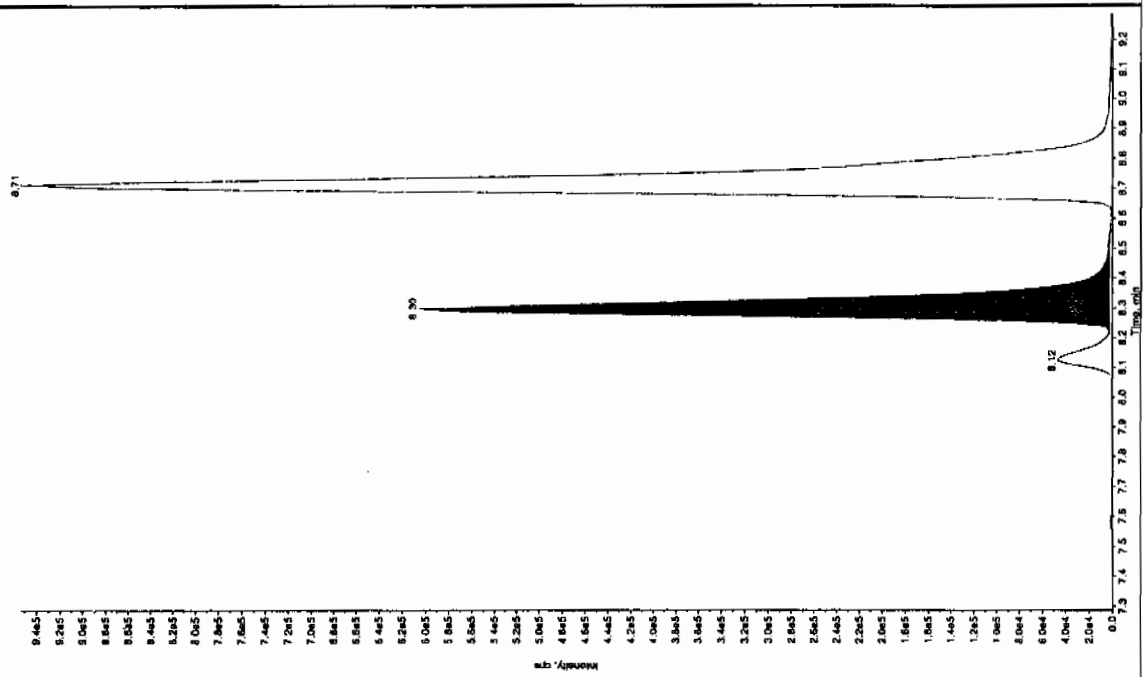
Sample Name: "120205814" Sample ID: "960307121" File: "EXS04080019.wif"
 Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

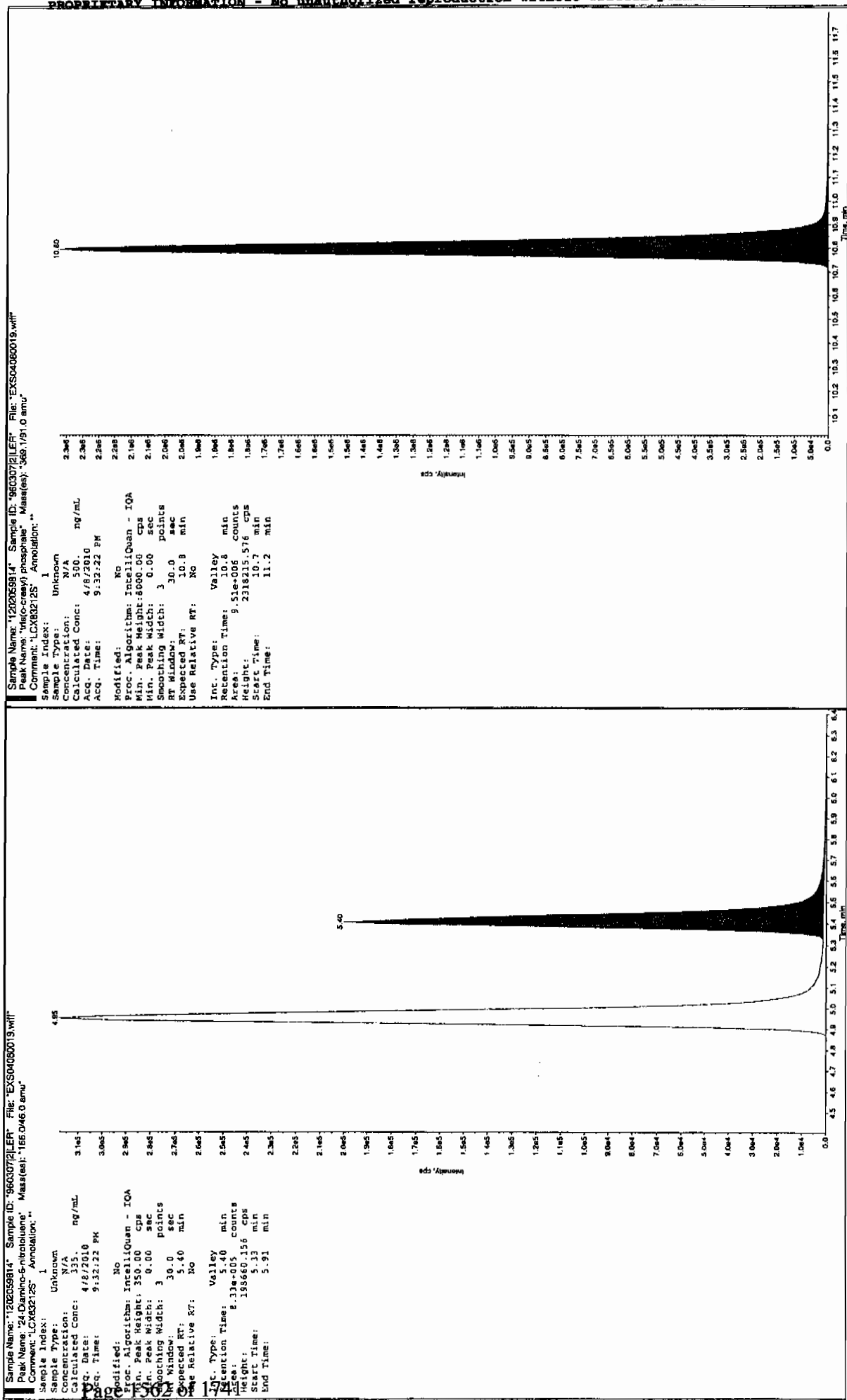
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 478.2010
 Acq. Date: 9/8/2010
 Acq. Time: 9:32:12 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 4.95 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.95 min
 Area: 1.40e+006 counts
 Height: 318005.280 cps
 Start Time: 4.46 min
 End Time: 5.26 min



Sample Name: "120205814" Sample ID: "960307121" File: "EXS04080019.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 230.0
 Acq. Date: 9/8/2010
 Acq. Time: 9:32:12 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: 8.29 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.30 min
 Area: 2.34e+005 counts
 Height: 602911.515 cps
 Start Time: 8.23 min
 End Time: 8.54 min





1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494(248373001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 1202059815

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412208a

Date Analyzed: 16-APR-10 21:28

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4930	
121-14-2	2,4-Dinitrotoluene	5460	
121-82-4	RDX	5360	
19406-51-0	4-Amino-2,6-dinitrotoluene	4840	
2691-41-0	HMX	5030	
35572-78-2	2-Amino-4,6-dinitrotoluene	5110	
479-45-8	Tetryl	101	J
606-20-2	2,6-Dinitrotoluene	4890	
78-11-5	PETN	5410	
88-72-2	o-Nitrotoluene	3700	
98-95-3	Nitrobenzene	3920	
99-08-1	m-Nitrotoluene	4200	
99-35-4	1,3,5-Trinitrobenzene	3420	
99-65-0	m-Dinitrobenzene	4700	
99-99-0	p-Nitrotoluene	4180	

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 59 of 97

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412208a

Date: 16-Apr-2010

Time: 21:28:04

ID: 1202059815

Vial: 2:1,E

4477

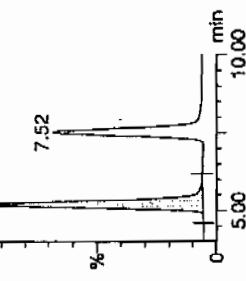
4/12/10

WAC 960302 / 248373001 ugs / 21

↓ Tenax

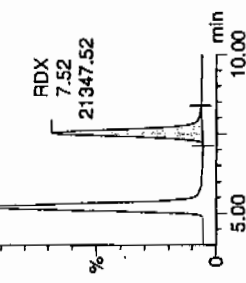
HMX

F2:MRM of 1 channel,AP-
176 > 102
1.194e+005



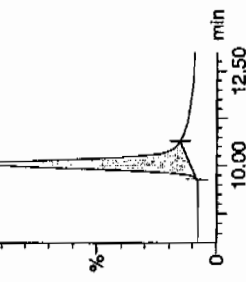
RDX

F2:MRM of 1 channel,AP-
176 > 102
1.194e+005



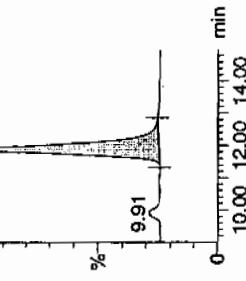
135-Trinitrobenzene

F4:MRM of 1 channel,AP-
213 > 183
7.696e+004



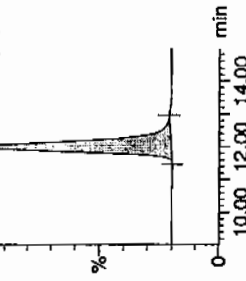
13-Dinitrobenzene-d4

F5:MRM of 2 channels,AP-
172 > 142
2.449e+004



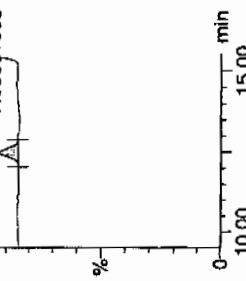
13-Dinitrobenzene

F5:MRM of 2 channels,AP-
168 > 138
3.003e+004



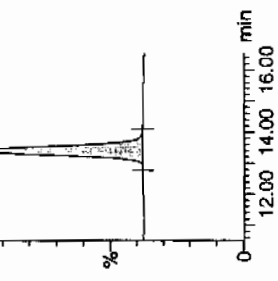
Tetryl

F6:MRM of 1 channel,AP-
241 > 181
7.033e+003



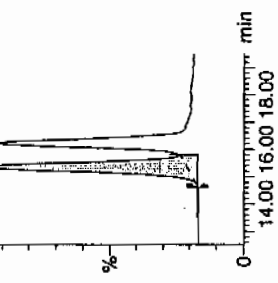
Nitrobenzene

F7:MRM of 1 channel,AP-
123 > 46
1.594e+004



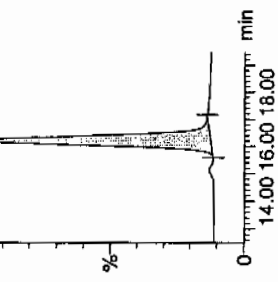
4-Amino-26-dinitrotoluene

F11:MRM of 2 channels,AP-
197 > 167
3.674e+004



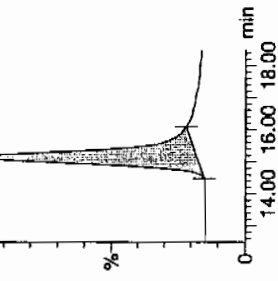
2-Amino-46-dinitrotoluene

F11:MRM of 2 channels,AP-
197 > 180
5.620e+004



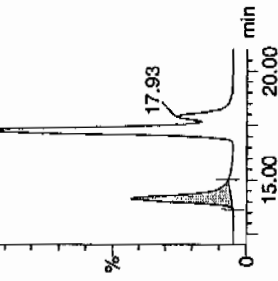
246-Trinitrotoluene

F10:MRM of 1 channel,AP-
227 > 210
4.091e+004



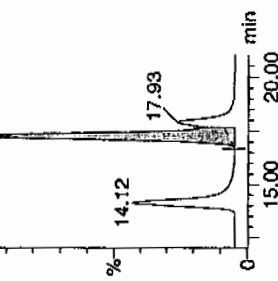
34-dinitrotoluene

F9:MRM of 2 channels,AP-
182 > 152
1.280e+005



26-dinitrotoluene

F9:MRM of 2 channels,AP-
182 > 152
1.280e+005



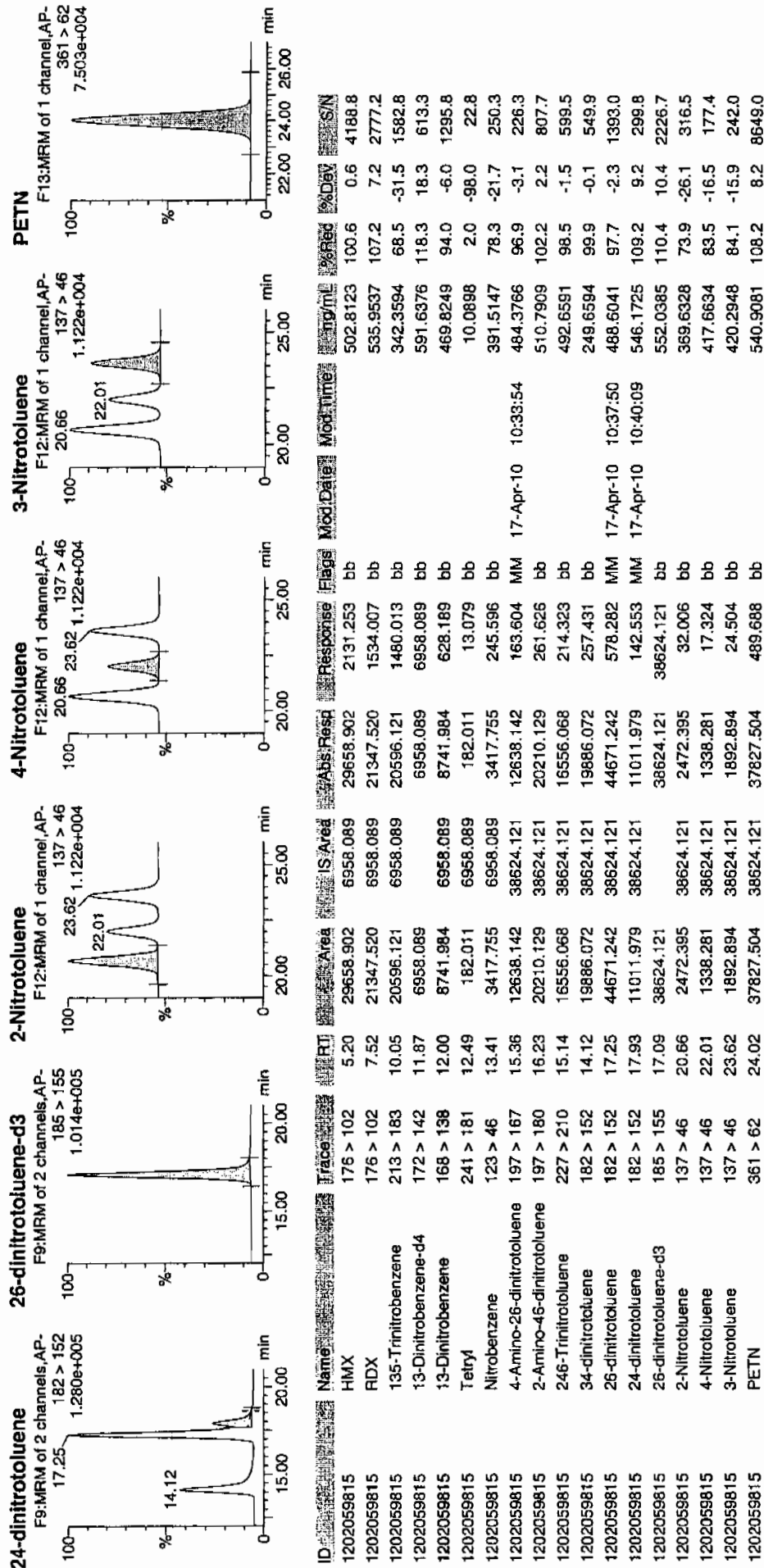
4477 4/19/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 60 of 97

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7494(248373001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-2154

Matrix: SOIL

GEL Sample ID: 1202059815

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960306

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04080020.wiff

Date Analyzed: 08-APR-10 21:48

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5660	
59229-75-3	2,6-Diamino-4-nitrotoluene	4180	
618-87-1	3,5-Dinitroaniline	4340	
6629-29-4	2,4-Diamino-6-nitrotoluene	3670	
78-30-8	tris(o-cresyl) phosphate	5010	

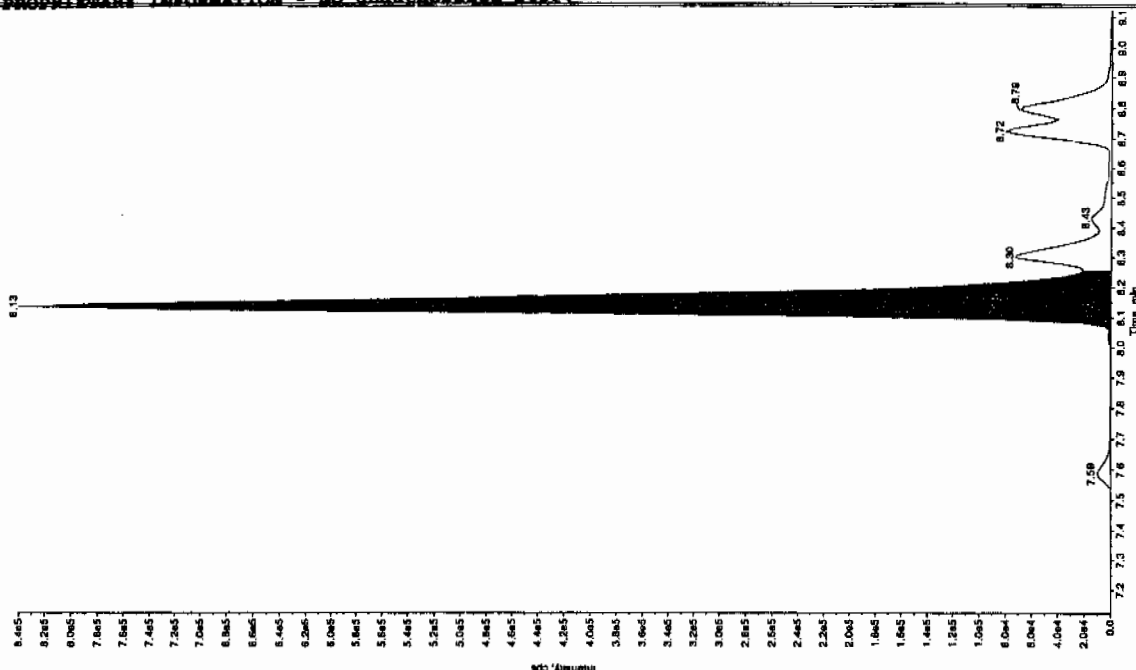
*Concentration =

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

Run 4/12/10

Sample Name: "1202059815" Sample ID: "960307121" File: "EX504060020.wif"
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
 Comment: "LCX832125" Annotation: "1"

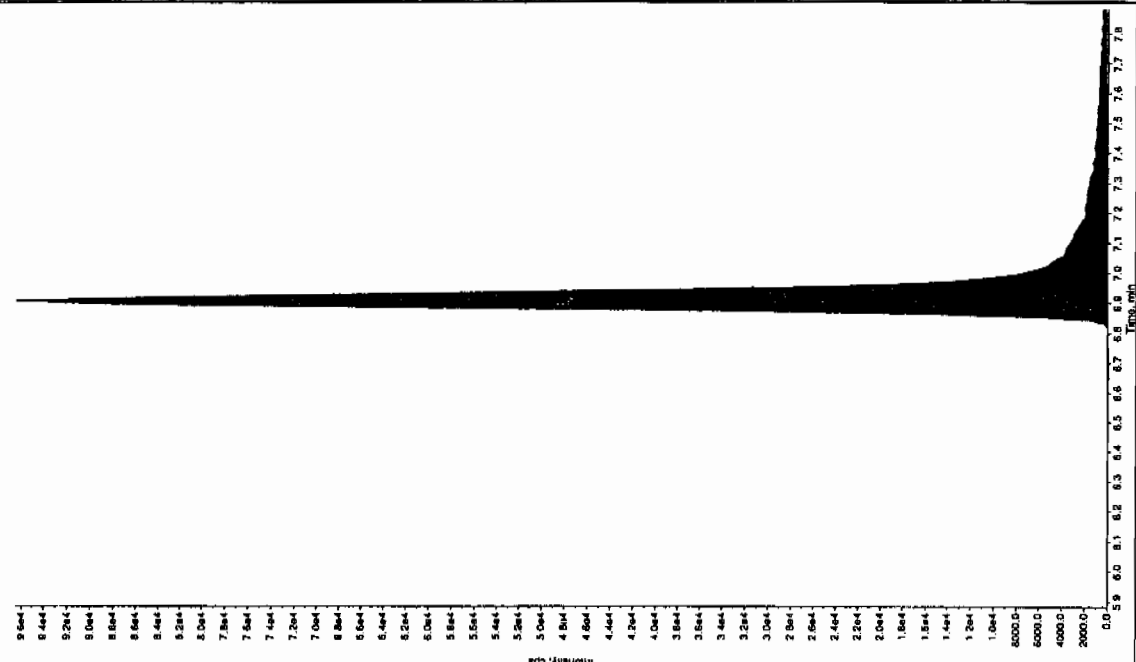
Sample Index: 1
 Sample Type: Unknown
 Concentration: 434. ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 9:48:04 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.12 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.13 min
 Area: 3.34e+005 counts
 Height: 83971.931 cps
 Start Time: 7.97 min
 End Time: 8.26 min



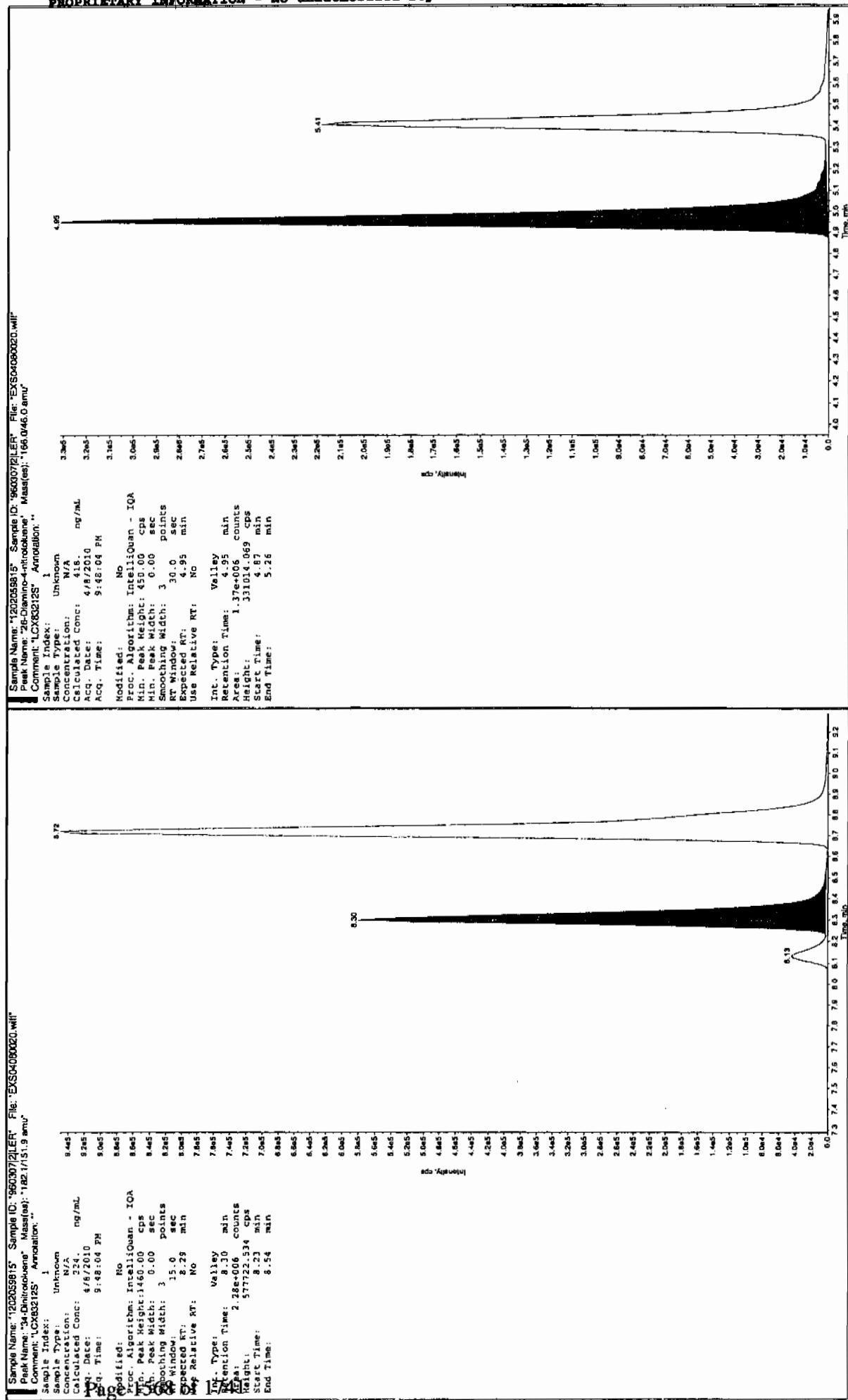
Run 04/12/10

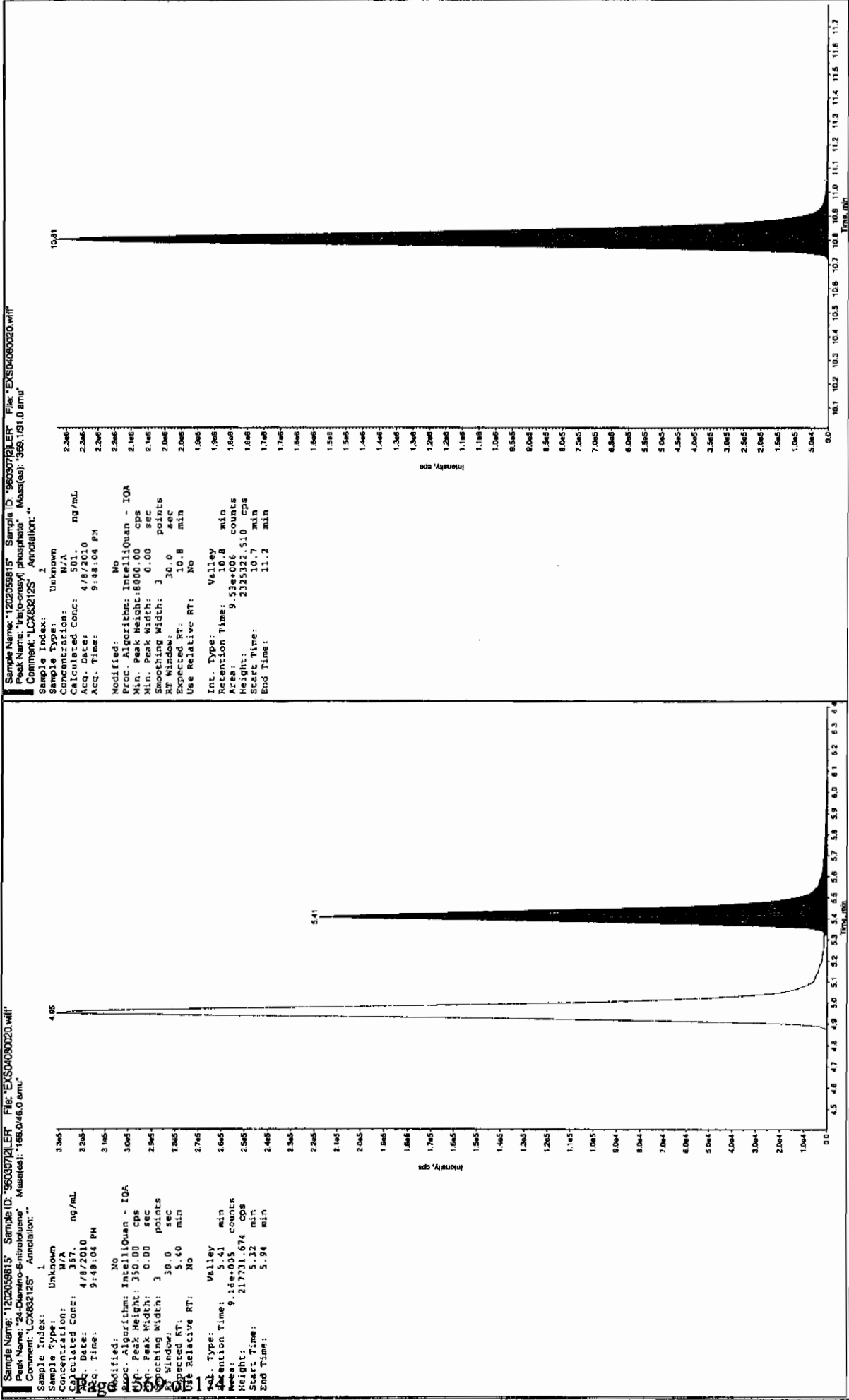
Sample Name: "1202059815" Sample ID: "960307121" File: "EX504060020.wif"
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
 Comment: "LCX832125" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 566. ng/mL
 Acq. Date: 4/8/2010
 Acq. Time: 9:48:04 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.88 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.90 min
 Area: 4.82e+005 counts
 Height: 96627.574 cps
 Start Time: 6.80 min
 End Time: 7.03 min



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





MISCELLANEOUS DATA

Prep Logbook Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 960306 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)
1202059812 MB	10-MAR-2010 20:27:00	2	10	5
1202059813 LCS	10-MAR-2010 20:27:00	2	10	5
248373001	10-MAR-2010 20:27:00	2	10	5
1202059814 MS (248373001)	10-MAR-2010 20:27:00	2	10	5
1202059815 MSD (248373001)	10-MAR-2010 20:27:00	2	10	5
248373002	10-MAR-2010 20:27:00	2	10	5
248373003	10-MAR-2010 20:27:00	2	10	5
248373004	10-MAR-2010 20:27:00	2	10	5
248373005	10-MAR-2010 20:27:00	2	10	5
248373006	10-MAR-2010 20:27:00	2	10	5
248373007	10-MAR-2010 20:27:00	2	10	5
248373008	10-MAR-2010 20:27:00	2	10	5
248373009	10-MAR-2010 20:27:00	2	10	5
248373010	10-MAR-2010 20:27:00	2	10	5
248373011	10-MAR-2010 20:27:00	2	10	5
248373014	10-MAR-2010 20:27:00	2	10	5
248373015	10-MAR-2010 20:27:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202059813	8321 Explosives LCS	DXX100225-03	.1	mL	Final Solvent: ACN
LCS	1202059813	8321 LANL Explosives Mix 10mg/L	UXCX100223-02.03	1	mL	
MS	1202059814	8321 Explosives LCS	DXX100225-03	.1	mL	
MS	1202059814	8321 LANL Explosives Mix 10mg/L	UXCX100223-02.03	1	mL	
MSD	1202059815	8321 Explosives LCS	DXX100225-03	.1	mL	
MSD	1202059815	8321 LANL Explosives Mix 10mg/L	UXCX100223-02.03	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DXP100309-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LOMSMS #1

Date: 04/12/10
 Extr. Injection Volume: 50uL
 Sequence Number: 041210expA
 Initial Calibration Date: 04/12/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX100324-02.3
 Mobile Phase Lot#: 1296548, 1289686
 Standard-Samp Reagent Lot#: 1299881, 1284736
 Reviewed BY: *AMK*
 Date: *04/20/10*
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100412-07 & WXX100415-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0412001a	XIBLK01	MAP	4/12/10 15:40			1		USE	B
EXP0412002a	XIBLK01	MAP	4/12/10 16:10			1		USE	B
EXP0412003a	WXXICAL-01	MAP	4/12/10 16:39			1		USE	I
EXP0412004a	WXXICAL-02	MAP	4/12/10 17:09			1		USE	I
EXP0412005a	WXXICAL-03	MAP	4/12/10 17:38			1		USE	I
EXP0412006a	WXXICAL-04	MAP	4/12/10 18:08			1		USE	I
EXP0412007a	WXXICAL-05	MAP	4/12/10 18:37			1		USE	I
EXP0412008a	WXXICAL-06	MAP	4/12/10 19:07			1		USE	I
EXP0412009a	XIBLK02	MAP	4/12/10 19:36			1		USE	B
EXP0412010a	WXXICV	MAP	4/12/10 20:06			1		USE	C
EXP0412011a	XIBLK03	MAP	4/12/10 20:35			1		USE	B
EXP0412012a	WXXCRI	MAP	4/12/10 21:04			1		USE	C
EXP0412013a	1202047525	MAP	4/12/10 21:34	955063	Various	2	LANL	USE	S
EXP0412014a	1202047526	MAP	4/12/10 22:04	955063	Various	2	LANL	USE	S
EXP0412015a	247332002	MAP	4/12/10 22:33	955063	10-1905	2	LANL	USE	S
EXP0412016a	1202047527	MAP	4/12/10 23:02	955063	10-1905	2	LANL	USE	S
EXP0412017a	1202047528	MAP	4/12/10 23:32	955063	10-1905	2	LANL	USE	S
EXP0412018a	247332003	MAP	4/13/10 0:01	955063	10-1905	2	LANL	USE	S
EXP0412019a	247332004	MAP	4/13/10 0:31	955063	10-1905	2	LANL	USE	S
EXP0412020a	247332005	MAP	4/13/10 1:00	955063	10-1905	2	LANL	USE	S
EXP0412021a	247332006	MAP	4/13/10 1:30	955063	10-1905	2	LANL	USE	S
EXP0412022a	247332007	MAP	4/13/10 1:59	955063	10-1905	2	LANL	USE	S
EXP0412023a	WXXCCV	MAP	4/13/10 2:29			1		USE	C
EXP0412024a	XIBLK04	MAP	4/13/10 2:58			1		USE	B
EXP0412025a	WXXCRI	MAP	4/13/10 3:28			1		USE	C
EXP0412026a	247332008	MAP	4/13/10 3:57	955063	10-1905	2	LANL	USE	S
EXP0412027a	247343001	MAP	4/13/10 4:27	955063	10-1908	2	LANL	USE	S
EXP0412028a	247343002	MAP	4/13/10 4:56	955063	10-1908	2	LANL	USE	S
EXP0412029a	247343003	MAP	4/13/10 5:26	955063	10-1908	2	LANL	USE	S

EXP0412030a	247343004	MAP	4/13/10 5:55	955063	10-1908	2	LANL	USE	S
EXP0412031a	247343005	MAP	4/13/10 6:25	955063	10-1908	2	LANL	USE	S
EXP0412032a	247343006	MAP	4/13/10 6:54	955063	10-1908	2	LANL	USE	S
EXP0412033a	247343007	MAP	4/13/10 7:24	955063	10-1908	2	LANL	USE	S
EXP0412034a	247343008	MAP	4/13/10 7:53	955063	10-1908	2	LANL	USE	S
EXP0412035a	247343009	MAP	4/13/10 8:23	955063	10-1908	2	LANL	USE	S
EXP0412036a	WXXCCV	MAP	4/13/10 8:52			1		USE	C
EXP0412037a	XIBLK05	MAP	4/13/10 9:22			1		USE	B
EXP0412038a	WXXCRI	MAP	4/13/10 9:51			1		USE	C
EXP0412039a	247343010	MAP	4/13/10 10:21	955063	10-1908	2	LANL	USE	S
EXP0412040a	247343011	MAP	4/13/10 10:50	955063	10-1908	2	LANL	USE	S
EXP0412041a	XIBLK06	MAP	4/13/10 11:20			1		USE	B
EXP0412042a	1202052398	MAP	4/13/10 11:50	957196	10-1972	2	LANL	USE	S
EXP0412043a	1202052399	MAP	4/13/10 12:19	957196	10-1972	2	LANL	USE	S
EXP0412044a	247767001	MAP	4/13/10 12:49	957196	10-1972	2	LANL	USE	S
EXP0412045a	1202052400	MAP	4/13/10 13:18	957196	10-1972	2	LANL	USE	S
EXP0412046a	1202052401	MAP	4/13/10 13:48	957196	10-1972	2	LANL	USE	S
EXP0412047a	247767002	MAP	4/13/10 14:17	957196	10-1972	2	LANL	USE	S
EXP0412048a	247767003	MAP	4/13/10 14:47	957196	10-1972	2	LANL	USE	S
EXP0412049a	WXXCCV	MAP	4/13/10 15:16			1		USE	C
EXP0412050a	XIBLK07	MAP	4/13/10 15:46			1		USE	B
EXP0412051a	WXXCRI	MAP	4/13/10 16:15			1		USE	C
EXP0412052a	247767004	MAP	4/13/10 16:45	957196	10-1972	2	LANL	USE	S
EXP0412053a	247767005	MAP	4/13/10 17:14	957196	10-1972	2	LANL	USE	S
EXP0412054a	247767006	MAP	4/13/10 17:44	957196	10-1972	2	LANL	USE	S
EXP0412055a	247767007	MAP	4/13/10 18:13	957196	10-1972	2	LANL	USE	S
EXP0412056a	247767008	MAP	4/13/10 18:43	957196	10-1972	2	LANL	USE	S
EXP0412057a	247767009	MAP	4/13/10 19:12	957196	10-1972	2	LANL	USE	S
EXP0412058a	247767010	MAP	4/13/10 19:42	957196	10-1972	2	LANL	USE	S
EXP0412059a	247767011	MAP	4/13/10 20:11	957196	10-1972	2	LANL	USE	S
EXP0412060a	WXXCCV	MAP	4/13/10 20:41			1		USE	C
EXP0412061a	XIBLK08	MAP	4/13/10 21:10			1		USE	B
EXP0412062a	WXXCRI	MAP	4/13/10 21:40			1		USE	C
EXP0412063a	1202055078	MAP	4/13/10 22:09	958282	Various	2	LANL	USE	S
EXP0412064a	1202055079	MAP	4/13/10 22:39	958282	Various	2	LANL	DUSE	S
EXP0412065a	248017003	MAP	4/13/10 23:08	958282	10-2039	2	LANL	USE	S
EXP0412066a	1202055080	MAP	4/13/10 23:38	958282	10-2039	2	LANL	DUSE	S

EXP0412067a	1202055081	MAP	4/14/10 0:07	958282	10-2039	2	LANL	USE	S
EXP0412068a	248042002	MAP	4/14/10 0:37	958282	10-2057	2	LANL	USE	S
EXP0412069a	248042008	MAP	4/14/10 1:06	958282	10-2057	2	LANL	USE	S
EXP0412070a	248042010	MAP	4/14/10 1:36	958282	10-2057	2	LANL	DUSE	S
EXP0412071a	248047003	MAP	4/14/10 2:05	958282	10-2045	2	LANL	USE	S
EXP0412072a	248047007	MAP	4/14/10 2:35	958282	10-2045	2	LANL	USE	S
EXP0412073a	WXXCCV	MAP	4/14/10 3:04			1		USE	C
EXP0412074a	XIBLK09	MAP	4/14/10 3:34			1		USE	B
EXP0412075a	WXXCRI	MAP	4/14/10 4:03			1		USE	C
EXP0412076a	1202055034	MAP	4/14/10 4:33	958262	10-2074	2	LANL	USE	S
EXP0412077a	1202055035	MAP	4/14/10 5:02	958262	10-2074	2	LANL	USE	S
EXP0412078a	248043001	MAP	4/14/10 5:32	958262	10-2074	2	LANL	USE	S
EXP0412079a	1202055036	MAP	4/14/10 6:01	958262	10-2074	2	LANL	USE	S
EXP0412080a	1202055037	MAP	4/14/10 6:31	958262	10-2074	2	LANL	USE	S
EXP0412081a	248043002	MAP	4/14/10 7:00	958262	10-2074	2	LANL	USE	S
EXP0412082a	XIBLK10	MAP	4/14/10 7:30			1		USE	B
EXP0412083a	248043003	MAP	4/14/10 7:59	958262	10-2074	2	LANL	USE	S
EXP0412084a	248043004	MAP	4/14/10 8:29	958262	10-2074	2	LANL	USE	S
EXP0412085a	XIBLK11	MAP	4/14/10 8:58			1		USE	B
EXP0412086a	WXXCCV	MAP	4/14/10 9:28			1		USE	C
EXP0412087a	XIBLK12	MAP	4/14/10 9:57			1		USE	B
EXP0412088a	WXXCRI	MAP	4/14/10 10:27			1		USE	C
EXP0412089a	248043005	MAP	4/14/10 10:56	958262	10-2074	2	LANL	USE	S
EXP0412090a	248043006	MAP	4/14/10 11:26	958262	10-2074	2	LANL	DUSE-RA	S
EXP0412091a	XIBLK13	MAP	4/14/10 11:55			1		USE	B
EXP0412092a	248043007	MAP	4/14/10 12:25	958262	10-2074	2	LANL	USE	S
EXP0412093a	248043008	MAP	4/14/10 12:54	958262	10-2074	2	LANL	DUSE-RA	S
EXP0412094a	248043009	MAP	4/14/10 13:24	958262	10-2074	2	LANL	USE	S
EXP0412095a	248043010	MAP	4/14/10 13:53	958262	10-2074	2	LANL	USE	S
EXP0412096a	248043011	MAP	4/14/10 14:23	958262	10-2074	2	LANL	USE	S
EXP0412097a	248043012	MAP	4/14/10 14:52	958262	10-2074	2	LANL	USE	S
EXP0412098a	XIBLK14	MAP	4/14/10 15:22			1		USE	B
EXP0412099a	WXXCCV	MAP	4/14/10 15:51			1		USE	C
EXP0412100a	XIBLK15	MAP	4/14/10 16:21			1		USE	B
EXP0412101a	WXXCRI	MAP	4/14/10 16:50			1		USE	C
EXP0412102a	248043013	MAP	4/14/10 17:20	958262	10-2074	2	LANL	USE	S
EXP0412103a	248043014	MAP	4/14/10 17:49	958262	10-2074	2	LANL	USE	S

EXP0412104a	248043015	MAP	4/14/10 18:19	958262	10-2074	2	LANL	USE	S
EXP0412105a	248043016	MAP	4/14/10 18:48	958262	10-2074	2	LANL	DUSE-RA	S
EXP0412106a	248043017	MAP	4/14/10 19:18	958262	10-2074	2	LANL	USE	S
EXP0412107a	248043018	MAP	4/14/10 19:47	958262	10-2074	2	LANL	USE	S
EXP0412108a	248043006	MAP	4/14/10 20:17	958262	10-2074	2	LANL	USE	S
EXP0412109a	248043008	MAP	4/14/10 20:46	958262	10-2074	2	LANL	USE	S
EXP0412110a	WXXCCV	MAP	4/14/10 21:16			1		USE	C
EXP0412111a	XIBLK16	MAP	4/14/10 21:45			1		USE	B
EXP0412112a	WXXCRI	MAP	4/14/10 22:15			1		USE	C
EXP0412113a	1202055877	MAP	4/14/10 22:44	958603	Various	2	LANL	USE	S
EXP0412114a	1202055878	MAP	4/14/10 23:14	958603	Various	2	LANL	DUSE-RA	S
EXP0412115a	248102001	MAP	4/14/10 23:43	958603	10-2089	2	LANL	USE	S
EXP0412116a	1202055879	MAP	4/15/10 0:13	958603	10-2089	2	LANL	USE	S
EXP0412117a	1202055880	MAP	4/15/10 0:42	958603	10-2089	2	LANL	USE	S
EXP0412118a	248102002	MAP	4/15/10 1:12	958603	10-2089	2	LANL	USE	S
EXP0412119a	248102003	MAP	4/15/10 1:41	958603	10-2089	2	LANL	USE	S
EXP0412120a	248102004	MAP	4/15/10 2:11	958603	10-2089	2	LANL	USE	S
EXP0412121a	248102005	MAP	4/15/10 2:40	958603	10-2089	2	LANL	USE	S
EXP0412122a	248102006	MAP	4/15/10 3:10	958603	10-2089	2	LANL	USE	S
EXP0412123a	WXXCCV	MAP	4/15/10 3:39			1		USE	C
EXP0412124a	XIBLK17	MAP	4/15/10 4:09			1		USE	B
EXP0412125a	WXXCRI	MAP	4/15/10 4:38			1		USE	C
EXP0412126a	248102007	MAP	4/15/10 5:08	958603	10-2089	2	LANL	USE	S
EXP0412127a	248102008	MAP	4/15/10 5:37	958603	10-2089	2	LANL	USE	S
EXP0412128a	248114002	MAP	4/15/10 6:07	958603	10-2092	2	LANL	USE	S
EXP0412129a	248114003	MAP	4/15/10 6:36	958603	10-2092	2	LANL	USE	S
EXP0412130a	248114004	MAP	4/15/10 7:06	958603	10-2092	2	LANL	USE	S
EXP0412131a	248114005	MAP	4/15/10 7:35	958603	10-2092	2	LANL	USE	S
EXP0412132a	248114006	MAP	4/15/10 8:05	958603	10-2092	2	LANL	USE	S
EXP0412133a	248114007	MAP	4/15/10 8:34	958603	10-2092	2	LANL	USE	S
EXP0412134a	248114008	MAP	4/15/10 9:04	958603	10-2092	2	LANL	USE	S
EXP0412135a	WXXCCV	MAP	4/15/10 9:33			1		USE	C
EXP0412136a	XIBLK18	MAP	4/15/10 10:03			1		USE	B
EXP0412137a	WXXCRI	MAP	4/15/10 10:33			1		USE	C
EXP0412138a	248043016	MAP	4/15/10 11:02	958262	10-2074	2	LANL	USE	S
EXP0412139a	1202055878	MAP	4/15/10 11:32	958603	Various	2	LANL	USE	S
EXP0412140a	248102003	MAP	4/15/10 12:01	958603	10-2089	2	LANL	DUSE	S

EXP0412141a	WXXCVC	MAP	4/15/10 12:31	1	USE	C
EXP0412142a	XIBLK19	MAP	4/15/10 13:00	1	USE	B
EXP0412143a	WXXCRI	MAP	4/15/10 13:30	1	USE	C
EXP0412144a	1202057500	MAP	4/15/10 13:59	2	LANL	S
EXP0412145a	1202057501	MAP	4/15/10 14:29	2	LANL	S
EXP0412146a	248244001	MAP	4/15/10 14:58	2	LANL	S
EXP0412147a	248244002	MAP	4/15/10 15:28	2	LANL	S
EXP0412148a	248244003	MAP	4/15/10 15:57	2	LANL	S
EXP0412149a	248244004	MAP	4/15/10 16:27	2	LANL	S
EXP0412150a	248244005	MAP	4/15/10 16:56	2	LANL	S
EXP0412151a	248244006	MAP	4/15/10 17:26	2	LANL	S
EXP0412152a	248244007	MAP	4/15/10 17:55	2	LANL	S
EXP0412153a	248244008	MAP	4/15/10 18:25	2	LANL	S
EXP0412154a	WXXCVC	MAP	4/15/10 18:54	1	USE	C
EXP0412155a	XIBLK20	MAP	4/15/10 19:24	1	USE	B
EXP0412156a	WXXCRI	MAP	4/15/10 19:53	1	USE	C
EXP0412157a	248249001	MAP	4/15/10 20:23	2	LANL	S
EXP0412158a	1202057502	MAP	4/15/10 20:52	2	LANL	S
EXP0412159a	1202057503	MAP	4/15/10 21:22	2	LANL	S
EXP0412160a	248249002	MAP	4/15/10 21:51	2	LANL	S
EXP0412161a	248249003	MAP	4/15/10 22:21	2	LANL	S
EXP0412162a	248249004	MAP	4/15/10 22:50	2	LANL	S
EXP0412163a	WXXCVC	MAP	4/15/10 23:20	1	USE	C
EXP0412164a	XIBLK21	MAP	4/15/10 23:49	1	USE	B
EXP0412165a	WXXCRI	MAP	4/16/10 0:19	1	USE	C
EXP0412166a	1202059808	MAP	4/16/10 0:48	2	LANL	S
EXP0412167a	1202059809	MAP	4/16/10 1:18	2	LANL	S
EXP0412168a	248370001	MAP	4/16/10 1:47	2	LANL	S
EXP0412169a	1202059810	MAP	4/16/10 2:17	2	LANL	S
EXP0412170a	1202059811	MAP	4/16/10 2:46	2	LANL	S
EXP0412171a	248370002	MAP	4/16/10 3:16	2	LANL	S
EXP0412172a	248370003	MAP	4/16/10 3:45	2	LANL	S
EXP0412173a	248370004	MAP	4/16/10 4:15	2	LANL	S
EXP0412174a	248370005	MAP	4/16/10 4:44	2	LANL	S
EXP0412175a	248370006	MAP	4/16/10 5:14	2	LANL	S
EXP0412176a	WXXCVC	MAP	4/16/10 5:43	1	USE	C
EXP0412177a	XIBLK22	MAP	4/16/10 6:13	1	USE	B

EXP0412178a	WXXCRI	MAP	4/16/10 6:42	960305	10-2150	1	LANL	USE	C
EXP0412179a	248370007	MAP	4/16/10 7:12	960305	10-2150	2	LANL	USE	S
EXP0412180a	248370008	MAP	4/16/10 7:41	960305	10-2150	2	LANL	USE	S
EXP0412181a	248370009	MAP	4/16/10 8:11	960305	10-2150	2	LANL	USE	S
EXP0412182a	248370010	MAP	4/16/10 8:40	960305	10-2150	2	LANL	USE	S
EXP0412183a	248370011	MAP	4/16/10 9:10	960305	10-2150	2	LANL	USE	S
EXP0412184a	248370012	MAP	4/16/10 9:39	960305	10-2150	2	LANL	USE	S
EXP0412185a	248370013	MAP	4/16/10 10:09	960305	10-2150	2	LANL	USE	S
EXP0412186a	248370014	MAP	4/16/10 10:38	960305	10-2150	2	LANL	USE	S
EXP0412187a	248370015	MAP	4/16/10 11:08	960305	10-2150	2	LANL	USE	S
EXP0412188a	248370016	MAP	4/16/10 11:37	960305	10-2150	2	LANL	USE	S
EXP0412189a	WXXCCV	MAP	4/16/10 12:07			1		USE	C
EXP0412190a	XIBLK23	MAP	4/16/10 12:36			1		USE	B
EXP0412191a	WXXCRI	MAP	4/16/10 13:06			1		USE	C
EXP0412192a	248370017	MAP	4/16/10 13:36	960305	10-2150	2	LANL	USE	S
EXP0412193a	248370018	MAP	4/16/10 14:05	960305	10-2150	2	LANL	USE	S
EXP0412194a	248370019	MAP	4/16/10 14:35	960305	10-2150	2	LANL	USE	S
EXP0412195a	248370020	MAP	4/16/10 15:04	960305	10-2150	2	LANL	USE	S
EXP0412196a	248244004	MAP	4/16/10 15:34	959338	10-2137	2	LANL	USE	S
EXP0412197a	248249001	MAP	4/16/10 16:03	959338	10-2140	2	LANL	USE	S
EXP0412198a	248249004	MAP	4/16/10 16:33	959338	10-2140	2	LANL	USE	S
EXP0412199a	1202059811	MAP	4/16/10 17:02	960305	10-2150	2	LANL	DUSE	S
EXP0412200a	248370019	MAP	4/16/10 17:32	960305	10-2150	2	LANL	USE	S
EXP0412201a	WXXCCV	MAP	4/16/10 18:01			1		USE	C
EXP0412202a	XIBLK24	MAP	4/16/10 18:31			1		USE	B
EXP0412203a	WXXCRI	MAP	4/16/10 19:00			1		USE	C
EXP0412204a	1202059812	MAP	4/16/10 19:30	960307	10-2154	2	LANL	USE	S
EXP0412205a	1202059813	MAP	4/16/10 19:59	960307	10-2154	2	LANL	USE	S
EXP0412206a	248373001	MAP	4/16/10 20:29	960307	10-2154	2	LANL	USE	S
EXP0412207a	1202059814	MAP	4/16/10 20:58	960307	10-2154	2	LANL	USE	S
EXP0412208a	1202059815	MAP	4/16/10 21:28	960307	10-2154	2	LANL	USE	S
EXP0412209a	248373002	MAP	4/16/10 21:57	960307	10-2154	2	LANL	USE	S
EXP0412210a	248373003	MAP	4/16/10 22:27	960307	10-2154	2	LANL	USE	S
EXP0412211a	248373004	MAP	4/16/10 22:56	960307	10-2154	2	LANL	DUSE-RA	S
EXP0412212a	248373005	MAP	4/16/10 23:26	960307	10-2154	2	LANL	USE	S
EXP0412213a	248373006	MAP	4/16/10 23:55	960307	10-2154	2	LANL	USE	S
EXP0412214a	WXXCCV	MAP	4/17/10 0:25			1		USE	C

EXP0412215a	XIBLK25	MAP	4/17/10 0:54			1			USE	B
EXP0412216a	WXXCRI	MAP	4/17/10 1:24			1			USE	C
EXP0412217a	248373007	MAP	4/17/10 1:53	960307	10-2154	2	LANL		USE	S
EXP0412218a	248373008	MAP	4/17/10 2:23	960307	10-2154	2	LANL		USE	S
EXP0412219a	248373009	MAP	4/17/10 2:52	960307	10-2154	2	LANL		USE	S
EXP0412220a	248373010	MAP	4/17/10 3:22	960307	10-2154	2	LANL		USE	S
EXP0412221a	248373011	MAP	4/17/10 3:51	960307	10-2154	2	LANL		USE	S
EXP0412222a	248373014	MAP	4/17/10 4:21	960307	10-2154	2	LANL		USE	S
EXP0412223a	248373015	MAP	4/17/10 4:50	960307	10-2154	2	LANL		USE	S
EXP0412224a	WXXCCV	MAP	4/17/10 5:20			1			DUSE-RA	S
EXP0412225a	XIBLK26	MAP	4/17/10 5:49			1			USE	C
EXP0412226a	WXXCRI	MAP	4/17/10 6:19			1			USE	B
EXP0412227a	1202053635	MAP	4/17/10 6:48	957705	10-2015	2	LANL		USE	C
EXP0412228a	1202053636	MAP	4/17/10 7:18	957705	10-2015	2	LANL		DUSE-RA	S
EXP0412229a	247915001	MAP	4/17/10 7:47	957705	10-2015	2	LANL		DUSE-RA	S
EXP0412230a	1202053637	MAP	4/17/10 8:17	957705	10-2015	2	LANL		DUSE-RA	S
EXP0412231a	1202053638	MAP	4/17/10 8:46	957705	10-2015	2	LANL		DUSE-RA	S
EXP0412232a	247915002	MAP	4/17/10 9:16	957705	10-2015	2	LANL		DUSE-RA	S
EXP0412233a	247915003	MAP	4/17/10 9:45	957705	10-2015	2	LANL		DUSE-RA	S
EXP0412234a	247915004	MAP	4/17/10 10:15	957705	10-2015	2	LANL		DUSE-RA	S
EXP0412235a	247915005	MAP	4/17/10 10:44	957705	10-2015	2	LANL		DUSE-RA	S
EXP0412236a	247915006	MAP	4/17/10 11:14	957705	10-2015	2	LANL		DUSE-RA	S
EXP0412237a	WXXCCV	MAP	4/17/10 11:43			1			DUSE	C
EXP0412238a	XIBLK27	MAP	4/17/10 12:13			1			DUSE	B
EXP0412239a	WXXCRI	MAP	4/17/10 12:42			1			DUSE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 04/18/10

Extr. Injection Volume: 50uL

Sequence Number: 041810expA

Initial Calibration Date: 04/18/10

Method: SW846 8321A-Modified

Int. Std.: UXX100324-02.4

Mobile Phase Lot#: 1301905, 1289686

Standard-Samp Reagent Lot#: 1299881, 1293274

Reviewed BY: *[Signature]*

Date: 04/19/10

SOP: GL-OA-E-056 Rev.12

Alt Check Std. ID: WXX100418-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0418001a	XIBLK01	MAP	4/18/10 14:12			1		USE	B
EXP0418002a	XIBLK01	MAP	4/18/10 14:41			1		USE	B
EXP0418003a	WXXICAL-01	MAP	4/18/10 15:09			1		USE	I
EXP0418004a	WXXICAL-02	MAP	4/18/10 15:38			1		USE	I
EXP0418005a	WXXICAL-03	MAP	4/18/10 16:06			1		USE	I
EXP0418006a	WXXICAL-04	MAP	4/18/10 16:35			1		USE	I
EXP0418007a	WXXICAL-05	MAP	4/18/10 17:03			1		USE	I
EXP0418008a	WXXICAL-06	MAP	4/18/10 17:32			1		USE	I
EXP0418009a	XIBLK02	MAP	4/18/10 18:00			1		USE	B
EXP0418010a	WXXICV	MAP	4/18/10 18:29			1		USE	C
EXP0418011a	XIBLK03	MAP	4/18/10 18:57			1		USE	B
EXP0418012a	WXXCRI	MAP	4/18/10 19:26			1		USE	C
EXP0418013a	1202060021	MAP	4/18/10 19:54	960388	Various	2	LANL	USE	S
EXP0418014a	1202060022	MAP	4/18/10 20:23	960388	Various	2	LANL	DUSE-RA	S
EXP0418015a	1202060025	MAP	4/18/10 20:51	960388	Various	2	LANL	USE	S
EXP0418016a	248399001	MAP	4/18/10 21:20	960388	10-2183	2	LANL	USE	S
EXP0418017a	248399003	MAP	4/18/10 21:48	960388	10-2183	2	LANL	USE	S
EXP0418018a	248399004	MAP	4/18/10 22:17	960388	10-2183	2	LANL	USE	S
EXP0418019a	248400003	MAP	4/18/10 22:45	960388	10-2175	2	LANL	DUSE-RA	S
EXP0418020a	248400008	MAP	4/18/10 23:14	960388	10-2175	2	LANL	DUSE-RA	S
EXP0418021a	WXXCCV	MAP	4/18/10 23:42			1		USE	C
EXP0418022a	XIBLK04	MAP	4/19/10 0:11			1		USE	B
EXP0418023a	WXXCRI	MAP	4/19/10 0:39			1		USE	C
EXP0418024a	248402001	MAP	4/19/10 1:08	960388	10-2185	2	LANL	DUSE-RA	S
EXP0418025a	1202060023	MAP	4/19/10 1:36	960388	10-2185	2	LANL	DUSE-RA	S
EXP0418026a	1202060024	MAP	4/19/10 2:05	960388	10-2185	2	LANL	DUSE-RA	S
EXP0418027a	XIBLK05	MAP	4/19/10 2:33			1		USE	B
EXP0418028a	248373004	MAP	4/19/10 3:02	960307	10-2154	2	LANL	USE	S
EXP0418029a	248373015	MAP	4/19/10 3:30	960307	10-2154	2	LANL	USE	S

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 04/08/10
 Extr. Injection Volume: 10uL
 Sequence Number: 040810
 Initial Calibration Date: 040810
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#: 1269686, 1293224
 Standard-Samp Reagent Lot#: 1292884, 1284736
 Reviewed By: HVM
 Date: 04/12/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100408-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS04080001.wiff	XIBLK01	LER	4/8/2010 16:49			1		USE	B
EXS04080002.wiff	XIBLK01	LER	4/8/2010 17:05			1		USE	B
EXS04080003.wiff	WXXICAL-19	LER	4/8/2010 17:21			1		USE	I
EXS04080004.wiff	WXXICAL-20	LER	4/8/2010 17:36			1		USE	I
EXS04080005.wiff	WXXICAL-21	LER	4/8/2010 17:52			1		USE	I
EXS04080006.wiff	WXXICAL-22	LER	4/8/2010 18:08			1		USE	I
EXS04080007.wiff	WXXICAL-23	LER	4/8/2010 18:23			1		USE	I
EXS04080008.wiff	WXXICAL-24	LER	4/8/2010 18:39			1		USE	I
EXS04080009.wiff	WXXICAL-25	LER	4/8/2010 18:55			1		USE	I
EXS04080010.wiff	XIBLK02	LER	4/8/2010 19:11			1		USE	B
EXS04080011.wiff	WXXICV	LER	4/8/2010 19:26			1		USE	C
EXS04080012.wiff	XIBLK03	LER	4/8/2010 19:42			1		USE	B
EXS04080013.wiff	WXXCRI	LER	4/8/2010 19:58			1		USE	C
EXS04080014.wiff	248244008	LER	4/8/2010 20:13	959338	10-2137	2	LANL	DUSE	S
EXS04080015.wiff	248244008	LER	4/8/2010 20:29	959338	10-2137	2	LANL	USE	S
EXS04080016.wiff	1202059812	LER	4/8/2010 20:45	960307	10-2154	2	LANL	USE	S
EXS04080017.wiff	1202059813	LER	4/8/2010 21:00	960307	10-2154	2	LANL	USE	S
EXS04080018.wiff	248373001	LER	4/8/2010 21:16	960307	10-2154	2	LANL	USE	S
EXS04080019.wiff	1202059814	LER	4/8/2010 21:32	960307	10-2154	2	LANL	USE	S
EXS04080020.wiff	1202059815	LER	4/8/2010 21:48	960307	10-2154	2	LANL	USE	S
EXS04080021.wiff	248373002	LER	4/8/2010 22:03	960307	10-2154	2	LANL	USE	S
EXS04080022.wiff	248373003	LER	4/8/2010 22:19	960307	10-2154	2	LANL	USE	S
EXS04080023.wiff	248373004	LER	4/8/2010 22:35	960307	10-2154	2	LANL	USE	S
EXS04080024.wiff	WXXCCV	LER	4/8/2010 22:50			1		USE	C
EXS04080025.wiff	XIBLK04	LER	4/8/2010 23:06			1		USE	B
EXS04080026.wiff	WXXCRI	LER	4/8/2010 23:22			1		USE	C
EXS04080027.wiff	248373005	LER	4/8/2010 23:37	960307	10-2154	2	LANL	USE	S
EXS04080028.wiff	248373006	LER	4/8/2010 23:53	960307	10-2154	2	LANL	USE	S
EXS04080029.wiff	248373007	LER	4/9/2010 0:09	960307	10-2154	2	LANL	USE	S
EXS04080030.wiff	248373008	LER	4/9/2010 0:25	960307	10-2154	2	LANL	USE	S

EXS04080031.wiff	248373009	LER	4/9/2010 0:40	960307	10-2154	2	LANL	USE	S
EXS04080032.wiff	248373010	LER	4/9/2010 0:56	960307	10-2154	2	LANL	USE	S
EXS04080033.wiff	248373011	LER	4/9/2010 1:12	960307	10-2154	2	LANL	USE	S
EXS04080034.wiff	248373014	LER	4/9/2010 1:28	960307	10-2154	2	LANL	USE	S
EXS04080035.wiff	248373015	LER	4/9/2010 1:43	960307	10-2154	2	LANL	USE	S
EXS04080036.wiff	WXXCCV	LER	4/9/2010 1:59			1		USE	C
EXS04080037.wiff	XIBLK05	LER	4/9/2010 2:15			1		USE	B
EXS04080038.wiff	WXXCRI	LER	4/9/2010 2:30			1		USE	C

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412223a

Date: 17-Apr-2010

Time: 04:50:39

ID: 248373015

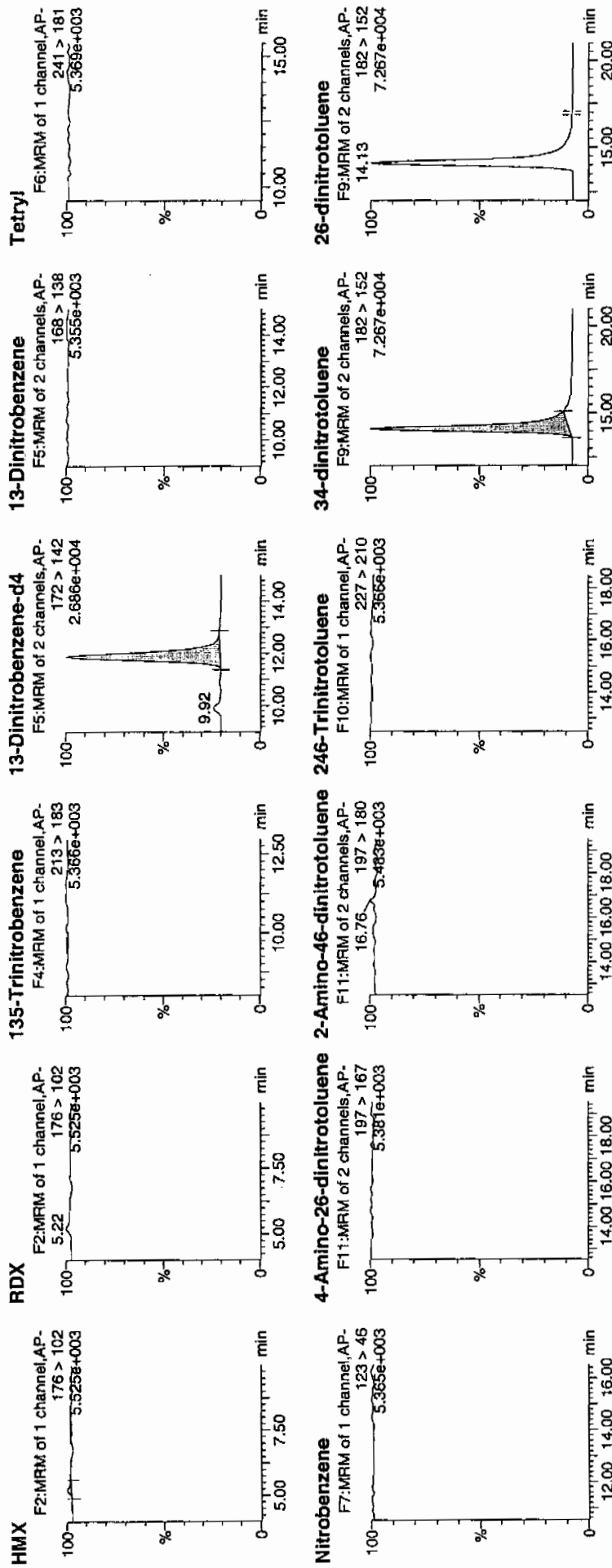
Vial: 2:3,E

CA - P 22 41

Compens 570413029

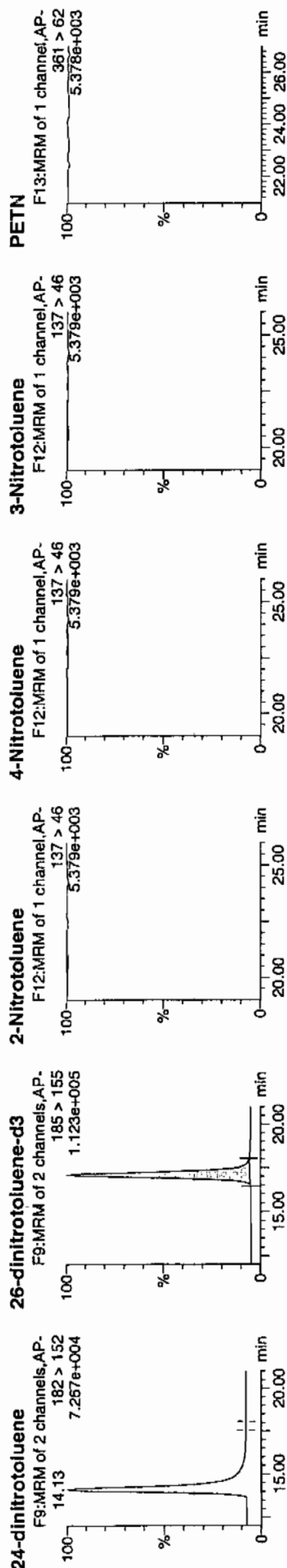
4/17/10

WAV 960307 | 8023 | 21



Amu 4/19/10

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[illegible]

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 818638
Revision No.: 1

DATA EXCEPTION REPORT

Mo. Day Yr. 19-APR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: LC-MS/MS	Test / Method: SW846 8321A Modified	Matrix Type: Solid	Client Code: LANL
Batch ID: 960307	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 248373(10-2154) Application Issues: Other Failed Recovery for MSD/PSD Failed Recovery for LCS/LCSD Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD			
Specification and Requirements Exception Description:		DER Disposition:	
1. The LCS (1202059813) did not meet spike recovery limits for Tetra at 5.90%. The recovery limits are 51-112%. 2. The MS (1202059814) did not meet spike recovery limits for Tetra at 5.49%. The recovery limits are 36-124%. 3. The MSD (1202059815) did not meet spike recovery limits for Tetra at 2.02%. The recovery limits are 36-124%. 4. The MS/MSD pair (1202059814/5) did not meet RPD acceptance limits for Tetra at 92.5%. The acceptance limits are 0-30%. 5. The internal standard responses were outside of the acceptance criteria in the following sample: 248373015. Please see the Form 8 in the data package for the exact recoveries.		1., 2. & 3. Since the samples exceed twice the hold time required for re-extraction, the data are reported with the appropriate DER. The discrepancies are noted in the case narrative. 4. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported with the appropriate DER. The discrepancy is noted in the case narrative. 5. The sample was re-analyzed and similar recoveries were observed. The re-analysis data are reported with the appropriate DER. The discrepancy is noted in the case narrative. The confirmation raw data are located in the Miscellaneous Section of the data package.	

Originator's Name:

Michael Penny

19-APR-10

Data Validator/Group Leader:

Herbert Maier

19-APR-10

GC
SEMIVOLATILE
PCB
ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2154

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 965805
Prep Batch Number: 965798

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
248373011	RE36-10-7523
248373014	RE36-10-7522
248373015	RE36-10-7521
1202072502	Method Blank (MB)
1202072503	Laboratory Control Sample (LCS)
1202072504	248389002(WST16-10-13296) Matrix Spike (MS)
1202072505	248389002(WST16-10-13296) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 15.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

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

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

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

Continuing Calibration Verification (CCV) Requirements

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

A LANL sample of similar matrix associated with another SDG (#10-2165) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD between the MS and MSD met the acceptance limits.

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions

Sample 248373015 (RE36-10-7521) was diluted at 1:5 due to the oily matrix of the extract.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information**Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and

report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

Data exception report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

Manual Integration

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

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

Review Validation

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

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

Reviewer: Jimmy Cao

Date: 3/29/10

Roadmap for LANL 10-2154 PCB

This roadmap was analyzed by yip00818 on 03-18-2010, 10:23.

This roadmap was packaged by yml on 03-29-2010, 07:35.

This roadmap was validated by jim01140 on 03-29-2010, 11:51.

Front Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/028f2801.d	248373011	sample	17-MAR-2010	11:04	10-2154.sub	RE36-10-7523	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/031f3101.d	248373014	sample	17-MAR-2010	11:41	10-2154.sub	RE36-10-7522	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/032f3201.d	248373015	sample	17-MAR-2010	11:52	10-2154.sub	RE36-10-7521	5.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/028b2801.d	248373011	sample	17-MAR-2010	11:04	10-2154.sub	RE36-10-7523	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/031b3101.d	248373014	sample	17-MAR-2010	11:41	10-2154.sub	RE36-10-7522	1.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/032b3201.d	248373015	sample	17-MAR-2010	11:52	10-2154.sub	RE36-10-7521	5.00000	965805	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/019f1901-3.d	1202072502	mb	17-MAR-2010	09:14	10-2154.sub	PBLK01	1.00000	965805	
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/020f2001-3.d	1202072503	lcs	17-MAR-2010	09:25	10-2154.sub	PBLK01LCS	1.00000	965805	

Back QC Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/019b1901-3.d	1202072502	mb	17-MAR-2010	09:14	10-2154.sub	PBLK01	1.00000	965805	
<input type="checkbox"/>	N	/chem/ecd1a.i/0317107.b/020b2001-3.d	1202072503	lcs	17-MAR-2010	09:25	10-2154.sub	PBLK01LCS	1.00000	965805	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373015

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 5
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	21.6	ug/kg	7.20	21.6	1
11104-28-2	Aroclor-1221	U	21.6	ug/kg	7.20	21.6	1
11141-16-5	Aroclor-1232	U	21.6	ug/kg	7.20	21.6	1
53469-21-9	Aroclor-1242	U	21.6	ug/kg	7.20	21.6	1
12672-29-6	Aroclor-1248	U	21.6	ug/kg	7.20	21.6	1
11097-69-1	Aroclor-1254	U	21.6	ug/kg	7.20	21.6	1
11096-82-5	Aroclor-1260	U	21.6	ug/kg	7.20	21.6	1

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-2154
Lab Sample ID: 248373014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Aliquot: 30.14 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 11.3
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: J
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.74	ug/kg	1.24	3.74	1
11104-28-2	Aroclor-1221	U	3.74	ug/kg	1.24	3.74	1
11141-16-5	Aroclor-1232	U	3.74	ug/kg	1.24	3.74	1
53469-21-9	Aroclor-1242	U	3.74	ug/kg	1.24	3.74	1
12672-29-6	Aroclor-1248	U	3.74	ug/kg	1.24	3.74	1
11097-69-1	Aroclor-1254	U	3.74	ug/kg	1.24	3.74	1
11096-82-5	Aroclor-1260	U	3.74	ug/kg	1.24	3.74	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 15.8
Project: LANL01004
SOP Ref: GI-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.94	ug/kg	1.31	3.94	1
11104-28-2	Aroclor-1221	U	3.94	ug/kg	1.31	3.94	1
11141-16-5	Aroclor-1232	U	3.94	ug/kg	1.31	3.94	1
53469-21-9	Aroclor-1242	J	2.70	ug/kg	1.31	3.94	2
12672-29-6	Aroclor-1248	U	3.94	ug/kg	1.31	3.94	1
11097-69-1	Aroclor-1254	U	3.94	ug/kg	1.31	3.94	1
11096-82-5	Aroclor-1260	U	3.94	ug/kg	1.31	3.94	1

QUALITY CONTROL SUMMARY

PCB

Page 1 of 1

Surrogate Recovery Report

SDG Number: 10-2154

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

Sample ID	Client ID	4CMX 1	4CMX 2	DCB 1	DCB 2
		%REC #	%REC #	%REC #	%REC #
1202072502	MB for batch 965798	64	64	64	65
1202072503	LCS for batch 965798	64	63	63	66
248373011	RE36-10-7523	62	62	59	65
248373014	RE36-10-7522	61	60	68	66
248373015	RE36-10-7521	56 D	59 D	59 D	65 D

Surrogate

Acceptance Limits

4CMX = 4cmx

(32%-120%)

DCB = Decachlorobiphenyl

(30%-116%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

PCB

Page 1 of 1

**Quality Control Summary
Spike Recovery Report**

SDG Number: 10-2154

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 965798

Matrix: SOIL

Lab Sample ID:1202072503

Instrument: ECD1A.1

Analysis Date: 03/17/2010 09:25

Dilution: 1

Analyst: YS1

Pre Batch II 965798

Inj. Vol: 1 uL

Batch ID: 965805

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	19.6	59	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	21.6	65	45-118

PCB

Page 1 of 2

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2165

Sample Type: Matrix Spike

Client ID: WST16-10-13296MS

Matrix: R

Lab Sample ID:1202072504

%Moisture: 17

Instrument: ECD1A.I

Analysis Date: 03/17/2010 14:19

Dilution: 1

Analyst: YS1

Prep Batch ID: 965798

Inj. Vol: 1 uL

Batch ID: 965805

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	40.1	0.00 U	24.3	61	23-119
11096-82-5	MS Aroclor-1260	40.1	0.00 U	30.2	75	28-124

PCB

Page 2 of 2

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2165

Sample Type: Matrix Spike Duplicate

Client ID: WST16-10-13296MSD

Matrix: R

Lab Sample ID: 1202072505

%Moisture: 17

Instrument: ECD1A.I

Analysis Date: 03/17/2010 14:32

Dilution: 1

Analyst: YS1

Prep Batch ID: 965798

Inj. Vol: 1 uL

Batch ID: 965805

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	40.1	0.00 U	23.2	58	23-119	5	0-28
11096-82-5	MSD Aroclor-1260	40.1	0.00 U	30.5	76	28-124	1	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-2154	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 965798	Instrument ID:	ECD1A.J_2	Data File:	019b1901-1.d
Lab Sample ID:	1202072502		ECD1A.J_1		019f1901-1.d
Column:	CLP2	Prep Date:	03/16/2010 21:02	Analyzed:	03/17/10 09:14
	CLP1	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 965798	1202072503	020f2001-1.d 020b2001-1.d	03/17/10	0925
02 RE36-10-7523	248373011	028f2801.d 028b2801.d	03/17/10	1104
03 RE36-10-7522	248373014	031f3101.d 031b3101.d	03/17/10	1141
04 RE36-10-7521	248373015	032f3201.d 032b3201.d	03/17/10	1152

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373015

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 22.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 5
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	21.6	ug/kg	7.20	21.6	1
11104-28-2	Aroclor-1221	U	21.6	ug/kg	7.20	21.6	1
11141-16-5	Aroclor-1232	U	21.6	ug/kg	7.20	21.6	1
53469-21-9	Aroclor-1242	U	21.6	ug/kg	7.20	21.6	1
12672-29-6	Aroclor-1248	U	21.6	ug/kg	7.20	21.6	1
11097-69-1	Aroclor-1254	U	21.6	ug/kg	7.20	21.6	1
11096-82-5	Aroclor-1260	U	21.6	ug/kg	7.20	21.6	1

Data File: /chem/ecdla.i/0317107.b/032f3201.d
Report Date: 17-Mar-2010 12:13

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/032f3201.d
Lab Smp Id: 248373015 Client Smp ID: RE36-10-7521
Inj Date : 17-MAR-2010 11:52
Operator : YS1 Inst ID: ecdla.i
Smp Info : |248373015|5|
Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7521|||
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 12:03 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 32
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-2154.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

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

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	22.91360	% Moisture

Cpnd Variable Local Compound Variable

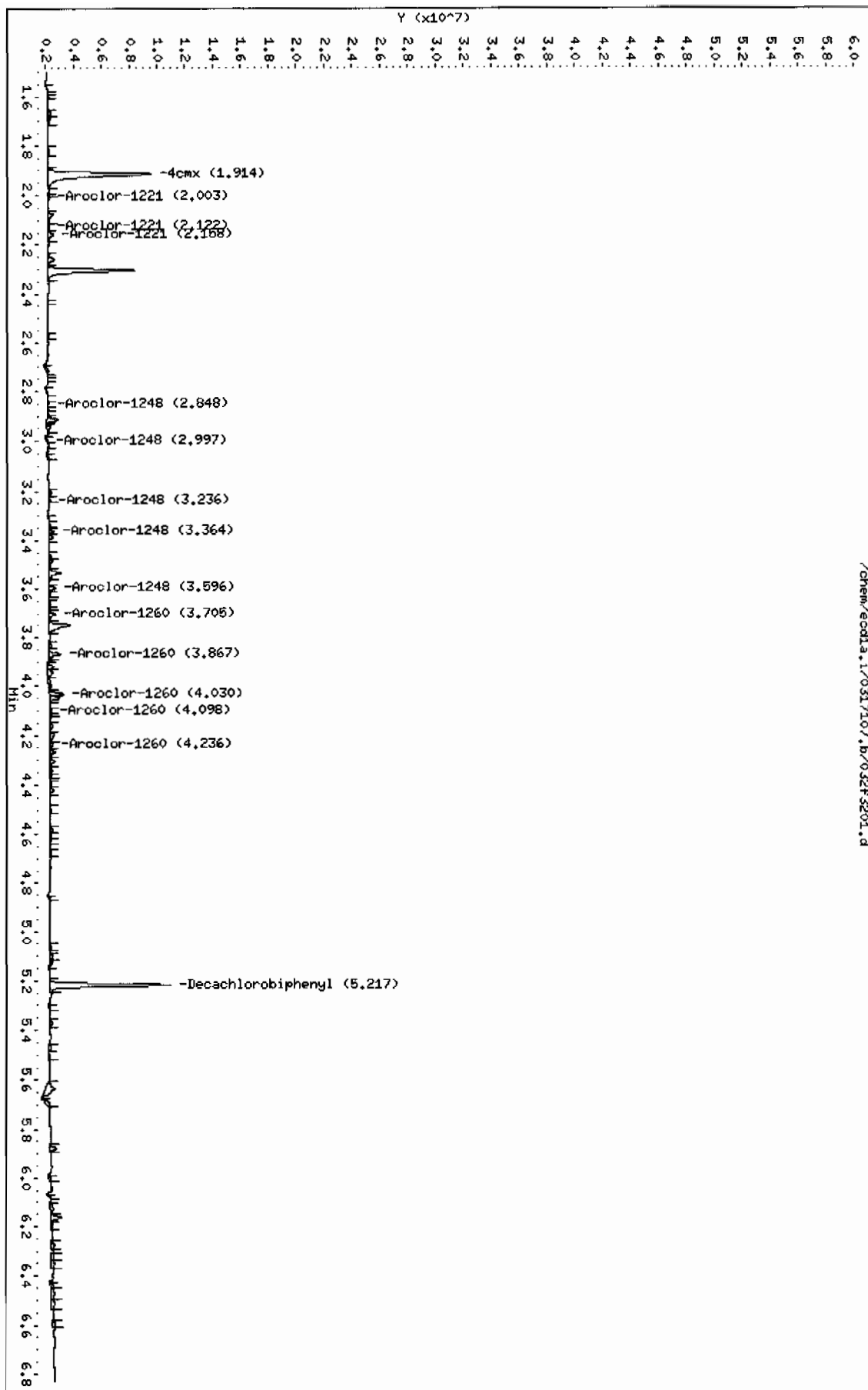
CONCENTRATIONS							
				ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
					CAS #: 877-09-8		
1.914	1.913	0.001	8673211 22.2662	4.8	80.00- 120.00	100.00	

					CAS #: 2051-24-3		
5.217	5.216	0.001	6983198 23.5180	5.1	80.00- 120.00	100.00	

Data File: /chem/eod1a.i/0317107.b/032f3201.d
Date: 17-MAR-2010 11:52
Client ID: RE36-10-7521
Sample Info: 1248373015151
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eod1a.i
Operator: YSL
Column diameter: 0.25

/chem/eod1a.i/0317107.b/032f3201.d



Data File: /chem/ecdl1a.i/0317107.b/032b3201.d
Report Date: 17-Mar-2010 12:14

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/032b3201.d
Lab Smp Id: 248373015 Client Smp ID: RE36-10-7521
Inj Date : 17-MAR-2010 11:52
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248373015|5|
Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7521|||
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 11:59 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 32
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-2154.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	22.91360	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.272	2.271	0.001	6145164	23.4251	5.1 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.913	5.913	0.000	4846091	25.8909	5.6 80.00- 120.00	100.00

Data File: /chem/ecda.i/0317107.b/032b3201.d

Date: 17-MAR-2010 11:52

Client ID: RE36-10-7521

Sample Info: 1248373015151

Volume Injected (uL): 1.0

Column phase: CLP2

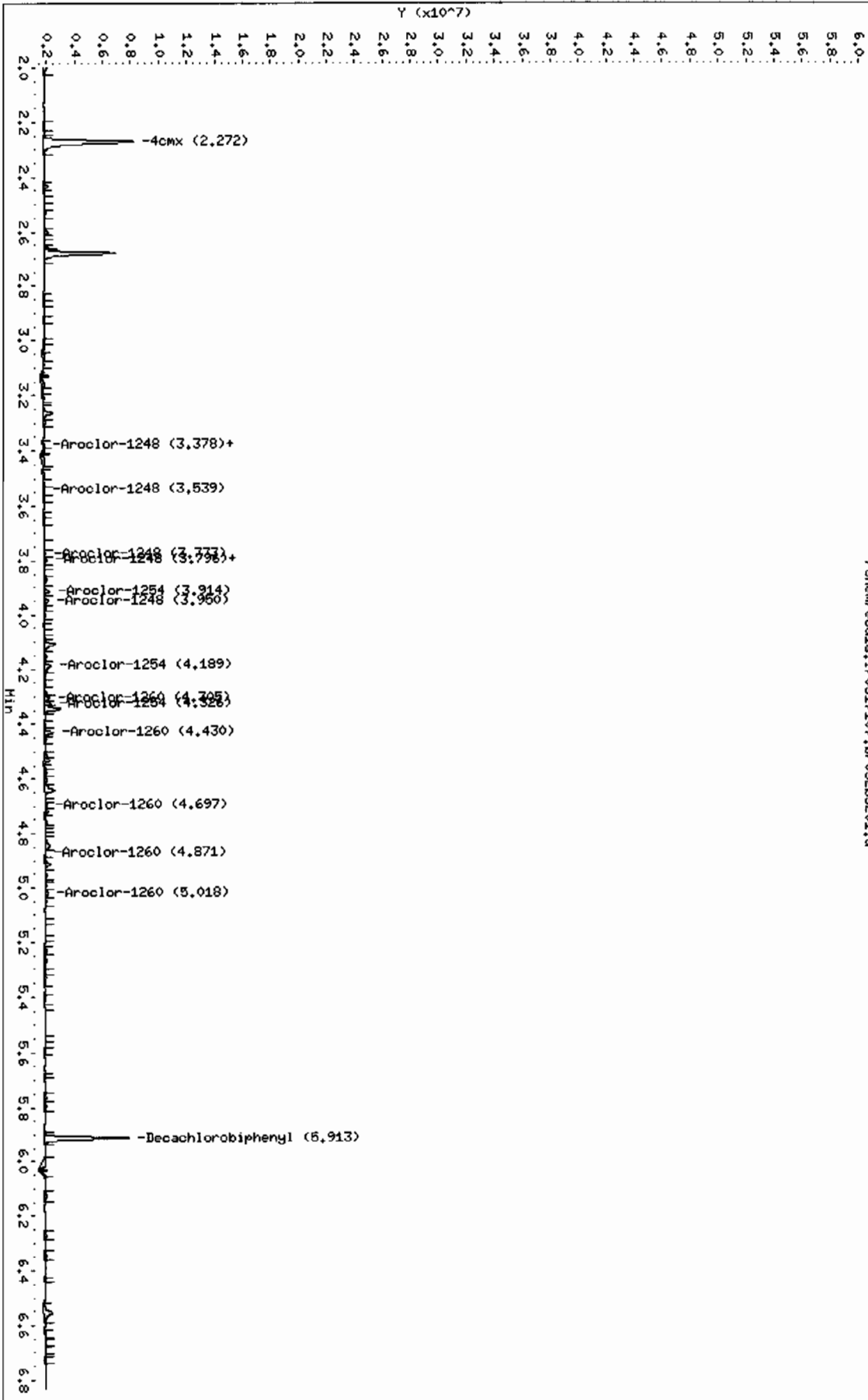
Instrument: ecda.i

Operator: YSI

Column diameter: 0.25

/chem/ecda.i/0317107.b/032b3201.d

Page 1



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2154
Lab Sample ID: 248373014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.14 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 11.3
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.74	ug/kg	1.24	3.74	1
11104-28-2	Aroclor-1221	U	3.74	ug/kg	1.24	3.74	1
11141-16-5	Aroclor-1232	U	3.74	ug/kg	1.24	3.74	1
53469-21-9	Aroclor-1242	U	3.74	ug/kg	1.24	3.74	1
12672-29-6	Aroclor-1248	U	3.74	ug/kg	1.24	3.74	1
11097-69-1	Aroclor-1254	U	3.74	ug/kg	1.24	3.74	1
11096-82-5	Aroclor-1260	U	3.74	ug/kg	1.24	3.74	1

Data File: /chem/ecdl1a.i/0317107.b/031f3101.d
Report Date: 17-Mar-2010 12:00

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/031f3101.d
Lab Smp Id: 248373014 Client Smp ID: RE36-10-7522
Inj Date : 17-MAR-2010 11:41
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248373014|1
Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7522|||
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 11:59 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2154.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	11.25430	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
1.913	1.913	0.000	47252250	121.308	4.5 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.215	5.216	-0.001	40161428	135.255	5.0 80.00- 120.00	100.00	

Data File: /chem/eodla.i/0317107.b/031f3101.d

Date : 17-MAR-2010 11:41

Client ID: RE36-10-7522

Sample Info: 124837301411

Volume Injected (uL): 1.0

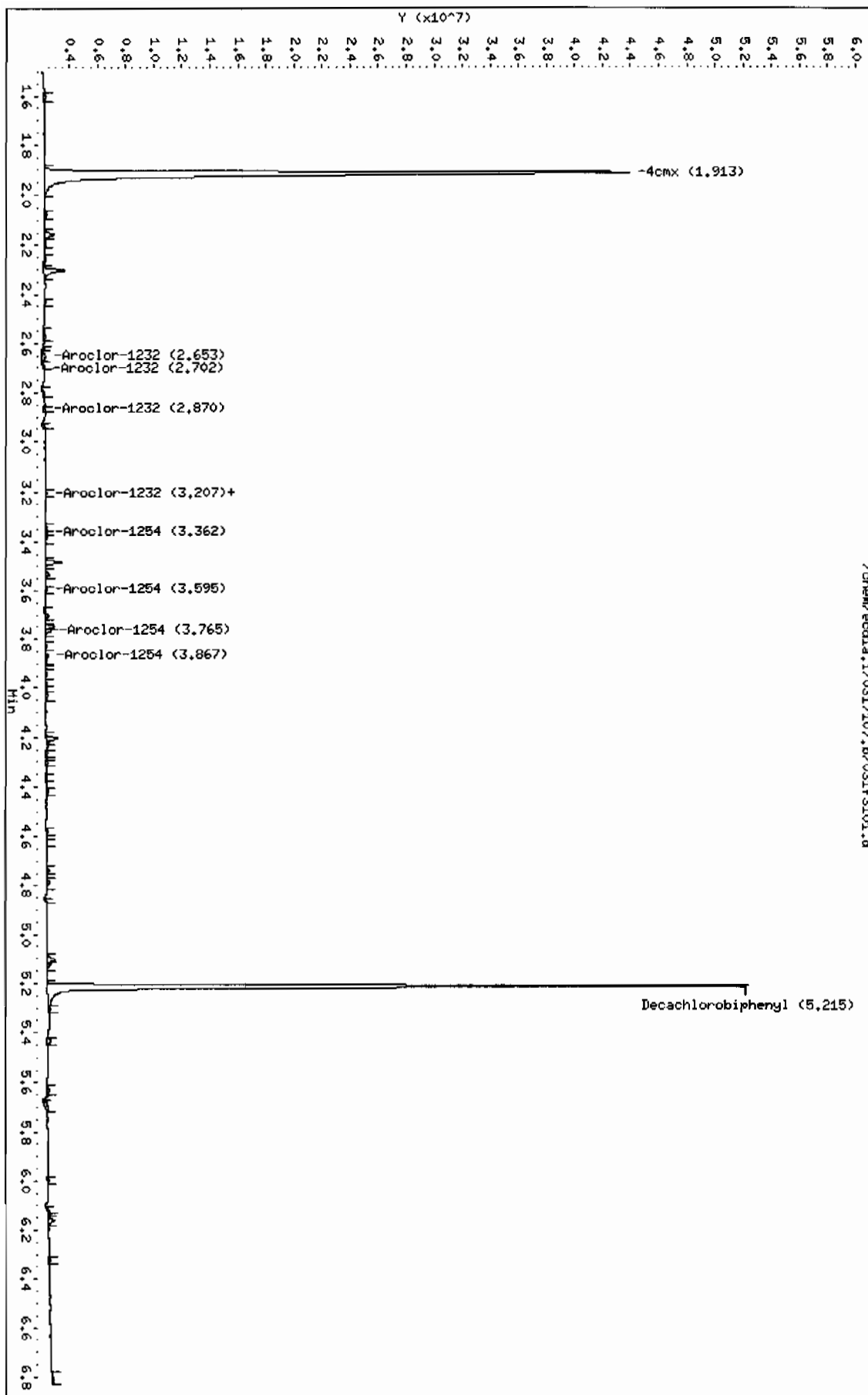
Column phase: CLP1

Instrument: eodla.i

Operator: YS1

Column diameter: 0.25

/chem/eodla.i/0317107.b/031f3101.d



Data File: /chem/ecdl1a.i/0317107.b/031b3101.d
Report Date: 17-Mar-2010 12:00

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/0317107.b/031b3101.d
Lab Smp Id: 248373014 Client Smp ID: RE36-10-7522
Inj Date : 17-MAR-2010 11:41
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248373014|1
Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7522|||
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 11:59 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2154.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	11.25430	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	

\$ 11 4cmx					CAS #: 877-09-8		
2.271	2.271	0.000	31715675 120.899	4.5	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.912	5.913	-0.001	24878194 132.915	5.0	80.00- 120.00	100.00	

Data File: /chem/ecdda.i/0317107.b/031b3101.d

Date: 17-MAR-2010 11:41

Client ID: RE36-10-7522

Sample Info: 124837301411

Volume Injected (uL): 1.0

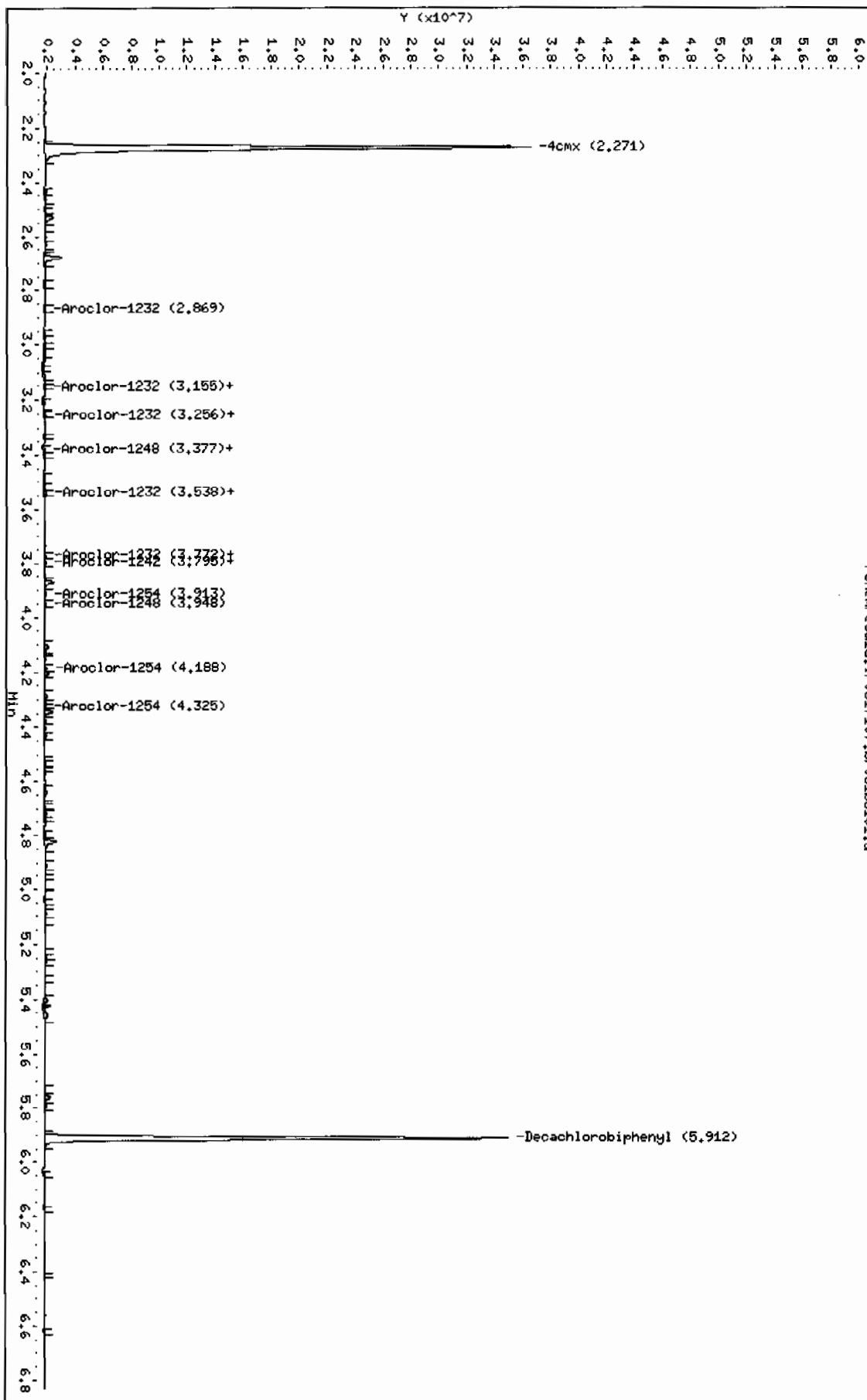
Column phase: CLP2

Instrument: ecdda.i

Operator: YS1

Column diameter: 0.25

/chem/ecdda.i/0317107.b/031b3101.d



PCB

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Certificate of Analysis

Sample Summary

SDG Number: 10-2154

Lab Sample ID: 248373011

Client ID: RE36-10-7523

Batch ID: 965805

Run Date: 03/17/2010 11:04

Prep Date: 03/16/2010 21:02

Data File: 028f2801.d

028b2801.d

Date Collected: 02/24/2010 12:00

Date Received: 03/02/2010 08:50

Client: LANL010

Method: SW846 8082

Inst: ECD1A.J

Analyst: YS1

Aliquot: 30.19 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 15.8

Project: LANL01004

SOP Ref: GI-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.94	ug/kg	1.31	3.94	1
11104-28-2	Aroclor-1221	U	3.94	ug/kg	1.31	3.94	1
11141-16-5	Aroclor-1232	U	3.94	ug/kg	1.31	3.94	1
53469-21-9	Aroclor-1242	J	2.70	ug/kg	1.31	3.94	2
12672-29-6	Aroclor-1248	U	3.94	ug/kg	1.31	3.94	1
11097-69-1	Aroclor-1254	U	3.94	ug/kg	1.31	3.94	1
11096-82-5	Aroclor-1260	U	3.94	ug/kg	1.31	3.94	1

Data File: /chem/ecdl1a.i/0317107.b/028f2801.d
Report Date: 17-Mar-2010 12:18

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/0317107.b/028f2801.d
Lab Smp Id: 248373011 Client Smp ID: RE36-10-7523
Inj Date : 17-MAR-2010 11:04
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248373011|1|
Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7523|||
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 12:03 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2154.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	15.84240	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8			
1.912	1.913	-0.001	47946893	123.091	4.8	80.00~	120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.215	5.216	-0.001	34820110	117.267	4.6	80.00~	120.00	100.00

4 Aroclor-1242					CAS #: 53469-21-9			
2.365	2.365	0.000	584355	47.3845	1.9	80.00~	120.00	100.00 (aM)
2.651	2.652	-0.001	658680	44.1993	1.7	113.09~	153.09	112.72
2.767	2.769	-0.002	211850	35.9335	1.4	30.20~	70.20	36.25
2.979	2.980	-0.001	667022	86.2289	3.4	43.54~	83.54	114.15

			CONCENTRATIONS					
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====		=====
4 Aroclor-1242 (continued)								
3.232	3.233	-0.001	463394	63.6134	2.5	2.66-	42.66	79.30
Average of Peak Concentrations =					2.2			

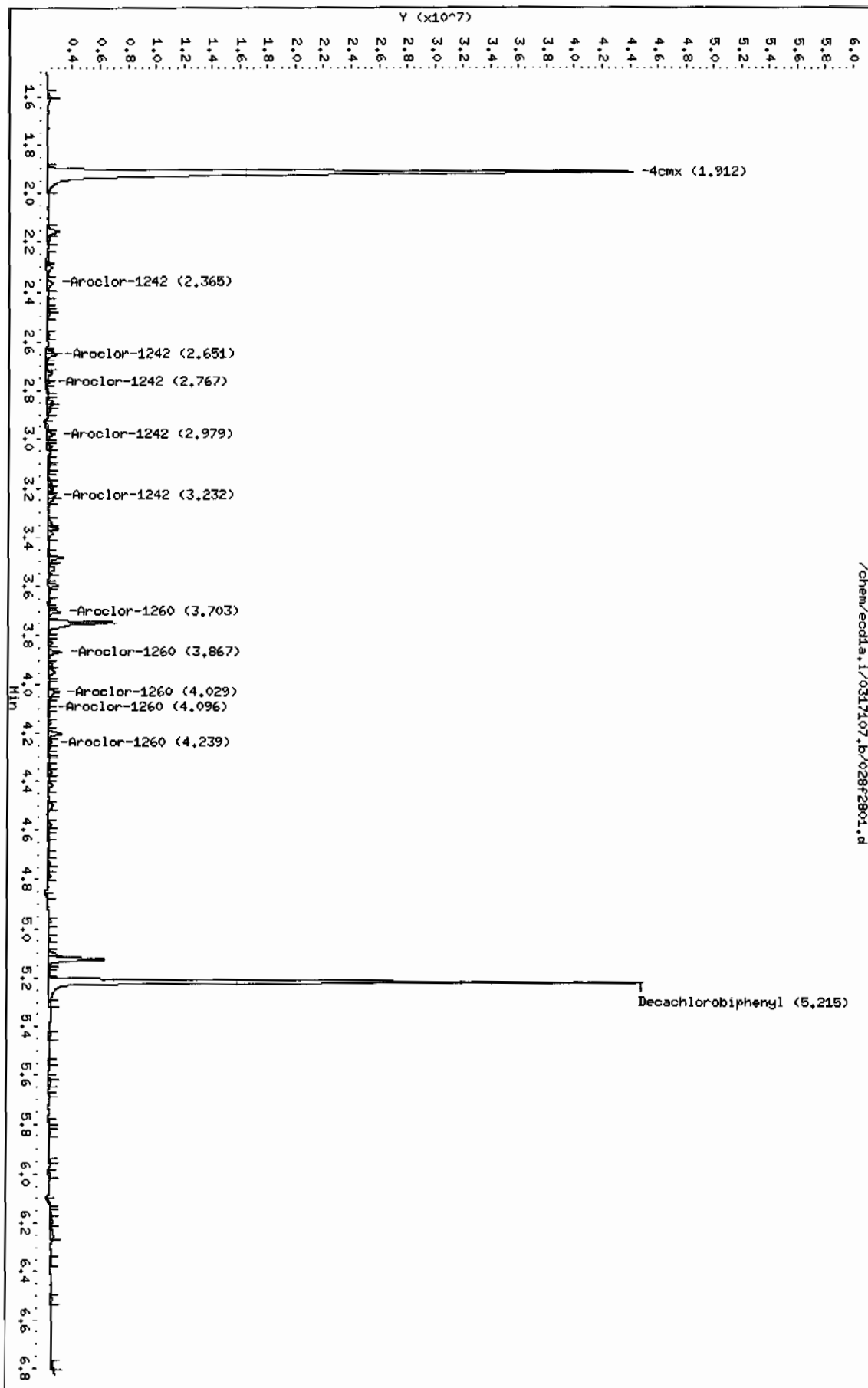
QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

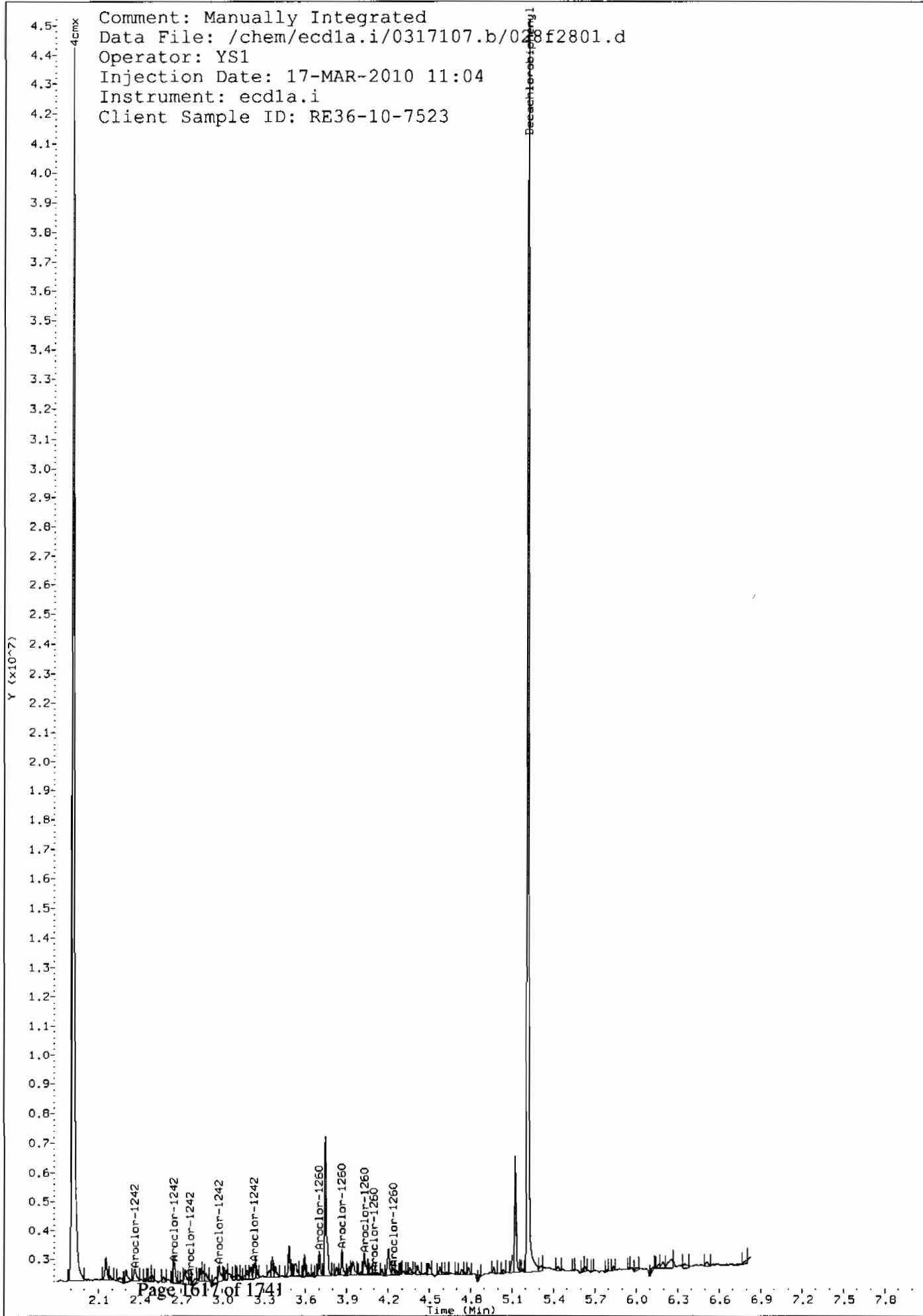
Data File: /chem/ecdda.i/0317107.b/028f2801.d
Date: 17-MAR-2010 11:04
Client ID: RE36-10-7523
Sample Info: 124837301111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25

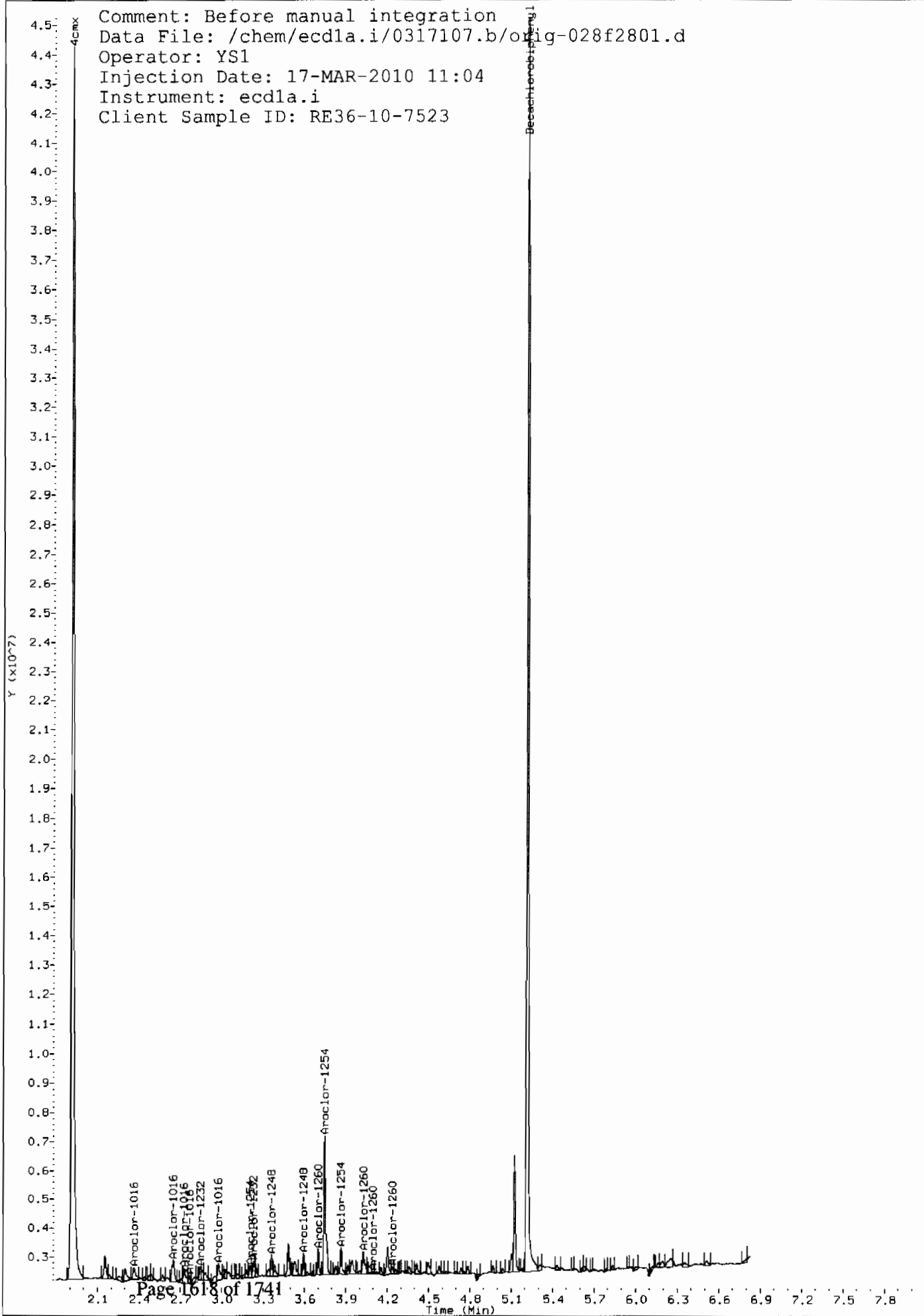
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Comment: Manually Integrated
Data File: /chem/ecdl1a.i/0317107.b/028f2801.d
Operator: YS1
Injection Date: 17-MAR-2010 11:04
Instrument: ecd1a.i
Client Sample ID: RE36-10-7523



Comment: Before manual integration
Data File: /chem/ecdla.i/0317107.b/orig-028f2801.d
Operator: YS1
Injection Date: 17-MAR-2010 11:04
Instrument: ecdla.i
Client Sample ID: RE36-10-7523



Data File: /chem/ecdla.i/0317107.b/028b2801.d
Report Date: 17-Mar-2010 12:00

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/0317107.b/028b2801.d
Lab Smp Id: 248373011 Client Smp ID: RE36-10-7523
Inj Date : 17-MAR-2010 11:04
Operator : YS1 Inst ID: ecdla.i
Smp Info : |248373011|1|
Misc Info : |ECD82P_1S|965805|SVA|LANL|SOIL|RE36-10-7523|||
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 11:59 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2154.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	15.84240	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.271	2.271	0.000	32283330	123.063	4.8 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.911	5.913	-0.002	24359077	130.142	5.1 80.00- 120.00	100.00

4 Aroclor-1242 CAS #: 53469-21-9						
3.166	3.167	-0.001	677972	66.8665	2.6 80.00- 120.00	100.00(a)
3.250	3.249	0.001	468310	65.9896	2.6 48.21- 88.21	69.08
3.539	3.540	-0.001	450688	81.7416	3.2 32.95- 72.95	66.48
3.772	3.773	-0.001	327177	57.1793	2.2 34.12- 74.12	48.26

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
4 Aroclor-1242 (continued)						
3.798	3.802	-0.004	459030	72.0662	2.8 41.43- 81.43	67.71
Average of Peak Concentrations =				2.7		

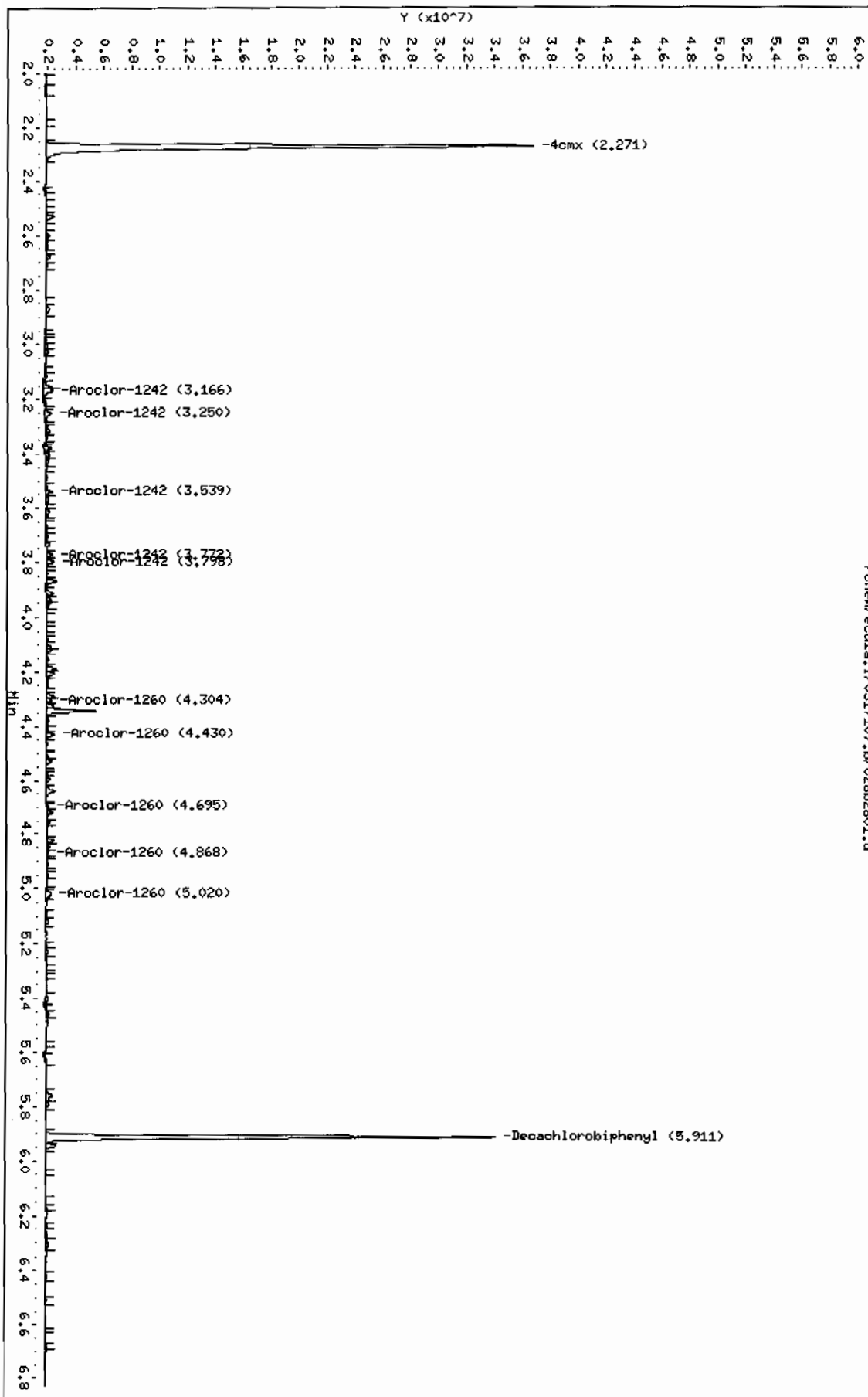
QC Flag Legend

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

Data File: /chem/ecdl.a.i/0317107.b/028b2801.d
Date: 17-MAR-2010 11:04
Client ID: RE36-10-7523
Sample Info: 124837301111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdl.a.i
Operator: YSI
Column diameter: 0.25

/chem/ecdl.a.i/0317107.b/028b2801.d



STANDARDS DATA

Report Date: 18-Mar-2010 09:29

Calibration History

Method : /chem/ecd1a.i/0317107.b/ECD1-F-8082-031110b.m
Start Cal Date: 22-FEB-2010 06:31
End Cal Date : 11-MAR-2010 20:22

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-FEB-2010 11:26	AR1268	/chem/ecd1a.i/022210.b/032f3201.d
11-MAR-2010 19:40	AR1248	/chem/ecd1a.i/031110b.b/029f2901.d
11-MAR-2010 18:37	AR1242	/chem/ecd1a.i/031110b.b/023f2301.d
11-MAR-2010 17:34	AR1254	/chem/ecd1a.i/031110b.b/017f1701.d
11-MAR-2010 16:31	AR1660	/chem/ecd1a.i/031110b.b/011f1101.d
Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecd1a.i/022210.b/033f3301.d
11-MAR-2010 19:51	AR1248	/chem/ecd1a.i/031110b.b/030f3001.d
11-MAR-2010 18:48	AR1242	/chem/ecd1a.i/031110b.b/024f2401.d
11-MAR-2010 17:45	AR1254	/chem/ecd1a.i/031110b.b/018f1801.d
11-MAR-2010 16:41	AR1660	/chem/ecd1a.i/031110b.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecd1a.i/022210.b/034f3401.d
11-MAR-2010 20:01	AR1248	/chem/ecd1a.i/031110b.b/031f3101.d
11-MAR-2010 18:58	AR1242	/chem/ecd1a.i/031110b.b/025f2501.d
11-MAR-2010 17:55	AR1254	/chem/ecd1a.i/031110b.b/019f1901.d
11-MAR-2010 16:52	AR1660	/chem/ecd1a.i/031110b.b/013f1301.d
Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecd1a.i/022210.b/035f3501.d
11-MAR-2010 20:12	AR1248	/chem/ecd1a.i/031110b.b/032f3201.d
11-MAR-2010 19:09	AR1242	/chem/ecd1a.i/031110b.b/026f2601.d
11-MAR-2010 18:06	AR1254	/chem/ecd1a.i/031110b.b/020f2001.d
11-MAR-2010 17:02	AR1660	/chem/ecd1a.i/031110b.b/014f1401.d
11-MAR-2010 16:10	AR1262	/chem/ecd1a.i/031110b.b/009f0901.d
11-MAR-2010 15:59	AR1221	/chem/ecd1a.i/031110b.b/008f0801.d
11-MAR-2010 15:49	AR1232	/chem/ecd1a.i/031110b.b/007f0701.d
11-MAR-2010 16:21	DDTANALOGSTD	/chem/ecd1a.i/031110b.b/010f1001.d
Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecd1a.i/022210.b/036f3601.d
11-MAR-2010 20:22	AR1248	/chem/ecd1a.i/031110b.b/033f3301.d
11-MAR-2010 19:19	AR1242	/chem/ecd1a.i/031110b.b/027f2701.d
11-MAR-2010 18:16	AR1254	/chem/ecd1a.i/031110b.b/021f2101.d
11-MAR-2010 17:13	AR1660	/chem/ecd1a.i/031110b.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 21:49 |AR1660	|/chem/ecdla.i/0317107.b/080f8001.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 20:08 |AR1660	|/chem/ecdla.i/0317107.b/072f7201.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 17:49 |AR1660	|/chem/ecdla.i/0317107.b/061f6101.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 16:00 |AR1660	|/chem/ecdla.i/0317107.b/052f5201.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 13:45 |AR1660	|/chem/ecdla.i/0317107.b/041f4101.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 11:16 |AR1660	|/chem/ecdla.i/0317107.b/029f2901.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 08:53 |AR1660	|/chem/ecdla.i/0317107.b/017f1701.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 07:22 |AR1262	|/chem/ecdla.i/0317107.b/009f0901.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 07:11 |AR1221	|/chem/ecdla.i/0317107.b/008f0801.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 07:01 |AR1232	|/chem/ecdla.i/0317107.b/007f0701.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 06:50 |AR1268	|/chem/ecdla.i/0317107.b/006f0601.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 06:39 |AR1248	|/chem/ecdla.i/0317107.b/005f0501.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 06:29 |AR1242	|/chem/ecdla.i/0317107.b/004f0401.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 06:18 |AR1254	|/chem/ecdla.i/0317107.b/003f0301.d	|
+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
| 17-MAR-2010 06:08 |AR1660	|/chem/ecdla.i/0317107.b/002f0201.d	|
+-----+-----+-----+-----+		

Report Date: 18-Mar-2010 09:29

Calibration History

Method : /chem/ecd1a.i/0317107.b/ECD1-B-8082-031110b.m
Start Cal Date: 22-FEB-2010 06:31
End Cal Date : 11-MAR-2010 20:22

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-FEB-2010 11:26	AR1268	/chem/ecd1a.i/022210.b/032b3201.d
11-MAR-2010 19:40	AR1248	/chem/ecd1a.i/031110b.b/029b2901.d
11-MAR-2010 18:37	AR1242	/chem/ecd1a.i/031110b.b/023b2301.d
11-MAR-2010 17:34	AR1254	/chem/ecd1a.i/031110b.b/017b1701.d
11-MAR-2010 16:31	AR1660	/chem/ecd1a.i/031110b.b/011b1101.d

Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecd1a.i/022210.b/033b3301.d
11-MAR-2010 19:51	AR1248	/chem/ecd1a.i/031110b.b/030b3001.d
11-MAR-2010 18:48	AR1242	/chem/ecd1a.i/031110b.b/024b2401.d
11-MAR-2010 17:45	AR1254	/chem/ecd1a.i/031110b.b/018b1801.d
11-MAR-2010 16:41	AR1660	/chem/ecd1a.i/031110b.b/012b1201.d

Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecd1a.i/022210.b/034b3401.d
11-MAR-2010 20:01	AR1248	/chem/ecd1a.i/031110b.b/031b3101.d
11-MAR-2010 18:58	AR1242	/chem/ecd1a.i/031110b.b/025b2501.d
11-MAR-2010 17:55	AR1254	/chem/ecd1a.i/031110b.b/019b1901.d
11-MAR-2010 16:52	AR1660	/chem/ecd1a.i/031110b.b/013b1301.d

Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecd1a.i/022210.b/035b3501.d
11-MAR-2010 20:12	AR1248	/chem/ecd1a.i/031110b.b/032b3201.d
11-MAR-2010 19:09	AR1242	/chem/ecd1a.i/031110b.b/026b2601.d
11-MAR-2010 18:06	AR1254	/chem/ecd1a.i/031110b.b/020b2001.d
11-MAR-2010 17:02	AR1660	/chem/ecd1a.i/031110b.b/014b1401.d
11-MAR-2010 16:10	AR1262	/chem/ecd1a.i/031110b.b/009b0901.d
11-MAR-2010 15:59	AR1221	/chem/ecd1a.i/031110b.b/008b0801.d
11-MAR-2010 15:49	AR1232	/chem/ecd1a.i/031110b.b/007b0701.d
11-MAR-2010 16:21	DDTANALOGSTD	/chem/ecd1a.i/031110b.b/010b1001.d

Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecd1a.i/022210.b/036b3601.d
11-MAR-2010 20:22	AR1248	/chem/ecd1a.i/031110b.b/033b3301.d
11-MAR-2010 19:19	AR1242	/chem/ecd1a.i/031110b.b/027b2701.d
11-MAR-2010 18:16	AR1254	/chem/ecd1a.i/031110b.b/021b2101.d
11-MAR-2010 17:13	AR1660	/chem/ecd1a.i/031110b.b/015b1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 21:49 |AR1660	|/chem/ecdla.i/0317107.b/080b8001.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 20:08 |AR1660	|/chem/ecdla.i/0317107.b/072b7201.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 17:49 |AR1660	|/chem/ecdla.i/0317107.b/061b6101.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 16:00 |AR1660	|/chem/ecdla.i/0317107.b/052b5201.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 13:45 |AR1660	|/chem/ecdla.i/0317107.b/041b4101.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 11:16 |AR1660	|/chem/ecdla.i/0317107.b/029b2901.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 08:53 |AR1660	|/chem/ecdla.i/0317107.b/017b1701.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 07:22 |AR1262	|/chem/ecdla.i/0317107.b/009b0901.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 07:11 |AR1221	|/chem/ecdla.i/0317107.b/008b0801.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 07:01 |AR1232	|/chem/ecdla.i/0317107.b/007b0701.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:50 |AR1268	|/chem/ecdla.i/0317107.b/006b0601.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:39 |AR1248	|/chem/ecdla.i/0317107.b/005b0501.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:29 |AR1242	|/chem/ecdla.i/0317107.b/004b0401.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:18 |AR1254	|/chem/ecdla.i/0317107.b/003b0301.d
| Ccal Level: 4 , Ccal Amount: 1000	
| 17-MAR-2010 06:08 |AR1660	|/chem/ecdla.i/0317107.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 18-Mar-2010 06:43 Number of CpnDs : 15
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events

Values

```

-----
Initial:Start Threshold      12031.000000
Initial:End Threshold        6015.500000
Initial:Area Threshold       15489.000000
Initial:P-P Resolution       1.000000
Initial:Bunch Factor         2.000000
Initial:Negative Peaks      OFF
Initial:Tension              0.500000
  
```

Compound	RT	RT Window	RF
1 Aroclor-1016	2.366	2.336-2.396	1.518e+04
	2.651	2.621-2.681	1.894e+04
	2.732	2.702-2.762	1.244e+04
	2.768	2.738-2.798	7.348e+03
	2.978	2.948-3.008	9.518e+03
63 4,4-DDD	3.888	3.868-3.908	3.140e+05
64 4,4-DDE	3.539	3.519-3.559	3.727e+05
62 4,4-DDT	4.052	4.032-4.072	2.363e+05
2 Aroclor-1221	2.026	1.996-2.056	4.466e+03
	2.118	2.088-2.148	2.447e+03
	2.144	2.114-2.174	1.083e+04
3 Aroclor-1232	2.365	2.335-2.395	6.667e+03
	2.652	2.622-2.682	8.344e+03
	2.732	2.702-2.762	5.531e+03
	2.847	2.817-2.877	2.649e+03
4 Aroclor-1242	3.234	3.204-3.264	3.555e+03
	2.365	2.335-2.395	1.233e+04
	2.652	2.622-2.682	1.490e+04
	2.769	2.739-2.799	5.896e+03
	2.980	2.950-3.010	7.735e+03
	3.233	3.203-3.263	7.285e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m

Compound	RT	RT Window	RF
5 Aroclor-1248	2.846	2.816-2.876	1.000e+04
	2.981	2.951-3.011	1.314e+04
	3.234	3.204-3.264	1.430e+04
	3.366	3.336-3.396	1.190e+04
	3.598	3.568-3.628	8.005e+03
6 Aroclor-1254	3.209	3.179-3.239	1.326e+04
	3.364	3.334-3.394	1.783e+04
	3.598	3.568-3.628	2.237e+04
	3.760	3.730-3.790	1.649e+04
	3.869	3.839-3.899	1.596e+04
7 Aroclor-1260	3.703	3.673-3.733	1.833e+04
	3.866	3.836-3.896	2.689e+04
	4.028	3.998-4.058	2.832e+04
	4.096	4.066-4.126	1.616e+04
	4.238	4.208-4.268	1.681e+04
8 Aroclor-1262	3.706	3.676-3.736	1.423e+04
	3.868	3.838-3.898	1.874e+04
	4.099	4.069-4.129	2.315e+04
	4.241	4.211-4.271	2.110e+04
	4.421	4.391-4.451	4.350e+04
9 Aroclor-1268	4.606	4.576-4.636	4.848e+04
	4.628	4.598-4.658	5.448e+04
	4.741	4.711-4.771	3.862e+04
	4.943	4.913-4.973	1.635e+04
	5.108	5.078-5.138	1.121e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.913	1.883-1.943	3.895e+05
\$ 12 Decachlorobiphenyl	5.216	5.186-5.246	2.969e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Quant Method : ESTD Target Version : 3.50
Last Update : 18-Mar-2010 06:43 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events

Values

Initial:Start Threshold 7222.000000
Initial:End Threshold 3611.000000
Initial:Area Threshold 6833.000000
Initial:P-P Resolution 0.000000
Initial:Bunch Factor 2.000000
Initial:Negative Peaks OFF
Initial:Tension 0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.166	3.136-3.196	1.258e+04
	3.248	3.218-3.278	8.634e+03
	3.312	3.282-3.342	5.287e+03
	3.538	3.508-3.568	6.893e+03
	3.614	3.584-3.644	6.423e+03
62 4,4-DDT	4.642	4.622-4.662	7.489e+04
63 4,4-DDE	4.111	4.091-4.131	2.469e+05
64 4,4-DDD	4.455	4.435-4.475	1.989e+05
2 Aroclor-1221	2.468	2.438-2.498	3.250e+03
	2.562	2.532-2.592	2.084e+03
	2.603	2.573-2.633	7.320e+03
3 Aroclor-1232	2.869	2.839-2.899	5.054e+03
	3.166	3.136-3.196	5.712e+03
	3.250	3.220-3.280	3.888e+03
	3.540	3.510-3.570	2.840e+03
4 Aroclor-1242	3.774	3.744-3.804	2.821e+03
	3.167	3.137-3.197	1.014e+04
	3.249	3.219-3.279	7.097e+03
	3.540	3.510-3.570	5.514e+03
	3.773	3.743-3.803	5.722e+03
	3.802	3.772-3.832	6.370e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.376	3.346-3.406	7.604e+03
	3.541	3.511-3.571	9.470e+03
	3.774	3.744-3.804	1.093e+04
	3.801	3.771-3.831	1.216e+04
	3.938	3.908-3.968	1.181e+04
6 Aroclor-1254	3.375	3.345-3.405	6.021e+03
	3.797	3.767-3.827	1.082e+04
	3.914	3.884-3.944	1.193e+04
	4.189	4.159-4.219	1.644e+04
	4.325	4.295-4.355	1.212e+04
7 Aroclor-1260	4.304	4.274-4.334	1.308e+04
	4.429	4.399-4.459	1.555e+04
	4.695	4.665-4.725	1.190e+04
	4.868	4.838-4.898	1.229e+04
	5.015	4.985-5.045	2.639e+04
8 Aroclor-1262	4.431	4.401-4.461	1.160e+04
	4.696	4.666-4.726	1.620e+04
	4.869	4.839-4.899	1.484e+04
	5.016	4.986-5.046	2.937e+04
	5.229	5.199-5.259	2.065e+04
9 Aroclor-1268	5.228	5.198-5.258	3.730e+04
	5.256	5.226-5.286	3.492e+04
	5.405	5.375-5.435	2.658e+04
	5.570	5.540-5.600	1.223e+04
	5.763	5.733-5.793	7.433e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.271	2.241-2.301	2.623e+05
\$ 12 Decachlorobiphenyl	5.913	5.883-5.943	1.872e+05

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
 End Cal Date : 11-MAR-2010 20:22
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
 Cal Date : 18-Mar-2010 06:43 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdl1a.i/022210.b/032f3201.d
 Level 2: /chem/ecdl1a.i/022210.b/033f3301.d
 Level 3: /chem/ecdl1a.i/022210.b/034f3401.d
 Level 4: /chem/ecdl1a.i/022210.b/035f3501.d
 Level 5: /chem/ecdl1a.i/022210.b/036f3601.d

	100.000	250.000	500.000	1000.000	4000.000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
1 Aroclor-1016(1)	17517	15916	14941	14342	13168	15177	10.833
(2)	20378	19291	18809	18310	17891	18936	5.082
(3)	13830	13020	12255	11836	11271	12442	8.071
(4)	7957	7573	7201	7091	6919	7348	5.665
(5)	10680	9850	9332	8998	8729	9518	8.119
63 4,4-DDD	++++	++++	++++	313980	++++	313980	0.000
64 4,4-DDE	++++	++++	++++	372684	++++	372684	0.000
62 4,4-DDT	++++	++++	++++	236265	++++	236265	0.000
2 Aroclor-1221(1)	++++	++++	++++	4466	++++	4466	0.000
(2)	++++	++++	++++	2447	++++	2447	0.000
(3)	++++	++++	++++	10828	++++	10828	0.000
3 Aroclor-1232(1)	++++	++++	++++	6667	++++	6667	0.000
(2)	++++	++++	++++	8344	++++	8344	0.000
(3)	++++	++++	++++	5531	++++	5531	0.000
(4)	++++	++++	++++	2649	++++	2649	0.000
(5)	++++	++++	++++	3555	++++	3555	0.000
4 Aroclor-1242(1)	14179	12973	12200	11692	10617	12332	10.871
(2)	16141	15119	14927	14559	13766	14903	5.801
(3)	6352	6182	5816	5703	5424	5896	6.324
(4)	8823	8005	7582	7293	6975	7735	9.260
(5)	7955	7511	7149	7022	6787	7285	6.273
5 Aroclor-1248(1)	11183	10572	9738	9526	8980	10000	8.748
(2)	14876	13683	12753	12517	11873	13140	8.885
(3)	15448	14508	14083	13911	13564	14303	5.068
(4)	13161	12385	11501	11480	10960	11898	7.335
(5)	8649	8385	7955	7608	7427	8005	6.411

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
 End Cal Date : 11-MAR-2010 20:22
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1.i/0317107.b/ECD1-F-8082-031110b.m
 Cal Date : 18-Mar-2010 06:43 yip00818
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	15079	13757	12872	12576	12027	13262	8.998
(2)	20126	18408	17163	17147	16322	17833	8.313
(3)	24516	23104	21642	21571	21024	22371	6.372
(4)	18056	17097	15691	15840	15766	16490	6.365
(5)	18024	16683	15151	15091	14874	15964	8.504
7 Aroclor-1260(1)	20231	18737	18018	17739	16925	18330	6.792
(2)	29345	27114	26401	26314	25275	26890	5.656
(3)	30716	28501	27786	27176	27398	28315	5.062
(4)	17775	16311	15776	15627	15300	16158	6.034
(5)	18203	16850	16463	16434	16114	16813	4.876
8 Aroclor-1262(1)	++++	++++	++++	14232	++++	14232	0.000
(2)	++++	++++	++++	18742	++++	18742	0.000
(3)	++++	++++	++++	23151	++++	23151	0.000
(4)	++++	++++	++++	21098	++++	21098	0.000
(5)	++++	++++	++++	43500	++++	43500	0.000
9 Aroclor-1268(1)	49163	48928	48151	48132	48019	48478	1.086
(2)	55254	54719	54718	54649	53075	54483	1.512
(3)	39937	38826	38121	38191	38006	38616	2.083
(4)	16234	16191	16152	16347	16815	16348	1.657
(5)	114910	115297	111446	111050	107804	112101	2.753
10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
\$ 11 4cmx	407603	391717	384007	385362	378927	389523	2.846
\$ 12 Decachlorobiphenyl	324859	292709	291687	292552	282844	296930	5.438

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 11-MAR-2010 20:22
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Cal Date : 18-Mar-2010 06:43 yip00818
Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdla.i/022210.b/032b3201.d
Level 2: /chem/ecdla.i/022210.b/033b3301.d
Level 3: /chem/ecdla.i/022210.b/034b3401.d
Level 4: /chem/ecdla.i/022210.b/035b3501.d
Level 5: /chem/ecdla.i/022210.b/036b3601.d

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	14376	12782	12025	12307	11436	12585	8.846
(2)	10090	9074	8445	8099	7462	8634	11.594
(3)	6137	5472	5151	4973	4701	5287	10.435
(4)	7962	7103	6817	6522	6060	6893	10.318
(5)	7497	6686	6263	5965	5703	6423	10.948
62 4,4-DDT	++++	++++	++++	74891	++++	74891	0.000
63 4,4-DDE	++++	++++	++++	246875	++++	246875	0.000
64 4,4-DDD	++++	++++	++++	198885	++++	198885	0.000
2 Aroclor-1221(1)	++++	++++	++++	3250	++++	3250	0.000
(2)	++++	++++	++++	2084	++++	2084	0.000
(3)	++++	++++	++++	7320	++++	7320	0.000
3 Aroclor-1232(1)	++++	++++	++++	5054	++++	5054	0.000
(2)	++++	++++	++++	5712	++++	5712	0.000
(3)	++++	++++	++++	3888	++++	3888	0.000
(4)	++++	++++	++++	2840	++++	2840	0.000
(5)	++++	++++	++++	2821	++++	2821	0.000
4 Aroclor-1242(1)	11230	10514	10117	9526	9309	10139	7.634
(2)	8350	7546	6909	6642	6036	7097	12.487
(3)	6442	5836	5387	5177	4727	5514	11.868
(4)	6626	6011	5573	5400	4999	5722	10.877
(5)	7365	6655	6241	6005	5582	6370	10.658
5 Aroclor-1248(1)	9056	8166	7435	6980	6383	7604	13.684
(2)	11093	10088	9257	8814	8097	9470	12.242
(3)	12505	11602	10677	10284	9581	10930	10.466
(4)	13890	12873	11986	11379	10657	12157	10.405
(5)	13590	12468	11541	11009	10453	11812	10.502

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
 End Cal Date : 11-MAR-2010 20:22
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl.a.i/0317107.b/ECD1-B-8082-031110b.m
 Cal Date : 18-Mar-2010 06:43 yip00818
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	7300	6493	5824	5480	5009	6021	14.886
(2)	12825	11548	10490	9974	9262	10820	12.909
(3)	14182	12643	11550	11031	10262	11934	12.788
(4)	19027	17317	15983	15442	14439	16442	10.826
(5)	14064	13049	11651	11174	10640	12116	11.634
7 Aroclor-1260(1)	15189	13569	12744	12369	11530	13080	10.610
(2)	17885	16016	15152	14853	13838	15549	9.776
(3)	13812	12250	11562	11271	10585	11896	10.311
(4)	14218	12635	11954	11625	11015	12289	9.981
(5)	29595	26825	25949	25629	23976	26395	7.824
8 Aroclor-1262(1)	++++	++++	++++	11597	++++	11597	0.000
(2)	++++	++++	++++	16200	++++	16200	0.000
(3)	++++	++++	++++	14838	++++	14838	0.000
(4)	++++	++++	++++	29366	++++	29366	0.000
(5)	++++	++++	++++	20651	++++	20651	0.000
9 Aroclor-1268(1)	41829	39003	36612	35751	33294	37298	8.721
(2)	39747	36378	33891	33096	31474	34917	9.246
(3)	30202	27679	25801	25188	24032	26580	9.093
(4)	14370	12834	11677	11309	10971	12232	11.329
(5)	81955	77588	73073	71224	67792	74326	7.452
M 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
11 4cmx	286554	267083	258607	255362	244057	262333	6.044
12 Decachlorobiphenyl	217815	191410	181026	177515	168101	187173	10.178

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0608
 Lab File ID: 002F0201 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15176.803	13679.245	0.01	-9.9	15.0
(2)	18935.774	17352.542	0.01	-8.4	15.0
(3)	12442.153	10865.667	0.01	-12.7	15.0
(4)	7348.319	6489.606	0.01	-11.7	15.0
(5)	9517.775	8337.119	0.01	-12.4	15.0
Aroclor-1260	18330.091	17103.795	0.01	-6.7	15.0
(2)	26889.831	24999.856	0.01	-7.0	15.0
(3)	28315.304	26757.729	0.01	-5.5	15.0
(4)	16157.873	15105.144	0.01	-6.5	15.0
(5)	16812.669	15681.925	0.01	-6.7	15.0
4cmx	389523.02	384270.94	0.01	-1.3	15.0
Decachlorobiphenyl	296930.38	280327.80	0.01	-5.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0608
 Lab File ID: 002B0201 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12584.978	11257.869	0.01	-10.5	15.0
(2)	8634.207	7602.660	0.01	-11.9	15.0
(3)	5286.637	4622.469	0.01	-12.6	15.0
(4)	6892.719	6158.940	0.01	-10.6	15.0
(5)	6422.564	5755.354	0.01	-10.4	15.0
Aroclor-1260	13080.231	12494.202	0.01	-4.5	15.0
(2)	15549.023	15069.938	0.01	-3.1	15.0
(3)	11896.069	11423.166	0.01	-4.0	15.0
(4)	12289.216	11829.647	0.01	-3.7	15.0
(5)	26394.638	26003.137	0.01	-1.5	15.0
4cmx	262332.66	257488.80	0.01	-1.8	15.0
Decachlorobiphenyl	187173.38	178998.77	0.01	-4.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0629
 Lab File ID: 004F0401 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1837 1919
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1242	12332.204	11593.290	0.01	-6.0	15.0
(2)	14902.512	14537.144	0.01	-2.4	15.0
(3)	5895.606	5553.924	0.01	-5.8	15.0
(4)	7735.479	7095.279	0.01	-8.3	15.0
(5)	7284.532	6386.220	0.01	-12.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0629
 Lab File ID: 004B0401 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1837 1919
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1242	10139.181	9708.362	0.01	-4.2	15.0
(2)	7096.726	6621.849	0.01	-6.7	15.0
(3)	5513.568	5140.297	0.01	-6.8	15.0
(4)	5721.948	5254.316	0.01	-8.2	15.0
(5)	6369.562	5963.672	0.01	-6.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0853
 Lab File ID: 017F1701 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	15176.803	13072.214	0.01	-13.9	15.0
(2)	18935.774	16743.348	0.01	-11.6	15.0
(3)	12442.153	10753.369	0.01	-13.6	15.0
(4)	7348.319	6446.442	0.01	-12.3	15.0
(5)	9517.775	8110.441	0.01	-14.8	15.0
Aroclor-1260	18330.091	16962.461	0.01	-7.5	15.0
(2)	26889.831	24950.358	0.01	-7.2	15.0
(3)	28315.304	26635.100	0.01	-5.9	15.0
(4)	16157.873	14960.531	0.01	-7.4	15.0
(5)	16812.669	15562.577	0.01	-7.4	15.0
=====	=====	=====	=====	=====	=====
4cmx	389523.02	378611.37	0.01	-2.8	15.0
Decachlorobiphenyl	296930.38	274816.37	0.01	-7.4	15.0
=====	=====	=====	=====	=====	=====

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 0853
 Lab File ID: 017B1701 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12584.978	11589.187	0.01	-7.9	15.0
(2)	8634.207	7549.847	0.01	-12.6	15.0
(3)	5286.637	4630.370	0.01	-12.4	15.0
(4)	6892.719	6092.955	0.01	-11.6	15.0
(5)	6422.564	5704.793	0.01	-11.2	15.0
Aroclor-1260	13080.231	12259.396	0.01	-6.3	15.0
(2)	15549.023	14795.087	0.01	-4.8	15.0
(3)	11896.069	11161.788	0.01	-6.2	15.0
(4)	12289.216	11576.871	0.01	-5.8	15.0
(5)	26394.638	25583.684	0.01	-3.1	15.0
4cmx	262332.66	254467.07	0.01	-3.0	15.0
Decachlorobiphenyl	187173.38	175017.13	0.01	-6.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 1116
 Lab File ID: 029F2901 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15176.803	13459.448	0.01	-11.3	15.0
(2)	18935.774	17913.772	0.01	-5.4	15.0
(3)	12442.153	11186.273	0.01	-10.1	15.0
(4)	7348.319	6757.155	0.01	-8.0	15.0
(5)	9517.775	8551.705	0.01	-10.2	15.0
Aroclor-1260	18330.091	17641.116	0.01	-3.8	15.0
(2)	26889.831	26151.299	0.01	-2.7	15.0
(3)	28315.304	28122.089	0.01	-0.7	15.0
(4)	16157.873	15875.614	0.01	-1.7	15.0
(5)	16812.669	16480.192	0.01	-2.0	15.0
4cmx	389523.02	390929.60	0.01	0.4	15.0
Decachlorobiphenyl	296930.38	291264.44	0.01	-1.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 1116
 Lab File ID: 029B2901 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	12584.978	11451.255	0.01	-9.0	15.0
(2)	8634.207	7723.504	0.01	-10.5	15.0
(3)	5286.637	4799.447	0.01	-9.2	15.0
(4)	6892.719	6302.422	0.01	-8.6	15.0
(5)	6422.564	5927.749	0.01	-7.7	15.0
Aroclor-1260	13080.231	12518.850	0.01	-4.3	15.0
(2)	15549.023	15297.014	0.01	-1.6	15.0
(3)	11896.069	11499.757	0.01	-3.3	15.0
(4)	12289.216	11961.723	0.01	-2.7	15.0
(5)	26394.638	26522.429	0.01	0.5	15.0
=====	=====	=====	=====	=====	=====
4cmx	262332.66	259596.09	0.01	-1.0	15.0
Decachlorobiphenyl	187173.38	181439.93	0.01	-3.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 1345
 Lab File ID: 041F4101 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15176.803	13740.657	0.01	-9.5	15.0
(2)	18935.774	17708.818	0.01	-6.5	15.0
(3)	12442.153	11345.501	0.01	-8.8	15.0
(4)	7348.319	6882.554	0.01	-6.3	15.0
(5)	9517.775	8830.871	0.01	-7.2	15.0
Aroclor-1260	18330.091	18503.233	0.01	0.9	15.0
(2)	26889.831	27155.414	0.01	1.0	15.0
(3)	28315.304	29180.860	0.01	3.0	15.0
(4)	16157.873	16467.549	0.01	1.9	15.0
(5)	16812.669	17157.620	0.01	2.0	15.0
4cmx	389523.02	399086.43	0.01	2.4	15.0
Decachlorobiphenyl	296930.38	295161.55	0.01	-0.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 Instrument ID: ECD1A Calibration Date: 03/17/10 Time: 1345
 Lab File ID: 041B4101 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1631 1713
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	12584.978	12114.864	0.01	-3.7	15.0
(2)	8634.207	7846.163	0.01	-9.1	15.0
(3)	5286.637	4874.001	0.01	-7.8	15.0
(4)	6892.719	6333.688	0.01	-8.1	15.0
(5)	6422.564	5813.034	0.01	-9.5	15.0
Aroclor-1260	13080.231	12801.946	0.01	-2.1	15.0
(2)	15549.023	15573.032	0.01	0.2	15.0
(3)	11896.069	11664.978	0.01	-1.9	15.0
(4)	12289.216	12135.049	0.01	-1.2	15.0
(5)	26394.638	26859.913	0.01	1.8	15.0
=====	=====	=====	=====	=====	=====
4cmx	262332.66	265274.04	0.01	1.1	15.0
Decachlorobiphenyl	187173.38	183690.27	0.01	-1.9	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/002f0201.d
 Lab Smp Id: WAR100222-60 01 Client Smp ID: AR166001
 Inj Date : 17-MAR-2010 06:08
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100222-60 01
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
 Meth Date : 17-Mar-2010 08:52 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpclp1

AMOUNTS							
			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
11 4cmx					CAS #: 877-09-8		
1.913	1.913	0.000	38427094	100.000	98.6	80.00- 120.00	100.00

12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.216	5.216	0.000	28032780	100.000	94.4	80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2		
2.366	2.366	0.000	13679245	1000.00	901	80.00- 120.00	100.00
2.651	2.651	0.000	17352542	1000.00	916	106.85- 146.85	126.85
2.732	2.732	0.000	10865667	1000.00	873	59.43- 99.43	79.43
2.768	2.768	0.000	6489606	1000.00	883	27.44- 67.44	47.44
2.978	2.978	0.000	8337119	1000.00	876	40.95- 80.95	60.95
Average of Peak Amounts =					890		

7 Aroclor-1260					CAS #: 11096-82-5		
3.703	3.703	0.000	17103795	1000.00	933	80.00- 120.00	100.00
3.866	3.866	0.000	24999856	1000.00	930	126.17- 166.17	146.17
4.028	4.028	0.000	26757729	1000.00	945	136.44- 176.44	156.44
4.096	4.096	0.000	15105144	1000.00	935	68.31- 108.31	88.31
4.238	4.238	0.000	15681925	1000.00	933	71.69- 111.69	91.69
Average of Peak Amounts =					935		

Data File: /chem/ecdl1.i/0317107.b/002f0201.d

Date: 17-MAR-2010 06:08

Client ID: AR166001

Sample Info: IMAK100222-60 01

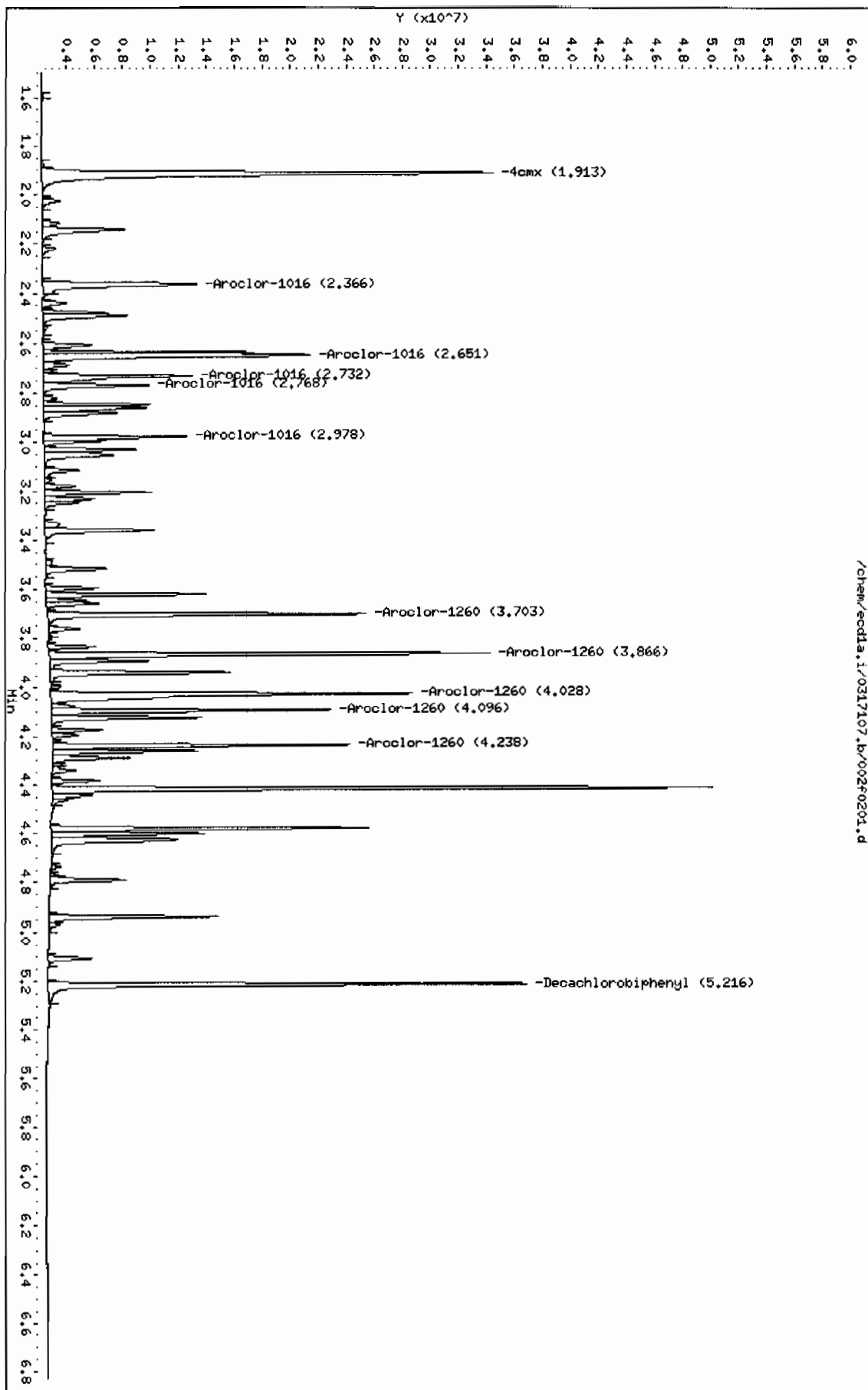
Column phase: CLP1

Instrument: ecdl1.i

Operator: YSI

Column diameter: 0.25

/chem/ecdl1.i/0317107.b/002f0201.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/002b0201.d

Lab Smp Id: WAR100222-60 01

Client Smp ID: AR166001

Inj Date : 17-MAR-2010 06:08

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100222-60 01

Misc Info :

Comment :

Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m

Meth Date : 17-Mar-2010 08:52 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS							
			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
11 4cmx					CAS #: 877-09-8		
2.271	2.271	0.000	25748880	100.000	98.2	80.00- 120.00	100.00

12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.913	5.913	0.000	17899877	100.000	95.6	80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2		
3.166	3.166	0.000	11257869	1000.00	894	80.00- 120.00	100.00 (M)
3.248	3.248	0.000	7602660	1000.00	880	47.53- 87.53	67.53
3.312	3.312	0.000	4622469	1000.00	874	21.06- 61.06	41.06
3.538	3.538	0.000	6158940	1000.00	894	34.71- 74.71	54.71
3.614	3.614	0.000	5755354	1000.00	896	31.12- 71.12	51.12
Average of Peak Amounts *					888		

7 Aroclor-1260					CAS #: 11096-82-5		
4.304	4.304	0.000	12494202	1000.00	955	80.00- 120.00	100.00
4.429	4.429	0.000	15069938	1000.00	969	100.62- 140.62	120.62
4.695	4.695	0.000	11423166	1000.00	960	71.43- 111.43	91.43
4.868	4.868	0.000	11829647	1000.00	963	74.68- 114.68	94.68
5.015	5.015	0.000	26003137	1000.00	985	188.12- 228.12	208.12
Average of Peak Amounts *					966		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/0317107.b/002b0201.d

Date: 17-MAR-2010 06:08

Client ID: AR166001

Sample Info: 11MRT00222-60 01

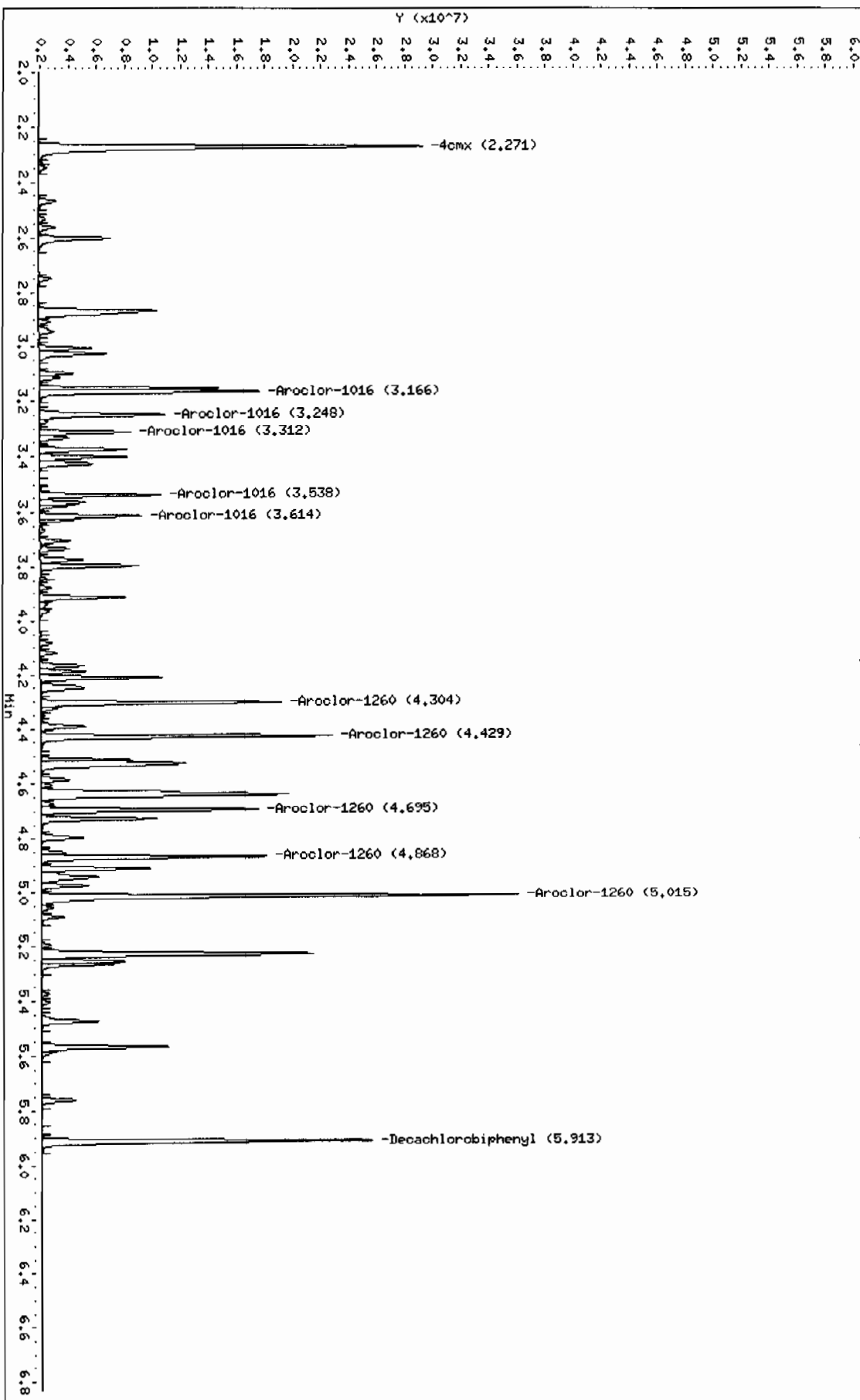
Column phase: CLP2

Instrument: eodla.i

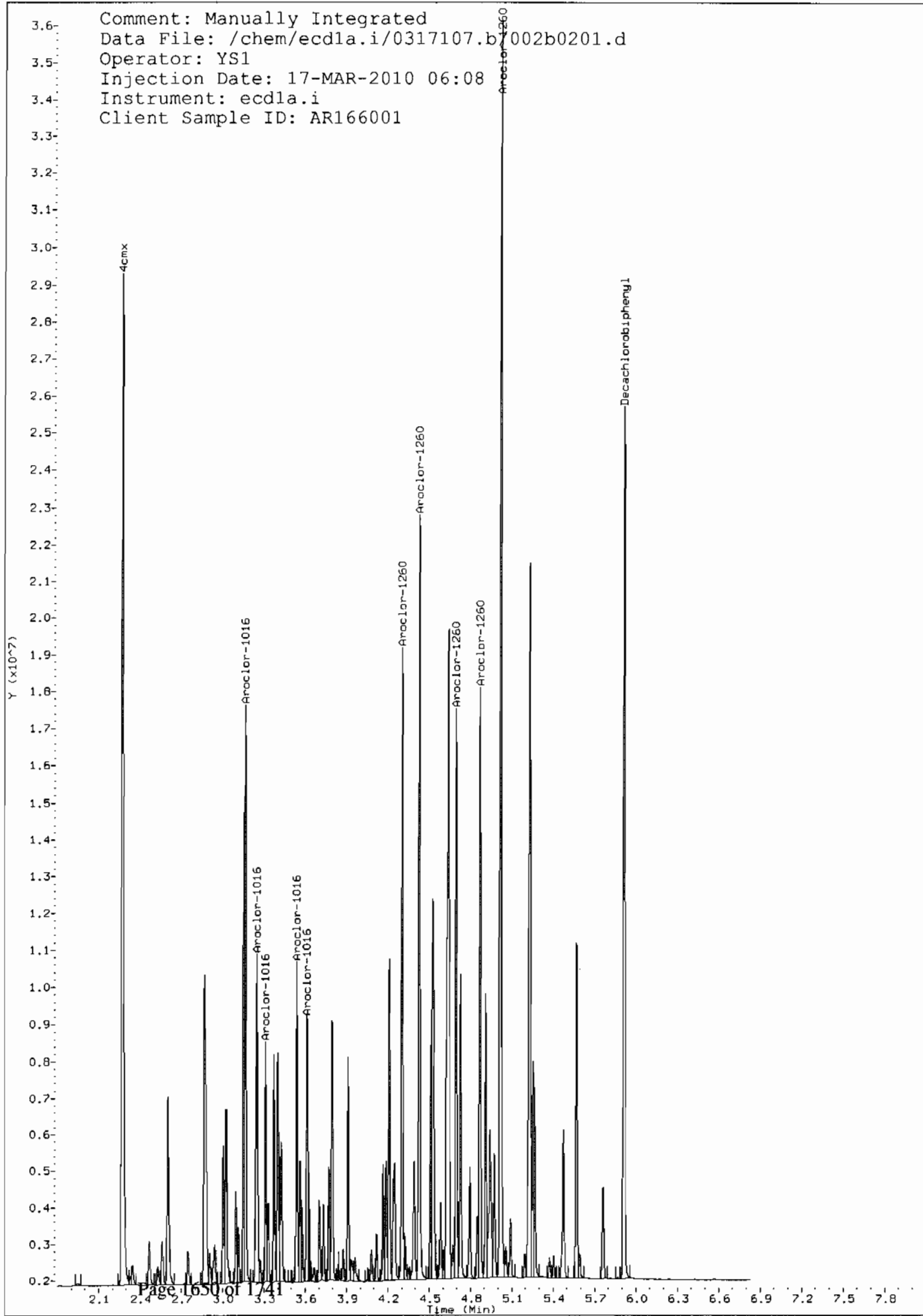
Operator: YSL

Column diameter: 0.25

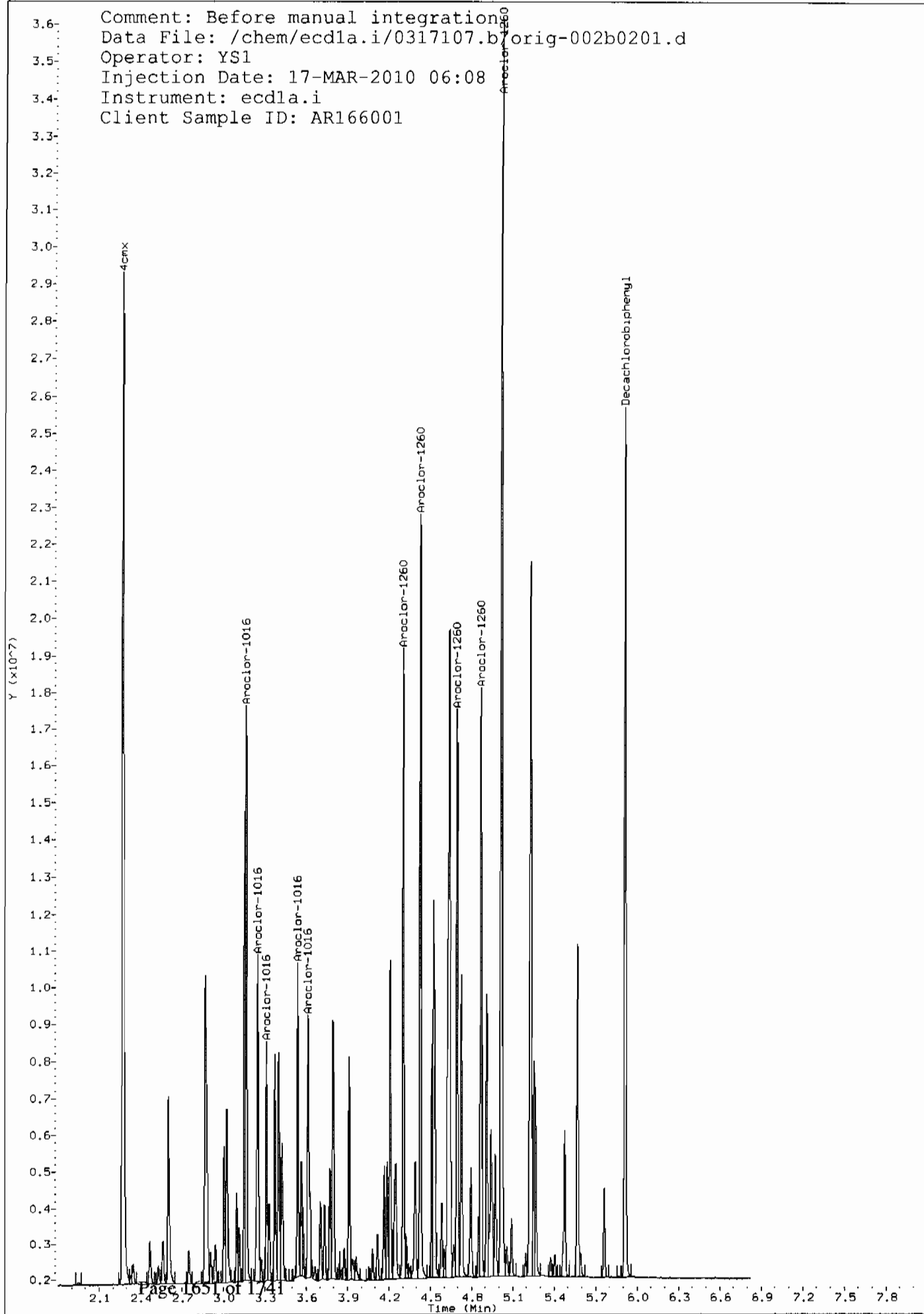
/chem/eodla.i/0317107.b/002b0201.d



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/0317107.b/002b0201.d
Operator: YS1
Injection Date: 17-MAR-2010 06:08
Instrument: ecd1a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdla.i/0317107.b orig-002b0201.d
Operator: YS1
Injection Date: 17-MAR-2010 06:08
Instrument: ecdla.i
Client Sample ID: AR166001



Data File: /chem/ecdl1a.i/0317107.b/003f0301.d
Report Date: 17-Mar-2010 08:52

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/003f0301.d

Lab Smp Id: WAR100219-54

Client Smp ID: AR125401

Inj Date : 17-MAR-2010 06:18

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100219-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m

Meth Date : 17-Mar-2010 08:52 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

6 Aroclor-1254

CAS #: 11097-69-1

3.209	3.209	0.000	11804928	1000.00	890 80.00- 120.00	100.00
3.364	3.364	0.000	15624759	1000.00	876 112.36- 152.36	132.36
3.598	3.598	0.000	20223062	1000.00	904 151.31- 191.31	171.31
3.760	3.760	0.000	14731608	1000.00	893 104.79- 144.79	124.79
3.869	3.869	0.000	14915377	1000.00	934 106.35- 146.35	126.35

Average of Peak Amounts =

900

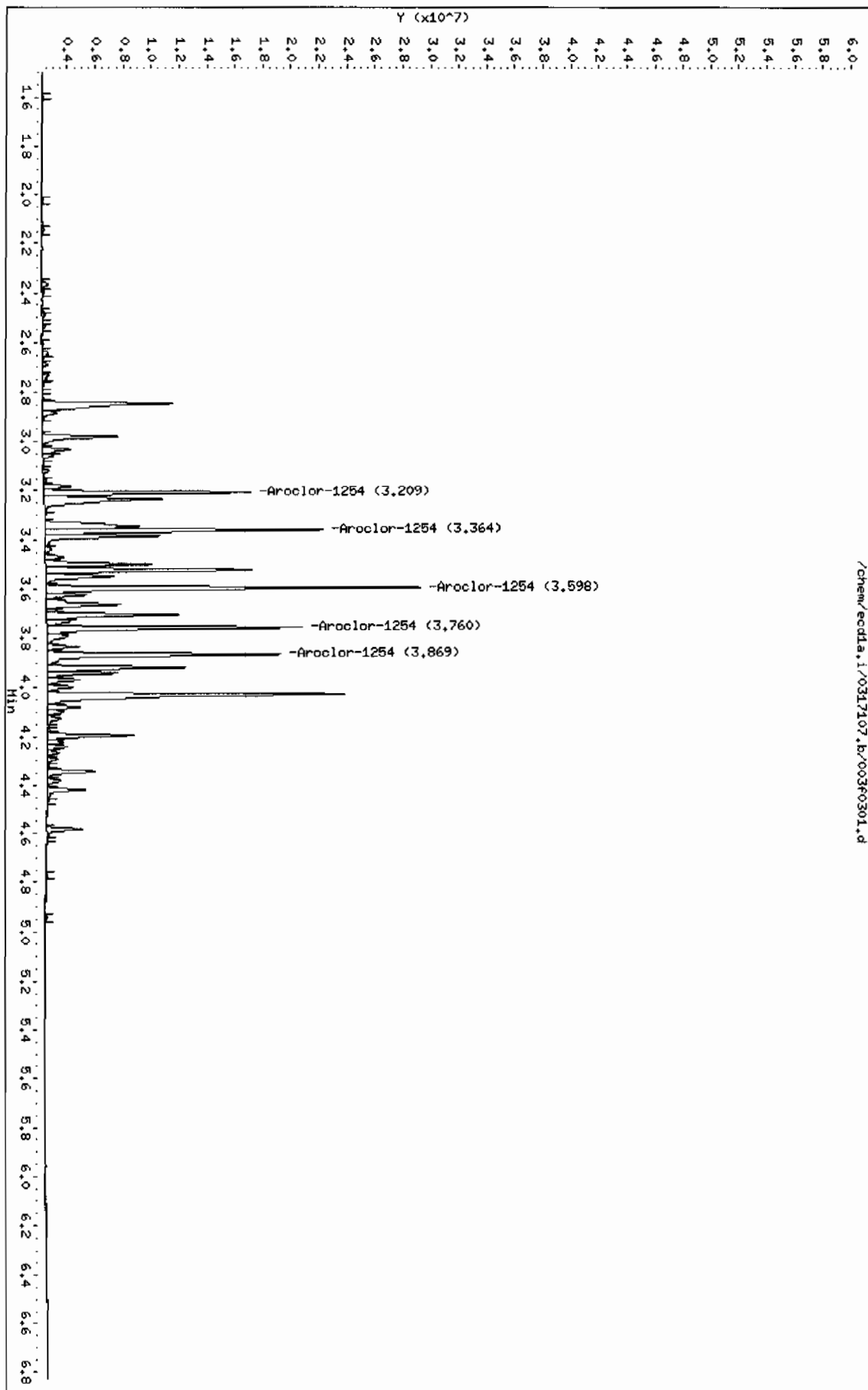
Data File: /chem/ecdda.i/0317107.b/003f0301.d
Date: 17-MAR-2010 06:18
Client ID: AR125401
Sample Info: IAPR100219-B4

Page 1

Column phase: CLP1

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25

/chem/ecdda.i/0317107.b/003f0301.d



Data File: /chem/ecdl1a.i/0317107.b/003b0301.d
Report Date: 17-Mar-2010 08:52

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/003b0301.d
Lab Smp Id: WAR100219-54 Client Smp ID: AR125401
Inj Date : 17-MAR-2010 06:18
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-54
Misc Info :
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclpl

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
----	--------	--------	-----------------------------	-------------------	--------------	-------

6 Aroclor-1254

CAS #: 11097-69-1

3.375	3.375	0.000	5433555 1000.00	902	80.00- 120.00	100.00
3.797	3.797	0.000	9922138 1000.00	917	162.61- 202.61	182.61
3.914	3.914	0.000	10795731 1000.00	905	178.69- 218.69	198.69
4.189	4.189	0.000	15040936 1000.00	915	256.82- 296.82	276.82
4.325	4.325	0.000	11339611 1000.00	936	188.70- 228.70	208.70

Average of Peak Amounts = 915

Data File: /chem/eodla.i/0317107.b/003b0301.d

Date: 17-MAR-2010 06:18

Client ID: AR125401

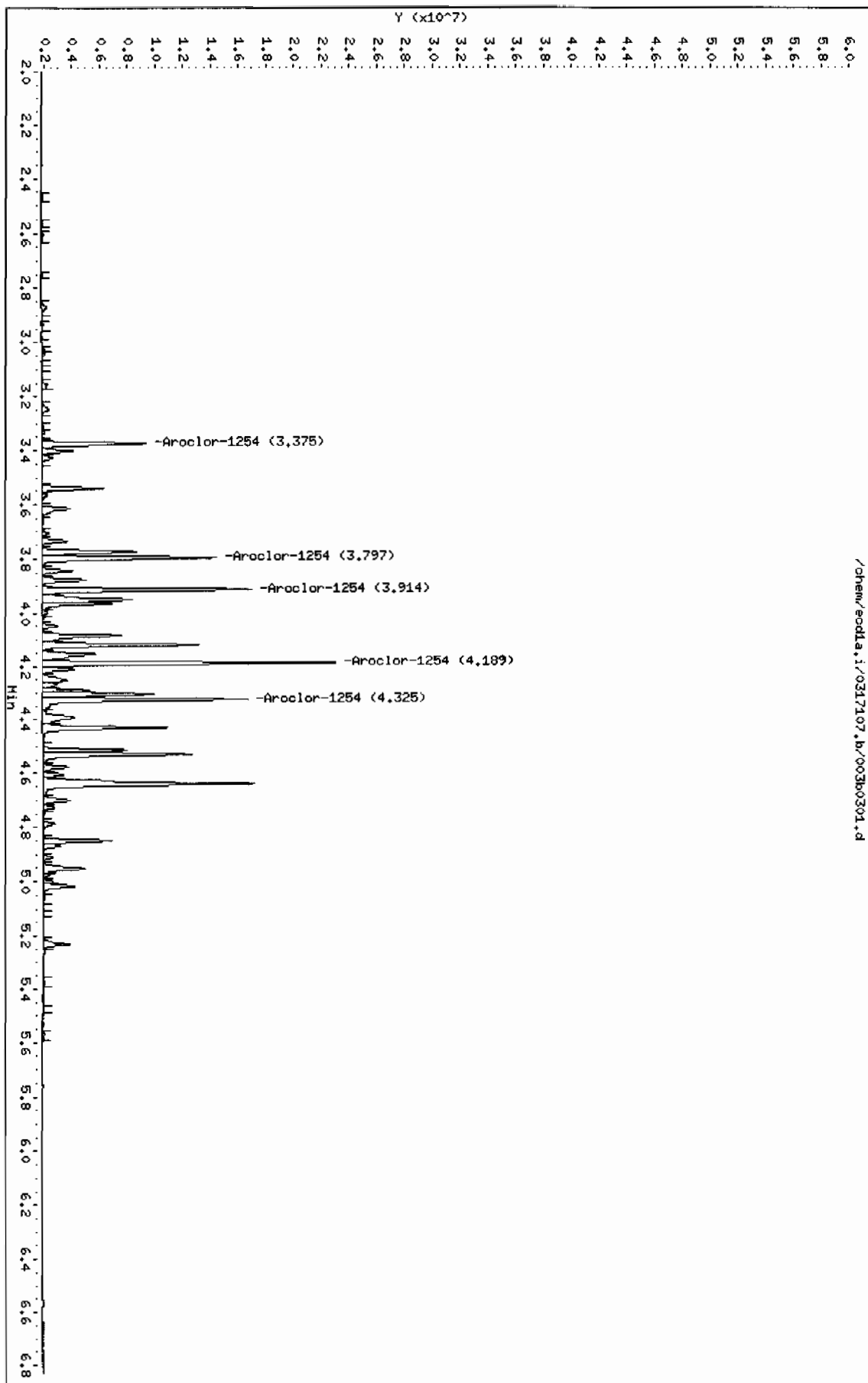
Sample Info: 1MAR100219-54

Page 1

Column phase: CLP2

Instrument: eodla.i
Operator: YSI
Column diameter: 0.25

/chem/eodla.i/0317107.b/003b0301.d



Data File: /chem/ecdl1a.i/0317107.b/004f0401.d
Report Date: 17-Mar-2010 08:53

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/004f0401.d
Lab Smp Id: WAR100219-42 Client Smp ID: AR124201
Inj Date : 17-MAR-2010 06:29
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-42
Misc Info :
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 08:53 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	*****	=====	=====	=====
4 Aroclor-1242			CAS #: 53469-21-9			
2.365	2.365	0.000	11593290 1000.00	940	80.00- 120.00	100.00
2.652	2.652	0.000	14537144 1000.00	975	105.39- 145.39	125.39
2.769	2.769	0.000	5553924 1000.00	942	27.91- 67.91	47.91
2.980	2.980	0.000	7095279 1000.00	917	41.20- 81.20	61.20
3.233	3.233	0.000	6386220 1000.00	877	35.09- 75.09	55.09
Average of Peak Amounts =			930			

Data File: /chem/ecdl1a.i/0317107.b/004f0401.d

Date: 17-MAR-2010 06:29

Client ID: AR124201

Sample Info: 1MAR100219-42

Column phase: CLP1

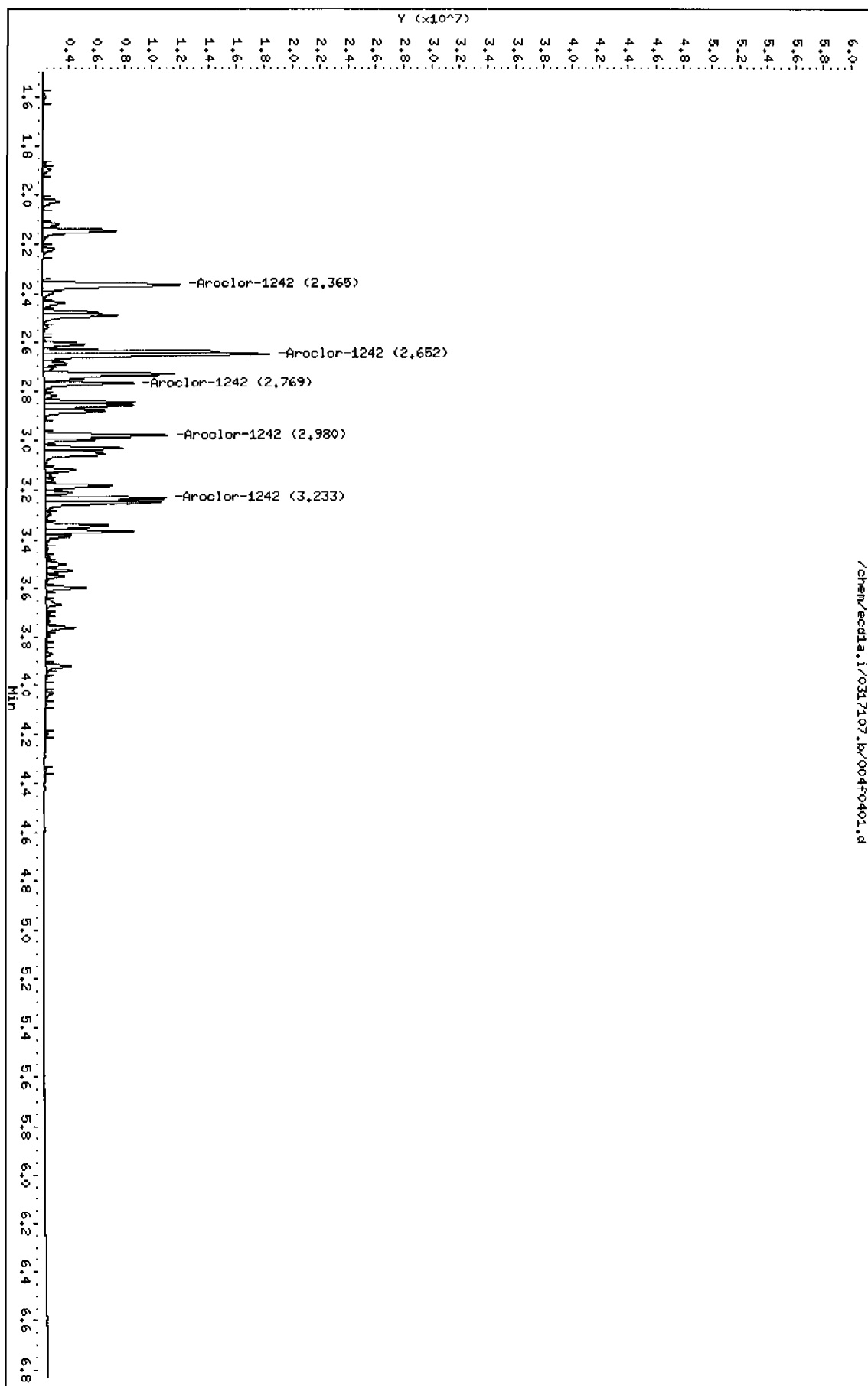
Page 1

Instrument: ecdl1a.i

Operator: YSI

Column diameter: 0.25

/chem/ecdl1a.i/0317107.b/004f0401.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/004b0401.d
Lab Smp Id: WAR100219-42 Client Smp ID: AR124201
Inj Date : 17-MAR-2010 06:29
Operator : YSl Inst ID: ecd1a.i
Smp Info : |WAR100219-42
Misc Info :
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
4						
Aroclor-1242			CAS #: 53469-21-9			
3.167	3.167	0.000	9708362 1000.00	958	80.00- 120.00	100.00
3.249	3.249	0.000	6621849 1000.00	933	48.21- 88.21	68.21
3.540	3.540	0.000	5140297 1000.00	932	32.95- 72.95	52.95
3.773	3.773	0.000	5254316 1000.00	918	34.12- 74.12	54.12
3.802	3.802	0.000	5963672 1000.00	936	41.43- 81.43	61.43
Average of Peak Amounts				935		

Data File: /chem/ecdl1a.i/0317107.b/004b0401.d

Date : 17-MAR-2010 06:29

Client ID: AR124201

Sample Info: 11MAR100219-42

Column phase: CLP2

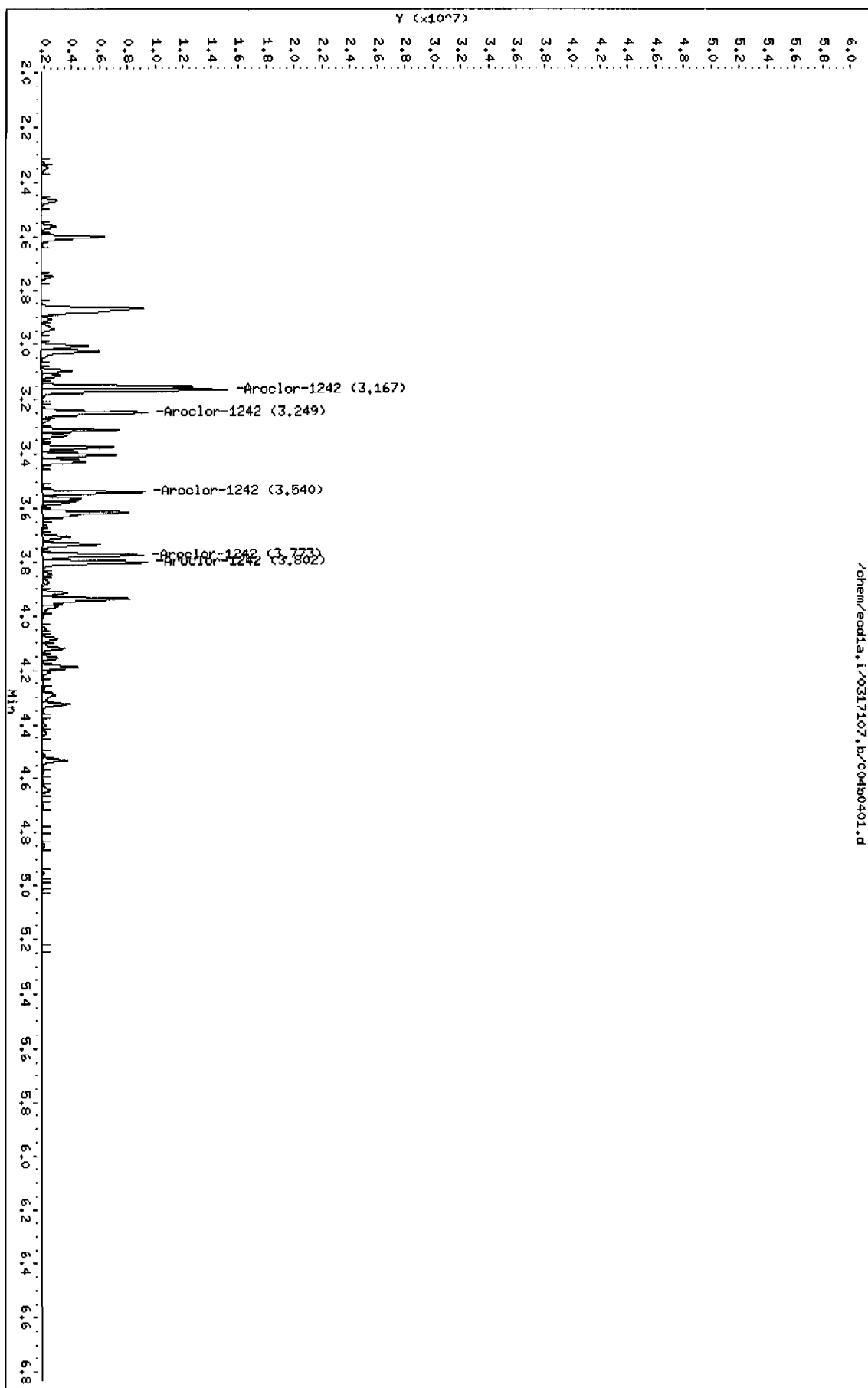
Page 1

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1a.i/0317107.b/004b0401.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/005f0501.d
Lab Smp Id: WAR100223-48 Client Smp ID: AR124801
Inj Date : 17-MAR-2010 06:39
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100223-48
Misc Info :
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 08:53 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5						
5 Aroclor-1248			CAS #: 12672-29-6			
2.846	2.846	0.000	9510059 1000.00	951	80.00- 120.00	100.00(M)
2.981	2.981	0.000	12717454 1000.00	968	113.73- 153.73	133.73
3.234	3.234	0.000	13366114 1000.00	934	120.55- 160.55	140.55
3.366	3.366	0.000	10901124 1000.00	916	94.63- 134.63	114.63
3.598	3.598	0.000	7582151 1000.00	947	59.73- 99.73	79.73
Average of Peak Amounts =			943			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/0317107.b/005f0501.d

Date: 17-MAR-2010 06:39

Client ID: RK124801

Sample Info: 1MAR100223-48

Column phase: CLP1

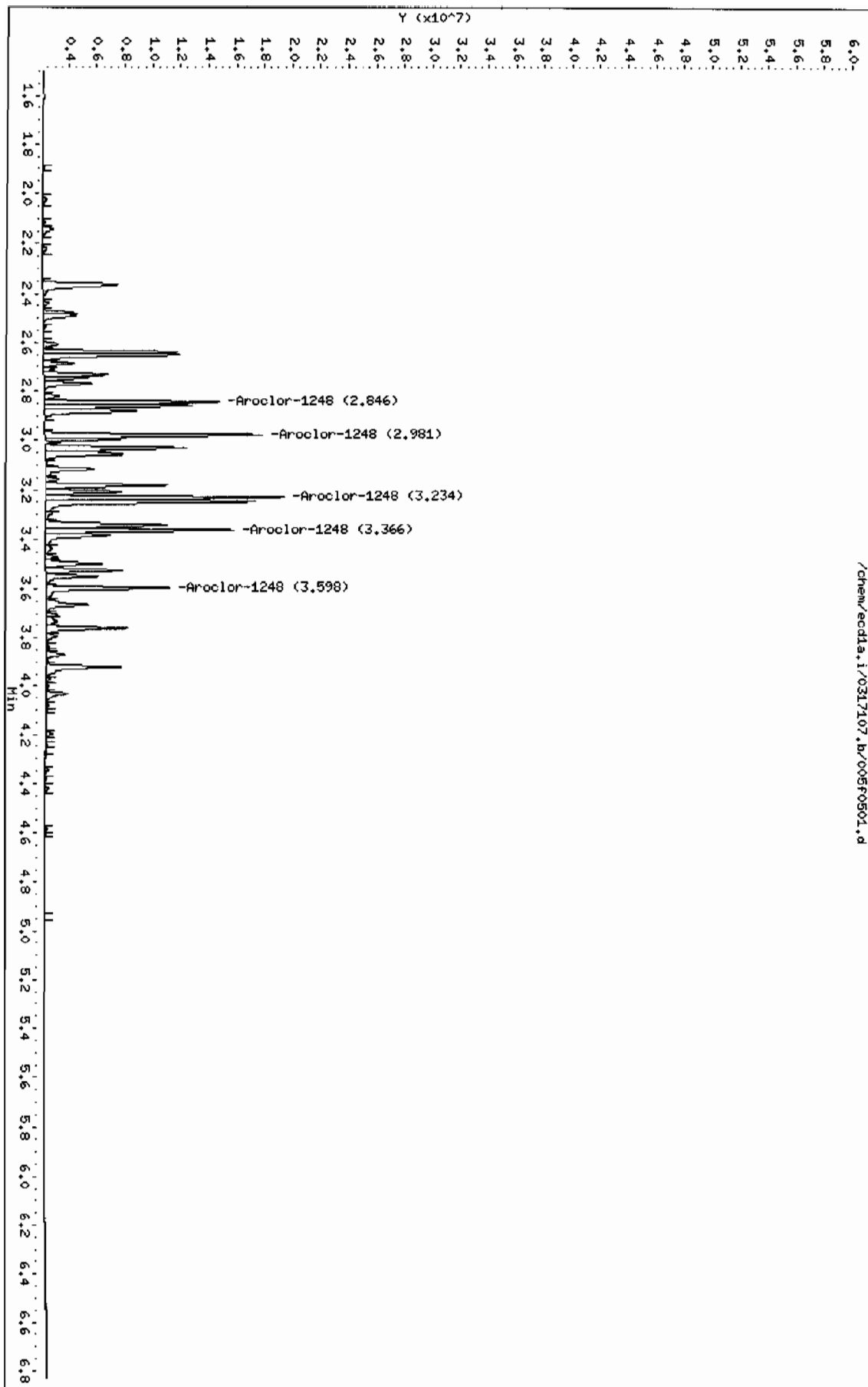
Page 1

Instrument: eod1a.i

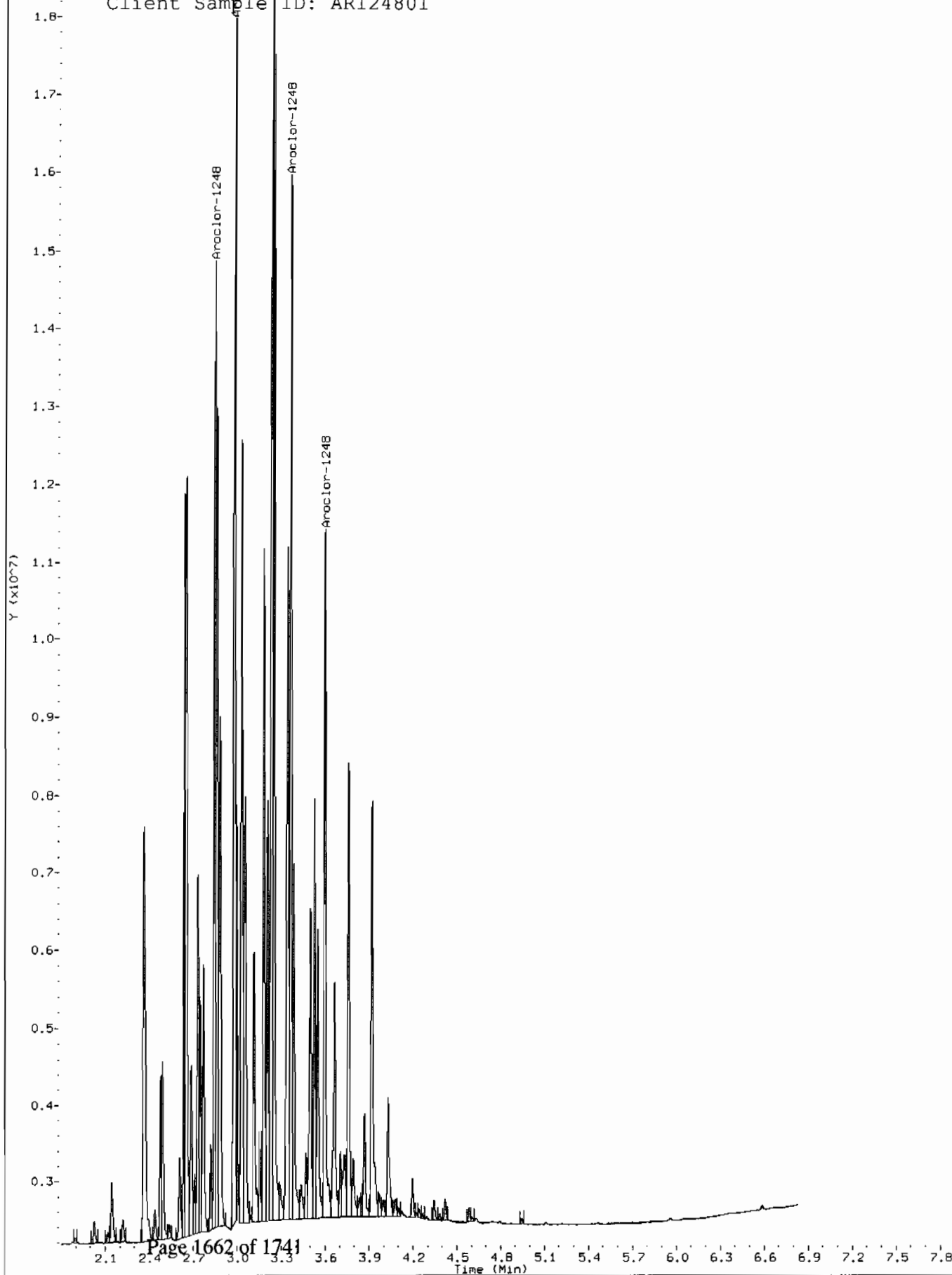
Operator: YSL

Column diameter: 0.25

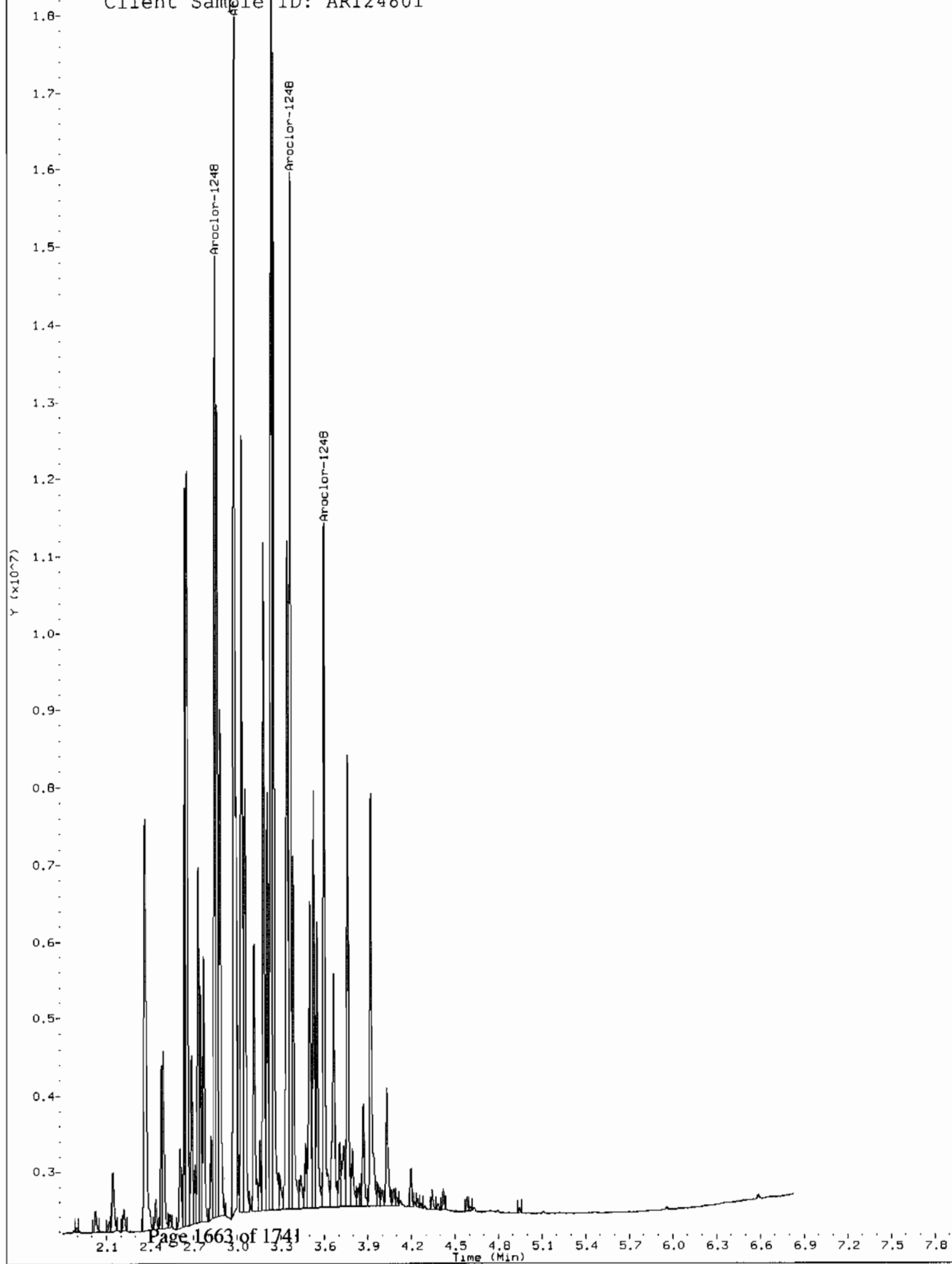
/chem/eod1a.i/0317107.b/005f0501.d



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/0317107.b/005f0501.d
Operator: J.S1
Injection Date: 17-MAR-2010 06:39
Instrument: ecdl1a.i
Client Sample ID: AR124801



Comment: Before manual integration
Data File: /chem/ecdl1a.i/0317107.b/orig-005f0501.d
Operator: S1
Injection Date: 17-MAR-2010 06:39
Instrument: ecdl1a.i
Client Sample ID: AR124801



Data File: /chem/ecdla.i/0317107.b/005b0501.d
Report Date: 17-Mar-2010 08:53

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/005b0501.d
Lab Smp Id: WAR100223-48 Client Smp ID: AR124801
Inj Date : 17-MAR-2010 06:39
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100223-48
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:53 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

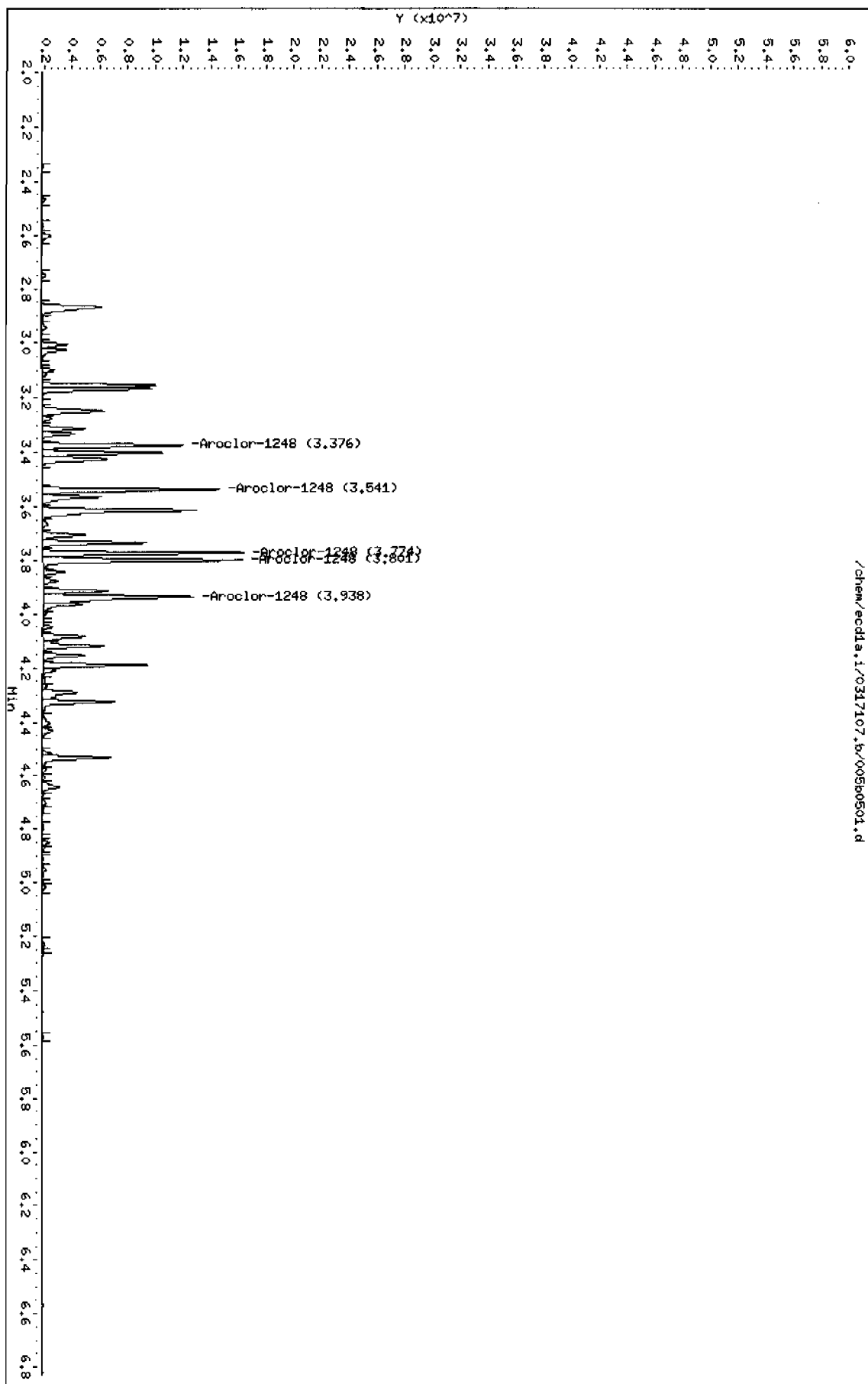
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5	3.376	3.376	0.000	7236477	1000.00	952 80.00- 120.00 100.00
	3.541	3.541	0.000	9076536	1000.00	958 105.43- 145.43 125.43
	3.774	3.774	0.000	10292916	1000.00	942 122.24- 162.24 142.24
	3.801	3.801	0.000	11574901	1000.00	952 139.95- 179.95 159.95
	3.938	3.938	0.000	11003666	1000.00	932 132.06- 172.06 152.06
Average of Peak Amounts =				947		

Data File: /chem/ecdl1.i/0317107.b/005b0501.d
Date: 17-MAR-2010 06:39
Client ID: AR124801
Sample Info: 1MR100223-48

Column phase: CLP2

Instrument: ecdl1.i
Operator: YSt
Column diameter: 0.25



Data File: /chem/ecdl1a.i/0317107.b/007f0701.d
Report Date: 17-Mar-2010 08:54

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/007f0701.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 17-MAR-2010 07:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 08:54 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.365	2.365	0.000	6445549 1000.00	967	80.00- 120.00	100.00
2.652	2.652	0.000	8203940 1000.00	983	107.28- 147.28	127.28
2.732	2.732	0.000	5266309 1000.00	952	61.70- 101.70	81.70
2.847	2.847	0.000	2540896 1000.00	959	19.42- 59.42	39.42
3.234	3.234	0.000	3243941 1000.00	912	30.33- 70.33	50.33
Average of Peak Amounts =				955		

Data File: /chem/ecdia.i/0317107.b/007f0701.d

Date: 17-MAR-2010 07:01

Client ID: AR123201

Sample Info: 1MR100104-32

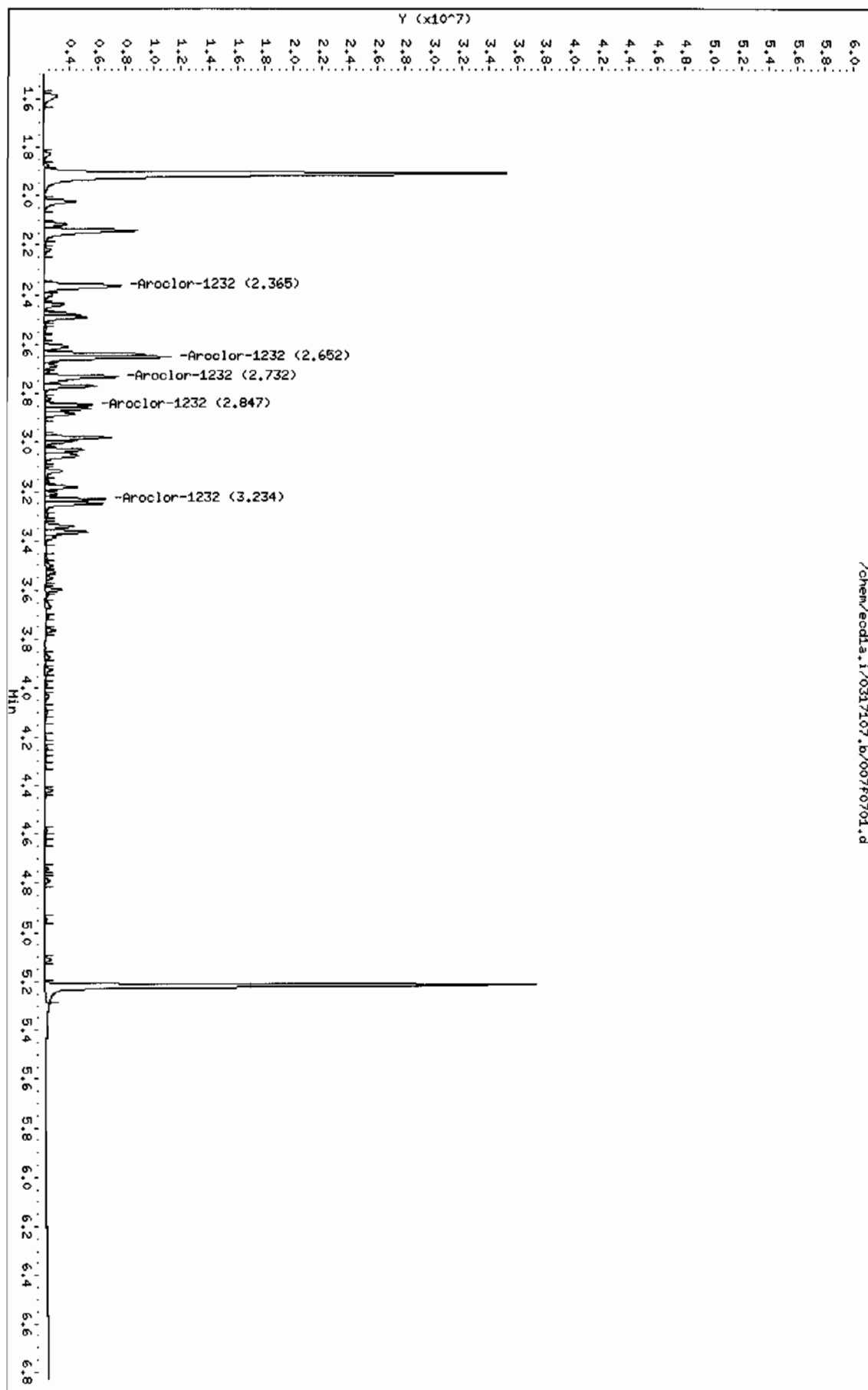
Column phase: CLP1

Instrument: ecdia.i

Operator: YS1

Column diameter: 0.25

/chem/ecdia.i/0317107.b/007f0701.d



Data File: /chem/ecdla.i/0317107.b/007b0701.d
Report Date: 17-Mar-2010 08:54

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/007b0701.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 17-MAR-2010 07:01
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:54 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.869	2.869	0.000	5036995 1000.00	997	80.00- 120.00	100.00
3.166	3.166	0.000	5500554 1000.00	963	89.20- 129.20	109.20
3.250	3.250	0.000	3863614 1000.00	994	56.70- 96.70	76.70
3.540	3.540	0.000	2837390 1000.00	999	36.33- 76.33	56.33
3.774	3.774	0.000	2755344 1000.00	977	34.70- 74.70	54.70
Average of Peak Amounts -				986		

Data File: /chem/ecdl1a.i/0317107.b/007b0701.d

Date: 17-MAR-2010 07:01

Client ID: AR123201

Sample Info: 1MAR100104-32

Column phase: CLP2

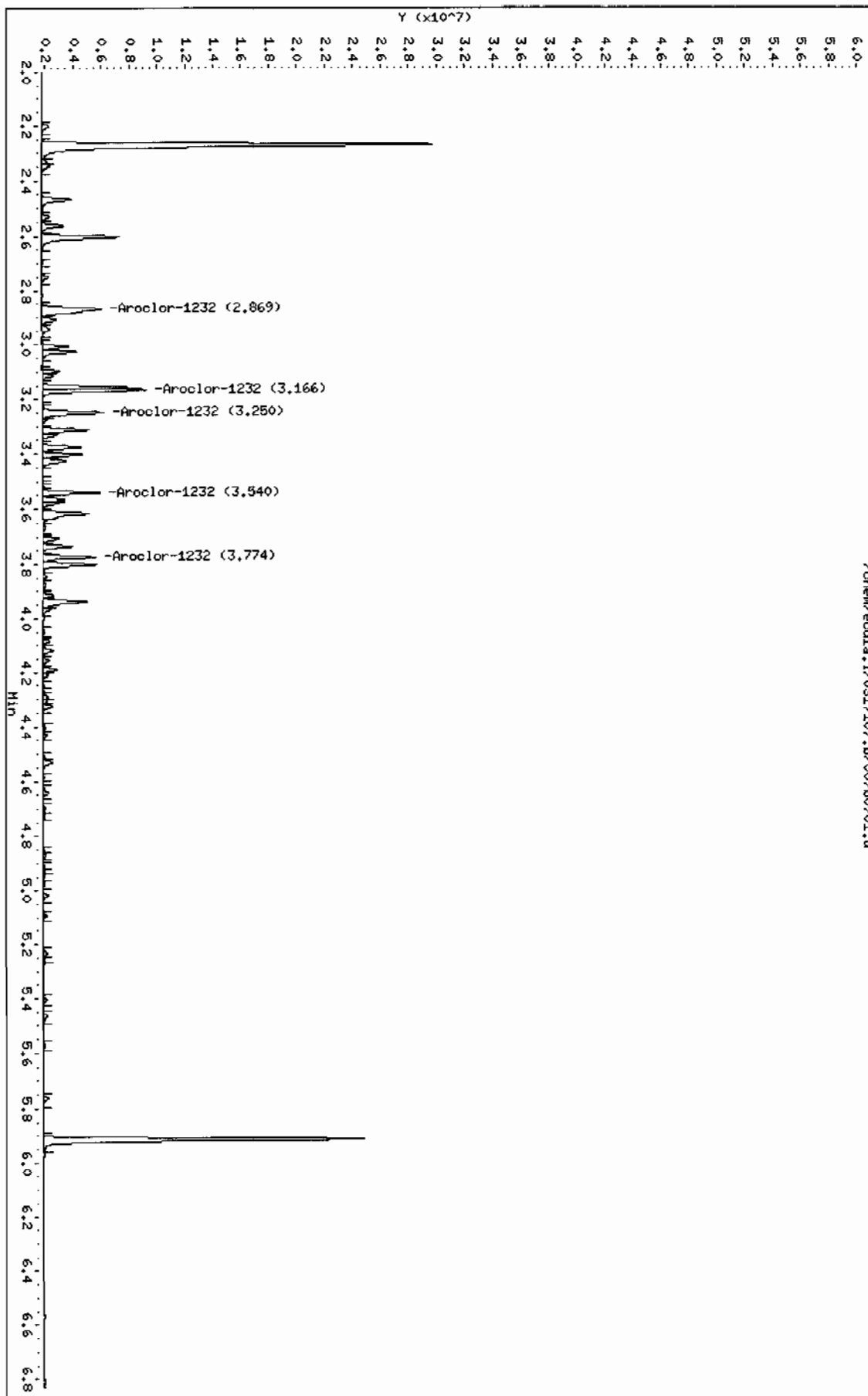
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Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1a.i/0317107.b/007b0701.d



Data File: /chem/ecdl1.i/0317107.b/008f0801.d
Report Date: 17-Mar-2010 08:54

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/0317107.b/008f0801.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 17-MAR-2010 07:11

Operator : YS1

Inst ID: ecd1.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdl1.i/0317107.b/ECD1-F-8082-031110b.m

Meth Date : 17-Mar-2010 08:54 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 8

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.026	2.026	0.000	4337779 1000.00	971	80.00- 120.00	100.00
2.118	2.118	0.000	2415598 1000.00	987	35.69- 75.69	55.69
2.144	2.144	0.000	10371015 1000.00	958	219.09- 259.09	239.09
Average of Peak Amounts				972		

Data File: /chem/eodla.i/0317107.b/008f0801.d

Date : 17-MAR-2010 07:11

Client ID: AR122101

Sample Info: IMA100104-21

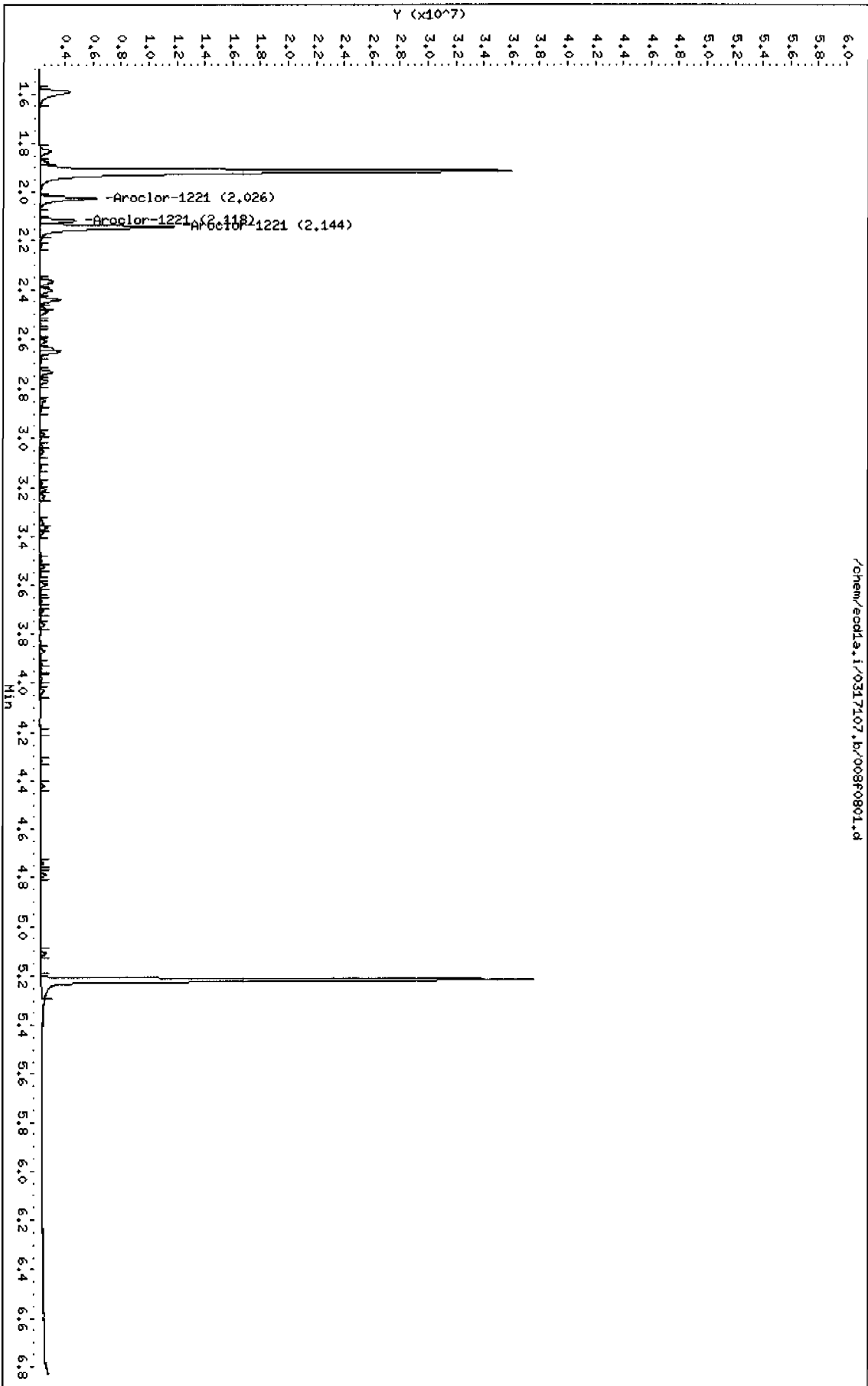
Column phase: CLP1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

Page 1



Data File: /chem/ecdla.i/0317107.b/008b0801.d
Report Date: 17-Mar-2010 08:54

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/008b0801.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 17-MAR-2010 07:11
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 08:54 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

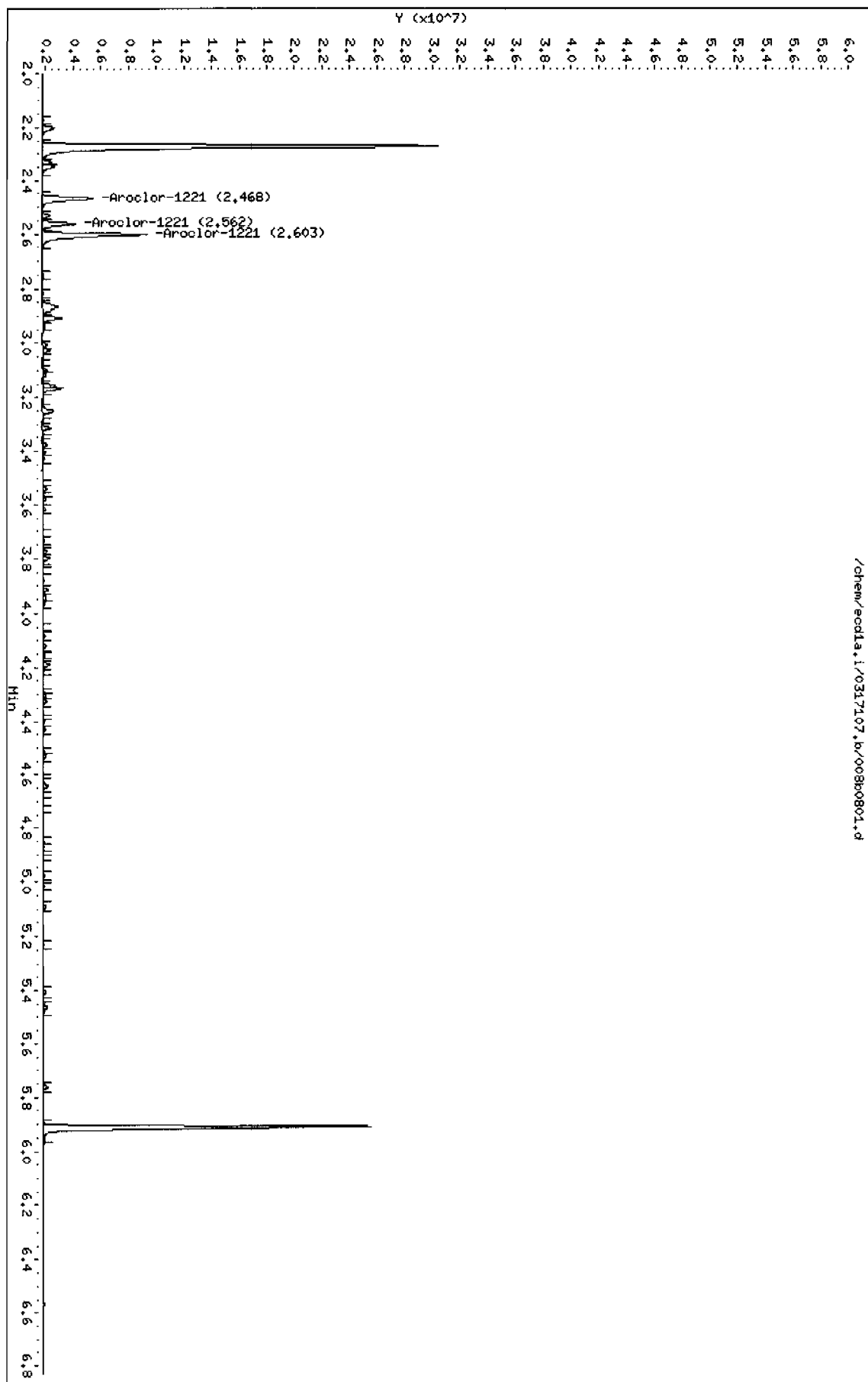
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.468	2.468	0.000	3218960 1000.00	990 80.00- 120.00	100.00	
2.562	2.562	0.000	2068793 1000.00	993 44.27- 84.27	64.27	
2.603	2.603	0.000	7132830 1000.00	974 201.59- 241.59	221.59	
Average of Peak Amounts =				986		

Data File: /chem/ecdl.a.i/0317107.b/0080801.d
Date: 17-MAR-2010 07:11
Client ID: AR122101
Sample Info: 1MAR100104-21

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Column Phase: CLP2

Instrument: ecdl.a.i
Operator: YSL
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/017f1701.d
 Lab Smp Id: WAR100222-60 02 Client Smp ID: AR166002
 Inj Date : 17-MAR-2010 08:53
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100222-60 02
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
 Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
 Als bottle: 17 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
1.912	1.913	-0.001	37861137 100.000	97.2	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.217	5.216	0.001	27481637 100.000	92.6	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.365	2.366	-0.001	13072214 1000.00	861	80.00- 120.00	100.00
2.652	2.651	0.001	16743348 1000.00	884	108.08- 148.08	128.08
2.732	2.732	0.000	10753369 1000.00	864	62.26- 102.26	82.26
2.769	2.768	0.001	6446442 1000.00	877	29.31- 69.31	49.31
2.979	2.978	0.001	8110441 1000.00	852	42.04- 82.04	62.04
Average of Peak Amounts				868		

7 Aroclor-1260				CAS #: 11096-82-5		
3.705	3.703	0.002	16962461 1000.00	925	80.00- 120.00	100.00
3.867	3.866	0.001	24950358 1000.00	928	127.09- 167.09	147.09
4.029	4.028	0.001	26635100 1000.00	941	137.02- 177.02	157.02
4.097	4.096	0.001	14960531 1000.00	926	68.20- 108.20	88.20
4.241	4.238	0.003	15562577 1000.00	926	71.75- 111.75	91.75
Average of Peak Amounts =				929		

Data File: /chem/eod1a.i/0317107.b/017F1701.d

Date: 17-MAR-2010 08:53

Client ID: AR166002

Sample Info: 1MAR100222-60 02

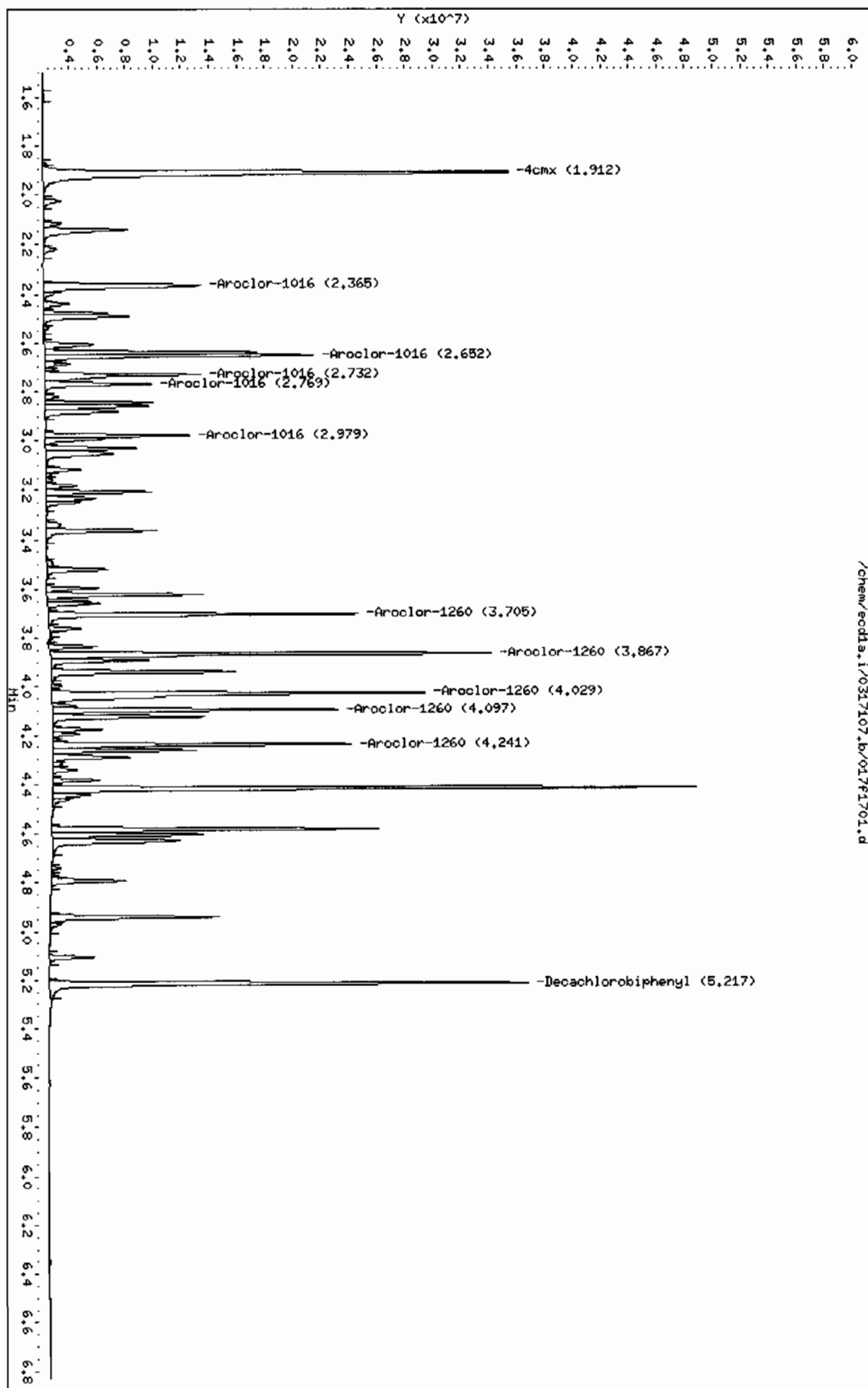
Column phase: CLP1

Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25

/chem/eod1a.i/0317107.b/017F1701.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/017b1701.d
 Lab Smp Id: WAR100222-60 02 Client Smp ID: AR166002
 Inj Date : 17-MAR-2010 08:53
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100222-60 02
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
 Meth Date : 17-Mar-2010 09:56 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 17 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE		RATIO	
==	=====	=====	RESPONSE (ug/L)	(ug/L)	=====		=====	
\$ 11 4cmx				CAS #: 877-09-8				
2.271	2.271	0.000	2544670/ 100.000	97.0	80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3				
5.913	5.913	0.000	17501713 100.000	93.5	80.00-	120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2				
3.166	3.166	0.000	11589187 1000.00	921	80.00-	120.00	100.00 (M)	
3.249	3.248	0.001	7549847 1000.00	874	45.15-	85.15	65.15	
3.312	3.312	0.000	4630370 1000.00	876	19.95-	59.95	39.95	
3.539	3.538	0.001	6092955 1000.00	884	32.57-	72.57	52.57	
3.615	3.614	0.001	5704793 1000.00	888	29.23-	69.23	49.23	
Average of Peak Amounts =				889				

7 Aroclor-1260				CAS #: 11096-82-5				
4.305	4.304	0.001	12259396 1000.00	937	80.00-	120.00	100.00	
4.430	4.429	0.001	14795087 1000.00	952	100.68-	140.68	120.68	
4.696	4.695	0.001	11161788 1000.00	938	71.05-	111.05	91.05	
4.869	4.868	0.001	11576871 1000.00	942	74.43-	114.43	94.43	
5.016	5.015	0.001	25583684 1000.00	969	188.69-	228.69	208.69	
Average of Peak Amounts =				948				

Data File: /chem/ecdl1a.i/0317107.b/017b1701.d
Report Date: 17-Mar-2010 09:56

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QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdda.i/0317107.b/017b1701.d

Date: 17-MAR-2010 08:53

Client ID: AR166002

Sample Info: 1MR100222-60 02

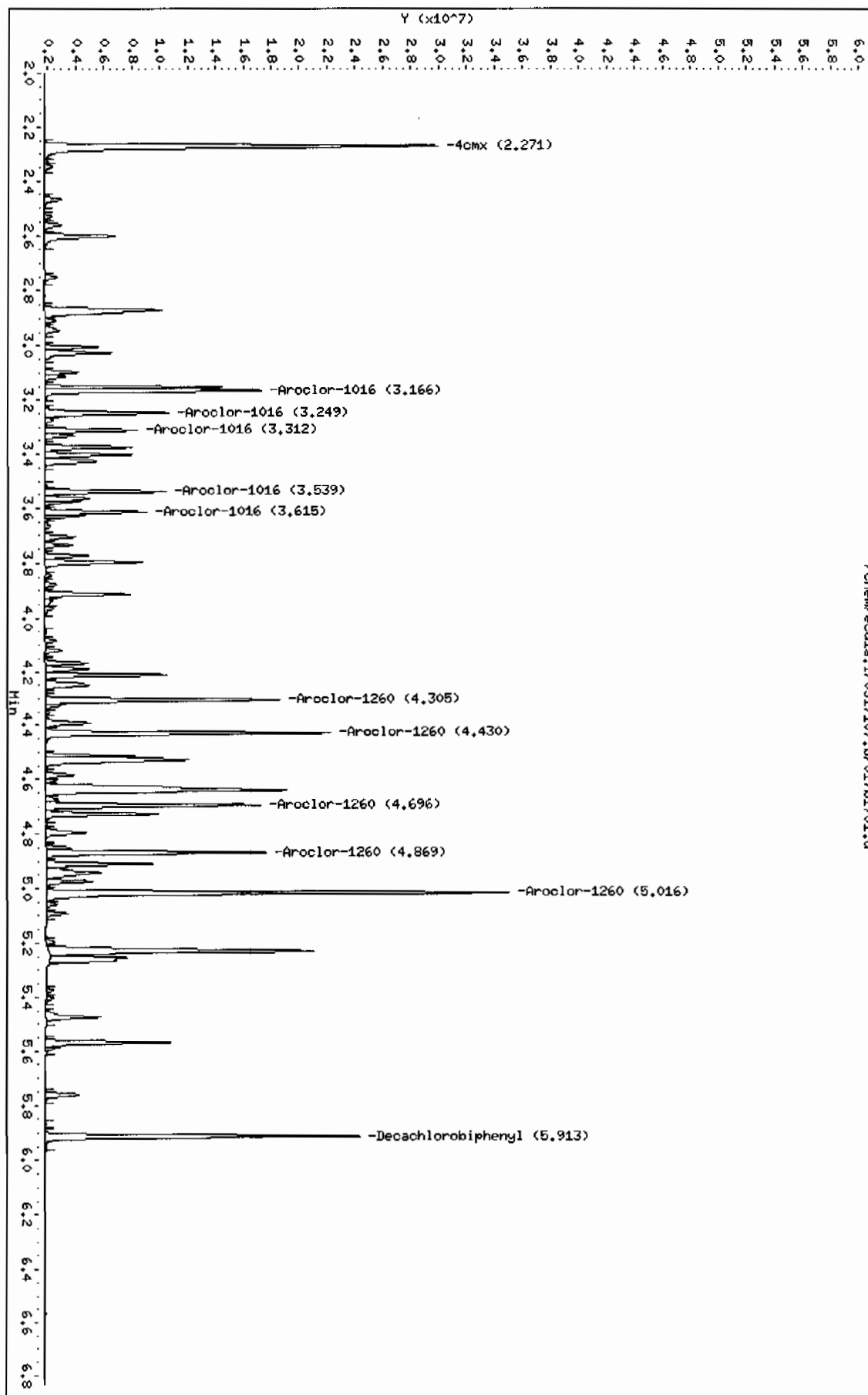
Column phase: CLP2

Instrument: ecdda.i

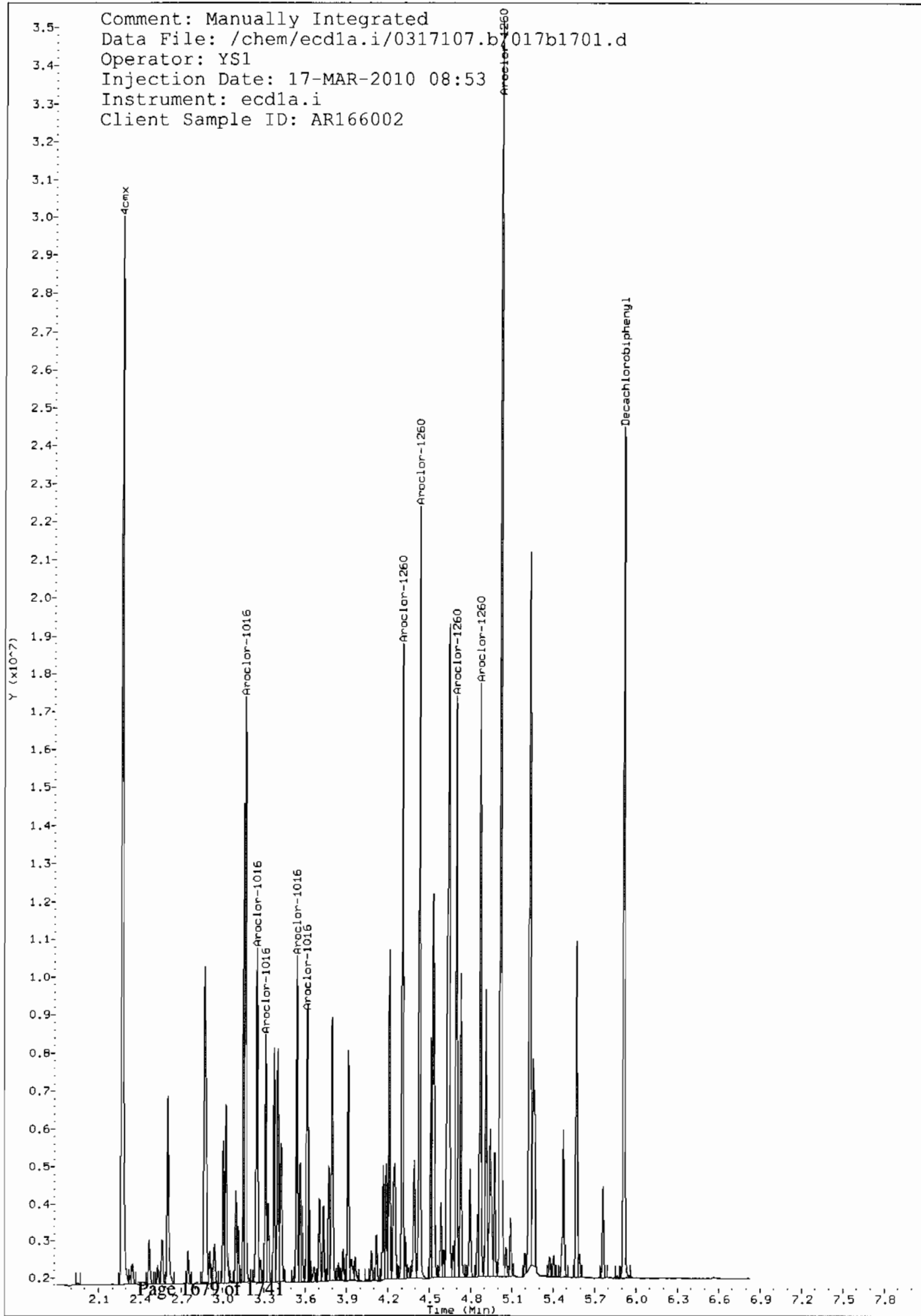
Operator: YSL

Column diameter: 0.25

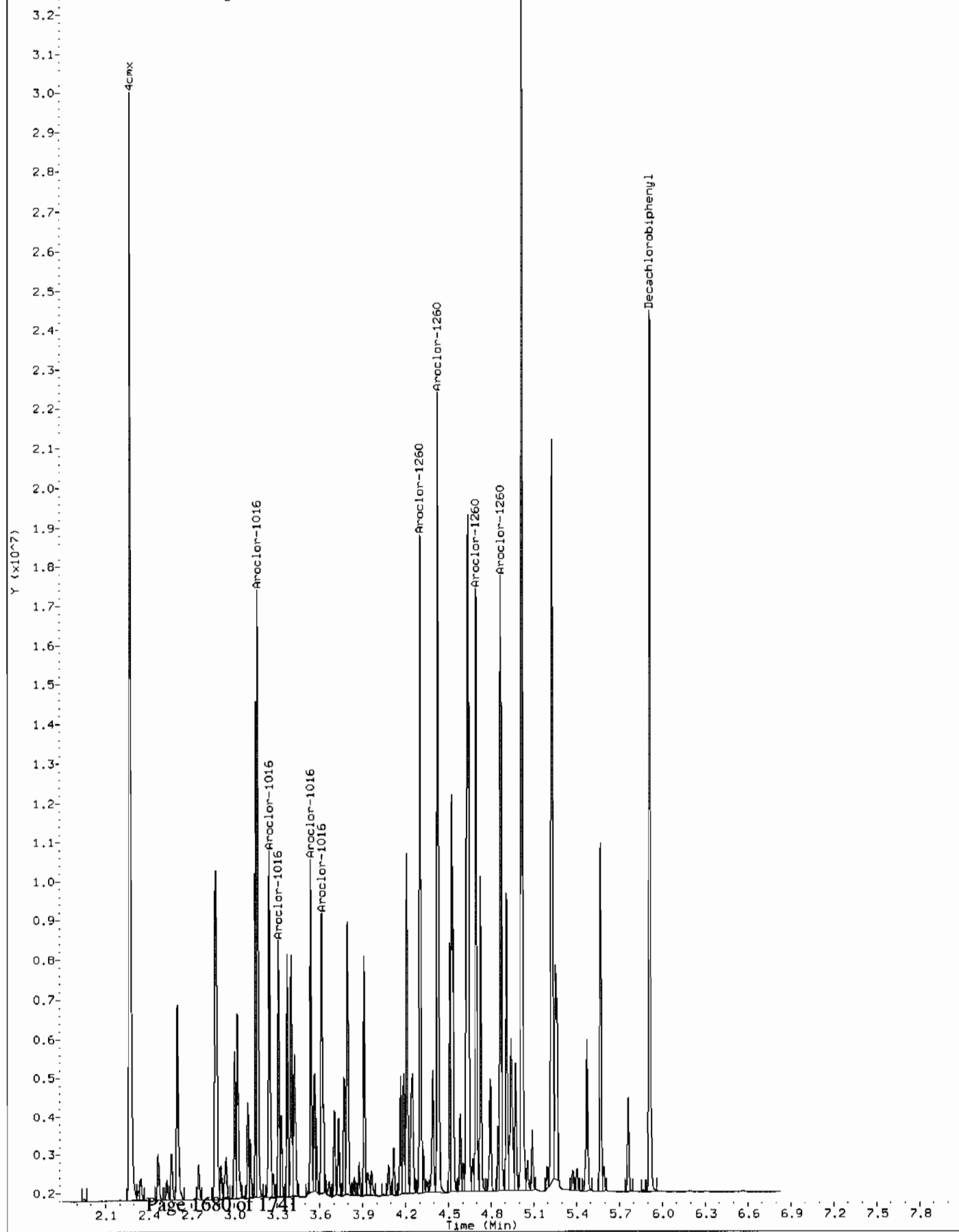
/chem/ecdda.i/0317107.b/017b1701.d



Comment: Manually Integrated
Data File: /chem/ecdl1.i/0317107.b\017b1701.d
Operator: YS1
Injection Date: 17-MAR-2010 08:53
Instrument: ecd1a.i
Client Sample ID: AR166002



Comment: Before manual integration
Data File: /chem/ecdl1.i/0317107.b orig-017b1701.d
Operator: YS1
Injection Date: 17-MAR-2010 08:53
Instrument: ecd1a.i
Client Sample ID: AR166002



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/0317107.b/029f2901.d
Lab Smp Id: WAR100222-60 03 Client Smp ID: AR166003
Inj Date : 17-MAR-2010 11:16
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 03
Misc Info :
Comment :
Method : /chem/ecd1a.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 12:02 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

				CAL-AMT		ON-COL			
RT	EXP RT	DLT RT		RESPONSE (ug/L)	(ug/L)	TARGET RANGE		RATIO	
==	=====	=====		=====	=====	=====	=====	=====	
\$ 11 4cmx						CAS #: 877-09-8			
1.911	1.913	-0.002		39092960 100.000	100	80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl						CAS #: 2051-24-3			
5.216	5.216	0.000		29126444 100.000	98.1	80.00-	120.00	100.00	

1 Aroclor-1016						CAS #: 12674-11-2			
2.364	2.366	-0.002		13459448 1000.00	887	80.00-	120.00	100.00	
2.650	2.651	-0.001		17913772 1000.00	946	113.09-	153.09	133.09	
2.731	2.732	-0.001		11186272 1000.00	899	63.11-	103.11	83.11	
2.769	2.768	0.001		6757155 1000.00	920	30.20-	70.20	50.20	
2.979	2.978	0.001		8551705 1000.00	898	43.54-	83.54	63.54	
Average of Peak Amounts =					910				

7 Aroclor-1260						CAS #: 11096-82-5			
3.704	3.703	0.001		17641116 1000.00	962	80.00-	120.00	100.00	
3.867	3.866	0.001		26151299 1000.00	972	128.24-	168.24	148.24	
4.029	4.028	0.001		28122088 1000.00	993	139.41-	179.41	159.41	
4.097	4.096	0.001		15875613 1000.00	982	69.99-	109.99	89.99	
4.239	4.238	0.001		16480191 1000.00	980	73.42-	113.42	93.42	
Average of Peak Amounts =					978				

Data File: /chem/ecdda.i/0317107.b/029f2901.d

Date: 17-MAR-2010 11:16

Client ID: AR166003

Sample Info: IWR100222-60 03

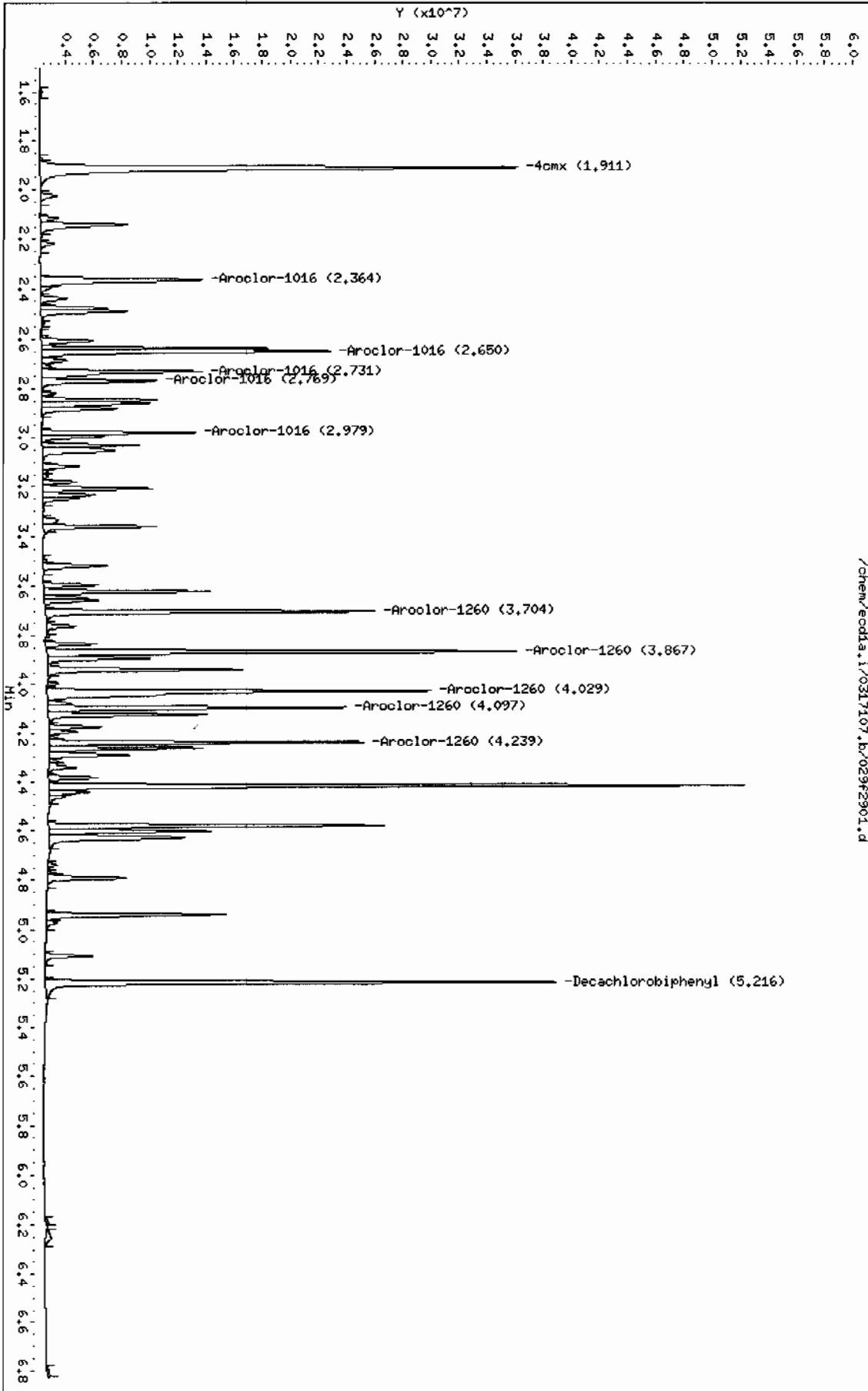
Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdla.i/0317107.b/029b2901.d
Report Date: 17-Mar-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/029b2901.d
Lab Smp Id: WAR100222-60 03 Client Smp ID: AR166003
Inj Date : 17-MAR-2010 11:16
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100222-60 03
Misc Info :
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 11:59 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO

\$ 11 4cmx				CAS #: 877-09-8		
2.270	2.271	-0.001	25959609 100.000	99.0	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.913	5.913	0.000	18143993 100.000	96.9	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.165	3.166	-0.001	11451255 1000.00	910	80.00- 120.00	100.00 (M)
3.249	3.248	0.001	7723504 1000.00	894	47.45- 87.45	67.45
3.312	3.312	0.000	4799447 1000.00	908	21.91- 61.91	41.91
3.539	3.538	0.001	6302421 1000.00	914	32.85- 72.85	55.04
3.614	3.614	0.000	5927748 1000.00	923	39.54- 79.54	61.54
Average of Peak Amounts =				910		

7 Aroclor-1260				CAS #: 11096-82-5		
4.304	4.304	0.000	12518850 1000.00	957	80.00- 120.00	100.00
4.429	4.429	0.000	15297014 1000.00	984	102.19- 142.19	122.19
4.694	4.695	-0.001	11499757 1000.00	967	71.86- 111.86	91.86
4.869	4.868	0.001	11961723 1000.00	973	75.55- 115.55	95.55
5.015	5.015	0.000	26522429 1000.00	1000	191.86- 231.86	211.86
Average of Peak Amounts =				977		

Data File: /chem/ecdl1a.i/0317107.b/029b2901.d
Report Date: 17-Mar-2010 12:01

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QC Flag Legend

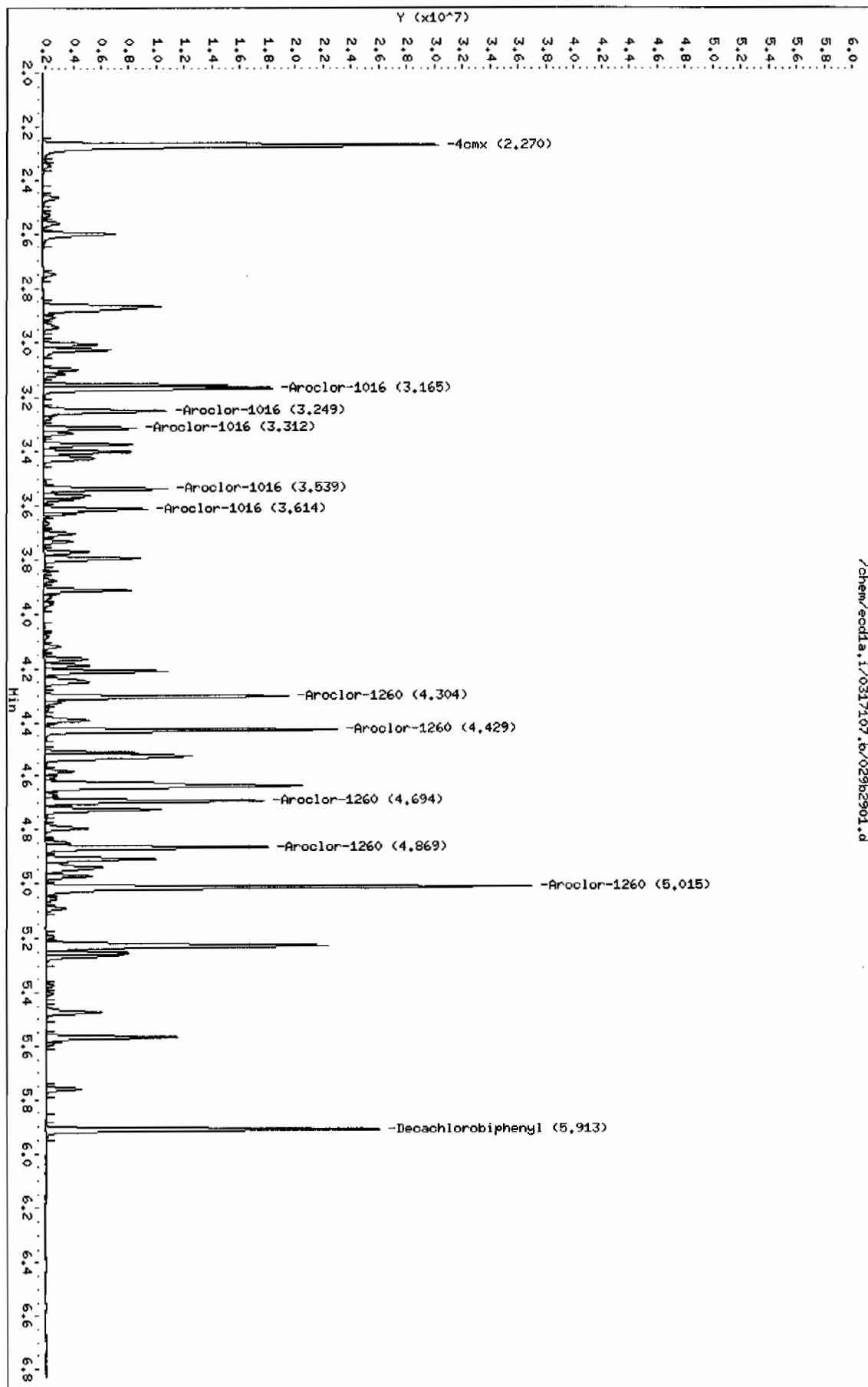
M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/0317107.b/02902901.d
Date: 17-MAR-2010 11:16
Client ID: AR166003
Sample Info: IMA100222-60 03

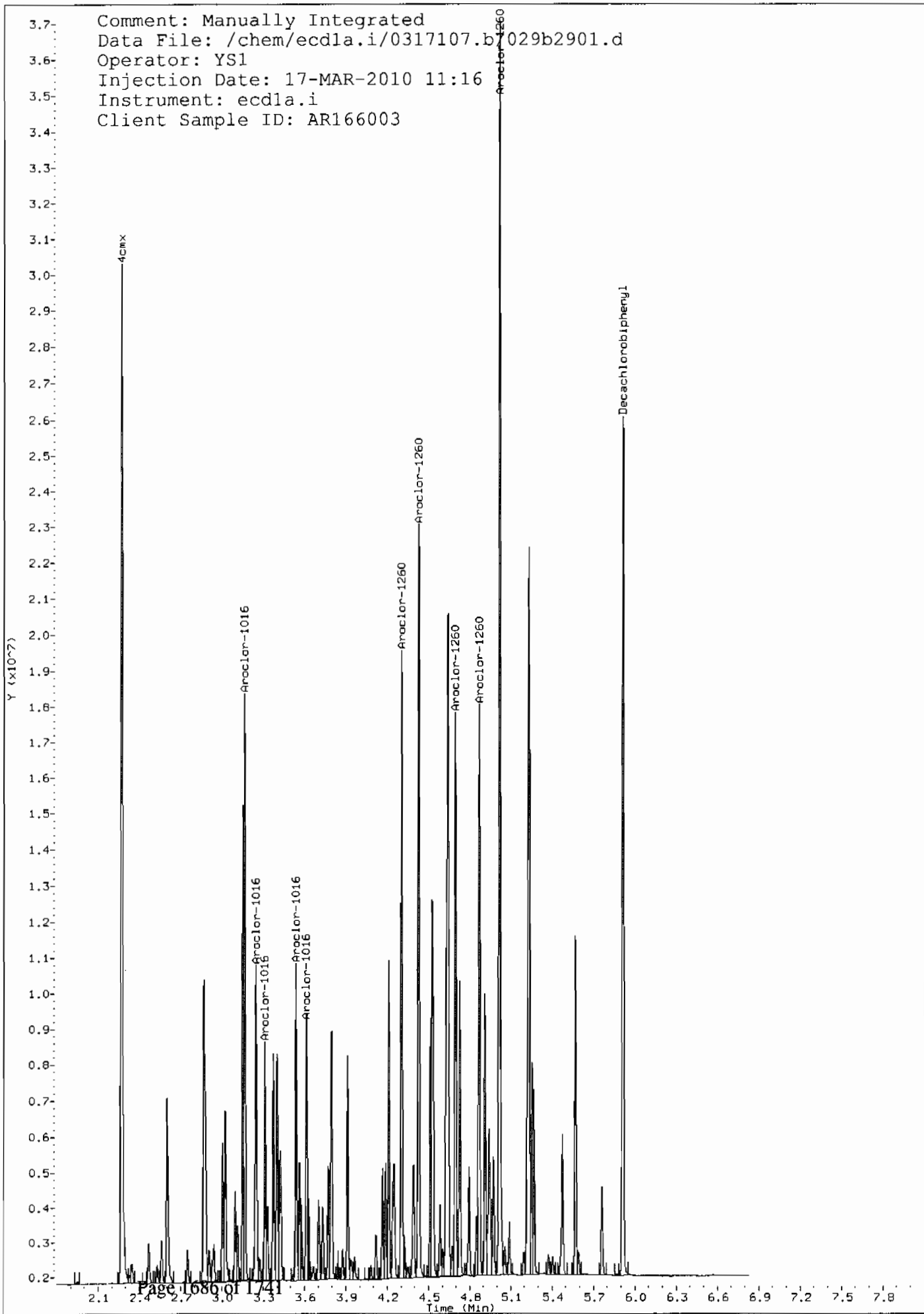
Column Phase: CLP2

Instrument: ecdl1a.i
Operator: YSL
Column diameter: 0.25

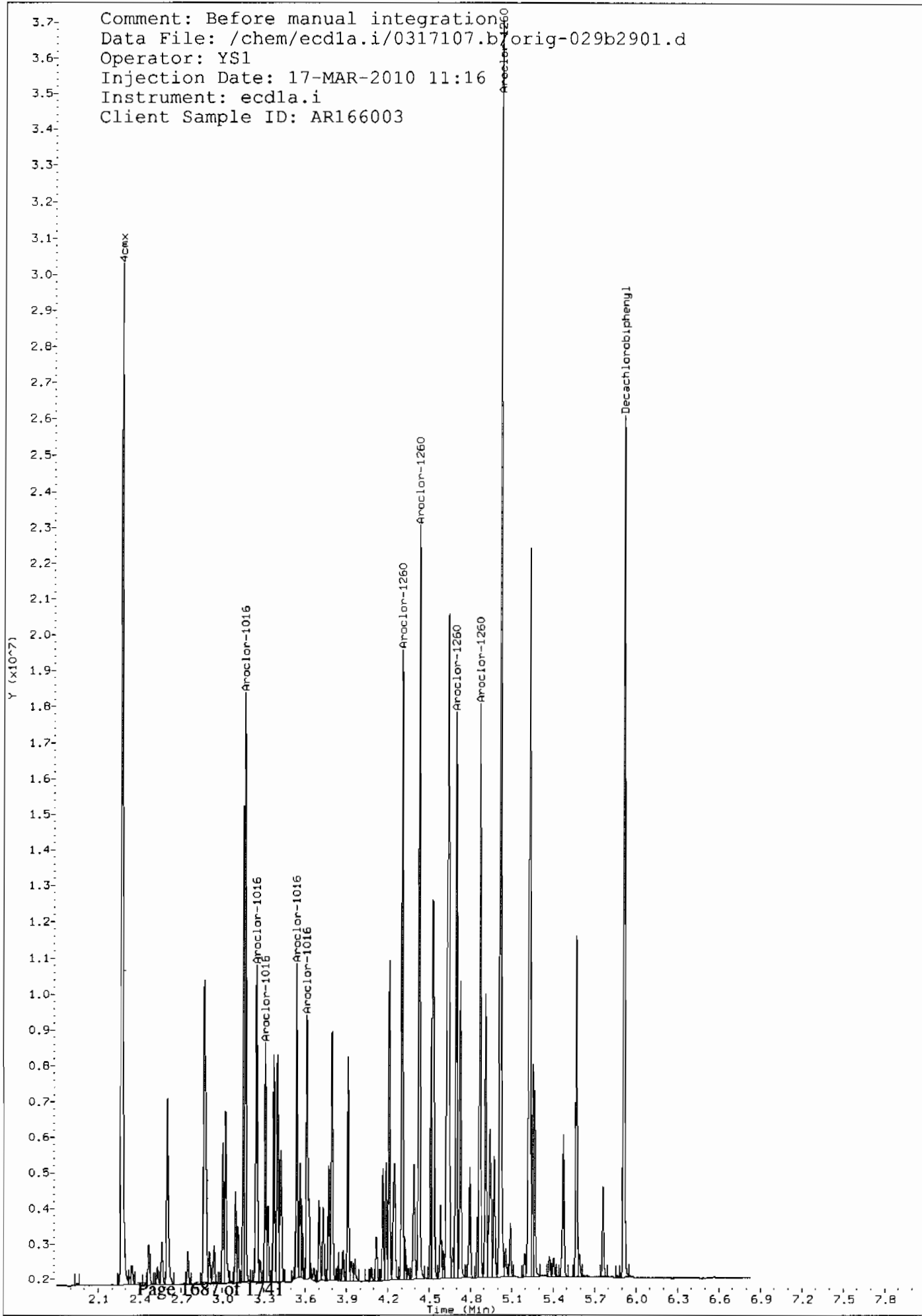
Page 1



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/0317107.b/029b2901.d
Operator: YS1
Injection Date: 17-MAR-2010 11:16
Instrument: ecd1a.i
Client Sample ID: AR166003



Comment: Before manual integration
Data File: /chem/ecdl1a.i/0317107.b orig-029b2901.d
Operator: YS1
Injection Date: 17-MAR-2010 11:16
Instrument: ecd1a.i
Client Sample ID: AR166003



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/041f4101.d
 Lab Smp Id: WAR100222-60 03 Client Smp ID: AR166003
 Inj Date : 17-MAR-2010 13:45
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100222-60 03
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
 Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
 Als bottle: 41 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS							
			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
1.913	1.913	0.000	39908643	100.000	102	80.00-	120.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.215	5.216	-0.001	29516155	100.000	99.4	80.00-	120.00

1 Aroclor-1016					CAS #: 12674-11-2		
2.364	2.366	-0.002	13740656	1000.00	905	80.00-	120.00
2.650	2.651	-0.001	17708818	1000.00	935	108.88-	148.88
2.730	2.732	-0.002	11345501	1000.00	912	62.57-	102.57
2.769	2.768	0.001	6882553	1000.00	937	30.09-	70.09
2.979	2.978	0.001	8830871	1000.00	928	44.27-	84.27
Average of Peak Amounts =					923		

7 Aroclor-1260					CAS #: 11096-82-5		
3.704	3.703	0.001	18503233	1000.00	1010	80.00-	120.00
3.867	3.866	0.001	27155414	1000.00	1010	126.76-	166.76
4.028	4.028	0.000	29180859	1000.00	1030	137.71-	177.71
4.097	4.096	0.001	16467548	1000.00	1020	69.00-	109.00
4.239	4.238	0.001	17157619	1000.00	1020	72.73-	112.73
Average of Peak Amounts =					1.02e+03		

Data File: /chem/eodla.i/0317107.b/041f4101.d

Date: 17-MAR-2010 13:45

Client ID: AR16603

Sample Info: HAR100222-60 03

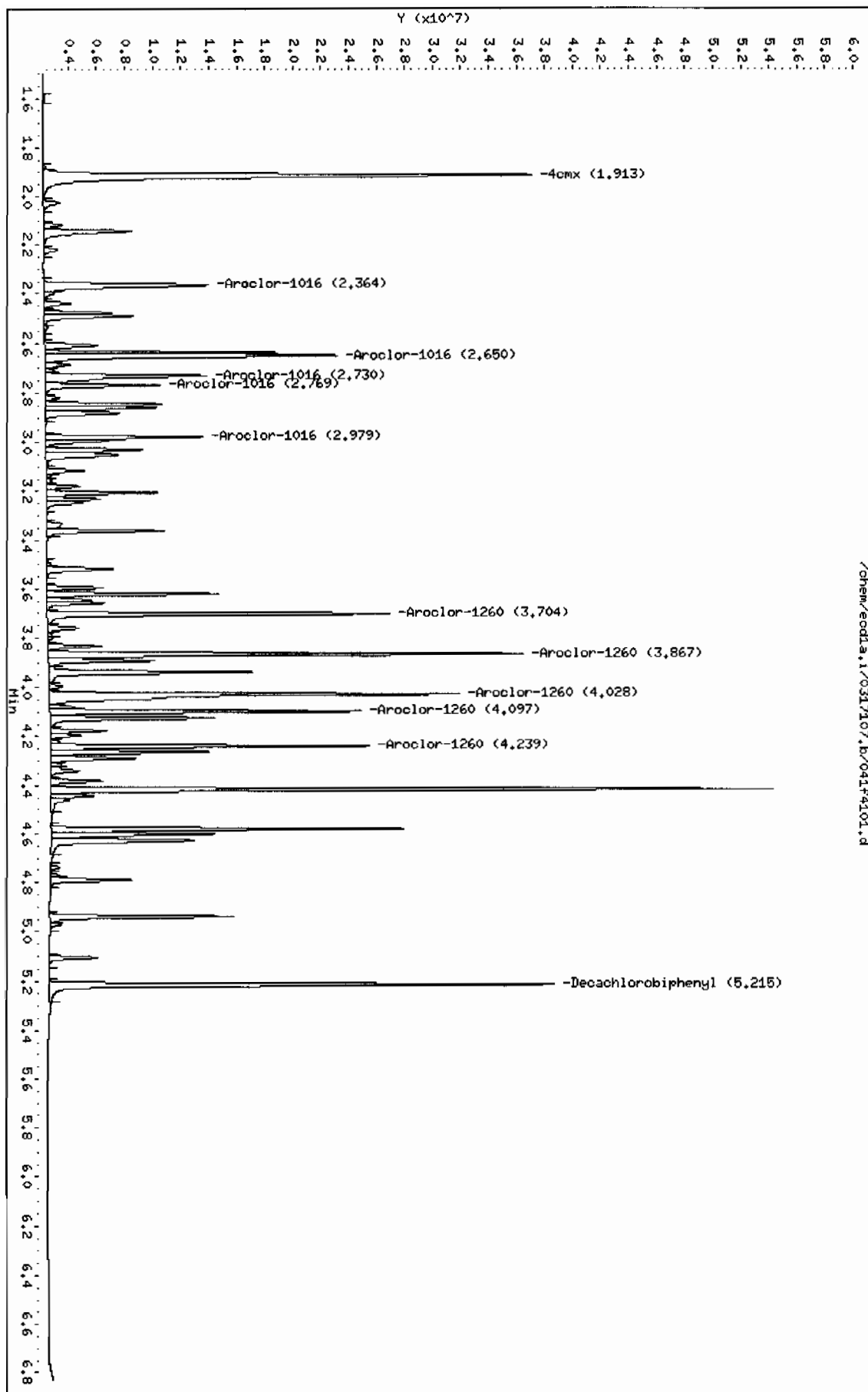
Column phase: CLP1

Instrument: eodla.i

Operator: YSA

Column diameter: 0.25

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Data File: /chem/ecdl1a.i/0317107.b/041b4101.d
 Report Date: 17-Mar-2010 14:03

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/041b4101.d
 Lab Smp Id: WAR100222-60 03 Client Smp ID: AR166003
 Inj Date : 17-MAR-2010 13:45
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |WAR100222-60 03
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
 Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 4l Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS							
RT	EXP RT	DLT RT	RESPONSE (ug/L)	CAL-AMT (ug/L)	ON-COL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
2.271	2.271	0.000	26527404	100.000	101	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.912	5.913	-0.001	18369027	100.000	98.1	80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2		
3.165	3.166	-0.001	12114864	1000.00	963	80.00- 120.00	100.00(M)
3.249	3.248	0.001	7846163	1000.00	909	44.76- 84.76	64.76
3.312	3.312	0.000	4874001	1000.00	922	20.23- 60.23	40.23
3.539	3.538	0.001	6333687	1000.00	919	30.77- 70.77	52.28
3.614	3.614	0.000	5813033	1000.00	905	37.01- 77.01	58.30
Average of Peak Amounts =					923		

7 Aroclor-1260					CAS #: 11096-82-5		
4.304	4.304	0.000	12801946	1000.00	979	80.00- 120.00	100.00
4.429	4.429	0.000	15573032	1000.00	1000	101.65- 141.65	121.65
4.694	4.695	-0.001	11664978	1000.00	980	71.12- 111.12	91.12
4.867	4.868	-0.001	12135049	1000.00	987	74.79- 114.79	94.79
5.014	5.015	-0.001	26859913	1000.00	1020	189.81- 229.81	209.81
Average of Peak Amounts =					993		

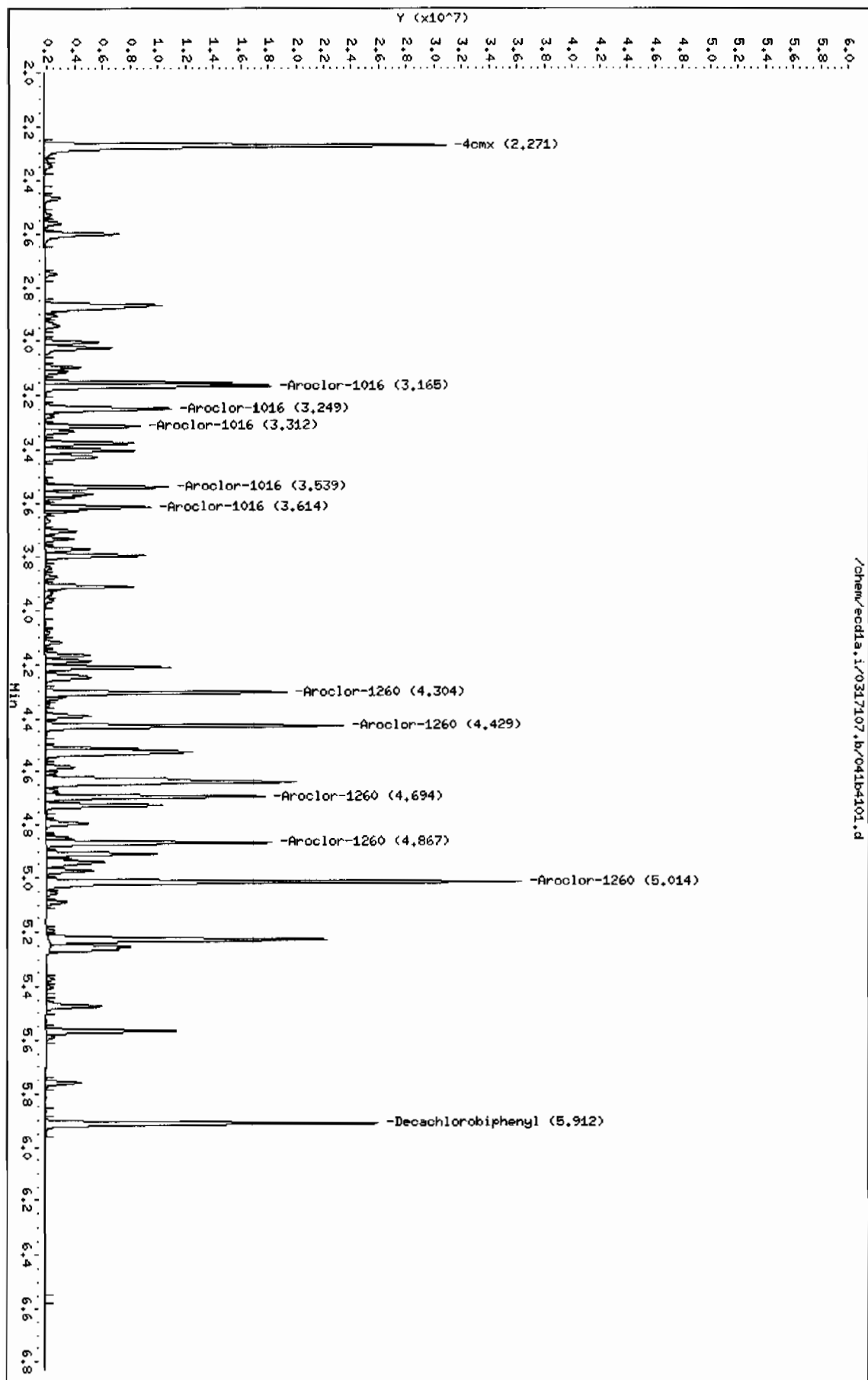
QC Flag Legend

M - Compound response manually integrated.

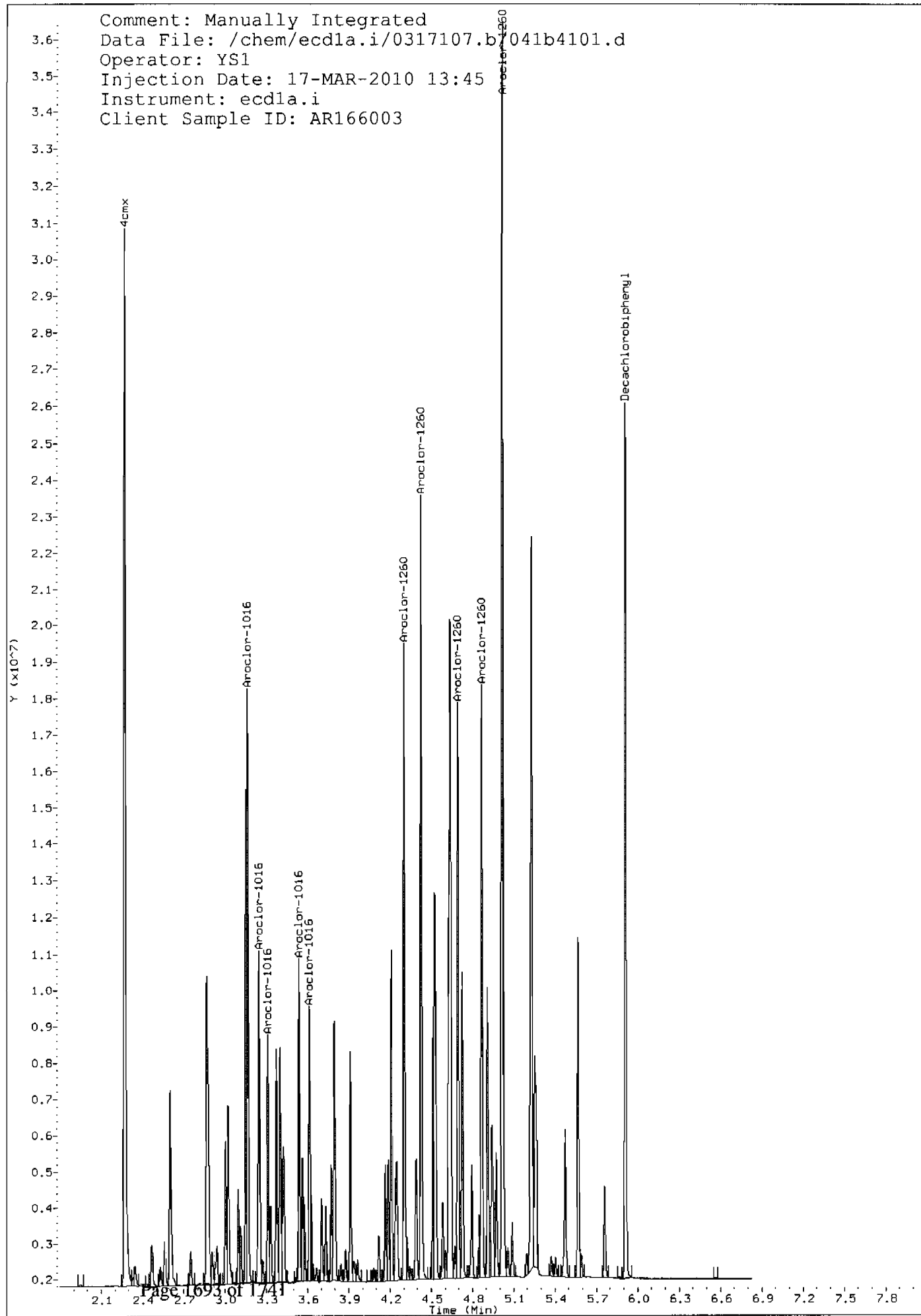
Data File: /chem/ecdl1a.i/0317107.b/041b4101.d
Date: 17-MAR-2010 13:45
Client ID: AR166003
Sample Info: 1MAR100222-60 03

Column Phase: CLP2

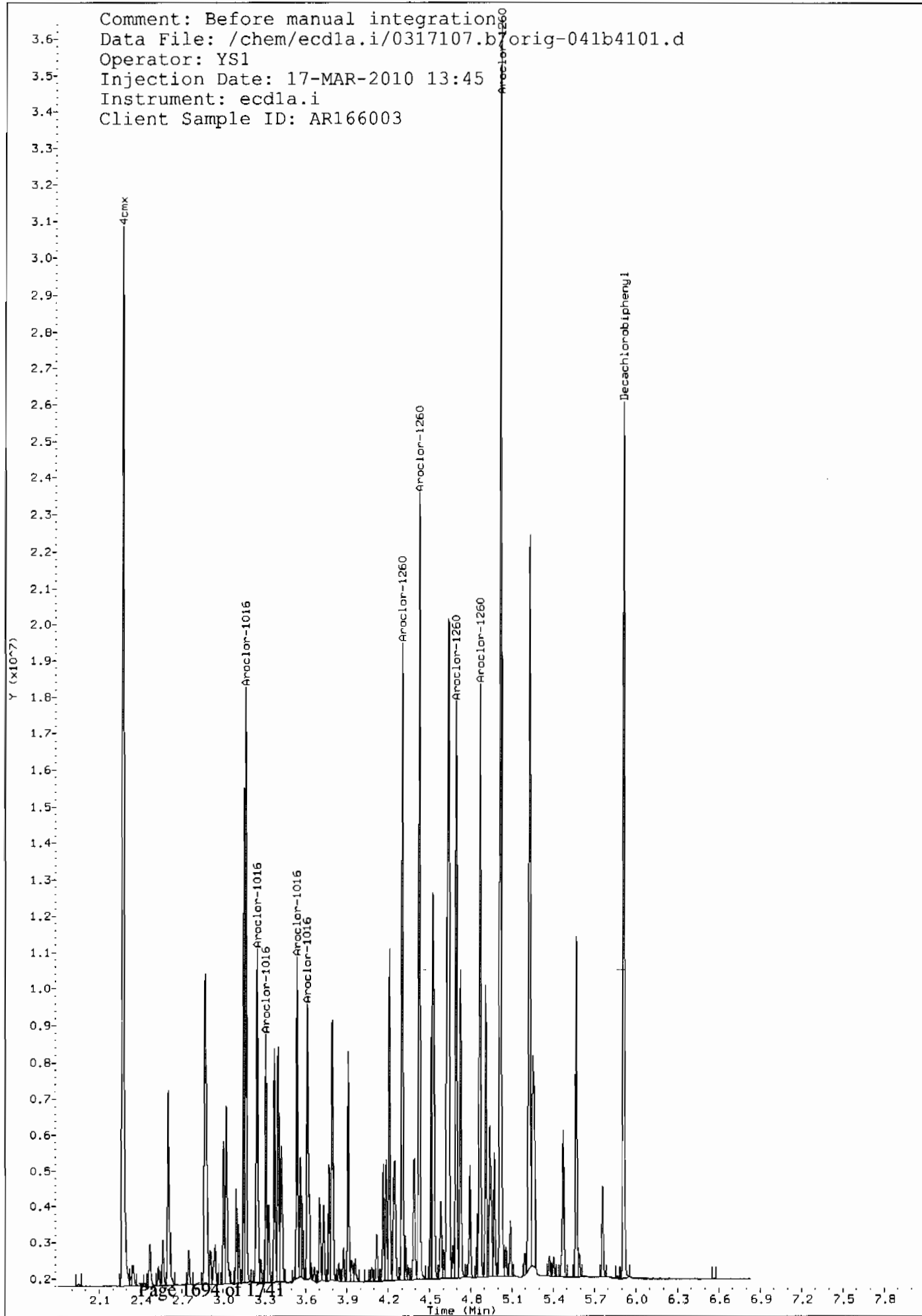
Instrument: ecdl1a.i
Operator: YSL
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdla.i/0317107.b/041b4101.d
Operator: YS1
Injection Date: 17-MAR-2010 13:45
Instrument: ecdla.i
Client Sample ID: AR166003



Comment: Before manual integration
Data File: /chem/ecdl1.i/0317107.b orig-041b4101.d
Operator: YS1
Injection Date: 17-MAR-2010 13:45
Instrument: ecd1a.i
Client Sample ID: AR166003



8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					S1		DCB	
S1 : 1.91 DCB: 5.22					RT		RT	
EPA	LAB	DATE	TIME					
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED		#		#	
01 PIBLK01	WAR100219-99	03/11/10	1446		1.91		5.23	
02 ZZZZZ	ZZZZZ	03/11/10	1456		1.92		5.22	
03 ZZZZZ	ZZZZZ	03/11/10	1507					
04 ZZZZZ	ZZZZZ	03/11/10	1517					
05 ZZZZZ	ZZZZZ	03/11/10	1528					
06 AR126801	WAR100107-68	03/11/10	1538					
07 AR123201	WAR100104-32	03/11/10	1549					
08 AR122101	WAR100104-21	03/11/10	1559					
09 AR126201	WAR100104-62	03/11/10	1610					
10 DDTANALOGSTD	WAR091219-DD	03/11/10	1621					
11 AR166001	WAR100311-01	03/11/10	1631		1.92		5.22	
12 AR166002	WAR100311-02	03/11/10	1641		1.92		5.22	
13 AR166003	WAR100311-03	03/11/10	1652		1.92		5.22	
14 AR166004	WAR100311-04	03/11/10	1702		1.91		5.22	
15 AR166005	IAR100311-01	03/11/10	1713		1.92		5.22	
16 AR166001	WAR100222-60	03/11/10	1724		1.91		5.22	
17 AR125401	WAR100311-05	03/11/10	1734					
18 AR125402	WAR100311-06	03/11/10	1745					
19 AR125403	WAR100311-07	03/11/10	1755					
20 AR125404	WAR100311-08	03/11/10	1806					
21 AR125405	IAR100219-02	03/11/10	1816					
22 AR125401	WAR100219-54	03/11/10	1827					
23 AR124201	WAR100311-09	03/11/10	1837					
24 AR124202	WAR100311-10	03/11/10	1848					
25 AR124203	WAR100311-11	03/11/10	1858					
26 AR124204	WAR100311-12	03/11/10	1909					
27 AR124205	IAR100219-01	03/11/10	1919					
28 AR124201	WAR100219-42	03/11/10	1930					
29 AR124801	WAR100311-13	03/11/10	1940					
30 AR124802	WAR100311-14	03/11/10	1951					
31 AR124803	WAR100311-15	03/11/10	2001					
32 AR124804	WAR100311-16	03/11/10	2012					

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.91		DCB: 5.22			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR100211-01	03/11/10	2022	
02	AR124801	WAR100223-48	03/11/10	2033	
03	PIBLK02	WAR100219-99	03/11/10	2044	1.91 5.22
04	ZZZZZ	ZZZZZ	03/11/10	2054	1.92 5.22
05	ZZZZZ	ZZZZZ	03/11/10	2105	1.92 5.22
06	ZZZZZ	ZZZZZ	03/11/10	2115	1.92 5.22
07	ZZZZZ	ZZZZZ	03/11/10	2126	1.92 5.22
08	ZZZZZ	ZZZZZ	03/11/10	2136	1.92 5.22
09	ZZZZZ	ZZZZZ	03/11/10	2147	1.92 5.22
10	ZZZZZ	ZZZZZ	03/11/10	2157	1.92 5.22
11	ZZZZZ	ZZZZZ	03/11/10	2208	1.92 5.22
12	ZZZZZ	ZZZZZ	03/11/10	2218	1.92 5.22
13	ZZZZZ	ZZZZZ	03/11/10	2229	1.92 5.22
14	AR166002	WAR100222-60	03/11/10	2239	1.91 5.22
15	PIBLK03	WAR100219-99	03/11/10	2250	1.91 5.22
16	ZZZZZ	ZZZZZ	03/11/10	2300	1.90 5.23
17	ZZZZZ	ZZZZZ	03/11/10	2311	1.92 5.22
18	ZZZZZ	ZZZZZ	03/11/10	2321	1.91 5.22
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					S1		DCB	
S1 : 2.27 DCB: 5.92					RT		RT	
EPA	LAB	DATE	TIME					
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED		#	#	#	#
01	PIBLK01	WAR100219-99	03/11/10	1446	2.27	5.92		
02	ZZZZZ	ZZZZZ	03/11/10	1456	2.27	5.92		
03	ZZZZZ	ZZZZZ	03/11/10	1507				
04	ZZZZZ	ZZZZZ	03/11/10	1517				
05	ZZZZZ	ZZZZZ	03/11/10	1528				
06	AR126801	WAR100107-68	03/11/10	1538				
07	AR123201	WAR100104-32	03/11/10	1549				
08	AR122101	WAR100104-21	03/11/10	1559				
09	AR126201	WAR100104-62	03/11/10	1610				
10	DDTANALOGSTD	WAR091219-DD	03/11/10	1621				
11	AR166001	WAR100311-01	03/11/10	1631	2.27	5.92		
12	AR166002	WAR100311-02	03/11/10	1641	2.27	5.92		
13	AR166003	WAR100311-03	03/11/10	1652	2.27	5.92		
14	AR166004	WAR100311-04	03/11/10	1702	2.27	5.92		
15	AR166005	IAR100311-01	03/11/10	1713	2.27	5.92		
16	AR166001	WAR100222-60	03/11/10	1724	2.27	5.92		
17	AR125401	WAR100311-05	03/11/10	1734				
18	AR125402	WAR100311-06	03/11/10	1745				
19	AR125403	WAR100311-07	03/11/10	1755				
20	AR125404	WAR100311-08	03/11/10	1806				
21	AR125405	IAR100219-02	03/11/10	1816				
22	AR125401	WAR100219-54	03/11/10	1827				
23	AR124201	WAR100311-09	03/11/10	1837				
24	AR124202	WAR100311-10	03/11/10	1848				
25	AR124203	WAR100311-11	03/11/10	1858				
26	AR124204	WAR100311-12	03/11/10	1909				
27	AR124205	IAR100219-01	03/11/10	1919				
28	AR124201	WAR100219-42	03/11/10	1930				
29	AR124801	WAR100311-13	03/11/10	1940				
30	AR124802	WAR100311-14	03/11/10	1951				
31	AR124803	WAR100311-15	03/11/10	2001				
32	AR124804	WAR100311-16	03/11/10	2012				

S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154
 GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10
 Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
 SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.27		DCB: 5.92			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR100211-01	03/11/10	2022	
02	AR124801	WAR100223-48	03/11/10	2033	
03	PIBLK02	WAR100219-99	03/11/10	2044	2.27 5.92
04	ZZZZZ	ZZZZZ	03/11/10	2054	2.28 5.92
05	ZZZZZ	ZZZZZ	03/11/10	2105	2.28 5.92
06	ZZZZZ	ZZZZZ	03/11/10	2115	2.28 5.92
07	ZZZZZ	ZZZZZ	03/11/10	2126	2.28 5.92
08	ZZZZZ	ZZZZZ	03/11/10	2136	2.28 5.92
09	ZZZZZ	ZZZZZ	03/11/10	2147	2.28 5.92
10	ZZZZZ	ZZZZZ	03/11/10	2157	2.28 5.92
11	ZZZZZ	ZZZZZ	03/11/10	2208	2.28 5.92
12	ZZZZZ	ZZZZZ	03/11/10	2218	2.28 5.92
13	ZZZZZ	ZZZZZ	03/11/10	2229	2.28 5.92
14	AR166002	WAR100222-60	03/11/10	2239	2.27 5.92
15	PIBLK03	WAR100219-99	03/11/10	2250	2.27 5.92
16	ZZZZZ	ZZZZZ	03/11/10	2300	5.92
17	ZZZZZ	ZZZZZ	03/11/10	2311	5.23*
18	ZZZZZ	ZZZZZ	03/11/10	2321	
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)
 DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.91			DCB: 5.22		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	03/17/10 0557	1.91	5.21
02	AR166001	WAR100222-60	03/17/10 0608	1.91	5.22
03	AR125401	WAR100219-54	03/17/10 0618		
04	AR124201	WAR100219-42	03/17/10 0629		
05	AR124801	WAR100223-48	03/17/10 0639		
06	AR126801	WAR100107-68	03/17/10 0650		
07	AR123201	WAR100104-32	03/17/10 0701		
08	AR122101	WAR100104-21	03/17/10 0711		
09	AR126201	WAR100104-62	03/17/10 0722		
10	DDTANALOGSTD	WAR091219-DD	03/17/10 0736		
11	PIBLK02	WAR100219-99	03/17/10 0746	1.91	5.22
12	ZZZZZ	ZZZZZ	03/17/10 0757	1.91	5.22
13	ZZZZZ	ZZZZZ	03/17/10 0807	1.91	5.22
14	ZZZZZ	ZZZZZ	03/17/10 0818	1.91	5.22
15	ZZZZZ	ZZZZZ	03/17/10 0828	1.91	5.22
16	ZZZZZ	ZZZZZ	03/17/10 0841	1.91	5.22
17	AR166002	WAR100222-60	03/17/10 0853	1.91	5.22
18	PIBLK03	WAR100219-99	03/17/10 0904	1.91	5.22
19	PBLK01	1202072502	03/17/10 0914	1.91	5.22
20	PBLK01LCS	1202072503	03/17/10 0925	1.91	5.22
21	ZZZZZ	ZZZZZ	03/17/10 0935	1.91	5.22
22	ZZZZZ	ZZZZZ	03/17/10 0948	1.91	5.22
23	ZZZZZ	ZZZZZ	03/17/10 1001	1.91	5.22
24	ZZZZZ	ZZZZZ	03/17/10 1013	1.91	5.22
25	ZZZZZ	ZZZZZ	03/17/10 1026	1.91	5.21
26	ZZZZZ	ZZZZZ	03/17/10 1038	1.91	5.21
27	ZZZZZ	ZZZZZ	03/17/10 1051	1.91	5.21
28	RE36-10-7523	248373011	03/17/10 1104	1.91	5.21
29	AR166003	WAR100222-60	03/17/10 1116	1.91	5.22
30	PIBLK04	WAR100219-99	03/17/10 1129	1.91	5.22
31	RE36-10-7522	248373014	03/17/10 1141	1.91	5.21
32	RE36-10-7521	248373015	03/17/10 1152	1.91	5.22

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 1.91				DCB: 5.22			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT
01	ZZZZZ	ZZZZZ	03/17/10	1205	1.91		5.22
02	ZZZZZ	ZZZZZ	03/17/10	1217	1.91		5.21
03	ZZZZZ	ZZZZZ	03/17/10	1230	1.91		5.21
04	ZZZZZ	ZZZZZ	03/17/10	1242	1.91		5.22
05	ZZZZZ	ZZZZZ	03/17/10	1255	1.91		5.21
06	ZZZZZ	ZZZZZ	03/17/10	1308	1.91		5.22
07	ZZZZZ	ZZZZZ	03/17/10	1320	1.91		5.22
08	ZZZZZ	ZZZZZ	03/17/10	1333	1.91		5.21
09	AR166003	WAR100222-60	03/17/10	1345	1.91		5.22
10	P1BLK04	WAR100219-99	03/17/10	1356	1.91		5.22
11	ZZZZZ	ZZZZZ	03/17/10	1406	1.91		5.22
12	ZZZZZ	ZZZZZ	03/17/10	1419	1.91		5.22
13	ZZZZZ	ZZZZZ	03/17/10	1432	1.91		5.22
14	ZZZZZ	ZZZZZ	03/17/10	1444	1.91		5.21
15	ZZZZZ	ZZZZZ	03/17/10	1457	1.91		5.21
16	ZZZZZ	ZZZZZ	03/17/10	1509	1.91		5.21
17	ZZZZZ	ZZZZZ	03/17/10	1522	1.91		5.21
18	ZZZZZ	ZZZZZ	03/17/10	1535	1.91		5.21
19	ZZZZZ	ZZZZZ	03/17/10	1547	1.91		5.21
20	AR166005	WAR100222-60	03/17/10	1600	1.91		5.22
21	P1BLK06	WAR100219-99	03/17/10	1610	1.91		5.22
22	ZZZZZ	ZZZZZ	03/17/10	1621	1.91		5.22
23	ZZZZZ	ZZZZZ	03/17/10	1634	1.91		5.22
24	ZZZZZ	ZZZZZ	03/17/10	1646	1.91		5.21
25	ZZZZZ	ZZZZZ	03/17/10	1659	1.91		5.22
26	ZZZZZ	ZZZZZ	03/17/10	1711	1.91		5.21
27	ZZZZZ	ZZZZZ	03/17/10	1724	1.91		5.22
28	ZZZZZ	ZZZZZ	03/17/10	1737	1.91		5.21
29	AR166006	WAR100222-60	03/17/10	1749	1.91		5.22
30	P1BLK07	WAR100219-99	03/17/10	1802	1.91		5.22
31	ZZZZZ	ZZZZZ	03/17/10	1815	1.91		
32	ZZZZZ	ZZZZZ	03/17/10	1827	1.91		5.22

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.27			DCB: 5.91		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	03/17/10	0557	
02	AR166001	WAR100222-60	03/17/10	0608	
03	AR125401	WAR100219-54	03/17/10	0618	
04	AR124201	WAR100219-42	03/17/10	0629	
05	AR124801	WAR100223-48	03/17/10	0639	
06	AR126801	WAR100107-68	03/17/10	0650	
07	AR123201	WAR100104-32	03/17/10	0701	
08	AR122101	WAR100104-21	03/17/10	0711	
09	AR126201	WAR100104-62	03/17/10	0722	
10	DDTANALOGSTD	WAR091219-DD	03/17/10	0736	
11	PIBLK02	WAR100219-99	03/17/10	0746	
12	ZZZZZ	ZZZZZ	03/17/10	0757	
13	ZZZZZ	ZZZZZ	03/17/10	0807	
14	ZZZZZ	ZZZZZ	03/17/10	0818	
15	ZZZZZ	ZZZZZ	03/17/10	0828	
16	ZZZZZ	ZZZZZ	03/17/10	0841	
17	AR166002	WAR100222-60	03/17/10	0853	
18	PIBLK03	WAR100219-99	03/17/10	0904	
19	PBLK01	1202072502	03/17/10	0914	
20	PBLK01LCS	1202072503	03/17/10	0925	
21	ZZZZZ	ZZZZZ	03/17/10	0935	
22	ZZZZZ	ZZZZZ	03/17/10	0948	
23	ZZZZZ	ZZZZZ	03/17/10	1001	
24	ZZZZZ	ZZZZZ	03/17/10	1013	
25	ZZZZZ	ZZZZZ	03/17/10	1026	
26	ZZZZZ	ZZZZZ	03/17/10	1038	
27	ZZZZZ	ZZZZZ	03/17/10	1051	
28	RE36-10-7523	248373011	03/17/10	1104	
29	AR166003	WAR100222-60	03/17/10	1116	
30	PIBLK04	WAR100219-99	03/17/10	1129	
31	RE36-10-7522	248373014	03/17/10	1141	
32	RE36-10-7521	248373015	03/17/10	1152	

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2154

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/11/10 03/11/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.27			DCB: 5.91		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	03/17/10	1205	2.27	5.91
02	ZZZZZ	03/17/10	1217	2.27	5.91
03	ZZZZZ	03/17/10	1230	2.27	5.91
04	ZZZZZ	03/17/10	1242	2.27	5.91
05	ZZZZZ	03/17/10	1255	2.27	5.91
06	ZZZZZ	03/17/10	1308	2.27	5.91
07	ZZZZZ	03/17/10	1320	2.27	5.91
08	ZZZZZ	03/17/10	1333	2.27	5.91
09	AR166003	WAR100222-60	03/17/10	1345	2.27
10	PIBLK04	WAR100219-99	03/17/10	1356	2.27
11	ZZZZZ	03/17/10	1406	2.27	5.91
12	ZZZZZ	03/17/10	1419	2.27	5.91
13	ZZZZZ	03/17/10	1432	2.27	5.91
14	ZZZZZ	03/17/10	1444	2.27	5.91
15	ZZZZZ	03/17/10	1457	2.27	5.91
16	ZZZZZ	03/17/10	1509	2.27	5.91
17	ZZZZZ	03/17/10	1522	2.27	5.91
18	ZZZZZ	03/17/10	1535	2.27	5.91
19	ZZZZZ	03/17/10	1547	2.27	5.91
20	AR166005	WAR100222-60	03/17/10	1600	2.27
21	PIBLK06	WAR100219-99	03/17/10	1610	2.27
22	ZZZZZ	03/17/10	1621	2.27	5.91
23	ZZZZZ	03/17/10	1634	2.27	5.91
24	ZZZZZ	03/17/10	1646	2.27	5.91
25	ZZZZZ	03/17/10	1659	2.27	5.91
26	ZZZZZ	03/17/10	1711	2.27	5.91
27	ZZZZZ	03/17/10	1724	2.27	5.91
28	ZZZZZ	03/17/10	1737	2.27	5.91
29	AR166006	WAR100222-60	03/17/10	1749	2.27
30	PIBLK07	WAR100219-99	03/17/10	1802	2.27
31	ZZZZZ	03/17/10	1815	2.27	5.91
32	ZZZZZ	03/17/10	1827	2.27	5.91

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

Page 1 of 1

SDG Number: 10-2154

Client ID: LCS for batch 965798

Lab Sample ID: 1202072503

Data File: 020f2001.d

Data File: 020b2001.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 17-MAR-10 09:25

Analyzed: 17-MAR-10 09:25

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							1.56
Column 1	1	2.37	2.34 - 2.4	19.8		ug/kg	
	2	2.65	2.62 - 2.68	19.1		ug/kg	
	3	2.73	2.7 - 2.76	19.1		ug/kg	
	4	2.77	2.74 - 2.8	19.3		ug/kg	
	5	2.98	2.95 - 3.01	19.3		ug/kg	
					19.3		
Column 2	1	3.17	3.14 - 3.2	19.8		ug/kg	
	2	3.25	3.22 - 3.28	19.5		ug/kg	
	3	3.31	3.28 - 3.34	19.2		ug/kg	
	4	3.54	3.51 - 3.57	19.6		ug/kg	
	5	3.62	3.58 - 3.64	20.1		ug/kg	
					19.6		
Aroclor-1260							1.26
Column 1	1	3.71	3.67 - 3.73	21		ug/kg	
	2	3.87	3.84 - 3.9	21.2		ug/kg	
	3	4.03	4 - 4.06	21.6		ug/kg	
	4	4.1	4.07 - 4.13	21.4		ug/kg	
	5	4.24	4.21 - 4.27	21.5		ug/kg	
					21.3		
Column 2	1	4.31	4.27 - 4.33	21		ug/kg	
	2	4.43	4.4 - 4.46	21.4		ug/kg	
	3	4.7	4.67 - 4.73	21.4		ug/kg	
	4	4.87	4.84 - 4.9	21.7		ug/kg	
	5	5.02	4.99 - 5.05	22.5		ug/kg	
					21.6		

Identification Summary

Page 1 of 1

SDG Number: 10-2154

Client ID: RE36-10-7523

Lab Sample ID: 248373011

Data File: 028f2801.d

Data File: 028b2801.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 17-MAR-10 11:04

Analyzed: 17-MAR-10 11:04

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1242							21.4
Column 1	1	2.37	2.34 - 2.4	1.86		ug/kg	
	2	2.65	2.62 - 2.68	1.74		ug/kg	
	3	2.77	2.74 - 2.8	1.41		ug/kg	
	4	2.98	2.95 - 3.01	3.39		ug/kg	
	5	3.23	3.2 - 3.26	2.5		ug/kg	
					2.18		
Column 2	1	3.17	3.14 - 3.2	2.63		ug/kg	
	2	3.25	3.22 - 3.28	2.6		ug/kg	
	3	3.54	3.51 - 3.57	3.22		ug/kg	
	4	3.77	3.74 - 3.8	2.25		ug/kg	
	5	3.8	3.77 - 3.83	2.84		ug/kg	
					2.71		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number:	10-2154	Matrix:	SOIL
Lab Sample ID:	1202072502		
Client Sample:	QC for batch 965798	Client:	LANL010
Client ID:	MB for batch 965798	Method:	SW846 8082
Batch ID:	965805	Inst:	ECD1A.1
Run Date:	03/17/2010 09:14	Analyst:	YS1
Prep Date:	03/16/2010 21:02	Aliquot:	30 g
Data File:	019f1901-1.d	Column:	1 CLP1
	019b1901-1.d		2 CLP2
		Project:	QC
		SOP Ref:	GL-OA-E-040
		Dilution:	1
		Inj. Vol:	1 uL
		Final Volume:	1 mL
		Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecdla.i/0317107.b/019f1901-3.d
Report Date: 17-Mar-2010 13:52

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/019f1901-3.d
Lab Smp Id: 1202072502 Client Smp ID: PBLK01
Inj Date : 17-MAR-2010 09:14
Operator : YSl Inst ID: ecdla.i
Smp Info : |1202072502|1|
Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 12:03 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 19 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2154.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8						
\$ 11 4cmx	1.913	1.913	0.000	49954676 128.246	4.3 80.00- 120.00	100.00

CAS #: 2051-24-3						
\$ 12 Decachlorobiphenyl	5.218	5.216	0.002	38276751 128.908	4.3 80.00- 120.00	100.00

Data File: /chem/eodta.i/0317107.b/019f1901-3.d

Page 1

Date : 17-MAR-2010 09:14

Client ID: PBLK01

Instrument: eodta.i

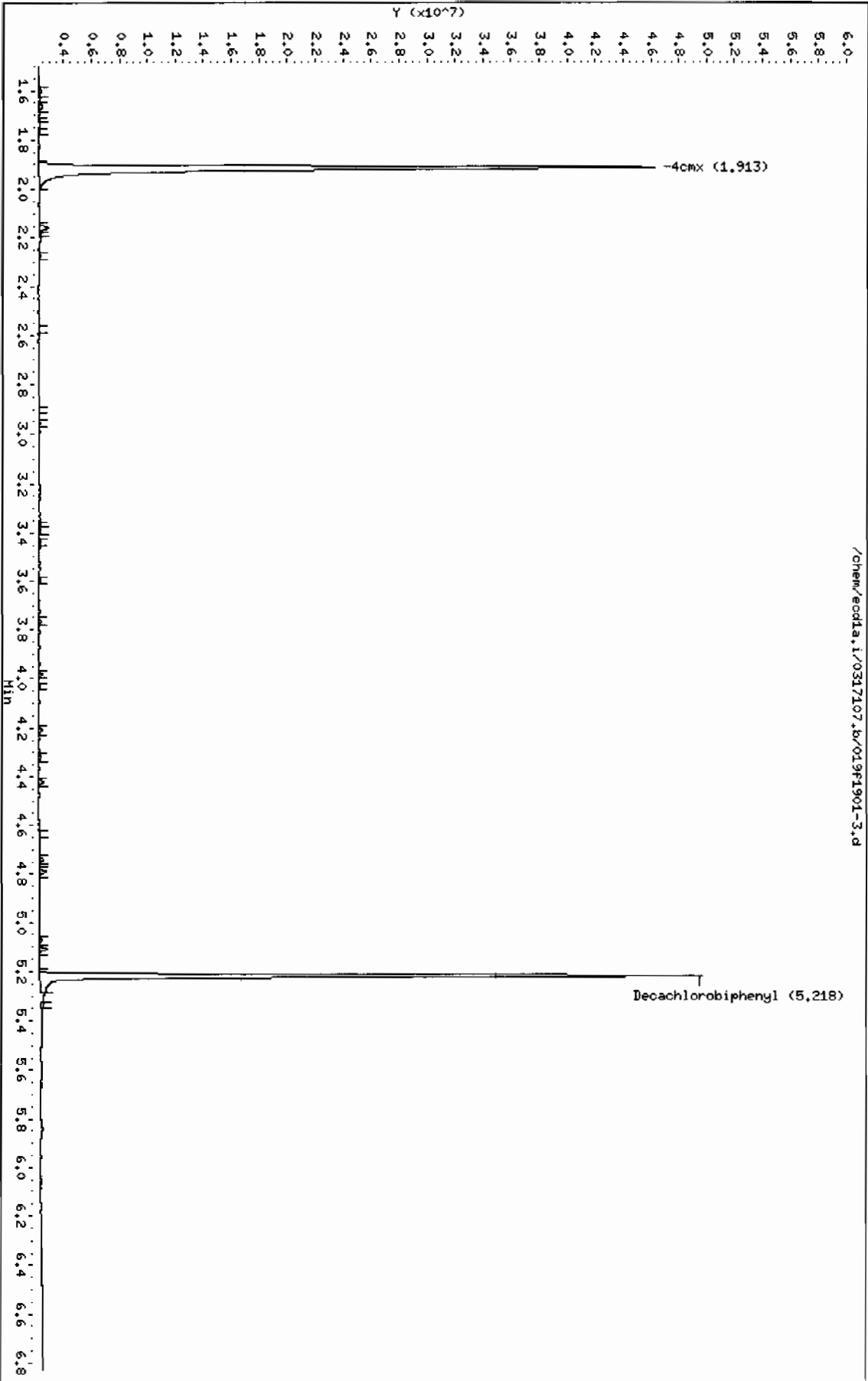
Sample Info: 11202072502111

Volume Injected (uL): 1.0

Operator: YSL

Column phase: CLP1

Column diameter: 0.25



Data File: /chem/ecdla.i/0317107.b/019b1901-3.d
Report Date: 17-Mar-2010 13:52

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/0317107.b/019b1901-3.d
Lab Smp Id: 1202072502 Client Smp ID: PBLK01
Inj Date : 17-MAR-2010 09:14
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202072502|1|
Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 11:59 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 19 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2154.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

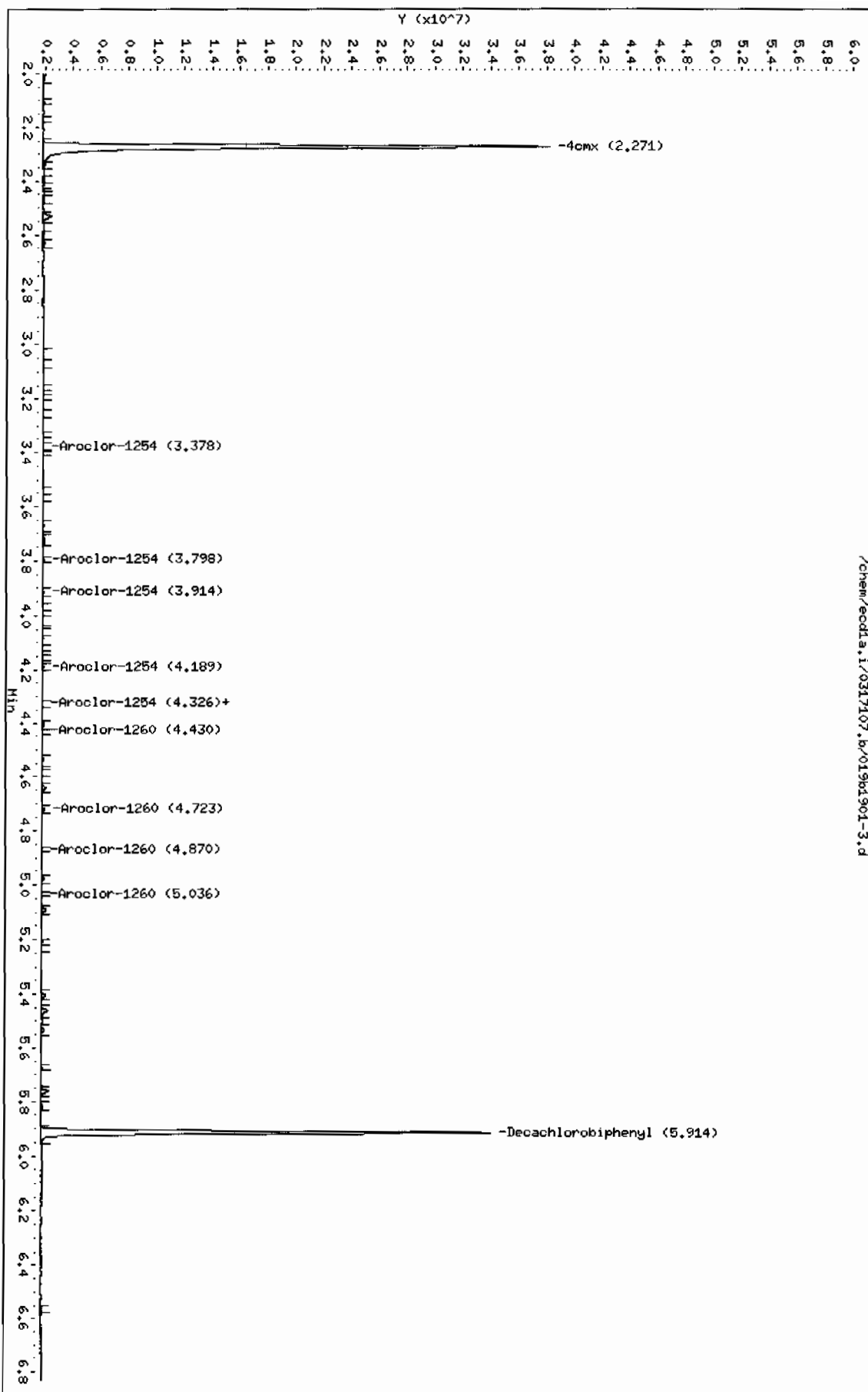
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====		=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.271	2.271	0.000	33641968 128.242	4.3	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.914	5.913	0.001	24504990 130.921	4.4	80.00- 120.00	100.00

Data File: /chem/ecdl1a.i/0317107.b/019b1901-3.d
Date: 17-MAR-2010 09:14
Client ID: PBLK01
Sample Info: 1120207250211
Volume Injected (uL): 1.0
Column Phase: CLP2

Instrument: ecdl1a.i
Operator: YS1
Column diameter: 0.25

/chem/ecdl1a.i/0317107.b/019b1901-3.d



PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-2154

Matrix: SOIL

Lab Sample ID: 1202072503

Client Sample: QC for batch 965798

Client: LANL010

Project: QC

Client ID: LCS for batch 965798

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 965805

Inst: ECD1A.I

Dilution: 1

Run Date: 03/17/2010 09:25

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 03/16/2010 21:02

Aliquot: 30 g

Final Volume: 1 mL

Data File: 020f2001-1.d

Column: 1 CLP1

Level: LOW

020b2001-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		19.6	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		21.6	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/020f2001-3.d

Lab Smp Id: 1202072503

Client Smp ID: PBLK01LCS

Inj Date : 17-MAR-2010 09:25

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |1202072503|1|

Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|LCS|

Comment :

Method : /chem/ecdl1a.i/0317107.b/ECD1-F-8082-031110b.m

Meth Date : 17-Mar-2010 12:03 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 20

QC Sample: LCS

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2154.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
1.914	1.913	0.001	49554639 127.219	4.2	80.00-	120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.218	5.216	0.002	37446239 126.111	4.2	80.00-	120.00	100.00
1 Aroclor-1016				CAS #: 12674-11-2			
2.367	2.366	0.001	8997695 592.858	19.8	80.00-	120.00	100.00
2.653	2.651	0.002	10841864 572.560	19.1	113.09-	153.09	120.50
2.734	2.732	0.002	7136270 573.556	19.1	63.11-	103.11	79.31
2.771	2.768	0.003	4248605 578.174	19.3	30.20-	70.20	47.22

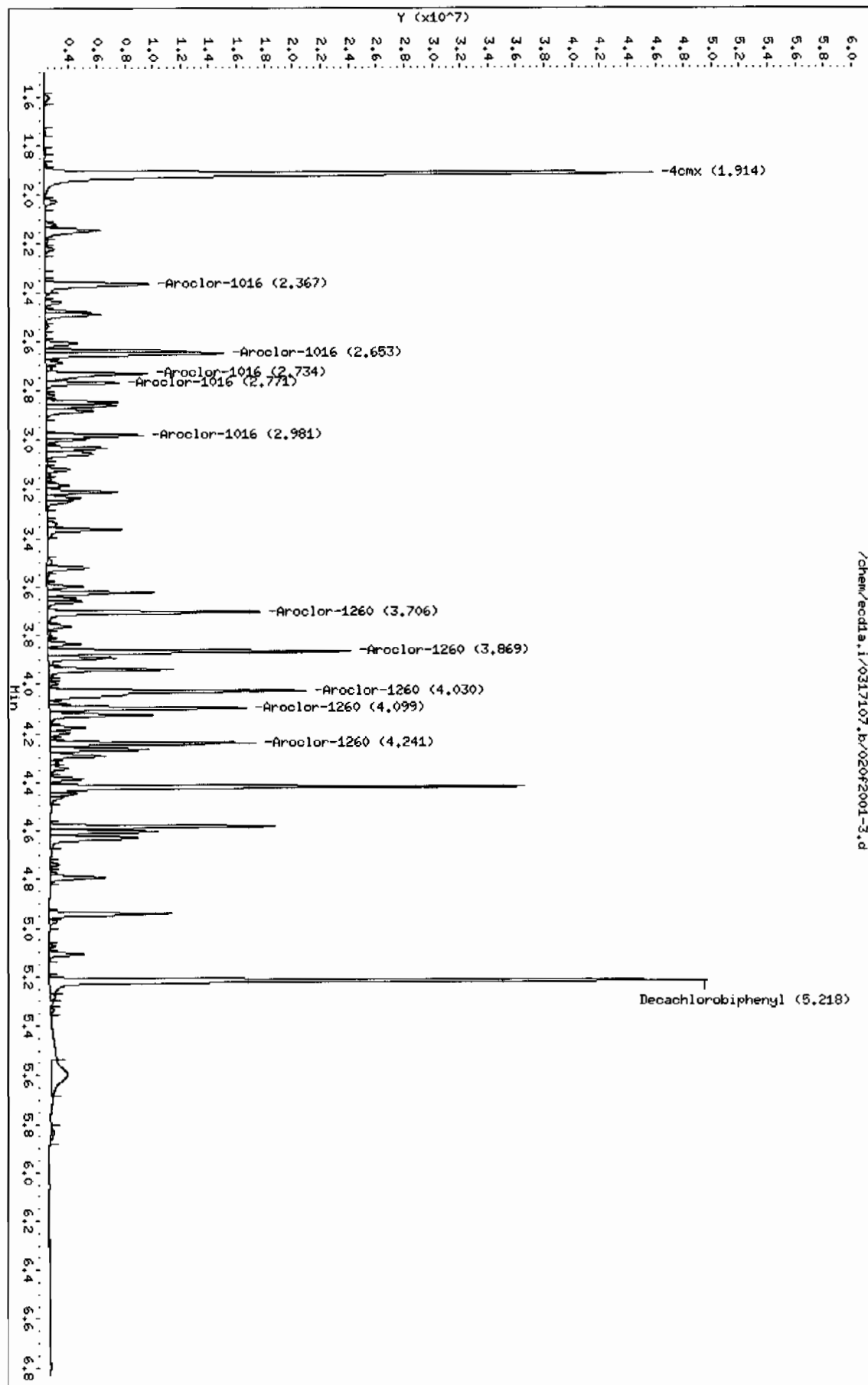
CONCENTRATIONS								
RT	EXP RT	DLT RT	ON-COL		FINAL	TARGET RANGE	RATIO	
			RESPONSE	(ug/L)	(ug/Kg)			
==	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)								
2.981	2.978	0.003	5516490	579.599	19.3	43.54- 83.54	61.31	
Average of Peak Concentrations =					19.3			

7 Aroclor-1260					CAS #: 11096-82-5			
3.706	3.703	0.003	11541540	629.650	21.0	80.00- 120.00	100.00	
3.869	3.866	0.003	17098736	635.881	21.2	128.24- 168.24	148.15	
4.030	4.028	0.002	18362288	648.493	21.6	139.41- 179.41	159.10	
4.099	4.096	0.003	10373752	642.025	21.4	69.99- 109.99	89.88	
4.241	4.238	0.003	10862707	646.102	21.5	73.42- 113.42	94.12	
Average of Peak Concentrations =					21.3			

Data File: /chem/ecdlia.i/0317107.b/020f2001-3.d
Date: 17-MAR-2010 09:25
Client ID: PBLKOLCS
Sample Info: 11202072503111
Volume injected (uL): 1.0
Column phase: CLP1

Instrument: ecdlia.i
Operator: YSL
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/0317107.b/020b2001-3.d
Lab Smp Id: 1202072503 Client Smp ID: PBLK01LCS
Inj Date : 17-MAR-2010 09:25
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202072503|1|
Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|LCS|
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 11:59 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 20 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2154.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
=====							
\$ 11 4cmx CAS #: 877-09-8							
2.272	2.271	0.001	33156462	126.391	4.2 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.914	5.913	0.001	24557073	131.200	4.4 80.00- 120.00	100.00	

1 Aroclor-1016 CAS #: 12674-11-2							
3.167	3.166	0.001	7458425	592.645	19.8 80.00- 120.00	100.00 (M)	
3.249	3.248	0.001	5041193	583.863	19.5 47.45- 87.45	67.59	
3.314	3.312	0.002	3038818	574.811	19.2 21.91- 61.91	40.74	
3.540	3.538	0.002	4059566	588.964	19.6 35.04- 75.04	54.43	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
3.615	3.614	0.001	3866323	601.991	20.1	31.77-	71.77	51.84	
Average of Peak Concentrations =					19.6				

7 Aroclor-1260					CAS #: 11096-82-5				
4.305	4.304	0.001	8255324	631.130	21.0	80.00-	120.00	100.00(H)	
4.430	4.429	0.001	10005162	643.459	21.4	102.19-	142.19	121.20	
4.696	4.695	0.001	7653246	643.342	21.4	71.86-	111.86	92.71	
4.869	4.868	0.001	7993649	650.460	21.7	75.55-	115.55	96.83	
5.017	5.015	0.002	17803224	674.502	22.5	191.86-	231.86	215.66	
Average of Peak Concentrations =					21.6				

QC Flag Legend

M - Compound response manually integrated.
 H - Operator selected an alternate compound hit.

Data File: /chem/eodda.i/0317107.b/020b2001-3.d

Date: 17-MAR-2010 09:25

Client ID: PBLKOLCS

Sample Info: 11202072503111

Volume Injected (ul): 1.0

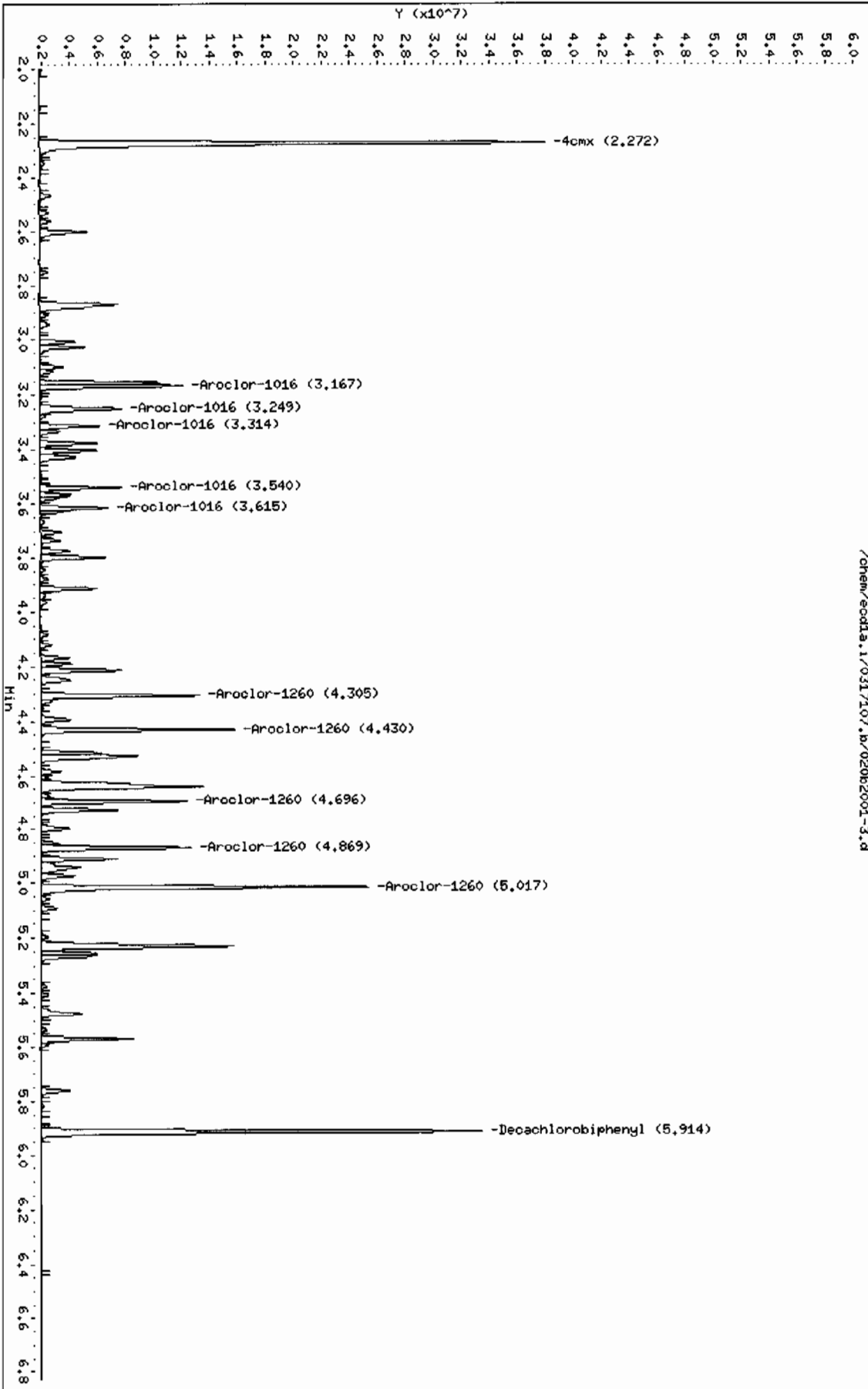
Column phase: CLP2

Instrument: eodda.i

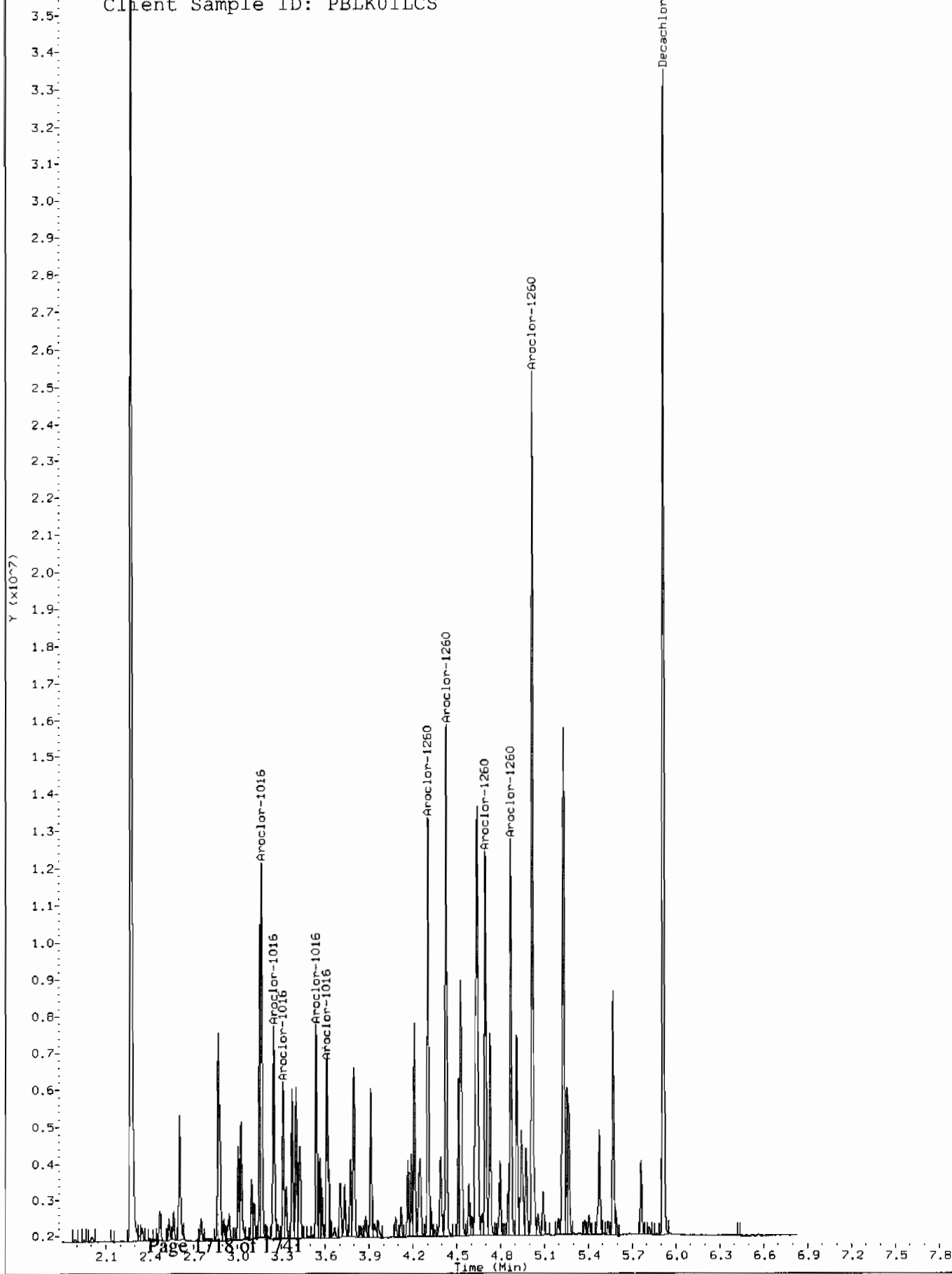
Operator: YSI

Column diameter: 0.25

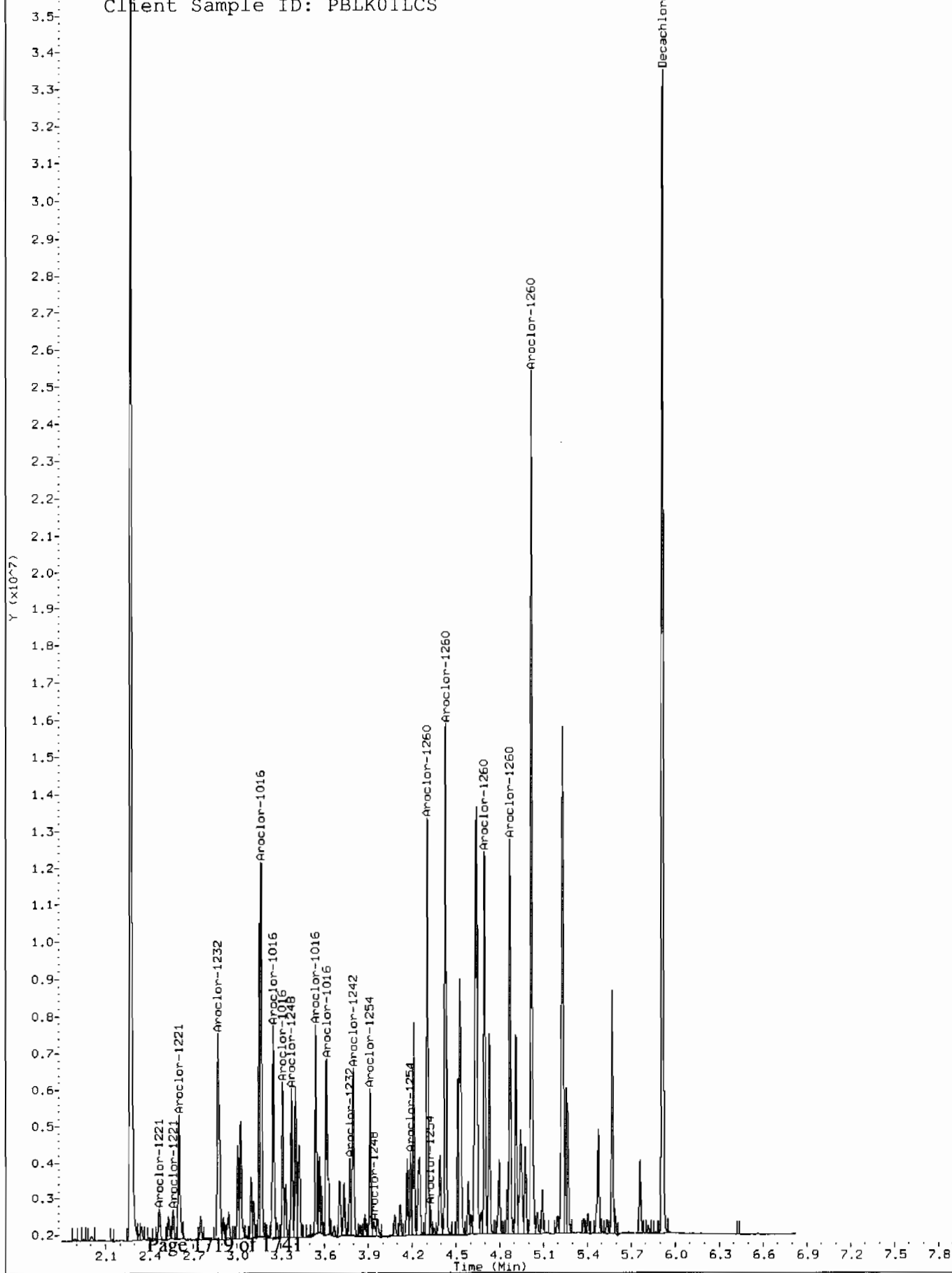
Page 1



Comment: Manually Integrated
Data File: /chem/ecdl1.i/0317107.b/020b2001-3.d
Operator: YS1
Injection Date: 17-MAR-2010 09:25
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS



Comment: Before manual integration
Data File: /chem/ecdla.i/0317107.b/orig-020b2001-3.d
Operator: YS1
Injection Date: 17-MAR-2010 09:25
Instrument: ecdla.i
Client Sample ID: PBLK01LCS



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 03/12/2010

METHOD: ECD1-F-8082-031110b.m

OPERATOR: YS1

REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA936
ALUMINA LOT 1281992-A
COPPER LOT 1249397-A

Calibration & QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/031110b.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100219-99-01	YS1	11-MAR-2010 14:46		031110b	1.01	CLEAN	
002f0201.d	WAR100222-60-01	YS1	11-MAR-2010 14:56		031110b	1.01	DUSE RE-ICAL	
003f0301.d	WAR100219-54	YS1	11-MAR-2010 15:07		031110b	1.01	DUSE RE-ICAL	
004f0401.d	WAR100219-42	YS1	11-MAR-2010 15:17		031110b	1.01	DUSE RE-ICAL	
005f0501.d	WAR100223-48	YS1	11-MAR-2010 15:28		031110b	1.01	DUSE RE-ICAL	
006f0601.d	WAR100107-68	YS1	11-MAR-2010 15:38		031110b	1.01	PASSED ON BOTH COLUMNS	
007f0701.d	WAR100104-32	YS1	11-MAR-2010 15:49		031110b	1.01	PATTERN ONLY	
008f0801.d	WAR100104-21	YS1	11-MAR-2010 15:59		031110b	1.01	PATTERN ONLY	
009f0901.d	WAR100104-62	YS1	11-MAR-2010 16:10		031110b	1.01	PATTERN ONLY	
010f1001.d	WAR091219-BDT	YS1	11-MAR-2010 16:21		031110b	1.01	DDT ANALOG STANDARD	
011f1101.d	WAR100311-01	YS1	11-MAR-2010 16:31		031110b	1.01	AR1660 I-CAL LEVEL 1	
012f1201.d	WAR100311-02	YS1	11-MAR-2010 16:41		031110b	1.01	AR1660 I-CAL LEVEL 2	
013f1301.d	WAR100311-03	YS1	11-MAR-2010 16:52		031110b	1.01	AR1660 I-CAL LEVEL 3	
014f1401.d	WAR100311-04	YS1	11-MAR-2010 17:02		031110b	1.01	AR1660 I-CAL LEVEL 4	
015f1501.d	WAR100311-01	YS1	11-MAR-2010 17:13		031110b	1.01	AR1660 I-CAL LEVEL 5	

Instrument Batch: /chem/ecd1a.i/031110b.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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016f1601.d	WAR100222-60 C1	YS1	11-MAR-2010 17:24		031110b	1.01	PASSED ON BOTH COLUMNS
017f1701.d	WAR100311-05	YS1	11-MAR-2010 17:34		031110b	1.0	AR1254 I-CAL LEVEL 1
018f1801.d	WAR100311-06	YS1	11-MAR-2010 17:45		031110b	1.01	AR1254 I-CAL LEVEL 2
019f1901.d	WAR100311-07	YS1	11-MAR-2010 17:55		031110b	1.01	AR1254 I-CAL LEVEL 3
020f2001.d	WAR100311-08	YS1	11-MAR-2010 18:06		031110b	1.01	AR1254 I-CAL LEVEL 4
021f2101.d	WAR100219-02	YS1	11-MAR-2010 18:16		031110b	1.01	AR1254 I-CAL LEVEL 5
022f2201.d	WAR100219-54	YS1	11-MAR-2010 18:27		031110b	1.01	PASSED ON BOTH COLUMNS
023f2301.d	WAR100311-09	YS1	11-MAR-2010 18:37		031110b	1.01	AR1242 I-CAL LEVEL 1
024f2401.d	WAR100311-10	YS1	11-MAR-2010 18:48		031110b	1.01	AR1242 I-CAL LEVEL 2
025f2501.d	WAR100311-11	YS1	11-MAR-2010 18:58		031110b	1.01	AR1242 I-CAL LEVEL 3
026f2601.d	WAR100311-12	YS1	11-MAR-2010 19:09		031110b	1.01	AR1242 I-CAL LEVEL 4
027f2701.d	WAR100219-01	YS1	11-MAR-2010 19:19		031110b	1.01	AR1242 I-CAL LEVEL 5
028f2801.d	WAR100219-42	YS1	11-MAR-2010 19:30		031110b	1.01	PASSED ON BOTH COLUMNS
029f2901.d	WAR100311-13	YS1	11-MAR-2010 19:40		031110b	1.01	AR1248 I-CAL LEVEL 1
030f3001.d	WAR100311-14	YS1	11-MAR-2010 19:51		031110b	1.01	AR1248 I-CAL LEVEL 2
031f3101.d	WAR100311-15	YS1	11-MAR-2010 20:01		031110b	1.01	AR1248 I-CAL LEVEL 3
032f3201.d	WAR100311-16	YS1	11-MAR-2010 20:12		031110b	1.01	AR1248 I-CAL LEVEL 4
033f3301.d	WAR100211-01	YS1	11-MAR-2010 20:22		031110b	1.01	AR1248 I-CAL LEVEL 5
034f3401.d	WAR100223-48	YS1	11-MAR-2010 20:33		031110b	1.01	PASSED ON BOTH COLUMNS
035f3501.d	WAR100219-99 02	YS1	11-MAR-2010 20:44		031110b	1.01	CLEAN

Instrument Batch: /chem/ecdl1.i/031110b.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1202067743	YS1	11-MAR-2010 20:54	963869	1246954	1.01MB		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT
037f3701.d	1202067744	YS1	11-MAR-2010 21:05	963869	1246954	1.01LCS		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT
038f3801.d	1246954003	YS1	11-MAR-2010 21:15	963869	1246954	1.01BBES		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT
039f3901.d	1202067745	YS1	11-MAR-2010 21:26	963869	1246954	1.01MS		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT
040f4001.d	1202067746	YS1	11-MAR-2010 21:36	963869	1246954	1.01MSD		DUSE CON FIRMATION FOR THE SAMPLES HAD HIT

041f401.d	246954006	YS1	11-MAR-2010 21:47	1963869	1246954	1.0	BBS	IDUSE CON FIRMATION FOR THE SAMPLES HAD HIT
042f420.d	246954007	YS1	11-MAR-2010 21:57	1963869	1246954	1.0	BBS	IDUSE CON FIRMATION FOR THE SAMPLES HAD HIT
043f4301.d	246954009	YS1	11-MAR-2010 22:08	1963869	1246954	1.0	BBS	IDUSE CON FIRMATION FOR THE SAMPLES HAD HIT
044f4401.d	246954012	YS1	11-MAR-2010 22:18	1963869	1246954	1.0	BBS	IDUSE CON FIRMATION FOR THE SAMPLES HAD HIT
045f4501.d	246954014	YS1	11-MAR-2010 22:29	1963869	1246954	1.0	BBS	IDUSE CON FIRMATION FOR THE SAMPLES HAD HIT
046f4601.d	1046100222-60 02	YS1	11-MAR-2010 22:39	1031110b	1031110b	1.0		PASSED ON BOTH COLUMNS
046f4901.d	1046100222-60 03	YS1	11-MAR-2010 23:11	1031110b	1031110b	1.0		CLEAN
047f4701.d	1047100219-99 03	YS1	11-MAR-2010 22:50	1031210	1031210	1.0		
047f5001.d	1047100219-99 04	YS1	11-MAR-2010 23:21	1031110b	1031110b	1.0		
048f4801.d	1048100311-07SCR	YS1	11-MAR-2010 23:00	1031110b	1031110b	1.0		LCS CSREEN FOR PREP

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 03/18/2010 METHOD: ECD1-F-8082-031110b.m OPERATOR:YS1 REVIEWED BY: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA936
ALUMINA LOT 1281992-A
COPPER LOT 1249397-A

Calibration & QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,

DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,

BF-Before, AF-After.

Sequence Number: /chem/ecdl1a.i/0317107.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100219-99 01	YS1	17-MAR-2010 05:57		0317107	1.0I	CLEAN	
002f0201.d	WAR100222-60 01	YS1	17-MAR-2010 06:08		0317107	1.0I	PASSED ON BOTH COLUMNS	
003f0301.d	WAR100219-54	YS1	17-MAR-2010 06:18		0317107	1.0I	PASSED ON BOTH COLUMNS	
004f0401.d	WAR100219-42	YS1	17-MAR-2010 06:29		0317107	1.0I	PASSED ON BOTH COLUMNS	
005f0501.d	WAR100223-48	YS1	17-MAR-2010 06:39		0317107	1.0I	PASSED ON BOTH COLUMNS	
006f0601.d	WAR100107-68	YS1	17-MAR-2010 06:50		0317107	1.0I	PASSED ON BOTH COLUMNS	
007f0701.d	WAR100104-32	YS1	17-MAR-2010 07:01		0317107	1.0I	PATTERN ONLY	
008f0801.d	WAR100104-21	YS1	17-MAR-2010 07:11		0317107	1.0I	PATTERN ONLY	
009f0901.d	WAR100104-62	YS1	17-MAR-2010 07:22		0317107	1.0I	PATTERN ONLY	
010f1001.d	WAR091219-DPT	YS1	17-MAR-2010 07:36		0317107	1.0I	DDT ANALOG STANDARD	
011f1101.d	WAR100219-99 02	YS1	17-MAR-2010 07:46		0317107	1.0I	CLEAN	
012f1201.d	12020711-8	YS1	17-MAR-2010 07:57	965286	0317107	1.0IQC A	DOSE	
013f1301.d	12020711-9	YS1	17-MAR-2010 08:07	965286	0317107	1.0IQC A	DOSE	
014f1401.d	12020711-20	YS1	17-MAR-2010 08:18	965286 15		1.0IQC A	DOSE	
015f1501.d	1248998005	YS1	17-MAR-2010 08:28	965286 1248998		1.0ICEEL	DOSE CONFIRMATION FOR DCB LOW	

Instrument Batch: /chem/ecdl1a.i/0317107.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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1016f1601.d	1248202002	YS1	17-MAR-2010 08:41	965380	10-2124	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1017f1701.d	124820222-60 02	YS1	17-MAR-2010 08:53		0317107	1.0		PASSED ON BOTH COLUMNS
1018f1801.d	124820219-99 03	YS1	17-MAR-2010 09:04		0317107	1.0		CLEAN
1019f1901.d	1202072502	YS1	17-MAR-2010 09:14	965805	10-2134	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1020f2001.d	1202072503	YS1	17-MAR-2010 09:25	965805	10-2134	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1021f2101.d	1248240009	YS1	17-MAR-2010 09:35	965805	10-2134	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1022f2201.d	1248240010	YS1	17-MAR-2010 09:48	965805	10-2134	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1023f2301.d	1248244001	YS1	17-MAR-2010 10:01	965805	10-2137	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1024f2401.d	1248249001	YS1	17-MAR-2010 10:13	965805	10-2140	1.0	LANL	USE RR 5X AFTER MORE SULFUR CLEANED
1025f2501.d	1248249002	YS1	17-MAR-2010 10:26	965805	10-2140	1.0	LANL	USE RR 5X AFTER MORE SULFUR CLEANED
1026f2601.d	1248249003	YS1	17-MAR-2010 10:38	965805	10-2140	1.0	LANL	USE RR 5X AFTER MORE SULFUR CLEANED
1027f2701.d	1248249004	YS1	17-MAR-2010 10:51	965805	10-2140	1.0	LANL	USE RR 5X AFTER MORE SULFUR CLEANED
1028f2801.d	1248373011	YS1	17-MAR-2010 11:04	965805	10-2154	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1029f2901.d	124820222-60 03	YS1	17-MAR-2010 11:16		0317107	1.0		PASSED ON BOTH COLUMNS
1030f3001.d	124820219-99 04	YS1	17-MAR-2010 11:29		0317107	1.0		CLEAN
1031f3101.d	1248373014	YS1	17-MAR-2010 11:41	965805	10-2154	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1032f3201.d	1248373015	YS1	17-MAR-2010 11:52	965805	10-2154	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1033f3301.d	1248377002	YS1	17-MAR-2010 12:05	965805	10-2157	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1034f3401.d	1248377003	YS1	17-MAR-2010 12:17	965805	10-2157	1.0	LANL	USE RR 10X
1035f3501.d	1248377004	YS1	17-MAR-2010 12:30	965805	10-2157	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl1a.i/0317107.b

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Data File	GE Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	1248377005	YS1	17-MAR-2010 12:42	965805	10-2157	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1037f3701.d	1248377006	YS1	17-MAR-2010 12:55	965805	10-2157	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1038f3801.d	1248377007	YS1	17-MAR-2010 13:08	965805	10-2157	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1039f3901.d	1248386003	YS1	17-MAR-2010 13:20	965805	10-2164	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1040f4001.d	1248386004	YS1	17-MAR-2010 13:33	965805	10-2164	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	WAR100222-60 03	YS1	17-MAR-2010 13:45		0317107	1.01	PASSED ON BOTH COLUMNS
042f4201.d	WAR100219-99 04	YS1	17-MAR-2010 13:56		0317107	1.01	CLEAN
043f4301.d	248389002	YS1	17-MAR-2010 14:06	965805	110-2165	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	1202072504	YS1	17-MAR-2010 14:19	965805	110-2165	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	1202072505	YS1	17-MAR-2010 14:32	965805	110-2165	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	248389003	YS1	17-MAR-2010 14:44	965805	110-2165	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	248249001	YS1	17-MAR-2010 14:57	965805	110-2140	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	248249002	YS1	17-MAR-2010 15:09	965805	110-2140	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	248249003	YS1	17-MAR-2010 15:22	965805	110-2140	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	248249004	YS1	17-MAR-2010 15:35	965805	110-2140	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	248377003	YS1	17-MAR-2010 15:47	965805	110-2157	10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	WAR100222-60 05	YS1	17-MAR-2010 16:00		0317107	1.01	PASSED ON BOTH COLUMNS
053f5301.d	WAR100219-99 06	YS1	17-MAR-2010 16:10		0317107	1.01	CLEAN
054f5401.d	1202071505	YS1	17-MAR-2010 16:21	965431	249169	1.01QC A	UPLOAD BOTH COLUMNS, USE FRONT
055f5501.d	1202071506	YS1	17-MAR-2010 16:34	965431	249169	1.01QC A	UPLOAD BOTH COLUMNS, USE FRONT

Instrument Batch: /chem/ecd1a.i/0317107.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	249169011	YS1	17-MAR-2010 16:46	965431	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
057f5701.d	249169012	YS1	17-MAR-2010 16:59	965431	249169	5.0	CDMF	DOSE RR 2X
058f5801.d	249169013	YS1	17-MAR-2010 17:11	965431	249169	10.0	CDMF	DOSE RR 2X
059f5901.d	249169014	YS1	17-MAR-2010 17:24	965431	249169	10.0	CDMF	DOSE RR 2X
060f6001.d	249169015	YS1	17-MAR-2010 17:37	965431	249169	10.0	CDMF	DOSE RR 2X
061f6101.d	WAR100222-60 06	YS1	17-MAR-2010 17:49		0317107	1.0		PASSED ON BOTH COLUMNS
062f6201.d	WAR100219-99 07	YS1	17-MAR-2010 18:02		0317107	1.0		CLEAN
063f6301.d	248480001	YS1	17-MAR-2010 18:15	965431	248480	5.0	ENRG	UPLOAD BOTH COLUMNS, USE FRONT
064f6401.d	249106001	YS1	17-MAR-2010 18:27	965431	249106	5.0	COMM	UPLOAD BOTH COLUMNS, USE FRONT

065f6501.d	249106002	YS1	17-MAR-2010 18:40	965431	249106	5.0' COMM	UPLOAD BOTH COLUMNS, USE FRONT
066f6601.d	249106004	YS1	17-MAR-2010 18:52	965431	249106	5.0' COMM	UPLOAD BOTH COLUMNS, USE FRONT
067f6701.d	249181001	YS1	17-MAR-2010 19:05	965431	249181	5.0' COMM	UPLOAD BOTH COLUMNS, USE FRONT
068f6801.d	249181002	YS1	17-MAR-2010 19:18	965431	249181	10.0' COMM	UPLOAD BOTH COLUMNS, USE FRONT
069f6901.d	249181004	YS1	17-MAR-2010 19:30	965431	249181	10.0' COMM	UPLOAD BOTH COLUMNS, USE FRONT
070f7001.d	249196001	YS1	17-MAR-2010 19:43	965431	249196	5.0' ENRG	UPLOAD BOTH COLUMNS, USE FRONT
071f7101.d	249231003	YS1	17-MAR-2010 19:56	965431	249231	5.0' PCGE	UPLOAD BOTH COLUMNS, USE FRONT
072f7201.d	WAR100222-60 07	YS1	17-MAR-2010 20:08		0317107	1.0'	PASSED ON BOTH COLUMNS
073f7301.d	WAR100219-99 08	YS1	17-MAR-2010 20:21		0317107	1.0'	CLEAN
074f7401.d	249293001	YS1	17-MAR-2010 20:33	965431	249293	20.0' LLNL	UPLOAD BOTH COLUMNS, USE FRONT
075f7501.d	1202071507	YS1	17-MAR-2010 20:46	965431	249293	20.0' QC A	UPLOAD BOTH COLUMNS, USE FRONT

Instrument Batch: /chem/ecdl1a.i/0317107.b Page: 4

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1202071508	YS1	17-MAR-2010 20:59	965431	249293	20.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
077f7701.d	249293002	YS1	17-MAR-2010 21:11	965431	249293	20.0	LLNL	UPLOAD BOTH COLUMNS, USE FRONT
078f7801.d	249293003	YS1	17-MAR-2010 21:24	965431	249293	10.0	LLNL	UPLOAD BOTH COLUMNS, USE FRONT
079f7901.d	249293004	YS1	17-MAR-2010 21:37	965431	249293	10.0	LLNL	UPLOAD BOTH COLUMNS, USE FRONT
080f8001.d	WAR100222-60 08	YS1	17-MAR-2010 21:49		0317107	1.0		PASSED ON BOTH COLUMNS
081f8101.d	WAR100219-99 09	YS1	17-MAR-2010 22:02		0317107	1.0		CLEAN

Data File: /chem/ecdl1a.i/0317107.b/044b4401.d
Report Date: 17-Mar-2010 14:40

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/044b4401.d

Lab Smp Id: 1202072504

Client Smp ID: WST16-10-13296MS

Inj Date : 17-MAR-2010 14:19

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |1202072504|1|

Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MS|

Comment :

Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m

Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 44

QC Sample: MS

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2165.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	17.02150	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	

\$ 11 4cmx					CAS #: 877-09-8		
2.271	2.271	0.000	36296126	138.367	5.5 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.913	5.913	0.000	28834864	154.054	6.2 80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2		
3.166	3.166	0.000	8003781	635.979	25.5 80.00- 120.00	100.00 (M)	
3.249	3.248	0.001	5261600	609.390	24.4 44.76- 84.76	65.74	
3.312	3.312	0.000	3205339	606.310	24.3 20.23- 60.23	40.05	
3.540	3.538	0.002	4368811	633.830	25.4 32.28- 72.28	54.58	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	==	=====	=====		
1 Aroclor-1016 (continued)									
3.615	3.614	0.001	4094510	637.520	25.5	27.98-	67.98	51.16	
Average of Peak Concentrations =					25.0				

7 Aroclor-1260					CAS #: 11096-82-5				
4.305	4.304	0.001	9465177	723.625	29.0	80.00-	120.00	100.00	
4.429	4.429	0.000	11828092	760.697	30.5	101.65-	141.65	124.96	
4.696	4.695	0.001	9153955	769.494	30.8	71.12-	111.12	96.71	
4.868	4.868	0.000	8993680	731.835	29.3	74.79-	114.79	95.02	
5.016	5.015	0.001	20781563	787.340	31.5	189.81-	229.81	219.56	
Average of Peak Concentrations =					30.2				

QC Flag Legend

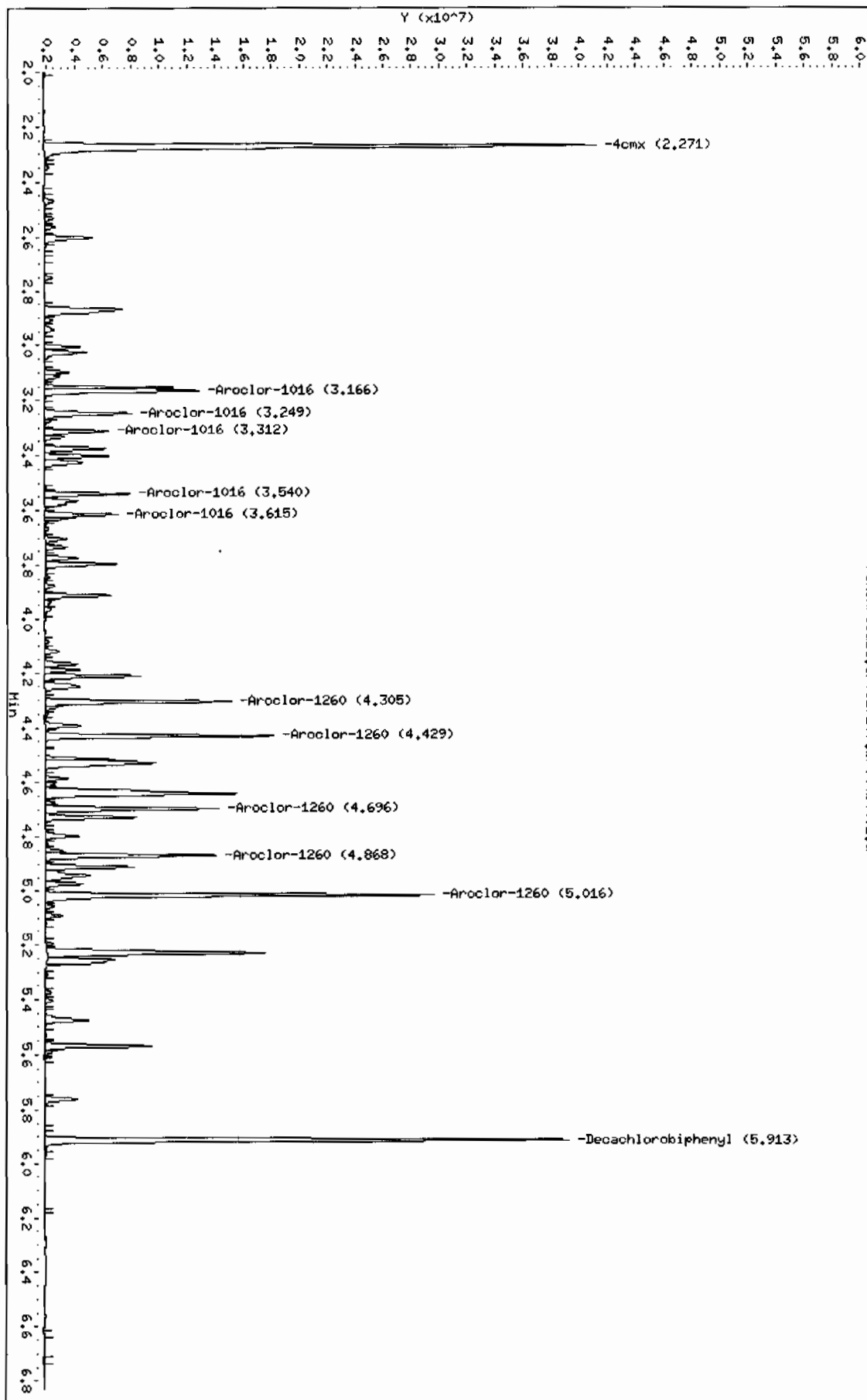
M - Compound response manually integrated.

Data File: /chem/ecdd1a.1/0317107.b/04b4401.d
Date: 17-MAR-2010 14:19
Client ID: MST16-10-13296MS
Sample Info: 11202072504111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdd1a.1
Operator: YSI
Column diameter: 0.25

/chem/ecdd1a.1/0317107.b/04b4401.d

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Data File: /chem/ecdla.i/0317107.b/044f4401.d
Report Date: 17-Mar-2010 14:40

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/0317107.b/044f4401.d
Lab Smp Id: 1202072504 Client Smp ID: WST16-10-13296MS
Inj Date : 17-MAR-2010 14:19
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202072504|1|
Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecdla.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 44 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2165.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.08000	Weight of sample extracted (g)
M	17.02150	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8							
1.913	1.913	0.000	54506059	139.930	5.6 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.216	5.216	0.000	44165345	148.740	6.0 80.00- 120.00	100.00	

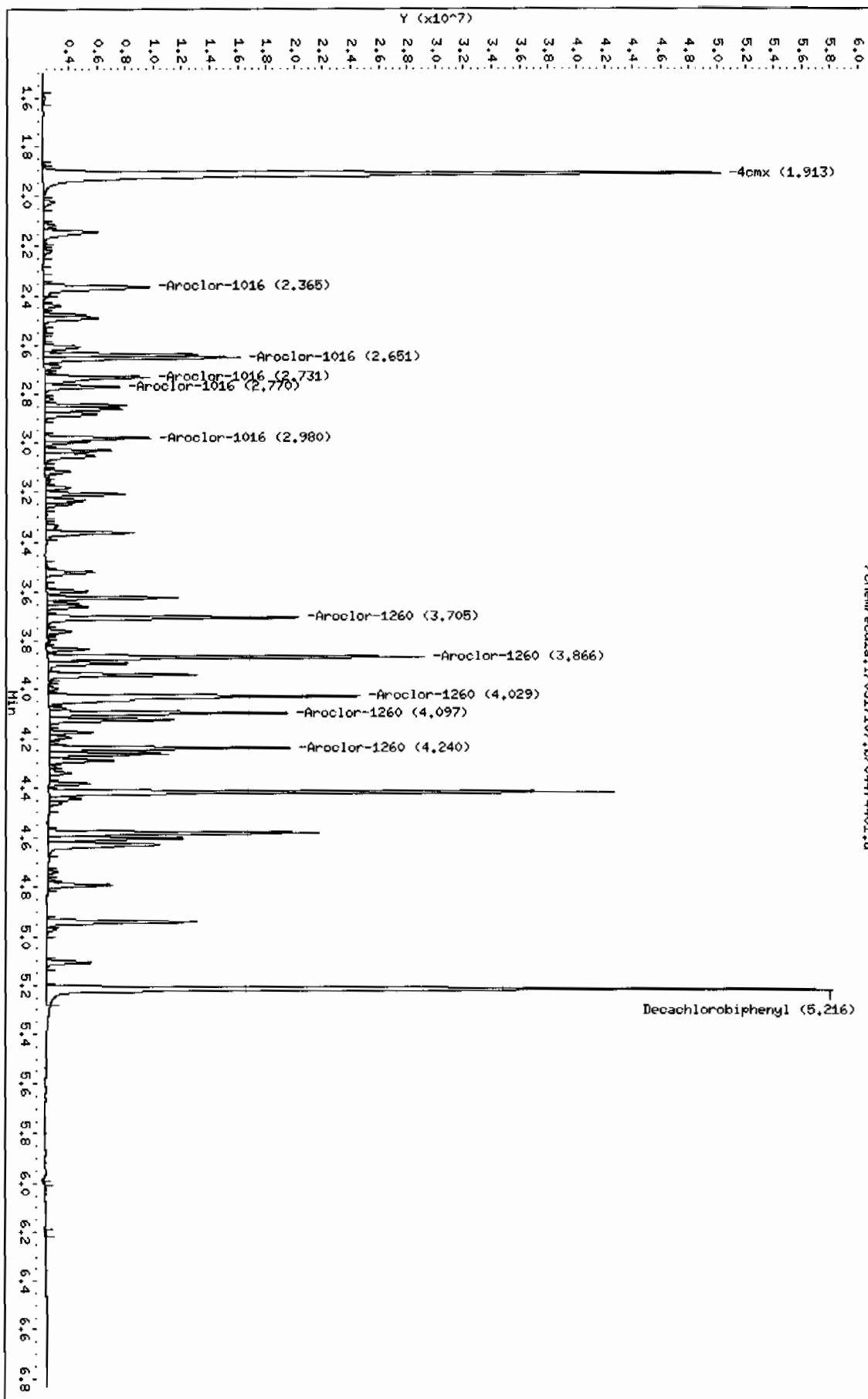
1 Aroclor-1016 CAS #: 12674-11-2							
2.365	2.366	-0.001	9061065	597.034	23.9 80.00- 120.00	100.00	
2.651	2.651	0.000	11572641	611.152	24.5 108.88- 148.88	127.72	
2.731	2.732	-0.001	7405104	595.163	23.8 62.57- 102.57	81.72	
2.770	2.768	0.002	4427709	602.547	24.1 30.09- 70.09	48.87	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO		
==	=====	==	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)									
2.980	2.978	0.002	5935425	623.615	25.0	44.27-	84.27	65.50	
Average of Peak Concentrations =					24.3				

7 Aroclor-1260					CAS #: 11096-82-5				
3.705	3.703	0.002	13298576	725.505	29.1	80.00-	120.00	100.00	
3.866	3.866	0.000	20495470	762.202	30.5	126.76-	166.76	154.12	
4.029	4.028	0.001	21502407	759.392	30.4	137.71-	177.71	161.69	
4.097	4.096	0.001	12508443	774.139	31.0	69.00-	109.00	94.06	
4.240	4.238	0.002	12671124	753.665	30.2	72.73-	112.73	95.28	
Average of Peak Concentrations =					30.2				

Data File: /chem/eodla.i/0317107.b/044f4401.d
Date : 17-MAR-2010 14:19
Client ID: MST16-10-13296MS
Sample Info: 1120207280411
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eodla.i
Operator: YS1
Column diameter: 0.25



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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/0317107.b/045b4501.d
Lab Smp Id: 1202072505 Client Smp ID: WST16-10-13296MSD
Inj Date : 17-MAR-2010 14:32
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202072505|1|
Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecdl1a.i/0317107.b/ECD1-B-8082-031110b.m
Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 45 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2165.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	17.02150	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO		
==	=====	==	=====	=====	=====	=====		
\$ 11 4cmx					CAS #: 877-09-8			
2.271	2.271	0.000	37294616	142.165	5.7 80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.912	5.913	-0.001	29153594	155.757	6.2 80.00-	120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
3.166	3.166	0.000	7669613	609.426	24.5 80.00-	120.00	100.00 (M)	
3.248	3.248	0.000	5018513	581.236	23.3 44.76-	84.76	65.43	
3.312	3.312	0.000	3010073	569.374	22.8 20.23-	60.23	39.25	
3.538	3.538	0.000	4172869	605.403	24.3 32.28-	72.28	54.41	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)									
3.614	3.614	0.000	3888666	605.470	24.3	27.98-	67.98	50.70	
Average of Peak Concentrations =					23.8				

7 Aroclor-1260					CAS #: 11096-82-5				
4.304	4.304	0.000	9272696	708.909	28.4	80.00-	120.00	100.00	
4.429	4.429	0.000	11716957	753.549	30.2	101.65-	141.65	126.36	
4.695	4.695	0.000	9295199	781.367	31.4	71.12-	111.12	100.24	
4.868	4.868	0.000	8801108	716.165	28.7	74.79-	114.79	94.91	
5.015	5.015	0.000	20936611	793.215	31.8	189.81-	229.81	225.79	
Average of Peak Concentrations =					30.1				

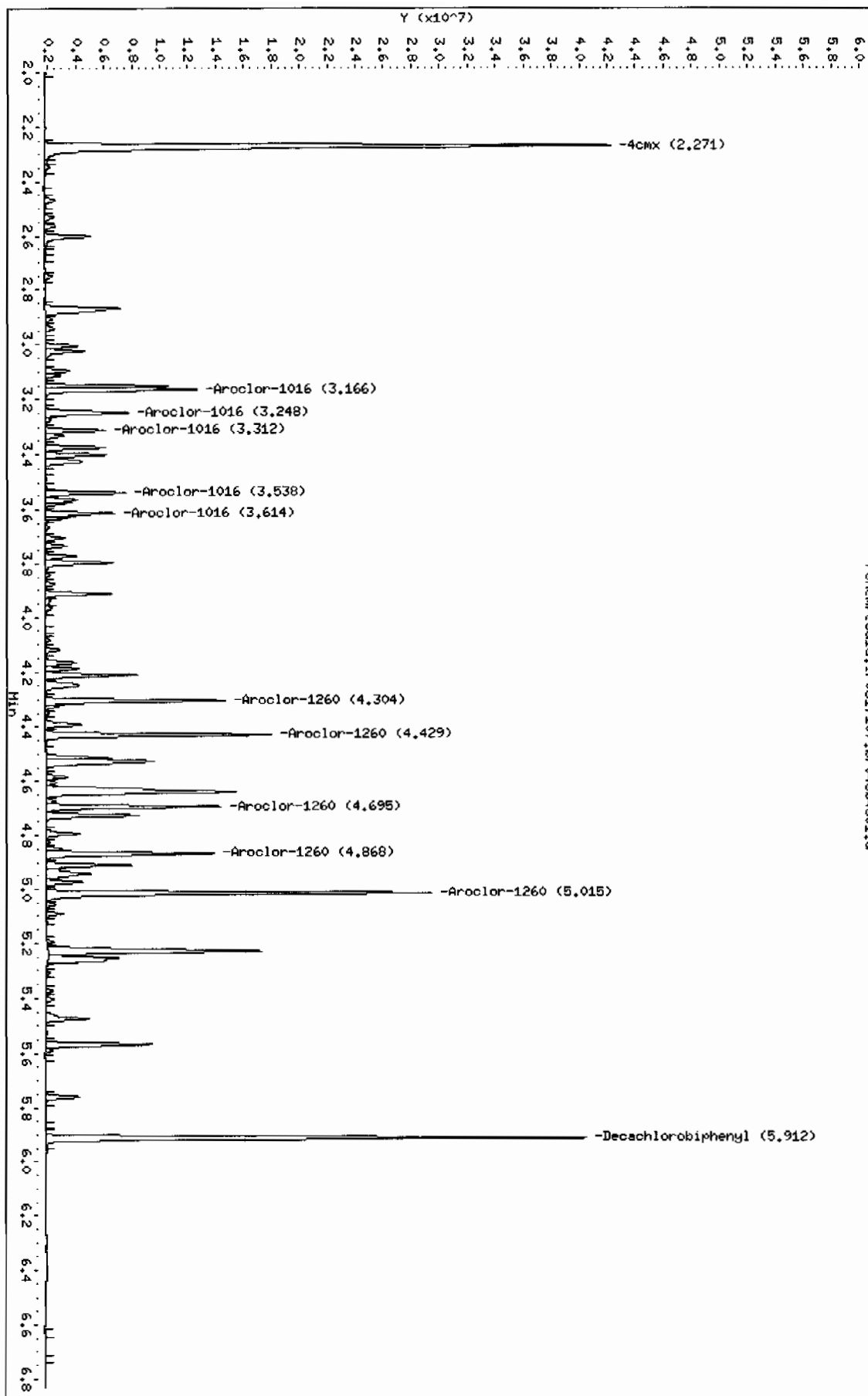
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/0317107.b/045b4501.d
Date: 17-MAR-2010 14:32
Client ID: MST16-10-13296MSD
Sample Info: 1120207250511
Volume Injected (uL): 1.0
Column Phase: CLP2

Instrument: eod1a.i
Operator: YSA
Column diameter: 0.25

/chem/eod1a.i/0317107.b/045b4501.d



Data File: /chem/ecd1a.i/0317107.b/045f4501.d
Report Date: 17-Mar-2010 14:48

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/0317107.b/045f4501.d
Lab Smp Id: 1202072505 Client Smp ID: WST16-10-13296MSD
Inj Date : 17-MAR-2010 14:32
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202072505|1|
Misc Info : |ECD82P_1S|965805|SVA|QC A|SOIL|MSD|1|1|
Comment :
Method : /chem/ecd1a.i/0317107.b/ECD1-F-8082-031110b.m
Meth Date : 17-Mar-2010 14:02 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 45 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2165.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	17.02150	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8							
1.913	1.913	0.000	55803151	143.260	5.8 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.216	5.216	0.000	44069366	148.416	6.0 80.00- 120.00	100.00	

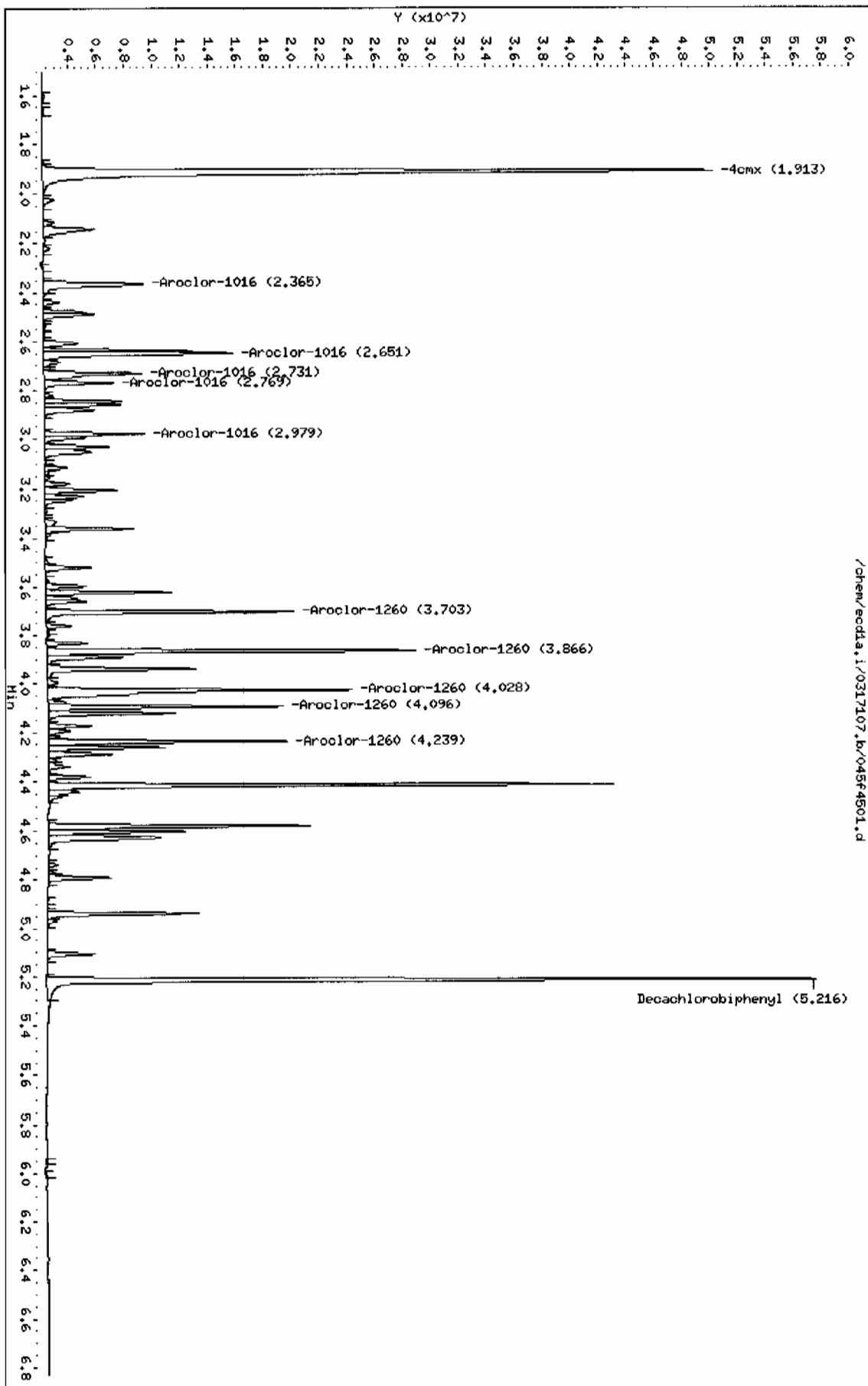
1 Aroclor-1016 CAS #: 12674-11-2							
2.365	2.366	-0.001	8633253	568.845	22.8 80.00- 120.00	100.00	
2.651	2.651	0.000	11708779	618.342	24.8 108.88- 148.88	135.62	
2.731	2.732	-0.001	6935672	557.433	22.4 62.57- 102.57	80.34	
2.769	2.768	0.001	4152301	565.068	22.7 30.09- 70.09	48.10	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====		=====	=====		=====
1 Aroclor-1016 (continued)								
2.979	2.978	0.001	5513261	579.259	23.2	44.27-	84.27	63.86
Average of Peak Concentrations =					23.2			

7 Aroclor-1260					CAS #: 11096-82-5			
3.703	3.703	0.000	13184981	719.308	28.9	80.00-	120.00	100.00
3.866	3.866	0.000	20548456	764.172	30.7	126.76-	166.76	155.85
4.028	4.028	0.000	21920213	774.147	31.1	137.71-	177.71	166.25
4.096	4.096	0.000	12695880	785.740	31.5	69.00-	109.00	96.29
4.239	4.238	0.001	12590927	748.895	30.1	72.73-	112.73	95.49
Average of Peak Concentrations =					30.5			

Data File: /chem/eodla.i/0317107.b/045f4501.d
Date: 17-MAR-2010 14:32
Client ID: MST16-10-13296MSD
Sample Info: 1120207250511
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eodla.i
Operator: YSL
Column diameter: 0.25



Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 965798
 Analyst: Andrew Schwemlin
 Method: SW846 3550B

Verified by: _____

Lab SOP: GL-OA-E-010 REV# 18
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202072502 MB	16-MAR-2010 21:02:00	30	H2SO4/KM2	2	9	1	0.03333	
1202072503 LCS	16-MAR-2010 21:02:00	30	H2SO4/KM2	2	9	1	0.03333	
248240009	16-MAR-2010 21:02:00	30.14	H2SO4/KM2	2	9	1	0.03318	
248240010	16-MAR-2010 21:02:00	30.17	H2SO4/KM2	2	9	1	0.03315	
248244001	16-MAR-2010 21:02:00	30.18	H2SO4/KM2	2	9	1	0.03313	
248249001	16-MAR-2010 21:02:00	30.03	H2SO4/KM2	2	9	1	0.0333	
248249002	16-MAR-2010 21:02:00	30.18	H2SO4/KM2	2	9	1	0.03313	
248249003	16-MAR-2010 21:02:00	30.04	H2SO4/KM2	2	9	1	0.03329	
248249004	16-MAR-2010 21:02:00	30.02	H2SO4/KM2	2	9	1	0.03331	
248373011	16-MAR-2010 21:02:00	30.19	H2SO4/KM2	2	9	1	0.03312	
248373014	16-MAR-2010 21:02:00	30.14	H2SO4/KM2	2	9	1	0.03318	
248373015	16-MAR-2010 21:02:00	30.01	H2SO4/KM2	2	9	1	0.03332	
248377002	16-MAR-2010 21:02:00	30.08	H2SO4/KM2	2	9	1	0.03324	
248377003	16-MAR-2010 21:02:00	30.08	H2SO4/KM2	2	9	1	0.03324	
248377004	16-MAR-2010 21:02:00	30.16	H2SO4/KM2	2	9	1	0.03316	
248377005	16-MAR-2010 21:02:00	30.07	H2SO4/KM2	2	9	1	0.03326	
248377006	16-MAR-2010 21:02:00	30.03	H2SO4/KM2	2	9	1	0.0333	
248386003	16-MAR-2010 21:02:00	30.19	H2SO4/KM2	2	9	1	0.03312	
248386004	16-MAR-2010 21:02:00	30.12	H2SO4/KM2	2	9	1	0.0332	
248389002	16-MAR-2010 21:02:00	30.08	H2SO4/KM2	2	9	1	0.03332	
1202072504 MS (248389002)	16-MAR-2010 21:02:00	30.02	H2SO4/KM2	2	9	1	0.03324	
1202072505 MSD (248389002)	16-MAR-2010 21:02:00	30.07	H2SO4/KM2	2	9	1	0.03326	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202072503	PCB Laboratory Control	WE1007224-07	1	mL	Clean up Date: 3/16/10
MS	1202072504	PCB Laboratory Control	WE1007224-07	1	mL	Clean up Initials: AJS
MSD	1202072505	PCB Laboratory Control	WE1007224-07	1	mL	Verified By: AAW
SURR All		PEST LOW LEVEL SURROGATE 200 UG/L	UE100302-16	1	mL	Final Solvent: Hexane
REGNT All		1:1 sulfuric acid	1260695a	5	mL	Clean Up SOP: GL-OA-E-037
REGNT All		Acetone	1273823-B1	150	mL	
REGNT All		Hexane	1279345-B2	150	mL	
REGNT All		5% Potassium Permanganate	B1275177-F	5	mL	
SOURC All		SODIUM SULFATE	1274910	30	g	