

REQUEST NUMBER: 10-2150

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NUMBER: 10

These Samples are on:

LANL Request Number:10-2150
Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

SHP DATE: 3/1/2010

TURNAROUND REQ'D: 30 Days

LAB REQUEST COMMENTS:

Signature: _____

perfectly

PRIORITY	METHOD CODE	LCNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
	SW-846:8260B	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8260B						
1	RE36-10-7418	R	2/24/2010			
1	RE36-10-7419	R	2/24/2010			
1	RE36-10-7420	R	2/24/2010			
1	RE36-10-7477	R	2/24/2010			
1	RE36-10-7478	R	2/24/2010			
1	RE36-10-7479	R	2/24/2010			
1	RE36-10-7480	R	2/24/2010			
1	RE36-10-7481	R	2/24/2010			
1	RE36-10-7482	R	2/24/2010			
1	RE36-10-7483	R	2/24/2010			
1	RE36-10-7484	R	2/24/2010			
1	RE36-10-7485	R	2/24/2010			
1	RE36-10-7486	R	2/24/2010			
1	RE36-10-7487	R	2/24/2010			
1	RE36-10-7488	R	2/24/2010			
1	RE36-10-7489	R	2/24/2010			
1	RE36-10-7490	R	2/24/2010			
SW-846:8270C						
1	RE36-10-7415	R	2/24/2010			
1	RE36-10-7416	R	2/24/2010			
1	RE36-10-7417	R	2/24/2010			
1	RE36-10-7418	R	2/24/2010			
1	RE36-10-7419	R	2/24/2010			
1	RE36-10-7420	R	2/24/2010			
1	RE36-10-7477	R	2/24/2010			
1	RE36-10-7478	R	2/24/2010			
1	RE36-10-7479	R	2/24/2010			
1	RE36-10-7480	R	2/24/2010			
1	RE36-10-7481	R	2/24/2010			

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8270C						
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
		1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	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	RE36-10-7490	R	2/24/2010	

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LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2150

REQUEST NUMBER: 10-2150

LOS ALAMOS**NATIONAL LABORATORY**

ATTN: Valerie Davis

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/31/2010

TURNAROUND REQ'D: 30

Request Hard Copy Flag: True

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE38-10-7415	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7415	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7420	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7420	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE38-10-7418	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7418	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE38-10-7417	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7417	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7419	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7419	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7416	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7416	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7478	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7478	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7490	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7490	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7487	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7487	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7483	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7483	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7481	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7481	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2150

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7486	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7486	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7477	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7477	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7489	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7489	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7479	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7479	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7482	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7482	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7480	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7480	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7485	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7485	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7488	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7488	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7484	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7484	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7415

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)		09:42		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610580		↓	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	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS 2/24/10 clear	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, moist, organic topsoil

SAMPLE COMMENTS:

roots

LOCATION DESC: 8-56

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 17 dpm

Beta/Gamma = 1556 dpm

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

COLLECTED BY (PRINT)

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) Sherin Newwood

(Signature) Sherin Newwood

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: RE36-10-7416

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/10		MEDIA:	OBT3		ALLA
TIME COLLECTED (HH:MM)		10:00		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610580	↓		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	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS gram clear	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 topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-56

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm

Beta/Gamma = 1814 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) J. Marin	2/25/10
(Signature) J. R. Marin	0750 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: RE36-10-7417

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)		11:00	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA		OK	
LOCATION ID:	36-610581	↓	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	NA			
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA	NA
BOREHOLE: YES/NO/NA	NO		BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1	↓	8260B	125 ML SEPTUM AMBER GLASS green clear	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, moist, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-32

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 17 dpm
Beta/Gamma = 1368 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: RE36-10-7418

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)		11:15		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610581		↓	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	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	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS <i>green glass clear</i>	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown, dry, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-32

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 2000 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

R. Saunders

JON MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Greenwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sherri Greenwood	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: RE36-10-7419

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		14:10		SUB-MEDIA:		TUFF 1	
PRS ID:	36-008	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	36-610582	↓		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	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:

Brown, dry, silty sandy topsoil, organic

SAMPLE COMMENTS: NA

LOCATION DESC: 8-35

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 82 dpm

Beta/Gamma = 2146 dpm

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

COLLECTED BY (PRINT)

B. 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	2/28/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherri 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: RE36-10-7420

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)		14:20		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610582	↓		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	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA	NO		
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		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:

Brown, dry, silty, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-35

FIELDSCREENING/MEASUREMENT RESULTS:

Alpha = 97 dpm
Beta/Gamma = 2070 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0}{0}$ 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) Jennifer Herwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Jennifer Herwood	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: RE36-10-7477

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)		09:00		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610611	↓		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 1/16" 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 clayey silty topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-58

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 53 dpm
Beta/Gamma = 1980 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) JON MARIN

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Henry Herwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Henry Herwood	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: RE36-10-7478

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)		09:10	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA		OK	
LOCATION ID:	36-610611	↓	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 1/2" x 2 1/2" 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, clayey, silty topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-58

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 23 dpm
Beta/Gamma = 2450 dpm

PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$ 7.2M 2/24/10

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

R. Saunders

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	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: RE36-10-7479

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)		09:25		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610612		↓	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		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 <i>from sample 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, moist, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-57

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = $\frac{41}{1819}$ dpm
Beta/Gamma = $\frac{1819}{1819}$ dpm

PID $\frac{\text{Ambient Reading}}{0}$ 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) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sherri 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: RE36-10-7480

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)		09:35		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610612	↓		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 2.0m 2.0m clear	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Dark brown, dry, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 857

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 5 dpm
Beta/Gamma = 2220 dpm

PID $\frac{\text{Ambient Reading}}{0} \frac{0}{0}$ 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) Sherrish Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherrish 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: RE36-10-7481

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)		10:10		SUB-MEDIA: TUFF 1		NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID:	36-610613	↓		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		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 1/2 in 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, moist, organic topsoil

SAMPLE COMMENTS:

LOCATION DESC: 8-48

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 193 dpm

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

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) JON 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	0750 AM	(Signature) Sherri 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: RE36-10-7482

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)		10:35		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610613			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	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>from 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, dry, organic topsoil

SAMPLE COMMENTS:

LOCATION DESC: 8-4/8

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 47 dpm
Beta/Gamma = 1931 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) 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: RE36-10-7483

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)		11:35		SUB-MEDIA: TUFF1		NA	
PRS ID:	36-008	DK		SAMPLE TECH CODE: HA		DK	
LOCATION ID:	36-610614	↓		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		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 ^{gsm} _{sample 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, moist, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-31

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 1844 dpm

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

COLLECTED BY (PRINT)

R. Sanders

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: RE36-10-7484

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)		11:50		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610614	↓		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	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 topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-31

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 17 dpm
Beta/Gamma = 2030 dpm

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

COLLECTED BY (PRINT)

R. Sanders

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherry Shewwood	2/25/10
(Signature) J. R. Marin	0750	(Signature) Sherry Shewwood	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: RE36-10-7485

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)		11:25		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610615	↓		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	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:
					NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	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:

Dark brown, moist, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-33

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 58 dpm
Beta/Gamma = 1810 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: RE36-10-7486

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		11:35		SUB-MEDIA:		TUFF 1	
PRS ID: 36-008		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 36-610615		↓		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		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	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:

Dark brown, dry, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-33

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 23 dpm
Beta/Gamma = 1726 dpm

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

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

JON 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	0756AM	(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: RE36-10-7487

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		11:45		SUB-MEDIA:		TUFF 1	
PRS ID: 36-008		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 36-610616		↓		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: B		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 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:

Dark brown, moist, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-47

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 1848 dpm

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

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. MARIN	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) J. R. Marin	6750 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: RE36-10-7488

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3		ALL H	
TIME COLLECTED (HH:MM)		11:52	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA		OK	
LOCATION ID:	36-610616	↓	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	NO			
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA	NO
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 1 AM 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:

Dark brown, dry, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-47

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 1844 dpm

PID $\frac{\text{Ambient Reading}}{0} = 0$ 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	0750pm	(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: RE36-10-7489

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)		13:05	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA		OK	
LOCATION ID:	36-610617	↓	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		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 1/2 qt, 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, moist, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-46

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 11 dpm
Beta/Gamma = 1829 dpm

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

COLLECTED BY (PRINT)

B. Saunders

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sheri Newwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sheri Newwood	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: RE36-10-7490

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3	ALL H	
TIME COLLECTED (HH:MM)		13:15	12:41:10	SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610617	↓		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	Y	
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, organic topsoil

SAMPLE COMMENTS:

LOCATION DESC: 8-46

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 64 dpm
Beta/Gamma = 1795 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

R. Saunders

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) J. R. Marin	0750 AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9834

ARS Sample Delivery Group: ARS2-10-00074

Request or PO Number:

Client Sample ID: RE36-10-7415

ARS Sample ID: ARS2-10-00074-001

Sample Collection Date: 02/24/10 09:42

Date Received: 02/25/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	14.40	20.51	34.06	20.59		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	18.36	12.44	17.92	12.64		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	30.15	0.10	30.15		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	8.84	4.73	1.04	4.73		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.24	0.14	0.11	0.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.49	0.26	0.06	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.53	0.48	0.26	0.48		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.44	0.27	0.09	0.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.31	0.43	0.25	0.43		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.25	0.45	0.48	0.45		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	1.18	1.41	0.74	1.43		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.03	0.12	0.07	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 5.56										

Matthew A. Edm
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



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

ARS Sample Delivery Group: AR52-10-00074
Client Sample ID: RE36-10-7416
Sample Collection Date: 02/24/10 10:00
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: AR52-10-00074-002
Date Received: 02/25/10 00:00
Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 1 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	12.43	19.18	32.75	19.24		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	26.00	13.78	18.31	14.18		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.04	0.16	0.13	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	23.83	9.17	1.45	9.20		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	-0.03	-0.74	0.13	-0.74		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.02	0.04	0.08	0.04		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.06	0.09	0.37	0.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.09	0.51	0.18	0.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.33	0.97	0.35	0.98		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.61	212.57	0.48	212.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.54	3.21	1.20	3.45		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.47	0.35	0.12	0.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.27										

Matthew J. Edin
Quality Assurance Review

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133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Request or PO Number:

Client Sample ID: RE36-10-7417

ARS Sample ID: ARS2-10-00074-003

Sample Collection Date: 02/24/10 11:00

Date Received: 02/25/10 00:00

Sample Matrix: Soil/Solid

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	18.93	22.32	33.91	22.44		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	28.91	13.80	17.73	14.25		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	38.90	0.12	38.90		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	14.67	6.91	1.34	6.93		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	0.17	0.16	0.18	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.41	0.27	0.07	0.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
SU-152	-0.52	150.57	0.34	150.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.13	0.46	0.13	0.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.08	0.73	0.46	0.73		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	0.60	0.66	0.49	0.66		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	4.96	3.81	1.48	3.97		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.01	0.13	0.09	0.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.14										

Matthew J. Edm
Quality Assurance Review

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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: RE36-10-7418
Sample Collection Date: 02/24/10 11:15
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-004
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	24.54	26.00	37.46	26.17		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	42.33	15.61	18.42	16.44		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	29.64	0.09	29.64		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	21.11	7.24	1.02	7.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.07	0.10	0.11	0.10		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.93	0.36	0.06	0.36		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RU-152	0.38	0.44	0.29	0.44		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.90	0.39	0.14	0.39		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.06	0.64	0.28	0.64		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.20	-0.82	0.35	-0.82		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.05	2.21	0.97	2.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.18	0.31	0.14	0.31		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.19

Matthew L. Edler
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



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

ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7419
Sample Collection Date: 02/24/10 14:10
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-005
Date Received: 02/25/10 00:00
Report Date: 02/26/10 14:37

Analyte Description	Analyte Results	Analyte Error +/- 2 s	MDC	TPU	Qual	Analyte Units	Analyte Test Method	Analyte Date/Time	Analyte Technician	Trace/Chem Recovery
GROSS ALPHA	42.05	30.21	34.06	30.64		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	58.22	17.36	17.92	18.77		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.05	0.18	0.18	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	27.92	10.55	1.64	10.58		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	-0.06	46.27	0.11	46.27		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	1.01	0.75	0.41	0.75		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.32	0.56	0.17	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.19	1.00	0.40	1.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.95	1.23	0.58	1.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.04	3.60	1.46	3.97		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.25	0.42	0.18	0.42		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.70										

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
Client Sample ID: RE38-10-7420
Sample Collection Date: 02/24/10 14:20
Sample Matrix: Soil/Solid

Request or PD Number:
ARS Sample ID: ARS2-10-00074-006
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	17.28	21.39	32.75	21.50		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	42.28	19.86	16.31	16.68		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	50.71	0.16	50.71		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	27.62	10.83	1.75	10.86		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	0.30	0.21	0.15	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.02	0.05	0.10	0.05		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.68	210.75	0.47	210.75		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.23	0.61	0.22	0.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-226	1.94	0.89	0.42	0.89		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.89	0.57	0.60	0.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	2.09	2.57	1.50	2.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.72	0.41	0.12	0.41		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 1.14

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: RE38-10-7477
Sample Collection Date: 02/24/10 09:00
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-007
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	28.10	28.70	33.91	25.93		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	53.09	16.60	17.73	17.83		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	2.04	3.82	1.88	3.82		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	0.03	0.06	0.07	0.06		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.23	0.16	0.05	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.06	0.12	0.21	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.63	0.25	0.05	0.25		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.19	0.53	0.20	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.35	139.39	0.30	139.39		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.58	2.59	1.03	2.72		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.01	-0.14	0.06	-0.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.57

Matthew J. Edm
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
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ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7478
Sample Collection Date: 02/24/10 09:10
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-008
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	19.58	24.12	37.46	24.24		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	43.56	18.66	18.42	16.54		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	44.27	0.14	44.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	16.60	7.87	1.93	7.88		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	-0.06	43.04	0.10	43.04		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	-0.60	171.36	0.98	171.36		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.06	0.49	0.18	0.50		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.27	0.77	0.37	0.77		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	0.18	0.70	0.61	0.70		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	8.68	4.01	1.33	4.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.03	34.42	0.08	34.42		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 1.23

Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7479
Sample Collection Date: 02/24/10 09:25
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-009
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	32.84	27.36	34.06	27.65		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	44.36	15.83	17.92	16.74		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.04	0.18	0.15	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	17.50	8.28	1.60	8.26		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	0.24	0.23	0.11	0.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.00	39.78	0.09	39.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.63	179.63	0.40	179.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.92	0.47	0.14	0.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.23	1.07	0.39	1.07		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.16	-0.30	0.35	-0.30		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	6.37	5.45	2.04	5.64		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.70	0.47	0.16	0.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.96										

Matthew A. Edley
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7480
Sample Collection Date: 02/24/10 09:35
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-010
Date Received: 02/25/10 00:00
Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Quel	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	22.09	23.39	32.75	23.55		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	53.91	17.21	18.31	18.44		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	46.41	0.15	46.41		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	30.14	10.83	1.60	10.86		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	0.02	0.06	0.17	0.06		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.27	0.24	0.09	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.01	0.02	0.40	0.02		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.29	0.63	0.25	0.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.60	0.84	0.39	0.85		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.84	0.74	0.48	0.74		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.28	4.32	1.72	4.48		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.19	0.32	0.14	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.22										

Metha A. Eder
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00074
 Client Sample ID: RE36-10-7481
 Sample Collection Date: 02/24/10 10:10
 Sample Matrix: Soil/Solid

Request or PO Number:
 ARS Sample ID: ARS2-10-00074-011
 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	41.88	30.07	33.91	30.80		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	54.80	16.97	17.73	18.23		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	27.16	0.09	27.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	14.22	5.89	0.94	5.70		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.02	0.04	0.08	0.04		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.79	0.32	0.08	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.29	-3.38	0.28	-3.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.93	0.35	0.10	0.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.82	0.73	0.23	0.73		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.16	0.26	0.34	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.95	2.56	0.81	2.80		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.22	0.21	0.09	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.88										

Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7482

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

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-012

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	34.47	29.39	37.46	29.69		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	32.15	14.66	18.42	15.18		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	34.82	0.11	34.82		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	26.26	8.75	1.20	8.75		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.07	0.09	0.12	0.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.15	0.26	0.13	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.20	0.18	0.07	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.47	134.78	0.30	134.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.39	0.47	0.12	0.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.89	0.77	0.45	0.77		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.49	0.83	0.44	0.83		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.17	4.03	1.83	4.14		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: 2.93										

Quality Assurance Review

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133 State Road 4, White Rock, NM 87544

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ARS Sample Delivery Group: ARS2-10-00074

Request or PO Number:

Client Sample ID: RE36-10-7483

ARS Sample ID: ARS2-10-00074-013

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

Date Received: 02/25/10 00:00

Sample Matrix: Sol/Solid

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	0.56	13.25	34.07	13.25		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	23.99	12.96	18.08	13.29		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.08	49.02	0.16	49.02		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	15.40	7.95	1.69	7.97		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	0.21	0.20	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.08	0.31	0.15	0.31		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.04	-0.08	0.43	-0.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.20	0.60	0.23	0.60		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.87	0.90	0.47	0.91		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.08	1.08	0.51	1.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	-1.16	561.66	1.26	561.66		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.39	0.58	0.24	0.58		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.51										

Matthew L. Edler
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7484
Sample Collection Date: 02/24/10 11:50
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-014
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	7.61	16.69	32.75	16.71		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	31.12	14.31	16.31	14.81		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	47.03	0.15	47.03		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	21.67	9.24	1.62	9.26		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	-0.06	45.73	0.11	45.73		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.04	0.12	0.10	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.40	0.48	0.42	0.48		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.30	0.56	0.18	0.37		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.56	1.17	0.39	1.17		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.36	-1.80	0.56	-1.80		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.26	3.80	1.44	3.98		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.16	0.23	0.11	0.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.89										

Matthew A. Edler
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00074

Request or PO Number:

Client Sample ID: RE36-10-7485

ARS Sample ID: ARS2-10-00074-015

Sample Collection Date: 02/24/10 11:25

Date Received: 02/25/10 00:00

Sample Matrix: Soil/Solid

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	23.32	24.07	33.91	24.24		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	28.52	13.85	17.73	14.28		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	38.44	0.11	38.44		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	23.78	8.40	1.22	8.43		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.14	0.20	0.12	0.20		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	-0.04	34.46	0.08	34.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.50	0.29	0.07	0.29		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.09	0.12	0.31	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.19	0.50	0.18	0.50		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.33	0.74	0.30	0.74		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.58	0.47	0.40	0.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.68	3.37	1.39	3.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.13	0.24	0.11	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.81										

MMA L. Eder
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00074

Request or PO Number:

Client Sample ID: RE36-10-7486

ARS Sample ID: ARS2-10-00074-016

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

Date Received: 02/25/10 00:00

Sample Matrix: Soil/Solid

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	19.59	24.06	37.39	24.17		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	24.47	13.40	18.23	13.73		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	48.09	0.15	48.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	27.20	10.47	1.66	10.50		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	-0.06	46.75	0.11	46.75		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.73	0.40	0.09	0.41		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-192	-0.12	-0.23	0.42	-0.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	2.04	0.67	0.17	0.68		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.68	0.91	0.40	0.91		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.42	0.60	0.50	0.60		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	6.88	4.23	1.66	4.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.53	0.55	0.19	0.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.52										

Matthew A. Edler
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



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

ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7487
Sample Collection Date: 02/24/10 11:45
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-017
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	-4.05	9.67	34.07	9.69		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	13.97	11.49	18.08	11.61		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	11.26	6.79	1.68	6.79		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	-0.66	47.49	0.11	47.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.03	0.06	0.09	0.06		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.13	0.24	0.42	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.09	0.83	0.17	0.83		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.25	0.78	0.41	0.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.06	0.09	0.55	0.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	2.20	3.76	1.73	3.80		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.07	0.19	0.10	0.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.23										

Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



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

ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7488
Sample Collection Date: 02/24/10 11:52
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-018
Date Received: 02/25/10 00:00
Report Date: 02/25/10 14:37

Analyte Description	Analyte Results	Analyte Error +/- 2 s	MDC	TPU	Qual	Analyte Units	Analyte Test Method	Analyte Date/Time	Analyte Technician	Tracer/Chem Recovery
GROSS ALPHA	2.77	13.70	12.65	13.70		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	56.11	16.94	16.12	18.28		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.02	-0.15	0.17	-0.15		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	22.71	9.68	1.70	9.70		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	0.20	0.23	0.13	0.23		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	-0.66	190.74	0.43	190.74		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PS-212	1.02	0.54	0.20	0.54		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.00	1.00	0.41	1.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.25	0.94	0.59	0.94		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.80	4.02	1.51	4.25		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.01	0.17	0.12	0.17		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.36										

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
Client Sample ID: RE36-10-7489
Sample Collection Date: 02/24/10 13:05
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-019
Date Received: 02/25/10 00:00
Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qm	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	28.12	25.70	33.91	25.93		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	18.67	12.72	17.73	12.92		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	38.58	0.12	38.58		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	18.59	7.75	1.33	7.77		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	0.03	0.06	0.12	0.06		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.18	0.18	0.07	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
BU-152	0.02	0.03	0.33	0.03		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.11	0.46	0.14	0.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.00	203.70	0.46	203.70		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.26	0.21	0.46	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	7.19	3.38	1.14	3.75		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.49	0.33	0.11	0.33		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 2.93

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

Request or PO Number:

Client Sample ID: RE38-10-7490

ARS Sample ID: ARS2-10-00074-020

Sample Collection Date: 02/24/10 13:15

Date Received: 02/25/10 00:00

Sample Matrix: Soil/Solid

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	9.69	19.83	37.46	19.88		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	40.03	18.12	18.42	18.89		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	36.22	0.12	36.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	18.97	7.59	1.25	7.81		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CD-60	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.17	0.16	0.12	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.25	0.21	0.07	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.49	190.54	0.34	190.84		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.95	0.45	0.18	0.45		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.49	0.61	0.30	0.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.56	0.66	0.38	0.66		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.90	3.20	1.22	3.39		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.03	34.39	0.08	34.30		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.44										

Matthew J. Eden
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2150 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 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):

- Sample RE36-10-7481 was diluted and reanalyzed due to a result for 4-isopropyltoluene that was > the high calibration standard. Both sets of results were reported, with the dilution designated as sample -7481REDL. The result for 4-isopropyltoluene in sample -7481 was qualified R,V7. The results for all target analytes except 4-isopropyltoluene in sample-7481REDL were NDs and, thus, were qualified UJ,V88, and only the result for 4-isopropyltoluene was validated.
- In the ICAL and/or ICV/CCV associated with all samples except -7486, the RRF for trichlorotrifluoroethane was <0.05. The associated sample results were NDs and, thus, were qualified R,V7b.
- Samples -7415, -7417, -7416, -7487, -7481REDL, -7486, and -7482 were analyzed beyond the HT but within 2X the HT. Associated sample results that were detects were qualified J-,V9. Associated sample results that were NDs were qualified UJ,V9.
- Both ICV %Ds for acetone were >20%. The acetone results for samples -7415, -7490, -7483, -7481, -7482, and -7485 were detects and, thus, were qualified J,V7c. All other associated acetone results were NDs and, thus, were qualified UJ,V7c. In the CCV associated with sample -7486, the %Ds for 2-butanone and 2,2-dichloropropane were >20%. In the CCVs associated with all other samples, the %D for trichlorotrifluoroethane was >20%. In the CCV associated with samples -7415, -7417, -7416, -7487, and -7482, the %D for 2-hexanone was >20%. The associated sample results were NDs and, thus, were qualified UJ,V7c.
- The surrogate %Rs for bromofluorobenzene were > the laboratory UAL in samples -7415, -7487, -7478, -7483, -7481, -7489, -7480, -7485, and -7484. Associated sample results that were detects were qualified J+,V3b. Associated sample results that were NDs were not qualified.

Reviewed by: Susan BallLevel: IDate: 04/29/10

DATA VALIDATION COVER SHEET	
5114-1	Records Use only
Data Validation Cover Sheet	 Los Alamos NATIONAL LABORATORY EST. 1943
VALIDATOR'S SIGNATURE: <u>Allison Self</u> DATE: <u>4/27/10</u>	
Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST


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 checked="" type="checkbox"/>	<input 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 $\geq 10\%R$. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
<input 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 checked="" type="checkbox"/>	<input 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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370001	Date Received: 03/02/2010 08:50	%Moisture: 41.6
Client ID: RE36-10-7415	Client: LANL010	Project: LANL01004
Batch ID: 963122	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/11/2010 02:08	Inst: VOA5.I	Dilution: 1
Prep Date: 03/10/2010 08:53	Analyst: CDS1	Purge Vol: 5 mL
Data File: 031010V5\5B344.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	HU	1.71	ug/kg	0.582	1.71 <u>UJ.V9</u>
74-87-3	Chloromethane	HU	1.71	ug/kg	0.514	1.71
75-01-4	Vinyl chloride	HU	1.71	ug/kg	0.514	1.71
74-83-9	Bromomethane	HU	1.71	ug/kg	0.514	1.71
75-00-3	Chloroethane	HU	1.71	ug/kg	0.514	1.71
75-69-4	Trichlorofluoromethane	HU	1.71	ug/kg	0.514	1.71
67-64-1	Acetone	H	9.15	ug/kg	2.84	8.57 J-,V9
75-35-4	1,1-Dichloroethylene	HU	1.71	ug/kg	0.514	1.71 <u>UJ.V9</u>
74-88-4	Iodomethane	HU	8.57	ug/kg	2.74	8.57
75-09-2	Methylene chloride	HU	8.57	ug/kg	3.43	8.57
75-15-0	Carbon disulfide	HU	8.57	ug/kg	2.14	8.57
156-60-5	trans-1,2-Dichloroethylene	HU	1.71	ug/kg	0.514	1.71
75-34-3	1,1-Dichloroethane	HU	1.71	ug/kg	0.514	1.71
78-93-3	2-Butanone	HU	8.57	ug/kg	2.57	8.57
156-59-2	cis-1,2-Dichloroethylene	HU	1.71	ug/kg	0.514	1.71
594-20-7	2,2-Dichloropropane	HU	1.71	ug/kg	0.514	1.71
67-66-3	Chloroform	HU	1.71	ug/kg	0.514	1.71
74-97-5	Bromochloromethane	HU	1.71	ug/kg	0.565	1.71
71-55-6	1,1,1-Trichloroethane	HU	1.71	ug/kg	0.514	1.71
563-58-6	1,1-Dichloropropene	HU	1.71	ug/kg	0.514	1.71
56-23-5	Carbon tetrachloride	HU	1.71	ug/kg	0.514	1.71
107-06-2	1,2-Dichloroethane	HU	1.71	ug/kg	0.514	1.71
71-43-2	Benzene	HU	1.71	ug/kg	0.514	1.71
79-01-6	Trichloroethylene	HU	1.71	ug/kg	0.565	1.71
78-87-5	1,2-Dichloropropane	HU	1.71	ug/kg	0.514	1.71
75-27-4	Bromodichloromethane	HU	1.71	ug/kg	0.514	1.71
74-95-3	Dibromomethane	HU	1.71	ug/kg	0.514	1.71
108-10-1	4-Methyl-2-pentanone	HU	8.57	ug/kg	2.14	8.57
10061-01-5	cis-1,3-Dichloropropylene	HU	1.71	ug/kg	0.514	1.71
108-88-3	Toluene	H	3.51	ug/kg	0.514	1.71 J-,V9
10061-02-6	trans-1,3-Dichloropropylene	HU	1.71	ug/kg	0.514	1.71 <u>UJ.V9</u>
79-00-5	1,1,2-Trichloroethane	HU	1.71	ug/kg	0.514	1.71
591-78-6	2-Hexanone	HU	8.57	ug/kg	2.57	8.57
142-28-9	1,3-Dichloropropane	HU	1.71	ug/kg	0.514	1.71
127-18-4	Tetrachloroethylene	HU	1.71	ug/kg	0.514	1.71
124-48-1	Dibromochloromethane	HU	1.71	ug/kg	0.514	1.71
106-93-4	1,2-Dibromoethane	HU	1.71	ug/kg	0.514	1.71
108-90-7	Chlorobenzene	HU	1.71	ug/kg	0.514	1.71

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7415
Batch ID: 963122
Run Date: 03/11/2010 02:08
Prep Date: 03/10/2010 08:53
Data File: 031010V5\SB344.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.71	ug/kg	0.514	1.71 UJ,V9
179601-23-1	m,p-Xylenes	HU	3.43	ug/kg	0.514	3.43
95-47-6	o-Xylene	HU	1.71	ug/kg	0.514	1.71
100-42-5	Styrene	HU	1.71	ug/kg	0.514	1.71
75-25-2	Bromoform	HU	1.71	ug/kg	0.514	1.71
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.71	ug/kg	0.514	1.71
96-18-4	1,2,3-Trichloropropane	HU	1.71	ug/kg	0.514	1.71
108-86-1	Bromobenzene	HU	1.71	ug/kg	0.514	1.71
103-65-1	n-Propylbenzene	HU	1.71	ug/kg	0.514	1.71
95-49-8	2-Chlorotoluene	HU	1.71	ug/kg	0.514	1.71
98-82-8	Isopropylbenzene	HU	1.71	ug/kg	0.514	1.71
108-67-8	1,3,5-Trimethylbenzene	HU	1.71	ug/kg	0.514	1.71
106-43-4	4-Chlorotoluene	HU	1.71	ug/kg	0.514	1.71
98-06-6	tert-Butylbenzene	HU	1.71	ug/kg	0.514	1.71
95-63-6	1,2,4-Trimethylbenzene	HU	1.71	ug/kg	0.514	1.71
135-98-8	sec-Butylbenzene	HU	1.71	ug/kg	0.514	1.71
99-87-6	4-Isopropyltoluene	H	26.0	ug/kg	0.514	1.71 J-,V9
541-73-1	1,3-Dichlorobenzene	HU	1.71	ug/kg	0.514	1.71 UJ,V9
106-46-7	1,4-Dichlorobenzene	HU	1.71	ug/kg	0.514	1.71
104-51-8	n-Butylbenzene	HU	1.71	ug/kg	0.514	1.71
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.71	ug/kg	0.514	1.71
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	HU	8.57	ug/kg	2.74	8.57 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.71	ug/kg	0.514	1.71 UJ,V9
95-50-1	1,2-Dichlorobenzene	HU	1.71	ug/kg	0.514	1.71 UJ,V9

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99		ug/kg	0	J
	unknown hydrocarbon	12.95		ug/kg	0	J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 8.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7420
Batch ID: 963122
Run Date: 03/10/2010 00:03
Prep Date: 03/09/2010 17:01
Data File: 030910V5\SB237.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.373	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.48	ug/kg	1.82	5.48 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.48	ug/kg	1.75	5.48
75-09-2	Methylene chloride	U	5.48	ug/kg	2.19	5.48
75-15-0	Carbon disulfide	U	5.48	ug/kg	1.37	5.48
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.48	ug/kg	1.64	5.48
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.362	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.362	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.48	ug/kg	1.37	5.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.48	ug/kg	1.64	5.48
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

AMF
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**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 8.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7420
Batch ID: 963122
Run Date: 03/10/2010 00:03
Prep Date: 03/09/2010 17:01
Data File: 030910V5\SB237.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.329	2.19
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.48	ug/kg	1.75	5.48 R,V7b
<i>Trichlorotrifluoroethane</i>						
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

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

AMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370003	Date Received: 03/02/2010 08:50	%Moisture: 18.7
Client ID: RE36-10-7418	Client: LANL010	Project: LANL01004
Batch ID: 963122	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/10/2010 00:30	Inst: VOA5.I	Dilution: 1
Prep Date: 03/09/2010 17:02	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030910V5\SB238.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	1.23	ug/kg	0.418	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.369	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.369	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.369	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.369	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.369	1.23
67-64-1	Acetone	U	6.15	ug/kg	2.04	6.15 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
74-88-4	Iodomethane	U	6.15	ug/kg	1.97	6.15
75-09-2	Methylene chloride	U	6.15	ug/kg	2.46	6.15
75-15-0	Carbon disulfide	U	6.15	ug/kg	1.54	6.15
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.369	1.23
78-93-3	2-Butanone	U	6.15	ug/kg	1.85	6.15
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.369	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.406	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.369	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.369	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.369	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.369	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.369	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.406	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.369	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.369	1.23
108-10-1	4-Methyl-2-pentanone	U	6.15	ug/kg	1.54	6.15
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.369	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.369	1.23
591-78-6	2-Hexanone	U	6.15	ug/kg	1.85	6.15
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.369	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.369	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.369	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.369	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.369	1.23

AMF
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**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370003

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 18.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7418
Batch ID: 963122
Run Date: 03/10/2010 00:30
Prep Date: 03/09/2010 17:02
Data File: 030910V5\SB238.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.369	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.369	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.369	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.369	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.369	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.369	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.369	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.369	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.369	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.369	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.369	1.23
99-87-6	4-Isopropyltoluene		1.61	ug/kg	0.369	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.369	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.369	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.15	ug/kg	1.97	6.15 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23

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

Page 1 of 2

SDG Number: 10-2150
 Lab Sample ID: 248370004

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7417
 Batch ID: 963122
 Run Date: 03/11/2010 02:34
 Prep Date: 03/10/2010 08:54
 Data File: 031010V5\SB345.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HU	1.27	ug/kg	0.430	1.27 <u>UJ.V9</u>
74-87-3	Chloromethane	HU	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	HU	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	HU	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	HU	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	HU	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	HU	6.33	ug/kg	2.10	6.33
75-35-4	1,1-Dichloroethylene	HU	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	HU	6.33	ug/kg	2.03	6.33
75-09-2	Methylene chloride	HU	6.33	ug/kg	2.53	6.33
75-15-0	Carbon disulfide	HU	6.33	ug/kg	1.58	6.33
156-60-5	trans-1,2-Dichloroethylene	HU	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	HU	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	HU	6.33	ug/kg	1.90	6.33
156-59-2	cis-1,2-Dichloroethylene	HU	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	HU	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	HU	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	HU	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	HU	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	HU	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	HU	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	HU	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	HU	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	HU	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	HU	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	HU	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	HU	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	HU	6.33	ug/kg	1.58	6.33
10061-01-5	cis-1,3-Dichloropropylene	HU	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	HU	1.27	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	HU	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	HU	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	HU	6.33	ug/kg	1.90	6.33
142-28-9	1,3-Dichloropropane	HU	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	HU	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	HU	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	HU	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	HU	1.27	ug/kg	0.380	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370004

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7417
 Batch ID: 963122
 Run Date: 03/11/2010 02:34
 Prep Date: 03/10/2010 08:54
 Data File: 031010V5\SB345.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.27	ug/kg	0.380	1.27 UJ,V9
179601-23-1	m,p-Xylenes	HU	2.53	ug/kg	0.380	2.53
95-47-6	o-Xylene	HU	1.27	ug/kg	0.380	1.27
100-42-5	Styrene	HU	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	HU	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	HU	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	HU	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	HU	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	HU	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	HU	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	HU	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	HU	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	HU	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	HU	1.27	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	HU	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	HJ	1.01	ug/kg	0.380	1.27 J-,V9
541-73-1	1,3-Dichlorobenzene	HU	1.27	ug/kg	0.380	1.27 UJ,V9
106-46-7	1,4-Dichlorobenzene	HU	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	HU	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	HU	6.33	ug/kg	2.03	6.33 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.27	ug/kg	0.380	1.27 UJ,V9
95-50-1	1,2-Dichlorobenzene	HU	1.27	ug/kg	0.380	1.27 UJ,V9

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: 10-2150
 Lab Sample ID: 248370005

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 16.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7419
 Batch ID: 963122
 Run Date: 03/10/2010 01:25
 Prep Date: 03/09/2010 17:04
 Data File: 030910V5\SB240.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.409	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.361	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.361	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.361	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.361	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.361	1.20
67-64-1	Acetone	U	6.02	ug/kg	2.00	6.02 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
74-88-4	Iodomethane	U	6.02	ug/kg	1.93	6.02
75-09-2	Methylene chloride	U	6.02	ug/kg	2.41	6.02
75-15-0	Carbon disulfide	U	6.02	ug/kg	1.51	6.02
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.361	1.20
78-93-3	2-Butanone	U	6.02	ug/kg	1.81	6.02
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.361	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.397	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.361	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.361	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.361	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.361	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.361	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.397	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.361	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.361	1.20
108-10-1	4-Methyl-2-pentanone	U	6.02	ug/kg	1.51	6.02
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.361	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.361	1.20
591-78-6	2-Hexanone	U	6.02	ug/kg	1.81	6.02
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.361	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.361	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.361	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.361	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.361	1.20

AMF
4/27/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370005

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 16.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7419
 Batch ID: 963122
 Run Date: 03/10/2010 01:25
 Prep Date: 03/09/2010 17:04
 Data File: 030910V5\SB240.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.361	2.41
95-47-6	o-Xylene	U	1.20	ug/kg	0.361	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.361	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.361	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.02	ug/kg	1.93	6.02 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2150	Date Collected:	02/24/2010 12:00	Matrix:	R
Lab Sample ID:	248370006	Date Received:	03/02/2010 08:50	%Moisture:	11.3
Client ID:	RE36-10-7416	Client:	LANL010	Project:	LANL01004
Batch ID:	963122	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Run Date:	03/11/2010 03:01	Inst:	VOA5.I	Dilution:	1
Prep Date:	03/10/2010 08:55	Analyst:	CDS1	Purge Vol:	5 mL
Data File:	031010V5\5B346.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	HU	1.13	ug/kg	0.383	1.13 <u>UJ.V9</u>
74-87-3	Chloromethane	HU	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	HU	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	HU	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	HU	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	HU	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	HU	5.64	ug/kg	1.87	5.64
75-35-4	1,1-Dichloroethylene	HU	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	HU	5.64	ug/kg	1.80	5.64
75-09-2	Methylene chloride	HU	5.64	ug/kg	2.25	5.64
75-15-0	Carbon disulfide	HU	5.64	ug/kg	1.41	5.64
156-60-5	trans-1,2-Dichloroethylene	HU	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	HU	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	HU	5.64	ug/kg	1.69	5.64
156-59-2	cis-1,2-Dichloroethylene	HU	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	HU	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	HU	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	HU	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	HU	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	HU	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	HU	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	HU	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	HU	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	HU	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	HU	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	HU	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	HU	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	HU	5.64	ug/kg	1.41	5.64
10061-01-5	cis-1,3-Dichloropropylene	HU	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	HU	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	HU	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	HU	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	HU	5.64	ug/kg	1.69	5.64
142-28-9	1,3-Dichloropropane	HU	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	HU	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	HU	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	HU	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	HU	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 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: RE36-10-7416
 Batch ID: 963122
 Run Date: 03/11/2010 03:01
 Prep Date: 03/10/2010 08:55
 Data File: 031010V5\5B346.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.13	ug/kg	0.338	1.13 UJ,V9
179601-23-1	m,p-Xylenes	HU	2.25	ug/kg	0.338	2.25
95-47-6	o-Xylene	HU	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	HU	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	HU	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	HU	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	HU	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	HU	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	HU	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	HU	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	HU	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	HU	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	HU	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	HU	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	HU	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	HU	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	HU	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	HU	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	HU	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	5.64	ug/kg	1.80	5.64 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.13	ug/kg	0.338	1.13 UJ,V9
95-50-1	1,2-Dichlorobenzene	HU	1.13	ug/kg	0.338	1.13 UJ,V9

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: 10-2150
 Lab Sample ID: 248370007

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7478
 Batch ID: 963122
 Run Date: 03/10/2010 02:19
 Prep Date: 03/09/2010 17:06
 Data File: 030910V5\5B242.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.54	ug/kg	1.84	5.54 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.54	ug/kg	1.77	5.54
75-09-2	Methylene chloride	U	5.54	ug/kg	2.22	5.54
75-15-0	Carbon disulfide	U	5.54	ug/kg	1.39	5.54
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.54	ug/kg	1.66	5.54
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.54	ug/kg	1.39	5.54
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.54	ug/kg	1.66	5.54
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370007

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.8
 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	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	J	0.543	ug/kg	0.333	2.22 J+,V3b
95-47-6	o-Xylene	J	0.366	ug/kg	0.333	1.11 J+,V3b
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.54	ug/kg	1.77	5.54 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

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

AMF
4/27/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370008

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7490
 Batch ID: 963122
 Run Date: 03/10/2010 02:47
 Prep Date: 03/09/2010 17:07
 Data File: 030910V5\SB243.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.35	ug/kg	0.459	1.35
74-87-3	Chloromethane	U	1.35	ug/kg	0.405	1.35
75-01-4	Vinyl chloride	U	1.35	ug/kg	0.405	1.35
74-83-9	Bromomethane	U	1.35	ug/kg	0.405	1.35
75-00-3	Chloroethane	U	1.35	ug/kg	0.405	1.35
75-69-4	Trichlorofluoromethane	U	1.35	ug/kg	0.405	1.35
67-64-1	Acetone	J	2.46	ug/kg	2.24	6.75 J,V7c
75-35-4	1,1-Dichloroethylene	U	1.35	ug/kg	0.405	1.35
74-88-4	Iodomethane	U	6.75	ug/kg	2.16	6.75
75-09-2	Methylene chloride	U	6.75	ug/kg	2.70	6.75
75-15-0	Carbon disulfide	U	6.75	ug/kg	1.69	6.75
156-60-5	trans-1,2-Dichloroethylene	U	1.35	ug/kg	0.405	1.35
75-34-3	1,1-Dichloroethane	U	1.35	ug/kg	0.405	1.35
78-93-3	2-Butanone	U	6.75	ug/kg	2.03	6.75
156-59-2	cis-1,2-Dichloroethylene	U	1.35	ug/kg	0.405	1.35
594-20-7	2,2-Dichloropropane	U	1.35	ug/kg	0.405	1.35
67-66-3	Chloroform	U	1.35	ug/kg	0.405	1.35
74-97-5	Bromochloromethane	U	1.35	ug/kg	0.446	1.35
71-55-6	1,1,1-Trichloroethane	U	1.35	ug/kg	0.405	1.35
563-58-6	1,1-Dichloropropene	U	1.35	ug/kg	0.405	1.35
56-23-5	Carbon tetrachloride	U	1.35	ug/kg	0.405	1.35
107-06-2	1,2-Dichloroethane	U	1.35	ug/kg	0.405	1.35
71-43-2	Benzene	U	1.35	ug/kg	0.405	1.35
79-01-6	Trichloroethylene	U	1.35	ug/kg	0.446	1.35
78-87-5	1,2-Dichloropropane	U	1.35	ug/kg	0.405	1.35
75-27-4	Bromodichloromethane	U	1.35	ug/kg	0.405	1.35
74-95-3	Dibromomethane	U	1.35	ug/kg	0.405	1.35
108-10-1	4-Methyl-2-pentanone	U	6.75	ug/kg	1.69	6.75
10061-01-5	cis-1,3-Dichloropropylene	U	1.35	ug/kg	0.405	1.35
108-88-3	Toluene		1.59	ug/kg	0.405	1.35
10061-02-6	trans-1,3-Dichloropropylene	U	1.35	ug/kg	0.405	1.35
79-00-5	1,1,2-Trichloroethane	U	1.35	ug/kg	0.405	1.35
591-78-6	2-Hexanone	U	6.75	ug/kg	2.03	6.75
142-28-9	1,3-Dichloropropane	U	1.35	ug/kg	0.405	1.35
127-18-4	Tetrachloroethylene	U	1.35	ug/kg	0.405	1.35
124-48-1	Dibromochloromethane	U	1.35	ug/kg	0.405	1.35
106-93-4	1,2-Dibromoethane	U	1.35	ug/kg	0.405	1.35
108-90-7	Chlorobenzene	U	1.35	ug/kg	0.405	1.35

AMF
4/27/10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370008

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 26
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7490
Batch ID: 963122
Run Date: 03/10/2010 02:47
Prep Date: 03/09/2010 17:07
Data File: 030910V5USB243.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.35	ug/kg	0.405	1.35
179601-23-1	m,p-Xylenes	U	2.70	ug/kg	0.405	2.70
95-47-6	o-Xylene	U	1.35	ug/kg	0.405	1.35
100-42-5	Styrene	U	1.35	ug/kg	0.405	1.35
75-25-2	Bromoform	U	1.35	ug/kg	0.405	1.35
79-34-5	1,1,2,2-Tetrachloroethane	U	1.35	ug/kg	0.405	1.35
96-18-4	1,2,3-Trichloropropane	U	1.35	ug/kg	0.405	1.35
108-86-1	Bromobenzene	U	1.35	ug/kg	0.405	1.35
103-65-1	n-Propylbenzene	U	1.35	ug/kg	0.405	1.35
95-49-8	2-Chlorotoluene	U	1.35	ug/kg	0.405	1.35
98-82-8	Isopropylbenzene	U	1.35	ug/kg	0.405	1.35
108-67-8	1,3,5-Trimethylbenzene	U	1.35	ug/kg	0.405	1.35
106-43-4	4-Chlorotoluene	U	1.35	ug/kg	0.405	1.35
98-06-6	tert-Butylbenzene	U	1.35	ug/kg	0.405	1.35
95-63-6	1,2,4-Trimethylbenzene	U	1.35	ug/kg	0.405	1.35
135-98-8	sec-Butylbenzene	U	1.35	ug/kg	0.405	1.35
99-87-6	4-Isopropyltoluene		6.66	ug/kg	0.405	1.35
541-73-1	1,3-Dichlorobenzene	U	1.35	ug/kg	0.405	1.35
106-46-7	1,4-Dichlorobenzene	U	1.35	ug/kg	0.405	1.35
104-51-8	n-Butylbenzene	U	1.35	ug/kg	0.405	1.35
96-12-8	1,2-Dibromo-3-chloropropane	U	1.35	ug/kg	0.405	1.35
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	6.75	ug/kg	2.16	6.75 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.35	ug/kg	0.405	1.35
95-50-1	1,2-Dichlorobenzene	U	1.35	ug/kg	0.405	1.35

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	11.99	7.31	ug/kg	0	J

AMF
4/27/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOAS.1
Analyst: CDS1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 24.5
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7487
Batch ID: 963122
Run Date: 03/11/2010 03:54
Prep Date: 03/10/2010 09:01
Data File: 031010V5\SB348.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HU	1.33	ug/kg	0.451	1.33 <u>UJ,V9</u>
74-87-3	Chloromethane	HU	1.33	ug/kg	0.398	1.33
75-01-4	Vinyl chloride	HU	1.33	ug/kg	0.398	1.33
74-83-9	Bromomethane	HU	1.33	ug/kg	0.398	1.33
75-00-3	Chloroethane	HU	1.33	ug/kg	0.398	1.33
75-69-4	Trichlorofluoromethane	HU	1.33	ug/kg	0.398	1.33
67-64-1	Acetone	HU	6.63	ug/kg	2.20	6.63
75-35-4	1,1-Dichloroethylene	HU	1.33	ug/kg	0.398	1.33
74-88-4	Iodomethane	HU	6.63	ug/kg	2.12	6.63
75-09-2	Methylene chloride	HU	6.63	ug/kg	2.65	6.63
75-15-0	Carbon disulfide	HU	6.63	ug/kg	1.66	6.63
156-60-5	trans-1,2-Dichloroethylene	HU	1.33	ug/kg	0.398	1.33
75-34-3	1,1-Dichloroethane	HU	1.33	ug/kg	0.398	1.33
78-93-3	2-Butanone	HU	6.63	ug/kg	1.99	6.63
156-59-2	cis-1,2-Dichloroethylene	HU	1.33	ug/kg	0.398	1.33
594-20-7	2,2-Dichloropropane	HU	1.33	ug/kg	0.398	1.33
67-66-3	Chloroform	HU	1.33	ug/kg	0.398	1.33
74-97-5	Bromochloromethane	HU	1.33	ug/kg	0.437	1.33
71-55-6	1,1,1-Trichloroethane	HU	1.33	ug/kg	0.398	1.33
563-58-6	1,1-Dichloropropene	HU	1.33	ug/kg	0.398	1.33
56-23-5	Carbon tetrachloride	HU	1.33	ug/kg	0.398	1.33
107-06-2	1,2-Dichloroethane	HU	1.33	ug/kg	0.398	1.33
71-43-2	Benzene	HU	1.33	ug/kg	0.398	1.33
79-01-6	Trichloroethylene	HU	1.33	ug/kg	0.437	1.33
78-87-5	1,2-Dichloropropane	HU	1.33	ug/kg	0.398	1.33
75-27-4	Bromodichloromethane	HU	1.33	ug/kg	0.398	1.33
74-95-3	Dibromomethane	HU	1.33	ug/kg	0.398	1.33
108-10-1	4-Methyl-2-pentanone	HU	6.63	ug/kg	1.66	6.63
10061-01-5	cis-1,3-Dichloropropylene	HU	1.33	ug/kg	0.398	1.33
108-88-3	Toluene	H	1.99	ug/kg	0.398	1.33 J-,V9
10061-02-6	trans-1,3-Dichloropropylene	HU	1.33	ug/kg	0.398	1.33 <u>UJ,V9</u>
79-00-5	1,1,2-Trichloroethane	HU	1.33	ug/kg	0.398	1.33
591-78-6	2-Hexanone	HU	6.63	ug/kg	1.99	6.63
142-28-9	1,3-Dichloropropane	HU	1.33	ug/kg	0.398	1.33
127-18-4	Tetrachloroethylene	HU	1.33	ug/kg	0.398	1.33
124-48-1	Dibromochloromethane	HU	1.33	ug/kg	0.398	1.33
106-93-4	1,2-Dibromoethane	HU	1.33	ug/kg	0.398	1.33
108-90-7	Chlorobenzene	HU	1.33	ug/kg	0.398	1.33

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 24.5
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7487
Batch ID: 963122
Run Date: 03/11/2010 03:54
Prep Date: 03/10/2010 09:01
Data File: 031010V5\5B348.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.33	ug/kg	0.398	1.33 UJ,V9
179601-23-1	m,p-Xylenes	HU	2.65	ug/kg	0.398	2.65
95-47-6	o-Xylene	HU	1.33	ug/kg	0.398	1.33
100-42-5	Styrene	HU	1.33	ug/kg	0.398	1.33
75-25-2	Bromoform	HU	1.33	ug/kg	0.398	1.33
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.33	ug/kg	0.398	1.33
96-18-4	1,2,3-Trichloropropane	HU	1.33	ug/kg	0.398	1.33
108-86-1	Bromobenzene	HU	1.33	ug/kg	0.398	1.33
103-65-1	n-Propylbenzene	HU	1.33	ug/kg	0.398	1.33
95-49-8	2-Chlorotoluene	HU	1.33	ug/kg	0.398	1.33
98-82-8	Isopropylbenzene	HU	1.33	ug/kg	0.398	1.33
108-67-8	1,3,5-Trimethylbenzene	HU	1.33	ug/kg	0.398	1.33
106-43-4	4-Chlorotoluene	HU	1.33	ug/kg	0.398	1.33
98-06-6	tert-Butylbenzene	HU	1.33	ug/kg	0.398	1.33
95-63-6	1,2,4-Trimethylbenzene	HU	1.33	ug/kg	0.398	1.33
135-98-8	sec-Butylbenzene	HU	1.33	ug/kg	0.398	1.33
99-87-6	4-Isopropyltoluene	H	2.32	ug/kg	0.398	1.33 J-,V9
541-73-1	1,3-Dichlorobenzene	HU	1.33	ug/kg	0.398	1.33 UJ,V9
106-46-7	1,4-Dichlorobenzene	HU	1.33	ug/kg	0.398	1.33
104-51-8	n-Butylbenzene	HU	1.33	ug/kg	0.398	1.33
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.33	ug/kg	0.398	1.33
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	6.63	ug/kg	2.12	6.63 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.33	ug/kg	0.398	1.33 UJ,V9
95-50-1	1,2-Dichlorobenzene	HU	1.33	ug/kg	0.398	1.33 UJ,V9

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-2150
 Lab Sample ID: 248370010

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Allquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7483
 Batch ID: 963122
 Run Date: 03/10/2010 03:41
 Prep Date: 03/09/2010 17:09
 Data File: 030910V5\SB245.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.32	ug/kg	0.447	1.32
74-87-3	Chloromethane	U	1.32	ug/kg	0.395	1.32
75-01-4	Vinyl chloride	U	1.32	ug/kg	0.395	1.32
74-83-9	Bromomethane	U	1.32	ug/kg	0.395	1.32
75-00-3	Chloroethane	U	1.32	ug/kg	0.395	1.32
75-69-4	Trichlorofluoromethane	U	1.32	ug/kg	0.395	1.32
67-64-1	Acetone		7.18	ug/kg	2.18	6.58 J,V7c
75-35-4	1,1-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
74-88-4	Iodomethane	U	6.58	ug/kg	2.11	6.58
75-09-2	Methylene chloride	J	3.57	ug/kg	2.63	6.58 J+,V3b
75-15-0	Carbon disulfide	U	6.58	ug/kg	1.64	6.58
156-60-5	trans-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
75-34-3	1,1-Dichloroethane	U	1.32	ug/kg	0.395	1.32
78-93-3	2-Butanone	U	6.58	ug/kg	1.97	6.58
156-59-2	cis-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
594-20-7	2,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
67-66-3	Chloroform	U	1.32	ug/kg	0.395	1.32
74-97-5	Bromochloromethane	U	1.32	ug/kg	0.434	1.32
71-55-6	1,1,1-Trichloroethane	U	1.32	ug/kg	0.395	1.32
563-58-6	1,1-Dichloropropene	U	1.32	ug/kg	0.395	1.32
56-23-5	Carbon tetrachloride	U	1.32	ug/kg	0.395	1.32
107-06-2	1,2-Dichloroethane	U	1.32	ug/kg	0.395	1.32
71-43-2	Benzene	U	1.32	ug/kg	0.395	1.32
79-01-6	Trichloroethylene	J	0.605	ug/kg	0.434	1.32 J+,V3b
78-87-5	1,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
75-27-4	Bromodichloromethane	U	1.32	ug/kg	0.395	1.32
74-95-3	Dibromomethane	U	1.32	ug/kg	0.395	1.32
108-10-1	4-Methyl-2-pentanone	U	6.58	ug/kg	1.64	6.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
108-88-3	Toluene		5.24	ug/kg	0.395	1.32 J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
79-00-5	1,1,2-Trichloroethane	U	1.32	ug/kg	0.395	1.32
591-78-6	2-Hexanone	U	6.58	ug/kg	1.97	6.58
142-28-9	1,3-Dichloropropane	U	1.32	ug/kg	0.395	1.32
127-18-4	Tetrachloroethylene	U	1.32	ug/kg	0.395	1.32
124-48-1	Dibromochloromethane	U	1.32	ug/kg	0.395	1.32
106-93-4	1,2-Dibromoethane	U	1.32	ug/kg	0.395	1.32
108-90-7	Chlorobenzene	U	1.32	ug/kg	0.395	1.32

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 24
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7483
Batch ID: 963122
Run Date: 03/10/2010 03:41
Prep Date: 03/09/2010 17:09
Data File: 030910V5\SB245.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.32	ug/kg	0.395	1.32
179601-23-1	m,p-Xylenes	J	0.960	ug/kg	0.395	2.63 J+,V3b
95-47-6	o-Xylene	J	0.513	ug/kg	0.395	1.32 J+,V3b
100-42-5	Styrene	U	1.32	ug/kg	0.395	1.32
75-25-2	Bromoform	U	1.32	ug/kg	0.395	1.32
79-34-5	1,1,2,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
96-18-4	1,2,3-Trichloropropane	U	1.32	ug/kg	0.395	1.32
108-86-1	Bromobenzene	U	1.32	ug/kg	0.395	1.32
103-65-1	n-Propylbenzene	U	1.32	ug/kg	0.395	1.32
95-49-8	2-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-82-8	Isopropylbenzene	U	1.32	ug/kg	0.395	1.32
108-67-8	1,3,5-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
106-43-4	4-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-06-6	tert-Butylbenzene	U	1.32	ug/kg	0.395	1.32
95-63-6	1,2,4-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
135-98-8	sec-Butylbenzene	U	1.32	ug/kg	0.395	1.32
99-87-6	4-Isopropyltoluene		89.3	ug/kg	0.395	1.32 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
106-46-7	1,4-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
104-51-8	n-Butylbenzene	U	1.32	ug/kg	0.395	1.32
96-12-8	1,2-Dibromo-3-chloropropane	U	1.32	ug/kg	0.395	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.58	ug/kg	2.11	6.58 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
95-50-1	1,2-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000115-10-6	Dimethyl ether	5.78	7.29	ug/kg	9	NJ
	unknown hydrocarbon	11.99	56	ug/kg	0	J
	unknown hydrocarbon	12.32	7.03	ug/kg	0	J
	unknown hydrocarbon	12.69	10	ug/kg	0	J
	unknown hydrocarbon	12.95	67.7	ug/kg	0	J
	unknown hydrocarbon	13.17	9.63	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7481REDL	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA3.I	Dilution: 50
Run Date: 03/19/2010 20:01	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/19/2010 09:01	Aliquot: 5 g	Final Volume: 10 mL
Data File: 031910V3\3D510.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	149	ug/kg	50.6	149 <u>UJJ.V88</u>
74-87-3	Chloromethane	HUh	149	ug/kg	44.7	149
75-01-4	Vinyl chloride	HUh	149	ug/kg	44.7	149
74-83-9	Bromomethane	HUh	149	ug/kg	44.7	149
75-00-3	Chloroethane	HUh	149	ug/kg	44.7	149
75-69-4	Trichlorofluoromethane	HUh	149	ug/kg	44.7	149
67-64-1	Acetone	HUh	745	ug/kg	247	745
75-35-4	1,1-Dichloroethylene	HUh	149	ug/kg	44.7	149
74-88-4	Iodomethane	HUh	745	ug/kg	238	745
75-09-2	Methylene chloride	HUh	745	ug/kg	298	745
75-15-0	Carbon disulfide	HUh	745	ug/kg	186	745
156-60-5	trans-1,2-Dichloroethylene	HUh	149	ug/kg	44.7	149
75-34-3	1,1-Dichloroethane	HUh	149	ug/kg	44.7	149
78-93-3	2-Butanone	HUh	745	ug/kg	223	745
156-59-2	cis-1,2-Dichloroethylene	HUh	149	ug/kg	44.7	149
594-20-7	2,2-Dichloropropane	HUh	149	ug/kg	44.7	149
67-66-3	Chloroform	HUh	149	ug/kg	44.7	149
74-97-5	Bromochloromethane	HUh	149	ug/kg	49.1	149
71-55-6	1,1,1-Trichloroethane	HUh	149	ug/kg	44.7	149
563-58-6	1,1-Dichloropropene	HUh	149	ug/kg	44.7	149
56-23-5	Carbon tetrachloride	HUh	149	ug/kg	44.7	149
107-06-2	1,2-Dichloroethane	HUh	149	ug/kg	44.7	149
71-43-2	Benzene	HUh	149	ug/kg	44.7	149
79-01-6	Trichloroethylene	HUh	149	ug/kg	49.1	149
78-87-5	1,2-Dichloropropane	HUh	149	ug/kg	44.7	149
75-27-4	Bromodichloromethane	HUh	149	ug/kg	44.7	149
74-95-3	Dibromomethane	HUh	149	ug/kg	44.7	149
108-10-1	4-Methyl-2-pentanone	HUh	745	ug/kg	186	745
10061-01-5	cis-1,3-Dichloropropylene	HUh	149	ug/kg	44.7	149
108-88-3	Toluene	HUh	149	ug/kg	44.7	149
10061-02-6	trans-1,3-Dichloropropylene	HUh	149	ug/kg	44.7	149
79-00-5	1,1,2-Trichloroethane	HUh	149	ug/kg	44.7	149
591-78-6	2-Hexanone	HUh	745	ug/kg	223	745
142-28-9	1,3-Dichloropropane	HUh	149	ug/kg	44.7	149
127-18-4	Tetrachloroethylene	HUh	149	ug/kg	44.7	149
124-48-1	Dibromochloromethane	HUh	149	ug/kg	44.7	149
106-93-4	1,2-Dibromoethane	HUh	149	ug/kg	44.7	149
108-90-7	Chlorobenzene	HUh	149	ug/kg	44.7	149

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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7481REDL	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA3.I	Dilution: 50
Run Date: 03/19/2010 20:01	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/19/2010 09:01	Allquot: 5 g	Final Volume: 10 mL
Data File: 031910V3\3D510.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	149	ug/kg	44.7	149 UJ,V88
179601-23-1	m,p-Xylenes	HUh	298	ug/kg	44.7	298
95-47-6	o-Xylene	HUh	149	ug/kg	44.7	149
100-42-5	Styrene	HUh	149	ug/kg	44.7	149
75-25-2	Bromoform	HUh	149	ug/kg	44.7	149
79-34-5	1,1,2,2-Tetrachloroethane	HUh	149	ug/kg	44.7	149
96-18-4	1,2,3-Trichloropropane	HUh	149	ug/kg	44.7	149
108-86-1	Bromobenzene	HUh	149	ug/kg	44.7	149
103-65-1	n-Propylbenzene	HUh	149	ug/kg	44.7	149
95-49-8	2-Chlorotoluene	HUh	149	ug/kg	44.7	149
98-82-8	Isopropylbenzene	HUh	149	ug/kg	44.7	149
108-67-8	1,3,5-Trimethylbenzene	HUh	149	ug/kg	44.7	149
106-43-4	4-Chlorotoluene	HUh	149	ug/kg	44.7	149
98-06-6	tert-Butylbenzene	HUh	149	ug/kg	44.7	149
95-63-6	1,2,4-Trimethylbenzene	HUh	149	ug/kg	44.7	149
135-98-8	sec-Butylbenzene	HUh	149	ug/kg	44.7	149
99-87-6	4-Isopropyltoluene	HUh	149	ug/kg	44.7	149 UJ,V9
541-73-1	1,3-Dichlorobenzene	HUh	149	ug/kg	44.7	149 UJ,V88
106-46-7	1,4-Dichlorobenzene	HUh	149	ug/kg	44.7	149
104-51-8	n-Butylbenzene	HUh	149	ug/kg	44.7	149
96-12-8	1,2-Dibromo-3-chloropropane	HUh	149	ug/kg	44.7	149
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	745	ug/kg	238	745
630-20-6	1,1,1,2-Tetrachloroethane	HUh	149	ug/kg	44.7	149
95-50-1	1,2-Dichlorobenzene	HUh	149	ug/kg	44.7	149

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	6.16	1090	ug/kg	0	J

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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7481	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 04:09	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:10	Alliquot: 5 g	Final Volume: 5 mL
Data File: 030910V5\SB246.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.49	ug/kg	0.506	1.49
74-87-3	Chloromethane	U	1.49	ug/kg	0.447	1.49
75-01-4	Vinyl chloride	U	1.49	ug/kg	0.447	1.49
74-83-9	Bromomethane	U	1.49	ug/kg	0.447	1.49
75-00-3	Chloroethane	U	1.49	ug/kg	0.447	1.49
75-69-4	Trichlorofluoromethane	U	1.49	ug/kg	0.447	1.49
67-64-1	Acetone		7.58	ug/kg	2.47	7.45 J,V7C
75-35-4	1,1-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
74-88-4	Iodomethane	U	7.45	ug/kg	2.38	7.45
75-09-2	Methylene chloride	U	7.45	ug/kg	2.98	7.45
75-15-0	Carbon disulfide	U	7.45	ug/kg	1.86	7.45
156-60-5	trans-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
75-34-3	1,1-Dichloroethane	U	1.49	ug/kg	0.447	1.49
78-93-3	2-Butanone	U	7.45	ug/kg	2.23	7.45
156-59-2	cis-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
594-20-7	2,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
67-66-3	Chloroform	U	1.49	ug/kg	0.447	1.49
74-97-5	Bromochloromethane	U	1.49	ug/kg	0.491	1.49
71-55-6	1,1,1-Trichloroethane	U	1.49	ug/kg	0.447	1.49
563-58-6	1,1-Dichloropropene	U	1.49	ug/kg	0.447	1.49
56-23-5	Carbon tetrachloride	U	1.49	ug/kg	0.447	1.49
107-06-2	1,2-Dichloroethane	U	1.49	ug/kg	0.447	1.49
71-43-2	Benzene	U	1.49	ug/kg	0.447	1.49
79-01-6	Trichloroethylene	U	1.49	ug/kg	0.491	1.49
78-87-5	1,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
75-27-4	Bromodichloromethane	U	1.49	ug/kg	0.447	1.49
74-95-3	Dibromomethane	U	1.49	ug/kg	0.447	1.49
108-10-1	4-Methyl-2-pentanone	U	7.45	ug/kg	1.86	7.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
108-88-3	Toluene		1.61	ug/kg	0.447	1.49 J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
79-00-5	1,1,2-Trichloroethane	U	1.49	ug/kg	0.447	1.49
591-78-6	2-Hexanone	U	7.45	ug/kg	2.23	7.45
142-28-9	1,3-Dichloropropane	U	1.49	ug/kg	0.447	1.49
127-18-4	Tetrachloroethylene	U	1.49	ug/kg	0.447	1.49
124-48-1	Dibromochloromethane	U	1.49	ug/kg	0.447	1.49
106-93-4	1,2-Dibromoethane	U	1.49	ug/kg	0.447	1.49
108-90-7	Chlorobenzene	U	1.49	ug/kg	0.447	1.49

Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-2150
Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 32.8
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7481
Batch ID: 963122
Run Date: 03/10/2010 04:09
Prep Date: 03/09/2010 17:10
Data File: 030910V5VB246.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.49	ug/kg	0.447	1.49
179601-23-1	m,p-Xylenes	U	2.98	ug/kg	0.447	2.98
95-47-6	o-Xylene	U	1.49	ug/kg	0.447	1.49
100-42-5	Styrene	U	1.49	ug/kg	0.447	1.49
75-25-2	Bromoform	U	1.49	ug/kg	0.447	1.49
79-34-5	1,1,2,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
96-18-4	1,2,3-Trichloropropane	U	1.49	ug/kg	0.447	1.49
108-86-1	Bromobenzene	U	1.49	ug/kg	0.447	1.49
103-65-1	n-Propylbenzene	U	1.49	ug/kg	0.447	1.49
95-49-8	2-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-82-8	Isopropylbenzene	U	1.49	ug/kg	0.447	1.49
108-67-8	1,3,5-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
106-43-4	4-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-06-6	tert-Butylbenzene	U	1.49	ug/kg	0.447	1.49
95-63-6	1,2,4-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
135-98-8	sec-Butylbenzene	U	1.49	ug/kg	0.447	1.49
99-87-6	4-Isopropyltoluene	E	768	ug/kg	0.447	1.49 R,V7
541-73-1	1,3-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
106-46-7	1,4-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
104-51-8	n-Butylbenzene	U	1.49	ug/kg	0.447	1.49
96-12-8	1,2-Dibromo-3-chloropropane	U	1.49	ug/kg	0.447	1.49
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	7.45	ug/kg	2.38	7.45 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
95-50-1	1,2-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	11.82	23.9	ug/kg	0	J
	unknown hydrocarbon	11.89	41.6	ug/kg	0	J
	unknown hydrocarbon	12	1620	ug/kg	0	J
	unknown hydrocarbon	12.13	11.9	ug/kg	0	J
	unknown hydrocarbon	12.32	323	ug/kg	0	J
	unknown hydrocarbon	12.38	24.5	ug/kg	0	J
	unknown hydrocarbon	12.49	68.5	ug/kg	0	J
	unknown hydrocarbon	12.53	19.9	ug/kg	0	J
	unknown hydrocarbon	12.54	10.2	ug/kg	0	J
	unknown hydrocarbon	12.68	84.7	ug/kg	0	J

AMF
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**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7481	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 04:09	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:10	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V5\5B246.D	Column: DB-624	

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 hydrocarbon	12.9	28.7	ug/kg	0	J
	unknown hydrocarbon	12.95	22.8	ug/kg	0	J
	unknown hydrocarbon	13.05	354	ug/kg	0	J
	unknown hydrocarbon	13.18	155	ug/kg	0	J
	unknown hydrocarbon	13.32	12.2	ug/kg	0	J
000099-85-4	1,4-Cyclohexadiene, 1-methyl-4-(1-	13.48	121	ug/kg	96	NJ
	unknown hydrocarbon	13.87	81.9	ug/kg	0	J
	unknown hydrocarbon	13.94	99.9	ug/kg	0	J
	unknown aromatic	14.09	123	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370012

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA3.I
 Analyst: CDS1
 Allquot: 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: RE36-10-7486
 Batch ID: 963122
 Run Date: 03/19/2010 19:03
 Prep Date: 03/19/2010 09:00
 Data File: 031910V33D508.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	1.27	ug/kg	0.431	1.27 UJ,V9
74-87-3	Chloromethane	HUh	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	HUh	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	HUh	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	HUh	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	HUh	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	HUh	6.34	ug/kg	2.10	6.34
75-35-4	1,1-Dichloroethylene	HUh	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	HUh	6.34	ug/kg	2.03	6.34
75-09-2	Methylene chloride	HJh	2.60	ug/kg	2.53	6.34 J-,V9
75-15-0	Carbon disulfide	HUh	6.34	ug/kg	1.58	6.34 UJ,V9
156-60-5	trans-1,2-Dichloroethylene	HUh	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	HUh	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	HUh	6.34	ug/kg	1.90	6.34
156-59-2	cis-1,2-Dichloroethylene	HUh	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	HUh	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	HUh	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	HUh	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	HUh	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	HUh	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	HUh	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	HUh	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	HUh	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	HUh	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	HUh	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	HUh	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	HUh	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	HUh	6.34	ug/kg	1.58	6.34
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	HUh	1.27	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	HUh	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	HUh	6.34	ug/kg	1.90	6.34
142-28-9	1,3-Dichloropropane	HUh	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	HUh	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	HUh	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	HUh	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	HUh	1.27	ug/kg	0.380	1.27

AMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370012	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7486	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA3.I	Dilution: 1
Run Date: 03/19/2010 19:03	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/19/2010 09:00	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031910V3\3D508.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	1.27	ug/kg	0.380	1.27 <u>UJ.V9</u>
179601-23-1	m,p-Xylenes	HUh	2.53	ug/kg	0.380	2.53
95-47-6	o-Xylene	HUh	1.27	ug/kg	0.380	1.27
100-42-5	Styrene	HUh	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	HUh	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	HUh	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	HUh	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	HUh	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	HUh	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	HUh	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	HUh	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	HUh	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	HUh	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	HUh	1.27	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	HUh	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	HUh	1.27	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	HUh	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	HUh	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	HUh	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.34	ug/kg	2.03	6.34
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	HUh	1.27	ug/kg	0.380	1.27

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: 10-2150
 Lab Sample ID: 248370013

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAS.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 23.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7477
 Batch ID: 963122
 Run Date: 03/10/2010 11:59
 Prep Date: 03/10/2010 08:45
 Data File: 031010V5\5B312.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.31	ug/kg	0.445	1.31
74-87-3	Chloromethane	U	1.31	ug/kg	0.393	1.31
75-01-4	Vinyl chloride	U	1.31	ug/kg	0.393	1.31
74-83-9	Bromomethane	U	1.31	ug/kg	0.393	1.31
75-00-3	Chloroethane	U	1.31	ug/kg	0.393	1.31
75-69-4	Trichlorofluoromethane	U	1.31	ug/kg	0.393	1.31
67-64-1	Acetone	U	6.55	ug/kg	2.17	6.55 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
74-88-4	Iodomethane	U	6.55	ug/kg	2.09	6.55
75-09-2	Methylene chloride	U	6.55	ug/kg	2.62	6.55
75-15-0	Carbon disulfide	U	6.55	ug/kg	1.64	6.55
156-60-5	trans-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
75-34-3	1,1-Dichloroethane	U	1.31	ug/kg	0.393	1.31
78-93-3	2-Butanone	U	6.55	ug/kg	1.96	6.55
156-59-2	cis-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
594-20-7	2,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
67-66-3	Chloroform	U	1.31	ug/kg	0.393	1.31
74-97-5	Bromochloromethane	U	1.31	ug/kg	0.432	1.31
71-55-6	1,1,1-Trichloroethane	U	1.31	ug/kg	0.393	1.31
563-58-6	1,1-Dichloropropene	U	1.31	ug/kg	0.393	1.31
56-23-5	Carbon tetrachloride	U	1.31	ug/kg	0.393	1.31
107-06-2	1,2-Dichloroethane	U	1.31	ug/kg	0.393	1.31
71-43-2	Benzene	U	1.31	ug/kg	0.393	1.31
79-01-6	Trichloroethylene	U	1.31	ug/kg	0.432	1.31
78-87-5	1,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
75-27-4	Bromodichloromethane	U	1.31	ug/kg	0.393	1.31
74-95-3	Dibromomethane	U	1.31	ug/kg	0.393	1.31
108-10-1	4-Methyl-2-pentanone	U	6.55	ug/kg	1.64	6.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
108-88-3	Toluene	U	1.31	ug/kg	0.393	1.31
10061-02-6	trans-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
79-00-5	1,1,2-Trichloroethane	U	1.31	ug/kg	0.393	1.31
591-78-6	2-Hexanone	U	6.55	ug/kg	1.96	6.55
142-28-9	1,3-Dichloropropane	U	1.31	ug/kg	0.393	1.31
127-18-4	Tetrachloroethylene	U	1.31	ug/kg	0.393	1.31
124-48-1	Dibromochloromethane	U	1.31	ug/kg	0.393	1.31
106-93-4	1,2-Dibromoethane	U	1.31	ug/kg	0.393	1.31
108-90-7	Chlorobenzene	U	1.31	ug/kg	0.393	1.31

Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-2150
Lab Sample ID: 248370013

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.1
Analyst: CDS1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 23.6
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7477
Batch ID: 963122
Run Date: 03/10/2010 11:59
Prep Date: 03/10/2010 08:45
Data File: 031010V55B312.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.31	ug/kg	0.393	1.31
179601-23-1	m,p-Xylenes	U	2.62	ug/kg	0.393	2.62
95-47-6	o-Xylene	U	1.31	ug/kg	0.393	1.31
100-42-5	Styrene	U	1.31	ug/kg	0.393	1.31
75-25-2	Bromoform	U	1.31	ug/kg	0.393	1.31
79-34-5	1,1,2,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
96-18-4	1,2,3-Trichloropropane	U	1.31	ug/kg	0.393	1.31
108-86-1	Bromobenzene	U	1.31	ug/kg	0.393	1.31
103-65-1	n-Propylbenzene	U	1.31	ug/kg	0.393	1.31
95-49-8	2-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-82-8	Isopropylbenzene	U	1.31	ug/kg	0.393	1.31
108-67-8	1,3,5-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
106-43-4	4-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-06-6	tert-Butylbenzene	U	1.31	ug/kg	0.393	1.31
95-63-6	1,2,4-Trimethylbenzene	J	0.406	ug/kg	0.393	1.31
135-98-8	sec-Butylbenzene	U	1.31	ug/kg	0.393	1.31
99-87-6	4-Isopropyltoluene	J	0.930	ug/kg	0.393	1.31
541-73-1	1,3-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
106-46-7	1,4-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
104-51-8	n-Butylbenzene	U	1.31	ug/kg	0.393	1.31
96-12-8	1,2-Dibromo-3-chloropropane	U	1.31	ug/kg	0.393	1.31
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.55	ug/kg	2.09	6.55 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
95-50-1	1,2-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31

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

Page 1 of 2

SDG Number: 10-2150
 Lab Sample ID: 248370014

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 35
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7489
 Batch ID: 963122
 Run Date: 03/10/2010 12:26
 Prep Date: 03/10/2010 08:46
 Data File: 031010V5\SB313.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.54	ug/kg	0.523	1.54
74-87-3	Chloromethane	U	1.54	ug/kg	0.462	1.54
75-01-4	Vinyl chloride	U	1.54	ug/kg	0.462	1.54
74-83-9	Bromomethane	U	1.54	ug/kg	0.462	1.54
75-00-3	Chloroethane	U	1.54	ug/kg	0.462	1.54
75-69-4	Trichlorofluoromethane	U	1.54	ug/kg	0.462	1.54
67-64-1	Acetone	U	7.70	ug/kg	2.56	7.70 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.54	ug/kg	0.462	1.54
74-88-4	Iodomethane	U	7.70	ug/kg	2.46	7.70
75-09-2	Methylene chloride	U	7.70	ug/kg	3.08	7.70
75-15-0	Carbon disulfide	U	7.70	ug/kg	1.92	7.70
156-60-5	trans-1,2-Dichloroethylene	U	1.54	ug/kg	0.462	1.54
75-34-3	1,1-Dichloroethane	U	1.54	ug/kg	0.462	1.54
78-93-3	2-Butanone	U	7.70	ug/kg	2.31	7.70
156-59-2	cis-1,2-Dichloroethylene	U	1.54	ug/kg	0.462	1.54
594-20-7	2,2-Dichloropropane	U	1.54	ug/kg	0.462	1.54
67-66-3	Chloroform	U	1.54	ug/kg	0.462	1.54
74-97-5	Bromochloromethane	U	1.54	ug/kg	0.508	1.54
71-55-6	1,1,1-Trichloroethane	U	1.54	ug/kg	0.462	1.54
563-58-6	1,1-Dichloropropene	U	1.54	ug/kg	0.462	1.54
56-23-5	Carbon tetrachloride	U	1.54	ug/kg	0.462	1.54
107-06-2	1,2-Dichloroethane	U	1.54	ug/kg	0.462	1.54
71-43-2	Benzene	U	1.54	ug/kg	0.462	1.54
79-01-6	Trichloroethylene	U	1.54	ug/kg	0.508	1.54
78-87-5	1,2-Dichloropropane	U	1.54	ug/kg	0.462	1.54
75-27-4	Bromodichloromethane	U	1.54	ug/kg	0.462	1.54
74-95-3	Dibromomethane	U	1.54	ug/kg	0.462	1.54
108-10-1	4-Methyl-2-pentanone	U	7.70	ug/kg	1.92	7.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.54	ug/kg	0.462	1.54
108-88-3	Toluene	J	1.06	ug/kg	0.462	1.54 J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.54	ug/kg	0.462	1.54
79-00-5	1,1,2-Trichloroethane	U	1.54	ug/kg	0.462	1.54
591-78-6	2-Hexanone	U	7.70	ug/kg	2.31	7.70
142-28-9	1,3-Dichloropropane	U	1.54	ug/kg	0.462	1.54
127-18-4	Tetrachloroethylene	U	1.54	ug/kg	0.462	1.54
124-48-1	Dibromochloromethane	U	1.54	ug/kg	0.462	1.54
106-93-4	1,2-Dibromoethane	U	1.54	ug/kg	0.462	1.54
108-90-7	Chlorobenzene	U	1.54	ug/kg	0.462	1.54

AMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370014

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAS.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 35
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7489
 Batch ID: 963122
 Run Date: 03/10/2010 12:26
 Prep Date: 03/10/2010 08:46
 Data File: 031010V5\SB313.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.54	ug/kg	0.462	1.54
179601-23-1	m,p-Xylenes	U	3.08	ug/kg	0.462	3.08
95-47-6	o-Xylene	U	1.54	ug/kg	0.462	1.54
100-42-5	Styrene	U	1.54	ug/kg	0.462	1.54
75-25-2	Bromoform	U	1.54	ug/kg	0.462	1.54
79-34-5	1,1,2,2-Tetrachloroethane	U	1.54	ug/kg	0.462	1.54
96-18-4	1,2,3-Trichloropropane	U	1.54	ug/kg	0.462	1.54
108-86-1	Bromobenzene	U	1.54	ug/kg	0.462	1.54
103-65-1	n-Propylbenzene	U	1.54	ug/kg	0.462	1.54
95-49-8	2-Chlorotoluene	U	1.54	ug/kg	0.462	1.54
98-82-8	Isopropylbenzene	U	1.54	ug/kg	0.462	1.54
108-67-8	1,3,5-Trimethylbenzene	U	1.54	ug/kg	0.462	1.54
106-43-4	4-Chlorotoluene	U	1.54	ug/kg	0.462	1.54
98-06-6	tert-Butylbenzene	U	1.54	ug/kg	0.462	1.54
95-63-6	1,2,4-Trimethylbenzene	U	1.54	ug/kg	0.462	1.54
135-98-8	sec-Butylbenzene	U	1.54	ug/kg	0.462	1.54
99-87-6	4-Isopropyltoluene		56.1	ug/kg	0.462	1.54 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.54	ug/kg	0.462	1.54
106-46-7	1,4-Dichlorobenzene	U	1.54	ug/kg	0.462	1.54
104-51-8	n-Butylbenzene	U	1.54	ug/kg	0.462	1.54
96-12-8	1,2-Dibromo-3-chloropropane	U	1.54	ug/kg	0.462	1.54
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	7.70	ug/kg	2.46	7.70 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.54	ug/kg	0.462	1.54
95-50-1	1,2-Dichlorobenzene	U	1.54	ug/kg	0.462	1.54

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	11.89	7.9	ug/kg	0	J
	unknown hydrocarbon	11.99	64	ug/kg	0	J
	unknown	12.32	31.1	ug/kg	0	J
	unknown hydrocarbon	12.32	21.2	ug/kg	0	J
	unknown hydrocarbon	12.69	8.16	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370015

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Allquot: 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

Client ID: RE36-10-7479
 Batch ID: 963122
 Run Date: 03/10/2010 12:53
 Prep Date: 03/10/2010 08:47
 Data File: 031010V5\5B314.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.37	ug/kg	0.467	1.37
74-87-3	Chloromethane	U	1.37	ug/kg	0.412	1.37
75-01-4	Vinyl chloride	U	1.37	ug/kg	0.412	1.37
74-83-9	Bromomethane	U	1.37	ug/kg	0.412	1.37
75-00-3	Chloroethane	U	1.37	ug/kg	0.412	1.37
75-69-4	Trichlorofluoromethane	U	1.37	ug/kg	0.412	1.37
67-64-1	Acetone	U	6.87	ug/kg	2.28	6.87 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
74-88-4	Iodomethane	U	6.87	ug/kg	2.20	6.87
75-09-2	Methylene chloride	U	6.87	ug/kg	2.75	6.87
75-15-0	Carbon disulfide	U	6.87	ug/kg	1.72	6.87
156-60-5	trans-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
75-34-3	1,1-Dichloroethane	U	1.37	ug/kg	0.412	1.37
78-93-3	2-Butanone	U	6.87	ug/kg	2.06	6.87
156-59-2	cis-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
594-20-7	2,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
67-66-3	Chloroform	U	1.37	ug/kg	0.412	1.37
74-97-5	Bromochloromethane	U	1.37	ug/kg	0.454	1.37
71-55-6	1,1,1-Trichloroethane	U	1.37	ug/kg	0.412	1.37
563-58-6	1,1-Dichloropropene	U	1.37	ug/kg	0.412	1.37
56-23-5	Carbon tetrachloride	U	1.37	ug/kg	0.412	1.37
107-06-2	1,2-Dichloroethane	U	1.37	ug/kg	0.412	1.37
71-43-2	Benzene	U	1.37	ug/kg	0.412	1.37
79-01-6	Trichloroethylene	U	1.37	ug/kg	0.454	1.37
78-87-5	1,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
75-27-4	Bromodichloromethane	U	1.37	ug/kg	0.412	1.37
74-95-3	Dibromomethane	U	1.37	ug/kg	0.412	1.37
108-10-1	4-Methyl-2-pentanone	U	6.87	ug/kg	1.72	6.87
10061-01-5	cis-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
108-88-3	Toluene	U	1.37	ug/kg	0.412	1.37
10061-02-6	trans-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
79-00-5	1,1,2-Trichloroethane	U	1.37	ug/kg	0.412	1.37
591-78-6	2-Hexanone	U	6.87	ug/kg	2.06	6.87
142-28-9	1,3-Dichloropropane	U	1.37	ug/kg	0.412	1.37
127-18-4	Tetrachloroethylene	U	1.37	ug/kg	0.412	1.37
124-48-1	Dibromochloromethane	U	1.37	ug/kg	0.412	1.37
106-93-4	1,2-Dibromoethane	U	1.37	ug/kg	0.412	1.37
108-90-7	Chlorobenzene	U	1.37	ug/kg	0.412	1.37

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370015

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
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

Client ID: RE36-10-7479
Batch ID: 963122
Run Date: 03/10/2010 12:53
Prep Date: 03/10/2010 08:47
Data File: 031010V5\SB314.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.37	ug/kg	0.412	1.37
179601-23-1	m,p-Xylenes	U	2.75	ug/kg	0.412	2.75
95-47-6	o-Xylene	U	1.37	ug/kg	0.412	1.37
100-42-5	Styrene	U	1.37	ug/kg	0.412	1.37
75-25-2	Bromoform	U	1.37	ug/kg	0.412	1.37
79-34-5	1,1,2,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
96-18-4	1,2,3-Trichloropropane	U	1.37	ug/kg	0.412	1.37
108-86-1	Bromobenzene	U	1.37	ug/kg	0.412	1.37
103-65-1	n-Propylbenzene	U	1.37	ug/kg	0.412	1.37
95-49-8	2-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-82-8	Isopropylbenzene	U	1.37	ug/kg	0.412	1.37
108-67-8	1,3,5-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
106-43-4	4-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-06-6	tert-Butylbenzene	U	1.37	ug/kg	0.412	1.37
95-63-6	1,2,4-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
135-98-8	sec-Butylbenzene	U	1.37	ug/kg	0.412	1.37
99-87-6	4-Isopropyltoluene	U	1.37	ug/kg	0.412	1.37
541-73-1	1,3-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
106-46-7	1,4-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
104-51-8	n-Butylbenzene	U	1.37	ug/kg	0.412	1.37
96-12-8	1,2-Dibromo-3-chloropropane	U	1.37	ug/kg	0.412	1.37
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.87	ug/kg	2.20	6.87 R,V7b
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
95-50-1	1,2-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370016

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7482
 Batch ID: 963122
 Run Date: 03/11/2010 11:59
 Prep Date: 03/11/2010 08:16
 Data File: 031110V5\5B413.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	1.32	ug/kg	0.449	1.32 UJ,V9
74-87-3	Chloromethane	HUh	1.32	ug/kg	0.396	1.32
75-01-4	Vinyl chloride	HUh	1.32	ug/kg	0.396	1.32
74-83-9	Bromomethane	HUh	1.32	ug/kg	0.396	1.32
75-00-3	Chloroethane	HUh	1.32	ug/kg	0.396	1.32
75-69-4	Trichlorofluoromethane	HUh	1.32	ug/kg	0.396	1.32
67-64-1	Acetone	Hh	13.2	ug/kg	2.19	6.61 J-,V9
75-35-4	1,1-Dichloroethylene	HUh	1.32	ug/kg	0.396	1.32 UJ,V9
74-88-4	Iodomethane	HUh	6.61	ug/kg	2.11	6.61
75-09-2	Methylene chloride	HUh	6.61	ug/kg	2.64	6.61
75-15-0	Carbon disulfide	HUh	6.61	ug/kg	1.65	6.61
156-60-5	trans-1,2-Dichloroethylene	HUh	1.32	ug/kg	0.396	1.32
75-34-3	1,1-Dichloroethane	HUh	1.32	ug/kg	0.396	1.32
78-93-3	2-Butanone	HUh	6.61	ug/kg	1.98	6.61
156-59-2	cis-1,2-Dichloroethylene	HUh	1.32	ug/kg	0.396	1.32
594-20-7	2,2-Dichloropropane	HUh	1.32	ug/kg	0.396	1.32
67-66-3	Chloroform	HUh	1.32	ug/kg	0.396	1.32
74-97-5	Bromochloromethane	HUh	1.32	ug/kg	0.436	1.32
71-55-6	1,1,1-Trichloroethane	HUh	1.32	ug/kg	0.396	1.32
563-58-6	1,1-Dichloropropene	HUh	1.32	ug/kg	0.396	1.32
56-23-5	Carbon tetrachloride	HUh	1.32	ug/kg	0.396	1.32
107-06-2	1,2-Dichloroethane	HUh	1.32	ug/kg	0.396	1.32
71-43-2	Benzene	HUh	1.32	ug/kg	0.396	1.32
79-01-6	Trichloroethylene	HUh	1.32	ug/kg	0.436	1.32
78-87-5	1,2-Dichloropropane	HUh	1.32	ug/kg	0.396	1.32
75-27-4	Bromodichloromethane	HUh	1.32	ug/kg	0.396	1.32
74-95-3	Dibromomethane	HUh	1.32	ug/kg	0.396	1.32
108-10-1	4-Methyl-2-pentanone	HUh	6.61	ug/kg	1.65	6.61
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.32	ug/kg	0.396	1.32
108-88-3	Toluene	Hh	1.55	ug/kg	0.396	1.32 J-,V9
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.32	ug/kg	0.396	1.32 UJ,V9
79-00-5	1,1,2-Trichloroethane	HUh	1.32	ug/kg	0.396	1.32
591-78-6	2-Hexanone	HUh	6.61	ug/kg	1.98	6.61
142-28-9	1,3-Dichloropropane	HUh	1.32	ug/kg	0.396	1.32
127-18-4	Tetrachloroethylene	HUh	1.32	ug/kg	0.396	1.32
124-48-1	Dibromochloromethane	HUh	1.32	ug/kg	0.396	1.32
106-93-4	1,2-Dibromoethane	HUh	1.32	ug/kg	0.396	1.32
108-90-7	Chlorobenzene	HUh	1.32	ug/kg	0.396	1.32

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Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-2150
Lab Sample ID: 248370016

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 24.3
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7482
Batch ID: 963122
Run Date: 03/11/2010 11:59
Prep Date: 03/11/2010 08:16
Data File: 031110V5\SB413.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	1.32	ug/kg	0.396	1.32 UJ,V9
179601-23-1	m,p-Xylenes	HUh	2.64	ug/kg	0.396	2.64
95-47-6	o-Xylene	HUh	1.32	ug/kg	0.396	1.32
100-42-5	Styrene	HUh	1.32	ug/kg	0.396	1.32
75-25-2	Bromoform	HUh	1.32	ug/kg	0.396	1.32
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.32	ug/kg	0.396	1.32
96-18-4	1,2,3-Trichloropropane	HUh	1.32	ug/kg	0.396	1.32
108-86-1	Bromobenzene	HUh	1.32	ug/kg	0.396	1.32
103-65-1	n-Propylbenzene	HUh	1.32	ug/kg	0.396	1.32
95-49-8	2-Chlorotoluene	HUh	1.32	ug/kg	0.396	1.32
98-82-8	Isopropylbenzene	HUh	1.32	ug/kg	0.396	1.32
108-67-8	1,3,5-Trimethylbenzene	HUh	1.32	ug/kg	0.396	1.32
106-43-4	4-Chlorotoluene	HUh	1.32	ug/kg	0.396	1.32
98-06-6	tert-Butylbenzene	HUh	1.32	ug/kg	0.396	1.32
95-63-6	1,2,4-Trimethylbenzene	HUh	1.32	ug/kg	0.396	1.32
135-98-8	sec-Butylbenzene	HUh	1.32	ug/kg	0.396	1.32
99-87-6	4-Isopropyltoluene	Hh	65.6	ug/kg	0.396	1.32 J-,V9
541-73-1	1,3-Dichlorobenzene	HUh	1.32	ug/kg	0.396	1.32 UJ,V9
106-46-7	1,4-Dichlorobenzene	HUh	1.32	ug/kg	0.396	1.32
104-51-8	n-Butylbenzene	HUh	1.32	ug/kg	0.396	1.32
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.32	ug/kg	0.396	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.61	ug/kg	2.11	6.61 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.32	ug/kg	0.396	1.32 UJ,V9
95-50-1	1,2-Dichlorobenzene	HUh	1.32	ug/kg	0.396	1.32 UJ,V9

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99	8.92	ug/kg	0	J
	unknown hydrocarbon	12.32	7.4	ug/kg	0	J
	unknown hydrocarbon	12.95	65.1	ug/kg	0	J
	unknown hydrocarbon	13.04	6.66	ug/kg	0	J
	unknown hydrocarbon	13.17	10.9	ug/kg	0	J
	unknown aromatic	14.09	7.64	ug/kg	0	J

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Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-2150
Lab Sample ID: 248370017

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 12.1
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7480
Batch ID: 963122
Run Date: 03/10/2010 13:46
Prep Date: 03/10/2010 08:49
Data File: 031010V5\5B316.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.387	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.341	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.341	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.341	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.341	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.341	1.14
67-64-1	Acetone	U	5.69	ug/kg	1.89	5.69 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
74-88-4	Iodomethane	U	5.69	ug/kg	1.82	5.69
75-09-2	Methylene chloride	U	5.69	ug/kg	2.28	5.69
75-15-0	Carbon disulfide	U	5.69	ug/kg	1.42	5.69
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.341	1.14
78-93-3	2-Butanone	U	5.69	ug/kg	1.71	5.69
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.341	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	0.341	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.341	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.341	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.341	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.341	1.14
79-01-6	Trichloroethylene	J	0.501	ug/kg	0.376	1.14 J+,V3b
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.341	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.341	1.14
108-10-1	4-Methyl-2-pentanone	U	5.69	ug/kg	1.42	5.69
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
108-88-3	Toluene	J	0.626	ug/kg	0.341	1.14 J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.341	1.14
591-78-6	2-Hexanone	U	5.69	ug/kg	1.71	5.69
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.341	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.341	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.341	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.341	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.341	1.14

AMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370017

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 12.1
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7480
Batch ID: 963122
Run Date: 03/10/2010 13:46
Prep Date: 03/10/2010 08:49
Data File: 031010V5\5B316.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.14	ug/kg	0.341	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.341	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.341	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.341	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.341	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.341	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.341	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.341	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.341	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.341	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.341	1.14
99-87-6	4-Isopropyltoluene	J	0.910	ug/kg	0.341	1.14 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.341	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.341	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.69	ug/kg	1.82	5.69 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	11.4	15.4	ug/kg	0	J

AMF
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370018

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Allquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7485
 Batch ID: 963122
 Run Date: 03/10/2010 14:13
 Prep Date: 03/10/2010 08:50
 Data File: 031010V5\SB317.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.36	ug/kg	0.462	1.36
74-87-3	Chloromethane	U	1.36	ug/kg	0.408	1.36
75-01-4	Vinyl chloride	U	1.36	ug/kg	0.408	1.36
74-83-9	Bromomethane	U	1.36	ug/kg	0.408	1.36
75-00-3	Chloroethane	U	1.36	ug/kg	0.408	1.36
75-69-4	Trichlorofluoromethane	U	1.36	ug/kg	0.408	1.36
67-64-1	Acetone	J	3.69	ug/kg	2.26	6.80 J,V7c
75-35-4	1,1-Dichloroethylene	U	1.36	ug/kg	0.408	1.36
74-88-4	Iodomethane	U	6.80	ug/kg	2.18	6.80
75-09-2	Methylene chloride	U	6.80	ug/kg	2.72	6.80
75-15-0	Carbon disulfide	U	6.80	ug/kg	1.70	6.80
156-60-5	trans-1,2-Dichloroethylene	U	1.36	ug/kg	0.408	1.36
75-34-3	1,1-Dichloroethane	U	1.36	ug/kg	0.408	1.36
78-93-3	2-Butanone	U	6.80	ug/kg	2.04	6.80
156-59-2	cis-1,2-Dichloroethylene	U	1.36	ug/kg	0.408	1.36
594-20-7	2,2-Dichloropropane	U	1.36	ug/kg	0.408	1.36
67-66-3	Chloroform	U	1.36	ug/kg	0.408	1.36
74-97-5	Bromochloromethane	U	1.36	ug/kg	0.449	1.36
71-55-6	1,1,1-Trichloroethane	U	1.36	ug/kg	0.408	1.36
563-58-6	1,1-Dichloropropene	U	1.36	ug/kg	0.408	1.36
56-23-5	Carbon tetrachloride	U	1.36	ug/kg	0.408	1.36
107-06-2	1,2-Dichloroethane	U	1.36	ug/kg	0.408	1.36
71-43-2	Benzene	U	1.36	ug/kg	0.408	1.36
79-01-6	Trichloroethylene	U	1.36	ug/kg	0.449	1.36
78-87-5	1,2-Dichloropropane	U	1.36	ug/kg	0.408	1.36
75-27-4	Bromodichloromethane	U	1.36	ug/kg	0.408	1.36
74-95-3	Dibromomethane	U	1.36	ug/kg	0.408	1.36
108-10-1	4-Methyl-2-pentanone	U	6.80	ug/kg	1.70	6.80
10061-01-5	cis-1,3-Dichloropropylene	U	1.36	ug/kg	0.408	1.36
108-88-3	Toluene	J	0.707	ug/kg	0.408	1.36 J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.36	ug/kg	0.408	1.36
79-00-5	1,1,2-Trichloroethane	U	1.36	ug/kg	0.408	1.36
591-78-6	2-Hexanone	U	6.80	ug/kg	2.04	6.80
142-28-9	1,3-Dichloropropane	U	1.36	ug/kg	0.408	1.36
127-18-4	Tetrachloroethylene	U	1.36	ug/kg	0.408	1.36
124-48-1	Dibromochloromethane	U	1.36	ug/kg	0.408	1.36
106-93-4	1,2-Dibromoethane	U	1.36	ug/kg	0.408	1.36
108-90-7	Chlorobenzene	U	1.36	ug/kg	0.408	1.36

AMF
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**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370018

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Allquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 26.5
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7485
Batch ID: 963122
Run Date: 03/10/2010 14:13
Prep Date: 03/10/2010 08:50
Data File: 031010V5\SB317.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.36	ug/kg	0.408	1.36
179601-23-1	m,p-Xylenes	U	2.72	ug/kg	0.408	2.72
95-47-6	o-Xylene	U	1.36	ug/kg	0.408	1.36
100-42-5	Styrene	U	1.36	ug/kg	0.408	1.36
75-25-2	Bromoform	U	1.36	ug/kg	0.408	1.36
79-34-5	1,1,2,2-Tetrachloroethane	U	1.36	ug/kg	0.408	1.36
96-18-4	1,2,3-Trichloropropane	U	1.36	ug/kg	0.408	1.36
108-86-1	Bromobenzene	U	1.36	ug/kg	0.408	1.36
103-65-1	n-Propylbenzene	U	1.36	ug/kg	0.408	1.36
95-49-8	2-Chlorotoluene	U	1.36	ug/kg	0.408	1.36
98-82-8	Isopropylbenzene	U	1.36	ug/kg	0.408	1.36
108-67-8	1,3,5-Trimethylbenzene	U	1.36	ug/kg	0.408	1.36
106-43-4	4-Chlorotoluene	U	1.36	ug/kg	0.408	1.36
98-06-6	tert-Butylbenzene	U	1.36	ug/kg	0.408	1.36
95-63-6	1,2,4-Trimethylbenzene	U	1.36	ug/kg	0.408	1.36
135-98-8	sec-Butylbenzene	U	1.36	ug/kg	0.408	1.36
99-87-6	4-Isopropyltoluene		2.35	ug/kg	0.408	1.36 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.36	ug/kg	0.408	1.36
106-46-7	1,4-Dichlorobenzene	U	1.36	ug/kg	0.408	1.36
104-51-8	n-Butylbenzene	U	1.36	ug/kg	0.408	1.36
96-12-8	1,2-Dibromo-3-chloropropane	U	1.36	ug/kg	0.408	1.36
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.80	ug/kg	2.18	6.80 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.36	ug/kg	0.408	1.36
95-50-1	1,2-Dichlorobenzene	U	1.36	ug/kg	0.408	1.36

Tentatively Identified Compound Summary

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

AMF
4/27/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370019

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7488
 Batch ID: 963122
 Run Date: 03/10/2010 14:39
 Prep Date: 03/10/2010 08:51
 Data File: 031010V5\5B318.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.56	ug/kg	1.85	5.56 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.56	ug/kg	1.78	5.56
75-09-2	Methylene chloride	U	5.56	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	U	5.56	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.56	ug/kg	1.67	5.56
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.56	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.56	ug/kg	1.67	5.56
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370019

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7488
 Batch ID: 963122
 Run Date: 03/10/2010 14:39
 Prep Date: 03/10/2010 08:51
 Data File: 031010V5\5B318.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.334	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.56	ug/kg	1.78	5.56 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370020	Date Received: 03/02/2010 08:50	%Moisture: 17.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7484	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 15:06	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:52	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V5\5B319.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.412	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.363	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.363	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.363	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.363	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.363	1.21
67-64-1	Acetone	U	6.06	ug/kg	2.01	6.06 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.363	1.21
74-88-4	Iodomethane	U	6.06	ug/kg	1.94	6.06
75-09-2	Methylene chloride	U	6.06	ug/kg	2.42	6.06
75-15-0	Carbon disulfide	U	6.06	ug/kg	1.51	6.06
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.363	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.363	1.21
78-93-3	2-Butanone	U	6.06	ug/kg	1.82	6.06
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.363	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.363	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.363	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.400	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.363	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.363	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.363	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.363	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.363	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.400	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.363	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.363	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.363	1.21
108-10-1	4-Methyl-2-pentanone	U	6.06	ug/kg	1.51	6.06
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.363	1.21
108-88-3	Toluene	J	0.412	ug/kg	0.363	1.21 J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.363	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.363	1.21
591-78-6	2-Hexanone	U	6.06	ug/kg	1.82	6.06
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.363	1.21
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.363	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.363	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.363	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.363	1.21

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370020

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 17.4
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL


Client ID: RE36-10-7484
Batch ID: 963122
Run Date: 03/10/2010 15:06
Prep Date: 03/10/2010 08:52
Data File: 031010V5\SB319.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.363	1.21
179601-23-1	m,p-Xylenes	U	2.42	ug/kg	0.363	2.42
95-47-6	o-Xylene	U	1.21	ug/kg	0.363	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.363	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.363	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.363	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.363	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.363	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.363	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.363	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.363	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.363	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.363	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.363	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.363	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.363	1.21
99-87-6	4-Isopropyltoluene		3.42	ug/kg	0.363	1.21 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.363	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.363	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.363	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.363	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.06	ug/kg	1.94	6.06 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.363	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.363	1.21

Tentatively Identified Compound Summary

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

AMF
4/27/10

DATA VALIDATION COVER SHEET	
5115-1 <p style="text-align: center;">Data Validation Cover Sheet</p>	Records Use only 

Section I.

REQUEST NUMBER: 10-2150 VALIDATION DATE: 4/28/10 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):

- The ICV/CCV %Ds for hexachlorocyclopentadiene; 2-methyl-4,6-dinitrophenol; bis(2-ethylhexyl)phthalate; and benzo(ghi)perylene were >20%. The benzo(ghi)perylene results for samples RE36-10-7481 and -7482 were detects and, thus, were qualified J,SV7c. The remaining associated sample results were NDs and, thus, were qualified UJ,SV7c.
- The LCS %R for benzyl alcohol was < the laboratory LAL but $\geq 10\%$. The associated sample results were NDs and, thus, were qualified UJ,SV12a.
- The MS/MSD %Rs for benzyl alcohol and 3,3'-dichlorobenzidine and the RPD for benzyl alcohol were outside the laboratory acceptance limits. MS/MSD analyses are not required for SVOCs, thus, no sample results were qualified.


Reviewed by: Susan Ball **Level:** I **Date:** 04/29/10

VALIDATOR'S SIGNATURE: Allison Felix DATE: 4/28/10


Form 5115-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project
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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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only



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

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

Page 1 of 3

SDG Number: 10-2150
Lab Sample ID: 248370001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7415
Batch ID: 961228
Run Date: 03/21/2010 19:47
Prep Date: 03/05/2010 11:30
Data File: s1c2109.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	571	ug/kg	114	571
108-95-2	Phenol	U	571	ug/kg	114	571
95-57-8	2-Chlorophenol	U	571	ug/kg	114	571
106-46-7	1,4-Dichlorobenzene	U	571	ug/kg	114	571
621-64-7	N-Nitrosodipropylamine	U	571	ug/kg	114	571
59-50-7	4-Chloro-3-methylphenol	U	571	ug/kg	114	571
83-32-9	Acenaphthene	U	57.1	ug/kg	18.8	57.1
121-14-2	2,4-Dinitrotoluene	U	571	ug/kg	57.1	571
100-02-7	4-Nitrophenol	U	571	ug/kg	188	571
87-86-5	Pentachlorophenol	U	571	ug/kg	143	571
129-00-0	Pyrene	U	57.1	ug/kg	17.1	57.1
110-86-1	Pyridine	U	571	ug/kg	114	571
62-53-3	Aniline	U	571	ug/kg	171	571
111-44-4	bis(2-Chloroethyl) ether	U	571	ug/kg	114	571
541-73-1	1,3-Dichlorobenzene	U	571	ug/kg	114	571
100-51-6	Benzyl alcohol	U	571	ug/kg	171	571 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	571	ug/kg	114	571
108-60-1	bis(2-Chloroisopropyl)ether	U	571	ug/kg	114	571
95-48-7	o-Cresol	U	571	ug/kg	114	571
65794-96-9	m,p-Cresols	U	571	ug/kg	171	571
67-72-1	Hexachloroethane	U	571	ug/kg	114	571
98-95-3	Nitrobenzene	U	571	ug/kg	114	571
78-59-1	Isophorone	U	571	ug/kg	114	571
88-75-5	2-Nitrophenol	U	571	ug/kg	114	571
105-67-9	2,4-Dimethylphenol	U	571	ug/kg	200	571
111-91-1	bis(2-Chloroethoxy)methane	U	571	ug/kg	114	571
120-83-2	2,4-Dichlorophenol	U	571	ug/kg	114	571
65-85-0	Benzoic acid	U	1140	ug/kg	286	1140
91-20-3	Naphthalene	U	57.1	ug/kg	17.1	57.1
106-47-8	4-Chloroaniline	U	571	ug/kg	114	571
87-68-3	Hexachlorobutadiene	U	571	ug/kg	114	571
91-57-6	2-Methylnaphthalene	U	57.1	ug/kg	11.4	57.1
77-47-4	Hexachlorocyclopentadiene	U	571	ug/kg	114	571 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	571	ug/kg	114	571
95-95-4	2,4,5-Trichlorophenol	U	571	ug/kg	114	571
91-58-7	2-Chloronaphthalene	U	57.1	ug/kg	18.8	57.1
88-74-4	2-Nitroaniline	U	571	ug/kg	114	571
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	571	ug/kg	114	571

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 2 of 3

SDG Number: 10-2150
Lab Sample ID: 248370001

Client ID: RE36-10-7415
Batch ID: 961228
Run Date: 03/21/2010 19:47
Prep Date: 03/05/2010 11:30
Data File: s1c2109.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Allquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	571	ug/kg	114	571
208-96-8	2,6-Dinitrotoluene	U	571	ug/kg	57.1	571
51-28-5	Acenaphthylene	U	57.1	ug/kg	17.1	57.1
132-64-9	2,4-Dinitrophenol	U	1140	ug/kg	217	1140
84-66-2	Dibenzofuran	U	571	ug/kg	114	571
86-73-7	Diethylphthalate	U	571	ug/kg	114	571
7005-72-3	Fluorene	U	57.1	ug/kg	17.1	57.1
534-52-1	4-Chlorophenylphenylether	U	571	ug/kg	114	571
100-01-6	2-Methyl-4,6-dinitrophenol	U	571	ug/kg	114	571 UJ,SV7c
122-39-4	4-Nitroaniline	U	571	ug/kg	171	571
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	571	ug/kg	114	571
118-74-1	Azobenzene	U	571	ug/kg	114	571
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	571	ug/kg	114	571
84-74-2	Hexachlorobenzene	U	571	ug/kg	114	571
206-44-0	Phenanthrene	U	57.1	ug/kg	17.1	57.1
85-68-7	Anthracene	U	57.1	ug/kg	11.4	57.1
56-55-3	Di-n-butylphthalate	U	571	ug/kg	114	571
91-94-1	Fluoranthene	U	57.1	ug/kg	17.1	57.1
218-01-9	Butylbenzylphthalate	U	571	ug/kg	114	571
117-81-7	Benzo(a)anthracene	U	57.1	ug/kg	17.1	57.1
117-84-0	3,3'-Dichlorobenzidine	U	571	ug/kg	171	571
205-99-2	Chrysene	U	57.1	ug/kg	17.1	57.1
207-08-9	bis(2-Ethylhexyl)phthalate	U	571	ug/kg	114	571 UJ,SV7c
50-32-8	Di-n-octylphthalate	U	571	ug/kg	114	571
193-39-5	Benzo(b)fluoranthene	U	57.1	ug/kg	17.1	57.1
53-70-3	Benzo(k)fluoranthene	U	57.1	ug/kg	17.1	57.1
191-24-2	Benzo(a)pyrene	U	57.1	ug/kg	17.1	57.1
120-82-1	Indeno(1,2,3-cd)pyrene	U	57.1	ug/kg	17.1	57.1
	Dibenzo(a,h)anthracene	U	57.1	ug/kg	17.1	57.1
	Benzo(ghi)perylene	U	57.1	ug/kg	17.1	57.1 UJ,SV7c
	1,2,4-Trichlorobenzene	U	571	ug/kg	114	571

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	1170	ug/kg		J
	Unknown Aldol Condensate	2.67	306	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370001	Date Received: 03/02/2010 08:50	%Moisture: 41.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7415	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 19:47	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Allquot: 30 g	Final Volume: 1 mL
Data File: slc2109.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
79-92-5	Camphene	3.29	277	ug/kg	98	NJ
3387-41-5	Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3.39	280	ug/kg	95	NJ
123-35-3	.beta.-Myrcene	3.42	813	ug/kg	93	NJ
29050-33-7	(+)-4-Carene	3.94	265	ug/kg	97	NJ
	Unknown	7.57	280	ug/kg		J
	Unknown	7.75	1040	ug/kg		J
	Unknown	7.85	386	ug/kg		J
	Unknown	7.92	626	ug/kg		J
	Unknown	7.95	857	ug/kg		J
	Unknown	8.01	270	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.15	2900	ug/kg	95	NJ
514-10-3	Abietic acid	8.27	1420	ug/kg	81	NJ
	Unknown	8.33	390	ug/kg		J
	Unknown	8.41	824	ug/kg		J
112-95-8	Eicosane	9.07	273	ug/kg	98	NJ
	Unknown	9.78	310	ug/kg		J
	Unknown	10.4	253	ug/kg		J
	Unknown	10.77	270	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	836	ug/kg	89	NJ

AMF
4/28/10

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

SDG Number: 10-2150
Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 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: RE36-10-7416
Batch ID: 961228
Run Date: 03/21/2010 22:32
Prep Date: 03/05/2010 11:30
Data File: slc2116.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	376	ug/kg	75.2	376
108-95-2	Phenol	U	376	ug/kg	75.2	376
95-57-8	2-Chlorophenol	U	376	ug/kg	75.2	376
106-46-7	1,4-Dichlorobenzene	U	376	ug/kg	75.2	376
621-64-7	N-Nitrosodipropylamine	U	376	ug/kg	75.2	376
59-50-7	4-Chloro-3-methylphenol	U	376	ug/kg	75.2	376
83-32-9	Acenaphthene	U	37.6	ug/kg	12.4	37.6
121-14-2	2,4-Dinitrotoluene	U	376	ug/kg	37.6	376
100-02-7	4-Nitrophenol	U	376	ug/kg	124	376
87-86-5	Pentachlorophenol	U	376	ug/kg	94.0	376
129-00-0	Pyrene	U	37.6	ug/kg	11.3	37.6
110-86-1	Pyridine	U	376	ug/kg	75.2	376
62-53-3	Aniline	U	376	ug/kg	113	376
111-44-4	bis(2-Chloroethyl) ether	U	376	ug/kg	75.2	376
541-73-1	1,3-Dichlorobenzene	U	376	ug/kg	75.2	376
100-51-6	Benzyl alcohol	U	376	ug/kg	113	376 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	376	ug/kg	75.2	376
108-60-1	bis(2-Chloroisopropyl)ether	U	376	ug/kg	75.2	376
95-48-7	o-Cresol	U	376	ug/kg	75.2	376
65794-96-9	m,p-Cresols	U	376	ug/kg	113	376
67-72-1	Hexachloroethane	U	376	ug/kg	75.2	376
98-95-3	Nitrobenzene	U	376	ug/kg	75.2	376
78-59-1	Isophorone	U	376	ug/kg	75.2	376
88-75-5	2-Nitrophenol	U	376	ug/kg	75.2	376
105-67-9	2,4-Dimethylphenol	U	376	ug/kg	132	376
111-91-1	bis(2-Chloroethoxy)methane	U	376	ug/kg	75.2	376
120-83-2	2,4-Dichlorophenol	U	376	ug/kg	75.2	376
65-85-0	Benzoic acid	U	752	ug/kg	188	752
91-20-3	Naphthalene	U	37.6	ug/kg	11.3	37.6
106-47-8	4-Chloroaniline	U	376	ug/kg	75.2	376
87-68-3	Hexachlorobutadiene	U	376	ug/kg	75.2	376
91-57-6	2-Methylnaphthalene	U	37.6	ug/kg	7.52	37.6
77-47-4	Hexachlorocyclopentadiene	U	376	ug/kg	75.2	376 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	376	ug/kg	75.2	376
95-95-4	2,4,5-Trichlorophenol	U	376	ug/kg	75.2	376
91-58-7	2-Chloronaphthalene	U	37.6	ug/kg	12.4	37.6
88-74-4	2-Nitroaniline	U	376	ug/kg	75.2	376
99-09-2	o-Nitroaniline	U	376	ug/kg	75.2	376
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 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: RE36-10-7416
Batch ID: 961228
Run Date: 03/21/2010 22:32
Prep Date: 03/05/2010 11:30
Data File: slc2116.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	376	ug/kg	75.2	376
606-20-2	2,6-Dinitrotoluene	U	376	ug/kg	37.6	376
208-96-8	Acenaphthylene	U	37.6	ug/kg	11.3	37.6
51-28-5	2,4-Dinitrophenol	U	752	ug/kg	143	752
132-64-9	Dibenzofuran	U	376	ug/kg	75.2	376
84-66-2	Diethylphthalate	U	376	ug/kg	75.2	376
86-73-7	Fluorene	U	37.6	ug/kg	11.3	37.6
7005-72-3	4-Chlorophenylphenylether	U	376	ug/kg	75.2	376
534-52-1	2-Methyl-4,6-dinitrophenol	U	376	ug/kg	75.2	376 UJ,SV7c
100-01-6	4-Nitroaniline	U	376	ug/kg	113	376
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	376	ug/kg	75.2	376
122-66-7	Azobenzene	U	376	ug/kg	75.2	376
101-55-3	1,2-Diphenylhydrazine 4-Bromophenylphenylether	U	376	ug/kg	75.2	376
118-74-1	Hexachlorobenzene	U	376	ug/kg	75.2	376
85-01-8	Phenanthrene	U	37.6	ug/kg	11.3	37.6
120-12-7	Anthracene	U	37.6	ug/kg	7.52	37.6
84-74-2	Di-n-butylphthalate	U	376	ug/kg	75.2	376
206-44-0	Fluoranthene	U	37.6	ug/kg	11.3	37.6
85-68-7	Butylbenzylphthalate	U	376	ug/kg	75.2	376
56-55-3	Benzo(a)anthracene	U	37.6	ug/kg	11.3	37.6
91-94-1	3,3'-Dichlorobenzidine	U	376	ug/kg	113	376
218-01-9	Chrysene	U	37.6	ug/kg	11.3	37.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	376	ug/kg	75.2	376 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	376	ug/kg	75.2	376
205-99-2	Benzo(b)fluoranthene	U	37.6	ug/kg	11.3	37.6
207-08-9	Benzo(k)fluoranthene	U	37.6	ug/kg	11.3	37.6
50-32-8	Benzo(a)pyrene	U	37.6	ug/kg	11.3	37.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.6	ug/kg	11.3	37.6
53-70-3	Dibenzo(a,h)anthracene	U	37.6	ug/kg	11.3	37.6
191-24-2	Benzo(ghi)perylene	U	37.6	ug/kg	11.3	37.6 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	376	ug/kg	75.2	376

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	232	ug/kg		J
	Unknown Aldol Condensate	2.67	218	ug/kg		JA

AMF
4/28/10

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

SDG Number: 10-2150

Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00

Date Received: 03/02/2010 08:50

Matrix: R

%Moisture: 11.3

Client: LANL010

Method: SW846 8270C

Project: LANL01004

SOP Ref: GL-OA-E-009

Client ID: RE36-10-7416

Batch ID: 961228

Inst: MSD1.I

Dilution: 1

Run Date: 03/21/2010 22:32

Analyst: AMY

Inj. Vol: .5 uL

Prep Date: 03/05/2010 11:30

Allquot: 30 g

Final Volume: 1 mL

Data File: s1c2116.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	Flt
	Unknown		7.89	241	ug/kg	J
	Unknown		9.06	254	ug/kg	J
112-95-8	Eicosane		9.77	212	ug/kg	98 NJ
1058-61-3	Stigmast-4-en-3-one		12.29	245	ug/kg	83 NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-2150
Lab Sample ID: 248370004

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21
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	422	ug/kg	84.4	422
108-95-2	Phenol	U	422	ug/kg	84.4	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.4	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.4	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.4	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.4	422
83-32-9	Acenaphthene	U	42.2	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene	U	422	ug/kg	42.2	422
100-02-7	4-Nitrophenol	U	422	ug/kg	139	422
87-86-5	Pentachlorophenol	U	422	ug/kg	105	422
129-00-0	Pyrene	U	42.2	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.4	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.4	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.4	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.4	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.4	422
95-48-7	o-Cresol	U	422	ug/kg	84.4	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.4	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.4	422
78-59-1	Isophorone	U	422	ug/kg	84.4	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.4	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.4	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.4	422
65-85-0	Benzoic acid	U	844	ug/kg	211	844
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.4	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.4	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.44	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.4	422 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.4	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.4	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.4	422
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	422	ug/kg	84.4	422

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370004	Date Received: 03/02/2010 08:50	%Moisture: 21
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7417	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:58	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Allquot: 30 g	Final Volume: 1 mL
Data File: slc2112.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	422	ug/kg	84.4	422
606-20-2	2,6-Dinitrotoluene	U	422	ug/kg	42.2	422
208-96-8	Acenaphthylene	U	42.2	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol	U	844	ug/kg	160	844
132-64-9	Dibenzofuran	U	422	ug/kg	84.4	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.4	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.4	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.4	422 UJ,SV7c
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.4	422
122-66-7	Azobenzene	U	422	ug/kg	84.4	422
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.4	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.4	422
85-01-8	Phenanthrene	U	42.2	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.44	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.4	422
206-44-0	Fluoranthene	U	42.2	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.4	422
56-55-3	Benzo(a)anthracene	U	42.2	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	U	42.2	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.4	422 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.4	422
205-99-2	Benzo(b)fluoranthene	U	42.2	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene	U	42.2	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene	U	42.2	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.2	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene	U	42.2	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene	U	42.2	ug/kg	12.7	42.2 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	422	ug/kg	84.4	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	247	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.19	741	ug/kg	97	NJ

AMF
4/28/10

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370004	Date Received: 03/02/2010 08:50	%Moisture: 21
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7417	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:58	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Allquot: 30 g	Final Volume: 1 mL
Data File: s1c2112.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
3386-33-2	Octadecane, 1-chloro-	8.09	192	ug/kg	95	NJ
	Unknown	8.32	186	ug/kg		J
	Unknown	8.58	469	ug/kg		J
7683-64-9	Squalene	8.86	187	ug/kg	93	NJ
	Unknown	9.15	390	ug/kg		J
70038-20-9	7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	9.17	379	ug/kg	90	NJ
	Unknown	10.39	182	ug/kg		J
	Unknown	12.29	329	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370003

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7418
Batch ID: 961228
Run Date: 03/21/2010 20:34
Prep Date: 03/05/2010 11:30
Data File: s1c2111.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	409	ug/kg	81.8	409
108-95-2	Phenol	U	409	ug/kg	81.8	409
95-57-8	2-Chlorophenol	U	409	ug/kg	81.8	409
106-46-7	1,4-Dichlorobenzene	U	409	ug/kg	81.8	409
621-64-7	N-Nitrosodipropylamine	U	409	ug/kg	81.8	409
59-50-7	4-Chloro-3-methylphenol	U	409	ug/kg	81.8	409
83-32-9	Acenaphthene	U	40.9	ug/kg	13.5	40.9
121-14-2	2,4-Dinitrotoluene	U	409	ug/kg	40.9	409
100-02-7	4-Nitrophenol	U	409	ug/kg	135	409
87-86-5	Pentachlorophenol	U	409	ug/kg	102	409
129-00-0	Pyrene	U	40.9	ug/kg	12.3	40.9
110-86-1	Pyridine	U	409	ug/kg	81.8	409
62-53-3	Aniline	U	409	ug/kg	123	409
111-44-4	bis(2-Chloroethyl) ether	U	409	ug/kg	81.8	409
541-73-1	1,3-Dichlorobenzene	U	409	ug/kg	81.8	409
100-51-6	Benzyl alcohol	U	409	ug/kg	123	409 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	409	ug/kg	81.8	409
108-60-1	bis(2-Chloroisopropyl)ether	U	409	ug/kg	81.8	409
95-48-7	o-Cresol	U	409	ug/kg	81.8	409
65794-96-9	m,p-Cresols	U	409	ug/kg	123	409
67-72-1	Hexachloroethane	U	409	ug/kg	81.8	409
98-95-3	Nitrobenzene	U	409	ug/kg	81.8	409
78-59-1	Isophorone	U	409	ug/kg	81.8	409
88-75-5	2-Nitrophenol	U	409	ug/kg	81.8	409
105-67-9	2,4-Dimethylphenol	U	409	ug/kg	143	409
111-91-1	bis(2-Chloroethoxy)methane	U	409	ug/kg	81.8	409
120-83-2	2,4-Dichlorophenol	U	409	ug/kg	81.8	409
65-85-0	Benzoic acid	U	818	ug/kg	205	818
91-20-3	Naphthalene	U	40.9	ug/kg	12.3	40.9
106-47-8	4-Chloroaniline	U	409	ug/kg	81.8	409
87-68-3	Hexachlorobutadiene	U	409	ug/kg	81.8	409
91-57-6	2-Methylnaphthalene	U	40.9	ug/kg	8.18	40.9
77-47-4	Hexachlorocyclopentadiene	U	409	ug/kg	81.8	409 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	409	ug/kg	81.8	409
95-95-4	2,4,5-Trichlorophenol	U	409	ug/kg	81.8	409
91-58-7	2-Chloronaphthalene	U	40.9	ug/kg	13.5	40.9
88-74-4	2-Nitroaniline	U	409	ug/kg	81.8	409
99-09-2	<i>o</i> -Nitroaniline	U	409	ug/kg	81.8	409
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370003

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	409	ug/kg	81.8	409
606-20-2	2,6-Dinitrotoluene	U	409	ug/kg	40.9	409
208-96-8	Acenaphthylene	U	40.9	ug/kg	12.3	40.9
51-28-5	2,4-Dinitrophenol	U	818	ug/kg	155	818
132-64-9	Dibenzofuran	U	409	ug/kg	81.8	409
84-66-2	Diethylphthalate	U	409	ug/kg	81.8	409
86-73-7	Fluorene	U	40.9	ug/kg	12.3	40.9
7005-72-3	4-Chlorophenylphenylether	U	409	ug/kg	81.8	409
534-52-1	2-Methyl-4,6-dinitrophenol	U	409	ug/kg	81.8	409 UJ,SV7c
100-01-6	4-Nitroaniline	U	409	ug/kg	123	409
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	409	ug/kg	81.8	409
122-66-7	Azobenzene	U	409	ug/kg	81.8	409
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	409	ug/kg	81.8	409
118-74-1	Hexachlorobenzene	U	409	ug/kg	81.8	409
85-01-8	Phenanthrene	U	40.9	ug/kg	12.3	40.9
120-12-7	Anthracene	U	40.9	ug/kg	8.18	40.9
84-74-2	Di-n-butylphthalate	U	409	ug/kg	81.8	409
206-44-0	Fluoranthene	U	40.9	ug/kg	12.3	40.9
85-68-7	Butylbenzylphthalate	U	409	ug/kg	81.8	409
56-55-3	Benzo(a)anthracene	U	40.9	ug/kg	12.3	40.9
91-94-1	3,3'-Dichlorobenzidine	U	409	ug/kg	123	409
218-01-9	Chrysene	U	40.9	ug/kg	12.3	40.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	409	ug/kg	81.8	409 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	409	ug/kg	81.8	409
205-99-2	Benzo(b)fluoranthene	U	40.9	ug/kg	12.3	40.9
207-08-9	Benzo(k)fluoranthene	U	40.9	ug/kg	12.3	40.9
50-32-8	Benzo(a)pyrene	U	40.9	ug/kg	12.3	40.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.9	ug/kg	12.3	40.9
53-70-3	Dibenzo(a,h)anthracene	U	40.9	ug/kg	12.3	40.9
191-24-2	Benzo(ghi)perylene	U	40.9	ug/kg	12.3	40.9 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	409	ug/kg	81.8	409

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	481	ug/kg		J
	Unknown Aldol Condensate	2.67	245	ug/kg		JA

AMF
4/28/10

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

SDG Number: 10-2150
Lab Sample ID: 248370003

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.7
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
7785-70-8	1R-.alpha.-Pinene	3.19	310	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	657	ug/kg	99	NJ
1000281-95-1	3-Bromobenzoic acid, pentadecyl ester	7.4	188	ug/kg	90	NJ
	Unknown	8.08	205	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.13	250	ug/kg	89	NJ
	Unknown	8.26	198	ug/kg		J
1000143-61-3	N-(4-Methoxyphenyl)-2-hydroxyimino-aceta	8.55	722	ug/kg	95	NJ
1058-61-3	Stigmast-4-en-3-one	12.29	259	ug/kg	91	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 16.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7419
Batch ID: 961228
Run Date: 03/21/2010 22:09
Prep Date: 03/05/2010 11:30
Data File: slc2115.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.3	401
108-95-2	Phenol	U	401	ug/kg	80.3	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.3	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.3	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.3	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.3	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene	J	21.2	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.3	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.3	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.3	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.3	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.3	401
95-48-7	o-Cresol	U	401	ug/kg	80.3	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.3	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.3	401
78-59-1	Isophorone	U	401	ug/kg	80.3	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.3	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.3	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.3	401
65-85-0	Benzoic acid	U	803	ug/kg	201	803
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.3	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.3	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.03	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.3	401 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.3	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.3	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline	U	401	ug/kg	80.3	401
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	401	ug/kg	80.3	401

AMF
4/28/10

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

SDG Number: 10-2150
Lab Sample ID: 248370005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 16.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7419
Batch ID: 961228
Run Date: 03/21/2010 22:09
Prep Date: 03/05/2010 11:30
Data File: s1c2115.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	401	ug/kg	80.3	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	803	ug/kg	153	803
132-64-9	Dibenzofuran	U	401	ug/kg	80.3	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.3	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.3	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.3	401 UJ,SV7c
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.3	401
122-66-7	Azobenzene	U	401	ug/kg	80.3	401
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.3	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.3	401
85-01-8	Phenanthrene	J	16.3	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.03	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.3	401
206-44-0	Fluoranthene	J	25.8	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.3	401
56-55-3	Benzo(a)anthracene	J	17.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	U	40.1	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.3	401 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.3	401
205-99-2	Benzo(b)fluoranthene	J	17.4	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	U	40.1	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.1	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	U	40.1	ug/kg	12.0	40.1 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.3	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	194	ug/kg		JA
	Unknown	7.32	195	ug/kg		J

AMF
4/28/10

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370005	Date Received: 03/02/2010 08:50	%Moisture: 16.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7419	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 22:09	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: slc2115.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	Flt	Qual
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	205	ug/kg	93	NJ
	Unknown	7.9	176	ug/kg		J
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	8.86	225	ug/kg	98	NJ
	Unknown	9.06	333	ug/kg		J
	Unknown	9.59	190	ug/kg		J
112-95-8	Eicosane	9.78	248	ug/kg	98	NJ
	Unknown	10.2	272	ug/kg		J
	Unknown	10.4	306	ug/kg		J
	Unknown	11.89	182	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	432	ug/kg	83	NJ

AMF
4/28/10

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

SDG Number: 10-2150
Lab Sample ID: 248370002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7420
Batch ID: 961228
Run Date: 03/21/2010 20:12
Prep Date: 03/05/2010 11:30
Data File: s1c2110.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.8	364
108-95-2	Phenol	U	364	ug/kg	72.8	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.8	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.8	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.8	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.8	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.0	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.8	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.8	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.8	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.8	364
108-60-1	bis(2-Chloroisopropyl) ether	U	364	ug/kg	72.8	364
95-48-7	o-Cresol	U	364	ug/kg	72.8	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.8	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.8	364
78-59-1	Isophorone	U	364	ug/kg	72.8	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.8	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	127	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.8	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.8	364
65-85-0	Benzoic acid	J	245	ug/kg	182	728
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.8	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.8	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.28	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.8	364 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.8	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.8	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.8	364
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	364	ug/kg	72.8	364

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370002	Date Received: 03/02/2010 08:50	%Moisture: 8.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7420	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:12	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2110.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	364	ug/kg	72.8	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	728	ug/kg	138	728
132-64-9	Dibenzofuran	U	364	ug/kg	72.8	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.8	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.8	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.8	364 UJ,SV7c
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.8	364
122-66-7	Azobenzene	U	364	ug/kg	72.8	364
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.8	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.8	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.28	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.8	364
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.8	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.8	364 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.8	364
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.8	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	1.82	318	ug/kg		J
	Unknown Aldol Condensate	2.67	238	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370002	Date Received: 03/02/2010 08:50	%Moisture: 8.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7420	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:12	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2110.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
112-95-8	Unknown	8.58	153	ug/kg		J
	Eicosane	9.06	232	ug/kg	97	NJ
	Unknown	9.16	255	ug/kg		J
	Unknown	11.53	155	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.29	259	ug/kg	93	NJ

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

Page 1 of 3

SDG Number: 10-2150
Lab Sample ID: 248370013

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7477
Batch ID: 961228
Run Date: 03/22/2010 01:18
Prep Date: 03/05/2010 11:30
Data File: s1c2123.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	435	ug/kg	87.0	435
108-95-2	Phenol	U	435	ug/kg	87.0	435
95-57-8	2-Chlorophenol	U	435	ug/kg	87.0	435
106-46-7	1,4-Dichlorobenzene	U	435	ug/kg	87.0	435
621-64-7	N-Nitrosodipropylamine	U	435	ug/kg	87.0	435
59-50-7	4-Chloro-3-methylphenol	U	435	ug/kg	87.0	435
83-32-9	Acenaphthene	U	43.5	ug/kg	14.4	43.5
121-14-2	2,4-Dinitrotoluene	U	435	ug/kg	43.5	435
100-02-7	4-Nitrophenol	U	435	ug/kg	144	435
87-86-5	Pentachlorophenol	U	435	ug/kg	109	435
129-00-0	Pyrene	J	27.9	ug/kg	13.1	43.5
110-86-1	Pyridine	U	435	ug/kg	87.0	435
62-53-3	Aniline	U	435	ug/kg	131	435
111-44-4	bis(2-Chloroethyl) ether	U	435	ug/kg	87.0	435
541-73-1	1,3-Dichlorobenzene	U	435	ug/kg	87.0	435
100-51-6	Benzyl alcohol	U	435	ug/kg	131	435 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	435	ug/kg	87.0	435
108-60-1	bis(2-Chloroisopropyl) ether	U	435	ug/kg	87.0	435
95-48-7	o-Cresol	U	435	ug/kg	87.0	435
65794-96-9	m,p-Cresols	U	435	ug/kg	131	435
67-72-1	Hexachloroethane	U	435	ug/kg	87.0	435
98-95-3	Nitrobenzene	U	435	ug/kg	87.0	435
78-59-1	Isophorone	U	435	ug/kg	87.0	435
88-75-5	2-Nitrophenol	U	435	ug/kg	87.0	435
105-67-9	2,4-Dimethylphenol	U	435	ug/kg	152	435
111-91-1	bis(2-Chloroethoxy)methane	U	435	ug/kg	87.0	435
120-83-2	2,4-Dichlorophenol	U	435	ug/kg	87.0	435
65-85-0	Benzoic acid	U	870	ug/kg	218	870
91-20-3	Naphthalene	U	43.5	ug/kg	13.1	43.5
106-47-8	4-Chloroaniline	U	435	ug/kg	87.0	435
87-68-3	Hexachlorobutadiene	U	435	ug/kg	87.0	435
91-57-6	2-Methylnaphthalene	U	43.5	ug/kg	8.70	43.5
77-47-4	Hexachlorocyclopentadiene	U	435	ug/kg	87.0	435 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	435	ug/kg	87.0	435
95-95-4	2,4,5-Trichlorophenol	U	435	ug/kg	87.0	435
91-58-7	2-Chloronaphthalene	U	43.5	ug/kg	14.4	43.5
88-74-4	2-Nitroaniline	U	435	ug/kg	87.0	435
99-09-2	o-Nitroaniline	U	435	ug/kg	87.0	435
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370013

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Allquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7477
Batch ID: 961228
Run Date: 03/22/2010 01:18
Prep Date: 03/05/2010 11:30
Data File: s1c2123.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	435	ug/kg	87.0	435
606-20-2	2,6-Dinitrotoluene	U	435	ug/kg	43.5	435
208-96-8	Acenaphthylene	U	43.5	ug/kg	13.1	43.5
51-28-5	2,4-Dinitrophenol	U	870	ug/kg	165	870
132-64-9	Dibenzofuran	U	435	ug/kg	87.0	435
84-66-2	Diethylphthalate	U	435	ug/kg	87.0	435
86-73-7	Fluorene	U	43.5	ug/kg	13.1	43.5
7005-72-3	4-Chlorophenylphenylether	U	435	ug/kg	87.0	435
534-52-1	2-Methyl-4,6-dinitrophenol	U	435	ug/kg	87.0	435 UJ,SV7c
100-01-6	4-Nitroaniline	U	435	ug/kg	131	435
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	435	ug/kg	87.0	435
122-66-7	Azobenzene	U	435	ug/kg	87.0	435
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	435	ug/kg	87.0	435
118-74-1	Hexachlorobenzene	U	435	ug/kg	87.0	435
85-01-8	Phenanthrene	J	15.4	ug/kg	13.1	43.5
120-12-7	Anthracene	U	43.5	ug/kg	8.70	43.5
84-74-2	Di-n-butylphthalate	U	435	ug/kg	87.0	435
206-44-0	Fluoranthene	J	29.7	ug/kg	13.1	43.5
85-68-7	Butylbenzylphthalate	U	435	ug/kg	87.0	435
56-55-3	Benzo(a)anthracene	J	17.9	ug/kg	13.1	43.5
91-94-1	3,3'-Dichlorobenzidine	U	435	ug/kg	131	435
218-01-9	Chrysene	J	16.7	ug/kg	13.1	43.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	435	ug/kg	87.0	435 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	435	ug/kg	87.0	435
205-99-2	Benzo(b)fluoranthene	J	24.8	ug/kg	13.1	43.5
207-08-9	Benzo(k)fluoranthene	U	43.5	ug/kg	13.1	43.5
50-32-8	Benzo(a)pyrene	J	13.6	ug/kg	13.1	43.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.5	ug/kg	13.1	43.5
53-70-3	Dibenzo(a,h)anthracene	U	43.5	ug/kg	13.1	43.5
191-24-2	Benzo(ghi)perylene	U	43.5	ug/kg	13.1	43.5 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	435	ug/kg	87.0	435

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	267	ug/kg		JA
3387-41-5	Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3.39	177	ug/kg	95	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370013	Date Received: 03/02/2010 08:50	%Moisture: 23.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7477	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 01:18	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2123.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
5989-27-5	D-Limonene	3.67	182	ug/kg	94	NJ
	Unknown	7.9	342	ug/kg		J
	Unknown	9.19	255	ug/kg		J
112-95-8	Eicosane	9.78	255	ug/kg	96	NJ

AMF
4/28/10

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370007	Date Received: 03/02/2010 08:50	%Moisture: 9.8
Client ID: RE36-10-7478	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 22:56	Inst: MSD1.1	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2117.d	Aliquot: 30 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	370	ug/kg	73.9	370
108-95-2	Phenol	U	370	ug/kg	73.9	370
95-57-8	2-Chlorophenol	U	370	ug/kg	73.9	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	73.9	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	73.9	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	73.9	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.4	370
129-00-0	Pyrene	J	24.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	73.9	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	73.9	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	73.9	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	73.9	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	73.9	370
95-48-7	o-Cresol	U	370	ug/kg	73.9	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	73.9	370
98-95-3	Nitrobenzene	U	370	ug/kg	73.9	370
78-59-1	Isophorone	U	370	ug/kg	73.9	370
88-75-5	2-Nitrophenol	U	370	ug/kg	73.9	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	73.9	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	73.9	370
65-85-0	Benzoic acid	U	739	ug/kg	185	739
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	73.9	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	73.9	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.39	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	73.9	370 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	73.9	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	73.9	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	73.9	370
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	370	ug/kg	73.9	370

AMF
4/28/10

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

SDG Number: 10-2150
Lab Sample ID: 248370007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	370	ug/kg	73.9	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	370	ug/kg	73.9	370
84-66-2	Diethylphthalate	U	370	ug/kg	73.9	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	73.9	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	73.9	370 UJ,SV7c
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	73.9	370
122-66-7	Azobenzene	U	370	ug/kg	73.9	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	73.9	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	73.9	370
85-01-8	Phenanthrene	J	11.7	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.39	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	73.9	370
206-44-0	Fluoranthene	J	21.7	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	73.9	370
56-55-3	Benzo(a)anthracene	J	13.3	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	J	15.8	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	73.9	370 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	370	ug/kg	73.9	370
205-99-2	Benzo(b)fluoranthene	J	19.3	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	73.9	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	230	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	241	ug/kg	99	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Allquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.8
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
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	6.59	213	ug/kg		J
	Unknown	8.09	357	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.13	339	ug/kg	95	NJ
55402-13-6	3-Octyne, 2,2,7-trimethyl-	8.93	222	ug/kg	83	NJ
112-95-8	Eicosane	9.06	167	ug/kg	97	NJ
	Unknown	9.77	206	ug/kg		J
	Unknown	12.29	177	ug/kg		J

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

SDG Number: 10-2150
Lab Sample ID: 248370015

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 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	458	ug/kg	91.7	458
108-95-2	Phenol	U	458	ug/kg	91.7	458
95-57-8	2-Chlorophenol	U	458	ug/kg	91.7	458
106-46-7	1,4-Dichlorobenzene	U	458	ug/kg	91.7	458
621-64-7	N-Nitrosodipropylamine	U	458	ug/kg	91.7	458
59-50-7	4-Chloro-3-methylphenol	U	458	ug/kg	91.7	458
83-32-9	Acenaphthene	U	45.8	ug/kg	15.1	45.8
121-14-2	2,4-Dinitrotoluene	U	458	ug/kg	45.8	458
100-02-7	4-Nitrophenol	U	458	ug/kg	151	458
87-86-5	Pentachlorophenol	U	458	ug/kg	115	458
129-00-0	Pyrene	U	45.8	ug/kg	13.7	45.8
110-86-1	Pyridine	U	458	ug/kg	91.7	458
62-53-3	Aniline	U	458	ug/kg	137	458
111-44-4	bis(2-Chloroethyl) ether	U	458	ug/kg	91.7	458
541-73-1	1,3-Dichlorobenzene	U	458	ug/kg	91.7	458
100-51-6	Benzyl alcohol	U	458	ug/kg	137	458 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	458	ug/kg	91.7	458
108-60-1	bis(2-Chloroisopropyl)ether	U	458	ug/kg	91.7	458
95-48-7	o-Cresol	U	458	ug/kg	91.7	458
65794-96-9	m,p-Cresols	U	458	ug/kg	137	458
67-72-1	Hexachloroethane	U	458	ug/kg	91.7	458
98-95-3	Nitrobenzene	U	458	ug/kg	91.7	458
78-59-1	Isophorone	U	458	ug/kg	91.7	458
88-75-5	2-Nitrophenol	U	458	ug/kg	91.7	458
105-67-9	2,4-Dimethylphenol	U	458	ug/kg	160	458
111-91-1	bis(2-Chloroethoxy)methane	U	458	ug/kg	91.7	458
120-83-2	2,4-Dichlorophenol	U	458	ug/kg	91.7	458
65-85-0	Benzoic acid	U	917	ug/kg	229	917
91-20-3	Naphthalene	U	45.8	ug/kg	13.7	45.8
106-47-8	4-Chloroaniline	U	458	ug/kg	91.7	458
87-68-3	Hexachlorobutadiene	U	458	ug/kg	91.7	458
91-57-6	2-Methylnaphthalene	U	45.8	ug/kg	9.17	45.8
77-47-4	Hexachlorocyclopentadiene	U	458	ug/kg	91.7	458 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	458	ug/kg	91.7	458
95-95-4	2,4,5-Trichlorophenol	U	458	ug/kg	91.7	458
91-58-7	2-Chloronaphthalene	U	45.8	ug/kg	15.1	45.8
88-74-4	2-Nitroaniline	U	458	ug/kg	91.7	458
99-09-2	o-Nitroaniline	U	458	ug/kg	91.7	458
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370015

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 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
131-11-3	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	458	ug/kg	91.7	458
606-20-2	2,6-Dinitrotoluene	U	458	ug/kg	45.8	458
208-96-8	Acenaphthylene	U	45.8	ug/kg	13.7	45.8
51-28-5	2,4-Dinitrophenol	U	917	ug/kg	174	917
132-64-9	Dibenzofuran	U	458	ug/kg	91.7	458
84-66-2	Diethylphthalate	U	458	ug/kg	91.7	458
86-73-7	Fluorene	U	45.8	ug/kg	13.7	45.8
7005-72-3	4-Chlorophenylphenylether	U	458	ug/kg	91.7	458
534-52-1	2-Methyl-4,6-dinitrophenol	U	458	ug/kg	91.7	458 UJ,SV7c
100-01-6	4-Nitroaniline	U	458	ug/kg	137	458
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	458	ug/kg	91.7	458
122-66-7	Azobenzene	U	458	ug/kg	91.7	458
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	458	ug/kg	91.7	458
118-74-1	Hexachlorobenzene	U	458	ug/kg	91.7	458
85-01-8	Phenanthrene	U	45.8	ug/kg	13.7	45.8
120-12-7	Anthracene	U	45.8	ug/kg	9.17	45.8
84-74-2	Di-n-butylphthalate	U	458	ug/kg	91.7	458
206-44-0	Fluoranthene	U	45.8	ug/kg	13.7	45.8
85-68-7	Butylbenzylphthalate	U	458	ug/kg	91.7	458
56-55-3	Benzo(a)anthracene	U	45.8	ug/kg	13.7	45.8
91-94-1	3,3'-Dichlorobenzidine	U	458	ug/kg	137	458
218-01-9	Chrysene	U	45.8	ug/kg	13.7	45.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	458	ug/kg	91.7	458 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	458	ug/kg	91.7	458
205-99-2	Benzo(b)fluoranthene	U	45.8	ug/kg	13.7	45.8
207-08-9	Benzo(k)fluoranthene	U	45.8	ug/kg	13.7	45.8
50-32-8	Benzo(a)pyrene	U	45.8	ug/kg	13.7	45.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.8	ug/kg	13.7	45.8
53-70-3	Dibenzo(a,h)anthracene	U	45.8	ug/kg	13.7	45.8
191-24-2	Benzo(ghi)perylene	U	45.8	ug/kg	13.7	45.8 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	458	ug/kg	91.7	458

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	514	ug/kg		J
	Unknown Aldol Condensate	2.67	257	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370015	Date Received: 03/02/2010 08:50	%Moisture: 27.3
Client ID: RE36-10-7479	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 02:05	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: slc2125.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
489-40-7	Unknown	5.14	739	ug/kg		J
	1H-Cycloprop[c]azulene, 1a,2,3,4,4a,5,6,	5.39	189	ug/kg	98	NJ
	Unknown	7.32	230	ug/kg		J
	Unknown	7.56	301	ug/kg		J
	Unknown	8.62	337	ug/kg		J
	Unknown	8.78	206	ug/kg		J
	Unknown	9	307	ug/kg		J
	Unknown	9.06	276	ug/kg		J
112-95-8	Eicosane	9.78	375	ug/kg	98	NJ
	Unknown	10.02	369	ug/kg		J
	Unknown	10.1	245	ug/kg		J
	Unknown	10.4	251	ug/kg		J
	Unknown	10.77	231	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	403	ug/kg	70	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370017

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7480
Batch ID: 961228
Run Date: 03/22/2010 02:53
Prep Date: 03/05/2010 11:30
Data File: s1c2127.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	379	ug/kg	75.8	379
108-95-2	Phenol	U	379	ug/kg	75.8	379
95-57-8	2-Chlorophenol	U	379	ug/kg	75.8	379
106-46-7	1,4-Dichlorobenzene	U	379	ug/kg	75.8	379
621-64-7	N-Nitrosodipropylamine	U	379	ug/kg	75.8	379
59-50-7	4-Chloro-3-methylphenol	U	379	ug/kg	75.8	379
83-32-9	Acenaphthene	U	37.9	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene	U	379	ug/kg	37.9	379
100-02-7	4-Nitrophenol	U	379	ug/kg	125	379
87-86-5	Pentachlorophenol	U	379	ug/kg	94.7	379
129-00-0	Pyrene	U	37.9	ug/kg	11.4	37.9
110-86-1	Pyridine	U	379	ug/kg	75.8	379
62-53-3	Aniline	U	379	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether	U	379	ug/kg	75.8	379
541-73-1	1,3-Dichlorobenzene	U	379	ug/kg	75.8	379
100-51-6	Benzyl alcohol	U	379	ug/kg	114	379 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	379	ug/kg	75.8	379
108-60-1	bis(2-Chloroisopropyl)ether	U	379	ug/kg	75.8	379
95-48-7	o-Cresol	U	379	ug/kg	75.8	379
65794-96-9	m,p-Cresols	U	379	ug/kg	114	379
67-72-1	Hexachloroethane	U	379	ug/kg	75.8	379
98-95-3	Nitrobenzene	U	379	ug/kg	75.8	379
78-59-1	Isophorone	U	379	ug/kg	75.8	379
88-75-5	2-Nitrophenol	U	379	ug/kg	75.8	379
105-67-9	2,4-Dimethylphenol	U	379	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane	U	379	ug/kg	75.8	379
120-83-2	2,4-Dichlorophenol	U	379	ug/kg	75.8	379
65-85-0	Benzoic acid	U	758	ug/kg	189	758
91-20-3	Naphthalene	U	37.9	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline	U	379	ug/kg	75.8	379
87-68-3	Hexachlorobutadiene	U	379	ug/kg	75.8	379
91-57-6	2-Methylnaphthalene	U	37.9	ug/kg	7.58	37.9
77-47-4	Hexachlorocyclopentadiene	U	379	ug/kg	75.8	379 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	379	ug/kg	75.8	379
95-95-4	2,4,5-Trichlorophenol	U	379	ug/kg	75.8	379
91-58-7	2-Chloronaphthalene	J	21.5	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline	U	379	ug/kg	75.8	379
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	379	ug/kg	75.8	379

AMF
4/28/10

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

SDG Number: 10-2150
Lab Sample ID: 248370017

Client ID: RE36-10-7480
Batch ID: 961228
Run Date: 03/22/2010 02:53
Prep Date: 03/05/2010 11:30
Data File: slc2127.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.1
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	379	ug/kg	75.8	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	758	ug/kg	144	758
132-64-9	Dibenzofuran	U	379	ug/kg	75.8	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.8	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.8	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.8	379 UJ,SV7c
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.8	379
122-66-7	Azobenzene	U	379	ug/kg	75.8	379
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.8	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.8	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.58	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.8	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.8	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.8	379 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.8	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.8	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	476	ug/kg		J
	Unknown Aldol Condensate	2.67	382	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370017	Date Received: 03/02/2010 08:50	%Moisture: 12.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7480	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 02:53	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s1c2127.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
7785-70-8	1R- α -Pinene	3.19	730	ug/kg	97	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.43	192	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	178	ug/kg	97	NJ
	Unknown	5.13	230	ug/kg		J
112-80-1	Oleic Acid	7.4	186	ug/kg	96	NJ
	Unknown	7.75	202	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	165	ug/kg	96	NJ
	Unknown	8.09	211	ug/kg		J
	Unknown	8.13	317	ug/kg		J
	Unknown	8.26	217	ug/kg		J
	Unknown	8.62	190	ug/kg		J
	Unknown	8.78	212	ug/kg		J
	Unknown	9	164	ug/kg		J
112-95-8	Eicosane	9.06	292	ug/kg	98	NJ
	Unknown	9.18	207	ug/kg		J
	Unknown	9.78	318	ug/kg		J
	Unknown	10.77	160	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	275	ug/kg	42	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7481
Batch ID: 961228
Run Date: 03/22/2010 00:31
Prep Date: 03/05/2010 11:30
Data File: s1c2121.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	495	ug/kg	99.0	495
108-95-2	Phenol	U	495	ug/kg	99.0	495
95-57-8	2-Chlorophenol	U	495	ug/kg	99.0	495
106-46-7	1,4-Dichlorobenzene	U	495	ug/kg	99.0	495
621-64-7	N-Nitrosodipropylamine	U	495	ug/kg	99.0	495
59-50-7	4-Chloro-3-methylphenol	U	495	ug/kg	99.0	495
83-32-9	Acenaphthene		120	ug/kg	16.3	49.5
121-14-2	2,4-Dinitrotoluene	U	495	ug/kg	49.5	495
100-02-7	4-Nitrophenol	U	495	ug/kg	163	495
87-86-5	Pentachlorophenol	U	495	ug/kg	124	495
129-00-0	Pyrene		829	ug/kg	14.8	49.5
110-86-1	Pyridine	U	495	ug/kg	99.0	495
62-53-3	Aniline	U	495	ug/kg	148	495
111-44-4	bis(2-Chloroethyl) ether	U	495	ug/kg	99.0	495
541-73-1	1,3-Dichlorobenzene	U	495	ug/kg	99.0	495
100-51-6	Benzyl alcohol	U	495	ug/kg	148	495 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	495	ug/kg	99.0	495
108-60-1	bis(2-Chloroisopropyl) ether	U	495	ug/kg	99.0	495
95-48-7	o-Cresol	U	495	ug/kg	99.0	495
65794-96-9	m,p-Cresols	U	495	ug/kg	148	495
67-72-1	Hexachloroethane	U	495	ug/kg	99.0	495
98-95-3	Nitrobenzene	U	495	ug/kg	99.0	495
78-59-1	Isophorone	U	495	ug/kg	99.0	495
88-75-5	2-Nitrophenol	U	495	ug/kg	99.0	495
105-67-9	2,4-Dimethylphenol	U	495	ug/kg	173	495
111-91-1	bis(2-Chloroethoxy)methane	U	495	ug/kg	99.0	495
120-83-2	2,4-Dichlorophenol	U	495	ug/kg	99.0	495
65-85-0	Benzoic acid	U	990	ug/kg	247	990
91-20-3	Naphthalene		81.5	ug/kg	14.8	49.5
106-47-8	4-Chloroaniline	U	495	ug/kg	99.0	495
87-68-3	Hexachlorobutadiene	U	495	ug/kg	99.0	495
91-57-6	2-Methylnaphthalene	J	32.4	ug/kg	9.90	49.5
77-47-4	Hexachlorocyclopentadiene	U	495	ug/kg	99.0	495 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	495	ug/kg	99.0	495
95-95-4	2,4,5-Trichlorophenol	U	495	ug/kg	99.0	495
91-58-7	2-Chloronaphthalene	U	49.5	ug/kg	16.3	49.5
88-74-4	2-Nitroaniline	U	495	ug/kg	99.0	495
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	495	ug/kg	99.0	495

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
Client ID: RE36-10-7481	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 00:31	Inst: MSD1.1	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2121.d	Aliquot: 30.09 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	495	ug/kg	99.0	495
606-20-2	2,6-Dinitrotoluene	U	495	ug/kg	49.5	495
208-96-8	Acenaphthylene	U	49.5	ug/kg	14.8	49.5
51-28-5	2,4-Dinitrophenol	U	990	ug/kg	188	990
132-64-9	Dibenzofuran	U	495	ug/kg	99.0	495
84-66-2	Diethylphthalate	U	495	ug/kg	99.0	495
86-73-7	Fluorene		131	ug/kg	14.8	49.5
7005-72-3	4-Chlorophenylphenylether	U	495	ug/kg	99.0	495
534-52-1	2-Methyl-4,6-dinitrophenol	U	495	ug/kg	99.0	495 UJ,SV7c
100-01-6	4-Nitroaniline	U	495	ug/kg	148	495
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	495	ug/kg	99.0	495
122-66-7	Azobenzene	U	495	ug/kg	99.0	495
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	495	ug/kg	99.0	495
118-74-1	Hexachlorobenzene	U	495	ug/kg	99.0	495
85-01-8	Phenanthrene		919	ug/kg	14.8	49.5
120-12-7	Anthracene		216	ug/kg	9.90	49.5
84-74-2	Di-n-butylphthalate	U	495	ug/kg	99.0	495
206-44-0	Fluoranthene		962	ug/kg	14.8	49.5
85-68-7	Butylbenzylphthalate	U	495	ug/kg	99.0	495
56-55-3	Benzo(a)anthracene		363	ug/kg	14.8	49.5
91-94-1	3,3'-Dichlorobenzidine	U	495	ug/kg	148	495
218-01-9	Chrysene		407	ug/kg	14.8	49.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	495	ug/kg	99.0	495 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	495	ug/kg	99.0	495
205-99-2	Benzo(b)fluoranthene		538	ug/kg	14.8	49.5
207-08-9	Benzo(k)fluoranthene	U	49.5	ug/kg	14.8	49.5
50-32-8	Benzo(a)pyrene		328	ug/kg	14.8	49.5
193-39-5	Indeno(1,2,3-cd)pyrene		131	ug/kg	14.8	49.5
53-70-3	Dibenzo(a,h)anthracene	U	49.5	ug/kg	14.8	49.5
191-24-2	Benzo(ghi)perylene		137	ug/kg	14.8	49.5 J,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	495	ug/kg	99.0	495

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
64-19-7	Acetic acid	1.66	918	ug/kg	86	NJ
	Unknown	1.82	250	ug/kg		J

AMF
4/28/10

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

SDG Number: 10-2150
Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.8
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
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.37	445	ug/kg		J
	Unknown	2.41	603	ug/kg		J
	Unknown	2.63	221	ug/kg		J
	Unknown Aldol Condensate	2.67	350	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	234	ug/kg	99	NJ
593-45-3	Octadecane	9.06	313	ug/kg	98	NJ
192-97-2	Benzo[e]pyrene	9.4	363	ug/kg	98	NJ
112-95-8	Eicosane	9.78	316	ug/kg	96	NJ
	Unknown	10.02	226	ug/kg		J

AMF
4/28/10

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

Page 1 of 3

SDG Number: 10-2150
Lab Sample ID: 248370016

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7482
Batch ID: 961228
Run Date: 03/22/2010 02:29
Prep Date: 03/05/2010 11:30
Data File: s1c2126.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	440	ug/kg	88.0	440
108-95-2	Phenol	U	440	ug/kg	88.0	440
95-57-8	2-Chlorophenol	U	440	ug/kg	88.0	440
106-46-7	1,4-Dichlorobenzene	U	440	ug/kg	88.0	440
621-64-7	N-Nitrosodipropylamine	U	440	ug/kg	88.0	440
59-50-7	4-Chloro-3-methylphenol	U	440	ug/kg	88.0	440
83-32-9	Acenaphthene		64.6	ug/kg	14.5	44.0
121-14-2	2,4-Dinitrotoluene	U	440	ug/kg	44.0	440
100-02-7	4-Nitrophenol	U	440	ug/kg	145	440
87-86-5	Pentachlorophenol	U	440	ug/kg	110	440
129-00-0	Pyrene		345	ug/kg	13.2	44.0
110-86-1	Pyridine	U	440	ug/kg	88.0	440
62-53-3	Aniline	U	440	ug/kg	132	440
111-44-4	bis(2-Chloroethyl) ether	U	440	ug/kg	88.0	440
541-73-1	1,3-Dichlorobenzene	U	440	ug/kg	88.0	440
100-51-6	Benzyl alcohol	U	440	ug/kg	132	440 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	440	ug/kg	88.0	440
108-60-1	bis(2-Chloroisopropyl) ether	U	440	ug/kg	88.0	440
95-48-7	o-Cresol	U	440	ug/kg	88.0	440
65794-96-9	m,p-Cresols	U	440	ug/kg	132	440
67-72-1	Hexachloroethane	U	440	ug/kg	88.0	440
98-95-3	Nitrobenzene	U	440	ug/kg	88.0	440
78-59-1	Isophorone	U	440	ug/kg	88.0	440
88-75-5	2-Nitrophenol	U	440	ug/kg	88.0	440
105-67-9	2,4-Dimethylphenol	U	440	ug/kg	154	440
111-91-1	bis(2-Chloroethoxy)methane	U	440	ug/kg	88.0	440
120-83-2	2,4-Dichlorophenol	U	440	ug/kg	88.0	440
65-85-0	Benzoic acid	U	880	ug/kg	220	880
91-20-3	Naphthalene	J	39.6	ug/kg	13.2	44.0
106-47-8	4-Chloroaniline	U	440	ug/kg	88.0	440
87-68-3	Hexachlorobutadiene	U	440	ug/kg	88.0	440
91-57-6	2-Methylnaphthalene	J	17.8	ug/kg	8.80	44.0
77-47-4	Hexachlorocyclopentadiene	U	440	ug/kg	88.0	440 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	440	ug/kg	88.0	440
95-95-4	2,4,5-Trichlorophenol	U	440	ug/kg	88.0	440
91-58-7	2-Chloronaphthalene	U	44.0	ug/kg	14.5	44.0
88-74-4	2-Nitroaniline	U	440	ug/kg	88.0	440
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	440	ug/kg	88.0	440

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

SDG Number: 10-2150
Lab Sample ID: 248370016

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.3
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	440	ug/kg	88.0	440
606-20-2	2,6-Dinitrotoluene	U	440	ug/kg	44.0	440
208-96-8	Acenaphthylene	U	44.0	ug/kg	13.2	44.0
51-28-5	2,4-Dinitrophenol	U	880	ug/kg	167	880
132-64-9	Dibenzofuran	U	440	ug/kg	88.0	440
84-66-2	Diethylphthalate	U	440	ug/kg	88.0	440
86-73-7	Fluorene		84.2	ug/kg	13.2	44.0
7005-72-3	4-Chlorophenylphenylether	U	440	ug/kg	88.0	440
534-52-1	2-Methyl-4,6-dinitrophenol	U	440	ug/kg	88.0	440 UJ,SV7c
100-01-6	4-Nitroaniline	U	440	ug/kg	132	440
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	440	ug/kg	88.0	440
122-66-7	Azobenzene	U	440	ug/kg	88.0	440
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	440	ug/kg	88.0	440
118-74-1	Hexachlorobenzene	U	440	ug/kg	88.0	440
85-01-8	Phenanthrene		480	ug/kg	13.2	44.0
120-12-7	Anthracene		104	ug/kg	8.80	44.0
84-74-2	Di-n-butylphthalate	U	440	ug/kg	88.0	440
206-44-0	Fluoranthene		399	ug/kg	13.2	44.0
85-68-7	Butylbenzylphthalate	U	440	ug/kg	88.0	440
56-55-3	Benzo(a)anthracene		168	ug/kg	13.2	44.0
91-94-1	3,3'-Dichlorobenzidine	U	440	ug/kg	132	440
218-01-9	Chrysene		146	ug/kg	13.2	44.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	440	ug/kg	88.0	440 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	440	ug/kg	88.0	440
205-99-2	Benzo(b)fluoranthene		195	ug/kg	13.2	44.0
207-08-9	Benzo(k)fluoranthene	U	44.0	ug/kg	13.2	44.0
50-32-8	Benzo(a)pyrene		117	ug/kg	13.2	44.0
193-39-5	Indeno(1,2,3-cd)pyrene		49.2	ug/kg	13.2	44.0
53-70-3	Dibenzo(a,h)anthracene	U	44.0	ug/kg	13.2	44.0
191-24-2	Benzo(ghi)perylene		54.5	ug/kg	13.2	44.0 J,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	440	ug/kg	88.0	440

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	268	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.19	760	ug/kg	97	NJ

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**Semi-Volatile
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Sample Summary**

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370016	Date Received: 03/02/2010 08:50	%Moisture: 24.3
Client ID: RE36-10-7482	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 02:29	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: slc2126.d	Allquot: 30.03 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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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	3.57	617	ug/kg	97	NJ
638-67-5	Tricosane	7.71	319	ug/kg	97	NJ
629-78-7	Heptadecane	7.9	424	ug/kg	98	NJ
7225-66-3	Tridecane, 7-hexyl-	8.09	476	ug/kg	96	NJ
544-76-3	Hexadecane	8.53	358	ug/kg	94	NJ
1000193-16-8	4-Methylbenzaldehyde N-allyl-N-ethoxycar	8.69	189	ug/kg	95	NJ
112-95-8	Eicosane	8.78	264	ug/kg	98	NJ
	Unknown	9.07	479	ug/kg		J
205-99-2	Benz[c]acephenanthrylene	9.16	452	ug/kg	96	NJ
	Unknown	9.4	439	ug/kg		J
	Unknown	9.78	407	ug/kg		J
	Unknown	10.23	329	ug/kg		J
	Unknown	10.77	213	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-2150
Lab Sample ID: 248370010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Allquot: 30 g
Column: J&W DB-SMS

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

Client ID: RE36-10-7483
Batch ID: 961228
Run Date: 03/22/2010 00:07
Prep Date: 03/05/2010 11:30
Data File: s1c2120.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	439	ug/kg	87.7	439
108-95-2	Phenol	U	439	ug/kg	87.7	439
95-57-8	2-Chlorophenol	U	439	ug/kg	87.7	439
106-46-7	1,4-Dichlorobenzene	U	439	ug/kg	87.7	439
621-64-7	N-Nitrosodipropylamine	U	439	ug/kg	87.7	439
59-50-7	4-Chloro-3-methylphenol	U	439	ug/kg	87.7	439
83-32-9	Acenaphthene	U	43.9	ug/kg	14.5	43.9
121-14-2	2,4-Dinitrotoluene	U	439	ug/kg	43.9	439
100-02-7	4-Nitrophenol	U	439	ug/kg	145	439
87-86-5	Pentachlorophenol	U	439	ug/kg	110	439
129-00-0	Pyrene	J	13.4	ug/kg	13.2	43.9
110-86-1	Pyridine	U	439	ug/kg	87.7	439
62-53-3	Aniline	U	439	ug/kg	132	439
111-44-4	bis(2-Chloroethyl) ether	U	439	ug/kg	87.7	439
541-73-1	1,3-Dichlorobenzene	U	439	ug/kg	87.7	439
100-51-6	Benzyl alcohol	U	439	ug/kg	132	439 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	439	ug/kg	87.7	439
108-60-1	bis(2-Chloroisopropyl)ether	U	439	ug/kg	87.7	439
95-48-7	o-Cresol	U	439	ug/kg	87.7	439
65794-96-9	m,p-Cresols	U	439	ug/kg	132	439
67-72-1	Hexachloroethane	U	439	ug/kg	87.7	439
98-95-3	Nitrobenzene	U	439	ug/kg	87.7	439
78-59-1	Isophorone	U	439	ug/kg	87.7	439
88-75-5	2-Nitrophenol	U	439	ug/kg	87.7	439
105-67-9	2,4-Dimethylphenol	U	439	ug/kg	153	439
111-91-1	bis(2-Chloroethoxy)methane	U	439	ug/kg	87.7	439
120-83-2	2,4-Dichlorophenol	U	439	ug/kg	87.7	439
65-85-0	Benzoic acid	U	877	ug/kg	219	877
91-20-3	Naphthalene	U	43.9	ug/kg	13.2	43.9
106-47-8	4-Chloroaniline	U	439	ug/kg	87.7	439
87-68-3	Hexachlorobutadiene	U	439	ug/kg	87.7	439
91-57-6	2-Methylnaphthalene	U	43.9	ug/kg	8.77	43.9
77-47-4	Hexachlorocyclopentadiene	U	439	ug/kg	87.7	439 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	439	ug/kg	87.7	439
95-95-4	2,4,5-Trichlorophenol	U	439	ug/kg	87.7	439
91-58-7	2-Chloronaphthalene	U	43.9	ug/kg	14.5	43.9
88-74-4	2-Nitroaniline	U	439	ug/kg	87.7	439
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	439	ug/kg	87.7	439

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Sample Summary**

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SDG Number: 10-2150
Lab Sample ID: 248370010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

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

Client ID: RE36-10-7483
Batch ID: 961228
Run Date: 03/22/2010 00:07
Prep Date: 03/05/2010 11:30
Data File: s1c2120.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	439	ug/kg	87.7	439
606-20-2	2,6-Dinitrotoluene	U	439	ug/kg	43.9	439
208-96-8	Acenaphthylene	U	43.9	ug/kg	13.2	43.9
51-28-5	2,4-Dinitrophenol	U	877	ug/kg	167	877
132-64-9	Dibenzofuran	U	439	ug/kg	87.7	439
84-66-2	Diethylphthalate	U	439	ug/kg	87.7	439
86-73-7	Fluorene	U	43.9	ug/kg	13.2	43.9
7005-72-3	4-Chlorophenylphenylether	U	439	ug/kg	87.7	439
534-52-1	2-Methyl-4,6-dinitrophenol	U	439	ug/kg	87.7	439 UJ,SV7c
100-01-6	4-Nitroaniline	U	439	ug/kg	132	439
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	439	ug/kg	87.7	439
122-66-7	Azobenzene	U	439	ug/kg	87.7	439
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	439	ug/kg	87.7	439
118-74-1	Hexachlorobenzene	U	439	ug/kg	87.7	439
85-01-8	Phenanthrene	U	43.9	ug/kg	13.2	43.9
120-12-7	Anthracene	U	43.9	ug/kg	8.77	43.9
84-74-2	Di-n-butylphthalate	U	439	ug/kg	87.7	439
206-44-0	Fluoranthene	U	43.9	ug/kg	13.2	43.9
85-68-7	Butylbenzylphthalate	U	439	ug/kg	87.7	439
56-55-3	Benzo(a)anthracene	U	43.9	ug/kg	13.2	43.9
91-94-1	3,3'-Dichlorobenzidine	U	439	ug/kg	132	439
218-01-9	Chrysene	U	43.9	ug/kg	13.2	43.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	439	ug/kg	87.7	439 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	439	ug/kg	87.7	439
205-99-2	Benzo(b)fluoranthene	U	43.9	ug/kg	13.2	43.9
207-08-9	Benzo(k)fluoranthene	U	43.9	ug/kg	13.2	43.9
50-32-8	Benzo(a)pyrene	U	43.9	ug/kg	13.2	43.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.9	ug/kg	13.2	43.9
53-70-3	Dibenzo(a,h)anthracene	U	43.9	ug/kg	13.2	43.9
191-24-2	Benzo(ghi)perylene	U	43.9	ug/kg	13.2	43.9 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	439	ug/kg	87.7	439

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	513	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.19	1610	ug/kg	97	NJ

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Certificate of Analysis
Sample Summary

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SDG Number: 10-2150
Lab Sample ID: 248370010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-92-5	Camphene	3.29	516	ug/kg	98	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.43	618	ug/kg	97	NJ
13466-78-9	3-Carene	3.57	1060	ug/kg	96	NJ
103-82-2	Benzeneacetic acid	4.62	203	ug/kg	90	NJ
87-44-5	Caryophyllene	5.45	197	ug/kg	99	NJ
57-10-3	n-Hexadecanoic acid	6.99	254	ug/kg	98	NJ
	Unknown	7.23	194	ug/kg		J
	Unknown	7.32	630	ug/kg		J
	Unknown	7.34	184	ug/kg		J
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	387	ug/kg	99	NJ
57-11-4	Octadecanoic acid	7.44	211	ug/kg	90	NJ
	Unknown	7.75	245	ug/kg		J
	Unknown	7.85	617	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	256	ug/kg	99	NJ
	Unknown	7.92	492	ug/kg		J
	Unknown	7.97	286	ug/kg		J
	Unknown	8.09	2370	ug/kg		J
	Unknown	8.14	1090	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	8.26	629	ug/kg	92	NJ
	Unknown	8.33	678	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	8.53	238	ug/kg	96	NJ
1599-67-3	1-Docosene	8.73	572	ug/kg	98	NJ
	Eicosane	9.07	764	ug/kg	0	J
112-40-3	Dodecane	9.76	594	ug/kg	90	NJ
	Unknown	10.02	4970	ug/kg		J
	Unknown	10.4	1010	ug/kg		J
83-47-6	.gamma.-Sitosterol	11.67	668	ug/kg	90	NJ
1058-61-3	Stigmast-4-en-3-one	12.31	1470	ug/kg	95	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370020

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 17.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7484
Batch ID: 961228
Run Date: 03/22/2010 04:03
Prep Date: 03/05/2010 11:30
Data File: s1c2130.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.7	404
108-95-2	Phenol	U	404	ug/kg	80.7	404
95-57-8	2-Chlorophenol	U	404	ug/kg	80.7	404
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.7	404
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.7	404
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.7	404
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404
129-00-0	Pyrene	U	40.4	ug/kg	12.1	40.4
110-86-1	Pyridine	U	404	ug/kg	80.7	404
62-53-3	Aniline	U	404	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.7	404
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.7	404
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.7	404
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.7	404
95-48-7	o-Cresol	U	404	ug/kg	80.7	404
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404
67-72-1	Hexachloroethane	U	404	ug/kg	80.7	404
98-95-3	Nitrobenzene	U	404	ug/kg	80.7	404
78-59-1	Isophorone	U	404	ug/kg	80.7	404
88-75-5	2-Nitrophenol	U	404	ug/kg	80.7	404
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.7	404
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.7	404
65-85-0	Benzoic acid	U	807	ug/kg	202	807
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline	U	404	ug/kg	80.7	404
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.7	404
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.07	40.4
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.7	404 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.7	404
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.7	404
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline	U	404	ug/kg	80.7	404
99-09-2	o-Nitroaniline	U	404	ug/kg	80.7	404
	3-Nitroaniline	U	404	ug/kg	80.7	404

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370020	Date Received: 03/02/2010 08:50	%Moisture: 17.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7484	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 04:03	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2130.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	404	ug/kg	80.7	404
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol	U	807	ug/kg	153	807
132-64-9	Dibenzofuran	U	404	ug/kg	80.7	404
84-66-2	Diethylphthalate	U	404	ug/kg	80.7	404
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.7	404
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.7	404 UJ,SV7c
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	404	ug/kg	80.7	404
122-66-7	Azobenzene	U	404	ug/kg	80.7	404
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.7	404
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.7	404
85-01-8	Phenanthrene	U	40.4	ug/kg	12.1	40.4
120-12-7	Anthracene	U	40.4	ug/kg	8.07	40.4
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.7	404
206-44-0	Fluoranthene	U	40.4	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate	J	214	ug/kg	80.7	404
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
218-01-9	Chrysene	U	40.4	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.7	404 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.7	404
205-99-2	Benzo(b)fluoranthene	U	40.4	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene	U	40.4	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene	U	40.4	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.4	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene	U	40.4	ug/kg	12.1	40.4 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.7	404

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.62	218	ug/kg		J
	Unknown Aldol Condensate	2.67	402	ug/kg		JA

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**Semi-Volatile
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Sample Summary**

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SDG Number: 10-2150
Lab Sample ID: 248370020

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 17.4
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
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
7785-70-8	1R-.alpha.-Pinene	3.19	789	ug/kg	97	NJ
79-92-5	Camphene	3.29	195	ug/kg	98	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.43	345	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	619	ug/kg	97	NJ
	Unknown	7.32	276	ug/kg		J
112-80-1	Oleic Acid	7.4	197	ug/kg	93	NJ
	Unknown	7.75	245	ug/kg		J
506-30-9	Eicosanoic acid	7.85	327	ug/kg	86	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	227	ug/kg	98	NJ
	Unknown	8.06	303	ug/kg		J
	Unknown	8.09	397	ug/kg		J
	Unknown	8.13	390	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	8.22	253	ug/kg	91	NJ
	Unknown	8.26	188	ug/kg		J
	Unknown	8.33	234	ug/kg		J
629-96-9	1-Eicosanol	8.7	449	ug/kg	89	NJ
112-95-8	Eicosane	9.07	334	ug/kg	96	NJ
	Unknown	10.02	1820	ug/kg		J
	Unknown	10.4	325	ug/kg		J
	Unknown	10.77	384	ug/kg		J
	Unknown	10.99	342	ug/kg		J
83-46-5	.beta.-Sitosterol	11.66	1370	ug/kg	91	NJ
1058-61-3	Stigmast-4-en-3-one	12.3	809	ug/kg	90	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370018	Date Received: 03/02/2010 08:50	%Moisture: 26.5
Client ID: RE36-10-7485	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 03:16	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: slc2128.d	Allquot: 30.09 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	452	ug/kg	90.4	452
108-95-2	Phenol	U	452	ug/kg	90.4	452
95-57-8	2-Chlorophenol	U	452	ug/kg	90.4	452
106-46-7	1,4-Dichlorobenzene	U	452	ug/kg	90.4	452
621-64-7	N-Nitrosodipropylamine	U	452	ug/kg	90.4	452
59-50-7	4-Chloro-3-methylphenol	U	452	ug/kg	90.4	452
83-32-9	Acenaphthene	U	45.2	ug/kg	14.9	45.2
121-14-2	2,4-Dinitrotoluene	U	452	ug/kg	45.2	452
100-02-7	4-Nitrophenol	U	452	ug/kg	149	452
87-86-5	Pentachlorophenol	U	452	ug/kg	113	452
129-00-0	Pyrene	J	16.9	ug/kg	13.6	45.2
110-86-1	Pyridine	U	452	ug/kg	90.4	452
62-53-3	Aniline	U	452	ug/kg	136	452
111-44-4	bis(2-Chloroethyl) ether	U	452	ug/kg	90.4	452
541-73-1	1,3-Dichlorobenzene	U	452	ug/kg	90.4	452
100-51-6	Benzyl alcohol	U	452	ug/kg	136	452 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	452	ug/kg	90.4	452
108-60-1	bis(2-Chloroisopropyl) ether	U	452	ug/kg	90.4	452
95-48-7	o-Cresol	U	452	ug/kg	90.4	452
65794-96-9	m,p-Cresols	U	452	ug/kg	136	452
67-72-1	Hexachloroethane	U	452	ug/kg	90.4	452
98-95-3	Nitrobenzene	U	452	ug/kg	90.4	452
78-59-1	Isophorone	U	452	ug/kg	90.4	452
88-75-5	2-Nitrophenol	U	452	ug/kg	90.4	452
105-67-9	2,4-Dimethylphenol	U	452	ug/kg	158	452
111-91-1	bis(2-Chloroethoxy)methane	U	452	ug/kg	90.4	452
120-83-2	2,4-Dichlorophenol	U	452	ug/kg	90.4	452
65-85-0	Benzoic acid	U	904	ug/kg	226	904
91-20-3	Naphthalene	U	45.2	ug/kg	13.6	45.2
106-47-8	4-Chloroaniline	U	452	ug/kg	90.4	452
87-68-3	Hexachlorobutadiene	U	452	ug/kg	90.4	452
91-57-6	2-Methylnaphthalene	U	45.2	ug/kg	9.04	45.2
77-47-4	Hexachlorocyclopentadiene	U	452	ug/kg	90.4	452 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	452	ug/kg	90.4	452
95-95-4	2,4,5-Trichlorophenol	U	452	ug/kg	90.4	452
91-58-7	2-Chloronaphthalene	U	45.2	ug/kg	14.9	45.2
88-74-4	2-Nitroaniline	U	452	ug/kg	90.4	452
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	452	ug/kg	90.4	452

Semi-Volatile
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Sample Summary

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SDG Number: 10-2150
Lab Sample ID: 248370018

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 26.5
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	452	ug/kg	90.4	452
606-20-2	2,6-Dinitrotoluene	U	452	ug/kg	45.2	452
208-96-8	Acenaphthylene	U	45.2	ug/kg	13.6	45.2
51-28-5	2,4-Dinitrophenol	U	904	ug/kg	172	904
132-64-9	Dibenzofuran	U	452	ug/kg	90.4	452
84-66-2	Diethylphthalate	U	452	ug/kg	90.4	452
86-73-7	Fluorene	U	45.2	ug/kg	13.6	45.2
7005-72-3	4-Chlorophenylphenylether	U	452	ug/kg	90.4	452
534-52-1	2-Methyl-4,6-dinitrophenol	U	452	ug/kg	90.4	452 UJ,SV7c
100-01-6	4-Nitroaniline	U	452	ug/kg	136	452
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	452	ug/kg	90.4	452
122-66-7	Azobenzene	U	452	ug/kg	90.4	452
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	452	ug/kg	90.4	452
118-74-1	Hexachlorobenzene	U	452	ug/kg	90.4	452
85-01-8	Phenanthrene	U	45.2	ug/kg	13.6	45.2
120-12-7	Anthracene	U	45.2	ug/kg	9.04	45.2
84-74-2	Di-n-butylphthalate	U	452	ug/kg	90.4	452
206-44-0	Fluoranthene	J	17.0	ug/kg	13.6	45.2
85-68-7	Butylbenzylphthalate	U	452	ug/kg	90.4	452
56-55-3	Benzo(a)anthracene	J	13.9	ug/kg	13.6	45.2
91-94-1	3,3'-Dichlorobenzidine	U	452	ug/kg	136	452
218-01-9	Chrysene	U	45.2	ug/kg	13.6	45.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	452	ug/kg	90.4	452 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	452	ug/kg	90.4	452
205-99-2	Benzo(b)fluoranthene	J	14.5	ug/kg	13.6	45.2
207-08-9	Benzo(k)fluoranthene	U	45.2	ug/kg	13.6	45.2
50-32-8	Benzo(a)pyrene	U	45.2	ug/kg	13.6	45.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.2	ug/kg	13.6	45.2
53-70-3	Dibenzo(a,h)anthracene	U	45.2	ug/kg	13.6	45.2
191-24-2	Benzo(ghi)perylene	U	45.2	ug/kg	13.6	45.2 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	452	ug/kg	90.4	452

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	226	ug/kg		J
	Unknown	1.82	289	ug/kg		J

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Sample Summary**

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370018	Date Received: 03/02/2010 08:50	%Moisture: 26.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7485	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 03:16	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2128.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 Aldol Condensate	2.67	461	ug/kg		JA
80-56-8	.alpha.-Pinene	3.19	194	ug/kg	96	NJ
79-92-5	Camphene	3.29	258	ug/kg	98	NJ
1227-93-6	1H-Naphtho[2,1-b]pyran, 3-ethenylidodecah	7.23	230	ug/kg	91	NJ
	Unknown	7.32	205	ug/kg		J
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	258	ug/kg	97	NJ
	Unknown	7.47	244	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	8.09	254	ug/kg	89	NJ
	Unknown	8.13	206	ug/kg		J
	Unknown	8.67	224	ug/kg		J
112-95-8	Eicosane	9.06	462	ug/kg	98	NJ
	Unknown	9.76	206	ug/kg		J
	Unknown	10.02	1440	ug/kg		J
	Unknown	10.77	199	ug/kg		J
	Unknown	11.7	438	ug/kg		J
	Unknown	12.3	523	ug/kg		J

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

SDG Number: 10-2150
Lab Sample ID: 248370012

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.01 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: RE36-10-7486
Batch ID: 961228
Run Date: 03/22/2010 00:54
Prep Date: 03/05/2010 11:30
Data File: s1c2122.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.5	422
108-95-2	Phenol	U	422	ug/kg	84.5	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.5	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.5	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.5	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.5	422
83-32-9	Acenaphthene	U	42.2	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene	U	422	ug/kg	42.2	422
100-02-7	4-Nitrophenol	U	422	ug/kg	139	422
87-86-5	Pentachlorophenol	U	422	ug/kg	106	422
129-00-0	Pyrene	J	20.0	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.5	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.5	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.5	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.5	422
108-60-1	bis(2-Chloroisopropyl) ether	U	422	ug/kg	84.5	422
95-48-7	o-Cresol	U	422	ug/kg	84.5	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.5	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.5	422
78-59-1	Isophorone	U	422	ug/kg	84.5	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.5	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.5	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.5	422
65-85-0	Benzoic acid	U	845	ug/kg	211	845
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.5	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.5	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.45	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.5	422 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.5	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.5	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.5	422
99-09-2	o-Nitroaniline	U	422	ug/kg	84.5	422
	3-Nitroaniline					

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Certificate of Analysis
Sample Summary

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SDG Number: 10-2150
Lab Sample ID: 248370012

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.01 g
Column: J&W DB-SMS

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: RE36-10-7486
Batch ID: 961228
Run Date: 03/22/2010 00:54
Prep Date: 03/05/2010 11:30
Data File: s1c2122.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	422	ug/kg	84.5	422
208-96-8	2,6-Dinitrotoluene	U	422	ug/kg	42.2	422
51-28-5	Acenaphthylene	U	42.2	ug/kg	12.7	42.2
132-64-9	2,4-Dinitrophenol	U	845	ug/kg	160	845
84-66-2	Dibenzofuran	U	422	ug/kg	84.5	422
86-73-7	Diethylphthalate	U	422	ug/kg	84.5	422
7005-72-3	Fluorene	U	42.2	ug/kg	12.7	42.2
534-52-1	4-Chlorophenylphenylether	U	422	ug/kg	84.5	422
100-01-6	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.5	422 UJ,SV7c
122-39-4	4-Nitroaniline	U	422	ug/kg	127	422
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	422	ug/kg	84.5	422
118-74-1	Azobenzene	U	422	ug/kg	84.5	422
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	422	ug/kg	84.5	422
84-74-2	Hexachlorobenzene	U	422	ug/kg	84.5	422
206-44-0	Phenanthrene	J	13.0	ug/kg	12.7	42.2
85-68-7	Anthracene	U	42.2	ug/kg	8.45	42.2
56-55-3	Di-n-butylphthalate	U	422	ug/kg	84.5	422
91-94-1	Fluoranthene	J	21.2	ug/kg	12.7	42.2
218-01-9	Butylbenzylphthalate	U	422	ug/kg	84.5	422
117-81-7	Benzo(a)anthracene	J	14.4	ug/kg	12.7	42.2
117-84-0	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
205-99-2	Chrysene	J	13.0	ug/kg	12.7	42.2
207-08-9	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.5	422 UJ,SV7c
50-32-8	Di-n-octylphthalate	U	422	ug/kg	84.5	422
193-39-5	Benzo(b)fluoranthene	J	17.3	ug/kg	12.7	42.2
53-70-3	Benzo(k)fluoranthene	U	42.2	ug/kg	12.7	42.2
191-24-2	Benzo(a)pyrene	U	42.2	ug/kg	12.7	42.2
120-82-1	Indeno(1,2,3-cd)pyrene	U	42.2	ug/kg	12.7	42.2
	Dibenzo(a,h)anthracene	U	42.2	ug/kg	12.7	42.2
	Benzo(ghi)perylene	U	42.2	ug/kg	12.7	42.2 UJ,SV7c
	1,2,4-Trichlorobenzene	U	422	ug/kg	84.5	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.8	507	ug/kg		J
	Unknown Aldol Condensate	2.67	242	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370012	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7486	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 00:54	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s1c2122.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
7785-70-8	1R- α -Pinene	3.19	711	ug/kg	97	NJ
79-92-5	Camphene	3.29	236	ug/kg	98	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	324	ug/kg	97	NJ
	Unknown	7.32	633	ug/kg		J
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	268	ug/kg	92	NJ
	Unknown	7.75	292	ug/kg		J
	Unknown	7.85	268	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	246	ug/kg	98	NJ
	Unknown	8.07	340	ug/kg		J
	Unknown	8.09	800	ug/kg		J
	Unknown	8.14	572	ug/kg		J
	Unknown	8.23	229	ug/kg		J
	Unknown	8.26	183	ug/kg		J
112-95-8	Eicosane	9.07	294	ug/kg	95	NJ
	Unknown	9.4	281	ug/kg		J
	Unknown	9.78	183	ug/kg		J
	Unknown	10.02	1330	ug/kg		J
	Unknown	10.4	182	ug/kg		J
83-46-5	.beta.-Sitosterol	11.67	213	ug/kg	91	NJ
	Unknown	11.79	245	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	649	ug/kg	92	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370009	Date Received: 03/02/2010 08:50	%Moisture: 24.5
Client ID: RE36-10-7487	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 23:44	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2119.d	Aliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	442	ug/kg	88.3	442
108-95-2	Phenol	U	442	ug/kg	88.3	442
95-57-8	2-Chlorophenol	U	442	ug/kg	88.3	442
106-46-7	1,4-Dichlorobenzene	U	442	ug/kg	88.3	442
621-64-7	N-Nitrosodipropylamine	U	442	ug/kg	88.3	442
59-50-7	4-Chloro-3-methylphenol	U	442	ug/kg	88.3	442
83-32-9	Acenaphthene	U	44.2	ug/kg	14.6	44.2
121-14-2	2,4-Dinitrotoluene	U	442	ug/kg	44.2	442
100-02-7	4-Nitrophenol	U	442	ug/kg	146	442
87-86-5	Pentachlorophenol	U	442	ug/kg	110	442
129-00-0	Pyrene	U	44.2	ug/kg	13.2	44.2
110-86-1	Pyridine	U	442	ug/kg	88.3	442
62-53-3	Aniline	U	442	ug/kg	132	442
111-44-4	bis(2-Chloroethyl) ether	U	442	ug/kg	88.3	442
541-73-1	1,3-Dichlorobenzene	U	442	ug/kg	88.3	442
100-51-6	Benzyl alcohol	U	442	ug/kg	132	442 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	442	ug/kg	88.3	442
108-60-1	bis(2-Chloroisopropyl) ether	U	442	ug/kg	88.3	442
95-48-7	o-Cresol	U	442	ug/kg	88.3	442
65794-96-9	m,p-Cresols	U	442	ug/kg	132	442
67-72-1	Hexachloroethane	U	442	ug/kg	88.3	442
98-95-3	Nitrobenzene	U	442	ug/kg	88.3	442
78-59-1	Isophorone	U	442	ug/kg	88.3	442
88-75-5	2-Nitrophenol	U	442	ug/kg	88.3	442
105-67-9	2,4-Dimethylphenol	U	442	ug/kg	155	442
111-91-1	bis(2-Chloroethoxy)methane	U	442	ug/kg	88.3	442
120-83-2	2,4-Dichlorophenol	U	442	ug/kg	88.3	442
65-85-0	Benzoic acid	U	883	ug/kg	221	883
91-20-3	Naphthalene	U	44.2	ug/kg	13.2	44.2
106-47-8	4-Chloroaniline	U	442	ug/kg	88.3	442
87-68-3	Hexachlorobutadiene	U	442	ug/kg	88.3	442
91-57-6	2-Methylnaphthalene	U	44.2	ug/kg	8.83	44.2
77-47-4	Hexachlorocyclopentadiene	U	442	ug/kg	88.3	442 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	442	ug/kg	88.3	442
95-95-4	2,4,5-Trichlorophenol	U	442	ug/kg	88.3	442
91-58-7	2-Chloronaphthalene	U	44.2	ug/kg	14.6	44.2
88-74-4	2-Nitroaniline	U	442	ug/kg	88.3	442
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	442	ug/kg	88.3	442

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370009	Date Received: 03/02/2010 08:50	%Moisture: 24.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7487	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 23:44	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s1c2119.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	442	ug/kg	88.3	442
606-20-2	2,6-Dinitrotoluene	U	442	ug/kg	44.2	442
208-96-8	Acenaphthylene	U	44.2	ug/kg	13.2	44.2
51-28-5	2,4-Dinitrophenol	U	883	ug/kg	168	883
132-64-9	Dibenzofuran	U	442	ug/kg	88.3	442
84-66-2	Diethylphthalate	U	442	ug/kg	88.3	442
86-73-7	Fluorene	U	44.2	ug/kg	13.2	44.2
7005-72-3	4-Chlorophenylphenylether	U	442	ug/kg	88.3	442
534-52-1	2-Methyl-4,6-dinitrophenol	U	442	ug/kg	88.3	442 UJ,SV7c
100-01-6	4-Nitroaniline	U	442	ug/kg	132	442
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	442	ug/kg	88.3	442
122-66-7	Azobenzene	U	442	ug/kg	88.3	442
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	442	ug/kg	88.3	442
118-74-1	Hexachlorobenzene	U	442	ug/kg	88.3	442
85-01-8	Phenanthrene	U	44.2	ug/kg	13.2	44.2
120-12-7	Anthracene	U	44.2	ug/kg	8.83	44.2
84-74-2	Di-n-butylphthalate	U	442	ug/kg	88.3	442
206-44-0	Fluoranthene	U	44.2	ug/kg	13.2	44.2
85-68-7	Butylbenzylphthalate	U	442	ug/kg	88.3	442
56-55-3	Benzo(a)anthracene	U	44.2	ug/kg	13.2	44.2
91-94-1	3,3'-Dichlorobenzidine	U	442	ug/kg	132	442
218-01-9	Chrysene	U	44.2	ug/kg	13.2	44.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	442	ug/kg	88.3	442 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	442	ug/kg	88.3	442
205-99-2	Benzo(b)fluoranthene	U	44.2	ug/kg	13.2	44.2
207-08-9	Benzo(k)fluoranthene	U	44.2	ug/kg	13.2	44.2
50-32-8	Benzo(a)pyrene	U	44.2	ug/kg	13.2	44.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.2	ug/kg	13.2	44.2
53-70-3	Dibenzo(a,h)anthracene	U	44.2	ug/kg	13.2	44.2
191-24-2	Benzo(ghi)perylene	U	44.2	ug/kg	13.2	44.2 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	442	ug/kg	88.3	442

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	284	ug/kg		J
	Unknown Aldol Condensate	2.67	221	ug/kg		JA

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

SDG Number: 10-2150
Lab Sample ID: 248370009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.01 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 24.5
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
	Unknown		12.29	236	ug/kg		J

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

SDG Number: 10-2150

Lab Sample ID: 248370019

Client ID: RE36-10-7488

Batch ID: 961228

Run Date: 03/22/2010 03:40

Prep Date: 03/05/2010 11:30

Data File: s1c2129.d

Date Collected: 02/24/2010 12:00

Date Received: 03/02/2010 08:50

Client: LANL010

Method: SW846 8270C

Inst: MSD1.I

Analyst: AMY

Aliquot: 30.09 g

Column: J&W DB-5MS

Matrix: R

%Moisture: 10

Project: LANL01004

SOP Ref: GL-OA-E-009

Dilution: 1

Inj. Vol: .5 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.9	369
108-95-2	Phenol	U	369	ug/kg	73.9	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.9	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.9	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.9	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.9	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.4	369
129-00-0	Pyrene	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.9	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.9	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.9	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.9	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.9	369
95-48-7	o-Cresol	U	369	ug/kg	73.9	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.9	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.9	369
78-59-1	Isophorone	U	369	ug/kg	73.9	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.9	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.9	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.9	369
65-85-0	Benzoic acid	U	739	ug/kg	185	739
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.9	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.9	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.39	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.9	369 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.9	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.9	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline	U	369	ug/kg	73.9	369
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	369	ug/kg	73.9	369

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

SDG Number: 10-2150
Lab Sample ID: 248370019

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10
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	369	ug/kg	73.9	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	369	ug/kg	73.9	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.9	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.9	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.9	369 UJ,SV7c
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.9	369
122-66-7	Azobenzene	U	369	ug/kg	73.9	369
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.9	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.9	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.39	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.9	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.9	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.9	369 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.9	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.9	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	156	ug/kg		J
	Unknown Aldol Condensate	2.67	380	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370019	Date Received: 03/02/2010 08:50	%Moisture: 10
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7488	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 03:40	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Alliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2129.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.19	307	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	196	ug/kg	99	NJ
112-95-8	Eicosane	8.09	152	ug/kg	92	NJ
	Unknown	12.3	186	ug/kg		J

AMF
4/28/10

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

SDG Number: 10-2150
Lab Sample ID: 248370014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7489
Batch ID: 961228
Run Date: 03/22/2010 01:42
Prep Date: 03/05/2010 11:30
Data File: s1c2124.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	513	ug/kg	103	513
108-95-2	Phenol	U	513	ug/kg	103	513
95-57-8	2-Chlorophenol	U	513	ug/kg	103	513
106-46-7	1,4-Dichlorobenzene	U	513	ug/kg	103	513
621-64-7	N-Nitrosodipropylamine	U	513	ug/kg	103	513
59-50-7	4-Chloro-3-methylphenol	U	513	ug/kg	103	513
83-32-9	Acenaphthene	U	51.3	ug/kg	16.9	51.3
121-14-2	2,4-Dinitrotoluene	U	513	ug/kg	51.3	513
100-02-7	4-Nitrophenol	U	513	ug/kg	169	513
87-86-5	Pentachlorophenol	U	513	ug/kg	128	513
129-00-0	Pyrene	U	51.3	ug/kg	15.4	51.3
110-86-1	Pyridine	U	513	ug/kg	103	513
62-53-3	Aniline	U	513	ug/kg	154	513
111-44-4	bis(2-Chloroethyl) ether	U	513	ug/kg	103	513
541-73-1	1,3-Dichlorobenzene	U	513	ug/kg	103	513
100-51-6	Benzyl alcohol	U	513	ug/kg	154	513 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	513	ug/kg	103	513
108-60-1	bis(2-Chloroisopropyl)ether	U	513	ug/kg	103	513
95-48-7	o-Cresol	U	513	ug/kg	103	513
65794-96-9	m,p-Cresols	U	513	ug/kg	154	513
67-72-1	Hexachloroethane	U	513	ug/kg	103	513
98-95-3	Nitrobenzene	U	513	ug/kg	103	513
78-59-1	Isophorone	U	513	ug/kg	103	513
88-75-5	2-Nitrophenol	U	513	ug/kg	103	513
105-67-9	2,4-Dimethylphenol	U	513	ug/kg	180	513
111-91-1	bis(2-Chloroethoxy)methane	U	513	ug/kg	103	513
120-83-2	2,4-Dichlorophenol	U	513	ug/kg	103	513
65-85-0	Benzoic acid	U	1030	ug/kg	257	1030
91-20-3	Naphthalene	U	51.3	ug/kg	15.4	51.3
106-47-8	4-Chloroaniline	U	513	ug/kg	103	513
87-68-3	Hexachlorobutadiene	U	513	ug/kg	103	513
91-57-6	2-Methylnaphthalene	U	51.3	ug/kg	10.3	51.3
77-47-4	Hexachlorocyclopentadiene	U	513	ug/kg	103	513 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	513	ug/kg	103	513
95-95-4	2,4,5-Trichlorophenol	U	513	ug/kg	103	513
91-58-7	2-Chloronaphthalene	U	51.3	ug/kg	16.9	51.3
88-74-4	2-Nitroaniline	U	513	ug/kg	103	513
99-09-2	o-Nitroaniline	U	513	ug/kg	103	513
	3-Nitroaniline					

AMF
4/28/10

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370014	Date Received: 03/02/2010 08:50	%Moisture: 35
Client ID: RE36-10-7489	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 01:42	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: slc2124.d	Allquot: 30 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	513	ug/kg	103	513
606-20-2	2,6-Dinitrotoluene	U	513	ug/kg	51.3	513
208-96-8	Acenaphthylene	U	51.3	ug/kg	15.4	51.3
51-28-5	2,4-Dinitrophenol	U	1030	ug/kg	195	1030
132-64-9	Dibenzofuran	U	513	ug/kg	103	513
84-66-2	Diethylphthalate	U	513	ug/kg	103	513
86-73-7	Fluorene	U	51.3	ug/kg	15.4	51.3
7005-72-3	4-Chlorophenylphenylether	U	513	ug/kg	103	513
534-52-1	2-Methyl-4,6-dinitrophenol	U	513	ug/kg	103	513 UJ,SV7c
100-01-6	4-Nitroaniline	U	513	ug/kg	154	513
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	513	ug/kg	103	513
122-66-7	Azobenzene	U	513	ug/kg	103	513
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	513	ug/kg	103	513
118-74-1	Hexachlorobenzene	U	513	ug/kg	103	513
85-01-8	Phenanthrene	U	51.3	ug/kg	15.4	51.3
120-12-7	Anthracene	U	51.3	ug/kg	10.3	51.3
84-74-2	Di-n-butylphthalate	U	513	ug/kg	103	513
206-44-0	Fluoranthene	U	51.3	ug/kg	15.4	51.3
85-68-7	Butylbenzylphthalate	U	513	ug/kg	103	513
56-55-3	Benzo(a)anthracene	U	51.3	ug/kg	15.4	51.3
91-94-1	3,3'-Dichlorobenzidine	U	513	ug/kg	154	513
218-01-9	Chrysene	U	51.3	ug/kg	15.4	51.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	513	ug/kg	103	513 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	513	ug/kg	103	513
205-99-2	Benzo(b)fluoranthene	U	51.3	ug/kg	15.4	51.3
207-08-9	Benzo(k)fluoranthene	U	51.3	ug/kg	15.4	51.3
50-32-8	Benzo(a)pyrene	U	51.3	ug/kg	15.4	51.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	51.3	ug/kg	15.4	51.3
53-70-3	Dibenzo(a,h)anthracene	U	51.3	ug/kg	15.4	51.3
191-24-2	Benzo(ghi)perylene	U	51.3	ug/kg	15.4	51.3 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	513	ug/kg	103	513

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	279	ug/kg		JA
638-67-5	Tricosane	7.71	355	ug/kg	97	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370014	Date Received: 03/02/2010 08:50	%Moisture: 35
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7489	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 01:42	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: slc2124.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
73105-67-6	1-Iodo-2-methylundecane	7.9	415	ug/kg	93	NJ
7225-66-3	Tridecane, 7-hexyl-	8.09	464	ug/kg	95	NJ
593-49-7	Heptacosane	8.53	385	ug/kg	99	NJ
112-95-8	Eicosane	8.78	361	ug/kg	98	NJ
	Unknown	9.06	706	ug/kg		J
	Unknown	9.39	577	ug/kg		J
	Unknown	9.78	647	ug/kg		J
	Unknown	10.23	478	ug/kg		J
	Unknown	10.77	360	ug/kg		J
	Unknown	11.4	243	ug/kg		J

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

SDG Number: 10-2150
Lab Sample ID: 248370008

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 26
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: .1 mL
Level: LOW

Client ID: RE36-10-7490
Batch ID: 961228
Run Date: 03/21/2010 23:20
Prep Date: 03/05/2010 11:30
Data File: s1c2118.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	449	ug/kg	89.8	449
108-95-2	Phenol	U	449	ug/kg	89.8	449
95-57-8	2-Chlorophenol	U	449	ug/kg	89.8	449
106-46-7	1,4-Dichlorobenzene	U	449	ug/kg	89.8	449
621-64-7	N-Nitrosodipropylamine	U	449	ug/kg	89.8	449
59-50-7	4-Chloro-3-methylphenol	U	449	ug/kg	89.8	449
83-32-9	Acenaphthene	U	44.9	ug/kg	14.8	44.9
121-14-2	2,4-Dinitrotoluene	U	449	ug/kg	44.9	449
100-02-7	4-Nitrophenol	U	449	ug/kg	148	449
87-86-5	Pentachlorophenol	U	449	ug/kg	112	449
129-00-0	Pyrene	U	44.9	ug/kg	13.5	44.9
110-86-1	Pyridine	U	449	ug/kg	89.8	449
62-53-3	Aniline	U	449	ug/kg	135	449
111-44-4	bis(2-Chloroethyl) ether	U	449	ug/kg	89.8	449
541-73-1	1,3-Dichlorobenzene	U	449	ug/kg	89.8	449
100-51-6	Benzyl alcohol	U	449	ug/kg	135	449 UJ,SV12a
95-50-1	1,2-Dichlorobenzene	U	449	ug/kg	89.8	449
108-60-1	bis(2-Chloroisopropyl)ether	U	449	ug/kg	89.8	449
95-48-7	o-Cresol	U	449	ug/kg	89.8	449
65794-96-9	m,p-Cresols	U	449	ug/kg	135	449
67-72-1	Hexachloroethane	U	449	ug/kg	89.8	449
98-95-3	Nitrobenzene	U	449	ug/kg	89.8	449
78-59-1	Isophorone	U	449	ug/kg	89.8	449
88-75-5	2-Nitrophenol	U	449	ug/kg	89.8	449
105-67-9	2,4-Dimethylphenol	U	449	ug/kg	157	449
111-91-1	bis(2-Chloroethoxy)methane	U	449	ug/kg	89.8	449
120-83-2	2,4-Dichlorophenol	U	449	ug/kg	89.8	449
65-85-0	Benzoic acid	U	898	ug/kg	224	898
91-20-3	Naphthalene	U	44.9	ug/kg	13.5	44.9
106-47-8	4-Chloroaniline	U	449	ug/kg	89.8	449
87-68-3	Hexachlorobutadiene	U	449	ug/kg	89.8	449
91-57-6	2-Methylnaphthalene	U	44.9	ug/kg	8.98	44.9
77-47-4	Hexachlorocyclopentadiene	U	449	ug/kg	89.8	449 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	449	ug/kg	89.8	449
95-95-4	2,4,5-Trichlorophenol	U	449	ug/kg	89.8	449
91-58-7	2-Chloronaphthalene	U	44.9	ug/kg	14.8	44.9
88-74-4	2-Nitroaniline	U	449	ug/kg	89.8	449
99-09-2	<i>o</i> -Nitroaniline	U	449	ug/kg	89.8	449
	3-Nitroaniline					

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370008	Date Received: 03/02/2010 08:50	%Moisture: 26
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7490	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 23:20	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2118.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	449	ug/kg	89.8	449
606-20-2	2,6-Dinitrotoluene	U	449	ug/kg	44.9	449
208-96-8	Acenaphthylene	U	44.9	ug/kg	13.5	44.9
51-28-5	2,4-Dinitrophenol	U	898	ug/kg	171	898
132-64-9	Dibenzofuran	U	449	ug/kg	89.8	449
84-66-2	Diethylphthalate	U	449	ug/kg	89.8	449
86-73-7	Fluorene	U	44.9	ug/kg	13.5	44.9
7005-72-3	4-Chlorophenylphenylether	U	449	ug/kg	89.8	449
534-52-1	2-Methyl-4,6-dinitrophenol	U	449	ug/kg	89.8	449 UJ,SV7c
100-01-6	4-Nitroaniline	U	449	ug/kg	135	449
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	449	ug/kg	89.8	449
122-66-7	Azobenzene	U	449	ug/kg	89.8	449
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	449	ug/kg	89.8	449
118-74-1	Hexachlorobenzene	U	449	ug/kg	89.8	449
85-01-8	Phenanthrene	U	44.9	ug/kg	13.5	44.9
120-12-7	Anthracene	U	44.9	ug/kg	8.98	44.9
84-74-2	Di-n-butylphthalate	U	449	ug/kg	89.8	449
206-44-0	Fluoranthene	U	44.9	ug/kg	13.5	44.9
85-68-7	Butylbenzylphthalate	U	449	ug/kg	89.8	449
56-55-3	Benzo(a)anthracene	U	44.9	ug/kg	13.5	44.9
91-94-1	3,3'-Dichlorobenzidine	U	449	ug/kg	135	449
218-01-9	Chrysene	U	44.9	ug/kg	13.5	44.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	449	ug/kg	89.8	449 UJ,SV7c
117-84-0	Di-n-octylphthalate	U	449	ug/kg	89.8	449
205-99-2	Benzo(b)fluoranthene	U	44.9	ug/kg	13.5	44.9
207-08-9	Benzo(k)fluoranthene	U	44.9	ug/kg	13.5	44.9
50-32-8	Benzo(a)pyrene	U	44.9	ug/kg	13.5	44.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.9	ug/kg	13.5	44.9
53-70-3	Dibenzo(a,h)anthracene	U	44.9	ug/kg	13.5	44.9
191-24-2	Benzo(ghi)perylene	U	44.9	ug/kg	13.5	44.9 UJ,SV7c
120-82-1	1,2,4-Trichlorobenzene	U	449	ug/kg	89.8	449

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	234	ug/kg		J
	Unknown Aldol Condensate	2.67	253	ug/kg		JA

AMF
4/28/10

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2150 VALIDATION DATE: 4/28/10 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):

- The ICAL RRF for p-nitrotoluene was <0.05 but ≥ 0.01 . The associated sample results were NDs and, thus, were qualified UJ,HE7b.
- The ICV/CCV %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. The ICV/CCV %Ds for RDX; PETN; and 2,4-diamino-6-nitrotoluene were $>20\%$ with positive bias. The associated sample results were NDs and, thus, were not qualified.
- The LCS %R for tetraol was $<$ the laboratory LAL but $\geq 10\%$. The associated sample results were NDs and, thus, were qualified UJ,HE12a.
- The MS/MSD %Rs for tetraol were $<$ the laboratory LAL but $\geq 10\%$. The associated sample results were NDs and, thus, were qualified UJ,HE12e. The MSD %R for TATB was $>$ the laboratory UAL. The associated sample results were NDs and, thus, were not qualified. The MS/MSD RPD for tetraol was $>$ the laboratory acceptance limit. The associated sample results were NDs and, thus, were qualified UJ,HE12g.

Reviewed by: Susan Ball


Level: I

Date: 04/29/10

VALIDATOR'S SIGNATURE:

Allison Felix

DATE: 4/28/10


DATA VALIDATION COVER SHEET	
5122-1 Data Validation Cover Sheet	Records Use only  Los Alamos NATIONAL LABORATORY EST. 1945
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 (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, HE12	J-, HE12
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE12c	R, HE12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The MS/MSD percent recovery was <10%.	R, HE12d	R, HE12d
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31. The MS/MSD percent recovery was >10% but <70%.	UJ, HE12e	J, HE12e
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
<input 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: RE36-10-7415

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370001

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412168a

Date Analyzed: 16-APR-10 01:47

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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: RE36-10-7415

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370001

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050016.wiff

Date Analyzed: 05-APR-10 16:41

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7420

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412171a

Date Analyzed: 16-APR-10 03:16

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 UJ,HE12a	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: RE36-10-7420

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050019.wiff

Date Analyzed: 05-APR-10 17:28

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--10-7418

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370003

Sample Amount 2

Moisture: 18.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412172a

Date Analyzed: 16-APR-10 03:45

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 UJ,HE12a	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: RE36-10-7418

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370003

Sample Amount 2

Moisture: 18.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050020.wiff

Date Analyzed: 05-APR-10 17:44

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: RE36-10-7417

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370004

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412173a

Date Analyzed: 16-APR-10 04:15

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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: RE36-10-7417

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370004

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050021.wiff

Date Analyzed: 05-APR-10 17:59

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: RE36-10-7419

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 260303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412174a

Date Analyzed: 16-APR-10 04:44

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 UJ,HE12a	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: RE36-10-7419

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050022.wiff

Date Analyzed: 05-APR-10 18:15

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7416

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370006

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412175a

Date Analyzed: 16-APR-10 05:14

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 UJ,HE12a	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: RE36-10-7416

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370006

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050023.wiff

Date Analyzed: 05-APR-10 18:31

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7478

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370007

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412179a

Date Analyzed: 16-APR-10 07:12

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 UJ,HE12a	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: RE36-10-7478

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370007

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050027.wiff

Date Analyzed: 05-APR-10 19:34

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: RE36-10-7490

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370008

Sample Amount 2

Moisture: 26.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412180a

Date Analyzed: 16-APR-10 07:41

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 UJ,HE12a	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

AMF
4/28/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7490

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370008

Sample Amount 2

Moisture: 26.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050028.wiff

Date Analyzed: 05-APR-10 19:49

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7487

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370009

Sample Amount 2

Moisture: 24.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412181a

Date Analyzed: 16-APR-10 08:11

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 UJ,HE12a	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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4/28/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7487

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370009

Sample Amount 2

Moisture: 24.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050029.wiff

Date Analyzed: 05-APR-10 20:05

Units: ug/kg

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

*Concentration =

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

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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7483

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370010

Sample Amount 2

Moisture: 24.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412182a

Date Analyzed: 16-APR-10 08:40

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 UJ,HE12a	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: RE36-10-7483

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370010

Sample Amount 2

Moisture: 24.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050030.wiff

Date Analyzed: 05-APR-10 20:21

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7481

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370011

Sample Amount 2

Moisture: 32.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 260303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412183a

Date Analyzed: 16-APR-10 09:10

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 UJ,HE12a	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: RE36-10-7481

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370011

Sample Amount 2

Moisture: 32.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050031.wiff

Date Analyzed: 05-APR-10 20:37

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: RE36-10-7486

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370012

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412184a

Date Analyzed: 16-APR-10 09:39

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 UJ,HE12a	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: RE36-10-7486

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370012

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 260303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050032.wiff

Date Analyzed: 05-APR-10 20:52

Units: ug/kg

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

*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7477

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370013

Sample Amount 2

Moisture: 23.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412185a

Date Analyzed: 16-APR-10 10:09

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 UJ,HE12a	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: RE36-10-7477

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370013

Sample Amount 2

Molsture: 23.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050033.wiff

Date Analyzed: 05-APR-10 21:08

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: RE36-10-7489

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370014

Sample Amount 2

Moisture: 35.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412186a

Date Analyzed: 16-APR-10 10:38

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 UJ,HE12a	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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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7489

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370014

Sample Amount 2

Molsture: 35.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050034.wiff

Date Analyzed: 05-APR-10 21:24

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: RE36-10-7479

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370015

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412187a

Date Analyzed: 16-APR-10 11:08

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7479

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370015

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050035.wiff

Date Analyzed: 05-APR-10 21:39

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7482

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370016

Sample Amount 2

Moisture: 24.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412188a

Date Analyzed: 16-APR-10 11:37

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 UJ,HE12a	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: RE36-10-7482

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370016

Sample Amount 2

Moisture: 24.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050036.wiff

Date Analyzed: 05-APR-10 21:55

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7480

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370017

Sample Amount 2

Moisture: 12.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412192a

Date Analyzed: 16-APR-10 13:36

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 UJ,HE12a	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: RE36-10-7480

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370017

Sample Amount 2

Moisture: 12.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050040.wiff

Date Analyzed: 05-APR-10 22:58

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7485

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370018

Sample Amount 2

Moisture: 26.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412193a

Date Analyzed: 16-APR-10 14:05

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 UJ,HE12a	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: RE36-10-7485

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370018

Sample Amount 2

Moisture: 26.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050041.wiff

Date Analyzed: 05-APR-10 23:14

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7488

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370019

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412200a

Date Analyzed: 16-APR-10 17:32

Units: ug/kg

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

AMF
4/28/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7488

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370019

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050042.wiff

Date Analyzed: 05-APR-10 23:29

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

AMF
4/28/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7484

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370020

Sample Amount 2

Moisture: 17.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 260303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412195a

Date Analyzed: 16-APR-10 15:04

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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: RE36-10-7484

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370020

Sample Amount 2

Moisture: 17.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050043.wiff

Date Analyzed: 05-APR-10 23:45

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

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2150 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):

- 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 were not included in the data package. No sample results were qualified.

Reviewed by: Susan Ball Level: I Date: 04/29/10

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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, P4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The surrogate is $<10\%R$. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



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

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-2150
Lab Sample ID: 248370001Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.02 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	5.71	ug/kg	1.90	5.71	1
11104-28-2	Aroclor-1221	U	5.71	ug/kg	1.90	5.71	1
11141-16-5	Aroclor-1232	U	5.71	ug/kg	1.90	5.71	1
53469-21-9	Aroclor-1242	U	5.71	ug/kg	1.90	5.71	1
12672-29-6	Aroclor-1248	U	5.71	ug/kg	1.90	5.71	1
11097-69-1	Aroclor-1254	J	5.40	ug/kg	1.90	5.71	2
11096-82-5	Aroclor-1260	U	5.71	ug/kg	1.90	5.71	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-2150	Date Collected:	02/24/2010 12:00	Matrix:	R
Lab Sample ID:	248370006	Date Received:	03/02/2010 08:50	% Moisture:	11.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE36-10-7416	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	965975	Inst:	ECD1AJ	Dilution:	1
Run Date:	03/18/2010 15:51	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	03/17/2010 11:22	Aliquot:	30 g	Final Volume:	1 mL
Data File:	053f5301.d	Column:	1 CLP1	Level:	LOW
	053b5301.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.76	ug/kg	1.25	3.76	1
11104-28-2	Aroclor-1221	U	3.76	ug/kg	1.25	3.76	1
11141-16-5	Aroclor-1232	U	3.76	ug/kg	1.25	3.76	1
53469-21-9	Aroclor-1242	U	3.76	ug/kg	1.25	3.76	1
12672-29-6	Aroclor-1248	U	3.76	ug/kg	1.25	3.76	1
11097-69-1	Aroclor-1254	U	3.76	ug/kg	1.25	3.76	1
11096-82-5	Aroclor-1260	U	3.76	ug/kg	1.25	3.76	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370004

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: 30.09 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.21	ug/kg	1.40	4.21	1
11104-28-2	Aroclor-1221	U	4.21	ug/kg	1.40	4.21	1
11141-16-5	Aroclor-1232	U	4.21	ug/kg	1.40	4.21	1
53469-21-9	Aroclor-1242	U	4.21	ug/kg	1.40	4.21	1
12672-29-6	Aroclor-1248	U	4.21	ug/kg	1.40	4.21	1
11097-69-1	Aroclor-1254		4.30	ug/kg	1.40	4.21	1
11096-82-5	Aroclor-1260	U	4.21	ug/kg	1.40	4.21	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370003

Client ID: RE36-10-7418
Batch ID: 965975
Run Date: 03/18/2010 15:13
Prep Date: 03/17/2010 11:22
Data File: 050f5001.d
050b5001.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: 30.03 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 18.7
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.10	ug/kg	1.36	4.10	1
11104-28-2	Aroclor-1221	U	4.10	ug/kg	1.36	4.10	1
11141-16-5	Aroclor-1232	U	4.10	ug/kg	1.36	4.10	1
53469-21-9	Aroclor-1242	U	4.10	ug/kg	1.36	4.10	1
12672-29-6	Aroclor-1248	U	4.10	ug/kg	1.36	4.10	1
11097-69-1	Aroclor-1254	U	4.10	ug/kg	1.36	4.10	1
11096-82-5	Aroclor-1260	U	4.10	ug/kg	1.36	4.10	1

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-2150
Lab Sample ID: 248370005Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Aliquot: 30.05 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 16.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOWClient ID: RE36-10-7419
Batch ID: 965975
Run Date: 03/18/2010 15:39
Prep Date: 03/17/2010 11:22
Data File: 052f5201.d
052b5201.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.01	ug/kg	1.33	4.01	1
11104-28-2	Aroclor-1221	U	4.01	ug/kg	1.33	4.01	1
11141-16-5	Aroclor-1232	U	4.01	ug/kg	1.33	4.01	1
53469-21-9	Aroclor-1242	U	4.01	ug/kg	1.33	4.01	1
12672-29-6	Aroclor-1248	U	4.01	ug/kg	1.33	4.01	1
11097-69-1	Aroclor-1254	P	4.80	ug/kg	1.33	4.01	1
11096-82-5	Aroclor-1260	U	4.01	ug/kg	1.33	4.01	1

AMF
4/27/10

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-2150
Lab Sample ID: 248370002Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1AJ
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 8.7
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.65	ug/kg	1.22	3.65	1
11104-28-2	Aroclor-1221	U	3.65	ug/kg	1.22	3.65	1
11141-16-5	Aroclor-1232	U	3.65	ug/kg	1.22	3.65	1
53469-21-9	Aroclor-1242	U	3.65	ug/kg	1.22	3.65	1
12672-29-6	Aroclor-1248	U	3.65	ug/kg	1.22	3.65	1
11097-69-1	Aroclor-1254	U	3.65	ug/kg	1.22	3.65	1
11096-82-5	Aroclor-1260	U	3.65	ug/kg	1.22	3.65	1

AMF
4/27/10

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2150

LOS ALAMOS

REQUEST NUMBER: 10-2150

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:

248370 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7415	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7415	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7420	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7420	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7418	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7418	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7417	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7417	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7419	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7419	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7416	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7416	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7478	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7478	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7490	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7490	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7487	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7487	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7483	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7483	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7481	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7481	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2150

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7486	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7486	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7477	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7477	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7489	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7489	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7479	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7479	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7482	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7482	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7480	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7480	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7485	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7485	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7488	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7488	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7484	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7484	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Monday, March 01, 2010

LOS ALAMOS
NATIONAL LABORATORY

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

These Samples are on:
LANL Request Number: 10-2150
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 ERS MO CONTACT:
Signature: 

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8082	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
	SW-846-8260B	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	

Monday, March 01, 2010

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REQUEST NUMBER: 10-2150

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.8260B	1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846.8270C	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	

Monday, March 01, 2010

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REQUEST NUMBER: 10-2150

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-B270C	1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846-B321A_MOD	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	

REQUEST NUMBER: 10-2150

Monday, March 01, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
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	SW-846-8321A_MOD	1	RE36-10-7490	R	2/24/2010	
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Final Page of REQUEST NUMBER 10-2150



March 08, 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: 248370
SDG: 10-2150

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: 10-2150
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 248370
SDG: 10-2150

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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 248370
SDG # : 10-2150**

March 08, 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 samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

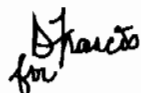
<u>Laboratory ID</u>	<u>Client ID</u>
248370001	RE36-10-7415
248370002	RE36-10-7420
248370003	RE36-10-7418
248370004	RE36-10-7417
248370005	RE36-10-7419
248370006	RE36-10-7416
248370007	RE36-10-7478
248370008	RE36-10-7490
248370009	RE36-10-7487
248370010	RE36-10-7483
248370011	RE36-10-7481
248370012	RE36-10-7486
248370013	RE36-10-7477
248370014	RE36-10-7489
248370015	RE36-10-7479
248370016	RE36-10-7482
248370017	RE36-10-7480
248370018	RE36-10-7485
248370019	RE36-10-7488
248370020	RE36-10-7484

Case Narrative

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

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

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



Valerie Davis

Project Manager

List of current GEL Certifications as of 08 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: 10-2150

LOS ALAMOS

REQUEST NUMBER: 10-2150

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:

248370 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7415	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7415	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7420	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7420	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7418	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7418	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7417	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7417	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7419	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7419	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7416	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-7416	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7478	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7478	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7490	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7490	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7487	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7487	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7483	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7483	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7481	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7481	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2150

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7486	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7486	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7477	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7477	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7489	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7489	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7479	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7479	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7482	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7482	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7480	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7480	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7485	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7485	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7488	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7488	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE36-10-7484	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-7484	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

REQUEST NUMBER: 10-2150

Monday, March 01, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-2150

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

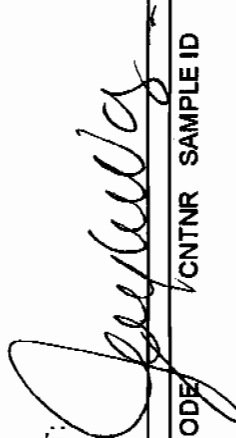
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
	SW-846:8260B					

Monday, March 01, 2010

REQUEST NUMBER: 10-2150

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:8270C	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2150

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:8321A_MOD	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
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		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
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REQUEST NUMBER: 10-2150

Monday, March 01, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE36-10-7490	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2150



SAMPLE RECEIPT & REVIEW FORM

Client: LANL			SDG/ARCO/Work Order: 10-2150		
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:
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

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

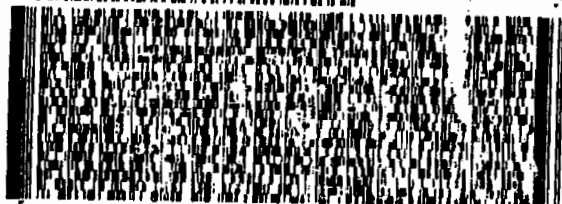
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CAD: 0014176/CAFE2450
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR1A015AGWMO

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

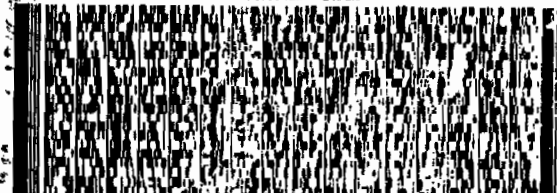
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MPS# 0263 7209 7850 2797
Mstr# 7209 7850 2786 0201

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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

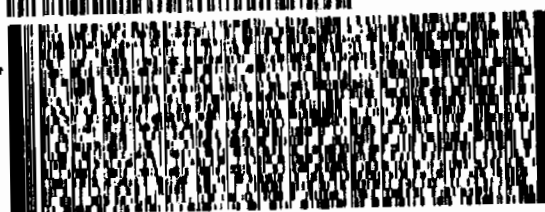
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LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

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CAD: 0014176/CAFE2450

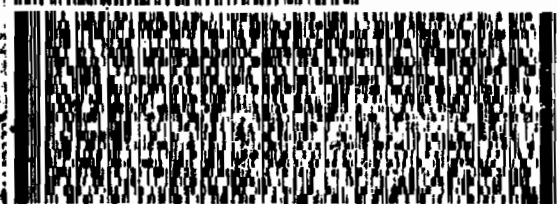
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1 of 2
TRK# 0201 7209 7850 2856
M# MASTER M#

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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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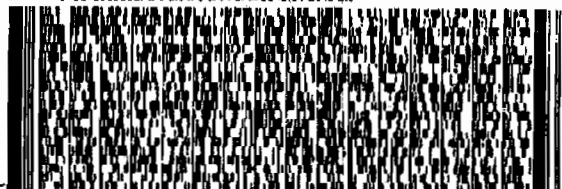
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450

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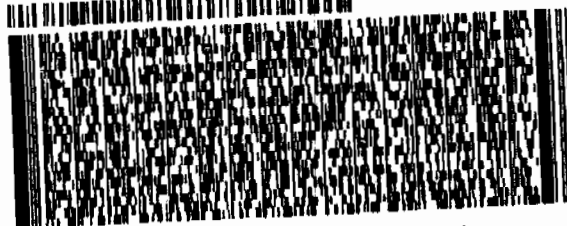
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PRIORITY OVERNIGHT

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

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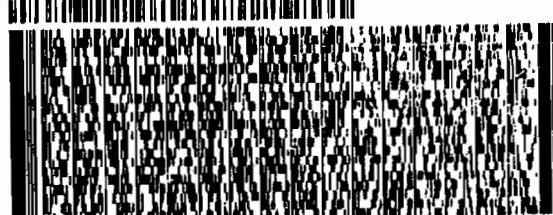
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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

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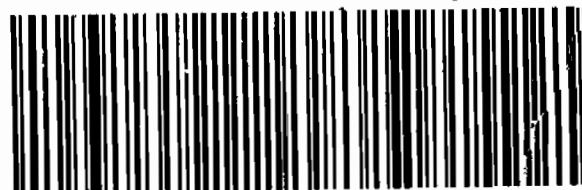
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TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

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CHS



LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450

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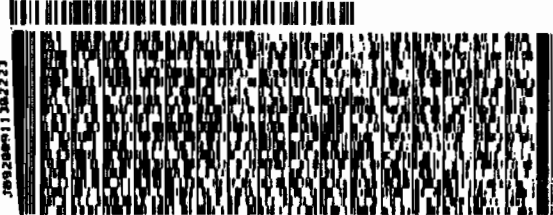
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GENERAL ENGINEERING LAB
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
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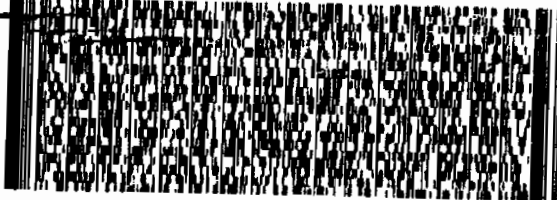
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LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

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

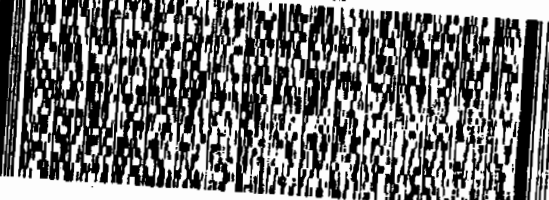
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

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

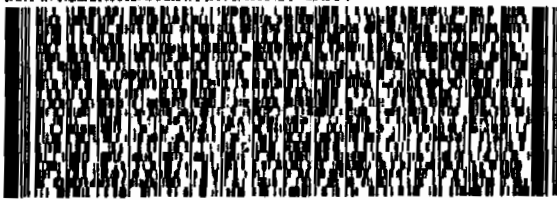
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

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

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MPSH 7209 7850 2904
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2 of 2
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Mstr# 7209 7850 2742 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

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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

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR1A015AGWMO

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

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
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2040 SAVAGE RD

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1 of 2
TRKH 7209 7850 2890
0201
NH MASTER NH

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 6B010AMR3A05529E00

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

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A05529E00

SHIP DATE: 01MAR10
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2450

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2 of 2
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TUE - 02MAR A1
PRIORITY OVERNIGHT

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3 of 3
MPS# 7209 7850 2661
0263
Mstr# 7209 7850 2640 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

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

SHIP DATE: 01MAR10
ACTWGT: 55.0 LB MAN
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LOS ALAMOS, NM 87545
UNITED STATES US

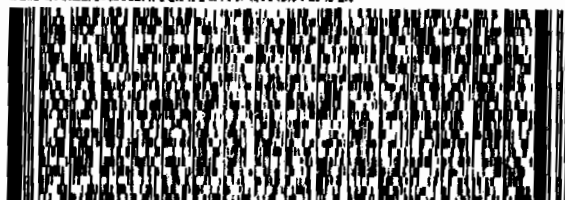
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 6B010AMR3A05529E00



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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 6B010AMR3A05529E00



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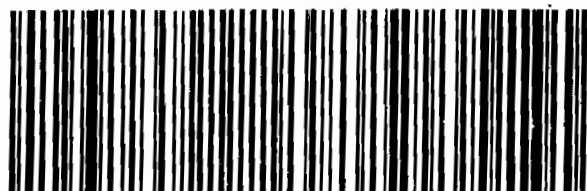


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NM MASTER NM

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



2 of 3
MPS# 7209 7850 2650
0263
Mstr# 7209 7850 2640 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
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CHS

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LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545
UNITED STATES US

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

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

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 6B010AMR2A0518YD0



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TRK# 7209 7850 2694
0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



1 of 2
TRK# 7209 7850 2709
0201
NM MASTER NM

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier Explanation

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL

A The TIC is a suspected aldol-condensation product

B Target analyte was detected in the associated blank

B Metals-Either presence of analyte detected in the associated blank, or
MDL/IDL < sample value < PQL

BD Results are either below the MDC or tracer recovery is low

C Analyte has been confirmed by GC/MS analysis

D Results are reported from a diluted aliquot of the sample

d 5-day BOD-The 2:1 depletion requirement was not met for this sample

E Organics-Concentration of the target analyte exceeds the instrument calibration range

E Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria

H Analytical holding time was exceeded

h Preparation or preservation holding time was exceeded

J Value is estimated

N Metals-The Matrix spike sample recovery is not within specified control limits

N Organics-Presumptive evidence based on mass spectral library search to make a tentative
identification of the analyte (TIC). Quantitation is based on nearest internal standard
response factor

N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration
by 4X or more

ND Analyte concentration is not detected above the reporting limit

UI Gamma Spectroscopy-Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

GC/MS Volatile Analysis

Case Narrative

**ChemStation Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2150**

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B
Prep Method: SW846 5030
Analytical Batch Number: 963122
Prep Batch Number: 963120

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
248370001	RE36-10-7415
248370002	RE36-10-7420
248370003	RE36-10-7418
248370004	RE36-10-7417
248370005	RE36-10-7419
248370006	RE36-10-7416
248370007	RE36-10-7478
248370008	RE36-10-7490
248370009	RE36-10-7487
248370010	RE36-10-7483
248370011	RE36-10-7481
248370012	RE36-10-7486
248370013	RE36-10-7477
248370014	RE36-10-7489
248370015	RE36-10-7479
248370016	RE36-10-7482
248370017	RE36-10-7480
248370018	RE36-10-7485
248370019	RE36-10-7488
248370020	RE36-10-7484
1202076534	High Blank (HB)
1202066162	Method Blank (MB)
1202066165	Laboratory Control Sample (LCS)
1202066166	Laboratory Control Sample (LCS)
1202077718	Method Blank (MB)
1202077719	Laboratory Control Sample (LCS)
1202077720	Laboratory Control Sample (LCS)
1202077721	Method Blank (MB)

1202077722	Laboratory Control Sample (LCS)
1202077723	Laboratory Control Sample (LCS)
1202077724	Method Blank (MB)
1202077725	Laboratory Control Sample (LCS)
1202077726	Laboratory Control Sample (LCS)
1202079010	Method Blank (MB)
1202079011	Laboratory Control Sample (LCS)
1202079012	Laboratory Control Sample (LCS)
1202066163	248370019(RE36-10-7488) Post Spike (PS)
1202066164	248370019(RE36-10-7488) 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.

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-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

The surrogate recoveries, in the following samples, were above the acceptance limits. Sample re-analysis confirmed matrix interference: 248370001 (RE36-10-7415), 248370007 (RE36-10-7478), 248370009 (RE36-10-7487), 248370010 (RE36-10-7483), 248370011 (RE36-10-7481), 248370014 (RE36-10-7489), 248370017 (RE36-10-7480), 248370018 (RE36-10-7485) and 248370020 (RE36-10-7484). See DER# 809841.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 248370019 (RE36-10-7488) 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 the following samples, internal standard responses were outside the required acceptance criteria. Sample reanalysis confirmed matrix interference: 248370001 (RE36-10-7415), 248370010 (RE36-10-7483), 248370011 (RE36-10-7481), 248370012 (RE36-10-7486) and 248370020 (RE36-10-7484). See DER# 809841.

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. The following sample could not be analyzed within holding due to sample capacity: 248370004 (RE36-10-7417). See DER# 809841.

The following samples were analyzed within the 14 day holding time. The samples required re-analyses due to unacceptable QC recoveries in the original analysis. The re-analyses could not be made within the 14 day holding time due to instrument constraints caused by sample capacity: 1202066163 (RE36-10-7488), 1202066164 (RE36-10-7488), 248370001 (RE36-10-7415), 248370004 (RE36-10-7417), 248370006 (RE36-10-7416), 248370009 (RE36-10-7487), 248370011 (RE36-10-7481), 248370012 (RE36-10-7486) and 248370016 (RE36-10-7482).

Sample Preservation and Integrity

All samples met the sample preservation and integrity requirements.

Sample Dilutions

The following sample was diluted using the methanol extraction procedure because target analyte concentrations exceeded the calibration range: 248370011 (RE36-10-7481).

Sample Re-extraction/Re-analysis

The samples in this SDG were re-analyzed due to unacceptable recoveries in the initial analysis. 1202066163 (RE36-10-7488), 1202066164 (RE36-10-7488), 248370001 (RE36-10-7415), 248370004 (RE36-10-7417), 248370006 (RE36-10-7416), 248370007 (RE36-10-7478), 248370009 (RE36-10-7487), 248370010 (RE36-10-7483), 248370011 (RE36-10-7481), 248370012 (RE36-10-7486), 248370014 (RE36-10-7489), 248370016 (RE36-10-7482), 248370017 (RE36-10-7480), 248370018 (RE36-10-7485) and 248370020 (RE36-10-7484).

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 # 809841 was generated for samples in 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 sample delivery group/work order. The tentatively identified compounds included some silanols. These compounds were due to column or septum bleed and were not native to the affected samples. Please note that non-requested target analytes that are reported on the quantitation reports will not be present on the Form I. These detected analytes are included in the calibrated method and as a result cannot be reported on the TIC quantitation report.

Additional Comments

The samples were not in the analyst's custody in LIMS. However, the analyst did maintain custody of the samples during analysis.

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
VOA3.I	Gas Chromatograph/Mass Spectrometer	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10
VOA5.1	Gas Chromatograph/Mass Spectrometer	HP6890N/HP5975	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement

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

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

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

Client SDG: 10-2150 GEL Work Order: 248370

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
- H Analytical holding time was exceeded
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- h Preparation or preservation holding time was exceeded

Review/Validation

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

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

Signature: 

Name: Stacy Calloway

Date: 29 MAR 2010

Title: Data Validator

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370001
 Client ID: RE36-10-7415
 Batch ID: 963122
 Run Date: 03/11/2010 02:08
 Prep Date: 03/10/2010 08:53
 Data File: 031010V55B344.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 41.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HU	1.71	ug/kg	0.582	1.71
74-87-3	Chloromethane	HU	1.71	ug/kg	0.514	1.71
75-01-4	Vinyl chloride	HU	1.71	ug/kg	0.514	1.71
74-83-9	Bromomethane	HU	1.71	ug/kg	0.514	1.71
75-00-3	Chloroethane	HU	1.71	ug/kg	0.514	1.71
75-69-4	Trichlorofluoromethane	HU	1.71	ug/kg	0.514	1.71
67-64-1	Acetone	H	9.15	ug/kg	2.84	8.57
75-35-4	1,1-Dichloroethylene	HU	1.71	ug/kg	0.514	1.71
74-88-4	Iodomethane	HU	8.57	ug/kg	2.74	8.57
75-09-2	Methylene chloride	HU	8.57	ug/kg	3.43	8.57
75-15-0	Carbon disulfide	HU	8.57	ug/kg	2.14	8.57
156-60-5	trans-1,2-Dichloroethylene	HU	1.71	ug/kg	0.514	1.71
75-34-3	1,1-Dichloroethane	HU	1.71	ug/kg	0.514	1.71
78-93-3	2-Butanone	HU	8.57	ug/kg	2.57	8.57
156-59-2	cis-1,2-Dichloroethylene	HU	1.71	ug/kg	0.514	1.71
594-20-7	2,2-Dichloropropane	HU	1.71	ug/kg	0.514	1.71
67-66-3	Chloroform	HU	1.71	ug/kg	0.514	1.71
74-97-5	Bromochloromethane	HU	1.71	ug/kg	0.565	1.71
71-55-6	1,1,1-Trichloroethane	HU	1.71	ug/kg	0.514	1.71
563-58-6	1,1-Dichloropropene	HU	1.71	ug/kg	0.514	1.71
56-23-5	Carbon tetrachloride	HU	1.71	ug/kg	0.514	1.71
107-06-2	1,2-Dichloroethane	HU	1.71	ug/kg	0.514	1.71
71-43-2	Benzene	HU	1.71	ug/kg	0.514	1.71
79-01-6	Trichloroethylene	HU	1.71	ug/kg	0.565	1.71
78-87-5	1,2-Dichloropropane	HU	1.71	ug/kg	0.514	1.71
75-27-4	Bromodichloromethane	HU	1.71	ug/kg	0.514	1.71
74-95-3	Dibromomethane	HU	1.71	ug/kg	0.514	1.71
108-10-1	4-Methyl-2-pentanone	HU	8.57	ug/kg	2.14	8.57
10061-01-5	cis-1,3-Dichloropropylene	HU	1.71	ug/kg	0.514	1.71
108-88-3	Toluene	H	3.51	ug/kg	0.514	1.71
10061-02-6	trans-1,3-Dichloropropylene	HU	1.71	ug/kg	0.514	1.71
79-00-5	1,1,2-Trichloroethane	HU	1.71	ug/kg	0.514	1.71
591-78-6	2-Hexanone	HU	8.57	ug/kg	2.57	8.57
142-28-9	1,3-Dichloropropane	HU	1.71	ug/kg	0.514	1.71
127-18-4	Tetrachloroethylene	HU	1.71	ug/kg	0.514	1.71
124-48-1	Dibromochloromethane	HU	1.71	ug/kg	0.514	1.71
106-93-4	1,2-Dibromoethane	HU	1.71	ug/kg	0.514	1.71
108-90-7	Chlorobenzene	HU	1.71	ug/kg	0.514	1.71

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370001

 Client ID: RE36-10-7415
 Batch ID: 963122
 Run Date: 03/11/2010 02:08
 Prep Date: 03/10/2010 08:53
 Data File: 031010V55B344.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 41.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.71	ug/kg	0.514	1.71
179601-23-1	m,p-Xylenes	HU	3.43	ug/kg	0.514	3.43
95-47-6	o-Xylene	HU	1.71	ug/kg	0.514	1.71
100-42-5	Styrene	HU	1.71	ug/kg	0.514	1.71
75-25-2	Bromoform	HU	1.71	ug/kg	0.514	1.71
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.71	ug/kg	0.514	1.71
96-18-4	1,2,3-Trichloropropane	HU	1.71	ug/kg	0.514	1.71
108-86-1	Bromobenzene	HU	1.71	ug/kg	0.514	1.71
103-65-1	n-Propylbenzene	HU	1.71	ug/kg	0.514	1.71
95-49-8	2-Chlorotoluene	HU	1.71	ug/kg	0.514	1.71
98-82-8	Isopropylbenzene	HU	1.71	ug/kg	0.514	1.71
108-67-8	1,3,5-Trimethylbenzene	HU	1.71	ug/kg	0.514	1.71
106-43-4	4-Chlorotoluene	HU	1.71	ug/kg	0.514	1.71
98-06-6	tert-Butylbenzene	HU	1.71	ug/kg	0.514	1.71
95-63-6	1,2,4-Trimethylbenzene	HU	1.71	ug/kg	0.514	1.71
135-98-8	sec-Butylbenzene	HU	1.71	ug/kg	0.514	1.71
99-87-6	4-Isopropyltoluene	H	26.0	ug/kg	0.514	1.71
541-73-1	1,3-Dichlorobenzene	HU	1.71	ug/kg	0.514	1.71
106-46-7	1,4-Dichlorobenzene	HU	1.71	ug/kg	0.514	1.71
104-51-8	n-Butylbenzene	HU	1.71	ug/kg	0.514	1.71
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.71	ug/kg	0.514	1.71
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	8.57	ug/kg	2.74	8.57
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.71	ug/kg	0.514	1.71
95-50-1	1,2-Dichlorobenzene	HU	1.71	ug/kg	0.514	1.71

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99		ug/kg	0	J
	unknown hydrocarbon	12.95		ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370002

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 8.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7420
 Batch ID: 963122
 Run Date: 03/10/2010 00:03
 Prep Date: 03/09/2010 17:01
 Data File: 030910V5\5B237.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.373	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.48	ug/kg	1.82	5.48
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.48	ug/kg	1.75	5.48
75-09-2	Methylene chloride	U	5.48	ug/kg	2.19	5.48
75-15-0	Carbon disulfide	U	5.48	ug/kg	1.37	5.48
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.48	ug/kg	1.64	5.48
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.362	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.362	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.48	ug/kg	1.37	5.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.48	ug/kg	1.64	5.48
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 8.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7420
Batch ID: 963122
Run Date: 03/10/2010 00:03
Prep Date: 03/09/2010 17:01
Data File: 030910V5\SB237.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.329	2.19
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.48	ug/kg	1.75	5.48
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370003	Date Received: 03/02/2010 08:50	%Moisture: 18.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7418	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 00:30	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:02	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V5\5B238.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.418	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.369	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.369	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.369	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.369	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.369	1.23
67-64-1	Acetone	U	6.15	ug/kg	2.04	6.15
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
74-88-4	Iodomethane	U	6.15	ug/kg	1.97	6.15
75-09-2	Methylene chloride	U	6.15	ug/kg	2.46	6.15
75-15-0	Carbon disulfide	U	6.15	ug/kg	1.54	6.15
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.369	1.23
78-93-3	2-Butanone	U	6.15	ug/kg	1.85	6.15
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.369	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.406	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.369	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.369	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.369	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.369	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.369	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.406	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.369	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.369	1.23
108-10-1	4-Methyl-2-pentanone	U	6.15	ug/kg	1.54	6.15
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.369	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.369	1.23
591-78-6	2-Hexanone	U	6.15	ug/kg	1.85	6.15
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.369	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.369	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.369	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.369	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.369	1.23

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370003

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 18.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7418
Batch ID: 963122
Run Date: 03/10/2010 00:30
Prep Date: 03/09/2010 17:02
Data File: 030910V5\5B238.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.369	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.369	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.369	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.369	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.369	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.369	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.369	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.369	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.369	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.369	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.369	1.23
99-87-6	4-Isopropyltoluene		1.61	ug/kg	0.369	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.369	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.369	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.15	ug/kg	1.97	6.15
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23

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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370004	Date Received: 03/02/2010 08:50	%Moisture: 21
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7417	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/11/2010 02:34	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:54	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B345.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HU	1.27	ug/kg	0.430	1.27
74-87-3	Chloromethane	HU	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	HU	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	HU	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	HU	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	HU	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	HU	6.33	ug/kg	2.10	6.33
75-35-4	1,1-Dichloroethylene	HU	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	HU	6.33	ug/kg	2.03	6.33
75-09-2	Methylene chloride	HU	6.33	ug/kg	2.53	6.33
75-15-0	Carbon disulfide	HU	6.33	ug/kg	1.58	6.33
156-60-5	trans-1,2-Dichloroethylene	HU	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	HU	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	HU	6.33	ug/kg	1.90	6.33
156-59-2	cis-1,2-Dichloroethylene	HU	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	HU	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	HU	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	HU	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	HU	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	HU	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	HU	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	HU	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	HU	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	HU	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	HU	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	HU	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	HU	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	HU	6.33	ug/kg	1.58	6.33
10061-01-5	cis-1,3-Dichloropropylene	HU	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	HU	1.27	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	HU	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	HU	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	HU	6.33	ug/kg	1.90	6.33
142-28-9	1,3-Dichloropropane	HU	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	HU	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	HU	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	HU	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	HU	1.27	ug/kg	0.380	1.27

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370004

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7417
Batch ID: 963122
Run Date: 03/11/2010 02:34
Prep Date: 03/10/2010 08:54
Data File: 031010V55B345.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	HU	2.53	ug/kg	0.380	2.53
95-47-6	o-Xylene	HU	1.27	ug/kg	0.380	1.27
100-42-5	Styrene	HU	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	HU	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	HU	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	HU	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	HU	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	HU	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	HU	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	HU	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	HU	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	HU	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	HU	1.27	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	HU	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	HJ	1.01	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	HU	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	HU	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	HU	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	6.33	ug/kg	2.03	6.33
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	HU	1.27	ug/kg	0.380	1.27

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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370005	Date Received: 03/02/2010 08:50	%Moisture: 16.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7419	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 01:25	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:04	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V55B240.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.409	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.361	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.361	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.361	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.361	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.361	1.20
67-64-1	Acetone	U	6.02	ug/kg	2.00	6.02
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
74-88-4	Iodomethane	U	6.02	ug/kg	1.93	6.02
75-09-2	Methylene chloride	U	6.02	ug/kg	2.41	6.02
75-15-0	Carbon disulfide	U	6.02	ug/kg	1.51	6.02
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.361	1.20
78-93-3	2-Butanone	U	6.02	ug/kg	1.81	6.02
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.361	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.397	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.361	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.361	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.361	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.361	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.361	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.397	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.361	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.361	1.20
108-10-1	4-Methyl-2-pentanone	U	6.02	ug/kg	1.51	6.02
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.361	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.361	1.20
591-78-6	2-Hexanone	U	6.02	ug/kg	1.81	6.02
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.361	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.361	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.361	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.361	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.361	1.20

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 16.9
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7419
Batch ID: 963122
Run Date: 03/10/2010 01:25
Prep Date: 03/09/2010 17:04
Data File: 030910V55B240.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.361	2.41
95-47-6	o-Xylene	U	1.20	ug/kg	0.361	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.361	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.361	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370006	Date Received: 03/02/2010 08:50	%Moisture: 11.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7416	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/11/2010 03:01	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:55	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B346.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HU	1.13	ug/kg	0.383	1.13
74-87-3	Chloromethane	HU	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	HU	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	HU	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	HU	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	HU	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	HU	5.64	ug/kg	1.87	5.64
75-35-4	1,1-Dichloroethylene	HU	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	HU	5.64	ug/kg	1.80	5.64
75-09-2	Methylene chloride	HU	5.64	ug/kg	2.25	5.64
75-15-0	Carbon disulfide	HU	5.64	ug/kg	1.41	5.64
156-60-5	trans-1,2-Dichloroethylene	HU	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	HU	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	HU	5.64	ug/kg	1.69	5.64
156-59-2	cis-1,2-Dichloroethylene	HU	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	HU	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	HU	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	HU	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	HU	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	HU	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	HU	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	HU	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	HU	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylene	HU	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	HU	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	HU	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	HU	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	HU	5.64	ug/kg	1.41	5.64
10061-01-5	cis-1,3-Dichloropropylene	HU	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	HU	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	HU	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	HU	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	HU	5.64	ug/kg	1.69	5.64
142-28-9	1,3-Dichloropropane	HU	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	HU	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	HU	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	HU	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	HU	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370006	Date Received: 03/02/2010 08:50	%Moisture: 11.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7416	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/11/2010 03:01	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:55	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V5\5B346.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	HU	2.25	ug/kg	0.338	2.25
95-47-6	o-Xylene	HU	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	HU	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	HU	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	HU	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	HU	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	HU	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	HU	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	HU	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	HU	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	HU	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	HU	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	HU	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	HU	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	HU	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	HU	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	HU	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	HU	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	5.64	ug/kg	1.80	5.64
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	HU	1.13	ug/kg	0.338	1.13

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: 10-2150
Lab Sample ID: 248370007

Client ID: RE36-10-7478
Batch ID: 963122
Run Date: 03/10/2010 02:19
Prep Date: 03/09/2010 17:06
Data File: 030910V5/5B242.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.1
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 9.8
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	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.54	ug/kg	1.84	5.54
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.54	ug/kg	1.77	5.54
75-09-2	Methylene chloride	U	5.54	ug/kg	2.22	5.54
75-15-0	Carbon disulfide	U	5.54	ug/kg	1.39	5.54
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.54	ug/kg	1.66	5.54
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.54	ug/kg	1.39	5.54
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.54	ug/kg	1.66	5.54
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370007
 Client ID: RE36-10-7478
 Batch ID: 963122
 Run Date: 03/10/2010 02:19
 Prep Date: 03/09/2010 17:06
 Data File: 030910V5/SB242.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.8
 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	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	J	0.543	ug/kg	0.333	2.22
95-47-6	o-Xylene	J	0.366	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.54	ug/kg	1.77	5.54
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370008	Date Received: 03/02/2010 08:50	%Moisture: 26
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7490	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 02:47	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:07	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V5\$B243.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.35	ug/kg	0.459	1.35
74-87-3	Chloromethane	U	1.35	ug/kg	0.405	1.35
75-01-4	Vinyl chloride	U	1.35	ug/kg	0.405	1.35
74-83-9	Bromomethane	U	1.35	ug/kg	0.405	1.35
75-00-3	Chloroethane	U	1.35	ug/kg	0.405	1.35
75-69-4	Trichlorofluoromethane	U	1.35	ug/kg	0.405	1.35
67-64-1	Acetone	J	2.46	ug/kg	2.24	6.75
75-35-4	1,1-Dichloroethylene	U	1.35	ug/kg	0.405	1.35
74-88-4	Iodomethane	U	6.75	ug/kg	2.16	6.75
75-09-2	Methylene chloride	U	6.75	ug/kg	2.70	6.75
75-15-0	Carbon disulfide	U	6.75	ug/kg	1.69	6.75
156-60-5	trans-1,2-Dichloroethylene	U	1.35	ug/kg	0.405	1.35
75-34-3	1,1-Dichloroethane	U	1.35	ug/kg	0.405	1.35
78-93-3	2-Butanone	U	6.75	ug/kg	2.03	6.75
156-59-2	cis-1,2-Dichloroethylene	U	1.35	ug/kg	0.405	1.35
594-20-7	2,2-Dichloropropane	U	1.35	ug/kg	0.405	1.35
67-66-3	Chloroform	U	1.35	ug/kg	0.405	1.35
74-97-5	Bromochloromethane	U	1.35	ug/kg	0.446	1.35
71-55-6	1,1,1-Trichloroethane	U	1.35	ug/kg	0.405	1.35
563-58-6	1,1-Dichloropropene	U	1.35	ug/kg	0.405	1.35
56-23-5	Carbon tetrachloride	U	1.35	ug/kg	0.405	1.35
107-06-2	1,2-Dichloroethane	U	1.35	ug/kg	0.405	1.35
71-43-2	Benzene	U	1.35	ug/kg	0.405	1.35
79-01-6	Trichloroethylene	U	1.35	ug/kg	0.446	1.35
78-87-5	1,2-Dichloropropane	U	1.35	ug/kg	0.405	1.35
75-27-4	Bromodichloromethane	U	1.35	ug/kg	0.405	1.35
74-95-3	Dibromomethane	U	1.35	ug/kg	0.405	1.35
108-10-1	4-Methyl-2-pentanone	U	6.75	ug/kg	1.69	6.75
10061-01-5	cis-1,3-Dichloropropylene	U	1.35	ug/kg	0.405	1.35
108-88-3	Toluene		1.59	ug/kg	0.405	1.35
10061-02-6	trans-1,3-Dichloropropylene	U	1.35	ug/kg	0.405	1.35
79-00-5	1,1,2-Trichloroethane	U	1.35	ug/kg	0.405	1.35
591-78-6	2-Hexanone	U	6.75	ug/kg	2.03	6.75
142-28-9	1,3-Dichloropropane	U	1.35	ug/kg	0.405	1.35
127-18-4	Tetrachloroethylene	U	1.35	ug/kg	0.405	1.35
124-48-1	Dibromochloromethane	U	1.35	ug/kg	0.405	1.35
106-93-4	1,2-Dibromoethane	U	1.35	ug/kg	0.405	1.35
108-90-7	Chlorobenzene	U	1.35	ug/kg	0.405	1.35

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370008	Date Received: 03/02/2010 08:50	%Moisture: 26
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7490	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 02:47	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:07	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V55B243.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.35	ug/kg	0.405	1.35
179601-23-1	m,p-Xylenes	U	2.70	ug/kg	0.405	2.70
95-47-6	o-Xylene	U	1.35	ug/kg	0.405	1.35
100-42-5	Styrene	U	1.35	ug/kg	0.405	1.35
75-25-2	Bromoform	U	1.35	ug/kg	0.405	1.35
79-34-5	1,1,2,2-Tetrachloroethane	U	1.35	ug/kg	0.405	1.35
96-18-4	1,2,3-Trichloropropane	U	1.35	ug/kg	0.405	1.35
108-86-1	Bromobenzene	U	1.35	ug/kg	0.405	1.35
103-65-1	n-Propylbenzene	U	1.35	ug/kg	0.405	1.35
95-49-8	2-Chlorotoluene	U	1.35	ug/kg	0.405	1.35
98-82-8	Isopropylbenzene	U	1.35	ug/kg	0.405	1.35
108-67-8	1,3,5-Trimethylbenzene	U	1.35	ug/kg	0.405	1.35
106-43-4	4-Chlorotoluene	U	1.35	ug/kg	0.405	1.35
98-06-6	tert-Butylbenzene	U	1.35	ug/kg	0.405	1.35
95-63-6	1,2,4-Trimethylbenzene	U	1.35	ug/kg	0.405	1.35
135-98-8	sec-Butylbenzene	U	1.35	ug/kg	0.405	1.35
99-87-6	4-Isopropyltoluene		6.66	ug/kg	0.405	1.35
541-73-1	1,3-Dichlorobenzene	U	1.35	ug/kg	0.405	1.35
106-46-7	1,4-Dichlorobenzene	U	1.35	ug/kg	0.405	1.35
104-51-8	n-Butylbenzene	U	1.35	ug/kg	0.405	1.35
96-12-8	1,2-Dibromo-3-chloropropane	U	1.35	ug/kg	0.405	1.35
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.75	ug/kg	2.16	6.75
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.35	ug/kg	0.405	1.35
95-50-1	1,2-Dichlorobenzene	U	1.35	ug/kg	0.405	1.35

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99	7.31	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370009
 Client ID: RE36-10-7487
 Batch ID: 963122
 Run Date: 03/11/2010 03:54
 Prep Date: 03/10/2010 09:01
 Data File: 031010V5\5B348.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24.5
 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	HU	1.33	ug/kg	0.451	1.33
74-87-3	Chloromethane	HU	1.33	ug/kg	0.398	1.33
75-01-4	Vinyl chloride	HU	1.33	ug/kg	0.398	1.33
74-83-9	Bromomethane	HU	1.33	ug/kg	0.398	1.33
75-00-3	Chloroethane	HU	1.33	ug/kg	0.398	1.33
75-69-4	Trichlorofluoromethane	HU	1.33	ug/kg	0.398	1.33
67-64-1	Acetone	HU	6.63	ug/kg	2.20	6.63
75-35-4	1,1-Dichloroethylene	HU	1.33	ug/kg	0.398	1.33
74-88-4	Iodomethane	HU	6.63	ug/kg	2.12	6.63
75-09-2	Methylene chloride	HU	6.63	ug/kg	2.65	6.63
75-15-0	Carbon disulfide	HU	6.63	ug/kg	1.66	6.63
156-60-5	trans-1,2-Dichloroethylene	HU	1.33	ug/kg	0.398	1.33
75-34-3	1,1-Dichloroethane	HU	1.33	ug/kg	0.398	1.33
78-93-3	2-Butanone	HU	6.63	ug/kg	1.99	6.63
156-59-2	cis-1,2-Dichloroethylene	HU	1.33	ug/kg	0.398	1.33
594-20-7	2,2-Dichloropropane	HU	1.33	ug/kg	0.398	1.33
67-66-3	Chloroform	HU	1.33	ug/kg	0.398	1.33
74-97-5	Bromochloromethane	HU	1.33	ug/kg	0.437	1.33
71-55-6	1,1,1-Trichloroethane	HU	1.33	ug/kg	0.398	1.33
563-58-6	1,1-Dichloropropene	HU	1.33	ug/kg	0.398	1.33
56-23-5	Carbon tetrachloride	HU	1.33	ug/kg	0.398	1.33
107-06-2	1,2-Dichloroethane	HU	1.33	ug/kg	0.398	1.33
71-43-2	Benzene	HU	1.33	ug/kg	0.398	1.33
79-01-6	Trichloroethylene	HU	1.33	ug/kg	0.437	1.33
78-87-5	1,2-Dichloropropane	HU	1.33	ug/kg	0.398	1.33
75-27-4	Bromodichloromethane	HU	1.33	ug/kg	0.398	1.33
74-95-3	Dibromomethane	HU	1.33	ug/kg	0.398	1.33
108-10-1	4-Methyl-2-pentanone	HU	6.63	ug/kg	1.66	6.63
10061-01-5	cis-1,3-Dichloropropylene	HU	1.33	ug/kg	0.398	1.33
108-88-3	Toluene	H	1.99	ug/kg	0.398	1.33
10061-02-6	trans-1,3-Dichloropropylene	HU	1.33	ug/kg	0.398	1.33
79-00-5	1,1,2-Trichloroethane	HU	1.33	ug/kg	0.398	1.33
591-78-6	2-Hexanone	HU	6.63	ug/kg	1.99	6.63
142-28-9	1,3-Dichloropropane	HU	1.33	ug/kg	0.398	1.33
127-18-4	Tetrachloroethylene	HU	1.33	ug/kg	0.398	1.33
124-48-1	Dibromochloromethane	HU	1.33	ug/kg	0.398	1.33
106-93-4	1,2-Dibromoethane	HU	1.33	ug/kg	0.398	1.33
108-90-7	Chlorobenzene	HU	1.33	ug/kg	0.398	1.33

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 24.5
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7487
Batch ID: 963122
Run Date: 03/11/2010 03:54
Prep Date: 03/10/2010 09:01
Data File: 031010V5\SB348.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.33	ug/kg	0.398	1.33
179601-23-1	m,p-Xylenes	HU	2.65	ug/kg	0.398	2.65
95-47-6	o-Xylene	HU	1.33	ug/kg	0.398	1.33
100-42-5	Styrene	HU	1.33	ug/kg	0.398	1.33
75-25-2	Bromoform	HU	1.33	ug/kg	0.398	1.33
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.33	ug/kg	0.398	1.33
96-18-4	1,2,3-Trichloropropane	HU	1.33	ug/kg	0.398	1.33
108-86-1	Bromobenzene	HU	1.33	ug/kg	0.398	1.33
103-65-1	n-Propylbenzene	HU	1.33	ug/kg	0.398	1.33
95-49-8	2-Chlorotoluene	HU	1.33	ug/kg	0.398	1.33
98-82-8	Isopropylbenzene	HU	1.33	ug/kg	0.398	1.33
108-67-8	1,3,5-Trimethylbenzene	HU	1.33	ug/kg	0.398	1.33
106-43-4	4-Chlorotoluene	HU	1.33	ug/kg	0.398	1.33
98-06-6	tert-Butylbenzene	HU	1.33	ug/kg	0.398	1.33
95-63-6	1,2,4-Trimethylbenzene	HU	1.33	ug/kg	0.398	1.33
135-98-8	sec-Butylbenzene	HU	1.33	ug/kg	0.398	1.33
99-87-6	4-Isopropyltoluene	H	2.32	ug/kg	0.398	1.33
541-73-1	1,3-Dichlorobenzene	HU	1.33	ug/kg	0.398	1.33
106-46-7	1,4-Dichlorobenzene	HU	1.33	ug/kg	0.398	1.33
104-51-8	n-Butylbenzene	HU	1.33	ug/kg	0.398	1.33
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.33	ug/kg	0.398	1.33
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	6.63	ug/kg	2.12	6.63
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.33	ug/kg	0.398	1.33
95-50-1	1,2-Dichlorobenzene	HU	1.33	ug/kg	0.398	1.33

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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370010	Date Received: 03/02/2010 08:50	%Moisture: 24
Client ID: RE36-10-7483	Client: LANL010	Project: LANL01004
Batch ID: 963122	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/10/2010 03:41	Inst: VOA5.1	Dilution: 1
Prep Date: 03/09/2010 17:09	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030910V55B245.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	1.32	ug/kg	0.447	1.32
74-87-3	Chloromethane	U	1.32	ug/kg	0.395	1.32
75-01-4	Vinyl chloride	U	1.32	ug/kg	0.395	1.32
74-83-9	Bromomethane	U	1.32	ug/kg	0.395	1.32
75-00-3	Chloroethane	U	1.32	ug/kg	0.395	1.32
75-69-4	Trichlorofluoromethane	U	1.32	ug/kg	0.395	1.32
67-64-1	Acetone		7.18	ug/kg	2.18	6.58
75-35-4	1,1-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
74-88-4	Iodomethane	U	6.58	ug/kg	2.11	6.58
75-09-2	Methylene chloride	J	3.57	ug/kg	2.63	6.58
75-15-0	Carbon disulfide	U	6.58	ug/kg	1.64	6.58
156-60-5	trans-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
75-34-3	1,1-Dichloroethane	U	1.32	ug/kg	0.395	1.32
78-93-3	2-Butanone	U	6.58	ug/kg	1.97	6.58
156-59-2	cis-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
594-20-7	2,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
67-66-3	Chloroform	U	1.32	ug/kg	0.395	1.32
74-97-5	Bromochloromethane	U	1.32	ug/kg	0.434	1.32
71-55-6	1,1,1-Trichloroethane	U	1.32	ug/kg	0.395	1.32
563-58-6	1,1-Dichloropropene	U	1.32	ug/kg	0.395	1.32
56-23-5	Carbon tetrachloride	U	1.32	ug/kg	0.395	1.32
107-06-2	1,2-Dichloroethane	U	1.32	ug/kg	0.395	1.32
71-43-2	Benzene	U	1.32	ug/kg	0.395	1.32
79-01-6	Trichloroethylene	J	0.605	ug/kg	0.434	1.32
78-87-5	1,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
75-27-4	Bromodichloromethane	U	1.32	ug/kg	0.395	1.32
74-95-3	Dibromomethane	U	1.32	ug/kg	0.395	1.32
108-10-1	4-Methyl-2-pentanone	U	6.58	ug/kg	1.64	6.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
108-88-3	Toluene		5.24	ug/kg	0.395	1.32
10061-02-6	trans-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
79-00-5	1,1,2-Trichloroethane	U	1.32	ug/kg	0.395	1.32
591-78-6	2-Hexanone	U	6.58	ug/kg	1.97	6.58
142-28-9	1,3-Dichloropropane	U	1.32	ug/kg	0.395	1.32
127-18-4	Tetrachloroethylene	U	1.32	ug/kg	0.395	1.32
124-48-1	Dibromochloromethane	U	1.32	ug/kg	0.395	1.32
106-93-4	1,2-Dibromoethane	U	1.32	ug/kg	0.395	1.32
108-90-7	Chlorobenzene	U	1.32	ug/kg	0.395	1.32

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370010	Date Received: 03/02/2010 08:50	%Moisture: 24
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7483	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 03:41	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:09	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V55B245.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.32	ug/kg	0.395	1.32
179601-23-1	m,p-Xylenes	J	0.960	ug/kg	0.395	2.63
95-47-6	o-Xylene	J	0.513	ug/kg	0.395	1.32
100-42-5	Styrene	U	1.32	ug/kg	0.395	1.32
75-25-2	Bromoform	U	1.32	ug/kg	0.395	1.32
79-34-5	1,1,2,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
96-18-4	1,2,3-Trichloropropane	U	1.32	ug/kg	0.395	1.32
108-86-1	Bromobenzene	U	1.32	ug/kg	0.395	1.32
103-65-1	n-Propylbenzene	U	1.32	ug/kg	0.395	1.32
95-49-8	2-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-82-8	Isopropylbenzene	U	1.32	ug/kg	0.395	1.32
108-67-8	1,3,5-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
106-43-4	4-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-06-6	tert-Butylbenzene	U	1.32	ug/kg	0.395	1.32
95-63-6	1,2,4-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
135-98-8	sec-Butylbenzene	U	1.32	ug/kg	0.395	1.32
99-87-6	4-Isopropyltoluene		89.3	ug/kg	0.395	1.32
541-73-1	1,3-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
106-46-7	1,4-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
104-51-8	n-Butylbenzene	U	1.32	ug/kg	0.395	1.32
96-12-8	1,2-Dibromo-3-chloropropane	U	1.32	ug/kg	0.395	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.58	ug/kg	2.11	6.58
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
95-50-1	1,2-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000115-10-6	Dimethyl ether	5.78	7.29	ug/kg	9	NJ
	unknown hydrocarbon	11.99	56	ug/kg	0	J
	unknown hydrocarbon	12.32	7.03	ug/kg	0	J
	unknown hydrocarbon	12.69	10	ug/kg	0	J
	unknown hydrocarbon	12.95	67.7	ug/kg	0	J
	unknown hydrocarbon	13.17	9.63	ug/kg	0	J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA3.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 32.8
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 50
Purge Vol: 5 mL
Final Volume: 10 mL

Client ID: RE36-10-7481REDL
Batch ID: 963122
Run Date: 03/19/2010 20:01
Prep Date: 03/19/2010 09:01
Data File: 031910V33D510.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	149	ug/kg	50.6	149
74-87-3	Chloromethane	HUh	149	ug/kg	44.7	149
75-01-4	Vinyl chloride	HUh	149	ug/kg	44.7	149
74-83-9	Bromomethane	HUh	149	ug/kg	44.7	149
75-00-3	Chloroethane	HUh	149	ug/kg	44.7	149
75-69-4	Trichlorofluoromethane	HUh	149	ug/kg	44.7	149
67-64-1	Acetone	HUh	745	ug/kg	247	745
75-35-4	1,1-Dichloroethylene	HUh	149	ug/kg	44.7	149
74-88-4	Iodomethane	HUh	745	ug/kg	238	745
75-09-2	Methylene chloride	HUh	745	ug/kg	298	745
75-15-0	Carbon disulfide	HUh	745	ug/kg	186	745
156-60-5	trans-1,2-Dichloroethylene	HUh	149	ug/kg	44.7	149
75-34-3	1,1-Dichloroethane	HUh	149	ug/kg	44.7	149
78-93-3	2-Butanone	HUh	745	ug/kg	223	745
156-59-2	cis-1,2-Dichloroethylene	HUh	149	ug/kg	44.7	149
594-20-7	2,2-Dichloropropane	HUh	149	ug/kg	44.7	149
67-66-3	Chloroform	HUh	149	ug/kg	44.7	149
74-97-5	Bromochloromethane	HUh	149	ug/kg	49.1	149
71-55-6	1,1,1-Trichloroethane	HUh	149	ug/kg	44.7	149
563-58-6	1,1-Dichloropropene	HUh	149	ug/kg	44.7	149
56-23-5	Carbon tetrachloride	HUh	149	ug/kg	44.7	149
107-06-2	1,2-Dichloroethane	HUh	149	ug/kg	44.7	149
71-43-2	Benzene	HUh	149	ug/kg	44.7	149
79-01-6	Trichloroethylene	HUh	149	ug/kg	49.1	149
78-87-5	1,2-Dichloropropane	HUh	149	ug/kg	44.7	149
75-27-4	Bromodichloromethane	HUh	149	ug/kg	44.7	149
74-95-3	Dibromomethane	HUh	149	ug/kg	44.7	149
108-10-1	4-Methyl-2-pentanone	HUh	745	ug/kg	186	745
10061-01-5	cis-1,3-Dichloropropylene	HUh	149	ug/kg	44.7	149
108-88-3	Toluene	HUh	149	ug/kg	44.7	149
10061-02-6	trans-1,3-Dichloropropylene	HUh	149	ug/kg	44.7	149
79-00-5	1,1,2-Trichloroethane	HUh	149	ug/kg	44.7	149
591-78-6	2-Hexanone	HUh	745	ug/kg	223	745
142-28-9	1,3-Dichloropropane	HUh	149	ug/kg	44.7	149
127-18-4	Tetrachloroethylene	HUh	149	ug/kg	44.7	149
124-48-1	Dibromochloromethane	HUh	149	ug/kg	44.7	149
106-93-4	1,2-Dibromoethane	HUh	149	ug/kg	44.7	149
108-90-7	Chlorobenzene	HUh	149	ug/kg	44.7	149

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA3.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 32.8
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 50
Purge Vol: 5 mL
Final Volume: 10 mL

Client ID: RE36-10-7481REDL
Batch ID: 963122
Run Date: 03/19/2010 20:01
Prep Date: 03/19/2010 09:01
Data File: 031910V33D510.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	149	ug/kg	44.7	149
179601-23-1	m,p-Xylenes	HUh	298	ug/kg	44.7	298
95-47-6	o-Xylene	HUh	149	ug/kg	44.7	149
100-42-5	Styrene	HUh	149	ug/kg	44.7	149
75-25-2	Bromoform	HUh	149	ug/kg	44.7	149
79-34-5	1,1,2,2-Tetrachloroethane	HUh	149	ug/kg	44.7	149
96-18-4	1,2,3-Trichloropropane	HUh	149	ug/kg	44.7	149
108-86-1	Bromobenzene	HUh	149	ug/kg	44.7	149
103-65-1	n-Propylbenzene	HUh	149	ug/kg	44.7	149
95-49-8	2-Chlorotoluene	HUh	149	ug/kg	44.7	149
98-82-8	Isopropylbenzene	HUh	149	ug/kg	44.7	149
108-67-8	1,3,5-Trimethylbenzene	HUh	149	ug/kg	44.7	149
106-43-4	4-Chlorotoluene	HUh	149	ug/kg	44.7	149
98-06-6	tert-Butylbenzene	HUh	149	ug/kg	44.7	149
95-63-6	1,2,4-Trimethylbenzene	HUh	149	ug/kg	44.7	149
135-98-8	sec-Butylbenzene	HUh	149	ug/kg	44.7	149
99-87-6	4-Isopropyltoluene	HUh	149	ug/kg	44.7	149
541-73-1	1,3-Dichlorobenzene	HUh	149	ug/kg	44.7	149
106-46-7	1,4-Dichlorobenzene	HUh	149	ug/kg	44.7	149
104-51-8	n-Butylbenzene	HUh	149	ug/kg	44.7	149
96-12-8	1,2-Dibromo-3-chloropropane	HUh	149	ug/kg	44.7	149
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	745	ug/kg	238	745
630-20-6	1,1,1,2-Tetrachloroethane	HUh	149	ug/kg	44.7	149
95-50-1	1,2-Dichlorobenzene	HUh	149	ug/kg	44.7	149

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	6.16	1090	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7481	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 04:09	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:10	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V55B246.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.49	ug/kg	0.506	1.49
74-87-3	Chloromethane	U	1.49	ug/kg	0.447	1.49
75-01-4	Vinyl chloride	U	1.49	ug/kg	0.447	1.49
74-83-9	Bromomethane	U	1.49	ug/kg	0.447	1.49
75-00-3	Chloroethane	U	1.49	ug/kg	0.447	1.49
75-69-4	Trichlorofluoromethane	U	1.49	ug/kg	0.447	1.49
67-64-1	Acetone		7.58	ug/kg	2.47	7.45
75-35-4	1,1-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
74-88-4	Iodomethane	U	7.45	ug/kg	2.38	7.45
75-09-2	Methylene chloride	U	7.45	ug/kg	2.98	7.45
75-15-0	Carbon disulfide	U	7.45	ug/kg	1.86	7.45
156-60-5	trans-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
75-34-3	1,1-Dichloroethane	U	1.49	ug/kg	0.447	1.49
78-93-3	2-Butanone	U	7.45	ug/kg	2.23	7.45
156-59-2	cis-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
594-20-7	2,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
67-66-3	Chloroform	U	1.49	ug/kg	0.447	1.49
74-97-5	Bromochloromethane	U	1.49	ug/kg	0.491	1.49
71-55-6	1,1,1-Trichloroethane	U	1.49	ug/kg	0.447	1.49
563-58-6	1,1-Dichloropropene	U	1.49	ug/kg	0.447	1.49
56-23-5	Carbon tetrachloride	U	1.49	ug/kg	0.447	1.49
107-06-2	1,2-Dichloroethane	U	1.49	ug/kg	0.447	1.49
71-43-2	Benzene	U	1.49	ug/kg	0.447	1.49
79-01-6	Trichloroethylene	U	1.49	ug/kg	0.491	1.49
78-87-5	1,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
75-27-4	Bromodichloromethane	U	1.49	ug/kg	0.447	1.49
74-95-3	Dibromomethane	U	1.49	ug/kg	0.447	1.49
108-10-1	4-Methyl-2-pentanone	U	7.45	ug/kg	1.86	7.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
108-88-3	Toluene		1.61	ug/kg	0.447	1.49
10061-02-6	trans-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
79-00-5	1,1,2-Trichloroethane	U	1.49	ug/kg	0.447	1.49
591-78-6	2-Hexanone	U	7.45	ug/kg	2.23	7.45
142-28-9	1,3-Dichloropropane	U	1.49	ug/kg	0.447	1.49
127-18-4	Tetrachloroethylene	U	1.49	ug/kg	0.447	1.49
124-48-1	Dibromochloromethane	U	1.49	ug/kg	0.447	1.49
106-93-4	1,2-Dibromoethane	U	1.49	ug/kg	0.447	1.49
108-90-7	Chlorobenzene	U	1.49	ug/kg	0.447	1.49

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7481	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 04:09	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:10	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V5\SB246.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.49	ug/kg	0.447	1.49
179601-23-1	m,p-Xylenes	U	2.98	ug/kg	0.447	2.98
95-47-6	o-Xylene	U	1.49	ug/kg	0.447	1.49
100-42-5	Styrene	U	1.49	ug/kg	0.447	1.49
75-25-2	Bromoform	U	1.49	ug/kg	0.447	1.49
79-34-5	1,1,2,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
96-18-4	1,2,3-Trichloropropane	U	1.49	ug/kg	0.447	1.49
108-86-1	Bromobenzene	U	1.49	ug/kg	0.447	1.49
103-65-1	n-Propylbenzene	U	1.49	ug/kg	0.447	1.49
95-49-8	2-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-82-8	Isopropylbenzene	U	1.49	ug/kg	0.447	1.49
108-67-8	1,3,5-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
106-43-4	4-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-06-6	tert-Butylbenzene	U	1.49	ug/kg	0.447	1.49
95-63-6	1,2,4-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
135-98-8	sec-Butylbenzene	U	1.49	ug/kg	0.447	1.49
99-87-6	4-Isopropyltoluene	E	768	ug/kg	0.447	1.49
541-73-1	1,3-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
106-46-7	1,4-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
104-51-8	n-Butylbenzene	U	1.49	ug/kg	0.447	1.49
96-12-8	1,2-Dibromo-3-chloropropane	U	1.49	ug/kg	0.447	1.49
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.45	ug/kg	2.38	7.45
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
95-50-1	1,2-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	11.82	23.9	ug/kg	0	J
	unknown hydrocarbon	11.89	41.6	ug/kg	0	J
	unknown hydrocarbon	12	1620	ug/kg	0	J
	unknown hydrocarbon	12.13	11.9	ug/kg	0	J
	unknown hydrocarbon	12.32	323	ug/kg	0	J
	unknown hydrocarbon	12.38	24.5	ug/kg	0	J
	unknown hydrocarbon	12.49	68.5	ug/kg	0	J
	unknown hydrocarbon	12.53	19.9	ug/kg	0	J
	unknown hydrocarbon	12.54	10.2	ug/kg	0	J
	unknown hydrocarbon	12.68	84.7	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7481	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 04:09	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:10	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V55B246.D	Column: DB-624	

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 hydrocarbon	12.9	28.7	ug/kg	0	J
	unknown hydrocarbon	12.95	22.8	ug/kg	0	J
	unknown hydrocarbon	13.05	354	ug/kg	0	J
	unknown hydrocarbon	13.18	155	ug/kg	0	J
	unknown hydrocarbon	13.32	12.2	ug/kg	0	J
000099-85-4	1,4-Cyclohexadiene, 1-methyl-4-(1-	13.48	121	ug/kg	96	NJ
	unknown hydrocarbon	13.87	81.9	ug/kg	0	J
	unknown hydrocarbon	13.94	99.9	ug/kg	0	J
	unknown aromatic	14.09	123	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370012	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-J0-7486	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA3.1	Dilution: 1
Run Date: 03/19/2010 19:03	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/19/2010 09:00	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031910V3\3D508.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	1.27	ug/kg	0.431	1.27
74-87-3	Chloromethane	HUh	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	HUh	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	HUh	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	HUh	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	HUh	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	HUh	6.34	ug/kg	2.10	6.34
75-35-4	1,1-Dichloroethylene	HUh	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	HUh	6.34	ug/kg	2.03	6.34
75-09-2	Methylene chloride	HUh	2.60	ug/kg	2.53	6.34
75-15-0	Carbon disulfide	HUh	6.34	ug/kg	1.58	6.34
156-60-5	trans-1,2-Dichloroethylene	HUh	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	HUh	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	HUh	6.34	ug/kg	1.90	6.34
156-59-2	cis-1,2-Dichloroethylene	HUh	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	HUh	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	HUh	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	HUh	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	HUh	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	HUh	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	HUh	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	HUh	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	HUh	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	HUh	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	HUh	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	HUh	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	HUh	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	HUh	6.34	ug/kg	1.58	6.34
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	HUh	1.27	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	HUh	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	HUh	6.34	ug/kg	1.90	6.34
142-28-9	1,3-Dichloropropane	HUh	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	HUh	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	HUh	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	HUh	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	HUh	1.27	ug/kg	0.380	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370012	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7486	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA3.1	Dilution: 1
Run Date: 03/19/2010 19:03	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/19/2010 09:00	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031910V3\3D508.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	HUh	2.53	ug/kg	0.380	2.53
95-47-6	o-Xylene	HUh	1.27	ug/kg	0.380	1.27
100-42-5	Styrene	HUh	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	HUh	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	HUh	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	HUh	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	HUh	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	HUh	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	HUh	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	HUh	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	HUh	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	HUh	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	HUh	1.27	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	HUh	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	HUh	1.27	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	HUh	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	HUh	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	HUh	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.34	ug/kg	2.03	6.34
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	HUh	1.27	ug/kg	0.380	1.27

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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370013	Date Received: 03/02/2010 08:50	%Moisture: 23.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7477	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 11:59	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:45	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V5\5B312.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.31	ug/kg	0.445	1.31
74-87-3	Chloromethane	U	1.31	ug/kg	0.393	1.31
75-01-4	Vinyl chloride	U	1.31	ug/kg	0.393	1.31
74-83-9	Bromomethane	U	1.31	ug/kg	0.393	1.31
75-00-3	Chloroethane	U	1.31	ug/kg	0.393	1.31
75-69-4	Trichlorofluoromethane	U	1.31	ug/kg	0.393	1.31
67-64-1	Acetone	U	6.55	ug/kg	2.17	6.55
75-35-4	1,1-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
74-88-4	Iodomethane	U	6.55	ug/kg	2.09	6.55
75-09-2	Methylene chloride	U	6.55	ug/kg	2.62	6.55
75-15-0	Carbon disulfide	U	6.55	ug/kg	1.64	6.55
156-60-5	trans-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
75-34-3	1,1-Dichloroethane	U	1.31	ug/kg	0.393	1.31
78-93-3	2-Butanone	U	6.55	ug/kg	1.96	6.55
156-59-2	cis-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
594-20-7	2,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
67-66-3	Chloroform	U	1.31	ug/kg	0.393	1.31
74-97-5	Bromochloromethane	U	1.31	ug/kg	0.432	1.31
71-55-6	1,1,1-Trichloroethane	U	1.31	ug/kg	0.393	1.31
563-58-6	1,1-Dichloropropene	U	1.31	ug/kg	0.393	1.31
56-23-5	Carbon tetrachloride	U	1.31	ug/kg	0.393	1.31
107-06-2	1,2-Dichloroethane	U	1.31	ug/kg	0.393	1.31
71-43-2	Benzene	U	1.31	ug/kg	0.393	1.31
79-01-6	Trichloroethylene	U	1.31	ug/kg	0.432	1.31
78-87-5	1,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
75-27-4	Bromodichloromethane	U	1.31	ug/kg	0.393	1.31
74-95-3	Dibromomethane	U	1.31	ug/kg	0.393	1.31
108-10-1	4-Methyl-2-pentanone	U	6.55	ug/kg	1.64	6.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
108-88-3	Toluene	U	1.31	ug/kg	0.393	1.31
10061-02-6	trans-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
79-00-5	1,1,2-Trichloroethane	U	1.31	ug/kg	0.393	1.31
591-78-6	2-Hexanone	U	6.55	ug/kg	1.96	6.55
142-28-9	1,3-Dichloropropane	U	1.31	ug/kg	0.393	1.31
127-18-4	Tetrachloroethylene	U	1.31	ug/kg	0.393	1.31
124-48-1	Dibromochloromethane	U	1.31	ug/kg	0.393	1.31
106-93-4	1,2-Dibromoethane	U	1.31	ug/kg	0.393	1.31
108-90-7	Chlorobenzene	U	1.31	ug/kg	0.393	1.31

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370013	Date Received: 03/02/2010 08:50	%Moisture: 23.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7477	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 11:59	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:45	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B312.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.31	ug/kg	0.393	1.31
179601-23-1	m,p-Xylenes	U	2.62	ug/kg	0.393	2.62
95-47-6	o-Xylene	U	1.31	ug/kg	0.393	1.31
100-42-5	Styrene	U	1.31	ug/kg	0.393	1.31
75-25-2	Bromoform	U	1.31	ug/kg	0.393	1.31
79-34-5	1,1,2,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
96-18-4	1,2,3-Trichloropropane	U	1.31	ug/kg	0.393	1.31
108-86-1	Bromobenzene	U	1.31	ug/kg	0.393	1.31
103-65-1	n-Propylbenzene	U	1.31	ug/kg	0.393	1.31
95-49-8	2-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-82-8	Isopropylbenzene	U	1.31	ug/kg	0.393	1.31
108-67-8	1,3,5-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
106-43-4	4-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-06-6	tert-Butylbenzene	U	1.31	ug/kg	0.393	1.31
95-63-6	1,2,4-Trimethylbenzene	J	0.406	ug/kg	0.393	1.31
135-98-8	sec-Butylbenzene	U	1.31	ug/kg	0.393	1.31
99-87-6	4-Isopropyltoluene	J	0.930	ug/kg	0.393	1.31
541-73-1	1,3-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
106-46-7	1,4-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
104-51-8	n-Butylbenzene	U	1.31	ug/kg	0.393	1.31
96-12-8	1,2-Dibromo-3-chloropropane	U	1.31	ug/kg	0.393	1.31
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.55	ug/kg	2.09	6.55
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
95-50-1	1,2-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31

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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370014	Date Received: 03/02/2010 08:50	%Moisture: 35
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7489	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 12:26	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:46	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V5\SB313.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.54	ug/kg	0.523	1.54
74-87-3	Chloromethane	U	1.54	ug/kg	0.462	1.54
75-01-4	Vinyl chloride	U	1.54	ug/kg	0.462	1.54
74-83-9	Bromomethane	U	1.54	ug/kg	0.462	1.54
75-00-3	Chloroethane	U	1.54	ug/kg	0.462	1.54
75-69-4	Trichlorofluoromethane	U	1.54	ug/kg	0.462	1.54
67-64-1	Acetone	U	7.70	ug/kg	2.56	7.70
75-35-4	1,1-Dichloroethylene	U	1.54	ug/kg	0.462	1.54
74-88-4	Iodomethane	U	7.70	ug/kg	2.46	7.70
75-09-2	Methylene chloride	U	7.70	ug/kg	3.08	7.70
75-15-0	Carbon disulfide	U	7.70	ug/kg	1.92	7.70
156-60-5	trans-1,2-Dichloroethylene	U	1.54	ug/kg	0.462	1.54
75-34-3	1,1-Dichloroethane	U	1.54	ug/kg	0.462	1.54
78-93-3	2-Butanone	U	7.70	ug/kg	2.31	7.70
156-59-2	cis-1,2-Dichloroethylene	U	1.54	ug/kg	0.462	1.54
594-20-7	2,2-Dichloropropane	U	1.54	ug/kg	0.462	1.54
67-66-3	Chloroform	U	1.54	ug/kg	0.462	1.54
74-97-5	Bromochloromethane	U	1.54	ug/kg	0.508	1.54
71-55-6	1,1,1-Trichloroethane	U	1.54	ug/kg	0.462	1.54
563-58-6	1,1-Dichloropropene	U	1.54	ug/kg	0.462	1.54
56-23-5	Carbon tetrachloride	U	1.54	ug/kg	0.462	1.54
107-06-2	1,2-Dichloroethane	U	1.54	ug/kg	0.462	1.54
71-43-2	Benzene	U	1.54	ug/kg	0.462	1.54
79-01-6	Trichloroethylene	U	1.54	ug/kg	0.508	1.54
78-87-5	1,2-Dichloropropane	U	1.54	ug/kg	0.462	1.54
75-27-4	Bromodichloromethane	U	1.54	ug/kg	0.462	1.54
74-95-3	Dibromomethane	U	1.54	ug/kg	0.462	1.54
108-10-1	4-Methyl-2-pentanone	U	7.70	ug/kg	1.92	7.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.54	ug/kg	0.462	1.54
108-88-3	Toluene	J	1.06	ug/kg	0.462	1.54
10061-02-6	trans-1,3-Dichloropropylene	U	1.54	ug/kg	0.462	1.54
79-00-5	1,1,2-Trichloroethane	U	1.54	ug/kg	0.462	1.54
591-78-6	2-Hexanone	U	7.70	ug/kg	2.31	7.70
142-28-9	1,3-Dichloropropane	U	1.54	ug/kg	0.462	1.54
127-18-4	Tetrachloroethylene	U	1.54	ug/kg	0.462	1.54
124-48-1	Dibromochloromethane	U	1.54	ug/kg	0.462	1.54
106-93-4	1,2-Dibromoethane	U	1.54	ug/kg	0.462	1.54
108-90-7	Chlorobenzene	U	1.54	ug/kg	0.462	1.54

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370014	Date Received: 03/02/2010 08:50	%Moisture: 35
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7489	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 12:26	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:46	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B313.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.54	ug/kg	0.462	1.54
179601-23-1	m,p-Xylenes	U	3.08	ug/kg	0.462	3.08
95-47-6	o-Xylene	U	1.54	ug/kg	0.462	1.54
100-42-5	Styrene	U	1.54	ug/kg	0.462	1.54
75-25-2	Bromoform	U	1.54	ug/kg	0.462	1.54
79-34-5	1,1,2,2-Tetrachloroethane	U	1.54	ug/kg	0.462	1.54
96-18-4	1,2,3-Trichloropropane	U	1.54	ug/kg	0.462	1.54
108-86-1	Bromobenzene	U	1.54	ug/kg	0.462	1.54
103-65-1	n-Propylbenzene	U	1.54	ug/kg	0.462	1.54
95-49-8	2-Chlorotoluene	U	1.54	ug/kg	0.462	1.54
98-82-8	Isopropylbenzene	U	1.54	ug/kg	0.462	1.54
108-67-8	1,3,5-Trimethylbenzene	U	1.54	ug/kg	0.462	1.54
106-43-4	4-Chlorotoluene	U	1.54	ug/kg	0.462	1.54
98-06-6	tert-Butylbenzene	U	1.54	ug/kg	0.462	1.54
95-63-6	1,2,4-Trimethylbenzene	U	1.54	ug/kg	0.462	1.54
135-98-8	sec-Butylbenzene	U	1.54	ug/kg	0.462	1.54
99-87-6	4-Isopropyltoluene		56.1	ug/kg	0.462	1.54
541-73-1	1,3-Dichlorobenzene	U	1.54	ug/kg	0.462	1.54
106-46-7	1,4-Dichlorobenzene	U	1.54	ug/kg	0.462	1.54
104-51-8	n-Butylbenzene	U	1.54	ug/kg	0.462	1.54
96-12-8	1,2-Dibromo-3-chloropropane	U	1.54	ug/kg	0.462	1.54
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.70	ug/kg	2.46	7.70
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.54	ug/kg	0.462	1.54
95-50-1	1,2-Dichlorobenzene	U	1.54	ug/kg	0.462	1.54

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.89	7.9	ug/kg	0	J
	unknown hydrocarbon	11.99	64	ug/kg	0	J
	unknown	12.32	31.1	ug/kg	0	J
	unknown hydrocarbon	12.32	21.2	ug/kg	0	J
	unknown hydrocarbon	12.69	8.16	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370015

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 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

Client ID: RE36-10-7479
 Batch ID: 963122
 Run Date: 03/10/2010 12:53
 Prep Date: 03/10/2010 08:47
 Data File: 031010V5\5B314.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.37	ug/kg	0.467	1.37
74-87-3	Chloromethane	U	1.37	ug/kg	0.412	1.37
75-01-4	Vinyl chloride	U	1.37	ug/kg	0.412	1.37
74-83-9	Bromomethane	U	1.37	ug/kg	0.412	1.37
75-00-3	Chloroethane	U	1.37	ug/kg	0.412	1.37
75-69-4	Trichlorofluoromethane	U	1.37	ug/kg	0.412	1.37
67-64-1	Acetone	U	6.87	ug/kg	2.28	6.87
75-35-4	1,1-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
74-88-4	Iodomethane	U	6.87	ug/kg	2.20	6.87
75-09-2	Methylene chloride	U	6.87	ug/kg	2.75	6.87
75-15-0	Carbon disulfide	U	6.87	ug/kg	1.72	6.87
156-60-5	trans-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
75-34-3	1,1-Dichloroethane	U	1.37	ug/kg	0.412	1.37
78-93-3	2-Butanone	U	6.87	ug/kg	2.06	6.87
156-59-2	cis-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
594-20-7	2,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
67-66-3	Chloroform	U	1.37	ug/kg	0.412	1.37
74-97-5	Bromochloromethane	U	1.37	ug/kg	0.454	1.37
71-55-6	1,1,1-Trichloroethane	U	1.37	ug/kg	0.412	1.37
563-58-6	1,1-Dichloropropene	U	1.37	ug/kg	0.412	1.37
56-23-5	Carbon tetrachloride	U	1.37	ug/kg	0.412	1.37
107-06-2	1,2-Dichloroethane	U	1.37	ug/kg	0.412	1.37
71-43-2	Benzene	U	1.37	ug/kg	0.412	1.37
79-01-6	Trichloroethylene	U	1.37	ug/kg	0.454	1.37
78-87-5	1,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
75-27-4	Bromodichloromethane	U	1.37	ug/kg	0.412	1.37
74-95-3	Dibromomethane	U	1.37	ug/kg	0.412	1.37
108-10-1	4-Methyl-2-pentanone	U	6.87	ug/kg	1.72	6.87
10061-01-5	cis-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
108-88-3	Toluene	U	1.37	ug/kg	0.412	1.37
10061-02-6	trans-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
79-00-5	1,1,2-Trichloroethane	U	1.37	ug/kg	0.412	1.37
591-78-6	2-Hexanone	U	6.87	ug/kg	2.06	6.87
142-28-9	1,3-Dichloropropane	U	1.37	ug/kg	0.412	1.37
127-18-4	Tetrachloroethylene	U	1.37	ug/kg	0.412	1.37
124-48-1	Dibromochloromethane	U	1.37	ug/kg	0.412	1.37
106-93-4	1,2-Dibromoethane	U	1.37	ug/kg	0.412	1.37
108-90-7	Chlorobenzene	U	1.37	ug/kg	0.412	1.37

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370015	Date Received: 03/02/2010 08:50	%Moisture: 27.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7479	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 12:53	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:47	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B314.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.37	ug/kg	0.412	1.37
179601-23-1	m,p-Xylenes	U	2.75	ug/kg	0.412	2.75
95-47-6	o-Xylene	U	1.37	ug/kg	0.412	1.37
100-42-5	Styrene	U	1.37	ug/kg	0.412	1.37
75-25-2	Bromoform	U	1.37	ug/kg	0.412	1.37
79-34-5	1,1,2,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
96-18-4	1,2,3-Trichloropropane	U	1.37	ug/kg	0.412	1.37
108-86-1	Bromobenzene	U	1.37	ug/kg	0.412	1.37
103-65-1	n-Propylbenzene	U	1.37	ug/kg	0.412	1.37
95-49-8	2-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-82-8	Isopropylbenzene	U	1.37	ug/kg	0.412	1.37
108-67-8	1,3,5-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
106-43-4	4-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-06-6	tert-Butylbenzene	U	1.37	ug/kg	0.412	1.37
95-63-6	1,2,4-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
135-98-8	sec-Butylbenzene	U	1.37	ug/kg	0.412	1.37
99-87-6	4-Isopropyltoluene	U	1.37	ug/kg	0.412	1.37
541-73-1	1,3-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
106-46-7	1,4-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
104-51-8	n-Butylbenzene	U	1.37	ug/kg	0.412	1.37
96-12-8	1,2-Dibromo-3-chloropropane	U	1.37	ug/kg	0.412	1.37
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.87	ug/kg	2.20	6.87
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
95-50-1	1,2-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37

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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370016	Date Received: 03/02/2010 08:50	%Moisture: 24.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7482	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/11/2010 11:59	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/11/2010 08:16	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031110V55B413.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	1.32	ug/kg	0.449	1.32
74-87-3	Chloromethane	HUh	1.32	ug/kg	0.396	1.32
75-01-4	Vinyl chloride	HUh	1.32	ug/kg	0.396	1.32
74-83-9	Bromomethane	HUh	1.32	ug/kg	0.396	1.32
75-00-3	Chloroethane	HUh	1.32	ug/kg	0.396	1.32
75-69-4	Trichlorofluoromethane	HUh	1.32	ug/kg	0.396	1.32
67-64-1	Acetone	Hh	13.2	ug/kg	2.19	6.61
75-35-4	1,1-Dichloroethylene	HUh	1.32	ug/kg	0.396	1.32
74-88-4	Iodomethane	HUh	6.61	ug/kg	2.11	6.61
75-09-2	Methylene chloride	HUh	6.61	ug/kg	2.64	6.61
75-15-0	Carbon disulfide	HUh	6.61	ug/kg	1.65	6.61
156-60-5	trans-1,2-Dichloroethylene	HUh	1.32	ug/kg	0.396	1.32
75-34-3	1,1-Dichloroethane	HUh	1.32	ug/kg	0.396	1.32
78-93-3	2-Butanone	HUh	6.61	ug/kg	1.98	6.61
156-59-2	cis-1,2-Dichloroethylene	HUh	1.32	ug/kg	0.396	1.32
594-20-7	2,2-Dichloropropane	HUh	1.32	ug/kg	0.396	1.32
67-66-3	Chloroform	HUh	1.32	ug/kg	0.396	1.32
74-97-5	Bromochloromethane	HUh	1.32	ug/kg	0.436	1.32
71-55-6	1,1,1-Trichloroethane	HUh	1.32	ug/kg	0.396	1.32
563-58-6	1,1-Dichloropropene	HUh	1.32	ug/kg	0.396	1.32
56-23-5	Carbon tetrachloride	HUh	1.32	ug/kg	0.396	1.32
107-06-2	1,2-Dichloroethane	HUh	1.32	ug/kg	0.396	1.32
71-43-2	Benzene	HUh	1.32	ug/kg	0.396	1.32
79-01-6	Trichloroethylene	HUh	1.32	ug/kg	0.436	1.32
78-87-5	1,2-Dichloropropane	HUh	1.32	ug/kg	0.396	1.32
75-27-4	Bromodichloromethane	HUh	1.32	ug/kg	0.396	1.32
74-95-3	Dibromomethane	HUh	1.32	ug/kg	0.396	1.32
108-10-1	4-Methyl-2-pentanone	HUh	6.61	ug/kg	1.65	6.61
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.32	ug/kg	0.396	1.32
108-88-3	Toluene	Hh	1.55	ug/kg	0.396	1.32
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.32	ug/kg	0.396	1.32
79-00-5	1,1,2-Trichloroethane	HUh	1.32	ug/kg	0.396	1.32
591-78-6	2-Hexanone	HUh	6.61	ug/kg	1.98	6.61
142-28-9	1,3-Dichloropropane	HUh	1.32	ug/kg	0.396	1.32
127-18-4	Tetrachloroethylene	HUh	1.32	ug/kg	0.396	1.32
124-48-1	Dibromochloromethane	HUh	1.32	ug/kg	0.396	1.32
106-93-4	1,2-Dibromoethane	HUh	1.32	ug/kg	0.396	1.32
108-90-7	Chlorobenzene	HUh	1.32	ug/kg	0.396	1.32

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370016
 Client ID: RE36-10-7482
 Batch ID: 963122
 Run Date: 03/11/2010 11:59
 Prep Date: 03/11/2010 08:16
 Data File: 031110V55B413.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 % Moisture: 24.3
 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	HUh	1.32	ug/kg	0.396	1.32
179601-23-1	m,p-Xylenes	HUh	2.64	ug/kg	0.396	2.64
95-47-6	o-Xylene	HUh	1.32	ug/kg	0.396	1.32
100-42-5	Styrene	HUh	1.32	ug/kg	0.396	1.32
75-25-2	Bromoform	HUh	1.32	ug/kg	0.396	1.32
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.32	ug/kg	0.396	1.32
96-18-4	1,2,3-Trichloropropane	HUh	1.32	ug/kg	0.396	1.32
108-86-1	Bromobenzene	HUh	1.32	ug/kg	0.396	1.32
103-65-1	n-Propylbenzene	HUh	1.32	ug/kg	0.396	1.32
95-49-8	2-Chlorotoluene	HUh	1.32	ug/kg	0.396	1.32
98-82-8	Isopropylbenzene	HUh	1.32	ug/kg	0.396	1.32
108-67-8	1,3,5-Trimethylbenzene	HUh	1.32	ug/kg	0.396	1.32
106-43-4	4-Chlorotoluene	HUh	1.32	ug/kg	0.396	1.32
98-06-6	tert-Butylbenzene	HUh	1.32	ug/kg	0.396	1.32
95-63-6	1,2,4-Trimethylbenzene	HUh	1.32	ug/kg	0.396	1.32
135-98-8	sec-Butylbenzene	HUh	1.32	ug/kg	0.396	1.32
99-87-6	4-Isopropyltoluene	Hh	65.6	ug/kg	0.396	1.32
541-73-1	1,3-Dichlorobenzene	HUh	1.32	ug/kg	0.396	1.32
106-46-7	1,4-Dichlorobenzene	HUh	1.32	ug/kg	0.396	1.32
104-51-8	n-Butylbenzene	HUh	1.32	ug/kg	0.396	1.32
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.32	ug/kg	0.396	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.61	ug/kg	2.11	6.61
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.32	ug/kg	0.396	1.32
95-50-1	1,2-Dichlorobenzene	HUh	1.32	ug/kg	0.396	1.32

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99	8.92	ug/kg	0	J
	unknown hydrocarbon	12.32	7.4	ug/kg	0	J
	unknown hydrocarbon	12.95	65.1	ug/kg	0	J
	unknown hydrocarbon	13.04	6.66	ug/kg	0	J
	unknown hydrocarbon	13.17	10.9	ug/kg	0	J
	unknown aromatic	14.09	7.64	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370017	Date Received: 03/02/2010 08:50	%Moisture: 12.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7480	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 13:46	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:49	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B316.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.387	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.341	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.341	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.341	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.341	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.341	1.14
67-64-1	Acetone	U	5.69	ug/kg	1.89	5.69
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
74-88-4	Iodomethane	U	5.69	ug/kg	1.82	5.69
75-09-2	Methylene chloride	U	5.69	ug/kg	2.28	5.69
75-15-0	Carbon disulfide	U	5.69	ug/kg	1.42	5.69
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.341	1.14
78-93-3	2-Butanone	U	5.69	ug/kg	1.71	5.69
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.341	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	0.341	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.341	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.341	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.341	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.341	1.14
79-01-6	Trichloroethylene	J	0.501	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.341	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.341	1.14
108-10-1	4-Methyl-2-pentanone	U	5.69	ug/kg	1.42	5.69
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
108-88-3	Toluene	J	0.626	ug/kg	0.341	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.341	1.14
591-78-6	2-Hexanone	U	5.69	ug/kg	1.71	5.69
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.341	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.341	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.341	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.341	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.341	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370017
 Client ID: RE36-10-7480
 Batch ID: 963122
 Run Date: 03/10/2010 13:46
 Prep Date: 03/10/2010 08:49
 Data File: 031010V55B316.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.1
 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	1.14	ug/kg	0.341	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.341	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.341	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.341	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.341	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.341	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.341	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.341	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.341	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.341	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.341	1.14
99-87-6	4-Isopropyltoluene	J	0.910	ug/kg	0.341	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.341	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.341	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.69	ug/kg	1.82	5.69
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	11.4	15.4	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370018	Date Received: 03/02/2010 08:50	%Moisture: 26.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7485	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5J	Dilution: 1
Run Date: 03/10/2010 14:13	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:50	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V5\SB317.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.36	ug/kg	0.462	1.36
74-87-3	Chloromethane	U	1.36	ug/kg	0.408	1.36
75-01-4	Vinyl chloride	U	1.36	ug/kg	0.408	1.36
74-83-9	Bromomethane	U	1.36	ug/kg	0.408	1.36
75-00-3	Chloroethane	U	1.36	ug/kg	0.408	1.36
75-69-4	Trichlorofluoromethane	U	1.36	ug/kg	0.408	1.36
67-64-1	Acetone	J	3.69	ug/kg	2.26	6.80
75-35-4	1,1-Dichloroethylene	U	1.36	ug/kg	0.408	1.36
74-88-4	Iodomethane	U	6.80	ug/kg	2.18	6.80
75-09-2	Methylene chloride	U	6.80	ug/kg	2.72	6.80
75-15-0	Carbon disulfide	U	6.80	ug/kg	1.70	6.80
156-60-5	trans-1,2-Dichloroethylene	U	1.36	ug/kg	0.408	1.36
75-34-3	1,1-Dichloroethane	U	1.36	ug/kg	0.408	1.36
78-93-3	2-Butanone	U	6.80	ug/kg	2.04	6.80
156-59-2	cis-1,2-Dichloroethylene	U	1.36	ug/kg	0.408	1.36
594-20-7	2,2-Dichloropropane	U	1.36	ug/kg	0.408	1.36
67-66-3	Chloroform	U	1.36	ug/kg	0.408	1.36
74-97-5	Bromochloromethane	U	1.36	ug/kg	0.449	1.36
71-55-6	1,1,1-Trichloroethane	U	1.36	ug/kg	0.408	1.36
563-58-6	1,1-Dichloropropene	U	1.36	ug/kg	0.408	1.36
56-23-5	Carbon tetrachloride	U	1.36	ug/kg	0.408	1.36
107-06-2	1,2-Dichloroethane	U	1.36	ug/kg	0.408	1.36
71-43-2	Benzene	U	1.36	ug/kg	0.408	1.36
79-01-6	Trichloroethylene	U	1.36	ug/kg	0.449	1.36
78-87-5	1,2-Dichloropropane	U	1.36	ug/kg	0.408	1.36
75-27-4	Bromodichloromethane	U	1.36	ug/kg	0.408	1.36
74-95-3	Dibromomethane	U	1.36	ug/kg	0.408	1.36
108-10-1	4-Methyl-2-pentanone	U	6.80	ug/kg	1.70	6.80
10061-01-5	cis-1,3-Dichloropropylene	U	1.36	ug/kg	0.408	1.36
108-88-3	Toluene	J	0.707	ug/kg	0.408	1.36
10061-02-6	trans-1,3-Dichloropropylene	U	1.36	ug/kg	0.408	1.36
79-00-5	1,1,2-Trichloroethane	U	1.36	ug/kg	0.408	1.36
591-78-6	2-Hexanone	U	6.80	ug/kg	2.04	6.80
142-28-9	1,3-Dichloropropane	U	1.36	ug/kg	0.408	1.36
127-18-4	Tetrachloroethylene	U	1.36	ug/kg	0.408	1.36
124-48-1	Dibromochloromethane	U	1.36	ug/kg	0.408	1.36
106-93-4	1,2-Dibromoethane	U	1.36	ug/kg	0.408	1.36
108-90-7	Chlorobenzene	U	1.36	ug/kg	0.408	1.36

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370018
 Client ID: RE36-10-7485
 Batch ID: 963122
 Run Date: 03/10/2010 14:13
 Prep Date: 03/10/2010 08:50
 Data File: 031010V5\$B317.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26.5
 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	1.36	ug/kg	0.408	1.36
179601-23-1	m,p-Xylenes	U	2.72	ug/kg	0.408	2.72
95-47-6	o-Xylene	U	1.36	ug/kg	0.408	1.36
100-42-5	Styrene	U	1.36	ug/kg	0.408	1.36
75-25-2	Bromoform	U	1.36	ug/kg	0.408	1.36
79-34-5	1,1,2,2-Tetrachloroethane	U	1.36	ug/kg	0.408	1.36
96-18-4	1,2,3-Trichloropropane	U	1.36	ug/kg	0.408	1.36
108-86-1	Bromobenzene	U	1.36	ug/kg	0.408	1.36
103-65-1	n-Propylbenzene	U	1.36	ug/kg	0.408	1.36
95-49-8	2-Chlorotoluene	U	1.36	ug/kg	0.408	1.36
98-82-8	Isopropylbenzene	U	1.36	ug/kg	0.408	1.36
108-67-8	1,3,5-Trimethylbenzene	U	1.36	ug/kg	0.408	1.36
106-43-4	4-Chlorotoluene	U	1.36	ug/kg	0.408	1.36
98-06-6	tert-Butylbenzene	U	1.36	ug/kg	0.408	1.36
95-63-6	1,2,4-Trimethylbenzene	U	1.36	ug/kg	0.408	1.36
135-98-8	sec-Butylbenzene	U	1.36	ug/kg	0.408	1.36
99-87-6	4-Isopropyltoluene		2.35	ug/kg	0.408	1.36
541-73-1	1,3-Dichlorobenzene	U	1.36	ug/kg	0.408	1.36
106-46-7	1,4-Dichlorobenzene	U	1.36	ug/kg	0.408	1.36
104-51-8	n-Butylbenzene	U	1.36	ug/kg	0.408	1.36
96-12-8	1,2-Dibromo-3-chloropropane	U	1.36	ug/kg	0.408	1.36
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.80	ug/kg	2.18	6.80
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.36	ug/kg	0.408	1.36
95-50-1	1,2-Dichlorobenzene	U	1.36	ug/kg	0.408	1.36

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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370019	Date Received: 03/02/2010 08:50	%Moisture: 10
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7488	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 14:39	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:51	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V5\5B318.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.56	ug/kg	1.85	5.56
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.56	ug/kg	1.78	5.56
75-09-2	Methylene chloride	U	5.56	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	U	5.56	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.56	ug/kg	1.67	5.56
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.56	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.56	ug/kg	1.67	5.56
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370019
 Client ID: RE36-10-7488
 Batch ID: 963122
 Run Date: 03/10/2010 14:39
 Prep Date: 03/10/2010 08:51
 Data File: 031010V55B318.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.334	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.56	ug/kg	1.78	5.56
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370020
 Client ID: RE36-10-7484
 Batch ID: 963122
 Run Date: 03/10/2010 15:06
 Prep Date: 03/10/2010 08:52
 Data File: 031010V55B319.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 17.4
 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	1.21	ug/kg	0.412	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.363	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.363	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.363	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.363	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.363	1.21
67-64-1	Acetone	U	6.06	ug/kg	2.01	6.06
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.363	1.21
74-88-4	Iodomethane	U	6.06	ug/kg	1.94	6.06
75-09-2	Methylene chloride	U	6.06	ug/kg	2.42	6.06
75-15-0	Carbon disulfide	U	6.06	ug/kg	1.51	6.06
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.363	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.363	1.21
78-93-3	2-Butanone	U	6.06	ug/kg	1.82	6.06
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.363	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.363	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.363	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.400	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.363	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.363	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.363	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.363	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.363	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.400	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.363	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.363	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.363	1.21
108-10-1	4-Methyl-2-pentanone	U	6.06	ug/kg	1.51	6.06
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.363	1.21
108-88-3	Toluene	J	0.412	ug/kg	0.363	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.363	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.363	1.21
591-78-6	2-Hexanone	U	6.06	ug/kg	1.82	6.06
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.363	1.21
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.363	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.363	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.363	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.363	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370020
 Client ID: RE36-10-7484
 Batch ID: 963122
 Run Date: 03/10/2010 15:06
 Prep Date: 03/10/2010 08:52
 Data File: 031010V55B319.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAS.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 17.4
 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	1.21	ug/kg	0.363	1.21
179601-23-1	m,p-Xylenes	U	2.42	ug/kg	0.363	2.42
95-47-6	o-Xylene	U	1.21	ug/kg	0.363	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.363	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.363	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.363	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.363	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.363	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.363	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.363	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.363	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.363	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.363	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.363	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.363	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.363	1.21
99-87-6	4-Isopropyltoluene		3.42	ug/kg	0.363	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.363	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.363	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.363	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.363	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.06	ug/kg	1.94	6.06
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.363	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.363	1.21

Tentatively Identified Compound Summary

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

Quality Control Summary

Volatile
Surrogate Recovery Report

Page 1 of 2

SDG Number: 10-2150

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202066165	LCS for batch 963120	83	88	107
1202066166	LCS for batch 963120	80	89	106
1202066162	MB for batch 963120	81	89	111
248370002	RE36-10-7420	84	89	117
248370003	RE36-10-7418	78	93	129
248370005	RE36-10-7419	81	91	119
248370007	RE36-10-7478	77	94	135 *
248370008	RE36-10-7490	77	92	122
248370010	RE36-10-7483	76	108	150 *
248370011	RE36-10-7481	77	102	148 *
1202077719	LCS for batch 963120	82	86	110
1202077720	LCS for batch 963120	80	87	110
1202077718	MB for batch 963120	76	86	113
248370013	RE36-10-7477	76	88	125
248370014	RE36-10-7489	74	96	147 *
248370015	RE36-10-7479	78	87	120
248370017	RE36-10-7480	73	95	140 *
248370018	RE36-10-7485	74	91	132 *
248370019	RE36-10-7488	75	86	117
248370020	RE36-10-7484	74	97	152 *
1202077722	LCS for batch 963120	76	85	114
1202077723	LCS for batch 963120	76	85	113
1202077721	MB for batch 963120	75	85	117
1202066163	RE36-10-7488PS	73	83	115

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: 10-2150

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202066164	RE36-10-7488PSD	73	83	116
248370001	RE36-10-7415	76	108	167 *
248370004	RE36-10-7417	73	85	124
248370006	RE36-10-7416	72	86	128
248370009	RE36-10-7487	70	89	141 *
1202077725	LCS for batch 963120	74	82	115
1202077726	LCS for batch 963120	74	83	115
1202077724	MB for batch 963120	70	84	120
248370016	RE36-10-7482	67	85	129
1202079011	LCS for batch 963120	106	104	101
1202079012	LCS for batch 963120	106	104	105
1202079010	MB for batch 963120	106	106	101
1202076534	HB for batch 963120	98 D	102 D	99 D
248370012	RE36-10-7486	103	113	116
248370011	RE36-10-7481REDL	99 D	101 D	98 D

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: 10-2150

Sample Type: Post Spike

Client ID: RE36-10-7488PS

Matrix: R

Lab Sample ID: 1202066163

%Moisture: 10

Instrument: VOA5.I

Analysis Date: 03/11/2010 00:49

Dilution: 1

Analyst: CDS1

Pren Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

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 25.4	51	39-148
74-87-3	PS Chloromethane	50.0	0.00	U 37.1	74	42-131
75-01-4	PS Vinyl chloride	50.0	0.00	U 39.4	79	50-127
74-83-9	PS Bromomethane	50.0	0.00	U 39.0	78	26-135
75-00-3	PS Chloroethane	50.0	0.00	U 39.8	80	54-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00	U 39.9	80	55-138
67-64-1	PS Acetone	250	0.00	U 74.7	30	20-144
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00	U 39.8	80	55-128
74-88-4	PS Iodomethane	250	0.00	U 190	76	47-132
75-09-2	PS Methylene chloride	50.0	0.00	U 41.3	83	56-123
75-15-0	PS Carbon disulfide	250	0.00	U 196	78	53-133
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00	U 41.6	83	57-119
75-34-3	PS 1,1-Dichloroethane	50.0	0.00	U 42.8	86	62-125
78-93-3	PS 2-Butanone	250	0.00	U 107	43	30-150
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00	U 42.2	84	60-124
594-20-7	PS 2,2-Dichloropropane	50.0	0.00	U 38.7	77	56-129
67-66-3	PS Chloroform	50.0	0.00	U 42.6	85	62-120
74-97-5	PS Bromochloromethane	50.0	0.00	U 43.1	86	51-135
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00	U 42.8	86	58-129
563-58-6	PS 1,1-Dichloropropene	50.0	0.00	U 40.8	82	59-126
56-23-5	PS Carbon tetrachloride	50.0	0.00	U 42.7	85	55-132
107-06-2	PS 1,2-Dichloroethane	50.0	0.00	U 42.0	84	54-121

Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 6

SDG Number: 10-2150

Sample Type: Post Spike

Client ID: RE36-10-7488PS

Matrix: R

Lab Sample ID: 1202066163

% Moisture: 10

Instrument: VOA5.I

Analysis Date: 03/11/2010 00:49

Dilution: 1

Analyst: CDS1

Pre Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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 41.2	82	58-120
79-01-6	PS Trichloroethylene	50.0	0.00	U 40.2	80	54-130
78-87-5	PS 1,2-Dichloropropane	50.0	0.00	U 42.2	84	59-121
75-27-4	PS Bromodichloromethane	50.0	0.00	U 44.4	89	57-130
74-95-3	PS Dibromomethane	50.0	0.00	U 44.2	88	57-124
108-10-1	PS 4-Methyl-2-pentanone	250	0.00	U 183	73	40-137
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00	U 38.3	77	50-131
108-88-3	PS Toluene	50.0	0.00	U 39.5	79	54-119
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00	U 39.1	78	47-133
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00	U 41.7	83	60-130
591-78-6	PS 2-Hexanone	250	0.00	U 79.4	32	30-139
142-28-9	PS 1,3-Dichloropropane	50.0	0.00	U 41.3	83	59-125
127-18-4	PS Tetrachloroethylene	50.0	0.00	U 38.0	76	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 41.0	82	55-127
108-90-7	PS Chlorobenzene	50.0	0.00	U 39.5	79	50-130
100-41-4	PS Ethylbenzene	50.0	0.00	U 37.8	76	50-121
179601-23-1	PS m,p-Xylenes	100	0.00	U 77.2	77	47-125
95-47-6	PS o-Xylene	50.0	0.00	U 39.7	79	51-127
100-42-5	PS Styrene	50.0	0.00	U 40.0	80	41-136
75-25-2	PS Bromoform	50.0	0.00	U 45.9	92	48-143
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00	U 40.9	82	52-129

Volatile

Page 3 of 6

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Post Spike

Client ID: RE36-10-7488PS

Matrix: R

Lab Sample ID: 1202066163

%Moisture: 10

Instrument: VOA5.I

Analysis Date: 03/11/2010 00:49

Dilution: 1

Analyst: CDS1

Pren Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

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	42.3	85	56-139
108-86-1	PS Bromobenzene	50.0	0.00 U	39.4	79	54-125
103-65-1	PS n-Propylbenzene	50.0	0.00 U	38.0	76	46-127
95-49-8	PS 2-Chlorotoluene	50.0	0.00 U	39.8	80	47-130
98-82-8	PS Isopropylbenzene	50.0	0.00 U	40.6	81	42-126
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00 U	39.0	78	44-132
106-43-4	PS 4-Chlorotoluene	50.0	0.00 U	37.2	74	46-127
98-06-6	PS tert-Butylbenzene	50.0	0.00 U	38.5	77	48-136
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00 U	38.4	77	42-132
135-98-8	PS sec-Butylbenzene	50.0	0.00 U	38.3	77	47-130
99-87-6	PS 4-Isopropyltoluene	50.0	0.00 U	33.6	67	36-142
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00 U	36.4	73	41-130
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00 U	35.8	72	41-126
104-51-8	PS n-Butylbenzene	50.0	0.00 U	33.5	67	37-136
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00 U	37.5	75	42-143
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00 U	42.5	85	58-127
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00 U	37.0	74	42-128

Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 6

SDG Number: 10-2150

Sample Type: Post Spike Duplicate

Client ID: RE36-10-7488PSD

Matrix: R

Lab Sample ID: 1202066164

%Moisture: 10

Instrument: VOA5.I

Analysis Date: 03/11/2010 01:15

Dilution: 1

Analyst: CDS1

Pren Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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 25.2	50	39-148	1	0-19
74-87-3	PSD Chloromethane	50.0	0.00	U 36.6	73	42-131	1	0-23
75-01-4	PSD Vinyl chloride	50.0	0.00	U 39.3	79	50-127	0	0-23
74-83-9	PSD Bromomethane	50.0	0.00	U 38.7	77	26-135	1	0-22
75-00-3	PSD Chloroethane	50.0	0.00	U 39.3	79	54-128	1	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00	U 39.7	79	55-138	0	0-21
67-64-1	PSD Acetone	250	0.00	U 73.5	29	20-144	2	0-22
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00	U 39.7	79	55-128	0	0-20
74-88-4	PSD Iodomethane	250	0.00	U 189	76	47-132	0	0-20
75-09-2	PSD Methylene chloride	50.0	0.00	U 41.5	83	56-123	1	0-20
75-15-0	PSD Carbon disulfide	250	0.00	U 196	78	53-133	0	0-22
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00	U 41.3	83	57-119	1	0-20
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00	U 42.6	85	62-125	1	0-20
78-93-3	PSD 2-Butanone	250	0.00	U 103	41	30-150	4	0-21
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00	U 42.2	84	60-124	0	0-20
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00	U 39.2	78	56-129	1	0-20
67-66-3	PSD Chloroform	50.0	0.00	U 42.7	85	62-120	0	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00	U 43.3	87	51-135	0	0-20
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00	U 42.6	85	58-129	0	0-20
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00	U 41.2	82	59-126	1	0-20
56-23-5	PSD Carbon tetrachloride	50.0	0.00	U 42.7	85	55-132	0	0-20
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00	U 41.9	84	54-121	0	0-20

Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 6

SDG Number: 10-2150

Sample Type: Post Spike Duplicate

Client ID: RE36-10-7488PSD

Matrix: R

Lab Sample ID: 1202066164

% Moisture: 10

Instrument: VOA5.1

Analysis Date: 03/11/2010 01:15

Dilution: 1

Analyst: CDS1

Pre Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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	40.6	81	58-120	1	0-20
79-01-6	PSD Trichloroethylene	50.0	0.00 U	39.9	80	54-130	1	0-23
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00 U	41.9	84	59-121	1	0-20
75-27-4	PSD Bromodichloromethane	50.0	0.00 U	44.2	88	57-130	0	0-20
74-95-3	PSD Dibromomethane	50.0	0.00 U	44.0	88	57-124	0	0-20
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00 U	176	71	40-137	4	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00 U	38.0	76	50-131	1	0-20
108-88-3	PSD Toluene	50.0	0.00 U	39.3	79	54-119	1	0-23
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00 U	38.3	77	47-133	2	0-24
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00 U	40.2	80	60-130	4	0-20
591-78-6	PSD 2-Hexanone	250	0.00 U	84.1	34	30-139	6	0-21
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00 U	41.2	82	59-125	0	0-20
127-18-4	PSD Tetrachloroethylene	50.0	0.00 U	38.2	76	50-126	1	0-20
124-48-1	PSD Dibromochloromethane	50.0	0.00 U	43.1	86	54-131	1	0-23
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00 U	40.3	81	55-127	2	0-23
108-90-7	PSD Chlorobenzene	50.0	0.00 U	39.6	79	50-130	0	0-24
100-41-4	PSD Ethylbenzene	50.0	0.00 U	37.9	76	50-121	0	0-24
179601-23-1	PSD m,p-Xylenes	100	0.00 U	77.7	78	47-125	1	0-25
95-47-6	PSD o-Xylene	50.0	0.00 U	39.6	79	51-127	0	0-24
100-42-5	PSD Styrene	50.0	0.00 U	39.9	80	41-136	0	0-24
75-25-2	PSD Bromoform	50.0	0.00 U	44.7	89	48-143	3	0-20
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00 U	40.0	80	52-129	2	0-20

Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-2150

Sample Type: Post Spike Duplicate

Client ID: RE36-10-7488PSD

Matrix: R

Lab Sample ID: 1202066164

%Moisture: 10

Instrument: VOA5.1

Analysis Date: 03/11/2010 01:15

Dilution: 1

Analyst: CDS1

Prep Batch #: 963120

Purge Vol: 5 mL

Batch ID: 963122

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 40.9	82	56-139	3	0-34
108-86-1	PSD Bromobenzene	50.0	0.00	U 39.8	80	54-125	1	0-22
103-65-1	PSD n-Propylbenzene	50.0	0.00	U 38.5	77	46-127	1	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U 39.8	80	47-130	0	0-24
98-82-8	PSD Isopropylbenzene	50.0	0.00	U 40.6	81	42-126	0	0-22
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U 39.5	79	44-132	1	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U 37.5	75	46-127	1	0-26
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U 38.5	77	48-136	0	0-24
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U 38.9	78	42-132	1	0-26
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U 38.6	77	47-130	1	0-27
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U 34.0	68	36-142	1	0-27
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U 36.6	73	41-130	0	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U 36.1	72	41-126	1	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U 34.0	68	37-136	1	0-29
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U 36.2	72	42-143	4	0-21
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U 42.4	85	58-127	0	0-20
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U 37.2	74	42-128	0	0-24

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 3

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202066165

Instrument: VOA5.I

Analysis Date: 03/09/2010 20:24

Dilution: 1

Analyst: CDS1

Pre Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

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	41.6	83	52-151
74-87-3	LCS Chloromethane	50.0	0.0	45.9	92	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	48.3	97	66-130
74-83-9	LCS Bromomethane	50.0	0.0	46.8	94	70-126
75-00-3	LCS Chloroethane	50.0	0.0	45.4	91	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	48.2	96	73-143
67-64-1	LCS Acetone	250	0.0	196	78	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	45.4	91	71-129
74-88-4	LCS Iodomethane	250	0.0	223	89	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	45.3	91	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	46.3	93	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	46.9	94	73-120
78-93-3	LCS 2-Butanone	250	0.0	206	82	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	46.1	92	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	45.3	91	73-134
67-66-3	LCS Chloroform	50.0	0.0	46.3	93	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	47.2	94	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	47.6	95	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	47.5	95	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	48.5	97	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	46.1	92	65-120

Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 3

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202066165

Instrument: VOA5.I

Analysis Date: 03/09/2010 20:24

Dilution: 1

Analyst: CDS1

Pre Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	45.1	90	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	46.4	93	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	45.8	92	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	48.5	97	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	48.7	97	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	236	94	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	46.9	94	78-127
108-88-3	LCS Toluene	50.0	0.0	44.0	88	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	47.0	94	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	45.6	91	75-120
591-78-6	LCS 2-Hexanone	250	0.0	206	83	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	46.0	92	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	45.2	90	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	48.9	98	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	46.7	93	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	44.7	89	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	43.3	87	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	90.7	91	76-120
95-47-6	LCS o-Xylene	50.0	0.0	44.8	90	76-122
100-42-5	LCS Styrene	50.0	0.0	47.8	96	75-125
75-25-2	LCS Bromoform	50.0	0.0	49.7	99	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	44.5	89	72-122

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: J202066165

Instrument: VOA5.I

Analysis Date: 03/09/2010 20:24

Dilution: 1

Analyst: CDS1

Pren Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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	45.9	92	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	43.6	87	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	43.9	88	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	44.9	90	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	44.5	89	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	42.8	86	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	43.2	86	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	44.5	89	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	44.7	89	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	44.9	90	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	43.6	87	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	43.5	87	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	42.9	86	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	45.7	91	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	46.7	93	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	44.3	89	75-120

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID:1202066166

Instrument: VOA5.I

Analysis Date: 03/09/2010 20:52

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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	308	123	67-140

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077719

Instrument: VOA5.1

Analysis Date: 03/10/2010 08:18

Dilution: 1

Analyst: CDS1

Pren Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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	41.8	84	52-151
74-87-3	LCS Chloromethane	50.0	0.0	45.9	92	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	50.4	101	66-130
74-83-9	LCS Bromomethane	50.0	0.0	47.5	95	70-126
75-00-3	LCS Chloroethane	50.0	0.0	46.9	94	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	51.1	102	73-143
67-64-1	LCS Acetone	250	0.0	212	85	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	49.0	98	71-129
74-88-4	LCS Iodomethane	250	0.0	232	93	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	46.4	93	64-121
75-15-0	LCS Carbon disulfide	250	0.0	247	99	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	48.6	97	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	48.8	98	73-120
78-93-3	LCS 2-Butanone	250	0.0	221	88	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	48.1	96	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	50.2	100	73-134
67-66-3	LCS Chloroform	50.0	0.0	47.9	96	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	48.3	97	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	50.2	100	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	50.3	101	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	51.7	103	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	46.8	94	65-120

Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077719

Instrument: VOA5.I

Analysis Date: 03/10/2010 08:18

Dilution: 1

Analyst: CDS1

Pre Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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	46.6	93	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	48.7	97	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	46.8	94	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	49.9	100	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	49.0	98	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	244	98	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	48.2	96	78-127
108-88-3	LCS Toluene	50.0	0.0	45.1	90	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	47.7	95	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	45.6	91	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	46.1	92	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	47.4	95	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	49.0	98	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	46.9	94	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	45.9	92	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	44.4	89	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	93.0	93	76-120
95-47-6	LCS o-Xylene	50.0	0.0	46.0	92	76-122
100-42-5	LCS Styrene	50.0	0.0	48.6	97	75-125
75-25-2	LCS Bromoform	50.0	0.0	50.9	102	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	45.1	90	72-122

Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077719

Instrument: VOA5.I

Analysis Date: 03/10/2010 08:18

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	46.4	93	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	44.5	89	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	45.5	91	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	45.2	90	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	46.3	93	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	45.9	92	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	44.3	89	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	44.9	90	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	45.8	92	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	46.7	93	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	47.2	94	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	44.6	89	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	44.6	89	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	45.1	90	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	46.1	92	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	47.5	95	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	45.2	90	75-120

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID:1202077720

Instrument: VOA5.I

Analysis Date: 03/10/2010 08:49

Dilution: 1

Analyst: CDS1

Pre Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

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	345	138	67-140

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077722

Instrument: VOA5.I

Analysis Date: 03/10/2010 19:59

Dilution: 1

Analyst: CDS1

Prep Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

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	29.2	58	52-151
74-87-3	LCS Chloromethane	50.0	0.0	39.1	78	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	42.1	84	66-130
74-83-9	LCS Bromomethane	50.0	0.0	43.0	86	70-126
75-00-3	LCS Chloroethane	50.0	0.0	42.2	84	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	44.5	89	73-143
67-64-1	LCS Acetone	250	0.0	171	68	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	43.2	86	71-129
74-88-4	LCS Iodomethane	250	0.0	213	85	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	222	89	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	44.7	89	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	45.3	91	73-120
78-93-3	LCS 2-Butanone	250	0.0	181	72	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	44.9	90	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	43.9	88	73-134
67-66-3	LCS Chloroform	50.0	0.0	44.7	89	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	44.8	90	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	45.6	91	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	45.9	92	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	46.6	93	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	44.2	88	65-120

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077722

Instrument: VOA5.J

Analysis Date: 03/10/2010 19:59

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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	43.5	87	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	44.4	89	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	44.4	89	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	46.5	93	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	45.9	92	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	207	83	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	44.9	90	78-127
108-88-3	LCS Toluene	50.0	0.0	41.6	83	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	44.4	89	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	42.4	85	75-120
591-78-6	LCS 2-Hexanone	250	0.0	179	72	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	42.7	85	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	42.5	85	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	45.6	91	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	43.5	87	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	42.6	85	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	41.2	82	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	85.3	85	76-120
95-47-6	LCS o-Xylene	50.0	0.0	42.2	84	76-122
100-42-5	LCS Styrene	50.0	0.0	45.3	91	75-125
75-25-2	LCS Bromoform	50.0	0.0	46.1	92	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	40.4	81	72-122

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077722

Instrument: VOA5.1

Analysis Date: 03/10/2010 19:59

Dilution: 1

Analyst: CDS1

Pre Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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	41.6	83	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	41.4	83	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	41.7	83	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	42.2	84	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	43.0	86	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	42.5	85	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	41.5	83	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	41.3	83	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	42.4	85	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	42.9	86	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	43.3	87	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	41.6	83	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	41.3	83	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	41.5	83	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	40.0	80	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	44.2	88	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	42.0	84	75-120

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID:1202077723

Instrument: VOA5.I

Analysis Date: 03/10/2010 20:25

Dilution: 1

Analyst: CDS1

Prep Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

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: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077725

Instrument: VOA5.I

Analysis Date: 03/11/2010 08:01

Dilution: 1

Analyst: CDS1

Pren Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077725

Instrument: VOA5.I

Analysis Date: 03/11/2010 08:01

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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

Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077725

Instrument: VOA5.I

Analysis Date: 03/11/2010 08:01

Dilution: 1

Analyst: CDS1

Pre Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 1

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202077726

Instrument: VOA5.I

Analysis Date: 03/11/2010 08:27

Dilution: 1

Analyst: CDS1

Pren Batch ID: 963120

Purge Vol: 5 mL

Batch ID: 963122

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	336	134	67-140

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 3

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202079011

Instrument: VOA3.I

Analysis Date: 03/19/2010 16:38

Dilution: 1

Analyst: CDS1

Pre Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

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	56.2	112	52-151
74-87-3	LCS Chloromethane	50.0	0.0	49.9	100	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	53.4	107	66-130
74-83-9	LCS Bromomethane	50.0	0.0	49.5	99	70-126
75-00-3	LCS Chloroethane	50.0	0.0	50.2	100	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	53.1	106	73-143
67-64-1	LCS Acetone	250	0.0	177	71	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	46.2	92	71-129
74-88-4	LCS Iodomethane	250	0.0	218	87	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	41.1	82	64-121
75-15-0	LCS Carbon disulfide	250	0.0	238	95	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	46.9	94	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	47.4	95	73-120
78-93-3	LCS 2-Butanone	250	0.0	179	72	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	47.5	95	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	58.2	116	73-134
67-66-3	LCS Chloroform	50.0	0.0	46.8	94	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	46.3	93	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	50.5	101	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	49.8	100	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	52.8	106	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	44.8	90	65-120

Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 3

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202079011

Instrument: VOA3.1

Analysis Date: 03/19/2010 16:38

Dilution: 1

Analyst: CDS1

Prep Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	45.8	92	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	48.1	96	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	48.2	96	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	49.9	100	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	47.7	95	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	252	101	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	52.0	104	78-127
108-88-3	LCS Toluene	50.0	0.0	47.5	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	49.6	99	75-120
591-78-6	LCS 2-Hexanone	250	0.0	208	83	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	47.3	95	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	47.7	95	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	52.1	104	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	48.9	98	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	46.8	94	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	47.4	95	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	96.8	97	76-120
95-47-6	LCS o-Xylene	50.0	0.0	50.3	101	76-122
100-42-5	LCS Styrene	50.0	0.0	51.2	102	75-125
75-25-2	LCS Bromoform	50.0	0.0	43.8	88	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	48.0	96	72-122

Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID: 1202079011

Instrument: VOA3.I

Analysis Date: 03/19/2010 16:38

Dilution: 1

Analyst: CDS1

Prep Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	47.1	94	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	46.5	93	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	48.4	97	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	46.9	94	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	49.4	99	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	49.2	98	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	48.3	97	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	49.9	100	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	48.6	97	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	49.1	98	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	50.8	102	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	45.8	92	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	46.8	94	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	50.9	102	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	44.7	89	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	49.9	100	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	46.2	92	75-120

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 1

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963120

Matrix: SOIL

Lab Sample ID:1202079012

Instrument: VOA3.I

Analysis Date: 03/19/2010 17:07

Dilution: 1

Analyst: CDS1

Pre Batch II 963120

Purge Vol: 5 mL

Batch ID: 963122

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	233	93	67-140

Method Blank Summary

Page 1 of 1

SDG Number:	10-2150	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 963120	Instrument ID:	VOA5.I	Data File:	030910V5\SB232.D
Lab Sample ID:	1202066162	Prep Date:	03/09/2010 17:00	Analyzed:	03/09/10 21:46
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 963120	1202066165	030910V5\SB229.D	03/09/10	2024
02 LCS for batch 963120	1202066166	030910V5\SB230sls.D	03/09/10	2052
03 RE36-10-7420	248370002	030910V5\SB237.D	03/10/10	0003
04 RE36-10-7418	248370003	030910V5\SB238.D	03/10/10	0030
05 RE36-10-7419	248370005	030910V5\SB240.D	03/10/10	0125
06 RE36-10-7478	248370007	030910V5\SB242.D	03/10/10	0219
07 RE36-10-7490	248370008	030910V5\SB243.D	03/10/10	0247
08 RE36-10-7483	248370010	030910V5\SB245.D	03/10/10	0341
09 RE36-10-7481	248370011	030910V5\SB246.D	03/10/10	0409

Method Blank Summary

Page 1 of 1

SDG Number:	10-2150	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 963120	Instrument ID:	VOA5.I	Data File:	031010V5\5B307BSP.D
Lab Sample ID:	1202077718	Prep Date:	03/10/2010 06:00	Analyzed:	03/10/10 09:44
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 963120	1202077719	031010V5\5B304LP.D	03/10/10	0818
02 LCS for batch 963120	1202077720	031010V5\5B305SLSP.D	03/10/10	0849
03 RE36-10-7477	248370013	031010V5\5B312.D	03/10/10	1159
04 RE36-10-7489	248370014	031010V5\5B313.D	03/10/10	1226
05 RE36-10-7479	248370015	031010V5\5B314.D	03/10/10	1253
06 RE36-10-7480	248370017	031010V5\5B316.D	03/10/10	1346
07 RE36-10-7485	248370018	031010V5\5B317.D	03/10/10	1413
08 RE36-10-7488	248370019	031010V5\5B318.D	03/10/10	1439
09 RE36-10-7484	248370020	031010V5\5B319.D	03/10/10	1506

Method Blank Summary

Page 1 of 1

SDG Number:	10-2150	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 963120	Instrument ID:	VOA5.I	Data File:	031010V5\5B333BSK.D
Lab Sample ID:	1202077721	Prep Date:	03/10/2010 17:00	Analyzed:	03/10/10 21:18
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 963120	1202077722	031010V5\5B330LK.D	03/10/10	1959
02 LCS for batch 963120	1202077723	031010V5\5B331SLSK.D	03/10/10	2025
03 RE36-10-7488PS	1202066163	031010V5\5B341.D	03/11/10	0049
04 RE36-10-7488PSD	1202066164	031010V5\5B342.D	03/11/10	0115
05 RE36-10-7415	248370001	031010V5\5B344.D	03/11/10	0208
06 RE36-10-7417	248370004	031010V5\5B345.D	03/11/10	0234
07 RE36-10-7416	248370006	031010V5\5B346.D	03/11/10	0301
08 RE36-10-7487	248370009	031010V5\5B348.D	03/11/10	0354

Method Blank Summary

Page 1 of 1

SDG Number:	10-2150	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 963120	Instrument ID:	VOA5.I	Data File:	031110V55B407BSz.D
Lab Sample ID:	1202077724	Prep Date:	03/11/2010 06:00	Analyzed:	03/11/10 09:20
Column:	DB-624				

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

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 963120	1202077725	031110V55B404LSz.D	03/11/10	0801
02 LCS for batch 963120	1202077726	031110V55B405SLSz.D	03/11/10	0827
03 RE36-10-7482	248370016	031110V55B413.D	03/11/10	1159

Method Blank Summary

Page 1 of 1

SDG Number:	10-2150	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 963120	Instrument ID:	VOA3.I	Data File:	031910V3\3D506.D
Lab Sample ID:	1202079010	Prep Date:	03/19/2010 11:35	Analyzed:	03/19/10 18:05
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 963120	1202079011	031910V3\3D503LS1.D	03/19/10	1638
02 LCS for batch 963120	1202079012	031910V3\3D504SLS1.D	03/19/10	1707
03 HB for batch 963120	1202076534	031910V3\3D507.D	03/19/10	1834
04 RE36-10-7486	248370012	031910V3\3D508.D	03/19/10	1903
05 RE36-10-7481REDL	248370011	031910V3\3D510.D	03/19/10	2001

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: VOA3.I

Injection Date/Time: 26-FEB-10 09:25

Column Description: DB-624

Lab File ID 022610V3\3A501.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	17.8
75	30.0 - 60.0% of mass 95	47
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	82.6
175	5.0 - 9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	97.7
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
ICALMIX[A]	W3VM100226-01	022610V3\3A503.D	26-FEB-10 10:23
ICALMIX[A]	W3VM100226-02	022610V3\3A504.D	26-FEB-10 10:53
ICALMIX[A]	W3VM100226-03	022610V3\3A505.D	26-FEB-10 11:23
ICALMIX[A]	W3VM100226-04	022610V3\3A506.D	26-FEB-10 11:52
ICALMIX[A]	W3VM100226-05	022610V3\3A507.D	26-FEB-10 12:22
ICALMIX[A]	W3VM100226-07	022610V3\3A509.D	26-FEB-10 13:21
ICALMIX[A]	W3VM100226-08	022610V3\3A511.D	26-FEB-10 14:20
ICVMIX[A]01	W3VM100226-10	022610V3\3A513.D	26-FEB-10 15:19
ICALMIX[B]	W3VM100226-11	022610V3\3A515.D	26-FEB-10 16:17
ICALMIX[B]	W3VM100226-12	022610V3\3A516.D	26-FEB-10 16:46
ICALMIX[B]	W3VM100226-13	022610V3\3A517.D	26-FEB-10 17:15
ICALMIX[B]	W3VM100226-14	022610V3\3A518.D	26-FEB-10 17:45
ICALMIX[B]	W3VM100226-15	022610V3\3A519.D	26-FEB-10 18:14
ICALMIX[B]	W3VM100226-16	022610V3\3A520.D	26-FEB-10 18:43
ICALMIX[B]	W3VM100226-17	022610V3\3A521.D	26-FEB-10 19:14
ICVMIX[B]02	W3VM100226-18	022610V3\3A523.D	26-FEB-10 20:12

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: VOA3.1

Injection Date/Time: 19-MAR-10 15:32

Column Description: DB-624

Lab File ID 031910V3\3D501.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	18.6
75	30.0 - 60.0% of mass 95	47.9
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	79.5
175	5.0 - 9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	99
177	5.0 - 9.0% of mass 176	6.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]02	W3VM100319-01	031910V3\3D502.D	19-MAR-10 15:58
BLK05LCS	1202079011	031910V3\3D503LS1.D	19-MAR-10 16:38
CCVMIX[B]03	W3VM100319-03	031910V3\3D504.D	19-MAR-10 17:07
BLK05SLCS	1202079012	031910V3\3D504SLS1.D	19-MAR-10 17:07
BLK05	1202079010	031910V3\3D506.D	19-MAR-10 18:05
HBLK01	1202076534	031910V3\3D507.D	19-MAR-10 18:34
RE36-10-7486	248370012	031910V3\3D508.D	19-MAR-10 19:03
RE36-10-7481REDL	248370011	031910V3\3D510.D	19-MAR-10 20:01

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: VOA5.1

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

Column Description: DB-624

Lab File ID 030310V5\5A301.D

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

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

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

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date/Time: 09-MAR-10 19:02

Column Description: DB-624

Lab File ID 030910V5\5B226.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	19.5
75	30.0 - 60.0% of mass 95	44.2
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	76.9
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.8
177	5.0 - 9.0% of mass 176	6.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]02	W5VM100309-05	030910V5\5B227.D	09-MAR-10 19:29
BLK01LCS	1202066165	030910V5\5B229.D	09-MAR-10 20:24
CCVMIX[B]03	W5VM100309-08	030910V5\5B230.D	09-MAR-10 20:52
BLK01SLCS	1202066166	030910V5\5B230sls.D	09-MAR-10 20:52
BLK01	1202066162	030910V5\5B232.D	09-MAR-10 21:46
RE36-10-7420	248370002	030910V5\5B237.D	10-MAR-10 00:03
RE36-10-7418	248370003	030910V5\5B238.D	10-MAR-10 00:30
RE36-10-7419	248370005	030910V5\5B240.D	10-MAR-10 01:25
RE36-10-7478	248370007	030910V5\5B242.D	10-MAR-10 02:19
RE36-10-7490	248370008	030910V5\5B243.D	10-MAR-10 02:47
RE36-10-7483	248370010	030910V5\5B245.D	10-MAR-10 03:41
RE36-10-7481	248370011	030910V5\5B246.D	10-MAR-10 04:09

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date/Time: 10-MAR-10 06:44

Column Description: DB-624

Lab File ID 031010V55B301.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	19.7
75	30.0 - 60.0% of mass 95	45.7
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.7
174	50.0 - 100.0% of mass 95	79.9
175	5.0 - 9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	95
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]04	W5VM100310-01	031010V55B302.D	10-MAR-10 07:11
BLK02LCS	1202077719	031010V55B304LP.D	10-MAR-10 08:18
CCVMIX[B]05	W5VM100310-04	031010V55B305.D	10-MAR-10 08:49
BLK02SLCS	1202077720	031010V55B305SLSP.D	10-MAR-10 08:49
BLK02	1202077718	031010V55B307BSP.D	10-MAR-10 09:44
RE36-10-7477	248370013	031010V55B312.D	10-MAR-10 11:59
RE36-10-7489	248370014	031010V55B313.D	10-MAR-10 12:26
RE36-10-7479	248370015	031010V55B314.D	10-MAR-10 12:53
RE36-10-7480	248370017	031010V55B316.D	10-MAR-10 13:46
RE36-10-7485	248370018	031010V55B317.D	10-MAR-10 14:13
RE36-10-7488	248370019	031010V55B318.D	10-MAR-10 14:39
RE36-10-7484	248370020	031010V55B319.D	10-MAR-10 15:06

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date/Time: 10-MAR-10 18:39

Column Description: DB-624

Lab File ID 031010V5\5B327.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	44.9
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	76.7
175	5.0 - 9.0% of mass 174	7.4
176	95.0 - 101.0% of mass 174	97.4
177	5.0 - 9.0% of mass 176	6.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]06	W5VM100310-05	031010V5\5B328.D	10-MAR-10 19:06
BLK03LCS	1202077722	031010V5\5B330LK.D	10-MAR-10 19:59
CCVMIX[B]07	W5VM100310-08	031010V5\5B331.D	10-MAR-10 20:25
BLK03SLCS	1202077723	031010V5\5B331SLSK.D	10-MAR-10 20:25
BLK03	1202077721	031010V5\5B333BSK.D	10-MAR-10 21:18
RE36-10-7488MS	1202066163	031010V5\5B341.D	11-MAR-10 00:49
RE36-10-7488MSD	1202066164	031010V5\5B342.D	11-MAR-10 01:15
RE36-10-7415	248370001	031010V5\5B344.D	11-MAR-10 02:08
RE36-10-7417	248370004	031010V5\5B345.D	11-MAR-10 02:34
RE36-10-7416	248370006	031010V5\5B346.D	11-MAR-10 03:01
RE36-10-7487	248370009	031010V5\5B348.D	11-MAR-10 03:54

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: VOA5.I

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

Column Description: DB-624

Lab File ID 031110V5\5B401.D

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

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]08	W5VM100311-01	031110V5\5B402.D	11-MAR-10 07:08
BLK04LCS	1202077725	031110V5\5B404LSz.D	11-MAR-10 08:01
CCVMIX[B]09	W5VM100311-04	031110V5\5B405.D	11-MAR-10 08:27
BLK04SLCS	1202077726	031110V5\5B405SLSz.D	11-MAR-10 08:27
BLK04	1202077724	031110V5\5B407BSz.D	11-MAR-10 09:20
RE36-10-7482	248370016	031110V5\5B413.D	11-MAR-10 11:59

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2150

Instrument: VOA3.I

STD Analysis Time: 19-MAR-10 15:58

GC Column: DB-624

Data File: C:\msdchem\1\DATA\031910V3\3D502.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	862609		12.2	673160		15.9	348012		18.4
Upper Limit	1725218		12.7	1346320		16.4	696024		18.9
Lower Limit	431305		11.7	336580		15.4	174006		17.9
Sample ID									
BLK05LCS	877132		12.2	686463		15.9	367178		18.4
BLK05SLCS	862427		12.2	672269		15.9	346549		18.4
BLK05	792360		12.2	602736		15.9	305805		18.4
HBLK01	824950		12.2	628348		15.9	311184		18.4
RE36-10-7486	695268		12.2	452573		15.9	166782	*	18.4
RE36-10-7481REDL	841763		12.2	624771		15.9	313631		18.4

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: 10-2150

Instrument: VOA5.1

STD Analysis Time: 09-MAR-10 19:29

GC Column: DB-624

Data File: C:\msdchem\1\DATA\030910V5\SB227.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1703057		8.39	1259186		11.1	646924		13.4
Upper Limit	3406114		8.89	2518372		11.6	1293848		13.9
Lower Limit	851529		7.89	629593		10.6	323462		12.9
Sample ID									
BLK01LCS	1710301		8.39	1274788		11.1	661108		13.4
BLK01SLCS	1740286		8.39	1283500		11.1	652615		13.4
BLK01	1700381		8.39	1245309		11.1	604375		13.4
RE36-10-7420	1688078		8.39	1226590		11.1	556082		13.4
RE36-10-7418	1670251		8.39	1135805		11.1	424530		13.4
RE36-10-7419	1603572		8.39	1118659		11.1	484651		13.4
RE36-10-7478	1570705		8.39	1035152		11.1	359259		13.4
RE36-10-7490	1579768		8.39	1076316		11.1	444411		13.4
RE36-10-7483	1486199		8.39	827346		11.1	223756	*	13.4
RE36-10-7481	1460506		8.39	853405		11.1	261177	*	13.4

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2150

Instrument: VOA5.I

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

GC Column: DB-624

Data File: C:\msdchem\1\DATA\031010V5\5B302.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT	Area	#	RT	Area	#	RT
12 Hour STD	1606795		8.39	1185606		11.1	589666		13.4
Upper Limit	3213590		8.89	2371212		11.6	1179332		13.9
Lower Limit	803398		7.89	592803		10.6	294833		12.9
Sample ID									
BLK02LCS	1608873		8.39	1214523		11.1	628122		13.4
BLK02SICS	1609574		8.39	1196444		11.1	611684		13.4
BLK02	1604852		8.39	1181429		11.1	565420		13.4
RE36-10-7477	1578466		8.39	1109102		11.1	457050		13.4
RE36-10-7489	1521542		8.39	953744		11.1	295035		13.4
RE36-10-7479	1566150		8.39	1125228		11.1	502609		13.4
RE36-10-7480	1517801		8.39	970064		11.1	320863		13.4
RE36-10-7485	1495262		8.39	989477		11.1	371975		13.4
RE36-10-7488	1537688		8.39	1116330		11.1	516207		13.4
RE36-10-7484	1498245		8.39	914678		11.1	269793	*	13.4

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2150

Instrument: VOA5.I

STD Analysis Time: 10-MAR-10 19:06

GC Column: DB-624

Data File: C:\msdchem\1\DATA\031010V5\5B328.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1508539		8.39	1111966		11.1	565862		13.4
Upper Limit	3017078		8.89	2223932		11.6	1131724		13.9
Lower Limit	754270		7.89	555983		10.6	282931		12.9
Sample ID									
BLK03LCS	1483847		8.39	1122837		11.1	573907		13.4
BLK03SLCS	1513110		8.39	1129367		11.1	570266		13.4
BLK03	1478853		8.39	1097369		11.1	531739		13.4
RE36-10-7488MS	1483617		8.39	1098636		11.1	537169		13.4
RE36-10-7488MSD	1472263		8.39	1097317		11.1	534367		13.4
RE36-10-7415	1125472		8.39	559098		11.1	131849	*	13.4
RE36-10-7417	1405834		8.39	1000558		11.1	441202		13.4
RE36-10-7416	1412003		8.39	989339		11.1	406956		13.4
RE36-10-7487	1383468		8.39	904952		11.1	309556		13.4

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2150

Instrument: VOA5.1

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

GC Column: DB-624

Data File: C:\msdchem\1\DATA\031110V5\5B402.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1428247		8.39	1072946		11.1	550065		13.4
Upper Limit	2856494		8.89	2145892		11.6	1100130		13.9
Lower Limit	714124		7.89	536473		10.6	275033		12.9
Sample ID									
BLK04LCS	1393474		8.39	1064611		11.1	553083		13.4
BLK04SLCS	1397071		8.39	1054675		11.1	537423		13.4
BLK04	1402275		8.39	1039581		11.1	502993		13.4
RE36-10-7482	1396823		8.39	971626		11.1	406516		13.4

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370012

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA3.I
Analyst: CDS1
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: RE36-10-7486
Batch ID: 963122
Run Date: 03/19/2010 19:03
Prep Date: 03/19/2010 09:00
Data File: 031910V3\3D508.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	1.27	ug/kg	0.431	1.27
74-87-3	Chloromethane	HUh	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	HUh	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	HUh	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	HUh	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	HUh	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	HUh	6.34	ug/kg	2.10	6.34
75-35-4	1,1-Dichloroethylene	HUh	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	HUh	6.34	ug/kg	2.03	6.34
75-09-2	Methylene chloride	HJh	2.60	ug/kg	2.53	6.34
75-15-0	Carbon disulfide	HUh	6.34	ug/kg	1.58	6.34
156-60-5	trans-1,2-Dichloroethylene	HUh	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	HUh	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	HUh	6.34	ug/kg	1.90	6.34
156-59-2	cis-1,2-Dichloroethylene	HUh	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	HUh	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	HUh	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	HUh	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	HUh	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	HUh	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	HUh	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	HUh	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	HUh	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	HUh	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	HUh	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	HUh	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	HUh	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	HUh	6.34	ug/kg	1.58	6.34
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	HUh	1.27	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	HUh	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	HUh	6.34	ug/kg	1.90	6.34
142-28-9	1,3-Dichloropropane	HUh	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	HUh	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	HUh	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	HUh	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	HUh	1.27	ug/kg	0.380	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370012	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7486	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA3.I	Dilution: 1
Run Date: 03/19/2010 19:03	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/19/2010 09:00	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031910V33D508.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	HUh	2.53	ug/kg	0.380	2.53
95-47-6	o-Xylene	HUh	1.27	ug/kg	0.380	1.27
100-42-5	Styrene	HUh	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	HUh	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	HUh	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	HUh	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	HUh	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	HUh	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	HUh	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	HUh	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	HUh	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	HUh	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	HUh	1.27	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	HUh	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	HUh	1.27	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	HUh	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	HUh	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	HUh	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.34	ug/kg	2.03	6.34
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	HUh	1.27	ug/kg	0.380	1.27

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\031910V3\
Data File : 3D508.D
Acq On : 19 Mar 2010 7:03 pm
Operator : CDS1
InstName : VOA3
Sample : |248370012||963122|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 20 09:43:44 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	12.232	12.232	1.000	96	695404	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	452626	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	164608	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	695268	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	452573	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	166782	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	11.793	11.793	0.964	65	219539	51.48	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	102.96%		
43) Toluene-d8	14.165	14.165	0.894	98	688697	56.54	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	113.08%		
61) Bromofluorobenzene	17.130	17.130	0.930	95	192040	57.86	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	115.72%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.800	0.000		0	N.D.		
3) Chloromethane	0.000	5.216	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.528	0.000		0	N.D.		
5) Bromomethane	0.000	6.291	0.000		0	N.D.		
6) Chloroethane	0.000	6.493	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	7.062	0.000		0	N.D.		
8) Ethyl ether	0.000	7.512	0.000		0	N.D.		
9) Acetone	7.999	7.987	0.654	43	3349	N.D.		
10) 1,1-Dichloroethylene	0.000	7.987	0.000		0	N.D.		
11) Iodomethane	0.000	8.271	0.000		0	N.D.		
12) Acetonitrile	0.000	8.449	0.000		0	N.D.		
13) Methyl acetate	0.000	8.520	0.000		0	N.D.		
14) Carbon disulfide	8.438	8.449	0.690	76	1391	N.D.		
15) Methylene chloride	8.746	8.746	0.715	84	8695	2.05	ug/L	92
16) tert-Butyl methyl ether	0.000	9.173	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	9.208	0.000		0	N.D.		
18) Vinyl acetate	0.000	9.837	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	9.860	0.000		0	N.D.		
20) 2-Butanone	0.000	10.643	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	10.691	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	10.714	0.000		0	N.D.		
23) Bromochloromethane	0.000	11.034	0.000		0	N.D.		
24) Chloroform	0.000	11.094	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	11.426	0.000		0	N.D.		
26) Cyclohexane	0.000	11.532	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	11.627	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	11.663	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	11.888	0.000		0	N.D.		
31) Benzene	0.000	11.912	0.000		0	N.D.		
32) Cyclohexene	0.000	12.054	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	12.398	0.000		0	N.D.		
34) Trichloroethylene	0.000	12.695	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	12.979	0.000		0	N.D.		
36) Methylcyclohexane	0.000	12.991	0.000		0	N.D.		
37) Dibromomethane	0.000	13.133	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D508.D
Acq On : 19 Mar 2010 7:03 pm
Operator : CDS1
InstName : VOA3
Sample : |248370012||963122|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 20 09:43:44 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	13.288	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	13.560	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	13.809	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	13.928	0.000		0	N.D.	
44) Toluene	0.000	14.248	0.000		0	N.D.	
45) trans-1,3-Dichloroprop...	0.000	14.426	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	14.675	0.000		0	N.D.	
47) 2-Hexanone	0.000	14.888	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	14.888	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	14.912	0.000		0	N.D.	
50) Dibromochloromethane	0.000	15.173	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	15.351	0.000		0	N.D.	
52) Chlorobenzene	0.000	15.885	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	15.956	0.000		0	N.D.	
54) Ethylbenzene	0.000	15.968	0.000		0	N.D.	
55) m,p-Xylenes	0.000	16.086	0.000		0	N.D.	
56) o-Xylene	0.000	16.549	0.000		0	N.D.	
57) Styrene	0.000	16.549	0.000		0	N.D.	
59) Bromoform	0.000	16.821	0.000		0	N.D.	
60) Isopropylbenzene	0.000	16.928	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	17.213	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	17.308	0.000		0	N.D.	
64) Bromobenzene	0.000	17.343	0.000		0	N.D.	
65) n-Propylbenzene	0.000	17.367	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	17.533	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	17.521	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	17.628	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	17.912	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	17.960	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	18.150	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	18.280	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	18.434	18.351	1.001	146	216	N.D.	
74) 1,4-Dichlorobenzene	18.434	18.434	1.001	146	216	N.D.	
75) n-Butylbenzene	0.000	18.742	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	18.885	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	19.810	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	20.936	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	21.126	0.000		0	N.D.	
80) Naphthalene	21.351	21.351	1.160	128	1187	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	21.719	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.711	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.751	0.000		0	N.D.	
85) Acrolein	0.000	7.750	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.975	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	8.141	0.000		0	N.D.	
88) Allyl chloride	0.000	8.556	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.793	0.000		0	N.D.	
90) Acrylonitrile	0.000	9.090	0.000		0	N.D.	
91) Isopropyl ether	0.000	9.884	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	10.003	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	10.406	0.000		0	N.D.	
94) Ethyl acetate	0.000	10.679	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D508.D
Acq On : 19 Mar 2010 7:03 pm
Operator : CDS1
InstName : VOA3
Sample : |248370012||963122|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 20 09:43:44 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

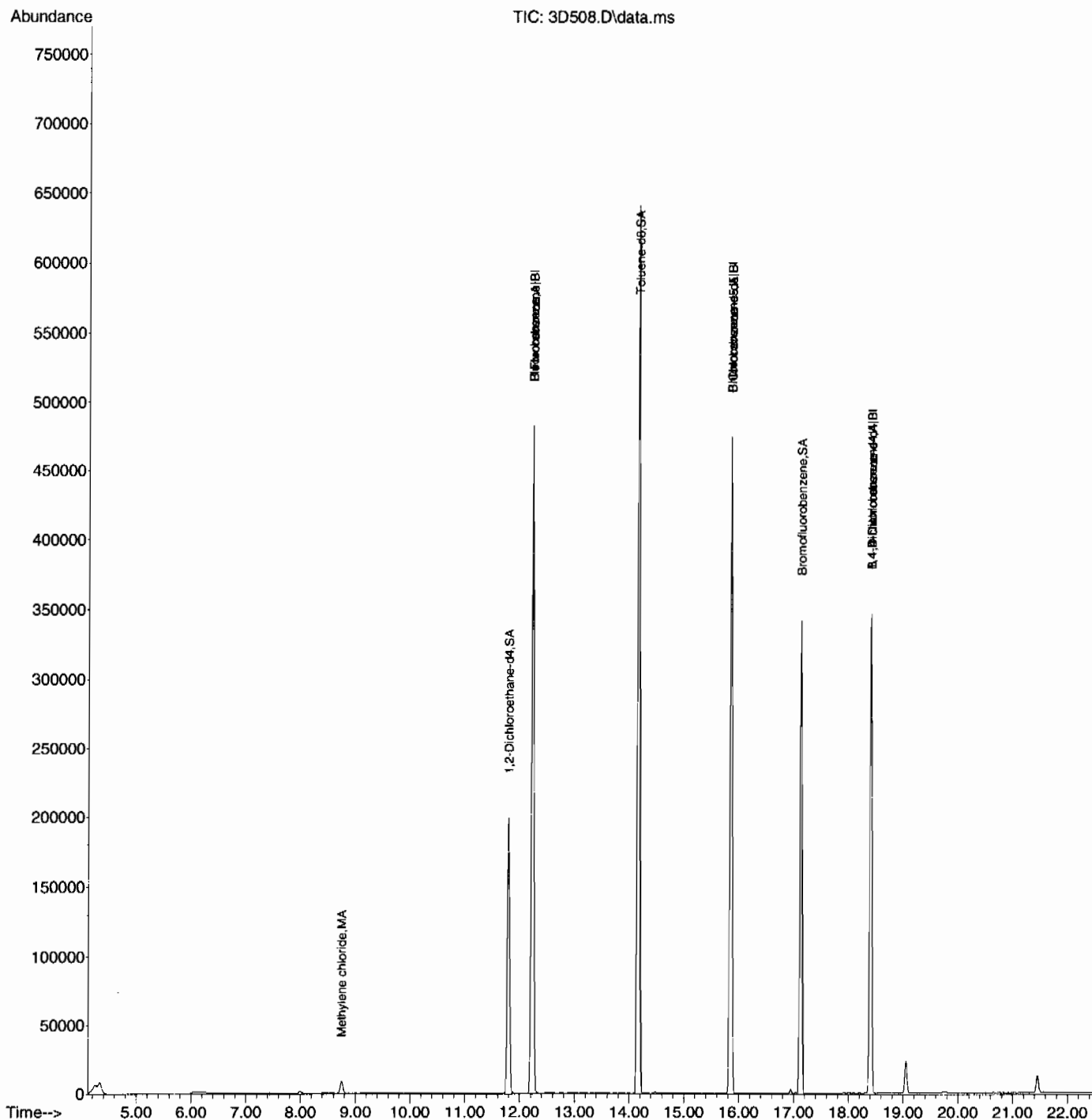
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	10.726	0.000		0	N.D.	
96) Methacrylonitrile	0.000	10.951	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	11.094	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	11.556	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	11.971	0.000		0	N.D.	
100) Methyl methacrylate	0.000	12.991	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	13.098	0.000		0	N.D.	
102) 2-Nitropropane	0.000	13.525	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	14.450	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	15.754	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	16.964	0.000		0	N.D.	
108) Cyclohexanone	0.000	17.082	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	17.260	0.000		0	N.D.	
110) Pentachloroethane	0.000	17.983	0.000		0	N.D.	
111) Benzyl chloride	0.000	18.553	0.000		0	N.D.	
112) bis(2-Chloroisopropyl)...	19.051	18.980	1.035	45	1384	N.D.	

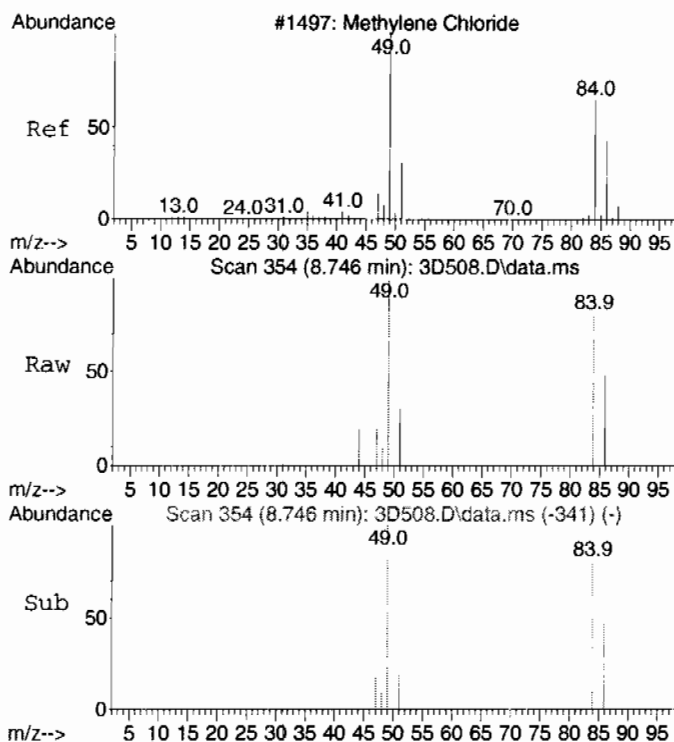
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D508.D
Acq On : 19 Mar 2010 7:03 pm
Operator : CDS1
InstName : VOA3
Sample : |248370012||963122|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

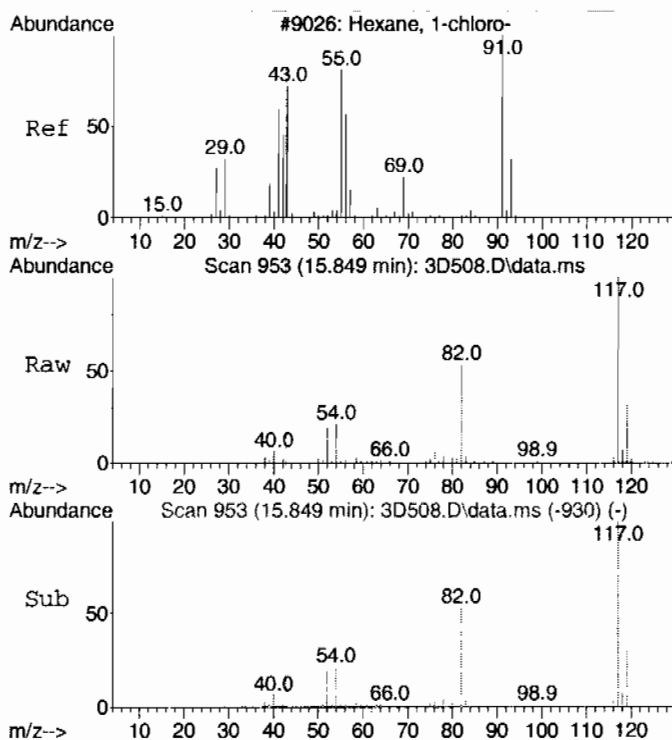
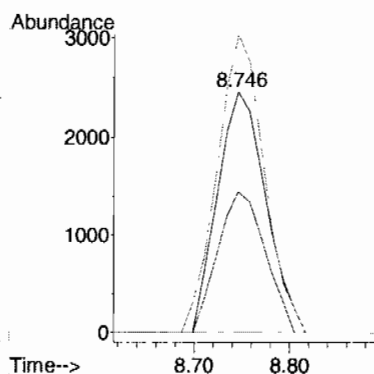
Quant Time: Mar 20 09:43:44 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE





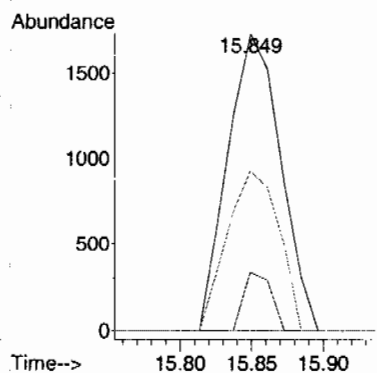
#15
Methylene chloride
Concen: 2.05 ug/L
RT: 8.746 min Scan# 354
Delta R.T. 0.000 min
Lab File: 3D508.D
Acq: 19 Mar 2010 7:03 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
86	57.5	35.0	95.0
49	120.4	99.0	159.0



#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.94 ug/L
RT: 15.849 min Scan# 953
Delta R.T. 0.095 min
Lab File: 3D508.D
Acq: 19 Mar 2010 7:03 pm

Tgt Ion	Ratio	Lower	Upper
55	100		
91	10.0	119.7	179.7#
56	52.2	29.6	89.6



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D508.D
Acq On : 19 Mar 2010 7:03 pm
Operator : CDS1
Sample : |248370012||963122|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.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\031910V3\
Data File : 3D508.D
Acq On : 19 Mar 2010 7:03 pm
Operator : CDS1
Sample : |248370012||963122|1|VOA|D|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.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: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
Client ID: RE36-10-7481REDL	Client: LANL010	Project: LANL01004
Batch ID: 963122	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/19/2010 20:01	Inst: VOA3I	Dilution: 50
Prep Date: 03/19/2010 09:01	Analyst: CDS1	Purge Vol: 5 mL
Data File: 031910V33D510.D	Aliquot: 5 g	Final Volume: 10 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HUh	149	ug/kg	50.6	149
74-87-3	Chloromethane	HUh	149	ug/kg	44.7	149
75-01-4	Vinyl chloride	HUh	149	ug/kg	44.7	149
74-83-9	Bromomethane	HUh	149	ug/kg	44.7	149
75-00-3	Chloroethane	HUh	149	ug/kg	44.7	149
75-69-4	Trichlorofluoromethane	HUh	149	ug/kg	44.7	149
67-64-1	Acetone	HUh	745	ug/kg	247	745
75-35-4	1,1-Dichloroethylene	HUh	149	ug/kg	44.7	149
74-88-4	Iodomethane	HUh	745	ug/kg	238	745
75-09-2	Methylene chloride	HUh	745	ug/kg	298	745
75-15-0	Carbon disulfide	HUh	745	ug/kg	186	745
156-60-5	trans-1,2-Dichloroethylene	HUh	149	ug/kg	44.7	149
75-34-3	1,1-Dichloroethane	HUh	149	ug/kg	44.7	149
78-93-3	2-Butanone	HUh	745	ug/kg	223	745
156-59-2	cis-1,2-Dichloroethylene	HUh	149	ug/kg	44.7	149
594-20-7	2,2-Dichloropropane	HUh	149	ug/kg	44.7	149
67-66-3	Chloroform	HUh	149	ug/kg	44.7	149
74-97-5	Bromochloromethane	HUh	149	ug/kg	49.1	149
71-55-6	1,1,1-Trichloroethane	HUh	149	ug/kg	44.7	149
563-58-6	1,1-Dichloropropene	HUh	149	ug/kg	44.7	149
56-23-5	Carbon tetrachloride	HUh	149	ug/kg	44.7	149
107-06-2	1,2-Dichloroethane	HUh	149	ug/kg	44.7	149
71-43-2	Benzene	HUh	149	ug/kg	44.7	149
79-01-6	Trichloroethylene	HUh	149	ug/kg	49.1	149
78-87-5	1,2-Dichloropropane	HUh	149	ug/kg	44.7	149
75-27-4	Bromodichloromethane	HUh	149	ug/kg	44.7	149
74-95-3	Dibromomethane	HUh	149	ug/kg	44.7	149
108-10-1	4-Methyl-2-pentanone	HUh	745	ug/kg	186	745
10061-01-5	cis-1,3-Dichloropropylene	HUh	149	ug/kg	44.7	149
108-88-3	Toluene	HUh	149	ug/kg	44.7	149
10061-02-6	trans-1,3-Dichloropropylene	HUh	149	ug/kg	44.7	149
79-00-5	1,1,2-Trichloroethane	HUh	149	ug/kg	44.7	149
591-78-6	2-Hexanone	HUh	745	ug/kg	223	745
142-28-9	1,3-Dichloropropane	HUh	149	ug/kg	44.7	149
127-18-4	Tetrachloroethylene	HUh	149	ug/kg	44.7	149
124-48-1	Dibromochloromethane	HUh	149	ug/kg	44.7	149
106-93-4	1,2-Dibromoethane	HUh	149	ug/kg	44.7	149
108-90-7	Chlorobenzene	HUh	149	ug/kg	44.7	149

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA3.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 32.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 50
 Purge Vol: 5 mL
 Final Volume: 10 mL

Client ID: RE36-10-7481REDL
 Batch ID: 963122
 Run Date: 03/19/2010 20:01
 Prep Date: 03/19/2010 09:01
 Data File: 031910V3\3D510.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	149	ug/kg	44.7	149
179601-23-1	m,p-Xylenes	HUh	298	ug/kg	44.7	298
95-47-6	o-Xylene	HUh	149	ug/kg	44.7	149
100-42-5	Styrene	HUh	149	ug/kg	44.7	149
75-25-2	Bromoform	HUh	149	ug/kg	44.7	149
79-34-5	1,1,2,2-Tetrachloroethane	HUh	149	ug/kg	44.7	149
96-18-4	1,2,3-Trichloropropane	HUh	149	ug/kg	44.7	149
108-86-1	Bromobenzene	HUh	149	ug/kg	44.7	149
103-65-1	n-Propylbenzene	HUh	149	ug/kg	44.7	149
95-49-8	2-Chlorotoluene	HUh	149	ug/kg	44.7	149
98-82-8	Isopropylbenzene	HUh	149	ug/kg	44.7	149
108-67-8	1,3,5-Trimethylbenzene	HUh	149	ug/kg	44.7	149
106-43-4	4-Chlorotoluene	HUh	149	ug/kg	44.7	149
98-06-6	tert-Butylbenzene	HUh	149	ug/kg	44.7	149
95-63-6	1,2,4-Trimethylbenzene	HUh	149	ug/kg	44.7	149
135-98-8	sec-Butylbenzene	HUh	149	ug/kg	44.7	149
99-87-6	4-Isopropyltoluene	HUh	149	ug/kg	44.7	149
541-73-1	1,3-Dichlorobenzene	HUh	149	ug/kg	44.7	149
106-46-7	1,4-Dichlorobenzene	HUh	149	ug/kg	44.7	149
104-51-8	n-Butylbenzene	HUh	149	ug/kg	44.7	149
96-12-8	1,2-Dibromo-3-chloropropane	HUh	149	ug/kg	44.7	149
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	745	ug/kg	238	745
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	HUh	149	ug/kg	44.7	149
95-50-1	1,2-Dichlorobenzene	HUh	149	ug/kg	44.7	149

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	6.16	1090	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D510.D
Acq On : 19 Mar 2010 8:01 pm
Operator : CDS1
InstName : VOA3
Sample : |248370011|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - SOIL 5G/10ML
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 20 09:44:13 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	12.232	12.232	1.000	96	841971	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	624708	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	308593	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	841763	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	624771	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	313631	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	11.794	11.793	0.964	65	254585	49.30	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 98.60%			
43) Toluene-d8	14.165	14.165	0.894	98	845149	50.27	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 100.54%			
61) Bromofluorobenzene	17.130	17.130	0.930	95	304282	48.90	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 97.80%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.800	0.000		0	N.D.		
3) Chloromethane	0.000	5.216	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.528	0.000		0	N.D.		
5) Bromomethane	6.232	6.291	0.509	94	946	N.D.		
6) Chloroethane	0.000	6.493	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	7.062	0.000		0	N.D.		
8) Ethyl ether	0.000	7.512	0.000		0	N.D.		
9) Acetone	7.999	7.987	0.654	43	1757	N.D.		
10) 1,1-Dichloroethylene	0.000	7.987	0.000		0	N.D.		
11) Iodomethane	0.000	8.271	0.000		0	N.D.		
12) Acetonitrile	0.000	8.449	0.000		0	N.D.		
13) Methyl acetate	0.000	8.520	0.000		0	N.D.		
14) Carbon disulfide	8.414	8.449	0.688	76	851	N.D.		
15) Methylene chloride	8.746	8.746	0.715	84	7661	N.D.		
16) tert-Butyl methyl ether	0.000	9.173	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	9.208	0.000		0	N.D.		
18) Vinyl acetate	0.000	9.837	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	9.860	0.000		0	N.D.		
20) 2-Butanone	0.000	10.643	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	10.691	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	10.714	0.000		0	N.D.		
23) Bromochloromethane	0.000	11.034	0.000		0	N.D.		
24) Chloroform	0.000	11.094	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	11.426	0.000		0	N.D.		
26) Cyclohexane	0.000	11.532	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	11.627	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	11.663	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	11.888	0.000		0	N.D.		
31) Benzene	0.000	11.912	0.000		0	N.D.		
32) Cyclohexene	0.000	12.054	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	12.398	0.000		0	N.D.		
34) Trichloroethylene	0.000	12.695	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	12.979	0.000		0	N.D.		
36) Methylcyclohexane	0.000	12.991	0.000		0	N.D.		
37) Dibromomethane	0.000	13.133	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D510.D
Acq On : 19 Mar 2010 8:01 pm
Operator : CDS1
InstName : VOA3
Sample : |248370011|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - SOIL 5G/10ML
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 20 09:44:13 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	13.288	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	13.560	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	13.809	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	13.928	0.000		0	N.D.	
44) Toluene	14.248	14.248	0.899	91	186	N.D.	
45) trans-1,3-Dichloroprop...	0.000	14.426	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	14.675	0.000		0	N.D.	
47) 2-Hexanone	0.000	14.888	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	14.888	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	14.912	0.000		0	N.D.	
50) Dibromochloromethane	0.000	15.173	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	15.351	0.000		0	N.D.	
52) Chlorobenzene	0.000	15.885	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	15.956	0.000		0	N.D.	
54) Ethylbenzene	0.000	15.968	0.000		0	N.D.	
55) m,p-Xylenes	0.000	16.086	0.000		0	N.D.	
56) o-Xylene	0.000	16.549	0.000		0	N.D.	
57) Styrene	0.000	16.549	0.000		0	N.D.	
59) Bromoform	0.000	16.821	0.000		0	N.D.	
60) Isopropylbenzene	16.940	16.928	0.920	105	1437	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	17.213	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	17.308	0.000		0	N.D.	
64) Bromobenzene	0.000	17.343	0.000		0	N.D.	
65) n-Propylbenzene	17.355	17.367	0.943	91	191	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	17.533	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	17.521	0.000		0	N.D.	
68) 4-Chlorotoluene	17.616	17.628	0.957	91	610	N.D.	
69) tert-Butylbenzene	0.000	17.912	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	17.960	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	18.150	0.000		0	N.D.	
72) 4-Isopropyltoluene	18.280	18.280	0.993	119	188	N.D.	
73) 1,3-Dichlorobenzene	0.000	18.351	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	18.434	0.000		0	N.D.	
75) n-Butylbenzene	0.000	18.742	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	18.885	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	19.810	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	20.936	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	21.126	0.000		0	N.D.	
80) Naphthalene	21.340	21.351	1.159	128	2492	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	21.719	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.711	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.751	0.000		0	N.D.	
85) Acrolein	0.000	7.750	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.975	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	8.141	0.000		0	N.D.	
88) Allyl chloride	0.000	8.556	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.793	0.000		0	N.D.	
90) Acrylonitrile	0.000	9.090	0.000		0	N.D.	
91) Isopropyl ether	0.000	9.884	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	10.003	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	10.406	0.000		0	N.D.	
94) Ethyl acetate	0.000	10.679	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D510.D
Acq On : 19 Mar 2010 8:01 pm
Operator : CDS1
InstName : VOA3
Sample : |248370011|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - SOIL 5G/10ML
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 20 09:44:13 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

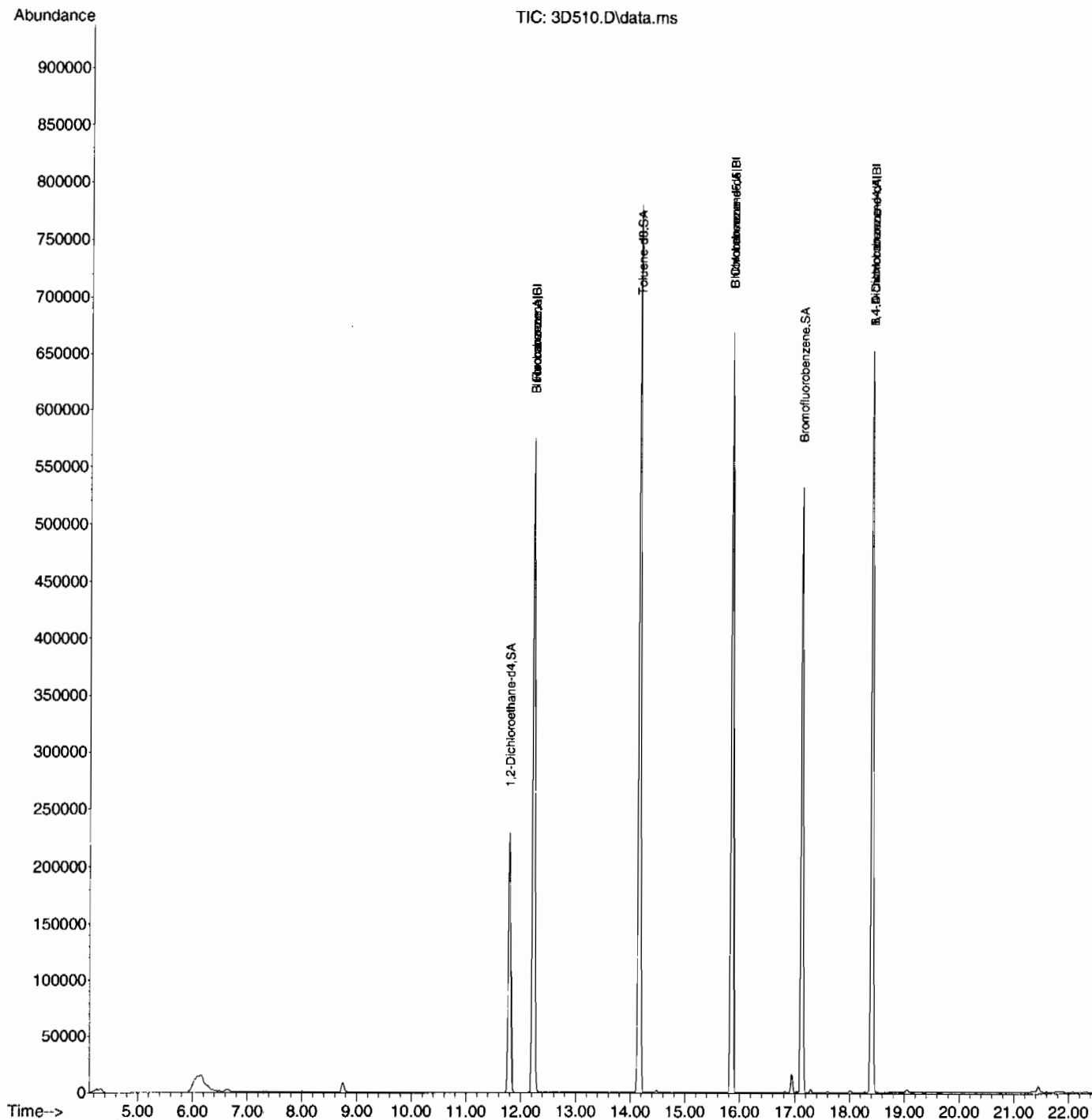
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	10.726	0.000		0	N.D.	
96) Methacrylonitrile	0.000	10.951	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	11.094	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	11.556	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	11.971	0.000		0	N.D.	
100) Methyl methacrylate	0.000	12.991	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	13.098	0.000		0	N.D.	
102) 2-Nitropropane	0.000	13.525	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	14.450	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	15.754	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	16.940	16.964	0.920	53	469	N.D.	
108) Cyclohexanone	0.000	17.082	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	17.260	0.000		0	N.D.	
110) Pentachloroethane	0.000	17.983	0.000		0	N.D.	
111) Benzyl chloride	0.000	18.553	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	0.000	18.980	0.000		0	N.D.	

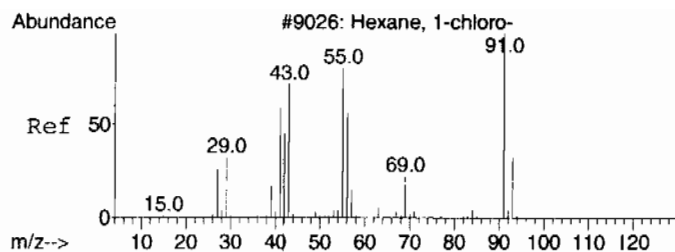
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

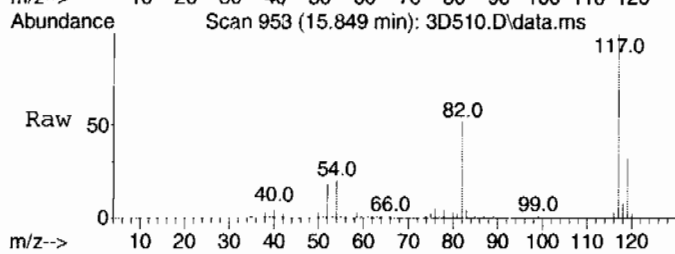
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Data File : 3D510.D
Acq On : 19 Mar 2010 8:01 pm
Operator : CDS1
InstName : VOA3
Sample : |248370011|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - SOIL 5G/10ML
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 20 09:44:13 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

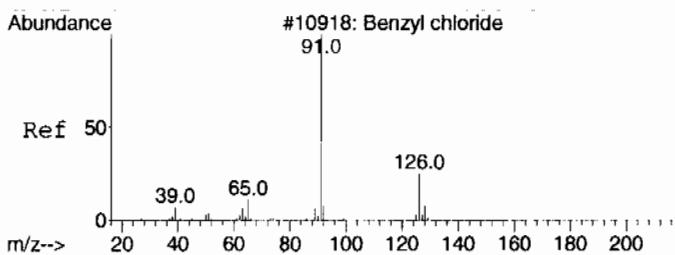
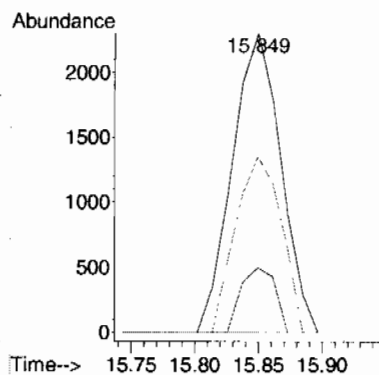
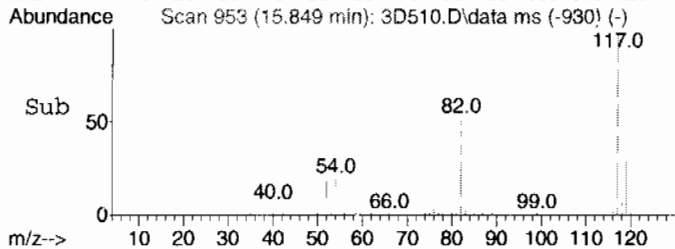




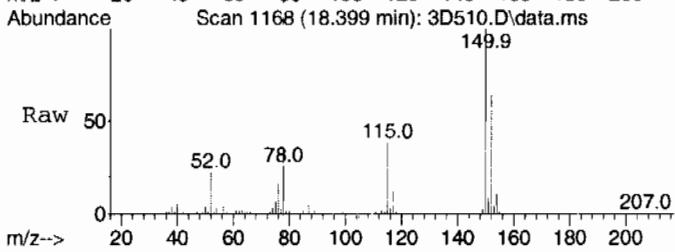
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.16 ug/L
RT: 15.849 min Scan# 953
Delta R.T. 0.095 min
Lab File: 3D510.D
Acq: 19 Mar 2010 8:01 pm



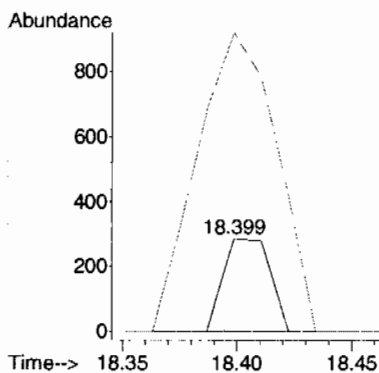
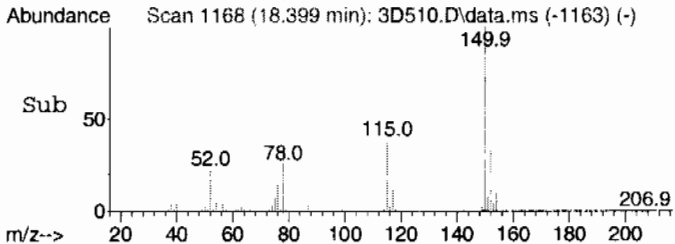
Tgt Ion: 55 Resp: 6128
Ion Ratio Lower Upper
55 100
91 15.3 119.7 179.7#
56 55.1 29.6 89.6



#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 1.67 ug/L
RT: 18.399 min Scan# 1168
Delta R.T. -0.154 min
Lab File: 3D510.D
Acq: 19 Mar 2010 8:01 pm



Tgt Ion: 91 Resp: 403
Ion Ratio Lower Upper
91 100
126 0.0 0.0 51.8
65 551.1 0.0 41.3#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D510.D
Acq On : 19 Mar 2010 8:01 pm
Operator : CDS1
Sample : |248370011|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - SOIL 5G/10ML
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

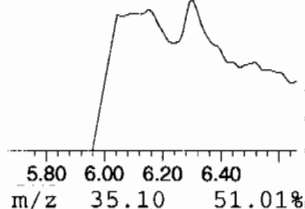
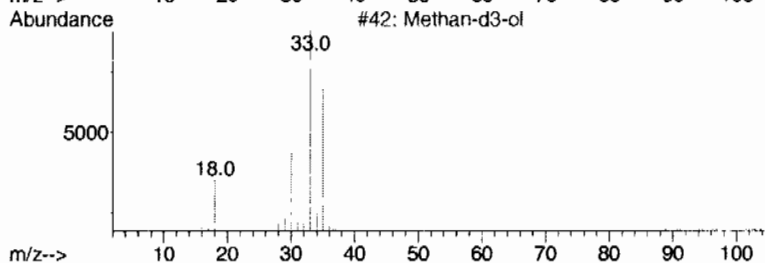
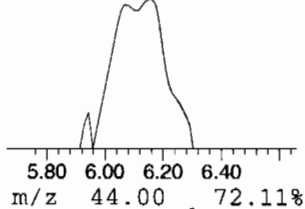
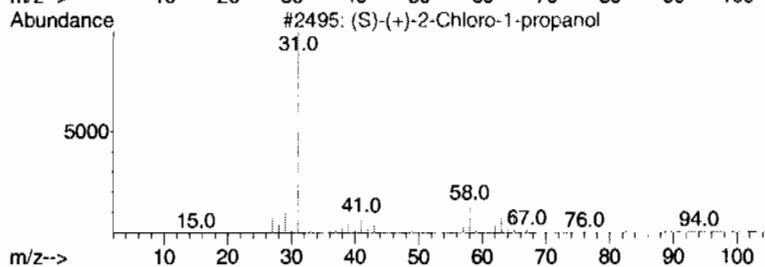
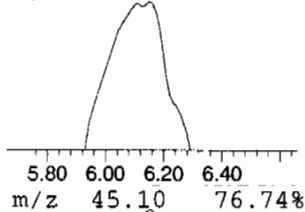
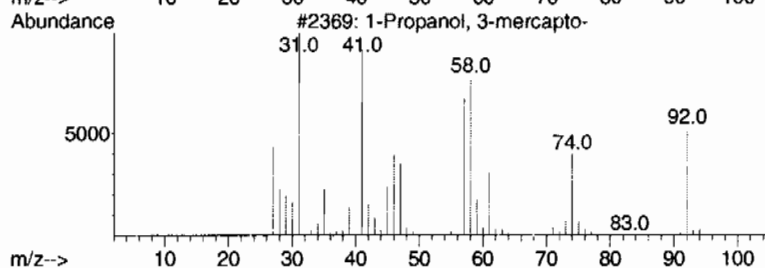
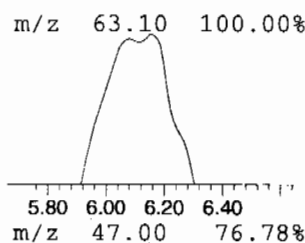
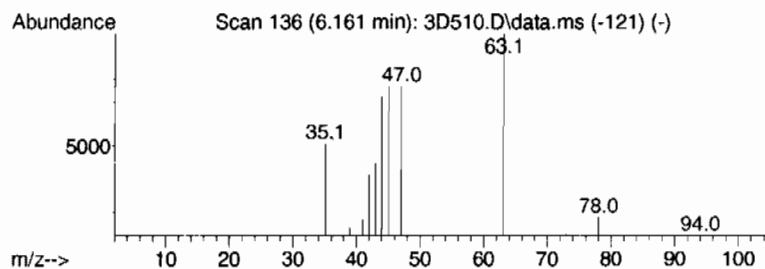
TIC Integration Parameters: default.P

Peak Number 1 unknown

Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.161	7.29 ug/L	247669	Fluorobenzene	12.232

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propanol, 3-mercapto-	92	C3H8OS	019721-22-3	9
2	(S)-(+)-2-Chloro-1-propanol	94	C3H7ClO	019210-21-0	3
3	Methan-d3-ol	35	CHD3O	001849-29-2	3
4	Methan-d3-ol	35	CHD3O	001849-29-2	3
5	Dimethyl Sulfoxide	78	C2H6OS	000067-68-5	2



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D510.D
Acq On : 19 Mar 2010 8:01 pm
Operator : CDS1
Sample : |248370011|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - SOIL 5G/10ML
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.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	6.161	7.3	ug/L	247669	1	12.232	1697700	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370002	Date Received: 03/02/2010 08:50	%Moisture: 8.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7420	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 00:03	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:01	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V55B237.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.373	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.48	ug/kg	1.82	5.48
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.48	ug/kg	1.75	5.48
75-09-2	Methylene chloride	U	5.48	ug/kg	2.19	5.48
75-15-0	Carbon disulfide	U	5.48	ug/kg	1.37	5.48
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.48	ug/kg	1.64	5.48
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.362	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.362	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.48	ug/kg	1.37	5.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.48	ug/kg	1.64	5.48
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370002
 Client ID: RE36-10-7420
 Batch ID: 963122
 Run Date: 03/10/2010 00:03
 Prep Date: 03/09/2010 17:01
 Data File: 030910V5\SB237.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 8.7
 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	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.329	2.19
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.48	ug/kg	1.75	5.48
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

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\030910V5\
Data File : 5B237.D
Acq On : 10 Mar 2010 12:03 am
Operator : CDS1
InstName : VOA5
Sample : |248370002|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 19 14:14:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1688078	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1226590	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	556082	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1688078	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1226590	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	556082	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	341272	41.77	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	83.54%		
43) Toluene-d8	9.721	9.721	0.872	98	1392456	44.39	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	88.78%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	651364	58.40	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	116.80%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.950	4.900	0.590	50	1398	Below Cal		54
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.184	6.174	0.737	43	1796	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	366	N.D.		
13) Methyl acetate	6.202	6.365	0.739	43	222	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	1174	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	6051	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.793	6.969	0.810	43	125	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.211	8.203	0.979	78	113	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000	56	9968	N.D.		
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B237.D
Acq On : 10 Mar 2010 12:03 am
Operator : CDS1
InstName : VOA5
Sample : |248370002|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 19 14:14:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	3146	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.171	11.181	1.003	91	2000	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	1665	N.D.	
56) o-Xylene	11.708	11.701	1.051	106	861	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.256	12.016	0.914	105	251	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.564	12.415	0.937	91	241	N.D.	
66) 1,3,5-Trimethylbenzene	12.553	12.564	0.936	105	1054	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.705	12.698	0.947	91	2324	N.D.	
69) tert-Butylbenzene	12.907	12.900	0.962	134	107	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	1445	N.D.	
71) sec-Butylbenzene	13.112	13.119	0.978	105	669	N.D.	
72) 4-Isopropyltoluene	13.236	13.229	0.987	119	2740	N.D.	
73) 1,3-Dichlorobenzene	13.356	13.349	0.996	146	107	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	2105	N.D.	
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	110	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.627	15.619	1.165	180	503	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	1378	N.D.	
81) 1,2,3-Trichlorobenzene	16.313	16.291	1.216	180	238	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.449	6.425	0.769	41	116	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B237.D
Acq On : 10 Mar 2010 12:03 am
Operator : CDS1
InstName : VOA5
Sample : |248370002|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 19 14:14:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

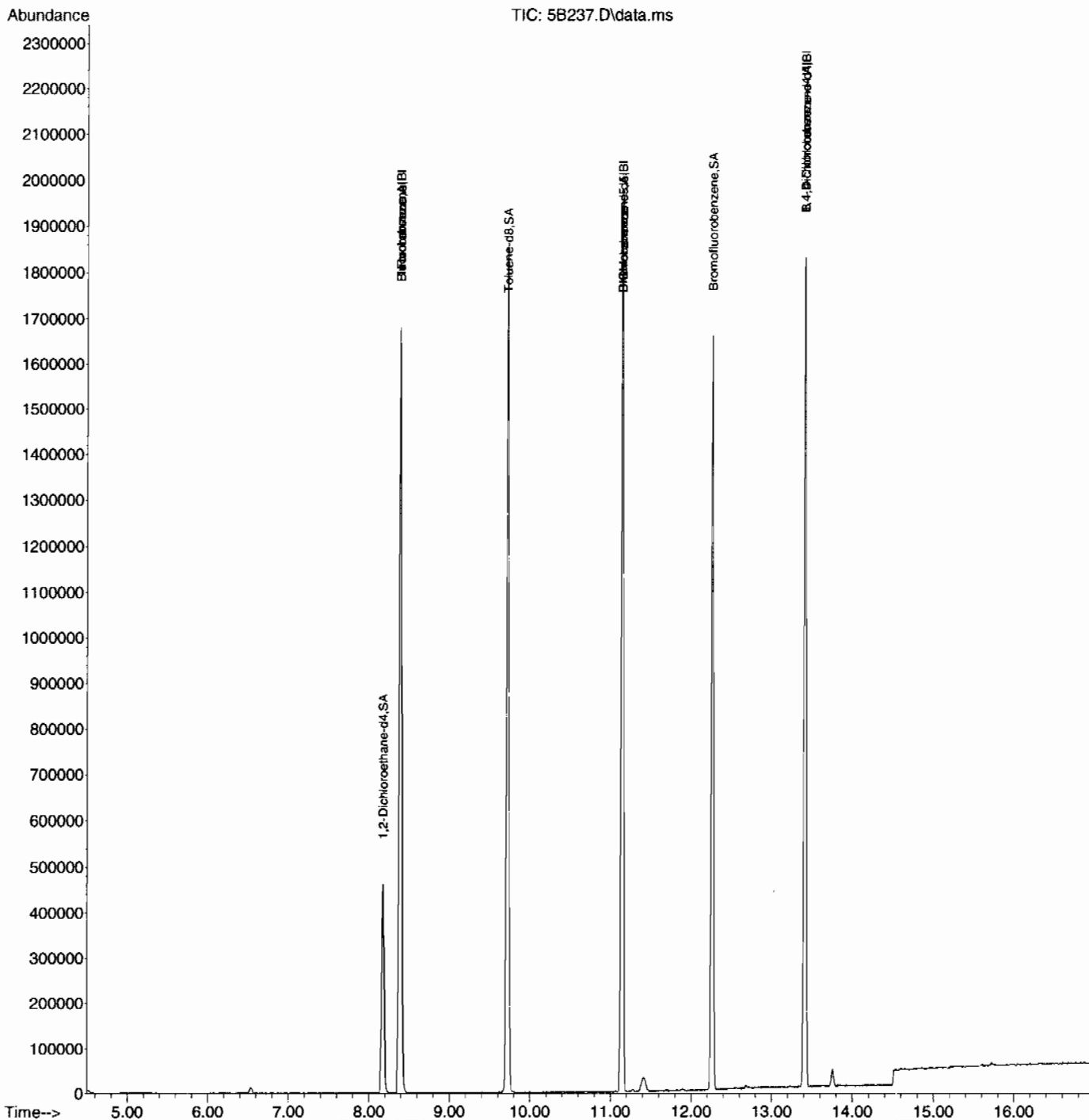
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.698	7.680	0.918	41	244	N.D.	
97) Tetrahydrofuran	7.701	7.716	0.918	42	1638	N.D.	
98) Isobutyl alcohol	7.875	7.857	0.939	41	113	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	1219	N.D.	
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	112	N.D.	

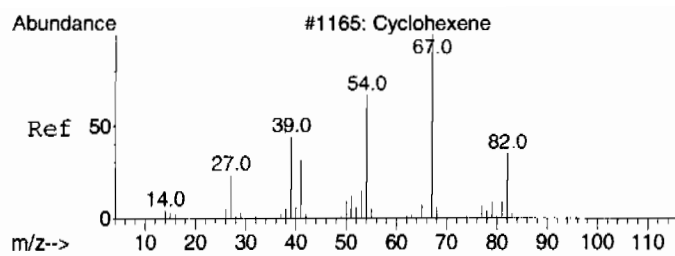
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B237.D
Acq On : 10 Mar 2010 12:03 am
Operator : CDS1
InstName : VOA5
Sample : |248370002|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 37 Sample Multiplier: 1

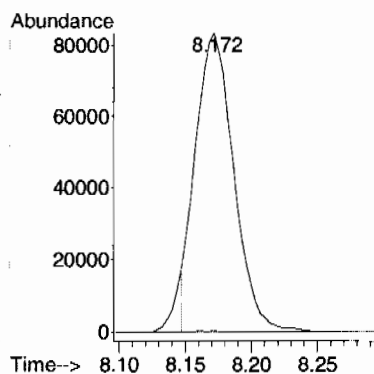
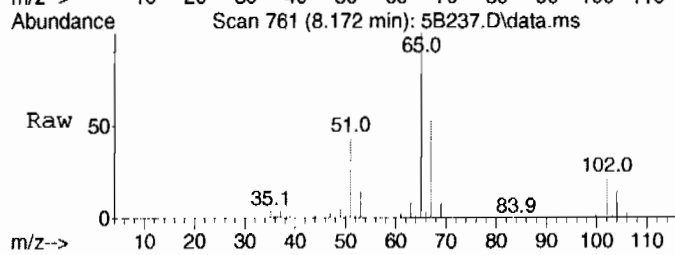
Quant Time: Mar 19 14:14:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





#32 BEFORE analyst DELETION
Cyclohexene
Concen: 14.82 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B237.D
Acq: 10 Mar 2010 12:03 am

Tgt Ion: 67 Resp: 168351
Ion Ratio Lower Upper
67 100
54 0.1 46.3 106.3#



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\

Data File : 5B237.D

Acq On : 10 Mar 2010 12:03 am

Operator : CDS1

Sample : |248370002|963122|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 37 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B237.D
Acq On : 10 Mar 2010 12:03 am
Operator : CDS1
Sample : |248370002|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 37 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370003

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 % Moisture: 18.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7418
 Batch ID: 963122
 Run Date: 03/10/2010 00:30
 Prep Date: 03/09/2010 17:02
 Data File: 030910V55B238.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/L.O.D	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.418	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.369	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.369	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.369	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.369	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.369	1.23
67-64-1	Acetone	U	6.15	ug/kg	2.04	6.15
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
74-88-4	Iodomethane	U	6.15	ug/kg	1.97	6.15
75-09-2	Methylene chloride	U	6.15	ug/kg	2.46	6.15
75-15-0	Carbon disulfide	U	6.15	ug/kg	1.54	6.15
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.369	1.23
78-93-3	2-Butanone	U	6.15	ug/kg	1.85	6.15
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.369	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.369	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.406	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.369	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.369	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.369	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.369	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.369	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.406	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.369	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.369	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.369	1.23
108-10-1	4-Methyl-2-pentanone	U	6.15	ug/kg	1.54	6.15
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.369	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.369	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.369	1.23
591-78-6	2-Hexanone	U	6.15	ug/kg	1.85	6.15
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.369	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.369	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.369	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.369	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.369	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370003	Date Received: 03/02/2010 08:50	% Moisture: 18.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7418	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/10/2010 00:30	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/09/2010 17:02	Aliquot: 5 g	Final Volume: 5 mL
Data File: 030910V5\5B238.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.369	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.369	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.369	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.369	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.369	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.369	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.369	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.369	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.369	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.369	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.369	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.369	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.369	1.23
99-87-6	4-Isopropyltoluene		1.61	ug/kg	0.369	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.369	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.369	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.15	ug/kg	1.97	6.15
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.369	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.369	1.23

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\030910V5\
Data File : 5B238.D
Acq On : 10 Mar 2010 12:30 am
Operator : CDS1
InstName : VOA5
Sample : |248370003|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 19 14:15:11 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1670251	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1135805	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	424530	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1670251	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1135805	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	424530	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	314940	38.96	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 77.92%			
43) Toluene-d8	9.721	9.721	0.872	98	1357312	46.73	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 93.46%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	550036	64.59	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 129.18%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.920	4.900	0.587	50	630	Below Cal	#	1
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	974	N.D.		
9) Acetone	6.177	6.174	0.736	43	6756	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	1551	N.D.		
13) Methyl acetate	6.365	6.365	0.759	43	120	N.D.		
14) Carbon disulfide	6.425	6.435	0.766	76	1454	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	9356	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	0.000	6.969	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.454	7.450	0.889	43	117	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	316	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	9072	Below Cal	#	20
34) Trichloroethylene	8.681	8.677	1.035	95	350	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B238.D
Acq On : 10 Mar 2010 12:30 am
Operator : CDS1
InstName : VOA5
Sample : |248370003|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 19 14:15:11 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	6725	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.174	11.181	1.003	91	4225	N.D.	
55) m,p-Xylenes	11.280	11.280	1.012	106	2954	N.D.	
56) o-Xylene	11.694	11.701	1.050	106	1605	N.D.	
57) Styrene	11.719	11.715	1.052	104	114	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	11.991	12.016	0.894	105	3128	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.415	12.415	0.926	91	3063	N.D.	
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	1831	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.677	12.698	0.945	91	2721	N.D.	
69) tert-Butylbenzene	12.872	12.900	0.960	134	110	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	4317	N.D.	
71) sec-Butylbenzene	13.108	13.119	0.977	105	119	N.D.	
72) 4-Isopropyltoluene	13.232	13.229	0.987	119	22330	1.31 ug/L	94
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	245	N.D.	
75) n-Butylbenzene	13.642	13.653	1.017	91	1236	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.619	15.619	1.165	180	305	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	1638	N.D.	
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	135	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.248	6.163	0.745	45	107	N.D.	
88) Allyl chloride	6.460	6.425	0.770	41	1551	N.D.	
89) tert-Butyl Alcohol	6.460	6.460	0.770	59	1390	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.454	7.383	0.889	43	117	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B238.D
Acq On : 10 Mar 2010 12:30 am
Operator : CDS1
InstName : VOA5
Sample : |248370003|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 19 14:15:11 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

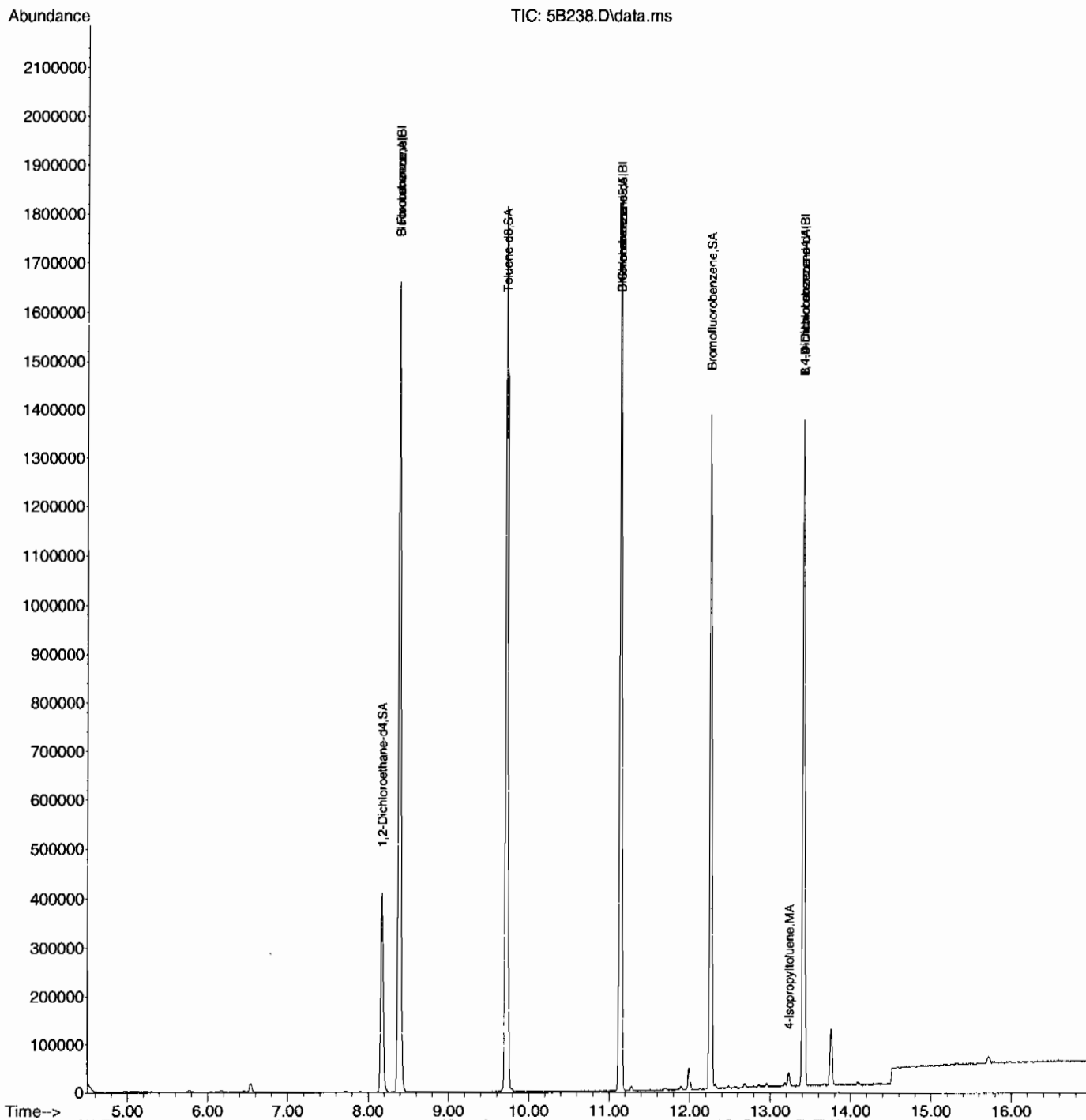
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.712	7.680	0.919	41	1030	N.D.	
97) Tetrahydrofuran	7.715	7.716	0.920	42	1628	N.D.	
98) Isobutyl alcohol	7.906	7.857	0.943	41	225	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.589	13.565	1.013	91	2508	N.D.	
112) bis(2-Chloroisopropyl)...	13.922	13.929	1.038	45	126	N.D.	

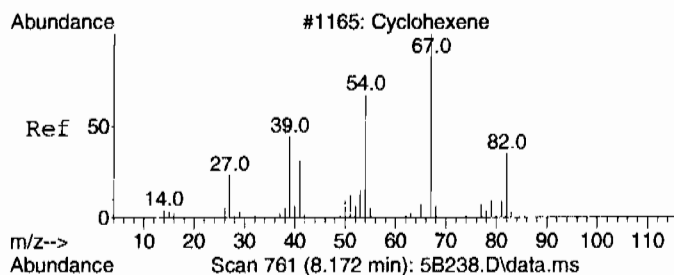
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B238.D
Acq On : 10 Mar 2010 12:30 am
Operator : CDS1
InstName : VOA5
Sample : |248370003|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 38 Sample Multiplier: 1

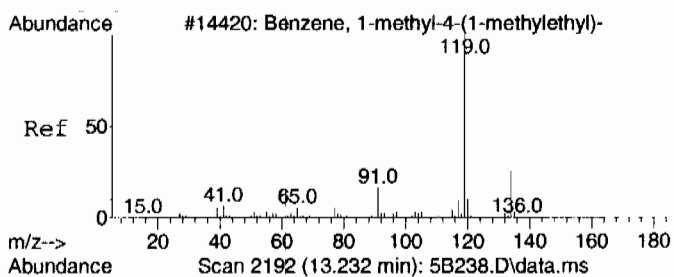
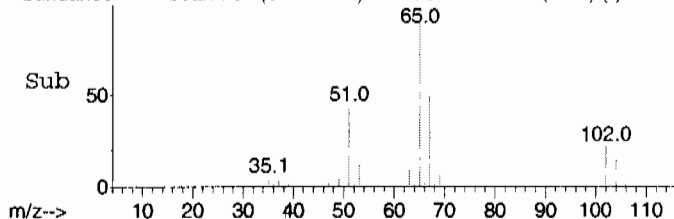
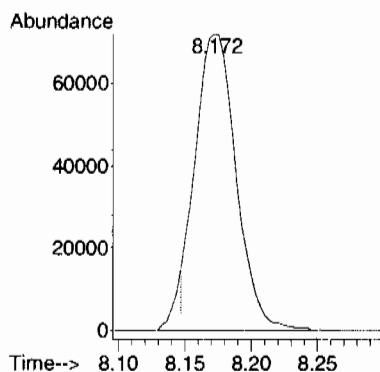
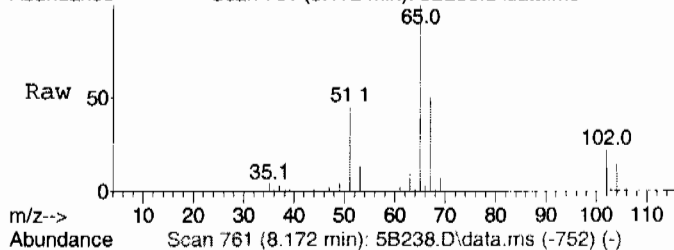
Quant Time: Mar 19 14:15:11 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





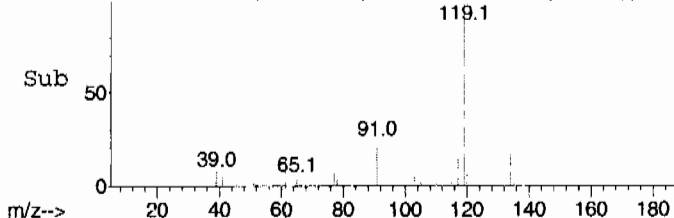
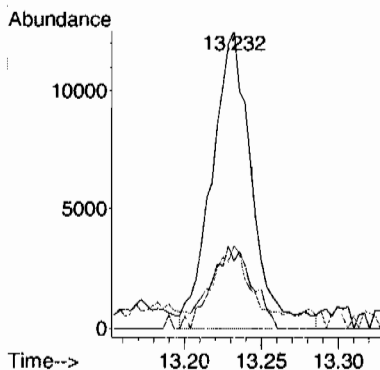
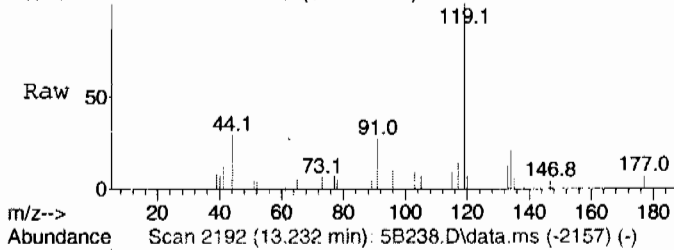
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.67 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B238.D
Acq: 10 Mar 2010 12:30 am

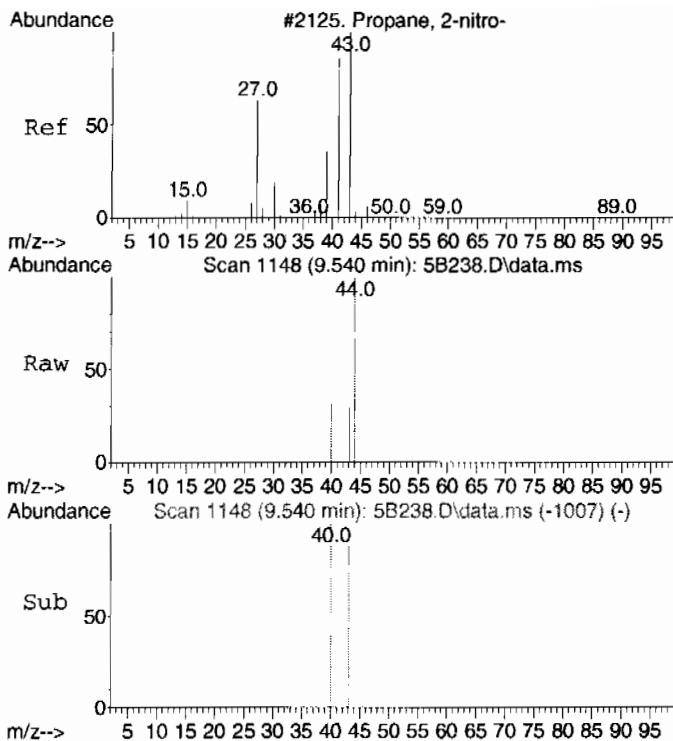
Tgt Ion: 67 Resp: 153610
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#72
4-Isopropyltoluene
Concen: 1.31 ug/L
RT: 13.232 min Scan# 2192
Delta R.T. 0.003 min
Lab File: 5B238.D
Acq: 10 Mar 2010 12:30 am

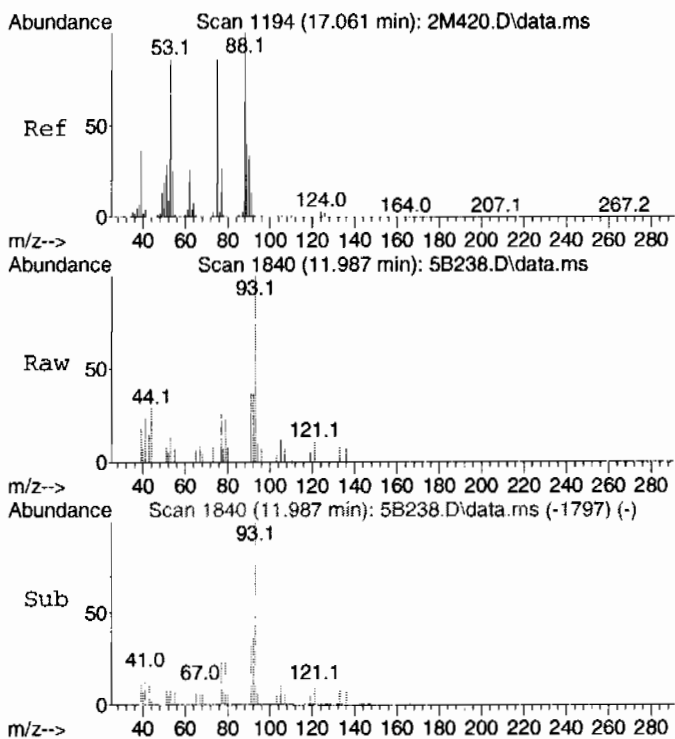
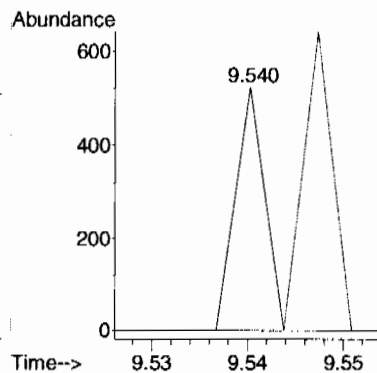
Tgt Ion: 119 Resp: 22330
Ion Ratio Lower Upper
119 100
134 27.6 0.0 57.2
91 29.1 0.0 53.0





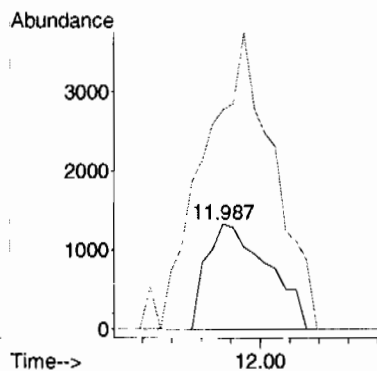
#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.95 ug/L
RT: 9.540 min Scan# 1148
Delta R.T. 0.198 min
Lab File: 5B238.D
Acq: 10 Mar 2010 12:30 am

Tgt Ion: 43 Resp: 111
Ion Ratio Lower Upper
43 100
41 122.5 52.5 112.5#



#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 1.21 ug/L
RT: 11.987 min Scan# 1840
Delta R.T. -0.149 min
Lab File: 5B238.D
Acq: 10 Mar 2010 12:30 am

Tgt Ion: 53 Resp: 1923
Ion Ratio Lower Upper
53 100
88 0.0 67.1 127.1#
77 321.2 1.8 61.8#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B238.D
Acq On : 10 Mar 2010 12:30 am
Operator : CDS1
Sample : |248370003|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 38 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B238.D
Acq On : 10 Mar 2010 12:30 am
Operator : CDS1
Sample : |248370003|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 38 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370005
 Client ID: RE36-10-7419
 Batch ID: 963122
 Run Date: 03/10/2010 01:25
 Prep Date: 03/09/2010 17:04
 Data File: 030910V5\5B240.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 16.9
 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	1.20	ug/kg	0.409	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.361	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.361	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.361	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.361	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.361	1.20
67-64-1	Acetone	U	6.02	ug/kg	2.00	6.02
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
74-88-4	Iodomethane	U	6.02	ug/kg	1.93	6.02
75-09-2	Methylene chloride	U	6.02	ug/kg	2.41	6.02
75-15-0	Carbon disulfide	U	6.02	ug/kg	1.51	6.02
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.361	1.20
78-93-3	2-Butanone	U	6.02	ug/kg	1.81	6.02
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.361	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.361	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.397	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.361	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.361	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.361	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.361	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.361	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.397	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.361	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.361	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.361	1.20
108-10-1	4-Methyl-2-pentanone	U	6.02	ug/kg	1.51	6.02
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.361	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.361	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.361	1.20
591-78-6	2-Hexanone	U	6.02	ug/kg	1.81	6.02
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.361	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.361	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.361	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.361	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.361	1.20

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370005

 Client ID: RE36-10-7419
 Batch ID: 963122
 Run Date: 03/10/2010 01:25
 Prep Date: 03/09/2010 17:04
 Data File: 030910V55B240.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAS.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 16.9
 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	1.20	ug/kg	0.361	1.20
179601-23-1	m,p-Xylenes	U	2.41	ug/kg	0.361	2.41
95-47-6	o-Xylene	U	1.20	ug/kg	0.361	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.361	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.361	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.361	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.361	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.361	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.361	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.361	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.361	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.361	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.361	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.361	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.361	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.361	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.02	ug/kg	1.93	6.02
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.361	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.361	1.20

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B240.D
Acq On : 10 Mar 2010 1:25 am
Operator : CDS1
InstName : VOA5
Sample : |248370005|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Mar 19 14:17:42 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1603572	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1118659	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	484651	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1603572	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1118659	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	484651	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.175	8.172	0.975	65	315199	40.61	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	81.22%		
43) Toluene-d8	9.721	9.721	0.872	98	1301631	45.50	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	91.00%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	579681	59.63	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	119.26%		
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.970	4.900	0.593	50	720	Below Cal		90
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.174	6.174	0.736	43	2658	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	179	N.D.		
13) Methyl acetate	6.174	6.365	0.736	43	2658	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	425	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	3967	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	0.000	6.969	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.196	8.203	0.977	78	106	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	8958	Below Cal	#	20
34) Trichloroethylene	8.455	8.677	1.008	95	108	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B240.D
Acq On : 10 Mar 2010 1:25 am
Operator : CDS1
InstName : VOA5
Sample : |248370005|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Mar 19 14:17:42 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.795	9.788	0.879	91	387	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.188	11.181	1.004	91	107	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.260	12.016	0.914	105	415	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.412	12.415	0.925	91	381	N.D.	
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	128	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.702	12.698	0.947	91	881	N.D.	
69) tert-Butylbenzene	12.995	12.900	0.969	134	107	N.D.	
70) 1,2,4-Trimethylbenzene	12.963	12.956	0.967	105	222	N.D.	
71) sec-Butylbenzene	13.119	13.119	0.978	105	427	N.D.	
72) 4-Isopropyltoluene	13.289	13.229	0.991	119	1422	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	247	N.D.	
75) n-Butylbenzene	13.642	13.653	1.017	91	1593	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.531	15.619	1.158	180	122	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	900	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.464	6.425	0.771	41	179	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B240.D
Acq On : 10 Mar 2010 1:25 am
Operator : CDS1
InstName : VOA5
Sample : |248370005|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Mar 19 14:17:42 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

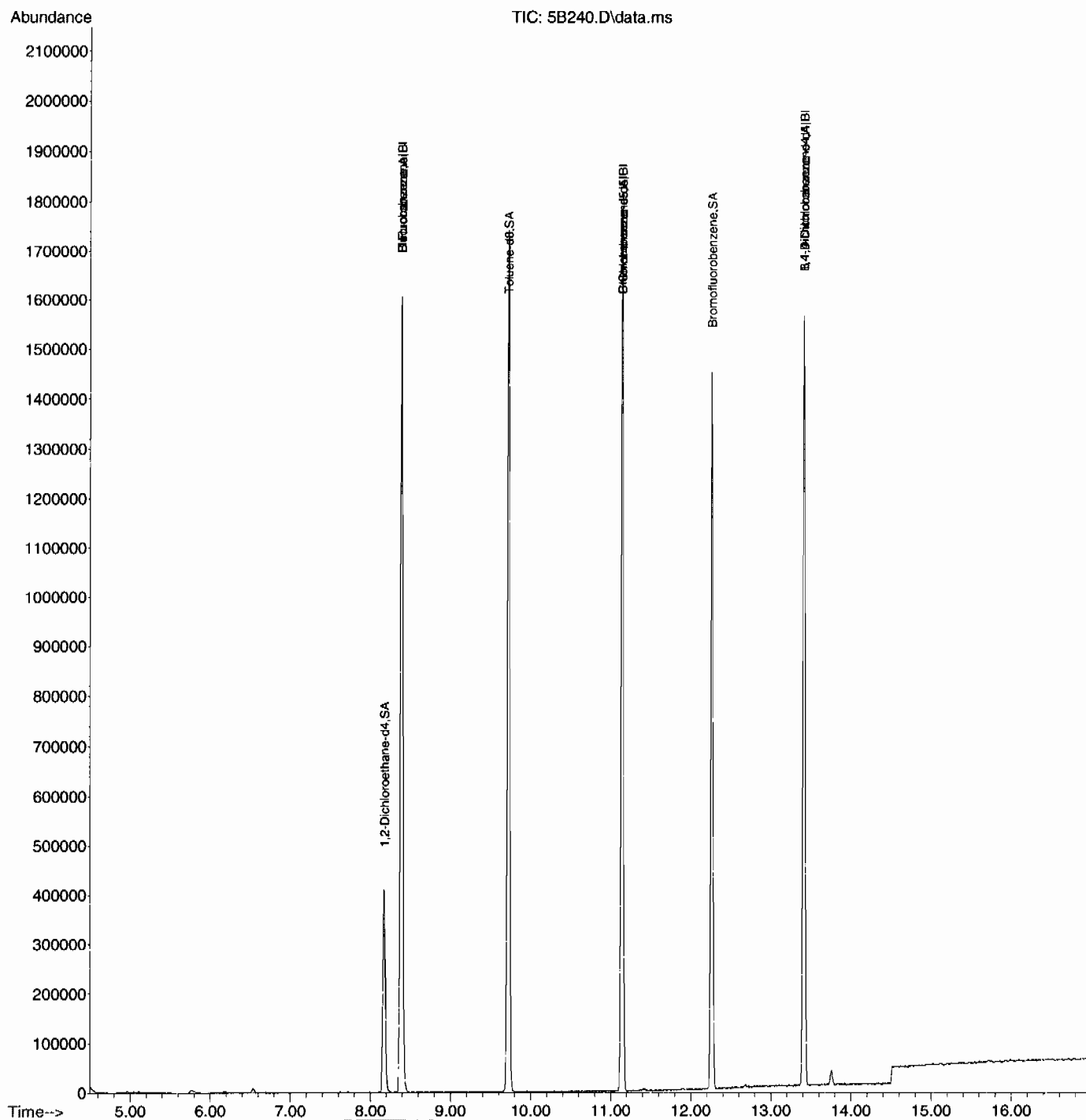
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.719	7.680	0.920	41	107	N.D.	
97) Tetrahydrofuran	7.712	7.716	0.919	42	137	N.D.	
98) Isobutyl alcohol	7.730	7.857	0.922	41	136	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	405	N.D.	
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	119	N.D.	

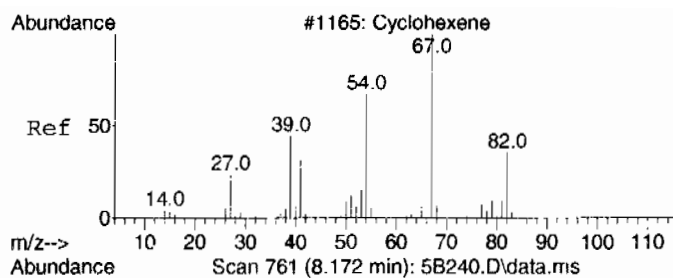
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B240.D
Acq On : 10 Mar 2010 1:25 am
Operator : CDS1
InstName : VOA5
Sample : |248370005|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 40 Sample Multiplier: 1

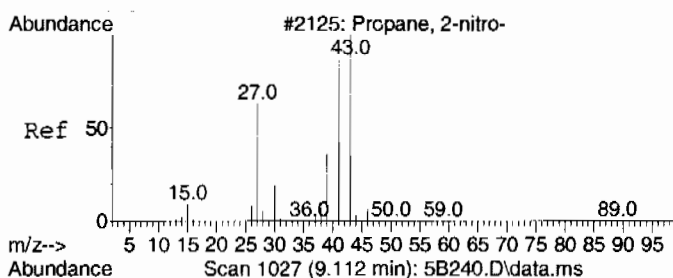
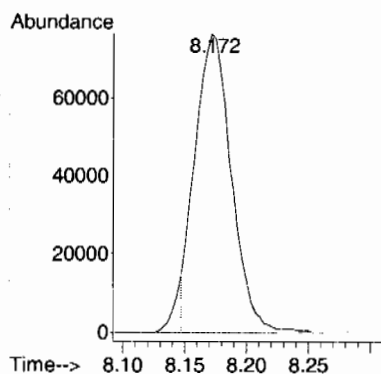
Quant Time: Mar 19 14:17:42 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





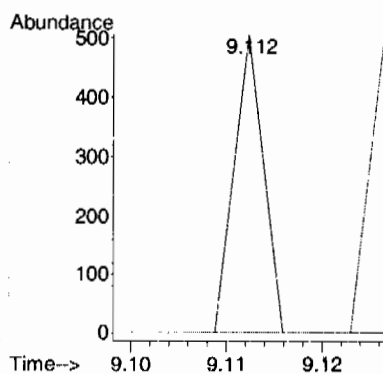
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 14.56 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B240.D
Acq: 10 Mar 2010 1:25 am

Tgt Ion: 67 Resp: 157102
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.95 ug/L
RT: 9.112 min Scan# 1027
Delta R.T. -0.230 min
Lab File: 5B240.D
Acq: 10 Mar 2010 1:25 am

Tgt Ion: 43 Resp: 107
Ion Ratio Lower Upper
43 100
41 100.0 52.5 112.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\

Data File : 5B240.D

Acq On : 10 Mar 2010 1:25 am

Operator : CDS1

Sample : |248370005|963122|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 40 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B240.D
Acq On : 10 Mar 2010 1:25 am
Operator : CDS1
Sample : |248370005|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 40 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370007	Date Received: 03/02/2010 08:50	%Moisture: 9.8
Client ID: RE36-10-7478	Client: LANL010	Project: LANL01004
Batch ID: 963122	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/10/2010 02:19	Inst: VOAS.I	Dilution: 1
Prep Date: 03/09/2010 17:06	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030910V55B242.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	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.54	ug/kg	1.84	5.54
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.54	ug/kg	1.77	5.54
75-09-2	Methylene chloride	U	5.54	ug/kg	2.22	5.54
75-15-0	Carbon disulfide	U	5.54	ug/kg	1.39	5.54
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.54	ug/kg	1.66	5.54
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.54	ug/kg	1.39	5.54
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.54	ug/kg	1.66	5.54
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370007

Client ID: RE36-10-7478
Batch ID: 963122
Run Date: 03/10/2010 02:19
Prep Date: 03/09/2010 17:06
Data File: 030910V55B242.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 9.8
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	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	J	0.543	ug/kg	0.333	2.22
95-47-6	o-Xylene	J	0.366	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.54	ug/kg	1.77	5.54
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B242.D
Acq On : 10 Mar 2010 2:19 am
Operator : CDS1
InstName : VOA5
Sample : |248370007|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Mar 10 06:18:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	8.388	8.387	1.000	96	1570705	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1035152	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	359259	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1570705	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1035152	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	359259	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	293859	38.65	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	77.30%		
43) Toluene-d8	9.721	9.721	0.872	98	1247306	47.12	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	94.24%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	486256	67.48	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	134.96%#		
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	1544	Below Cal		75
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	525	N.D.		
9) Acetone	6.181	6.174	0.737	43	1554	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	161	N.D.		
13) Methyl acetate	6.181	6.365	0.737	43	1554	N.D.		
14) Carbon disulfide	6.425	6.435	0.766	76	1114	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	7353	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.811	43	111	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	127	N.D.		
32) Cyclohexene	8.246	8.246	0.983	67	112	N.D.		
33) n-Butyl alcohol	8.388	8.377	1.000	56	8830	Below Cal	#	20
34) Trichloroethylene	8.685	8.677	1.035	95	225	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B242.D
Acq On : 10 Mar 2010 2:19 am
Operator : CDS1
InstName : VOA5
Sample : |248370007|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Mar 10 06:18:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.795	9.788	0.879	91	4482	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	6947	N.D.	
55) m,p-Xylenes	11.280	11.280	1.012	106	4690	0.49 ug/L #	75
56) o-Xylene	11.698	11.701	1.050	106	3232	0.33 ug/L #	78
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.012	12.016	0.896	105	357	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.416	12.415	0.926	91	2967	N.D.	
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	3439	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.691	12.698	0.946	91	1606	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	3499	N.D.	
71) sec-Butylbenzene	13.119	13.119	0.978	105	503	N.D.	
72) 4-Isopropyltoluene	13.225	13.229	0.986	119	3281	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	1320	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	202	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	1650	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.464	6.425	0.771	41	161	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B242.D
Acq On : 10 Mar 2010 2:19 am
Operator : CDS1
InstName : VOA5
Sample : |248370007|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Mar 10 06:18:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

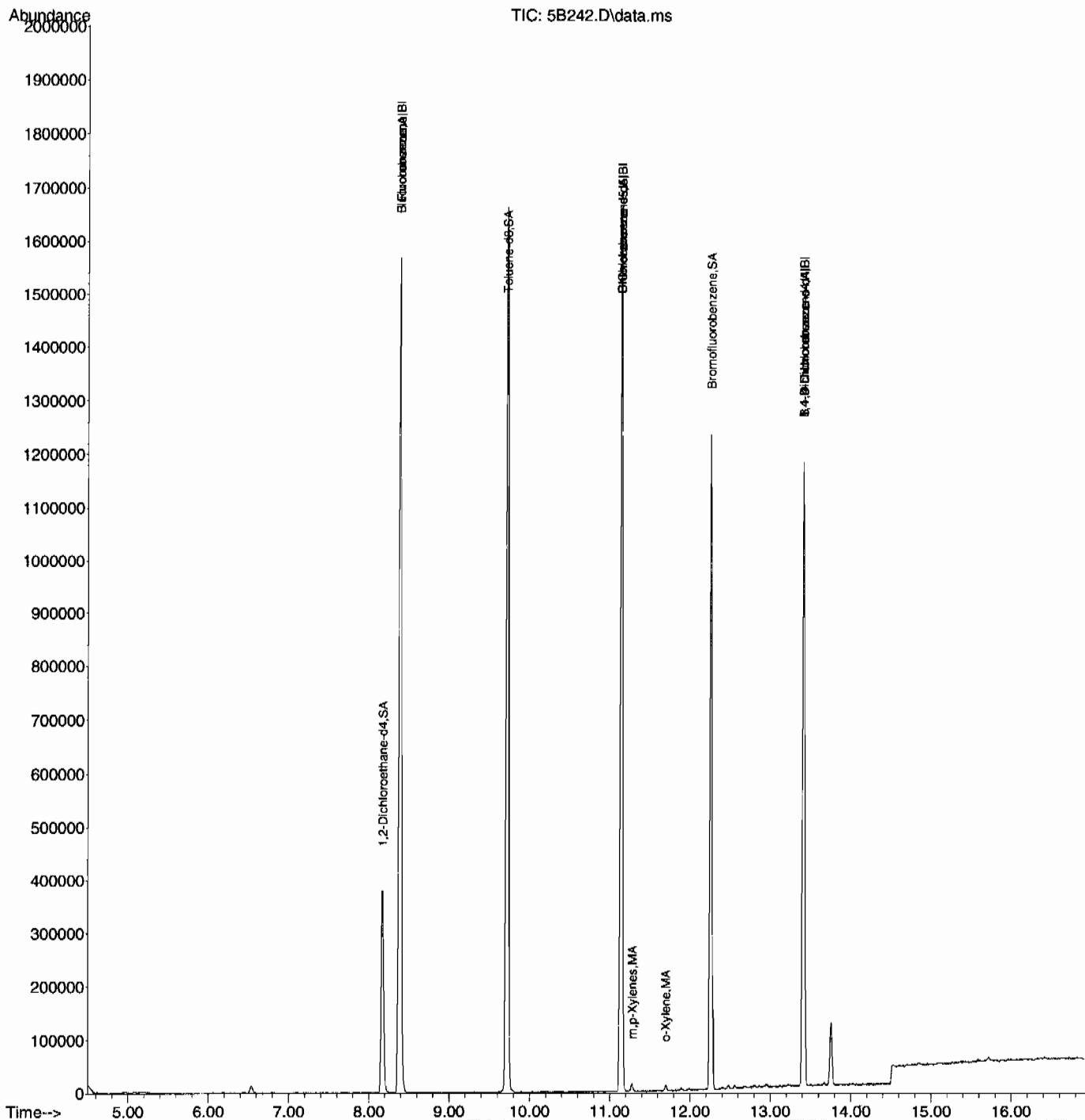
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.687	7.680	0.917	41	129	N.D.	
97) Tetrahydrofuran	7.723	7.716	0.921	42	833	N.D.	
98) Isobutyl alcohol	7.921	7.857	0.944	41	249	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	353	N.D.	
112) bis(2-Chloroisopropyl)...	13.936	13.929	1.039	45	130	N.D.	

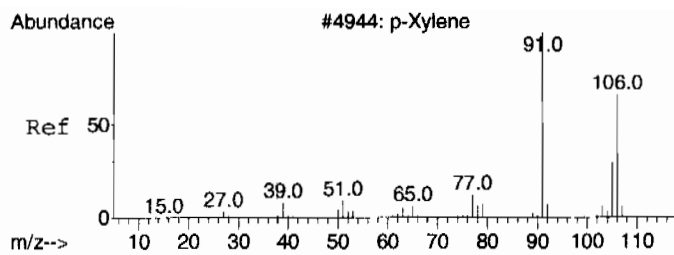
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B242.D
Acq On : 10 Mar 2010 2:19 am
Operator : CDS1
InstName : VOA5
Sample : |248370007|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 42 Sample Multiplier: 1

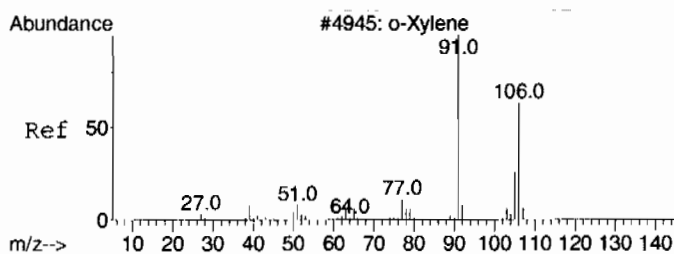
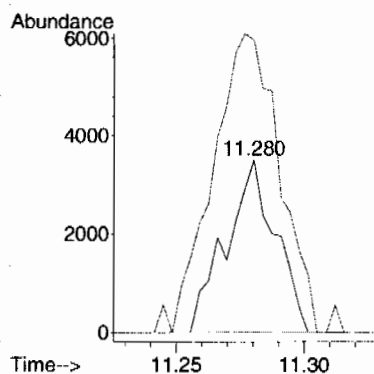
Quant Time: Mar 10 06:18:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





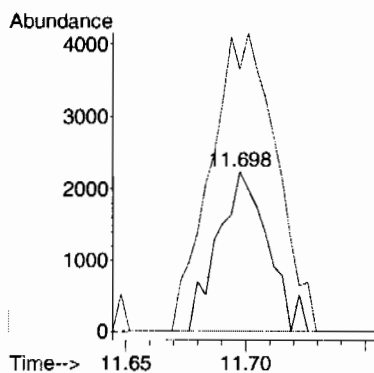
#55
m,p-Xylenes
Concen: 0.49 ug/L
RT: 11.280 min Scan# 1640
Delta R.T. 0.000 min
Lab File: 5B242.D
Acq: 10 Mar 2010 2:19 am

Tgt Ion:106 Resp: 4690
Ion Ratio Lower Upper
106 100
91 235.7 168.5 228.5#



#56
o-Xylene
Concen: 0.33 ug/L
RT: 11.698 min Scan# 1758
Delta R.T. -0.003 min
Lab File: 5B242.D
Acq: 10 Mar 2010 2:19 am

Tgt Ion:106 Resp: 3232
Ion Ratio Lower Upper
106 100
91 243.4 179.3 239.3#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B242.D
Acq On : 10 Mar 2010 2:19 am
Operator : CDS1
Sample : |248370007|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 42 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B242.D
Acq On : 10 Mar 2010 2:19 am
Operator : CDS1
Sample : |248370007|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 42 Sample Multiplier: 1

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

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370008

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAS.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26
 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	1.35	ug/kg	0.459	1.35
74-87-3	Chloromethane	U	1.35	ug/kg	0.405	1.35
75-01-4	Vinyl chloride	U	1.35	ug/kg	0.405	1.35
74-83-9	Bromomethane	U	1.35	ug/kg	0.405	1.35
75-00-3	Chloroethane	U	1.35	ug/kg	0.405	1.35
75-69-4	Trichlorofluoromethane	U	1.35	ug/kg	0.405	1.35
67-64-1	Acetone	J	2.46	ug/kg	2.24	6.75
75-35-4	1,1-Dichloroethylene	U	1.35	ug/kg	0.405	1.35
74-88-4	Iodomethane	U	6.75	ug/kg	2.16	6.75
75-09-2	Methylene chloride	U	6.75	ug/kg	2.70	6.75
75-15-0	Carbon disulfide	U	6.75	ug/kg	1.69	6.75
156-60-5	trans-1,2-Dichloroethylene	U	1.35	ug/kg	0.405	1.35
75-34-3	1,1-Dichloroethane	U	1.35	ug/kg	0.405	1.35
78-93-3	2-Butanone	U	6.75	ug/kg	2.03	6.75
156-59-2	cis-1,2-Dichloroethylene	U	1.35	ug/kg	0.405	1.35
594-20-7	2,2-Dichloropropane	U	1.35	ug/kg	0.405	1.35
67-66-3	Chloroform	U	1.35	ug/kg	0.405	1.35
74-97-5	Bromochloromethane	U	1.35	ug/kg	0.446	1.35
71-55-6	1,1,1-Trichloroethane	U	1.35	ug/kg	0.405	1.35
563-58-6	1,1-Dichloropropene	U	1.35	ug/kg	0.405	1.35
56-23-5	Carbon tetrachloride	U	1.35	ug/kg	0.405	1.35
107-06-2	1,2-Dichloroethane	U	1.35	ug/kg	0.405	1.35
71-43-2	Benzene	U	1.35	ug/kg	0.405	1.35
79-01-6	Trichloroethylene	U	1.35	ug/kg	0.446	1.35
78-87-5	1,2-Dichloropropane	U	1.35	ug/kg	0.405	1.35
75-27-4	Bromodichloromethane	U	1.35	ug/kg	0.405	1.35
74-95-3	Dibromomethane	U	1.35	ug/kg	0.405	1.35
108-10-1	4-Methyl-2-pentanone	U	6.75	ug/kg	1.69	6.75
10061-01-5	cis-1,3-Dichloropropylene	U	1.35	ug/kg	0.405	1.35
108-88-3	Toluene		1.59	ug/kg	0.405	1.35
10061-02-6	trans-1,3-Dichloropropylene	U	1.35	ug/kg	0.405	1.35
79-00-5	1,1,2-Trichloroethane	U	1.35	ug/kg	0.405	1.35
591-78-6	2-Hexanone	U	6.75	ug/kg	2.03	6.75
142-28-9	1,3-Dichloropropane	U	1.35	ug/kg	0.405	1.35
127-18-4	Tetrachloroethylene	U	1.35	ug/kg	0.405	1.35
124-48-1	Dibromochloromethane	U	1.35	ug/kg	0.405	1.35
106-93-4	1,2-Dibromoethane	U	1.35	ug/kg	0.405	1.35
108-90-7	Chlorobenzene	U	1.35	ug/kg	0.405	1.35

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370008

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7490
 Batch ID: 963122
 Run Date: 03/10/2010 02:47
 Prep Date: 03/09/2010 17:07
 Data File: 030910V55B243.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.35	ug/kg	0.405	1.35
179601-23-1	m,p-Xylenes	U	2.70	ug/kg	0.405	2.70
95-47-6	o-Xylene	U	1.35	ug/kg	0.405	1.35
100-42-5	Styrene	U	1.35	ug/kg	0.405	1.35
75-25-2	Bromoform	U	1.35	ug/kg	0.405	1.35
79-34-5	1,1,2,2-Tetrachloroethane	U	1.35	ug/kg	0.405	1.35
96-18-4	1,2,3-Trichloropropane	U	1.35	ug/kg	0.405	1.35
108-86-1	Bromobenzene	U	1.35	ug/kg	0.405	1.35
103-65-1	n-Propylbenzene	U	1.35	ug/kg	0.405	1.35
95-49-8	2-Chlorotoluene	U	1.35	ug/kg	0.405	1.35
98-82-8	Isopropylbenzene	U	1.35	ug/kg	0.405	1.35
108-67-8	1,3,5-Trimethylbenzene	U	1.35	ug/kg	0.405	1.35
106-43-4	4-Chlorotoluene	U	1.35	ug/kg	0.405	1.35
98-06-6	tert-Butylbenzene	U	1.35	ug/kg	0.405	1.35
95-63-6	1,2,4-Trimethylbenzene	U	1.35	ug/kg	0.405	1.35
135-98-8	sec-Butylbenzene	U	1.35	ug/kg	0.405	1.35
99-87-6	4-Isopropyltoluene		6.66	ug/kg	0.405	1.35
541-73-1	1,3-Dichlorobenzene	U	1.35	ug/kg	0.405	1.35
106-46-7	1,4-Dichlorobenzene	U	1.35	ug/kg	0.405	1.35
104-51-8	n-Butylbenzene	U	1.35	ug/kg	0.405	1.35
96-12-8	1,2-Dibromo-3-chloropropane	U	1.35	ug/kg	0.405	1.35
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.75	ug/kg	2.16	6.75
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.35	ug/kg	0.405	1.35
95-50-1	1,2-Dichlorobenzene	U	1.35	ug/kg	0.405	1.35

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99	7.31	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B243.D
Acq On : 10 Mar 2010 2:47 am
Operator : CDS1
InstName : VOA5
Sample : |248370008|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Mar 19 14:19:20 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.388	8.387	1.000	96	1579768	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1076316	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.409	13.413	1.000	152	444411	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1579768	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1076316	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.409	13.413	1.000	152	444411	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	295351	38.63	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	77.26%		
43) Toluene-d8	9.721	9.721	0.872	98	1266371	46.01	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	92.02%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	545207	61.16	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	122.32%		
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	175	Below Cal	#	1
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.937	5.695	0.708	101	781	N.D.		
8) Ethyl ether	5.867	5.866	0.699	59	180	N.D.		
9) Acetone	6.177	6.174	0.736	43	8599	1.82	ug/L	91
10) 1,1-Dichloroethylene	6.160	6.156	0.734	61	1293	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	118	N.D.		
13) Methyl acetate	0.000	6.365	0.000		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766	76	904	N.D.		
15) Methylene chloride	6.542	6.538	0.780	84	6723	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.796	6.969	0.810	43	294	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.450	7.450	0.888	43	386	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.917	7.924	0.944	56	343	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.200	8.203	0.978	78	593	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.395	8.377	1.001	56	8790	Below Cal	#	21
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B243.D
Acq On : 10 Mar 2010 2:47 am
Operator : CDS1
InstName : VOA5
Sample : |248370008|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Mar 19 14:19:20 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.717	9.487	1.159	75	107	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	27370	1.18 ug/L	98
45) trans-1,3-Dichloroprop...	9.717	9.968	0.872	75	107	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.171	11.181	1.003	91	2300	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	961	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.416	12.415	0.926	91	1582	N.D.	
66) 1,3,5-Trimethylbenzene	12.571	12.564	0.937	105	249	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.947	91	2966	N.D.	
69) tert-Butylbenzene	12.950	12.900	0.966	134	120	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.967	105	4534	N.D.	
71) sec-Butylbenzene	13.109	13.119	0.978	105	227	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.987	119	88379	4.93 ug/L	96
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	1366	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	1220	N.D.	
81) 1,2,3-Trichlorobenzene	16.269	16.291	1.213	180	121	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.163	6.163	0.735	45	1178	N.D.	
88) Allyl chloride	6.450	6.425	0.769	41	268	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.450	7.383	0.888	43	386	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B243.D
Acq On : 10 Mar 2010 2:47 am
Operator : CDS1
InstName : VOA5
Sample : |248370008|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Mar 19 14:19:20 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

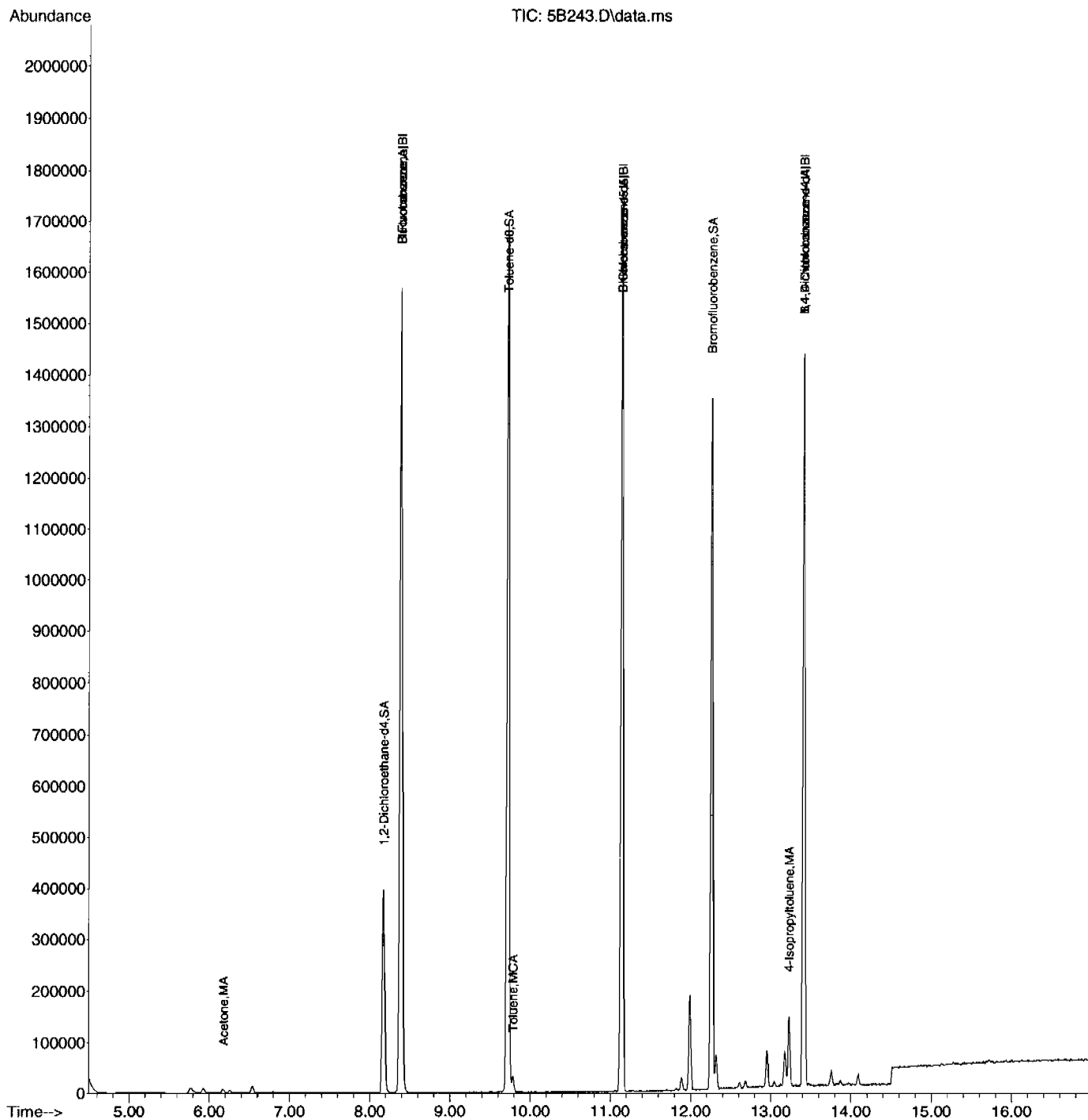
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.705	7.680	0.919	41	404	N.D.	
97) Tetrahydrofuran	7.705	7.716	0.919	42	473	N.D.	
98) Isobutyl alcohol	7.868	7.857	0.938	41	107	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	12.302	12.267	0.917	42	106	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	1311	N.D.	
112) bis(2-Chloroisopropyl)...	13.901	13.929	1.037	45	129	N.D.	

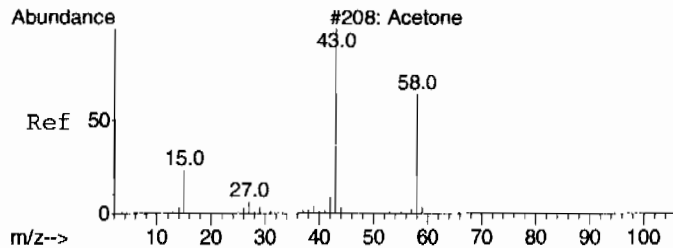
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B243.D
Acq On : 10 Mar 2010 2:47 am
Operator : CDS1
InstName : VOA5
Sample : |248370008|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 43 Sample Multiplier: 1

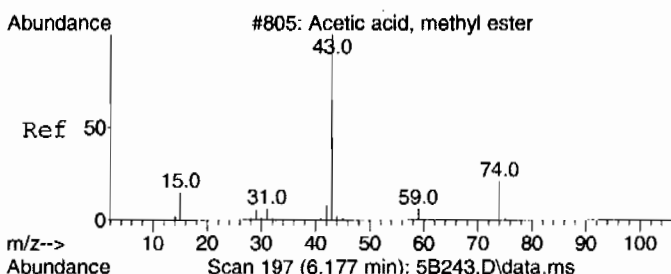
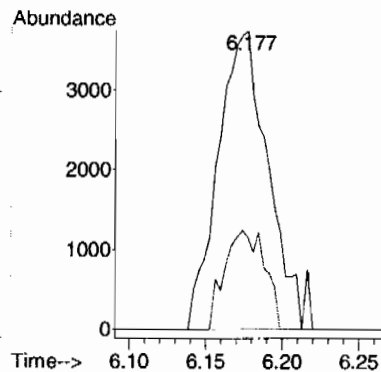
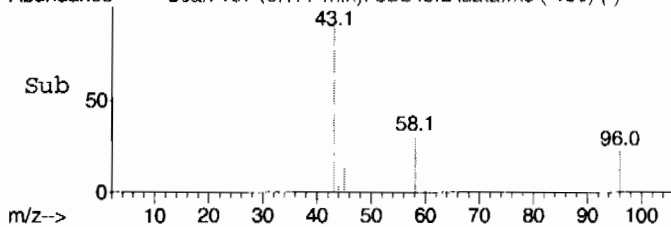
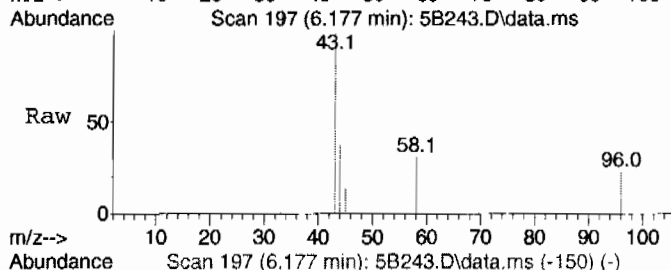
Quant Time: Mar 19 14:19:20 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





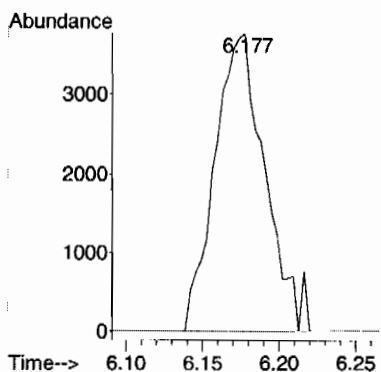
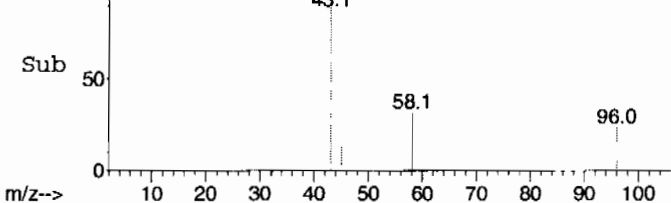
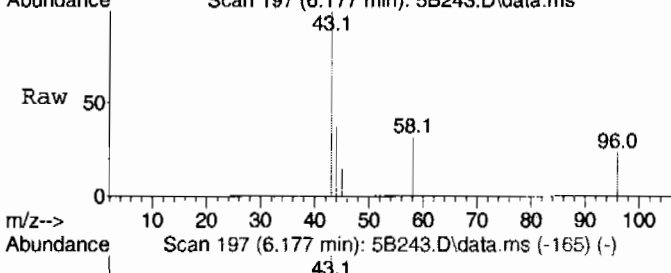
#9
Acetone
Concen: 1.82 ug/L
RT: 6.177 min Scan# 197
Delta R.T. 0.003 min
Lab File: 5B243.D
Acq: 10 Mar 2010 2:47 am

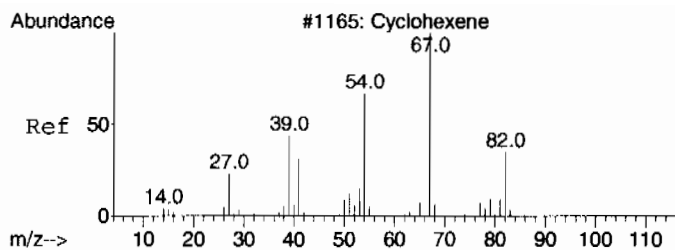
Tgt Ion	Ratio	Lower	Upper
43	100		
58	26.7	1.9	61.9



#13 BEFORE analyst DELETION
Methyl acetate
Concen: 1.67 ug/L
RT: 6.177 min Scan# 197
Delta R.T. -0.188 min
Lab File: 5B243.D
Acq: 10 Mar 2010 2:47 am

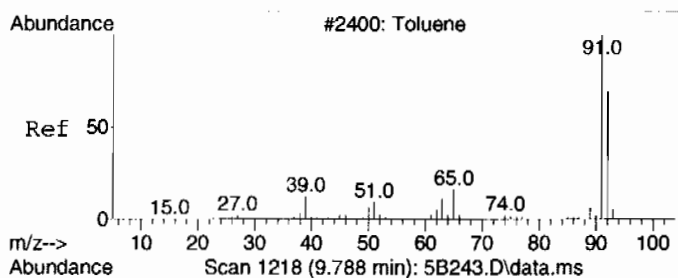
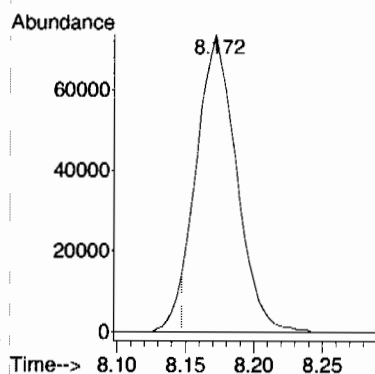
Tgt Ion	Ratio	Lower	Upper
43	100		
74	0.0	0.0	48.8
59	0.0	0.0	37.6





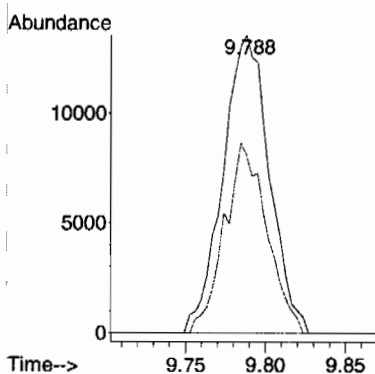
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.74 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B243.D
Acq: 10 Mar 2010 2:47 am

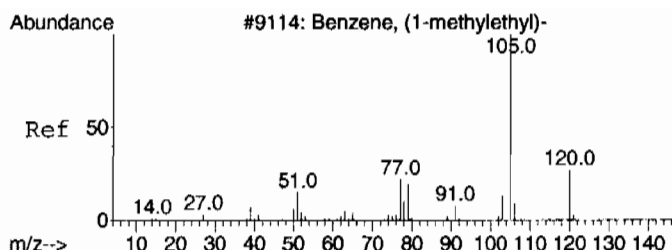
Tgt Ion: 67 Resp: 146080
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#44
Toluene
Concen: 1.18 ug/L
RT: 9.788 min Scan# 1218
Delta R.T. 0.000 min
Lab File: 5B243.D
Acq: 10 Mar 2010 2:47 am

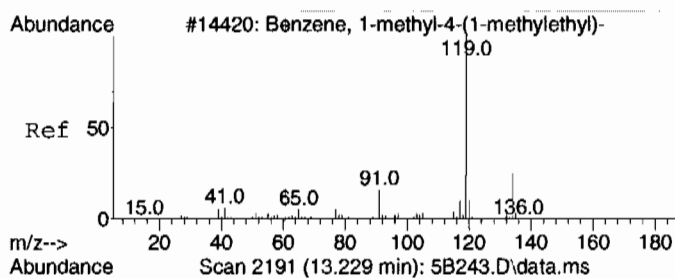
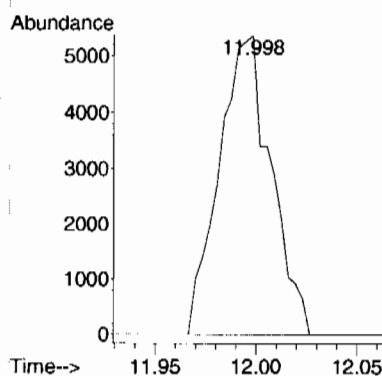
Tgt Ion: 91 Resp: 27370
Ion Ratio Lower Upper
91 100
92 58.0 29.5 89.5





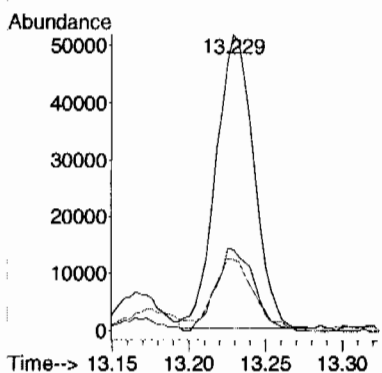
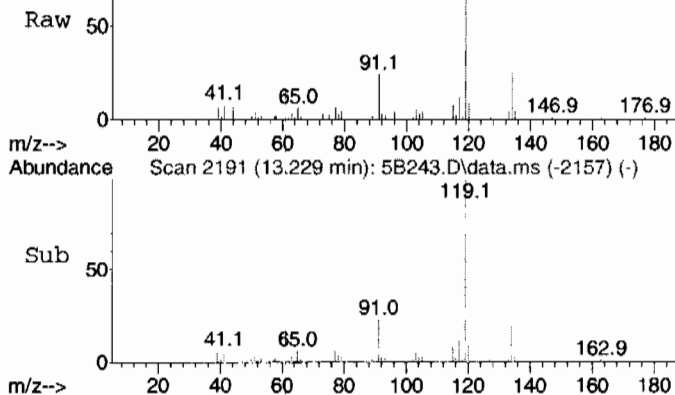
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.47 ug/L
RT: 11.998 min Scan# 1843
Delta R.T. -0.018 min
Lab File: 5B243.D
Acq: 10 Mar 2010 2:47 am

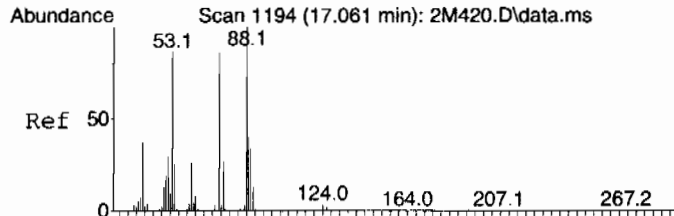
Tgt Ion	Ratio	Lower	Upper
105	100		
120	0.0	0.0	57.3



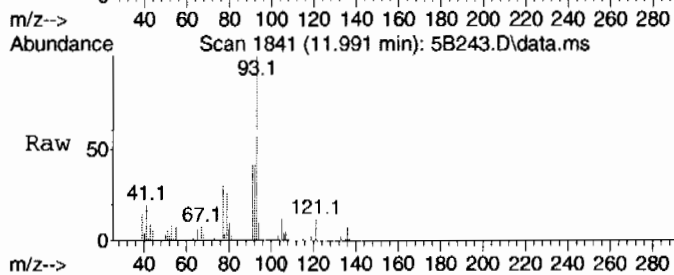
#72
4-Isopropyltoluene
Concen: 4.93 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5B243.D
Acq: 10 Mar 2010 2:47 am

Tgt Ion	Ratio	Lower	Upper
119	100		
134	28.3	0.0	57.2
91	26.0	0.0	53.0

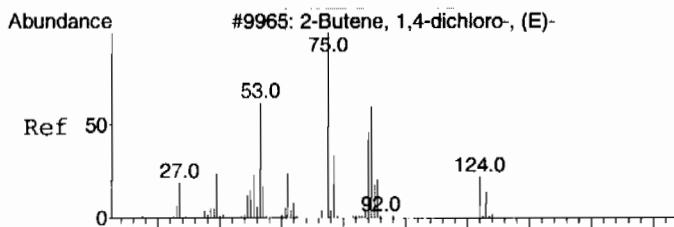
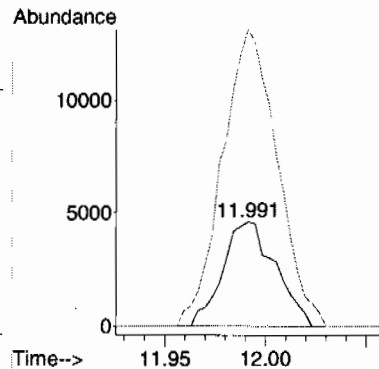
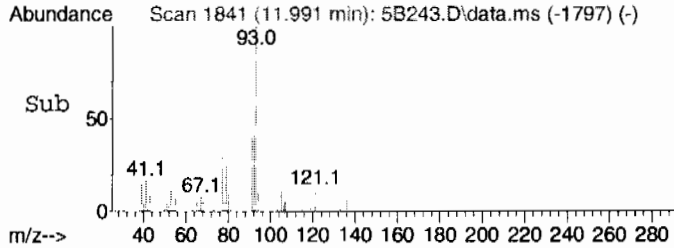




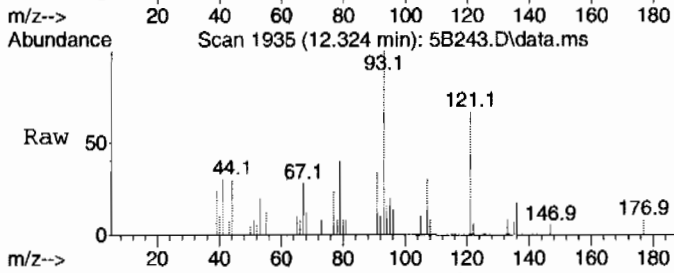
#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 5.03 ug/L
 RT: 11.991 min Scan# 1841
 Delta R.T. -0.145 min
 Lab File: 5B243.D
 Acq: 10 Mar 2010 2:47 am



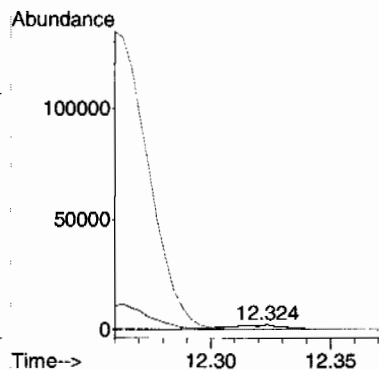
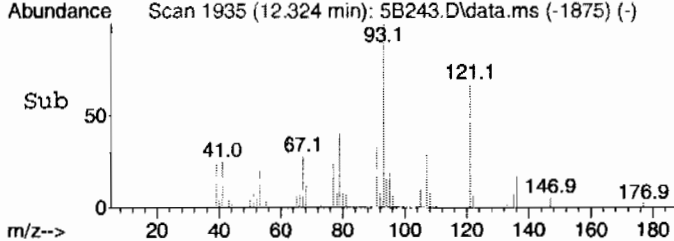
Tgt Ion: 53 Resp: 8360
 Ion Ratio Lower Upper
 53 100
 88 0.0 67.1 127.1#
 77 297.7 1.8 61.8#



#109 BEFORE analyst DELETION
 trans-1,4-Dichloro-2-butene
 Concen: 1.92 ug/L
 RT: 12.324 min Scan# 1935
 Delta R.T. -0.088 min
 Lab File: 5B243.D
 Acq: 10 Mar 2010 2:47 am



Tgt Ion: 53 Resp: 3012
 Ion Ratio Lower Upper
 53 100
 88 0.0 15.5 75.5#
 75 0.0 92.0 152.0#



Library Search Compound Report
GEL Laboratories, LLC

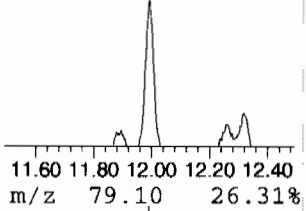
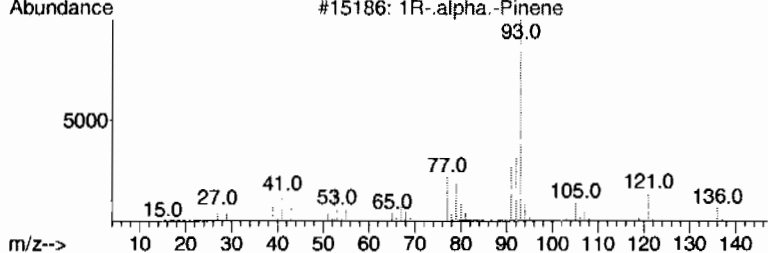
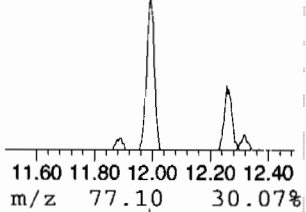
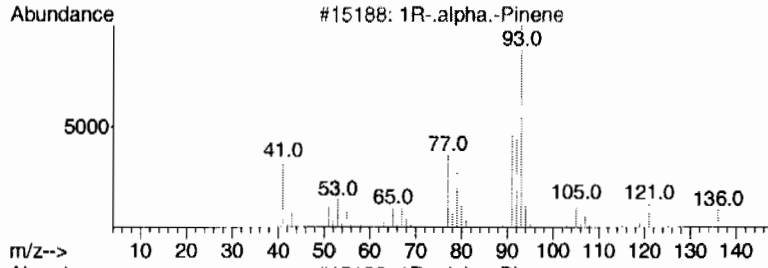
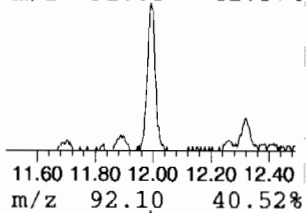
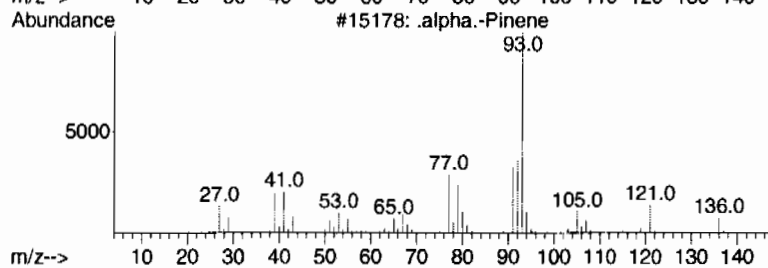
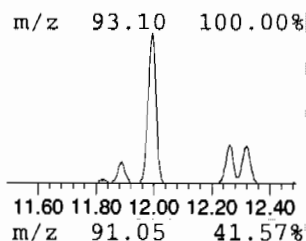
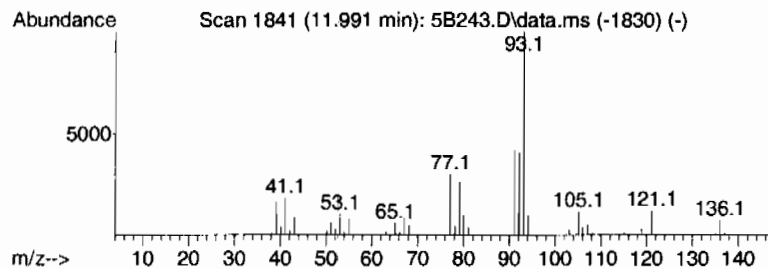
Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B243.D
Acq On : 10 Mar 2010 2:47 am
Operator : CDS1
Sample : |248370008|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 43 Sample Multiplier: 1

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

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

Peak Number 1 unknown hydrocarbon Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.	
11.991	5.41 ug/L	360243	B Chlorobenzene-d5	11.142	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	97
2	1R-.alpha.-Pinene	136	C10H16	007785-70-8	95
3	1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
4	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	94
5	.alpha.-Pinene	136	C10H16	000080-56-8	91



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B243.D
Acq On : 10 Mar 2010 2:47 am
Operator : CDS1
Sample : |248370008|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 43 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown hydroca...	11.991	5.4	ug/L	360243	4	11.142	3329800	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370010
 Client ID: RE36-10-7483
 Batch ID: 963122
 Run Date: 03/10/2010 03:41
 Prep Date: 03/09/2010 17:09
 Data File: 030910V55B245.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24
 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	1.32	ug/kg	0.447	1.32
74-87-3	Chloromethane	U	1.32	ug/kg	0.395	1.32
75-01-4	Vinyl chloride	U	1.32	ug/kg	0.395	1.32
74-83-9	Bromomethane	U	1.32	ug/kg	0.395	1.32
75-00-3	Chloroethane	U	1.32	ug/kg	0.395	1.32
75-69-4	Trichlorofluoromethane	U	1.32	ug/kg	0.395	1.32
67-64-1	Acetone		7.18	ug/kg	2.18	6.58
75-35-4	1,1-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
74-88-4	Iodomethane	U	6.58	ug/kg	2.11	6.58
75-09-2	Methylene chloride	J	3.57	ug/kg	2.63	6.58
75-15-0	Carbon disulfide	U	6.58	ug/kg	1.64	6.58
156-60-5	trans-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
75-34-3	1,1-Dichloroethane	U	1.32	ug/kg	0.395	1.32
78-93-3	2-Butanone	U	6.58	ug/kg	1.97	6.58
156-59-2	cis-1,2-Dichloroethylene	U	1.32	ug/kg	0.395	1.32
594-20-7	2,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
67-66-3	Chloroform	U	1.32	ug/kg	0.395	1.32
74-97-5	Bromochloromethane	U	1.32	ug/kg	0.434	1.32
71-55-6	1,1,1-Trichloroethane	U	1.32	ug/kg	0.395	1.32
563-58-6	1,1-Dichloropropene	U	1.32	ug/kg	0.395	1.32
56-23-5	Carbon tetrachloride	U	1.32	ug/kg	0.395	1.32
107-06-2	1,2-Dichloroethane	U	1.32	ug/kg	0.395	1.32
71-43-2	Benzene	U	1.32	ug/kg	0.395	1.32
79-01-6	Trichloroethylene	J	0.605	ug/kg	0.434	1.32
78-87-5	1,2-Dichloropropane	U	1.32	ug/kg	0.395	1.32
75-27-4	Bromodichloromethane	U	1.32	ug/kg	0.395	1.32
74-95-3	Dibromomethane	U	1.32	ug/kg	0.395	1.32
108-10-1	4-Methyl-2-pentanone	U	6.58	ug/kg	1.64	6.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
108-88-3	Toluene		5.24	ug/kg	0.395	1.32
10061-02-6	trans-1,3-Dichloropropylene	U	1.32	ug/kg	0.395	1.32
79-00-5	1,1,2-Trichloroethane	U	1.32	ug/kg	0.395	1.32
591-78-6	2-Hexanone	U	6.58	ug/kg	1.97	6.58
142-28-9	1,3-Dichloropropane	U	1.32	ug/kg	0.395	1.32
127-18-4	Tetrachloroethylene	U	1.32	ug/kg	0.395	1.32
124-48-1	Dibromochloromethane	U	1.32	ug/kg	0.395	1.32
106-93-4	1,2-Dibromoethane	U	1.32	ug/kg	0.395	1.32
108-90-7	Chlorobenzene	U	1.32	ug/kg	0.395	1.32

**Volatile
Certificate of Analysis
Sample Summary**

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Lab Sample ID: 248370010

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Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 24
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	1.32	ug/kg	0.395	1.32
179601-23-1	m,p-Xylenes	J	0.960	ug/kg	0.395	2.63
95-47-6	o-Xylene	J	0.513	ug/kg	0.395	1.32
100-42-5	Styrene	U	1.32	ug/kg	0.395	1.32
75-25-2	Bromoform	U	1.32	ug/kg	0.395	1.32
79-34-5	1,1,2,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
96-18-4	1,2,3-Trichloropropane	U	1.32	ug/kg	0.395	1.32
108-86-1	Bromobenzene	U	1.32	ug/kg	0.395	1.32
103-65-1	n-Propylbenzene	U	1.32	ug/kg	0.395	1.32
95-49-8	2-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-82-8	Isopropylbenzene	U	1.32	ug/kg	0.395	1.32
108-67-8	1,3,5-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
106-43-4	4-Chlorotoluene	U	1.32	ug/kg	0.395	1.32
98-06-6	tert-Butylbenzene	U	1.32	ug/kg	0.395	1.32
95-63-6	1,2,4-Trimethylbenzene	U	1.32	ug/kg	0.395	1.32
135-98-8	sec-Butylbenzene	U	1.32	ug/kg	0.395	1.32
99-87-6	4-Isopropyltoluene		89.3	ug/kg	0.395	1.32
541-73-1	1,3-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
106-46-7	1,4-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32
104-51-8	n-Butylbenzene	U	1.32	ug/kg	0.395	1.32
96-12-8	1,2-Dibromo-3-chloropropane	U	1.32	ug/kg	0.395	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.58	ug/kg	2.11	6.58
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.32	ug/kg	0.395	1.32
95-50-1	1,2-Dichlorobenzene	U	1.32	ug/kg	0.395	1.32

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000115-10-6	Dimethyl ether	5.78	7.29	ug/kg	9	NJ
	unknown hydrocarbon	11.99	56	ug/kg	0	J
	unknown hydrocarbon	12.32	7.03	ug/kg	0	J
	unknown hydrocarbon	12.69	10	ug/kg	0	J
	unknown hydrocarbon	12.95	67.7	ug/kg	0	J
	unknown hydrocarbon	13.17	9.63	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B245.D
Acq On : 10 Mar 2010 3:41 am
Operator : CDS1
InstName : VOA5
Sample : |248370010|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Mar 19 14:21:00 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1486199	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	827346	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	223756	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1486199	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	827346	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	223756	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	274711	38.19	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 76.38%			
43) Toluene-d8	9.721	9.721	0.872	98	1139290	53.85	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 107.70%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	336634	75.01	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 150.02%#			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	2425	Below Cal		62
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	1522	N.D.		
9) Acetone	6.181	6.174	0.737	43	24259	5.46	ug/L	90
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	485	N.D.		
13) Methyl acetate	6.372	6.365	0.760	43	291	N.D.		
14) Carbon disulfide	6.425	6.435	0.766	76	3530	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	18549	2.71	ug/L	99
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.863	6.969	0.818	43	121	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.447	7.450	0.888	43	1618	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.200	8.203	0.978	78	2733	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	8132	Below Cal	#	21
34) Trichloroethylene	8.681	8.677	1.035	95	2350	0.46	ug/L	90
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B245.D
Acq On : 10 Mar 2010 3:41 am
Operator : CDS1
InstName : VOA5
Sample : |248370010|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Mar 19 14:21:00 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	70692	3.98 ug/L	97
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.209	10.279	0.916	43	110	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	0.000	11.181	0.000		0m	N.D. d	
55) m,p-Xylenes	11.273	11.280	1.012	106	5608	0.73 ug/L	84
56) o-Xylene	11.701	11.701	1.050	106	3052	0.39 ug/L #	64
57) Styrene	11.715	11.715	1.051	104	119	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	0.000	12.415	0.000		0m	N.D. d	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0m	N.D. d	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	12.698	0.000		0m	N.D. d	
69) tert-Butylbenzene	12.900	12.900	0.962	134	115	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D. d	
71) sec-Butylbenzene	13.112	13.119	0.978	105	427	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	612241	67.89 ug/L	99
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	1933	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	202	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	1571	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.160	6.163	0.734	45	5053	N.D.	
88) Allyl chloride	6.428	6.425	0.766	41	109	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.433	7.383	0.886	43	254	N.D.	

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Response via : Initial Calibration
Integrator: RTE

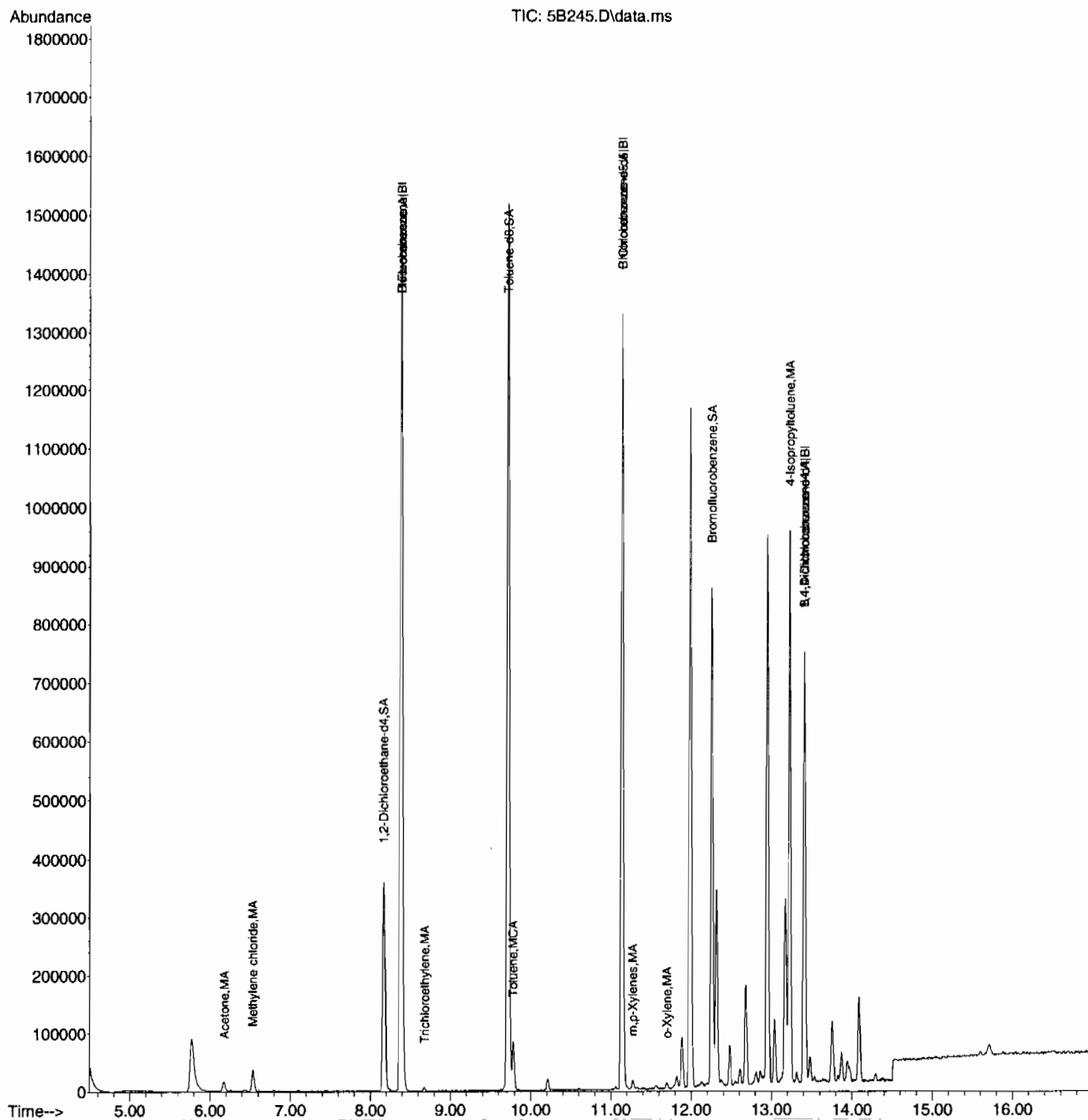
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.698	7.680	0.918	41	141	N.D.	
97) Tetrahydrofuran	7.716	7.716	0.920	42	1022	N.D.	
98) Isobutyl alcohol	7.868	7.857	0.938	41	114	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	11.061	10.980	0.825	55	127	N.D.	
107) cis-1,4-Dichloro-2-butene	12.150	12.136	0.906	53	225	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	324	N.D.	
112) bis(2-Chloroisopropyl)...	13.933	13.929	1.039	45	238	N.D.	

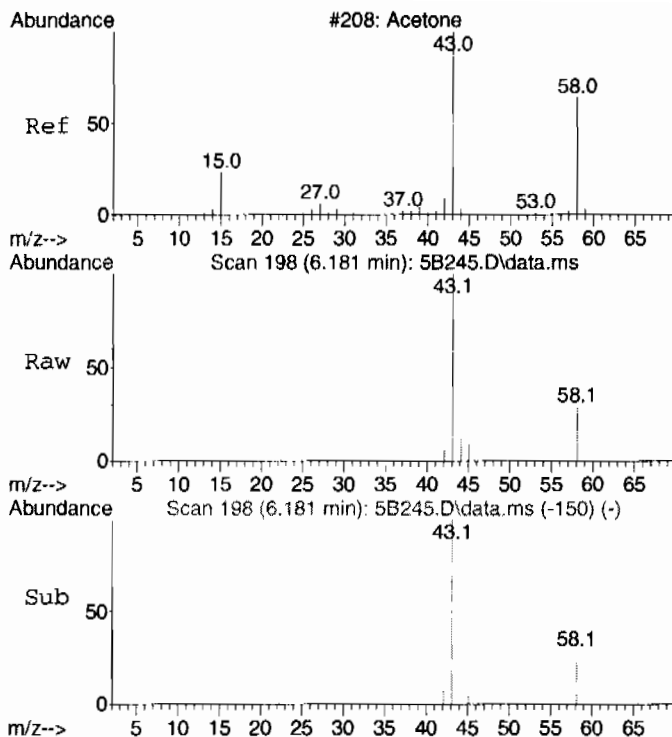
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

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GEL Laboratories, LLC

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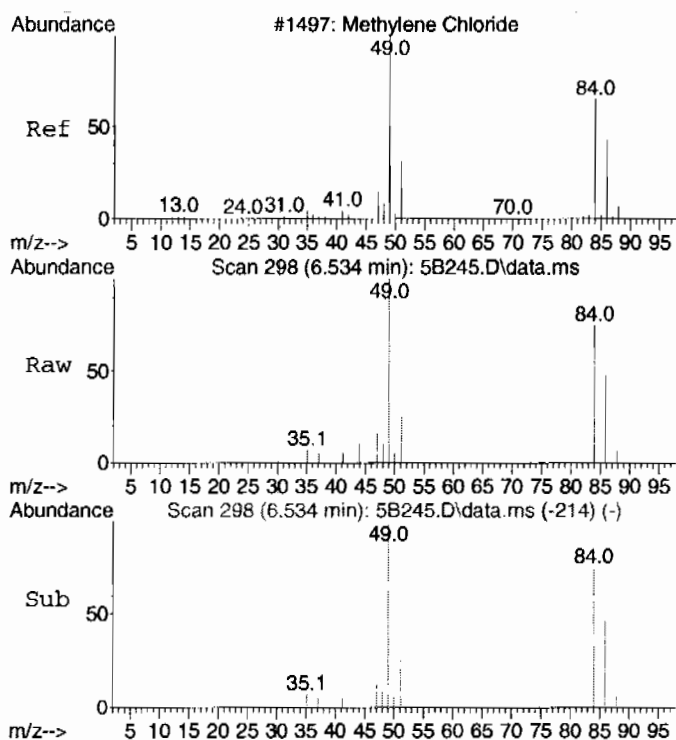
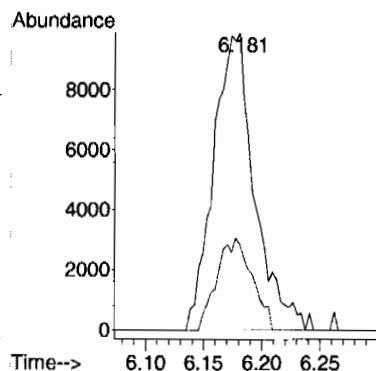
Quant Time: Mar 19 14:21:00 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





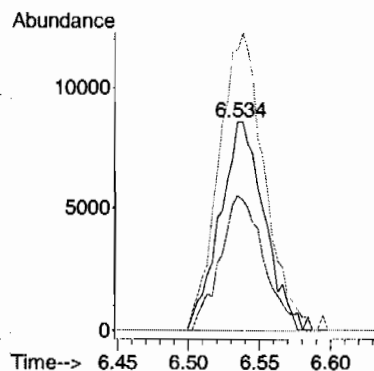
#9
Acetone
Concen: 5.46 ug/L
RT: 6.181 min Scan# 198
Delta R.T. 0.007 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

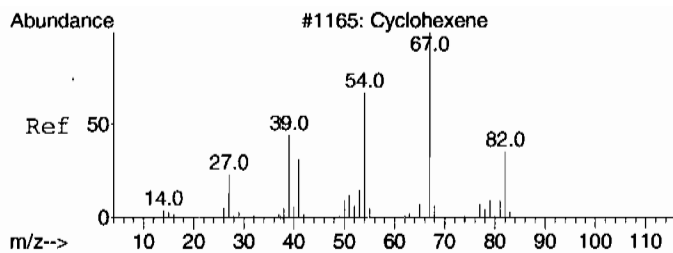
Tgt Ion	Ratio	Lower	Upper
43	100		
58	26.4	1.9	61.9



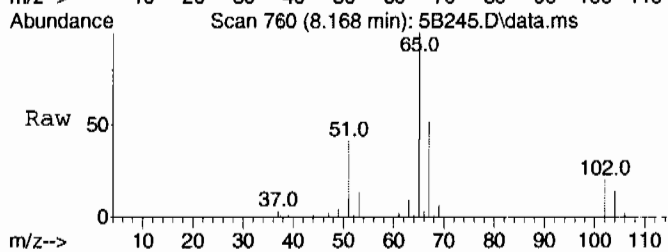
#15
Methylene chloride
Concen: 2.71 ug/L
RT: 6.534 min Scan# 298
Delta R.T. -0.004 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

Tgt Ion	Ratio	Lower	Upper
84	100		
86	62.6	33.2	93.2
49	146.1	117.6	177.6

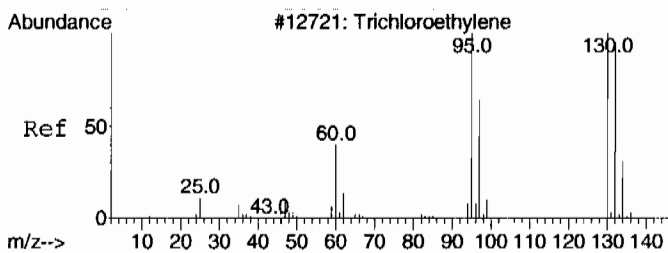
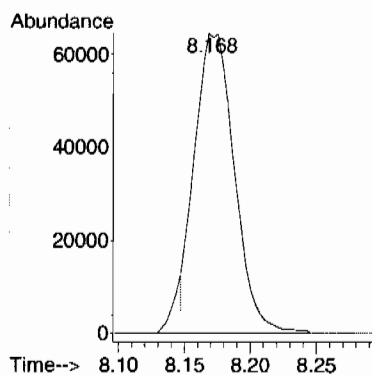
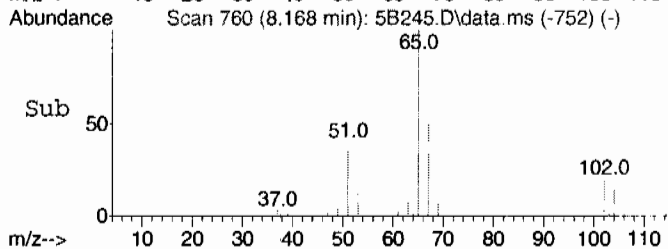




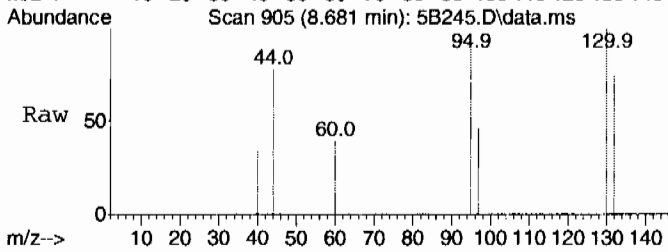
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.58 ug/L
RT: 8.168 min Scan# 760
Delta R.T. -0.078 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am



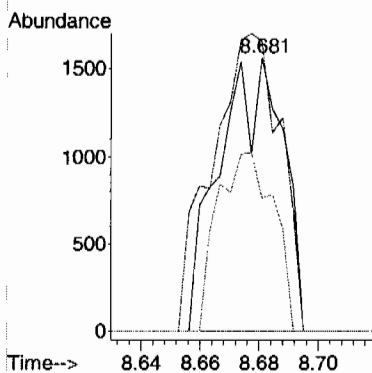
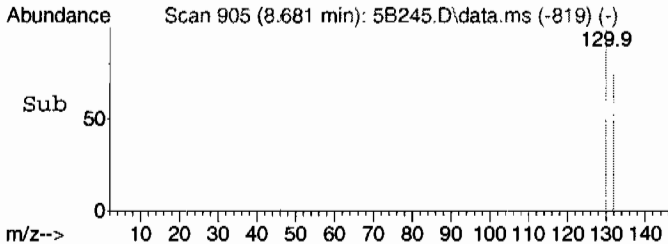
Tgt Ion: 67 Resp: 135787
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#

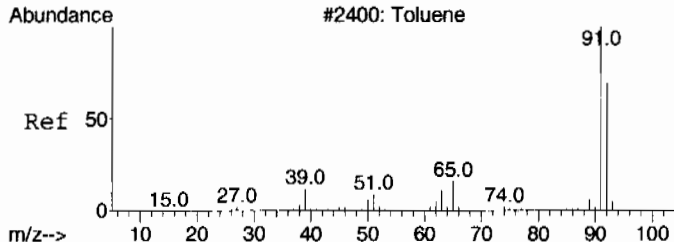


#34
Trichloroethylene
Concen: 0.46 ug/L
RT: 8.681 min Scan# 905
Delta R.T. 0.004 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am



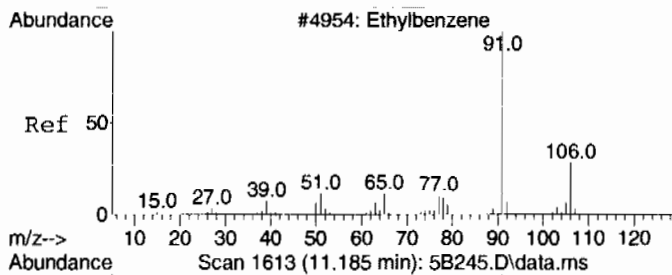
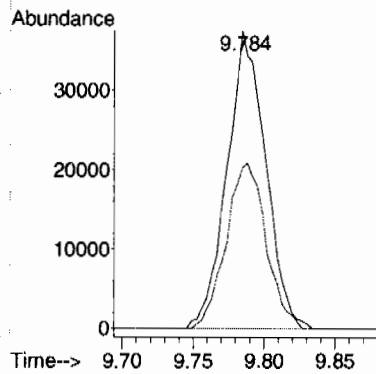
Tgt Ion: 95 Resp: 2350
Ion Ratio Lower Upper
95 100
130 116.4 75.1 135.1
97 57.8 35.2 95.2





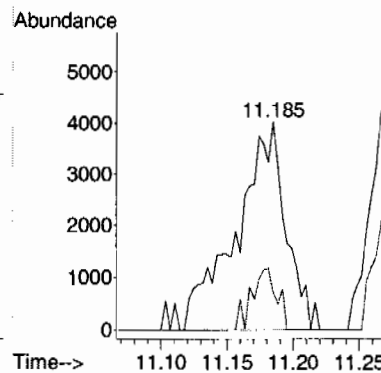
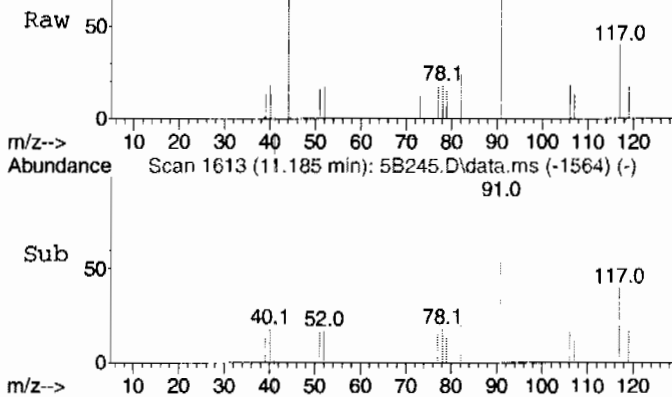
#44
Toluene
Concen: 3.98 ug/L
RT: 9.784 min Scan# 1217
Delta R.T. -0.004 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

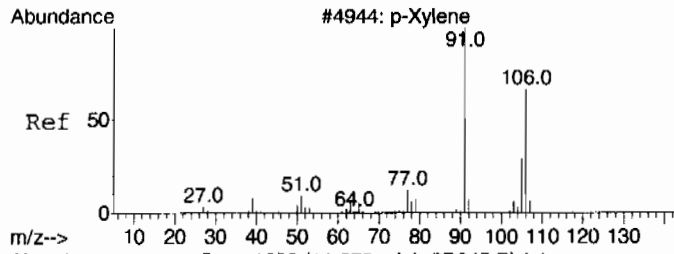
Tgt Ion: 91 Resp: 70692
Ion Ratio Lower Upper
91 100
92 57.5 29.5 89.5



#54 BEFORE analyst DELETION
Ethylbenzene
Concen: 0.51 ug/L
RT: 11.185 min Scan# 1613
Delta R.T. 0.004 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

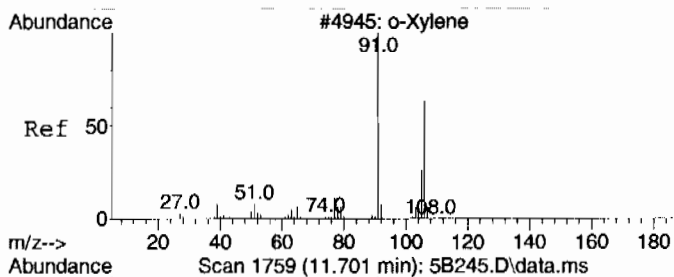
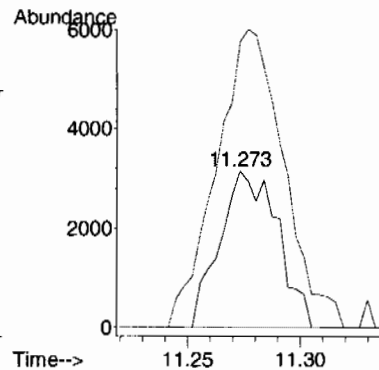
Tgt Ion: 91 Resp: 10349
Ion Ratio Lower Upper
91 100
106 14.9 2.6 62.6





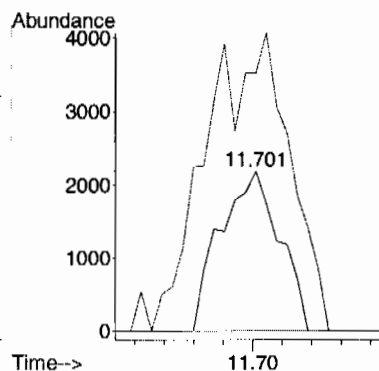
#55
m,p-Xylenes
Concen: 0.73 ug/L
RT: 11.273 min Scan# 1638
Delta R.T. -0.007 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

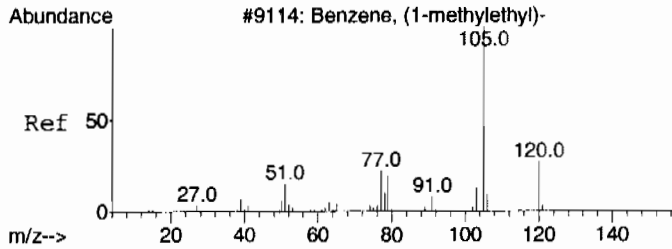
Tgt Ion:106 Resp: 5608
Ion Ratio Lower Upper
106 100
91 222.3 168.5 228.5



#56
o-Xylene
Concen: 0.39 ug/L
RT: 11.701 min Scan# 1759
Delta R.T. 0.000 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

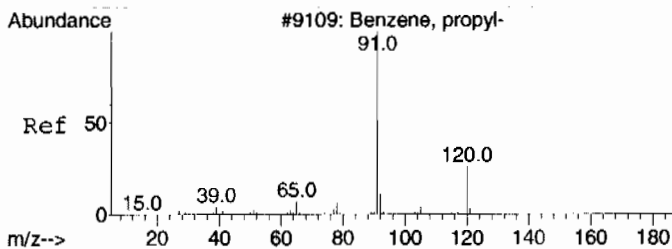
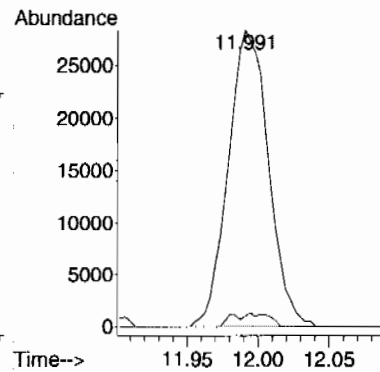
Tgt Ion:106 Resp: 3052
Ion Ratio Lower Upper
106 100
91 265.3 179.3 239.3#





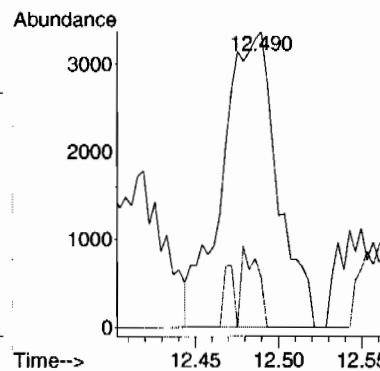
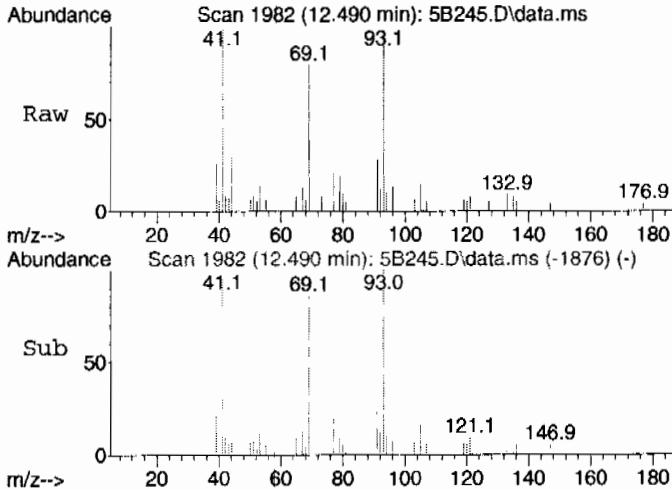
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 5.46 ug/L
RT: 11.991 min Scan# 1841
Delta R.T. -0.025 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

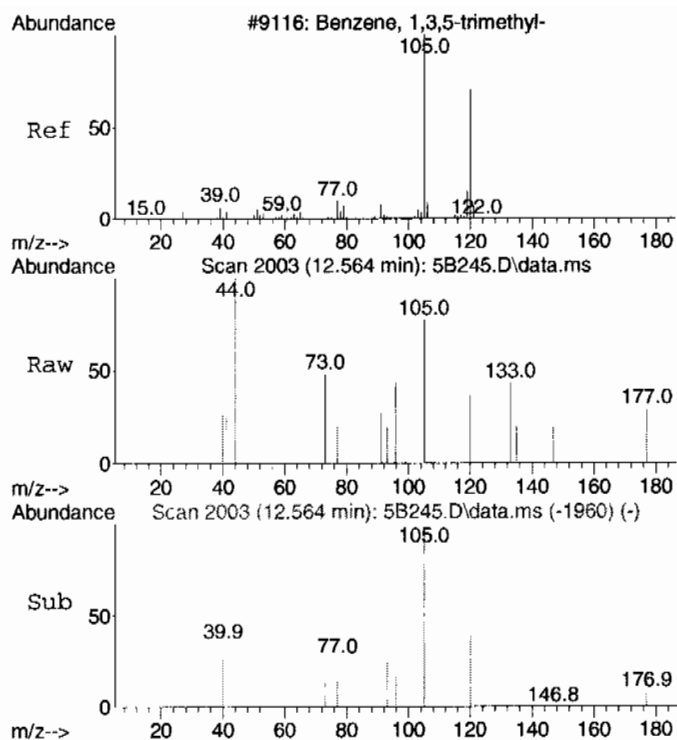
Tgt Ion	Ratio	Lower	Upper
105	100		
120	2.8	0.0	57.3



#65 BEFORE analyst DELETION
n-Propylbenzene
Concen: 0.62 ug/L
RT: 12.490 min Scan# 1982
Delta R.T. 0.075 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

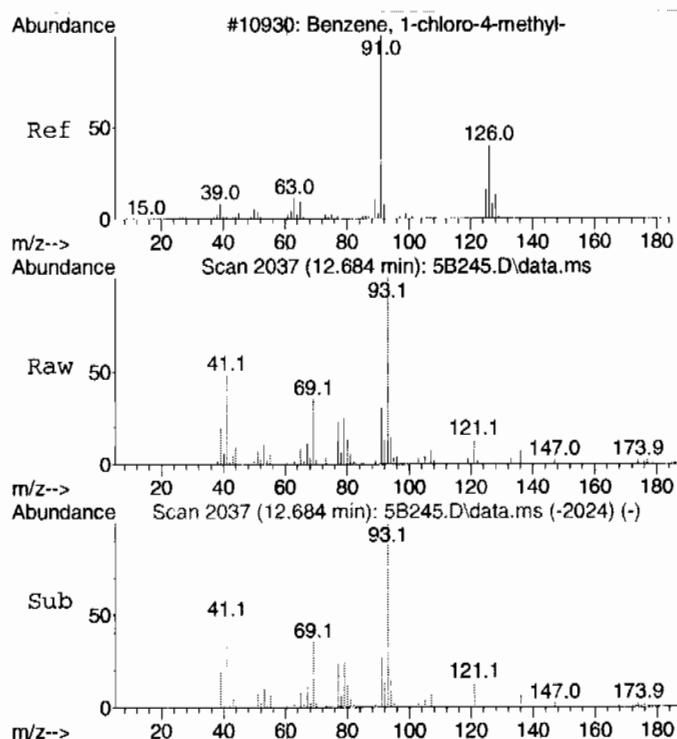
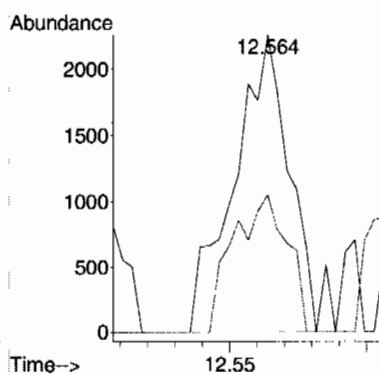
Tgt Ion	Ratio	Lower	Upper
91	100		
120	8.0	0.0	54.1





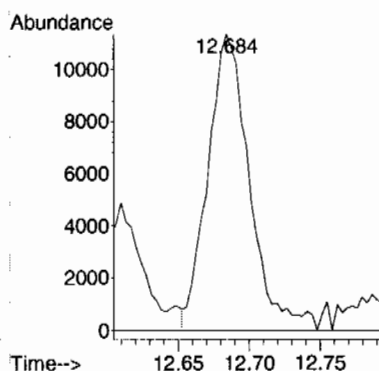
#66 BEFORE analyst DELETION
1,3,5-Trimethylbenzene
Concen: 0.36 ug/L
RT: 12.564 min Scan# 2003
Delta R.T. -0.000 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

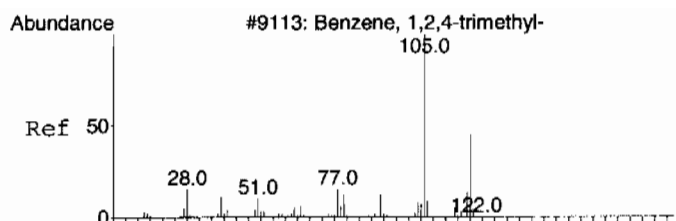
Tgt Ion	Ratio	Lower	Upper
105	100		
120	45.9	20.0	80.0



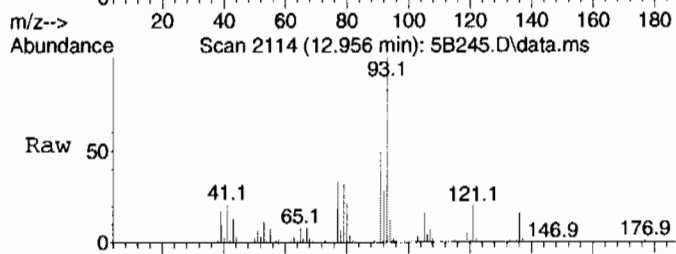
#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 2.93 ug/L
RT: 12.684 min Scan# 2037
Delta R.T. -0.014 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	3.6	63.6#

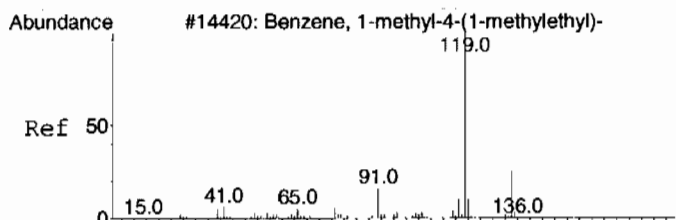
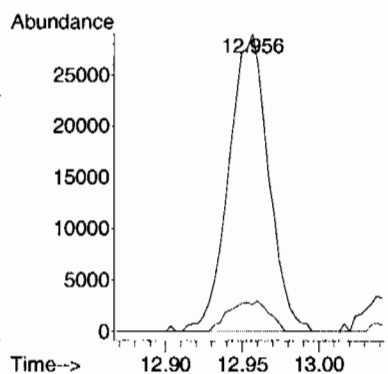
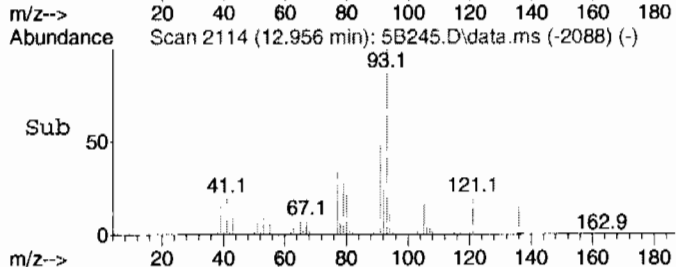




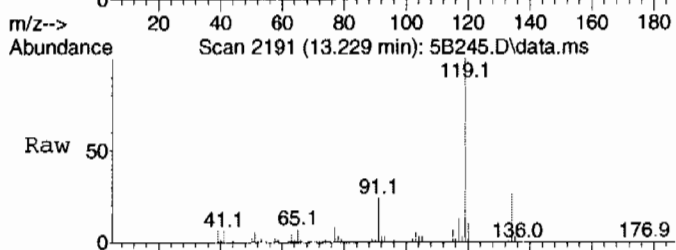
#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 5.83 ug/L
RT: 12.956 min Scan# 2114
Delta R.T. 0.000 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am



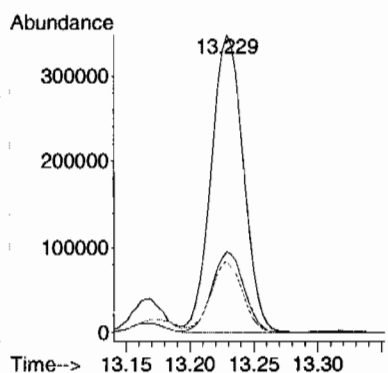
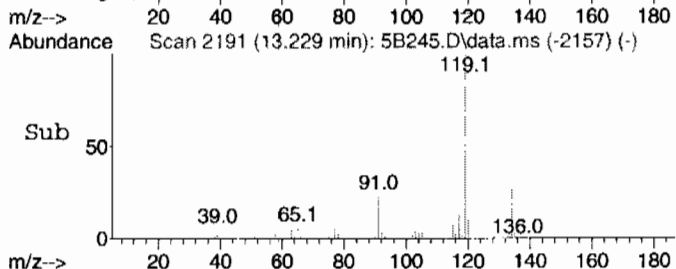
Tgt Ion:105 Resp: 52039
Ion Ratio Lower Upper
105 100
120 10.4 17.4 77.4#

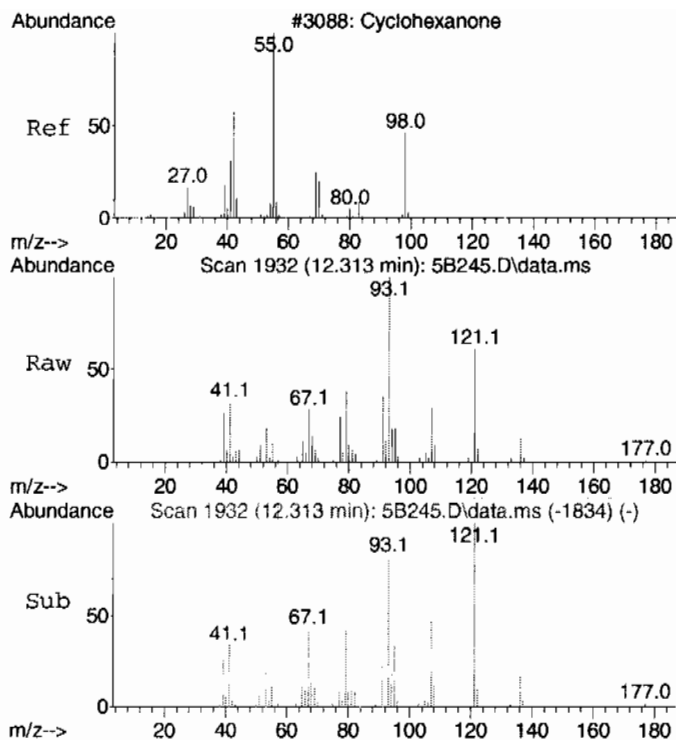


#72
4-Isopropyltoluene
Concen: 67.89 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am



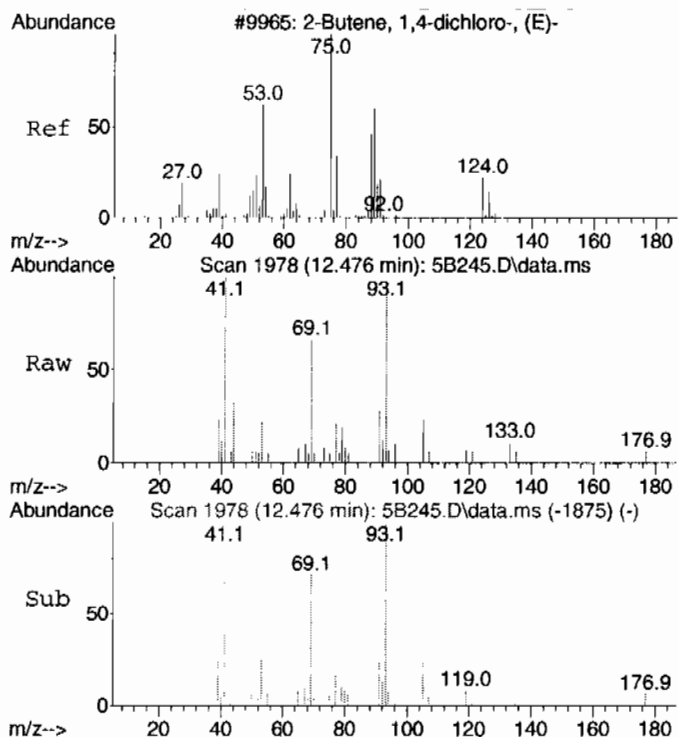
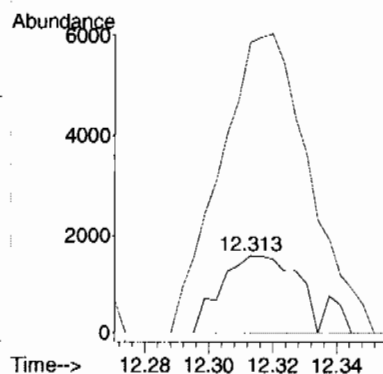
Tgt Ion:119 Resp: 612241
Ion Ratio Lower Upper
119 100
134 27.5 0.0 57.2
91 23.4 0.0 53.0





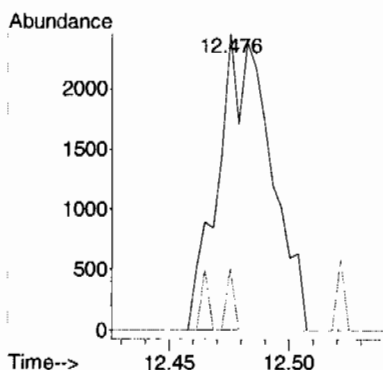
#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 37.89 ug/L
RT: 12.313 min Scan# 1932
Delta R.T. 0.046 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

Tgt Ion: 42 Resp: 2606
Ion Ratio Lower Upper
42 100
55 447.6 120.2 180.2#
98 0.0 29.2 89.2#



#109 BEFORE analyst DELETION
trans-1,4-Dichloro-2-butene
Concen: 4.74 ug/L
RT: 12.476 min Scan# 1978
Delta R.T. 0.064 min
Lab File: 5B245.D
Acq: 10 Mar 2010 3:41 am

Tgt Ion: 53 Resp: 3732
Ion Ratio Lower Upper
53 100
88 0.0 15.5 75.5#
75 2.9 92.0 152.0#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B245.D
Acq On : 10 Mar 2010 3:41 am
Operator : CDS1
Sample : |248370010|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

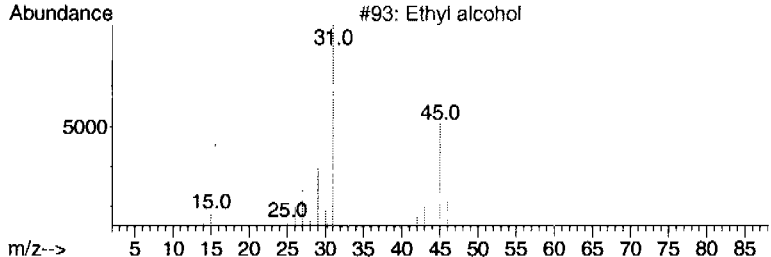
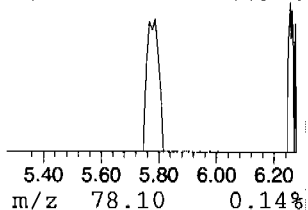
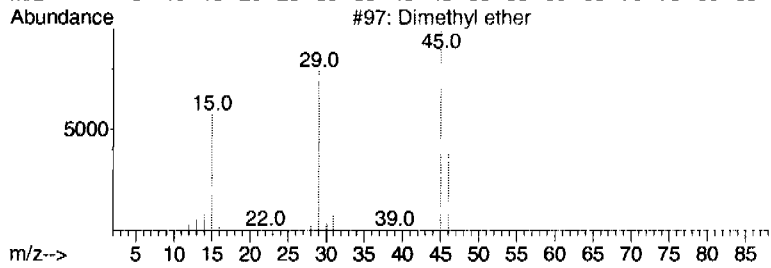
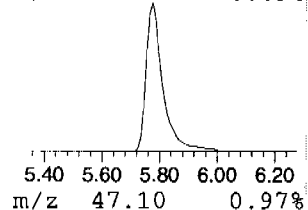
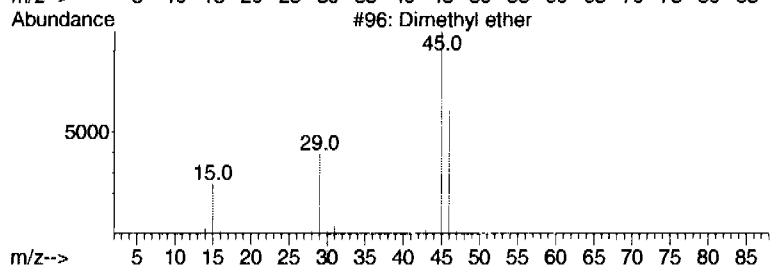
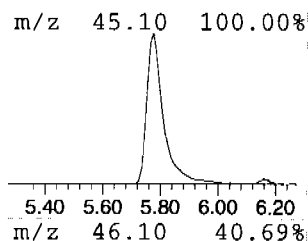
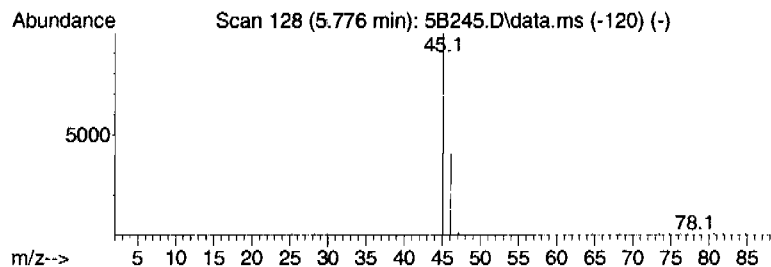
SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 1 Dimethyl ether Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.		
5.776	5.54 ug/L	347248	Fluorobenzene	8.387		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Dimethyl ether	46	C2H6O	000115-10-6	9
2		Dimethyl ether	46	C2H6O	000115-10-6	9
3		Ethyl alcohol	46	C2H6O	000064-17-5	7
4		Ethyl alcohol	46	C2H6O	000064-17-5	7
5		Ethyl alcohol	46	C2H6O	000064-17-5	4



Library Search Compound Report
GEL Laboratories, LLC

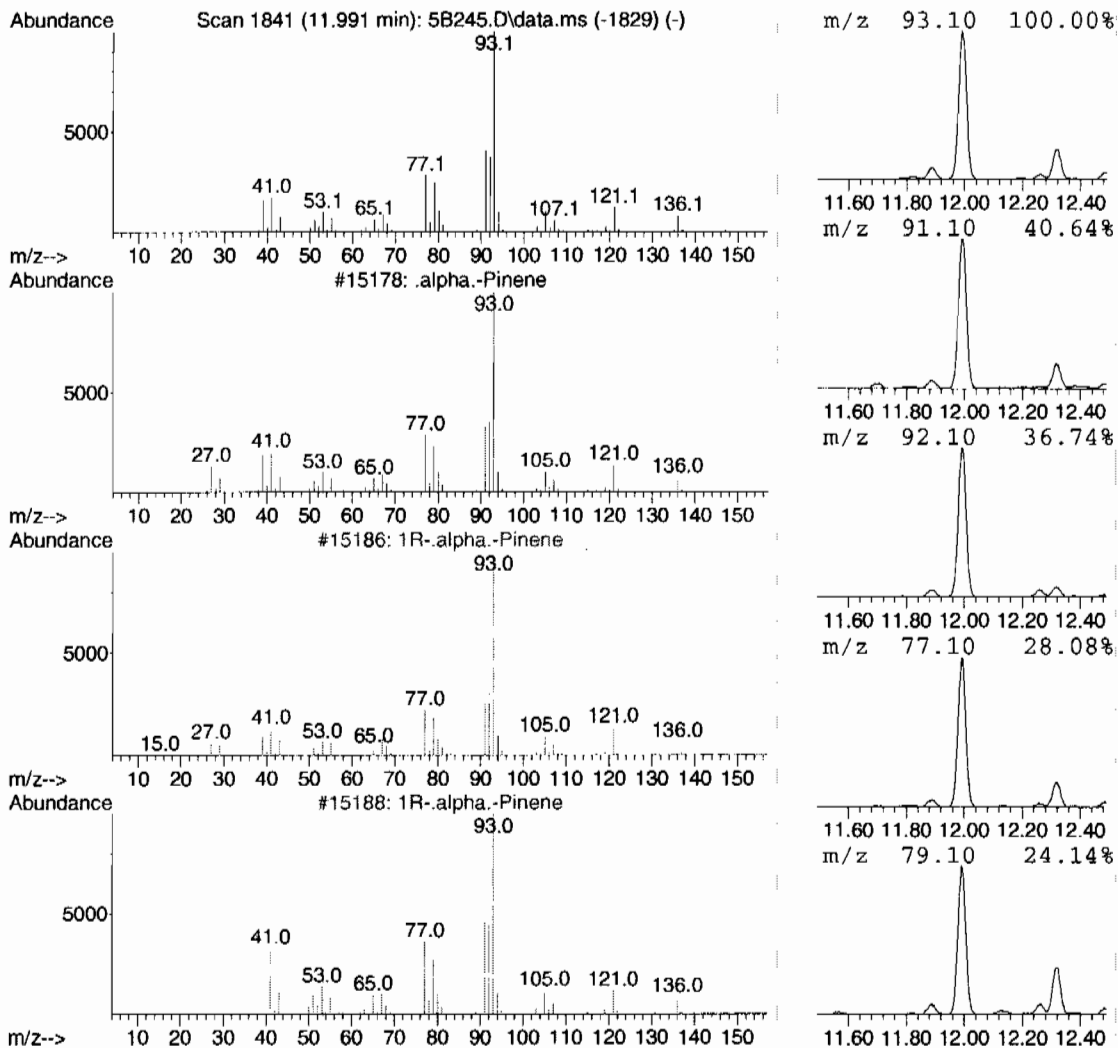
Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B245.D
Acq On : 10 Mar 2010 3:41 am
Operator : CDS1
Sample : |248370010|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

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

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

Peak Number 2 unknown hydrocarbon Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.	
11.991	42.60 ug/L	2188680	B Chlorobenzene-d5	11.142	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	96
2	1R-.alpha.-Pinene	136	C10H16	007785-70-8	95
3	1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
4	.alpha.-Pinene	136	C10H16	000080-56-8	94
5	.alpha.-Pinene	136	C10H16	000080-56-8	94



Library Search Compound Report
GEL Laboratories, LLC

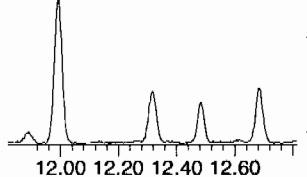
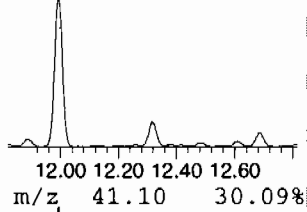
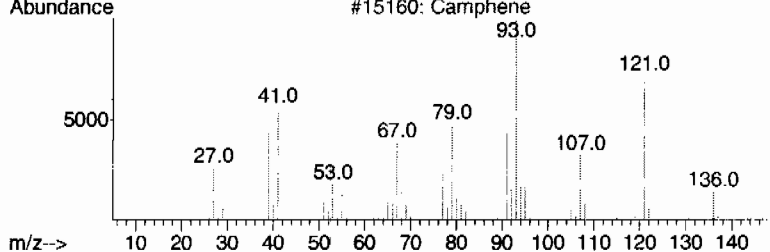
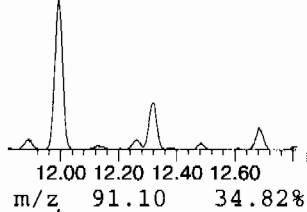
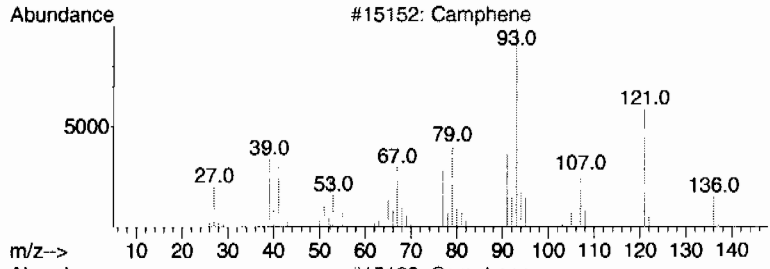
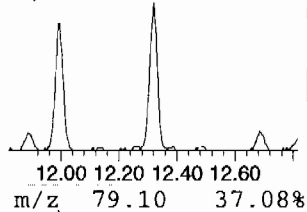
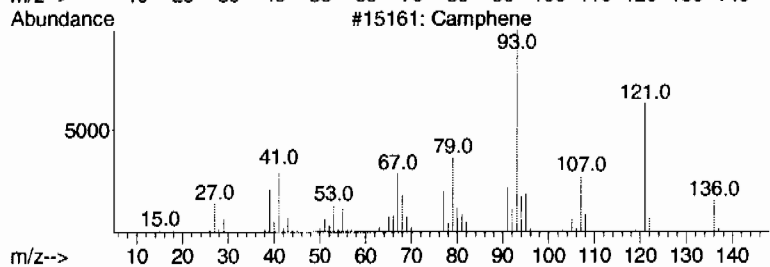
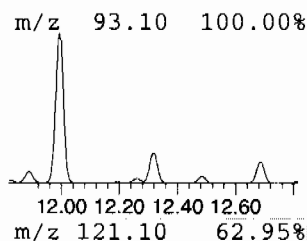
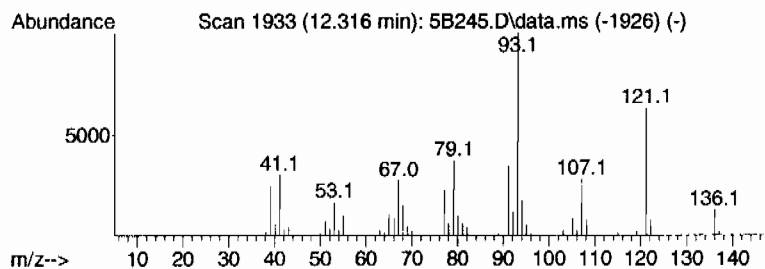
Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B245.D
Acq On : 10 Mar 2010 3:41 am
Operator : CDS1
Sample : |248370010|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

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

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

Peak Number 3 unknown hydrocarbon Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.		
12.316	5.34 ug/L	145847	1,4-Dichlorobenzene-d4	13.413		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Camphene	136	C10H16	000079-92-5	95
2		Camphene	136	C10H16	000079-92-5	95
3		Camphene	136	C10H16	000079-92-5	94
4		Camphene	136	C10H16	000079-92-5	94
5		Bicyclo[2.2.1]heptane, 2,2-dimet...	136	C10H16	005794-04-7	94



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B245.D
Acq On : 10 Mar 2010 3:41 am
Operator : CDS1
Sample : |248370010|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

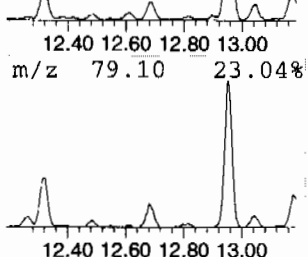
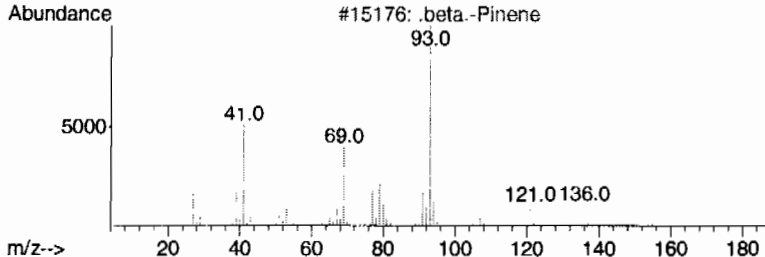
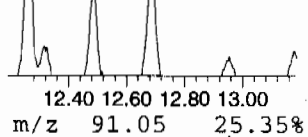
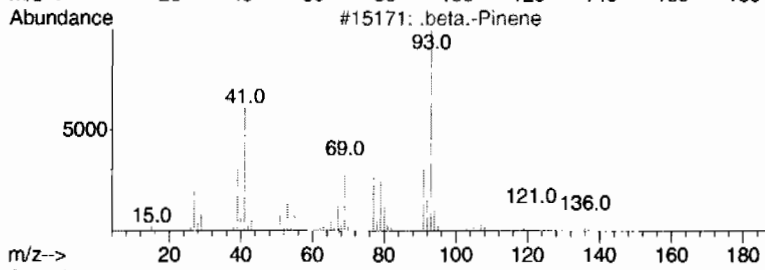
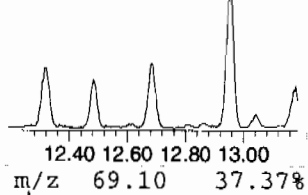
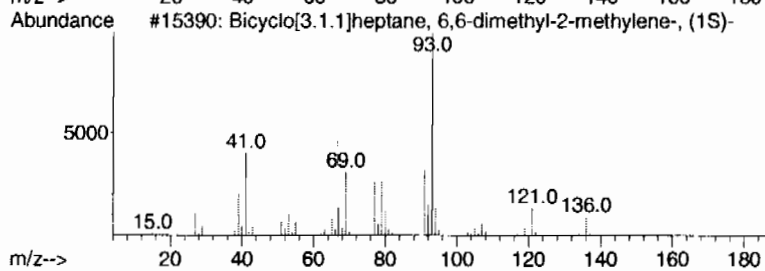
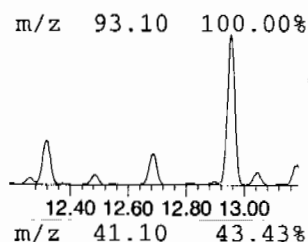
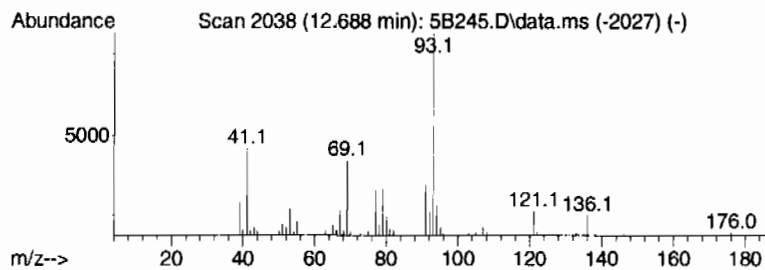
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 5 unknown hydrocarbon Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.688	7.61 ug/L	207771	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Bicyclo[3.1.1]heptane, 6,6-dimet...	136	C10H16	018172-67-3	97
2			.beta.-Pinene	136	C10H16	000127-91-3	95
3			.beta.-Pinene	136	C10H16	000127-91-3	95
4			.beta.-Pinene	136	C10H16	000127-91-3	94
5			.beta.-Pinene	136	C10H16	000127-91-3	93



Library Search Compound Report
GEL Laboratories, LLC

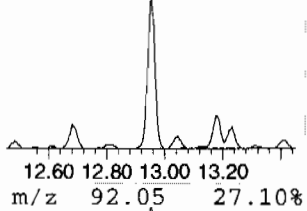
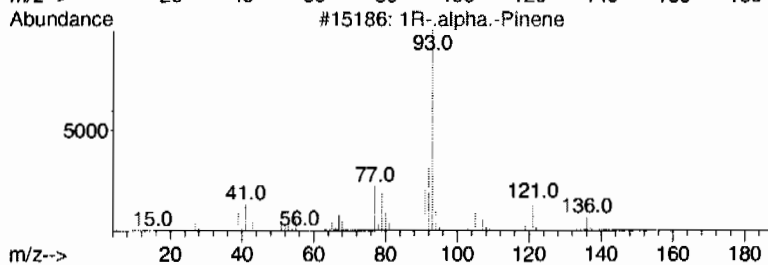
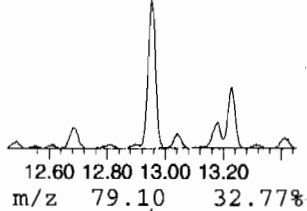
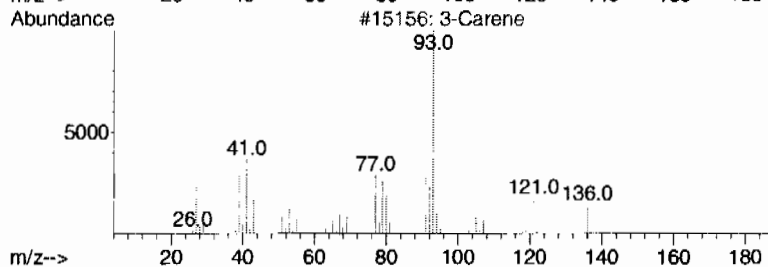
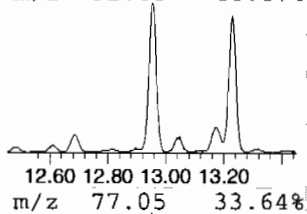
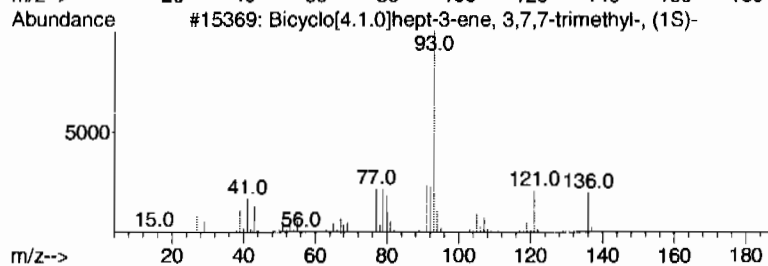
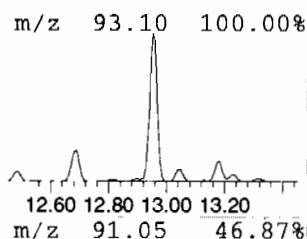
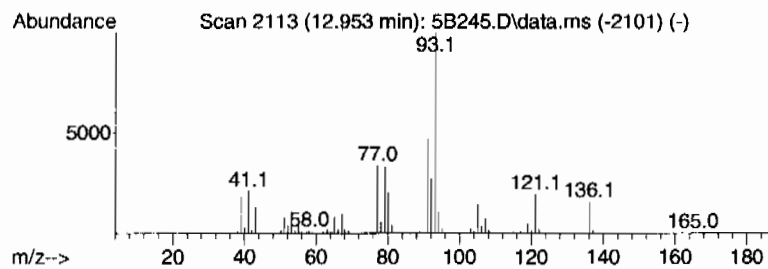
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Data File : 5B245.D
Acq On : 10 Mar 2010 3:41 am
Operator : CDS1
Sample : |248370010|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

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

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

Peak Number 6 unknown hydrocarbon Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.		
12.953	51.48 ug/L	1406260	1,4-Dichlorobenzene-d4	13.413		
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	97
2		3-Carene	136	C10H16	013466-78-9	96
3		1R-.alpha.-Pinene	136	C10H16	007785-70-8	93
4		3-Carene	136	C10H16	013466-78-9	91
5		Cyclopentene, 3-isopropenyl-5,5-...	136	C10H16	1000162-25-4	91



Library Search Compound Report
GEL Laboratories, LLC

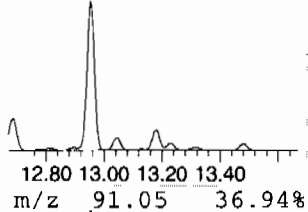
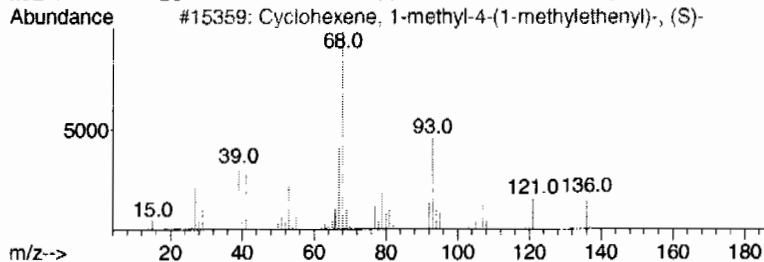
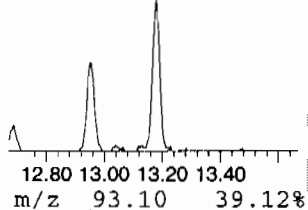
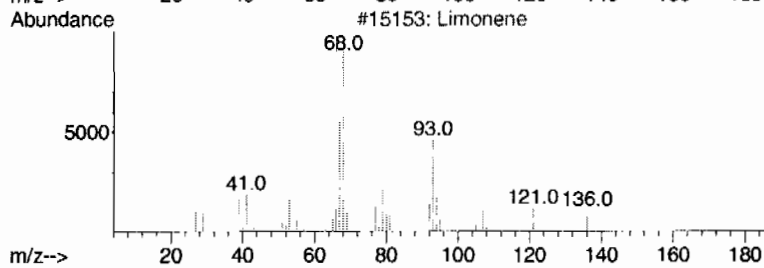
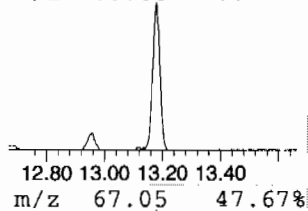
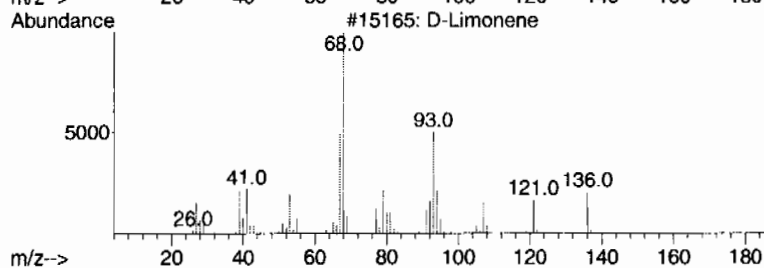
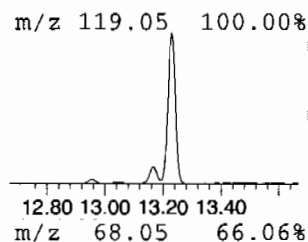
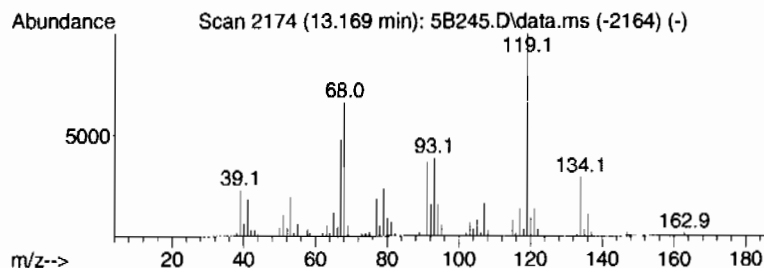
Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B245.D
Acq On : 10 Mar 2010 3:41 am
Operator : CDS1
Sample : |248370010|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

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

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

Peak Number 8 unknown hydrocarbon Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.	
13.169	7.32 ug/L	199972	1,4-Dichlorobenzene-d4	13.413	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	83
2	Limonene	136	C10H16	000138-86-3	70
3	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	005989-54-8	60
4	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	007705-14-8	52
5	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	46



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B245.D
Acq On : 10 Mar 2010 3:41 am
Operator : CDS1
Sample : |248370010|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Dimethyl ether	5.776	5.5	ug/L	347248	1	8.387	3136600	50.0
unknown hydroca...	11.991	42.6	ug/L	2188680	4	11.142	2568820	50.0
unknown hydroca...	12.316	5.3	ug/L	145847	5	13.413	1365920	50.0
unknown hydroca...	12.688	7.6	ug/L	207771	5	13.413	1365920	50.0
unknown hydroca...	12.953	51.5	ug/L	1406260	5	13.413	1365920	50.0
unknown hydroca...	13.169	7.3	ug/L	199972	5	13.413	1365920	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
Client ID: RE36-10-7481	Client: LANL010	Project: LANL01004
Batch ID: 963122	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/10/2010 04:09	Inst: VOA5.1	Dilution: 1
Prep Date: 03/09/2010 17:10	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030910V5\SB246.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	1.49	ug/kg	0.506	1.49
74-87-3	Chloromethane	U	1.49	ug/kg	0.447	1.49
75-01-4	Vinyl chloride	U	1.49	ug/kg	0.447	1.49
74-83-9	Bromomethane	U	1.49	ug/kg	0.447	1.49
75-00-3	Chloroethane	U	1.49	ug/kg	0.447	1.49
75-69-4	Trichlorofluoromethane	U	1.49	ug/kg	0.447	1.49
67-64-1	Acetone		7.58	ug/kg	2.47	7.45
75-35-4	1,1-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
74-88-4	Iodomethane	U	7.45	ug/kg	2.38	7.45
75-09-2	Methylene chloride	U	7.45	ug/kg	2.98	7.45
75-15-0	Carbon disulfide	U	7.45	ug/kg	1.86	7.45
156-60-5	trans-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
75-34-3	1,1-Dichloroethane	U	1.49	ug/kg	0.447	1.49
78-93-3	2-Butanone	U	7.45	ug/kg	2.23	7.45
156-59-2	cis-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
594-20-7	2,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
67-66-3	Chloroform	U	1.49	ug/kg	0.447	1.49
74-97-5	Bromochloromethane	U	1.49	ug/kg	0.491	1.49
71-55-6	1,1,1-Trichloroethane	U	1.49	ug/kg	0.447	1.49
563-58-6	1,1-Dichloropropene	U	1.49	ug/kg	0.447	1.49
56-23-5	Carbon tetrachloride	U	1.49	ug/kg	0.447	1.49
107-06-2	1,2-Dichloroethane	U	1.49	ug/kg	0.447	1.49
71-43-2	Benzene	U	1.49	ug/kg	0.447	1.49
79-01-6	Trichloroethylene	U	1.49	ug/kg	0.491	1.49
78-87-5	1,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
75-27-4	Bromodichloromethane	U	1.49	ug/kg	0.447	1.49
74-95-3	Dibromomethane	U	1.49	ug/kg	0.447	1.49
108-10-1	4-Methyl-2-pentanone	U	7.45	ug/kg	1.86	7.45
10061-01-5	cis-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
108-88-3	Toluene		1.61	ug/kg	0.447	1.49
10061-02-6	trans-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
79-00-5	1,1,2-Trichloroethane	U	1.49	ug/kg	0.447	1.49
591-78-6	2-Hexanone	U	7.45	ug/kg	2.23	7.45
142-28-9	1,3-Dichloropropane	U	1.49	ug/kg	0.447	1.49
127-18-4	Tetrachloroethylene	U	1.49	ug/kg	0.447	1.49
124-48-1	Dibromochloromethane	U	1.49	ug/kg	0.447	1.49
106-93-4	1,2-Dibromoethane	U	1.49	ug/kg	0.447	1.49
108-90-7	Chlorobenzene	U	1.49	ug/kg	0.447	1.49

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370011
 Client ID: RE36-10-7481
 Batch ID: 963122
 Run Date: 03/10/2010 04:09
 Prep Date: 03/09/2010 17:10
 Data File: 030910V55B246.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 32.8
 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	1.49	ug/kg	0.447	1.49
179601-23-1	m,p-Xylenes	U	2.98	ug/kg	0.447	2.98
95-47-6	o-Xylene	U	1.49	ug/kg	0.447	1.49
100-42-5	Styrene	U	1.49	ug/kg	0.447	1.49
75-25-2	Bromoform	U	1.49	ug/kg	0.447	1.49
79-34-5	1,1,2,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
96-18-4	1,2,3-Trichloropropane	U	1.49	ug/kg	0.447	1.49
108-86-1	Bromobenzene	U	1.49	ug/kg	0.447	1.49
103-65-1	n-Propylbenzene	U	1.49	ug/kg	0.447	1.49
95-49-8	2-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-82-8	Isopropylbenzene	U	1.49	ug/kg	0.447	1.49
108-67-8	1,3,5-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
106-43-4	4-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-06-6	tert-Butylbenzene	U	1.49	ug/kg	0.447	1.49
95-63-6	1,2,4-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
135-98-8	sec-Butylbenzene	U	1.49	ug/kg	0.447	1.49
99-87-6	4-Isopropyltoluene	E	768	ug/kg	0.447	1.49
541-73-1	1,3-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
106-46-7	1,4-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
104-51-8	n-Butylbenzene	U	1.49	ug/kg	0.447	1.49
96-12-8	1,2-Dibromo-3-chloropropane	U	1.49	ug/kg	0.447	1.49
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.45	ug/kg	2.38	7.45
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
95-50-1	1,2-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	11.82	23.9	ug/kg	0	J
	unknown hydrocarbon	11.89	41.6	ug/kg	0	J
	unknown hydrocarbon	12	1620	ug/kg	0	J
	unknown hydrocarbon	12.13	11.9	ug/kg	0	J
	unknown hydrocarbon	12.32	323	ug/kg	0	J
	unknown hydrocarbon	12.38	24.5	ug/kg	0	J
	unknown hydrocarbon	12.49	68.5	ug/kg	0	J
	unknown hydrocarbon	12.53	19.9	ug/kg	0	J
	unknown hydrocarbon	12.54	10.2	ug/kg	0	J
	unknown hydrocarbon	12.68	84.7	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
Client ID: RE36-10-7481	Client: LANL010	Project: LANL01004
Batch ID: 963122	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/10/2010 04:09	Inst: VOA5.I	Dilution: 1
Prep Date: 03/09/2010 17:10	Analyst: CDS1	Purge Vol: 5 mL
Data File: 030910V5\5B246.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

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 hydrocarbon	12.9	28.7	ug/kg	0	J
	unknown hydrocarbon	12.95	22.8	ug/kg	0	J
	unknown hydrocarbon	13.05	354	ug/kg	0	J
	unknown hydrocarbon	13.18	155	ug/kg	0	J
	unknown hydrocarbon	13.32	12.2	ug/kg	0	J
000099-85-4	1,4-Cyclohexadiene, 1-methyl-4-(1-	13.48	121	ug/kg	96	NJ
	unknown hydrocarbon	13.87	81.9	ug/kg	0	J
	unknown hydrocarbon	13.94	99.9	ug/kg	0	J
	unknown aromatic	14.09	123	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
InstName : VOA5
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 19 14:27:04 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1460506	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	853405	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	261177	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1460506	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	853405	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	261177	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	270739	38.30	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	76.60%		
43) Toluene-d8	9.721	9.721	0.872	98	1110210	50.87	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	101.74%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	388616	74.18	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	148.36%#		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.910	4.900	0.585	50	166	Below Cal	#	1
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.927	5.695	0.707	101	2439	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.174	6.174	0.736	43	22200	5.09	ug/L	95
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0m	N.D.	d	
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.471	6.464	0.771	41	337	N.D.		
13) Methyl acetate	6.365	6.365	0.759	43	366	N.D.		
14) Carbon disulfide	6.439	6.435	0.768	76	680	N.D.		
15) Methylene chloride	6.545	6.538	0.780	84	5568	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.793	6.969	0.810	43	1033	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.450	7.450	0.888	43	2539	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.924	7.924	0.945	56	2560	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.221	8.203	0.980	78	107	N.D.		
32) Cyclohexene	8.239	8.246	0.982	67	256	N.D.		
33) n-Butyl alcohol	8.391	8.377	1.000	56	8470	Below Cal	#	20
34) Trichloroethylene	8.667	8.677	1.033	95	132	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
InstName : VOA5
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 19 14:27:04 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	19847	1.08 ug/L	95
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.524	10.279	0.944	43	112	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.909	10.771	0.979	107	127	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	0.000	11.181	0.000		0m	N.D. d	
55) m,p-Xylenes	0.000	11.280	0.000		0m	N.D. d	
56) o-Xylene	11.701	11.701	1.050	106	1443	N.D.	
57) Styrene	11.825	11.715	1.061	104	379	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	12.370	12.348	0.922	83	107	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0m	N.D. d	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	0.000	12.415	0.000		0m	N.D. d	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0m	N.D. d	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	12.698	0.000		0m	N.D. d	
69) tert-Butylbenzene	0.000	12.900	0.000		0m	N.D. d	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D. d	
71) sec-Butylbenzene	13.105	13.119	0.977	105	338	N.D.	
72) 4-Isopropyltoluene	13.232	13.229	0.987	119	5429619	515.83 ug/L	98 E
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	0.000	13.653	0.000		0m	N.D. d	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	236	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	90180	10.71 ug/L	98
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.156	6.163	0.734	45	3150	N.D.	
88) Allyl chloride	6.435	6.425	0.767	41	146	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.450	7.383	0.888	43	2539	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
InstName : VOA5
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 19 14:27:04 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

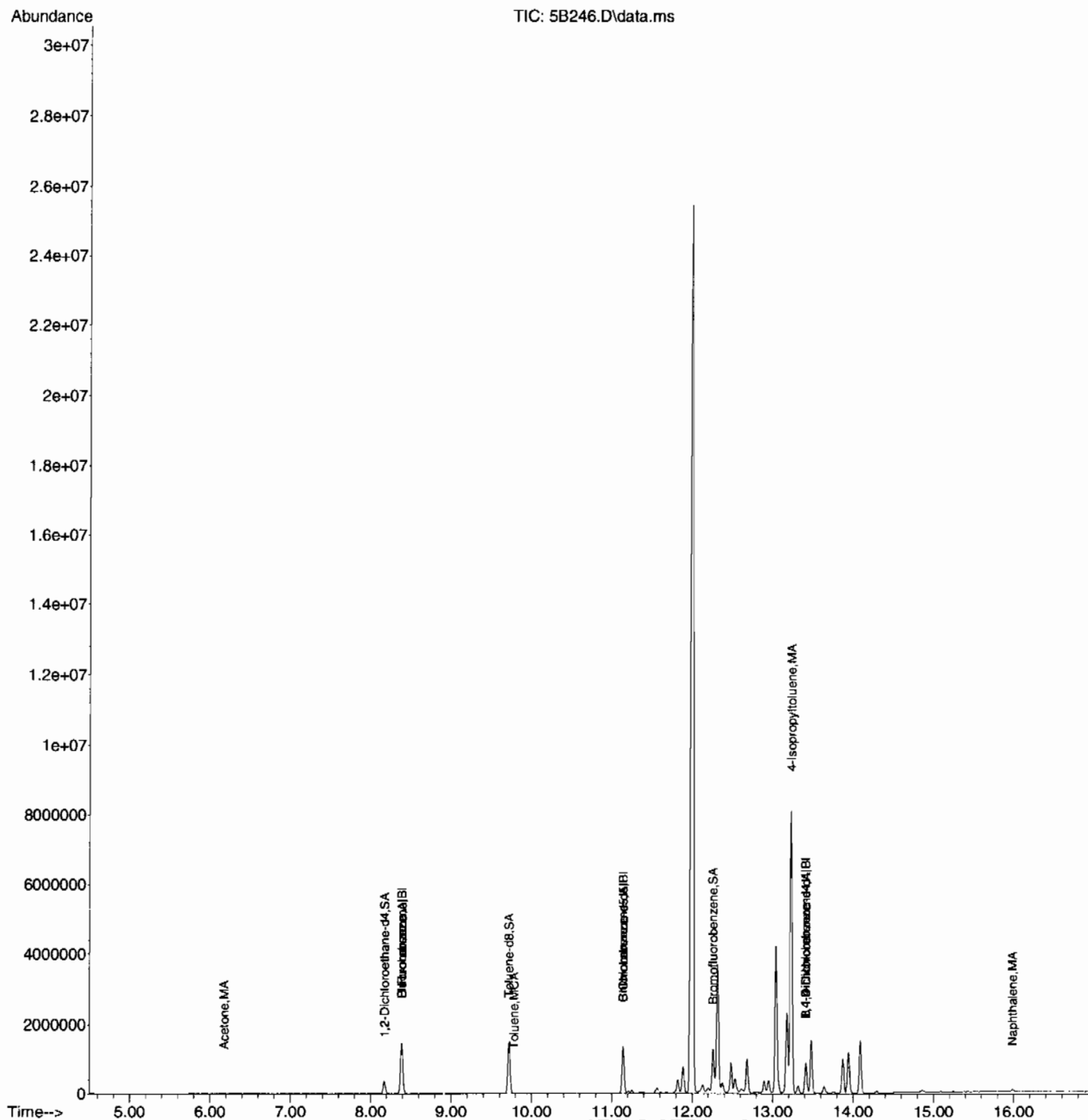
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.723	7.680	0.921	41	448	N.D.	
97) Tetrahydrofuran	7.712	7.716	0.919	42	121	N.D.	
98) Isobutyl alcohol	7.854	7.857	0.936	41	142	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	12.267	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.423	12.412	0.926	53	397	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.554	13.565	1.011	91	294	N.D.	
112) bis(2-Chloroisopropyl)...	14.095	13.929	1.051	45	530	N.D.	

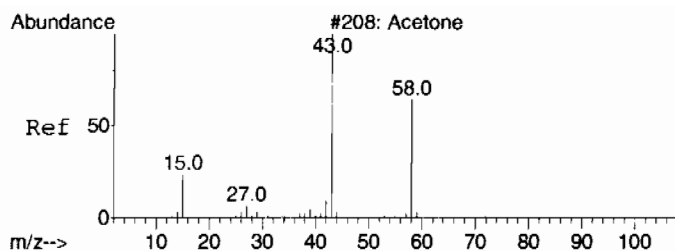
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
InstName : VOA5
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

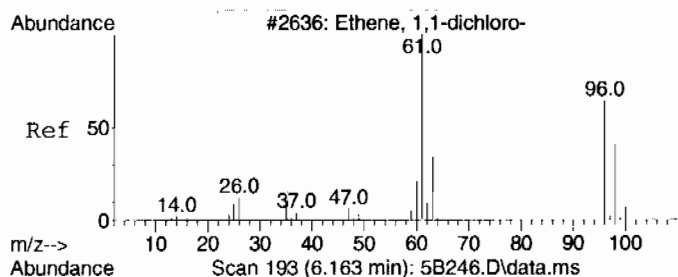
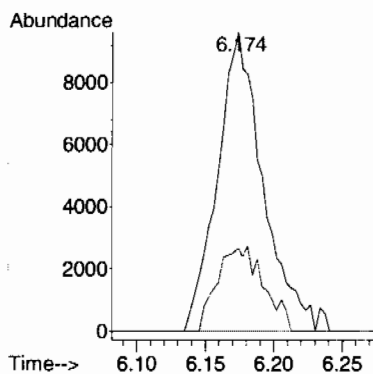
Quant Time: Mar 19 14:27:04 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





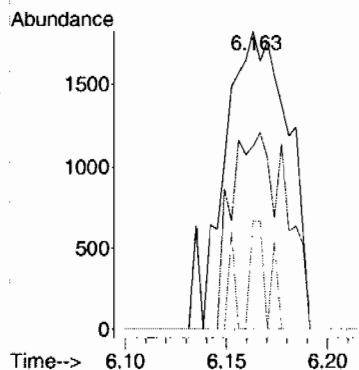
#9
Acetone
Concen: 5.09 ug/L
RT: 6.174 min Scan# 196
Delta R.T. -0.000 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

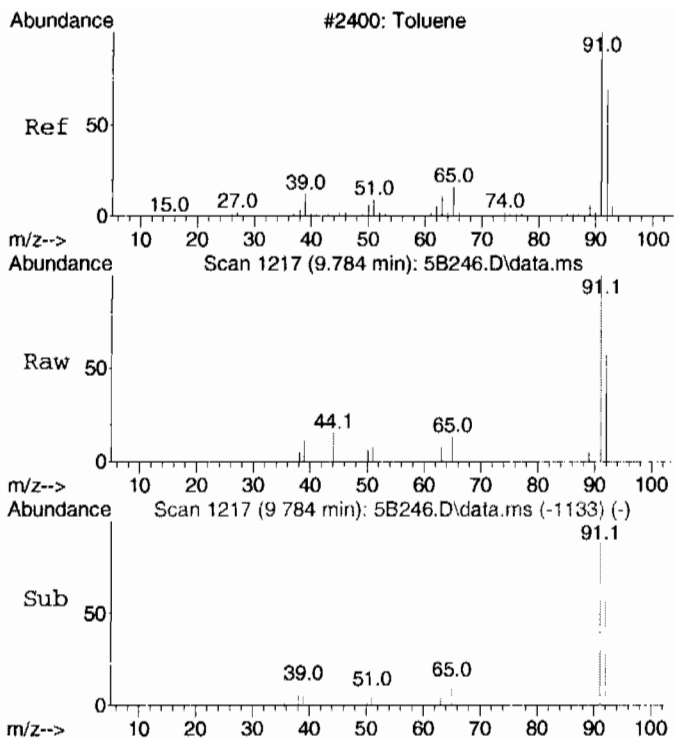
Tgt Ion: 43 Resp: 22200
Ion Ratio Lower Upper
43 100
58 29.0 1.9 61.9



#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 0.57 ug/L
RT: 6.163 min Scan# 193
Delta R.T. 0.007 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

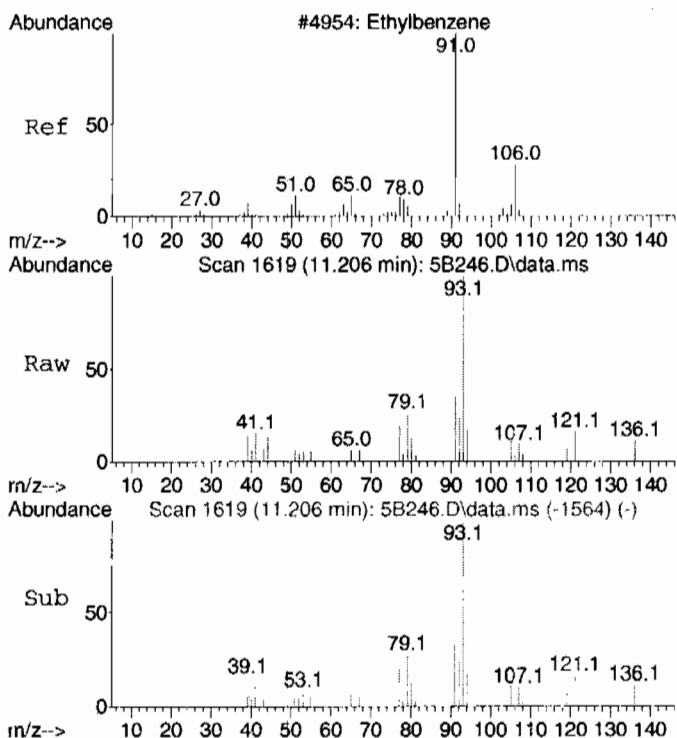
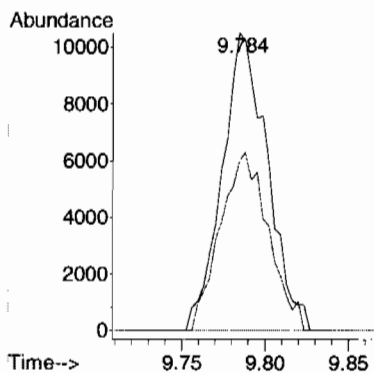
Tgt Ion: 61 Resp: 3993
Ion Ratio Lower Upper
61 100
96 57.2 26.6 86.6
63 10.0 1.1 61.1





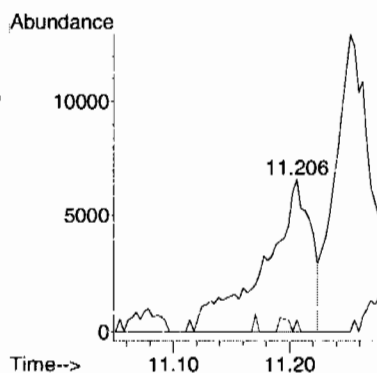
#44
Toluene
Concen: 1.08 ug/L
RT: 9.784 min Scan# 1217
Delta R.T. -0.004 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

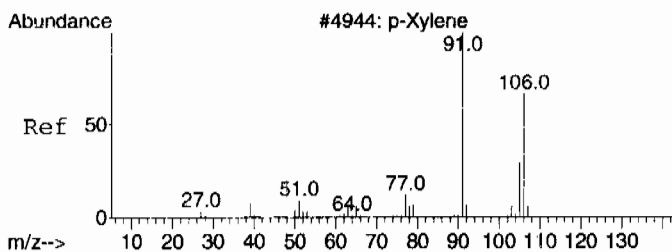
Tgt Ion: 91 Resp: 19847
Ion Ratio Lower Upper
91 100
92 63.6 29.5 89.5



#54 BEFORE analyst DELETION
Ethylbenzene
Concen: 0.87 ug/L
RT: 11.206 min Scan# 1619
Delta R.T. 0.025 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

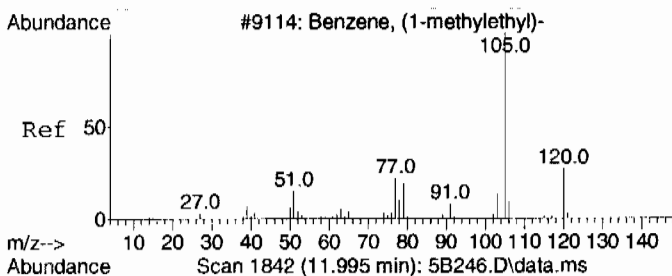
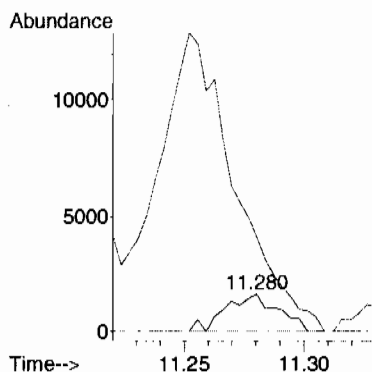
Tgt Ion: 91 Resp: 18173
Ion Ratio Lower Upper
91 100
106 2.7 2.6 62.6





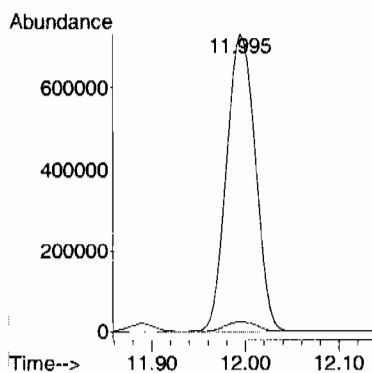
#55 BEFORE analyst DELETION
m,p-Xylenes
Concen: 0.32 ug/L
RT: 11.280 min Scan# 1640
Delta R.T. 0.000 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

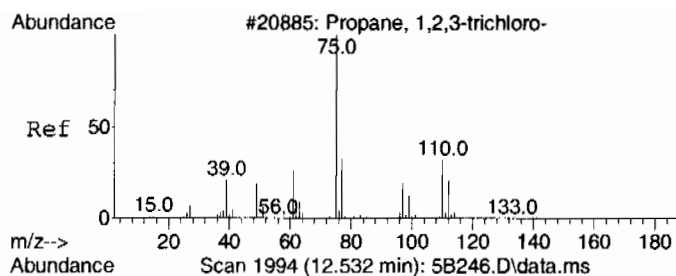
Tgt Ion:106 Resp: 2555
Ion Ratio Lower Upper
106 100
91 1098.9 168.5 228.5#



#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 130.61 ug/L
RT: 11.995 min Scan# 1842
Delta R.T. -0.021 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

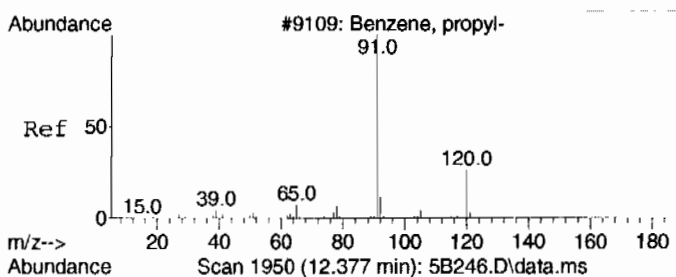
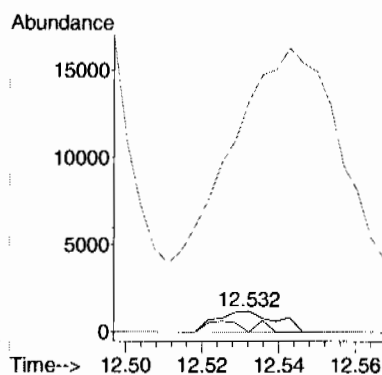
Tgt Ion:105 Resp: 1565193
Ion Ratio Lower Upper
105 100
120 3.4 0.0 57.3





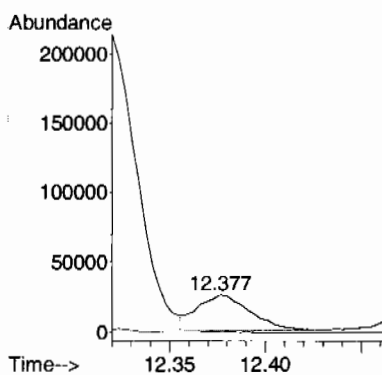
#63 BEFORE analyst DELETION
1,2,3-Trichloropropane
Concen: 1.57 ug/L
RT: 12.532 min Scan# 1994
Delta R.T. 0.078 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

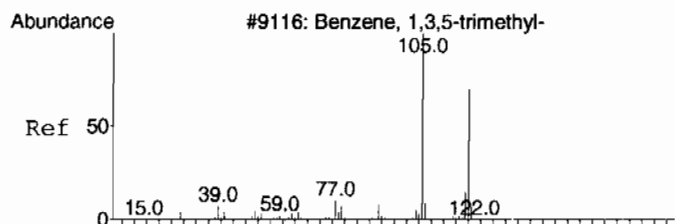
Tgt Ion: 110 Resp: 1302
Ion Ratio Lower Upper
110 100
75 28.3 275.2 335.2#
77 2585.9 613.9 673.9#



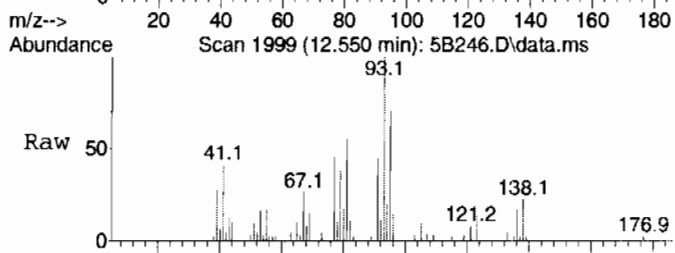
#65 BEFORE analyst DELETION
n-Propylbenzene
Concen: 3.24 ug/L
RT: 12.377 min Scan# 1950
Delta R.T. -0.038 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

Tgt Ion: 91 Resp: 46838
Ion Ratio Lower Upper
91 100
120 2.0 0.0 54.1

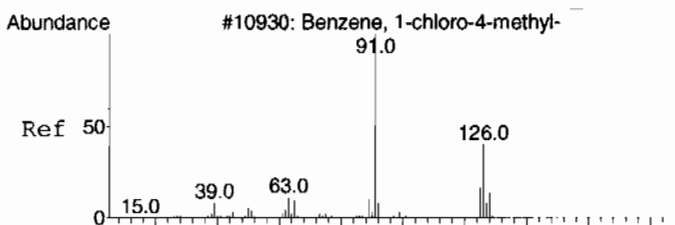
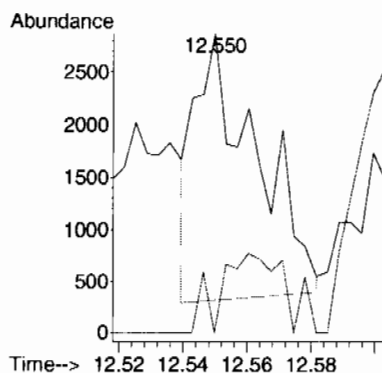
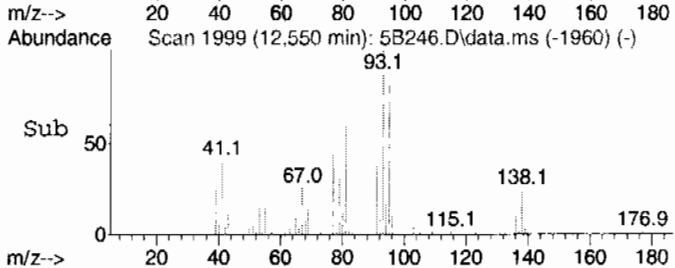




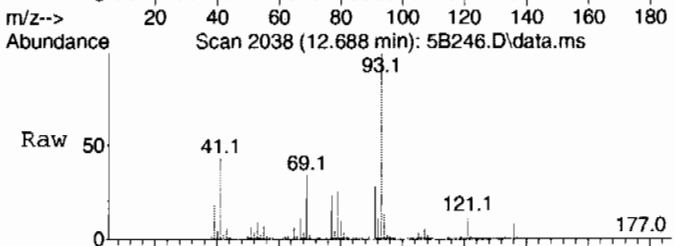
#66 BEFORE analyst DELETION
 1,3,5-Trimethylbenzene
 Concen: 0.33 ug/L
 RT: 12.550 min Scan# 1999
 Delta R.T. -0.014 min
 Lab File: 5B246.D
 Acq: 10 Mar 2010 4:09 am



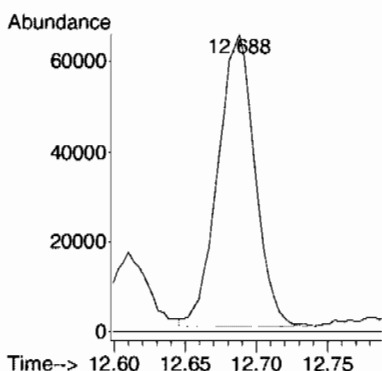
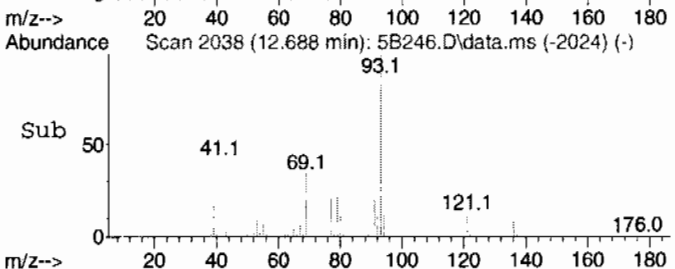
Tgt Ion: 105 Resp: 3419
 Ion Ratio Lower Upper
 105 100
 120 32.4 20.0 80.0

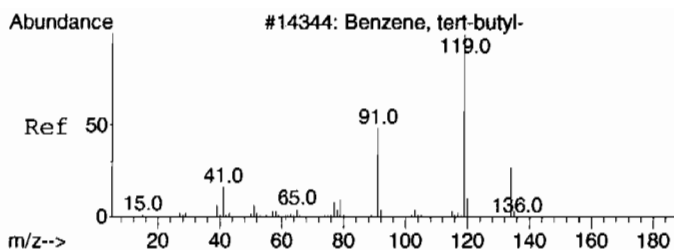


#68 BEFORE analyst DELETION
 4-Chlorotoluene
 Concen: 12.79 ug/L
 RT: 12.688 min Scan# 2038
 Delta R.T. -0.010 min
 Lab File: 5B246.D
 Acq: 10 Mar 2010 4:09 am

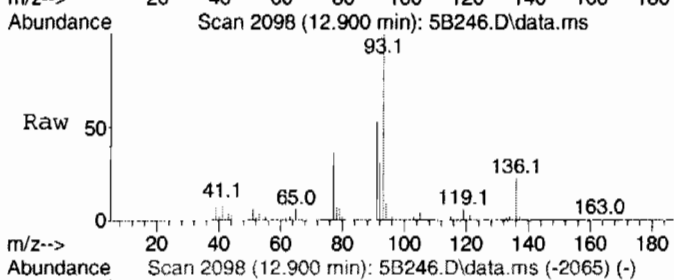


Tgt Ion: 91 Resp: 117613
 Ion Ratio Lower Upper
 91 100
 126 0.0 3.6 63.6#

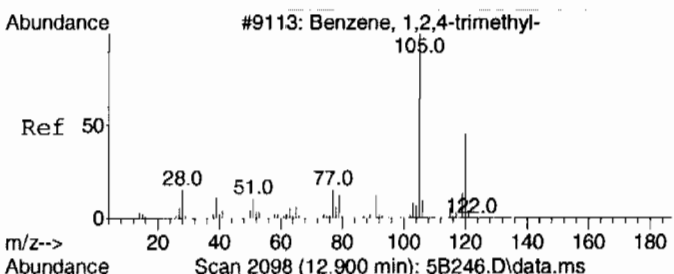
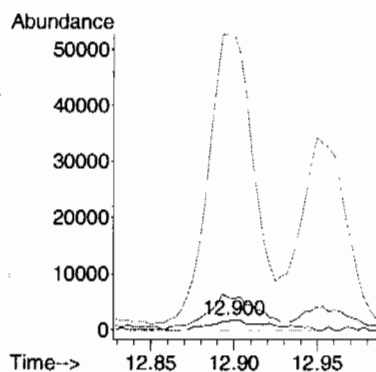
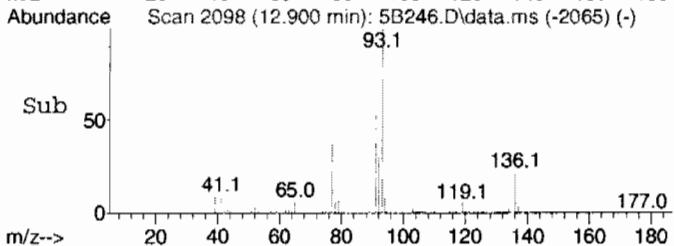




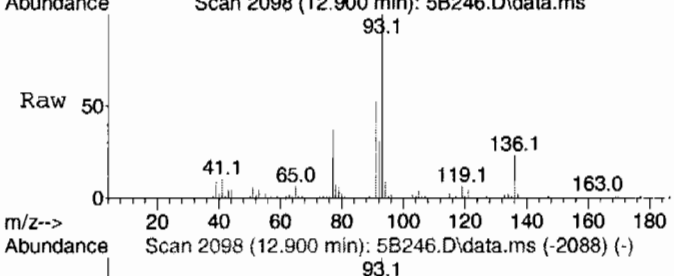
#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 1.88 ug/L
RT: 12.900 min Scan# 2098
Delta R.T. -0.000 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am



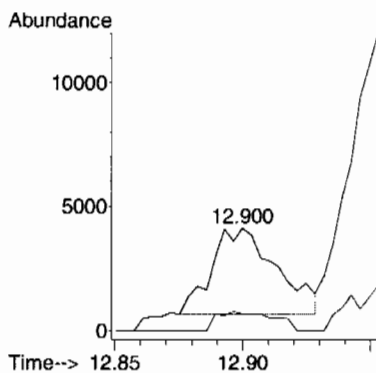
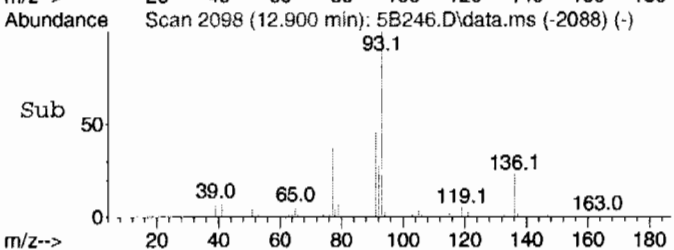
Tgt Ion:134 Resp: 4439
Ion Ratio Lower Upper
134 100
119 305.5 361.0 421.0#
91 2237.6 228.5 288.5#

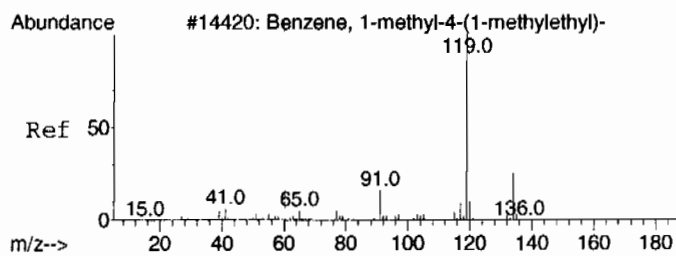


#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 0.58 ug/L
RT: 12.900 min Scan# 2098
Delta R.T. -0.056 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am



Tgt Ion:105 Resp: 6021
Ion Ratio Lower Upper
105 100
120 20.8 17.4 77.4

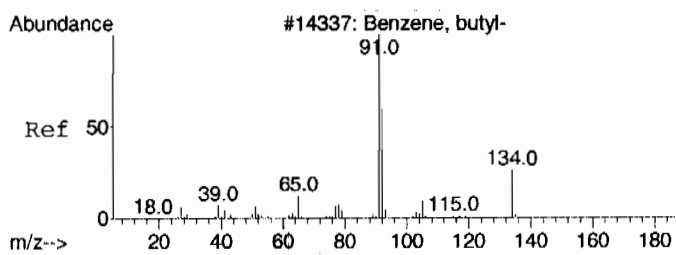
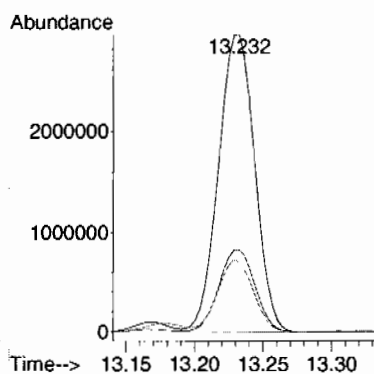




#72
4-Isopropyltoluene
Concen: 515.83 ug/L
RT: 13.232 min Scan# 2192
Delta R.T. 0.003 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

Tgt Ion: 119 Resp: 5429619

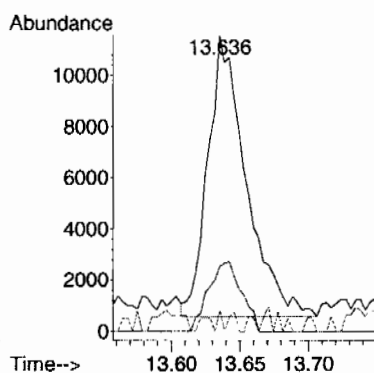
Ion	Ratio	Lower	Upper
119	100		
134	27.8	0.0	57.2
91	24.0	0.0	53.0

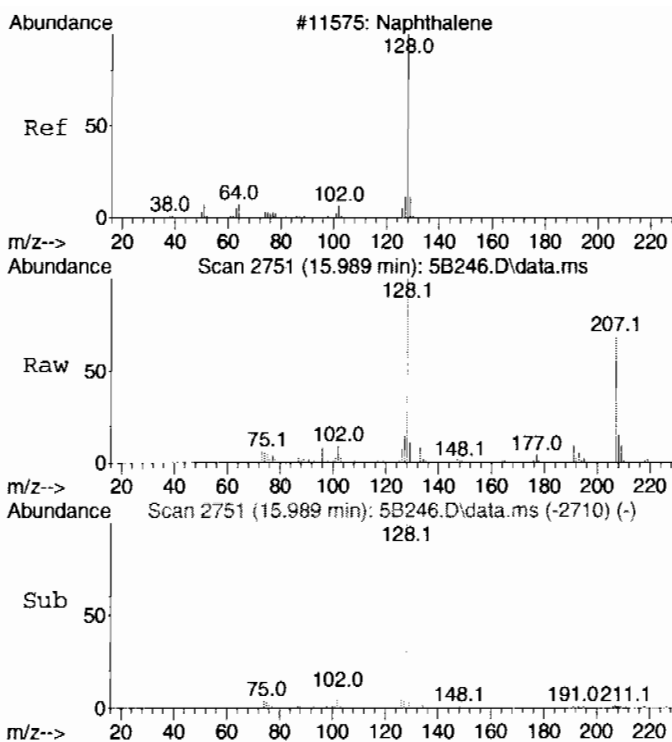


#75 BEFORE analyst DELETION
n-Butylbenzene
Concen: 2.06 ug/L
RT: 13.636 min Scan# 2306
Delta R.T. -0.017 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

Tgt Ion: 91 Resp: 21244

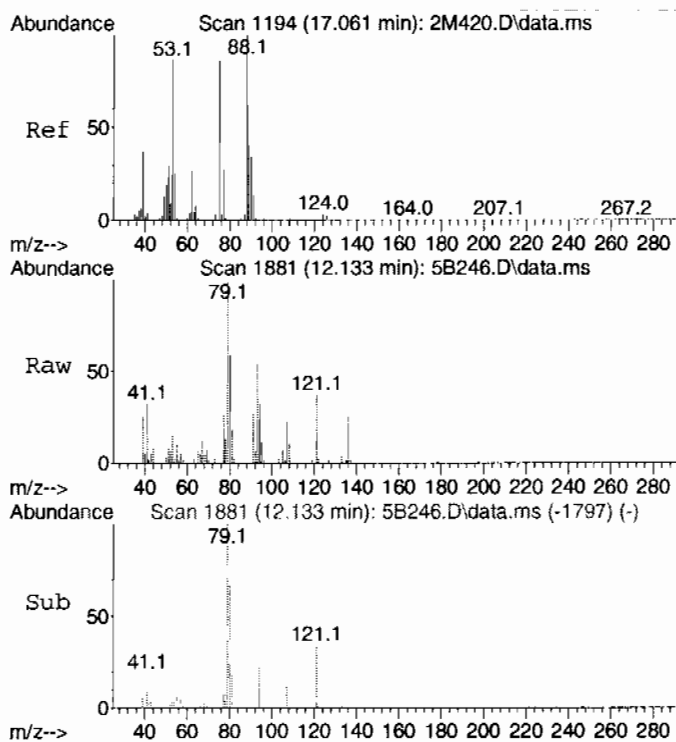
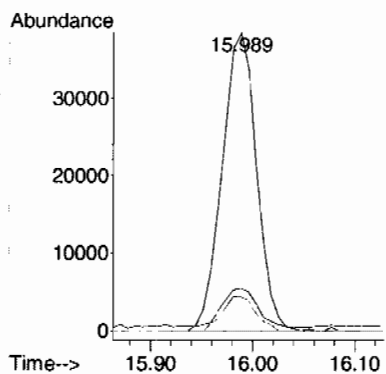
Ion	Ratio	Lower	Upper
91	100		
92	0.0	25.0	85.0#
134	0.8	0.0	57.3





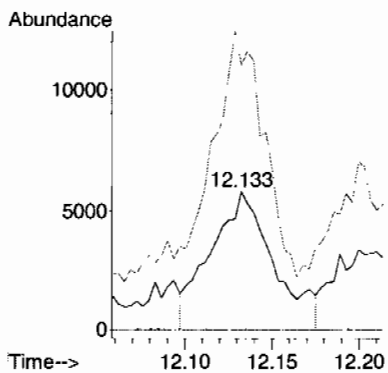
#80
Naphthalene
Concen: 10.71 ug/L
RT: 15.989 min Scan# 2751
Delta R.T. 0.001 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

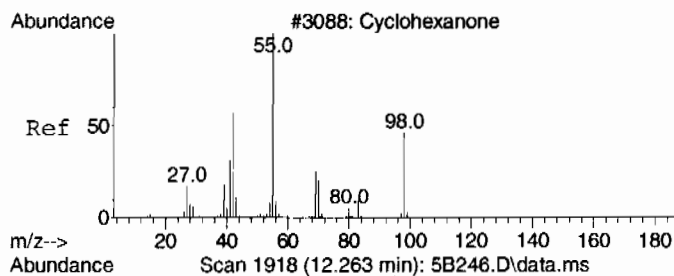
Tgt Ion	Ratio	Lower	Upper
128	100		
127	13.3	0.0	42.4
129	11.1	0.0	40.8



#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 14.87 ug/L
RT: 12.133 min Scan# 1881
Delta R.T. -0.003 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

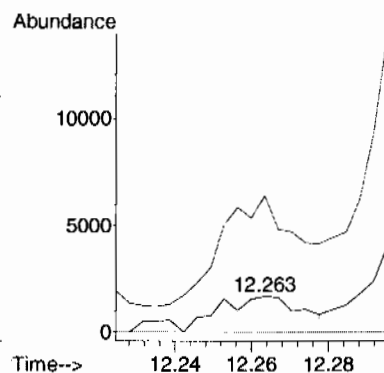
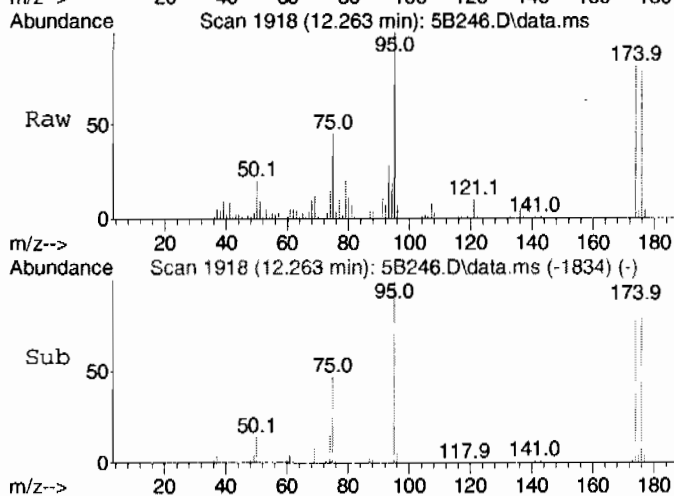
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	67.1	127.1#
77	179.2	1.8	61.8#





#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 31.05 ug/L
RT: 12.263 min Scan# 1918
Delta R.T. -0.004 min
Lab File: 5B246.D
Acq: 10 Mar 2010 4:09 am

Tgt Ion: 42 Resp: 2493
Ion Ratio Lower Upper
42 100
55 321.5 120.2 180.2#
98 0.0 29.2 89.2#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

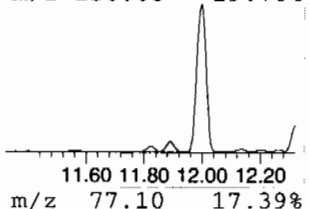
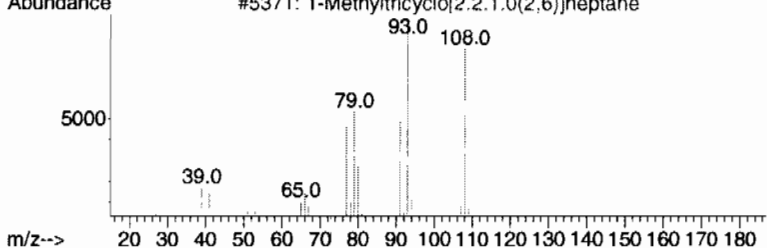
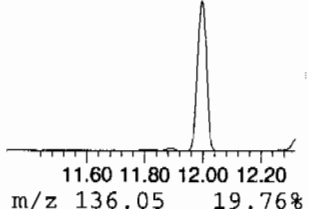
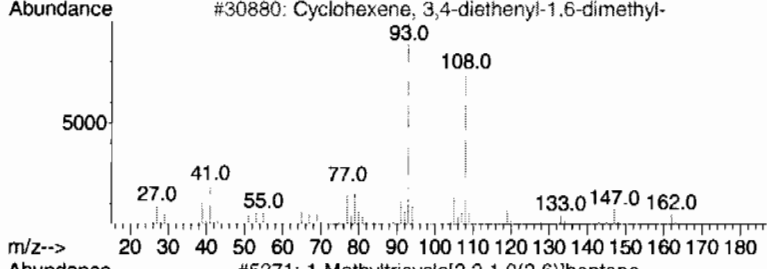
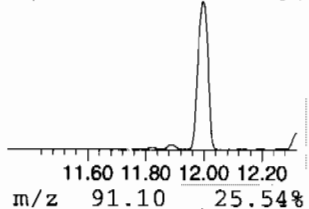
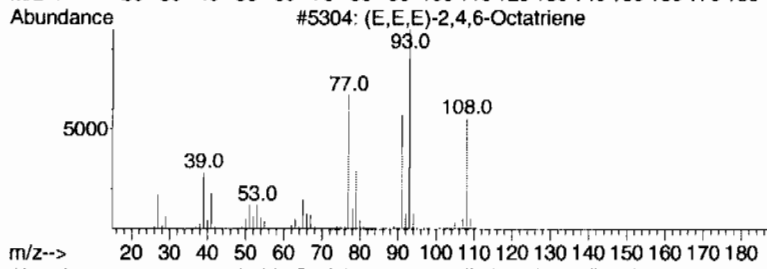
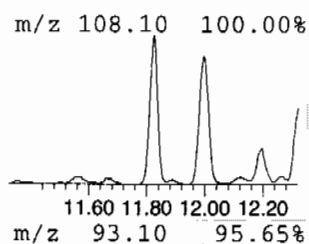
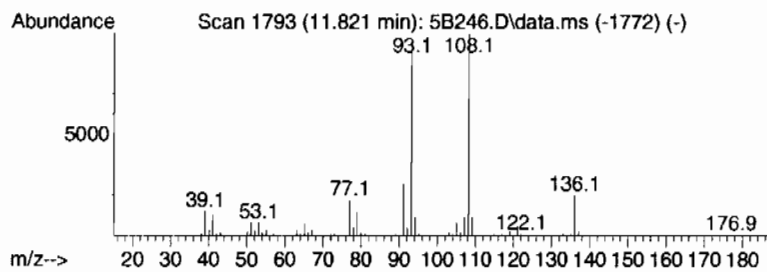
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.821	16.04 ug/L	847089	B Chlorobenzene-d5	11.142

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(E,E,E)-2,4,6-Octatriene	108	C8H12	015192-80-0	83
2	Cyclohexene, 3,4-diethenyl-1,6-d...	162	C12H18	061142-14-1	72
3	1-Methyltricyclo[2.2.1.0(2,6)]he...	108	C8H12	004601-85-8	50
4	Pyrazine, 2-methyl-6-propyl-	136	C8H12N2	029444-46-0	43
5	Cyclohexene, 4-methylene-1-(1-me...	136	C10H16	000099-84-3	43



Library Search Compound Report
GEL Laboratories, LLC

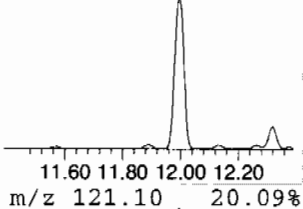
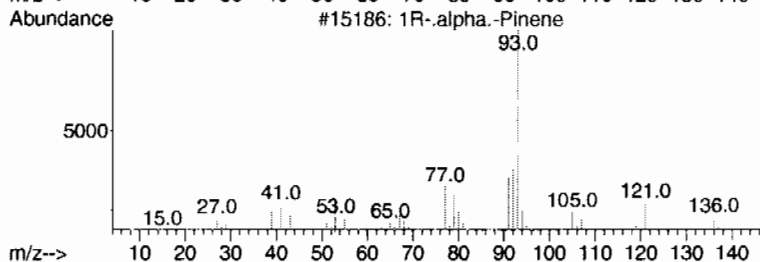
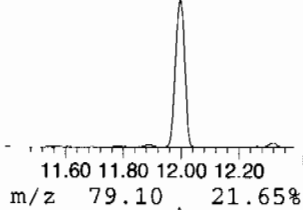
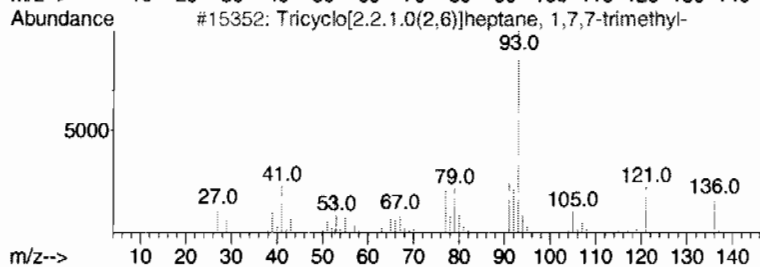
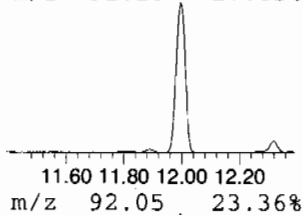
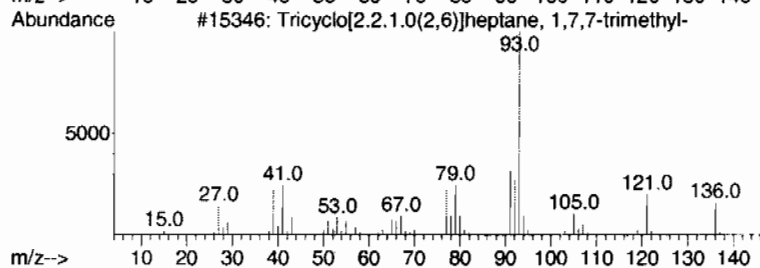
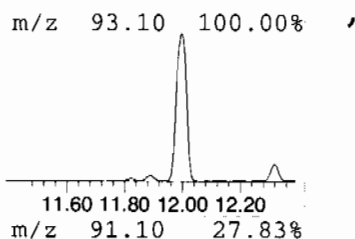
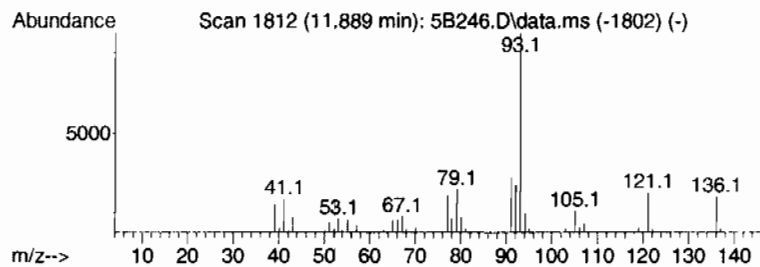
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Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

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

Peak Number 2 unknown hydrocarbon Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.	
11.889	27.94 ug/L	1475610	B Chlorobenzene-d5	11.142	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000508-32-7	96
2	Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000508-32-7	96
3	1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
4	Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000508-32-7	94
5	1S-.alpha.-Pinene	136	C10H16	007785-26-4	91



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

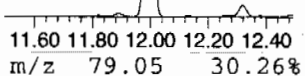
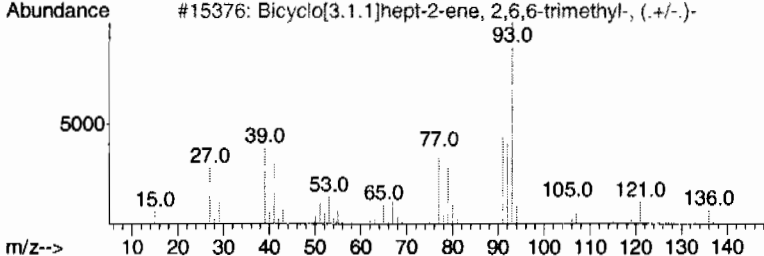
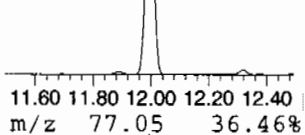
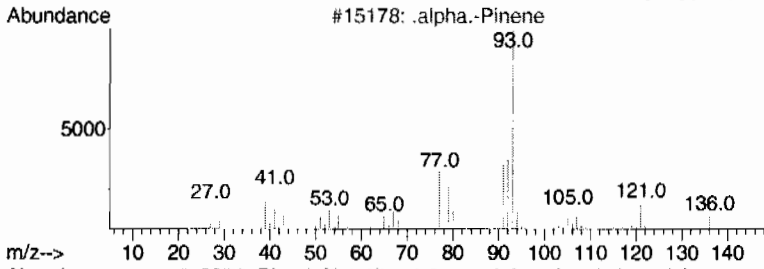
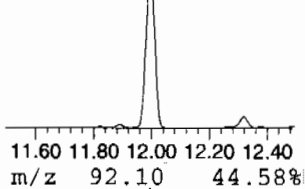
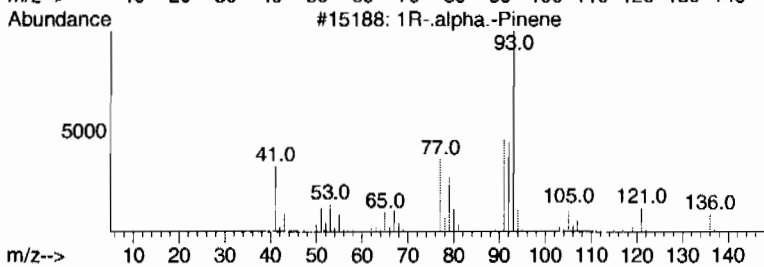
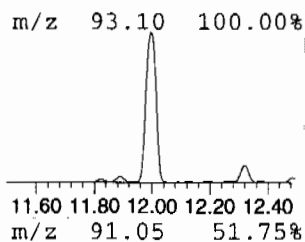
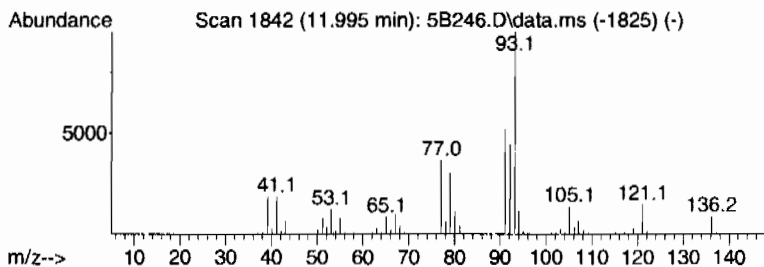
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 3 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.995	1088.92 ug/L	57518600	B Chlorobenzene-d5	11.142

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1R-.alpha.-Pinene	136	C10H16	007785-70-8	96
2		.alpha.-Pinene	136	C10H16	000080-56-8	96
3		Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	95
4		1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
5		.alpha.-Pinene	136	C10H16	000080-56-8	94



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

SubList :

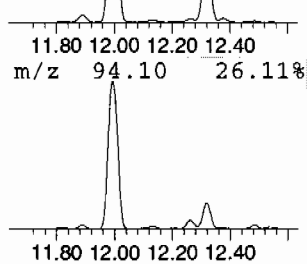
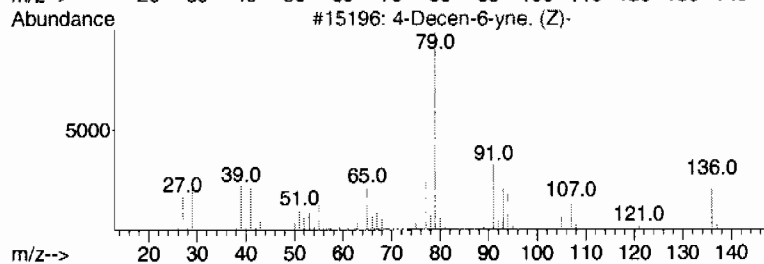
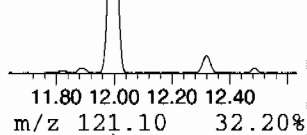
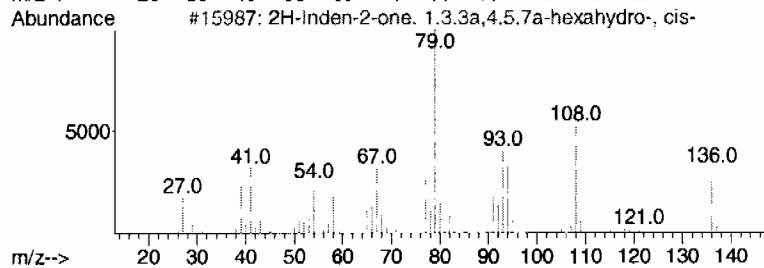
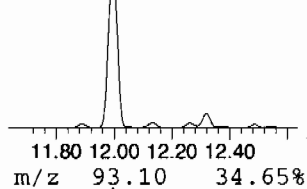
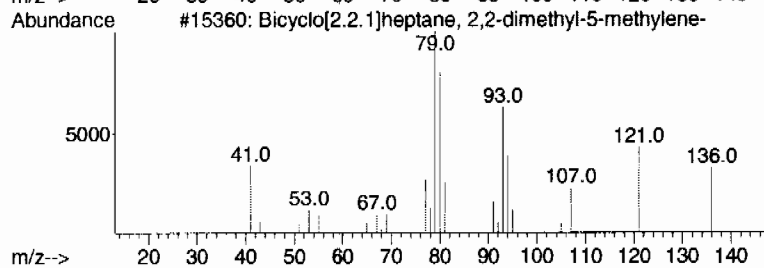
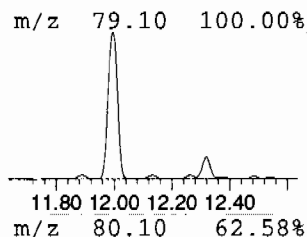
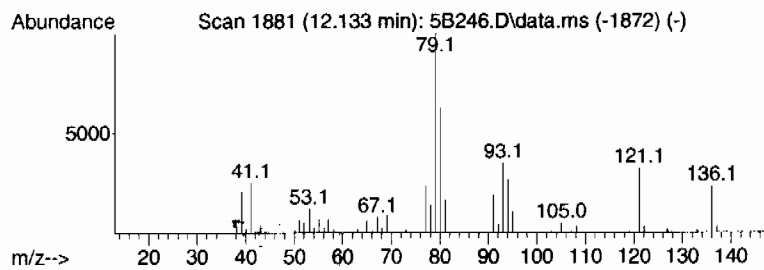
TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 4 unknown hydrocarbon Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.133	7.97 ug/L	420753	B Chlorobenzene-d5	11.142

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Bicyclo[2.2.1]heptane, 2,2-dimet...	136	C10H16	000497-32-5	95
2			2H-Inden-2-one, 1,3,3a,4,5,7a-he...	136	C9H12O	070501-26-7	59
3			4-Decen-6-yne, (Z)-	136	C10H16	013343-76-5	59
4			Bicyclobutylidene	108	C8H12	006708-14-1	53
5			Spiro[2.4]heptane, 5-methylene-	108	C8H12	037745-07-6	43



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

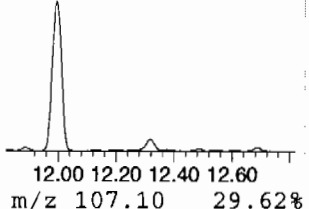
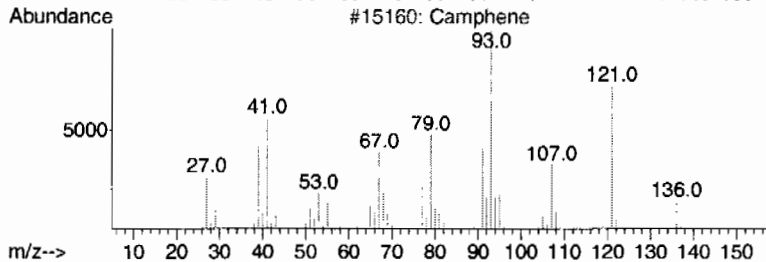
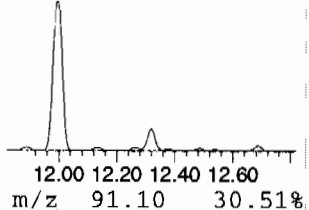
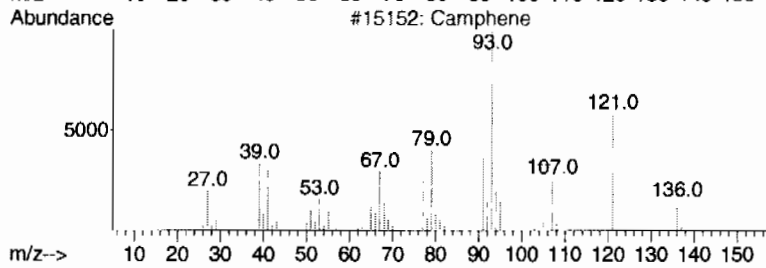
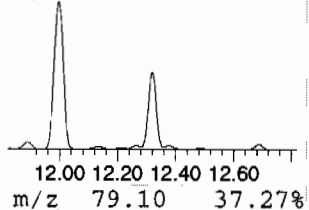
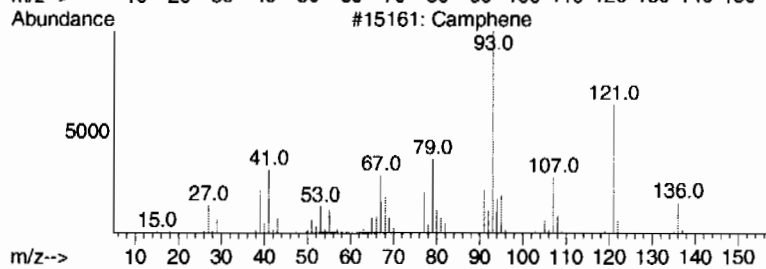
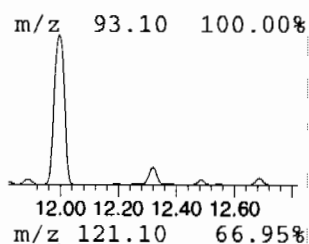
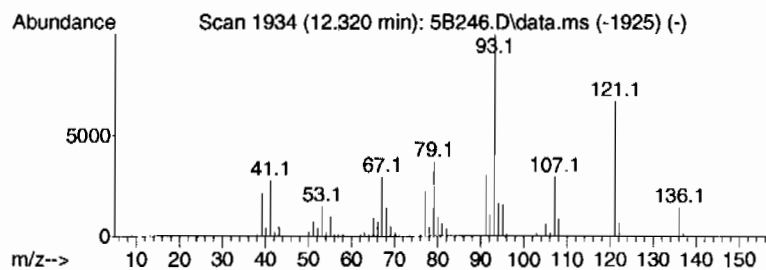
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Quant Title : Volatile Organics 8260B SubList :

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.
12.320	216.89 ug/L	7183000	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Camphene	136	C10H16	000079-92-5	98
2			Camphene	136	C10H16	000079-92-5	97
3			Camphene	136	C10H16	000079-92-5	95
4			Camphene	136	C10H16	000079-92-5	91
5			(+)-4-Carene	136	C10H16	029050-33-7	87



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

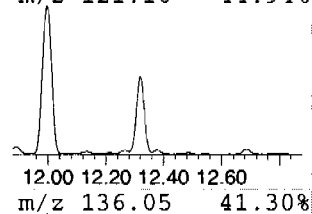
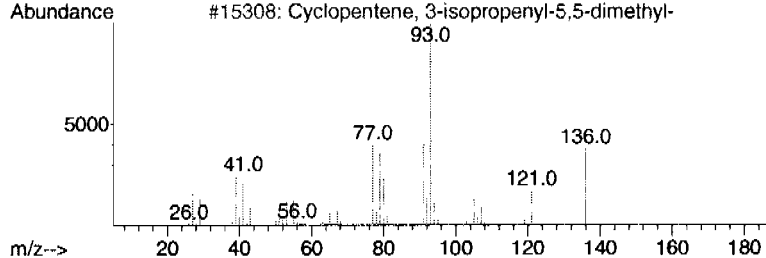
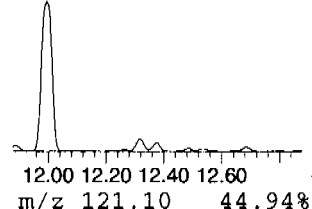
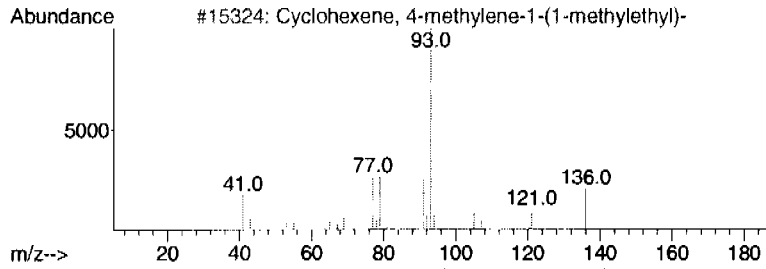
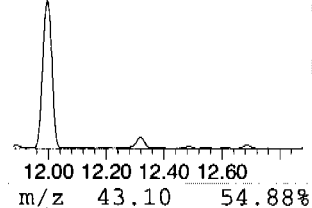
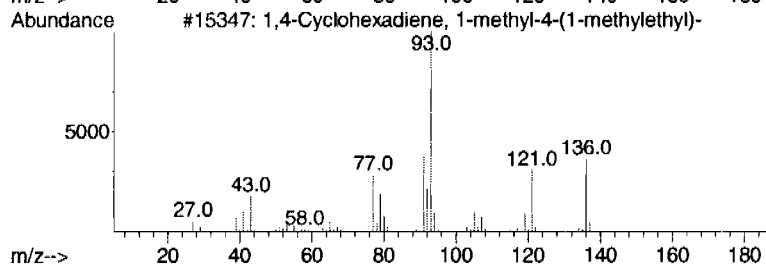
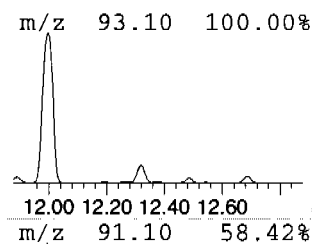
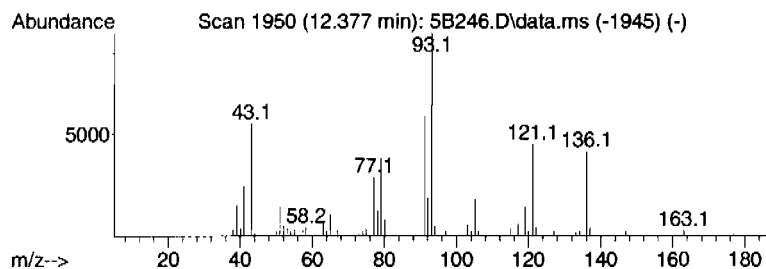
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 6 unknown hydrocarbon Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.377	16.43 ug/L	544007	1,4-Dichlorobenzene-d4	13.413

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	87
2	Cyclohexene, 4-methylene-1-(1-me...	136	C10H16	000099-84-3	72
3	Cyclopentene, 3-isopropenyl-5,5-...	136	C10H16	1000162-25-4	72
4	Cyclohexane, 1-methylene-4-(1-me...	136	C10H16	000499-97-8	72
5	Bicyclo[2.2.1]hept-2-ene, 1,7,7-...	136	C10H16	000464-17-5	64



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

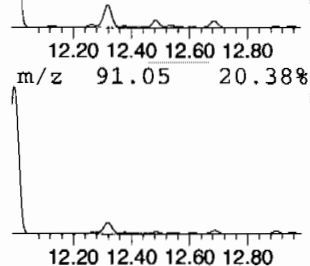
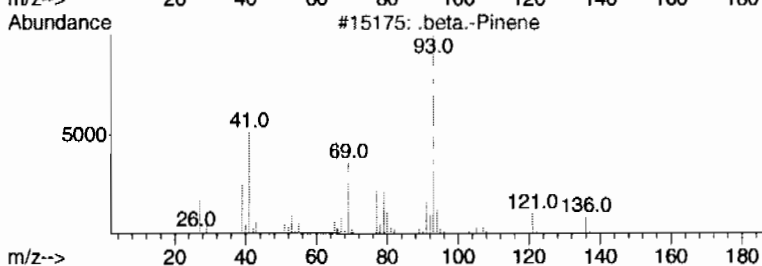
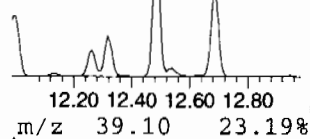
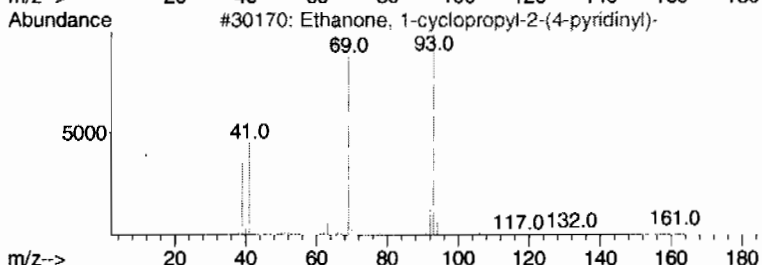
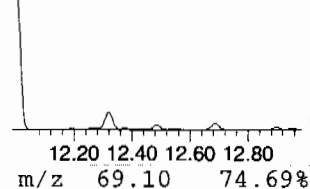
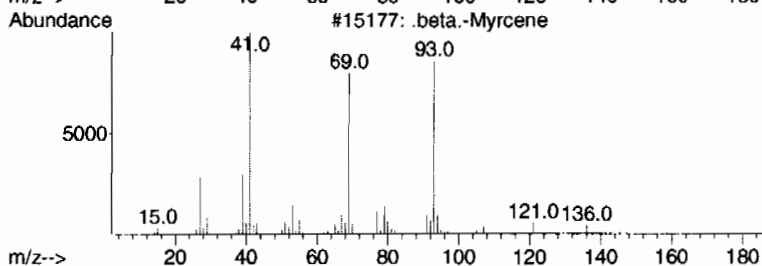
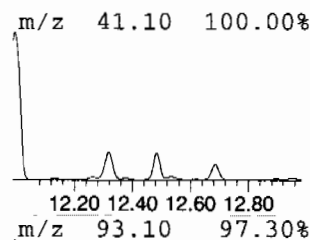
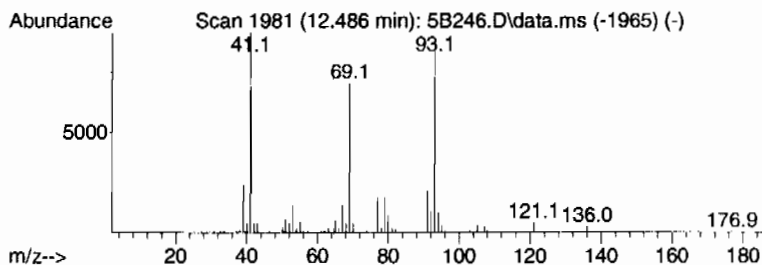
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Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 7 unknown hydrocarbon Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.486	46.02 ug/L	1524100	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	.	beta.-Myrcene	136	C10H16	000123-35-3	91	
2	Ethanone, 1-cyclopropyl-2-(4-pyr...	161	C10H11NO	006580-95-6	59		
3	.	beta.-Pinene	136	C10H16	000127-91-3	55	
4	Bicyclo[3.1.0]hex-2-ene, 4-methy...	136	C10H16	028634-89-1	46		
5	Bicyclo[3.1.0]hexane, 4-methylen...	136	C10H16	003387-41-5	43		



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

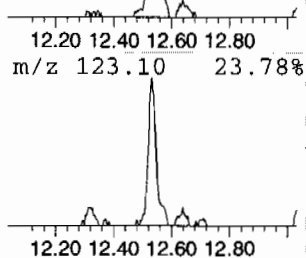
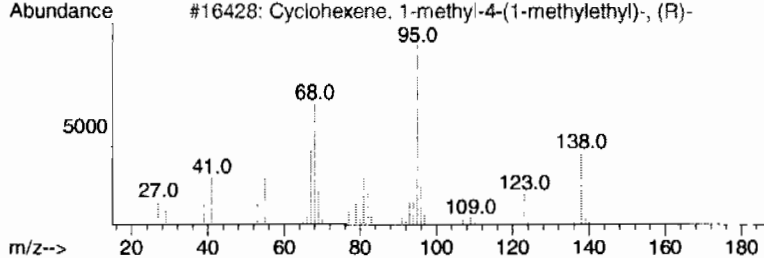
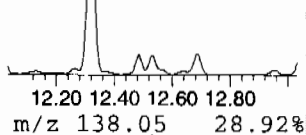
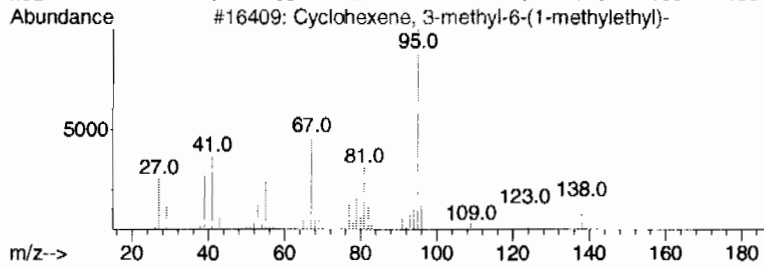
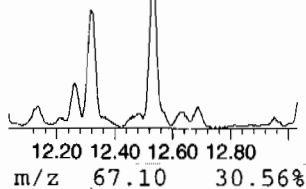
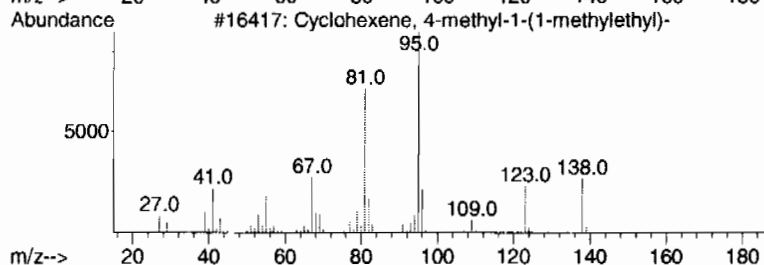
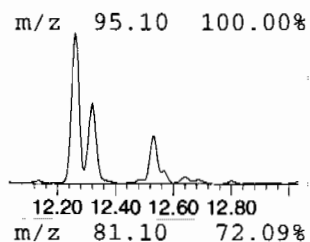
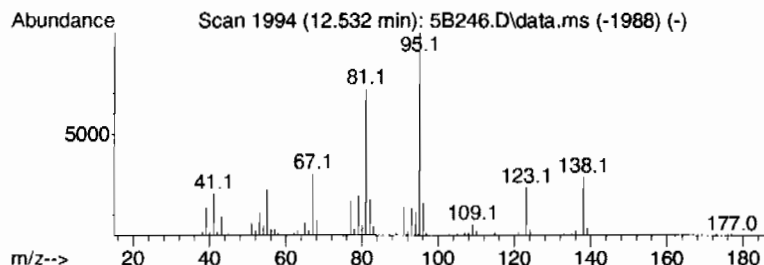
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TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

Peak Number 8 unknown hydrocarbon Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.532	13.38 ug/L	442980	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	94
2			Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	005256-65-5	90
3			Cyclohexene, 1-methyl-4-(1-methy...	138	C10H18	001195-31-9	90
4			Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	87
5			Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	001124-26-1	87



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Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

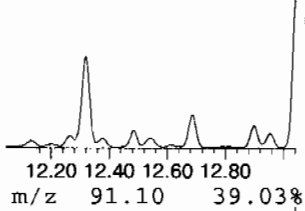
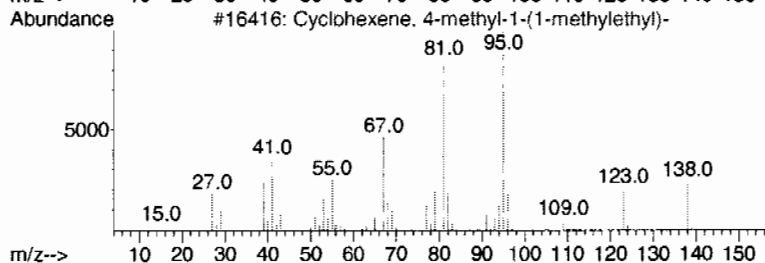
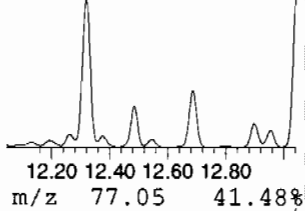
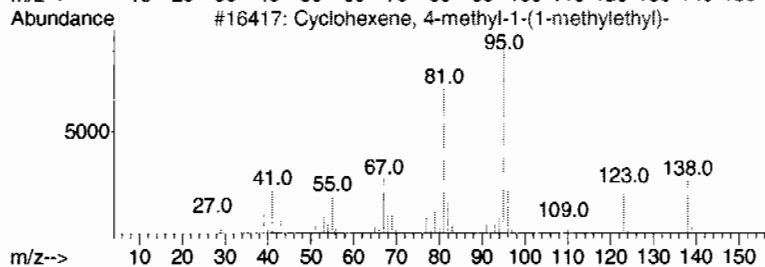
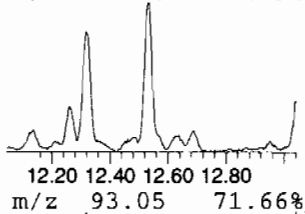
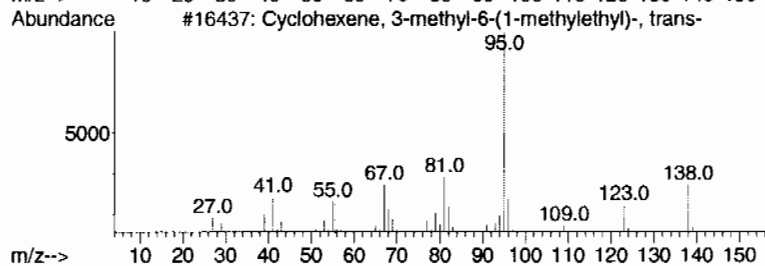
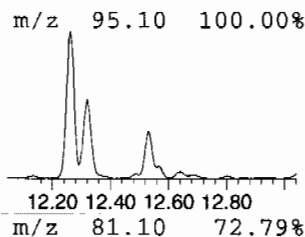
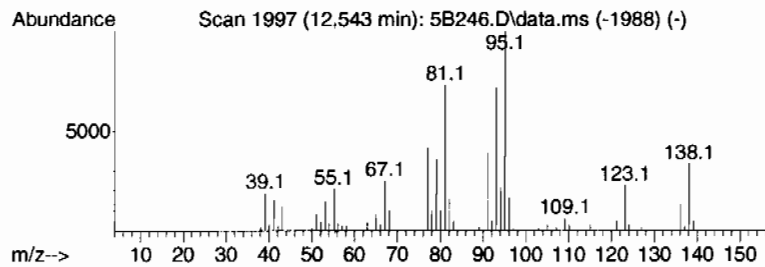
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TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 9 unknown hydrocarbon Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.	
12.543	6.86 ug/L	227073	1,4-Dichlorobenzene-d4	13.413	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	001124-26-1	55
2	Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	55
3	Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	53
4	Cyclohexane, 1-methyl-4-(1-methy...	138	C10H18	001124-27-2	53
5	Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	49



Library Search Compound Report
GEL Laboratories, LLC

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Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

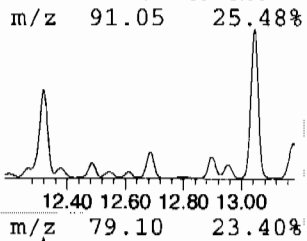
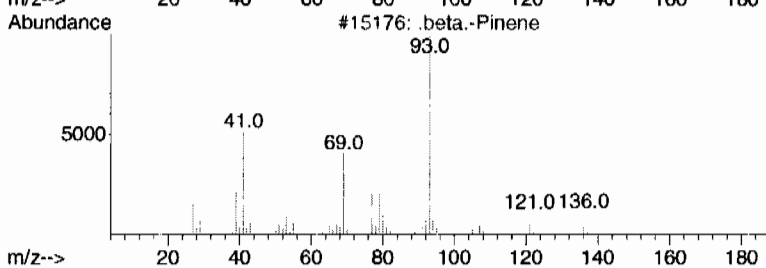
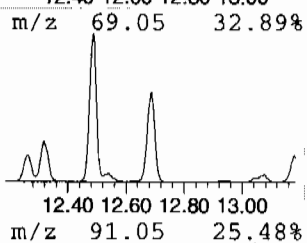
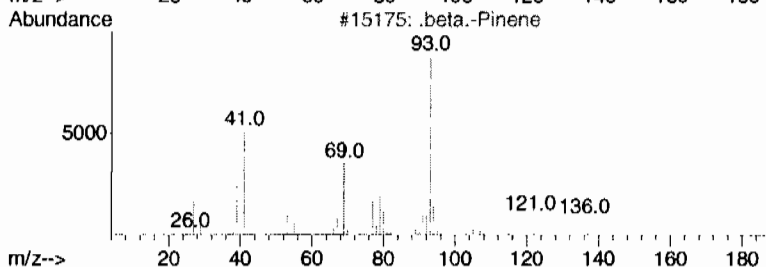
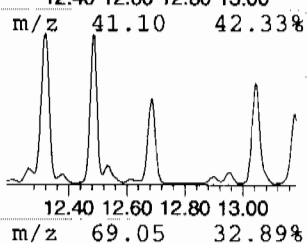
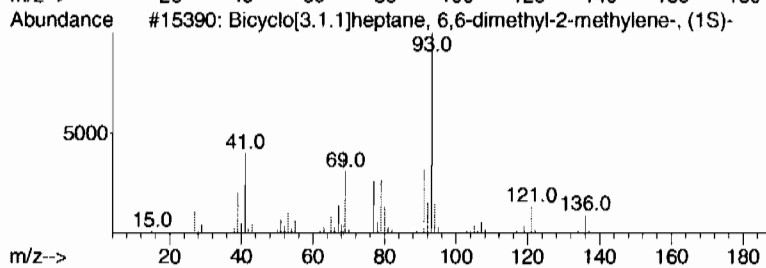
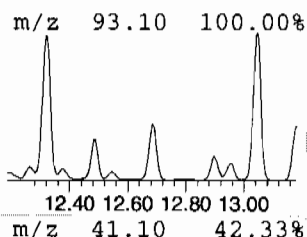
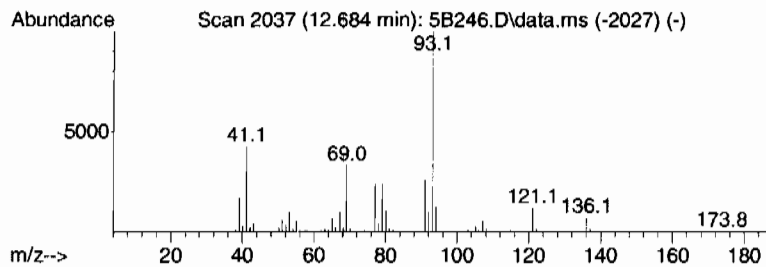
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TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 10 unknown hydrocarbon Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.		
12.684	56.85 ug/L	1882680	1,4-Dichlorobenzene-d4	13.413		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Bicyclo[3.1.1]heptane, 6,6-dimet...	136	C10H16	018172-67-3	95
2		.beta.-Pinene	136	C10H16	000127-91-3	94
3		.beta.-Pinene	136	C10H16	000127-91-3	91
4		Cyclohexene, 4-methylene-1-(1-me...	136	C10H16	000099-84-3	91
5		Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000508-32-7	91



Library Search Compound Report
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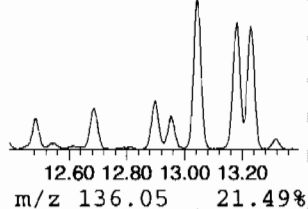
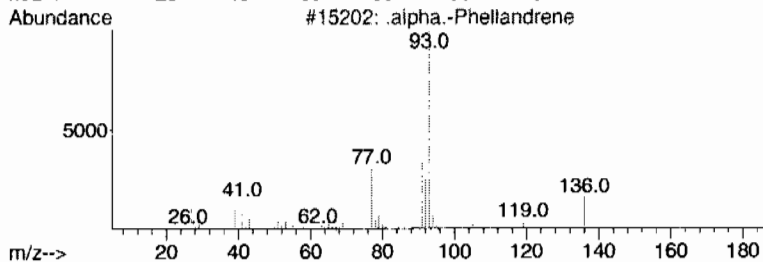
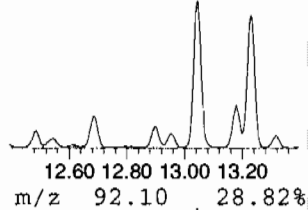
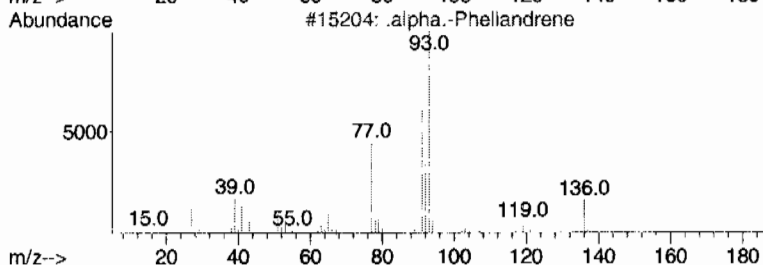
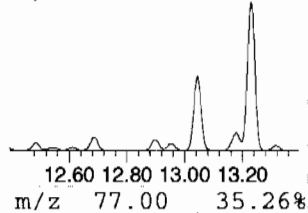
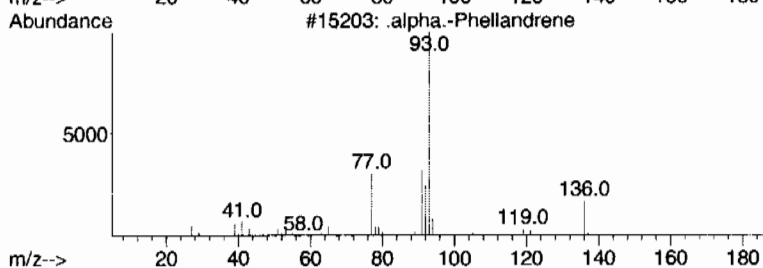
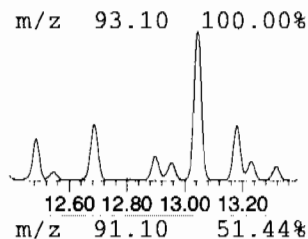
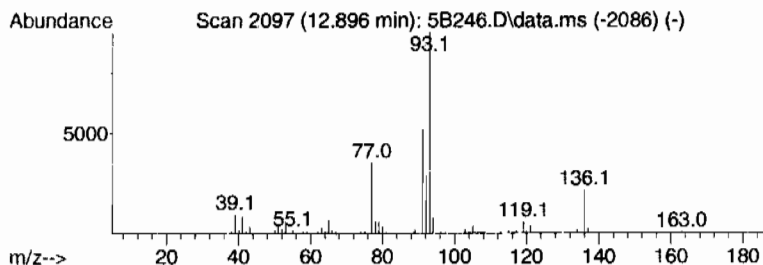
Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

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

Peak Number 11 unknown hydrocarbon Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.		
12.896	19.26 ug/L	637996	1,4-Dichlorobenzene-d4	13.413		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		.alpha.-Phellandrene	136	C10H16	000099-83-2	95
2		.alpha.-Phellandrene	136	C10H16	000099-83-2	91
3		.alpha.-Phellandrene	136	C10H16	000099-83-2	91
4		3-Carene	136	C10H16	013466-78-9	86
5		1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	78



Library Search Compound Report
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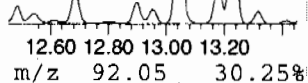
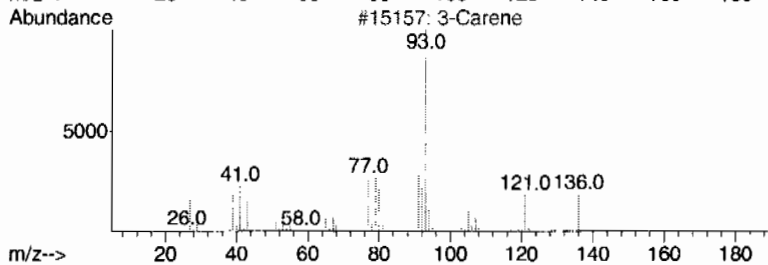
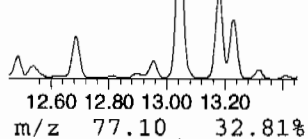
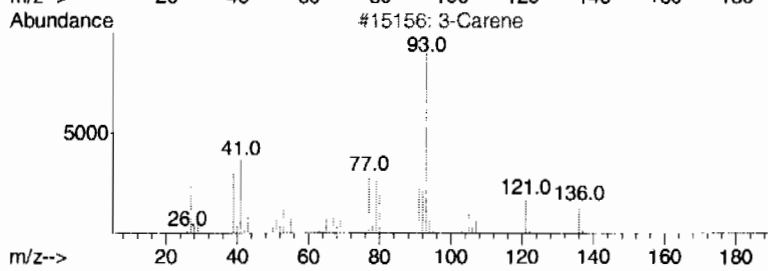
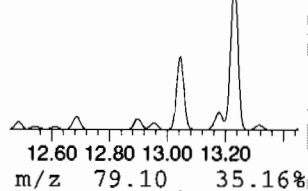
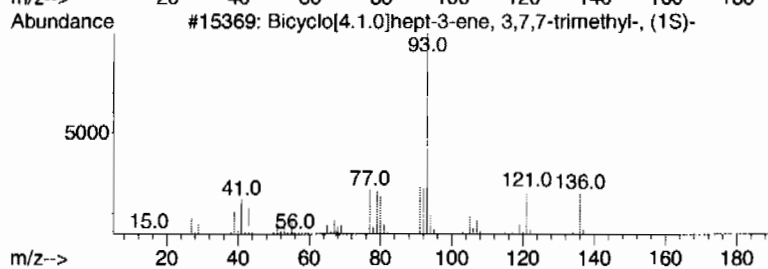
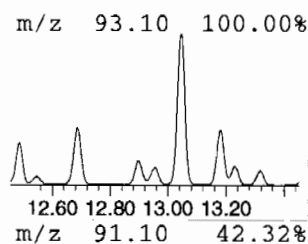
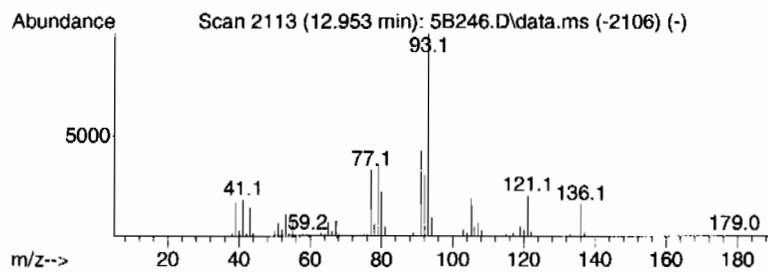
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Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

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

Peak Number 12 unknown hydrocarbon Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.953	15.32 ug/L	507265	1,4-Dichlorobenzene-d4	13.413
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	3-Carene	136 C10H16	013466-78-9	91
4	1R-.alpha.-Pinene	136 C10H16	007785-70-8	91
5	1S-.alpha.-Pinene	136 C10H16	007785-26-4	91



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Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

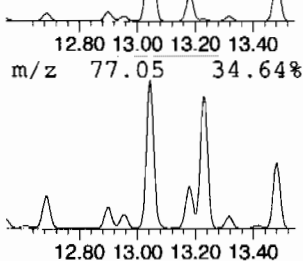
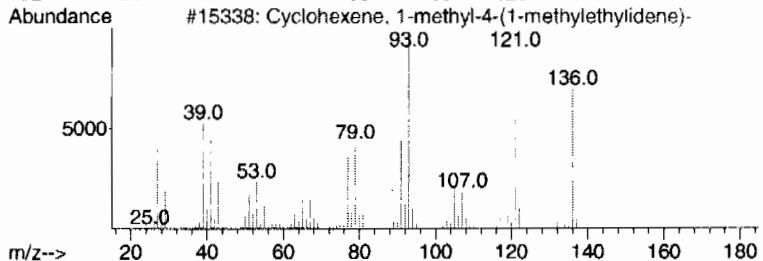
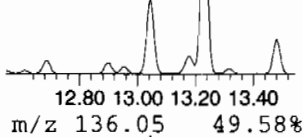
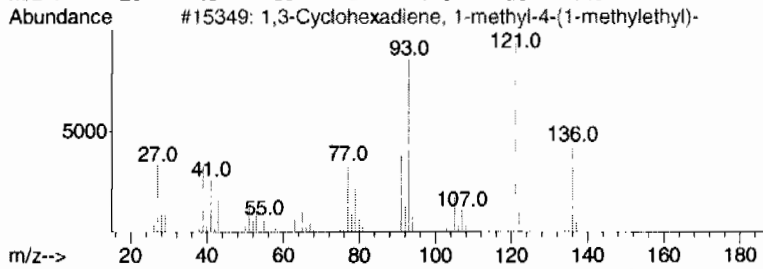
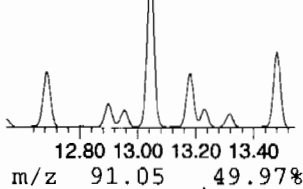
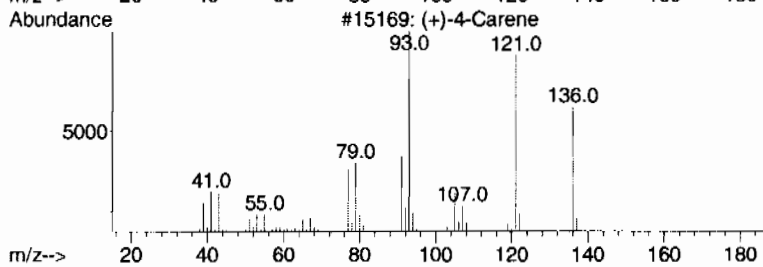
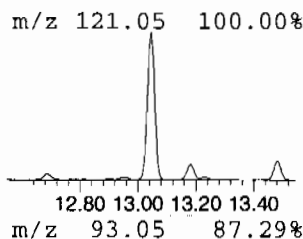
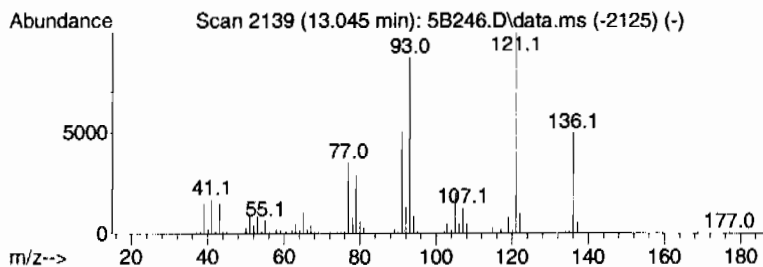
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 13 unknown hydrocarbon Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.045	238.05 ug/L	7883550	1,4-Dichlorobenzene-d4	13.413

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	(+)-4-Carene		136	C10H16	029050-33-7	97
2	1,3-Cyclohexadiene, 1-methyl-4-(...		136	C10H16	000099-86-5	97
3	Cyclohexene, 1-methyl-4-(1-methy...		136	C10H16	000586-62-9	94
4	Cyclohexene, 1-methyl-4-(1-methy...		136	C10H16	000586-62-9	94
5	Bicyclo[4.1.0]hept-2-ene, 3,7,7-...		136	C10H16	000554-61-0	94



Library Search Compound Report
GEL Laboratories, LLC

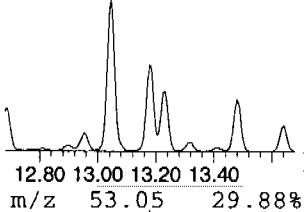
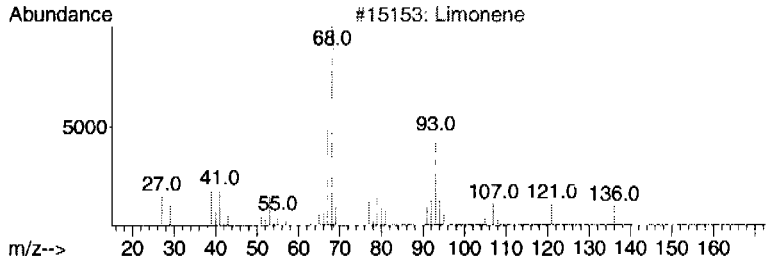
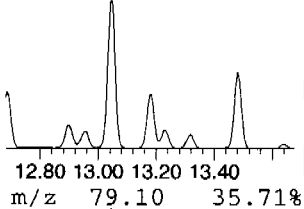
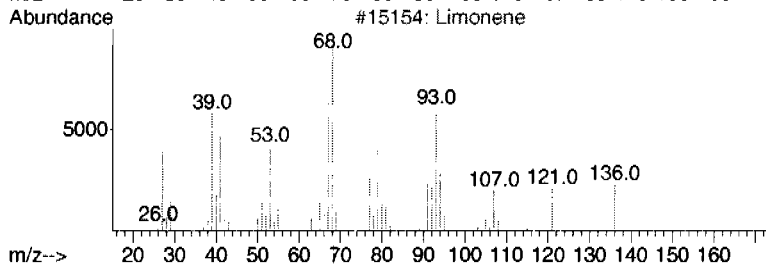
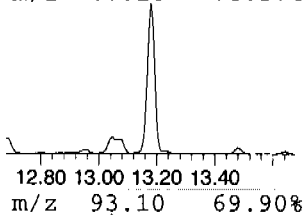
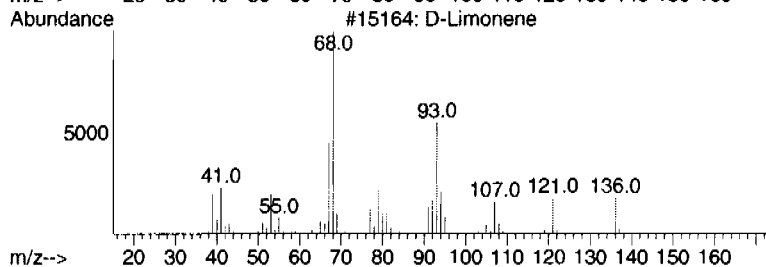
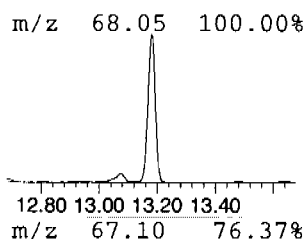
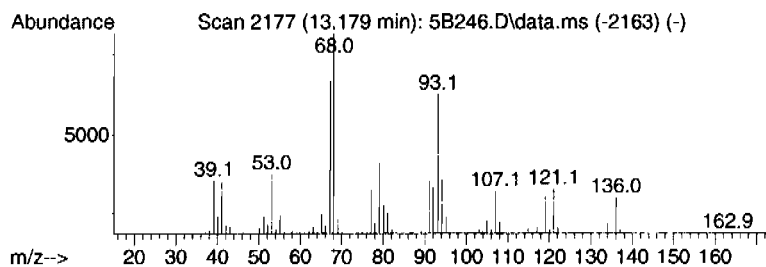
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Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

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

Peak Number 14 unknown hydrocarbon Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.		
13.179	104.15 ug/L	3449120	1,4-Dichlorobenzene-d4	13.413		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		D-Limonene	136	C10H16	005989-27-5	94
2		Limonene	136	C10H16	000138-86-3	90
3		Limonene	136	C10H16	000138-86-3	81
4		D-Limonene	136	C10H16	005989-27-5	81
5		Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	007705-14-8	81



Library Search Compound Report
GEL Laboratories, LLC

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Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

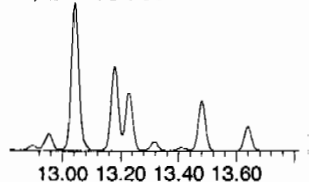
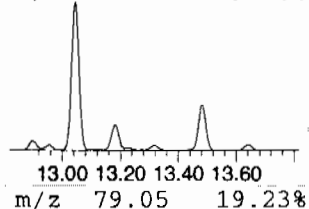
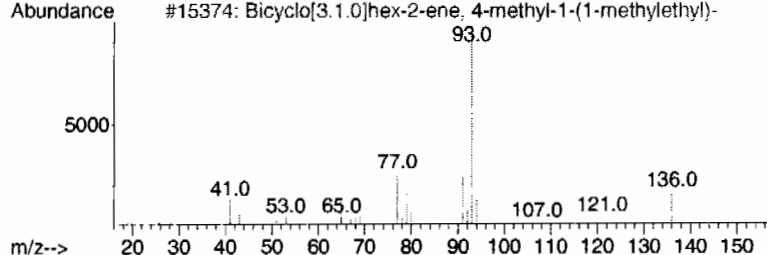
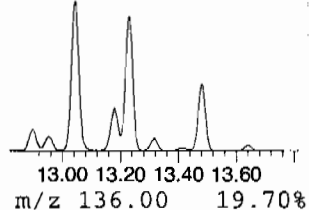
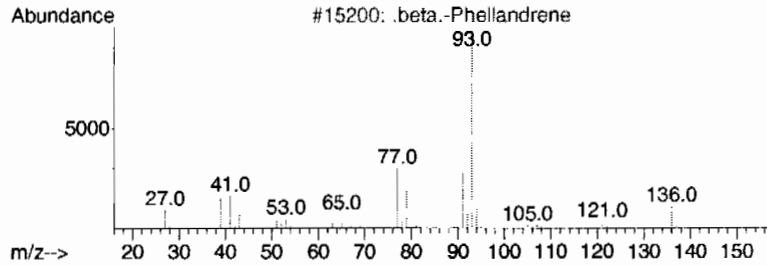
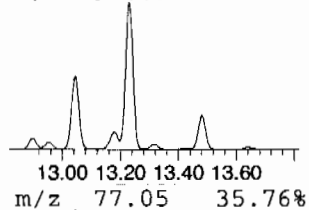
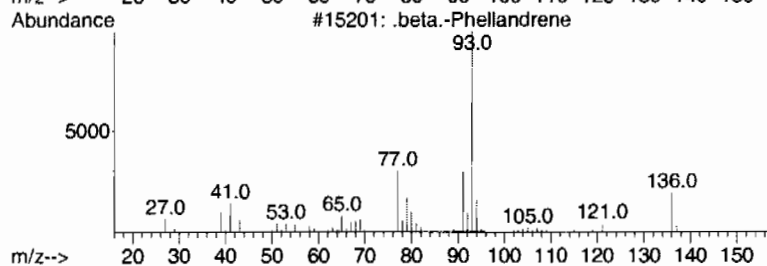
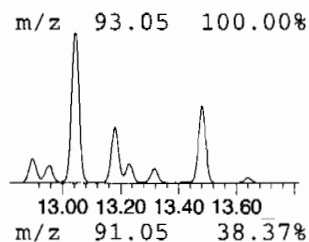
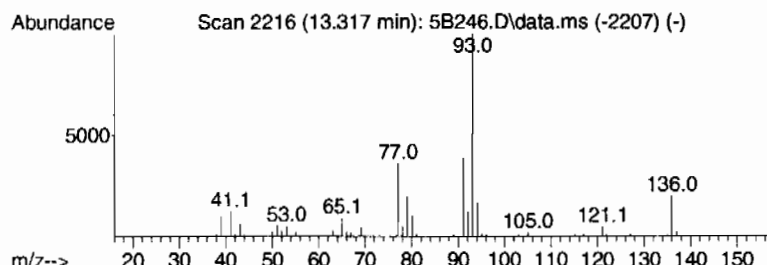
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 15 unknown hydrocarbon Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.317	8.20 ug/L	271611	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	.	beta.-Phellandrene	136	C10H16	000555-10-2	91	
2	.	beta.-Phellandrene	136	C10H16	000555-10-2	91	
3	Bicyclo[3.1.0]hex-2-ene, 4-methy...	136	C10H16	028634-89-1	91		
4	Bicyclo[3.1.0]hexane, 4-methylen...	136	C10H16	003387-41-5	91		
5	.	beta.-Phellandrene	136	C10H16	000555-10-2	87	



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

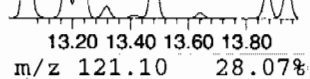
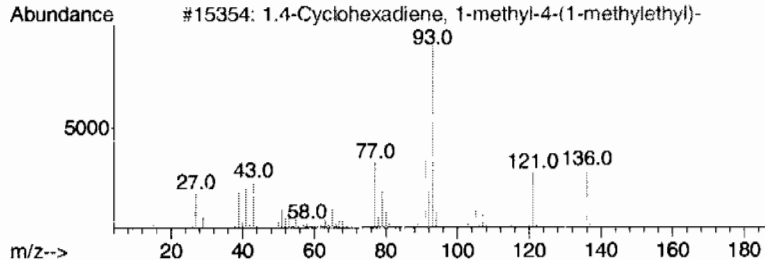
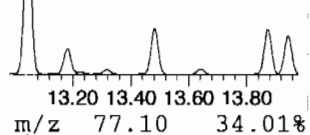
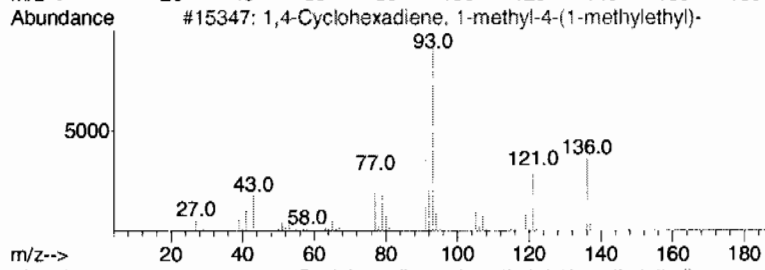
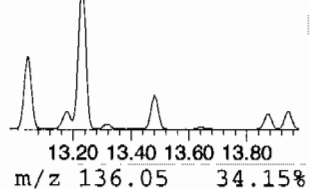
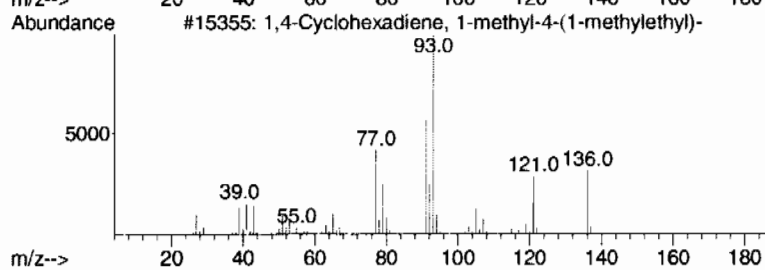
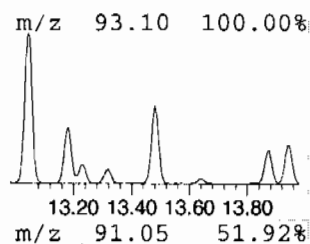
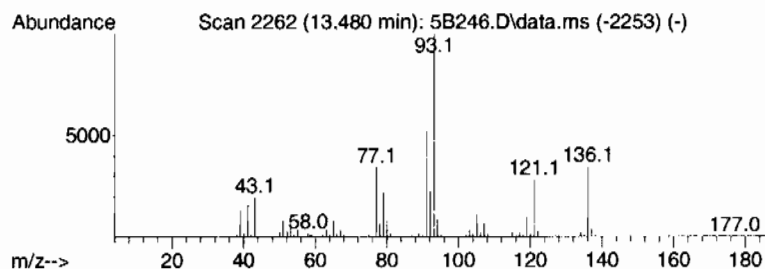
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 16 1,4-Cyclohexadiene, 1-methy... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.480	81.43 ug/L	2696760	B 1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	96
2			1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	96
3			1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	96
4			1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	95
5			Bicyclo[4.1.0]hept-3-ene, 3,7,7-...	136	C10H16	000498-15-7	94



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

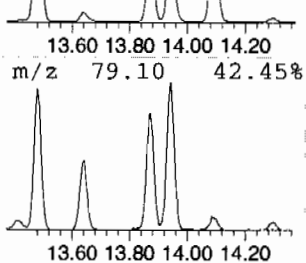
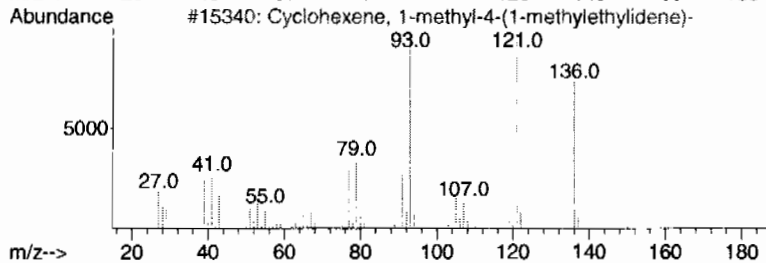
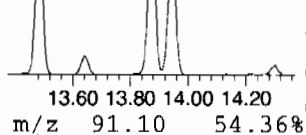
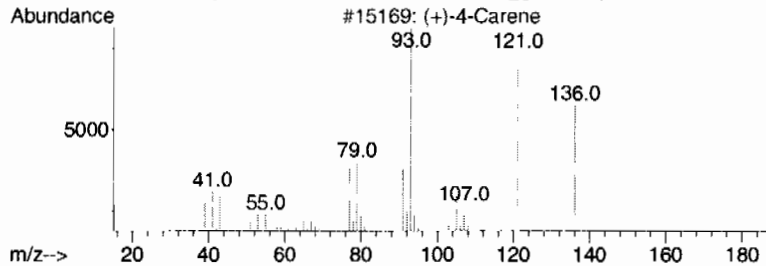
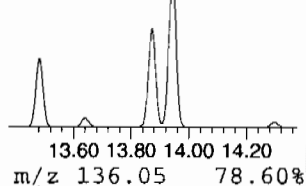
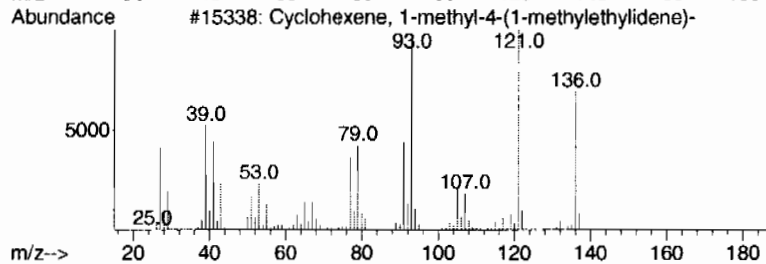
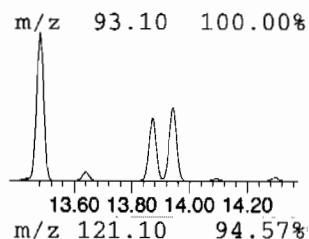
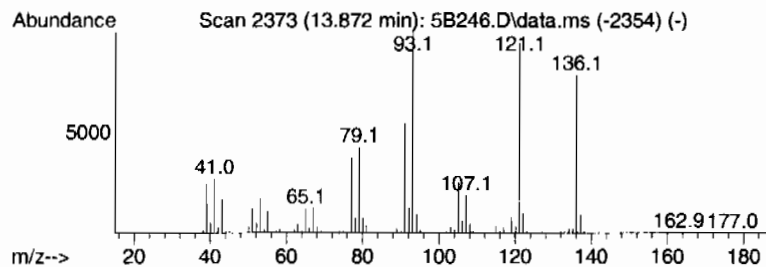
SubList :

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

Peak Number 17 unknown hydrocarbon Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.873	55.02 ug/L	1822130	B 1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	000586-62-9	97
2			(+)-4-Carene	136	C10H16	029050-33-7	97
3			Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	000586-62-9	96
4			Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	000586-62-9	96
5			Bicyclo[4.1.0]hept-2-ene, 3,7,7-...	136	C10H16	000554-61-0	94



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

SubList :

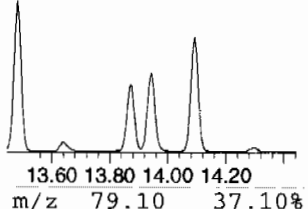
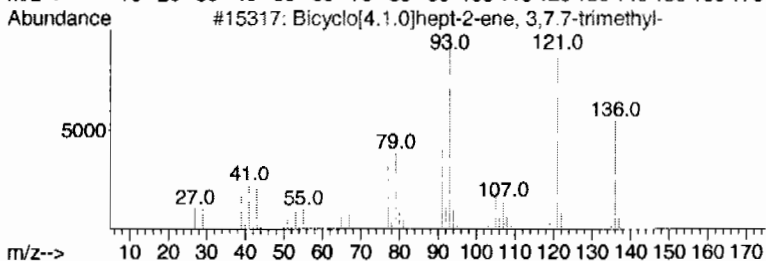
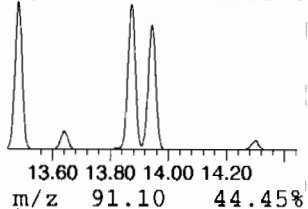
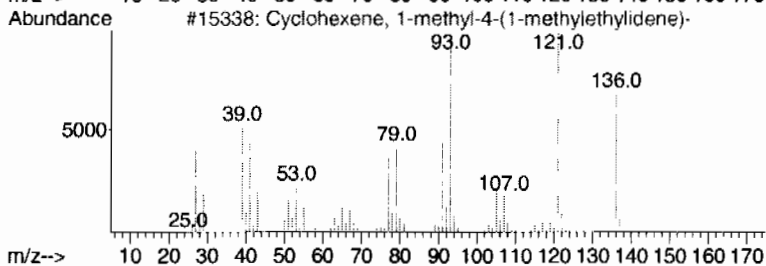
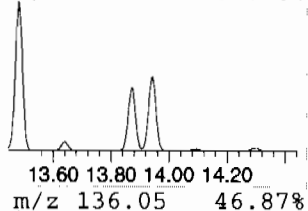
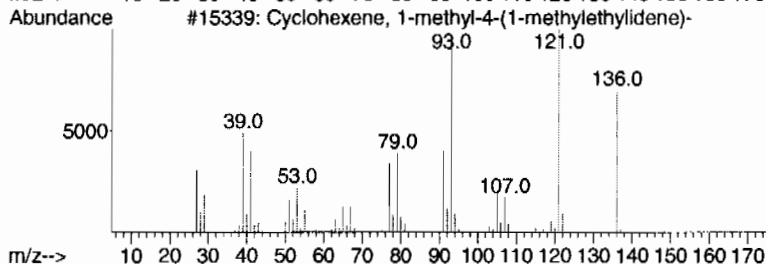
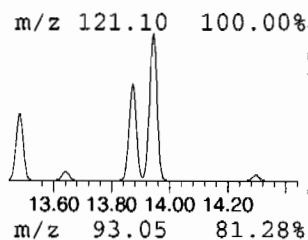
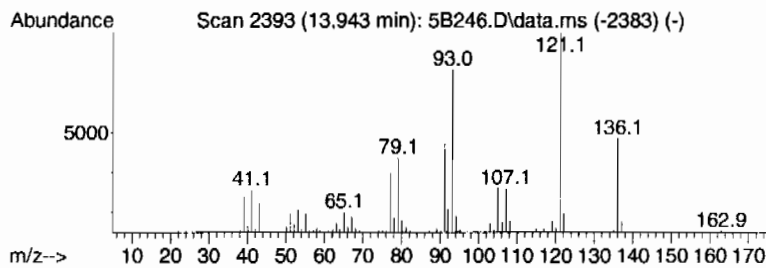
TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 18 unknown hydrocarbon Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.943	67.06 ug/L	2220920	B 1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	000586-62-9	96
2			Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	000586-62-9	95
3			Bicyclo[4.1.0]hept-2-ene, 3,7,7-...	136	C10H16	000554-61-0	95
4			Cyclohexene, 3-methyl-6-(1-methy...	136	C10H16	000586-63-0	94
5			(+)-4-Carene	136	C10H16	029050-33-7	93



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

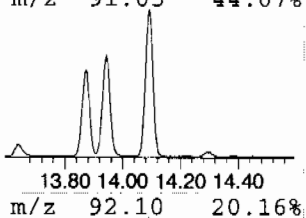
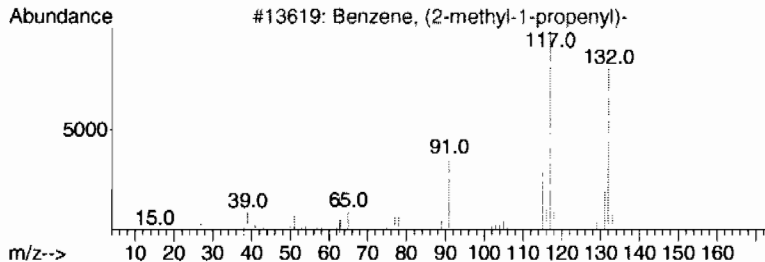
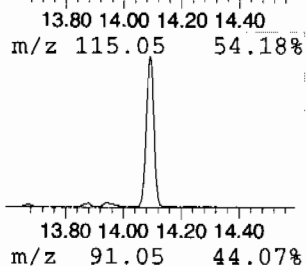
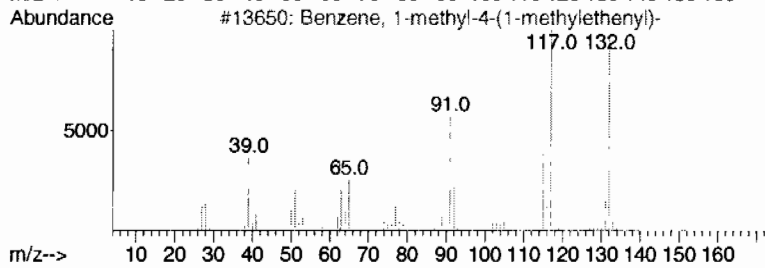
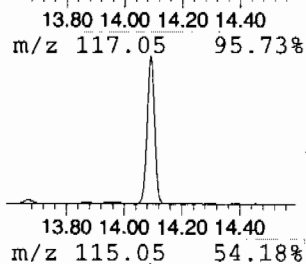
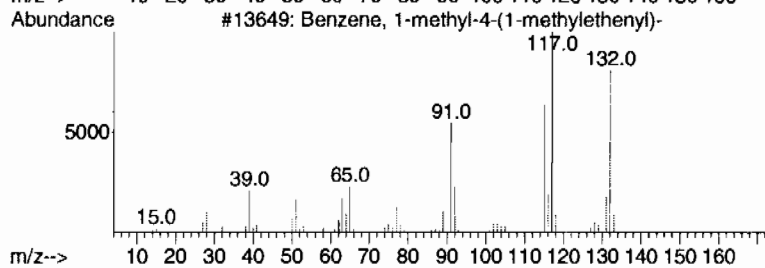
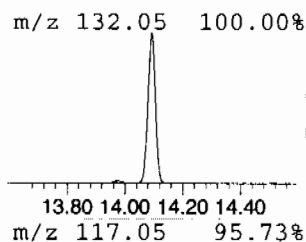
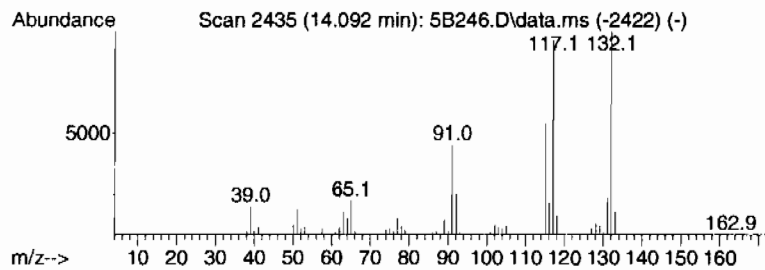
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 19 unknown aromatic Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.092	82.39 ug/L	2728420	B 1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1-methyl-4-(1-methyleth...	132	C10H12	001195-32-0	96
2			Benzene, 1-methyl-4-(1-methyleth...	132	C10H12	001195-32-0	93
3			Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	87
4			Benzene, 1-methyl-4-(1-methyleth...	132	C10H12	001195-32-0	87
5			Benzene, 2-butenyl-	132	C10H12	001560-06-1	86



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B246.D
Acq On : 10 Mar 2010 4:09 am
Operator : CDS1
Sample : |248370011|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown	11.821	16.0	ug/L	847089	4	11.142	2641090	50.0
unknown hydroca...	11.889	27.9	ug/L	1475610	4	11.142	2641090	50.0
unknown hydroca...	11.995	1088.9	ug/L	57518600	4	11.142	2641090	50.0
unknown hydroca...	12.133	8.0	ug/L	420753	4	11.142	2641090	50.0
unknown hydroca...	12.320	216.9	ug/L	7183000	5	13.413	1655890	50.0
unknown hydroca...	12.377	16.4	ug/L	544007	5	13.413	1655890	50.0
unknown hydroca...	12.486	46.0	ug/L	1524100	5	13.413	1655890	50.0
unknown hydroca...	12.532	13.4	ug/L	442980	5	13.413	1655890	50.0
unknown hydroca...	12.543	6.9	ug/L	227073	5	13.413	1655890	50.0
unknown hydroca...	12.684	56.9	ug/L	1882680	5	13.413	1655890	50.0
unknown hydroca...	12.896	19.3	ug/L	637996	5	13.413	1655890	50.0
unknown hydroca...	12.953	15.3	ug/L	507265	5	13.413	1655890	50.0
unknown hydroca...	13.045	238.1	ug/L	7883550	5	13.413	1655890	50.0
unknown hydroca...	13.179	104.2	ug/L	3449120	5	13.413	1655890	50.0
unknown hydroca...	13.317	8.2	ug/L	271611	5	13.413	1655890	50.0
1,4-Cyclohexadi...	13.480	81.4	ug/L	2696760	6	13.413	1655890	50.0
unknown hydroca...	13.873	55.0	ug/L	1822130	6	13.413	1655890	50.0
unknown hydroca...	13.943	67.1	ug/L	2220920	6	13.413	1655890	50.0
unknown aromatic	14.092	82.4	ug/L	2728420	6	13.413	1655890	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370013
 Client ID: RE36-10-7477
 Batch ID: 963122
 Run Date: 03/10/2010 11:59
 Prep Date: 03/10/2010 08:45
 Data File: 031010V55B312.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 % Moisture: 23.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.31	ug/kg	0.445	1.31
74-87-3	Chloromethane	U	1.31	ug/kg	0.393	1.31
75-01-4	Vinyl chloride	U	1.31	ug/kg	0.393	1.31
74-83-9	Bromomethane	U	1.31	ug/kg	0.393	1.31
75-00-3	Chloroethane	U	1.31	ug/kg	0.393	1.31
75-69-4	Trichlorofluoromethane	U	1.31	ug/kg	0.393	1.31
67-64-1	Acetone	U	6.55	ug/kg	2.17	6.55
75-35-4	1,1-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
74-88-4	Iodomethane	U	6.55	ug/kg	2.09	6.55
75-09-2	Methylene chloride	U	6.55	ug/kg	2.62	6.55
75-15-0	Carbon disulfide	U	6.55	ug/kg	1.64	6.55
156-60-5	trans-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
75-34-3	1,1-Dichloroethane	U	1.31	ug/kg	0.393	1.31
78-93-3	2-Butanone	U	6.55	ug/kg	1.96	6.55
156-59-2	cis-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
594-20-7	2,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
67-66-3	Chloroform	U	1.31	ug/kg	0.393	1.31
74-97-5	Bromochloromethane	U	1.31	ug/kg	0.432	1.31
71-55-6	1,1,1-Trichloroethane	U	1.31	ug/kg	0.393	1.31
563-58-6	1,1-Dichloropropene	U	1.31	ug/kg	0.393	1.31
56-23-5	Carbon tetrachloride	U	1.31	ug/kg	0.393	1.31
107-06-2	1,2-Dichloroethane	U	1.31	ug/kg	0.393	1.31
71-43-2	Benzene	U	1.31	ug/kg	0.393	1.31
79-01-6	Trichloroethylene	U	1.31	ug/kg	0.432	1.31
78-87-5	1,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
75-27-4	Bromodichloromethane	U	1.31	ug/kg	0.393	1.31
74-95-3	Dibromomethane	U	1.31	ug/kg	0.393	1.31
108-10-1	4-Methyl-2-pentanone	U	6.55	ug/kg	1.64	6.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
108-88-3	Toluene	U	1.31	ug/kg	0.393	1.31
10061-02-6	trans-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
79-00-5	1,1,2-Trichloroethane	U	1.31	ug/kg	0.393	1.31
591-78-6	2-Hexanone	U	6.55	ug/kg	1.96	6.55
142-28-9	1,3-Dichloropropane	U	1.31	ug/kg	0.393	1.31
127-18-4	Tetrachloroethylene	U	1.31	ug/kg	0.393	1.31
124-48-1	Dibromochloromethane	U	1.31	ug/kg	0.393	1.31
106-93-4	1,2-Dibromoethane	U	1.31	ug/kg	0.393	1.31
108-90-7	Chlorobenzene	U	1.31	ug/kg	0.393	1.31

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370013
 Client ID: RE36-10-7477
 Batch ID: 963122
 Run Date: 03/10/2010 11:59
 Prep Date: 03/10/2010 08:45
 Data File: 031010V55B312.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 23.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.31	ug/kg	0.393	1.31
179601-23-1	m,p-Xylenes	U	2.62	ug/kg	0.393	2.62
95-47-6	o-Xylene	U	1.31	ug/kg	0.393	1.31
100-42-5	Styrene	U	1.31	ug/kg	0.393	1.31
75-25-2	Bromoform	U	1.31	ug/kg	0.393	1.31
79-34-5	1,1,2,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
96-18-4	1,2,3-Trichloropropane	U	1.31	ug/kg	0.393	1.31
108-86-1	Bromobenzene	U	1.31	ug/kg	0.393	1.31
103-65-1	n-Propylbenzene	U	1.31	ug/kg	0.393	1.31
95-49-8	2-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-82-8	Isopropylbenzene	U	1.31	ug/kg	0.393	1.31
108-67-8	1,3,5-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
106-43-4	4-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-06-6	tert-Butylbenzene	U	1.31	ug/kg	0.393	1.31
95-63-6	1,2,4-Trimethylbenzene	J	0.406	ug/kg	0.393	1.31
135-98-8	sec-Butylbenzene	U	1.31	ug/kg	0.393	1.31
99-87-6	4-Isopropyltoluene	J	0.930	ug/kg	0.393	1.31
541-73-1	1,3-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
106-46-7	1,4-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
104-51-8	n-Butylbenzene	U	1.31	ug/kg	0.393	1.31
96-12-8	1,2-Dibromo-3-chloropropane	U	1.31	ug/kg	0.393	1.31
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.55	ug/kg	2.09	6.55
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
95-50-1	1,2-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31

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\031010V5\
Data File : 5B312.D
Acq On : 10 Mar 2010 11:59 am
Operator : CDS1
InstName : VOA5
Sample : |248370013|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 11 07:18:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1578466	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1109102	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	457050	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1578466	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1109102	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	457050	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	289738	37.92	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	75.84%		
43) Toluene-d8	9.721	9.721	0.872	98	1250291	44.08	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	88.16%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	573079	62.51	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	125.02%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.910	4.900	0.585	50	645	Below Cal		65
4) Vinyl chloride	5.031	5.041	0.600	62	249	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	902	N.D.		
9) Acetone	6.184	6.174	0.737	43	2728	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	538	N.D.		
13) Methyl acetate	6.213	6.365	0.741	43	125	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	856	N.D.		
15) Methylene chloride	6.541	6.538	0.780	84	9169	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.969	6.969	0.831	43	112	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.214	8.203	0.979	78	252	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.391	8.377	1.000	56	8978	Below Cal	#	21
34) Trichloroethylene	8.674	8.677	1.034	95	107	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B312.D
Acq On : 10 Mar 2010 11:59 am
Operator : CDS1
InstName : VOA5
Sample : |248370013|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 11 07:18:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	3407	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.290	10.279	0.924	43	128	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	2372	N.D.	
55) m,p-Xylenes	11.273	11.280	1.012	106	2577	N.D.	
56) o-Xylene	11.697	11.701	1.050	106	1440	N.D.	
57) Styrene	11.715	11.715	1.051	104	541	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.009	12.016	0.895	105	443	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.419	12.415	0.926	91	3264	N.D.	
66) 1,3,5-Trimethylbenzene	12.553	12.564	0.936	105	1971	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.691	12.698	0.946	91	2477	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	5720	0.31 ug/L	95
71) sec-Butylbenzene	13.126	13.119	0.979	105	501	N.D.	
72) 4-Isopropyltoluene	13.236	13.229	0.987	119	13028	0.71 ug/L	90
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	126	N.D.	
74) 1,4-Dichlorobenzene	13.434	13.441	1.002	146	704	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	2837	N.D.	
76) 1,2-Dichlorobenzene	13.851	13.858	1.033	146	114	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	661	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	0.000	15.988	0.000		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	554	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.457	6.425	0.770	41	270	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B312.D
Acq On : 10 Mar 2010 11:59 am
Operator : CDS1
InstName : VOA5
Sample : |248370013|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 11 07:18:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

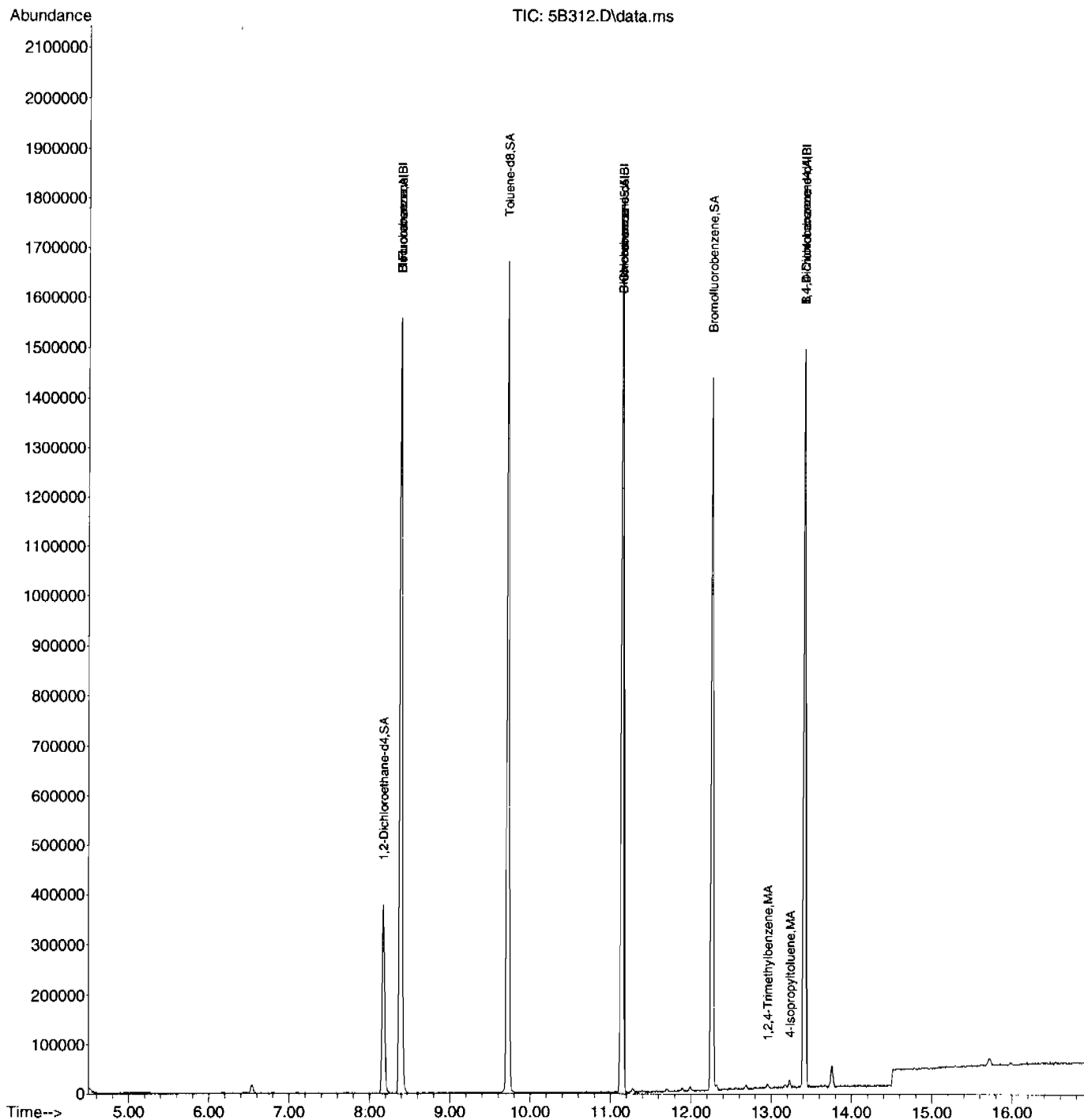
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.719	7.680	0.920	41	116	N.D.	
97) Tetrahydrofuran	7.716	7.716	0.920	42	122	N.D.	
98) Isobutyl alcohol	7.719	7.857	0.920	41	116	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	11.991	12.136	0.894	53	106	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	1137	N.D.	
112) bis(2-Chloroisopropyl)...	13.929	13.929	1.038	45	108	N.D.	

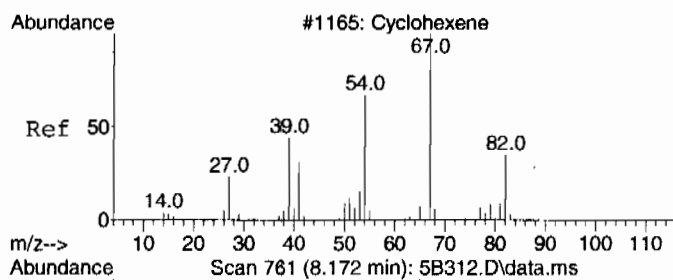
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B312.D
Acq On : 10 Mar 2010 11:59 am
Operator : CDS1
InstName : VOA5
Sample : |248370013|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

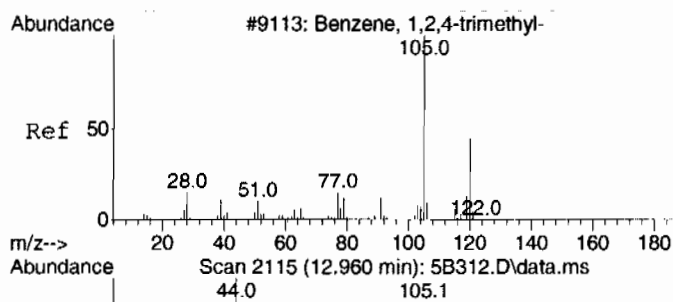
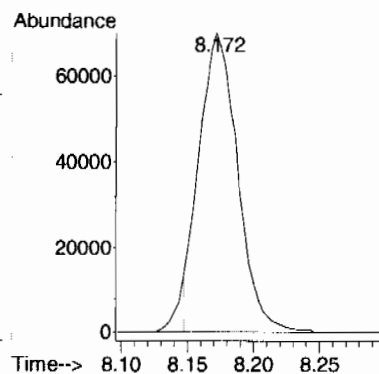
Quant Time: Mar 11 07:18:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





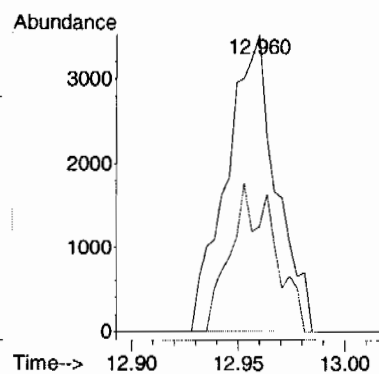
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.49 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B312.D
Acq: 10 Mar 2010 11:59 am

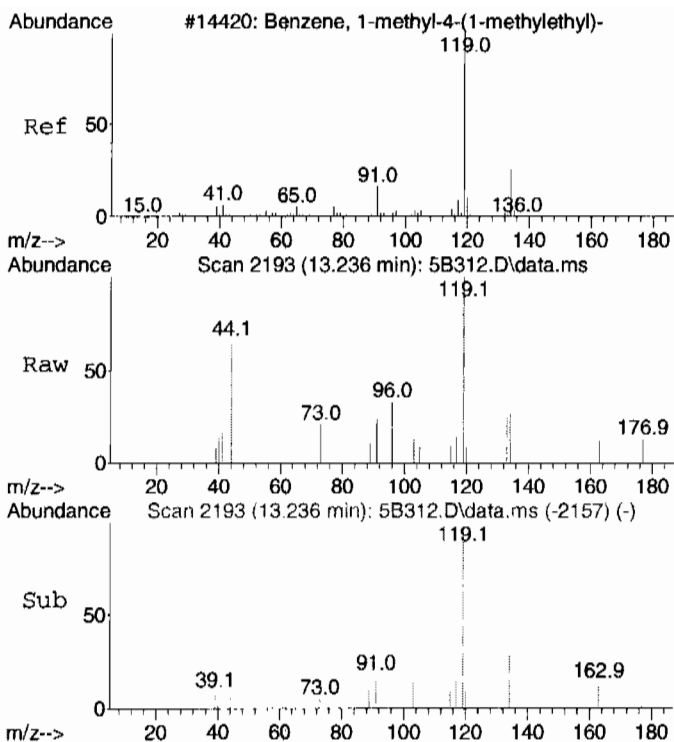
Tgt Ion: 67 Resp: 143229
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#70
1,2,4-Trimethylbenzene
Concen: 0.31 ug/L
RT: 12.960 min Scan# 2115
Delta R.T. 0.004 min
Lab File: 5B312.D
Acq: 10 Mar 2010 11:59 am

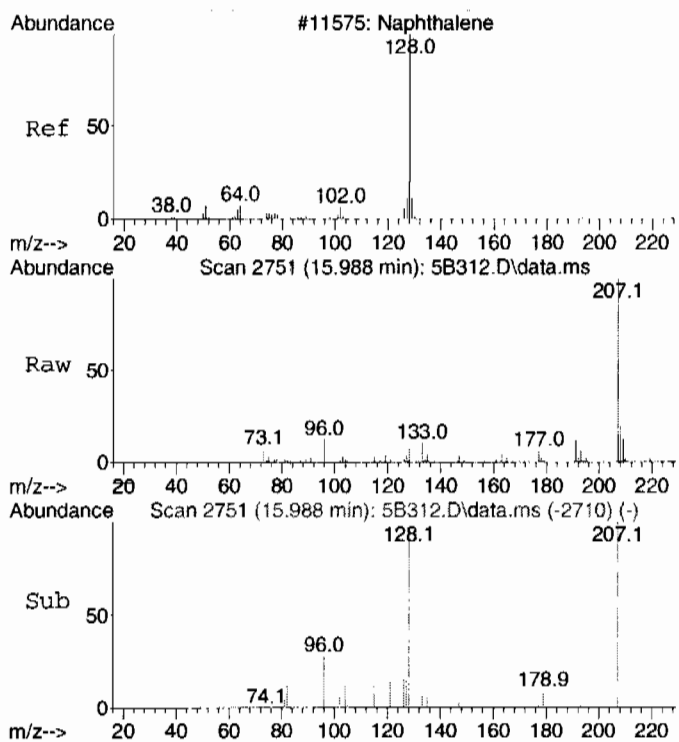
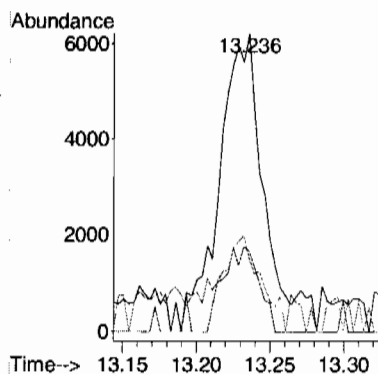
Tgt Ion: 105 Resp: 5720
Ion Ratio Lower Upper
105 100
120 43.8 17.4 77.4





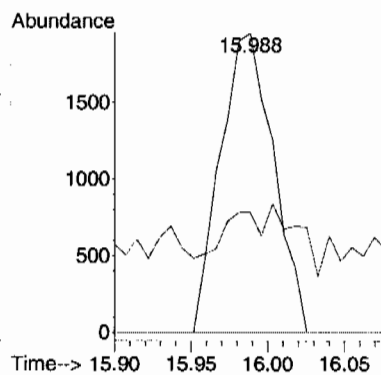
#72
4-Isopropyltoluene
Concen: 0.71 ug/L
RT: 13.236 min Scan# 2193
Delta R.T. 0.007 min
Lab File: 5B312.D
Acq: 10 Mar 2010 11:59 am

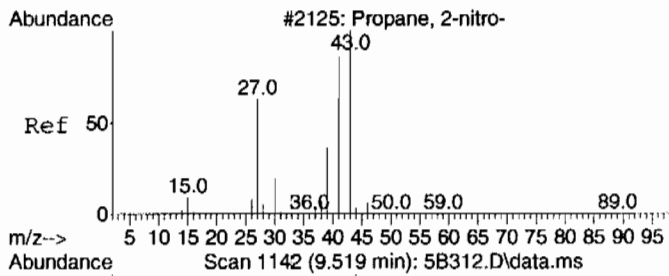
Tgt Ion:	119	Resp:	13028
Ion Ratio	Lower	Upper	
119	100		
134	22.7	0.0	57.2
91	29.0	0.0	53.0



#80 BEFORE analyst DELETION
Naphthalene
Concen: 0.32 ug/L
RT: 15.988 min Scan# 2751
Delta R.T. 0.000 min
Lab File: 5B312.D
Acq: 10 Mar 2010 11:59 am

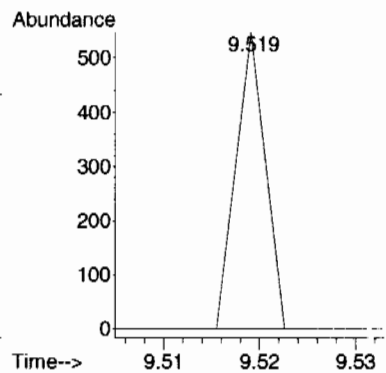
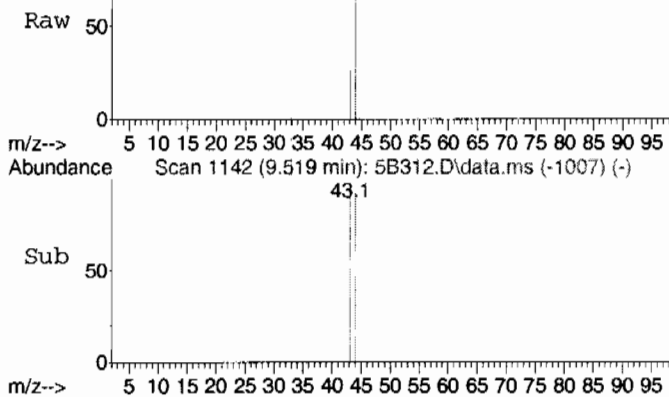
Tgt Ion:	128	Resp:	4698
Ion Ratio	Lower	Upper	
128	100		
127	30.3	0.0	42.4
129	0.0	0.0	40.8





#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.95 ug/L
RT: 9.519 min Scan# 1142
Delta R.T. 0.177 min
Lab File: 5B312.D
Acq: 10 Mar 2010 11:59 am

Tgt Ion: 43 Resp: 116
Ion Ratio Lower Upper
43 100
41 0.0 52.5 112.5#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\

Data File : 5B312.D

Acq On : 10 Mar 2010 11:59 am

Operator : CDS1

Sample : |248370013|963122|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 12 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B312.D
Acq On : 10 Mar 2010 11:59 am
Operator : CDS1
Sample : |248370013|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 12 Sample Multiplier: 1

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

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370014
 Client ID: RE36-10-7489
 Batch ID: 963122
 Run Date: 03/10/2010 12:26
 Prep Date: 03/10/2010 08:46
 Data File: 031010V55B313.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 35
 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	0.523	1.54
74-87-3	Chloromethane	U	1.54	ug/kg	0.462	1.54
75-01-4	Vinyl chloride	U	1.54	ug/kg	0.462	1.54
74-83-9	Bromomethane	U	1.54	ug/kg	0.462	1.54
75-00-3	Chloroethane	U	1.54	ug/kg	0.462	1.54
75-69-4	Trichlorofluoromethane	U	1.54	ug/kg	0.462	1.54
67-64-1	Acetone	U	7.70	ug/kg	2.56	7.70
75-35-4	1,1-Dichloroethylene	U	1.54	ug/kg	0.462	1.54
74-88-4	Iodomethane	U	7.70	ug/kg	2.46	7.70
75-09-2	Methylene chloride	U	7.70	ug/kg	3.08	7.70
75-15-0	Carbon disulfide	U	7.70	ug/kg	1.92	7.70
156-60-5	trans-1,2-Dichloroethylene	U	1.54	ug/kg	0.462	1.54
75-34-3	1,1-Dichloroethane	U	1.54	ug/kg	0.462	1.54
78-93-3	2-Butanone	U	7.70	ug/kg	2.31	7.70
156-59-2	cis-1,2-Dichloroethylene	U	1.54	ug/kg	0.462	1.54
594-20-7	2,2-Dichloropropane	U	1.54	ug/kg	0.462	1.54
67-66-3	Chloroform	U	1.54	ug/kg	0.462	1.54
74-97-5	Bromochloromethane	U	1.54	ug/kg	0.508	1.54
71-55-6	1,1,1-Trichloroethane	U	1.54	ug/kg	0.462	1.54
563-58-6	1,1-Dichloropropene	U	1.54	ug/kg	0.462	1.54
56-23-5	Carbon tetrachloride	U	1.54	ug/kg	0.462	1.54
107-06-2	1,2-Dichloroethane	U	1.54	ug/kg	0.462	1.54
71-43-2	Benzene	U	1.54	ug/kg	0.462	1.54
79-01-6	Trichloroethylene	U	1.54	ug/kg	0.508	1.54
78-87-5	1,2-Dichloropropane	U	1.54	ug/kg	0.462	1.54
75-27-4	Bromodichloromethane	U	1.54	ug/kg	0.462	1.54
74-95-3	Dibromomethane	U	1.54	ug/kg	0.462	1.54
108-10-1	4-Methyl-2-pentanone	U	7.70	ug/kg	1.92	7.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.54	ug/kg	0.462	1.54
108-88-3	Toluene	J	1.06	ug/kg	0.462	1.54
10061-02-6	trans-1,3-Dichloropropylene	U	1.54	ug/kg	0.462	1.54
79-00-5	1,1,2-Trichloroethane	U	1.54	ug/kg	0.462	1.54
591-78-6	2-Hexanone	U	7.70	ug/kg	2.31	7.70
142-28-9	1,3-Dichloropropane	U	1.54	ug/kg	0.462	1.54
127-18-4	Tetrachloroethylene	U	1.54	ug/kg	0.462	1.54
124-48-1	Dibromochloromethane	U	1.54	ug/kg	0.462	1.54
106-93-4	1,2-Dibromoethane	U	1.54	ug/kg	0.462	1.54
108-90-7	Chlorobenzene	U	1.54	ug/kg	0.462	1.54

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370014
 Client ID: RE36-10-7489
 Batch ID: 963122
 Run Date: 03/10/2010 12:26
 Prep Date: 03/10/2010 08:46
 Data File: 031010V55B313.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 35
 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	0.462	1.54
179601-23-1	m,p-Xylenes	U	3.08	ug/kg	0.462	3.08
95-47-6	o-Xylene	U	1.54	ug/kg	0.462	1.54
100-42-5	Styrene	U	1.54	ug/kg	0.462	1.54
75-25-2	Bromoform	U	1.54	ug/kg	0.462	1.54
79-34-5	1,1,2,2-Tetrachloroethane	U	1.54	ug/kg	0.462	1.54
96-18-4	1,2,3-Trichloropropane	U	1.54	ug/kg	0.462	1.54
108-86-1	Bromobenzene	U	1.54	ug/kg	0.462	1.54
103-65-1	n-Propylbenzene	U	1.54	ug/kg	0.462	1.54
95-49-8	2-Chlorotoluene	U	1.54	ug/kg	0.462	1.54
98-82-8	Isopropylbenzene	U	1.54	ug/kg	0.462	1.54
108-67-8	1,3,5-Trimethylbenzene	U	1.54	ug/kg	0.462	1.54
106-43-4	4-Chlorotoluene	U	1.54	ug/kg	0.462	1.54
98-06-6	tert-Butylbenzene	U	1.54	ug/kg	0.462	1.54
95-63-6	1,2,4-Trimethylbenzene	U	1.54	ug/kg	0.462	1.54
135-98-8	sec-Butylbenzene	U	1.54	ug/kg	0.462	1.54
99-87-6	4-Isopropyltoluene		56.1	ug/kg	0.462	1.54
541-73-1	1,3-Dichlorobenzene	U	1.54	ug/kg	0.462	1.54
106-46-7	1,4-Dichlorobenzene	U	1.54	ug/kg	0.462	1.54
104-51-8	n-Butylbenzene	U	1.54	ug/kg	0.462	1.54
96-12-8	1,2-Dibromo-3-chloropropane	U	1.54	ug/kg	0.462	1.54
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.70	ug/kg	2.46	7.70
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.54	ug/kg	0.462	1.54
95-50-1	1,2-Dichlorobenzene	U	1.54	ug/kg	0.462	1.54

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.89	7.9	ug/kg	0	J
	unknown hydrocarbon	11.99	64	ug/kg	0	J
	unknown	12.32	31.1	ug/kg	0	J
	unknown hydrocarbon	12.32	21.2	ug/kg	0	J
	unknown hydrocarbon	12.69	8.16	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B313.D
Acq On : 10 Mar 2010 12:26 pm
Operator : CDS1
InstName : VOA5
Sample : |248370014|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 11 07:24:49 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	8.388	8.387	1.000	96	1521542	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	953744	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	295035	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1521542	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	953744	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	295035	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	272487	37.00	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	74.00%		
43) Toluene-d8	9.721	9.721	0.872	98	1174460	48.15	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	96.30%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	434235	73.38	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	146.76%#		
Target Compounds								
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.860	4.900	0.579	50	181	Below Cal	#	1
4) Vinyl chloride	5.051	5.041	0.602	62	517	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	337	N.D.		
9) Acetone	6.167	6.174	0.735	43	3995	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0m	N.D.	d	
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.471	6.464	0.771	41	305	N.D.		
13) Methyl acetate	6.361	6.365	0.758	43	272	N.D.		
14) Carbon disulfide	6.435	6.435	0.767	76	1306	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	4093	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.811	43	1420	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.443	7.450	0.887	43	118	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.924	7.924	0.945	56	11921	1.16	ug/L	92
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.211	8.203	0.979	78	1327	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.391	8.377	1.000	56	8601	Below Cal	#	21
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B313.D
Acq On : 10 Mar 2010 12:26 pm
Operator : CDS1
InstName : VOA5
Sample : |248370014|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 11 07:24:49 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.		
44) Toluene	9.788	9.788	0.878	91	14028	0.69 ug/L		93
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.		
47) 2-Hexanone	10.290	10.279	0.924	43	131	N.D.		
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.		
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.		
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.		
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.		
54) Ethylbenzene	0.000	11.181	0.000		0m	N.D.	d	
55) m,p-Xylenes	0.000	11.280	0.000		0m	N.D.	d	
56) o-Xylene	11.698	11.701	1.050	106	1252	N.D.		
57) Styrene	11.715	11.715	1.051	104	872	N.D.		
59) Bromoform	0.000	12.005	0.000		0	N.D.		
60) Isopropylbenzene	0.000	12.016	0.000		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	12.327	12.348	0.919	83	106	N.D.		
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.		
64) Bromobenzene	0.000	12.465	0.000		0	N.D.		
65) n-Propylbenzene	0.000	12.415	0.000		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936	105	1650	N.D.		
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000	12.698	0.000		0m	N.D.	d	
69) tert-Butylbenzene	12.928	12.900	0.964	134	110	N.D.		
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D.	d	
71) sec-Butylbenzene	13.123	13.119	0.978	105	852	N.D.		
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	432897	36.41 ug/L		99
73) 1,3-Dichlorobenzene	13.346	13.349	0.995	146	223	N.D.		
74) 1,4-Dichlorobenzene	13.434	13.441	1.002	146	128	N.D.		
75) n-Butylbenzene	13.667	13.653	1.019	91	2113	N.D.		
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	619	N.D.		
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.		
80) Naphthalene	0.000	15.988	0.000		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	265	N.D.		
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.255	6.163	0.746	45	6159	N.D.		
88) Allyl chloride	6.446	6.425	0.769	41	124	N.D.		
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.		
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.		
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.		
94) Ethyl acetate	7.443	7.383	0.887	43	118	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B313.D
Acq On : 10 Mar 2010 12:26 pm
Operator : CDS1
InstName : VOA5
Sample : |248370014|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 11 07:24:49 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

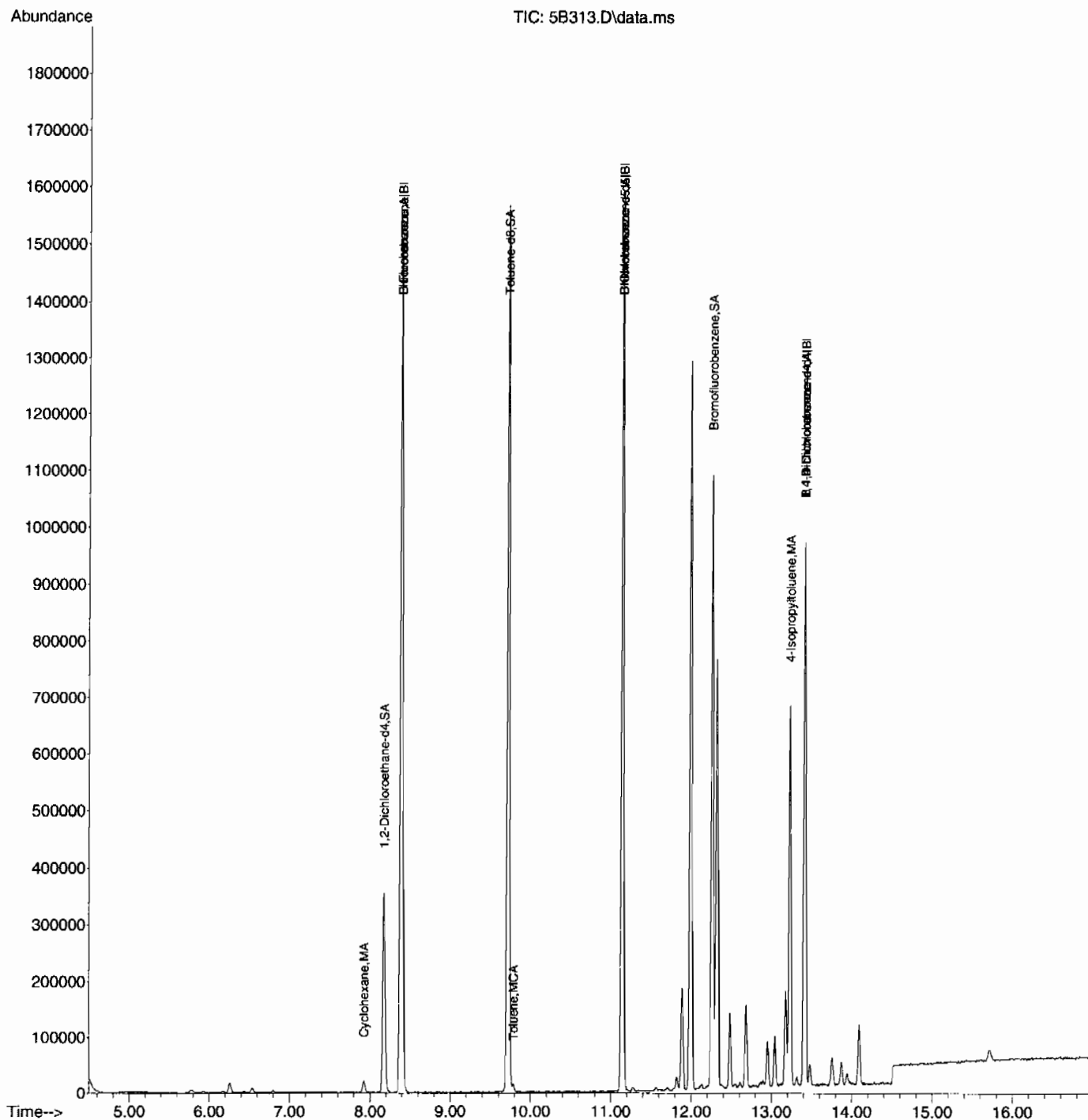
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	0.000	7.680	0.000		0m	N.D.	d
97) Tetrahydrofuran	7.712	7.716	0.919	42	382	N.D.	
98) Isobutyl alcohol	0.000	7.857	0.000		0m	N.D.	d
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.133	12.136	0.905	53	118	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.387	12.412	0.924	53	110	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	1782	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	13.929	0.000		0m	N.D.	d

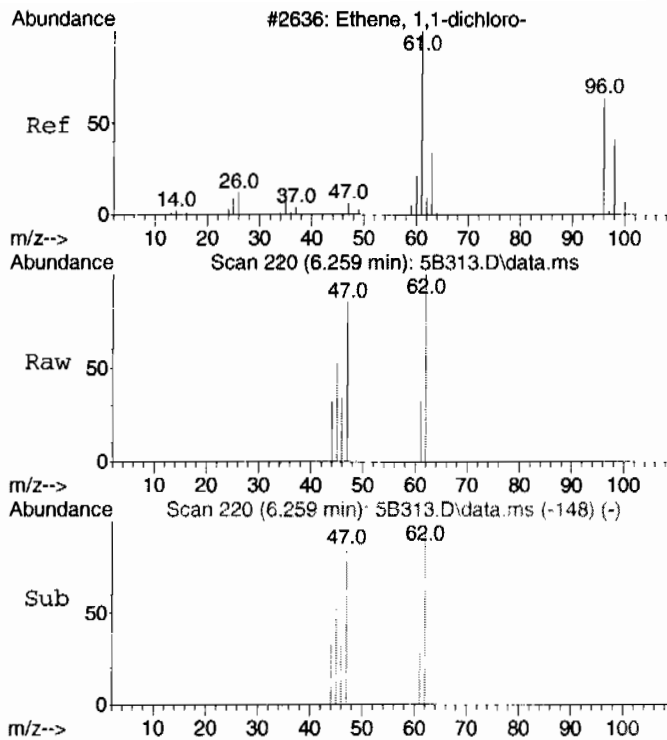
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B313.D
Acq On : 10 Mar 2010 12:26 pm
Operator : CDS1
InstName : VOA5
Sample : |248370014|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

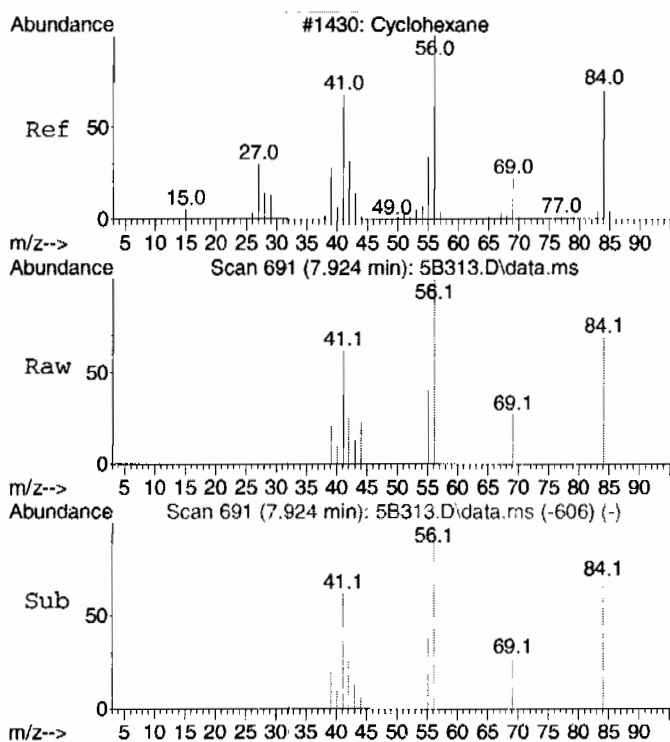
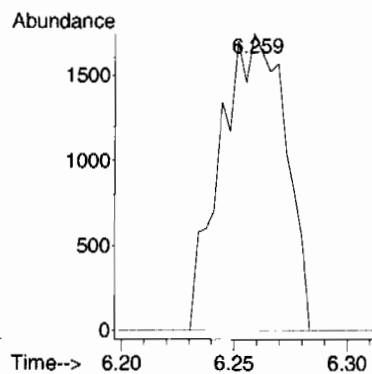
Quant Time: Mar 11 07:24:49 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





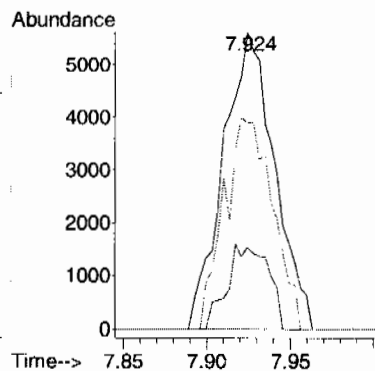
#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 0.48 ug/L
RT: 6.259 min Scan# 220
Delta R.T. 0.103 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

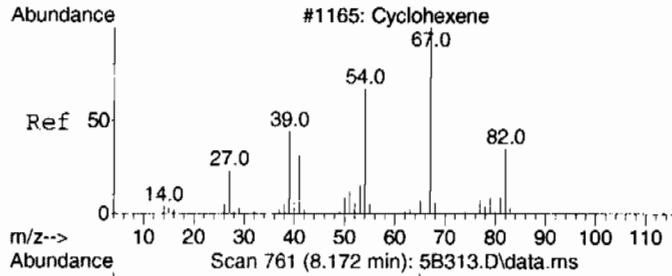
Tgt Ion	Ratio	Lower	Upper
61	100		
96	0.0	26.6	86.6#
63	0.0	1.1	61.1#



#26
Cyclohexane
Concen: 1.16 ug/L
RT: 7.924 min Scan# 691
Delta R.T. 0.000 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

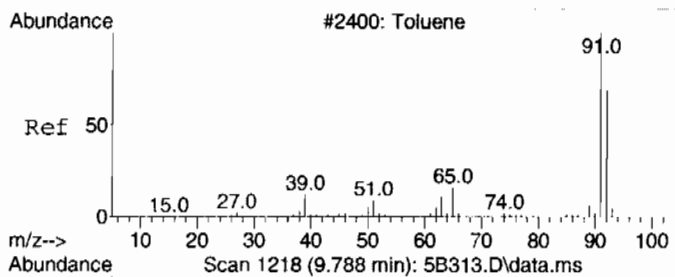
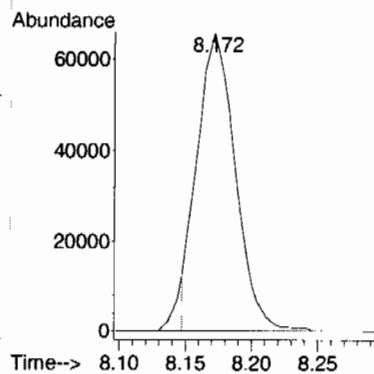
Tgt Ion	Ratio	Lower	Upper
56	100		
69	22.8	0.0	56.4
84	67.6	44.6	104.6





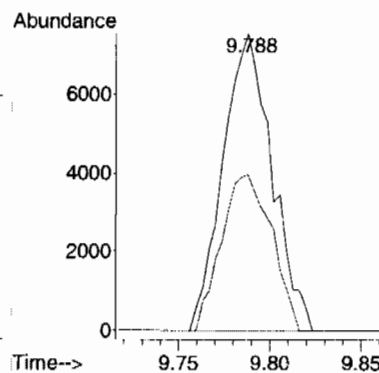
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.07 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

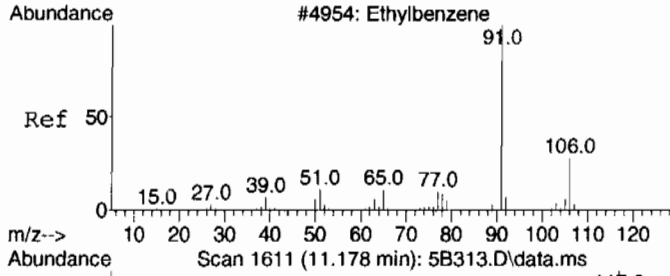
Tgt Ion: 67 Resp: 133764
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#44
Toluene
Concen: 0.69 ug/L
RT: 9.788 min Scan# 1218
Delta R.T. -0.000 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

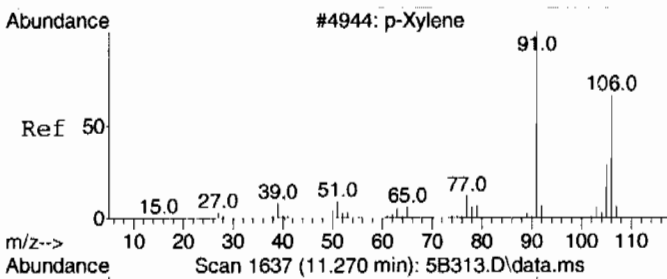
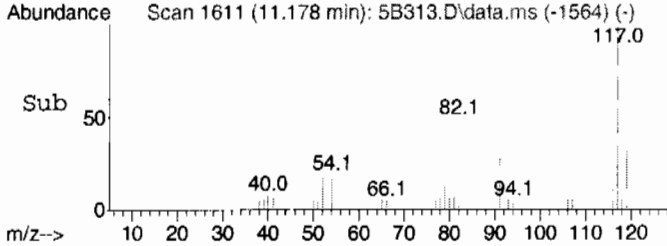
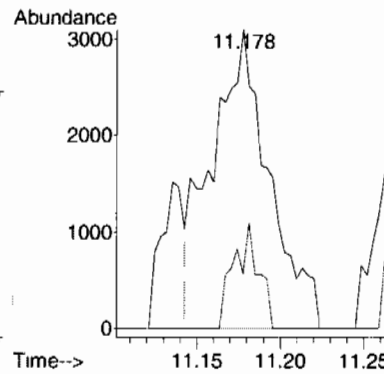
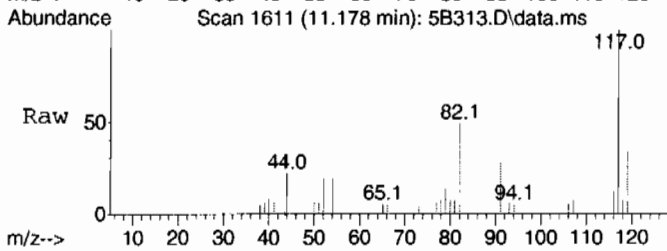
Tgt Ion: 91 Resp: 14028
Ion Ratio Lower Upper
91 100
92 53.9 29.5 89.5





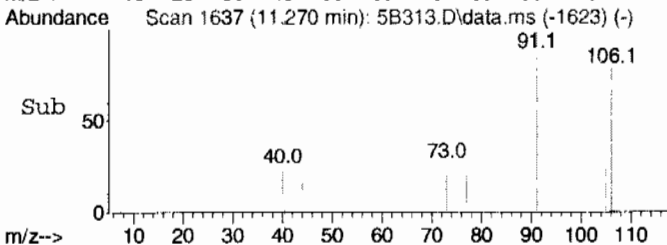
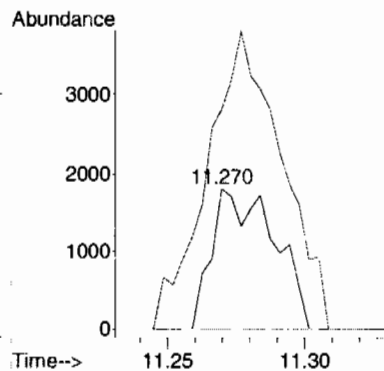
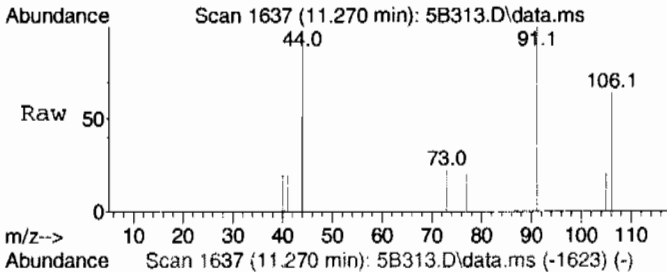
#54 BEFORE analyst DELETION
Ethylbenzene
Concen: 0.32 ug/L
RT: 11.178 min Scan# 1611
Delta R.T. -0.003 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

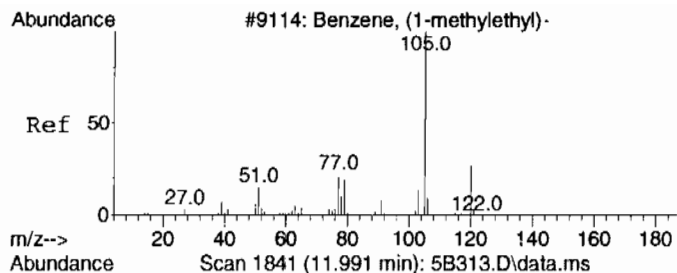
Tgt Ion: 91 Resp: 7473
Ion Ratio Lower Upper
91 100
106 15.2 2.6 62.6



#55 BEFORE analyst DELETION
m,p-Xylenes
Concen: 0.32 ug/L
RT: 11.270 min Scan# 1637
Delta R.T. -0.010 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

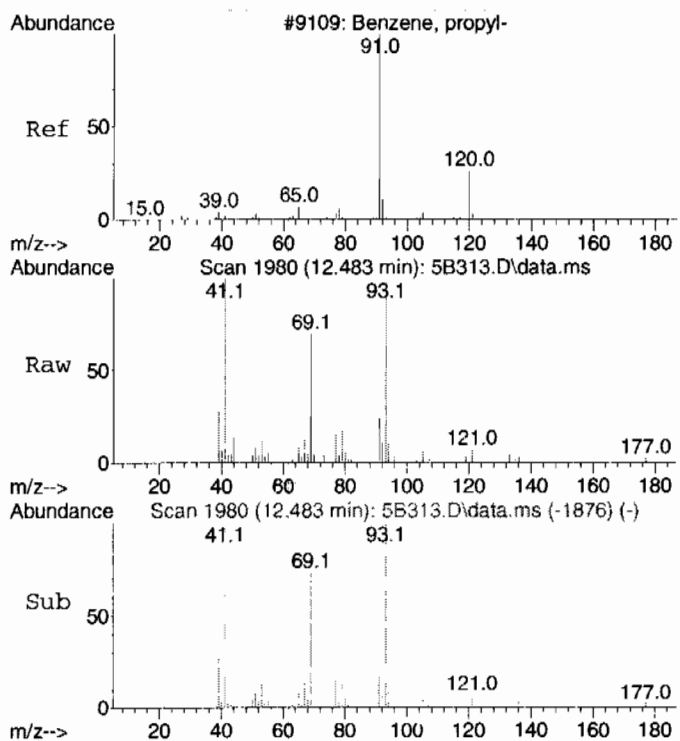
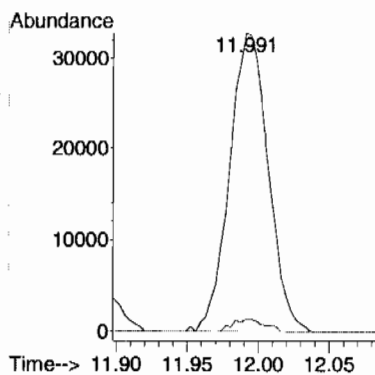
Tgt Ion: 106 Resp: 2859
Ion Ratio Lower Upper
106 100
91 252.0 168.5 228.5#





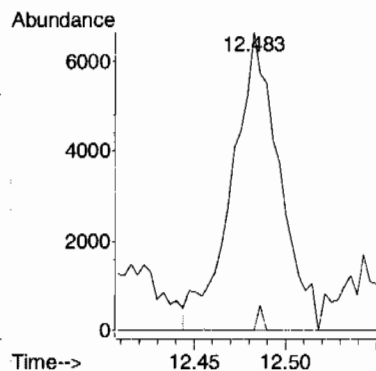
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 4.57 ug/L
RT: 11.991 min Scan# 1841
Delta R.T. -0.025 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

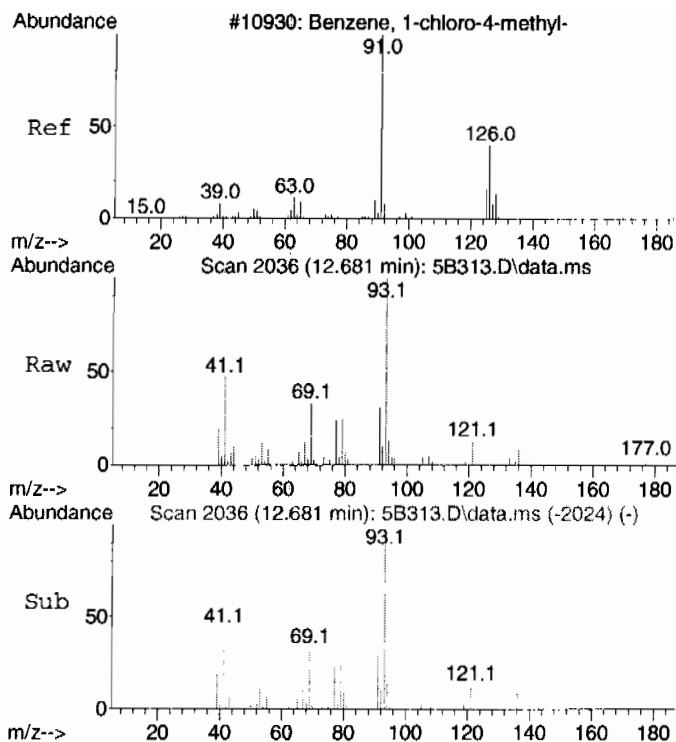
Tgt Ion: 105 Resp: 61841
Ion Ratio Lower Upper
105 100
120 3.5 0.0 57.3



#65 BEFORE analyst DELETION
n-Propylbenzene
Concen: 0.74 ug/L
RT: 12.483 min Scan# 1980
Delta R.T. 0.068 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

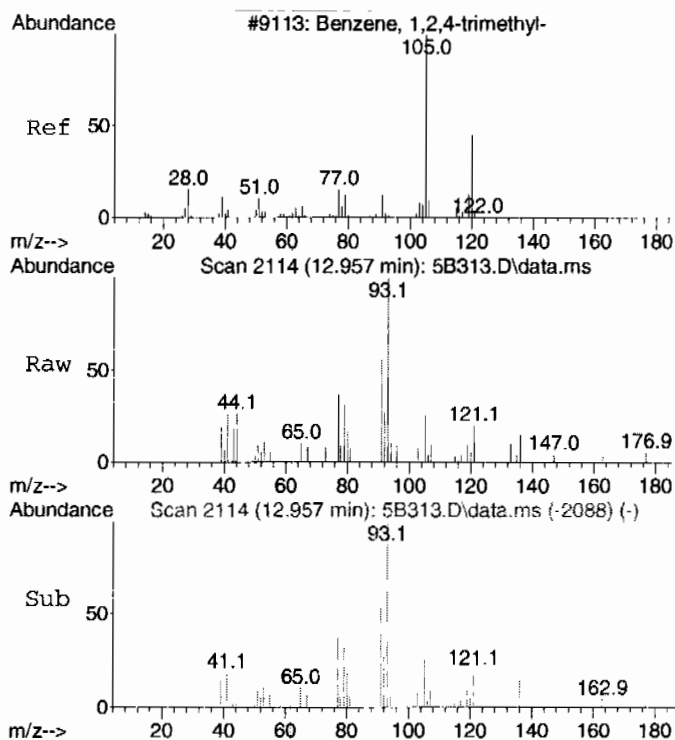
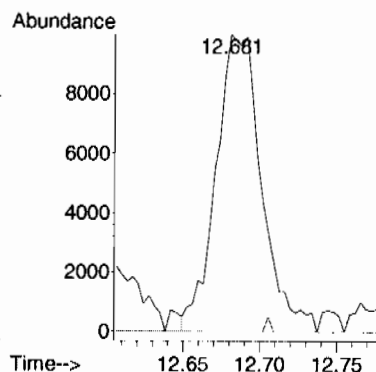
Tgt Ion: 91 Resp: 12063
Ion Ratio Lower Upper
91 100
120 1.0 0.0 54.1





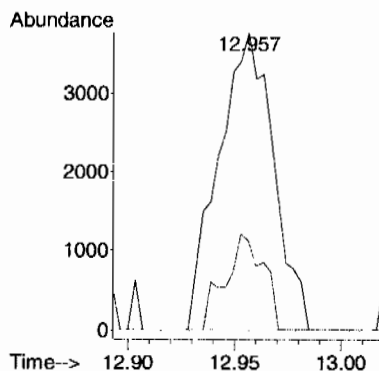
#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 1.99 ug/L
RT: 12.681 min Scan# 2036
Delta R.T. -0.017 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

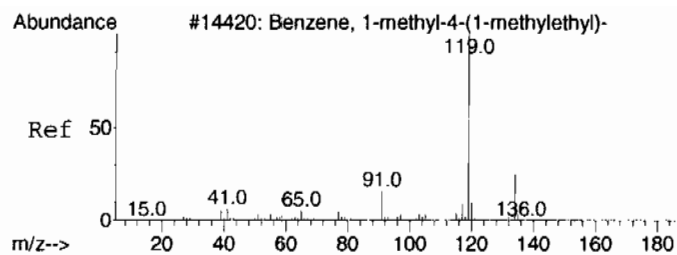
Tgt Ion: 91 Resp: 20679
Ion Ratio Lower Upper
91 100
126 0.5 3.6 63.6#



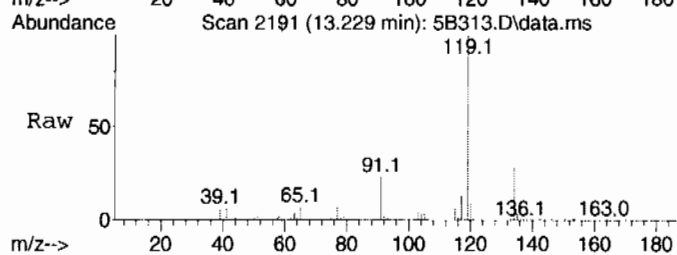
#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 0.57 ug/L
RT: 12.957 min Scan# 2114
Delta R.T. 0.001 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

Tgt Ion: 105 Resp: 6744
Ion Ratio Lower Upper
105 100
120 22.3 17.4 77.4

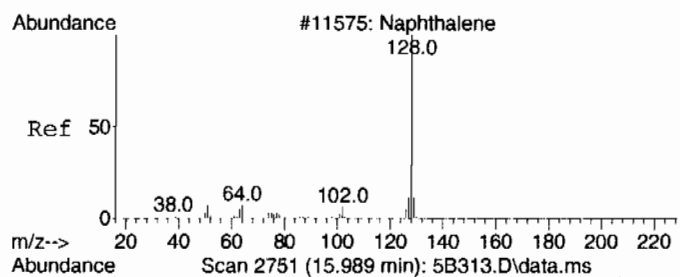
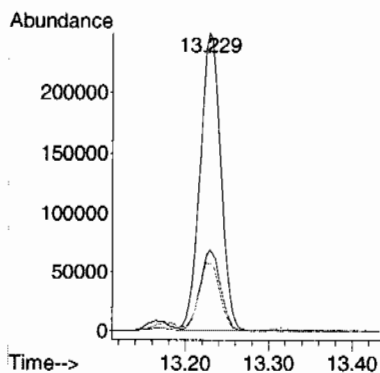
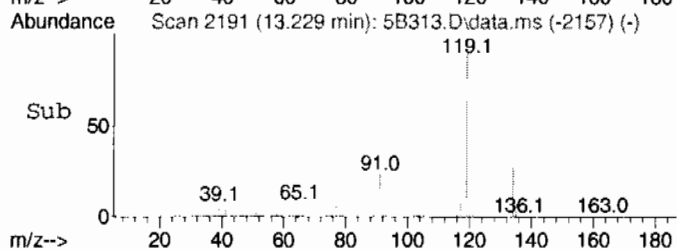




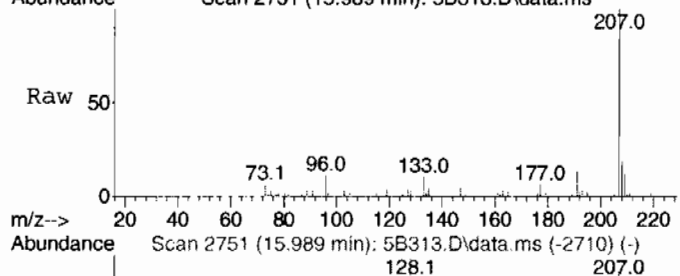
#72
4-Isopropyltoluene
Concen: 36.41 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm



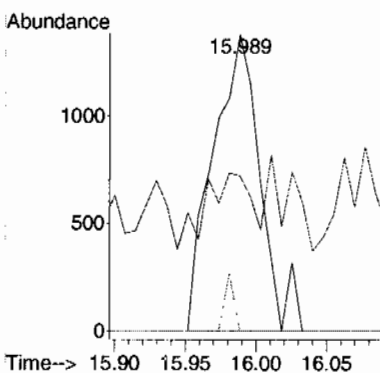
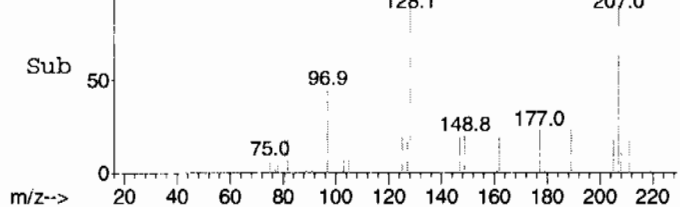
Tgt Ion:119 Resp: 432897
Ion Ratio Lower Upper
119 100
134 27.5 0.0 57.2
91 23.8 0.0 53.0

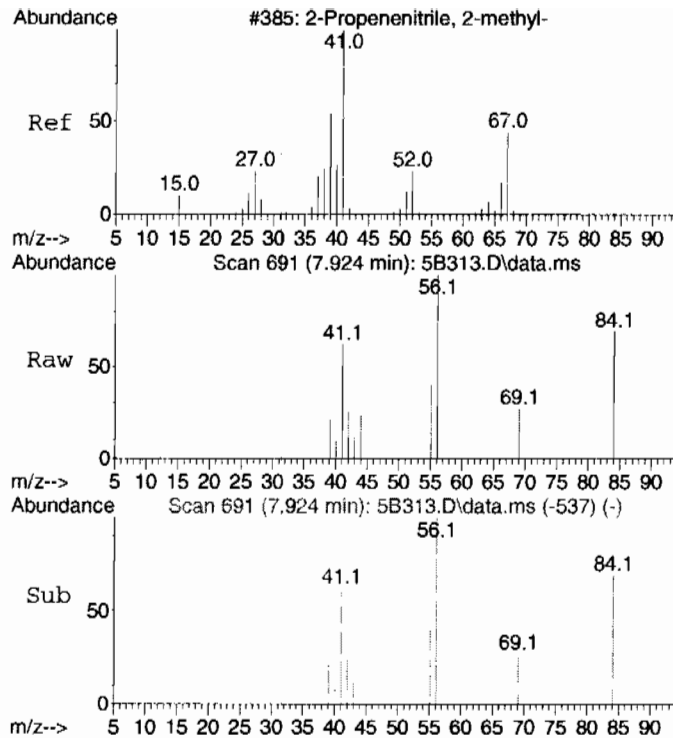


#80 BEFORE analyst DELETION
Naphthalene
Concen: 0.34 ug/L
RT: 15.989 min Scan# 2751
Delta R.T. 0.001 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm



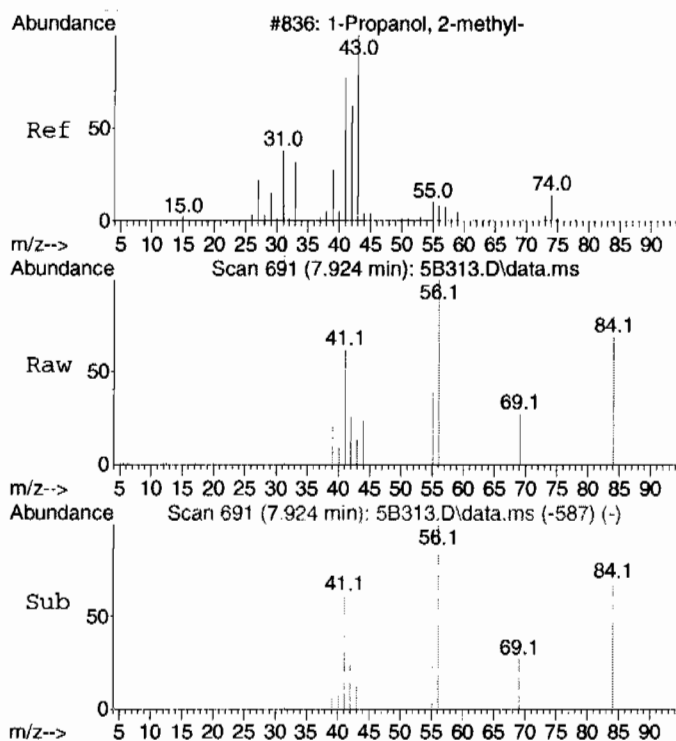
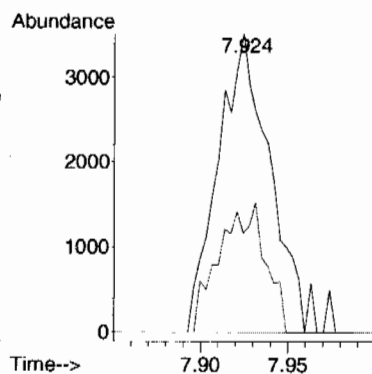
Tgt Ion:128 Resp: 3187
Ion Ratio Lower Upper
128 100
127 25.0 0.0 42.4
129 3.7 0.0 40.8





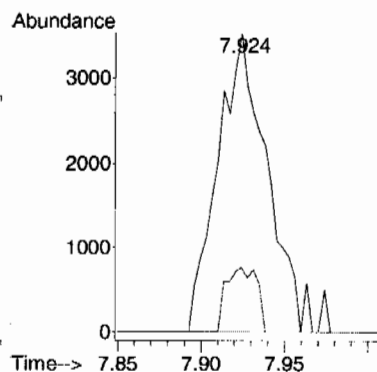
#96 BEFORE analyst DELETION
Methacrylonitrile
Concen: 1.56 ug/L
RT: 7.924 min Scan# 691
Delta R.T. 0.244 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

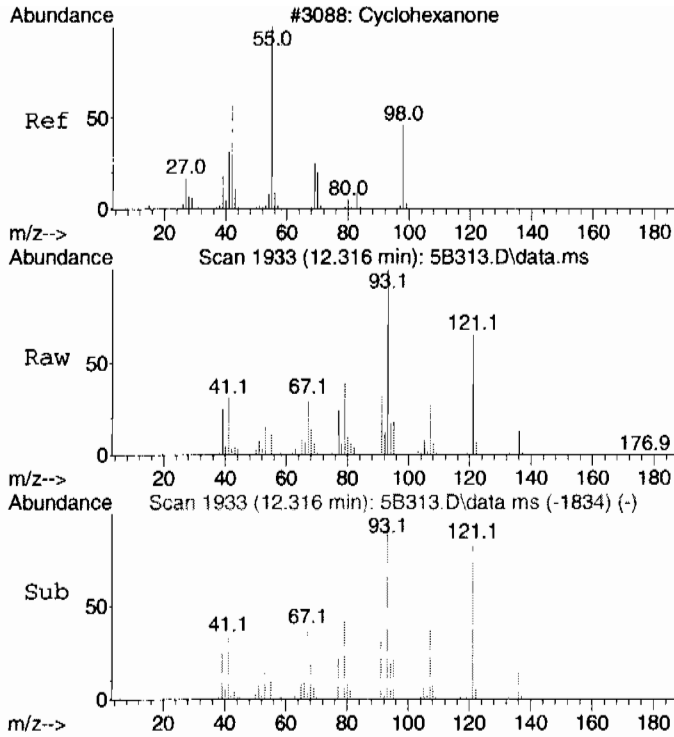
Tgt Ion: 41 Resp: 7280
Ion Ratio Lower Upper
41 100
39 38.7 18.1 78.1



#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 32.83 ug/L
RT: 7.924 min Scan# 691
Delta R.T. 0.067 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

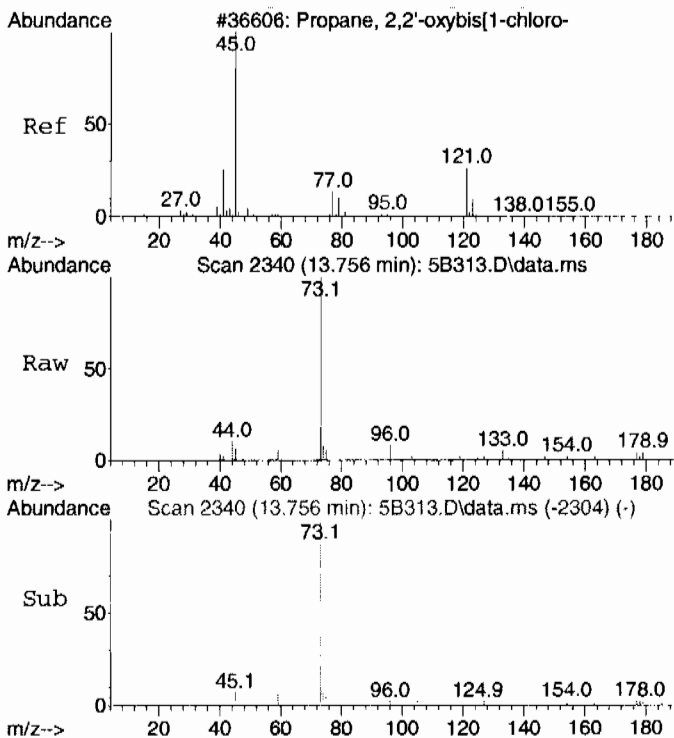
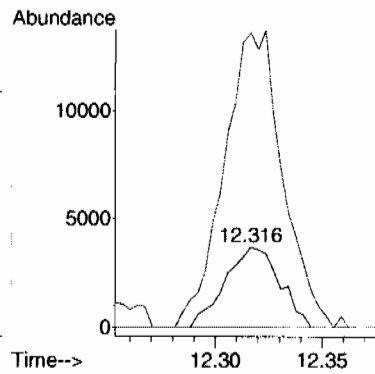
Tgt Ion: 41 Resp: 7279
Ion Ratio Lower Upper
41 100
43 13.4 118.1 178.1#





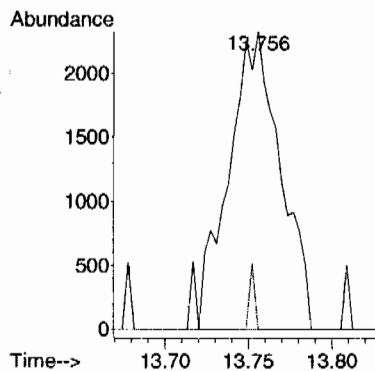
#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 71.82 ug/L
RT: 12.316 min Scan# 1933
Delta R.T. 0.049 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

Tgt Ion	Ratio	Lower	Upper
42	100		
55	401.6	120.2	180.2#
98	0.0	29.2	89.2#



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 2.63 ug/L
RT: 13.756 min Scan# 2340
Delta R.T. -0.173 min
Lab File: 5B313.D
Acq: 10 Mar 2010 12:26 pm

Tgt Ion	Ratio	Lower	Upper
45	100		
121	2.1	0.0	51.5



Library Search Compound Report
GEL Laboratories, LLC

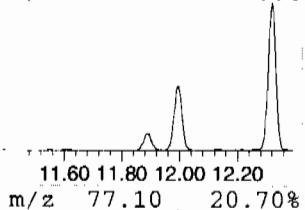
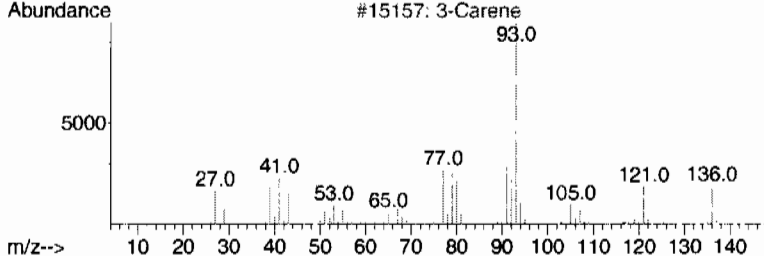
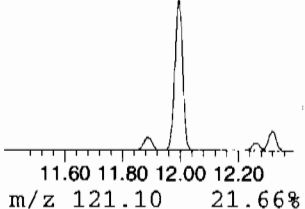
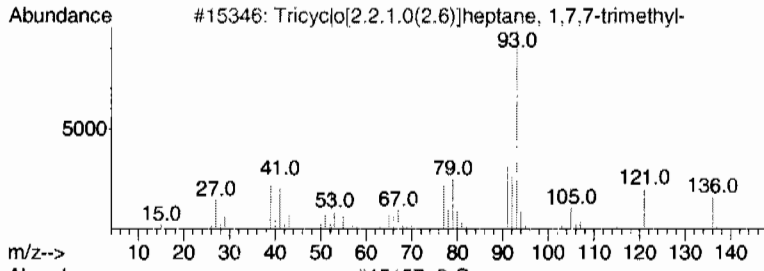
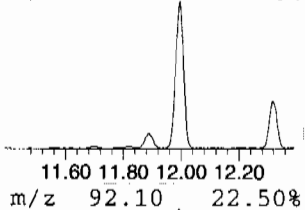
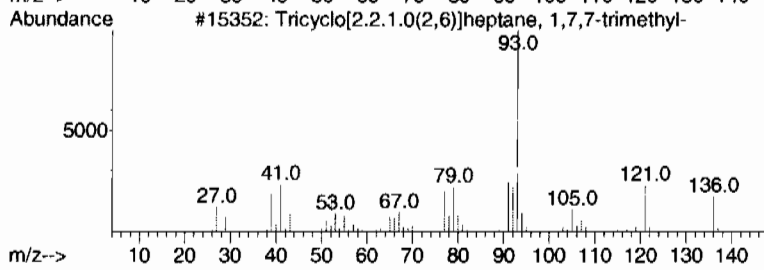
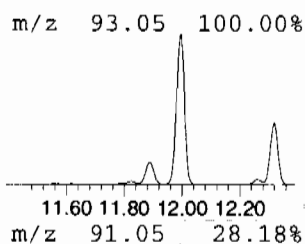
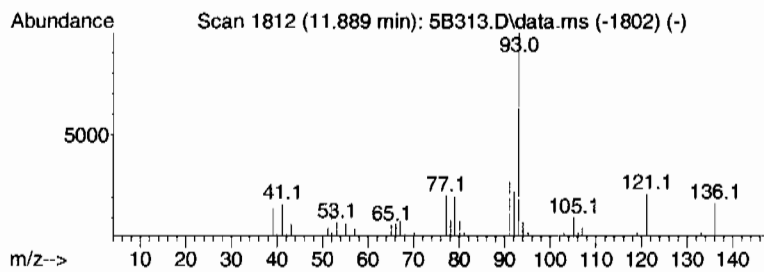
Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B313.D
Acq On : 10 Mar 2010 12:26 pm
Operator : CDS1
Sample : |248370014|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

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

Peak Number 1 unknown hydrocarbon Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.		
11.889	5.13 ug/L	305129	B Chlorobenzene-d5	11.142		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000508-32-7	96
2		Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000508-32-7	96
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	94
5		Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000508-32-7	94



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B313.D
Acq On : 10 Mar 2010 12:26 pm
Operator : CDS1
Sample : |248370014|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

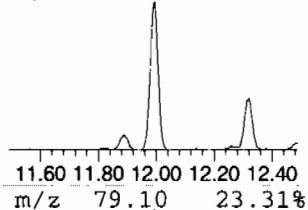
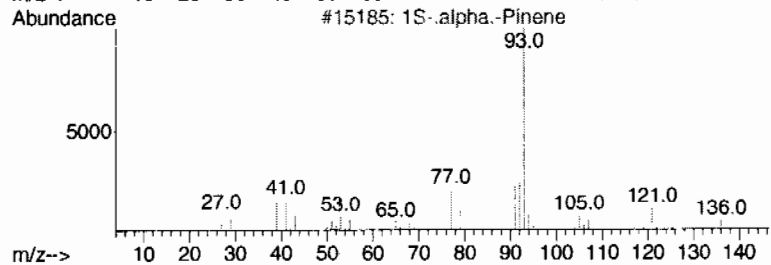
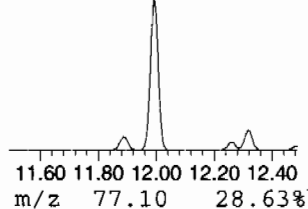
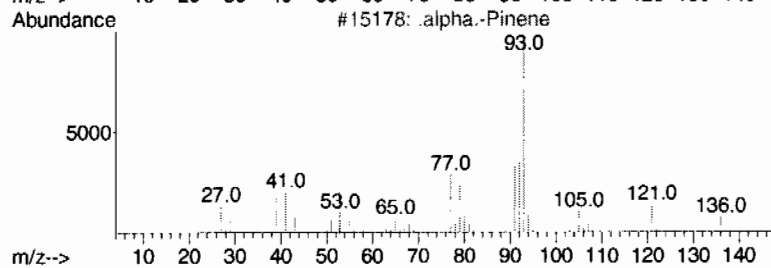
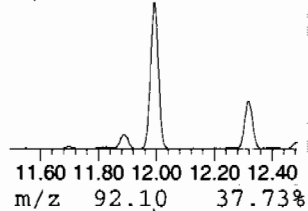
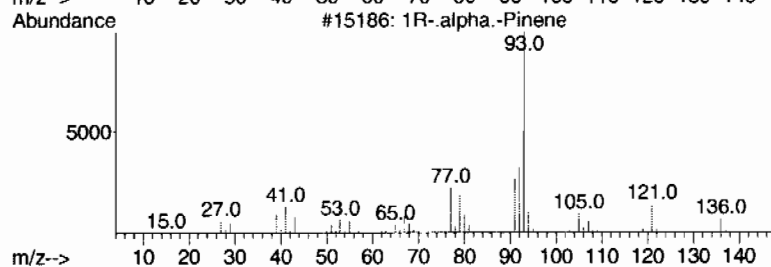
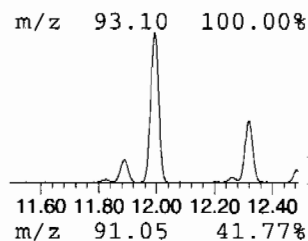
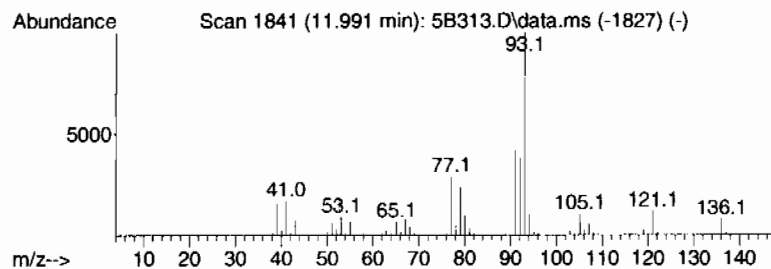
SubList :

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

Peak Number 2 unknown hydrocarbon Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.991	41.54 ug/L	2468680	B Chlorobenzene-d5	11.142

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1R-.alpha.-Pinene	136	C10H16	007785-70-8	96
2			.alpha.-Pinene	136	C10H16	000080-56-8	96
3			1S-.alpha.-Pinene	136	C10H16	007785-26-4	96
4			1R-.alpha.-Pinene	136	C10H16	007785-70-8	96
5			.alpha.-Pinene	136	C10H16	000080-56-8	94



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B313.D
Acq On : 10 Mar 2010 12:26 pm
Operator : CDS1
Sample : |248370014|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

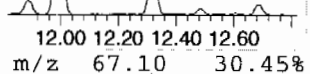
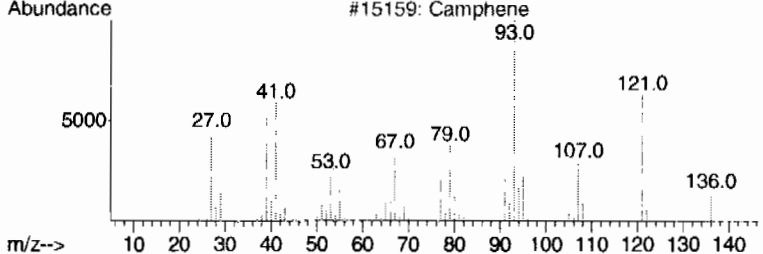
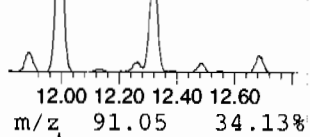
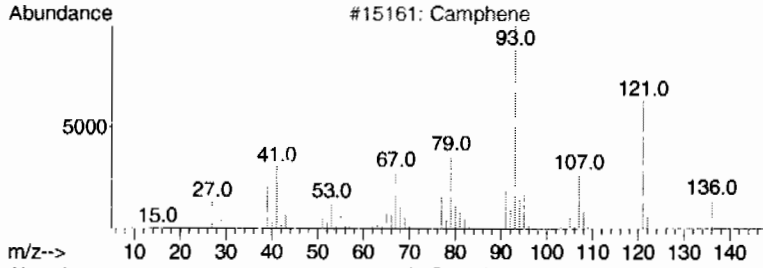
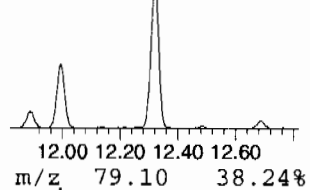
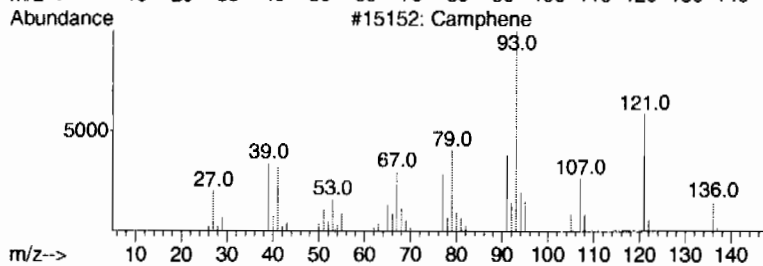
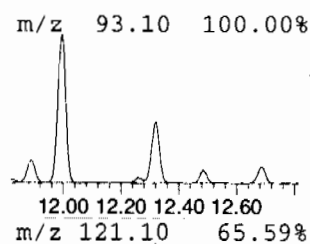
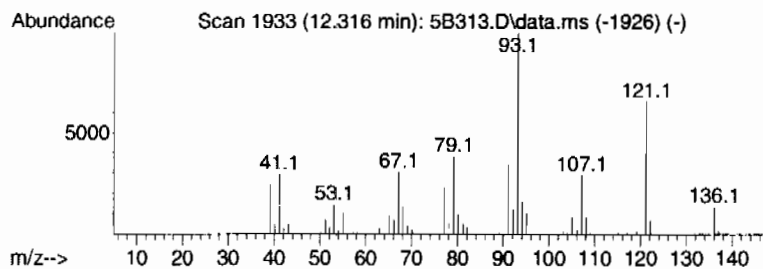
SubList :

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

Peak Number 3 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.317	20.19 ug/L	720998	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Camphene	136	C10H16	000079-92-5	97
2			Camphene	136	C10H16	000079-92-5	95
3			Camphene	136	C10H16	000079-92-5	91
4			Camphene	136	C10H16	000079-92-5	90
5			(+)-4-Carene	136	C10H16	029050-33-7	87

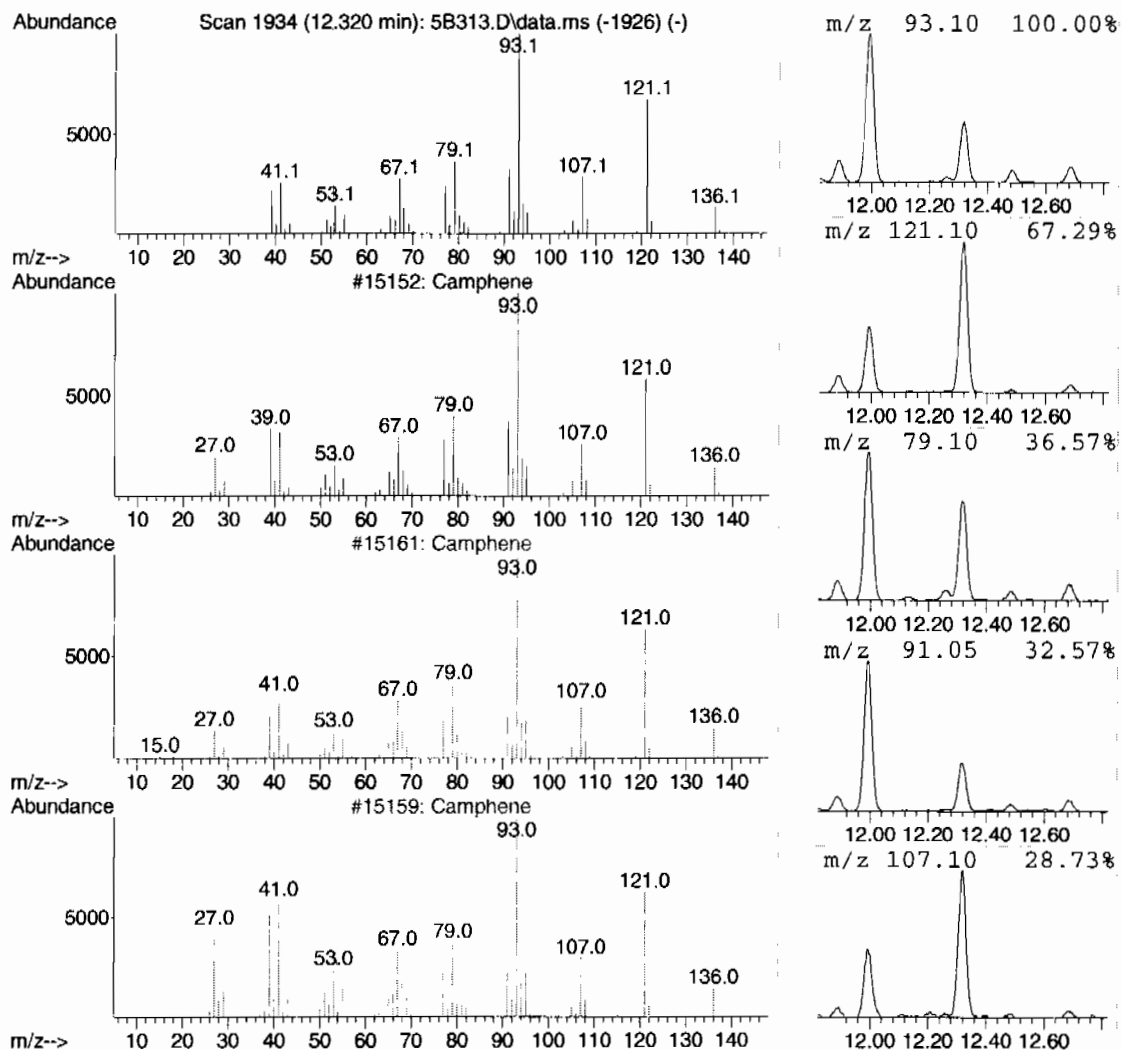


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Data Path : C:\msdchem\1\DATA\031010V5\  
Data File : 5B313.D  
Acq On    : 10 Mar 2010 12:26 pm  
Operator  : CDS1  
Sample    : |248370014|963122|1|VOA|1|VOA8260BS|  
Misc      : LANL 5G - SOIL  
ALS Vial  : 13 Sample Multiplier: 1
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TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.320	13.74 ug/L	490448	1,4-Dichlorobenzene-d4	13.413

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Camphene	136	C10H16	000079-92-5	97
2		Camphene	136	C10H16	000079-92-5	93
3		Camphene	136	C10H16	000079-92-5	91
4		Camphene	136	C10H16	000079-92-5	90
5		(+)-4-Carene	136	C10H16	029050-33-7	87



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B313.D
Acq On : 10 Mar 2010 12:26 pm
Operator : CDS1
Sample : |248370014|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

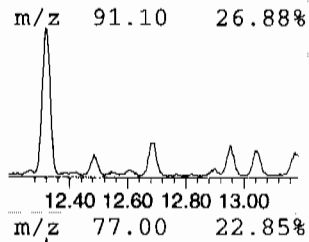
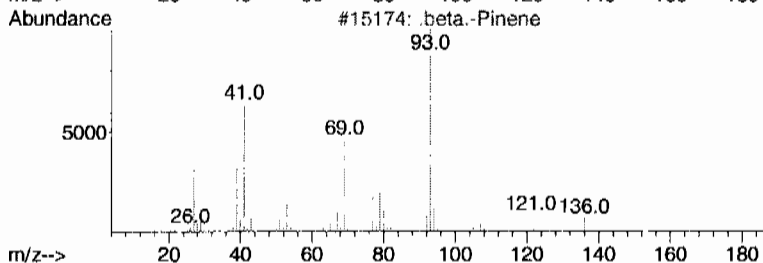
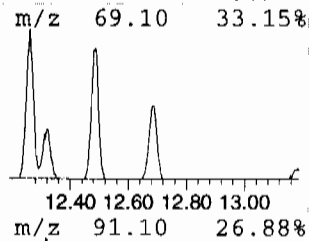
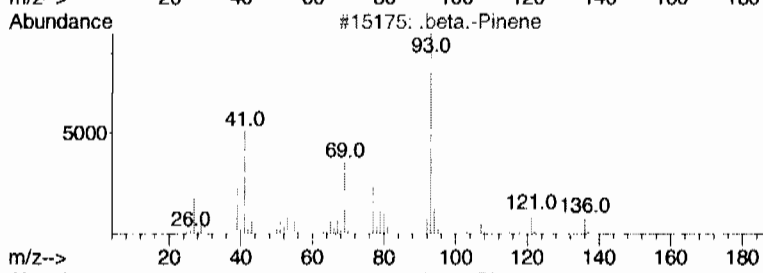
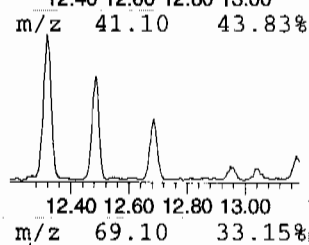
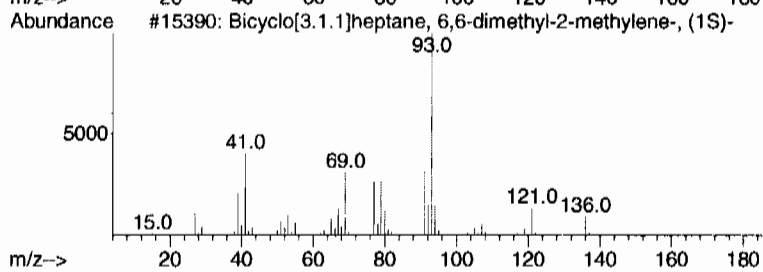
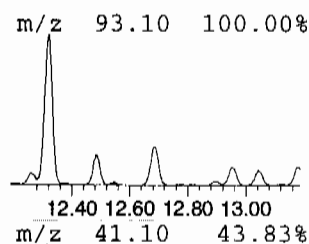
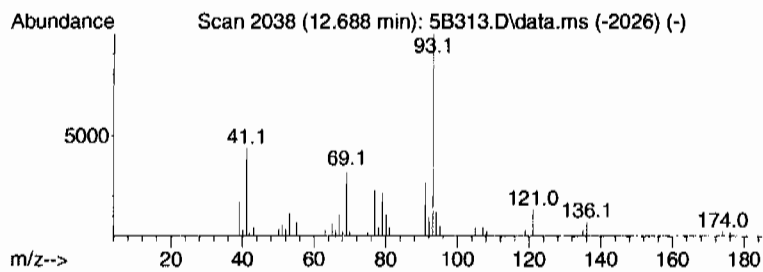
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 5 unknown hydrocarbon Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.688	5.30 ug/L	189067	1,4-Dichlorobenzene-d4	13.413

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Bicyclo[3.1.1]heptane, 6,6-dimet...	136	C10H16	018172-67-3	95
2		.beta.-Pinene	136	C10H16	000127-91-3	94
3		.beta.-Pinene	136	C10H16	000127-91-3	91
4		.beta.-Pinene	136	C10H16	000127-91-3	91
5		Cyclohexene, 4-methylene-1-(1-me...	136	C10H16	000099-84-3	91



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B313.D
Acq On : 10 Mar 2010 12:26 pm
Operator : CDS1
Sample : |248370014|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	11.889	5.1	ug/L	305129	4	11.142	2971390	50.0
unknown hydroca...	11.991	41.5	ug/L	2468680	4	11.142	2971390	50.0
unknown	12.317	20.2	ug/L	720998	5	13.413	1785260	50.0
unknown hydroca...	12.320	13.7	ug/L	490448	5	13.413	1785260	50.0
unknown hydroca...	12.688	5.3	ug/L	189067	5	13.413	1785260	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370015

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.J
Analyst: CDS1
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

Client ID: RE36-10-7479
Batch ID: 963122
Run Date: 03/10/2010 12:53
Prep Date: 03/10/2010 08:47
Data File: 031010V55B314.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.37	ug/kg	0.467	1.37
74-87-3	Chloromethane	U	1.37	ug/kg	0.412	1.37
75-01-4	Vinyl chloride	U	1.37	ug/kg	0.412	1.37
74-83-9	Bromomethane	U	1.37	ug/kg	0.412	1.37
75-00-3	Chloroethane	U	1.37	ug/kg	0.412	1.37
75-69-4	Trichlorofluoromethane	U	1.37	ug/kg	0.412	1.37
67-64-1	Acetone	U	6.87	ug/kg	2.28	6.87
75-35-4	1,1-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
74-88-4	Iodomethane	U	6.87	ug/kg	2.20	6.87
75-09-2	Methylene chloride	U	6.87	ug/kg	2.75	6.87
75-15-0	Carbon disulfide	U	6.87	ug/kg	1.72	6.87
156-60-5	trans-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
75-34-3	1,1-Dichloroethane	U	1.37	ug/kg	0.412	1.37
78-93-3	2-Butanone	U	6.87	ug/kg	2.06	6.87
156-59-2	cis-1,2-Dichloroethylene	U	1.37	ug/kg	0.412	1.37
594-20-7	2,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
67-66-3	Chloroform	U	1.37	ug/kg	0.412	1.37
74-97-5	Bromochloromethane	U	1.37	ug/kg	0.454	1.37
71-55-6	1,1,1-Trichloroethane	U	1.37	ug/kg	0.412	1.37
563-58-6	1,1-Dichloropropene	U	1.37	ug/kg	0.412	1.37
56-23-5	Carbon tetrachloride	U	1.37	ug/kg	0.412	1.37
107-06-2	1,2-Dichloroethane	U	1.37	ug/kg	0.412	1.37
71-43-2	Benzene	U	1.37	ug/kg	0.412	1.37
79-01-6	Trichloroethylene	U	1.37	ug/kg	0.454	1.37
78-87-5	1,2-Dichloropropane	U	1.37	ug/kg	0.412	1.37
75-27-4	Bromodichloromethane	U	1.37	ug/kg	0.412	1.37
74-95-3	Dibromomethane	U	1.37	ug/kg	0.412	1.37
108-10-1	4-Methyl-2-pentanone	U	6.87	ug/kg	1.72	6.87
10061-01-5	cis-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
108-88-3	Toluene	U	1.37	ug/kg	0.412	1.37
10061-02-6	trans-1,3-Dichloropropylene	U	1.37	ug/kg	0.412	1.37
79-00-5	1,1,2-Trichloroethane	U	1.37	ug/kg	0.412	1.37
591-78-6	2-Hexanone	U	6.87	ug/kg	2.06	6.87
142-28-9	1,3-Dichloropropane	U	1.37	ug/kg	0.412	1.37
127-18-4	Tetrachloroethylene	U	1.37	ug/kg	0.412	1.37
124-48-1	Dibromochloromethane	U	1.37	ug/kg	0.412	1.37
106-93-4	1,2-Dibromoethane	U	1.37	ug/kg	0.412	1.37
108-90-7	Chlorobenzene	U	1.37	ug/kg	0.412	1.37

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370015	Date Received: 03/02/2010 08:50	%Moisture: 27.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7479	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/10/2010 12:53	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:47	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B314.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.37	ug/kg	0.412	1.37
179601-23-1	m,p-Xylenes	U	2.75	ug/kg	0.412	2.75
95-47-6	o-Xylene	U	1.37	ug/kg	0.412	1.37
100-42-5	Styrene	U	1.37	ug/kg	0.412	1.37
75-25-2	Bromoform	U	1.37	ug/kg	0.412	1.37
79-34-5	1,1,2,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
96-18-4	1,2,3-Trichloropropane	U	1.37	ug/kg	0.412	1.37
108-86-1	Bromobenzene	U	1.37	ug/kg	0.412	1.37
103-65-1	n-Propylbenzene	U	1.37	ug/kg	0.412	1.37
95-49-8	2-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-82-8	Isopropylbenzene	U	1.37	ug/kg	0.412	1.37
108-67-8	1,3,5-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
106-43-4	4-Chlorotoluene	U	1.37	ug/kg	0.412	1.37
98-06-6	tert-Butylbenzene	U	1.37	ug/kg	0.412	1.37
95-63-6	1,2,4-Trimethylbenzene	U	1.37	ug/kg	0.412	1.37
135-98-8	sec-Butylbenzene	U	1.37	ug/kg	0.412	1.37
99-87-6	4-Isopropyltoluene	U	1.37	ug/kg	0.412	1.37
541-73-1	1,3-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
106-46-7	1,4-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37
104-51-8	n-Butylbenzene	U	1.37	ug/kg	0.412	1.37
96-12-8	1,2-Dibromo-3-chloropropane	U	1.37	ug/kg	0.412	1.37
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.87	ug/kg	2.20	6.87
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.37	ug/kg	0.412	1.37
95-50-1	1,2-Dichlorobenzene	U	1.37	ug/kg	0.412	1.37

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\031010V5\
Data File : 5B314.D
Acq On : 10 Mar 2010 12:53 pm
Operator : CDS1
InstName : VOA5
Sample : |248370015|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 11 07:26:18 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1566150	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1125228	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	502609	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1566150	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1125228	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	502609	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	295494	38.98	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	77.96%		
43) Toluene-d8	9.721	9.721	0.872	98	1249406	43.42	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	86.84%		
61) Bromofluorobenzene	12.263	12.260	0.914	95	604935	60.00	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	120.00%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	1033	Below Cal		74
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699	59	341	N.D.		
9) Acetone	6.167	6.174	0.735	43	4178	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.467	6.464	0.771	41	377	N.D.		
13) Methyl acetate	6.167	6.365	0.735	43	4178	N.D.		
14) Carbon disulfide	6.432	6.435	0.767	76	1025	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	5089	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.810	6.969	0.812	43	162	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.443	7.450	0.887	43	143	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.200	8.203	0.978	78	125	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.384	8.377	1.000	56	9104	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B314.D
Acq On : 10 Mar 2010 12:53 pm
Operator : CDS1
InstName : VOA5
Sample : |248370015|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 11 07:26:18 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	4101	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.283	10.279	0.923	43	127	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.139	11.181	1.000	91	4357	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	249	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.712	11.715	1.051	104	114	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.256	12.016	0.914	105	234	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.422	12.415	0.926	91	421	N.D.	
66) 1,3,5-Trimethylbenzene	12.553	12.564	0.936	105	384	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	2052	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.946	12.956	0.965	105	1149	N.D.	
71) sec-Butylbenzene	13.123	13.119	0.978	105	383	N.D.	
72) 4-Isopropyltoluene	0.000	13.229	0.000		0m	N.D.	d
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.430	13.441	1.001	146	260	N.D.	
75) n-Butylbenzene	13.657	13.653	1.018	91	1489	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	579	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	4577	N.D.	
81) 1,2,3-Trichlorobenzene	16.298	16.291	1.215	180	263	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.457	6.425	0.770	41	370	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.443	7.383	0.887	43	143	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B314.D
Acq On : 10 Mar 2010 12:53 pm
Operator : CDS1
InstName : VOA5
Sample : |248370015|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 11 07:26:18 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

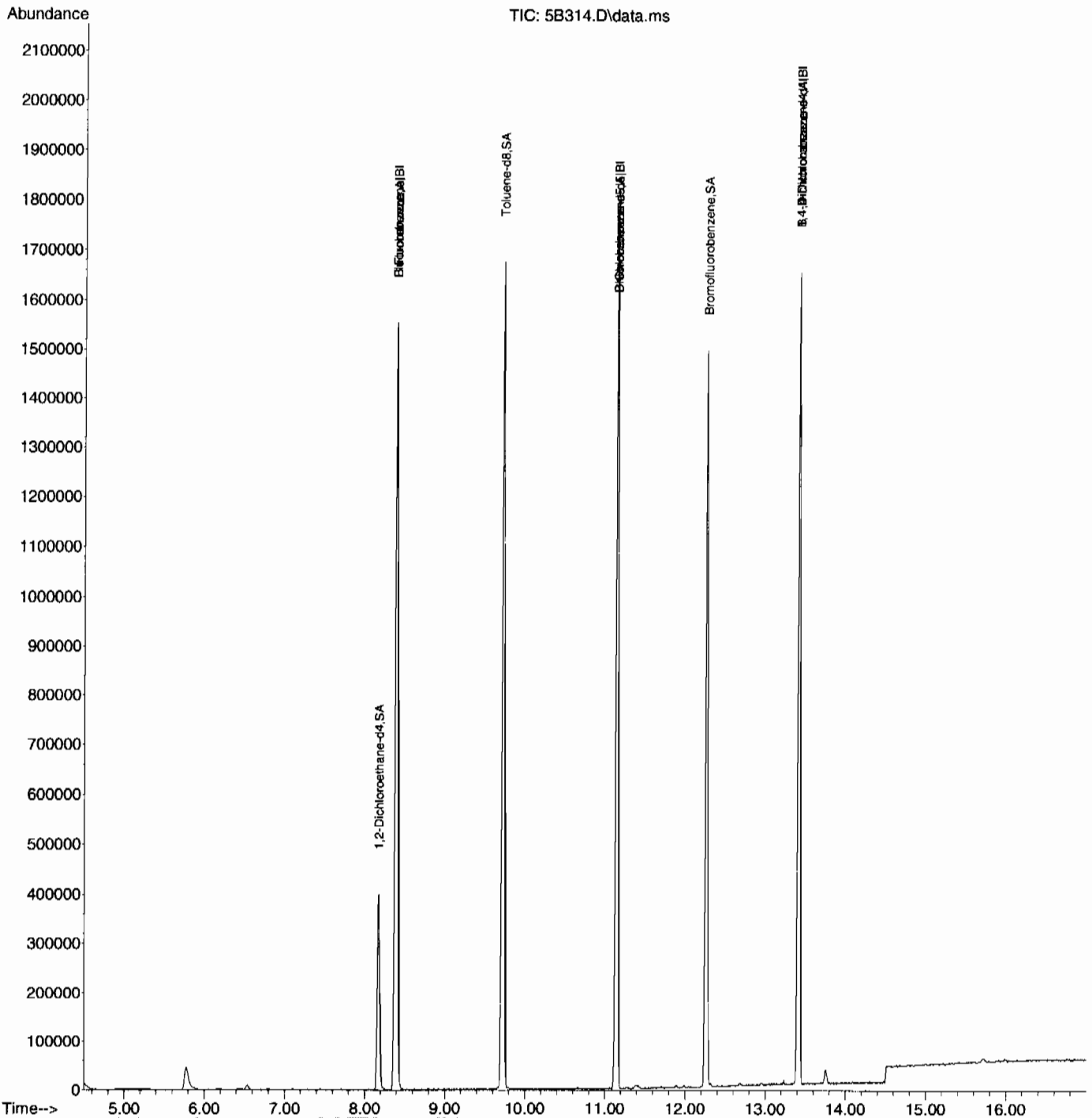
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.708	7.680	0.919	41	132	N.D.	
97) Tetrahydrofuran	7.712	7.716	0.919	42	232	N.D.	
98) Isobutyl alcohol	7.708	7.857	0.919	41	132	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.554	13.565	1.011	91	1116	N.D.	
112) bis(2-Chloroisopropyl)...	13.943	13.929	1.040	45	113	N.D.	

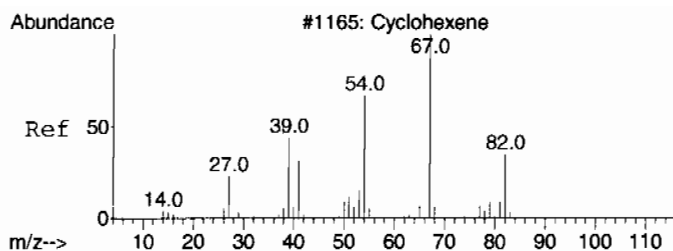
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B314.D
Acq On : 10 Mar 2010 12:53 pm
Operator : CDS1
InstName : VOA5
Sample : |248370015|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 14 Sample Multiplier: 1

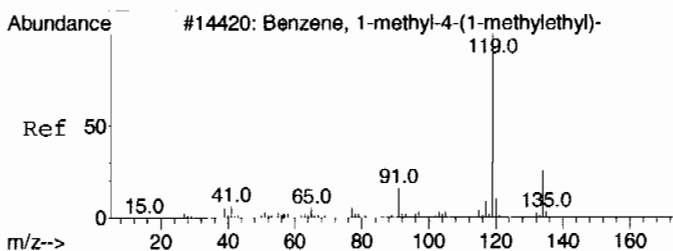
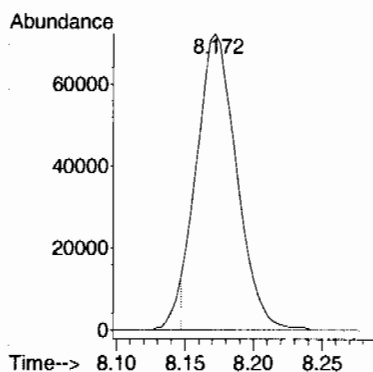
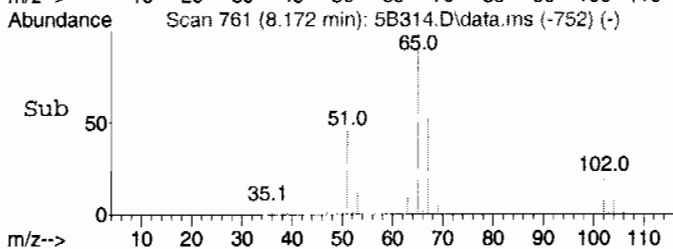
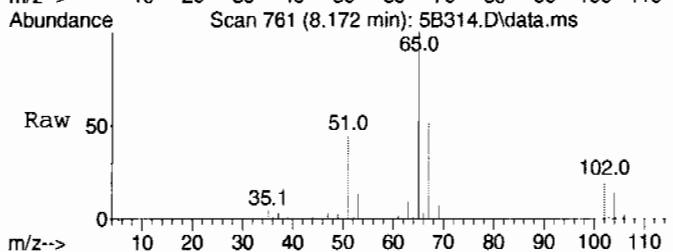
Quant Time: Mar 11 07:26:18 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





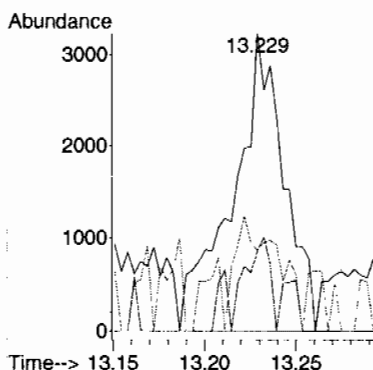
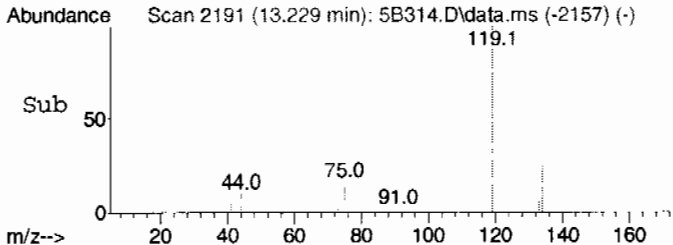
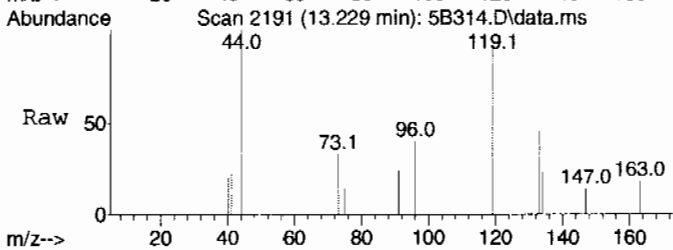
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.78 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B314.D
Acq: 10 Mar 2010 12:53 pm

Tgt Ion: 67 Resp: 145161
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#72 BEFORE analyst DELETION
4-Isopropyltoluene
Concen: 0.31 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5B314.D
Acq: 10 Mar 2010 12:53 pm

Tgt Ion: 119 Resp: 6263
Ion Ratio Lower Upper
119 100
134 14.9 0.0 57.2
91 31.8 0.0 53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B314.D
Acq On : 10 Mar 2010 12:53 pm
Operator : CDS1
Sample : |248370015|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 14 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B314.D
Acq On : 10 Mar 2010 12:53 pm
Operator : CDS1
Sample : |248370015|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 14 Sample Multiplier: 1

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

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

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

--Internal Standard--			
#	RT	Resp	Conc

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370017

 Client ID: RE36-10-7480
 Batch ID: 963122
 Run Date: 03/10/2010 13:46
 Prep Date: 03/10/2010 08:49
 Data File: 031010V55B316.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 12.1
 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
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.387	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.341	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.341	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.341	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.341	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.341	1.14
67-64-1	Acetone	U	5.69	ug/kg	1.89	5.69
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
74-88-4	Iodomethane	U	5.69	ug/kg	1.82	5.69
75-09-2	Methylene chloride	U	5.69	ug/kg	2.28	5.69
75-15-0	Carbon disulfide	U	5.69	ug/kg	1.42	5.69
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.341	1.14
78-93-3	2-Butanone	U	5.69	ug/kg	1.71	5.69
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.341	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	0.341	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.341	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.341	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.341	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.341	1.14
79-01-6	Trichloroethylene	J	0.501	ug/kg	0.376	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.341	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.341	1.14
108-10-1	4-Methyl-2-pentanone	U	5.69	ug/kg	1.42	5.69
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
108-88-3	Toluene	J	0.626	ug/kg	0.341	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.341	1.14
591-78-6	2-Hexanone	U	5.69	ug/kg	1.71	5.69
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.341	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.341	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.341	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.341	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.341	1.14

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 248370017

Client ID: RE36-10-7480
Batch ID: 963122
Run Date: 03/10/2010 13:46
Prep Date: 03/10/2010 08:49
Data File: 031010V55B316.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
% Moisture: 12.1
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	1.14	ug/kg	0.341	1.14
179601-23-1	m,p-Xylenes	U	2.28	ug/kg	0.341	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.341	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.341	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.341	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.341	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.341	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.341	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.341	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.341	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.341	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.341	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.341	1.14
99-87-6	4-Isopropyltoluene	J	0.910	ug/kg	0.341	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.341	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.341	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.69	ug/kg	1.82	5.69
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.341	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.341	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	11.4	15.4	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B316.D
Acq On : 10 Mar 2010 1:46 pm
Operator : CDS1
InstName : VOA5
Sample : |248370017|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 11 07:31:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1517801	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	970064	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	320863	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1517801	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	970064	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	320863	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	269321	36.66	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	73.32%			
43) Toluene-d8	9.721	9.721	0.872	98	1177420	47.46	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	94.92%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	451850	70.21	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	140.42%#			
Target Compounds								
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.879	4.900	0.582	50	1221	Below Cal		69
4) Vinyl chloride	5.041	5.041	0.601	62	162	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.866	5.866	0.699	59	1158	N.D.		
9) Acetone	6.174	6.174	0.736	43	5773	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.471	6.464	0.771	41	262	N.D.		
13) Methyl acetate	6.365	6.365	0.759	43	107	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	1186	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	10500	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.785	6.969	0.809	43	391	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.447	7.450	0.888	43	107	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.200	8.203	0.978	78	647	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.391	8.377	1.000	56	8604	Below Cal	#	19
34) Trichloroethylene	8.677	8.677	1.035	95	2287	0.44	ug/L	97
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B316.D
Acq On : 10 Mar 2010 1:46 pm
Operator : CDS1
InstName : VOA5
Sample : |248370017|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 11 07:31:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	11439	0.55 ug/L	99
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.286	10.279	0.923	43	110	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	11.393	11.216	1.023	131	1360	N.D.	
54) Ethylbenzene	11.185	11.181	1.004	91	5517	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0m	N.D. d	
56) o-Xylene	11.697	11.701	1.050	106	2603	N.D.	
57) Styrene	11.715	11.715	1.051	104	132	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.023	12.016	0.896	105	290	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.493	12.415	0.931	91	588	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0m	N.D. d	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.698	12.698	0.947	91	2078	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D. d	
71) sec-Butylbenzene	13.108	13.119	0.977	105	1883	N.D.	
72) 4-Isopropyltoluene	13.225	13.229	0.986	119	10342	0.80 ug/L	80
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.434	13.441	1.002	146	107	N.D.	
75) n-Butylbenzene	13.649	13.653	1.018	91	118	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.605	15.619	1.163	180	267	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	0.000	15.988	0.000		0m	N.D. d	
81) 1,2,3-Trichlorobenzene	16.276	16.291	1.213	180	391	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.163	6.163	0.735	45	125	N.D.	
88) Allyl chloride	6.446	6.425	0.769	41	339	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.447	7.383	0.888	43	107	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B316.D
Acq On : 10 Mar 2010 1:46 pm
Operator : CDS1
InstName : VOA5
Sample : |248370017|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 11 07:31:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

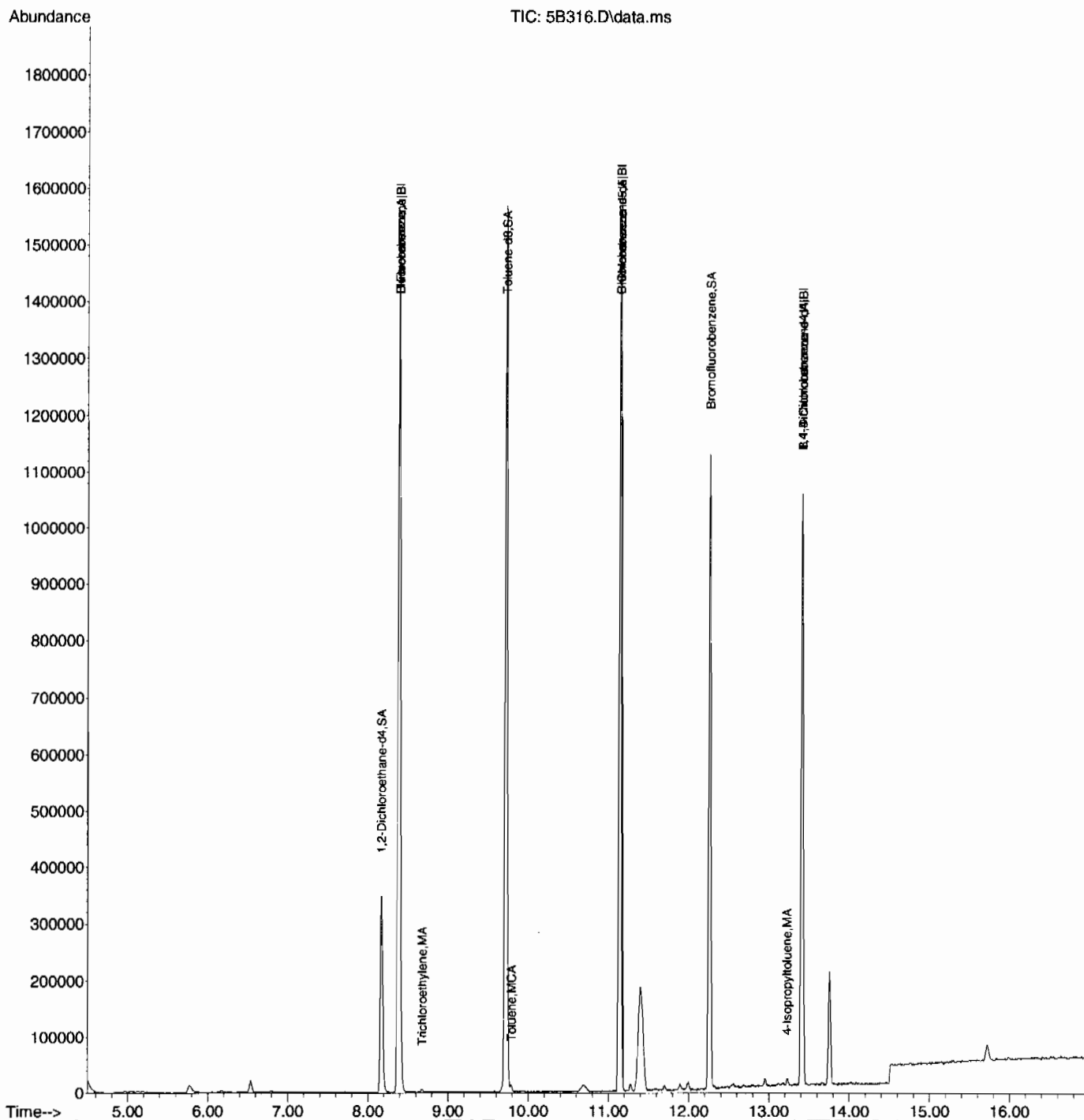
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.705	7.680	0.919	41	144	N.D.	
97) Tetrahydrofuran	0.000	7.716	0.000		0	N.D.	
98) Isobutyl alcohol	7.924	7.857	0.945	41	114	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	11.980	12.136	0.893	53	146	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	12.316	12.412	0.918	53	116	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	666	N.D.	
112) bis(2-Chloroisopropyl)...	13.858	13.929	1.033	45	130	N.D.	

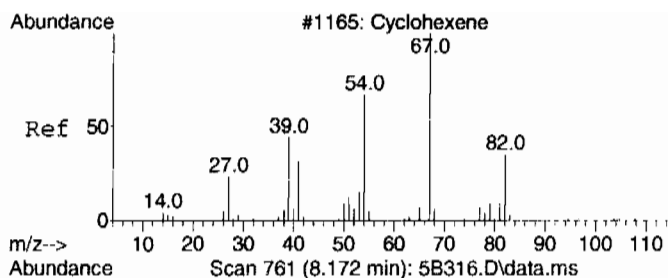
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B316.D
Acq On : 10 Mar 2010 1:46 pm
Operator : CDS1
InstName : VOA5
Sample : |248370017|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

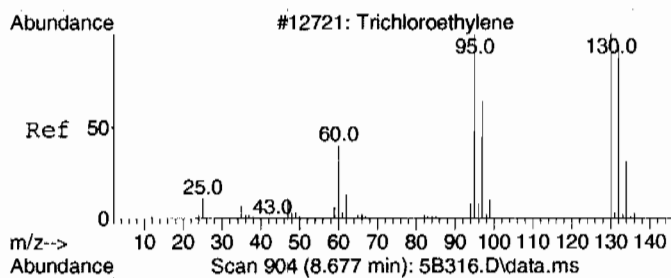
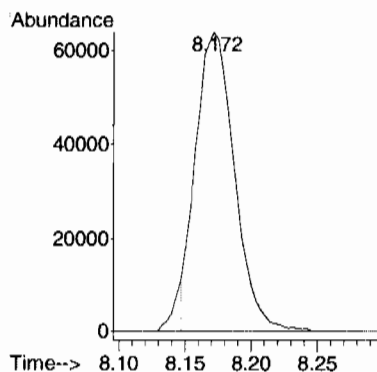
Quant Time: Mar 11 07:31:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





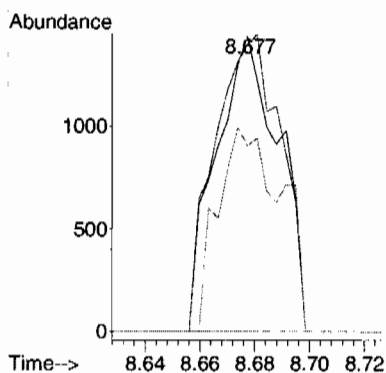
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 12.85 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B316.D
Acq: 10 Mar 2010 1:46 pm

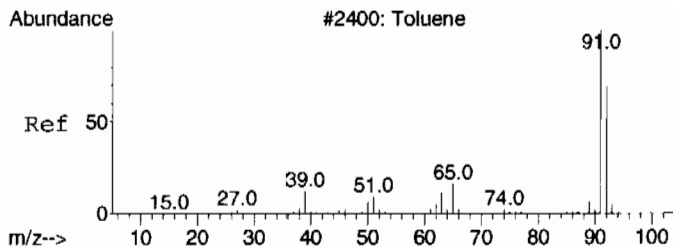
Tgt Ion: 67 Resp: 131264
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#34
Trichloroethylene
Concen: 0.44 ug/L
RT: 8.677 min Scan# 904
Delta R.T. 0.000 min
Lab File: 5B316.D
Acq: 10 Mar 2010 1:46 pm

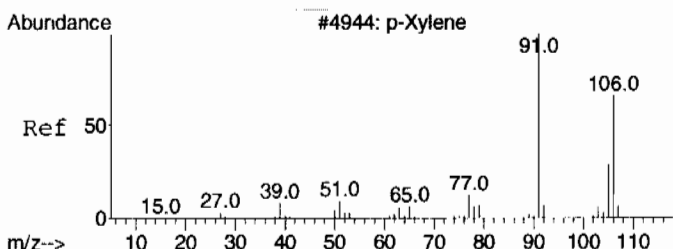
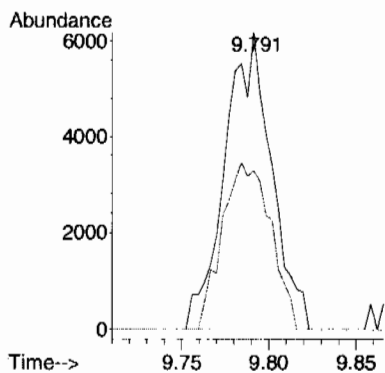
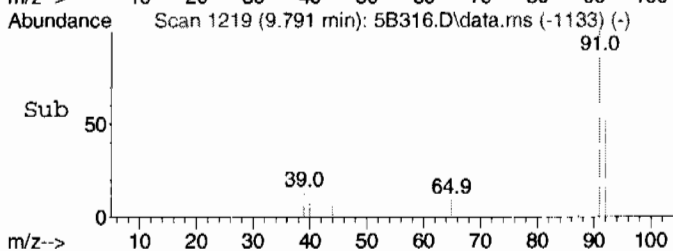
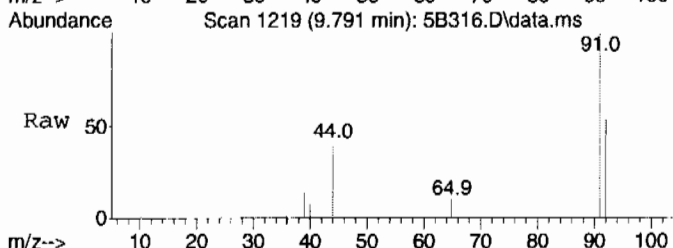
Tgt Ion: 95 Resp: 2287
Ion Ratio Lower Upper
95 100
130 105.6 75.1 135.1
97 70.1 35.2 95.2





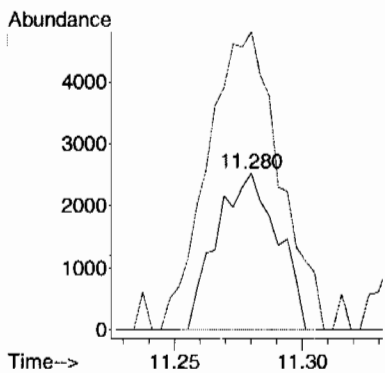
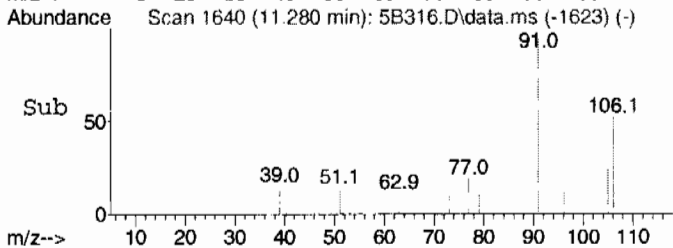
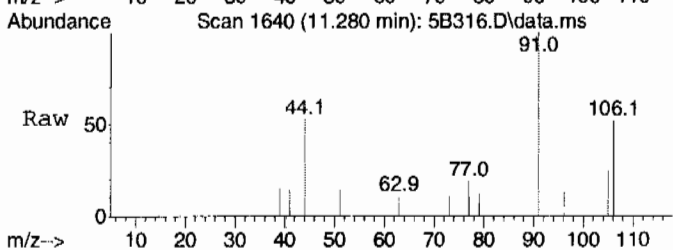
#44
Toluene
Concen: 0.55 ug/L
RT: 9.791 min Scan# 1219
Delta R.T. 0.003 min
Lab File: 5B316.D
Acq: 10 Mar 2010 1:46 pm

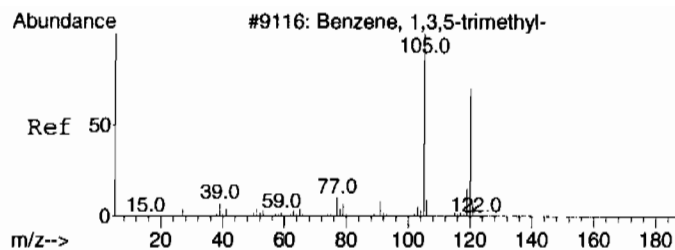
Tgt Ion: 91 Resp: 11439
Ion Ratio Lower Upper
91 100
92 58.4 29.5 89.5



#55 BEFORE analyst DELETION
m,p-Xylenes
Concen: 0.46 ug/L
RT: 11.280 min Scan# 1640
Delta R.T. 0.000 min
Lab File: 5B316.D
Acq: 10 Mar 2010 1:46 pm

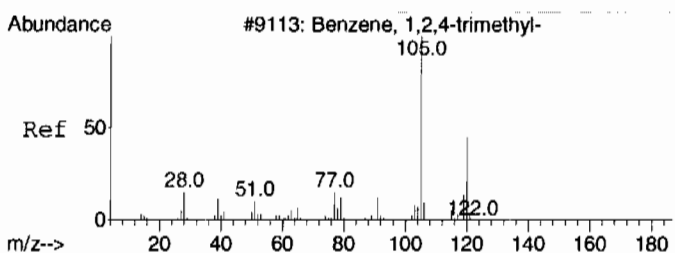
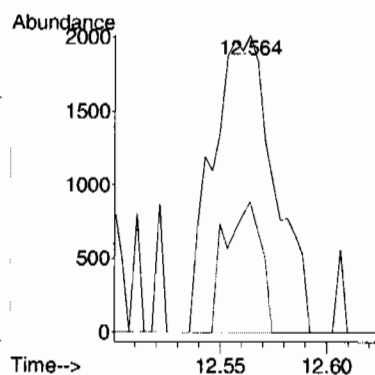
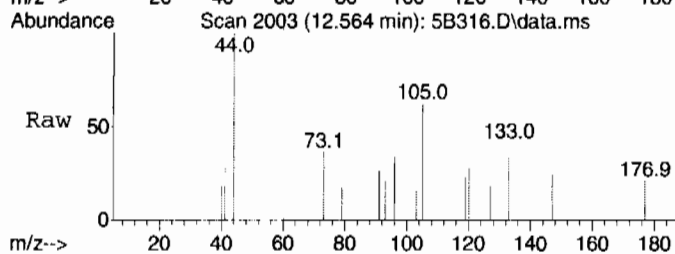
Tgt Ion: 106 Resp: 4180
Ion Ratio Lower Upper
106 100
91 224.8 168.5 228.5





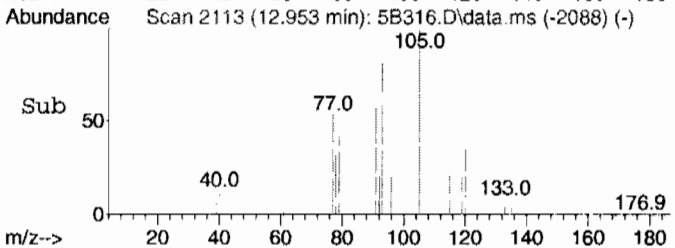
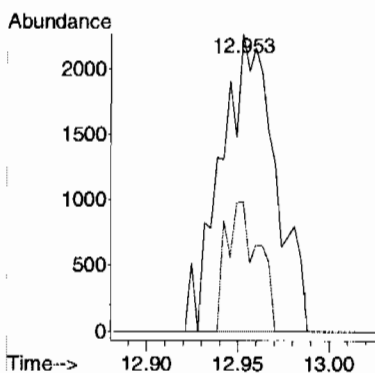
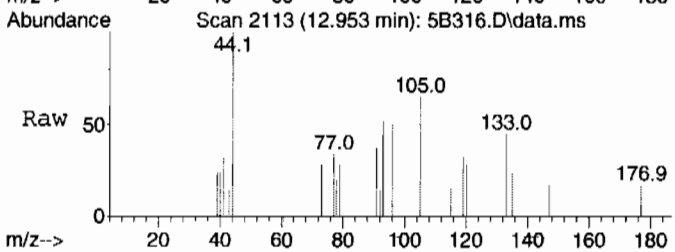
#66 BEFORE analyst DELETION
1,3,5-Trimethylbenzene
Concen: 0.32 ug/L
RT: 12.564 min Scan# 2003
Delta R.T. -0.000 min
Lab File: 5B316.D
Acq: 10 Mar 2010 1:46 pm

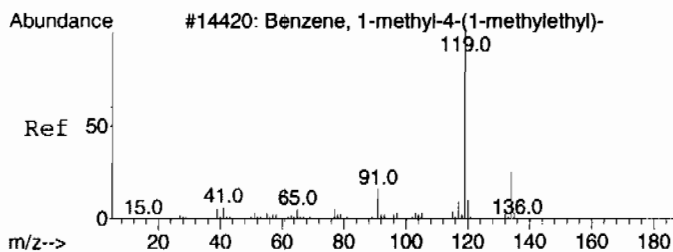
Tgt Ion:105 Resp: 4041
Ion Ratio Lower Upper
105 100
120 25.5 20.0 80.0



#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 0.37 ug/L
RT: 12.953 min Scan# 2113
Delta R.T. -0.003 min
Lab File: 5B316.D
Acq: 10 Mar 2010 1:46 pm

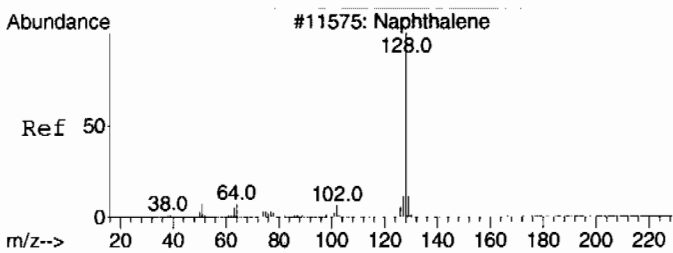
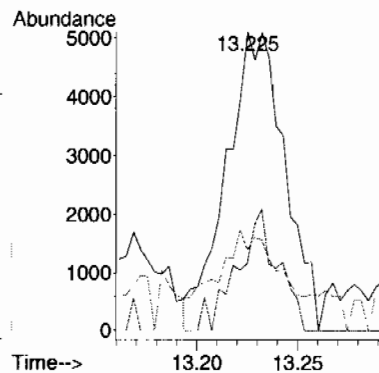
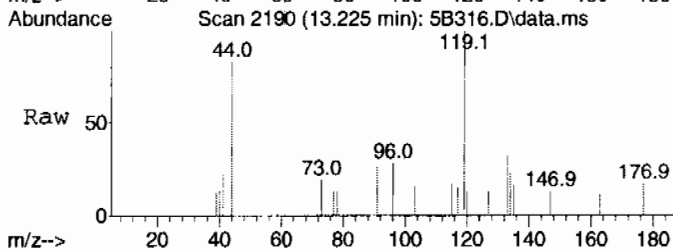
Tgt Ion:105 Resp: 4678
Ion Ratio Lower Upper
105 100
120 25.9 17.4 77.4





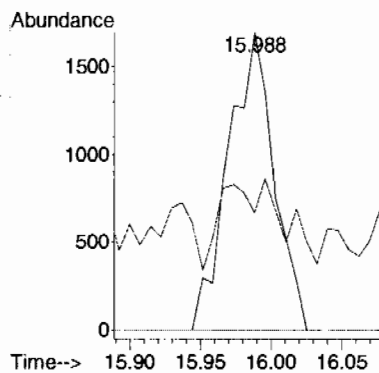
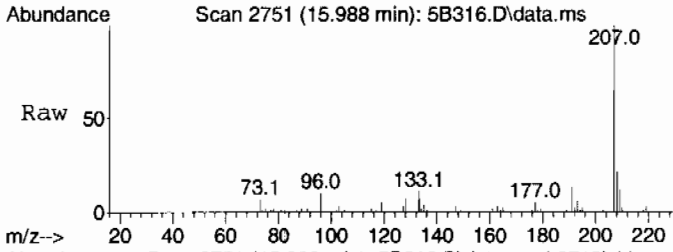
#72
4-Isopropyltoluene
Concen: 0.80 ug/L
RT: 13.225 min Scan# 2190
Delta R.T. -0.004 min
Lab File: 5B316.D
Acq: 10 Mar 2010 1:46 pm

Tgt Ion	Ratio	Lower	Upper
119	100		
134	28.6	0.0	57.2
91	42.4	0.0	53.0



#80 BEFORE analyst DELETION
Naphthalene
Concen: 0.37 ug/L
RT: 15.988 min Scan# 2751
Delta R.T. 0.000 min
Lab File: 5B316.D
Acq: 10 Mar 2010 1:46 pm

Tgt Ion	Ratio	Lower	Upper
128	100		
127	41.3	0.0	42.4
129	0.0	0.0	40.8



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B316.D
Acq On : 10 Mar 2010 1:46 pm
Operator : CDS1
Sample : |248370017|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

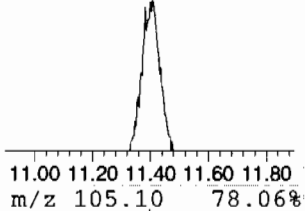
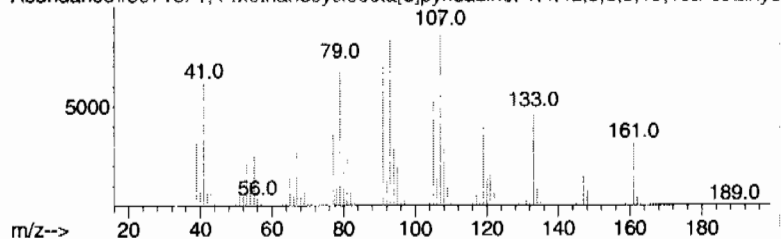
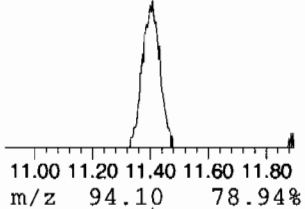
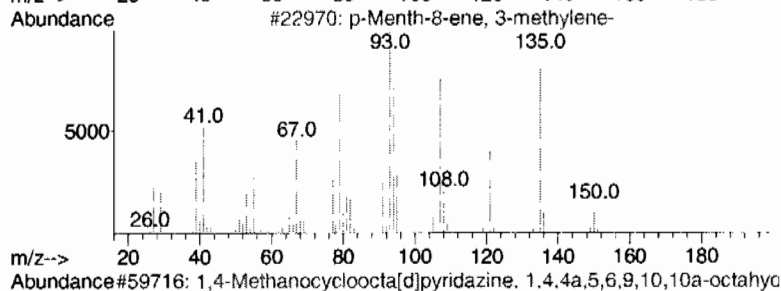
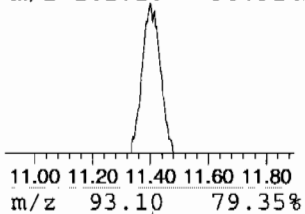
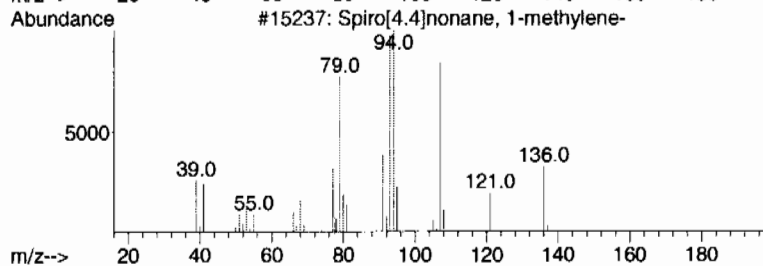
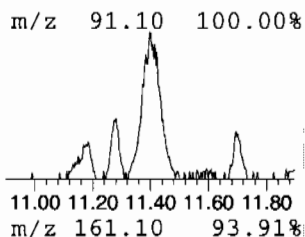
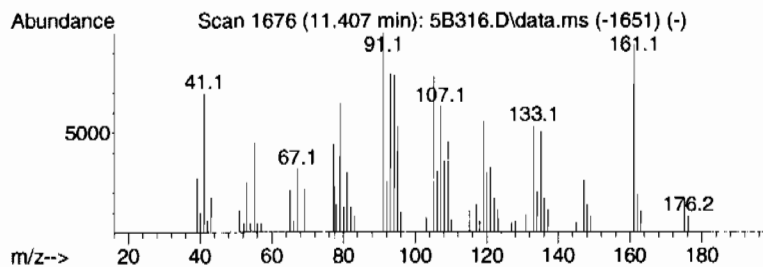
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 7 unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.397	13.53 ug/L	811368	B Chlorobenzene-d5	11.142

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Spiro[4.4]nonane, 1-methylene-	136	C10H16	019144-06-0	38
2	p-Menth-8-ene, 3-methylene-	150	C11H18	1000151-25-7	38
3	1,4-Methanocycloocta[d]pyridazin...	204	C13H20N2	1000221-85-9	35
4	Cyclohexene, 2-ethenyl-1,3,3-tri...	150	C11H18	005293-90-3	27
5	Tetracyclo[5.2.1.0(2,6).0(3,5)]d...	162	C12H18	074646-38-1	22



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B316.D
Acq On : 10 Mar 2010 1:46 pm
Operator : CDS1
Sample : |248370017|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 16 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	11.397	13.5	ug/L	811368	4	11.142	2998390	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370018
 Client ID: RE36-10-7485
 Batch ID: 963122
 Run Date: 03/10/2010 14:13
 Prep Date: 03/10/2010 08:50
 Data File: 031010V55B317.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26.5
 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	1.36	ug/kg	0.462	1.36
74-87-3	Chloromethane	U	1.36	ug/kg	0.408	1.36
75-01-4	Vinyl chloride	U	1.36	ug/kg	0.408	1.36
74-83-9	Bromomethane	U	1.36	ug/kg	0.408	1.36
75-00-3	Chloroethane	U	1.36	ug/kg	0.408	1.36
75-69-4	Trichlorofluoromethane	U	1.36	ug/kg	0.408	1.36
67-64-1	Acetone	J	3.69	ug/kg	2.26	6.80
75-35-4	1,1-Dichloroethylene	U	1.36	ug/kg	0.408	1.36
74-88-4	Iodomethane	U	6.80	ug/kg	2.18	6.80
75-09-2	Methylene chloride	U	6.80	ug/kg	2.72	6.80
75-15-0	Carbon disulfide	U	6.80	ug/kg	1.70	6.80
156-60-5	trans-1,2-Dichloroethylene	U	1.36	ug/kg	0.408	1.36
75-34-3	1,1-Dichloroethane	U	1.36	ug/kg	0.408	1.36
78-93-3	2-Butanone	U	6.80	ug/kg	2.04	6.80
156-59-2	cis-1,2-Dichloroethylene	U	1.36	ug/kg	0.408	1.36
594-20-7	2,2-Dichloropropane	U	1.36	ug/kg	0.408	1.36
67-66-3	Chloroform	U	1.36	ug/kg	0.408	1.36
74-97-5	Bromochloromethane	U	1.36	ug/kg	0.449	1.36
71-55-6	1,1,1-Trichloroethane	U	1.36	ug/kg	0.408	1.36
563-58-6	1,1-Dichloropropene	U	1.36	ug/kg	0.408	1.36
56-23-5	Carbon tetrachloride	U	1.36	ug/kg	0.408	1.36
107-06-2	1,2-Dichloroethane	U	1.36	ug/kg	0.408	1.36
71-43-2	Benzene	U	1.36	ug/kg	0.408	1.36
79-01-6	Trichloroethylene	U	1.36	ug/kg	0.449	1.36
78-87-5	1,2-Dichloropropane	U	1.36	ug/kg	0.408	1.36
75-27-4	Bromodichloromethane	U	1.36	ug/kg	0.408	1.36
74-95-3	Dibromomethane	U	1.36	ug/kg	0.408	1.36
108-10-1	4-Methyl-2-pentanone	U	6.80	ug/kg	1.70	6.80
10061-01-5	cis-1,3-Dichloropropylene	U	1.36	ug/kg	0.408	1.36
108-88-3	Toluene	J	0.707	ug/kg	0.408	1.36
10061-02-6	trans-1,3-Dichloropropylene	U	1.36	ug/kg	0.408	1.36
79-00-5	1,1,2-Trichloroethane	U	1.36	ug/kg	0.408	1.36
591-78-6	2-Hexanone	U	6.80	ug/kg	2.04	6.80
142-28-9	1,3-Dichloropropane	U	1.36	ug/kg	0.408	1.36
127-18-4	Tetrachloroethylene	U	1.36	ug/kg	0.408	1.36
124-48-1	Dibromochloromethane	U	1.36	ug/kg	0.408	1.36
106-93-4	1,2-Dibromoethane	U	1.36	ug/kg	0.408	1.36
108-90-7	Chlorobenzene	U	1.36	ug/kg	0.408	1.36

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370018

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 26.5
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7485
 Batch ID: 963122
 Run Date: 03/10/2010 14:13
 Prep Date: 03/10/2010 08:50
 Data File: 031010V55B317.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.36	ug/kg	0.408	1.36
179601-23-1	m,p-Xylenes	U	2.72	ug/kg	0.408	2.72
95-47-6	o-Xylene	U	1.36	ug/kg	0.408	1.36
100-42-5	Styrene	U	1.36	ug/kg	0.408	1.36
75-25-2	Bromoform	U	1.36	ug/kg	0.408	1.36
79-34-5	1,1,2,2-Tetrachloroethane	U	1.36	ug/kg	0.408	1.36
96-18-4	1,2,3-Trichloropropane	U	1.36	ug/kg	0.408	1.36
108-86-1	Bromobenzene	U	1.36	ug/kg	0.408	1.36
103-65-1	n-Propylbenzene	U	1.36	ug/kg	0.408	1.36
95-49-8	2-Chlorotoluene	U	1.36	ug/kg	0.408	1.36
98-82-8	Isopropylbenzene	U	1.36	ug/kg	0.408	1.36
108-67-8	1,3,5-Trimethylbenzene	U	1.36	ug/kg	0.408	1.36
106-43-4	4-Chlorotoluene	U	1.36	ug/kg	0.408	1.36
98-06-6	tert-Butylbenzene	U	1.36	ug/kg	0.408	1.36
95-63-6	1,2,4-Trimethylbenzene	U	1.36	ug/kg	0.408	1.36
135-98-8	sec-Butylbenzene	U	1.36	ug/kg	0.408	1.36
99-87-6	4-Isopropyltoluene		2.35	ug/kg	0.408	1.36
541-73-1	1,3-Dichlorobenzene	U	1.36	ug/kg	0.408	1.36
106-46-7	1,4-Dichlorobenzene	U	1.36	ug/kg	0.408	1.36
104-51-8	n-Butylbenzene	U	1.36	ug/kg	0.408	1.36
96-12-8	1,2-Dibromo-3-chloropropane	U	1.36	ug/kg	0.408	1.36
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.80	ug/kg	2.18	6.80
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.36	ug/kg	0.408	1.36
95-50-1	1,2-Dichlorobenzene	U	1.36	ug/kg	0.408	1.36

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\031010V5\
Data File : 5B317.D
Acq On : 10 Mar 2010 2:13 pm
Operator : CDS1
InstName : VOA5
Sample : |248370018|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 11 07:33:53 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1495262	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	989477	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	371975	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1495262	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	989477	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	371975	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	267463	36.96	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery =		73.92%			
43) Toluene-d8	9.721	9.721	0.872	98	1147466	45.35	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery =		90.70%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	494161	66.23	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery =		132.46%#			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	1502	Below Cal		91
4) Vinyl chloride	5.041	5.041	0.601	62	192	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.937	5.695	0.708	101	967	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.174	6.174	0.736	43	12119	2.71 ug/L		90
10) 1,1-Dichloroethylene	6.167	6.156	0.735	61	1650	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	231	N.D.		
13) Methyl acetate	6.365	6.365	0.759	43	123	N.D.		
14) Carbon disulfide	6.442	6.435	0.768	76	788	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	3371	Below Cal		90
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.807	6.969	0.812	43	1250	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.450	7.450	0.888	43	1143	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.928	7.924	0.945	56	4005	0.40 ug/L		87
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	128	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	8403	Below Cal	#	21
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B317.D
Acq On : 10 Mar 2010 2:13 pm
Operator : CDS1
InstName : VOA5
Sample : |248370018|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 11 07:33:53 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.795	9.788	0.879	91	11115	0.52 ug/L	98
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.181	11.181	1.003	91	872	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	107	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	11.998	12.016	0.895	105	2511	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.394	12.415	0.924	91	2395	N.D.	
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936	105	217	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.702	12.698	0.947	91	654	N.D.	
69) tert-Butylbenzene	12.985	12.900	0.968	134	121	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	2381	N.D.	
71) sec-Butylbenzene	13.116	13.119	0.978	105	225	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	25903	1.73 ug/L	96
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.427	13.441	1.001	146	228	N.D.	
75) n-Butylbenzene	13.664	13.653	1.019	91	995	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	241	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	2839	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.156	6.163	0.734	45	2781	N.D.	
88) Allyl chloride	6.404	6.425	0.763	41	109	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.450	7.383	0.888	43	1143	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B317.D
Acq On : 10 Mar 2010 2:13 pm
Operator : CDS1
InstName : VOA5
Sample : |248370018|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 11 07:33:53 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

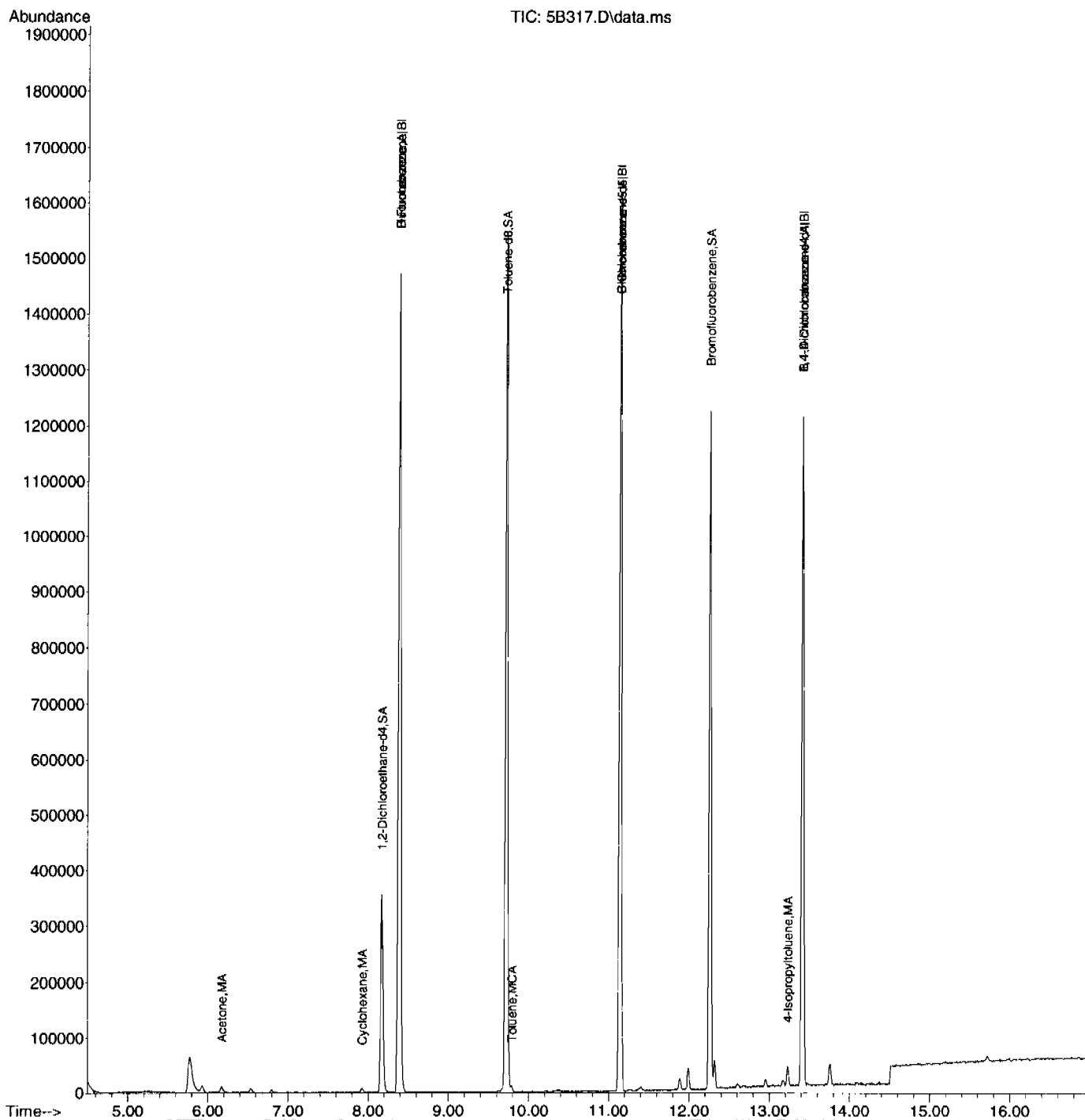
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.857	7.680	0.937	41	112	N.D.	
97) Tetrahydrofuran	7.726	7.716	0.921	42	234	N.D.	
98) Isobutyl alcohol	7.857	7.857	0.937	41	112	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.547	13.565	1.010	91	1365	N.D.	
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	231	N.D.	

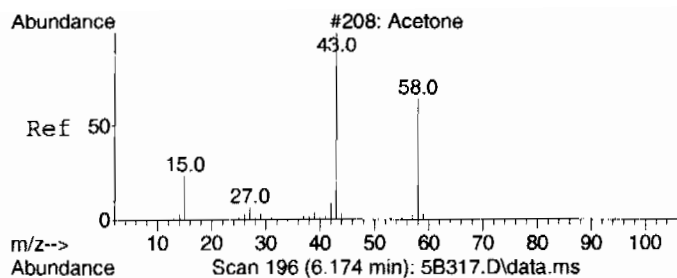
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B317.D
Acq On : 10 Mar 2010 2:13 pm
Operator : CDS1
InstName : VOA5
Sample : |248370018|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

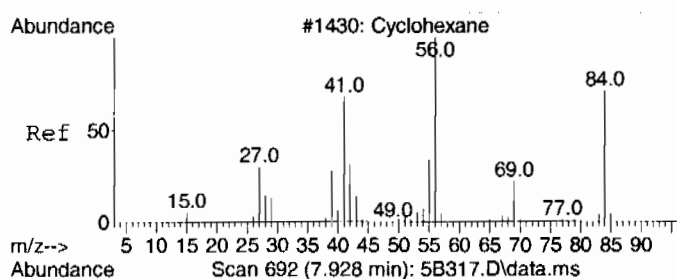
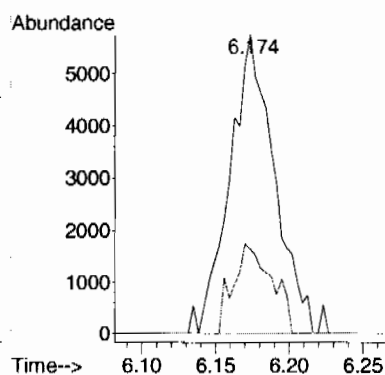
Quant Time: Mar 11 07:33:53 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





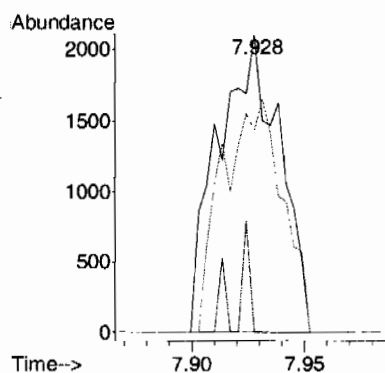
#9
Acetone
Concen: 2.71 ug/L
RT: 6.174 min Scan# 196
Delta R.T. -0.000 min
Lab File: 5B317.D
Acq: 10 Mar 2010 2:13 pm

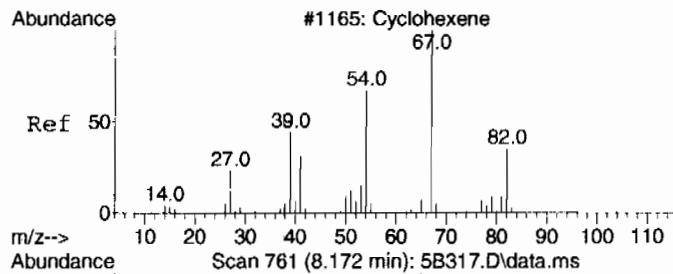
Tgt Ion: 43 Resp: 12119
Ion Ratio Lower Upper
43 100
58 26.2 1.9 61.9



#26
Cyclohexane
Concen: 0.40 ug/L
RT: 7.928 min Scan# 692
Delta R.T. 0.004 min
Lab File: 5B317.D
Acq: 10 Mar 2010 2:13 pm

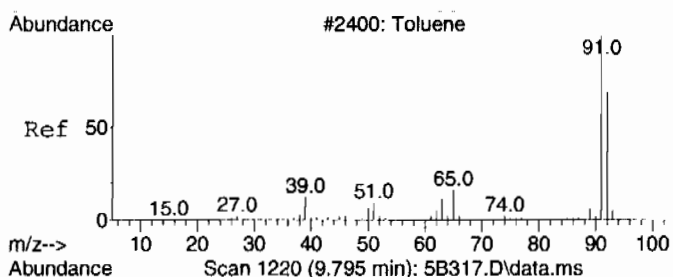
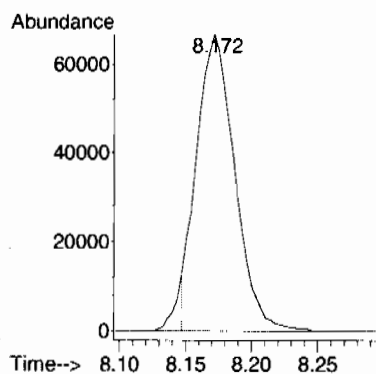
Tgt Ion: 56 Resp: 4005
Ion Ratio Lower Upper
56 100
69 4.2 0.0 56.4
84 76.7 44.6 104.6





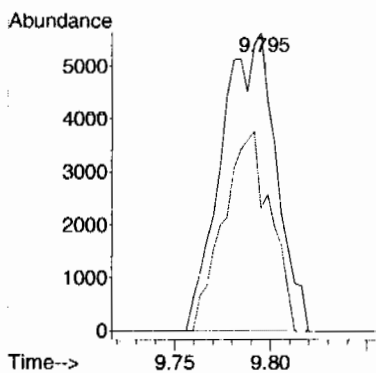
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.31 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B317.D
Acq: 10 Mar 2010 2:13 pm

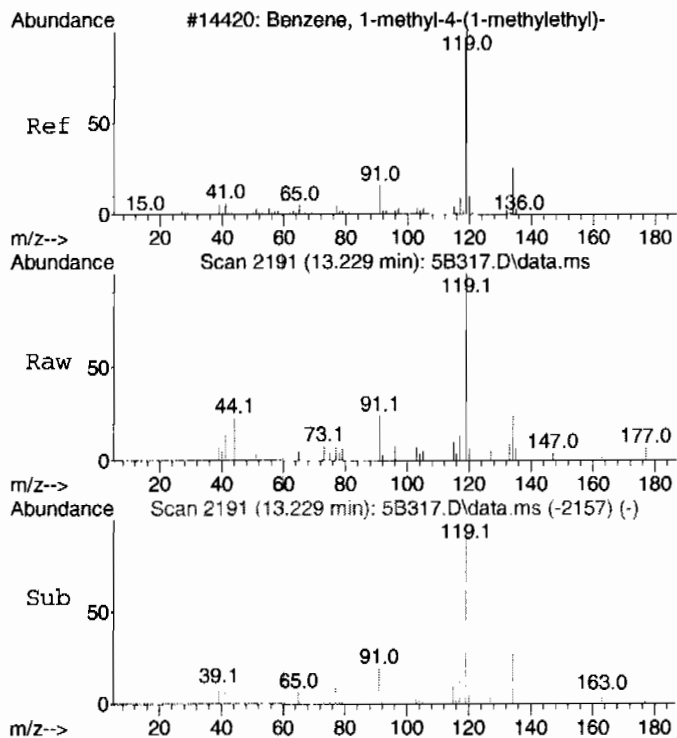
Tgt Ion: 67 Resp: 133928
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#44
Toluene
Concen: 0.52 ug/L
RT: 9.795 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 5B317.D
Acq: 10 Mar 2010 2:13 pm

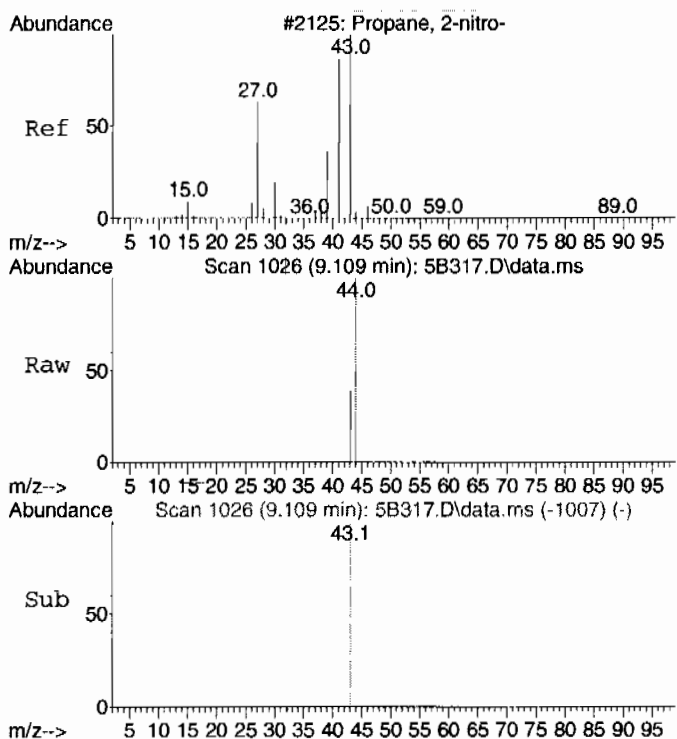
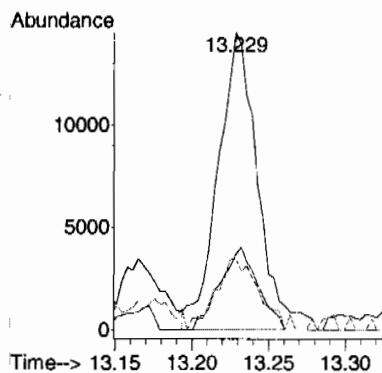
Tgt Ion: 91 Resp: 11115
Ion Ratio Lower Upper
91 100
92 57.8 29.5 89.5





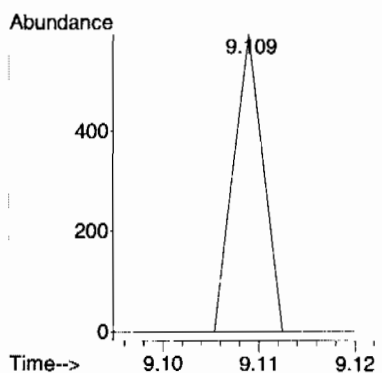
#72
4-Isopropyltoluene
Concen: 1.73 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5B317.D
Acq: 10 Mar 2010 2:13 pm

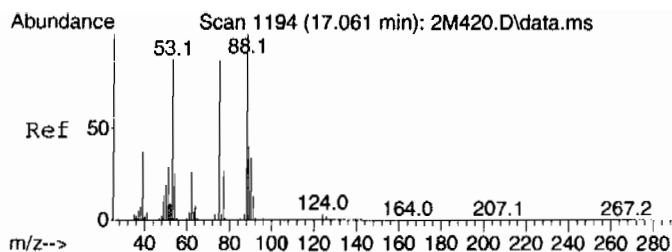
Tgt Ion	Ratio	Lower	Upper
119	100		
134	26.7	0.0	57.2
91	26.2	0.0	53.0



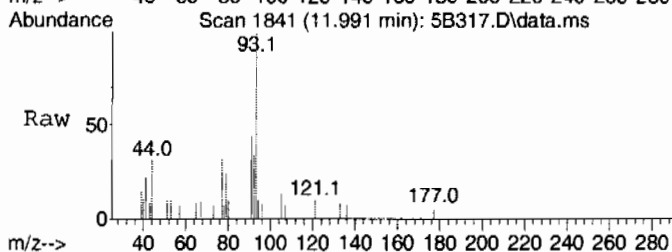
#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.96 ug/L
RT: 9.109 min Scan# 1026
Delta R.T. -0.233 min
Lab File: 5B317.D
Acq: 10 Mar 2010 2:13 pm

Tgt Ion	Ratio	Lower	Upper
43	100		
41	0.0	52.5	112.5#

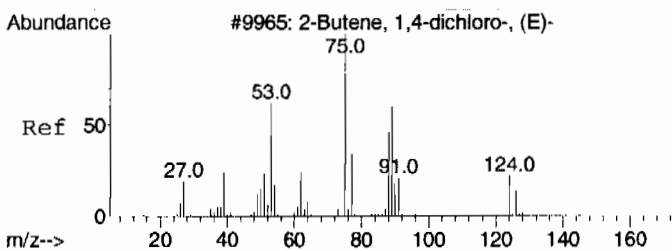
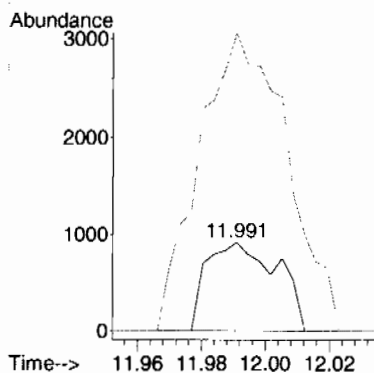
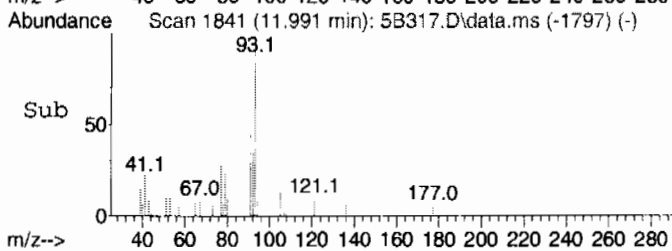




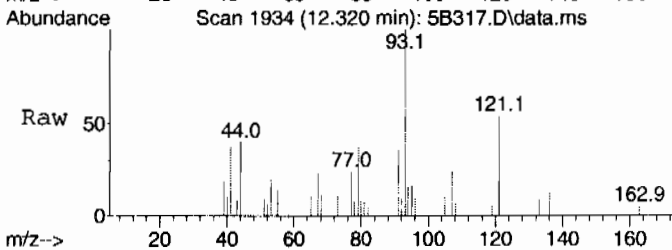
#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 1.01 ug/L
 RT: 11.991 min Scan# 1841
 Delta R.T. -0.145 min
 Lab File: 5B317.D
 Acq: 10 Mar 2010 2:13 pm



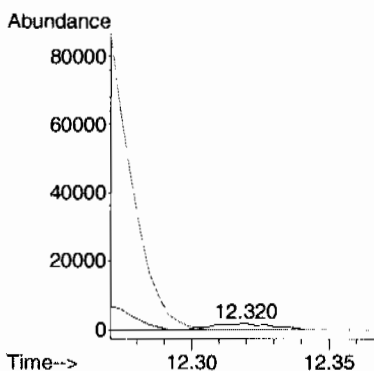
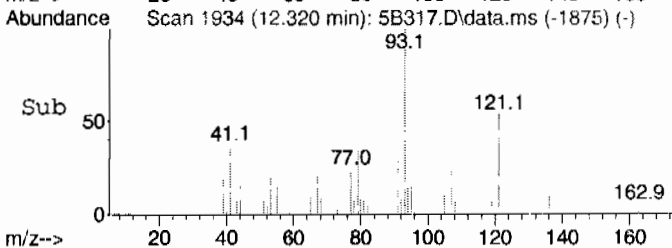
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	67.1	127.1#
77	416.5	1.8	61.8#



#109 BEFORE analyst DELETION
 trans-1,4-Dichloro-2-butene
 Concen: 2.09 ug/L
 RT: 12.320 min Scan# 1934
 Delta R.T. -0.092 min
 Lab File: 5B317.D
 Acq: 10 Mar 2010 2:13 pm



Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	15.5	75.5#
75	0.0	92.0	152.0#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B317.D
Acq On : 10 Mar 2010 2:13 pm
Operator : CDS1
Sample : |248370018|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B317.D
Acq On : 10 Mar 2010 2:13 pm
Operator : CDS1
Sample : |248370018|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 17 Sample Multiplier: 1

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

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370019
 Client ID: RE36-10-7488
 Batch ID: 963122
 Run Date: 03/10/2010 14:39
 Prep Date: 03/10/2010 08:51
 Data File: 031010V5\SB318.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 % Moisture: 10
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.56	ug/kg	1.85	5.56
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.56	ug/kg	1.78	5.56
75-09-2	Methylene chloride	U	5.56	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	U	5.56	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.56	ug/kg	1.67	5.56
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.56	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.56	ug/kg	1.67	5.56
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370019
 Client ID: RE36-10-7488
 Batch ID: 963122
 Run Date: 03/10/2010 14:39
 Prep Date: 03/10/2010 08:51
 Data File: 031010V55B318.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.334	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.56	ug/kg	1.78	5.56
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B318.D
Acq On : 10 Mar 2010 2:39 pm
Operator : CDS1
InstName : VOA5
Sample : |248370019|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 11 07:34:19 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	8.391	8.387	1.000	96	1537688	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1116330	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	516207	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1537688	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1116330	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	516207	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	280485	37.69	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	75.38%		
43) Toluene-d8	9.724	9.721	0.873	98	1228042	43.01	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	86.02%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	603454	58.28	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	116.56%		
Target Compounds								
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	5.051	4.900	0.602	50	2688	Below Cal		72
4) Vinyl chloride	5.041	5.041	0.601	62	153	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.700	59	399	N.D.		
9) Acetone	6.177	6.174	0.736	43	794	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.770	41	265	N.D.		
13) Methyl acetate	6.195	6.365	0.738	43	245	N.D.		
14) Carbon disulfide	6.439	6.435	0.767	76	415	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	6219	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.810	43	268	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.200	8.203	0.977	78	237	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.384	8.377	0.999	56	8457	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B318.D
Acq On : 10 Mar 2010 2:39 pm
Operator : CDS1
InstName : VOA5
Sample : |248370019|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 11 07:34:19 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.675	9.487	1.153	75	551	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	2541	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	1812	N.D.	
55) m,p-Xylenes	11.287	11.280	1.013	106	1330	N.D.	
56) o-Xylene	11.701	11.701	1.050	106	287	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	11.896	12.016	0.887	105	1585	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.270	12.465	0.915	156	119	N.D.	
65) n-Propylbenzene	12.408	12.415	0.925	91	1908	N.D.	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1191	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.713	12.698	0.948	91	1373	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	3551	N.D.	
71) sec-Butylbenzene	0.000	13.119	0.000		0	N.D.	
72) 4-Isopropyltoluene	13.236	13.229	0.987	119	2529	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	437	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	145	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	4084	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.443	6.425	0.768	41	244	N.D.	
89) tert-Butyl Alcohol	6.471	6.460	0.771	59	239	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B318.D
Acq On : 10 Mar 2010 2:39 pm
Operator : CDS1
InstName : VOA5
Sample : |248370019|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 11 07:34:19 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

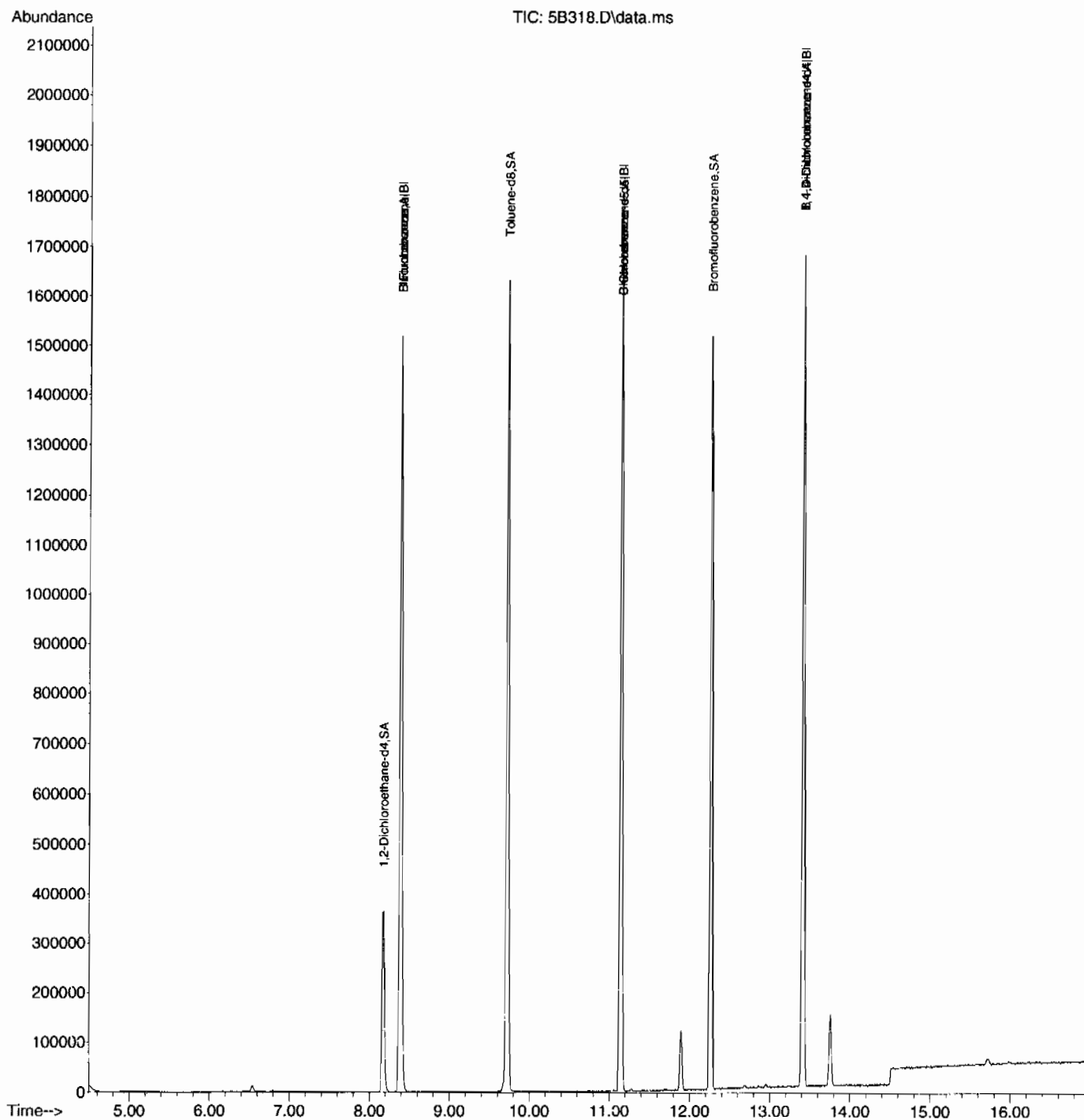
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.709	7.680	0.919	41	130	N.D.	
97) Tetrahydrofuran	7.709	7.716	0.919	42	120	N.D.	
98) Isobutyl alcohol	7.730	7.857	0.921	41	123	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	653	N.D.	
112) bis(2-Chloroisopropyl)...	13.915	13.929	1.037	45	108	N.D.	

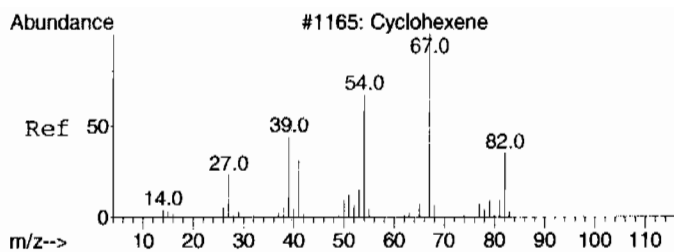
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B318.D
Acq On : 10 Mar 2010 2:39 pm
Operator : CDS1
InstName : VOA5
Sample : |248370019|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

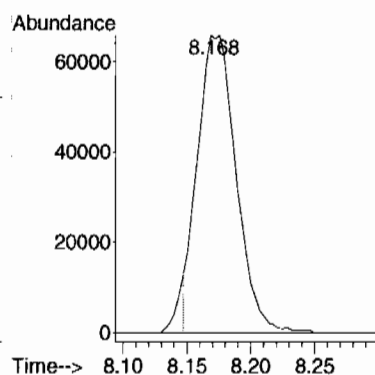
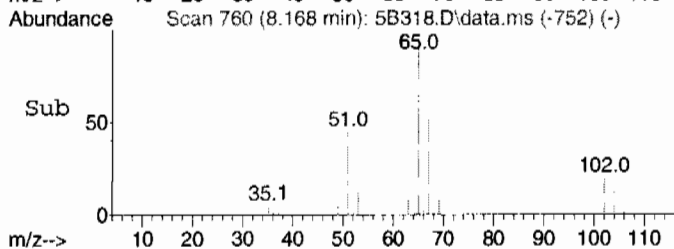
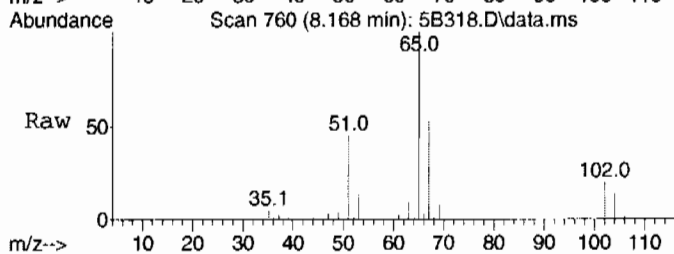
Quant Time: Mar 11 07:34:19 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.41 ug/L
RT: 8.168 min Scan# 760
Delta R.T. -0.078 min
Lab File: 5B318.D
Acq: 10 Mar 2010 2:39 pm

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



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B318.D
Acq On : 10 Mar 2010 2:39 pm
Operator : CDS1
Sample : |248370019|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B318.D
Acq On : 10 Mar 2010 2:39 pm
Operator : CDS1
Sample : |248370019|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 18 Sample Multiplier: 1

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

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370020
 Client ID: RE36-10-7484
 Batch ID: 963122
 Run Date: 03/10/2010 15:06
 Prep Date: 03/10/2010 08:52
 Data File: 031010V5\5B319.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 17.4
 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	1.21	ug/kg	0.412	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.363	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.363	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.363	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.363	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.363	1.21
67-64-1	Acetone	U	6.06	ug/kg	2.01	6.06
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.363	1.21
74-88-4	Iodomethane	U	6.06	ug/kg	1.94	6.06
75-09-2	Methylene chloride	U	6.06	ug/kg	2.42	6.06
75-15-0	Carbon disulfide	U	6.06	ug/kg	1.51	6.06
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.363	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.363	1.21
78-93-3	2-Butanone	U	6.06	ug/kg	1.82	6.06
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.363	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.363	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.363	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.400	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.363	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.363	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.363	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.363	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.363	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.400	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.363	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.363	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.363	1.21
108-10-1	4-Methyl-2-pentanone	U	6.06	ug/kg	1.51	6.06
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.363	1.21
108-88-3	Toluene	J	0.412	ug/kg	0.363	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.363	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.363	1.21
591-78-6	2-Hexanone	U	6.06	ug/kg	1.82	6.06
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.363	1.21
127-18-4	Tetrachloroethylene	U	1.21	ug/kg	0.363	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.363	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.363	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.363	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370020
 Client ID: RE36-10-7484
 Batch ID: 963122
 Run Date: 03/10/2010 15:06
 Prep Date: 03/10/2010 08:52
 Data File: 031010V55B319.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5J
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 17.4
 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	1.21	ug/kg	0.363	1.21
179601-23-1	m,p-Xylenes	U	2.42	ug/kg	0.363	2.42
95-47-6	o-Xylene	U	1.21	ug/kg	0.363	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.363	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.363	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.363	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.363	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.363	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.363	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.363	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.363	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.363	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.363	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.363	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.363	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.363	1.21
99-87-6	4-Isopropyltoluene		3.42	ug/kg	0.363	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.363	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.363	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.363	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.363	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.06	ug/kg	1.94	6.06
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.363	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.363	1.21

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\031010V5\
Data File : 5B319.D
Acq On : 10 Mar 2010 3:06 pm
Operator : CDS1
InstName : VOA5
Sample : |248370020|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 11 07:35:10 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1498245	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	914678	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	269793	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1498245	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	914678	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	269793	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.175	8.172	0.975	65	267940	36.95	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	73.90%		
43) Toluene-d8	9.721	9.721	0.872	98	1136206	48.57	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	97.14%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	412347	76.20	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	152.40%#		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.960	4.900	0.591	50	694	Below Cal		59
4) Vinyl chloride	5.041	5.041	0.601	62	339	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	156	N.D.		
9) Acetone	6.174	6.174	0.736	43	4828	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.471	6.464	0.771	41	265	N.D.		
13) Methyl acetate	6.365	6.365	0.759	43	230	N.D.		
14) Carbon disulfide	6.435	6.435	0.767	76	573	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	4173	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.793	6.969	0.810	43	121	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.447	7.450	0.888	43	139	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.921	7.924	0.944	56	113	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978	78	702	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.391	8.377	1.000	56	8864	N.D.		
34) Trichloroethylene	8.674	8.677	1.034	95	131	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B319.D
Acq On : 10 Mar 2010 3:06 pm
Operator : CDS1
InstName : VOA5
Sample : |248370020|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 11 07:35:10 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	6627	0.34 ug/L	87
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.174	11.181	1.003	91	1424	N.D.	
55) m,p-Xylenes	11.284	11.280	1.013	106	1001	N.D.	
56) o-Xylene	11.694	11.701	1.050	106	228	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	11.998	12.016	0.895	105	3265	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.419	12.415	0.926	91	979	N.D.	
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	388	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	12.698	0.000		0m	N.D. d	
69) tert-Butylbenzene	12.960	12.900	0.966	134	249	N.D.	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	3052	N.D.	
71) sec-Butylbenzene	13.112	13.119	0.978	105	217	N.D.	
72) 4-Isopropyltoluene	13.232	13.229	0.987	119	30657	2.82 ug/L	95
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.657	13.653	1.018	91	1325	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.605	15.619	1.163	180	122	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.996	15.988	1.193	128	1988	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.453	6.425	0.769	41	221	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.447	7.383	0.888	43	139	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B319.D
Acq On : 10 Mar 2010 3:06 pm
Operator : CDS1
InstName : VOA5
Sample : |248370020|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 11 07:35:10 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

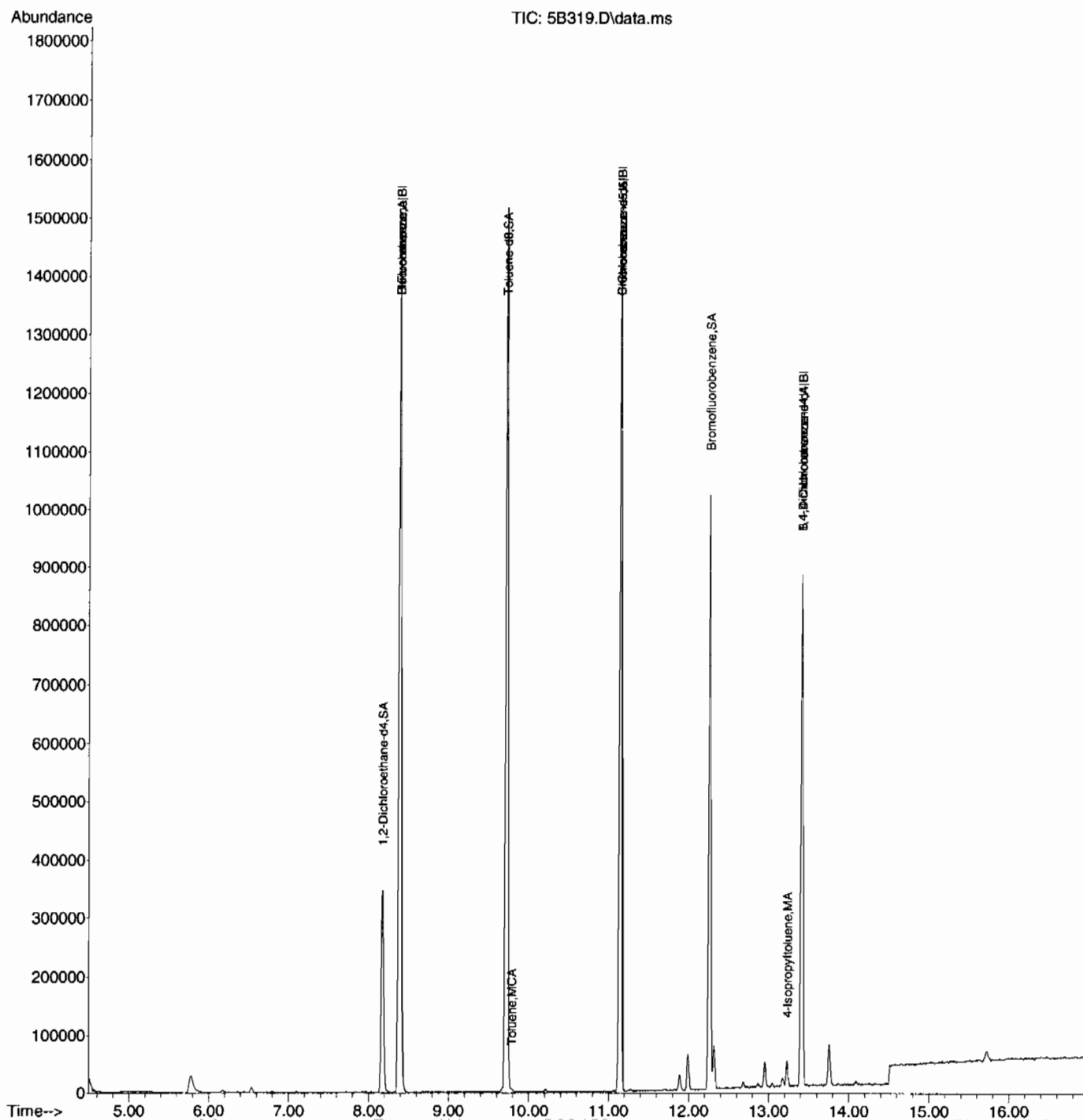
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.730	7.680	0.922	41	139	N.D.	
97) Tetrahydrofuran	7.719	7.716	0.920	42	124	N.D.	
98) Isobutyl alcohol	7.924	7.857	0.945	41	232	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	12.316	12.267	0.918	42	124	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	492	N.D.	
112) bis(2-Chloroisopropyl)...	13.950	13.929	1.040	45	134	N.D.	

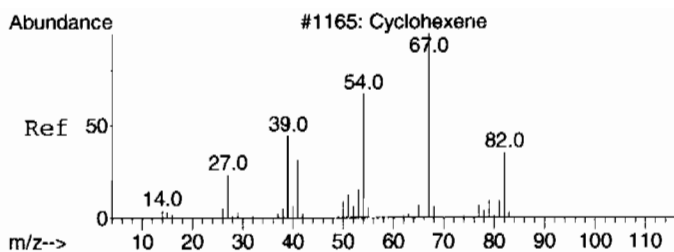
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B319.D
Acq On : 10 Mar 2010 3:06 pm
Operator : CDS1
InstName : VOA5
Sample : |248370020|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 19 Sample Multiplier: 1

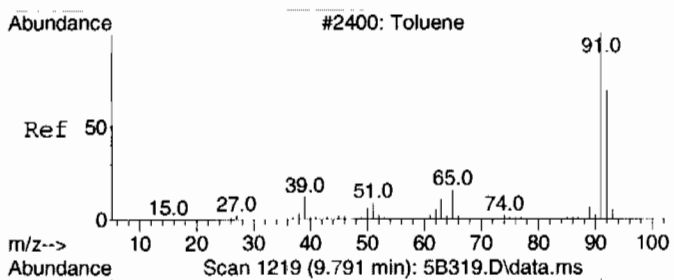
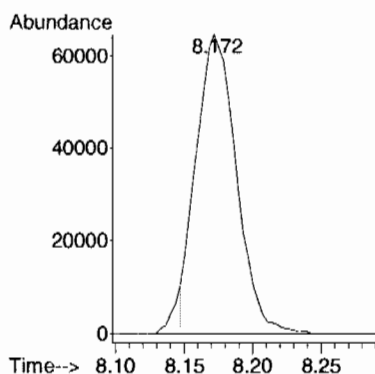
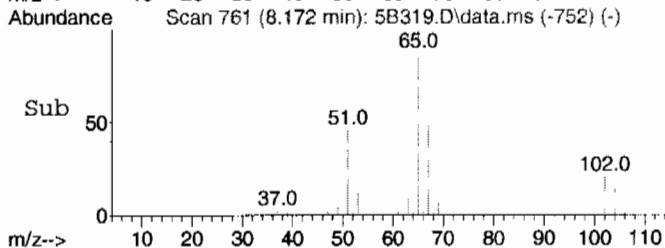
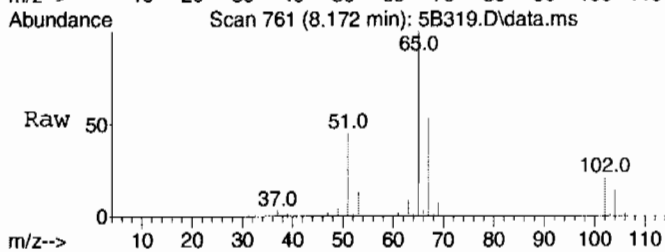
Quant Time: Mar 11 07:35:10 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





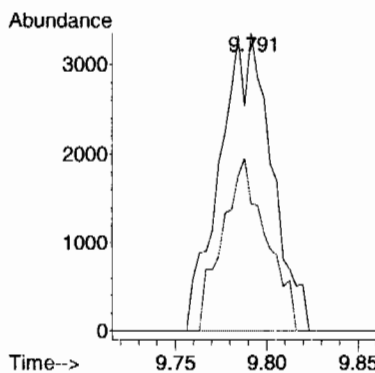
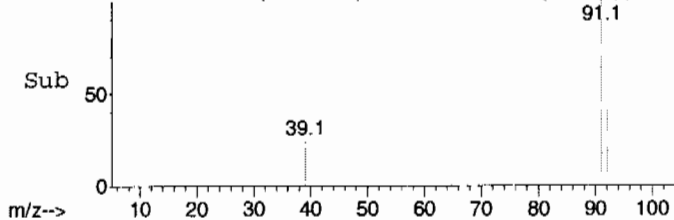
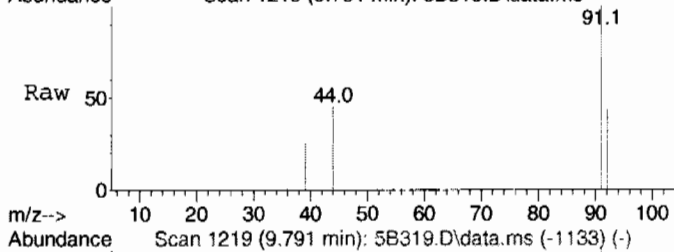
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Cyclohexene
Concen: 13.09 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B319.D
Acq: 10 Mar 2010 3:06 pm

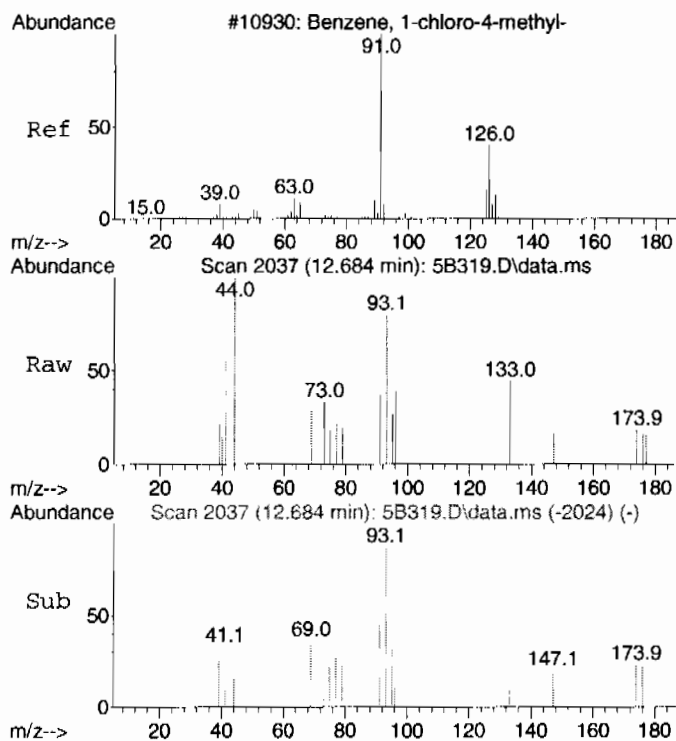
Tgt Ion: 67 Resp: 131997
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#44
Toluene
Concen: 0.34 ug/L
RT: 9.791 min Scan# 1219
Delta R.T. 0.003 min
Lab File: 5B319.D
Acq: 10 Mar 2010 3:06 pm

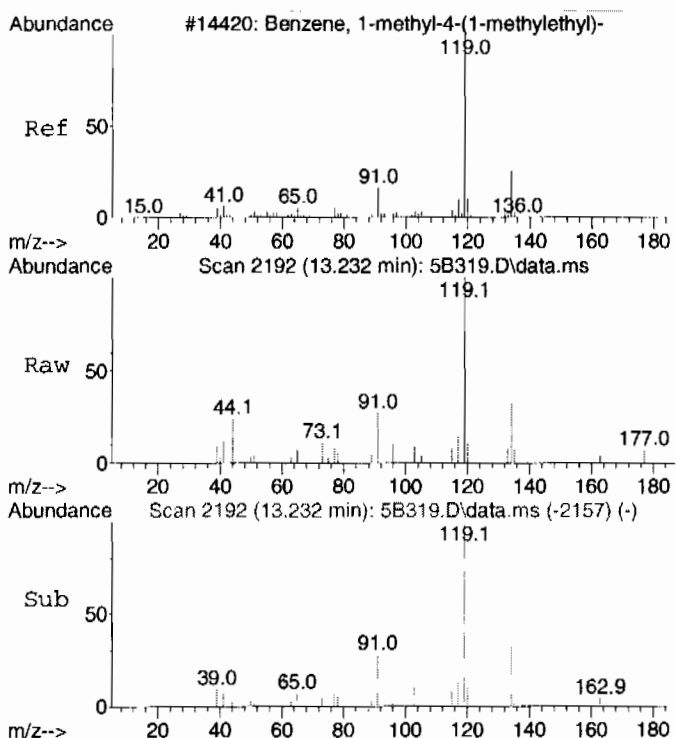
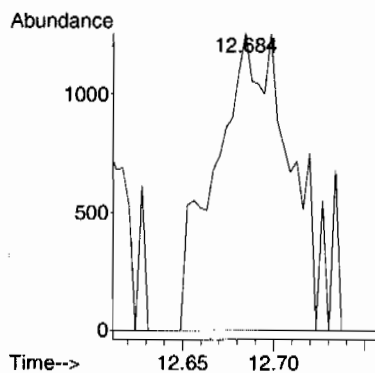
Tgt Ion: 91 Resp: 6627
Ion Ratio Lower Upper
91 100
92 49.7 29.5 89.5





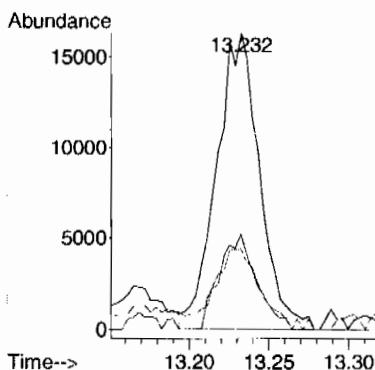
#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.36 ug/L
RT: 12.684 min Scan# 2037
Delta R.T. -0.014 min
Lab File: 5B319.D
Acq: 10 Mar 2010 3:06 pm

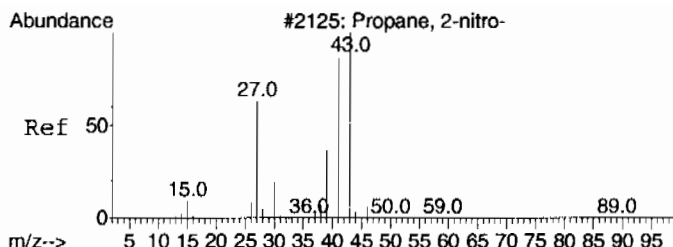
Tgt Ion: 91 Resp: 3463
Ion Ratio Lower Upper
91 100
126 0.0 3.6 63.6#



#72
4-Isopropyltoluene
Concen: 2.82 ug/L
RT: 13.232 min Scan# 2192
Delta R.T. 0.003 min
Lab File: 5B319.D
Acq: 10 Mar 2010 3:06 pm

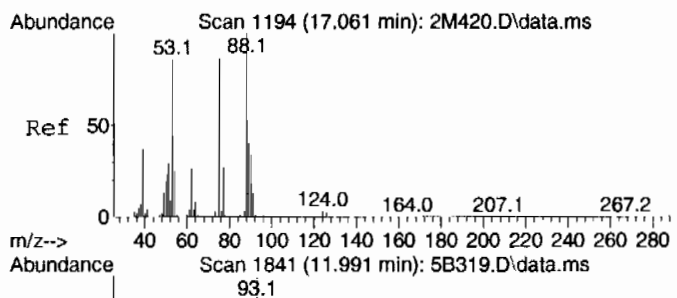
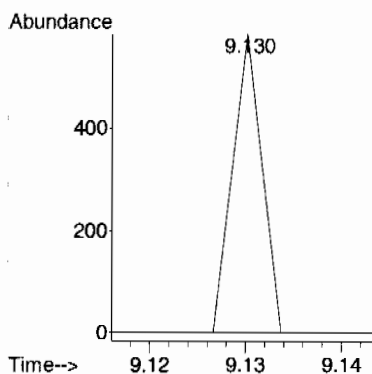
Tgt Ion: 119 Resp: 30657
Ion Ratio Lower Upper
119 100
134 27.6 0.0 57.2
91 27.9 0.0 53.0





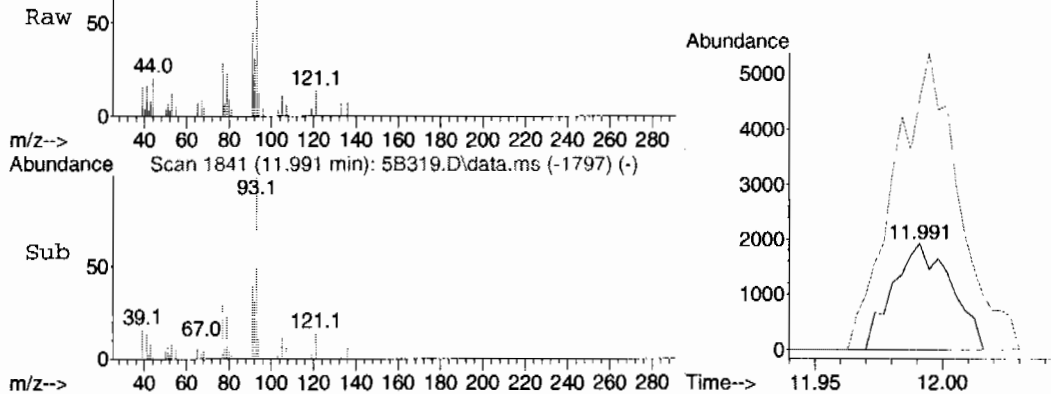
#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.96 ug/L
RT: 9.130 min Scan# 1032
Delta R.T. -0.212 min
Lab File: 5B319.D
Acq: 10 Mar 2010 3:06 pm

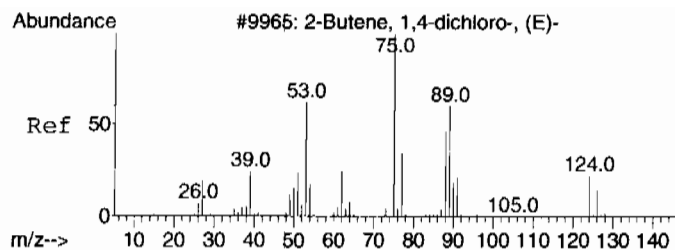
Tgt Ion: 43 Resp: 123
Ion Ratio Lower Upper
43 100
41 0.0 52.5 112.5#



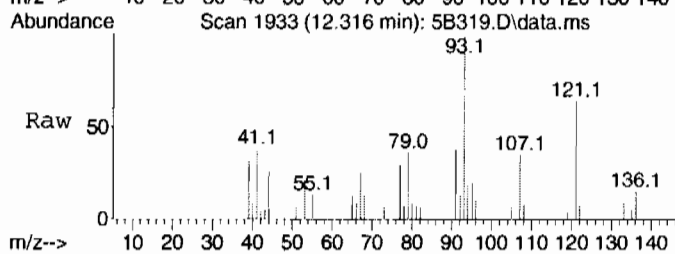
#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 2.97 ug/L
RT: 11.991 min Scan# 1841
Delta R.T. -0.145 min
Lab File: 5B319.D
Acq: 10 Mar 2010 3:06 pm

Tgt Ion: 53 Resp: 3001
Ion Ratio Lower Upper
53 100
88 0.0 67.1 127.1#
77 313.4 1.8 61.8#

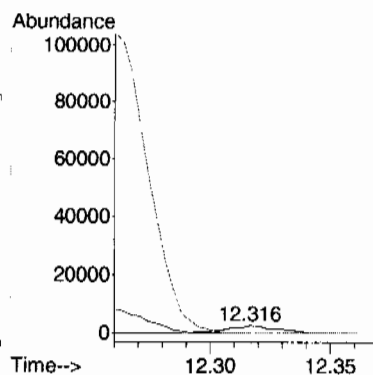
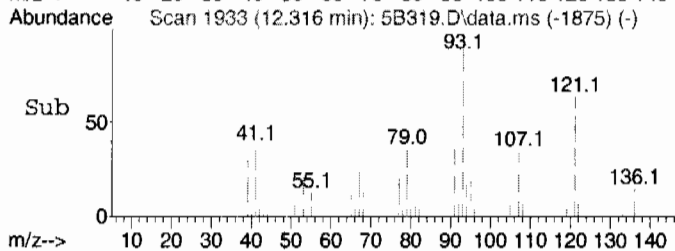




#109 BEFORE analyst DELETION
 trans-1,4-Dichloro-2-butene
 Concen: 3.91 ug/L
 RT: 12.316 min Scan# 1933
 Delta R.T. -0.096 min
 Lab File: 5B319.D
 Acq: 10 Mar 2010 3:06 pm



Tgt Ion: 53 Resp: 3717
 Ion Ratio Lower Upper
 53 100
 88 0.0 15.5 75.5#
 75 0.0 92.0 152.0#



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\

Data File : 5B319.D

Acq On : 10 Mar 2010 3:06 pm

Operator : CDS1

Sample : |248370020|963122|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 19 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B319.D
Acq On : 10 Mar 2010 3:06 pm
Operator : CDS1
Sample : |248370020|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 19 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370001

Client ID: RE36-10-7415
Batch ID: 963122
Run Date: 03/11/2010 02:08
Prep Date: 03/10/2010 08:53
Data File: 031010V55B344.D

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HU	1.71	ug/kg	0.582	1.71
74-87-3	Chloromethane	HU	1.71	ug/kg	0.514	1.71
75-01-4	Vinyl chloride	HU	1.71	ug/kg	0.514	1.71
74-83-9	Bromomethane	HU	1.71	ug/kg	0.514	1.71
75-00-3	Chloroethane	HU	1.71	ug/kg	0.514	1.71
75-69-4	Trichlorofluoromethane	HU	1.71	ug/kg	0.514	1.71
67-64-1	Acetone	H	9.15	ug/kg	2.84	8.57
75-35-4	1,1-Dichloroethylene	HU	1.71	ug/kg	0.514	1.71
74-88-4	Iodomethane	HU	8.57	ug/kg	2.74	8.57
75-09-2	Methylene chloride	HU	8.57	ug/kg	3.43	8.57
75-15-0	Carbon disulfide	HU	8.57	ug/kg	2.14	8.57
156-60-5	trans-1,2-Dichloroethylene	HU	1.71	ug/kg	0.514	1.71
75-34-3	1,1-Dichloroethane	HU	1.71	ug/kg	0.514	1.71
78-93-3	2-Butanone	HU	8.57	ug/kg	2.57	8.57
156-59-2	cis-1,2-Dichloroethylene	HU	1.71	ug/kg	0.514	1.71
594-20-7	2,2-Dichloropropane	HU	1.71	ug/kg	0.514	1.71
67-66-3	Chloroform	HU	1.71	ug/kg	0.514	1.71
74-97-5	Bromochloromethane	HU	1.71	ug/kg	0.565	1.71
71-55-6	1,1,1-Trichloroethane	HU	1.71	ug/kg	0.514	1.71
563-58-6	1,1-Dichloropropene	HU	1.71	ug/kg	0.514	1.71
56-23-5	Carbon tetrachloride	HU	1.71	ug/kg	0.514	1.71
107-06-2	1,2-Dichloroethane	HU	1.71	ug/kg	0.514	1.71
71-43-2	Benzene	HU	1.71	ug/kg	0.514	1.71
79-01-6	Trichloroethylene	HU	1.71	ug/kg	0.565	1.71
78-87-5	1,2-Dichloropropane	HU	1.71	ug/kg	0.514	1.71
75-27-4	Bromodichloromethane	HU	1.71	ug/kg	0.514	1.71
74-95-3	Dibromomethane	HU	1.71	ug/kg	0.514	1.71
108-10-1	4-Methyl-2-pentanone	HU	8.57	ug/kg	2.14	8.57
10061-01-5	cis-1,3-Dichloropropylene	HU	1.71	ug/kg	0.514	1.71
108-88-3	Toluene	H	3.51	ug/kg	0.514	1.71
10061-02-6	trans-1,3-Dichloropropylene	HU	1.71	ug/kg	0.514	1.71
79-00-5	1,1,2-Trichloroethane	HU	1.71	ug/kg	0.514	1.71
591-78-6	2-Hexanone	HU	8.57	ug/kg	2.57	8.57
142-28-9	1,3-Dichloropropane	HU	1.71	ug/kg	0.514	1.71
127-18-4	Tetrachloroethylene	HU	1.71	ug/kg	0.514	1.71
124-48-1	Dibromochloromethane	HU	1.71	ug/kg	0.514	1.71
106-93-4	1,2-Dibromoethane	HU	1.71	ug/kg	0.514	1.71
108-90-7	Chlorobenzene	HU	1.71	ug/kg	0.514	1.71

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8260B
Inst: VOA5.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE36-10-7415
Batch ID: 963122
Run Date: 03/11/2010 02:08
Prep Date: 03/10/2010 08:53
Data File: 031010V55B344.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.71	ug/kg	0.514	1.71
179601-23-1	m,p-Xylenes	HU	3.43	ug/kg	0.514	3.43
95-47-6	o-Xylene	HU	1.71	ug/kg	0.514	1.71
100-42-5	Styrene	HU	1.71	ug/kg	0.514	1.71
75-25-2	Bromoform	HU	1.71	ug/kg	0.514	1.71
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.71	ug/kg	0.514	1.71
96-18-4	1,2,3-Trichloropropane	HU	1.71	ug/kg	0.514	1.71
108-86-1	Bromobenzene	HU	1.71	ug/kg	0.514	1.71
103-65-1	n-Propylbenzene	HU	1.71	ug/kg	0.514	1.71
95-49-8	2-Chlorotoluene	HU	1.71	ug/kg	0.514	1.71
98-82-8	Isopropylbenzene	HU	1.71	ug/kg	0.514	1.71
108-67-8	1,3,5-Trimethylbenzene	HU	1.71	ug/kg	0.514	1.71
106-43-4	4-Chlorotoluene	HU	1.71	ug/kg	0.514	1.71
98-06-6	tert-Butylbenzene	HU	1.71	ug/kg	0.514	1.71
95-63-6	1,2,4-Trimethylbenzene	HU	1.71	ug/kg	0.514	1.71
135-98-8	sec-Butylbenzene	HU	1.71	ug/kg	0.514	1.71
99-87-6	4-Isopropyltoluene	H	26.0	ug/kg	0.514	1.71
541-73-1	1,3-Dichlorobenzene	HU	1.71	ug/kg	0.514	1.71
106-46-7	1,4-Dichlorobenzene	HU	1.71	ug/kg	0.514	1.71
104-51-8	n-Butylbenzene	HU	1.71	ug/kg	0.514	1.71
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.71	ug/kg	0.514	1.71
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	8.57	ug/kg	2.74	8.57
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.71	ug/kg	0.514	1.71
95-50-1	1,2-Dichlorobenzene	HU	1.71	ug/kg	0.514	1.71

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99		ug/kg	0	J
	unknown hydrocarbon	12.95		ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B344.D
Acq On : 11 Mar 2010 2:08 am
Operator : CDS1
InstName : VOA5
Sample : |248370001|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Mar 11 07:59:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1125472	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	559098	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	131849	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1125472	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	559098	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	131849	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	206790	37.96	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	75.92%			
43) Toluene-d8	9.721	9.721	0.872	98	774618	54.17	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	108.34%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	220759	83.47	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	166.94%#			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	647	Below Cal		87
4) Vinyl chloride	5.031	5.041	0.600	62	158	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.876	5.866	0.701	59	603	N.D.		
9) Acetone	6.174	6.174	0.736	43	17972	5.34	ug/L	93
10) 1,1-Dichloroethylene	6.258	6.156	0.746	61	380	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	1161	N.D.		
13) Methyl acetate	6.354	6.365	0.758	43	487	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	1746	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	6756	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.796	6.969	0.810	43	736	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.454	7.450	0.889	43	2468	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.928	7.924	0.945	56	731	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.211	8.203	0.979	78	267	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	6568	Below Cal	#	32
34) Trichloroethylene	8.677	8.677	1.035	95	742	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B344.D
Acq On : 11 Mar 2010 2:08 am
Operator : CDS1
InstName : VOA5
Sample : |248370001|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Mar 11 07:59:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	24631	2.05 ug/L	93
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.279	10.279	0.923	43	356	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.170	11.174	1.003	112	223	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.181	11.181	1.003	91	3612	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0m	N.D. d	
56) o-Xylene	11.697	11.701	1.050	106	1134	N.D.	
57) Styrene	11.712	11.715	1.051	104	141	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	0.000	12.415	0.000		0m	N.D. d	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0m	N.D. d	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	12.698	0.000		0m	N.D. d	
69) tert-Butylbenzene	0.000	12.900	0.000		0m	N.D. d	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D. d	
71) sec-Butylbenzene	13.052	13.119	0.973	105	375	N.D.	
72) 4-Isopropyltoluene	13.232	13.229	0.987	119	80517	15.15 ug/L	98
73) 1,3-Dichlorobenzene	13.342	13.349	0.995	146	134	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0m	N.D. d	
75) n-Butylbenzene	13.657	13.653	1.018	91	1191	N.D.	
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	332	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0m	N.D. d	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	0.000	15.988	0.000		0m	N.D. d	
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	395	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.167	6.163	0.735	45	157	N.D.	
88) Allyl chloride	6.446	6.425	0.769	41	417	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.454	7.383	0.889	43	2468	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B344.D
Acq On : 11 Mar 2010 2:08 am
Operator : CDS1
InstName : VOA5
Sample : |248370001|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Mar 11 07:59:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

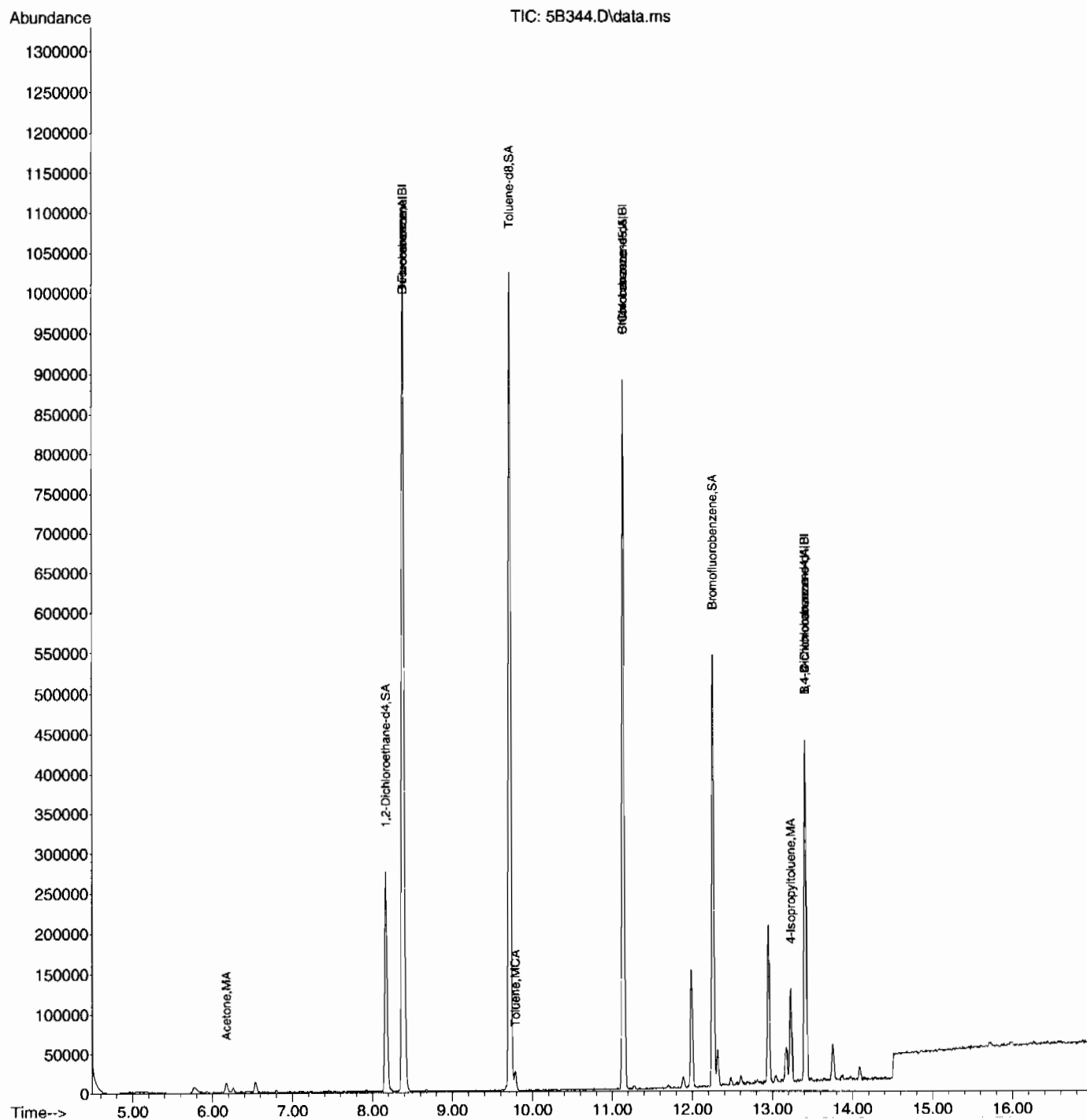
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.708	7.680	0.919	41	107	N.D.	
97) Tetrahydrofuran	7.715	7.716	0.920	42	169	N.D.	
98) Isobutyl alcohol	7.924	7.857	0.945	41	569	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	562	N.D.	
112) bis(2-Chloroisopropyl)...	13.904	13.929	1.037	45	121	N.D.	

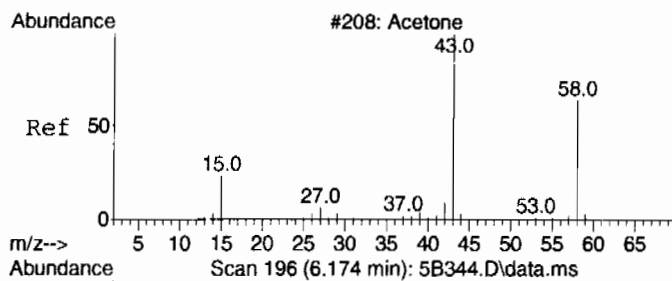
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B344.D
Acq On : 11 Mar 2010 2:08 am
Operator : CDS1
InstName : VOA5
Sample : |248370001|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 44 Sample Multiplier: 1

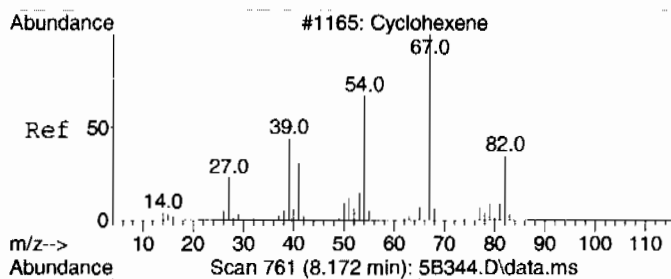
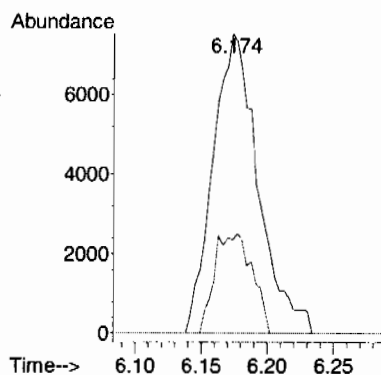
Quant Time: Mar 11 07:59:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





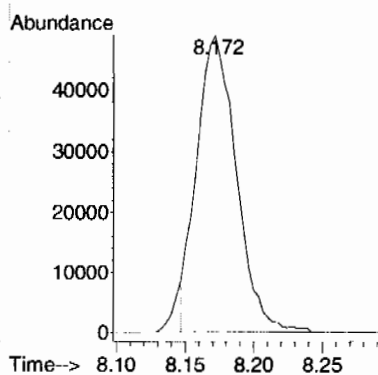
#9
Acetone
Concen: 5.34 ug/L
RT: 6.174 min Scan# 196
Delta R.T. -0.000 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

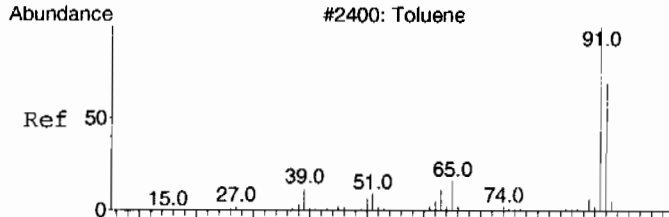
Tgt Ion	Ratio	Lower	Upper
43	100		
58	27.9	1.9	61.9



#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.09 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

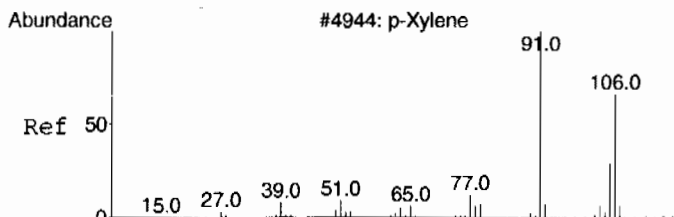
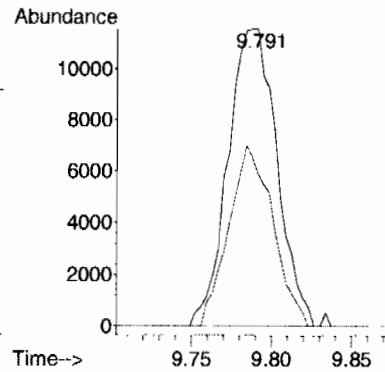
Tgt Ion	Ratio	Lower	Upper
67	100		
54	0.0	46.3	106.3





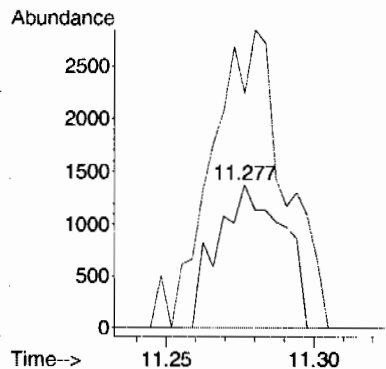
#44
Toluene
Concen: 2.05 ug/L
RT: 9.791 min Scan# 1219
Delta R.T. 0.003 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

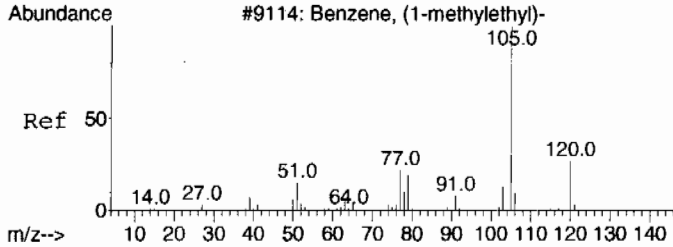
Tgt Ion: 91 Resp: 24631
Ion Ratio Lower Upper
91 100
92 54.6 29.5 89.5



#55 BEFORE analyst DELETION
m,p-Xylenes
Concen: 0.41 ug/L
RT: 11.277 min Scan# 1639
Delta R.T. -0.003 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

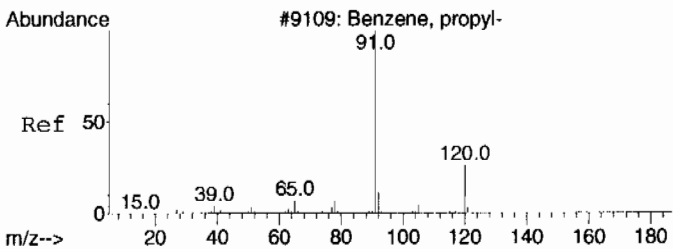
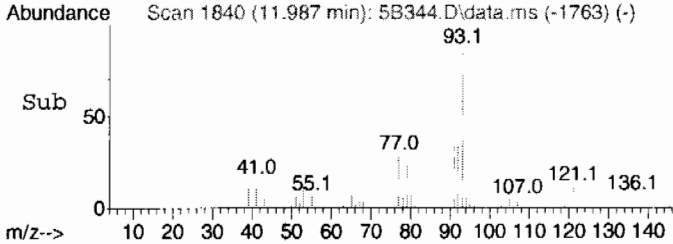
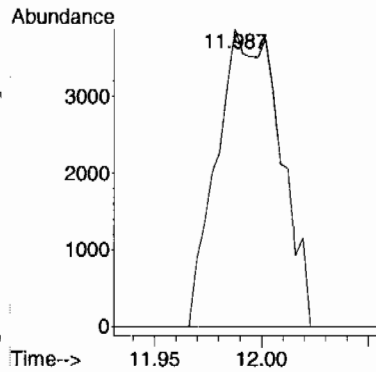
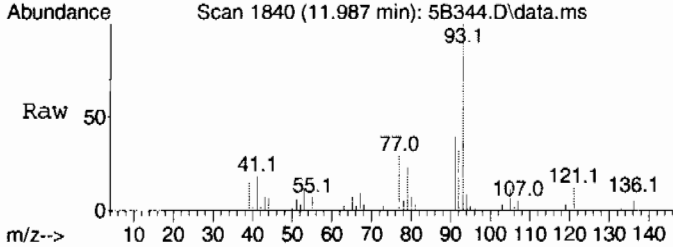
Tgt Ion: 106 Resp: 2124
Ion Ratio Lower Upper
106 100
91 230.5 168.5 228.5#





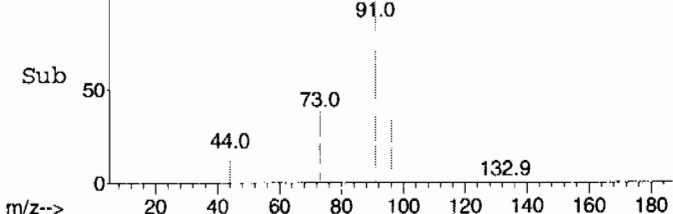
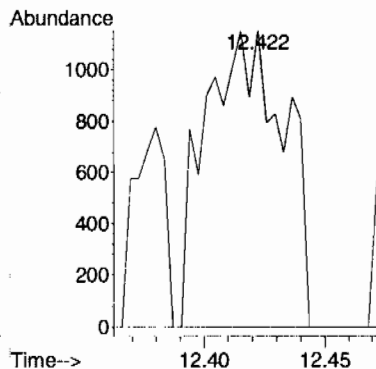
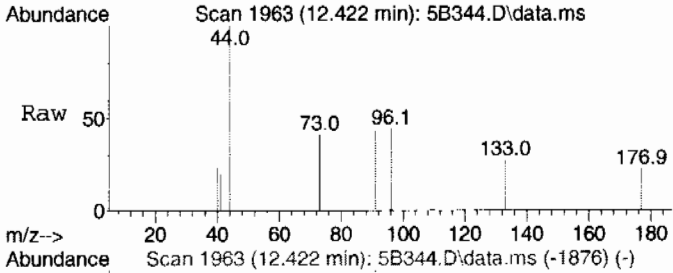
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 1.30 ug/L
RT: 11.987 min Scan# 1840
Delta R.T. -0.029 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

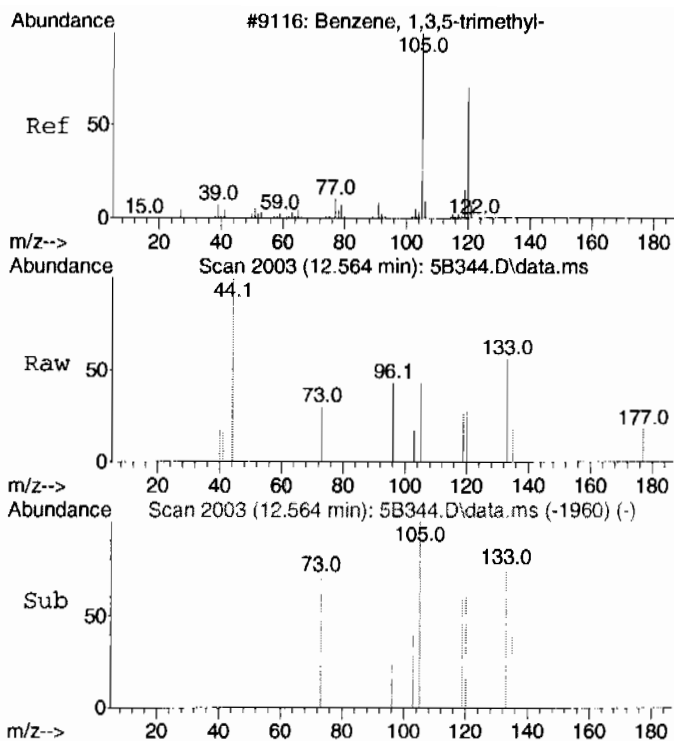
Tgt Ion	Ratio	Lower	Upper
105	100		
120	0.0	0.0	57.3



#65 BEFORE analyst DELETION
n-Propylbenzene
Concen: 0.36 ug/L
RT: 12.422 min Scan# 1963
Delta R.T. 0.007 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

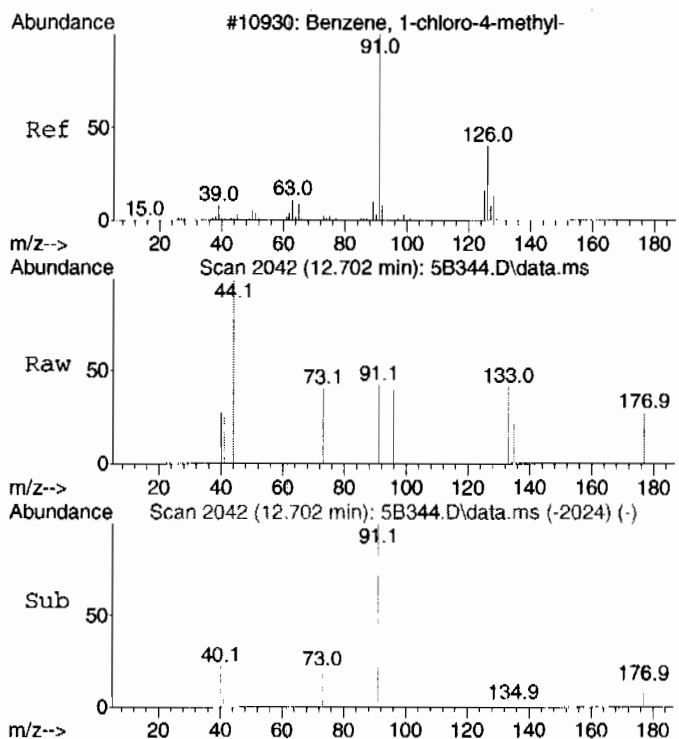
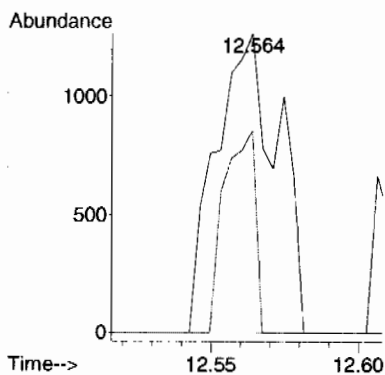
Tgt Ion	Ratio	Lower	Upper
91	100		
120	0.0	0.0	54.1





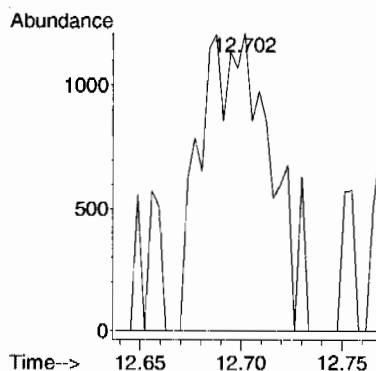
#66 BEFORE analyst DELETION
1,3,5-Trimethylbenzene
Concen: 0.36 ug/L
RT: 12.564 min Scan# 2003
Delta R.T. -0.000 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

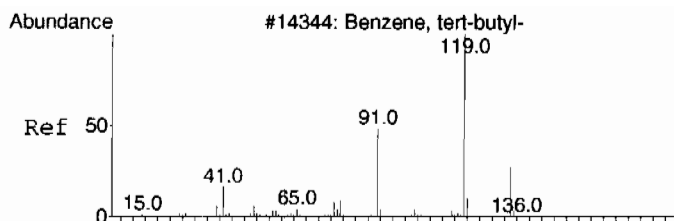
Tgt Ion: 105 Resp: 1856
Ion Ratio Lower Upper
105 100
120 33.9 20.0 80.0



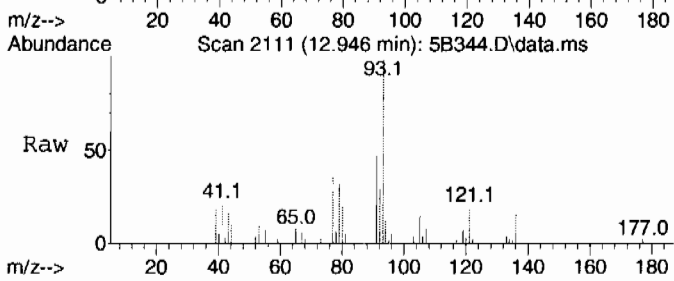
#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.63 ug/L
RT: 12.702 min Scan# 2042
Delta R.T. 0.004 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

Tgt Ion: 91 Resp: 2937
Ion Ratio Lower Upper
91 100
126 0.0 3.6 63.6#

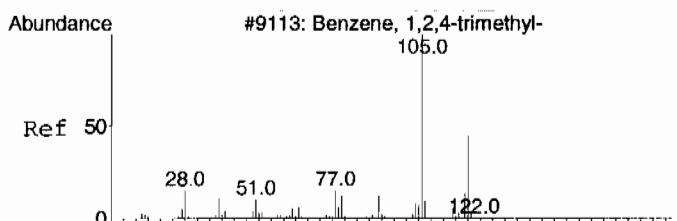
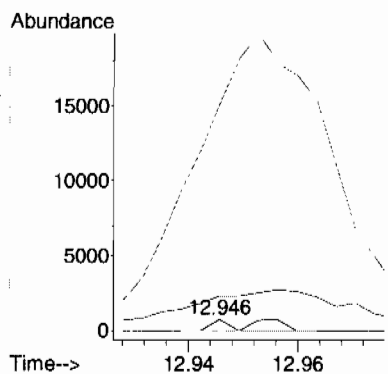
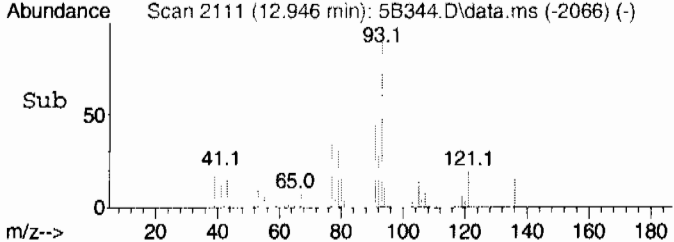




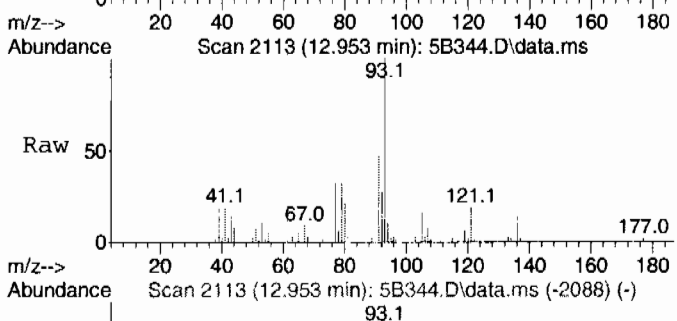
#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 0.40 ug/L
RT: 12.946 min Scan# 2111
Delta R.T. 0.046 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am



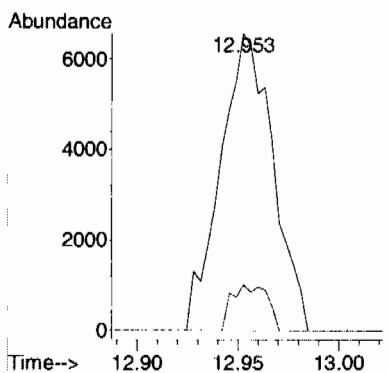
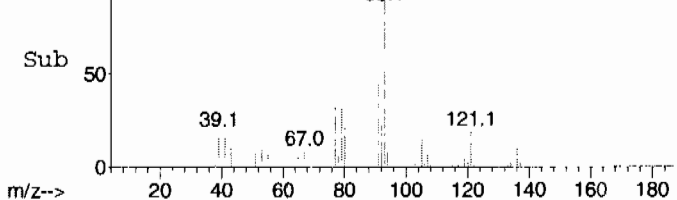
Tgt Ion:134 Resp: 471
Ion Ratio Lower Upper
134 100
119 1404.0 361.0 421.0#
91 7601.5 228.5 288.5#

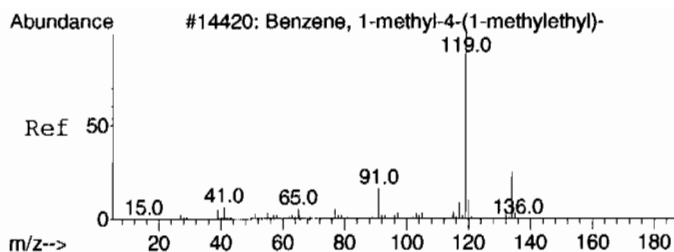


#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 2.25 ug/L
RT: 12.953 min Scan# 2113
Delta R.T. -0.003 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am



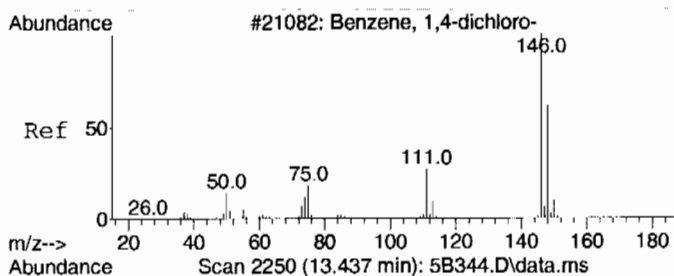
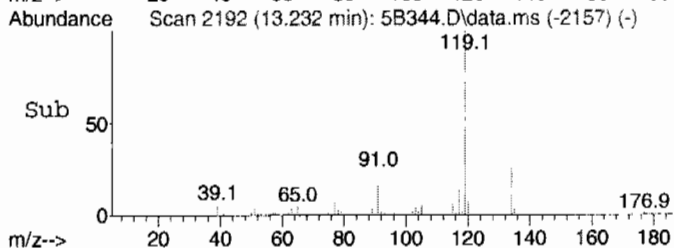
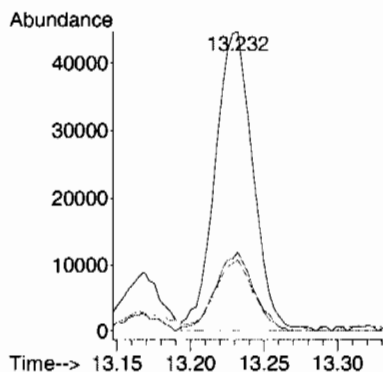
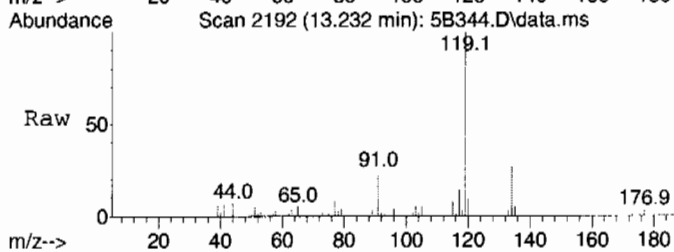
Tgt Ion:105 Resp: 11822
Ion Ratio Lower Upper
105 100
120 10.3 17.4 77.4#





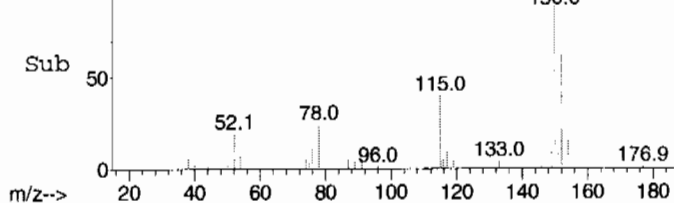
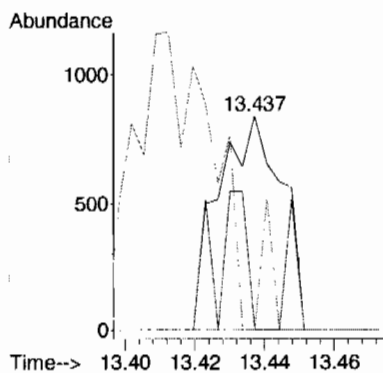
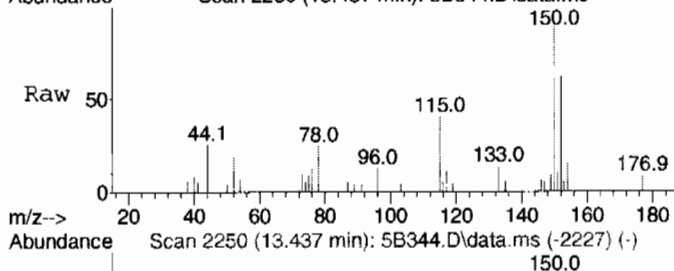
#72
4-Isopropyltoluene
Concen: 15.15 ug/L
RT: 13.232 min Scan# 2192
Delta R.T. 0.003 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

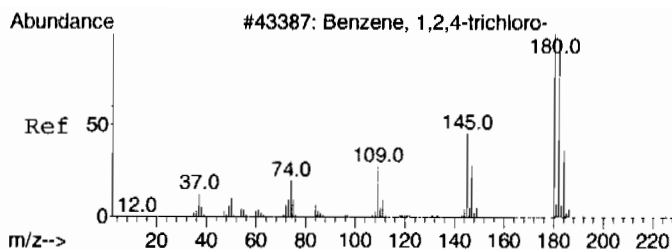
Tgt Ion	Ratio	Lower	Upper
119	100		
134	27.1	0.0	57.2
91	24.5	0.0	53.0



#74 BEFORE analyst DELETION
1,4-Dichlorobenzene
Concen: 0.36 ug/L
RT: 13.437 min Scan# 2250
Delta R.T. -0.004 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

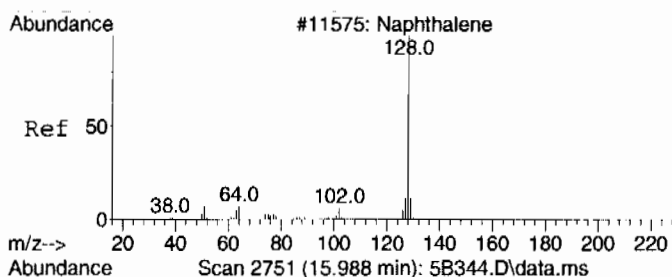
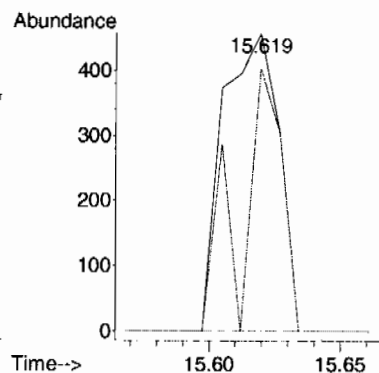
Tgt Ion	Ratio	Lower	Upper
146	100		
148	10.3	33.9	93.9#
111	10.3	10.6	70.6#





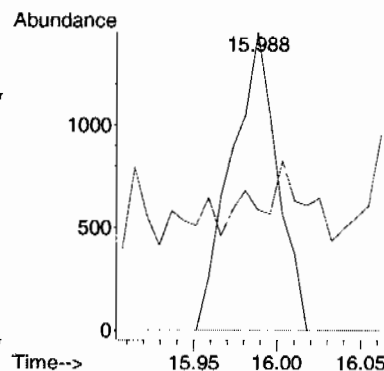
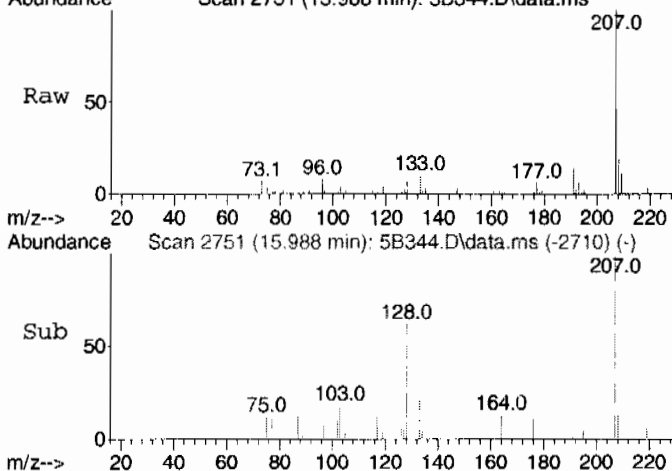
#78 BEFORE analyst DELETION
1,2,4-Trichlorobenzene
Concen: 0.36 ug/L
RT: 15.619 min Scan# 2701
Delta R.T. 0.000 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

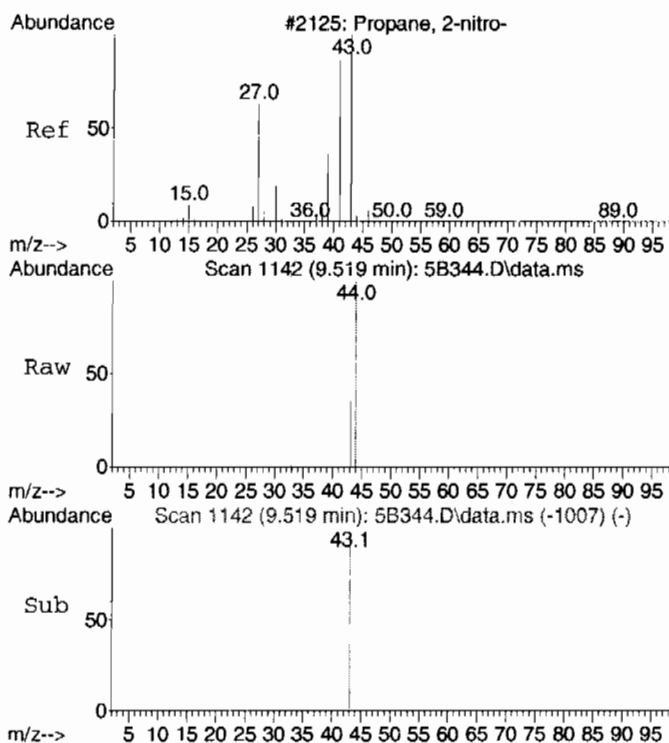
Tgt Ion:180 Resp: 678
Ion Ratio Lower Upper
180 100
182 65.0 65.6 125.6#



#80 BEFORE analyst DELETION
Naphthalene
Concen: 0.65 ug/L
RT: 15.988 min Scan# 2751
Delta R.T. 0.000 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

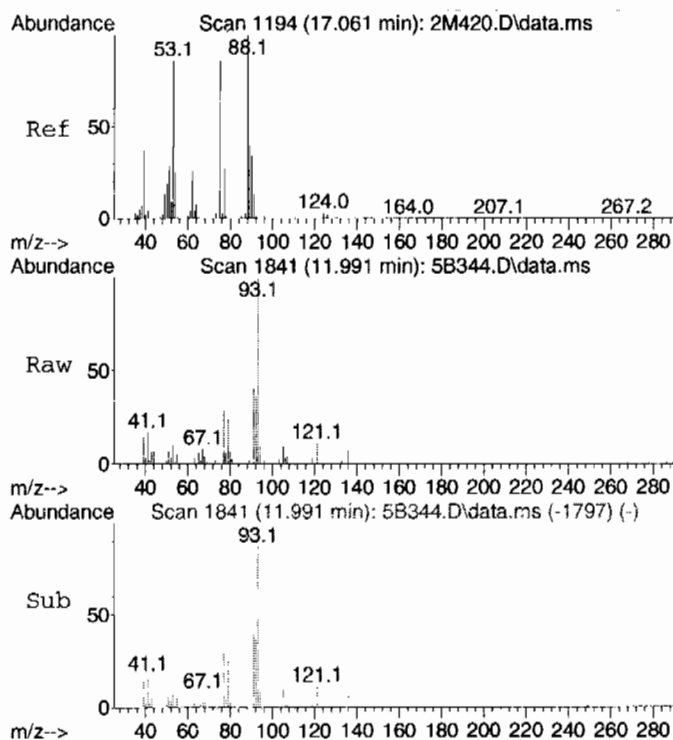
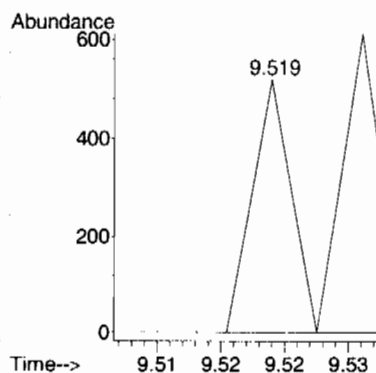
Tgt Ion:128 Resp: 2781
Ion Ratio Lower Upper
128 100
127 13.2 0.0 42.4
129 0.0 0.0 40.8





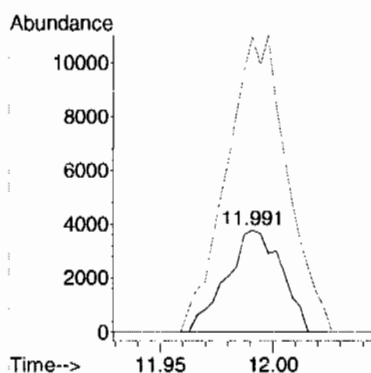
#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.97 ug/L
RT: 9.519 min Scan# 1142
Delta R.T. 0.177 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

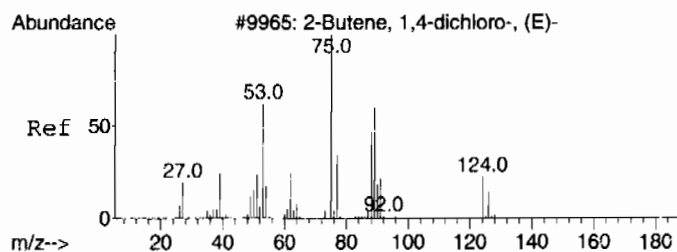
Tgt Ion	Ratio	Lower	Upper
43	100		
41	104.5	52.5	112.5



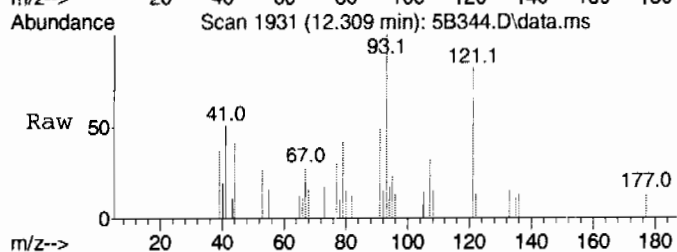
#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 12.93 ug/L
RT: 11.991 min Scan# 1841
Delta R.T. -0.145 min
Lab File: 5B344.D
Acq: 11 Mar 2010 2:08 am

Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	67.1	127.1#
77	321.6	1.8	61.8#

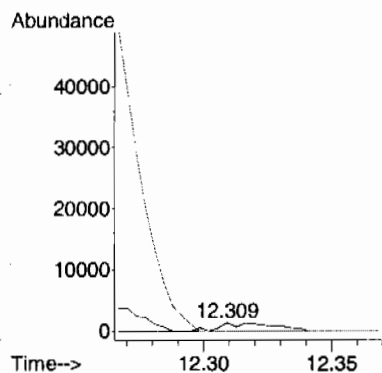
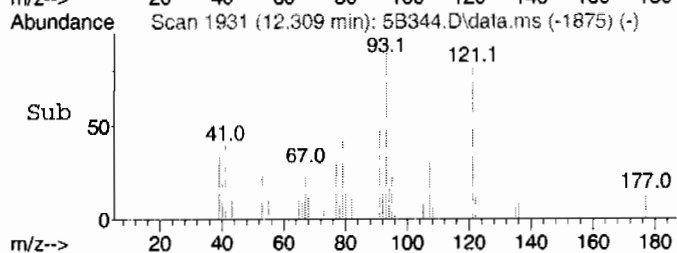




#109 BEFORE analyst DELETION
 trans-1,4-Dichloro-2-butene
 Concen: 4.33 ug/L
 RT: 12.309 min Scan# 1931
 Delta R.T. -0.103 min
 Lab File: 5B344.D
 Acq: 11 Mar 2010 2:08 am



Tgt Ion: 53 Resp: 2009
 Ion Ratio Lower Upper
 53 100
 88 406.9 15.5 75.5#
 75 4978.9 92.0 152.0#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B344.D
Acq On : 11 Mar 2010 2:08 am
Operator : CDS1
Sample : |248370001|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 44 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

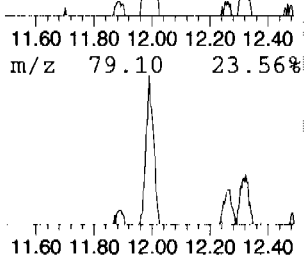
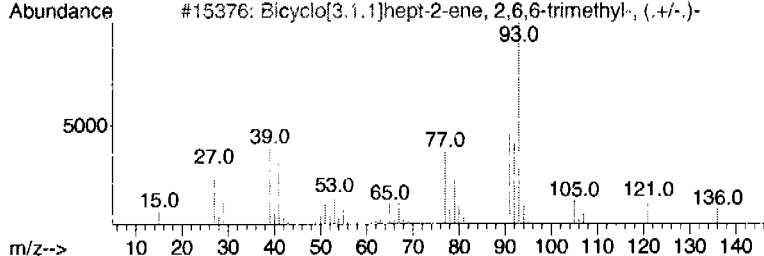
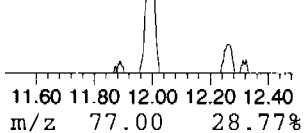
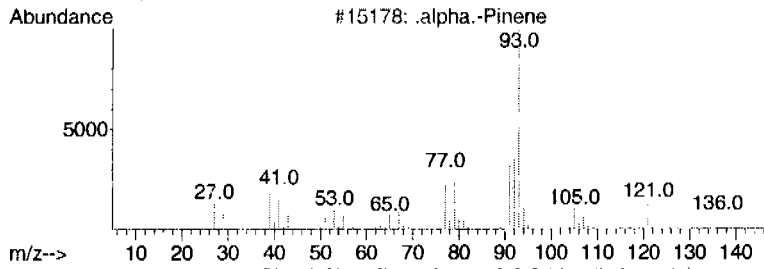
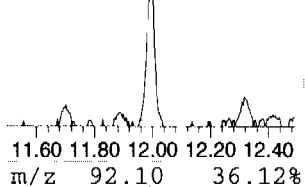
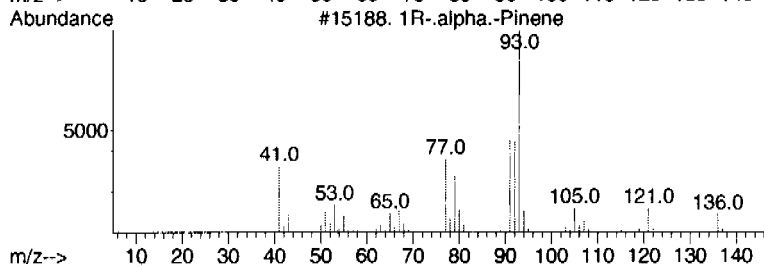
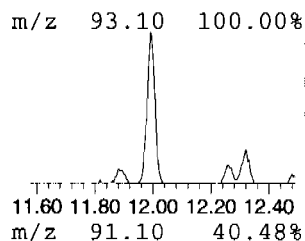
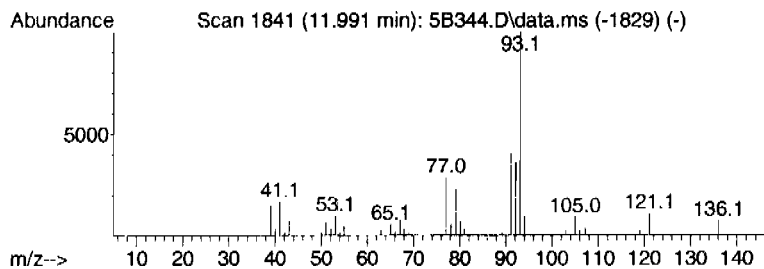
SubList :

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

Peak Number 1 unknown hydrocarbon Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.991	5.96 ug/L	204657	B Chlorobenzene-d5	11.142

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1R-.alpha.-Pinene	136	C10H16	007785-70-8	96
2	.alpha.-Pinene	136	C10H16	000080-56-8	95
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	94
5	1S-.alpha.-Pinene	136	C10H16	007785-26-4	91



Library Search Compound Report
GEL Laboratories, LLC

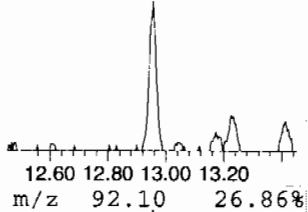
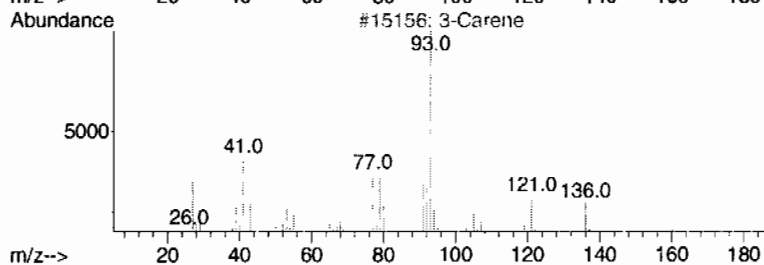
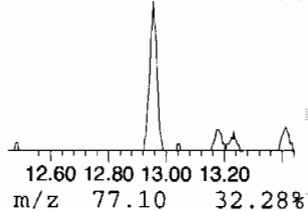
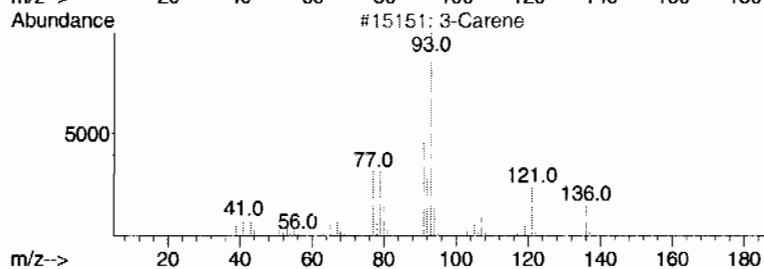
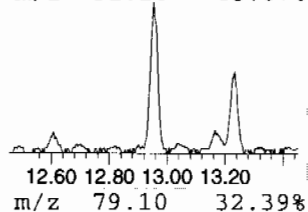
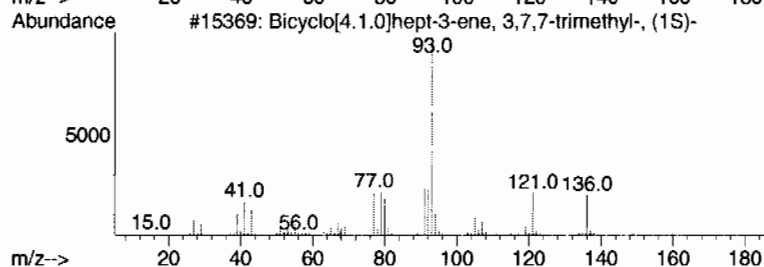
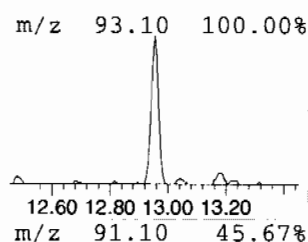
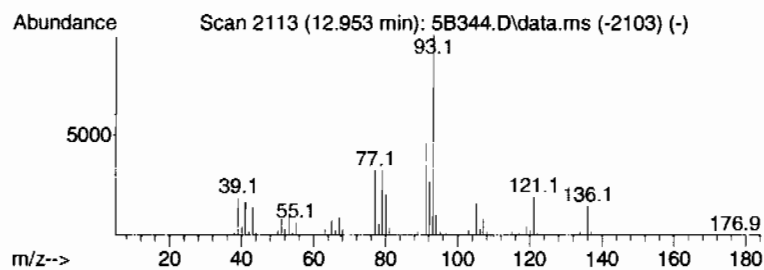
Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B344.D
Acq On : 11 Mar 2010 2:08 am
Operator : CDS1
Sample : |248370001|963122|1|VOA|1|VOA8260BS|
Misc : LANTL 5G - SOIL
ALS Vial : 44 Sample Multiplier: 1

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

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

Peak Number 2 unknown hydrocarbon Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.953	13.03 ug/L	206555	1,4-Dichlorobenzene-d4	13.413
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	3-Carene	136 C10H16	013466-78-9	94
4	4-Carene	136 C10H16	1000150-36-1	93
5	.alpha.-Phellandrene	136 C10H16	000099-83-2	92



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B344.D
Acq On : 11 Mar 2010 2:08 am
Operator : CDS1
Sample : |248370001|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 44 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	11.991	6.0	ug/L	204657	4	11.142	1717740	50.0
unknown hydroca...	12.953	13.0	ug/L	206555	5	13.413	792513	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370004	Date Received: 03/02/2010 08:50	%Moisture: 21
Client ID: RE36-10-7417	Client: LANL010	Project: LANL01004
Batch ID: 963122	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 03/11/2010 02:34	Inst: VOA5.1	Dilution: 1
Prep Date: 03/10/2010 08:54	Analyst: CDS1	Purge Vol: 5 mL
Data File: 031010V55B345.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	HU	1.27	ug/kg	0.430	1.27
74-87-3	Chloromethane	HU	1.27	ug/kg	0.380	1.27
75-01-4	Vinyl chloride	HU	1.27	ug/kg	0.380	1.27
74-83-9	Bromomethane	HU	1.27	ug/kg	0.380	1.27
75-00-3	Chloroethane	HU	1.27	ug/kg	0.380	1.27
75-69-4	Trichlorofluoromethane	HU	1.27	ug/kg	0.380	1.27
67-64-1	Acetone	HU	6.33	ug/kg	2.10	6.33
75-35-4	1,1-Dichloroethylene	HU	1.27	ug/kg	0.380	1.27
74-88-4	Iodomethane	HU	6.33	ug/kg	2.03	6.33
75-09-2	Methylene chloride	HU	6.33	ug/kg	2.53	6.33
75-15-0	Carbon disulfide	HU	6.33	ug/kg	1.58	6.33
156-60-5	trans-1,2-Dichloroethylene	HU	1.27	ug/kg	0.380	1.27
75-34-3	1,1-Dichloroethane	HU	1.27	ug/kg	0.380	1.27
78-93-3	2-Butanone	HU	6.33	ug/kg	1.90	6.33
156-59-2	cis-1,2-Dichloroethylene	HU	1.27	ug/kg	0.380	1.27
594-20-7	2,2-Dichloropropane	HU	1.27	ug/kg	0.380	1.27
67-66-3	Chloroform	HU	1.27	ug/kg	0.380	1.27
74-97-5	Bromochloromethane	HU	1.27	ug/kg	0.418	1.27
71-55-6	1,1,1-Trichloroethane	HU	1.27	ug/kg	0.380	1.27
563-58-6	1,1-Dichloropropene	HU	1.27	ug/kg	0.380	1.27
56-23-5	Carbon tetrachloride	HU	1.27	ug/kg	0.380	1.27
107-06-2	1,2-Dichloroethane	HU	1.27	ug/kg	0.380	1.27
71-43-2	Benzene	HU	1.27	ug/kg	0.380	1.27
79-01-6	Trichloroethylene	HU	1.27	ug/kg	0.418	1.27
78-87-5	1,2-Dichloropropane	HU	1.27	ug/kg	0.380	1.27
75-27-4	Bromodichloromethane	HU	1.27	ug/kg	0.380	1.27
74-95-3	Dibromomethane	HU	1.27	ug/kg	0.380	1.27
108-10-1	4-Methyl-2-pentanone	HU	6.33	ug/kg	1.58	6.33
10061-01-5	cis-1,3-Dichloropropylene	HU	1.27	ug/kg	0.380	1.27
108-88-3	Toluene	HU	1.27	ug/kg	0.380	1.27
10061-02-6	trans-1,3-Dichloropropylene	HU	1.27	ug/kg	0.380	1.27
79-00-5	1,1,2-Trichloroethane	HU	1.27	ug/kg	0.380	1.27
591-78-6	2-Hexanone	HU	6.33	ug/kg	1.90	6.33
142-28-9	1,3-Dichloropropane	HU	1.27	ug/kg	0.380	1.27
127-18-4	Tetrachloroethylene	HU	1.27	ug/kg	0.380	1.27
124-48-1	Dibromochloromethane	HU	1.27	ug/kg	0.380	1.27
106-93-4	1,2-Dibromoethane	HU	1.27	ug/kg	0.380	1.27
108-90-7	Chlorobenzene	HU	1.27	ug/kg	0.380	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370004

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE36-10-7417
 Batch ID: 963122
 Run Date: 03/11/2010 02:34
 Prep Date: 03/10/2010 08:54
 Data File: 031010V5\5B345.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HU	1.27	ug/kg	0.380	1.27
179601-23-1	m,p-Xylenes	HU	2.53	ug/kg	0.380	2.53
95-47-6	o-Xylene	HU	1.27	ug/kg	0.380	1.27
100-42-5	Styrene	HU	1.27	ug/kg	0.380	1.27
75-25-2	Bromoform	HU	1.27	ug/kg	0.380	1.27
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.27	ug/kg	0.380	1.27
96-18-4	1,2,3-Trichloropropane	HU	1.27	ug/kg	0.380	1.27
108-86-1	Bromobenzene	HU	1.27	ug/kg	0.380	1.27
103-65-1	n-Propylbenzene	HU	1.27	ug/kg	0.380	1.27
95-49-8	2-Chlorotoluene	HU	1.27	ug/kg	0.380	1.27
98-82-8	Isopropylbenzene	HU	1.27	ug/kg	0.380	1.27
108-67-8	1,3,5-Trimethylbenzene	HU	1.27	ug/kg	0.380	1.27
106-43-4	4-Chlorotoluene	HU	1.27	ug/kg	0.380	1.27
98-06-6	tert-Butylbenzene	HU	1.27	ug/kg	0.380	1.27
95-63-6	1,2,4-Trimethylbenzene	HU	1.27	ug/kg	0.380	1.27
135-98-8	sec-Butylbenzene	HU	1.27	ug/kg	0.380	1.27
99-87-6	4-Isopropyltoluene	HJ	1.01	ug/kg	0.380	1.27
541-73-1	1,3-Dichlorobenzene	HU	1.27	ug/kg	0.380	1.27
106-46-7	1,4-Dichlorobenzene	HU	1.27	ug/kg	0.380	1.27
104-51-8	n-Butylbenzene	HU	1.27	ug/kg	0.380	1.27
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.27	ug/kg	0.380	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	6.33	ug/kg	2.03	6.33
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.27	ug/kg	0.380	1.27
95-50-1	1,2-Dichlorobenzene	HU	1.27	ug/kg	0.380	1.27

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\031010V5\
Data File : 5B345.D
Acq On : 11 Mar 2010 2:34 am
Operator : CDS1
InstName : VOA5
Sample : |248370004|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Mar 11 08:01:28 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1405834	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1000558	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	441202	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1405834	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1000558	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	441202	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.973	65	248096	36.46	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	72.92%		
43) Toluene-d8	9.721	9.721	0.872	98	1090766	42.63	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	85.26%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	546936	61.80	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	123.60%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.920	4.900	0.586	50	486	Below Cal		97
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.174	6.174	0.736	43	2550	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.770	41	745	N.D.		
13) Methyl acetate	6.357	6.365	0.758	43	109	N.D.		
14) Carbon disulfide	6.435	6.435	0.767	76	387	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	3905	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	0.000	6.969	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.454	7.450	0.888	43	113	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.976	78	143	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.380	8.377	0.999	56	7688	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B345.D
Acq On : 11 Mar 2010 2:34 am
Operator : CDS1
InstName : VOA5
Sample : |248370004|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Mar 11 08:01:28 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	1119	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.142	11.181	1.000	91	3850	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.708	11.715	1.051	104	107	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.023	12.016	0.896	105	110	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.422	12.415	0.926	91	907	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	1869	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966	105	673	N.D.	
71) sec-Butylbenzene	13.112	13.119	0.978	105	393	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	14234	0.80 ug/L	92
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	293	N.D.	
75) n-Butylbenzene	13.664	13.653	1.019	91	1909	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	399	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	3569	N.D.	
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	114	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.464	6.425	0.770	41	745	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.454	7.383	0.888	43	113	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B345.D
Acq On : 11 Mar 2010 2:34 am
Operator : CDS1
InstName : VOA5
Sample : |248370004|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Mar 11 08:01:28 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

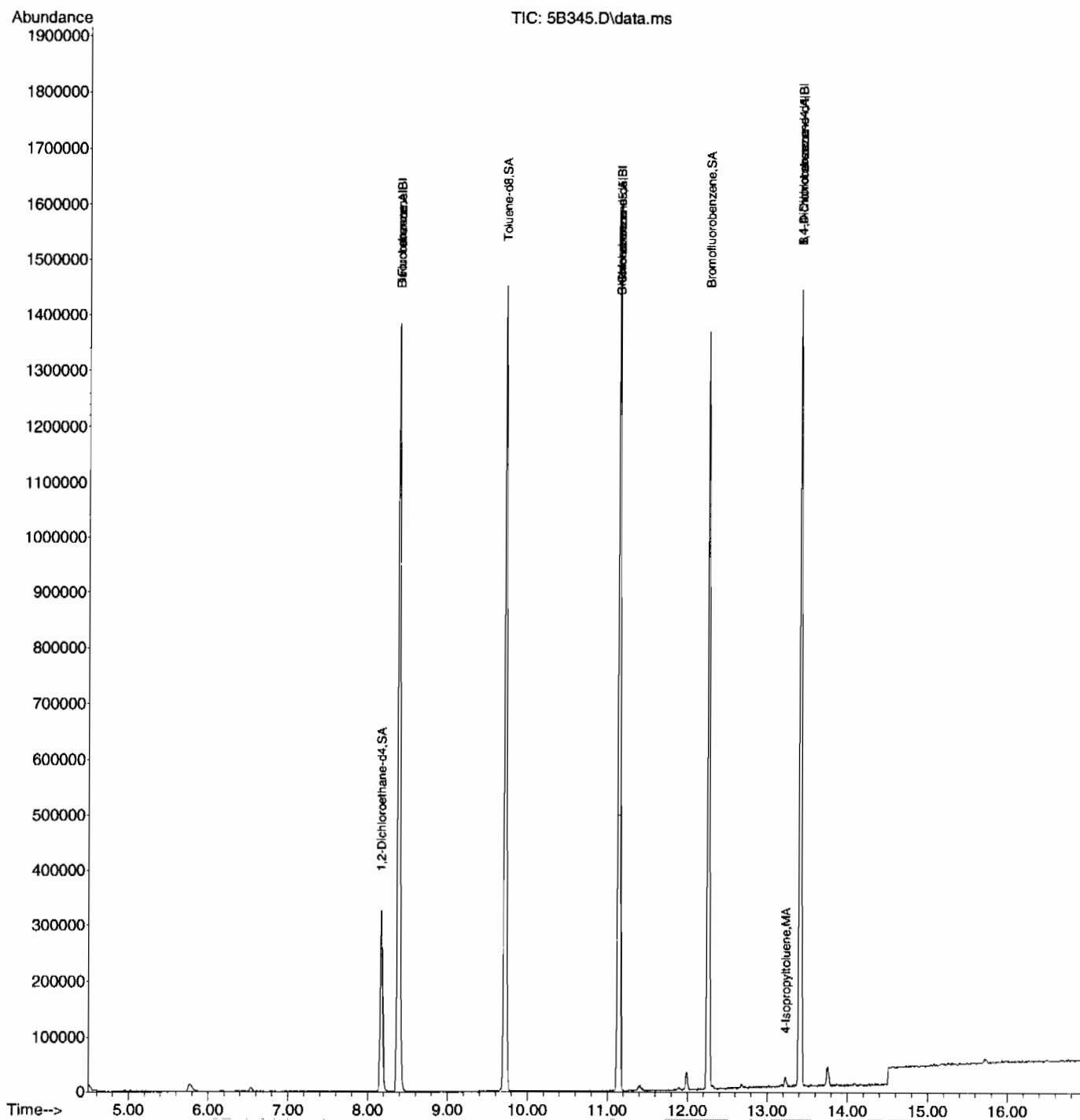
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.715	7.680	0.920	41	121	N.D.	
97) Tetrahydrofuran	7.701	7.716	0.918	42	121	N.D.	
98) Isobutyl alcohol	7.715	7.857	0.920	41	121	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	11.994	12.136	0.894	53	1141	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.558	13.565	1.011	91	731	N.D.	
112) bis(2-Chloroisopropyl)...	13.911	13.929	1.037	45	107	N.D.	

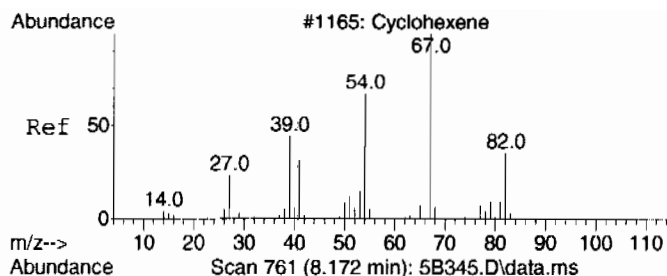
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B345.D
Acq On : 11 Mar 2010 2:34 am
Operator : CDS1
InstName : VOA5
Sample : |248370004|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

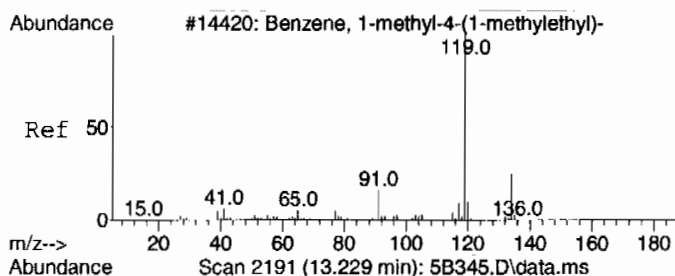
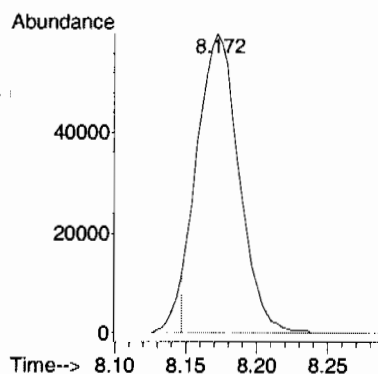
Quant Time: Mar 11 08:01:28 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





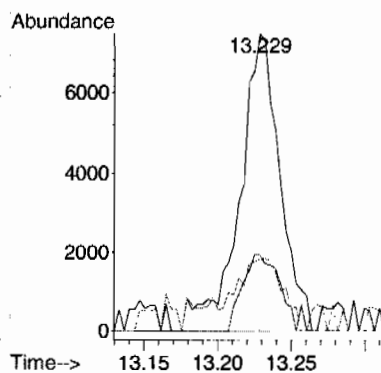
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 12.94 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B345.D
Acq: 11 Mar 2010 2:34 am

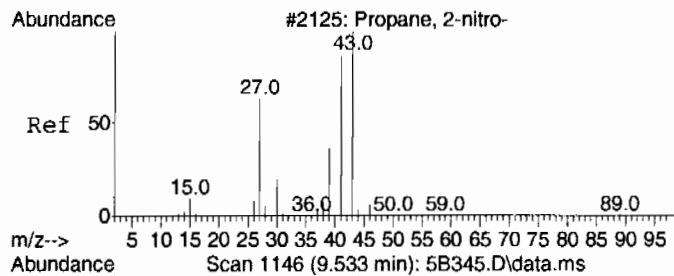
Tgt Ion: 67 Resp: 122387
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#72
4-Isopropyltoluene
Concen: 0.80 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5B345.D
Acq: 11 Mar 2010 2:34 am

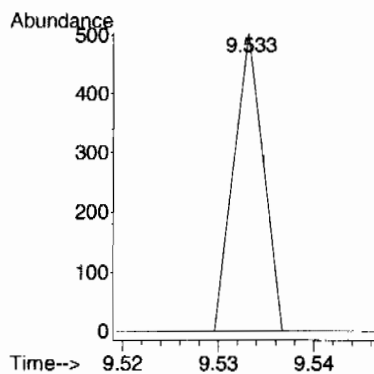
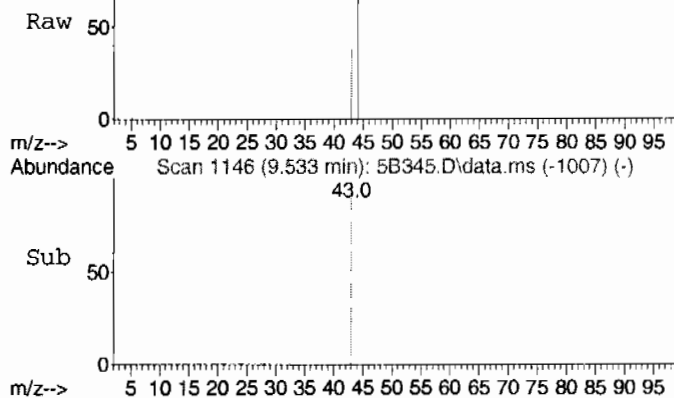
Tgt Ion: 119 Resp: 14234
Ion Ratio Lower Upper
119 100
134 24.4 0.0 57.2
91 27.9 0.0 53.0





#102 BEFORE analyst DELETION
 2-Nitropropane
 Concen: 6.96 ug/L
 RT: 9.533 min Scan# 1146
 Delta R.T. 0.191 min
 Lab File: 5B345.D
 Acq: 11 Mar 2010 2:34 am

Tgt Ion: 43 Resp: 107
 Ion Ratio Lower Upper
 43 100
 41 112.1 52.5 112.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B345.D
Acq On : 11 Mar 2010 2:34 am
Operator : CDS1
Sample : |248370004|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B345.D
Acq On : 11 Mar 2010 2:34 am
Operator : CDS1
Sample : |248370004|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 45 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOAS.I
 Analyst: CDS1
 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: RE36-10-7416
 Batch ID: 963122
 Run Date: 03/11/2010 03:01
 Prep Date: 03/10/2010 08:55
 Data File: 031010V55B346.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HU	1.13	ug/kg	0.383	1.13
74-87-3	Chloromethane	HU	1.13	ug/kg	0.338	1.13
75-01-4	Vinyl chloride	HU	1.13	ug/kg	0.338	1.13
74-83-9	Bromomethane	HU	1.13	ug/kg	0.338	1.13
75-00-3	Chloroethane	HU	1.13	ug/kg	0.338	1.13
75-69-4	Trichlorofluoromethane	HU	1.13	ug/kg	0.338	1.13
67-64-1	Acetone	HU	5.64	ug/kg	1.87	5.64
75-35-4	1,1-Dichloroethylene	HU	1.13	ug/kg	0.338	1.13
74-88-4	Iodomethane	HU	5.64	ug/kg	1.80	5.64
75-09-2	Methylene chloride	HU	5.64	ug/kg	2.25	5.64
75-15-0	Carbon disulfide	HU	5.64	ug/kg	1.41	5.64
156-60-5	trans-1,2-Dichloroethylene	HU	1.13	ug/kg	0.338	1.13
75-34-3	1,1-Dichloroethane	HU	1.13	ug/kg	0.338	1.13
78-93-3	2-Butanone	HU	5.64	ug/kg	1.69	5.64
156-59-2	cis-1,2-Dichloroethylene	HU	1.13	ug/kg	0.338	1.13
594-20-7	2,2-Dichloropropane	HU	1.13	ug/kg	0.338	1.13
67-66-3	Chloroform	HU	1.13	ug/kg	0.338	1.13
74-97-5	Bromochloromethane	HU	1.13	ug/kg	0.372	1.13
71-55-6	1,1,1-Trichloroethane	HU	1.13	ug/kg	0.338	1.13
563-58-6	1,1-Dichloropropene	HU	1.13	ug/kg	0.338	1.13
56-23-5	Carbon tetrachloride	HU	1.13	ug/kg	0.338	1.13
107-06-2	1,2-Dichloroethane	HU	1.13	ug/kg	0.338	1.13
71-43-2	Benzene	HU	1.13	ug/kg	0.338	1.13
79-01-6	Trichloroethylen	HU	1.13	ug/kg	0.372	1.13
78-87-5	1,2-Dichloropropane	HU	1.13	ug/kg	0.338	1.13
75-27-4	Bromodichloromethane	HU	1.13	ug/kg	0.338	1.13
74-95-3	Dibromomethane	HU	1.13	ug/kg	0.338	1.13
108-10-1	4-Methyl-2-pentanone	HU	5.64	ug/kg	1.41	5.64
10061-01-5	cis-1,3-Dichloropropylene	HU	1.13	ug/kg	0.338	1.13
108-88-3	Toluene	HU	1.13	ug/kg	0.338	1.13
10061-02-6	trans-1,3-Dichloropropylene	HU	1.13	ug/kg	0.338	1.13
79-00-5	1,1,2-Trichloroethane	HU	1.13	ug/kg	0.338	1.13
591-78-6	2-Hexanone	HU	5.64	ug/kg	1.69	5.64
142-28-9	1,3-Dichloropropane	HU	1.13	ug/kg	0.338	1.13
127-18-4	Tetrachloroethylene	HU	1.13	ug/kg	0.338	1.13
124-48-1	Dibromochloromethane	HU	1.13	ug/kg	0.338	1.13
106-93-4	1,2-Dibromoethane	HU	1.13	ug/kg	0.338	1.13
108-90-7	Chlorobenzene	HU	1.13	ug/kg	0.338	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370006
 Client ID: RE36-10-7416
 Batch ID: 963122
 Run Date: 03/11/2010 03:01
 Prep Date: 03/10/2010 08:55
 Data File: 031010V55B346.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.1
 Analyst: CDS1
 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	HU	1.13	ug/kg	0.338	1.13
179601-23-1	m,p-Xylenes	HU	2.25	ug/kg	0.338	2.25
95-47-6	o-Xylene	HU	1.13	ug/kg	0.338	1.13
100-42-5	Styrene	HU	1.13	ug/kg	0.338	1.13
75-25-2	Bromoform	HU	1.13	ug/kg	0.338	1.13
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.13	ug/kg	0.338	1.13
96-18-4	1,2,3-Trichloropropane	HU	1.13	ug/kg	0.338	1.13
108-86-1	Bromobenzene	HU	1.13	ug/kg	0.338	1.13
103-65-1	n-Propylbenzene	HU	1.13	ug/kg	0.338	1.13
95-49-8	2-Chlorotoluene	HU	1.13	ug/kg	0.338	1.13
98-82-8	Isopropylbenzene	HU	1.13	ug/kg	0.338	1.13
108-67-8	1,3,5-Trimethylbenzene	HU	1.13	ug/kg	0.338	1.13
106-43-4	4-Chlorotoluene	HU	1.13	ug/kg	0.338	1.13
98-06-6	tert-Butylbenzene	HU	1.13	ug/kg	0.338	1.13
95-63-6	1,2,4-Trimethylbenzene	HU	1.13	ug/kg	0.338	1.13
135-98-8	sec-Butylbenzene	HU	1.13	ug/kg	0.338	1.13
99-87-6	4-Isopropyltoluene	HU	1.13	ug/kg	0.338	1.13
541-73-1	1,3-Dichlorobenzene	HU	1.13	ug/kg	0.338	1.13
106-46-7	1,4-Dichlorobenzene	HU	1.13	ug/kg	0.338	1.13
104-51-8	n-Butylbenzene	HU	1.13	ug/kg	0.338	1.13
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.13	ug/kg	0.338	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	5.64	ug/kg	1.80	5.64
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.13	ug/kg	0.338	1.13
95-50-1	1,2-Dichlorobenzene	HU	1.13	ug/kg	0.338	1.13

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\031010V5\
Data File : 5B346.D
Acq On : 11 Mar 2010 3:01 am
Operator : CDS1
InstName : VOA5
Sample : |248370006|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 11 08:01:58 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1412003	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	989339	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	406956	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1412003	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	989339	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	406956	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	246908	36.13	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	72.26%			
43) Toluene-d8	9.721	9.721	0.872	98	1088578	43.02	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	86.04%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	524402	64.24	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	128.48%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584	50	515	Below Cal		99
4) Vinyl chloride	5.041	5.041	0.601	62	154	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.174	6.174	0.736	43	396	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.467	6.464	0.771	41	491	N.D.		
13) Methyl acetate	6.184	6.365	0.737	43	244	N.D.		
14) Carbon disulfide	6.432	6.435	0.767	76	412	N.D.		
15) Methylene chloride	6.541	6.538	0.780	84	1568	Below Cal		83
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.785	6.969	0.809	43	111	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.214	8.203	0.979	78	109	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	7947	Below Cal	#	19
34) Trichloroethylene	8.667	8.677	1.033	95	112	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B346.D
Acq On : 11 Mar 2010 3:01 am
Operator : CDS1
InstName : VOA5
Sample : |248370006|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 11 08:01:58 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	482	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.146	11.181	1.000	91	3315	N.D.	
55) m,p-Xylenes	11.273	11.280	1.012	106	227	N.D.	
56) o-Xylene	11.697	11.701	1.050	106	111	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.263	12.016	0.914	105	118	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.415	12.415	0.926	91	918	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	12.564	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.705	12.698	0.947	91	1438	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	760	N.D.	
71) sec-Butylbenzene	13.108	13.119	0.977	105	113	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	2550	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.444	13.441	1.002	146	506	N.D.	
75) n-Butylbenzene	13.657	13.653	1.018	91	1978	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	2647	N.D.	
81) 1,2,3-Trichlorobenzene	16.276	16.291	1.213	180	112	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.467	6.425	0.771	41	491	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B346.D
Acq On : 11 Mar 2010 3:01 am
Operator : CDS1
InstName : VOA5
Sample : |248370006|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 11 08:01:58 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

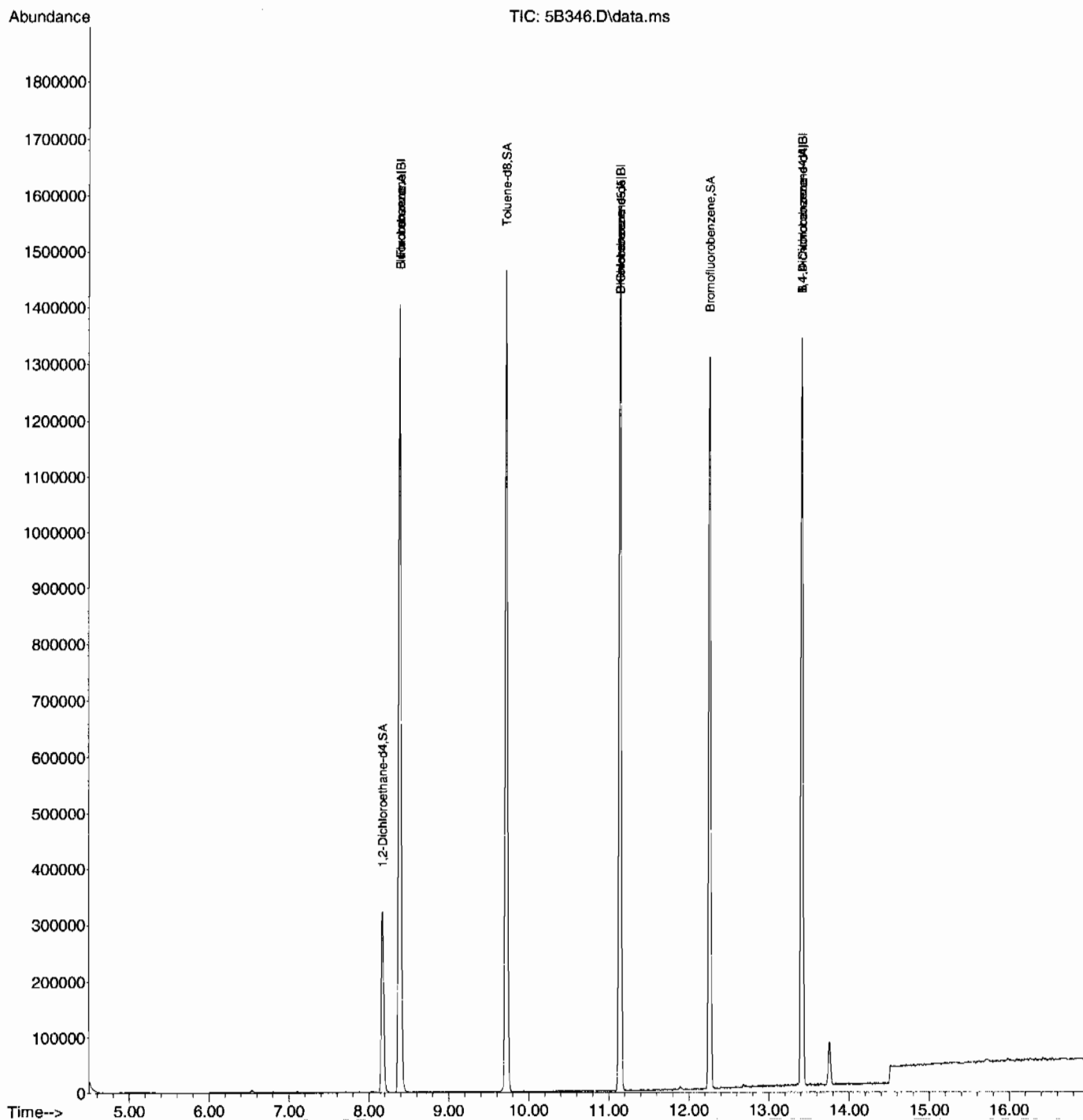
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.705	7.680	0.918	41	110	N.D.	
97) Tetrahydrofuran	7.716	7.716	0.920	42	263	N.D.	
98) Isobutyl alcohol	7.705	7.857	0.918	41	110	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	147	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	13.929	0.000		0m	N.D.	d

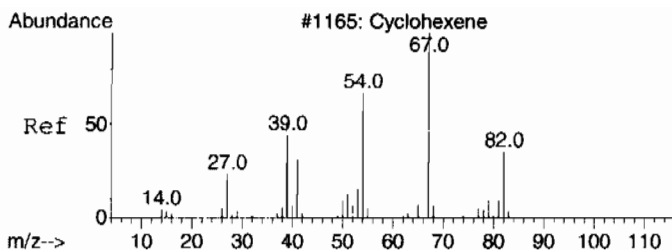
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B346.D
Acq On : 11 Mar 2010 3:01 am
Operator : CDS1
InstName : VOA5
Sample : |248370006|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

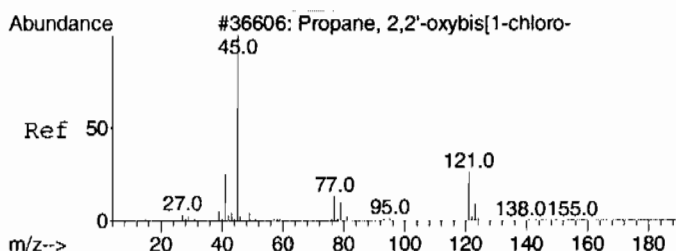
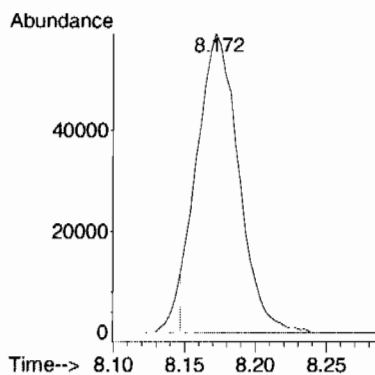
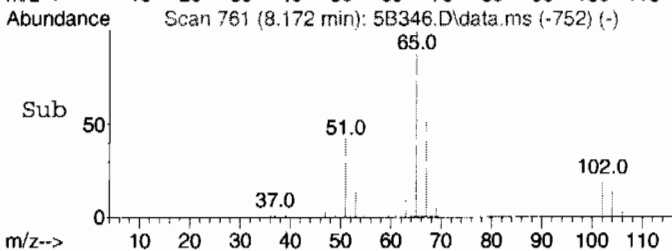
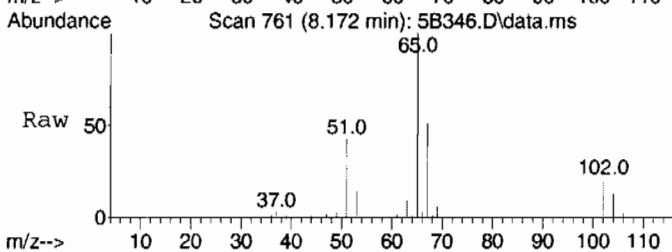
Quant Time: Mar 11 08:01:58 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





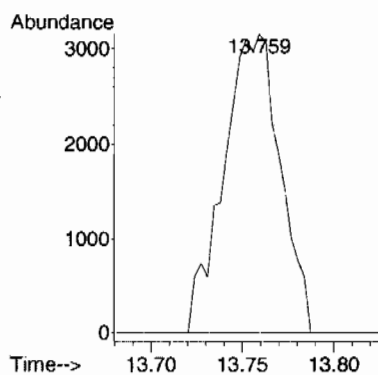
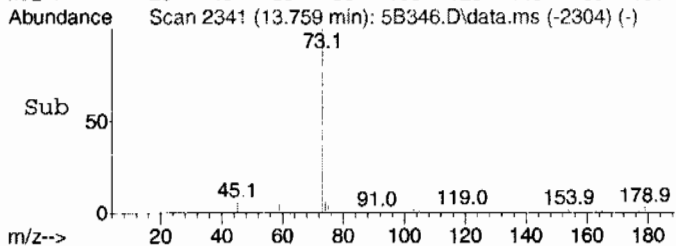
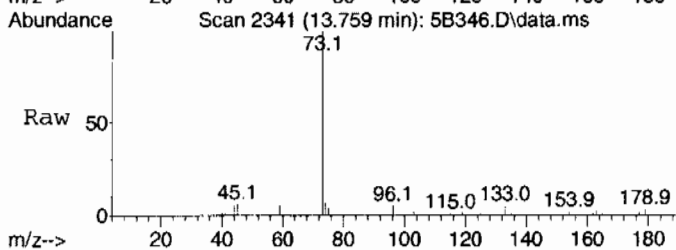
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 12.70 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B346.D
Acq: 11 Mar 2010 3:01 am

Tgt Ion: 67 Resp: 120690
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 2.55 ug/L
RT: 13.759 min Scan# 2341
Delta R.T. -0.170 min
Lab File: 5B346.D
Acq: 11 Mar 2010 3:01 am

Tgt Ion: 45 Resp: 6849
Ion Ratio Lower Upper
45 100
121 0.0 0.0 51.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B346.D
Acq On : 11 Mar 2010 3:01 am
Operator : CDS1
Sample : |248370006|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B346.D
Acq On : 11 Mar 2010 3:01 am
Operator : CDS1
Sample : |248370006|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 46 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370009	Date Received: 03/02/2010 08:50	%Moisture: 24.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7487	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/11/2010 03:54	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 09:01	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B348.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	HU	1.33	ug/kg	0.451	1.33
74-87-3	Chloromethane	HU	1.33	ug/kg	0.398	1.33
75-01-4	Vinyl chloride	HU	1.33	ug/kg	0.398	1.33
74-83-9	Bromomethane	HU	1.33	ug/kg	0.398	1.33
75-00-3	Chloroethane	HU	1.33	ug/kg	0.398	1.33
75-69-4	Trichlorofluoromethane	HU	1.33	ug/kg	0.398	1.33
67-64-1	Acetone	HU	6.63	ug/kg	2.20	6.63
75-35-4	1,1-Dichloroethylene	HU	1.33	ug/kg	0.398	1.33
74-88-4	Iodomethane	HU	6.63	ug/kg	2.12	6.63
75-09-2	Methylene chloride	HU	6.63	ug/kg	2.65	6.63
75-15-0	Carbon disulfide	HU	6.63	ug/kg	1.66	6.63
156-60-5	trans-1,2-Dichloroethylene	HU	1.33	ug/kg	0.398	1.33
75-34-3	1,1-Dichloroethane	HU	1.33	ug/kg	0.398	1.33
78-93-3	2-Butanone	HU	6.63	ug/kg	1.99	6.63
156-59-2	cis-1,2-Dichloroethylene	HU	1.33	ug/kg	0.398	1.33
594-20-7	2,2-Dichloropropane	HU	1.33	ug/kg	0.398	1.33
67-66-3	Chloroform	HU	1.33	ug/kg	0.398	1.33
74-97-5	Bromochloromethane	HU	1.33	ug/kg	0.437	1.33
71-55-6	1,1,1-Trichloroethane	HU	1.33	ug/kg	0.398	1.33
563-58-6	1,1-Dichloropropene	HU	1.33	ug/kg	0.398	1.33
56-23-5	Carbon tetrachloride	HU	1.33	ug/kg	0.398	1.33
107-06-2	1,2-Dichloroethane	HU	1.33	ug/kg	0.398	1.33
71-43-2	Benzene	HU	1.33	ug/kg	0.398	1.33
79-01-6	Trichloroethylene	HU	1.33	ug/kg	0.437	1.33
78-87-5	1,2-Dichloropropane	HU	1.33	ug/kg	0.398	1.33
75-27-4	Bromodichloromethane	HU	1.33	ug/kg	0.398	1.33
74-95-3	Dibromomethane	HU	1.33	ug/kg	0.398	1.33
108-10-1	4-Methyl-2-pentanone	HU	6.63	ug/kg	1.66	6.63
10061-01-5	cis-1,3-Dichloropropylene	HU	1.33	ug/kg	0.398	1.33
108-88-3	Toluene	H	1.99	ug/kg	0.398	1.33
10061-02-6	trans-1,3-Dichloropropylene	HU	1.33	ug/kg	0.398	1.33
79-00-5	1,1,2-Trichloroethane	HU	1.33	ug/kg	0.398	1.33
591-78-6	2-Hexanone	HU	6.63	ug/kg	1.99	6.63
142-28-9	1,3-Dichloropropane	HU	1.33	ug/kg	0.398	1.33
127-18-4	Tetrachloroethylene	HU	1.33	ug/kg	0.398	1.33
124-48-1	Dibromochloromethane	HU	1.33	ug/kg	0.398	1.33
106-93-4	1,2-Dibromoethane	HU	1.33	ug/kg	0.398	1.33
108-90-7	Chlorobenzene	HU	1.33	ug/kg	0.398	1.33

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370009
 Client ID: RE36-10-7487
 Batch ID: 963122
 Run Date: 03/11/2010 03:54
 Prep Date: 03/10/2010 09:01
 Data File: 031010V55B348.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24.5
 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	HU	1.33	ug/kg	0.398	1.33
179601-23-1	m,p-Xylenes	HU	2.65	ug/kg	0.398	2.65
95-47-6	o-Xylene	HU	1.33	ug/kg	0.398	1.33
100-42-5	Styrene	HU	1.33	ug/kg	0.398	1.33
75-25-2	Bromoform	HU	1.33	ug/kg	0.398	1.33
79-34-5	1,1,2,2-Tetrachloroethane	HU	1.33	ug/kg	0.398	1.33
96-18-4	1,2,3-Trichloropropane	HU	1.33	ug/kg	0.398	1.33
108-86-1	Bromobenzene	HU	1.33	ug/kg	0.398	1.33
103-65-1	n-Propylbenzene	HU	1.33	ug/kg	0.398	1.33
95-49-8	2-Chlorotoluene	HU	1.33	ug/kg	0.398	1.33
98-82-8	Isopropylbenzene	HU	1.33	ug/kg	0.398	1.33
108-67-8	1,3,5-Trimethylbenzene	HU	1.33	ug/kg	0.398	1.33
106-43-4	4-Chlorotoluene	HU	1.33	ug/kg	0.398	1.33
98-06-6	tert-Butylbenzene	HU	1.33	ug/kg	0.398	1.33
95-63-6	1,2,4-Trimethylbenzene	HU	1.33	ug/kg	0.398	1.33
135-98-8	sec-Butylbenzene	HU	1.33	ug/kg	0.398	1.33
99-87-6	4-Isopropyltoluene	H	2.32	ug/kg	0.398	1.33
541-73-1	1,3-Dichlorobenzene	HU	1.33	ug/kg	0.398	1.33
106-46-7	1,4-Dichlorobenzene	HU	1.33	ug/kg	0.398	1.33
104-51-8	n-Butylbenzene	HU	1.33	ug/kg	0.398	1.33
96-12-8	1,2-Dibromo-3-chloropropane	HU	1.33	ug/kg	0.398	1.33
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	6.63	ug/kg	2.12	6.63
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	HU	1.33	ug/kg	0.398	1.33
95-50-1	1,2-Dichlorobenzene	HU	1.33	ug/kg	0.398	1.33

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\031010V5\
Data File : 5B348.D
Acq On : 11 Mar 2010 3:54 am
Operator : CDS1
InstName : VOA5
Sample : |248370009|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Mar 11 08:04:22 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1383468	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	904952	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	309556	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1383468	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	904952	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	309556	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	235408	35.16	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	70.32%			
43) Toluene-d8	9.721	9.721	0.872	98	1033160	44.64	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	89.28%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	437196	70.41	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	140.82%#			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.960	4.900	0.591	50	353	Below Cal		74
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.181	6.174	0.737	43	5571	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.453	6.464	0.769	41	111	N.D.		
13) Methyl acetate	6.234	6.365	0.743	43	157	N.D.		
14) Carbon disulfide	6.439	6.435	0.768	76	163	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	1309	Below Cal	#	65
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	0.000	6.969	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.395	8.203	1.001	78	1624	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.384	8.377	1.000	56	7934	Below Cal	#	19
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B348.D
Acq On : 11 Mar 2010 3:54 am
Operator : CDS1
InstName : VOA5
Sample : |248370009|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Mar 11 08:04:22 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	29131	1.50 ug/L	95
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.188	11.181	1.004	91	129	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	11.995	12.016	0.894	105	2502	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	0.000	12.415	0.000		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.610	12.564	0.940	105	810	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	1170	N.D.	
69) tert-Butylbenzene	12.801	12.900	0.954	134	109	N.D.	
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	699	N.D.	
71) sec-Butylbenzene	13.162	13.119	0.981	105	126	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	21864	1.75 ug/L	92
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	1198	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	1798	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.453	6.425	0.769	41	111	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B348.D
Acq On : 11 Mar 2010 3:54 am
Operator : CDS1
InstName : VOA5
Sample : |248370009|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Mar 11 08:04:22 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

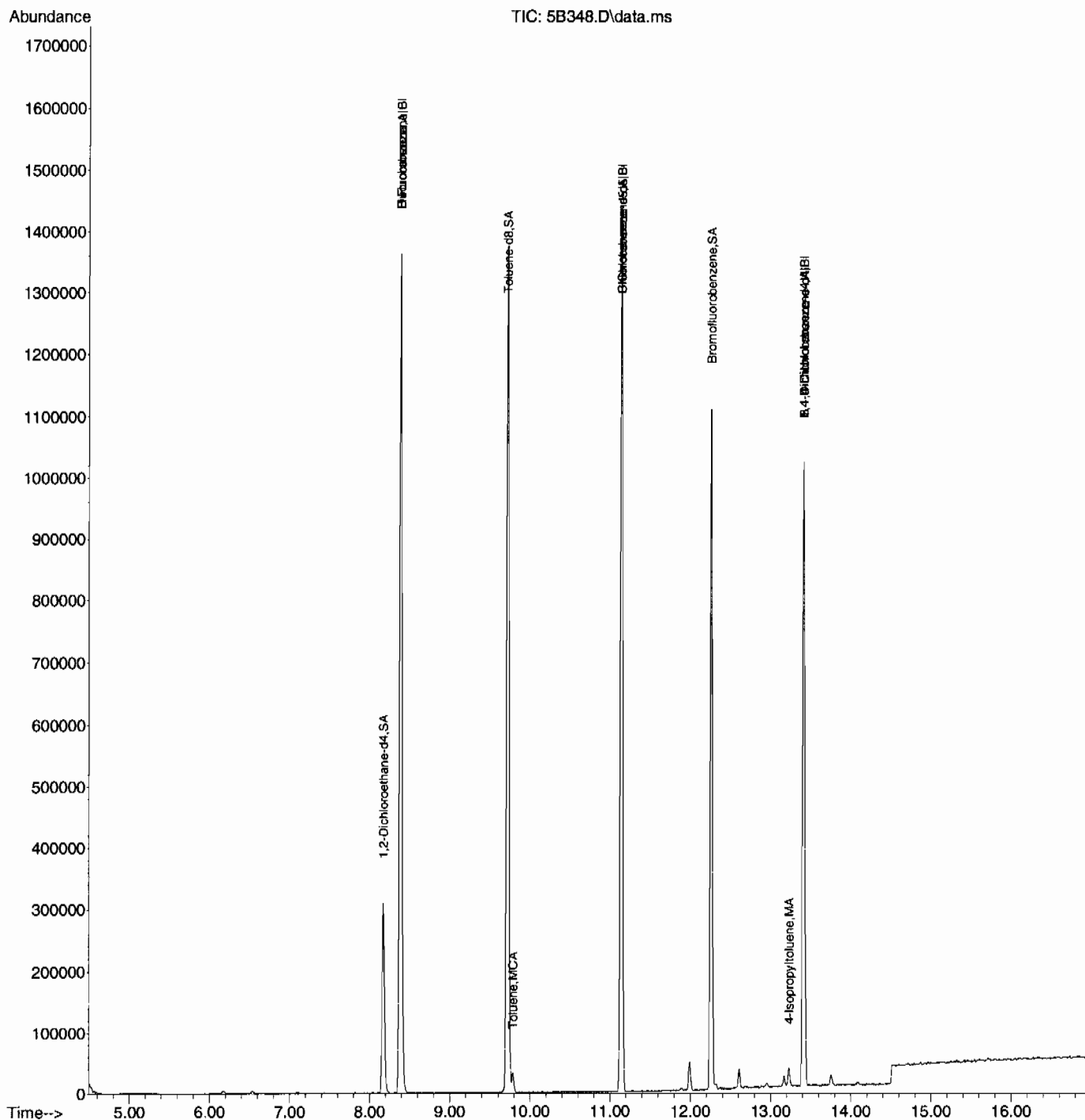
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.776	7.680	0.927	41	111	N.D.	
97) Tetrahydrofuran	0.000	7.716	0.000		0	N.D.	
98) Isobutyl alcohol	7.776	7.857	0.927	41	111	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	12.610	12.412	0.940	53	126	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	380	N.D.	
112) bis(2-Chloroisopropyl)...	14.067	13.929	1.049	45	109	N.D.	

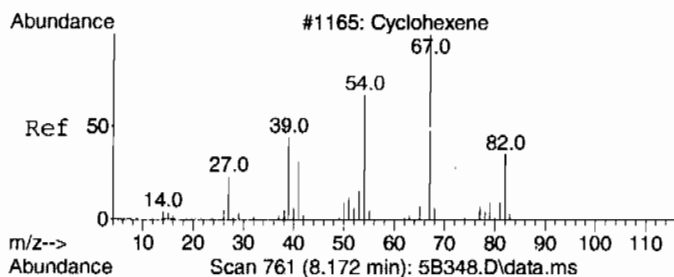
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B348.D
Acq On : 11 Mar 2010 3:54 am
Operator : CDS1
InstName : VOA5
Sample : |248370009|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 48 Sample Multiplier: 1

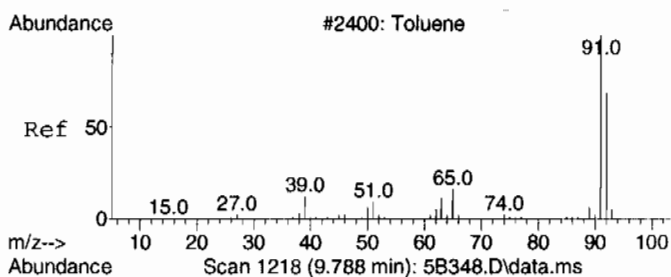
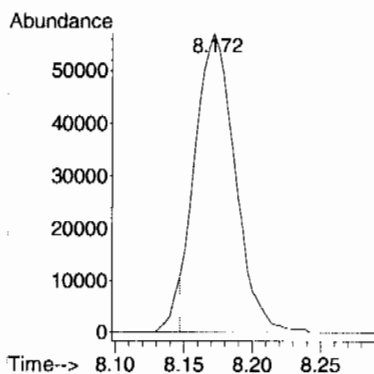
Quant Time: Mar 11 08:04:22 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





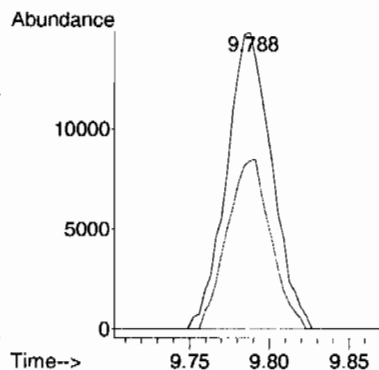
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 12.50 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B348.D
Acq: 11 Mar 2010 3:54 am

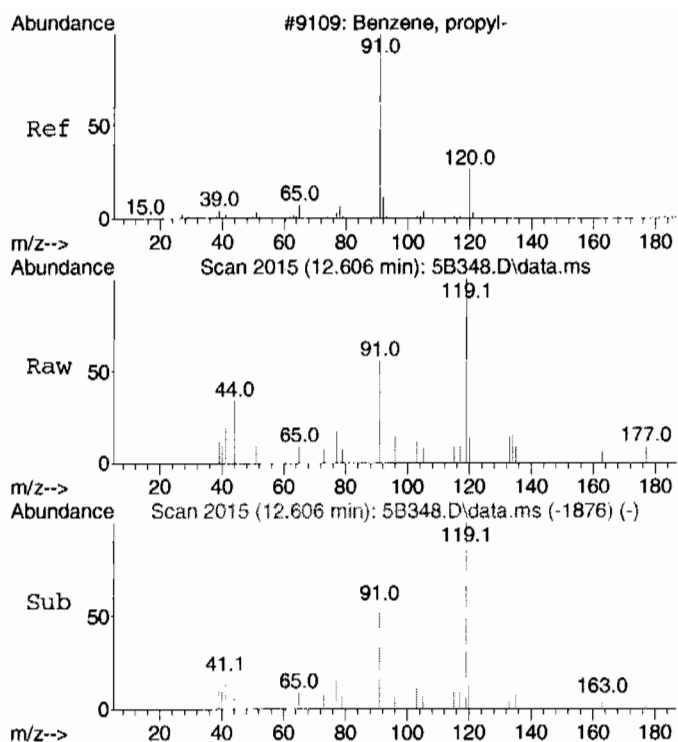
Tgt Ion: 67 Resp: 116358
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#44
Toluene
Concen: 1.50 ug/L
RT: 9.788 min Scan# 1218
Delta R.T. -0.000 min
Lab File: 5B348.D
Acq: 11 Mar 2010 3:54 am

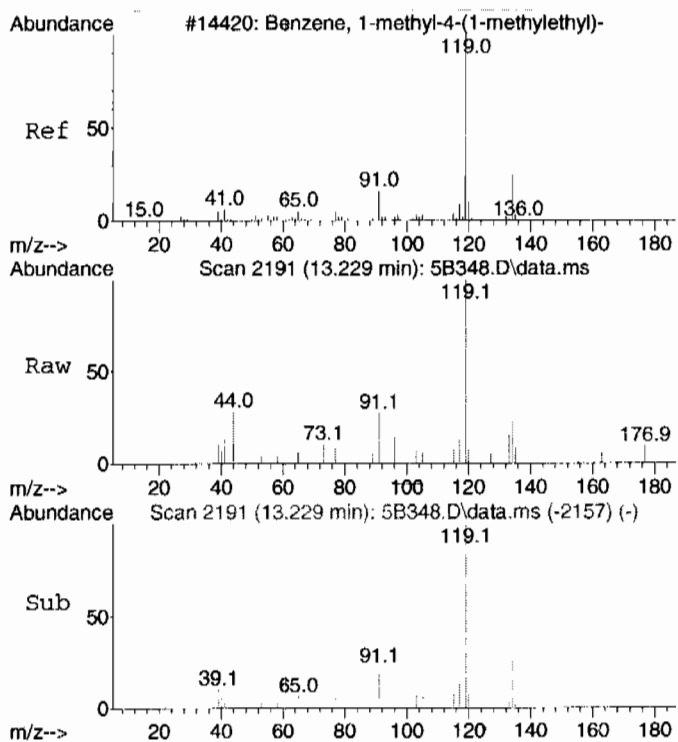
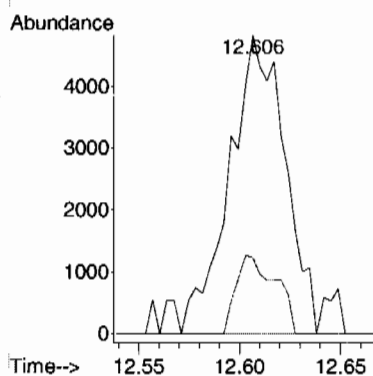
Tgt Ion: 91 Resp: 29131
Ion Ratio Lower Upper
91 100
92 55.5 29.5 89.5





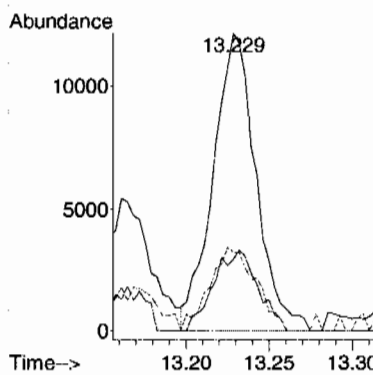
#65 BEFORE analyst DELETION
n-Propylbenzene
Concen: 0.54 ug/L
RT: 12.606 min Scan# 2015
Delta R.T. 0.191 min
Lab File: 5B348.D
Acq: 11 Mar 2010 3:54 am

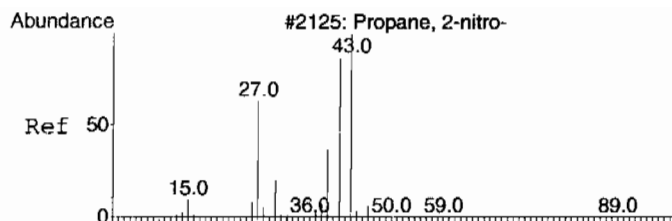
Tgt Ion	Ratio	Lower	Upper
91	100		
120	18.7	0.0	54.1



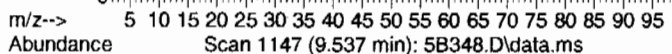
#72
4-Isopropyltoluene
Concen: 1.75 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5B348.D
Acq: 11 Mar 2010 3:54 am

Tgt Ion	Ratio	Lower	Upper
119	100		
134	28.2	0.0	57.2
91	30.3	0.0	53.0

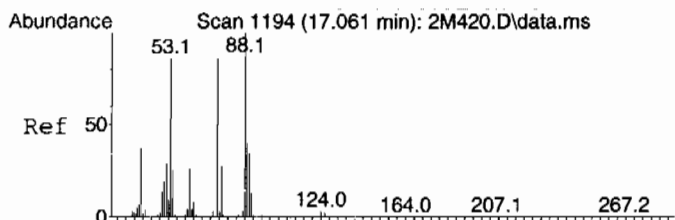
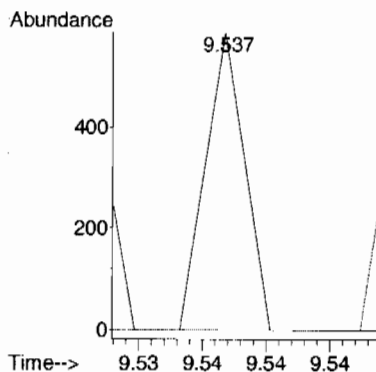
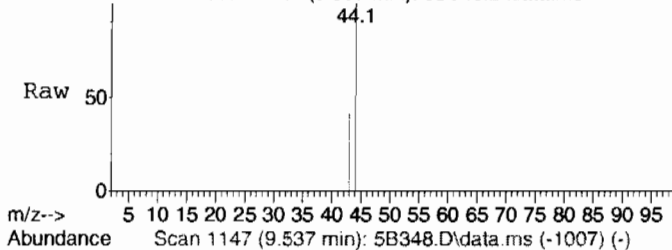




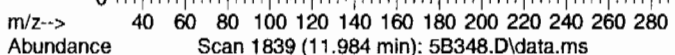
#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.97 ug/L
RT: 9.537 min Scan# 1147
Delta R.T. 0.195 min
Lab File: 5B348.D
Acq: 11 Mar 2010 3:54 am



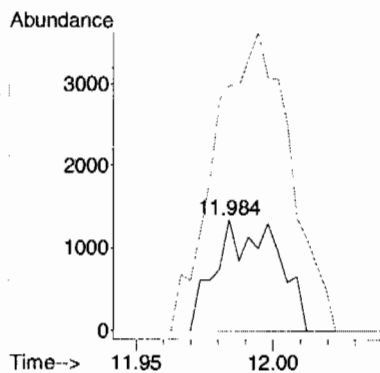
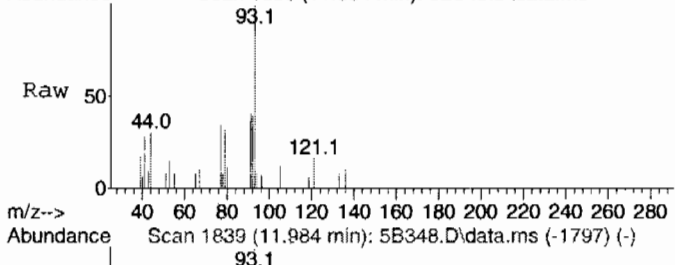
Tgt Ion: 43 Resp: 125
Ion Ratio Lower Upper
43 100
41 97.6 52.5 112.5



#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 1.79 ug/L
RT: 11.984 min Scan# 1839
Delta R.T. -0.152 min
Lab File: 5B348.D
Acq: 11 Mar 2010 3:54 am



Tgt Ion: 53 Resp: 2071
Ion Ratio Lower Upper
53 100
88 0.0 67.1 127.1#
77 332.8 1.8 61.8#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B348.D
Acq On : 11 Mar 2010 3:54 am
Operator : CDS1
Sample : |248370009|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 48 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B348.D
Acq On : 11 Mar 2010 3:54 am
Operator : CDS1
Sample : |248370009|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 48 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370016
 Client ID: RE36-10-7482
 Batch ID: 963122
 Run Date: 03/11/2010 11:59
 Prep Date: 03/11/2010 08:16
 Data File: 031110V55B413.D

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL.010
 Method: SW846 8260B
 Inst: VOA5.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 24.3
 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	HUh	1.32	ug/kg	0.449	1.32
74-87-3	Chloromethane	HUh	1.32	ug/kg	0.396	1.32
75-01-4	Vinyl chloride	HUh	1.32	ug/kg	0.396	1.32
74-83-9	Bromomethane	HUh	1.32	ug/kg	0.396	1.32
75-00-3	Chloroethane	HUh	1.32	ug/kg	0.396	1.32
75-69-4	Trichlorofluoromethane	HUh	1.32	ug/kg	0.396	1.32
67-64-1	Acetone	Hh	13.2	ug/kg	2.19	6.61
75-35-4	1,1-Dichloroethylene	HUh	1.32	ug/kg	0.396	1.32
74-88-4	Iodomethane	HUh	6.61	ug/kg	2.11	6.61
75-09-2	Methylene chloride	HUh	6.61	ug/kg	2.64	6.61
75-15-0	Carbon disulfide	HUh	6.61	ug/kg	1.65	6.61
156-60-5	trans-1,2-Dichloroethylene	HUh	1.32	ug/kg	0.396	1.32
75-34-3	1,1-Dichloroethane	HUh	1.32	ug/kg	0.396	1.32
78-93-3	2-Butanone	HUh	6.61	ug/kg	1.98	6.61
156-59-2	cis-1,2-Dichloroethylene	HUh	1.32	ug/kg	0.396	1.32
594-20-7	2,2-Dichloropropane	HUh	1.32	ug/kg	0.396	1.32
67-66-3	Chloroform	HUh	1.32	ug/kg	0.396	1.32
74-97-5	Bromochloromethane	HUh	1.32	ug/kg	0.436	1.32
71-55-6	1,1,1-Trichloroethane	HUh	1.32	ug/kg	0.396	1.32
563-58-6	1,1-Dichloropropene	HUh	1.32	ug/kg	0.396	1.32
56-23-5	Carbon tetrachloride	HUh	1.32	ug/kg	0.396	1.32
107-06-2	1,2-Dichloroethane	HUh	1.32	ug/kg	0.396	1.32
71-43-2	Benzene	HUh	1.32	ug/kg	0.396	1.32
79-01-6	Trichloroethylene	HUh	1.32	ug/kg	0.436	1.32
78-87-5	1,2-Dichloropropane	HUh	1.32	ug/kg	0.396	1.32
75-27-4	Bromodichloromethane	HUh	1.32	ug/kg	0.396	1.32
74-95-3	Dibromomethane	HUh	1.32	ug/kg	0.396	1.32
108-10-1	4-Methyl-2-pentanone	HUh	6.61	ug/kg	1.65	6.61
10061-01-5	cis-1,3-Dichloropropylene	HUh	1.32	ug/kg	0.396	1.32
108-88-3	Toluene	Hh	1.55	ug/kg	0.396	1.32
10061-02-6	trans-1,3-Dichloropropylene	HUh	1.32	ug/kg	0.396	1.32
79-00-5	1,1,2-Trichloroethane	HUh	1.32	ug/kg	0.396	1.32
591-78-6	2-Hexanone	HUh	6.61	ug/kg	1.98	6.61
142-28-9	1,3-Dichloropropane	HUh	1.32	ug/kg	0.396	1.32
127-18-4	Tetrachloroethylene	HUh	1.32	ug/kg	0.396	1.32
124-48-1	Dibromochloromethane	HUh	1.32	ug/kg	0.396	1.32
106-93-4	1,2-Dibromoethane	HUh	1.32	ug/kg	0.396	1.32
108-90-7	Chlorobenzene	HUh	1.32	ug/kg	0.396	1.32

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370016	Date Received: 03/02/2010 08:50	%Moisture: 24.3
	Client: 1.ANL010	Project: 1.ANL01004
Client ID: RE36-10-7482	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.1	Dilution: 1
Run Date: 03/11/2010 11:59	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/11/2010 08:16	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031110V55B413.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	HUh	1.32	ug/kg	0.396	1.32
179601-23-1	m,p-Xylenes	HUh	2.64	ug/kg	0.396	2.64
95-47-6	o-Xylene	HUh	1.32	ug/kg	0.396	1.32
100-42-5	Styrene	HUh	1.32	ug/kg	0.396	1.32
75-25-2	Bromoform	HUh	1.32	ug/kg	0.396	1.32
79-34-5	1,1,2,2-Tetrachloroethane	HUh	1.32	ug/kg	0.396	1.32
96-18-4	1,2,3-Trichloropropane	HUh	1.32	ug/kg	0.396	1.32
108-86-1	Bromobenzene	HUh	1.32	ug/kg	0.396	1.32
103-65-1	n-Propylbenzene	HUh	1.32	ug/kg	0.396	1.32
95-49-8	2-Chlorotoluene	HUh	1.32	ug/kg	0.396	1.32
98-82-8	Isopropylbenzene	HUh	1.32	ug/kg	0.396	1.32
108-67-8	1,3,5-Trimethylbenzene	HUh	1.32	ug/kg	0.396	1.32
106-43-4	4-Chlorotoluene	HUh	1.32	ug/kg	0.396	1.32
98-06-6	tert-Butylbenzene	HUh	1.32	ug/kg	0.396	1.32
95-63-6	1,2,4-Trimethylbenzene	HUh	1.32	ug/kg	0.396	1.32
135-98-8	sec-Butylbenzene	HUh	1.32	ug/kg	0.396	1.32
99-87-6	4-Isopropyltoluene	Hh	65.6	ug/kg	0.396	1.32
541-73-1	1,3-Dichlorobenzene	HUh	1.32	ug/kg	0.396	1.32
106-46-7	1,4-Dichlorobenzene	HUh	1.32	ug/kg	0.396	1.32
104-51-8	n-Butylbenzene	HUh	1.32	ug/kg	0.396	1.32
96-12-8	1,2-Dibromo-3-chloropropane	HUh	1.32	ug/kg	0.396	1.32
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HUh	6.61	ug/kg	2.11	6.61
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	HUh	1.32	ug/kg	0.396	1.32
95-50-1	1,2-Dichlorobenzene	HUh	1.32	ug/kg	0.396	1.32

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99	8.92	ug/kg	0	J
	unknown hydrocarbon	12.32	7.4	ug/kg	0	J
	unknown hydrocarbon	12.95	65.1	ug/kg	0	J
	unknown hydrocarbon	13.04	6.66	ug/kg	0	J
	unknown hydrocarbon	13.17	10.9	ug/kg	0	J
	unknown aromatic	14.09	7.64	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
InstName : VOA5
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 11 18:11:13 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1396823	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	971626	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	406516	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1396823	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	971626	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	406516	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	226773	33.54	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	67.08%			
43) Toluene-d8	9.721	9.721	0.872	98	1049942	42.25	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	84.50%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	526715	64.60	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	129.20%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	5.000	4.900	0.596	50	887	Below Cal		80
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.866	5.866	0.699	59	1116	N.D.		
9) Acetone	6.177	6.174	0.736	43	41717	10.00	ug/L	95
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	377	N.D.		
13) Methyl acetate	6.425	6.365	0.766	43	112	N.D.		
14) Carbon disulfide	6.432	6.435	0.767	76	560	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	10468	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.824	6.969	0.814	43	115	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.450	7.450	0.888	43	2057	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.928	7.924	0.945	56	1272	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978	78	108	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.394	8.377	1.001	56	4122	Below Cal	#	19
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
InstName : VOA5
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 11 18:11:13 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	24349	1.17 ug/L	98
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.142	11.181	1.000	91	6572	N.D.	
55) m,p-Xylenes	11.280	11.280	1.012	106	1128	N.D.	
56) o-Xylene	11.697	11.701	1.050	106	712	N.D.	
57) Styrene	11.705	11.715	1.050	104	116	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.479	12.415	0.930	91	2466	N.D.	
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	1352	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	12.698	0.000		0m	N.D. d	
69) tert-Butylbenzene	12.903	12.900	0.962	134	122	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D. d	
71) sec-Butylbenzene	13.116	13.119	0.978	105	279	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	814135	49.69 ug/L	100
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.444	13.441	1.002	146	114	N.D.	
75) n-Butylbenzene	13.646	13.653	1.017	91	2084	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.619	15.619	1.165	180	182	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	128254	9.79 ug/L	98
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D. d	
88) Allyl chloride	6.446	6.425	0.769	41	248	N.D.	
89) tert-Butyl Alcohol	6.460	6.460	0.770	59	398	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.450	7.383	0.888	43	2057	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
InstName : VOA5
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 11 18:11:13 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

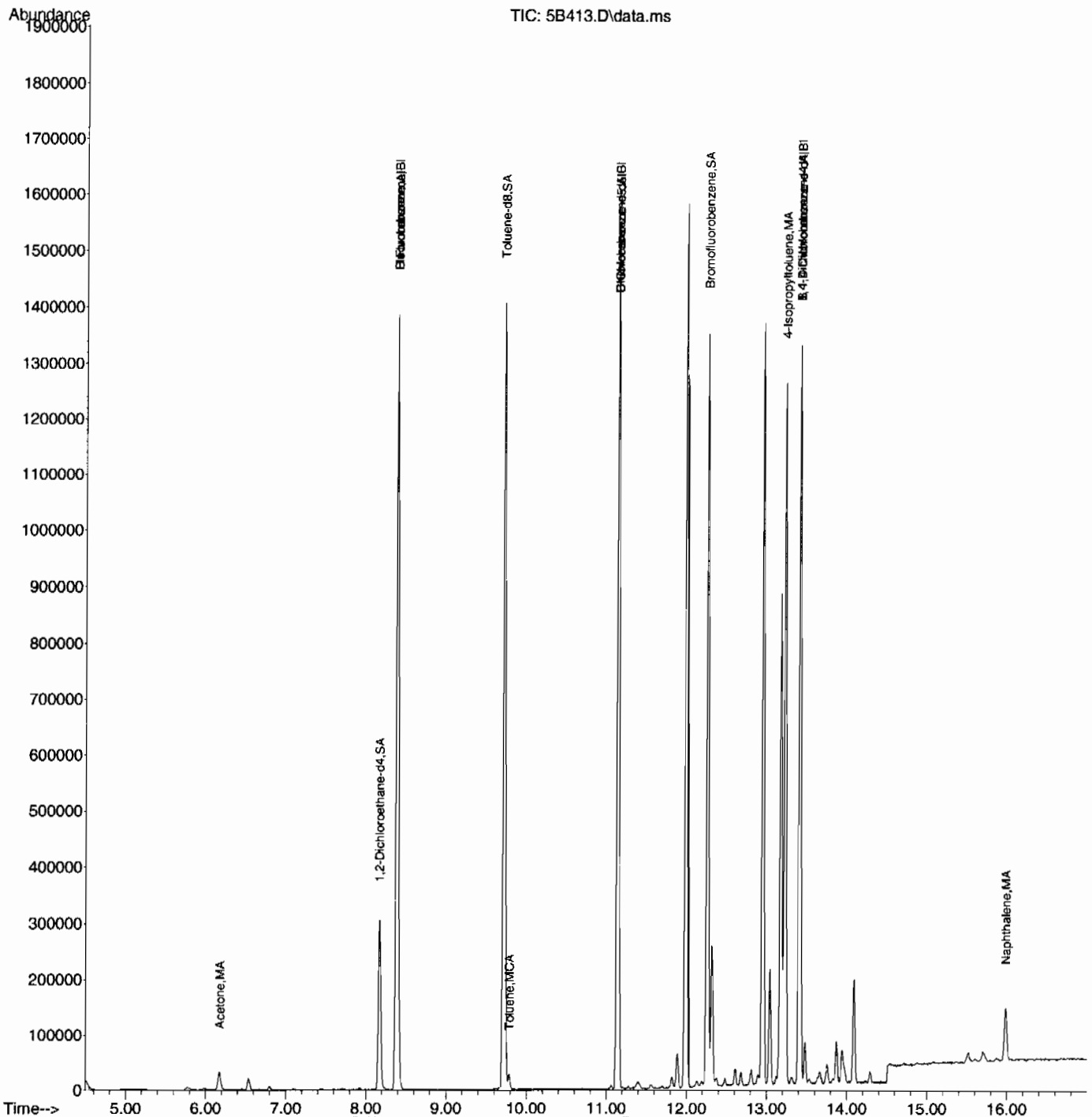
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.691	7.680	0.917	41	135	N.D.	
97) Tetrahydrofuran	7.708	7.716	0.919	42	2123	N.D.	
98) Isobutyl alcohol	7.850	7.857	0.936	41	247	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	11.057	10.980	0.824	55	114	N.D.	
107) cis-1,4-Dichloro-2-butene	12.129	12.136	0.904	53	124	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.475	12.412	0.930	53	390	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	1186	N.D.	
112) bis(2-Chloroisopropyl)...	13.940	13.929	1.039	45	108	N.D.	

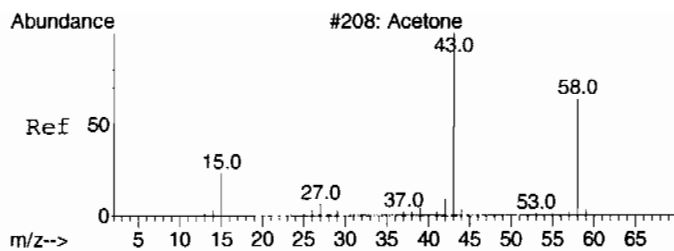
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
InstName : VOA5
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

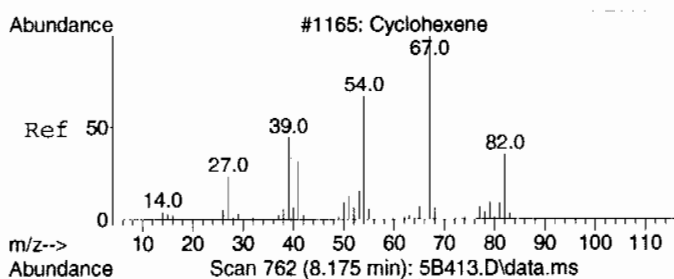
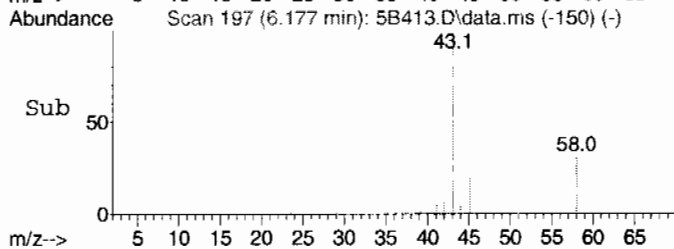
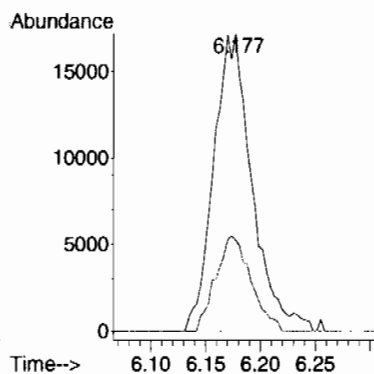
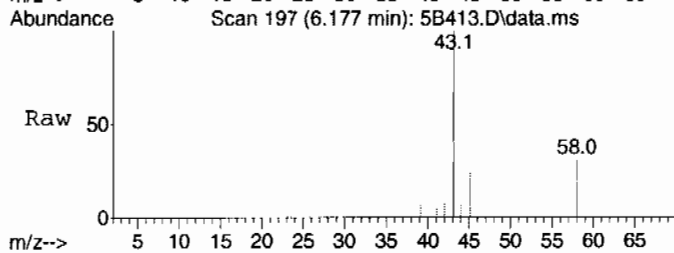
Quant Time: Mar 11 18:11:13 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





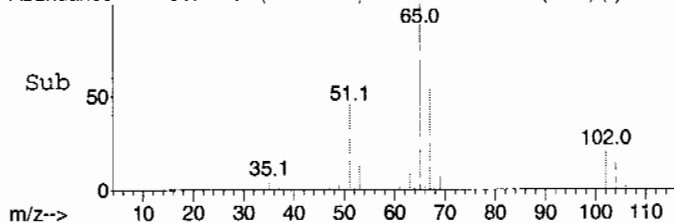
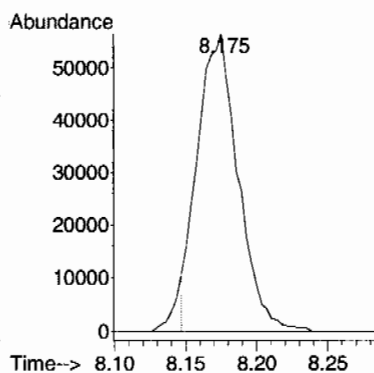
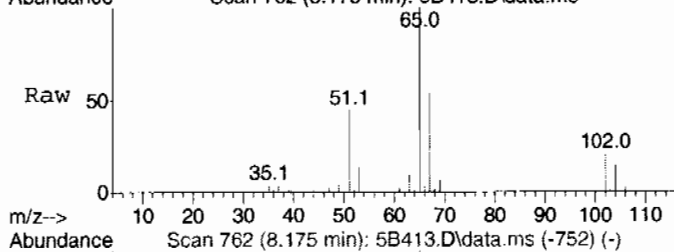
#9
Acetone
Concen: 10.00 ug/L
RT: 6.177 min Scan# 197
Delta R.T. 0.003 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

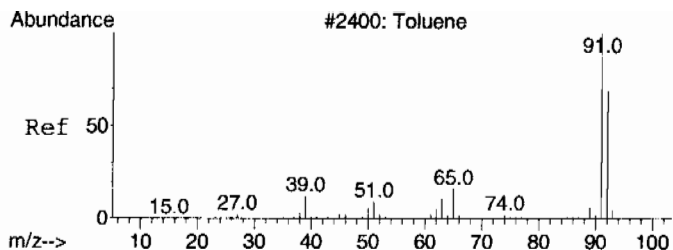
Tgt Ion:	43	Resp:	41717
Ion Ratio	100	Lower	Upper
58	29.1	1.9	61.9



#32 BEFORE analyst DELETION
Cyclohexene
Concen: 11.89 ug/L
RT: 8.175 min Scan# 762
Delta R.T. -0.071 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

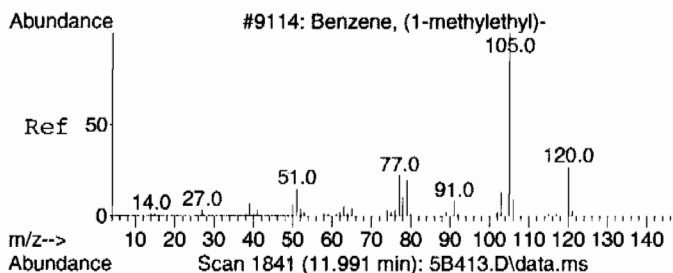
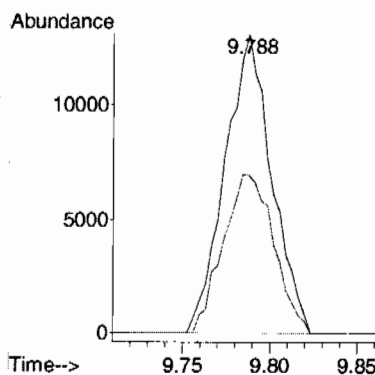
Tgt Ion:	67	Resp:	111771
Ion Ratio	100	Lower	Upper
54	0.0	46.3	106.3#





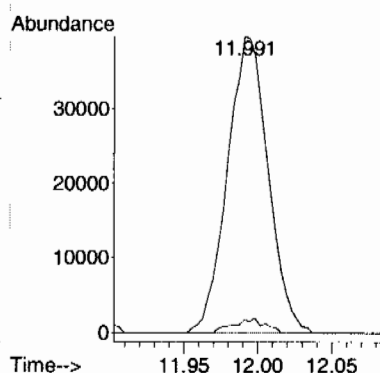
#44
Toluene
Concen: 1.17 ug/L
RT: 9.788 min Scan# 1218
Delta R.T. -0.000 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

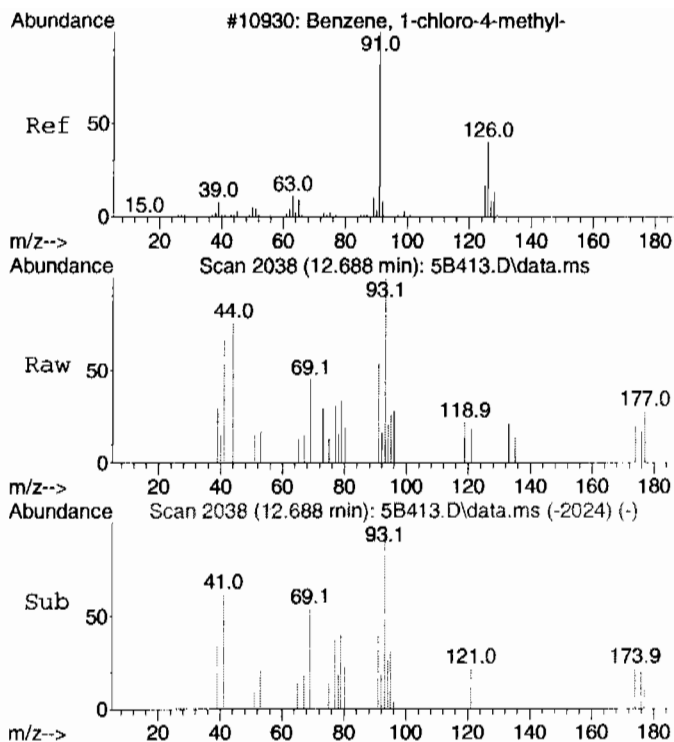
Tgt Ion: 91 Resp: 24349
Ion Ratio Lower Upper
91 100
92 57.8 29.5 89.5



#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 4.05 ug/L
RT: 11.991 min Scan# 1841
Delta R.T. -0.025 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

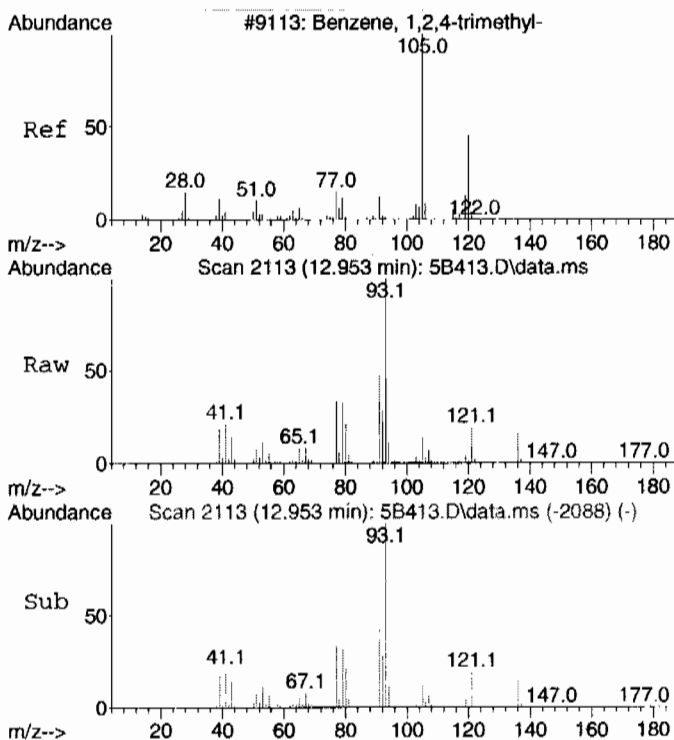
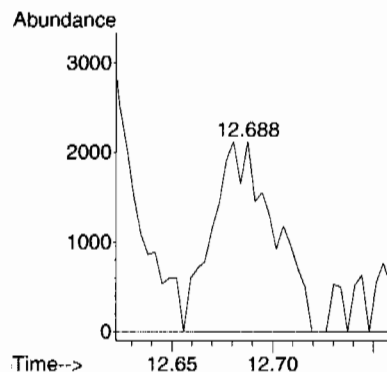
Tgt Ion: 105 Resp: 75630
Ion Ratio Lower Upper
105 100
120 3.8 0.0 57.3





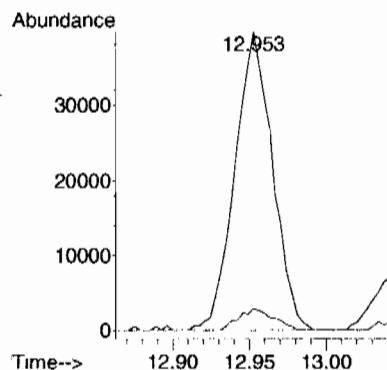
#68 BEFORE analyst DELETION
4-Chlorotoluene
Concen: 0.31 ug/L
RT: 12.688 min Scan# 2038
Delta R.T. -0.010 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

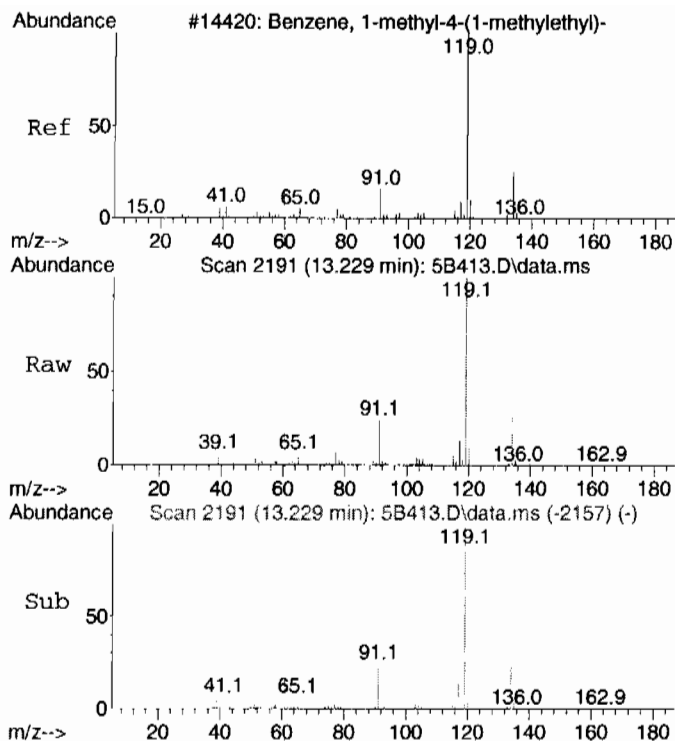
Tgt Ion: 91 Resp: 4464
Ion Ratio Lower Upper
91 100
126 0.0 3.6 63.6#



#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 4.17 ug/L
RT: 12.953 min Scan# 2113
Delta R.T. -0.003 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

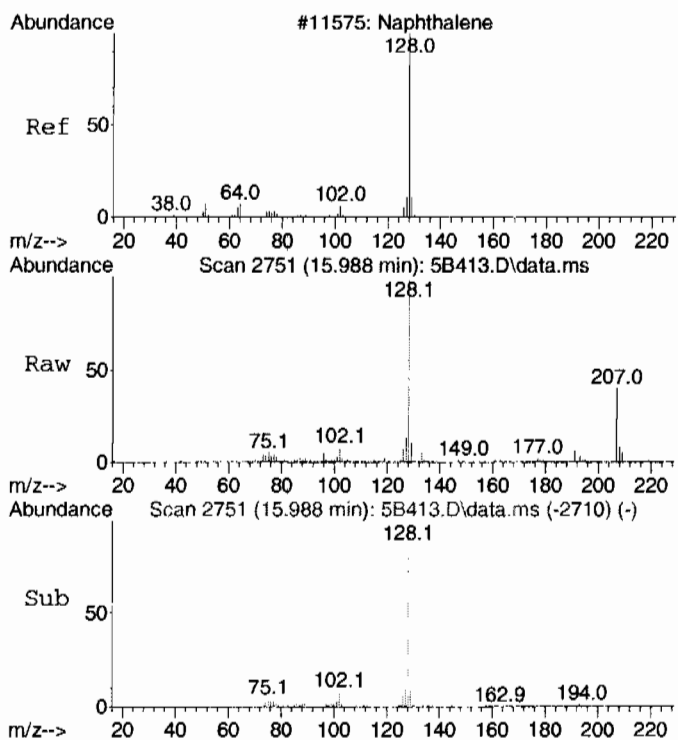
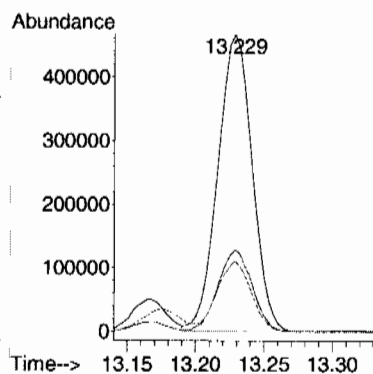
Tgt Ion: 105 Resp: 67656
Ion Ratio Lower Upper
105 100
120 6.7 17.4 77.4#





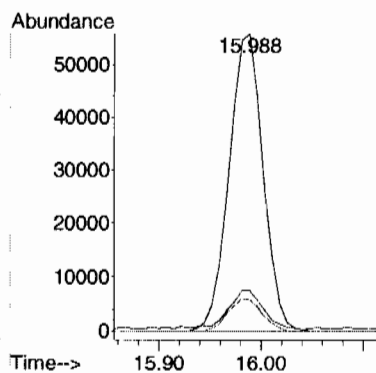
#72
4-Isopropyltoluene
Concen: 49.69 ug/L
RT: 13.229 min Scan# 2191
Delta R.T. -0.000 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

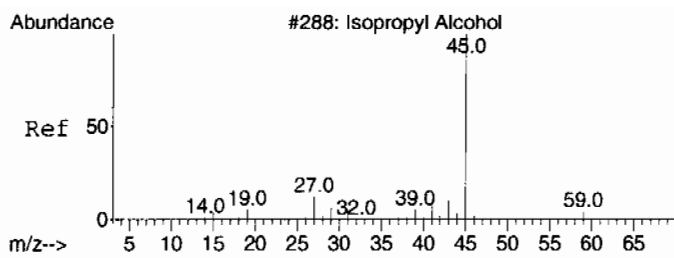
Tgt Ion	Ratio	Lower	Upper
119	100		
134	27.3	0.0	57.2
91	23.1	0.0	53.0



#80
Naphthalene
Concen: 9.79 ug/L
RT: 15.988 min Scan# 2751
Delta R.T. 0.000 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

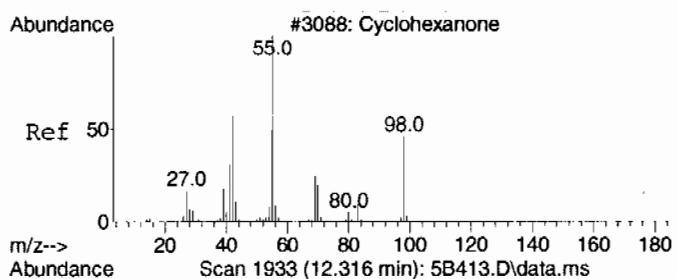
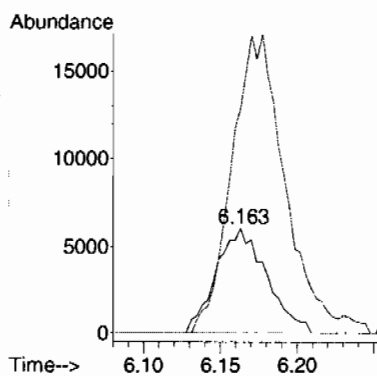
Tgt Ion	Ratio	Lower	Upper
128	100		
127	13.7	0.0	42.4
129	10.8	0.0	40.8





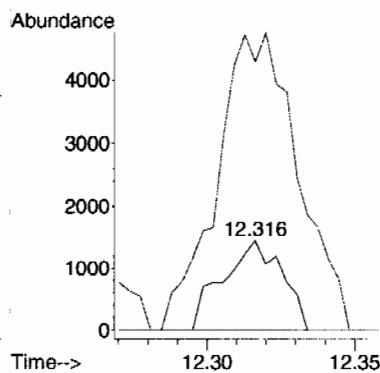
#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 33.18 ug/L
RT: 6.163 min Scan# 193
Delta R.T. 0.000 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

Tgt Ion: 45 Resp: 13862
Ion Ratio Lower Upper
45 100
43 300.9 0.0 48.5#



#108 BEFORE analyst DELETION
Cyclohexanone
Concen: 16.14 ug/L
RT: 12.316 min Scan# 1933
Delta R.T. 0.049 min
Lab File: 5B413.D
Acq: 11 Mar 2010 11:59 am

Tgt Ion: 42 Resp: 2017
Ion Ratio Lower Upper
42 100
55 449.2 120.2 180.2#
98 0.0 29.2 89.2#



Library Search Compound Report
GEL Laboratories, LLC

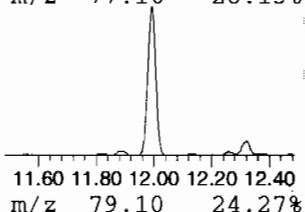
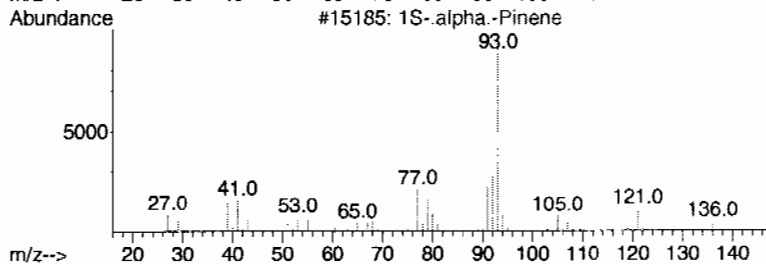
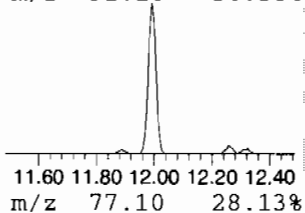
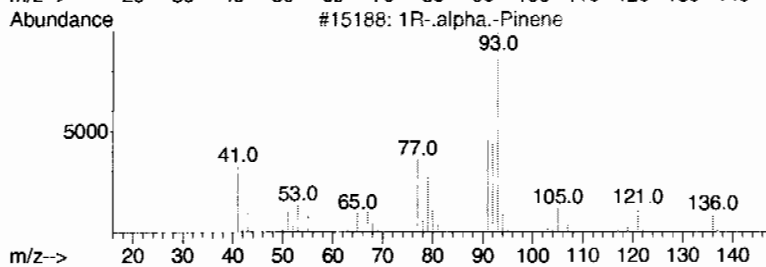
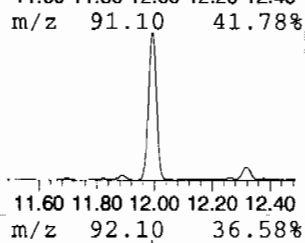
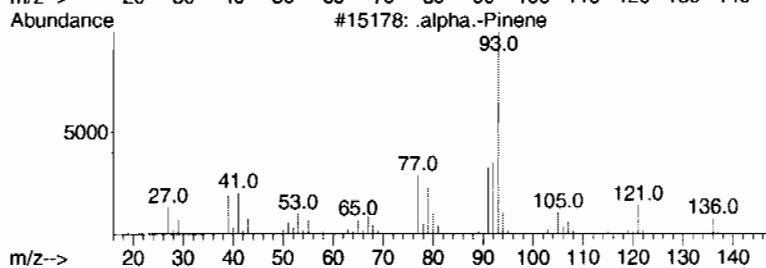
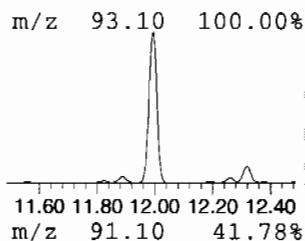
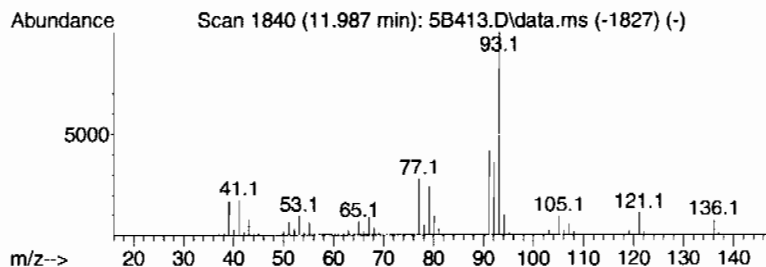
Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

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

Peak Number 1 unknown hydrocarbon Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.	
11.987	6.75 ug/L	405531	B Chlorobenzene-d5	11.142	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	96
2	1R-.alpha.-Pinene	136	C10H16	007785-70-8	96
3	1S-.alpha.-Pinene	136	C10H16	007785-26-4	96
4	1R-.alpha.-Pinene	136	C10H16	007785-70-8	95
5	.alpha.-Pinene	136	C10H16	000080-56-8	94



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

SubList :

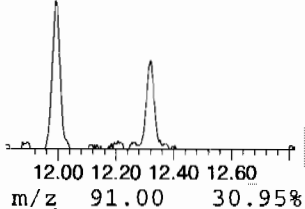
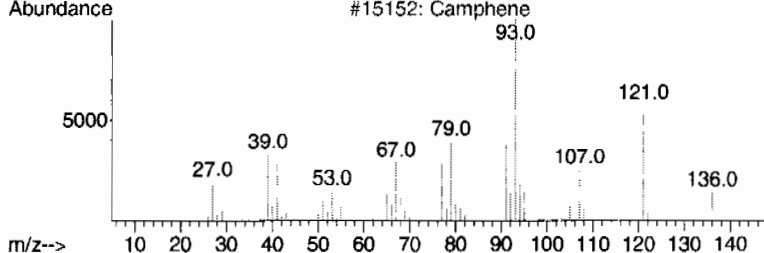
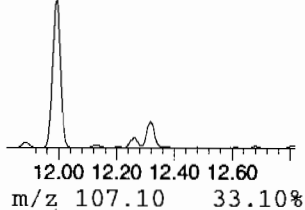
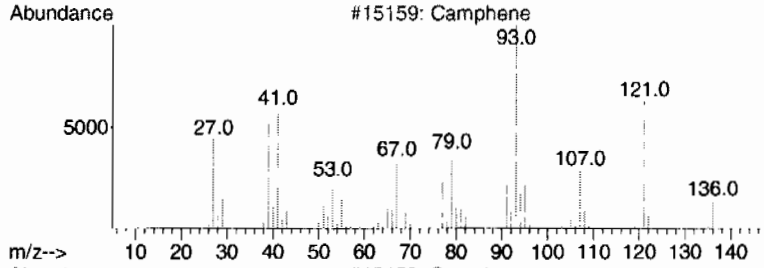
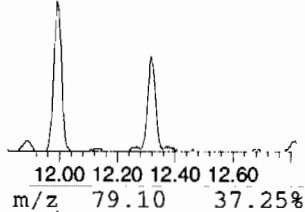
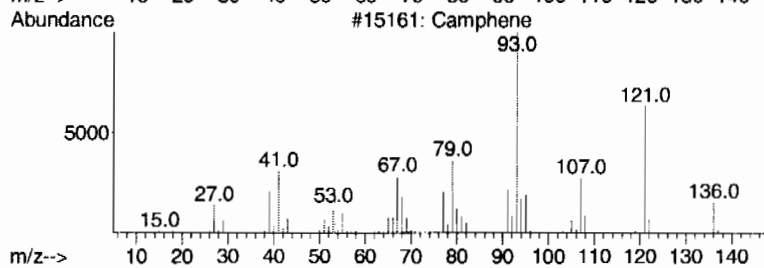
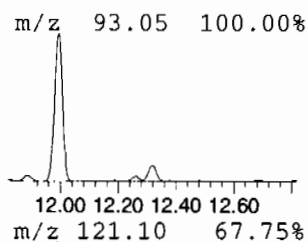
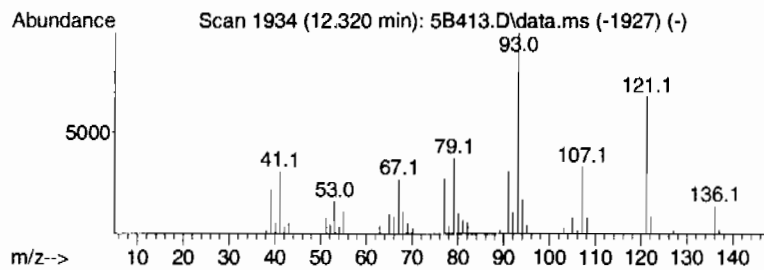
TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 3 unknown hydrocarbon Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.320	5.60 ug/L	273528	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Camphene	136	C10H16	000079-92-5	94
2			Camphene	136	C10H16	000079-92-5	94
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

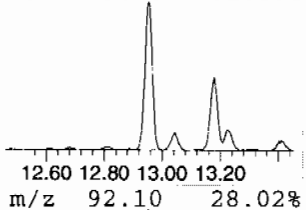
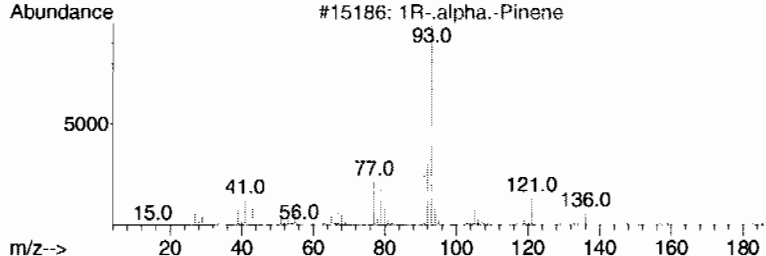
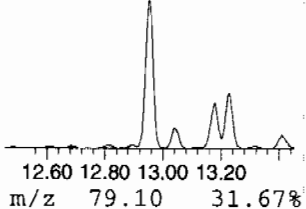
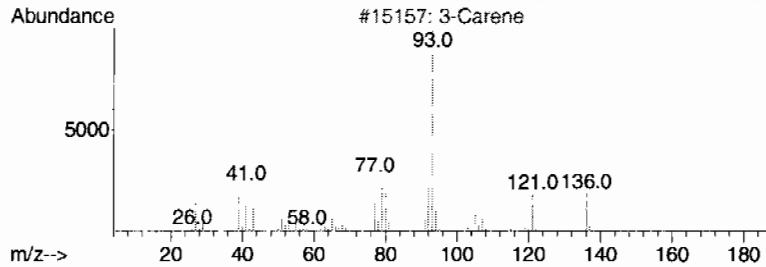
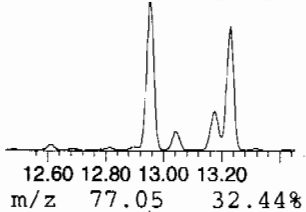
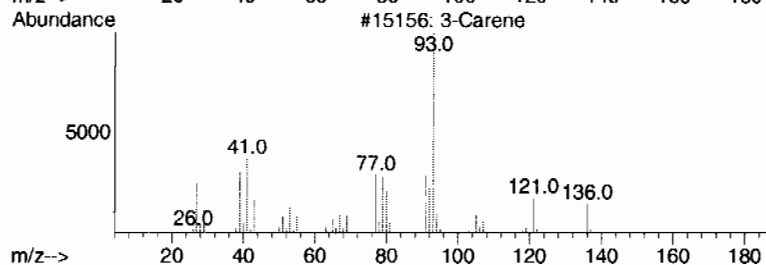
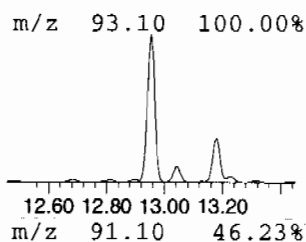
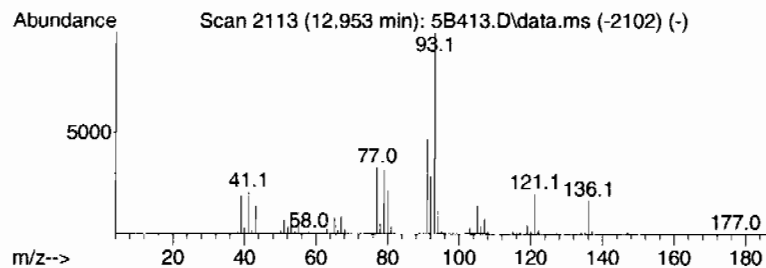
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Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

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

Peak Number 4 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.		
12.953	49.28 ug/L	2405070	1,4-Dichlorobenzene-d4	13.413		
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		1R-.alpha.-Pinene	136	C10H16	007785-70-8	95
4		1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	94
5		3-Carene	136	C10H16	013466-78-9	94



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

SubList :

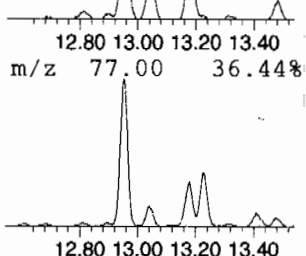
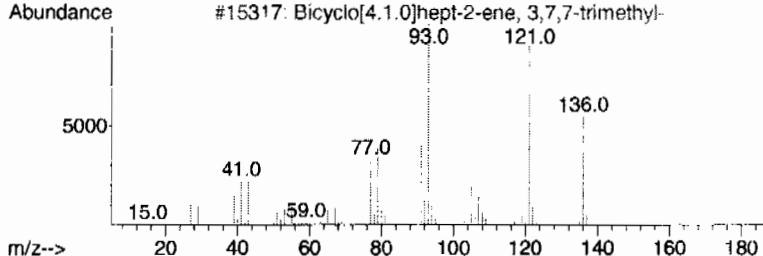
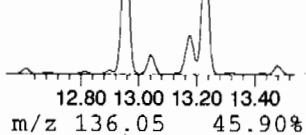
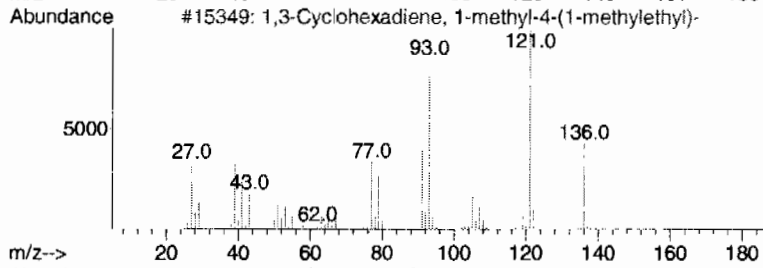
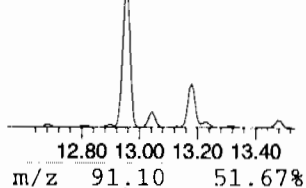
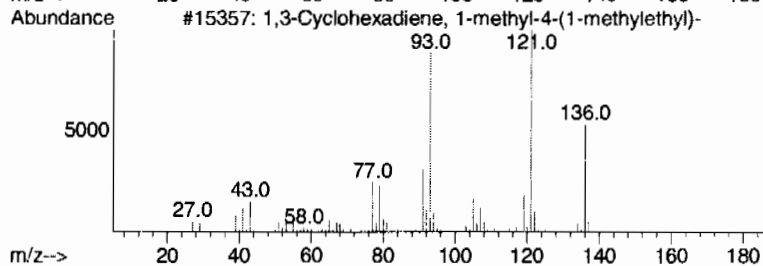
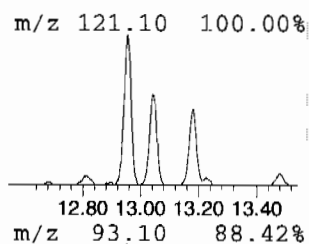
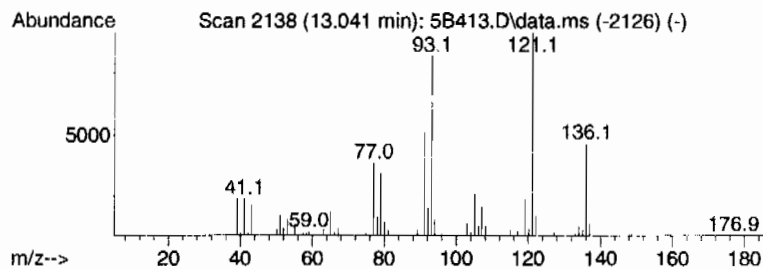
TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 5 unknown hydrocarbon Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.041	5.04 ug/L	246138	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1,3-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-86-5	97
2			1,3-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-86-5	96
3			Bicyclo[4.1.0]hept-2-ene, 3,7,7-...	136	C10H16	000554-61-0	96
4			Cyclohexene, 1-methyl-4-(1-methyl-...	136	C10H16	000586-62-9	96
5			Cyclohexene, 1-methyl-4-(1-methyl-...	136	C10H16	000586-62-9	95



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

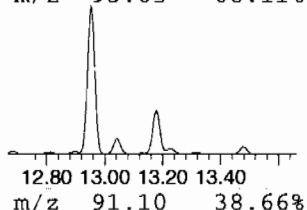
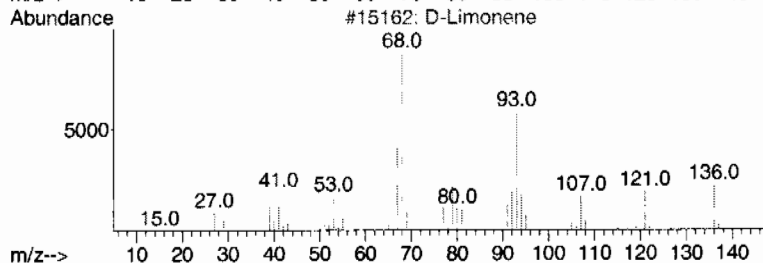
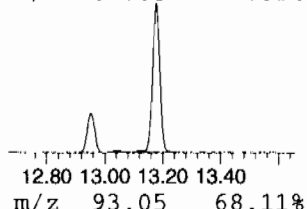
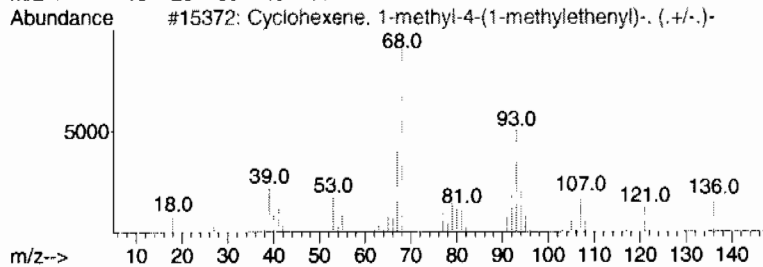
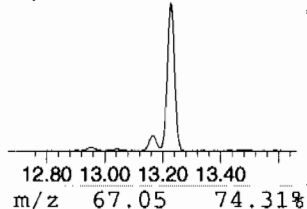
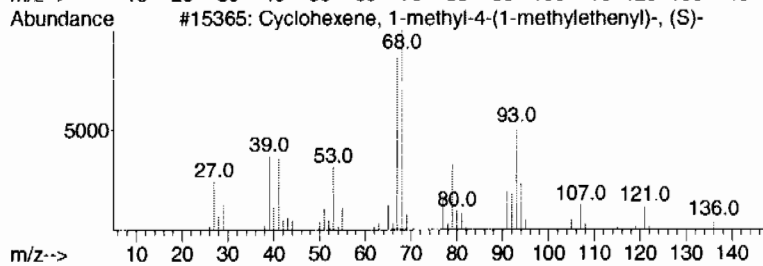
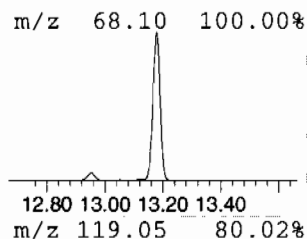
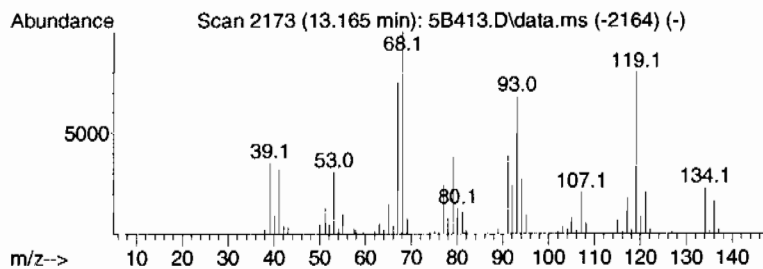
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 6 unknown hydrocarbon Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.165	8.24 ug/L	402151	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	005989-54-8	70
2			Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	007705-14-8	60
3			D-Limonene	136	C10H16	005989-27-5	60
4			D-Limonene	136	C10H16	005989-27-5	60
5			Limonene	136	C10H16	000138-86-3	60



Library Search Compound Report
GEL Laboratories, LLC

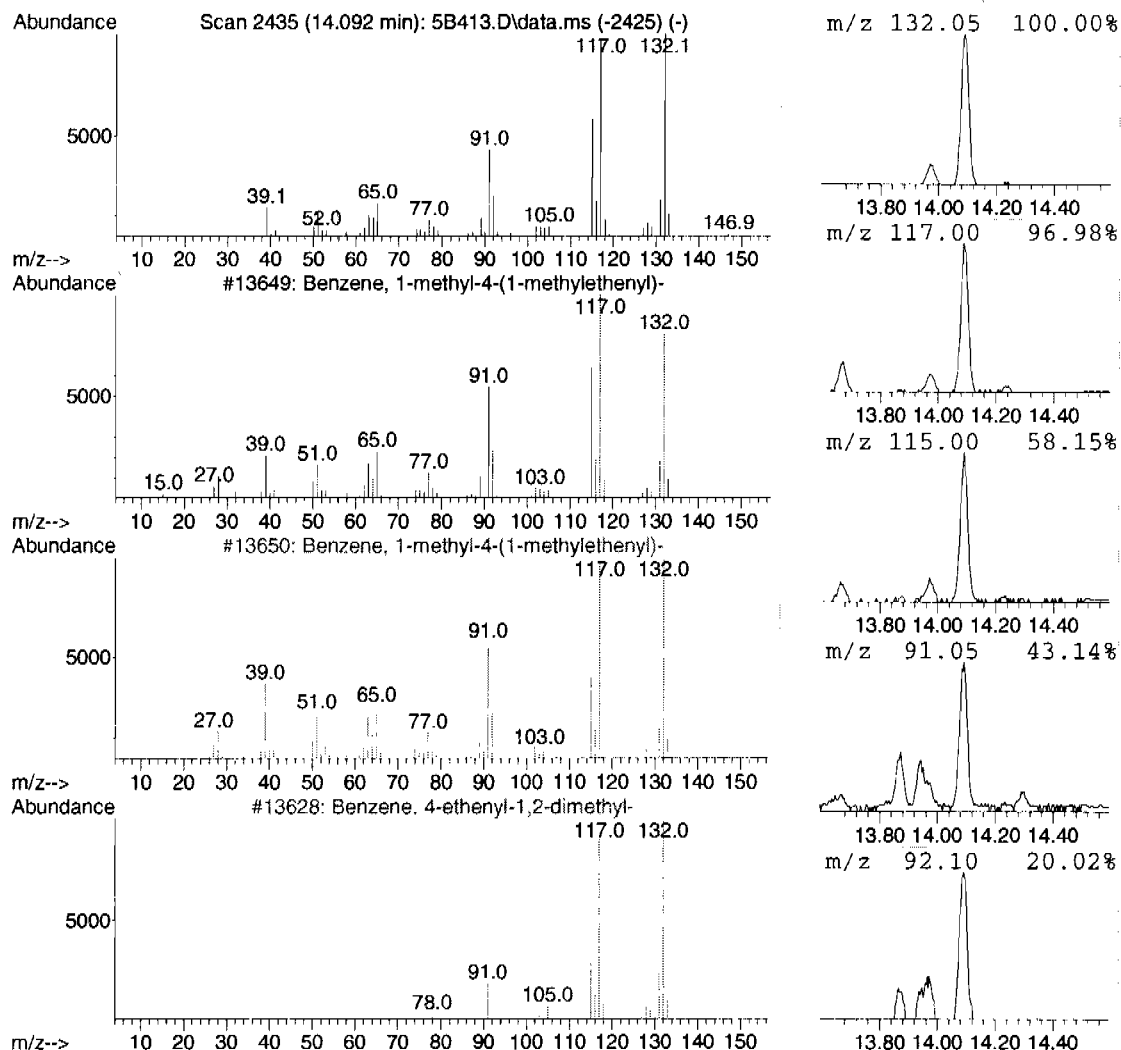
Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

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

Peak Number 7 unknown aromatic Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.	
14.092	5.78 ug/L	282204	B 1,4-Dichlorobenzene-d4	13.413	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methyleth...	132	C10H12	001195-32-0	97
2	Benzene, 1-methyl-4-(1-methyleth...	132	C10H12	001195-32-0	90
3	Benzene, 4-ethenyl-1,2-dimethyl-	132	C10H12	027831-13-6	87
4	Benzene, 1-methyl-4-(1-methyleth...	132	C10H12	001195-32-0	87
5	Benzene, 2-butenyl-	132	C10H12	001560-06-1	83



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B413.D
Acq On : 11 Mar 2010 11:59 am
Operator : CDS1
Sample : |248370016|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL
ALS Vial : 13 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard---			
					#	RT	Resp	Conc
unknown hydroca...	11.987	6.8	ug/L	405531	4	11.142	3003600	50.0
unknown hydroca...	12.320	5.6	ug/L	273528	5	13.413	2440160	50.0
unknown hydroca...	12.953	49.3	ug/L	2405070	5	13.413	2440160	50.0
unknown hydroca...	13.041	5.0	ug/L	246138	5	13.413	2440160	50.0
unknown hydroca...	13.165	8.2	ug/L	402151	5	13.413	2440160	50.0
unknown aromatic	14.092	5.8	ug/L	282204	6	13.413	2440160	50.0

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
Styrene		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-chloropropene		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 VOA3

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M

Last Update : Mon Mar 01 09:52:36 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\022610V3\3A511.D

Injection Date	Mix	Calibration File
26 Feb 2010 2:20 pm	A	C:\msdchem\1\DATA\022610V3\3A511.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\022610V3\3A515.D

Injection Date	Mix	Calibration File
26 Feb 2010 10:23 am	A	C:\msdchem\1\DATA\022610V3\3A503.D
26 Feb 2010 4:17 pm	B	C:\msdchem\1\DATA\022610V3\3A515.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\022610V3\3A516.D

Injection Date	Mix	Calibration File
26 Feb 2010 10:53 am	A	C:\msdchem\1\DATA\022610V3\3A504.D
26 Feb 2010 4:46 pm	B	C:\msdchem\1\DATA\022610V3\3A516.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\022610V3\3A517.D

Injection Date	Mix	Calibration File
26 Feb 2010 11:23 am	A	C:\msdchem\1\DATA\022610V3\3A505.D
26 Feb 2010 5:15 pm	B	C:\msdchem\1\DATA\022610V3\3A517.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\022610V3\3A518.D

Injection Date	Mix	Calibration File
26 Feb 2010 11:52 am	A	C:\msdchem\1\DATA\022610V3\3A506.D
26 Feb 2010 5:45 pm	B	C:\msdchem\1\DATA\022610V3\3A518.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\022610V3\3A519.D

Injection Date	Mix	Calibration File
26 Feb 2010 12:22 pm	A	C:\msdchem\1\DATA\022610V3\3A507.D
26 Feb 2010 6:14 pm	B	C:\msdchem\1\DATA\022610V3\3A519.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\022610V3\3A520.D

Injection Date	Mix	Calibration File
26 Feb 2010 12:52 pm	A	C:\msdchem\1\DATA\022610V3\3A508.D
26 Feb 2010 6:43 pm	B	C:\msdchem\1\DATA\022610V3\3A520.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\022610V3\3A521.D

Injection Date	Mix	Calibration File
26 Feb 2010 1:21 pm	A	C:\msdchem\1\DATA\022610V3\3A509.D
26 Feb 2010 7:14 pm	B	C:\msdchem\1\DATA\022610V3\3A521.D

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Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Last Update : Mon Mar 01 09:52:36 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 ml | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
2)MA	Dichlorodifluoromethane 0.0023 | 0.1374 | 0.00		2277 265306	5491	18101	26429	54755		LINR		0.9995
3)MPA	Chloromethane		0.2616031 0.2242101	0.2323936	0.2502915	0.2201181	0.2227574	0.2352	AVRG		7.2040
4)MCA	Vinyl chloride		0.2541011 0.2406996	0.2352067	0.2551214	0.2262592	0.2268934	0.2397	AVRG		5.3131
5)MA	Bromomethane		0.2072141 0.1976563	0.1833422	0.1967047	0.1853018	0.1905574	0.1935	AVRG		4.5923
6)MA	Chloroethane		0.1439835 0.1609703	0.1515516	0.1635666	0.1519987	0.1571248	0.1549	AVRG		4.6177
7)MA	Trichlorofluoromethane		0.3275129 0.3295311	0.3205552	0.3526688	0.3230757	0.3256797	0.3298	AVRG		3.5251
8)MA	Ethyl ether		0.1632206 0.1815809	0.1588711	0.1698610	0.1702956	0.1792069	0.1705	AVRG		5.1616
9)MA	Acetone		0.2512718 0.1922869	0.2223648	0.2033793	0.2013304	0.1941089	0.2108	AVRG		10.6879
10)MCA	1,1-Dichloroethylene		0.3242442 0.3458620	0.3114878	0.3387494	0.3630812	0.3504022	0.3390	AVRG		5.4902
11)MA	Iodomethane		0.4294534 0.4190581	0.4178005	0.4292890	0.4418386	0.4343625	0.4286	AVRG		2.1314
12)MA	Acetonitrile		0.0402682 0.0326505	0.0382372	0.0366367	0.0366463	0.0346505	0.0365	AVRG		7.2968
13)MA	Methyl acetate		0.2076535 0.1795084	0.1923167	0.1885164	0.1826725	0.1780487	0.1881	AVRG		5.8454
14)MA	Carbon disulfide		0.7600850 0.7072909	0.7160095	0.7724256	0.7803354	0.7507584	0.7478	AVRG		4.0011
15)MA	Methylene chloride			0.3707264	0.3129119	0.2978783	0.2772388	0.3046	AVRG		13.5875
16)MA	tert-Butyl methyl ether		0.2643832 0.6294121 0.6487595	0.7724787	0.6242810	0.6481214	0.6521856	0.6625	AVRG		8.3090

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Last Update : Mon Mar 01 09:52:36 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 m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
17)MA	trans-1,2-Dichloroethylene	0.2879134 0.3121953	0.3205825	0.3159418	0.3271093	0.3199899	0.3140	AVRG	4.3640		
18)MA	Vinyl acetate	0.3708955 0.3676321	0.3562677	0.3763507	0.3961861	0.3992501	0.3778	AVRG	4.4531		
19)MPA	1,1-Dichloroethane	0.3891895 0.3840108	0.3951156	0.3902567	0.4064048	0.4023760	0.3946	AVRG	2.1516		
20)MA	2-Butanone	0.2176096 0.2243453	0.2073927	0.2035761	0.2041258	0.2025725	0.2099	AVRG	4.2679		
21)MA	cis-1,2-Dichloroethylene	0.3148132 0.3490691	0.3479486	0.3487669	0.3618816	0.3617607	0.3474	AVRG	4.9575		
22)MA	2,2-Dichloropropane	0.2273085 0.2579670	0.2285154	0.2406765	0.2548518	0.2523942	0.2436	AVRG	5.5433		
23)MA	Bromochloromethane	0.1225494 0.1324406	0.1224921	0.1286731	0.1292831	0.1318949	0.1279	AVRG	3.4433		
24)MCA	Chloroform	0.3924582 0.4048216	0.3828801	0.4055065	0.4179002	0.4123718	0.4027	AVRG	3.2088		
25)MA	1,1,1-Trichloroethane	0.3013633 0.3457650	0.3029120	0.3266748	0.3385056	0.3468985	0.3270	AVRG	6.2937		
26)MA	Cyclohexane	0.3569848 0.3650756	0.3431964	0.3658950	0.3821484	0.3830406	0.3661	AVRG	4.1489		
27)MA	1,1-Dichloropropene	0.2585487 0.2772380	0.2705751	0.2830943	0.2924361	0.2851494	0.2778	AVRG	4.3171		
28)MA	Carbon tetrachloride	0.2621925 0.3083052	0.2521945	0.2910993	0.2979444	0.3040173	0.2860	AVRG	8.1269		
29)SA	1,2-Dichloroethane-d4	0.3048163 0.3054923	0.3038023	0.3043099	0.3120712	0.3093640	0.3066	AVRG	1.0820		
30)MA	1,2-Dichloroethane	0.3206540 0.3078525	0.3189165	0.3150473	0.3121416	0.3149056	0.3149	AVRG	1.4658		
31)MA	Benzene	0.8925155 0.8492594	0.8667581	0.8810794	0.9114586	0.8881848	0.8815	AVRG	2.4438		

Response Factor Report VOA3

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M

Last Update : Mon Mar 01 09:52:36 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
432) MA	Cyclohexene		0.3909578 0.4052279	0.4007418	0.4027450	0.4153084	0.4060418	0.4035	AVRG		1.9651
33) MA	n-Butyl alcohol -0.0153 | 0.0095 | 0.00	6147	13646 1801412	26068	68644	152277	327782		LINR	#	0.9998
34) MA	Trichloroethylene		0.2185741 0.2296824	0.2169080	0.2293622	0.2366375	0.2345330	0.2276	AVRG		3.5852
35) MA	1,2-Dichloropropane		0.2132156 0.2142021	0.2089330	0.2127484	0.2202776	0.2222368	0.2153	AVRG		2.3272
36) MA	Methylcyclohexane		0.3768113 0.3724753	0.3477301	0.3812230	0.3983542	0.3842014	0.3768	AVRG		4.4451
37) MA	Dibromomethane		0.1343382 0.1494473	0.1372676	0.1528224	0.1446250	0.1484067	0.1445	AVRG		5.0347
38) MA	Bromodichloromethane		0.2494928 0.3062115	0.2501461	0.2659550	0.2845010	0.2930440	0.2749	AVRG		8.5160
39) MA	2-Chloroethylvinyl ether -0.0077 | 0.0716 | 0.00		4198 681672	8783	24673	52943	116501		LINR		0.9993
40) MA	cis-1,3-Dichloropropylene		0.2842160 0.3552871	0.2817182	0.2936149	0.3215129	0.3379201	0.3124	AVRG		9.7753
42) MA	4-Methyl-2-pentanone		0.1126917 0.1280754	0.1194132	0.1148631	0.1259371	0.1238311	0.1208	AVRG		5.1220
43) SA	Toluene-d8		1.3518916 1.3270201	1.3510408	1.3495094	1.3589702	1.3350480	1.3456	AVRG		0.8917
44) MA	Toluene		1.2887421 1.1259558	1.1909009	1.1756455	1.2234448	1.1780655	1.1971	AVRG		4.5776
45) MA	trans-1,3-Dichloropropyl		0.3431112 0.4100913	0.3410400	0.3336466	0.3709023	0.3844142	0.3639	AVRG		8.2205
46) MA	1,1,2-Trichloroethane		0.2078616 0.2076847	0.2077071	0.1987867	0.2114831	0.2074057	0.2068	AVRG		2.0427
47) MA	2-Hexanone		0.3084722 0.3216425	0.3020269	0.2974837	0.3127201	0.3081516	0.3084	AVRG		2.7277

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Last Update : Mon Mar 01 09:52:36 2010
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m_1(x) + m_2(xE_2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
48)MA	1,3-Dichloropropane	0.4572956 0.4094379	0.4237014	0.4156022	0.4398228	0.4312282	0.4295	4.0479	AVRG		
49)MA	Tetrachloroethylene	0.2354138 0.2179223	0.2323932	0.2334344	0.2470356	0.2330730	0.2332	3.9786	AVRG		
50)MA	Dibromochloromethane	0.2494340 0.3164834	0.2429278	0.2628701	0.2793324	0.2903839	0.2736	10.0684	AVRG		
51)MA	1,2-Dibromoethane	0.2700109 0.2763561	0.2529708	0.2593241	0.2696286	0.2675353	0.2660	3.1600	AVRG		
52)MPA	Chlorobenzene	0.8011741 0.7610658	0.8025255	0.7738711	0.7949044	0.7811634	0.7858	2.1101	AVRG		
53)MA	1,1,1,2-Tetrachloroethane	0.2596875 0.2989609	0.2347810	0.2665300	0.2764643	0.2846701	0.2702	8.2002	AVRG		
54)MCA	Ethylbenzene	1.2936945 1.1837419	1.2319507	1.2102932	1.2614568	1.2410204	1.2370	3.1107	AVRG		
55)MA	m,p-Xylenes	0.4932529 0.4920194	0.4670689	0.4844705	0.5068089	0.5057304	0.4916	2.9988	AVRG		
56)MA	o-Xylene	0.4360212 0.5137219	0.4710369	0.4978140	0.5103853	0.5178328	0.4911	6.4898	AVRG		
57)MA	Styrene	0.7238189 0.8665230	0.7084516	0.7473548	0.8145164	0.8437693	0.7841	8.4573	AVRG		
59)MPA	Bromoform	1705 319914	3889	10263	22941	51759		0.9991	LINR		
60)MA	Isopropylbenzene	2.4693419 2.4666939	2.3478839	2.4305203	2.6280982	2.5248171	2.4779	3.7905	AVRG		
61)SA	Bromofluorobenzene	1.0117596 1.0073171	1.0079856	1.0046478	1.0271820	0.9900732	1.0082	1.1861	AVRG		
62)MPA	1,1,2,2-Tetrachloroethane	0.7433905 0.6532974	0.6459507	0.6400614	0.6862034	0.6503548	0.6699	5.8917	AVRG		
63)MA	1,2,3-Trichloropropane	0.1757257 0.1837154	0.1959634	0.1795787	0.1879136	0.1821393	0.1842	3.8379	AVRG		

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Last Update : Mon Mar 01 09:52:36 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
64)MA	Bromobenzene	0.6990069 0.6475703	0.6629458	0.6426559	0.6822975	0.6563265	0.6651	AVRG	---	---	3.2511
65)MA	n-Propylbenzene	2.9422568 2.7493829	2.7629100	2.8065839	3.0179028	2.9094149	2.8647	AVRG	---	---	3.7765
66)MA	1,3,5-Trimethylbenzene	2.0469325 2.0860717	1.9298056	2.0787279	2.1864852	2.1459569	2.0790	AVRG	---	---	4.2684
67)MA	2-Chlorotoluene	0.6347272 0.6139231	0.5819245	0.6222625	0.6463357	0.6062180	0.6176	AVRG	---	---	3.6616
68)MA	4-Chlorotoluene	1.8471368 1.7388256	1.7078987	1.7755335	1.8322518	1.7621182	1.7773	AVRG	---	---	3.0224
69)MA	tert-Butylbenzene	0.4350706 0.4655259	0.4117658	0.4362952	0.4645460	0.4550383	0.4447	AVRG	---	---	4.6980
70)MA	1,2,4-Trimethylbenzene	2.0659938 2.1467458	1.9676109	2.0841121	2.2405674	2.1433822	2.1081	AVRG	---	---	4.3668
71)MA	sec-Butylbenzene	2.7144952 2.7936401	2.6279901	2.7422793	2.9803647	2.8483307	2.7845	AVRG	---	---	4.3601
72)MA	4-Isopropyltoluene	2.0910379 2.2836300	2.0254634	2.1899010	2.3425800	2.3301522	2.2105	AVRG	---	---	5.9346
73)MA	1,3-Dichlorobenzene	1.1816611 1.1098192	1.0951751	1.1217743	1.1796527	1.1299381	1.1363	AVRG	---	---	3.1927
74)MA	1,4-Dichlorobenzene	1.3881352 1.2545517	1.2944681	1.2955782	1.3126890	1.2684404	1.3023	AVRG	---	---	3.6030
75)MA	n-Butylbenzene	2.0697504 2.1295339	1.9510321	2.1190961	2.2016901	2.1409973	2.1020	AVRG	---	---	4.0558
76)MA	1,2-Dichlorobenzene	1.4165185 1.2532868	1.2799703	1.2581950	1.2909697	1.2572560	1.2927	AVRG	---	---	4.8305
77)MA	1,2-Dibromo-3-chloroprop -0.0053 | 0.1663 | 0.00	781 133971	1316	4274	9282	21730		LINR	---	---	0.9992
78)MA	1,2,4-Trichlorobenzene	0.9378991 0.8776912	0.8250578	0.8776677	0.8575450	0.8402688	0.8694	AVRG	---	---	4.5388

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
79)MA	Hexachlorobutadiene		0.4091917 0.4355717	0.4158585	0.4369926	0.4600403	0.4549497	0.4354	AVRG		4.6622
80)MA	Naphthalene		2.2751115 2.3480964	2.1617013	2.1746687	2.2434688	2.2115010	2.2358	AVRG		3.1009
81)MA	1,2,3-Trichlorobenzene		0.9335860 0.7911532	0.8654297	0.8480960	0.8344446	0.8213539	0.8490	AVRG		5.7093
83)B	Chlorotrifluoroethylene	0.1190819	0.1377014	0.1479953	0.1454693	0.1461092	0.1375422	0.1390	AVRG		7.7082
84)B	2-Chloro-1,1,1-trifluoro		0.2744057 0.2773425	0.2713970	0.2898784	0.2919948	0.2691515	0.2812	AVRG		3.7411
85)B	Acrolein -0.0015 | 0.0265 | 0.00		1403 3279		9512	24236	47814		LNIR		0.9980
86)B	Trichlorotrifluoroethane	0.0734506	0.0898388 0.0724274	0.0811825	0.0933924	0.0875572	0.0810551	0.0827	AVRG		9.6856
87)B	Isopropyl Alcohol	0.0206065	0.0174188 0.0200712	0.0174588	0.0177164	0.0190216	0.0189562	0.0187	AVRG		6.8216
88)B	Allyl chloride	0.2938643	0.3045021 0.2697421	0.2795530	0.3208515	0.3079574	0.2971171	0.2962	AVRG		5.8443
89)B	tert-Butyl Alcohol	0.0349488	0.0300975 0.0331829	0.0289918	0.0293445	0.0310667	0.0319348	0.0314	AVRG		6.8727
90)B	Acrylonitrile	0.0926929	0.0889918 0.0836840	0.0785965	0.0934529	0.0907204	0.0916199	0.0885	AVRG		6.1568
91)B	Isopropyl ether	0.7305681	0.6865236 0.7509827	0.6893026	0.6900478	0.7296397	0.6892134	0.7095	AVRG		3.7716
92)B	2-Chloro-1,3-butadiene	0.2761391	0.2345953 0.2553679	0.2329521	0.2695636	0.2673914	0.2659065	0.2574	AVRG		6.7158
93)B	Ethyl tert-butyl ether	0.7134150	0.6338255 0.7361818	0.6463766	0.6459686	0.7027133	0.6637324	0.6775	AVRG		5.8516
94)B	Ethyl acetate	0.2226895	0.2406210 0.1965077	0.2049246	0.2259259	0.2193049	0.2193727	0.2185	AVRG		6.5572

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M

Last Update : Mon Mar 01 09:52:36 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
95)B	Propionitrile	0.0366098	0.0354359 0.0331975	0.0304722	0.0353374	0.0357550	0.0362016	0.0347	AVRG		6.2330
96)B	Methacrylonitrile	0.1390662	0.1322547 0.1243633	0.1231819	0.1389465	0.1368367	0.1375294	0.1332	AVRG		5.1183
97)B	Tetrahydrofuran	0.0756568	0.0752463 0.0677925	0.0706133	0.0751958	0.0749912	0.0750971	0.0735	AVRG		4.1654
98)B	Isobutyl alcohol	0.0108529	0.0091276 0.0089532	0.0080827	0.0096923	0.0095609	0.0099136	0.0095	AVRG	#	9.1336
99)B	Methyl tert-amyl ether	0.6618921	0.6223530 0.6872022	0.5817259	0.6074483	0.6202135	0.5992109	0.6257	AVRG		5.8728
100)B	Methyl methacrylate	0.1563346	0.1333805 0.1427461	0.1253282	0.1490333	0.1503818	0.1513841	0.1441	AVRG		7.6851
101)B	1,4-Dioxane	0.0032585	0.0028392 0.0028687	0.0029697	0.0031861	0.0031487	0.0031801	0.0031	AVRG	#	5.5087
102)B	2-Nitropropane	309988	3847 607260	6920	21607	47943	108855		LINR		0.9989
104)B	Ethyl methacrylate	0.3689686	0.2946797 0.3358201	0.2932699	0.3534190	0.3617355	0.3690872	0.3396	AVRG		9.7609
106)B	1-Chlorohexane	0.4681816	0.4130883 0.4784814	0.4136660	0.4742347	0.4785112	0.4453676	0.4531	AVRG		6.4850
107)B	cis-1,4-Dichloro-2-buten	0.1861930	0.1509128 0.1732163	0.1467436	0.1638729	0.1731162	0.1801043	0.1677	AVRG		8.7458
108)B	Cyclohexanone		0.0187731	0.0165114	0.0196026	0.0193252	0.0220481	0.0193	AVRG		10.2864
109)B	trans-1,4-Dichloro-2-but	0.1812394	0.1519917 0.1661826	0.1386168	0.1673497	0.1662643	0.1735759	0.1636	AVRG		8.6349
110)B	Pentachloroethane	415588	5968	11742	24680	71270	130274		LINR		0.9942
111)B	Benzyl chloride	1588109	20461 3095519	40373	116221	266770	576558		LINR		0.9988

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Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m1(x) + m2(xE2)$

b	Compound	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
	m1	7								
	m2									
12)B	bis(2-Chloroisopropyl)et	0.3201400	0.3187359	0.3223401	0.3177936	0.3358707	0.3232	AVRG		3.9104
		0.3045391								

#) = Out of Range

Calibration History Report VOA5

GEL Laboratories, LLC

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

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\030310V5\5A311.D

Injection Date	Mix	Calibration File
3 Mar 2010 3:18 pm	A	C:\msdchem\1\DATA\030310V5\5A311.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\030310V5\5A315.D

Injection Date	Mix	Calibration File
3 Mar 2010 11:52 am	A	C:\msdchem\1\DATA\030310V5\5A303.D
3 Mar 2010 5:01 pm	B	C:\msdchem\1\DATA\030310V5\5A315.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\030310V5\5A316.D

Injection Date	Mix	Calibration File
3 Mar 2010 12:18 pm	A	C:\msdchem\1\DATA\030310V5\5A304.D
3 Mar 2010 5:27 pm	B	C:\msdchem\1\DATA\030310V5\5A316.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\030310V5\5A317.D

Injection Date	Mix	Calibration File
3 Mar 2010 12:43 pm	A	C:\msdchem\1\DATA\030310V5\5A305.D
3 Mar 2010 5:52 pm	B	C:\msdchem\1\DATA\030310V5\5A317.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\030310V5\5A318.D

Injection Date	Mix	Calibration File
3 Mar 2010 1:09 pm	A	C:\msdchem\1\DATA\030310V5\5A306.D
3 Mar 2010 6:18 pm	B	C:\msdchem\1\DATA\030310V5\5A318.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\030310V5\5A319.D

Injection Date	Mix	Calibration File
3 Mar 2010 1:35 pm	A	C:\msdchem\1\DATA\030310V5\5A307.D
3 Mar 2010 6:44 pm	B	C:\msdchem\1\DATA\030310V5\5A319.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\030310V5\5A320.D

Injection Date	Mix	Calibration File
3 Mar 2010 2:01 pm	A	C:\msdchem\1\DATA\030310V5\5A308.D
3 Mar 2010 7:10 pm	B	C:\msdchem\1\DATA\030310V5\5A320.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\030310V5\5A321.D

Injection Date	Mix	Calibration File
3 Mar 2010 2:26 pm	A	C:\msdchem\1\DATA\030310V5\5A309.D
3 Mar 2010 7:35 pm	B	C:\msdchem\1\DATA\030310V5\5A321.D

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VOA5-8260-030310.M Wed Mar 17 16:27:54 2010

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Response Factor Report VOA5
GEL Laboratories, LLC

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

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m_1(x) + m_2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
2)MA	Dichlorodifluoromethane	0.1071911	0.1343128 0.1106837	0.1140372	0.1271918	0.1076299	0.1161426	0.1167	AVRG		8.8231
3)MPA	Chloromethane 0.0020 | 0.1467 | 0.00	261159	10037 510887	13766	31895	57674	114670		LINR		0.9998
4)MCA	Vinyl chloride	0.1157351	0.1366188 0.1183938	0.1281019	0.1255313	0.1197165	0.1183782	0.1232	AVRG		5.9617
5)MA	Bromomethane	0.1170655	0.1239625 0.1206884	0.1169147	0.1094959	0.1165166	0.1190689	0.1177	AVRG		3.7964
6)MA	Chloroethane	0.1233612	0.1370210 0.1233229	0.1216074	0.1215156	0.1214055	0.1263787	0.1249	AVRG		4.4855
7)MA	Trichlorofluoromethane	0.2117030	0.2153456 0.2117388	0.2178553	0.2129630	0.2104313	0.2210791	0.2144	AVRG		1.8020
8)MA	Ethyl ether	0.1947530	0.1871370 0.1794319	0.1767368	0.1717271	0.1985778	0.1841458	0.1846	AVRG		5.2291
9)MA	Acetone	0.1463100	0.1866060 0.1376620	0.1644416	0.1375065	0.1478785	0.1253868	0.1494	AVRG		13.6035
10)MCA	1,1-Dichloroethylene	0.2389821	0.2398002 0.2445433	0.2409558	0.2398242	0.2475025	0.2208403	0.2389	AVRG		3.5757
11)MA	Iodomethane	0.2471140	0.2444391 0.2442657	0.2568896	0.2483905	0.2612671	0.2249439	0.2468	AVRG		4.6894
12)MA	Acetonitrile	0.0283547	0.0347170 0.0256546	0.0322725	0.0285058	0.0304863	0.0249732	0.0293	AVRG		11.9223
13)MA	Methyl acetate	0.1652002	0.1815060 0.1485899	0.1773876	0.1581228	0.1758673	0.1361690	0.1633	AVRG		10.2209
14)MA	Carbon disulfide	0.4578684	0.5050741 0.4584238	0.5194211	0.5014662	0.5065645	0.4033217	0.4789	AVRG		8.5995
15)MA	Methylene chloride 0.0023 | 0.1884 | 0.00	347452	11571 651820	21218	39402	76880	131269		LINR		0.9995
16)MA	tert-Butyl methyl ether	0.5036196	0.4725751 0.4964892	0.5978178	0.4559781	0.5175164	0.4382739	0.4975	AVRG		10.4953

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	0.2628117	0.2484881 0.2644957	0.2741276	0.2591751	0.2691941	0.2403411	0.2598	AVRG		4.5316
18)MA	Vinyl acetate	0.4300924	0.4257145 0.3838583	0.3882024	0.3995826	0.4134088	0.4228412	0.4091	AVRG		4.5605
19)MPA	1,1-Dichloroethane	0.3302035	0.3142904 0.3294966	0.3229238	0.3125231	0.3367887	0.3058631	0.3217	AVRG		3.4802
20)MA	2-Butanone	0.1882036	0.1936957 0.1818946	0.1811767	0.1647833	0.1816863	0.1545487	0.1780	AVRG		7.6550
21)MA	cis-1,2-Dichloroethylene	0.3090002	0.2816842 0.3063284	0.3216599	0.2968513	0.3189112	0.2809374	0.3022	AVRG		5.4422
22)MA	2,2-Dichloropropane	0.2371246	0.2583557 0.2337214	0.2487143	0.2316248	0.2394110	0.2202251	0.2385	AVRG		5.1515
23)MA	Bromochloromethane	0.0955632	0.0843041 0.0945829	0.0899282	0.0830960	0.0936185	0.0838221	0.0893	AVRG		6.1291
24)MCA	Chloroform	0.2968630	0.2880392 0.2933504	0.2944044	0.2766864	0.2987853	0.2690593	0.2882	AVRG		3.8825
25)MA	1,1,1-Trichloroethane	0.2446109	0.2341424 0.2416415	0.2408483	0.2355644	0.2432168	0.2237423	0.2377	AVRG		3.0518
26)MA	Cyclohexane	0.3362899	0.3377261 0.3291308	0.3632086	0.3428843	0.3469778	0.3103599	0.3381	AVRG		4.8083
27)MA	1,1-Dichloropropene	0.2203338	0.2256423 0.2134343	0.2194822	0.2171957	0.2254819	0.2043886	0.2180	AVRG		3.3958
28)MA	Carbon tetrachloride	0.2111430	0.1982649 0.2090476	0.2143055	0.1985177	0.2044374	0.1914744	0.2039	AVRG		4.0179
29)SA	1,2-Dichloroethane-d4	0.2469049	0.2369252 0.2490915	0.2336174	0.2380253	0.2497712	0.2396695	0.2420	AVRG		2.6779
30)MA	1,2-Dichloroethane	0.2554033	0.2479518 0.2486772	0.2572257	0.2440949	0.2612232	0.2285764	0.2490	AVRG		4.3389
31)MA	Benzene	0.7207210	0.7418443 0.7026943	0.7731024	0.7153431	0.7479119	0.6649804	0.7238	AVRG		4.8270

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 m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
32)MA	Cyclohexene	0.3339520	0.3123061 0.3234949	0.3866319	0.3393842	0.3509290	0.3080677	0.3364	AVRG		7.9572
33)MA	n-Butyl alcohol 0.0059 | 0.0070 | 0.00	19260 1408012	34213 2352134	56344	121141	269492	466484		LINR	#	0.9947
34)MA	Trichloroethylene	0.1724887	0.1816132 0.1698750	0.1780411	0.1681998	0.1729789	0.1601051	0.1719	AVRG		4.0477
35)MA	1,2-Dichloropropane	0.2087711	0.2111626 0.2051990	0.2097606	0.1902748	0.2128689	0.1930853	0.2044	AVRG		4.4358
36)MA	Methylcyclohexane	0.3125154	0.3236754 0.2954954	0.3376340	0.3191597	0.3187083	0.2915431	0.3141	AVRG		5.1167
37)MA	Dibromomethane	0.1147921	0.0958611 0.1112747	0.1022045	0.0940684	0.1106872	0.0984524	0.1039	AVRG		7.9840
38)MA	Bromodichloromethane	0.2331295	0.1958516 0.2322850	0.2002811	0.2032170	0.2187202	0.2032823	0.2124	AVRG		7.3274
39)MA	2-Chloroethylvinyl ether	0.0686203	0.0564924 0.0652642	0.0601502	0.0771933	0.0701491	0.0593383	0.0653	AVRG		11.1044
40)MA	cis-1,3-Dichloropropylene	0.3125399	0.2818987 0.3029780	0.2841853	0.2759376	0.3026459	0.2752061	0.2908	AVRG		5.1555
42)MA	4-Methyl-2-pentanone	0.1271094	0.1231600 0.1177079	0.1229976	0.1118485	0.1258398	0.1083137	0.1196	AVRG		6.0173
43)SA	Toluene-d8	1.2721004	1.2715773 1.2960357	1.2614345	1.2794096	1.2985942	1.2717942	1.2787	AVRG		1.0765
44)MA	Toluene	1.0348743	1.1518044 0.9819176	1.1664465	1.0787639	1.0942945	1.0060419	1.0734	AVRG		6.5499
45)MA	trans-1,3-Dichloropropyl	0.3858636	0.3568487 0.3673651	0.3722761	0.3512502	0.3821534	0.3436649	0.3656	AVRG		4.3186
46)MA	1,1,2-Trichloroethane	0.1865070	0.1809477 0.1759586	0.1909377	0.1747003	0.1892881	0.1696366	0.1811	AVRG		4.4615
47)MA	2-Hexanone	0.3467953	0.3284339 0.3313724	0.3316048	0.3042837	0.3395084	0.2907043	0.3247	AVRG		6.1423

Response 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	0.4018238	0.3986847 0.3753277	0.3941649	0.3766925	0.4132373	0.3644275	0.3892	AVRG		4.4680
49)MA	Tetrachloroethylene	0.1886479	0.2101304 0.1744663	0.2182619	0.2019552	0.1998049	0.1830335	0.1966	AVRG		7.8477
50)MA	Dibromochloromethane	0.2419406	0.2023411 0.2365549	0.2093074	0.1956150	0.2219088	0.2007112	0.2155	AVRG		8.4921
51)MA	1,2-Dibromoethane	0.2238521	0.2177735 0.2124675	0.2045353	0.1960736	0.2183057	0.1960958	0.2099	AVRG		5.3073
52)MPA	Chlorobenzene	0.6872590	0.7408323 0.6366570	0.7386193	0.6950357	0.7183845	0.6572330	0.6963	AVRG		5.6932
53)MA	1,1,1,2-Tetrachloroethan	0.2494816	0.2332060 0.2379202	0.2374976	0.2252816	0.2425499	0.2251908	0.2359	AVRG		3.7523
54)MCA	Ethylbenzene	1.1606703	1.3980293 1.0780788	1.3671495	1.2021431	1.2341387	1.1328429	1.2247	AVRG		9.7166
55)MA	m,p-Xylenes	0.4618127	0.4755362 0.4281219	0.4871003	0.4628331	0.4838482	0.4481627	0.4639	AVRG		4.4913
56)MA	o-Xylene	0.4689336	0.4805646 0.4384802	0.4947283	0.4674384	0.4872624	0.4439087	0.4688	AVRG		4.5189
57)MA	Styrene	0.7780846	0.6852095 0.7485180	0.6985634	0.6741433	0.7377851	0.6904055	0.7161	AVRG		5.4221
59)MPA	Bromoform	0.3074710	0.2425130 0.2932519	0.2628946	0.2525902	0.2877580	0.2590520	0.2722	AVRG		8.8146
60)MA	Isopropylbenzene	2.2318182	2.3943888 2.0444667	2.5037151	2.3076026	2.3716419	2.2055021	2.2942	AVRG		6.5198
61)SA	Bromofluorobenzene	0.9869307	1.0123469 0.9932836	1.0080037	1.0035486	1.0238053	0.9924612	1.0029	AVRG		1.2932
62)MPA	1,1,2,2-Tetrachloroethan	0.5917981	0.6871449 0.5341051	0.6275343	0.5716073	0.6108623	0.5337210	0.5938	AVRG		9.1753
63)MA	1,2,3-Trichloropropane	0.1663007	0.1542994 0.1462352	0.1701851	0.1567715	0.1717308	0.1442981	0.1585	AVRG		7.0291

Response Factor Report VOA5
GEL Laboratories, LLC

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

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m1(x) + m2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
64)MA	Bromobenzene	0.5547476	0.6486814 0.5243606	0.6270489	0.5549342	0.5944725	0.5351627	0.5771	AVRG		8.2053
65)MA	n-Propylbenzene	2.6188023	3.1428673 2.4230362	3.0740107	2.7659361	2.7519459	2.6123049	2.7698	AVRG		9.3207
66)MA	1,3,5-Trimethylbenzene	1.9147331	2.1140806 1.7809313	2.1176062	1.9345676	1.9838360	1.8693101	1.9593	AVRG		6.3245
67)MA	2-Chlorotoluene	0.5556979	0.6336821 0.5174526	0.6149888	0.5712532	0.5980658	0.5347064	0.5751	AVRG		7.4098
68)MA	4-Chlorotoluene	1.6724026	2.0033682 1.5676196	1.9506321	1.7393299	1.7773161	1.6165466	1.7610	AVRG		9.3178
69)MA	tert-Butylbenzene	0.4229275	0.5220044 0.3925972	0.5067096	0.4594991	0.4418889	0.4115510	0.4510	AVRG		10.7312
70)MA	1,2,4-Trimethylbenzene	1.9586218	2.1474948 1.8420857	2.1428091	1.9400417	2.0243304	1.8983398	1.9934	AVRG		5.9008
71)MA	sec-Butylbenzene	2.4689370	2.7713754 2.2728207	2.7409960	2.5556188	2.5245775	2.4127685	2.5353	AVRG		6.9611
72)MA	4-Isopropyltoluene	1.9874771	2.1276691 1.8512791	2.1644277	1.9988403	2.0283563	1.9476327	2.0151	AVRG		5.2660
73)MA	1,3-Dichlorobenzene	1.0613620	1.2393706 1.0114602	1.1735978	1.0546701	1.1091368	1.0209850	1.0958	AVRG		7.6742
74)MA	1,4-Dichlorobenzene	1.0794919	1.2623150 1.0206465	1.1764354	1.0887098	1.1479739	1.0224741	1.1140	AVRG		7.8575
75)MA	n-Butylbenzene	1.8731727	2.2862752 1.7525689	2.2057605	1.9471241	1.9465316	1.8399483	1.9788	AVRG		9.8883
76)MA	1,2-Dichlorobenzene	1.0422240	1.1619981 0.9895673	1.1046351	1.0096084	1.0812630	0.9841815	1.0534	AVRG		6.2618
77)MA	1,2-Dibromo-3-chloroprop	0.1172103	0.1466513 0.1082926	0.1103702	0.0987550	0.1134385	0.0964579	0.1130	AVRG		14.6986
78)MA	1,2,4-Trichlorobenzene	0.7207589	0.7703834 0.6948904	0.7294288	0.6781382	0.7096930	0.6624167	0.7094	AVRG		5.0317

Response Factor Report VOA5
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Last Update : Tue Mar 09 07:08:19 2010
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m1(x) + m2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
79)MA	Hexachlorobutadiene	0.4278299	0.4733681 0.4047082	0.4525326	0.4213133	0.4251323	0.4112408	0.4309	AVRG		5.5882
80)MA	Naphthalene	1.7289583	1.6207382 1.6143553	1.6540963	1.4827854	1.6683802	1.5100228	1.6113	AVRG		5.4224
81)MA	1,2,3-Trichlorobenzene	0.6423302	0.6276676 0.6195878	0.6346658	0.5810652	0.6448961	0.5831963	0.6191	AVRG		4.3026
83)B	Chlorotrifluoroethylene	0.0735216	0.0835210 0.0860804	0.0722722	0.0684897	0.0802235	0.0986873	0.0804	AVRG		12.7622
84)B	2-Chloro-1,1,1-trifluoro	0.1183741	0.1102455 0.1256300	0.1129374	0.1103017	0.1195944	0.1242927	0.1173	AVRG		5.4176
85)B	Acrolein	221757	2624 537267	5641	16329	36743	72786		LINR		0.9903
86)B	Trichlorotrifluoroethane	0.0405821	0.0459929 0.0499271	0.0456091	0.0440692	0.0471327	0.0405003	0.0448	AVRG		7.6523
87)B	Isopropyl Alcohol	0.0156865	0.0132039 0.0168508	0.0133281	0.0136177	0.0152807	0.0167250	0.0150	AVRG		10.5258
88)B	Allyl chloride	0.3013963	0.3545867 0.3247091	0.3325385	0.3315882	0.3447311	0.3139613	0.3291	AVRG		5.4472
89)B	tert-Butyl Alcohol	0.0229193	0.0182895 0.0244880	0.0196806	0.0209845	0.0227963	0.0247242	0.0220	AVRG		11.0285
90)B	Acrylonitrile	0.0699699	0.0715226 0.0753880	0.0684122	0.0745782	0.0754865	0.0711180	0.0724	AVRG		3.8849
91)B	Isopropyl ether	0.7352384	0.7025458 0.7994663	0.6794811	0.6820459	0.7654787	0.7924311	0.7367	AVRG		6.8556
92)B	2-Chloro-1,3-butadiene	0.2159482	0.1980383 0.2496900	0.1966904	0.2032729	0.2213056	0.2015126	0.2124	AVRG		8.8880
93)B	Ethyl tert-butyl ether	0.5377480	0.4313279 0.6133655	0.4816021	0.5236631	0.5726499	0.5688029	0.5327	AVRG		11.4695
94)B	Ethyl acetate	0.1873901	0.2038656 0.1978070	0.1859171	0.1985214	0.2051710	0.1930163	0.1960	AVRG		3.8432

Response Factor Report VOA5
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Last Update : Tue Mar 09 07:08:19 2010
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m_1(x) + m_2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
95)B	Propionitrile	0.0274167	0.0254057 0.0295674	0.0261084	0.0287780	0.0296110	0.0280571	0.0278	AVRG		5.8911
96)B	Methacrylonitrile	0.1462335	0.1576755 0.1544466	0.1461036	0.1559698	0.1612840	0.1496123	0.1530	AVRG		3.8305
97)B	Tetrahydrofuran	0.0649169	0.0717706 0.0687676	0.0675774	0.0711026	0.0723381	0.0676879	0.0692	AVRG		3.8938
98)B	Isobutyl alcohol	0.0077815	0.0071325 0.0076959	0.0063262	0.0072331	0.0073822	0.0074520	0.0073	AVRG	#	6.6246
99)B	Methyl tert-amyl ether	0.4244686	0.3693071 0.4894317	0.3868580	0.4285646	0.4452561	0.4538868	0.4283	AVRG		9.4811
100)B	Methyl methacrylate	0.1178945	0.1081095 0.1241707	0.1026339	0.1134532	0.1237597	0.1183364	0.1155	AVRG		6.9053
101)B	1,4-Dioxane	0.0021058	0.0019460 0.0022074	0.0018691	0.0020607	0.0021756	0.0020610	0.0021	AVRG	#	5.8304
102)B	2-Nitropropane -0.0083 | 0.0603 | 0.00	483598	8038 1057258	15631	44649	93248	187428		LINR		0.9974
104)B	Ethyl methacrylate	0.3067238	0.2614159 0.3151848	0.2550206	0.2945269	0.3244650	0.3086265	0.2951	AVRG		9.0970
106)B	1-Chlorohexane	0.4829755	0.5235250 0.5218822	0.4770701	0.4681758	0.5166419	0.5271408	0.5025	AVRG		5.0286
107)B	cis-1,4-Dichloro-2-buten	0.1870322	0.1796601 0.1976993	0.1700290	0.1860859	0.2007261	0.1875530	0.1870	AVRG		5.5493
108)B	Cyclohexanone		0.0139831	0.0143555	0.0153783	0.0164251	0.0167053	0.0154	AVRG		7.8679
109)B	trans-1,4-Dichloro-2-but		0.1664803 0.1845150	0.1640418	0.1749215	0.1913325	0.1771113	0.1761	AVRG		5.4159
110)B	Pentachloroethane	0.2461688	0.2534545 0.2701388	0.1993333	0.2360493	0.2598436	0.2423291	0.2439	AVRG		9.3035
111)B	Benzyl chloride	0.8579629	0.8960861 0.8906143	0.8542224	0.9170528	0.9675422	0.8839666	0.8953	AVRG		4.3075

Response Factor Report VOA5

GEL Laboratories, LLC

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

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m1(x) + m2(xE2)$

b	Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
	m1	6	7								
m2	bis(2-Chloroisopropyl)et	0.3165820	0.3441093	0.3217389	0.3317707	0.3404966	0.3253184	0.3294	AVRG		3.0276
			0.3259263								

20#) = Out of Range

Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date 03-MAR-10 16:10

Data File: 030310V5\5A313.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W5VM100303-10

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.242	0.24421		.01		0.91322	30		Averaged	
SToluene-d8	1.2787	1.27452		.01		-0.32689	30		Averaged	
SBromofluorobenzene	1.0029	0.99178		.01		-1.10878	30		Averaged	
Dichlorodifluoromethane	0.1167	0.10877		.01		-6.7952	30		Averaged	
Chloromethane	50	47.23	50			-5.54	30		Linear	spcc
Vinyl chloride	0.1232	0.11935		.01		-3.125	20		Averaged	ccc
Bromomethane	0.1177	0.1182		.01		0.42481	30		Averaged	
Chloroethane	0.1249	0.12029		.01		-3.69095	30		Averaged	
Trichlorofluoromethane	0.2144	0.21193		.01		-1.15205	30		Averaged	
Ethyl ether	0.1846	0.17033		.01		-7.73023	30		Averaged	
1,1-Dichloroethylene	0.2389	0.22217		.01		-7.00293	20		Averaged	ccc
Acetone	0.1494	0.11803		.01		-20.99732	40		Averaged	
Iodomethane	0.2468	0.23547		.01		-4.59076	30		Averaged	
Methyl acetate	0.1633	0.14216		.01		-12.9455	40		Averaged	
Carbon disulfide	0.4789	0.4718		.01		-1.48256	30		Averaged	
Acetonitrile	0.0293	0.02521		.01		-13.95904	30		Averaged	
Methylene chloride	50	47.91	50			-4.18	30		Linear	
tert-Butyl methyl ether	0.4975	0.4619		.01		-7.15578	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.24929		.01		-4.04542	30		Averaged	
Vinyl acetate	0.4091	0.41961		.01		2.56905	40		Averaged	
1,1-Dichloroethane	0.3217	0.31699		.1		-1.4641	30		Averaged	spcc
2-Butanone	0.178	0.14855		.01		-16.54494	40		Averaged	
2,2-Dichloropropane	0.2385	0.22482		.01		-5.73585	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.29612		.01		-2.01191	30		Averaged	
Chloroform	0.2882	0.28311		.01		-1.76613	20		Averaged	ccc
Bromochloromethane	0.0893	0.09141		.01		2.36282	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.23371		.01		-1.67859	30		Averaged	
Cyclohexane	0.3381	0.32396		.01		-4.18219	30		Averaged	
1,1-Dichloropropene	0.218	0.20984		.01		-3.74312	30		Averaged	
Carbon tetrachloride	0.2039	0.20004		.01		-1.89308	30		Averaged	
Benzene	0.7238	0.68663		.01		-5.1354	30		Averaged	
1,2-Dichloroethane	0.249	0.23966		.01		-3.751	30		Averaged	
Cyclohexene	0.3364	0.31082		.01		-7.60404	30		Averaged	
n-Butyl alcohol	5000	4684.67	5000			-6.3066	40		Linear	
Trichloroethylene	0.1719	0.16611		.01		-3.36824	30		Averaged	
Methylcyclohexane	0.3141	0.28966		.01		-7.78096	30		Averaged	
1,2-Dichloropropane	0.2044	0.1998		.01		-2.25049	20		Averaged	ccc

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 03-MAR-10 16:10

Data File: 030310V5\5A313.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W5VM100303-10

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.10512		.01		1.17421	30		Averaged	
Bromodichloromethane	0.2124	0.22108		.01		4.08663	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.06282		.01		-3.79786	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.28903		.01		-0.60867	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.1091		.01		-8.77926	40		Averaged	
Toluene	1.0734	0.98913		.01		-7.85075	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.35772		.01		-2.15536	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.17385		.01		-4.00331	30		Averaged	
2-Hexanone	0.3247	0.27267		.01		-16.02402	40		Averaged	
Tetrachloroethylene	0.1966	0.1809		.01		-7.98576	30		Averaged	
1,3-Dichloropropane	0.3892	0.36897		.01		-5.19784	30		Averaged	
Dibromochloromethane	0.2155	0.21995		.01		2.06497	30		Averaged	
1,2-Dibromoethane	0.2099	0.20474		.01		-2.45831	30		Averaged	
Chlorobenzene	0.6963	0.65948		.3		-5.28795	30		Averaged	spcc
Ethylbenzene	1.2247	1.10154		.01		-10.05634	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.23427		.01		-0.69097	30		Averaged	
m,p-Xylenes	0.4639	0.43751		.01		-5.68873	30		Averaged	
o-Xylene	0.4688	0.44327		.01		-5.44582	30		Averaged	
Styrene	0.7161	0.73277		.01		2.32789	30		Averaged	
Bromoform	0.2722	0.28094		.1		3.21087	30		Averaged	spcc
Isopropylbenzene	2.2942	2.10689		.01		-8.1645	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.5349		.3		-9.91916	30		Averaged	spcc
n-Propylbenzene	2.7698	2.4928		.01		-10.00072	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.14961		.01		-5.60883	30		Averaged	
Bromobenzene	0.5771	0.53865		.01		-6.66262	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	1.81472		.01		-7.37917	30		Averaged	
2-Chlorotoluene	0.5751	0.532		.01		-7.49435	30		Averaged	
4-Chlorotoluene	1.761	1.61118		.01		-8.50767	30		Averaged	
tert-Butylbenzene	0.451	0.39993		.01		-11.32373	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	1.86402		.01		-6.49042	30		Averaged	
sec-Butylbenzene	2.5353	2.31846		.01		-8.55283	30		Averaged	
4-Isopropyltoluene	2.0151	1.87648		.01		-6.87906	30		Averaged	
1,3-Dichlorobenzene	1.0958	1.02852		.01		-6.13981	30		Averaged	
1,4-Dichlorobenzene	1.114	1.04673		.01		-6.0386	30		Averaged	
n-Butylbenzene	1.9788	1.7573		.01		-11.19365	30		Averaged	
1,2-Dichlorobenzene	1.0534	0.99705		.01		-5.34934	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.10451		.01		-7.51327	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 03-MAR-10 16:10

Data File: 030310V5\5A313.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W5VM100303-10 Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.69168		.01		-2.49789	30		Averaged
Hexachlorobutadiene	0.4309	0.41116		.01		-4.58111	30		Averaged
Naphthalene	1.6113	1.57133		.01		-2.48061	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.62516		.01		0.97884	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A313.D
Acq On : 3 Mar 2010 4:10 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 07:22:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.391	8.387	1.000	96	1746399	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1312296	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	682831	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1746399	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1312296	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	682831	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	426493	50.46	ug/L	0.00
43) Toluene-d8	9.724	9.721	0.873	98	1672551	49.84	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	677221	49.45	ug/L	0.00
Target Compounds								
2) Dichlorodifluoromethane	4.668	4.668	0.556	85	189950	46.58	ug/L	96
3) Chloromethane	4.900	4.900	0.584	50	245590	47.23	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	208439	48.43	ug/L	97
5) Bromomethane	5.434	5.423	0.648	94	206417	50.22	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	210081	48.14	ug/L	99
7) Trichlorofluoromethane	5.705	5.695	0.680	101	370114	49.41	ug/L	99
8) Ethyl ether	5.867	5.866	0.699	59	297471	46.12	ug/L	97
9) Acetone	6.174	6.174	0.736	43	1030674	197.52	ug/L	99
10) 1,1-Dichloroethylene	6.156	6.156	0.734	61	387994	46.49	ug/L	99
11) Iodomethane	6.361	6.357	0.758	142	2056129	238.56	ug/L	99
12) Acetonitrile	6.464	6.464	0.770	41	1100599	1076.16	ug/L	98
13) Methyl acetate	6.365	6.365	0.759	43	1241350	217.69	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	4119792	246.31	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	319169	47.91	ug/L	99
16) tert-Butyl methyl ether	6.641	6.640	0.791	73	806665	46.43	ug/L	99
17) trans-1,2-Dichloroethy...	6.715	6.715	0.800	61	435366	47.98	ug/L	99
18) Vinyl acetate	6.969	6.969	0.831	43	3664023	256.42	ug/L	100
19) 1,1-Dichloroethane	7.072	7.068	0.843	63	553584	49.26	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	1297140	208.64	ug/L	100
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	517143	48.99	ug/L	100
22) 2,2-Dichloropropane	7.514	7.514	0.895	77	392633	47.14	ug/L	98
23) Bromochloromethane	7.723	7.719	0.920	128	159635	51.20	ug/L	98
24) Chloroform	7.702	7.701	0.918	83	494431	49.12	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	408147	49.16	ug/L	99
26) Cyclohexane	7.924	7.924	0.944	56	565761	47.91	ug/L	99
27) 1,1-Dichloropropene	8.009	8.005	0.954	75	366466	48.13	ug/L	99
28) Carbon tetrachloride	8.023	8.020	0.956	117	349351	49.06	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.981	62	418545	48.12	ug/L	100
31) Benzene	8.200	8.203	0.977	78	1199124	47.43	ug/L	100
32) Cyclohexene	8.250	8.246	0.983	67	542810	46.20	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.998	56	1150973	4684.67	ug/L	99
34) Trichloroethylene	8.678	8.677	1.034	95	290093	48.32	ug/L	99
35) 1,2-Dichloropropane	8.929	8.932	1.064	63	348926	48.86	ug/L	100
36) Methylcyclohexane	8.830	8.826	1.052	83	505866	46.11	ug/L	98
37) Dibromomethane	9.063	9.059	1.080	93	183578	50.58	ug/L	99
38) Bromodichloromethane	9.113	9.112	1.086	83	386094	52.04	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	548585	240.47	ug/L	100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.130	75	504766	49.70	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A313.D
Acq On : 3 Mar 2010 4:10 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 07:22:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	715875	228.12	ug/L	99
44) Toluene	9.788	9.788	0.878	91	1298029	46.07	ug/L	100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	469439	48.92	ug/L	99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	228140	47.99	ug/L	98
47) 2-Hexanone	10.280	10.279	0.923	43	1789138	209.96	ug/L	100
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	484201	47.40	ug/L	99
49) Tetrachloroethylene	10.290	10.290	0.924	164	237399	46.00	ug/L	99
50) Dibromochloromethane	10.584	10.583	0.950	129	288635	51.04	ug/L	99
51) 1,2-Dibromoethane	10.775	10.771	0.967	107	268682	48.78	ug/L	98
52) Chlorobenzene	11.174	11.174	1.003	112	865428	47.36	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	307438	49.66	ug/L	100
54) Ethylbenzene	11.181	11.181	1.003	91	1445541	44.97	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	1148282	94.31	ug/L	99
56) o-Xylene	11.701	11.701	1.050	106	581707	47.28	ug/L	99
57) Styrene	11.715	11.715	1.051	104	961606	51.16	ug/L	94
59) Bromoform	12.005	12.005	0.895	173	191832	51.60	ug/L	100
60) Isopropylbenzene	12.016	12.016	0.896	105	1438651	45.92	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.352	12.348	0.921	83	365248	45.04	ug/L	100
63) 1,2,3-Trichloropropane	12.451	12.454	0.928	110	102156	47.18	ug/L #	93
64) Bromobenzene	12.465	12.465	0.929	156	367810	46.67	ug/L	98
65) n-Propylbenzene	12.419	12.415	0.926	91	1702161	45.00	ug/L	99
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.936	105	1239147	46.31	ug/L	100
67) 2-Chlorotoluene	12.599	12.596	0.939	126	363269	46.25	ug/L #	80
68) 4-Chlorotoluene	12.698	12.698	0.946	91	1100162	45.75	ug/L	100
69) tert-Butylbenzene	12.903	12.900	0.962	134	273083	44.34	ug/L	99
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1272813	46.76	ug/L	99
71) sec-Butylbenzene	13.119	13.119	0.978	105	1583116	45.72	ug/L	99
72) 4-Isopropyltoluene	13.232	13.229	0.986	119	1281322	46.56	ug/L	100
73) 1,3-Dichlorobenzene	13.353	13.349	0.995	146	702303	46.93	ug/L	100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	714738	46.98	ug/L	99
75) n-Butylbenzene	13.653	13.653	1.018	91	1199936	44.40	ug/L	100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	680815	47.33	ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	71362	46.23	ug/L	97
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.164	180	472299	48.75	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	280754	47.71	ug/L	98
80) Naphthalene	15.989	15.988	1.192	128	1072953	48.76	ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.214	180	426882	50.49	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	5.967	6.082	0.711		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.167	6.163	0.735		0m	N.D.	d	
88) Allyl chloride	6.464	6.425	0.770		0m	N.D.	d	
89) tert-Butyl Alcohol	6.460	6.460	0.770		0m	N.D.	d	
90) Acrylonitrile	6.683	6.747	0.796		0m	N.D.	d	
91) Isopropyl ether	6.916	6.920	0.824		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.033	7.104	0.838		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.196	7.192	0.858		0m	N.D.	d	
94) Ethyl acetate	7.376	7.383	0.879		0m	N.D.	d	
95) Propionitrile	7.663	7.585	0.913		0m	N.D.	d	
96) Methacrylonitrile	7.673	7.680	0.914		0m	N.D.	d	
97) Tetrahydrofuran	7.712	7.716	0.919		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A313.D
Acq On : 3 Mar 2010 4:10 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01
ALS Vial : 13 Sample Multiplier: 1

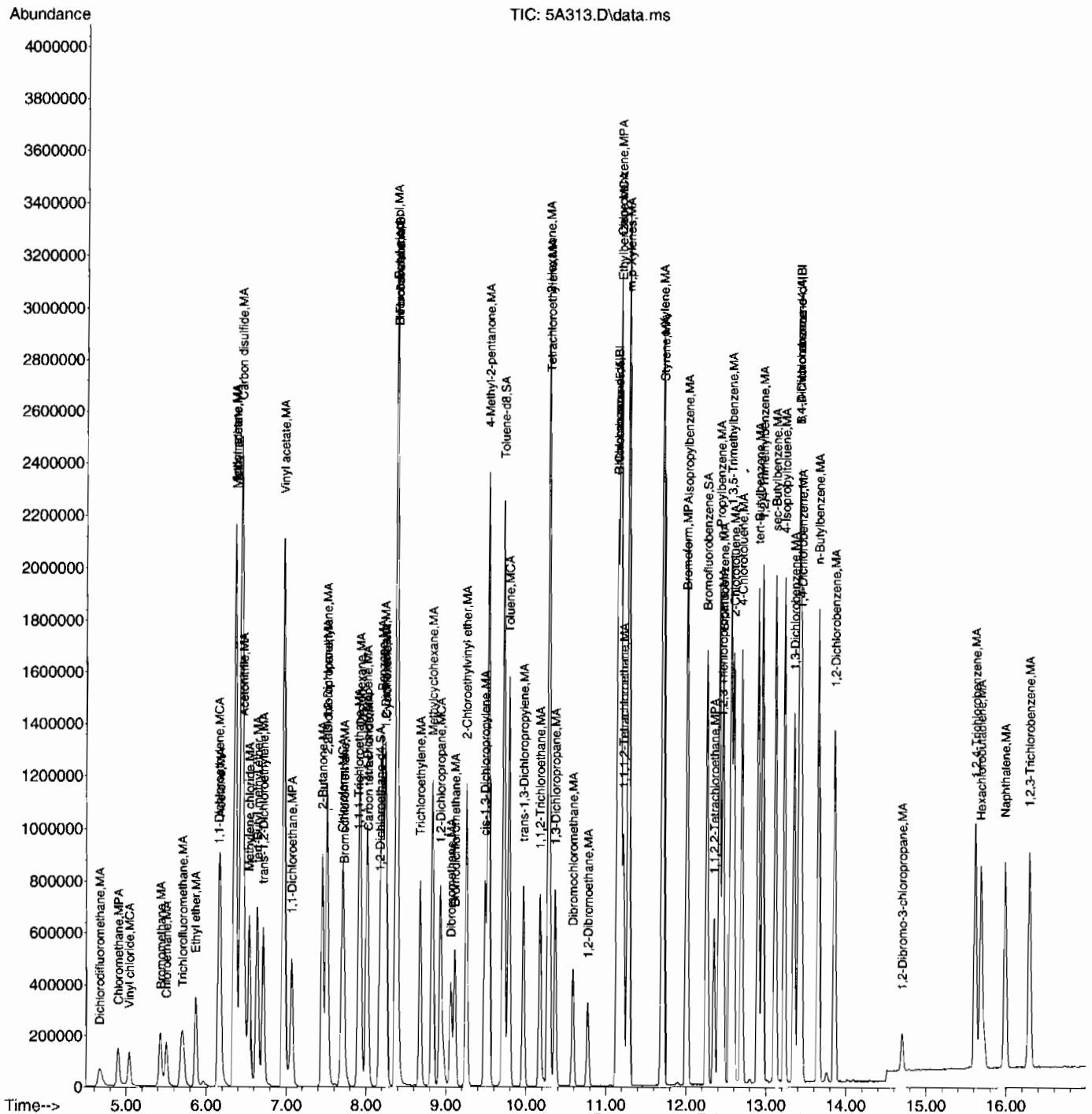
Quant Time: Mar 09 07:22:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.673	7.857	0.914		0m	N.D.	d
99) Methyl tert-amyl ether	8.119	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.830	8.801	1.052		0m	N.D.	d
101) 1,4-Dioxane	9.056	8.957	1.079		0m	N.D.	d
102) 2-Nitropropane	9.353	9.342	1.115		0m	N.D.	d
104) Ethyl methacrylate	9.869	9.859	0.886		0m	N.D.	d
106) 1-Chlorohexane	11.050	10.980	0.824		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.895		0m	N.D.	d
108) Cyclohexanone	12.267	12.267	0.914		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.415	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.020	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.558	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.926	13.929	1.038		0m	N.D.	d

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

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Data Path   : C:\msdchem\1\DATA\030310V5\  
Data File  : 5A313.D  
Acq On     : 3 Mar 2010    4:10 pm  
Operator   : CDS1  
InstName   : VOA5  
Sample     : |W5VM100303-10|ICV|1|VOA|1|  
Misc       : ICV 5mL - MIX[A] 0220-01C+0301-01  
ALS Vial   : 13    Sample Multiplier: 1
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Quant Time: Mar 09 07:22:02 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date: 03-MAR-10 20:27

Data File: 030310V5\5A323.D

Init. Cal. Date(s): 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID: W5VM100303-18 Quant Type: ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.242	0.24732		.01		2.19835	30		Averaged
S Toluene-d8	1.2787	1.27239		.01		-0.49347	30		Averaged
S Bromofluorobenzene	1.0029	1.00377		.01		0.08675	30		Averaged
Chlorotrifluoroethylene	0.0804	0.08935		.01		11.13184	30		Averaged
2-Chloro-1,1,1-trifluoroethane	0.1173	0.12314		.01		4.97869	30		Averaged
Trichlorotrifluoroethane	0.0448	0.04225		.01		-5.69196	30		Averaged
Acrolein	250	209.83	250			-16.068	30		Linear
Isopropyl Alcohol	0.015	0.01636		.01		9.06667	40		Averaged
Allyl chloride	0.3291	0.29416		.01		-10.61683	30		Averaged
tert-Butyl Alcohol	0.022	0.02431		.01		10.5	40		Averaged
Acrylonitrile	0.0724	0.0686		.01		-5.24862	30		Averaged
Isopropyl ether	0.7367	0.73607		.01		-0.08552	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.22289		.01		4.93879	30		Averaged
Ethyl tert-butyl ether	0.5327	0.57757		.01		8.42313	30		Averaged
Ethyl acetate	0.196	0.17171		.01		-12.39286	40		Averaged
Propionitrile	0.0278	0.02682		.01		-3.52518	30		Averaged
Methacrylonitrile	0.153	0.14244		.01		-6.90196	30		Averaged
Tetrahydrofuran	0.0692	0.0645		.01		-6.79191	30		Averaged
Isobutyl alcohol	0.0073	0.00698		.01		-4.38356	40		Averaged
Methyl tert-amyl ether	0.4283	0.46461		.01		8.4777	30		Averaged
Methyl methacrylate	0.1155	0.1132		.01		-1.99134	30		Averaged
1,4-Dioxane	0.0021	0.00194		.01		-7.61905	40		Averaged
2-Nitropropane	250	229.4	250			-8.24	30		Linear
Ethyl methacrylate	0.2951	0.29405		.01		-0.35581	30		Averaged
1-Chlorohexane	0.5025	0.46939		.01		-6.58905	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.18605		.01		-0.50802	30		Averaged
Cyclohexanone	0.0154	0.03579		.01		132.4026	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.17466		.01		-0.81772	30		Averaged
Pentachloroethane	0.2439	0.16659		.01		-31.69742	30	*	Averaged
Benzyl chloride	0.8953	0.78208		.01		-12.64604	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.30154		.01		-8.4578	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A323.D
Acq On : 3 Mar 2010 8:27 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-18|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1707267	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1280650	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	656283	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1707267	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1280650	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	656283	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	422235	51.10	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1629487	49.75	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	658756	50.04	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.608	4.668	0.549		0m	N.D.	d	
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.041	5.041	0.601		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.866	5.866	0.699		0m	N.D.	d	
9) Acetone	6.160	6.174	0.734		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.082	6.156	0.725		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.340	6.464	0.756		0m	N.D.	d	
13) Methyl acetate	6.361	6.365	0.758		0m	N.D.	d	
14) Carbon disulfide	6.421	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.538	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.644	6.640	0.792		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.793	6.969	0.810		0m	N.D.	d	
19) 1,1-Dichloroethane	7.100	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.482	7.507	0.892		0m	N.D.	d	
22) 2,2-Dichloropropane	7.514	7.514	0.896		0m	N.D.	d	
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.967	7.924	0.950		0m	N.D.	d	
27) 1,1-Dichloropropene	8.122	8.005	0.968		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.249	8.246	0.984		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.684	8.677	1.035		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.840	8.826	1.054		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	9.685	9.487	1.155		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A323.D
Acq On : 3 Mar 2010 8:27 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-18|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.519	9.526	0.854		0m	N.D.	d
44) Toluene	9.788	9.788	0.878		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.290	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.276	10.279	0.922		0m	N.D.	d
48) 1,3-Dichloropropane	10.364	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.178	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.209	11.216	1.006		0m	N.D.	d
54) Ethylbenzene	11.209	11.181	1.006		0m	N.D.	d
55) m,p-Xylenes	11.284	11.280	1.013		0m	N.D.	d
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.712	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.019	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.458	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.412	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.567	12.564	0.937		0m	N.D.	d
67) 2-Chlorotoluene	12.599	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.702	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.900	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.324	13.229	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.356	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.650	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.851	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165		0m	N.D.	d
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214		0m	N.D.	d
83) Chlorotrifluoroethylene	4.608	4.608	0.549	116	457640	166.70 ug/L	98
84) 2-Chloro-1,1,1-trifluo...	5.111	5.111	0.609	118	630710	157.42 ug/L	99
85) Acrolein	6.078	6.082	0.725	56	203044	209.83 ug/L	100
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	360646	235.60 ug/L	99
87) Isopropyl Alcohol	6.163	6.163	0.735	45	1396118	2733.84 ug/L	100
88) Allyl chloride	6.425	6.425	0.766	41	2511086	223.48 ug/L	100
89) tert-Butyl Alcohol	6.457	6.460	0.770	59	2075409	2764.91 ug/L	91
90) Acrylonitrile	6.743	6.747	0.804	53	585578	237.02 ug/L	99
91) Isopropyl ether	6.916	6.920	0.825	45	1256662	49.96 ug/L	100
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	380533	52.48 ug/L	99
93) Ethyl tert-butyl ether	7.192	7.192	0.857	59	986070	54.21 ug/L	100
94) Ethyl acetate	7.380	7.383	0.880	43	1465750	219.06 ug/L	100
95) Propionitrile	7.585	7.585	0.904	54	228923	240.74 ug/L	99
96) Methacrylonitrile	7.677	7.680	0.915	41	1215874	232.67 ug/L	99
97) Tetrahydrofuran	7.712	7.716	0.919	42	550635	233.15 ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A323.D
Acq On : 3 Mar 2010 8:27 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-18|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

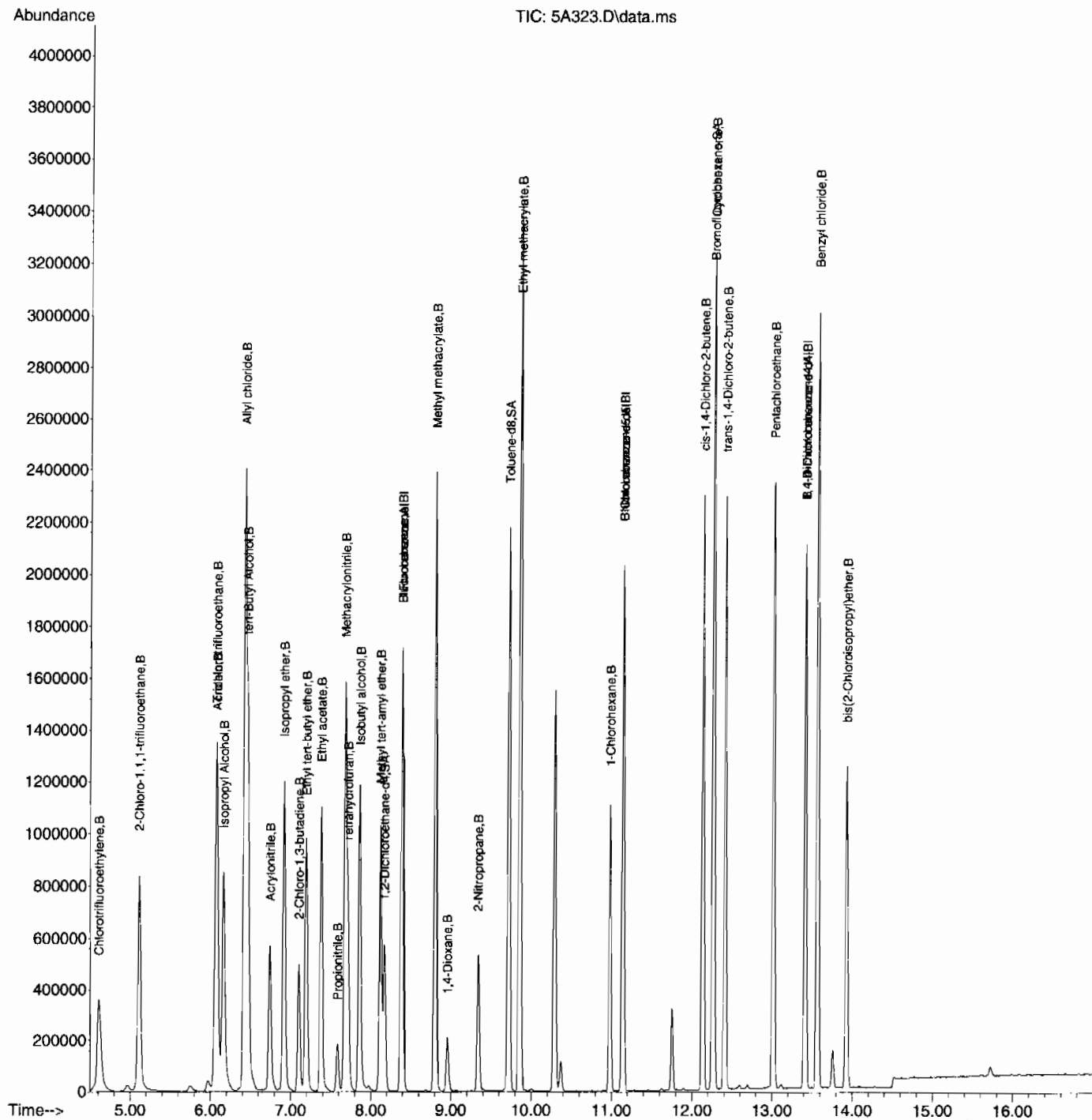
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	7.861	7.857	0.937	41	595640	2394.15	ug/L	98
99) Methyl tert-amyl ether	8.119	8.122	0.968	73	793220	54.25	ug/L	99
100) Methyl methacrylate	8.801	8.801	1.049	69	966318	245.07	ug/L	100
101) 1,4-Dioxane	8.957	8.957	1.068	88	165981	2358.78	ug/L	99
102) 2-Nitropropane	9.339	9.342	1.113	43	457968	229.40	ug/L	100
104) Ethyl methacrylate	9.859	9.859	0.885	69	1882867	249.08	ug/L	100
106) 1-Chlorohexane	10.976	10.980	0.818	55	308055	46.71	ug/L	100
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	610518	248.78	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	587226	2910.89	ug/L	99 E
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925	53	573129	247.92	ug/L	99
110) Pentachloroethane	13.017	13.017	0.970	167	546649	170.75	ug/L	99
111) Benzyl chloride	13.565	13.565	1.011	91	2566329	218.37	ug/L	100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	989493	228.84	ug/L	99

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A323.D
Acq On : 3 Mar 2010 8:27 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100303-18|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA3.1

Injection Date 26-FEB-10 15:19

Data File: 022610V3\3A513.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W3VM100226-10

Quant Type ISTD

Method:022610V3\VOA3-8260-022610.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.3066	0.3003		.01		-2.05479	30		Averaged	
SToluene-d8	1.3456	1.32808		.01		-1.30202	30		Averaged	
SBromofluorobenzene	1.0082	0.98895		.01		-1.90934	30		Averaged	
Dichlorodifluoromethane	50	54.65	50			9.3	30		Linear	
Chloromethane	0.2352	0.22356		.1		-4.94898	30		Averaged	spcc
Vinyl chloride	0.2397	0.25527		.01		6.49562	20		Averaged	ccc
Bromomethane	0.1935	0.20362		.01		5.22997	30		Averaged	
Chloroethane	0.1549	0.1638		.01		5.74564	30		Averaged	
Trichlorofluoromethane	0.3298	0.35359		.01		7.21346	30		Averaged	
Ethyl ether	0.1705	0.17805		.01		4.42815	30		Averaged	
Acetone	0.2108	0.15587		.01		-26.05787	40		Averaged	
1,1-Dichloroethylene	0.339	0.33566		.01		-0.98525	20		Averaged	ccc
Iodomethane	0.4286	0.405		.01		-5.5063	30		Averaged	
Carbon disulfide	0.7478	0.73439		.01		-1.79326	30		Averaged	
Acetonitrile	0.0365	0.03221		.01		-11.75342	30		Averaged	
Methyl acetate	0.1881	0.16656		.01		-11.45136	40		Averaged	
Methylene chloride	0.3046	0.26555		.01		-12.82009	30		Averaged	
tert-Butyl methyl ether	0.6625	0.62916		.01		-5.03245	30		Averaged	
trans-1,2-Dichloroethylene	0.314	0.30972		.01		-1.36306	30		Averaged	
Vinyl acetate	0.3778	0.41502		.01		9.85177	40		Averaged	
1,1-Dichloroethane	0.3946	0.38617		.1		-2.13634	30		Averaged	spcc
2-Butanone	0.2099	0.1738		.01		-17.19867	40		Averaged	
cis-1,2-Dichloroethylene	0.3474	0.34931		.01		0.5498	30		Averaged	
2,2-Dichloropropane	0.2436	0.25483		.01		4.61002	30		Averaged	
Bromochloromethane	0.1279	0.12754		.01		-0.28147	30		Averaged	
Chloroform	0.4027	0.40211		.01		-0.14651	20		Averaged	ccc
1,1,1-Trichloroethane	0.327	0.34021		.01		4.03976	30		Averaged	
Cyclohexane	0.3661	0.3763		.01		2.78612	30		Averaged	
1,1-Dichloropropene	0.2778	0.28616		.01		3.00936	30		Averaged	
Carbon tetrachloride	0.286	0.31003		.01		8.4021	30		Averaged	
1,2-Dichloroethane	0.3149	0.30336		.01		-3.66466	30		Averaged	
Benzene	0.8815	0.86018		.01		-2.4186	30		Averaged	
Cyclohexene	0.4035	0.39817		.01		-1.32094	30		Averaged	
n-Butyl alcohol	5000	4762.41	5000			-4.7518	40		Linear	
Trichloroethylene	0.2276	0.22899		.01		0.61072	30		Averaged	
1,2-Dichloropropane	0.2153	0.2176		.01		1.06828	20		Averaged	ccc
Methylcyclohexane	0.3768	0.38727		.01		2.77866	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA3.I

Injection Date 26-FEB-10 15:19

Data File: 022610V3\3A513.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W3VM100226-10

Quant Type ISTD

Method: 022610V3\VOA3-8260-022610.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1445	0.14557		.01		0.74048	30		Averaged	
Bromodichloromethane	0.2749	0.30159		.01		9.70899	30		Averaged	
2-Chloroethylvinyl ether	250	250.97	250			0.388	30		Linear	
cis-1,3-Dichloropropylene	0.3124	0.33552		.01		7.40077	30		Averaged	
4-Methyl-2-pentanone	0.1208	0.11733		.01		-2.87252	40		Averaged	
Toluene	1.1971	1.13336		.01		-5.32453	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3639	0.39665		.01		8.99973	30		Averaged	
1,1,2-Trichloroethane	0.2068	0.20353		.01		-1.58124	30		Averaged	
1,3-Dichloropropane	0.4295	0.41333		.01		-3.76484	30		Averaged	
2-Hexanone	0.3084	0.26421		.01		-14.32879	40		Averaged	
Tetrachloroethylene	0.2332	0.22732		.01		-2.52144	30		Averaged	
Dibromochloromethane	0.2736	0.30228		.01		10.48246	30		Averaged	
1,2-Dibromoethane	0.266	0.26681		.01		0.30451	30		Averaged	
Chlorobenzene	0.7858	0.77084		.3		-1.90379	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.2702	0.28898		.01		6.95041	30		Averaged	
Ethylbenzene	1.237	1.21385		.01		-1.87146	20		Averaged	ccc
m,p-Xylenes	0.4916	0.49098		.01		-0.12612	30		Averaged	
o-Xylene	0.4911	0.51577		.01		5.02342	30		Averaged	
Styrene	0.7841	0.86736		.01		10.61854	30		Averaged	
Bromoform	50	46.48	50			-7.04	30		Linear	spcc
Isopropylbenzene	2.4779	2.50374		.01		1.04282	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6699	0.64527		.3		-3.67667	30		Averaged	spcc
1,2,3-Trichloropropane	0.1842	0.18044		.01		-2.04126	30		Averaged	
Bromobenzene	0.6651	0.65372		.01		-1.71102	30		Averaged	
n-Propylbenzene	2.8647	2.836		.01		-1.00185	30		Averaged	
2-Chlorotoluene	0.6176	0.6121		.01		-0.89054	30		Averaged	
1,3,5-Trimethylbenzene	2.079	2.11644		.01		1.80087	30		Averaged	
4-Chlorotoluene	1.7773	1.77993		.01		0.14798	30		Averaged	
tert-Butylbenzene	0.4447	0.4734		.01		6.45379	30		Averaged	
1,2,4-Trimethylbenzene	2.1081	2.12508		.01		0.80546	30		Averaged	
sec-Butylbenzene	2.7845	2.84065		.01		2.01652	30		Averaged	
4-Isopropyltoluene	2.2105	2.33061		.01		5.43361	30		Averaged	
1,3-Dichlorobenzene	1.1363	1.12222		.01		-1.23911	30		Averaged	
1,4-Dichlorobenzene	1.3023	1.27042		.01		-2.44798	30		Averaged	
n-Butylbenzene	2.102	2.16723		.01		3.10324	30		Averaged	
1,2-Dichlorobenzene	1.2927	1.25397		.01		-2.99605	30		Averaged	
1,2-Dibromo-3-chloropropane	50	46.4	50			-7.2	30		Linear	

Continuing Calibration Summary

Instrument ID: VOA3.I

Injection Date 26-FEB-10 15:19

Data File: 022610V3\3A513.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W3VM100226-10 Quant Type ISTD

Method:022610V3\VOA3-8260-022610.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.8694	0.86027		.01		-1.05015	30		Averaged
Hexachlorobutadiene	0.4354	0.44974		.01		3.29352	30		Averaged
Naphthalene	2.2358	2.24989		.01		0.6302	30		Averaged
1,2,3-Trichlorobenzene	0.849	0.81257		.01		-4.29093	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\022610V3\
Data File : 3A513.D
Acq On : 26 Feb 2010 3:19 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100226-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A]ULT 0220-01B+0224-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 01 10:53:10 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	12.232	12.232	1.000	96	936508	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	752375	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	394353	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	936346	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	752423	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	402226	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	11.794	11.793	0.964	65	281232	48.97	ug/L	0.00
43) Toluene-d8	14.165	14.165	0.894	98	999214	49.35	ug/L	0.00
61) Bromofluorobenzene	17.130	17.130	0.930	95	389997	49.05	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.800	4.800	0.392	85	142729	54.65	ug/L	99
3) Chloromethane	5.216	5.216	0.426	50	209362	47.52	ug/L	100
4) Vinyl chloride	5.528	5.528	0.452	62	239062	53.24	ug/L	99
5) Bromomethane	6.291	6.291	0.514	94	190692	52.63	ug/L	99
6) Chloroethane	6.493	6.493	0.531	64	153397	52.88	ug/L	100
7) Trichlorofluoromethane	7.062	7.062	0.577	101	331143	53.60	ug/L	99
8) Ethyl ether	7.501	7.512	0.613	59	166741	52.21	ug/L	98
9) Acetone	7.987	7.987	0.653	43	729886	184.87	ug/L	100
10) 1,1-Dichloroethylene	7.987	7.987	0.653	61	314346	49.51	ug/L	100
11) Iodomethane	8.272	8.271	0.676	142	1896419	236.21	ug/L	100
12) Acetonitrile	8.450	8.449	0.691	41	754198	1102.74	ug/L	99
13) Methyl acetate	8.521	8.520	0.697	43	779924	221.35	ug/L	99
14) Carbon disulfide	8.438	8.449	0.690	76	3438823	245.51	ug/L	100
15) Methylene chloride	8.746	8.746	0.715	84	248687	43.59	ug/L	100
16) tert-Butyl methyl ether	9.173	9.173	0.750	73	589212	47.48	ug/L	100
17) trans-1,2-Dichloroethy...	9.208	9.208	0.753	61	290052	49.32	ug/L	100
18) Vinyl acetate	9.837	9.837	0.804	43	1943338	274.65	ug/L	100
19) 1,1-Dichloroethane	9.861	9.860	0.806	63	361653	48.94	ug/L	100
20) 2-Butanone	10.643	10.643	0.870	43	813812	206.96	ug/L	100
21) cis-1,2-Dichloroethylene	10.691	10.691	0.874	61	327129	50.28	ug/L	100
22) 2,2-Dichloropropane	10.714	10.714	0.876	77	238652	52.30	ug/L	99
23) Bromochloromethane	11.035	11.034	0.902	128	119446	49.87	ug/L	98
24) Chloroform	11.094	11.094	0.907	83	376583	49.93	ug/L	100
25) 1,1,1-Trichloroethane	11.426	11.426	0.934	97	318612	52.02	ug/L	99
26) Cyclohexane	11.533	11.532	0.943	56	352411	51.40	ug/L	100
27) 1,1-Dichloropropene	11.628	11.627	0.951	75	267994	51.50	ug/L	100
28) Carbon tetrachloride	11.663	11.663	0.953	117	290345	54.21	ug/L	100
30) 1,2-Dichloroethane	11.888	11.888	0.972	62	284097	48.16	ug/L	99
31) Benzene	11.912	11.912	0.974	78	805562	48.79	ug/L	100
32) Cyclohexene	12.054	12.054	0.985	67	372888	49.34	ug/L	100
33) n-Butyl alcohol	12.398	12.398	1.014	56	828859	4762.41	ug/L	100
34) Trichloroethylene	12.695	12.695	1.038	95	214451	50.30	ug/L	100
35) 1,2-Dichloropropane	12.979	12.979	1.061	63	203783	50.54	ug/L	99
36) Methylcyclohexane	12.991	12.991	1.062	83	362681	51.39	ug/L	100
37) Dibromomethane	13.134	13.133	1.074	93	136326	50.38	ug/L	99
38) Bromodichloromethane	13.288	13.288	1.086	83	282443	54.86	ug/L	100
39) 2-Chloroethylvinyl ether	13.560	13.560	1.109	63	329400	250.97	ug/L	99
40) cis-1,3-Dichloropropylene	13.810	13.809	1.129	75	314220	53.70	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\022610V3\
Data File : 3A513.D
Acq On : 26 Feb 2010 3:19 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100226-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A]ULT 0220-01B+0224-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 01 10:53:10 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	13.928	13.928	0.879	58	441398	242.82	ug/L 100
44) Toluene	14.248	14.248	0.899	91	852708	47.34	ug/L 100
45) trans-1,3-Dichloroprop...	14.426	14.426	0.910	75	298433	54.51	ug/L 99
46) 1,1,2-Trichloroethane	14.675	14.675	0.926	83	153130	49.20	ug/L 100
47) 2-Hexanone	14.889	14.888	0.939	43	993918	214.17	ug/L 99
48) 1,3-Dichloropropane	14.877	14.888	0.939	76	310982	48.12	ug/L 95
49) Tetrachloroethylene	14.912	14.912	0.941	164	171028	48.74	ug/L 99
50) Dibromochloromethane	15.173	15.173	0.957	129	227430	55.25	ug/L 100
51) 1,2-Dibromoethane	15.351	15.351	0.969	107	200741	50.16	ug/L 99
52) Chlorobenzene	15.885	15.885	1.002	112	579962	49.05	ug/L 99
53) 1,1,1,2-Tetrachloroethane	15.956	15.956	1.007	131	217421	53.48	ug/L 99
54) Ethylbenzene	15.968	15.968	1.007	91	913268	49.06	ug/L 100
55) m,p-Xylenes	16.086	16.086	1.015	106	738806	99.88	ug/L 99
56) o-Xylene	16.549	16.549	1.044	106	388050	52.51	ug/L 99
57) Styrene	16.549	16.549	1.044	104	652578	55.31	ug/L 99
59) Bromoform	16.810	16.821	0.913	173	140794	46.48	ug/L 99
60) Isopropylbenzene	16.928	16.928	0.919	105	987356	50.52	ug/L 100
62) 1,1,2,2-Tetrachloroethane	17.213	17.213	0.935	83	254466	48.16	ug/L 100
63) 1,2,3-Trichloropropane	17.296	17.308	0.939	110	71156	48.99	ug/L 95
64) Bromobenzene	17.343	17.343	0.942	156	257796	49.14	ug/L 99
65) n-Propylbenzene	17.367	17.367	0.943	91	1118385	49.50	ug/L 99
66) 1,3,5-Trimethylbenzene	17.533	17.533	0.952	105	834626	50.90	ug/L 100
67) 2-Chlorotoluene	17.521	17.521	0.952	126	241382	49.56	ug/L 98
68) 4-Chlorotoluene	17.628	17.628	0.957	91	701921	50.07	ug/L 100
69) tert-Butylbenzene	17.913	17.912	0.973	134	186686	53.23	ug/L 99
70) 1,2,4-Trimethylbenzene	17.960	17.960	0.976	105	838030	50.40	ug/L 99
71) sec-Butylbenzene	18.150	18.150	0.986	105	1120217	51.01	ug/L 100
72) 4-Isopropyltoluene	18.280	18.280	0.993	119	919082	52.72	ug/L 100
73) 1,3-Dichlorobenzene	18.351	18.351	0.997	146	442549	49.38	ug/L 100
74) 1,4-Dichlorobenzene	18.434	18.434	1.001	146	500995	48.78	ug/L 100
75) n-Butylbenzene	18.743	18.742	1.018	91	854654	51.55	ug/L 99
76) 1,2-Dichlorobenzene	18.885	18.885	1.026	146	494507	48.50	ug/L 99
77) 1,2-Dibromo-3-chloropr...	19.810	19.810	1.076	157	58785	46.40	ug/L 97
78) 1,2,4-Trichlorobenzene	20.936	20.936	1.137	180	339251	49.48	ug/L 99
79) Hexachlorobutadiene	21.126	21.126	1.148	225	177358	51.64	ug/L 100
80) Naphthalene	21.352	21.351	1.160	128	887252	50.32	ug/L 100
81) 1,2,3-Trichlorobenzene	21.719	21.719	1.180	180	320439	47.85	ug/L 99
83) Chlorotrifluoroethylene	0.000	4.711	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.751	0.000		0	N.D.	
85) Acrolein	0.000	7.750	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.975	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	8.141	0.000		0	N.D.	
88) Allyl chloride	8.450	8.556	0.691		0m	N.D.	d
89) tert-Butyl Alcohol	0.000	8.793	0.000		0	N.D.	
90) Acrylonitrile	9.173	9.090	0.750		0m	N.D.	d
91) Isopropyl ether	9.837	9.884	0.804		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	0.000	10.003	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	10.406	0.000		0	N.D.	
94) Ethyl acetate	10.643	10.679	0.870		0m	N.D.	d
95) Propionitrile	10.643	10.726	0.870		0m	N.D.	d
96) Methacrylonitrile	0.000	10.951	0.000		0	N.D.	
97) Tetrahydrofuran	11.106	11.094	0.908		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\022610V3\
Data File : 3A513.D
Acq On : 26 Feb 2010 3:19 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100226-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A]ULT 0220-01B+0224-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 01 10:53:10 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

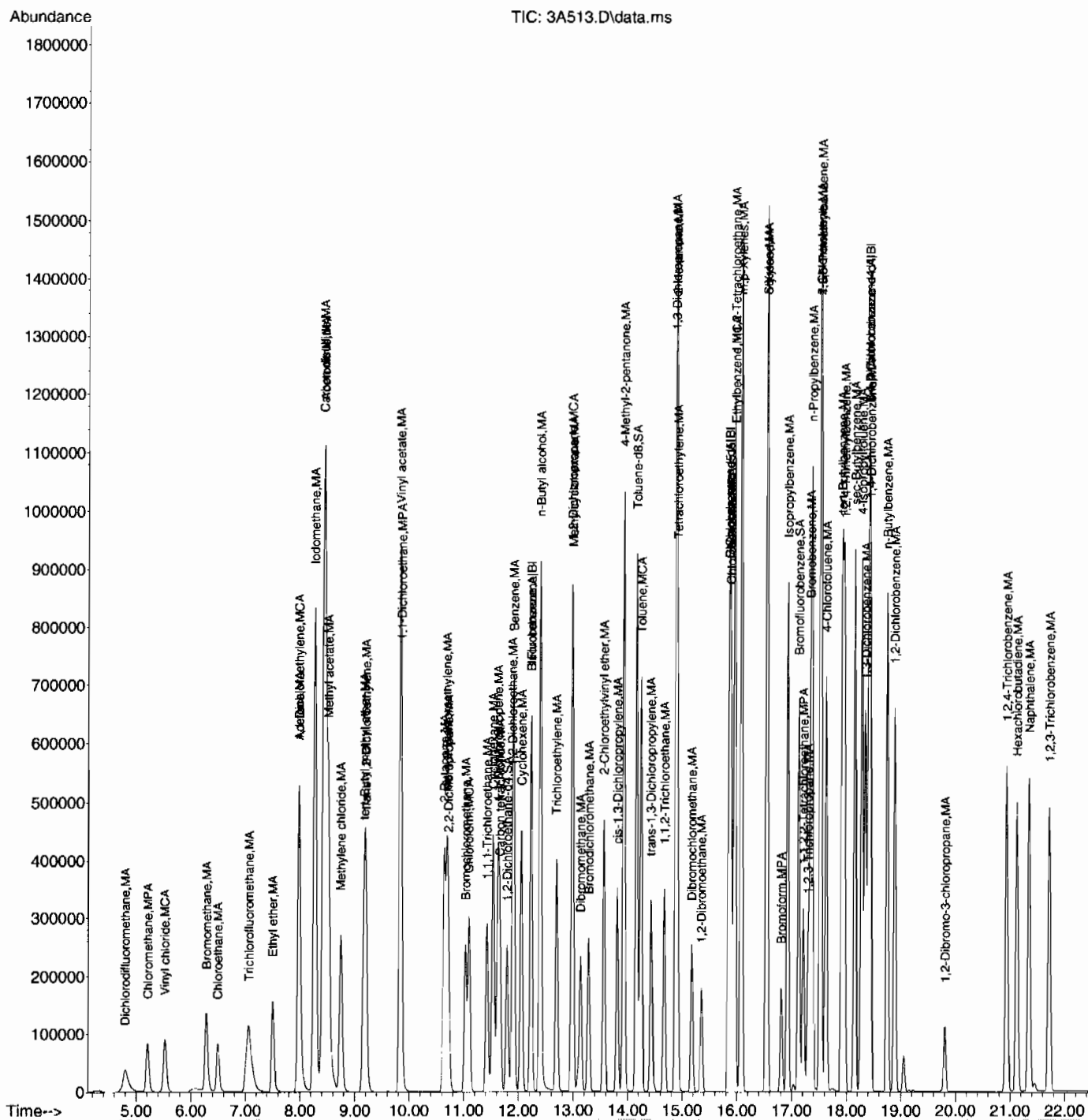
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	11.533	11.556	0.943		0m	N.D.	d
99) Methyl tert-amyl ether	11.912	11.971	0.974		0m	N.D.	d
100) Methyl methacrylate	12.991	12.991	1.062		0m	N.D.	d
101) 1,4-Dioxane	0.000	13.098	0.000		0	N.D.	
102) 2-Nitropropane	13.560	13.525	1.109		0m	N.D.	d
104) Ethyl methacrylate	0.000	14.450	0.000		0	N.D.	
106) 1-Chlorohexane	15.849	15.754	0.861		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	16.928	16.964	0.919		0m	N.D.	d
108) Cyclohexanone	16.928	17.082	0.919		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	17.367	17.260	0.943		0m	N.D.	d
110) Pentachloroethane	17.984	17.983	0.977		0m	N.D.	d
111) Benzyl chloride	18.399	18.553	0.999		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	19.051	18.980	1.035		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\022610V3\
Data File : 3A513.D
Acq On : 26 Feb 2010 3:19 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100226-10|ICV|1|VOA|1|
Misc : ICV 5mL - MIX[A]ULT 0220-01B+0224-01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 01 10:53:10 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA3.I

Injection Date: 26-FEB-10 20:12

Data File: 022610V3\3A523.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W3VM100226-18

Quant Type ISTD

Method:022610V3\VOA3-8260-022610.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.3066	0.29676		.01		-3.20939	30		Averaged
SToluene-d8	1.3456	1.38683		.01		3.06406	30		Averaged
SBromofluorobenzene	1.0082	1.01858		.01		1.02956	30		Averaged
Chlorotrifluoroethylene	0.139	0.1017		.01		-26.83453	30		Averaged
2-Chloro-1,1,1-trifluoroethane	0.2812	0.26227		.01		-6.73186	30		Averaged
Acrolein	250	371.65	250			48.66	30	*	Linear
Trichlorotrifluoroethane	0.0827	0.08123		.01		-1.77751	30		Averaged
Isopropyl Alcohol	0.0187	0.01839		.01		-1.65775	40		Averaged
Allyl chloride	0.2962	0.29625		.01		0.01688	30		Averaged
tert-Butyl Alcohol	0.0314	0.02994		.01		-4.64968	40		Averaged
Acrylonitrile	0.0885	0.08974		.01		1.40113	30		Averaged
Isopropyl ether	0.7095	0.67398		.01		-5.00634	30		Averaged
2-Chloro-1,3-butadiene	0.2574	0.29403		.01		14.23077	30		Averaged
Ethyl tert-butyl ether	0.6775	0.64733		.01		-4.45314	30		Averaged
Ethyl acetate	0.2185	0.20232		.01		-7.40503	40		Averaged
Propionitrile	0.0347	0.03535		.01		1.8732	30		Averaged
Methacrylonitrile	0.1332	0.13306		.01		-0.10511	30		Averaged
Tetrahydrofuran	0.0735	0.07446		.01		1.30612	30		Averaged
Isobutyl alcohol	0.0095	0.00964		.01		1.47368	40		Averaged
Methyl tert-amyl ether	0.6257	0.59791		.01		-4.44143	30		Averaged
Methyl methacrylate	0.1441	0.15252		.01		5.84316	30		Averaged
1,4-Dioxane	0.0031	0.00297		.01		-4.19355	40		Averaged
2-Nitropropane	250	261.34	250			4.536	30		Linear
Ethyl methacrylate	0.3396	0.37143		.01		9.37279	30		Averaged
1-Chlorohexane	0.4531	0.43436		.01		-4.13595	30		Averaged
cis-1,4-Dichloro-2-butene	0.1677	0.19341		.01		15.33095	30		Averaged
Cyclohexanone	0.0193	0.04804		.01		148.91192	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1636	0.18335		.01		12.07213	30		Averaged
Pentachloroethane	250	256.05	250			2.42	30		Linear
Benzyl chloride	250	251.22	250			0.488	30		Linear
bis(2-Chloroisopropyl)ether	0.3232	0.31962		.01		-1.10767	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\022610V3\
Data File : 3A523.D
Acq On : 26 Feb 2010 8:12 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100226-18|ICV|1|VOA|1|
Misc : GEL 5mL - MIX[B] 215-08A+125-08D
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 01 09:53:34 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	12.232	12.232	1.000	96	950148	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	727148	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	372193	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	949803	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	727332	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	379636	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	11.793	11.793	0.964	65	281968	48.39	ug/L	0.00
43) Toluene-d8	14.165	14.165	0.894	98	1008431	51.53	ug/L	0.00
61) Bromofluorobenzene	17.130	17.130	0.930	95	379109	50.52	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.800	0.000		0	N.D.		
3) Chloromethane	0.000	5.216	0.000		0	N.D.		
4) Vinyl chloride	5.736	5.528	0.469		0m	N.D.	d	
5) Bromomethane	0.000	6.291	0.000		0	N.D.		
6) Chloroethane	0.000	6.493	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	7.062	0.000		0	N.D.		
8) Ethyl ether	0.000	7.512	0.000		0	N.D.		
9) Acetone	7.987	7.987	0.653		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.975	7.987	0.652		0m	N.D.	d	
11) Iodomethane	8.260	8.271	0.675		0m	N.D.	d	
12) Acetonitrile	8.556	8.449	0.699		0m	N.D.	d	
13) Methyl acetate	8.532	8.520	0.698		0m	N.D.	d	
14) Carbon disulfide	8.556	8.449	0.699		0m	N.D.	d	
15) Methylene chloride	8.746	8.746	0.715		0m	N.D.	d	
16) tert-Butyl methyl ether	9.173	9.173	0.750		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	9.208	0.000		0	N.D.		
18) Vinyl acetate	9.884	9.837	0.808		0m	N.D.	d	
19) 1,1-Dichloroethane	10.003	9.860	0.818		0m	N.D.	d	
20) 2-Butanone	10.679	10.643	0.873		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	10.679	10.691	0.873		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	10.714	0.000		0	N.D.		
23) Bromochloromethane	0.000	11.034	0.000		0	N.D.		
24) Chloroform	0.000	11.094	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	11.426	0.000		0	N.D.		
26) Cyclohexane	11.556	11.532	0.945		0m	N.D.	d	
27) 1,1-Dichloropropene	11.556	11.627	0.945		0m	N.D.	d	
28) Carbon tetrachloride	0.000	11.663	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	11.888	0.000		0	N.D.		
31) Benzene	11.912	11.912	0.974		0m	N.D.	d	
32) Cyclohexene	0.000	12.054	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	12.398	0.000		0	N.D.		
34) Trichloroethylene	12.706	12.695	1.039		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	12.979	0.000		0	N.D.		
36) Methylcyclohexane	12.991	12.991	1.062		0m	N.D.	d	
37) Dibromomethane	0.000	13.133	0.000		0	N.D.		
38) Bromodichloromethane	0.000	13.288	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	13.560	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000	13.809	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\022610V3\
Data File : 3A523.D
Acq On : 26 Feb 2010 8:12 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100226-18|ICV|1|VOA|1|
Misc : GEL 5mL - MIX[B] 215-08A+125-08D
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 01 09:53:34 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	0.000	13.928	0.000		0	N.D.	
44) Toluene	14.248	14.248	0.899		0m	N.D.	d
45) trans-1,3-Dichloroprop...	0.000	14.426	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	14.675	0.000		0	N.D.	
47) 2-Hexanone	14.888	14.888	0.939		0m	N.D.	d
48) 1,3-Dichloropropane	14.924	14.888	0.942		0m	N.D.	d
49) Tetrachloroethylene	14.912	14.912	0.941		0m	N.D.	d
50) Dibromochloromethane	0.000	15.173	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	15.351	0.000		0	N.D.	
52) Chlorobenzene	0.000	15.885	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	15.956	0.000		0	N.D.	
54) Ethylbenzene	15.968	15.968	1.007		0m	N.D.	d
55) m,p-Xylenes	0.000	16.086	0.000		0	N.D.	
56) o-Xylene	0.000	16.549	0.000		0	N.D.	
57) Styrene	16.549	16.549	1.044		0m	N.D.	d
59) Bromoform	0.000	16.821	0.000		0	N.D.	
60) Isopropylbenzene	0.000	16.928	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	17.260	17.213	0.938		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	17.308	0.000		0	N.D.	
64) Bromobenzene	0.000	17.343	0.000		0	N.D.	
65) n-Propylbenzene	17.367	17.367	0.943		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	17.533	17.533	0.952		0m	N.D.	d
67) 2-Chlorotoluene	17.521	17.521	0.952		0m	N.D.	d
68) 4-Chlorotoluene	17.628	17.628	0.957		0m	N.D.	d
69) tert-Butylbenzene	17.983	17.912	0.977		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	17.960	17.960	0.976		0m	N.D.	d
71) sec-Butylbenzene	0.000	18.150	0.000		0	N.D.	
72) 4-Isopropyltoluene	18.280	18.280	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	18.339	18.351	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	18.434	18.434	1.001		0m	N.D.	d
75) n-Butylbenzene	0.000	18.742	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	18.885	18.885	1.026		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	19.810	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	20.936	20.936	1.137		0m	N.D.	d
79) Hexachlorobutadiene	0.000	21.126	0.000		0	N.D.	
80) Naphthalene	21.351	21.351	1.160		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	0.000	21.719	0.000		0	N.D.	
83) Chlorotrifluoroethylene	4.711	4.711	0.385	116	289790	109.76 ug/L	100
84) 2-Chloro-1,1,1-trifluo...	5.751	5.751	0.470	118	747303	139.90 ug/L	100
85) Acrolein	7.750	7.750	0.634	56	185578	371.65 ug/L	99 E
86) Trichlorotrifluoroethane	7.975	7.975	0.652	85	385754	245.55 ug/L	99
87) Isopropyl Alcohol	8.141	8.141	0.666	45	873506	2452.46 ug/L	99
88) Allyl chloride	8.556	8.556	0.699	41	1406915	250.02 ug/L	100
89) tert-Butyl Alcohol	8.793	8.793	0.719	59	1422034	2386.59 ug/L	99
90) Acrylonitrile	9.090	9.090	0.743	53	426191	253.41 ug/L	100
91) Isopropyl ether	9.884	9.884	0.808	45	640147	47.50 ug/L	99
92) 2-Chloro-1,3-butadiene	10.003	10.003	0.818	53	279268	57.11 ug/L	100
93) Ethyl tert-butyl ether	10.406	10.406	0.851	59	614840	47.78 ug/L	100
94) Ethyl acetate	10.679	10.679	0.873	43	960817	231.51 ug/L	100
95) Propionitrile	10.726	10.726	0.877	54	167873	254.56 ug/L	99
96) Methacrylonitrile	10.951	10.951	0.895	41	631884	249.79 ug/L	99
97) Tetrahydrofuran	11.094	11.094	0.907	42	353594	253.21 ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\022610V3\
Data File : 3A523.D
Acq On : 26 Feb 2010 8:12 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100226-18|ICV|1|VOA|1|
Misc : GEL 5mL - MIX[B] 215-08A+125-08D
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 01 09:53:34 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

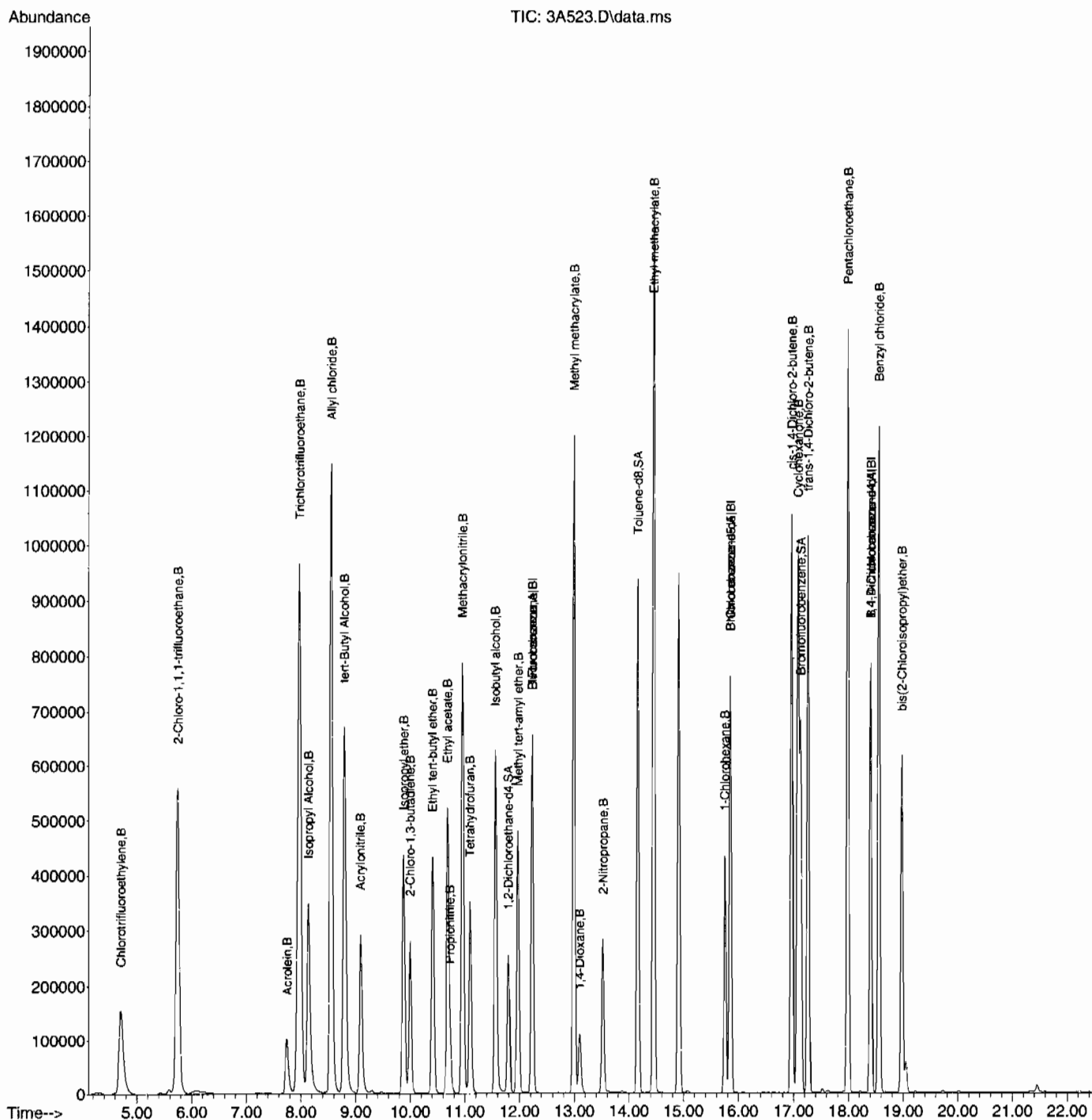
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	11.556	11.556	0.945	41	457824	2549.09	ug/L	99
99) Methyl tert-amyl ether	11.971	11.971	0.979	73	567900	47.78	ug/L	99
100) Methyl methacrylate	12.991	12.991	1.062	69	724331	264.64	ug/L	100
101) 1,4-Dioxane	13.098	13.098	1.071	88	141128	2424.39	ug/L	100
102) 2-Nitropropane	13.525	13.525	1.106	43	317134	261.34	ug/L	100
104) Ethyl methacrylate	14.450	14.450	0.912	69	1350775	273.46	ug/L	100
106) 1-Chlorohexane	15.754	15.754	0.856	55	164899	47.93	ug/L	100
107) cis-1,4-Dichloro-2-butene	16.964	16.964	0.921	53	367128	288.26	ug/L	99
108) Cyclohexanone	17.082	17.082	0.928	42	455921	3119.00	ug/L	99 E
109) trans-1,4-Dichloro-2-b...	17.260	17.260	0.938	53	348032	280.18	ug/L	100
110) Pentachloroethane	17.983	17.983	0.977	167	421398	256.05	ug/L	100 E
111) Benzyl chloride	18.553	18.553	1.008	91	1528395	251.22	ug/L	100
112) bis(2-Chloroisopropyl)...	18.980	18.980	1.031	45	606689	247.23	ug/L	100

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\022610V3\
Data File : 3A523.D
Acq On : 26 Feb 2010 8:12 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100226-18|ICV|1|VOA|1|
Misc : GEL 5mL - MIX[B] 215-08A+125-08D
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 01 09:53:34 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date: 09-MAR-10 19:29

Data File: 030910V5\5B227.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W5VM100309-05

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.242	0.19981		.01		-17.43388	30		Averaged	
SToluene-d8	1.2787	1.17419		.01		-8.17314	30		Averaged	
SBromofluorobenzene	1.0029	1.09738		.01		9.42068	30		Averaged	
Dichlorodifluoromethane	0.1167	0.11058		.01		-5.24422	30		Averaged	
Chloromethane	50	49.92	50			-0.16	30		Linear	spcc
Vinyl chloride	0.1232	0.11988		.01		-2.69481	20		Averaged	ccc
Bromomethane	0.1177	0.12105		.01		2.84622	30		Averaged	
Chloroethane	0.1249	0.11881		.01		-4.8759	30		Averaged	
Trichlorofluoromethane	0.2144	0.19903		.01		-7.16884	30		Averaged	
Ethyl ether	0.1846	0.17787		.01		-3.64572	30		Averaged	
1,1-Dichloroethylene	0.2389	0.23471		.01		-1.75387	20		Averaged	ccc
Acetone	0.1494	0.12849		.01		-13.99598	40		Averaged	
Methyl acetate	0.1633	0.13985		.01		-14.36007	40		Averaged	
Iodomethane	0.2468	0.23833		.01		-3.43193	30		Averaged	
Carbon disulfide	0.4789	0.46138		.01		-3.65838	30		Averaged	
Acetonitrile	0.0293	0.02418		.01		-17.4744	30		Averaged	
Methylene chloride	50	46.87	50			-6.26	30		Linear	
tert-Butyl methyl ether	0.4975	0.43825		.01		-11.90955	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.24998		.01		-3.77983	30		Averaged	
Vinyl acetate	0.4091	0.38943		.01		-4.80812	40		Averaged	
1,1-Dichloroethane	0.3217	0.31121		.1		-3.2608	30		Averaged	spcc
2-Butanone	0.178	0.17101		.01		-3.92697	40		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.288		.01		-4.69887	30		Averaged	
2,2-Dichloropropane	0.2385	0.22283		.01		-6.57023	30		Averaged	
Chloroform	0.2882	0.27193		.01		-5.64539	20		Averaged	ccc
Bromochloromethane	0.0893	0.08673		.01		-2.87794	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.22859		.01		-3.83256	30		Averaged	
Cyclohexane	0.3381	0.32742		.01		-3.15883	30		Averaged	
1,1-Dichloropropene	0.218	0.20755		.01		-4.79358	30		Averaged	
Carbon tetrachloride	0.2039	0.20084		.01		-1.50074	30		Averaged	
Benzene	0.7238	0.6649		.01		-8.13761	30		Averaged	
1,2-Dichloroethane	0.249	0.23028		.01		-7.51807	30		Averaged	
Cyclohexene	0.3364	0.31773		.01		-5.54994	30		Averaged	
n-Butyl alcohol	5000	4505.68	5000			-9.8864	40		Linear	
Trichloroethylene	0.1719	0.15975		.01		-7.06806	30		Averaged	
Methylcyclohexane	0.3141	0.29321		.01		-6.65075	30		Averaged	
1,2-Dichloropropane	0.2044	0.18948		.01		-7.29941	20		Averaged	ccc

Continuing Calibration Summary

Instrument ID: VOA5.1

Injection Date: 09-MAR-10 19:29

Data File: 030910V5\5B227.D

Init. Cal. Date(s): 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID: W5VM100309-05

Quant Type: ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.10057		.01		-3.205	30		Averaged	
Bromodichloromethane	0.2124	0.20933		.01		-1.44539	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.05585		.01		-14.47167	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.27545		.01		-5.27854	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.11071		.01		-7.43311	40		Averaged	
Toluene	1.0734	0.96563		.01		-10.04006	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.34195		.01		-6.46882	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.16439		.01		-9.22695	30		Averaged	
2-Hexanone	0.3247	0.31918		.01		-1.70003	40		Averaged	
Tetrachloroethylene	0.1966	0.1777		.01		-9.61343	30		Averaged	
1,3-Dichloropropane	0.3892	0.35143		.01		-9.70452	30		Averaged	
Dibromochloromethane	0.2155	0.21094		.01		-2.11601	30		Averaged	
1,2-Dibromoethane	0.2099	0.19406		.01		-7.54645	30		Averaged	
Chlorobenzene	0.6963	0.62806		.3		-9.80037	30		Averaged	spcc
Ethylbenzene	1.2247	1.08267		.01		-11.59713	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.22364		.01		-5.19712	30		Averaged	
m,p-Xylenes	0.4639	0.42783		.01		-7.77538	30		Averaged	
o-Xylene	0.4688	0.42806		.01		-8.69027	30		Averaged	
Styrene	0.7161	0.69338		.01		-3.17274	30		Averaged	
Bromoform	0.2722	0.26489		.1		-2.68553	30		Averaged	spcc
Isopropylbenzene	2.2942	2.09016		.01		-8.89373	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.51218		.3		-13.74537	30		Averaged	spcc
n-Propylbenzene	2.7698	2.47486		.01		-10.64842	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.13918		.01		-12.18927	30		Averaged	
Bromobenzene	0.5771	0.50581		.01		-12.35315	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	1.78479		.01		-8.90675	30		Averaged	
2-Chlorotoluene	0.5751	0.51457		.01		-10.52513	30		Averaged	
4-Chlorotoluene	1.761	1.53406		.01		-12.887	30		Averaged	
tert-Butylbenzene	0.451	0.39881		.01		-11.57206	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	1.81363		.01		-9.01826	30		Averaged	
sec-Butylbenzene	2.5353	2.31683		.01		-8.61713	30		Averaged	
4-Isopropyltoluene	2.0151	1.85005		.01		-8.19066	30		Averaged	
1,3-Dichlorobenzene	1.0958	0.96566		.01		-11.87625	30		Averaged	
1,4-Dichlorobenzene	1.114	0.97176		.01		-12.7684	30		Averaged	
n-Butylbenzene	1.9788	1.74271		.01		-11.93097	30		Averaged	
1,2-Dichlorobenzene	1.0534	0.93671		.01		-11.07746	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.093		.01		-17.69912	30		Averaged	

Continuing Calibration Summary

Page 3 of 3

Instrument ID: VOA5.1

Injection Date 09-MAR-10 19:29

Data File: 030910V5\5B227.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W5VM100309-05 Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.63199		.01		-10.91204	30		Averaged
Hexachlorobutadiene	0.4309	0.39656		.01		-7.96937	30		Averaged
Naphthalene	1.6113	1.44816		.01		-10.12474	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.56572		.01		-8.62219	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B227.D
Acq On : 9 Mar 2010 7:29 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-05|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 09 19:58:09 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1703057	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.139	11.142	1.000	117	1259186	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	646924	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1703057	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.139	11.142	1.000	117	1259186	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	646924	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	340296	41.28	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.873	98	1478522	45.91	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	709923	54.71	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	188323	47.36	ug/L	96
3) Chloromethane	4.900	4.900	0.584	50	252912	49.92	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	204167	48.65	ug/L	99
5) Bromomethane	5.423	5.423	0.647	94	206161	51.44	ug/L	100
6) Chloroethane	5.504	5.504	0.656	64	202346	47.55	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	338965	46.41	ug/L	100
8) Ethyl ether	5.867	5.866	0.699	59	302926	48.17	ug/L	95
9) Acetone	6.174	6.174	0.736	43	1094093	215.00	ug/L	99
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	399723	49.12	ug/L	100
11) Iodomethane	6.358	6.357	0.758	142	2029413	241.46	ug/L	99
12) Acetonitrile	6.464	6.464	0.771	41	1029462	1032.22	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1190865	214.15	ug/L	100
14) Carbon disulfide	6.435	6.435	0.767	76	3928782	240.87	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	304575	46.87	ug/L	99
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	746371	44.05	ug/L	99
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	425728	48.11	ug/L	100
18) Vinyl acetate	6.966	6.969	0.831	43	3316092	237.98	ug/L	99
19) 1,1-Dichloroethane	7.072	7.068	0.843	63	530004	48.37	ug/L	99
20) 2-Butanone	7.447	7.450	0.888	43	1456169	240.18	ug/L	100
21) cis-1,2-Dichloroethylene	7.503	7.507	0.895	61	490473	47.65	ug/L	99
22) 2,2-Dichloropropane	7.507	7.514	0.895	77	379499	46.72	ug/L	98
23) Bromochloromethane	7.719	7.719	0.920	128	147699	48.57	ug/L	99
24) Chloroform	7.698	7.701	0.918	83	463113	47.18	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	389305	48.09	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	557622	48.42	ug/L	99
27) 1,1-Dichloropropene	8.002	8.005	0.954	75	353466	47.60	ug/L	100
28) Carbon tetrachloride	8.020	8.020	0.956	117	342034	49.25	ug/L	99
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	392175	46.24	ug/L	100
31) Benzene	8.200	8.203	0.978	78	1132363	45.93	ug/L	98
32) Cyclohexene	8.250	8.246	0.984	67	541112	47.23	ug/L	99
33) n-Butyl alcohol	8.373	8.377	0.998	56	1079907	4505.68	ug/L	100
34) Trichloroethylene	8.677	8.677	1.035	95	272070	46.47	ug/L	99
35) 1,2-Dichloropropane	8.929	8.932	1.065	63	322698	46.34	ug/L	100
36) Methylcyclohexane	8.830	8.826	1.053	83	499351	46.67	ug/L	98
37) Dibromomethane	9.059	9.059	1.080	93	171280	48.40	ug/L	99
38) Bromodichloromethane	9.109	9.112	1.086	83	356506	49.28	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	475563	213.76	ug/L	100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	469107	47.37	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B227.D
Acq On : 9 Mar 2010 7:29 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-05|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 09 19:58:09 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.530	9.526	0.856	58	697009	231.47	ug/L 99
44) Toluene	9.788	9.788	0.879	91	1215910	44.98	ug/L 100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.895	75	430582	46.76	ug/L 100
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	206998	45.38	ug/L 100
47) 2-Hexanone	10.276	10.279	0.923	43	2009548	245.77	ug/L 100
48) 1,3-Dichloropropane	10.361	10.364	0.930	76	442513	45.15	ug/L 99
49) Tetrachloroethylene	10.290	10.290	0.924	164	223752	45.19	ug/L 99
50) Dibromochloromethane	10.584	10.583	0.950	129	265617	48.95	ug/L 100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	244363	46.23	ug/L 100
52) Chlorobenzene	11.174	11.174	1.003	112	790846	45.10	ug/L 99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	281608	47.41	ug/L 100
54) Ethylbenzene	11.178	11.181	1.003	91	1363281	44.20	ug/L 99
55) m,p-Xylenes	11.280	11.280	1.013	106	1077435	92.22	ug/L 99
56) o-Xylene	11.701	11.701	1.050	106	539004	45.66	ug/L 100
57) Styrene	11.715	11.715	1.052	104	873095	48.41	ug/L 93
59) Bromoform	12.005	12.005	0.895	173	171363	48.65	ug/L 98
60) Isopropylbenzene	12.016	12.016	0.896	105	1352173	45.55	ug/L 100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	331340	43.13	ug/L 100
63) 1,2,3-Trichloropropane	12.451	12.454	0.928	110	90037	43.89	ug/L # 85
64) Bromobenzene	12.465	12.465	0.929	156	327221	43.83	ug/L 99
65) n-Propylbenzene	12.415	12.415	0.926	91	1601048	44.68	ug/L 99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1154621	45.55	ug/L 99
67) 2-Chlorotoluene	12.599	12.596	0.939	126	332887	44.74	ug/L # 81
68) 4-Chlorotoluene	12.698	12.698	0.947	91	992423	43.56	ug/L 100
69) tert-Butylbenzene	12.903	12.900	0.962	134	257999	44.21	ug/L 98
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1173283	45.49	ug/L 99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1498813	45.69	ug/L 100
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1196844	45.90	ug/L 99
73) 1,3-Dichlorobenzene	13.353	13.349	0.996	146	624709	44.06	ug/L 100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	628655	43.62	ug/L 100
75) n-Butylbenzene	13.653	13.653	1.018	91	1127398	44.04	ug/L 100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	605981	44.46	ug/L 100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	60161	41.14	ug/L 94
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	408851	44.54	ug/L 98
79) Hexachlorobutadiene	15.686	15.686	1.169	225	256542	46.02	ug/L 99
80) Naphthalene	15.988	15.988	1.192	128	936848	44.94	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	365977	45.69	ug/L 99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.167	6.163	0.735		0m	N.D.	d
88) Allyl chloride	6.464	6.425	0.771		0m	N.D.	d
89) tert-Butyl Alcohol	6.464	6.460	0.771		0m	N.D.	d
90) Acrylonitrile	6.637	6.747	0.791		0m	N.D.	d
91) Isopropyl ether	6.962	6.920	0.830		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.040	7.104	0.839		0m	N.D.	d
93) Ethyl tert-butyl ether	7.068	7.192	0.843		0m	N.D.	d
94) Ethyl acetate	7.380	7.383	0.880		0m	N.D.	d
95) Propionitrile	7.666	7.585	0.914		0m	N.D.	d
96) Methacrylonitrile	7.673	7.680	0.915		0m	N.D.	d
97) Tetrahydrofuran	7.719	7.716	0.920		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B227.D
Acq On : 9 Mar 2010 7:29 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-05|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 09 19:58:09 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

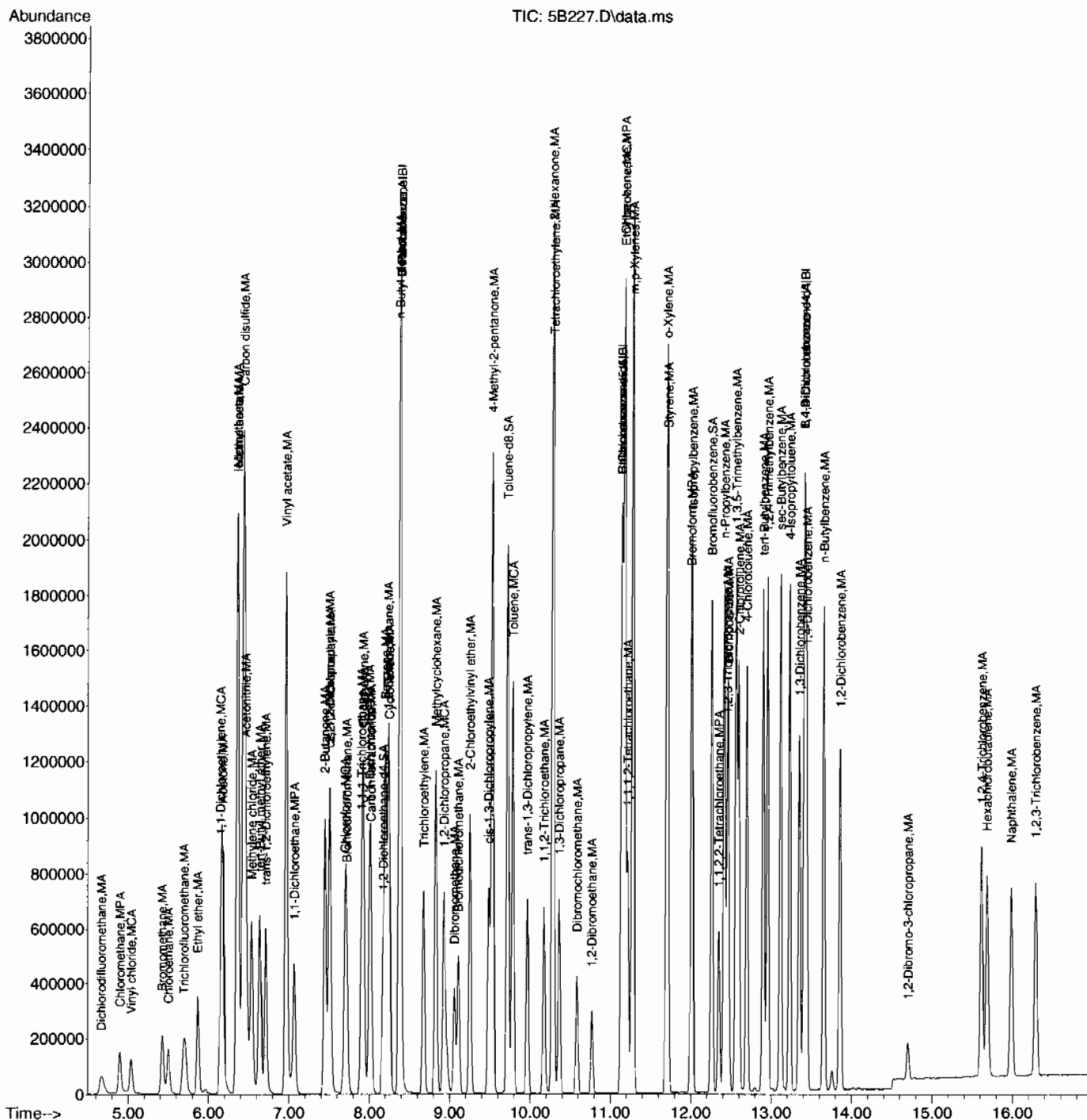
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.737	7.857	0.922		0m	N.D.	d
99) Methyl tert-amyl ether	8.200	8.122	0.978		0m	N.D.	d
100) Methyl methacrylate	8.830	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	9.332	9.342	1.113		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.408	12.267	0.925		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.415	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.017	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.561	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.932	13.929	1.039		0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B227.D
Acq On : 9 Mar 2010 7:29 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-05|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 09 19:58:09 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date: 09-MAR-10 20:52

Data File: 030910V5\5B230.D

Init. Cal. Date(s): 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID: W5VM100309-08

Quant Type: ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.242	0.19442		.01		-19.66116	30		Averaged
SToluene-d8	1.2787	1.13429		.01		-11.2935	30		Averaged
SBromofluorobenzene	1.0029	1.06617		.01		6.3087	30		Averaged
Trichlorotrifluoroethane	0.0448	0.05528		.01		23.39286	30		Averaged
Acrolein	250	260.39	250			4.156	30		Linear
Allyl chloride	0.3291	0.27818		.01		-15.4725	30		Averaged
Acrylonitrile	0.0724	0.07158		.01		-1.1326	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.25965		.01		22.24576	30		Averaged
Ethyl acetate	0.196	0.17895		.01		-8.69898	40		Averaged
Propionitrile	0.0278	0.02792		.01		0.43165	30		Averaged
Methacrylonitrile	0.153	0.14844		.01		-2.98039	30		Averaged
Tetrahydrofuran	0.0692	0.06731		.01		-2.73121	30		Averaged
Isobutyl alcohol	0.0073	0.00723		.01		-0.9589	40		Averaged
Methyl methacrylate	0.1155	0.11678		.01		1.10823	30		Averaged
1,4-Dioxane	0.0021	0.00197		.01		-6.19048	40		Averaged
2-Nitropropane	250	242.53	250			-2.988	30		Linear
Ethyl methacrylate	0.2951	0.30822		.01		4.44595	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.20287		.01		8.48663	30		Averaged
Cyclohexanone	0.0154	0.05997		.01		289.41558	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.19021		.01		8.01249	30		Averaged
Pentachloroethane	0.2439	0.25071		.01		2.79213	30		Averaged
Benzyl chloride	0.8953	0.95296		.01		6.4403	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.30697		.01		-6.80935	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B230.D
Acq On : 9 Mar 2010 8:52 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-08|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 08:13:59 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1740286	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1283500	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	652615	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1740286	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1283500	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	652615	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	338355	40.17	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1455863	44.35	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	695800	53.15	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.167	6.174	0.735		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.071	6.156	0.724		0m	N.D.	d	
11) Iodomethane	6.351	6.357	0.757		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.368	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.542	6.538	0.780		0m	N.D.	d	
16) tert-Butyl methyl ether	6.644	6.640	0.792		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	7.100	6.969	0.847		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.500	7.507	0.894		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.857	7.924	0.937		0m	N.D.	d	
27) 1,1-Dichloropropene	8.126	8.005	0.969		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.172	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.798	8.826	1.049		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B230.D
Acq On : 9 Mar 2010 8:52 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-08|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B |UVM100215-08B
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 08:13:59 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.523	9.526	0.855		0m	N.D.	d
44) Toluene	9.784	9.788	0.878		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.975	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.290	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.283	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.364	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.775	10.771	0.967		0m	N.D.	d
52) Chlorobenzene	11.171	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.213	11.216	1.006		0m	N.D.	d
54) Ethylbenzene	11.167	11.181	1.002		0m	N.D.	d
55) m,p-Xylenes	11.277	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.705	11.701	1.050		0m	N.D.	d
57) Styrene	11.712	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.019	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.355	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.469	12.465	0.930		0m	N.D.	d
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.599	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.903	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.112	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.229	13.229	0.986		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.356	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.437	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.657	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.855	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165		0m	N.D.	d
79) Hexachlorobutadiene	15.693	15.686	1.170		0m	N.D.	d
80) Naphthalene	15.981	15.988	1.191		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	260898	260.39	ug/L 98
86) Trichlorotrifluoroethane	6.068	6.071	0.723	85	481055	308.30	ug/L 98
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2420539	211.33	ug/L 93
89) tert-Butyl Alcohol	6.432	6.460	0.767	59	1140	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	622835	247.32	ug/L 99
91) Isopropyl ether	7.107	6.920	0.847	45	109	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	451871	61.14	ug/L 99
93) Ethyl tert-butyl ether	7.376	7.192	0.879	59	1106	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1557096	228.30	ug/L 100
95) Propionitrile	7.581	7.585	0.904	54	242975	250.67	ug/L 100
96) Methacrylonitrile	7.677	7.680	0.915	41	1291677	242.48	ug/L 100
97) Tetrahydrofuran	7.712	7.716	0.919	42	585651	243.27	ug/L 100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B230.D
Acq On : 9 Mar 2010 8:52 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-08|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 08:13:59 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.857	7.857	0.937	41	629477	2482.15	ug/L 100
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	8.801	8.801	1.049	69	1016159	252.82	ug/L 99
101) 1,4-Dioxane	8.957	8.957	1.068	88	171378	2389.27	ug/L 100
102) 2-Nitropropane	9.342	9.342	1.114	43	494371	242.53	ug/L 99
104) Ethyl methacrylate	9.859	9.859	0.885	69	1978000	261.08	ug/L 100
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	661993	271.27	ug/L 99
108) Cyclohexanone	12.267	12.267	0.915	42	978477	4877.59	ug/L 99 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	620661	269.99	ug/L 100
110) Pentachloroethane	13.017	13.017	0.970	167	818100	256.98	ug/L 100
111) Benzyl chloride	13.565	13.565	1.011	91	3109579	266.09	ug/L 100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	1001651	232.96	ug/L 99

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

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B230.D
Acq On : 9 Mar 2010 8:52 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100309-08|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 30 Sample Multiplier: 1

TIC: 5B230.D\data.ms

Abundance

Time-->

5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00

Acrylonitrile, B

Acrylonitrile, B

2-Chloro-1,3-butadiene, B

Ethyl acetate, B

Propionitrile, B

Methacrylonitrile, B

Isobutyl alcohol, B

1,2-Dichloroethane-d4, SA

1,4-Dioxane, B

2-Nitropropane, B

Toluene-d8, SA

Ethyl methacrylate, B

Bis(2-chloroisopropyl)ether, B

cis-1,4-Dichloro-2-butene, B

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

Gydoxanone, B

Pentachloroethane, B

Benzyl chloride, B

Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.1

Injection Date 10-MAR-10 07:11

Data File: 031010V5\5B302.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W5VM100310-01

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.242	0.19273		.01		-20.3595	30		Averaged	
SToluene-d8	1.2787	1.13709		.01		-11.07453	30		Averaged	
SBromofluorobenzene	1.0029	1.13771		.01		13.44202	30		Averaged	
Dichlorodifluoromethane	0.1167	0.11395		.01		-2.35647	30		Averaged	
Chloromethane	50	53.36	50			6.72	30		Linear	spcc
Vinyl chloride	0.1232	0.13228		.01		7.37013	20		Averaged	ccc
Bromomethane	0.1177	0.12282		.01		4.35004	30		Averaged	
Chloroethane	0.1249	0.12725		.01		1.88151	30		Averaged	
Trichlorofluoromethane	0.2144	0.22839		.01		6.52519	30		Averaged	
Ethyl ether	0.1846	0.18647		.01		1.013	30		Averaged	
1,1-Dichloroethylene	0.2389	0.24078		.01		0.78694	20		Averaged	ccc
Acetone	0.1494	0.13194		.01		-11.68675	40		Averaged	
Methyl acetate	0.1633	0.136		.01		-16.7177	40		Averaged	
Iodomethane	0.2468	0.23201		.01		-5.99271	30		Averaged	
Carbon disulfide	0.4789	0.44983		.01		-6.07016	30		Averaged	
Acetonitrile	0.0293	0.02336		.01		-20.27304	30		Averaged	
Methylene chloride	50	46.52	50			-6.96	30		Linear	
tert-Butyl methyl ether	0.4975	0.42233		.01		-15.10955	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.26015		.01		0.13472	30		Averaged	
Vinyl acetate	0.4091	0.41223		.01		0.76509	40		Averaged	
1,1-Dichloroethane	0.3217	0.32125		.1		-0.13988	30		Averaged	spcc
2-Butanone	0.178	0.16673		.01		-6.33146	40		Averaged	
2,2-Dichloropropane	0.2385	0.24645		.01		3.33333	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.29733		.01		-1.61152	30		Averaged	
Chloroform	0.2882	0.28231		.01		-2.04372	20		Averaged	ccc
Bromochloromethane	0.0893	0.08565		.01		-4.08735	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.25101		.01		5.5995	30		Averaged	
Cyclohexane	0.3381	0.34855		.01		3.0908	30		Averaged	
1,1-Dichloropropene	0.218	0.22569		.01		3.52752	30		Averaged	
Carbon tetrachloride	0.2039	0.21968		.01		7.73909	30		Averaged	
Benzene	0.7238	0.6946		.01		-4.03426	30		Averaged	
1,2-Dichloroethane	0.249	0.23159		.01		-6.99197	30		Averaged	
Cyclohexene	0.3364	0.34337		.01		2.07194	30		Averaged	
n-Butyl alcohol	5000	4406.22	5000			-11.8756	40		Linear	
Trichloroethylene	0.1719	0.172		.01		0.05817	30		Averaged	
Methylcyclohexane	0.3141	0.32213		.01		2.55651	30		Averaged	
1,2-Dichloropropane	0.2044	0.19629		.01		-3.96771	20		Averaged	ccc

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 10-MAR-10 07:11

Data File: 031010V5\5B302.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W5VM100310-01

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.10104		.01		-2.75265	30		Averaged	
Bromodichloromethane	0.2124	0.21503		.01		1.23823	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.0571		.01		-12.55743	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.28663		.01		-1.43398	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.11419		.01		-4.52341	40		Averaged	
Toluene	1.0734	1.03517		.01		-3.56158	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.35632		.01		-2.53829	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.16846		.01		-6.97957	30		Averaged	
2-Hexanone	0.3247	0.31619		.01		-2.62088	40		Averaged	
Tetrachloroethylene	0.1966	0.20057		.01		2.01933	30		Averaged	
1,3-Dichloropropane	0.3892	0.36089		.01		-7.2739	30		Averaged	
Dibromochloromethane	0.2155	0.22012		.01		2.14385	30		Averaged	
1,2-Dibromoethane	0.2099	0.19678		.01		-6.2506	30		Averaged	
Chlorobenzene	0.6963	0.67045		.3		-3.71248	30		Averaged	spcc
Ethylbenzene	1.2247	1.18656		.01		-3.11423	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.23988		.01		1.68716	30		Averaged	
m,p-Xylenes	0.4639	0.46885		.01		1.06704	30		Averaged	
o-Xylene	0.4688	0.46135		.01		-1.58916	30		Averaged	
Styrene	0.7161	0.73915		.01		3.21882	30		Averaged	
Bromoform	0.2722	0.28701		.1		5.44085	30		Averaged	spcc
Isopropylbenzene	2.2942	2.43754		.01		6.24793	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.54723		.3		-7.84271	30		Averaged	spcc
n-Propylbenzene	2.7698	2.87938		.01		3.95624	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.14805		.01		-6.59306	30		Averaged	
Bromobenzene	0.5771	0.54973		.01		-4.74268	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	2.04017		.01		4.12749	30		Averaged	
2-Chlorotoluene	0.5751	0.58222		.01		1.23805	30		Averaged	
4-Chlorotoluene	1.761	1.74151		.01		-1.10676	30		Averaged	
tert-Butylbenzene	0.451	0.46878		.01		3.94235	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	2.05925		.01		3.3034	30		Averaged	
sec-Butylbenzene	2.5353	2.73874		.01		8.0243	30		Averaged	
4-Isopropyltoluene	2.0151	2.16842		.01		7.60856	30		Averaged	
1,3-Dichlorobenzene	1.0958	1.0789		.01		-1.54225	30		Averaged	
1,4-Dichlorobenzene	1.114	1.07115		.01		-3.8465	30		Averaged	
n-Butylbenzene	1.9788	2.05427		.01		3.81393	30		Averaged	
1,2-Dichlorobenzene	1.0534	1.01694		.01		-3.46117	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.09546		.01		-15.52212	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA5.1

Injection Date 10-MAR-10 07:11

Data File: 031010V5\5B302.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W5VM100310-01

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.68223		.01		-3.83	30		Averaged
Hexachlorobutadiene	0.4309	0.44736		.01		3.81991	30		Averaged
Naphthalene	1.6113	1.40789		.01		-12.62397	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.57102		.01		-7.76611	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B302.D
Acq On : 10 Mar 2010 7:11 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 10 07:58:30 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1606795	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.139	11.142	1.000	117	1185606	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	589666	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1606795	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.139	11.142	1.000	117	1185606	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	589666	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	309673	39.82	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.873	98	1348138	44.46	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	670869	56.72	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	183091	48.80	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	254836	53.36	ug/L	98
4) Vinyl chloride	5.041	5.041	0.601	62	212553	53.68	ug/L	99
5) Bromomethane	5.423	5.423	0.647	94	197353	52.19	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	204460	50.92	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	366974	53.25	ug/L	100
8) Ethyl ether	5.866	5.866	0.699	59	299623	50.50	ug/L	95
9) Acetone	6.170	6.174	0.736	43	1060020	220.79	ug/L	100
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	386881	50.39	ug/L	100
11) Iodomethane	6.358	6.357	0.758	142	1863926	235.05	ug/L	100
12) Acetonitrile	6.460	6.464	0.770	41	938548	997.44	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1092608	208.25	ug/L	100
14) Carbon disulfide	6.432	6.435	0.767	76	3613956	234.84	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	285244	46.52	ug/L	98
16) tert-Butyl methyl ether	6.640	6.640	0.792	73	678597	42.45	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	418006	50.07	ug/L	99
18) Vinyl acetate	6.966	6.969	0.831	43	3311844	251.91	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	516176	49.93	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	1339488	234.17	ug/L	99
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	477755	49.20	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	395988	51.68	ug/L	98
23) Bromochloromethane	7.723	7.719	0.921	128	137620	47.97	ug/L	98
24) Chloroform	7.698	7.701	0.918	83	453612	48.98	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	403324	52.80	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	560043	51.55	ug/L	99
27) 1,1-Dichloropropene	8.005	8.005	0.954	75	362636	51.76	ug/L	99
28) Carbon tetrachloride	8.020	8.020	0.956	117	352983	53.87	ug/L	100
30) 1,2-Dichloroethane	8.232	8.235	0.981	62	372116	46.50	ug/L	100
31) Benzene	8.200	8.203	0.978	78	1116084	47.98	ug/L	98
32) Cyclohexene	8.246	8.246	0.983	67	551729	51.04	ug/L	100
33) n-Butyl alcohol	8.373	8.377	0.998	56	996584	4406.22	ug/L	100
34) Trichloroethylene	8.677	8.677	1.035	95	276361	50.03	ug/L	100
35) 1,2-Dichloropropane	8.928	8.932	1.065	63	315401	48.01	ug/L	99
36) Methylcyclohexane	8.829	8.826	1.053	83	517597	51.28	ug/L	98
37) Dibromomethane	9.056	9.059	1.080	93	162346	48.62	ug/L	99
38) Bromodichloromethane	9.109	9.112	1.086	83	345505	50.62	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	458758	218.56	ug/L	100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	460558	49.29	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B302.D
Acq On : 10 Mar 2010 7:11 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 10 07:58:30 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	676928	238.76	ug/L 99
44) Toluene	9.788	9.788	0.879	91	1227308	48.22	ug/L 100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	422456	48.73	ug/L 100
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	199723	46.50	ug/L 98
47) 2-Hexanone	10.279	10.279	0.923	43	1874361	243.47	ug/L 100
48) 1,3-Dichloropropane	10.361	10.364	0.930	76	427879	46.36	ug/L 99
49) Tetrachloroethylene	10.290	10.290	0.924	164	237801	51.01	ug/L 99
50) Dibromochloromethane	10.584	10.583	0.950	129	260970	51.07	ug/L 100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	233298	46.88	ug/L 99
52) Chlorobenzene	11.171	11.174	1.003	112	794889	48.14	ug/L 99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	284399	50.85	ug/L 100
54) Ethylbenzene	11.178	11.181	1.003	91	1406791	48.44	ug/L 99
55) m,p-Xylenes	11.280	11.280	1.013	106	1111752	101.06	ug/L 99
56) o-Xylene	11.697	11.701	1.050	106	546977	49.21	ug/L 100
57) Styrene	11.712	11.715	1.051	104	876342	51.61	ug/L 92
59) Bromoform	12.002	12.005	0.895	173	169242	52.72	ug/L 100
60) Isopropylbenzene	12.012	12.016	0.896	105	1437333	53.12	ug/L 99
62) 1,1,2,2-Tetrachloroethane	12.345	12.348	0.920	83	322684	46.08	ug/L 100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	87298	46.69	ug/L # 82
64) Bromobenzene	12.465	12.465	0.929	156	324156	47.63	ug/L 99
65) n-Propylbenzene	12.415	12.415	0.926	91	1697873	51.98	ug/L 99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1203018	52.06	ug/L 100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	343315	50.62	ug/L # 81
68) 4-Chlorotoluene	12.698	12.698	0.947	91	1026912	49.45	ug/L 99
69) tert-Butylbenzene	12.900	12.900	0.962	134	276421	51.97	ug/L 98
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1214269	51.65	ug/L 99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1614943	54.01	ug/L 99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1278645	53.80	ug/L 99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	636189	49.23	ug/L 100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	631620	48.08	ug/L 99
75) n-Butylbenzene	13.653	13.653	1.018	91	1211331	51.91	ug/L 100
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	599656	48.27	ug/L 100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	56288	42.23	ug/L 96
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	402288	48.09	ug/L 99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	263795	51.91	ug/L 99
80) Naphthalene	15.988	15.988	1.192	128	830185	43.69	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	336712	46.12	ug/L 99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.170	6.163	0.736		0m	N.D.	d
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d
89) tert-Butyl Alcohol	6.460	6.460	0.770		0m	N.D.	d
90) Acrylonitrile	6.640	6.747	0.792		0m	N.D.	d
91) Isopropyl ether	6.966	6.920	0.831		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.037	7.104	0.839		0m	N.D.	d
93) Ethyl tert-butyl ether	7.065	7.192	0.842		0m	N.D.	d
94) Ethyl acetate	7.380	7.383	0.880		0m	N.D.	d
95) Propionitrile	7.673	7.585	0.915		0m	N.D.	d
96) Methacrylonitrile	7.670	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.708	7.716	0.919		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B302.D
Acq On : 10 Mar 2010 7:11 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 2 Sample Multiplier: 1

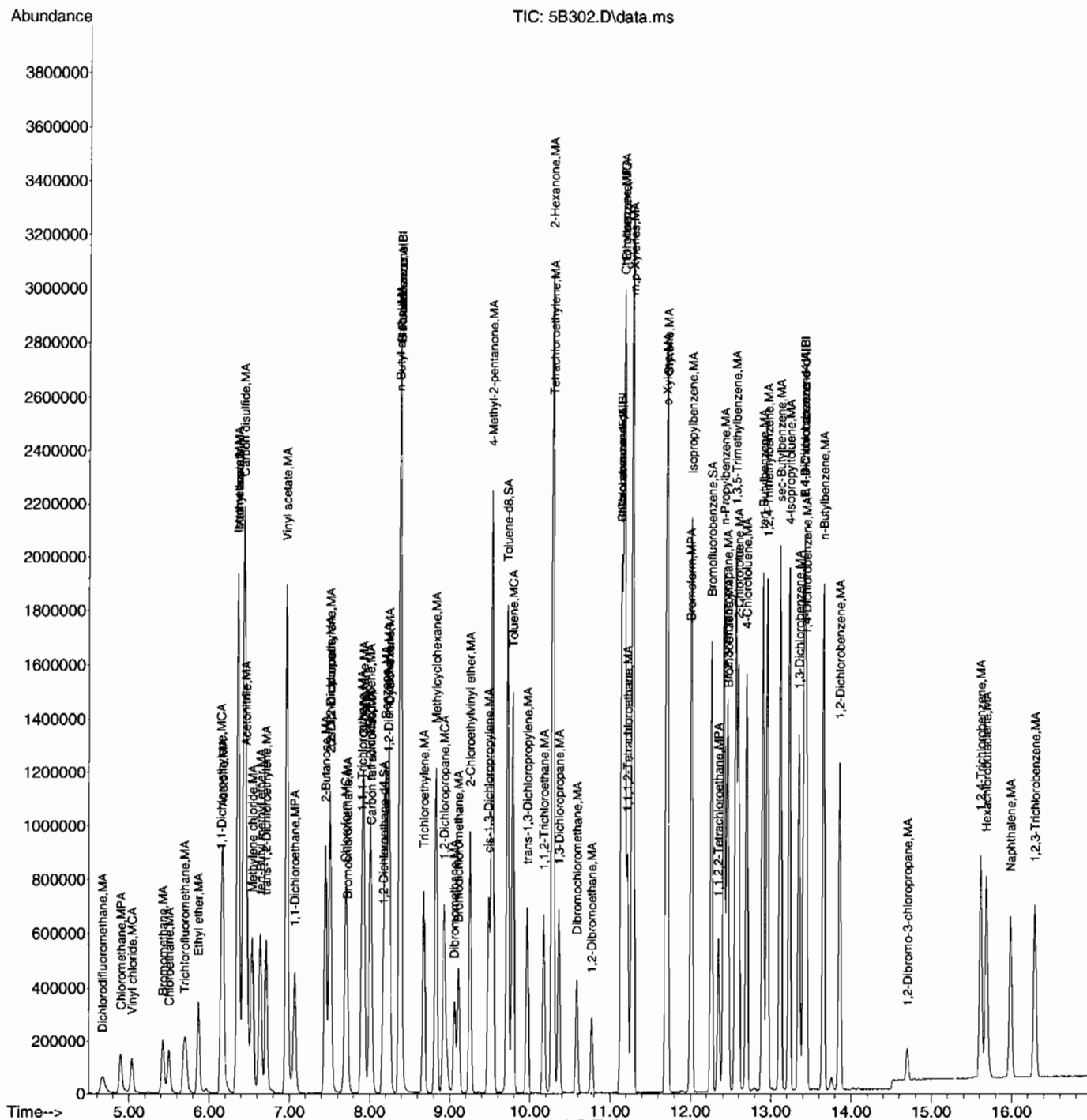
Quant Time: Mar 10 07:58:30 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.670	7.857	0.914		0m	N.D.	d
99) Methyl tert-amyl ether	8.200	8.122	0.978		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	9.063	8.957	1.081		0m	N.D.	d
102) 2-Nitropropane	9.197	9.342	1.097		0m	N.D.	d
104) Ethyl methacrylate	9.862	9.859	0.885		0m	N.D.	d
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.016	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.415	12.267	0.926		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.017	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.558	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038		0m	N.D.	d

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

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Data Path : C:\msdchem\1\DATA\031010V5\  
Data File : 5B302.D  
Acq On    : 10 Mar 2010    7:11 am  
Operator  : CDS1  
InstName  : VOA5  
Sample    : |W5VM100310-01|CCV|1|VOA|1|  
Misc      : CCV 5mL - MIX[A] 0222-07B+0106-07D  
ALS Vial  : 2    Sample Multiplier: 1
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Quant Time: Mar 10 07:58:30 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date 10-MAR-10 08:49

Data File: 031010V5\5B305.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W5VM100310-04

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.242	0.19342		.01		-20.07438	30		Averaged
SToluene-d8	1.2787	1.11673		.01		-12.66677	30		Averaged
S'Bromofluorobenzene	1.0029	1.10143		.01		9.82451	30		Averaged
Trichlorotrifluoroethane	0.0448	0.06188		.01		38.125	30	*	Averaged
Acrolein	250	276.52	250			10.608	30		Linear
Allyl chloride	0.3291	0.29863		.01		-9.25858	30		Averaged
Acrylonitrile	0.0724	0.07488		.01		3.42541	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.28245		.01		32.98023	30	*	Averaged
Ethyl acetate	0.196	0.18802		.01		-4.07143	40		Averaged
Propionitrile	0.0278	0.0293		.01		5.39568	30		Averaged
Methacrylonitrile	0.153	0.15482		.01		1.18954	30		Averaged
Tetrahydrofuran	0.0692	0.07098		.01		2.57225	30		Averaged
Isobutyl alcohol	0.0073	0.00777		.01		6.43836	40		Averaged
Methyl methacrylate	0.1155	0.12126		.01		4.98701	30		Averaged
1,4-Dioxane	0.0021	0.00206		.01		-1.90476	40		Averaged
2-Nitropropane	250	253.94	250			1.576	30		Linear
Ethyl methacrylate	0.2951	0.317		.01		7.42121	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.21271		.01		13.74866	30		Averaged
Cyclohexanone	0.0154	0.0649		.01		321.42857	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.19828		.01		12.59512	30		Averaged
Pentachloroethane	0.2439	0.30121		.01		23.49733	30		Averaged
Benzyl chloride	0.8953	1.06375		.01		18.81492	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.32407		.01		-1.61809	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B305.D
Acq On : 10 Mar 2010 8:49 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

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

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1609574	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1196444	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	611684	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1609574	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1196444	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	611684	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	311321	39.96	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1336102	43.67	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	673725	54.91	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	5.423	5.423	0.647		0m	N.D.	d	
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.695	5.695	0.679		0m	N.D.	d	
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.170	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.142	6.156	0.732		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.358	6.365	0.758		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.538	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.641	6.640	0.792		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800		0m	N.D.	d	
18) Vinyl acetate	6.966	6.969	0.831		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.500	7.507	0.894		0m	N.D.	d	
22) 2,2-Dichloropropane	7.514	7.514	0.896		0m	N.D.	d	
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.701	7.701	0.918		0m	N.D.	d	
25) 1,1,1-Trichloroethane	7.899	7.906	0.942		0m	N.D.	d	
26) Cyclohexane	7.949	7.924	0.948		0m	N.D.	d	
27) 1,1-Dichloropropene	8.006	8.005	0.954		0m	N.D.	d	
28) Carbon tetrachloride	8.027	8.020	0.957		0m	N.D.	d	
30) 1,2-Dichloroethane	8.228	8.235	0.981		0m	N.D.	d	
31) Benzene	8.197	8.203	0.977		0m	N.D.	d	
32) Cyclohexene	8.168	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.677	8.677	1.035		0m	N.D.	d	
35) 1,2-Dichloropropane	8.932	8.932	1.065		0m	N.D.	d	
36) Methylcyclohexane	8.805	8.826	1.050		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	9.116	9.112	1.087		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	9.480	9.487	1.130		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B305.D
Acq On : 10 Mar 2010 8:49 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

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

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.526	9.526	0.855		0m	N.D.	d
44) Toluene	9.788	9.788	0.878		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.283	10.173	0.923		0m	N.D.	d
47) 2-Hexanone	10.279	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.361	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.294	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	10.573	10.583	0.949		0m	N.D.	d
51) 1,2-Dibromoethane	10.771	10.771	0.967		0m	N.D.	d
52) Chlorobenzene	11.171	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.220	11.216	1.007		0m	N.D.	d
54) Ethylbenzene	11.171	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.280	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.694	11.701	1.050		0m	N.D.	d
57) Styrene	11.708	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.016	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.458	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.596	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.695	12.698	0.946		0m	N.D.	d
69) tert-Butylbenzene	12.900	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.119	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.229	13.229	0.986		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.349	13.349	0.995		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.437	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.657	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.862	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	14.697	14.704	1.096		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164		0m	N.D.	d
79) Hexachlorobutadiene	15.693	15.686	1.170		0m	N.D.	d
80) Naphthalene	15.989	15.988	1.192		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	257213	276.52 ug/L	97
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	497996	345.07 ug/L	100
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2403361	226.87 ug/L	93
89) tert-Butyl Alcohol	6.450	6.460	0.769	59	107	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	602640	258.74 ug/L	99
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	454617	66.50 ug/L	100
93) Ethyl tert-butyl ether	7.383	7.192	0.880	59	630	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1513153	239.87 ug/L	100
95) Propionitrile	7.581	7.585	0.904	54	235817	263.04 ug/L	100
96) Methacrylonitrile	7.677	7.680	0.915	41	1245972	252.90 ug/L	100
97) Tetrahydrofuran	7.712	7.716	0.919	42	571214	256.55 ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B305.D
Acq On : 10 Mar 2010 8:49 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

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

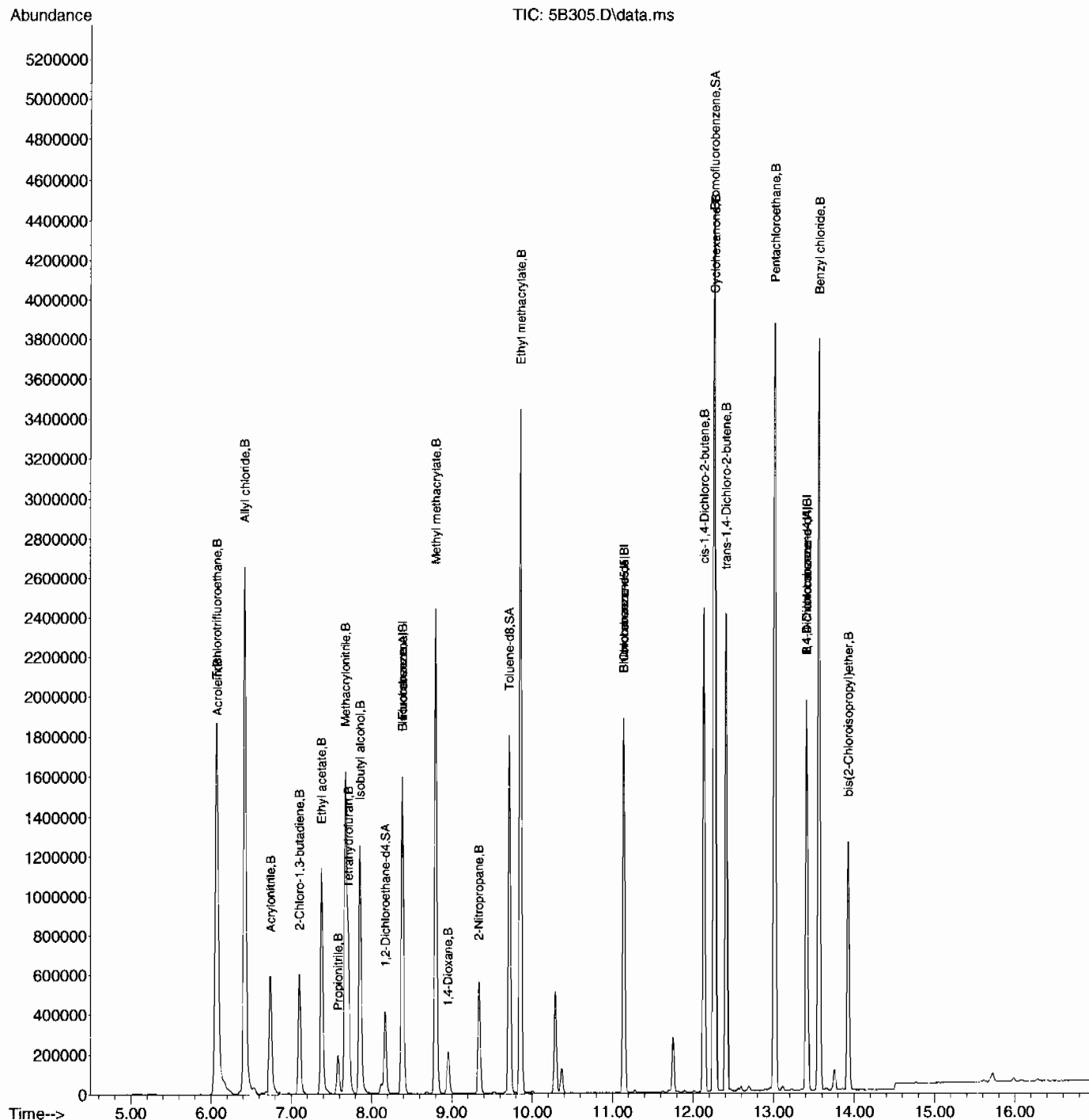
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.857	7.857	0.937	41	625201	2665.49	ug/L 100
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	8.801	8.801	1.049	69	975870	262.51	ug/L 99
101) 1,4-Dioxane	8.953	8.957	1.067	88	165971	2501.79	ug/L 100
102) 2-Nitropropane	9.339	9.342	1.113	43	479394	253.94	ug/L 99
104) Ethyl methacrylate	9.859	9.859	0.885	69	1896393	268.52	ug/L 100
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	650555	284.42	ug/L 99
108) Cyclohexanone	12.267	12.267	0.915	42	992507	5278.60	ug/L 98 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	606422	281.45	ug/L 100
110) Pentachloroethane	13.017	13.017	0.970	167	921216	308.74	ug/L 100
111) Benzyl chloride	13.565	13.565	1.011	91	3253404	297.02	ug/L 100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	991143	245.94	ug/L 99

(#) = 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\031010V5\
Data File : 5B305.D
Acq On : 10 Mar 2010 8:49 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

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



Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date 10-MAR-10 19:06

Data File: 031010V5\B328.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W5VM100310-05

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.242	0.18275		.01		-24.48347	30		Averaged	
SToluene-d8	1.2787	1.12437		.01		-12.06929	30		Averaged	
SBromofluorobenzene	1.0029	1.15632		.01		15.29764	30		Averaged	
Dichlorodifluoromethane	0.1167	0.1085		.01		-7.02656	30		Averaged	
Chloromethane	50	52.13	50			4.26	30		Linear	spcc
Vinyl chloride	0.1232	0.12445		.01		1.01461	20		Averaged	ccc
Bromomethane	0.1177	0.12103		.01		2.82923	30		Averaged	
Chloroethane	0.1249	0.12368		.01		-0.97678	30		Averaged	
Trichlorofluoromethane	0.2144	0.21629		.01		0.88153	30		Averaged	
Ethyl ether	0.1846	0.18563		.01		0.55796	30		Averaged	
1,1-Dichloroethylene	0.2389	0.2697		.01		12.89242	20		Averaged	ccc
Acetone	0.1494	0.15904		.01		6.45248	40		Averaged	
Methyl acetate	0.1633	0.16481		.01		0.92468	40		Averaged	
Iodomethane	0.2468	0.2701		.01		9.44084	30		Averaged	
Carbon disulfide	0.4789	0.52565		.01		9.76195	30		Averaged	
Acetonitrile	0.0293	0.02843		.01		-2.96928	30		Averaged	
Methylene chloride	50	52.74	50			5.48	30		Linear	
tert-Butyl methyl ether	0.4975	0.50004		.01		0.51055	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.28849		.01		11.04311	30		Averaged	
Vinyl acetate	0.4091	0.39531		.01		-3.37081	40		Averaged	
1,1-Dichloroethane	0.3217	0.35737		.01		11.08797	30		Averaged	spcc
2-Butanone	0.178	0.21039		.01		18.19663	40		Averaged	
2,2-Dichloropropane	0.2385	0.25518		.01		6.99371	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.32855		.01		8.71939	30		Averaged	
Chloroform	0.2882	0.31202		.01		8.26509	20		Averaged	ccc
Bromochloromethane	0.0893	0.09692		.01		8.53303	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.26047		.01		9.5793	30		Averaged	
Cyclohexane	0.3381	0.37414		.01		10.65957	30		Averaged	
1,1-Dichloropropene	0.218	0.23856		.01		9.43119	30		Averaged	
Carbon tetrachloride	0.2039	0.22697		.01		11.31437	30		Averaged	
Benzene	0.7238	0.75943		.01		4.92263	30		Averaged	
1,2-Dichloroethane	0.249	0.26362		.01		5.87149	30		Averaged	
Cyclohexene	0.3364	0.36657		.01		8.96849	30		Averaged	
n-Butyl alcohol	5000	5240.22	5000			4.8044	40		Linear	
Trichloroethylene	0.1719	0.18122		.01		5.42176	30		Averaged	
Methylcyclohexane	0.3141	0.33674		.01		7.2079	30		Averaged	
1,2-Dichloropropane	0.2044	0.21855		.01		6.9227	20		Averaged	ccc

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 10-MAR-10 19:06

Data File: 031010V5\5B328.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W5VM100310-05

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.11414		.01		9.85563	30		Averaged	
Bromodichloromethane	0.2124	0.23535		.01		10.80508	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.05799		.01		-11.19449	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.31346		.01		7.7923	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.13219		.01		10.52676	40		Averaged	
Toluene	1.0734	1.09498		.01		2.01043	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.3904		.01		6.78337	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.18787		.01		3.73827	30		Averaged	
2-Hexanone	0.3247	0.39198		.01		20.72067	40		Averaged	
Tetrachloroethylene	0.1966	0.2024		.01		2.95015	30		Averaged	
1,3-Dichloropropane	0.3892	0.40704		.01		4.58376	30		Averaged	
Dibromochloromethane	0.2155	0.23881		.01		10.81671	30		Averaged	
1,2-Dibromoethane	0.2099	0.21898		.01		4.32587	30		Averaged	
Chlorobenzene	0.6963	0.70612		.3		1.41031	30		Averaged	spcc
Ethylbenzene	1.2247	1.21483		.01		-0.80591	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.25118		.01		6.47732	30		Averaged	
m,p-Xylenes	0.4639	0.48151		.01		3.79608	30		Averaged	
o-Xylene	0.4688	0.48278		.01		2.98208	30		Averaged	
Styrene	0.7161	0.7852		.01		9.64949	30		Averaged	
Bromoform	0.2722	0.30872		.1		13.41661	30		Averaged	spcc
Isopropylbenzene	2.2942	2.3753		.01		3.535	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.58658		.3		-1.2159	30		Averaged	spcc
n-Propylbenzene	2.7698	2.81403		.01		1.59687	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.16069		.01		1.3817	30		Averaged	
Bromobenzene	0.5771	0.56616		.01		-1.89569	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	2.02746		.01		3.47879	30		Averaged	
2-Chlorotoluene	0.5751	0.57722		.01		0.36863	30		Averaged	
4-Chlorotoluene	1.761	1.7352		.01		-1.46508	30		Averaged	
tert-Butylbenzene	0.451	0.44985		.01		-0.25499	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	2.05161		.01		2.92014	30		Averaged	
sec-Butylbenzene	2.5353	2.6262		.01		3.58537	30		Averaged	
4-Isopropyltoluene	2.0151	2.0911		.01		3.77152	30		Averaged	
1,3-Dichlorobenzene	1.0958	1.08567		.01		-0.92444	30		Averaged	
1,4-Dichlorobenzene	1.114	1.08847		.01		-2.29174	30		Averaged	
n-Butylbenzene	1.9788	1.99167		.01		0.65039	30		Averaged	
1,2-Dichlorobenzene	1.0534	1.05493		.01		0.14524	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.11021		.01		-2.46903	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 10-MAR-10 19:06

Data File: 031010V5\5B328.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W5VM100310-05 Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.72925		.01		2.79814	30		Averaged
Hexachlorobutadiene	0.4309	0.44717		.01		3.77582	30		Averaged
Naphthalene	1.6113	1.66857		.01		3.55427	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.64668		.01		4.45485	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B328.D
Acq On : 10 Mar 2010 7:06 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-05|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 10 19:42:21 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1508539	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1111966	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	565862	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1508539	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1111966	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	565862	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	275679	37.76	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1250258	43.97	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	654319	57.65	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	163680	46.47	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	233797	52.13	ug/L	100
4) Vinyl chloride	5.041	5.041	0.601	62	187737	50.50	ug/L	98
5) Bromomethane	5.423	5.423	0.647	94	182577	51.43	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	186580	49.49	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	326285	50.43	ug/L	100
8) Ethyl ether	5.866	5.866	0.699	59	280024	50.27	ug/L	99
9) Acetone	6.170	6.174	0.736	43	1199612	266.14	ug/L	99
10) 1,1-Dichloroethylene	6.149	6.156	0.733	61	406846	56.44	ug/L	99
11) Iodomethane	6.358	6.357	0.758	142	2037258	273.64	ug/L	99
12) Acetonitrile	6.464	6.464	0.771	41	1072351	1213.87	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1243141	252.37	ug/L	100
14) Carbon disulfide	6.435	6.435	0.767	76	3964821	274.42	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	303196	52.74	ug/L	95
16) tert-Butyl methyl ether	6.633	6.640	0.791	73	754332	50.26	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	435196	55.52	ug/L	99
18) Vinyl acetate	6.966	6.969	0.831	43	2981705	241.57	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	539107	55.54	ug/L	100
20) 2-Butanone	7.447	7.450	0.888	43	1586914	295.50	ug/L	99
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	495628	54.36	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	384943	53.51	ug/L	96
23) Bromochloromethane	7.719	7.719	0.920	128	146210	54.28	ug/L	96
24) Chloroform	7.701	7.701	0.918	83	470694	54.14	ug/L	99
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	392929	54.79	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	564408	55.33	ug/L	99
27) 1,1-Dichloropropene	8.002	8.005	0.954	75	359879	54.72	ug/L	97
28) Carbon tetrachloride	8.020	8.020	0.956	117	342391	55.66	ug/L	99
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	397687	52.93	ug/L	100
31) Benzene	8.200	8.203	0.978	78	1145629	52.46	ug/L	96
32) Cyclohexene	8.246	8.246	0.983	67	552983	54.48	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.999	56	1111062	5240.22	ug/L	99
34) Trichloroethylene	8.674	8.677	1.034	95	273379	52.71	ug/L	100
35) 1,2-Dichloropropane	8.928	8.932	1.065	63	329696	53.45	ug/L	100
36) Methylcyclohexane	8.829	8.826	1.053	83	507982	53.60	ug/L	99
37) Dibromomethane	9.059	9.059	1.080	93	172178	54.92	ug/L	99
38) Bromodichloromethane	9.112	9.112	1.086	83	355035	55.40	ug/L	100
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	437404	221.96	ug/L	99
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	472870	53.90	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B328.D
Acq On : 10 Mar 2010 7:06 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-05|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 10 19:42:21 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	734936	276.38	ug/L	96
44) Toluene	9.788	9.788	0.878	91	1217579	51.00	ug/L	100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	434110	53.39	ug/L	98
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	208906	51.86	ug/L	98
47) 2-Hexanone	10.279	10.279	0.923	43	2179348	301.83	ug/L	99
48) 1,3-Dichloropropane	10.361	10.364	0.930	76	452615	52.29	ug/L	98
49) Tetrachloroethylene	10.294	10.290	0.924	164	225058	51.47	ug/L	100
50) Dibromochloromethane	10.587	10.583	0.950	129	265549	55.41	ug/L	99
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	243503	52.17	ug/L	100
52) Chlorobenzene	11.171	11.174	1.003	112	785177	50.71	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.216	11.216	1.007	131	279307	53.24	ug/L	99
54) Ethylbenzene	11.178	11.181	1.003	91	1350850	49.60	ug/L	100
55) m,p-Xylenes	11.280	11.280	1.012	106	1070838	103.79	ug/L	99
56) o-Xylene	11.697	11.701	1.050	106	536837	51.50	ug/L	99
57) Styrene	11.715	11.715	1.051	104	873121	54.82	ug/L	92
59) Bromoform	12.005	12.005	0.895	173	174694	56.70	ug/L	99
60) Isopropylbenzene	12.012	12.016	0.896	105	1344090	51.77	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	331923	49.39	ug/L	99
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	90931	50.68	ug/L #	88
64) Bromobenzene	12.461	12.465	0.929	156	320371	49.06	ug/L	98
65) n-Propylbenzene	12.415	12.415	0.926	91	1592352	50.80	ug/L	99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1147265	51.74	ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	326629	50.18	ug/L #	79
68) 4-Chlorotoluene	12.698	12.698	0.947	91	981882	49.27	ug/L	100
69) tert-Butylbenzene	12.900	12.900	0.962	134	254553	49.87	ug/L	99
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1160930	51.46	ug/L	98
71) sec-Butylbenzene	13.116	13.119	0.978	105	1486066	51.79	ug/L	99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1183272	51.89	ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	614338	49.54	ug/L	100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	615924	48.85	ug/L	99
75) n-Butylbenzene	13.653	13.653	1.018	91	1127013	50.33	ug/L	100
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	596947	50.07	ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	62366	48.76	ug/L	95
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	412654	51.40	ug/L	100
79) Hexachlorobutadiene	15.686	15.686	1.169	225	253039	51.89	ug/L	99
80) Naphthalene	15.988	15.988	1.192	128	944180	51.78	ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	365934	52.23	ug/L	100
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.181	6.163	0.737		0m	N.D.	d	
88) Allyl chloride	6.464	6.425	0.771		0m	N.D.	d	
89) tert-Butyl Alcohol	6.471	6.460	0.771		0m	N.D.	d	
90) Acrylonitrile	6.640	6.747	0.792		0m	N.D.	d	
91) Isopropyl ether	6.962	6.920	0.830		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.040	7.104	0.839		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.054	7.192	0.841		0m	N.D.	d	
94) Ethyl acetate	7.383	7.383	0.880		0m	N.D.	d	
95) Propionitrile	7.673	7.585	0.915		0m	N.D.	d	
96) Methacrylonitrile	7.673	7.680	0.915		0m	N.D.	d	
97) Tetrahydrofuran	7.719	7.716	0.920		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B328.D
Acq On : 10 Mar 2010 7:06 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-05|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 10 19:42:21 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.765	7.857	0.926		0m	N.D.	d
99) Methyl tert-amyl ether	8.193	8.122	0.977		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	9.063	8.957	1.081		0m	N.D.	d
102) 2-Nitropropane	9.370	9.342	1.117		0m	N.D.	d
104) Ethyl methacrylate	9.851	9.859	0.884		0m	N.D.	d
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.016	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.263	12.267	0.914		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.020	13.017	0.971		0m	N.D.	d
111) Benzyl chloride	13.554	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.922	13.929	1.038		0m	N.D.	d

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

Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date: 10-MAR-10 20:25

Data File: 031010V5\5B331.D

Init. Cal. Date(s): 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID: W5VM100310-08

Quant Type: ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.242	0.18279		.01		-24.46694	30		Averaged
SToluene-d8	1.2787	1.08762		.01		-14.9433	30		Averaged
SBromofluorobenzene	1.0029	1.13561		.01		13.23263	30		Averaged
Trichlorotrifluoroethane	0.0448	0.05407		.01		20.69196	30		Averaged
Acrolein	250	253.41	250			1.364	30		Linear
Allyl chloride	0.3291	0.28657		.01		-12.92312	30		Averaged
Acrylonitrile	0.0724	0.06886		.01		-4.8895	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.26211		.01		23.40395	30		Averaged
Ethyl acetate	0.196	0.17341		.01		-11.52551	40		Averaged
Propionitrile	0.0278	0.02663		.01		-4.20863	30		Averaged
Methacrylonitrile	0.153	0.144		.01		-5.88235	30		Averaged
Tetrahydrofuran	0.0692	0.06433		.01		-7.03757	30		Averaged
Isobutyl alcohol	0.0073	0.00676		.01		-7.39726	40		Averaged
Methyl methacrylate	0.1155	0.11276		.01		-2.37229	30		Averaged
1,4-Dioxane	0.0021	0.00179		.01		-14.7619	40		Averaged
2-Nitropropane	250	231.55	250			-7.38	30		Linear
Ethyl methacrylate	0.2951	0.29608		.01		0.33209	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.19691		.01		5.29947	30		Averaged
Cyclohexanone	0.0154	0.05741		.01		272.79221	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.18265		.01		3.71948	30		Averaged
Pentachloroethane	0.2439	0.26751		.01		9.6802	30		Averaged
Benzyl chloride	0.8953	0.90571		.01		1.16274	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.29014		.01		-11.91864	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B331.D
Acq On : 10 Mar 2010 8:25 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-08|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 07:16:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1513110	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1129367	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	570266	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1513110	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1129367	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	570266	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	276575	37.77	ug/L	0.00
43) Toluene-d8	9.724	9.721	0.873	98	1228326	42.53	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	647597	56.62	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	6.071	5.866	0.724		0m	N.D.	d	
9) Acetone	6.174	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.071	6.156	0.724		0m	N.D.	d	
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.425	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.534	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.640	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	7.097	6.969	0.846		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.510	7.450	0.895		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.510	7.507	0.895		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.698	7.701	0.917		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.857	7.924	0.936		0m	N.D.	d	
27) 1,1-Dichloropropene	8.126	8.005	0.968		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.172	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.394	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.681	8.677	1.035		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.801	8.826	1.049		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	9.484	9.487	1.130		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B331.D
Acq On : 10 Mar 2010 8:25 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-08|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 07:16:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.530	9.526	0.855		0m	N.D.	d
44) Toluene	9.791	9.788	0.879		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.972	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.290	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.279	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.368	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.293	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.781	10.771	0.968		0m	N.D.	d
52) Chlorobenzene	11.174	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.284	11.280	1.013		0m	N.D.	d
56) o-Xylene	11.694	11.701	1.050		0m	N.D.	d
57) Styrene	11.712	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.019	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.352	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.468	12.465	0.930		0m	N.D.	d
65) n-Propylbenzene	12.412	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937		0m	N.D.	d
67) 2-Chlorotoluene	12.603	12.596	0.940		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.903	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.229	13.229	0.986		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.352	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.437	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.653	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.851	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.605	15.619	1.163		0m	N.D.	d
79) Hexachlorobutadiene	15.678	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.981	15.988	1.191		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	220366	253.41 ug/L	97
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	409033	301.50 ug/L	98
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.425	6.425	0.766	41	2168065	217.71 ug/L	93
89) tert-Butyl Alcohol	0.000	6.460	0.000		0m	N.D.	d
90) Acrylonitrile	6.743	6.747	0.804	53	520967	237.93 ug/L	99
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.107	7.104	0.847	53	396608	61.72 ug/L	100
93) Ethyl tert-butyl ether	7.376	7.192	0.879	59	1108	N.D.	
94) Ethyl acetate	7.383	7.383	0.880	43	1311920	221.23 ug/L	99
95) Propionitrile	7.585	7.585	0.904	54	201436	239.01 ug/L	100
96) Methacrylonitrile	7.680	7.680	0.915	41	1089433	235.22 ug/L	100
97) Tetrahydrofuran	7.712	7.716	0.919	42	486673	232.51 ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B331.D
Acq On : 10 Mar 2010 8:25 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-08|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 07:16:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

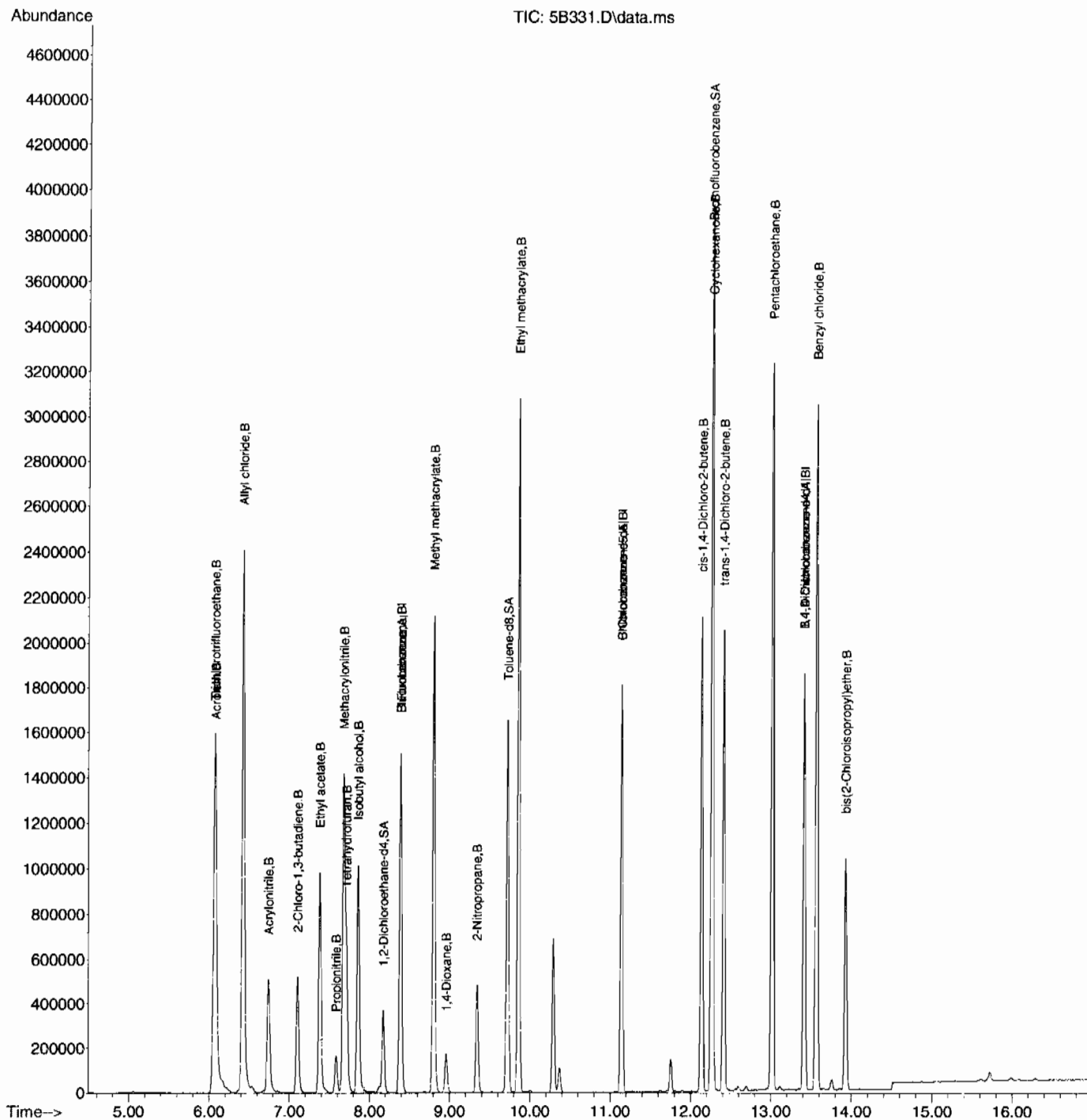
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.857	7.857	0.936	41	511513	2319.82	ug/L 100
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	8.801	8.801	1.049	69	853082	244.11	ug/L 98
101) 1,4-Dioxane	8.960	8.957	1.068	88	135501	2172.71	ug/L 100
102) 2-Nitropropane	9.342	9.342	1.113	43	409817	231.55	ug/L 100
104) Ethyl methacrylate	9.859	9.859	0.885	69	1671912	250.80	ug/L 98
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	561464	263.30	ug/L 99
108) Cyclohexanone	12.267	12.267	0.915	42	818414	4668.82	ug/L 98 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	520799	259.27	ug/L 99
110) Pentachloroethane	13.016	13.017	0.970	167	762750	274.19	ug/L 100
111) Benzyl chloride	13.565	13.565	1.011	91	2582465	252.89	ug/L 100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	827293	220.19	ug/L 100

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B331.D
Acq On : 10 Mar 2010 8:25 pm
Operator : CDS1
InstName : VOA5
Sample : |W5VM100310-08|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 07:16:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date 11-MAR-10 07:08

Data File: 031110V5\5B402.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W5VM100311-01

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.242	0.17376		.01		-28.19835	30		Averaged	
SToluene-d8	1.2787	1.06303		.01		-16.86635	30		Averaged	
SBromofluorobenzene	1.0029	1.1393		.01		13.60056	30		Averaged	
Dichlorodifluoromethane	0.1167	0.12643		.01		8.33762	30		Averaged	
Chloromethane	50	54.56	50			9.12	30		Linear	spcc
Vinyl chloride	0.1232	0.13383		.01		8.62825	20		Averaged	ccc
Bromomethane	0.1177	0.12968		.01		10.17842	30		Averaged	
Chloroethane	0.1249	0.13049		.01		4.47558	30		Averaged	
Trichlorofluoromethane	0.2144	0.22904		.01		6.82836	30		Averaged	
Ethyl ether	0.1846	0.187		.01		1.30011	30		Averaged	
1,1-Dichloroethylene	0.2389	0.26778		.01		12.08874	20		Averaged	ccc
Acetone	0.1494	0.15952		.01		6.77376	40		Averaged	
Methyl acetate	0.1633	0.15954		.01		-2.30251	40		Averaged	
Iodomethane	0.2468	0.2636		.01		6.80713	30		Averaged	
Carbon disulfide	0.4789	0.52421		.01		9.46127	30		Averaged	
Acetonitrile	0.0293	0.02713		.01		-7.40614	30		Averaged	
Methylene chloride	50	50.7	50			1.4	30		Linear	
tert-Butyl methyl ether	0.4975	0.48299		.01		-2.91658	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.28586		.01		10.03079	30		Averaged	
Vinyl acetate	0.4091	0.43942		.01		7.41139	40		Averaged	
1,1-Dichloroethane	0.3217	0.3495		.1		8.64159	30		Averaged	spcc
2-Butanone	0.178	0.21162		.01		18.88764	40		Averaged	
2,2-Dichloropropane	0.2385	0.26494		.01		11.08595	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.3217		.01		6.45268	30		Averaged	
Chloroform	0.2882	0.3008		.01		4.37196	20		Averaged	ccc
Bromochloromethane	0.0893	0.09368		.01		4.90482	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.26149		.01		10.00841	30		Averaged	
Cyclohexane	0.3381	0.38117		.01		12.73883	30		Averaged	
1,1-Dichloropropene	0.218	0.23983		.01		10.01376	30		Averaged	
Carbon tetrachloride	0.2039	0.23058		.01		13.08485	30		Averaged	
Benzene	0.7238	0.74333		.01		2.69826	30		Averaged	
1,2-Dichloroethane	0.249	0.25507		.01		2.43775	30		Averaged	
Cyclohexene	0.3364	0.36811		.01		9.42628	30		Averaged	
n-Butyl alcohol	5000	4961.07	5000			-0.7786	40		Linear	
Trichloroethylene	0.1719	0.17873		.01		3.97324	30		Averaged	
Methylcyclohexane	0.3141	0.33917		.01		7.98153	30		Averaged	
1,2-Dichloropropane	0.2044	0.21032		.01		2.89628	20		Averaged	ccc

Continuing Calibration Summary

Instrument ID: VOA5.1

Injection Date 11-MAR-10 07:08

Data File: 031110V5\5B402.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W5VM100311-01

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.11118		.01		7.00674	30		Averaged	
Bromodichloromethane	0.2124	0.22823		.01		7.45292	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.06227		.01		-4.64012	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.30649		.01		5.39546	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.13582		.01		13.56187	40		Averaged	
Toluene	1.0734	1.05847		.01		-1.39091	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.37657		.01		3.00055	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.17707		.01		-2.22529	30		Averaged	
2-Hexanone	0.3247	0.3984		.01		22.69787	40		Averaged	
Tetrachloroethylene	0.1966	0.19737		.01		0.39166	30		Averaged	
1,3-Dichloropropane	0.3892	0.3832		.01		-1.54162	30		Averaged	
Dibromochloromethane	0.2155	0.22806		.01		5.82831	30		Averaged	
1,2-Dibromoethane	0.2099	0.20592		.01		-1.89614	30		Averaged	
Chlorobenzene	0.6963	0.68066		.3		-2.24616	30		Averaged	spcc
Ethylbenzene	1.2247	1.19182		.01		-2.68474	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.24382		.01		3.35735	30		Averaged	
m,p-Xylenes	0.4639	0.46855		.01		1.00237	30		Averaged	
o-Xylene	0.4688	0.46849		.01		-0.06613	30		Averaged	
Styrene	0.7161	0.75345		.01		5.21575	30		Averaged	
Bromoform	0.2722	0.2909		.1		6.86995	30		Averaged	spcc
Isopropylbenzene	2.2942	2.34093		.01		2.03688	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.5569		.3		-6.21421	30		Averaged	spcc
n-Propylbenzene	2.7698	2.78278		.01		0.46863	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.149		.01		-5.99369	30		Averaged	
Bromobenzene	0.5771	0.54546		.01		-5.48259	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	1.97365		.01		0.7324	30		Averaged	
2-Chlorotoluene	0.5751	0.56871		.01		-1.11111	30		Averaged	
4-Chlorotoluene	1.761	1.69879		.01		-3.53265	30		Averaged	
tert-Butylbenzene	0.451	0.43948		.01		-2.55432	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	2.00397		.01		0.53025	30		Averaged	
sec-Butylbenzene	2.5353	2.61728		.01		3.23354	30		Averaged	
4-Isopropyltoluene	2.0151	2.09278		.01		3.8549	30		Averaged	
1,3-Dichlorobenzene	1.0958	1.06026		.01		-3.24329	30		Averaged	
1,4-Dichlorobenzene	1.114	1.07102		.01		-3.85817	30		Averaged	
n-Butylbenzene	1.9788	2.00781		.01		1.46604	30		Averaged	
1,2-Dichlorobenzene	1.0534	1.00929		.01		-4.18739	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.10429		.01		-7.70796	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 11-MAR-10 07:08

Data File: 031110V5\SB402.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W5VM100311-01 Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.7231		.01		1.93121	30		Averaged
Hexachlorobutadiene	0.4309	0.45124		.01		4.72035	30		Averaged
Naphthalene	1.6113	1.57746		.01		-2.10017	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.6246		.01		0.88839	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B402.D
Acq On : 11 Mar 2010 7:08 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100311-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 07:21:23 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1428247	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1072946	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	550065	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1428247	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1072946	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	550065	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	248173	35.90	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1140573	41.57	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	626687	56.80	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	180577	54.15	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	231545	54.56	ug/L	98
4) Vinyl chloride	5.041	5.041	0.601	62	191148	54.31	ug/L	99
5) Bromomethane	5.423	5.423	0.647	94	185217	55.10	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	186367	52.22	ug/L	100
7) Trichlorofluoromethane	5.705	5.695	0.680	101	327129	53.40	ug/L	100
8) Ethyl ether	5.867	5.866	0.699	59	267078	50.64	ug/L	97
9) Acetone	6.170	6.174	0.736	43	1139153	266.93	ug/L	100
10) 1,1-Dichloroethylene	6.153	6.156	0.734	61	382453	56.04	ug/L	99
11) Iodomethane	6.358	6.357	0.758	142	1882423	267.06	ug/L	100
12) Acetonitrile	6.460	6.464	0.770	41	968733	1158.22	ug/L	97
13) Methyl acetate	6.361	6.365	0.758	43	1139323	244.30	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	3743515	273.67	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	276081	50.70	ug/L	97
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	689832	48.55	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	408279	55.01	ug/L	98
18) Vinyl acetate	6.966	6.969	0.831	43	3138022	268.53	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	499179	54.32	ug/L	99
20) 2-Butanone	7.447	7.450	0.888	43	1511215	297.22	ug/L	99
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	459473	53.23	ug/L	98
22) 2,2-Dichloropropane	7.511	7.514	0.895	77	378395	55.55	ug/L	97
23) Bromochloromethane	7.719	7.719	0.920	128	133800	52.47	ug/L	96
24) Chloroform	7.701	7.701	0.918	83	429611	52.19	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	373475	55.01	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	544405	56.37	ug/L	98
27) 1,1-Dichloropropene	8.006	8.005	0.954	75	342540	55.01	ug/L	98
28) Carbon tetrachloride	8.020	8.020	0.956	117	329324	56.55	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	364298	51.21	ug/L	98
31) Benzene	8.204	8.203	0.978	78	1061661	51.35	ug/L	96
32) Cyclohexene	8.246	8.246	0.983	67	525758	54.71	ug/L	100
33) n-Butyl alcohol	8.377	8.377	0.999	56	996336	4961.07	ug/L	98
34) Trichloroethylene	8.674	8.677	1.034	95	255271	51.99	ug/L	100
35) 1,2-Dichloropropane	8.929	8.932	1.065	63	300393	51.44	ug/L	100
36) Methylcyclohexane	8.830	8.826	1.053	83	484421	53.99	ug/L	98
37) Dibromomethane	9.059	9.059	1.080	93	158797	53.50	ug/L	98
38) Bromodichloromethane	9.113	9.112	1.086	83	325963	53.73	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	444717	238.36	ug/L	99
40) cis-1,3-Dichloropropylene	9.487	9.487	1.131	75	437745	52.70	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B402.D
Acq On : 11 Mar 2010 7:08 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100311-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 07:21:23 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	728626	283.98	ug/L 97
44) Toluene	9.788	9.788	0.878	91	1135683	49.30	ug/L 100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	404038	51.50	ug/L 100
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	189984	48.88	ug/L 99
47) 2-Hexanone	10.280	10.279	0.923	43	2137325	306.77	ug/L 99
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	411158	49.23	ug/L 98
49) Tetrachloroethylene	10.294	10.290	0.924	164	211765	50.19	ug/L 98
50) Dibromochloromethane	10.587	10.583	0.950	129	244701	52.92	ug/L 100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	220944	49.06	ug/L 99
52) Chlorobenzene	11.174	11.174	1.003	112	730310	48.88	ug/L 98
53) 1,1,1,2-Tetrachloroethane	11.213	11.216	1.006	131	261605	51.68	ug/L 99
54) Ethylbenzene	11.178	11.181	1.003	91	1278759	48.66	ug/L 99
55) m,p-Xylenes	11.280	11.280	1.012	106	1005462	101.00	ug/L 100
56) o-Xylene	11.701	11.701	1.050	106	502663	49.97	ug/L 99
57) Styrene	11.712	11.715	1.051	104	808412	52.61	ug/L 93
59) Bromoform	12.005	12.005	0.895	173	160013	53.43	ug/L 100
60) Isopropylbenzene	12.012	12.016	0.896	105	1287664	51.02	ug/L 100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	306333	46.89	ug/L 100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	81961	46.99	ug/L # 83
64) Bromobenzene	12.465	12.465	0.929	156	300038	47.26	ug/L 99
65) n-Propylbenzene	12.415	12.415	0.926	91	1530710	50.23	ug/L 99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1085635	50.37	ug/L 100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	312828	49.44	ug/L # 81
68) 4-Chlorotoluene	12.698	12.698	0.947	91	934443	48.23	ug/L 100
69) tert-Butylbenzene	12.903	12.900	0.962	134	241741	48.72	ug/L 100
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1102315	50.27	ug/L 99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1439674	51.62	ug/L 100
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1151165	51.93	ug/L 99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	583210	48.38	ug/L 100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	589131	48.07	ug/L 100
75) n-Butylbenzene	13.653	13.653	1.018	91	1104427	50.73	ug/L 100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	555175	47.91	ug/L 100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	57365	46.13	ug/L 99
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	397752	50.97	ug/L 100
79) Hexachlorobutadiene	15.686	15.686	1.169	225	248212	52.36	ug/L 99
80) Naphthalene	15.989	15.988	1.192	128	867708	48.95	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	343572	50.45	ug/L 99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.177	6.163	0.736		0m	N.D.	d
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d
89) tert-Butyl Alcohol	6.460	6.460	0.770		0m	N.D.	d
90) Acrylonitrile	6.641	6.747	0.792		0m	N.D.	d
91) Isopropyl ether	6.966	6.920	0.831		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.033	7.104	0.839		0m	N.D.	d
93) Ethyl tert-butyl ether	7.051	7.192	0.841		0m	N.D.	d
94) Ethyl acetate	7.376	7.383	0.879		0m	N.D.	d
95) Propionitrile	7.670	7.585	0.914		0m	N.D.	d
96) Methacrylonitrile	7.666	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.719	7.716	0.920		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B402.D
Acq On : 11 Mar 2010 7:08 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100311-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 07:21:23 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

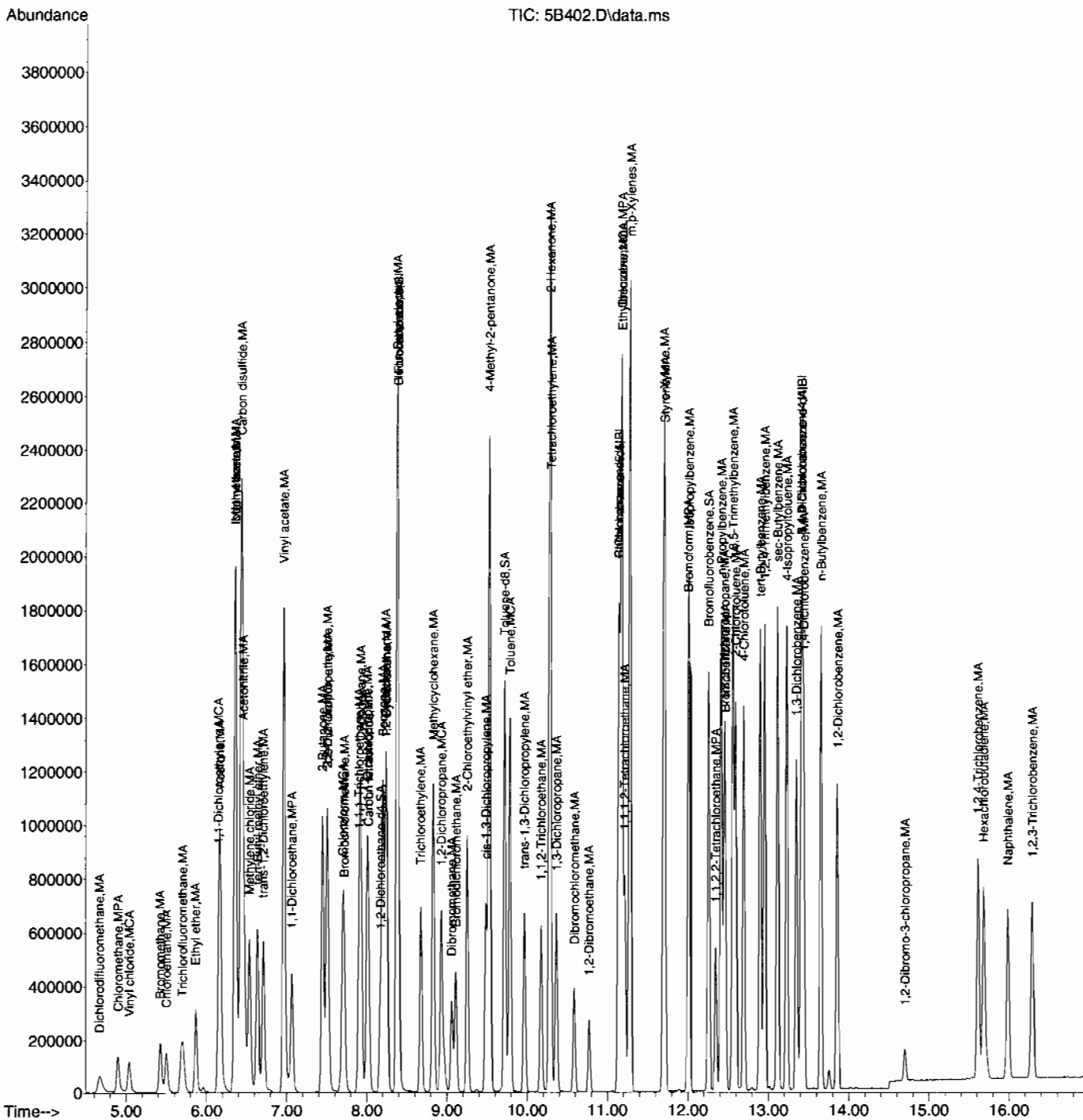
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.747	7.857	0.924		0m	N.D.	d
99) Methyl tert-amyl ether	8.207	8.122	0.978		0m	N.D.	d
100) Methyl methacrylate	8.830	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	9.063	8.957	1.081		0m	N.D.	d
102) 2-Nitropropane	9.371	9.342	1.117		0m	N.D.	d
104) Ethyl methacrylate	9.855	9.859	0.884		0m	N.D.	d
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.133	12.136	0.905		0m	N.D.	d
108) Cyclohexanone	12.263	12.267	0.914		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.415	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.017	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.568	13.565	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.915	13.929	1.037		0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B402.D
Acq On : 11 Mar 2010 7:08 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100311-01|CCV|1|VOA|1|
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 07:21:23 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA5.I

Injection Date 11-MAR-10 08:27

Data File: 031110V5\5B405.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W5VM100311-04

Quant Type ISTD

Method:030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.242	0.17886		.01		-26.09091	30		Averaged
SToluene-d8	1.2787	1.06084		.01		-17.03762	30		Averaged
SBromofluorobenzene	1.0029	1.15668		.01		15.33353	30		Averaged
Trichlorotrifluoroethane	0.0448	0.06026		.01		34.50893	30	*	Averaged
Acrolein	250	260.66	250			4.264	30		Linear
Allyl chloride	0.3291	0.29552		.01		-10.20359	30		Averaged
Acrylonitrile	0.0724	0.07077		.01		-2.25138	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.27591		.01		29.90113	30		Averaged
Ethyl acetate	0.196	0.179		.01		-8.67347	40		Averaged
Propionitrile	0.0278	0.0276		.01		-0.71942	30		Averaged
Methacrylonitrile	0.153	0.14848		.01		-2.95425	30		Averaged
Tetrahydrofuran	0.0692	0.06682		.01		-3.43931	30		Averaged
Isobutyl alcohol	0.0073	0.00693		.01		-5.06849	40		Averaged
Methyl methacrylate	0.1155	0.11451		.01		-0.85714	30		Averaged
1,4-Dioxane	0.0021	0.00181		.01		-13.80952	40		Averaged
2-Nitropropane	250	241.26	250			-3.496	30		Linear
Ethyl methacrylate	0.2951	0.29774		.01		0.89461	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.2019		.01		7.96791	30		Averaged
Cyclohexanone	0.0154	0.0597		.01		287.66234	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.18941		.01		7.55821	30		Averaged
Pentachloroethane	0.2439	0.28721		.01		17.75728	30		Averaged
Benzyl chloride	0.8953	1.01427		.01		13.28828	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.29517		.01		-10.39162	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B405.D
Acq On : 11 Mar 2010 8:27 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100311-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1397071	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1054675	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537423	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1397071	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1054675	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537423	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	249884	36.96	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1118838	41.48	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	621626	57.67	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.170	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.064	6.156	0.723		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.421	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.542	6.538	0.780		0m	N.D.	d	
16) tert-Butyl methyl ether	6.634	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.973	6.969	0.831		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.380	7.507	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.854	7.924	0.936		0m	N.D.	d	
27) 1,1-Dichloropropene	8.122	8.005	0.968		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.977		0m	N.D.	d	
32) Cyclohexene	8.250	8.246	0.984		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.798	8.826	1.049		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	9.480	9.487	1.130		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B405.D
Acq On : 11 Mar 2010 8:27 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100311-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.519	9.526	0.854		0m	N.D.	d
44) Toluene	9.792	9.788	0.879		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.972	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.287	10.173	0.923		0m	N.D.	d
47) 2-Hexanone	10.276	10.279	0.922		0m	N.D.	d
48) 1,3-Dichloropropane	10.368	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.764	10.771	0.966		0m	N.D.	d
52) Chlorobenzene	11.174	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.280	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.701	11.701	1.050		0m	N.D.	d
57) Styrene	11.715	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.012	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.408	12.348	0.925		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.461	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.561	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.596	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.907	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.232	13.229	0.987		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.356	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.653	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.858	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164		0m	N.D.	d
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.981	15.988	1.191		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	209673	260.66 ug/L	99
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	420908	336.02 ug/L	100
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2064299	224.51 ug/L	93
89) tert-Butyl Alcohol	6.421	6.460	0.766	59	764	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	494368	244.54 ug/L	100
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	385462	64.96 ug/L	100
93) Ethyl tert-butyl ether	7.369	7.192	0.879	59	107	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1250386	228.37 ug/L	99
95) Propionitrile	7.585	7.585	0.904	54	192800	247.77 ug/L	99
96) Methacrylonitrile	7.677	7.680	0.915	41	1037180	242.54 ug/L	100
97) Tetrahydrofuran	7.709	7.716	0.919	42	466766	241.52 ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B405.D
Acq On : 11 Mar 2010 8:27 am
Operator : CDS1
InstName : VOA5
Sample : |W5VM100311-04|CCV|1|VOA|1|VOA8260BS|
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	7.861	7.857	0.937	41	483945	2377.09	ug/L	98
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	799913	247.91	ug/L	97
101) 1,4-Dioxane	8.957	8.957	1.068	88	126561	2197.92	ug/L	99
102) 2-Nitropropane	9.342	9.342	1.114	43	394732	241.26	ug/L	99
104) Ethyl methacrylate	9.859	9.859	0.885	69	1570077	252.20	ug/L	98
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	542526	269.96	ug/L	100
108) Cyclohexanone	12.267	12.267	0.915	42	802097	4855.37	ug/L	97 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	508969	268.86	ug/L	98
110) Pentachloroethane	13.013	13.017	0.970	167	771770	294.39	ug/L	99
111) Benzyl chloride	13.565	13.565	1.011	91	2725462	283.21	ug/L	100
112) bis(2-Chloroisopropyl)...	13.926	13.929	1.038	45	793167	224.01	ug/L	100

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

```
Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B405.D  
Acq On    : 11 Mar 2010    8:27 am  
Operator  : CDS1  
InstName  : VOA5  
Sample    : |W5VM100311-04|CCV|1|VOA|1|VOA8260BS|  
Misc      : CCV 5G - SOIL MIX[B |UVM100215-08B  
ALS Vial  : 5    Sample Multiplier: 1
```

Abundance

TIC: 5B405.D\data.ms

Time-->

5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00

Acrolein, B

Acrylonitrile, B

2-Chloro-1,3-butadiene, B

Propionitrile, B

Ethyl acetate, B

Methacrylonitrile, B

Isobutyl alcohol, B

1,2-Dichloroethane-d4, SA

1,4-Dioxane, B

2-Nitropropane, B

Toluene-d8, SA

Ethyl methacrylate, B

Bis(2-chloroisopropyl) ether, B

4,4'-Dichlorobiphenyl, B

1,4-Dichloro-2-butene, B

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

Bis(2-chloroisopropyl) ether, B

Pentachloroethane, B

Benzyl chloride, B

Continuing Calibration Summary

Client SDG: 10-2150

Instrument ID: VOA3.I

Injection Date: 19-MAR-10 15:58

Data File: 031910V3\3D502.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W3VM100319-01

Quant Type ISTD

Method:022610V3\VOA3-8260-022610.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.3066	0.30667		.01		0.02283	30		Averaged	
SToluene-d8	1.3456	1.28671		.01		-4.37649	30		Averaged	
SBromofluorobenzene	1.0082	0.99998		.01		-0.81531	30		Averaged	
Dichlorodifluoromethane	50	59.3	50			18.6	30		Linear	
Chloromethane	0.2352	0.26001		.1		10.54847	30		Averaged	spcc
Vinyl chloride	0.2397	0.27924		.01		16.49562	20		Averaged	ccc
Bromomethane	0.1935	0.21253		.01		9.83463	30		Averaged	
Chloroethane	0.1549	0.17102		.01		10.40671	30		Averaged	
Trichlorofluoromethane	0.3298	0.37357		.01		13.27168	30		Averaged	
Ethyl ether	0.1705	0.18309		.01		7.38416	30		Averaged	
Acetone	0.2108	0.15585		.01		-26.06736	40		Averaged	
1,1-Dichloroethylene	0.339	0.33565		.01		-0.9882	20		Averaged	ccc
Iodomethane	0.4286	0.40447		.01		-5.62996	30		Averaged	
Carbon disulfide	0.7478	0.77012		.01		2.98476	30		Averaged	
Acetonitrile	0.0365	0.03171		.01		-13.12329	30		Averaged	
Methyl acetate	0.1881	0.17142		.01		-8.86762	40		Averaged	
Methylene chloride	0.3046	0.27704		.01		-9.04793	30		Averaged	
tert-Butyl methyl ether	0.6625	0.63494		.01		-4.16	30		Averaged	
trans-1,2-Dichloroethylene	0.314	0.32086		.01		2.18471	30		Averaged	
Vinyl acetate	0.3778	0.47526		.01		25.79672	40		Averaged	
1,1-Dichloroethane	0.3946	0.40367		.1		2.29853	30		Averaged	spcc
2-Butanone	0.2099	0.15629		.01		-25.54073	40		Averaged	
cis-1,2-Dichloroethylene	0.3474	0.36221		.01		4.2631	30		Averaged	
2,2-Dichloropropane	0.2436	0.31028		.01		27.37274	30		Averaged	
Bromochloromethane	0.1279	0.12829		.01		0.30493	30		Averaged	
Chloroform	0.4027	0.41522		.01		3.10901	20		Averaged	ccc
1,1,1-Trichloroethane	0.327	0.35376		.01		8.18349	30		Averaged	
Cyclohexane	0.3661	0.39002		.01		6.53373	30		Averaged	
1,1-Dichloropropene	0.2778	0.3003		.01		8.09935	30		Averaged	
Carbon tetrachloride	0.286	0.32036		.01		12.01399	30		Averaged	
1,2-Dichloroethane	0.3149	0.30513		.01		-3.10257	30		Averaged	
Benzene	0.8815	0.89349		.01		1.36018	30		Averaged	
Cyclohexene	0.4035	0.41714		.01		3.38042	30		Averaged	
n-Butyl alcohol	5000	3716.28	5000			-25.6744	40		Linear	
Trichloroethylene	0.2276	0.23563		.01		3.52812	30		Averaged	
1,2-Dichloropropane	0.2153	0.22919		.01		6.45146	20		Averaged	ccc
Methylcyclohexane	0.3768	0.40191		.01		6.66401	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA3.1

Injection Date 19-MAR-10 15:58

Data File: 031910V3\3D502.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W3VM100319-01

Quant Type ISTD

Method:022610V3\VOA3-8260-022610.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1445	0.14674		.01		1.55017	30		Averaged	
Bromodichloromethane	0.2749	0.30214		.01		9.90906	30		Averaged	
2-Chloroethylvinyl ether	250	428.88	250			71.552	30	*	Linear	
cis-1,3-Dichloropropylene	0.3124	0.34932		.01		11.81818	30		Averaged	
4-Methyl-2-pentanone	0.1208	0.12404		.01		2.68212	40		Averaged	
Toluene	1.1971	1.19323		.01		-0.32328	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3639	0.4059		.01		11.54163	30		Averaged	
1,1,2-Trichloroethane	0.2068	0.21077		.01		1.91973	30		Averaged	
1,3-Dichloropropane	0.4295	0.42285		.01		-1.54831	30		Averaged	
2-Hexanone	0.3084	0.26185		.01		-15.09403	40		Averaged	
Tetrachloroethylene	0.2332	0.2347		.01		0.64322	30		Averaged	
Dibromochloromethane	0.2736	0.30941		.01		13.08845	30		Averaged	
1,2-Dibromoethane	0.266	0.27573		.01		3.65789	30		Averaged	
Chlorobenzene	0.7858	0.80878		.3		2.92441	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.2702	0.30281		.01		12.06884	30		Averaged	
Ethylbenzene	1.237	1.28312		.01		3.72838	20		Averaged	ccc
m,p-Xylenes	0.4916	0.52565		.01		6.92636	30		Averaged	ccc
o-Xylene	0.4911	0.54041		.01		10.04072	30		Averaged	
Styrene	0.7841	0.8912		.01		13.65897	30		Averaged	
Bromoform	50	48.14	50			-3.72	30		Linear	spcc
Isopropylbenzene	2.4779	2.74974		.01		10.97058	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6699	0.7037		.3		5.04553	30		Averaged	spcc
1,2,3-Trichloropropane	0.1842	0.18602		.01		0.98806	30		Averaged	
Bromobenzene	0.6651	0.69197		.01		4.03999	30		Averaged	
n-Propylbenzene	2.8647	3.13866		.01		9.56331	30		Averaged	
2-Chlorotoluene	0.6176	0.67475		.01		9.25356	30		Averaged	
1,3,5-Trimethylbenzene	2.079	2.30447		.01		10.84512	30		Averaged	
4-Chlorotoluene	1.7773	1.92186		.01		8.13369	30		Averaged	
tert-Butylbenzene	0.4447	0.49945		.01		12.31167	30		Averaged	
1,2,4-Trimethylbenzene	2.1081	2.31849		.01		9.98008	30		Averaged	
sec-Butylbenzene	2.7845	2.9737		.01		6.79476	30		Averaged	
4-Isopropyltoluene	2.2105	2.45831		.01		11.21059	30		Averaged	
1,3-Dichlorobenzene	1.1363	1.14534		.01		0.79556	30		Averaged	
1,4-Dichlorobenzene	1.3023	1.33857		.01		2.78507	30		Averaged	
n-Butylbenzene	2.102	2.35184		.01		11.88582	30		Averaged	
1,2-Dichlorobenzene	1.2927	1.29486		.01		0.16709	30		Averaged	
1,2-Dibromo-3-chloropropane	50	44.65	50			-10.7	30		Linear	

Continuing Calibration Summary

Instrument ID: VOA3.I

Injection Date 19-MAR-10 15:58

Data File: 031910V3\3D502.D

Init. Cal. Date(s) 26-FEB-10 10:23 03-MAR-10 19:3

Lab Sample ID W3VM100319-01 Quant Type ISTD

Method: 022610V3\VOA3-8260-022610.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.8694	0.96357		.01		10.83161	30		Averaged
Hexachlorobutadiene	0.4354	0.47101		.01		8.17869	30		Averaged
Naphthalene	2.2358	2.45182		.01		9.66187	30		Averaged
1,2,3-Trichlorobenzene	0.849	0.92005		.01		8.36867	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D502.D
Acq On : 19 Mar 2010 3:58 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100319-01|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5mL - MIX[A] 0305-01C+0318-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 19 16:17:16 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	12.232	12.232	1.000	96	862805	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	673203	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	341239	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	862609	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	673160	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	348012	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	11.793	11.793	0.964	65	264600	50.01	ug/L	0.00
43) Toluene-d8	14.165	14.165	0.894	98	866219	47.81	ug/L	0.00
61) Bromofluorobenzene	17.130	17.130	0.930	95	341232	49.59	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.800	4.800	0.392	85	142507	59.30	ug/L	97
3) Chloromethane	5.231	5.216	0.428	50	224336	55.27	ug/L	98
4) Vinyl chloride	5.543	5.528	0.453	62	240931	58.24	ug/L	99
5) Bromomethane	6.291	6.291	0.514	94	183373	54.93	ug/L	98
6) Chloroethane	6.493	6.493	0.531	64	147553	55.21	ug/L	100
7) Trichlorofluoromethane	7.062	7.062	0.577	101	322321	56.63	ug/L	99
8) Ethyl ether	7.501	7.512	0.613	59	157971	53.69	ug/L	99
9) Acetone	7.975	7.987	0.652	43	672346	184.84	ug/L	100
10) 1,1-Dichloroethylene	7.987	7.987	0.653	61	289598	49.51	ug/L	99
11) Iodomethane	8.271	8.271	0.676	142	1744898	235.91	ug/L	99
12) Acetonitrile	8.449	8.449	0.691	41	683951	1085.46	ug/L	99
13) Methyl acetate	8.520	8.520	0.697	43	739522	227.81	ug/L	99
14) Carbon disulfide	8.437	8.449	0.690	76	3322307	257.46	ug/L	100
15) Methylene chloride	8.746	8.746	0.715	84	239028	45.47	ug/L	97
16) tert-Butyl methyl ether	9.173	9.173	0.750	73	547832	47.92	ug/L	99
17) trans-1,2-Dichloroethy...	9.208	9.208	0.753	61	276843	51.10	ug/L	99
18) Vinyl acetate	9.837	9.837	0.804	43	2050289	314.52	ug/L	100
19) 1,1-Dichloroethane	9.849	9.860	0.805	63	348286	51.15	ug/L	100
20) 2-Butanone	10.631	10.643	0.869	43	674235	186.11	ug/L	100
21) cis-1,2-Dichloroethylene	10.690	10.691	0.874	61	312514	52.14	ug/L	98
22) 2,2-Dichloropropane	10.714	10.714	0.876	77	267709	63.68	ug/L	94
23) Bromochloromethane	11.034	11.034	0.902	128	110687	50.16	ug/L	97
24) Chloroform	11.094	11.094	0.907	83	358256	51.56	ug/L	100
25) 1,1,1-Trichloroethane	11.426	11.426	0.934	97	305229	54.09	ug/L	99
26) Cyclohexane	11.532	11.532	0.943	56	336511	53.27	ug/L	99
27) 1,1-Dichloropropene	11.615	11.627	0.950	75	259101	54.04	ug/L	99
28) Carbon tetrachloride	11.663	11.663	0.953	117	276406	56.01	ug/L	99
30) 1,2-Dichloroethane	11.888	11.888	0.972	62	263268	48.45	ug/L	99
31) Benzene	11.912	11.912	0.974	78	770908	50.68	ug/L	100
32) Cyclohexene	12.054	12.054	0.985	67	359913	51.69	ug/L	100
33) n-Butyl alcohol	12.398	12.398	1.014	56	592993	3716.28	ug/L	99
34) Trichloroethylene	12.695	12.695	1.038	95	203300	51.76	ug/L	100
35) 1,2-Dichloropropane	12.979	12.979	1.061	63	197744	53.23	ug/L	98
36) Methylcyclohexane	12.979	12.991	1.061	83	346770	53.33	ug/L	99
37) Dibromomethane	13.133	13.133	1.074	93	126611	50.78	ug/L	97
38) Bromodichloromethane	13.276	13.288	1.085	83	260685	54.96	ug/L	100
39) 2-Chloroethylvinyl ether	13.560	13.560	1.109	63	523342	428.88	ug/L	99
40) cis-1,3-Dichloropropylene	13.809	13.809	1.129	75	301399	55.91	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D502.D
Acq On : 19 Mar 2010 3:58 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100319-01|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5mL - MIX[A] 0305-01C+0318-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 19 16:17:16 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	13.928	13.928	0.879	58	417514	256.70	ug/L	100
44) Toluene	14.248	14.248	0.899	91	803284	49.84	ug/L	100
45) trans-1,3-Dichloroprop...	14.426	14.426	0.910	75	273250	55.78	ug/L	97
46) 1,1,2-Trichloroethane	14.675	14.675	0.926	83	141888	50.95	ug/L	100
47) 2-Hexanone	14.888	14.888	0.939	43	881403	212.26	ug/L	99
48) 1,3-Dichloropropane	14.877	14.888	0.939	76	284664	49.22	ug/L	92
49) Tetrachloroethylene	14.912	14.912	0.941	164	158004	50.32	ug/L	98
50) Dibromochloromethane	15.173	15.173	0.957	129	208296	56.55	ug/L	100
51) 1,2-Dibromoethane	15.351	15.351	0.969	107	185619	51.83	ug/L	100
52) Chlorobenzene	15.885	15.885	1.002	112	544473	51.46	ug/L	99
53) 1,1,1,2-Tetrachloroethane	15.944	15.956	1.006	131	203855	56.04	ug/L	99
54) Ethylbenzene	15.968	15.968	1.007	91	863803	51.86	ug/L	100
55) m,p-Xylenes	16.086	16.086	1.015	106	707732	106.93	ug/L	100
56) o-Xylene	16.549	16.549	1.044	106	363803	55.02	ug/L	100
57) Styrene	16.549	16.549	1.044	104	599959	56.83	ug/L	100
59) Bromoform	16.809	16.821	0.913	173	126309	48.14	ug/L	99
60) Isopropylbenzene	16.928	16.928	0.919	105	938317	55.49	ug/L	100
62) 1,1,2,2-Tetrachloroethane	17.213	17.213	0.935	83	240130	52.52	ug/L	100
63) 1,2,3-Trichloropropane	17.296	17.308	0.939	110	63477	50.50	ug/L #	89
64) Bromobenzene	17.343	17.343	0.942	156	236128	52.02	ug/L	98
65) n-Propylbenzene	17.367	17.367	0.943	91	1071032	54.78	ug/L	100
66) 1,3,5-Trimethylbenzene	17.533	17.533	0.952	105	786376	55.42	ug/L	100
67) 2-Chlorotoluene	17.521	17.521	0.952	126	230252	54.63	ug/L	99
68) 4-Chlorotoluene	17.628	17.628	0.957	91	655815	54.07	ug/L	100
69) tert-Butylbenzene	17.912	17.912	0.973	134	170431	56.15	ug/L	98
70) 1,2,4-Trimethylbenzene	17.960	17.960	0.976	105	791159	54.99	ug/L	99
71) sec-Butylbenzene	18.149	18.150	0.986	105	1014743	53.40	ug/L	99
72) 4-Isopropyltoluene	18.280	18.280	0.993	119	838870	55.61	ug/L	100
73) 1,3-Dichlorobenzene	18.339	18.351	0.996	146	390835	50.40	ug/L	100
74) 1,4-Dichlorobenzene	18.434	18.434	1.001	146	456772	51.39	ug/L	99
75) n-Butylbenzene	18.742	18.742	1.018	91	802539	55.94	ug/L	99
76) 1,2-Dichlorobenzene	18.885	18.885	1.026	146	441856	50.08	ug/L	100
77) 1,2-Dibromo-3-chloropr...	19.810	19.810	1.076	157	48882	44.65	ug/L	96
78) 1,2,4-Trichlorobenzene	20.936	20.936	1.137	180	328807	55.42	ug/L	100
79) Hexachlorobutadiene	21.126	21.126	1.148	225	160726	54.08	ug/L	99
80) Naphthalene	21.351	21.351	1.160	128	836656	54.83	ug/L	100
81) 1,2,3-Trichlorobenzene	21.719	21.719	1.180	180	313956	54.18	ug/L	98
83) Chlorotrifluoroethylene	0.000	4.711	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.751	0.000		0	N.D.		
85) Acrolein	0.000	7.750	0.000		0	N.D.		
86) Trichlorotrifluoroethane	7.963	7.975	0.651		0m	N.D.	d	
87) Isopropyl Alcohol	0.000	8.141	0.000		0	N.D.		
88) Allyl chloride	8.449	8.556	0.691		0m	N.D.	d	
89) tert-Butyl Alcohol	0.000	8.793	0.000		0	N.D.		
90) Acrylonitrile	9.173	9.090	0.750		0m	N.D.	d	
91) Isopropyl ether	9.837	9.884	0.804		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	10.038	10.003	0.821		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000	10.406	0.000		0	N.D.		
94) Ethyl acetate	10.631	10.679	0.869		0m	N.D.	d	
95) Propionitrile	10.631	10.726	0.869		0m	N.D.	d	
96) Methacrylonitrile	0.000	10.951	0.000		0	N.D.		
97) Tetrahydrofuran	11.094	11.094	0.907		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D502.D
Acq On : 19 Mar 2010 3:58 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100319-01|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5mL - MIX[A] 0305-01C+0318-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 19 16:17:16 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	11.532	11.556	0.943		0m	N.D.	d
99) Methyl tert-amyl ether	11.912	11.971	0.974		0m	N.D.	d
100) Methyl methacrylate	12.979	12.991	1.061		0m	N.D.	d
101) 1,4-Dioxane	0.000	13.098	0.000		0	N.D.	
102) 2-Nitropropane	13.560	13.525	1.109		0m	N.D.	d
104) Ethyl methacrylate	14.450	14.450	0.912		0m	N.D.	d
106) 1-Chlorohexane	15.849	15.754	0.861		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	16.928	16.964	0.919		0m	N.D.	d
108) Cyclohexanone	16.916	17.082	0.919		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	17.367	17.260	0.943		0m	N.D.	d
110) Pentachloroethane	17.983	17.983	0.977		0m	N.D.	d
111) Benzyl chloride	18.553	18.553	1.008		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	19.051	18.980	1.035		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: 10-2150

Instrument ID: VOA3.I

Injection Date: 19-MAR-10 17:07

Data File: 031910V3\3D504.D

Init. Cal. Date(s) 26-FEB-10 10:23 - 03-MAR-10 19:3

Lab Sample ID W3VM100319-03

Quant Type ISTD

Method:022610V3\VOA3-8260-022610.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.3066	0.32511		.01		6.03718	30		Averaged
SToluene-d8	1.3456	1.40302		.01		4.26724	30		Averaged
SBromofluorobenzene	1.0082	1.05798		.01		4.93751	30		Averaged
Acrolein	250	372.42	250			48.968	30	*	Linear
Trichlorotrifluoroethane	0.0827	0.0771		.01		-6.77146	30		Averaged
Allyl chloride	0.2962	0.25896		.01		-12.57259	30		Averaged
Acrylonitrile	0.0885	0.07247		.01		-18.11299	30		Averaged
2-Chloro-1,3-butadiene	0.2574	0.25534		.01		-0.80031	30		Averaged
Ethyl acetate	0.2185	0.16357		.01		-25.13959	40		Averaged
Propionitrile	0.0347	0.02821		.01		-18.70317	30		Averaged
Methacrylonitrile	0.1332	0.1072		.01		-19.51952	30		Averaged
Tetrahydrofuran	0.0735	0.05813		.01		-20.91156	30		Averaged
Isobutyl alcohol	0.0095	0.00626		.01		-34.10526	40		Averaged
Methyl methacrylate	0.1441	0.12728		.01		-11.67245	30		Averaged
1,4-Dioxane	0.0031	0.00228		.01		-26.45161	40		Averaged
2-Nitropropane	250	206.95	250			-17.22	30		Linear
Ethyl methacrylate	0.3396	0.30366		.01		-10.58304	30		Averaged
cis-1,4-Dichloro-2-butene	0.1677	0.18053		.01		7.65057	30		Averaged
Cyclohexanone	0.0193	0.01449		.01		-24.92228	40		Averaged
trans-1,4-Dichloro-2-butene	0.1636	0.17386		.01		6.27139	30		Averaged
Pentachloroethane	250	293.96	250			17.584	30		Linear
Benzyl chloride	250	330.89	250			32.356	30	*	Linear
bis(2-Chloroisopropyl)ether	0.3232	0.2699		.01		-16.49134	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D504.D
Acq On : 19 Mar 2010 5:07 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100319-03|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5G - SOIL UVM100304-08A MIX[B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 09:38:35 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	12.232	12.232	1.000	96	862704	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	672337	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	339547	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	862427	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	672269	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	346549	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	11.793	11.793	0.964	65	280472	53.01	ug/L	0.00
43) Toluene-d8	14.165	14.165	0.894	98	943300	52.13	ug/L	0.00
61) Bromofluorobenzene	17.130	17.130	0.930	95	359234	52.47	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.800	0.000		0	N.D.		
3) Chloromethane	5.201	5.216	0.425		0m	N.D.	d	
4) Vinyl chloride	0.000	5.528	0.000		0	N.D.		
5) Bromomethane	0.000	6.291	0.000		0	N.D.		
6) Chloroethane	0.000	6.493	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	7.062	0.000		0	N.D.		
8) Ethyl ether	0.000	7.512	0.000		0	N.D.		
9) Acetone	7.975	7.987	0.652		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.963	7.987	0.651		0m	N.D.	d	
11) Iodomethane	8.271	8.271	0.676		0m	N.D.	d	
12) Acetonitrile	8.556	8.449	0.699		0m	N.D.	d	
13) Methyl acetate	8.520	8.520	0.697		0m	N.D.	d	
14) Carbon disulfide	8.556	8.449	0.699		0m	N.D.	d	
15) Methylene chloride	8.746	8.746	0.715		0m	N.D.	d	
16) tert-Butyl methyl ether	0.000	9.173	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	9.208	0.000		0	N.D.		
18) Vinyl acetate	9.837	9.837	0.804		0m	N.D.	d	
19) 1,1-Dichloroethane	10.003	9.860	0.818		0m	N.D.	d	
20) 2-Butanone	10.679	10.643	0.873		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	10.679	10.691	0.873		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	10.714	0.000		0	N.D.		
23) Bromochloromethane	0.000	11.034	0.000		0	N.D.		
24) Chloroform	11.094	11.094	0.907		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	11.426	0.000		0	N.D.		
26) Cyclohexane	11.568	11.532	0.946		0m	N.D.	d	
27) 1,1-Dichloropropene	11.568	11.627	0.946		0m	N.D.	d	
28) Carbon tetrachloride	0.000	11.663	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	11.888	0.000		0	N.D.		
31) Benzene	11.912	11.912	0.974		0m	N.D.	d	
32) Cyclohexene	0.000	12.054	0.000		0	N.D.		
33) n-Butyl alcohol	12.446	12.398	1.017		0m	N.D.	d	
34) Trichloroethylene	12.695	12.695	1.038		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	12.979	0.000		0	N.D.		
36) Methylcyclohexane	12.991	12.991	1.062		0m	N.D.	d	
37) Dibromomethane	0.000	13.133	0.000		0	N.D.		
38) Bromodichloromethane	0.000	13.288	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	13.560	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000	13.809	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D504.D
Acq On : 19 Mar 2010 5:07 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100319-03|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5G - SOIL UVM100304-08A MIX[B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 09:38:35 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	13.928	13.928	0.879		0m	N.D.	d
44) Toluene	14.248	14.248	0.899		0m	N.D.	d
45) trans-1,3-Dichloroprop...	14.438	14.426	0.911		0m	N.D.	d
46) 1,1,2-Trichloroethane	0.000	14.675	0.000		0	N.D.	
47) 2-Hexanone	14.888	14.888	0.939		0m	N.D.	d
48) 1,3-Dichloropropane	14.924	14.888	0.942		0m	N.D.	d
49) Tetrachloroethylene	14.912	14.912	0.941		0m	N.D.	d
50) Dibromochloromethane	0.000	15.173	0.000		0	N.D.	
51) 1,2-Dibromoethane	15.351	15.351	0.969		0m	N.D.	d
52) Chlorobenzene	15.885	15.885	1.002		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	0.000	15.956	0.000		0	N.D.	
54) Ethylbenzene	15.968	15.968	1.007		0m	N.D.	d
55) m,p-Xylenes	16.074	16.086	1.014		0m	N.D.	d
56) o-Xylene	16.549	16.549	1.044		0m	N.D.	d
57) Styrene	16.549	16.549	1.044		0m	N.D.	d
59) Bromoform	0.000	16.821	0.000		0	N.D.	
60) Isopropylbenzene	16.928	16.928	0.919		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	17.260	17.213	0.938		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	17.308	0.000		0	N.D.	
64) Bromobenzene	17.343	17.343	0.942		0m	N.D.	d
65) n-Propylbenzene	17.367	17.367	0.943		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	17.533	17.533	0.952		0m	N.D.	d
67) 2-Chlorotoluene	17.628	17.521	0.957		0m	N.D.	d
68) 4-Chlorotoluene	17.628	17.628	0.957		0m	N.D.	d
69) tert-Butylbenzene	17.983	17.912	0.977		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	17.960	17.960	0.976		0m	N.D.	d
71) sec-Butylbenzene	18.150	18.150	0.986		0m	N.D.	d
72) 4-Isopropyltoluene	18.280	18.280	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	18.339	18.351	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	18.434	18.434	1.001		0m	N.D.	d
75) n-Butylbenzene	18.742	18.742	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	18.885	18.885	1.026		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	19.810	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	20.936	20.936	1.137		0m	N.D.	d
79) Hexachlorobutadiene	0.000	21.126	0.000		0	N.D.	
80) Naphthalene	21.339	21.351	1.159		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	21.719	21.719	1.180		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.711	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.751	0.000		0	N.D.	
85) Acrolein	7.738	7.750	0.633	56	168856	372.42 ug/L	93 E
86) Trichlorotrifluoroethane	7.975	7.975	0.652	85	332474	233.08 ug/L	99
87) Isopropyl Alcohol	8.141	8.141	0.666	45	7032	N.D.	
88) Allyl chloride	8.556	8.556	0.699	41	1116691	218.55 ug/L	99
89) tert-Butyl Alcohol	0.000	8.793	0.000		0	N.D.	
90) Acrylonitrile	9.090	9.090	0.743	53	312481	204.62 ug/L	99
91) Isopropyl ether	0.000	9.884	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	10.003	10.003	0.818	53	220211	49.60 ug/L	99
93) Ethyl tert-butyl ether	0.000	10.406	0.000		0	N.D.	
94) Ethyl acetate	10.679	10.679	0.873	43	705326	187.17 ug/L	100
95) Propionitrile	10.726	10.726	0.877	54	121657	203.17 ug/L	99
96) Methacrylonitrile	10.951	10.951	0.895	41	462254	201.25 ug/L	99
97) Tetrahydrofuran	11.094	11.094	0.907	42	250657	197.68 ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D504.D
Acq On : 19 Mar 2010 5:07 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100319-03|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5G - SOIL UVM100304-08A MIX[B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 09:38:35 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

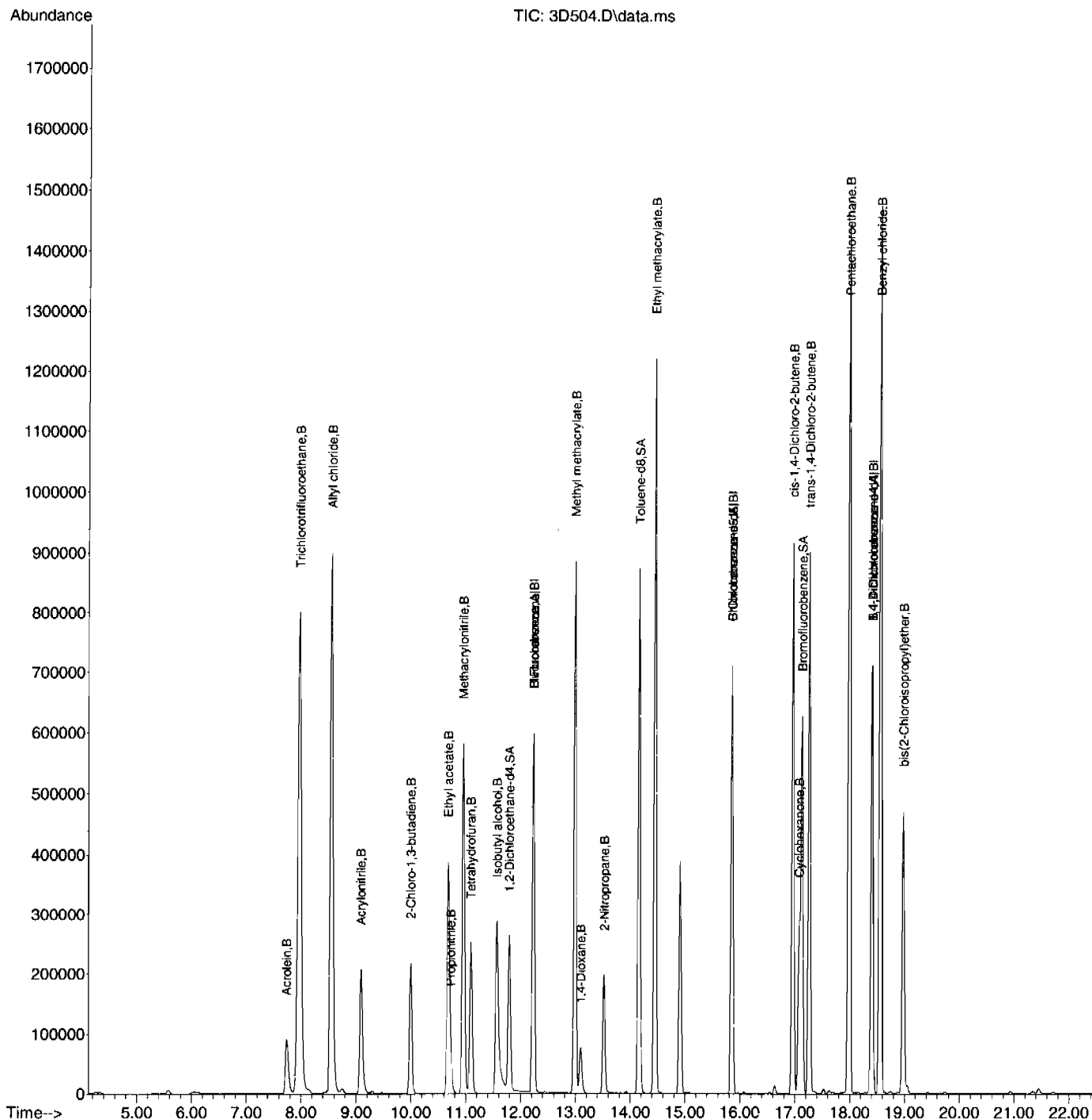
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	11.568	11.556	0.946	41	269806	1654.44	ug/L	98
99) Methyl tert-amyl ether	0.000	11.971	0.000		0	N.D.		
100) Methyl methacrylate	12.991	12.991	1.062	69	548838	220.84	ug/L	96
101) 1,4-Dioxane	13.098	13.098	1.071	88	98245	1858.70	ug/L	100
102) 2-Nitropropane	13.525	13.525	1.106	43	226799	206.95	ug/L	99
104) Ethyl methacrylate	14.450	14.450	0.912	69	1020710	223.56	ug/L	98
106) 1-Chlorohexane	0.000	15.754	0.000		0m	N.D.	d	
107) cis-1,4-Dichloro-2-butene	16.964	16.964	0.921	53	312808	269.06	ug/L	99
108) Cyclohexanone	17.082	17.082	0.928	42	125570	941.05	ug/L	100 E
109) trans-1,4-Dichloro-2-b...	17.260	17.260	0.938	53	301252	265.67	ug/L	98
110) Pentachloroethane	17.983	17.983	0.977	167	443171	293.96	ug/L	96 E
111) Benzyl chloride	18.553	18.553	1.008	91	1840475	330.89	ug/L	100
112) bis(2-Chloroisopropyl)...	18.980	18.980	1.031	45	467672	208.78	ug/L	98

(#) = 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\031910V3\
Data File : 3D504.D
Acq On : 19 Mar 2010 5:07 pm
Operator : CDS1
InstName : VOA3
Sample : |W3VM100319-03|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5G - SOIL UVM100304-08A MIX[B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 09:38:35 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE



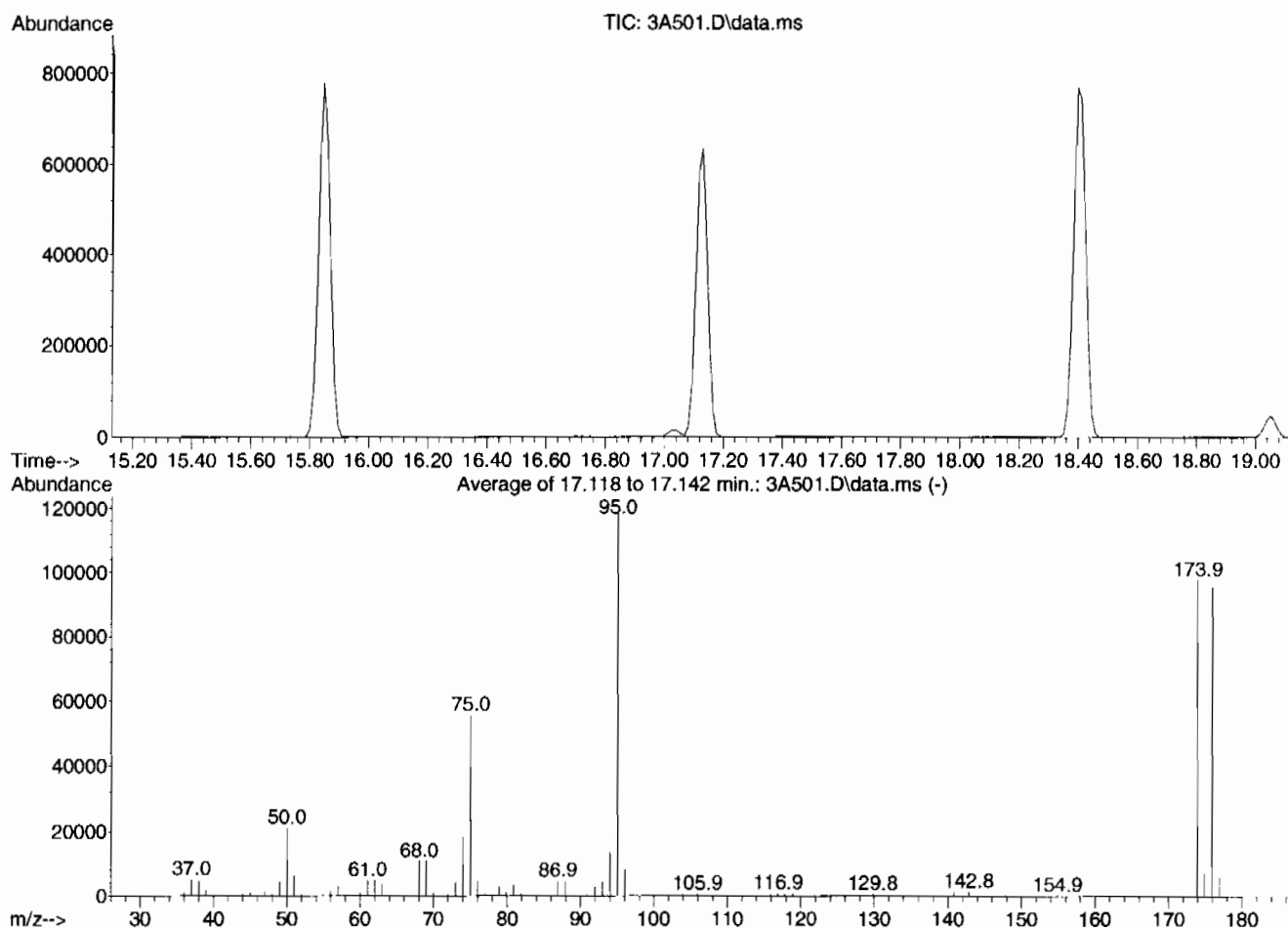
Quality Control Data

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\022610V3\
Data File : 3A501.D
Acq On : 26 Feb 2010 9:25 am
Operator : CDS1
Sample : |UVM100203-02|BFB|1|VOA|1|
Misc : BFB 5mL N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Title : Volatile Organics 8260B SubList :
Last Update : Sat Feb 27 06:30:11 2010



Spectrum Information: Average of 17.118 to 17.142 min.

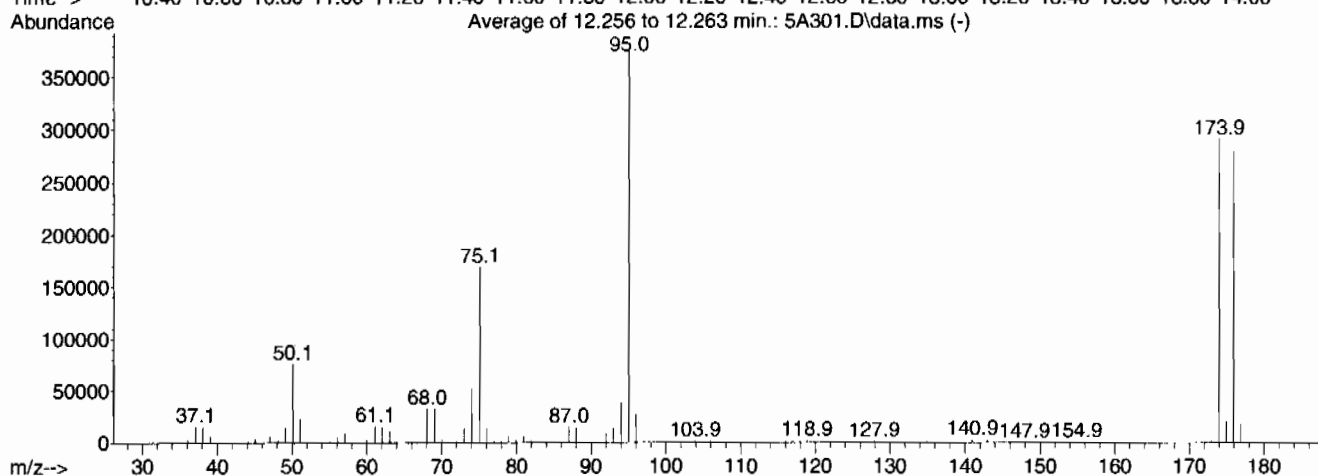
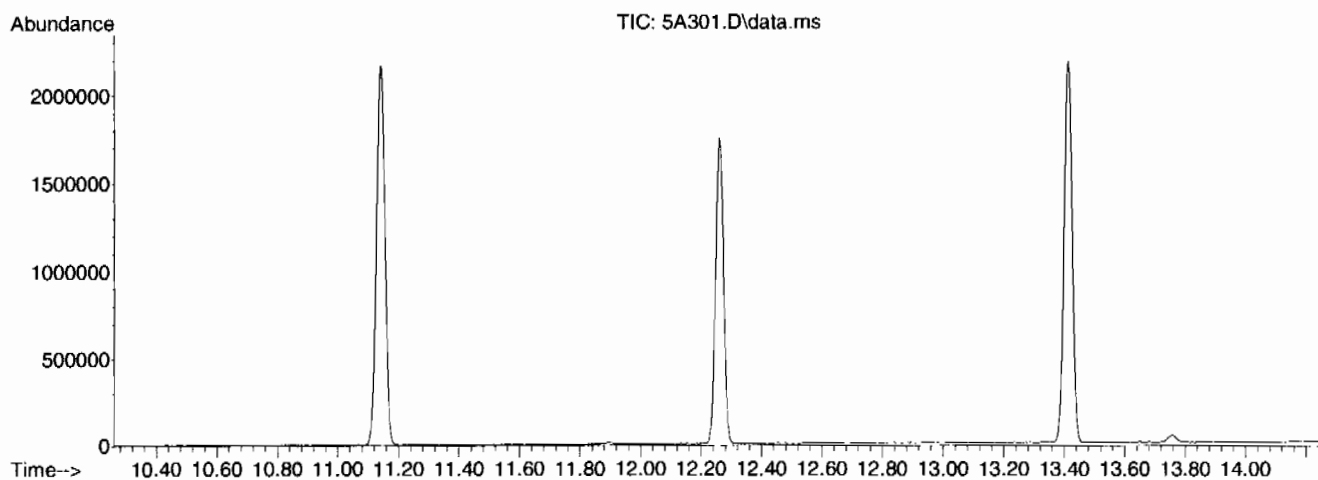
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	20991	PASS
75	95	30	60	47.0	55499	PASS
95	95	100	100	100.0	118061	PASS
96	95	5	9	6.7	7933	PASS
173	174	0.00	2	0.5	458	PASS
174	95	50	100	82.6	97544	PASS
175	174	5	9	7.1	6941	PASS
176	174	95	101	97.7	95341	PASS
177	176	5	9	6.4	6099	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\
Data File : 5A301.D
Acq On : 3 Mar 2010 11:00 am
Operator : CDS1
Sample : |UVM100203-02|BFB|1|VOA|1|VOA8260BL|
Misc : BFB 5mL N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Title : Volatile Organics 8260B SubList :
Last Update : Fri Mar 05 15:47:51 2010



Spectrum Information: Average of 12.256 to 12.263 min.

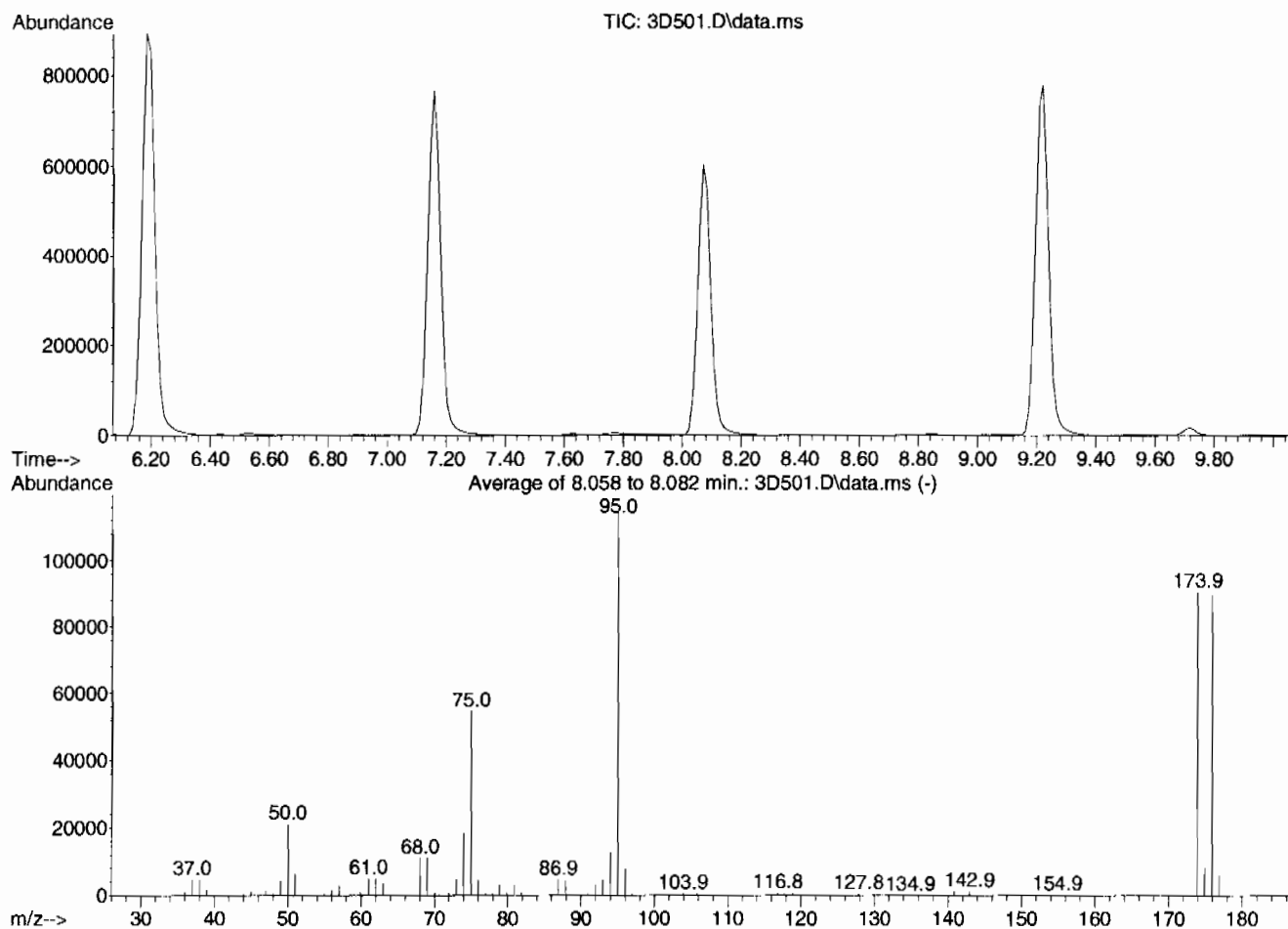
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	75616	PASS
75	95	30	60	45.2	169109	PASS
95	95	100	100	100.0	373952	PASS
96	95	5	9	7.4	27492	PASS
173	174	0.00	2	0.6	1817	PASS
174	95	50	100	77.7	290688	PASS
175	174	5	9	7.4	21371	PASS
176	174	95	101	96.2	279659	PASS
177	176	5	9	6.3	17646	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D501.D
Acq On : 19 Mar 2010 3:32 pm
Operator : CDS1
Sample : |UVM100217-02|BFB2|1|VOA|1|
Misc : BFB 5mL N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Title : Volatile Organics 8260B SubList :
Last Update : Mon Mar 01 09:52:36 2010



Spectrum Information: Average of 8.058 to 8.082 min.

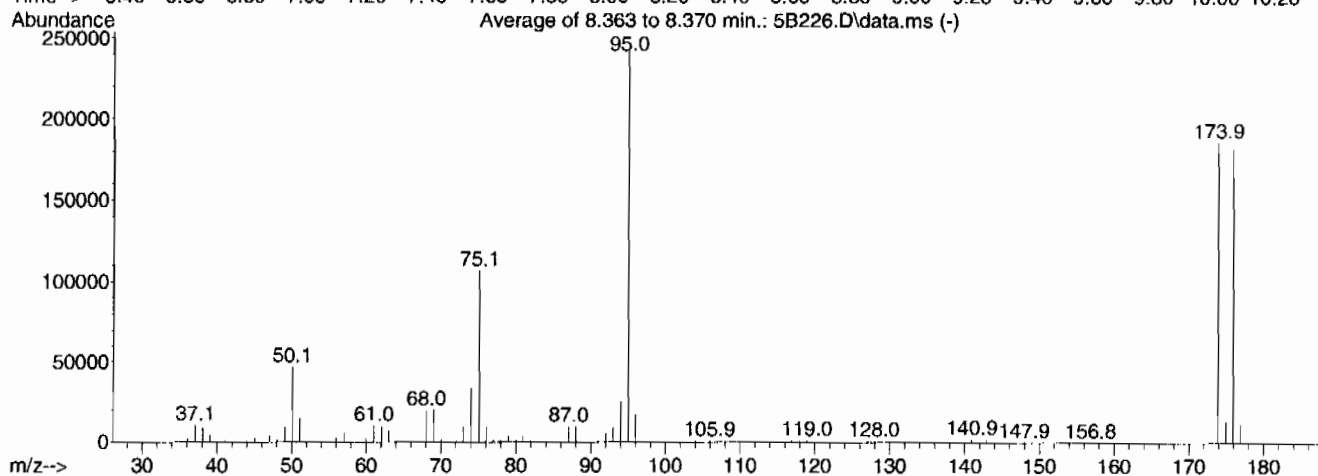
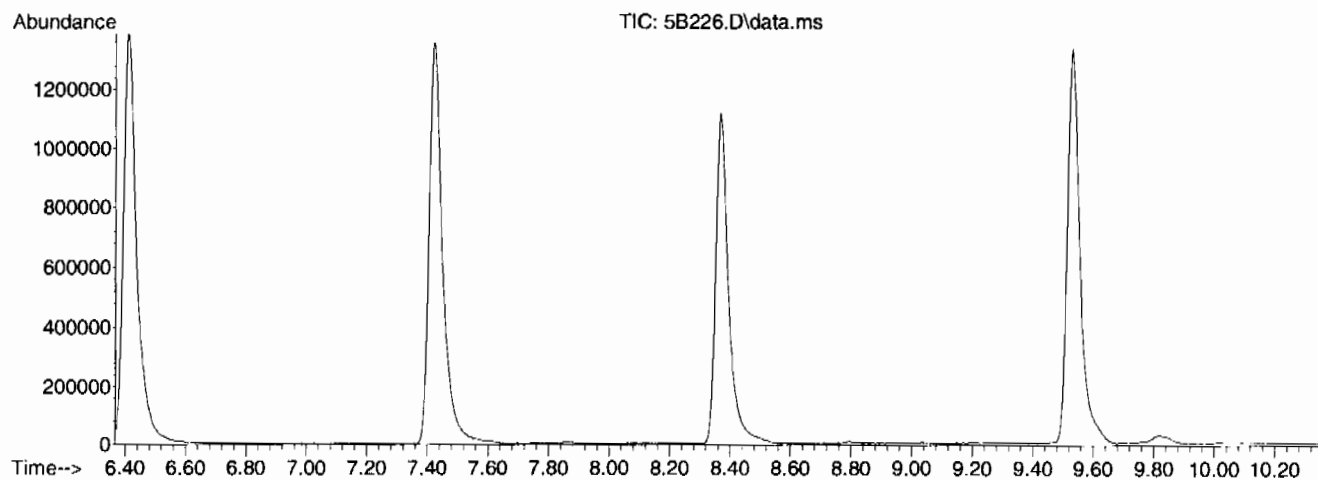
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	21184	PASS
75	95	30	60	47.9	54648	PASS
95	95	100	100	100.0	114101	PASS
96	95	5	9	6.8	7791	PASS
173	174	0.00	2	0.5	498	PASS
174	95	50	100	79.5	90709	PASS
175	174	5	9	7.1	6459	PASS
176	174	95	101	99.0	89776	PASS
177	176	5	9	6.6	5889	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B226.D
Acq On : 9 Mar 2010 7:02 pm
Operator : CDS1
Sample : |UVM100217-02|BFB2|1|VOA|1|VOA8260BL|
Misc : BFB 5mL N/A
ALS Vial : 26 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Title : Volatile Organics 8260B SubList :
Last Update : Tue Mar 09 07:08:19 2010



AutoFind: Scans 815, 816, 817; Background Corrected with Scan 799

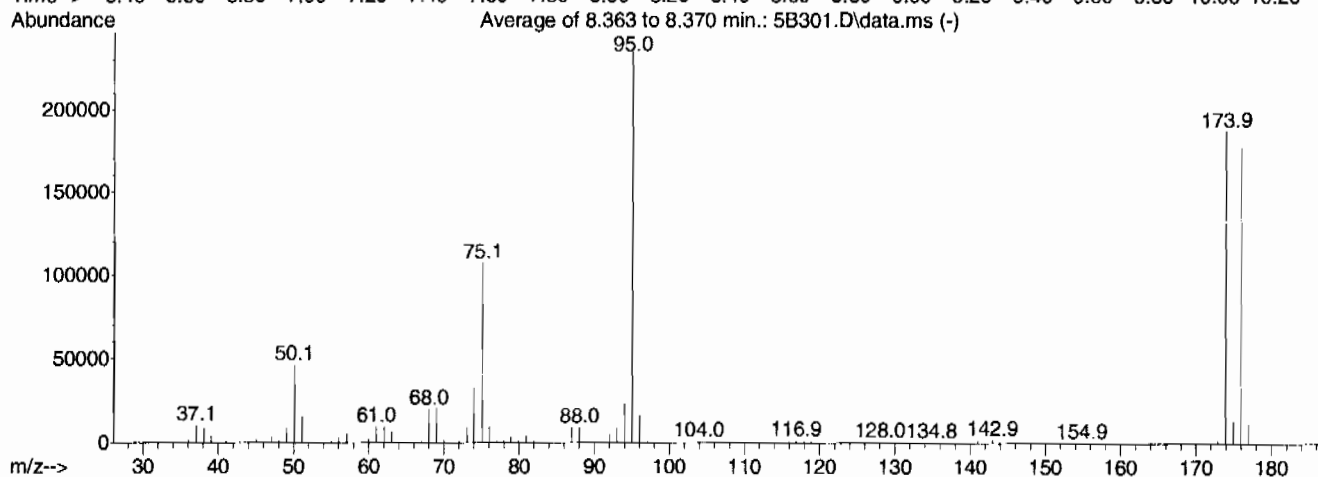
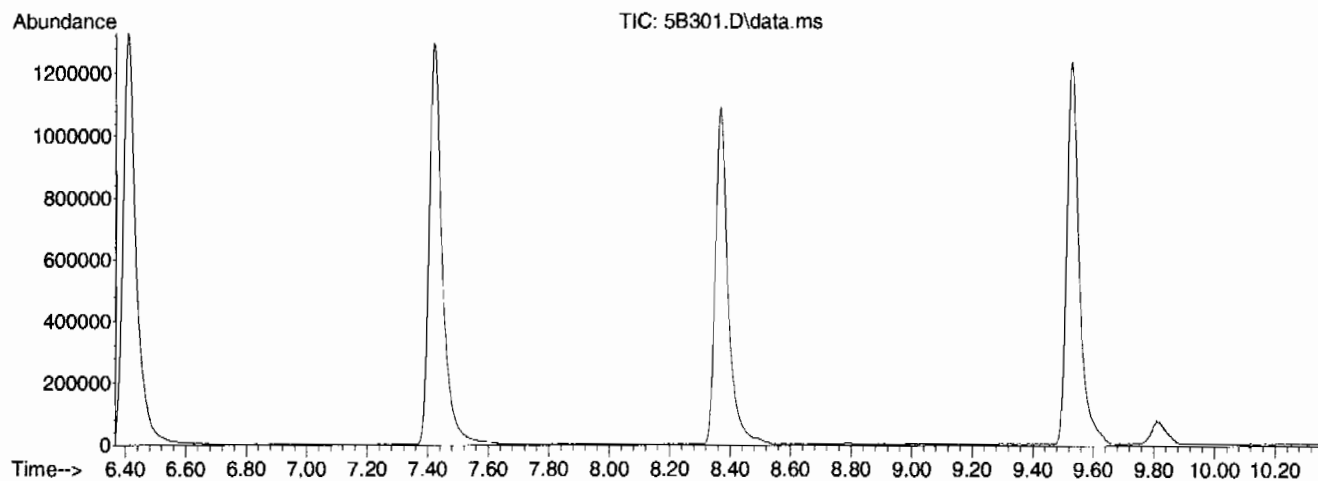
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	47051	PASS
75	95	30	60	44.2	106717	PASS
95	95	100	100	100.0	241557	PASS
96	95	5	9	7.1	17268	PASS
173	174	0.00	2	0.6	1149	PASS
174	95	50	100	76.9	185749	PASS
175	174	5	9	7.2	13365	PASS
176	174	95	101	97.8	181675	PASS
177	176	5	9	6.6	12034	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B301.D
Acq On : 10 Mar 2010 6:44 am
Operator : CDS1
Sample : |UVM100217-02|BFB|1|VOA|1|VOA8260BL|
Misc : BFB 5mL N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Title : Volatile Organics 8260B SubList :
Last Update : Tue Mar 09 07:08:19 2010



Spectrum Information: Average of 8.363 to 8.370 min.

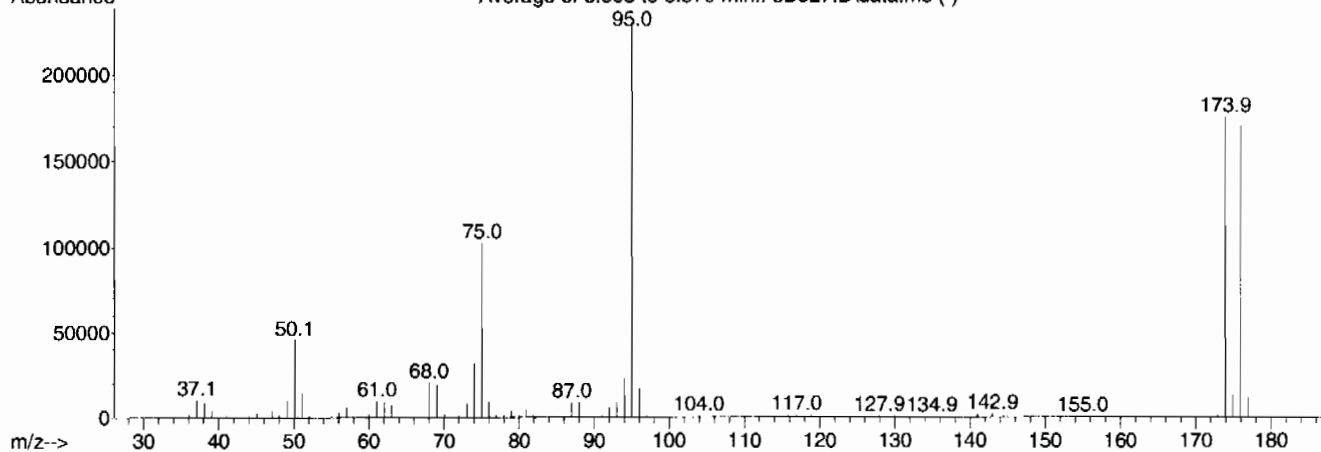
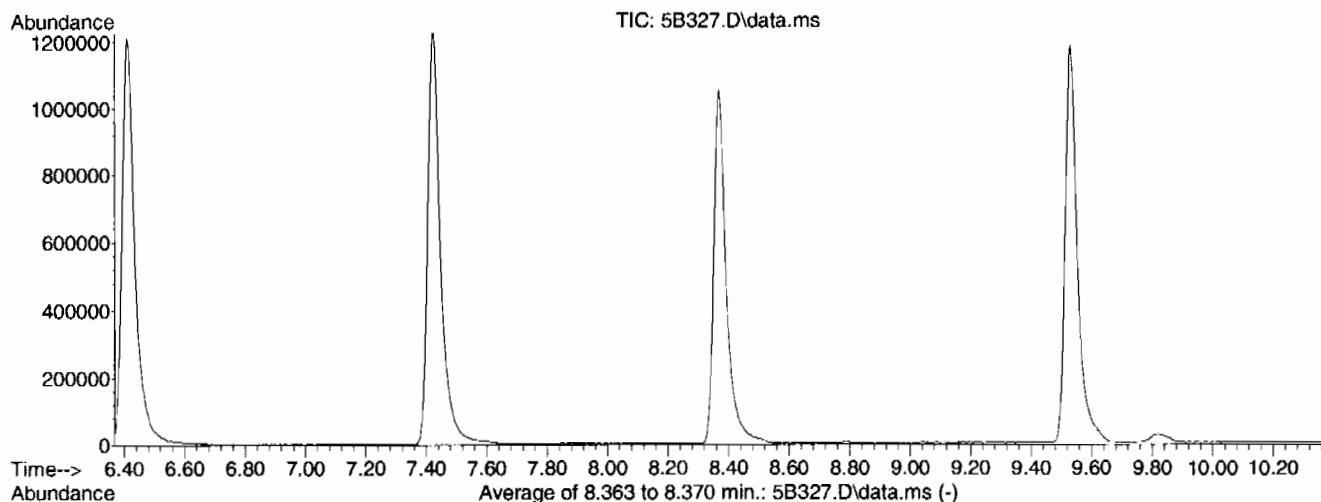
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	46304	PASS
75	95	30	60	45.7	107296	PASS
95	95	100	100	100.0	234795	PASS
96	95	5	9	7.0	16445	PASS
173	174	0.00	2	0.7	1401	PASS
174	95	50	100	79.9	187563	PASS
175	174	5	9	6.9	12929	PASS
176	174	95	101	95.0	178219	PASS
177	176	5	9	6.3	11287	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B327.D
Acq On : 10 Mar 2010 6:39 pm
Operator : CDS1
Sample : |UVM100217-02|BFB2|1|VOA|1|
Misc : BFB 5mL N/A
ALS Vial : 27 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\031810V5\VOA5-8260-031810.M
Title : Volatile Organics 8260B SubList :
Last Update : Fri Mar 26 06:43:20 2010



Spectrum Information: Average of 8.363 to 8.370 min.

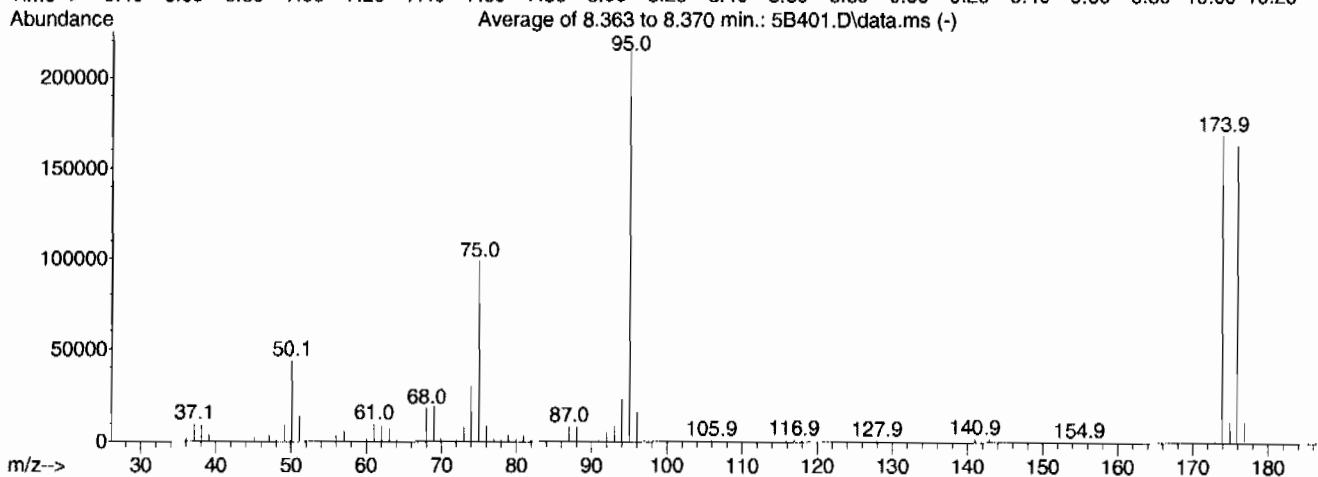
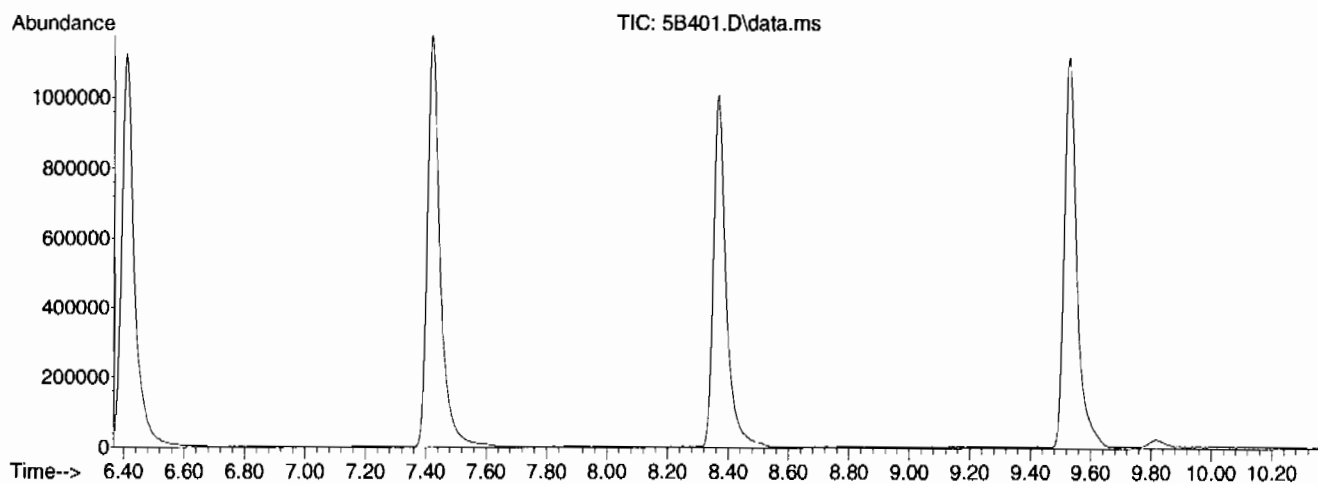
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.9	45368	PASS
75	95	30	60	44.9	102365	PASS
95	95	100	100	100.0	227947	PASS
96	95	5	9	7.2	16480	PASS
173	174	0.00	2	0.6	1031	PASS
174	95	50	100	76.7	174763	PASS
175	174	5	9	7.4	12927	PASS
176	174	95	101	97.4	170261	PASS
177	176	5	9	6.6	11173	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B401.D
Acq On : 11 Mar 2010 6:41 am
Operator : CDS1
Sample : |UVM100217-02|BFB|1|VOA|1|VOA8260BL|
Misc : BFB 5mL N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Title : Volatile Organics 8260B SubList :
Last Update : Tue Mar 09 07:08:19 2010



Spectrum Information: Average of 8.363 to 8.370 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.3	43597	PASS
75	95	30	60	46.0	98624	PASS
95	95	100	100	100.0	214549	PASS
96	95	5	9	7.5	16033	PASS
173	174	0.00	2	0.5	889	PASS
174	95	50	100	78.8	169067	PASS
175	174	5	9	6.8	11523	PASS
176	174	95	101	96.8	163669	PASS
177	176	5	9	7.0	11476	PASS

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 1202079010
 Client Sample: QC for batch 963120
 Client ID: MB for batch 963120
 Batch ID: 963122
 Run Date: 03/19/2010 18:05
 Prep Date: 03/19/2010 11:35
 Data File: 031910V33D506.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA3.I
 Analyst: CDS1
 Aliquot: 5 g
 Column: DB-624

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202079010

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: MB for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA3.I

Dilution: 1

Run Date: 03/19/2010 18:05

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/19/2010 11:35

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031910V33D506.D

Column: DB-624

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D506.D
Acq On : 19 Mar 2010 6:05 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079010|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 20 09:40:42 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	12.232	12.232	1.000	96	792665	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	602675	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	300040	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	792360	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	602736	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	305805	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	11.794	11.793	0.964	65	257760	53.02	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 106.04%			
43) Toluene-d8	14.165	14.165	0.894	98	857970	52.90	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 105.80%			
61) Bromofluorobenzene	17.130	17.130	0.930	95	306517	50.67	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 101.34%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.800	0.000		0	N.D.		
3) Chloromethane	0.000	5.216	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.528	0.000		0	N.D.		
5) Bromomethane	0.000	6.291	0.000		0	N.D.		
6) Chloroethane	0.000	6.493	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	7.062	0.000		0	N.D.		
8) Ethyl ether	0.000	7.512	0.000		0	N.D.		
9) Acetone	7.999	7.987	0.654	43	2678	N.D.		
10) 1,1-Dichloroethylene	0.000	7.987	0.000		0	N.D.		
11) Iodomethane	0.000	8.271	0.000		0	N.D.		
12) Acetonitrile	8.461	8.449	0.692	41	590	N.D.		
13) Methyl acetate	0.000	8.520	0.000		0	N.D.		
14) Carbon disulfide	8.426	8.449	0.689	76	2266	N.D.		
15) Methylene chloride	8.746	8.746	0.715	84	8315	N.D.		
16) tert-Butyl methyl ether	0.000	9.173	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	9.208	0.000		0	N.D.		
18) Vinyl acetate	0.000	9.837	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	9.860	0.000		0	N.D.		
20) 2-Butanone	0.000	10.643	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	10.691	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	10.714	0.000		0	N.D.		
23) Bromochloromethane	0.000	11.034	0.000		0	N.D.		
24) Chloroform	0.000	11.094	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	11.426	0.000		0	N.D.		
26) Cyclohexane	0.000	11.532	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	11.627	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	11.663	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	11.888	0.000		0	N.D.		
31) Benzene	0.000	11.912	0.000		0	N.D.		
32) Cyclohexene	0.000	12.054	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	12.398	0.000		0	N.D.		
34) Trichloroethylene	0.000	12.695	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	12.979	0.000		0	N.D.		
36) Methylcyclohexane	0.000	12.991	0.000		0	N.D.		
37) Dibromomethane	0.000	13.133	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D506.D
Acq On : 19 Mar 2010 6:05 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079010|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 20 09:40:42 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	13.288	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	13.560	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	13.809	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	13.928	0.000		0	N.D.	
44) Toluene	0.000	14.248	0.000		0	N.D.	
45) trans-1,3-Dichloroprop...	0.000	14.426	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	14.675	0.000		0	N.D.	
47) 2-Hexanone	14.889	14.888	0.939	43	403	N.D.	
48) 1,3-Dichloropropane	0.000	14.888	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	14.912	0.000		0	N.D.	
50) Dibromochloromethane	0.000	15.173	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	15.351	0.000		0	N.D.	
52) Chlorobenzene	0.000	15.885	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	15.956	0.000		0	N.D.	
54) Ethylbenzene	16.086	15.968	1.015	91	403	N.D.	
55) m,p-Xylenes	0.000	16.086	0.000		0	N.D.	
56) o-Xylene	0.000	16.549	0.000		0	N.D.	
57) Styrene	0.000	16.549	0.000		0	N.D.	
59) Bromoform	0.000	16.821	0.000		0	N.D.	
60) Isopropylbenzene	0.000	16.928	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	17.213	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	17.308	0.000		0	N.D.	
64) Bromobenzene	0.000	17.343	0.000		0	N.D.	
65) n-Propylbenzene	0.000	17.367	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	17.533	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	17.521	0.000		0	N.D.	
68) 4-Chlorotoluene	17.628	17.628	0.957	91	196	N.D.	
69) tert-Butylbenzene	0.000	17.912	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	17.960	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	18.150	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	18.280	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	18.339	18.351	0.996	146	359	N.D.	
74) 1,4-Dichlorobenzene	18.434	18.434	1.001	146	671	N.D.	
75) n-Butylbenzene	0.000	18.742	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	18.885	18.885	1.026	146	398	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	19.810	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	20.936	20.936	1.137	180	385	N.D.	
79) Hexachlorobutadiene	0.000	21.126	0.000		0	N.D.	
80) Naphthalene	21.352	21.351	1.160	128	1724	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	21.719	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.711	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.751	0.000		0	N.D.	
85) Acrolein	0.000	7.750	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.975	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	8.141	0.000		0	N.D.	
88) Allyl chloride	8.461	8.556	0.692	41	590	N.D.	
89) tert-Butyl Alcohol	0.000	8.793	0.000		0	N.D.	
90) Acrylonitrile	0.000	9.090	0.000		0	N.D.	
91) Isopropyl ether	0.000	9.884	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	10.003	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	10.406	0.000		0	N.D.	
94) Ethyl acetate	0.000	10.679	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D506.D
Acq On : 19 Mar 2010 6:05 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079010|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 20 09:40:42 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

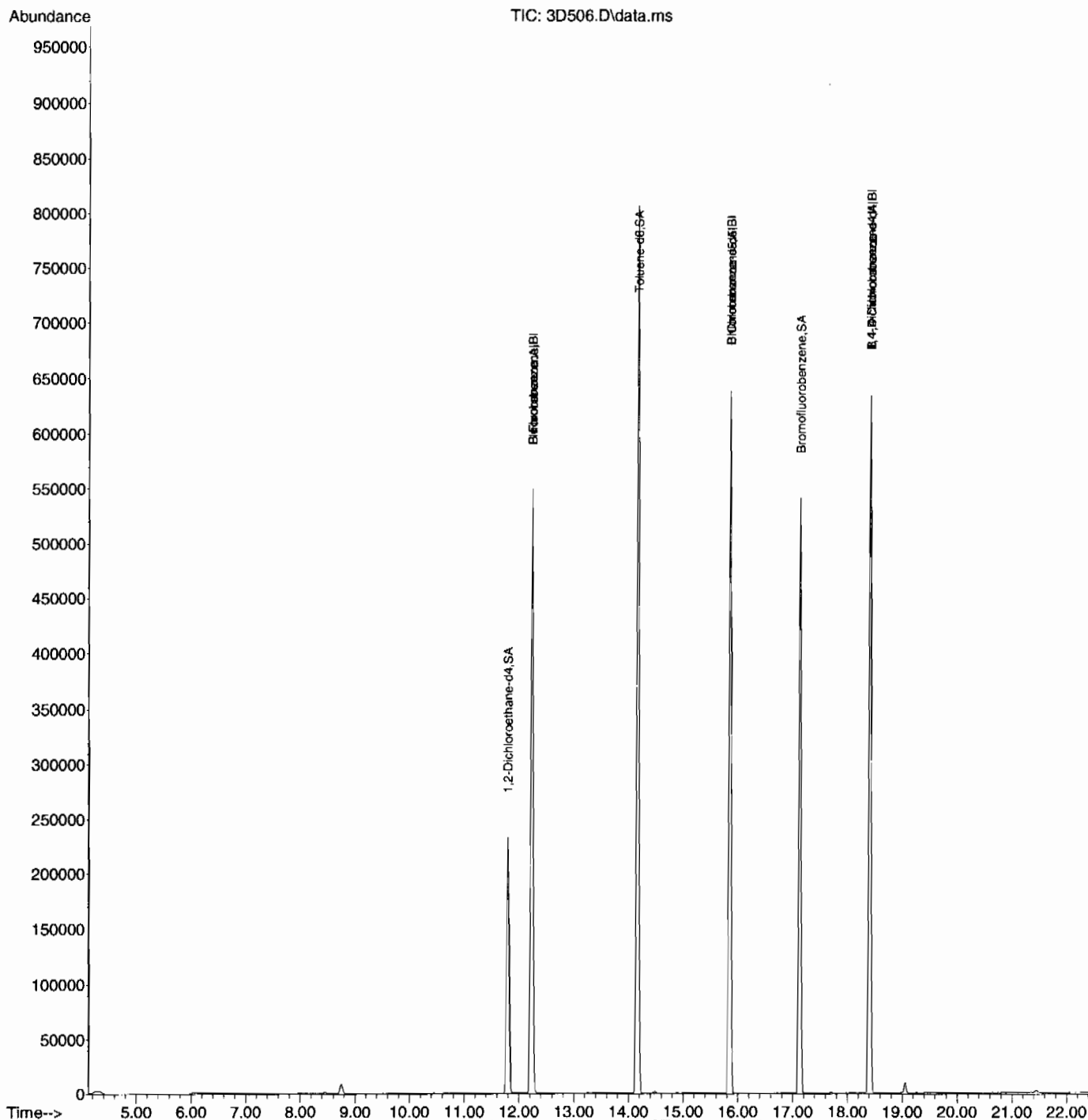
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	10.726	0.000		0	N.D.	
96) Methacrylonitrile	0.000	10.951	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	11.094	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	11.556	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	11.971	0.000		0	N.D.	
100) Methyl methacrylate	0.000	12.991	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	13.098	0.000		0	N.D.	
102) 2-Nitropropane	0.000	13.525	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	14.450	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	15.754	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	16.964	0.000		0	N.D.	
108) Cyclohexanone	0.000	17.082	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	17.260	0.000		0	N.D.	
110) Pentachloroethane	0.000	17.983	0.000		0	N.D.	
111) Benzyl chloride	0.000	18.553	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	19.051	18.980	1.035	45	371	N.D.	

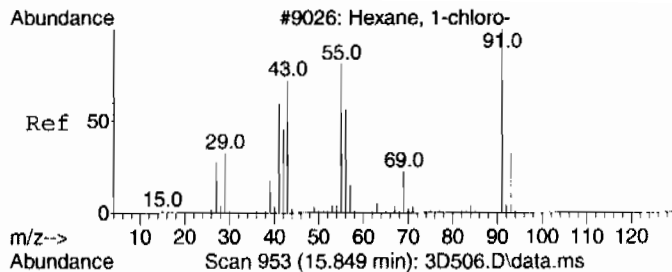
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D506.D
Acq On : 19 Mar 2010 6:05 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079010|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

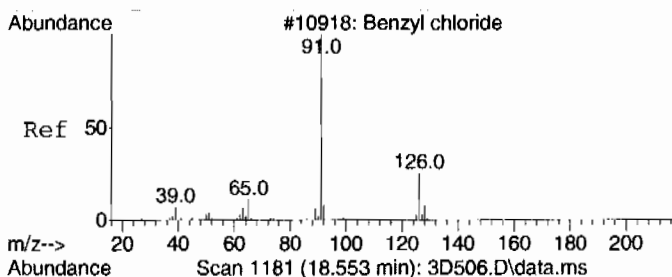
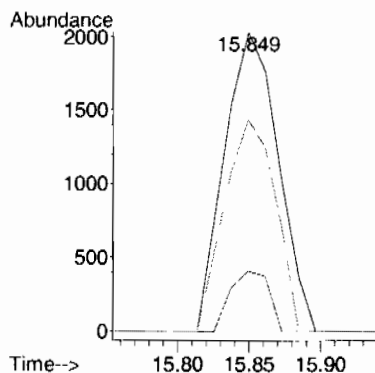
Quant Time: Mar 20 09:40:42 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE





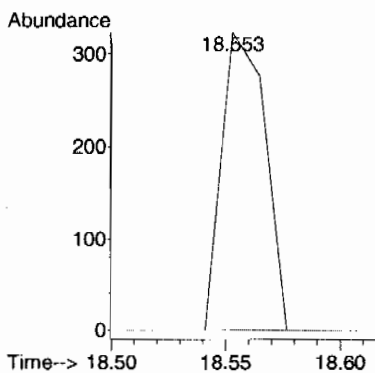
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.91 ug/L
RT: 15.849 min Scan# 953
Delta R.T. 0.095 min
Lab File: 3D506.D
Acq: 19 Mar 2010 6:05 pm

Tgt Ion: 55 Resp: 5301
Ion Ratio Lower Upper
55 100
91 14.5 119.7 179.7#
56 66.9 29.6 89.6



#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 1.68 ug/L
RT: 18.553 min Scan# 1181
Delta R.T. 0.000 min
Lab File: 3D506.D
Acq: 19 Mar 2010 6:05 pm

Tgt Ion: 91 Resp: 427
Ion Ratio Lower Upper
91 100
126 0.0 0.0 51.8
65 0.0 0.0 41.3



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\

Data File : 3D506.D

Acq On : 19 Mar 2010 6:05 pm

Operator : CDS1

Sample : |1202079010|963122|1|VOA|1|VOA8260BS|

Misc : BLANK 5G - SOIL

ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.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\031910V3\
Data File : 3D506.D
Acq On : 19 Mar 2010 6:05 pm
Operator : CDS1
Sample : |1202079010|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.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: 10-2150

Matrix: SOIL

Lab Sample ID: 1202066162

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: MB for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.I

Dilution: 1

Run Date: 03/09/2010 21:46

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/09/2010 17:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 030910V55B232.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: 10-2150

Matrix: SOIL

Lab Sample ID: 1202066162

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: MB for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.1

Dilution: 1

Run Date: 03/09/2010 21:46

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/09/2010 17:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 030910V55B232.D

Column: DB-624

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B232.D
Acq On : 9 Mar 2010 9:46 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066162|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Mar 10 08:15:06 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1700381	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1245309	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	604375	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1700381	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1245309	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	604375	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	331698	40.30	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	80.60%			
43) Toluene-d8	9.721	9.721	0.872	98	1413567	44.39	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	88.78%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	675050	55.68	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	111.36%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.970	4.900	0.593	50	1435	Below Cal		63
4) Vinyl chloride	5.021	5.041	0.599	62	158	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.177	6.174	0.736	43	2627	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	1227	N.D.		
13) Methyl acetate	6.177	6.365	0.736	43	2627	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	1654	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	6161	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.962	6.969	0.830	43	127	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.461	7.450	0.890	43	225	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.977	78	138	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.391	8.377	1.000	56	9943	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B232.D
Acq On : 9 Mar 2010 9:46 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066162|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Mar 10 08:15:06 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	3293	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.290	10.279	0.924	43	791	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.185	11.174	1.004	112	108	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.142	11.181	1.000	91	4673	N.D.	
55) m,p-Xylenes	11.280	11.280	1.012	106	280	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.715	11.715	1.051	104	121	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.019	12.016	0.896	105	114	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.412	12.415	0.925	91	1993	N.D.	
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936	105	1070	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.698	12.698	0.947	91	2856	N.D.	
69) tert-Butylbenzene	12.999	12.900	0.969	134	111	N.D.	
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966	105	926	N.D.	
71) sec-Butylbenzene	13.119	13.119	0.978	105	1012	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	3374	N.D.	
73) 1,3-Dichlorobenzene	13.342	13.349	0.995	146	561	N.D.	
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	837	N.D.	
75) n-Butylbenzene	13.639	13.653	1.017	91	3148	N.D.	
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	436	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	1100	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	2977	N.D.	
81) 1,2,3-Trichlorobenzene	16.298	16.291	1.215	180	921	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.464	6.425	0.771	41	1227	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.461	7.383	0.890	43	225	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B232.D
Acq On : 9 Mar 2010 9:46 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066162|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Mar 10 08:15:06 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

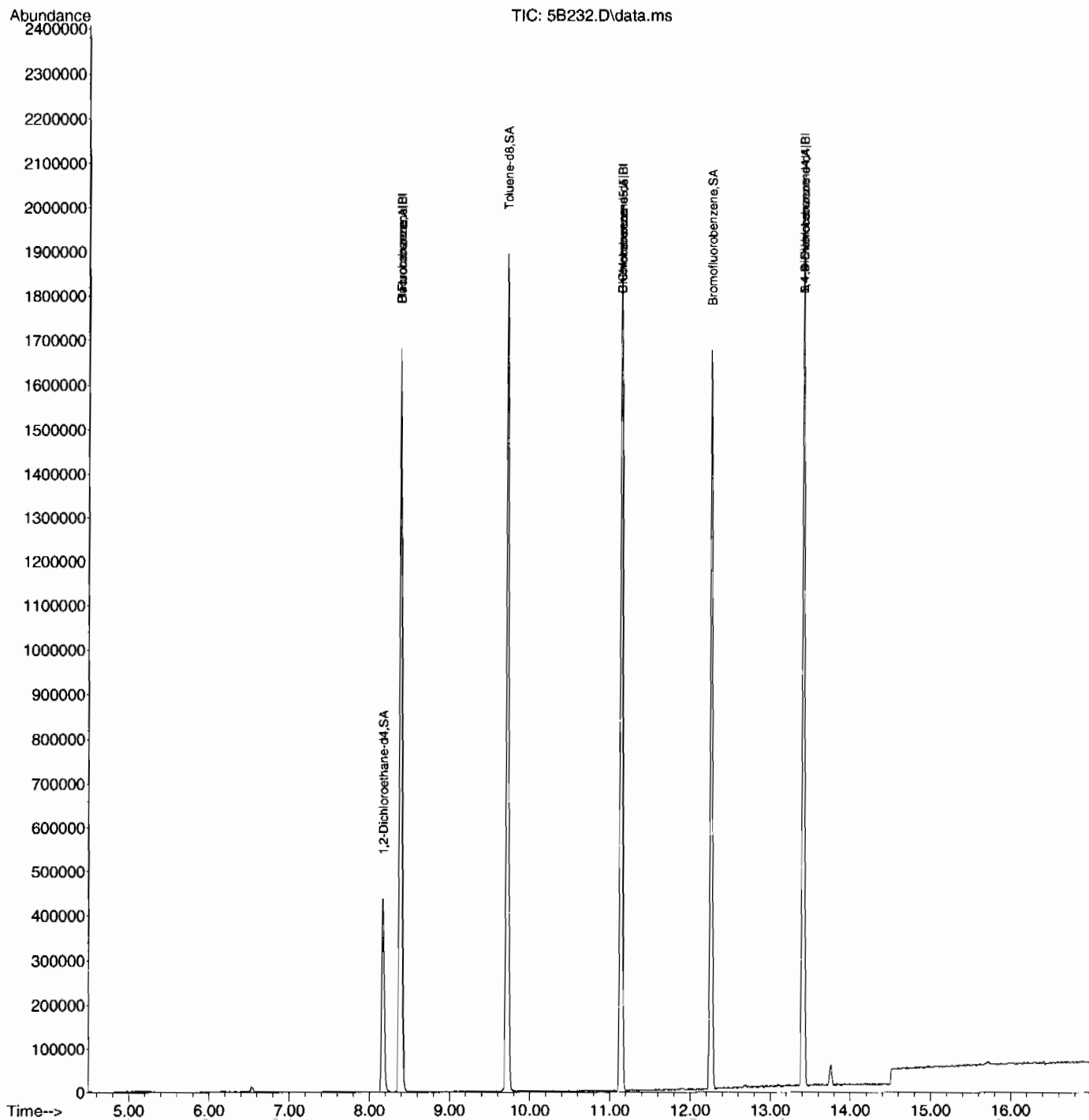
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.691	7.680	0.917	41	161	N.D.	
97) Tetrahydrofuran	7.716	7.716	0.920	42	1050	N.D.	
98) Isobutyl alcohol	7.935	7.857	0.946	41	126	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.125	12.136	0.904	53	113	N.D.	
108) Cyclohexanone	12.267	12.267	0.915	42	117	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	3753	N.D.	
112) bis(2-Chloroisopropyl)...	13.943	13.929	1.040	45	467	N.D.	

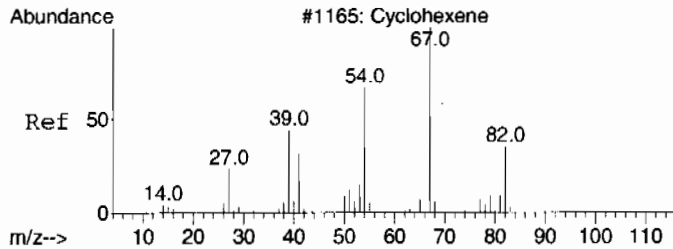
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B232.D
Acq On : 9 Mar 2010 9:46 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066162|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 32 Sample Multiplier: 1

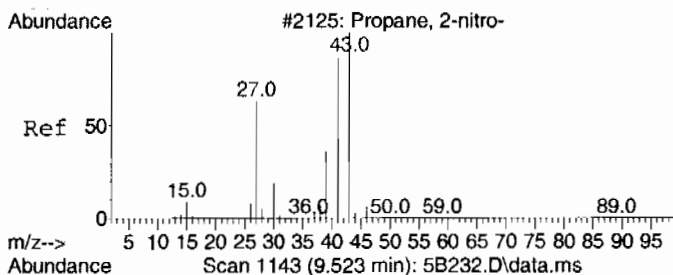
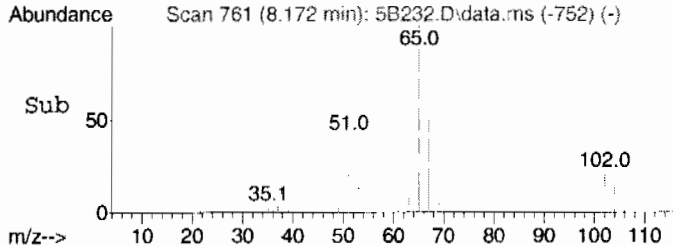
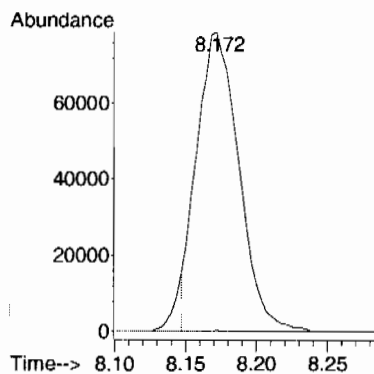
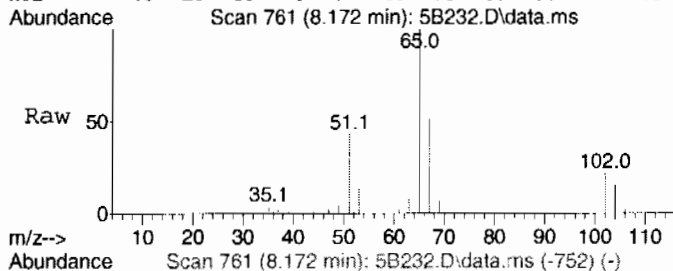
Quant Time: Mar 10 08:15:06 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





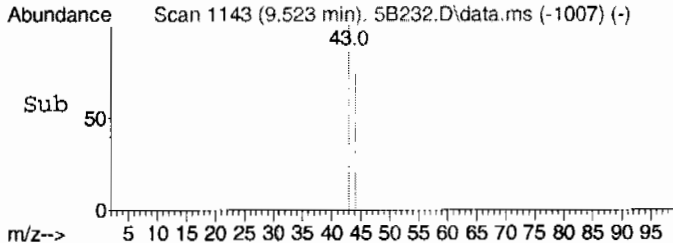
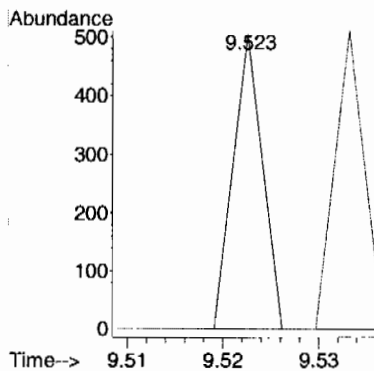
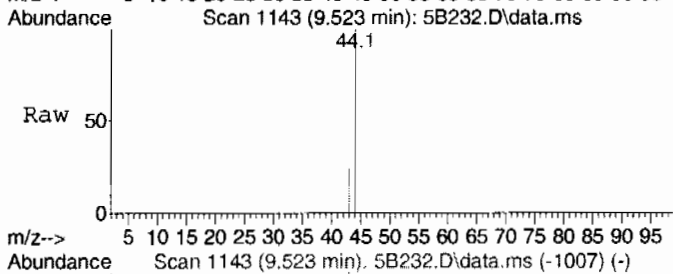
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 14.21 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B232.D
Acq: 9 Mar 2010 9:46 pm

Tgt Ion: 67 Resp: 162531
Ion Ratio Lower Upper
67 100
54 0.1 46.3 106.3#



#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 6.94 ug/L
RT: 9.523 min Scan# 1143
Delta R.T. 0.181 min
Lab File: 5B232.D
Acq: 9 Mar 2010 9:46 pm

Tgt Ion: 43 Resp: 107
Ion Ratio Lower Upper
43 100
41 100.9 52.5 112.5



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\

Data File : 5B232.D

Acq On : 9 Mar 2010 9:46 pm

Operator : CDS1

Sample : |1202066162|963122|1|VOA|1|VOA8260BS|

Misc : BLANK 5G - SOIL

ALS Vial : 32 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B232.D
Acq On : 9 Mar 2010 9:46 pm
Operator : CDS1
Sample : |1202066162|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 32 Sample Multiplier: 1

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

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077718

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: MB for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.1

Dilution: 1

Run Date: 03/10/2010 09:44

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/10/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031010V55B307BSP.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: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077718

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: MB for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.I

Dilution: 1

Run Date: 03/10/2010 09:44

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/10/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031010V5\SB307BSP.D

Column: DB-624

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B307BSP.D
Acq On : 10 Mar 2010 9:44 am
Operator : CDS1
InstName : VOA5
Sample : |1202077718|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 10 10:46:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1604852	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1181429	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.412	13.413	1.000	152	565420	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1604852	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1181429	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.412	13.413	1.000	152	565420	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	295022	37.98	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	75.96%			
43) Toluene-d8	9.720	9.721	0.872	98	1294076	42.83	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	85.66%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	642107	56.62	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	113.24%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.899	4.900	0.584	50	1245	Below Cal		99
4) Vinyl chloride	5.020	5.041	0.599	62	587	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.173	6.174	0.736	43	2593	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.453	6.464	0.769	41	545	N.D.		
13) Methyl acetate	6.173	6.365	0.736	43	2593	N.D.		
14) Carbon disulfide	6.439	6.435	0.768	76	1105	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	5617	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.792	6.969	0.810	43	120	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.450	7.450	0.888	43	120	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.200	8.203	0.978	78	282	N.D.		
32) Cyclohexene	8.246	8.246	0.983	67	109	N.D.		
33) n-Butyl alcohol	8.387	8.377	1.000	56	8970	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B307BSP.D
Acq On : 10 Mar 2010 9:44 am
Operator : CDS1
InstName : VOA5
Sample : |1202077718|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 10 10:46:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.675	9.487	1.153	75	118	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	1761	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.279	10.279	0.923	43	456	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.167	11.174	1.002	112	128	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.188	11.181	1.004	91	399	N.D.	
55) m,p-Xylenes	11.287	11.280	1.013	106	112	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.715	11.715	1.051	104	351	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.009	12.016	0.895	105	358	N.D.	
62) 1,1,2,2-Tetrachloroethane	12.267	12.348	0.915	83	108	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.412	12.415	0.925	91	1924	N.D.	
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	699	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	2480	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	904	N.D.	
71) sec-Butylbenzene	13.115	13.119	0.978	105	1278	N.D.	
72) 4-Isopropyltoluene	13.221	13.229	0.986	119	3455	N.D.	
73) 1,3-Dichlorobenzene	13.345	13.349	0.995	146	317	N.D.	
74) 1,4-Dichlorobenzene	13.434	13.441	1.002	146	1078	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	2176	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	999	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	5281	N.D.	
81) 1,2,3-Trichlorobenzene	16.283	16.291	1.214	180	715	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.435	6.425	0.767	41	152	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.450	7.383	0.888	43	120	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B307BSP.D
Acq On : 10 Mar 2010 9:44 am
Operator : CDS1
InstName : VOA5
Sample : |1202077718|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 10 10:46:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

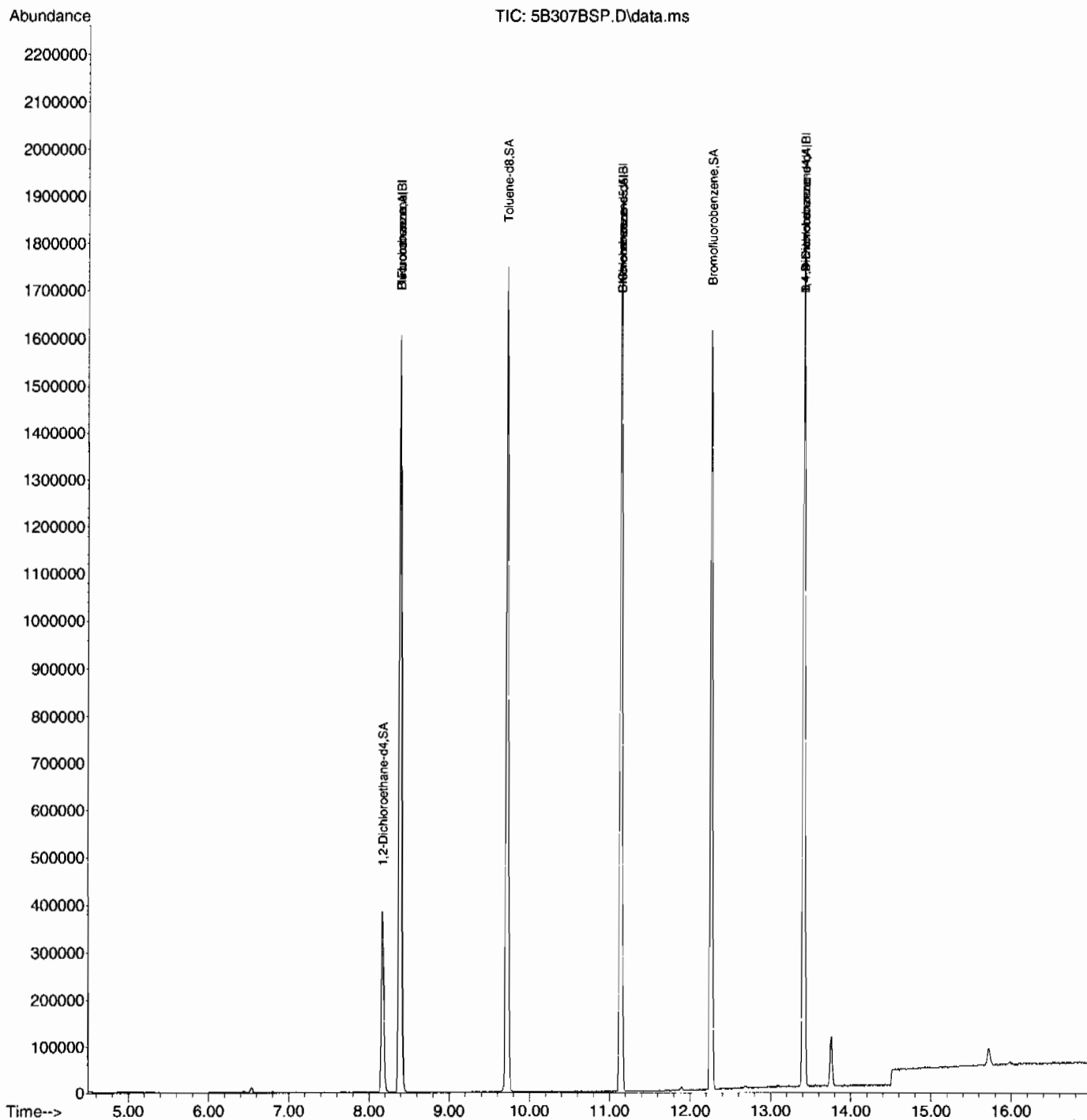
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.715	7.680	0.920	41	145	N.D.	
97) Tetrahydrofuran	0.000	7.716	0.000		0	N.D.	
98) Isobutyl alcohol	7.924	7.857	0.945	41	131	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	12.263	12.267	0.914	42	396	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.568	13.565	1.012	91	3857	N.D.	
112) bis(2-Chloroisopropyl)...	13.929	13.929	1.038	45	444	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\031010V5\
Data File : 5B307BSP.D
Acq On : 10 Mar 2010 9:44 am
Operator : CDS1
InstName : VOA5
Sample : |1202077718|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 10 10:46:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B307BS1.D
Acq On : 10 Mar 2010 9:44 am
Operator : CDS1
Sample : |1202065319|962697|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B307BS1.D
Acq On : 10 Mar 2010 9:44 am
Operator : CDS1
Sample : |1202065319|962697|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077721

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: MB for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.I

Dilution: 1

Run Date: 03/10/2010 21:18

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/10/2010 17:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031010V55B333BSK.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: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077721

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: MB for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.I

Dilution: 1

Run Date: 03/10/2010 21:18

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/10/2010 17:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031010V55B333BSK.D

Column: DB-624

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B333BSK.D
Acq On : 10 Mar 2010 9:18 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077721|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

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

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1478853	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1097369	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	531739	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1478853	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1097369	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	531739	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.175	8.172	0.974	65	269729	37.68	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	75.36%			
43) Toluene-d8	9.724	9.721	0.873	98	1191200	42.45	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	84.90%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	624047	58.51	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	117.02%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	601	Below Cal		94
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.174	6.174	0.736	43	1301	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.770	41	1013	N.D.		
13) Methyl acetate	6.202	6.365	0.739	43	116	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	716	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	6186	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	0.000	6.969	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.387	8.203	1.000	78	2036	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.384	8.377	0.999	56	8325	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B333BSK.D
Acq On : 10 Mar 2010 9:18 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077721|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

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

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.795	9.788	0.879	91	1506	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.283	10.279	0.923	43	245	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.163	11.174	1.002	112	126	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	273	N.D.	
55) m,p-Xylenes	11.280	11.280	1.012	106	132	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.719	11.715	1.052	104	124	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.263	12.016	0.914	105	501	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.465	12.465	0.929	156	113	N.D.	
65) n-Propylbenzene	12.415	12.415	0.926	91	813	N.D.	
66) 1,3,5-Trimethylbenzene	12.567	12.564	0.937	105	395	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.691	12.698	0.946	91	2213	N.D.	
69) tert-Butylbenzene	12.910	12.900	0.963	134	106	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	885	N.D.	
71) sec-Butylbenzene	13.108	13.119	0.977	105	907	N.D.	
72) 4-Isopropyltoluene	13.264	13.229	0.989	119	974	N.D.	
73) 1,3-Dichlorobenzene	13.360	13.349	0.996	146	329	N.D.	
74) 1,4-Dichlorobenzene	13.451	13.441	1.003	146	118	N.D.	
75) n-Butylbenzene	13.646	13.653	1.017	91	1772	N.D.	
76) 1,2-Dichlorobenzene	13.851	13.858	1.033	146	121	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.619	15.619	1.165	180	1005	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	4828	N.D.	
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	478	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.464	6.425	0.770	41	1013	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B333BSK.D
Acq On : 10 Mar 2010 9:18 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077721|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

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

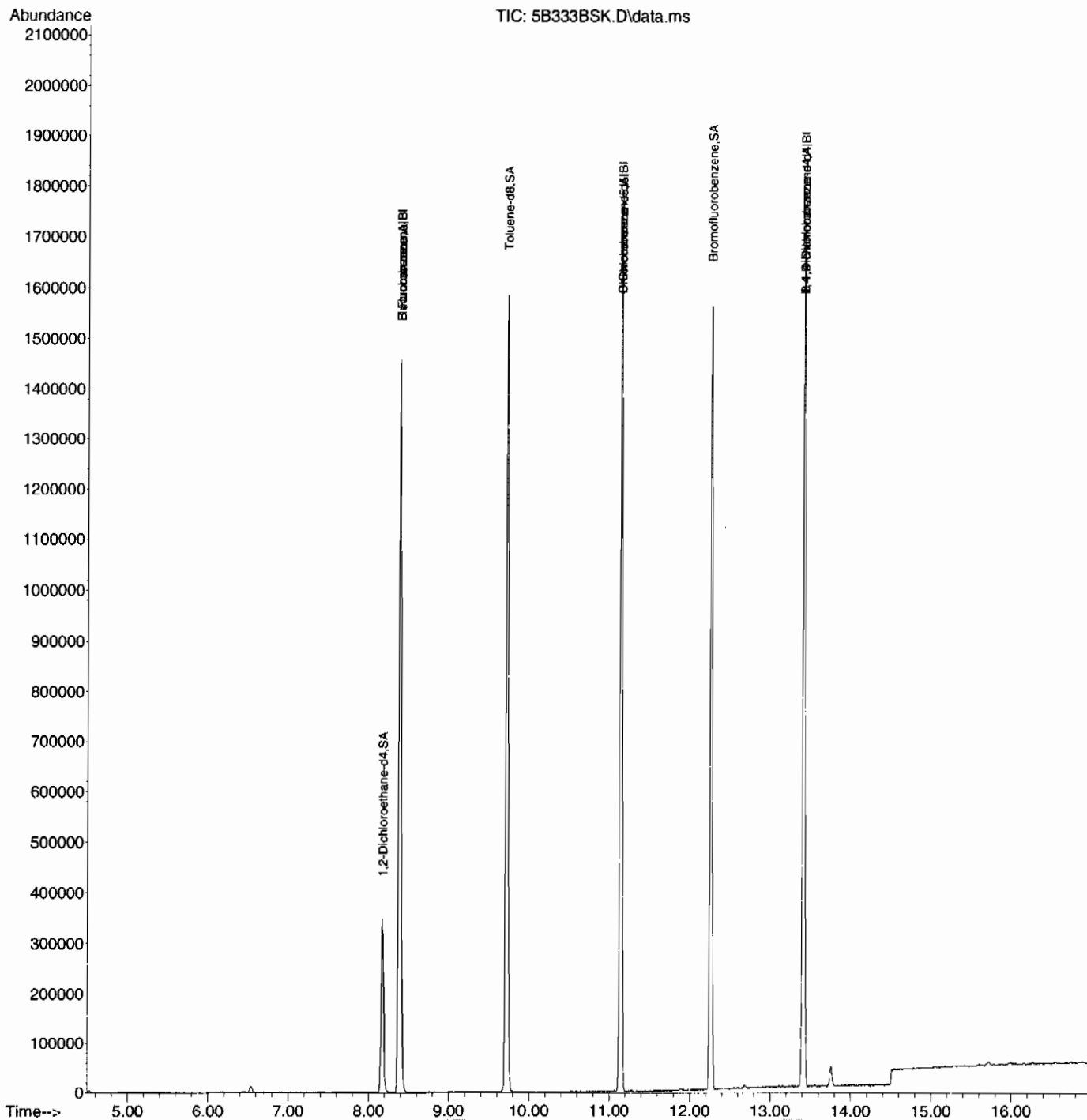
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.719	7.680	0.920	41	111	N.D.	
97) Tetrahydrofuran	0.000	7.716	0.000		0	N.D.	
98) Isobutyl alcohol	7.719	7.857	0.920	41	111	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	12.270	12.267	0.915	42	240	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	2658	N.D.	
112) bis(2-Chloroisopropyl)...	13.918	13.929	1.038	45	361	N.D.	

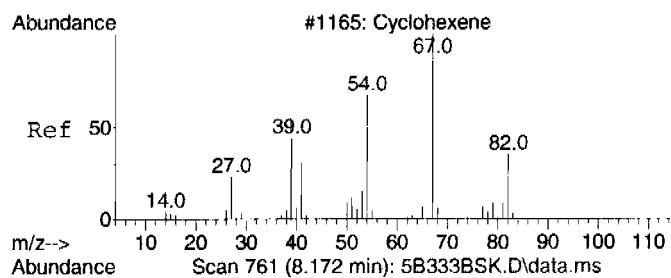
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B333BSK.D
Acq On : 10 Mar 2010 9:18 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077721|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

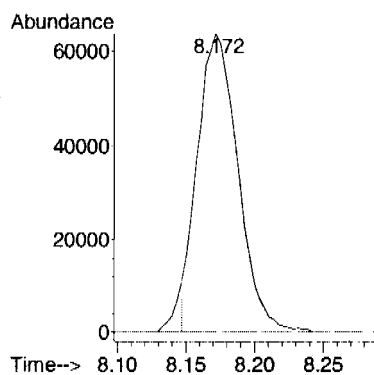
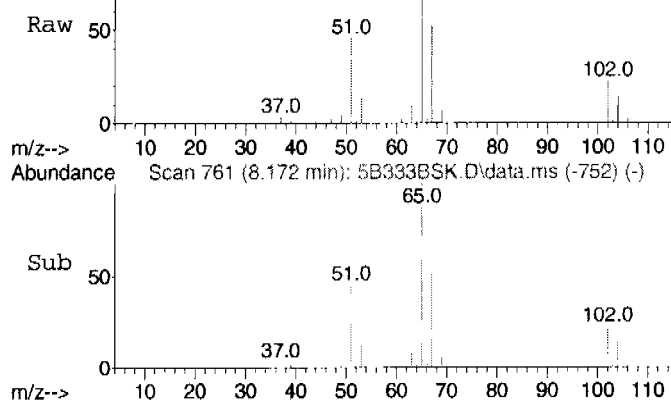
Quant Time: Mar 11 07:17:10 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





#32 BEFORE analyst DELETION
Cyclohexene
Concen: 13.24 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B333BSK.D
Acq: 10 Mar 2010 9:18 pm

Tgt Ion: 67 Resp: 131726
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\

Data File : 5B333BSK.D

Acq On : 10 Mar 2010 9:18 pm

Operator : CDS1

Sample : |1202077721|963122|1|VOA|1|VOA8260BS|

Misc : BLANK 5G - SOIL

ALS Vial : 33 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B333BSK.D
Acq On : 10 Mar 2010 9:18 pm
Operator : CDS1
Sample : |1202077721|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077724

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: MB for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.1

Dilution: 1

Run Date: 03/11/2010 09:20

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V5\SB407BSz.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: 10-2150
Lab Sample ID: 1202077724
Client Sample: QC for batch 963120
Client ID: MB for batch 963120
Batch ID: 963122
Run Date: 03/11/2010 09:20
Prep Date: 03/11/2010 06:00
Data File: 031110V55B407BSz.D

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

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

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B407BSz.D
Acq On : 11 Mar 2010 9:20 am
Operator : CDS1
InstName : VOA5
Sample : |1202077724|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 11 17:16:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1402275	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1039581	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	502993	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1402275	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1039581	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	502993	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	239195	35.24	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	70.48%		
43) Toluene-d8	9.721	9.721	0.872	98	1116666	42.00	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	84.00%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	606779	60.14	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	120.28%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584	50	527	Below Cal		97
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.170	6.174	0.736	43	762	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.467	6.464	0.771	41	373	N.D.		
13) Methyl acetate	6.191	6.365	0.738	43	245	N.D.		
14) Carbon disulfide	6.435	6.435	0.767	76	844	N.D.		
15) Methylene chloride	6.541	6.538	0.780	84	3919	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.811	43	2172	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.196	8.203	0.977	78	118	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.391	8.377	1.000	56	8241	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B407BSz.D
Acq On : 11 Mar 2010 9:20 am
Operator : CDS1
InstName : VOA5
Sample : |1202077724|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 11 17:16:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.774	9.788	0.877	91	2188	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.272	10.279	0.922	43	249	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	244	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.412	12.415	0.925	91	1720	N.D.	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	215	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	1372	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	671	N.D.	
71) sec-Butylbenzene	13.108	13.119	0.977	105	842	N.D.	
72) 4-Isopropyltoluene	13.299	13.229	0.992	119	1017	N.D.	
73) 1,3-Dichlorobenzene	13.342	13.349	0.995	146	108	N.D.	
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	497	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	2339	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	837	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	0.000	15.988	0.000		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	712	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.446	6.425	0.769	41	109	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B407BSz.D
Acq On : 11 Mar 2010 9:20 am
Operator : CDS1
InstName : VOA5
Sample : |1202077724|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 11 17:16:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

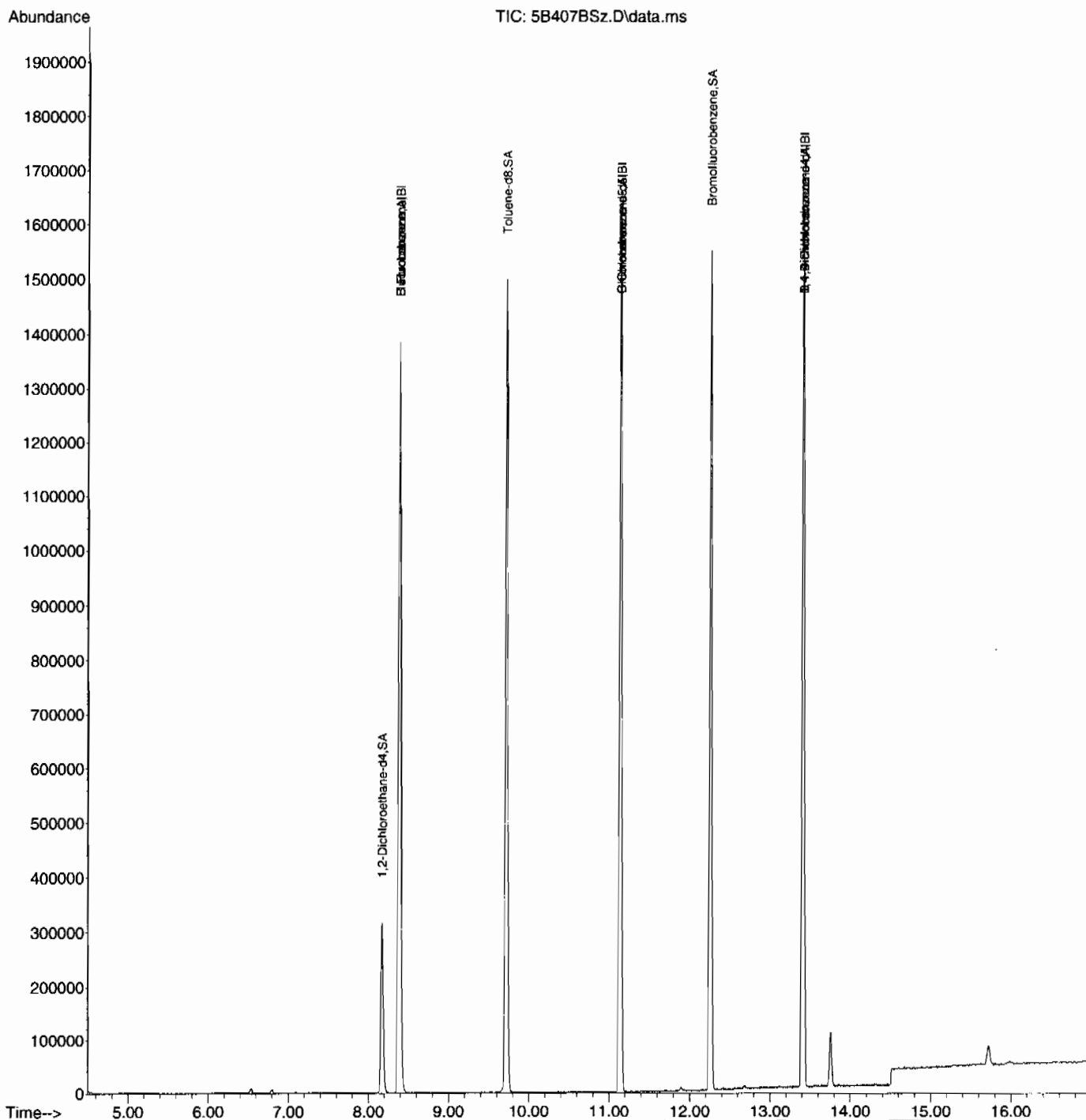
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.712	7.680	0.919	41	229	N.D.	
97) Tetrahydrofuran	7.705	7.716	0.919	42	113	N.D.	
98) Isobutyl alcohol	7.744	7.857	0.923	41	107	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	12.263	12.267	0.914	42	229	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	3422	N.D.	
112) bis(2-Chloroisopropyl)...	13.932	13.929	1.039	45	132	N.D.	

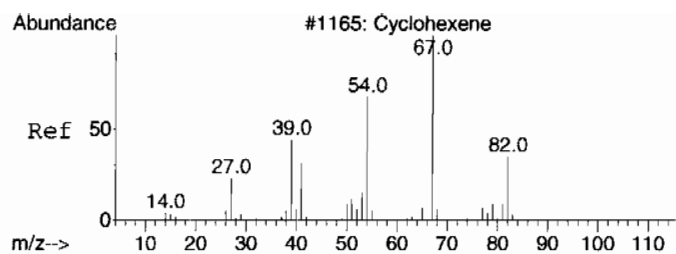
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B407BSz.D
Acq On : 11 Mar 2010 9:20 am
Operator : CDS1
InstName : VOA5
Sample : |1202077724|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

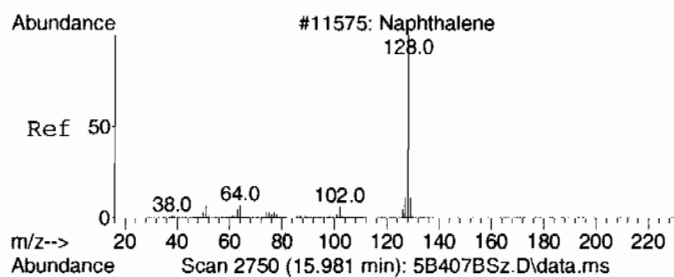
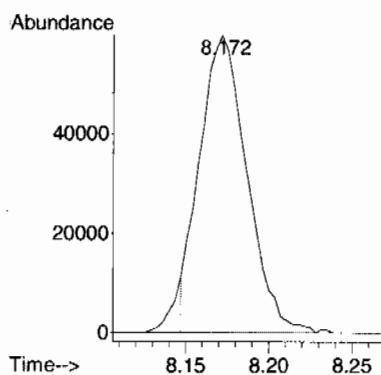
Quant Time: Mar 11 17:16:25 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE





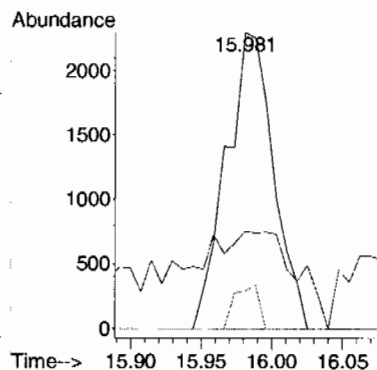
#32 BEFORE analyst DELETION
Cyclohexene
Concen: 12.52 ug/L
RT: 8.172 min Scan# 761
Delta R.T. -0.074 min
Lab File: 5B407BSz.D
Acq: 11 Mar 2010 9:20 am

Tgt Ion: 67 Resp: 118132
Ion Ratio Lower Upper
67 100
54 0.0 46.3 106.3#



#80 BEFORE analyst DELETION
Naphthalene
Concen: 0.33 ug/L
RT: 15.981 min Scan# 2750
Delta R.T. -0.007 min
Lab File: 5B407BSz.D
Acq: 11 Mar 2010 9:20 am

Tgt Ion: 128 Resp: 5333
Ion Ratio Lower Upper
128 100
127 77.1 0.0 42.4#
129 7.4 0.0 40.8



Library Search Compound Report

GEL Laboratories, LLC

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

Data File : 5B407BSz.D

Acq On : 11 Mar 2010 9:20 am

Operator : CDS1

Sample : |1202077724|963122|1|VOA|1|VOA8260BS|

Misc : BLANK 5G - SOIL

ALS Vial : 7 Sample Multiplier: 1

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

Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B407BSz.D
Acq On : 11 Mar 2010 9:20 am
Operator : CDS1
Sample : |1202077724|963122|1|VOA|1|VOA8260BS|
Misc : BLANK 5G - SOIL
ALS Vial : 7 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202076534

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: HB for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA3.I

Dilution: 50

Run Date: 03/19/2010 18:34

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/19/2010 09:03

Aliquot: 5 g

Final Volume: 10 mL

Data File: 031910V3\3D507.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	100	ug/kg	34.0	100
74-87-3	Chloromethane	U	100	ug/kg	30.0	100
75-01-4	Vinyl chloride	U	100	ug/kg	30.0	100
74-83-9	Bromomethane	U	100	ug/kg	30.0	100
75-00-3	Chloroethane	U	100	ug/kg	30.0	100
75-69-4	Trichlorofluoromethane	U	100	ug/kg	30.0	100
67-64-1	Acetone	U	500	ug/kg	166	500
75-35-4	1,1-Dichloroethylene	U	100	ug/kg	30.0	100
74-88-4	Iodomethane	U	500	ug/kg	160	500
75-09-2	Methylene chloride	U	500	ug/kg	200	500
75-15-0	Carbon disulfide	U	500	ug/kg	125	500
156-60-5	trans-1,2-Dichloroethylene	U	100	ug/kg	30.0	100
75-34-3	1,1-Dichloroethane	U	100	ug/kg	30.0	100
78-93-3	2-Butanone	U	500	ug/kg	150	500
156-59-2	cis-1,2-Dichloroethylene	U	100	ug/kg	30.0	100
594-20-7	2,2-Dichloropropane	U	100	ug/kg	30.0	100
67-66-3	Chloroform	U	100	ug/kg	30.0	100
74-97-5	Bromochloromethane	U	100	ug/kg	33.0	100
71-55-6	1,1,1-Trichloroethane	U	100	ug/kg	30.0	100
563-58-6	1,1-Dichloropropene	U	100	ug/kg	30.0	100
56-23-5	Carbon tetrachloride	U	100	ug/kg	30.0	100
107-06-2	1,2-Dichloroethane	U	100	ug/kg	30.0	100
71-43-2	Benzene	U	100	ug/kg	30.0	100
79-01-6	Trichloroethylene	U	100	ug/kg	33.0	100
78-87-5	1,2-Dichloropropane	U	100	ug/kg	30.0	100
75-27-4	Bromodichloromethane	U	100	ug/kg	30.0	100
74-95-3	Dibromomethane	U	100	ug/kg	30.0	100
108-10-1	4-Methyl-2-pentanone	U	500	ug/kg	125	500
10061-01-5	cis-1,3-Dichloropropylene	U	100	ug/kg	30.0	100
108-88-3	Toluene	U	100	ug/kg	30.0	100
10061-02-6	trans-1,3-Dichloropropylene	U	100	ug/kg	30.0	100
79-00-5	1,1,2-Trichloroethane	U	100	ug/kg	30.0	100
591-78-6	2-Hexanone	U	500	ug/kg	150	500
142-28-9	1,3-Dichloropropane	U	100	ug/kg	30.0	100
127-18-4	Tetrachloroethylene	U	100	ug/kg	30.0	100
124-48-1	Dibromochloromethane	U	100	ug/kg	30.0	100
106-93-4	1,2-Dibromoethane	U	100	ug/kg	30.0	100
108-90-7	Chlorobenzene	U	100	ug/kg	30.0	100

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 1202076534
Client Sample: QC for batch 963120
Client ID: HB for batch 963120
Batch ID: 963122
Run Date: 03/19/2010 18:34
Prep Date: 03/19/2010 09:03
Data File: 031910V33D507.D

Client: LANL010
Method: SW846 8260B
Inst: VOA3.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

Matrix: SOIL
Project: QC
SOP Ref: GL-OA-E-038
Dilution: 50
Purge Vol: 5 mL
Final Volume: 10 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	100	ug/kg	30.0	100
179601-23-1	m,p-Xylenes	U	200	ug/kg	30.0	200
95-47-6	o-Xylene	U	100	ug/kg	30.0	100
100-42-5	Styrene	U	100	ug/kg	30.0	100
75-25-2	Bromoform	U	100	ug/kg	30.0	100
79-34-5	1,1,2,2-Tetrachloroethane	U	100	ug/kg	30.0	100
96-18-4	1,2,3-Trichloropropane	U	100	ug/kg	30.0	100
108-86-1	Bromobenzene	U	100	ug/kg	30.0	100
103-65-1	n-Propylbenzene	U	100	ug/kg	30.0	100
95-49-8	2-Chlorotoluene	U	100	ug/kg	30.0	100
98-82-8	Isopropylbenzene	U	100	ug/kg	30.0	100
108-67-8	1,3,5-Trimethylbenzene	U	100	ug/kg	30.0	100
106-43-4	4-Chlorotoluene	U	100	ug/kg	30.0	100
98-06-6	tert-Butylbenzene	U	100	ug/kg	30.0	100
95-63-6	1,2,4-Trimethylbenzene	U	100	ug/kg	30.0	100
135-98-8	sec-Butylbenzene	U	100	ug/kg	30.0	100
99-87-6	4-Isopropyltoluene	U	100	ug/kg	30.0	100
541-73-1	1,3-Dichlorobenzene	U	100	ug/kg	30.0	100
106-46-7	1,4-Dichlorobenzene	U	100	ug/kg	30.0	100
104-51-8	n-Butylbenzene	U	100	ug/kg	30.0	100
96-12-8	1,2-Dibromo-3-chloropropane	U	100	ug/kg	30.0	100
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	500	ug/kg	160	500
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	100	ug/kg	30.0	100
95-50-1	1,2-Dichlorobenzene	U	100	ug/kg	30.0	100

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	6.14	720	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D507.D
Acq On : 19 Mar 2010 6:34 pm
Operator : CDS1
InstName : VOA3
Sample : |1202076534|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - HB SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 20 09:43:12 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	12.232	12.232	1.000	96	825255	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	628285	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	305560	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	824950	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	628348	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	311184	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	11.793	11.793	0.964	65	247338	48.87	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	97.74%		
43) Toluene-d8	14.165	14.165	0.894	98	858125	50.75	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	101.50%		
61) Bromofluorobenzene	17.130	17.130	0.930	95	306336	49.72	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	99.44%		
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.800	0.000		0	N.D.		
3) Chloromethane	0.000	5.216	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.528	0.000		0	N.D.		
5) Bromomethane	0.000	6.291	0.000		0	N.D.		
6) Chloroethane	0.000	6.493	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	7.062	0.000		0	N.D.		
8) Ethyl ether	0.000	7.512	0.000		0	N.D.		
9) Acetone	7.999	7.987	0.654	43	937	N.D.		
10) 1,1-Dichloroethylene	0.000	7.987	0.000		0	N.D.		
11) Iodomethane	0.000	8.271	0.000		0	N.D.		
12) Acetonitrile	0.000	8.449	0.000		0	N.D.		
13) Methyl acetate	0.000	8.520	0.000		0	N.D.		
14) Carbon disulfide	8.426	8.449	0.689	76	1187	N.D.		
15) Methylene chloride	8.746	8.746	0.715	84	6552	N.D.		
16) tert-Butyl methyl ether	0.000	9.173	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	9.208	0.000		0	N.D.		
18) Vinyl acetate	0.000	9.837	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	9.860	0.000		0	N.D.		
20) 2-Butanone	10.643	10.643	0.870	43	367	N.D.		
21) cis-1,2-Dichloroethylene	0.000	10.691	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	10.714	0.000		0	N.D.		
23) Bromochloromethane	0.000	11.034	0.000		0	N.D.		
24) Chloroform	0.000	11.094	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	11.426	0.000		0	N.D.		
26) Cyclohexane	0.000	11.532	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	11.627	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	11.663	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	11.888	0.000		0	N.D.		
31) Benzene	0.000	11.912	0.000		0	N.D.		
32) Cyclohexene	0.000	12.054	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	12.398	0.000		0	N.D.		
34) Trichloroethylene	0.000	12.695	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	12.979	0.000		0	N.D.		
36) Methylcyclohexane	0.000	12.991	0.000		0	N.D.		
37) Dibromomethane	0.000	13.133	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D507.D
Acq On : 19 Mar 2010 6:34 pm
Operator : CDS1
InstName : VOA3
Sample : |1202076534|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - HB SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 20 09:43:12 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	13.288	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	13.560	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	13.809	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	13.928	0.000		0	N.D.	
44) Toluene	0.000	14.248	0.000		0	N.D.	
45) trans-1,3-Dichloroprop...	0.000	14.426	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	14.675	0.000		0	N.D.	
47) 2-Hexanone	14.889	14.888	0.939	43	394	N.D.	
48) 1,3-Dichloropropane	0.000	14.888	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	14.912	0.000		0	N.D.	
50) Dibromochloromethane	0.000	15.173	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	15.351	0.000		0	N.D.	
52) Chlorobenzene	0.000	15.885	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	15.956	0.000		0	N.D.	
54) Ethylbenzene	16.086	15.968	1.015	91	393	N.D.	
55) m,p-Xylenes	0.000	16.086	0.000		0	N.D.	
56) o-Xylene	0.000	16.549	0.000		0	N.D.	
57) Styrene	0.000	16.549	0.000		0	N.D.	
59) Bromoform	0.000	16.821	0.000		0	N.D.	
60) Isopropylbenzene	0.000	16.928	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	17.213	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	17.308	0.000		0	N.D.	
64) Bromobenzene	0.000	17.343	0.000		0	N.D.	
65) n-Propylbenzene	0.000	17.367	0.000		0	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	17.533	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	17.521	0.000		0	N.D.	
68) 4-Chlorotoluene	17.628	17.628	0.957	91	201	N.D.	
69) tert-Butylbenzene	0.000	17.912	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	17.960	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	18.150	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	18.280	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	18.351	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	18.434	0.000		0	N.D.	
75) n-Butylbenzene	0.000	18.742	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	18.885	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	19.810	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	20.936	20.936	1.137	180	203	N.D.	
79) Hexachlorobutadiene	0.000	21.126	0.000		0	N.D.	
80) Naphthalene	21.351	21.351	1.160	128	1710	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	21.719	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.711	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.751	0.000		0	N.D.	
85) Acrolein	0.000	7.750	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.975	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	8.141	0.000		0	N.D.	
88) Allyl chloride	0.000	8.556	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	8.793	0.000		0	N.D.	
90) Acrylonitrile	0.000	9.090	0.000		0	N.D.	
91) Isopropyl ether	0.000	9.884	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	10.003	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	10.406	0.000		0	N.D.	
94) Ethyl acetate	10.643	10.679	0.870	43	367	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D507.D
Acq On : 19 Mar 2010 6:34 pm
Operator : CDS1
InstName : VOA3
Sample : |1202076534|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - HB SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 20 09:43:12 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

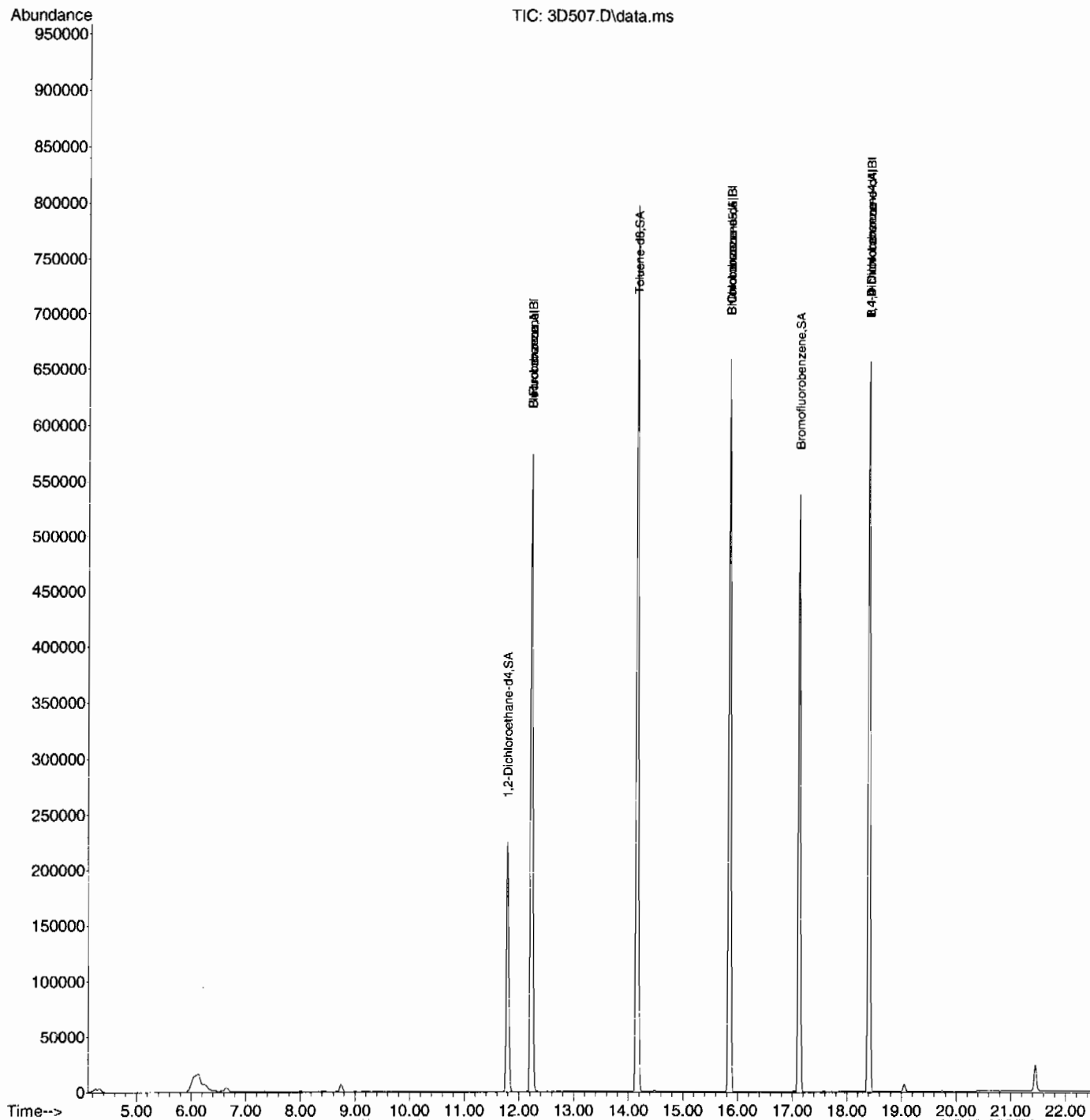
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	10.726	0.000		0	N.D.	
96) Methacrylonitrile	0.000	10.951	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	11.094	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	11.556	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	11.971	0.000		0	N.D.	
100) Methyl methacrylate	0.000	12.991	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	13.098	0.000		0	N.D.	
102) 2-Nitropropane	0.000	13.525	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	14.450	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	15.754	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	16.964	0.000		0	N.D.	
108) Cyclohexanone	0.000	17.082	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	17.260	0.000		0	N.D.	
110) Pentachloroethane	0.000	17.983	0.000		0	N.D.	
111) Benzyl chloride	0.000	18.553	0.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	0.000	18.980	0.000		0	N.D.	

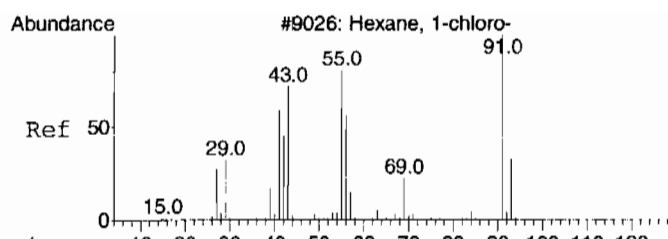
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

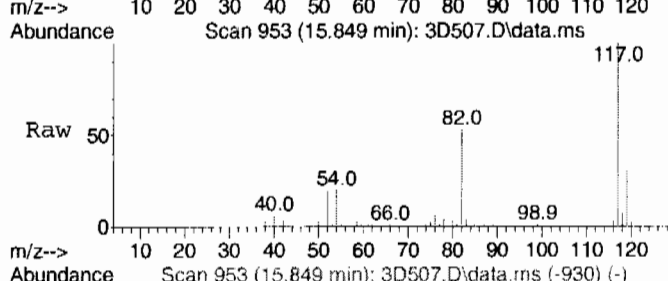
Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D507.D
Acq On : 19 Mar 2010 6:34 pm
Operator : CDS1
InstName : VOA3
Sample : |1202076534|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - HB SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 20 09:43:12 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

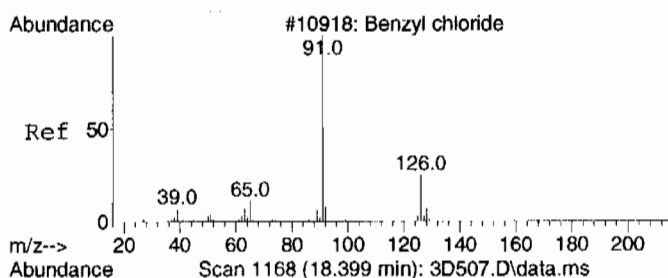
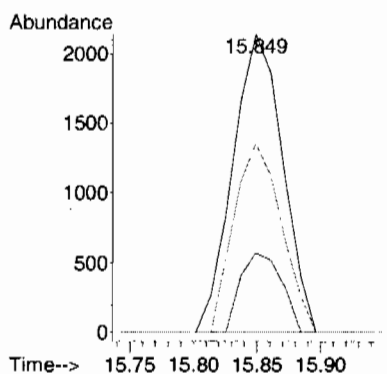
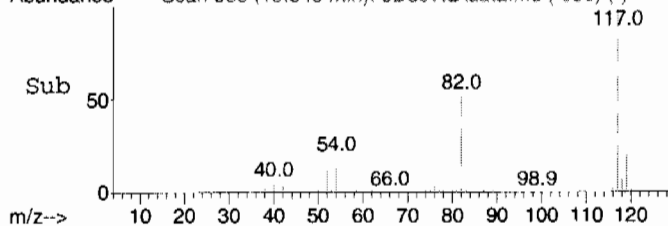




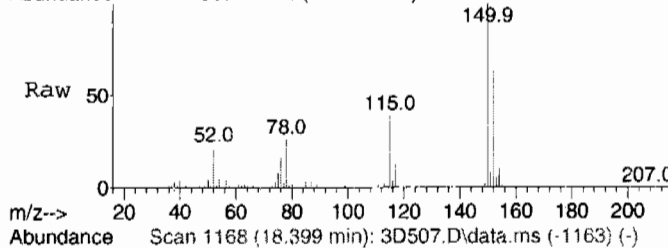
#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.08 ug/L
RT: 15.849 min Scan# 953
Delta R.T. 0.095 min
Lab File: 3D507.D
Acq: 19 Mar 2010 6:34 pm



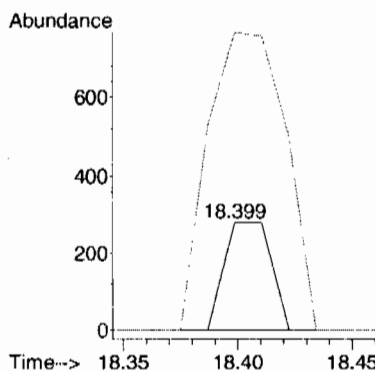
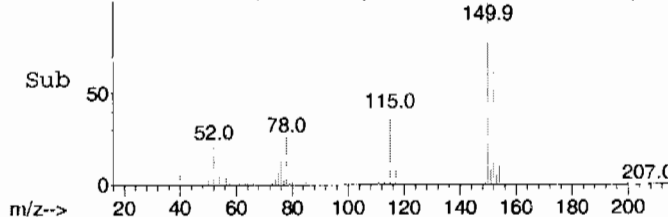
Tgt Ion: 55 Resp: 5859
Ion Ratio Lower Upper
55 100
91 22.1 119.7 179.7#
56 60.7 29.6 89.6



#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 1.67 ug/L
RT: 18.399 min Scan# 1168
Delta R.T. -0.154 min
Lab File: 3D507.D
Acq: 19 Mar 2010 6:34 pm



Tgt Ion: 91 Resp: 398
Ion Ratio Lower Upper
91 100
126 0.0 0.0 51.8
65 455.8 0.0 41.3#



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D507.D
Acq On : 19 Mar 2010 6:34 pm
Operator : CDS1
Sample : |1202076534|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - HB SOIL
ALS Vial : 9 Sample Multiplier: 1

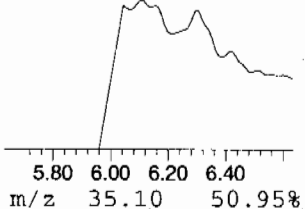
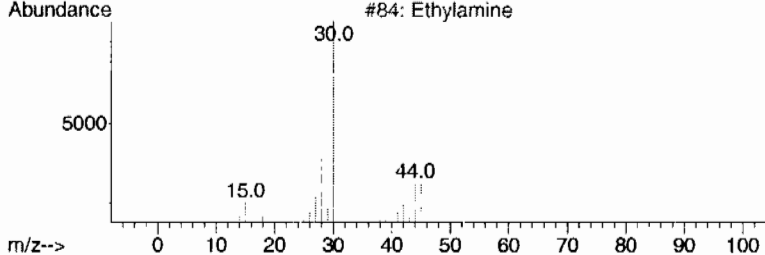
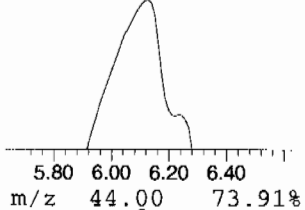
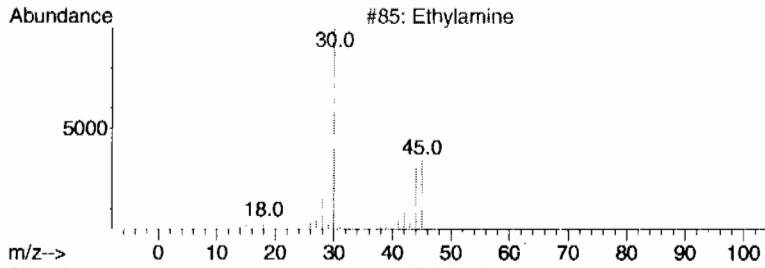
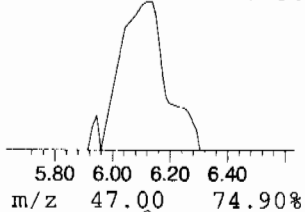
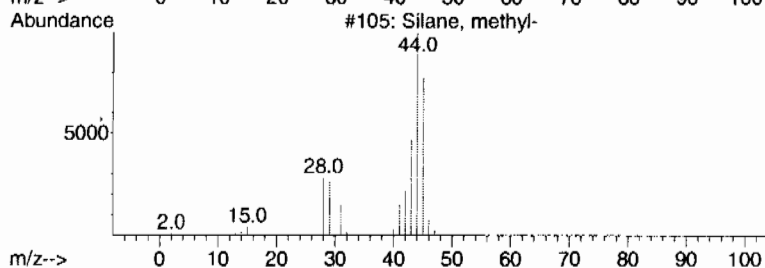
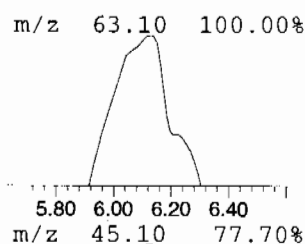
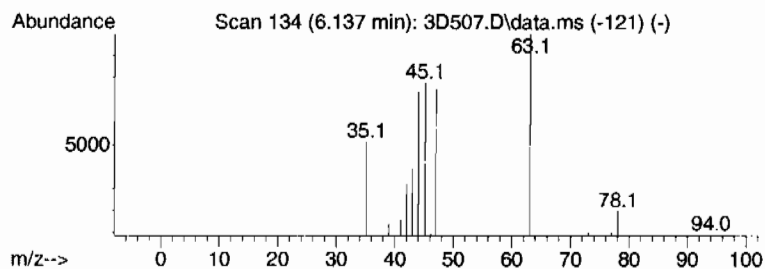
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :

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

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.137	7.20 ug/L	243164	Fluorobenzene	12.232

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Silane, methyl-	46	CH6Si	000992-94-9	11
2	Ethylamine	45	C2H7N	000075-04-7	9
3	Ethylamine	45	C2H7N	000075-04-7	9
4	Ethanol, 2-(vinylloxy)-	88	C4H8O2	000764-48-7	9
5	Ethanol, 2-(2-aminoethoxy)-	105	C4H11NO2	000929-06-6	4



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D507.D
Acq On : 19 Mar 2010 6:34 pm
Operator : CDS1
Sample : |1202076534|963122|50|VOA|D|VOA8260BS|
Misc : LANL 100UL - HB SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.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	6.137	7.2	ug/L	243164	1	12.232	1688400	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202079011

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: LCS for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA3.I

Dilution: 1

Run Date: 03/19/2010 16:38

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/19/2010 11:35

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031910V33D503LS1.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		56.2	ug/kg	0.340	1.00
74-87-3	Chloromethane		49.9	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		53.4	ug/kg	0.300	1.00
74-83-9	Bromomethane		49.5	ug/kg	0.300	1.00
75-00-3	Chloroethane		50.2	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		53.1	ug/kg	0.300	1.00
67-64-1	Acetone		177	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		46.2	ug/kg	0.300	1.00
74-88-4	Iodomethane		218	ug/kg	1.60	5.00
75-09-2	Methylene chloride		41.1	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		238	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		46.9	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		47.4	ug/kg	0.300	1.00
78-93-3	2-Butanone		179	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		47.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		58.2	ug/kg	0.300	1.00
67-66-3	Chloroform		46.8	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		46.3	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		50.5	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		49.8	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		52.8	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		44.8	ug/kg	0.300	1.00
71-43-2	Benzene		45.8	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		48.1	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		48.2	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		49.9	ug/kg	0.300	1.00
74-95-3	Dibromomethane		47.7	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		252	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		52.0	ug/kg	0.300	1.00
108-88-3	Toluene		47.5	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		49.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone		208	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		47.3	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		47.7	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		52.1	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		48.9	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		46.8	ug/kg	0.300	1.00

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 1202079011
Client Sample: QC for batch 963120
Client ID: LCS for batch 963120
Batch ID: 963122
Run Date: 03/19/2010 16:38
Prep Date: 03/19/2010 11:35
Data File: 031910V3\3D503LS1.D

Client: LANL010
Method: SW846 8260B
Inst: VOA3.I
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		47.4	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		96.8	ug/kg	0.300	2.00
95-47-6	o-Xylene		50.3	ug/kg	0.300	1.00
100-42-5	Styrene		51.2	ug/kg	0.300	1.00
75-25-2	Bromoform		43.8	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		48.0	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		47.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		46.5	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		48.4	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		46.9	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		49.4	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		49.2	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		48.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		49.9	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		48.6	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		49.1	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		50.8	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		45.8	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		46.8	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		50.9	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		44.7	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		49.9	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		46.2	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D503LS1.D
Acq On : 19 Mar 2010 4:38 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079011|963122|1|VOA|1|VOA8260BL|
Misc : LCS 5G - SOIL MIX[A] 0305-01C+0316-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 20 09:37:13 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	12.232	12.232	1.000	96	877316	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	686507	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	358877	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	877132	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	686463	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.411	18.410	1.000	152	367178	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	11.794	11.793	0.964	65	284424	52.86	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	= 105.72%			
43) Toluene-d8	14.165	14.165	0.894	98	960186	51.97	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	= 103.94%			
61) Bromofluorobenzene	17.130	17.130	0.930	95	364172	50.33	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	= 100.66%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.800	4.800	0.392	85	137448	56.21	ug/L	96
3) Chloromethane	5.216	5.216	0.426	50	206118	49.94	ug/L	99
4) Vinyl chloride	5.528	5.528	0.452	62	224375	53.35	ug/L	99
5) Bromomethane	6.291	6.291	0.514	94	168094	49.52	ug/L	100
6) Chloroethane	6.493	6.493	0.531	64	136479	50.23	ug/L	99
7) Trichlorofluoromethane	7.050	7.062	0.576	101	307065	53.06	ug/L	99
8) Ethyl ether	7.501	7.512	0.613	59	147512	49.31	ug/L	99
9) Acetone	7.975	7.987	0.652	43	655258	177.16	ug/L	100
10) 1,1-Dichloroethylene	7.975	7.987	0.652	61	274582	46.17	ug/L	99
11) Iodomethane	8.272	8.271	0.676	142	1636136	217.54	ug/L	99
12) Acetonitrile	8.438	8.449	0.690	41	684218	1067.92	ug/L	99
13) Methyl acetate	8.509	8.520	0.696	43	731169	221.51	ug/L	99
14) Carbon disulfide	8.438	8.449	0.690	76	3118593	237.67	ug/L	100
15) Methylene chloride	8.746	8.746	0.715	84	219779	41.12	ug/L	97
16) tert-Butyl methyl ether	9.173	9.173	0.750	73	528447	45.46	ug/L	100
17) trans-1,2-Dichloroethy...	9.197	9.208	0.752	61	258245	46.88	ug/L	99
18) Vinyl acetate	9.837	9.837	0.804	43	1945114	293.45	ug/L	100
19) 1,1-Dichloroethane	9.849	9.860	0.805	63	328113	47.39	ug/L	100
20) 2-Butanone	10.631	10.643	0.869	43	659871	179.14	ug/L	100
21) cis-1,2-Dichloroethylene	10.679	10.691	0.873	61	289277	47.46	ug/L	99
22) 2,2-Dichloropropane	10.714	10.714	0.876	77	248577	58.15	ug/L	96
23) Bromochloromethane	11.023	11.034	0.901	128	103935	46.32	ug/L	98
24) Chloroform	11.094	11.094	0.907	83	330442	46.77	ug/L	99
25) 1,1,1-Trichloroethane	11.414	11.426	0.933	97	289571	50.47	ug/L	100
26) Cyclohexane	11.533	11.532	0.943	56	317262	49.40	ug/L	100
27) 1,1-Dichloropropene	11.616	11.627	0.950	75	242649	49.77	ug/L	100
28) Carbon tetrachloride	11.651	11.663	0.952	117	264704	52.76	ug/L	100
30) 1,2-Dichloroethane	11.888	11.888	0.972	62	247591	44.81	ug/L	100
31) Benzene	11.912	11.912	0.974	78	708515	45.81	ug/L	100
32) Cyclohexene	12.054	12.054	0.985	67	344398	48.64	ug/L	99
33) n-Butyl alcohol	12.398	12.398	1.014	56	614942	3788.48	ug/L	100
34) Trichloroethylene	12.695	12.695	1.038	95	192234	48.13	ug/L	100
35) 1,2-Dichloropropane	12.979	12.979	1.061	63	182022	48.19	ug/L	99
36) Methylcyclohexane	12.979	12.991	1.061	83	331984	50.21	ug/L	99
37) Dibromomethane	13.134	13.133	1.074	93	120803	47.65	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D503LS1.D
Acq On : 19 Mar 2010 4:38 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079011|963122|1|VOA|1|VOA8260BL|
Misc : LCS 5G - SOIL MIX[A] 0305-01C+0316-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 20 09:37:13 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	13.276	13.288	1.085	83	240695	49.90	ug/L 99
39) 2-Chloroethylvinyl ether	13.560	13.560	1.109	63	554721	446.85	ug/L 98
40) cis-1,3-Dichloropropylene	13.809	13.809	1.129	75	284812	51.96	ug/L 99
42) 4-Methyl-2-pentanone	13.928	13.928	0.879	58	418320	252.21	ug/L 99
44) Toluene	14.248	14.248	0.899	91	781118	47.52	ug/L 99
45) trans-1,3-Dichloroprop...	14.426	14.426	0.910	75	265409	53.12	ug/L 98
46) 1,1,2-Trichloroethane	14.663	14.675	0.925	83	140839	49.60	ug/L 99
47) 2-Hexanone	14.877	14.888	0.939	43	882782	208.47	ug/L 100
48) 1,3-Dichloropropane	14.877	14.888	0.939	76	278751	47.27	ug/L 92
49) Tetrachloroethylene	14.912	14.912	0.941	164	152664	47.68	ug/L 98
50) Dibromochloromethane	15.173	15.173	0.957	129	195667	52.09	ug/L 98
51) 1,2-Dibromoethane	15.351	15.351	0.969	107	178647	48.92	ug/L 99
52) Chlorobenzene	15.885	15.885	1.002	112	504494	46.76	ug/L 99
53) 1,1,1,2-Tetrachloroethane	15.944	15.956	1.006	131	185028	49.88	ug/L 98
54) Ethylbenzene	15.956	15.968	1.007	91	804161	47.35	ug/L 100
55) m,p-Xylenes	16.074	16.086	1.014	106	653444	96.82	ug/L 99
56) o-Xylene	16.537	16.549	1.043	106	338951	50.26	ug/L 100
57) Styrene	16.549	16.549	1.044	104	550939	51.18	ug/L 99
59) Bromoform	16.810	16.821	0.913	173	120437	43.78	ug/L 98
60) Isopropylbenzene	16.928	16.928	0.919	105	878169	49.38	ug/L 99
62) 1,1,2,2-Tetrachloroethane	17.213	17.213	0.935	83	230973	48.04	ug/L 100
63) 1,2,3-Trichloropropane	17.296	17.308	0.939	110	62231	47.08	ug/L 97
64) Bromobenzene	17.343	17.343	0.942	156	222169	46.54	ug/L 99
65) n-Propylbenzene	17.367	17.367	0.943	91	994186	48.35	ug/L 100
66) 1,3,5-Trimethylbenzene	17.533	17.533	0.952	105	734378	49.21	ug/L 100
67) 2-Chlorotoluene	17.521	17.521	0.952	126	207801	46.88	ug/L 97
68) 4-Chlorotoluene	17.628	17.628	0.957	91	615929	48.28	ug/L 98
69) tert-Butylbenzene	17.913	17.912	0.973	134	159354	49.92	ug/L 97
70) 1,2,4-Trimethylbenzene	17.960	17.960	0.976	105	734555	48.55	ug/L 99
71) sec-Butylbenzene	18.150	18.150	0.986	105	981409	49.10	ug/L 100
72) 4-Isopropyltoluene	18.280	18.280	0.993	119	805908	50.80	ug/L 100
73) 1,3-Dichlorobenzene	18.339	18.351	0.996	146	373120	45.75	ug/L 99
74) 1,4-Dichlorobenzene	18.434	18.434	1.001	146	437524	46.81	ug/L 99
75) n-Butylbenzene	18.743	18.742	1.018	91	767873	50.90	ug/L 99
76) 1,2-Dichlorobenzene	18.885	18.885	1.026	146	428853	46.22	ug/L 100
77) 1,2-Dibromo-3-chloropr...	19.810	19.810	1.076	157	51481	44.71	ug/L 97
78) 1,2,4-Trichlorobenzene	20.936	20.936	1.137	180	317077	50.82	ug/L 100
79) Hexachlorobutadiene	21.126	21.126	1.148	225	151779	48.56	ug/L 98
80) Naphthalene	21.340	21.351	1.159	128	833071	51.91	ug/L 100
81) 1,2,3-Trichlorobenzene	21.719	21.719	1.180	180	309125	50.73	ug/L 100
83) Chlorotrifluoroethylene	0.000	4.711	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.751	0.000		0	N.D.	
85) Acrolein	0.000	7.750	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.975	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	8.141	0.000		0	N.D.	
88) Allyl chloride	8.438	8.556	0.690		0m	N.D. d	
89) tert-Butyl Alcohol	0.000	8.793	0.000		0	N.D.	
90) Acrylonitrile	9.161	9.090	0.749		0m	N.D. d	
91) Isopropyl ether	9.837	9.884	0.804		0m	N.D. d	
92) 2-Chloro-1,3-butadiene	10.038	10.003	0.821		0m	N.D. d	
93) Ethyl tert-butyl ether	0.000	10.406	0.000		0	N.D.	
94) Ethyl acetate	10.631	10.679	0.869		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

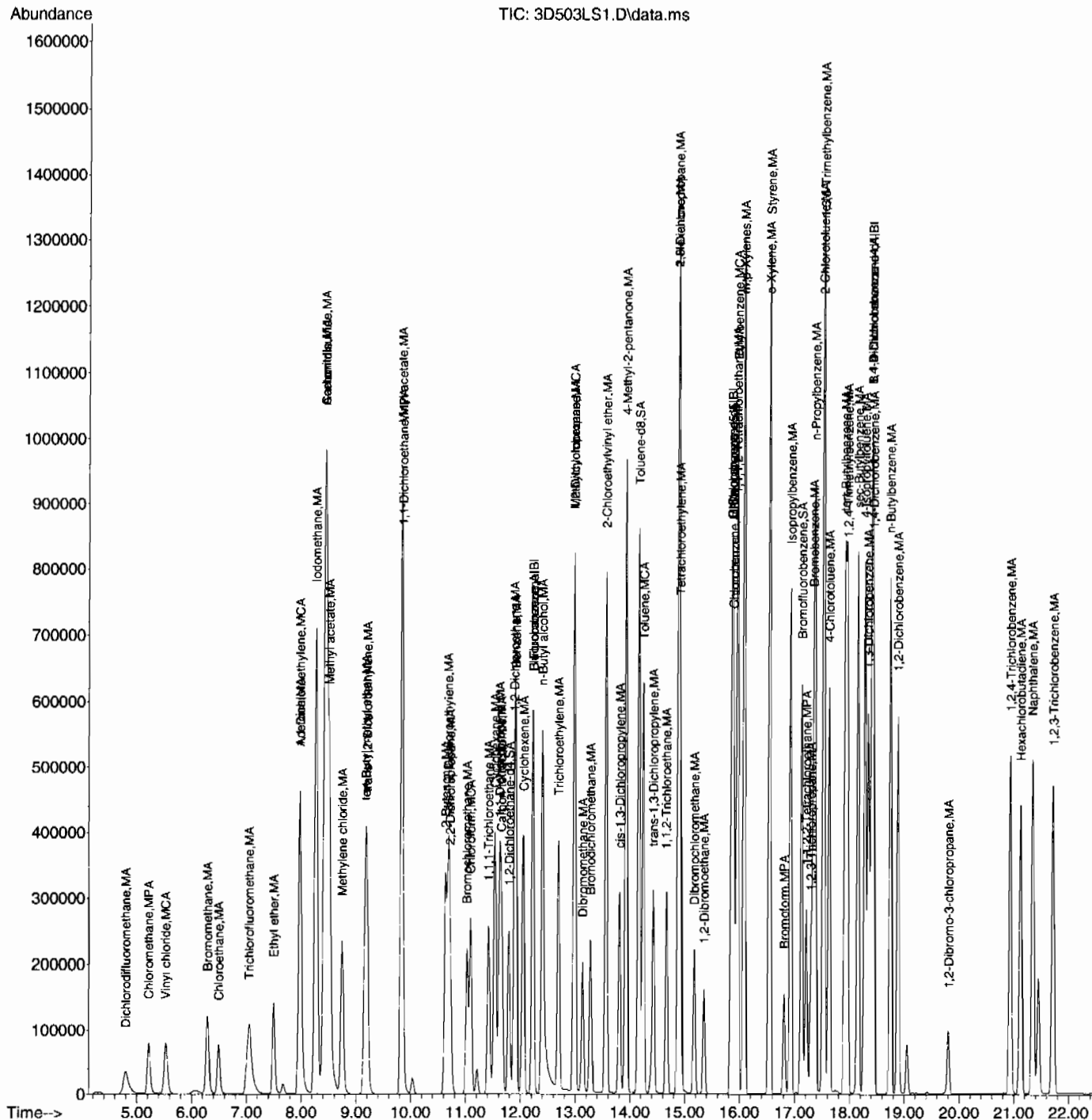
Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D503LS1.D
Acq On : 19 Mar 2010 4:38 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079011|963122|1|VOA|1|VOA8260BL|
Misc : LCS 5G - SOIL MIX[A] 0305-01C+0316-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 20 09:37:13 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	10.631	10.726	0.869		0m	N.D.	d
96) Methacrylonitrile	0.000	10.951	0.000		0	N.D.	
97) Tetrahydrofuran	11.094	11.094	0.907		0m	N.D.	d
98) Isobutyl alcohol	11.533	11.556	0.943		0m	N.D.	d
99) Methyl tert-amyl ether	11.912	11.971	0.974		0m	N.D.	d
100) Methyl methacrylate	12.979	12.991	1.061		0m	N.D.	d
101) 1,4-Dioxane	0.000	13.098	0.000		0	N.D.	
102) 2-Nitropropane	13.560	13.525	1.109		0m	N.D.	d
104) Ethyl methacrylate	0.000	14.450	0.000		0	N.D.	
106) 1-Chlorohexane	15.849	15.754	0.861		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	16.928	16.964	0.919		0m	N.D.	d
108) Cyclohexanone	16.916	17.082	0.919		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	17.367	17.260	0.943		0m	N.D.	d
110) Pentachloroethane	17.984	17.983	0.977		0m	N.D.	d
111) Benzyl chloride	18.553	18.553	1.008		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	19.051	18.980	1.035		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\031910V3\  
Data File : 3D503LS1.D  
Acq On : 19 Mar 2010 4:38 pm  
Operator : CDS1  
InstName : VOA3  
Sample : |1202079011|963122|1|VOA|1|VOA8260BL|  
Misc : LCS 5G - SOIL MIX[A] 0305-01C+0316-01  
ALS Vial : 4 Sample Multiplier: 1
```

Abundance TIC: 3D503LS1.D\data.ms

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202079012

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: LCS for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA3.1

Dilution: 1

Run Date: 03/19/2010 17:07

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/19/2010 11:35

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031910V33D504SL51.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: 10-2150
Lab Sample ID: 1202079012
Client Sample: QC for batch 963120
Client ID: LCS for batch 963120
Batch ID: 963122
Run Date: 03/19/2010 17:07
Prep Date: 03/19/2010 11:35
Data File: 031910V3\3D504SLS1.D

Client: LANL010
Method: SW846 8260B
Inst: VOA3.1
Analyst: CDS1
Aliquot: 5 g
Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	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		233	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\031910V3\
Data File : 3D504SLS1.D
Acq On : 19 Mar 2010 5:07 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079012|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL UVM100304-08A MIX[B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 09:38:35 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	12.232	12.232	1.000	96	862704	50.00	ug/L	0.00
41) Chlorobenzene-d5	15.849	15.849	1.000	117	672337	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	339547	50.00	ug/L	0.00
82) B Fluorobenzene	12.232	12.232	1.000	96	862427	50.00	ug/L	0.00
103) B Chlorobenzene-d5	15.849	15.849	1.000	117	672269	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	18.410	18.410	1.000	152	346549	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	11.793	11.793	0.964	65	280472	53.01	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	106.02%			
43) Toluene-d8	14.165	14.165	0.894	98	943300	52.13	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	104.26%			
61) Bromofluorobenzene	17.130	17.130	0.930	95	359234	52.47	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	104.94%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.800	0.000		0	N.D.		
3) Chloromethane	5.201	5.216	0.425		0m	N.D.	d	
4) Vinyl chloride	0.000	5.528	0.000		0	N.D.		
5) Bromomethane	0.000	6.291	0.000		0	N.D.		
6) Chloroethane	0.000	6.493	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	7.062	0.000		0	N.D.		
8) Ethyl ether	0.000	7.512	0.000		0	N.D.		
9) Acetone	7.975	7.987	0.652		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.963	7.987	0.651		0m	N.D.	d	
11) Iodomethane	8.271	8.271	0.676		0m	N.D.	d	
12) Acetonitrile	8.556	8.449	0.699		0m	N.D.	d	
13) Methyl acetate	8.520	8.520	0.697		0m	N.D.	d	
14) Carbon disulfide	8.556	8.449	0.699		0m	N.D.	d	
15) Methylene chloride	8.746	8.746	0.715		0m	N.D.	d	
16) tert-Butyl methyl ether	0.000	9.173	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	9.208	0.000		0	N.D.		
18) Vinyl acetate	9.837	9.837	0.804		0m	N.D.	d	
19) 1,1-Dichloroethane	10.003	9.860	0.818		0m	N.D.	d	
20) 2-Butanone	10.679	10.643	0.873		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	10.679	10.691	0.873		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	10.714	0.000		0	N.D.		
23) Bromochloromethane	0.000	11.034	0.000		0	N.D.		
24) Chloroform	11.094	11.094	0.907		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	11.426	0.000		0	N.D.		
26) Cyclohexane	11.568	11.532	0.946		0m	N.D.	d	
27) 1,1-Dichloropropene	11.568	11.627	0.946		0m	N.D.	d	
28) Carbon tetrachloride	0.000	11.663	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	11.888	0.000		0	N.D.		
31) Benzene	11.912	11.912	0.974		0m	N.D.	d	
32) Cyclohexene	0.000	12.054	0.000		0	N.D.		
33) n-Butyl alcohol	12.446	12.398	1.017		0m	N.D.	d	
34) Trichloroethylene	12.695	12.695	1.038		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	12.979	0.000		0	N.D.		
36) Methylcyclohexane	12.991	12.991	1.062		0m	N.D.	d	
37) Dibromomethane	0.000	13.133	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D504SLS1.D
Acq On : 19 Mar 2010 5:07 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079012|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL UVM100304-08A MIX[B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 09:38:35 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	0.000	13.288	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	13.560	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000	13.809	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	13.928	13.928	0.879		0m	N.D.	d	
44) Toluene	14.248	14.248	0.899		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	14.438	14.426	0.911		0m	N.D.	d	
46) 1,1,2-Trichloroethane	0.000	14.675	0.000		0	N.D.		
47) 2-Hexanone	14.888	14.888	0.939		0m	N.D.	d	
48) 1,3-Dichloropropane	14.924	14.888	0.942		0m	N.D.	d	
49) Tetrachloroethylene	14.912	14.912	0.941		0m	N.D.	d	
50) Dibromochloromethane	0.000	15.173	0.000		0	N.D.		
51) 1,2-Dibromoethane	15.351	15.351	0.969		0m	N.D.	d	
52) Chlorobenzene	15.885	15.885	1.002		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	0.000	15.956	0.000		0	N.D.		
54) Ethylbenzene	15.968	15.968	1.007		0m	N.D.	d	
55) m,p-Xylenes	16.074	16.086	1.014		0m	N.D.	d	
56) o-Xylene	16.549	16.549	1.044		0m	N.D.	d	
57) Styrene	16.549	16.549	1.044		0m	N.D.	d	
59) Bromoform	0.000	16.821	0.000		0	N.D.		
60) Isopropylbenzene	16.928	16.928	0.919		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	17.260	17.213	0.938		0m	N.D.	d	
63) 1,2,3-Trichloropropane	0.000	17.308	0.000		0	N.D.		
64) Bromobenzene	17.343	17.343	0.942		0m	N.D.	d	
65) n-Propylbenzene	17.367	17.367	0.943		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	17.533	17.533	0.952		0m	N.D.	d	
67) 2-Chlorotoluene	17.628	17.521	0.957		0m	N.D.	d	
68) 4-Chlorotoluene	17.628	17.628	0.957		0m	N.D.	d	
69) tert-Butylbenzene	17.983	17.912	0.977		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	17.960	17.960	0.976		0m	N.D.	d	
71) sec-Butylbenzene	18.150	18.150	0.986		0m	N.D.	d	
72) 4-Isopropyltoluene	18.280	18.280	0.993		0m	N.D.	d	
73) 1,3-Dichlorobenzene	18.339	18.351	0.996		0m	N.D.	d	
74) 1,4-Dichlorobenzene	18.434	18.434	1.001		0m	N.D.	d	
75) n-Butylbenzene	18.742	18.742	1.018		0m	N.D.	d	
76) 1,2-Dichlorobenzene	18.885	18.885	1.026		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	0.000	19.810	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	20.936	20.936	1.137		0m	N.D.	d	
79) Hexachlorobutadiene	0.000	21.126	0.000		0	N.D.		
80) Naphthalene	21.339	21.351	1.159		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	21.719	21.719	1.180		0m	N.D.	d	
83) Chlorotrifluoroethylene	0.000	4.711	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.751	0.000		0	N.D.		
85) Acrolein	7.738	7.750	0.633	56	168856	372.42	ug/L	93 E
86) Trichlorotrifluoroethane	7.975	7.975	0.652	85	332474	233.08	ug/L	99
87) Isopropyl Alcohol	8.141	8.141	0.666	45	7032	N.D.		
88) Allyl chloride	8.556	8.556	0.699	41	1116691	218.55	ug/L	99
89) tert-Butyl Alcohol	0.000	8.793	0.000		0	N.D.		
90) Acrylonitrile	9.090	9.090	0.743	53	312481	204.62	ug/L	99
91) Isopropyl ether	0.000	9.884	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	10.003	10.003	0.818	53	220211	49.60	ug/L	99
93) Ethyl tert-butyl ether	0.000	10.406	0.000		0	N.D.		
94) Ethyl acetate	10.679	10.679	0.873	43	705326	187.17	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031910V3\
Data File : 3D504SLS1.D
Acq On : 19 Mar 2010 5:07 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079012|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL UVM100304-08A MIX[B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 09:38:35 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE

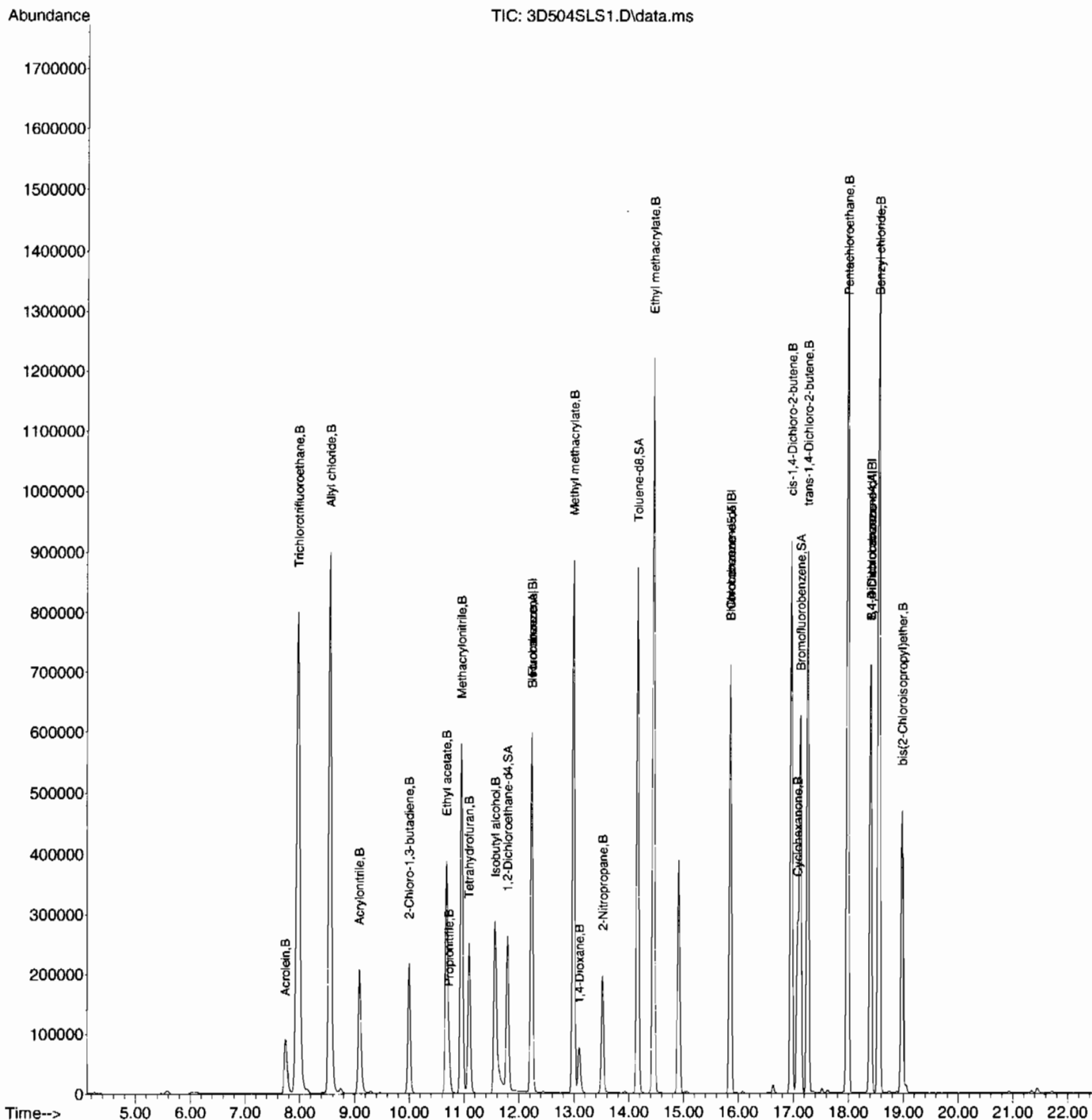
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	10.726	10.726	0.877	54	121657	203.17	ug/L	99
96) Methacrylonitrile	10.951	10.951	0.895	41	462254	201.25	ug/L	99
97) Tetrahydrofuran	11.094	11.094	0.907	42	250657	197.68	ug/L	99
98) Isobutyl alcohol	11.568	11.556	0.946	41	269806	1654.44	ug/L	98
99) Methyl tert-amyl ether	0.000	11.971	0.000		0	N.D.		
100) Methyl methacrylate	12.991	12.991	1.062	69	548838	220.84	ug/L	96
101) 1,4-Dioxane	13.098	13.098	1.071	88	98245	1858.70	ug/L	100
102) 2-Nitropropane	13.525	13.525	1.106	43	226799	206.95	ug/L	99
104) Ethyl methacrylate	14.450	14.450	0.912	69	1020710	223.56	ug/L	98
106) 1-Chlorohexane	0.000	15.754	0.000		0m	N.D.	d	
107) cis-1,4-Dichloro-2-butene	16.964	16.964	0.921	53	312808	269.06	ug/L	99
108) Cyclohexanone	17.082	17.082	0.928	42	125570	941.05	ug/L	100 E
109) trans-1,4-Dichloro-2-b...	17.260	17.260	0.938	53	301252	265.67	ug/L	98
110) Pentachloroethane	17.983	17.983	0.977	167	443171	293.96	ug/L	96 E
111) Benzyl chloride	18.553	18.553	1.008	91	1840475	330.89	ug/L	100
112) bis(2-Chloroisopropyl)...	18.980	18.980	1.031	45	467672	208.78	ug/L	98

(#) = 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\031910V3\
Data File : 3D504SLS1.D
Acq On : 19 Mar 2010 5:07 pm
Operator : CDS1
InstName : VOA3
Sample : |1202079012|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL UVM100304-08A MIX[B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 09:38:35 2010
Quant Method : C:\msdchem\1\DATA\022610V3\VOA3-8260-022610.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Mar 01 09:52:36 2010
Response via : Initial Calibration
Integrator: RTE



**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 1202066165

Client Sample: QC for batch 963120
Client ID: LCS for batch 963120
Batch ID: 963122
Run Date: 03/09/2010 20:24
Prep Date: 03/09/2010 17:00
Data File: 030910V5\SB229.D

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

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		41.6	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.9	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		48.3	ug/kg	0.300	1.00
74-83-9	Bromomethane		46.8	ug/kg	0.300	1.00
75-00-3	Chloroethane		45.4	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		48.2	ug/kg	0.300	1.00
67-64-1	Acetone		196	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		45.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		223	ug/kg	1.60	5.00
75-09-2	Methylene chloride		45.3	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		46.3	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		46.9	ug/kg	0.300	1.00
78-93-3	2-Butanone		206	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		46.1	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		45.3	ug/kg	0.300	1.00
67-66-3	Chloroform		46.3	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		47.2	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		47.6	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		47.5	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		48.5	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		46.1	ug/kg	0.300	1.00
71-43-2	Benzene		45.1	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		46.4	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		45.8	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		48.5	ug/kg	0.300	1.00
74-95-3	Dibromomethane		48.7	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		236	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		46.9	ug/kg	0.300	1.00
108-88-3	Toluene		44.0	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		47.0	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		45.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone		206	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		46.0	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		45.2	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		48.9	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		46.7	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		44.7	ug/kg	0.300	1.00

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 1202066165
Client Sample: QC for batch 963120
Client ID: LCS for batch 963120
Batch ID: 963122
Run Date: 03/09/2010 20:24
Prep Date: 03/09/2010 17:00
Data File: 030910V55B229.D

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

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		43.3	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		90.7	ug/kg	0.300	2.00
95-47-6	o-Xylene		44.8	ug/kg	0.300	1.00
100-42-5	Styrene		47.8	ug/kg	0.300	1.00
75-25-2	Bromoform		49.7	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		44.5	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		45.9	ug/kg	0.300	1.00
108-86-1	Bromobenzene		43.6	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		43.7	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		43.9	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		44.9	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		44.5	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		42.8	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		43.2	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		44.5	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		44.7	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		44.9	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		43.6	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		43.5	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		42.9	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		45.7	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		46.7	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		44.3	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B229.D
Acq On : 9 Mar 2010 8:24 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066165|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Mar 09 21:09:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1710301	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1274788	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	661108	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1710301	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1274788	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	661108	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	341801	41.29	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	82.58%			
43) Toluene-d8	9.721	9.721	0.872	98	1440724	44.19	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	88.38%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	706949	53.31	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	106.62%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	165951	41.56	ug/L	96
3) Chloromethane	4.900	4.900	0.584	50	233934	45.92	ug/L	98
4) Vinyl chloride	5.041	5.041	0.601	62	203347	48.25	ug/L	98
5) Bromomethane	5.423	5.423	0.647	94	188410	46.81	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	194213	45.44	ug/L	99
7) Trichlorofluoromethane	5.695	5.695	0.679	101	353664	48.21	ug/L	99
8) Ethyl ether	5.867	5.866	0.699	59	299253	47.38	ug/L	98
9) Acetone	6.174	6.174	0.736	43	999759	195.63	ug/L	99
10) 1,1-Dichloroethylene	6.153	6.156	0.734	61	371041	45.40	ug/L	99
11) Iodomethane	6.358	6.357	0.758	142	1883545	223.15	ug/L	99
12) Acetonitrile	6.457	6.464	0.770	41	1102682	1100.95	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1265403	226.59	ug/L	100
14) Carbon disulfide	6.435	6.435	0.767	76	3882653	237.03	ug/L	100
15) Methylene chloride	6.534	6.538	0.779	84	295878	45.32	ug/L	98
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	758175	44.56	ug/L	99
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	411118	46.26	ug/L	100
18) Vinyl acetate	6.966	6.969	0.831	43	3501982	250.25	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	516159	46.90	ug/L	100
20) 2-Butanone	7.447	7.450	0.888	43	1252437	205.70	ug/L	100
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	476637	46.11	ug/L	100
22) 2,2-Dichloropropane	7.511	7.514	0.895	77	369471	45.30	ug/L	98
23) Bromochloromethane	7.719	7.719	0.920	128	144218	47.23	ug/L	97
24) Chloroform	7.698	7.701	0.918	83	456231	46.28	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	387006	47.60	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	553280	47.84	ug/L	99
27) 1,1-Dichloropropene	8.002	8.005	0.954	75	354479	47.54	ug/L	100
28) Carbon tetrachloride	8.020	8.020	0.956	117	338087	48.48	ug/L	99
30) 1,2-Dichloroethane	8.232	8.235	0.981	62	392288	46.05	ug/L	100
31) Benzene	8.200	8.203	0.978	78	1116702	45.10	ug/L	99
32) Cyclohexene	8.246	8.246	0.983	67	524296	45.56	ug/L	99
33) n-Butyl alcohol	8.373	8.377	0.998	56	1207324	5020.74	ug/L	99
34) Trichloroethylene	8.678	8.677	1.035	95	272767	46.39	ug/L	99
35) 1,2-Dichloropropane	8.929	8.932	1.065	63	320432	45.82	ug/L	100
36) Methylcyclohexane	8.830	8.826	1.053	83	499833	46.52	ug/L	99
37) Dibromomethane	9.059	9.059	1.080	93	173160	48.72	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B229.D
Acq On : 9 Mar 2010 8:24 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066165|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Mar 09 21:09:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	9.109	9.112	1.086	83	352651	48.54	ug/L 100
39) 2-Chloroethylvinyl ether	9.250	9.254	1.103	63	474370	212.32	ug/L 100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	466495	46.90	ug/L 98
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	719584	236.05	ug/L 99
44) Toluene	9.788	9.788	0.878	91	1203347	43.97	ug/L 100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	438375	47.03	ug/L 100
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	210443	45.57	ug/L 99
47) 2-Hexanone	10.280	10.279	0.923	43	1709092	206.47	ug/L 99
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	456062	45.96	ug/L 100
49) Tetrachloroethylene	10.290	10.290	0.924	164	226674	45.22	ug/L 100
50) Dibromochloromethane	10.587	10.583	0.950	129	268442	48.86	ug/L 100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	250086	46.74	ug/L 99
52) Chlorobenzene	11.171	11.174	1.003	112	793965	44.72	ug/L 99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	281013	46.73	ug/L 99
54) Ethylbenzene	11.178	11.181	1.003	91	1350390	43.25	ug/L 100
55) m,p-Xylenes	11.280	11.280	1.012	106	1073039	90.72	ug/L 99
56) o-Xylene	11.698	11.701	1.050	106	535133	44.78	ug/L 100
57) Styrene	11.712	11.715	1.051	104	873435	47.84	ug/L 93
59) Bromoform	12.002	12.005	0.895	173	178800	49.68	ug/L 99
60) Isopropylbenzene	12.012	12.016	0.896	105	1361809	44.89	ug/L 99
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	349082	44.46	ug/L 100
63) 1,2,3-Trichloropropane	12.451	12.454	0.928	110	96269	45.92	ug/L 93
64) Bromobenzene	12.461	12.465	0.929	156	332725	43.61	ug/L 100
65) n-Propylbenzene	12.415	12.415	0.926	91	1599735	43.68	ug/L 99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1153260	44.52	ug/L 100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	334002	43.92	ug/L # 80
68) 4-Chlorotoluene	12.695	12.698	0.946	91	996794	42.81	ug/L 100
69) tert-Butylbenzene	12.900	12.900	0.962	134	257885	43.24	ug/L 99
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1172397	44.48	ug/L 98
71) sec-Butylbenzene	13.116	13.119	0.978	105	1498711	44.71	ug/L 99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1197324	44.94	ug/L 100
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	631093	43.56	ug/L 100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	640661	43.49	ug/L 100
75) n-Butylbenzene	13.653	13.653	1.018	91	1122311	42.90	ug/L 99
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	616479	44.26	ug/L 100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	68240	45.66	ug/L 95
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	416380	44.39	ug/L 100
79) Hexachlorobutadiene	15.686	15.686	1.169	225	258482	45.37	ug/L 99
80) Naphthalene	15.989	15.988	1.192	128	982465	46.11	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	384479	46.97	ug/L 100
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	6.075	6.071	0.724		0m	N.D.	d
87) Isopropyl Alcohol	6.177	6.163	0.736		0m	N.D.	d
88) Allyl chloride	6.457	6.425	0.770		0m	N.D.	d
89) tert-Butyl Alcohol	6.464	6.460	0.771		0m	N.D.	d
90) Acrylonitrile	6.633	6.747	0.791		0m	N.D.	d
91) Isopropyl ether	6.966	6.920	0.831		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.090	7.104	0.845		0m	N.D.	d
93) Ethyl tert-butyl ether	7.058	7.192	0.841		0m	N.D.	d
94) Ethyl acetate	7.376	7.383	0.879		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B229.D
Acq On : 9 Mar 2010 8:24 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066165|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Mar 09 21:09:26 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.663	7.585	0.914		0m	N.D.	d
96) Methacrylonitrile	7.670	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.712	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.670	7.857	0.914		0m	N.D.	d
99) Methyl tert-amyl ether	8.200	8.122	0.978		0m	N.D.	d
100) Methyl methacrylate	8.830	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	9.357	9.342	1.116		0m	N.D.	d
104) Ethyl methacrylate	9.862	9.859	0.885		0m	N.D.	d
106) 1-Chlorohexane	11.029	10.980	0.822		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	12.016	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.362	12.267	0.922		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.017	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.554	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.918	13.929	1.038		0m	N.D.	d

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 1202066166
 Client Sample: QC for batch 963120
 Client ID: LCS for batch 963120
 Batch ID: 963122
 Run Date: 03/09/2010 20:52
 Prep Date: 03/09/2010 17:00
 Data File: 030910V5\5B230sls.D

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

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 1202066166
 Client Sample: QC for batch 963120
 Client ID: LCS for batch 963120
 Batch ID: 963122
 Run Date: 03/09/2010 20:52
 Prep Date: 03/09/2010 17:00
 Data File: 030910V55B230sls.D

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

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	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		308	ug/kg	1.60	5.00
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B230s1s.D
Acq On : 9 Mar 2010 8:52 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066166|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 08:13:59 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1740286	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1283500	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	652615	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1740286	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1283500	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	652615	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	338355	40.17	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	80.34%		
43) Toluene-d8	9.721	9.721	0.872	98	1455863	44.35	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	88.70%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	695800	53.15	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	106.30%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.167	6.174	0.735		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.071	6.156	0.724		0m	N.D.	d	
11) Iodomethane	6.351	6.357	0.757		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.368	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.542	6.538	0.780		0m	N.D.	d	
16) tert-Butyl methyl ether	6.644	6.640	0.792		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	7.100	6.969	0.847		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.500	7.507	0.894		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.857	7.924	0.937		0m	N.D.	d	
27) 1,1-Dichloropropene	8.126	8.005	0.969		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.172	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.798	8.826	1.049		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B230sls.D
Acq On : 9 Mar 2010 8:52 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066166|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 08:13:59 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131		0m	N.D.	d
42) 4-Methyl-2-pentanone	9.523	9.526	0.855		0m	N.D.	d
44) Toluene	9.784	9.788	0.878		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.975	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.290	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.283	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.364	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.775	10.771	0.967		0m	N.D.	d
52) Chlorobenzene	11.171	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.213	11.216	1.006		0m	N.D.	d
54) Ethylbenzene	11.167	11.181	1.002		0m	N.D.	d
55) m,p-Xylenes	11.277	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.705	11.701	1.050		0m	N.D.	d
57) Styrene	11.712	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.019	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.355	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.469	12.465	0.930		0m	N.D.	d
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.599	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.903	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.112	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.229	13.229	0.986		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.356	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.437	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.657	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.855	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165		0m	N.D.	d
79) Hexachlorobutadiene	15.693	15.686	1.170		0m	N.D.	d
80) Naphthalene	15.981	15.988	1.191		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	260898	260.39 ug/L	98
86) Trichlorotrifluoroethane	6.068	6.071	0.723	85	481055	308.30 ug/L	98
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2420539	211.33 ug/L	93
89) tert-Butyl Alcohol	6.432	6.460	0.767	59	1140	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	622835	247.32 ug/L	99
91) Isopropyl ether	7.107	6.920	0.847	45	109	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	451871	61.14 ug/L	99
93) Ethyl tert-butyl ether	7.376	7.192	0.879	59	1106	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1557096	228.30 ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B230sls.D
Acq On : 9 Mar 2010 8:52 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066166|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 08:13:59 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.581	7.585	0.904	54	242975	250.67	ug/L 100
96) Methacrylonitrile	7.677	7.680	0.915	41	1291677	242.48	ug/L 100
97) Tetrahydrofuran	7.712	7.716	0.919	42	585651	243.27	ug/L 100
98) Isobutyl alcohol	7.857	7.857	0.937	41	629477	2482.15	ug/L 100
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	8.801	8.801	1.049	69	1016159	252.82	ug/L 99
101) 1,4-Dioxane	8.957	8.957	1.068	88	171378	2389.27	ug/L 100
102) 2-Nitropropane	9.342	9.342	1.114	43	494371	242.53	ug/L 99
104) Ethyl methacrylate	9.859	9.859	0.885	69	1978000	261.08	ug/L 100
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	661993	271.27	ug/L 99
108) Cyclohexanone	12.267	12.267	0.915	42	978477	4877.59	ug/L 99 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	620661	269.99	ug/L 100
110) Pentachloroethane	13.017	13.017	0.970	167	818100	256.98	ug/L 100
111) Benzyl chloride	13.565	13.565	1.011	91	3109579	266.09	ug/L 100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	1001651	232.96	ug/L 99

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

Data Path : C:\msdchem\1\DATA\030910V5\
Data File : 5B230sls.D
Acq On : 9 Mar 2010 8:52 pm
Operator : CDS1
InstName : VOA5
Sample : |1202066166|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 30 Sample Multiplier: 1

[illegible]

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 1202077719
 Client Sample: QC for batch 963120
 Client ID: LCS for batch 963120
 Batch ID: 963122
 Run Date: 03/10/2010 08:18
 Prep Date: 03/10/2010 06:00
 Data File: 031010V55B304LP.D

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

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQ1/LOQ
75-71-8	Dichlorodifluoromethane		41.8	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.9	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		50.4	ug/kg	0.300	1.00
74-83-9	Bromomethane		47.5	ug/kg	0.300	1.00
75-00-3	Chloroethane		46.9	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		51.1	ug/kg	0.300	1.00
67-64-1	Acetone		212	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		49.0	ug/kg	0.300	1.00
74-88-4	Iodomethane		232	ug/kg	1.60	5.00
75-09-2	Methylene chloride		46.4	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		247	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		48.6	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		48.8	ug/kg	0.300	1.00
78-93-3	2-Butanone		221	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		48.1	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		50.2	ug/kg	0.300	1.00
67-66-3	Chloroform		47.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		48.3	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		50.2	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		50.3	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		51.7	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		46.8	ug/kg	0.300	1.00
71-43-2	Benzene		46.6	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		48.7	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		46.8	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		49.9	ug/kg	0.300	1.00
74-95-3	Dibromomethane		49.0	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		244	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		48.2	ug/kg	0.300	1.00
108-88-3	Toluene		45.1	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		47.7	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		45.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone		219	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		46.1	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		47.4	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		49.0	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		46.9	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		45.9	ug/kg	0.300	1.00

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150
Lab Sample ID: 1202077719
Client Sample: QC for batch 963120
Client ID: LCS for batch 963120
Batch ID: 963122
Run Date: 03/10/2010 08:18
Prep Date: 03/10/2010 06:00
Data File: 031010V5\5B304LP.D

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

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		44.4	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		93.0	ug/kg	0.300	2.00
95-47-6	o-Xylene		46.0	ug/kg	0.300	1.00
100-42-5	Styrene		48.6	ug/kg	0.300	1.00
75-25-2	Bromoform		50.9	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		45.1	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		46.4	ug/kg	0.300	1.00
108-86-1	Bromobenzene		44.5	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		45.5	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		45.2	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		46.3	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		45.9	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		44.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		44.9	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		45.8	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		46.7	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		47.2	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		44.6	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		44.6	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		45.1	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		46.1	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		47.5	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		45.2	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B304LP.D
Acq On : 10 Mar 2010 8:18 am
Operator : CDS1
InstName : VOA5
Sample : |1202077719|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 09:18:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1608873	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1214523	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	628122	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1608873	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1214523	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	628122	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	318899	40.95	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	81.90%			
43) Toluene-d8	9.721	9.721	0.872	98	1342620	43.23	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	86.46%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	694002	55.08	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	110.16%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	157184	41.84	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	220152	45.94	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	199884	50.42	ug/L	98
5) Bromomethane	5.423	5.423	0.647	94	179692	47.46	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	188653	46.92	ug/L	100
7) Trichlorofluoromethane	5.705	5.695	0.680	101	352371	51.07	ug/L	99
8) Ethyl ether	5.866	5.866	0.699	59	268326	45.16	ug/L	96
9) Acetone	6.174	6.174	0.736	43	1017138	211.58	ug/L	99
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	376681	49.00	ug/L	99
11) Iodomethane	6.358	6.357	0.758	142	1844004	232.24	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	1059737	1124.78	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1204991	229.37	ug/L	100
14) Carbon disulfide	6.435	6.435	0.767	76	3808335	247.15	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	285149	46.44	ug/L	97
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	721088	45.05	ug/L	100
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	406643	48.64	ug/L	99
18) Vinyl acetate	6.966	6.969	0.831	43	3542686	269.12	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	504683	48.75	ug/L	100
20) 2-Butanone	7.447	7.450	0.888	43	1266037	221.04	ug/L	99
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	468040	48.13	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	385026	50.18	ug/L	100
23) Bromochloromethane	7.716	7.719	0.920	128	138837	48.33	ug/L	98
24) Chloroform	7.698	7.701	0.918	83	444049	47.89	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	383916	50.20	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	554972	51.01	ug/L	99
27) 1,1-Dichloropropene	8.005	8.005	0.954	75	352529	50.26	ug/L	99
28) Carbon tetrachloride	8.023	8.020	0.957	117	339007	51.67	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	374571	46.75	ug/L	100
31) Benzene	8.200	8.203	0.978	78	1086001	46.63	ug/L	98
32) Cyclohexene	8.246	8.246	0.983	67	525122	48.51	ug/L	100
33) n-Butyl alcohol	8.377	8.377	0.999	56	1155892	5110.65	ug/L	99
34) Trichloroethylene	8.677	8.677	1.035	95	269375	48.70	ug/L	99
35) 1,2-Dichloropropane	8.928	8.932	1.065	63	307611	46.76	ug/L	100
36) Methylcyclohexane	8.829	8.826	1.053	83	494976	48.97	ug/L	98
37) Dibromomethane	9.056	9.059	1.080	93	163784	48.99	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B304LP.D
Acq On : 10 Mar 2010 8:18 am
Operator : CDS1
InstName : VOA5
Sample : |1202077719|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 09:18:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	9.109	9.112	1.086	83	341238	49.93	ug/L 100
39) 2-Chloroethylvinyl ether	9.250	9.254	1.103	63	423823	201.66	ug/L 100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	451151	48.22	ug/L 99
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	708103	243.81	ug/L 100
44) Toluene	9.784	9.788	0.878	91	1175160	45.07	ug/L 100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	423291	47.66	ug/L 99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	200631	45.60	ug/L 99
47) 2-Hexanone	10.279	10.279	0.923	43	1726030	218.86	ug/L 100
48) 1,3-Dichloropropane	10.361	10.364	0.930	76	436113	46.13	ug/L 100
49) Tetrachloroethylene	10.290	10.290	0.924	164	226445	47.41	ug/L 98
50) Dibromochloromethane	10.584	10.583	0.950	129	256411	48.99	ug/L 100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	238904	46.86	ug/L 100
52) Chlorobenzene	11.171	11.174	1.003	112	775829	45.87	ug/L 100
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	272297	47.53	ug/L 100
54) Ethylbenzene	11.178	11.181	1.003	91	1320696	44.39	ug/L 99
55) m,p-Xylenes	11.280	11.280	1.012	106	1048448	93.04	ug/L 99
56) o-Xylene	11.697	11.701	1.050	106	523224	45.95	ug/L 99
57) Styrene	11.712	11.715	1.051	104	845185	48.59	ug/L 94
59) Bromoform	12.005	12.005	0.895	173	174044	50.89	ug/L 99
60) Isopropylbenzene	12.012	12.016	0.896	105	1335616	46.34	ug/L 100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	336200	45.07	ug/L 99
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	92441	46.41	ug/L 94
64) Bromobenzene	12.461	12.465	0.929	156	322343	44.47	ug/L 99
65) n-Propylbenzene	12.415	12.415	0.926	91	1583658	45.51	ug/L 99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1129717	45.90	ug/L 100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	326363	45.17	ug/L # 81
68) 4-Chlorotoluene	12.695	12.698	0.946	91	979757	44.29	ug/L 100
69) tert-Butylbenzene	12.900	12.900	0.962	134	254396	44.90	ug/L 98
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1147779	45.83	ug/L 99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1487739	46.71	ug/L 99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1193856	47.16	ug/L 99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	613316	44.55	ug/L 100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	623565	44.56	ug/L 100
75) n-Butylbenzene	13.653	13.653	1.018	91	1122081	45.14	ug/L 100
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	598621	45.24	ug/L 99
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	65431	46.08	ug/L 97
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	413558	46.41	ug/L 100
79) Hexachlorobutadiene	15.686	15.686	1.169	225	252725	46.69	ug/L 100
80) Naphthalene	15.988	15.988	1.192	128	958716	47.36	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	374390	48.14	ug/L 100
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.085	6.082	0.726		0m	N.D.	d
86) Trichlorotrifluoroethane	6.060	6.071	0.723		0m	N.D.	d
87) Isopropyl Alcohol	6.167	6.163	0.735		0m	N.D.	d
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d
89) tert-Butyl Alcohol	6.460	6.460	0.770		0m	N.D.	d
90) Acrylonitrile	6.750	6.747	0.805		0m	N.D.	d
91) Isopropyl ether	6.923	6.920	0.825		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847		0m	N.D.	d
93) Ethyl tert-butyl ether	7.068	7.192	0.843		0m	N.D.	d
94) Ethyl acetate	7.380	7.383	0.880		0m	N.D.	d

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B304LP.D
Acq On : 10 Mar 2010 8:18 am
Operator : CDS1
InstName : VOA5
Sample : |1202077719|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 10 09:18:36 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.574	7.585	0.903		0m	N.D.	d
96) Methacrylonitrile	7.677	7.680	0.915		0m	N.D.	d
97) Tetrahydrofuran	7.712	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.857	7.857	0.937		0m	N.D.	d
99) Methyl tert-amyl ether	8.196	8.122	0.977		0m	N.D.	d
100) Methyl methacrylate	8.826	8.801	1.052		0m	N.D.	d
101) 1,4-Dioxane	8.960	8.957	1.068		0m	N.D.	d
102) 2-Nitropropane	9.406	9.342	1.121		0m	N.D.	d
104) Ethyl methacrylate	9.855	9.859	0.884		0m	N.D.	d
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.143	12.136	0.905		0m	N.D.	d
108) Cyclohexanone	12.263	12.267	0.914		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.013	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.565	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.932	13.929	1.039		0m	N.D.	d

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150		Matrix: SOIL	
Lab Sample ID: 1202077720			
Client Sample: QC for batch 963120	Client: LANL010	Project: QC	
Client ID: LCS for batch 963120	Method: SW846 8260B	SOP Ref: GL-OA-E-038	
Batch ID: 963122	Inst: VOA5.I	Dilution: 1	
Run Date: 03/10/2010 08:49	Analyst: CDS1	Purge Vol: 5 mL	
Prep Date: 03/10/2010 06:00	Aliquot: 5 g	Final Volume: 5 mL	
Data File: 031010V55B305SLSP.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-Dichloroethylen	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: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077720

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: LCS for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.I

Dilution: 1

Run Date: 03/10/2010 08:49

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/10/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031010V55B30SSLSP.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		345	ug/kg	1.60	5.00
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B305SLSP.D
Acq On : 10 Mar 2010 8:49 am
Operator : CDS1
InstName : VOA5
Sample : |1202077720|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

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

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1609574	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1196444	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	611684	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1609574	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1196444	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	611684	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	311321	39.96	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	79.92%			
43) Toluene-d8	9.721	9.721	0.872	98	1336102	43.67	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	87.34%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	673725	54.91	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	109.82%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	5.423	5.423	0.647		0m	N.D.	d	
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.695	5.695	0.679		0m	N.D.	d	
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.170	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.142	6.156	0.732		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.358	6.365	0.758		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.538	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.641	6.640	0.792		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800		0m	N.D.	d	
18) Vinyl acetate	6.966	6.969	0.831		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.500	7.507	0.894		0m	N.D.	d	
22) 2,2-Dichloropropane	7.514	7.514	0.896		0m	N.D.	d	
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.701	7.701	0.918		0m	N.D.	d	
25) 1,1,1-Trichloroethane	7.899	7.906	0.942		0m	N.D.	d	
26) Cyclohexane	7.949	7.924	0.948		0m	N.D.	d	
27) 1,1-Dichloropropene	8.006	8.005	0.954		0m	N.D.	d	
28) Carbon tetrachloride	8.027	8.020	0.957		0m	N.D.	d	
30) 1,2-Dichloroethane	8.228	8.235	0.981		0m	N.D.	d	
31) Benzene	8.197	8.203	0.977		0m	N.D.	d	
32) Cyclohexene	8.168	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.677	8.677	1.035		0m	N.D.	d	
35) 1,2-Dichloropropane	8.932	8.932	1.065		0m	N.D.	d	
36) Methylcyclohexane	8.805	8.826	1.050		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B305SLSP.D
Acq On : 10 Mar 2010 8:49 am
Operator : CDS1
InstName : VOA5
Sample : |1202077720|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

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

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	9.116	9.112	1.087		0m	N.D.	d
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.480	9.487	1.130		0m	N.D.	d
42) 4-Methyl-2-pentanone	9.526	9.526	0.855		0m	N.D.	d
44) Toluene	9.788	9.788	0.878		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.283	10.173	0.923		0m	N.D.	d
47) 2-Hexanone	10.279	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.361	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.294	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	10.573	10.583	0.949		0m	N.D.	d
51) 1,2-Dibromoethane	10.771	10.771	0.967		0m	N.D.	d
52) Chlorobenzene	11.171	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.220	11.216	1.007		0m	N.D.	d
54) Ethylbenzene	11.171	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.280	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.694	11.701	1.050		0m	N.D.	d
57) Styrene	11.708	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.016	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.458	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.596	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.695	12.698	0.946		0m	N.D.	d
69) tert-Butylbenzene	12.900	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.119	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.229	13.229	0.986		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.349	13.349	0.995		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.437	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.657	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.862	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	14.697	14.704	1.096		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164		0m	N.D.	d
79) Hexachlorobutadiene	15.693	15.686	1.170		0m	N.D.	d
80) Naphthalene	15.989	15.988	1.192		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	257213	276.52	ug/L 97
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	497996	345.07	ug/L 100
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2403361	226.87	ug/L 93
89) tert-Butyl Alcohol	6.450	6.460	0.769	59	107	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	602640	258.74	ug/L 99
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	454617	66.50	ug/L 100
93) Ethyl tert-butyl ether	7.383	7.192	0.880	59	630	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1513153	239.87	ug/L 100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B305SLSP.D
Acq On : 10 Mar 2010 8:49 am
Operator : CDS1
InstName : VOA5
Sample : |1202077720|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

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

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	7.581	7.585	0.904	54	235817	263.04	ug/L	100
96) Methacrylonitrile	7.677	7.680	0.915	41	1245972	252.90	ug/L	100
97) Tetrahydrofuran	7.712	7.716	0.919	42	571214	256.55	ug/L	99
98) Isobutyl alcohol	7.857	7.857	0.937	41	625201	2665.49	ug/L	100
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	975870	262.51	ug/L	99
101) 1,4-Dioxane	8.953	8.957	1.067	88	165971	2501.79	ug/L	100
102) 2-Nitropropane	9.339	9.342	1.113	43	479394	253.94	ug/L	99
104) Ethyl methacrylate	9.859	9.859	0.885	69	1896393	268.52	ug/L	100
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	650555	284.42	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	992507	5278.60	ug/L	98 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	606422	281.45	ug/L	100
110) Pentachloroethane	13.017	13.017	0.970	167	921216	308.74	ug/L	100
111) Benzyl chloride	13.565	13.565	1.011	91	3253404	297.02	ug/L	100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	991143	245.94	ug/L	99

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077722

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: LCS for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.1

Dilution: 1

Run Date: 03/10/2010 19:59

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/10/2010 17:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031010V5SB330LK.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		29.2	ug/kg	0.340	1.00
74-87-3	Chloromethane		39.1	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		42.1	ug/kg	0.300	1.00
74-83-9	Bromomethane		43.0	ug/kg	0.300	1.00
75-00-3	Chloroethane		42.2	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		44.5	ug/kg	0.300	1.00
67-64-1	Acetone		171	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		43.2	ug/kg	0.300	1.00
74-88-4	Iodomethane		213	ug/kg	1.60	5.00
75-09-2	Methylene chloride		43.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		222	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		44.7	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		45.3	ug/kg	0.300	1.00
78-93-3	2-Butanone		181	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		44.9	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		43.9	ug/kg	0.300	1.00
67-66-3	Chloroform		44.7	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		44.8	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		45.6	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		45.9	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		46.6	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		44.2	ug/kg	0.300	1.00
71-43-2	Benzene		43.5	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		44.4	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		44.4	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		46.5	ug/kg	0.300	1.00
74-95-3	Dibromomethane		45.9	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		207	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		44.9	ug/kg	0.300	1.00
108-88-3	Toluene		41.6	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		44.4	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		42.4	ug/kg	0.300	1.00
591-78-6	2-Hexanone		179	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		42.7	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		42.5	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		45.6	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		43.5	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		42.6	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 1202077722
 Client Sample: QC for batch 963120
 Client ID: LCS for batch 963120
 Batch ID: 963122
 Run Date: 03/10/2010 19:59
 Prep Date: 03/10/2010 17:00
 Data File: 031010V55B330LK.D

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

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		41.2	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		85.3	ug/kg	0.300	2.00
95-47-6	o-Xylene		42.2	ug/kg	0.300	1.00
100-42-5	Styrene		45.3	ug/kg	0.300	1.00
75-25-2	Bromoform		46.1	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		40.4	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		41.6	ug/kg	0.300	1.00
108-86-1	Bromobenzene		41.4	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		41.7	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		42.2	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		43.0	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		42.5	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		41.5	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		41.3	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		42.4	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		42.9	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		43.3	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		41.6	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		41.3	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		41.5	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		40.0	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		44.2	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		42.0	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B330LK.D
Acq On : 10 Mar 2010 7:59 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077722|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 21:38:56 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1483847	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1122837	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	573907	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1483847	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1122837	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	573907	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	274198	38.18	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	76.36%		
43) Toluene-d8	9.721	9.721	0.872	98	1220735	42.51	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	85.02%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	654519	56.86	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	113.72%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	101182	29.21	ug/L	98
3) Chloromethane	4.900	4.900	0.584	50	173368	39.13	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	153836	42.07	ug/L	99
5) Bromomethane	5.423	5.423	0.647	94	150059	42.97	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	156576	42.23	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	283112	44.49	ug/L	100
8) Ethyl ether	5.867	5.866	0.699	59	239024	43.62	ug/L	100
9) Acetone	6.174	6.174	0.736	43	757051	170.75	ug/L	100
10) 1,1-Dichloroethylene	6.153	6.156	0.734	61	306316	43.20	ug/L	100
11) Iodomethane	6.358	6.357	0.758	142	1562083	213.31	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	873174	1004.85	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	990255	204.38	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	3159977	222.35	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	248859	43.91	ug/L	96
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	613227	41.54	ug/L	100
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	344303	44.66	ug/L	99
18) Vinyl acetate	6.966	6.969	0.831	43	2822300	232.46	ug/L	98
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	432363	45.28	ug/L	99
20) 2-Butanone	7.447	7.450	0.888	43	956443	181.06	ug/L	99
21) cis-1,2-Dichloroethylene	7.503	7.507	0.895	61	402731	44.91	ug/L	98
22) 2,2-Dichloropropane	7.511	7.514	0.895	77	310970	43.94	ug/L	97
23) Bromochloromethane	7.719	7.719	0.920	128	118746	44.82	ug/L	95
24) Chloroform	7.701	7.701	0.918	83	382053	44.67	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	321617	45.60	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	460927	45.94	ug/L	98
27) 1,1-Dichloropropene	8.006	8.005	0.954	75	296687	45.86	ug/L	99
28) Carbon tetrachloride	8.020	8.020	0.956	117	282009	46.61	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	326770	44.22	ug/L	100
31) Benzene	8.204	8.203	0.978	78	934398	43.50	ug/L	98
32) Cyclohexene	8.246	8.246	0.983	67	433678	43.44	ug/L	100
33) n-Butyl alcohol	8.377	8.377	0.999	56	901626	4315.82	ug/L	99
34) Trichloroethylene	8.678	8.677	1.035	95	226307	44.36	ug/L	100
35) 1,2-Dichloropropane	8.932	8.932	1.065	63	269157	44.36	ug/L	99
36) Methylcyclohexane	8.826	8.826	1.052	83	411366	44.13	ug/L	99
37) Dibromomethane	9.063	9.059	1.081	93	141428	45.86	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B330LK.D
Acq On : 10 Mar 2010 7:59 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077722|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 21:38:56 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	9.112	9.112	1.086	83	293205	46.52 ug/L	100
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	387460	199.89 ug/L	99
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	387511	44.91 ug/L	99
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	556486	207.25 ug/L	98
44) Toluene	9.788	9.788	0.878	91	1002732	41.60 ug/L	100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	364172	44.35 ug/L	99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	172640	42.44 ug/L	99
47) 2-Hexanone	10.280	10.279	0.923	43	1308607	179.48 ug/L	99
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	373143	42.69 ug/L	98
49) Tetrachloroethylene	10.294	10.290	0.924	164	187665	42.50 ug/L	99
50) Dibromochloromethane	10.587	10.583	0.950	129	220711	45.61 ug/L	100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	204794	43.45 ug/L	99
52) Chlorobenzene	11.174	11.174	1.003	112	666301	42.61 ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	234232	44.22 ug/L	99
54) Ethylbenzene	11.178	11.181	1.003	91	1131745	41.15 ug/L	100
55) m,p-Xylenes	11.280	11.280	1.012	106	888687	85.30 ug/L	100
56) o-Xylene	11.701	11.701	1.050	106	444481	42.22 ug/L	99
57) Styrene	11.715	11.715	1.051	104	727969	45.27 ug/L	93
59) Bromoform	12.005	12.005	0.895	173	144056	46.10 ug/L	100
60) Isopropylbenzene	12.012	12.016	0.896	105	1132323	43.00 ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	275533	40.42 ug/L	100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	75771	41.64 ug/L #	84
64) Bromobenzene	12.461	12.465	0.929	156	274128	41.39 ug/L	98
65) n-Propylbenzene	12.415	12.415	0.926	91	1326719	41.73 ug/L	100
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	956618	42.54 ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	278381	42.17 ug/L #	81
68) 4-Chlorotoluene	12.698	12.698	0.947	91	839263	41.52 ug/L	100
69) tert-Butylbenzene	12.903	12.900	0.962	134	214004	41.34 ug/L	99
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	971115	42.44 ug/L	99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1248605	42.91 ug/L	100
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1000703	43.27 ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	523795	41.64 ug/L	100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	528434	41.33 ug/L	100
75) n-Butylbenzene	13.653	13.653	1.018	91	943032	41.52 ug/L	100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	507428	41.97 ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	51948	40.04 ug/L	96
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	347990	42.74 ug/L	100
79) Hexachlorobutadiene	15.686	15.686	1.169	225	214619	43.40 ug/L	100
80) Naphthalene	15.989	15.988	1.192	128	801862	43.36 ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	321964	45.31 ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.174	6.163	0.736		0m	N.D. d	
88) Allyl chloride	6.460	6.425	0.770		0m	N.D. d	
89) tert-Butyl Alcohol	6.471	6.460	0.771		0m	N.D. d	
90) Acrylonitrile	6.633	6.747	0.791		0m	N.D. d	
91) Isopropyl ether	6.916	6.920	0.825		0m	N.D. d	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	7.072	7.192	0.843		0m	N.D. d	
94) Ethyl acetate	7.376	7.383	0.879		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B330LK.D
Acq On : 10 Mar 2010 7:59 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077722|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 21:38:56 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

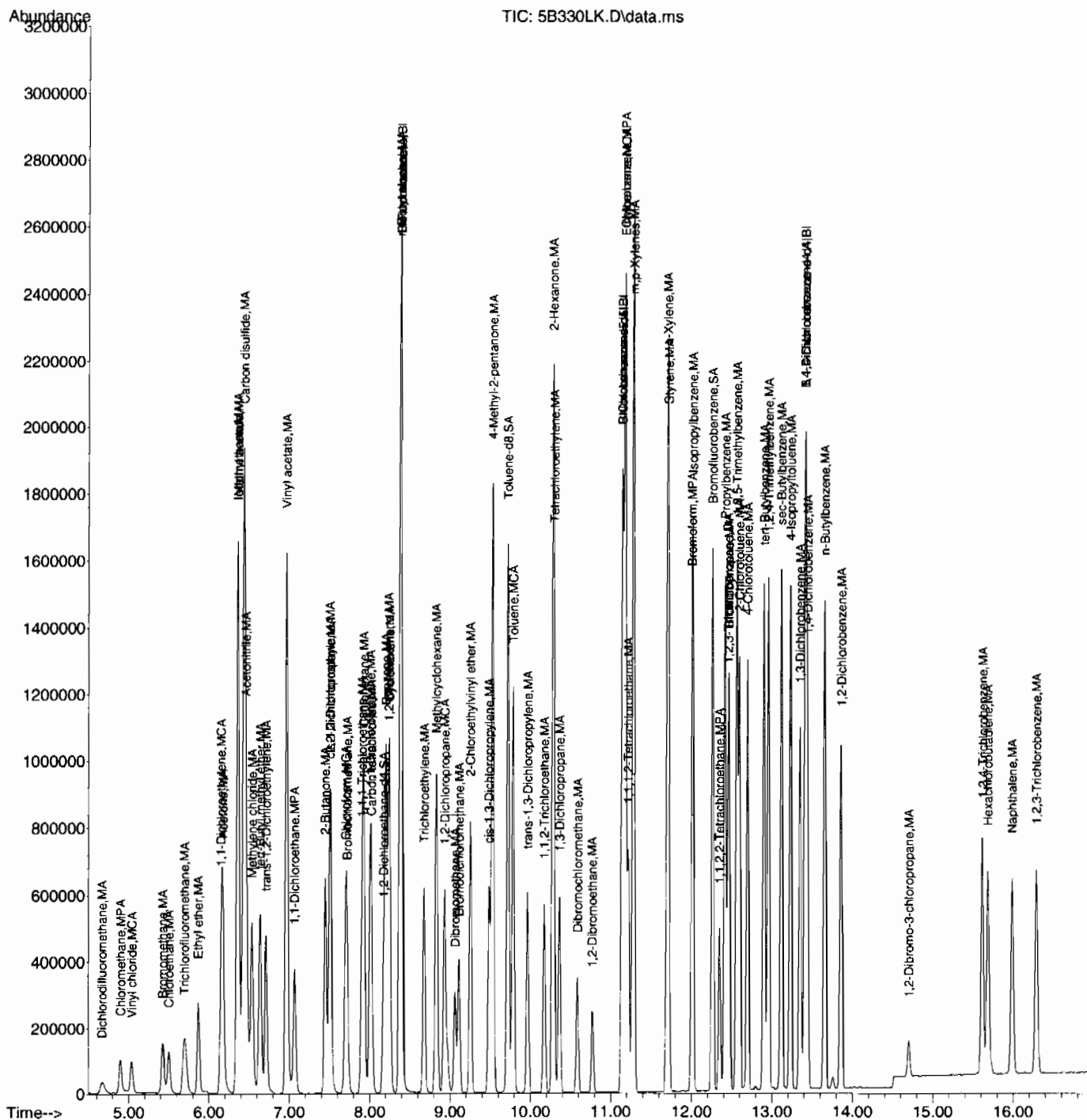
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.454	7.585	0.889		0m	N.D.	d
96) Methacrylonitrile	7.511	7.680	0.895		0m	N.D.	d
97) Tetrahydrofuran	7.701	7.716	0.918		0m	N.D.	d
98) Isobutyl alcohol	7.832	7.857	0.934		0m	N.D.	d
99) Methyl tert-amyl ether	8.122	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.826	8.801	1.052		0m	N.D.	d
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	9.364	9.342	1.116		0m	N.D.	d
104) Ethyl methacrylate	9.852	9.859	0.884		0m	N.D.	d
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.009	12.136	0.895		0m	N.D.	d
108) Cyclohexanone	12.362	12.267	0.922		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.419	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.020	13.017	0.971		0m	N.D.	d
111) Benzyl chloride	13.568	13.565	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.929	13.929	1.038		0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B330LK.D
Acq On : 10 Mar 2010 7:59 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077722|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0220-01E+0308-01
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 10 21:38:56 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077723

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: LCS for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.I

Dilution: 1

Run Date: 03/10/2010 20:25

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/10/2010 17:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031010V55B331SLSK.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: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077723

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: LCS for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.I

Dilution: 1

Run Date: 03/10/2010 20:25

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/10/2010 17:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031010V55B331SLSK.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		302	ug/kg	1.60	5.00
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B331SLSK.D
Acq On : 10 Mar 2010 8:25 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077723|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 07:16:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1513110	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1129367	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	570266	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1513110	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1129367	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	570266	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	276575	37.77	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	75.54%			
43) Toluene-d8	9.724	9.721	0.873	98	1228326	42.53	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	85.06%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	647597	56.62	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	113.24%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	6.071	5.866	0.724		0m	N.D.	d	
9) Acetone	6.174	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.071	6.156	0.724		0m	N.D.	d	
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.425	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.534	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.640	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	7.097	6.969	0.846		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.510	7.450	0.895		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.510	7.507	0.895		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.698	7.701	0.917		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.857	7.924	0.936		0m	N.D.	d	
27) 1,1-Dichloropropene	8.126	8.005	0.968		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.172	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.394	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.681	8.677	1.035		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.801	8.826	1.049		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B331SLSK.D
Acq On : 10 Mar 2010 8:25 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077723|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 07:16:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.484	9.487	1.130		0m	N.D.	d
42) 4-Methyl-2-pentanone	9.530	9.526	0.855		0m	N.D.	d
44) Toluene	9.791	9.788	0.879		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.972	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.290	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.279	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.368	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.293	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.781	10.771	0.968		0m	N.D.	d
52) Chlorobenzene	11.174	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.284	11.280	1.013		0m	N.D.	d
56) o-Xylene	11.694	11.701	1.050		0m	N.D.	d
57) Styrene	11.712	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.019	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.352	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.468	12.465	0.930		0m	N.D.	d
65) n-Propylbenzene	12.412	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937		0m	N.D.	d
67) 2-Chlorotoluene	12.603	12.596	0.940		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.903	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.229	13.229	0.986		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.352	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.437	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.653	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.851	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.605	15.619	1.163		0m	N.D.	d
79) Hexachlorobutadiene	15.678	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.981	15.988	1.191		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	220366	253.41	ug/L 97
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	409033	301.50	ug/L 98
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.425	6.425	0.766	41	2168065	217.71	ug/L 93
89) tert-Butyl Alcohol	0.000	6.460	0.000		0m	N.D.	d
90) Acrylonitrile	6.743	6.747	0.804	53	520967	237.93	ug/L 99
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.107	7.104	0.847	53	396608	61.72	ug/L 100
93) Ethyl tert-butyl ether	7.376	7.192	0.879	59	1108	N.D.	
94) Ethyl acetate	7.383	7.383	0.880	43	1311920	221.23	ug/L 99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B331SLSK.D
Acq On : 10 Mar 2010 8:25 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077723|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 07:16:44 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	7.585	7.585	0.904	54	201436	239.01	ug/L	100
96) Methacrylonitrile	7.680	7.680	0.915	41	1089433	235.22	ug/L	100
97) Tetrahydrofuran	7.712	7.716	0.919	42	486673	232.51	ug/L	99
98) Isobutyl alcohol	7.857	7.857	0.936	41	511513	2319.82	ug/L	100
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	853082	244.11	ug/L	98
101) 1,4-Dioxane	8.960	8.957	1.068	88	135501	2172.71	ug/L	100
102) 2-Nitropropane	9.342	9.342	1.113	43	409817	231.55	ug/L	100
104) Ethyl methacrylate	9.859	9.859	0.885	69	1671912	250.80	ug/L	98
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	561464	263.30	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	818414	4668.82	ug/L	98 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	520799	259.27	ug/L	99
110) Pentachloroethane	13.016	13.017	0.970	167	762750	274.19	ug/L	100
111) Benzyl chloride	13.565	13.565	1.011	91	2582465	252.89	ug/L	100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	827293	220.19	ug/L	100

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

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B331SLSK.D
Acq On : 10 Mar 2010 8:25 pm
Operator : CDS1
InstName : VOA5
Sample : |1202077723|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 31 Sample Multiplier: 1

TIC: 5B331.SLSK.D\data.ms

Abundance

Time-->

Labels:

- Acrifluorfluoroethane.B
- Acrylonitrile.B
- 2-Chloro-1,3-butadiene.B
- Ethyl acetate.B
- Methacrylonitrile.B
- Isobutyl alcohol.B
- 1,2-Dichloroethane-d4.SA
- Bis(2-chloroisopropyl)ether.B
- 1,4-Dioxane.B
- 2-Nitropropane.B
- Toluene-d8.SA
- Ethyl methacrylate.B
- Bis(2-chloroisopropyl)ether.B
- cis-1,4-Dichloro-2-butene.B
- trans-1,4-Dichloro-2-butene.B
- Gycohexano-Bis(2-chloroisopropyl)ether.B
- Pentachloroethane.B
- Benzyl chloride.B

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077725

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: LCS for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.I

Dilution: 1

Run Date: 03/11/2010 08:01

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V55B404LSz.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		58.5	ug/kg	0.340	1.00
74-87-3	Chloromethane		54.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		58.2	ug/kg	0.300	1.00
74-83-9	Bromomethane		54.6	ug/kg	0.300	1.00
75-00-3	Chloroethane		54.1	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		58.7	ug/kg	0.300	1.00
67-64-1	Acetone		232	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		54.6	ug/kg	0.300	1.00
74-88-4	Iodomethane		261	ug/kg	1.60	5.00
75-09-2	Methylene chloride		51.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		282	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		55.0	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		54.7	ug/kg	0.300	1.00
78-93-3	2-Butanone		240	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		53.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		56.1	ug/kg	0.300	1.00
67-66-3	Chloroform		53.2	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		53.4	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		56.3	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		56.2	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		57.7	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		52.1	ug/kg	0.300	1.00
71-43-2	Benzene		51.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		53.7	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		52.4	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		55.5	ug/kg	0.300	1.00
74-95-3	Dibromomethane		53.8	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		256	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		53.4	ug/kg	0.300	1.00
108-88-3	Toluene		49.6	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		51.9	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		49.4	ug/kg	0.300	1.00
591-78-6	2-Hexanone		235	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		49.7	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		51.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		53.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		50.4	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		49.9	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 1202077725
 Client Sample: QC for batch 963120
 Client ID: LCS for batch 963120
 Batch ID: 963122
 Run Date: 03/11/2010 08:01
 Prep Date: 03/11/2010 06:00
 Data File: 031110V55B404LSz.D

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

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		48.6	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		102	ug/kg	0.300	2.00
95-47-6	o-Xylene		50.4	ug/kg	0.300	1.00
100-42-5	Styrene		53.2	ug/kg	0.300	1.00
75-25-2	Bromoform		54.4	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.7	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		48.8	ug/kg	0.300	1.00
108-86-1	Bromobenzene		48.0	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		49.7	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		49.2	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		50.5	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		50.0	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		48.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		48.9	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		49.8	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		50.8	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		51.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		48.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		48.5	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		50.0	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		47.6	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		51.9	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		48.7	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B404LSz.D
Acq On : 11 Mar 2010 8:01 am
Operator : CDS1
InstName : VOA5
Sample : |1202077725|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 11 08:29:37 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1393474	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1064611	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	553083	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1393474	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1064611	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	553083	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	250550	37.15	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	74.30%			
43) Toluene-d8	9.721	9.721	0.872	98	1117775	41.05	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	82.10%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	639510	57.65	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	115.30%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	190296	58.49	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	225677	54.50	ug/L	98
4) Vinyl chloride	5.041	5.041	0.601	62	199981	58.24	ug/L	99
5) Bromomethane	5.423	5.423	0.647	94	179015	54.59	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	188292	54.07	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	350523	58.65	ug/L	100
8) Ethyl ether	5.866	5.866	0.699	59	268662	52.21	ug/L	95
9) Acetone	6.174	6.174	0.736	43	967895	232.46	ug/L	100
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	363711	54.62	ug/L	99
11) Iodomethane	6.357	6.357	0.758	142	1793802	260.84	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	987210	1209.77	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1101573	242.10	ug/L	100
14) Carbon disulfide	6.435	6.435	0.767	76	3757922	281.58	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	275595	51.89	ug/L	95
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	696732	50.25	ug/L	100
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	398279	55.01	ug/L	98
18) Vinyl acetate	6.969	6.969	0.831	43	3417387	299.73	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	490347	54.69	ug/L	99
20) 2-Butanone	7.450	7.450	0.888	43	1190548	239.99	ug/L	99
21) cis-1,2-Dichloroethylene	7.503	7.507	0.895	61	450813	53.53	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	372785	56.10	ug/L	98
23) Bromochloromethane	7.719	7.719	0.920	128	132745	53.35	ug/L	96
24) Chloroform	7.698	7.701	0.918	83	427198	53.19	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	373048	56.32	ug/L	100
26) Cyclohexane	7.924	7.924	0.945	56	539360	57.24	ug/L	99
27) 1,1-Dichloropropene	8.002	8.005	0.954	75	341172	56.16	ug/L	99
28) Carbon tetrachloride	8.023	8.020	0.957	117	327561	57.65	ug/L	99
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	361529	52.09	ug/L	99
31) Benzene	8.200	8.203	0.978	78	1043662	51.74	ug/L	96
32) Cyclohexene	8.246	8.246	0.983	67	507223	54.10	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.999	56	1024845	5232.66	ug/L	100
34) Trichloroethylene	8.677	8.677	1.035	95	257099	53.67	ug/L	100
35) 1,2-Dichloropropane	8.932	8.932	1.065	63	298548	52.40	ug/L	100
36) Methylcyclohexane	8.829	8.826	1.053	83	483678	55.25	ug/L	99
37) Dibromomethane	9.059	9.059	1.080	93	155659	53.75	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B404LSz.D
Acq On : 11 Mar 2010 8:01 am
Operator : CDS1
InstName : VOA5
Sample : |1202077725|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 11 08:29:37 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	9.109	9.112	1.086	83	328621	55.52 ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	410578	225.55 ug/L	99
40) cis-1,3-Dichloropropylene	9.487	9.487	1.131	75	432801	53.41 ug/L	97
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	650794	255.63 ug/L	98
44) Toluene	9.788	9.788	0.878	91	1133278	49.58 ug/L	100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	403747	51.86 ug/L	99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	190412	49.37 ug/L	99
47) 2-Hexanone	10.279	10.279	0.923	43	1621063	234.50 ug/L	100
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	411792	49.69 ug/L	98
49) Tetrachloroethylene	10.293	10.290	0.924	164	216159	51.63 ug/L	99
50) Dibromochloromethane	10.587	10.583	0.950	129	246203	53.66 ug/L	99
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	225419	50.44 ug/L	99
52) Chlorobenzene	11.174	11.174	1.003	112	740375	49.94 ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.216	11.216	1.007	131	260574	51.88 ug/L	100
54) Ethylbenzene	11.178	11.181	1.003	91	1266225	48.56 ug/L	100
55) m,p-Xylenes	11.280	11.280	1.012	106	1008223	102.07 ug/L	99
56) o-Xylene	11.697	11.701	1.050	106	502903	50.39 ug/L	99
57) Styrene	11.712	11.715	1.051	104	811763	53.24 ug/L	93
59) Bromoform	12.005	12.005	0.895	173	163765	54.39 ug/L	99
60) Isopropylbenzene	12.012	12.016	0.896	105	1281854	50.51 ug/L	99
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	313058	47.66 ug/L	100
63) 1,2,3-Trichloropropane	12.451	12.454	0.928	110	85587	48.80 ug/L #	90
64) Bromobenzene	12.461	12.465	0.929	156	306243	47.98 ug/L	99
65) n-Propylbenzene	12.415	12.415	0.926	91	1522034	49.68 ug/L	99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1083770	50.01 ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	313234	49.24 ug/L #	80
68) 4-Chlorotoluene	12.698	12.698	0.947	91	940301	48.27 ug/L	100
69) tert-Butylbenzene	12.900	12.900	0.962	134	243826	48.87 ug/L	99
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1097407	49.77 ug/L	100
71) sec-Butylbenzene	13.115	13.119	0.978	105	1424819	50.81 ug/L	99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1138818	51.09 ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	590201	48.69 ug/L	100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	597250	48.47 ug/L	100
75) n-Butylbenzene	13.653	13.653	1.018	91	1094849	50.02 ug/L	99
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	566891	48.65 ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.704	14.704	1.096	157	59452	47.55 ug/L	99
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	399320	50.89 ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	246575	51.73 ug/L	99
80) Naphthalene	15.988	15.988	1.192	128	897785	50.37 ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	362064	52.87 ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.174	6.163	0.736		0m	N.D. d	
88) Allyl chloride	6.460	6.425	0.770		0m	N.D. d	
89) tert-Butyl Alcohol	6.471	6.460	0.771		0m	N.D. d	
90) Acrylonitrile	6.644	6.747	0.792		0m	N.D. d	
91) Isopropyl ether	6.909	6.920	0.824		0m	N.D. d	
92) 2-Chloro-1,3-butadiene	7.036	7.104	0.839		0m	N.D. d	
93) Ethyl tert-butyl ether	7.181	7.192	0.856		0m	N.D. d	
94) Ethyl acetate	7.387	7.383	0.881		0m	N.D. d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B404LSz.D
Acq On : 11 Mar 2010 8:01 am
Operator : CDS1
InstName : VOA5
Sample : |1202077725|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 11 08:29:37 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

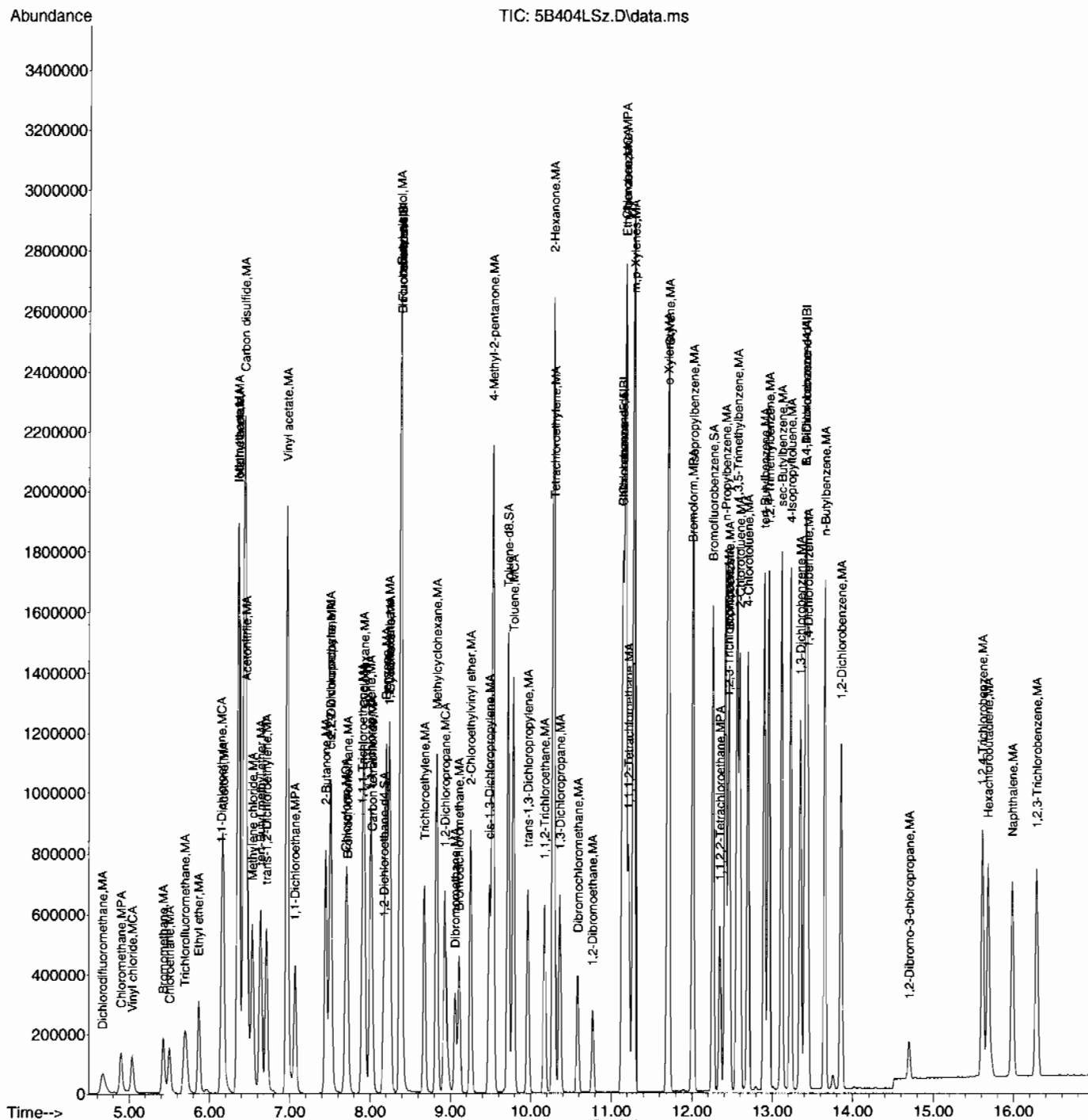
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.669	7.585	0.914		0m	N.D.	d
96) Methacrylonitrile	7.669	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.712	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.800	7.857	0.930		0m	N.D.	d
99) Methyl tert-amyl ether	8.126	8.122	0.969		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	9.370	9.342	1.117		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.359	12.267	0.921		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.016	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.568	13.565	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.897	13.929	1.036		0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B404LSz.D
Acq On : 11 Mar 2010 8:01 am
Operator : CDS1
InstName : VOA5
Sample : |1202077725|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 11 08:29:37 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077726

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: LCS for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOA5.I

Dilution: 1

Run Date: 03/11/2010 08:27

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V5VB405SLSz.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: 10-2150

Matrix: SOIL

Lab Sample ID: 1202077726

Client Sample: QC for batch 963120

Client: LANL010

Project: QC

Client ID: LCS for batch 963120

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963122

Inst: VOASJ

Dilution: 1

Run Date: 03/11/2010 08:27

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V55B405SLSz.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		336	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B405SLSz.D
Acq On : 11 Mar 2010 8:27 am
Operator : CDS1
InstName : VOA5
Sample : |1202077726|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1397071	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1054675	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537423	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1397071	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1054675	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537423	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	249884	36.96	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	73.92%			
43) Toluene-d8	9.721	9.721	0.872	98	1118838	41.48	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	82.96%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	621626	57.67	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	115.34%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.170	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.064	6.156	0.723		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.421	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.542	6.538	0.780		0m	N.D.	d	
16) tert-Butyl methyl ether	6.634	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.973	6.969	0.831		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.380	7.507	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.854	7.924	0.936		0m	N.D.	d	
27) 1,1-Dichloropropene	8.122	8.005	0.968		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.977		0m	N.D.	d	
32) Cyclohexene	8.250	8.246	0.984		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.798	8.826	1.049		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B405SLSz.D
Acq On : 11 Mar 2010 8:27 am
Operator : CDS1
InstName : VOA5
Sample : |1202077726|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.480	9.487	1.130		0m	N.D. d	
42) 4-Methyl-2-pentanone	9.519	9.526	0.854		0m	N.D. d	
44) Toluene	9.792	9.788	0.879		0m	N.D. d	
45) trans-1,3-Dichloroprop...	9.972	9.968	0.895		0m	N.D. d	
46) 1,1,2-Trichloroethane	10.287	10.173	0.923		0m	N.D. d	
47) 2-Hexanone	10.276	10.279	0.922		0m	N.D. d	
48) 1,3-Dichloropropane	10.368	10.364	0.930		0m	N.D. d	
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D. d	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.764	10.771	0.966		0m	N.D. d	
52) Chlorobenzene	11.174	11.174	1.003		0m	N.D. d	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003		0m	N.D. d	
55) m,p-Xylenes	11.280	11.280	1.012		0m	N.D. d	
56) o-Xylene	11.701	11.701	1.050		0m	N.D. d	
57) Styrene	11.715	11.715	1.051		0m	N.D. d	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.012	12.016	0.896		0m	N.D. d	
62) 1,1,2,2-Tetrachloroethane	12.408	12.348	0.925		0m	N.D. d	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.461	12.465	0.929		0m	N.D. d	
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D. d	
66) 1,3,5-Trimethylbenzene	12.561	12.564	0.936		0m	N.D. d	
67) 2-Chlorotoluene	12.596	12.596	0.939		0m	N.D. d	
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D. d	
69) tert-Butylbenzene	12.907	12.900	0.962		0m	N.D. d	
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D. d	
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D. d	
72) 4-Isopropyltoluene	13.232	13.229	0.987		0m	N.D. d	
73) 1,3-Dichlorobenzene	13.356	13.349	0.996		0m	N.D. d	
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D. d	
75) n-Butylbenzene	13.653	13.653	1.018		0m	N.D. d	
76) 1,2-Dichlorobenzene	13.858	13.858	1.033		0m	N.D. d	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164		0m	N.D. d	
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D. d	
80) Naphthalene	15.981	15.988	1.191		0m	N.D. d	
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D. d	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	209673	260.66 ug/L	99
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	420908	336.02 ug/L	100
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D. d	
88) Allyl chloride	6.421	6.425	0.766	41	2064299	224.51 ug/L	93
89) tert-Butyl Alcohol	6.421	6.460	0.766	59	764	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	494368	244.54 ug/L	100
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	385462	64.96 ug/L	100
93) Ethyl tert-butyl ether	7.369	7.192	0.879	59	107	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1250386	228.37 ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B405SLSz.D
Acq On : 11 Mar 2010 8:27 am
Operator : CDS1
InstName : VOA5
Sample : |1202077726|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

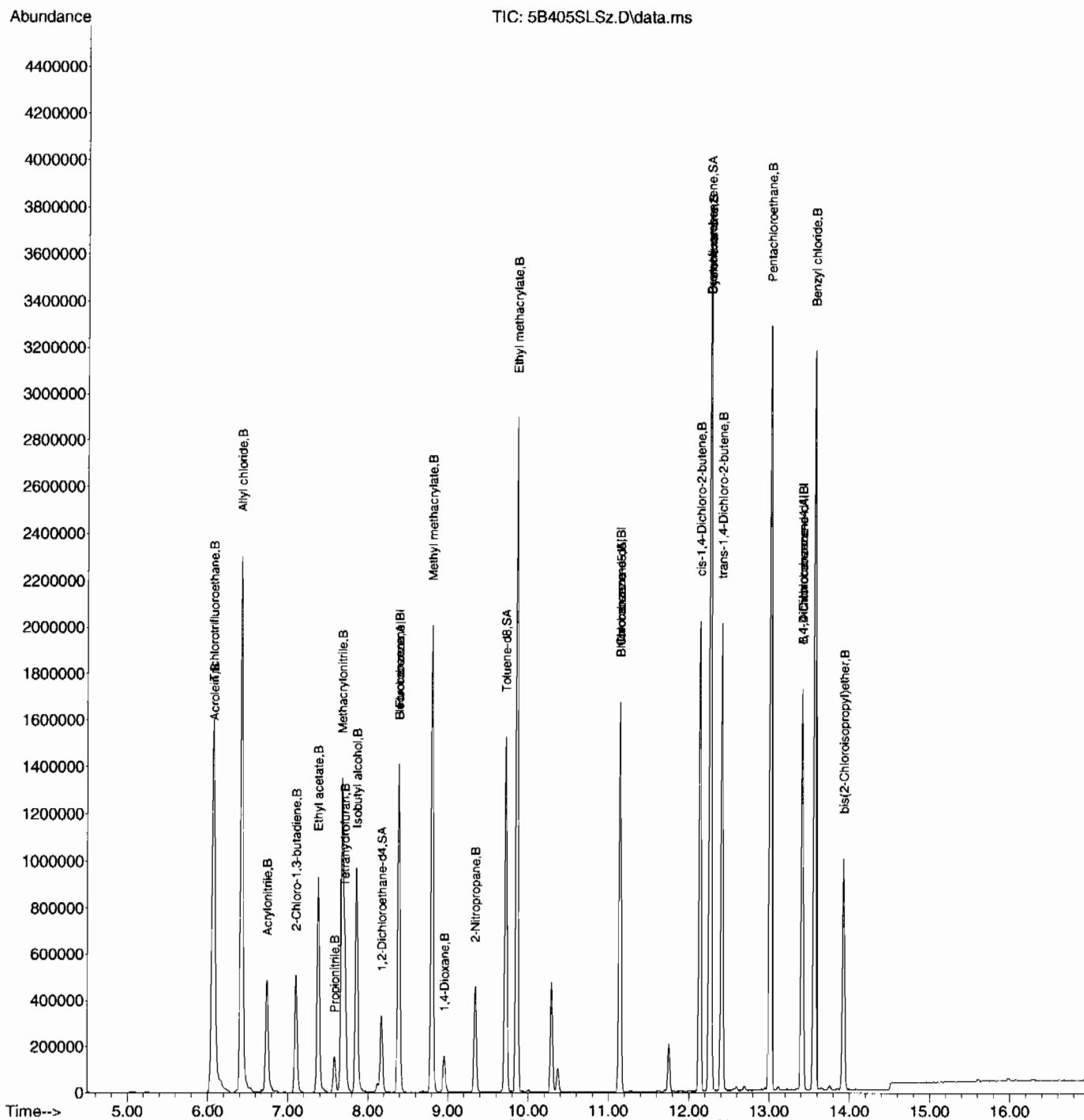
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	7.585	7.585	0.904	54	192800	247.77	ug/L	99
96) Methacrylonitrile	7.677	7.680	0.915	41	1037180	242.54	ug/L	100
97) Tetrahydrofuran	7.709	7.716	0.919	42	466766	241.52	ug/L	99
98) Isobutyl alcohol	7.861	7.857	0.937	41	483945	2377.09	ug/L	98
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	799913	247.91	ug/L	97
101) 1,4-Dioxane	8.957	8.957	1.068	88	126561	2197.92	ug/L	99
102) 2-Nitropropane	9.342	9.342	1.114	43	394732	241.26	ug/L	99
104) Ethyl methacrylate	9.859	9.859	0.885	69	1570077	252.20	ug/L	98
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	542526	269.96	ug/L	100
108) Cyclohexanone	12.267	12.267	0.915	42	802097	4855.37	ug/L	97 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	508969	268.86	ug/L	98
110) Pentachloroethane	13.013	13.017	0.970	167	771770	294.39	ug/L	99
111) Benzyl chloride	13.565	13.565	1.011	91	2725462	283.21	ug/L	100
112) bis(2-Chloroisopropyl)...	13.926	13.929	1.038	45	793167	224.01	ug/L	100

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\
Data File : 5B405SLSz.D
Acq On : 11 Mar 2010 8:27 am
Operator : CDS1
InstName : VOA5
Sample : |1202077726|963122|1|VOA|1|VOA8260BS|
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202066163	Date Received: 03/02/2010 08:50	%Moisture: 10
Client Sample: QC for batch 963120	Client: LANL010	Project: QC
Client ID: RE36-10-7488PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOAS.I	Dilution: 1
Run Date: 03/11/2010 00:49	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:58	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B341.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	H	28.2	ug/kg	0.378	1.11
74-87-3	Chloromethane	H	41.2	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	H	43.8	ug/kg	0.334	1.11
74-83-9	Bromomethane	H	43.3	ug/kg	0.334	1.11
75-00-3	Chloroethane	H	44.3	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	H	44.3	ug/kg	0.334	1.11
67-64-1	Acetone	H	83.1	ug/kg	1.85	5.56
75-35-4	1,1-Dichloroethylene	H	44.2	ug/kg	0.334	1.11
74-88-4	Iodomethane	H	211	ug/kg	1.78	5.56
75-09-2	Methylene chloride	H	45.9	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	H	218	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	H	46.3	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	H	47.6	ug/kg	0.334	1.11
78-93-3	2-Butanone	H	119	ug/kg	1.67	5.56
156-59-2	cis-1,2-Dichloroethylene	H	46.9	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	H	43.1	ug/kg	0.334	1.11
67-66-3	Chloroform	H	47.3	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	H	48.0	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	H	47.5	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	H	45.3	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	H	47.5	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	H	46.6	ug/kg	0.334	1.11
71-43-2	Benzene	H	45.7	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	H	44.7	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	H	46.9	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	H	49.4	ug/kg	0.334	1.11
74-95-3	Dibromomethane	H	49.1	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	H	203	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	H	42.6	ug/kg	0.334	1.11
108-88-3	Toluene	H	43.9	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	H	43.5	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	H	46.3	ug/kg	0.334	1.11
591-78-6	2-Hexanone	H	88.2	ug/kg	1.67	5.56
142-28-9	1,3-Dichloropropane	H	45.9	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	H	42.2	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	H	48.4	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	H	45.6	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	H	44.0	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202066163	Date Received: 03/02/2010 08:50	%Moisture: 10
Client Sample: QC for batch 963120	Client: LANL010	Project: QC
Client ID: RE36-10-7488PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5J	Dilution: 1
Run Date: 03/11/2010 00:49	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:58	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B341.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	H	42.0	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	H	85.9	ug/kg	0.334	2.22
95-47-6	o-Xylene	H	44.2	ug/kg	0.334	1.11
100-42-5	Styrene	H	44.4	ug/kg	0.334	1.11
75-25-2	Bromoform	H	51.0	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	H	45.4	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	H	47.1	ug/kg	0.334	1.11
108-86-1	Bromobenzene	H	43.8	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	H	42.3	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	H	44.2	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	H	45.1	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	H	43.4	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	H	41.4	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	H	42.8	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	H	42.7	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	H	42.6	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	H	37.3	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	H	40.4	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	H	39.8	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	H	37.3	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	H	41.7	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	5.56	ug/kg	1.78	5.56
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	H	47.3	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	H	41.1	ug/kg	0.334	1.11

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B341.D
Acq On : 11 Mar 2010 12:49 am
Operator : CDS1
InstName : VOA5
Sample : |1202066163|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MS 248370019 MIX[A]
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Mar 11 07:07:16 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1483617	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1098636	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537169	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1483617	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1098636	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537169	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	260857	36.33	ug/L	0.00
Spiked Amount	50.000	Range 66 - 134	Recovery	=	72.66%			
43) Toluene-d8	9.721	9.721	0.872	98	1167483	41.55	ug/L	0.00
Spiked Amount	50.000	Range 71 - 128	Recovery	=	83.10%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	617947	57.35	ug/L	0.00
Spiked Amount	50.000	Range 65 - 130	Recovery	=	114.70%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	87871	25.37	ug/L	98
3) Chloromethane	4.900	4.900	0.584	50	164507	37.10	ug/L	99
4) Vinyl chloride	5.041	5.041	0.601	62	144198	39.44	ug/L	99
5) Bromomethane	5.423	5.423	0.647	94	136114	38.98	ug/L	97
6) Chloroethane	5.504	5.504	0.656	64	147656	39.83	ug/L	99
7) Trichlorofluoromethane	5.695	5.695	0.679	101	253677	39.87	ug/L	99
8) Ethyl ether	5.866	5.866	0.699	59	216423	39.50	ug/L	94
9) Acetone	6.170	6.174	0.736	43	331260	74.73	ug/L	100
10) 1,1-Dichloroethylene	6.149	6.156	0.733	61	281991	39.78	ug/L	100
11) Iodomethane	6.357	6.357	0.758	142	1392571	190.19	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	826115	950.84	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1138676	235.05	ug/L	99
14) Carbon disulfide	6.432	6.435	0.767	76	2787607	196.18	ug/L	100
15) Methylene chloride	6.534	6.538	0.779	84	234289	41.31	ug/L	95
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	589865	39.96	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	320850	41.62	ug/L	99
18) Vinyl acetate	6.969	6.969	0.831	43	2877	N.D.		
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	408911	42.83	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	566704	107.30	ug/L	99
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	378231	42.18	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	274070	38.74	ug/L	96
23) Bromochloromethane	7.719	7.719	0.920	128	114279	43.14	ug/L	96
24) Chloroform	7.698	7.701	0.918	83	363802	42.55	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	301660	42.77	ug/L	100
26) Cyclohexane	7.921	7.924	0.944	56	408369	40.71	ug/L	97
27) 1,1-Dichloropropene	8.002	8.005	0.954	75	263685	40.77	ug/L	98
28) Carbon tetrachloride	8.020	8.020	0.956	117	258562	42.74	ug/L	99
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	309985	41.95	ug/L	100
31) Benzene	8.200	8.203	0.978	78	883844	41.15	ug/L	98
32) Cyclohexene	8.246	8.246	0.983	67	393506	39.42	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.999	56	683421	3261.65	ug/L	99
34) Trichloroethylene	8.674	8.677	1.034	95	204949	40.18	ug/L	99
35) 1,2-Dichloropropane	8.928	8.932	1.065	63	255953	42.19	ug/L	99
36) Methylcyclohexane	8.829	8.826	1.053	83	346712	37.20	ug/L	98
37) Dibromomethane	9.059	9.059	1.080	93	136156	44.16	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B341.D
Acq On : 11 Mar 2010 12:49 am
Operator : CDS1
InstName : VOA5
Sample : |1202066163|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MS 248370019 MIX[A]
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Mar 11 07:07:16 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	9.109	9.112	1.086	83	279977	44.42	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	324273	167.32	ug/L	99
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	330495	38.31	ug/L	99
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	480743	182.98	ug/L	98
44) Toluene	9.788	9.788	0.878	91	931481	39.49	ug/L	100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	314248	39.12	ug/L	99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	165847	41.67	ug/L	98
47) 2-Hexanone	10.279	10.279	0.923	43	566100	79.35	ug/L	99
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	353424	41.33	ug/L	98
49) Tetrachloroethylene	10.290	10.290	0.924	164	164001	37.96	ug/L	99
50) Dibromochloromethane	10.583	10.583	0.950	129	206118	43.53	ug/L	100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	189236	41.04	ug/L	99
52) Chlorobenzene	11.170	11.174	1.003	112	604955	39.54	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.216	11.216	1.007	131	220450	42.53	ug/L	100
54) Ethylbenzene	11.178	11.181	1.003	91	1017131	37.80	ug/L	100
55) m,p-Xylenes	11.280	11.280	1.012	106	787282	77.23	ug/L	100
56) o-Xylene	11.697	11.701	1.050	106	409248	39.73	ug/L	99
57) Styrene	11.715	11.715	1.051	104	629058	39.98	ug/L	92
59) Bromoform	12.005	12.005	0.895	173	134110	45.86	ug/L	99
60) Isopropylbenzene	12.012	12.016	0.896	105	1000523	40.59	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	260653	40.86	ug/L	100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	72115	42.34	ug/L	96
64) Bromobenzene	12.465	12.465	0.929	156	244437	39.43	ug/L	99
65) n-Propylbenzene	12.415	12.415	0.926	91	1131196	38.01	ug/L	99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	821226	39.01	ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	245807	39.78	ug/L	# 82
68) 4-Chlorotoluene	12.698	12.698	0.947	91	703975	37.21	ug/L	100
69) tert-Butylbenzene	12.900	12.900	0.962	134	186387	38.47	ug/L	99
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	822093	38.39	ug/L	98
71) sec-Butylbenzene	13.115	13.119	0.978	105	1043201	38.30	ug/L	100
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	727028	33.58	ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	428304	36.38	ug/L	100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	428341	35.79	ug/L	99
75) n-Butylbenzene	13.653	13.653	1.018	91	712656	33.52	ug/L	100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	418800	37.01	ug/L	99
77) 1,2-Dibromo-3-chloropr...	14.697	14.704	1.096	157	45568	37.53	ug/L	95
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	220533	28.94	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	140215	30.29	ug/L	99
80) Naphthalene	15.988	15.988	1.192	128	543839	31.42	ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	195257	29.36	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.159	6.163	0.734		0m	N.D.	d	
88) Allyl chloride	6.633	6.425	0.791		0m	N.D.	d	
89) tert-Butyl Alcohol	6.464	6.460	0.771		0m	N.D.	d	
90) Acrylonitrile	6.640	6.747	0.792		0m	N.D.	d	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.		
93) Ethyl tert-butyl ether	7.065	7.192	0.842		0m	N.D.	d	
94) Ethyl acetate	7.330	7.383	0.874		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031010V5\
Data File : 5B341.D
Acq On : 11 Mar 2010 12:49 am
Operator : CDS1
InstName : VOA5
Sample : |1202066163|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MS 248370019 MIX[A]
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Mar 11 07:07:16 2010
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 09 07:08:19 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.447	7.585	0.888		0m	N.D.	d
96) Methacrylonitrile	7.510	7.680	0.895		0m	N.D.	d
97) Tetrahydrofuran	7.708	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.857	7.857	0.937		0m	N.D.	d
99) Methyl tert-amyl ether	8.083	8.122	0.964		0m	N.D.	d
100) Methyl methacrylate	8.826	8.801	1.052		0m	N.D.	d
101) 1,4-Dioxane	9.056	8.957	1.080		0m	N.D.	d
102) 2-Nitropropane	9.416	9.342	1.123		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.412	12.267	0.925		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.415	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.009	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.561	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.932	13.929	1.039		0m	N.D.	d

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202066164	Date Received: 03/02/2010 08:50	%Moisture: 10
Client Sample: QC for batch 963120	Client: LANL010	Project: QC
Client ID: RE36-10-7488PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/11/2010 01:15	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:59	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V5\5B342.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	H	28.0	ug/kg	0.378	1.11
74-87-3	Chloromethane	H	40.7	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	H	43.7	ug/kg	0.334	1.11
74-83-9	Bromomethane	H	43.0	ug/kg	0.334	1.11
75-00-3	Chloroethane	H	43.7	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	H	44.1	ug/kg	0.334	1.11
67-64-1	Acetone	H	81.7	ug/kg	1.85	5.56
75-35-4	1,1-Dichloroethylene	H	44.2	ug/kg	0.334	1.11
74-88-4	Iodomethane	H	211	ug/kg	1.78	5.56
75-09-2	Methylene chloride	H	46.2	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	H	218	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	H	45.9	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	H	47.3	ug/kg	0.334	1.11
78-93-3	2-Butanone	H	115	ug/kg	1.67	5.56
156-59-2	cis-1,2-Dichloroethylene	H	46.9	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	H	43.6	ug/kg	0.334	1.11
67-66-3	Chloroform	H	47.4	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	H	48.1	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	H	47.4	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	H	45.7	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	H	47.4	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	H	46.5	ug/kg	0.334	1.11
71-43-2	Benzene	H	45.1	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	H	44.3	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	H	46.5	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	H	49.1	ug/kg	0.334	1.11
74-95-3	Dibromomethane	H	48.9	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	H	196	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	H	42.2	ug/kg	0.334	1.11
108-88-3	Toluene	H	43.6	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	H	42.6	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	H	44.7	ug/kg	0.334	1.11
591-78-6	2-Hexanone	H	93.5	ug/kg	1.67	5.56
142-28-9	1,3-Dichloropropane	H	45.8	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	H	42.5	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	H	47.9	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	H	44.8	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	H	44.0	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202066164	Date Received: 03/02/2010 08:50	%Moisture: 10
Client Sample: QC for batch 963120	Client: LANL010	Project: QC
Client ID: RE36-10-7488PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963122	Inst: VOA5.I	Dilution: 1
Run Date: 03/11/2010 01:15	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/10/2010 08:59	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031010V55B342.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	H	42.2	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	H	86.3	ug/kg	0.334	2.22
95-47-6	o-Xylene	H	44.0	ug/kg	0.334	1.11
100-42-5	Styrene	H	44.4	ug/kg	0.334	1.11
75-25-2	Bromoform	H	49.7	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	H	44.4	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	H	45.5	ug/kg	0.334	1.11
108-86-1	Bromobenzene	H	44.2	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	H	42.8	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	H	44.2	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	H	45.2	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	H	43.9	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	H	41.6	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	H	42.8	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	H	43.2	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	H	42.9	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	H	37.8	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	H	40.6	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	H	40.1	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	H	37.8	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	H	40.3	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	HU	5.56	ug/kg	1.78	5.56
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	H	47.1	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	H	41.3	ug/kg	0.334	1.11

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Misc : LANL 5G - SOIL MSD 248370019 MIX[A]
ALS Vial : 42 Sample Multiplier: 1

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

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1472263	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1097317	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	534367	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1472263	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1097317	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	534367	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	259430	36.41	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	72.82%		
43) Toluene-d8	9.721	9.721	0.872	98	1166144	41.55	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	83.10%		
61) Bromofluorobenzene	12.260	12.260	0.914	95	620849	57.92	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	115.84%		
Target Compounds								
	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	86605	25.19	ug/L	98
3) Chloromethane	4.900	4.900	0.584	50	161249	36.63	ug/L	98
4) Vinyl chloride	5.041	5.041	0.601	62	142734	39.34	ug/L	98
5) Bromomethane	5.423	5.423	0.647	94	134174	38.72	ug/L	96
6) Chloroethane	5.504	5.504	0.656	64	144621	39.31	ug/L	99
7) Trichlorofluoromethane	5.695	5.695	0.679	101	250618	39.69	ug/L	98
8) Ethyl ether	5.866	5.866	0.699	59	227806	41.90	ug/L	100
9) Acetone	6.174	6.174	0.736	43	323152	73.46	ug/L	100
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	279569	39.74	ug/L	99
11) Iodomethane	6.357	6.357	0.758	142	1376367	189.43	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	791759	918.33	ug/L	97
13) Methyl acetate	6.361	6.365	0.758	43	1081566	224.98	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	2764176	196.03	ug/L	100
15) Methylene chloride	6.534	6.538	0.779	84	233659	41.52	ug/L	96
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	580640	39.64	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	316077	41.32	ug/L	100
18) Vinyl acetate	6.966	6.969	0.831	43	4624	N.D.		
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	403220	42.56	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	541830	103.38	ug/L	100
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	375362	42.18	ug/L	99
22) 2,2-Dichloropropane	7.514	7.514	0.896	77	275502	39.24	ug/L	98
23) Bromochloromethane	7.715	7.719	0.920	128	113861	43.31	ug/L	98
24) Chloroform	7.698	7.701	0.918	83	362184	42.68	ug/L	98
25) 1,1,1-Trichloroethane	7.906	7.906	0.943	97	298311	42.62	ug/L	100
26) Cyclohexane	7.924	7.924	0.945	56	403709	40.55	ug/L	98
27) 1,1-Dichloropropene	8.005	8.005	0.954	75	264157	41.15	ug/L	98
28) Carbon tetrachloride	8.020	8.020	0.956	117	256226	42.68	ug/L	99
30) 1,2-Dichloroethane	8.232	8.235	0.981	62	307024	41.87	ug/L	100
31) Benzene	8.203	8.203	0.978	78	865521	40.61	ug/L	98
32) Cyclohexene	8.246	8.246	0.983	67	387826	39.15	ug/L	98
33) n-Butyl alcohol	8.377	8.377	0.999	56	661959	3182.57	ug/L	99
34) Trichloroethylene	8.674	8.677	1.034	95	201922	39.89	ug/L	100
35) 1,2-Dichloropropane	8.928	8.932	1.065	63	251906	41.85	ug/L	100
36) Methylcyclohexane	8.829	8.826	1.053	83	349316	37.77	ug/L	98
37) Dibromomethane	9.059	9.059	1.080	93	134674	44.02	ug/L	99

Quantitation Report
GEL Laboratories, LLC

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Data File : 5B342.D
Acq On : 11 Mar 2010 1:15 am
Operator : CDS1
InstName : VOA5
Sample : |1202066164|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MSD 248370019 MIX[A]
ALS Vial : 42 Sample Multiplier: 1

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

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	9.109	9.112	1.086	83	276401	44.20	ug/L	100
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	301693	156.87	ug/L	99
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	325173	37.98	ug/L	98
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	462815	176.37	ug/L	98
44) Toluene	9.788	9.788	0.878	91	924668	39.25	ug/L	100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	307659	38.34	ug/L	99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	159720	40.18	ug/L	97
47) 2-Hexanone	10.279	10.279	0.923	43	599371	84.12	ug/L	98
48) 1,3-Dichloropropane	10.361	10.364	0.930	76	351569	41.16	ug/L	100
49) Tetrachloroethylene	10.293	10.290	0.924	164	164971	38.23	ug/L	99
50) Dibromochloromethane	10.583	10.583	0.950	129	203571	43.05	ug/L	100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	185810	40.34	ug/L	100
52) Chlorobenzene	11.170	11.174	1.003	112	604769	39.58	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.216	11.216	1.007	131	219476	42.40	ug/L	99
54) Ethylbenzene	11.178	11.181	1.003	91	1019781	37.94	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	790685	77.66	ug/L	100
56) o-Xylene	11.697	11.701	1.050	106	407457	39.61	ug/L	98
57) Styrene	11.715	11.715	1.051	104	627717	39.94	ug/L	93
59) Bromoform	12.005	12.005	0.895	173	130069	44.71	ug/L	99
60) Isopropylbenzene	12.012	12.016	0.896	105	995945	40.62	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	253606	39.96	ug/L	100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	69337	40.92	ug/L #	91
64) Bromobenzene	12.465	12.465	0.929	156	245443	39.80	ug/L	99
65) n-Propylbenzene	12.415	12.415	0.926	91	1140631	38.53	ug/L	99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	827590	39.52	ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	244344	39.75	ug/L #	81
68) 4-Chlorotoluene	12.695	12.698	0.946	91	705021	37.46	ug/L	99
69) tert-Butylbenzene	12.900	12.900	0.962	134	185730	38.53	ug/L	99
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	827778	38.86	ug/L	99
71) sec-Butylbenzene	13.115	13.119	0.978	105	1044731	38.56	ug/L	99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	731259	33.96	ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	428098	36.55	ug/L	100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	429217	36.05	ug/L	100
75) n-Butylbenzene	13.653	13.653	1.018	91	719477	34.02	ug/L	100
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	418274	37.15	ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.704	14.704	1.096	157	43755	36.22	ug/L	98
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	219709	28.98	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	144031	31.28	ug/L	99
80) Naphthalene	15.988	15.988	1.192	128	531096	30.84	ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	197634	29.87	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.156	6.163	0.734		0m	N.D.	d	
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d	
89) tert-Butyl Alcohol	6.467	6.460	0.771		0m	N.D.	d	
90) Acrylonitrile	6.633	6.747	0.791		0m	N.D.	d	
91) Isopropyl ether	6.711	6.920	0.800		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.		
93) Ethyl tert-butyl ether	7.065	7.192	0.842		0m	N.D.	d	
94) Ethyl acetate	7.333	7.383	0.874		0m	N.D.	d	

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ALS Vial : 42 Sample Multiplier: 1

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Quant Title : Volatile Organics 8260B SubList :
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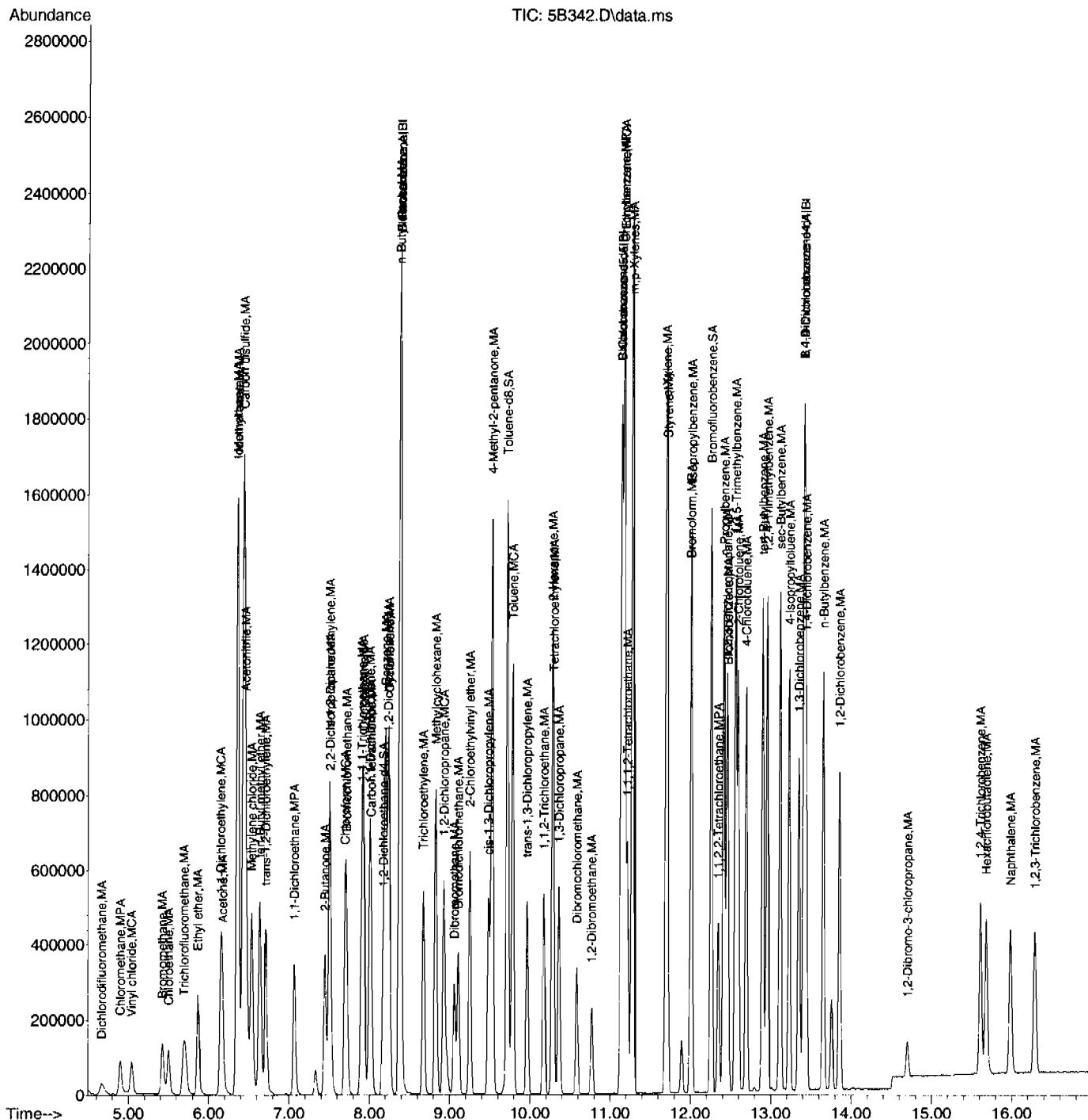
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.450	7.585	0.888		0m	N.D.	d
96) Methacrylonitrile	7.510	7.680	0.895		0m	N.D.	d
97) Tetrahydrofuran	7.726	7.716	0.921		0m	N.D.	d
98) Isobutyl alcohol	7.860	7.857	0.937		0m	N.D.	d
99) Methyl tert-amyl ether	8.203	8.122	0.978		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	9.059	8.957	1.080		0m	N.D.	d
102) 2-Nitropropane	9.317	9.342	1.111		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.415	12.267	0.926		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.020	13.017	0.971		0m	N.D.	d
111) Benzyl chloride	13.557	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.855	13.929	1.033		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\031010V5\
Data File : 5B342.D
Acq On : 11 Mar 2010 1:15 am
Operator : CDS1
InstName : VOA5
Sample : |1202066164|963122|1|VOA|1|VOA8260BS|
Misc : LANL 5G - SOIL MSD 248370019 MIX[A]
ALS Vial : 42 Sample Multiplier: 1

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



Miscellaneous

Prep Logbook

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

Batch ID:	963120	Verified by:		Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst:	Crystal Stacey								
Method:	SW846 5030								
Lab SOP:	GL-OA-E-038 REV# 14								
Instrument:	Sartorius Balance B-001								

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1	
1202066162 MB	09-MAR-2010 17:00:00	Soil	5	5	1		
1202066165 LCS	09-MAR-2010 17:00:00	Soil	5	5	1		
1202066166 LCS	09-MAR-2010 17:00:00	Soil	5	5	1		
248370002	09-MAR-2010 17:01:00	Soil	5	5	1		
248370003	09-MAR-2010 17:02:00	Soil	5	5	1		
248370005	09-MAR-2010 17:04:00	Soil	5	5	1		
248370007	09-MAR-2010 17:06:00	Soil	5	5	1		
248370008	09-MAR-2010 17:07:00	Soil	5	5	1		
248370010	09-MAR-2010 17:09:00	Soil	5	5	1		
248370011	09-MAR-2010 17:10:00	Soil	5	5	1		
1202077718 MB	10-MAR-2010 06:00:00	Soil	5	5	1		
1202077719 LCS	10-MAR-2010 06:00:00	Soil	5	5	1		
1202077720 LCS	10-MAR-2010 06:00:00	Soil	5	5	1		
248370013	10-MAR-2010 08:45:00	Soil	5	5	1		
248370014	10-MAR-2010 08:46:00	Soil	5	5	1		
248370015	10-MAR-2010 08:47:00	Soil	5	5	1		
248370017	10-MAR-2010 08:49:00	Soil	5	5	1		
248370018	10-MAR-2010 08:50:00	Soil	5	5	1		
248370019	10-MAR-2010 08:51:00	Soil	5	5	1		
248370020	10-MAR-2010 08:52:00	Soil	5	5	1		
248370001	10-MAR-2010 08:53:00	Soil	5	5	1		
248370004	10-MAR-2010 08:54:00	Soil	5	5	1		
248370006	10-MAR-2010 08:55:00	Soil	5	5	1		
1202066163 PS (248370019)	10-MAR-2010 08:58:00	Soil	5	5	1		
1202066164 PSD (248370019)	10-MAR-2010 08:59:00	Soil	5	5	1		
248370009	10-MAR-2010 09:01:00	Soil	5	5	1		

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 963120

Analyst: Crystal Stacey

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
1202077721 MB	10-MAR-2010 17:00:00	Soil	5	5	1	
1202077722 LCS	10-MAR-2010 17:00:00	Soil	5	5	1	
1202077723 LCS	10-MAR-2010 17:00:00	Soil	5	5	1	
1202077724 MB	11-MAR-2010 06:00:00	Soil	5	5	1	
1202077725 LCS	11-MAR-2010 06:00:00	Soil	5	5	1	
1202077726 LCS	11-MAR-2010 06:00:00	Soil	5	5	1	
248370016	11-MAR-2010 08:16:00	Soil	5	5	1	
248370012	19-MAR-2010 09:00:00	Soil	5	5	1	
248370011 - 2	19-MAR-2010 09:01:00	Soil	5	10	2	
1202076534 HB	19-MAR-2010 09:03:00	Soil	5	10	2	
1202079010 MB	19-MAR-2010 11:35:00	Soil	5	5	1	
1202079011 LCS	19-MAR-2010 11:35:00	Soil	5	5	1	
1202079012 LCS	19-MAR-2010 11:35:00	Soil	5	5	1	

Reagent/Solvent Lot ID Description Amount

Comments:

Date: 2/26/2010 Method 8260/624 Operator: CDS1 REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1435

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Purge Amount	Water Purge Vol:	Soil Purge Wt.	Mid level ext. MeOH Vol:	Methanol Lot #	Heated Purge
5					
5					
n/a					
n/a					
n/a					
x					

Daily Standard Volume Added for Purge (ul)

(See pg. _____ for ICAL Std. Sci. lds)		Solution ID#	Bik/ Smpl	CCV	LCS	MS/ BFB
NaHSO4 lot # _____	N/A	IS	1	1	1	
		SS	1	1	1	
		LONG ICV	W3VM100226-10			5+5
Cl test lot # _____	N/A	BFB	UVM100203-02			1
		SHORT ICV	W3VM100226-18			5+5
Sequence Number: 022610V3						

Analysis			Wt.(g) or Dil.										Matrix		Accepta		Comments
Date	Time	Data File	Lab Sample ID	Client	Batch #	Vol(ml/ul)	Factor	pH	AS	Slot #	Analyst	Cl test	ble(O/X)				
2/26/2010 9:25		3A501.D	UVM100203-02	-----	BFB	5ml	1	N/A	1	w	CDS1	N/A	O				
2/26/2010 9:54		3A502.D	1202---	-----	BLANK	5ml	1	N/A	2	w	CDS1	N/A	x	clean-up blank			
2/26/2010 10:23		3A503.D	W3VM100226-01	VSTD001	ICAL	5ul ea.	1	N/A	3	w	CDS1	N/A	O	UVM100106-02D+UVM100202-02D			
2/26/2010 10:53		3A504.D	W3VM100226-02	VSTD002	ICAL	5ul ea.	1	N/A	4	w	CDS1	N/A	O	UVM100106-03D+UVM100202-03D			
2/26/2010 11:23		3A505.D	W3VM100226-03	VSTD005	ICAL	5ul ea.	1	N/A	5	w	CDS1	N/A	O	UVM100106-04D+UVM100202-04D			
2/26/2010 11:52		3A506.D	W3VM100226-04	VSTD010	ICAL	5ul ea.	1	N/A	6	w	CDS1	N/A	O	UVM100106-05D+UVM100202-05D			
2/26/2010 12:22		3A507.D	W3VM100226-05	VSTD020	ICAL	5ul ea.	1	N/A	7	w	CDS1	N/A	O	UVM100106-06D+UVM100202-06D			
2/26/2010 12:52		3A508.D	W3VM100226-06	VSTD050	ICAL	5ul ea.	1	N/A	8	w	CDS1	N/A	X	UVM100106-07D+UVM100202-07D gases low			
2/26/2010 13:21		3A509.D	W3VM100226-07	VSTD100	ICAL	5ul ea.	1	N/A	9	w	CDS1	N/A	O	UVM100106-08D+UVM100202-08D			
2/26/2010 13:50		3A510.D	1202---	GEL	BLANK	5ml	1	N/A	10	w	CDS1	N/A	x	clean-up blank			
2/26/2010 14:20		3A511.D	W3VM100226-08	VSTD0005	ICAL	5ul ea.	1	N/A	11	w	CDS1	N/A	O	UVM100106-01D+UVM100202-01D			
2/26/2010 14:49		3A512.D	W3VM100226-09	-----	ICV	5ul ea.	1	N/A	12	w	CDS1	N/A	X	UVM100126-02E+VVM100224-01 freon high			
2/26/2010 15:19		3A513.D	W3VM100226-10	-----	ICV	5ul ea.	1	N/A	13	w	CDS1	N/A	O	UVM100220-01B+VVM100224-01			
2/26/2010 15:48		3A514.D	1202---	-----	BLANK	5ml	1	N/A	14	w	CDS1	N/A	x				
2/26/2010 16:17		3A515.D	W3VM100226-11	VSTD005S	ICAL	5ul ea.	1	N/A	15	w	CDS1	N/A	O	UVM100125-01E+UVM100215-01			
2/26/2010 16:46		3A516.D	W3VM100226-12	VSTD010S	ICAL	5ul ea.	1	N/A	16	w	CDS1	N/A	O	UVM100125-02E+UVM100215-02			
2/26/2010 17:15		3A517.D	W3VM100226-13	VSTD025S	ICAL	5ul ea.	1	N/A	17	w	CDS1	N/A	O	UVM100125-03E+UVM100215-03			
2/26/2010 17:45		3A518.D	W3VM100226-14	VSTD050S	ICAL	5ul ea.	1	N/A	18	w	CDS1	N/A	O	UVM100125-04E+UVM100215-04			
2/26/2010 18:14		3A519.D	W3VM100226-15	VSTD100S	ICAL	5ul ea.	1	N/A	19	w	CDS1	N/A	O	UVM100125-05E+UVM100215-05			
2/26/2010 18:43		3A520.D	W3VM100226-16	VSTD250S	ICAL	5ul ea.	1	N/A	20	w	CDS1	N/A	O	UVM100125-06E+UVM100215-06			
2/26/2010 19:14		3A521.D	W3VM100226-17	VSTD500S	ICAL	5ul ea.	1	N/A	21	w	CDS1	N/A	O	UVM100125-07E+UVM100215-07			
2/26/2010 19:43		3A522.D	1202---	-----	BLANK	5ml	1	N/A	22	w	CDS1	N/A	x	clean-up blank			
2/26/2010 20:12		3A523.D	W3VM100226-18	-----	ICV	5ul ea.	1	N/A	23	w	CDS1	N/A	O	UVM100215-08A+UVM100125-08D			

Date: 3/19/2010 Method 8260/624 Operator: CDS1
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: Multiplier Voltage: 1435

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/26/2010
(See pg. 26 for ICAL Std. Sci. Ids)
NaHSO4 lot # N/A
CI test lot # N/A
Sequence Number: 031910V3

Daily Standard	Volume Added for Purge (ul)	MS/MS/	BFB
CCV W3VM100318-01	1	5+5	1
IS UVM100217-01	1	1	1
SS UVM100217-02	1	1	1
LCS/MS W3VM100318-01/02			5+5
BFB UVM100217-02			1
SHORT W3VM100318-03		5	5

Purge Amount

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

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil.	Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptance ble(O/X)	Comments
3/19/2010	15:32	3D501.D	UVM100217-02	-----	BFB2	5ml	1	1	N/A	1	w	CDS1	N/A	O	
3/19/2010	15:58	3D502.D	W3VM100319-01	-----	CCV/LCS	5ml	1	1	N/A	3	w	CDS1	N/A	O	UVM100305-01C+IVM100318-01
3/19/2010	16:38	3D503.D	W3VM100319-02	-----	LCS	5G	1	1	N/A	4	s	CDS1	N/A	O	UVM100305-01C+IVM100318-01
3/19/2010	17:07	3D504.D	W3VM100319-03	-----	CCV/LCS	5G	1	1	N/A	5	s	CDS1	N/A	O	UVM100304-08A
3/19/2010	17:36	3D505.D	120207-----	-----	BLANK	5ML	1	1	N/A	7	w	CDS1	N/A	O	
3/19/2010	18:05	3D506.D	120207-----	-----	BLANK	5G	1	1	N/A	8	s	CDS1	N/A	O	
3/19/2010	18:34	3D507.D	1202076534	LANL	963122	100UL	50	1	N/A	9	w	CDS1	N/A	O	HB
3/19/2010	19:03	3D508.D	248370012	LANL	963122	5G	1	1	N/A	8	s	CDS1	N/A	O	
3/19/2010	19:33	3D509.D	248370011	LANL	963122	50UL	100	1	N/A	9	w	CDS1	N/A	X	5G/10ML see 3D510
3/19/2010	20:01	3D510.D	248370011	LANL	963122	100UL	50	1	N/A	10	w	CDS1	N/A	O	5G/10ML

Date: 3/3/2010 Method 8260/624 Operator: cds1
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1412

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: _____
(See pg. _____ for ICAI Std. Sci. Ids)
NaHSO4 lot # n/a
CI test lot # n/a
Sequence Number: 03310V5

Daily Standard Volume Added for Purge (ul)
Solution ID# Bk/ Smpl CCV LCS MS/ BFB
IS UVM100203-01 1 1 1
SS UVM100203-02 1 1 1
Long ICV W5VM100303-10 5+5
BFB UVM100203-02 1
Short ICV W5VM100303-18 5+5

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

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Accepta ble(O/X)	Comments
3 Mar 2010	11:00	5A301.D	UVM100203-02	BLANK	BFB	5mL	1	N/A	1	w	CDS1	N/A	O	clean-up blank
3 Mar 2010	11:26	5A302.D	120206-----	BLANK	BLANK	5mL	1	N/A	2	w	CDS1	N/A	X	UVM100106-02D+UVM100222-02A
3 Mar 2010	11:52	5A303.D	W5VM100303-01	VSTD001L	ICAL	5uL ea.	1	N/A	3	w	CDS1	N/A	O	UVM100106-03D+UVM100222-03A
3 Mar 2010	12:18	5A304.D	W5VM100303-02	VSTD002L	ICAL	5uL ea.	1	N/A	4	w	CDS1	N/A	O	UVM100106-04D+UVM100222-04A
3 Mar 2010	12:43	5A305.D	W5VM100303-03	VSTD005L	ICAL	5uL ea.	1	N/A	5	w	CDS1	N/A	O	UVM100106-05D+UVM100222-05A
3 Mar 2010	13:09	5A306.D	W5VM100303-04	VSTD010L	ICAL	5uL ea.	1	N/A	6	w	CDS1	N/A	O	UVM100106-06D+UVM100222-06A
3 Mar 2010	13:35	5A307.D	W5VM100303-05	VSTD020L	ICAL	5uL ea.	1	N/A	7	w	CDS1	N/A	O	UVM100106-07D+UVM100222-07A
3 Mar 2010	14:01	5A308.D	W5VM100303-06	VSTD050L	ICAL	5uL ea.	1	N/A	8	w	CDS1	N/A	O	UVM100106-08D+UVM100222-08A
3 Mar 2010	14:26	5A309.D	W5VM100303-07	VSTD100L	ICAL	5uL ea.	1	N/A	9	w	CDS1	N/A	O	clean-up blank
3 Mar 2010	14:52	5A310.D	120206-----	BLANK	BLANK	5mL	1	N/A	10	w	CDS1	N/A	X	UVM100106-01D+UVM100222-01A
3 Mar 2010	15:18	5A311.D	W5VM100303-08	VSTD0005L	ICAL	5uL ea.	1	N/A	11	w	CDS1	N/A	O	UVM100126-02E+UVM100301-01 ketones low
3 Mar 2010	15:44	5A312.D	W5VM100303-09	ICV	LCS	5uL ea.	1	N/A	12	w	CDS1	N/A	X	UVM100220-01C+UVM100301-01
3 Mar 2010	16:10	5A313.D	W5VM100303-10	ICV	LCS	5uL ea.	1	N/A	13	w	CDS1	N/A	O	clean-up blank
3 Mar 2010	16:35	5A314.D	120206-----	BLANK	BLANK	5mL	1	N/A	14	w	CDS1	N/A	X	UVM100215-01+UVM100227-01A
3 Mar 2010	17:01	5A315.D	W5VM100303-11	VSTD005S	ICAL	5uL ea.	1	N/A	15	w	CDS1	N/A	O	UVM100215-02+UVM100227-02A
3 Mar 2010	17:27	5A316.D	W5VM100303-12	VSTD010S	ICAL	5uL ea.	1	N/A	16	w	CDS1	N/A	O	UVM100215-03+UVM100227-03A
3 Mar 2010	17:52	5A317.D	W5VM100303-13	VSTD025S	ICAL	5uL ea.	1	N/A	17	w	CDS1	N/A	O	UVM100215-04+UVM100227-04A
3 Mar 2010	18:18	5A318.D	W5VM100303-14	VSTD050S	ICAL	5uL ea.	1	N/A	18	w	CDS1	N/A	O	UVM100215-05+UVM100227-05A
3 Mar 2010	18:44	5A319.D	W5VM100303-15	VSTD100S	ICAL	5uL ea.	1	N/A	19	w	CDS1	N/A	O	UVM100215-06+UVM100227-06A
3 Mar 2010	19:10	5A320.D	W5VM100303-16	VSTD250S	ICAL	5uL ea.	1	N/A	20	w	CDS1	N/A	O	UVM100215-07+UVM100227-07A
3 Mar 2010	19:35	5A321.D	W5VM100303-17	VSTD500S	ICAL	5uL ea.	1	N/A	21	w	CDS1	N/A	O	clean-up blank
3 Mar 2010	20:01	5A322.D	120206-----	BLANK	BLANK	5mL	1	N/A	22	w	CDS1	N/A	X	UVM100215-08A+UVM100125-08E
3 Mar 2010	20:27	5A323.D	W5VM100303-18	ICV	ICV	5uL ea.	1	N/A	23	w	CDS1	N/A	O	

Date: 3/9/2010 Method 8260/624 Operator: CDS1
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1412

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/3/2010
(See pg. 43 for ICAL Std. Sol. Ids)
NaHSO4 lot # n/a
CI test lot # 81710
Sequence Number: 030910V5 pm

Daily Standard Volume Added for Purge (ul)
Solution ID# Smp/ Blk/ CCV LCS MS/ BFB
CCV W5VM100309-05 1 1 1 1
IS UVM100203-01 1 1 1 1
SS UVM100217-02 1 1 1 1
LCS/MS W5VM100309-06/07 5+5
BFB UVM100217-02 1
SHORT W5VM100309-08 5 5

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

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil.	Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable (O/X)	Comments
9 Mar 2010	19:02	5B226.D	UVM100217-02	-----	BFB2	5ML	1	N/A	26	W	CDS1	N/A	O		
9 Mar 2010	19:29	5B227.D	W5VM100309-05	-----	CCV	5ML	1	N/A	27	W	CDS1	N/A	O		UVM100222-07B+UVM100106-07D
9 Mar 2010	19:57	5B228.D	W5VM100309-06	-----	LCS	5ML	1	N/A	28	W	CDS1	N/A	O		UVM100220-01E+UVM100308-01
9 Mar 2010	20:24	5B229.D	W5VM100309-07	-----	LCS	5G	1	N/A	29	W	CDS1	N/A	O		UVM100220-01E+UVM100308-01
9 Mar 2010	20:52	5B230.D	W5VM100309-08	-----	CCV/LCS	5G	1	N/A	30	W	CDS1	N/A	O		UVM100215-08B
9 Mar 2010	21:19	5B231.D	120206-----	-----	BLANK	5ML	1	N/A	31	W	CDS1	N/A	O		
9 Mar 2010	21:46	5B232.D	120206-----	-----	BLANK	5G	1	N/A	32	S	CDS1	N/A	O		
9 Mar 2010	22:13	5B233.D	248455001	GEIC	963119	5ML	1	PH2	33	W	CDS1	N	O		
9 Mar 2010	22:41	5B234.D	248455002	GEIC	963119	5ML	1	PH2	34	W	CDS1	N	O		
9 Mar 2010	23:08	5B235.D	248455003	GEIC	963119	5ML	1	PH2	35	W	CDS1	N	O		
9 Mar 2010	23:35	5B236.D	248370001	LANL	963122	5G	1	N/A	36	S	CDS1	N/A	X		IS low, SS high--conf. of 5B344
3/10/2010	0:03	5B237.D	248370002	LANL	963122	5G	1	N/A	37	S	CDS1	N/A	O		
3/10/2010	0:30	5B238.D	248370003	LANL	963122	5G	1	N/A	38	S	CDS1	N/A	O		
3/10/2010	0:57	5B239.D	248370004	LANL	963122	5G	1	N/A	39	S	CDS1	N/A	X		SS high--see 5B345
3/10/2010	1:25	5B240.D	248370005	LANL	963122	5G	1	N/A	40	S	CDS1	N/A	O		
3/10/2010	1:52	5B241.D	248370006	LANL	963122	5G	1	N/A	41	S	CDS1	N/A	X		IS low, SS high--see 5B346
3/10/2010	2:19	5B242.D	248370007	LANL	963122	5G	1	N/A	42	S	CDS1	N/A	O		SS high--conf. by 5B347
3/10/2010	2:47	5B243.D	248370008	LANL	963122	5G	1	N/A	43	S	CDS1	N/A	O		
3/10/2010	3:14	5B244.D	248370009	LANL	963122	5G	1	N/A	44	S	CDS1	N/A	X		IS low, SS high--conf. of 5B348
3/10/2010	3:41	5B245.D	248370010	LANL	963122	5G	1	N/A	45	S	CDS1	N/A	O		IS low, SS high--conf. by 5B349
3/10/2010	4:09	5B246.D	248370011	LANL	963122	5G	1	N/A	46	S	CDS1	N/A	O		IS low, SS high--W/ 3B510
3/10/2010	4:36	5B247.D	248370012	LANL	963122	5G	1	N/A	47	S	CDS1	N/A	X		rep c/o-see 3B508
3/10/2010	5:03	5B248.D	1202066158	GEIC	963119	5ML	1	PH2	48	W	CDS1	N/A	X		MS 248455003 Archeon error
3/10/2010	5:30	5B249.D	1202066159	GEIC	963119	5ML	1	PH2	49	W	CDS1	N/A	X		MSD 248455003 Archeon error

Date: 3/10/2010 Method 8260/624 Operator: CDS1
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1412

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/3/2010
(See pg. 43 for ICAL Std. Sci. Ids)
NaHSO4 lot # n/a
Ci test lot # 81710
Sequence Number: 031010V5

Daily Standard Volume Added for Purge (ul)
Solution ID# W5VM100310-01
CCV W5VM100310-01
IS UVM100203-01
SS UVM100217-02
LCS/MS W5VM100310-02/03
BFB UVM100217-02
SHORT W5VM100310-04

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

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil.	Factor pH	AS Slot #	Matrix w or s	Analyst	Ci test (Y/N)	Acceptance ble(O/X)	Comments
3/10/2010	6:44	5B301.D	UVM100217-02	-----	BFB	5ML	1	N/A	1	W	CDS1	N/A	O	
3/10/2010	7:11	5B302.D	W5VM100310-01	-----	CCV	5ML	1	N/A	2	W	CDS1	N/A	O	UVM100222-07B+UVM100106-07D
3/10/2010	7:38	5B303.D	W5VM100310-02	-----	LCS	5ML	1	N/A	3	W	CDS1	N/A	O	UVM100220-01E+UVM100308-01
3/10/2010	8:18	5B304.D	W5VM100310-03	-----	LCS	5G	1	N/A	4	W	CDS1	N/A	O	UVM100220-01E+UVM100308-01
3/10/2010	8:49	5B305.D	W5VM100310-04	-----	CCV	5G	1	N/A	5	W	CDS1	N/A	O	UVM100215-08B
3/10/2010	9:17	5B306.D	120206-----	-----	BLANK	5ML	1	N/A	6	W	CDS1	N/A	O	
3/10/2010	9:44	5B307.D	120206-----	-----	BLANK	5G	1	N/A	7	S	CDS1	N/A	O	
3/10/2010	10:12	5B308.D	1202066158	GEIC	963119	5ML	1	PH2	8	W	CDS1	N	O	MS 248455003 MIX[A]
3/10/2010	10:39	5B309.D	1202066159	GEIC	963119	5ML	1	PH2	9	W	CDS1	N	O	MSD 248455003 MIX[A]
3/10/2010	11:06	5B310.D	120206-----	CH2M	-----	5ML	1	N/A	10	W	CDS1	N/A	O	SCREEN
3/10/2010	11:33	5B311.D	248240001	LANL	961880	5G	1	N/A	11	S	CDS1	N/A	X	IS low-conf. 5A509
3/10/2010	11:59	5B312.D	248370013	LANL	963122	5G	1	N/A	12	S	CDS1	N/A	O	
3/10/2010	12:26	5B313.D	248370014	LANL	963122	5G	1	N/A	13	S	CDS1	N/A	O	SS high-conf. by 5B412
3/10/2010	12:53	5B314.D	248370015	LANL	963122	5G	1	N/A	14	S	CDS1	N/A	O	
3/10/2010	13:19	5B315.D	248370016	LANL	963122	5G	1	N/A	15	S	CDS1	N/A	X	SS high-see 5B413
3/10/2010	13:46	5B316.D	248370017	LANL	963122	5G	1	N/A	16	S	CDS1	N/A	O	SS high-conf. by 5B414
3/10/2010	14:13	5B317.D	248370018	LANL	963122	5G	1	N/A	17	S	CDS1	N/A	O	SS high-conf. by 5B415
3/10/2010	14:39	5B318.D	248370019	LANL	963122	5G	1	N/A	18	S	CDS1	N/A	O	
3/10/2010	15:06	5B319.D	248370020	LANL	963122	5G	1	N/A	19	S	CDS1	N/A	O	IS low, SS high-conf. 5A516
3/10/2010	15:33	5B320.D	248377001	LANL	962697	5G	1	N/A	20	S	CDS1	N/A	O	
3/10/2010	16:00	5B321.D	248377002	LANL	962697	5G	1	N/A	21	S	CDS1	N/A	O	
3/10/2010	16:27	5B322.D	248377003	LANL	962697	5G	1	N/A	22	S	CDS1	N/A	O	
3/10/2010	16:53	5B323.D	248377004	LANL	962697	5G	1	N/A	23	S	CDS1	N/A	O	
3/10/2010	17:20	5B324.D	248377005	LANL	962697	5G	1	N/A	24	S	CDS1	N/A	O	
3/10/2010	17:46	5B325.D	248377006	LANL	962697	5G	1	N/A	25	S	CDS1	N/A	O	
3/10/2010	18:13	5B326.D	248377007	LANL	962697	5G	1	N/A	26	S	CDS1	N/A	O	

Date: 3/10/2010 Method 8260/624 Operator: CDS1
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1412

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/3/2010

(See pg. 43 for ICAL Std. Sol. Ids)

NaHSO4 lot # n/a

CI test lot # n/a

Sequence Number: 031010V5pm

Daily Standard Volume Added for Purge (ul)

Solution ID#	CCV	W5VM100310-05	Blk/	MS/	LCS	BFB
IS	UVM100203-01	1	1	1	1	
SS	UVM100217-02	1	1	1	1	
LCS/MS	W5VM100310-06/07				5+5	
BFB	UVM100217-02					1
SHORT	W5VM100310-08				5	5

Purge Amount

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

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil.	Factor	pH	AS Slot #	Matrix	Analyst	CI test (Y/N)	Acceptance ble(O/X)	Comments
3/10/2010	18:39	5B327.D	UVM100217-02	-----	BFB2	5ml	1	N/A	27	w	CDS1	N/A	O		
3/10/2010	19:06	5B328.D	W5VM100310-05	-----	CCV	5ml	1	N/A	28	w	CDS1	N/A	O		UVM100222-07B+UVM100106-07D
3/10/2010	19:33	5B329.D	W5VM100310-06	-----	LCS	5ml	1	N/A	29	w	CDS1	N/A	O		UVM100220-01E+UVM100308-01
3/10/2010	19:59	5B330.D	W5VM100310-07	-----	LCS	5G	1	N/A	30	w	CDS1	N/A	O		UVM100220-01E+UVM100308-01
3/10/2010	20:25	5B331.D	W5VM100310-08	-----	CCV	5G	1	N/A	31	w	CDS1	N/A	O		UVM100215-08B
3/10/2010	20:52	5B332.D	120206-----	-----	BLANK	5ML	1	N/A	32	w	CDS1	N/A	O		
3/10/2010	21:18	5B333.D	120206-----	-----	BLANK	5G	1	N/A	33	s	CDS1	N/A	O		
3/10/2010	21:45	5B334.D	248249001	LANL	962697	5G	1	N/A	34	s	CDS1	N/A	O		IS low, SS high-conf. by 5B408
3/10/2010	22:11	5B335.D	248249002	LANL	962697	5G	1	N/A	35	s	CDS1	N/A	X		IS low, SS high-conf. of 5B409
3/10/2010	22:38	5B336.D	248249003	LANL	962697	5G	1	N/A	36	s	CDS1	N/A	X		IS low, SS high-conf. of 5B410
3/10/2010	23:04	5B337.D	248249004	LANL	962697	5G	1	N/A	37	s	CDS1	N/A	X		SS high-conf. of 5B411
3/10/2010	23:30	5B338.D	248249005	LANL	962697	5G	1	N/A	38	s	CDS1	N/A	O		
3/10/2010	23:57	5B339.D	1202065320	LANL	962697	5G	1	N/A	39	s	CDS1	N/A	O		MS 248377004 MIX[A]
3/11/2010	0:23	5B340.D	1202065321	LANL	962697	5G	1	N/A	40	s	CDS1	N/A	O		MS 248377004 MIX[A]
3/11/2010	0:49	5B341.D	1202066163	LANL	963122	5G	1	N/A	41	s	CDS1	N/A	O		MS 248370019 MIX[A]
3/11/2010	1:15	5B342.D	1202066164	LANL	963122	5G	1	N/A	42	s	CDS1	N/A	O		MS 248370019 MIX[A]
3/11/2010	1:42	5B343.D	120206-----	BLANK	BLANK	5ML	1	N/A	43	w	CDS1	N/A	X		clean-up blank
3/11/2010	2:08	5B344.D	248370001	LANL	963122	5G	1	N/A	44	s	CDS1	N/A	O		IS low, SS high-conf. by 5B236
3/11/2010	2:34	5B345.D	248370004	LANL	963122	5G	1	N/A	45	s	CDS1	N/A	O		
3/11/2010	3:01	5B346.D	248370006	LANL	963122	5G	1	N/A	46	s	CDS1	N/A	O		
3/11/2010	3:27	5B347.D	248370007	LANL	963122	5G	1	N/A	47	s	CDS1	N/A	X		SS high-conf. of 5B242
3/11/2010	3:54	5B348.D	248370009	LANL	963122	5G	1	N/A	48	s	CDS1	N/A	O		SS high-conf. BY 5B244
3/11/2010	4:20	5B349.D	248370010	LANL	963122	5G	1	N/A	49	s	CDS1	N/A	X		IS low, SS high-conf. of 5B245
3/11/2010	4:46	5B350.D	248370011	LANL	963122	5G	1	N/A	50	s	CDS1	N/A	X		IS low, SS high-conf. of 5B246

Date: 3/11/2010 Method 8260/624 Operator: CDS1
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1412

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/3/2010

(See pg. 43 for ICAL Std. Sol. Ids)

NaHSO4 lot # n/a

CI test lot # n/a

Sequence Number: 031110V5

Daily Standard Volume Added for Purge (ul)

Solution ID#	CCV	W5VM100311-01	IS	UVM100203-01	1	1	1
SS	UVM100217-02	1	1	1	1	1	1
LCS/MS	W5VM100311-02/03					5+5	
BFB	UVM100217-02						1
SHORT	W5VM100311-04				5	5	

Purge Amount

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

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil.	Factor	pH	AS Slot #	Matrix	Analyst	CI test (Y/N)	Acceptance ble(O/X)	Comments
3/11/2010	6:41	5B401.D	UVM100217-02	-----	BFB	5ML	1	1	N/A	1	w	CDS1	N/A	O	
3/11/2010	7:08	5B402.D	W5VM100311-01	-----	CCV	5ML	1	1	N/A	2	w	CDS1	N/A	O	UVM100222-07B+UVM100106-07D
3/11/2010	7:34	5B403.D	W5VM100311-02	-----	LCS	5ML	1	1	N/A	3	w	CDS1	N/A	O	UVM100305-01A+IVM100310-01
3/11/2010	8:01	5B404.D	W5VM100311-03	-----	LCS	5g	1	1	N/A	4	s	CDS1	N/A	O	UVM100305-01A+IVM100310-01
3/11/2010	8:27	5B405.D	W5VM100311-04	-----	CCV/lcs	5g	1	1	N/A	5	s	CDS1	N/A	O	UVM100215-08B
3/11/2010	8:54	5B406.D	120206-0000	-----	BLANK	5ML	1	1	N/A	6	w	CDS1	N/A	O	
3/11/2010	9:20	5B407.D	120206-0000	-----	BLANK	5G	1	1	N/A	7	s	CDS1	N/A	O	
3/11/2010	9:47	5B408.D	248249001	LANL	962697	5G	1	1	N/A	8	s	CDS1	N/A	X	IS low, SS high--conf. of 5B334
3/11/2010	10:13	5B409.D	248249002	LANL	962697	5G	1	1	N/A	9	s	CDS1	N/A	O	SS high--conf. by 5B535
3/11/2010	10:40	5B410.D	248249003	LANL	962697	5G	1	1	N/A	10	s	CDS1	N/A	O	IS low, SS high--conf. by 5B336
3/11/2010	11:07	5B411.D	248249004	LANL	962697	5G	1	1	N/A	11	s	CDS1	N/A	O	
3/11/2010	11:33	5B412.D	248370014	LANL	963122	5G	1	1	N/A	12	s	CDS1	N/A	X	SS high--conf. of 5B313
3/11/2010	11:59	5B413.D	248370016	LANL	963122	5G	1	1	N/A	13	s	CDS1	N/A	O	H'
3/11/2010	12:26	5B414.D	248370017	LANL	963122	5G	1	1	N/A	14	s	CDS1	N/A	X	SS high--conf. of 5B316
3/11/2010	12:53	5B415.D	248370018	LANL	963122	5G	1	1	N/A	15	s	CDS1	N/A	X	SS high--conf. of 5B317
3/11/2010	13:19	5B416.D	248370020	LANL	963122	5G	1	1	N/A	16	s	CDS1	N/A	X	IS low, SS high--conf. of 5B319
3/11/2010	13:45	5B417.D	248517001	LANL	963809	5G	1	1	N/A	17	s	CDS1	N/A	O	IS low, SS high--conf. by 3D417
3/11/2010	14:12	5B418.D	248519001	LANL	963809	5G	1	1	N/A	18	s	CDS1	N/A	O	IS low, SS high--conf. by 5B514
3/11/2010	14:39	5B419.D	248519002	LANL	963809	5G	1	1	N/A	19	s	CDS1	N/A	O	SS high--conf. by 5B515
3/11/2010	15:05	5B420.D	248519003	LANL	963809	5G	1	1	N/A	20	s	CDS1	N/A	O	IS low, SS high--conf. by 5B516
3/11/2010	15:32	5B421.D	248519004	LANL	963809	5G	1	1	N/A	21	s	CDS1	N/A	O	IS low, SS high--conf. by 5B517
3/11/2010	15:58	5B422.D	248519005	LANL	963809	5G	1	1	N/A	22	s	CDS1	N/A	O	SS high--conf. by 5B518
3/11/2010	16:25	5B423.D	248519006	LANL	963809	5G	1	1	N/A	23	s	CDS1	N/A	O	SS high--conf. by 5B526
3/11/2010	16:51	5B424.D	248519007	LANL	963809	5G	1	1	N/A	24	s	CDS1	N/A	O	IS low, SS high--conf. by 5B527
3/11/2010	17:18	5B425.D	248519008	LANL	963809	5G	1	1	N/A	25	s	CDS1	N/A	O	IS low, SS high--conf. by 5B528
3/11/2010	17:44	5B426.D	248519009	LANL	963809	5G	1	1	N/A	26	s	CDS1	N/A	O	IS low, SS high--conf. by 5B529

DATA EXCEPTION REPORT

Mo.Day Yr. 25-MAR-10	Division: Federal	Quality Criteria: Client Contract	Type: Process
Instrument Type: VOA GC/MS	Test / Method: 8260	Matrix Type: Solid	Client Code: LANL010
Batch ID: 963122	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 248370(10-2150)

Application Issues:

Failed Recovery for Surrogate or Tracer
Container scanning event for custody missed
Sample Analyzed out of Holding
Other

**Specification and Requirements
Exception Description:**

1. All samples were analyzed within the 14 day holding time for volatile analysis. The samples required re-analysis due to unacceptable internal standard and/or surrogate recoveries in the original analysis, cross contamination from a previously analyzed sample or dilution required for a target detected which exceeded the calibration range of the instrument. The effected samples are:

248370001, 248370004, 248370006, 248370009, 248370011,
248370012, 248370016, 248370019MS, 248370019MSD

2. The recoveries for one or more internal standards were outside of acceptance limits in the following samples:

248370001, 248370010, 248370011, 248370012, 248370020

3. The recoveries for one or more surrogates were outside of acceptance limits in the following samples:

248370001, 248370007, 248370009, 248370010, 248370011, 48370014,
248370017, 248370018, 248370020

4. The samples in this SDG were not scanned into the analyst's custody prior to analysis.

DER Disposition:

1. Narrate and report data. The re-analyses could not be performed inside of the 14 day holding time due to instrumentation constraints caused by sample capacity. All re-analysis were within two times the 14 day holding time.

2,3. Narrate and report data. All unacceptable recoveries were confirmed by reanalysis. In all instances, the results obtained were similar to the original ones. It is believed that matrix interference was demonstrated.

4. Narrate and report data. The analyst maintained custody of the samples throughout their analysis.

Originator's Name:

Crystal Stacey 26-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 10-2150**

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:	961228
Prep Batch Number:	961226

Sample Analysis

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

Sample ID	Client ID
248370001	RE36-10-7415
248370002	RE36-10-7420
248370003	RE36-10-7418
248370004	RE36-10-7417
248370005	RE36-10-7419
248370006	RE36-10-7416
248370007	RE36-10-7478
248370008	RE36-10-7490
248370009	RE36-10-7487
248370010	RE36-10-7483
248370011	RE36-10-7481
248370012	RE36-10-7486
248370013	RE36-10-7477
248370014	RE36-10-7489
248370015	RE36-10-7479
248370016	RE36-10-7482
248370017	RE36-10-7480
248370018	RE36-10-7485
248370019	RE36-10-7488
248370020	RE36-10-7484
1202061822	Method Blank (MB)
1202061823	Laboratory Control Sample (LCS)
1202061824	248370004(RE36-10-7417) Matrix Spike (MS)
1202061825	248370004(RE36-10-7417) 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 inverted 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 (1202061823) recovered Benzyl alcohol at 25%(limits:27%-108%). The failure represented less than 5% of the requested spike analyte list. That satisfied the clients acceptance criteria and the data were reported.

QC Sample Designation

Sample 248370004 (RE36-10-7417) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement

The MS (1202061824)and MSD (1202061825) recovered 3,3'-dichlorobenzidine at 16% and 15%, respectively (limits: 30%-124%) and Benzyl alcohol at 0% and 11%, respectively (limits: 19%-112%).As the MS failures confirmed in the MSD, they were attributed to sample matrix interference and the data were reported.

Matrix Spike Duplicate (MSD) Recovery Statement

The MS (1202061824)and MSD (1202061825) recovered 3,3'-dichlorobenzidine at 16% and 15%, respectively (limits: 30%-124%) and Benzyl alcohol at 0% and 11%, respectively (limits: 19%-112%).As the MS failures confirmed in the MSD, they were attributed to sample matrix interference and the data were reported.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD value for Benzyl alcohol was 200% (limit: 30%). The failure was attributed to sample matrix interference and 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: 809345. 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
MSD1.I	HP 5973 Mass Spectrometer	HP6890/HP5973	ZB-5ms	25m x 0.2mm, 0.33um (5% Polysilarylene-95% Polydimethylsiloxane)

Certification Statement

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

Review Validation:

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

Reviewer:  Date: 3-29-10

Roadmap for LANL 10-2150 SVOA

This roadmap was analyzed by Ilo00884 on 03-24-2010, 20:31.

This roadmap was packaged by CHA01131 on 03-29-2010, 10:53.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2109.d	248370001	21-MAR-2010	19:47	10-2150.sub	RE36-10-7415	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2110.d	248370002	21-MAR-2010	20:12	10-2150.sub	RE36-10-7420	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2111.d	248370003	21-MAR-2010	20:34	10-2150.sub	RE36-10-7418	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2112.d	248370004	21-MAR-2010	20:58	10-2150.sub	RE36-10-7417	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2115.d	248370005	21-MAR-2010	22:09	10-2150.sub	RE36-10-7419	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2116.d	248370006	21-MAR-2010	22:32	10-2150.sub	RE36-10-7416	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2117.d	248370007	21-MAR-2010	22:56	10-2150.sub	RE36-10-7478	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2118.d	248370008	21-MAR-2010	23:20	10-2150.sub	RE36-10-7490	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2119.d	248370009	21-MAR-2010	23:44	10-2150.sub	RE36-10-7487	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2120.d	248370010	22-MAR-2010	00:07	10-2150.sub	RE36-10-7483	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2121.d	248370011	22-MAR-2010	00:31	10-2150.sub	RE36-10-7481	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2122.d	248370012	22-MAR-2010	00:54	10-2150.sub	RE36-10-7486	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2123.d	248370013	22-MAR-2010	01:18	10-2150.sub	RE36-10-7477	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2124.d	248370014	22-MAR-2010	01:42	10-2150.sub	RE36-10-7489	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2125.d	248370015	22-MAR-2010	02:05	10-2150.sub	RE36-10-7479	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2126.d	248370016	22-MAR-2010	02:29	10-2150.sub	RE36-10-7482	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2127.d	248370017	22-MAR-2010	02:53	10-2150.sub	RE36-10-7480	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2128.d	248370018	22-MAR-2010	03:16	10-2150.sub	RE36-10-7485	1	961228	REPORT

<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2129.d	248370019	22-MAR-2010	03:40	10-2150.sub	RE36-10-7488	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2130.d	248370020	22-MAR-2010	04:03	10-2150.sub	RE36-10-7484	1	961228	REPORT

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublst	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2106.d	1202061822	mb	21-MAR-2010	18:36	10-2150.sub	SBLK01	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2107.d	1202061823	lcs	21-MAR-2010	19:00	10-2150.sub	SBLK01LCS	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2113.d	1202061824	ms	21-MAR-2010	21:21	10-2150.sub	RE36-10-7417MS	1	961228	REPORT
<input type="checkbox"/>	N	/chem/MSD1.i/s032110.b/s1c2114.d	1202061825	msd	21-MAR-2010	21:45	10-2150.sub	RE36-10-7417MSD	1	961228	REPORT

Sample Data Summary

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

SDG Number: 10-2150
Lab Sample ID: 248370001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7415
Batch ID: 961228
Run Date: 03/21/2010 19:47
Prep Date: 03/05/2010 11:30
Data File: s1c2109.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	571	ug/kg	114	571
108-95-2	Phenol	U	571	ug/kg	114	571
95-57-8	2-Chlorophenol	U	571	ug/kg	114	571
106-46-7	1,4-Dichlorobenzene	U	571	ug/kg	114	571
621-64-7	N-Nitrosodipropylamine	U	571	ug/kg	114	571
59-50-7	4-Chloro-3-methylphenol	U	571	ug/kg	114	571
83-32-9	Acenaphthene	U	57.1	ug/kg	18.8	57.1
121-14-2	2,4-Dinitrotoluene	U	571	ug/kg	57.1	571
100-02-7	4-Nitrophenol	U	571	ug/kg	188	571
87-86-5	Pentachlorophenol	U	571	ug/kg	143	571
129-00-0	Pyrene	U	57.1	ug/kg	17.1	57.1
110-86-1	Pyridine	U	571	ug/kg	114	571
62-53-3	Aniline	U	571	ug/kg	171	571
111-44-4	bis(2-Chloroethyl) ether	U	571	ug/kg	114	571
541-73-1	1,3-Dichlorobenzene	U	571	ug/kg	114	571
100-51-6	Benzyl alcohol	U	571	ug/kg	171	571
95-50-1	1,2-Dichlorobenzene	U	571	ug/kg	114	571
108-60-1	bis(2-Chloroisopropyl)ether	U	571	ug/kg	114	571
95-48-7	o-Cresol	U	571	ug/kg	114	571
65794-96-9	m,p-Cresols	U	571	ug/kg	171	571
67-72-1	Hexachloroethane	U	571	ug/kg	114	571
98-95-3	Nitrobenzene	U	571	ug/kg	114	571
78-59-1	Isophorone	U	571	ug/kg	114	571
88-75-5	2-Nitrophenol	U	571	ug/kg	114	571
105-67-9	2,4-Dimethylphenol	U	571	ug/kg	200	571
111-91-1	bis(2-Chloroethoxy)methane	U	571	ug/kg	114	571
120-83-2	2,4-Dichlorophenol	U	571	ug/kg	114	571
65-85-0	Benzoic acid	U	1140	ug/kg	286	1140
91-20-3	Naphthalene	U	57.1	ug/kg	17.1	57.1
106-47-8	4-Chloroaniline	U	571	ug/kg	114	571
87-68-3	Hexachlorobutadiene	U	571	ug/kg	114	571
91-57-6	2-Methylnaphthalene	U	57.1	ug/kg	11.4	57.1
77-47-4	Hexachlorocyclopentadiene	U	571	ug/kg	114	571
88-06-2	2,4,6-Trichlorophenol	U	571	ug/kg	114	571
95-95-4	2,4,5-Trichlorophenol	U	571	ug/kg	114	571
91-58-7	2-Chloronaphthalene	U	57.1	ug/kg	18.8	57.1
88-74-4	2-Nitroaniline	U	571	ug/kg	114	571
99-09-2	<i>o</i> -Nitroaniline 3-Nitroaniline	U	571	ug/kg	114	571

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

SDG Number: 10-2150
Lab Sample ID: 248370001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	571	ug/kg	114	571
606-20-2	2,6-Dinitrotoluene	U	571	ug/kg	57.1	571
208-96-8	Acenaphthylene	U	57.1	ug/kg	17.1	57.1
51-28-5	2,4-Dinitrophenol	U	1140	ug/kg	217	1140
132-64-9	Dibenzofuran	U	571	ug/kg	114	571
84-66-2	Diethylphthalate	U	571	ug/kg	114	571
86-73-7	Fluorene	U	57.1	ug/kg	17.1	57.1
7005-72-3	4-Chlorophenylphenylether	U	571	ug/kg	114	571
534-52-1	2-Methyl-4,6-dinitrophenol	U	571	ug/kg	114	571
100-01-6	4-Nitroaniline	U	571	ug/kg	171	571
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	571	ug/kg	114	571
122-66-7	Azobenzene	U	571	ug/kg	114	571
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	571	ug/kg	114	571
118-74-1	Hexachlorobenzene	U	571	ug/kg	114	571
85-01-8	Phenanthrene	U	57.1	ug/kg	17.1	57.1
120-12-7	Anthracene	U	57.1	ug/kg	11.4	57.1
84-74-2	Di-n-butylphthalate	U	571	ug/kg	114	571
206-44-0	Fluoranthene	U	57.1	ug/kg	17.1	57.1
85-68-7	Butylbenzylphthalate	U	571	ug/kg	114	571
56-55-3	Benzo(a)anthracene	U	57.1	ug/kg	17.1	57.1
91-94-1	3,3'-Dichlorobenzidine	U	571	ug/kg	171	571
218-01-9	Chrysene	U	57.1	ug/kg	17.1	57.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	571	ug/kg	114	571
117-84-0	Di-n-octylphthalate	U	571	ug/kg	114	571
205-99-2	Benzo(b)fluoranthene	U	57.1	ug/kg	17.1	57.1
207-08-9	Benzo(k)fluoranthene	U	57.1	ug/kg	17.1	57.1
50-32-8	Benzo(a)pyrene	U	57.1	ug/kg	17.1	57.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	57.1	ug/kg	17.1	57.1
53-70-3	Dibenzo(a,h)anthracene	U	57.1	ug/kg	17.1	57.1
191-24-2	Benzo(ghi)perylene	U	57.1	ug/kg	17.1	57.1
120-82-1	1,2,4-Trichlorobenzene	U	571	ug/kg	114	571

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	1170	ug/kg		J
	Unknown Aldol Condensate	2.67	306	ug/kg		JA

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

SDG Number: 10-2150
Lab Sample ID: 248370001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7415
Batch ID: 961228
Run Date: 03/21/2010 19:47
Prep Date: 03/05/2010 11:30
Data File: s1c2109.d

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
79-92-5	Camphene	3.29	277	ug/kg	98	NJ
3387-41-5	Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3.39	280	ug/kg	95	NJ
123-35-3	.beta.-Myrcene	3.42	813	ug/kg	93	NJ
29050-33-7	(+)-4-Carene	3.94	265	ug/kg	97	NJ
	Unknown	7.57	280	ug/kg		J
	Unknown	7.75	1040	ug/kg		J
	Unknown	7.85	386	ug/kg		J
	Unknown	7.92	626	ug/kg		J
	Unknown	7.95	857	ug/kg		J
	Unknown	8.01	270	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.15	2900	ug/kg	95	NJ
514-10-3	Abietic acid	8.27	1420	ug/kg	81	NJ
	Unknown	8.33	390	ug/kg		J
	Unknown	8.41	824	ug/kg		J
112-95-8	Eicosane	9.07	273	ug/kg	98	NJ
	Unknown	9.78	310	ug/kg		J
	Unknown	10.4	253	ug/kg		J
	Unknown	10.77	270	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	836	ug/kg	89	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370006	Date Received: 03/02/2010 08:50	%Moisture: 11.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7416	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 22:32	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: slc2116.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	376	ug/kg	75.2	376
108-95-2	Phenol	U	376	ug/kg	75.2	376
95-57-8	2-Chlorophenol	U	376	ug/kg	75.2	376
106-46-7	1,4-Dichlorobenzene	U	376	ug/kg	75.2	376
621-64-7	N-Nitrosodipropylamine	U	376	ug/kg	75.2	376
59-50-7	4-Chloro-3-methylphenol	U	376	ug/kg	75.2	376
83-32-9	Acenaphthene	U	37.6	ug/kg	12.4	37.6
121-14-2	2,4-Dinitrotoluene	U	376	ug/kg	37.6	376
100-02-7	4-Nitrophenol	U	376	ug/kg	124	376
87-86-5	Pentachlorophenol	U	376	ug/kg	94.0	376
129-00-0	Pyrene	U	37.6	ug/kg	11.3	37.6
110-86-1	Pyridine	U	376	ug/kg	75.2	376
62-53-3	Aniline	U	376	ug/kg	113	376
111-44-4	bis(2-Chloroethyl) ether	U	376	ug/kg	75.2	376
541-73-1	1,3-Dichlorobenzene	U	376	ug/kg	75.2	376
100-51-6	Benzyl alcohol	U	376	ug/kg	113	376
95-50-1	1,2-Dichlorobenzene	U	376	ug/kg	75.2	376
108-60-1	bis(2-Chloroisopropyl)ether	U	376	ug/kg	75.2	376
95-48-7	o-Cresol	U	376	ug/kg	75.2	376
65794-96-9	m,p-Cresols	U	376	ug/kg	113	376
67-72-1	Hexachloroethane	U	376	ug/kg	75.2	376
98-95-3	Nitrobenzene	U	376	ug/kg	75.2	376
78-59-1	Isophorone	U	376	ug/kg	75.2	376
88-75-5	2-Nitrophenol	U	376	ug/kg	75.2	376
105-67-9	2,4-Dimethylphenol	U	376	ug/kg	132	376
111-91-1	bis(2-Chloroethoxy)methane	U	376	ug/kg	75.2	376
120-83-2	2,4-Dichlorophenol	U	376	ug/kg	75.2	376
65-85-0	Benzoic acid	U	752	ug/kg	188	752
91-20-3	Naphthalene	U	37.6	ug/kg	11.3	37.6
106-47-8	4-Chloroaniline	U	376	ug/kg	75.2	376
87-68-3	Hexachlorobutadiene	U	376	ug/kg	75.2	376
91-57-6	2-Methylnaphthalene	U	37.6	ug/kg	7.52	37.6
77-47-4	Hexachlorocyclopentadiene	U	376	ug/kg	75.2	376
88-06-2	2,4,6-Trichlorophenol	U	376	ug/kg	75.2	376
95-95-4	2,4,5-Trichlorophenol	U	376	ug/kg	75.2	376
91-58-7	2-Chloronaphthalene	U	37.6	ug/kg	12.4	37.6
88-74-4	2-Nitroaniline	U	376	ug/kg	75.2	376
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	376	ug/kg	75.2	376

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

SDG Number: 10-2150
Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 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: RE36-10-7416
Batch ID: 961228
Run Date: 03/21/2010 22:32
Prep Date: 03/05/2010 11:30
Data File: s1c2116.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	376	ug/kg	75.2	376
606-20-2	2,6-Dinitrotoluene	U	376	ug/kg	37.6	376
208-96-8	Acenaphthylene	U	37.6	ug/kg	11.3	37.6
51-28-5	2,4-Dinitrophenol	U	752	ug/kg	143	752
132-64-9	Dibenzofuran	U	376	ug/kg	75.2	376
84-66-2	Diethylphthalate	U	376	ug/kg	75.2	376
86-73-7	Fluorene	U	37.6	ug/kg	11.3	37.6
7005-72-3	4-Chlorophenylphenylether	U	376	ug/kg	75.2	376
534-52-1	2-Methyl-4,6-dinitrophenol	U	376	ug/kg	75.2	376
100-01-6	4-Nitroaniline	U	376	ug/kg	113	376
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	376	ug/kg	75.2	376
122-66-7	Azobenzene	U	376	ug/kg	75.2	376
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	376	ug/kg	75.2	376
118-74-1	Hexachlorobenzene	U	376	ug/kg	75.2	376
85-01-8	Phenanthrene	U	37.6	ug/kg	11.3	37.6
120-12-7	Anthracene	U	37.6	ug/kg	7.52	37.6
84-74-2	Di-n-butylphthalate	U	376	ug/kg	75.2	376
206-44-0	Fluoranthene	U	37.6	ug/kg	11.3	37.6
85-68-7	Butylbenzylphthalate	U	376	ug/kg	75.2	376
56-55-3	Benzo(a)anthracene	U	37.6	ug/kg	11.3	37.6
91-94-1	3,3'-Dichlorobenzidine	U	376	ug/kg	113	376
218-01-9	Chrysene	U	37.6	ug/kg	11.3	37.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	376	ug/kg	75.2	376
117-84-0	Di-n-octylphthalate	U	376	ug/kg	75.2	376
205-99-2	Benzo(b)fluoranthene	U	37.6	ug/kg	11.3	37.6
207-08-9	Benzo(k)fluoranthene	U	37.6	ug/kg	11.3	37.6
50-32-8	Benzo(a)pyrene	U	37.6	ug/kg	11.3	37.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.6	ug/kg	11.3	37.6
53-70-3	Dibenzo(a,h)anthracene	U	37.6	ug/kg	11.3	37.6
191-24-2	Benzo(ghi)perylene	U	37.6	ug/kg	11.3	37.6
120-82-1	1,2,4-Trichlorobenzene	U	376	ug/kg	75.2	376

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	232	ug/kg		J
	Unknown Aldol Condensate	2.67	218	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370006	Date Received: 03/02/2010 08:50	%Moisture: 11.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7416	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 22:32	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2116.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	7.89	241	ug/kg		J
	Unknown	9.06	254	ug/kg		J
112-95-8	Eicosane	9.77	212	ug/kg	98	NJ
1058-61-3	Stigmast-4-en-3-one	12.29	245	ug/kg	83	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370004	Date Received: 03/02/2010 08:50	%Moisture: 21
Client ID: RE36-10-7417	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 20:58	Inst: MSD1.1	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2112.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.4	422
108-95-2	Phenol	U	422	ug/kg	84.4	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.4	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.4	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.4	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.4	422
83-32-9	Acenaphthene	U	42.2	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene	U	422	ug/kg	42.2	422
100-02-7	4-Nitrophenol	U	422	ug/kg	139	422
87-86-5	Pentachlorophenol	U	422	ug/kg	105	422
129-00-0	Pyrene	U	42.2	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.4	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.4	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.4	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.4	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.4	422
95-48-7	o-Cresol	U	422	ug/kg	84.4	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.4	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.4	422
78-59-1	Isophorone	U	422	ug/kg	84.4	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.4	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.4	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.4	422
65-85-0	Benzoic acid	U	844	ug/kg	211	844
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.4	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.4	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.44	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.4	422
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.4	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.4	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.4	422
99-09-2	<i>o</i> -Nitroaniline	U	422	ug/kg	84.4	422
	3-Nitroaniline					

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370004	Date Received: 03/02/2010 08:50	%Moisture: 21
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7417	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:58	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2112.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	422	ug/kg	84.4	422
606-20-2	2,6-Dinitrotoluene	U	422	ug/kg	42.2	422
208-96-8	Acenaphthylene	U	42.2	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol	U	844	ug/kg	160	844
132-64-9	Dibenzofuran	U	422	ug/kg	84.4	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.4	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.4	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.4	422
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.4	422
122-66-7	Azobenzene	U	422	ug/kg	84.4	422
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.4	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.4	422
85-01-8	Phenanthrene	U	42.2	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.44	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.4	422
206-44-0	Fluoranthene	U	42.2	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.4	422
56-55-3	Benzo(a)anthracene	U	42.2	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	U	42.2	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.4	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.4	422
205-99-2	Benzo(b)fluoranthene	U	42.2	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene	U	42.2	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene	U	42.2	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.2	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene	U	42.2	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene	U	42.2	ug/kg	12.7	42.2
120-82-1	1,2,4-Trichlorobenzene	U	422	ug/kg	84.4	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	247	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.19	741	ug/kg	97	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370004

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1J
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7417
Batch ID: 961228
Run Date: 03/21/2010 20:58
Prep Date: 03/05/2010 11:30
Data File: s1c2112.d

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
3386-33-2	Octadecane, 1-chloro-	8.09	192	ug/kg	95	NJ
	Unknown	8.32	186	ug/kg		J
	Unknown	8.58	469	ug/kg		J
7683-64-9	Squalene	8.86	187	ug/kg	93	NJ
	Unknown	9.15	390	ug/kg		J
70038-20-9	7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	9.17	379	ug/kg	90	NJ
	Unknown	10.39	182	ug/kg		J
	Unknown	12.29	329	ug/kg		J

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370003	Date Received: 03/02/2010 08:50	%Moisture: 18.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7418	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:34	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: slc2111.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	409	ug/kg	81.8	409
108-95-2	Phenol	U	409	ug/kg	81.8	409
95-57-8	2-Chlorophenol	U	409	ug/kg	81.8	409
106-46-7	1,4-Dichlorobenzene	U	409	ug/kg	81.8	409
621-64-7	N-Nitrosodipropylamine	U	409	ug/kg	81.8	409
59-50-7	4-Chloro-3-methylphenol	U	409	ug/kg	81.8	409
83-32-9	Acenaphthene	U	40.9	ug/kg	13.5	40.9
121-14-2	2,4-Dinitrotoluene	U	409	ug/kg	40.9	409
100-02-7	4-Nitrophenol	U	409	ug/kg	135	409
87-86-5	Pentachlorophenol	U	409	ug/kg	102	409
129-00-0	Pyrene	U	40.9	ug/kg	12.3	40.9
110-86-1	Pyridine	U	409	ug/kg	81.8	409
62-53-3	Aniline	U	409	ug/kg	123	409
111-44-4	bis(2-Chloroethyl) ether	U	409	ug/kg	81.8	409
541-73-1	1,3-Dichlorobenzene	U	409	ug/kg	81.8	409
100-51-6	Benzyl alcohol	U	409	ug/kg	123	409
95-50-1	1,2-Dichlorobenzene	U	409	ug/kg	81.8	409
108-60-1	bis(2-Chloroisopropyl) ether	U	409	ug/kg	81.8	409
95-48-7	o-Cresol	U	409	ug/kg	81.8	409
65794-96-9	m,p-Cresols	U	409	ug/kg	123	409
67-72-1	Hexachloroethane	U	409	ug/kg	81.8	409
98-95-3	Nitrobenzene	U	409	ug/kg	81.8	409
78-59-1	Isophorone	U	409	ug/kg	81.8	409
88-75-5	2-Nitrophenol	U	409	ug/kg	81.8	409
105-67-9	2,4-Dimethylphenol	U	409	ug/kg	143	409
111-91-1	bis(2-Chloroethoxy)methane	U	409	ug/kg	81.8	409
120-83-2	2,4-Dichlorophenol	U	409	ug/kg	81.8	409
65-85-0	Benzoic acid	U	818	ug/kg	205	818
91-20-3	Naphthalene	U	40.9	ug/kg	12.3	40.9
106-47-8	4-Chloroaniline	U	409	ug/kg	81.8	409
87-68-3	Hexachlorobutadiene	U	409	ug/kg	81.8	409
91-57-6	2-Methylnaphthalene	U	40.9	ug/kg	8.18	40.9
77-47-4	Hexachlorocyclopentadiene	U	409	ug/kg	81.8	409
88-06-2	2,4,6-Trichlorophenol	U	409	ug/kg	81.8	409
95-95-4	2,4,5-Trichlorophenol	U	409	ug/kg	81.8	409
91-58-7	2-Chloronaphthalene	U	40.9	ug/kg	13.5	40.9
88-74-4	2-Nitroaniline	U	409	ug/kg	81.8	409
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	409	ug/kg	81.8	409

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370003	Date Received: 03/02/2010 08:50	%Moisture: 18.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7418	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:34	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s1c2111.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	409	ug/kg	81.8	409
606-20-2	2,6-Dinitrotoluene	U	409	ug/kg	40.9	409
208-96-8	Acenaphthylene	U	40.9	ug/kg	12.3	40.9
51-28-5	2,4-Dinitrophenol	U	818	ug/kg	155	818
132-64-9	Dibenzofuran	U	409	ug/kg	81.8	409
84-66-2	Diethylphthalate	U	409	ug/kg	81.8	409
86-73-7	Fluorene	U	40.9	ug/kg	12.3	40.9
7005-72-3	4-Chlorophenylphenylether	U	409	ug/kg	81.8	409
534-52-1	2-Methyl-4,6-dinitrophenol	U	409	ug/kg	81.8	409
100-01-6	4-Nitroaniline	U	409	ug/kg	123	409
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	409	ug/kg	81.8	409
122-66-7	Azobenzene	U	409	ug/kg	81.8	409
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	409	ug/kg	81.8	409
118-74-1	Hexachlorobenzene	U	409	ug/kg	81.8	409
85-01-8	Phenanthrene	U	40.9	ug/kg	12.3	40.9
120-12-7	Anthracene	U	40.9	ug/kg	8.18	40.9
84-74-2	Di-n-butylphthalate	U	409	ug/kg	81.8	409
206-44-0	Fluoranthene	U	40.9	ug/kg	12.3	40.9
85-68-7	Butylbenzylphthalate	U	409	ug/kg	81.8	409
56-55-3	Benzo(a)anthracene	U	40.9	ug/kg	12.3	40.9
91-94-1	3,3'-Dichlorobenzidine	U	409	ug/kg	123	409
218-01-9	Chrysene	U	40.9	ug/kg	12.3	40.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	409	ug/kg	81.8	409
117-84-0	Di-n-octylphthalate	U	409	ug/kg	81.8	409
205-99-2	Benzo(b)fluoranthene	U	40.9	ug/kg	12.3	40.9
207-08-9	Benzo(k)fluoranthene	U	40.9	ug/kg	12.3	40.9
50-32-8	Benzo(a)pyrene	U	40.9	ug/kg	12.3	40.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.9	ug/kg	12.3	40.9
53-70-3	Dibenzo(a,h)anthracene	U	40.9	ug/kg	12.3	40.9
191-24-2	Benzo(ghi)perylene	U	40.9	ug/kg	12.3	40.9
120-82-1	1,2,4-Trichlorobenzene	U	409	ug/kg	81.8	409

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	481	ug/kg		J
	Unknown Aldol Condensate	2.67	245	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370003	Date Received: 03/02/2010 08:50	%Moisture: 18.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7418	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1I	Dilution: 1
Run Date: 03/21/2010 20:34	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s1c2111.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
7785-70-8	1R-.alpha.-Pinene	3.19	310	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	657	ug/kg	99	NJ
1000281-95-1	3-Bromobenzoic acid, pentadecyl ester	7.4	188	ug/kg	90	NJ
	Unknown	8.08	205	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.13	250	ug/kg	89	NJ
	Unknown	8.26	198	ug/kg		J
1000143-61-3	N-(4-Methoxyphenyl)-2-hydroxyimino-aceta	8.55	722	ug/kg	95	NJ
1058-61-3	Stigmast-4-en-3-one	12.29	259	ug/kg	91	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 16.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7419
Batch ID: 961228
Run Date: 03/21/2010 22:09
Prep Date: 03/05/2010 11:30
Data File: s1c2115.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.3	401
108-95-2	Phenol	U	401	ug/kg	80.3	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.3	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.3	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.3	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.3	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene	J	21.2	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.3	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.3	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.3	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.3	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.3	401
95-48-7	o-Cresol	U	401	ug/kg	80.3	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.3	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.3	401
78-59-1	Isophorone	U	401	ug/kg	80.3	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.3	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.3	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.3	401
65-85-0	Benzoic acid	U	803	ug/kg	201	803
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.3	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.3	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.03	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.3	401
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.3	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.3	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline	U	401	ug/kg	80.3	401
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	401	ug/kg	80.3	401

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370005	Date Received: 03/02/2010 08:50	%Moisture: 16.9
Client ID: RE36-10-7419	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 22:09	Inst: MSD1.1	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2115.d	Aliquot: 30 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	401	ug/kg	80.3	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	803	ug/kg	153	803
132-64-9	Dibenzofuran	U	401	ug/kg	80.3	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.3	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.3	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.3	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.3	401
122-66-7	Azobenzene	U	401	ug/kg	80.3	401
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.3	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.3	401
85-01-8	Phenanthrene	J	16.3	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.03	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.3	401
206-44-0	Fluoranthene	J	25.8	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.3	401
56-55-3	Benzo(a)anthracene	J	17.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	U	40.1	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.3	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.3	401
205-99-2	Benzo(b)fluoranthene	J	17.4	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	U	40.1	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.1	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	U	40.1	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.3	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	194	ug/kg		JA
	Unknown	7.32	195	ug/kg		J

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370005	Date Received: 03/02/2010 08:50	%Moisture: 16.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7419	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 22:09	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2115.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
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	205	ug/kg	93	NJ
	Unknown	7.9	176	ug/kg		J
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	8.86	225	ug/kg	98	NJ
	Unknown	9.06	333	ug/kg		J
	Unknown	9.59	190	ug/kg		J
112-95-8	Eicosane	9.78	248	ug/kg	98	NJ
	Unknown	10.2	272	ug/kg		J
	Unknown	10.4	306	ug/kg		J
	Unknown	11.89	182	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	432	ug/kg	83	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7420
Batch ID: 961228
Run Date: 03/21/2010 20:12
Prep Date: 03/05/2010 11:30
Data File: slc2110.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.8	364
108-95-2	Phenol	U	364	ug/kg	72.8	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.8	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.8	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.8	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.8	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.0	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.8	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.8	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.8	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.8	364
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.8	364
95-48-7	o-Cresol	U	364	ug/kg	72.8	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.8	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.8	364
78-59-1	Isophorone	U	364	ug/kg	72.8	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.8	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	127	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.8	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.8	364
65-85-0	Benzoic acid	J	245	ug/kg	182	728
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.8	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.8	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.28	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.8	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.8	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.8	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.8	364
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	364	ug/kg	72.8	364

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370002	Date Received: 03/02/2010 08:50	%Moisture: 8.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7420	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:12	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2110.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	364	ug/kg	72.8	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	728	ug/kg	138	728
132-64-9	Dibenzofuran	U	364	ug/kg	72.8	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.8	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.8	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.8	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.8	364
122-66-7	Azobenzene	U	364	ug/kg	72.8	364
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.8	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.8	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.28	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.8	364
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.8	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.8	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.8	364
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.8	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	318	ug/kg		J
	Unknown Aldol Condensate	2.67	238	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370002	Date Received: 03/02/2010 08:50	%Moisture: 8.7
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7420	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.1	Dilution: 1
Run Date: 03/21/2010 20:12	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2110.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	8.58	153	ug/kg		J
112-95-8	Eicosane	9.06	232	ug/kg	97	NJ
	Unknown	9.16	255	ug/kg		J
	Unknown	11.53	155	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.29	259	ug/kg	93	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370013	Date Received: 03/02/2010 08:50	%Moisture: 23.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7477	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 01:18	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2123.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	435	ug/kg	87.0	435
108-95-2	Phenol	U	435	ug/kg	87.0	435
95-57-8	2-Chlorophenol	U	435	ug/kg	87.0	435
106-46-7	1,4-Dichlorobenzene	U	435	ug/kg	87.0	435
621-64-7	N-Nitrosodipropylamine	U	435	ug/kg	87.0	435
59-50-7	4-Chloro-3-methylphenol	U	435	ug/kg	87.0	435
83-32-9	Acenaphthene	U	43.5	ug/kg	14.4	43.5
121-14-2	2,4-Dinitrotoluene	U	435	ug/kg	43.5	435
100-02-7	4-Nitrophenol	U	435	ug/kg	144	435
87-86-5	Pentachlorophenol	U	435	ug/kg	109	435
129-00-0	Pyrene	J	27.9	ug/kg	13.1	43.5
110-86-1	Pyridine	U	435	ug/kg	87.0	435
62-53-3	Aniline	U	435	ug/kg	131	435
111-44-4	bis(2-Chloroethyl) ether	U	435	ug/kg	87.0	435
541-73-1	1,3-Dichlorobenzene	U	435	ug/kg	87.0	435
100-51-6	Benzyl alcohol	U	435	ug/kg	131	435
95-50-1	1,2-Dichlorobenzene	U	435	ug/kg	87.0	435
108-60-1	bis(2-Chloroisopropyl)ether	U	435	ug/kg	87.0	435
95-48-7	o-Cresol	U	435	ug/kg	87.0	435
65794-96-9	m,p-Cresols	U	435	ug/kg	131	435
67-72-1	Hexachloroethane	U	435	ug/kg	87.0	435
98-95-3	Nitrobenzene	U	435	ug/kg	87.0	435
78-59-1	Isophorone	U	435	ug/kg	87.0	435
88-75-5	2-Nitrophenol	U	435	ug/kg	87.0	435
105-67-9	2,4-Dimethylphenol	U	435	ug/kg	152	435
111-91-1	bis(2-Chloroethoxy)methane	U	435	ug/kg	87.0	435
120-83-2	2,4-Dichlorophenol	U	435	ug/kg	87.0	435
65-85-0	Benzoic acid	U	870	ug/kg	218	870
91-20-3	Naphthalene	U	43.5	ug/kg	13.1	43.5
106-47-8	4-Chloroaniline	U	435	ug/kg	87.0	435
87-68-3	Hexachlorobutadiene	U	435	ug/kg	87.0	435
91-57-6	2-Methylnaphthalene	U	43.5	ug/kg	8.70	43.5
77-47-4	Hexachlorocyclopentadiene	U	435	ug/kg	87.0	435
88-06-2	2,4,6-Trichlorophenol	U	435	ug/kg	87.0	435
95-95-4	2,4,5-Trichlorophenol	U	435	ug/kg	87.0	435
91-58-7	2-Chloronaphthalene	U	43.5	ug/kg	14.4	43.5
88-74-4	2-Nitroaniline	U	435	ug/kg	87.0	435
99-09-2	3-Nitroaniline	U	435	ug/kg	87.0	435

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370013	Date Received: 03/02/2010 08:50	%Moisture: 23.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7477	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.1	Dilution: 1
Run Date: 03/22/2010 01:18	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2123.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	435	ug/kg	87.0	435
606-20-2	2,6-Dinitrotoluene	U	435	ug/kg	43.5	435
208-96-8	Acenaphthylene	U	43.5	ug/kg	13.1	43.5
51-28-5	2,4-Dinitrophenol	U	870	ug/kg	165	870
132-64-9	Dibenzofuran	U	435	ug/kg	87.0	435
84-66-2	Diethylphthalate	U	435	ug/kg	87.0	435
86-73-7	Fluorene	U	43.5	ug/kg	13.1	43.5
7005-72-3	4-Chlorophenylphenylether	U	435	ug/kg	87.0	435
534-52-1	2-Methyl-4,6-dinitrophenol	U	435	ug/kg	87.0	435
100-01-6	4-Nitroaniline	U	435	ug/kg	131	435
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	435	ug/kg	87.0	435
122-66-7	Azobenzene	U	435	ug/kg	87.0	435
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	435	ug/kg	87.0	435
118-74-1	Hexachlorobenzene	U	435	ug/kg	87.0	435
85-01-8	Phenanthrene	J	15.4	ug/kg	13.1	43.5
120-12-7	Anthracene	U	43.5	ug/kg	8.70	43.5
84-74-2	Di-n-butylphthalate	U	435	ug/kg	87.0	435
206-44-0	Fluoranthene	J	29.7	ug/kg	13.1	43.5
85-68-7	Butylbenzylphthalate	U	435	ug/kg	87.0	435
56-55-3	Benzo(a)anthracene	J	17.9	ug/kg	13.1	43.5
91-94-1	3,3'-Dichlorobenzidine	U	435	ug/kg	131	435
218-01-9	Chrysene	J	16.7	ug/kg	13.1	43.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	435	ug/kg	87.0	435
117-84-0	Di-n-octylphthalate	U	435	ug/kg	87.0	435
205-99-2	Benzo(b)fluoranthene	J	24.8	ug/kg	13.1	43.5
207-08-9	Benzo(k)fluoranthene	U	43.5	ug/kg	13.1	43.5
50-32-8	Benzo(a)pyrene	J	13.6	ug/kg	13.1	43.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.5	ug/kg	13.1	43.5
53-70-3	Dibenzo(a,h)anthracene	U	43.5	ug/kg	13.1	43.5
191-24-2	Benzo(ghi)perylene	U	43.5	ug/kg	13.1	43.5
120-82-1	1,2,4-Trichlorobenzene	U	435	ug/kg	87.0	435

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	267	ug/kg		JA
3387-41-5	Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3.39	177	ug/kg	95	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370013	Date Received: 03/02/2010 08:50	%Moisture: 23.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7477	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.J	Dilution: 1
Run Date: 03/22/2010 01:18	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2123.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
5989-27-5	D-Limonene	3.67	182	ug/kg	94	NJ
	Unknown	7.9	342	ug/kg		J
	Unknown	9.19	255	ug/kg		J
112-95-8	Eicosane	9.78	255	ug/kg	96	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7478
Batch ID: 961228
Run Date: 03/21/2010 22:56
Prep Date: 03/05/2010 11:30
Data File: s1c2117.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	73.9	370
108-95-2	Phenol	U	370	ug/kg	73.9	370
95-57-8	2-Chlorophenol	U	370	ug/kg	73.9	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	73.9	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	73.9	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	73.9	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.4	370
129-00-0	Pyrene	J	24.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	73.9	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	73.9	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	73.9	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	73.9	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	73.9	370
95-48-7	o-Cresol	U	370	ug/kg	73.9	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	73.9	370
98-95-3	Nitrobenzene	U	370	ug/kg	73.9	370
78-59-1	Isophorone	U	370	ug/kg	73.9	370
88-75-5	2-Nitrophenol	U	370	ug/kg	73.9	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	73.9	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	73.9	370
65-85-0	Benzoic acid	U	739	ug/kg	185	739
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	73.9	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	73.9	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.39	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	73.9	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	73.9	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	73.9	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	73.9	370
99-09-2	o-Nitroaniline	U	370	ug/kg	73.9	370
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	370	ug/kg	73.9	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	370	ug/kg	73.9	370
84-66-2	Diethylphthalate	U	370	ug/kg	73.9	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	73.9	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	73.9	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	73.9	370
122-66-7	Azobenzene	U	370	ug/kg	73.9	370
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	73.9	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	73.9	370
85-01-8	Phenanthrene	J	11.7	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.39	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	73.9	370
206-44-0	Fluoranthene	J	21.7	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	73.9	370
56-55-3	Benzo(a)anthracene	J	13.3	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	J	15.8	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	73.9	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	73.9	370
205-99-2	Benzo(b)fluoranthene	J	19.3	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	73.9	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	230	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	241	ug/kg	99	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370007

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7478
Batch ID: 961228
Run Date: 03/21/2010 22:56
Prep Date: 03/05/2010 11:30
Data File: s1c2117.d

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	6.59	213	ug/kg		J
	Unknown	8.09	357	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.13	339	ug/kg	95	NJ
55402-13-6	3-Octyne, 2,2,7-trimethyl-	8.93	222	ug/kg	83	NJ
112-95-8	Eicosane	9.06	167	ug/kg	97	NJ
	Unknown	9.77	206	ug/kg		J
	Unknown	12.29	177	ug/kg		J

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370015	Date Received: 03/02/2010 08:50	%Moisture: 27.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7479	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 02:05	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: slc2125.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	458	ug/kg	91.7	458
108-95-2	Phenol	U	458	ug/kg	91.7	458
95-57-8	2-Chlorophenol	U	458	ug/kg	91.7	458
106-46-7	1,4-Dichlorobenzene	U	458	ug/kg	91.7	458
621-64-7	N-Nitrosodipropylamine	U	458	ug/kg	91.7	458
59-50-7	4-Chloro-3-methylphenol	U	458	ug/kg	91.7	458
83-32-9	Acenaphthene	U	45.8	ug/kg	15.1	45.8
121-14-2	2,4-Dinitrotoluene	U	458	ug/kg	45.8	458
100-02-7	4-Nitrophenol	U	458	ug/kg	151	458
87-86-5	Pentachlorophenol	U	458	ug/kg	115	458
129-00-0	Pyrene	U	45.8	ug/kg	13.7	45.8
110-86-1	Pyridine	U	458	ug/kg	91.7	458
62-53-3	Aniline	U	458	ug/kg	137	458
111-44-4	bis(2-Chloroethyl) ether	U	458	ug/kg	91.7	458
541-73-1	1,3-Dichlorobenzene	U	458	ug/kg	91.7	458
100-51-6	Benzyl alcohol	U	458	ug/kg	137	458
95-50-1	1,2-Dichlorobenzene	U	458	ug/kg	91.7	458
108-60-1	bis(2-Chloroisopropyl)ether	U	458	ug/kg	91.7	458
95-48-7	o-Cresol	U	458	ug/kg	91.7	458
65794-96-9	m,p-Cresols	U	458	ug/kg	137	458
67-72-1	Hexachloroethane	U	458	ug/kg	91.7	458
98-95-3	Nitrobenzene	U	458	ug/kg	91.7	458
78-59-1	Isophorone	U	458	ug/kg	91.7	458
88-75-5	2-Nitrophenol	U	458	ug/kg	91.7	458
105-67-9	2,4-Dimethylphenol	U	458	ug/kg	160	458
111-91-1	bis(2-Chloroethoxy)methane	U	458	ug/kg	91.7	458
120-83-2	2,4-Dichlorophenol	U	458	ug/kg	91.7	458
65-85-0	Benzoic acid	U	917	ug/kg	229	917
91-20-3	Naphthalene	U	45.8	ug/kg	13.7	45.8
106-47-8	4-Chloroaniline	U	458	ug/kg	91.7	458
87-68-3	Hexachlorobutadiene	U	458	ug/kg	91.7	458
91-57-6	2-Methylnaphthalene	U	45.8	ug/kg	9.17	45.8
77-47-4	Hexachlorocyclopentadiene	U	458	ug/kg	91.7	458
88-06-2	2,4,6-Trichlorophenol	U	458	ug/kg	91.7	458
95-95-4	2,4,5-Trichlorophenol	U	458	ug/kg	91.7	458
91-58-7	2-Chloronaphthalene	U	45.8	ug/kg	15.1	45.8
88-74-4	2-Nitroaniline	U	458	ug/kg	91.7	458
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	458	ug/kg	91.7	458

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370015	Date Received: 03/02/2010 08:50	%Moisture: 27.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7479	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 02:05	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2125.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	458	ug/kg	91.7	458
606-20-2	2,6-Dinitrotoluene	U	458	ug/kg	45.8	458
208-96-8	Acenaphthylene	U	45.8	ug/kg	13.7	45.8
51-28-5	2,4-Dinitrophenol	U	917	ug/kg	174	917
132-64-9	Dibenzofuran	U	458	ug/kg	91.7	458
84-66-2	Diethylphthalate	U	458	ug/kg	91.7	458
86-73-7	Fluorene	U	45.8	ug/kg	13.7	45.8
7005-72-3	4-Chlorophenylphenylether	U	458	ug/kg	91.7	458
534-52-1	2-Methyl-4,6-dinitrophenol	U	458	ug/kg	91.7	458
100-01-6	4-Nitroaniline	U	458	ug/kg	137	458
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	458	ug/kg	91.7	458
122-66-7	Azobenzene	U	458	ug/kg	91.7	458
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	458	ug/kg	91.7	458
118-74-1	Hexachlorobenzene	U	458	ug/kg	91.7	458
85-01-8	Phenanthrene	U	45.8	ug/kg	13.7	45.8
120-12-7	Anthracene	U	45.8	ug/kg	9.17	45.8
84-74-2	Di-n-butylphthalate	U	458	ug/kg	91.7	458
206-44-0	Fluoranthene	U	45.8	ug/kg	13.7	45.8
85-68-7	Butylbenzylphthalate	U	458	ug/kg	91.7	458
56-55-3	Benzo(a)anthracene	U	45.8	ug/kg	13.7	45.8
91-94-1	3,3'-Dichlorobenzidine	U	458	ug/kg	137	458
218-01-9	Chrysene	U	45.8	ug/kg	13.7	45.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	458	ug/kg	91.7	458
117-84-0	Di-n-octylphthalate	U	458	ug/kg	91.7	458
205-99-2	Benzo(b)fluoranthene	U	45.8	ug/kg	13.7	45.8
207-08-9	Benzo(k)fluoranthene	U	45.8	ug/kg	13.7	45.8
50-32-8	Benzo(a)pyrene	U	45.8	ug/kg	13.7	45.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.8	ug/kg	13.7	45.8
53-70-3	Dibenzo(a,h)anthracene	U	45.8	ug/kg	13.7	45.8
191-24-2	Benzo(ghi)perylene	U	45.8	ug/kg	13.7	45.8
120-82-1	1,2,4-Trichlorobenzene	U	458	ug/kg	91.7	458

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	514	ug/kg		J
	Unknown Aldol Condensate	2.67	257	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370015	Date Received: 03/02/2010 08:50	% Moisture: 27.3
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7479	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 02:05	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: slc2125.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
489-40-7	Unknown	5.14	739	ug/kg		J
	1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,	5.39	189	ug/kg	98	NJ
	Unknown	7.32	230	ug/kg		J
	Unknown	7.56	301	ug/kg		J
	Unknown	8.62	337	ug/kg		J
	Unknown	8.78	206	ug/kg		J
	Unknown	9	307	ug/kg		J
112-95-8	Unknown	9.06	276	ug/kg		J
	Eicosane	9.78	375	ug/kg	98	NJ
	Unknown	10.02	369	ug/kg		J
	Unknown	10.1	245	ug/kg		J
	Unknown	10.4	251	ug/kg		J
1058-61-3	Unknown	10.77	231	ug/kg		J
	Stigmast-4-en-3-one	12.3	403	ug/kg	70	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370017

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7480
Batch ID: 961228
Run Date: 03/22/2010 02:53
Prep Date: 03/05/2010 11:30
Data File: s1c2127.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	379	ug/kg	75.8	379
108-95-2	Phenol	U	379	ug/kg	75.8	379
95-57-8	2-Chlorophenol	U	379	ug/kg	75.8	379
106-46-7	1,4-Dichlorobenzene	U	379	ug/kg	75.8	379
621-64-7	N-Nitrosodipropylamine	U	379	ug/kg	75.8	379
59-50-7	4-Chloro-3-methylphenol	U	379	ug/kg	75.8	379
83-32-9	Acenaphthene	U	37.9	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene	U	379	ug/kg	37.9	379
100-02-7	4-Nitrophenol	U	379	ug/kg	125	379
87-86-5	Pentachlorophenol	U	379	ug/kg	94.7	379
129-00-0	Pyrene	U	37.9	ug/kg	11.4	37.9
110-86-1	Pyridine	U	379	ug/kg	75.8	379
62-53-3	Aniline	U	379	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether	U	379	ug/kg	75.8	379
541-73-1	1,3-Dichlorobenzene	U	379	ug/kg	75.8	379
100-51-6	Benzyl alcohol	U	379	ug/kg	114	379
95-50-1	1,2-Dichlorobenzene	U	379	ug/kg	75.8	379
108-60-1	bis(2-Chloroisopropyl)ether	U	379	ug/kg	75.8	379
95-48-7	o-Cresol	U	379	ug/kg	75.8	379
65794-96-9	m,p-Cresols	U	379	ug/kg	114	379
67-72-1	Hexachloroethane	U	379	ug/kg	75.8	379
98-95-3	Nitrobenzene	U	379	ug/kg	75.8	379
78-59-1	Isophorone	U	379	ug/kg	75.8	379
88-75-5	2-Nitrophenol	U	379	ug/kg	75.8	379
105-67-9	2,4-Dimethylphenol	U	379	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane	U	379	ug/kg	75.8	379
120-83-2	2,4-Dichlorophenol	U	379	ug/kg	75.8	379
65-85-0	Benzoic acid	U	758	ug/kg	189	758
91-20-3	Naphthalene	U	37.9	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline	U	379	ug/kg	75.8	379
87-68-3	Hexachlorobutadiene	U	379	ug/kg	75.8	379
91-57-6	2-Methylnaphthalene	U	37.9	ug/kg	7.58	37.9
77-47-4	Hexachlorocyclopentadiene	U	379	ug/kg	75.8	379
88-06-2	2,4,6-Trichlorophenol	U	379	ug/kg	75.8	379
95-95-4	2,4,5-Trichlorophenol	U	379	ug/kg	75.8	379
91-58-7	2-Chloronaphthalene	J	21.5	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline	U	379	ug/kg	75.8	379
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	379	ug/kg	75.8	379

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370017	Date Received: 03/02/2010 08:50	%Moisture: 12.1
Client ID: RE36-10-7480	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 02:53	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: slc2127.d	Aliquot: 30.03 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	379	ug/kg	75.8	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	758	ug/kg	144	758
132-64-9	Dibenzofuran	U	379	ug/kg	75.8	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.8	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.8	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.8	379
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.8	379
122-66-7	Azobenzene	U	379	ug/kg	75.8	379
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.8	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.8	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.58	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.8	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.8	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.8	379
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.8	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.8	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	476	ug/kg		J
	Unknown Aldol Condensate	2.67	382	ug/kg		JA

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

SDG Number: 10-2150
Lab Sample ID: 248370017

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.1
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
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.19	730	ug/kg	97	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.43	192	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	178	ug/kg	97	NJ
	Unknown	5.13	230	ug/kg		J
112-80-1	Oleic Acid	7.4	186	ug/kg	96	NJ
	Unknown	7.75	202	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	165	ug/kg	96	NJ
	Unknown	8.09	211	ug/kg		J
	Unknown	8.13	317	ug/kg		J
	Unknown	8.26	217	ug/kg		J
	Unknown	8.62	190	ug/kg		J
	Unknown	8.78	212	ug/kg		J
	Unknown	9	164	ug/kg		J
112-95-8	Eicosane	9.06	292	ug/kg	98	NJ
	Unknown	9.18	207	ug/kg		J
	Unknown	9.78	318	ug/kg		J
	Unknown	10.77	160	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	275	ug/kg	42	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7481
Batch ID: 961228
Run Date: 03/22/2010 00:31
Prep Date: 03/05/2010 11:30
Data File: s1c2121.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	495	ug/kg	99.0	495
108-95-2	Phenol	U	495	ug/kg	99.0	495
95-57-8	2-Chlorophenol	U	495	ug/kg	99.0	495
106-46-7	1,4-Dichlorobenzene	U	495	ug/kg	99.0	495
621-64-7	N-Nitrosodipropylamine	U	495	ug/kg	99.0	495
59-50-7	4-Chloro-3-methylphenol	U	495	ug/kg	99.0	495
83-32-9	Acenaphthene		120	ug/kg	16.3	49.5
121-14-2	2,4-Dinitrotoluene	U	495	ug/kg	49.5	495
100-02-7	4-Nitrophenol	U	495	ug/kg	163	495
87-86-5	Pentachlorophenol	U	495	ug/kg	124	495
129-00-0	Pyrene		829	ug/kg	14.8	49.5
110-86-1	Pyridine	U	495	ug/kg	99.0	495
62-53-3	Aniline	U	495	ug/kg	148	495
111-44-4	bis(2-Chloroethyl) ether	U	495	ug/kg	99.0	495
541-73-1	1,3-Dichlorobenzene	U	495	ug/kg	99.0	495
100-51-6	Benzyl alcohol	U	495	ug/kg	148	495
95-50-1	1,2-Dichlorobenzene	U	495	ug/kg	99.0	495
108-60-1	bis(2-Chloroisopropyl)ether	U	495	ug/kg	99.0	495
95-48-7	o-Cresol	U	495	ug/kg	99.0	495
65794-96-9	m,p-Cresols	U	495	ug/kg	148	495
67-72-1	Hexachloroethane	U	495	ug/kg	99.0	495
98-95-3	Nitrobenzene	U	495	ug/kg	99.0	495
78-59-1	Isophorone	U	495	ug/kg	99.0	495
88-75-5	2-Nitrophenol	U	495	ug/kg	99.0	495
105-67-9	2,4-Dimethylphenol	U	495	ug/kg	173	495
111-91-1	bis(2-Chloroethoxy)methane	U	495	ug/kg	99.0	495
120-83-2	2,4-Dichlorophenol	U	495	ug/kg	99.0	495
65-85-0	Benzoic acid	U	990	ug/kg	247	990
91-20-3	Naphthalene		81.5	ug/kg	14.8	49.5
106-47-8	4-Chloroaniline	U	495	ug/kg	99.0	495
87-68-3	Hexachlorobutadiene	U	495	ug/kg	99.0	495
91-57-6	2-Methylnaphthalene	J	32.4	ug/kg	9.90	49.5
77-47-4	Hexachlorocyclopentadiene	U	495	ug/kg	99.0	495
88-06-2	2,4,6-Trichlorophenol	U	495	ug/kg	99.0	495
95-95-4	2,4,5-Trichlorophenol	U	495	ug/kg	99.0	495
91-58-7	2-Chloronaphthalene	U	49.5	ug/kg	16.3	49.5
88-74-4	2-Nitroaniline	U	495	ug/kg	99.0	495
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	495	ug/kg	99.0	495

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	% Moisture: 32.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7481	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.1	Dilution: 1
Run Date: 03/22/2010 00:31	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2121.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	495	ug/kg	99.0	495
606-20-2	2,6-Dinitrotoluene	U	495	ug/kg	49.5	495
208-96-8	Acenaphthylene	U	49.5	ug/kg	14.8	49.5
51-28-5	2,4-Dinitrophenol	U	990	ug/kg	188	990
132-64-9	Dibenzofuran	U	495	ug/kg	99.0	495
84-66-2	Diethylphthalate	U	495	ug/kg	99.0	495
86-73-7	Fluorene		131	ug/kg	14.8	49.5
7005-72-3	4-Chlorophenylphenylether	U	495	ug/kg	99.0	495
534-52-1	2-Methyl-4,6-dinitrophenol	U	495	ug/kg	99.0	495
100-01-6	4-Nitroaniline	U	495	ug/kg	148	495
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	495	ug/kg	99.0	495
122-66-7	Azobenzene	U	495	ug/kg	99.0	495
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	495	ug/kg	99.0	495
118-74-1	Hexachlorobenzene	U	495	ug/kg	99.0	495
85-01-8	Phenanthrene		919	ug/kg	14.8	49.5
120-12-7	Anthracene		216	ug/kg	9.90	49.5
84-74-2	Di-n-butylphthalate	U	495	ug/kg	99.0	495
206-44-0	Fluoranthene		962	ug/kg	14.8	49.5
85-68-7	Butylbenzylphthalate	U	495	ug/kg	99.0	495
56-55-3	Benzo(a)anthracene		363	ug/kg	14.8	49.5
91-94-1	3,3'-Dichlorobenzidine	U	495	ug/kg	148	495
218-01-9	Chrysene		407	ug/kg	14.8	49.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	495	ug/kg	99.0	495
117-84-0	Di-n-octylphthalate	U	495	ug/kg	99.0	495
205-99-2	Benzo(b)fluoranthene		538	ug/kg	14.8	49.5
207-08-9	Benzo(k)fluoranthene	U	49.5	ug/kg	14.8	49.5
50-32-8	Benzo(a)pyrene		328	ug/kg	14.8	49.5
193-39-5	Indeno(1,2,3-cd)pyrene		131	ug/kg	14.8	49.5
53-70-3	Dibenzo(a,h)anthracene	U	49.5	ug/kg	14.8	49.5
191-24-2	Benzo(ghi)perylene		137	ug/kg	14.8	49.5
120-82-1	1,2,4-Trichlorobenzene	U	495	ug/kg	99.0	495

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
64-19-7	Acetic acid	1.66	918	ug/kg	86	NJ
	Unknown	1.82	250	ug/kg		J

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

SDG Number: 10-2150
Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.J
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7481
Batch ID: 961228
Run Date: 03/22/2010 00:31
Prep Date: 03/05/2010 11:30
Data File: s1c2121.d

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	2.37	445	ug/kg		J
	Unknown	2.41	603	ug/kg		J
	Unknown	2.63	221	ug/kg		J
	Unknown Aldol Condensate	2.67	350	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	234	ug/kg	99	NJ
593-45-3	Octadecane	9.06	313	ug/kg	98	NJ
192-97-2	Benzo[e]pyrene	9.4	363	ug/kg	98	NJ
112-95-8	Eicosane	9.78	316	ug/kg	96	NJ
	Unknown	10.02	226	ug/kg		J

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

SDG Number: 10-2150
Lab Sample ID: 248370016

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7482
Batch ID: 961228
Run Date: 03/22/2010 02:29
Prep Date: 03/05/2010 11:30
Data File: s1c2126.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	440	ug/kg	88.0	440
108-95-2	Phenol	U	440	ug/kg	88.0	440
95-57-8	2-Chlorophenol	U	440	ug/kg	88.0	440
106-46-7	1,4-Dichlorobenzene	U	440	ug/kg	88.0	440
621-64-7	N-Nitrosodipropylamine	U	440	ug/kg	88.0	440
59-50-7	4-Chloro-3-methylphenol	U	440	ug/kg	88.0	440
83-32-9	Acenaphthene		64.6	ug/kg	14.5	44.0
121-14-2	2,4-Dinitrotoluene	U	440	ug/kg	44.0	440
100-02-7	4-Nitrophenol	U	440	ug/kg	145	440
87-86-5	Pentachlorophenol	U	440	ug/kg	110	440
129-00-0	Pyrene		345	ug/kg	13.2	44.0
110-86-1	Pyridine	U	440	ug/kg	88.0	440
62-53-3	Aniline	U	440	ug/kg	132	440
111-44-4	bis(2-Chloroethyl) ether	U	440	ug/kg	88.0	440
541-73-1	1,3-Dichlorobenzene	U	440	ug/kg	88.0	440
100-51-6	Benzyl alcohol	U	440	ug/kg	132	440
95-50-1	1,2-Dichlorobenzene	U	440	ug/kg	88.0	440
108-60-1	bis(2-Chloroisopropyl)ether	U	440	ug/kg	88.0	440
95-48-7	o-Cresol	U	440	ug/kg	88.0	440
65794-96-9	m,p-Cresols	U	440	ug/kg	132	440
67-72-1	Hexachloroethane	U	440	ug/kg	88.0	440
98-95-3	Nitrobenzene	U	440	ug/kg	88.0	440
78-59-1	Isophorone	U	440	ug/kg	88.0	440
88-75-5	2-Nitrophenol	U	440	ug/kg	88.0	440
105-67-9	2,4-Dimethylphenol	U	440	ug/kg	154	440
111-91-1	bis(2-Chloroethoxy)methane	U	440	ug/kg	88.0	440
120-83-2	2,4-Dichlorophenol	U	440	ug/kg	88.0	440
65-85-0	Benzoic acid	U	880	ug/kg	220	880
91-20-3	Naphthalene	J	39.6	ug/kg	13.2	44.0
106-47-8	4-Chloroaniline	U	440	ug/kg	88.0	440
87-68-3	Hexachlorobutadiene	U	440	ug/kg	88.0	440
91-57-6	2-Methylnaphthalene	J	17.8	ug/kg	8.80	44.0
77-47-4	Hexachlorocyclopentadiene	U	440	ug/kg	88.0	440
88-06-2	2,4,6-Trichlorophenol	U	440	ug/kg	88.0	440
95-95-4	2,4,5-Trichlorophenol	U	440	ug/kg	88.0	440
91-58-7	2-Chloronaphthalene	U	44.0	ug/kg	14.5	44.0
88-74-4	2-Nitroaniline	U	440	ug/kg	88.0	440
99-09-2	3-Nitroaniline	U	440	ug/kg	88.0	440

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

SDG Number: 10-2150
Lab Sample ID: 248370016

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7482
Batch ID: 961228
Run Date: 03/22/2010 02:29
Prep Date: 03/05/2010 11:30
Data File: s1c2126.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	440	ug/kg	88.0	440
606-20-2	2,6-Dinitrotoluene	U	440	ug/kg	44.0	440
208-96-8	Acenaphthylene	U	44.0	ug/kg	13.2	44.0
51-28-5	2,4-Dinitrophenol	U	880	ug/kg	167	880
132-64-9	Dibenzofuran	U	440	ug/kg	88.0	440
84-66-2	Diethylphthalate	U	440	ug/kg	88.0	440
86-73-7	Fluorene		84.2	ug/kg	13.2	44.0
7005-72-3	4-Chlorophenylphenylether	U	440	ug/kg	88.0	440
534-52-1	2-Methyl-4,6-dinitrophenol	U	440	ug/kg	88.0	440
100-01-6	4-Nitroaniline	U	440	ug/kg	132	440
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	440	ug/kg	88.0	440
122-66-7	Azobenzene	U	440	ug/kg	88.0	440
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	440	ug/kg	88.0	440
118-74-1	Hexachlorobenzene	U	440	ug/kg	88.0	440
85-01-8	Phenanthrene		480	ug/kg	13.2	44.0
120-12-7	Anthracene		104	ug/kg	8.80	44.0
84-74-2	Di-n-butylphthalate	U	440	ug/kg	88.0	440
206-44-0	Fluoranthene		399	ug/kg	13.2	44.0
85-68-7	Butylbenzylphthalate	U	440	ug/kg	88.0	440
56-55-3	Benzo(a)anthracene		168	ug/kg	13.2	44.0
91-94-1	3,3'-Dichlorobenzidine	U	440	ug/kg	132	440
218-01-9	Chrysene		146	ug/kg	13.2	44.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	440	ug/kg	88.0	440
117-84-0	Di-n-octylphthalate	U	440	ug/kg	88.0	440
205-99-2	Benzo(b)fluoranthene		195	ug/kg	13.2	44.0
207-08-9	Benzo(k)fluoranthene	U	44.0	ug/kg	13.2	44.0
50-32-8	Benzo(a)pyrene		117	ug/kg	13.2	44.0
193-39-5	Indeno(1,2,3-cd)pyrene		49.2	ug/kg	13.2	44.0
53-70-3	Dibenzo(a,h)anthracene	U	44.0	ug/kg	13.2	44.0
191-24-2	Benzo(ghi)perylene		54.5	ug/kg	13.2	44.0
120-82-1	1,2,4-Trichlorobenzene	U	440	ug/kg	88.0	440

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	268	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.19	760	ug/kg	97	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370016

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7482
Batch ID: 961228
Run Date: 03/22/2010 02:29
Prep Date: 03/05/2010 11:30
Data File: s1c2126.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	3.57	617	ug/kg	97	NJ
638-67-5	Tricosane	7.71	319	ug/kg	97	NJ
629-78-7	Heptadecane	7.9	424	ug/kg	98	NJ
7225-66-3	Tridecane, 7-hexyl-	8.09	476	ug/kg	96	NJ
544-76-3	Hexadecane	8.53	358	ug/kg	94	NJ
1000193-16-8	4-Methylbenzaldehyde N-allyl-N-ethoxycar	8.69	189	ug/kg	95	NJ
112-95-8	Eicosane	8.78	264	ug/kg	98	NJ
	Unknown	9.07	479	ug/kg		J
205-99-2	Benz[e]acephenanthrylene	9.16	452	ug/kg	96	NJ
	Unknown	9.4	439	ug/kg		J
	Unknown	9.78	407	ug/kg		J
	Unknown	10.23	329	ug/kg		J
	Unknown	10.77	213	ug/kg		J

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

SDG Number: 10-2150
Lab Sample ID: 248370010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

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

Client ID: RE36-10-7483
Batch ID: 961228
Run Date: 03/22/2010 00:07
Prep Date: 03/05/2010 11:30
Data File: slc2120.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	439	ug/kg	87.7	439
108-95-2	Phenol	U	439	ug/kg	87.7	439
95-57-8	2-Chlorophenol	U	439	ug/kg	87.7	439
106-46-7	1,4-Dichlorobenzene	U	439	ug/kg	87.7	439
621-64-7	N-Nitrosodipropylamine	U	439	ug/kg	87.7	439
59-50-7	4-Chloro-3-methylphenol	U	439	ug/kg	87.7	439
83-32-9	Acenaphthene	U	43.9	ug/kg	14.5	43.9
121-14-2	2,4-Dinitrotoluene	U	439	ug/kg	43.9	439
100-02-7	4-Nitrophenol	U	439	ug/kg	145	439
87-86-5	Pentachlorophenol	U	439	ug/kg	110	439
129-00-0	Pyrene	J	13.4	ug/kg	13.2	43.9
110-86-1	Pyridine	U	439	ug/kg	87.7	439
62-53-3	Aniline	U	439	ug/kg	132	439
111-44-4	bis(2-Chloroethyl) ether	U	439	ug/kg	87.7	439
541-73-1	1,3-Dichlorobenzene	U	439	ug/kg	87.7	439
100-51-6	Benzyl alcohol	U	439	ug/kg	132	439
95-50-1	1,2-Dichlorobenzene	U	439	ug/kg	87.7	439
108-60-1	bis(2-Chloroisopropyl)ether	U	439	ug/kg	87.7	439
95-48-7	o-Cresol	U	439	ug/kg	87.7	439
65794-96-9	m,p-Cresols	U	439	ug/kg	132	439
67-72-1	Hexachloroethane	U	439	ug/kg	87.7	439
98-95-3	Nitrobenzene	U	439	ug/kg	87.7	439
78-59-1	Isophorone	U	439	ug/kg	87.7	439
88-75-5	2-Nitrophenol	U	439	ug/kg	87.7	439
105-67-9	2,4-Dimethylphenol	U	439	ug/kg	153	439
111-91-1	bis(2-Chloroethoxy)methane	U	439	ug/kg	87.7	439
120-83-2	2,4-Dichlorophenol	U	439	ug/kg	87.7	439
65-85-0	Benzoic acid	U	877	ug/kg	219	877
91-20-3	Naphthalene	U	43.9	ug/kg	13.2	43.9
106-47-8	4-Chloroaniline	U	439	ug/kg	87.7	439
87-68-3	Hexachlorobutadiene	U	439	ug/kg	87.7	439
91-57-6	2-Methylnaphthalene	U	43.9	ug/kg	8.77	43.9
77-47-4	Hexachlorocyclopentadiene	U	439	ug/kg	87.7	439
88-06-2	2,4,6-Trichlorophenol	U	439	ug/kg	87.7	439
95-95-4	2,4,5-Trichlorophenol	U	439	ug/kg	87.7	439
91-58-7	2-Chloronaphthalene	U	43.9	ug/kg	14.5	43.9
88-74-4	2-Nitroaniline	U	439	ug/kg	87.7	439
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	439	ug/kg	87.7	439

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

SDG Number: 10-2150
Lab Sample ID: 248370010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

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

Client ID: RE36-10-7483
Batch ID: 961228
Run Date: 03/22/2010 00:07
Prep Date: 03/05/2010 11:30
Data File: s1c2120.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	439	ug/kg	87.7	439
606-20-2	2,6-Dinitrotoluene	U	439	ug/kg	43.9	439
208-96-8	Acenaphthylene	U	43.9	ug/kg	13.2	43.9
51-28-5	2,4-Dinitrophenol	U	877	ug/kg	167	877
132-64-9	Dibenzofuran	U	439	ug/kg	87.7	439
84-66-2	Diethylphthalate	U	439	ug/kg	87.7	439
86-73-7	Fluorene	U	43.9	ug/kg	13.2	43.9
7005-72-3	4-Chlorophenylphenylether	U	439	ug/kg	87.7	439
534-52-1	2-Methyl-4,6-dinitrophenol	U	439	ug/kg	87.7	439
100-01-6	4-Nitroaniline	U	439	ug/kg	132	439
122-39-4	<i>p</i> -Nitroaniline					
	Diphenylamine	U	439	ug/kg	87.7	439
122-66-7	Azobenzene	U	439	ug/kg	87.7	439
101-55-3	<i>1,2</i> -Diphenylhydrazine					
	4-Bromophenylphenylether	U	439	ug/kg	87.7	439
118-74-1	Hexachlorobenzene	U	439	ug/kg	87.7	439
85-01-8	Phenanthrene	U	43.9	ug/kg	13.2	43.9
120-12-7	Anthracene	U	43.9	ug/kg	8.77	43.9
84-74-2	Di-n-butylphthalate	U	439	ug/kg	87.7	439
206-44-0	Fluoranthene	U	43.9	ug/kg	13.2	43.9
85-68-7	Butylbenzylphthalate	U	439	ug/kg	87.7	439
56-55-3	Benzo(a)anthracene	U	43.9	ug/kg	13.2	43.9
91-94-1	3,3'-Dichlorobenzidine	U	439	ug/kg	132	439
218-01-9	Chrysene	U	43.9	ug/kg	13.2	43.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	439	ug/kg	87.7	439
117-84-0	Di-n-octylphthalate	U	439	ug/kg	87.7	439
205-99-2	Benzo(b)fluoranthene	U	43.9	ug/kg	13.2	43.9
207-08-9	Benzo(k)fluoranthene	U	43.9	ug/kg	13.2	43.9
50-32-8	Benzo(a)pyrene	U	43.9	ug/kg	13.2	43.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.9	ug/kg	13.2	43.9
53-70-3	Dibenzo(a,h)anthracene	U	43.9	ug/kg	13.2	43.9
191-24-2	Benzo(ghi)perylene	U	43.9	ug/kg	13.2	43.9
120-82-1	1,2,4-Trichlorobenzene	U	439	ug/kg	87.7	439

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	513	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.19	1610	ug/kg	97	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370010	Date Received: 03/02/2010 08:50	%Moisture: 24
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7483	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 00:07	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: slc2120.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
79-92-5	Camphene	3.29	516	ug/kg	98	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.43	618	ug/kg	97	NJ
13466-78-9	3-Carene	3.57	1060	ug/kg	96	NJ
103-82-2	Benzeneacetic acid	4.62	203	ug/kg	90	NJ
87-44-5	Caryophyllene	5.45	197	ug/kg	99	NJ
57-10-3	n-Hexadecanoic acid	6.99	254	ug/kg	98	NJ
	Unknown	7.23	194	ug/kg		J
	Unknown	7.32	630	ug/kg		J
	Unknown	7.34	184	ug/kg		J
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	387	ug/kg	99	NJ
57-11-4	Octadecanoic acid	7.44	211	ug/kg	90	NJ
	Unknown	7.75	245	ug/kg		J
	Unknown	7.85	617	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	256	ug/kg	99	NJ
	Unknown	7.92	492	ug/kg		J
	Unknown	7.97	286	ug/kg		J
	Unknown	8.09	2370	ug/kg		J
	Unknown	8.14	1090	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	8.26	629	ug/kg	92	NJ
	Unknown	8.33	678	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	8.53	238	ug/kg	96	NJ
1599-67-3	1-Docosene	8.73	572	ug/kg	98	NJ
	Eicosane	9.07	764	ug/kg	0	J
112-40-3	Dodecane	9.76	594	ug/kg	90	NJ
	Unknown	10.02	4970	ug/kg		J
	Unknown	10.4	1010	ug/kg		J
83-47-6	.gamma.-Sitosterol	11.67	668	ug/kg	90	NJ
1058-61-3	Stigmast-4-en-3-one	12.31	1470	ug/kg	95	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370020

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 17.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7484
Batch ID: 961228
Run Date: 03/22/2010 04:03
Prep Date: 03/05/2010 11:30
Data File: slc2130.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.7	404
108-95-2	Phenol	U	404	ug/kg	80.7	404
95-57-8	2-Chlorophenol	U	404	ug/kg	80.7	404
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.7	404
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.7	404
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.7	404
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404
129-00-0	Pyrene	U	40.4	ug/kg	12.1	40.4
110-86-1	Pyridine	U	404	ug/kg	80.7	404
62-53-3	Aniline	U	404	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.7	404
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.7	404
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.7	404
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.7	404
95-48-7	o-Cresol	U	404	ug/kg	80.7	404
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404
67-72-1	Hexachloroethane	U	404	ug/kg	80.7	404
98-95-3	Nitrobenzene	U	404	ug/kg	80.7	404
78-59-1	Isophorone	U	404	ug/kg	80.7	404
88-75-5	2-Nitrophenol	U	404	ug/kg	80.7	404
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.7	404
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.7	404
65-85-0	Benzoic acid	U	807	ug/kg	202	807
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline	U	404	ug/kg	80.7	404
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.7	404
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.07	40.4
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.7	404
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.7	404
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.7	404
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline	U	404	ug/kg	80.7	404
99-09-2	<i>o</i> -Nitroaniline	U	404	ug/kg	80.7	404
	3-Nitroaniline					

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370020	Date Received: 03/02/2010 08:50	%Moisture: 17.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7484	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.1	Dilution: 1
Run Date: 03/22/2010 04:03	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2130.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	404	ug/kg	80.7	404
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol	U	807	ug/kg	153	807
132-64-9	Dibenzofuran	U	404	ug/kg	80.7	404
84-66-2	Diethylphthalate	U	404	ug/kg	80.7	404
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.7	404
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.7	404
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	404	ug/kg	80.7	404
122-66-7	Azobenzene	U	404	ug/kg	80.7	404
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.7	404
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.7	404
85-01-8	Phenanthrene	U	40.4	ug/kg	12.1	40.4
120-12-7	Anthracene	U	40.4	ug/kg	8.07	40.4
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.7	404
206-44-0	Fluoranthene	U	40.4	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate	J	214	ug/kg	80.7	404
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
218-01-9	Chrysene	U	40.4	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.7	404
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.7	404
205-99-2	Benzo(b)fluoranthene	U	40.4	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene	U	40.4	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene	U	40.4	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.4	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene	U	40.4	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.7	404

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.62	218	ug/kg		J
	Unknown Aldol Condensate	2.67	402	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370020	Date Received: 03/02/2010 08:50	%Moisture: 17.4
Client ID: RE36-10-7484	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 04:03	Inst: MSD1.1	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2130.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT	Units	Fit	Qual	
7785-70-8	1R-.alpha.-Pinene	3.19	789	ug/kg	97	NJ
79-92-5	Camphene	3.29	195	ug/kg	98	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.43	345	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	619	ug/kg	97	NJ
	Unknown	7.32	276	ug/kg		J
112-80-1	Oleic Acid	7.4	197	ug/kg	93	NJ
	Unknown	7.75	245	ug/kg		J
506-30-9	Eicosanoic acid	7.85	327	ug/kg	86	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	227	ug/kg	98	NJ
	Unknown	8.06	303	ug/kg		J
	Unknown	8.09	397	ug/kg		J
	Unknown	8.13	390	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	8.22	253	ug/kg	91	NJ
	Unknown	8.26	188	ug/kg		J
	Unknown	8.33	234	ug/kg		J
629-96-9	1-Eicosanol	8.7	449	ug/kg	89	NJ
112-95-8	Eicosane	9.07	334	ug/kg	96	NJ
	Unknown	10.02	1820	ug/kg		J
	Unknown	10.4	325	ug/kg		J
	Unknown	10.77	384	ug/kg		J
	Unknown	10.99	342	ug/kg		J
83-46-5	.beta.-Sitosterol	11.66	1370	ug/kg	91	NJ
1058-61-3	Stigmast-4-en-3-one	12.3	809	ug/kg	90	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370018	Date Received: 03/02/2010 08:50	%Moisture: 26.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7485	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 03:16	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2128.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	452	ug/kg	90.4	452
108-95-2	Phenol	U	452	ug/kg	90.4	452
95-57-8	2-Chlorophenol	U	452	ug/kg	90.4	452
106-46-7	1,4-Dichlorobenzene	U	452	ug/kg	90.4	452
621-64-7	N-Nitrosodipropylamine	U	452	ug/kg	90.4	452
59-50-7	4-Chloro-3-methylphenol	U	452	ug/kg	90.4	452
83-32-9	Acenaphthene	U	45.2	ug/kg	14.9	45.2
121-14-2	2,4-Dinitrotoluene	U	452	ug/kg	45.2	452
100-02-7	4-Nitrophenol	U	452	ug/kg	149	452
87-86-5	Pentachlorophenol	U	452	ug/kg	113	452
129-00-0	Pyrene	J	16.9	ug/kg	13.6	45.2
110-86-1	Pyridine	U	452	ug/kg	90.4	452
62-53-3	Aniline	U	452	ug/kg	136	452
111-44-4	bis(2-Chloroethyl) ether	U	452	ug/kg	90.4	452
541-73-1	1,3-Dichlorobenzene	U	452	ug/kg	90.4	452
100-51-6	Benzyl alcohol	U	452	ug/kg	136	452
95-50-1	1,2-Dichlorobenzene	U	452	ug/kg	90.4	452
108-60-1	bis(2-Chloroisopropyl)ether	U	452	ug/kg	90.4	452
95-48-7	o-Cresol	U	452	ug/kg	90.4	452
65794-96-9	m,p-Cresols	U	452	ug/kg	136	452
67-72-1	Hexachloroethane	U	452	ug/kg	90.4	452
98-95-3	Nitrobenzene	U	452	ug/kg	90.4	452
78-59-1	Isophorone	U	452	ug/kg	90.4	452
88-75-5	2-Nitrophenol	U	452	ug/kg	90.4	452
105-67-9	2,4-Dimethylphenol	U	452	ug/kg	158	452
111-91-1	bis(2-Chloroethoxy)methane	U	452	ug/kg	90.4	452
120-83-2	2,4-Dichlorophenol	U	452	ug/kg	90.4	452
65-85-0	Benzoic acid	U	904	ug/kg	226	904
91-20-3	Naphthalene	U	45.2	ug/kg	13.6	45.2
106-47-8	4-Chloroaniline	U	452	ug/kg	90.4	452
87-68-3	Hexachlorobutadiene	U	452	ug/kg	90.4	452
91-57-6	2-Methylnaphthalene	U	45.2	ug/kg	9.04	45.2
77-47-4	Hexachlorocyclopentadiene	U	452	ug/kg	90.4	452
88-06-2	2,4,6-Trichlorophenol	U	452	ug/kg	90.4	452
95-95-4	2,4,5-Trichlorophenol	U	452	ug/kg	90.4	452
91-58-7	2-Chloronaphthalene	U	45.2	ug/kg	14.9	45.2
88-74-4	2-Nitroaniline	U	452	ug/kg	90.4	452
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	452	ug/kg	90.4	452

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370018	Date Received: 03/02/2010 08:50	%Moisture: 26.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7485	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 03:16	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: slc2128.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	452	ug/kg	90.4	452
606-20-2	2,6-Dinitrotoluene	U	452	ug/kg	45.2	452
208-96-8	Acenaphthylene	U	45.2	ug/kg	13.6	45.2
51-28-5	2,4-Dinitrophenol	U	904	ug/kg	172	904
132-64-9	Dibenzofuran	U	452	ug/kg	90.4	452
84-66-2	Diethylphthalate	U	452	ug/kg	90.4	452
86-73-7	Fluorene	U	45.2	ug/kg	13.6	45.2
7005-72-3	4-Chlorophenylphenylether	U	452	ug/kg	90.4	452
534-52-1	2-Methyl-4,6-dinitrophenol	U	452	ug/kg	90.4	452
100-01-6	4-Nitroaniline	U	452	ug/kg	136	452
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	452	ug/kg	90.4	452
122-66-7	Azobenzene	U	452	ug/kg	90.4	452
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	452	ug/kg	90.4	452
118-74-1	Hexachlorobenzene	U	452	ug/kg	90.4	452
85-01-8	Phenanthrene	U	45.2	ug/kg	13.6	45.2
120-12-7	Anthracene	U	45.2	ug/kg	9.04	45.2
84-74-2	Di-n-butylphthalate	U	452	ug/kg	90.4	452
206-44-0	Fluoranthene	J	17.0	ug/kg	13.6	45.2
85-68-7	Butylbenzylphthalate	U	452	ug/kg	90.4	452
56-55-3	Benzo(a)anthracene	J	13.9	ug/kg	13.6	45.2
91-94-1	3,3'-Dichlorobenzidine	U	452	ug/kg	136	452
218-01-9	Chrysene	U	45.2	ug/kg	13.6	45.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	452	ug/kg	90.4	452
117-84-0	Di-n-octylphthalate	U	452	ug/kg	90.4	452
205-99-2	Benzo(b)fluoranthene	J	14.5	ug/kg	13.6	45.2
207-08-9	Benzo(k)fluoranthene	U	45.2	ug/kg	13.6	45.2
50-32-8	Benzo(a)pyrene	U	45.2	ug/kg	13.6	45.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.2	ug/kg	13.6	45.2
53-70-3	Dibenzo(a,h)anthracene	U	45.2	ug/kg	13.6	45.2
191-24-2	Benzo(ghi)perylene	U	45.2	ug/kg	13.6	45.2
120-82-1	1,2,4-Trichlorobenzene	U	452	ug/kg	90.4	452

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	226	ug/kg		J
	Unknown	1.82	289	ug/kg		J

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370018	Date Received: 03/02/2010 08:50	%Moisture: 26.5
Client ID: RE36-10-7485	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 03:16	Inst: MSD1.1	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2128.d	Aliquot: 30.09 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 Aldol Condensate	2.67	461	ug/kg		JA
80-56-8	.alpha.-Pinene	3.19	194	ug/kg	96	NJ
79-92-5	Camphene	3.29	258	ug/kg	98	NJ
1227-93-6	1H-Naphtho[2,1-b]pyran, 3-ethenyldecacah	7.23	230	ug/kg	91	NJ
	Unknown	7.32	205	ug/kg		J
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	258	ug/kg	97	NJ
	Unknown	7.47	244	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	8.09	254	ug/kg	89	NJ
	Unknown	8.13	206	ug/kg		J
	Unknown	8.67	224	ug/kg		J
112-95-8	Eicosane	9.06	462	ug/kg	98	NJ
	Unknown	9.76	206	ug/kg		J
	Unknown	10.02	1440	ug/kg		J
	Unknown	10.77	199	ug/kg		J
	Unknown	11.7	438	ug/kg		J
	Unknown	12.3	523	ug/kg		J

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370012	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7486	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 00:54	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s1c2122.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	422	ug/kg	84.5	422
108-95-2	Phenol	U	422	ug/kg	84.5	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.5	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.5	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.5	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.5	422
83-32-9	Acenaphthene	U	42.2	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene	U	422	ug/kg	42.2	422
100-02-7	4-Nitrophenol	U	422	ug/kg	139	422
87-86-5	Pentachlorophenol	U	422	ug/kg	106	422
129-00-0	Pyrene	J	20.0	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.5	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.5	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.5	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.5	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.5	422
95-48-7	o-Cresol	U	422	ug/kg	84.5	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.5	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.5	422
78-59-1	Isophorone	U	422	ug/kg	84.5	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.5	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.5	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.5	422
65-85-0	Benzoic acid	U	845	ug/kg	211	845
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.5	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.5	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.45	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.5	422
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.5	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.5	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.5	422
99-09-2	<i>o</i> -Nitroaniline	U	422	ug/kg	84.5	422
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370012

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.01 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	422	ug/kg	84.5	422
606-20-2	2,6-Dinitrotoluene	U	422	ug/kg	42.2	422
208-96-8	Acenaphthylene	U	42.2	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol	U	845	ug/kg	160	845
132-64-9	Dibenzofuran	U	422	ug/kg	84.5	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.5	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.5	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.5	422
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.5	422
122-66-7	Azobenzene	U	422	ug/kg	84.5	422
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.5	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.5	422
85-01-8	Phenanthrene	J	13.0	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.45	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.5	422
206-44-0	Fluoranthene	J	21.2	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.5	422
56-55-3	Benzo(a)anthracene	J	14.4	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	J	13.0	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.5	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.5	422
205-99-2	Benzo(b)fluoranthene	J	17.3	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene	U	42.2	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene	U	42.2	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.2	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene	U	42.2	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene	U	42.2	ug/kg	12.7	42.2
120-82-1	1,2,4-Trichlorobenzene	U	422	ug/kg	84.5	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.8	507	ug/kg		J
	Unknown Aldol Condensate	2.67	242	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370012	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7486	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 00:54	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s1c2122.d	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
7785-70-8	1R-.alpha.-Pinene	3.19	711	ug/kg	97	NJ
79-92-5	Camphene	3.29	236	ug/kg	98	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	324	ug/kg	97	NJ
	Unknown	7.32	633	ug/kg		J
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	268	ug/kg	92	NJ
	Unknown	7.75	292	ug/kg		J
	Unknown	7.85	268	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	246	ug/kg	98	NJ
	Unknown	8.07	340	ug/kg		J
	Unknown	8.09	800	ug/kg		J
	Unknown	8.14	572	ug/kg		J
	Unknown	8.23	229	ug/kg		J
	Unknown	8.26	183	ug/kg		J
112-95-8	Eicosane	9.07	294	ug/kg	95	NJ
	Unknown	9.4	281	ug/kg		J
	Unknown	9.78	183	ug/kg		J
	Unknown	10.02	1330	ug/kg		J
	Unknown	10.4	182	ug/kg		J
83-46-5	.beta.-Sitosterol	11.67	213	ug/kg	91	NJ
	Unknown	11.79	245	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	649	ug/kg	92	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370009	Date Received: 03/02/2010 08:50	%Moisture: 24.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7487	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 23:44	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s1c2119.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	442	ug/kg	88.3	442
108-95-2	Phenol	U	442	ug/kg	88.3	442
95-57-8	2-Chlorophenol	U	442	ug/kg	88.3	442
106-46-7	1,4-Dichlorobenzene	U	442	ug/kg	88.3	442
621-64-7	N-Nitrosodipropylamine	U	442	ug/kg	88.3	442
59-50-7	4-Chloro-3-methylphenol	U	442	ug/kg	88.3	442
83-32-9	Acenaphthene	U	44.2	ug/kg	14.6	44.2
121-14-2	2,4-Dinitrotoluene	U	442	ug/kg	44.2	442
100-02-7	4-Nitrophenol	U	442	ug/kg	146	442
87-86-5	Pentachlorophenol	U	442	ug/kg	110	442
129-00-0	Pyrene	U	44.2	ug/kg	13.2	44.2
110-86-1	Pyridine	U	442	ug/kg	88.3	442
62-53-3	Aniline	U	442	ug/kg	132	442
111-44-4	bis(2-Chloroethyl) ether	U	442	ug/kg	88.3	442
541-73-1	1,3-Dichlorobenzene	U	442	ug/kg	88.3	442
100-51-6	Benzyl alcohol	U	442	ug/kg	132	442
95-50-1	1,2-Dichlorobenzene	U	442	ug/kg	88.3	442
108-60-1	bis(2-Chloroisopropyl)ether	U	442	ug/kg	88.3	442
95-48-7	o-Cresol	U	442	ug/kg	88.3	442
65794-96-9	m,p-Cresols	U	442	ug/kg	132	442
67-72-1	Hexachloroethane	U	442	ug/kg	88.3	442
98-95-3	Nitrobenzene	U	442	ug/kg	88.3	442
78-59-1	Isophorone	U	442	ug/kg	88.3	442
88-75-5	2-Nitrophenol	U	442	ug/kg	88.3	442
105-67-9	2,4-Dimethylphenol	U	442	ug/kg	155	442
111-91-1	bis(2-Chloroethoxy)methane	U	442	ug/kg	88.3	442
120-83-2	2,4-Dichlorophenol	U	442	ug/kg	88.3	442
65-85-0	Benzoic acid	U	883	ug/kg	221	883
91-20-3	Naphthalene	U	44.2	ug/kg	13.2	44.2
106-47-8	4-Chloroaniline	U	442	ug/kg	88.3	442
87-68-3	Hexachlorobutadiene	U	442	ug/kg	88.3	442
91-57-6	2-Methylnaphthalene	U	44.2	ug/kg	8.83	44.2
77-47-4	Hexachlorocyclopentadiene	U	442	ug/kg	88.3	442
88-06-2	2,4,6-Trichlorophenol	U	442	ug/kg	88.3	442
95-95-4	2,4,5-Trichlorophenol	U	442	ug/kg	88.3	442
91-58-7	2-Chloronaphthalene	U	44.2	ug/kg	14.6	44.2
88-74-4	2-Nitroaniline	U	442	ug/kg	88.3	442
99-09-2	o-Nitroaniline	U	442	ug/kg	88.3	442
	3-Nitroaniline					

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370009	Date Received: 03/02/2010 08:50	%Moisture: 24.5
Client ID: RE36-10-7487	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 23:44	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: slc2119.d	Aliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	442	ug/kg	88.3	442
606-20-2	2,6-Dinitrotoluene	U	442	ug/kg	44.2	442
208-96-8	Acenaphthylene	U	44.2	ug/kg	13.2	44.2
51-28-5	2,4-Dinitrophenol	U	883	ug/kg	168	883
132-64-9	Dibenzofuran	U	442	ug/kg	88.3	442
84-66-2	Diethylphthalate	U	442	ug/kg	88.3	442
86-73-7	Fluorene	U	44.2	ug/kg	13.2	44.2
7005-72-3	4-Chlorophenylphenylether	U	442	ug/kg	88.3	442
534-52-1	2-Methyl-4,6-dinitrophenol	U	442	ug/kg	88.3	442
100-01-6	4-Nitroaniline	U	442	ug/kg	132	442
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	442	ug/kg	88.3	442
122-66-7	Azobenzene	U	442	ug/kg	88.3	442
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	442	ug/kg	88.3	442
118-74-1	Hexachlorobenzene	U	442	ug/kg	88.3	442
85-01-8	Phenanthrene	U	44.2	ug/kg	13.2	44.2
120-12-7	Anthracene	U	44.2	ug/kg	8.83	44.2
84-74-2	Di-n-butylphthalate	U	442	ug/kg	88.3	442
206-44-0	Fluoranthene	U	44.2	ug/kg	13.2	44.2
85-68-7	Butylbenzylphthalate	U	442	ug/kg	88.3	442
56-55-3	Benzo(a)anthracene	U	44.2	ug/kg	13.2	44.2
91-94-1	3,3'-Dichlorobenzidine	U	442	ug/kg	132	442
218-01-9	Chrysene	U	44.2	ug/kg	13.2	44.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	442	ug/kg	88.3	442
117-84-0	Di-n-octylphthalate	U	442	ug/kg	88.3	442
205-99-2	Benzo(b)fluoranthene	U	44.2	ug/kg	13.2	44.2
207-08-9	Benzo(k)fluoranthene	U	44.2	ug/kg	13.2	44.2
50-32-8	Benzo(a)pyrene	U	44.2	ug/kg	13.2	44.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.2	ug/kg	13.2	44.2
53-70-3	Dibenzo(a,h)anthracene	U	44.2	ug/kg	13.2	44.2
191-24-2	Benzo(ghi)perylene	U	44.2	ug/kg	13.2	44.2
120-82-1	1,2,4-Trichlorobenzene	U	442	ug/kg	88.3	442

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	284	ug/kg		J
	Unknown Aldol Condensate	2.67	221	ug/kg		JA

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

SDG Number: 10-2150
Lab Sample ID: 248370009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1J
Analyst: AMY
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7487
Batch ID: 961228
Run Date: 03/21/2010 23:44
Prep Date: 03/05/2010 11:30
Data File: s1c2119.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	12.29	236	ug/kg		J

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

SDG Number: 10-2150
Lab Sample ID: 248370019

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 10
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7488
Batch ID: 961228
Run Date: 03/22/2010 03:40
Prep Date: 03/05/2010 11:30
Data File: s1c2129.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.9	369
108-95-2	Phenol	U	369	ug/kg	73.9	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.9	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.9	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.9	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.9	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.4	369
129-00-0	Pyrene	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.9	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.9	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.9	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.9	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.9	369
95-48-7	o-Cresol	U	369	ug/kg	73.9	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.9	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.9	369
78-59-1	Isophorone	U	369	ug/kg	73.9	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.9	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.9	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.9	369
65-85-0	Benzoic acid	U	739	ug/kg	185	739
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.9	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.9	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.39	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.9	369
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.9	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.9	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline	U	369	ug/kg	73.9	369
99-09-2	<i>o</i> -Nitroaniline	U	369	ug/kg	73.9	369
	3-Nitroaniline					

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370019

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7488
Batch ID: 961228
Run Date: 03/22/2010 03:40
Prep Date: 03/05/2010 11:30
Data File: s1c2129.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	369	ug/kg	73.9	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	369	ug/kg	73.9	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.9	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.9	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.9	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.9	369
122-66-7	Azobenzene	U	369	ug/kg	73.9	369
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.9	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.9	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.39	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.9	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.9	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.9	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.9	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.9	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	156	ug/kg		J
	Unknown Aldol Condensate	2.67	380	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370019	Date Received: 03/02/2010 08:50	%Moisture: 10
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7488	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 03:40	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2129.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.19	307	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	196	ug/kg	99	NJ
112-95-8	Eicosane	8.09	152	ug/kg	92	NJ
	Unknown	12.3	186	ug/kg		J

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

SDG Number: 10-2150
Lab Sample ID: 248370014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.J
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35
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	513	ug/kg	103	513
108-95-2	Phenol	U	513	ug/kg	103	513
95-57-8	2-Chlorophenol	U	513	ug/kg	103	513
106-46-7	1,4-Dichlorobenzene	U	513	ug/kg	103	513
621-64-7	N-Nitrosodipropylamine	U	513	ug/kg	103	513
59-50-7	4-Chloro-3-methylphenol	U	513	ug/kg	103	513
83-32-9	Acenaphthene	U	51.3	ug/kg	16.9	51.3
121-14-2	2,4-Dinitrotoluene	U	513	ug/kg	51.3	513
100-02-7	4-Nitrophenol	U	513	ug/kg	169	513
87-86-5	Pentachlorophenol	U	513	ug/kg	128	513
129-00-0	Pyrene	U	51.3	ug/kg	15.4	51.3
110-86-1	Pyridine	U	513	ug/kg	103	513
62-53-3	Aniline	U	513	ug/kg	154	513
111-44-4	bis(2-Chloroethyl) ether	U	513	ug/kg	103	513
541-73-1	1,3-Dichlorobenzene	U	513	ug/kg	103	513
100-51-6	Benzyl alcohol	U	513	ug/kg	154	513
95-50-1	1,2-Dichlorobenzene	U	513	ug/kg	103	513
108-60-1	bis(2-Chloroisopropyl)ether	U	513	ug/kg	103	513
95-48-7	o-Cresol	U	513	ug/kg	103	513
65794-96-9	m,p-Cresols	U	513	ug/kg	154	513
67-72-1	Hexachloroethane	U	513	ug/kg	103	513
98-95-3	Nitrobenzene	U	513	ug/kg	103	513
78-59-1	Isophorone	U	513	ug/kg	103	513
88-75-5	2-Nitrophenol	U	513	ug/kg	103	513
105-67-9	2,4-Dimethylphenol	U	513	ug/kg	180	513
111-91-1	bis(2-Chloroethoxy)methane	U	513	ug/kg	103	513
120-83-2	2,4-Dichlorophenol	U	513	ug/kg	103	513
65-85-0	Benzoic acid	U	1030	ug/kg	257	1030
91-20-3	Naphthalene	U	51.3	ug/kg	15.4	51.3
106-47-8	4-Chloroaniline	U	513	ug/kg	103	513
87-68-3	Hexachlorobutadiene	U	513	ug/kg	103	513
91-57-6	2-Methylnaphthalene	U	51.3	ug/kg	10.3	51.3
77-47-4	Hexachlorocyclopentadiene	U	513	ug/kg	103	513
88-06-2	2,4,6-Trichlorophenol	U	513	ug/kg	103	513
95-95-4	2,4,5-Trichlorophenol	U	513	ug/kg	103	513
91-58-7	2-Chloronaphthalene	U	51.3	ug/kg	16.9	51.3
88-74-4	2-Nitroaniline	U	513	ug/kg	103	513
99-09-2	o-Nitroaniline	U	513	ug/kg	103	513
	3-Nitroaniline					

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370014	Date Received: 03/02/2010 08:50	%Moisture: 35
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7489	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1J	Dilution: 1
Run Date: 03/22/2010 01:42	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2124.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	513	ug/kg	103	513
606-20-2	2,6-Dinitrotoluene	U	513	ug/kg	51.3	513
208-96-8	Acenaphthylene	U	51.3	ug/kg	15.4	51.3
51-28-5	2,4-Dinitrophenol	U	1030	ug/kg	195	1030
132-64-9	Dibenzofuran	U	513	ug/kg	103	513
84-66-2	Diethylphthalate	U	513	ug/kg	103	513
86-73-7	Fluorene	U	51.3	ug/kg	15.4	51.3
7005-72-3	4-Chlorophenylphenylether	U	513	ug/kg	103	513
534-52-1	2-Methyl-4,6-dinitrophenol	U	513	ug/kg	103	513
100-01-6	4-Nitroaniline	U	513	ug/kg	154	513
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	513	ug/kg	103	513
122-66-7	Azobenzene	U	513	ug/kg	103	513
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	513	ug/kg	103	513
118-74-1	Hexachlorobenzene	U	513	ug/kg	103	513
85-01-8	Phenanthrene	U	51.3	ug/kg	15.4	51.3
120-12-7	Anthracene	U	51.3	ug/kg	10.3	51.3
84-74-2	Di-n-butylphthalate	U	513	ug/kg	103	513
206-44-0	Fluoranthene	U	51.3	ug/kg	15.4	51.3
85-68-7	Butylbenzylphthalate	U	513	ug/kg	103	513
56-55-3	Benzo(a)anthracene	U	51.3	ug/kg	15.4	51.3
91-94-1	3,3'-Dichlorobenzidine	U	513	ug/kg	154	513
218-01-9	Chrysene	U	51.3	ug/kg	15.4	51.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	513	ug/kg	103	513
117-84-0	Di-n-octylphthalate	U	513	ug/kg	103	513
205-99-2	Benzo(b)fluoranthene	U	51.3	ug/kg	15.4	51.3
207-08-9	Benzo(k)fluoranthene	U	51.3	ug/kg	15.4	51.3
50-32-8	Benzo(a)pyrene	U	51.3	ug/kg	15.4	51.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	51.3	ug/kg	15.4	51.3
53-70-3	Dibenzo(a,h)anthracene	U	51.3	ug/kg	15.4	51.3
191-24-2	Benzo(ghi)perylene	U	51.3	ug/kg	15.4	51.3
120-82-1	1,2,4-Trichlorobenzene	U	513	ug/kg	103	513

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	279	ug/kg		JA
638-67-5	Tricosane	7.71	355	ug/kg	97	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35
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
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
73105-67-6	1-Iodo-2-methylundecane	7.9	415	ug/kg	93	NJ
7225-66-3	Tridecane, 7-hexyl-	8.09	464	ug/kg	95	NJ
593-49-7	Heptacosane	8.53	385	ug/kg	99	NJ
112-95-8	Eicosane	8.78	361	ug/kg	98	NJ
	Unknown	9.06	706	ug/kg		J
	Unknown	9.39	577	ug/kg		J
	Unknown	9.78	647	ug/kg		J
	Unknown	10.23	478	ug/kg		J
	Unknown	10.77	360	ug/kg		J
	Unknown	11.4	243	ug/kg		J

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370008	Date Received: 03/02/2010 08:50	%Moisture: 26
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7490	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.1	Dilution: 1
Run Date: 03/21/2010 23:20	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2118.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	449	ug/kg	89.8	449
108-95-2	Phenol	U	449	ug/kg	89.8	449
95-57-8	2-Chlorophenol	U	449	ug/kg	89.8	449
106-46-7	1,4-Dichlorobenzene	U	449	ug/kg	89.8	449
621-64-7	N-Nitrosodipropylamine	U	449	ug/kg	89.8	449
59-50-7	4-Chloro-3-methylphenol	U	449	ug/kg	89.8	449
83-32-9	Acenaphthene	U	44.9	ug/kg	14.8	44.9
121-14-2	2,4-Dinitrotoluene	U	449	ug/kg	44.9	449
100-02-7	4-Nitrophenol	U	449	ug/kg	148	449
87-86-5	Pentachlorophenol	U	449	ug/kg	112	449
129-00-0	Pyrene	U	44.9	ug/kg	13.5	44.9
110-86-1	Pyridine	U	449	ug/kg	89.8	449
62-53-3	Aniline	U	449	ug/kg	135	449
111-44-4	bis(2-Chloroethyl) ether	U	449	ug/kg	89.8	449
541-73-1	1,3-Dichlorobenzene	U	449	ug/kg	89.8	449
100-51-6	Benzyl alcohol	U	449	ug/kg	135	449
95-50-1	1,2-Dichlorobenzene	U	449	ug/kg	89.8	449
108-60-1	bis(2-Chloroisopropyl)ether	U	449	ug/kg	89.8	449
95-48-7	o-Cresol	U	449	ug/kg	89.8	449
65794-96-9	m,p-Cresols	U	449	ug/kg	135	449
67-72-1	Hexachloroethane	U	449	ug/kg	89.8	449
98-95-3	Nitrobenzene	U	449	ug/kg	89.8	449
78-59-1	Isophorone	U	449	ug/kg	89.8	449
88-75-5	2-Nitrophenol	U	449	ug/kg	89.8	449
105-67-9	2,4-Dimethylphenol	U	449	ug/kg	157	449
111-91-1	bis(2-Chloroethoxy)methane	U	449	ug/kg	89.8	449
120-83-2	2,4-Dichlorophenol	U	449	ug/kg	89.8	449
65-85-0	Benzoic acid	U	898	ug/kg	224	898
91-20-3	Naphthalene	U	44.9	ug/kg	13.5	44.9
106-47-8	4-Chloroaniline	U	449	ug/kg	89.8	449
87-68-3	Hexachlorobutadiene	U	449	ug/kg	89.8	449
91-57-6	2-Methylnaphthalene	U	44.9	ug/kg	8.98	44.9
77-47-4	Hexachlorocyclopentadiene	U	449	ug/kg	89.8	449
88-06-2	2,4,6-Trichlorophenol	U	449	ug/kg	89.8	449
95-95-4	2,4,5-Trichlorophenol	U	449	ug/kg	89.8	449
91-58-7	2-Chloronaphthalene	U	44.9	ug/kg	14.8	44.9
88-74-4	2-Nitroaniline	U	449	ug/kg	89.8	449
99-09-2	o-Nitroaniline	U	449	ug/kg	89.8	449
	3-Nitroaniline					

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370008	Date Received: 03/02/2010 08:50	%Moisture: 26
Client ID: RE36-10-7490	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 23:20	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2118.d	Aliquot: 30.09 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	449	ug/kg	89.8	449
606-20-2	2,6-Dinitrotoluene	U	449	ug/kg	44.9	449
208-96-8	Acenaphthylene	U	44.9	ug/kg	13.5	44.9
51-28-5	2,4-Dinitrophenol	U	898	ug/kg	171	898
132-64-9	Dibenzofuran	U	449	ug/kg	89.8	449
84-66-2	Diethylphthalate	U	449	ug/kg	89.8	449
86-73-7	Fluorene	U	44.9	ug/kg	13.5	44.9
7005-72-3	4-Chlorophenylphenylether	U	449	ug/kg	89.8	449
534-52-1	2-Methyl-4,6-dinitrophenol	U	449	ug/kg	89.8	449
100-01-6	4-Nitroaniline	U	449	ug/kg	135	449
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	449	ug/kg	89.8	449
122-66-7	Azobenzene	U	449	ug/kg	89.8	449
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	449	ug/kg	89.8	449
118-74-1	Hexachlorobenzene	U	449	ug/kg	89.8	449
85-01-8	Phenanthrene	U	44.9	ug/kg	13.5	44.9
120-12-7	Anthracene	U	44.9	ug/kg	8.98	44.9
84-74-2	Di-n-butylphthalate	U	449	ug/kg	89.8	449
206-44-0	Fluoranthene	U	44.9	ug/kg	13.5	44.9
85-68-7	Butylbenzylphthalate	U	449	ug/kg	89.8	449
56-55-3	Benzo(a)anthracene	U	44.9	ug/kg	13.5	44.9
91-94-1	3,3'-Dichlorobenzidine	U	449	ug/kg	135	449
218-01-9	Chrysene	U	44.9	ug/kg	13.5	44.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	449	ug/kg	89.8	449
117-84-0	Di-n-octylphthalate	U	449	ug/kg	89.8	449
205-99-2	Benzo(b)fluoranthene	U	44.9	ug/kg	13.5	44.9
207-08-9	Benzo(k)fluoranthene	U	44.9	ug/kg	13.5	44.9
50-32-8	Benzo(a)pyrene	U	44.9	ug/kg	13.5	44.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.9	ug/kg	13.5	44.9
53-70-3	Dibenzo(a,h)anthracene	U	44.9	ug/kg	13.5	44.9
191-24-2	Benzo(ghi)perylene	U	44.9	ug/kg	13.5	44.9
120-82-1	1,2,4-Trichlorobenzene	U	449	ug/kg	89.8	449

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	234	ug/kg		J
	Unknown Aldol Condensate	2.67	253	ug/kg		JA

QC Summary

Semi-Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-2150

Matrix Type: SOLID

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

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1202061822	MB for batch 961226	70	69	77	71	61	94
1202061823	LCS for batch 961226	79	77	82	78	66	87
248370001	RE36-10-7415	57	63	70	48	46	54
248370002	RE36-10-7420	76	81	88	78	68	91
248370003	RE36-10-7418	58	63	67	55	53	66
248370004	RE36-10-7417	61	67	68	52	53	71
1202061824	RE36-10-7417MS	52	56	55	47	49	57
1202061825	RE36-10-7417MSD	65	67	64	54	55	59
248370005	RE36-10-7419	60	62	70	61	55	70
248370006	RE36-10-7416	80	81	89	75	70	88
248370007	RE36-10-7478	73	74	81	72	63	88
248370008	RE36-10-7490	55	57	57	38	49	48
248370009	RE36-10-7487	57	59	65	56	52	68
248370010	RE36-10-7483	59	59	66	56	50	71
248370011	RE36-10-7481	59	60	63	52	52	60
248370012	RE36-10-7486	65	67	70	59	57	71
248370013	RE36-10-7477	70	71	75	67	67	93
248370014	RE36-10-7489	57	58	61	49	50	61
248370015	RE36-10-7479	60	62	67	55	53	62
248370016	RE36-10-7482	68	70	71	50	56	75
248370017	RE36-10-7480	69	71	74	68	64	86
248370018	RE36-10-7485	55	57	59	53	55	73
248370019	RE36-10-7488	67	70	72	65	64	91
248370020	RE36-10-7484	62	63	67	62	58	82

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

Page 1 of 4

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961226

Matrix: SOIL

Lab Sample ID: 1202061823

Instrument: MSD1.I

Analysis Date: 03/21/2010 19:00

Dilution: 1

Analyst: AMY

Prep Batch ID: 961226

Inj. Vol: .5 uL

Batch ID: 961228

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	1060	63	22-114
108-95-2	LCS Phenol	1670	0.0	1260	76	39-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1280	77	40-107
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1130	68	33-108
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1570	94	34-113
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1230	74	42-114
83-32-9	LCS Acenaphthene	1670	0.0	1270	76	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1340	81	49-112
100-02-7	LCS 4-Nitrophenol	1670	0.0	649	39	24-113
87-86-5	LCS Pentachlorophenol	1670	0.0	1050	63	27-116
129-00-0	LCS Pyrene	1670	0.0	1260	75	42-113
110-86-1	LCS Pyridine	1670	0.0	1110	66	8-125
62-53-3	LCS Aniline	1670	0.0	802	48	18-126
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1250	75	32-103
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1110	67	32-108
100-51-6	LCS Benzyl alcohol	1670	0.0	419	25 *	27-108
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1170	70	35-111
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1530	92	28-117
95-48-7	LCS o-Cresol	1670	0.0	1280	77	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1530	92	45-121
67-72-1	LCS Hexachloroethane	1670	0.0	1160	69	30-109
98-95-3	LCS Nitrobenzene	1670	0.0	1330	80	33-116

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 4

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961226

Matrix: SOIL

Lab Sample ID: 1202061823

Instrument: MSD1.I

Analysis Date: 03/21/2010 19:00

Dilution: 1

Analyst: AMY

Prep Batch ID: 961226

Inj. Vol: .5 uL

Batch ID: 961228

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	1360	82	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	600	36	32-112
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1270	76	34-110
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1290	78	34-116
65-85-0	LCS Benzoic acid	3330	0.0	3390	102	22-138
91-20-3	LCS Naphthalene	1670	0.0	1220	73	35-103
106-47-8	LCS 4-Chloroaniline	1670	0.0	887	53	20-118
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1180	71	31-117
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1290	78	38-115
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1050	63	22-140
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1240	75	40-110
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	1280	77	43-113
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	1280	77	37-111
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	1410	85	41-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	1120	67	34-125
131-11-3	LCS Dimethylphthalate	1670	0.0	1370	82	48-122
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1310	79	47-107
208-96-8	LCS Acenaphthylene	1670	0.0	1370	82	44-110
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	1150	69	18-127
132-64-9	LCS Dibenzofuran	1670	0.0	1330	80	49-115
84-66-2	LCS Diethylphthalate	1670	0.0	1410	85	51-126

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 4

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961226

Matrix: SOIL

Lab Sample ID: 1202061823

Instrument: MSD1.I

Analysis Date: 03/21/2010 19:00

Dilution: 1

Analyst: AMY

Pre Batch ID: 961226

Inj. Vol: .5 uL

Batch ID: 961228

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	1300	78	43-109
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1320	79	45-115
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1110	67	32-117
100-01-6	LCS 4-Nitroaniline <i>p</i> -Nitroaniline	1670	0.0	1380	83	33-148
122-39-4	LCS Diphenylamine	1670	0.0	1390	84	46-114
122-66-7	LCS Azobenzene <i>1,2</i> -Diphenylhydrazine	1670	0.0	1520	91	38-123
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1210	73	40-119
118-74-1	LCS Hexachlorobenzene	1670	0.0	1130	68	43-111
85-01-8	LCS Phenanthrene	1670	0.0	1270	76	46-107
120-12-7	LCS Anthracene	1670	0.0	1290	78	46-110
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1500	90	52-132
206-44-0	LCS Fluoranthene	1670	0.0	1320	79	51-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1560	94	47-137
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1340	80	50-108
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	992	60	36-103
218-01-9	LCS Chrysene	1670	0.0	1300	78	48-111
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	1690	101	48-139
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1500	90	42-141
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1140	68	49-114
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1350	81	50-116
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1290	77	54-114
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1420	85	53-120

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 4

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 961226

Matrix: SOIL

Lab Sample ID: 1202061823

Instrument: MSD1.I

Analysis Date: 03/21/2010 19:00

Dilution: 1

Analyst: AMY

Pre Batch ID: 961226

Inj. Vol: .5 uL

Batch ID: 961228

CAS No	Paramname	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	1400	84	53-121
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1470	88	50-121
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1190	71	32-114

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 8

SDG Number: 10-2150

Sample Type: Matrix Spike

Client ID: RE36-10-7417MS

Matrix: R

Lab Sample ID: 1202061824

%Moisture: 21

Instrument: MSD1.I

Analysis Date: 03/21/2010 21:21

Dilution: 1

Analyst: AMY

Prep Batch II 961226

Inj. Vol: .5 uL

Batch ID: 961228

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	2110	0.00 U	892	42	27-98
108-95-2	MS Phenol	2110	0.00 U	1090	52	33-94
95-57-8	MS 2-Chlorophenol	2110	0.00 U	1020	48	29-96
106-46-7	MS 1,4-Dichlorobenzene	2110	0.00 U	627	30	27-96
621-64-7	MS N-Nitrosodipropylamine	2110	0.00 U	1250	59	29-102
59-50-7	MS 4-Chloro-3-methylphenol	2110	0.00 U	1200	57	29-110
83-32-9	MS Acenaphthene	2110	0.00 U	898	43	17-109
121-14-2	MS 2,4-Dinitrotoluene	2110	0.00 U	1140	54	33-107
100-02-7	MS 4-Nitrophenol	2110	0.00 U	1140	54	15-110
87-86-5	MS Pentachlorophenol	2110	0.00 U	1100	52	23-110
129-00-0	MS Pyrene	2110	0.00 U	982	47	24-118
110-86-1	MS Pyridine	2110	0.00 U	913	43	25-102
62-53-3	MS Aniline	2110	0.00 U	709	34	18-109
111-44-4	MS bis(2-Chloroethyl) ether	2110	0.00 U	973	46	29-96
541-73-1	MS 1,3-Dichlorobenzene	2110	0.00 U	595	28	26-97
100-51-6	MS Benzyl alcohol	2110	0.00 U	0.00	0 *	19-112
95-50-1	MS 1,2-Dichlorobenzene	2110	0.00 U	696	33	30-97
108-60-1	MS bis(2-Chloroisopropyl)ether	2110	0.00 U	1120	53	28-103
95-48-7	MS o-Cresol	2110	0.00 U	1190	56	32-107
65794-96-9	MS m,p-Cresols	2110	0.00 U	1390	66	33-115
67-72-1	MS Hexachloroethane	2110	0.00 U	542	26	25-100
98-95-3	MS Nitrobenzene	2110	0.00 U	1100	52	27-106

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 8

SDG Number: 10-2150

Sample Type: Matrix Spike

Client ID: RE36-10-7417MS

Matrix: R

Lab Sample ID: 1202061824

%Moisture: 21

Instrument: MSD1.I

Analysis Date: 03/21/2010 21:21

Dilution: 1

Analyst: AMY

Pre Batch ID: 961226

Inj. Vol: .5 uL

Batch ID: 961228

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	2110	0.00 U	1130	54	29-104
88-75-5	MS 2-Nitrophenol	2110	0.00 U	1080	51	26-102
105-67-9	MS 2,4-Dimethylphenol	2110	0.00 U	1240	59	22-104
111-91-1	MS bis(2-Chloroethoxy)methane	2110	0.00 U	1060	50	27-101
120-83-2	MS 2,4-Dichlorophenol	2110	0.00 U	1100	52	26-103
65-85-0	MS Benzoic acid	4220	0.00 U	3340	79	13-131
91-20-3	MS Naphthalene	2110	0.00 U	896	42	23-103
106-47-8	MS 4-Chloroaniline	2110	0.00 U	714	34	26-103
87-68-3	MS Hexachlorobutadiene	2110	0.00 U	630	30	28-101
91-57-6	MS 2-Methylnaphthalene	2110	0.00 U	945	45	27-106
77-47-4	MS Hexachlorocyclopentadiene	2110	0.00 U	592	28	24-117
88-06-2	MS 2,4,6-Trichlorophenol	2110	0.00 U	1030	49	26-105
95-95-4	MS 2,4,5-Trichlorophenol	2110	0.00 U	1130	54	30-110
91-58-7	MS 2-Chloronaphthalene	2110	0.00 U	911	43	28-102
88-74-4	MS 2-Nitroaniline o-Nitroaniline	2110	0.00 U	1190	56	33-106
99-09-2	MS 3-Nitroaniline m-Nitroaniline	2110	0.00 U	1070	51	33-116
131-11-3	MS Dimethylphthalate	2110	0.00 U	1170	55	38-113
606-20-2	MS 2,6-Dinitrotoluene	2110	0.00 U	1090	52	29-107
208-96-8	MS Acenaphthylene	2110	0.00 U	1010	48	25-108
51-28-5	MS 2,4-Dinitrophenol	2110	0.00 U	1150	54	14-102
132-64-9	MS Dibenzofuran	2110	0.00 U	979	46	35-112
84-66-2	MS Diethylphthalate	2110	0.00 U	1170	55	36-122

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 8

SDG Number: 10-2150

Sample Type: Matrix Spike

Client ID: RE36-10-7417MS

Matrix: R

Lab Sample ID: 1202061824

%Moisture: 21

Instrument: MSD1.I

Analysis Date: 03/21/2010 21:21

Dilution: 1

Analyst: AMY

Prep Batch II 961226

Inj. Vol: .5 uL

Batch ID: 961228

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	2110	0.00 U	957	45	33-105
7005-72-3	MS 4-Chlorophenylphenylether	2110	0.00 U	943	45	30-110
534-52-1	MS 2-Methyl-4,6-dinitrophenol	2110	0.00 U	1070	51	26-97
100-01-6	MS 4-Nitroaniline <i>p-Nitroaniline</i>	2110	0.00 U	1260	60	28-135
122-39-4	MS Diphenylamine	2110	0.00 U	1030	49	33-109
122-66-7	MS Azobenzene <i>1,2-Diphenylhydrazine</i>	2110	0.00 U	1150	55	31-113
101-55-3	MS 4-Bromophenylphenylether	2110	0.00 U	892	42	31-109
118-74-1	MS Hexachlorobenzene	2110	0.00 U	827	39	37-99
85-01-8	MS Phenanthrene	2110	0.00 U	981	47	29-109
120-12-7	MS Anthracene	2110	0.00 U	1010	48	19-118
84-74-2	MS Di-n-butylphthalate	2110	0.00 U	1100	52	39-123
206-44-0	MS Fluoranthene	2110	0.00 U	1040	49	33-114
85-68-7	MS Butylbenzylphthalate	2110	0.00 U	1170	55	35-131
56-55-3	MS Benzo(a)anthracene	2110	0.00 U	971	46	30-111
91-94-1	MS 3,3'-Dichlorobenzidine	2110	0.00 U	334	16 *	30-124
218-01-9	MS Chrysene	2110	0.00 U	1040	49	32-108
117-81-7	MS bis(2-Ethylhexyl)phthalate	2110	0.00 U	1180	56	37-129
117-84-0	MS Di-n-octylphthalate	2110	0.00 U	1130	54	31-143
205-99-2	MS Benzo(b)fluoranthene	2110	0.00 U	954	45	29-118
207-08-9	MS Benzo(k)fluoranthene	2110	0.00 U	958	45	32-118
50-32-8	MS Benzo(a)pyrene	2110	0.00 U	962	46	33-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	2110	0.00 U	932	44	29-114

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-2150

Sample Type: Matrix Spike

Client ID: RE36-10-7417MS

Matrix: R

Lab Sample ID: 1202061824

%Moisture: 21

Instrument: MSD1.I

Analysis Date: 03/21/2010 21:21

Dilution: 1

Analyst: AMY

Pre Batch II 961226

Inj. Vol: .5 uL

Batch ID: 961228

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	2110	0.00 U	933	44	27-119
191-24-2	MS Benzo(ghi)perylene	2110	0.00 U	888	42	28-112
120-82-1	MS 1,2,4-Trichlorobenzene	2110	0.00 U	787	37	28-99

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 8

SDG Number: 10-2150

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-7417MSD

Matrix: R

Lab Sample ID: 1202061825

%Moisture: 21

Instrument: MSD1.J

Analysis Date: 03/21/2010 21:45

Dilution: 1

Analyst: AMY

Prep Batch II 961226

Inj. Vol: .5 uL

Batch ID: 961228

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	2110	0.00 U	1170	55	27-98	27	0-30
108-95-2	MSD Phenol	2110	0.00 U	1380	65	33-94	23	0-30
95-57-8	MSD 2-Chlorophenol	2110	0.00 U	1320	63	29-96	26	0-30
106-46-7	MSD 1,4-Dichlorobenzene	2110	0.00 U	763	36	27-96	20	0-30
621-64-7	MSD N-Nitrosodipropylamine	2110	0.00 U	1600	76	29-102	25	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	2110	0.00 U	1440	68	29-110	19	0-30
83-32-9	MSD Acenaphthene	2110	0.00 U	1140	54	17-109	24	0-30
121-14-2	MSD 2,4-Dinitrotoluene	2110	0.00 U	1350	64	33-107	16	0-30
100-02-7	MSD 4-Nitrophenol	2110	0.00 U	1350	64	15-110	17	0-30
87-86-5	MSD Pentachlorophenol	2110	0.00 U	1350	64	23-110	20	0-30
129-00-0	MSD Pyrene	2110	0.00 U	1120	53	24-118	13	0-30
110-86-1	MSD Pyridine	2110	0.00 U	1120	53	25-102	20	0-30
62-53-3	MSD Aniline	2110	0.00 U	804	38	18-109	13	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	2110	0.00 U	1240	59	29-96	24	0-30
541-73-1	MSD 1,3-Dichlorobenzene	2110	0.00 U	719	34	26-97	19	0-30
100-51-6	MSD Benzyl alcohol	2110	0.00 U	221	10 *	19-112	200 *	0-30
95-50-1	MSD 1,2-Dichlorobenzene	2110	0.00 U	858	41	30-97	21	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	2110	0.00 U	1410	67	28-103	23	0-30
95-48-7	MSD o-Cresol	2110	0.00 U	1510	72	32-107	24	0-30
65794-96-9	MSD m,p-Cresols	2110	0.00 U	1720	81	33-115	21	0-30
67-72-1	MSD Hexachloroethane	2110	0.00 U	653	31	25-100	19	0-30
98-95-3	MSD Nitrobenzene	2110	0.00 U	1410	67	27-106	25	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-7417MSD

Matrix: R

Lab Sample ID: 1202061825

%Moisture: 21

Instrument: MSD1.I

Analysis Date: 03/21/2010 21:45

Dilution: 1

Analyst: AMY

Pren Batch ID: 961226

Inj. Vol: .5 uL

Batch ID: 961228

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	2110	0.00	U	1450	69	29-104	25	0-30
88-75-5	MSD 2-Nitrophenol	2110	0.00	U	1380	66	26-102	25	0-30
105-67-9	MSD 2,4-Dimethylphenol	2110	0.00	U	1510	71	22-104	20	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	2110	0.00	U	1360	64	27-101	25	0-30
120-83-2	MSD 2,4-Dichlorophenol	2110	0.00	U	1390	66	26-103	23	0-30
65-85-0	MSD Benzoic acid	4220	0.00	U	4200	100	13-131	23	0-30
91-20-3	MSD Naphthalene	2110	0.00	U	1120	53	23-103	23	0-30
106-47-8	MSD 4-Chloroaniline	2110	0.00	U	779	37	26-103	9	0-30
87-68-3	MSD Hexachlorobutadiene	2110	0.00	U	763	36	28-101	19	0-30
91-57-6	MSD 2-Methylnaphthalene	2110	0.00	U	1190	56	27-106	23	0-30
77-47-4	MSD Hexachlorocyclopentadiene	2110	0.00	U	797	38	24-117	30	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	2110	0.00	U	1310	62	26-105	24	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	2110	0.00	U	1410	67	30-110	22	0-30
91-58-7	MSD 2-Chloronaphthalene	2110	0.00	U	1170	55	28-102	25	0-30
88-74-4	MSD 2-Nitroaniline o-Nitroaniline	2110	0.00	U	1470	70	33-106	21	0-30
99-09-2	MSD 3-Nitroaniline m-Nitroaniline	2110	0.00	U	1150	54	33-116	6	0-30
131-11-3	MSD Dimethylphthalate	2110	0.00	U	1440	68	38-113	21	0-30
606-20-2	MSD 2,6-Dinitrotoluene	2110	0.00	U	1330	63	29-107	20	0-30
208-96-8	MSD Acenaphthylene	2110	0.00	U	1290	61	25-108	24	0-30
51-28-5	MSD 2,4-Dinitrophenol	2110	0.00	U	1380	65	14-102	18	0-30
132-64-9	MSD Dibenzofuran	2110	0.00	U	1230	58	35-112	22	0-30
84-66-2	MSD Diethylphthalate	2110	0.00	U	1410	67	36-122	19	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-2150

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-7417MSD

Matrix: R

Lab Sample ID: 1202061825

%Moisture: 21

Instrument: MSD1.I

Analysis Date: 03/21/2010 21:45

Dilution: 1

Analyst: AMY

Pren Batch ID: 961226

Inj. Vol: .5 uL

Batch ID: 961228

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	2110	0.00 U	1180	56	33-105	21	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	2110	0.00 U	1170	56	30-110	22	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	2110	0.00 U	1340	63	26-97	22	0-30
100-01-6	MSD 4-Nitroaniline <i>p-Nitroaniline</i>	2110	0.00 U	1470	70	28-135	15	0-30
122-39-4	MSD Diphenylamine	2110	0.00 U	1220	58	33-109	17	0-30
122-66-7	MSD Azobenzene <i>1,2-Diphenylhydrazine</i>	2110	0.00 U	1380	66	31-113	18	0-30
101-55-3	MSD 4-Bromophenylphenylether	2110	0.00 U	1060	50	31-109	17	0-30
118-74-1	MSD Hexachlorobenzene	2110	0.00 U	969	46	37-99	16	0-30
85-01-8	MSD Phenanthrene	2110	0.00 U	1160	55	29-109	17	0-30
120-12-7	MSD Anthracene	2110	0.00 U	1170	55	19-118	15	0-30
84-74-2	MSD Di-n-butylphthalate	2110	0.00 U	1260	60	39-123	13	0-30
206-44-0	MSD Fluoranthene	2110	0.00 U	1160	55	33-114	11	0-30
85-68-7	MSD Butylbenzylphthalate	2110	0.00 U	1310	62	35-131	12	0-30
56-55-3	MSD Benzo(a)anthracene	2110	0.00 U	1090	52	30-111	11	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	2110	0.00 U	325	15 *	30-124	3	0-30
218-01-9	MSD Chrysene	2110	0.00 U	1210	57	32-108	16	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	2110	0.00 U	1310	62	37-129	10	0-30
117-84-0	MSD Di-n-octylphthalate	2110	0.00 U	1250	59	31-143	10	0-30
205-99-2	MSD Benzo(b)fluoranthene	2110	0.00 U	1020	48	29-118	7	0-30
207-08-9	MSD Benzo(k)fluoranthene	2110	0.00 U	1120	53	32-118	16	0-30
50-32-8	MSD Benzo(a)pyrene	2110	0.00 U	1080	51	33-115	12	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	2110	0.00 U	1040	49	29-114	11	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 8 of 8

SDG Number: 10-2150

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-7417MSD

Matrix: R

Lab Sample ID: 1202061825

% Moisture: 21

Instrument: MSD1.I

Analysis Date: 03/21/2010 21:45

Dilution: 1

Analyst: AMY

Pre Batch ID: 961226

Inj. Vol: .5 uL

Batch ID: 961228

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	2110	0.00 U	1040	49	27-119	11	0-30
191-24-2	MSD Benzo(ghi)perylene	2110	0.00 U	990	47	28-112	11	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	2110	0.00 U	977	46	28-99	22	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-2150	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 961226	Instrument ID:	MSD1.I	Data File:	s1c2106.d
Lab Sample ID:	1202061822	Prep Date:	03/05/2010 11:30	Analyzed:	03/21/10 18:36
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 961226	1202061823	s1c2107.d	03/21/10	1900
02 RE36-10-7415	248370001	s1c2109.d	03/21/10	1947
03 RE36-10-7420	248370002	s1c2110.d	03/21/10	2012
04 RE36-10-7418	248370003	s1c2111.d	03/21/10	2034
05 RE36-10-7417	248370004	s1c2112.d	03/21/10	2058
06 RE36-10-7417MS	1202061824	s1c2113.d	03/21/10	2121
07 RE36-10-7417MSD	1202061825	s1c2114.d	03/21/10	2145
08 RE36-10-7419	248370005	s1c2115.d	03/21/10	2209
09 RE36-10-7416	248370006	s1c2116.d	03/21/10	2232
10 RE36-10-7478	248370007	s1c2117.d	03/21/10	2256
11 RE36-10-7490	248370008	s1c2118.d	03/21/10	2320
12 RE36-10-7487	248370009	s1c2119.d	03/21/10	2344
13 RE36-10-7483	248370010	s1c2120.d	03/22/10	0007
14 RE36-10-7481	248370011	s1c2121.d	03/22/10	0031
15 RE36-10-7486	248370012	s1c2122.d	03/22/10	0054
16 RE36-10-7477	248370013	s1c2123.d	03/22/10	0118
17 RE36-10-7489	248370014	s1c2124.d	03/22/10	0142
18 RE36-10-7479	248370015	s1c2125.d	03/22/10	0205
19 RE36-10-7482	248370016	s1c2126.d	03/22/10	0229
20 RE36-10-7480	248370017	s1c2127.d	03/22/10	0253
21 RE36-10-7485	248370018	s1c2128.d	03/22/10	0316
22 RE36-10-7488	248370019	s1c2129.d	03/22/10	0340
23 RE36-10-7484	248370020	s1c2130.d	03/22/10	0403

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: MSD1.I

Injection Date/Time: 15-MAR-10 16:24

Column Description: J&W DB-5MS

Lab File ID /chem/MSD1.i/s031510a.b/slcl513.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.5
68	Less than 2% of mass 69	1.3
69	Mass 69 Relative Abundance	37.7
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	47.1
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	27.8
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	76.2
442	Greater than 40% of mass 198	94.4
443	17 - 23% of mass 442	19.1

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN100309-08	slcl515.d	15-MAR-10 17:03
MEGA040	WBN100309-05.1	slcl516.d	15-MAR-10 17:31
MEGA010	WBN100309-07	slcl517.d	15-MAR-10 17:59
MEGA020	WBN100309-06	slcl518.d	15-MAR-10 18:28
MEGA040	WBN100309-05.1	slcl518.d	15-MAR-10 18:28
MEGA050	WBN100309-04	slcl519.d	15-MAR-10 18:57
MEGA080	WBN100309-03	slcl520.d	15-MAR-10 19:26
MEGA100	WBN100309-02	slcl521.d	15-MAR-10 19:55
MEGA120	WBN100309-01	slcl522.d	15-MAR-10 20:24
AP010	WBN100312-01	slcl523.d	15-MAR-10 20:53
AP020	WBN100312-02	slcl524.d	15-MAR-10 21:17
AP040	WBN100312-03.1	slcl525.d	15-MAR-10 21:40
AP050	WBN100312-04	slcl526.d	15-MAR-10 22:04
AP080	WBN100312-05	slcl527.d	15-MAR-10 22:27
AP100	WBN100312-06	slcl528.d	15-MAR-10 22:50
AP120	WBN100312-07	slcl529.d	15-MAR-10 23:14

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: MSD1.I

Injection Date/Time: 15-MAR-10 16:24

Column Description: J&W DB-5MS

Lab File ID /chem/MSD1.i/s031510a.b/slcl513.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.5
68	Less than 2% of mass 69	1.3
69	Mass 69 Relative Abundance	37.7
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	47.1
197	0 - 1% of mass 198	0.9
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	27.8
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	76.2
442	Greater than 40% of mass 198	94.4
443	17 - 23% of mass 442	19.1

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
MEGAICV	WBN100309-09.1	slcl531-C.d	16-MAR-10 00:06
APICV	WBN100312-08.1	slcl533-C.d	16-MAR-10 00:58

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: MSD1.I

Injection Date/Time: 21-MAR-10 16:40

Column Description: J&W DB-5MS

Lab File ID /chem/MSD1.i/s032110.b/s1c2101.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	42.7
68	Less than 2% of mass 69	0.2
69	Mass 69 Relative Abundance	39.2
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	47.4
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	25.8
365	Greater than 1% of mass 198	2.5
441	Present, but less than mass 443	74.6
442	Greater than 40% of mass 198	81.3
443	17 - 23% of mass 442	19.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100309-05.2	s1c2102.d	21-MAR-10 16:55
APCVS	WBN100312-03.2	s1c2103.d	21-MAR-10 17:25
SBLK01	1202061822	s1c2106.d	21-MAR-10 18:36
SBLK01LCS	1202061823	s1c2107.d	21-MAR-10 19:00
RE36-10-7415	248370001	s1c2109.d	21-MAR-10 19:47
RE36-10-7420	248370002	s1c2110.d	21-MAR-10 20:12
RE36-10-7418	248370003	s1c2111.d	21-MAR-10 20:34
RE36-10-7417	248370004	s1c2112.d	21-MAR-10 20:58
RE36-10-7417MS	1202061824	s1c2113.d	21-MAR-10 21:21
RE36-10-7417MSD	1202061825	s1c2114.d	21-MAR-10 21:45
RE36-10-7419	248370005	s1c2115.d	21-MAR-10 22:09
RE36-10-7416	248370006	s1c2116.d	21-MAR-10 22:32
RE36-10-7478	248370007	s1c2117.d	21-MAR-10 22:56
RE36-10-7490	248370008	s1c2118.d	21-MAR-10 23:20
RE36-10-7487	248370009	s1c2119.d	21-MAR-10 23:44
RE36-10-7483	248370010	s1c2120.d	22-MAR-10 00:07

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2150

Instrument ID: MSD1.I

Injection Date/Time: 21-MAR-10 16:40

Column Description: J&W DB-5MS

Lab File ID /chem/MSD1.i/s032110.b/s1c2101.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	42.7
68	Less than 2% of mass 69	0.2
69	Mass 69 Relative Abundance	39.2
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	47.4
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	25.8
365	Greater than 1% of mass 198	2.5
441	Present, but less than mass 443	74.6
442	Greater than 40% of mass 198	81.3
443	17 - 23% of mass 442	19.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE36-10-7481	248370011	s1c2121.d	22-MAR-10 00:31
RE36-10-7486	248370012	s1c2122.d	22-MAR-10 00:54
RE36-10-7477	248370013	s1c2123.d	22-MAR-10 01:18
RE36-10-7489	248370014	s1c2124.d	22-MAR-10 01:42
RE36-10-7479	248370015	s1c2125.d	22-MAR-10 02:05
RE36-10-7482	248370016	s1c2126.d	22-MAR-10 02:29
RE36-10-7480	248370017	s1c2127.d	22-MAR-10 02:53
RE36-10-7485	248370018	s1c2128.d	22-MAR-10 03:16
RE36-10-7488	248370019	s1c2129.d	22-MAR-10 03:40
RE36-10-7484	248370020	s1c2130.d	22-MAR-10 04:03

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2150

Instrument: MSD1.I

STD Analysis Time: 21-MAR-10 16:55

GC Column: J&W DB-5MS

Data File: s1c2102.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	452910		3.61	1893610		4.47	949198		5.7	1628892		6.71	1332589		8.29	1144861		9.52
Upper Limit	905820		4.11	3787220		4.97	1898396		6.2	3257784		7.21	2665178		8.79	2289722		10.0
Lower Limit	226455		3.11	946805		3.97	474599		5.2	814446		6.21	666295		7.79	572431		9.02
Sample ID																		
BLK01	447653		3.61	1767129		4.46	931782		5.7	1539732		6.7	1183054		8.29	991549		9.52
BLK01LCS	442106		3.61	1912471		4.47	926897		5.7	1614730		6.71	1363873		8.29	1201524		9.53
RE36-10-7415	394396		3.61	1559793		4.46	818379		5.7	1365697		6.7	1104623		8.29	846462		9.53
RE36-10-7420	399239		3.61	1578138		4.46	823992		5.7	1390664		6.7	1109470		8.29	884833		9.52
RE36-10-7418	453200		3.61	1801150		4.46	940707		5.7	1661252		6.7	1405544		8.29	1108430		9.52
RE36-10-7417	466105		3.61	1817036		4.46	944221		5.7	1562764		6.7	1176721		8.29	912793		9.52
RE36-10-7417MS	446660		3.61	1863951		4.46	945847		5.7	1656960		6.71	1411692		8.29	1136214		9.52
RE36-10-7417MSD	446785		3.61	1863391		4.46	915905		5.7	1610916		6.71	1324334		8.29	1064095		9.53
RE36-10-7419	446120		3.61	1756753		4.46	937672		5.7	1639189		6.7	1354115		8.29	974997		9.52
RE36-10-7416	439112		3.61	1715293		4.46	918043		5.7	1625260		6.7	1415080		8.29	1053799		9.52
RE36-10-7478	483389		3.61	1886852		4.46	973826		5.7	1651056		6.7	1225310		8.29	755782		9.52
RE36-10-7490	479229		3.61	1880030		4.46	984259		5.7	1769998		6.7	1437073		8.29	912211		9.52
RE36-10-7487	468827		3.61	1837272		4.46	961190		5.7	1628021		6.7	1235815		8.29	812012		9.52
RE36-10-7483	441049		3.61	1727352		4.46	907776		5.7	1596570		6.71	1091013		8.29	650969		9.53
RE36-10-7481	479972		3.61	1891124		4.46	989622		5.7	1777112		6.71	1372811		8.29	750045		9.53
RE36-10-7486	460681		3.61	1804295		4.46	950833		5.7	1648021		6.71	1231094		8.29	783914		9.53
RE36-10-7477	468271		3.61	1816604		4.46	958519		5.7	1672364		6.71	1254830		8.29	739254		9.52
RE36-10-7489	476115		3.61	1853061		4.46	968246		5.7	1675611		6.71	1278903		8.29	759617		9.52
RE36-10-7479	457125		3.61	1782782		4.46	926135		5.7	1648944		6.71	1291224		8.29	824939		9.53
RE36-10-7482	489077		3.61	1890751		4.46	972504		5.7	1709237		6.71	1233626		8.29	717021		9.53
RE36-10-7480	440454		3.61	1753348		4.46	921385		5.7	1681077		6.71	1281009		8.29	720505		9.53
RE36-10-7485	478716		3.61	1863129		4.46	961959		5.7	1696781		6.71	1257137		8.29	679081		9.53
RE36-10-7488	467991		3.61	1836404		4.46	969041		5.7	1706948		6.71	1241055		8.29	677189		9.52
RE36-10-7484	460283		3.61	1797982		4.46	937387		5.7	1629086		6.71	1161304		8.29	650930		9.53

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: 10-2150
Lab Sample ID: 248370001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	571	ug/kg	114	571
108-95-2	Phenol	U	571	ug/kg	114	571
95-57-8	2-Chlorophenol	U	571	ug/kg	114	571
106-46-7	1,4-Dichlorobenzene	U	571	ug/kg	114	571
621-64-7	N-Nitrosodipropylamine	U	571	ug/kg	114	571
59-50-7	4-Chloro-3-methylphenol	U	571	ug/kg	114	571
83-32-9	Acenaphthene	U	57.1	ug/kg	18.8	57.1
121-14-2	2,4-Dinitrotoluene	U	571	ug/kg	57.1	571
100-02-7	4-Nitrophenol	U	571	ug/kg	188	571
87-86-5	Pentachlorophenol	U	571	ug/kg	143	571
129-00-0	Pyrene	U	57.1	ug/kg	17.1	57.1
110-86-1	Pyridine	U	571	ug/kg	114	571
62-53-3	Aniline	U	571	ug/kg	171	571
111-44-4	bis(2-Chloroethyl) ether	U	571	ug/kg	114	571
541-73-1	1,3-Dichlorobenzene	U	571	ug/kg	114	571
100-51-6	Benzyl alcohol	U	571	ug/kg	171	571
95-50-1	1,2-Dichlorobenzene	U	571	ug/kg	114	571
108-60-1	bis(2-Chloroisopropyl)ether	U	571	ug/kg	114	571
95-48-7	o-Cresol	U	571	ug/kg	114	571
65794-96-9	m,p-Cresols	U	571	ug/kg	171	571
67-72-1	Hexachloroethane	U	571	ug/kg	114	571
98-95-3	Nitrobenzene	U	571	ug/kg	114	571
78-59-1	Isophorone	U	571	ug/kg	114	571
88-75-5	2-Nitrophenol	U	571	ug/kg	114	571
105-67-9	2,4-Dimethylphenol	U	571	ug/kg	200	571
111-91-1	bis(2-Chloroethoxy)methane	U	571	ug/kg	114	571
120-83-2	2,4-Dichlorophenol	U	571	ug/kg	114	571
65-85-0	Benzoic acid	U	1140	ug/kg	286	1140
91-20-3	Naphthalene	U	57.1	ug/kg	17.1	57.1
106-47-8	4-Chloroaniline	U	571	ug/kg	114	571
87-68-3	Hexachlorobutadiene	U	571	ug/kg	114	571
91-57-6	2-Methylnaphthalene	U	57.1	ug/kg	11.4	57.1
77-47-4	Hexachlorocyclopentadiene	U	571	ug/kg	114	571
88-06-2	2,4,6-Trichlorophenol	U	571	ug/kg	114	571
95-95-4	2,4,5-Trichlorophenol	U	571	ug/kg	114	571
91-58-7	2-Chloronaphthalene	U	57.1	ug/kg	18.8	57.1
88-74-4	2-Nitroaniline	U	571	ug/kg	114	571
99-09-2	<i>o</i> -Nitroaniline	U	571	ug/kg	114	571
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370001

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7415
Batch ID: 961228
Run Date: 03/21/2010 19:47
Prep Date: 03/05/2010 11:30
Data File: s1c2109.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	571	ug/kg	114	571
606-20-2	2,6-Dinitrotoluene	U	571	ug/kg	57.1	571
208-96-8	Acenaphthylene	U	57.1	ug/kg	17.1	57.1
51-28-5	2,4-Dinitrophenol	U	1140	ug/kg	217	1140
132-64-9	Dibenzofuran	U	571	ug/kg	114	571
84-66-2	Diethylphthalate	U	571	ug/kg	114	571
86-73-7	Fluorene	U	57.1	ug/kg	17.1	57.1
7005-72-3	4-Chlorophenylphenylether	U	571	ug/kg	114	571
534-52-1	2-Methyl-4,6-dinitrophenol	U	571	ug/kg	114	571
100-01-6	4-Nitroaniline	U	571	ug/kg	171	571
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	571	ug/kg	114	571
122-66-7	Azobenzene	U	571	ug/kg	114	571
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	571	ug/kg	114	571
118-74-1	Hexachlorobenzene	U	571	ug/kg	114	571
85-01-8	Phenanthrene	U	57.1	ug/kg	17.1	57.1
120-12-7	Anthracene	U	57.1	ug/kg	11.4	57.1
84-74-2	Di-n-butylphthalate	U	571	ug/kg	114	571
206-44-0	Fluoranthene	U	57.1	ug/kg	17.1	57.1
85-68-7	Butylbenzylphthalate	U	571	ug/kg	114	571
56-55-3	Benzo(a)anthracene	U	57.1	ug/kg	17.1	57.1
91-94-1	3,3'-Dichlorobenzidine	U	571	ug/kg	171	571
218-01-9	Chrysene	U	57.1	ug/kg	17.1	57.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	571	ug/kg	114	571
117-84-0	Di-n-octylphthalate	U	571	ug/kg	114	571
205-99-2	Benzo(b)fluoranthene	U	57.1	ug/kg	17.1	57.1
207-08-9	Benzo(k)fluoranthene	U	57.1	ug/kg	17.1	57.1
50-32-8	Benzo(a)pyrene	U	57.1	ug/kg	17.1	57.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	57.1	ug/kg	17.1	57.1
53-70-3	Dibenzo(a,h)anthracene	U	57.1	ug/kg	17.1	57.1
191-24-2	Benzo(ghi)perylene	U	57.1	ug/kg	17.1	57.1
120-82-1	1,2,4-Trichlorobenzene	U	571	ug/kg	114	571

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	1170	ug/kg		J
	Unknown Aldol Condensate	2.67	306	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370001	Date Received: 03/02/2010 08:50	% Moisture: 41.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7415	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 19:47	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: slc2109.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
79-92-5	Camphene	3.29	277	ug/kg	98	NJ
3387-41-5	Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3.39	280	ug/kg	95	NJ
123-35-3	.beta.-Myrcene	3.42	813	ug/kg	93	NJ
29050-33-7	(+)-4-Carene	3.94	265	ug/kg	97	NJ
	Unknown	7.57	280	ug/kg		J
	Unknown	7.75	1040	ug/kg		J
	Unknown	7.85	386	ug/kg		J
	Unknown	7.92	626	ug/kg		J
	Unknown	7.95	857	ug/kg		J
	Unknown	8.01	270	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.15	2900	ug/kg	95	NJ
514-10-3	Abietic acid	8.27	1420	ug/kg	81	NJ
	Unknown	8.33	390	ug/kg		J
	Unknown	8.41	824	ug/kg		J
112-95-8	Eicosane	9.07	273	ug/kg	98	NJ
	Unknown	9.78	310	ug/kg		J
	Unknown	10.4	253	ug/kg		J
	Unknown	10.77	270	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	836	ug/kg	89	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2109.d
Lab Smp Id: 248370001 Client Smp ID: RE36-10-7415
Inj Date : 21-MAR-2010 19:47
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370001|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	41.62960	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
	=====	==	=====	=====	=====	(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	394396	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1559793	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	818379	40.0000	
* 67 Phenanthrene-d10	188	6.704	6.710	(1.000)	1365697	40.0000	
* 91 Chrysene-d12	240	8.292	8.292	(1.000)	1104623	40.0000	
* 98 Perylene-d12	264	9.528	9.522	(1.000)	846462	40.0000	
\$ 3 2-Fluorophenol	112	2.828	2.822	(0.783)	578576	56.9699	3250
\$ 5 Phenol-d5	99	3.346	3.346	(0.927)	774981	62.6581	3580
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	336665	35.1914	2010
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	537672	23.7891	1360
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	124520	46.4100	2650
\$ 81 p-Terphenyl-d14	244	7.622	7.622	(0.919)	493948	26.8217	1530

ION RATIO REPORT

SV REPORT

Data file: slc2109.d

Report Date: 03/22/2010 11:52

Lab. ID: 248370001

SampleType: SAMPLE

Injection Date: 21-MAR-2010 19:47

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370001|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	32242	3.35	3.40	80-120	100	()
93	35929	3.39	3.40	233-293	111	(Q)

6	Phenol	CAS#: 108-95-2				
94	110531	3.19	3.36	80-120	100	(T)
66	20673	3.19	3.36	11- 71	19	(T)
65	81476	3.19	3.36	0- 58	74	(QT)

7	bis(2-Chloroethyl) ether	CAS#: 111-44-4				
63	30231	3.58	3.42	80-120	100	(T)
93	1073474	3.58	3.42	95-155	3551	(QT)
95	15763	3.58	3.42	7- 67	52	(T)

15	o-Cresol	CAS#: 95-48-7				
107	76369	3.58	3.74	80-120	100	(T)
108	16293	3.58	3.74	85-145	21	(QT)
77	368188	3.58	3.74	19- 79	482	(QT)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	48776	3.97	3.86	80-120	100	(T)
42	36288	3.97	3.86	48-108	74	(T)

40	2-Chloronaphthalene	CAS#: 91-58-7				
162	40563	5.44	5.30	80-120	100	(T)
164	2318	5.44	5.30	2- 62	6	(T)
127	3099	5.44	5.30	9- 69	8	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
42 o-Nitroaniline		CAS#: 88-74-4				
65	51639	5.44	5.37	80-120	100	(T)
92	59519	5.44	5.37	33- 93	115	(QT)
138	4396	5.44	5.37	80-140	9	(QT)

41 m-Nitroaniline		CAS#: 99-09-2				
138	226	5.70	5.66	80-120	100	()
92	5446	5.70	5.66	71-131	2401	(Q)
108	17230	5.70	5.66	0- 40	7597	(Q)

43 Dimethylphthalate		CAS#: 131-11-3				
163	147505	5.70	5.49	80-120	100	(T)
164	818379	5.70	5.49	0- 40	555	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	104688	5.70	5.54	80-120	100	(T)
63	1725	5.70	5.54	50-110	2	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	104688	5.70	5.83	80-120	100	(T)
89	1683	5.70	5.82	38- 98	2	(QT)
63	1725	5.70	5.82	20- 80	2	(QT)

53 Fluorene		CAS#: 86-73-7				
166	9022	6.25	6.09	80-120	100	(T)
165	9615	6.25	6.09	61-121	107	(T)
167	3376	6.25	6.09	0- 43	37	(T)

56 p-Nitroaniline		CAS#: 100-01-6				
138	353	6.10	6.09	80-120	100	()
108	473	6.12	6.09	29- 89	134	(Q)
92	534	6.19	6.09	14- 74	151	(QT)

85 Butylbenzylphthalate		CAS#: 85-68-7				
149	238698	8.09	7.87	80-120	100	(T)
91	241856	8.09	7.87	39- 99	101	(QT)
206	4136	8.09	7.87	0- 50	2	(T)

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	11544	8.11	8.28	80-120	100	(T)
226	5560	8.09	8.28	0- 55	48	(T)
229	8613	8.11	8.28	0- 49	75	(QT)

92 Chrysene		CAS#: 218-01-9				
228	11731	8.11	8.31	80-120	100	(T)
229	8613	8.11	8.31	0- 49	73	(QT)
226	5560	8.09	8.31	0- 58	47	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
	93 bis(2-Ethylhexyl)phthalate			CAS#: 117-81-7		
149	244430	8.09	8.20	80-120	100	(T)
167	27257	8.09	8.20	0- 59	11	(T)

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/s1c2109.d
Lab Smp Id: 248370001 Client Smp ID: RE36-10-7415
Inj Date : 21-MAR-2010 19:47
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370001|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: s1c1620.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.00000	weight of sample
M	41.62960	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2463836	40.000
* 91 Chrysene-d12	8.292	3473914	40.000
* 98 Perylene-d12	9.528	2481304	40.000

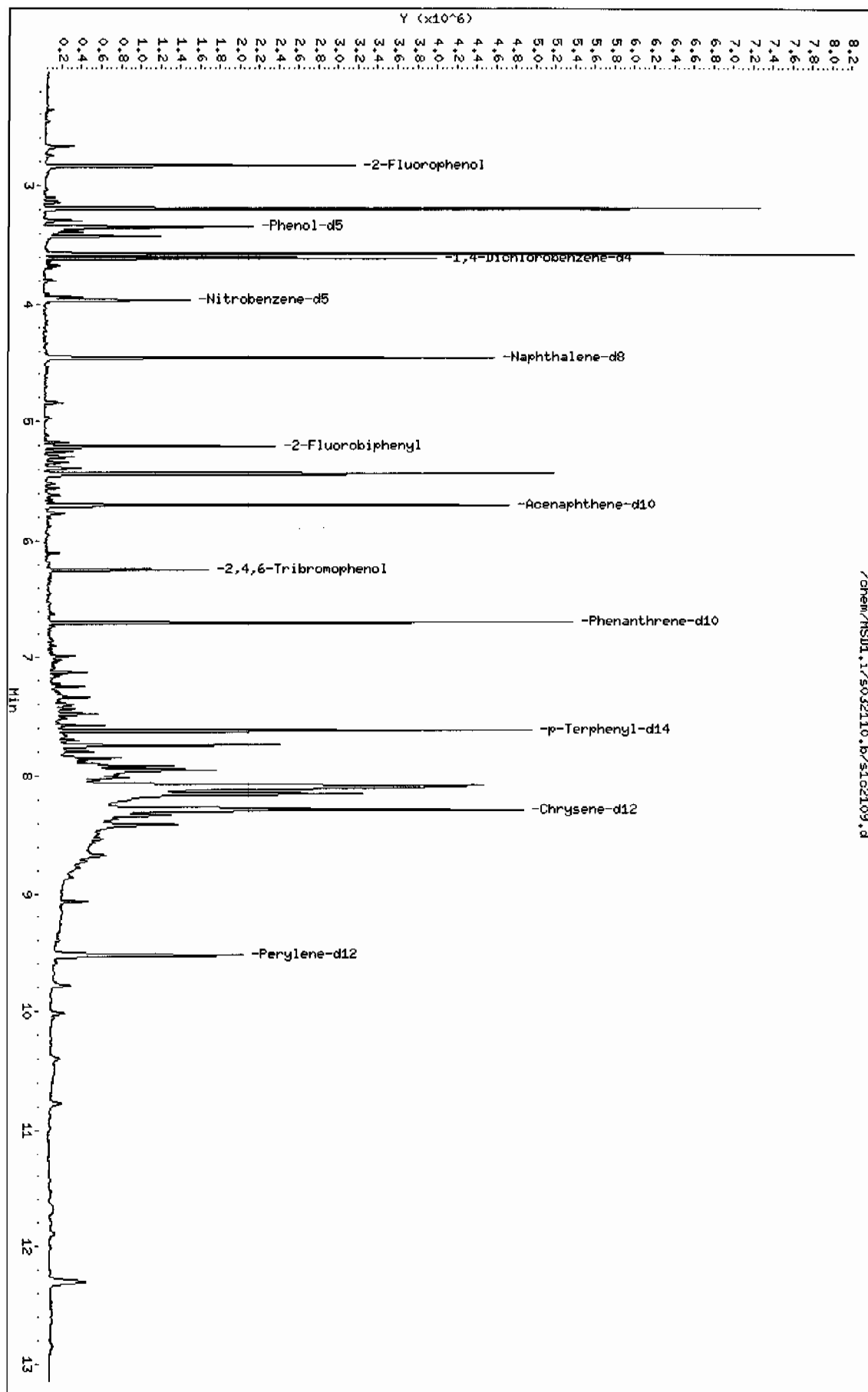
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CFND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
1.810	1262807	20.5014754	1170	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	329948	5.35666194	306	0		0	10
Camphene					CAS #: 79-92-5		
3.293	298590	4.84755652	277	98	NIST05.L	15160	10
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m					CAS #: 3387-41-5		
3.387	301683	4.89776893	280	95	NIST05.L	15373	10
.beta.-Myrcene					CAS #: 123-35-3		
3.422	877365	14.2438815	813	93	NIST05.L	15177	10
(+)-4-Carene					CAS #: 29050-33-7		
3.940	286341	4.64869942	265	97	NIST05.L	15169	10
Unknown					CAS #:		
7.575	426313	4.90873213	280	0		0	91
Unknown					CAS #:		
7.745	1586670	18.2695397	1040	0		0	91
Unknown					CAS #:		
7.851	587077	6.75983287	386	0		0	91
Unknown					CAS #:		
7.922	952487	10.9673060	626	0		0	91
Unknown					CAS #:		
7.951	1303445	15.0083774	857	0		0	91
Unknown					CAS #:		
8.010	410244	4.72370762	270	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
8.151	4415912	50.8465305	2900	95	NIST05.L	125036	91
Abietic acid					CAS #: 514-10-3		
8.275	2161819	24.8920195	1420	81	NIST05.L	126141	91
Unknown					CAS #:		
8.334	593498	6.83376481	390	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown					CAS #:		
8.410	1252766	14.4248369	824	0		0	91
Eicosane					CAS #: 112-95-8		
9.069	296487	4.77953569	273	98	NIST05.L	113490	98
Unknown					CAS #:		
9.781	336310	5.42149717	310	0		0	98
Unknown					CAS #:		
10.398	275275	4.43758980	253	0		0	98
Unknown					CAS #:		
10.769	293744	4.73531757	270	0		0	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
12.298	908292	14.6421645	836	89	NIST05.L	173936	98

Data File: /chem/HSD1.i/s032110.b/slc2109.d
 Date : 21-MAR-2010 19:47
 Client ID: RE36-10-7415
 Sample Info: 1248370001/96122811/SVW11/LANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SHS

Instrument: HSD1.i
 Operator: PMY
 Column diameter: 0.20



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 12483700011961228111SVMI11LANL

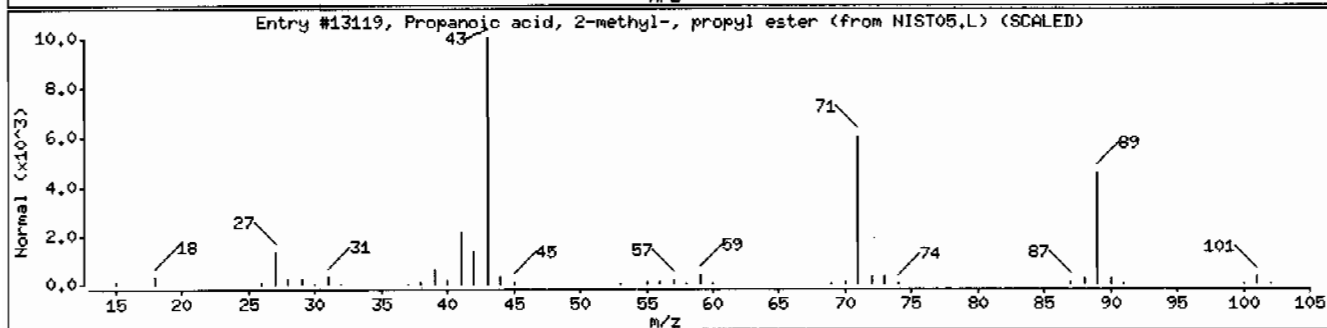
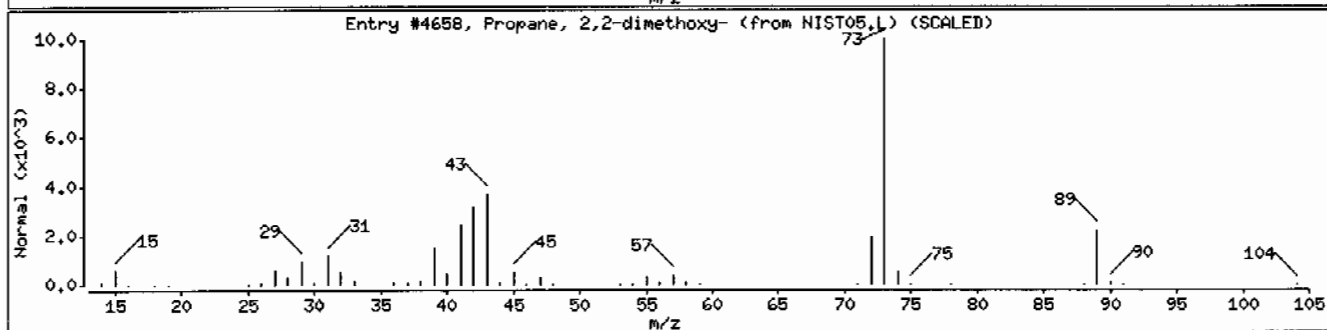
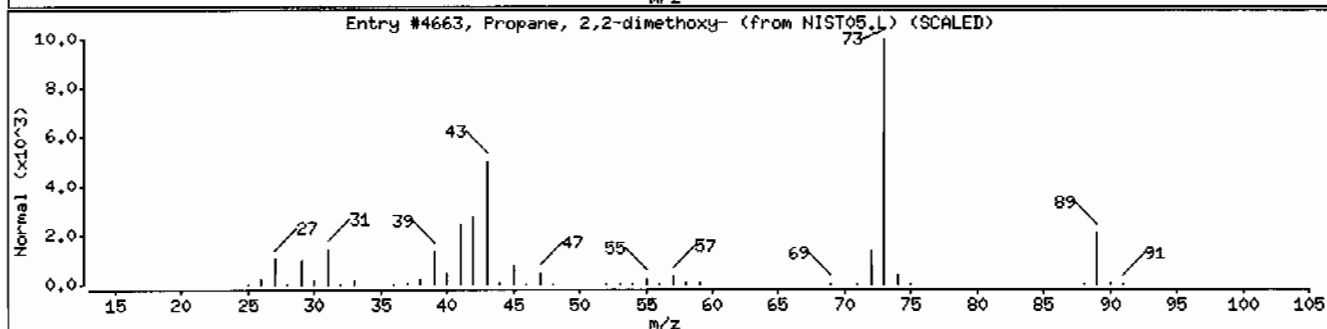
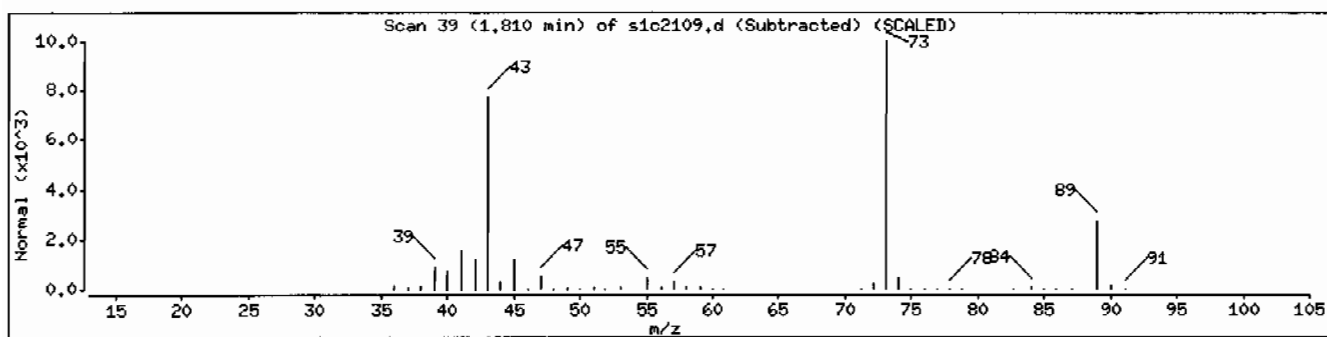
Volume Injected (uL): 0.5

Operator: AMY

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	36	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	28	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	25	C7H14O2	130



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: I248370001|961228|1|SVM11|LANL

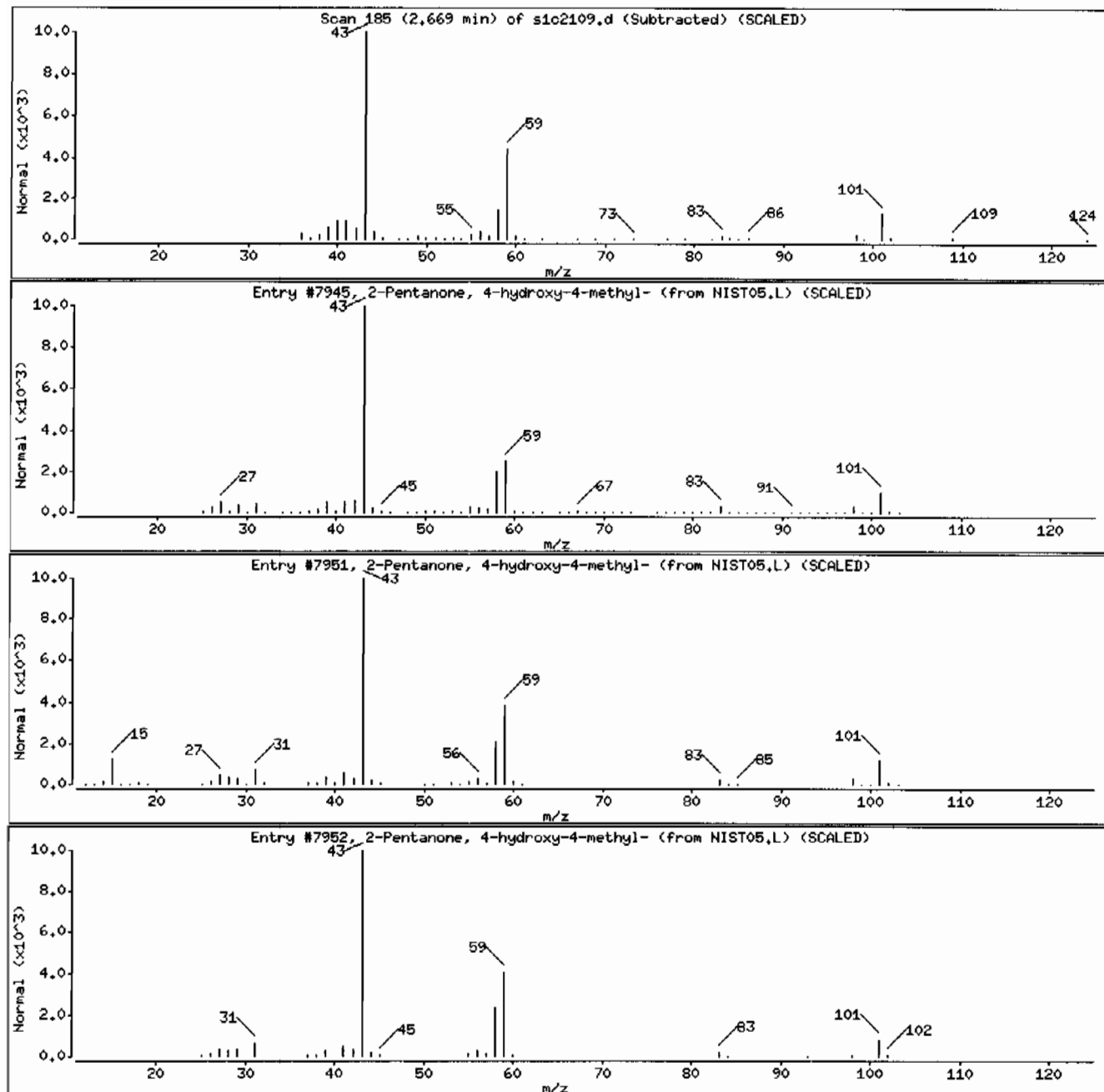
Volume Injected (uL): 0.5

Operator: AMY

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	7945	72	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 12483700011961228111SVH111LANL

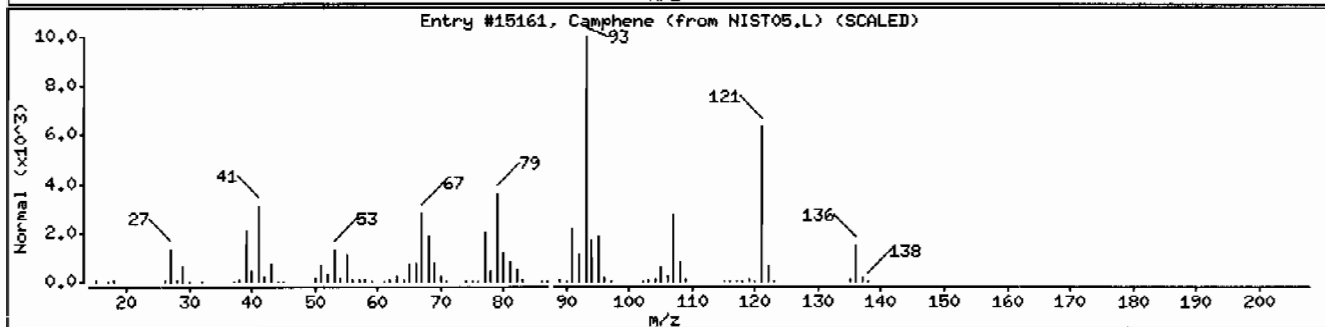
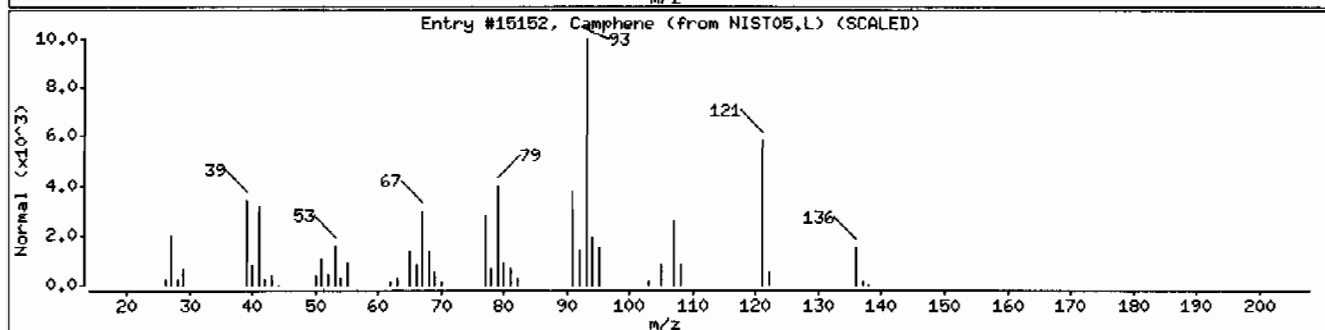
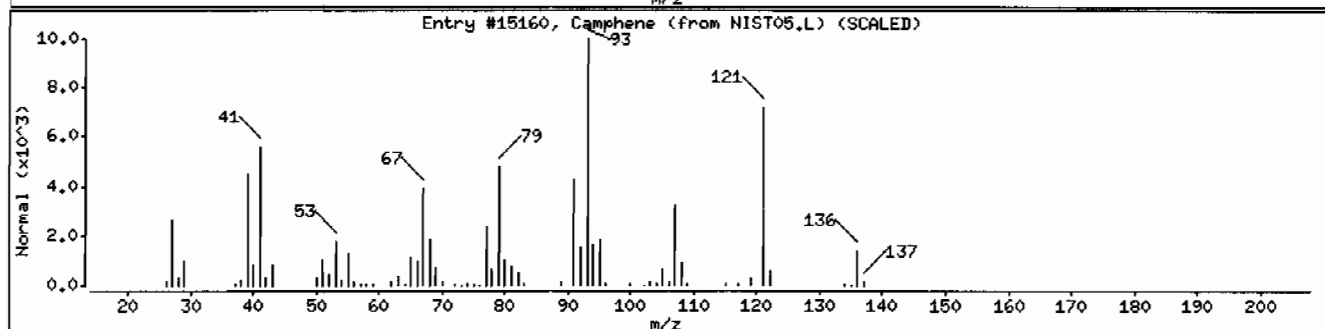
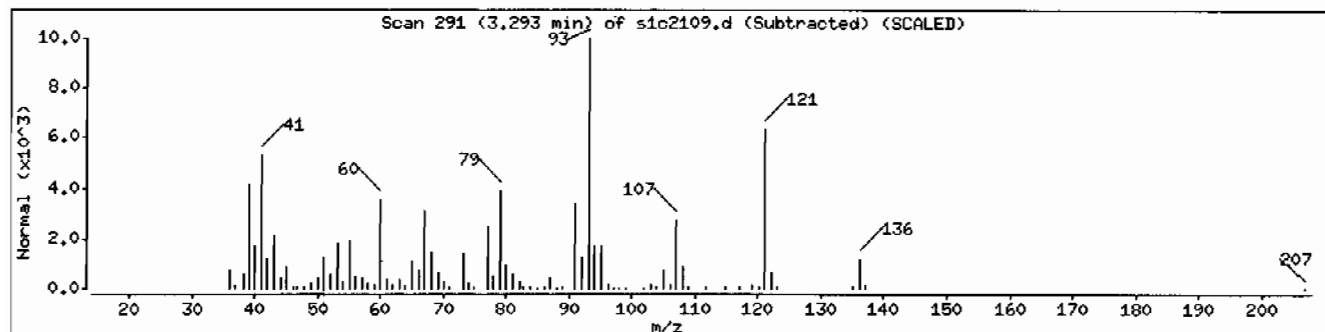
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST05.L	15160	98	C10H16	136
Camphene	79-92-5	NIST05.L	15152	97	C10H16	136
Camphene	79-92-5	NIST05.L	15161	97	C10H16	136



Date: 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: HSD1.i

Sample Info: I248370001196122811|SVMI1|LANL

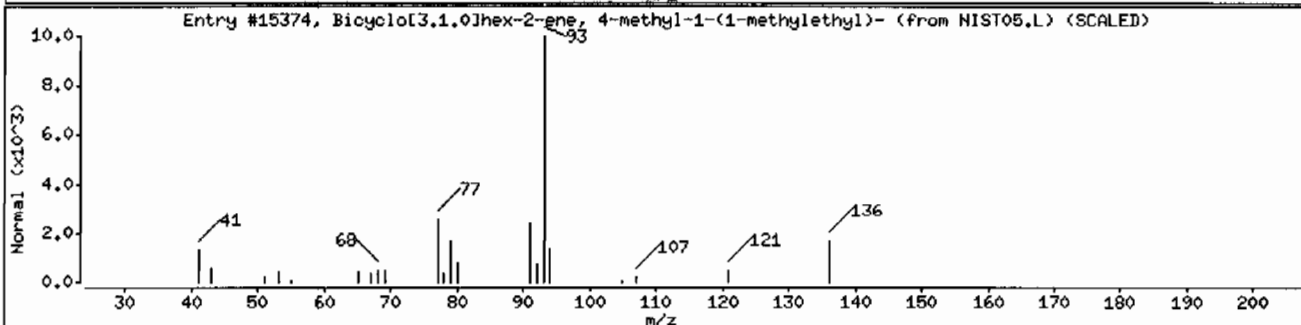
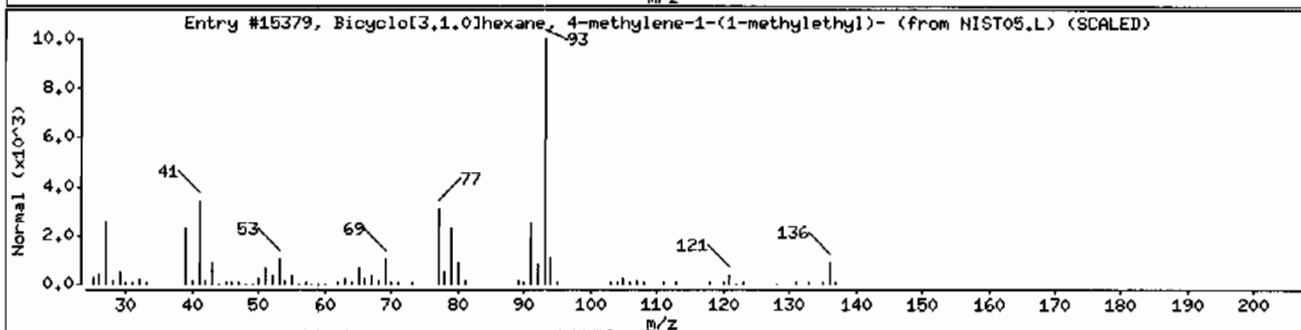
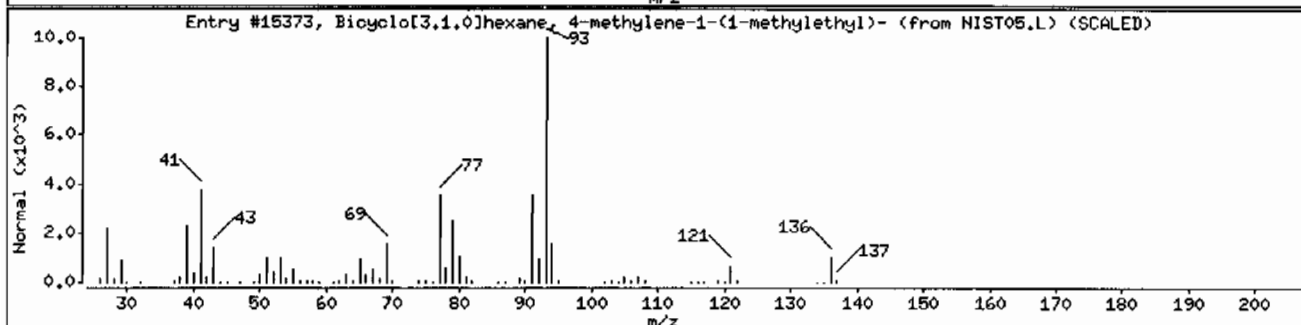
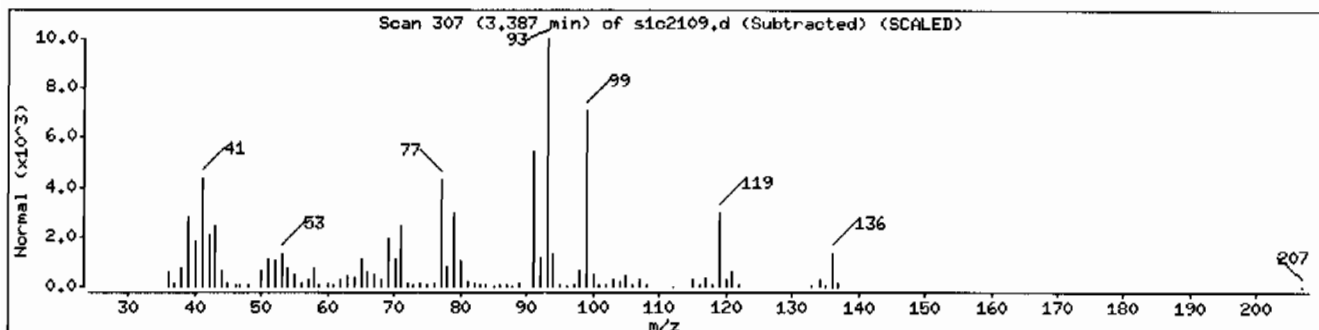
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3387-41-5	NIST05.L	15373	95	C10H16	136
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3387-41-5	NIST05.L	15379	70	C10H16	136
Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m	28634-89-1	NIST05.L	15374	70	C10H16	136



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 1248370001/96122811/SVM11/LANL

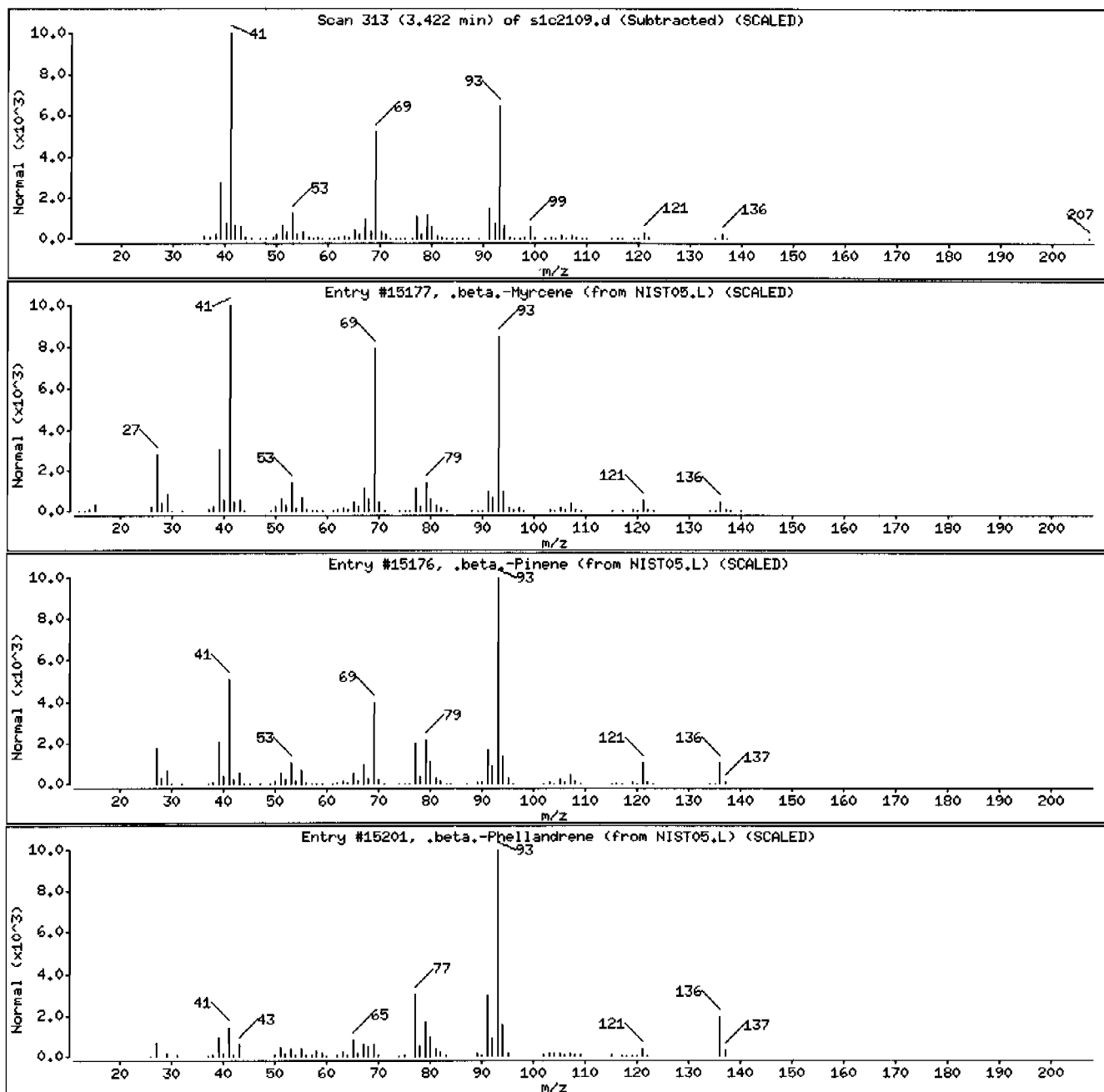
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Myrcene	123-35-3	NIST05.L	15177	93	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15176	78	C10H16	136
.beta.-Phellandrene	555-10-2	NIST05.L	15201	59	C10H16	136



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: I248370001I9612281IISVM1IILANL

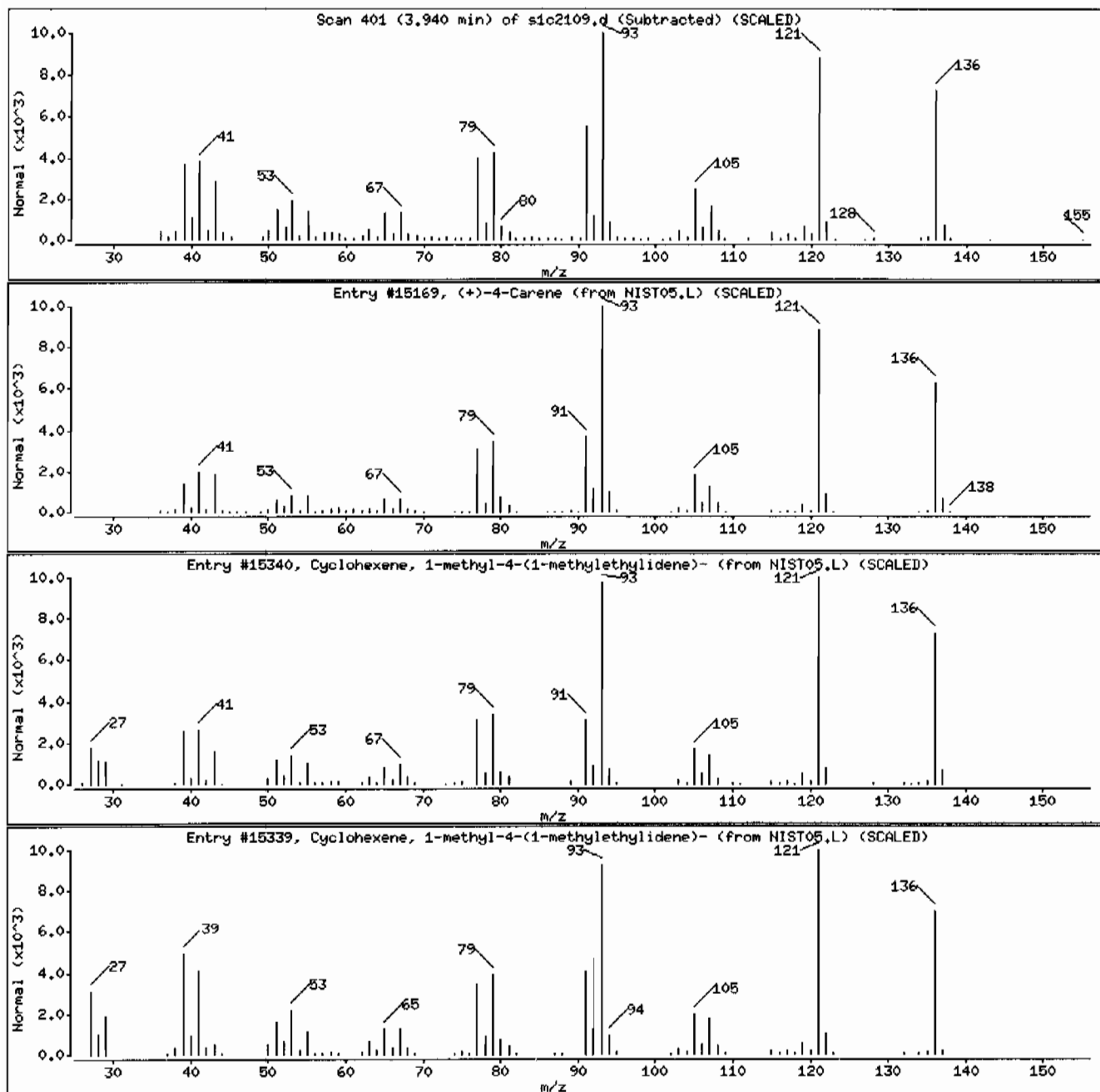
Volume Injected (ul): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(+)-4-Carene	29050-33-7	NIST05.L	15169	97	C10H16	136
Cyclohexene, 1-methyl-4-(1-methylethylid	586-62-9	NIST05.L	15340	96	C10H16	136
Cyclohexene, 1-methyl-4-(1-methylethylid	586-62-9	NIST05.L	15339	96	C10H16	136



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: I248370001|961228|11SVMI1|LANL

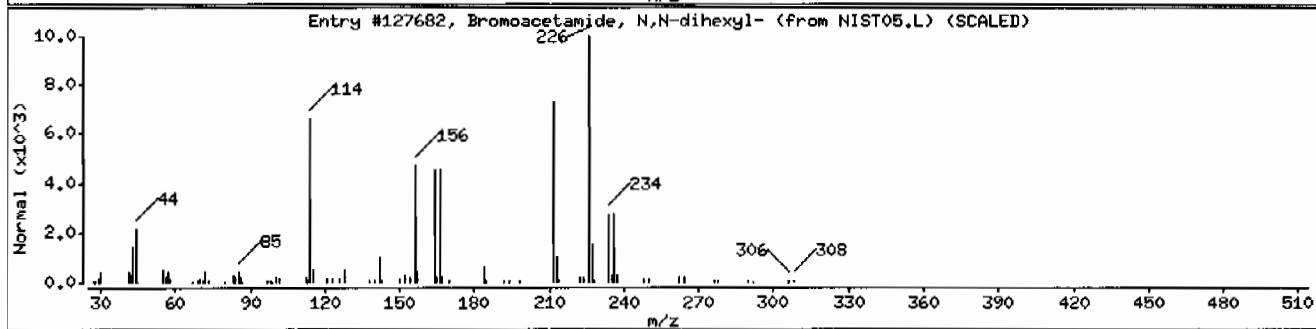
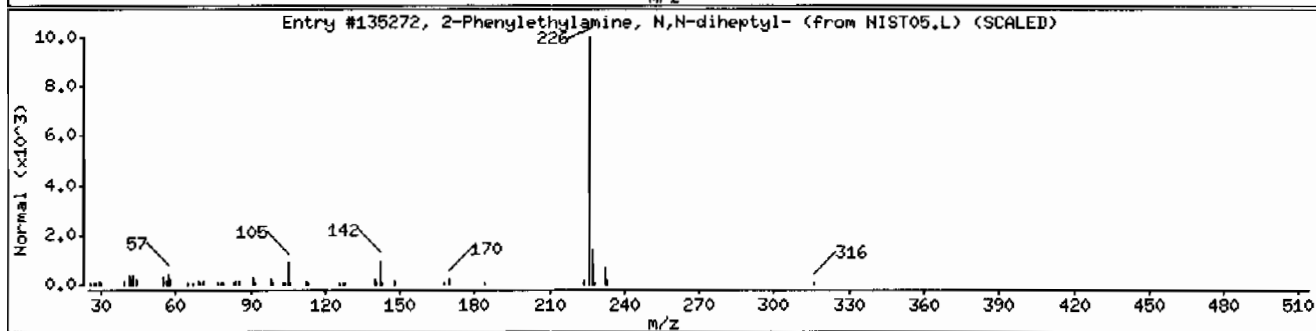
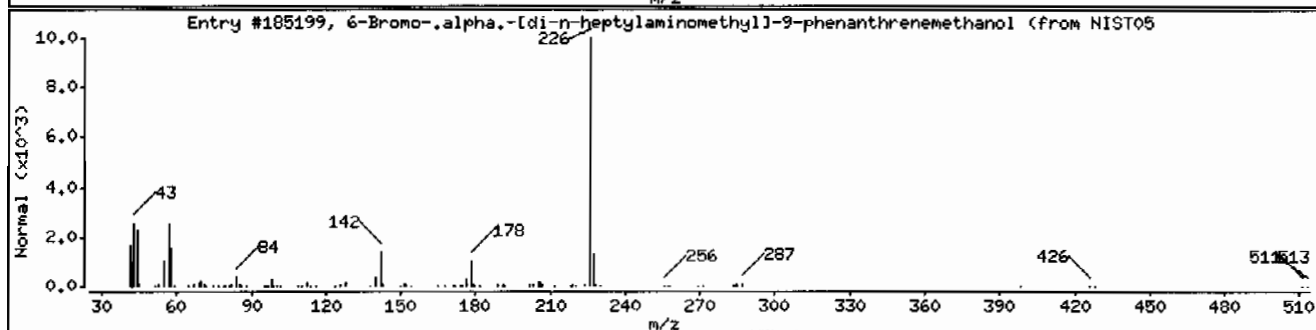
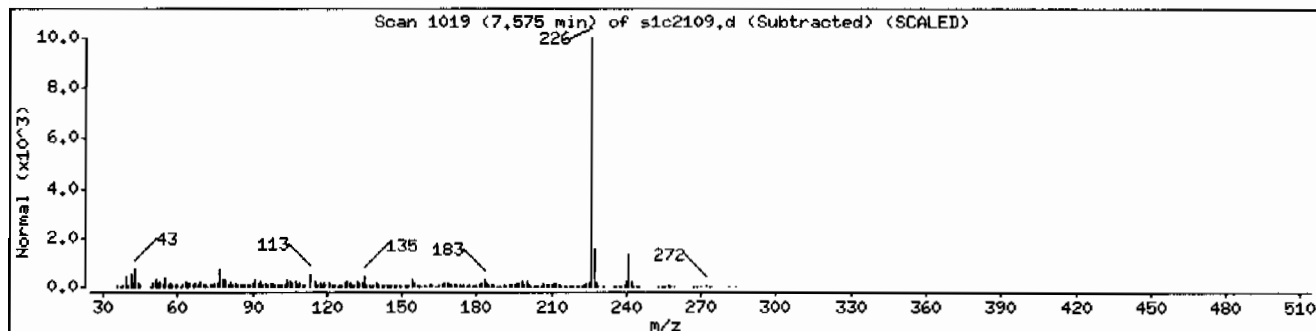
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
6-Bromo-.alpha.-[di-n-heptylaminomethyl]	27022-39-5	NIST05.L	185199	59	C30H42BrNO	511
2-Phenylethylamine, N,N-diheptyl-	1000310-49-4	NIST05.L	135272	59	C22H39N	317
Bromoacetamide, N,N-dihexyl-	1000308-16-9	NIST05.L	127682	53	C14H28BrNO	305



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 1248370001|96122811|SVH11|LANL

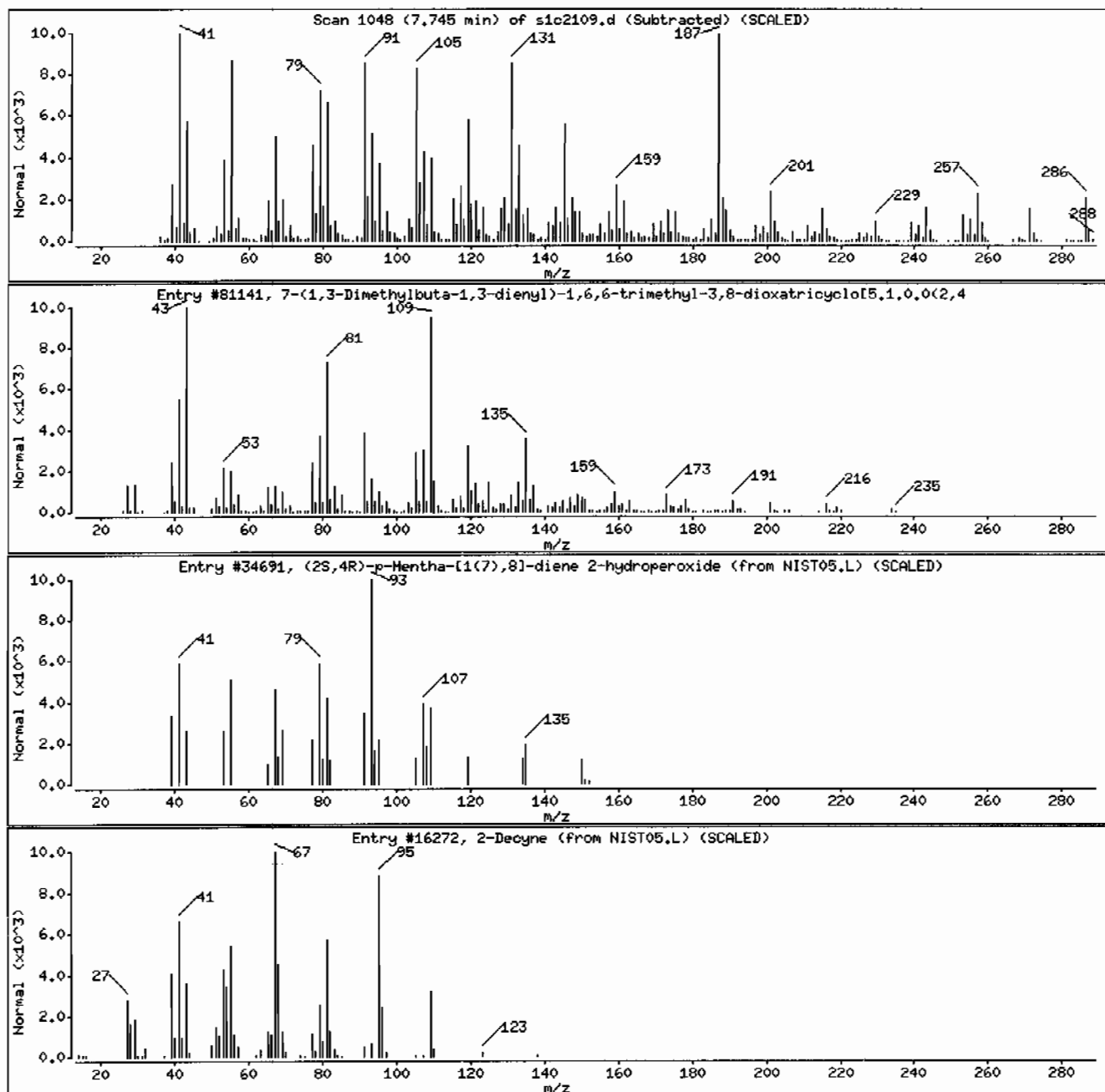
Volume Injected (uL): 0.5

Operator: AMY

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	35	C15H22O2	234
(2S,4R)-p-Mentha-1(7),8J-diene 2-hydroper	1000292-74-4	NIST05.L	34691	35	C10H16O2	168
2-Decyne	2384-70-5	NIST05.L	16272	22	C10H18	138



Date: 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 1248370001196122811SVH11ILANL

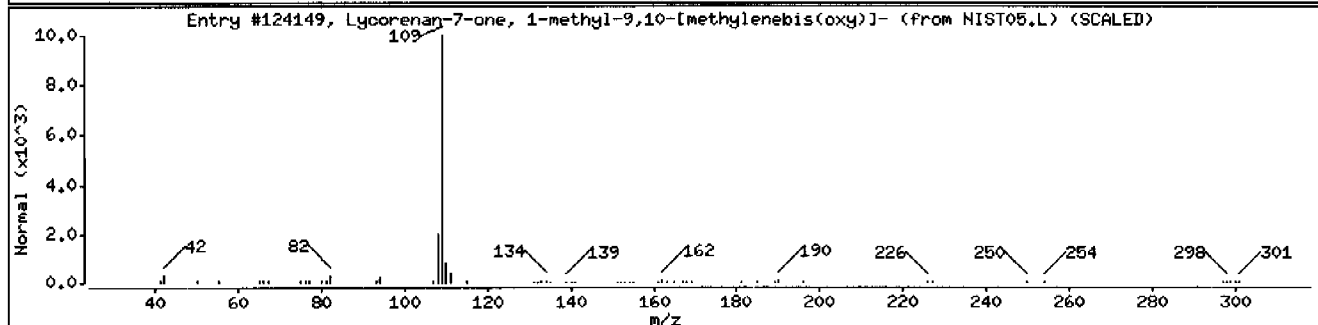
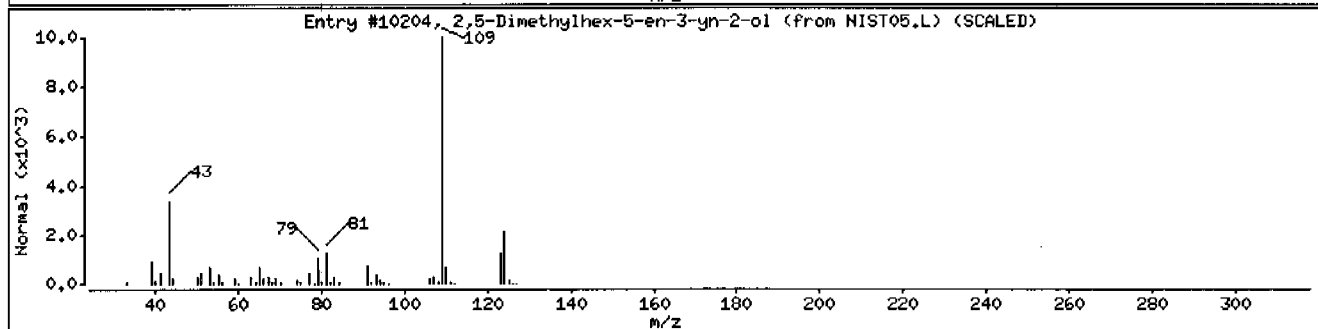
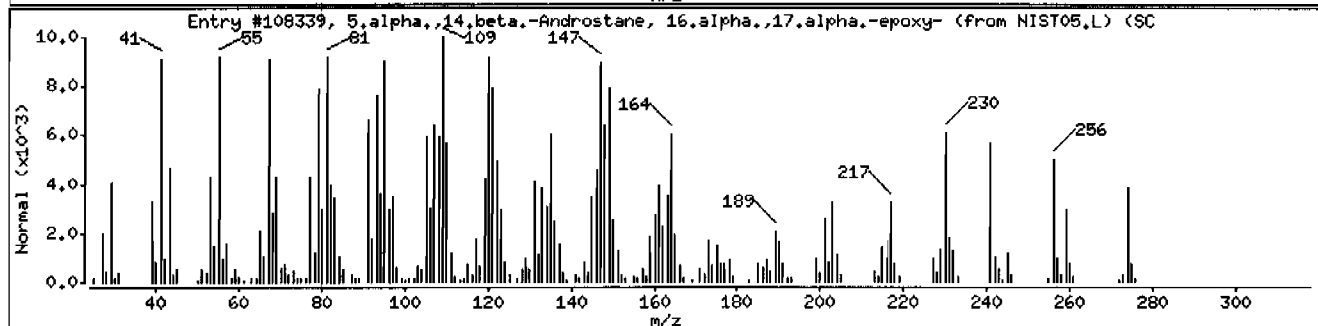
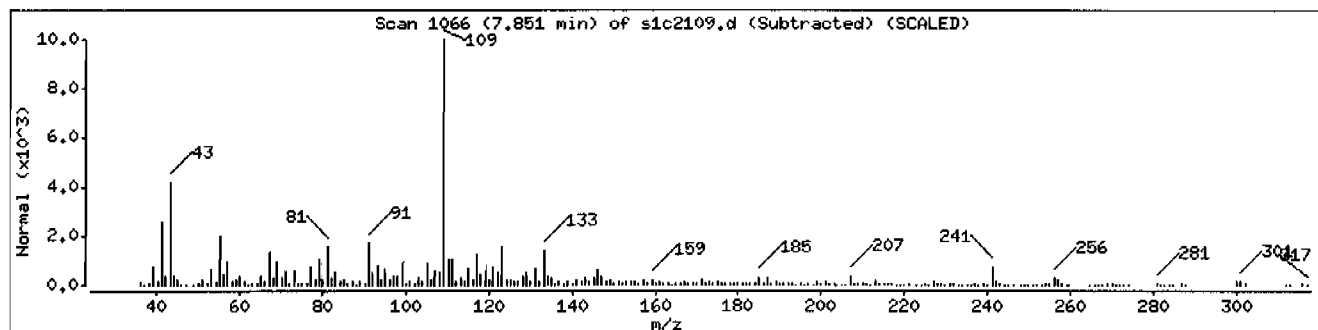
Volume Injected (uL): 0.5

Operator: AMY

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	53	C19H30O	274
2,5-Dimethylhex-5-en-3-yn-2-ol	1000302-74-9	NIST05.L	10204	53	C8H12O	124
Lycorenan-7-one, 1-methyl-9,10-[methylene	568-40-1	NIST05.L	124149	50	C17H17NO4	299



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 12483700011961228111SVMI11LANL

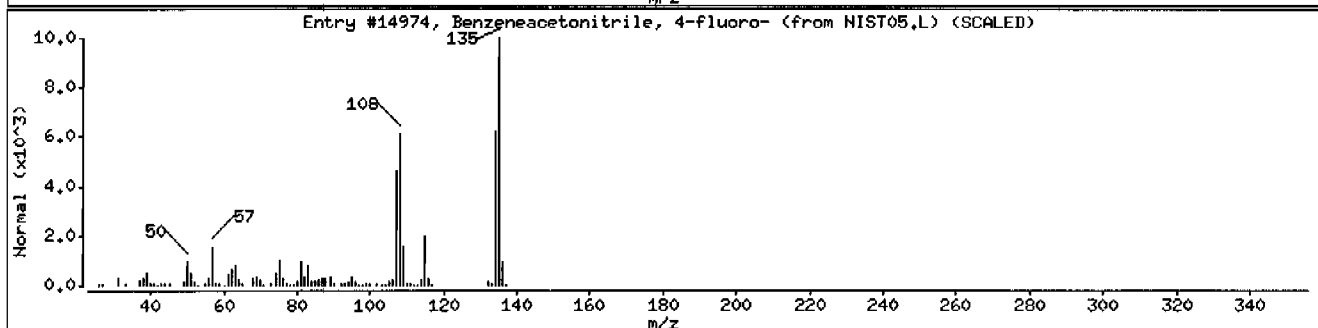
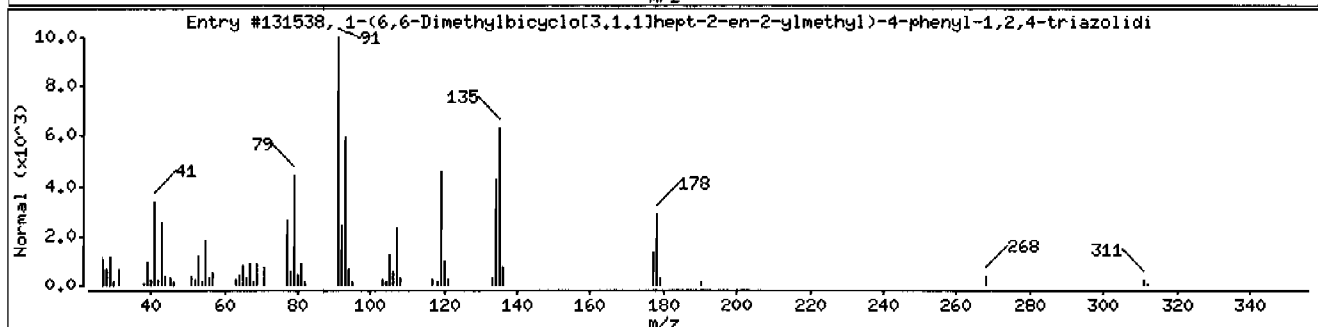
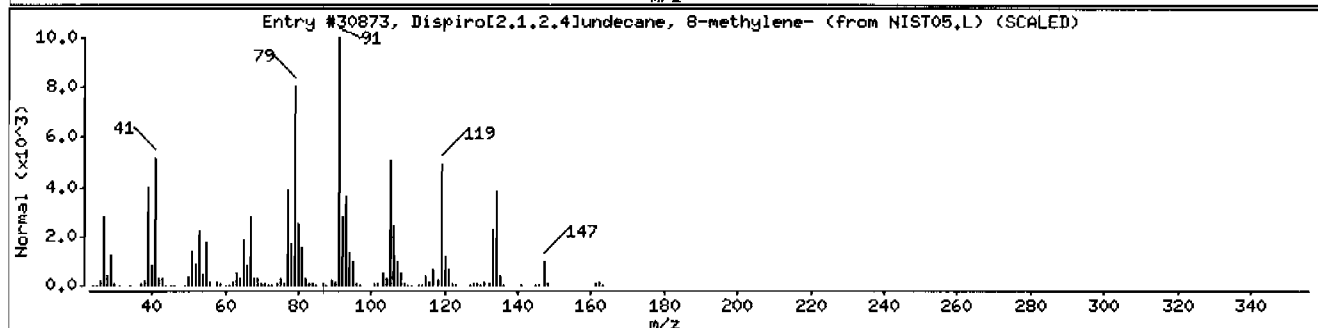
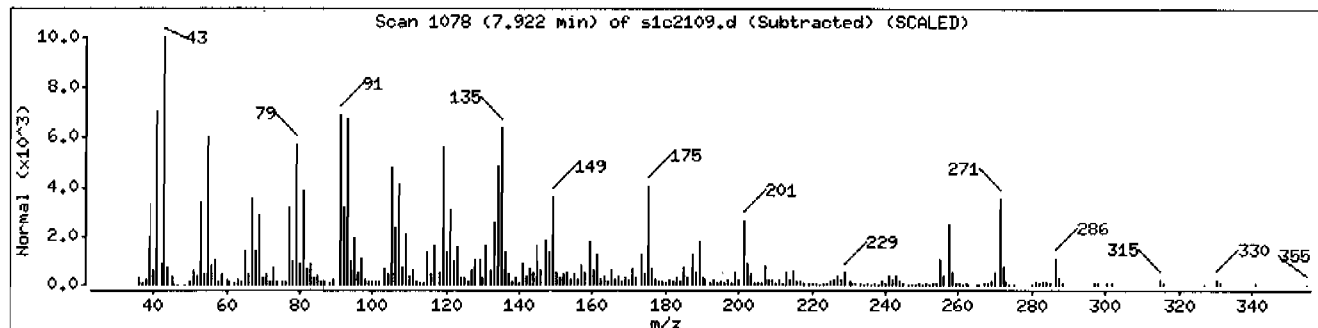
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dispiro[2.1.2.4]undecane, 8-methylene-	51567-08-9	NIST05.L	30873	47	C12H18	162
1-(6,6-Dimethylbicyclo[3.1.1]hept-2-en-2	74402-29-2	NIST05.L	131538	38	C18H21N3O2	311
Benzeneacetonitrile, 4-fluoro-	459-22-3	NIST05.L	14974	30	C8H6FN	135



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 1248370001196122811SVMI11LANL

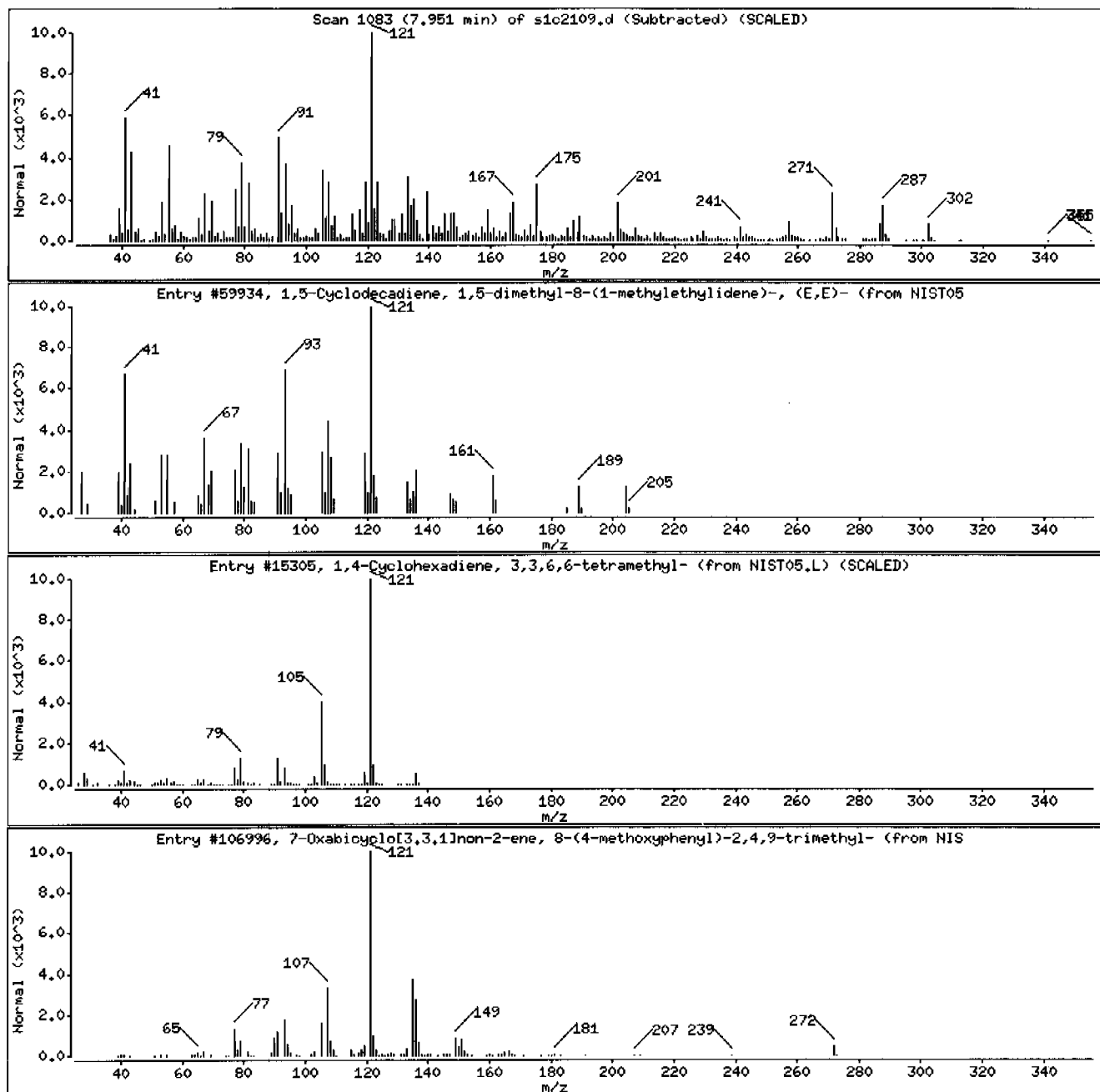
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,5-Cyclodecadiene, 1,5-dimethyl-8-(1-me	15423-57-1	NIST05.L	59934	50	C15H24	204
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	35	C10H16	136
7-Oxabicyclo[3,3,1]non-2-ene, 8-(4-metho	1000264-58-5	NIST05.L	106996	30	C18H24O2	272



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 12483700011961228111SVH111LANL

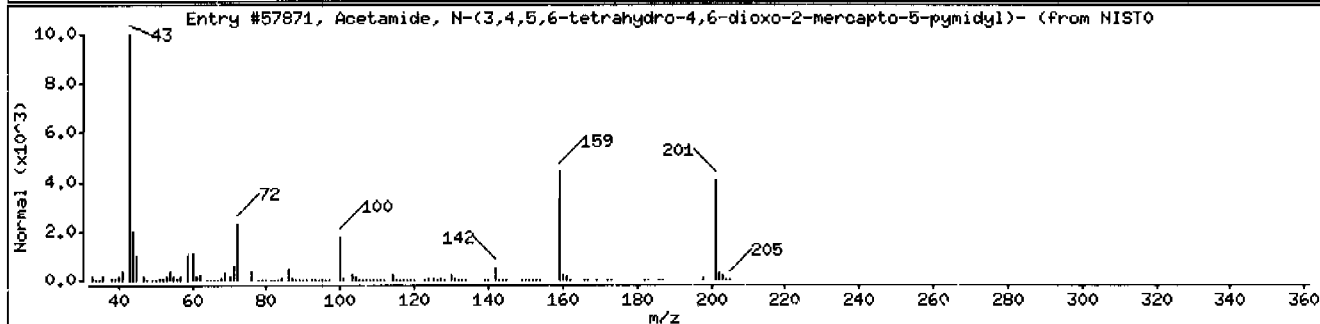
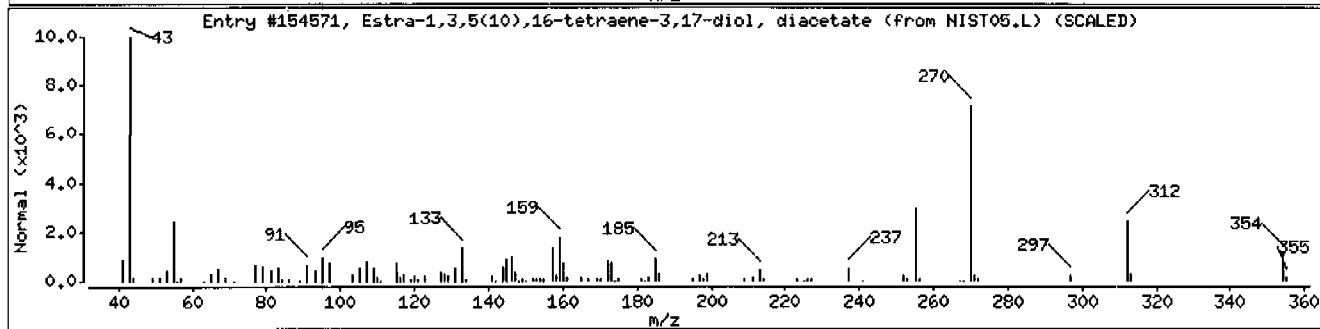
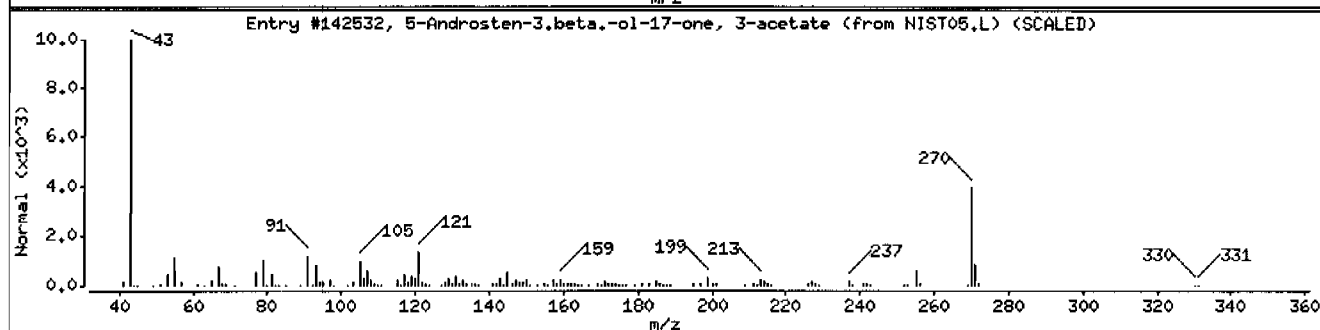
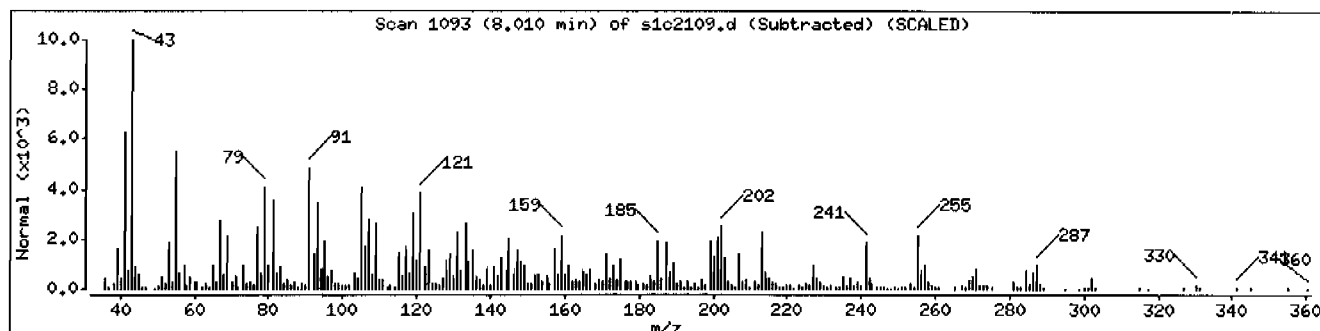
Volume Injected (UL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Androsten-3,β-ol-17-one, 3-acetate	1000127-30-4	NIST05.L	142532	35	C21H30O3	330
Estra-1,3,5(10),16-tetraene-3,17-diol, d	20592-42-1	NIST05.L	154571	12	C22H26O4	354
Acetamide, N-(3,4,5,6-tetrahydro-4,6-dio	10082-59-4	NIST05.L	57871	11	C6H7N3O3S	201



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: HSD1.i

Sample Info: 12483700011961228111SVMI11LANL

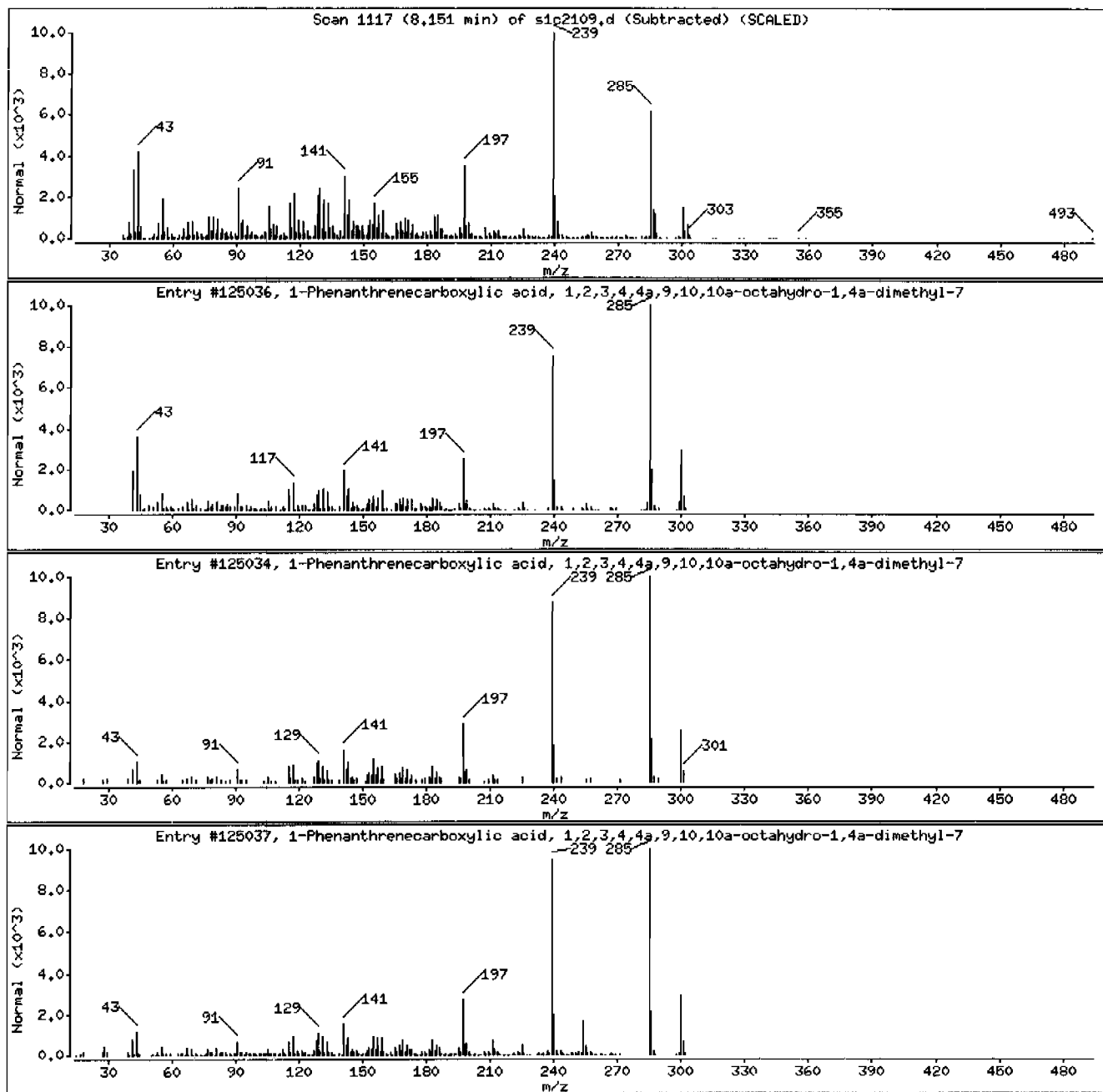
Volume Injected (uL): 0.5

Operator: AMY

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	125034	94	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	87	C20H28O2	300



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: HSD1.i

Sample Info: 1248370001196122811|SVH11|LANL

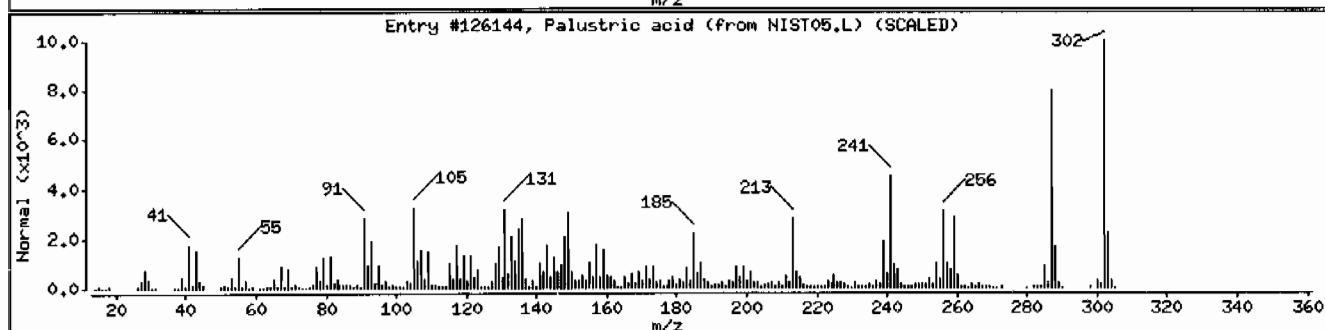
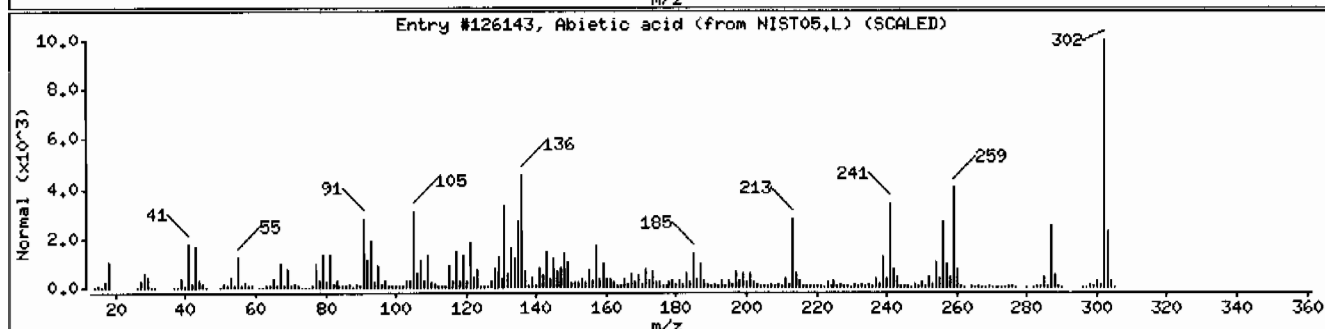
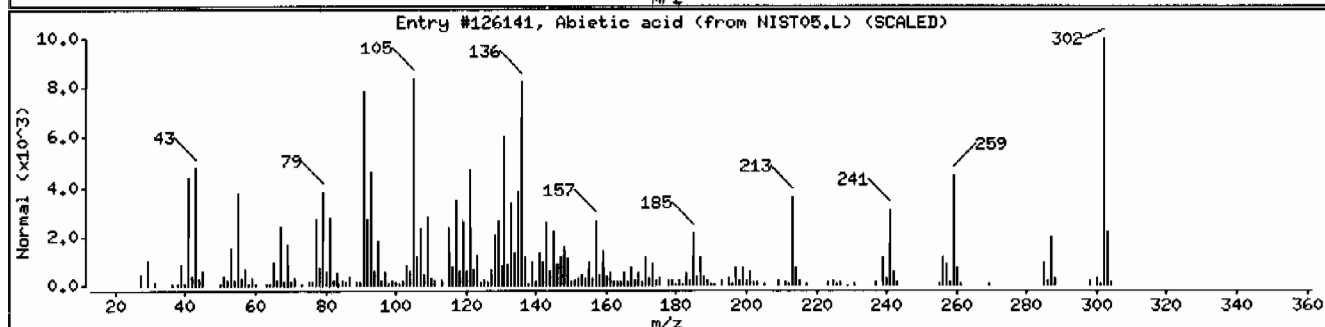
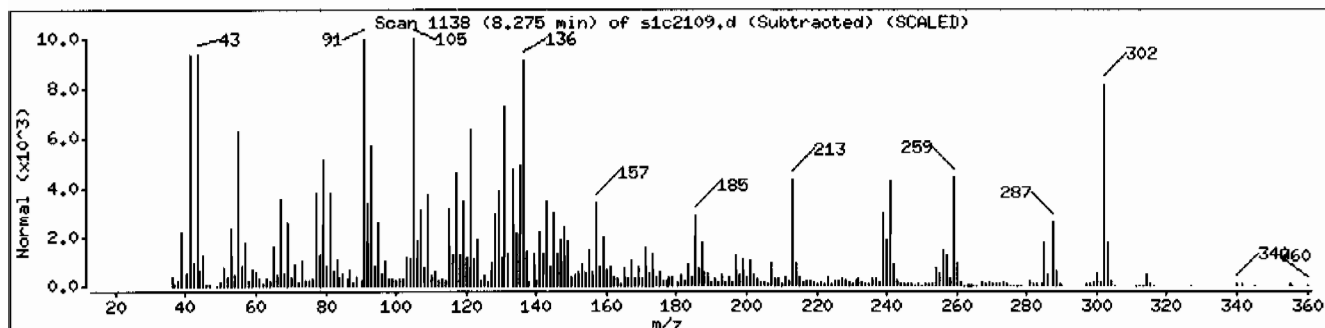
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Abietic acid	514-10-3	NIST05.L	126141	81	C ₂₀ H ₃₀ O ₂	302
Abietic acid	514-10-3	NIST05.L	126143	81	C ₂₀ H ₃₀ O ₂	302
Palustic acid	1945-53-5	NIST05.L	126144	70	C ₂₀ H ₃₀ O ₂	302



Date: 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 12483700011961228111SVMI11LANL

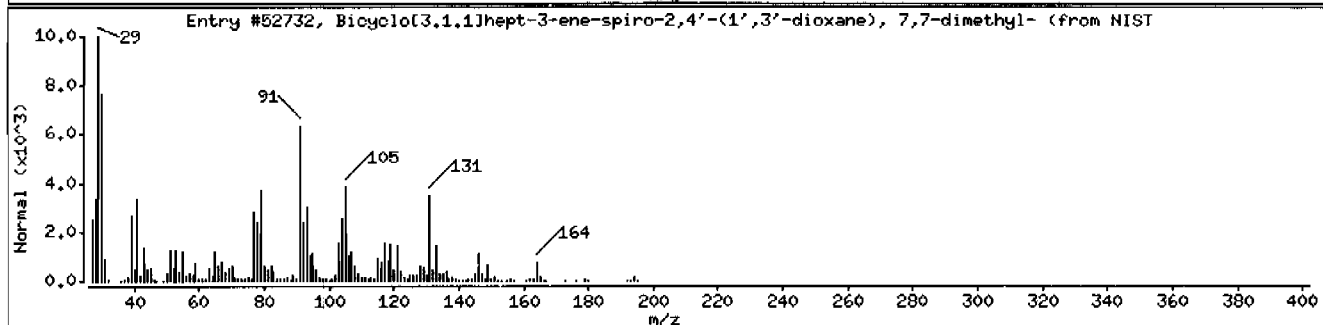
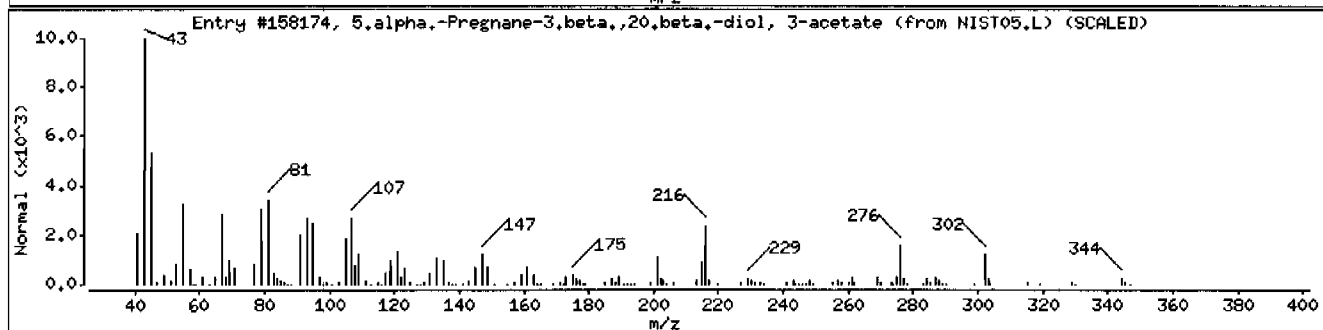
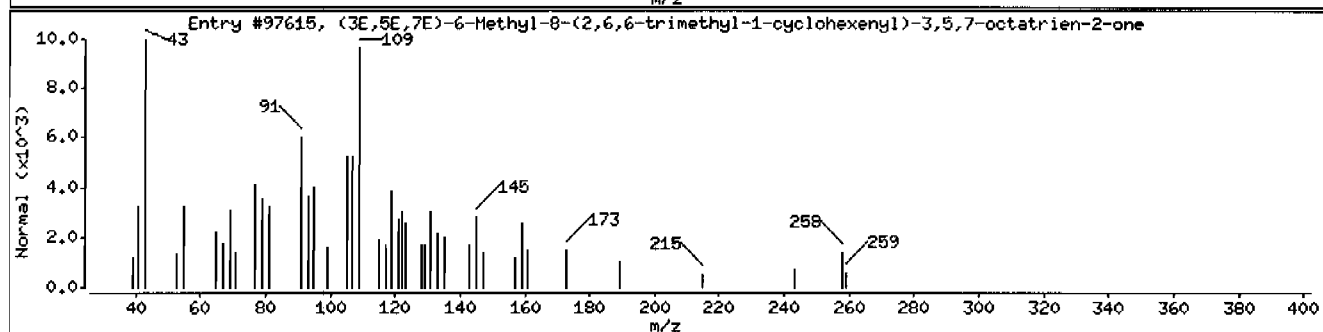
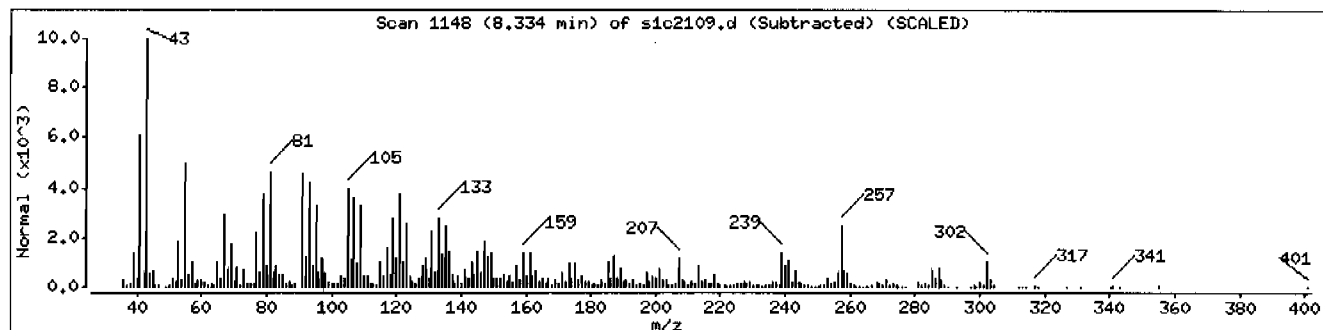
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	25	C ₁₈ H ₂₆ O	258
5,α-pregnane-3,β,20,β,21,β-diol,	17182-23-9	NIST05.L	158174	14	C ₂₃ H ₃₈ O ₃	362
Bicyclo[3.1.1]hept-3-ene-spiro-2,4'-(1',	1000149-76-2	NIST05.L	52732	11	C ₁₂ H ₁₈ O ₂	194



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 1248370001196122811ISVH11ILANL

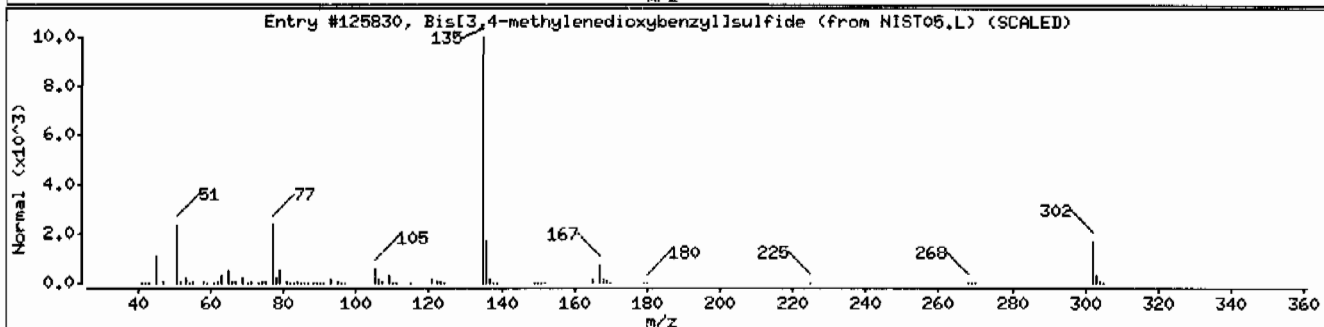
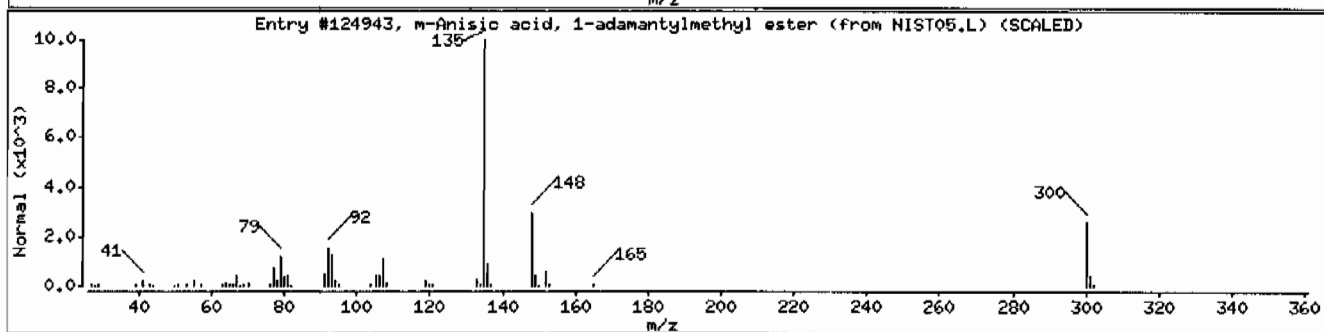
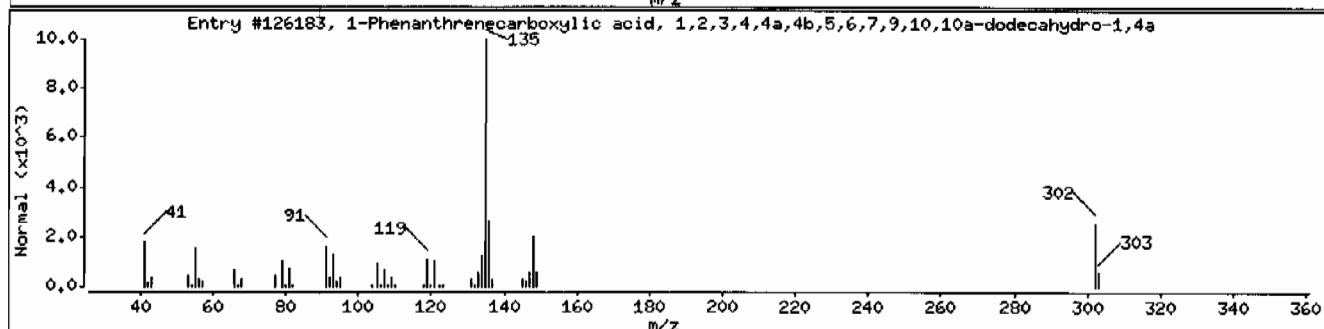
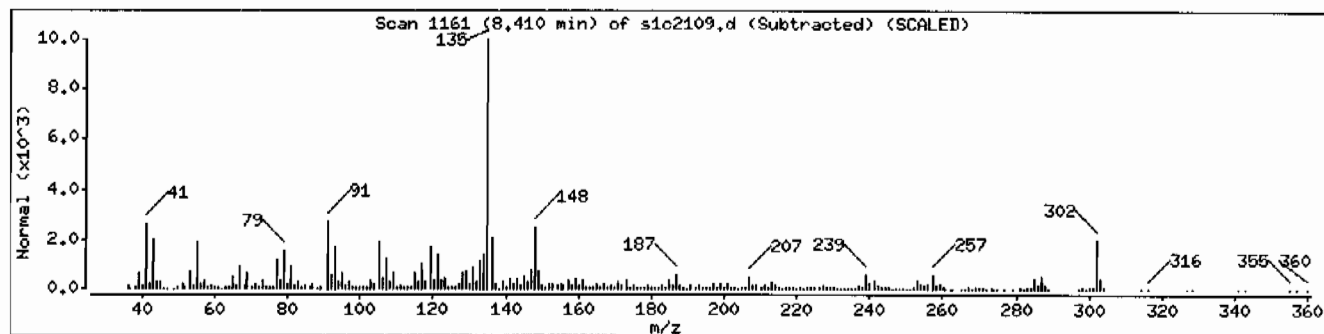
Volume Injected (uL): 0.5

Operator: AMY

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	471-77-2	NIST05.L	126183	93	C20H30O2	302
m-Anisic acid, 1-adamantylmethyl ester	1000292-25-3	NIST05.L	124943	55	C19H24O3	300
Bis[3,4-methylenedioxybenzyl]sulfide	49647-48-5	NIST05.L	125830	52	C16H14O4S	302



Date: 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: I248370001196122811SVH111LANL

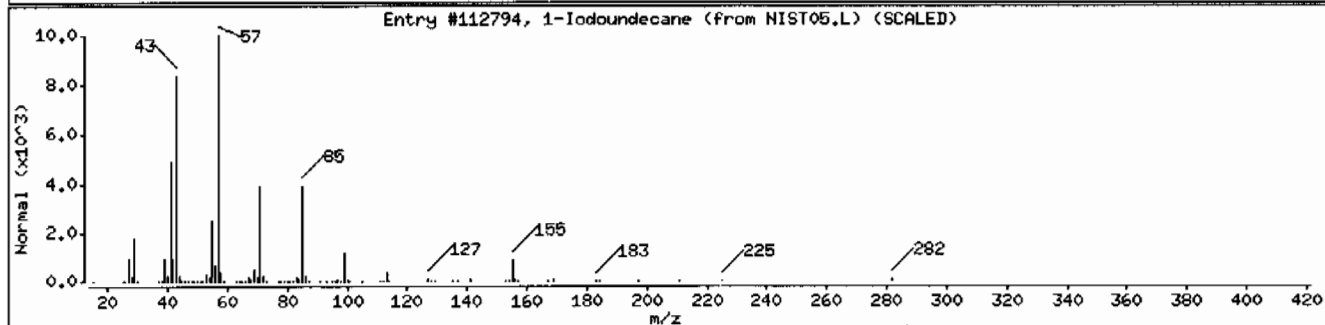
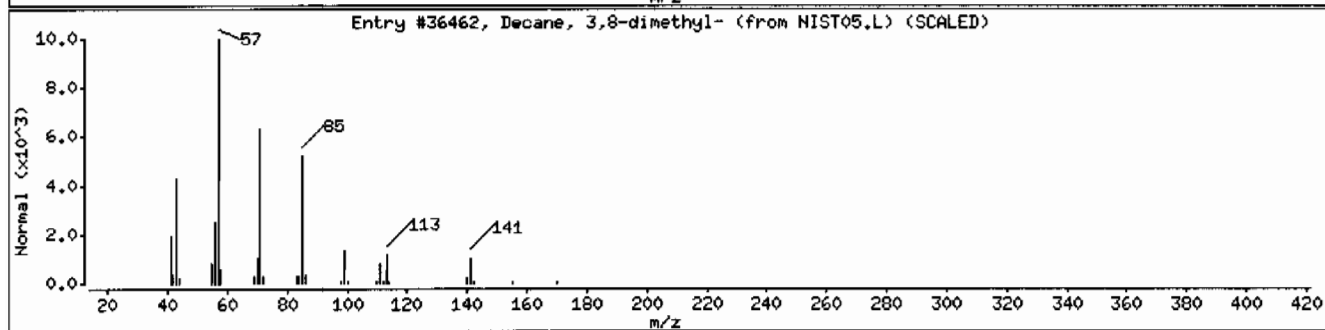
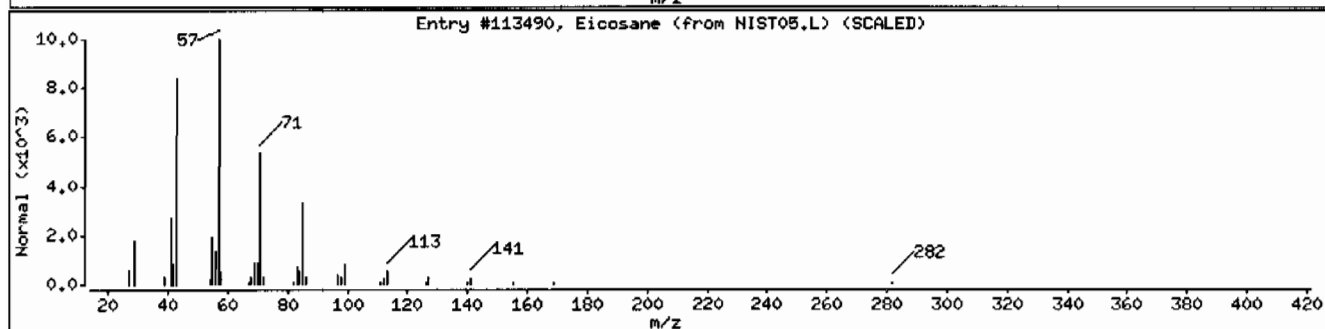
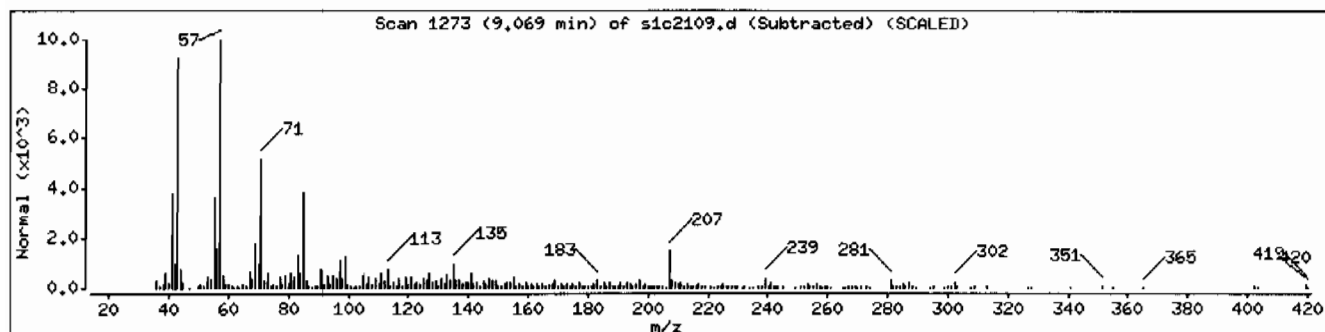
Volume Injected (uL): 0.5

Operator: AMY

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	98	C20H42	282
Decane, 3,8-dimethyl-	17312-55-9	NIST05.L	36462	92	C12H26	170
1-Iodoundecane	4282-44-4	NIST05.L	112794	89	C11H23I	282



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: 1248370001196122811SVH11/LANL

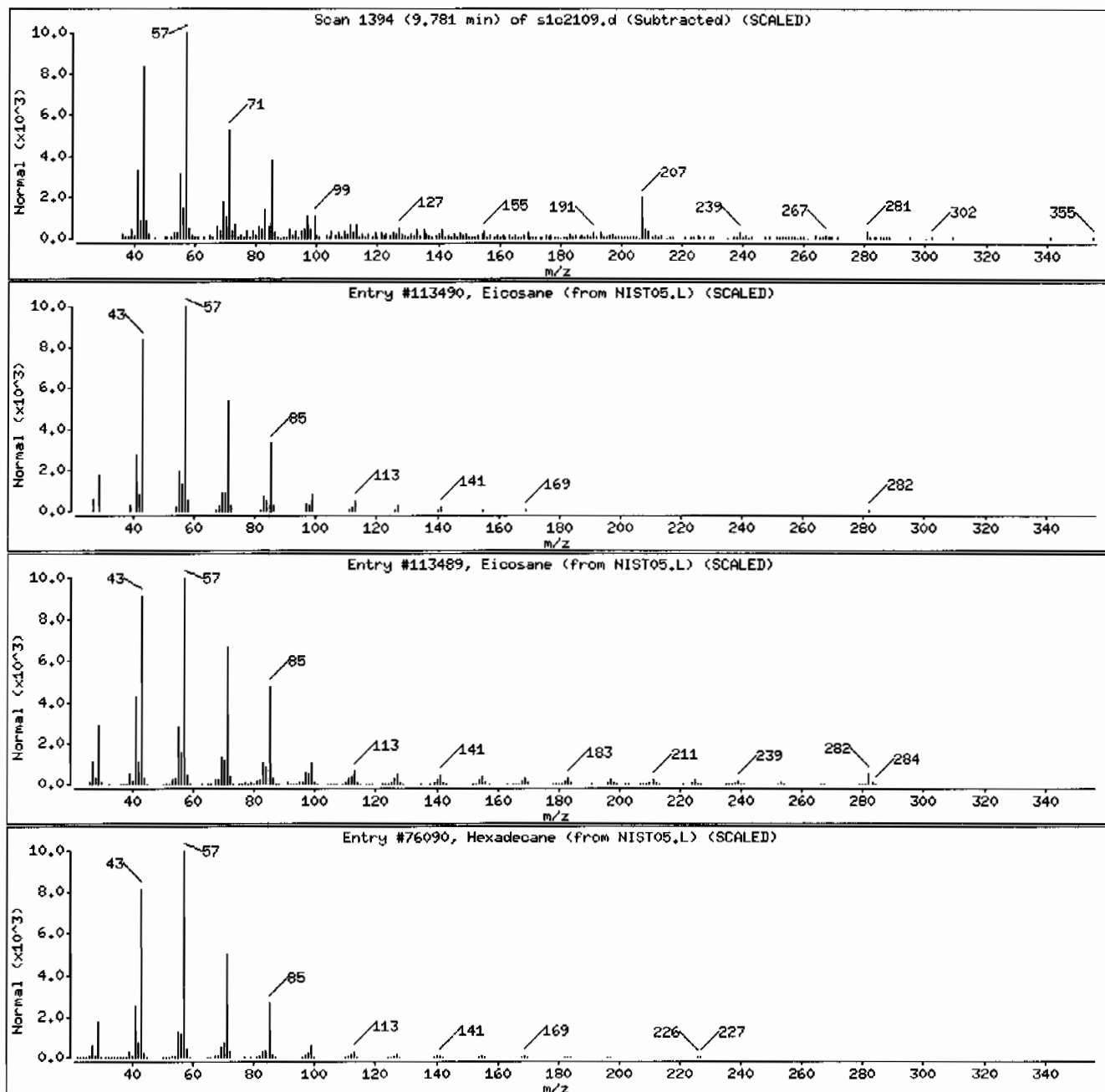
Volume Injected (uL): 0.5

Operator: AMY

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	98	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	97	C ₂₀ H ₄₂	282
Hexadecane	544-76-3	NIST05.L	76090	93	C ₁₆ H ₃₄	226



Date : 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: I2483700011961228111SVM111LANL

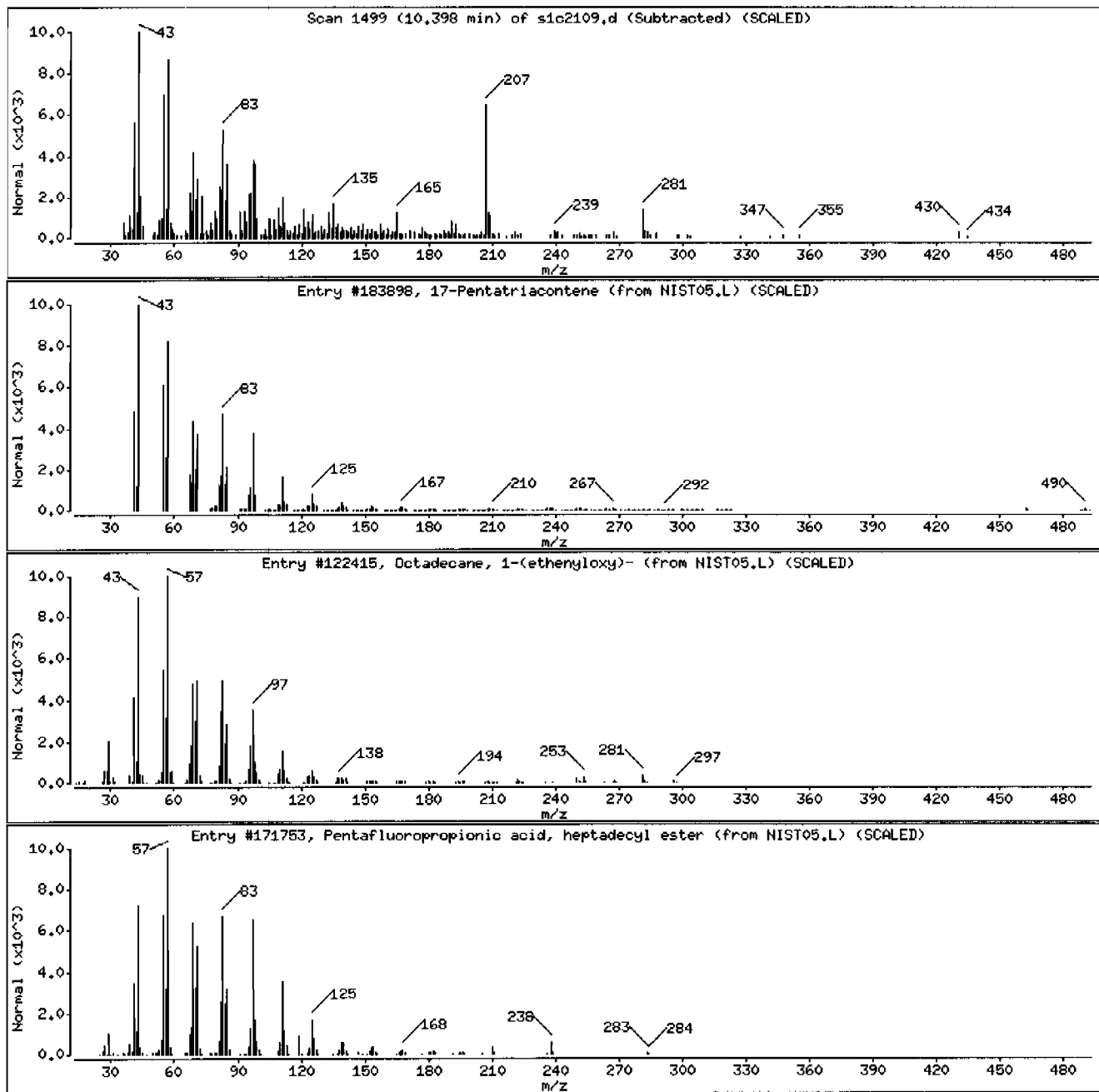
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
17-Pentatriacontene	6971-40-0	NIST05.L	183898	49	C35H70	491
Octadecane, 1-(ethenyl)-	930-02-9	NIST05.L	122415	47	C20H40	296
Pentafluoropropionic acid, heptadecyl es	1000283-04-2	NIST05.L	171753	45	C20H35F5O2	402



Date: 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: HSD1.i

Sample Info: 12483700011961228111SVH111LANL

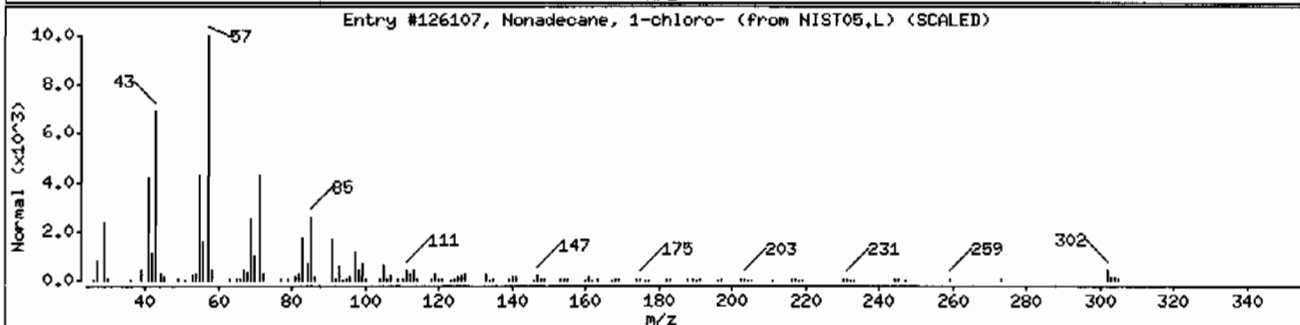
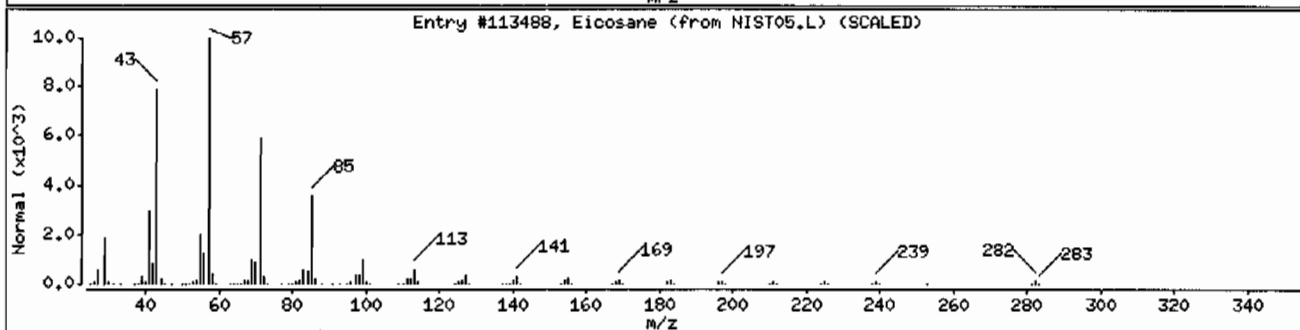
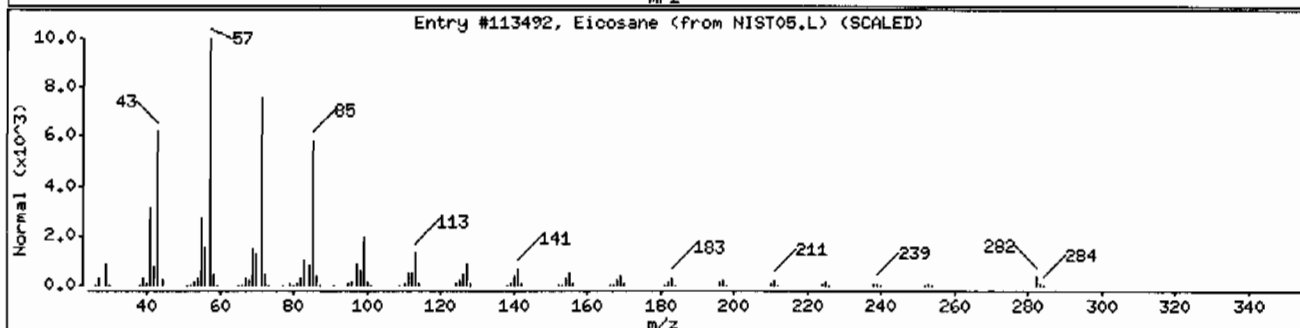
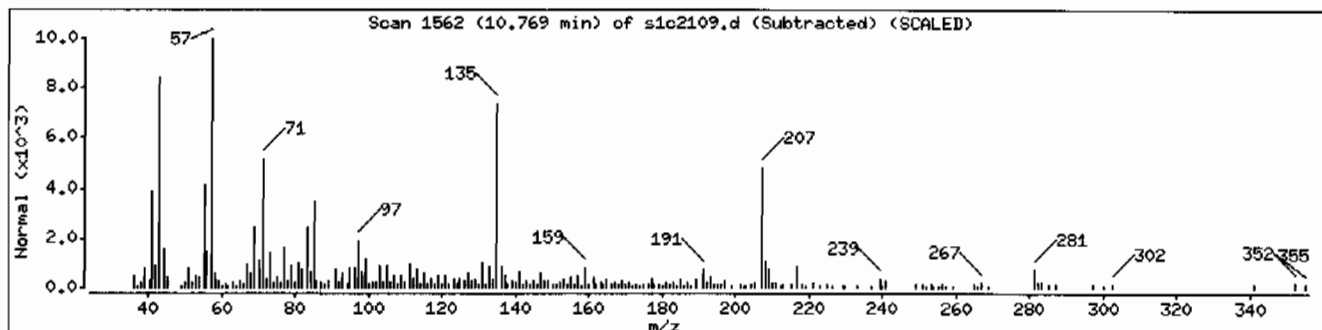
Volume Injected (uL): 0.5

Operator: AMY

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	91	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	91	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	78	C19H39Cl	302



Date: 21-MAR-2010 19:47

Client ID: RE36-10-7415

Instrument: MSD1.i

Sample Info: I248370001I961228I1ISVM11ILANL

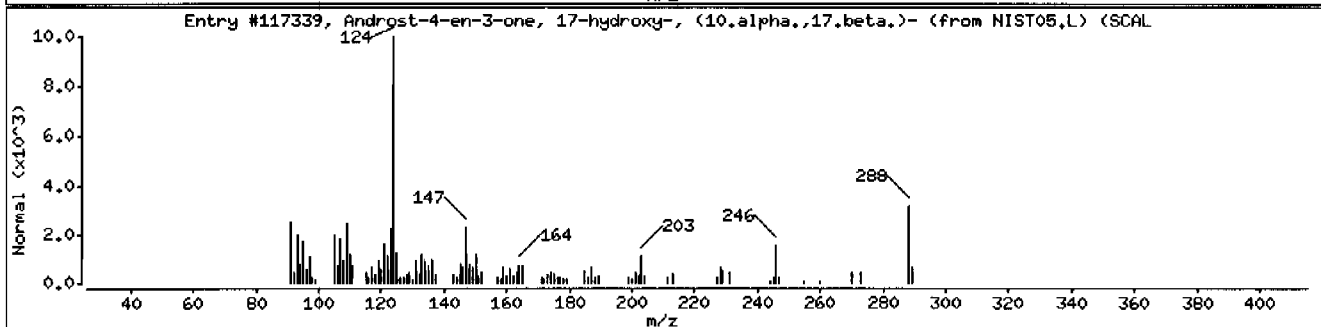
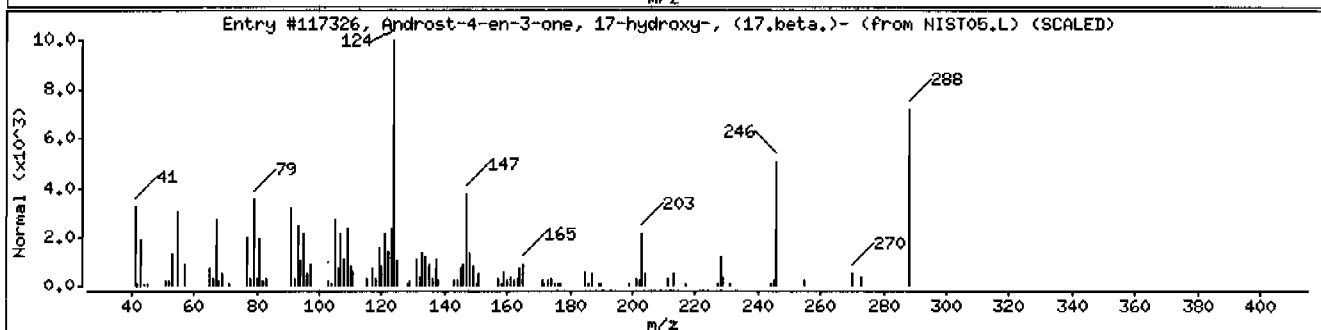
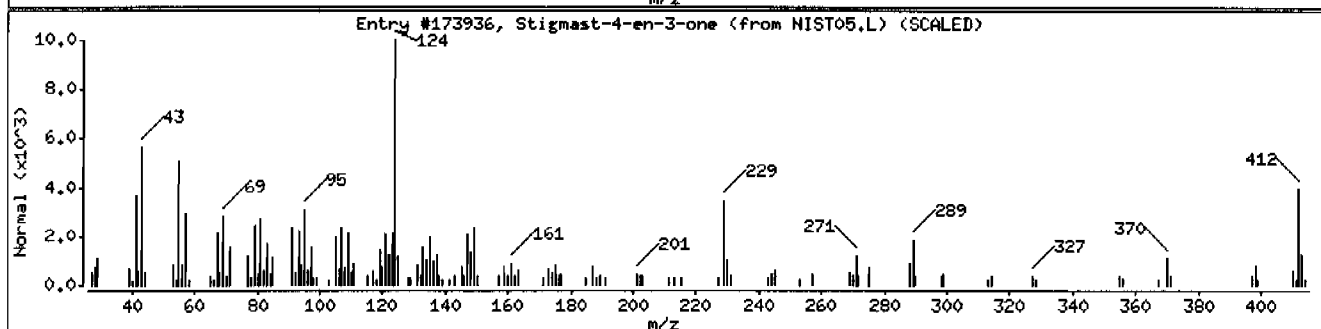
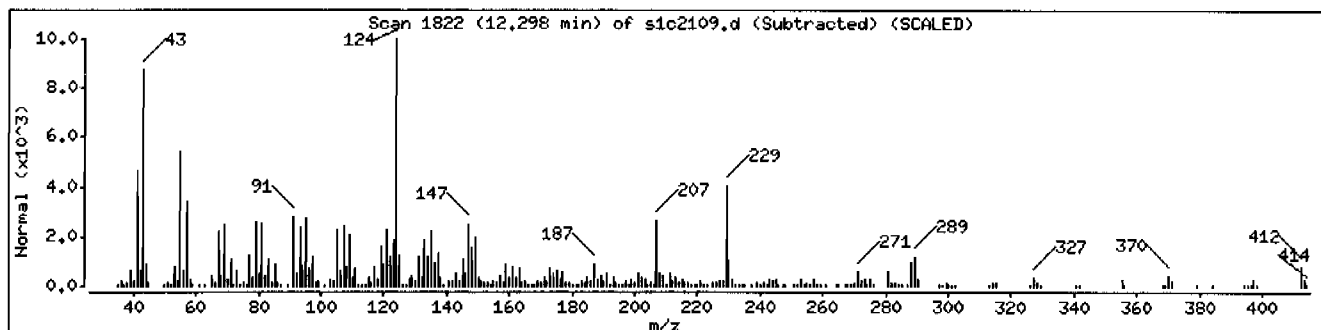
Volume Injected (uL): 0.5

Operator: AMY

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	89	C ₂₉ H ₄₈ O	412
Androst-4-en-3-one, 17-hydroxy-, (17.beta)	58-22-0	NIST05.L	117326	62	C ₁₉ H ₂₈ O ₂	288
Androst-4-en-3-one, 17-hydroxy-, (10.alpha)	604-39-7	NIST05.L	117339	42	C ₁₉ H ₂₈ O ₂	288



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

SDG Number: 10-2150
Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL.010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 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: RE36-10-7416
Batch ID: 961228
Run Date: 03/21/2010 22:32
Prep Date: 03/05/2010 11:30
Data File: slc2116.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	376	ug/kg	75.2	376
108-95-2	Phenol	U	376	ug/kg	75.2	376
95-57-8	2-Chlorophenol	U	376	ug/kg	75.2	376
106-46-7	1,4-Dichlorobenzene	U	376	ug/kg	75.2	376
621-64-7	N-Nitrosodipropylamine	U	376	ug/kg	75.2	376
59-50-7	4-Chloro-3-methylphenol	U	376	ug/kg	75.2	376
83-32-9	Acenaphthene	U	37.6	ug/kg	12.4	37.6
121-14-2	2,4-Dinitrotoluene	U	376	ug/kg	37.6	376
100-02-7	4-Nitrophenol	U	376	ug/kg	124	376
87-86-5	Pentachlorophenol	U	376	ug/kg	94.0	376
129-00-0	Pyrene	U	37.6	ug/kg	11.3	37.6
110-86-1	Pyridine	U	376	ug/kg	75.2	376
62-53-3	Aniline	U	376	ug/kg	113	376
111-44-4	bis(2-Chloroethyl) ether	U	376	ug/kg	75.2	376
541-73-1	1,3-Dichlorobenzene	U	376	ug/kg	75.2	376
100-51-6	Benzyl alcohol	U	376	ug/kg	113	376
95-50-1	1,2-Dichlorobenzene	U	376	ug/kg	75.2	376
108-60-1	bis(2-Chloroisopropyl)ether	U	376	ug/kg	75.2	376
95-48-7	o-Cresol	U	376	ug/kg	75.2	376
65794-96-9	m,p-Cresols	U	376	ug/kg	113	376
67-72-1	Hexachloroethane	U	376	ug/kg	75.2	376
98-95-3	Nitrobenzene	U	376	ug/kg	75.2	376
78-59-1	Isophorone	U	376	ug/kg	75.2	376
88-75-5	2-Nitrophenol	U	376	ug/kg	75.2	376
105-67-9	2,4-Dimethylphenol	U	376	ug/kg	132	376
111-91-1	bis(2-Chloroethoxy)methane	U	376	ug/kg	75.2	376
120-83-2	2,4-Dichlorophenol	U	376	ug/kg	75.2	376
65-85-0	Benzoic acid	U	752	ug/kg	188	752
91-20-3	Naphthalene	U	37.6	ug/kg	11.3	37.6
106-47-8	4-Chloroaniline	U	376	ug/kg	75.2	376
87-68-3	Hexachlorobutadiene	U	376	ug/kg	75.2	376
91-57-6	2-Methylnaphthalene	U	37.6	ug/kg	7.52	37.6
77-47-4	Hexachlorocyclopentadiene	U	376	ug/kg	75.2	376
88-06-2	2,4,6-Trichlorophenol	U	376	ug/kg	75.2	376
95-95-4	2,4,5-Trichlorophenol	U	376	ug/kg	75.2	376
91-58-7	2-Chloronaphthalene	U	37.6	ug/kg	12.4	37.6
88-74-4	2-Nitroaniline	U	376	ug/kg	75.2	376
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	376	ug/kg	75.2	376

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

SDG Number: 10-2150
Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 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: RE36-10-7416
Batch ID: 961228
Run Date: 03/21/2010 22:32
Prep Date: 03/05/2010 11:30
Data File: s1c2116.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	376	ug/kg	75.2	376
606-20-2	2,6-Dinitrotoluene	U	376	ug/kg	37.6	376
208-96-8	Acenaphthylene	U	37.6	ug/kg	11.3	37.6
51-28-5	2,4-Dinitrophenol	U	752	ug/kg	143	752
132-64-9	Dibenzofuran	U	376	ug/kg	75.2	376
84-66-2	Diethylphthalate	U	376	ug/kg	75.2	376
86-73-7	Fluorene	U	37.6	ug/kg	11.3	37.6
7005-72-3	4-Chlorophenylphenylether	U	376	ug/kg	75.2	376
534-52-1	2-Methyl-4,6-dinitrophenol	U	376	ug/kg	75.2	376
100-01-6	4-Nitroaniline	U	376	ug/kg	113	376
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	376	ug/kg	75.2	376
122-66-7	Azobenzene	U	376	ug/kg	75.2	376
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	376	ug/kg	75.2	376
118-74-1	Hexachlorobenzene	U	376	ug/kg	75.2	376
85-01-8	Phenanthrene	U	37.6	ug/kg	11.3	37.6
120-12-7	Anthracene	U	37.6	ug/kg	7.52	37.6
84-74-2	Di-n-butylphthalate	U	376	ug/kg	75.2	376
206-44-0	Fluoranthene	U	37.6	ug/kg	11.3	37.6
85-68-7	Butylbenzylphthalate	U	376	ug/kg	75.2	376
56-55-3	Benzo(a)anthracene	U	37.6	ug/kg	11.3	37.6
91-94-1	3,3'-Dichlorobenzidine	U	376	ug/kg	113	376
218-01-9	Chrysene	U	37.6	ug/kg	11.3	37.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	376	ug/kg	75.2	376
117-84-0	Di-n-octylphthalate	U	376	ug/kg	75.2	376
205-99-2	Benzo(b)fluoranthene	U	37.6	ug/kg	11.3	37.6
207-08-9	Benzo(k)fluoranthene	U	37.6	ug/kg	11.3	37.6
50-32-8	Benzo(a)pyrene	U	37.6	ug/kg	11.3	37.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.6	ug/kg	11.3	37.6
53-70-3	Dibenzo(a,h)anthracene	U	37.6	ug/kg	11.3	37.6
191-24-2	Benzo(ghi)perylene	U	37.6	ug/kg	11.3	37.6
120-82-1	1,2,4-Trichlorobenzene	U	376	ug/kg	75.2	376

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	232	ug/kg		J
	Unknown Aldol Condensate	2.67	218	ug/kg		JA

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

SDG Number: 10-2150
Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30 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: RE36-10-7416
Batch ID: 961228
Run Date: 03/21/2010 22:32
Prep Date: 03/05/2010 11:30
Data File: s1c2116.d

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	7.89	241	ug/kg		J
	Unknown	9.06	254	ug/kg		J
112-95-8	Eicosane	9.77	212	ug/kg	98	NJ
1058-61-3	Stigmast-4-en-3-one	12.29	245	ug/kg	83	NJ

Data File: /chem/MSD1.i/s032110.b/slc2116.d
Report Date: 22-Mar-2010 15:14

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GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2116.d
Lab Smp Id: 248370006 Client Smp ID: RE36-10-7416
Inj Date : 21-MAR-2010 22:32
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370006|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	11.30770	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
	=====	==	=====	=====	=====	(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	439112	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1715293	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	918043	40.0000	
* 67 Phenanthrene-d10	188	6.704	6.710	(1.000)	1625260	40.0000	
* 91 Chrysene-d12	240	8.287	8.292	(1.000)	1415080	40.0000	
* 98 Perylene-d12	264	9.522	9.522	(1.000)	1053799	40.0000	
\$ 3 2-Fluorophenol	112	2.834	2.822	(0.785)	910087	80.4869	3020
\$ 5 Phenol-d5	99	3.346	3.346	(0.927)	1110922	80.6728	3030
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	468561	44.5382	1670
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	956027	37.7070	1420
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	210768	70.0274	2630
\$ 81 p-Terphenyl-d14	244	7.622	7.622	(0.920)	1033288	43.7985	1650

ION RATIO REPORT

SV REPORT

Data file: slc2116.d

Report Date: 03/22/2010 11:54

Lab. ID: 248370006

SampleType: SAMPLE

Injection Date: 21-MAR-2010 22:32

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370006|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	53381	3.35	3.40	80-120	100	()
93	3396	3.39	3.40	233-293	6	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	66142	3.97	3.86	80-120	100	(T)
42	45433	3.97	3.86	48-108	69	(T)

41	m-Nitroaniline	CAS#: 99-09-2				
138	160	5.70	5.66	80-120	100	()
92	4325	5.70	5.66	71-131	2702	(Q)
108	16491	5.70	5.66	0- 40	10300	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	166148	5.70	5.49	80-120	100	(T)
164	918043	5.70	5.49	0- 40	553	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	118017	5.70	5.54	80-120	100	(T)
63	1793	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	118017	5.70	5.83	80-120	100	(T)
89	1443	5.70	5.82	38- 98	1	(QT)
63	1793	5.70	5.82	20- 80	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	16122	6.25	6.09	80-120	100	(T)
165	16707	6.25	6.09	61-121	104	(T)
167	5724	6.25	6.09	0- 43	36	(T)

56 p-Nitroaniline		CAS#: 100-01-6				
138	354	6.10	6.09	80-120	100	()
108	1296	6.17	6.09	29- 89	365	(QT)
92	212	6.12	6.09	14- 74	60	()

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	16178	6.25	6.40	80-120	100	(T)
141	96021	6.25	6.40	48-108	594	(QT)
250	31974	6.25	6.40	67-127	198	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2116.d
Lab Smp Id: 248370006 Client Smp ID: RE36-10-7416
Inj Date : 21-MAR-2010 22:32
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370006|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	11.30770	% moisture

Cpnd Variable Local Compound Variable

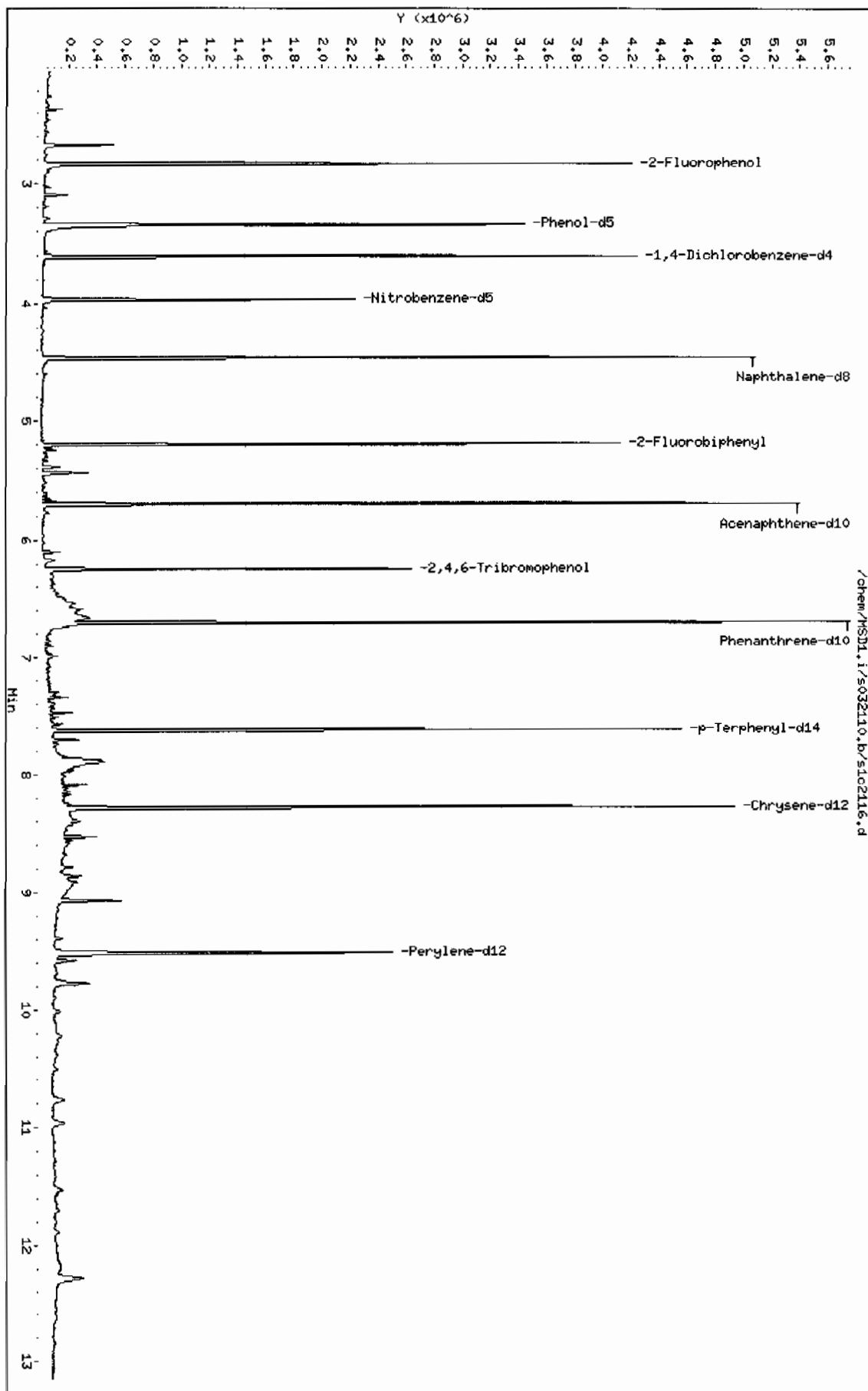
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2682641	40.000
* 91 Chrysene-d12	8.287	3901078	40.000
* 98 Perylene-d12	9.522	3053754	40.000

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 #:		
1.811	413971	6.17258736	232	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	388143	5.78748157	218	0		0	10
Unknown					CAS #:		
7.892	625993	6.41866621	241	0		0	91
Unknown					CAS #:		
9.063	516338	6.76332644	254	0		0	98
Eicosane					CAS #: 112-95-8		
9.775	430507	5.63904737	212	98	NIST05.L	113490	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
12.286	496710	6.50622519	244	83	NIST05.L	173936	98

Data File: /chem/MSD1.i/s032110.b/s1c2116.d
 Date: 21-MAR-2010 22:32
 Client ID: RE36-10-7416
 Sample Info: 12483700061961228111SVH111LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD1.i
 Operator: AMY
 Column diameter: 0.20



Date: 21-MAR-2010 22:32

Client ID: RE36-10-7416

Instrument: HSD1.i

Sample Info: 12483700061961228111SVMI11LANL

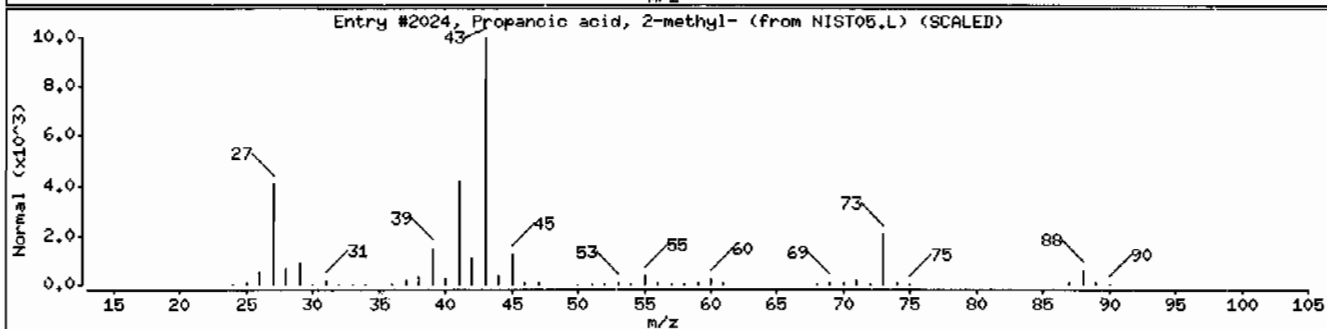
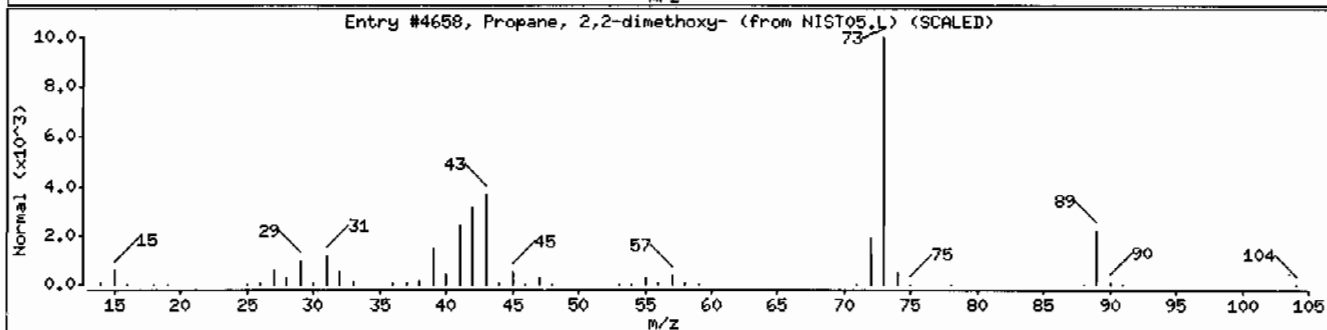
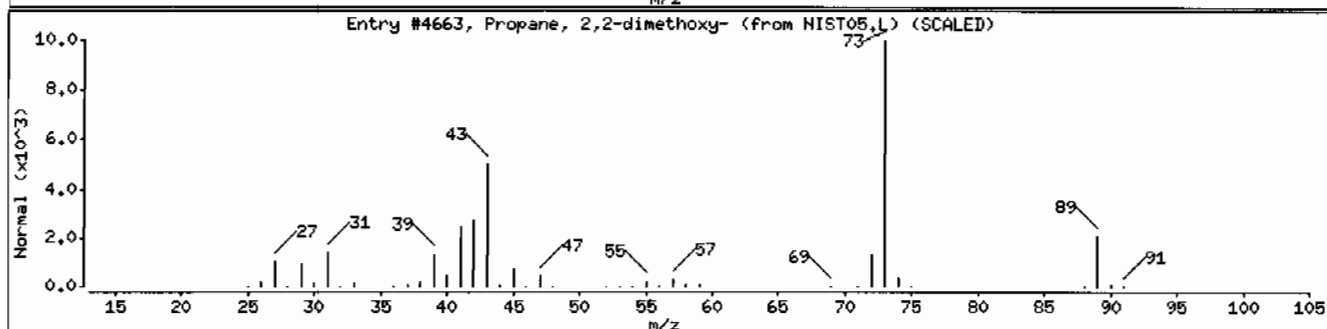
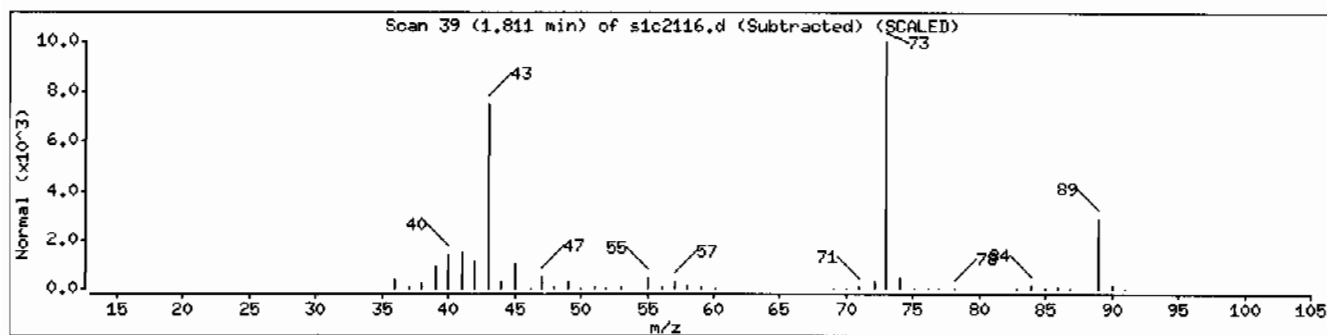
Volume Injected (uL): 0.5

Operator: AMY

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	33	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	28	C5H12O2	104
Propanoic acid, 2-methyl-	79-31-2	NIST05.L	2024	28	C4H8O2	88



Date : 21-MAR-2010 22:32

Client ID: RE36-10-7416

Instrument: MSD1.i

Sample Info: 1248370006196122811SVH111LANL

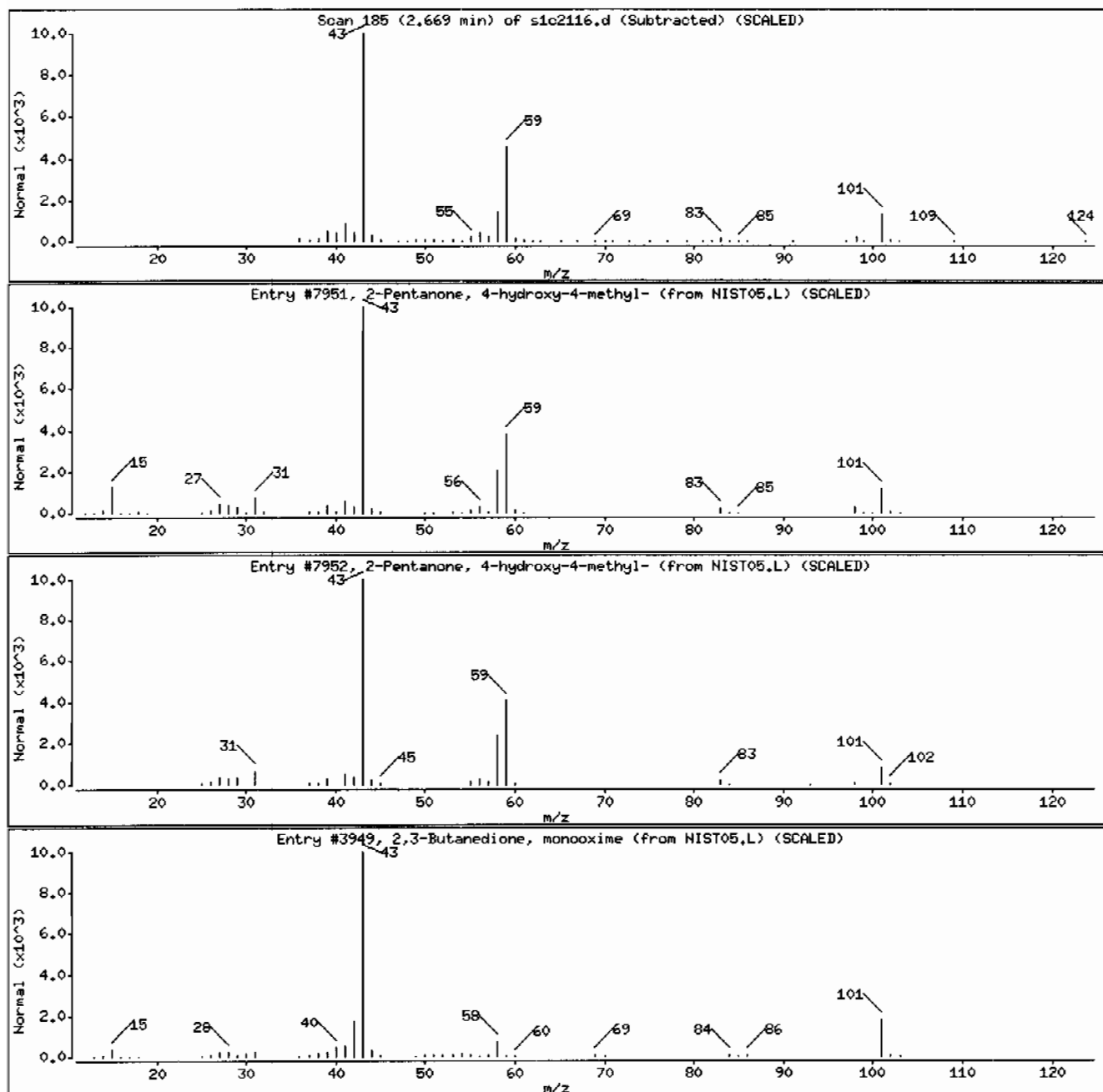
Volume Injected (uL): 0.5

Operator: AMY

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	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101



Date : 21-MAR-2010 22:32

Client ID: RE36-10-7416

Instrument: MSD1.i

Sample Info: 1248370006196122811SVH11ILANL

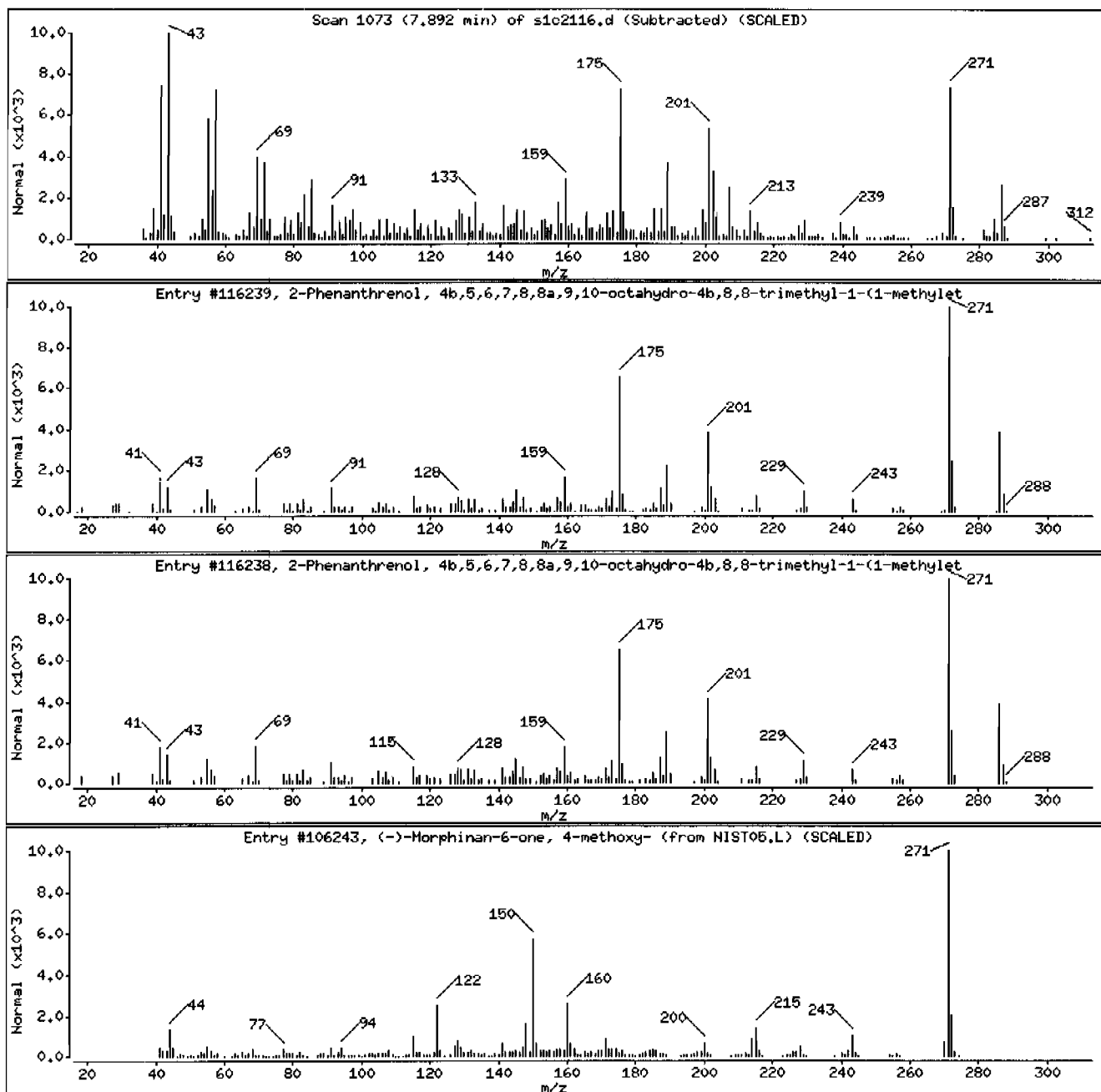
Volume Injected (uL): 0.5

Operator: AMY

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	116239	70	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	60	C20H30O	286
(-)-Morphinan-6-one, 4-methoxy-	1000129-09-1	NIST05.L	106243	47	C17H21NO2	271



Date : 21-MAR-2010 22:32

Client ID: RE36-10-7416

Instrument: MSD1.i

Sample Info: I248370006196122811SVMI11LANL

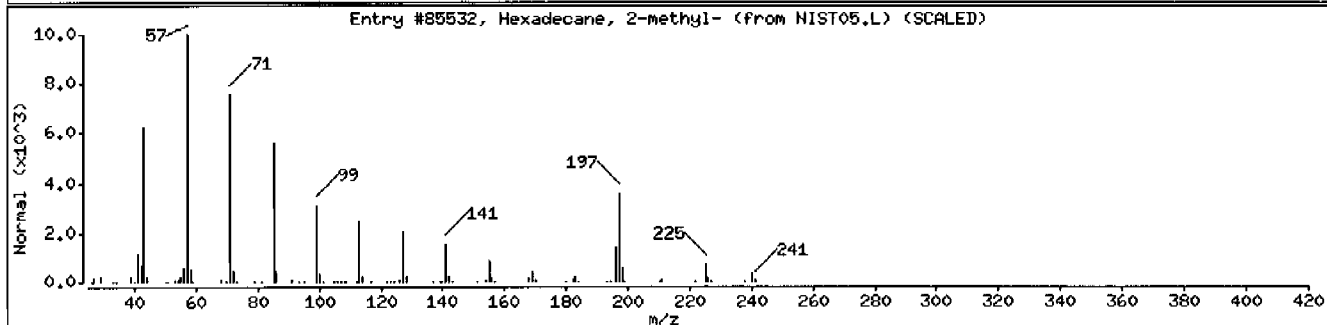
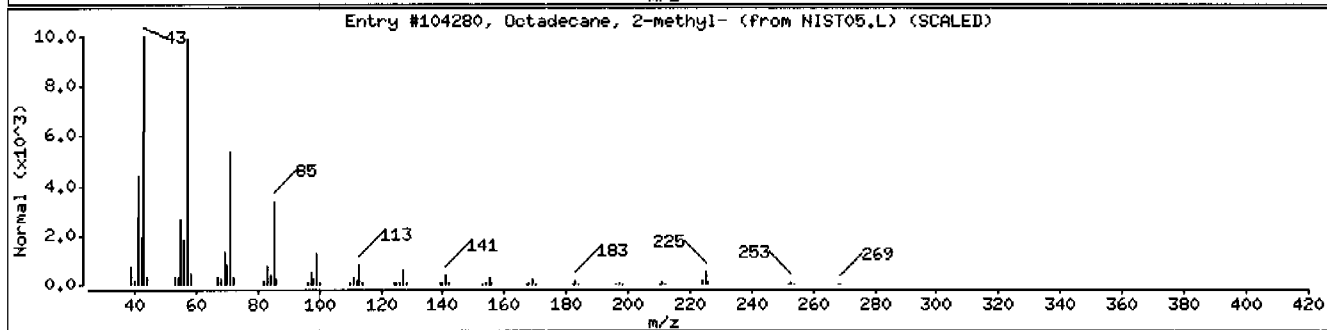
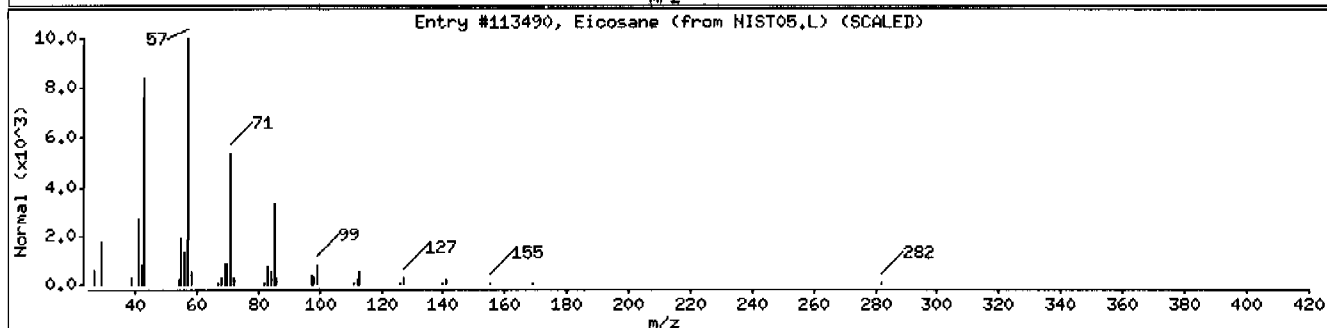
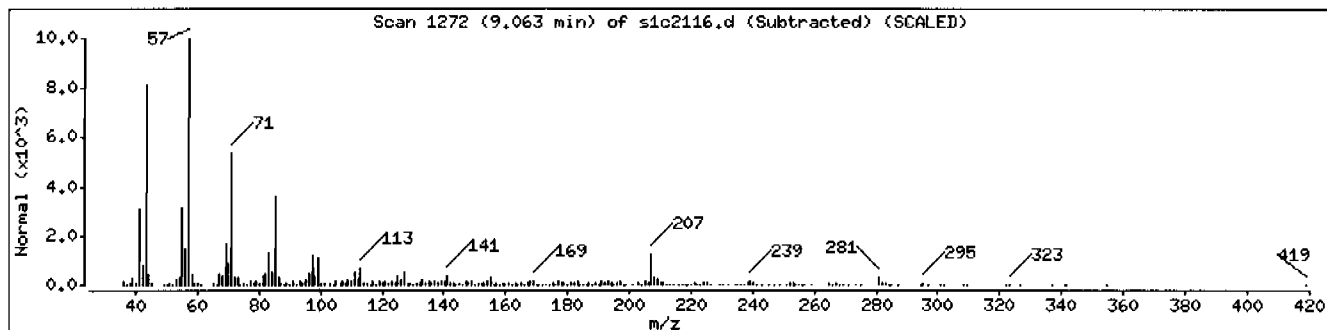
Volume Injected (uL): 0.5

Operator: AMY

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	98	C20H42	282
Octadecane, 2-methyl-	1560-88-9	NIST05.L	104280	90	C19H40	268
Hexadecane, 2-methyl-	1560-92-5	NIST05.L	85532	89	C17H36	240



Date : 21-MAR-2010 22:32

Client ID: RE36-10-7416

Instrument: MSD1.i

Sample Info: 1248370006196122811SVMI11LANL

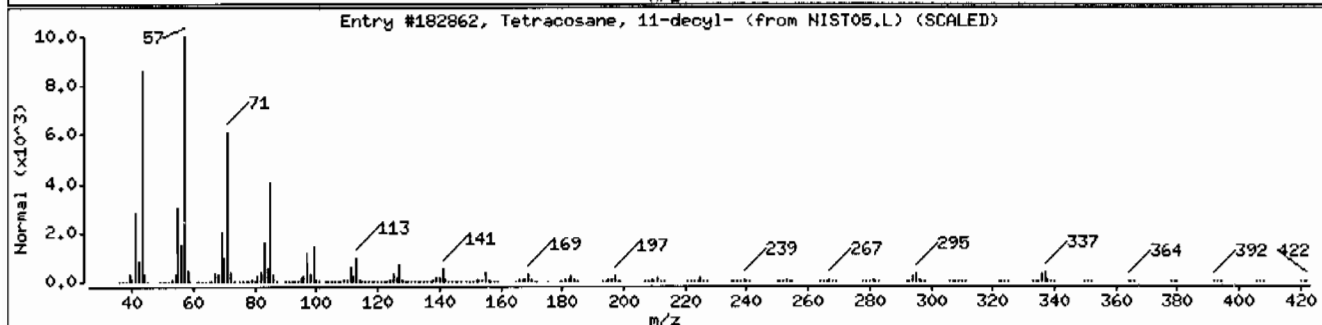
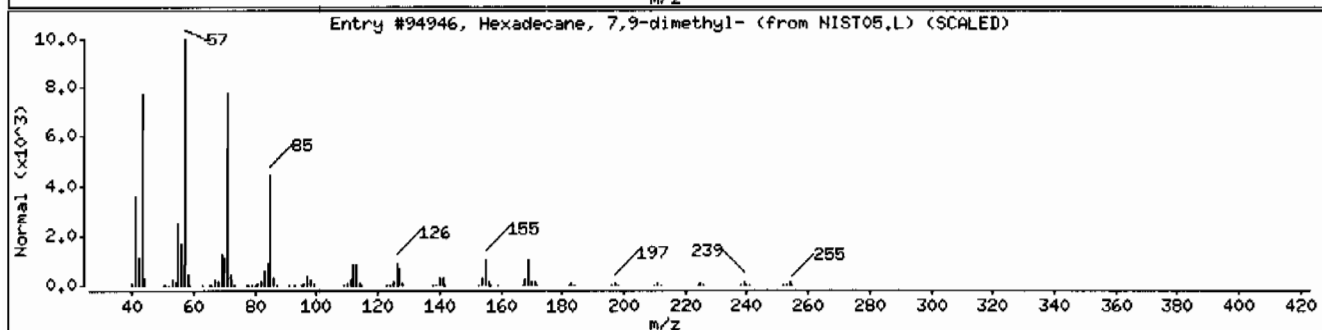
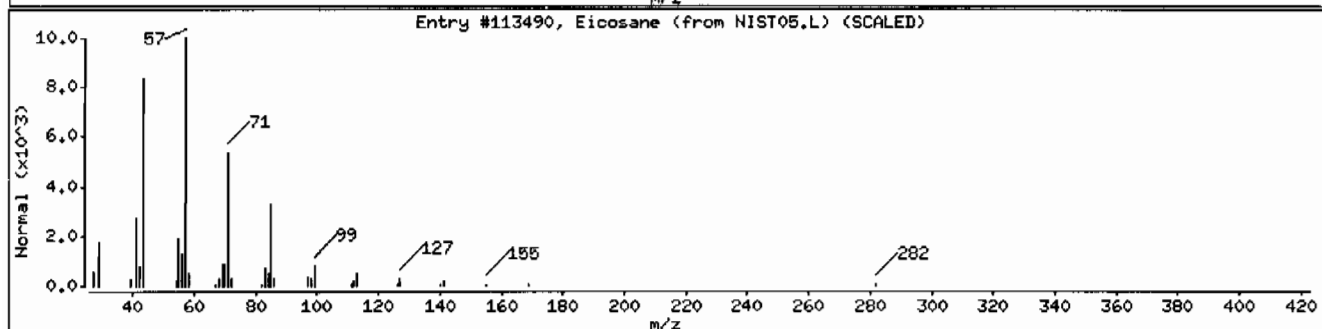
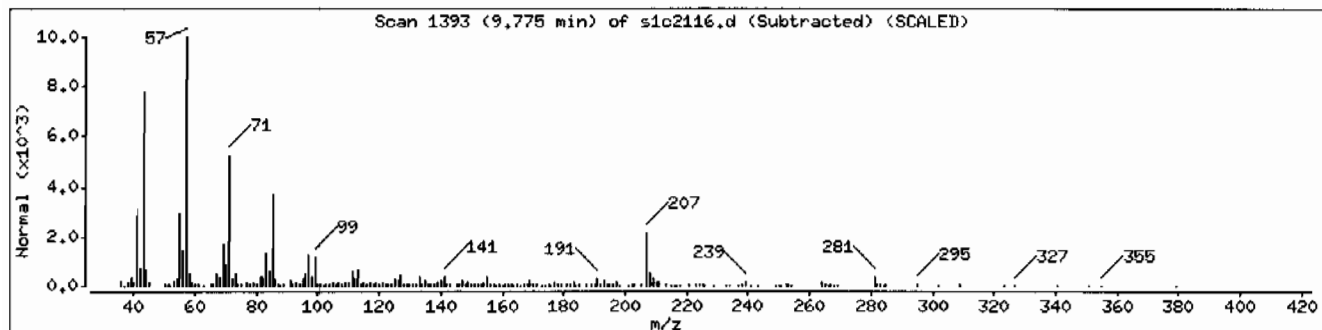
Volume Injected (uL): 0.5

Operator: AMY

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	98	C20H42	282
Hexadecane, 7,9-dimethyl-	21164-95-4	NIST05.L	94946	78	C18H38	254
Tetracosane, 11-decyl-	55429-84-0	NIST05.L	182862	76	C34H70	479



Date : 21-MAR-2010 22:32

Client ID: RE36-10-7416

Instrument: MSD1.i

Sample Info: 12483700061961228111SVMI11LANL

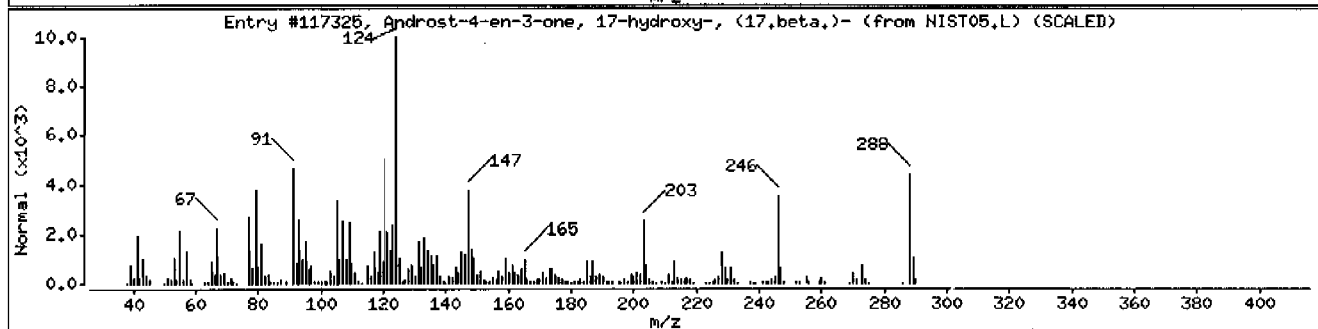
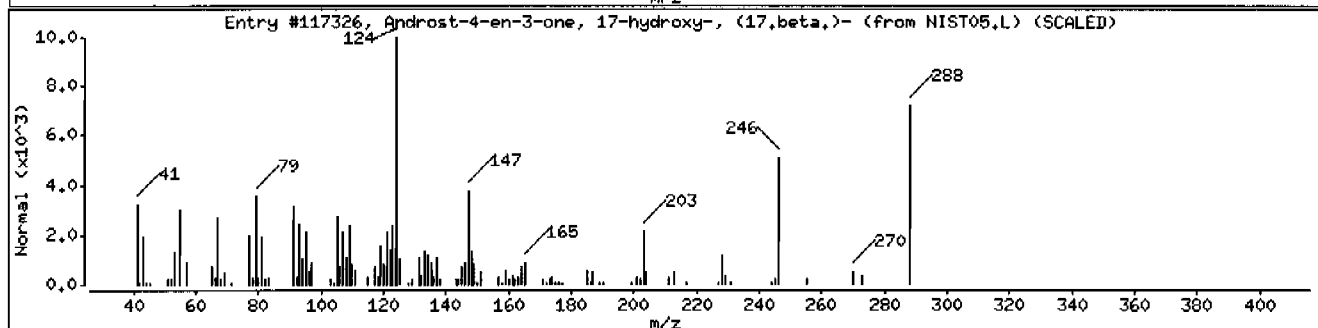
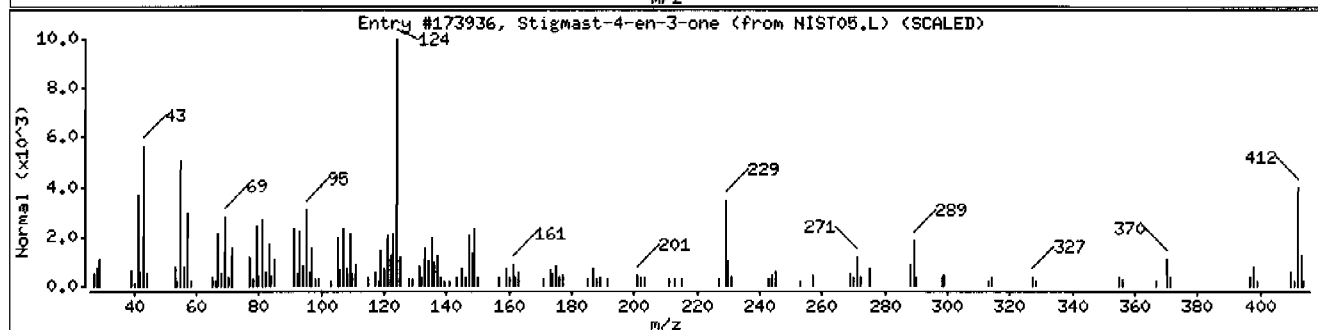
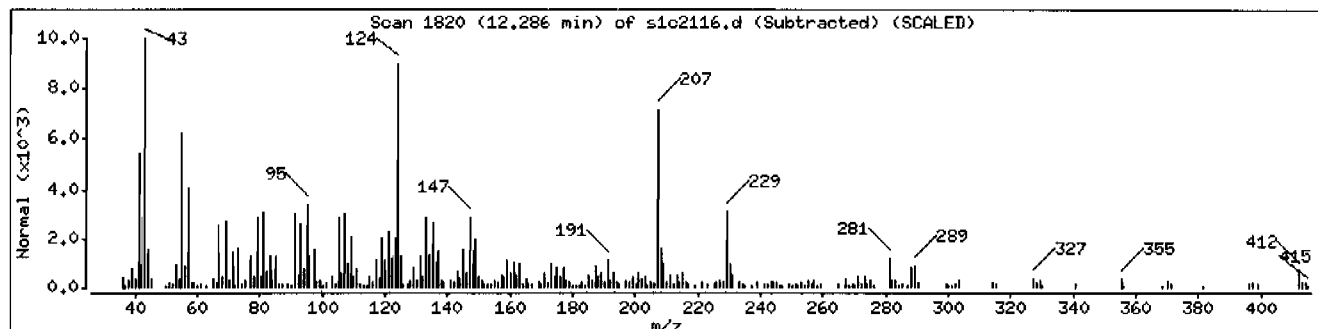
Volume Injected (uL): 0.5

Operator: AMY

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	83	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117326	47	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117325	38	C19H28O2	288



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

SDG Number: 10-2150
Lab Sample ID: 248370004

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7417
Batch ID: 961228
Run Date: 03/21/2010 20:58
Prep Date: 03/05/2010 11:30
Data File: s1c2112.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.4	422
108-95-2	Phenol	U	422	ug/kg	84.4	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.4	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.4	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.4	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.4	422
83-32-9	Acenaphthene	U	42.2	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene	U	422	ug/kg	42.2	422
100-02-7	4-Nitrophenol	U	422	ug/kg	139	422
87-86-5	Pentachlorophenol	U	422	ug/kg	105	422
129-00-0	Pyrene	U	42.2	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.4	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.4	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.4	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.4	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.4	422
95-48-7	o-Cresol	U	422	ug/kg	84.4	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.4	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.4	422
78-59-1	Isophorone	U	422	ug/kg	84.4	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.4	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.4	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.4	422
65-85-0	Benzoic acid	U	844	ug/kg	211	844
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.4	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.4	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.44	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.4	422
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.4	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.4	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.4	422
99-09-2	<i>o</i> -Nitroaniline 3-Nitroaniline	U	422	ug/kg	84.4	422

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370004	Date Received: 03/02/2010 08:50	%Moisture: 21
Client ID: RE36-10-7417	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/21/2010 20:58	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2112.d	Aliquot: 30 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	422	ug/kg	84.4	422
606-20-2	2,6-Dinitrotoluene	U	422	ug/kg	42.2	422
208-96-8	Acenaphthylene	U	42.2	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol	U	844	ug/kg	160	844
132-64-9	Dibenzofuran	U	422	ug/kg	84.4	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.4	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.4	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.4	422
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.4	422
122-66-7	Azobenzene	U	422	ug/kg	84.4	422
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.4	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.4	422
85-01-8	Phenanthrene	U	42.2	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.44	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.4	422
206-44-0	Fluoranthene	U	42.2	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.4	422
56-55-3	Benzo(a)anthracene	U	42.2	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	U	42.2	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.4	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.4	422
205-99-2	Benzo(b)fluoranthene	U	42.2	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene	U	42.2	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene	U	42.2	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.2	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene	U	42.2	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene	U	42.2	ug/kg	12.7	42.2
120-82-1	1,2,4-Trichlorobenzene	U	422	ug/kg	84.4	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	247	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.19	741	ug/kg	97	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370004	Date Received: 03/02/2010 08:50	%Moisture: 21
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7417	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:58	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2112.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
3386-33-2	Octadecane, 1-chloro-	8.09	192	ug/kg	95	NJ
	Unknown	8.32	186	ug/kg		J
	Unknown	8.58	469	ug/kg		J
7683-64-9	Squalene	8.86	187	ug/kg	93	NJ
	Unknown	9.15	390	ug/kg		J
70038-20-9	7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	9.17	379	ug/kg	90	NJ
	Unknown	10.39	182	ug/kg		J
	Unknown	12.29	329	ug/kg		J

Data File: /chem/MSD1.i/s032110.b/slc2112.d
Report Date: 22-Mar-2010 14:57

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2112.d
Lab Smp Id: 248370004 Client Smp ID: RE36-10-7417
Inj Date : 21-MAR-2010 20:58
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370004|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	20.98950	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.610	3.610	(1.000)	466105	40.0000	
* 29 Naphthalene-d8		136	4.463	4.469	(1.000)	1817036	40.0000	
* 46 Acenaphthene-d10		164	5.704	5.704	(1.000)	944221	40.0000	
* 67 Phenanthrene-d10		188	6.704	6.710	(1.000)	1562764	40.0000	
* 91 Chrysene-d12		240	8.286	8.292	(1.000)	1176721	40.0000	
* 98 Perylene-d12		264	9.522	9.522	(1.000)	912793	40.0000	
\$ 3 2-Fluorophenol		112	2.828	2.822	(0.783)	737906	61.4802	2590
\$ 5 Phenol-d5		99	3.346	3.346	(0.927)	973011	66.5661	2810
\$ 20 Nitrobenzene-d5		82	3.969	3.975	(0.889)	379284	34.0335	1440
\$ 39 2-Fluorobiphenyl		172	5.204	5.204	(0.912)	677638	25.9859	1100
\$ 60 2,4,6-Tribromophenol		329	6.251	6.251	(1.096)	164509	53.1426	2240
\$ 81 p-Terphenyl-d14		244	7.622	7.622	(0.920)	694667	35.4097	1490

ION RATIO REPORT

SV REPORT

Data file: slc2112.d

Report Date: 03/22/2010 11:53

Lab. ID: 248370004

SampleType: SAMPLE

Injection Date: 21-MAR-2010 20:58

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370004|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	46380	3.35	3.40	80-120	100	()
93	3843	3.38	3.40	233-293	8	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	53519	3.97	3.86	80-120	100	(T)
42	36279	3.97	3.86	48-108	68	(T)

40	2-Chloronaphthalene	CAS#: 91-58-7				
162	15738	5.43	5.30	80-120	100	(T)
164	921	5.43	5.30	2- 62	6	(T)
127	1131	5.43	5.30	9- 69	7	(QT)

42	o-Nitroaniline	CAS#: 88-74-4				
65	21569	5.43	5.37	80-120	100	(T)
92	25284	5.43	5.37	33- 93	117	(QT)
138	1450	5.43	5.37	80-140	7	(Q)

41	m-Nitroaniline	CAS#: 99-09-2				
138	188	5.70	5.66	80-120	100	()
92	4723	5.70	5.66	71-131	2506	(Q)
108	16780	5.70	5.66	0- 40	8902	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	169794	5.70	5.49	80-120	100	(T)
164	944221	5.70	5.49	0- 40	556	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	120959	5.70	5.54	80-120	100	(T)
63	2018	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	120959	5.70	5.83	80-120	100	(T)
89	1613	5.70	5.82	38- 98	1	(QT)
63	2018	5.70	5.82	20- 80	2	(QT)

53	Fluorene			CAS#: 86-73-7		
166	12390	6.25	6.09	80-120	100	(T)
165	13184	6.25	6.09	61-121	106	(T)
167	4388	6.25	6.09	0- 43	35	(T)

56	p-Nitroaniline			CAS#: 100-01-6		
138	226	6.10	6.09	80-120	100	()
108	899	6.06	6.09	29- 89	397	(Q)
92	317	6.10	6.09	14- 74	140	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD1.i/s032110.b/slc2112.d
Report Date: 22-Mar-2010 14:57

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2112.d
Lab Smp Id: 248370004 Client Smp ID: RE36-10-7417
Inj Date : 21-MAR-2010 20:58
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370004|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	20.98950	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2868308	40.000
* 91 Chrysene-d12	8.286	3311684	40.000
* 98 Perylene-d12	9.522	2618969	40.000

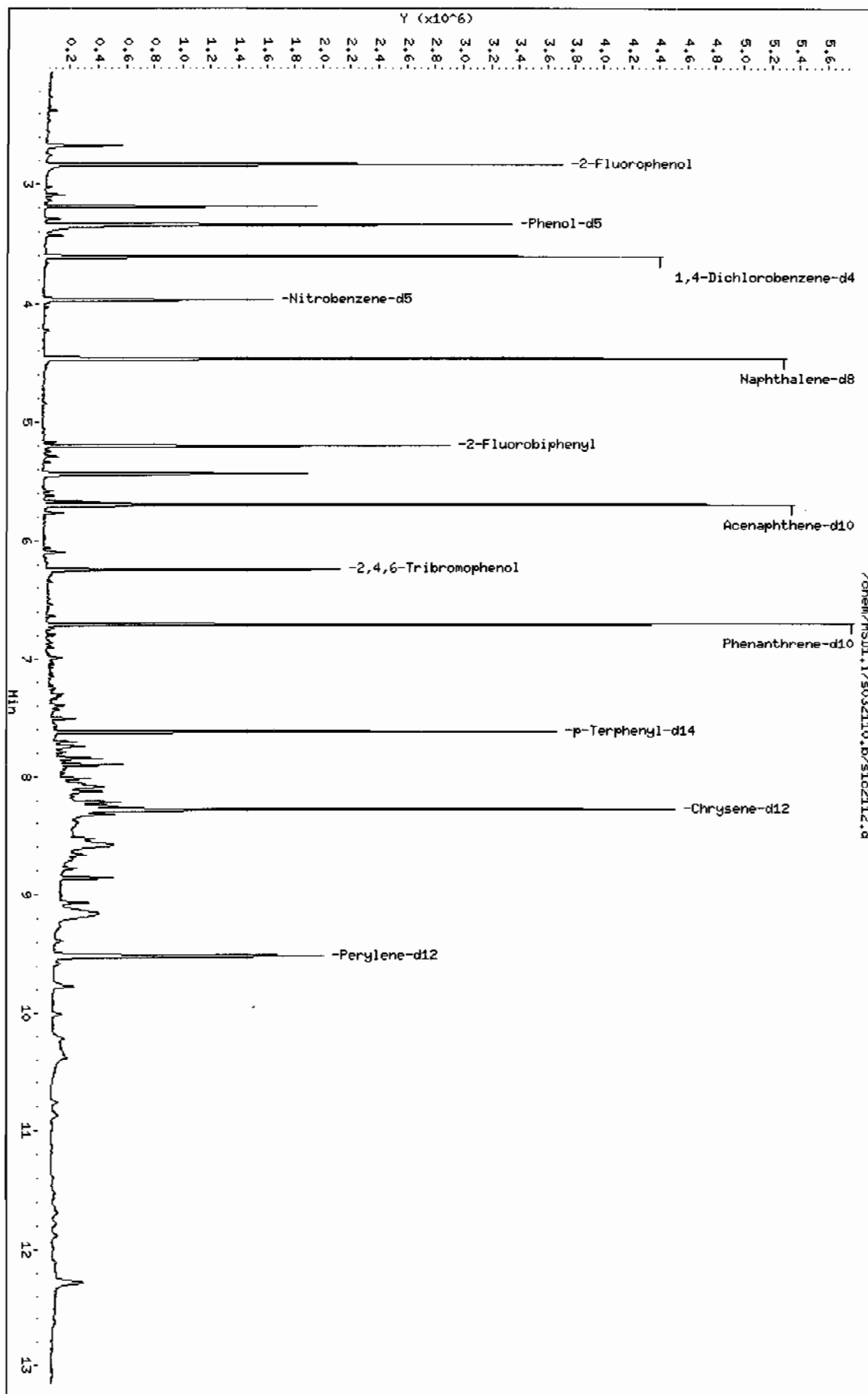
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.669	419537	5.85065177	247	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.193	1258775	17.5542516	740	97	NIST05.L	15188	10
Octadecane, 1-chloro-					CAS #: 3386-33-2		
8.092	376300	4.54512178	192	95	NIST05.L	117263	91
Unknown					CAS #:		
8.322	365421	4.41371601	186	0		0	91
Unknown					CAS #:		
8.581	919789	11.1096206	469	0		0	91
Squalene					CAS #: 7683-64-9		
8.857	366564	4.42751918	187	93	NIST05.L	173556	91
Unknown					CAS #:		
9.151	605550	9.24866983	390	0		0	98
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet					CAS #: 70038-20-9		
9.169	588048	8.98136154	379	90	NIST05.L	69982	98
Unknown					CAS #:		
10.386	282232	4.31058416	182	0		0	98
Unknown					CAS #:		
12.286	511347	7.80990105	329	0		0	98

Data File: /chem/HSD1.i/5032110.b/s102112.d
Date: 24-MAR-2010 20:58
Client ID: RE36-10-7417
Sample Info: 1248370004196122811.SVH111LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: HSD1.i
Operator: AMY
Column diameter: 0.20

Page 1



Date : 21-MAR-2010 20:58

Client ID: RE36-10-7417

Instrument: HSD1.i

Sample Info: 1248370004196122811SVH111LANL

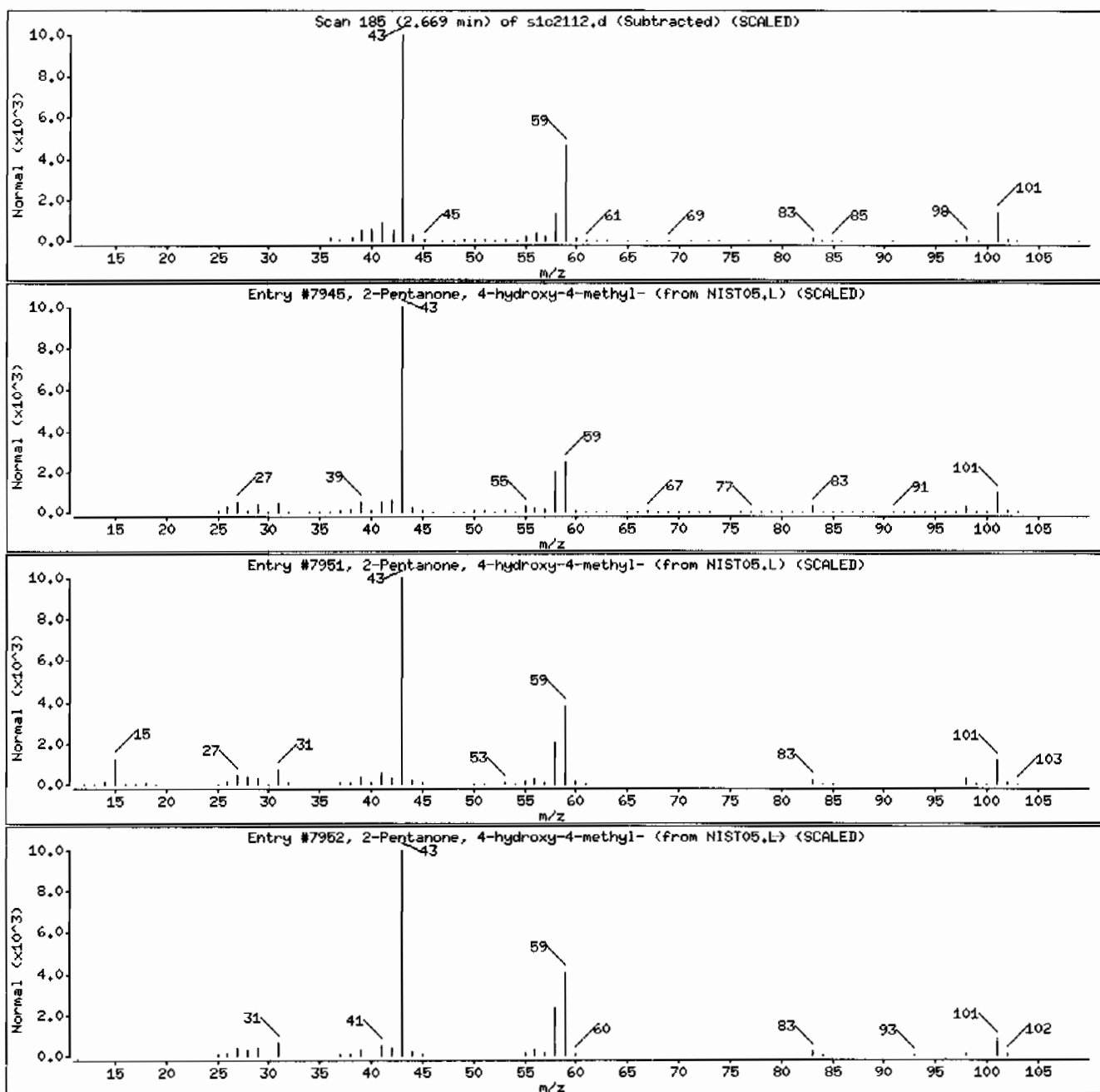
Volume Injected (uL): 0.5

Operator: AMY

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	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 21-MAR-2010 20:58

Client ID: RE36-10-7417

Instrument: MSD1.i

Sample Info: I248370004I961228I1SVH11ILANL

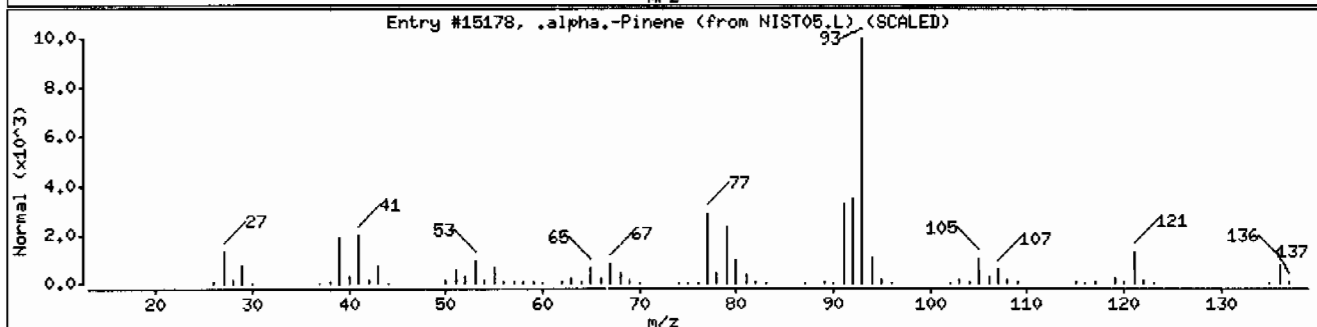
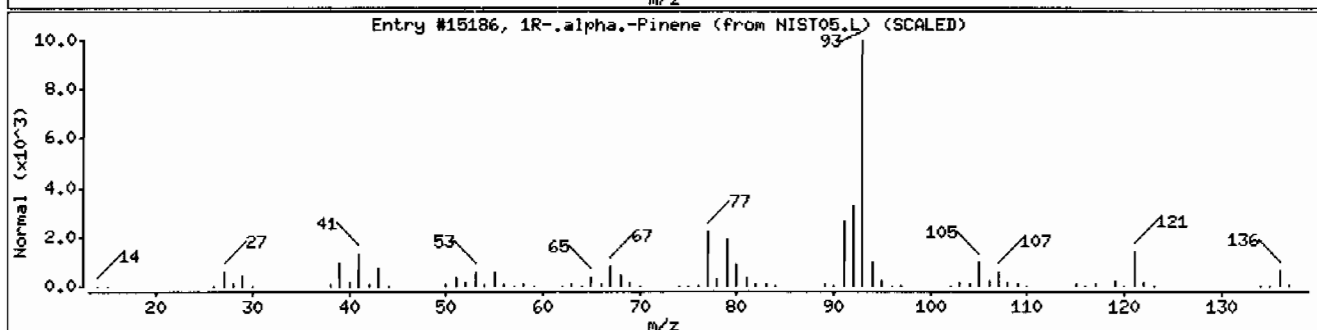
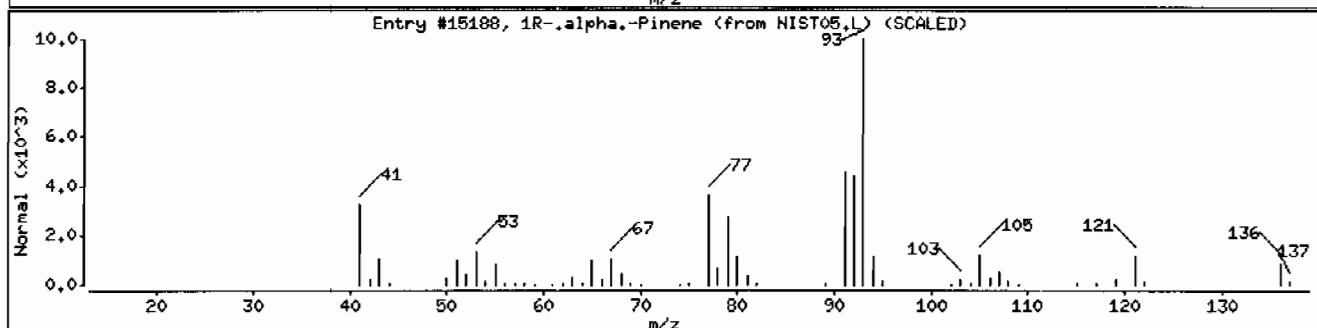
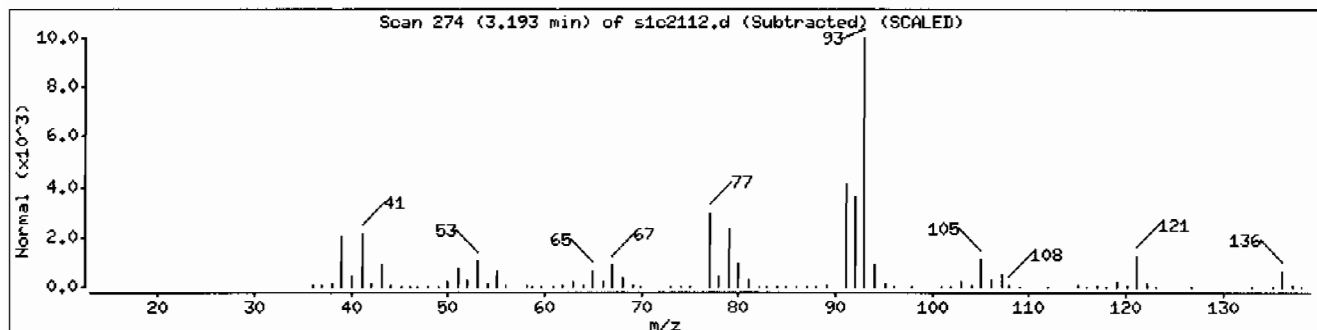
Volume Injected (uL): 0.5

Operator: AMY

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
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 20:58

Client ID: RE36-10-7417

Instrument: HSD1.i

Sample Info: I248370004196122811SVMI1ILANL

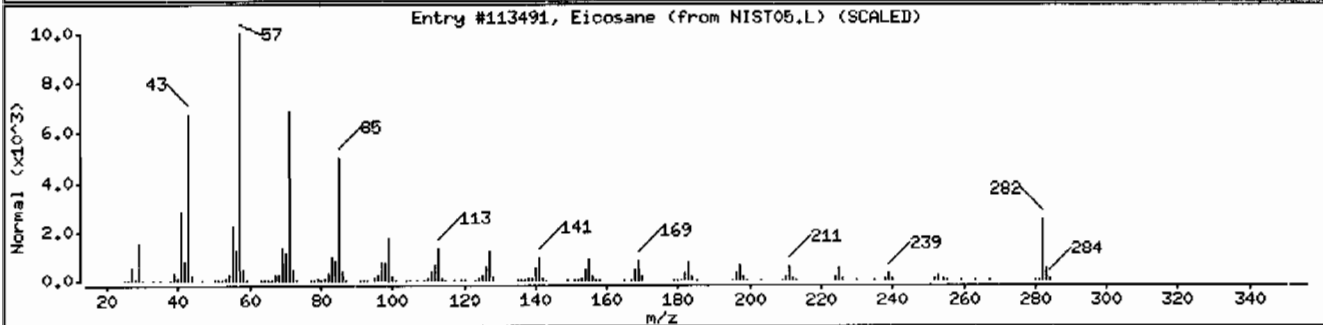
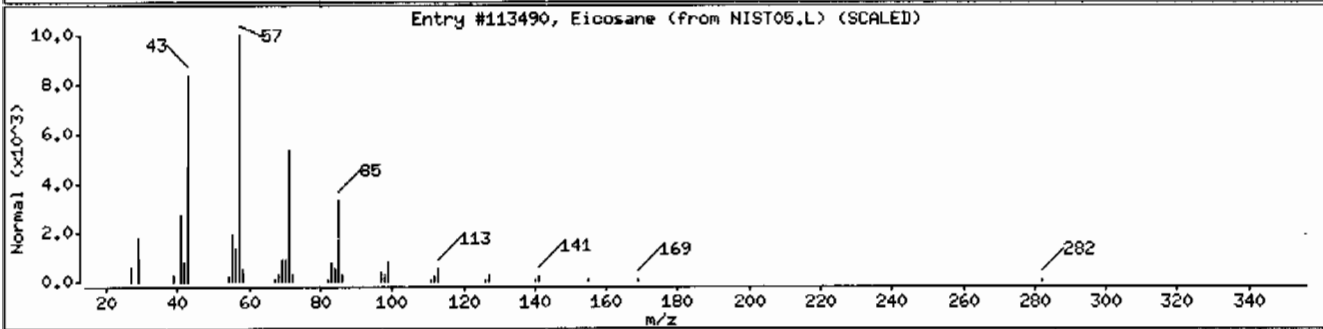
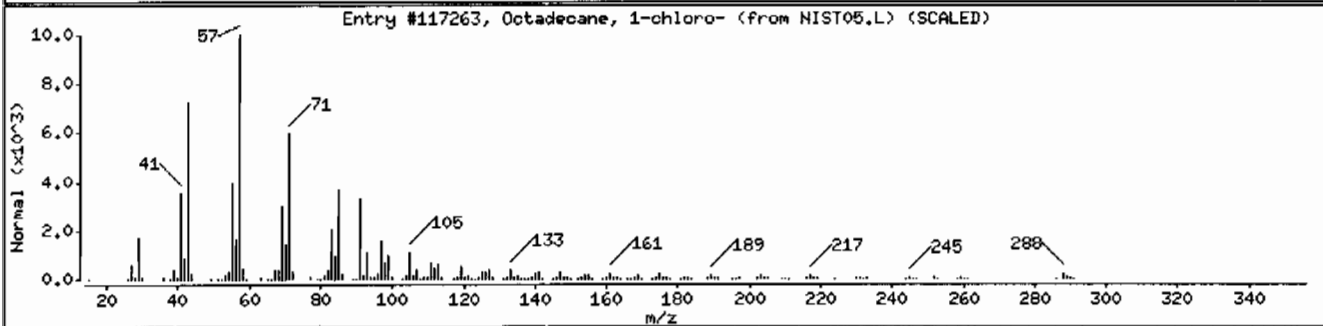
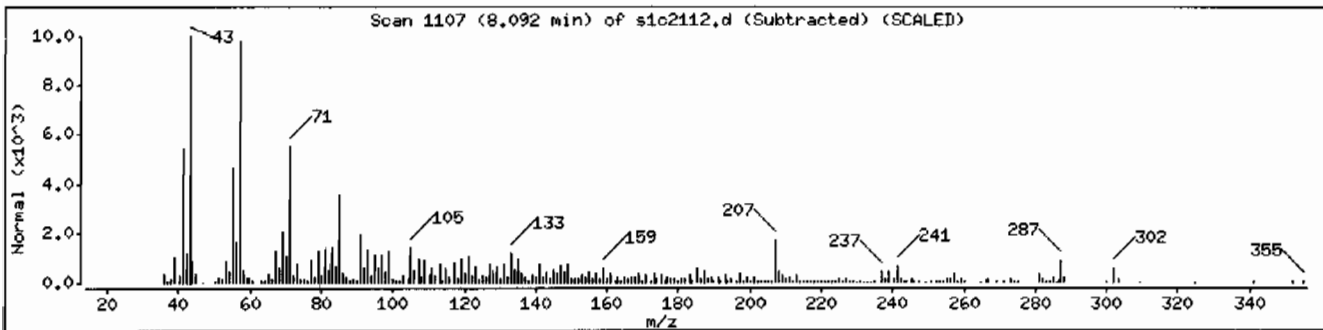
Volume Injected (uL): 0.5

Operator: AMY

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	95	C20H42	282
Eicosane	112-95-8	NIST05.L	113491	90	C20H42	282



Date : 21-MAR-2010 20:58

Client ID: RE36-10-7417

Instrument: MSD1.i

Sample Info: I2483700041961228111SVMI11LANL

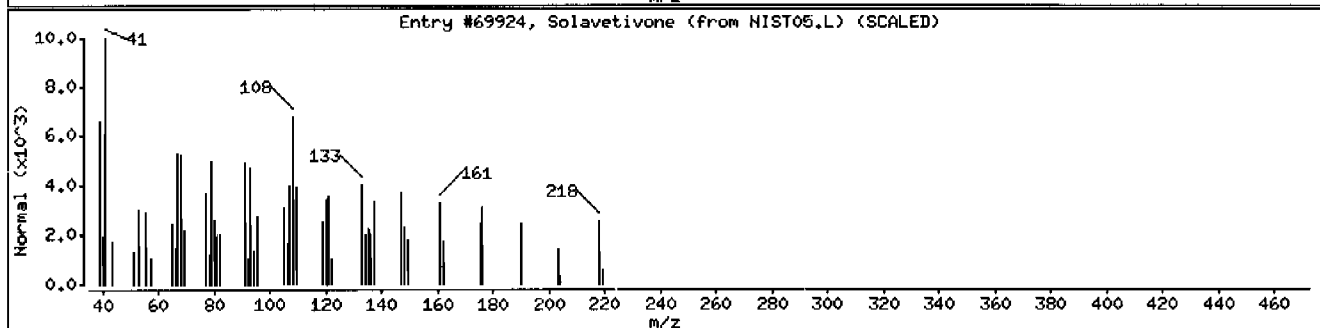
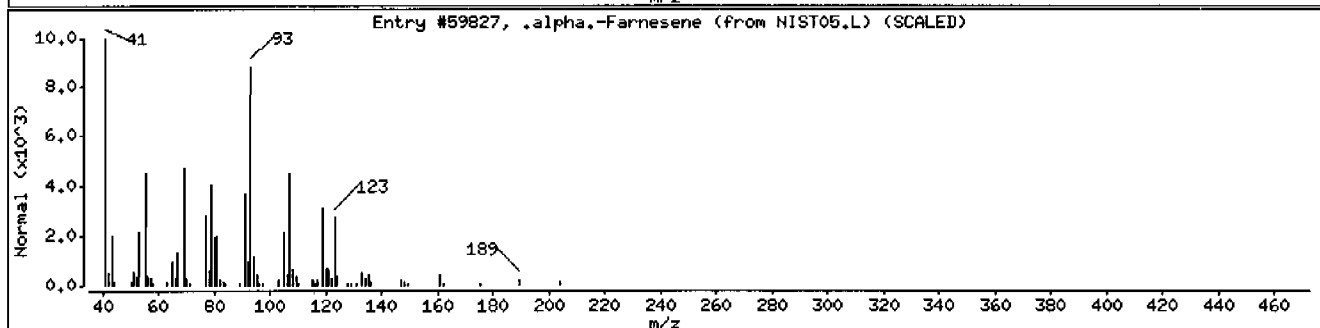
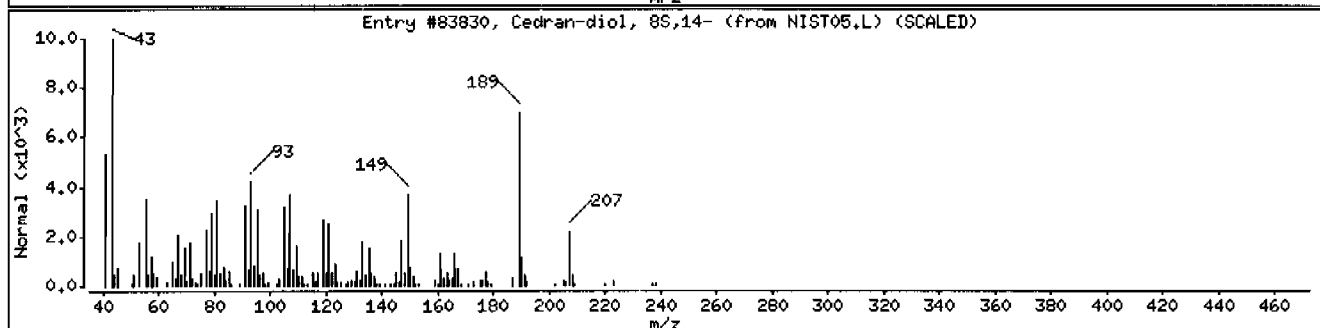
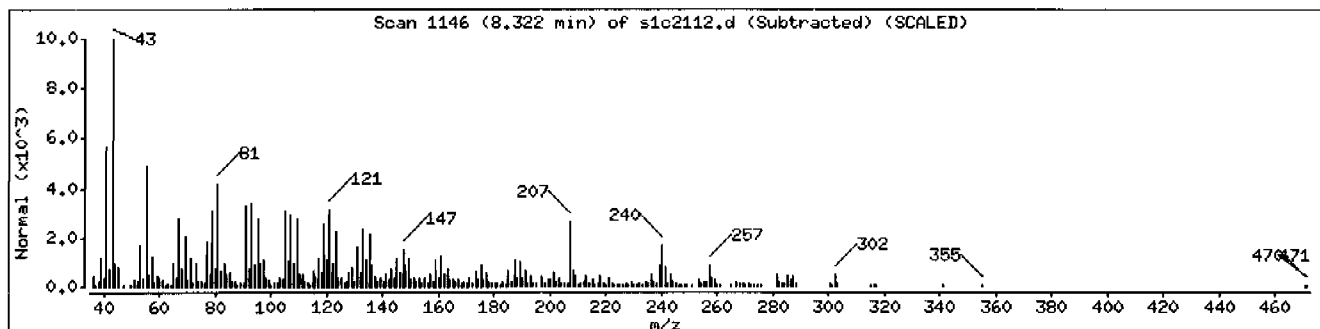
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	78	C15H26O2	238
.alpha.-Farnesene	502-61-4	NIST05.L	59827	49	C15H24	204
Solavetivone	54878-25-0	NIST05.L	69924	43	C15H22O	218



Date : 21-MAR-2010 20:58

Client ID: RE36-10-7417

Instrument: MSD1.i

Sample Info: 1248370004/96122811/SVM11/LANL

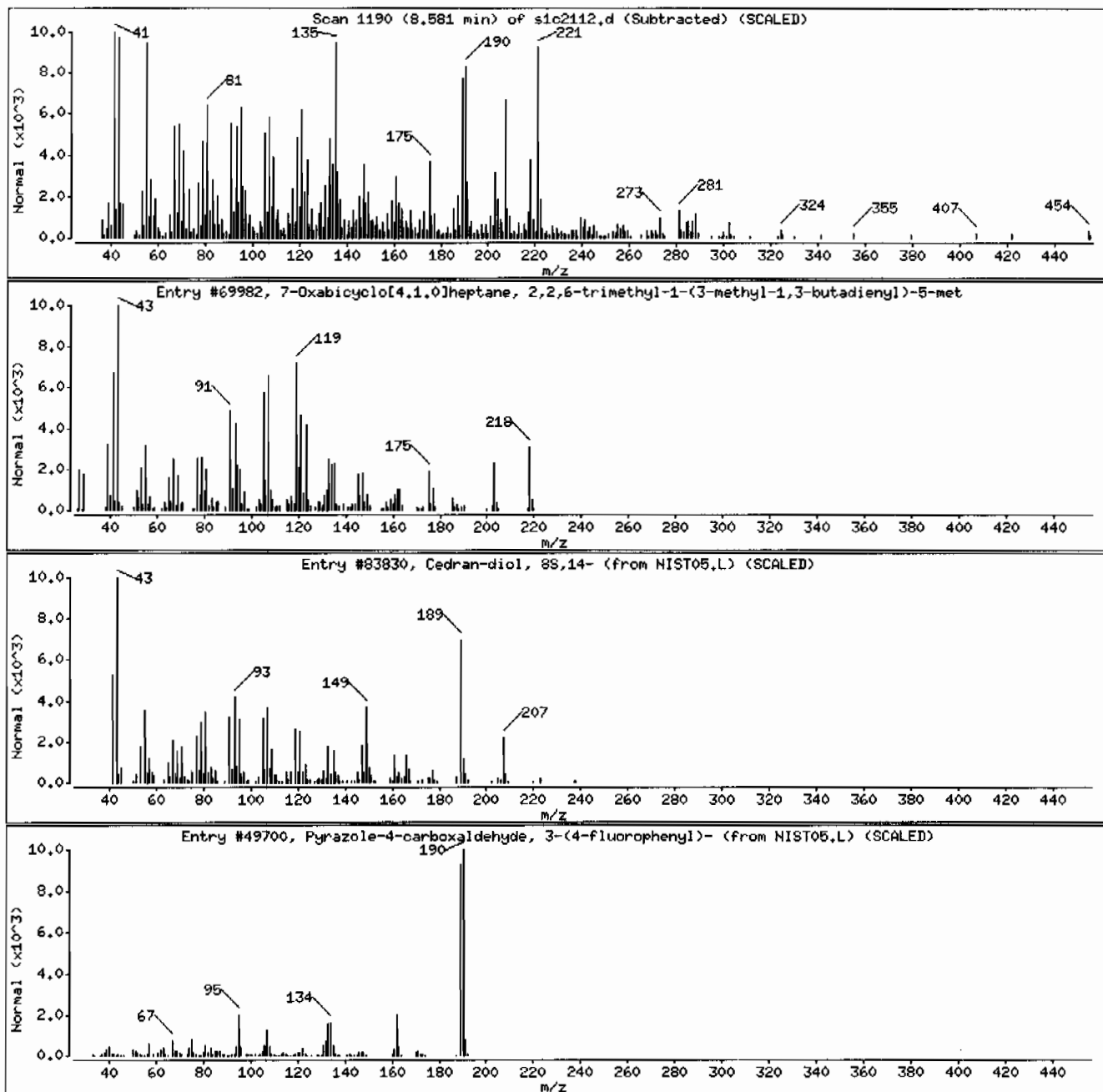
Volume Injected (uL): 0.5

Operator: AMY

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, 2,2,6-trimet	70038-20-9	NIST05.L	69982	55	C15H22O	218
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	45	C15H26O2	238
Pyrazole-4-carboxaldehyde, 3-(4-fluoroph	306936-57-2	NIST05.L	49700	38	C10H7FN2O	190



Date : 21-MAR-2010 20:58

Client ID: RE36-10-7417

Instrument: MSD1.i

Sample Info: I248370004196122811ISVM11ILANL

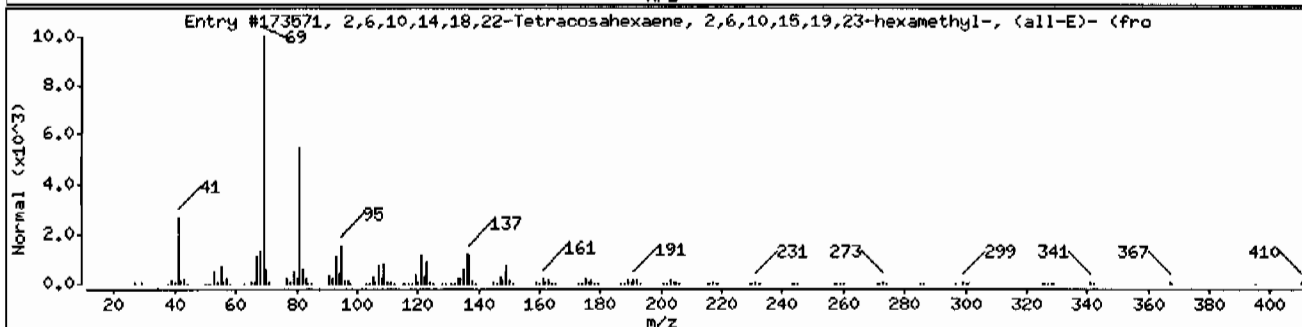
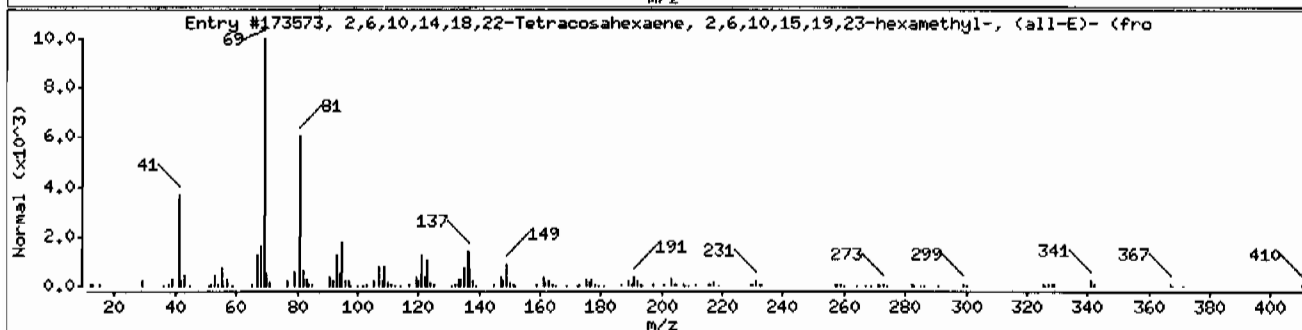
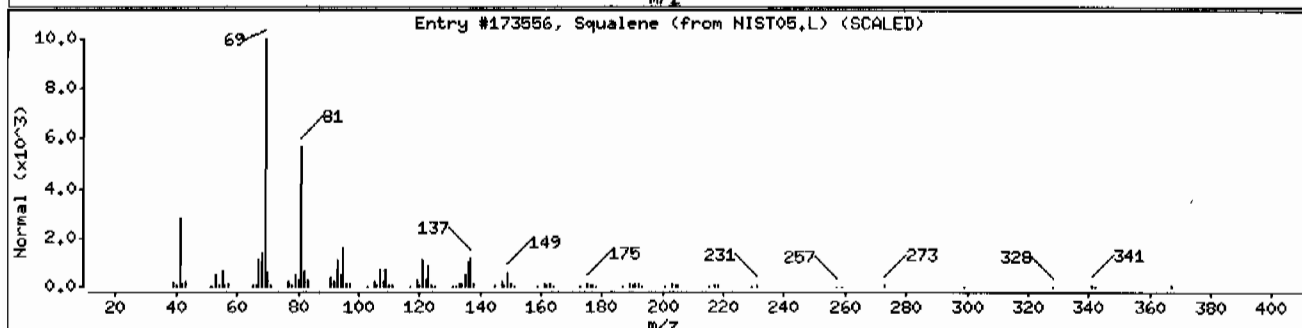
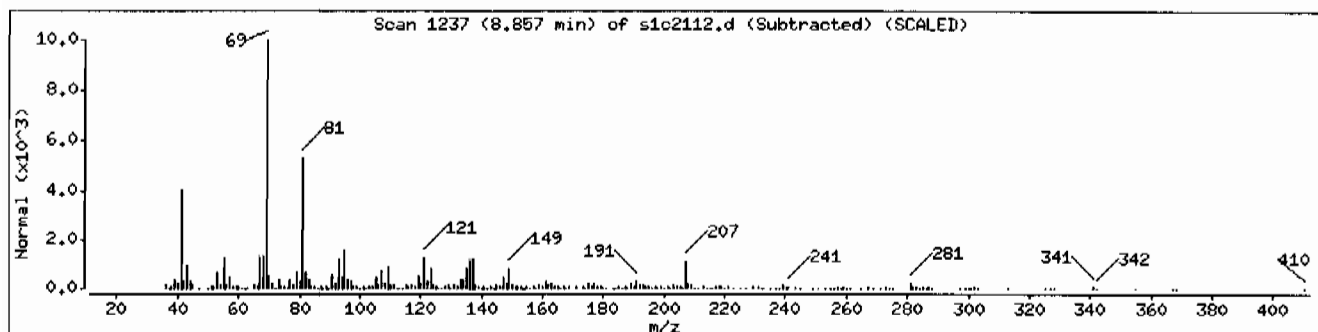
Volume Injected (uL): 0.5

Operator: AMY

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	93	C30H50	410
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173573	90	C30H50	410
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173571	90	C30H50	410



Date : 21-MAR-2010 20:58

Client ID: RE36-10-7417

Instrument: MSD1.i

Sample Info: 1248370004196122811SVH111LANL

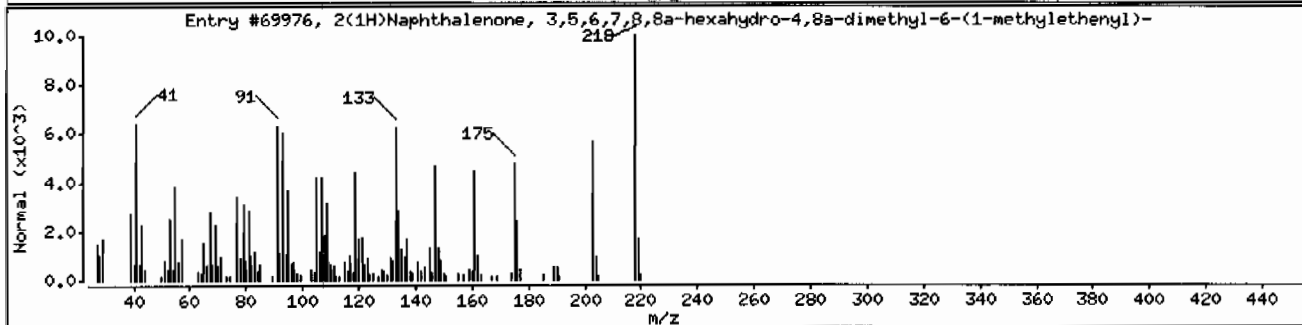
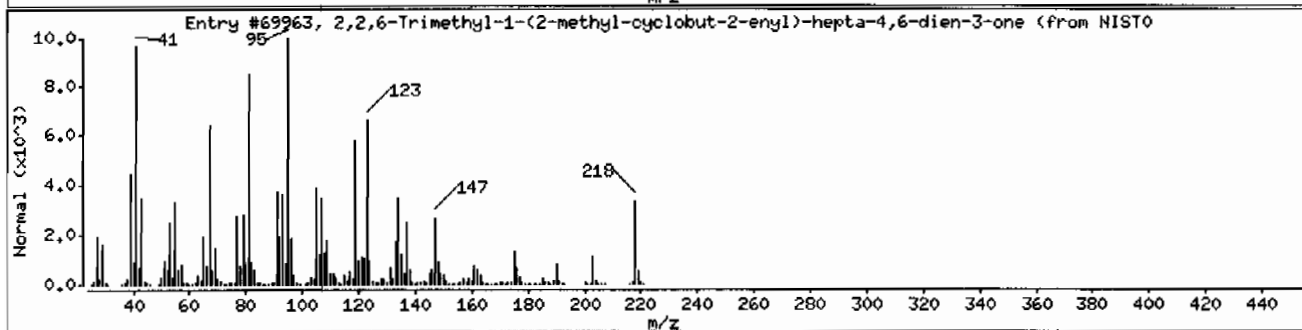
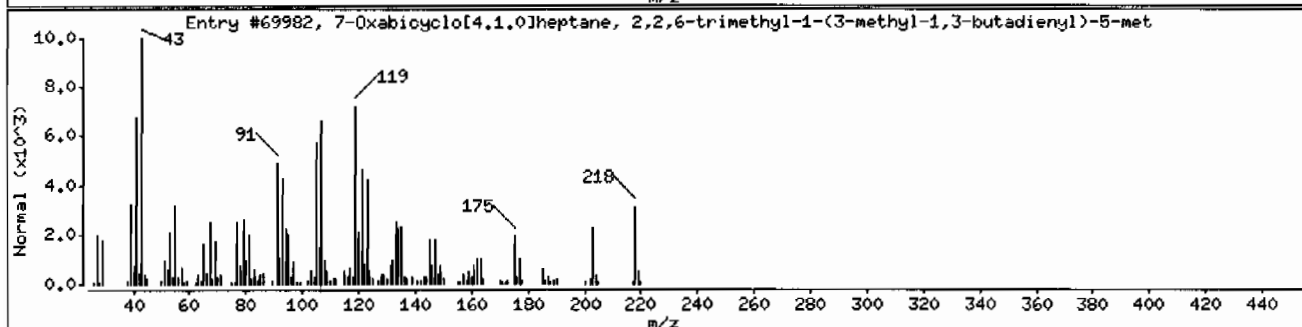
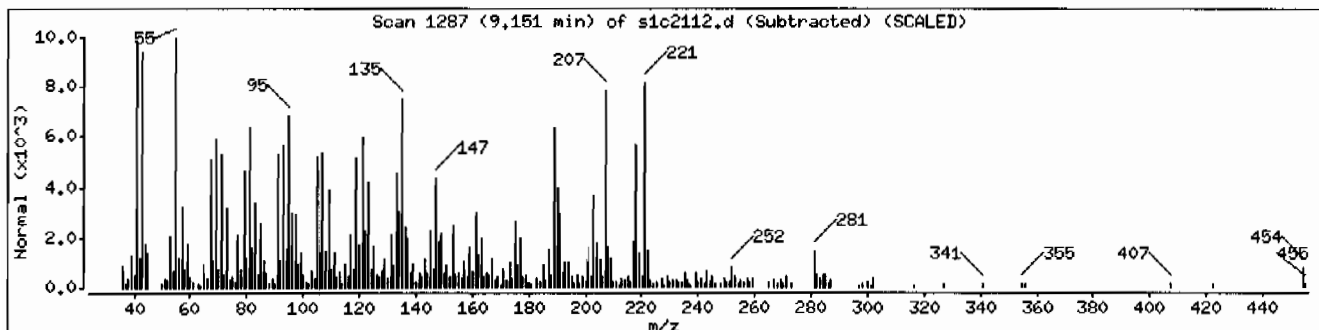
Volume Injected (uL): 0.5

Operator: AMY

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, 2,2,6-trimet	70038-20-9	NIST05.L	69982	62	C15H22O	218
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e	1000188-72-8	NIST05.L	69963	43	C15H22O	218
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	40	C15H22O	218



Date : 21-MAR-2010 20:58

Client ID: RE36-10-7417

Instrument: HSD1.i

Sample Info: I248370004196122811SVMI1ILANL

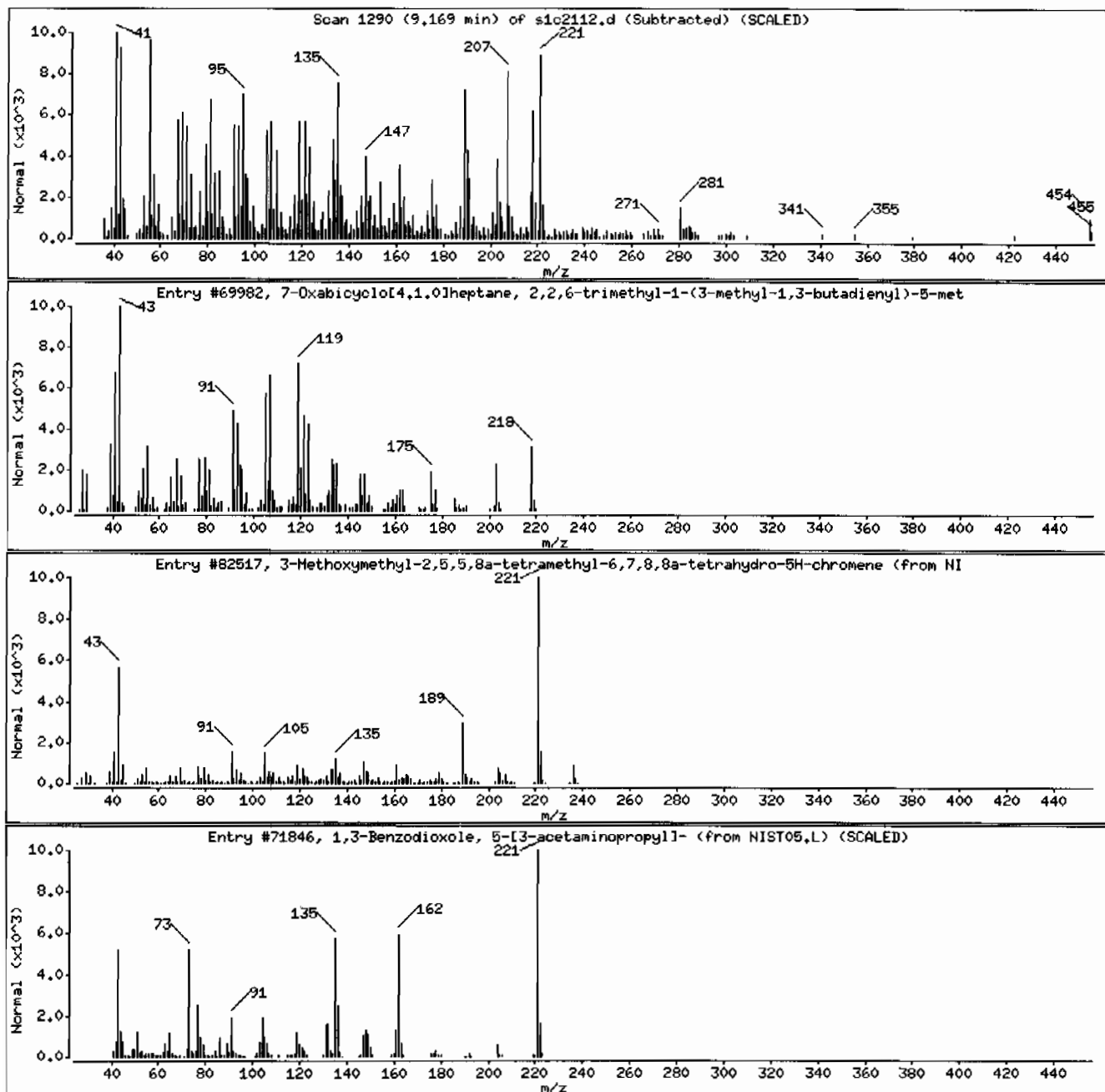
Volume Injected (uL): 0.5

Operator: AMY

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
3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7	64201-73-6	NIST05.L	82517	50	C15H24O2	236
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	25	C12H15NO3	221



Date : 21-MAR-2010 20:58

Client ID: RE36-10-7417

Instrument: MSD1.i

Sample Info: 1248370004196122811SVMI11LANL

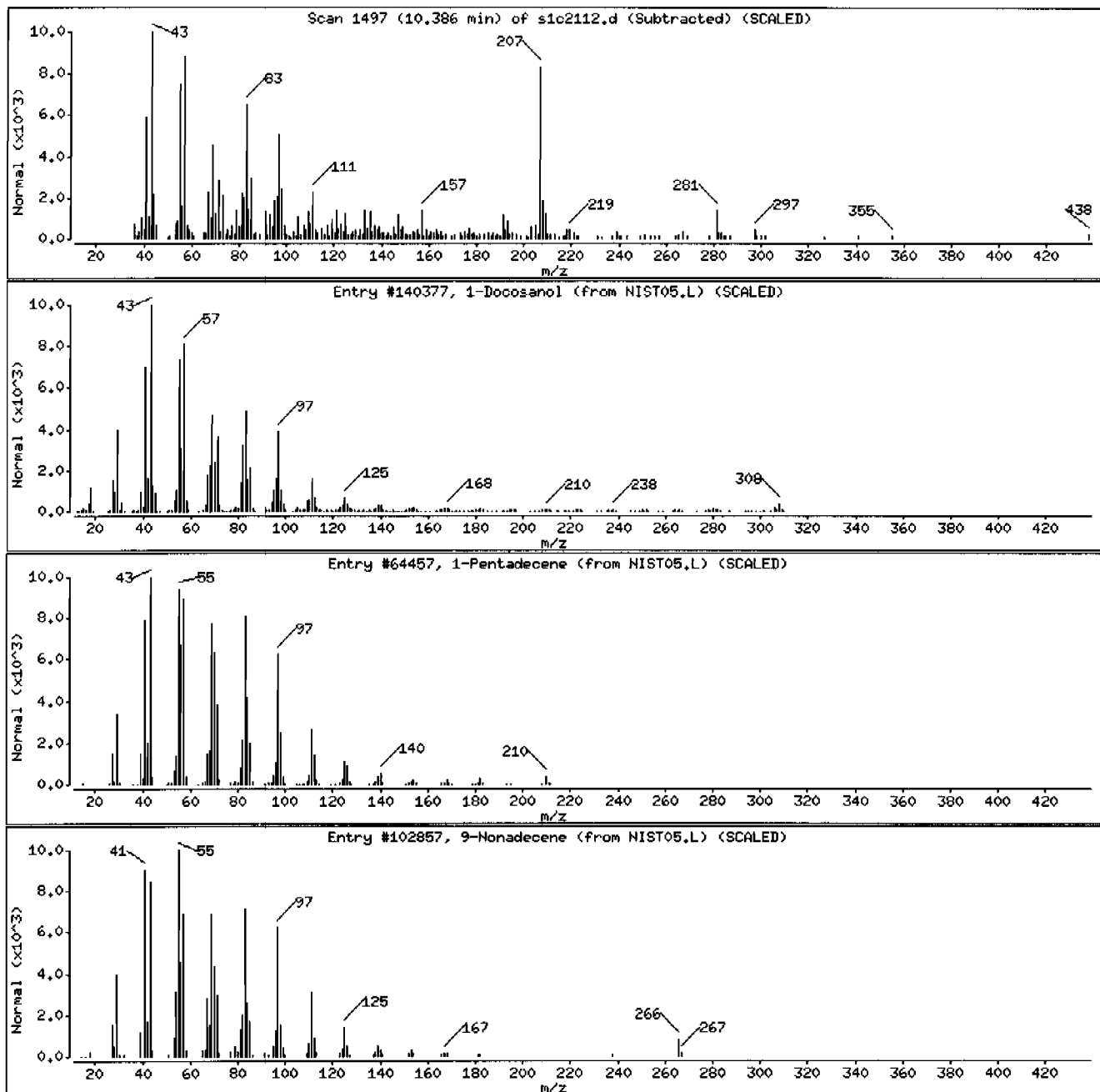
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Docosanol	661-19-8	NIST05.L	140377	43	C22H46O	326
1-Pentadecene	13360-61-7	NIST05.L	64457	38	C15H30	210
9-Nonadecene	31035-07-1	NIST05.L	102857	35	C19H38	266



Date : 21-MAR-2010 20:58

Client ID: RE36-10-7417

Instrument: MSD1.i

Sample Info: 1248370004196122811SVH111LANL

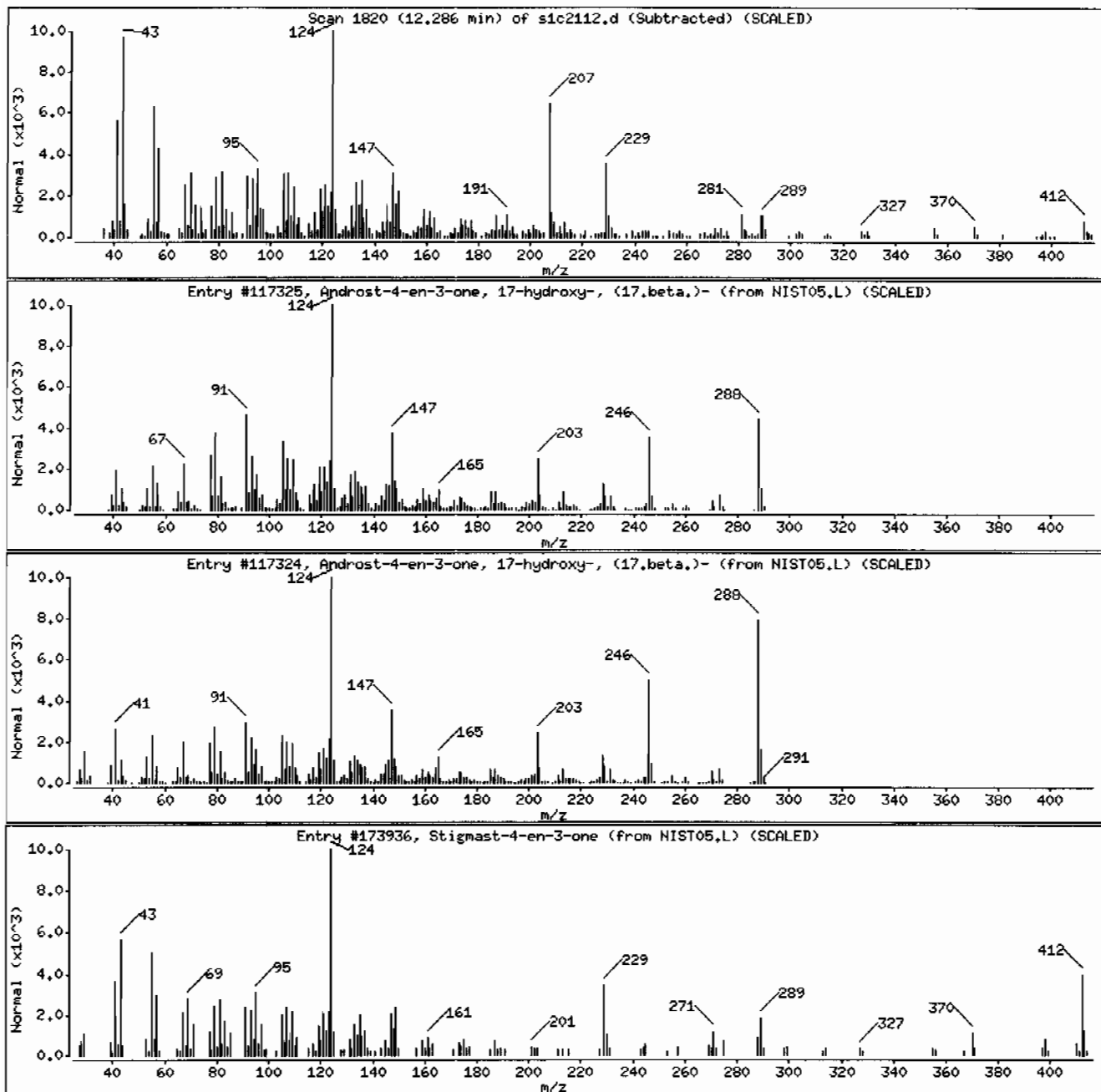
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117325	64	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117324	58	C19H28O2	288
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	55	C29H48O	412



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

SDG Number: 10-2150
Lab Sample ID: 248370003

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7418
Batch ID: 961228
Run Date: 03/21/2010 20:34
Prep Date: 03/05/2010 11:30
Data File: s1c2111.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	409	ug/kg	81.8	409
108-95-2	Phenol	U	409	ug/kg	81.8	409
95-57-8	2-Chlorophenol	U	409	ug/kg	81.8	409
106-46-7	1,4-Dichlorobenzene	U	409	ug/kg	81.8	409
621-64-7	N-Nitrosodipropylamine	U	409	ug/kg	81.8	409
59-50-7	4-Chloro-3-methylphenol	U	409	ug/kg	81.8	409
83-32-9	Acenaphthene	U	40.9	ug/kg	13.5	40.9
121-14-2	2,4-Dinitrotoluene	U	409	ug/kg	40.9	409
100-02-7	4-Nitrophenol	U	409	ug/kg	135	409
87-86-5	Pentachlorophenol	U	409	ug/kg	102	409
129-00-0	Pyrene	U	40.9	ug/kg	12.3	40.9
110-86-1	Pyridine	U	409	ug/kg	81.8	409
62-53-3	Aniline	U	409	ug/kg	123	409
111-44-4	bis(2-Chloroethyl) ether	U	409	ug/kg	81.8	409
541-73-1	1,3-Dichlorobenzene	U	409	ug/kg	81.8	409
100-51-6	Benzyl alcohol	U	409	ug/kg	123	409
95-50-1	1,2-Dichlorobenzene	U	409	ug/kg	81.8	409
108-60-1	bis(2-Chloroisopropyl)ether	U	409	ug/kg	81.8	409
95-48-7	o-Cresol	U	409	ug/kg	81.8	409
65794-96-9	m,p-Cresols	U	409	ug/kg	123	409
67-72-1	Hexachloroethane	U	409	ug/kg	81.8	409
98-95-3	Nitrobenzene	U	409	ug/kg	81.8	409
78-59-1	Isophorone	U	409	ug/kg	81.8	409
88-75-5	2-Nitrophenol	U	409	ug/kg	81.8	409
105-67-9	2,4-Dimethylphenol	U	409	ug/kg	143	409
111-91-1	bis(2-Chloroethoxy)methane	U	409	ug/kg	81.8	409
120-83-2	2,4-Dichlorophenol	U	409	ug/kg	81.8	409
65-85-0	Benzoic acid	U	818	ug/kg	205	818
91-20-3	Naphthalene	U	40.9	ug/kg	12.3	40.9
106-47-8	4-Chloroaniline	U	409	ug/kg	81.8	409
87-68-3	Hexachlorobutadiene	U	409	ug/kg	81.8	409
91-57-6	2-Methylnaphthalene	U	40.9	ug/kg	8.18	40.9
77-47-4	Hexachlorocyclopentadiene	U	409	ug/kg	81.8	409
88-06-2	2,4,6-Trichlorophenol	U	409	ug/kg	81.8	409
95-95-4	2,4,5-Trichlorophenol	U	409	ug/kg	81.8	409
91-58-7	2-Chloronaphthalene	U	40.9	ug/kg	13.5	40.9
88-74-4	2-Nitroaniline	U	409	ug/kg	81.8	409
99-09-2	<i>o</i> -Nitroaniline	U	409	ug/kg	81.8	409
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370003

Client ID: RE36-10-7418
Batch ID: 961228
Run Date: 03/21/2010 20:34
Prep Date: 03/05/2010 11:30
Data File: slc2111.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.7
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	MDI/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	409	ug/kg	81.8	409
606-20-2	2,6-Dinitrotoluene	U	409	ug/kg	40.9	409
208-96-8	Acenaphthylene	U	40.9	ug/kg	12.3	40.9
51-28-5	2,4-Dinitrophenol	U	818	ug/kg	155	818
132-64-9	Dibenzofuran	U	409	ug/kg	81.8	409
84-66-2	Diethylphthalate	U	409	ug/kg	81.8	409
86-73-7	Fluorene	U	40.9	ug/kg	12.3	40.9
7005-72-3	4-Chlorophenylphenylether	U	409	ug/kg	81.8	409
534-52-1	2-Methyl-4,6-dinitrophenol	U	409	ug/kg	81.8	409
100-01-6	4-Nitroaniline	U	409	ug/kg	123	409
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	409	ug/kg	81.8	409
122-66-7	Azobenzene	U	409	ug/kg	81.8	409
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	409	ug/kg	81.8	409
118-74-1	Hexachlorobenzene	U	409	ug/kg	81.8	409
85-01-8	Phenanthrene	U	40.9	ug/kg	12.3	40.9
120-12-7	Anthracene	U	40.9	ug/kg	8.18	40.9
84-74-2	Di-n-butylphthalate	U	409	ug/kg	81.8	409
206-44-0	Fluoranthene	U	40.9	ug/kg	12.3	40.9
85-68-7	Butylbenzylphthalate	U	409	ug/kg	81.8	409
56-55-3	Benzo(a)anthracene	U	40.9	ug/kg	12.3	40.9
91-94-1	3,3'-Dichlorobenzidine	U	409	ug/kg	123	409
218-01-9	Chrysene	U	40.9	ug/kg	12.3	40.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	409	ug/kg	81.8	409
117-84-0	Di-n-octylphthalate	U	409	ug/kg	81.8	409
205-99-2	Benzo(b)fluoranthene	U	40.9	ug/kg	12.3	40.9
207-08-9	Benzo(k)fluoranthene	U	40.9	ug/kg	12.3	40.9
50-32-8	Benzo(a)pyrene	U	40.9	ug/kg	12.3	40.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.9	ug/kg	12.3	40.9
53-70-3	Dibenzo(a,h)anthracene	U	40.9	ug/kg	12.3	40.9
191-24-2	Benzo(ghi)perylene	U	40.9	ug/kg	12.3	40.9
120-82-1	1,2,4-Trichlorobenzene	U	409	ug/kg	81.8	409

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	481	ug/kg		J
	Unknown Aldol Condensate	2.67	245	ug/kg		JA

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

SDG Number: 10-2150
Lab Sample ID: 248370003

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 18.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7418
Batch ID: 961228
Run Date: 03/21/2010 20:34
Prep Date: 03/05/2010 11:30
Data File: s1c2111.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
7785-70-8	1R-.alpha.-Pinene	3.19	310	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	657	ug/kg	99	NJ
1000281-95-1	3-Bromobenzoic acid, pentadecyl ester	7.4	188	ug/kg	90	NJ
	Unknown	8.08	205	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.13	250	ug/kg	89	NJ
	Unknown	8.26	198	ug/kg		J
1000143-61-3	N-(4-Methoxyphenyl)-2-hydroxyimino-aceta	8.55	722	ug/kg	95	NJ
1058-61-3	Stigmast-4-en-3-one	12.29	259	ug/kg	91	NJ

Data File: /chem/MSD1.i/s032110.b/slc2111.d
 Report Date: 22-Mar-2010 14:54

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2111.d
 Lab Smp Id: 248370003 Client Smp ID: RE36-10-7418
 Inj Date : 21-MAR-2010 20:34
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370003|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	18.70600	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	453200	40.0000		
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1801150	40.0000		
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	940707	40.0000		
* 67 Phenanthrene-d10	188	6.704	6.710	(1.000)	1661252	40.0000		
* 91 Chrysene-d12	240	8.286	8.292	(1.000)	1405544	40.0000		
* 98 Perylene-d12	264	9.522	9.522	(1.000)	1108430	40.0000		
\$ 3 2-Fluorophenol	112	2.828	2.822	(0.783)	673113	57.6787	2360	
\$ 5 Phenol-d5	99	3.346	3.346	(0.927)	890290	62.6413	2560	
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	368999	33.4026	1370	
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	716802	27.5905	1130	
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	163691	53.0759	2170	
\$ 81 p-Terphenyl-d14	244	7.622	7.622	(0.920)	769296	32.8298	1340	

ION RATIO REPORT

SV REPORT

Data file: slc2111.d

Report Date: 03/22/2010 11:53

Lab. ID: 248370003

SampleType: SAMPLE

Injection Date: 21-MAR-2010 20:34

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370003|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	42895	3.35	3.40	80-120	100	()
93	8948	3.39	3.40	233-293	21	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	51889	3.97	3.86	80-120	100	(T)
42	36663	3.97	3.86	48-108	71	(T)

40	2-Chloronaphthalene	CAS#: 91-58-7				
162	16695	5.44	5.30	80-120	100	(T)
164	1003	5.43	5.30	2- 62	6	(T)
127	1309	5.44	5.30	9- 69	8	(QT)

42	o-Nitroaniline	CAS#: 88-74-4				
65	20993	5.43	5.37	80-120	100	(T)
92	23760	5.43	5.37	33- 93	113	(QT)
138	1840	5.43	5.37	80-140	9	(Q)

41	m-Nitroaniline	CAS#: 99-09-2				
138	220	5.70	5.66	80-120	100	()
92	5296	5.70	5.66	71-131	2397	(Q)
108	17678	5.70	5.66	0- 40	8000	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	170951	5.70	5.49	80-120	100	(T)
164	940707	5.70	5.49	0- 40	550	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL

44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	121543	5.70	5.54	80-120	100	(T)
63	2091	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	121543	5.70	5.83	80-120	100	(T)
89	1611	5.70	5.82	38- 98	1	(QT)
63	2091	5.70	5.82	20- 80	2	(QT)

53	Fluorene			CAS#: 86-73-7		
166	12773	6.25	6.09	80-120	100	(T)
165	12675	6.25	6.09	61-121	99	(T)
167	4643	6.25	6.09	0- 43	36	(T)

56	p-Nitroaniline			CAS#: 100-01-6		
138	423	6.10	6.09	80-120	100	()
108	385	5.98	6.09	29- 89	91	(QT)
92	391	6.15	6.09	14- 74	93	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD1.i/s032110.b/slc2111.d
 Report Date: 22-Mar-2010 14:54

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GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2111.d
 Lab Smp Id: 248370003 Client Smp ID: RE36-10-7418
 Inj Date : 21-MAR-2010 20:34
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370003|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	18.70600	% moisture

Cpnd Variable

Local Compound Variable

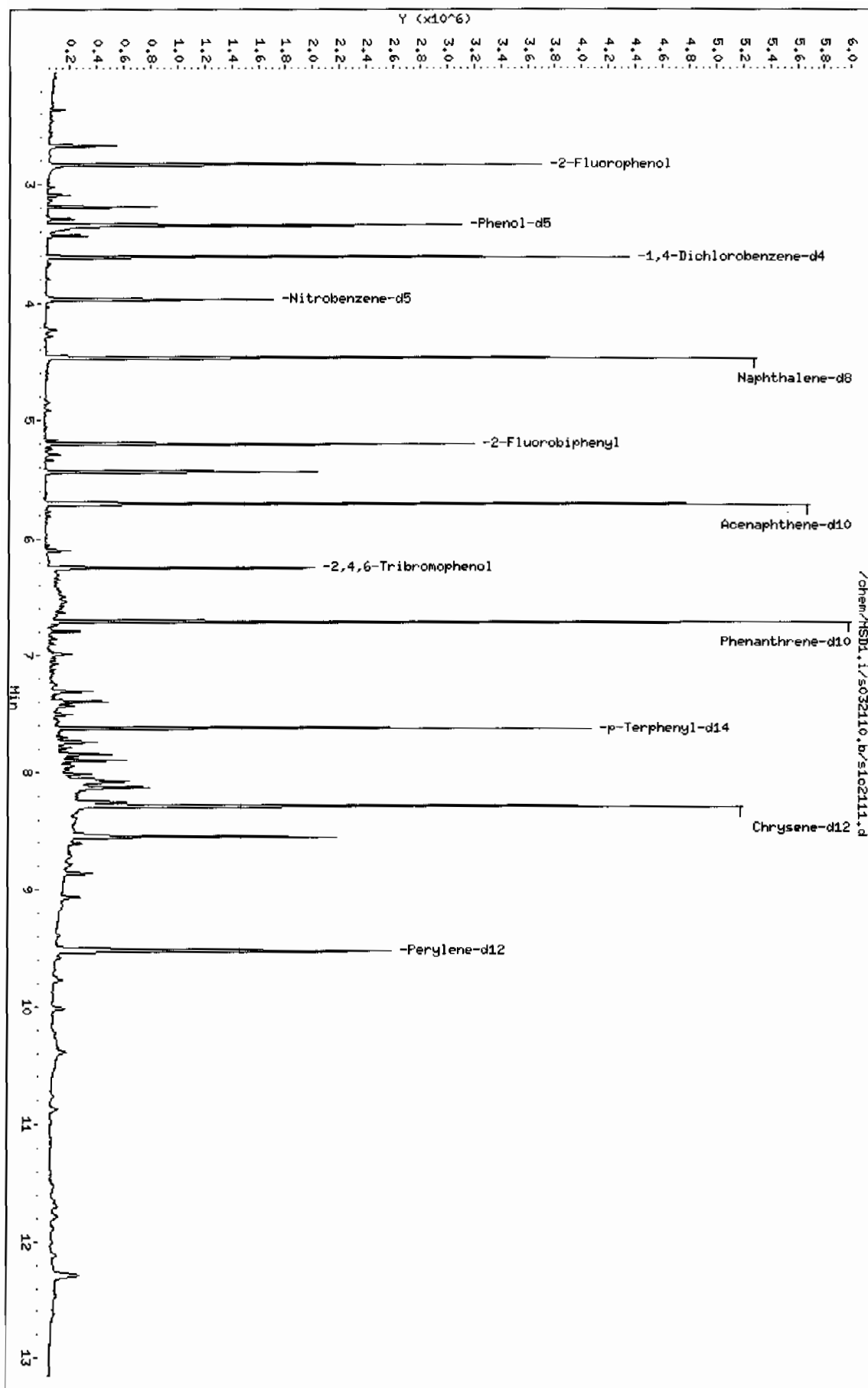
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2792399	40.000
* 46 Acenaphthene-d10	5.704	4119389	40.000
* 67 Phenanthrene-d10	6.704	4138526	40.000
* 91 Chrysene-d12	8.286	3800777	40.000
* 98 Perylene-d12	9.522	3170094	40.000

CONCENTRATIONS					QUANT		
RT	AREA	CN-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 #:		
1.810	820354	11.7512388	481	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	418385	5.99319890	245	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.193	529743	7.58835777	310	97	NIST05.L	15188	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.434	1653899	16.0596487	657	99	NIST05.L	60023	46
3-Bromobenzoic acid, pentadecyl ester					CAS #: 1000281-95-1		
7.398	474817	4.58923345	188	90	NIST05.L	173414	67
Unknown					CAS #:		
8.081	475711	5.00645695	205	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
8.133	580401	6.10823731	250	89	NIST05.L	125037	91
Unknown					CAS #:		
8.257	459904	4.84010550	198	0		0	91
N-(4-Methoxyphenyl)-2-hydroxyimino-aceta					CAS #: 1000143-61-3		
8.545	1676670	17.6455435	722	95	NIST05.L	53297	91
Stigmast-4-en-3-one					CAS #: 1058-61-3		
12.292	502122	6.33573616	259	91	NIST05.L	173936	98

Data File: /chem/MSD1.i/s032110.b/sic2111.d
 Date: 21-MAR-2010 20:34
 Client ID: RE36-10-7418
 Sample Info: 1248370003/96122811SUM11L.ANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD1.i
 Operator: AMY
 Column diameter: 0.20



Date : 21-MAR-2010 20:34

Client ID: RE36-10-7418

Instrument: MSD1.i

Sample Info: I248370003I961228I1ISVH11ILANL

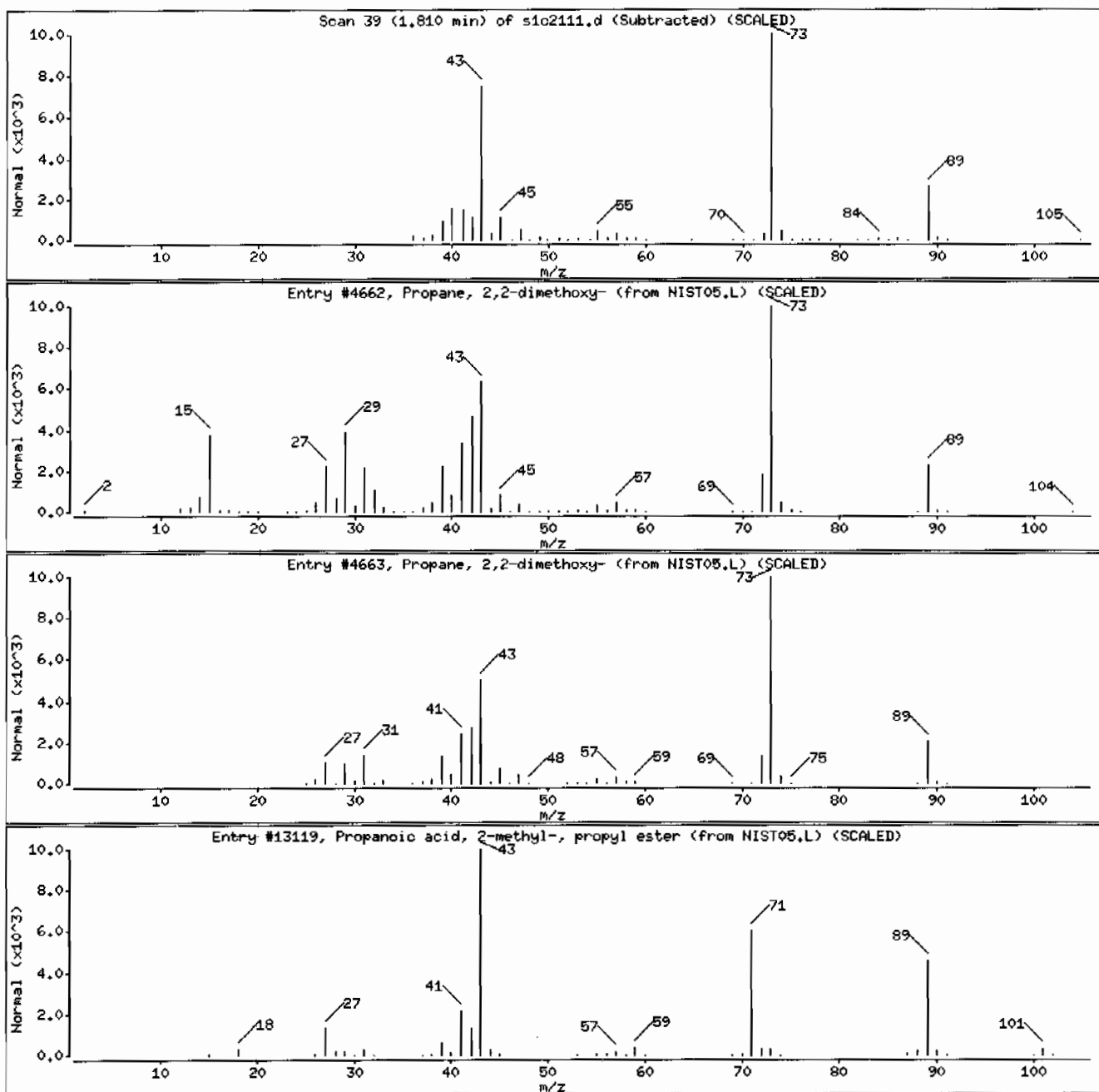
Volume Injected (uL): 0.5

Operator: AMY

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	39	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	36	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	25	C7H14O2	130



Date : 21-MAR-2010 20:34

Client ID: RE36-10-7418

Instrument: MSD1.i

Sample Info: 12483700031961228111SVH111LANL

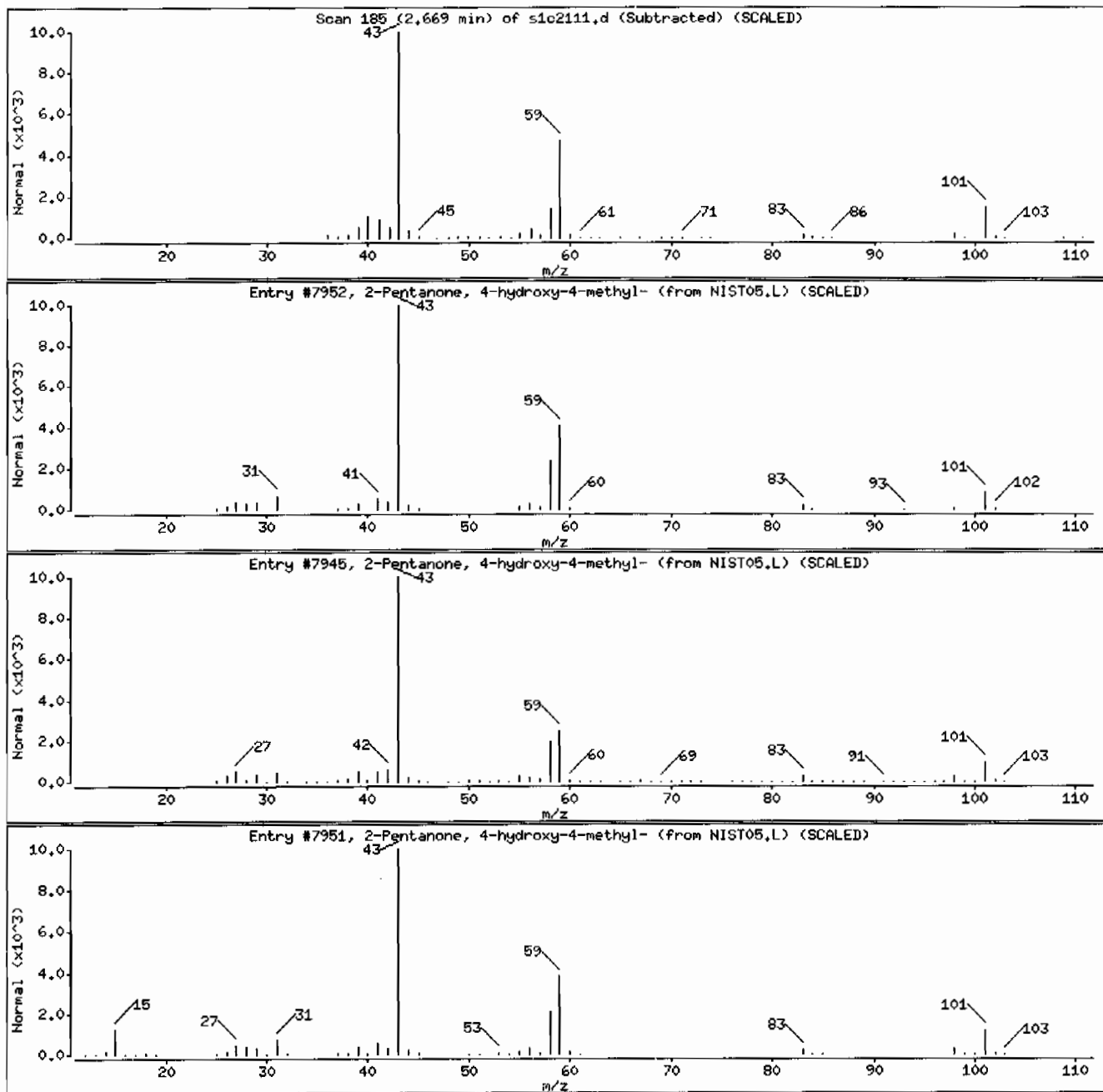
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	42	C6H12O2	116



Date : 21-MAR-2010 20:34

Client ID: RE36-10-7418

Instrument: MSD1.i

Sample Info: 12483700031961228111SVH111LANL

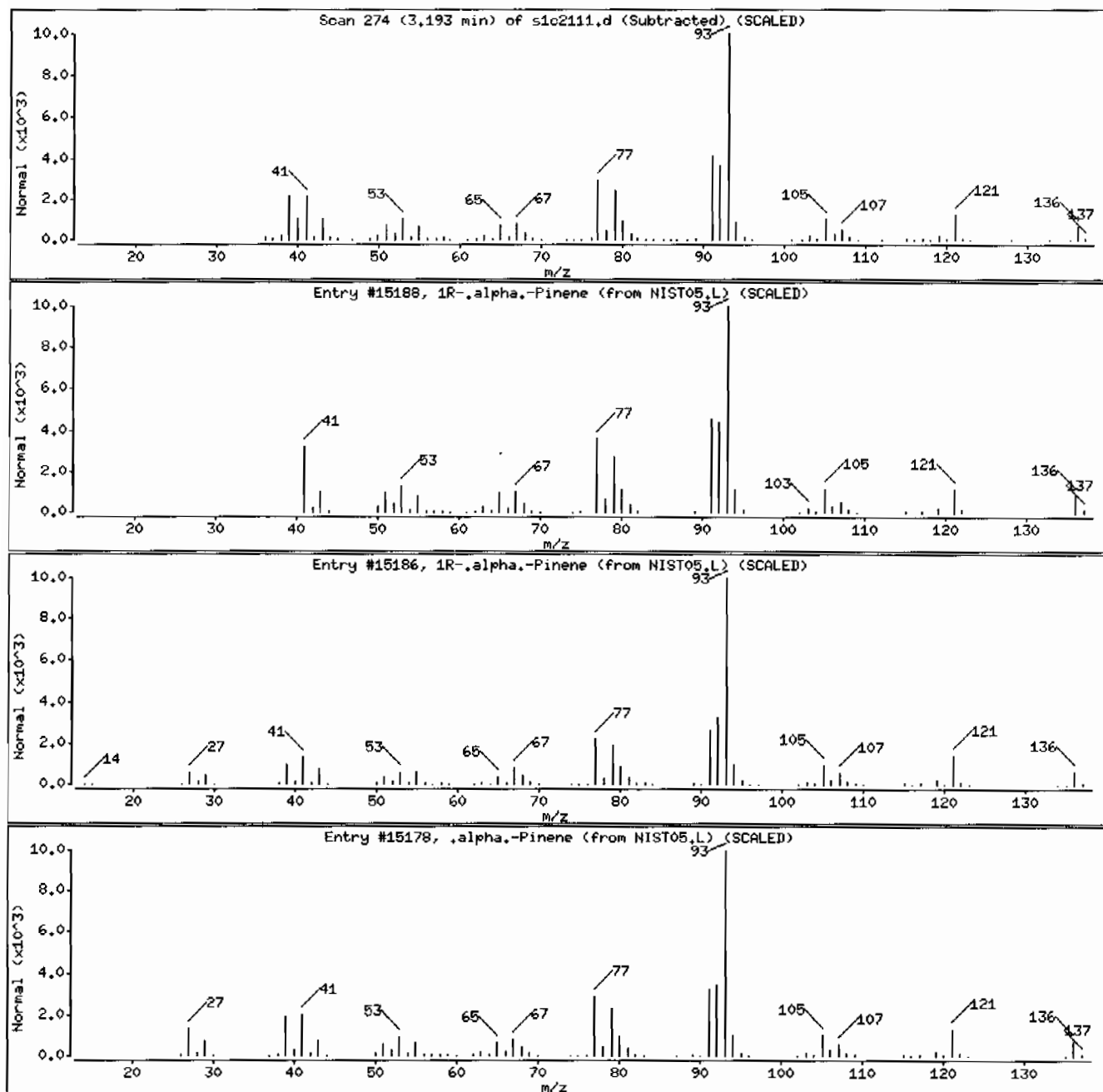
Volume Injected (uL): 0.5

Operator: AMY

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
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 20:34

Client ID: RE36-10-7418

Instrument: MSD1.i

Sample Info: 1248370003196122811SVH111LANL

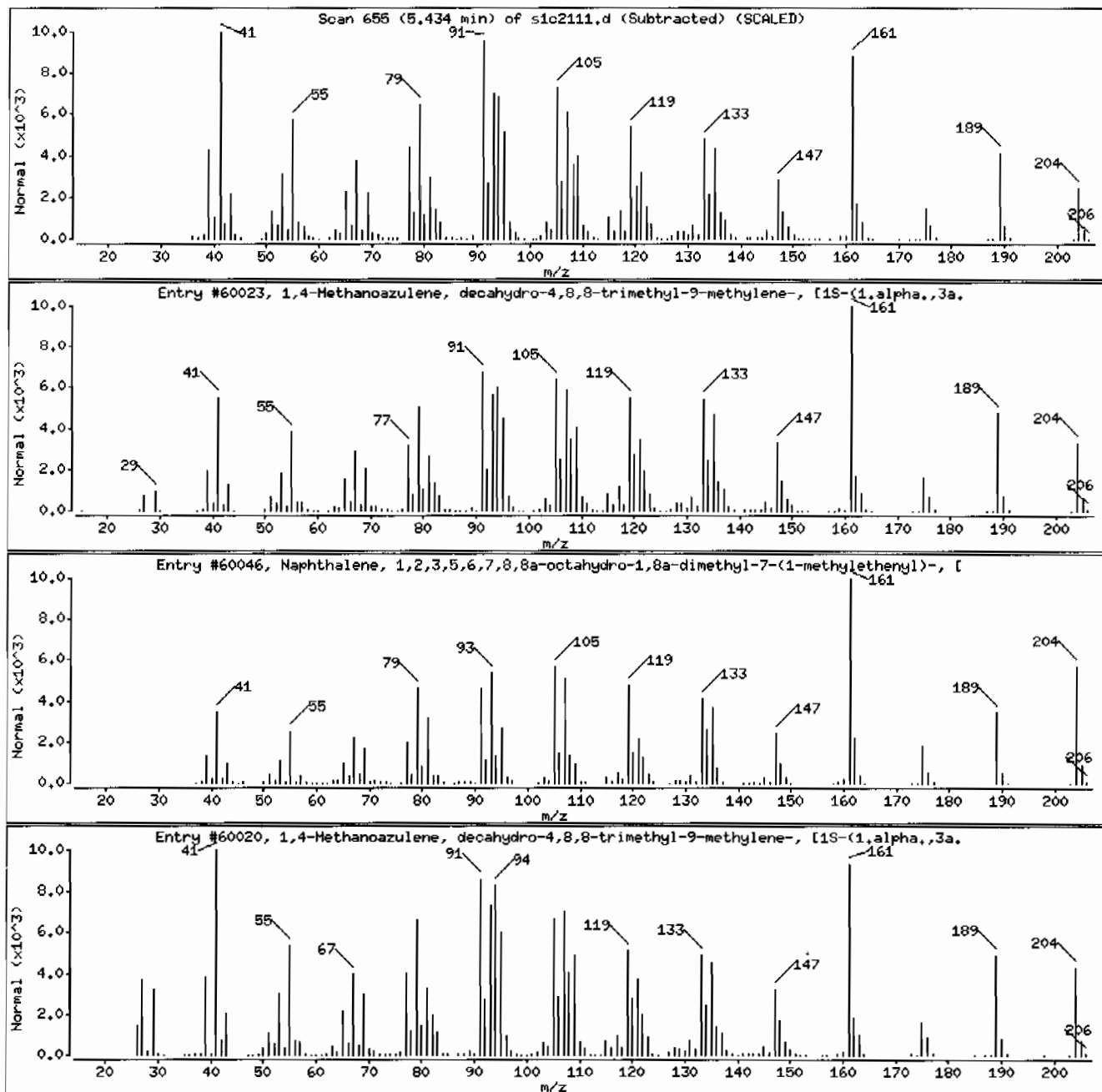
Volume Injected (uL): 0.5

Operator: AHY

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	60046	98	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	98	C15H24	204



Date : 21-MAR-2010 20:34

Client ID: RE36-10-7418

Instrument: MSD1.i

Sample Info: 1248370003196122811SVH111LANL

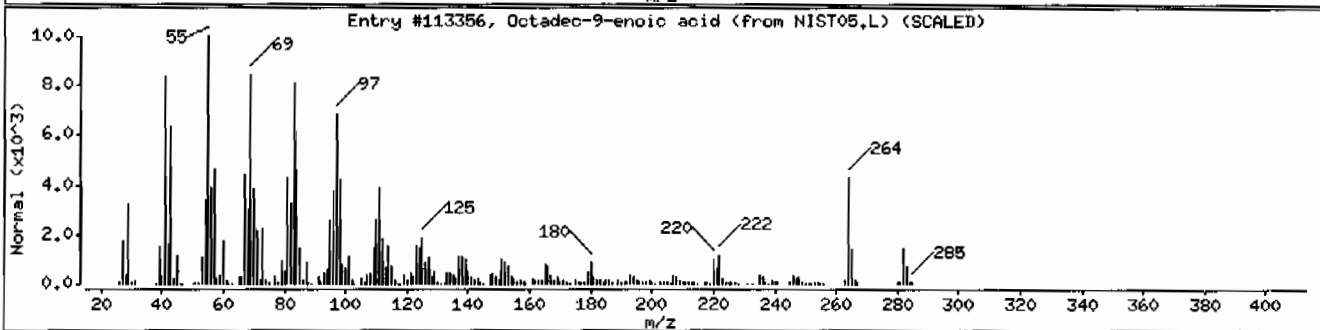
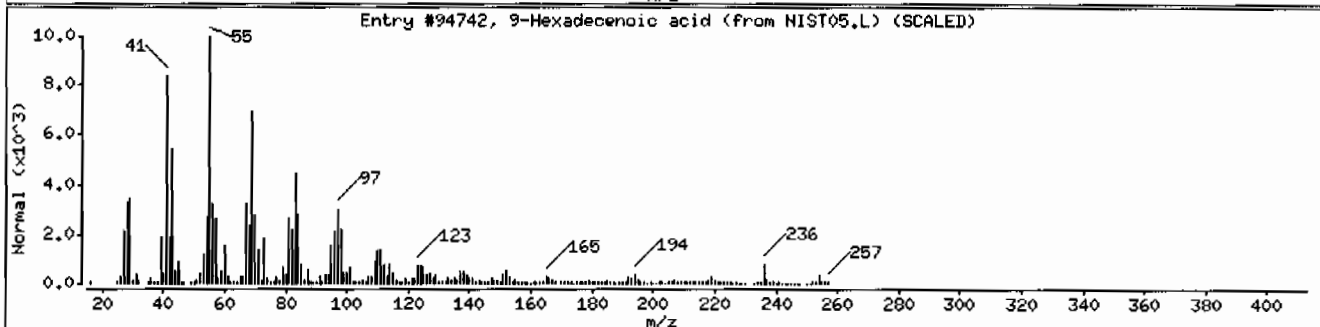
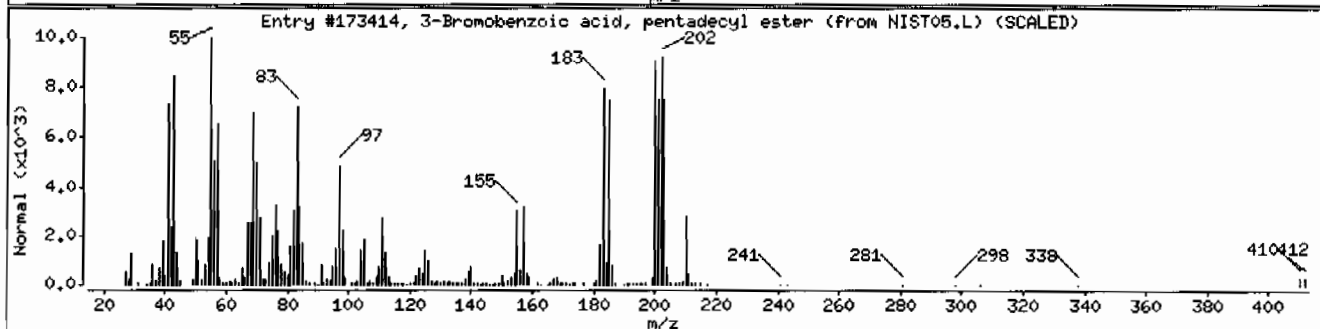
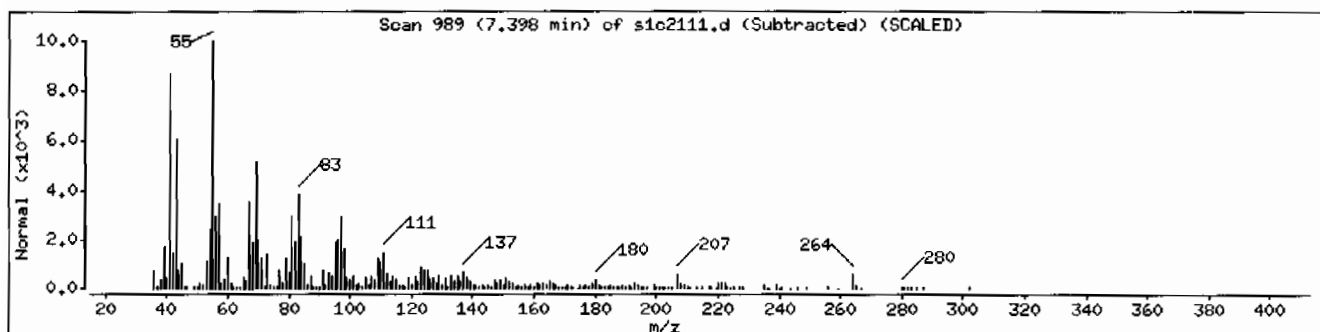
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Bromobenzoic acid, pentadecyl ester	1000281-95-1	NIST05.L	173414	90	C22H35BrO2	410
9-Hexadecenoic acid	2091-29-4	NIST05.L	94742	87	C16H30O2	254
Octadec-9-enoic acid	1000190-13-7	NIST05.L	113356	87	C18H34O2	282



Date: 21-MAR-2010 20:34

Client ID: RE36-10-7418

Instrument: MSD1.i

Sample Info: 1248370003196122811SVMI11LANL

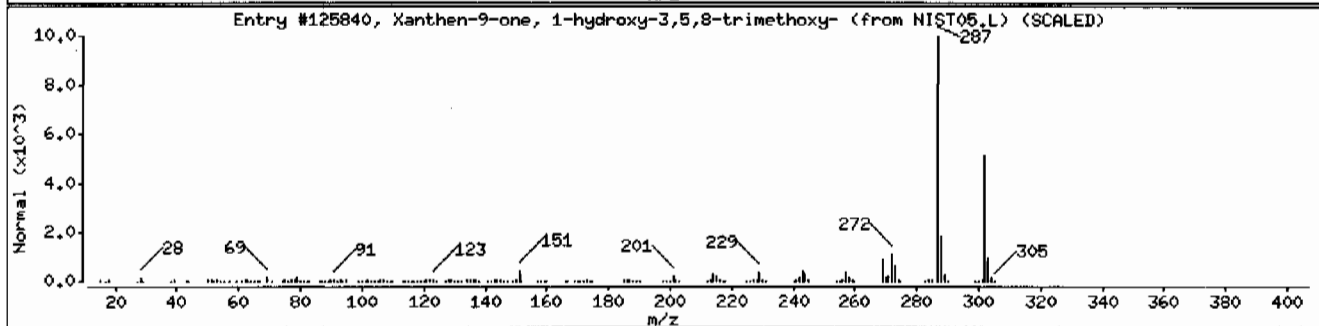
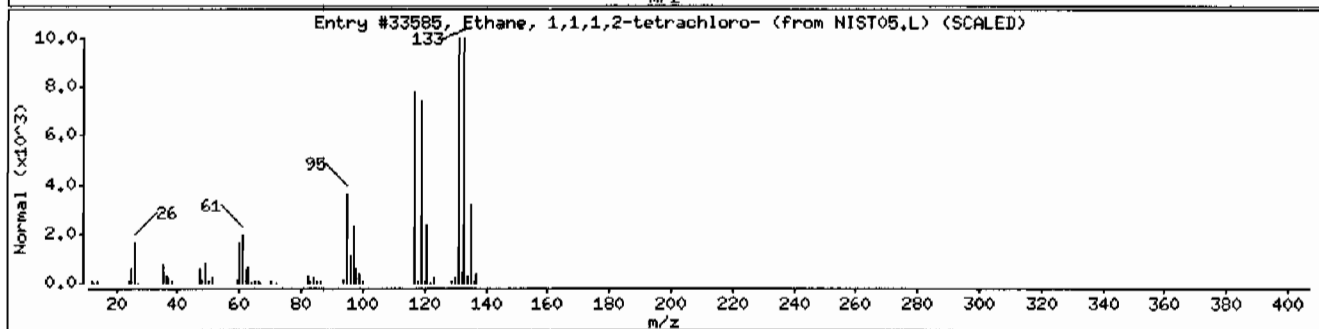
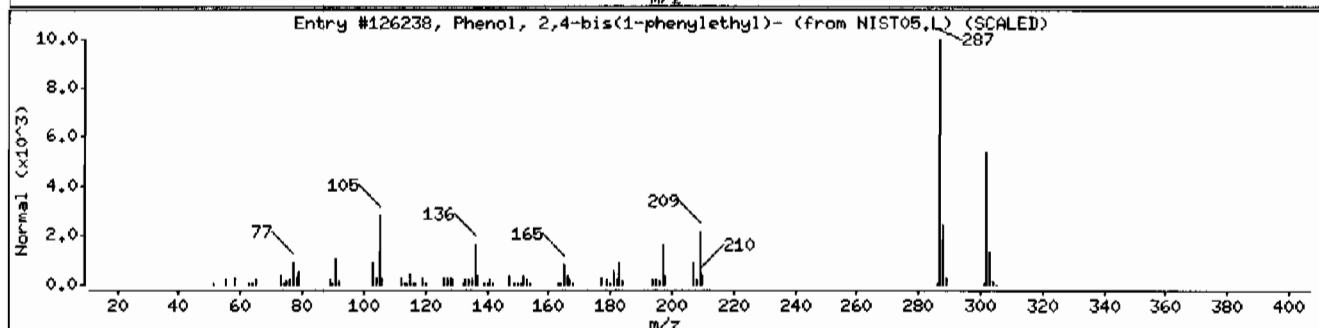
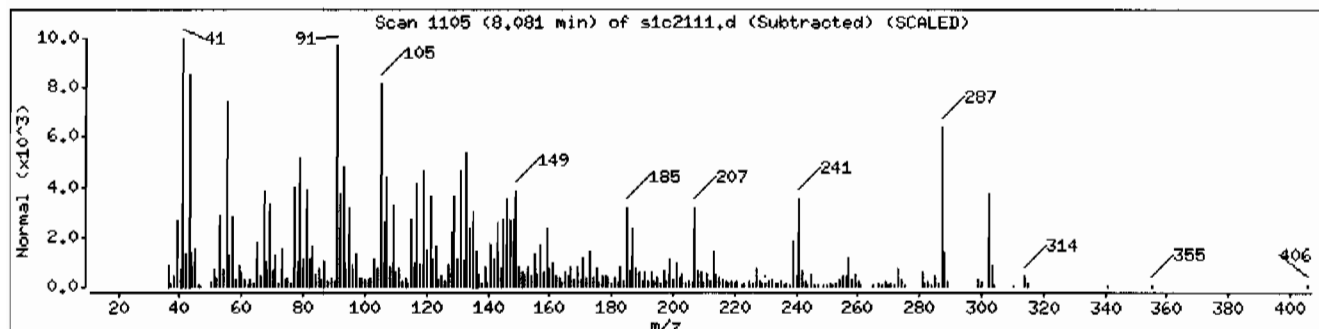
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	40	C22H22O	302
Ethane, 1,1,1,2-tetrachloro-	630-20-6	NIST05.L	33585	35	C2H2Cl4	166
Xanthen-9-one, 1-hydroxy-3,5,8-trimethoxy-	49599-09-9	NIST05.L	125840	25	C16H14O6	302



Date : 21-MAR-2010 20:34

Client ID: RE36-10-7418

Instrument: HSD1.i

Sample Info: 1248370003196122811SVMI11LANL

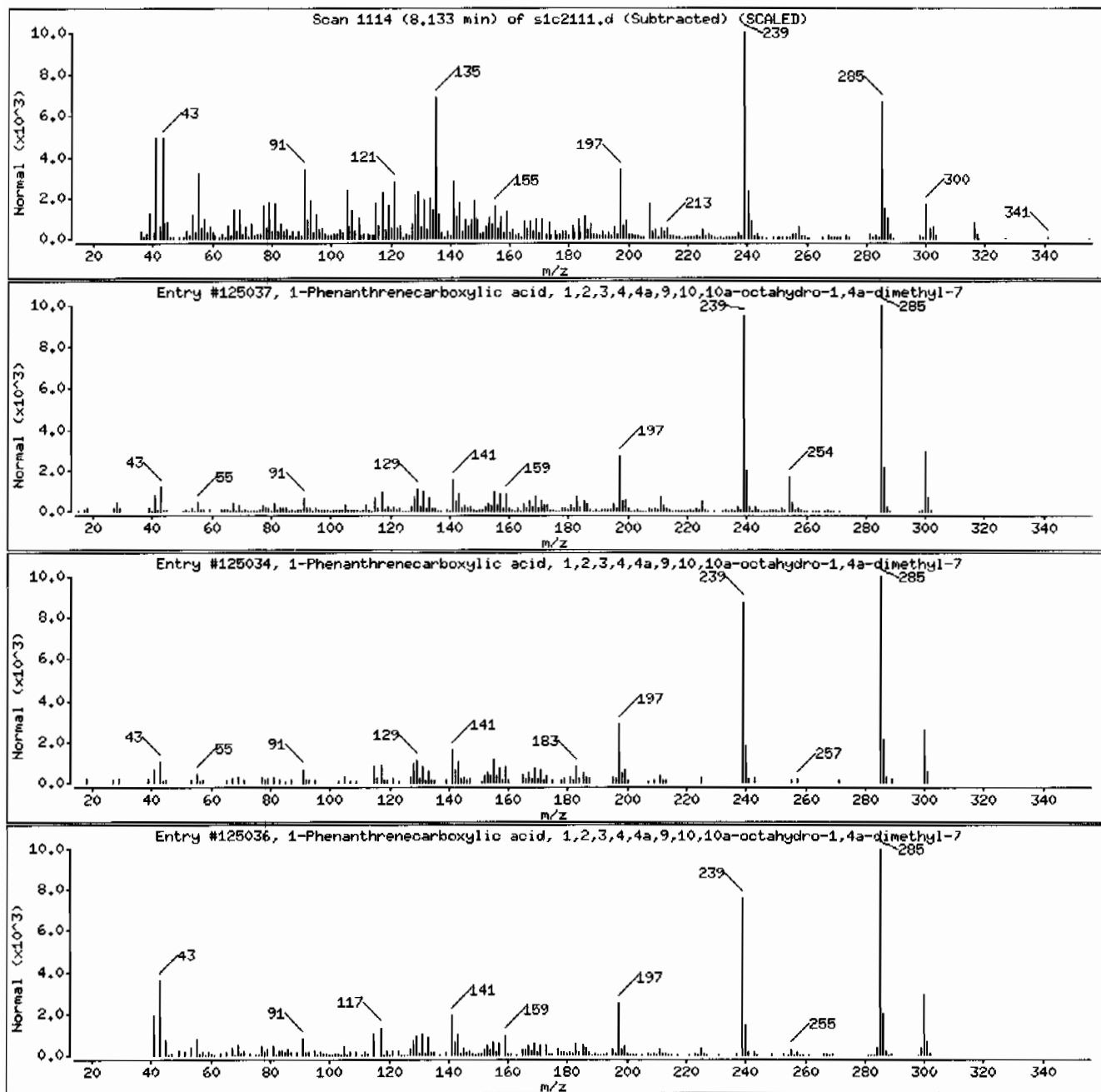
Volume Injected (uL): 0.5

Operator: AMY

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	89	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	86	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	83	C20H28O2	300



Date : 21-MAR-2010 20:34

Client ID: RE36-10-7418

Instrument: MSD1.i

Sample Info: 1248370003196122811(SVM11)LANL

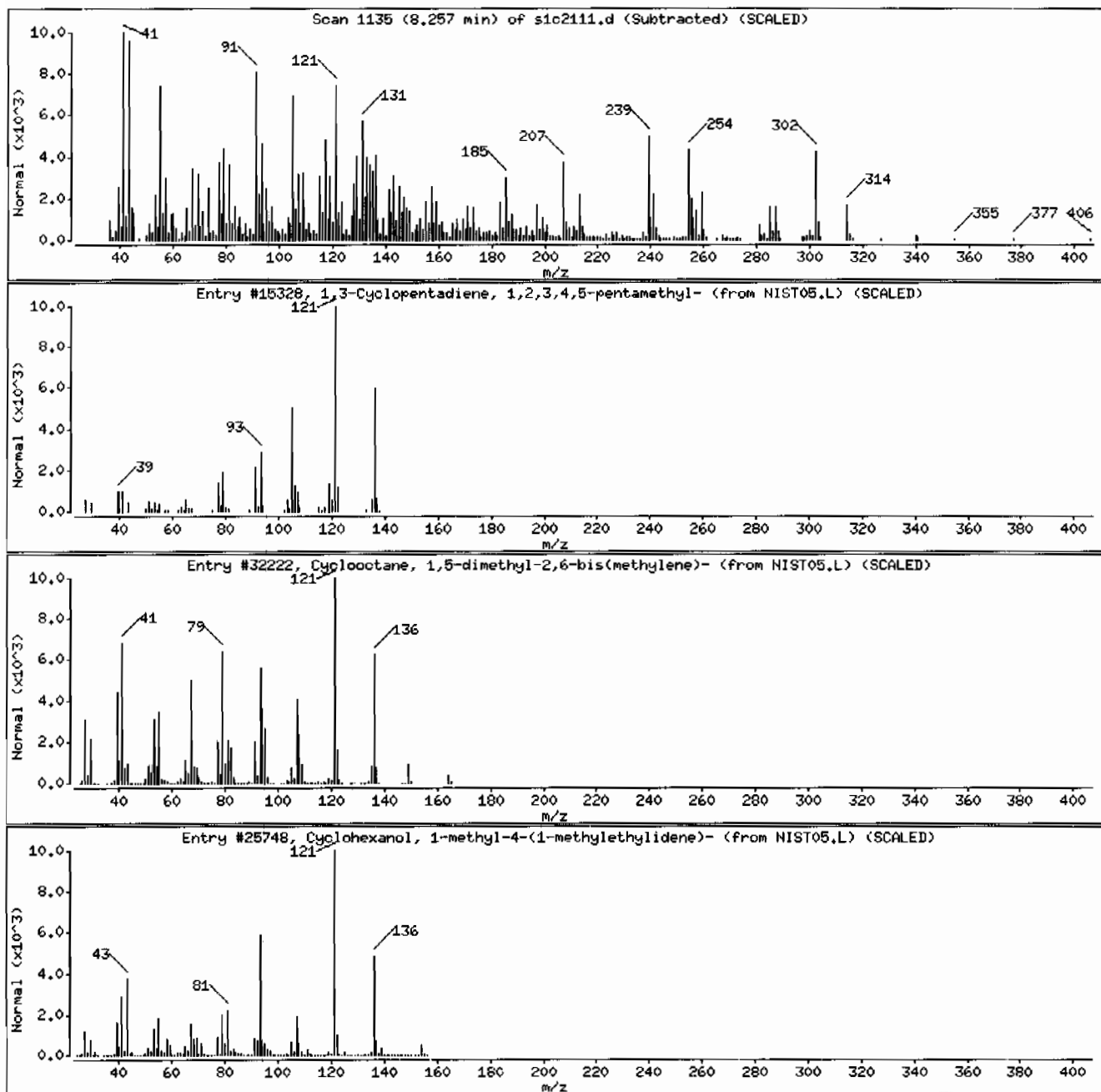
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Cyclopentadiene, 1,2,3,4,5-pentameth	4045-44-7	NIST05.L	15328	35	C10H16	136
Cyclooctane, 1,5-dimethyl-2,6-bis(methyl	74301-13-6	NIST05.L	32222	35	C12H20	164
Cyclohexanol, 1-methyl-4-(1-methylethyl)	586-81-2	NIST05.L	25748	35	C10H18O	154



Date : 21-MAR-2010 20:34

Client ID: RE36-10-7418

Instrument: MSD1.i

Sample Info: 12483700031961228111SVMI11LANL

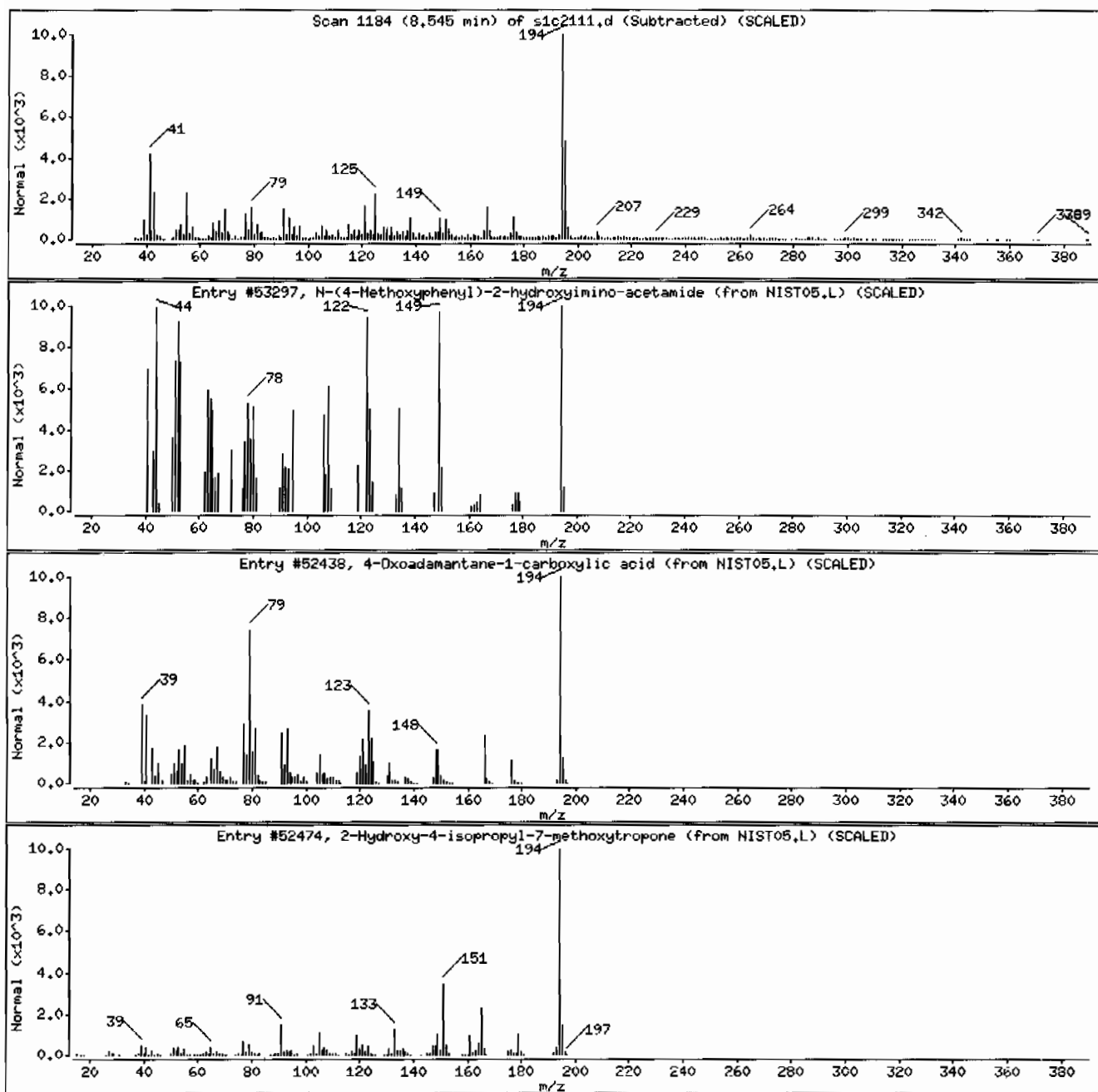
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
N-(4-Methoxyphenyl)-2-hydroxyimino-aceta	1000143-61-3	NIST05.L	53297	95	C9H10N2O3	194
4-Oxadamantane-1-carboxylic acid	1000302-82-2	NIST05.L	52438	47	C11H14O3	194
2-Hydroxy-4-isopropyl-7-methoxytropone	89647-85-8	NIST05.L	52474	43	C11H14O3	194



Date : 21-MAR-2010 20:34

Client ID: RE36-10-7418

Instrument: MSD1.i

Sample Info: 1248370003196122811SVH111LANL

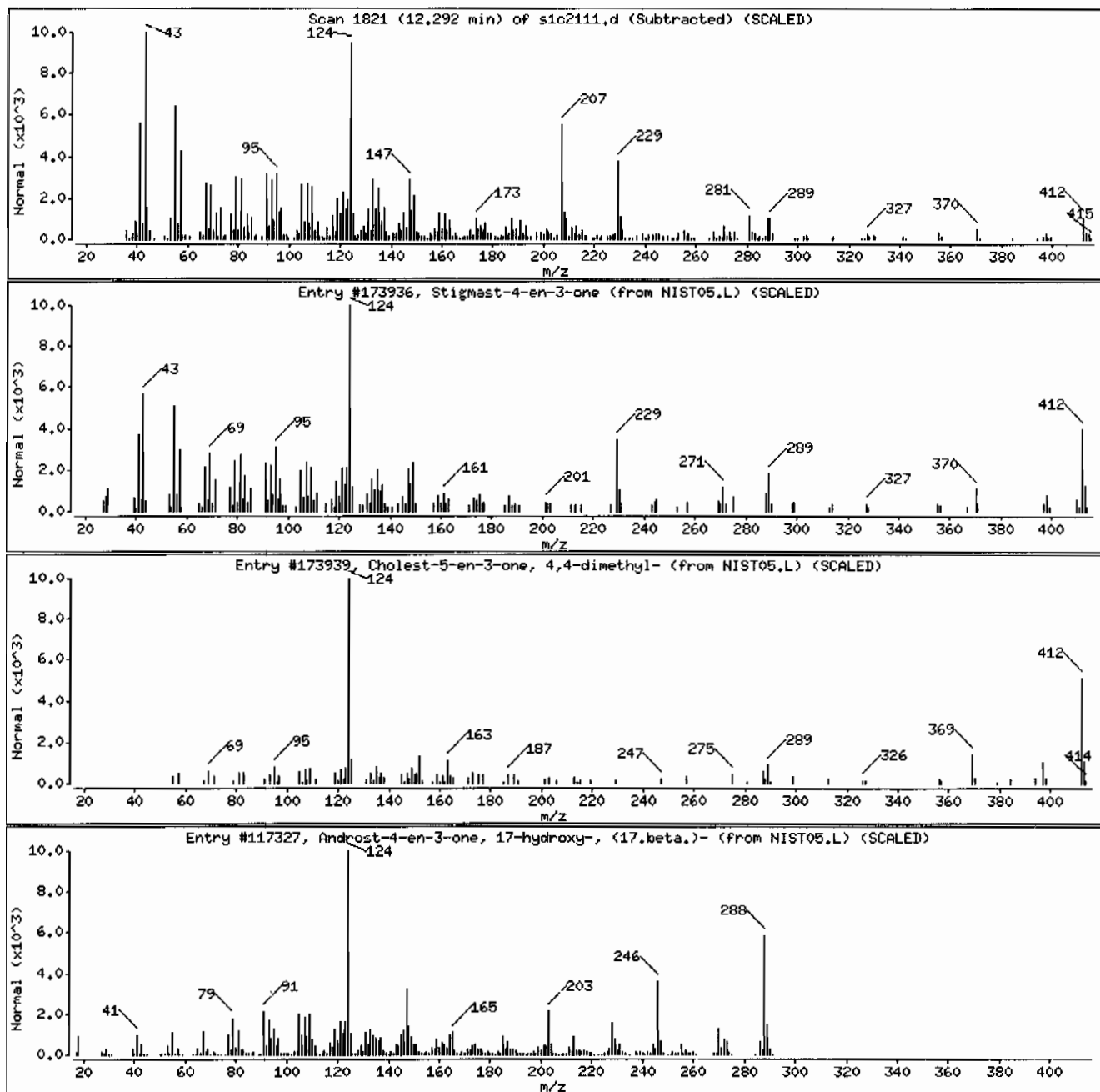
Volume Injected (uL): 0.5

Operator: AMY

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	91	C29H48O	412
Cholest-5-en-3-one, 4,4-dimethyl-	2220-42-0	NIST05.L	173939	64	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17 β).	58-22-0	NIST05.L	117327	41	C19H28O2	288



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

SDG Number: 10-2150
Lab Sample ID: 248370005

Client ID: RE36-10-7419
Batch ID: 961228
Run Date: 03/21/2010 22:09
Prep Date: 03/05/2010 11:30
Data File: s1c2115.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 16.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	401	ug/kg	80.3	401
108-95-2	Phenol	U	401	ug/kg	80.3	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.3	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.3	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.3	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.3	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene	J	21.2	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.3	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.3	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.3	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.3	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.3	401
95-48-7	o-Cresol	U	401	ug/kg	80.3	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.3	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.3	401
78-59-1	Isophorone	U	401	ug/kg	80.3	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.3	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.3	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.3	401
65-85-0	Benzoic acid	U	803	ug/kg	201	803
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.3	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.3	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.03	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.3	401
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.3	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.3	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline	U	401	ug/kg	80.3	401
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	401	ug/kg	80.3	401

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

SDG Number: 10-2150
Lab Sample ID: 248370005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 16.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7419
Batch ID: 961228
Run Date: 03/21/2010 22:09
Prep Date: 03/05/2010 11:30
Data File: s1c2115.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	401	ug/kg	80.3	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	803	ug/kg	153	803
132-64-9	Dibenzofuran	U	401	ug/kg	80.3	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.3	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.3	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.3	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.3	401
122-66-7	Azobenzene	U	401	ug/kg	80.3	401
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.3	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.3	401
85-01-8	Phenanthrene	J	16.3	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.03	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.3	401
206-44-0	Fluoranthene	J	25.8	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.3	401
56-55-3	Benzo(a)anthracene	J	17.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	U	40.1	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.3	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.3	401
205-99-2	Benzo(b)fluoranthene	J	17.4	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	U	40.1	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.1	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	U	40.1	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.3	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	194	ug/kg		JA
	Unknown	7.32	195	ug/kg		J

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370005	Date Received: 03/02/2010 08:50	%Moisture: 16.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7419	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 22:09	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2115.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQI/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	205	ug/kg	93	NJ
	Unknown	7.9	176	ug/kg		J
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	8.86	225	ug/kg	98	NJ
	Unknown	9.06	333	ug/kg		J
	Unknown	9.59	190	ug/kg		J
112-95-8	Eicosane	9.78	248	ug/kg	98	NJ
	Unknown	10.2	272	ug/kg		J
	Unknown	10.4	306	ug/kg		J
	Unknown	11.89	182	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	432	ug/kg	83	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2115.d
 Lab Smp Id: 248370005 Client Smp ID: RE36-10-7419
 Inj Date : 21-MAR-2010 22:09
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370005|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 15
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	16.94620	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng/ul)	(ug/Kg)
=====	----	--	-----	-----	-----	-----	-----
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	446120	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1756753	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	937672	40.0000	
* 67 Phenanthrene-d10	188	6.704	6.710	(1.000)	1639189	40.0000	
* 91 Chrysene-d12	240	8.292	8.292	(1.000)	1354115	40.0000	
* 98 Perylene-d12	264	9.522	9.522	(1.000)	974997	40.0000	
\$ 3 2-Fluorophenol	112	2.828	2.822	(0.783)	684751	59.6072	2390
\$ 5 Phenol-d5	99	3.346	3.346	(0.927)	869173	62.1260	2490
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	376821	34.9727	1400
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	785228	30.3221	1220
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	169005	54.9763	2210
\$ 81 p-Terphenyl-d14	244	7.628	7.622	(0.920)	792619	35.1097	1410

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	(ng/ul)	(ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====	=====	=====
79 Pyrene	202	7.563	7.569	(0.912)	20310	0.52856	21.2 (a)		
68 Phenanthrene	178	6.716	6.722	(1.002)	14352	0.40522	16.3 (a)		
76 Fluoranthene	202	7.428	7.434	(1.108)	23431	0.64370	25.8 (a)		
89 Benzo (a) anthracene	228	8.281	8.281	(0.999)	13529	0.42504	17.0 (a)		
95 Benzo (b) fluoranthene	252	9.128	9.133	(0.959)	11633	0.43385	17.4 (a)		

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: slc2115.d

Report Date: 03/22/2010 11:54

Lab. ID: 248370005

SampleType: SAMPLE

Injection Date: 21-MAR-2010 22:09

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370005|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	42183	3.35	3.40	80-120	100	()
93	8919	3.39	3.40	233-293	21	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	53399	3.97	3.86	80-120	100	(T)
42	36093	3.97	3.86	48-108	68	(T)

41	m-Nitroaniline	CAS#: 99-09-2				
138	199	5.70	5.66	80-120	100	()
92	4765	5.70	5.66	71-131	2390	(Q)
108	17525	5.70	5.66	0- 40	8787	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	168456	5.70	5.49	80-120	100	(T)
164	937672	5.70	5.49	0- 40	557	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	119241	5.70	5.54	80-120	100	(T)
63	1805	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	119241	5.70	5.83	80-120	100	(T)
89	1554	5.70	5.82	38- 98	1	(QT)
63	1805	5.70	5.82	20- 80	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	13024	6.25	6.09	80-120	100	(T)
165	13723	6.25	6.09	61-121	105	(T)
167	4792	6.25	6.09	0- 43	37	(T)

56 p-Nitroaniline		CAS#: 100-01-6				
138	109	6.14	6.09	80-120	100	()
108	261	6.12	6.09	29- 89	239	(Q)
92	435	6.06	6.09	14- 74	396	(Q)

68 Phenanthrene		CAS#: 85-01-8				
178	14352	6.72	6.72	80-120	100	()
179	3638	6.72	6.72	0- 45	25	()
176	2874	6.72	6.72	0- 48	20	()

69 Anthracene		CAS#: 120-12-7				
178	14352	6.72	6.75	80-120	100	()
179	3638	6.72	6.75	0- 45	25	()
176	2874	6.72	6.75	0- 48	20	()

76 Fluoranthene		CAS#: 206-44-0				
202	23431	7.43	7.43	80-120	100	()
203	3899	7.43	7.43	0- 47	17	()
101	3933	7.43	7.43	0- 45	17	()

79 Pyrene		CAS#: 129-00-0				
202	20310	7.56	7.57	80-120	100	()
200	4229	7.56	7.57	0- 49	21	()
101	4017	7.56	7.56	0- 49	20	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	13529	8.28	8.28	80-120	100	()
226	2750	8.28	8.28	0- 55	20	()
229	3796	8.28	8.28	0- 49	28	()

92 Chrysene		CAS#: 218-01-9				
228	13529	8.28	8.31	80-120	100	()
229	3796	8.28	8.31	0- 49	28	()
226	2754	8.28	8.31	0- 58	20	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	11633	9.13	9.13	80-120	100	()
253	1434	9.13	9.13	0- 52	12	()
125	2634	9.13	9.13	0- 46	23	()

96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	11678	9.13	9.16	80-120	100	()
253	1434	9.13	9.16	0- 51	12	()
125	3009	9.13	9.16	0- 45	26	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2115.d
Lab Smp Id: 248370005 Client Smp ID: RE36-10-7419
Inj Date : 21-MAR-2010 22:09
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370005|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.00000	weight of sample
M	16.94620	% moisture

Cpnd Variable

Local Compound Variable

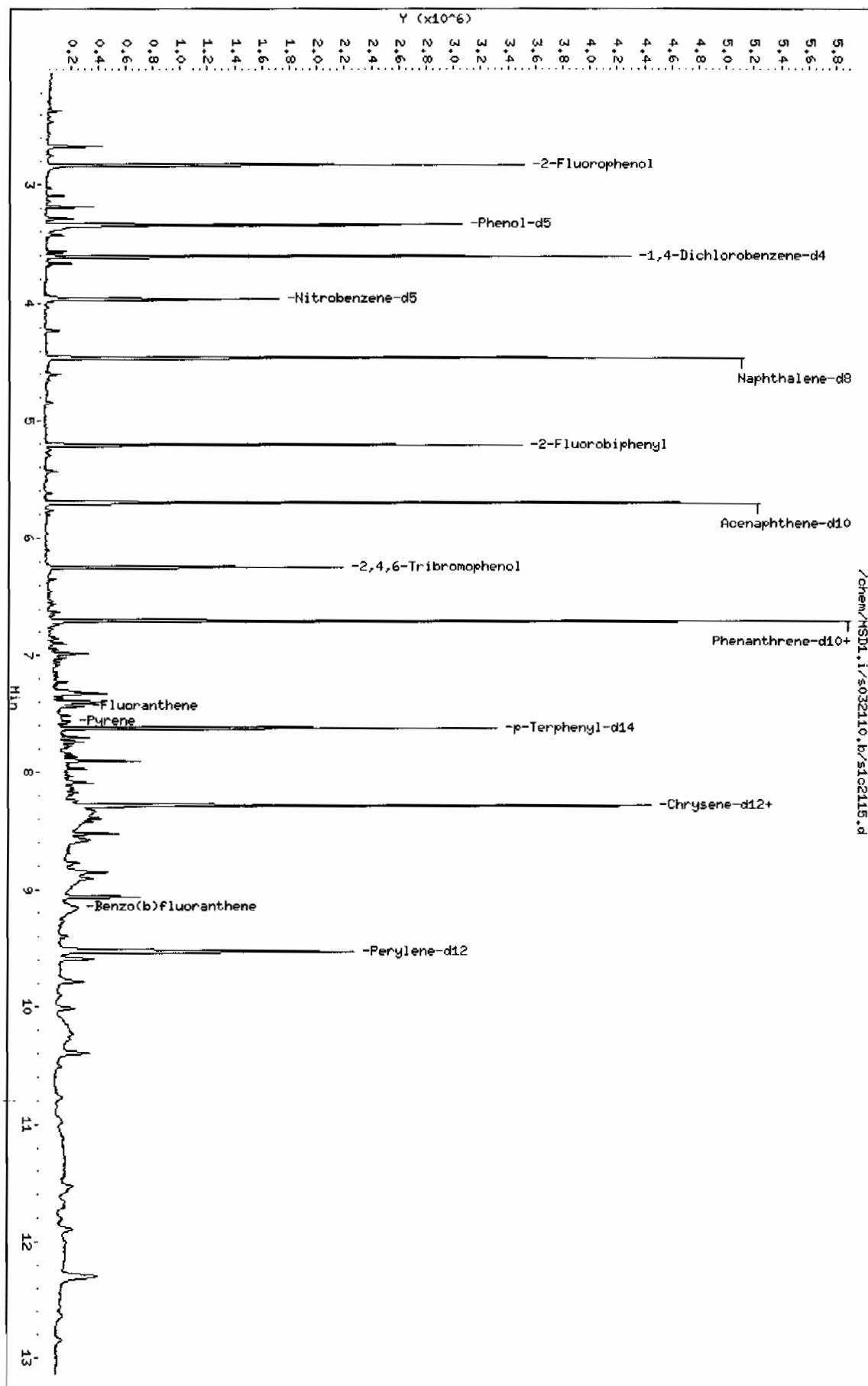
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2749551	40.000
* 67 Phenanthrene-d10	6.704	4125992	40.000
* 91 Chrysene-d12	8.292	3846860	40.000
* 98 Perylene-d12	9.522	2823582	40.000

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/b1)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.669	331992	4.82976529	194	0		0	10
Unknown					CAS #:		
7.322	501286	4.85978397	195	0		0	67
2-Methyl-2,2-3,13-octadecadienol					CAS #: 1000130-90-5		
7.398	527816	5.11698125	205	93	NIST05.L	112083	67
Unknown					CAS #:		
7.904	422919	4.39754649	176	0		0	91
2,6,10,14,18,22-Tetracosahexaene, 2,6,10					CAS #: 111-02-4		
8.857	539804	5.61293001	225	98	NIST05.L	173571	91
Unknown					CAS #:		
9.063	586204	8.30440607	333	0		0	98
Unknown					CAS #:		
9.586	333995	4.73150311	190	0		0	98
Eicosane					CAS #: 112-95-8		
9.781	435795	6.17364851	248	98	NIST05.L	113492	98
Unknown					CAS #:		
10.198	477945	6.77076239	272	0		0	98
Unknown					CAS #:		
10.398	538959	7.63510674	306	0		0	98
Unknown					CAS #:		
11.892	320211	4.53624321	182	0		0	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
12.298	759568	10.7603418	432	83	NIST05.L	173936	98

Data File: /chem/HSD1.i/s032110.b/s1c2115.d
 Date : 21-Mar-2010 22:09
 Client ID: RE36-10-7419
 Sample Info: 1248370005196122811|SVH111LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: HSD1.i
 Operator: AMY
 Column diameter: 0.20



Date: 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 1248370005196122811ISVH11ILANL

Volume Injected (uL): 0.5

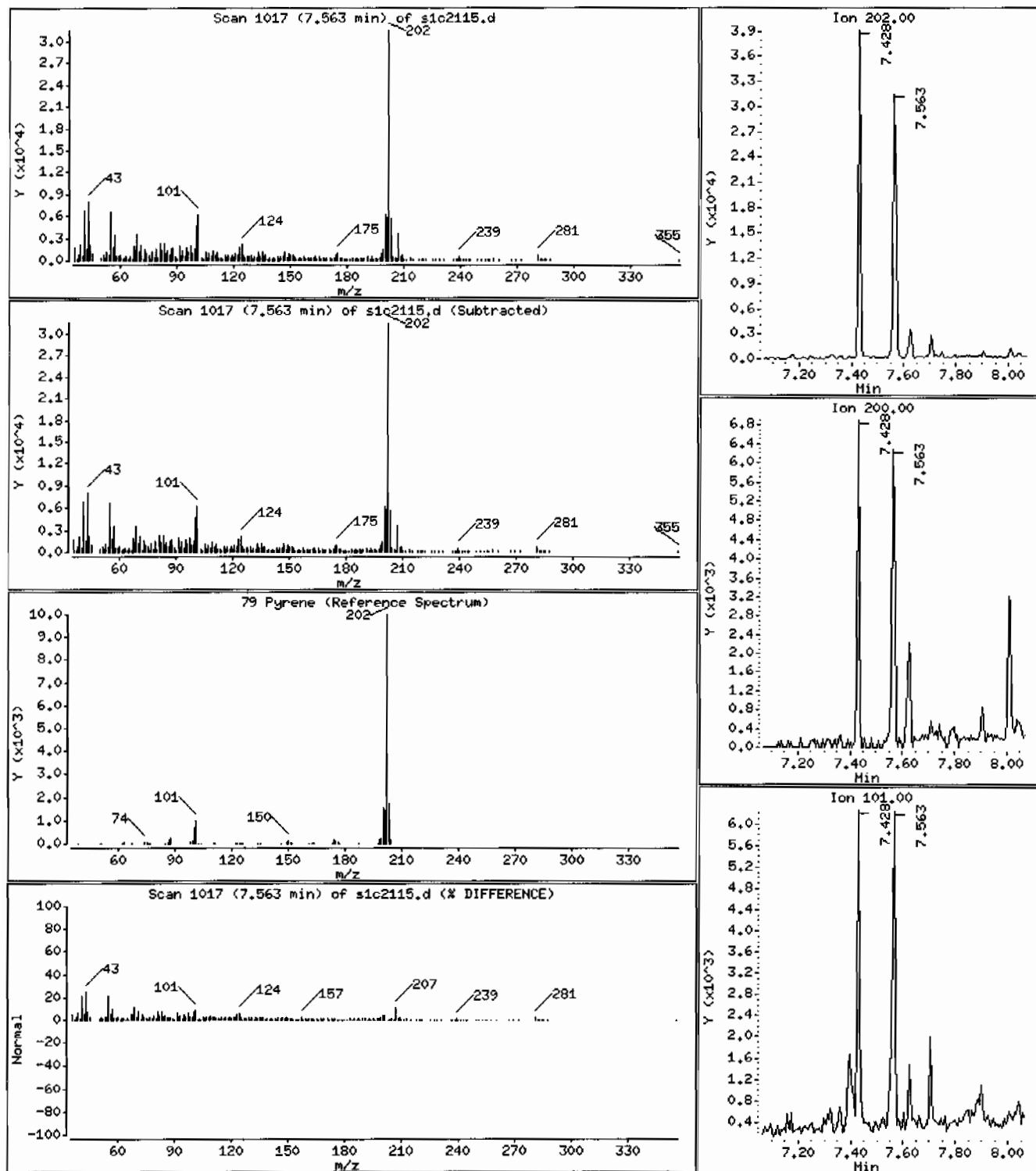
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 21.2 ug/Kg



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: HSD1.i

Sample Info: 12483700051961228111SVH111LANL

Volume Injected (uL): 0.5

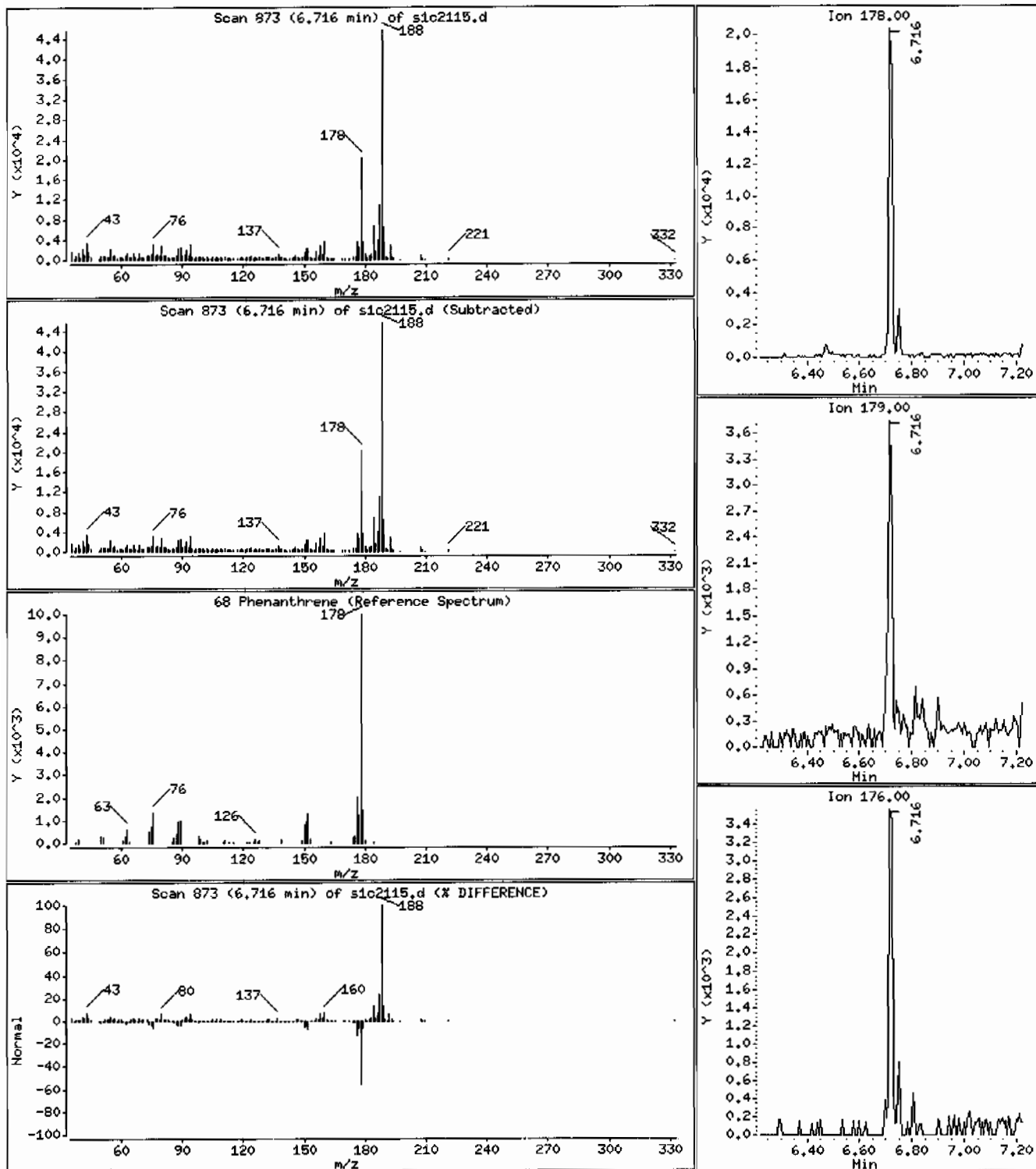
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 16.3 ug/Kg



Date: 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 12483700051961228111SVM111LANL

Volume Injected (uL): 0.5

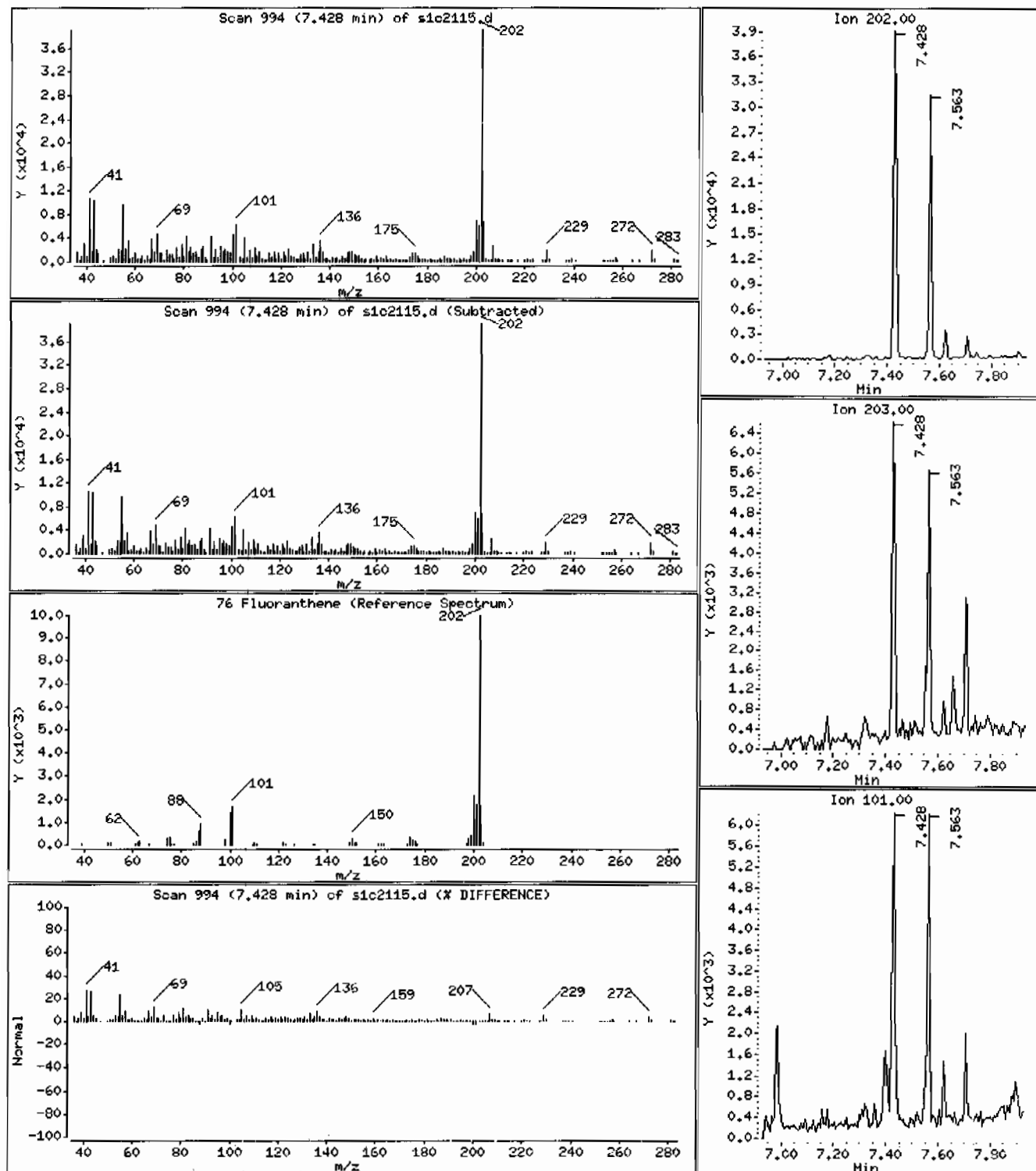
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 25.8 ug/Kg



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 1248370005196122811SVH111LANL

Volume Injected (ul): 0.5

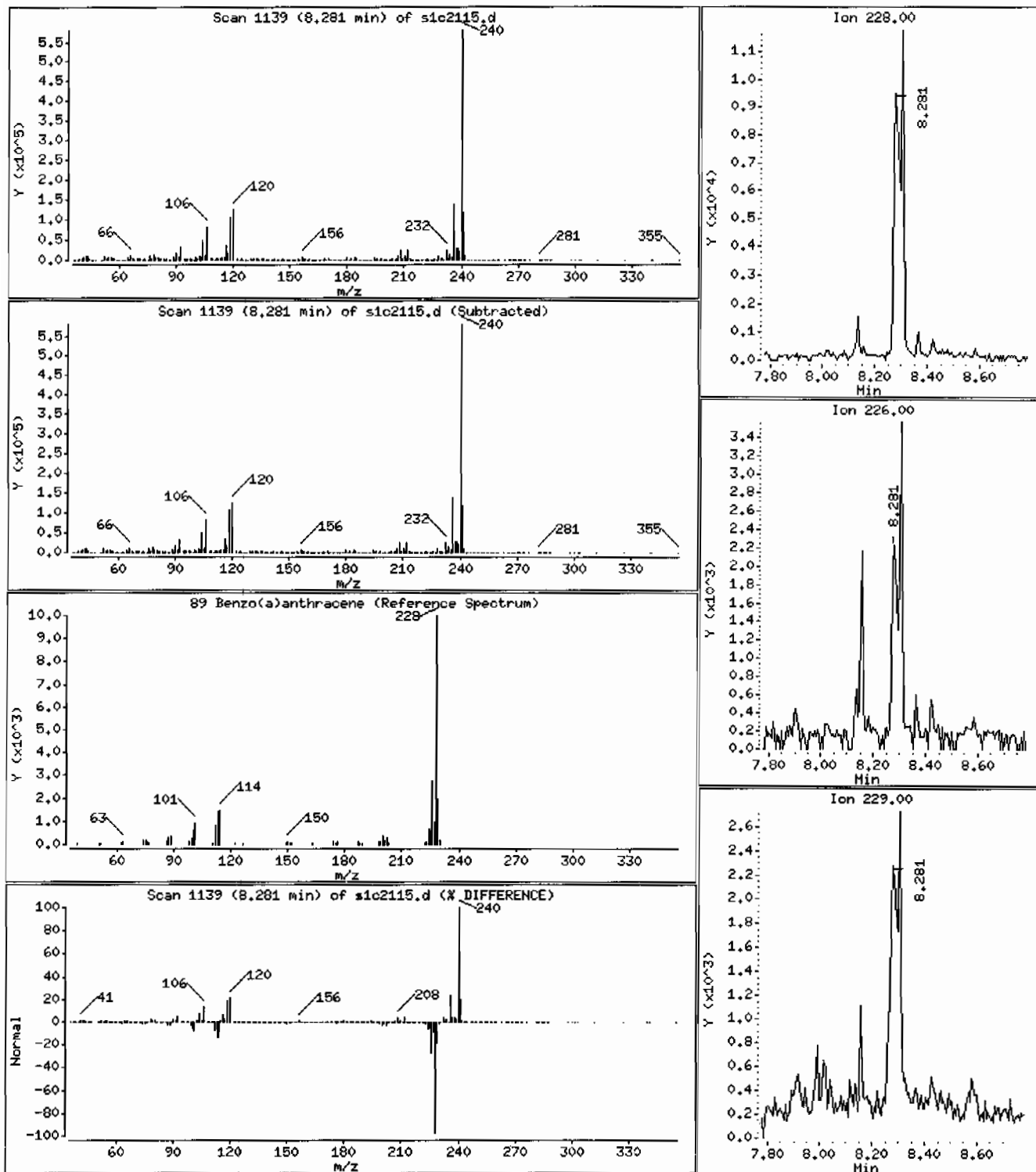
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 17.0 ug/Kg



Date: 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 12483700051961228111SVMI11LANL

Volume Injected (uL): 0.5

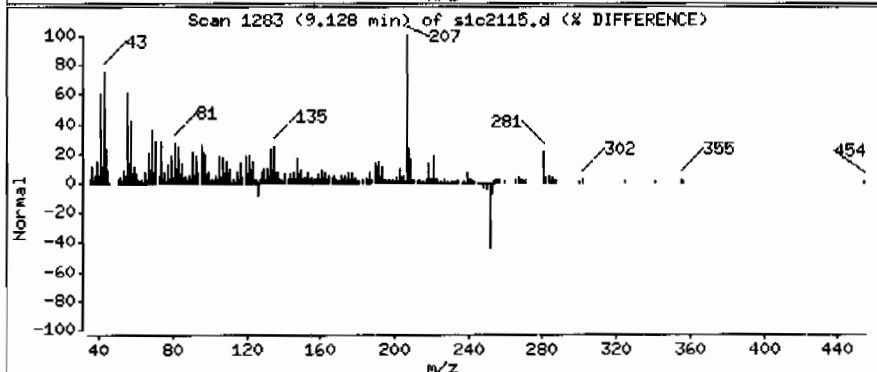
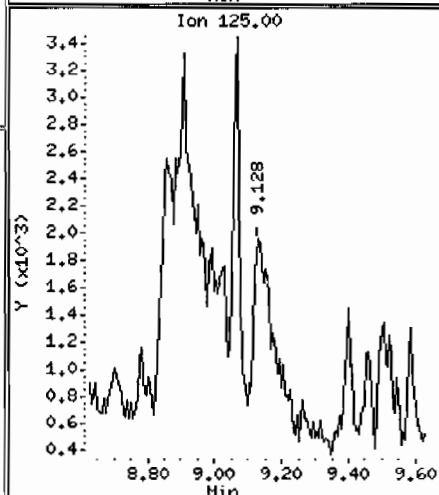
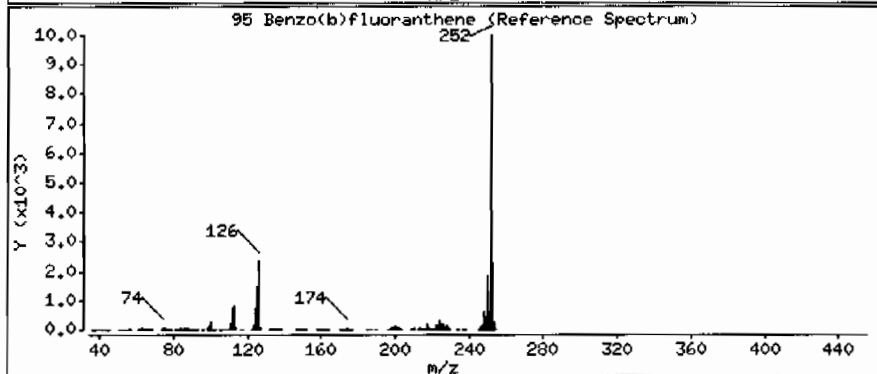
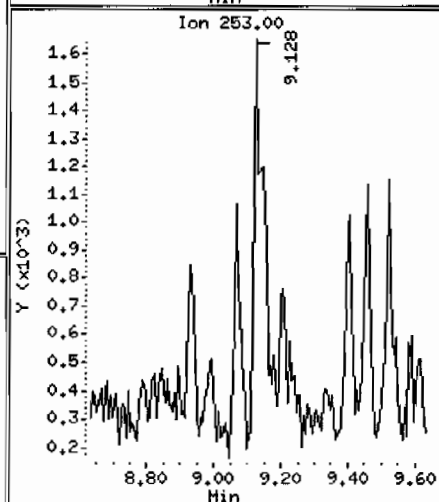
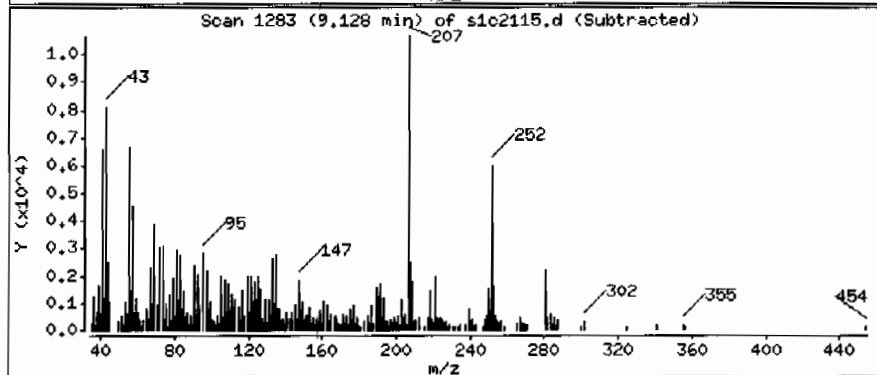
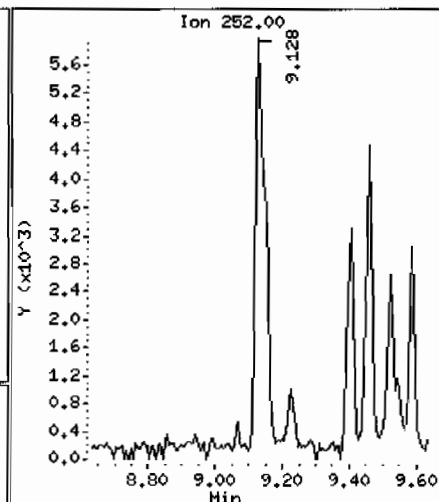
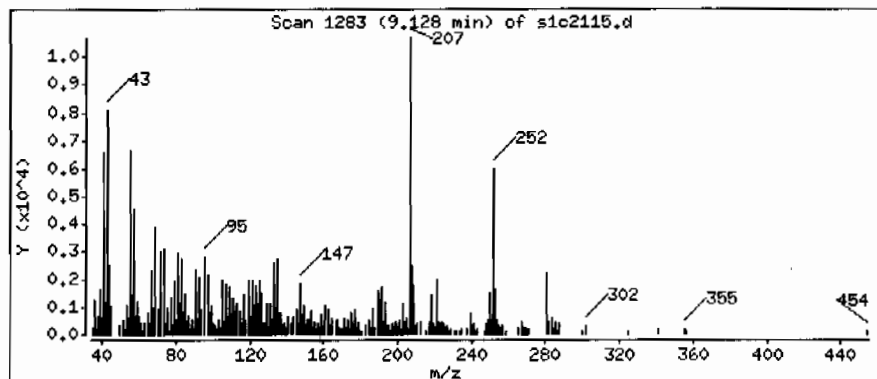
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 17.4 ug/Kg



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 12483700051961228111SVMI11LANL

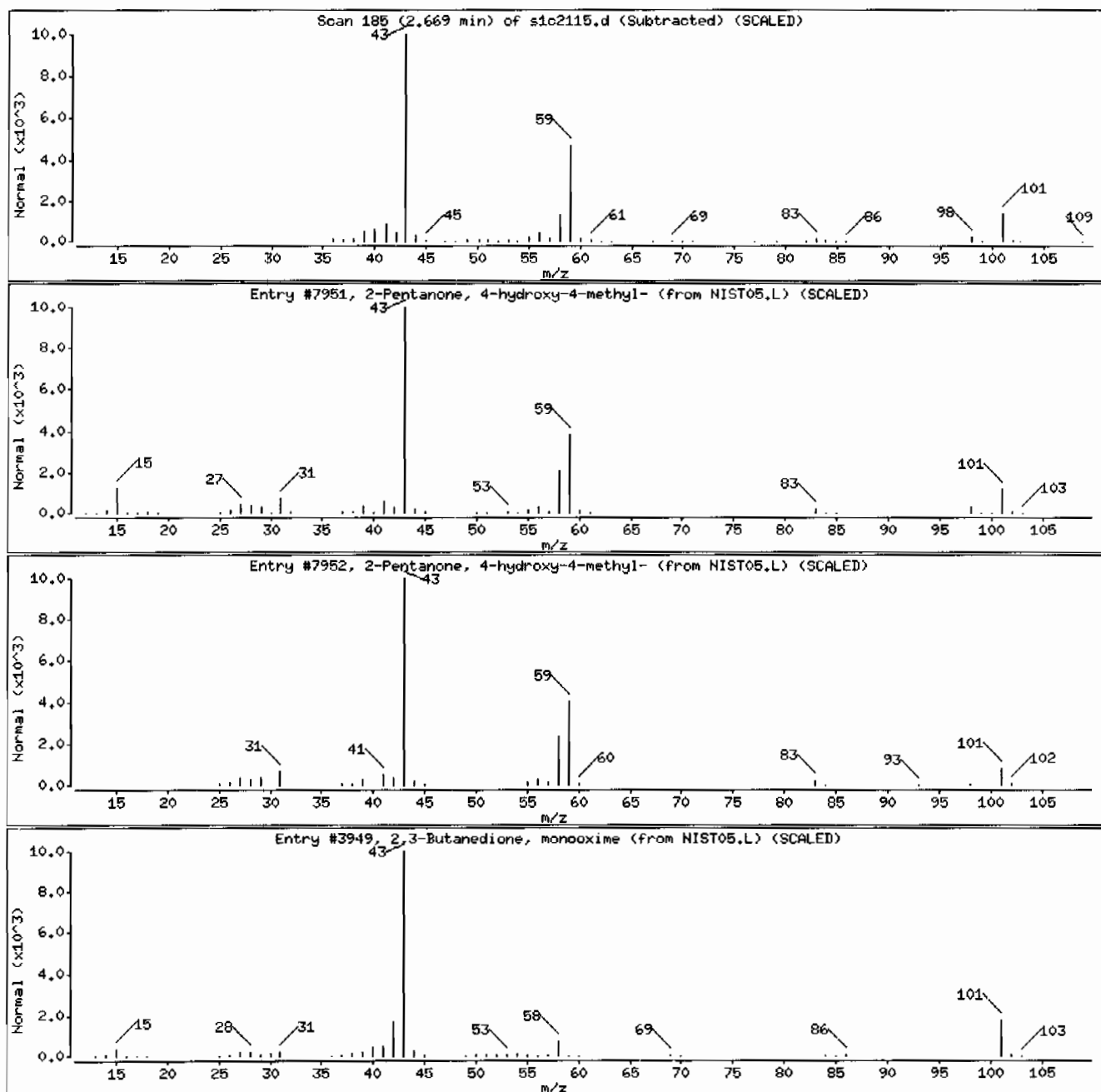
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: I248370005I961228I1ISVM11ILANL

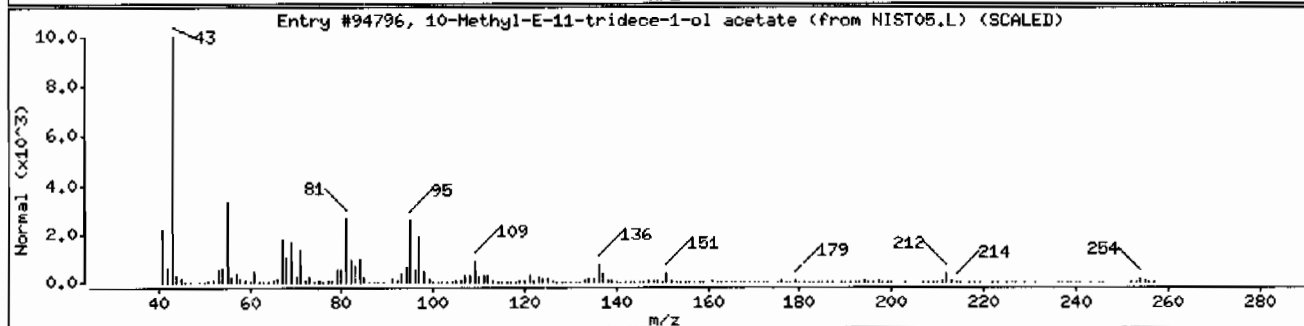
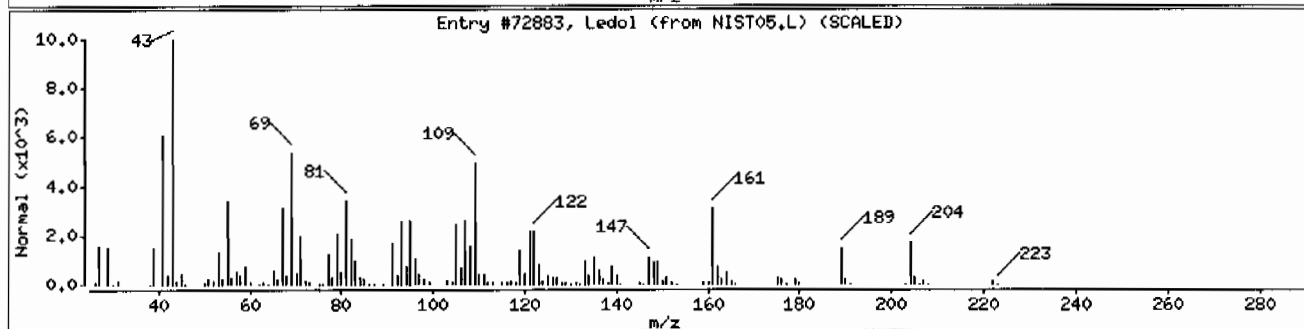
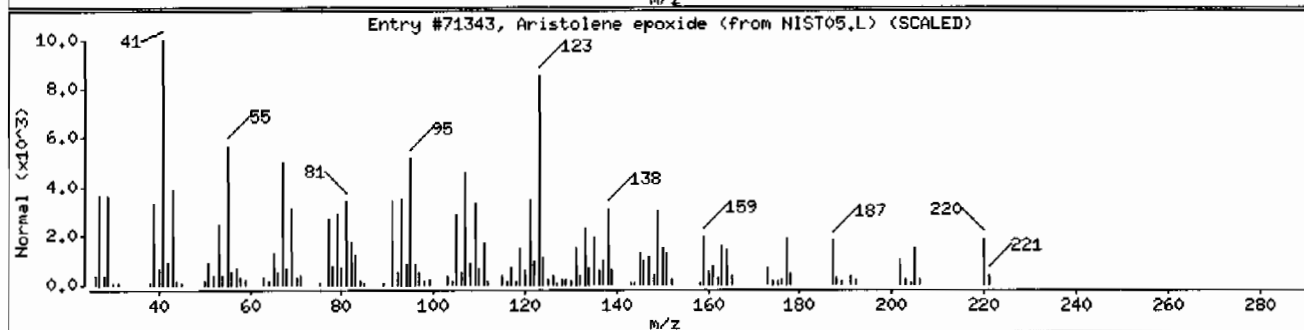
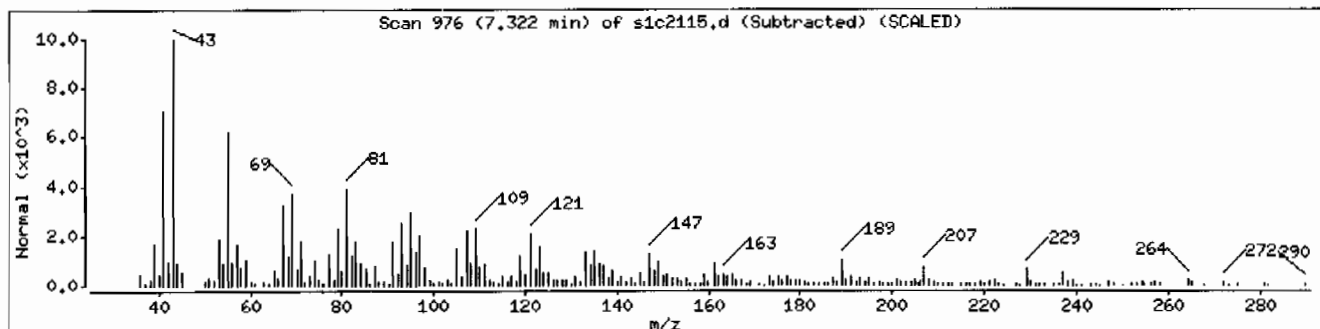
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Aristolene epoxide	1000151-48-9	NIST05.L	71343	78	C15H24O	220
Ledol	577-27-5	NIST05.L	72883	78	C15H26O	222
10-Methyl-E-11-tridece-1-ol acetate	1000130-97-3	NIST05.L	94796	60	C16H30O2	254



Date: 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 1248370005196122811SVH111LANL

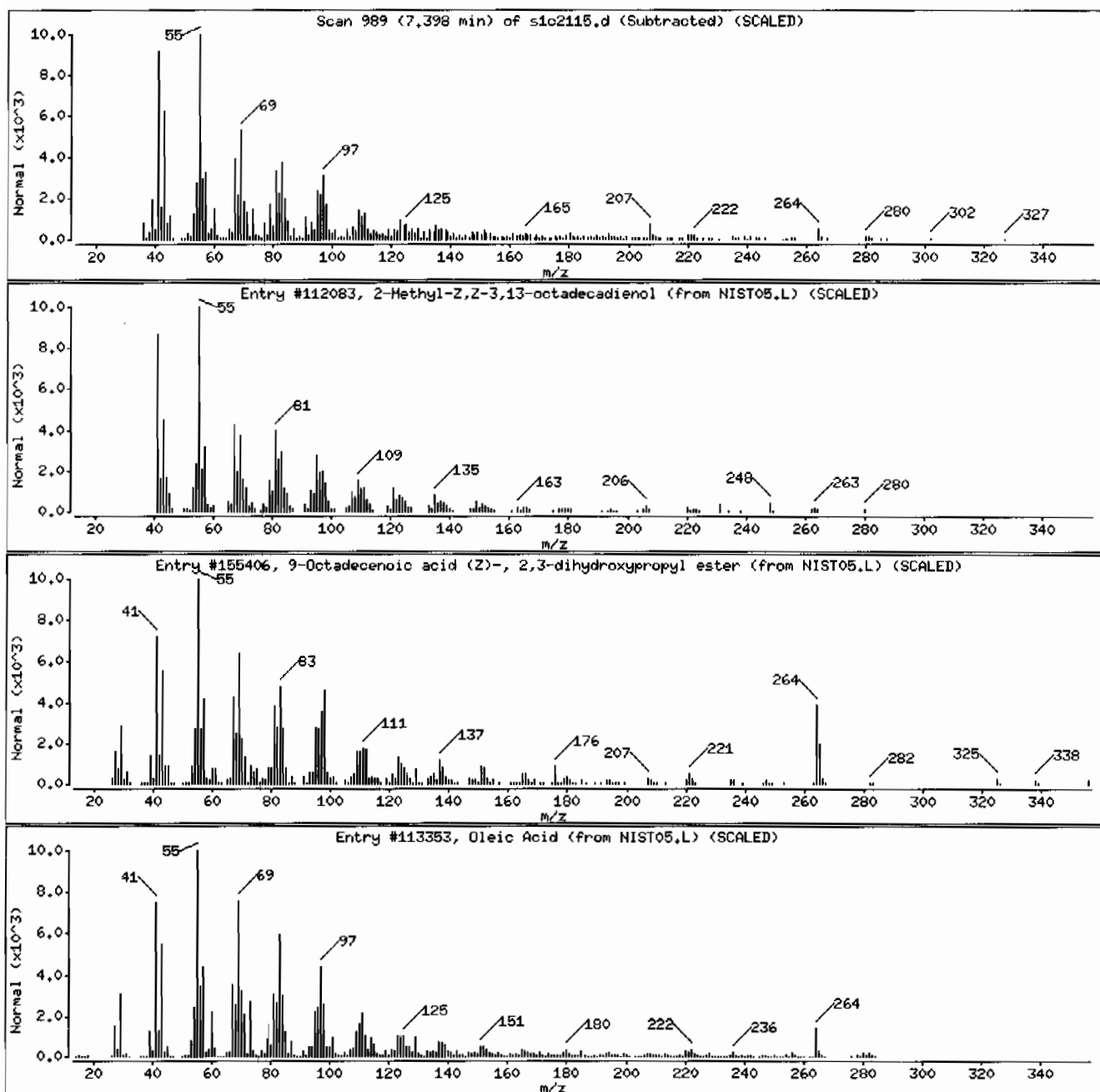
Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Methyl-Z,Z-3,13-octadecadienol	1000130-90-5	NIST05.L	112083	93	C19H36O	280
9-Octadecenoic acid (Z)-, 2,3-dihydroxypropyl ester	111-03-5	NIST05.L	155406	91	C21H40O4	356
Oleic Acid	112-80-1	NIST05.L	113353	87	C18H34O2	282



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 1248370005196122811SVMI1/LANL

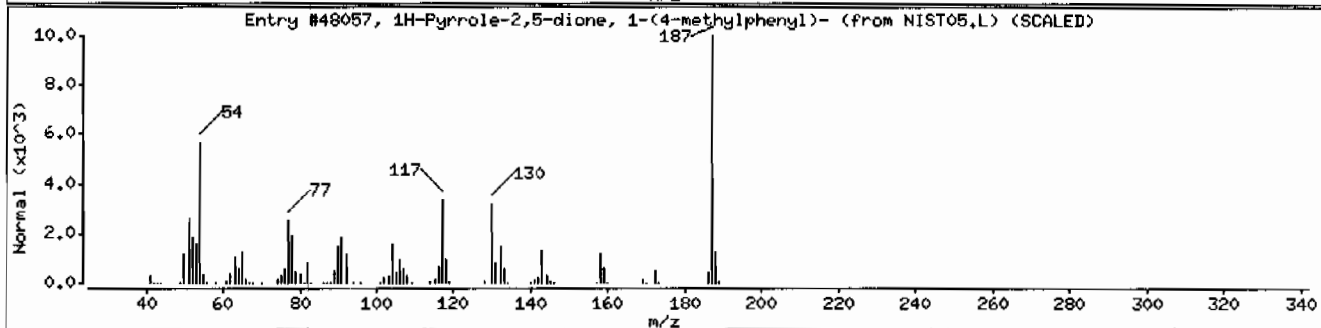
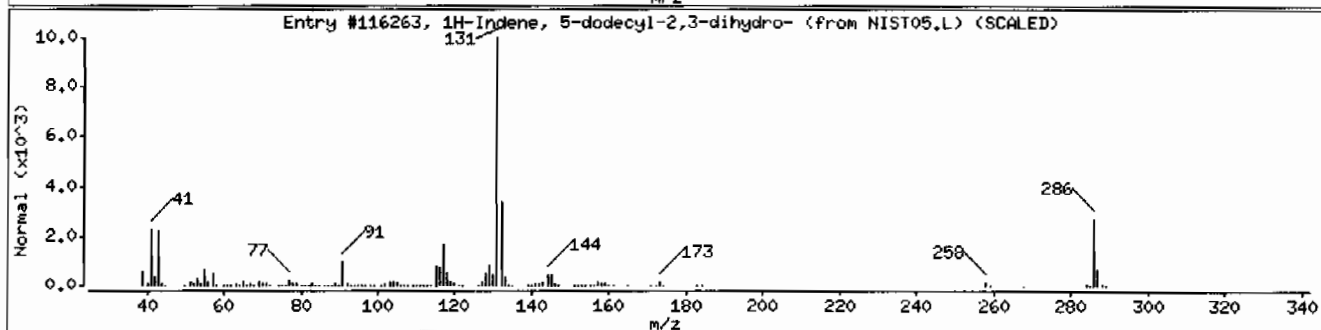
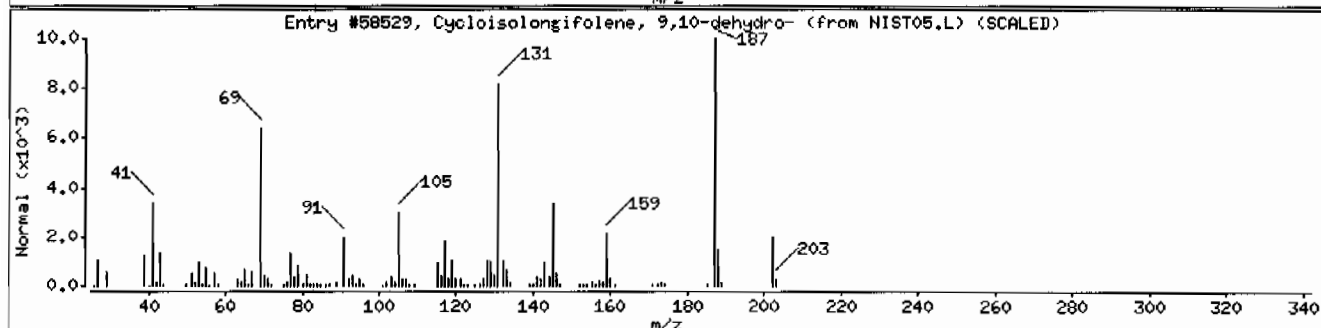
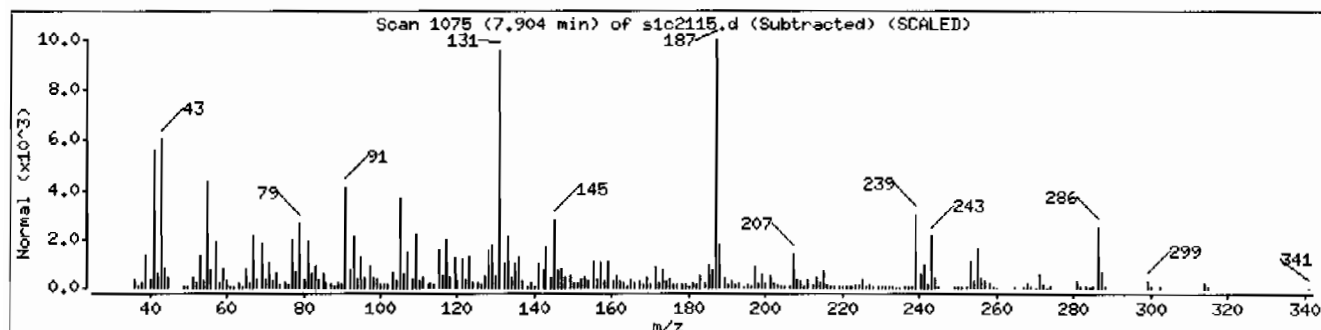
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cycloisolongifolene, 9,10-dehydro-	1000156-81-6	NIST05.L	58529	62	C15H22	202
1H-Indene, 5-dodecyl-2,3-dihydro-	55256-23-0	NIST05.L	116263	42	C21H34	286
1H-Pyrrole-2,5-dione, 1-(4-methylphenyl)	1631-28-3	NIST05.L	48057	25	C11H9NO2	187



Date: 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: HSD1.i

Sample Info: 1248370005196122811SVH111LANL

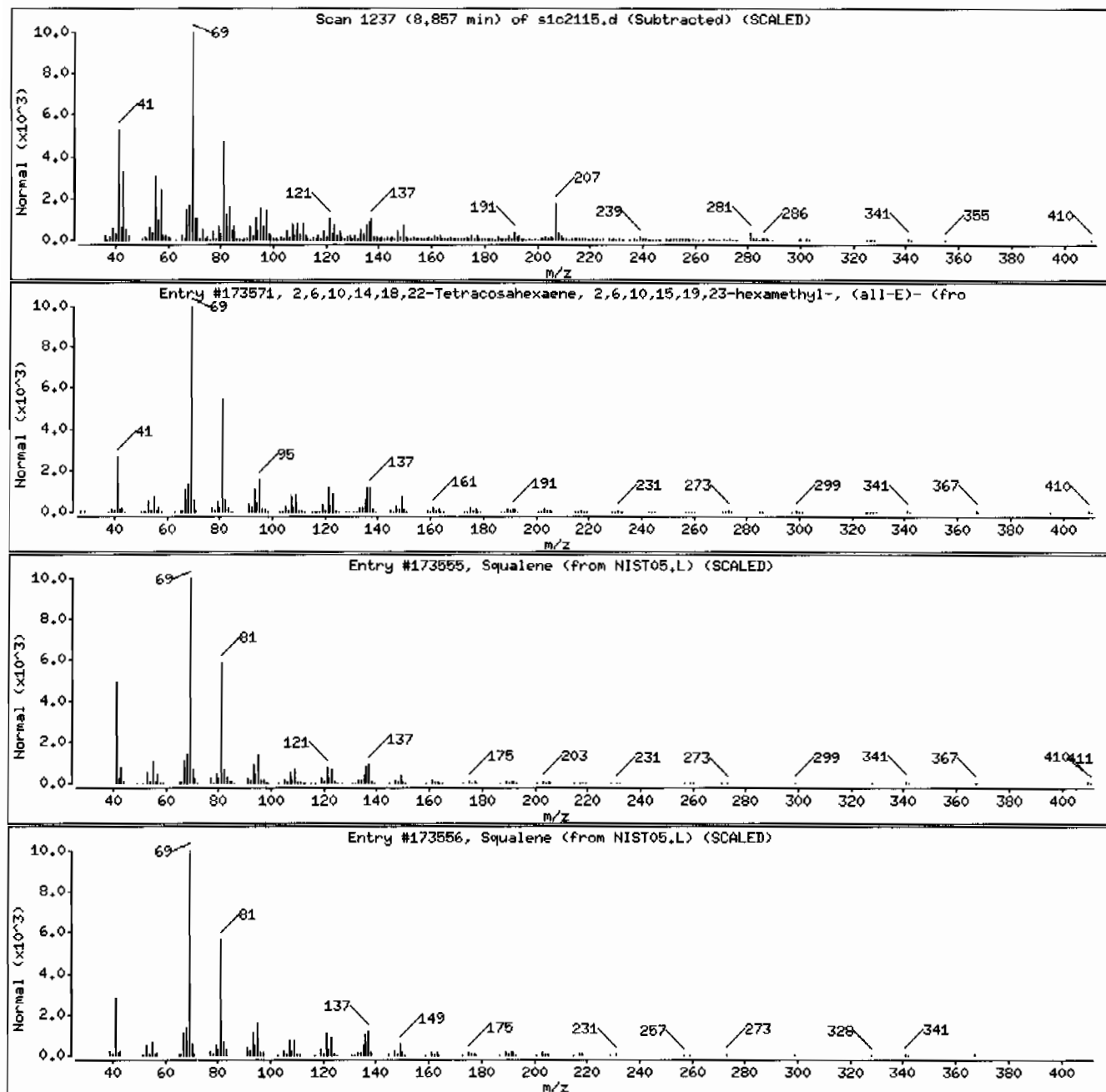
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173571	98	C30H50	410
Squalene	7683-64-9	NIST05.L	173555	93	C30H50	410
Squalene	7683-64-9	NIST05.L	173556	76	C30H50	410



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: I248370005196122811SVH111LANL

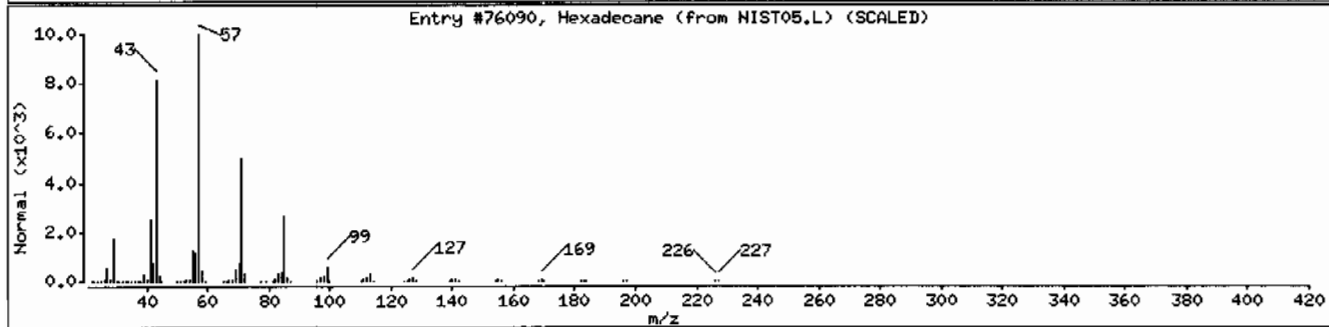
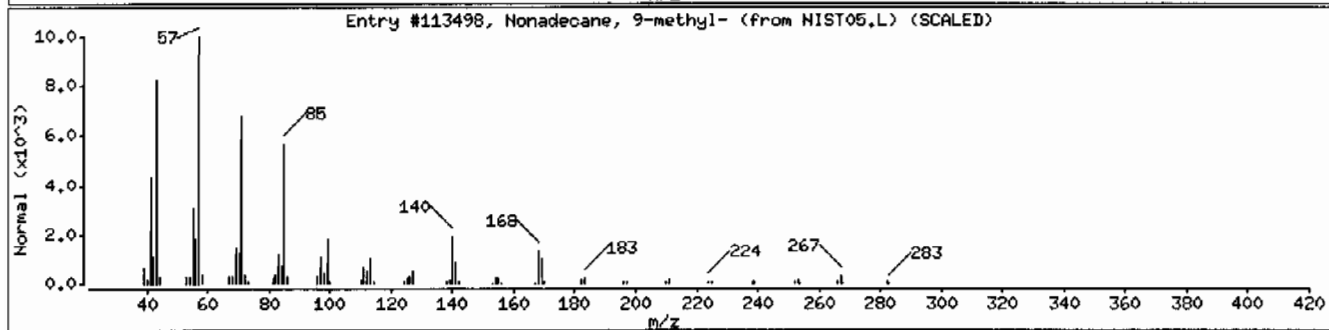
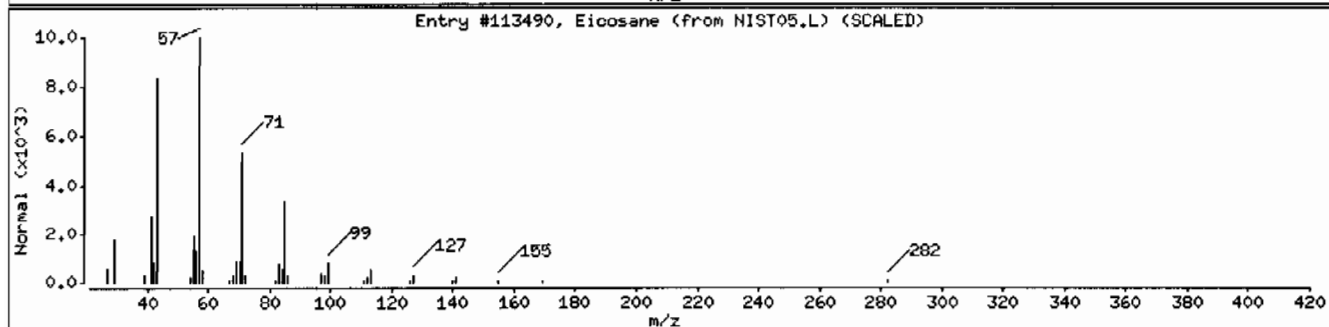
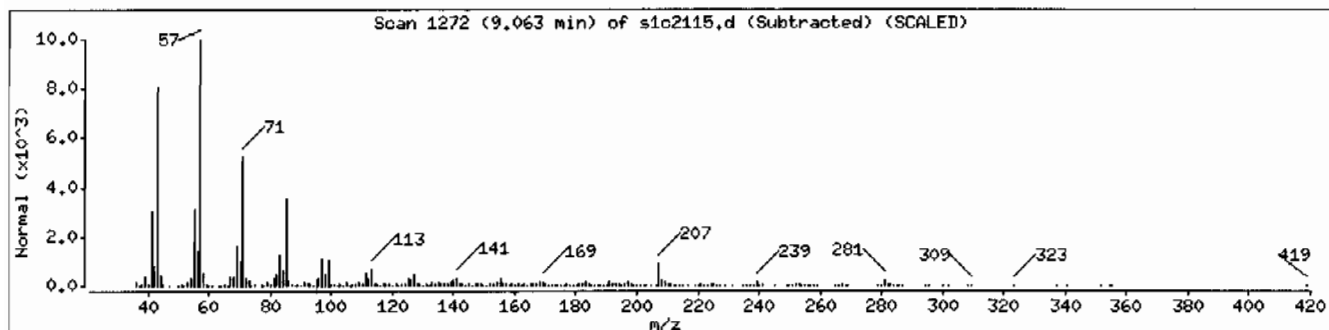
Volume Injected (uL): 0.5

Operator: AMY

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	97	C20H42	282
Nonadecane, 9-methyl-	13287-24-6	NIST05.L	113498	95	C20H42	282
Hexadecane	544-76-3	NIST05.L	76090	94	C16H34	226



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 1248370005196122811SVH11ILANL

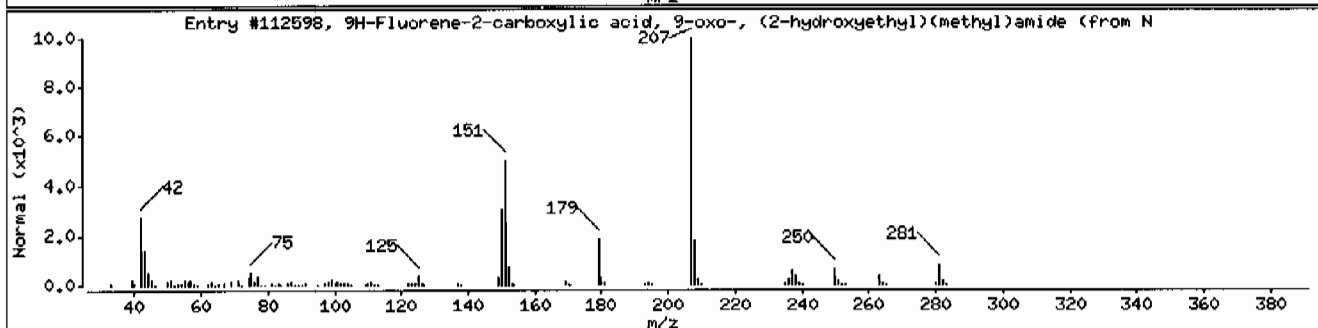
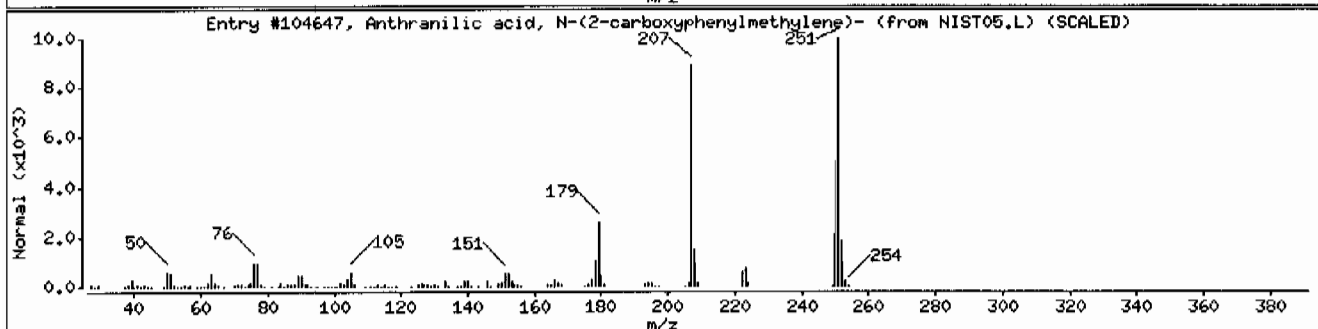
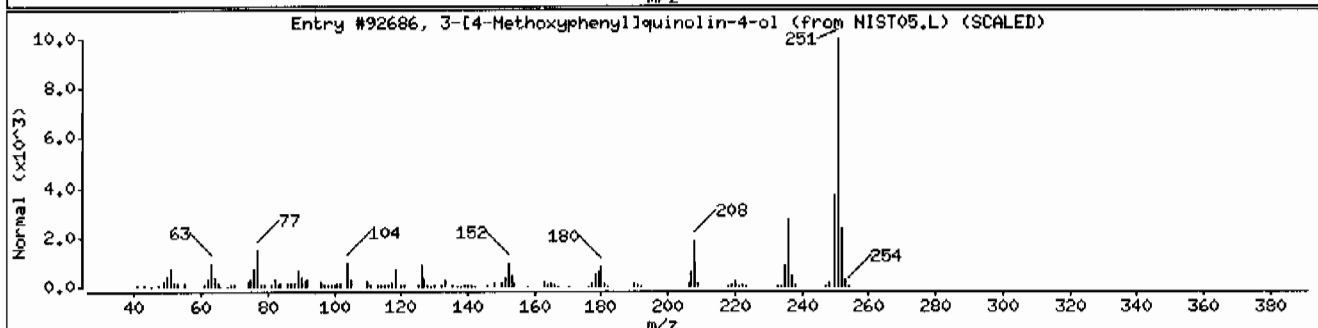
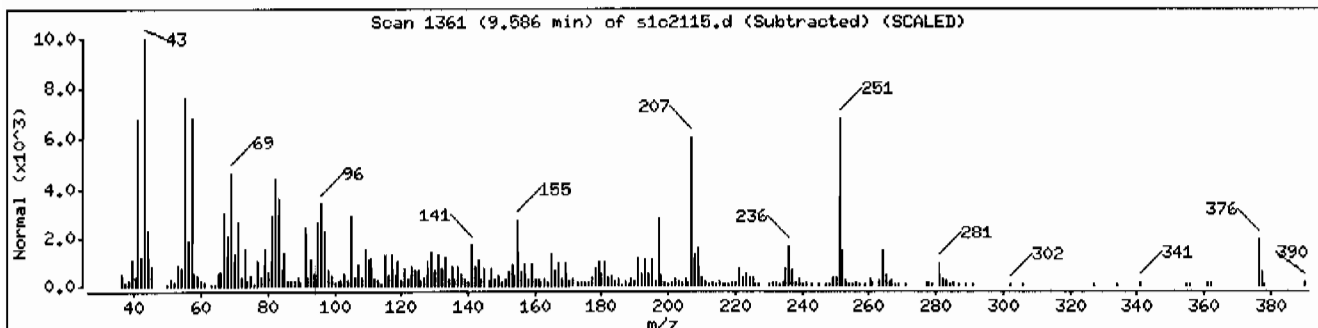
Volume Injected (uL): 0.5

Operator: AMY

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	62	C16H13N02	251
Anthranilic acid, N-(2-carboxyphenyl)meth	77631-37-9	NIST05.L	104647	53	C15H11N04	269
9H-Fluorene-2-carboxylic acid, 9-oxo-, (	1000316-02-1	NIST05.L	112598	38	C17H15N03	281



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: I248370005196122811SVH11ILANL

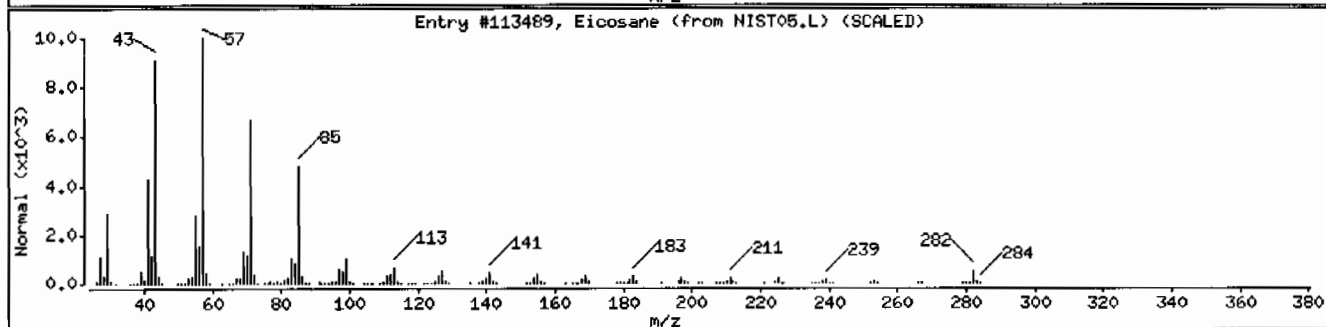
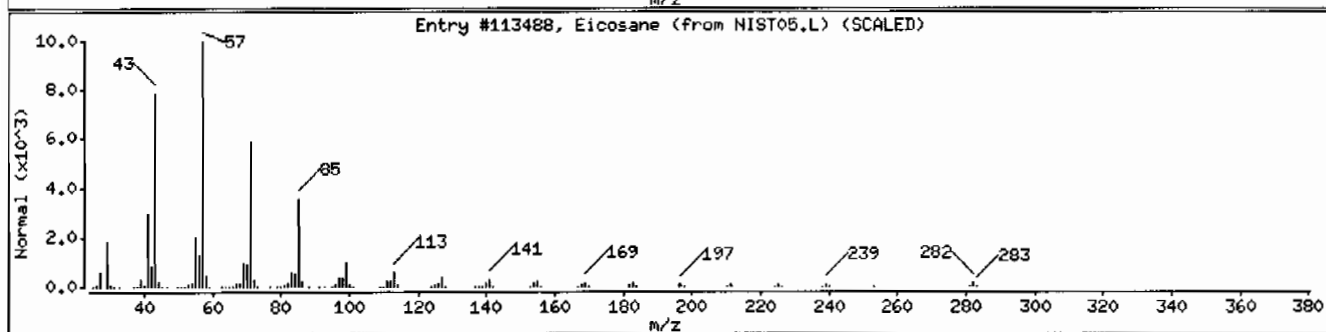
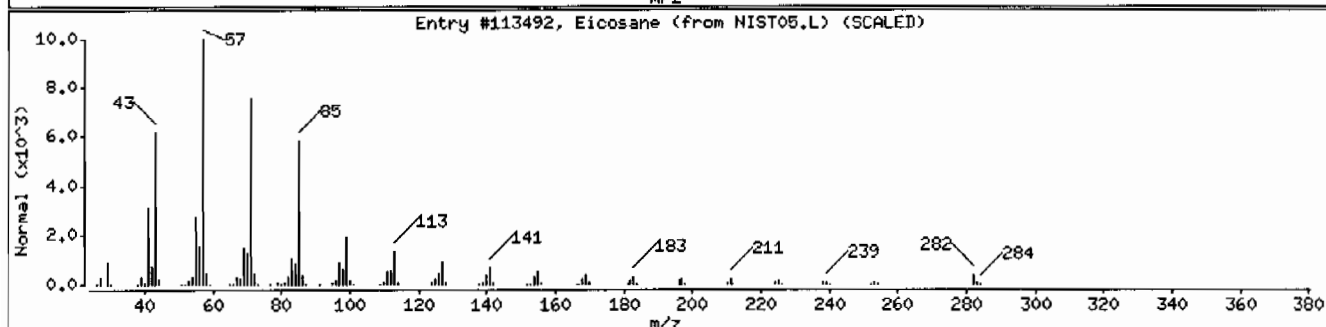
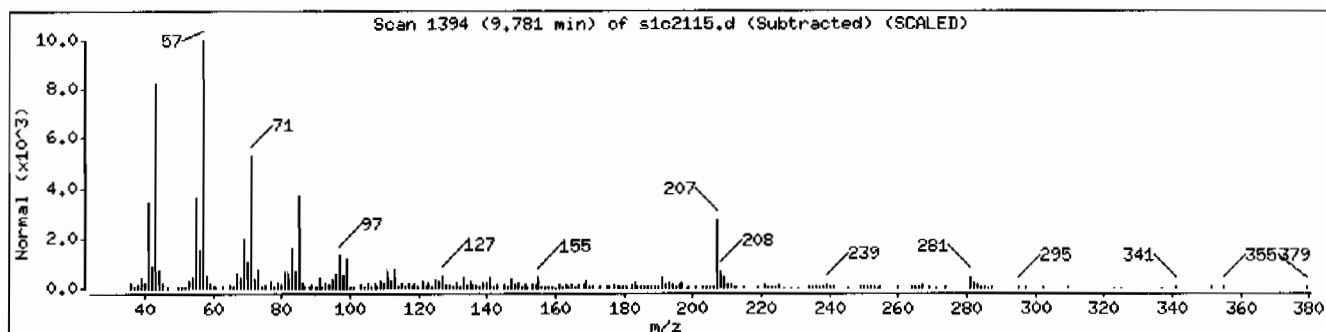
Volume Injected (uL): 0.5

Operator: AMY

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	113492	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	97	C20H42	282



Date: 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 1248370005196122811SVH111LANL

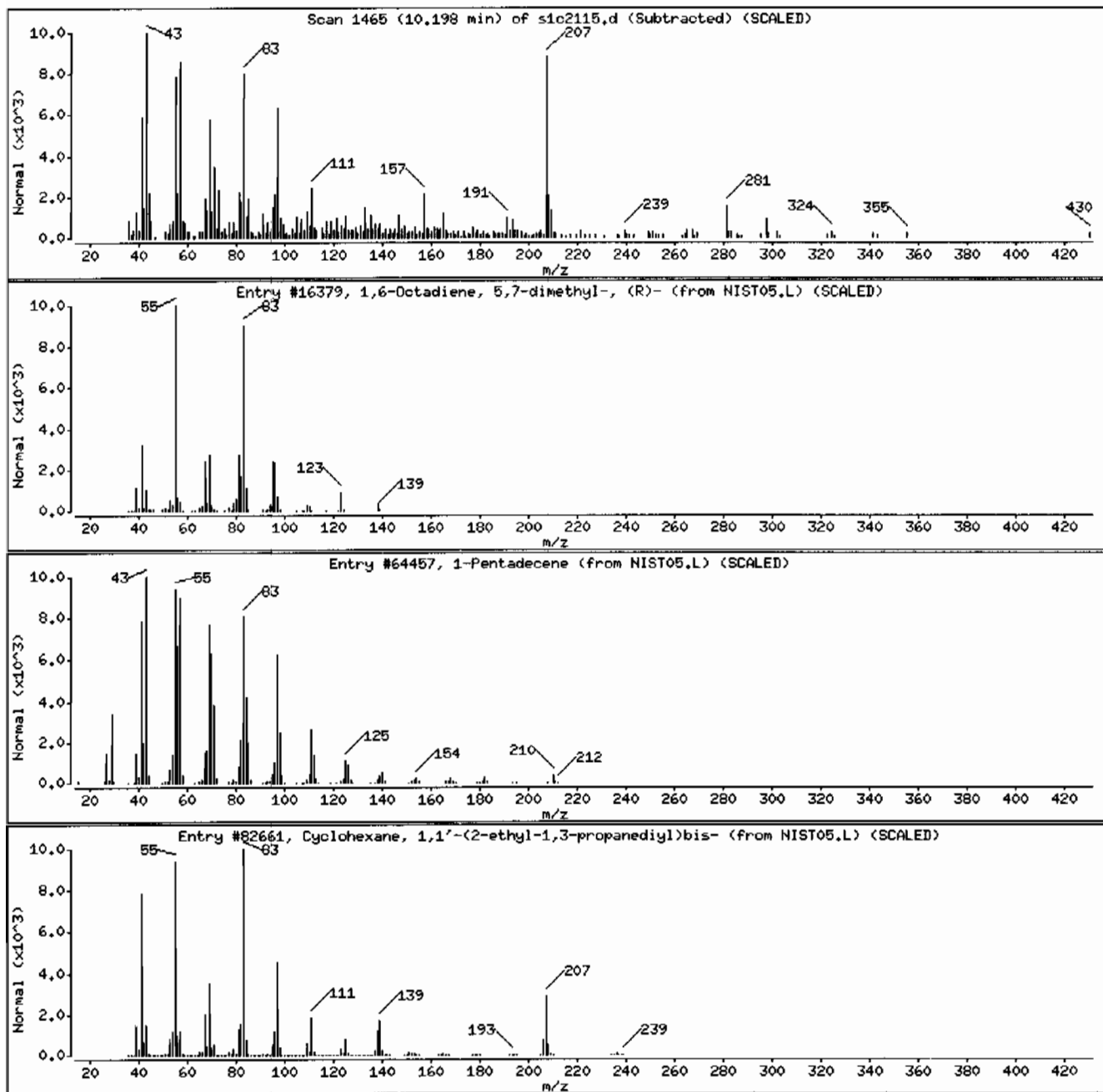
Volume Injected (uL): 0.5

Operator: AMY

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	60	C10H18	138
1-Pentadecene	13360-61-7	NIST05.L	64457	50	C15H30	210
Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	54833-34-0	NIST05.L	82661	38	C17H32	236



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 1248370005196122811SVMI11LANL

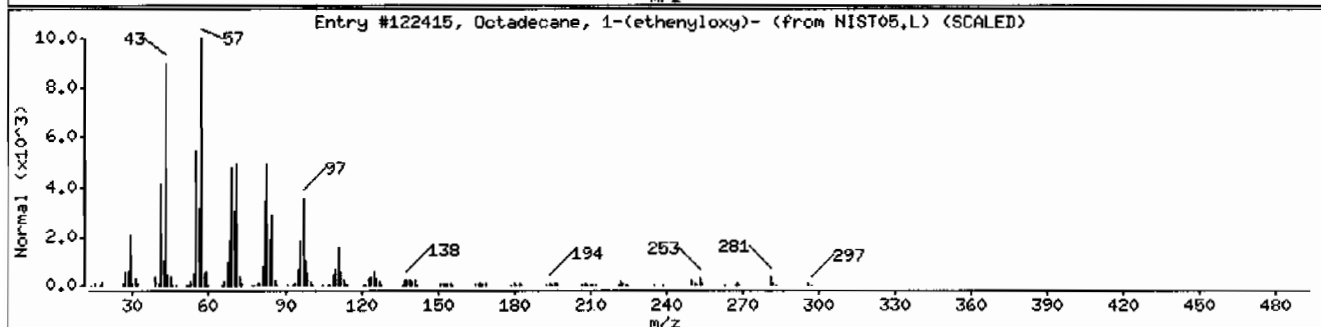
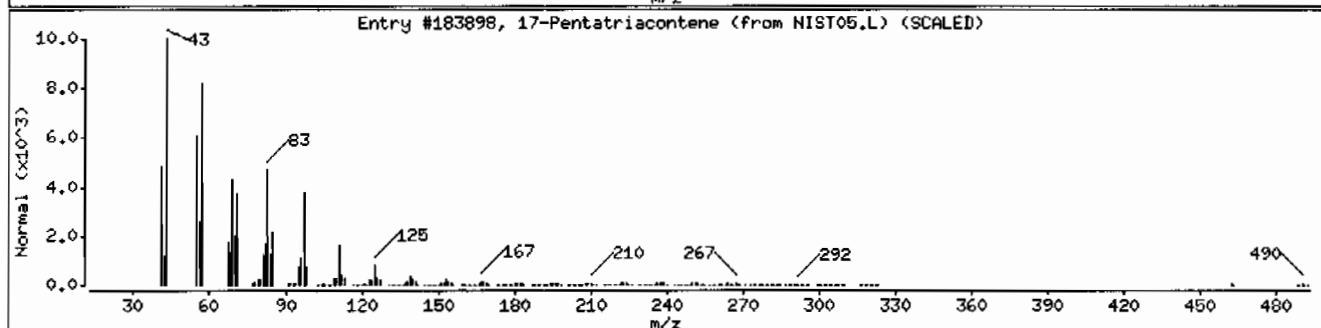
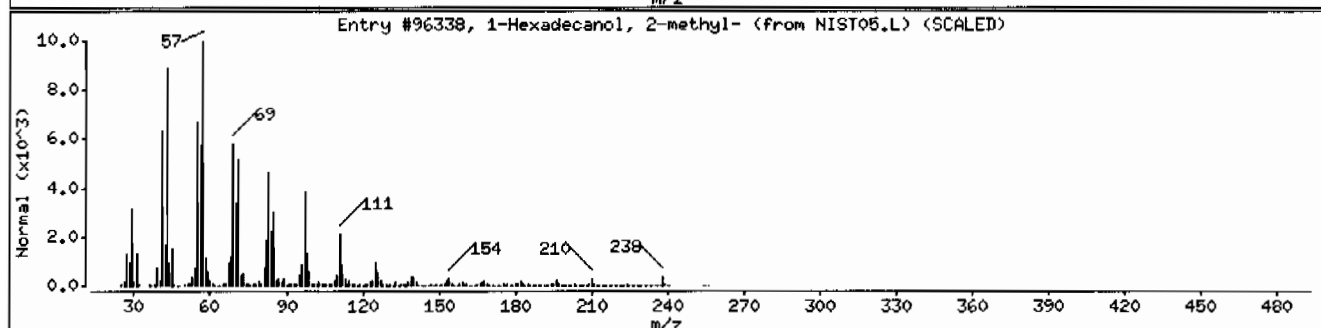
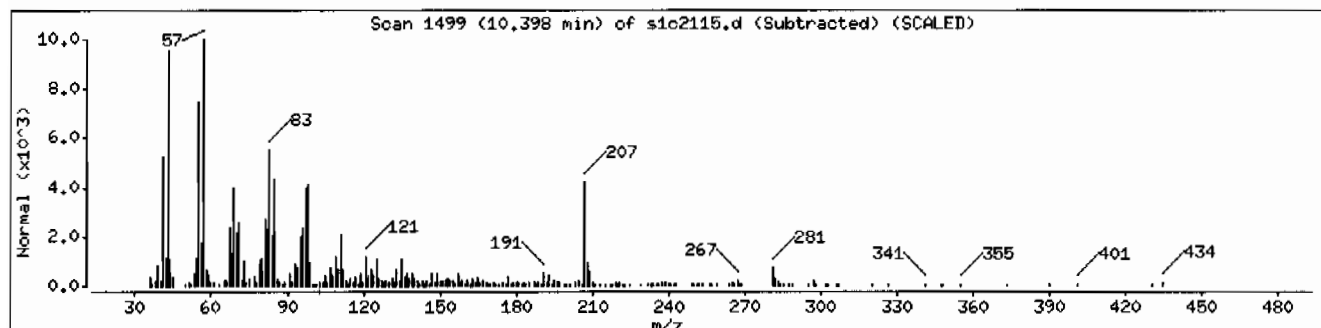
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Hexadecanol, 2-methyl-	2490-48-4	NIST05.L	96338	50	C17H36O	256
17-Pentatriacontene	6971-40-0	NIST05.L	183898	45	C35H70	491
Octadecane, 1-(ethenyl)-	930-02-9	NIST05.L	122415	43	C20H40	296



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: HSD1.i

Sample Info: 1248370005196122811SVH111LANL

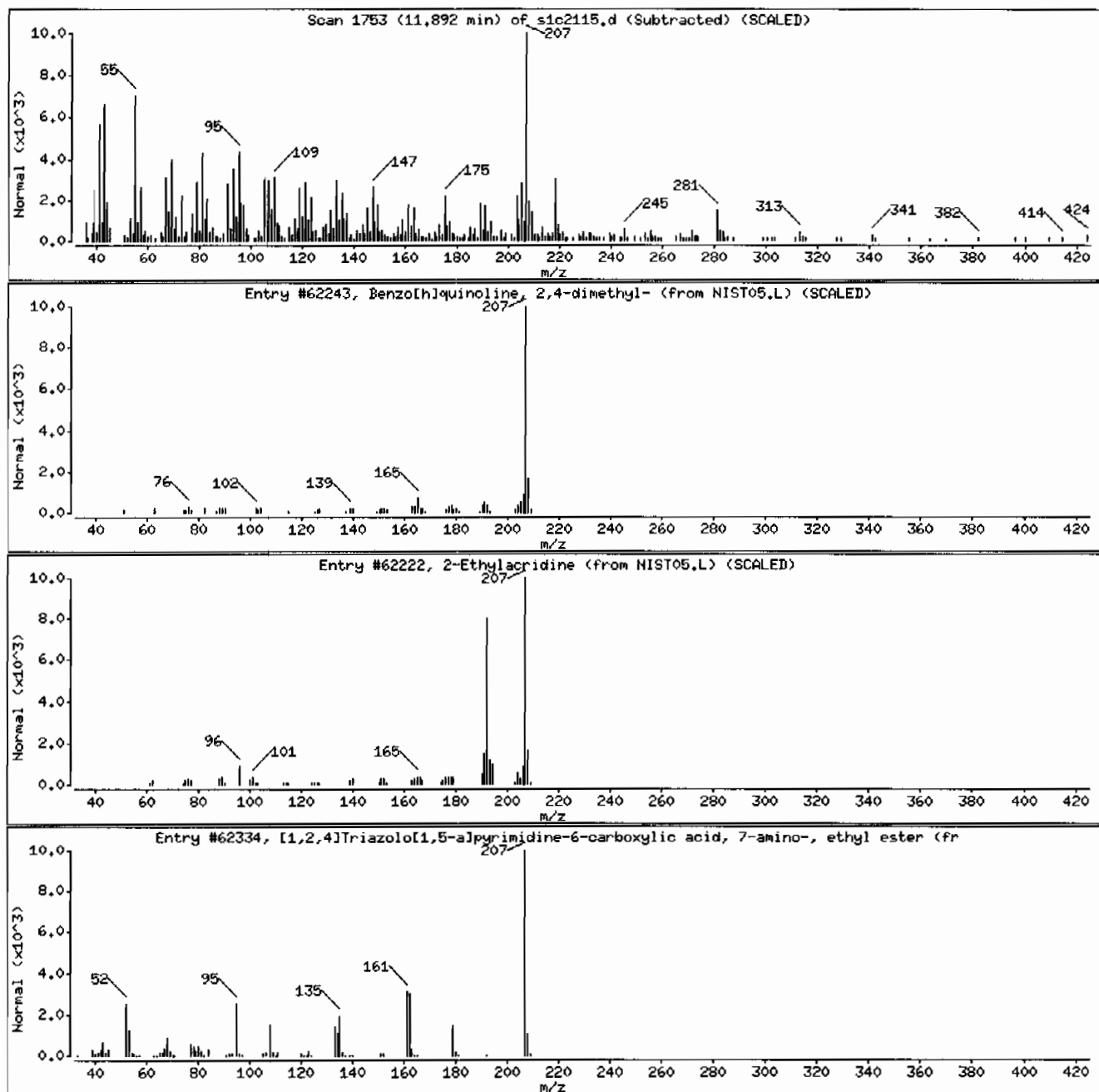
Volume Injected (uL): 0.5

Operator: AMY

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	42	C15H13N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	30	C15H13N	207
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo	1000316-75-8	NIST05.L	62334	30	C8H9N5O2	207



Date : 21-MAR-2010 22:09

Client ID: RE36-10-7419

Instrument: MSD1.i

Sample Info: 1248370005196122811SVH11ILANL

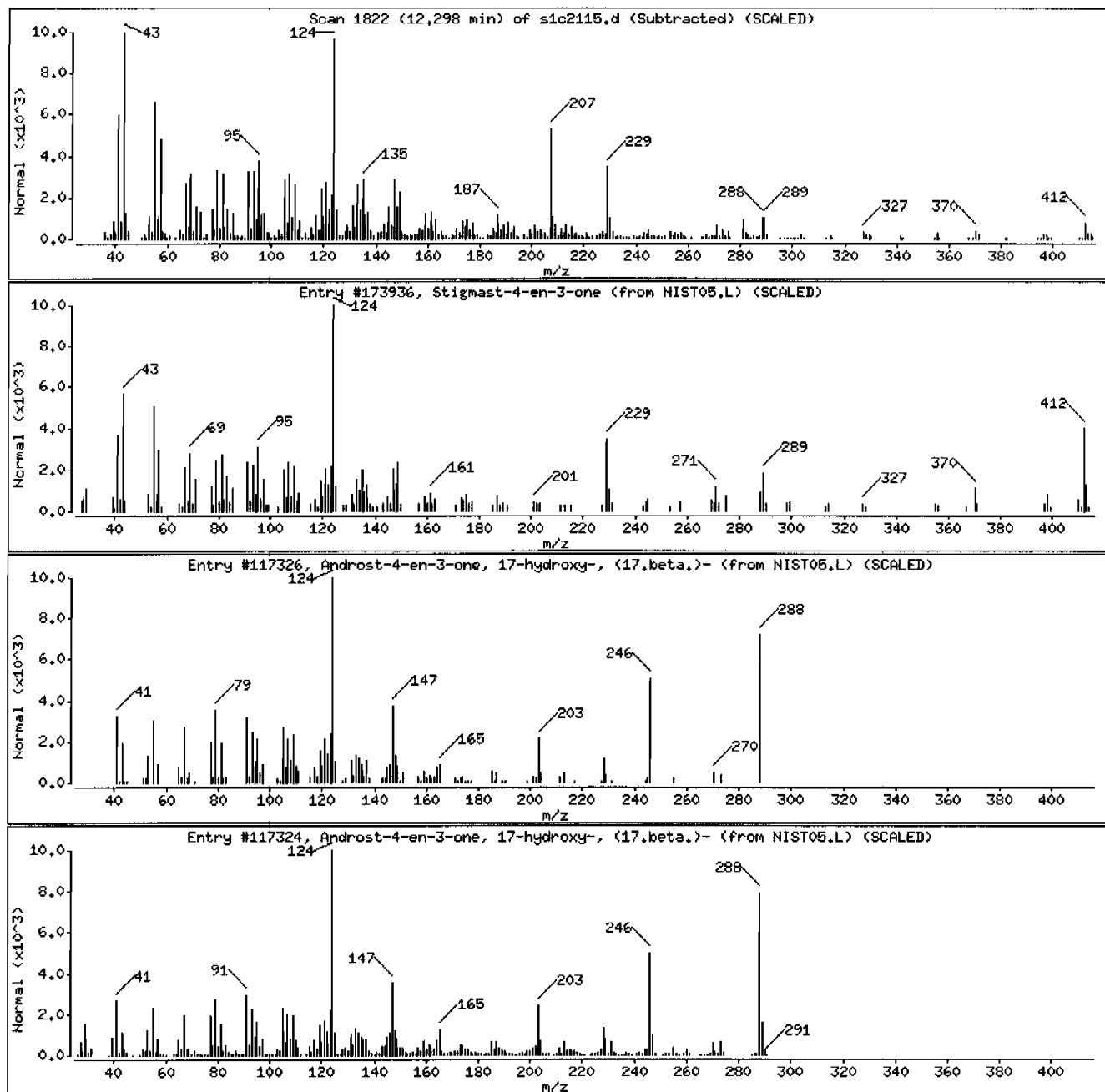
Volume Injected (uL): 0.5

Operator: AMY

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	83	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17.β)	58-22-0	NIST05.L	117326	59	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17.β)	58-22-0	NIST05.L	117324	58	C19H28O2	288



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

SDG Number: 10-2150
Lab Sample ID: 248370002

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7420
Batch ID: 961228
Run Date: 03/21/2010 20:12
Prep Date: 03/05/2010 11:30
Data File: s1c2110.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.8	364
108-95-2	Phenol	U	364	ug/kg	72.8	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.8	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.8	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.8	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.8	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.0	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.8	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.8	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.8	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.8	364
108-60 1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.8	364
95-48-7	o-Cresol	U	364	ug/kg	72.8	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.8	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.8	364
78-59-1	Isophorone	U	364	ug/kg	72.8	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.8	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	127	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.8	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.8	364
65-85-0	Benzoic acid	J	245	ug/kg	182	728
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.8	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.8	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.28	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.8	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.8	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.8	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.8	364
99-09-2	<i>o</i> -Nitroaniline	U	364	ug/kg	72.8	364
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370002

Client ID: RE36-10-7420
Batch ID: 961228
Run Date: 03/21/2010 20:12
Prep Date: 03/05/2010 11:30
Data File: s1c2110.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.7
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	364	ug/kg	72.8	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	728	ug/kg	138	728
132-64-9	Dibenzofuran	U	364	ug/kg	72.8	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.8	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.8	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.8	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.8	364
122-66-7	Azobenzene	U	364	ug/kg	72.8	364
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.8	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.8	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.28	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.8	364
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.8	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.8	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.8	364
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.8	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	318	ug/kg		J
	Unknown Aldol Condensate	2.67	238	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370002	Date Received: 03/02/2010 08:50	%Moisture: 8.7
	Client: LANL.010	Project: LANL.01004
Client ID: RE36-10-7420	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 20:12	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2110.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	8.58	153	ug/kg		J
112-95-8	Eicosane	9.06	232	ug/kg	97	NJ
	Unknown	9.16	255	ug/kg		J
	Unknown	11.53	155	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.29	259	ug/kg	93	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2110.d
Lab Smp Id: 248370002 Client Smp ID: RE36-10-7420
Inj Date : 21-MAR-2010 20:12
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370002|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	8.73510	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	399239	40.0000		
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1578138	40.0000		
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	823992	40.0000		
* 67 Phenanthrene-d10	188	6.704	6.710	(1.000)	1390664	40.0000		
* 91 Chrysene-d12	240	8.286	8.292	(1.000)	1109470	40.0000		
* 98 Perylene-d12	264	9.522	9.522	(1.000)	884833	40.0000		
\$ 3 2-Fluorophenol	112	2.828	2.822	(0.783)	777805	75.6581	2760	
\$ 5 Phenol-d5	99	3.345	3.346	(0.927)	1009915	80.6623	2940	
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	425795	43.9907	1600	
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	890102	39.1139	1420	
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	183564	67.9503	2470	
\$ 81 p-Terphenyl-d14	244	7.622	7.622	(0.920)	839265	45.3735	1650	

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
	MASS						ON-COLUMN	FINAL
	=====		==	=====	=====	=====	(ng/ul)	(ug/Kg)
27 Benzoic acid	105		4.234	4.275	(0.949)	34811	6.72376	245(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: slc2110.d

Report Date: 03/22/2010 11:52

Lab. ID: 248370002

SampleType: SAMPLE

Injection Date: 21-MAR-2010 20:12

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370002|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	48807	3.35	3.40	80-120	100	()
93	828	3.39	3.40	233-293	2	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	60415	3.97	3.86	80-120	100	(T)
42	41827	3.97	3.86	48-108	69	(T)

21 Nitrobenzene		CAS#: 98-95-3				
77	27664	4.23	3.99	80-120	100	(T)
65	1190	4.23	3.99	0- 45	4	(T)
123	1925	4.23	3.99	19- 79	7	(QT)

27 Benzoic acid		CAS#: 65-85-0				
105	34811	4.23	4.27	80-120	100	()
122	29312	4.23	4.27	61-121	84	()
77	26818	4.23	4.27	50-110	77	()

43 Dimethylphthalate		CAS#: 131-11-3				
163	149159	5.70	5.49	80-120	100	(T)
164	823992	5.70	5.49	0- 40	552	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	105812	5.70	5.54	80-120	100	(T)
63	1774	5.70	5.54	50-110	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	105812	5.70	5.83	80-120	100	(T)
89	1408	5.70	5.82	38- 98	1	(QT)
63	1774	5.70	5.82	20- 80	2	(QT)

53	Fluorene		CAS#: 86-73-7			
166	14280	6.25	6.09	80-120	100	(T)
165	14062	6.25	6.09	61-121	98	(T)
167	5349	6.25	6.09	0- 43	37	(T)

56	p-Nitroaniline		CAS#: 100-01-6			
138	513	6.29	6.09	80-120	100	(T)
108	211	6.27	6.09	29- 89	41	(T)
92	278	6.31	6.09	14- 74	54	(T)

61	4-Bromophenylphenylether		CAS#: 101-55-3			
248	14319	6.25	6.40	80-120	100	(T)
141	83422	6.25	6.40	48-108	583	(QT)
250	27731	6.25	6.40	67-127	194	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2110.d
 Lab Smp Id: 248370002 Client Smp ID: RE36-10-7420
 Inj Date : 21-MAR-2010 20:12
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370002|961228|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	8.73510	% moisture

Cpnd Variable

Local Compound Variable

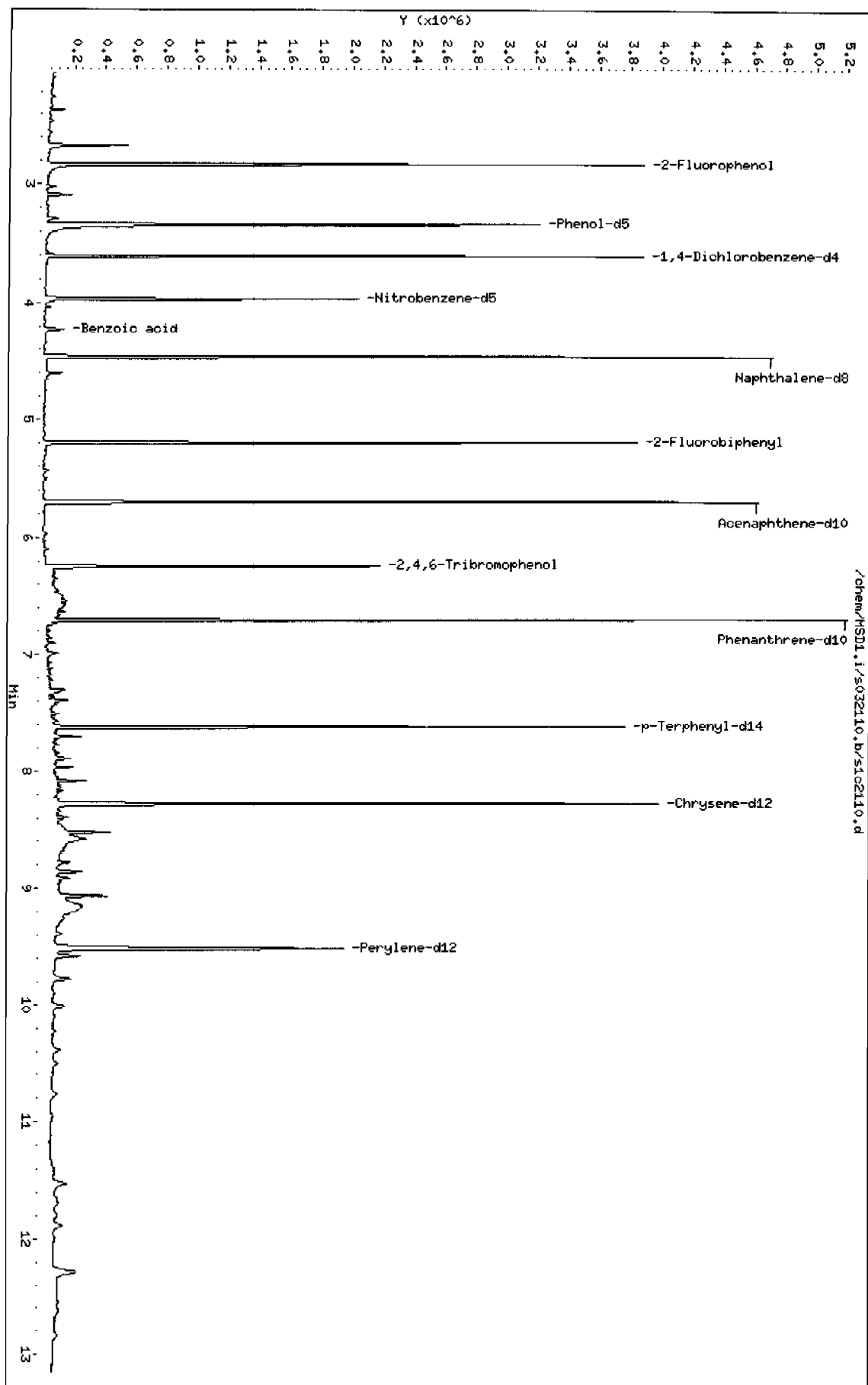
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2462466	40.000
* 91 Chrysene-d12	8.286	3103424	40.000
* 98 Perylene-d12	9.522	2533608	40.000

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 #:		
1.816	537587	8.73249009	318	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	402156	6.53257886	238	0		0	10
Unknown					CAS #:		
8.580	326423	4.20726402	153	0		0	91
Eicosane					CAS #: 112-95-8		
9.063	403751	6.37431896	232	97	NIST05.L	113489	98
Unknown					CAS #:		
9.163	443872	7.00774188	255	0		0	98
Unknown					CAS #:		
11.527	269689	4.25778000	155	0		0	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
12.292	450144	7.10676227	259	93	NIST05.L	173936	98

Data File: /chem/MSD1.i/s032110.b/sic2110.d
Date : 21-MAR-2010 20:12
Client ID: REC6-10-7420
Sample Info: 1248370002|96122811|SWH11L9HL
Volume Injected (uL): 0.5
Column Phase: 3uM DB-SHS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20



Date : 21-MAR-2010 20:12

Client ID: RE36-10-7420

Instrument: MSD1.i

Sample Info: I248370002I9612281IISVM11ILANL

Volume Injected (uL): 0.5

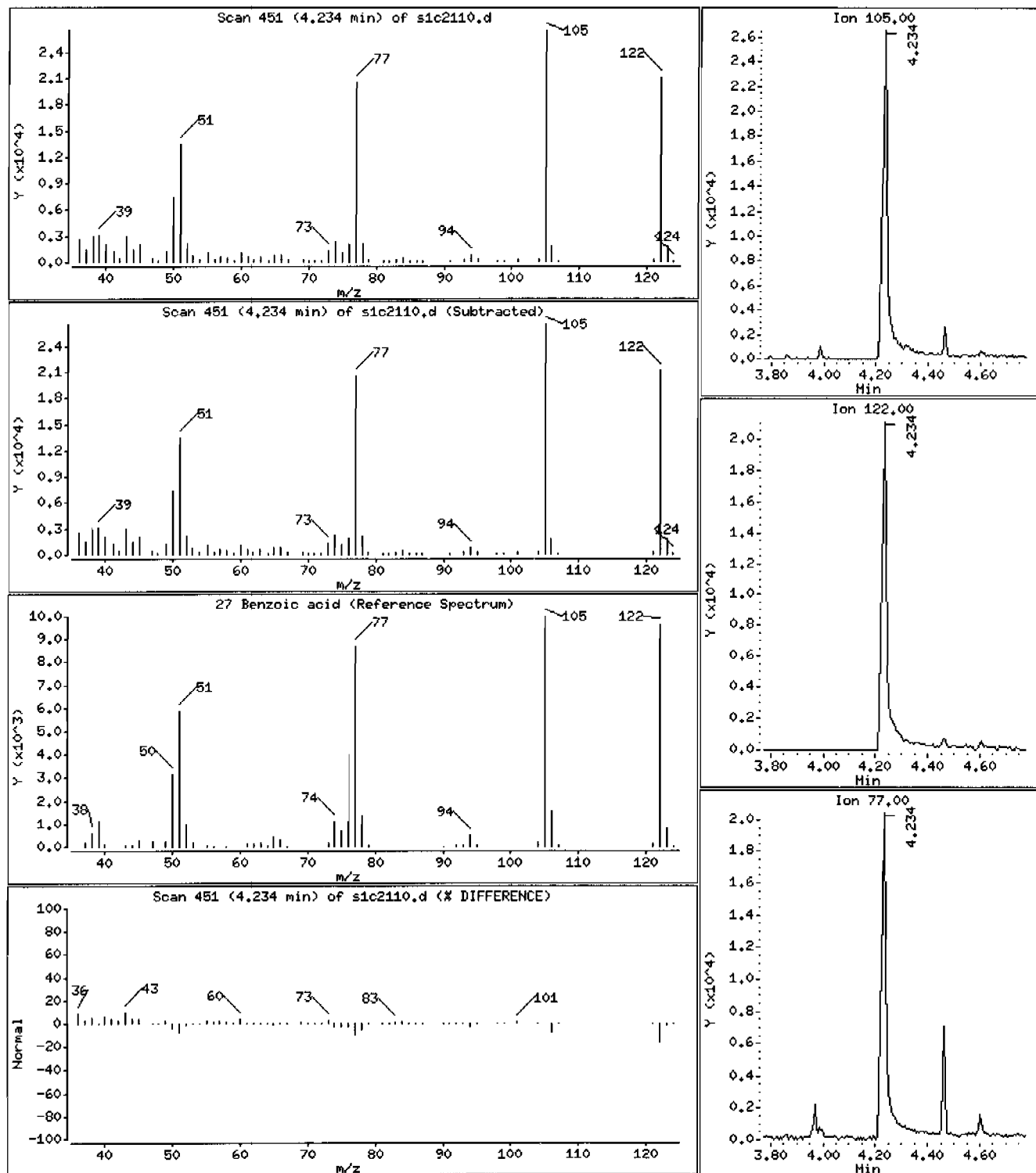
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

27 Benzoic acid

Concentration: 245 ug/Kg



Date : 21-MAR-2010 20:12

Client ID: RE36-10-7420

Instrument: MSD1.i

Sample Info: 12483700021961228111SVH111LANL

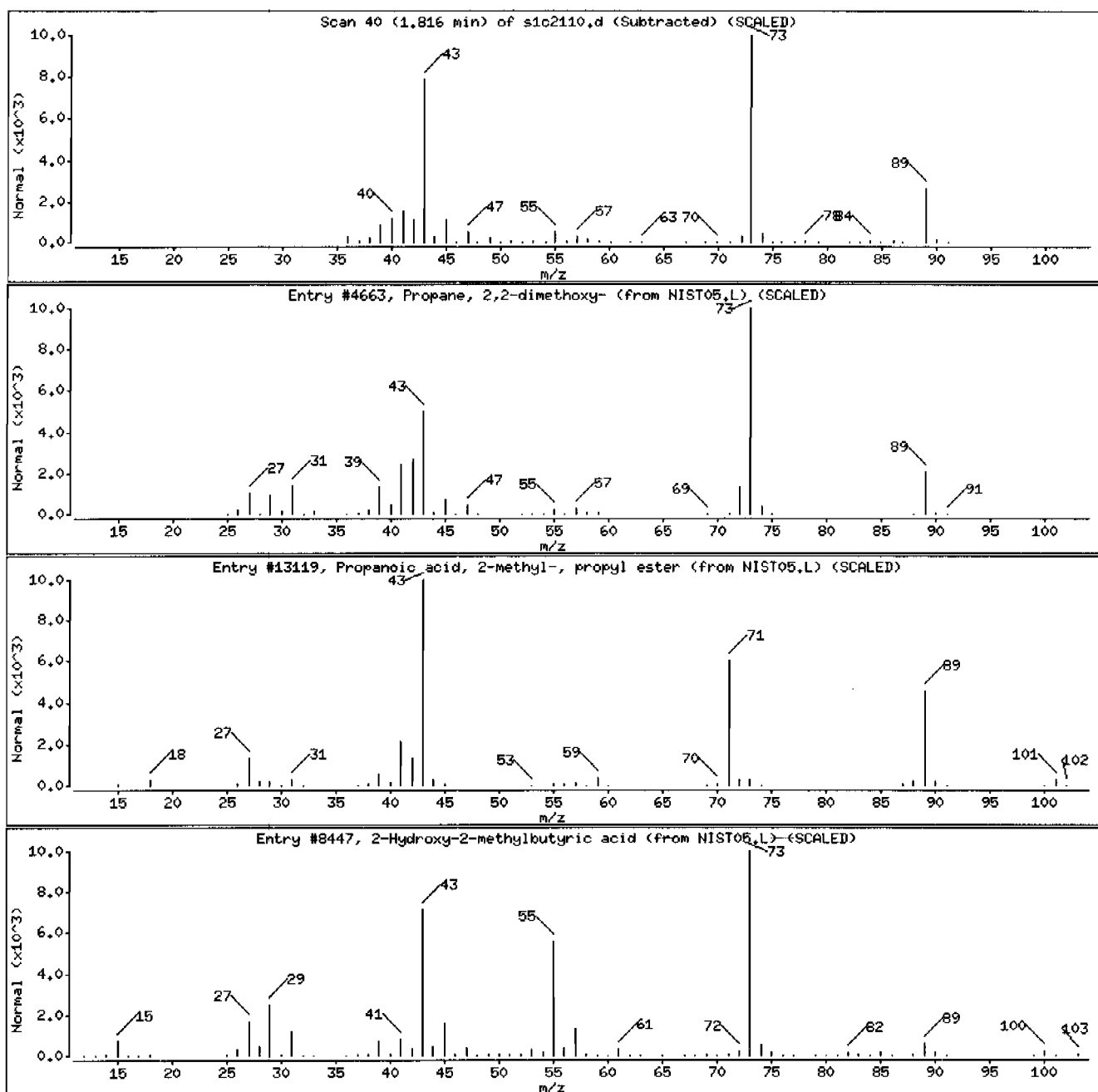
Volume Injected (uL): 0.5

Operator: AMY

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	36	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	25	C7H14O2	130
2-Hydroxy-2-methylbutyric acid	3739-30-8	NIST05.L	8447	23	C5H10O3	118



Date : 21-MAR-2010 20:12

Client ID: RE36-10-7420

Instrument: MSD1.i

Sample Info: 1248370002196122811SVH11ILANL

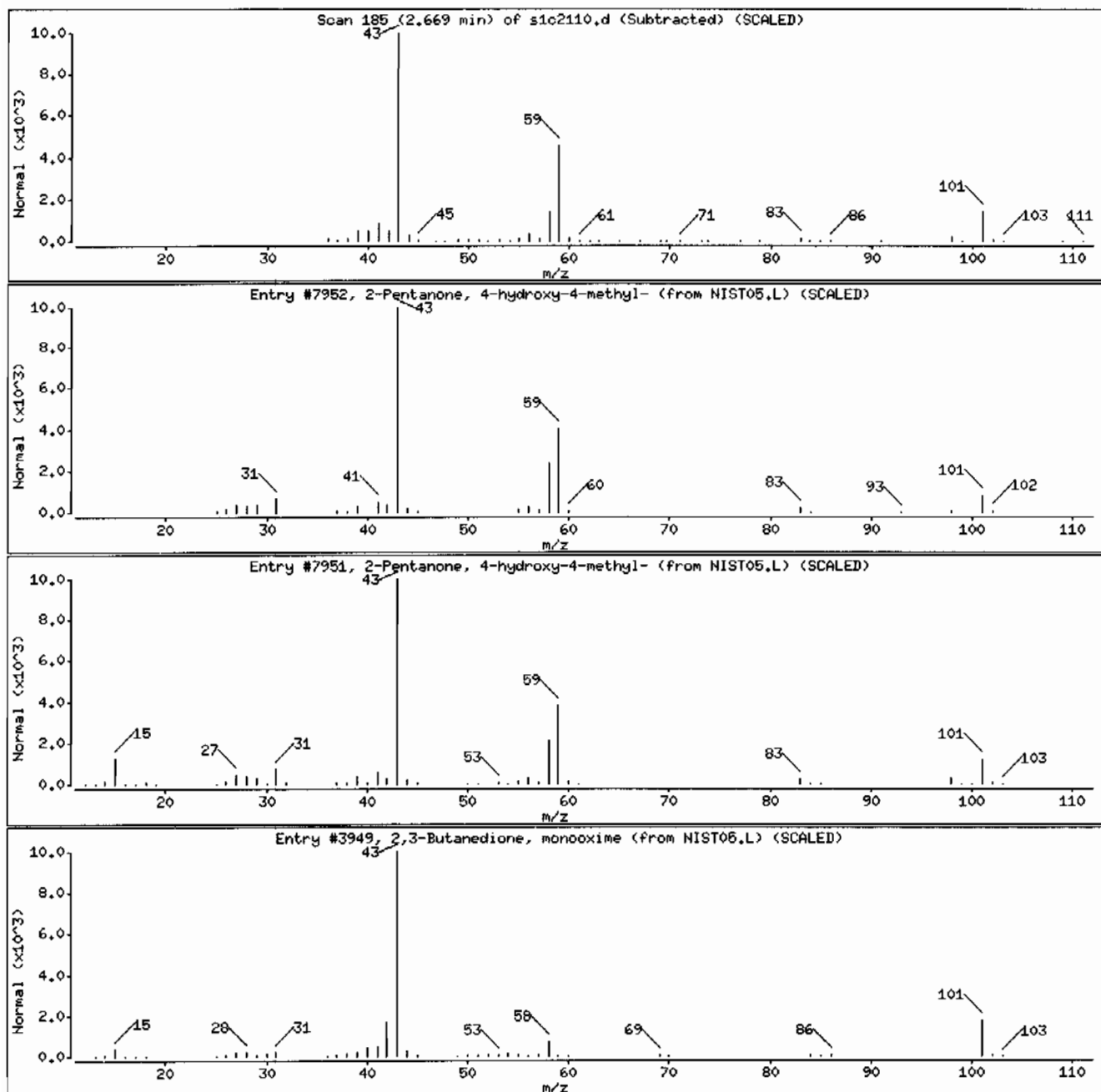
Volume Injected (uL): 0.5

Operator: AMY

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	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101



Date : 21-MAR-2010 20:12

Client ID: RE36-10-7420

Instrument: HSD1.i

Sample Info: 1248370002196122811SVH11ILANL

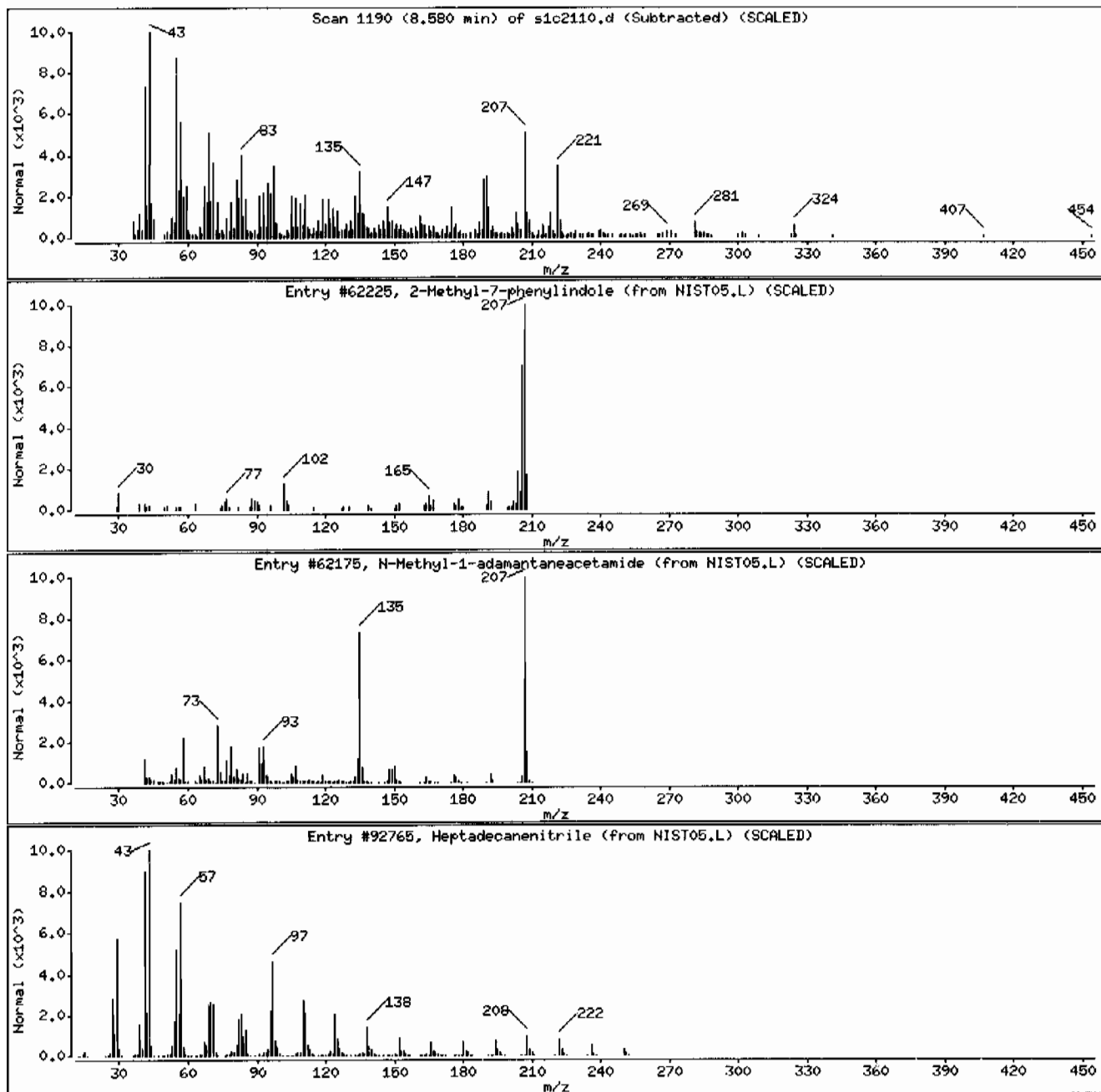
Volume Injected (uL): 0.5

Operator: AMY

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	25	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	18	C13H21NO	207
Heptadecanenitrile	5399-02-0	NIST05.L	92765	18	C17H33N	251



Date : 21-MAR-2010 20:12

Client ID: RE36-10-7420

Instrument: HSD1.i

Sample Info: 1248370002196122811SVMI11LANL

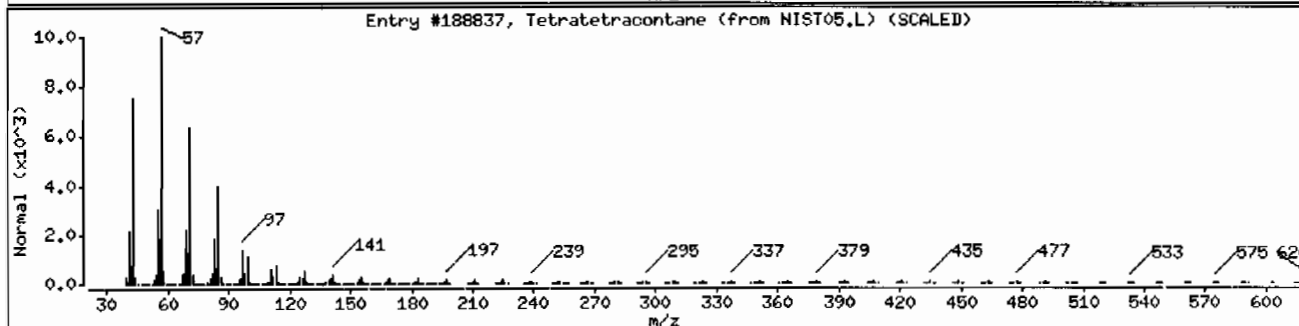
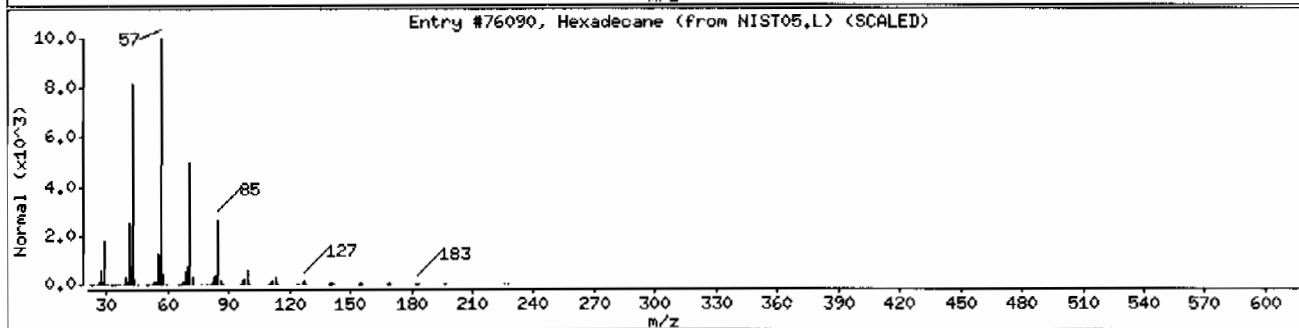
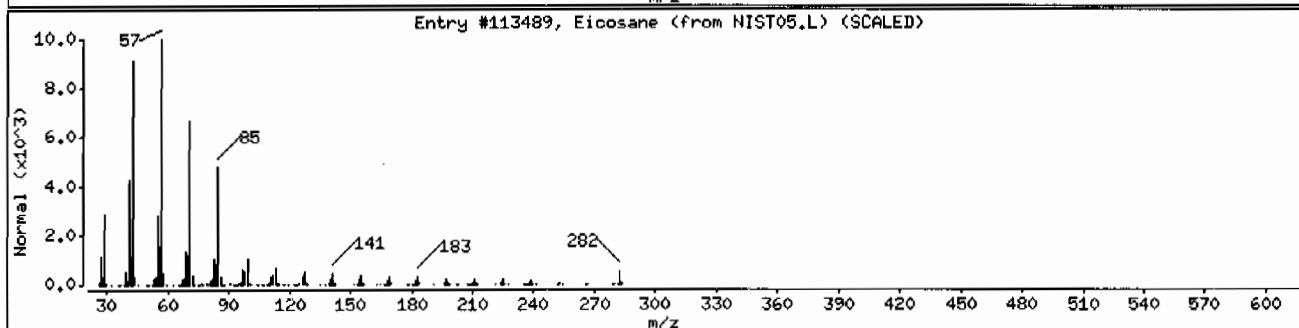
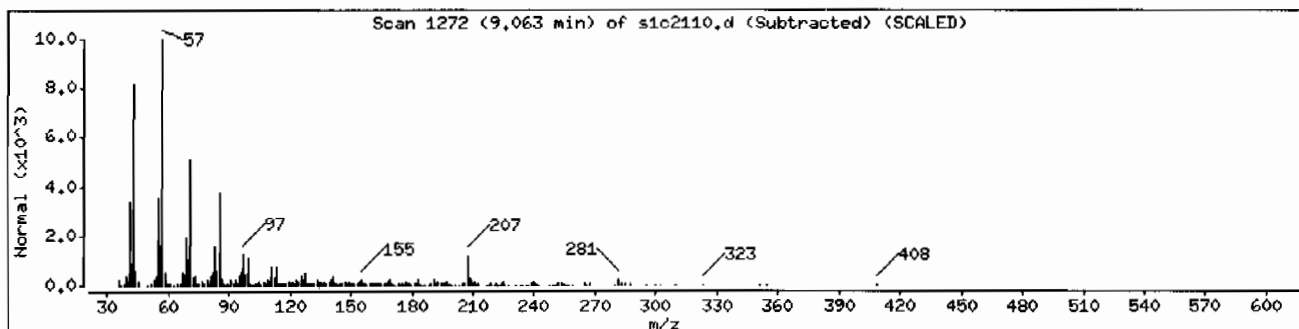
Volume Injected (uL): 0.5

Operator: AMY

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	113489	97	C20H42	282
Hexadecane	544-76-3	NIST05.L	76090	94	C16H34	226
Tetratetracontane	7098-22-8	NIST05.L	188837	81	C44H90	619



Date : 21-MAR-2010 20:12

Client ID: RE36-10-7420

Instrument: HSD1.i

Sample Info: 1248370002196122811SVMI11LANL

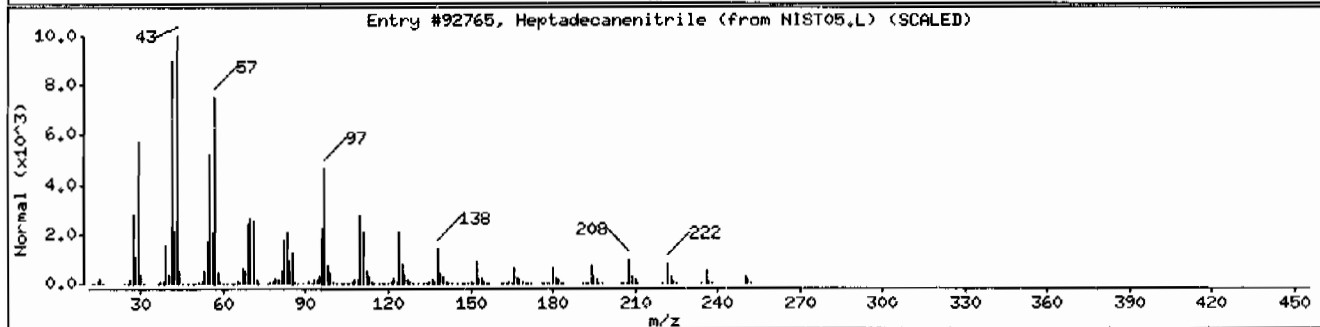
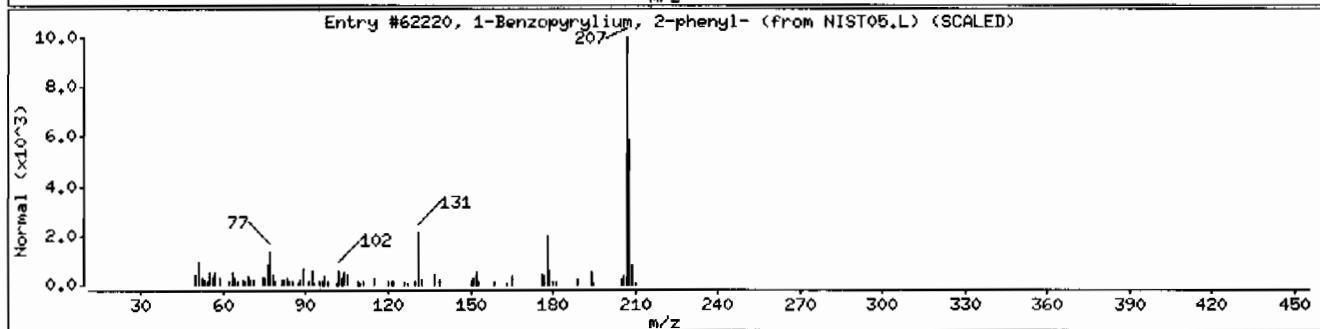
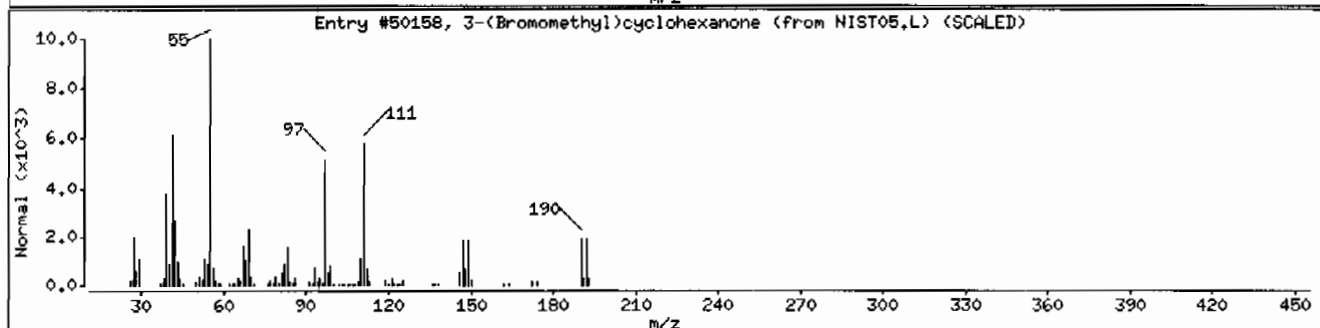
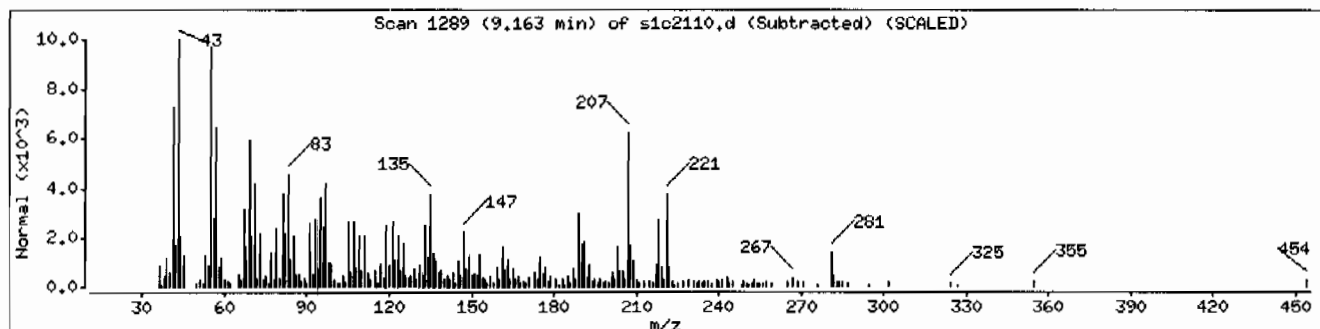
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-(Bromomethyl)cyclohexanone	168278-83-9	NIST05.L	50158	15	C7H11BrO	190
1-Benzopyrylium, 2-phenyl-	14051-53-7	NIST05.L	62220	15	C15H11O	207
Heptadecanenitrile	5399-02-0	NIST05.L	92765	15	C17H33N	251



Date : 21-MAR-2010 20:12

Client ID: RE36-10-7420

Instrument: MSD1.i

Sample Info: 1248370002196122811ISVM11ILANL

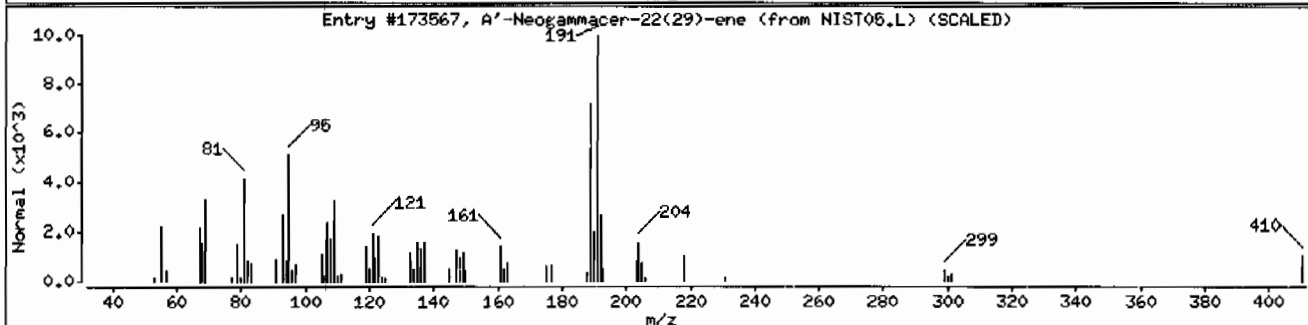
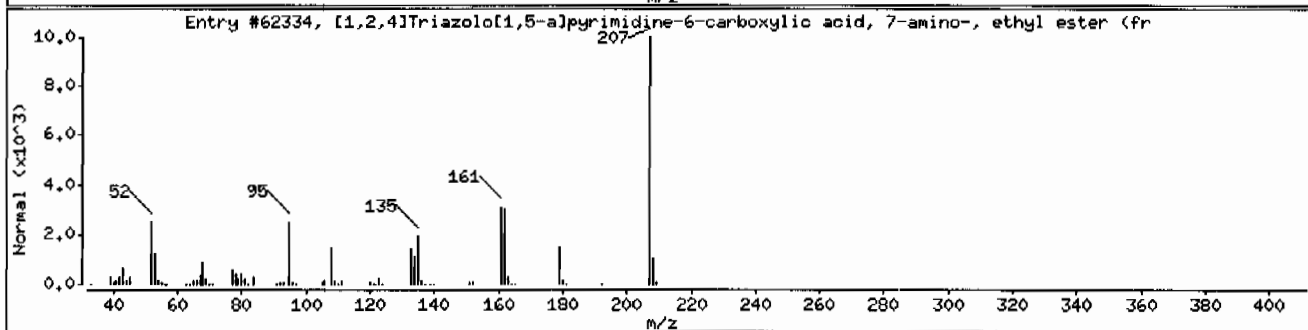
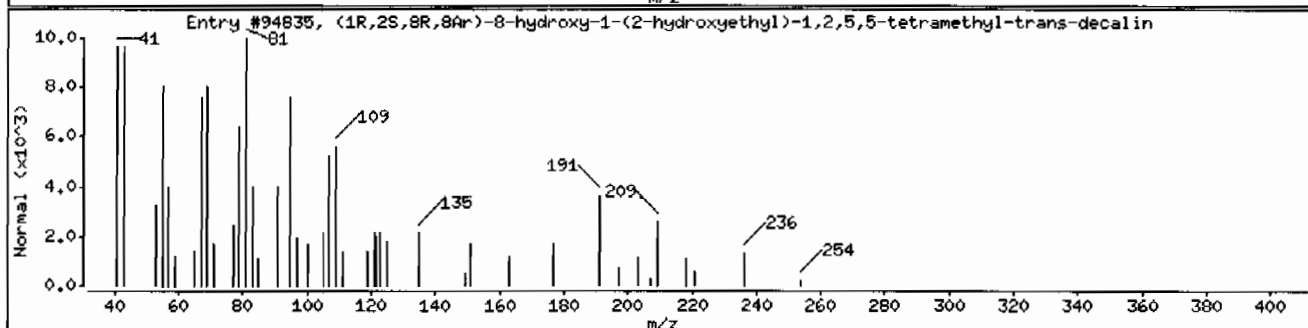
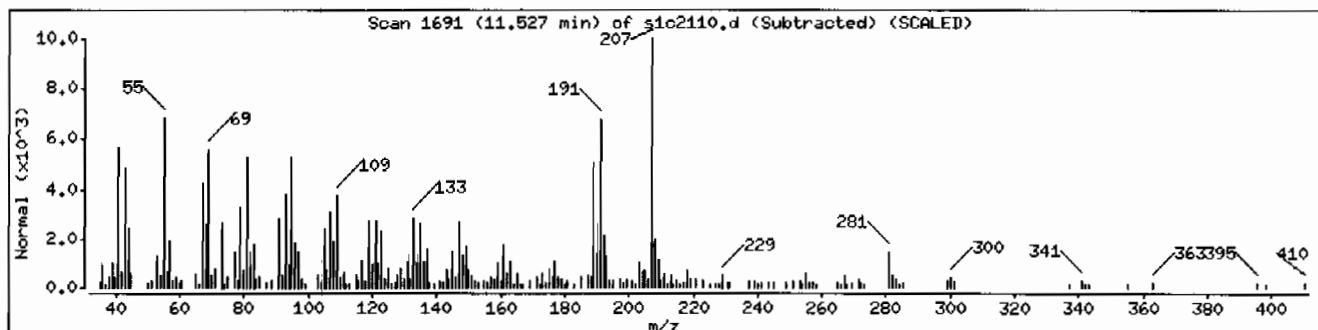
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(1R,2S,8R,8Ar)-8-hydroxy-1-(2-hydroxyethyl)-1,2,5,5-tetramethyl-trans-decalin	1000298-98-3	NIST05.L	94835	43	C16H30O2	254
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-amino-, ethyl ester (fr	1000316-75-8	NIST05.L	62334	38	C8H9N5O2	207
A'-Neogammacer-22(29)-ene	1615-91-4	NIST05.L	173567	38	C30H50	410



Date: 21-MAR-2010 20:12

Client ID: RE36-10-7420

Instrument: MSD1.i

Sample Info: 12483700021961228111SVH111LANL

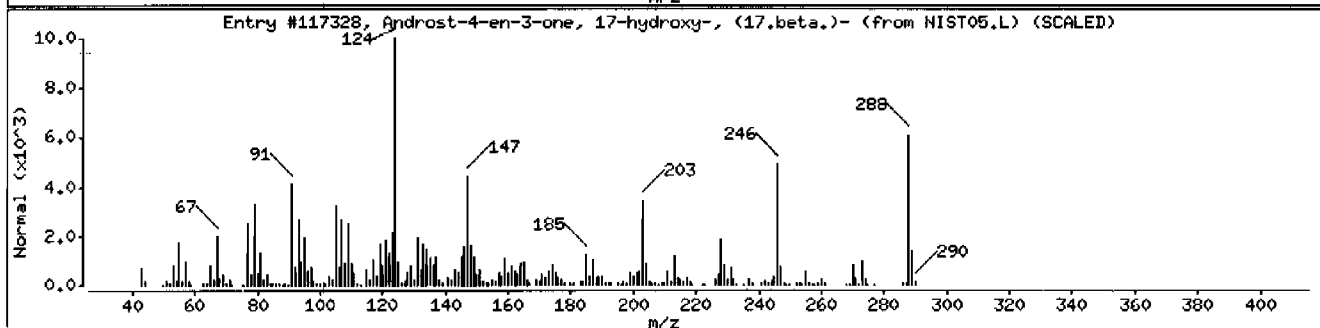
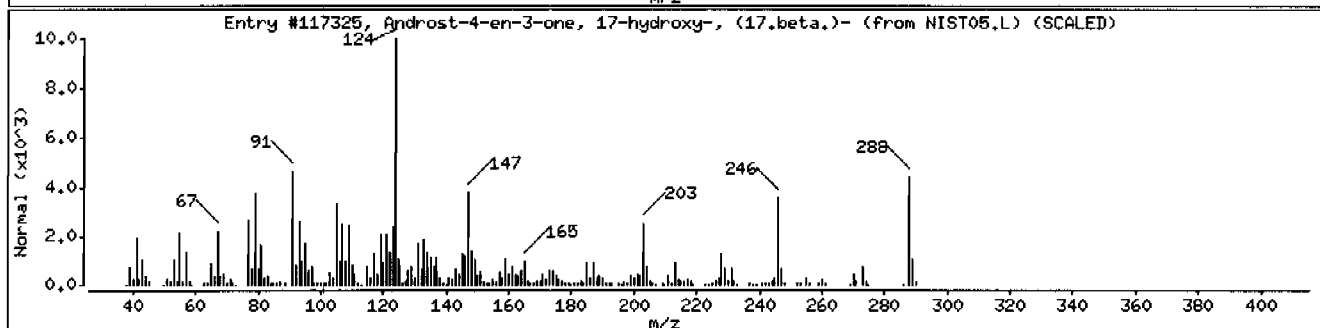
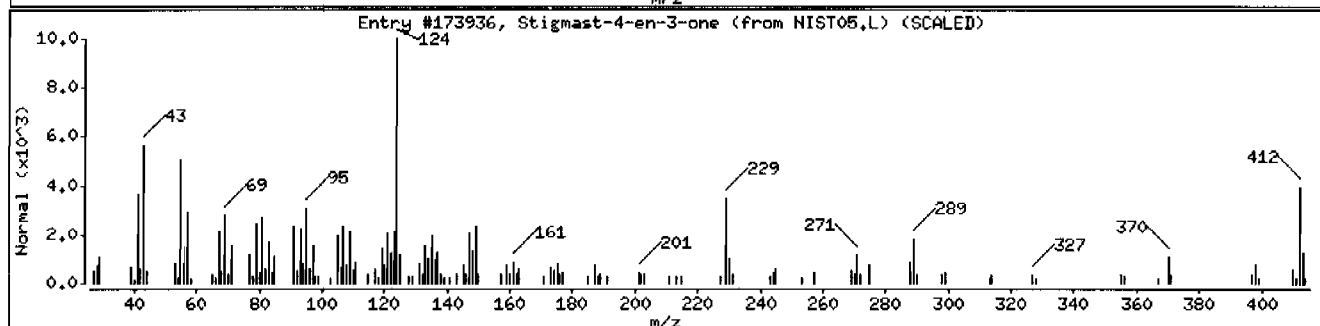
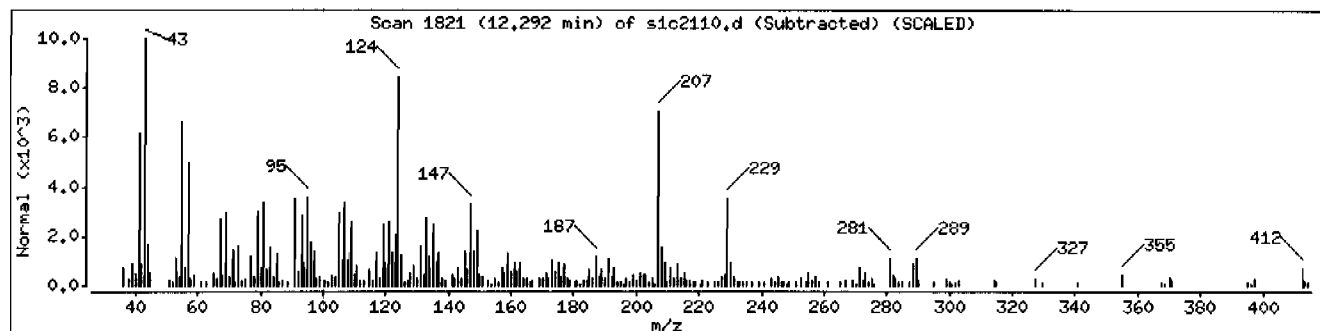
Volume Injected (uL): 0.5

Operator: AMY

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.bet	58-22-0	NIST05.L	117325	55	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117328	46	C19H28O2	288



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

SDG Number: 10-2150
Lab Sample ID: 248370013

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	435	ug/kg	87.0	435
108-95-2	Phenol	U	435	ug/kg	87.0	435
95-57-8	2-Chlorophenol	U	435	ug/kg	87.0	435
106-46-7	1,4-Dichlorobenzene	U	435	ug/kg	87.0	435
621-64-7	N-Nitrosodipropylamine	U	435	ug/kg	87.0	435
59-50-7	4-Chloro-3-methylphenol	U	435	ug/kg	87.0	435
83-32-9	Acenaphthene	U	43.5	ug/kg	14.4	43.5
121-14-2	2,4-Dinitrotoluene	U	435	ug/kg	43.5	435
100-02-7	4-Nitrophenol	U	435	ug/kg	144	435
87-86-5	Pentachlorophenol	U	435	ug/kg	109	435
129-00-0	Pyrene	J	27.9	ug/kg	13.1	43.5
110-86-1	Pyridine	U	435	ug/kg	87.0	435
62-53-3	Aniline	U	435	ug/kg	131	435
111-44-4	bis(2-Chloroethyl) ether	U	435	ug/kg	87.0	435
541-73-1	1,3-Dichlorobenzene	U	435	ug/kg	87.0	435
100-51-6	Benzyl alcohol	U	435	ug/kg	131	435
95-50-1	1,2-Dichlorobenzene	U	435	ug/kg	87.0	435
108-60-1	bis(2-Chloroisopropyl)ether	U	435	ug/kg	87.0	435
95-48-7	o-Cresol	U	435	ug/kg	87.0	435
65794-96-9	m,p-Cresols	U	435	ug/kg	131	435
67-72-1	Hexachloroethane	U	435	ug/kg	87.0	435
98-95-3	Nitrobenzene	U	435	ug/kg	87.0	435
78-59-1	Isophorone	U	435	ug/kg	87.0	435
88-75-5	2-Nitrophenol	U	435	ug/kg	87.0	435
105-67-9	2,4-Dimethylphenol	U	435	ug/kg	152	435
111-91-1	bis(2-Chloroethoxy)methane	U	435	ug/kg	87.0	435
120-83-2	2,4-Dichlorophenol	U	435	ug/kg	87.0	435
65-85-0	Benzoic acid	U	870	ug/kg	218	870
91-20-3	Naphthalene	U	43.5	ug/kg	13.1	43.5
106-47-8	4-Chloroaniline	U	435	ug/kg	87.0	435
87-68-3	Hexachlorobutadiene	U	435	ug/kg	87.0	435
91-57-6	2-Methylnaphthalene	U	43.5	ug/kg	8.70	43.5
77-47-4	Hexachlorocyclopentadiene	U	435	ug/kg	87.0	435
88-06-2	2,4,6-Trichlorophenol	U	435	ug/kg	87.0	435
95-95-4	2,4,5-Trichlorophenol	U	435	ug/kg	87.0	435
91-58-7	2-Chloronaphthalene	U	43.5	ug/kg	14.4	43.5
88-74-4	2-Nitroaniline	U	435	ug/kg	87.0	435
99-09-2	<i>o</i> -Nitroaniline	U	435	ug/kg	87.0	435
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370013

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	435	ug/kg	87.0	435
606-20-2	2,6-Dinitrotoluene	U	435	ug/kg	43.5	435
208-96-8	Acenaphthylene	U	43.5	ug/kg	13.1	43.5
51-28-5	2,4-Dinitrophenol	U	870	ug/kg	165	870
132-64-9	Dibenzofuran	U	435	ug/kg	87.0	435
84-66-2	Diethylphthalate	U	435	ug/kg	87.0	435
86-73-7	Fluorene	U	43.5	ug/kg	13.1	43.5
7005-72-3	4-Chlorophenylphenylether	U	435	ug/kg	87.0	435
534-52-1	2-Methyl-4,6-dinitrophenol	U	435	ug/kg	87.0	435
100-01-6	4-Nitroaniline	U	435	ug/kg	131	435
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	435	ug/kg	87.0	435
122-66-7	Azobenzene	U	435	ug/kg	87.0	435
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	435	ug/kg	87.0	435
118-74-1	Hexachlorobenzene	U	435	ug/kg	87.0	435
85-01-8	Phenanthrene	J	15.4	ug/kg	13.1	43.5
120-12-7	Anthracene	U	43.5	ug/kg	8.70	43.5
84-74-2	Di-n-butylphthalate	U	435	ug/kg	87.0	435
206-44-0	Fluoranthene	J	29.7	ug/kg	13.1	43.5
85-68-7	Butylbenzylphthalate	U	435	ug/kg	87.0	435
56-55-3	Benzo(a)anthracene	J	17.9	ug/kg	13.1	43.5
91-94-1	3,3'-Dichlorobenzidine	U	435	ug/kg	131	435
218-01-9	Chrysene	J	16.7	ug/kg	13.1	43.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	435	ug/kg	87.0	435
117-84-0	Di-n-octylphthalate	U	435	ug/kg	87.0	435
205-99-2	Benzo(b)fluoranthene	J	24.8	ug/kg	13.1	43.5
207-08-9	Benzo(k)fluoranthene	U	43.5	ug/kg	13.1	43.5
50-32-8	Benzo(a)pyrene	J	13.6	ug/kg	13.1	43.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.5	ug/kg	13.1	43.5
53-70-3	Dibenzo(a,h)anthracene	U	43.5	ug/kg	13.1	43.5
191-24-2	Benzo(ghi)perylene	U	43.5	ug/kg	13.1	43.5
120-82-1	1,2,4-Trichlorobenzene	U	435	ug/kg	87.0	435

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	267	ug/kg		JA
3387-41-5	Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3.39	177	ug/kg	95	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370013	Date Received: 03/02/2010 08:50	%Moisture: 23.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7477	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 01:18	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2123.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/L.O.D	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
5989-27-5	D-Limonene	3.67	182	ug/kg	94	NJ
	Unknown	7.9	342	ug/kg		J
	Unknown	9.19	255	ug/kg		J
112-95-8	Eicosane	9.78	255	ug/kg	96	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2123.d
Lab Smp Id: 248370013 Client Smp ID: RE36-10-7477
Inj Date : 22-MAR-2010 01:18
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370013|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	23.61490	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	468271	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1816604	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	958519	40.0000	
* 67 Phenanthrene-d10	188	6.710	6.710	(1.000)	1672364	40.0000	
* 91 Chrysene-d12	240	8.292	8.292	(1.000)	1254830	40.0000	
* 98 Perylene-d12	264	9.522	9.522	(1.000)	739254	40.0000	
\$ 3 2-Fluorophenol	112	2.834	2.822	(0.785)	845457	70.1152	3050
\$ 5 Phenol-d5	99	3.352	3.346	(0.928)	1047274	71.3152	3100
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	420300	37.7228	1640
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	893263	33.7437	1470
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	210968	67.1340	2920
\$ 81 p-Terphenyl-d14	244	7.628	7.622	(0.920)	977247	46.7130	2030

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	7.569	7.569	(0.913)	22835	0.64129	27.9(a)
68 Phenanthrene	178	6.722	6.722	(1.002)	12802	0.35428	15.4(a)
76 Fluoranthene	202	7.434	7.434	(1.108)	25348	0.68255	29.7(a)
89 Benzo(a)anthracene	228	8.281	8.281	(0.999)	12168	0.41253	17.9(a)
92 Chrysene	228	8.304	8.310	(1.001)	10607	0.38483	16.7(a)
95 Benzo(b)fluoranthene	252	9.134	9.133	(0.959)	11589	0.57003	24.8(a)
97 Benzo(a)pyrene	252	9.463	9.463	(0.994)	5090	0.31268	13.6(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: slc2123.d

Report Date: 03/22/2010 11:57

Lab. ID: 248370013

SampleType: SAMPLE

Injection Date: 22-MAR-2010 01:18

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370013|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	48372	3.35	3.40	80-120	100	()
93	51844	3.39	3.40	233-293	107	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	60170	3.97	3.86	80-120	100	(T)
42	40536	3.97	3.86	48-108	67	(T)

41	m-Nitroaniline		CAS#: 99-09-2			
138	140	5.70	5.66	80-120	100	()
92	4704	5.70	5.66	71-131	3357	(Q)
108	17642	5.70	5.66	0- 40	12589	(Q)

43	Dimethylphthalate		CAS#: 131-11-3			
163	171943	5.70	5.49	80-120	100	(T)
164	958519	5.70	5.49	0- 40	557	(QT)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	125301	5.70	5.54	80-120	100	(T)
63	2131	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	125301	5.70	5.83	80-120	100	(T)
89	2055	5.70	5.82	38- 98	2	(QT)
63	2131	5.70	5.82	20- 80	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	16364	6.25	6.09	80-120	100	(T)
165	16873	6.25	6.09	61-121	103	(T)
167	5814	6.25	6.09	0- 43	36	(T)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	15584	6.25	6.40	80-120	100	(T)
141	96410	6.25	6.40	48-108	619	(QT)
250	31795	6.25	6.40	67-127	204	(QT)

68 Phenanthrene		CAS#: 85-01-8				
178	12802	6.72	6.72	80-120	100	()
179	3137	6.72	6.72	0- 45	25	()
176	2395	6.72	6.72	0- 48	19	()

69 Anthracene		CAS#: 120-12-7				
178	12802	6.72	6.75	80-120	100	()
179	3137	6.72	6.75	0- 45	25	()
176	2395	6.72	6.75	0- 48	19	()

76 Fluoranthene		CAS#: 206-44-0				
202	25348	7.43	7.43	80-120	100	()
203	4190	7.43	7.43	0- 47	17	()
101	3773	7.43	7.43	0- 45	15	()

79 Pyrene		CAS#: 129-00-0				
202	22835	7.57	7.57	80-120	100	()
200	4540	7.57	7.57	0- 49	20	()
101	4095	7.56	7.56	0- 49	18	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	12168	8.28	8.28	80-120	100	()
226	2512	8.28	8.28	0- 55	21	()
229	3709	8.28	8.28	0- 49	30	()

92 Chrysene		CAS#: 218-01-9				
228	10607	8.30	8.31	80-120	100	()
229	2572	8.31	8.31	0- 49	24	()
226	3553	8.30	8.31	0- 58	33	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	11589	9.13	9.13	80-120	100	()
253	1826	9.13	9.13	0- 52	16	()
125	2608	9.14	9.13	0- 46	23	()

96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	11589	9.13	9.16	80-120	100	()
253	1826	9.13	9.16	0- 51	16	()
125	2608	9.14	9.16	0- 45	23	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
97	Benzo(a)pyrene		CAS#:	50-32-8		
252	5090	9.46	9.46	80-120	100	()
253	992	9.46	9.46	0- 52	20	()
125	1039	9.46	9.46	0- 45	20	()

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2123.d
 Lab Smp Id: 248370013 Client Smp ID: RE36-10-7477
 Inj Date : 22-MAR-2010 01:18
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370013|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 23
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	23.61490	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2851280	40.000
* 91 Chrysene-d12	8.292	4010473	40.000
* 98 Perylene-d12	9.522	2100443	40.000

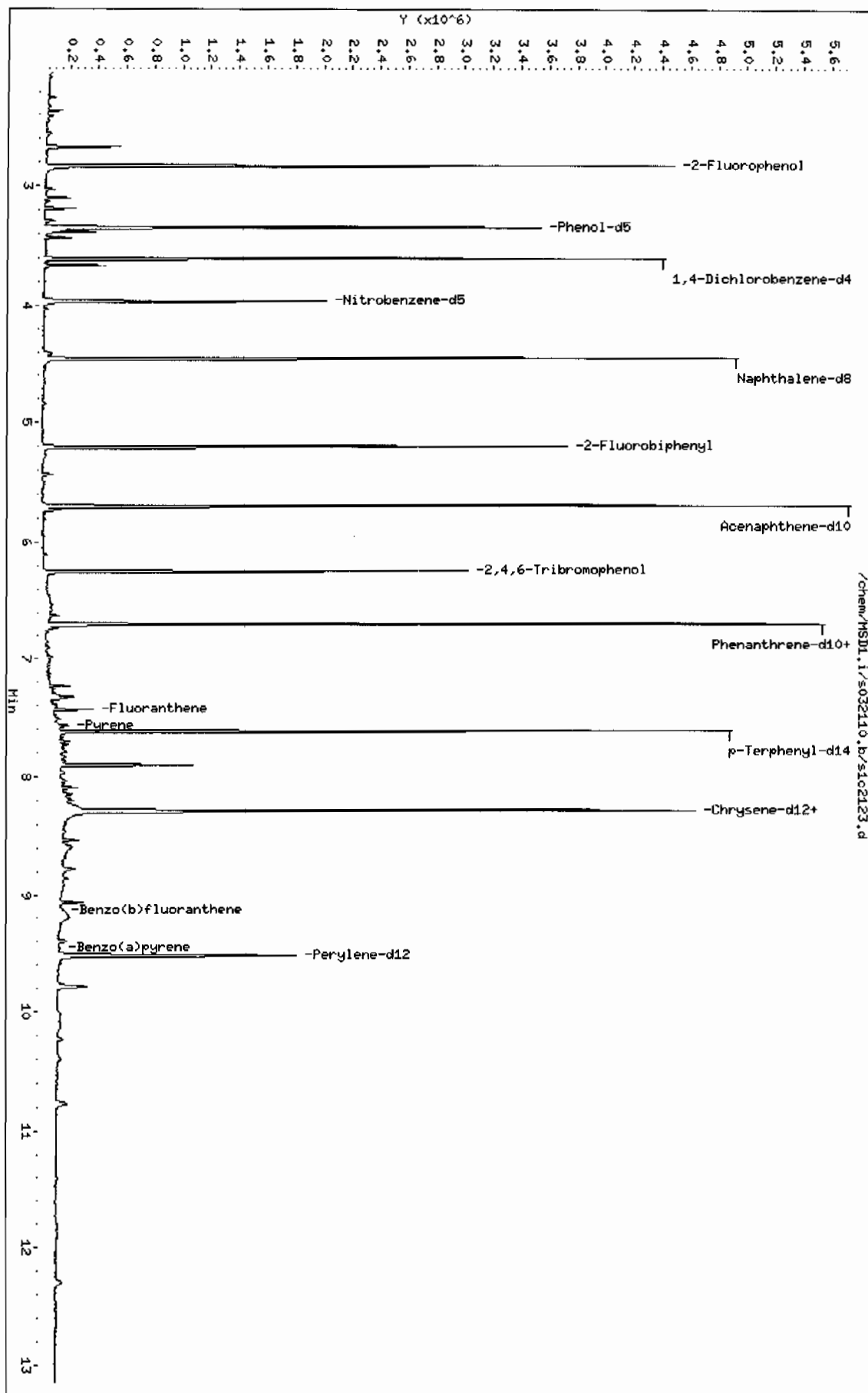
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.669	436847	6.12843281	267	0		0	10
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m					CAS #: 3387-41-5		
3.387	289204	4.05717666	176	95	NIST05.L	15373	10
D-Limonene					CAS #: 5989-27-5		
3.669	297833	4.17823570	182	94	NIST05.L	15165	10
Unknown					CAS #:		
7.904	788925	7.86864474	342	0		0	91
Unknown					CAS #:		
9.192	307828	5.86216002	255	0		0	98
Eicosane					CAS #: 112-95-8		
9.781	308211	5.86944908	255	96	NIST05.L	113488	98

Data File: /chem/MSD1.i/s032110.b/s102123.d
 Date: 22-MAR-2010 01:18
 Client ID: RE36-10-7477
 Sample Info: 1248370013|96122811|SWM11L4NL
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-SMS

Instrument: MSD1.i
 Operator: AMY
 Column diameter: 0.20

Page 1



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 124837001319612281115VH111LANL

Volume Injected (uL): 0.5

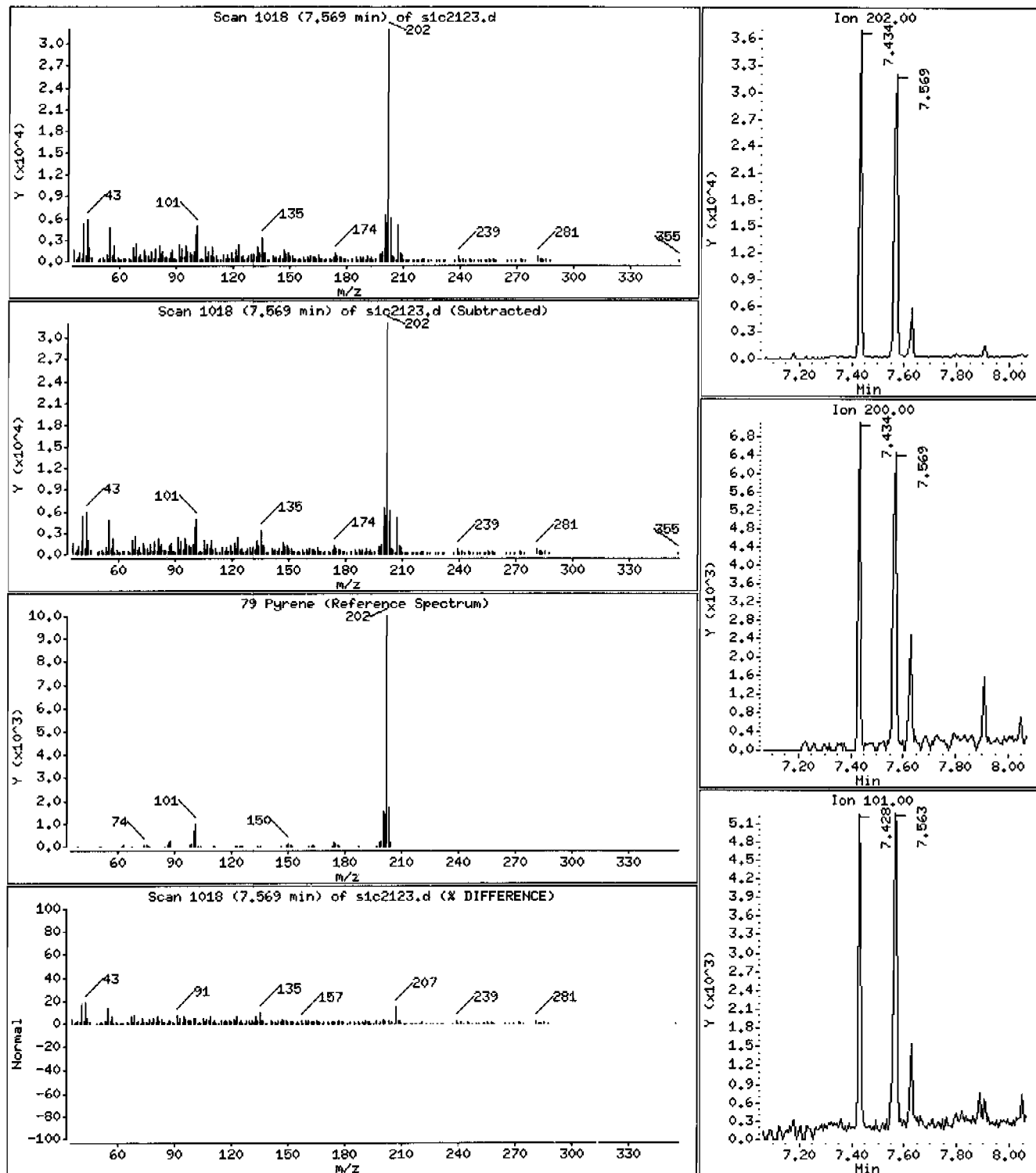
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 27.9 ug/Kg



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 1248370013196122811SVMI11LANL

Volume Injected (uL): 0.5

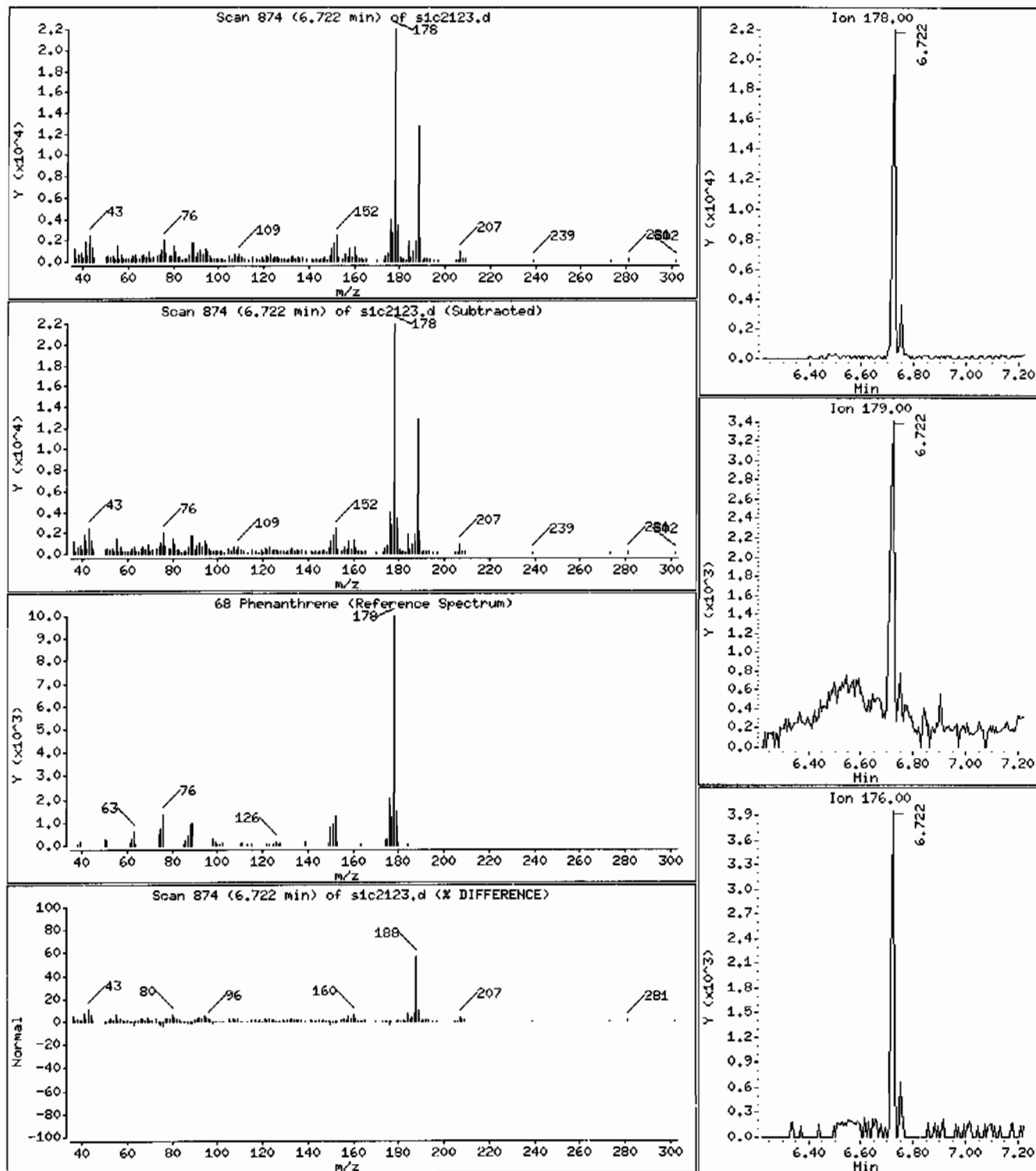
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 15.4 ug/Kg



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 1248370013196122811/SVMI1/LANL

Volume Injected (uL): 0.5

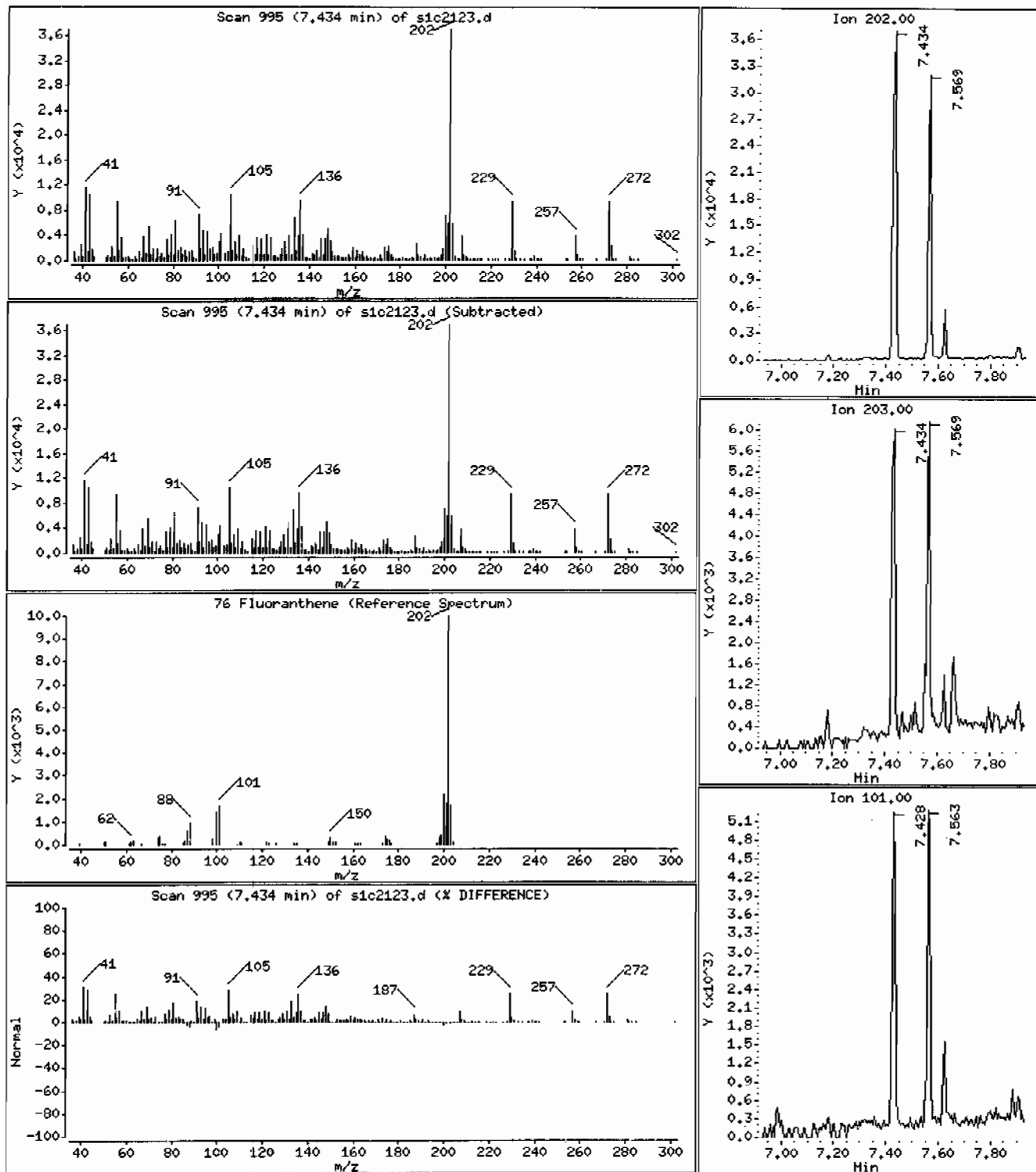
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 29.7 ug/Kg



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 1248370013196122811SVH111LANL

Volume Injected (uL): 0.5

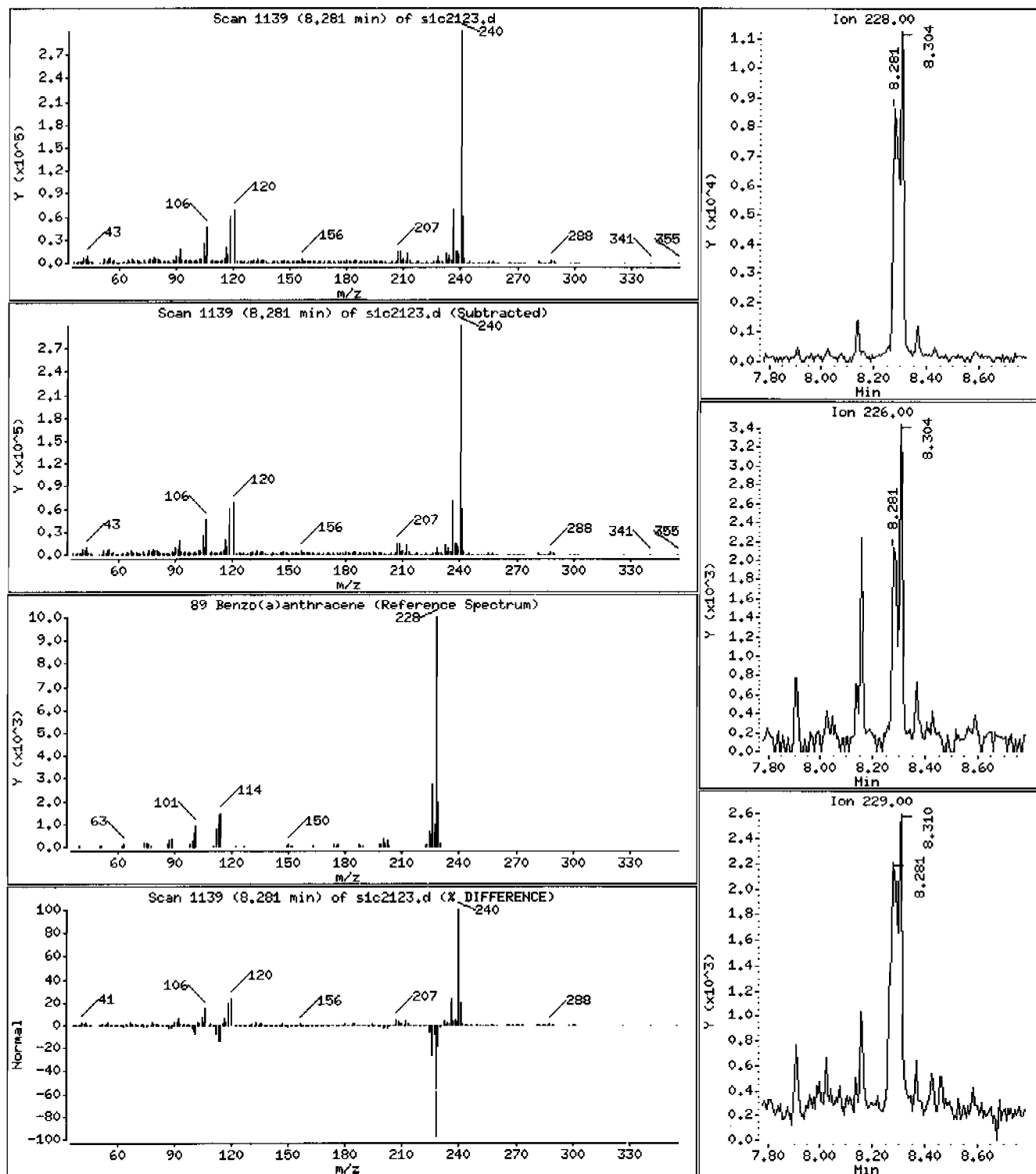
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 17.9 ug/Kg



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 12483700131961228111SVMI11LANL

Volume Injected (uL): 0.5

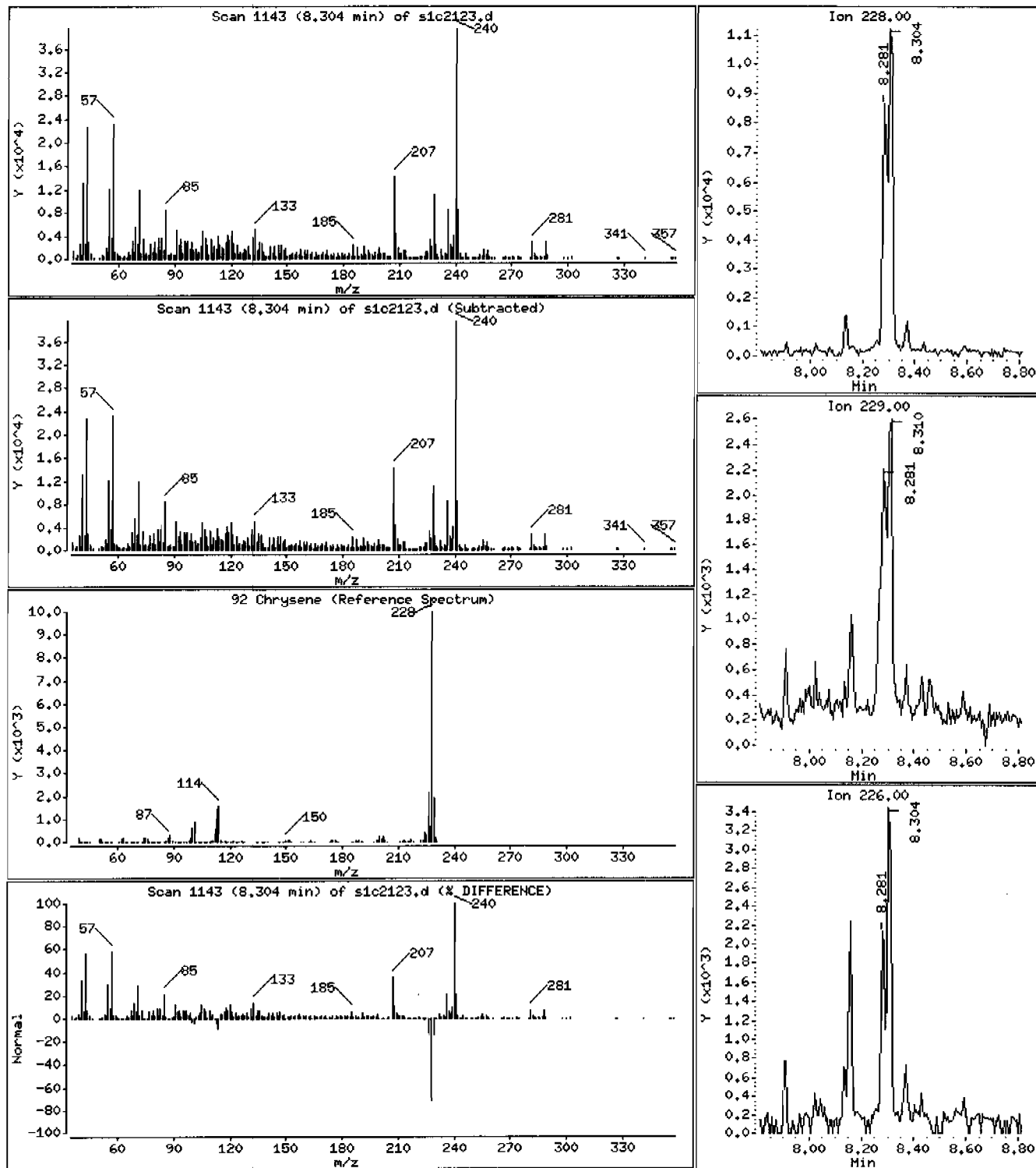
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 16.7 ug/Kg



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: HSD1.i

Sample Info: 1248370013196122811SVMI1ILANL

Volume Injected (uL): 0.5

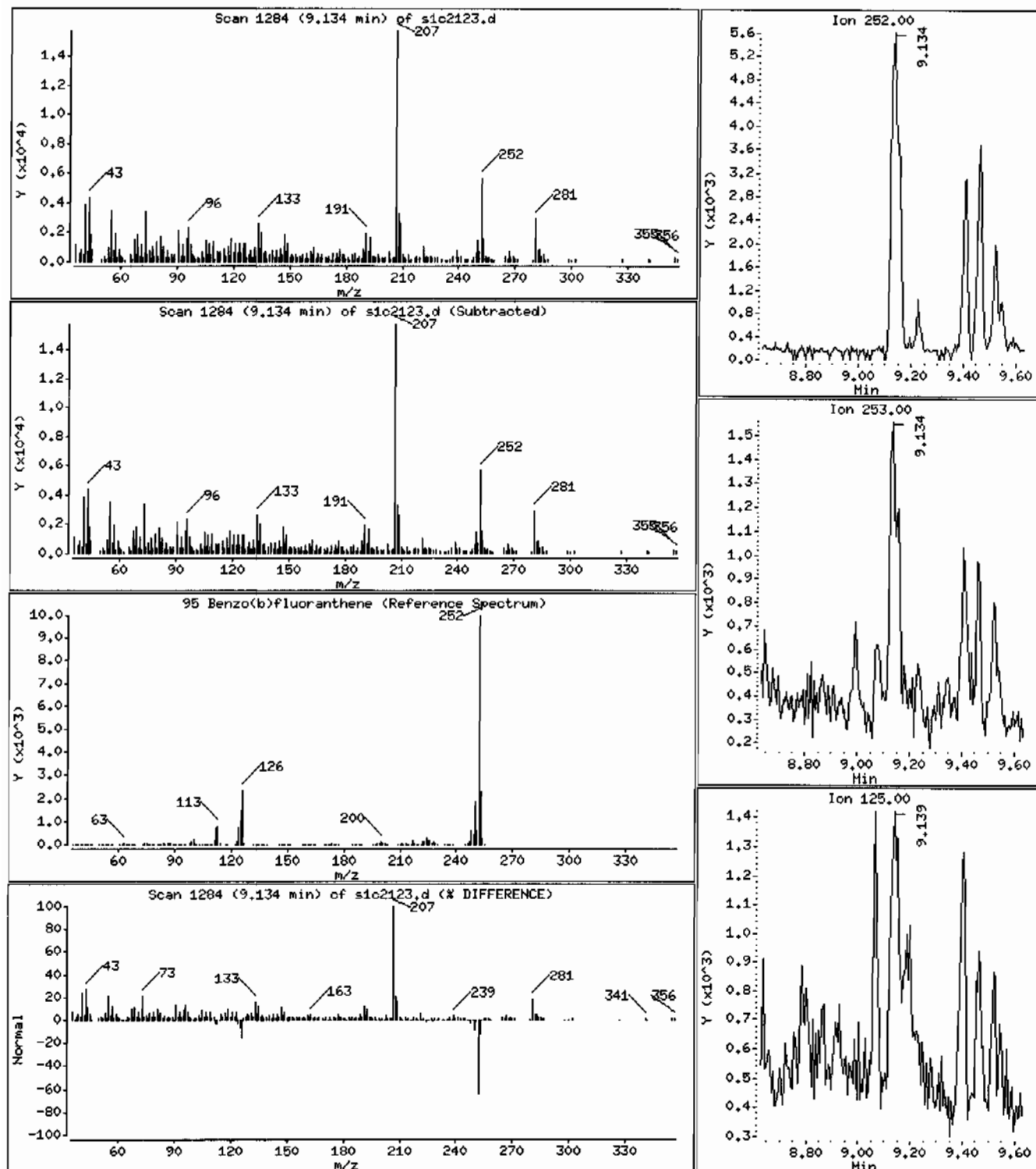
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

96 Benzo(b)fluoranthene

Concentration: 24.8 ug/Kg



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 1248370013196122811ISVH11ILANL

Volume Injected (uL): 0.5

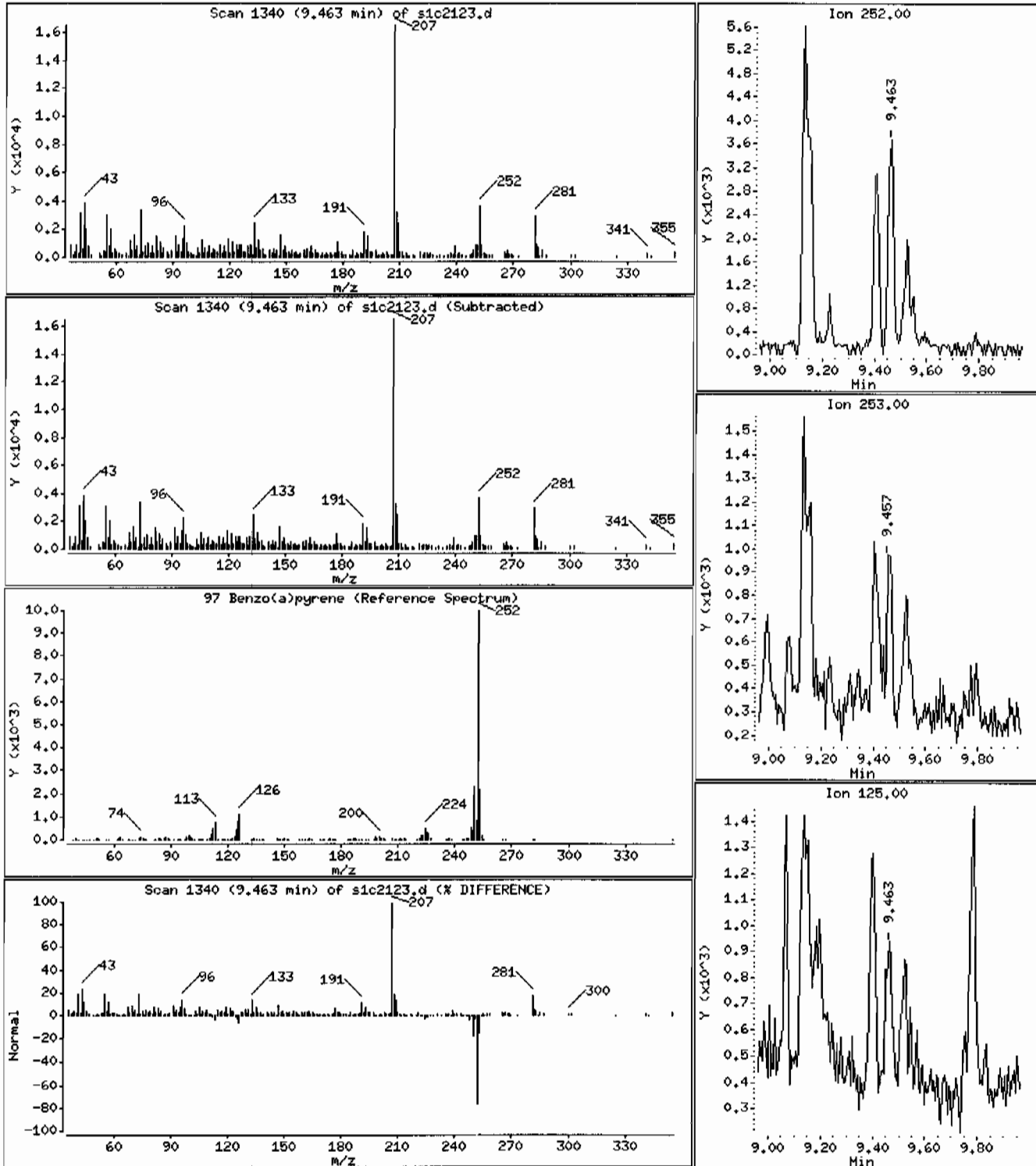
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 13.6 ug/Kg



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 1248370013196122811ISVM11ILANL

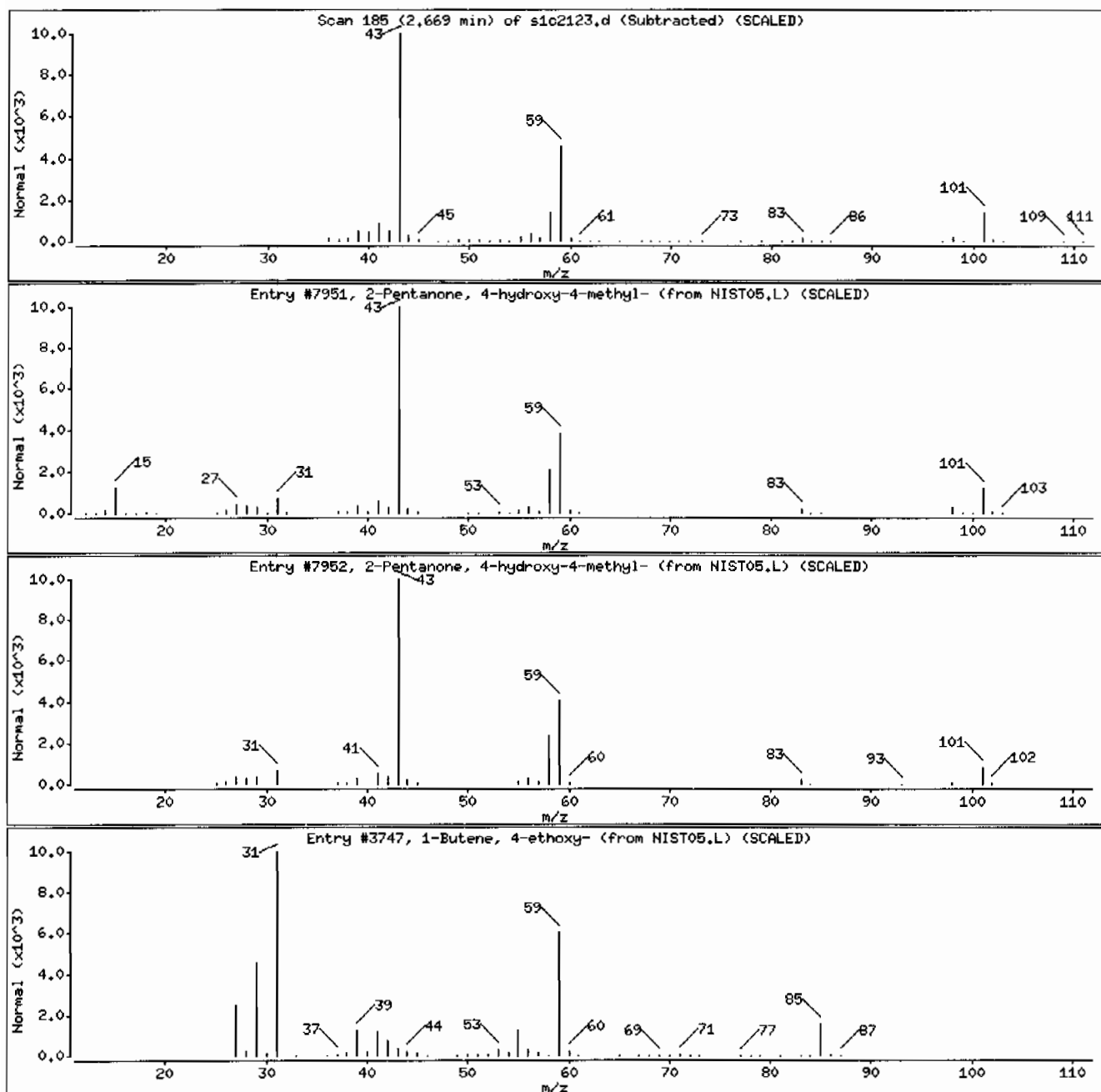
Volume Injected (uL): 0.5

Operator: AMY

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	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
1-Butene, 4-ethoxy-	44611-46-3	NIST05.L	3747	23	C6H12O	100



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 12483700131961228111SVH111LANL

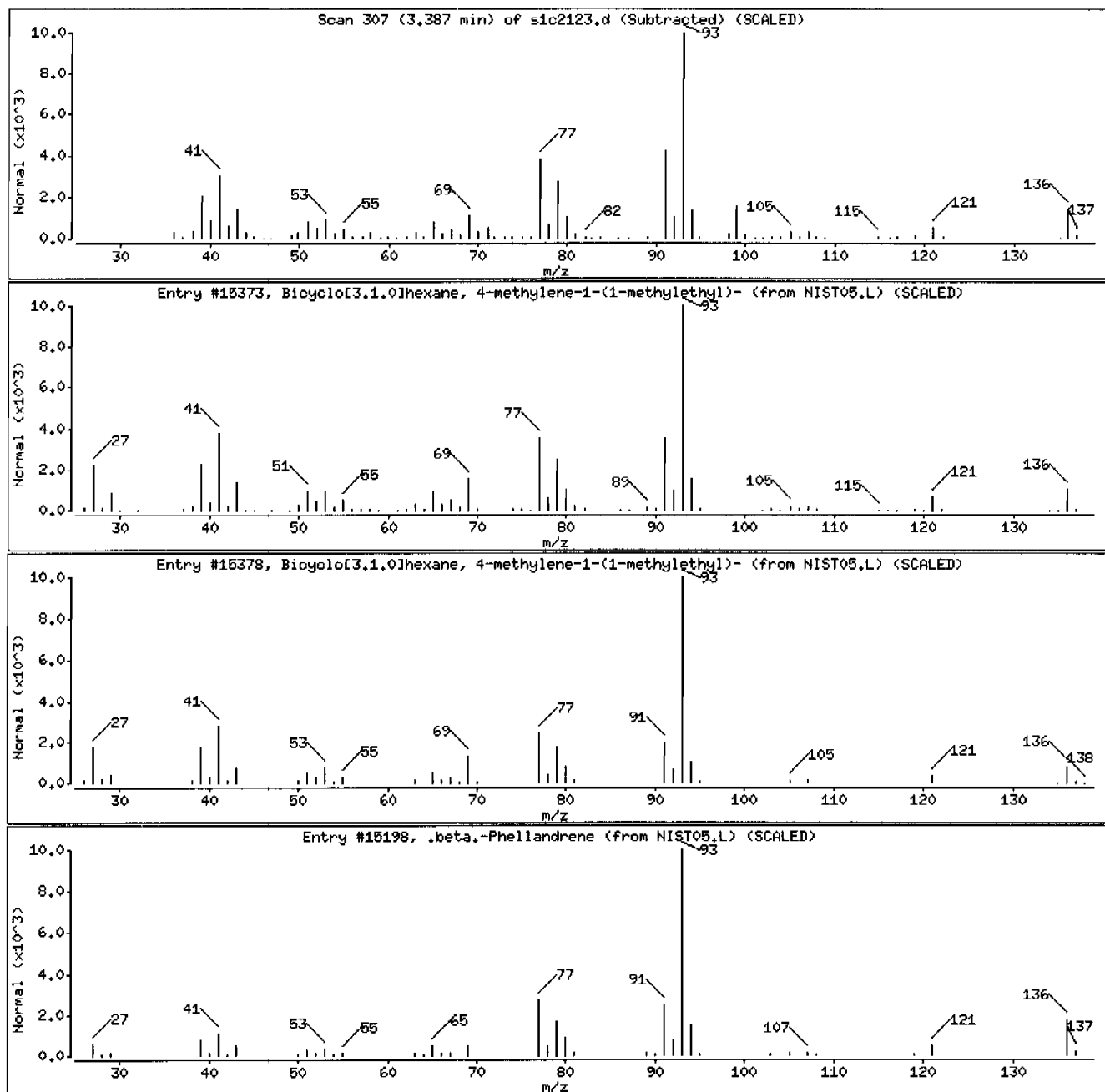
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3387-41-5	NIST05.L	15373	96	C10H16	136
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3387-41-5	NIST05.L	15378	90	C10H16	136
.beta.-Phellandrene	555-10-2	NIST05.L	15198	90	C10H16	136



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: I248370013196122811SVMI1ILANL

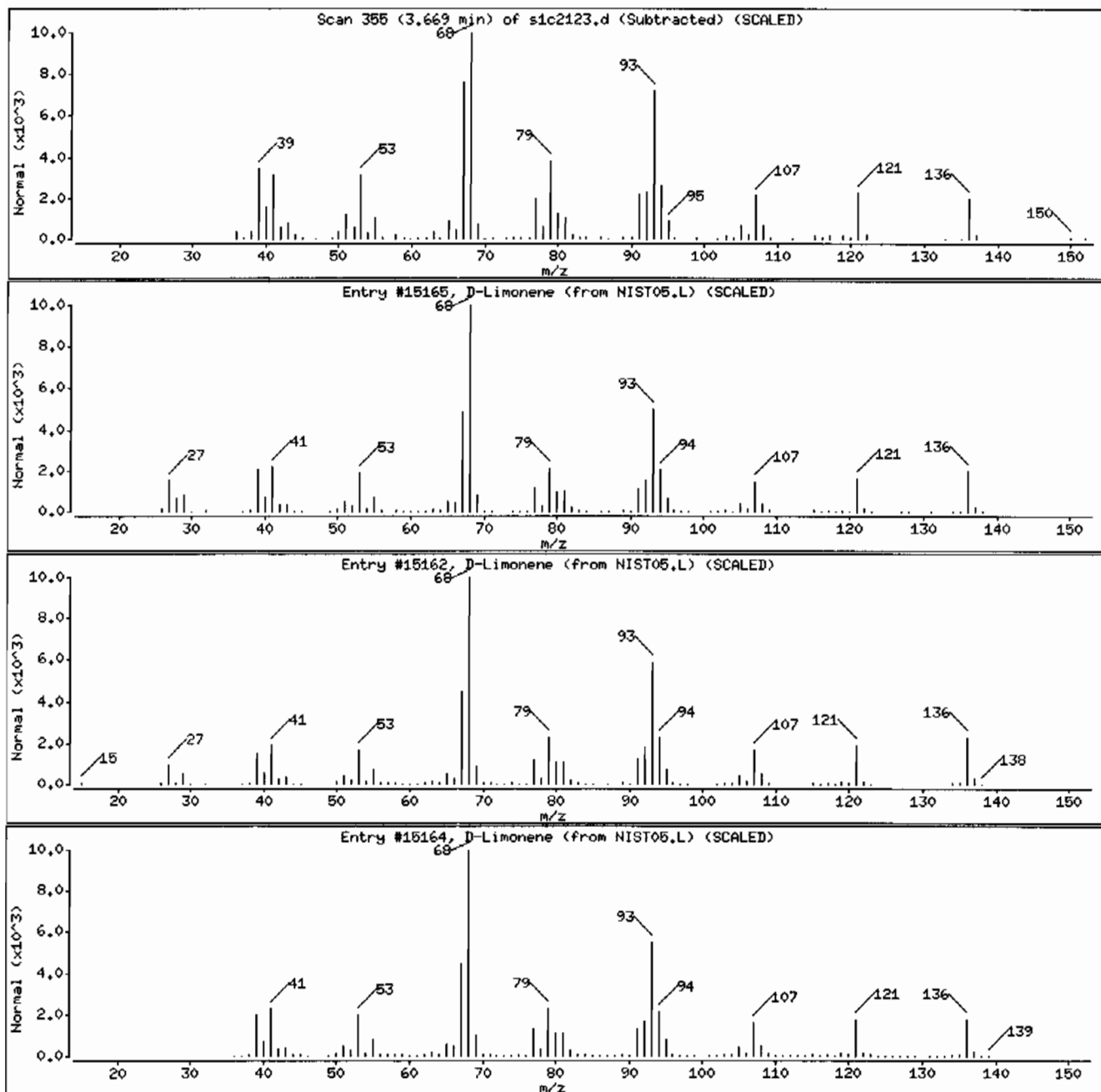
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
D-Limonene	5989-27-5	NIST05.L	15165	94	C10H16	136
D-Limonene	5989-27-5	NIST05.L	15162	94	C10H16	136
D-Limonene	5989-27-5	NIST05.L	15164	94	C10H16	136



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 1248370013196122811SVH111LANL

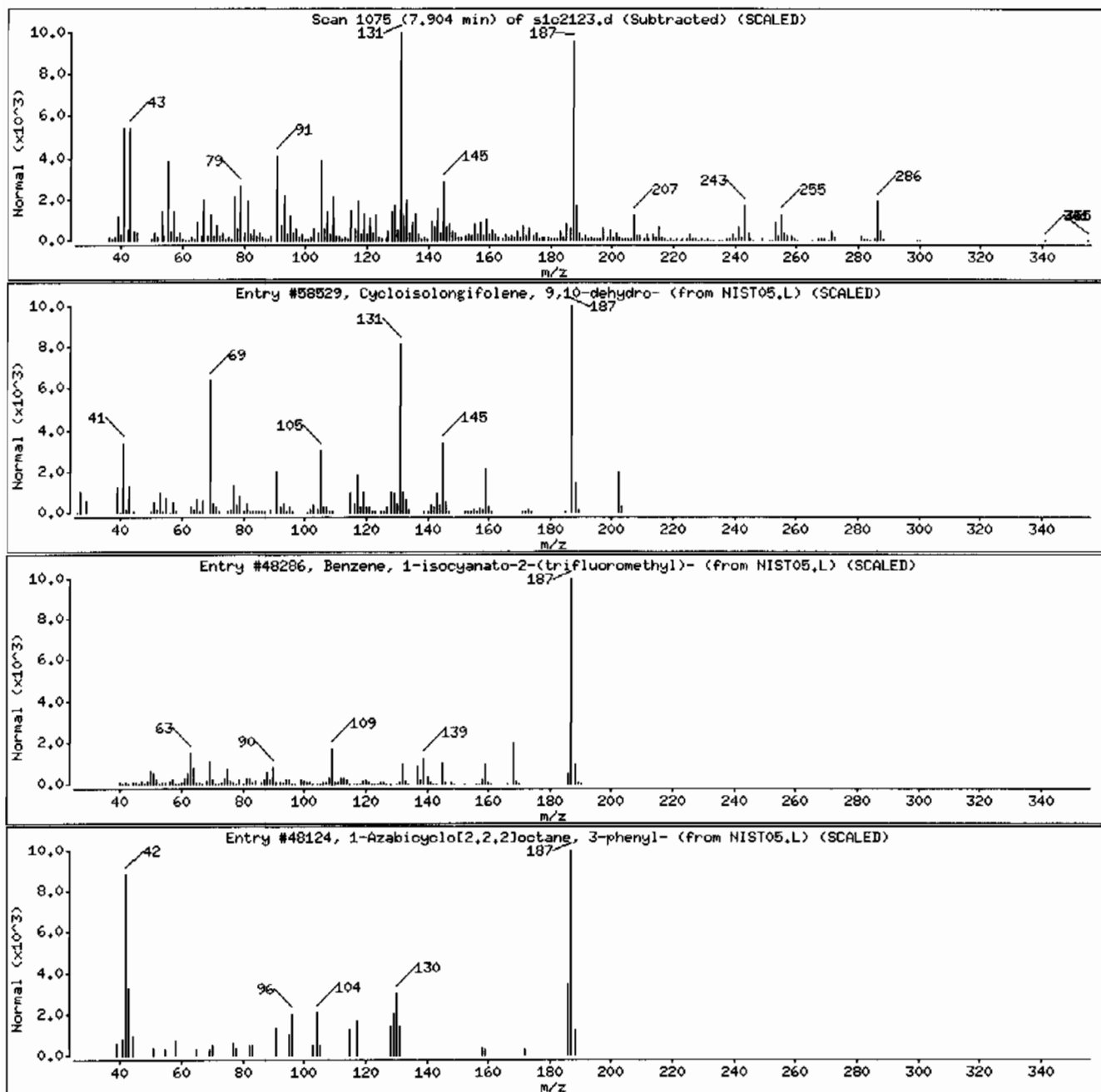
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cycloisolongifolene, 9,10-dehydro-	1000156-81-6	NIST05.L	58529	68	C15H22	202
Benzene, 1-isocyanato-2-(trifluoromethyl)-	2285-12-3	NIST05.L	48286	27	C8H4F3NO	187
1-Azabicyclo[2.2.2]octane, 3-phenyl-	58822-88-1	NIST05.L	48124	27	C13H17N	187



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 1248370013196122811ISVH11LANL

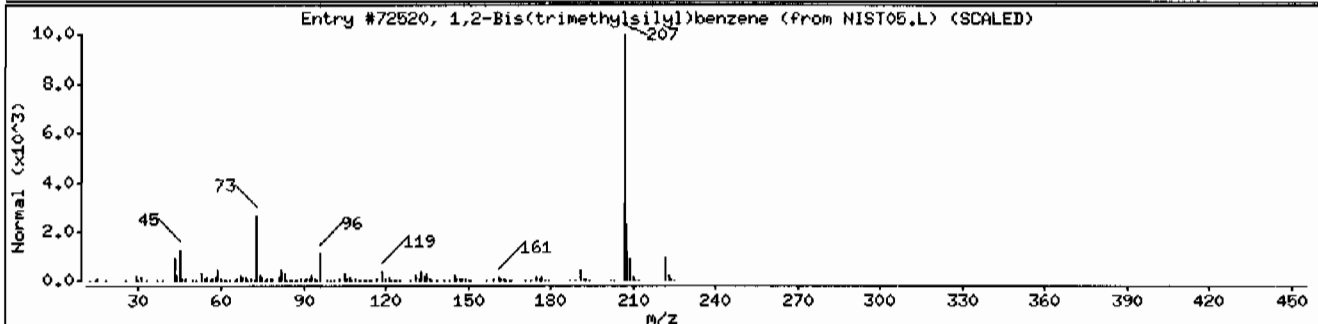
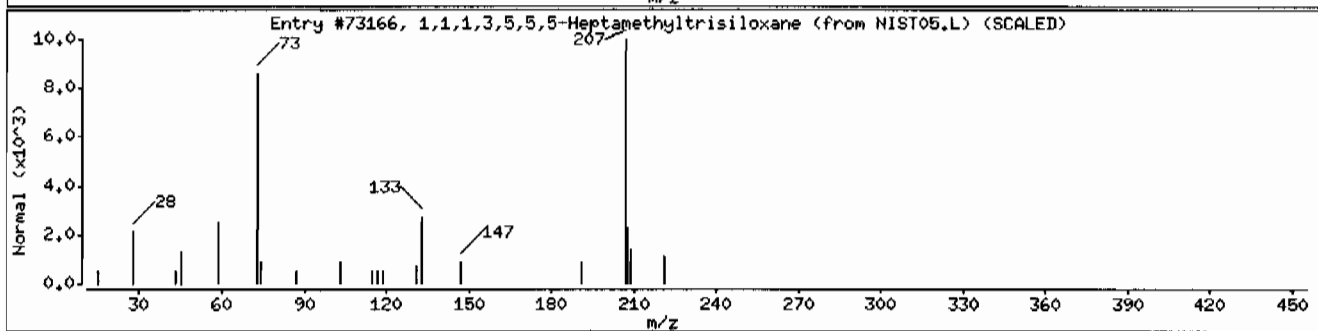
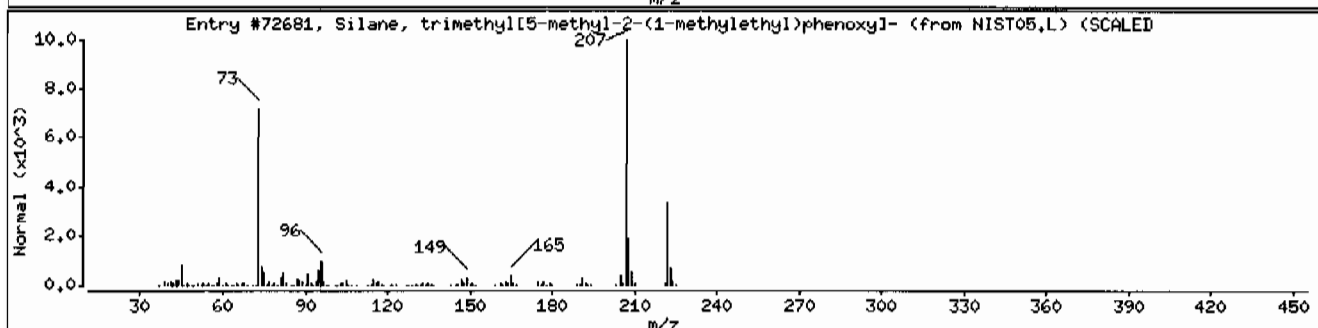
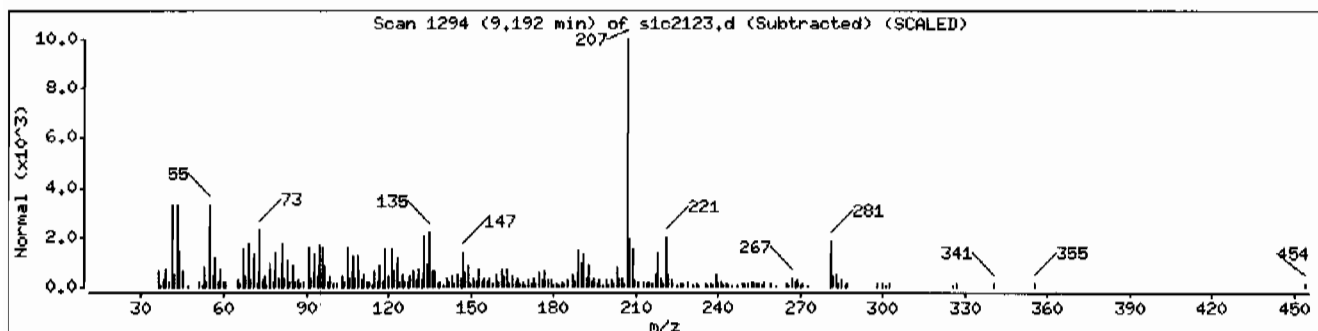
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72681	60	C13H22OSi	222
1,1,1,3,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	59	C7H22O2Si3	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	50	C12H22Si2	222



Date : 22-MAR-2010 01:18

Client ID: RE36-10-7477

Instrument: MSD1.i

Sample Info: 12483700131961228111SVH111LANL

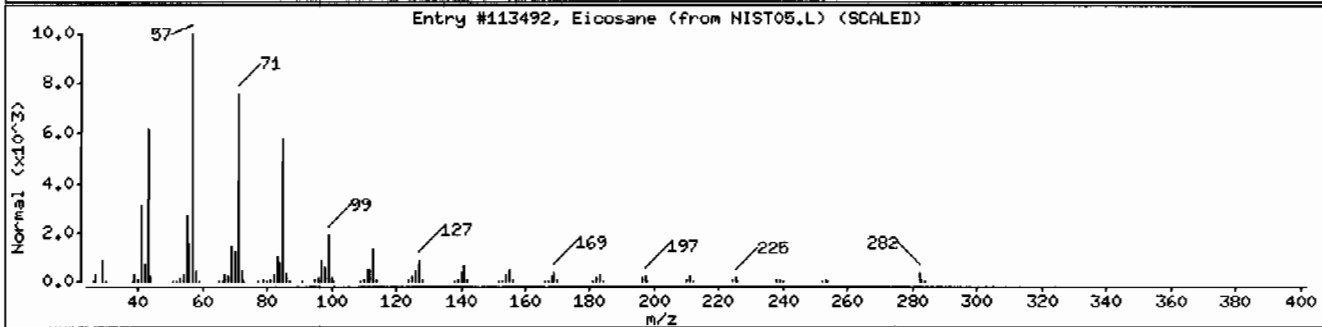
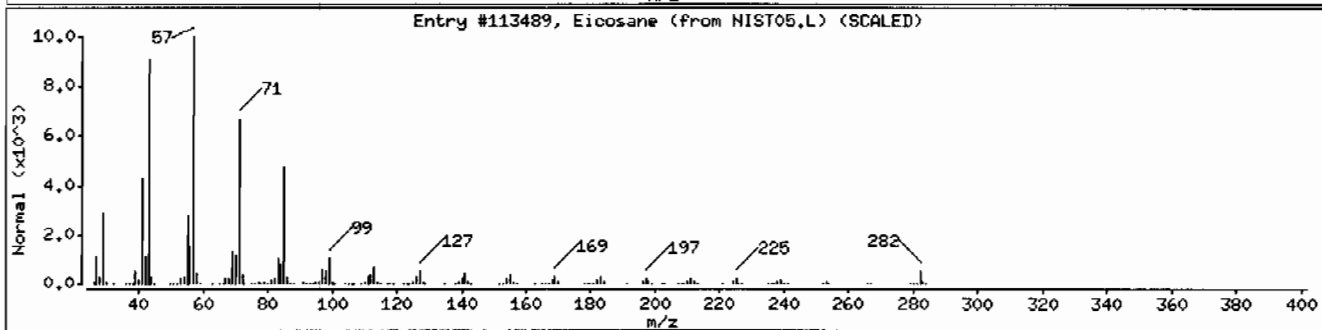
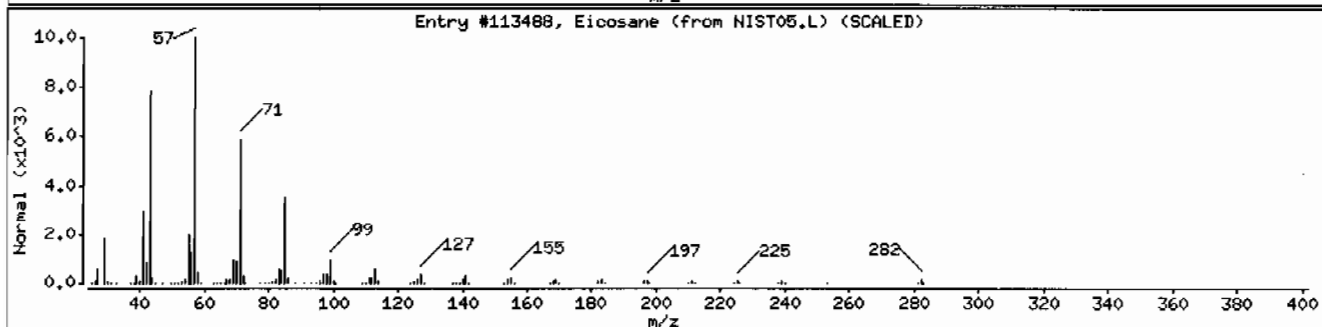
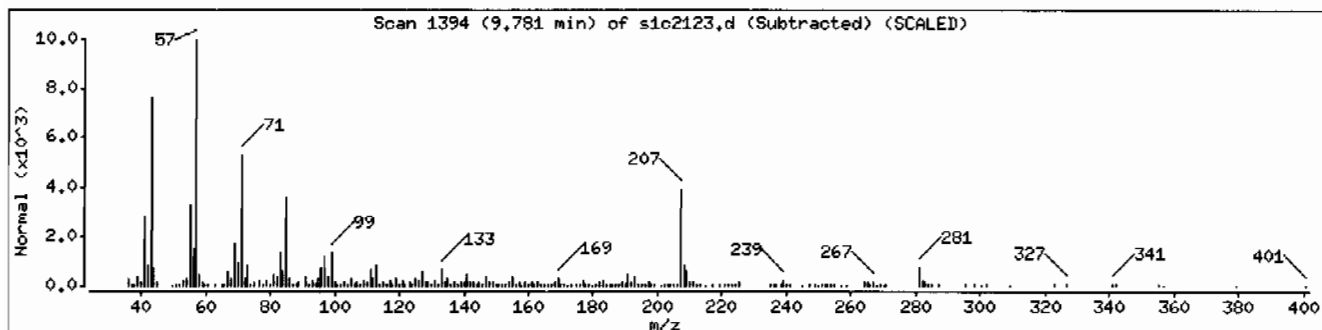
Volume Injected (uL): 0.5

Operator: AMY

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	113488	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	95	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282



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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370007	Date Received: 03/02/2010 08:50	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7478	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.1	Dilution: 1
Run Date: 03/21/2010 22:56	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2117.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	370	ug/kg	73.9	370
108-95-2	Phenol	U	370	ug/kg	73.9	370
95-57-8	2-Chlorophenol	U	370	ug/kg	73.9	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	73.9	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	73.9	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	73.9	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.4	370
129-00-0	Pyrene	J	24.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	73.9	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	73.9	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	73.9	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	73.9	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	73.9	370
95-48-7	o-Cresol	U	370	ug/kg	73.9	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	73.9	370
98-95-3	Nitrobenzene	U	370	ug/kg	73.9	370
78-59-1	Isophorone	U	370	ug/kg	73.9	370
88-75-5	2-Nitrophenol	U	370	ug/kg	73.9	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	73.9	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	73.9	370
65-85-0	Benzoic acid	U	739	ug/kg	185	739
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	73.9	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	73.9	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.39	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	73.9	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	73.9	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	73.9	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	73.9	370
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	370	ug/kg	73.9	370

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370007	Date Received: 03/02/2010 08:50	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7478	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1J	Dilution: 1
Run Date: 03/21/2010 22:56	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2117.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	370	ug/kg	73.9	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	370	ug/kg	73.9	370
84-66-2	Diethylphthalate	U	370	ug/kg	73.9	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	73.9	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	73.9	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	73.9	370
122-66-7	Azobenzene	U	370	ug/kg	73.9	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	73.9	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	73.9	370
85-01-8	Phenanthrene	J	11.7	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.39	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	73.9	370
206-44-0	Fluoranthene	J	21.7	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	73.9	370
56-55-3	Benzo(a)anthracene	J	13.3	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	J	15.8	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	73.9	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	73.9	370
205-99-2	Benzo(b)fluoranthene	J	19.3	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	73.9	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	230	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	241	ug/kg	99	NJ

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370007	Date Received: 03/02/2010 08:50	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7478	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 22:56	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: slc2117.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	6.59	213	ug/kg		J
	Unknown	8.09	357	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.13	339	ug/kg	95	NJ
55402-13-6	3-Octyne, 2,2,7-trimethyl-	8.93	222	ug/kg	83	NJ
112-95-8	Eicosane	9.06	167	ug/kg	97	NJ
	Unknown	9.77	206	ug/kg		J
	Unknown	12.29	177	ug/kg		J

Data File: /chem/MSD1.i/s032110.b/slc2117.d
Report Date: 22-Mar-2010 15:17

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2117.d
Lab Smp Id: 248370007 Client Smp ID: RE36-10-7478
Inj Date : 21-MAR-2010 22:56
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370007|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	9.81350	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.610	3.610	(1.000)	483389	40.0000	
* 29 Naphthalene-d8		136	4.463	4.469	(1.000)	1886852	40.0000	
* 46 Acenaphthene-d10		164	5.704	5.704	(1.000)	973826	40.0000	
* 67 Phenanthrene-d10		188	6.704	6.710	(1.000)	1651056	40.0000	
* 91 Chrysene-d12		240	8.287	8.292	(1.000)	1225310	40.0000	
* 98 Perylene-d12		264	9.522	9.522	(1.000)	755782	40.0000	
\$ 3 2-Fluorophenol		112	2.834	2.822	(0.785)	910491	73.1470	2700
\$ 5 Phenol-d5		99	3.346	3.346	(0.927)	1120226	73.8972	2730
\$ 20 Nitrobenzene-d5		82	3.969	3.975	(0.889)	468829	40.5118	1500
\$ 39 2-Fluorobiphenyl		172	5.204	5.204	(0.912)	961622	35.7550	1320
\$ 60 2,4,6-Tribromophenol		329	6.251	6.251	(1.096)	199742	62.5626	2310
\$ 81 p-Terphenyl-d14		244	7.628	7.622	(0.920)	895658	43.8445	1620

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====	=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	7.563	7.569	(0.913)	22562	0.64889	24.0 (a)	
68 Phenanthrene	178	6.722	6.722	(1.003)	11331	0.31762	11.7 (a)	
76 Fluoranthene	202	7.428	7.434	(1.108)	21559	0.58801	21.7 (a)	
89 Benzo(a)anthracene	228	8.281	8.281	(0.999)	10402	0.36115	13.3 (aQ)	
92 Chrysene	228	8.304	8.310	(1.002)	11524	0.42817	15.8 (a)	
95 Benzo(b)fluoranthene	252	9.128	9.133	(0.959)	10831	0.52110	19.3 (a)	

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: slc2117.d

Report Date: 03/22/2010 11:54

Lab. ID: 248370007

SampleType: SAMPLE

Injection Date: 21-MAR-2010 22:56

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370007|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	52728	3.35	3.40	80-120	100	()
93	7739	3.39	3.40	233-293	15	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	66283	3.97	3.86	80-120	100	(T)
42	45627	3.97	3.86	48-108	69	(T)

41	m-Nitroaniline	CAS#: 99-09-2				
138	162	5.70	5.66	80-120	100	()
92	5030	5.70	5.66	71-131	3092	(Q)
108	17927	5.70	5.66	0- 40	11016	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	175788	5.70	5.49	80-120	100	(T)
164	973826	5.70	5.49	0- 40	554	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	124479	5.70	5.54	80-120	100	(T)
63	2055	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	124479	5.70	5.83	80-120	100	(T)
89	1965	5.70	5.82	38- 98	2	(QT)
63	2010	5.70	5.82	20- 80	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	15416	6.25	6.09	80-120	100	(T)
165	16317	6.25	6.09	61-121	106	(T)
167	5912	6.25	6.09	0- 43	38	(T)

56 p-Nitroaniline		CAS#: 100-01-6				
138	832	6.10	6.09	80-120	100	()
108	571	6.07	6.09	29- 89	69	()
92	454	5.96	6.09	14- 74	55	(T)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	15667	6.25	6.40	80-120	100	(T)
141	90092	6.25	6.40	48-108	575	(QT)
250	30602	6.25	6.40	67-127	195	(QT)

68 Phenanthrene		CAS#: 85-01-8				
178	11331	6.72	6.72	80-120	100	()
179	3031	6.72	6.72	0- 45	27	()
176	1961	6.72	6.72	0- 48	17	()

69 Anthracene		CAS#: 120-12-7				
178	11331	6.72	6.75	80-120	100	()
179	3031	6.72	6.75	0- 45	27	()
176	1961	6.72	6.75	0- 48	17	()

76 Fluoranthene		CAS#: 206-44-0				
202	21559	7.43	7.43	80-120	100	()
203	3787	7.43	7.43	0- 47	18	()
101	3518	7.43	7.43	0- 45	16	()

79 Pyrene		CAS#: 129-00-0				
202	22562	7.56	7.57	80-120	100	()
200	4924	7.56	7.57	0- 49	22	()
101	4591	7.56	7.56	0- 49	20	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	10402	8.28	8.28	80-120	100	()
226	1892	8.27	8.28	0- 55	18	()
229	5399	8.29	8.28	0- 49	52	(Q)

92 Chrysene		CAS#: 218-01-9				
228	11524	8.30	8.31	80-120	100	()
229	2642	8.30	8.31	0- 49	23	()
226	3326	8.30	8.31	0- 58	29	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	10831	9.13	9.13	80-120	100	()
253	3107	9.13	9.13	0- 52	29	()
125	1544	9.13	9.13	0- 46	14	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	10831	9.13	9.16	80-120	100	()
253	3107	9.13	9.16	0- 51	29	()
125	1663	9.13	9.16	0- 45	15	()

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/s1c2117.d
 Lab Smp Id: 248370007 Client Smp ID: RE36-10-7478
 Inj Date : 21-MAR-2010 22:56
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370007|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: s1c1620.d
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	9.81350	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2997833	40.000
* 46 Acenaphthene-d10	5.704	4206808	40.000
* 67 Phenanthrene-d10	6.704	4080996	40.000
* 91 Chrysene-d12	8.287	3571639	40.000
* 98 Perylene-d12	9.522	2128879	40.000

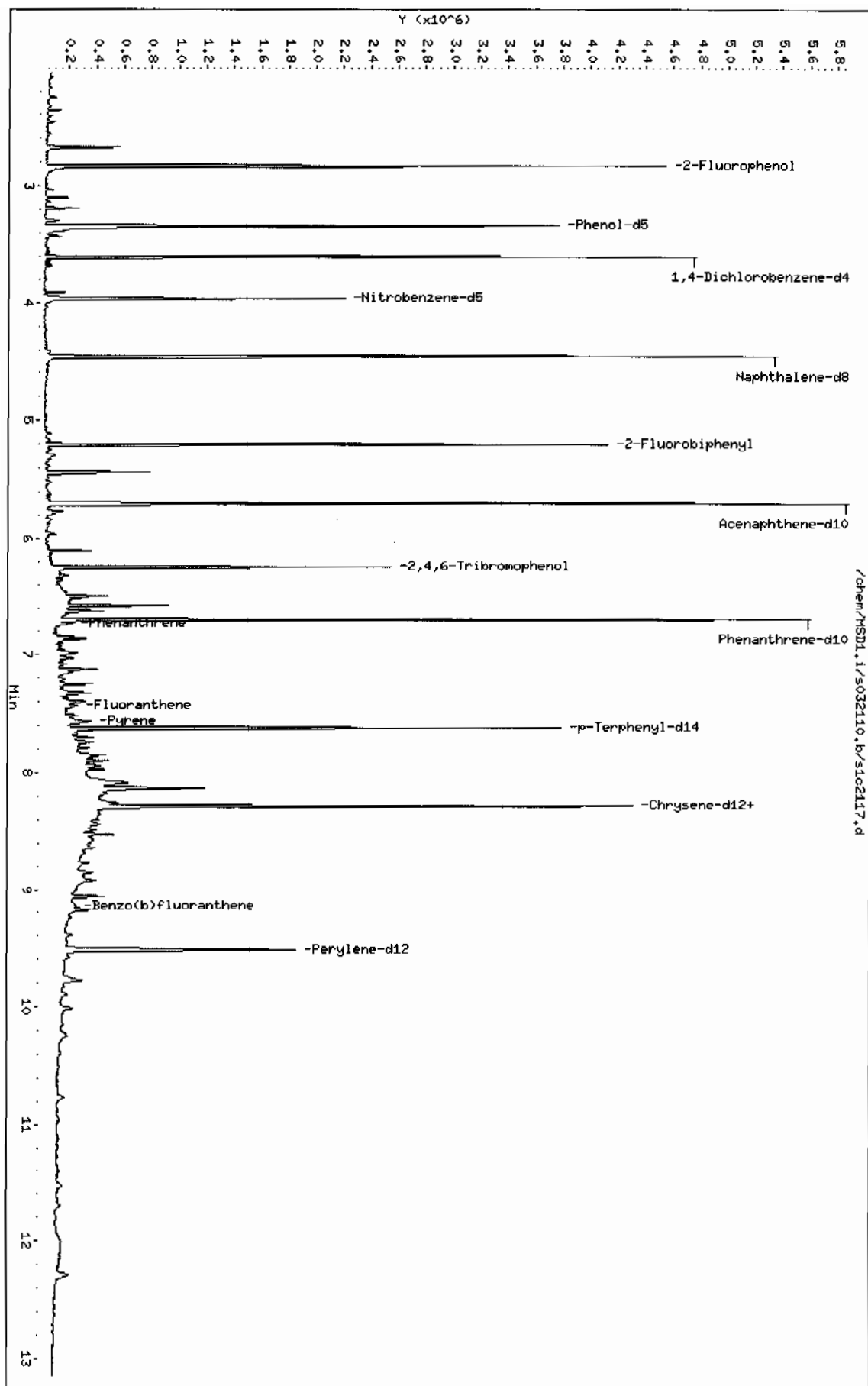
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.669	467133	6.23294160	230	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.434	684721	6.51059701	241	99	NIST05.L	60023	46
Unknown					CAS #:		
6.587	589265	5.77569716	213	0		0	67
Unknown					CAS #:		
8.092	863427	9.66981406	357	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 5155-70-4		
8.134	818777	9.16975607	339	95	NIST05.L	125035	91
3-Octyne, 2,2,7-trimethyl-					CAS #: 55402-13-6		
8.928	320061	6.01370275	222	83	NIST05.L	24399	98
Eicosane					CAS #: 112-95-8		
9.063	241019	4.52856884	167	97	NIST05.L	113488	98
Unknown					CAS #:		
9.775	296477	5.57058281	206	0		0	98
Unknown					CAS #:		
12.292	254790	4.78729894	177	0		0	98

Date File: /chem/MSDL.i/s032110.b/s102117.d
 Date: 21-MAR-2010 22:56
 Client ID: RE36-10-7478
 Sample Info: 1248370007196122811ISWH11LANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: MSDL.i
 Operator: AMY
 Column diameter: 0.20

Page 1



Date : 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.i

Sample Info: I248370007196122811SVH11LANL

Volume Injected (uL): 0.5

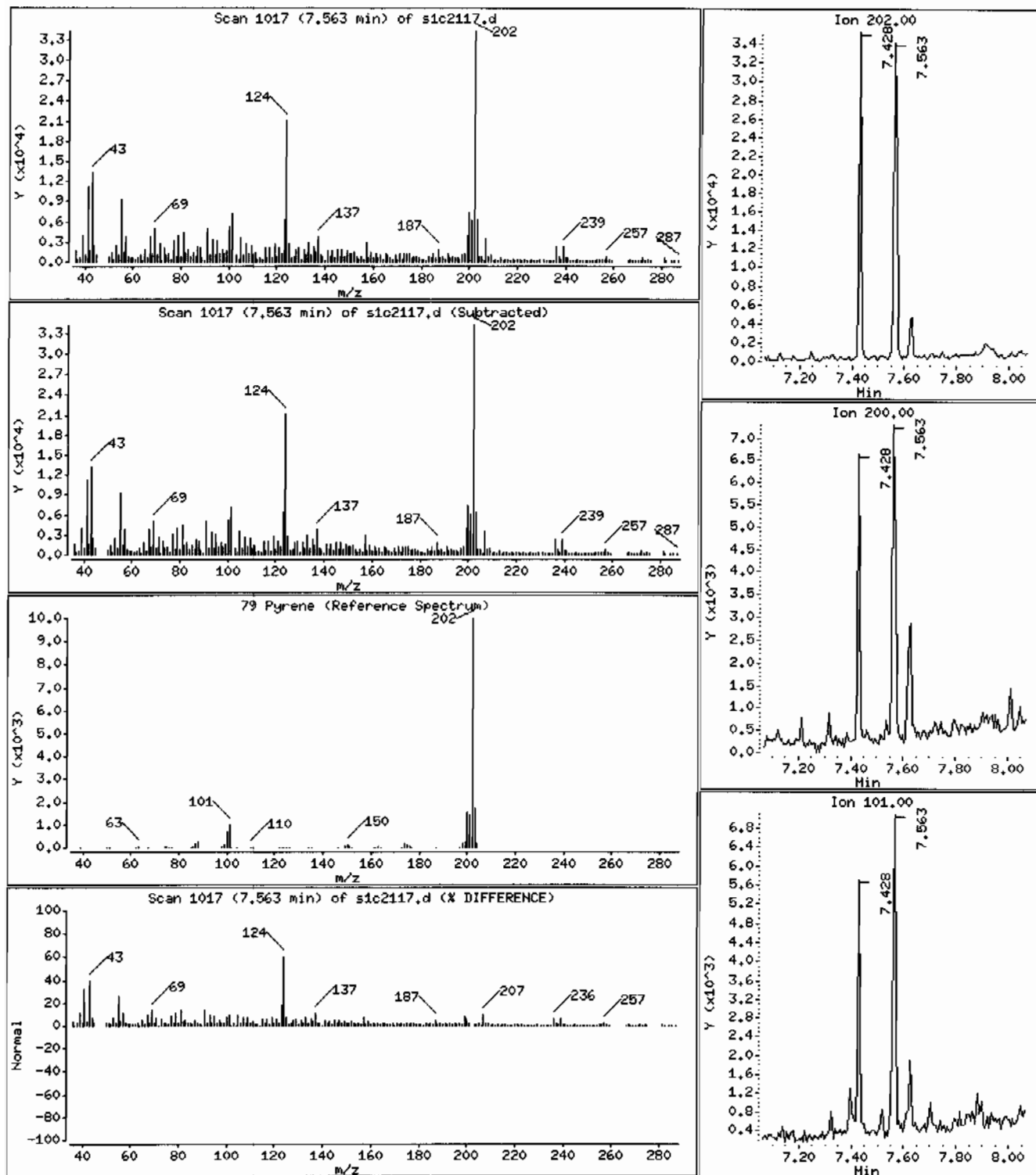
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 24.0 ug/Kg



Date : 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.i

Sample Info: 1248370007196122811SVMI11LANL

Volume Injected (uL): 0.5

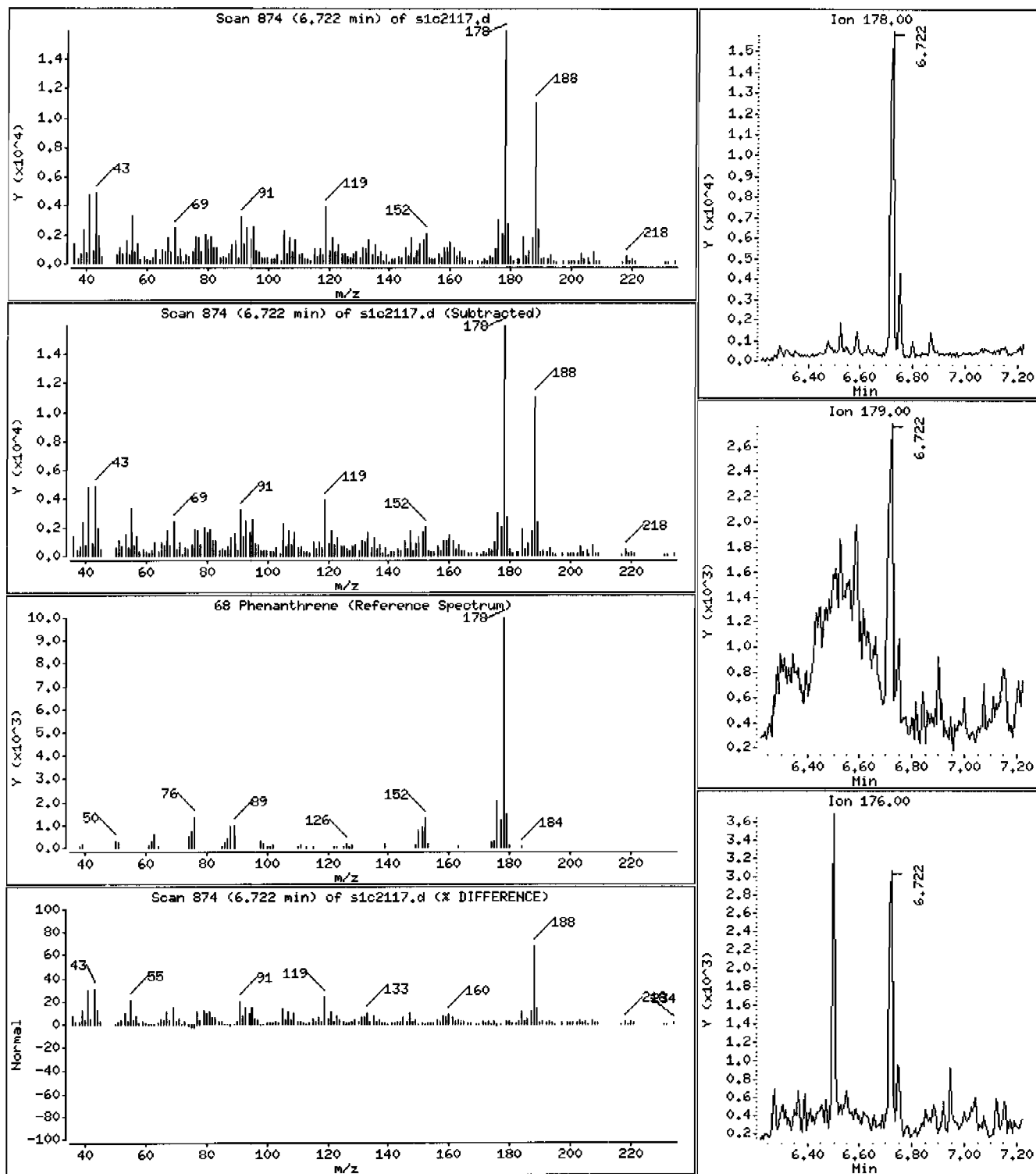
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 11.7 ug/Kg



Date : 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: HSD1.i

Sample Info: 1248370007196122811ISVH11ILANL

Volume Injected (uL): 0.5

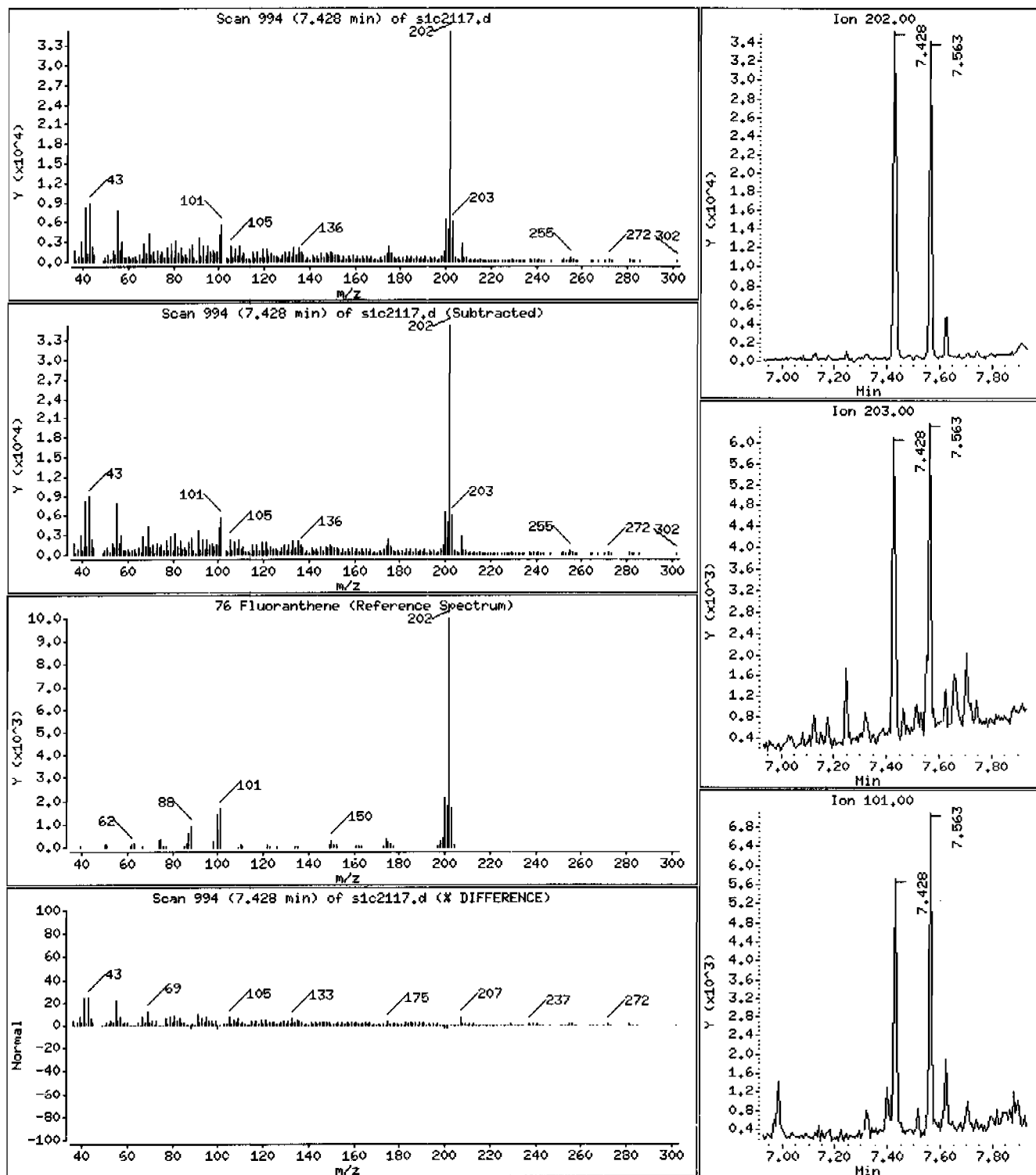
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 21.7 ug/Kg



Date: 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.1

Sample Info: 1248370007196122811SVH11ILANL

Volume Injected (uL): 0.5

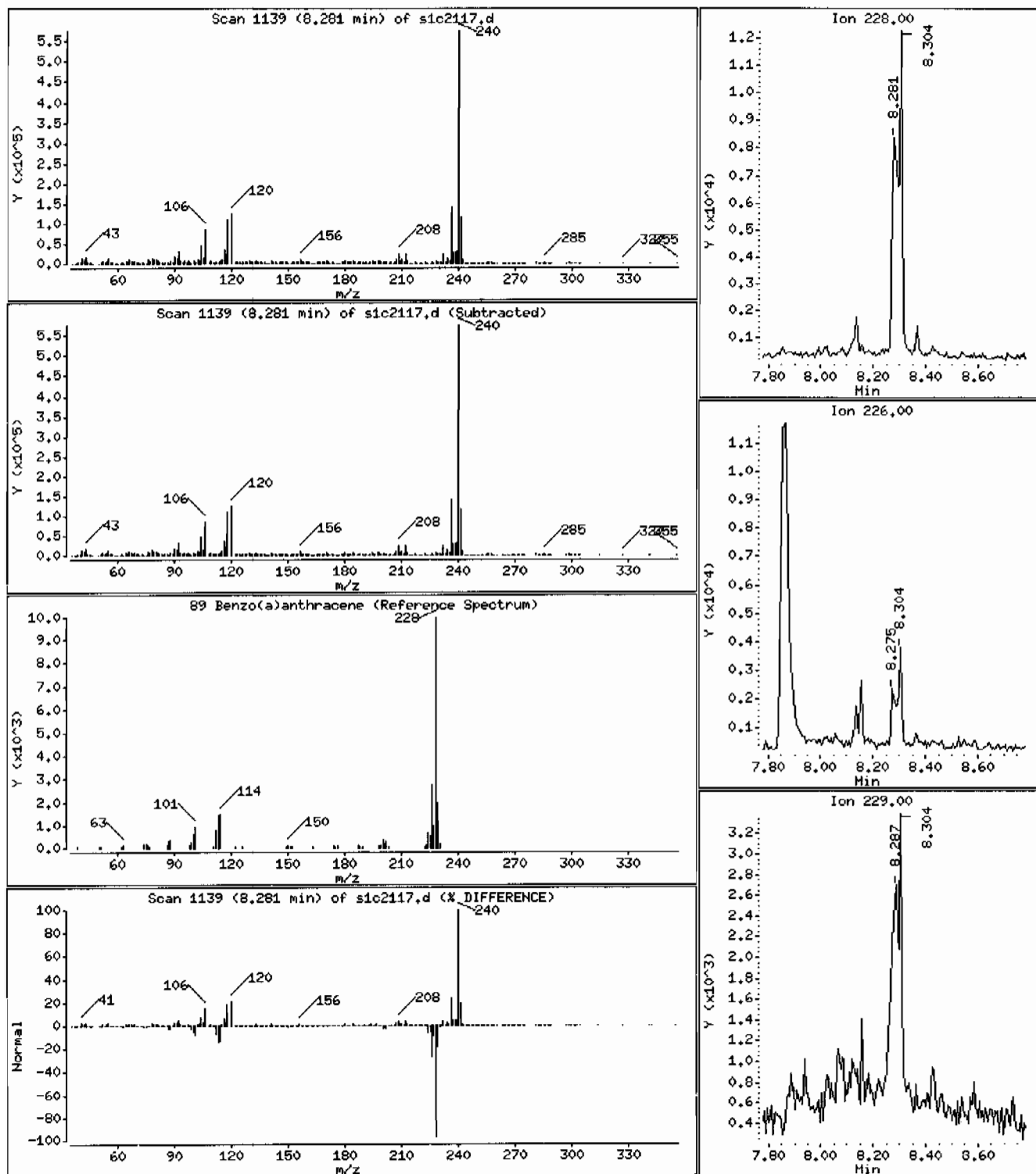
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 13.3 ug/Kg



Date: 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: HSD1.i

Sample Info: 1248370007196122811SVMI1ILANL

Volume Injected (uL): 0.5

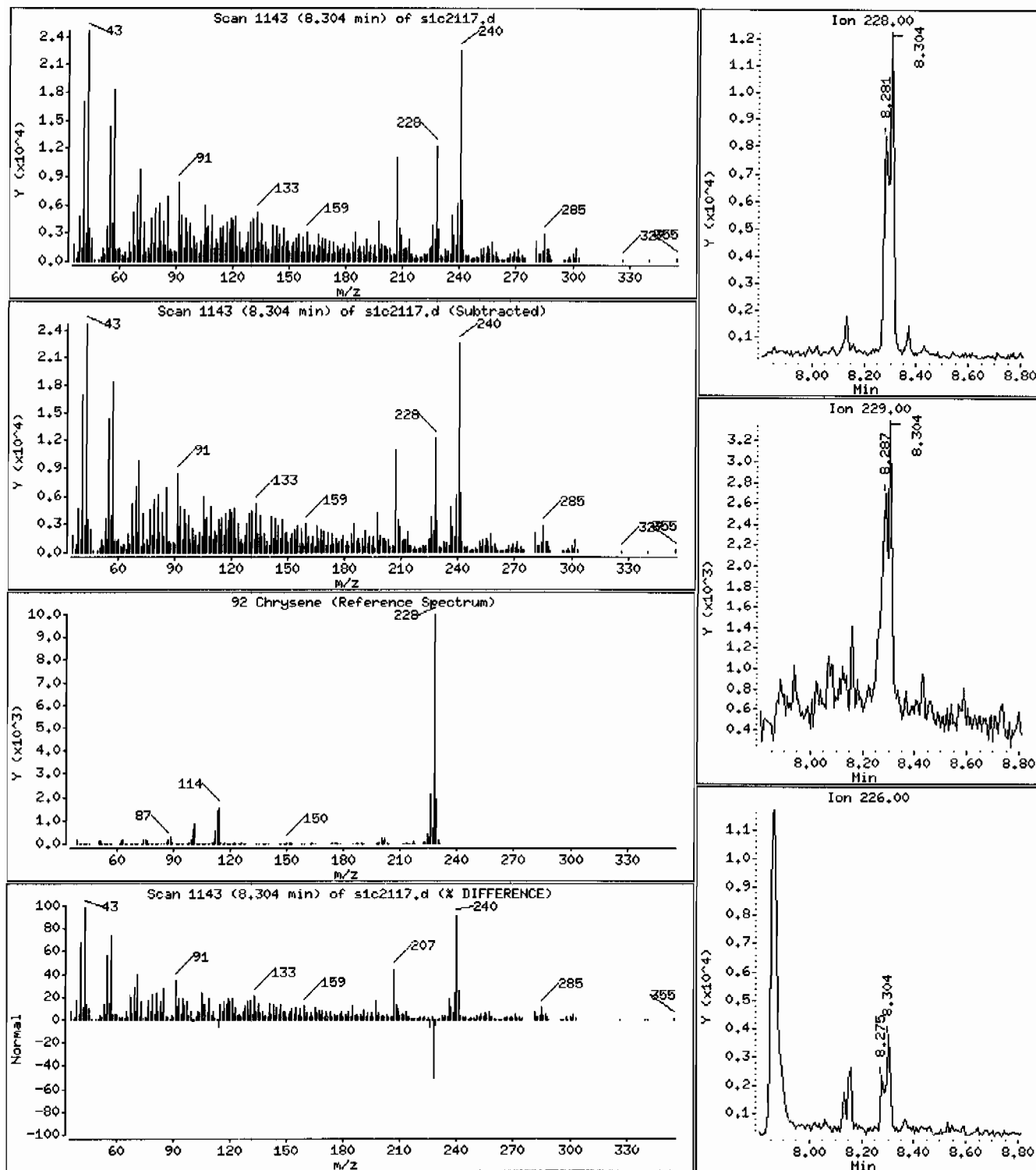
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 15.8 ug/Kg



Date : 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.i

Sample Info: 1248370007196122811SVH111LANL

Volume Injected (uL): 0.5

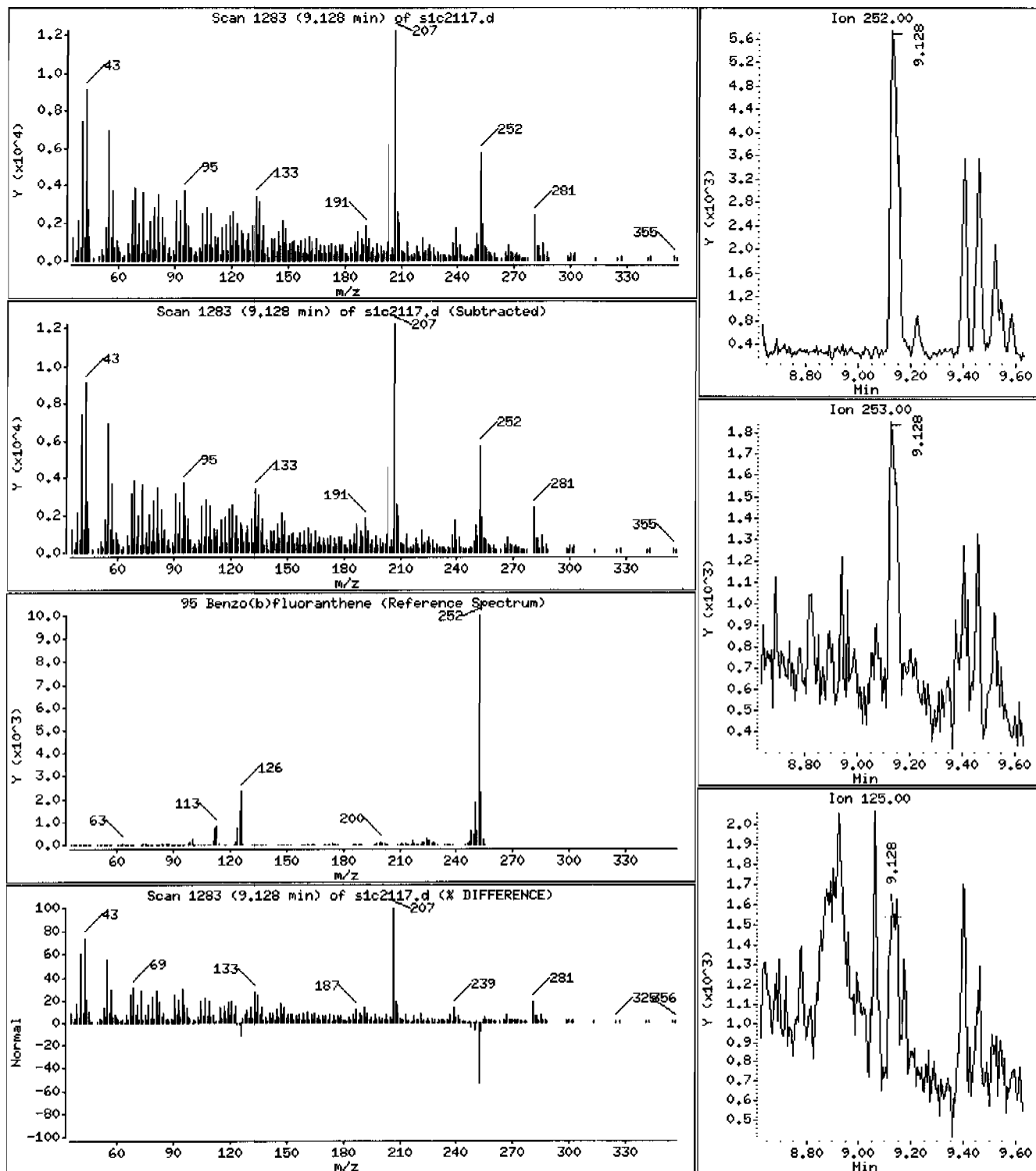
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 19.3 ug/Kg



Date : 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: HSD1.i

Sample Info: 12483700071961228111SVH111LANL

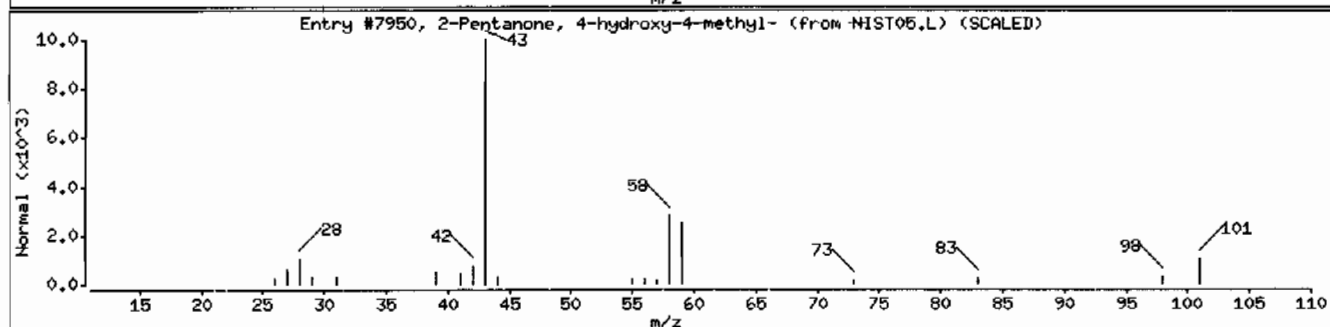
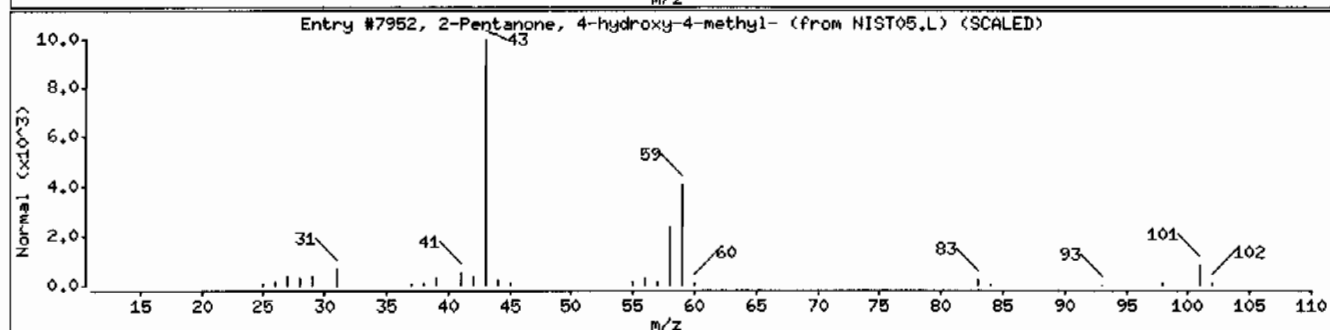
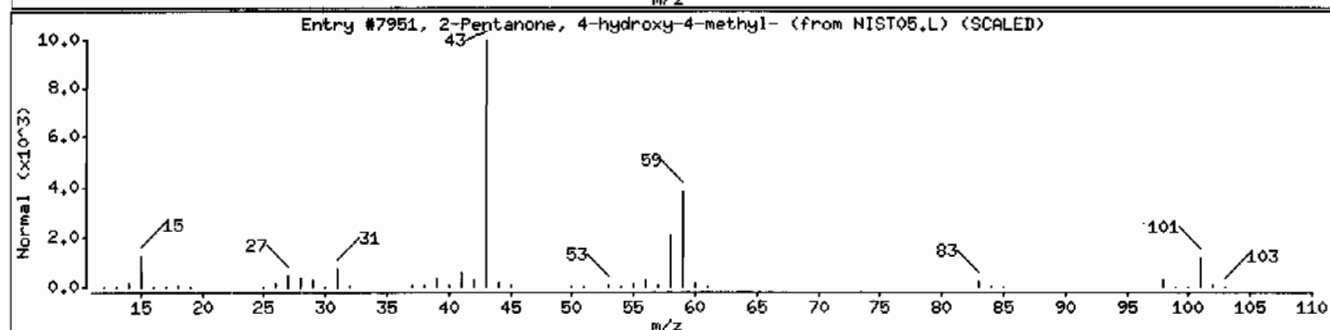
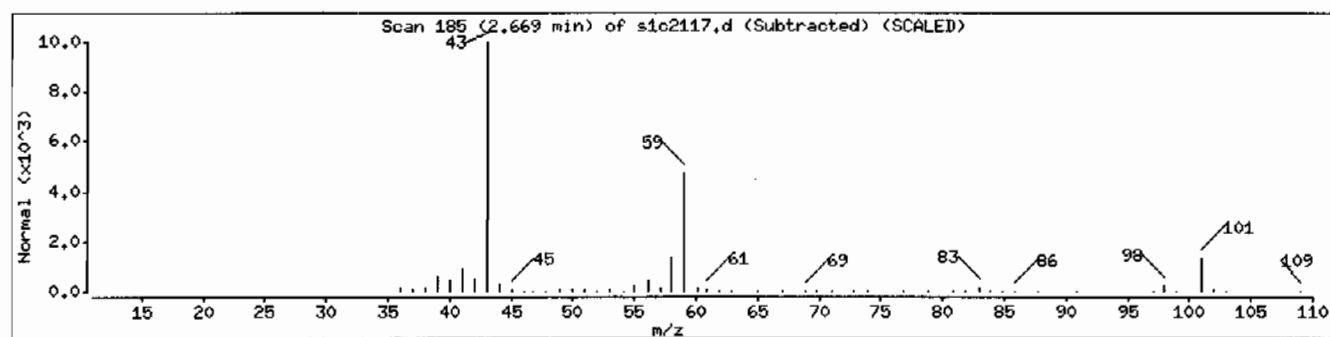
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7950	25	C6H12O2	116



Date : 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.i

Sample Info: 1248370007196122811SVH111LANL

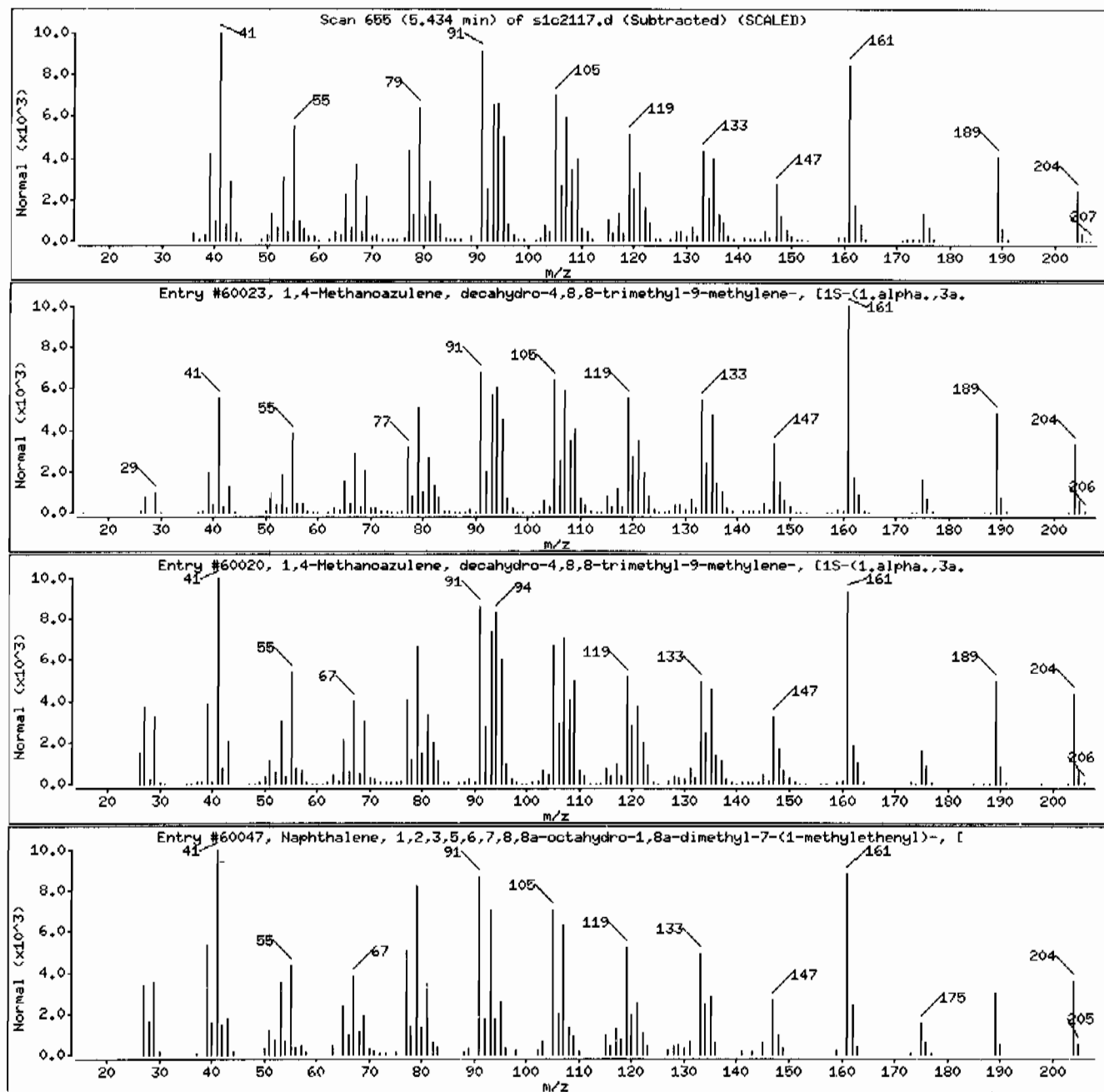
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60023	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	98	C15H24	204



Date : 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.i

Sample Info: 12483700071961228111SVH111LANL

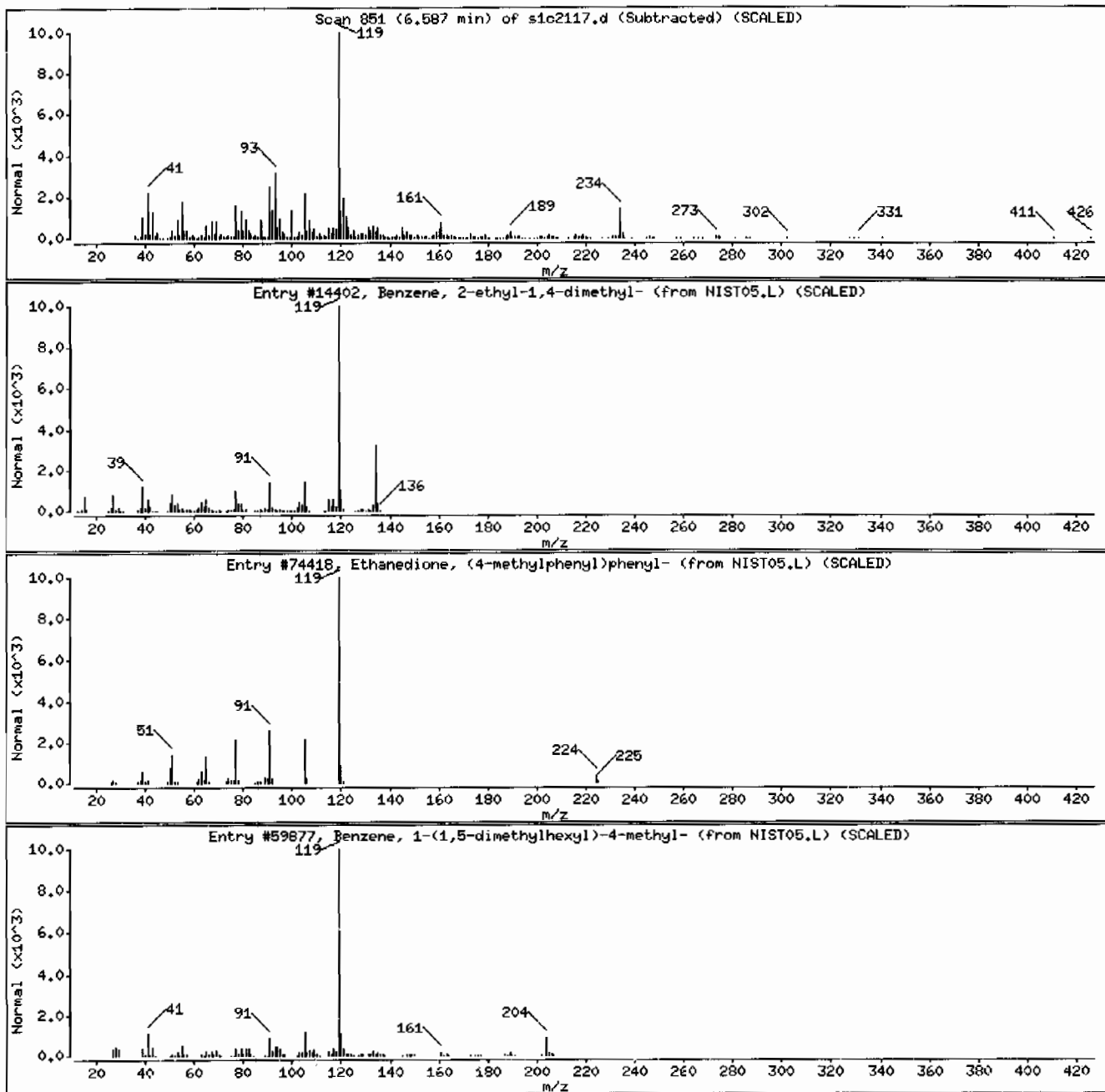
Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	NIST05.L	14402	49	C10H14	134
Ethanedione, (4-methylphenyl)phenyl-	2431-00-7	NIST05.L	74418	47	C15H12O2	224
Benzene, 1-(1,5-dimethylhexyl)-4-methyl-	1461-02-5	NIST05.L	59877	43	C15H24	204



Date: 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: HSD1.i

Sample Info: 1248370007196122811SVH11ILANL

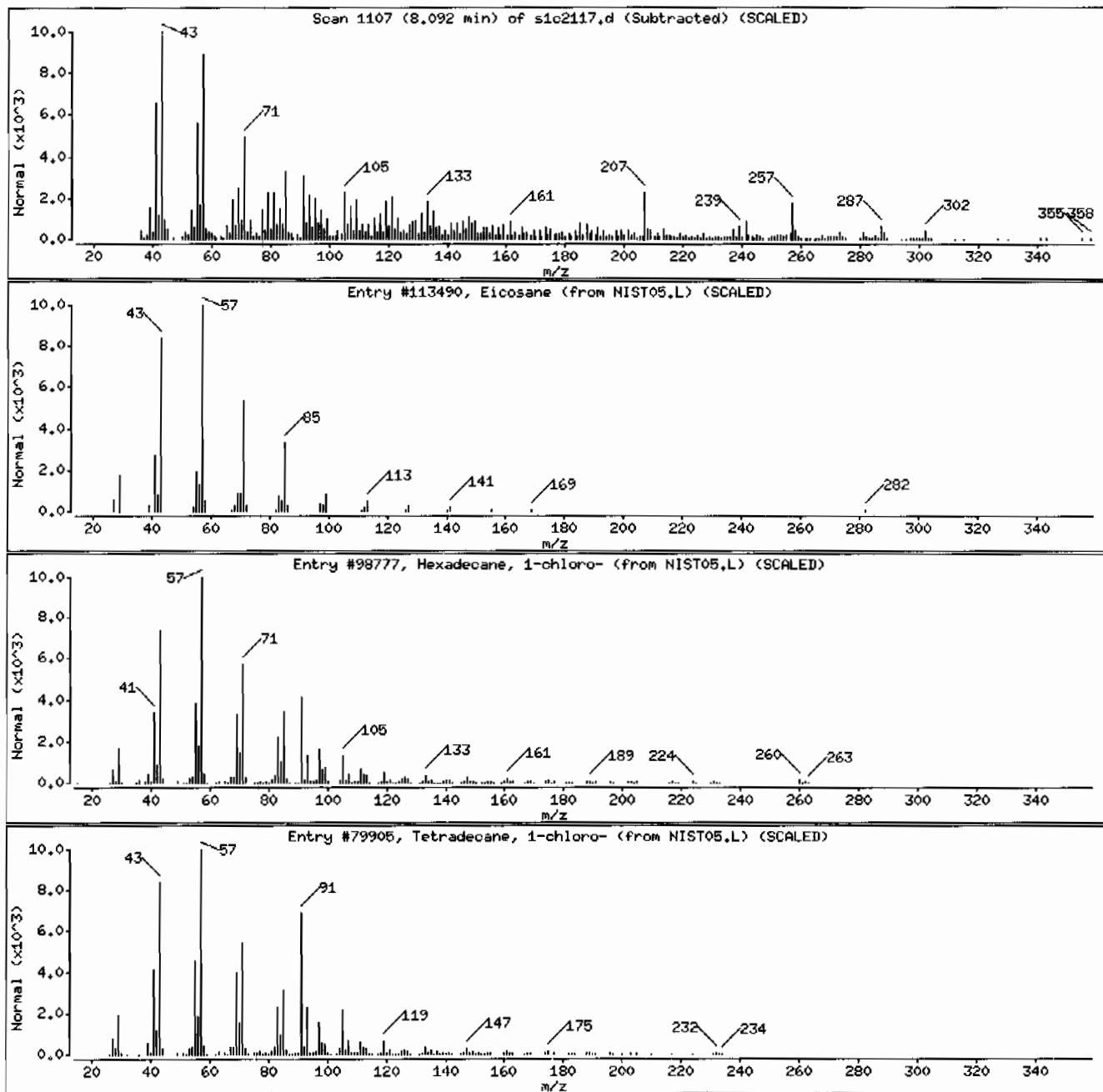
Volume Injected (uL): 0.5

Operator: AMY

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	94	C20H42	282
Hexadecane, 1-chloro-	4860-03-1	NIST05.L	98777	89	C16H33Cl	260
Tetradecane, 1-chloro-	2425-54-9	NIST05.L	79905	53	C14H29Cl	232



Date: 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: HSD1.i

Sample Info: 1248370007196122811ISVH11ILANL

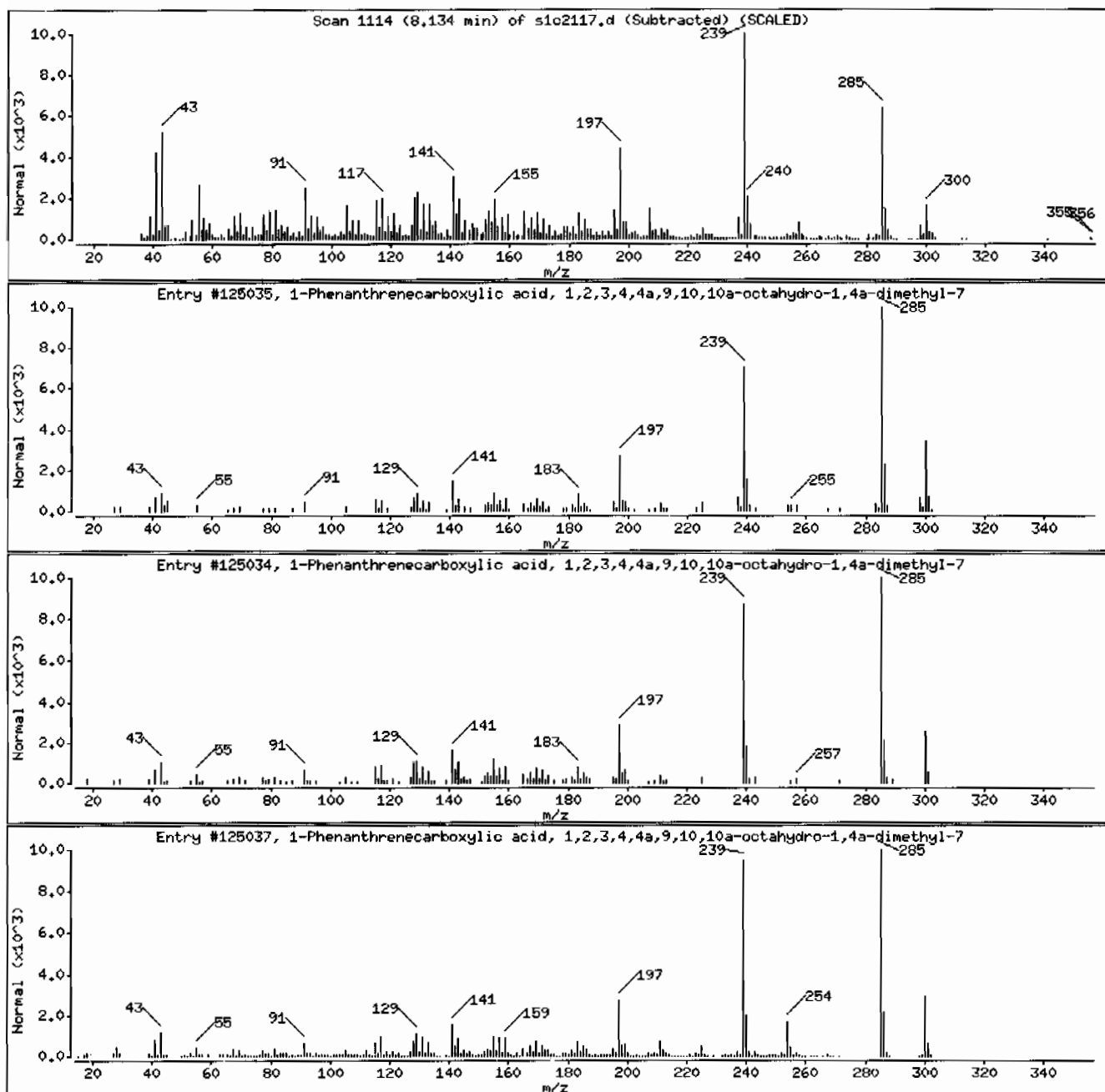
Volume Injected (uL): 0.5

Operator: AMY

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	95	C20H28O2	300
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	125037	93	C20H28O2	300



Date: 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.i

Sample Info: 1248370007196122811SVH111LANL

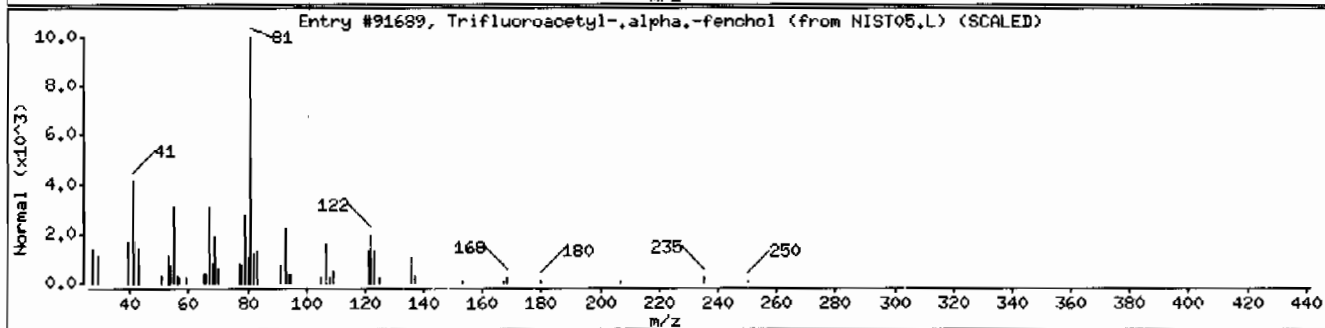
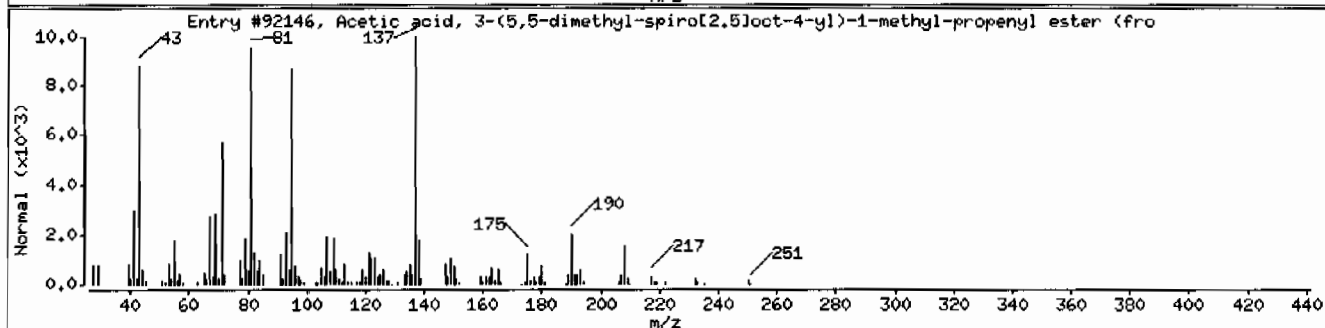
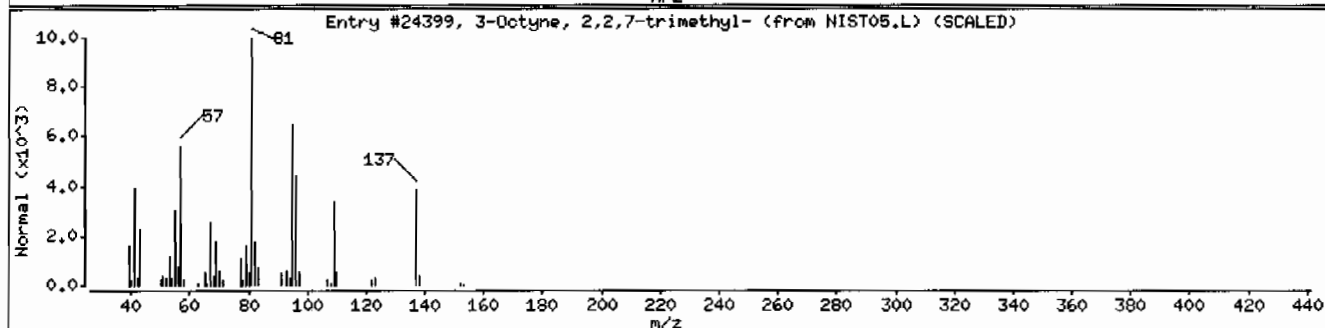
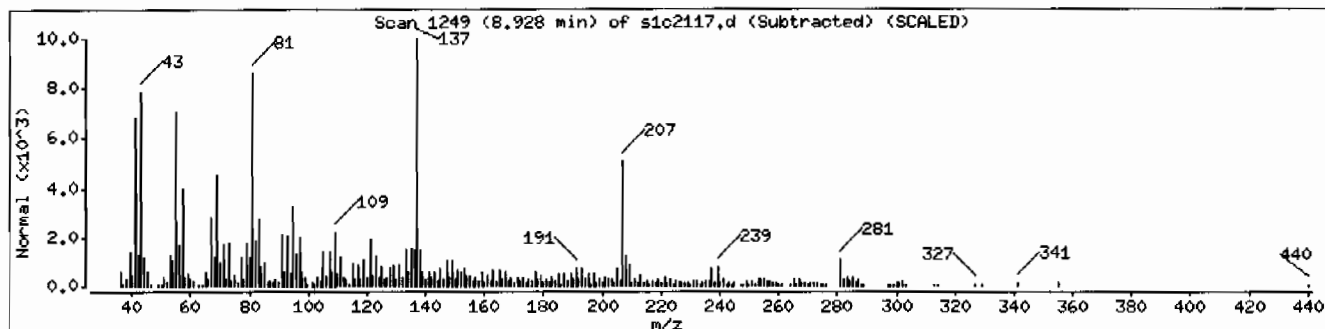
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Octyne, 2,2,7-trimethyl-	55402-13-6	NIST05.L	24399	83	C11H20	152
Acetic acid, 3-(5,5-dimethyl-spiro[2.5]oct-4-yl)-1-methyl-propenyl ester	77143-33-0	NIST05.L	92146	49	C16H26O2	250
Trifluoroacetyl-,alpha.-fenchol	31076-73-0	NIST05.L	91689	45	C12H17F3O2	250



Date : 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.i

Sample Info: I248370007196122811SVMI11LANL

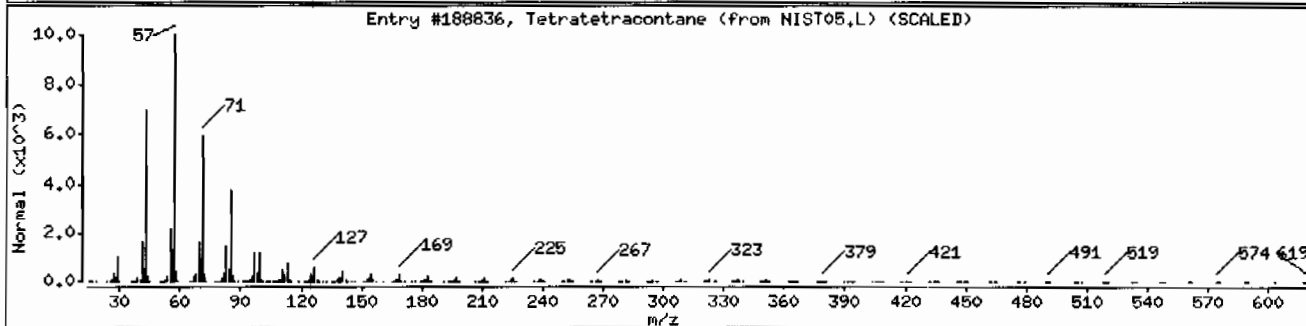
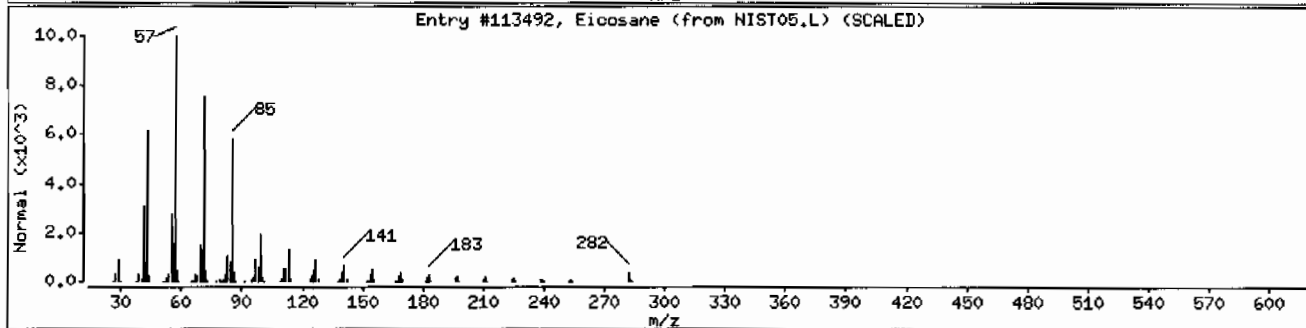
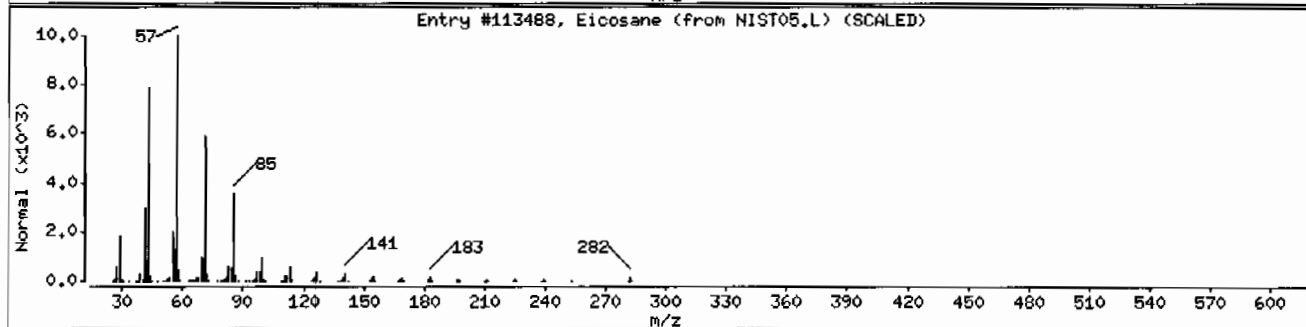
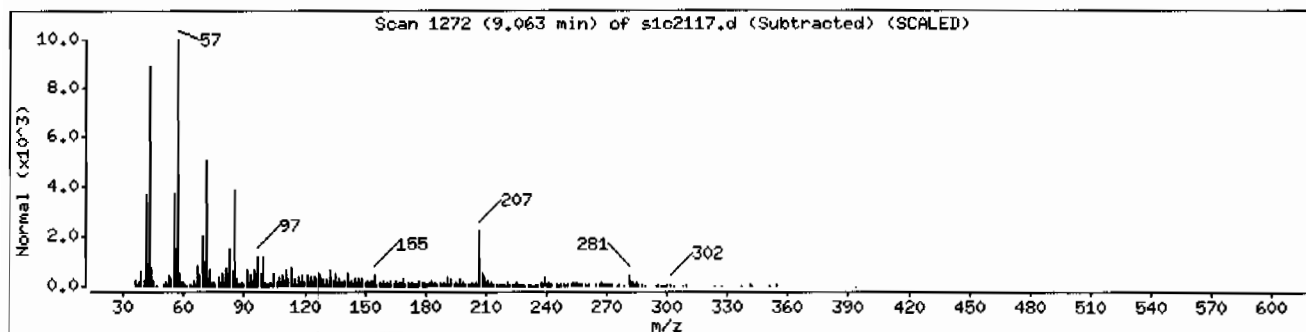
Volume Injected (uL): 0.5

Operator: AMY

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	113488	97	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113492	90	C ₂₀ H ₄₂	282
Tetratetracontane	7098-22-8	NIST05.L	188836	76	C ₄₄ H ₉₀	619



Date: 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.i

Sample Info: 1248370007196122811SVMI11LANL

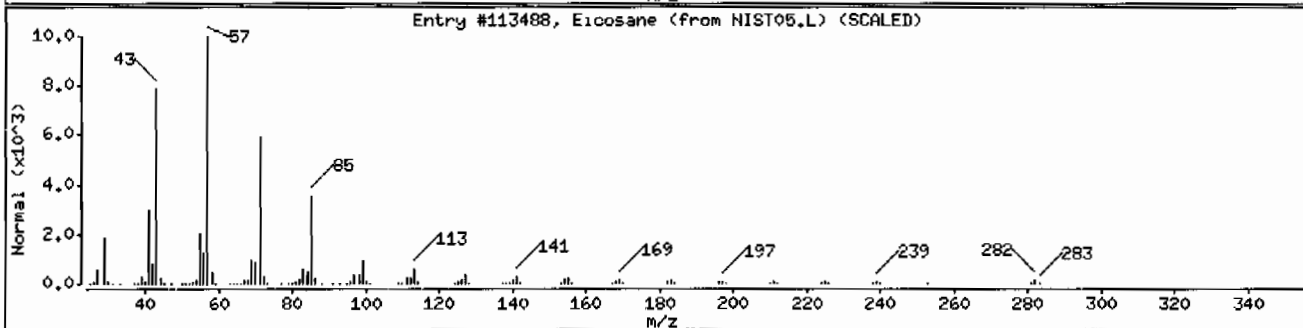
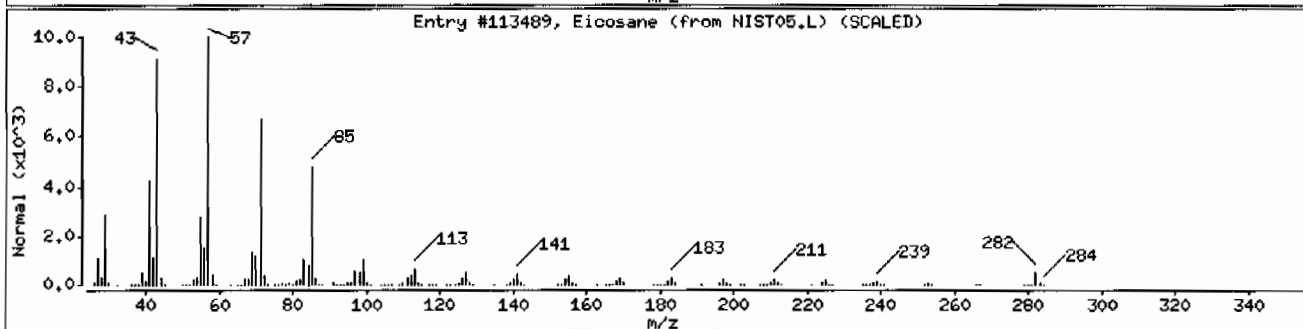
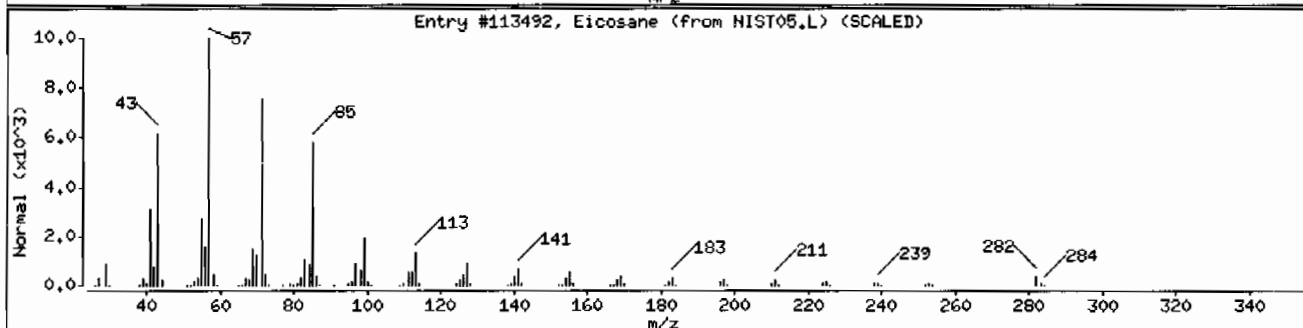
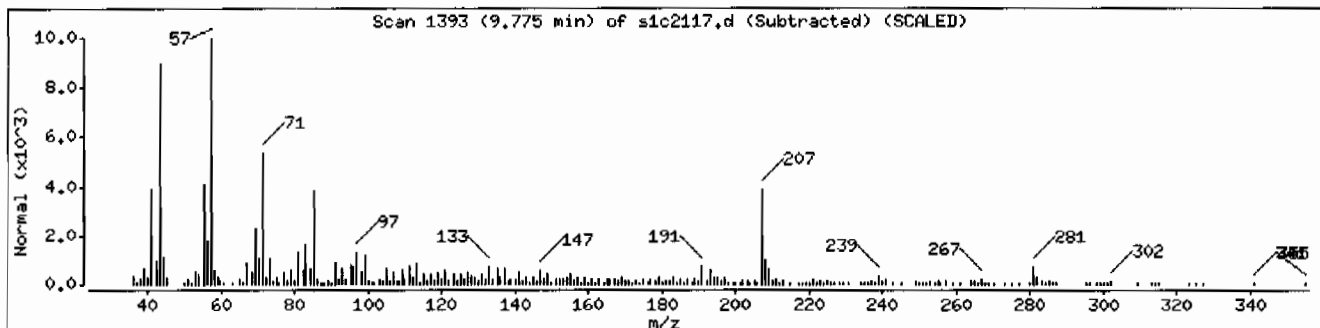
Volume Injected (uL): 0.5

Operator: AMY

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	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	92	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113488	91	C ₂₀ H ₄₂	282



Date : 21-MAR-2010 22:56

Client ID: RE36-10-7478

Instrument: MSD1.i

Sample Info: I248370007196122811SVMI11LANL

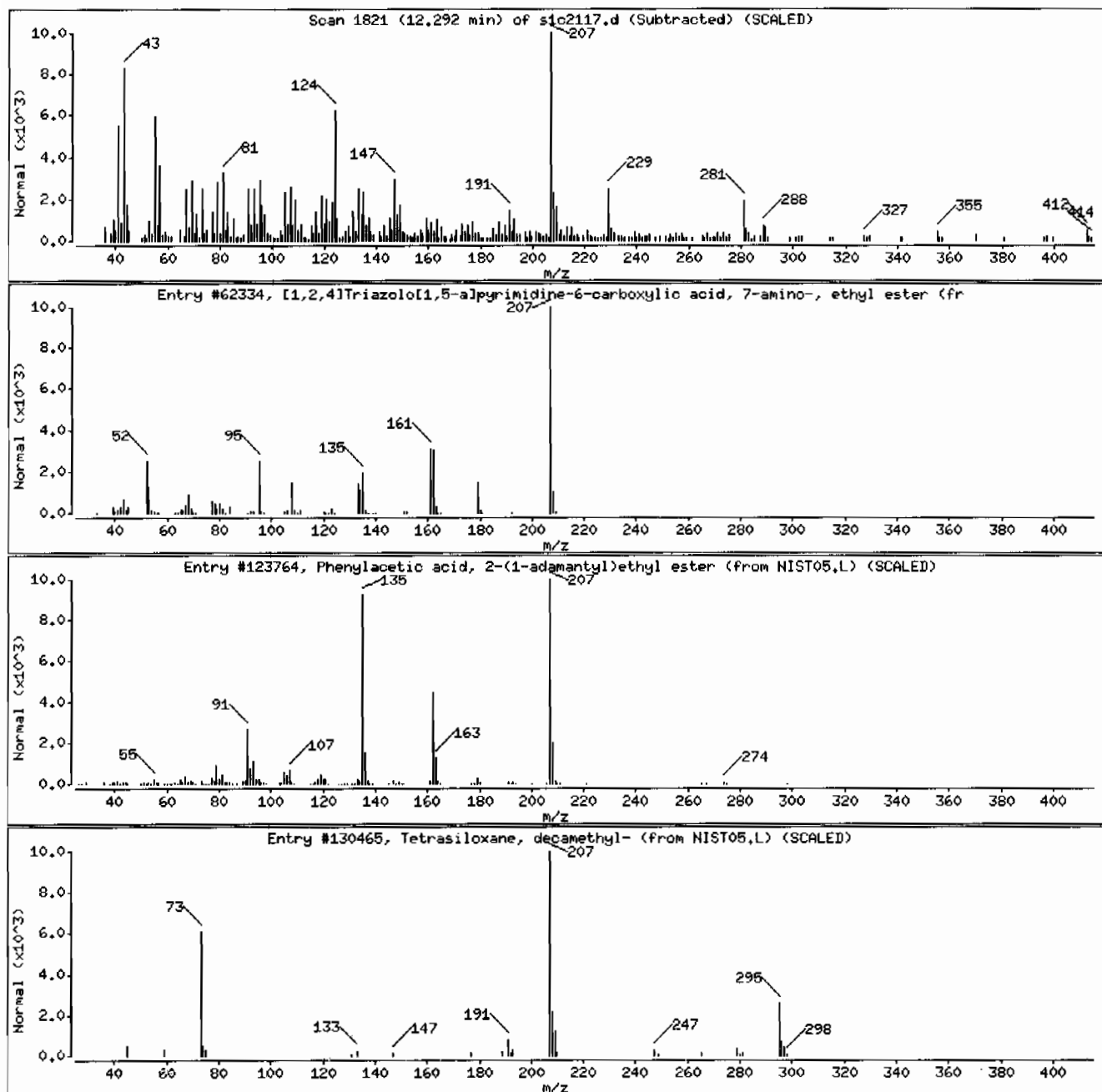
Volume Injected (uL): 0.5

Operator: AMY

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]Triazolo[1,5-a]pyrimidine-6-carbo	1000316-75-8	NIST05.L	62334	35	C8H9N5O2	207
Phenylacetic acid, 2-(1-adamantyl)ethyl	1000282-91-2	NIST05.L	123764	35	C20H26O2	298
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	27	C10H30O3Si4	310



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

SDG Number: 10-2150
Lab Sample ID: 248370015

Client ID: RE36-10-7479
Batch ID: 961228
Run Date: 03/22/2010 02:05
Prep Date: 03/05/2010 11:30
Data File: s1c2125.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.J
Analyst: AMY
Aliquot: 30 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	458	ug/kg	91.7	458
108-95-2	Phenol	U	458	ug/kg	91.7	458
95-57-8	2-Chlorophenol	U	458	ug/kg	91.7	458
106-46-7	1,4-Dichlorobenzene	U	458	ug/kg	91.7	458
621-64-7	N-Nitrosodipropylamine	U	458	ug/kg	91.7	458
59-50-7	4-Chloro-3-methylphenol	U	458	ug/kg	91.7	458
83-32-9	Acenaphthene	U	45.8	ug/kg	15.1	45.8
121-14-2	2,4-Dinitrotoluene	U	458	ug/kg	45.8	458
100-02-7	4-Nitrophenol	U	458	ug/kg	151	458
87-86-5	Pentachlorophenol	U	458	ug/kg	115	458
129-00-0	Pyrene	U	45.8	ug/kg	13.7	45.8
110-86-1	Pyridine	U	458	ug/kg	91.7	458
62-53-3	Aniline	U	458	ug/kg	137	458
111-44-4	bis(2-Chloroethyl) ether	U	458	ug/kg	91.7	458
541-73-1	1,3-Dichlorobenzene	U	458	ug/kg	91.7	458
100-51-6	Benzyl alcohol	U	458	ug/kg	137	458
95-50-1	1,2-Dichlorobenzene	U	458	ug/kg	91.7	458
108-60-1	bis(2-Chloroisopropyl)ether	U	458	ug/kg	91.7	458
95-48-7	o-Cresol	U	458	ug/kg	91.7	458
65794-96-9	m,p-Cresols	U	458	ug/kg	137	458
67-72-1	Hexachloroethane	U	458	ug/kg	91.7	458
98-95-3	Nitrobenzene	U	458	ug/kg	91.7	458
78-59-1	Isophorone	U	458	ug/kg	91.7	458
88-75-5	2-Nitrophenol	U	458	ug/kg	91.7	458
105-67-9	2,4-Dimethylphenol	U	458	ug/kg	160	458
111-91-1	bis(2-Chloroethoxy)methane	U	458	ug/kg	91.7	458
120-83-2	2,4-Dichlorophenol	U	458	ug/kg	91.7	458
65-85-0	Benzoic acid	U	917	ug/kg	229	917
91-20-3	Naphthalene	U	45.8	ug/kg	13.7	45.8
106-47-8	4-Chloroaniline	U	458	ug/kg	91.7	458
87-68-3	Hexachlorobutadiene	U	458	ug/kg	91.7	458
91-57-6	2-Methylnaphthalene	U	45.8	ug/kg	9.17	45.8
77-47-4	Hexachlorocyclopentadiene	U	458	ug/kg	91.7	458
88-06-2	2,4,6-Trichlorophenol	U	458	ug/kg	91.7	458
95-95-4	2,4,5-Trichlorophenol	U	458	ug/kg	91.7	458
91-58-7	2-Chloronaphthalene	U	45.8	ug/kg	15.1	45.8
88-74-4	2-Nitroaniline	U	458	ug/kg	91.7	458
99-09-2	<i>o</i> -Nitroaniline	U	458	ug/kg	91.7	458
	3-Nitroaniline					

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

SDG Number: 10-2150
Lab Sample ID: 248370015

Client ID: RE36-10-7479
Batch ID: 961228
Run Date: 03/22/2010 02:05
Prep Date: 03/05/2010 11:30
Data File: s1c2125.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 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
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	458	ug/kg	91.7	458
606-20-2	2,6-Dinitrotoluene	U	458	ug/kg	45.8	458
208-96-8	Acenaphthylene	U	45.8	ug/kg	13.7	45.8
51-28-5	2,4-Dinitrophenol	U	917	ug/kg	174	917
132-64-9	Dibenzofuran	U	458	ug/kg	91.7	458
84-66-2	Diethylphthalate	U	458	ug/kg	91.7	458
86-73-7	Fluorene	U	45.8	ug/kg	13.7	45.8
7005-72-3	4-Chlorophenylphenylether	U	458	ug/kg	91.7	458
534-52-1	2-Methyl-4,6-dinitrophenol	U	458	ug/kg	91.7	458
100-01-6	4-Nitroaniline	U	458	ug/kg	137	458
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	458	ug/kg	91.7	458
122-66-7	Azobenzene	U	458	ug/kg	91.7	458
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	458	ug/kg	91.7	458
118-74-1	Hexachlorobenzene	U	458	ug/kg	91.7	458
85-01-8	Phenanthrene	U	45.8	ug/kg	13.7	45.8
120-12-7	Anthracene	U	45.8	ug/kg	9.17	45.8
84-74-2	Di-n-butylphthalate	U	458	ug/kg	91.7	458
206-44-0	Fluoranthene	U	45.8	ug/kg	13.7	45.8
85-68-7	Butylbenzylphthalate	U	458	ug/kg	91.7	458
56-55-3	Benzo(a)anthracene	U	45.8	ug/kg	13.7	45.8
91-94-1	3,3'-Dichlorobenzidine	U	458	ug/kg	137	458
218-01-9	Chrysene	U	45.8	ug/kg	13.7	45.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	458	ug/kg	91.7	458
117-84-0	Di-n-octylphthalate	U	458	ug/kg	91.7	458
205-99-2	Benzo(b)fluoranthene	U	45.8	ug/kg	13.7	45.8
207-08-9	Benzo(k)fluoranthene	U	45.8	ug/kg	13.7	45.8
50-32-8	Benzo(a)pyrene	U	45.8	ug/kg	13.7	45.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.8	ug/kg	13.7	45.8
53-70-3	Dibenzo(a,h)anthracene	U	45.8	ug/kg	13.7	45.8
191-24-2	Benzo(ghi)perylene	U	45.8	ug/kg	13.7	45.8
120-82-1	1,2,4-Trichlorobenzene	U	458	ug/kg	91.7	458

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	514	ug/kg		J
	Unknown Aldol Condensate	2.67	257	ug/kg		JA

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

SDG Number: 10-2150
Lab Sample ID: 248370015

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1J
Analyst: AMY
Aliquot: 30 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: RE36-10-7479
Batch ID: 961228
Run Date: 03/22/2010 02:05
Prep Date: 03/05/2010 11:30
Data File: s1c2125.d

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
	Unknown	5.14	739	ug/kg		J
489-40-7	1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,	5.39	189	ug/kg	98	NJ
	Unknown	7.32	230	ug/kg		J
	Unknown	7.56	301	ug/kg		J
	Unknown	8.62	337	ug/kg		J
	Unknown	8.78	206	ug/kg		J
	Unknown	9	307	ug/kg		J
	Unknown	9.06	276	ug/kg		J
112-95-8	Eicosane	9.78	375	ug/kg	98	NJ
	Unknown	10.02	369	ug/kg		J
	Unknown	10.1	245	ug/kg		J
	Unknown	10.4	251	ug/kg		J
	Unknown	10.77	231	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	403	ug/kg	70	NJ

Data File: /chem/MSD1.i/s032110.b/slc2125.d
Report Date: 22-Mar-2010 16:03

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2125.d
Lab Smp Id: 248370015 Client Smp ID: RE36-10-7479
Inj Date : 22-MAR-2010 02:05
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370015|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	27.26950	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.610	3.610	(1.000)	457125	40.0000	
* 29 Naphthalene-d8		136	4.463	4.469	(1.000)	1782782	40.0000	
* 46 Acenaphthene-d10		164	5.704	5.704	(1.000)	926135	40.0000	
* 67 Phenanthrene-d10		188	6.710	6.710	(1.000)	1648944	40.0000	
* 91 Chrysene-d12		240	8.292	8.292	(1.000)	1291224	40.0000	
* 98 Perylene-d12		264	9.528	9.522	(1.000)	824939	40.0000	
\$ 3 2-Fluorophenol		112	2.834	2.822	(0.785)	709977	60.3152	2760
\$ 5 Phenol-d5		99	3.352	3.346	(0.928)	884576	61.7048	2830
\$ 20 Nitrobenzene-d5		82	3.969	3.975	(0.889)	366806	33.5462	1540
\$ 39 2-Fluorobiphenyl		172	5.204	5.204	(0.912)	699699	27.3559	1250
\$ 60 2,4,6-Tribromophenol		329	6.251	6.251	(1.096)	161267	53.1126	2430
\$ 81 p-Terphenyl-d14		244	7.628	7.622	(0.920)	670034	31.1253	1430

ION RATIO REPORT

SV REPORT

Data file: slc2125.d

Report Date: 03/22/2010 11:58

Lab. ID: 248370015

SampleType: SAMPLE

Injection Date: 22-MAR-2010 02:05

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370015|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	41603	3.35	3.40	80-120	100	()
93	8533	3.39	3.40	233-293	21	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	46798	3.97	3.86	80-120	100	(T)
42	35870	3.97	3.86	48-108	77	(T)

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	30932	5.33	5.30	80-120	100	()
164	662	5.33	5.30	2- 62	2	(Q)
127	376	5.34	5.30	9- 69	1	(Q)

42 o-Nitroaniline		CAS#: 88-74-4				
65	14086	5.43	5.37	80-120	100	(T)
92	16170	5.44	5.37	33- 93	115	(QT)
138	914	5.43	5.37	80-140	6	(Q)

41 m-Nitroaniline		CAS#: 99-09-2				
138	157	5.67	5.66	80-120	100	()
92	699	5.68	5.66	71-131	444	(Q)
108	17661	5.70	5.66	0- 40	11193	(Q)

43 Dimethylphthalate		CAS#: 131-11-3				
163	166790	5.70	5.49	80-120	100	(T)
164	926135	5.70	5.49	0- 40	555	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	118430	5.70	5.54	80-120	100	(T)
63	2235	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	118430	5.70	5.83	80-120	100	(T)
89	1586	5.70	5.82	38- 98	1	(QT)
63	1936	5.70	5.82	20- 80	2	(QT)

53	Fluorene			CAS#: 86-73-7		
166	13154	6.25	6.09	80-120	100	(T)
165	13162	6.25	6.09	61-121	100	(T)
167	5184	6.25	6.09	0- 43	39	(T)

56	p-Nitroaniline			CAS#: 100-01-6		
138	450	6.08	6.09	80-120	100	()
108	328	6.06	6.09	29- 89	73	()
92	256	6.17	6.09	14- 74	57	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2125.d
Lab Smp Id: 248370015 Client Smp ID: RE36-10-7479
Inj Date : 22-MAR-2010 02:05
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370015|961228|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	27.26950	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2793032	40.000
* 46 Acenaphthene-d10	5.704	3996473	40.000
* 67 Phenanthrene-d10	6.710	4131108	40.000
* 91 Chrysene-d12	8.292	3537834	40.000
* 98 Perylene-d12	9.528	2444599	40.000

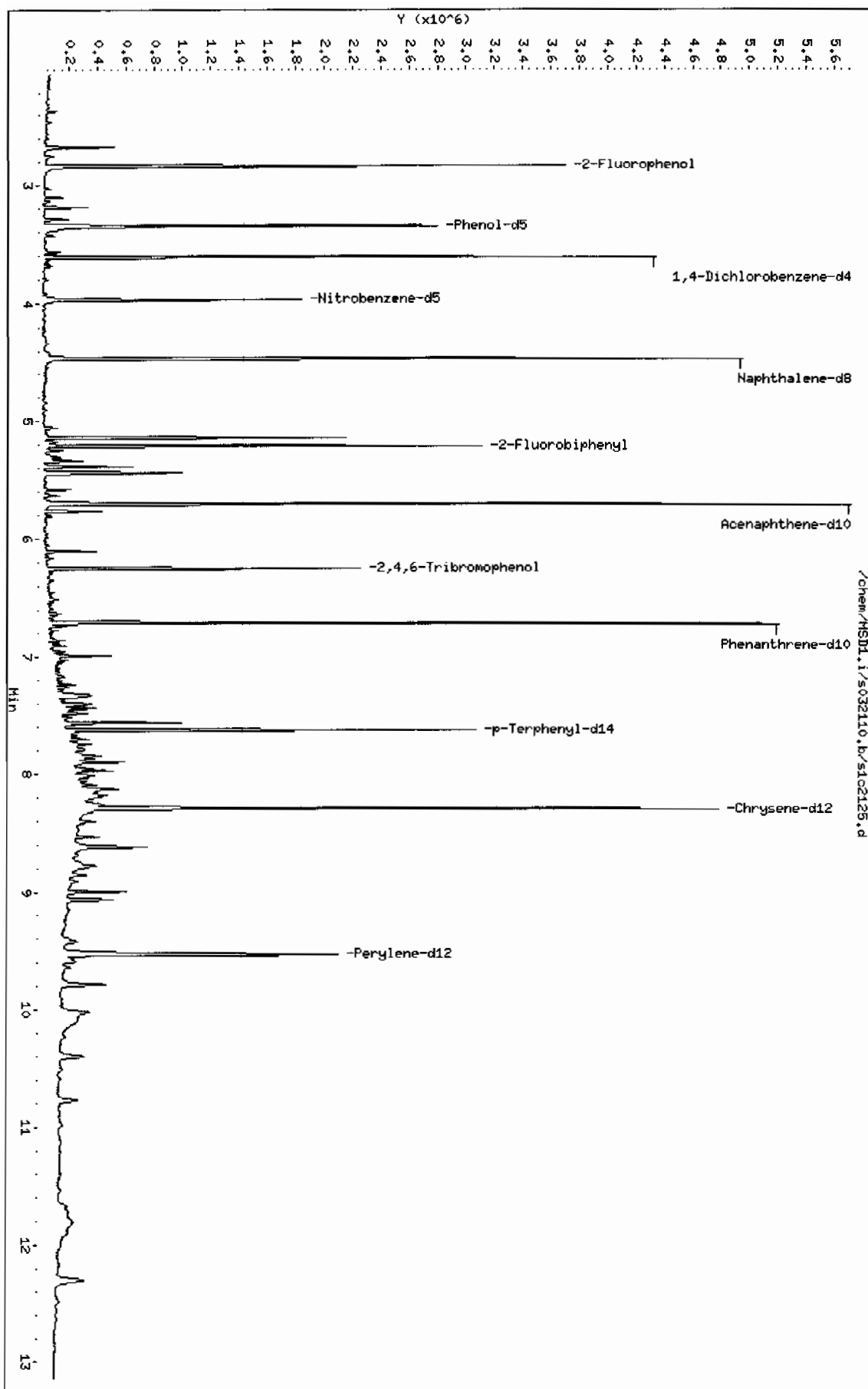
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
1.816	783804	11.2251368	514	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	391880	5.61225223	257	0		0	10
Unknown					CAS #:		
5.140	1611769	16.1319162	739	0		0	46
1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,					CAS #: 489-40-7		
5.387	410965	4.11328107	188	98	NIST05.L	60089	46
Unknown					CAS #:		
7.322	517501	5.01077004	230	0		0	67
Unknown					CAS #:		
7.557	579971	6.55735332	300	0		0	91
Unknown					CAS #:		
8.616	650244	7.35188969	337	0		0	91
Unknown					CAS #:		
8.781	397619	4.49561786	206	0		0	91
Unknown					CAS #:		
8.998	408788	6.68883243	306	0		0	98
Unknown					CAS #:		
9.063	367576	6.01450238	276	0		0	98
Eicosane					CAS #: 112-95-8		
9.781	499746	8.17714893	375	98	NIST05.L	113488	98
Unknown					CAS #:		
10.022	492704	8.06192065	369	0		0	98
Unknown					CAS #:		
10.098	326981	5.35026420	245	0		0	98
Unknown					CAS #:		
10.398	335021	5.48181850	251	0		0	98
Unknown					CAS #:		
10.775	307623	5.03350718	231	0		0	98

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Stigmast-4-en-3-one					CAS #: 1058-61-3		
12.298	536908	8.78521425	403	70	NIST05.L	173936	98

Data File: /chem/MSD1.i/s032110.b/s1c2125.d
 Date: 22-MAR-2010 02:05
 Client ID: RE36-10-7479
 Sample Info: 1248370015136122811SVH11LAL
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-5MS

Instrument: MSD1.i
 Operator: AHY
 Column diameter: 0.20



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 1248370015196122811|SVH11|LANL

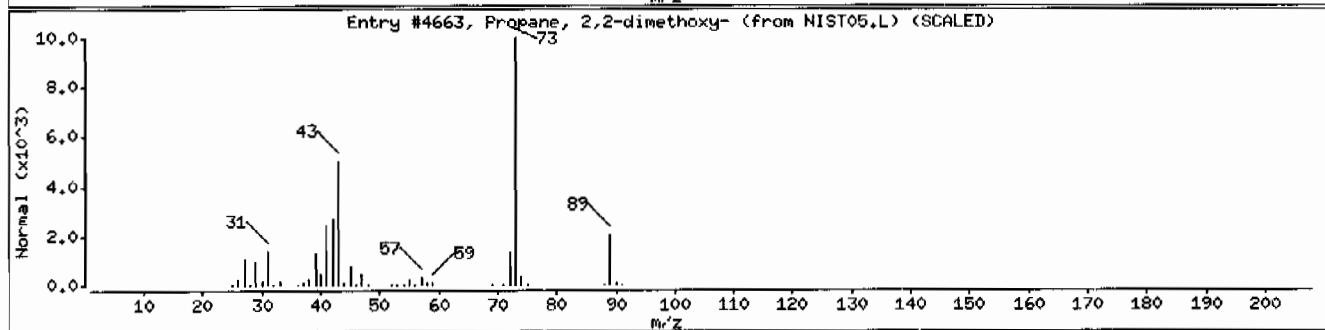
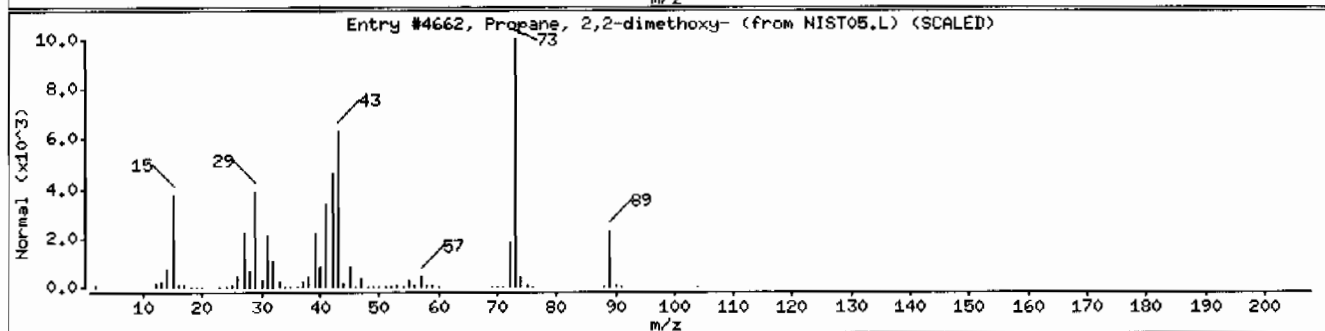
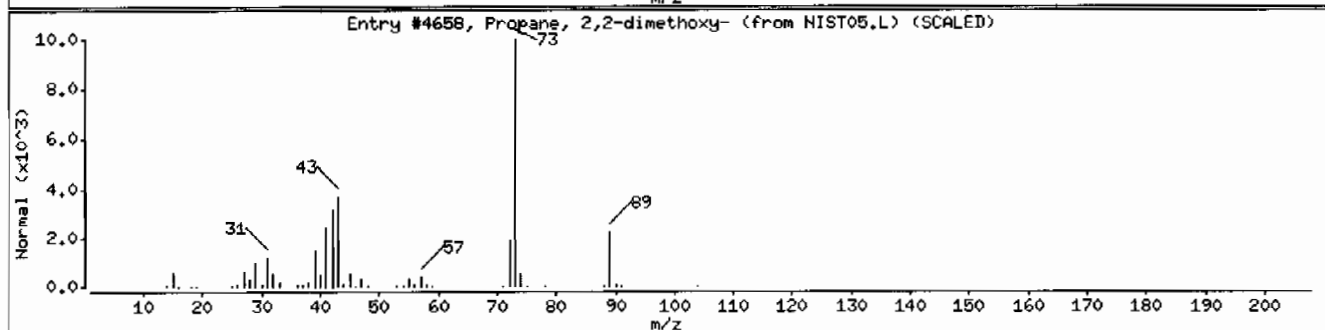
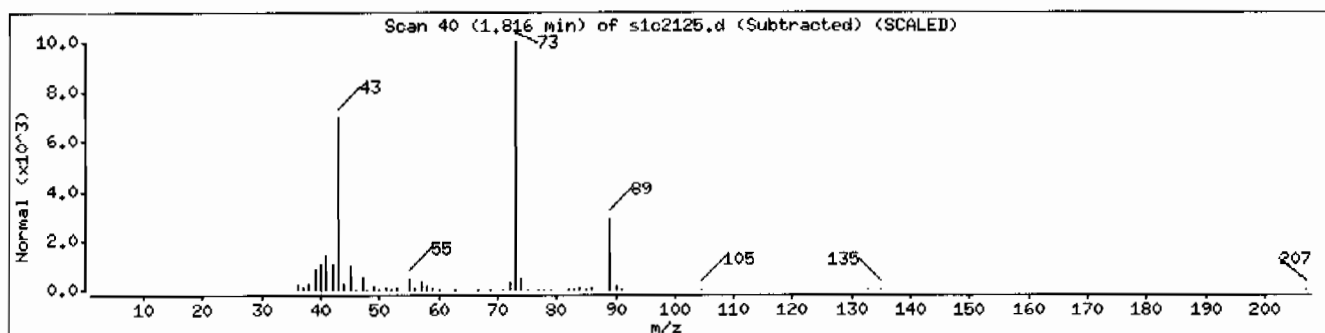
Volume Injected (uL): 0.5

Operator: AMY

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	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	4663	23	C5H12O2	104



Date: 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 1248370015196122811|SVH11|LANL

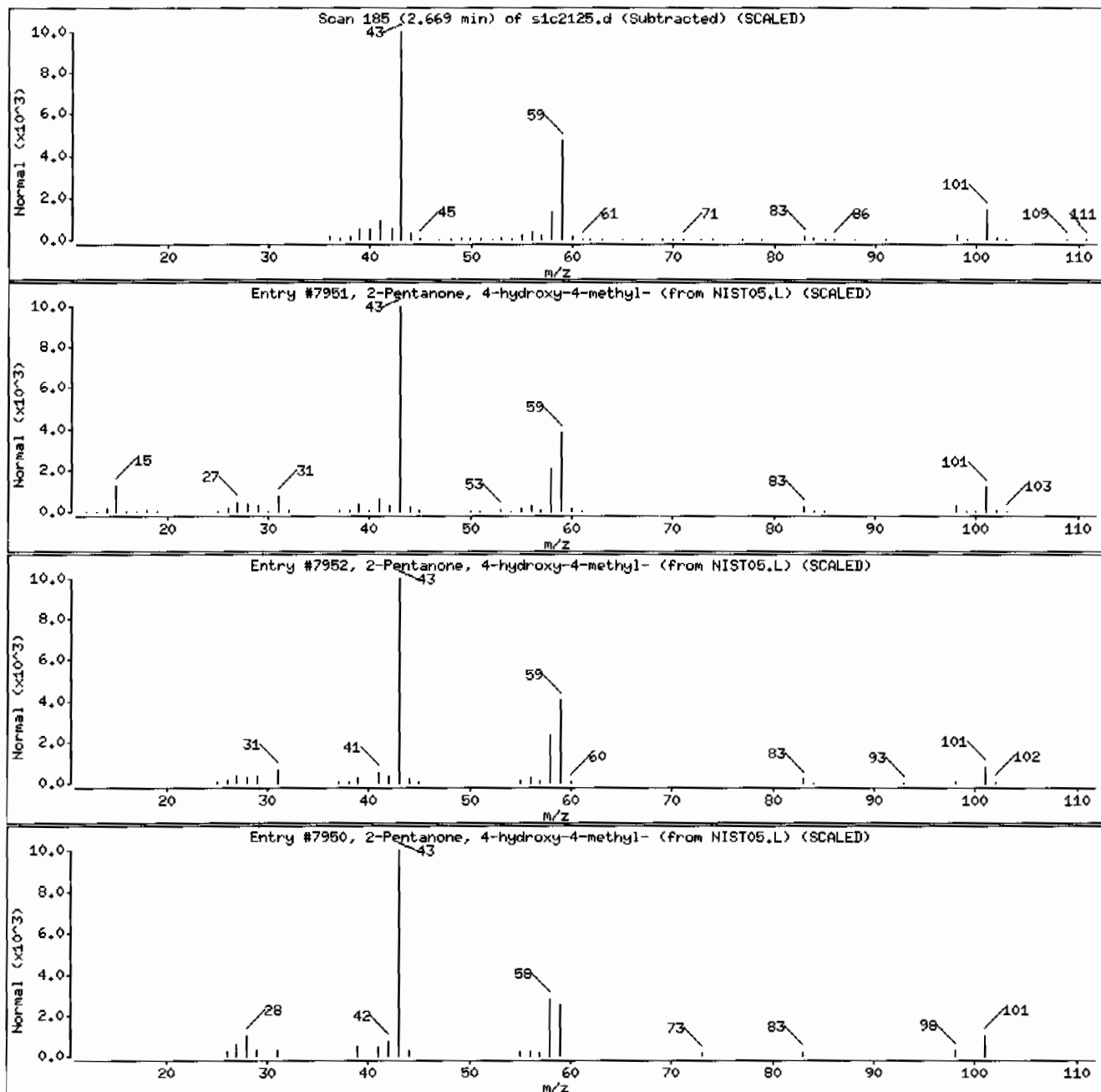
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C ₆ H ₁₂ O ₂	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C ₆ H ₁₂ O ₂	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7950	25	C ₆ H ₁₂ O ₂	116



Date: 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 12483700151961228111SVMI11LANL

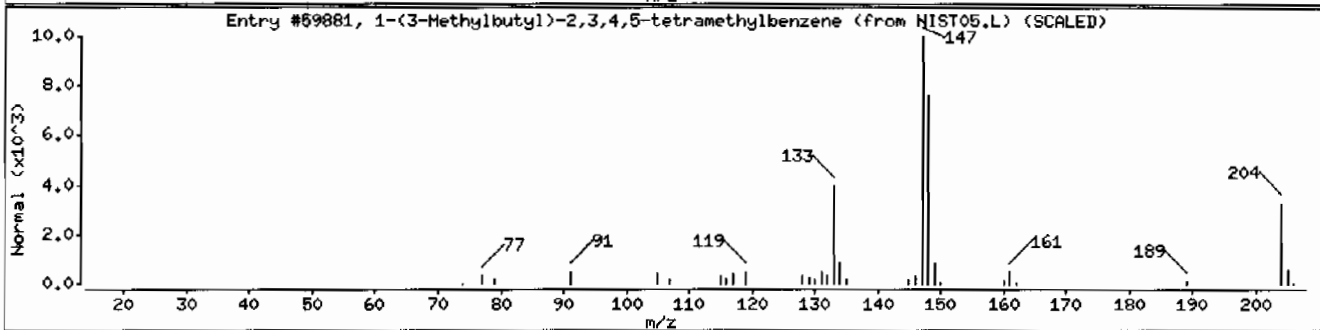
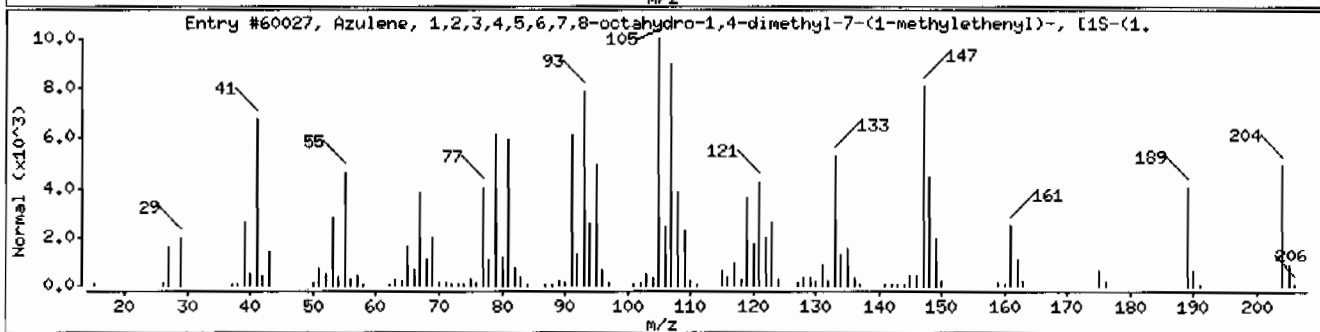
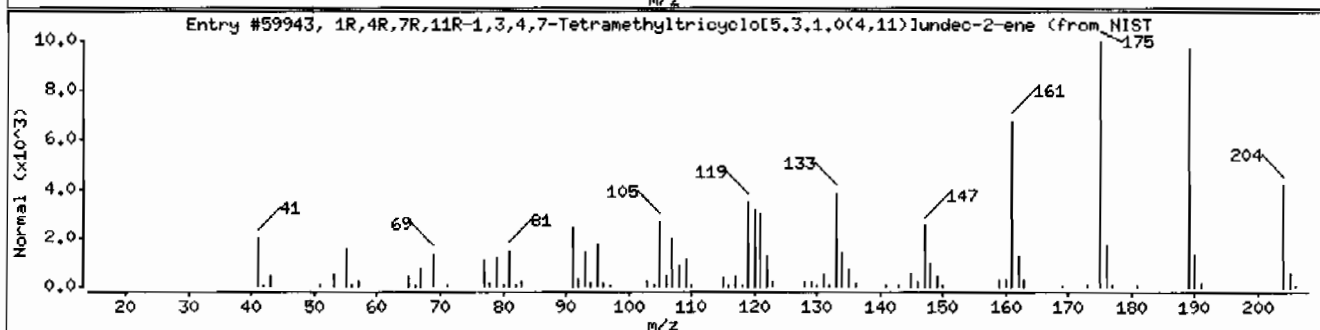
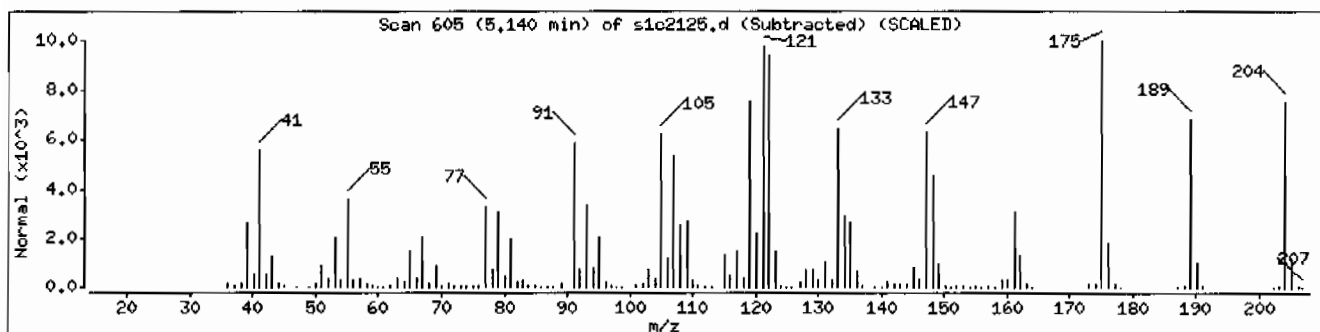
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1R,4R,7R,11R-1,3,4,7-Tetramethyltricyclo	137235-59-7	NIST05.L	59943	53	C ₁₅ H ₂₄	204
Azulene, 1,2,3,4,5,6,7,8-octahydro-1,4-d	3691-12-1	NIST05.L	60027	52	C ₁₅ H ₂₄	204
1-(3-Methylbutyl)-2,3,4,5-tetramethylben	116761-71-8	NIST05.L	59881	50	C ₁₅ H ₂₄	204



Date: 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 12483700151961228111SVH111LANL

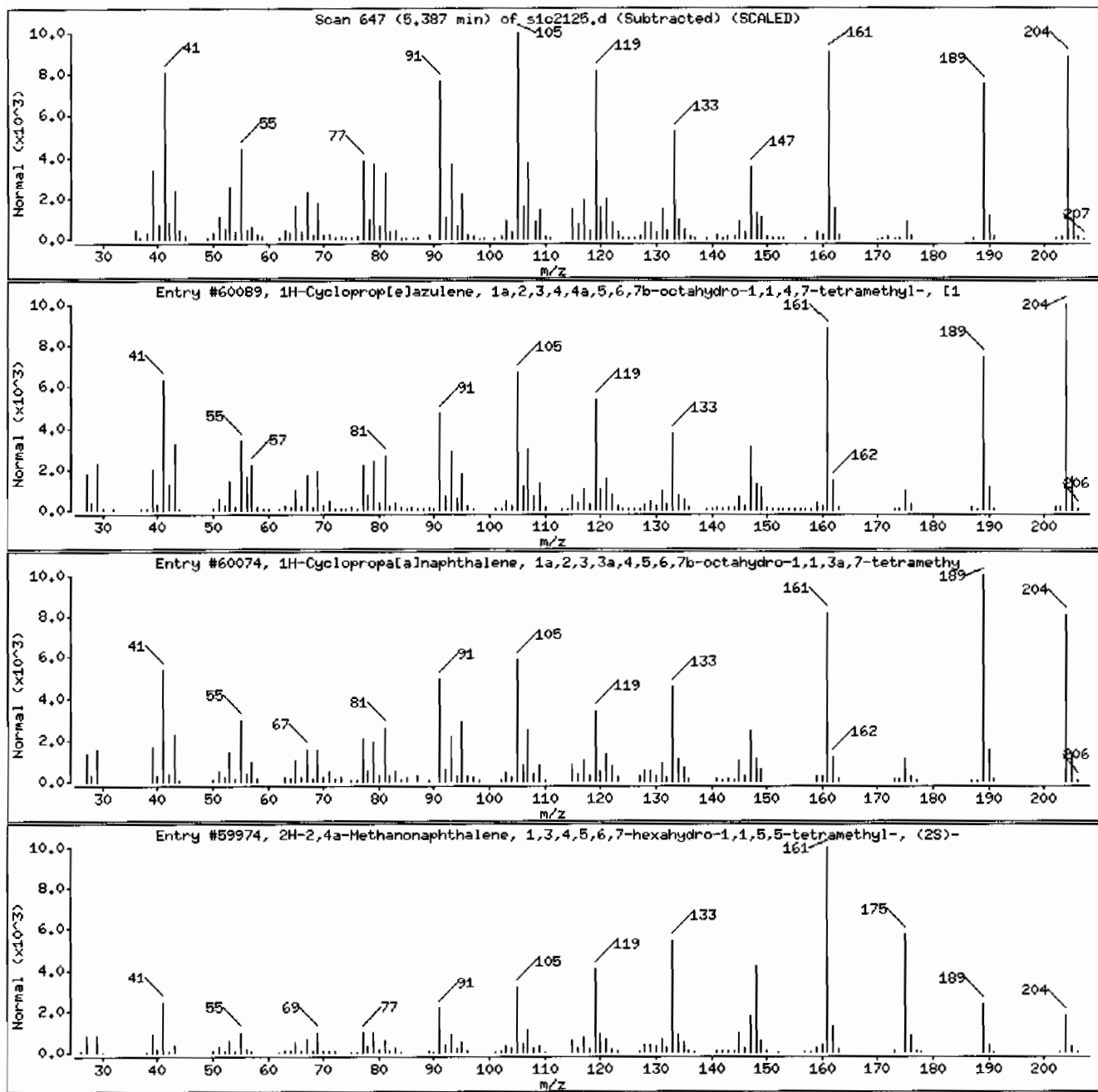
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Cycloprop[elazulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60089	98	C15H24	204
1H-Cycloprop[al]naphthalene, 1a,2,3,3a,4	489-29-2	NIST05.L	60074	95	C15H24	204
2H-2,4a-Methanonaphthalene, 1,3,4,5,6,7-	1135-66-6	NIST05.L	59974	93	C15H24	204



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 1248370015196122811SVH11ILANL

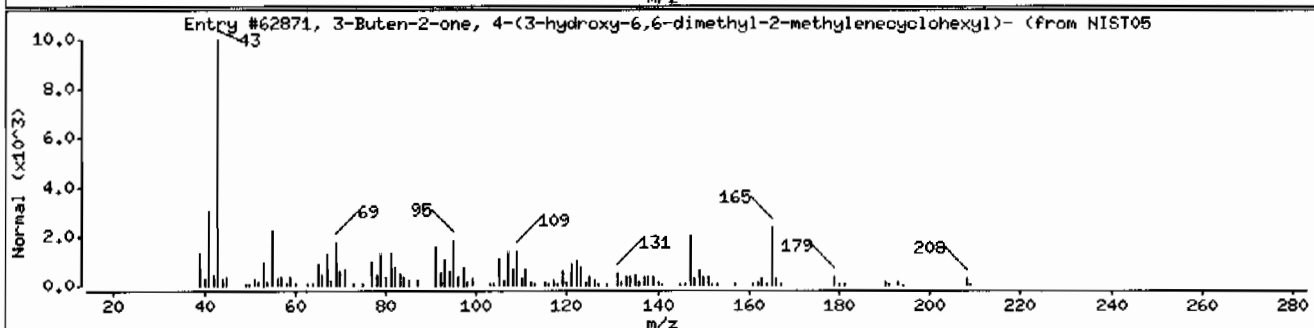
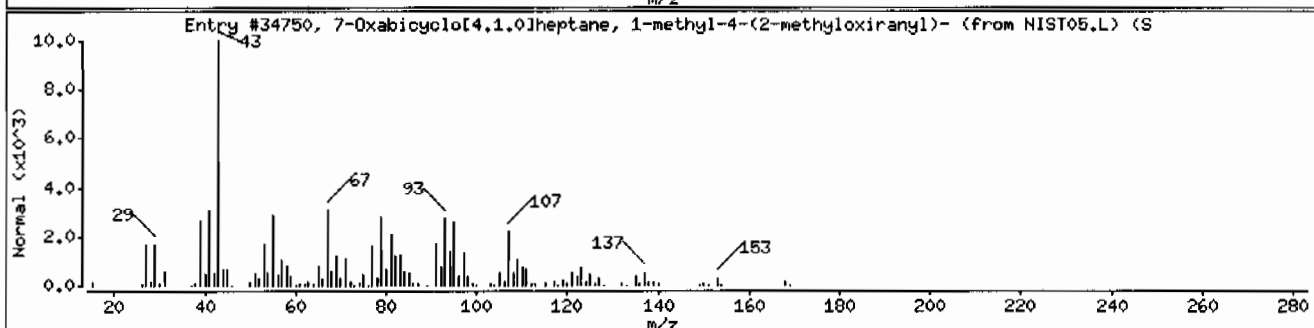
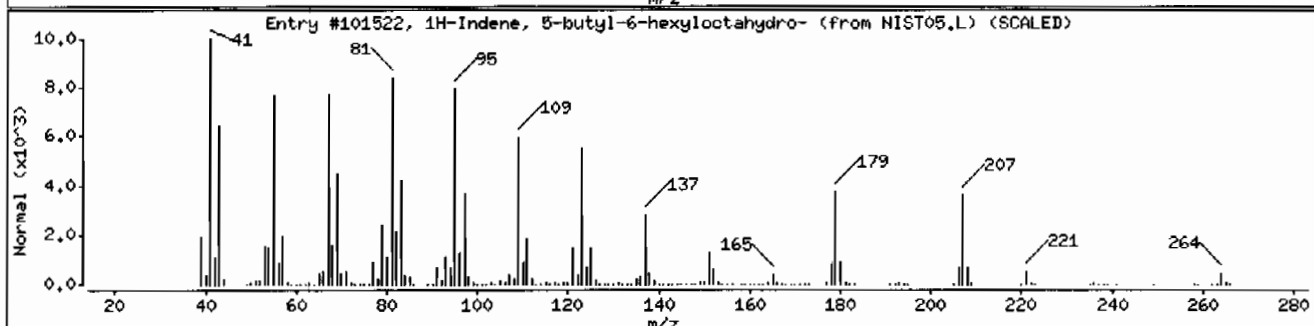
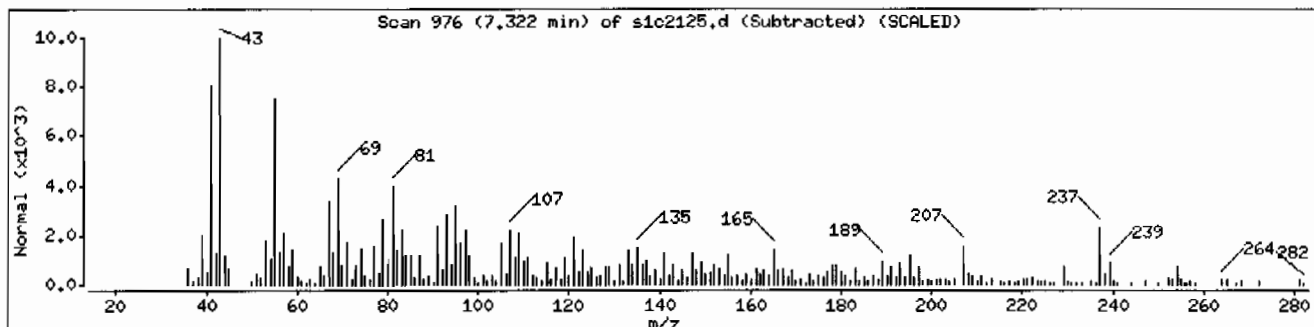
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	56	C19H36	264
7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(	96-08-2	NIST05.L	34750	46	C10H16O2	168
3-Buten-2-one, 4-(3-hydroxy-6,6-dimethyl	1000142-31-3	NIST05.L	62871	46	C13H20O2	208



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: I248370015I96122811ISVH11ILANL

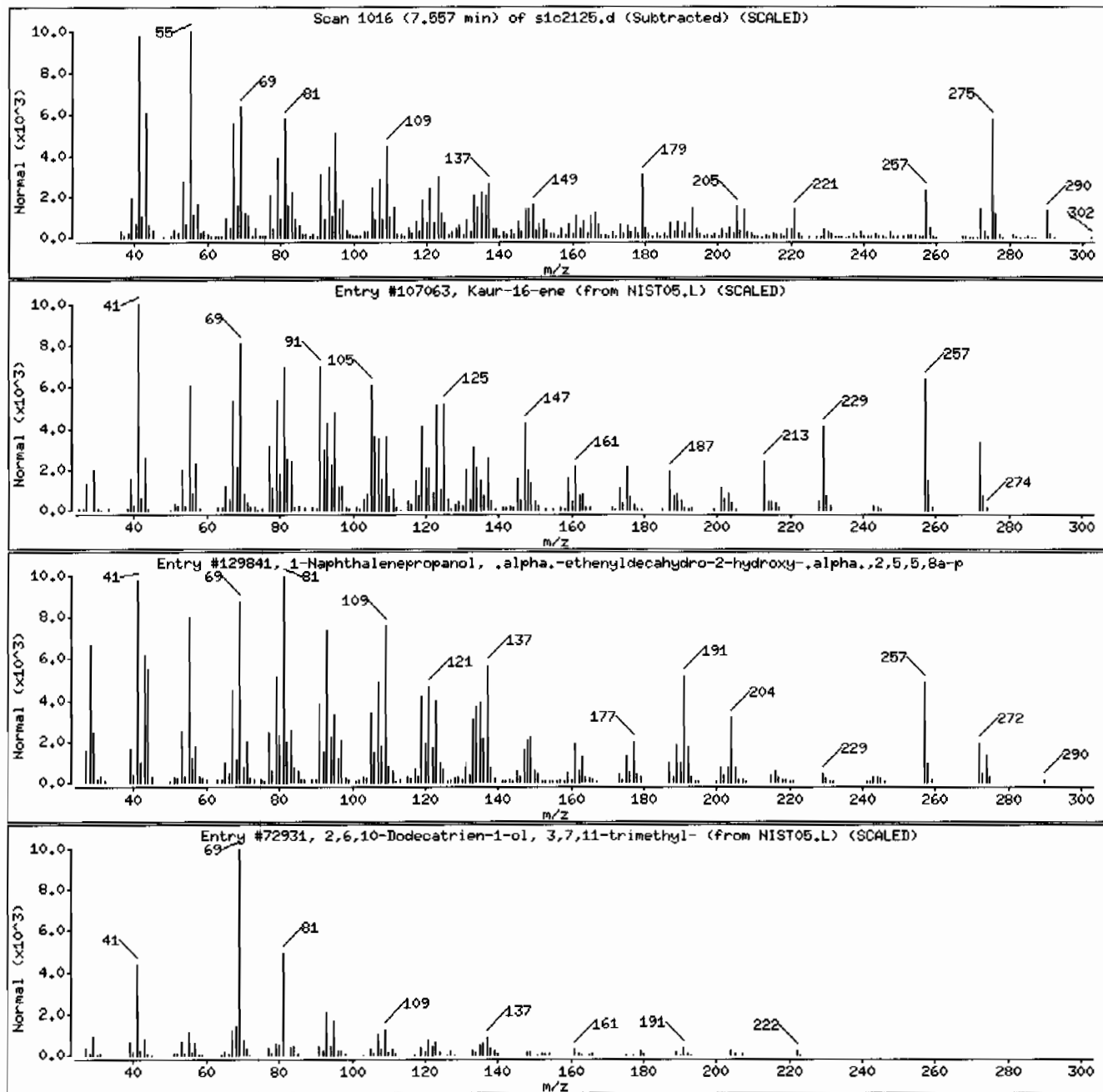
Volume Injected (uL): 0.5

Operator: AMY

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	562-28-7	NIST05.L	107063	42	C ₂₀ H ₃₂	272
1-Naphthalenepropanol, .alpha.-ethenylde	515-03-7	NIST05.L	129841	38	C ₂₀ H ₁₆ O ₂	308
2,6,10-Dodecatrien-1-ol, 3,7,11-trimethy	4602-84-0	NIST05.L	72931	38	C ₁₅ H ₂₆ O	222



Date: 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 12483700151961228111SVH111LANL

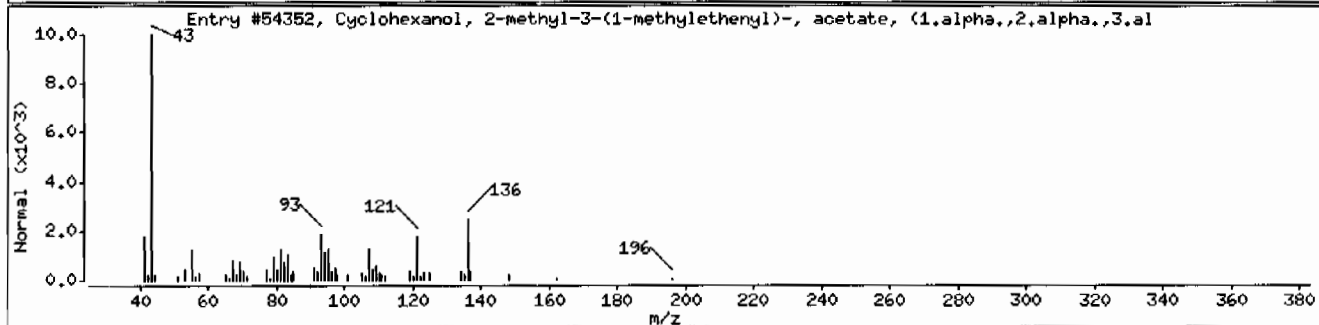
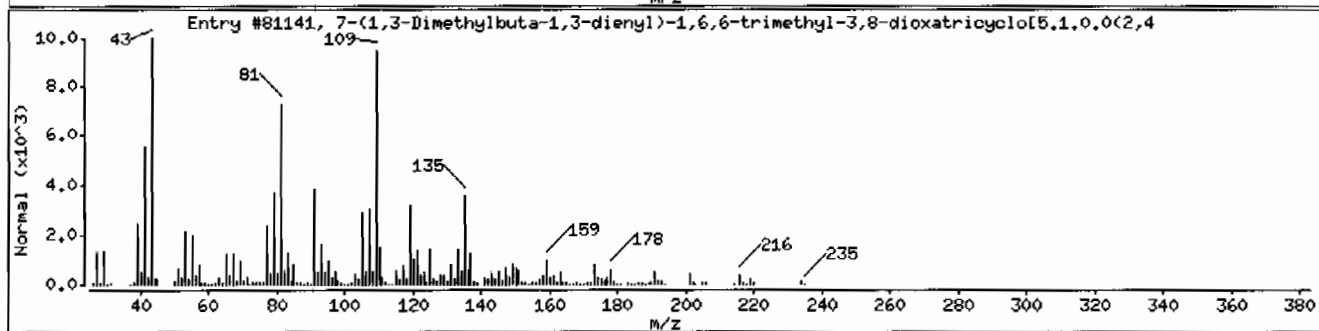
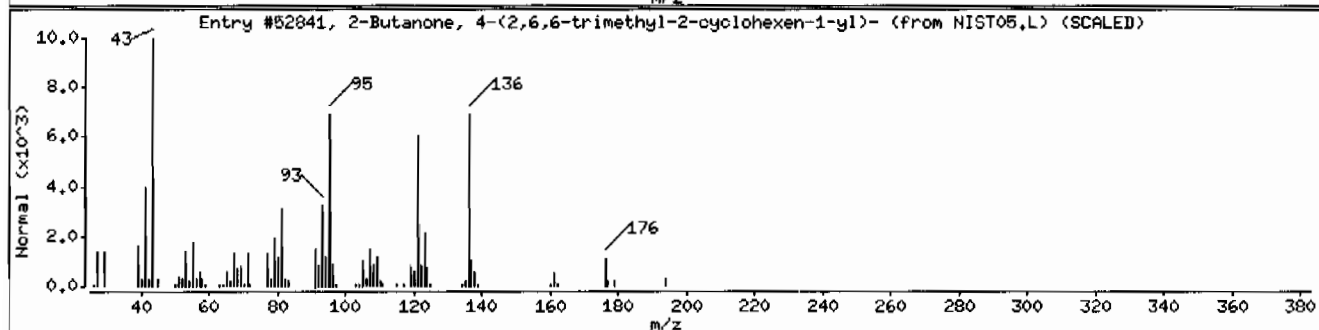
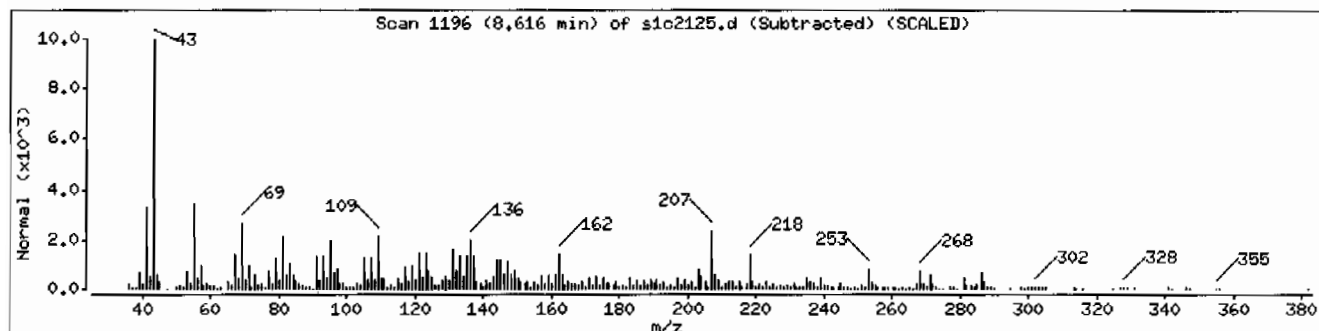
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butanone, 4-(2,6,6-trimethyl-2-cyclohex	31499-72-6	NIST05.L	52841	25	C13H22O	194
7-(1,3-Dimethylbuta-1,3-dienyl)-1,6,6-tr	1000190-22-7	NIST05.L	81141	25	C15H22O2	234
Cyclohexanol, 2-methyl-3-(1-methyletheny	54845-29-3	NIST05.L	54352	25	C12H20O2	196



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 12483700151961228111SVMI11LANL

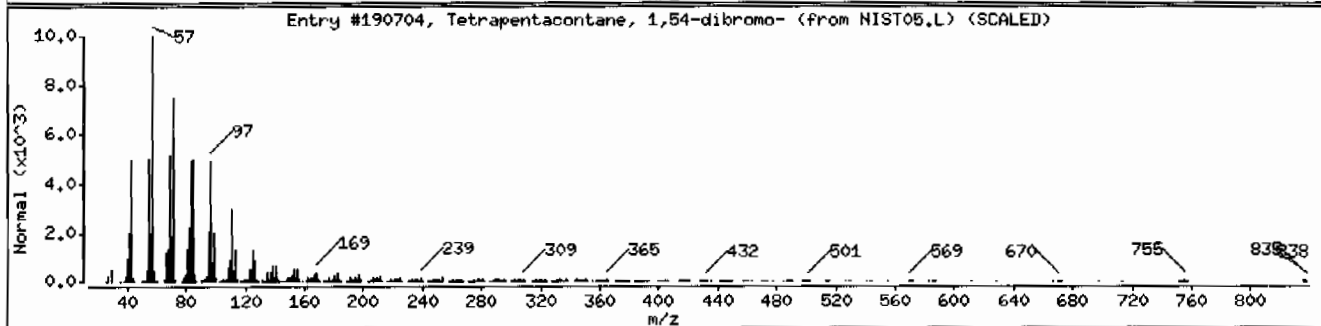
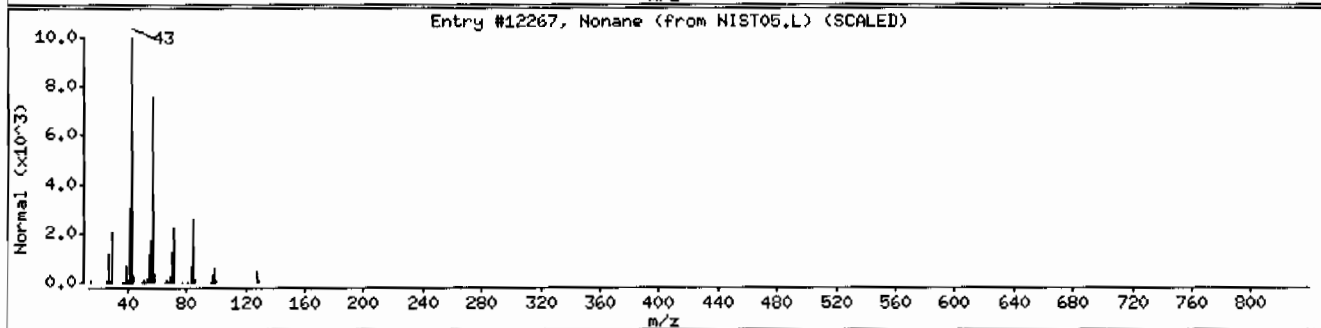
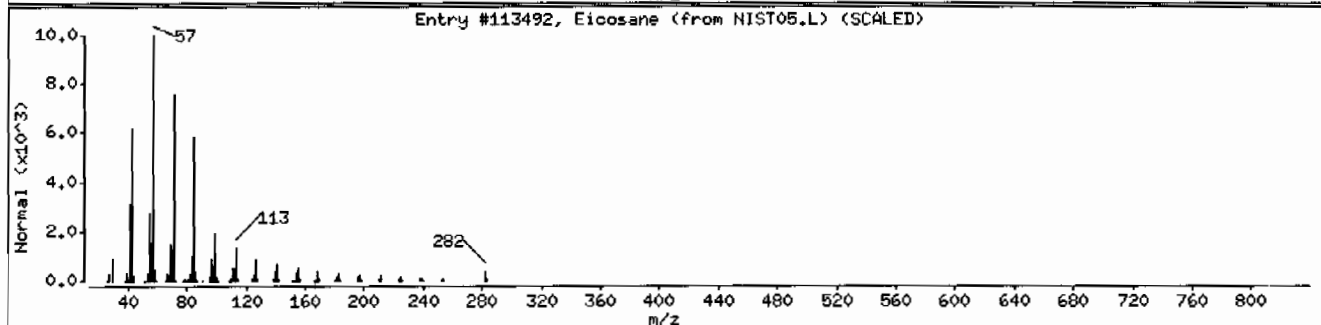
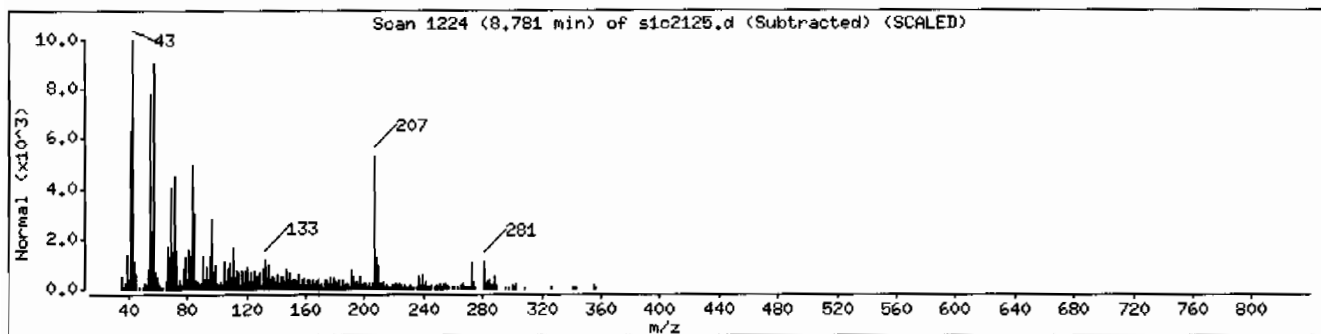
Volume Injected (uL): 0.5

Operator: AMY

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	91	C ₂₀ H ₄₂	282
Nonane	111-84-2	NIST05.L	12267	53	C ₉ H ₂₀	128
Tetrapentacontane, 1,54-dibromo-	1000156-09-4	NIST05.L	190704	50	C ₅₄ H ₁₀₈ Br ₂	915



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: HSD1.i

Sample Info: 1248370015196122811|SVMI1|LANL

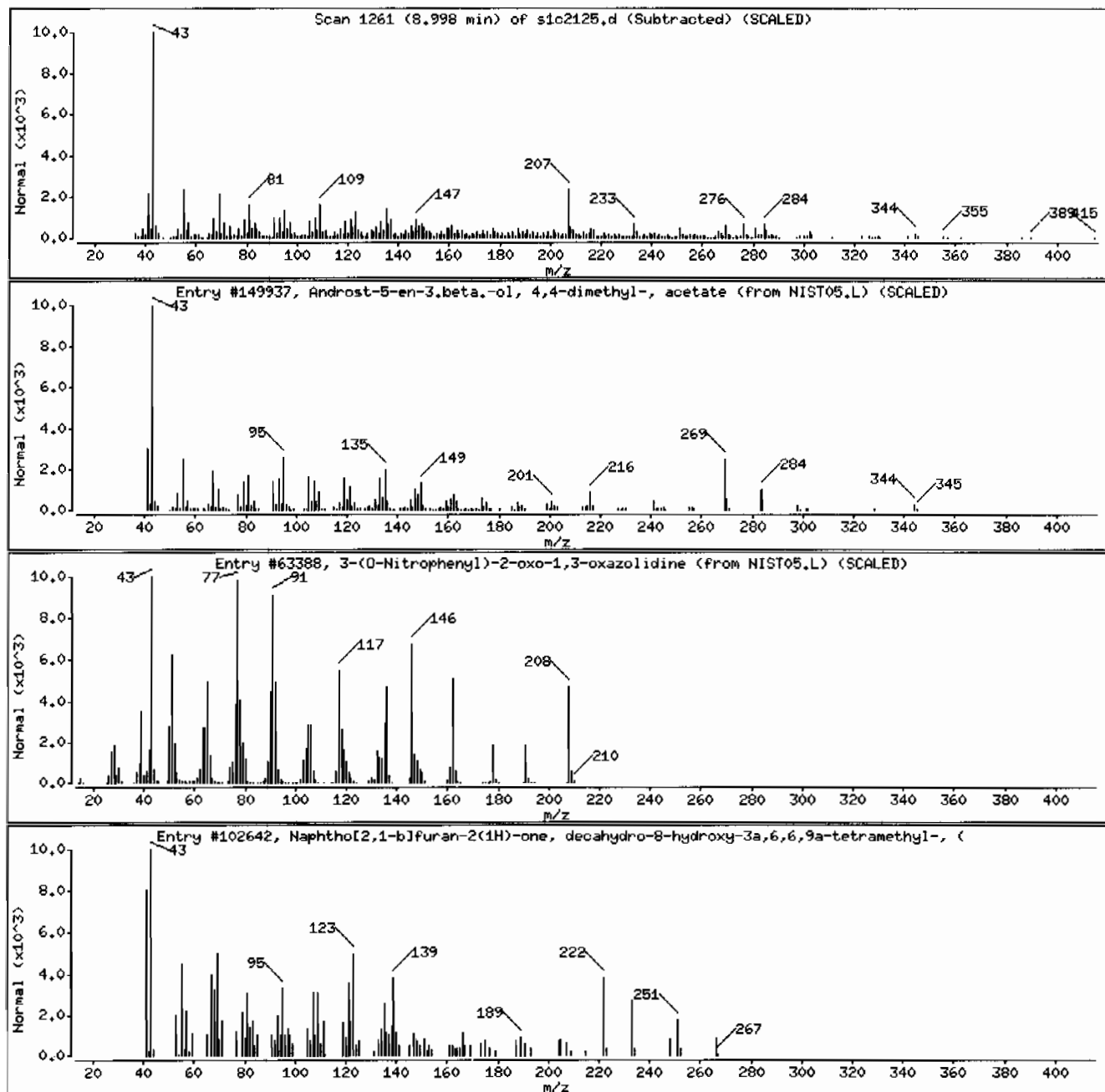
Volume Injected (uL): 0.5

Operator: AMY

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-3,β-ol, 4,4-dimethyl-,	7673-18-9	NIST05.L	149937	44	C23H36O2	344
3-(0-Nitrophenyl)-2-oxo-1,3-oxazolidine	90417-72-4	NIST05.L	63388	25	C9H8N2O4	208
Naphtho[2,1-b]furan-2(1H)-one, decahydro	29065-33-6	NIST05.L	102642	18	C16H26O3	266



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 12483700151961228111SVMI11LANL

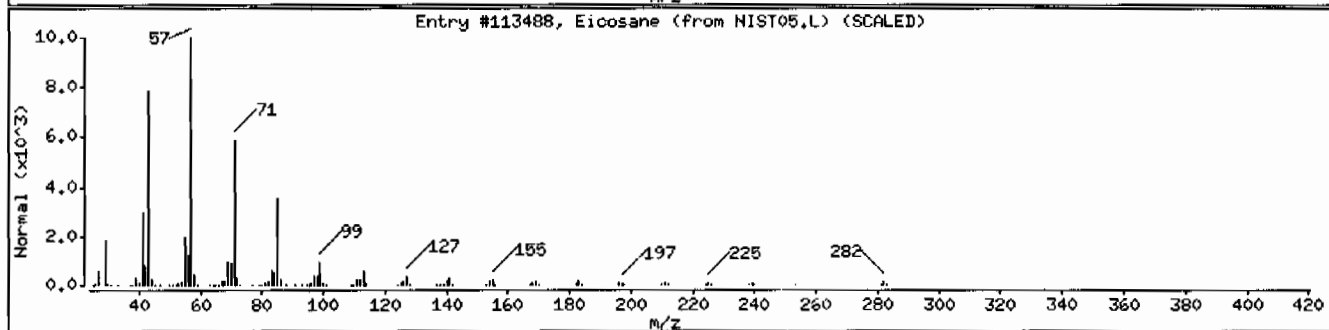
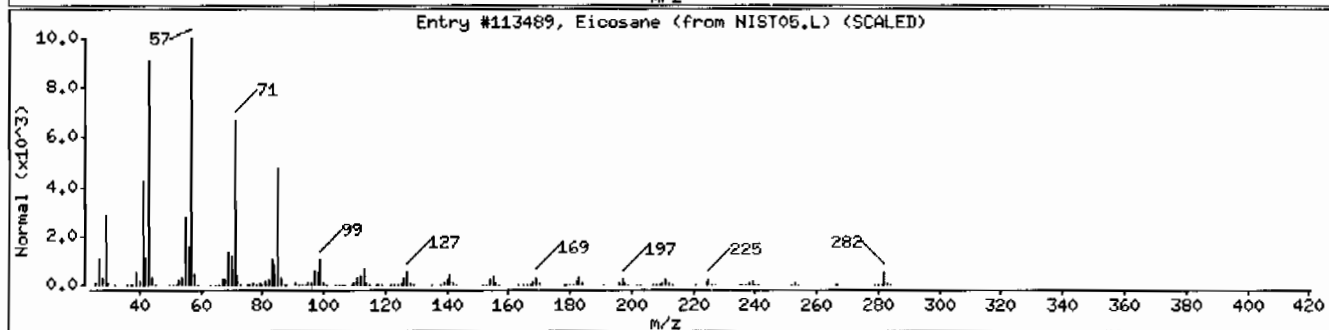
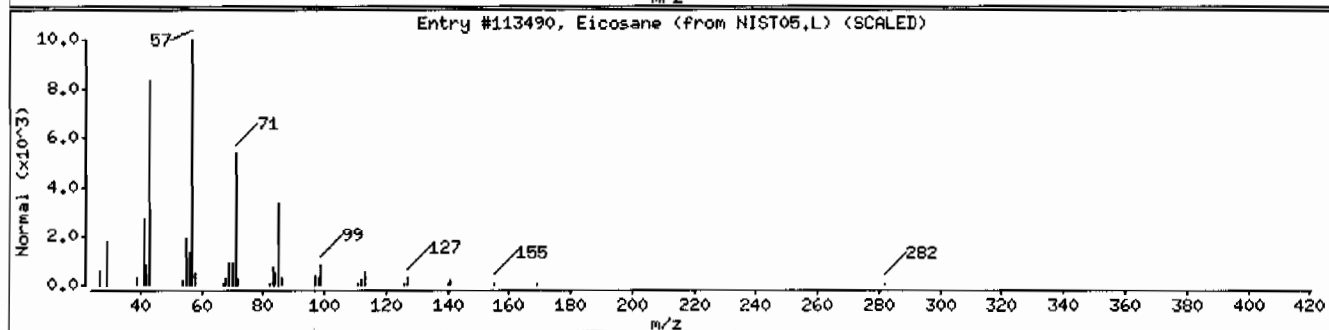
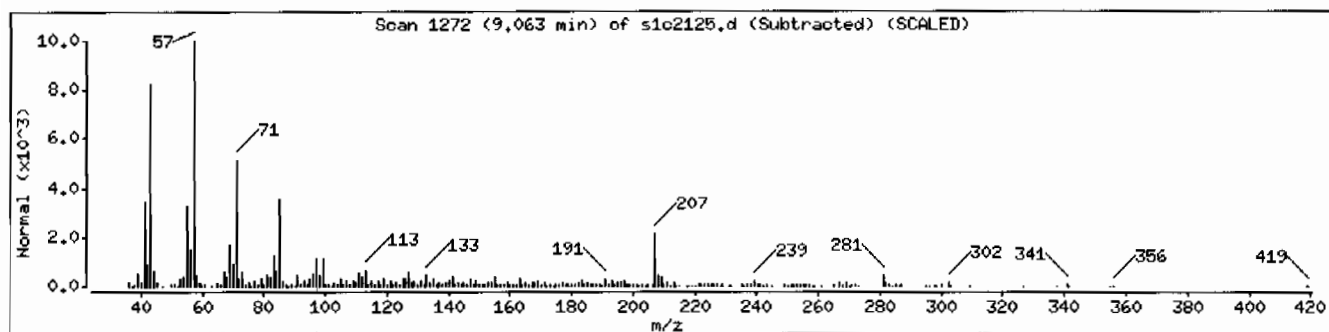
Volume Injected (uL): 0.5

Operator: AMY

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	98	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	97	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113488	96	C ₂₀ H ₄₂	282



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 1248370015196122811SVH111LANL

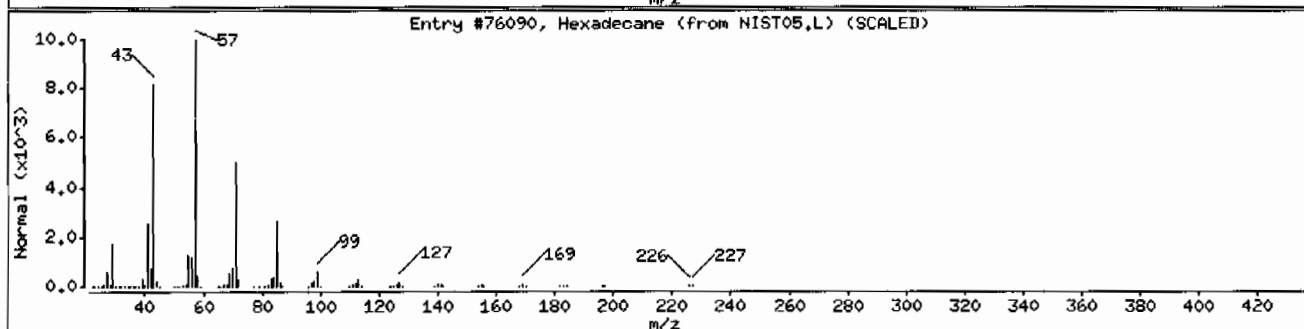
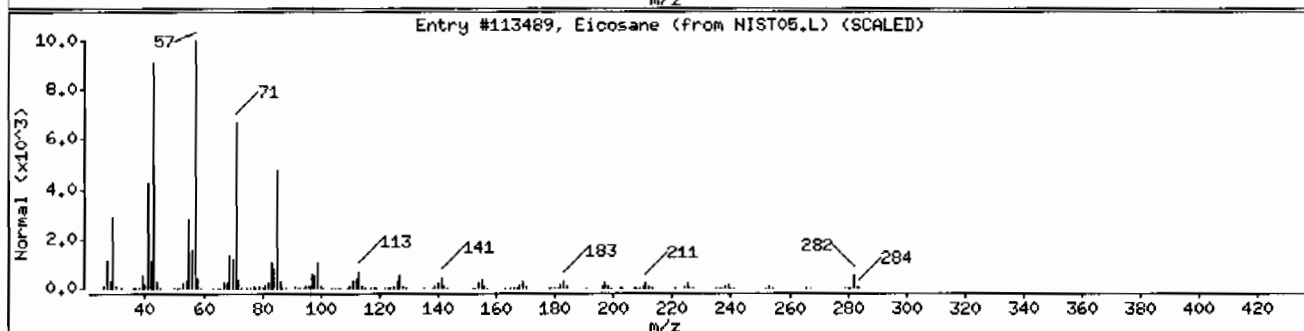
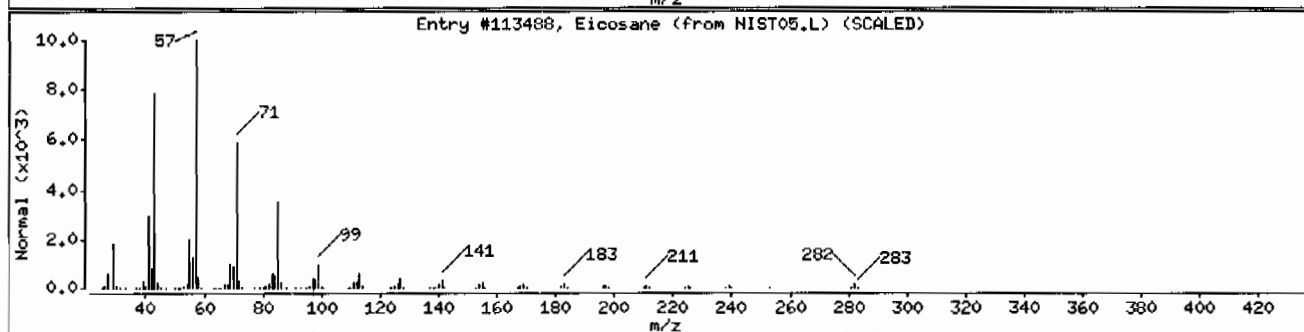
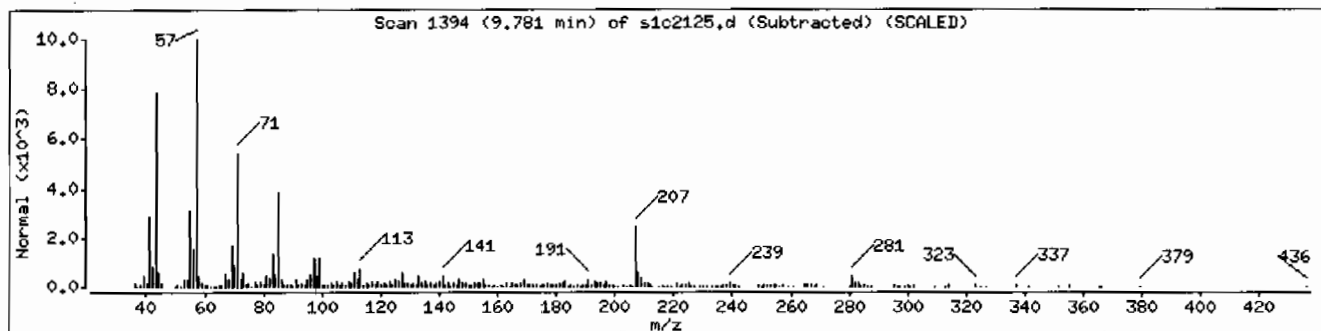
Volume Injected (uL): 0.5

Operator: AMY

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	113488	98	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	97	C ₂₀ H ₄₂	282
Hexadecane	544-76-3	NIST05.L	76090	92	C ₁₆ H ₃₄	226



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: I248370015196122811SVH111LANL

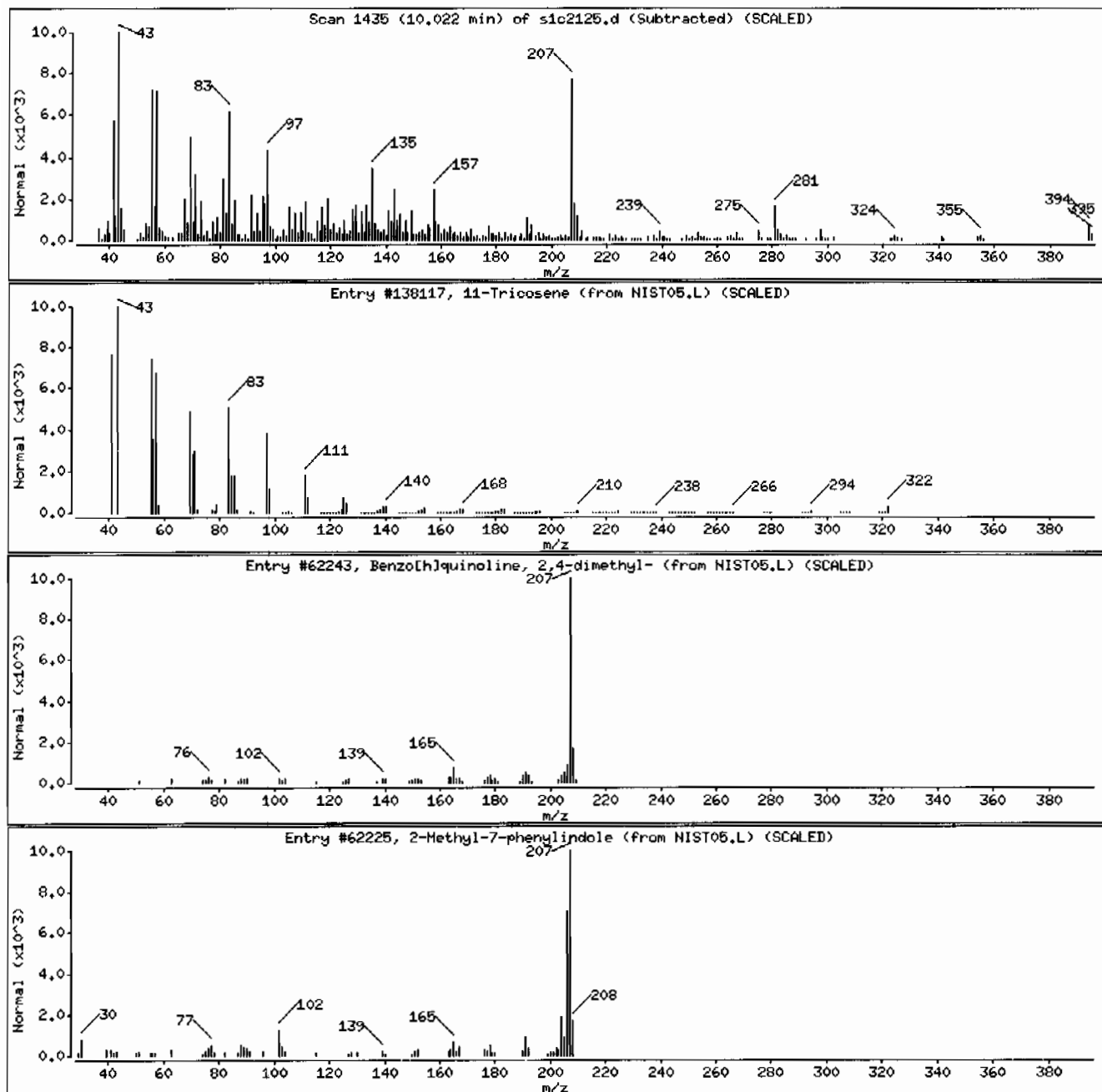
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
11-Tricosene	52078-56-5	NIST05.L	138117	25	C23H46	322
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	25	C15H13N	207
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	25	C15H13N	207



Date: 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: I248370015196122811SVH11ILANL

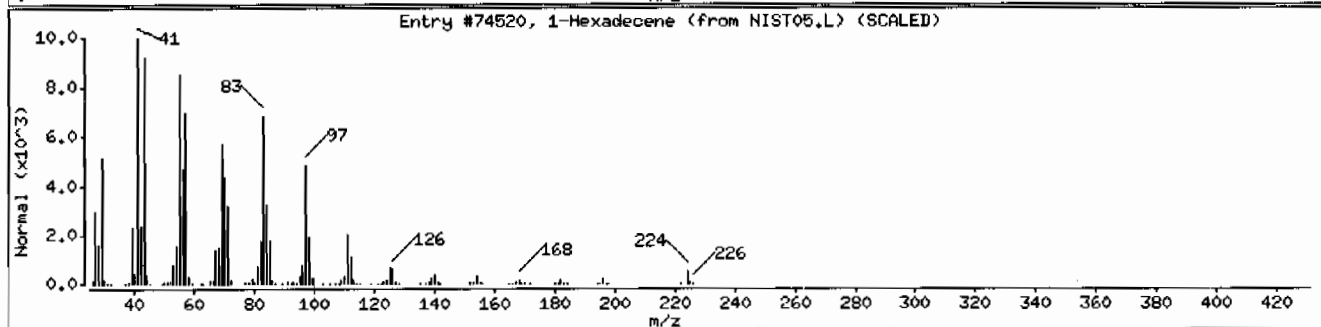
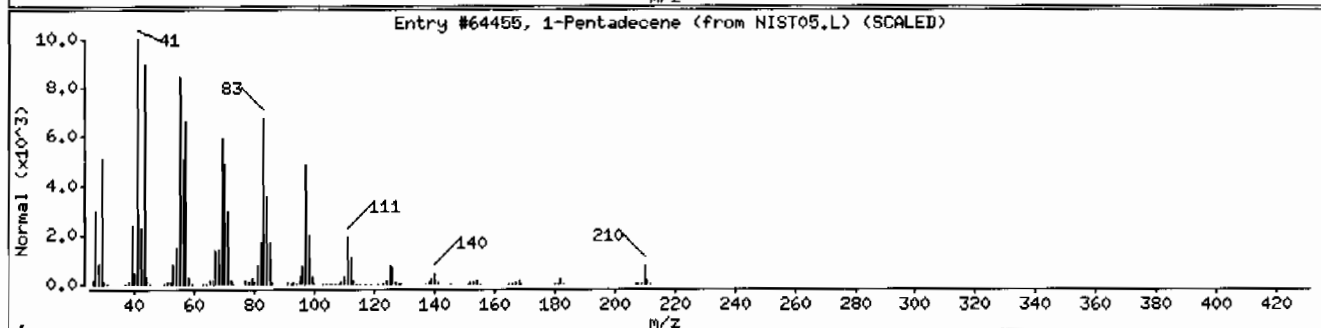
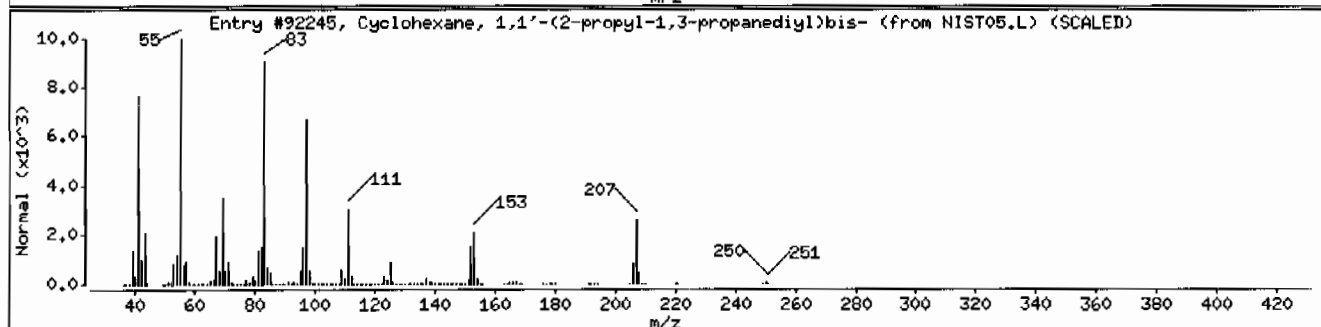
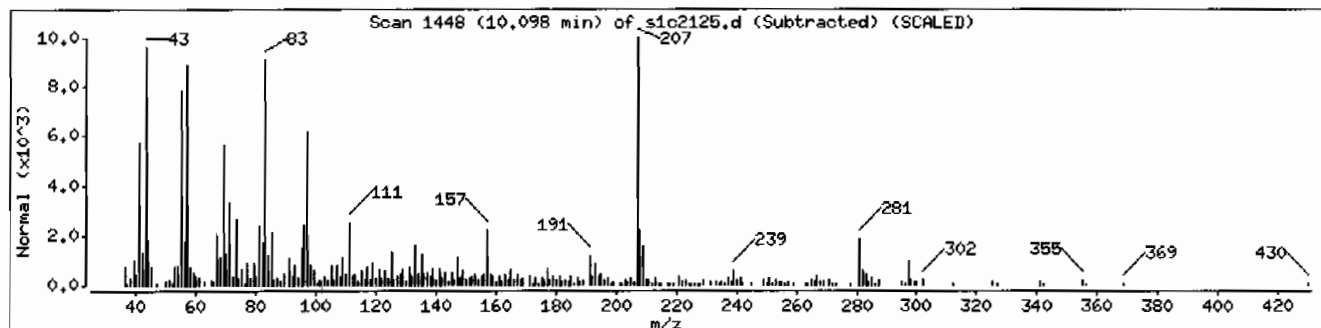
Volume Injected (uL): 0.5

Operator: AHY

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	55	C19H34	250
1-Pentadecene	13360-61-7	NIST05.L	64455	50	C15H30	210
1-Hexadecene	629-73-2	NIST05.L	74520	50	C16H32	224



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: 1248370015196122811SVH111LANL

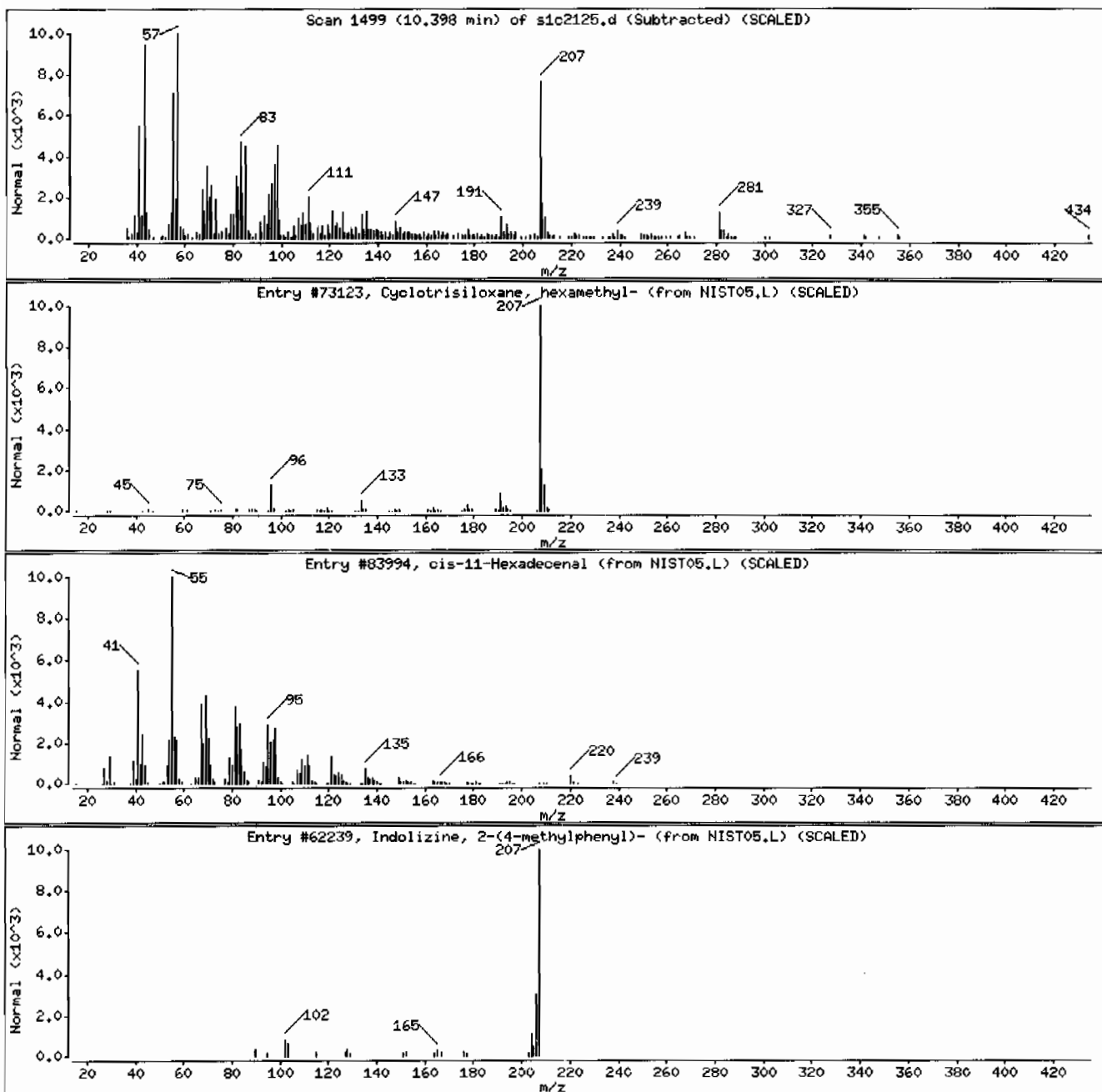
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	27	C ₆ H ₁₈ O ₃ Si ₃	222
cis-11-Hexadecenal	53939-28-9	NIST05.L	83994	25	C ₁₆ H ₃₀ O	238
Indolizine, 2-(4-methylphenyl)-	7496-81-3	NIST05.L	62239	25	C ₁₅ H ₁₃ N	207



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: MSD1.i

Sample Info: I248370015196122811SVMI11LANL

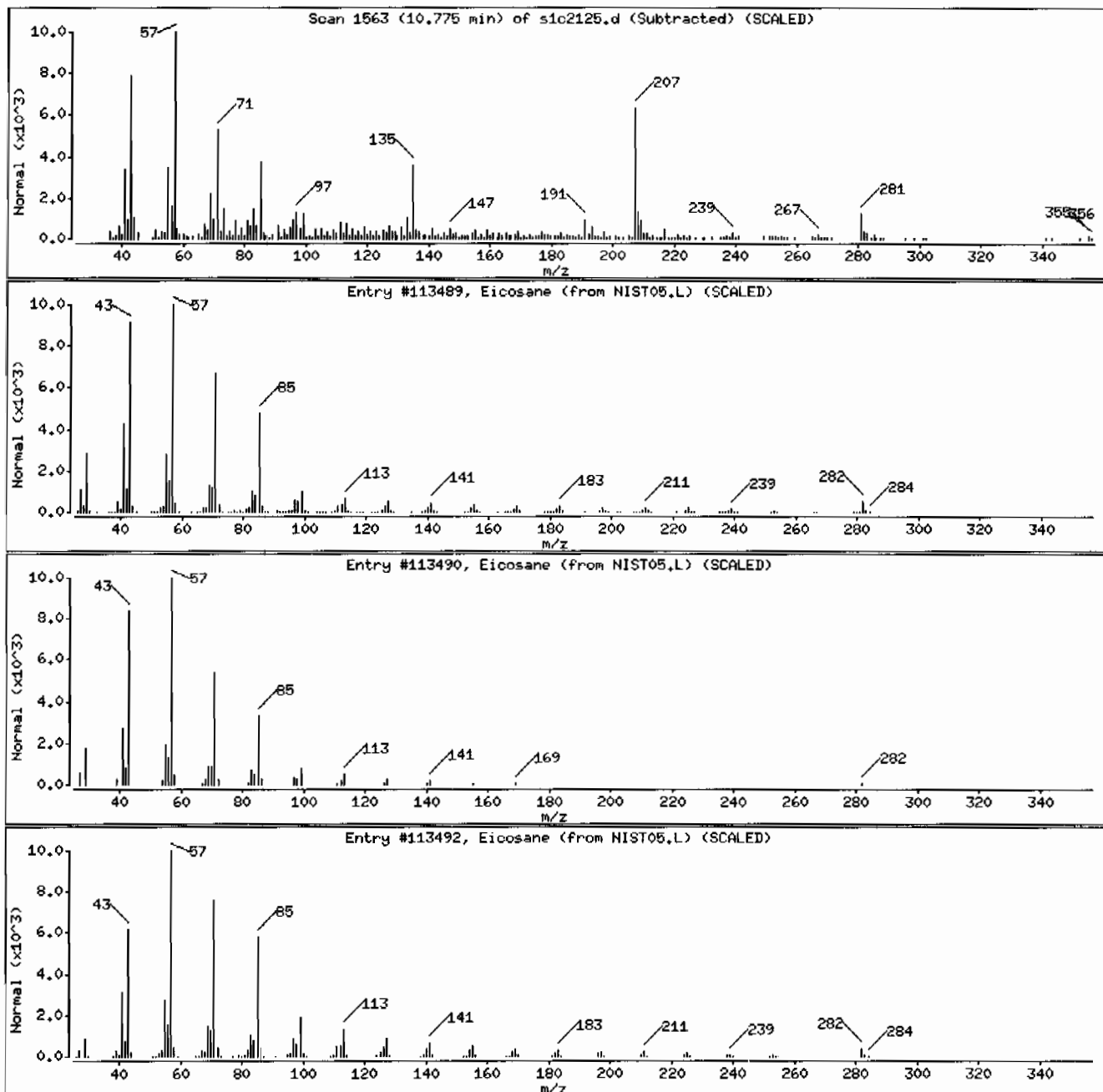
Volume Injected (uL): 0.5

Operator: AMY

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	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113490	93	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	83	C20H42	282



Date : 22-MAR-2010 02:05

Client ID: RE36-10-7479

Instrument: HSD1.i

Sample Info: 1248370015196122811SVH11ILANL

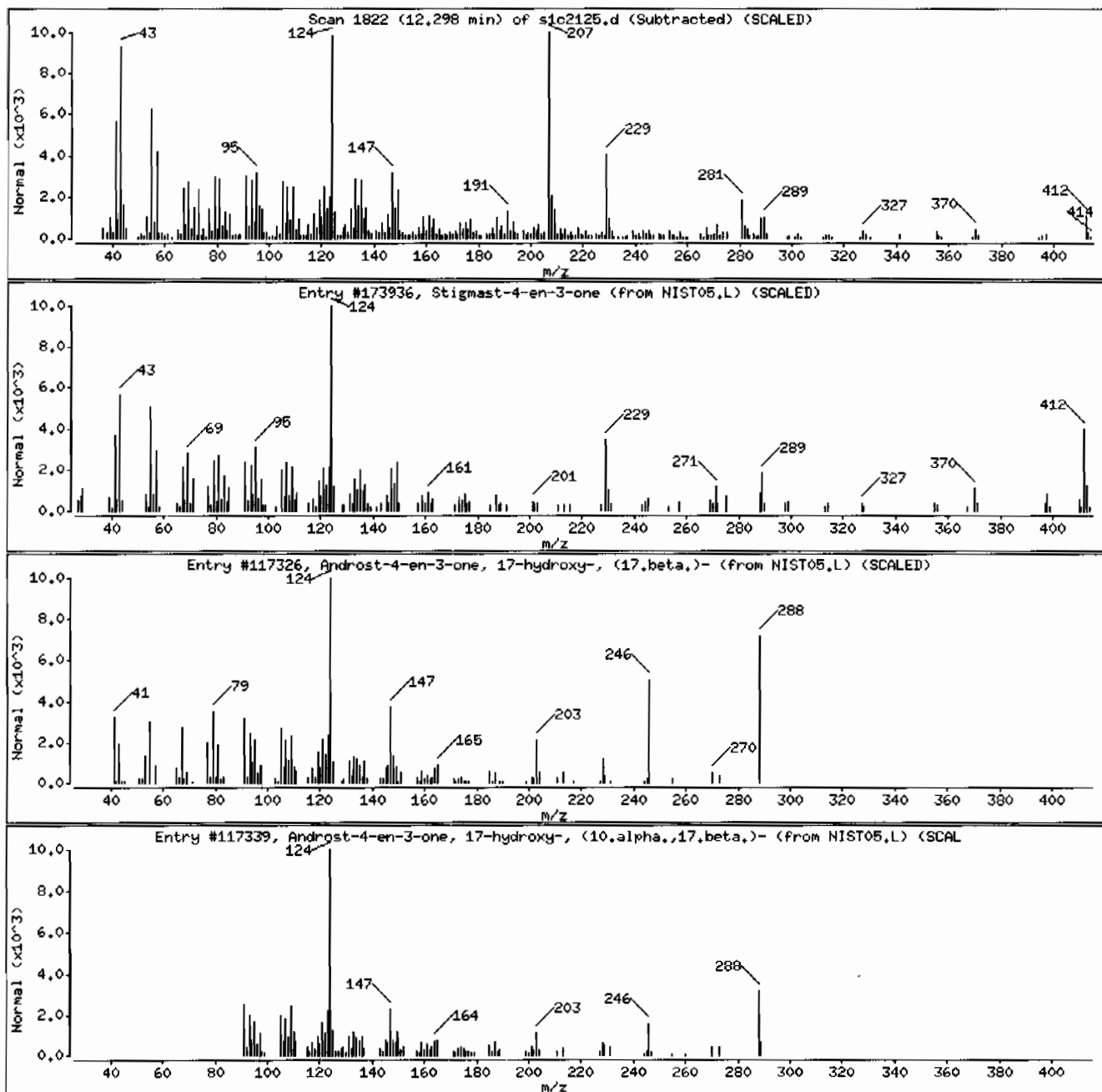
Volume Injected (uL): 0.5

Operator: AMY

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	70	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17.β)	58-22-0	NIST05.L	117326	62	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (10.α)	604-39-7	NIST05.L	117339	47	C19H28O2	288



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

SDG Number: 10-2150
Lab Sample ID: 248370017

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7480
Batch ID: 961228
Run Date: 03/22/2010 02:53
Prep Date: 03/05/2010 11:30
Data File: s1c2127.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	379	ug/kg	75.8	379
108-95-2	Phenol	U	379	ug/kg	75.8	379
95-57-8	2-Chlorophenol	U	379	ug/kg	75.8	379
106-46-7	1,4-Dichlorobenzene	U	379	ug/kg	75.8	379
621-64-7	N-Nitrosodipropylamine	U	379	ug/kg	75.8	379
59-50-7	4-Chloro-3-methylphenol	U	379	ug/kg	75.8	379
83-32-9	Acenaphthene	U	37.9	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene	U	379	ug/kg	37.9	379
100-02-7	4-Nitrophenol	U	379	ug/kg	125	379
87-86-5	Pentachlorophenol	U	379	ug/kg	94.7	379
129-00-0	Pyrene	U	37.9	ug/kg	11.4	37.9
110-86-1	Pyridine	U	379	ug/kg	75.8	379
62-53-3	Aniline	U	379	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether	U	379	ug/kg	75.8	379
541-73-1	1,3-Dichlorobenzene	U	379	ug/kg	75.8	379
100-51-6	Benzyl alcohol	U	379	ug/kg	114	379
95-50-1	1,2-Dichlorobenzene	U	379	ug/kg	75.8	379
108-60-1	bis(2-Chloroisopropyl)ether	U	379	ug/kg	75.8	379
95-48-7	o-Cresol	U	379	ug/kg	75.8	379
65794-96-9	m,p-Cresols	U	379	ug/kg	114	379
67-72-1	Hexachloroethane	U	379	ug/kg	75.8	379
98-95-3	Nitrobenzene	U	379	ug/kg	75.8	379
78-59-1	Isophorone	U	379	ug/kg	75.8	379
88-75-5	2-Nitrophenol	U	379	ug/kg	75.8	379
105-67-9	2,4-Dimethylphenol	U	379	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane	U	379	ug/kg	75.8	379
120-83-2	2,4-Dichlorophenol	U	379	ug/kg	75.8	379
65-85-0	Benzoic acid	U	758	ug/kg	189	758
91-20-3	Naphthalene	U	37.9	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline	U	379	ug/kg	75.8	379
87-68-3	Hexachlorobutadiene	U	379	ug/kg	75.8	379
91-57-6	2-Methylnaphthalene	U	37.9	ug/kg	7.58	37.9
77-47-4	Hexachlorocyclopentadiene	U	379	ug/kg	75.8	379
88-06-2	2,4,6-Trichlorophenol	U	379	ug/kg	75.8	379
95-95-4	2,4,5-Trichlorophenol	U	379	ug/kg	75.8	379
91-58-7	2-Chloronaphthalene	J	21.5	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline	U	379	ug/kg	75.8	379
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	379	ug/kg	75.8	379

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370017	Date Received: 03/02/2010 08:50	% Moisture: 12.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7480	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 02:53	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s1c2127.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	379	ug/kg	75.8	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	758	ug/kg	144	758
132-64-9	Dibenzofuran	U	379	ug/kg	75.8	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.8	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.8	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.8	379
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.8	379
122-66-7	Azobenzene	U	379	ug/kg	75.8	379
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.8	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.8	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.58	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.8	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.8	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.8	379
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.8	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.8	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	476	ug/kg		J
	Unknown Aldol Condensate	2.67	382	ug/kg		JA

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

SDG Number: 10-2150
Lab Sample ID: 248370017

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.1
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
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.19	730	ug/kg	97	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.43	192	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	178	ug/kg	97	NJ
	Unknown	5.13	230	ug/kg		J
112-80-1	Oleic Acid	7.4	186	ug/kg	96	NJ
	Unknown	7.75	202	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	165	ug/kg	96	NJ
	Unknown	8.09	211	ug/kg		J
	Unknown	8.13	317	ug/kg		J
	Unknown	8.26	217	ug/kg		J
	Unknown	8.62	190	ug/kg		J
	Unknown	8.78	212	ug/kg		J
	Unknown	9	164	ug/kg		J
112-95-8	Eicosane	9.06	292	ug/kg	98	NJ
	Unknown	9.18	207	ug/kg		J
	Unknown	9.78	318	ug/kg		J
	Unknown	10.77	160	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	275	ug/kg	42	NJ

Data File: /chem/MSD1.i/s032110.b/slc2127.d
Report Date: 22-Mar-2010 16:17

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2127.d
Lab Smp Id: 248370017 Client Smp ID: RE36-10-7480
Inj Date : 22-MAR-2010 02:53
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370017|961228|1|SVM|1|LANL
Misc Info : |MSD8270_5|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.03000	weight of sample
M	12.12370	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL (ng/ul) (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	440454	40.0000
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1753348	40.0000
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	921385	40.0000
* 67 Phenanthrene-d10	188	6.710	6.710	(1.000)	1681077	40.0000
* 91 Chrysene-d12	240	8.292	8.292	(1.000)	1281009	40.0000
* 98 Perylene-d12	264	9.528	9.522	(1.000)	720505	40.0000
\$ 3 2-Fluorophenol	112	2.834	2.822	(0.785)	778694	68.6569 2600
\$ 5 Phenol-d5	99	3.352	3.346	(0.928)	977322	70.7548 2680
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	400541	37.2464 1410
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	869682	34.1770 1300
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	194415	64.3599 2440
\$ 81 p-Terphenyl-d14	244	7.628	7.622	(0.920)	920386	43.0959 1630

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
40 2-Chloronaphthalene	162	5.334	5.304	(0.935)	12531	0.56776	21.5(aQ)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: slc2127.d

Report Date: 03/22/2010 11:59

Lab. ID: 248370017

SampleType: SAMPLE

Injection Date: 22-MAR-2010 02:53

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370017|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	45133	3.35	3.40	80-120	100	()
93	9214	3.39	3.40	233-293	20	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	57560	3.97	3.86	80-120	100	(T)
42	39311	3.97	3.86	48-108	68	(T)

40	2-Chloronaphthalene	CAS#: 91-58-7				
162	12531	5.33	5.30	80-120	100	()
164	312	5.34	5.30	2- 62	2	()
127	240	5.34	5.30	9- 69	2	(Q)

42	o-Nitroaniline	CAS#: 88-74-4				
65	12740	5.43	5.37	80-120	100	(T)
92	14455	5.43	5.37	33- 93	113	(QT)
138	968	5.44	5.37	80-140	8	(QT)

41	m-Nitroaniline	CAS#: 99-09-2				
138	230	5.68	5.66	80-120	100	()
92	865	5.67	5.66	71-131	376	(Q)
108	16643	5.70	5.66	0- 40	7226	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	165297	5.70	5.49	80-120	100	(T)
164	921385	5.70	5.49	0- 40	557	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	117873	5.70	5.54	80-120	100	(T)
63	1867	5.70	5.54	50-110	2	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	117873	5.70	5.83	80-120	100	(T)
89	1560	5.70	5.82	38- 98	1	(QT)
63	1833	5.70	5.82	20- 80	2	(QT)

53 Fluorene				CAS#: 86-73-7		
166	15639	6.25	6.09	80-120	100	(T)
165	15332	6.25	6.09	61-121	98	(T)
167	5598	6.25	6.09	0- 43	36	(T)

56 p-Nitroaniline				CAS#: 100-01-6		
138	384	6.08	6.09	80-120	100	()
108	575	6.08	6.09	29- 89	150	(Q)
92	293	6.15	6.09	14- 74	76	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2127.d
 Lab Smp Id: 248370017 Client Smp ID: RE36-10-7480
 Inj Date : 22-MAR-2010 02:53
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370017|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 27
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	12.12370	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2704635	40.000
* 46 Acenaphthene-d10	5.704	3971450	40.000
* 67 Phenanthrene-d10	6.710	4184311	40.000
* 91 Chrysene-d12	8.292	3575605	40.000
* 98 Perylene-d12	9.528	2064218	40.000

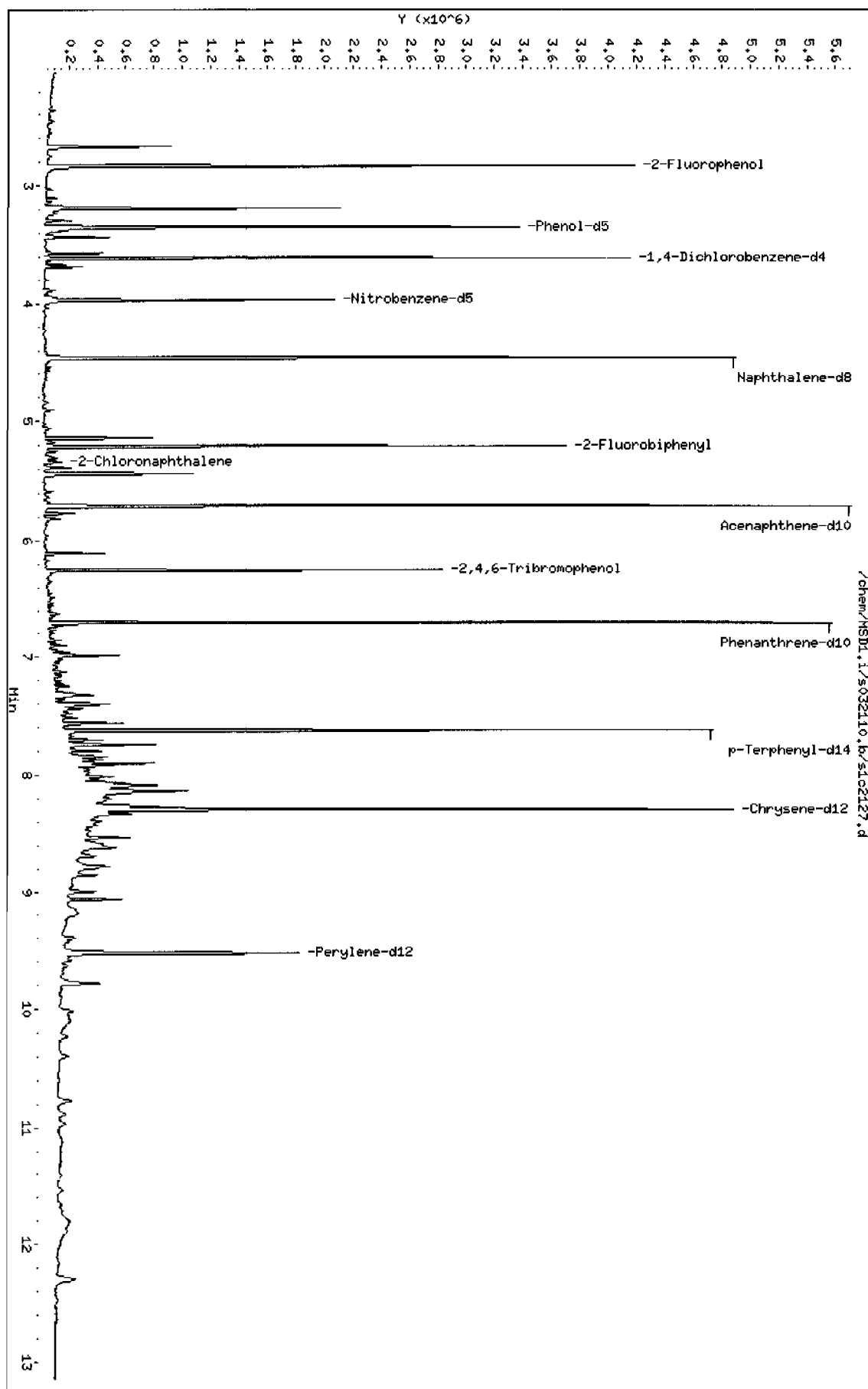
CONCENTRATIONS					QUANT		
RT	AREA	ON-CCL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.810	848756	12.5526139	476	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	681387	10.0773244	382	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.193	1303091	19.2719625	730	97	NIST05.L	15188	10
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me					CAS #: 18172-67-3		
3.434	341907	5.05661088	192	97	NIST05.L	15390	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
3.569	317453	4.69494580	178	97	NIST05.L	15369	10
Unknown					CAS #:		
5.134	603437	6.07774825	230	0		0	46
Oleic Acid					CAS #: 112-80-1		
7.398	513523	4.90903649	186	96	NIST05.L	113353	67
Unknown					CAS #:		
7.745	477392	5.34054278	202	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
7.898	389674	4.35924796	165	96	NIST05.L	133618	91
Unknown					CAS #:		
8.087	497231	5.56247642	211	0		0	91
Unknown					CAS #:		
8.134	747923	8.36695484	317	0		0	91
Unknown					CAS #:		
8.263	510839	5.71471012	216	0		0	91
Unknown					CAS #:		
8.616	448298	5.01506801	190	0		0	91
Unknown					CAS #:		
8.781	499111	5.58351439	212	0		0	91
Unknown					CAS #:		
8.996	223244	4.32597901	164	0		0	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Eicosane					CAS #: 112-95-8		
9.063	398076	7.71584276	292	98	NIST05.L	113490	98
Unknown					CAS #:		
9.181	281887	5.46235152	207	0		0	98
Unknown					CAS #:		
9.781	433348	8.39732577	318	0		0	98
Unknown					CAS #:		
10.769	217685	4.21824627	160	0		0	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
12.298	374979	7.26625583	275	42	NIST05.L	173936	98

Data File: /chem/MSD1.i/s032110.b/s1c2127.d
Date : 22-MAR-2010 02:53
Client ID: RE36-10-7480
Sample Info: 1248370017196122811SVN111LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20



Date: 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: HSD1.i

Sample Info: 1248370017196122811SVMI11LANL

Volume Injected (uL): 0.5

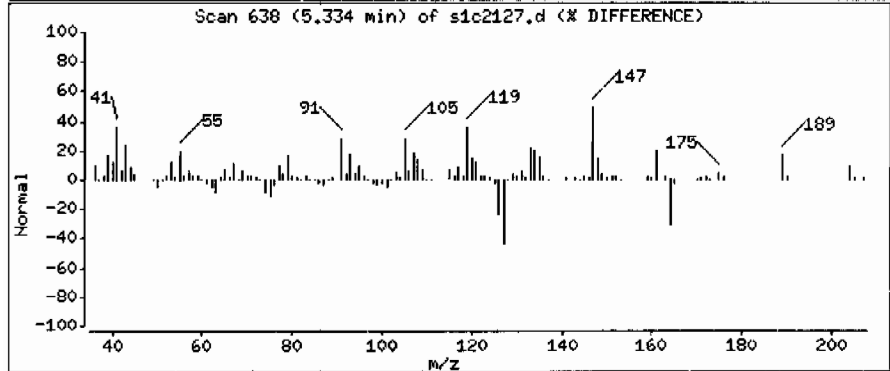
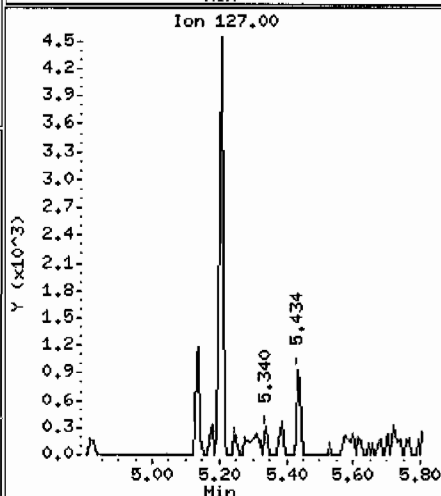
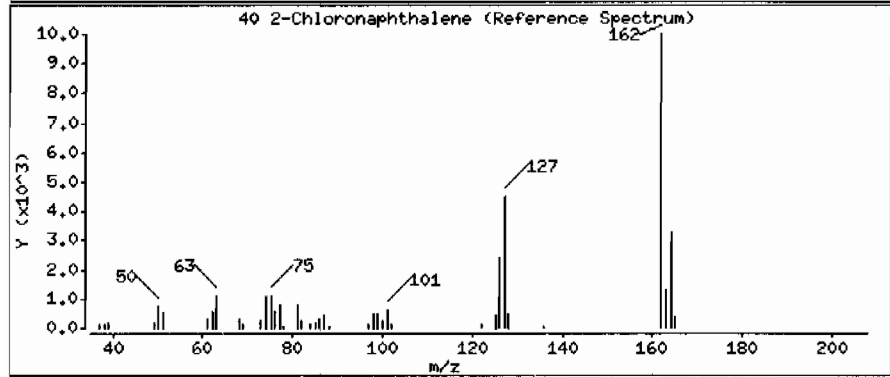
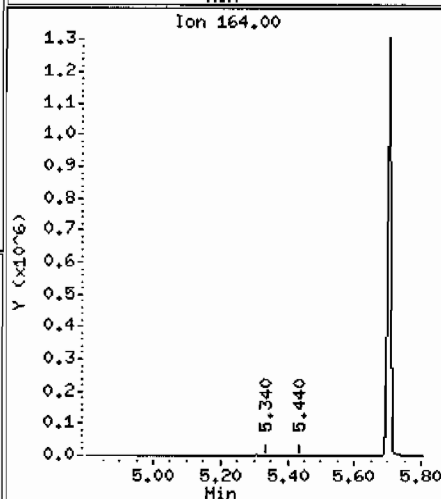
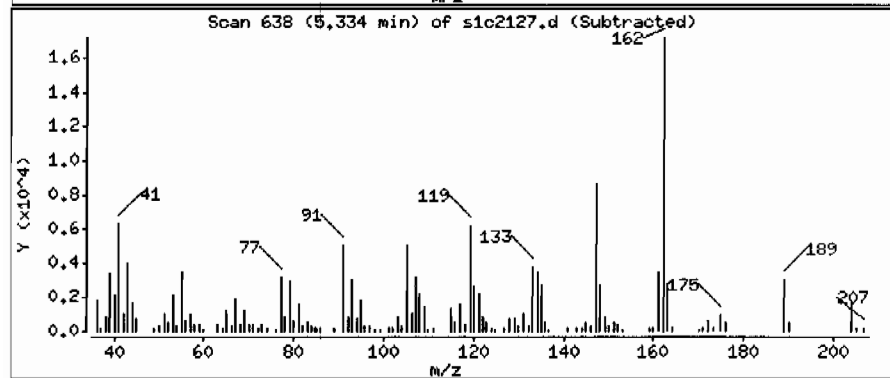
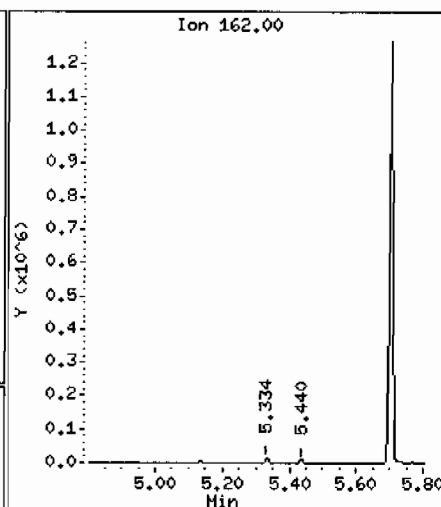
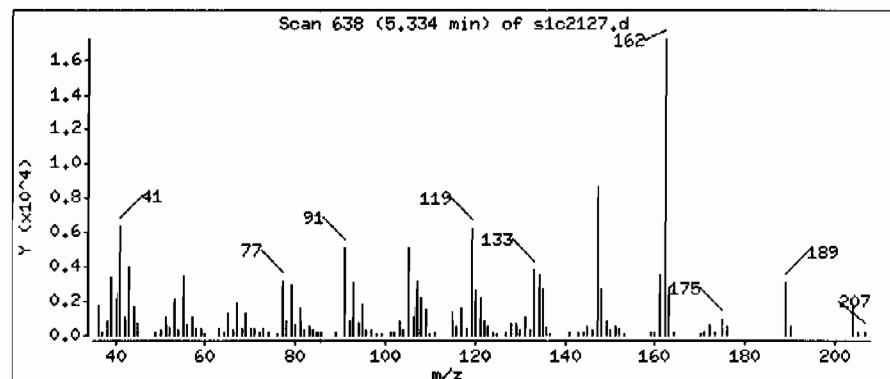
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

40 2-Chloronaphthalene

Concentration: 21.5 ug/Kg



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: I248370017196122811ISVM11ILANL

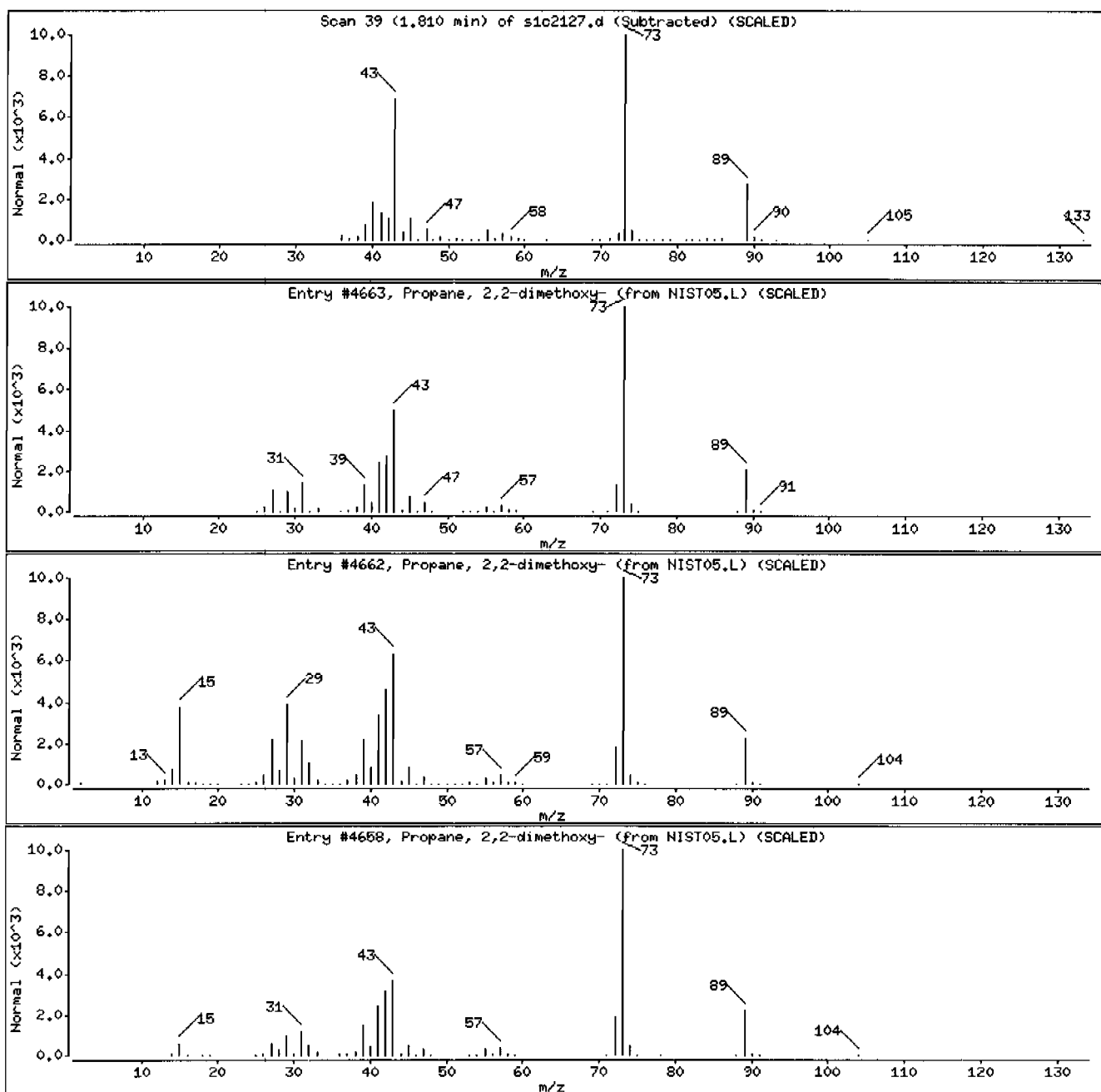
Volume Injected (uL): 0.5

Operator: AMY

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	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	38	C5H12O2	104



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811SVMI11LANL

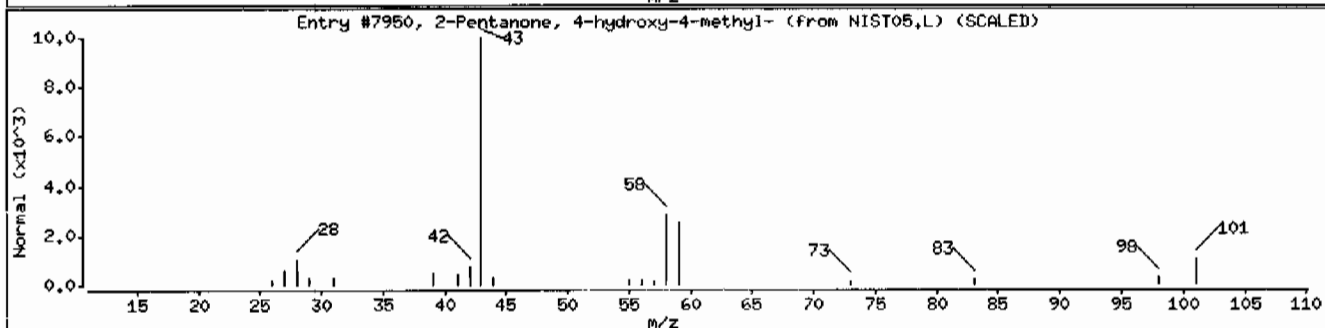
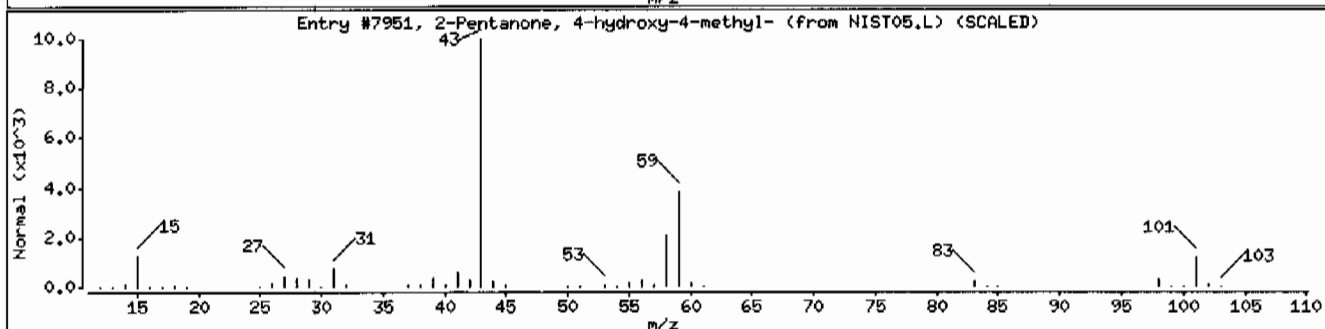
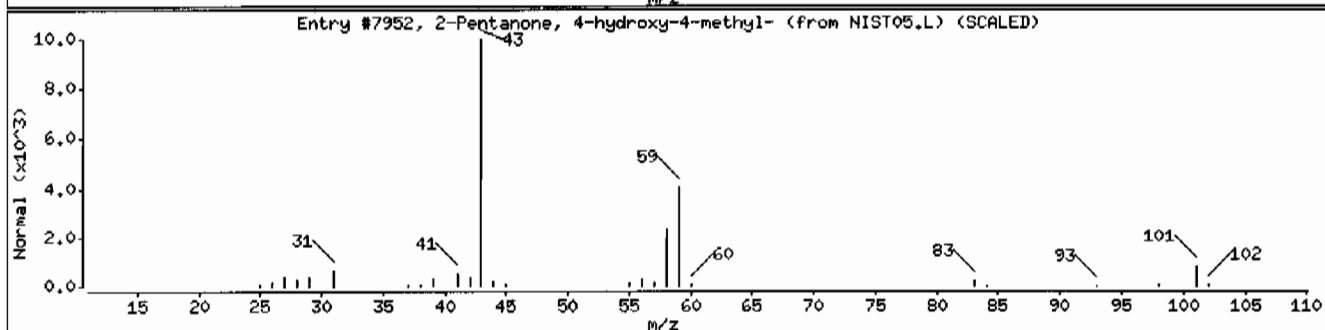
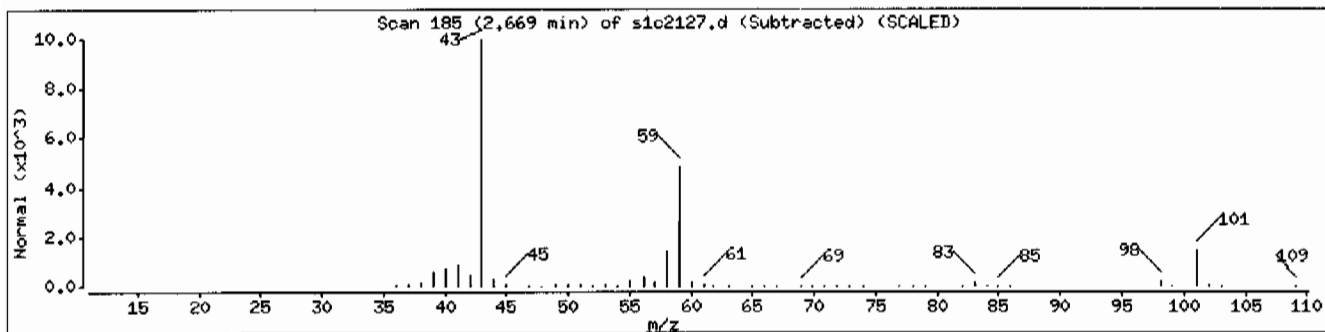
Volume Injected (uL): 0.5

Operator: AHY

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	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7950	17	C6H12O2	116



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: HSD1.i

Sample Info: I2483700171961228111SVH111LANL

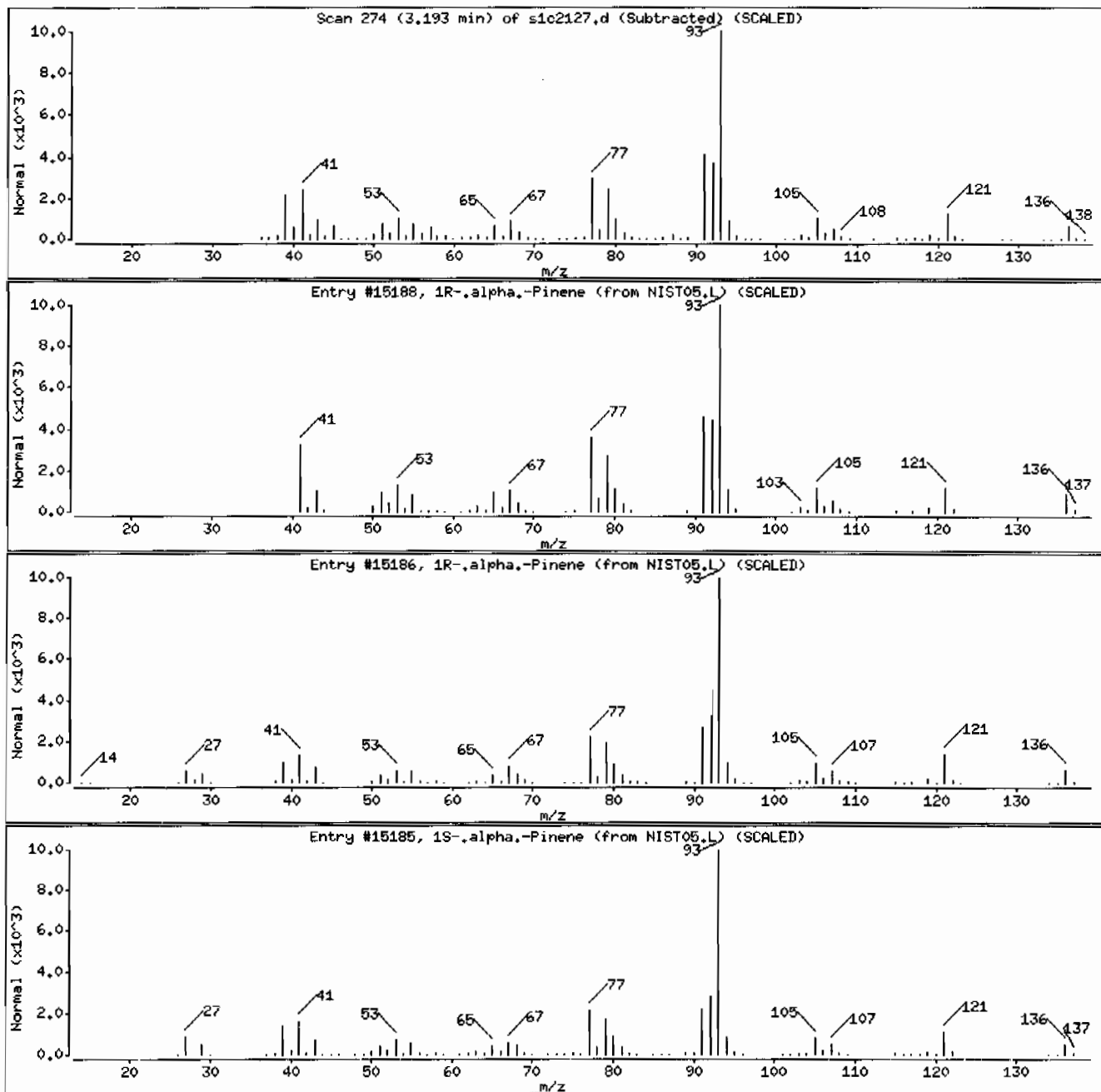
Volume Injected (uL): 0.5

Operator: AHY

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
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
1S-.alpha.-Pinene	7785-26-4	NIST05.L	15185	96	C10H16	136



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811SVMI11LANL

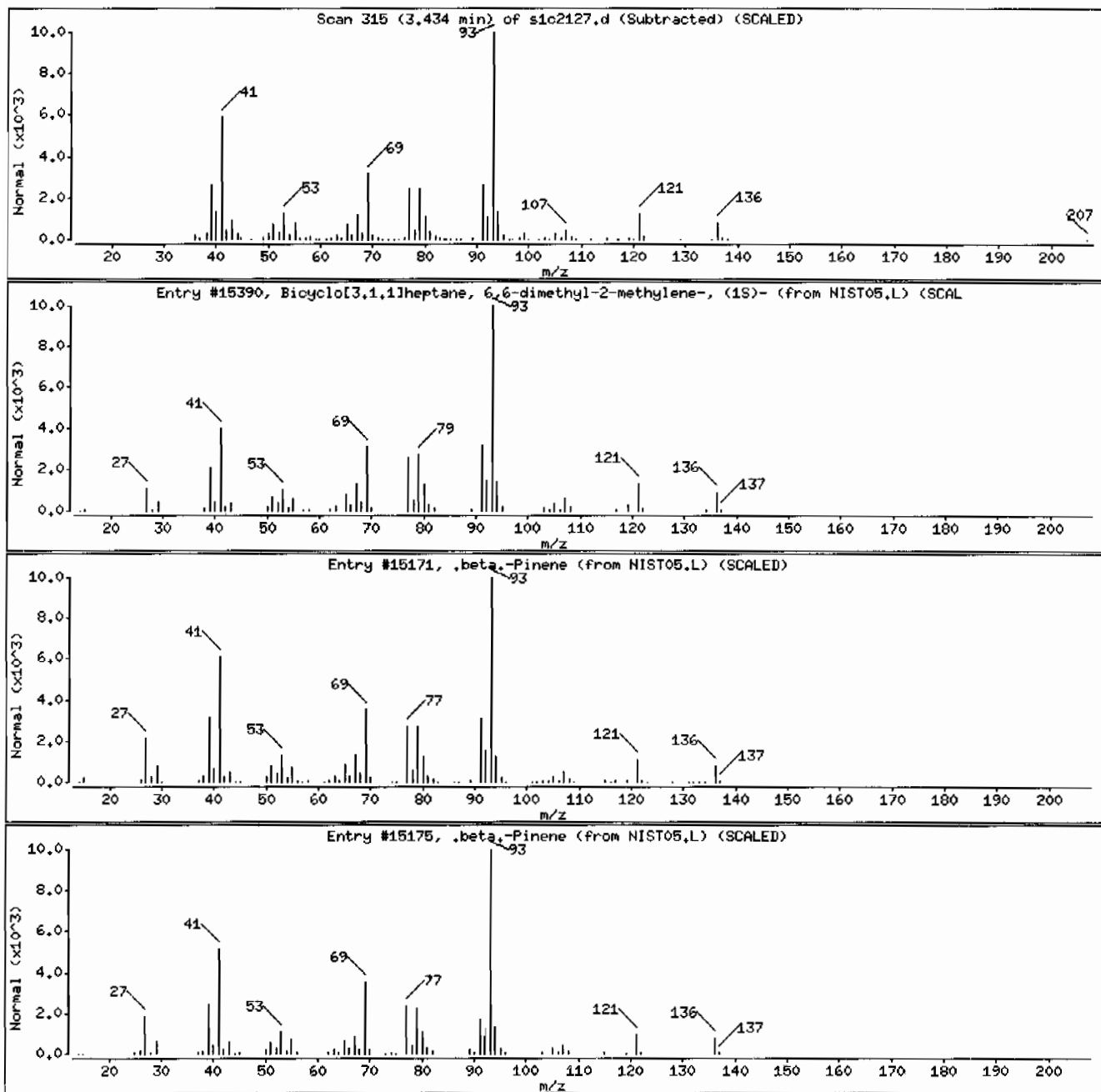
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	97	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15171	96	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15175	94	C10H16	136



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811SVH111LANL

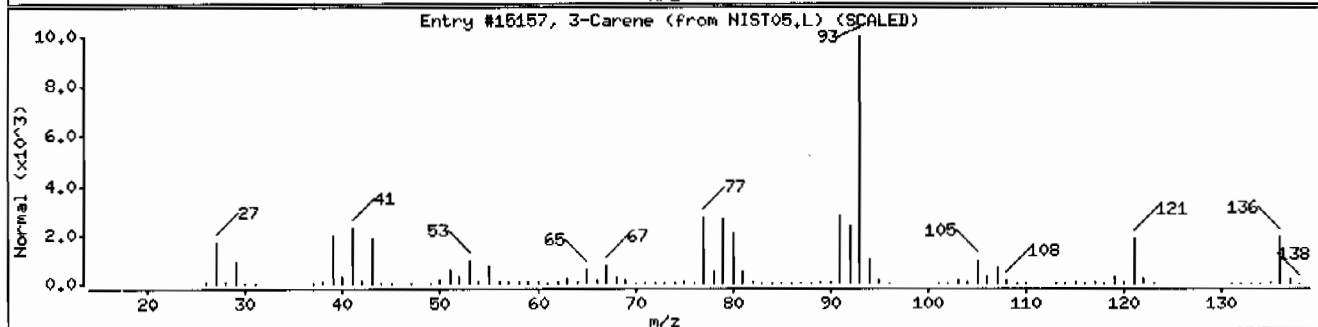
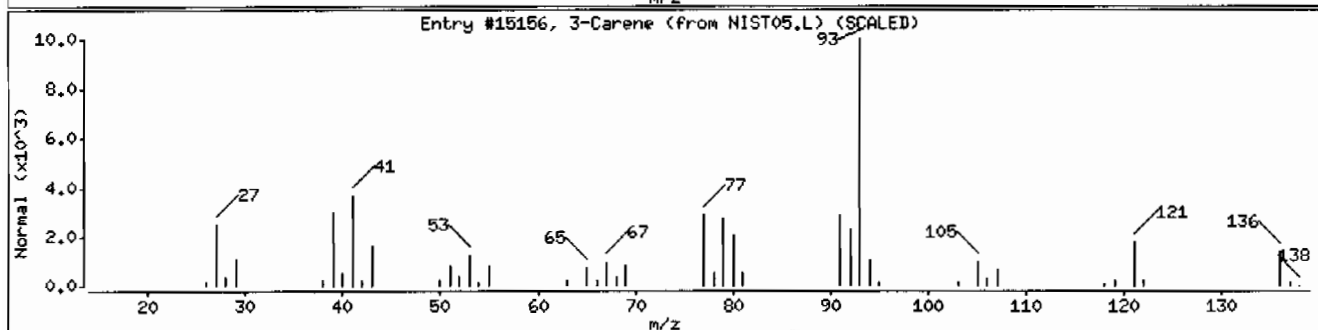
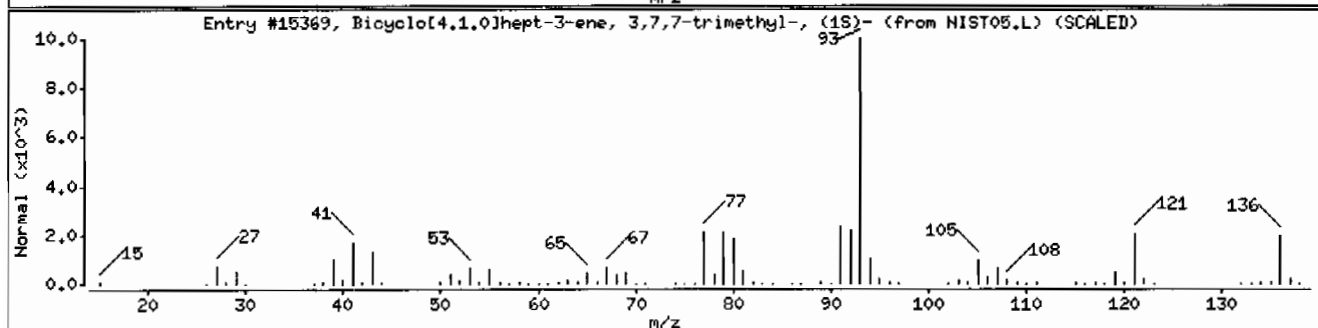
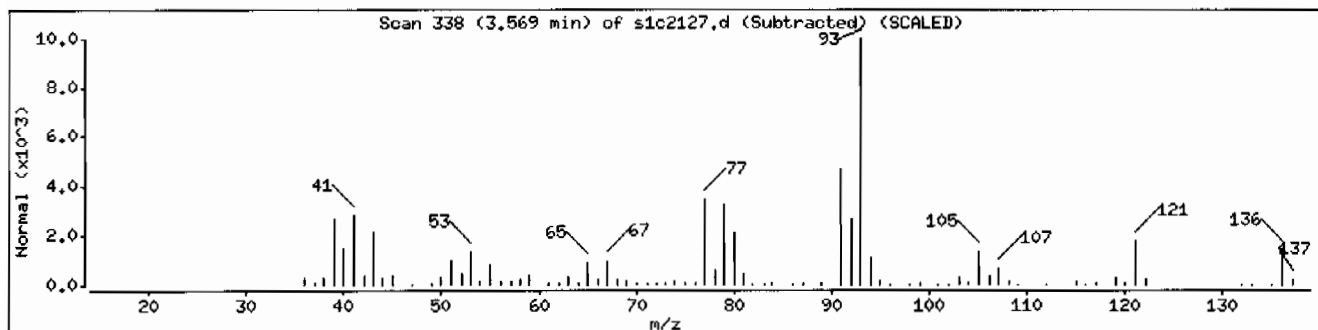
Volume Injected (uL): 0.5

Operator: AMY

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	15156	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: HSD1.i

Sample Info: I248370017196122811SVMI11LANL

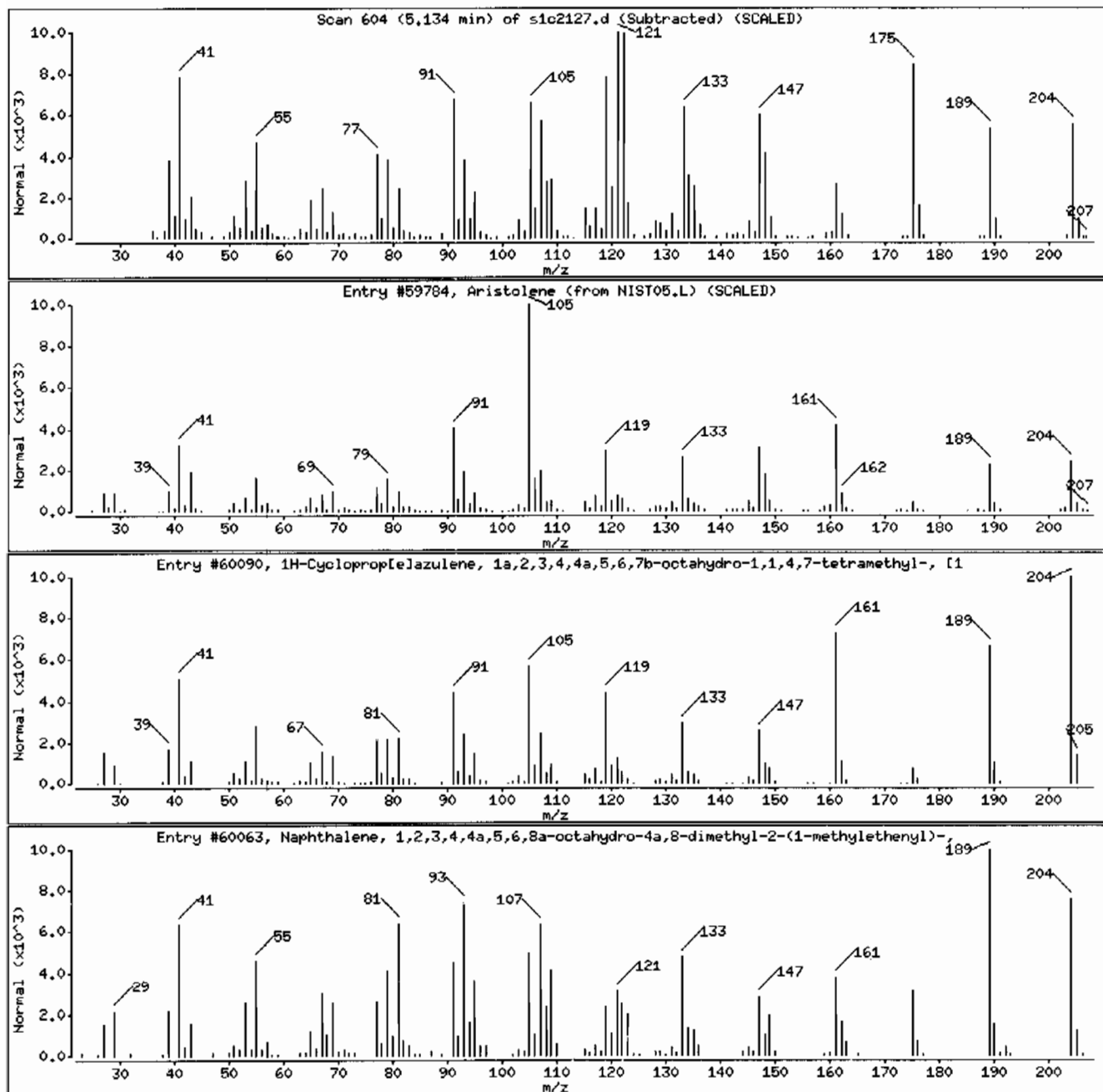
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Aristolene	1000150-14-9	NIST05.L	59784	70	C15H24	204
1H-Cycloprop[elazulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60090	64	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	473-13-2	NIST05.L	60063	53	C15H24	204



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.1

Sample Info: 1248370017196122811SVMI11LANL

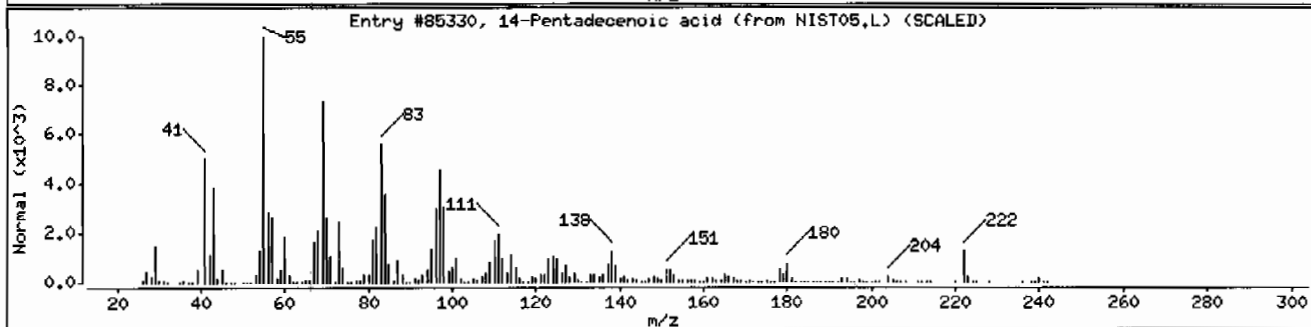
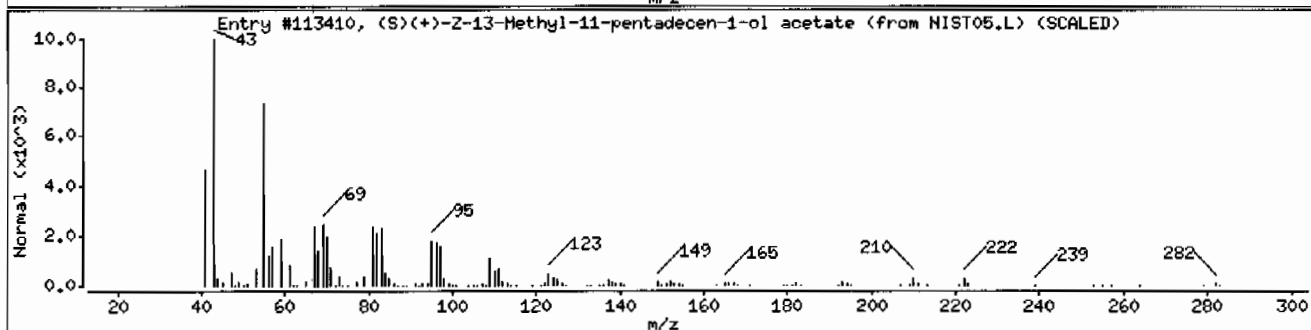
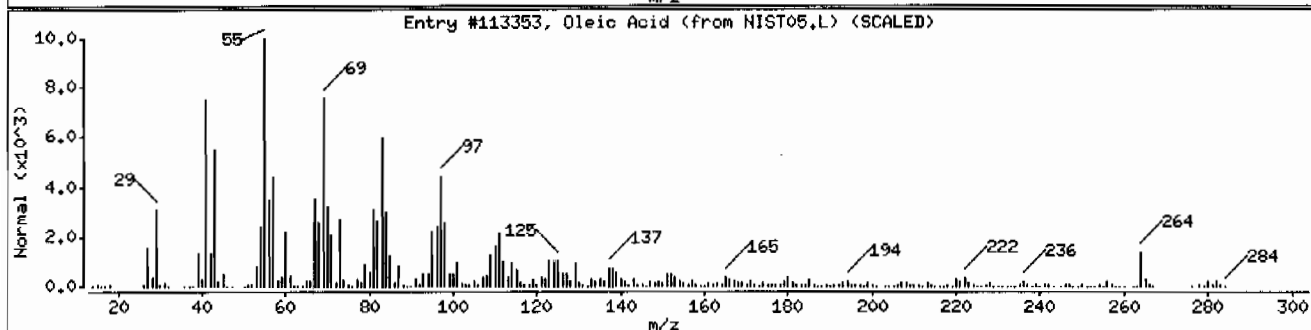
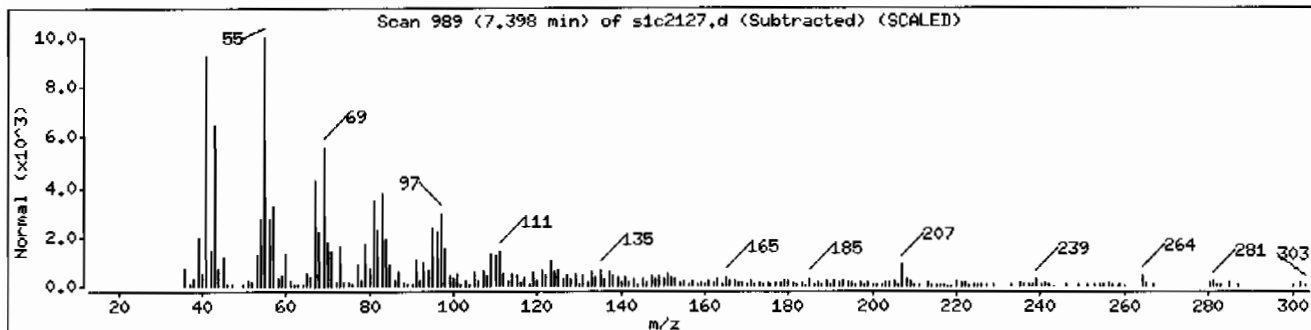
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Oleic Acid	112-80-1	NIST05.L	113353	96	C18H34O2	282
(S)(+)-2-13-Methyl-11-pentadecen-1-ol ac	1000130-84-8	NIST05.L	113410	87	C18H34O2	282
14-Pentadecenoic acid	17351-34-7	NIST05.L	85330	83	C15H28O2	240



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811SVH111LANL

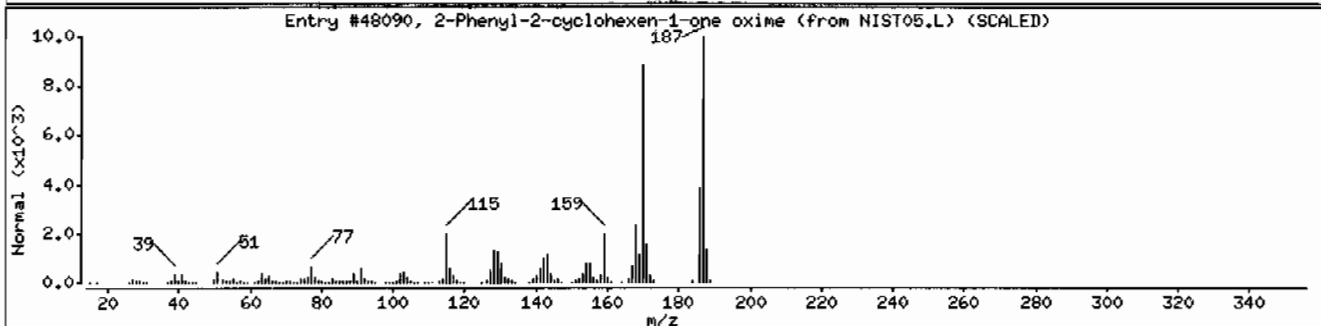
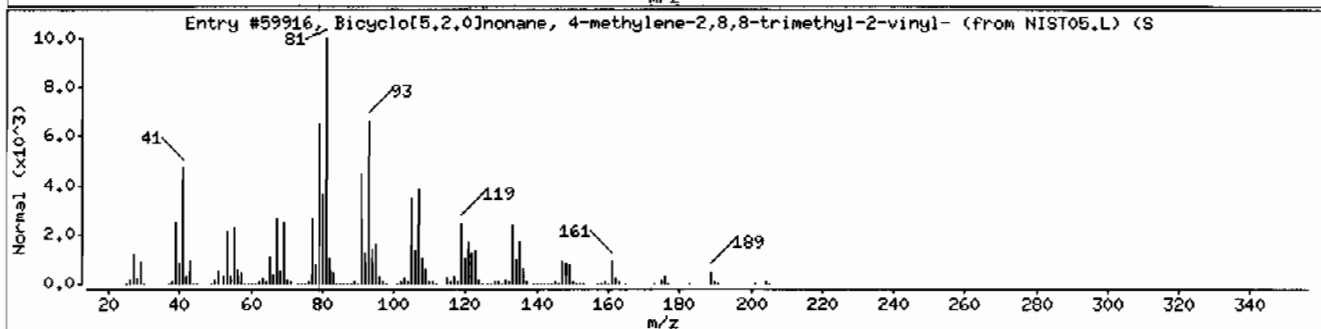
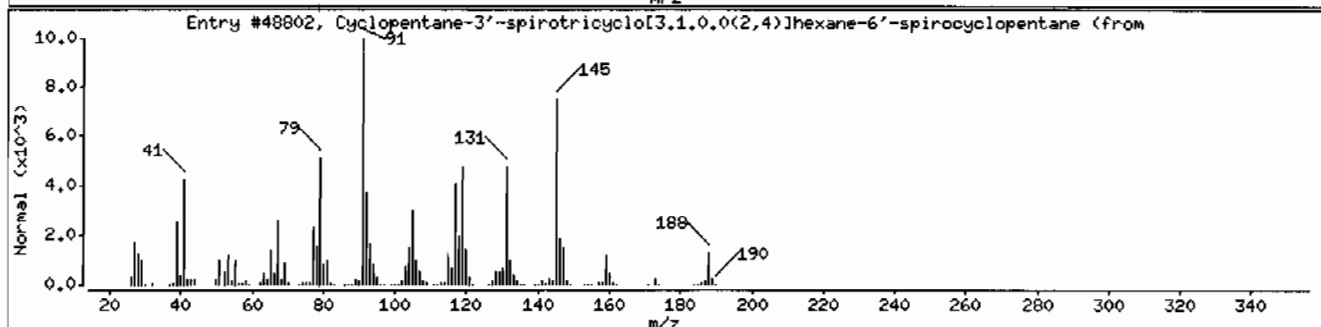
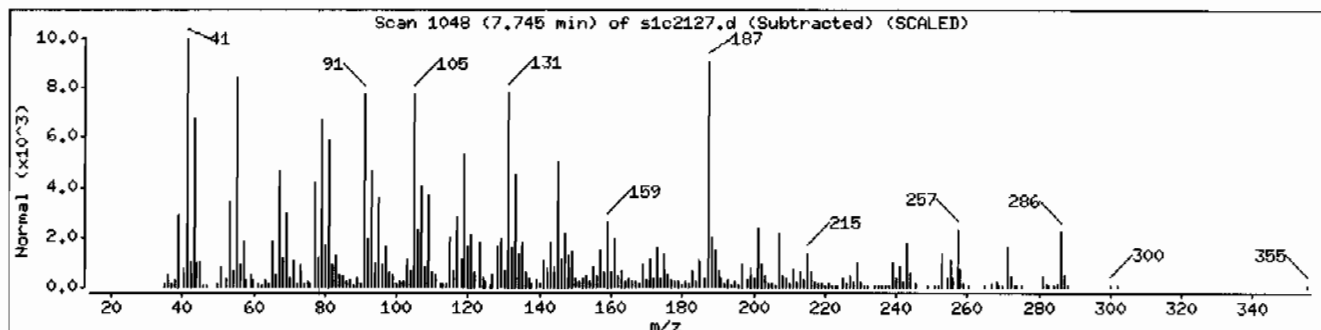
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopentane-3'-spirotricyclo[3.1.0.0(2,	78578-93-5	NIST05.L	48802	25	C14H20	188
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	25	C15H24	204
2-Phenyl-2-cyclohexen-1-one oxime	56923-15-0	NIST05.L	48090	25	C12H13NO	187



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811ISVH11ILANL

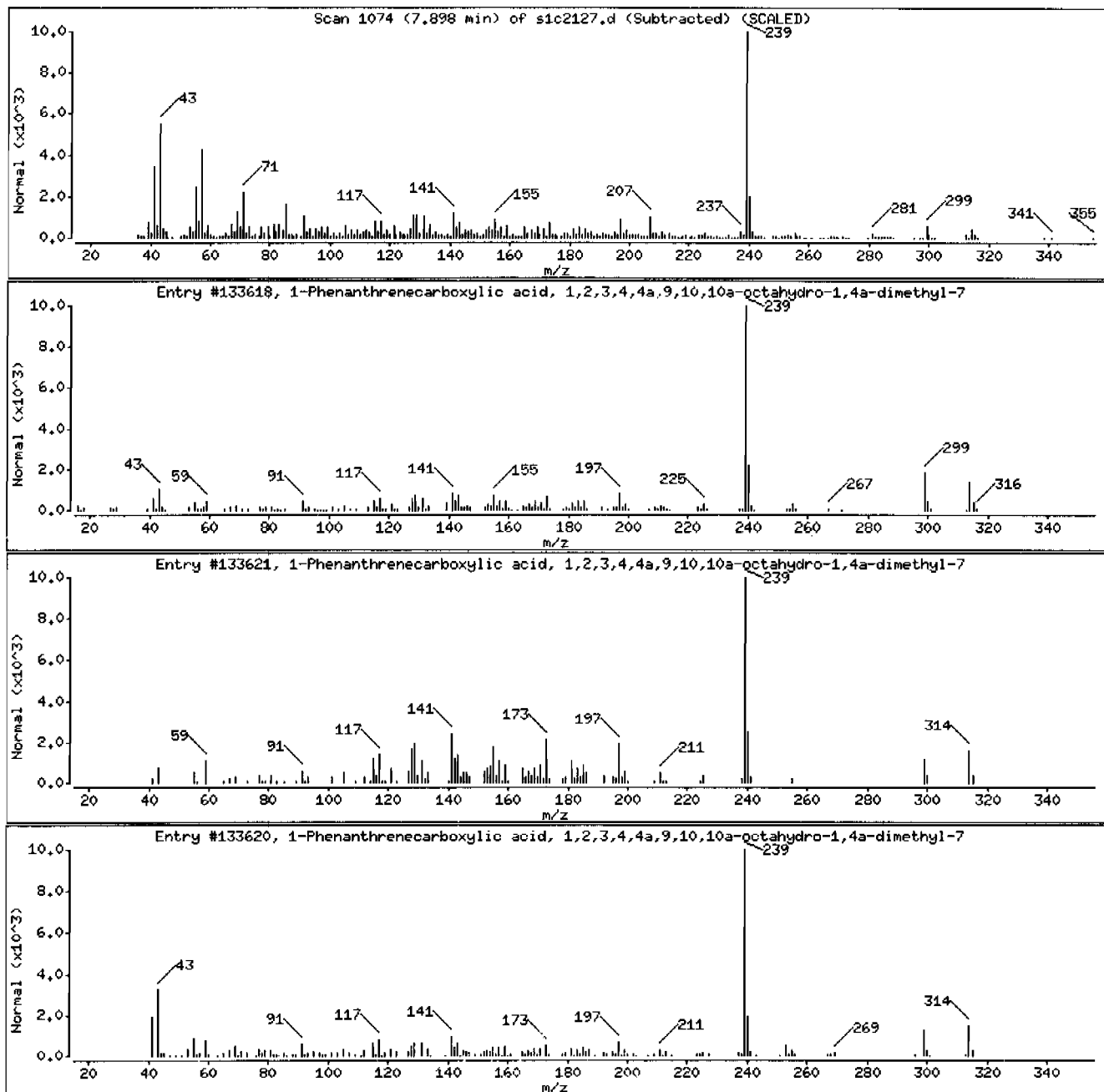
Volume Injected (uL): 0.5

Operator: AMY

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	96	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	95	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811SVH11ILANL

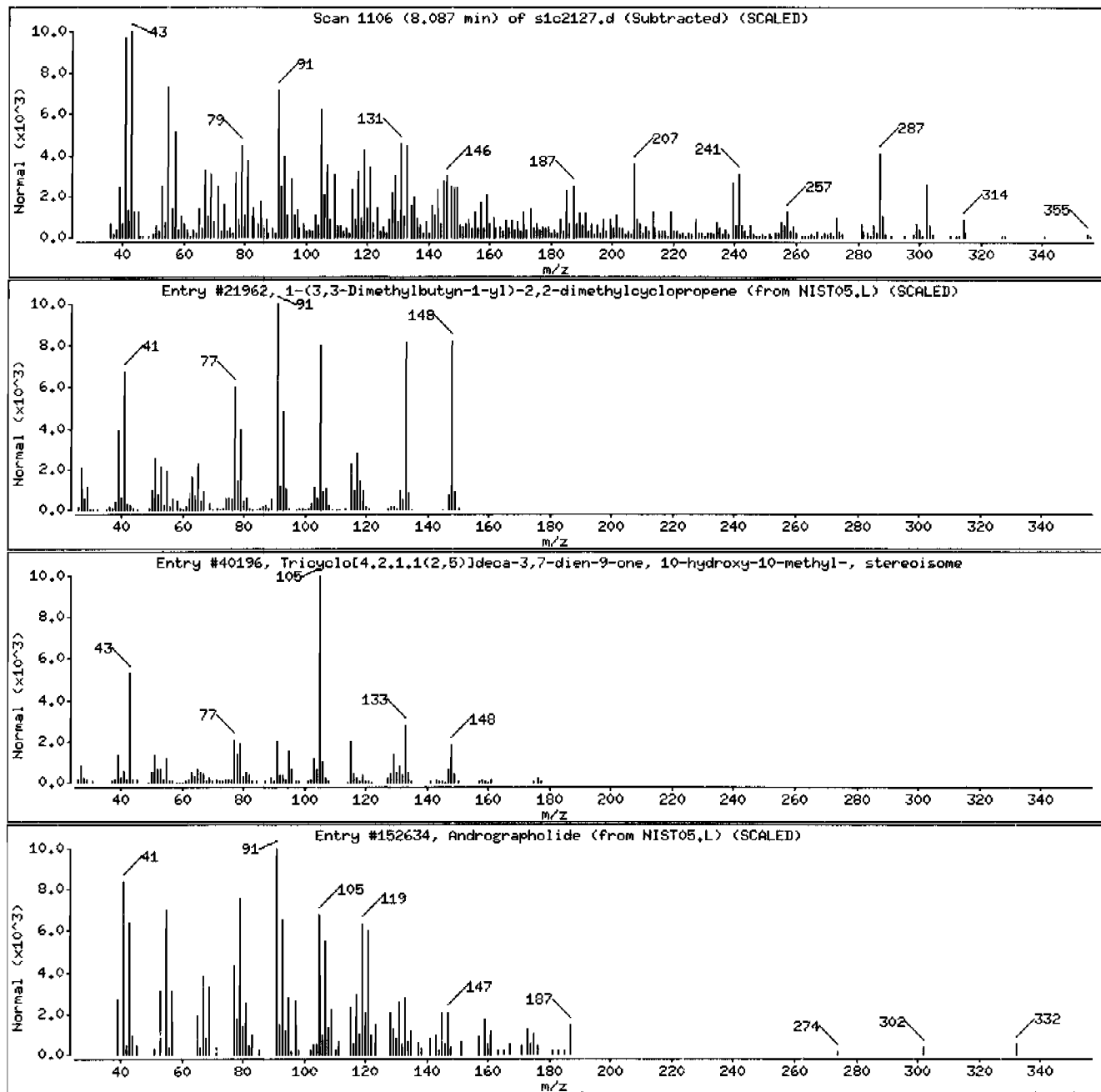
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-(3,3-Dimethylbutyn-1-yl)-2,2-dimethylc	1000222-04-6	NIST05.L	21962	25	C11H16	148
Tricyclo[4.2.1.1(2,5)]deca-3,7-dien-9-on	70220-88-1	NIST05.L	40196	15	C11H12O2	176
Andrographolide	5508-58-7	NIST05.L	152634	11	C20H30O5	350



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: I2483700171961228111SVMI11LANL

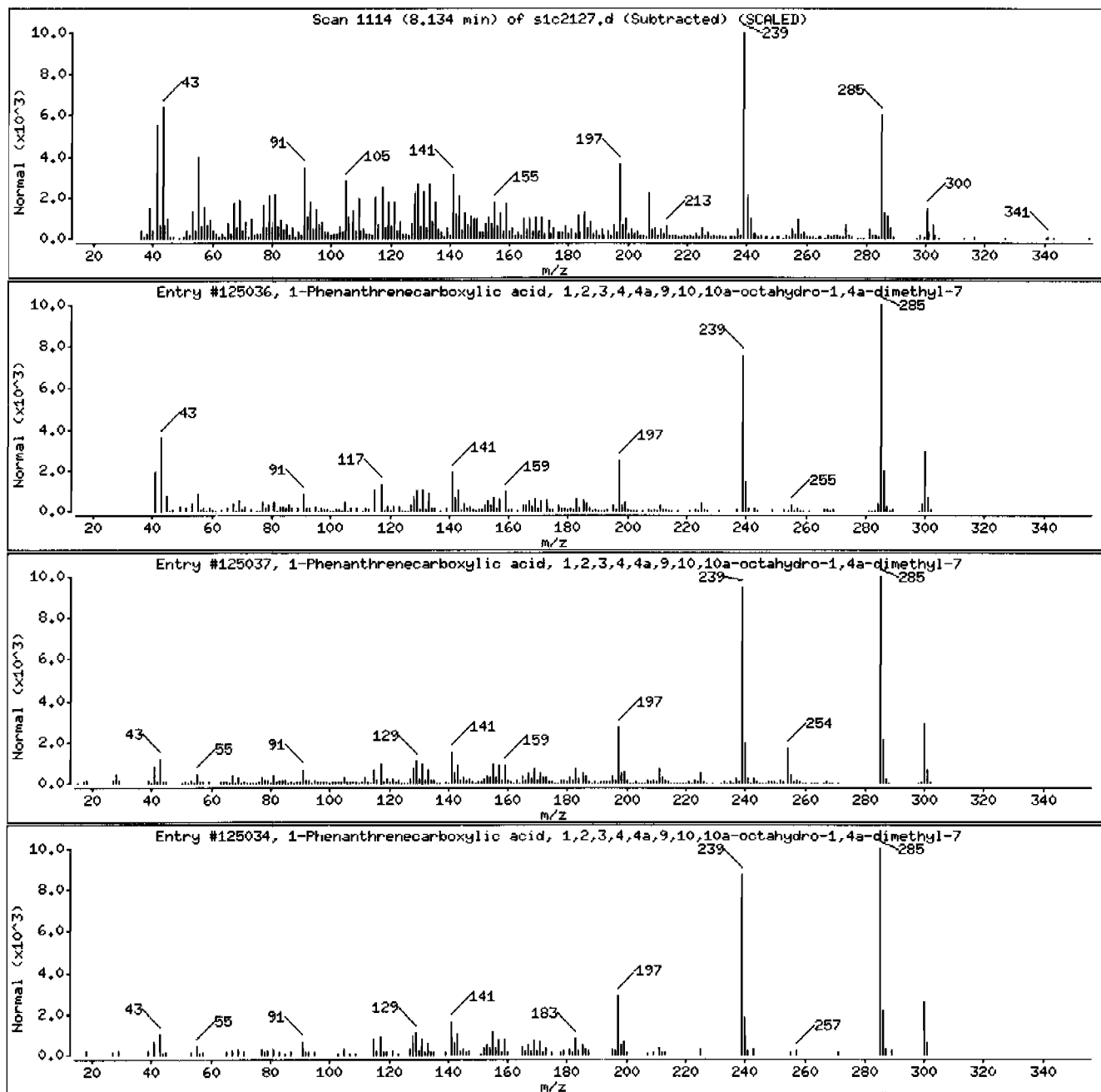
Volume Injected (uL): 0.5

Operator: AMY

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



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: I248370017196122811SVH111LANL

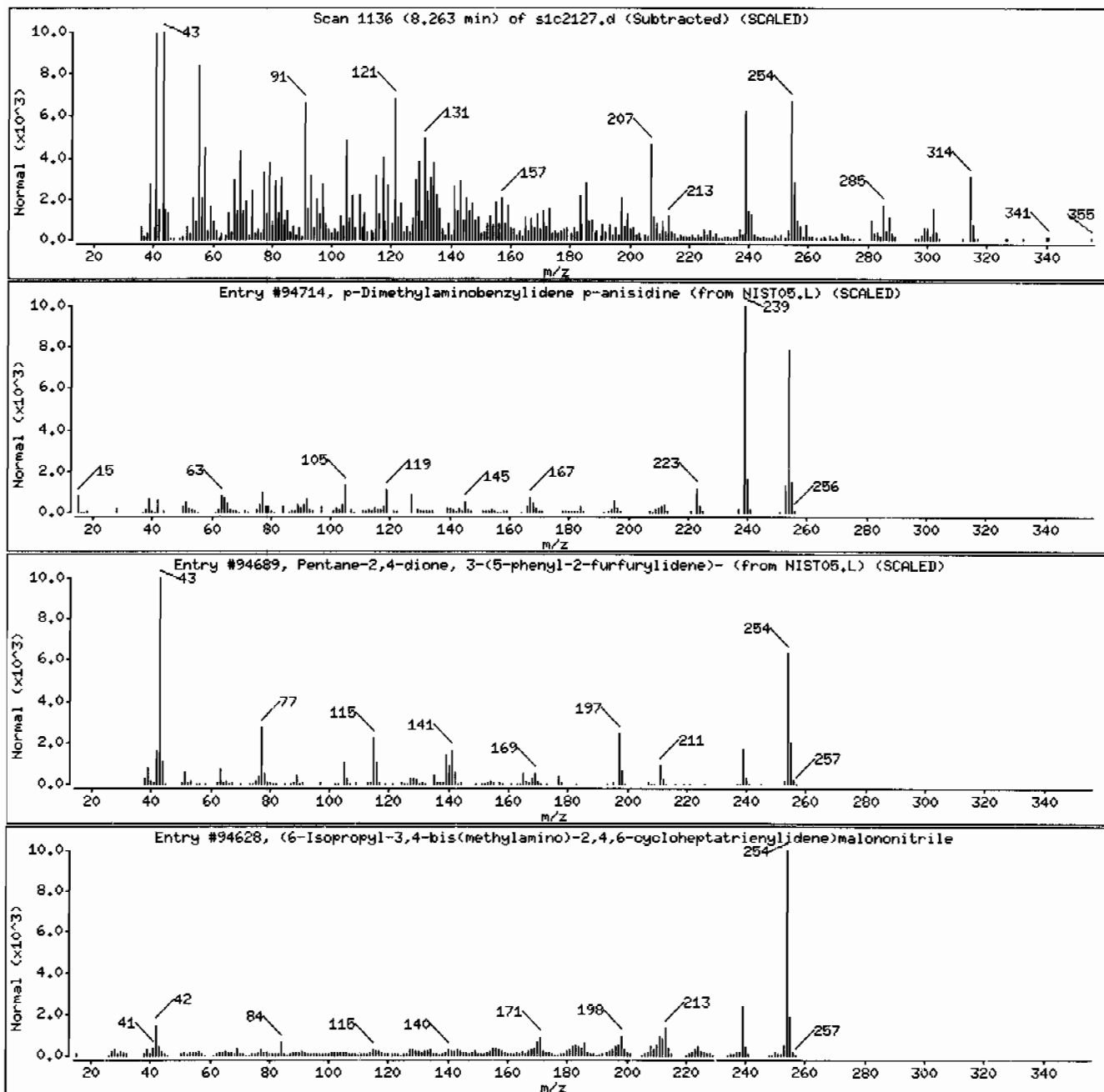
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
p-Dimethylaminobenzylidene p-anisidine	1749-04-8	NIST05.L	94714	35	C16H18N2O	254
Pentane-2,4-dione, 3-(5-phenyl-2-furfuryl	116626-23-4	NIST05.L	94689	25	C16H14O3	254
(6-Isopropyl-3,4-bis(methylamino)-2,4,6-	14203-76-0	NIST05.L	94628	25	C15H18N4	254



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811SVMI11LANL

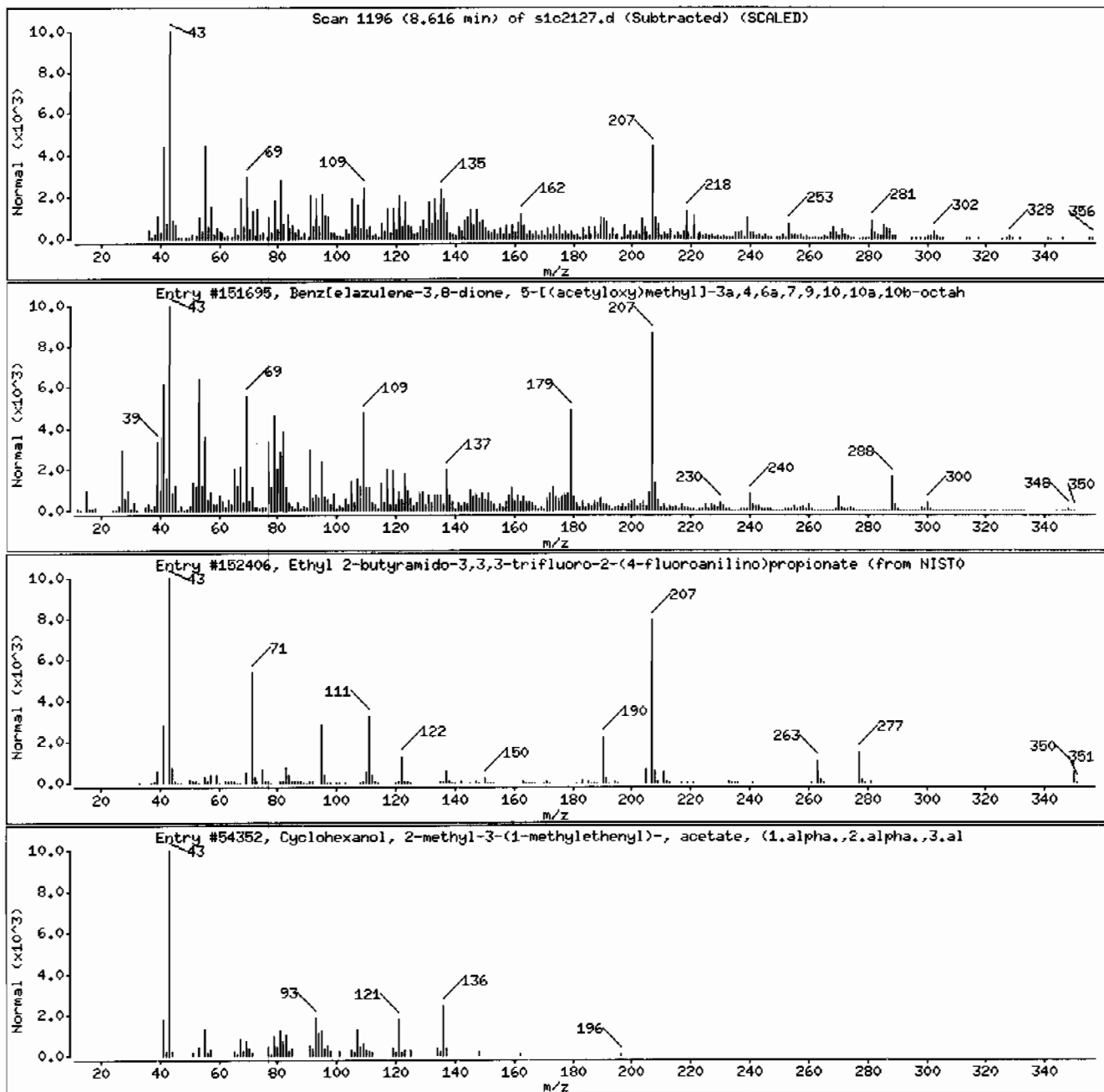
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzofelazulene-3,8-dione, 5-[(acetyloxy)methyl]-3a,4,6a,7,9,10,10a,10b-octah	25536-74-7	NIST05.L	151695	38	C19H24O6	348
Ethyl 2-butylamido-3,3,3-trifluoro-2-(4-fluoroanilino)propionate (from NIST0	1000224-16-2	NIST05.L	152406	16	C15H18F4N2O3	350
Cyclohexanol, 2-methyl-3-(1-methylethenyl)-, acetate, (1.alpha.,2.alpha.,3.alpha.)	54845-29-3	NIST05.L	54352	15	C12H20O2	196



Date: 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811SVH111LANL

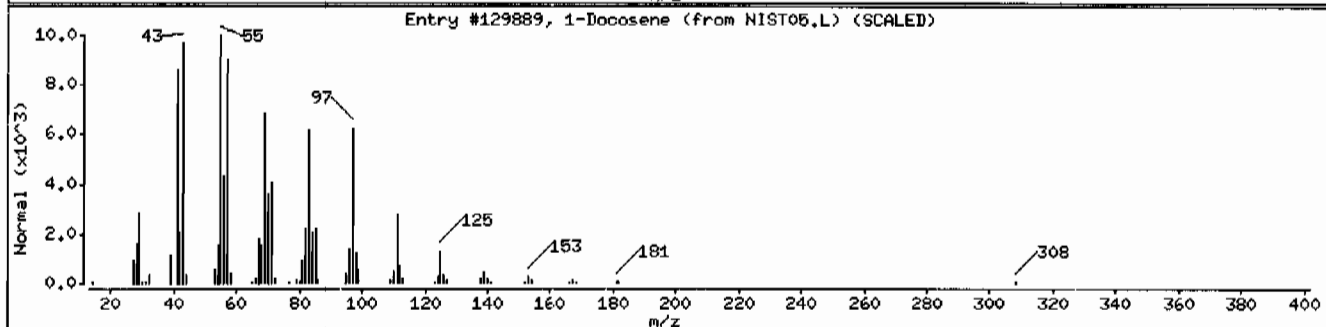
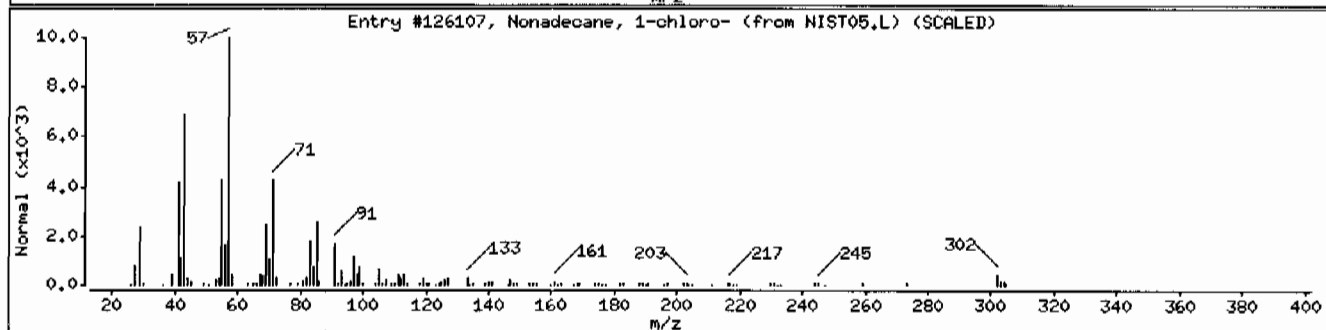
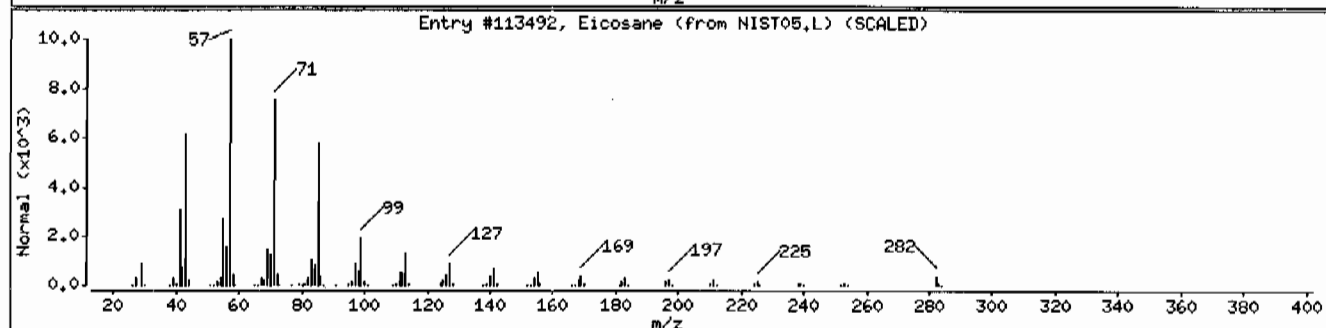
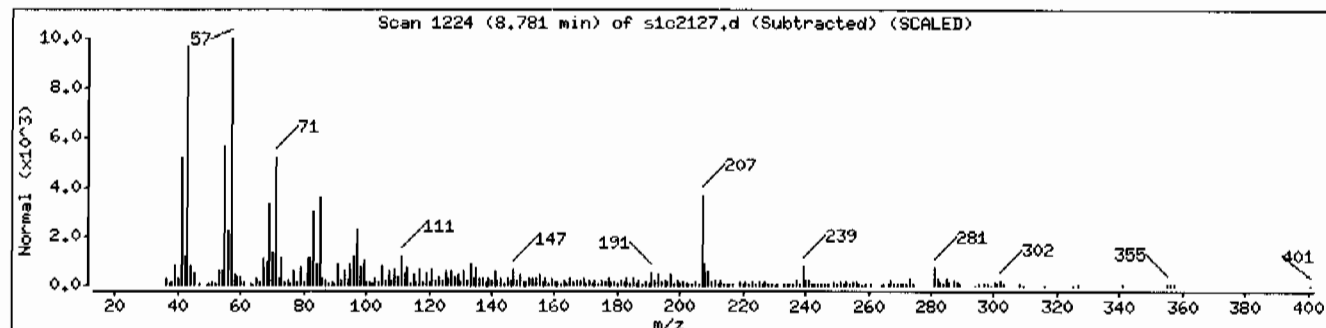
Volume Injected (uL): 0.5

Operator: AMY

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	95	C ₂₀ H ₄₂	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	95	C ₁₉ H ₃₉ Cl	302
1-Docosene	1599-67-3	NIST05.L	129889	93	C ₂₂ H ₄₄	308



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811SVMI11LANL

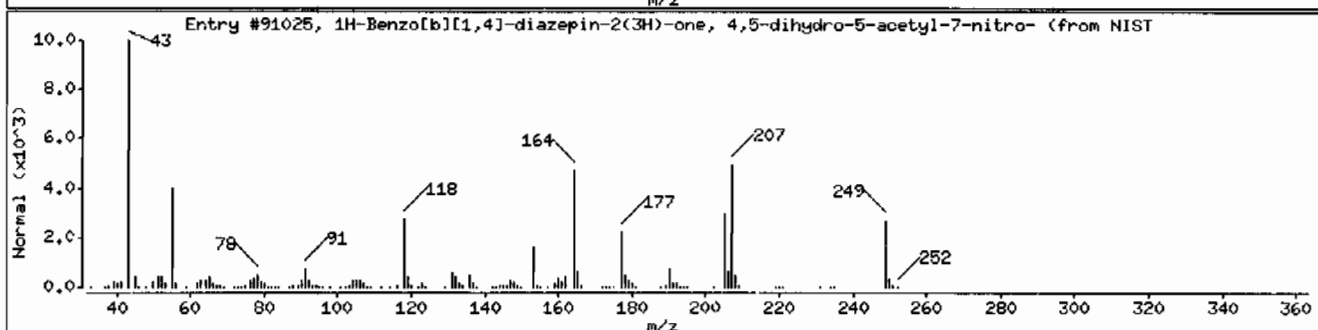
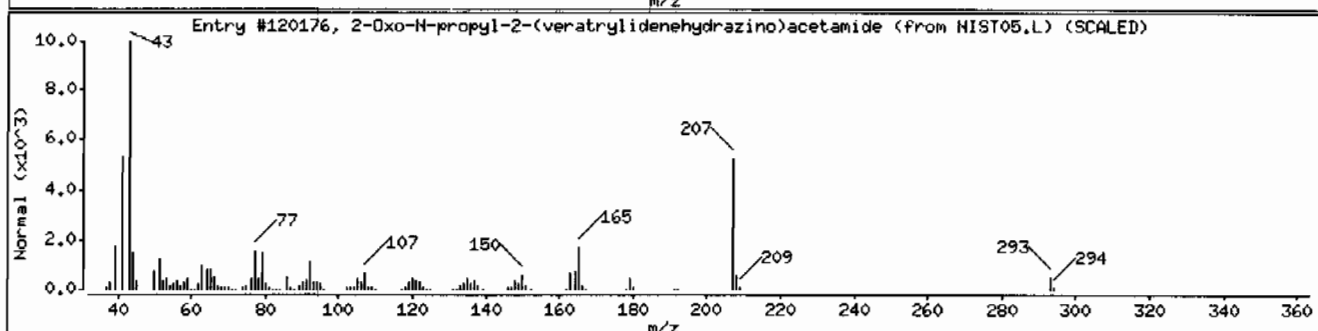
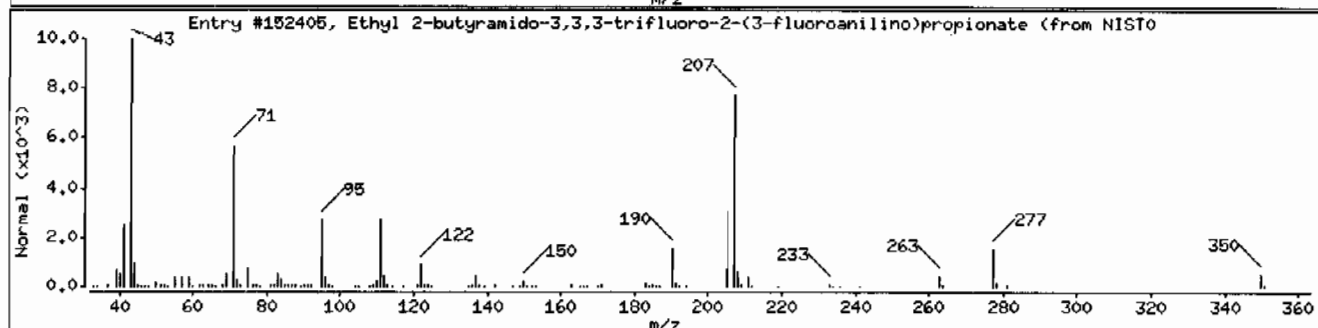
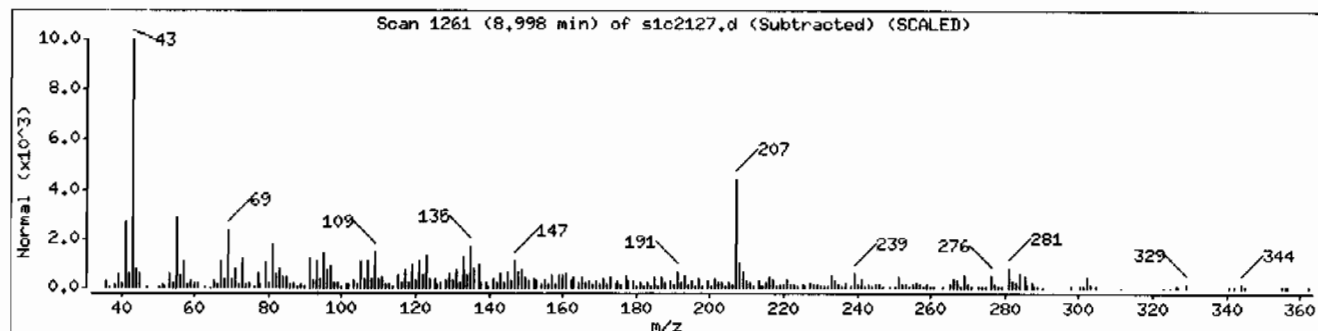
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethyl 2-butylamido-3,3,3-trifluoro-2-(3-	1000224-16-1	NIST05.L	152405	17	C15H18F4N2O3	350
2-Oxo-N-propyl-2-(veratrylidenehydrazino	339241-37-1	NIST05.L	120176	17	C14H19N3O4	293
1H-Benzo[b][1,4]-diazepin-2(3H)-one, 4,5	312530-60-2	NIST05.L	91025	17	C11H11N3O4	249



Date: 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: HSD1.i

Sample Info: 12483700171961228111SVMI11LANL

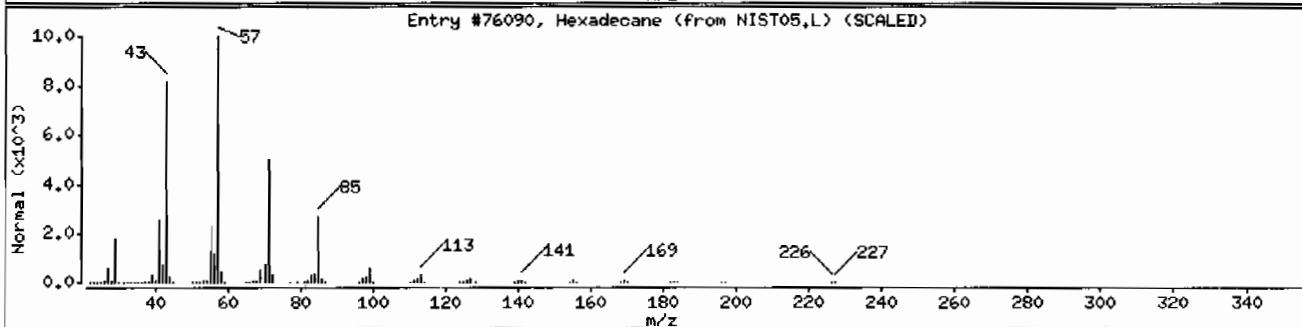
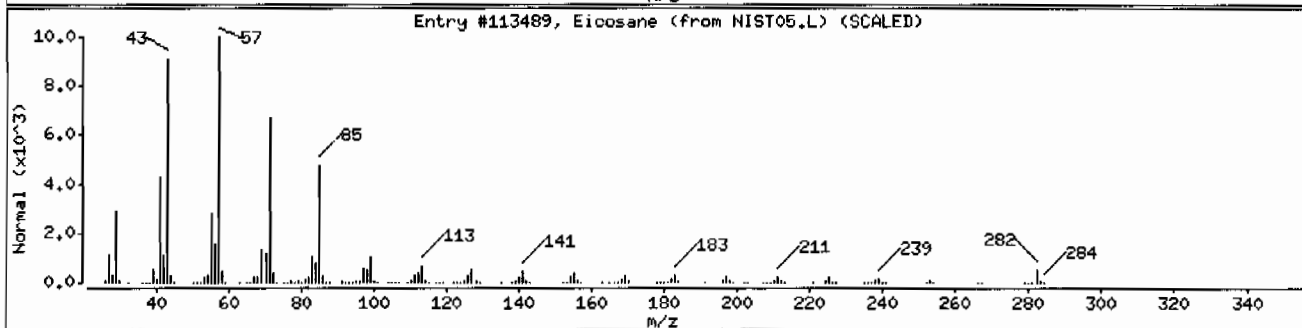
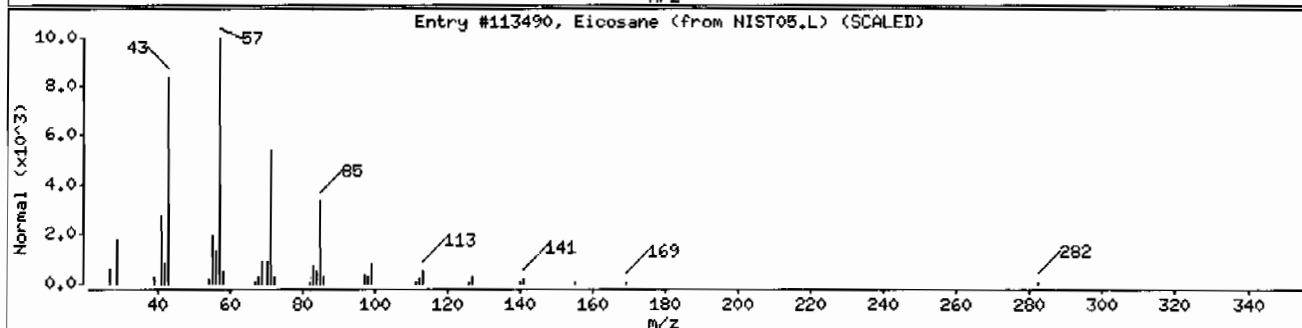
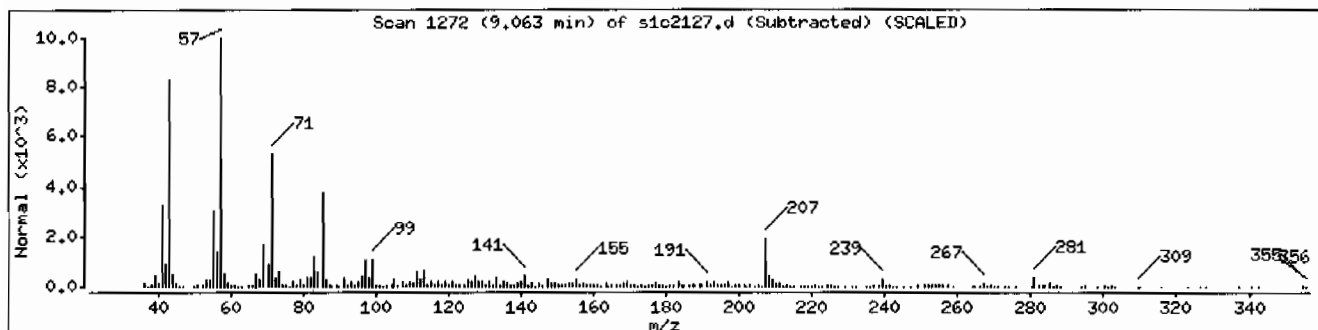
Volume Injected (uL): 0.5

Operator: AMY

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	98	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	97	C ₂₀ H ₄₂	282
Hexadecane	544-76-3	NIST05.L	76090	92	C ₁₆ H ₃₄	226



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811ISVM11ILANL

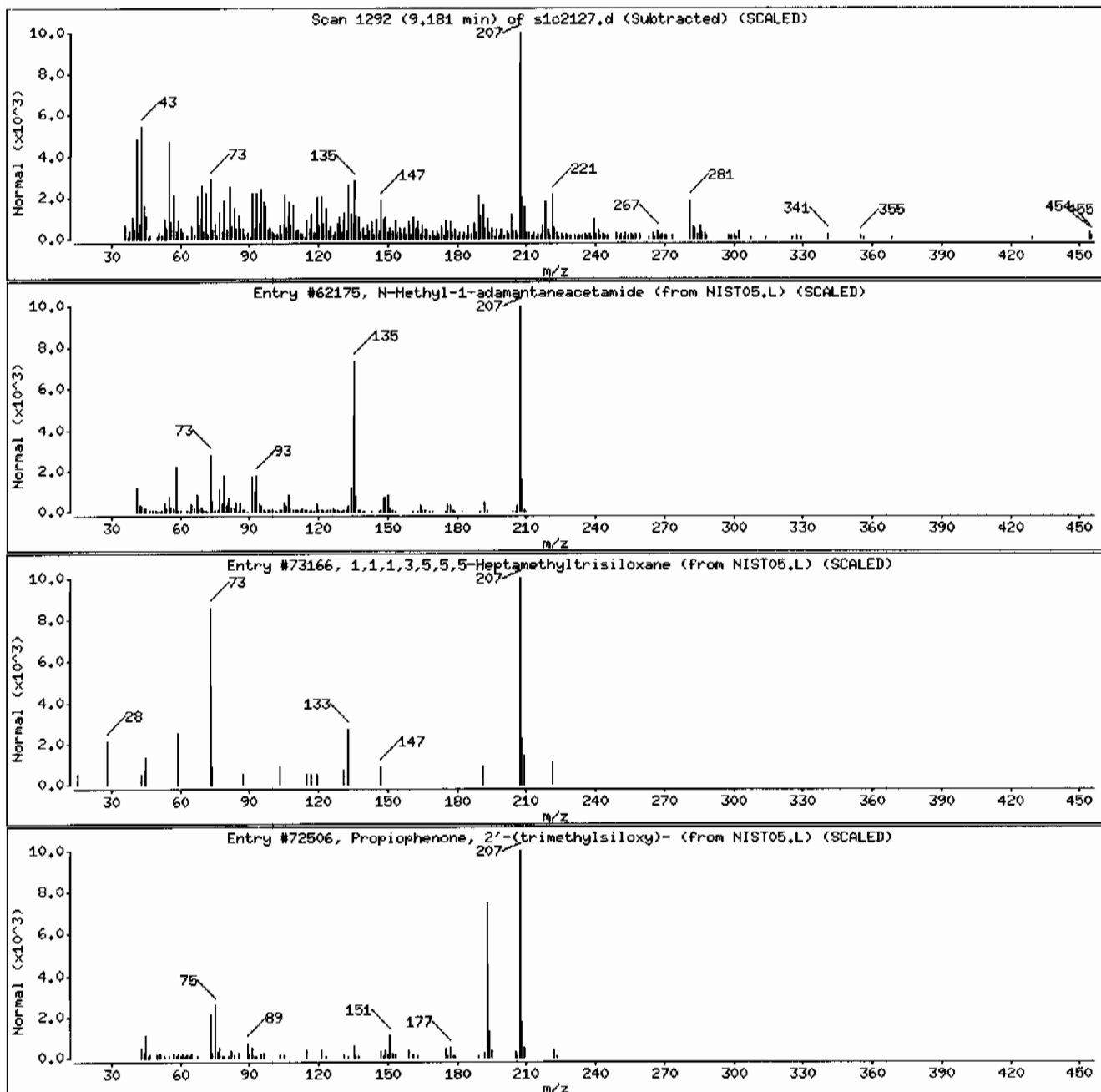
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	45	C13H21NO	207
1,1,1,3,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	43	C7H22O2Si3	222
Propiophenone, 2'-(trimethylsiloxy)-	33342-87-9	NIST05.L	72506	38	C12H18O2Si	222



Date: 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811SVH11ILANL

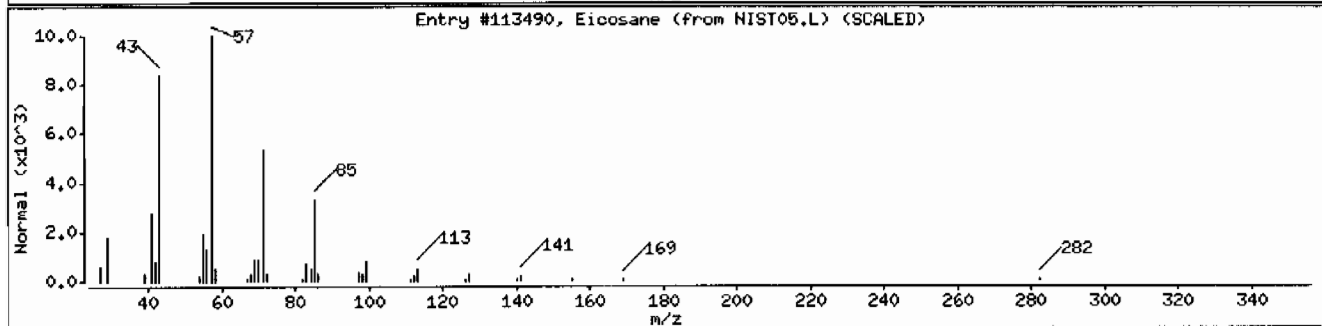
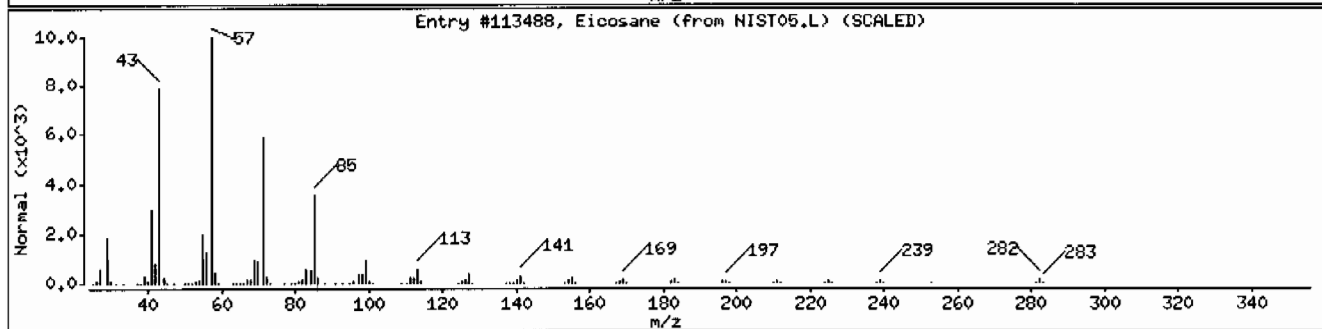
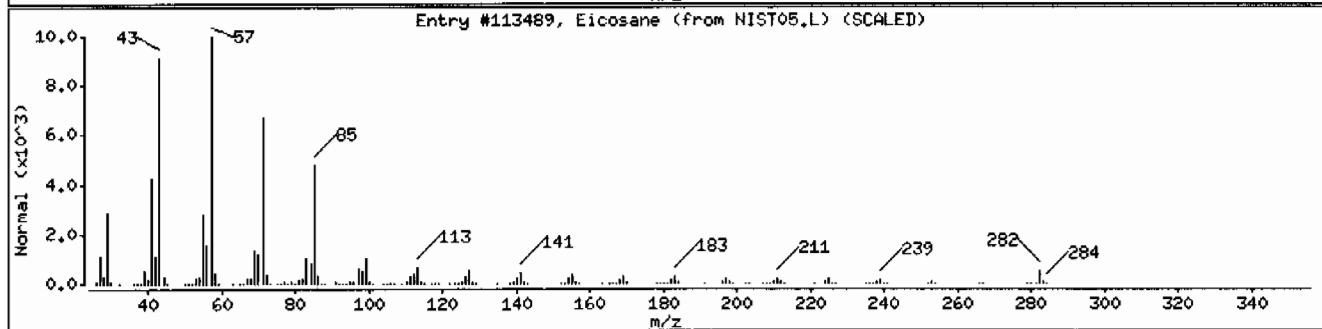
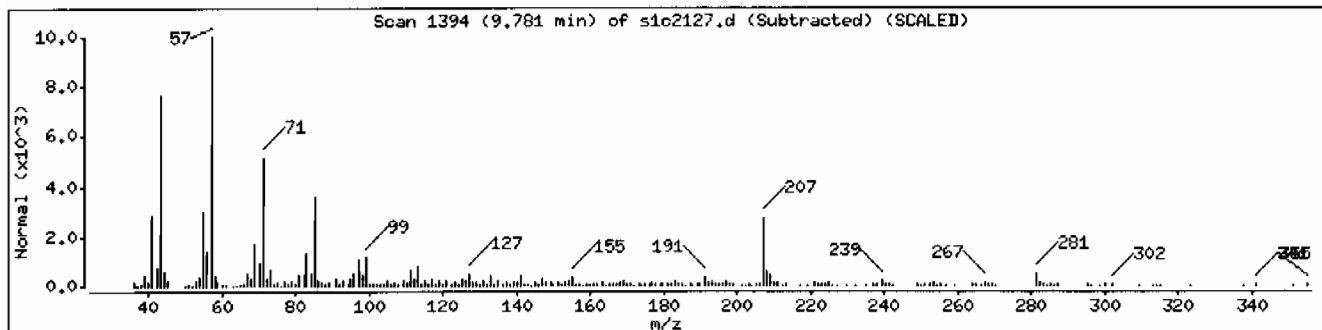
Volume Injected (uL): 0.5

Operator: AHY

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	97	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113488	97	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113490	97	C ₂₀ H ₄₂	282



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: 1248370017196122811ISVM11LANL

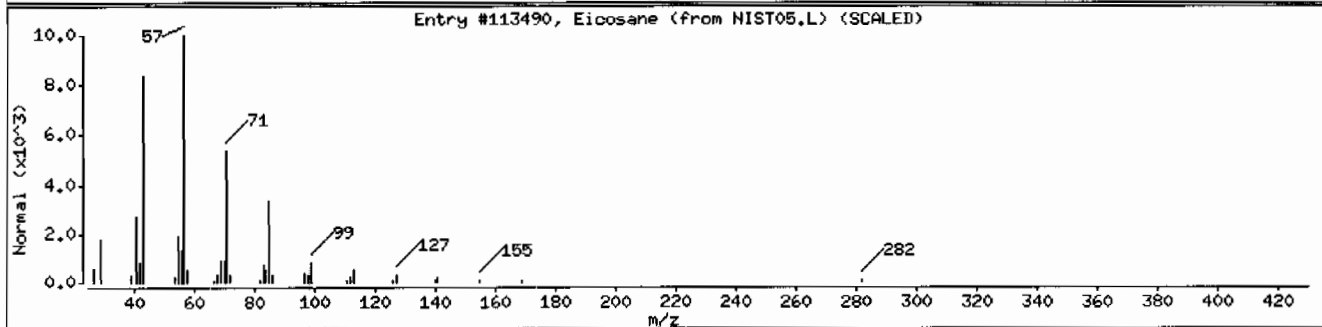
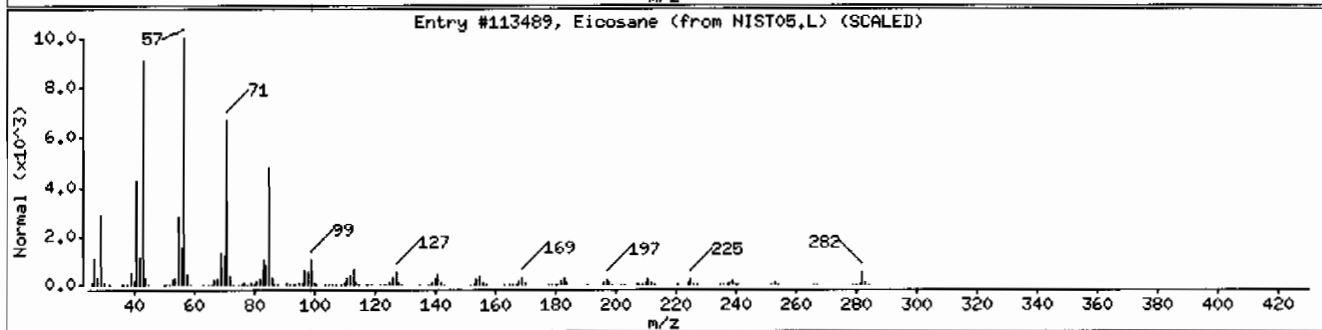
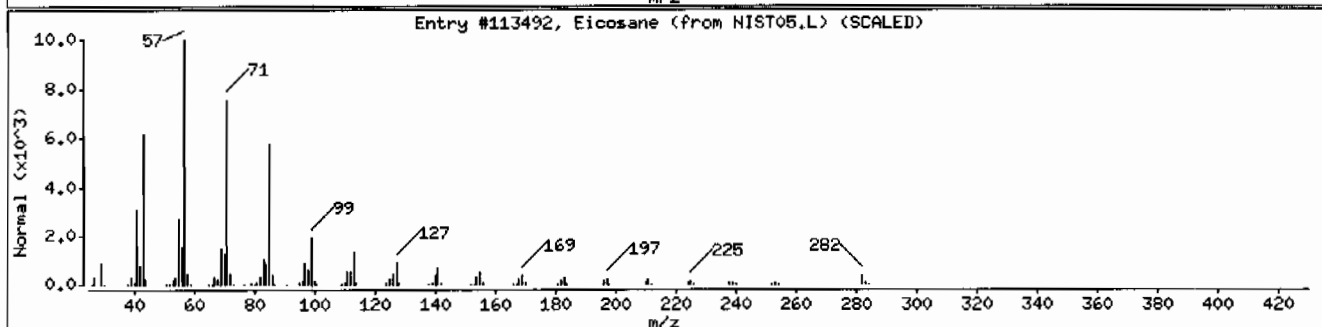
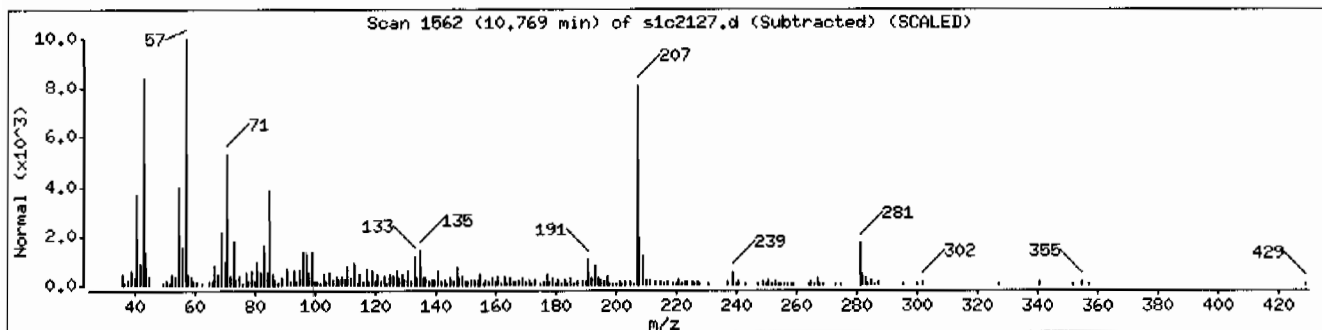
Volume Injected (uL): 0.5

Operator: AMY

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	91	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113490	64	C ₂₀ H ₄₂	282



Date : 22-MAR-2010 02:53

Client ID: RE36-10-7480

Instrument: MSD1.i

Sample Info: I248370017196122811SVMI1ILANL

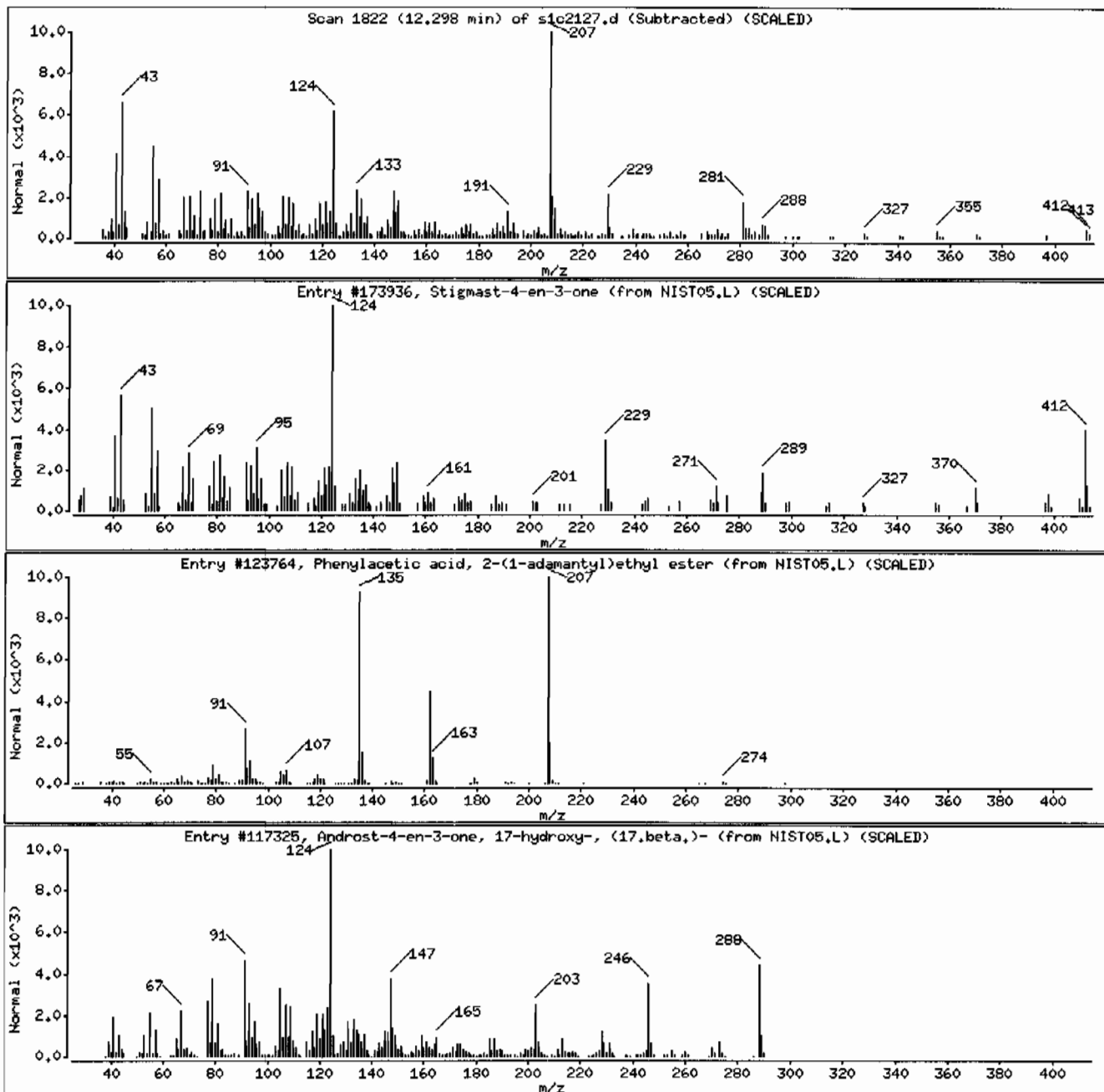
Volume Injected (uL): 0.5

Operator: AMY

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	42	C29H48O	412
Phenylacetic acid, 2-(1-Adamantyl)ethyl	1000282-91-2	NIST05.L	123764	38	C20H26O2	298
Androst-4-en-3-one, 17-hydroxy-, (17 β)-	58-22-0	NIST05.L	117325	35	C19H28O2	288



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

SDG Number: 10-2150
Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 32.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7481
Batch ID: 961228
Run Date: 03/22/2010 00:31
Prep Date: 03/05/2010 11:30
Data File: s1c2121.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	495	ug/kg	99.0	495
108-95-2	Phenol	U	495	ug/kg	99.0	495
95-57-8	2-Chlorophenol	U	495	ug/kg	99.0	495
106-46-7	1,4-Dichlorobenzene	U	495	ug/kg	99.0	495
621-64-7	N-Nitrosodipropylamine	U	495	ug/kg	99.0	495
59-50-7	4-Chloro-3-methylphenol	U	495	ug/kg	99.0	495
83-32-9	Accenaphthene		120	ug/kg	16.3	49.5
121-14-2	2,4-Dinitrotoluene	U	495	ug/kg	49.5	495
100-02-7	4-Nitrophenol	U	495	ug/kg	163	495
87-86-5	Pentachlorophenol	U	495	ug/kg	124	495
129-00-0	Pyrene		829	ug/kg	14.8	49.5
110-86-1	Pyridine	U	495	ug/kg	99.0	495
62-53-3	Aniline	U	495	ug/kg	148	495
111-44-4	bis(2-Chloroethyl) ether	U	495	ug/kg	99.0	495
541-73-1	1,3-Dichlorobenzene	U	495	ug/kg	99.0	495
100-51-6	Benzyl alcohol	U	495	ug/kg	148	495
95-50-1	1,2-Dichlorobenzene	U	495	ug/kg	99.0	495
108-60-1	bis(2-Chloroisopropyl)ether	U	495	ug/kg	99.0	495
95-48-7	o-Cresol	U	495	ug/kg	99.0	495
65794-96-9	m,p-Cresols	U	495	ug/kg	148	495
67-72-1	Hexachloroethane	U	495	ug/kg	99.0	495
98-95-3	Nitrobenzene	U	495	ug/kg	99.0	495
78-59-1	Isophorone	U	495	ug/kg	99.0	495
88-75-5	2-Nitrophenol	U	495	ug/kg	99.0	495
105-67-9	2,4-Dimethylphenol	U	495	ug/kg	173	495
111-91-1	bis(2-Chloroethoxy)methane	U	495	ug/kg	99.0	495
120-83-2	2,4-Dichlorophenol	U	495	ug/kg	99.0	495
65-85-0	Benzoic acid	U	990	ug/kg	247	990
91-20-3	Naphthalene		81.5	ug/kg	14.8	49.5
106-47-8	4-Chloroaniline	U	495	ug/kg	99.0	495
87-68-3	Hexachlorobutadiene	U	495	ug/kg	99.0	495
91-57-6	2-Methylnaphthalene	J	32.4	ug/kg	9.90	49.5
77-47-4	Hexachlorocyclopentadiene	U	495	ug/kg	99.0	495
88-06-2	2,4,6-Trichlorophenol	U	495	ug/kg	99.0	495
95-95-4	2,4,5-Trichlorophenol	U	495	ug/kg	99.0	495
91-58-7	2-Chloronaphthalene	U	49.5	ug/kg	16.3	49.5
88-74-4	2-Nitroaniline	U	495	ug/kg	99.0	495
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	495	ug/kg	99.0	495

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

SDG Number: 10-2150
Lab Sample ID: 248370011

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 32.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7481
Batch ID: 961228
Run Date: 03/22/2010 00:31
Prep Date: 03/05/2010 11:30
Data File: s1c2121.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	495	ug/kg	99.0	495
606-20-2	2,6-Dinitrotoluene	U	495	ug/kg	49.5	495
208-96-8	Acenaphthylene	U	49.5	ug/kg	14.8	49.5
51-28-5	2,4-Dinitrophenol	U	990	ug/kg	188	990
132-64-9	Dibenzofuran	U	495	ug/kg	99.0	495
84-66-2	Diethylphthalate	U	495	ug/kg	99.0	495
86-73-7	Fluorene		131	ug/kg	14.8	49.5
7005-72-3	4-Chlorophenylphenylether	U	495	ug/kg	99.0	495
534-52-1	2-Methyl-4,6-dinitrophenol	U	495	ug/kg	99.0	495
100-01-6	4-Nitroaniline	U	495	ug/kg	148	495
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	495	ug/kg	99.0	495
122-66-7	Azobenzene	U	495	ug/kg	99.0	495
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	495	ug/kg	99.0	495
118-74-1	Hexachlorobenzene	U	495	ug/kg	99.0	495
85-01-8	Phenanthrene		919	ug/kg	14.8	49.5
120-12-7	Anthracene		216	ug/kg	9.90	49.5
84-74-2	Di-n-butylphthalate	U	495	ug/kg	99.0	495
206-44-0	Fluoranthene		962	ug/kg	14.8	49.5
85-68-7	Butylbenzylphthalate	U	495	ug/kg	99.0	495
56-55-3	Benzo(a)anthracene		363	ug/kg	14.8	49.5
91-94-1	3,3'-Dichlorobenzidine	U	495	ug/kg	148	495
218-01-9	Chrysene		407	ug/kg	14.8	49.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	495	ug/kg	99.0	495
117-84-0	Di-n-octylphthalate	U	495	ug/kg	99.0	495
205-99-2	Benzo(b)fluoranthene		538	ug/kg	14.8	49.5
207-08-9	Benzo(k)fluoranthene	U	49.5	ug/kg	14.8	49.5
50-32-8	Benzo(a)pyrene		328	ug/kg	14.8	49.5
193-39-5	Indeno(1,2,3-cd)pyrene		131	ug/kg	14.8	49.5
53-70-3	Dibenzo(a,h)anthracene	U	49.5	ug/kg	14.8	49.5
191-24-2	Benzo(ghi)perylene		137	ug/kg	14.8	49.5
120-82-1	1,2,4-Trichlorobenzene	U	495	ug/kg	99.0	495

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
64-19-7	Acetic acid	1.66	918	ug/kg	86	NJ
	Unknown	1.82	250	ug/kg		J

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370011	Date Received: 03/02/2010 08:50	%Moisture: 32.8
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7481	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 00:31	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2121.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	2.37	445	ug/kg		J
	Unknown	2.41	603	ug/kg		J
	Unknown	2.63	221	ug/kg		J
	Unknown Aldol Condensate	2.67	350	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	234	ug/kg	99	NJ
593-45-3	Octadecane	9.06	313	ug/kg	98	NJ
192-97-2	Benzo[e]pyrene	9.4	363	ug/kg	98	NJ
112-95-8	Eicosane	9.78	316	ug/kg	96	NJ
	Unknown	10.02	226	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2121.d
 Lab Smp Id: 248370011 Client Smp ID: RE36-10-7481
 Inj Date : 22-MAR-2010 00:31
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370011|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 21
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	32.84590	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	479972	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1891124	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	989622	40.0000	
* 67 Phenanthrene-d10	188	6.710	6.710	(1.000)	1777112	40.0000	
* 91 Chrysene-d12	240	8.292	8.292	(1.000)	1372811	40.0000	
* 98 Perylene-d12	264	9.527	9.522	(1.000)	750045	40.0000	
\$ 3 2-Fluorophenol	112	2.834	2.822	(0.785)	733476	59.3455	2940
\$ 5 Phenol-d5	99	3.351	3.346	(0.928)	900673	59.8370	2960
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	367937	31.7219	1570
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	707677	25.8929	1280
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	168825	52.0348	2580
\$ 81 p-Terphenyl-d14	244	7.628	7.622	(0.920)	692311	30.2489	1500

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
47 Acenaphthene	154	5.728	5.728	(1.004)	58444	2.41772	120
79 Pyrene	202	7.569	7.569	(0.913)	652793	16.7573	829
30 Naphthalene	128	4.481	4.481	(1.004)	62449	1.64648	81.5
34 2-Methylnaphthalene	142	4.957	4.957	(1.111)	15780	0.65532	32.4 (a)
53 Fluorene	166	6.086	6.087	(1.067)	71896	2.64015	131
68 Phenanthrene	178	6.722	6.722	(1.002)	713165	18.5729	919
69 Anthracene	178	6.751	6.751	(1.006)	164774	4.36971	216
76 Fluoranthene	202	7.433	7.434	(1.108)	766755	19.4296	962
89 Benzo(a)anthracene	228	8.280	8.281	(0.999)	236594	7.33186	363
92 Chrysene	228	8.310	8.310	(1.002)	248157	8.22948	407
95 Benzo(b)fluoranthene	252	9.133	9.133	(0.959)	224246	10.8714	538
97 Benzo(a)pyrene	252	9.463	9.463	(0.993)	109337	6.61993	328
99 Indeno(1,2,3-cd)pyrene	276	10.851	10.869	(1.139)	37260	2.65333	131
101 Benzo(ghi)perylene	276	11.274	11.286	(1.183)	31593	2.77380	137

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: slc2121.d

Report Date: 03/22/2010 11:56

Lab. ID: 248370011

SampleType: SAMPLE

Injection Date: 22-MAR-2010 00:31

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370011|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1	N-Methyl-N-nitrosomethylamine			CAS#: 62-75-9		
74	17035	1.93	2.16	80-120	100	(T)
42	3513	1.93	2.16	68-128	21	(QT)
43	38977	1.94	2.16	12- 72	229	(QT)

4	Aniline			CAS#: 62-53-3		
66	42757	3.35	3.40	80-120	100	()
93	2586	3.39	3.40	233-293	6	(Q)

17	N-Nitrosodipropylamine			CAS#: 621-64-7		
70	52193	3.97	3.86	80-120	100	(T)
42	35987	3.97	3.86	48-108	69	(T)

30	Naphthalene			CAS#: 91-20-3		
128	62449	4.48	4.48	80-120	100	()
129	7004	4.48	4.48	0- 41	11	()
127	7913	4.48	4.48	0- 44	13	()

34	2-Methylnaphthalene			CAS#: 91-57-6		
142	15780	4.96	4.96	80-120	100	()
141	13579	4.96	4.96	57-117	86	()

41	m-Nitroaniline			CAS#: 99-09-2		
138	186	5.66	5.66	80-120	100	()
92	944	5.67	5.66	71-131	506	(Q)
108	18268	5.70	5.66	0- 40	9783	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
43 Dimethylphthalate				CAS#: 131-11-3		
163	177416	5.70	5.49	80-120	100	(T)
164	989622	5.70	5.49	0- 40	558	(QT)

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	125017	5.70	5.54	80-120	100	(T)
63	2008	5.70	5.54	50-110	2	(QT)

45 Acenaphthylene				CAS#: 208-96-8		
152	30015	5.73	5.61	80-120	100	(T)
151	10925	5.73	5.61	0- 49	36	(T)
153	64356	5.73	5.61	0- 43	214	(QT)

47 Acenaphthene				CAS#: 83-32-9		
154	58444	5.73	5.73	80-120	100	()
153	64356	5.73	5.73	75-135	110	()
152	30039	5.73	5.73	18- 78	51	()

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	125017	5.70	5.83	80-120	100	(T)
89	1501	5.70	5.82	38- 98	1	(QT)
63	2008	5.70	5.82	20- 80	2	(QT)

52 4-Nitrophenol				CAS#: 100-02-7		
139	17196	5.85	5.76	80-120	100	(T)
109	1139	5.81	5.76	28- 88	7	(Q)
65	661	5.82	5.76	63-123	4	(Q)

53 Fluorene				CAS#: 86-73-7		
166	71896	6.09	6.09	80-120	100	()
165	65873	6.09	6.09	61-121	92	()
167	11518	6.09	6.09	0- 43	16	()

56 p-Nitroaniline				CAS#: 100-01-6		
138	1044	6.09	6.09	80-120	100	()
108	439	6.06	6.09	29- 89	42	()
92	1186	6.06	6.09	14- 74	114	(Q)

68 Phenanthrene				CAS#: 85-01-8		
178	713165	6.72	6.72	80-120	100	()
179	111597	6.72	6.72	0- 45	16	()
176	131844	6.72	6.72	0- 48	18	()

69 Anthracene				CAS#: 120-12-7		
178	164774	6.75	6.75	80-120	100	()
179	38895	6.75	6.75	0- 45	24	()
176	29688	6.75	6.75	0- 48	18	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
76 Fluoranthene			CAS#:	206-44-0		
202	766755	7.43	7.43	80-120	100	()
203	130752	7.43	7.43	0- 47	17	()
101	116012	7.43	7.43	0- 45	15	()

79 Pyrene			CAS#:	129-00-0		
202	652793	7.57	7.57	80-120	100	()
200	128040	7.57	7.57	0- 49	20	()
101	126231	7.57	7.56	0- 49	19	()

89 Benzo(a)anthracene			CAS#:	56-55-3		
228	236594	8.28	8.28	80-120	100	()
226	61719	8.28	8.28	0- 55	26	()
229	65170	8.28	8.28	0- 49	28	()

92 Chrysene			CAS#:	218-01-9		
228	248157	8.31	8.31	80-120	100	()
229	59798	8.31	8.31	0- 49	24	()
226	71278	8.31	8.31	0- 58	29	()

95 Benzo(b)fluoranthene			CAS#:	205-99-2		
252	224246	9.13	9.13	80-120	100	()
253	49257	9.13	9.13	0- 52	22	()
125	38021	9.13	9.13	0- 46	17	()

96 Benzo(k)fluoranthene			CAS#:	207-08-9		
252	224246	9.13	9.16	80-120	100	()
253	50247	9.13	9.16	0- 51	22	()
125	38154	9.13	9.16	0- 45	17	()

97 Benzo(a)pyrene			CAS#:	50-32-8		
252	109337	9.46	9.46	80-120	100	()
253	25830	9.46	9.46	0- 52	24	()
125	18027	9.46	9.46	0- 45	16	()

99 Indeno(1,2,3-cd)pyrene			CAS#:	193-39-5		
276	37260	10.85	10.87	80-120	100	()
138	12820	10.85	10.87	11- 71	34	()

100 Dibenzo(a,h)anthracene			CAS#:	53-70-3		
278	10287	10.86	10.87	80-120	100	()
139	2424	10.86	10.87	0- 53	24	()

101 Benzo(ghi)perylene			CAS#:	191-24-2		
276	31593	11.27	11.29	80-120	100	()
138	10593	11.27	11.28	1- 61	34	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2121.d
Lab Smp Id: 248370011 Client Smp ID: RE36-10-7481
Inj Date : 22-MAR-2010 00:31
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370011|961228|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	32.84590	% moisture

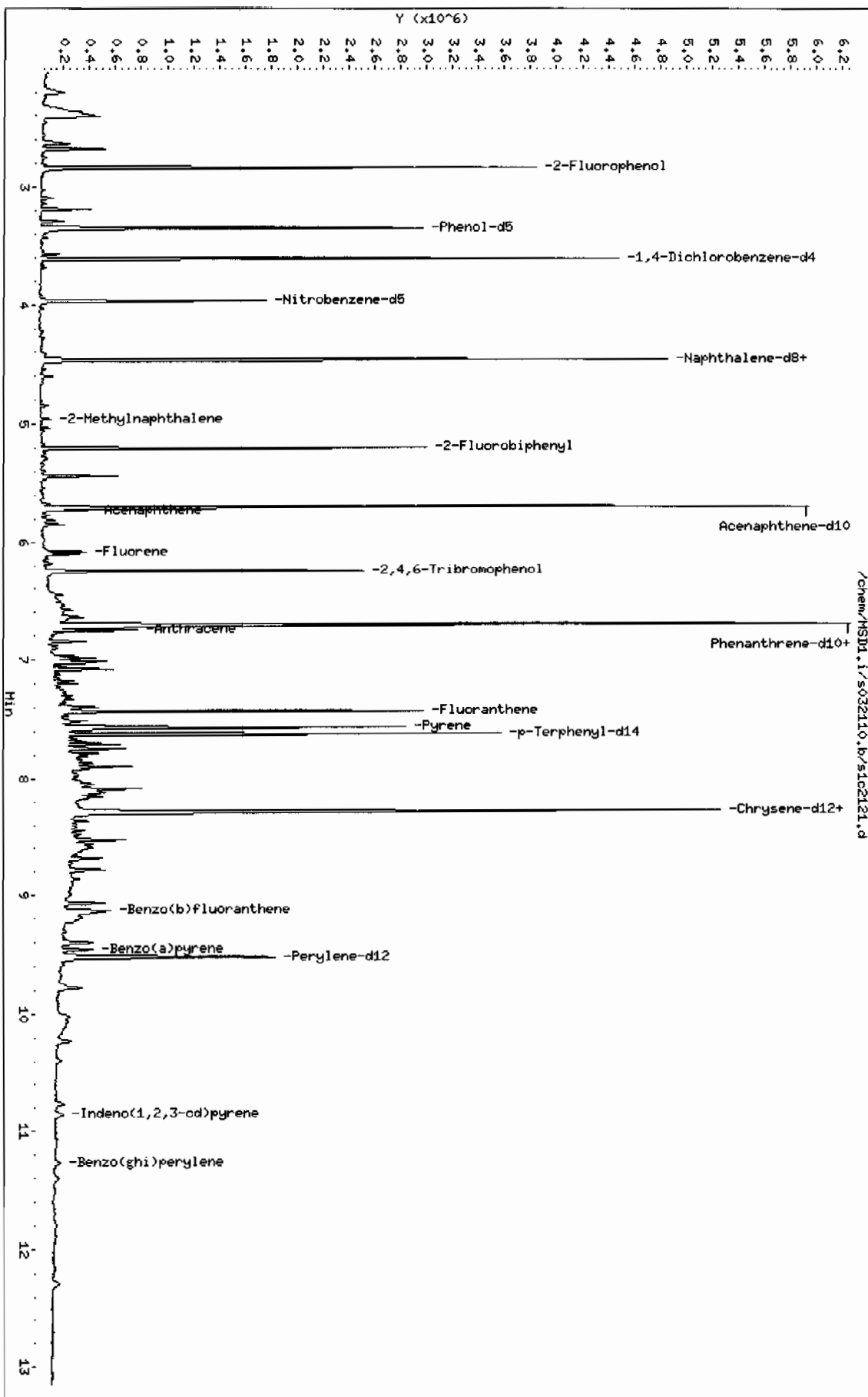
Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2926710	40.000
* 46 Acenaphthene-d10	5.704	4289256	40.000
* 98 Perylene-d12	9.527	2186973	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	
----	----	-----	-----	----	-----	-----	-----
Acetic acid					CAS #: 64-19-7		
1.657	1357641	18.5551773	918	86	NIST05.L	257	10
Unknown					CAS #:		
1.816	369536	5.05053332	250	0		0	10
Unknown					CAS #:		
2.369	657482	8.98595377	445	0		0	10
Unknown					CAS #:		
2.410	891014	12.1776825	603	0		0	10
Unknown					CAS #:		
2.634	326972	4.46879169	221	0		0	10
Unknown Aldol Condensate					CAS #:		
2.675	516769	7.06280064	350	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.434	507292	4.73081941	234	99	NIST05.L	60020	46
Octadecane					CAS #: 593-45-3		
9.063	346045	6.32920042	313	98	NIST05.L	94930	98
Benzo[e]pyrene					CAS #: 192-97-2		
9.404	400754	7.32983632	363	98	NIST05.L	93577	98
Eicosane					CAS #: 112-95-8		
9.780	349612	6.39443532	316	96	NIST05.L	113489	98
Unknown					CAS #:		
10.022	249370	4.56100810	226	0		0	98



Data File: /chem/MSD1.i/s032110.b/s102121.d
Date: 22-MAR-2010 00:31
Client ID: RE36-10-7481
Sample Info: 124837001196122811(SMH11)LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: PMY
Column diameter: 0.20

Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 1248370011196122811SVMI1/LANL

Volume Injected (uL): 0.5

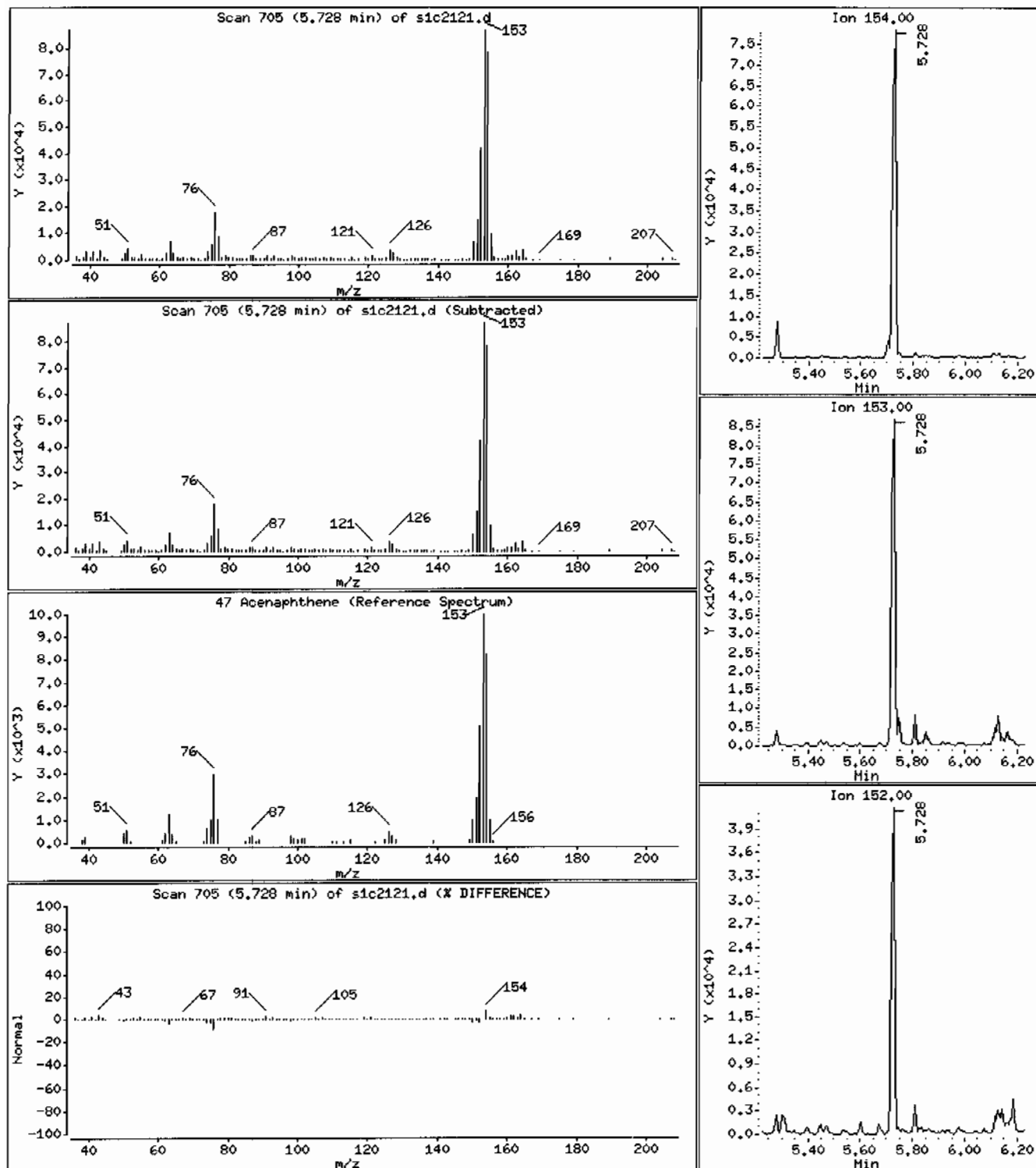
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

47 Acenaphthene

Concentration: 120 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: I248370011196122811ISVH11ILANL

Volume Injected (uL): 0.5

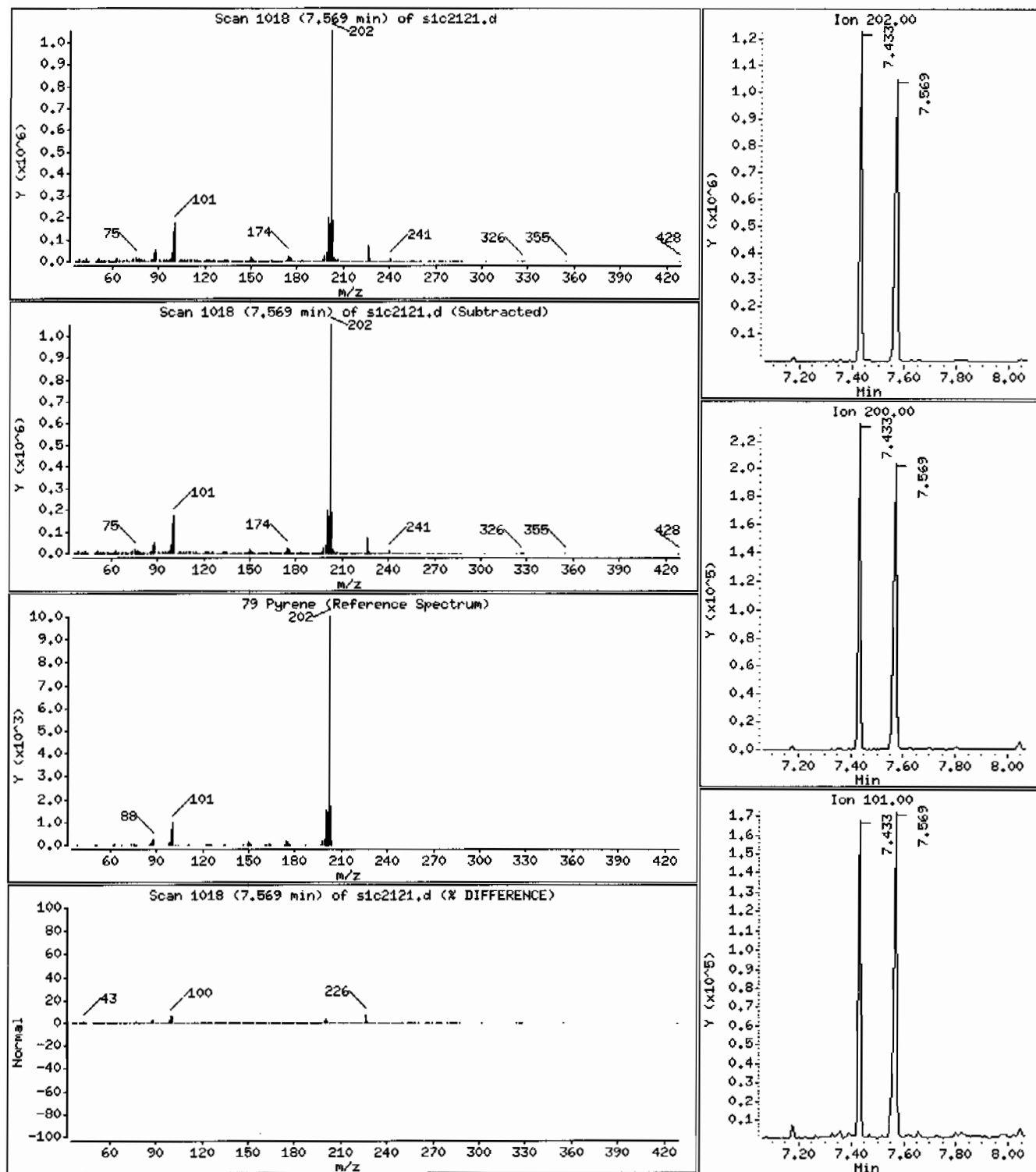
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 829 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 1248370011196122811SVH111LANL

Volume Injected (uL): 0.5

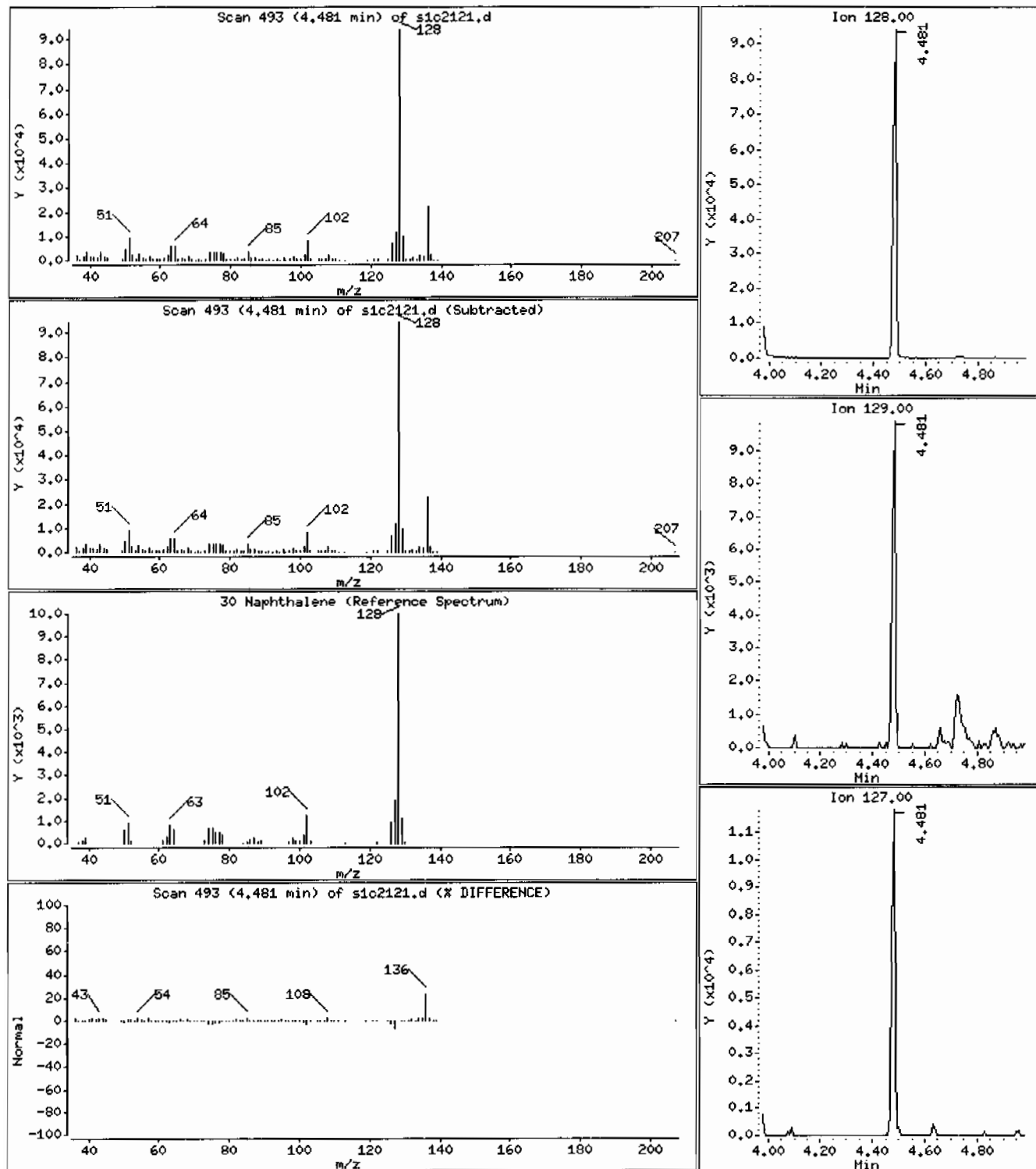
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

30 Naphthalene

Concentration: 81.5 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: HSD1.i

Sample Info: I248370011196122811SVH111LANL

Volume Injected (uL): 0.5

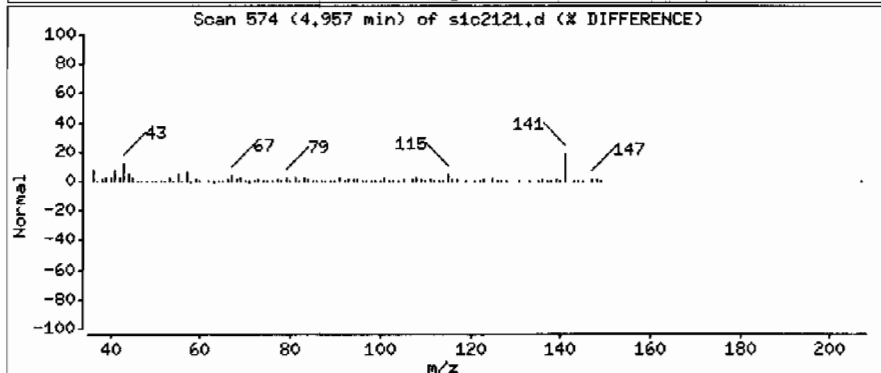
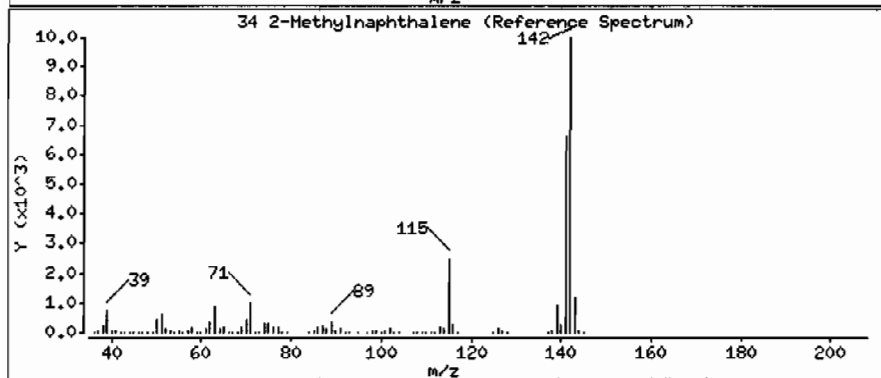
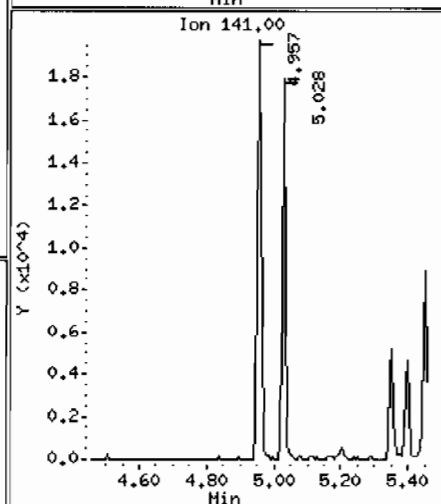
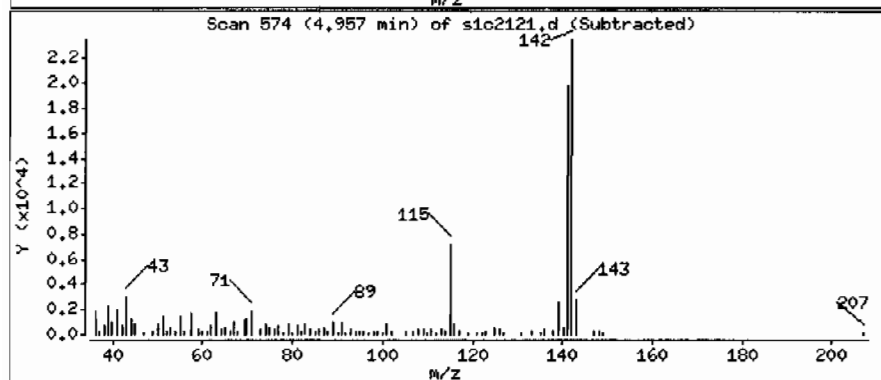
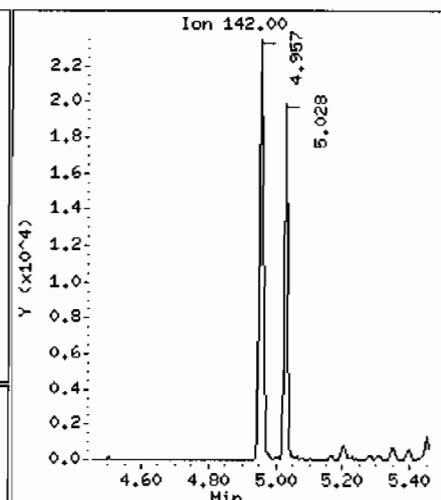
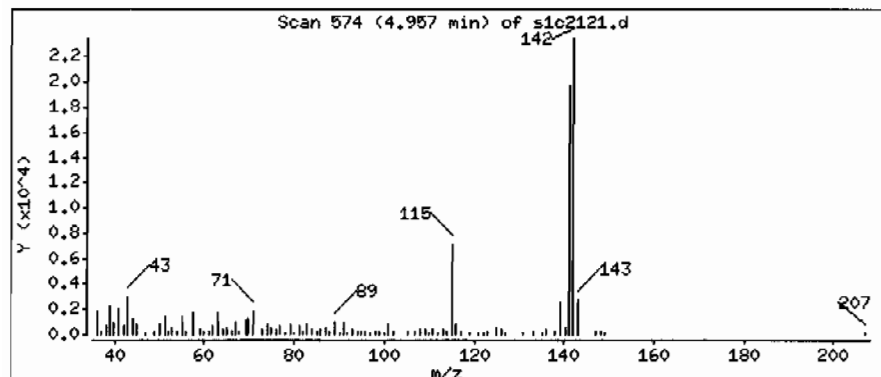
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

34 2-Methylnaphthalene

Concentration: 32.4 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 12483700111961228111SVMI11LANL

Volume Injected (uL): 0.5

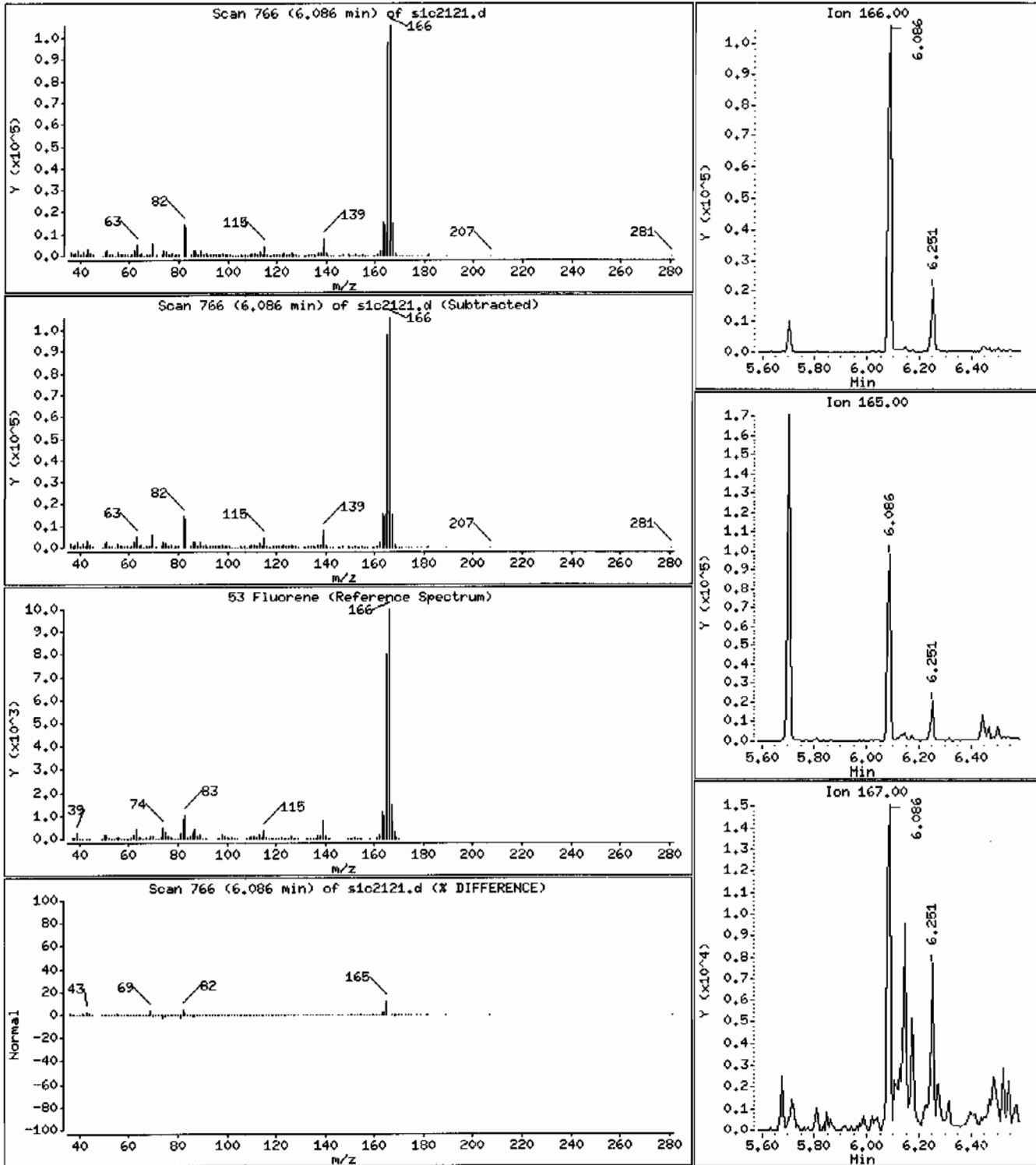
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

53 Fluorene

Concentration: 131 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 1248370011|96122811|SVH11|LANL

Volume Injected (uL): 0.5

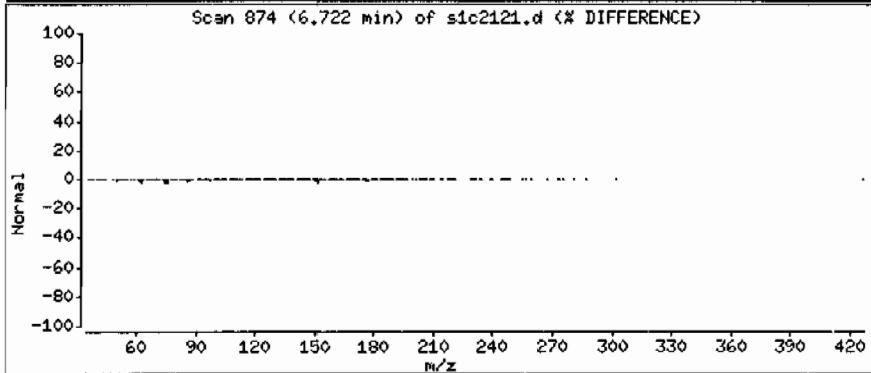
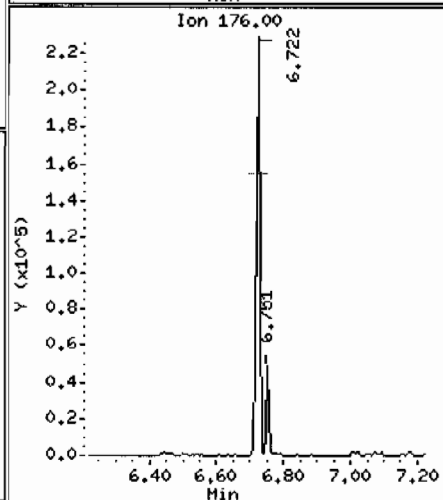
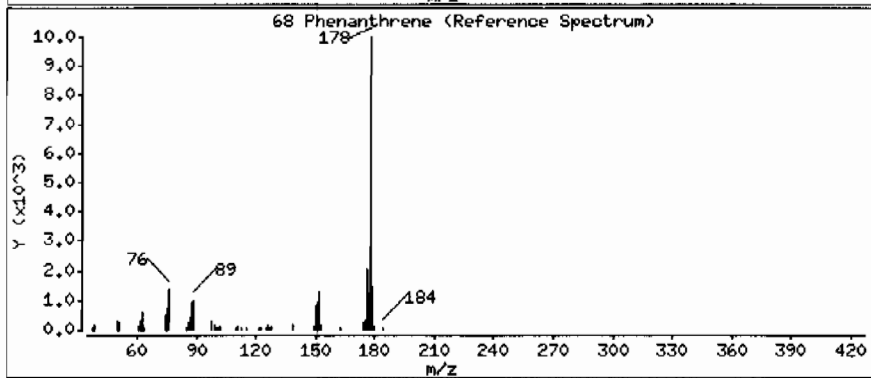
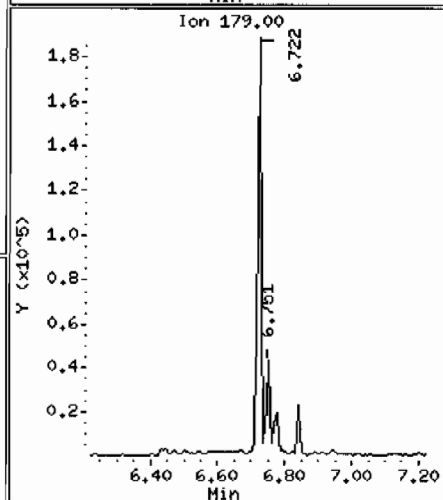
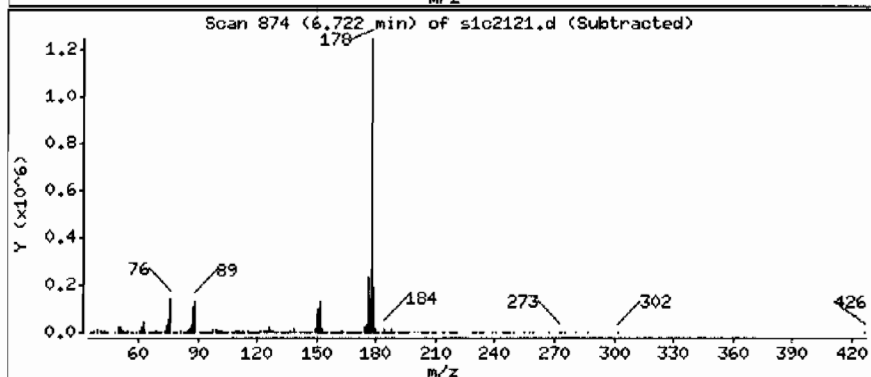
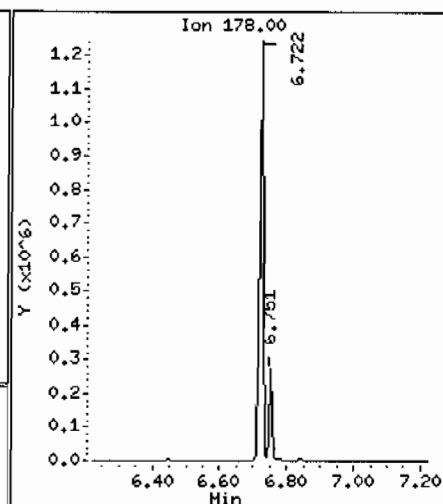
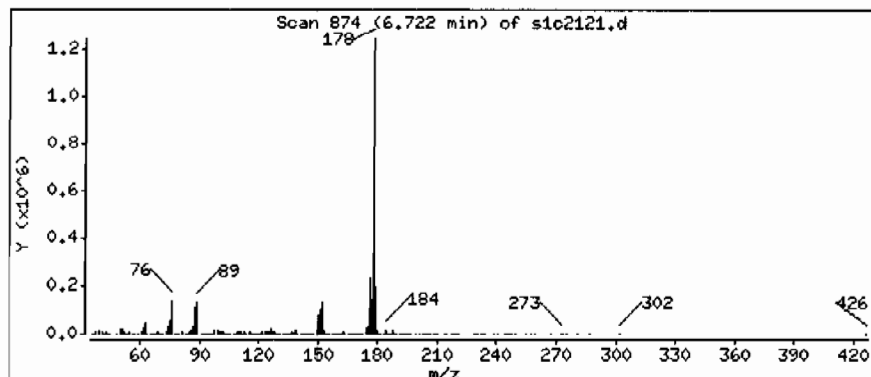
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 919 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: I2483700111961228111SVMI11LANL

Volume Injected (uL): 0.5

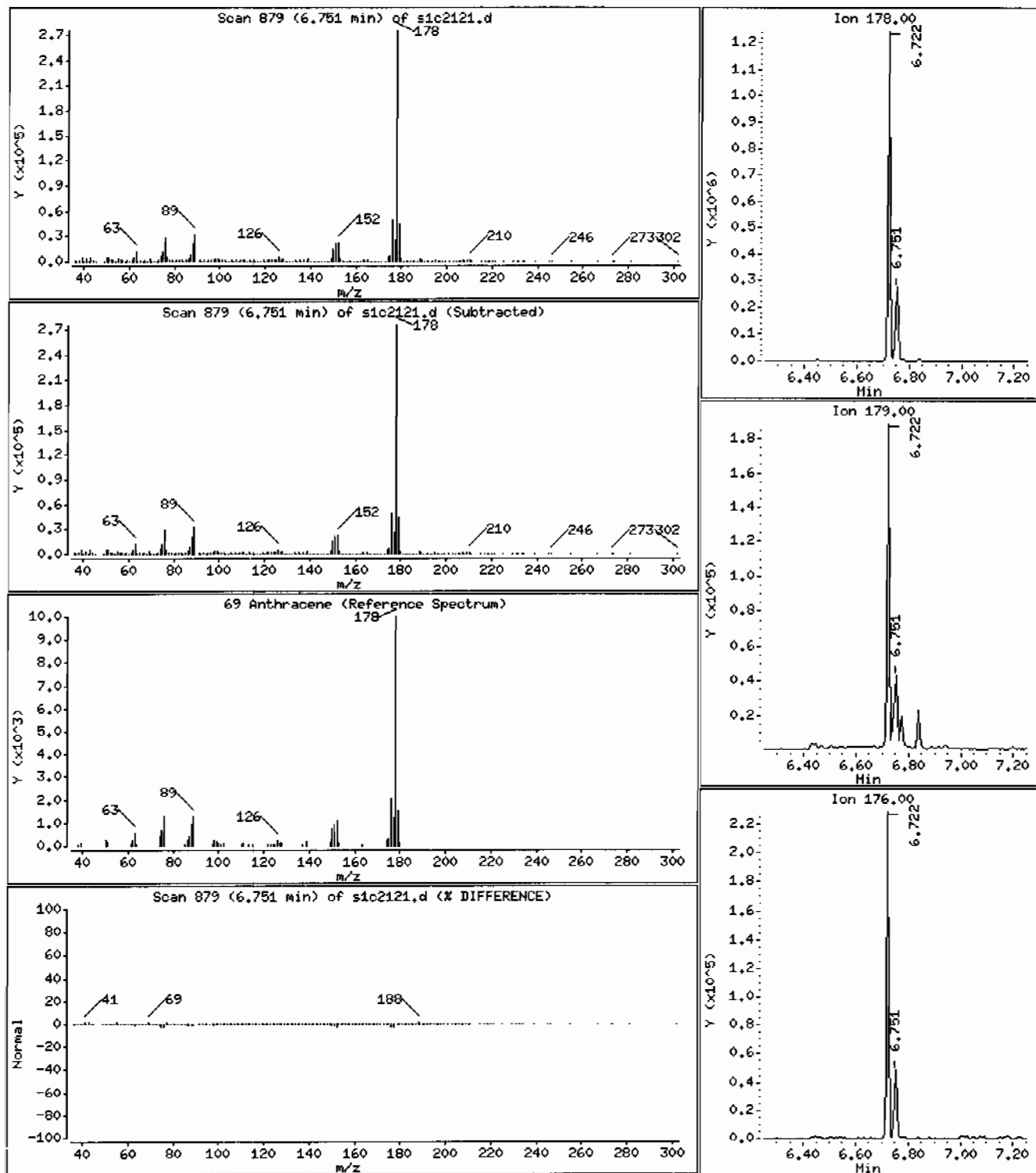
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 216 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 1248370011|96122811|SVH11|LANL

Volume Injected (uL): 0.5

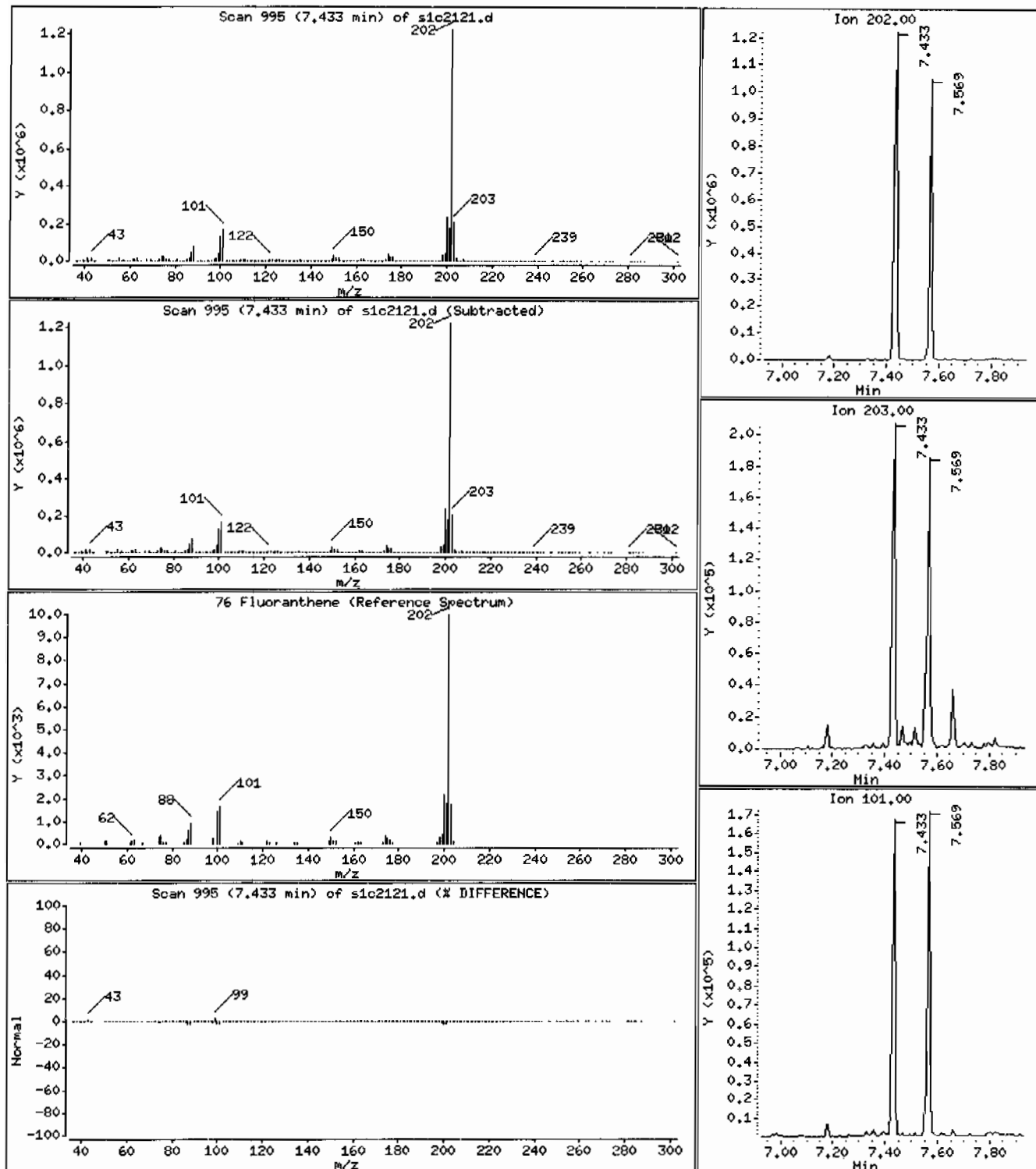
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 962 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: HSD1.i

Sample Info: 1248370011196122811SVH111LANL

Volume Injected (uL): 0.5

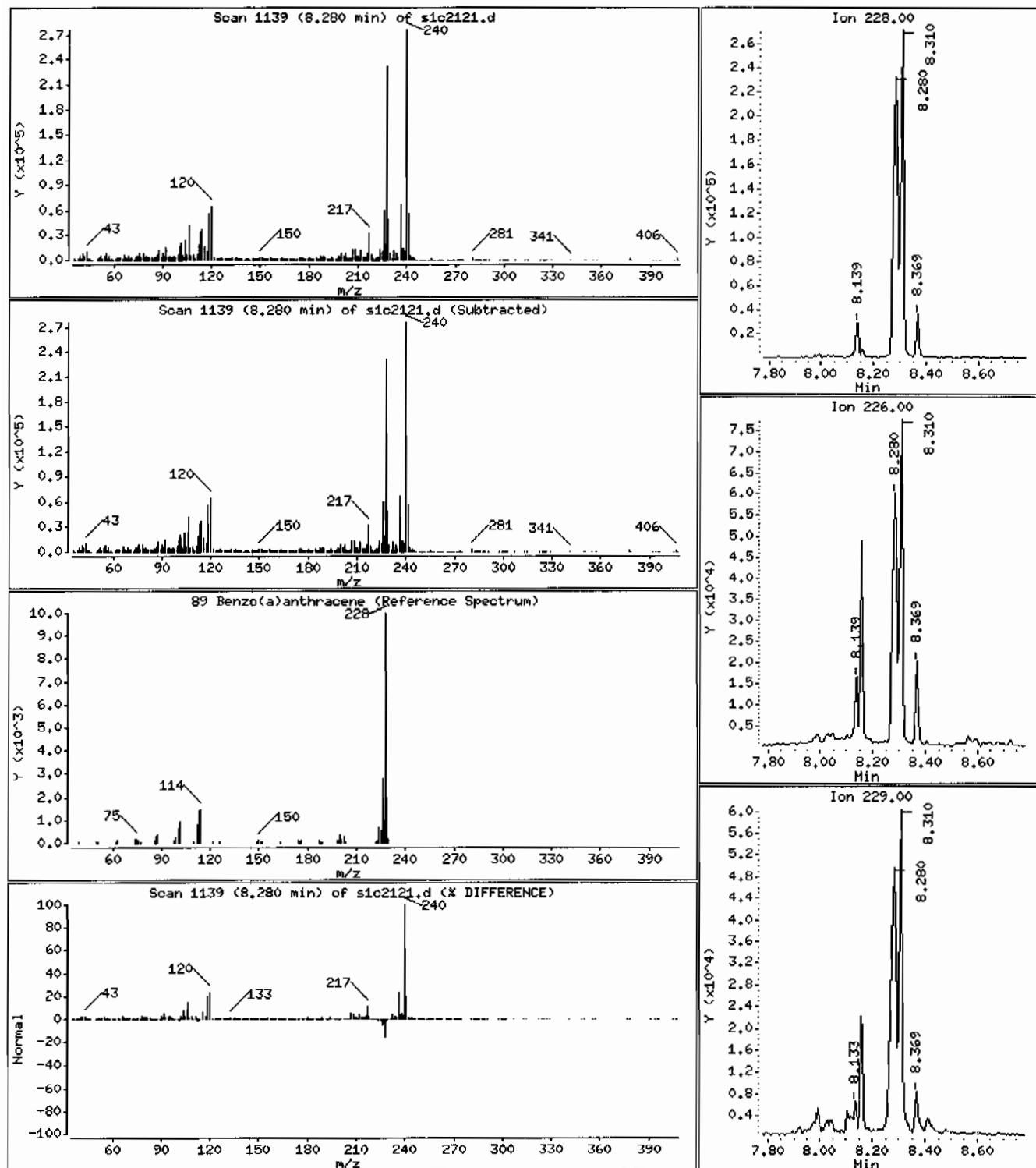
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 363 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: HSD1.i

Sample Info: 1248370011196122811SVH111LANL

Volume Injected (uL): 0.5

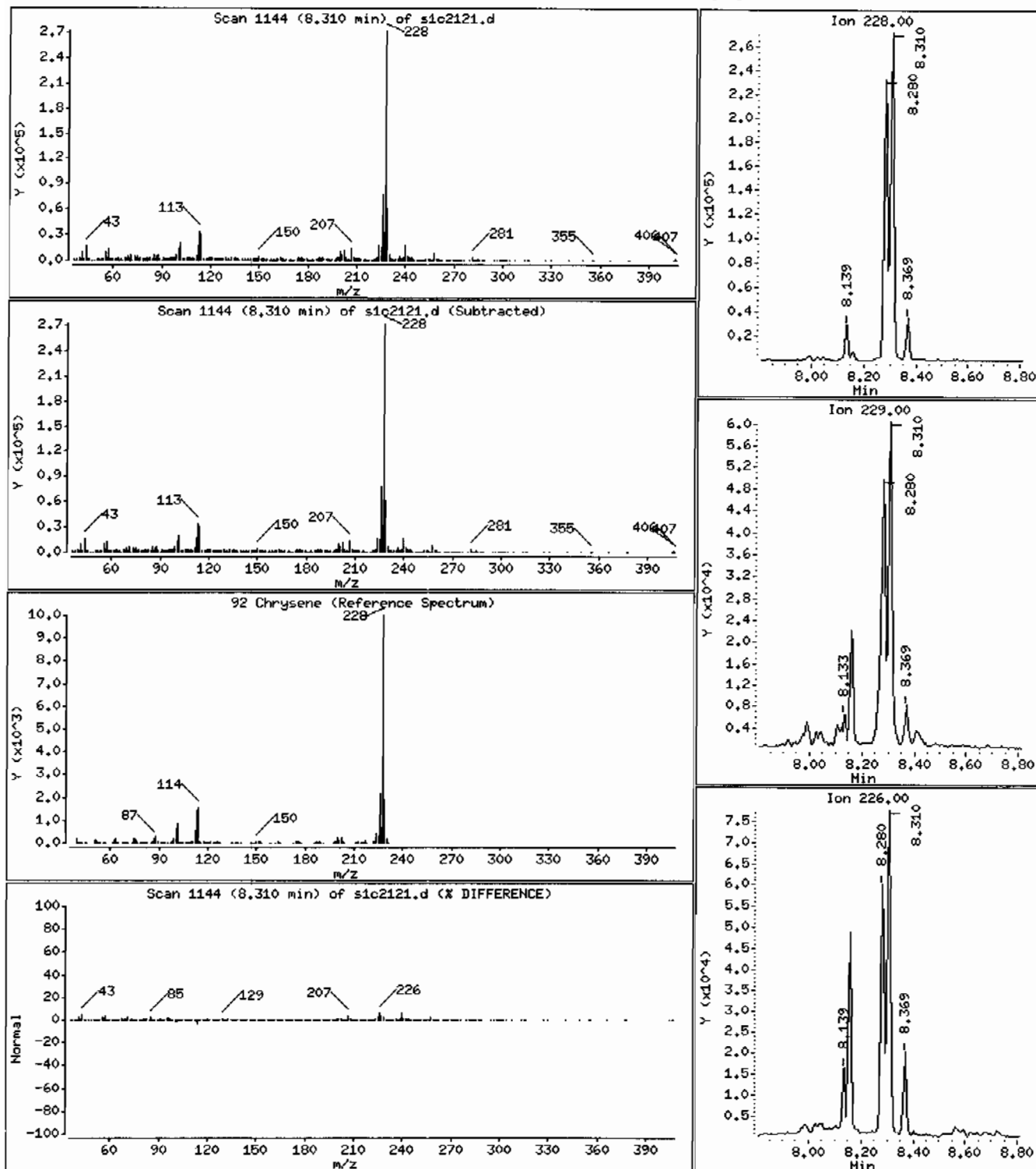
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 407 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: I2483700111961228111SVH111LANL

Volume Injected (uL): 0.5

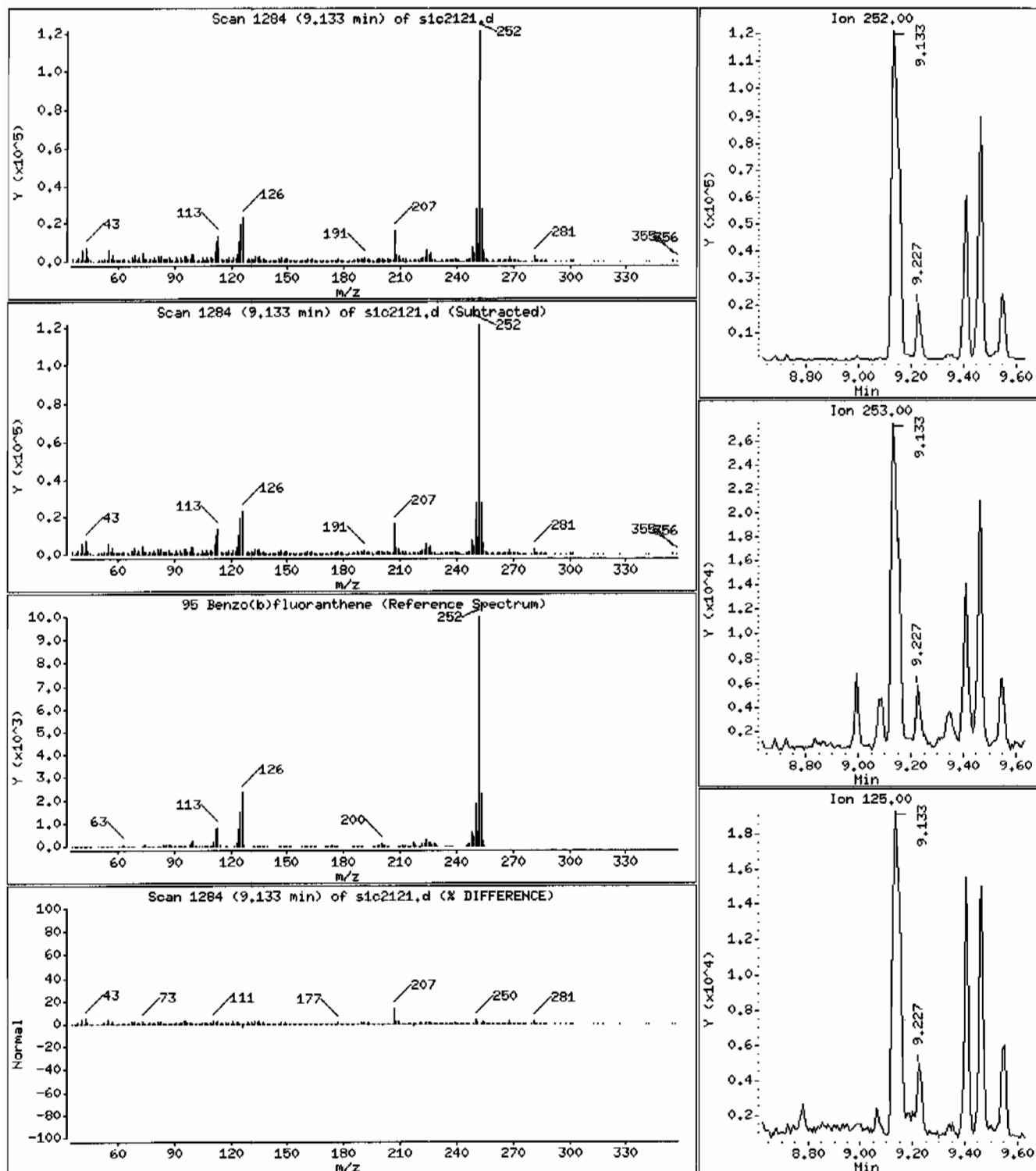
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 538 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: HSD1.i

Sample Info: 1248370011/96122811/SMH11/LANL

Volume Injected (uL): 0.5

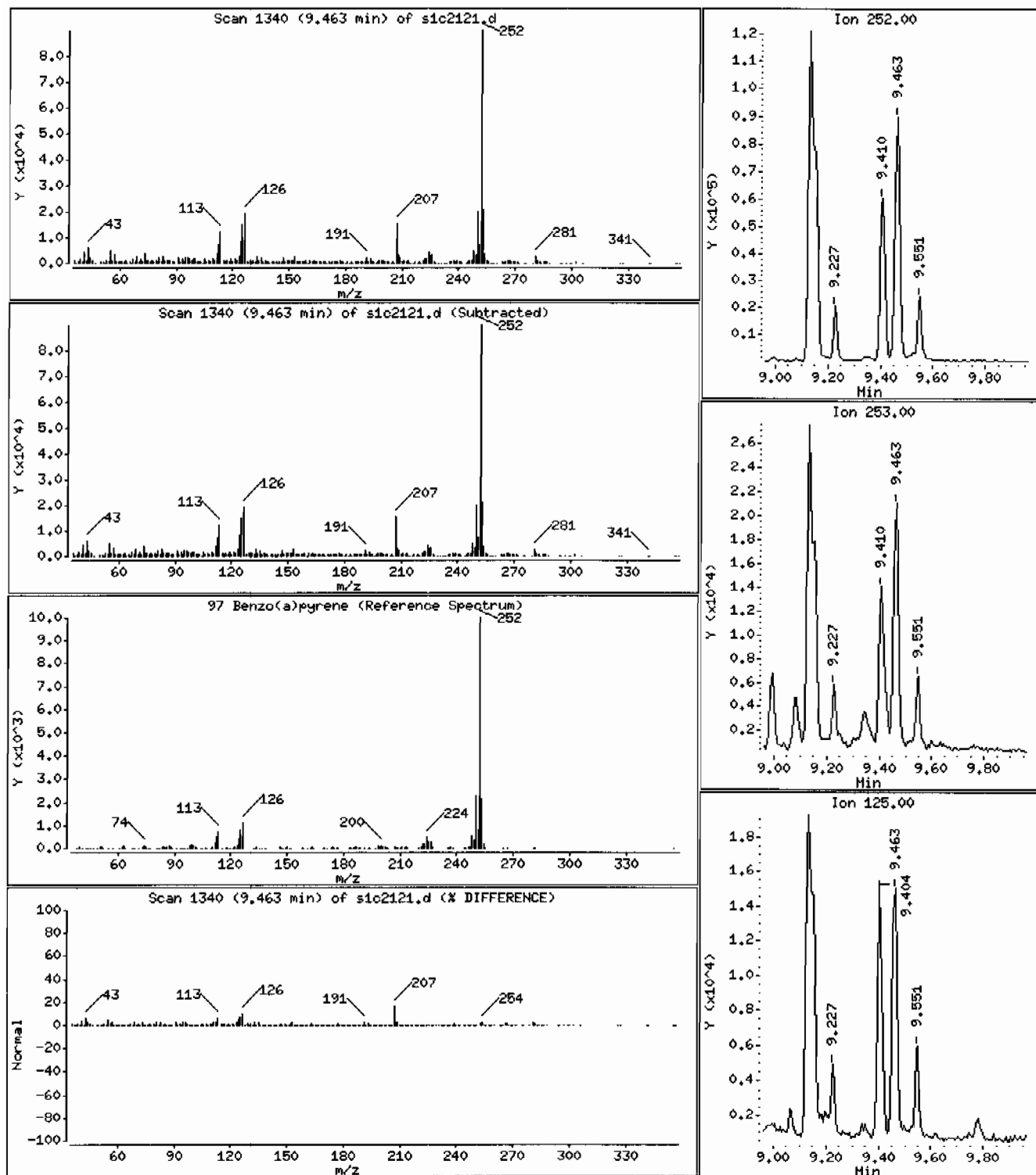
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 328 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 12483700111961228111SVMI11LANL

Volume Injected (uL): 0.5

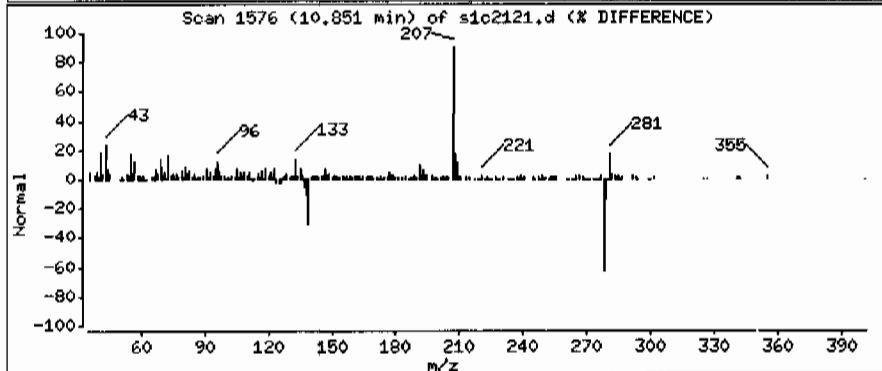
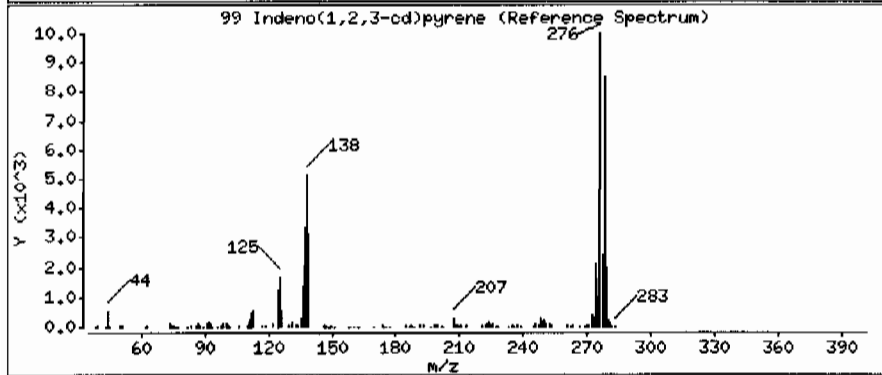
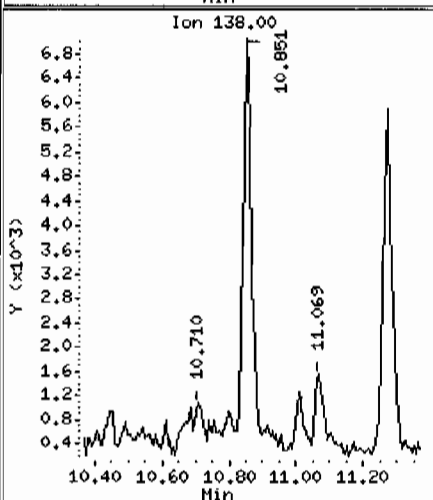
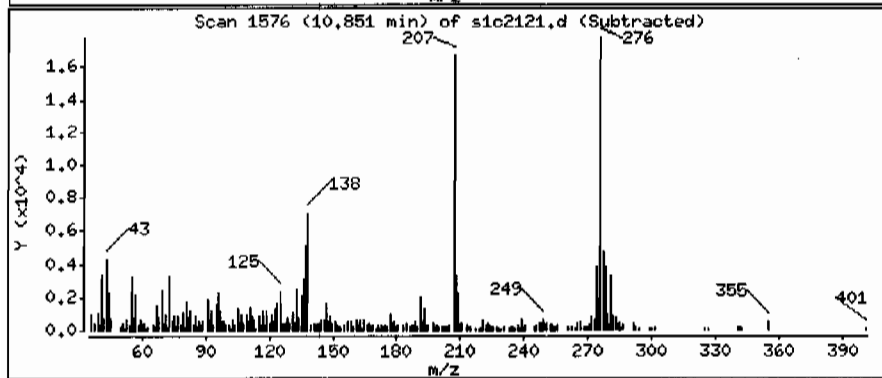
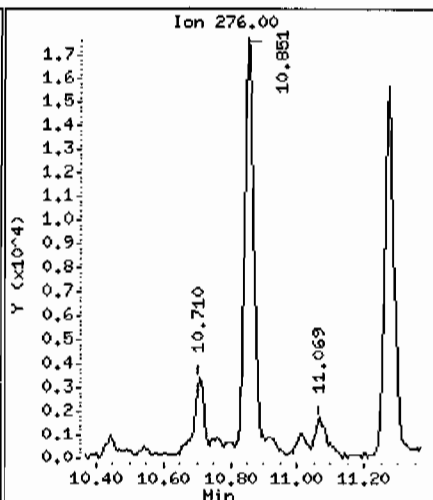
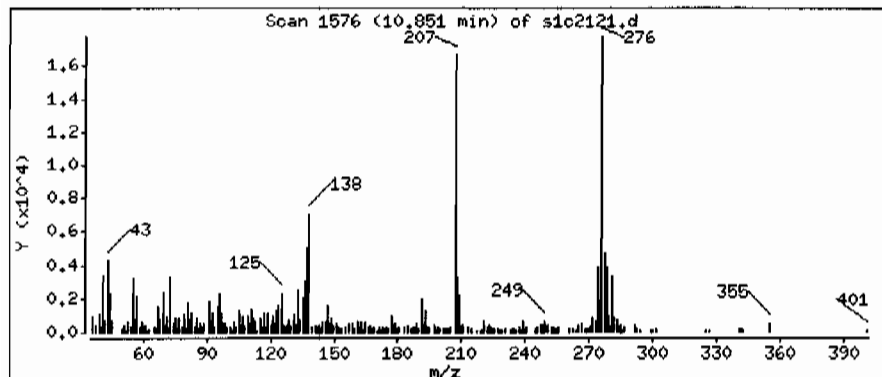
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 131 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.1

Sample Info: 12483700111961228111SVH111LANL

Volume Injected (uL): 0.5

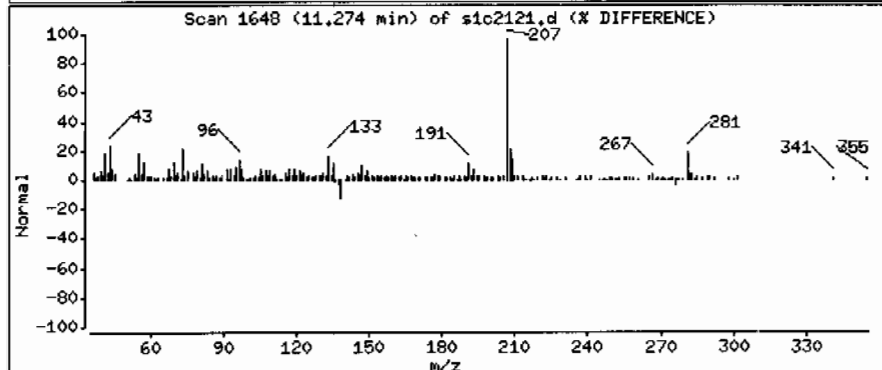
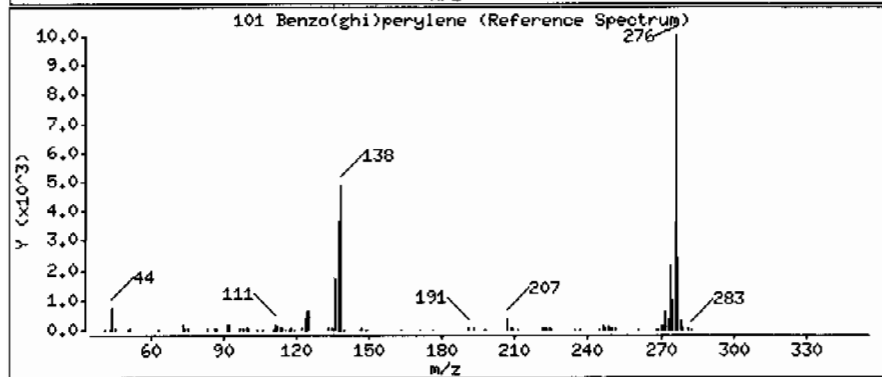
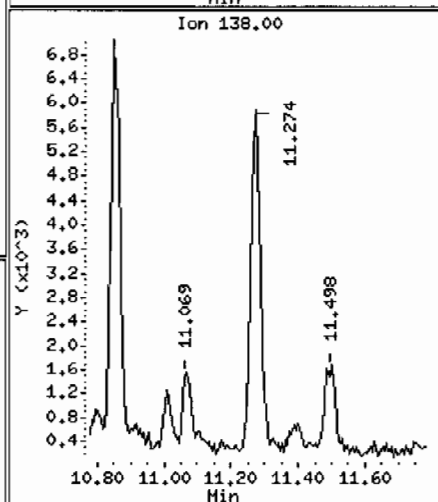
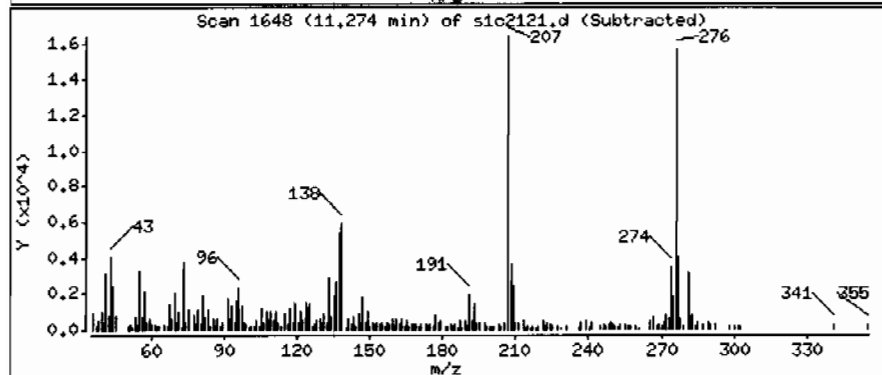
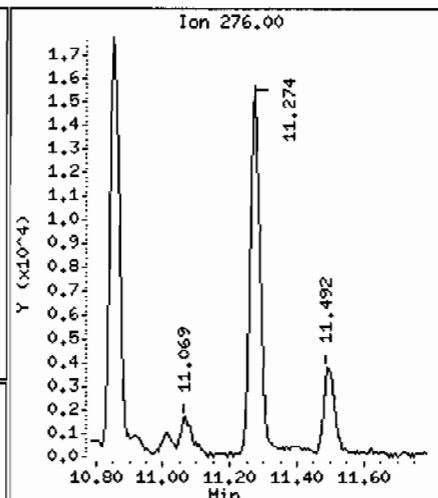
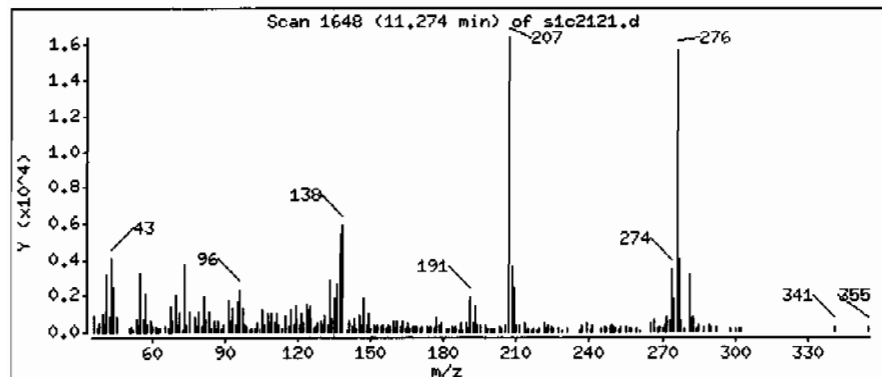
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 137 ug/Kg



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: HSD1.i

Sample Info: 124837001196122811SVMI11LANL

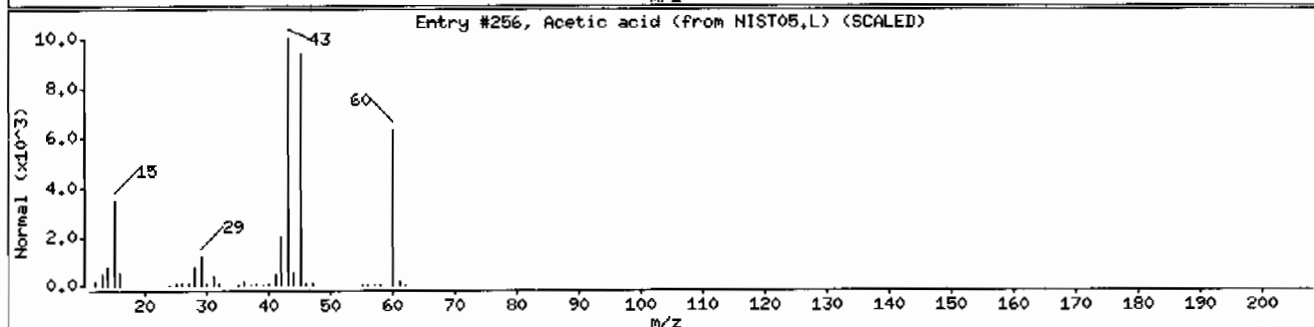
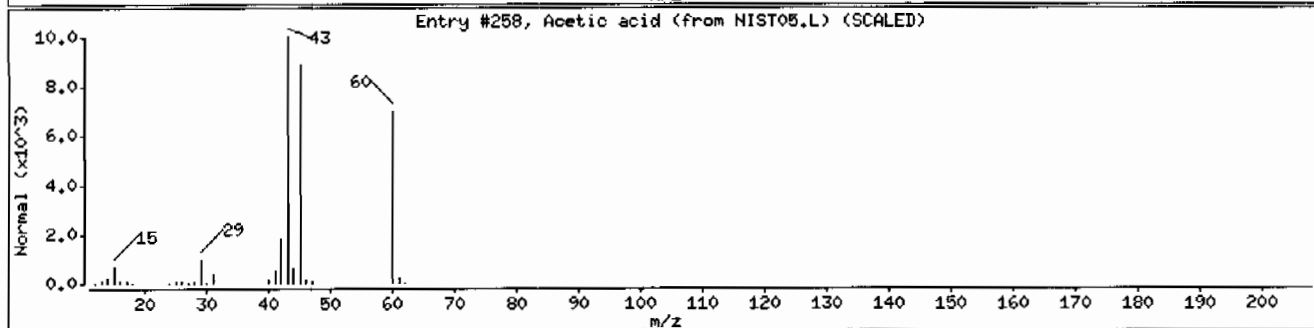
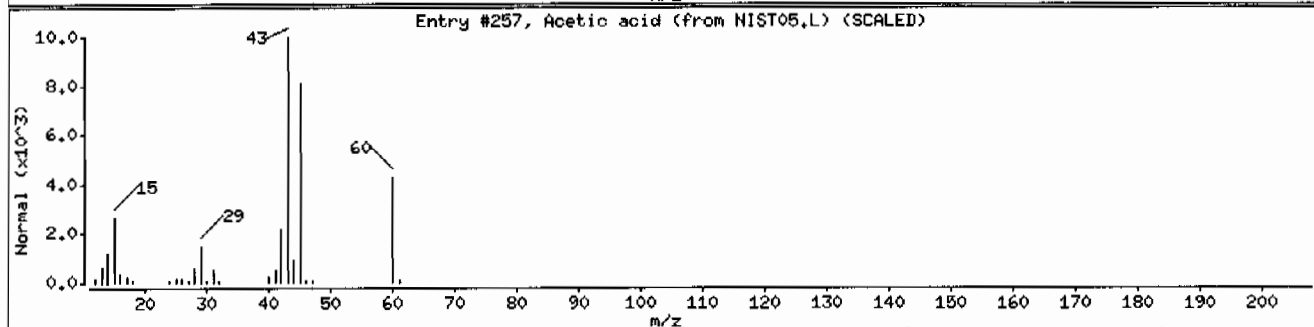
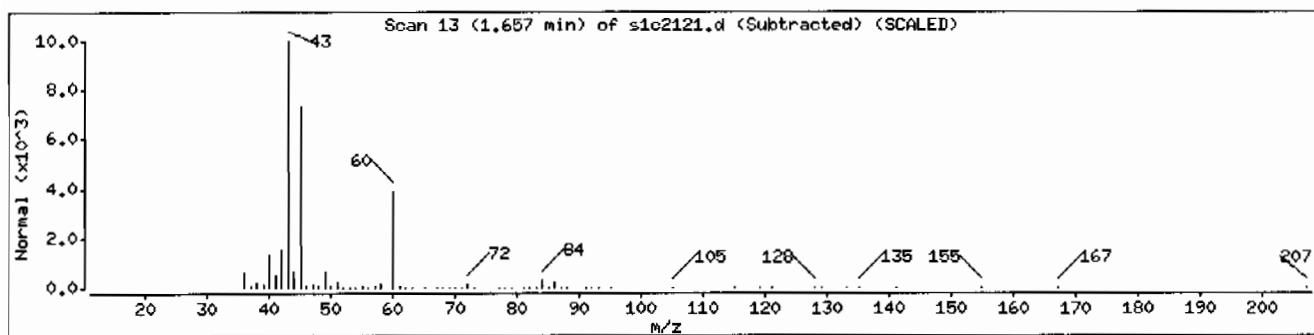
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetic acid	64-19-7	NIST05.L	257	86	C2H4O2	60
Acetic acid	64-19-7	NIST05.L	258	78	C2H4O2	60
Acetic acid	64-19-7	NIST05.L	256	72	C2H4O2	60



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: HSD1.i

Sample Info: I248370011|96122811|SVMI11|LANL

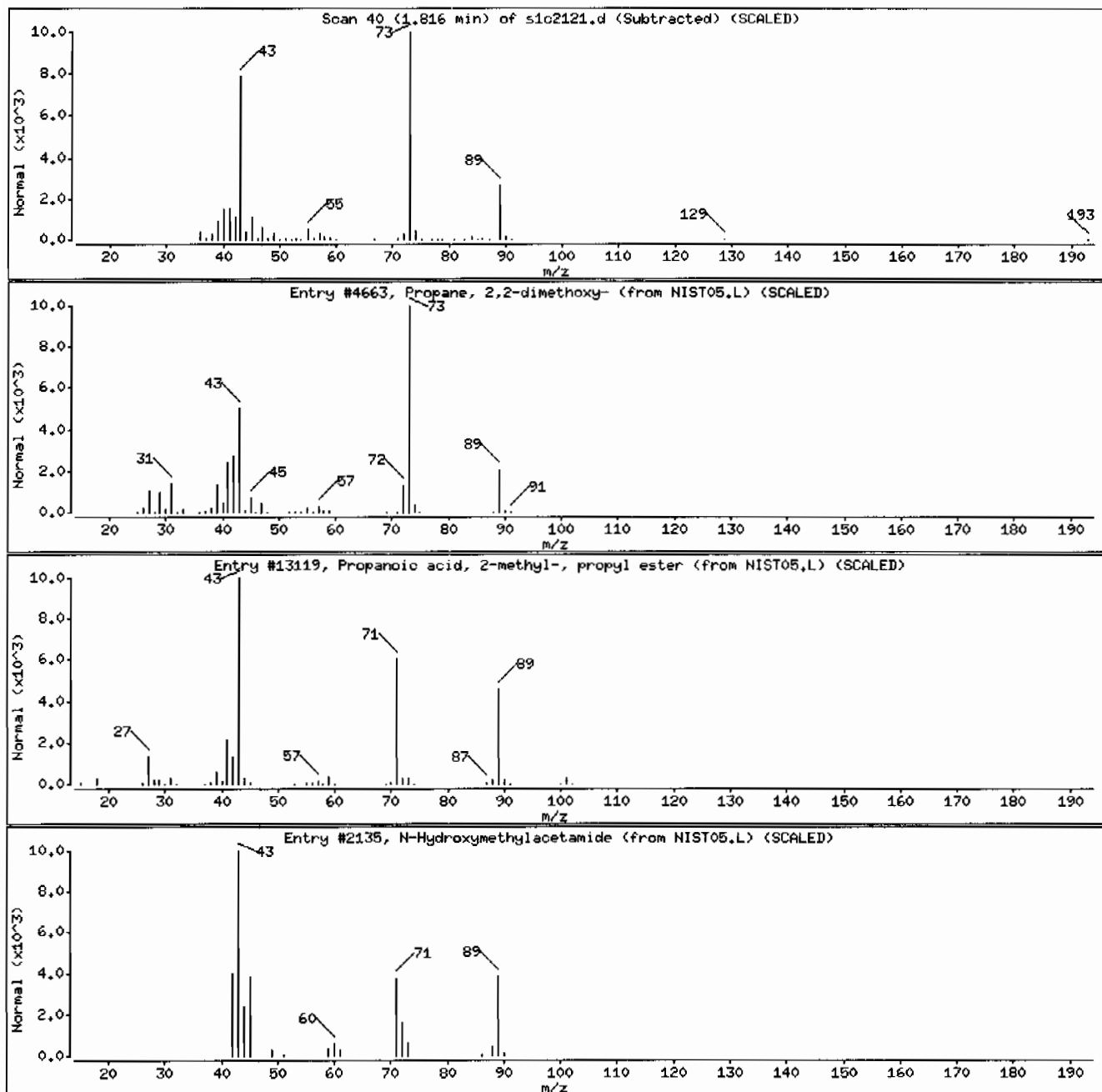
Volume Injected (uL): 0.5

Operator: AMY

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	33	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	25	C7H14O2	130
N-Hydroxymethylacetamide	625-51-4	NIST05.L	2135	23	C3H7NO2	89



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 1248370011196122811SVH111LANL

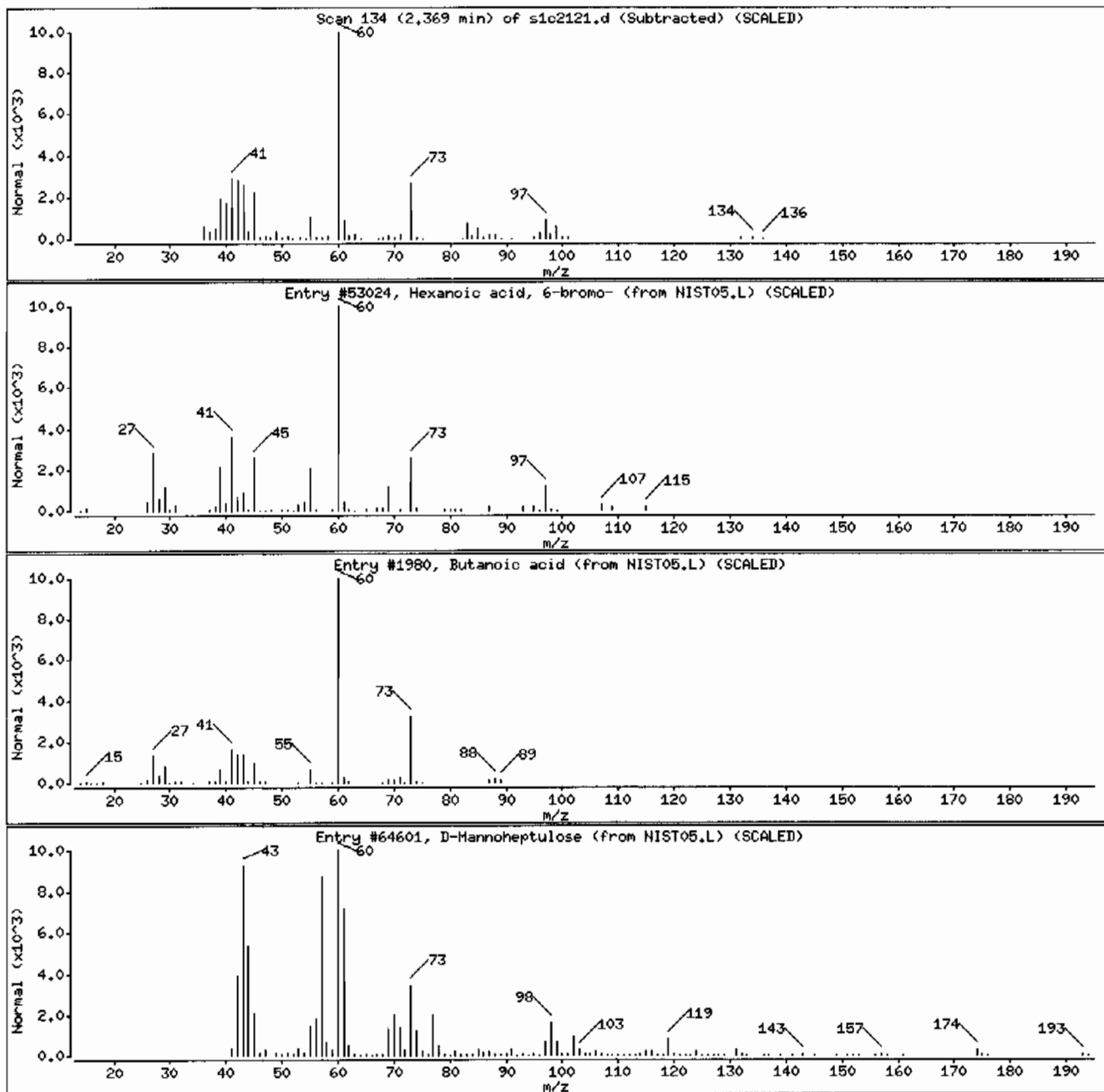
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Hexanoic acid, 6-bromo-	4224-70-8	NIST05.L	53024	64	C6H11BrO2	194
Butanoic acid	107-92-6	NIST05.L	1980	53	C4H8O2	88
D-Mannoheptulose	3615-44-9	NIST05.L	64601	38	C7H14O7	210



Date: 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: HSD1.i

Sample Info: 1248370011/96122811/SVM11/LANL

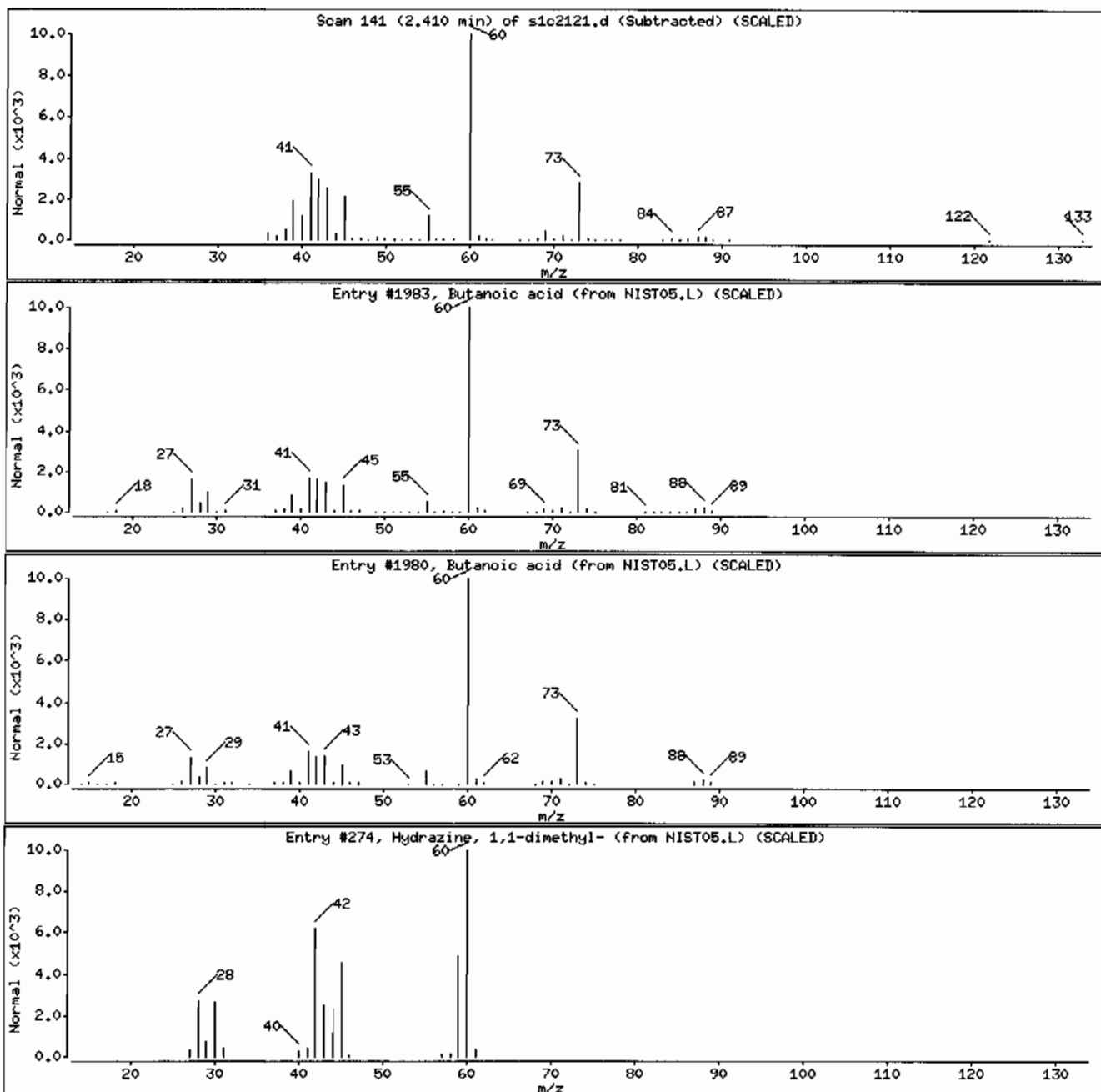
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid	107-92-6	NIST05.L	1983	59	C4H8O2	88
Butanoic acid	107-92-6	NIST05.L	1980	38	C4H8O2	88
Hydrazine, 1,1-dimethyl-	57-14-7	NIST05.L	274	9	C2H8N2	60



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 12483700111961228111SVH111LANL

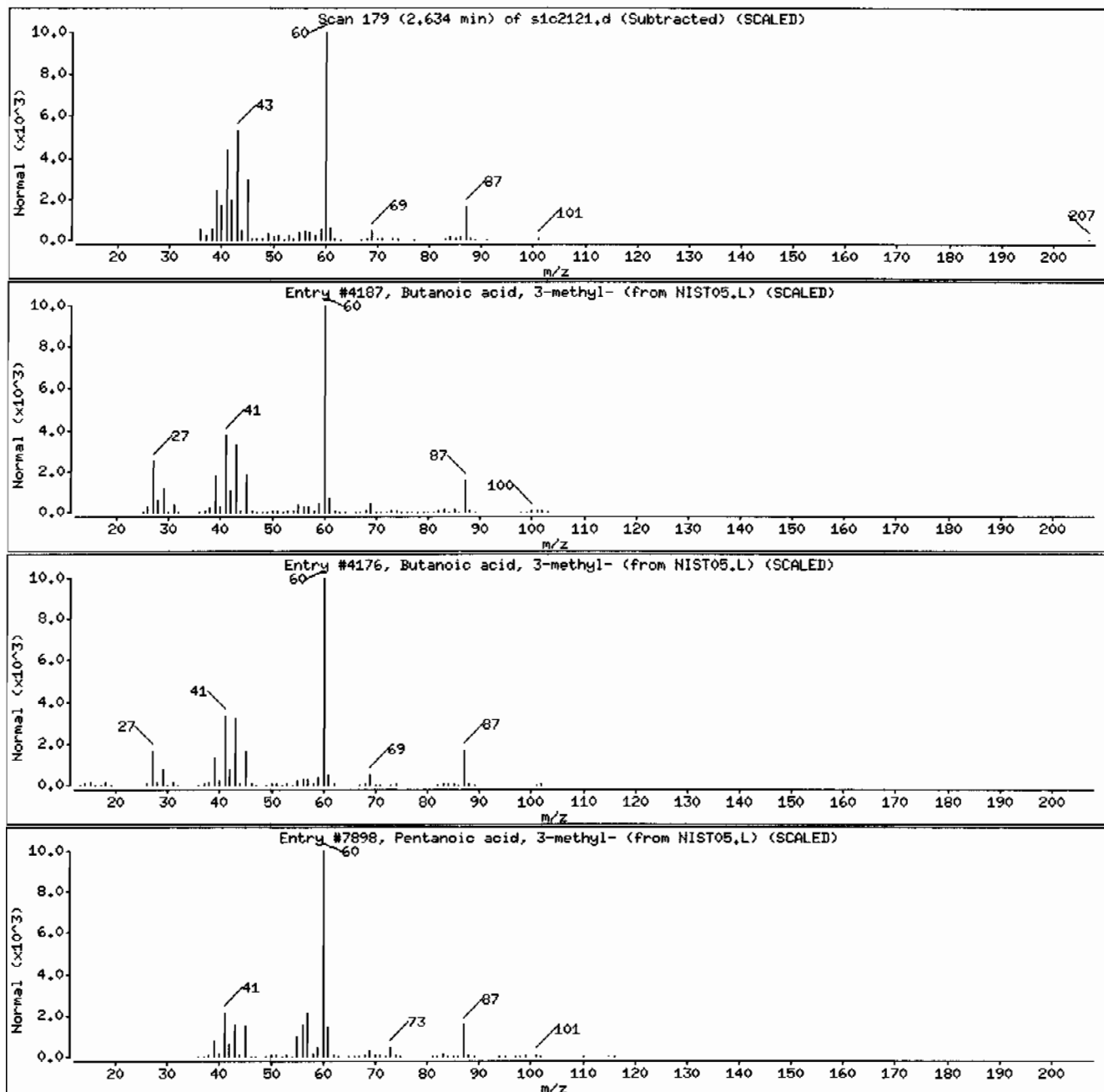
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 3-methyl-	503-74-2	NIST05.L	4187	59	C5H10O2	102
Butanoic acid, 3-methyl-	503-74-2	NIST05.L	4176	59	C5H10O2	102
Pentanoic acid, 3-methyl-	105-43-1	NIST05.L	7898	50	C6H12O2	116



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 124837001196122811SVMI11LANL

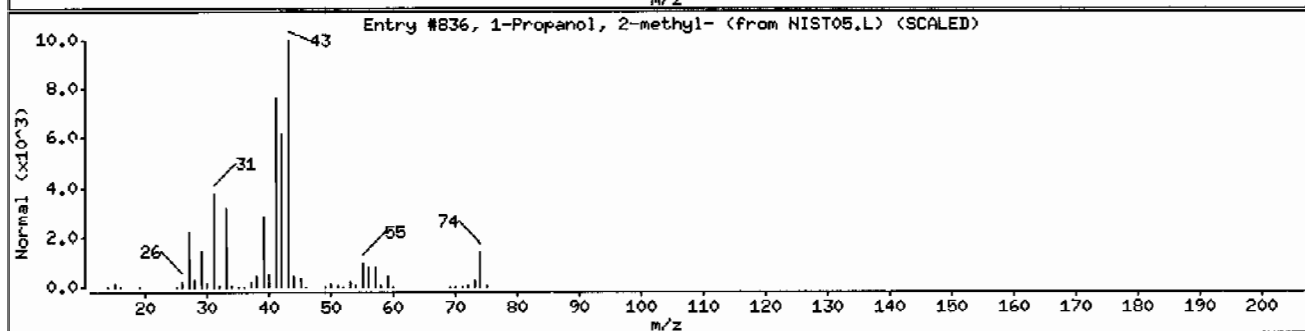
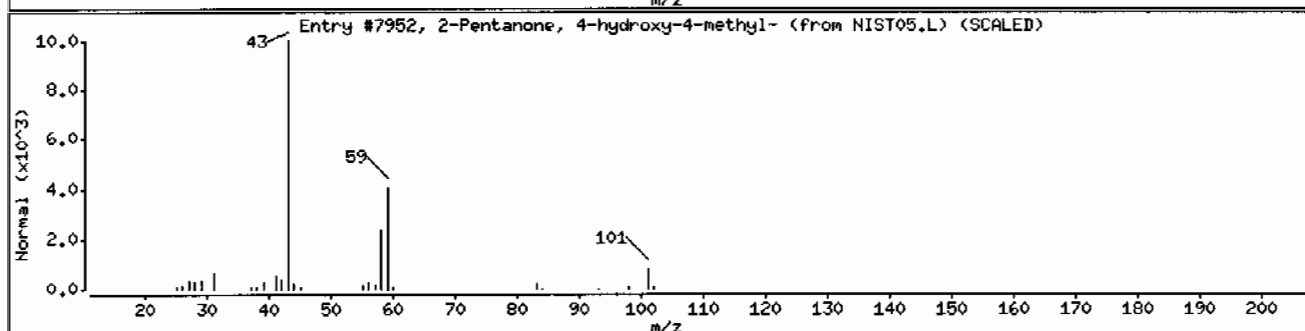
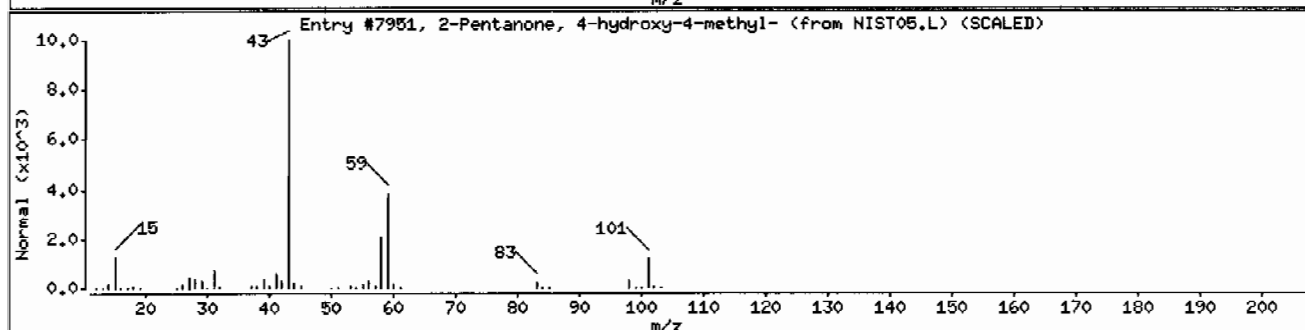
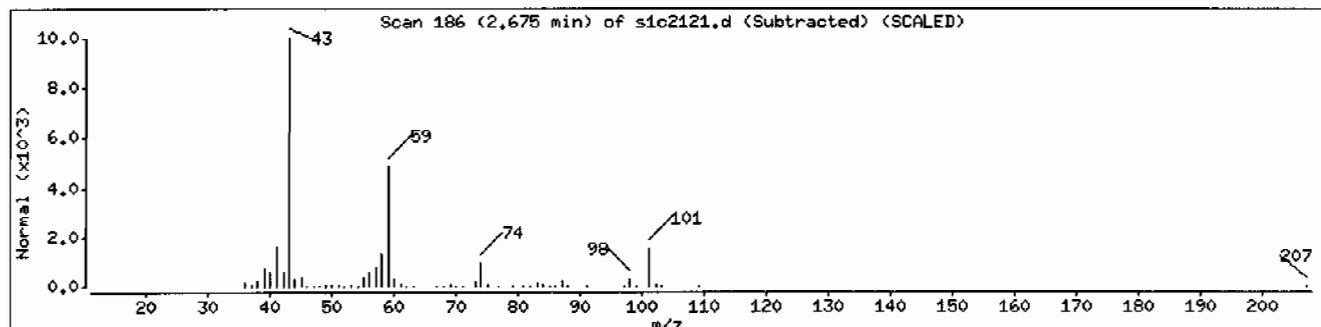
Volume Injected (uL): 0.5

Operator: AMY

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	42	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	36	C6H12O2	116
1-Propanol, 2-methyl-	78-83-1	NIST05.L	836	22	C4H10O	74



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 124837001196122811SVH11LANL

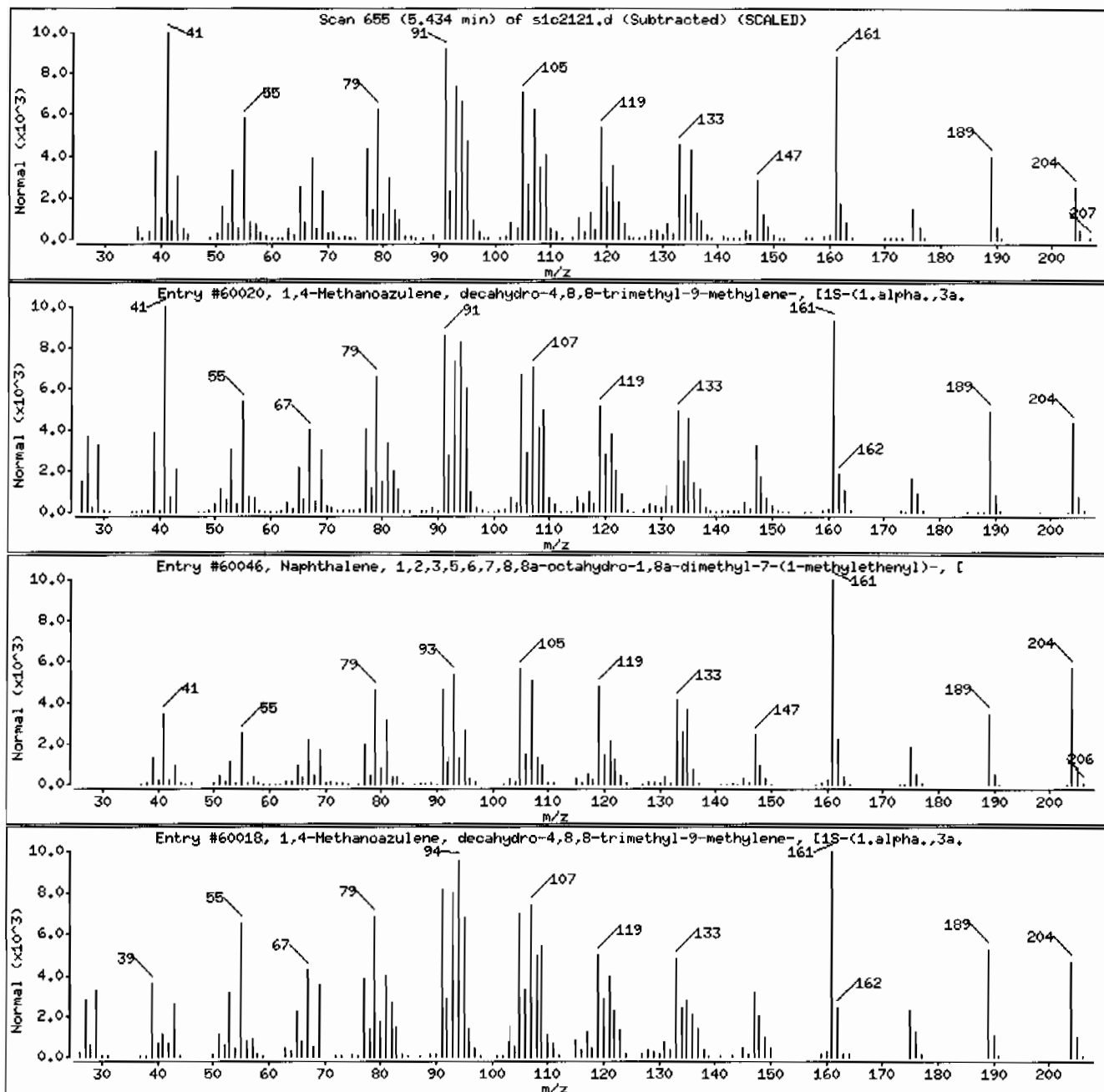
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	97	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	96	C15H24	204



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 1248370011196122811SVMI1ILANL

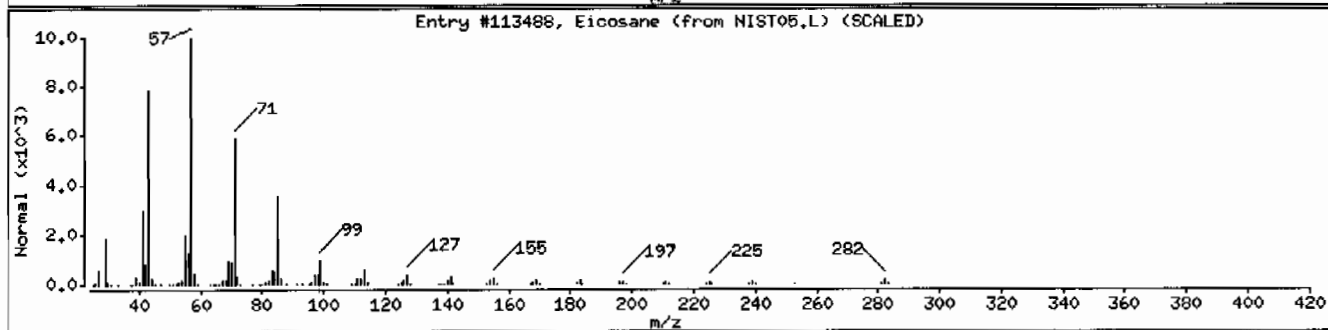
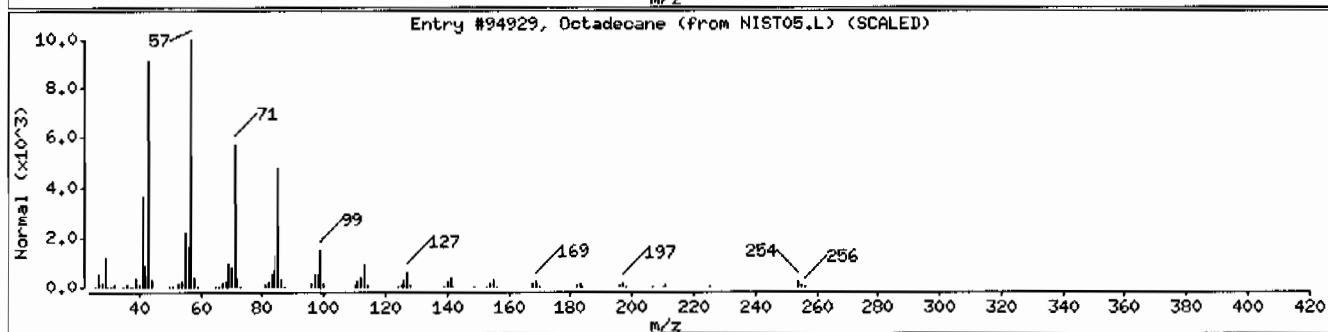
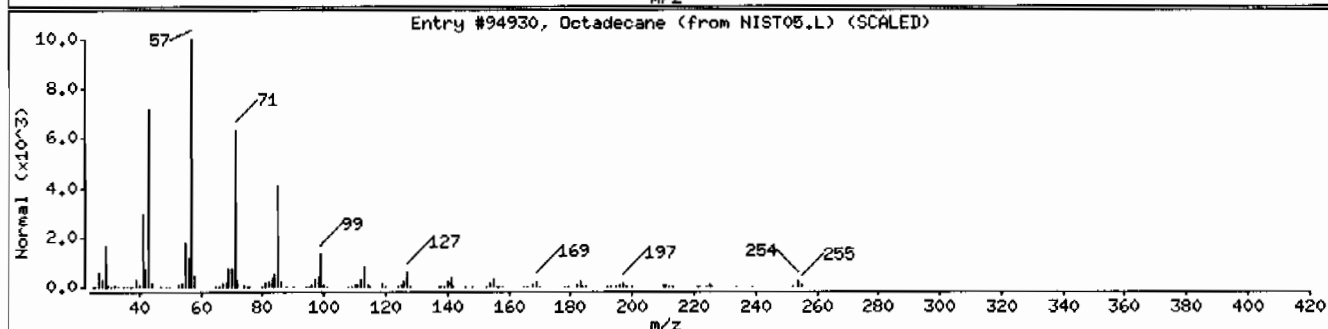
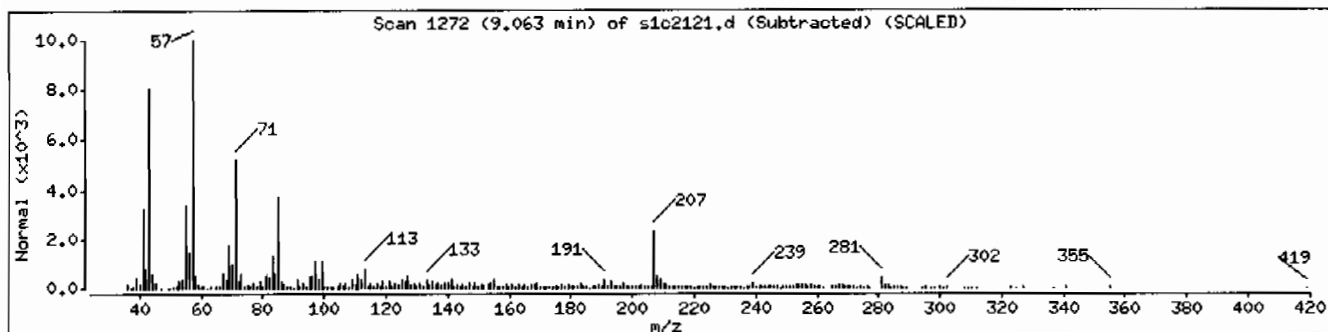
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane	593-45-3	NIST05.L	94930	98	C ₁₈ H ₃₈	254
Octadecane	593-45-3	NIST05.L	94929	98	C ₁₈ H ₃₈	254
Eicosane	112-95-8	NIST05.L	113488	98	C ₂₀ H ₄₂	282



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: I248370011196122811SVMI11LANL

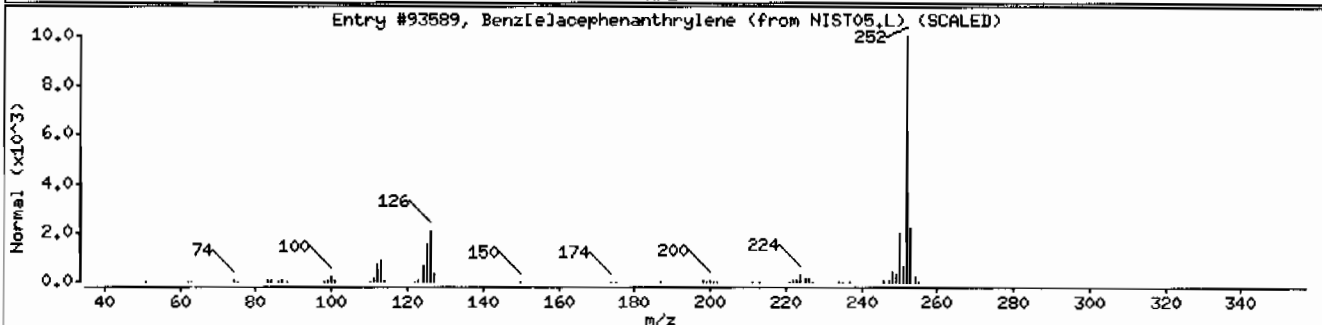
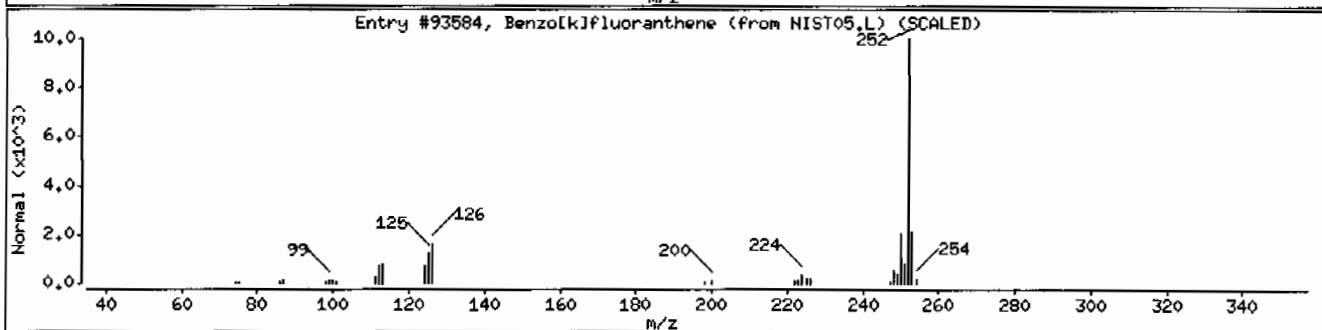
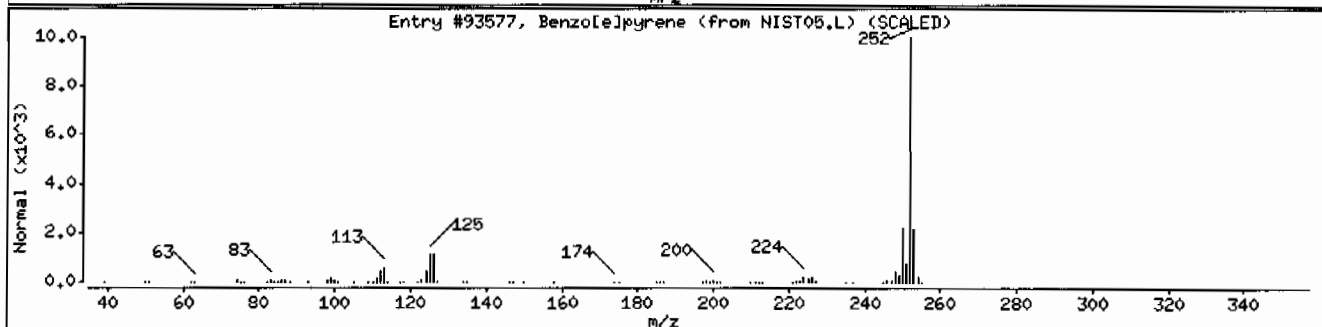
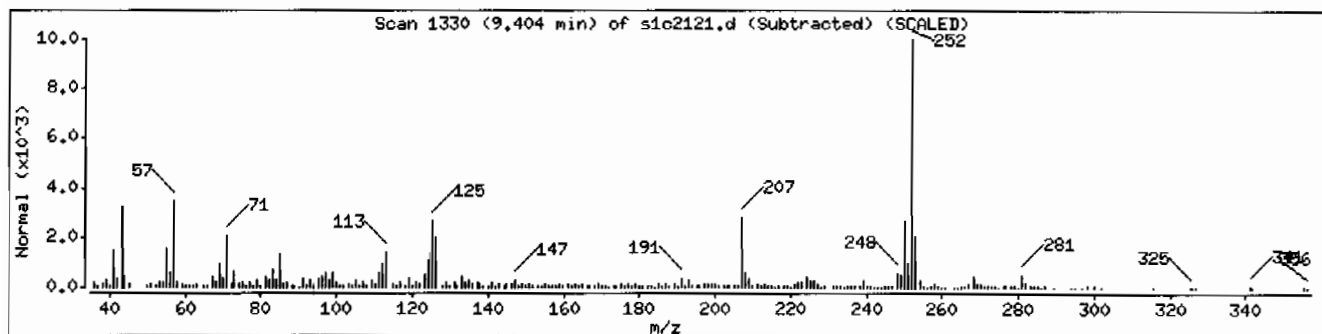
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzo[e]pyrene	192-97-2	NIST05.L	93577	98	C20H12	252
Benzo[k]fluoranthene	207-08-9	NIST05.L	93584	98	C20H12	252
Benzo[e]acephenanthrylene	205-99-2	NIST05.L	93589	96	C20H12	252



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: I248370011196122811SVH111LANL

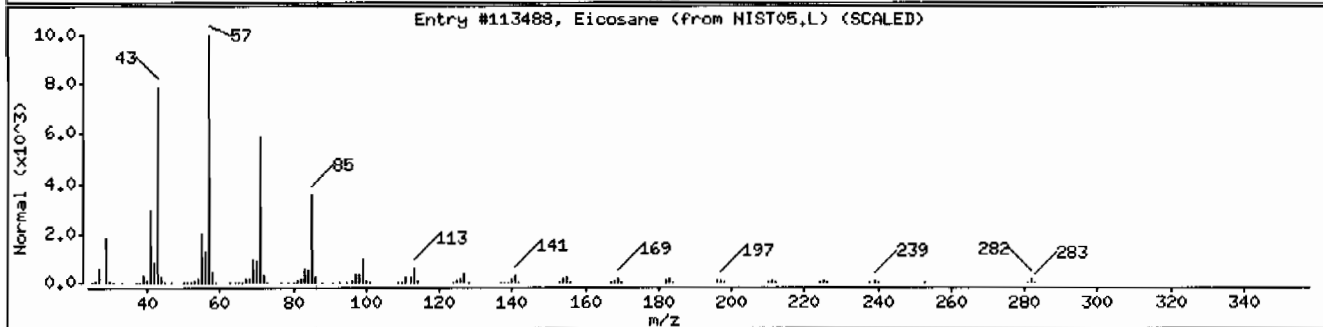
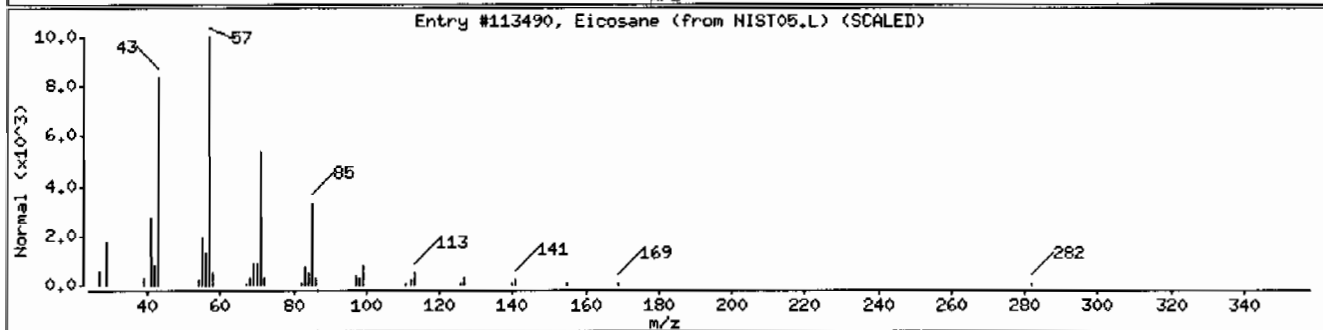
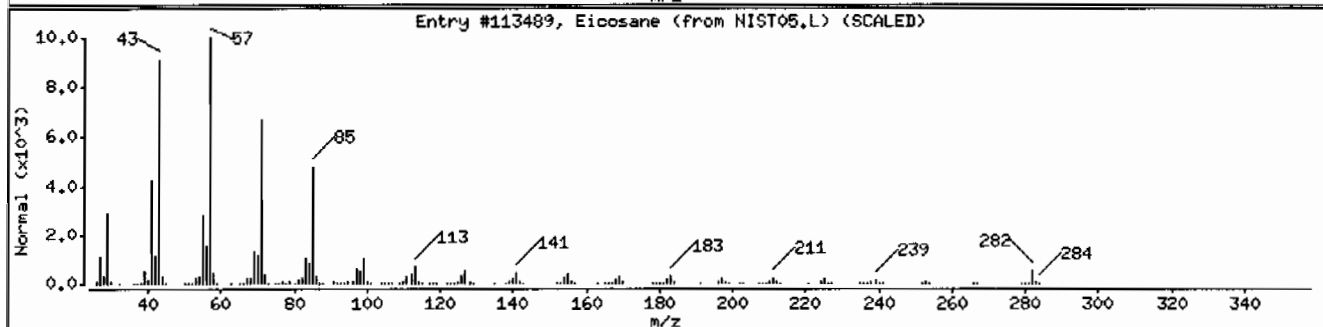
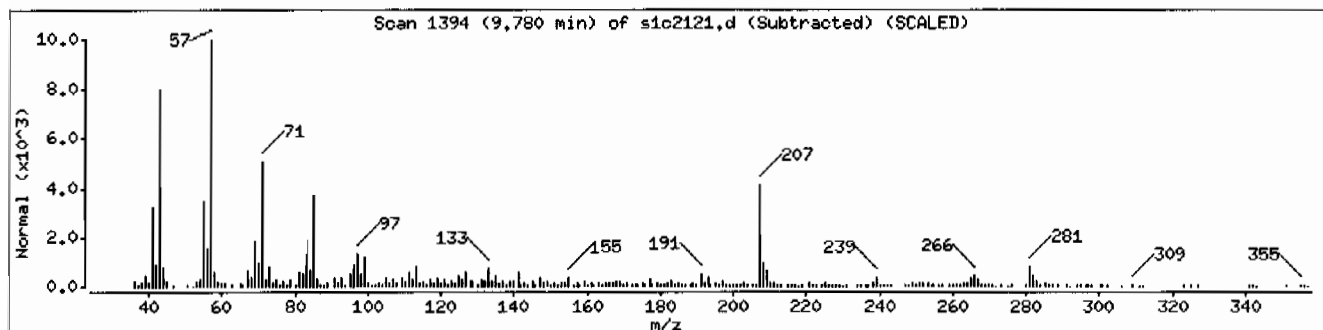
Volume Injected (uL): 0.5

Operator: AHY

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	113489	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113490	95	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113488	90	C ₂₀ H ₄₂	282



Date : 22-MAR-2010 00:31

Client ID: RE36-10-7481

Instrument: MSD1.i

Sample Info: 1248370011196122811SVH111LANL

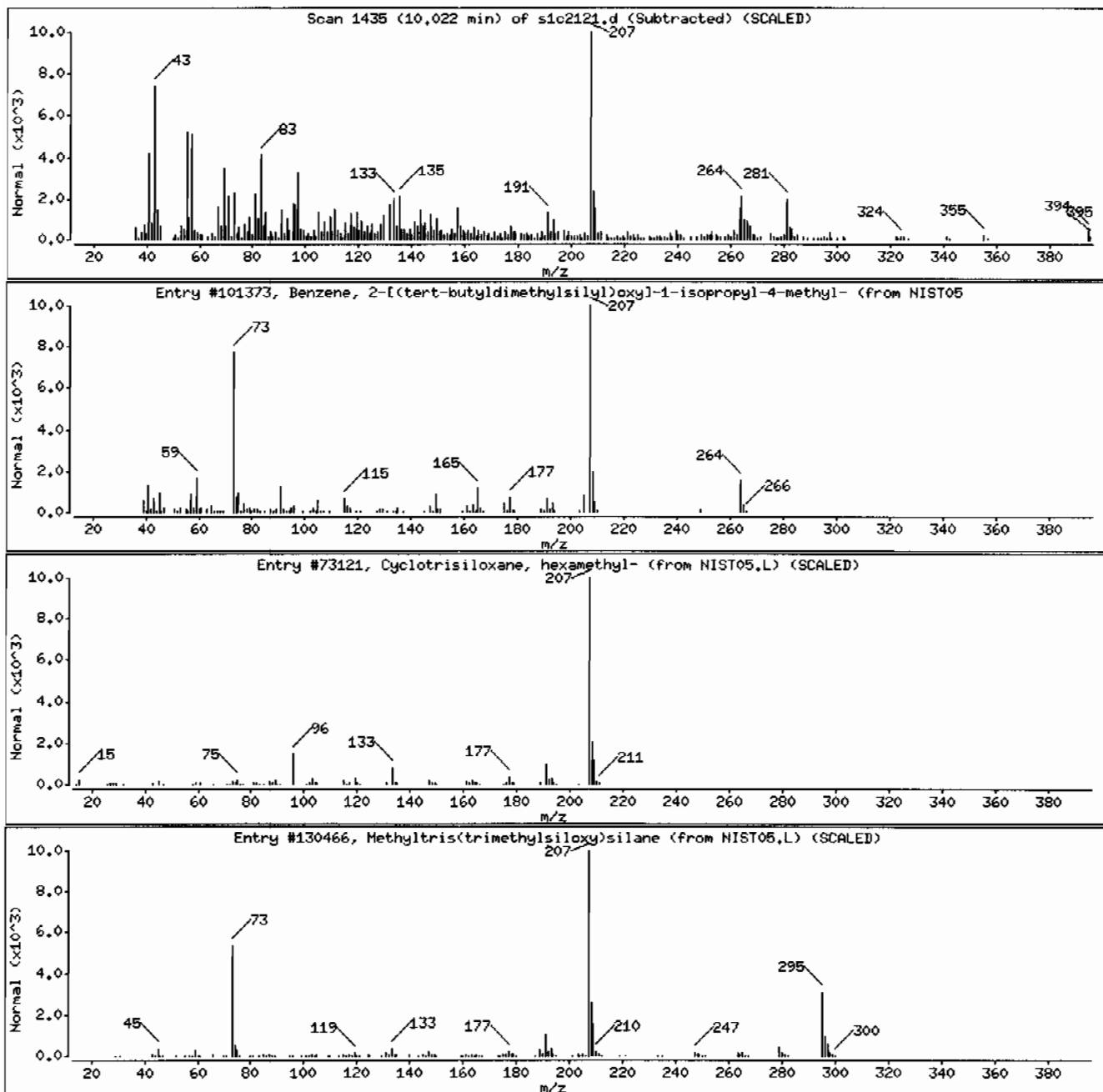
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 2-[(tert-butyldimethylsilyl)oxy]	330455-64-6	NIST05.L	101373	45	C ₁₆ H ₂₈ O ₂ Si	264
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	35	C ₆ H ₁₈ O ₃ Si ₃	222
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	35	C ₁₀ H ₃₀ O ₃ Si ₄	310



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

SDG Number: 10-2150
Lab Sample ID: 248370016

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.3
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	440	ug/kg	88.0	440
108-95-2	Phenol	U	440	ug/kg	88.0	440
95-57-8	2-Chlorophenol	U	440	ug/kg	88.0	440
106-46-7	1,4-Dichlorobenzene	U	440	ug/kg	88.0	440
621-64-7	N-Nitrosodipropylamine	U	440	ug/kg	88.0	440
59-50-7	4-Chloro-3-methylphenol	U	440	ug/kg	88.0	440
83-32-9	Acenaphthene		64.6	ug/kg	14.5	44.0
121-14-2	2,4-Dinitrotoluene	U	440	ug/kg	44.0	440
100-02-7	4-Nitrophenol	U	440	ug/kg	145	440
87-86-5	Pentachlorophenol	U	440	ug/kg	110	440
129-00-0	Pyrene		345	ug/kg	13.2	44.0
110-86-1	Pyridine	U	440	ug/kg	88.0	440
62-53-3	Aniline	U	440	ug/kg	132	440
111-44-4	bis(2-Chloroethyl) ether	U	440	ug/kg	88.0	440
541-73-1	1,3-Dichlorobenzene	U	440	ug/kg	88.0	440
100-51-6	Benzyl alcohol	U	440	ug/kg	132	440
95-50-1	1,2-Dichlorobenzene	U	440	ug/kg	88.0	440
108-60-1	bis(2-Chloroisopropyl)ether	U	440	ug/kg	88.0	440
95-48-7	o-Cresol	U	440	ug/kg	88.0	440
65794-96-9	m,p-Cresols	U	440	ug/kg	132	440
67-72-1	Hexachloroethane	U	440	ug/kg	88.0	440
98-95-3	Nitrobenzene	U	440	ug/kg	88.0	440
78-59-1	Isophorone	U	440	ug/kg	88.0	440
88-75-5	2-Nitrophenol	U	440	ug/kg	88.0	440
105-67-9	2,4-Dimethylphenol	U	440	ug/kg	154	440
111-91-1	bis(2-Chloroethoxy)methane	U	440	ug/kg	88.0	440
120-83-2	2,4-Dichlorophenol	U	440	ug/kg	88.0	440
65-85-0	Benzoic acid	U	880	ug/kg	220	880
91-20-3	Naphthalene	J	39.6	ug/kg	13.2	44.0
106-47-8	4-Chloroaniline	U	440	ug/kg	88.0	440
87-68-3	Hexachlorobutadiene	U	440	ug/kg	88.0	440
91-57-6	2-Methylnaphthalene	J	17.8	ug/kg	8.80	44.0
77-47-4	Hexachlorocyclopentadiene	U	440	ug/kg	88.0	440
88-06-2	2,4,6-Trichlorophenol	U	440	ug/kg	88.0	440
95-95-4	2,4,5-Trichlorophenol	U	440	ug/kg	88.0	440
91-58-7	2-Chloronaphthalene	U	44.0	ug/kg	14.5	44.0
88-74-4	2-Nitroaniline	U	440	ug/kg	88.0	440
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	440	ug/kg	88.0	440

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

SDG Number: 10-2150
Lab Sample ID: 248370016

Client ID: RE36-10-7482
Batch ID: 961228
Run Date: 03/22/2010 02:29
Prep Date: 03/05/2010 11:30
Data File: s1c2126.d

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 24.3
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	440	ug/kg	88.0	440
606-20-2	2,6-Dinitrotoluene	U	440	ug/kg	44.0	440
208-96-8	Acenaphthylene	U	44.0	ug/kg	13.2	44.0
51-28-5	2,4-Dinitrophenol	U	880	ug/kg	167	880
132-64-9	Dibenzofuran	U	440	ug/kg	88.0	440
84-66-2	Diethylphthalate	U	440	ug/kg	88.0	440
86-73-7	Fluorene		84.2	ug/kg	13.2	44.0
7005-72-3	4-Chlorophenylphenylether	U	440	ug/kg	88.0	440
534-52-1	2-Methyl-4,6-dinitrophenol	U	440	ug/kg	88.0	440
100-01-6	4-Nitroaniline	U	440	ug/kg	132	440
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	440	ug/kg	88.0	440
122-66-7	Azobenzene	U	440	ug/kg	88.0	440
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	440	ug/kg	88.0	440
118-74-1	Hexachlorobenzene	U	440	ug/kg	88.0	440
85-01-8	Phenanthrene		480	ug/kg	13.2	44.0
120-12-7	Anthracene		104	ug/kg	8.80	44.0
84-74-2	Di-n-butylphthalate	U	440	ug/kg	88.0	440
206-44-0	Fluoranthene		399	ug/kg	13.2	44.0
85-68-7	Butylbenzylphthalate	U	440	ug/kg	88.0	440
56-55-3	Benzo(a)anthracene		168	ug/kg	13.2	44.0
91-94-1	3,3'-Dichlorobenzidine	U	440	ug/kg	132	440
218-01-9	Chrysene		146	ug/kg	13.2	44.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	440	ug/kg	88.0	440
117-84-0	Di-n-octylphthalate	U	440	ug/kg	88.0	440
205-99-2	Benzo(b)fluoranthene		195	ug/kg	13.2	44.0
207-08-9	Benzo(k)fluoranthene	U	44.0	ug/kg	13.2	44.0
50-32-8	Benzo(a)pyrene		117	ug/kg	13.2	44.0
193-39-5	Indeno(1,2,3-cd)pyrene		49.2	ug/kg	13.2	44.0
53-70-3	Dibenzo(a,h)anthracene	U	44.0	ug/kg	13.2	44.0
191-24-2	Benzo(ghi)perylene		54.5	ug/kg	13.2	44.0
120-82-1	1,2,4-Trichlorobenzene	U	440	ug/kg	88.0	440

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	268	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.19	760	ug/kg	97	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370016

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.3
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
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	617	ug/kg	97	NJ
638-67-5	Tricosane	7.71	319	ug/kg	97	NJ
629-78-7	Heptadecane	7.9	424	ug/kg	98	NJ
7225-66-3	Tridecane, 7-hexyl-	8.09	476	ug/kg	96	NJ
544-76-3	Hexadecane	8.53	358	ug/kg	94	NJ
1000193-16-8	4-Methylbenzaldehyde N-allyl-N-ethoxycar	8.69	189	ug/kg	95	NJ
112-95-8	Eicosane	8.78	264	ug/kg	98	NJ
	Unknown	9.07	479	ug/kg		J
205-99-2	Benz[e]acephenanthrylene	9.16	452	ug/kg	96	NJ
	Unknown	9.4	439	ug/kg		J
	Unknown	9.78	407	ug/kg		J
	Unknown	10.23	329	ug/kg		J
	Unknown	10.77	213	ug/kg		J

Data File: /chem/MSD1.i/s032110.b/slc2126.d
Report Date: 22-Mar-2010 16:06

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2126.d
Lab Smp Id: 248370016 Client Smp ID: RE36-10-7482
Inj Date : 22-MAR-2010 02:29
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370016|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	24.30330	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610 (1.000)	489077	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469 (1.000)	1890751	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704 (1.000)	972504	40.0000	
* 67 Phenanthrene-d10	188	6.710	6.710 (1.000)	1709237	40.0000	
* 91 Chrysene-d12	240	8.292	8.292 (1.000)	1233626	40.0000	
* 98 Perylene-d12	264	9.527	9.522 (1.000)	717021	40.0000	
\$ 3 2-Fluorophenol	112	2.834	2.822 (0.785)	856250	67.9894	2990
\$ 5 Phenol-d5	99	3.351	3.346 (0.928)	1067626	69.6083	3060
\$ 20 Nitrobenzene-d5	82	3.969	3.975 (0.889)	409823	35.3401	1550
\$ 39 2-Fluorobiphenyl	172	5.204	5.204 (0.912)	672972	25.0565	1100
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251 (1.096)	178859	56.0978	2470
\$ 81 p-Terphenyl-d14	244	7.628	7.622 (0.920)	770737	37.4750	1650

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
47 Acenaphthene	154	5.728	5.728	(1.004)	34898	1.46908	64.6
79 Pyrene	202	7.569	7.569	(0.913)	274660	7.84606	345
30 Naphthalene	128	4.481	4.481	(1.004)	34118	0.89970	39.6(a)
34 2-Methylnaphthalene	142	4.957	4.957	(1.111)	9751	0.40502	17.8(a)
53 Fluorene	166	6.086	6.087	(1.067)	51205	1.91344	84.2
68 Phenanthrene	178	6.722	6.722	(1.002)	403179	10.9169	480
69 Anthracene	178	6.751	6.751	(1.006)	85899	2.36845	104
76 Fluoranthene	202	7.433	7.434	(1.108)	344276	9.07038	399
89 Benzo(a)anthracene	228	8.280	8.281	(0.999)	111031	3.82897	168
92 Chrysene	228	8.310	8.310	(1.002)	90207	3.32900	146
95 Benzo(b)fluoranthene	252	9.133	9.133	(0.959)	87457	4.43517	195
97 Benzo(a)pyrene	252	9.463	9.463	(0.993)	41928	2.65550	117
99 Indeno(1,2,3-cd)pyrene	276	10.857	10.869	(1.140)	15008	1.11796	49.2
101 Benzo(ghi)perylene	276	11.274	11.286	(1.183)	13497	1.23959	54.5

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: slc2126.d

Report Date: 03/22/2010 11:59

Lab. ID: 248370016

SampleType: SAMPLE

Injection Date: 22-MAR-2010 02:29

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370016|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	50857	3.35	3.40	80-120	100	()
93	3831	3.39	3.40	233-293	8	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	58333	3.97	3.86	80-120	100	(T)
42	40711	3.97	3.86	48-108	70	(T)

30	Naphthalene		CAS#: 91-20-3			
128	34118	4.48	4.48	80-120	100	()
129	3971	4.48	4.48	0- 41	12	()
127	4261	4.48	4.48	0- 44	12	()

34	2-Methylnaphthalene		CAS#: 91-57-6			
142	9751	4.96	4.96	80-120	100	()
141	8493	4.96	4.96	57-117	87	()

40	2-Chloronaphthalene		CAS#: 91-58-7			
162	18553	5.44	5.30	80-120	100	(T)
164	1227	5.44	5.30	2- 62	7	(T)
127	2055	5.44	5.30	9- 69	11	(T)

42	o-Nitroaniline		CAS#: 88-74-4			
65	27259	5.43	5.37	80-120	100	(T)
92	28624	5.43	5.37	33- 93	105	(QT)
138	2693	5.44	5.37	80-140	10	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
41 m-Nitroaniline			CAS#:	99-09-2		
138	484	5.71	5.66	80-120	100	()
92	4917	5.70	5.66	71-131	1015	(Q)
108	18261	5.70	5.66	0- 40	3768	(Q)
<hr/>						
43 Dimethylphthalate			CAS#:	131-11-3		
163	176974	5.70	5.49	80-120	100	(T)
164	972504	5.70	5.49	0- 40	550	(QT)
<hr/>						
44 2,6-Dinitrotoluene			CAS#:	606-20-2		
165	125302	5.70	5.54	80-120	100	(T)
63	2305	5.70	5.54	50-110	2	(QT)
<hr/>						
45 Acenaphthylene			CAS#:	208-96-8		
152	17066	5.73	5.61	80-120	100	(T)
151	6181	5.73	5.61	0- 49	36	(T)
153	37294	5.73	5.61	0- 43	219	(QT)
<hr/>						
47 Acenaphthene			CAS#:	83-32-9		
154	34898	5.73	5.73	80-120	100	()
153	37376	5.73	5.73	75-135	107	()
152	17342	5.73	5.73	18- 78	50	()
<hr/>						
50 2,4-Dinitrotoluene			CAS#:	121-14-2		
165	125302	5.70	5.83	80-120	100	(T)
89	1706	5.70	5.82	38- 98	1	(QT)
63	2305	5.70	5.82	20- 80	2	(QT)
<hr/>						
53 Fluorene			CAS#:	86-73-7		
166	51205	6.09	6.09	80-120	100	()
165	44448	6.09	6.09	61-121	87	()
167	7687	6.09	6.09	0- 43	15	()
<hr/>						
56 p-Nitroaniline			CAS#:	100-01-6		
138	492	6.10	6.09	80-120	100	()
108	6504	6.08	6.09	29- 89	1322	(Q)
92	1910	6.06	6.09	14- 74	388	(Q)
<hr/>						
68 Phenanthrene			CAS#:	85-01-8		
178	403179	6.72	6.72	80-120	100	()
179	60898	6.72	6.72	0- 45	15	()
176	73372	6.72	6.72	0- 48	18	()
<hr/>						
69 Anthracene			CAS#:	120-12-7		
178	85899	6.75	6.75	80-120	100	()
179	19982	6.75	6.75	0- 45	23	()
176	15687	6.75	6.75	0- 48	18	()
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
76 Fluoranthene		CAS#: 206-44-0				
202	344276	7.43	7.43	80-120	100	()
203	59795	7.43	7.43	0- 47	17	()
101	50766	7.43	7.43	0- 45	15	()

79 Pyrene		CAS#: 129-00-0				
202	274660	7.57	7.57	80-120	100	()
200	58796	7.57	7.57	0- 49	21	()
101	55220	7.57	7.56	0- 49	20	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	111031	8.28	8.28	80-120	100	()
226	25104	8.28	8.28	0- 55	23	()
229	28190	8.28	8.28	0- 49	25	()

92 Chrysene		CAS#: 218-01-9				
228	90207	8.31	8.31	80-120	100	()
229	20620	8.31	8.31	0- 49	23	()
226	28244	8.31	8.31	0- 58	31	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	87457	9.13	9.13	80-120	100	()
253	15538	9.13	9.13	0- 52	18	()
125	17715	9.13	9.13	0- 46	20	()

96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	87767	9.13	9.16	80-120	100	()
253	15538	9.13	9.16	0- 51	18	()
125	16337	9.13	9.16	0- 45	19	()

97 Benzo(a)pyrene		CAS#: 50-32-8				
252	41928	9.46	9.46	80-120	100	()
253	9564	9.46	9.46	0- 52	23	()
125	8153	9.46	9.46	0- 45	19	()

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	15008	10.86	10.87	80-120	100	()
138	6460	10.86	10.87	11- 71	43	()

100 Dibenzo(a,h)anthracene		CAS#: 53-70-3				
278	4839	10.86	10.87	80-120	100	()
139	2953	10.85	10.87	0- 53	61	(Q)

101 Benzo(ghi)perylene		CAS#: 191-24-2				
276	13497	11.27	11.29	80-120	100	()
138	5956	11.27	11.28	1- 61	44	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2126.d
Lab Smp Id: 248370016 Client Smp ID: RE36-10-7482
Inj Date : 22-MAR-2010 02:29
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370016|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	24.30330	% moisture

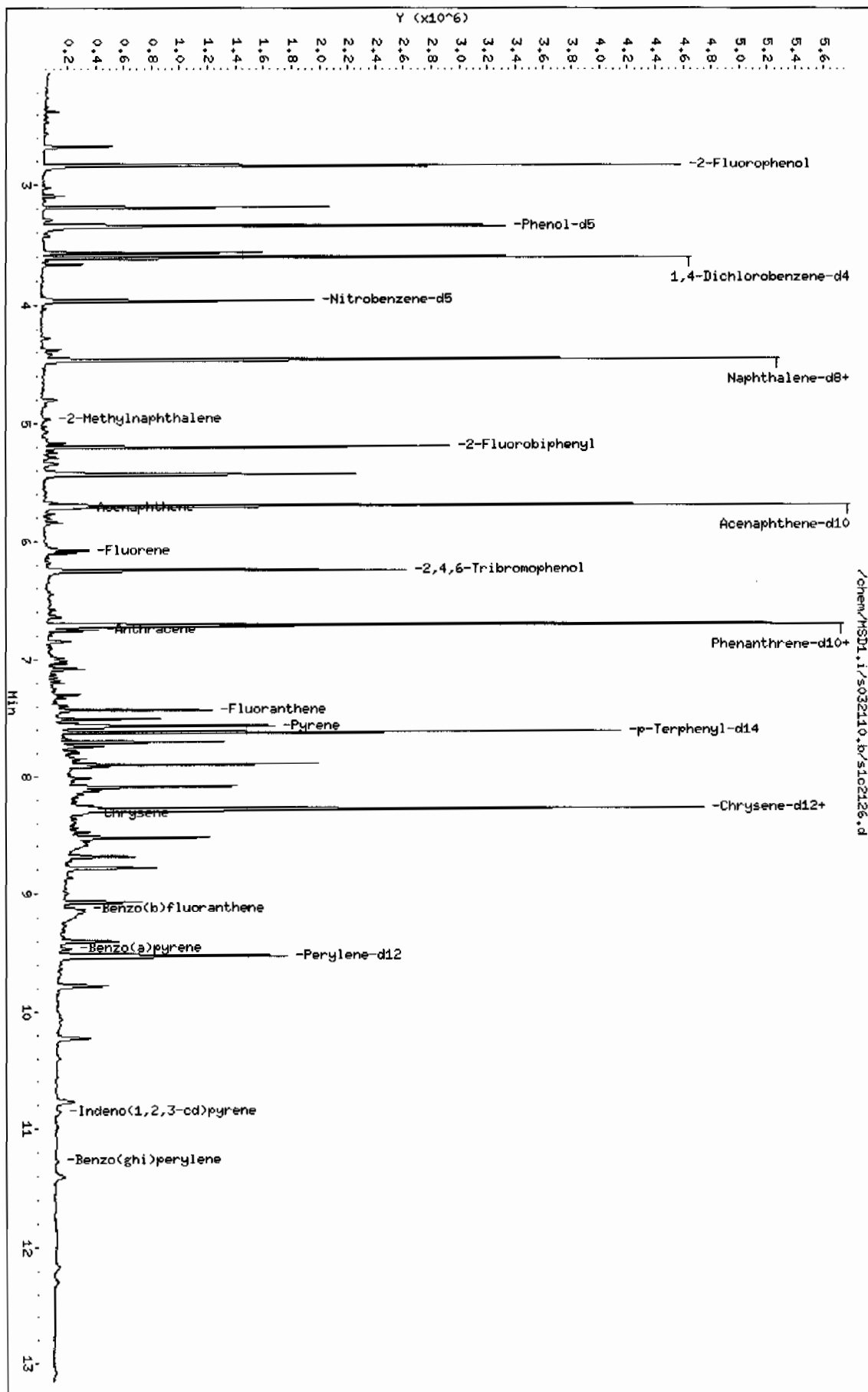
Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2963979	40.000
* 91 Chrysene-d12	8.292	4439749	40.000
* 98 Perylene-d12	9.527	2066787	40.000

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

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.669	451948	6.09920608	268	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.193	1280558	17.2816000	760	97	NIST05.L	15188	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
3.569	1038757	14.0184137	617	97	NIST05.L	15369	10
Tricosane					CAS #: 638-67-5		
7.710	804391	7.24717453	319	97	NIST05.L	139233	91
Heptadecane					CAS #: 629-78-7		
7.898	1069187	9.63286213	424	98	NIST05.L	85523	91
Tridecane, 7-hexyl-					CAS #: 7225-66-3		
8.092	1201875	10.8283167	476	96	NIST05.L	104273	91
Hexadecane					CAS #: 544-76-3		
8.527	903596	8.14096381	358	94	NIST05.L	76090	91
4-Methylbenzaldehyde N-allyl-N-ethoxycar					CAS #: 1000193-16-8		
8.686	476123	4.28964112	189	95	NIST05.L	89205	91
Eicosane					CAS #: 112-95-8		
8.780	664911	5.99052516	264	98	NIST05.L	113490	91
Unknown					CAS #:		
9.069	562252	10.8816551	479	0		0	98
Benz[e]acephenanthrylene					CAS #: 205-99-2		
9.157	531290	10.2824284	452	96	NIST05.L	93589	98
Unknown					CAS #:		
9.398	515674	9.98021350	439	0		0	98
Unknown					CAS #:		
9.780	478280	9.25648740	407	0		0	98
Unknown					CAS #:		
10.233	386853	7.48704141	329	0		0	98
Unknown					CAS #:		
10.768	249625	4.83116255	212	0		0	98



Data File: /chem/MSD1.i/s032110.b/s102126.d
Date: 22-MAR-2010 02:29
Client ID: RE36-10-7482
Sample Info: 1248370016196122811SWH11LNL
Volume Injected (uL): 0.5
Column Phase: 3M DB-SMS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

Date: 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 1248370016196122811SVH11/LANL

Volume Injected (uL): 0.5

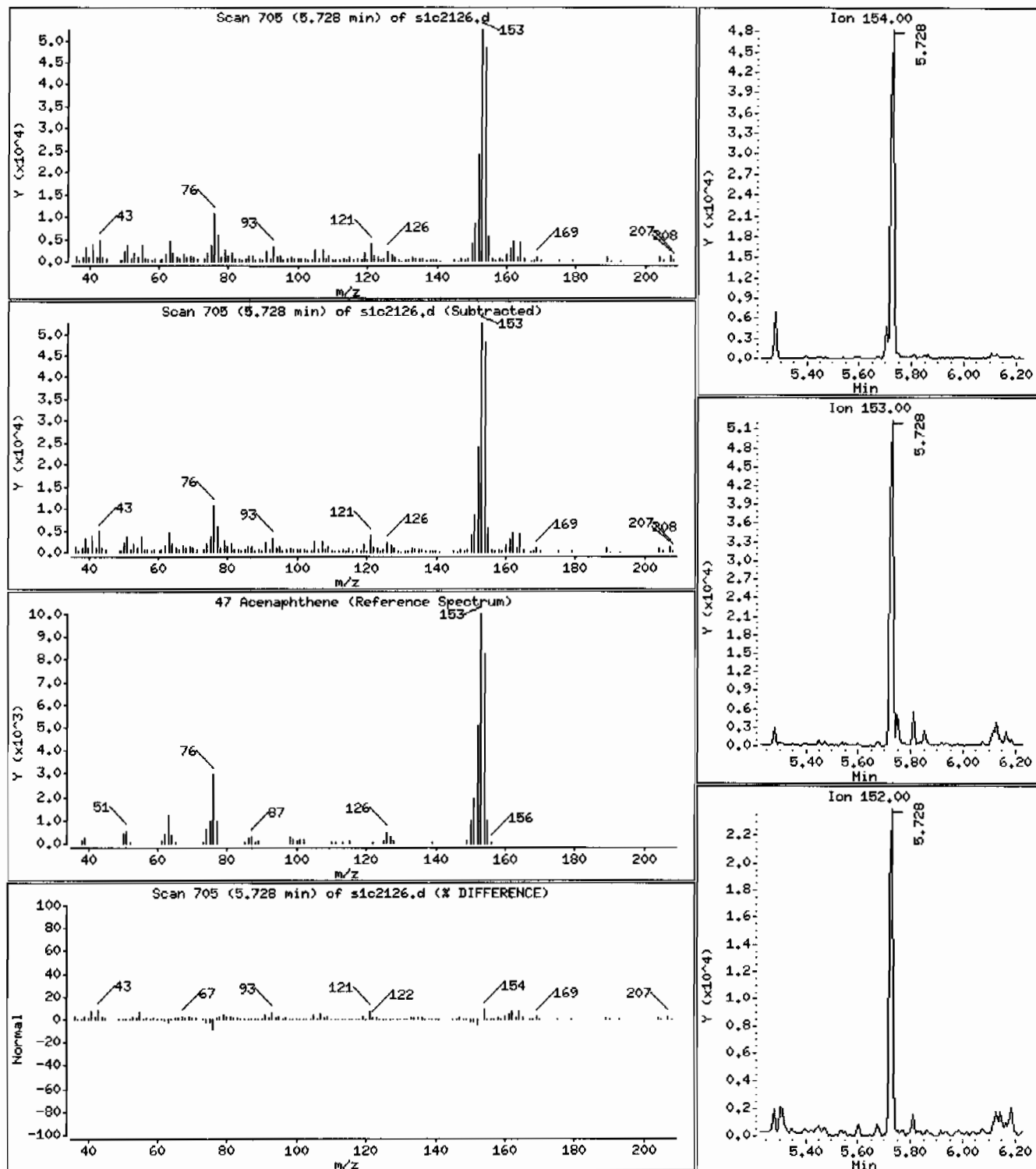
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

47 Acenaphthene

Concentration: 64.6 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 1248370016196122811SVMI11LANL

Volume Injected (uL): 0.5

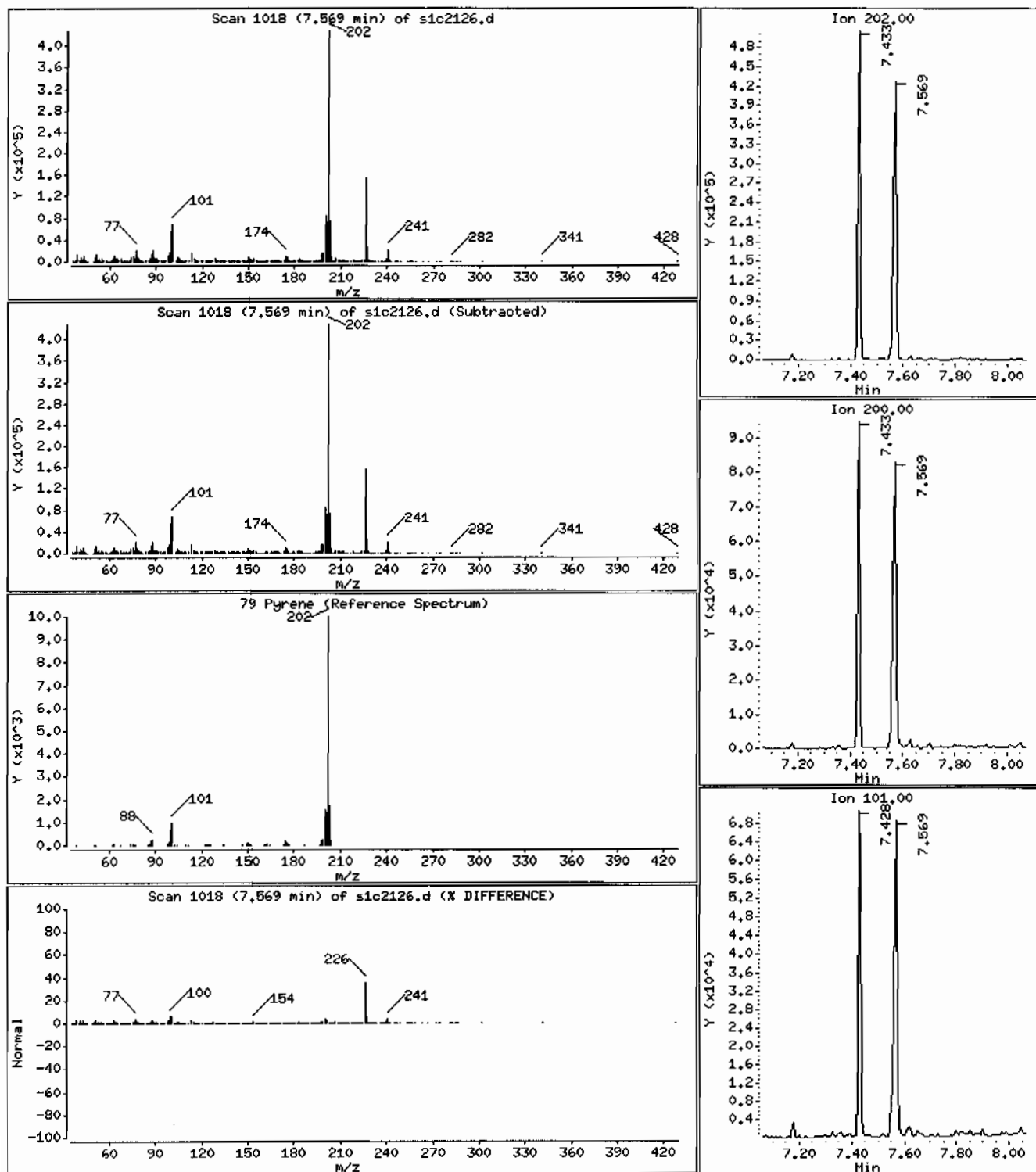
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 345 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 1248370016196122811|SVMI1|LANL

Volume Injected (uL): 0.5

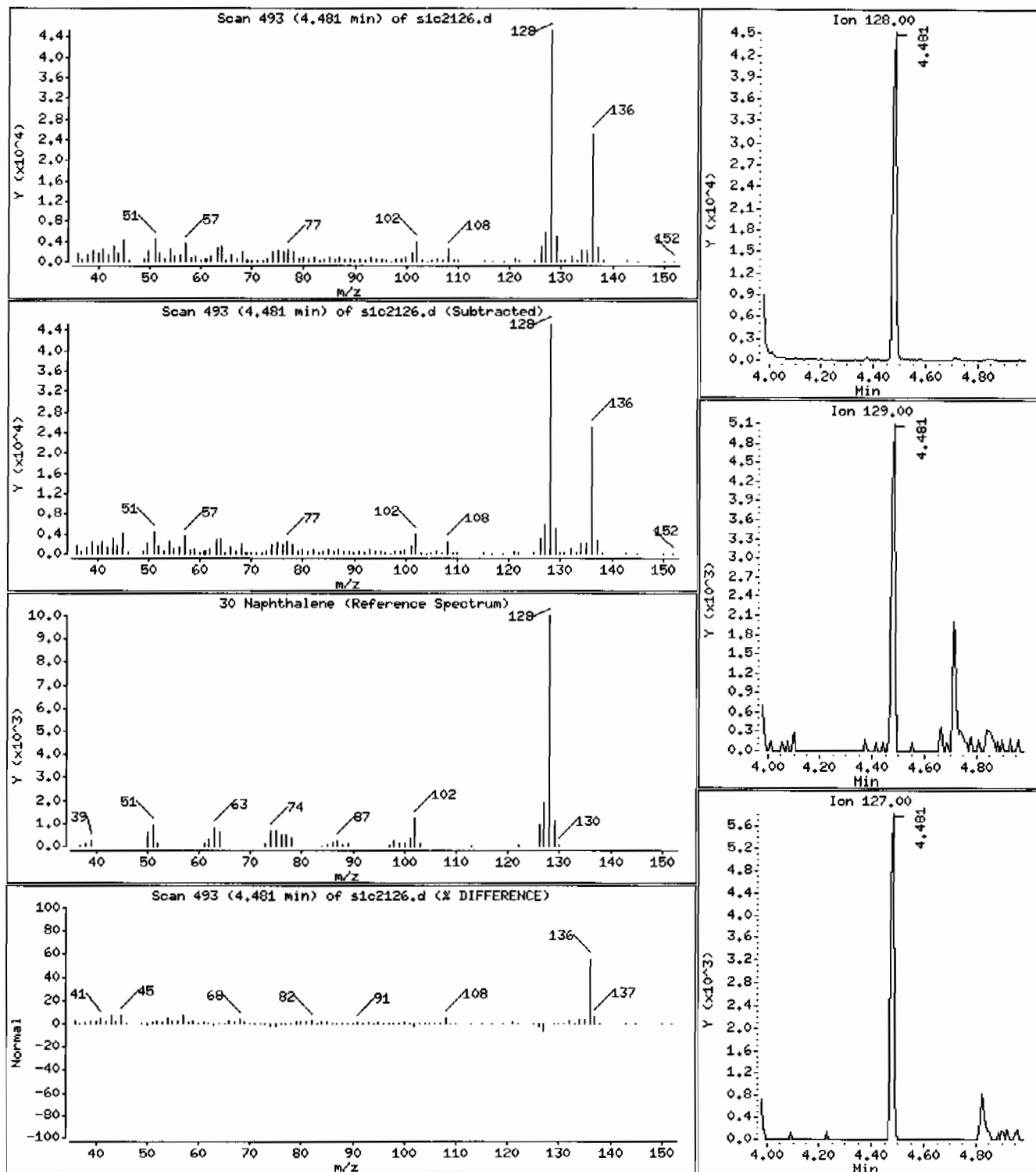
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

30 Naphthalene

Concentration: 39.6 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: I2483700161961228111SVH111LANL

Volume Injected (uL): 0.5

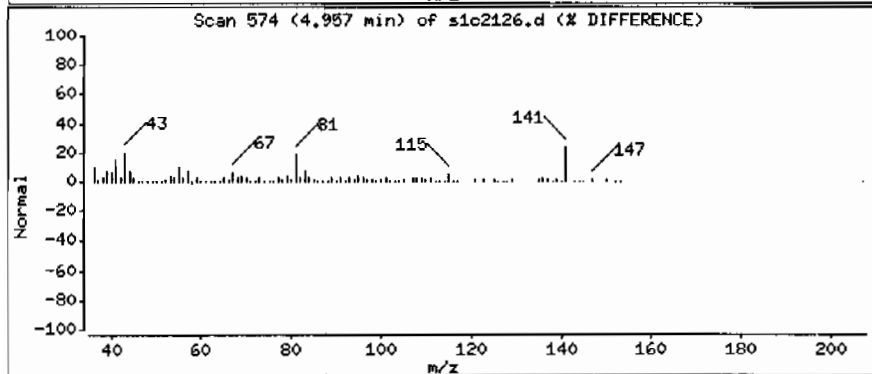
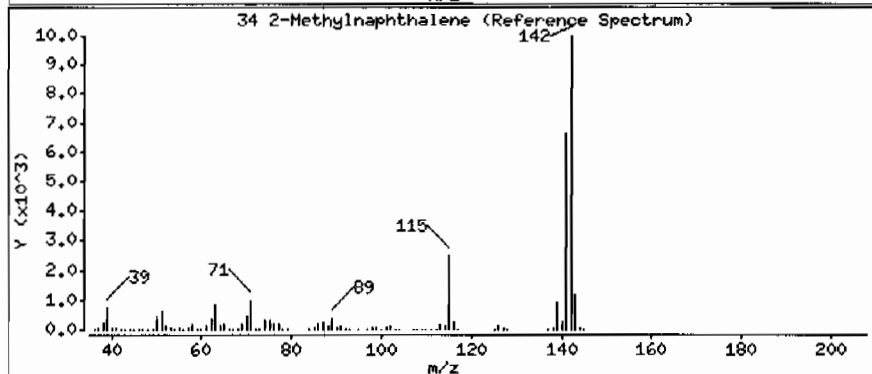
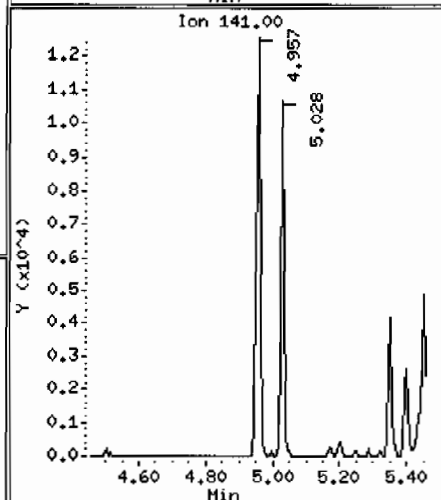
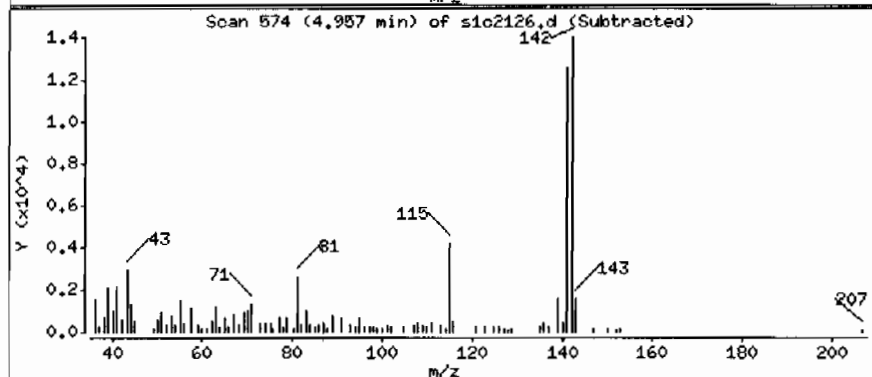
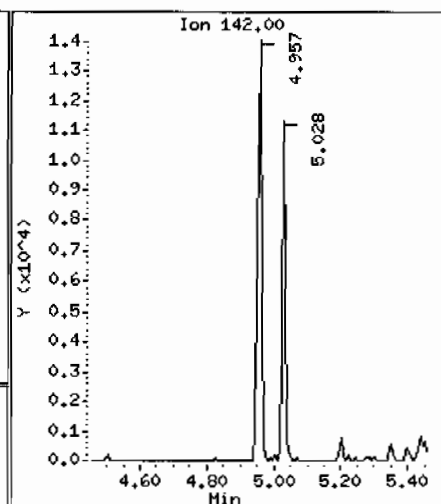
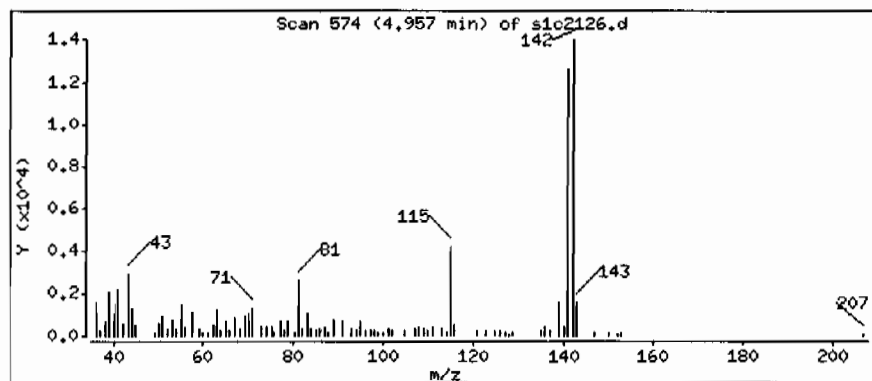
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

34 2-Methylnaphthalene

Concentration: 17.8 ug/Kg



Date: 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 1248370016196122811SVH111LANL

Volume Injected (uL): 0.5

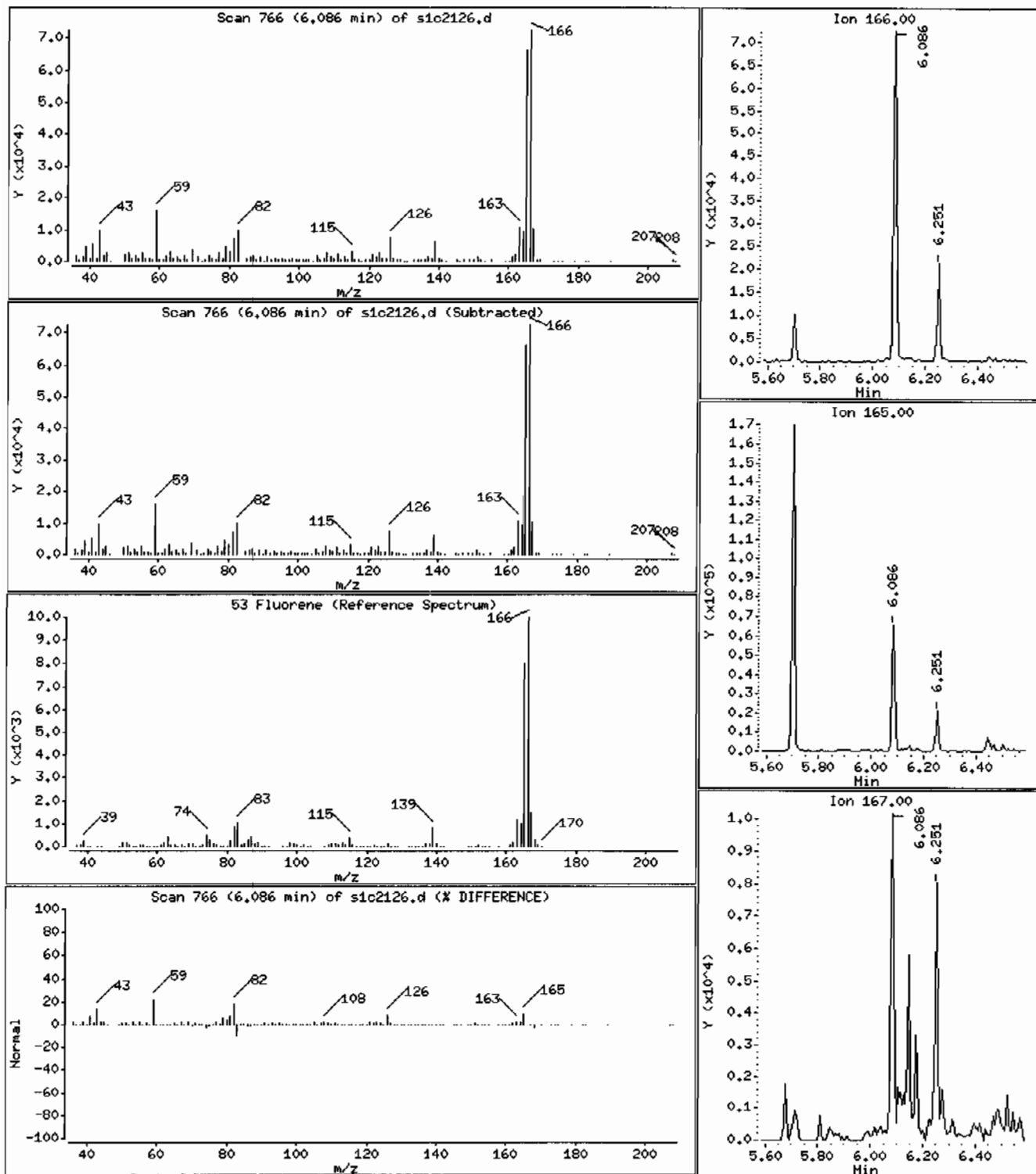
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

53 Fluorene

Concentration: 84.2 ug/Kg



Date: 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 1248370016196122811SVH11LANL

Volume Injected (uL): 0.5

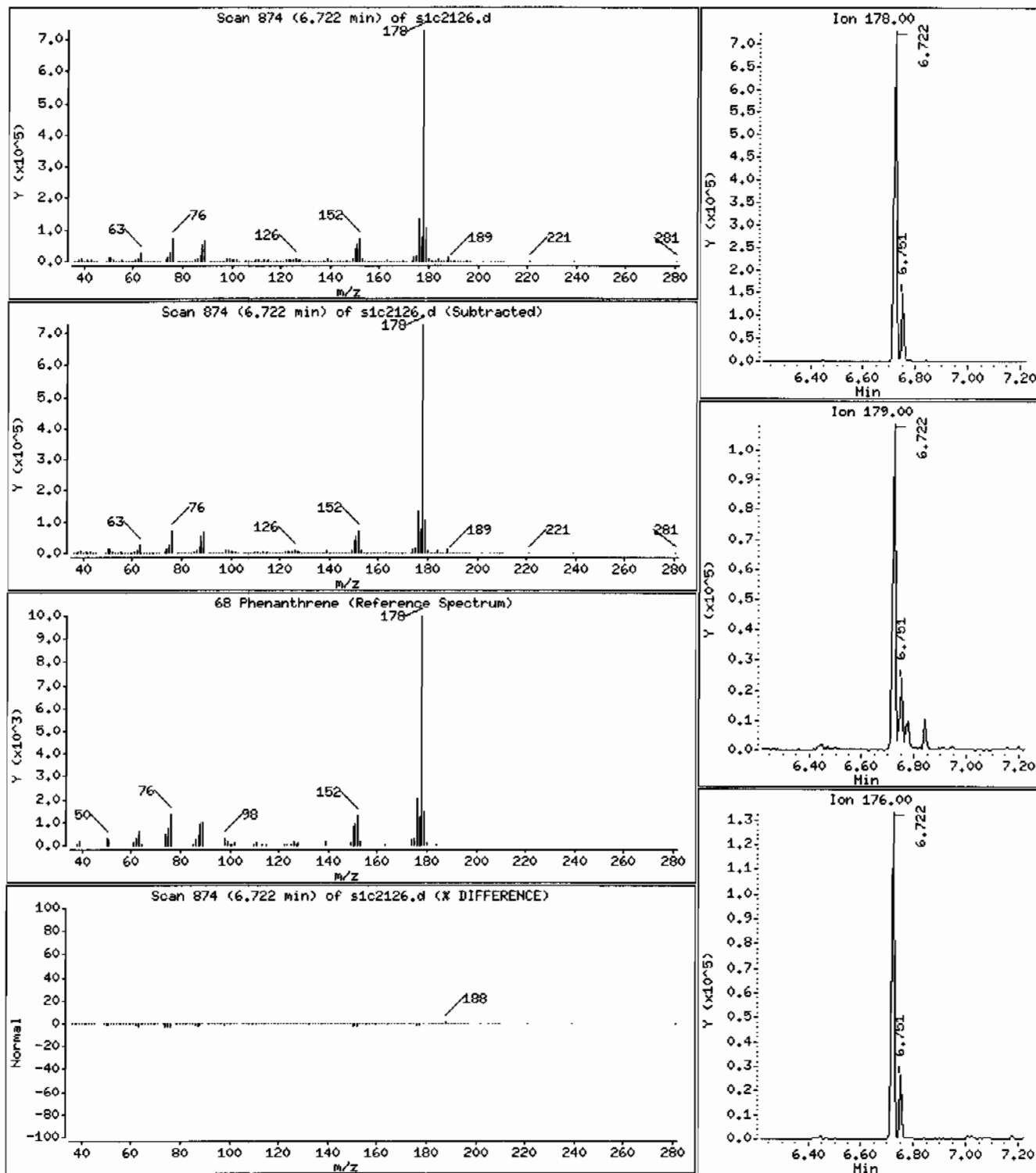
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 480 ug/Kg



Date: 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 1248370016196122811SVH11ILANL

Volume Injected (uL): 0.5

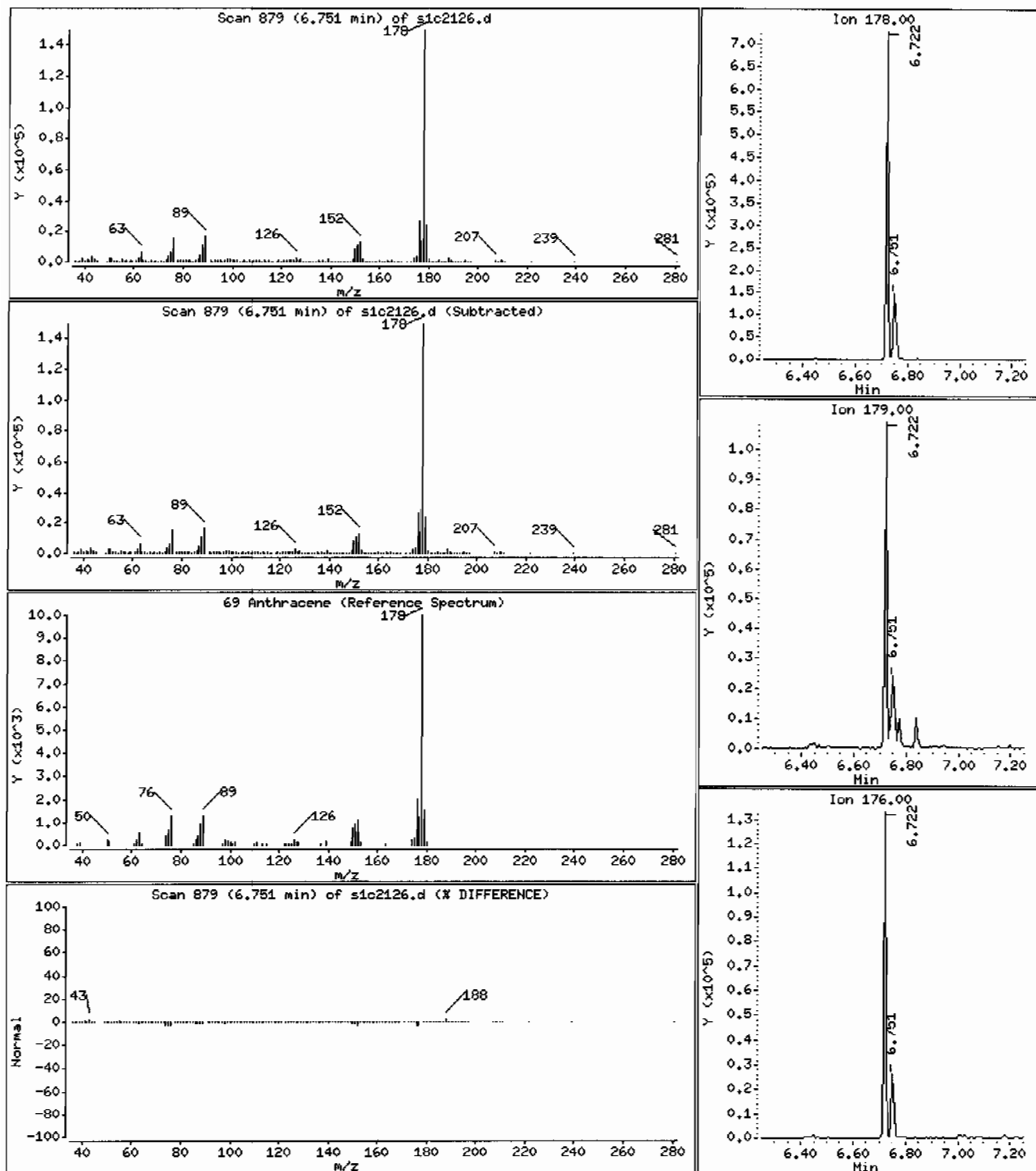
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

69 Anthracene

Concentration: 104 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: I2483700161961228111SVH111LANL

Volume Injected (uL): 0.5

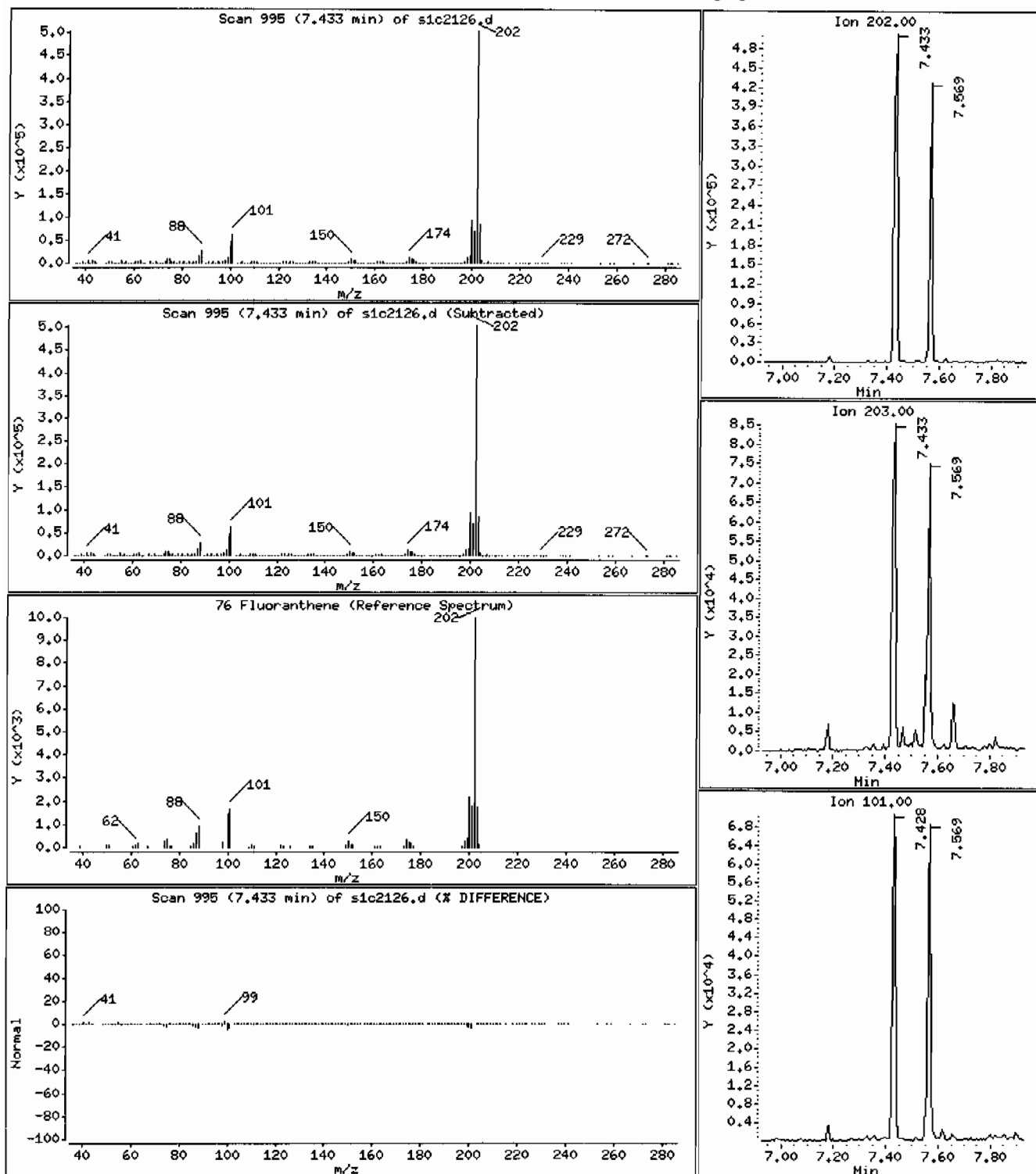
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 399 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 1248370016196122811SVH111LANL

Volume Injected (uL): 0.5

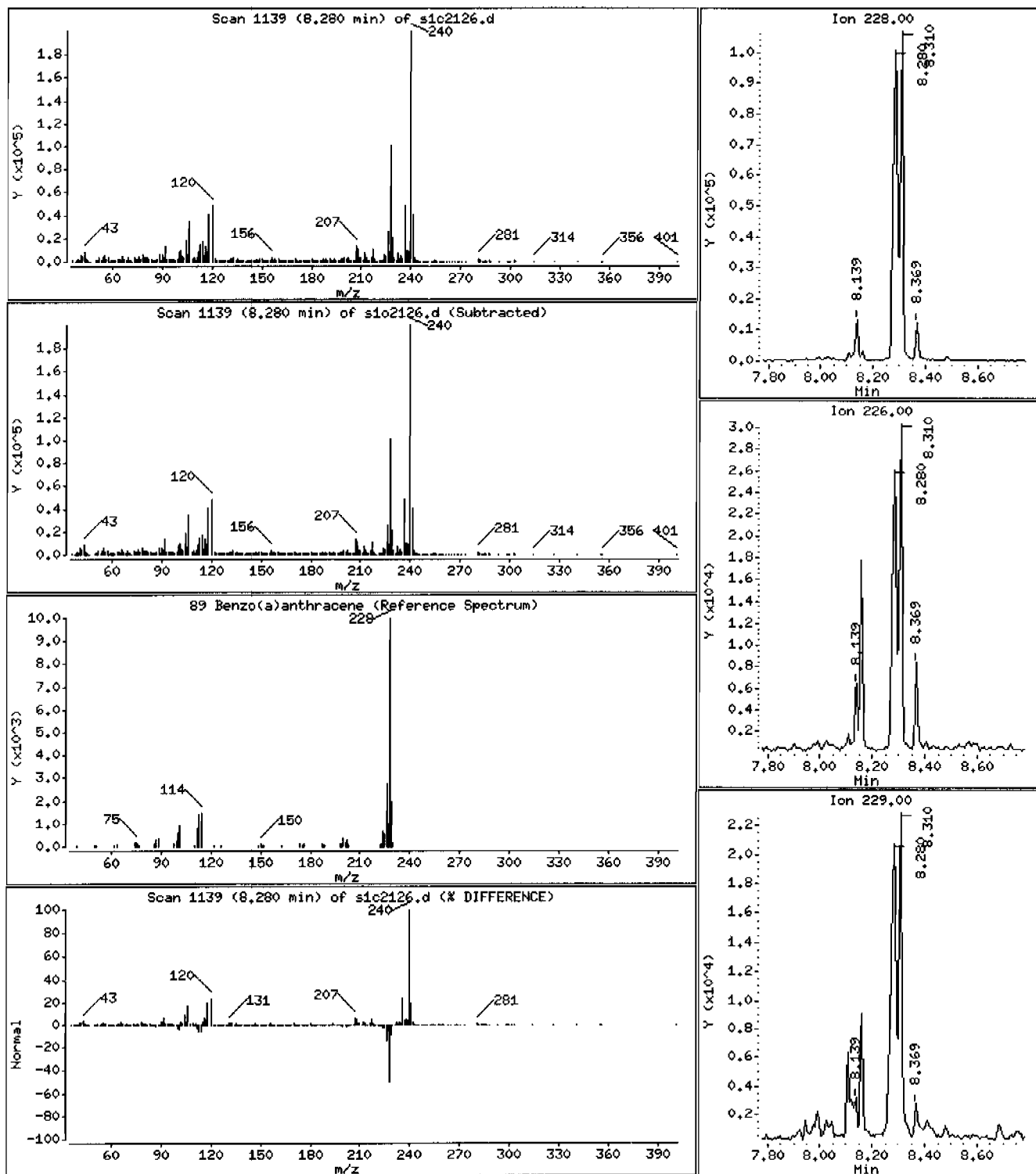
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 168 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.1

Sample Info: I248370016196122811SVMI11LANL

Volume Injected (uL): 0.5

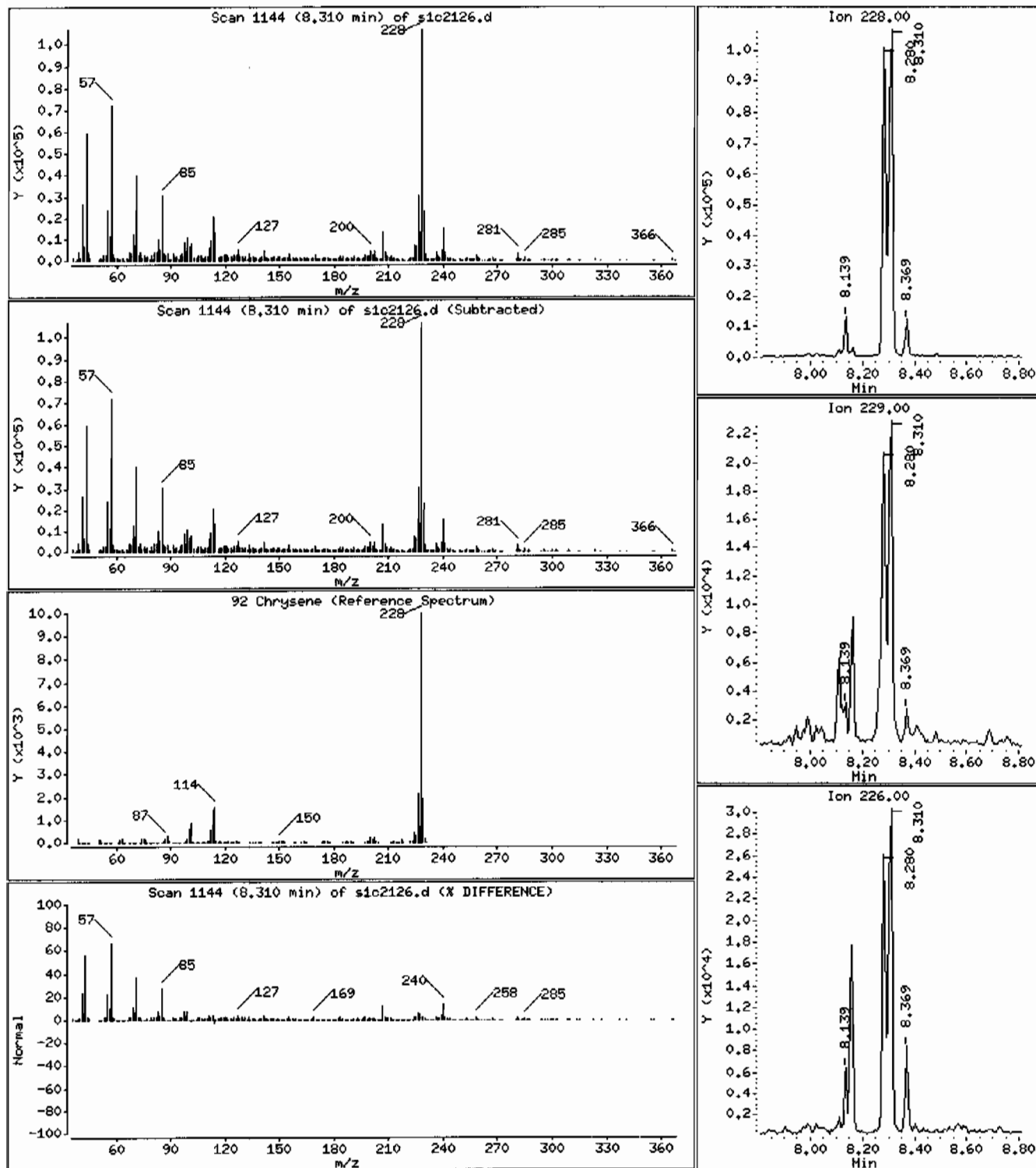
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 146 ug/Kg



Data File: /chem/MSD1.i/s032110.b/s1c2126.d

Page 12

Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 1248370016196122811ISVM11ILANL

Volume Injected (uL): 0.5

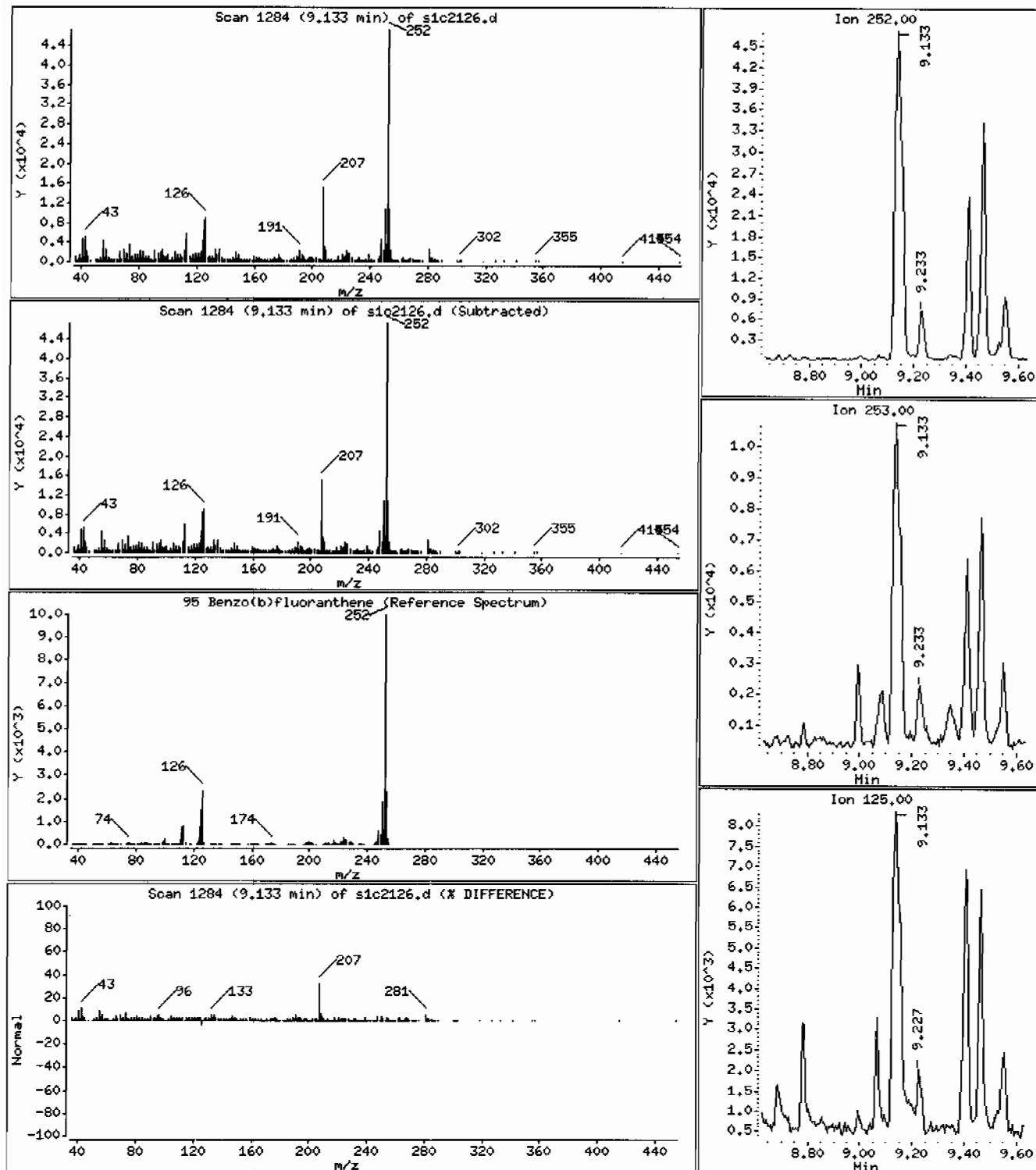
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 195 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 12483700161961228111SVH111LANL

Volume Injected (uL): 0.5

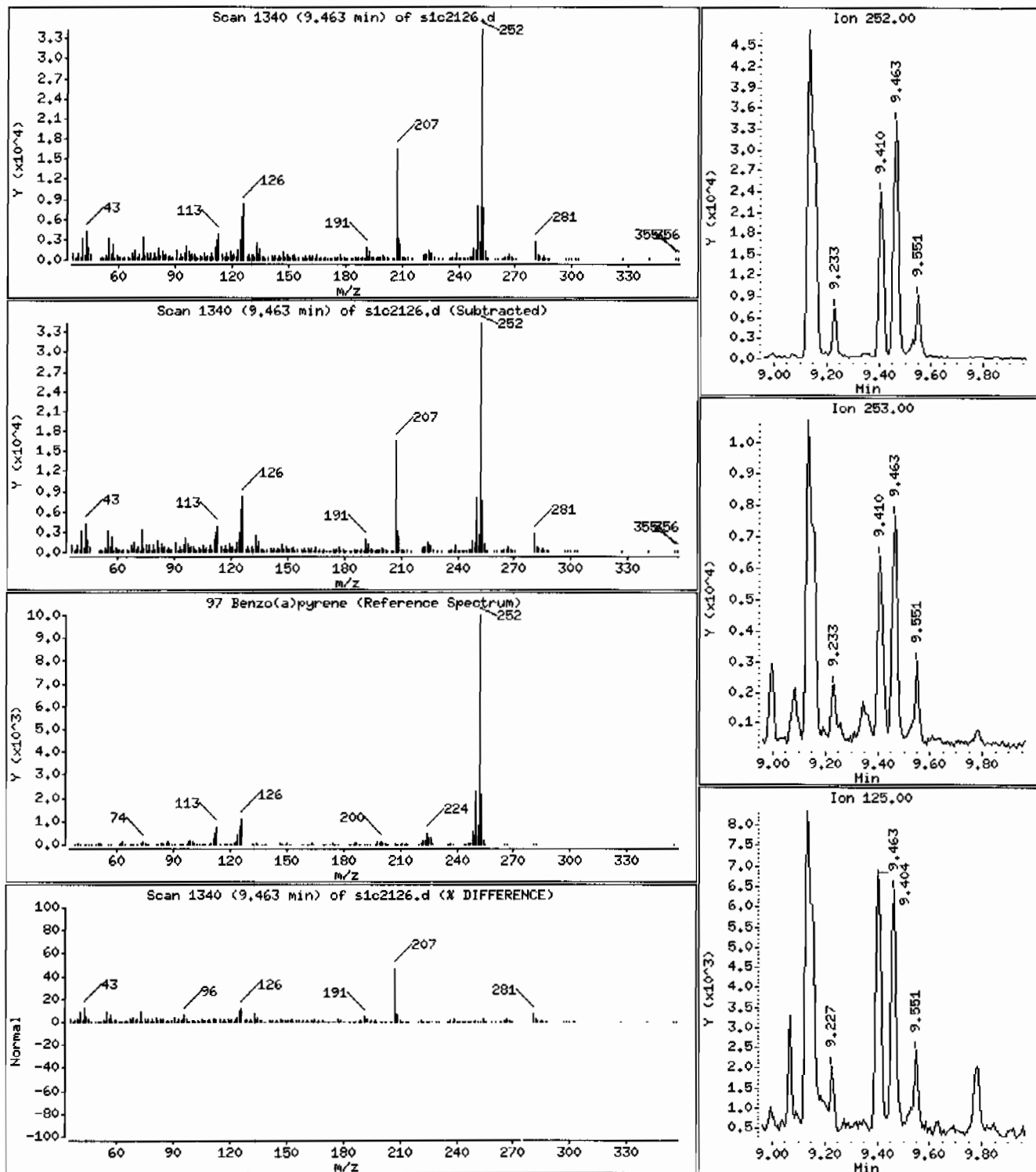
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 117 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 1248370016196122811SVMI11LANL

Volume Injected (uL): 0.5

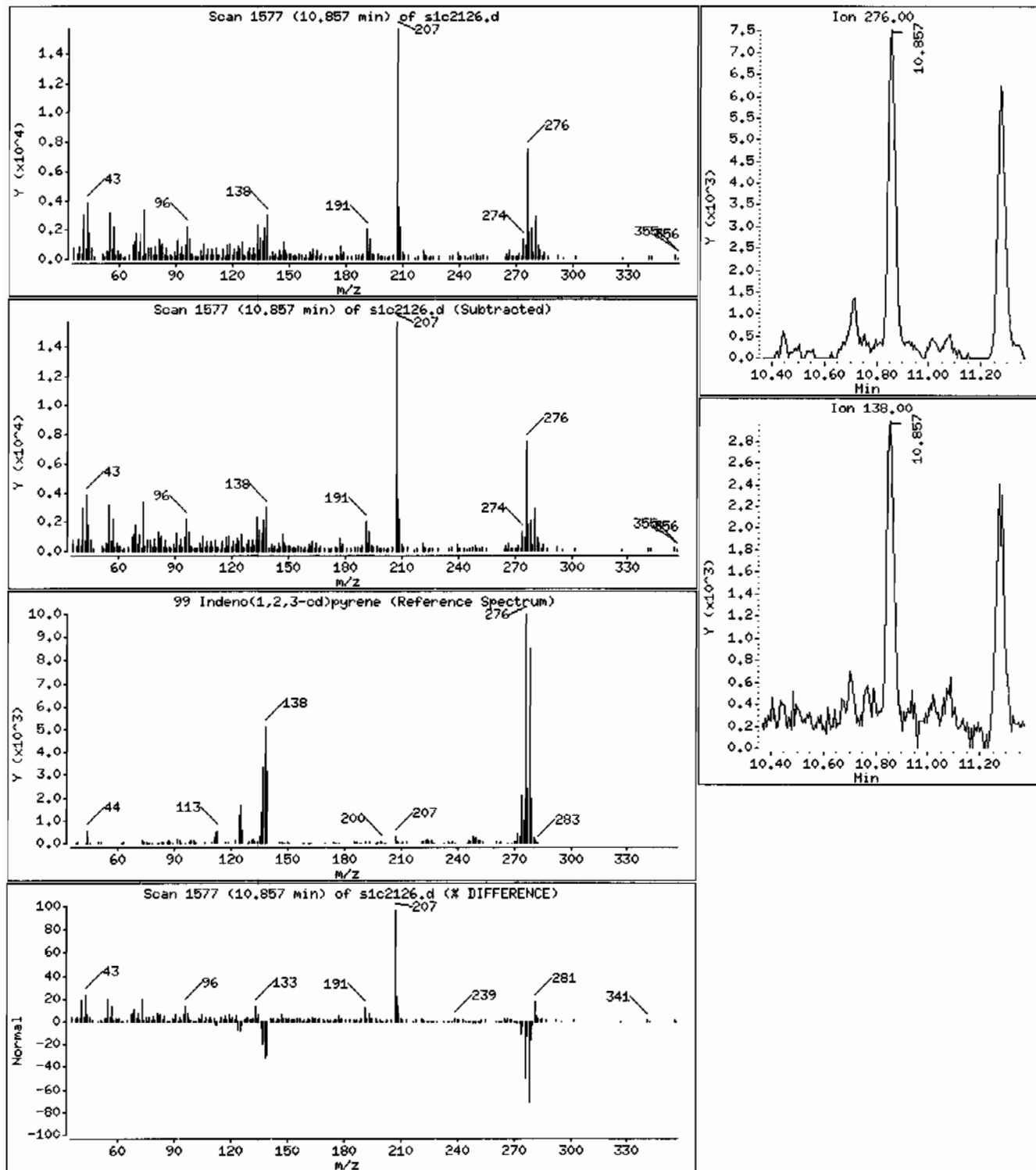
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 49.2 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 1248370016196122811SVH11ILANL

Volume Injected (uL): 0.5

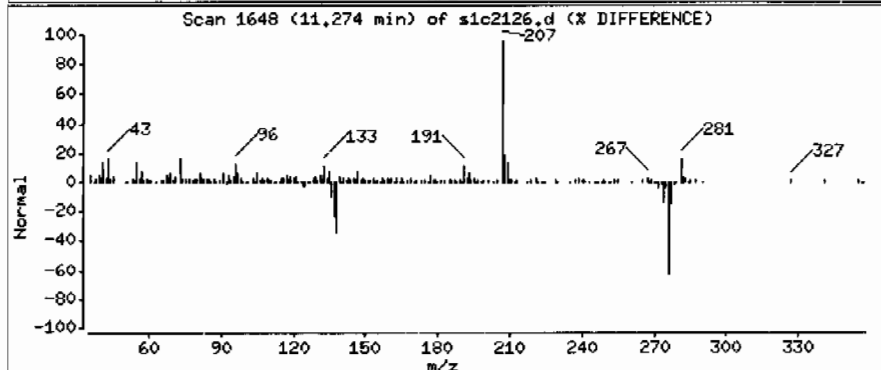
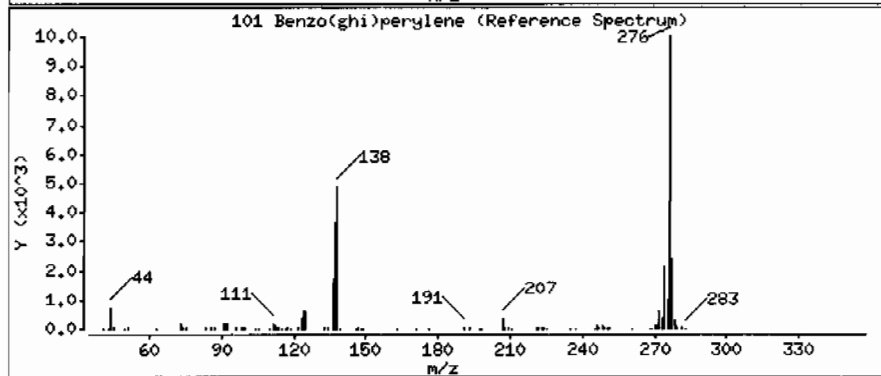
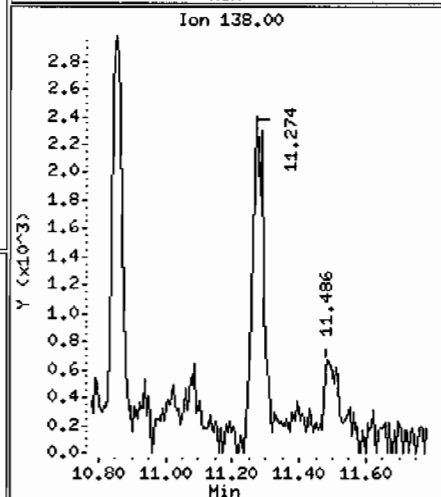
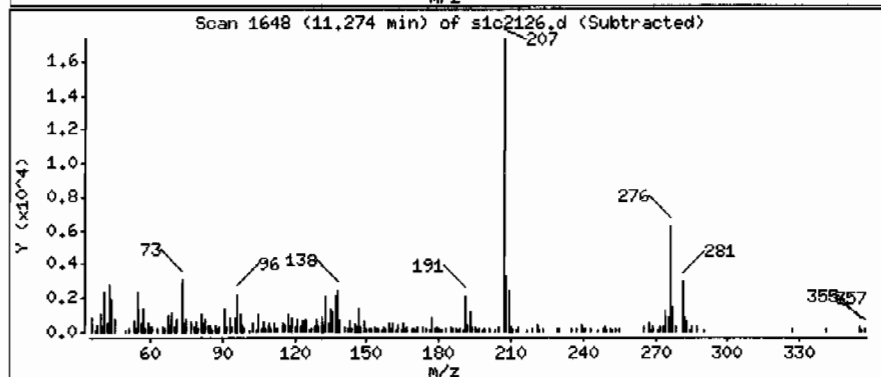
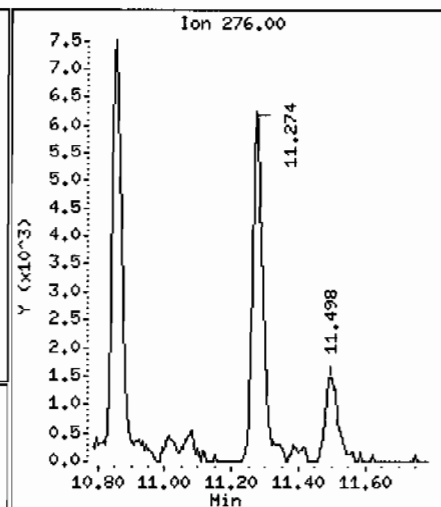
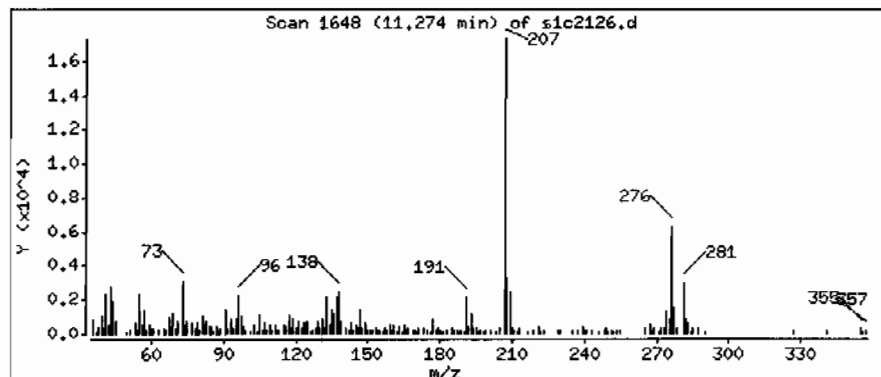
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 54.5 ug/Kg



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 12483700161961228111SVH11ILANL

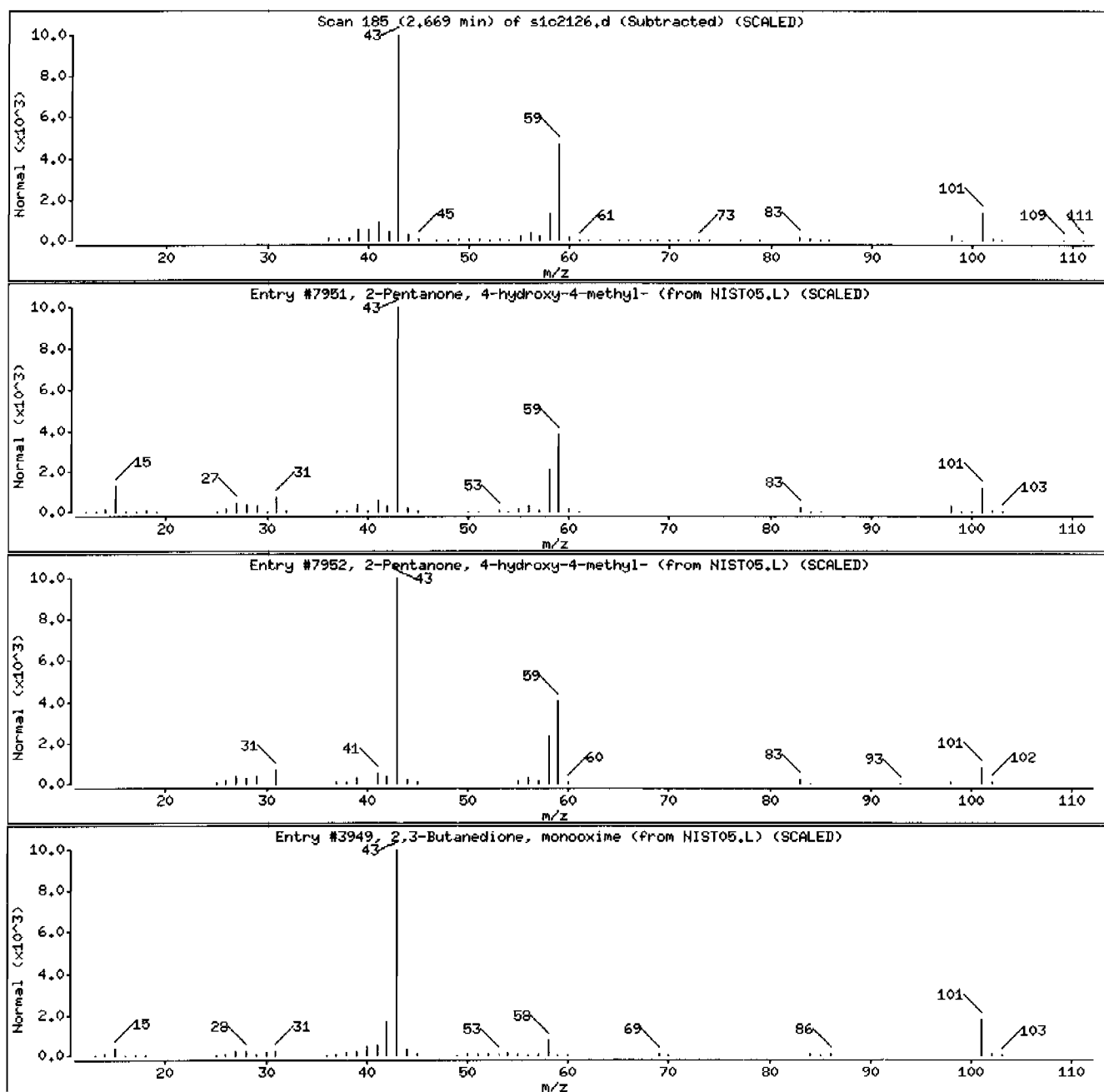
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 12483700161961228111SVMI11LANL

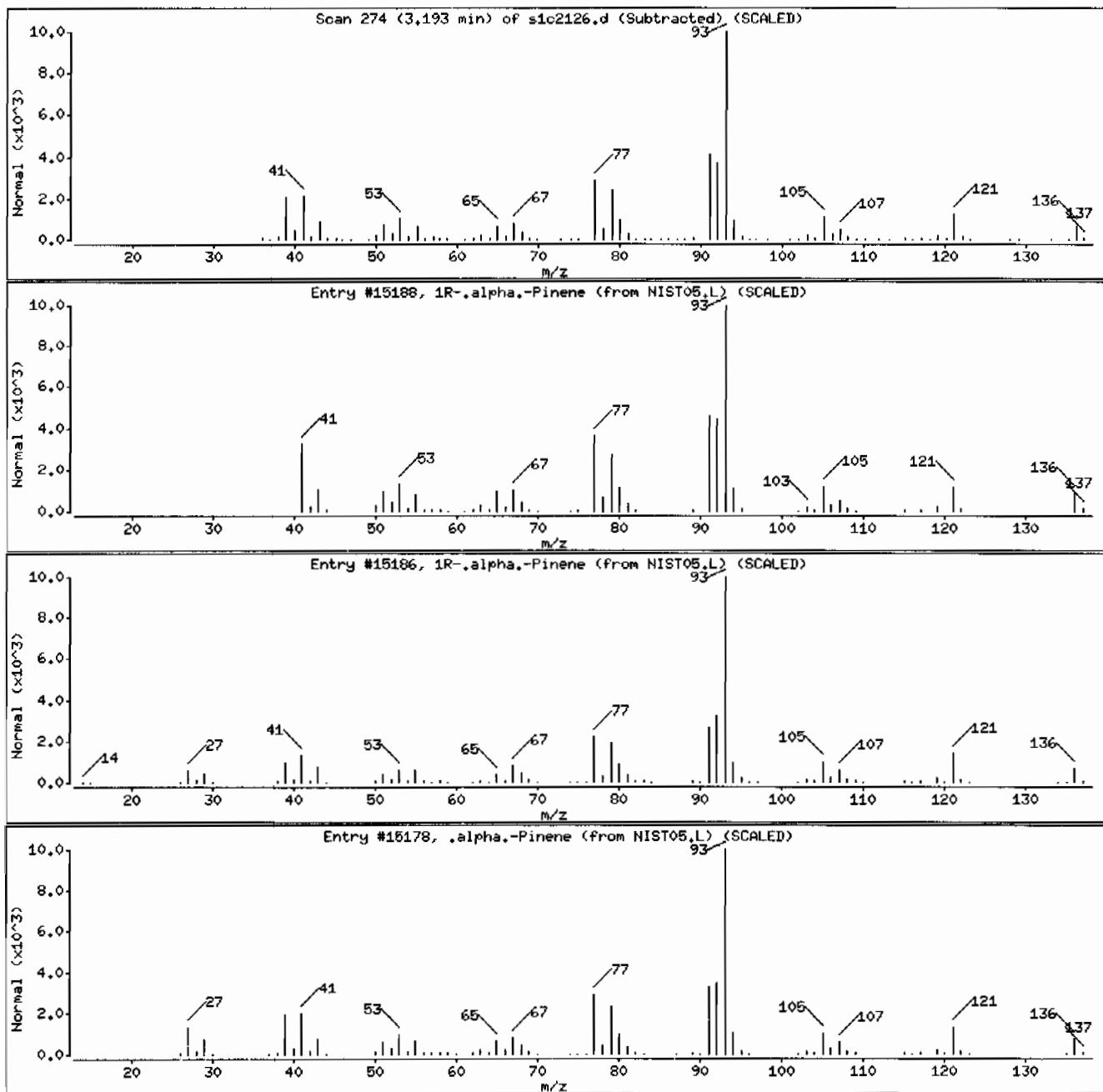
Volume Injected (uL): 0.5

Operator: AMY

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



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 12483700161961228111SVMI1ILANL

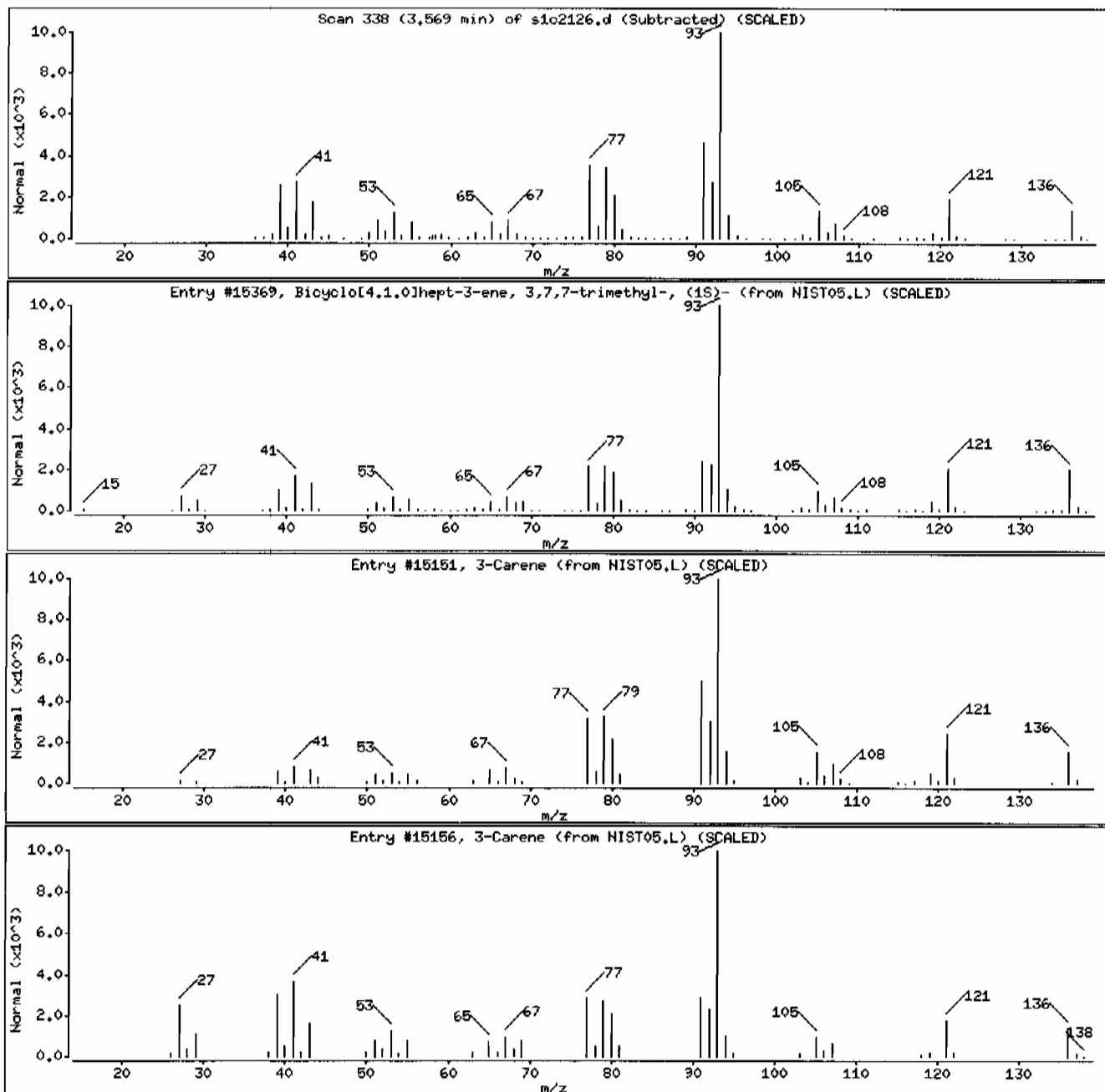
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

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



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 1248370016196122811SVMI1ILANL

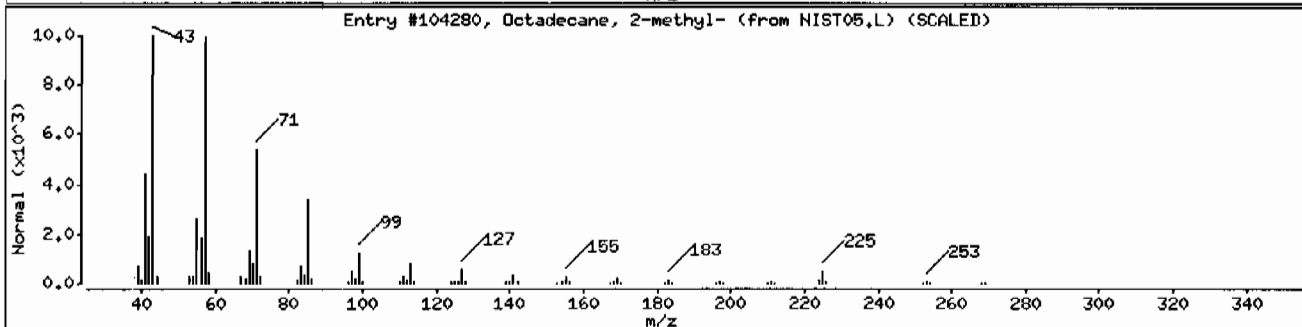
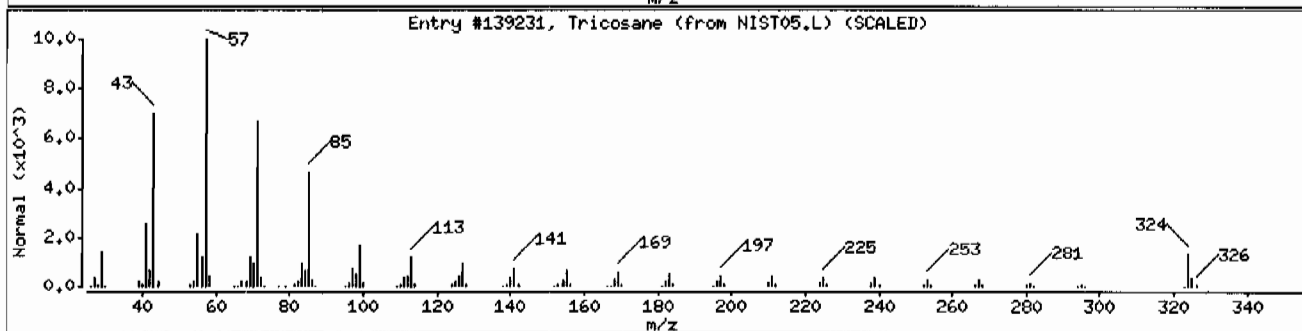
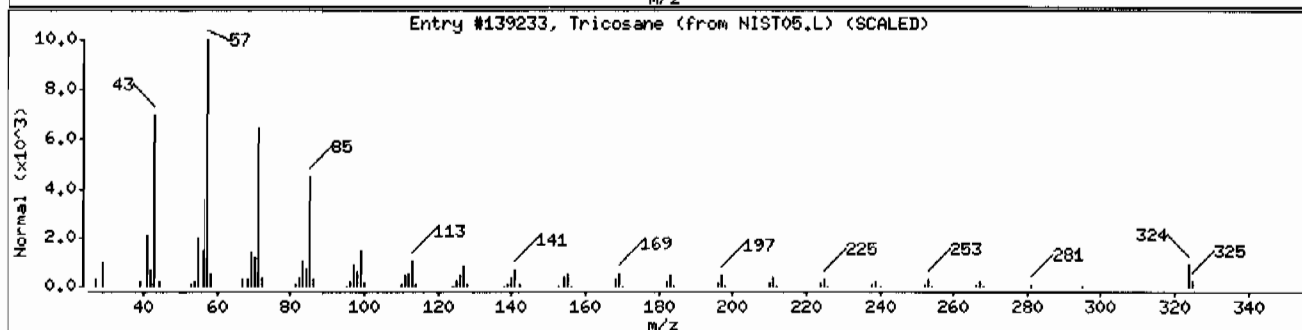
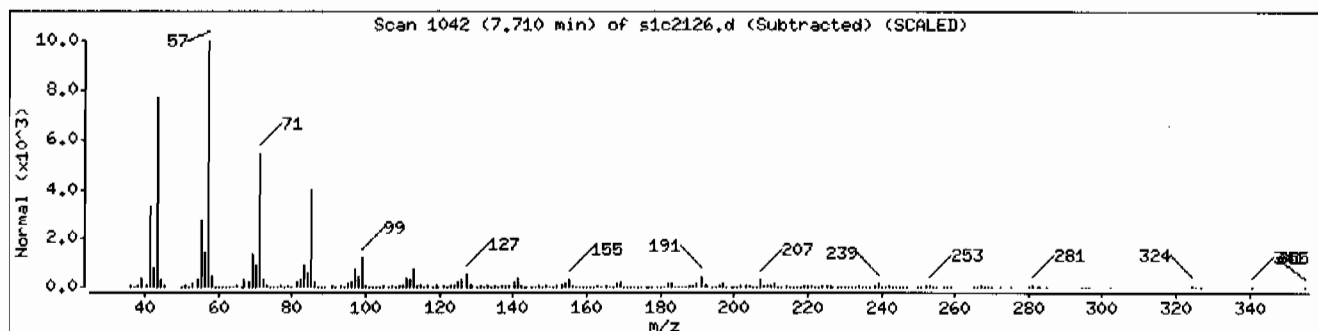
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricosane	638-67-5	NIST05.L	139233	97	C23H48	324
Tricosane	638-67-5	NIST05.L	139231	95	C23H48	324
Octadecane, 2-methyl-	1560-88-9	NIST05.L	104280	93	C19H40	268



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1,i

Sample Info: I248370016196122811ISVM11ILANL

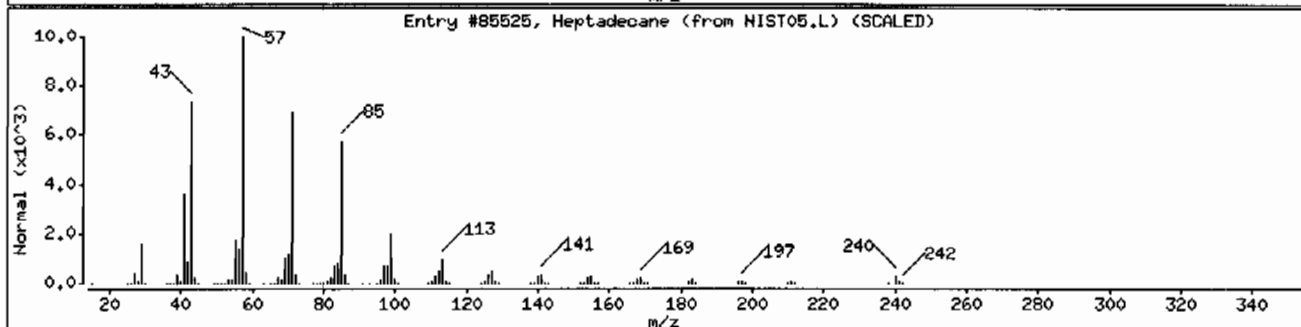
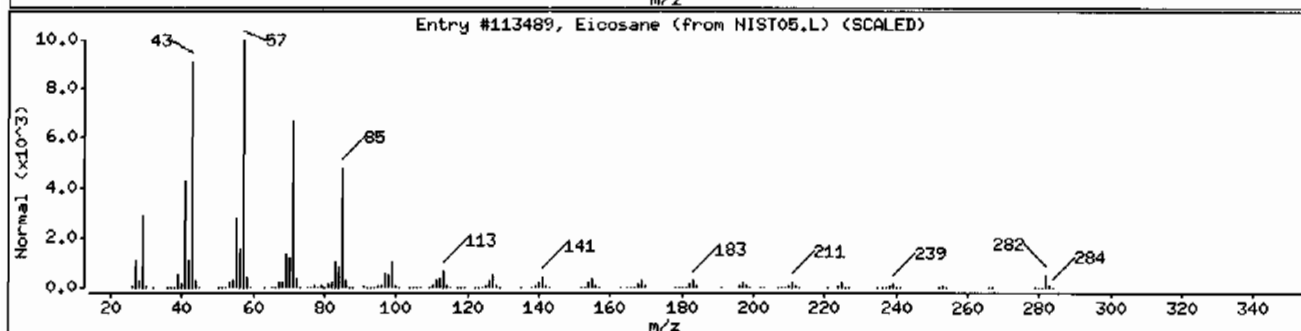
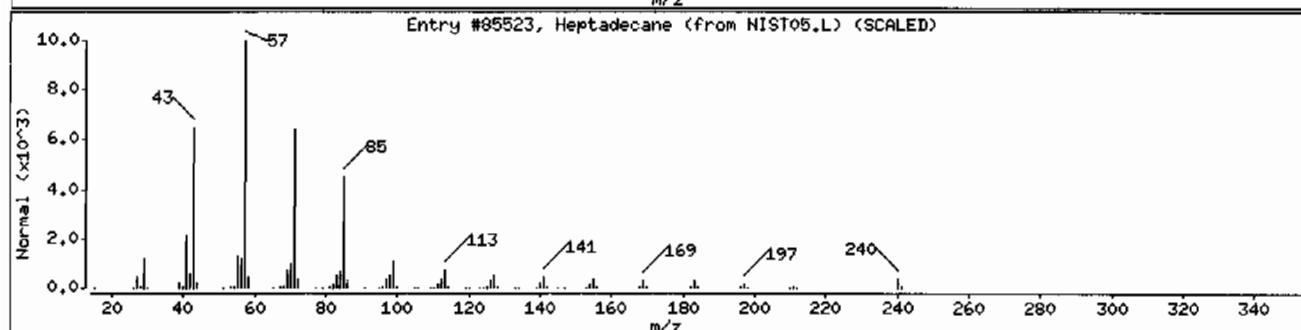
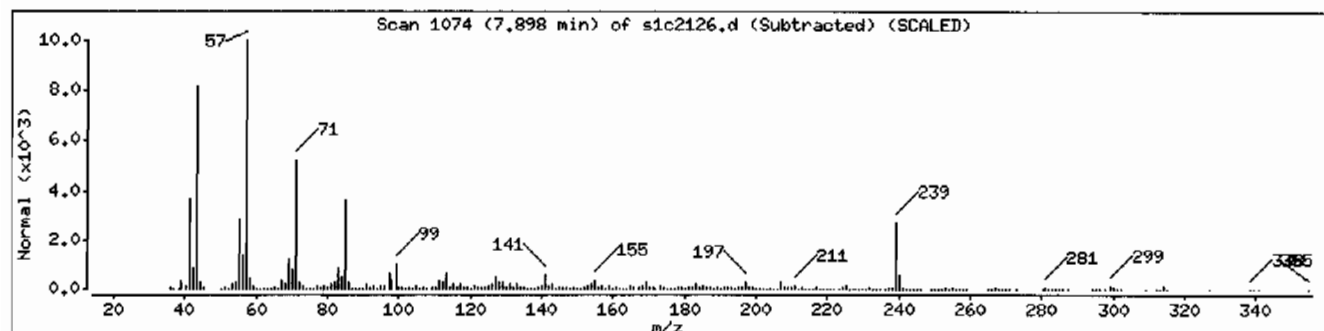
Volume Injected (uL): 0.5

Operator: AMY

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	98	C17H36	240
Eicosane	112-95-8	NIST05.L	113489	97	C20H42	282
Heptadecane	629-78-7	NIST05.L	85525	94	C17H36	240



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 1248370016196122811ISVM11ILANL

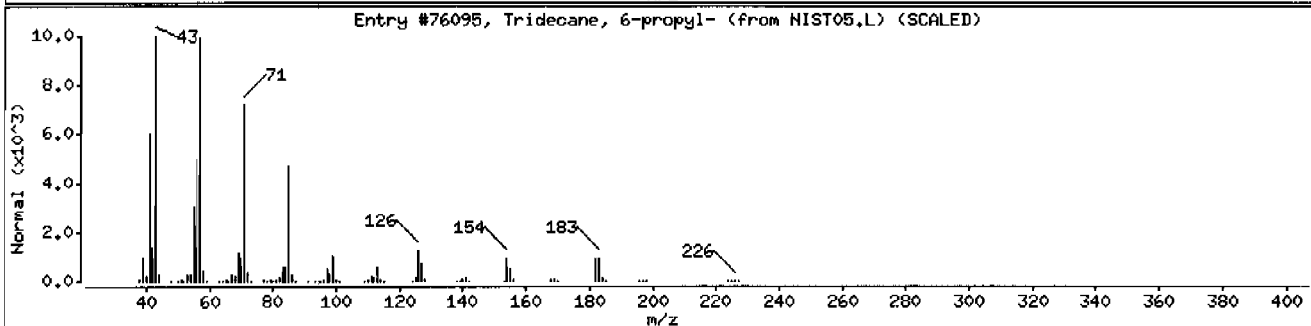
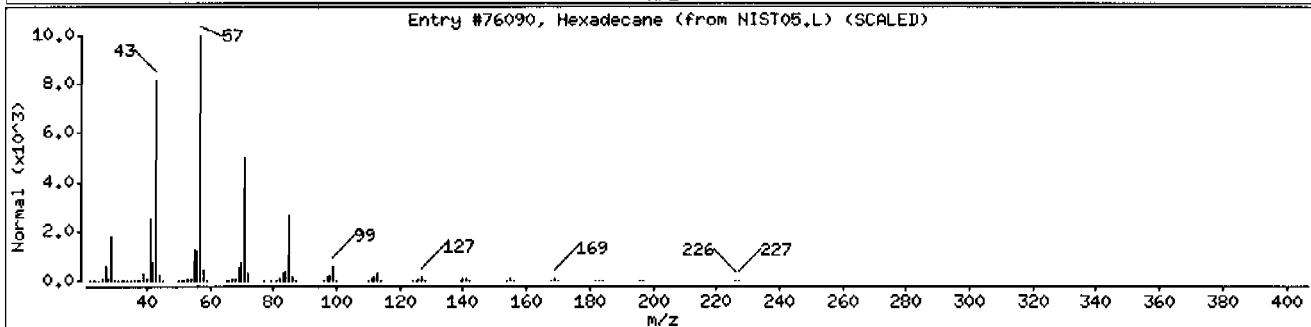
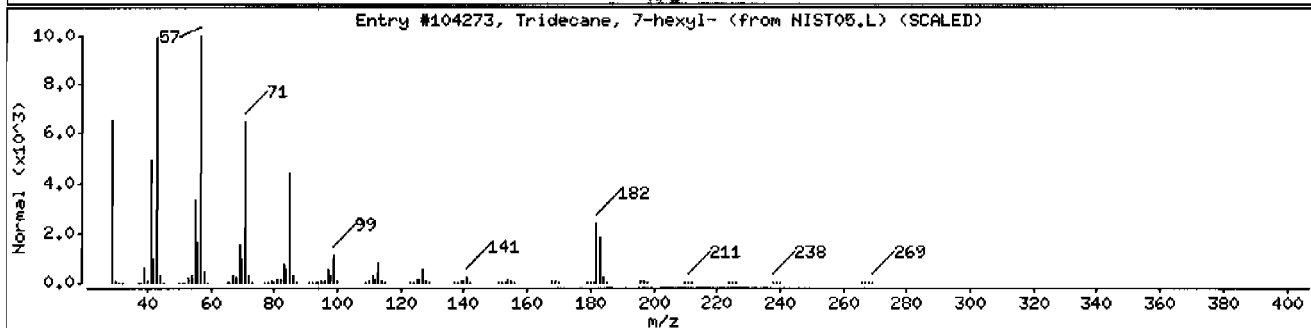
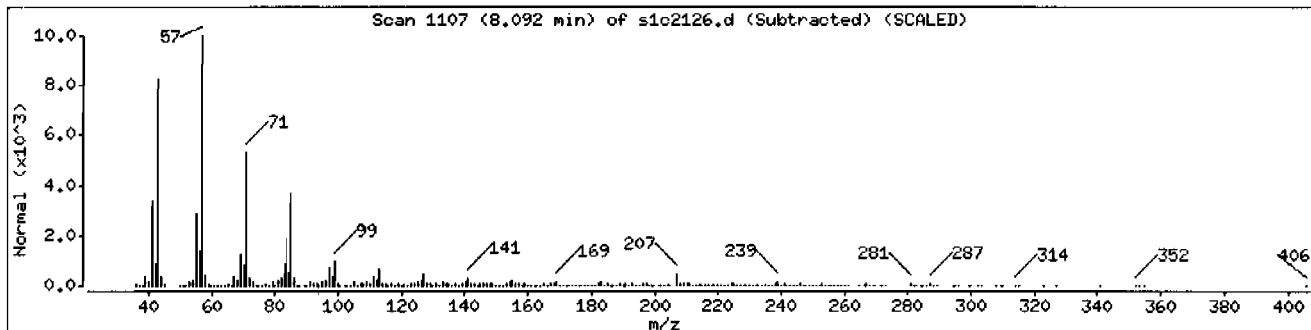
Volume Injected (uL): 0.5

Operator: AMY

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	96	C19H40	268
Hexadecane	544-76-3	NIST05.L	76090	95	C16H34	226
Tridecane, 6-propyl-	55045-10-8	NIST05.L	76095	90	C16H34	226



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 1248370016196122811ISVMI1ILANL

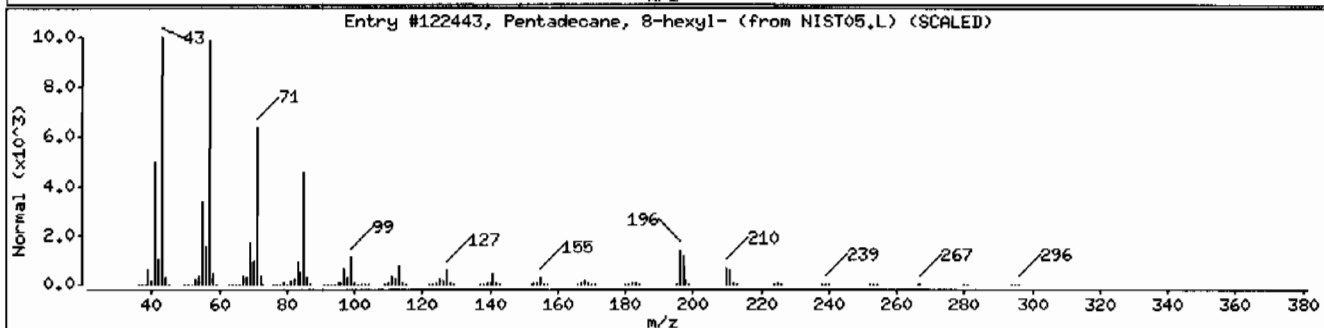
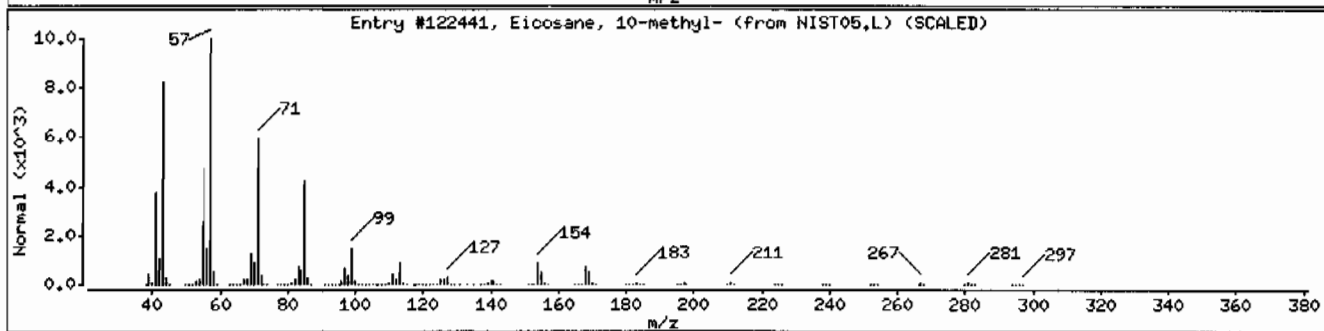
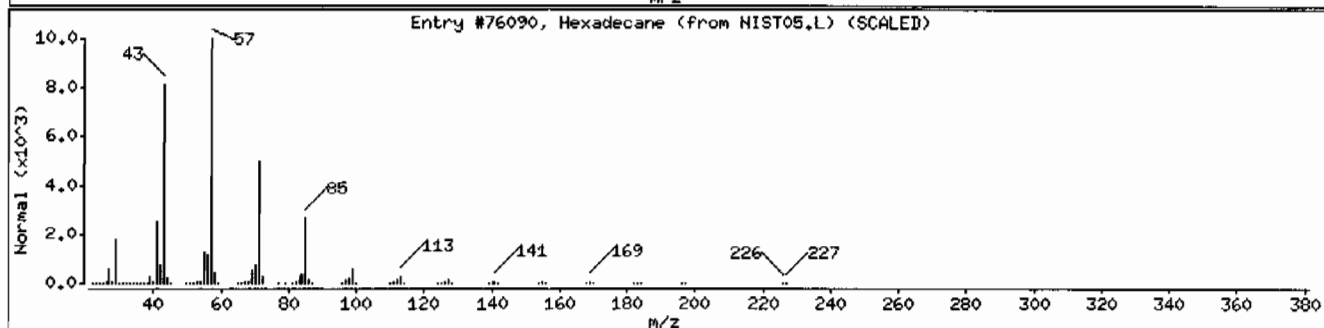
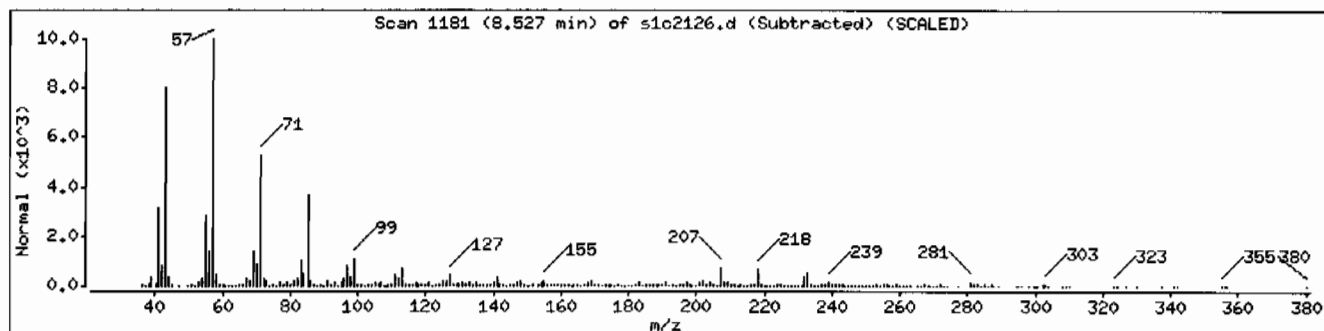
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecane	544-76-3	NIST05.L	76090	94	C16H34	226
Eicosane, 10-methyl-	54833-23-7	NIST05.L	122441	93	C21H44	296
Pentadecane, 8-hexyl-	13475-75-7	NIST05.L	122443	93	C21H44	296



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: I248370016196122811SVMI1ILANL

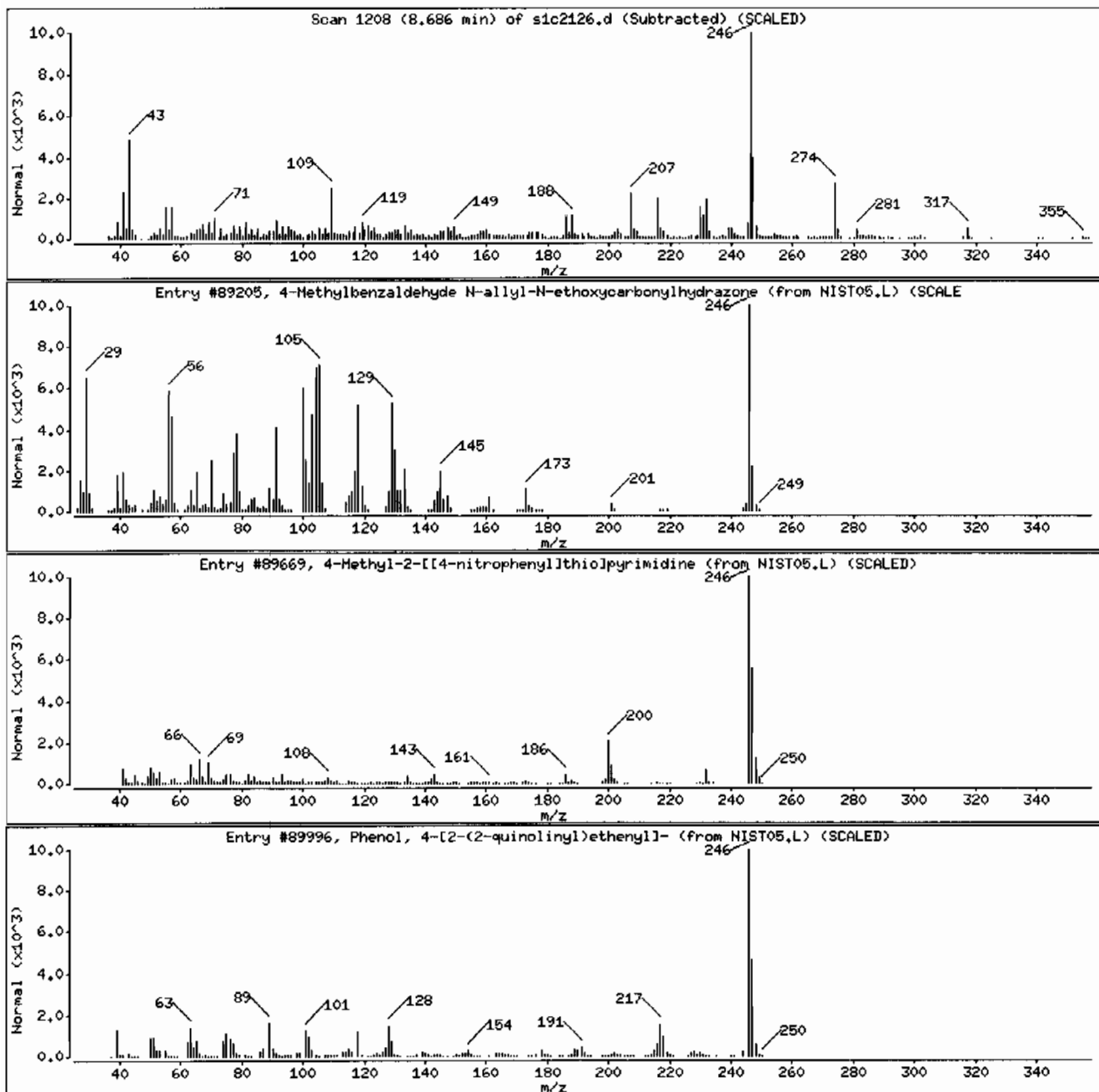
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4-Methylbenzaldehyde N-allyl-N-ethoxycarbonylhydrazone	1000193-16-8	NIST05.L	89205	95	C14H18N2O2	246
4-Methyl-2-[[4-nitrophenyl]thio]pyrimidin-5-ylmethanone	1000213-74-4	NIST05.L	89669	38	C11H9N3O2S	247
Phenol, 4-[2-(2-quinolinyl)ethenyl]-	4752-58-3	NIST05.L	89996	38	C17H13NO	247



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 12483700161961228111SVH111LANL

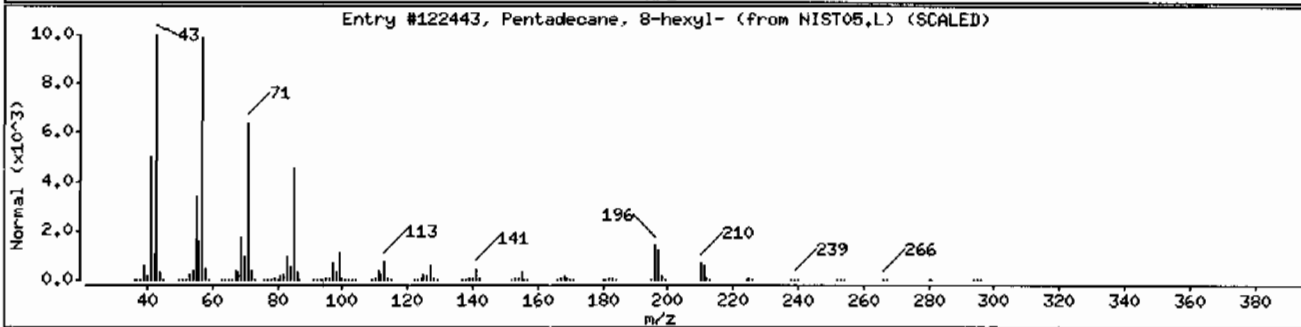
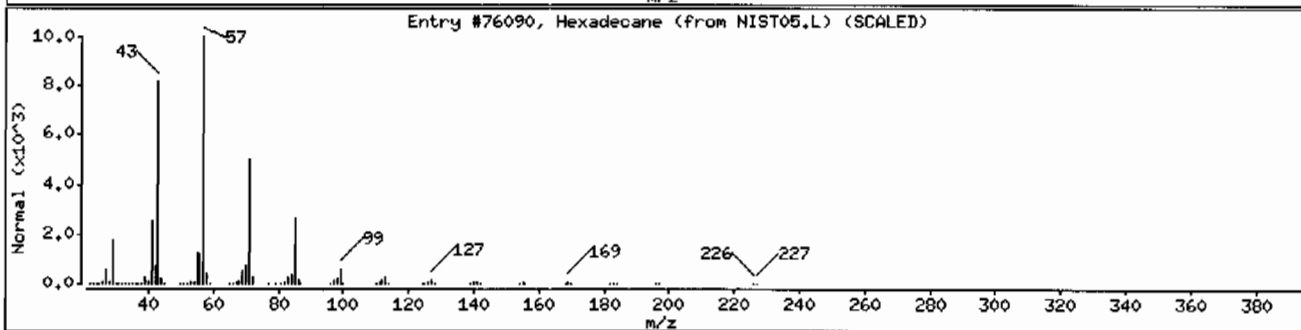
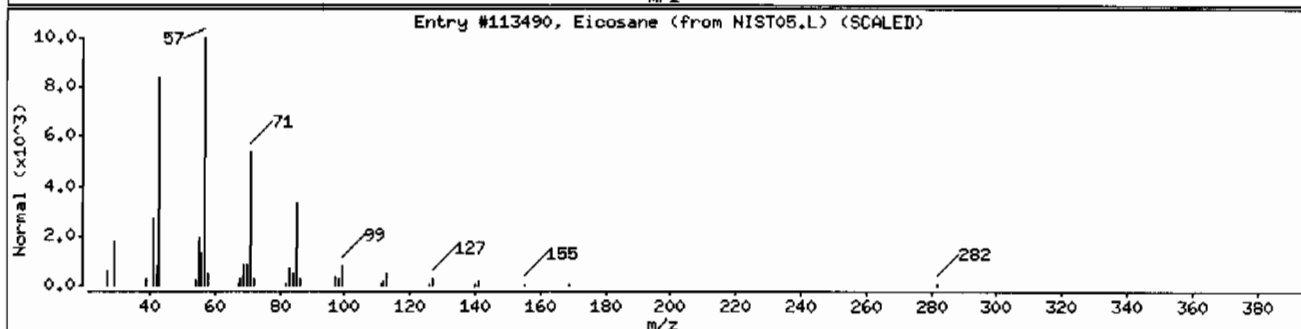
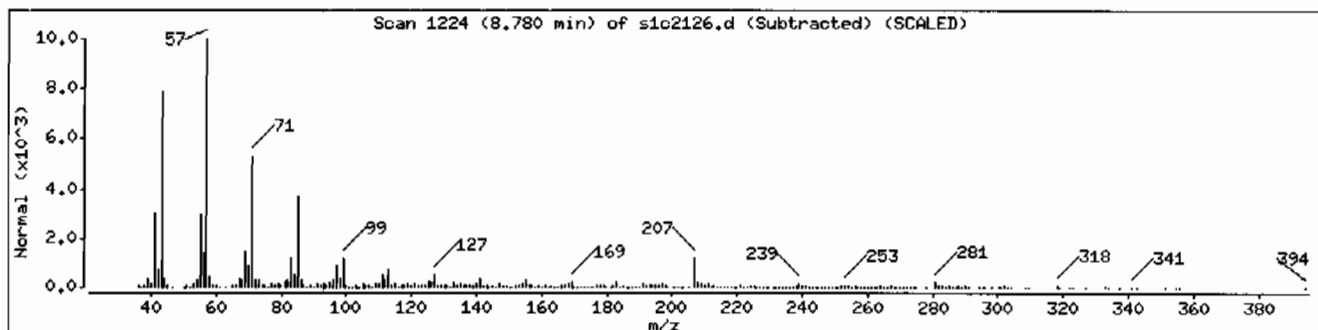
Volume Injected (uL): 0.5

Operator: AMY

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	98	C ₂₀ H ₄₂	282
Hexadecane	544-76-3	NIST05.L	76090	94	C ₁₆ H ₃₄	226
Pentadecane, 8-hexyl-	13475-75-7	NIST05.L	122443	93	C ₂₁ H ₄₄	296



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 12483700161961228111SVH111LANL

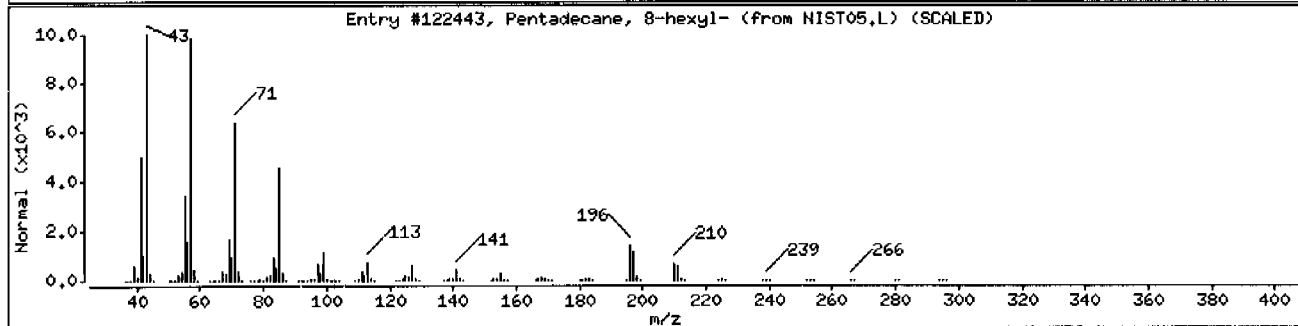
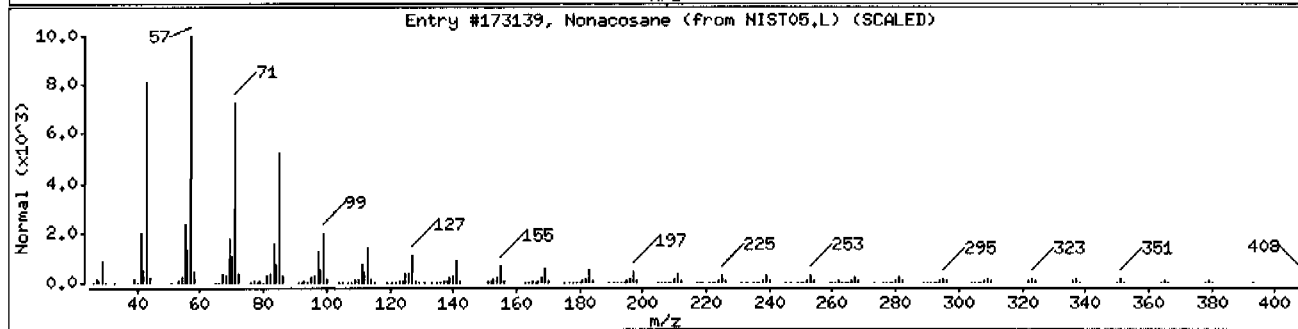
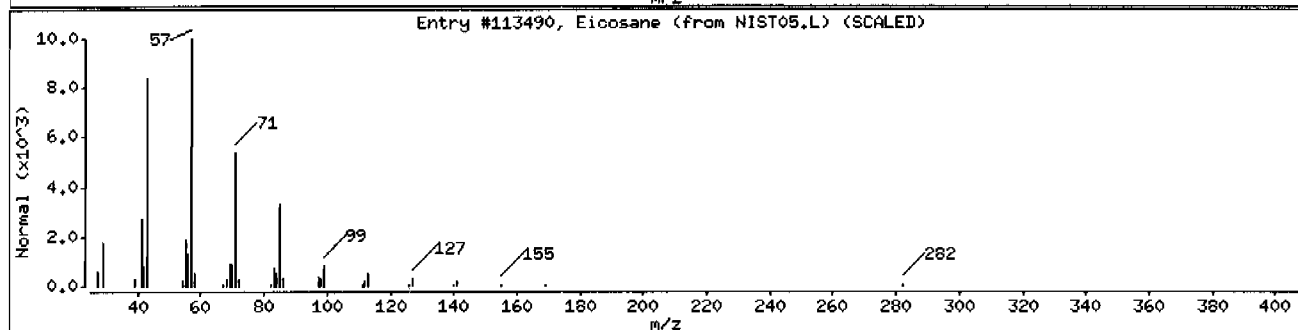
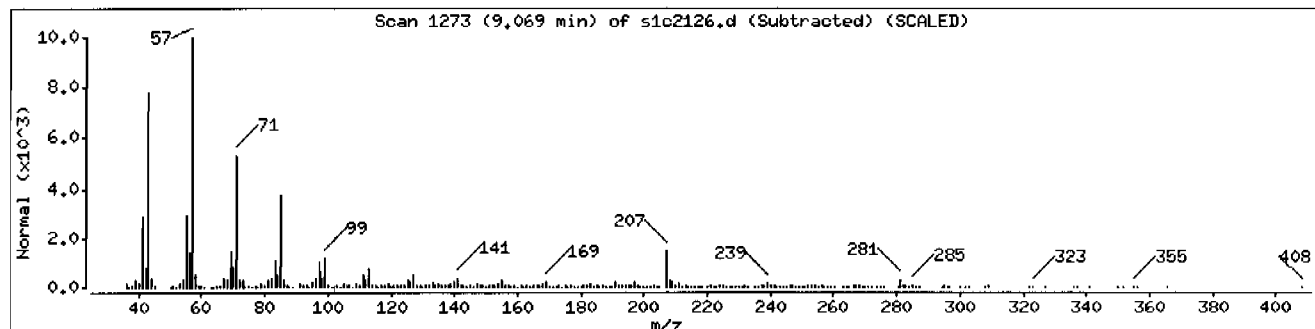
Volume Injected (uL): 0.5

Operator: AMY

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	98	C20H42	282
Nonacosane	630-03-5	NIST05.L	173139	96	C29H60	408
Pentadecane, 8-hexyl-	13475-75-7	NIST05.L	122443	93	C21H44	296



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 12483700161961228111SVH111LANL

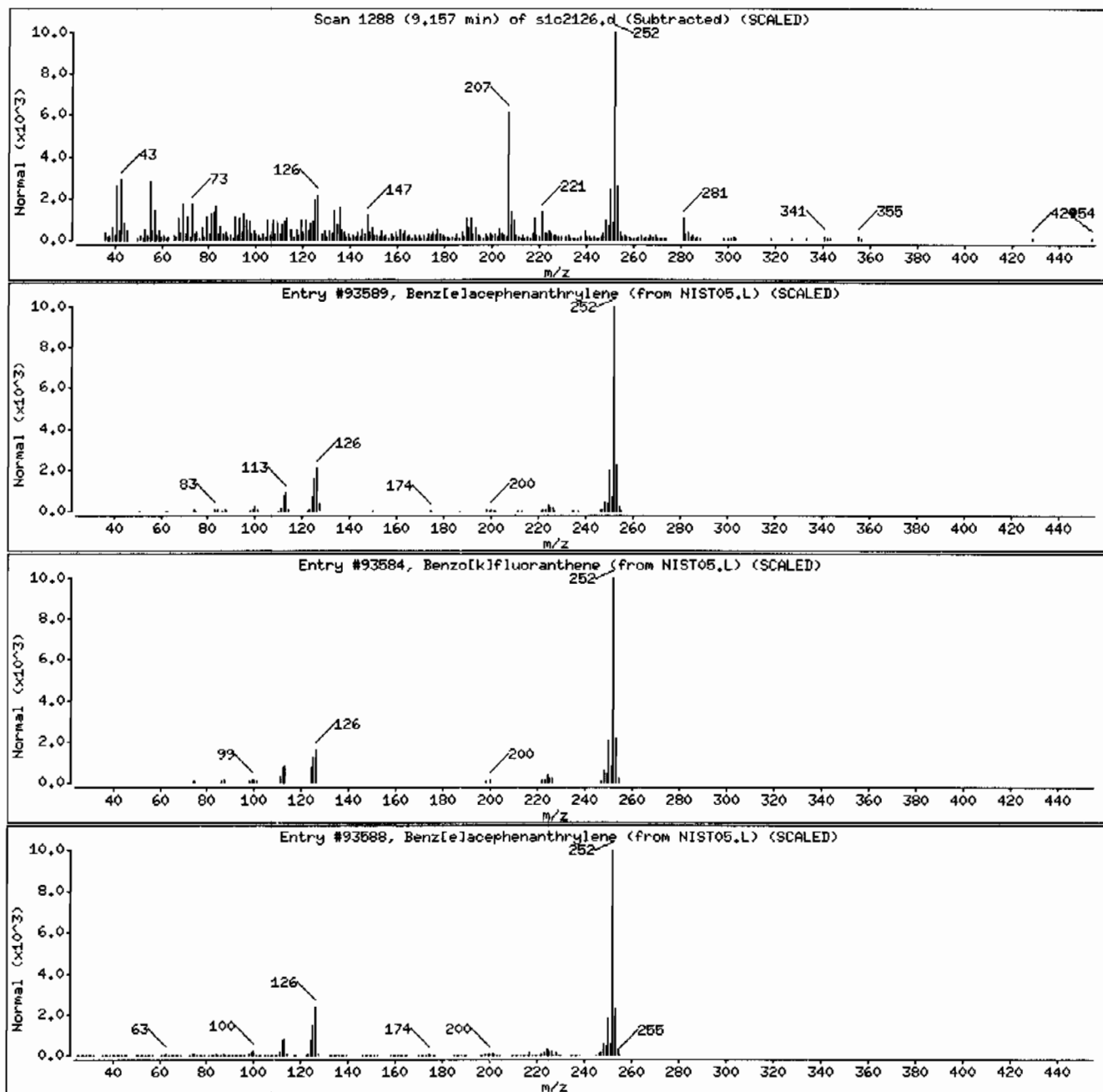
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benz[e]acephenanthrylene	205-99-2	NIST05.L	93589	96	C ₂₀ H ₁₂	252
Benzo[k]fluoranthene	207-08-9	NIST05.L	93584	96	C ₂₀ H ₁₂	252
Benz[e]acephenanthrylene	205-99-2	NIST05.L	93588	95	C ₂₀ H ₁₂	252



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.i

Sample Info: 1248370016196122811SVMI11LANL

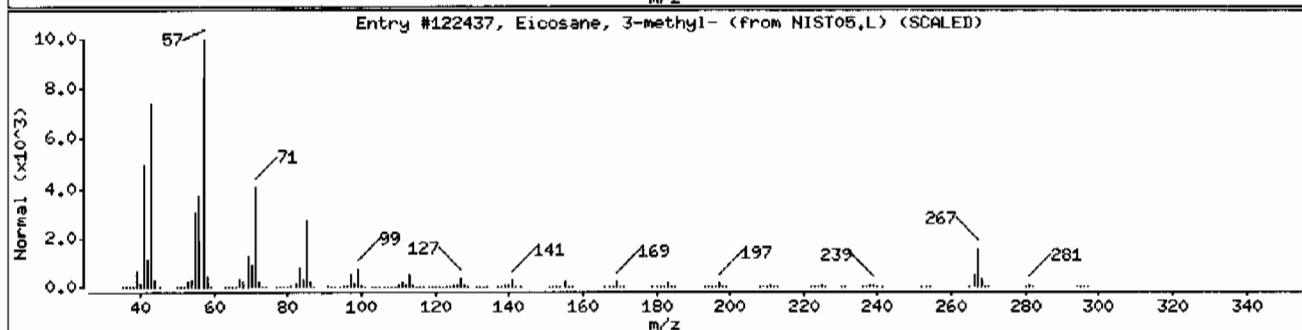
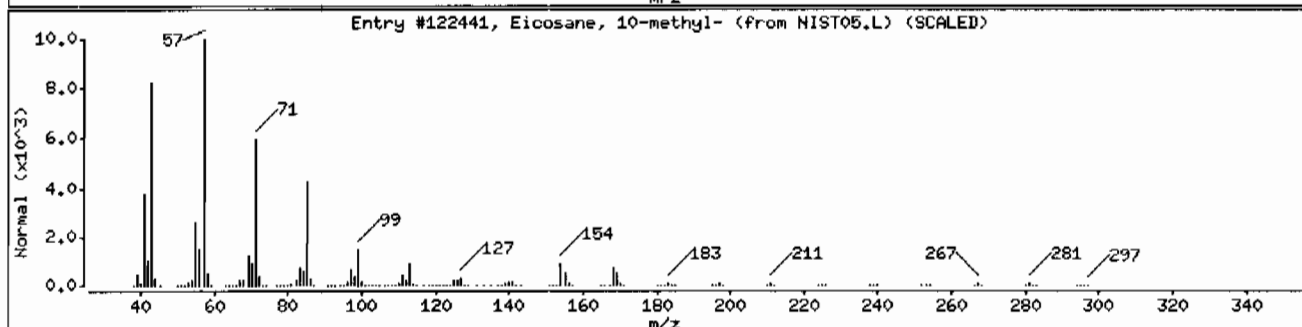
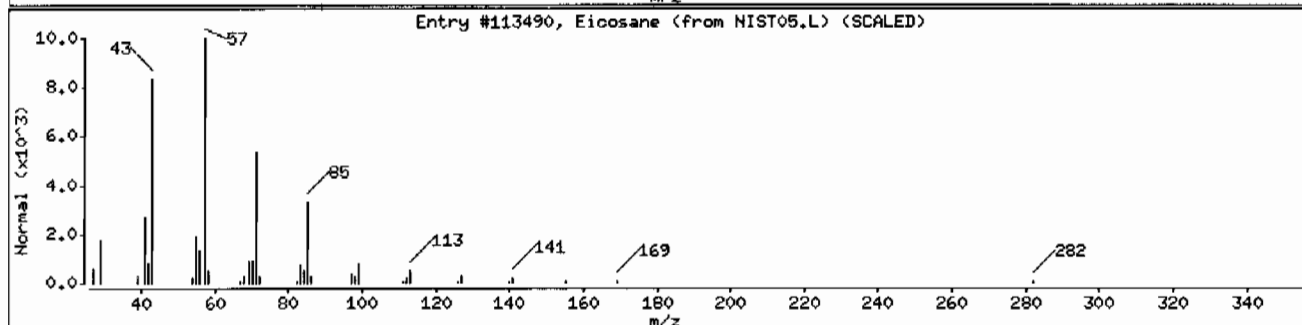
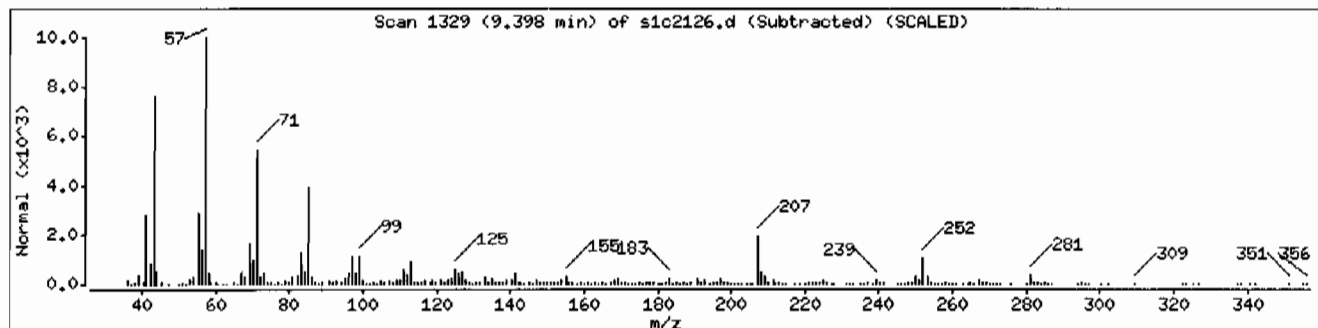
Volume Injected (uL): 0.5

Operator: AMY

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	98	C20H42	282
Eicosane, 10-methyl-	54833-23-7	NIST05.L	122441	89	C21H44	296
Eicosane, 3-methyl-	6418-46-8	NIST05.L	122437	86	C21H44	296



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 12483700161961228111SVH111LANL

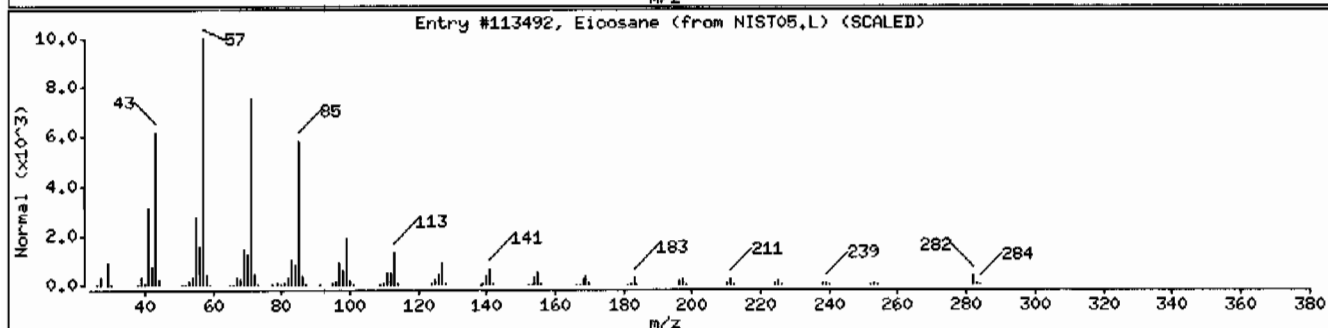
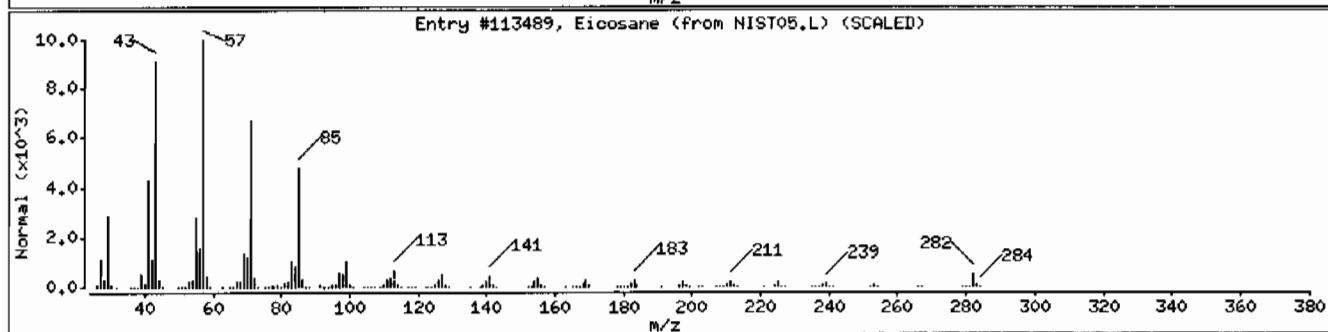
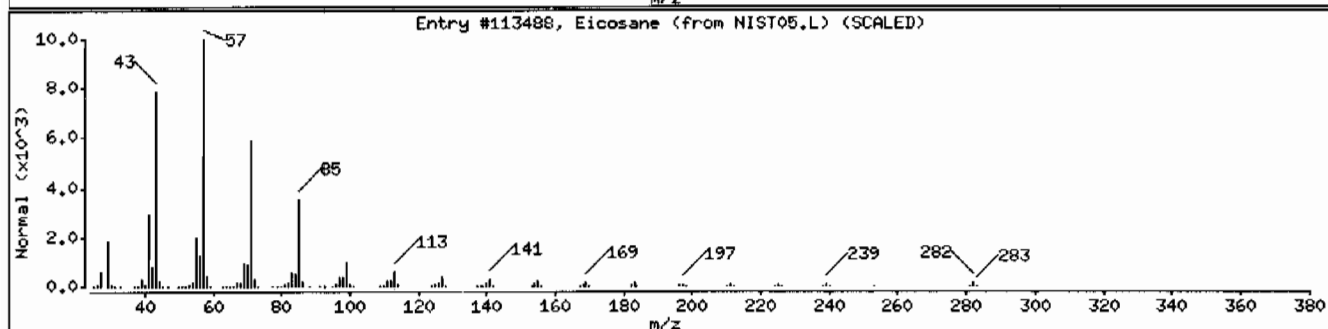
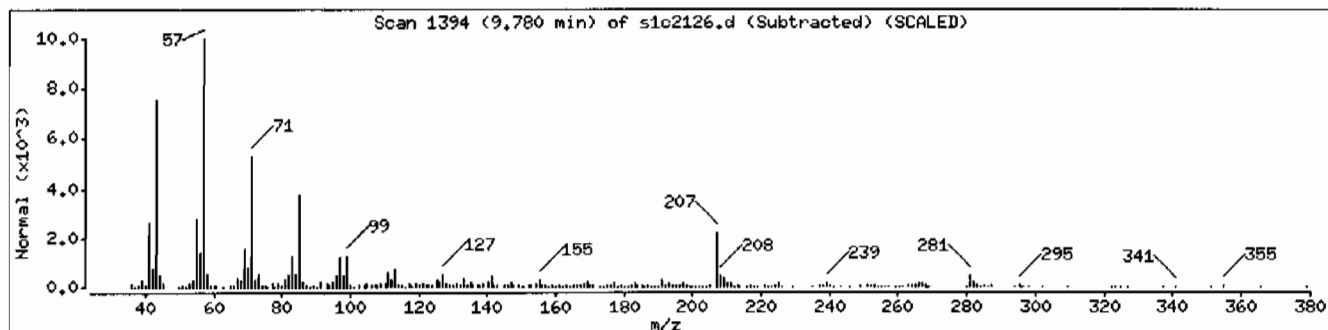
Volume Injected (uL): 0.5

Operator: AMY

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	113488	98	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113492	96	C ₂₀ H ₄₂	282



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: MSD1.1

Sample Info: 1248370016196122811SVMI1ILANL

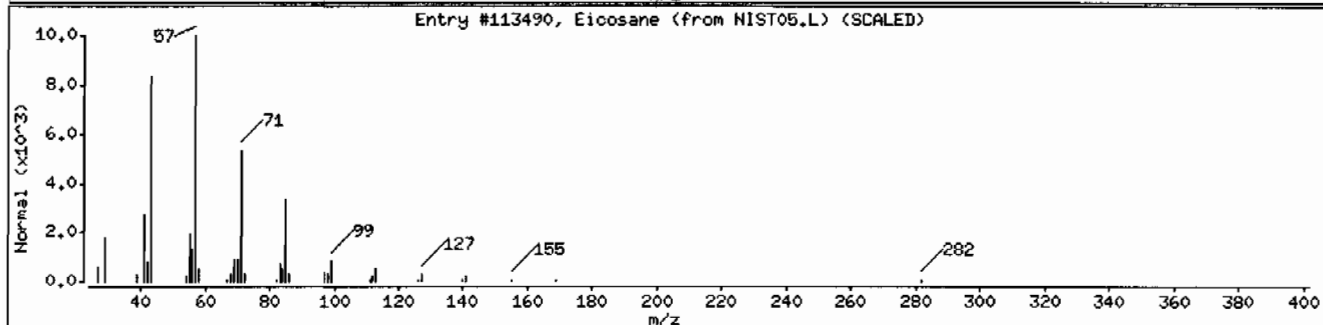
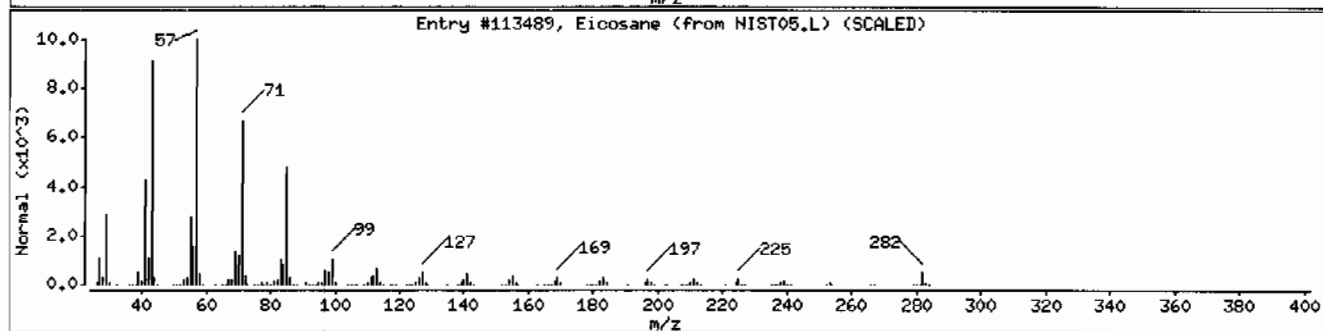
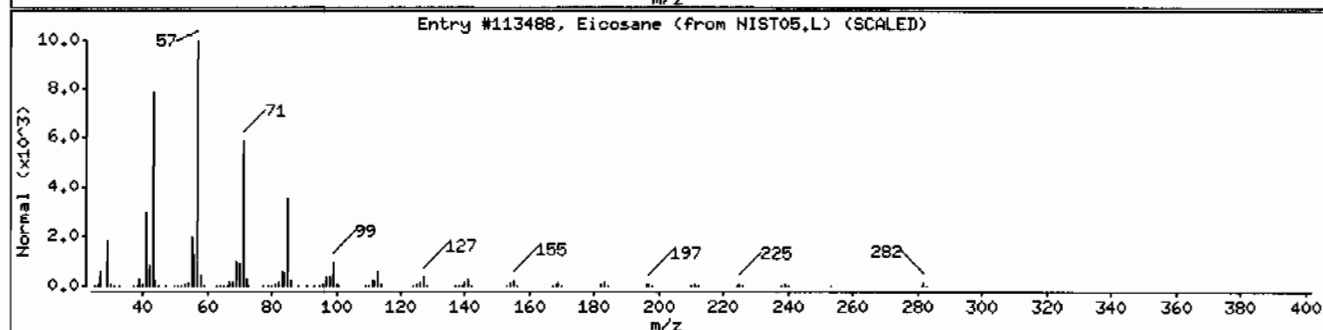
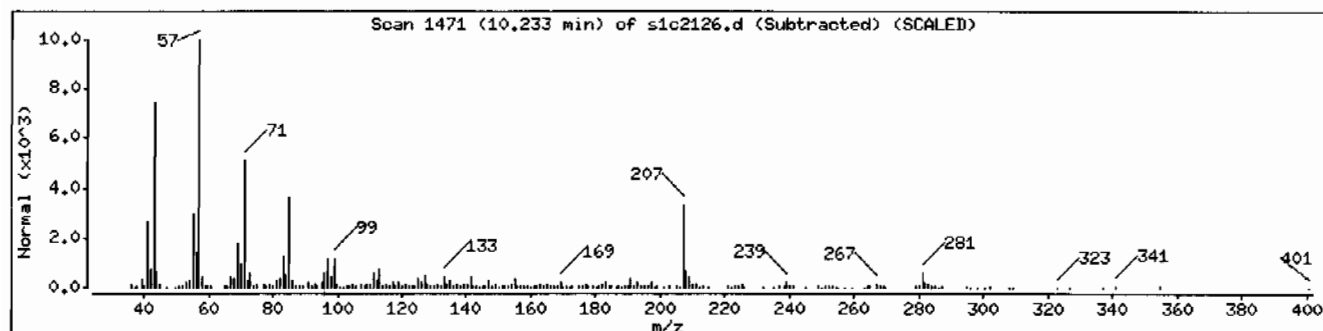
Volume Injected (uL): 0.5

Operator: AMY

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	113488	98	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	97	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113490	97	C ₂₀ H ₄₂	282



Date : 22-MAR-2010 02:29

Client ID: RE36-10-7482

Instrument: HSD1.i

Sample Info: 1248370016196122811SVMI11LANL

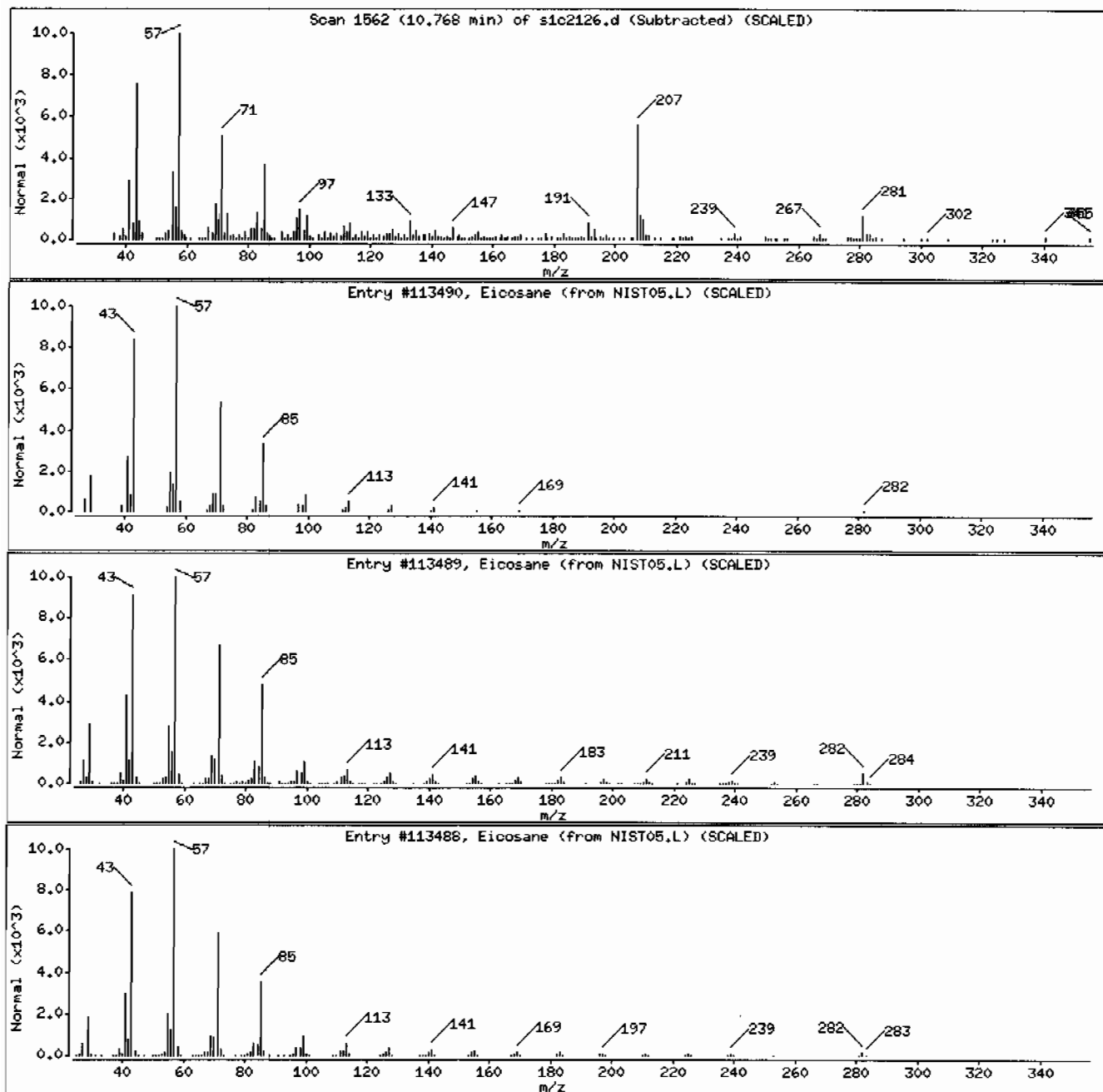
Volume Injected (uL): 0.5

Operator: AMY

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
Eicosane	112-95-8	NIST05.L	113489	95	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113488	95	C ₂₀ H ₄₂	282



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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370010	Date Received: 03/02/2010 08:50	%Moisture: 24
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7483	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 00:07	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2120.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	439	ug/kg	87.7	439
108-95-2	Phenol	U	439	ug/kg	87.7	439
95-57-8	2-Chlorophenol	U	439	ug/kg	87.7	439
106-46-7	1,4-Dichlorobenzene	U	439	ug/kg	87.7	439
621-64-7	N-Nitrosodipropylamine	U	439	ug/kg	87.7	439
59-50-7	4-Chloro-3-methylphenol	U	439	ug/kg	87.7	439
83-32-9	Acenaphthene	U	43.9	ug/kg	14.5	43.9
121-14-2	2,4-Dinitrotoluene	U	439	ug/kg	43.9	439
100-02-7	4-Nitrophenol	U	439	ug/kg	145	439
87-86-5	Pentachlorophenol	U	439	ug/kg	110	439
129-00-0	Pyrene	J	13.4	ug/kg	13.2	43.9
110-86-1	Pyridine	U	439	ug/kg	87.7	439
62-53-3	Aniline	U	439	ug/kg	132	439
111-44-4	bis(2-Chloroethyl) ether	U	439	ug/kg	87.7	439
541-73-1	1,3-Dichlorobenzene	U	439	ug/kg	87.7	439
100-51-6	Benzyl alcohol	U	439	ug/kg	132	439
95-50-1	1,2-Dichlorobenzene	U	439	ug/kg	87.7	439
108-60-1	bis(2-Chloroisopropyl) ether	U	439	ug/kg	87.7	439
95-48-7	o-Cresol	U	439	ug/kg	87.7	439
65794-96-9	m,p-Cresols	U	439	ug/kg	132	439
67-72-1	Hexachloroethane	U	439	ug/kg	87.7	439
98-95-3	Nitrobenzene	U	439	ug/kg	87.7	439
78-59-1	Isophorone	U	439	ug/kg	87.7	439
88-75-5	2-Nitrophenol	U	439	ug/kg	87.7	439
105-67-9	2,4-Dimethylphenol	U	439	ug/kg	153	439
111-91-1	bis(2-Chloroethoxy)methane	U	439	ug/kg	87.7	439
120-83-2	2,4-Dichlorophenol	U	439	ug/kg	87.7	439
65-85-0	Benzoic acid	U	877	ug/kg	219	877
91-20-3	Naphthalene	U	43.9	ug/kg	13.2	43.9
106-47-8	4-Chloroaniline	U	439	ug/kg	87.7	439
87-68-3	Hexachlorobutadiene	U	439	ug/kg	87.7	439
91-57-6	2-Methylnaphthalene	U	43.9	ug/kg	8.77	43.9
77-47-4	Hexachlorocyclopentadiene	U	439	ug/kg	87.7	439
88-06-2	2,4,6-Trichlorophenol	U	439	ug/kg	87.7	439
95-95-4	2,4,5-Trichlorophenol	U	439	ug/kg	87.7	439
91-58-7	2-Chloronaphthalene	U	43.9	ug/kg	14.5	43.9
88-74-4	2-Nitroaniline	U	439	ug/kg	87.7	439
99-09-2	o-Nitroaniline	U	439	ug/kg	87.7	439
	3-Nitroaniline					

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370010	Date Received: 03/02/2010 08:50	%Moisture: 24
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7483	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 00:07	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2120.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	439	ug/kg	87.7	439
606-20-2	2,6-Dinitrotoluene	U	439	ug/kg	43.9	439
208-96-8	Acenaphthylene	U	43.9	ug/kg	13.2	43.9
51-28-5	2,4-Dinitrophenol	U	877	ug/kg	167	877
132-64-9	Dibenzofuran	U	439	ug/kg	87.7	439
84-66-2	Diethylphthalate	U	439	ug/kg	87.7	439
86-73-7	Fluorene	U	43.9	ug/kg	13.2	43.9
7005-72-3	4-Chlorophenylphenylether	U	439	ug/kg	87.7	439
534-52-1	2-Methyl-4,6-dinitrophenol	U	439	ug/kg	87.7	439
100-01-6	4-Nitroaniline	U	439	ug/kg	132	439
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	439	ug/kg	87.7	439
122-66-7	Azobenzene	U	439	ug/kg	87.7	439
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	439	ug/kg	87.7	439
118-74-1	Hexachlorobenzene	U	439	ug/kg	87.7	439
85-01-8	Phenanthrene	U	43.9	ug/kg	13.2	43.9
120-12-7	Anthracene	U	43.9	ug/kg	8.77	43.9
84-74-2	Di-n-butylphthalate	U	439	ug/kg	87.7	439
206-44-0	Fluoranthene	U	43.9	ug/kg	13.2	43.9
85-68-7	Butylbenzylphthalate	U	439	ug/kg	87.7	439
56-55-3	Benzo(a)anthracene	U	43.9	ug/kg	13.2	43.9
91-94-1	3,3'-Dichlorobenzidine	U	439	ug/kg	132	439
218-01-9	Chrysene	U	43.9	ug/kg	13.2	43.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	439	ug/kg	87.7	439
117-84-0	Di-n-octylphthalate	U	439	ug/kg	87.7	439
205-99-2	Benzo(b)fluoranthene	U	43.9	ug/kg	13.2	43.9
207-08-9	Benzo(k)fluoranthene	U	43.9	ug/kg	13.2	43.9
50-32-8	Benzo(a)pyrene	U	43.9	ug/kg	13.2	43.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.9	ug/kg	13.2	43.9
53-70-3	Dibenzo(a,h)anthracene	U	43.9	ug/kg	13.2	43.9
191-24-2	Benzo(ghi)perylene	U	43.9	ug/kg	13.2	43.9
120-82-1	1,2,4-Trichlorobenzene	U	439	ug/kg	87.7	439

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	513	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.19	1610	ug/kg	97	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370010

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

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

Client ID: RE36-10-7483
Batch ID: 961228
Run Date: 03/22/2010 00:07
Prep Date: 03/05/2010 11:30
Data File: s1c2120.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
79-92-5	Camphene	3.29	516	ug/kg	98	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.43	618	ug/kg	97	NJ
13466-78-9	3-Carene	3.57	1060	ug/kg	96	NJ
103-82-2	Benzeneacetic acid	4.62	203	ug/kg	90	NJ
87-44-5	Caryophyllene	5.45	197	ug/kg	99	NJ
57-10-3	n-Hexadecanoic acid	6.99	254	ug/kg	98	NJ
	Unknown	7.23	194	ug/kg		J
	Unknown	7.32	630	ug/kg		J
	Unknown	7.34	184	ug/kg		J
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	387	ug/kg	99	NJ
57-11-4	Octadecanoic acid	7.44	211	ug/kg	90	NJ
	Unknown	7.75	245	ug/kg		J
	Unknown	7.85	617	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	256	ug/kg	99	NJ
	Unknown	7.92	492	ug/kg		J
	Unknown	7.97	286	ug/kg		J
	Unknown	8.09	2370	ug/kg		J
	Unknown	8.14	1090	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	8.26	629	ug/kg	92	NJ
	Unknown	8.33	678	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	8.53	238	ug/kg	96	NJ
1599-67-3	1-Docosene	8.73	572	ug/kg	98	NJ
	Eicosane	9.07	764	ug/kg	0	J
112-40-3	Dodecane	9.76	594	ug/kg	90	NJ
	Unknown	10.02	4970	ug/kg		J
	Unknown	10.4	1010	ug/kg		J
83-47-6	.gamma.-Sitosterol	11.67	668	ug/kg	90	NJ
1058-61-3	Stigmast-4-en-3-one	12.31	1470	ug/kg	95	NJ

Data File: /chem/MSD1.i/s032110.b/slc2120.d
Report Date: 22-Mar-2010 15:39

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2120.d
Lab Smp Id: 248370010 Client Smp ID: RE36-10-7483
Inj Date : 22-MAR-2010 00:07
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370010|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.sub
Target Version: 3.50
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	23.99480	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.610	3.610	(1.000)	441049	40.0000	
* 29 Naphthalene-d8		136	4.463	4.469	(1.000)	1727352	40.0000	
* 46 Acenaphthene-d10		164	5.704	5.704	(1.000)	907776	40.0000	
* 67 Phenanthrene-d10		188	6.710	6.710	(1.000)	1596570	40.0000	
* 91 Chrysene-d12		240	8.292	8.292	(1.000)	1091013	40.0000	
* 98 Perylene-d12		264	9.528	9.522	(1.000)	650969	40.0000	
\$ 3 2-Fluorophenol		112	2.834	2.822	(0.785)	670693	59.0547	2590
\$ 5 Phenol-d5		99	3.351	3.346	(0.928)	818170	59.1528	2590
\$ 20 Nitrobenzene-d5		82	3.969	3.975	(0.889)	349178	32.9588	1440
\$ 39 2-Fluorobiphenyl		172	5.204	5.204	(0.912)	703377	28.0559	1230
\$ 60 2,4,6-Tribromophenol		329	6.251	6.251	(1.096)	150053	50.4188	2210
\$ 81 p-Terphenyl-d14		244	7.628	7.622	(0.920)	643620	35.3849	1550

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
	MASS						ON-COLUMN	FINAL
	=====			=====	=====	=====	(ng/ul)	(ug/Kg)
79 Pyrene	202		7.563	7.569	(0.912)	9468	0.30582	13.4 (a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: slc2120.d

Report Date: 03/22/2010 11:56

Lab. ID: 248370010

SampleType: SAMPLE

Injection Date: 22-MAR-2010 00:07

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370010|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1	N-Methyl-N-nitrosomethylamine			CAS#: 62-75-9		
74	12900	1.92	2.16	80-120	100	(T)
42	6063	1.93	2.16	68-128	47	(QT)
43	44811	1.93	2.16	12- 72	347	(QT)

4	Aniline			CAS#: 62-53-3		
66	39797	3.35	3.40	80-120	100	()
93	44877	3.39	3.40	233-293	113	(Q)

6	Phenol			CAS#: 108-95-2		
94	54509	3.19	3.36	80-120	100	(T)
66	10266	3.19	3.36	11- 71	19	(T)
65	39914	3.19	3.36	0- 58	73	(QT)

15	o-Cresol			CAS#: 95-48-7		
107	23504	3.57	3.74	80-120	100	(T)
108	5464	3.57	3.74	85-145	23	(QT)
77	112896	3.57	3.74	19- 79	480	(QT)

17	N-Nitrosodipropylamine			CAS#: 621-64-7		
70	50540	3.97	3.86	80-120	100	(T)
42	38194	3.97	3.86	48-108	76	(T)

22	Isophorone			CAS#: 78-59-1		
82	353225	3.97	4.14	80-120	100	(T)
138	408	3.97	4.14	0- 49	0	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
41 m-Nitroaniline			CAS#:	99-09-2		
138	523	5.67	5.66	80-120	100	()
92	2431	5.67	5.66	71-131	464	(Q)
108	24838	5.70	5.66	0- 40	4741	(Q)

43 Dimethylphthalate			CAS#:	131-11-3		
163	166552	5.70	5.49	80-120	100	(T)
164	907776	5.70	5.49	0- 40	545	(QT)

44 2,6-Dinitrotoluene			CAS#:	606-20-2		
165	117206	5.70	5.54	80-120	100	(T)
63	2660	5.70	5.54	50-110	2	(QT)

50 2,4-Dinitrotoluene			CAS#:	121-14-2		
165	117206	5.70	5.83	80-120	100	(T)
89	1773	5.70	5.82	38- 98	2	(QT)
63	2595	5.70	5.82	20- 80	2	(QT)

53 Fluorene			CAS#:	86-73-7		
166	11912	6.25	6.09	80-120	100	(T)
165	12086	6.25	6.09	61-121	101	(T)
167	3883	6.25	6.09	0- 43	33	(T)

56 p-Nitroaniline			CAS#:	100-01-6		
138	350	6.06	6.09	80-120	100	()
108	1262	5.98	6.09	29- 89	360	(QT)
92	726	5.92	6.09	14- 74	207	(QT)

79 Pyrene			CAS#:	129-00-0		
202	9468	7.56	7.57	80-120	100	()
200	2606	7.56	7.57	0- 49	28	()
101	2134	7.56	7.56	0- 49	23	()

85 Butylbenzylphthalate			CAS#:	85-68-7		
149	62355	7.92	7.87	80-120	100	()
91	70226	7.92	7.87	39- 99	113	(Q)
206	1242	7.95	7.87	0- 50	2	(T)

92 Chrysene			CAS#:	218-01-9		
228	7203	8.29	8.31	80-120	100	()
229	5250	8.29	8.31	0- 49	73	(Q)
226	1320	8.29	8.31	0- 58	18	()

93 bis(2-Ethylhexyl)phthalate			CAS#:	117-81-7		
149	41915	8.09	8.20	80-120	100	(T)
167	4355	8.09	8.20	0- 59	10	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2120.d
Lab Smp Id: 248370010 Client Smp ID: RE36-10-7483
Inj Date : 22-MAR-2010 00:07
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370010|961228|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	23.99480	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2746004	40.000
* 29 Naphthalene-d8	4.463	3501348	40.000
* 46 Acenaphthene-d10	5.704	4318025	40.000
* 67 Phenanthrene-d10	6.710	4012209	40.000
* 91 Chrysene-d12	8.292	3128294	40.000
* 98 Perylene-d12	9.528	2089476	40.000

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.810	803186	11.6996995	513	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.193	2519720	36.7038011	1610	97	NIST05.L	15188	10
Camphene					CAS #: 79-92-5		
3.293	808407	11.7757505	516	98	NIST05.L	15160	10
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me					CAS #: 18172-67-3		
3.434	967465	14.0926969	618	97	NIST05.L	15390	10
3-Carene					CAS #: 13466-78-9		
3.575	1656789	24.1338170	1060	96	NIST05.L	15156	10
Benzeneacetic acid					CAS #: 103-82-2		
4.616	405253	4.62968181	203	90	NIST05.L	15740	29
Caryophyllene					CAS #: 87-44-5		
5.445	485167	4.49433844	197	99	NIST05.L	59797	46
n-Hexadecanoic acid					CAS #: 57-10-3		
6.987	580088	5.78322759	254	98	NIST05.L	96235	67
Unknown					CAS #:		
7.228	443665	4.42315243	194	0		0	67
Unknown					CAS #:		
7.322	1440879	14.3649428	630	0		0	67
Unknown					CAS #:		
7.339	419882	4.18604393	184	0		0	67
2-Methyl-2,2-3,13-octadecadienol					CAS #: 1000130-90-5		
7.398	884600	8.81907880	387	99	NIST05.L	112083	67
Octadecanoic acid					CAS #: 57-11-4		
7.439	482428	4.80959755	211	90	NIST05.L	114821	67
Unknown					CAS #:		
7.745	437571	5.59500700	245	0		0	91
Unknown					CAS #:		
7.851	1099789	14.0624750	617	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
7.898	455922	5.82965771	256	99	NIST05.L	133618	91
Unknown					CAS #:		
7.922	876550	11.2080196	492	0		0	91
Unknown					CAS #:		
7.975	510242	6.52421606	286	0		0	91
Unknown					CAS #:		
8.092	4234858	54.1490992	2370	0		0	91
Unknown					CAS #:		
8.139	1936232	24.7576780	1080	0		0	91
1,2-Benzisothiazole, 3-(hexahydro-1H-azo					CAS #: 309735-29-3		
8.263	1121898	14.3451672	629	92	NIST05.L	101019	91
Unknown					CAS #:		
8.328	1208595	15.4537202	678	0		0	91
Octadecane, 1-chloro-					CAS #: 3386-33-2		
8.528	424777	5.43141465	238	96	NIST05.L	117263	91
1-Docosene					CAS #: 1599-67-3		
8.728	1019455	13.0352857	572	98	NIST05.L	129888	91
Eicosane					CAS #:		
9.069	910453	17.4293094	764	0		0	98 (L)
Dodecane					CAS #: 112-40-3		
9.757	707193	13.5381761	594	90	NIST05.L	36429	98
Unknown					CAS #:		
10.022	5924364	113.413374	4970	0		0	98
Unknown					CAS #:		
10.404	1199280	22.9584818	1010	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
11.669	795677	15.2320837	668	90	NIST05.L	174402	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
12.310	1745420	33.4135278	1460	95	NIST05.L	173936	98

Data File: /chem/MSD1.i/s032110.b/slc2120.d
Report Date: 22-Mar-2010 15:39

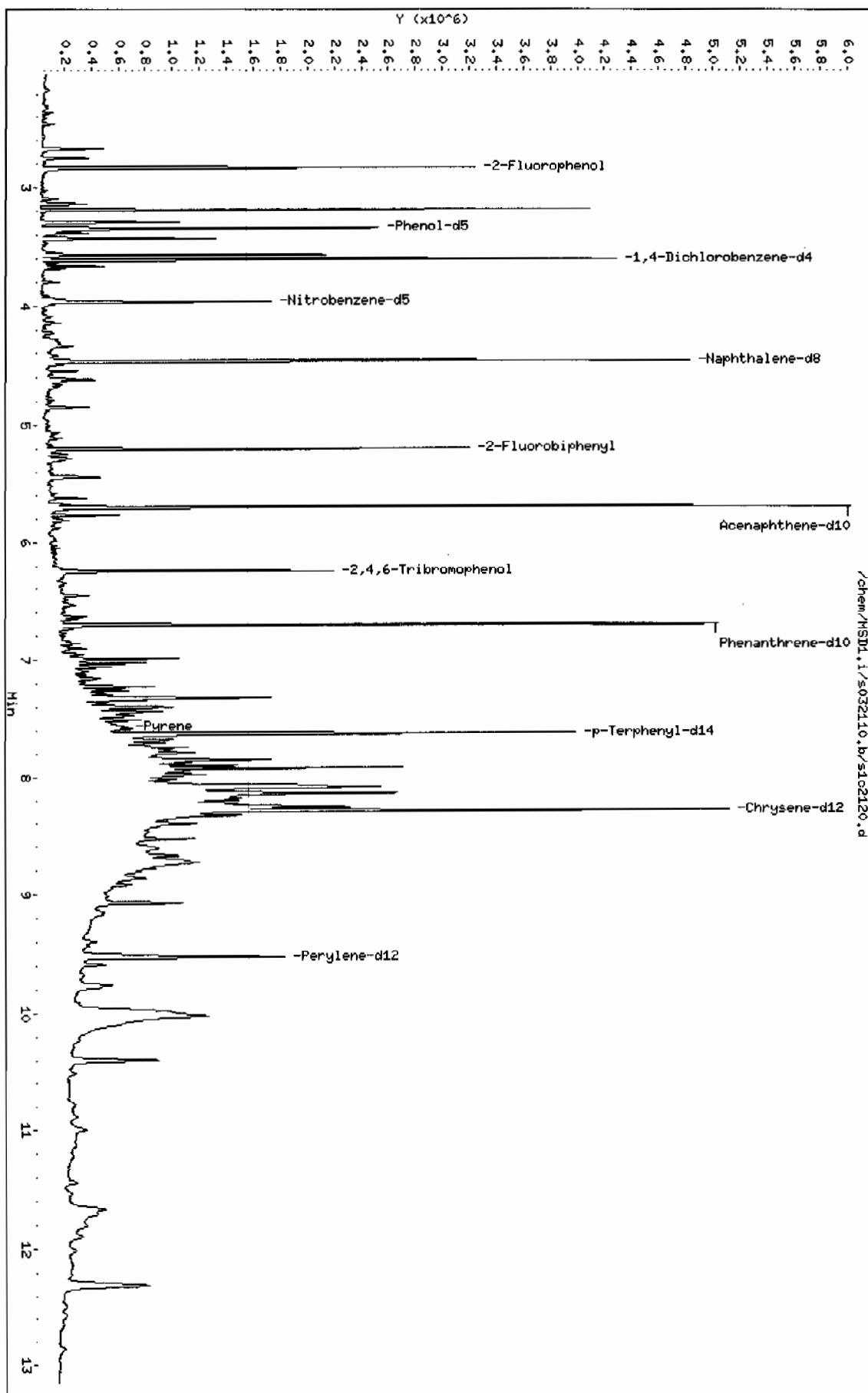
Page 4

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: /chem/MSD1.i/s032110.b/s102120.d
 Date: 22-MAR-2010 00:07
 Client ID: RES6-10-7483
 Sample Info: 1248370010196122811SVH11.LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD1.i
 Operator: AMY
 Column diameter: 0.20



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: HSD1.i

Sample Info: 1248370010196122811SVMI11LANL

Volume Injected (uL): 0.5

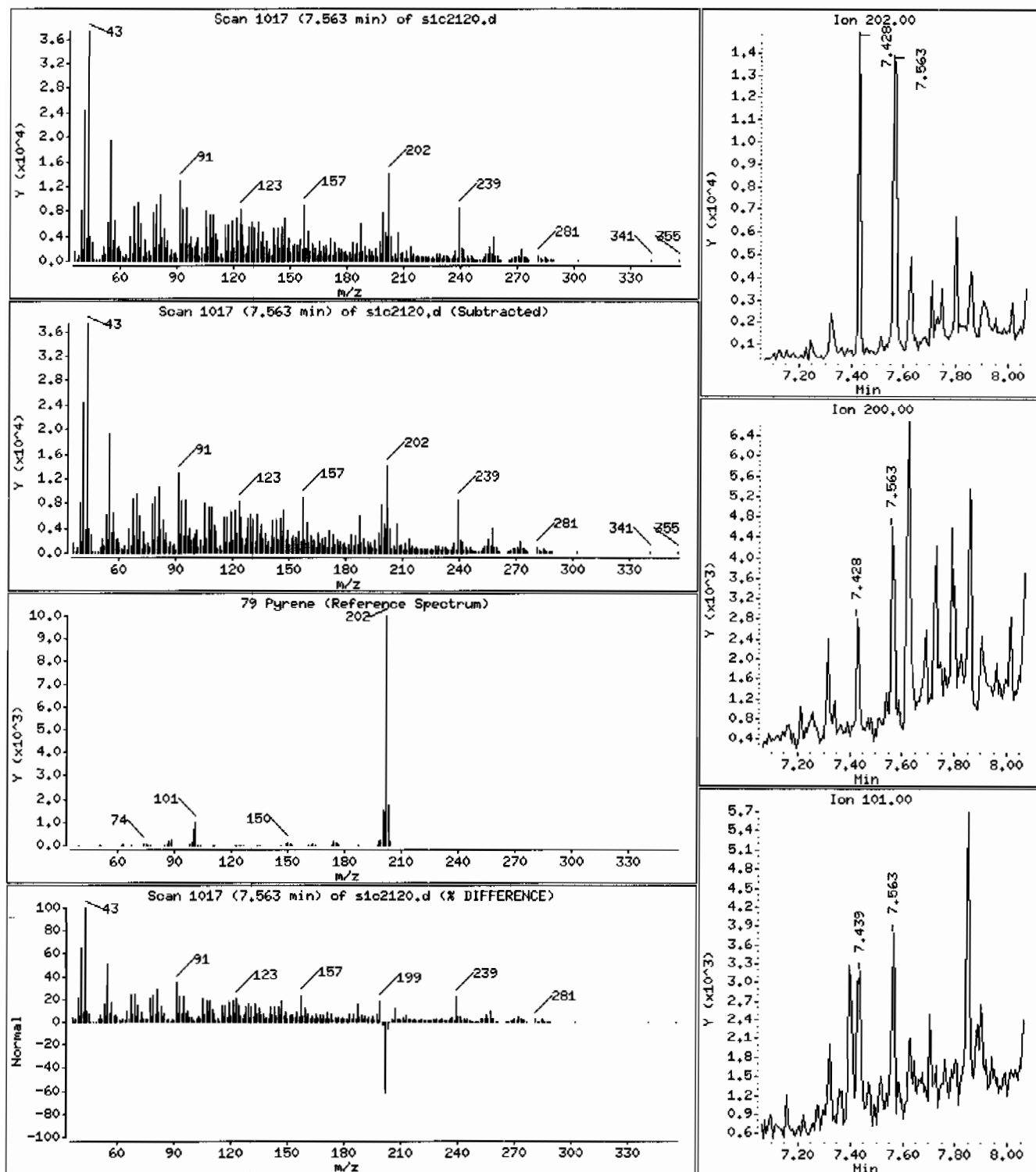
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 13.4 ug/Kg



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: I248370010196122811ISVH11ILANL

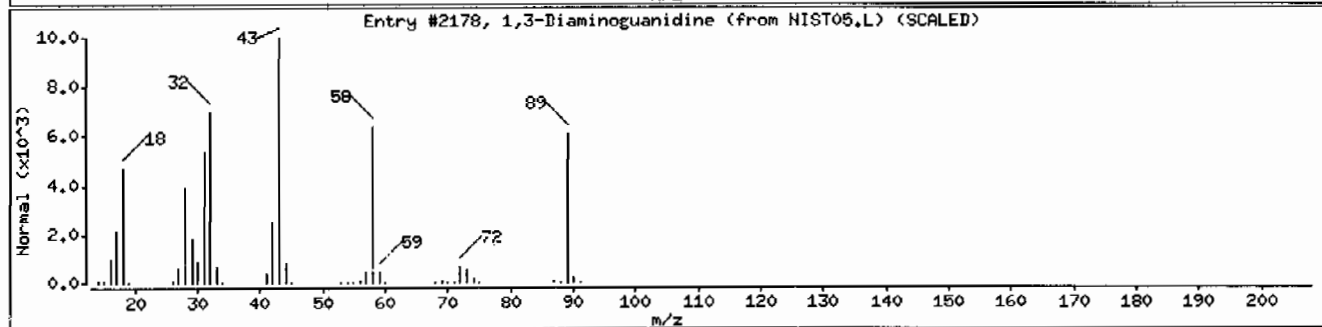
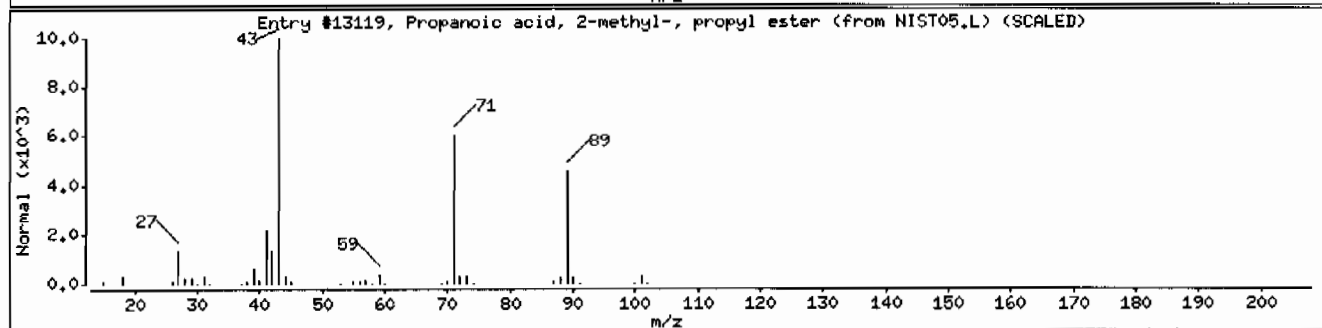
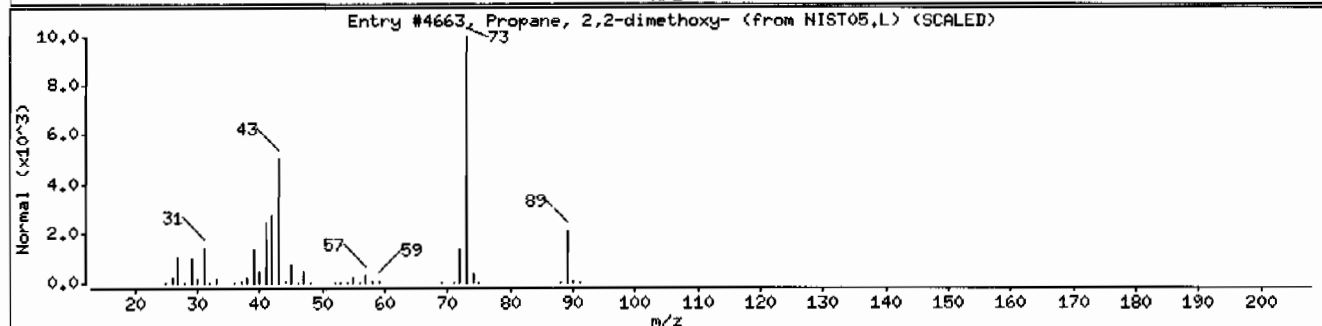
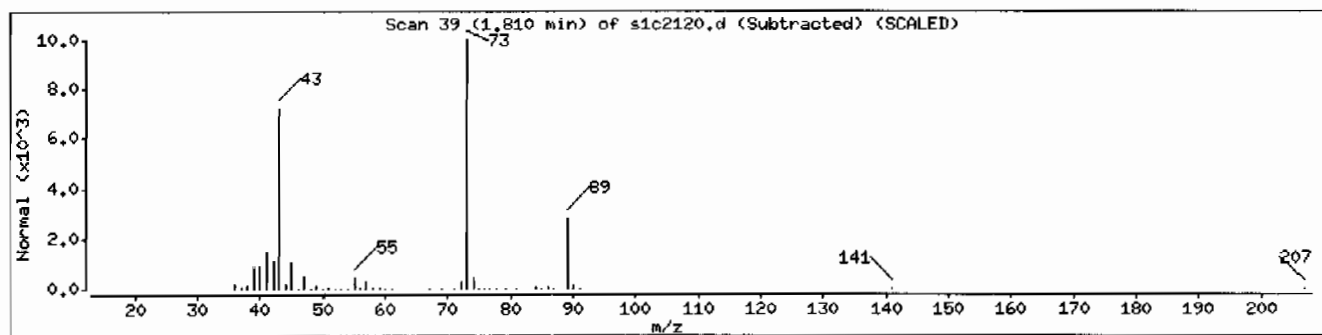
Volume Injected (uL): 0.5

Operator: AMY

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	45	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	17	C7H14O2	130
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	17	CH7N5	89



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811ISVH11ILANL

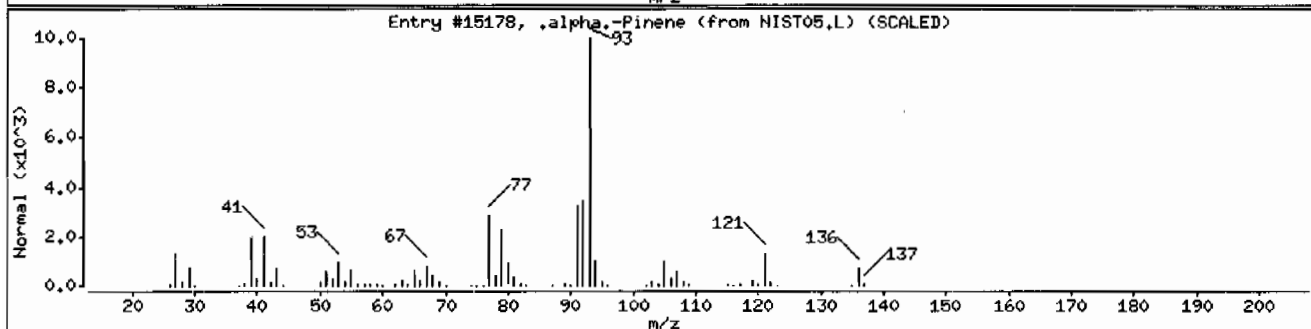
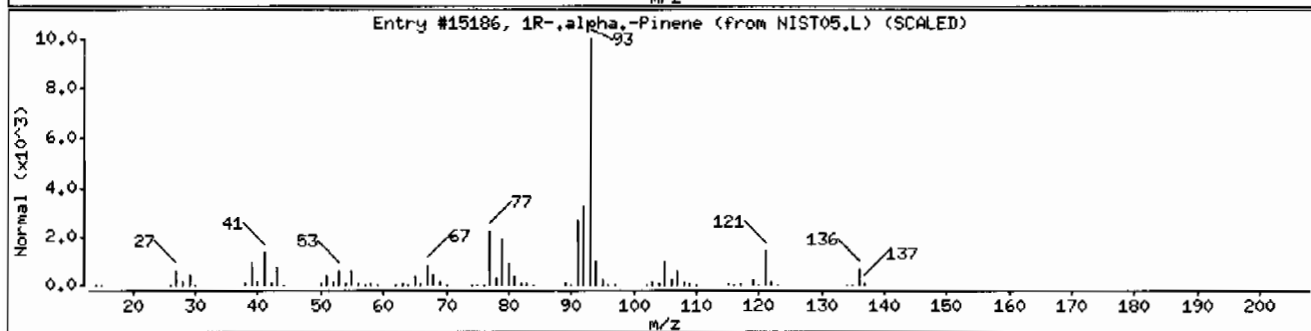
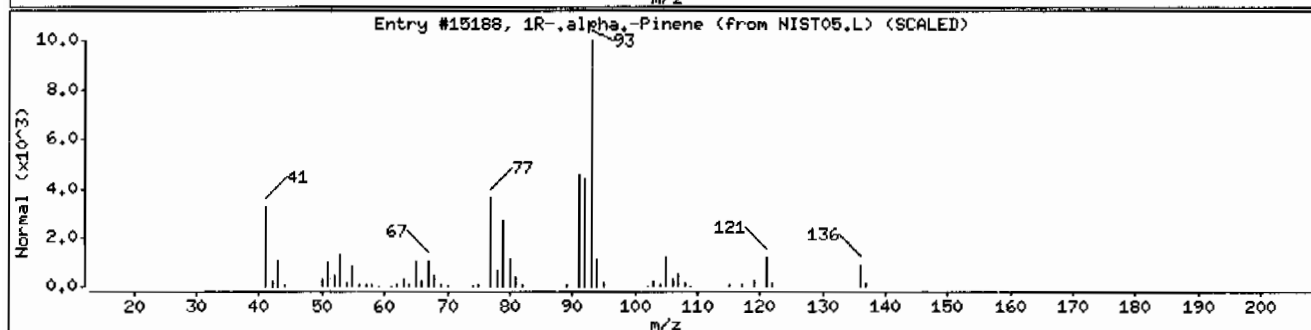
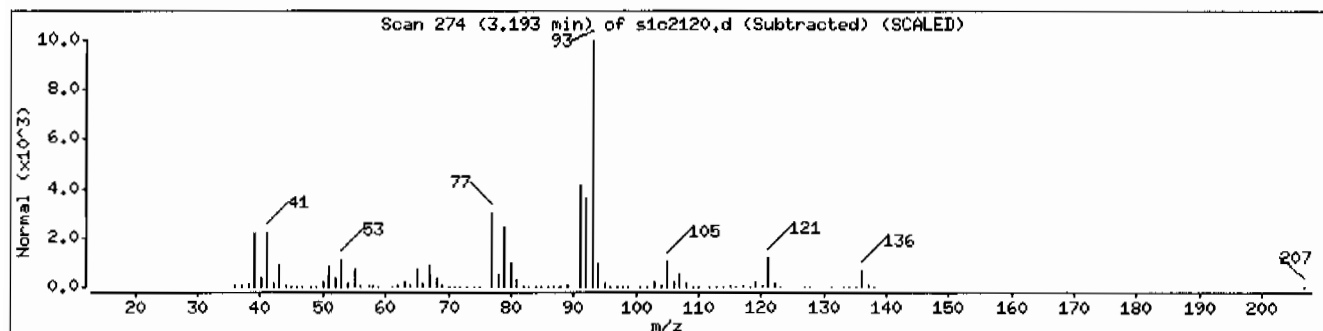
Volume Injected (uL): 0.5

Operator: AHY

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



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: HSD1.i

Sample Info: 1248370010196122811SVH111LANL

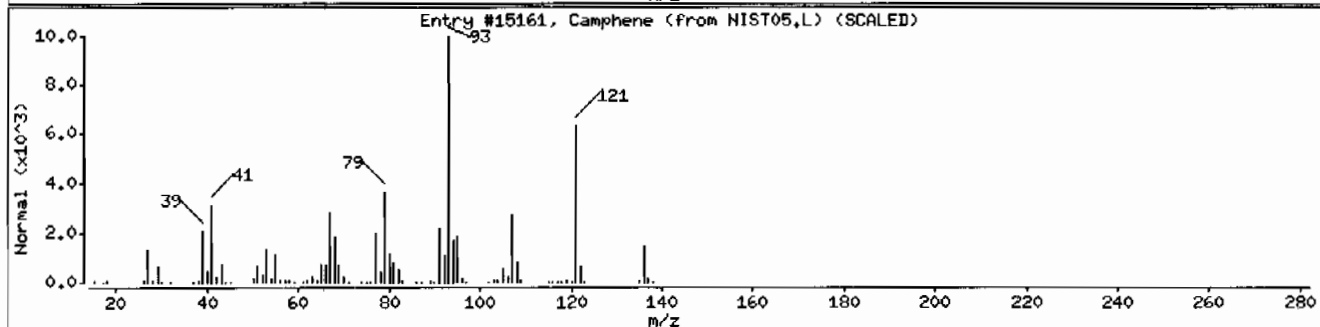
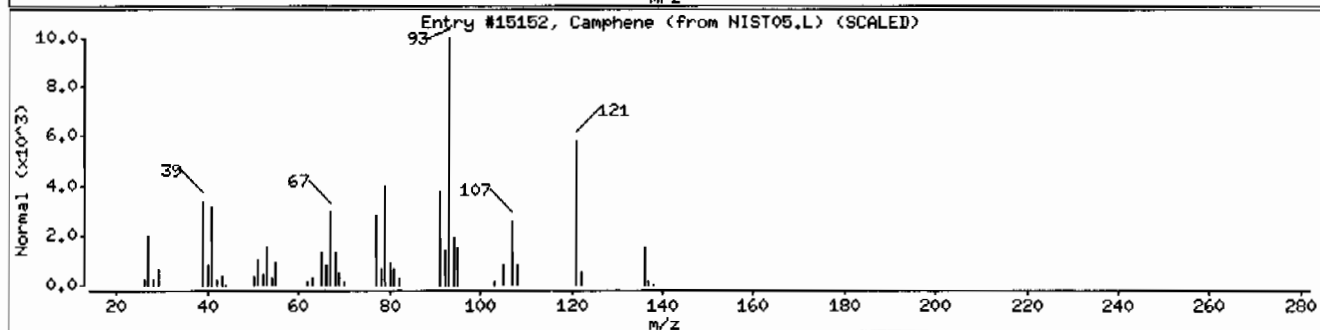
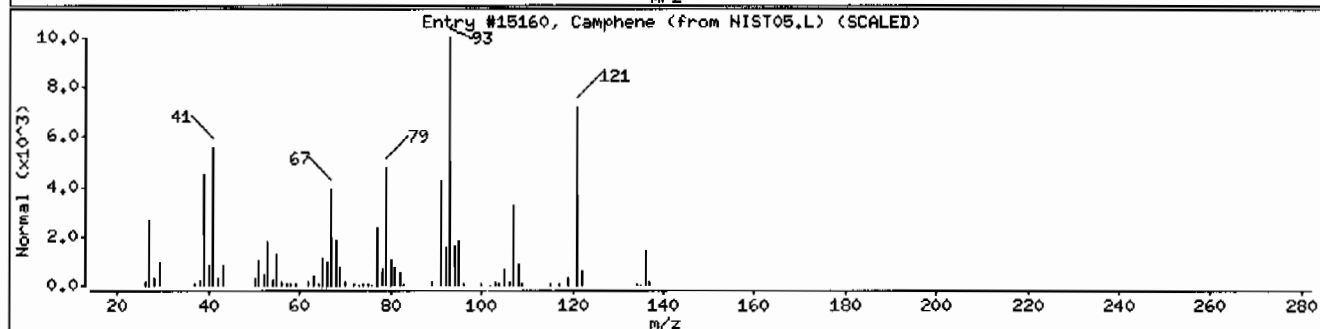
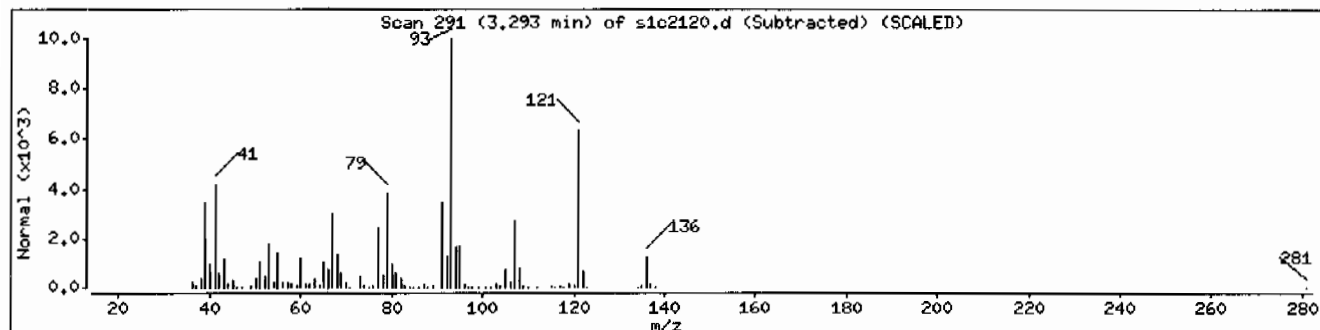
Volume Injected (UL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST05.L	15160	98	C10H16	136
Camphene	79-92-5	NIST05.L	15152	97	C10H16	136
Camphene	79-92-5	NIST05.L	15161	97	C10H16	136



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 12483700101961228111SVH111LANL

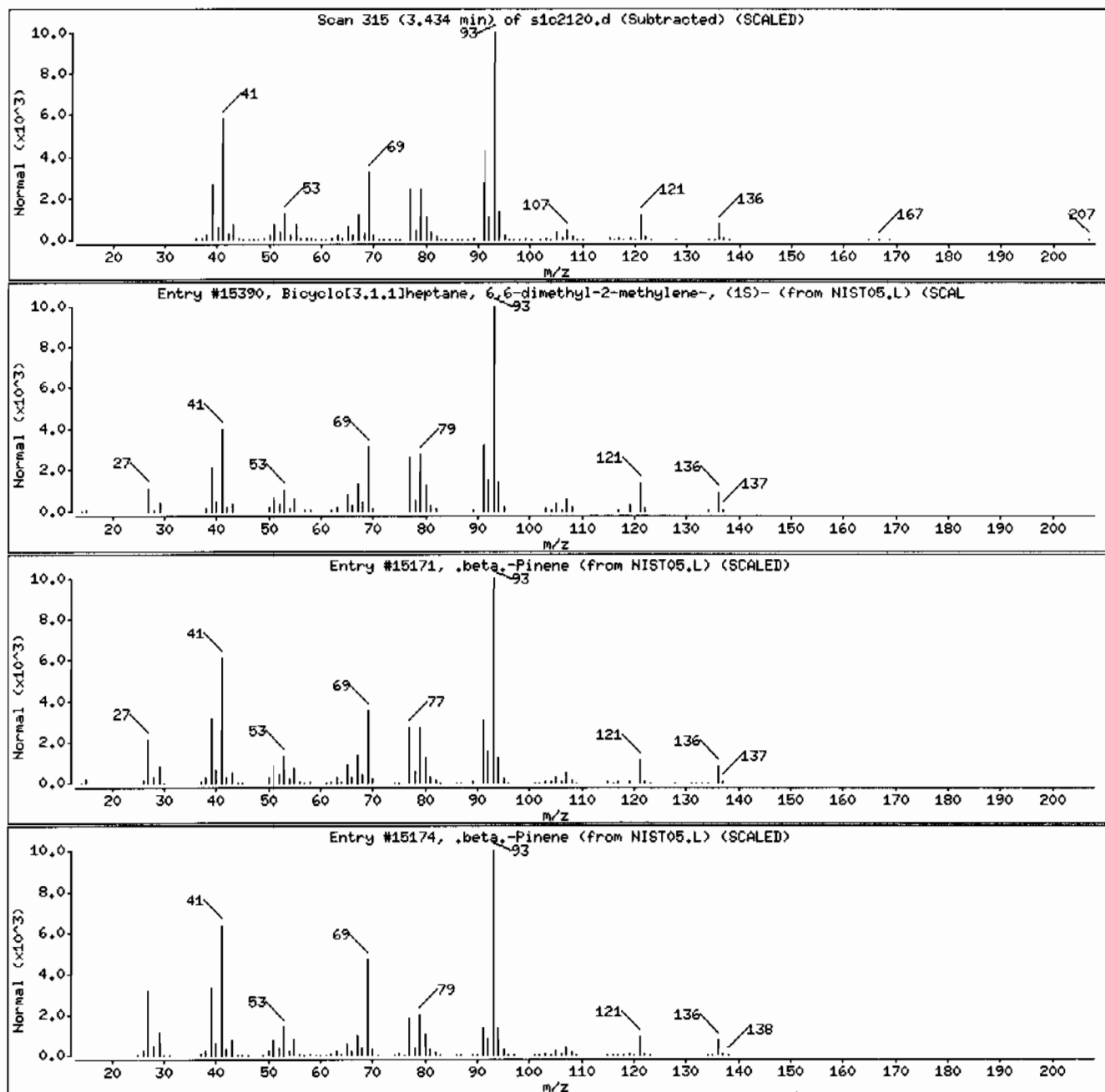
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	97	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15171	97	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15174	94	C10H16	136



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: HSD1.i

Sample Info: 1248370010196122811SVH11ILANL

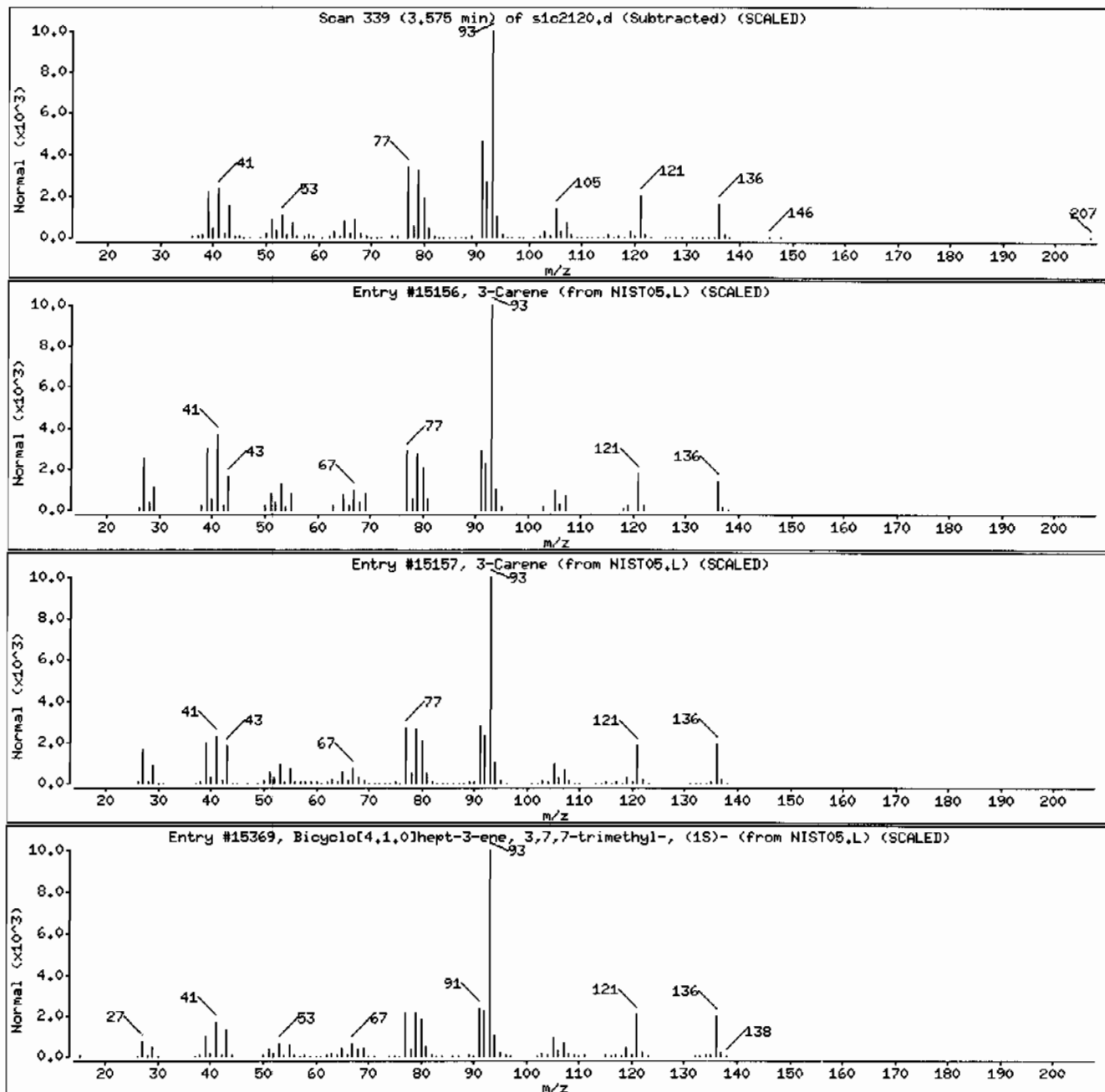
Volume Injected (uL): 0.5

Operator: AMY

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
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST05.L	15369	95	C10H16	136



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811ISVM11ILANL

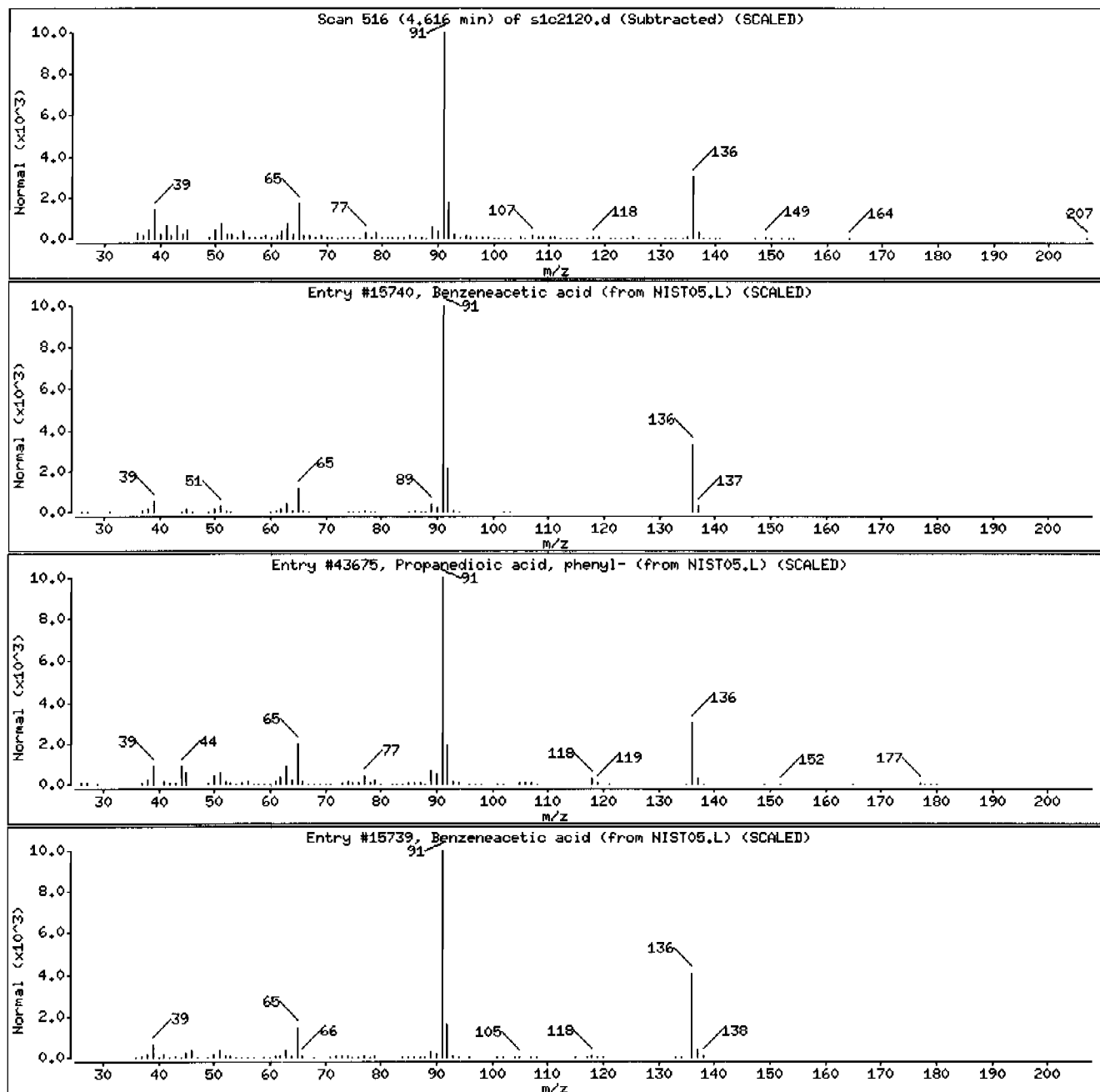
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzeneacetic acid	103-82-2	NIST05.L	15740	90	C8H8O2	136
Propanedioic acid, phenyl-	2613-89-0	NIST05.L	43675	86	C9H8O4	180
Benzeneacetic acid	103-82-2	NIST05.L	15739	80	C8H8O2	136



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811ISVH11ILANL

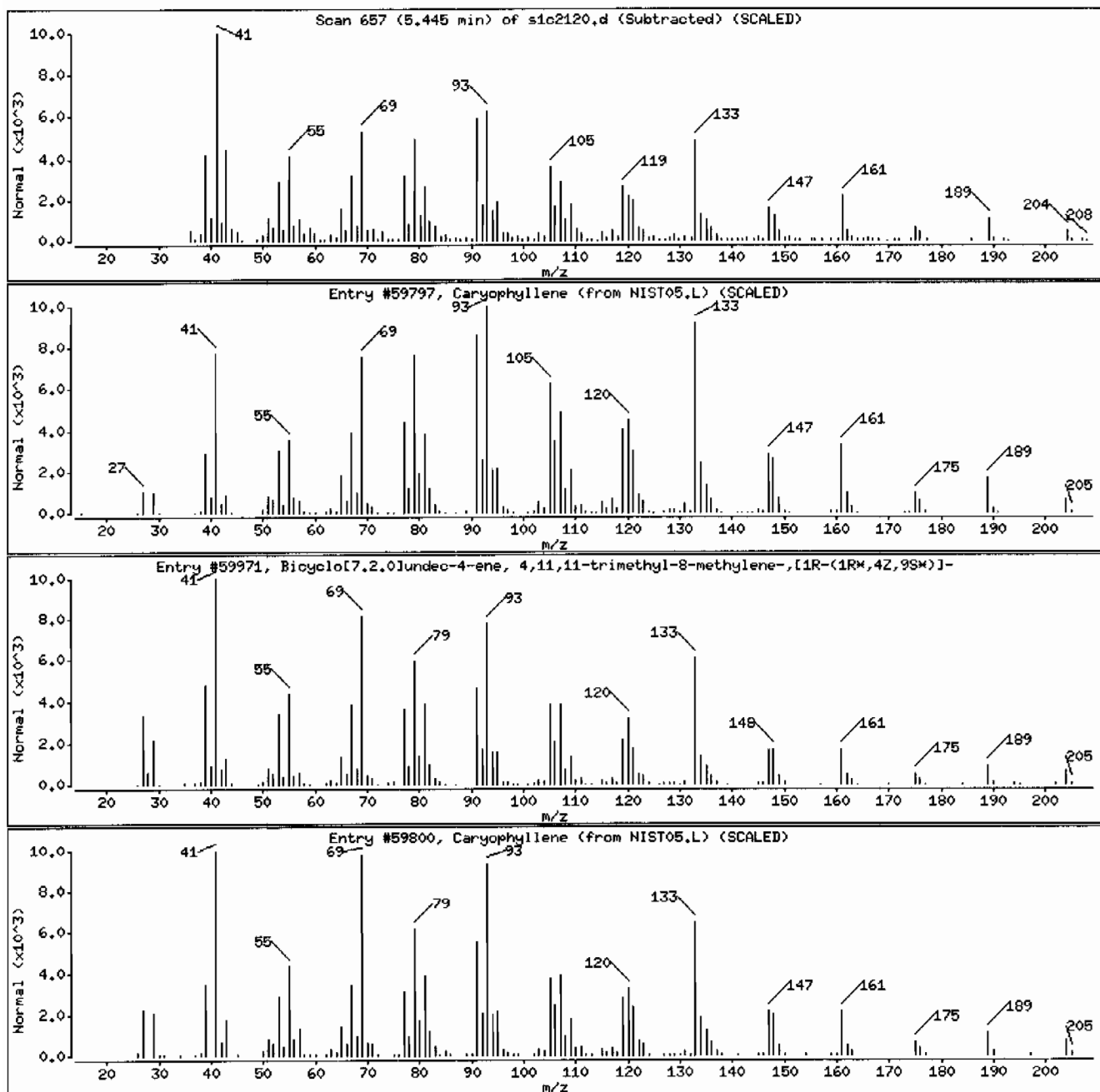
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Caryophyllene	87-44-5	NIST05.L	59797	99	C15H24	204
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime	118-65-0	NIST05.L	59971	98	C15H24	204
Caryophyllene	87-44-5	NIST05.L	59800	98	C15H24	204



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 12483700101961228111SVMI11LANL

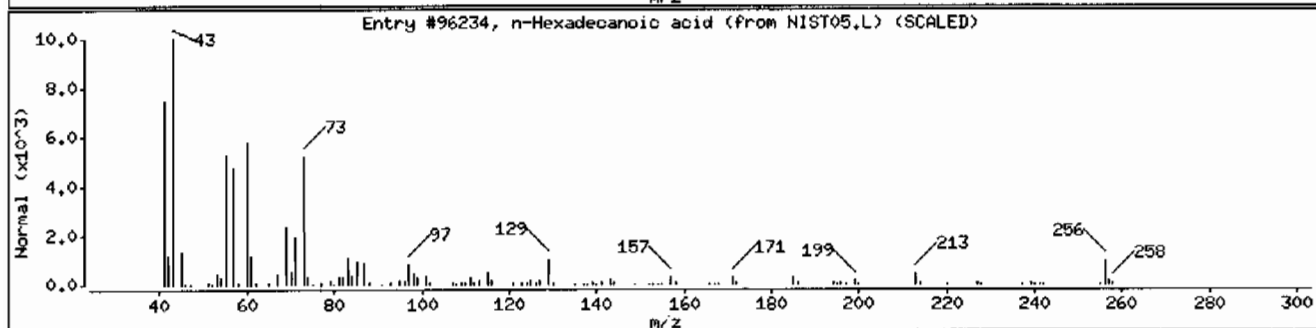
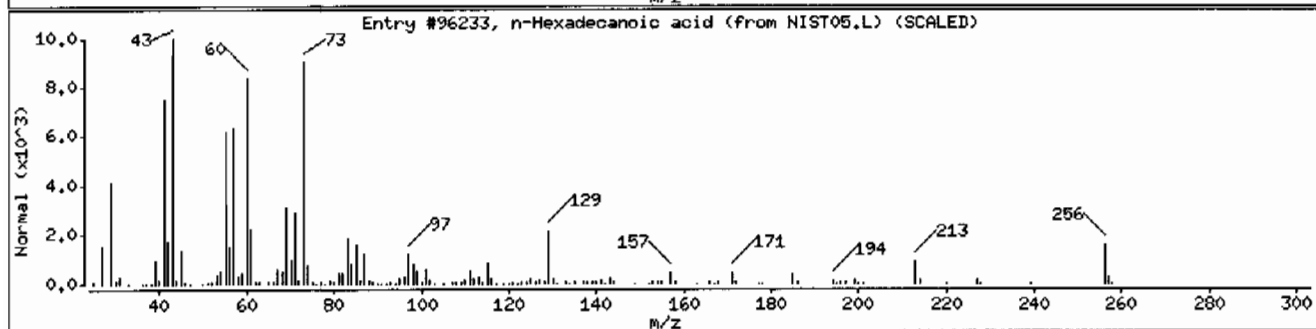
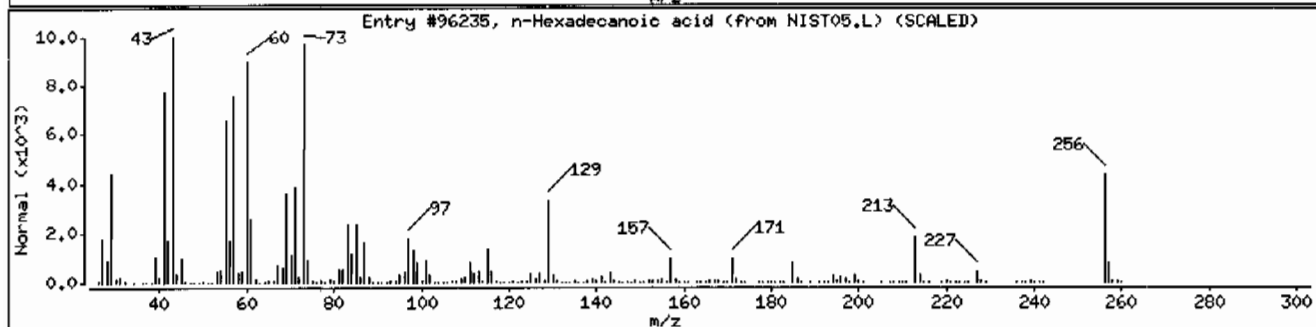
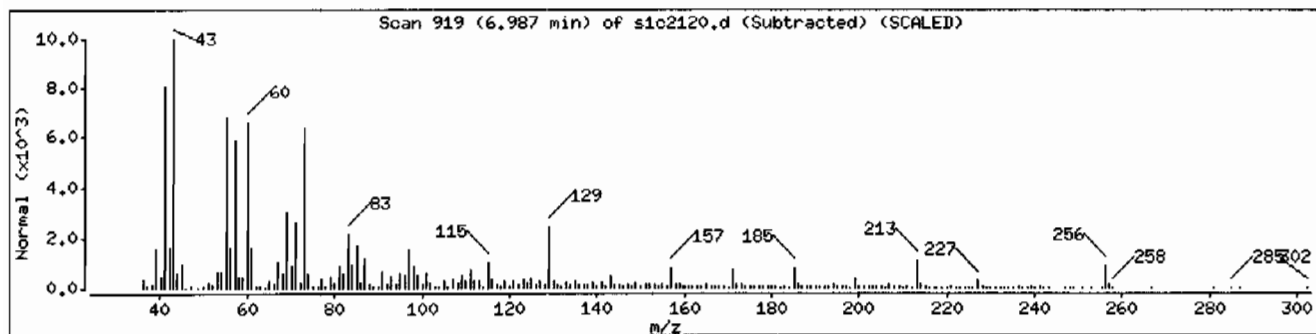
Volume Injected (uL): 0.5

Operator: AMY

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	93	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	90	C16H32O2	256



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Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811SVMI11LANL

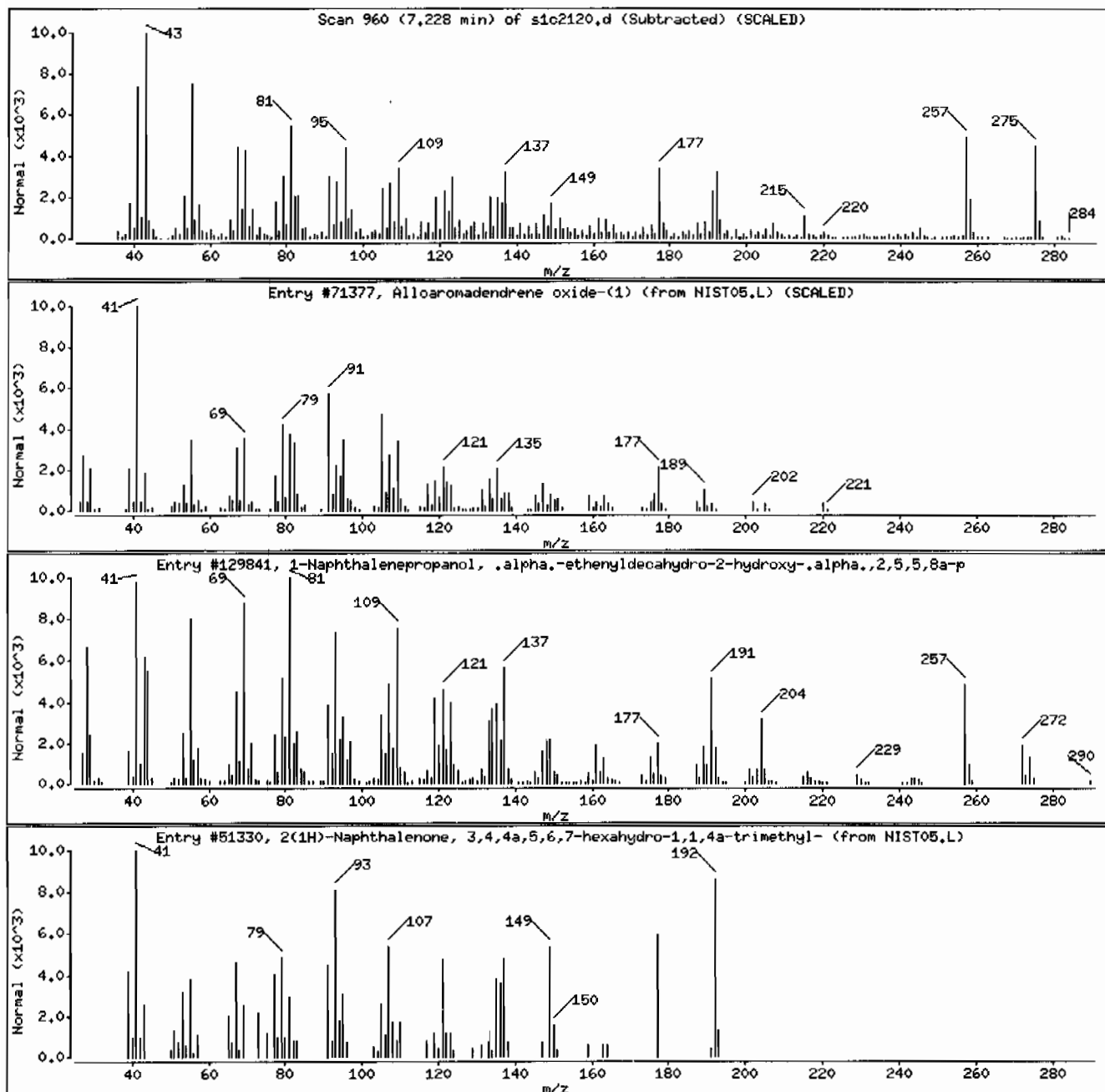
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Alloaromadendrene oxide-(1)	1000156-12-8	NIST05.L	71377	25	C15H24O	220
1-Naphthalenepropanol, .alpha.-ethenylde	515-03-7	NIST05.L	129841	25	C20H36O2	308
2(1H)-Naphthalenone, 3,4,4a,5,6,7-hexahy	4668-61-5	NIST05.L	51330	22	C13H20O	192



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811SVMI11LANL

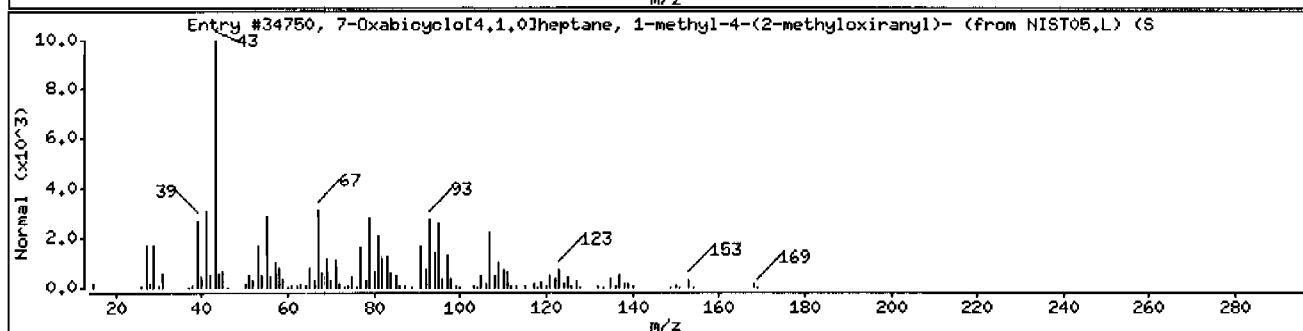
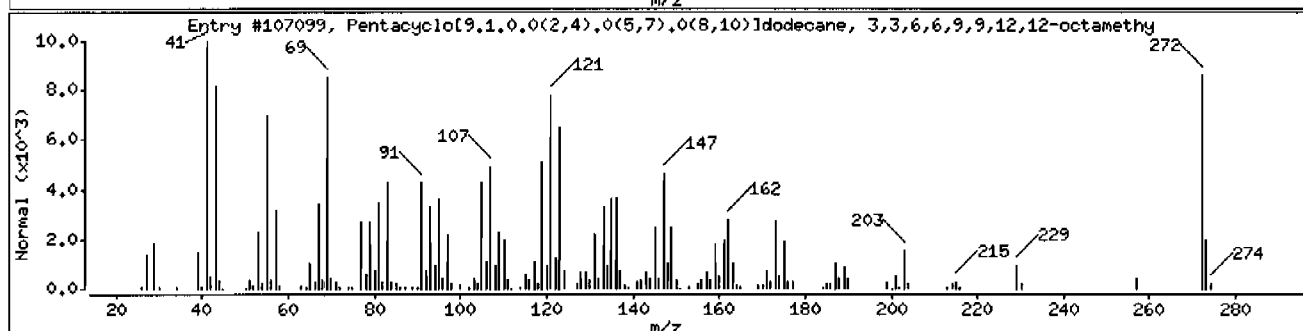
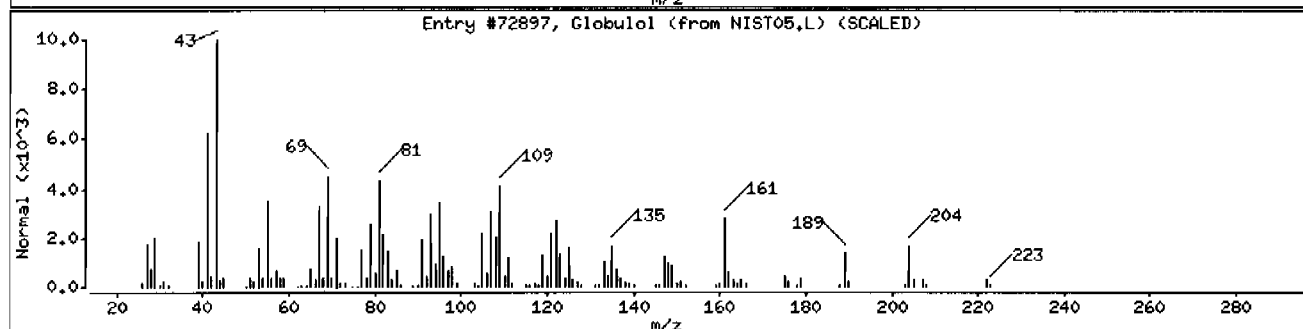
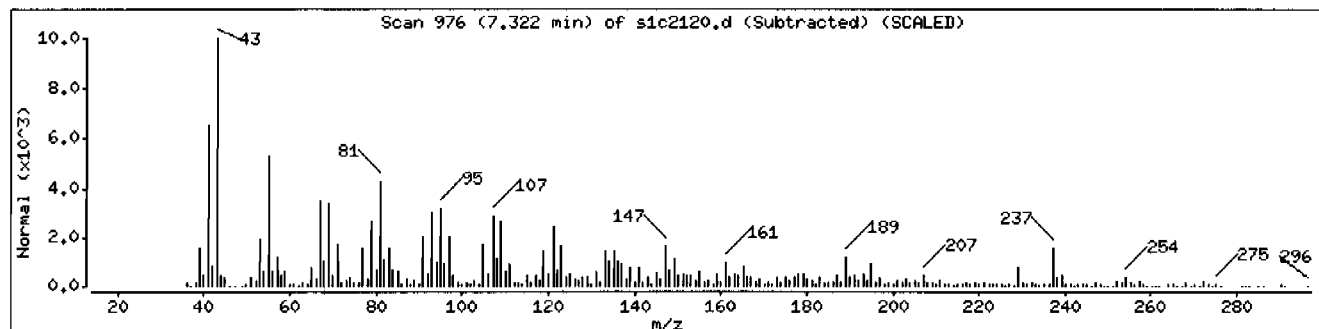
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Globulol	51371-47-2	NIST05.L	72897	50	C15H26O	222
Pentacyclo[9.1.0.0(2,4).0(5,7).0(8,10)]d	1000152-38-2	NIST05.L	107099	48	C20H32	272
7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(	96-08-2	NIST05.L	34750	46	C10H16O2	168



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1,i

Sample Info: 1248370010196122811SVMI11LANL

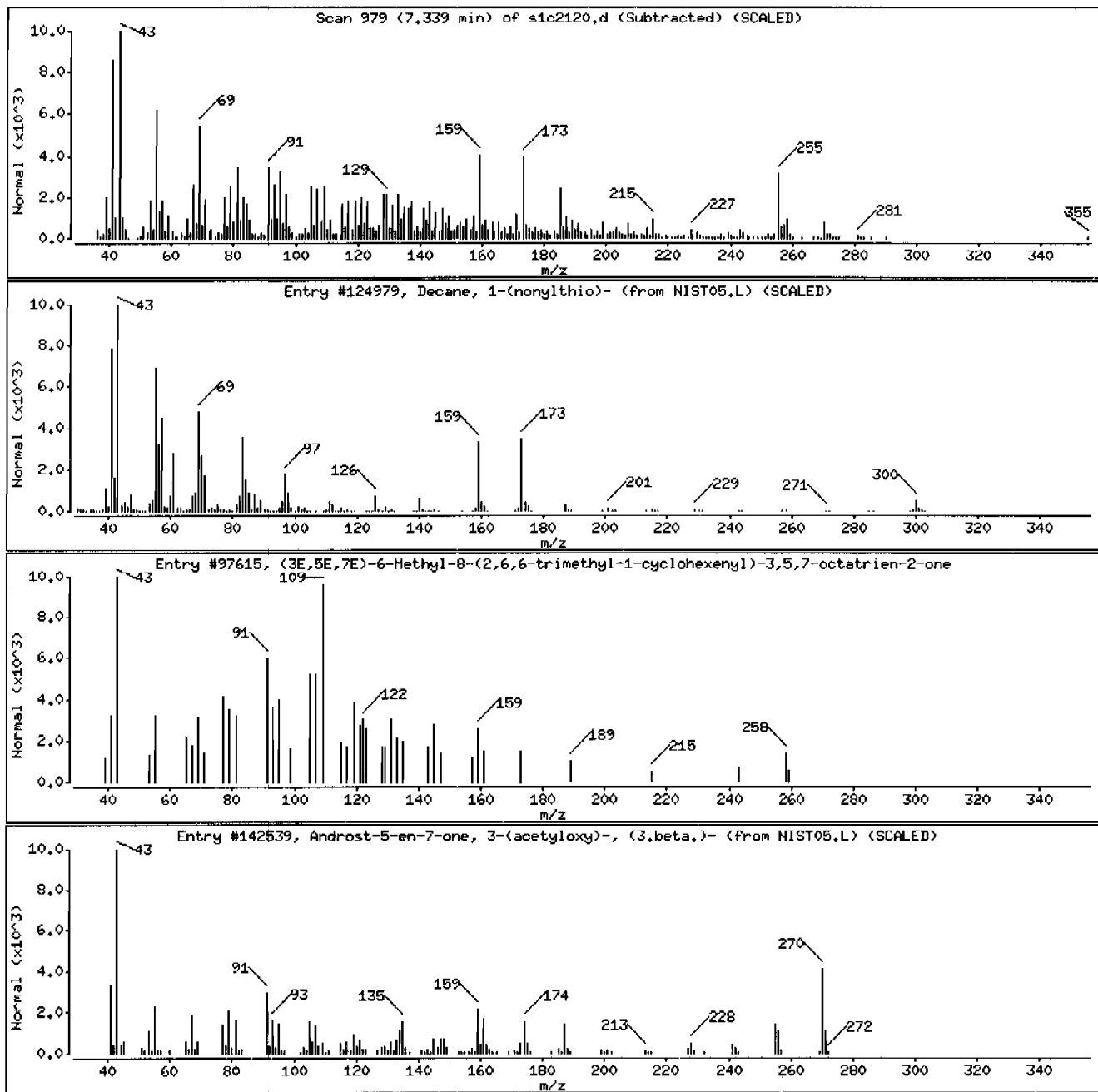
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Decane, 1-(nonylthio)-	54934-54-2	NIST05.L	124979	22	C19H40S	300
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	11	C18H26O	258
Androst-5-en-7-one, 3-(acetyloxy)-, (3.β	25845-92-5	NIST05.L	142539	10	C21H30O3	330



Date: 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 12483700101961228111SVH111LANL

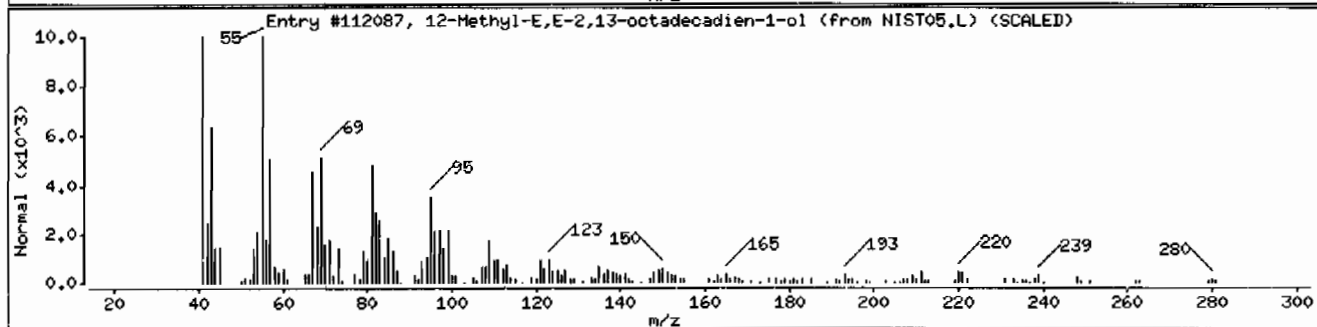
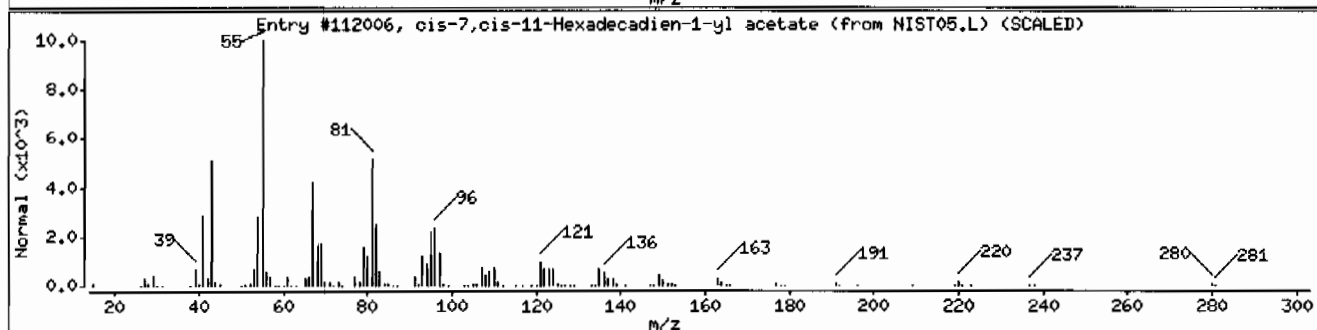
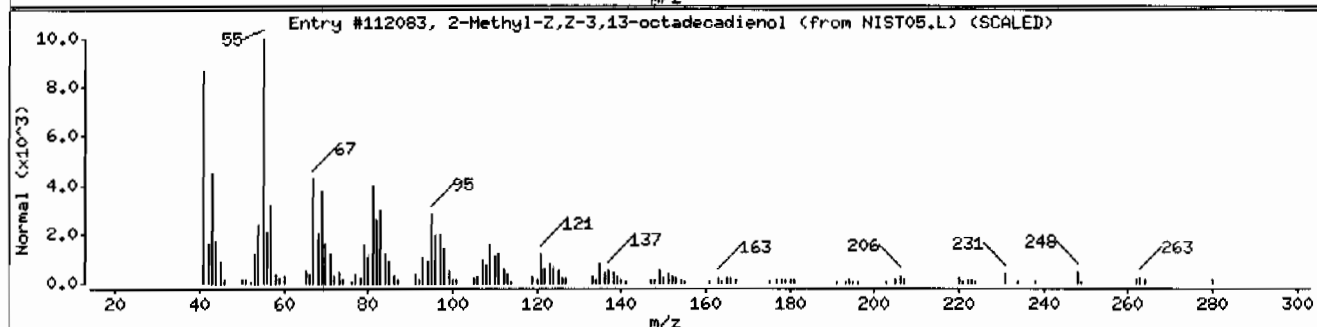
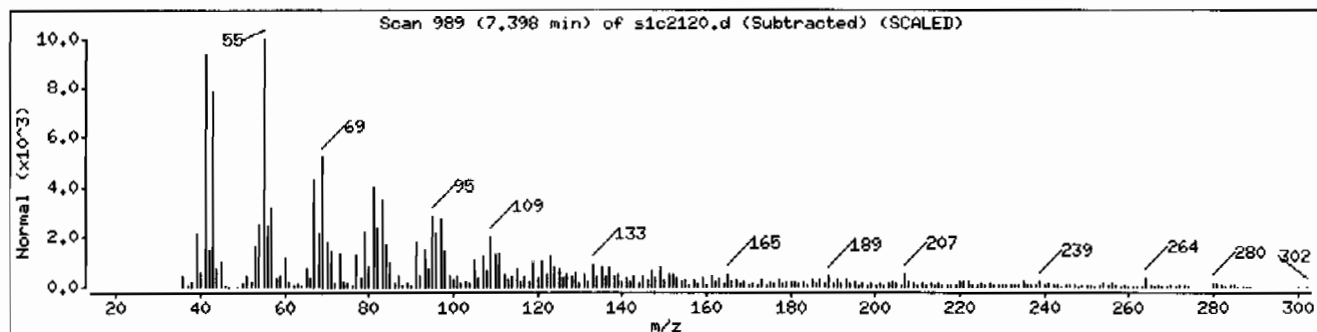
Volume Injected (UL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Methyl-2,Z-3,13-octadecadienol	1000130-90-5	NIST05.L	112083	99	C19H36O	280
cis-7,cis-11-Hexadecadien-1-yl acetate	52207-99-5	NIST05.L	112006	93	C18H32O2	280
12-Methyl-E,E-2,13-octadecadien-1-ol	1000130-90-4	NIST05.L	112087	89	C19H36O	280



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: I248370010196122811SVH111LANL

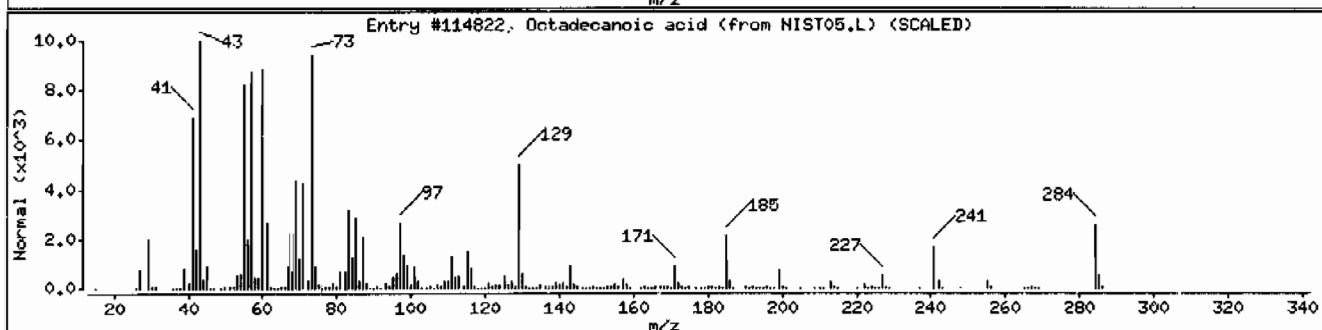
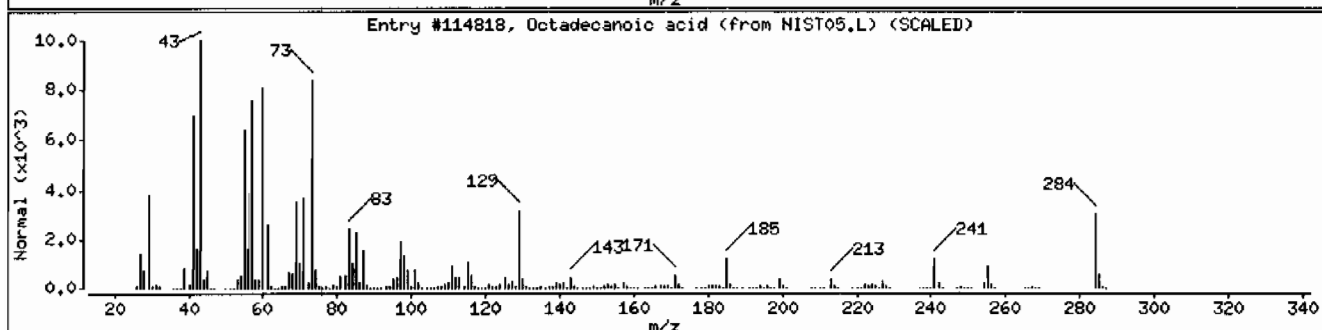
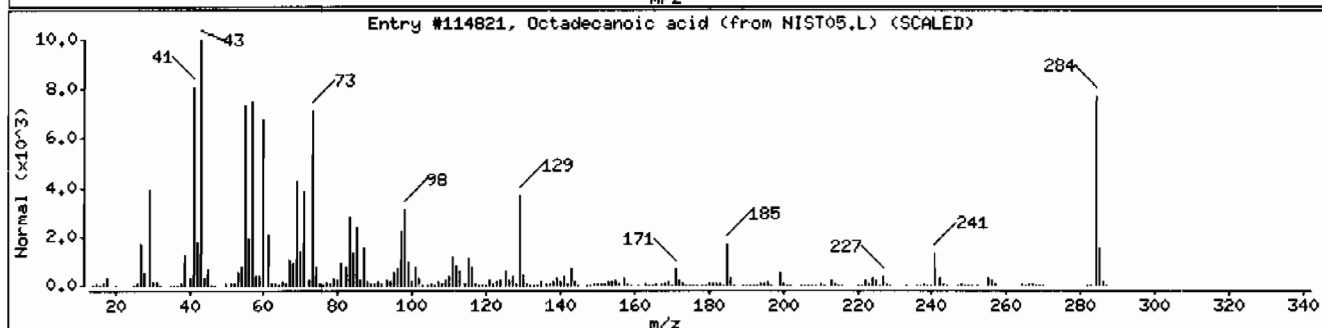
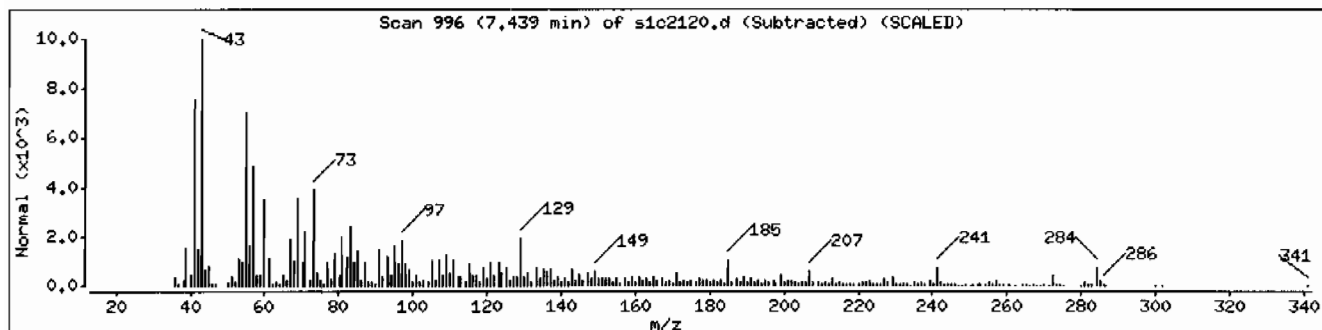
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecanoic acid	57-11-4	NIST05.L	114821	90	C18H36O2	284
Octadecanoic acid	57-11-4	NIST05.L	114818	70	C18H36O2	284
Octadecanoic acid	57-11-4	NIST05.L	114822	55	C18H36O2	284



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: I2483700101961228111SVH111LANL

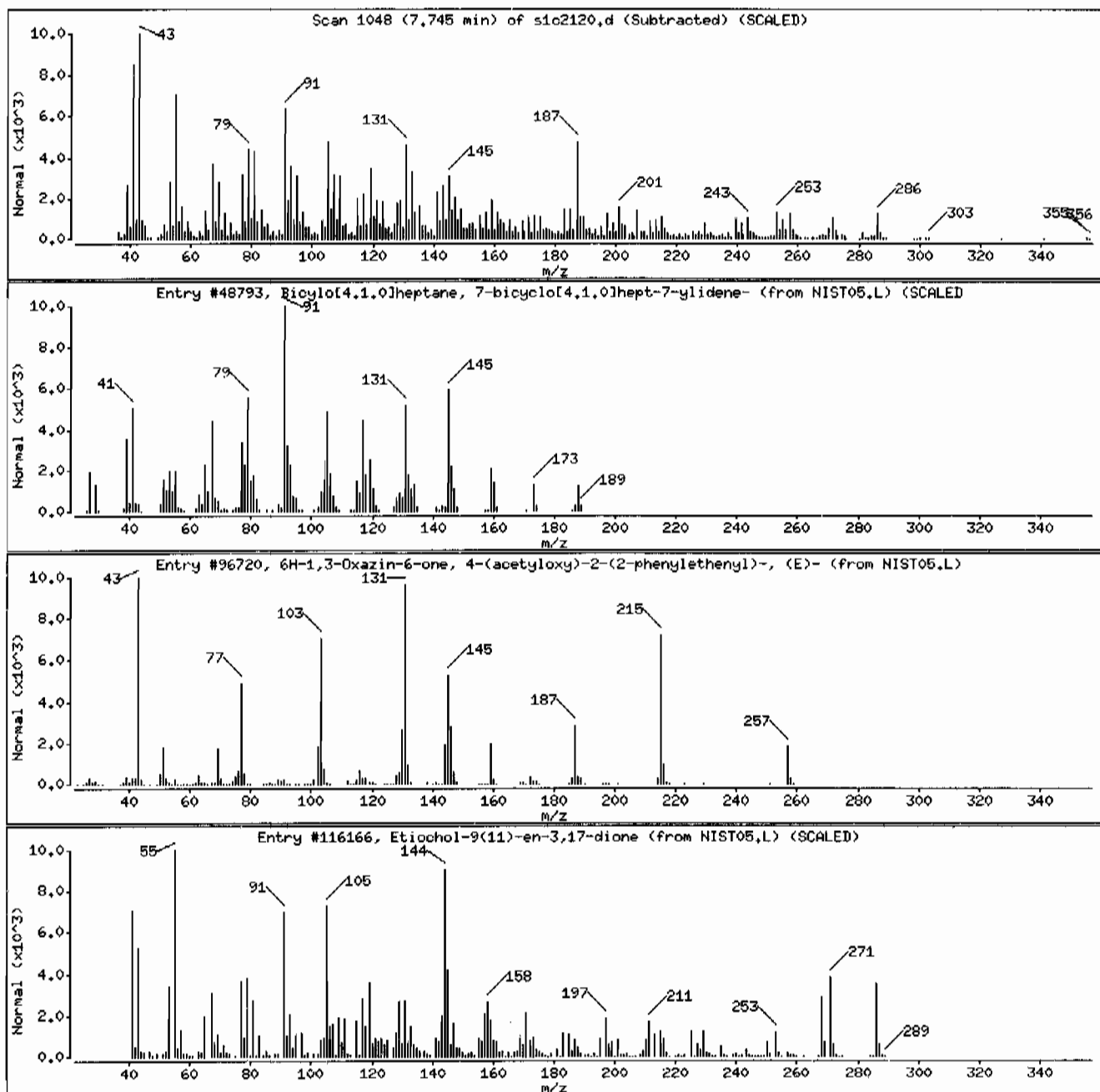
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[4.1.0]heptane, 7-bicyclo[4.1.0]he	1000152-39-9	NIST05.L	48793	40	C14H20	188
6H-1,3-Oxazin-6-one, 4-(acetyloxy)-2-(2-	138744-82-8	NIST05.L	96720	35	C14H11N04	257
Etiocol-9(11)-en-3,17-dione	1000128-32-7	NIST05.L	116166	35	C19H26O2	286



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811SVMI11LANL

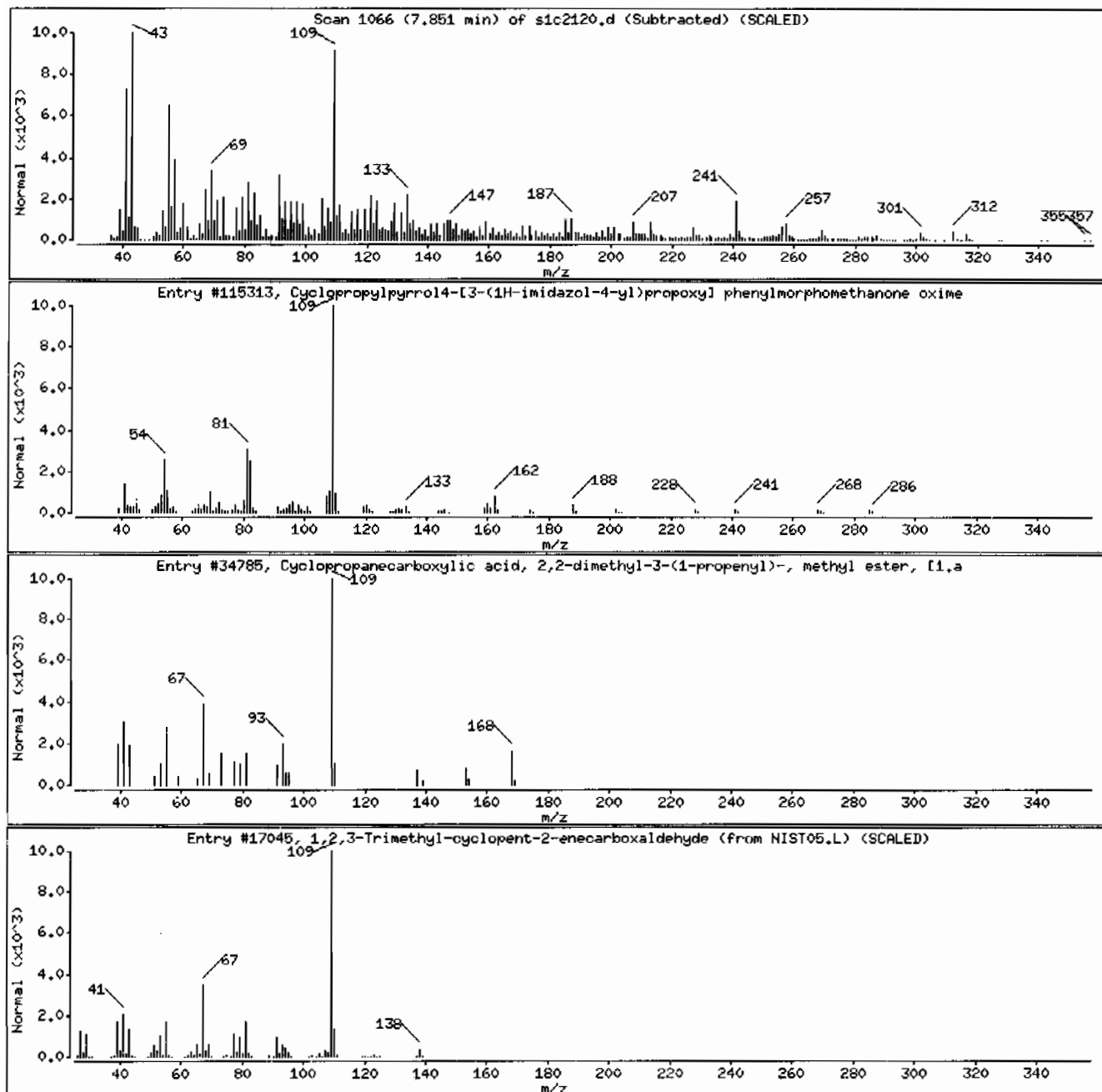
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopropylpyrrol-4-[3-(1H-imidazol-4-yl)	1000311-87-8	NIST05.L	115313	46	C16H19N3O2	285
Cyclopropanecarboxylic acid, 2,2-dimethy	33383-56-1	NIST05.L	34785	38	C10H16O2	168
1,2,3-Trimethyl-cyclopent-2-enecarboxald	1000190-18-1	NIST05.L	17045	38	C9H14O	138



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Client ID: RE36-10-7483

Instrument: MSD1.1

Sample Info: 1248370010196122811SVH111LANL

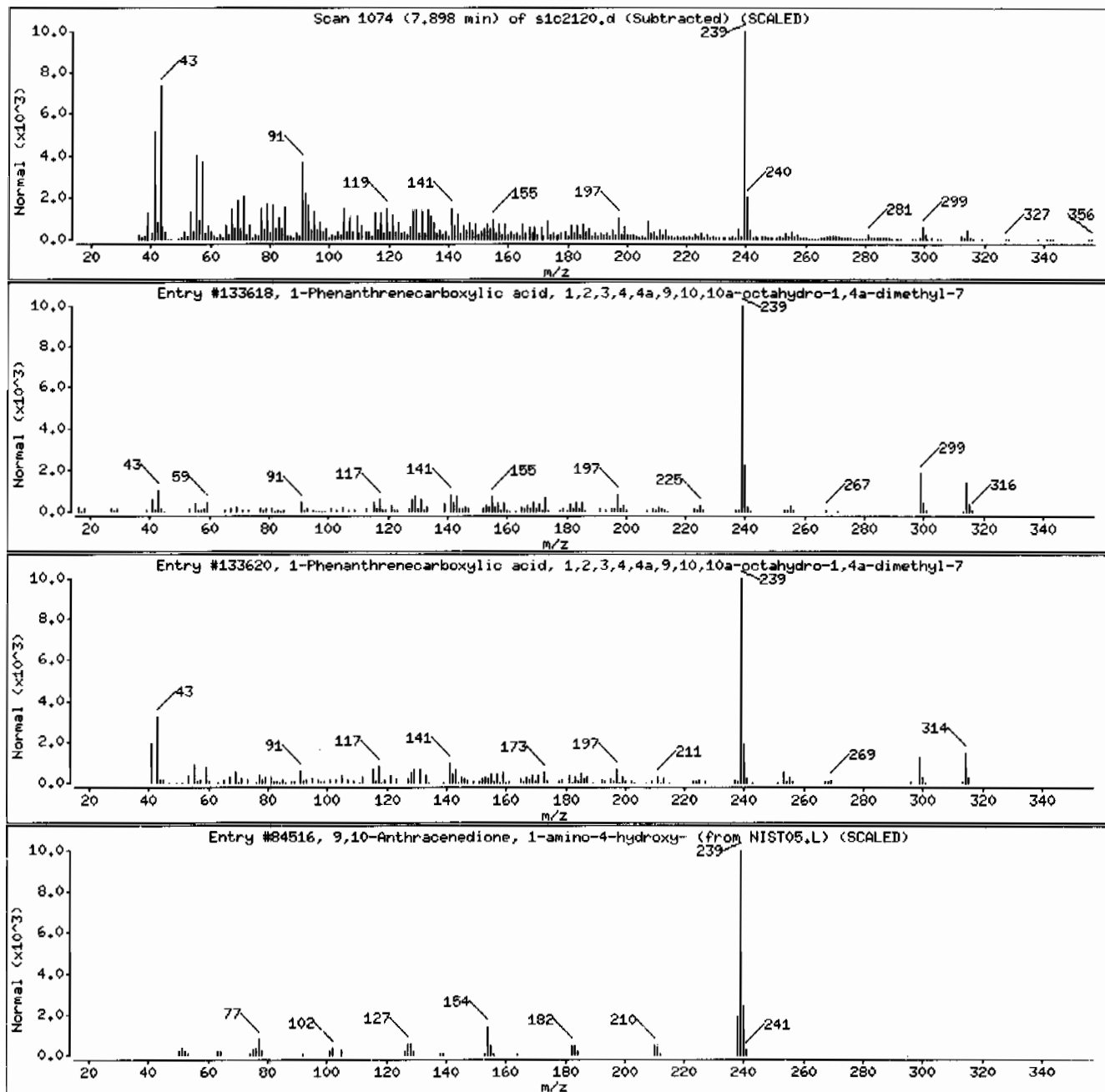
Volume Injected (uL): 0.5

Operator: AMY

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	99	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	91	C21H30O2	314
9,10-Anthracenedione, 1-amino-4-hydroxy-	116-85-8	NIST05.L	84516	55	C14H9NO3	239



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811SVH11ILANL

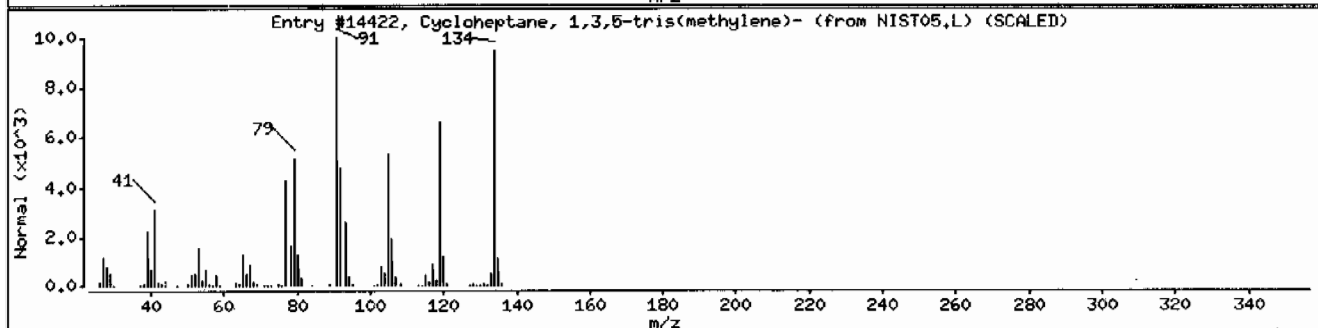
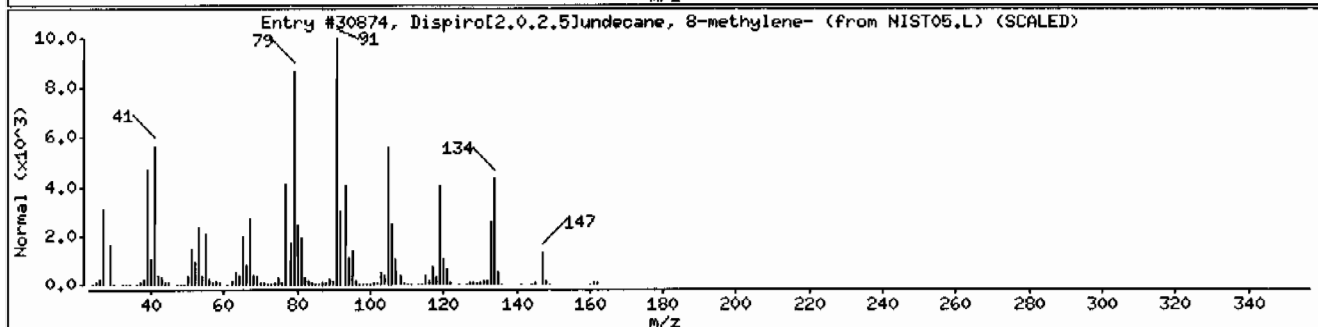
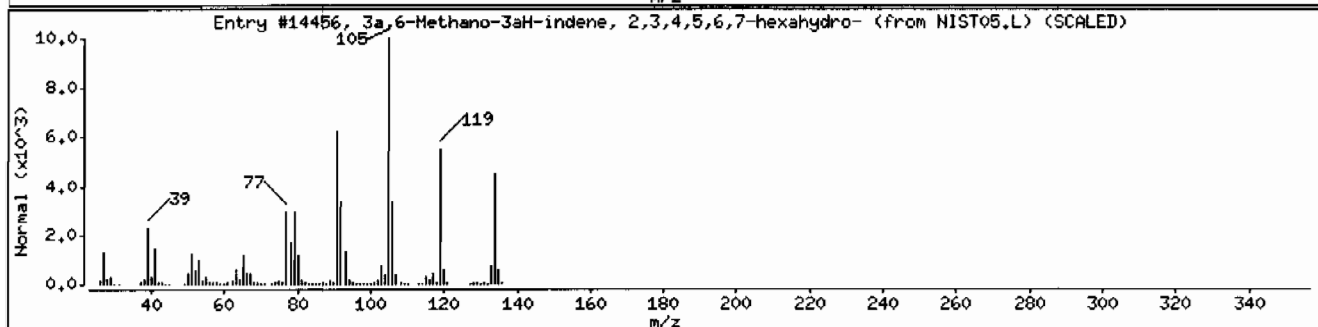
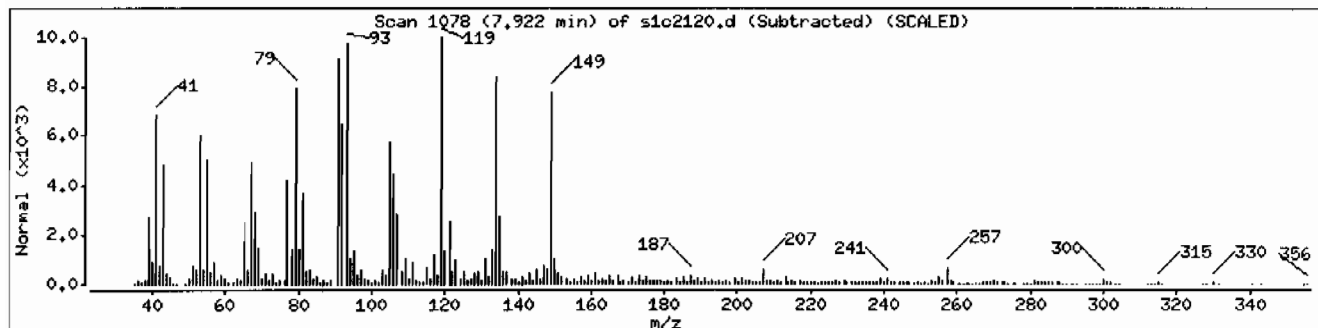
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3a,6-Methano-3aH-indene, 2,3,4,5,6,7-hex	98640-10-9	NIST05.L	14456	38	C10H14	134
Dispiro[2.0,2.5]undecane, 8-methylene-	51567-09-0	NIST05.L	30874	38	C12H18	162
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14422	30	C10H14	134



Date: 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: HSD1.i

Sample Info: 1248370010196122811SVH111LANL

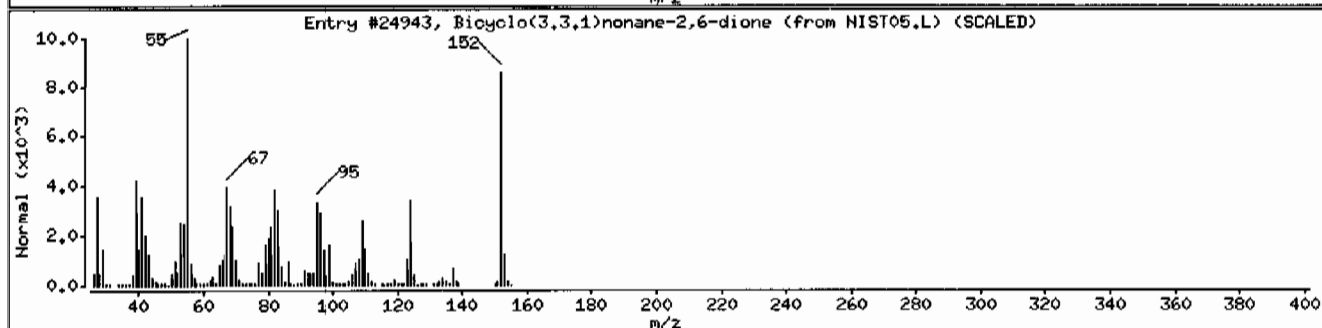
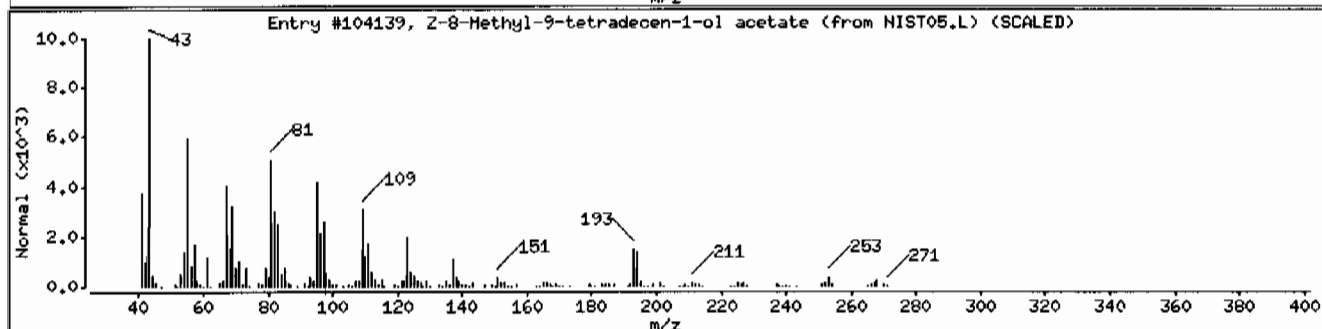
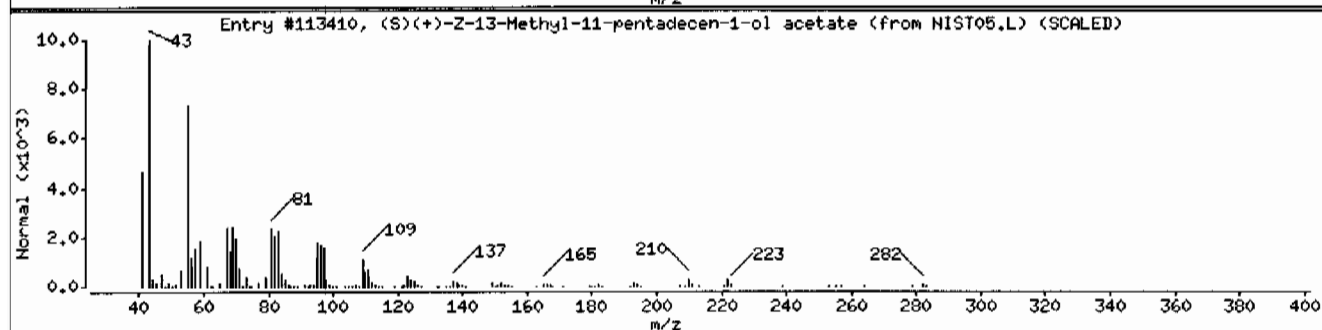
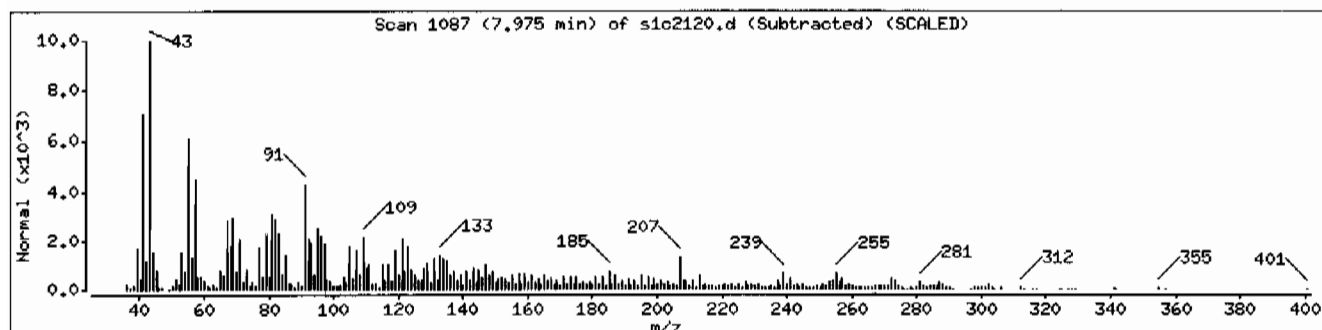
Volume Injected (uL): 0.5

Operator: AMY

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	59	C18H34O2	282
Z-8-Methyl-9-tetradecen-1-ol acetate	1000130-82-4	NIST05.L	104139	55	C17H32O2	268
Bicyclo(3.3.1)nonane-2,6-dione	16473-11-3	NIST05.L	24943	50	C9H12O2	152



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Client ID: RE36-10-7483

Instrument: HSD1.i

Sample Info: I248370010196122811SVH111LANL

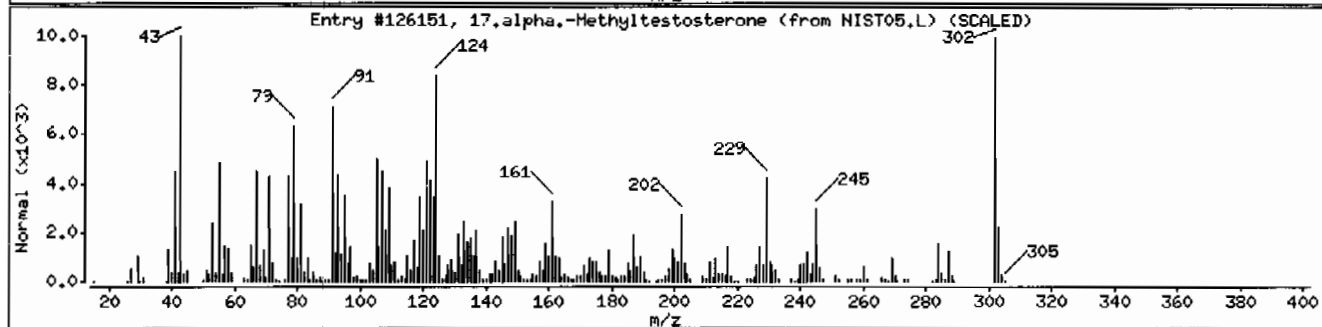
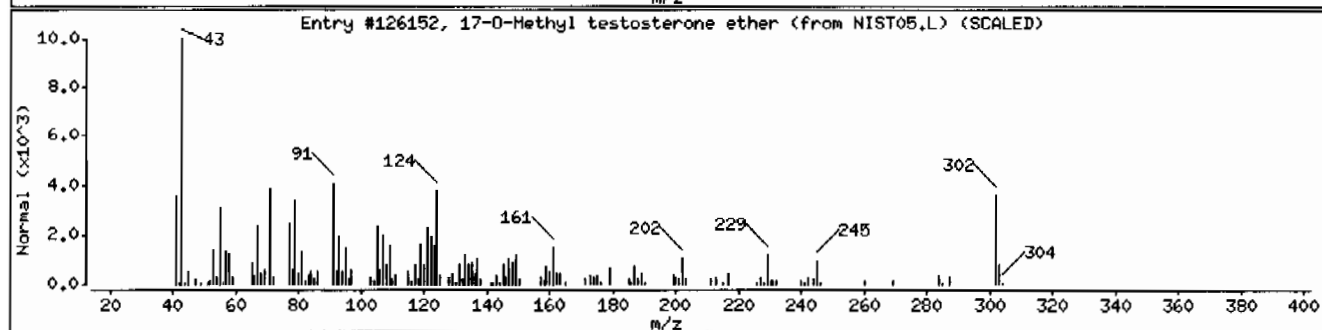
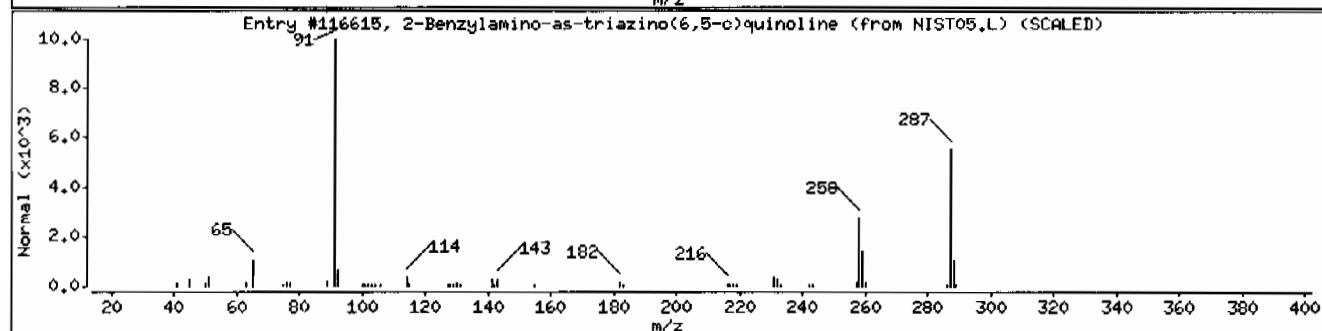
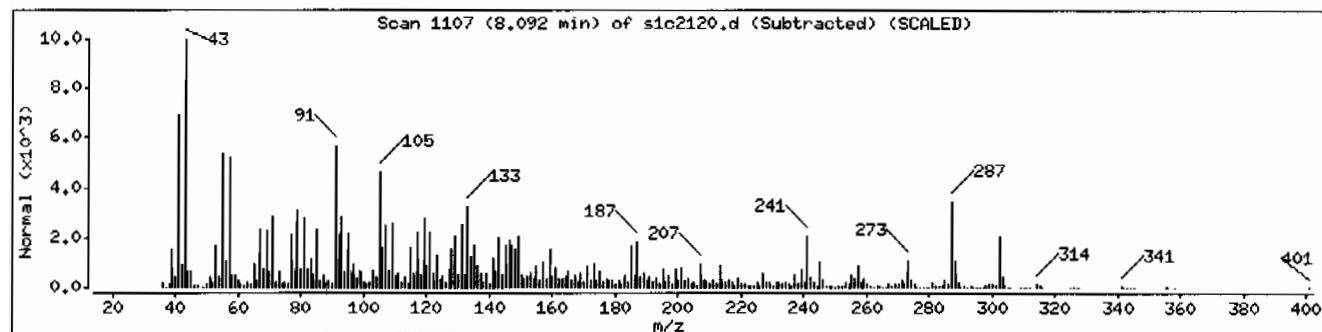
Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Benzylamino-as-triazino(6,5-c)quinolin	81547-18-4	NIST05.L	116615	15	C17H13N5	287
17-O-Methyl testosterone ether	13990-32-4	NIST05.L	126152	11	C20H30O2	302
17.alpha.-Methyltestosterone	58-18-4	NIST05.L	126151	11	C20H30O2	302



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811SVH111LANL

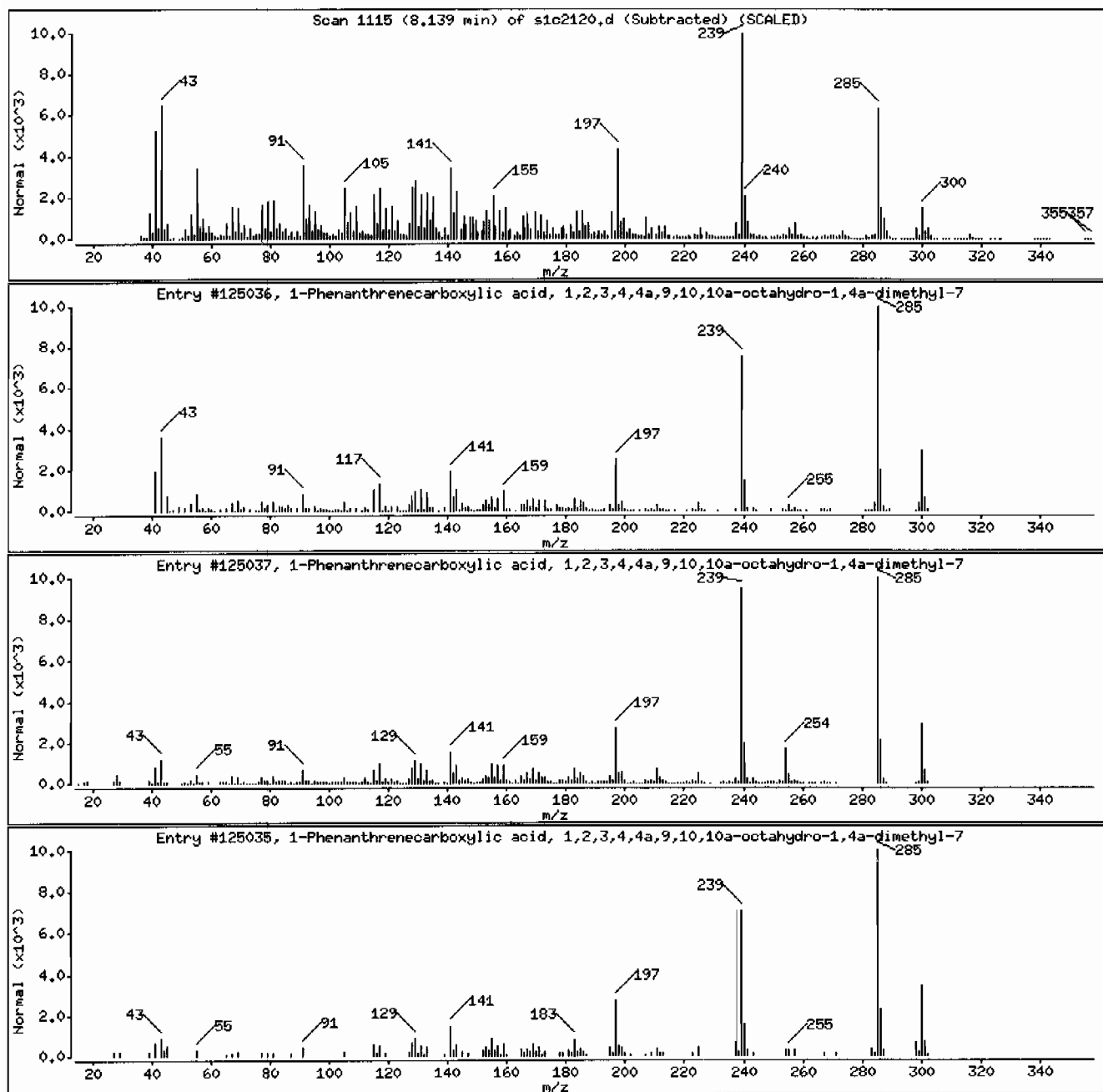
Volume Injected (uL): 0.5

Operator: AMY

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	91	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	91	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	86	C20H28O2	300



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: HSD1.i

Sample Info: 12483700101961228111SVH111LANL

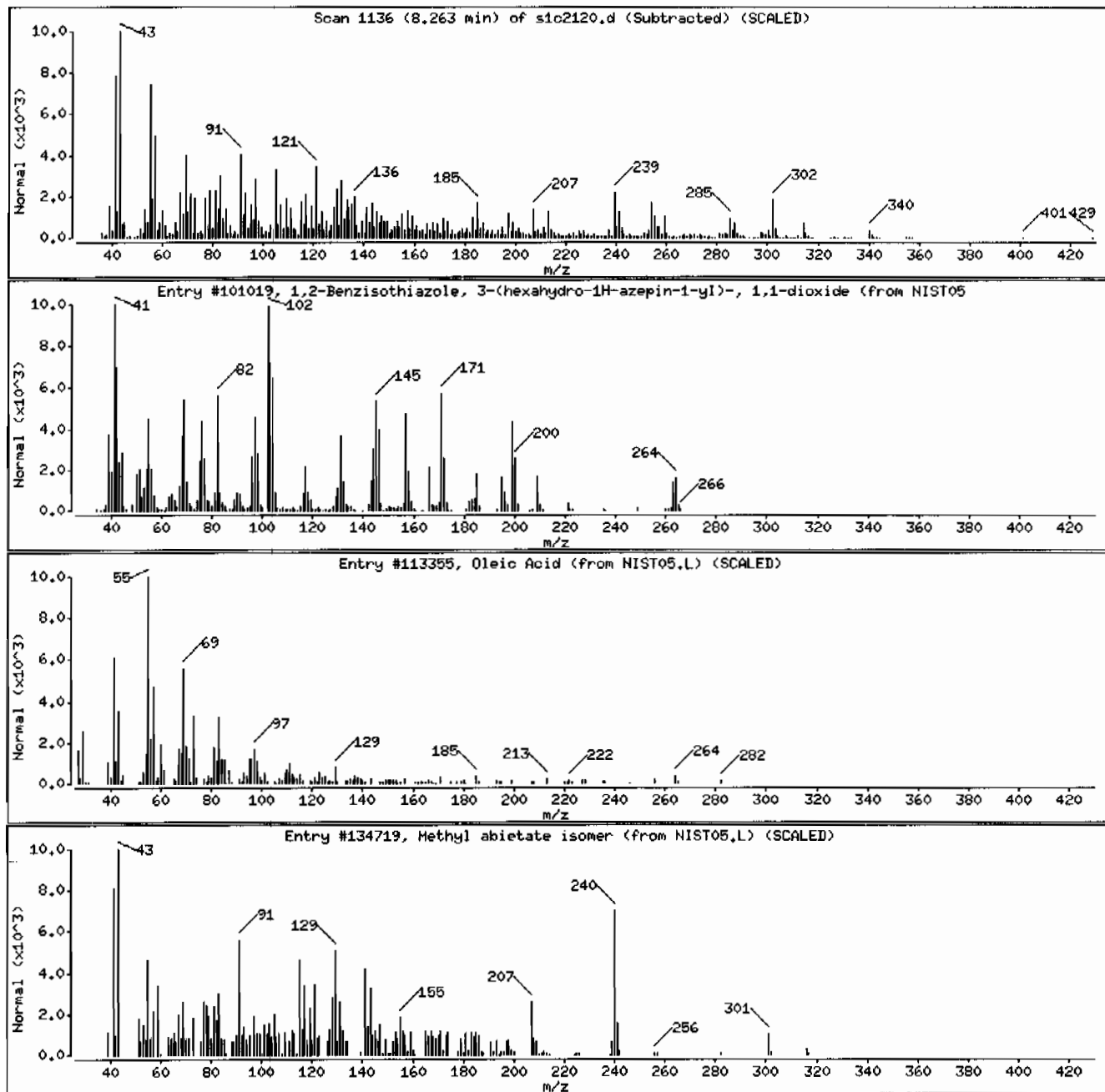
Volume Injected (uL): 0.5

Operator: AMY

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	92	C13H16N2O2S	264
Oleic Acid	112-80-1	NIST05.L	113355	25	C18H34O2	282
Methyl abietate isomer	24563-92-6	NIST05.L	134719	12	C21H32O2	316



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811SVMI11LANL

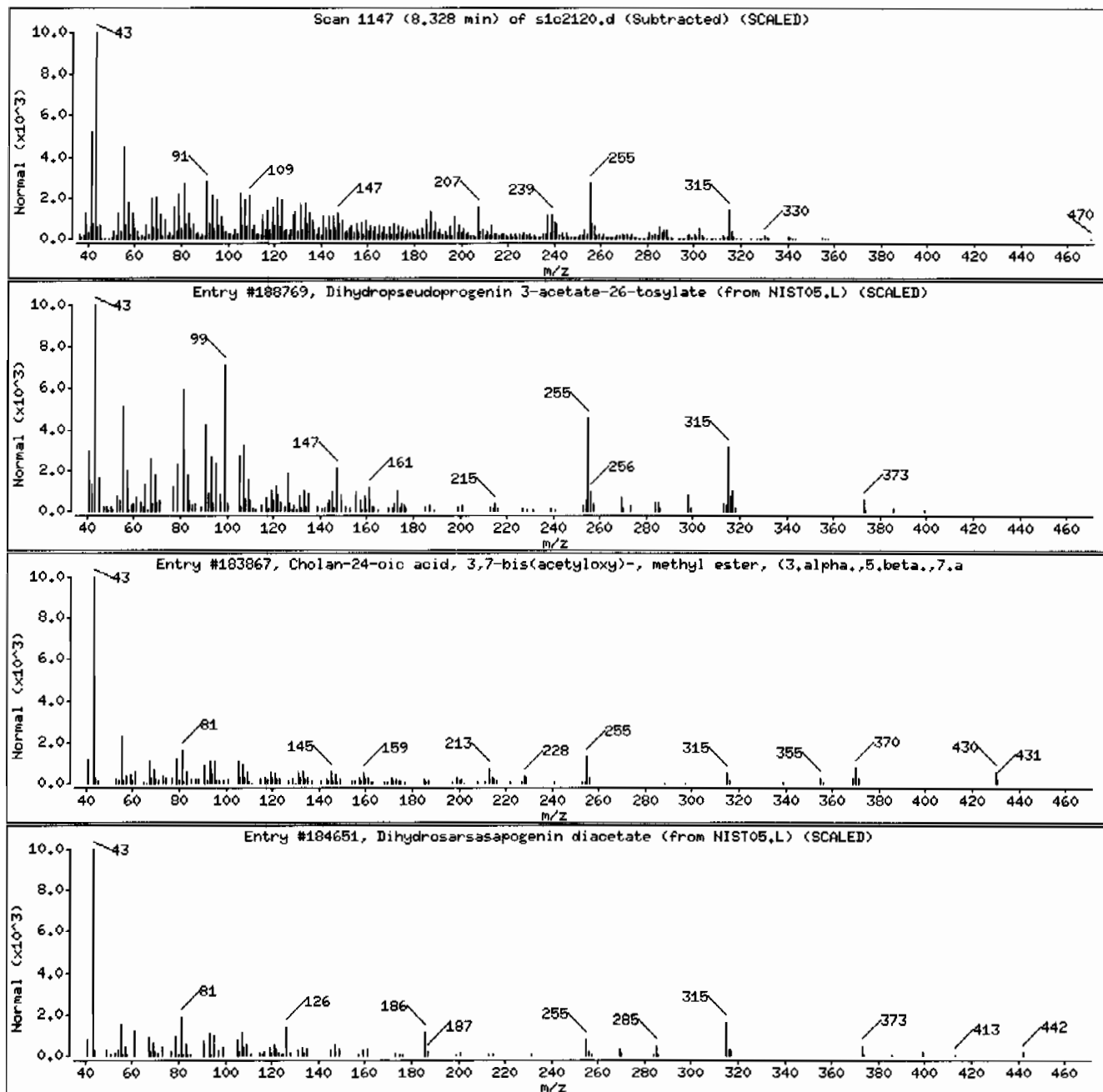
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dihydropseudoprogenin 3-acetate-26-tosyl	1000255-26-6	NIST05.L	188769	38	C36H54O6S	614
Cholan-24-oic acid, 3,7-bis(acetyloxy)-	2616-71-9	NIST05.L	183867	25	C29H46O6	490
Dihydrosarsasapogenin diacetate	1000255-26-2	NIST05.L	184651	16	C31H50O5	502



Date: 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: HSD1.i

Sample Info: 1248370010196122811SVH111LANL

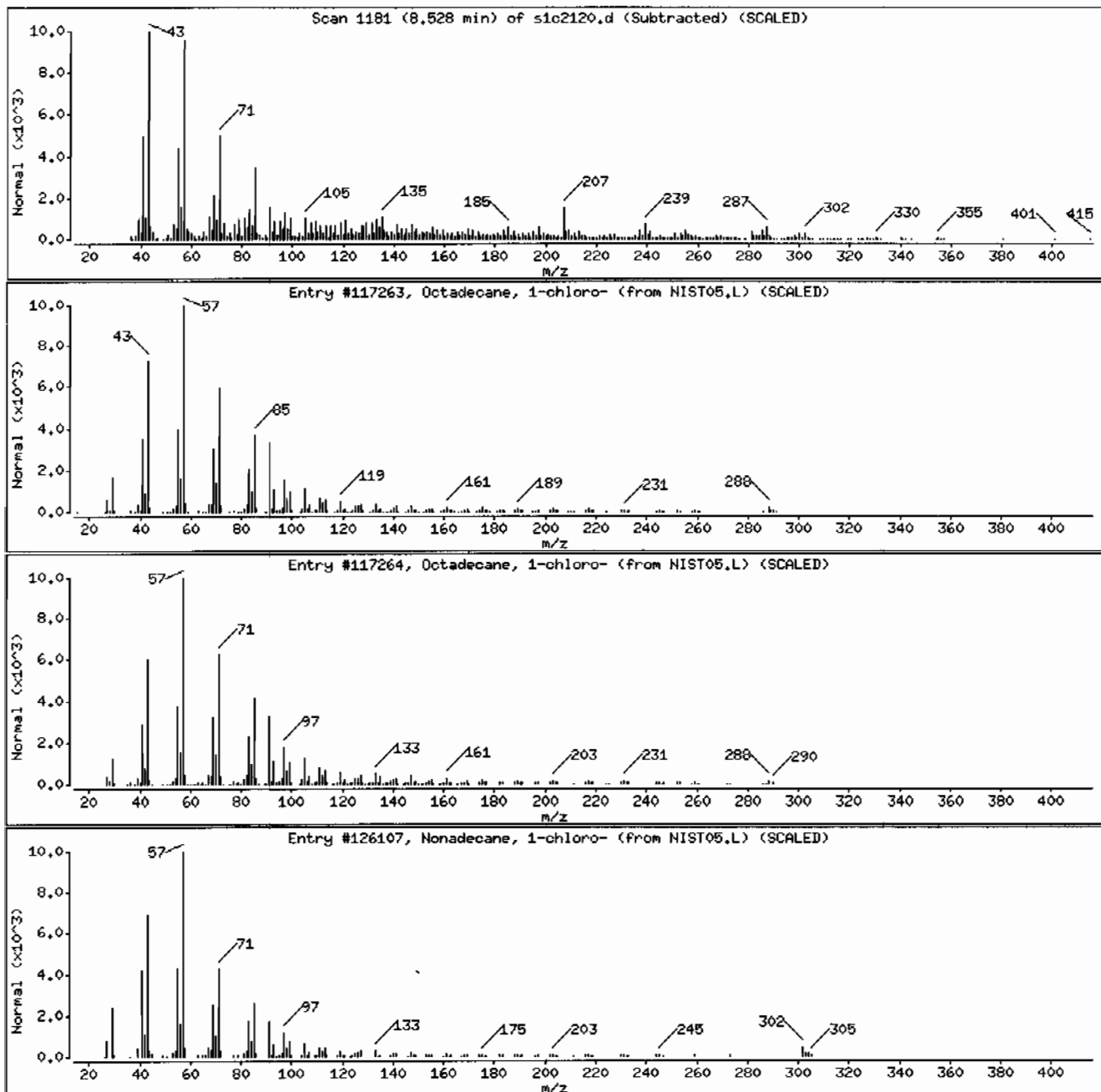
Volume Injected (uL): 0.5

Operator: AMY

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	96	C18H37Cl	288
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	95	C18H37Cl	288
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	95	C19H39Cl	302



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: HSD1.i

Sample Info: I248370010196122811SVH11ILANL

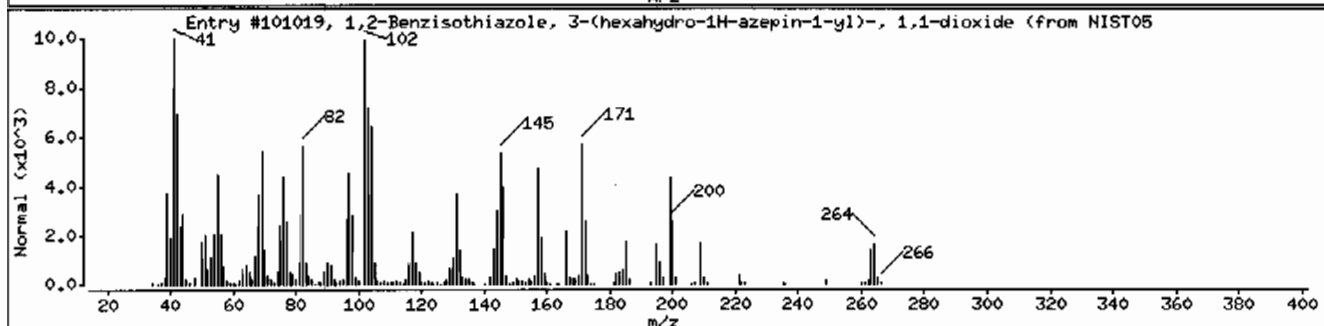
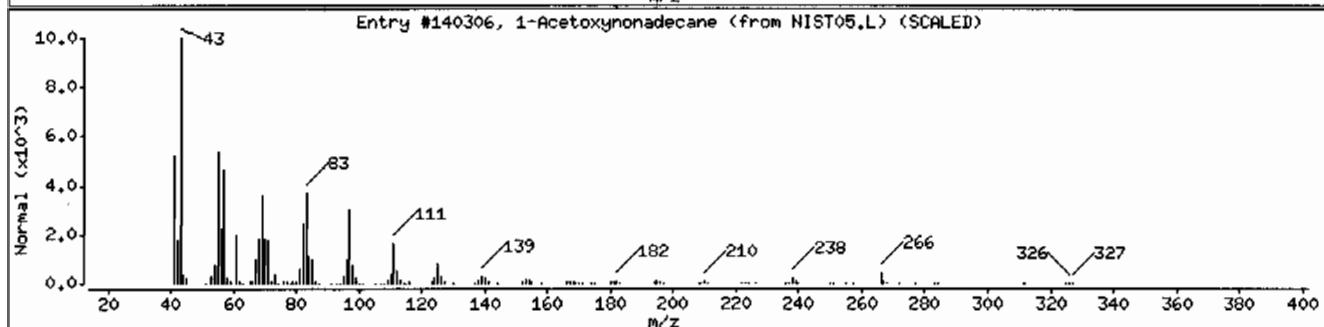
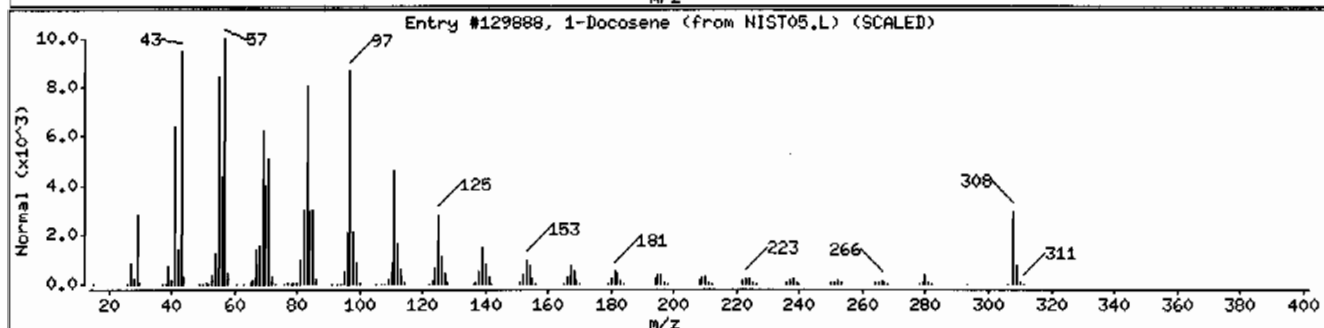
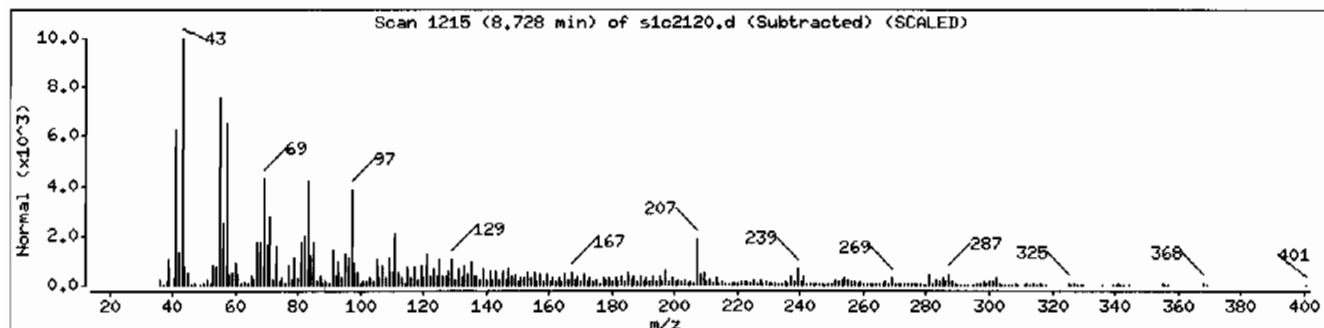
Volume Injected (uL): 0.5

Operator: AMY

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	98	C22H44	308
1-Acetoxyundecadecane	1577-43-1	NIST05.L	140306	92	C21H42O2	326
1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-, 1,1-dioxide	309735-29-3	NIST05.L	101019	91	C13H16N2O2S	264



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: I248370010196122811SVH11ILANL

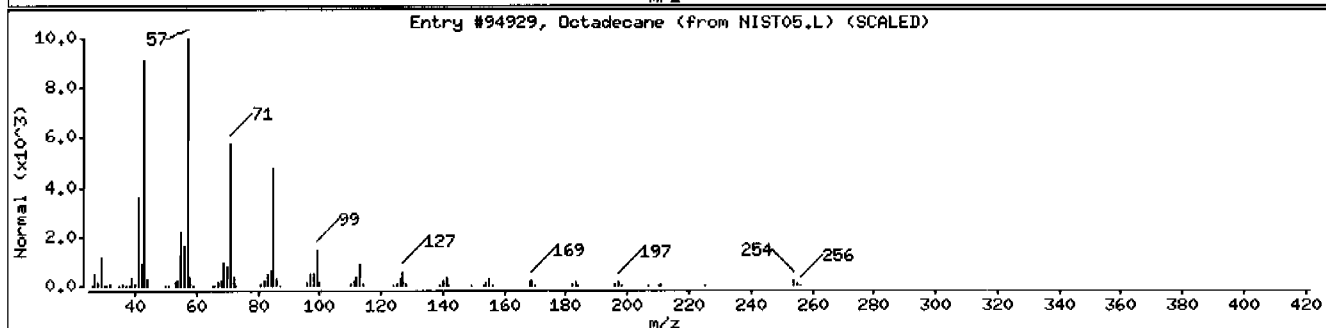
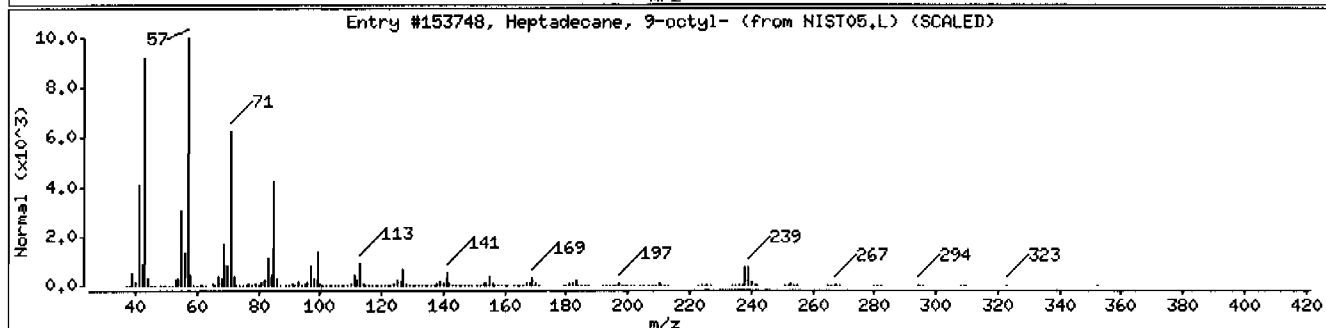
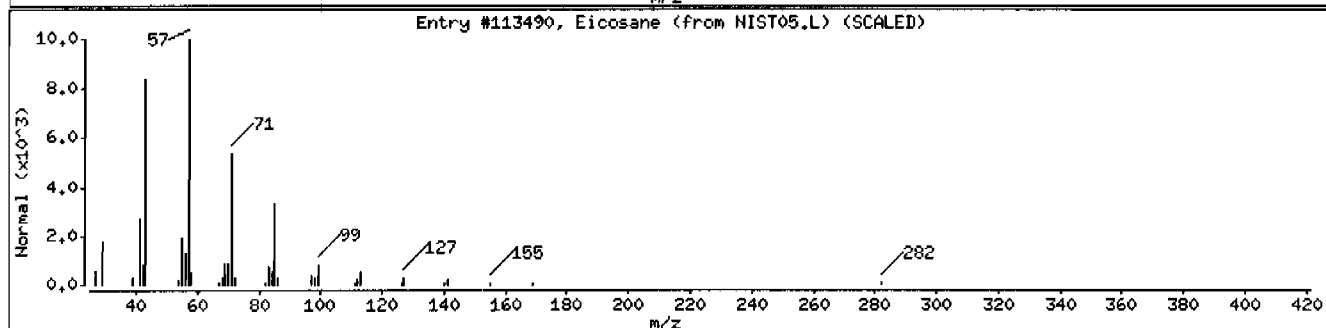
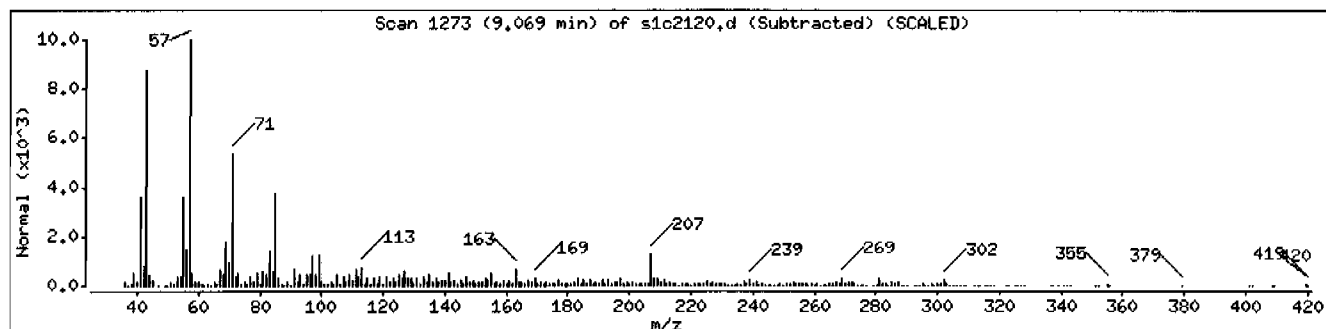
Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane						
Eicosane	112-95-8	NIST05.L	113490	98	C ₂₀ H ₄₂	282
Heptadecane, 9-octyl-	7225-64-1	NIST05.L	153748	94	C ₂₅ H ₅₂	352
Octadecane	593-45-3	NIST05.L	94929	94	C ₁₈ H ₃₈	254



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: I248370010196122811SVMI11LANL

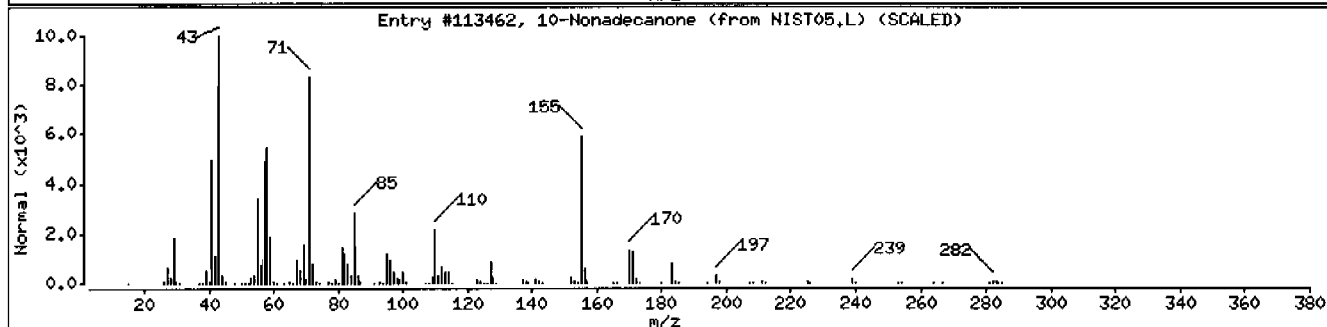
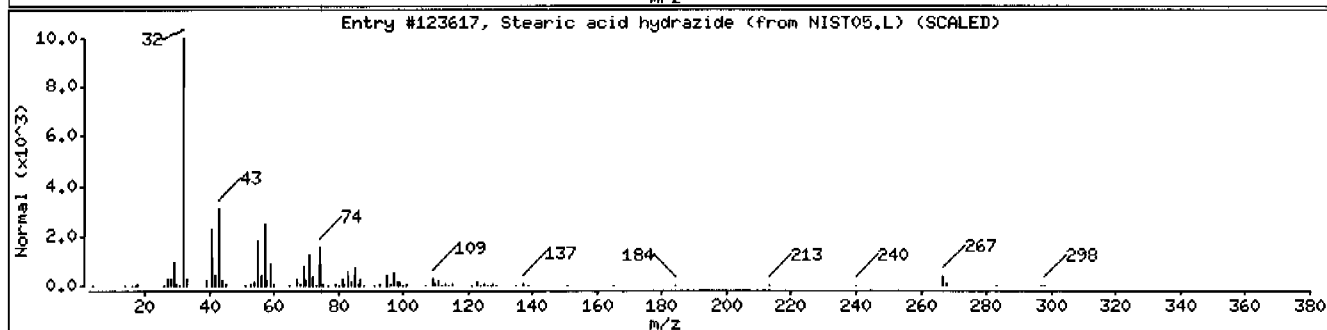
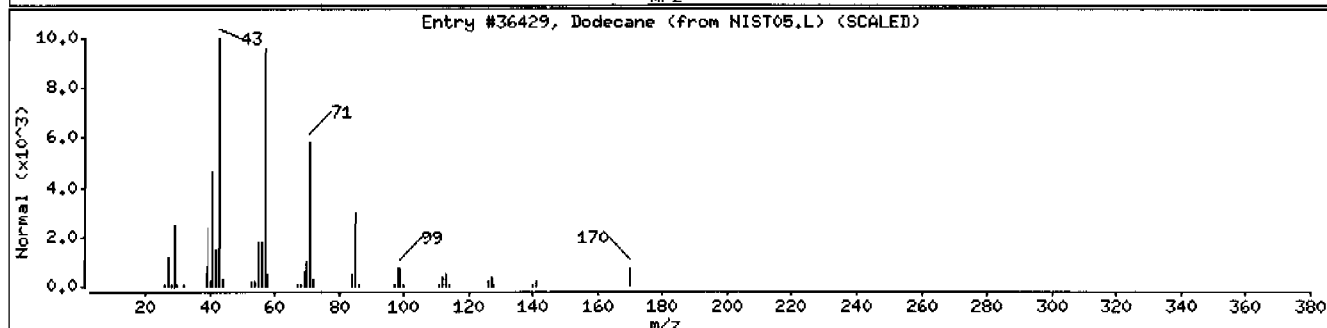
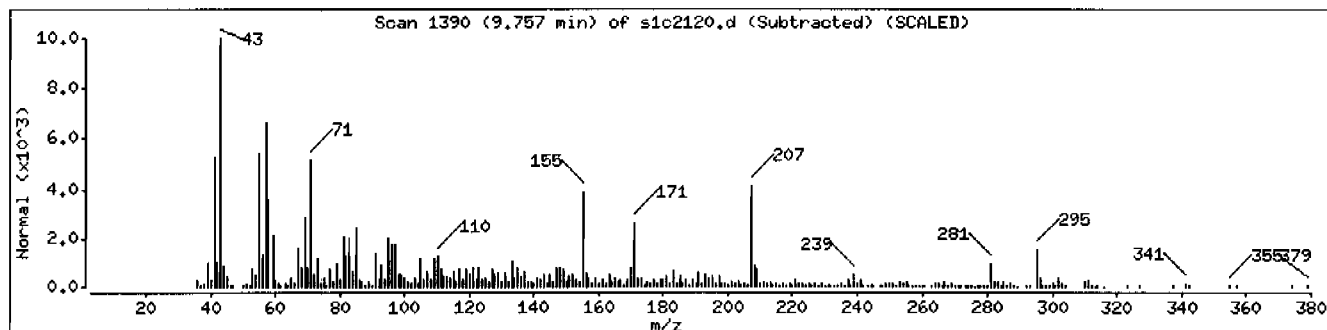
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Dodecane	112-40-3	NIST05.L	36429	90	C12H26	170
Stearic acid hydrazide	4130-54-5	NIST05.L	123617	47	C18H38N2O	298
10-Nonadecanone	504-57-4	NIST05.L	113462	46	C19H38O	282



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811SVH11ILANL

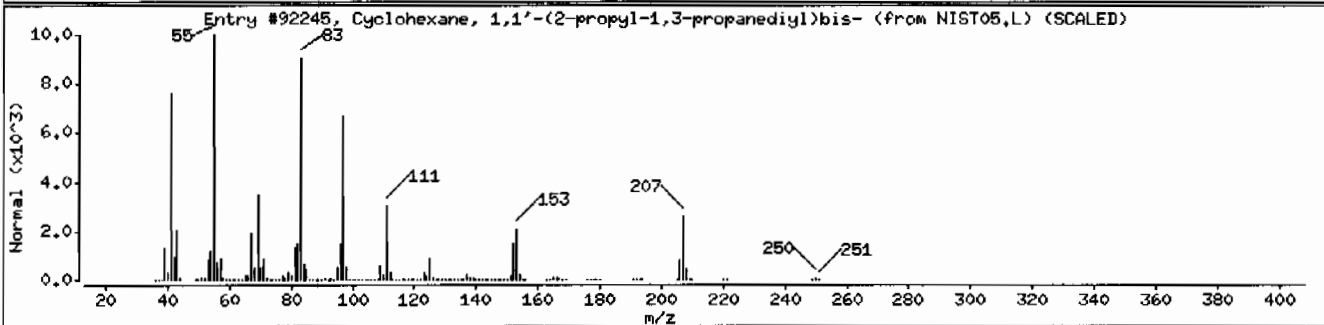
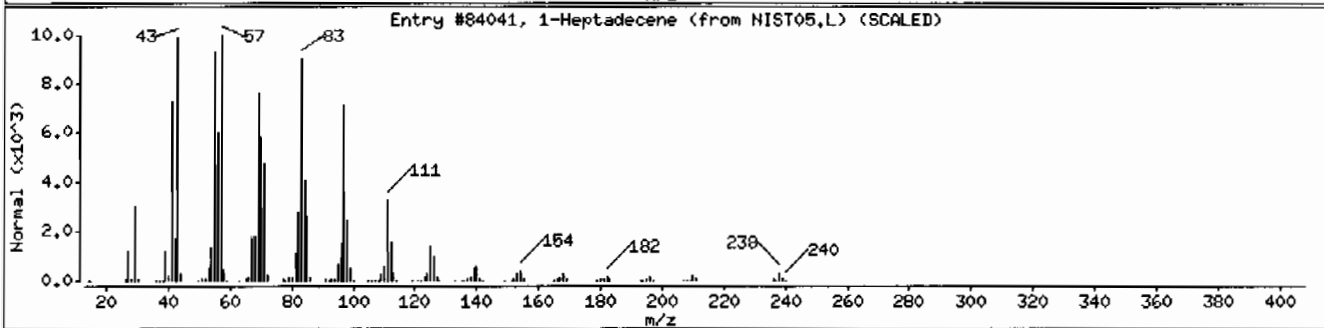
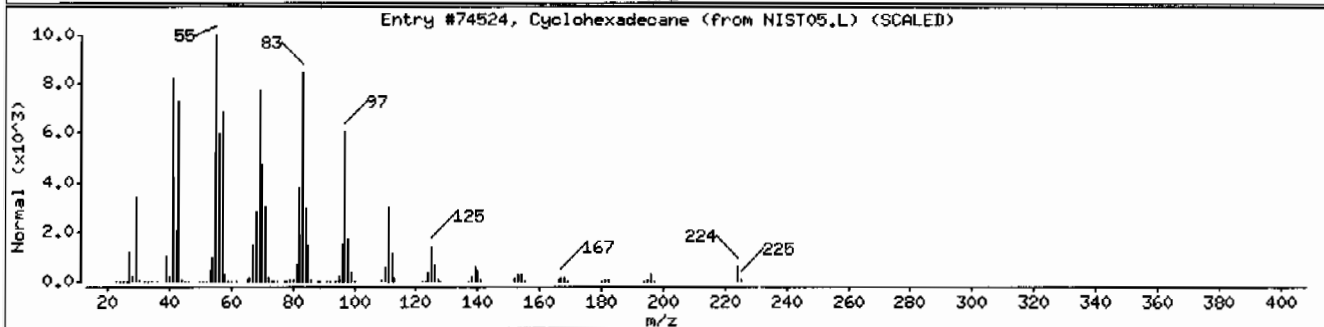
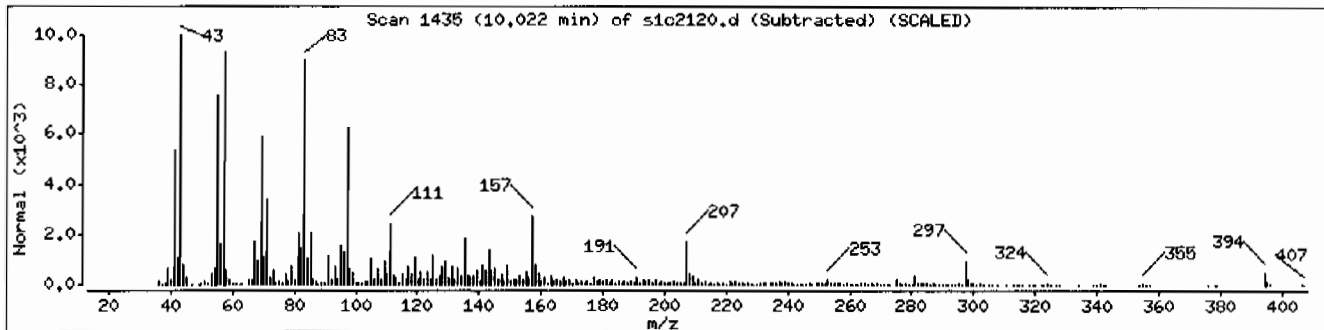
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexadecane	295-65-8	NIST05.L	74524	70	C16H32	224
1-Heptadecene	6765-39-6	NIST05.L	84041	64	C17H34	238
Cyclohexane, 1,1'-(2-propyl-1,3-propanediyl)bis-	55030-21-2	NIST05.L	92245	52	C18H34	250



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: I2483700101961228111SVH111LANL

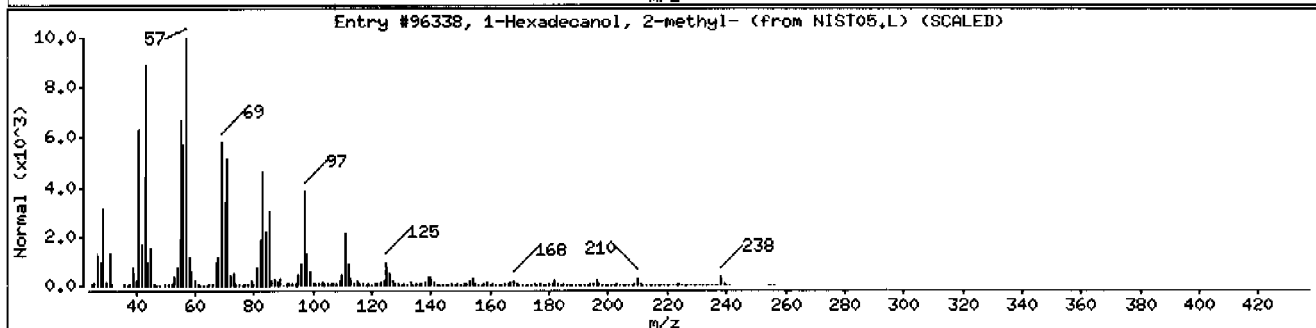
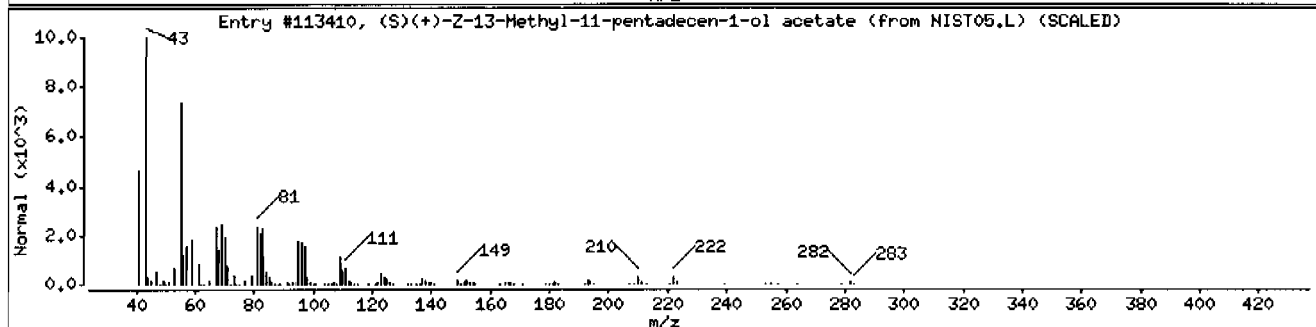
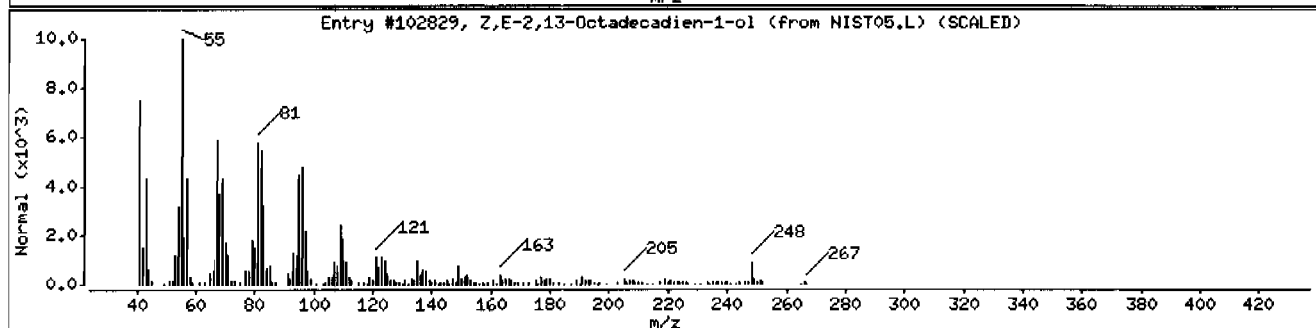
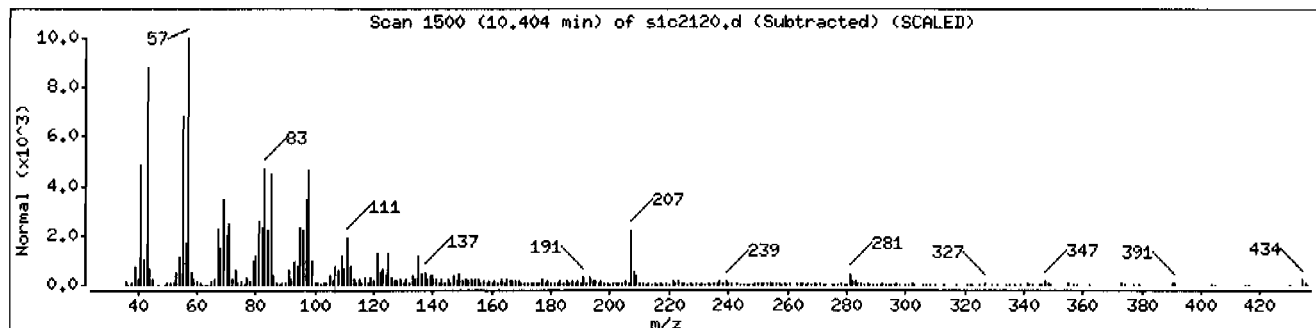
Volume Injected (UL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Z,E-2,13-Octadecadien-1-ol	1000131-10-3	NIST05.L	102829	53	C18H34O	266
(S)(+)-Z-13-Hethyl-11-pentadecen-1-ol ac	1000130-84-8	NIST05.L	113410	50	C18H34O2	282
1-Hexadecanol, 2-methyl-	2490-48-4	NIST05.L	96338	46	C17H36O	256



Date : 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: MSD1.i

Sample Info: 1248370010196122811SVMI11LANL

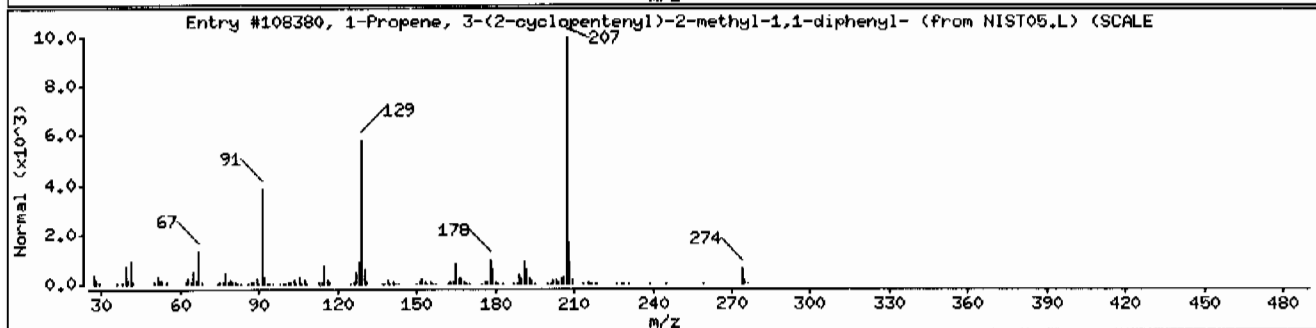
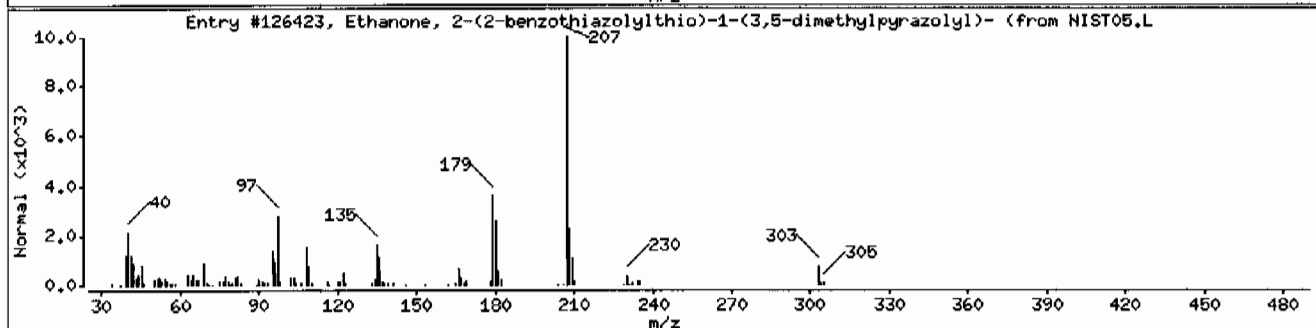
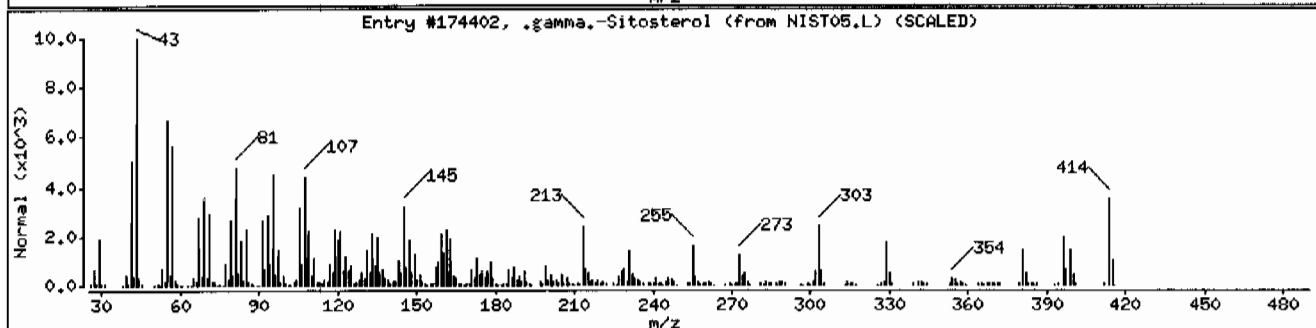
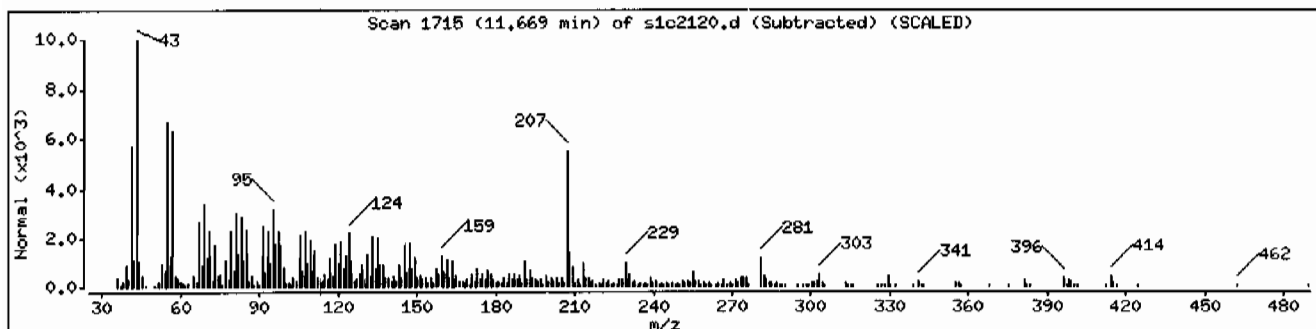
Volume Injected (uL): 0.5

Operator: AMY

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	90	C29H50O	414
Ethanone, 2-(2-benzothiazolylthio)-1-(3,	155670-84-1	NIST05.L	126423	30	C14H13N3OS2	303
1-Propene, 3-(2-cyclopentyl)-2-methyl-	1000154-23-3	NIST05.L	108380	25	C21H22	274



Date: 22-MAR-2010 00:07

Client ID: RE36-10-7483

Instrument: HSD1.i

Sample Info: 12483700101961228111SVH111LANL

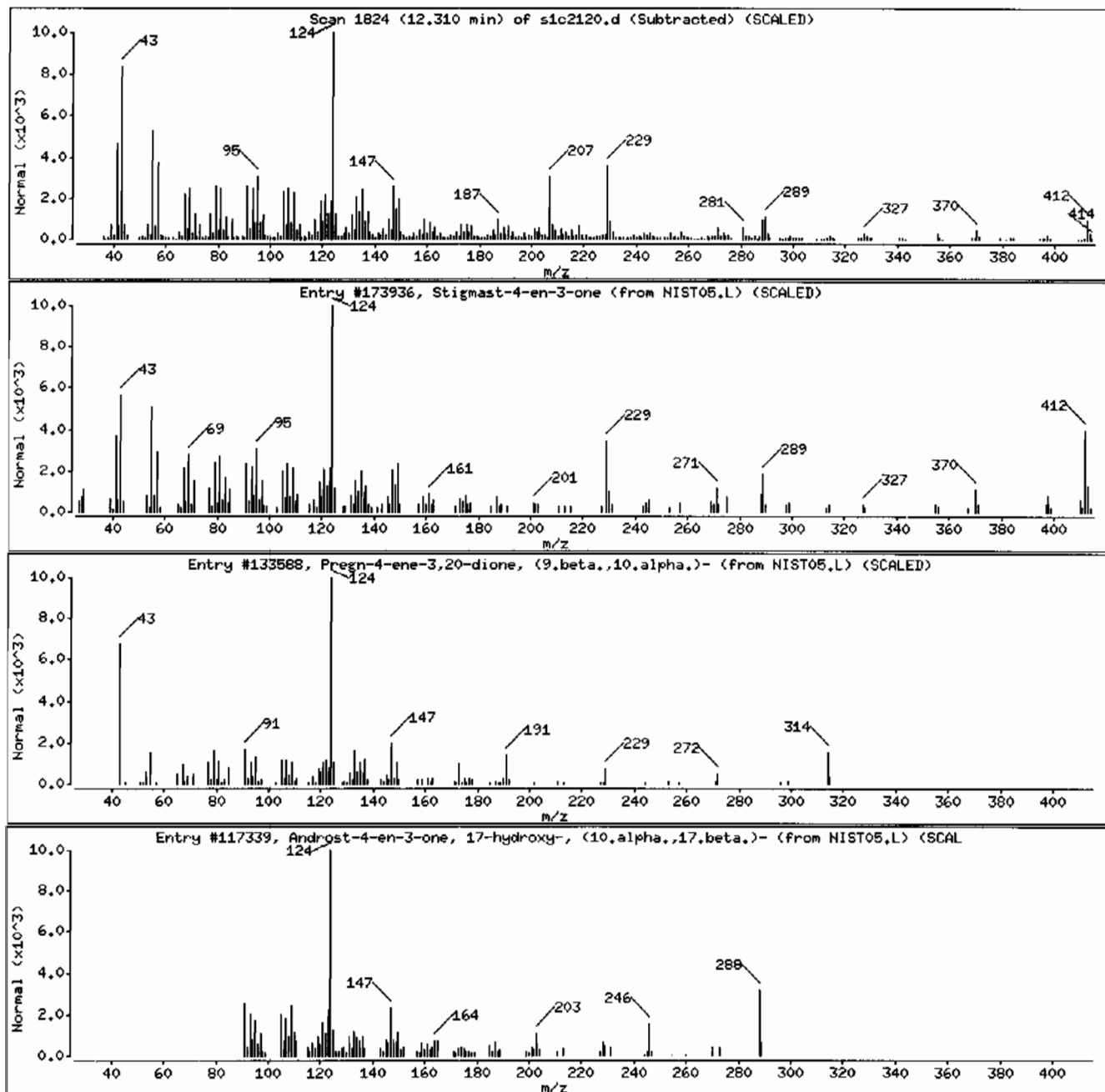
Volume Injected (uL): 0.5

Operator: AMY

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	95	C29H48O	412
Pregn-4-ene-3,20-dione, (9.beta.,10.alpha.)	2756-10-4	NIST05.L	133588	60	C21H30O2	314
Androst-4-en-3-one, 17-hydroxy-, (10.alpha.)	604-39-7	NIST05.L	117339	50	C19H28O2	288



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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370020	Date Received: 03/02/2010 08:50	%Moisture: 17.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7484	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 04:03	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2130.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	404	ug/kg	80.7	404
108-95-2	Phenol	U	404	ug/kg	80.7	404
95-57-8	2-Chlorophenol	U	404	ug/kg	80.7	404
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.7	404
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.7	404
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.7	404
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404
129-00-0	Pyrene	U	40.4	ug/kg	12.1	40.4
110-86-1	Pyridine	U	404	ug/kg	80.7	404
62-53-3	Aniline	U	404	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.7	404
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.7	404
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.7	404
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.7	404
95-48-7	o-Cresol	U	404	ug/kg	80.7	404
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404
67-72-1	Hexachloroethane	U	404	ug/kg	80.7	404
98-95-3	Nitrobenzene	U	404	ug/kg	80.7	404
78-59-1	Isophorone	U	404	ug/kg	80.7	404
88-75-5	2-Nitrophenol	U	404	ug/kg	80.7	404
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.7	404
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.7	404
65-85-0	Benzoic acid	U	807	ug/kg	202	807
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline	U	404	ug/kg	80.7	404
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.7	404
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.07	40.4
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.7	404
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.7	404
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.7	404
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline	U	404	ug/kg	80.7	404
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	404	ug/kg	80.7	404

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370020	Date Received: 03/02/2010 08:50	%Moisture: 17.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7484	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 04:03	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2130.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	404	ug/kg	80.7	404
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol	U	807	ug/kg	153	807
132-64-9	Dibenzofuran	U	404	ug/kg	80.7	404
84-66-2	Diethylphthalate	U	404	ug/kg	80.7	404
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.7	404
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.7	404
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	404	ug/kg	80.7	404
122-66-7	Azobenzene	U	404	ug/kg	80.7	404
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.7	404
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.7	404
85-01-8	Phenanthrene	U	40.4	ug/kg	12.1	40.4
120-12-7	Anthracene	U	40.4	ug/kg	8.07	40.4
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.7	404
206-44-0	Fluoranthene	U	40.4	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate	J	214	ug/kg	80.7	404
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
218-01-9	Chrysene	U	40.4	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.7	404
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.7	404
205-99-2	Benzo(b)fluoranthene	U	40.4	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene	U	40.4	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene	U	40.4	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.4	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene	U	40.4	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.7	404

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.62	218	ug/kg		J
	Unknown Aldol Condensate	2.67	402	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370020	Date Received: 03/02/2010 08:50	%Moisture: 17.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7484	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.1	Dilution: 1
Run Date: 03/22/2010 04:03	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: slc2130.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
7785-70-8	1R- alpha- Pinene	3.19	789	ug/kg	97	NJ
79-92-5	Camphene	3.29	195	ug/kg	98	NJ
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	3.43	345	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	619	ug/kg	97	NJ
	Unknown	7.32	276	ug/kg		J
112-80-1	Oleic Acid	7.4	197	ug/kg	93	NJ
	Unknown	7.75	245	ug/kg		J
506-30-9	Eicosanoic acid	7.85	327	ug/kg	86	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	227	ug/kg	98	NJ
	Unknown	8.06	303	ug/kg		J
	Unknown	8.09	397	ug/kg		J
	Unknown	8.13	390	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	8.22	253	ug/kg	91	NJ
	Unknown	8.26	188	ug/kg		J
	Unknown	8.33	234	ug/kg		J
629-96-9	1-Eicosanol	8.7	449	ug/kg	89	NJ
112-95-8	Eicosane	9.07	334	ug/kg	96	NJ
	Unknown	10.02	1820	ug/kg		J
	Unknown	10.4	325	ug/kg		J
	Unknown	10.77	384	ug/kg		J
	Unknown	10.99	342	ug/kg		J
83-46-5	.beta.-Sitosterol	11.66	1370	ug/kg	91	NJ
1058-61-3	Stigmast-4-en-3-one	12.3	809	ug/kg	90	NJ

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2130.d
 Lab Smp Id: 248370020 Client Smp ID: RE36-10-7484
 Inj Date : 22-MAR-2010 04:03
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370020|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 30
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	17.43440	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610 (1.000)	460283	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469 (1.000)	1797982	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704 (1.000)	937387	40.0000	
* 67 Phenanthrene-d10	188	6.710	6.710 (1.000)	1629086	40.0000	
* 91 Chrysene-d12	240	8.292	8.292 (1.000)	1161304	40.0000	
* 98 Perylene-d12	264	9.527	9.522 (1.000)	650930	40.0000	
\$ 3 2-Fluorophenol	112	2.834	2.822 (0.785)	731181	61.6904	2490
\$ 5 Phenol-d5	99	3.351	3.346 (0.928)	905147	62.7066	2530
\$ 20 Nitrobenzene-d5	82	3.969	3.975 (0.889)	371291	33.6693	1360
\$ 39 2-Fluorobiphenyl	172	5.204	5.204 (0.912)	807755	31.2015	1260
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251 (1.096)	177183	57.6540	2330
\$ 81 p-Terphenyl-d14	244	7.628	7.622 (0.920)	795044	41.0642	1660

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng/ul)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
85 Butylbenzylphthalate	149	7.875	7.875	(0.950)	747/4	5.30159	214 (a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: slc2130.d

Report Date: 03/22/2010 12:00

Lab. ID: 248370020

SampleType: SAMPLE

Injection Date: 22-MAR-2010 04:03

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370020|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1	N-Methyl-N-nitrosomethylamine			CAS#: 62-75-9		
74	24946	1.93	2.16	80-120	100	(T)
42	5644	1.93	2.16	68-128	23	(QT)
43	40637	1.93	2.16	12- 72	163	(QT)

4	Aniline			CAS#: 62-53-3		
66	42572	3.35	3.40	80-120	100	()
93	16964	3.39	3.40	233-293	40	(Q)

17	N-Nitrosodipropylamine			CAS#: 621-64-7		
70	48745	3.97	3.86	80-120	100	(T)
42	37942	3.97	3.86	48-108	78	(T)

22	Isophorone			CAS#: 78-59-1		
82	373942	3.97	4.14	80-120	100	(T)
138	325	4.16	4.14	0- 49	0	()

41	m-Nitroaniline			CAS#: 99-09-2		
138	480	5.67	5.66	80-120	100	()
92	681	5.68	5.66	71-131	142	(Q)
108	525	5.68	5.66	0- 40	109	(Q)

43	Dimethylphthalate			CAS#: 131-11-3		
163	169275	5.70	5.49	80-120	100	(T)
164	937387	5.70	5.49	0- 40	554	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	121429	5.70	5.54	80-120	100	(T)
63	2018	5.70	5.54	50-110	2	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	121429	5.70	5.83	80-120	100	(T)
89	1412	5.70	5.82	38- 98	1	(QT)
63	2023	5.70	5.82	20- 80	2	(QT)

53 Fluorene				CAS#: 86-73-7		
166	13880	6.25	6.09	80-120	100	(T)
165	14087	6.25	6.09	61-121	101	(T)
167	4629	6.25	6.09	0- 43	33	(T)

56 p-Nitroaniline				CAS#: 100-01-6		
138	413	6.18	6.09	80-120	100	(T)
108	361	6.20	6.09	29- 89	87	(T)
92	293	6.15	6.09	14- 74	71	()

85 Butylbenzylphthalate				CAS#: 85-68-7		
149	74774	7.87	7.87	80-120	100	()
91	49958	7.87	7.87	39- 99	67	()
206	15071	7.87	7.87	0- 50	20	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2130.d
 Lab Smp Id: 248370020 Client Smp ID: RE36-10-7484
 Inj Date : 22-MAR-2010 04:03
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370020|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 30
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.sub
 Target Version: 3.50
 Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	17.43440	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2812277	40.000
* 67 Phenanthrene-d10	6.710	4081491	40.000
* 91 Chrysene-d12	8.292	3128428	40.000
* 98 Perylene-d12	9.527	1920789	40.000

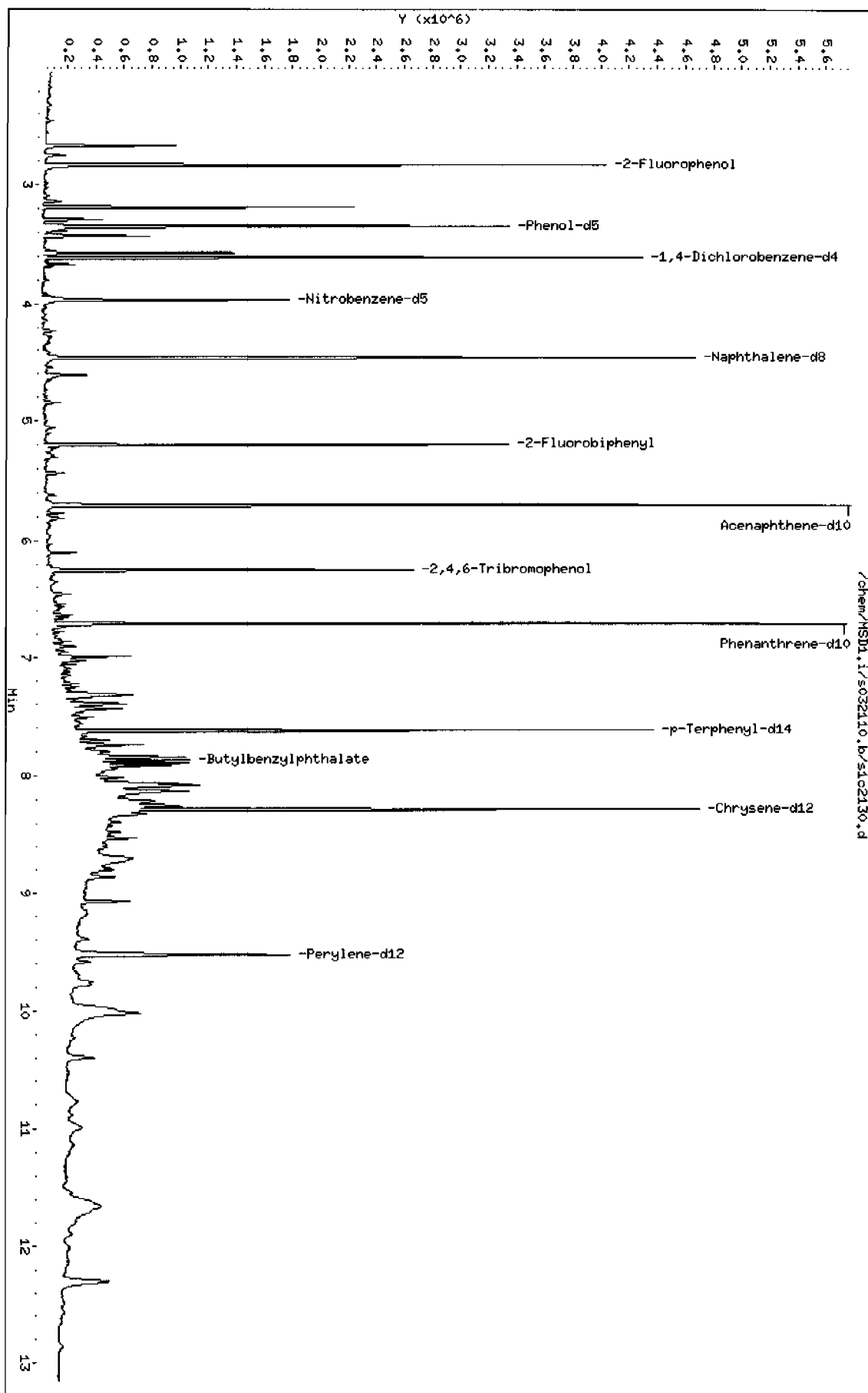
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	---	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
1.622	379312	5.39507980	218	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	699909	9.95505421	402	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.193	1373513	19.5359537	789	97	NIST05.L	15188	10
Camphene					CAS #: 79-92-5		
3.293	340272	4.83980248	195	98	NIST05.L	15160	10
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me					CAS #: 18172-67-3		
3.434	600901	8.54682197	345	97	NIST05.L	15390	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
3.575	1077984	15.3325454	619	97	NIST05.L	15369	10
Unknown					CAS #:		
7.316	696857	6.82943743	276	0		0	67
Oleic Acid					CAS #: 112-80-1		
7.398	497367	4.87436285	197	93	NIST05.L	113354	67
Unknown					CAS #:		
7.745	475254	6.07657989	245	0		0	91
Eicosanoic acid					CAS #: 506-30-9		
7.845	632753	8.09036556	327	86	NIST05.L	132301	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
7.898	439966	5.62539835	227	98	NIST05.L	133618	91
Unknown					CAS #:		
8.063	586441	7.49822368	303	0		0	91
Unknown					CAS #:		
8.086	769268	9.83584123	397	0		0	91
Unknown					CAS #:		
8.133	756467	9.67216192	390	0		0	91
1,2-Benzisothiazole, 3-(hexahydro-1H-aze					CAS #: 309735-29-3		
8.216	489833	6.26299662	253	91	NIST05.L	101019	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
8.263	364126	4.65570904	188	0		0	91
Unknown				CAS #:			
8.327	453984	5.80462752	234	0		0	91
1-Eicosanol				CAS #: 629-96-9			
8.698	869202	11.1135964	449	89	NIST05.L	123792	91
Eicosane				CAS #: 112-95-8			
9.069	396794	8.26315040	334	96	NIST05.L	113488	98
Unknown				CAS #:			
10.021	2165621	45.0985749	1820	0		0	98
Unknown				CAS #:			
10.404	386229	8.04312329	325	0		0	98
Unknown				CAS #:			
10.769	457005	9.51702416	384	0		0	98
Unknown				CAS #:			
10.986	406487	8.46499406	342	0		0	98
.beta.-Sitosterol				CAS #: 83-46-5			
11.657	1635381	34.0564346	1370	91	NIST05.L	174399	98
Stigmast-4-en-3-one				CAS #: 1058-61-3			
12.304	961754	20.0283141	808	90	NIST05.L	173936	98

Data File: /chem/MSD1.i/s032110.b/s102130.d
 Date : 22-MAR-2010 04:03
 Client ID: RE36-10-7484
 Sample Info: 1248370020196122811SVN11.LANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD1.i
 Operator: AMY
 Column diameter: 0.20



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: I248370020196122811SVH11ILANL

Volume Injected (uL): 0.5

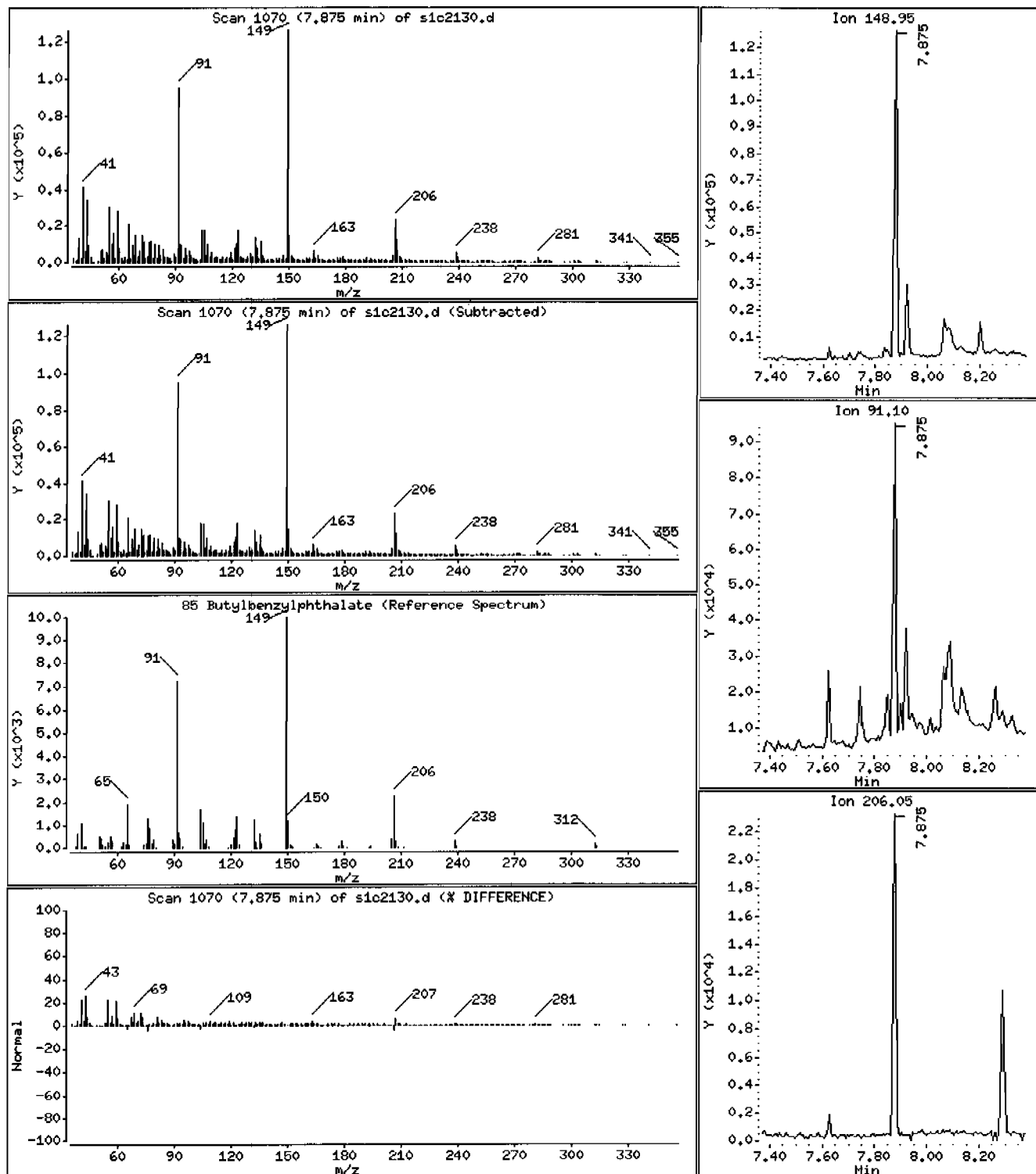
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

85 Butylbenzylphthalate

Concentration: 214 ug/Kg



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811ISVM11ILANL

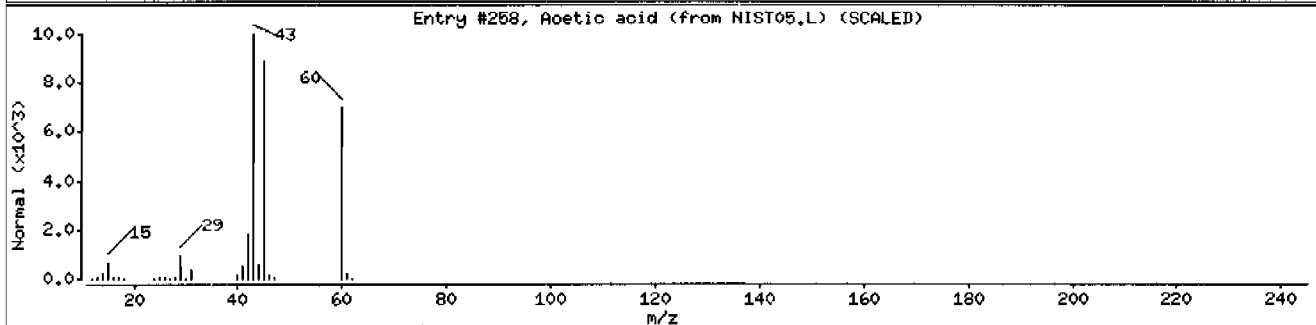
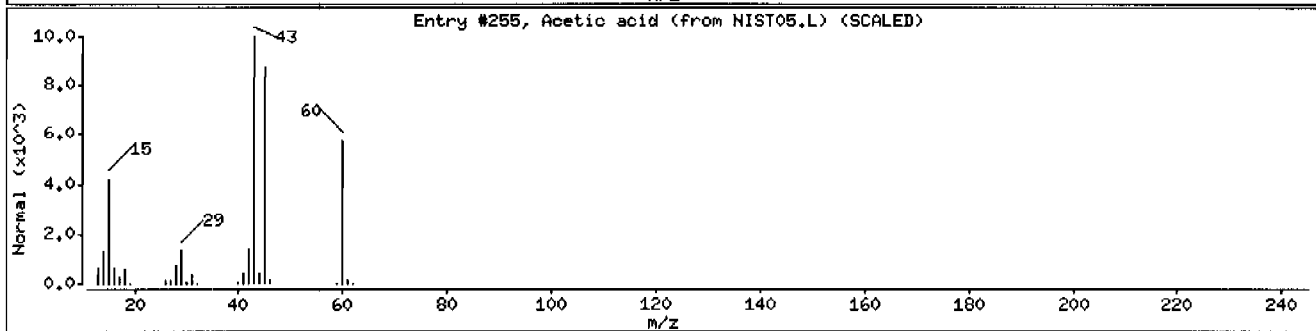
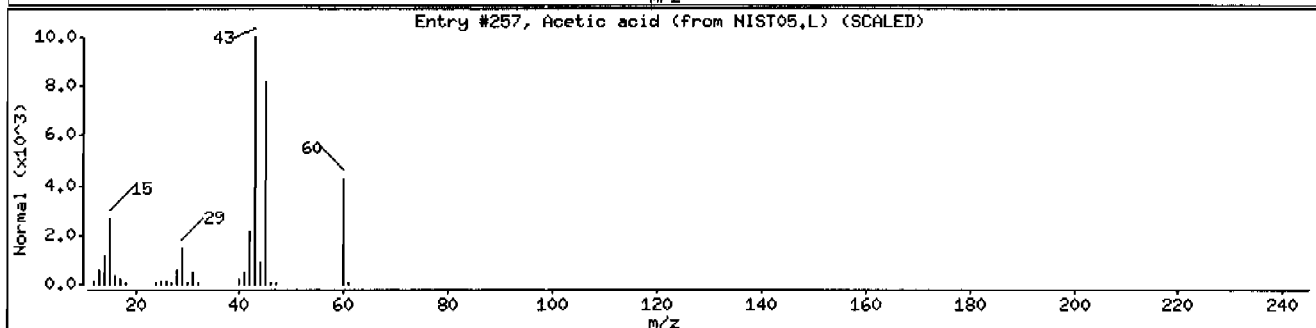
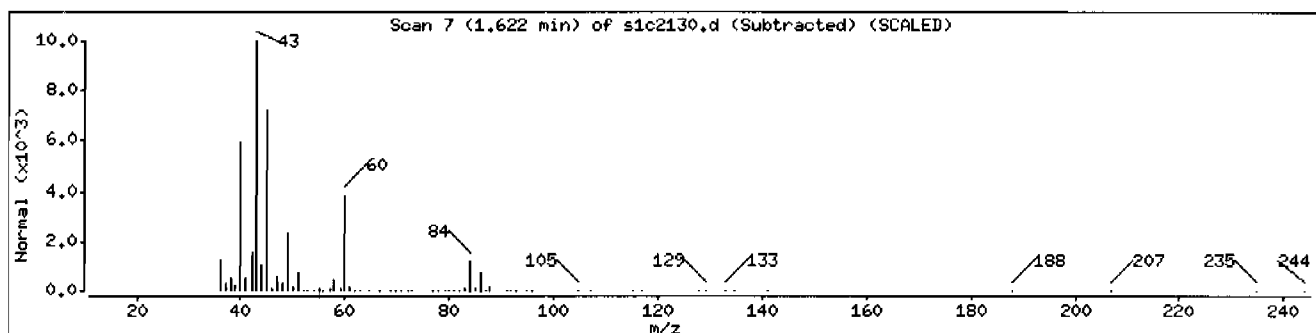
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid	64-19-7	NIST05.L	257	43	C2H4O2	60
Acetic acid	64-19-7	NIST05.L	255	38	C2H4O2	60
Acetic acid	64-19-7	NIST05.L	258	38	C2H4O2	60



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: HSD1.i

Sample Info: 12483700201961228111SVM111LANL

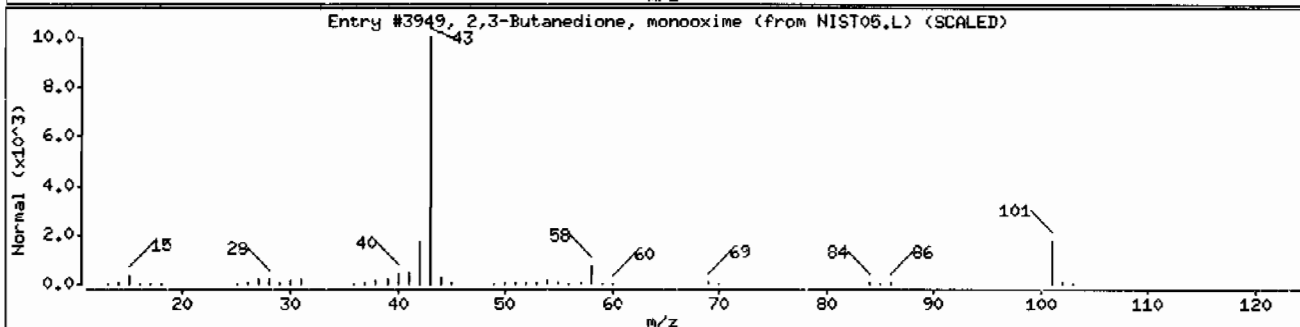
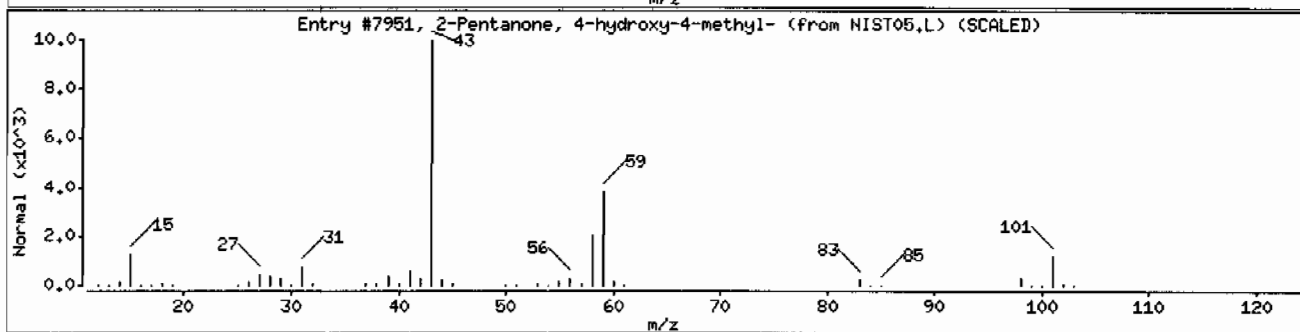
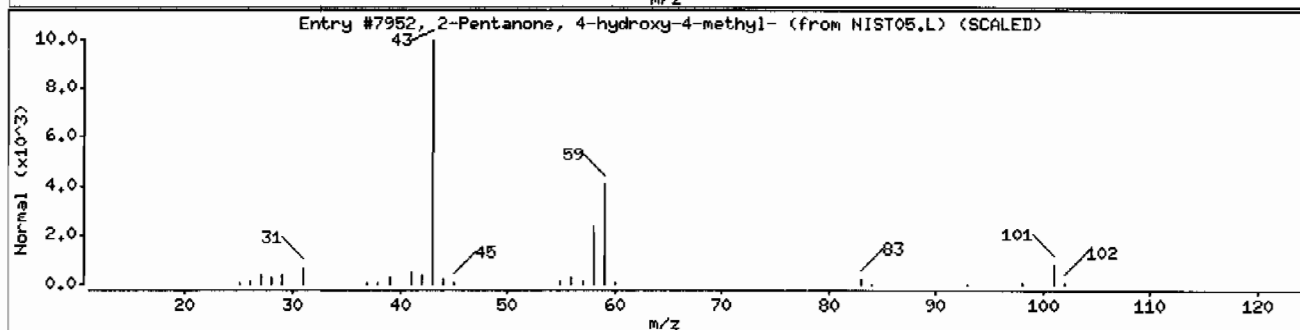
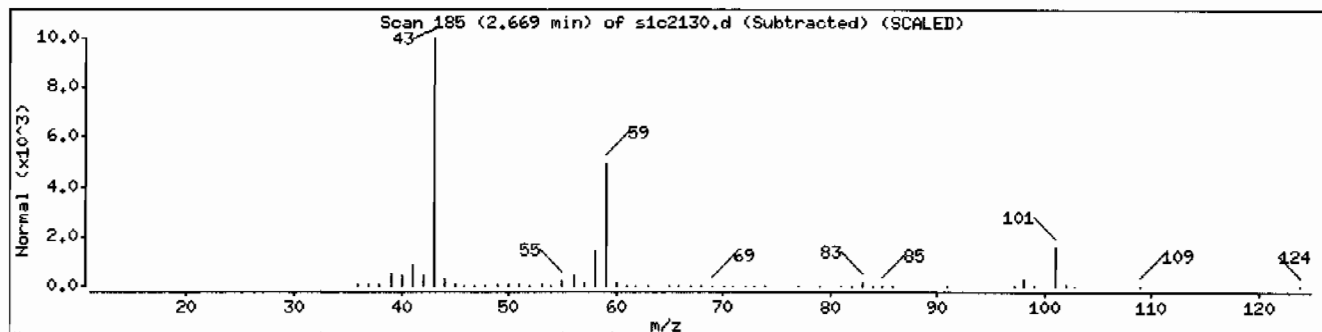
Volume Injected (uL): 0.5

Operator: AMY

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	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 12483700201961228111SVMI11LANL

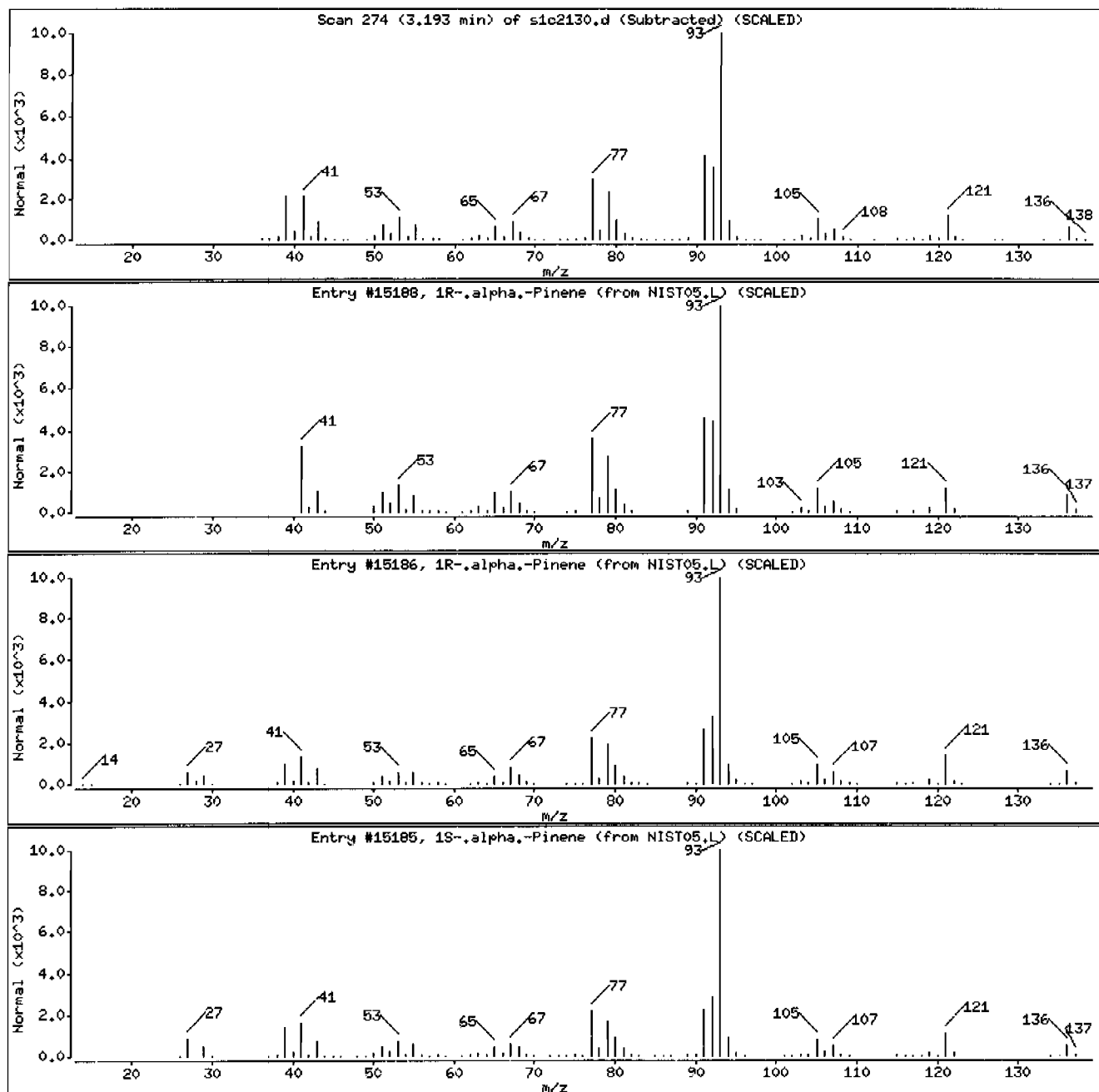
Volume Injected (uL): 0.5

Operator: AMY

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
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	97	C10H16	136
1S-.alpha.-Pinene	7785-26-4	NIST05.L	15185	96	C10H16	136



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.1

Sample Info: 12483700201961228111SVH111LANL

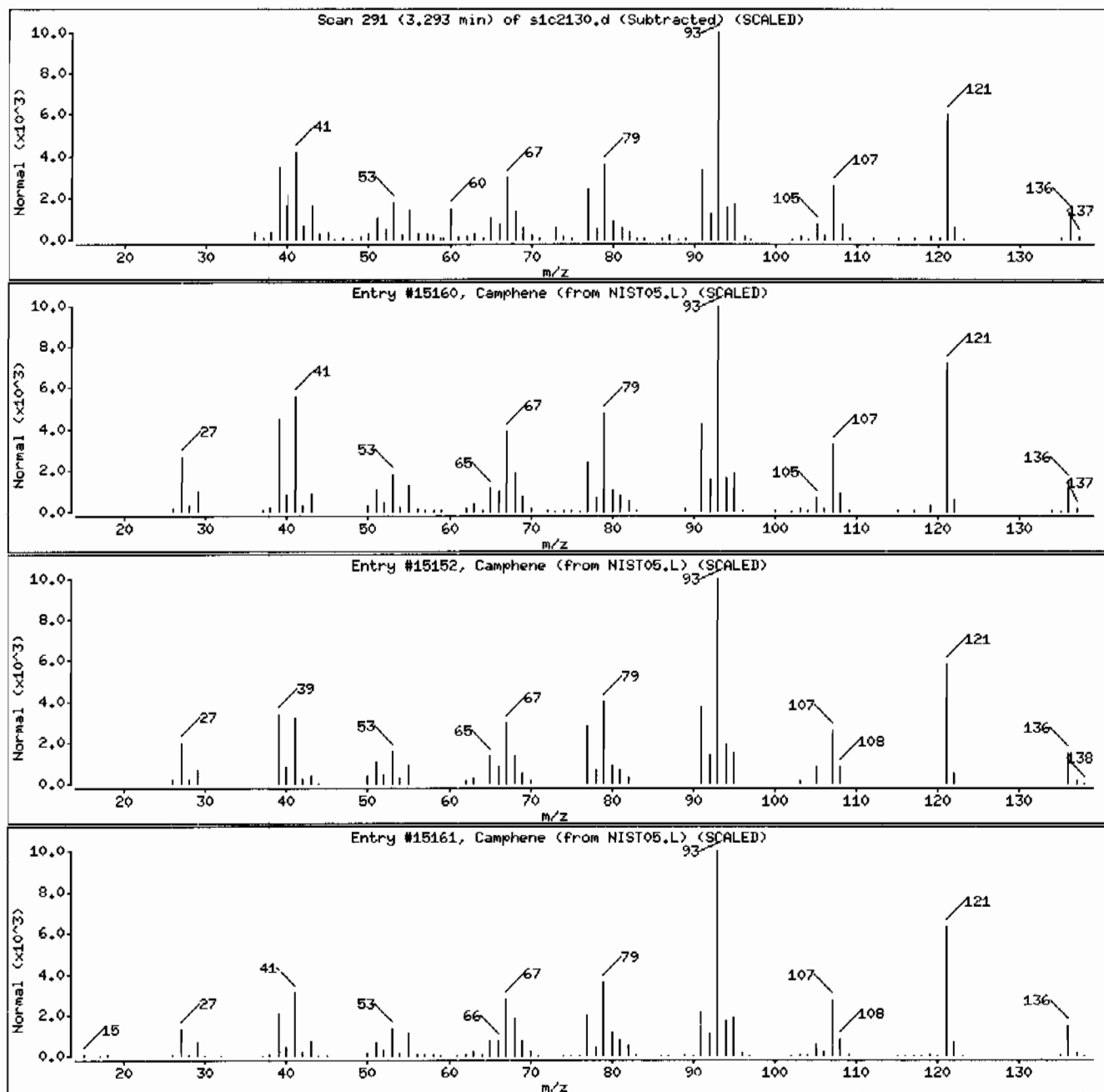
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST05.L	15160	98	C10H16	136
Camphene	79-92-5	NIST05.L	15152	97	C10H16	136
Camphene	79-92-5	NIST05.L	15161	97	C10H16	136



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVMI11LANL

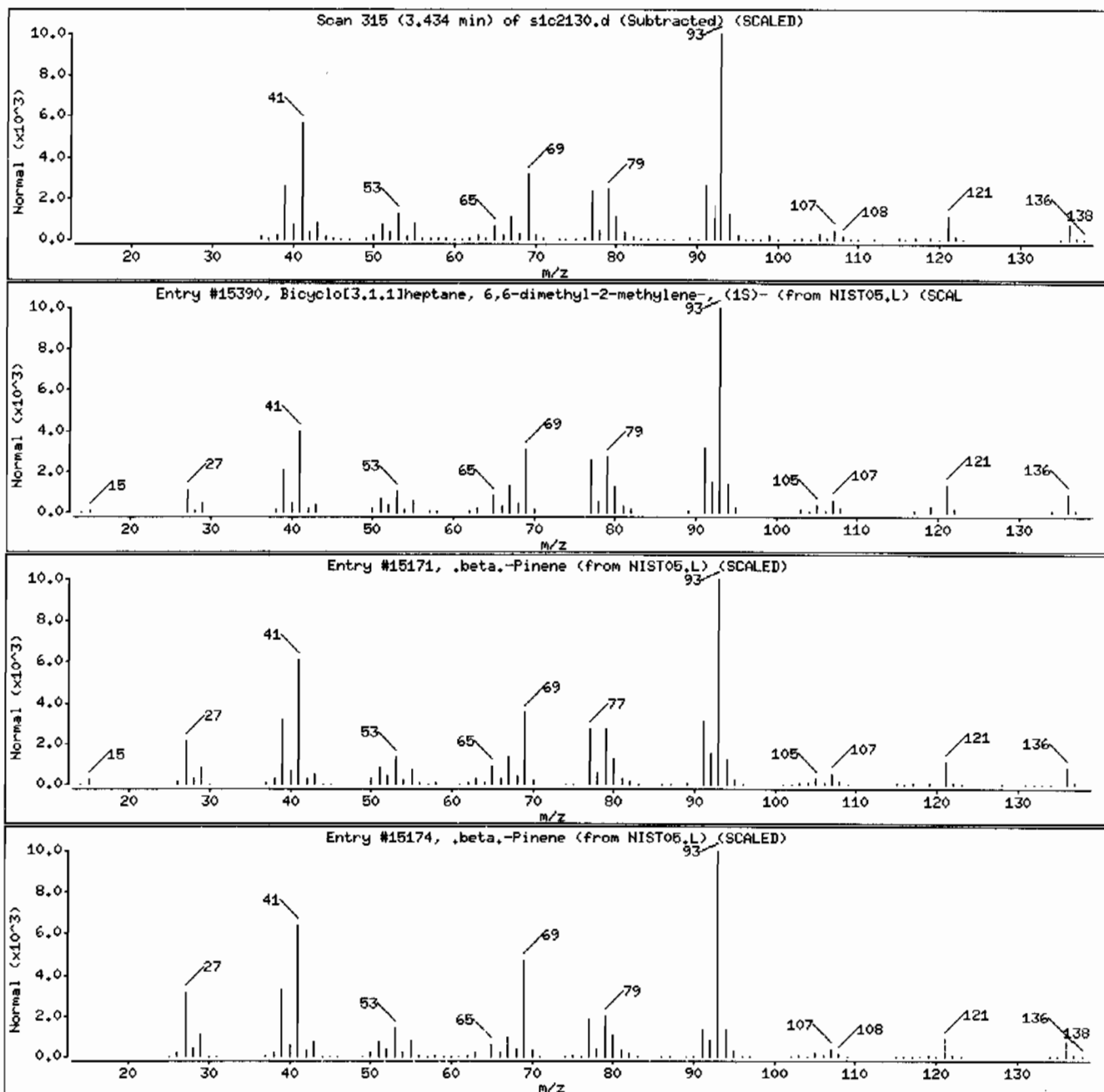
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	97	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15171	96	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15174	94	C10H16	136



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVMI11LANL

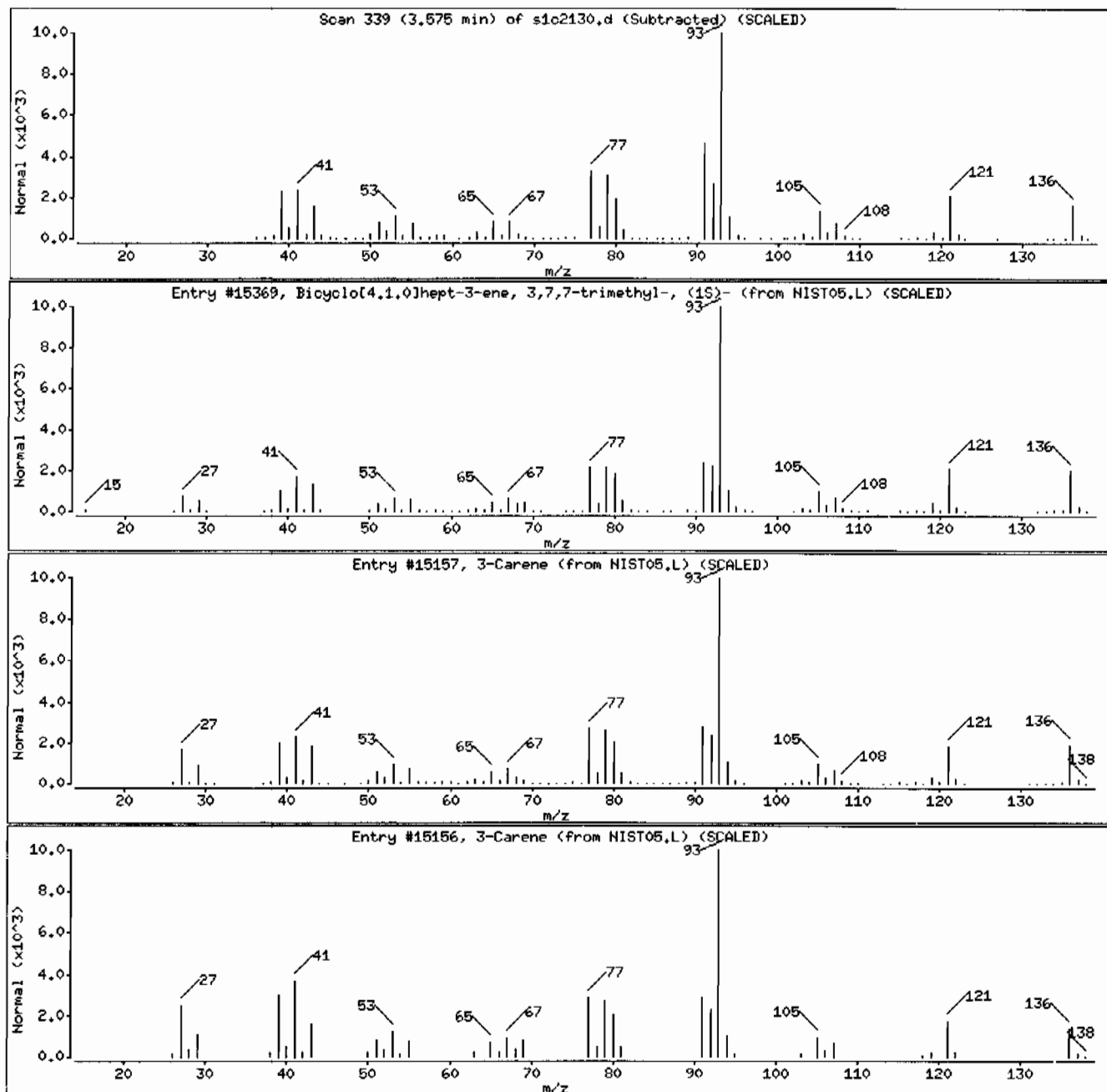
Volume Injected (uL): 0.5

Operator: AMY

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	15157	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: HSD1.i

Sample Info: 12483700201961228111SVH111LANL

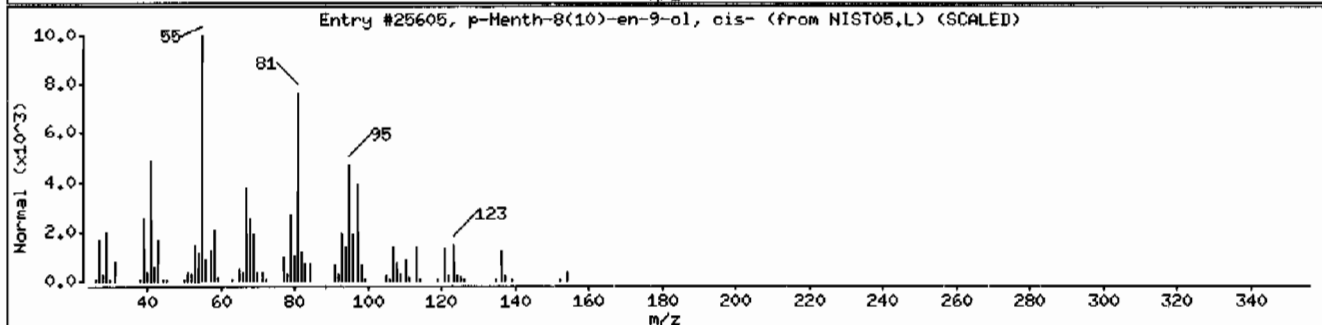
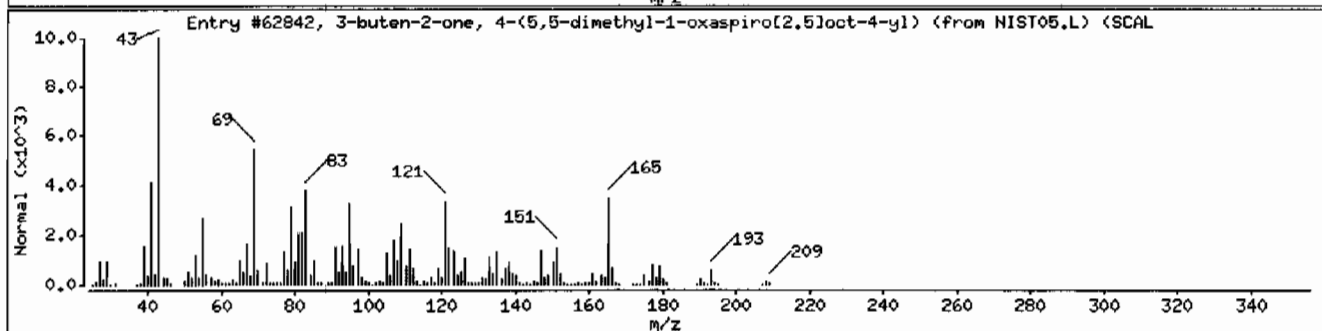
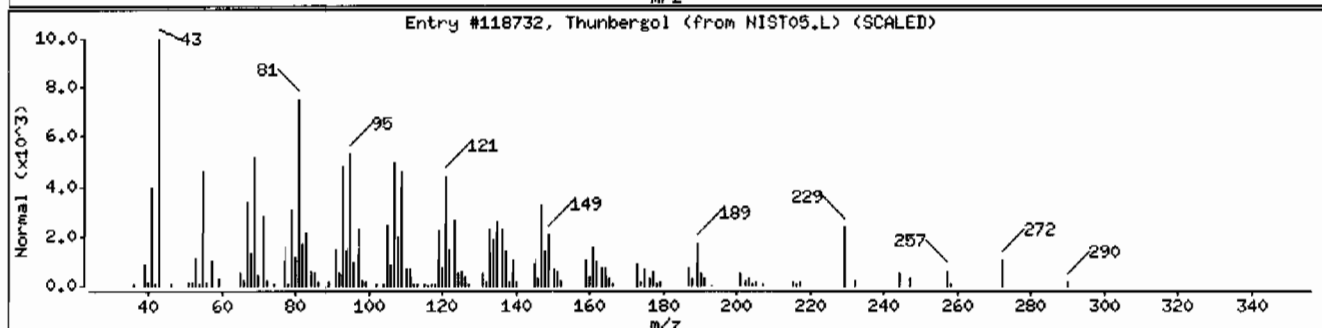
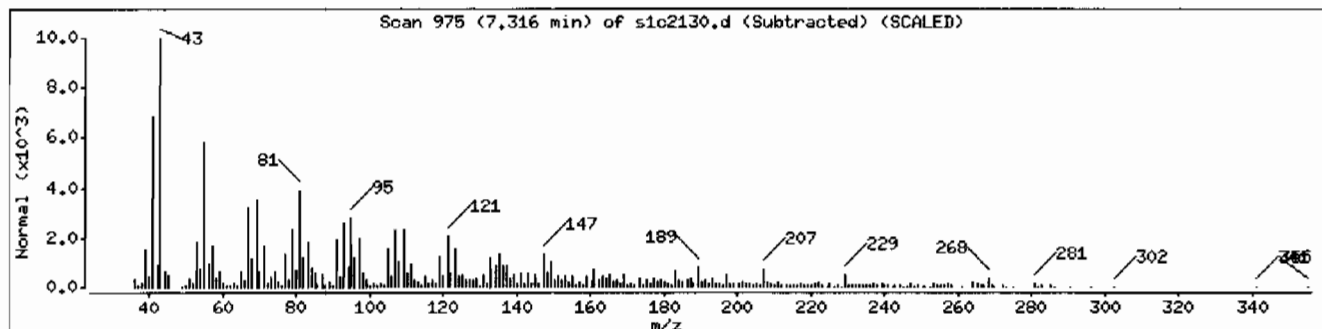
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thunbergol	26269-17-4	NIST05.L	118732	74	C20H34O	290
3-buten-2-one, 4-(5,5-dimethyl-1-oxaspiro	1000196-66-5	NIST05.L	62842	70	C13H20O2	208
p-Menth-8(10)-en-9-ol, cis-	15714-13-3	NIST05.L	25605	55	C10H18O	154



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811ISVM11ILANL

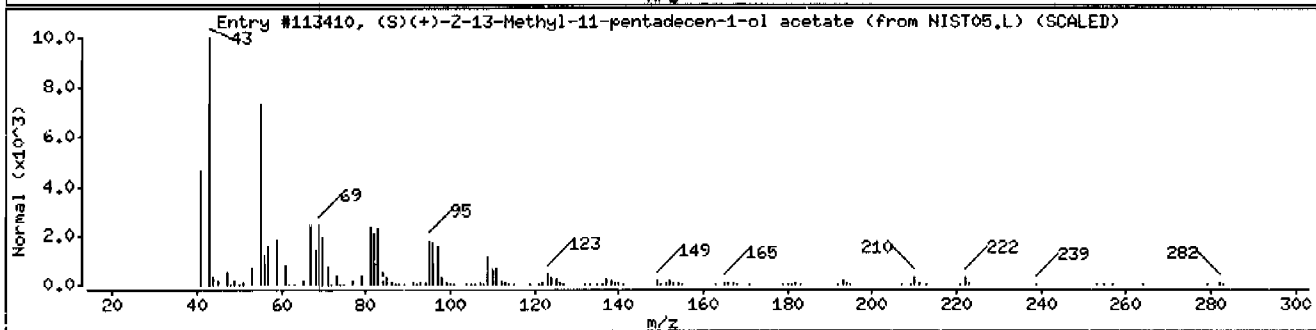
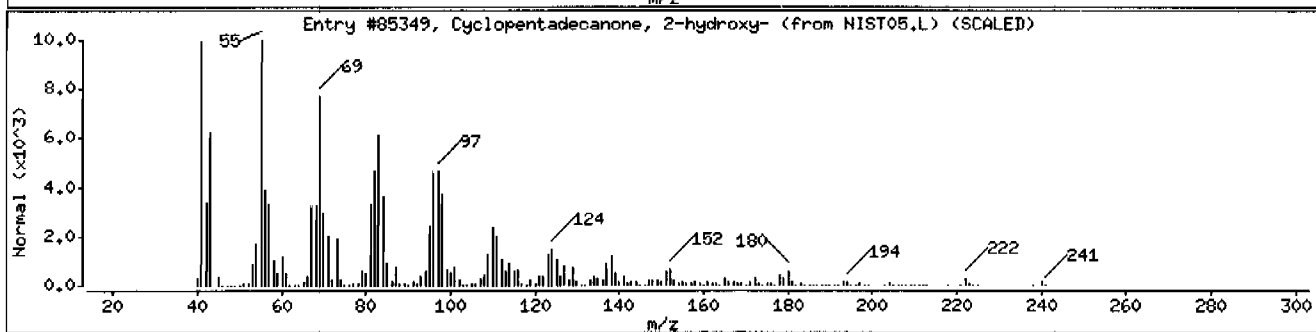
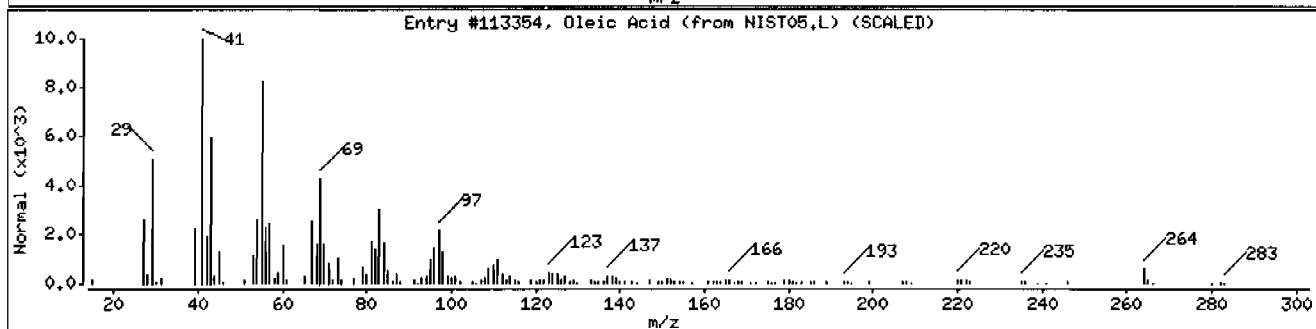
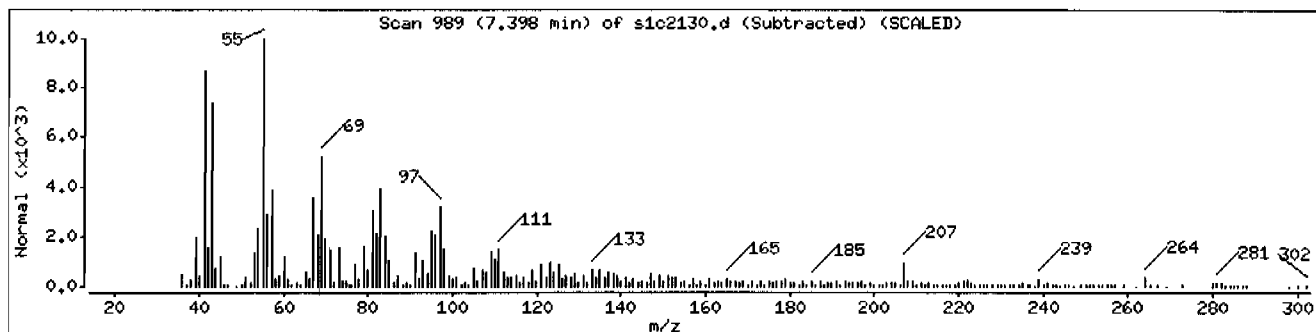
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Oleic Acid	112-80-1	NIST05.L	113354	93	C18H34O2	282
Cyclopentadecanone, 2-hydroxy-	4727-18-8	NIST05.L	85349	90	C15H28O2	240
(S)(+)-2-13-Methyl-11-pentadecen-1-ol ac	1000130-84-8	NIST05.L	113410	86	C18H34O2	282



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: HSD1.i

Sample Info: 12483700201961228111SVH111LANL

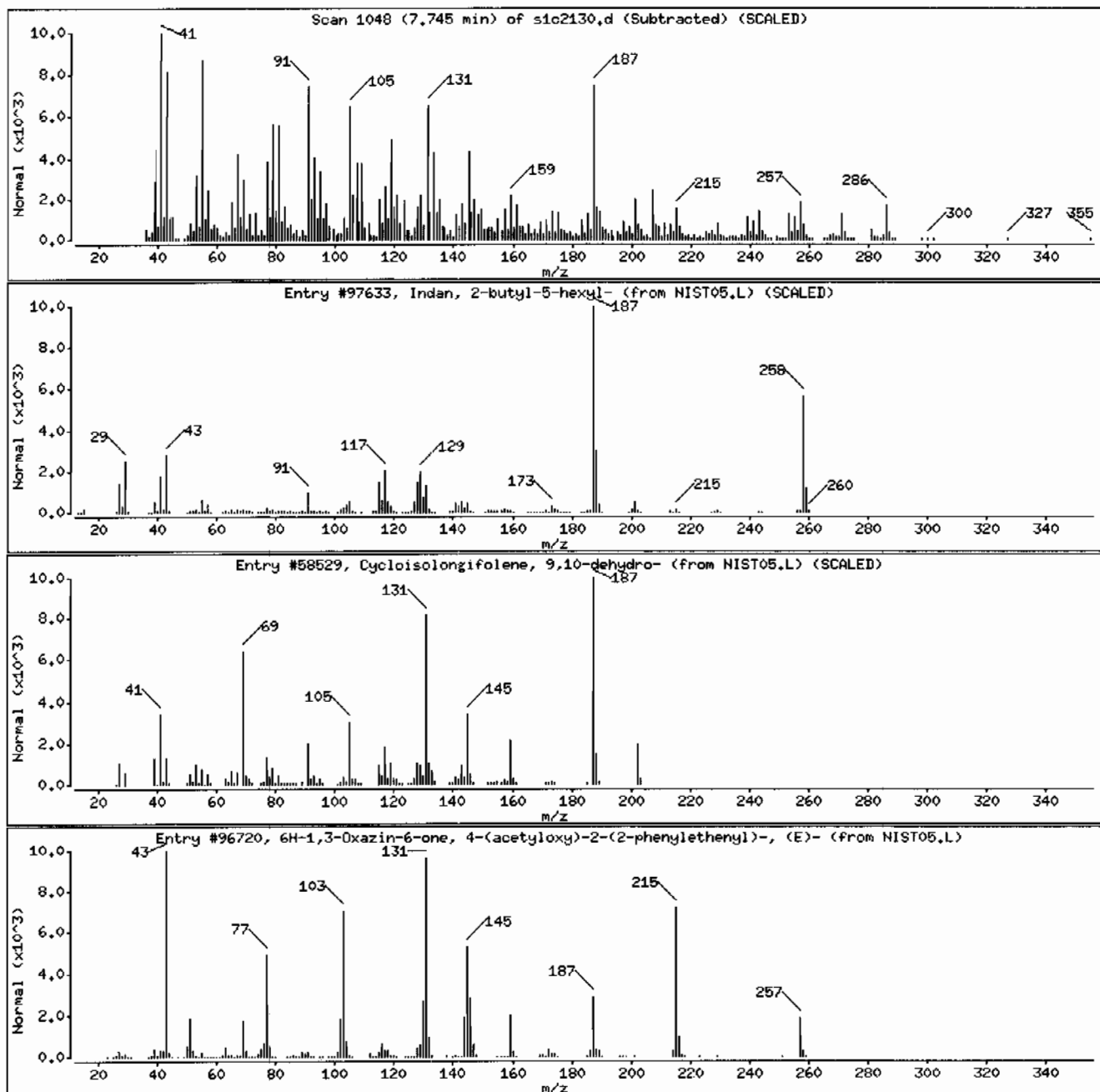
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Indan, 2-butyl-5-hexyl-	25446-32-6	NIST05.L	97633	62	C19H30	258
Cycloisolongifolene, 9,10-dehydro-	1000156-81-6	NIST05.L	58529	43	C15H22	202
6H-1,3-Oxazin-6-one, 4-(acetyloxy)-2-(2-	138744-82-8	NIST05.L	96720	30	C14H11N04	257



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVMI11LANL

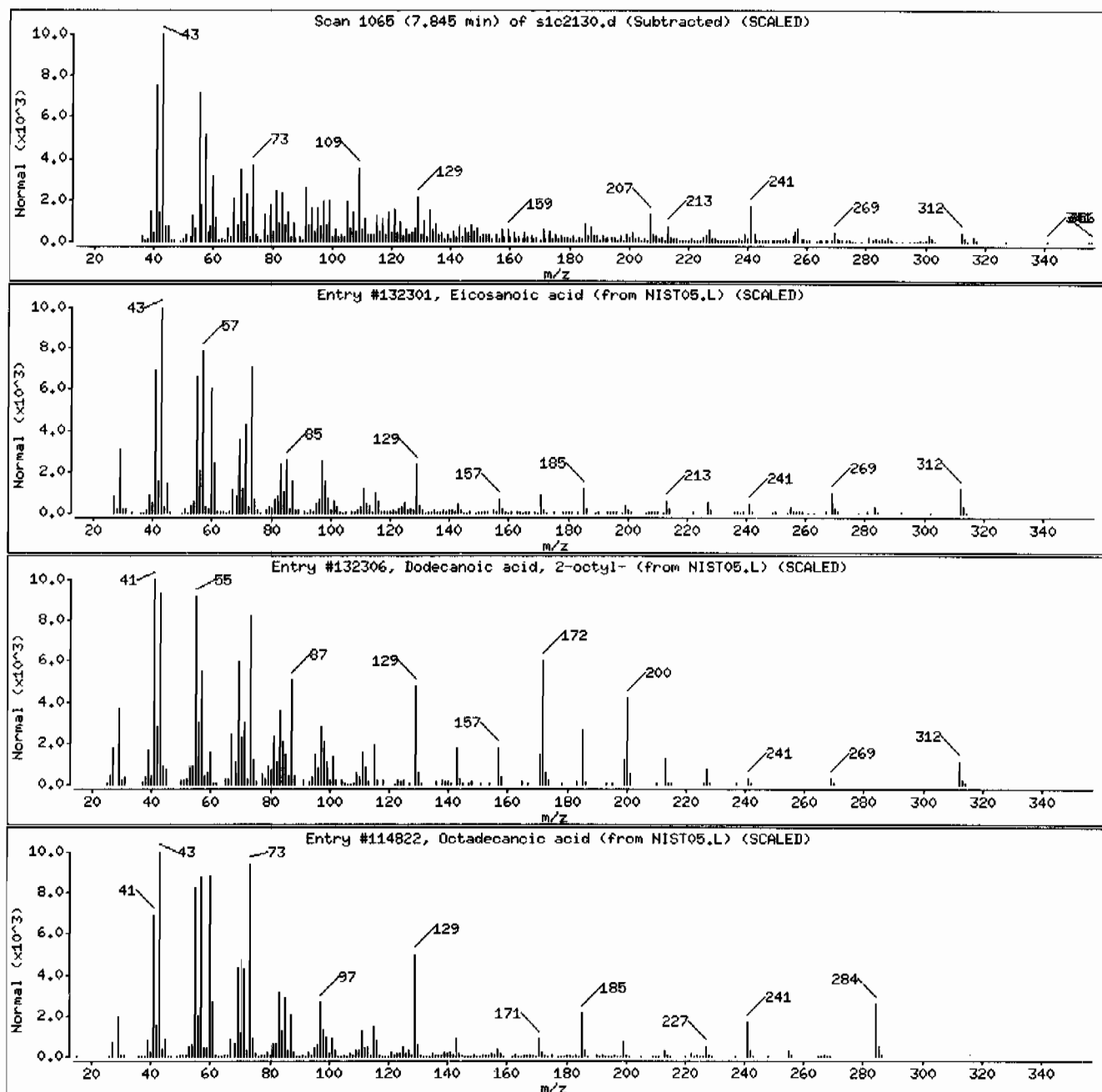
Volume Injected (uL): 0.5

Operator: AMY

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	86	C20H40O2	312
Dodecanoic acid, 2-octyl-	40596-46-1	NIST05.L	132306	56	C20H40O2	312
Octadecanoic acid	57-11-4	NIST05.L	114822	43	C18H36O2	284



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 12483700201961228111SVH111LANL

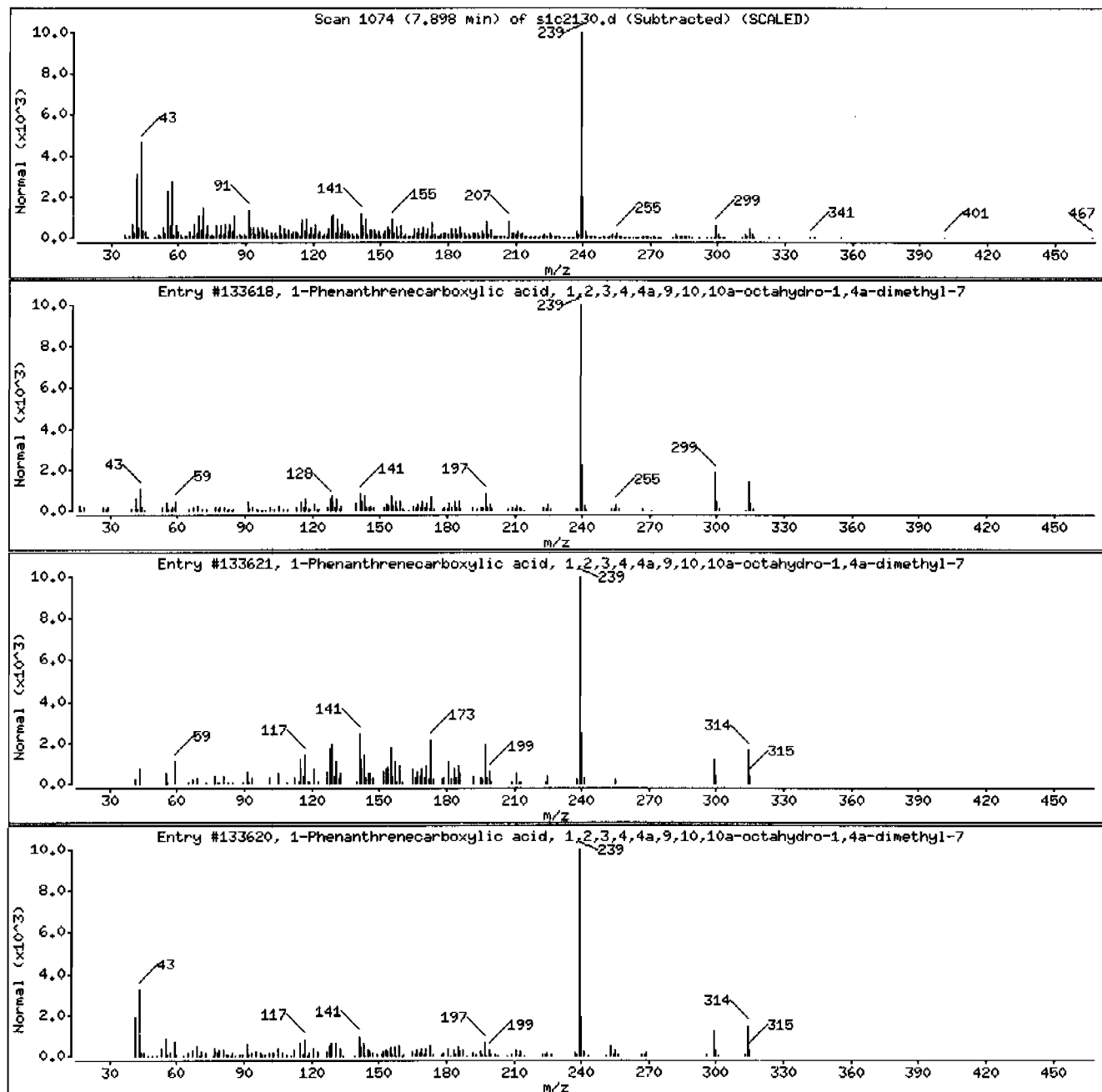
Volume Injected (uL): 0.5

Operator: AMY

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



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: HSD1.i

Sample Info: I248370020196122811SVMI1ILANL

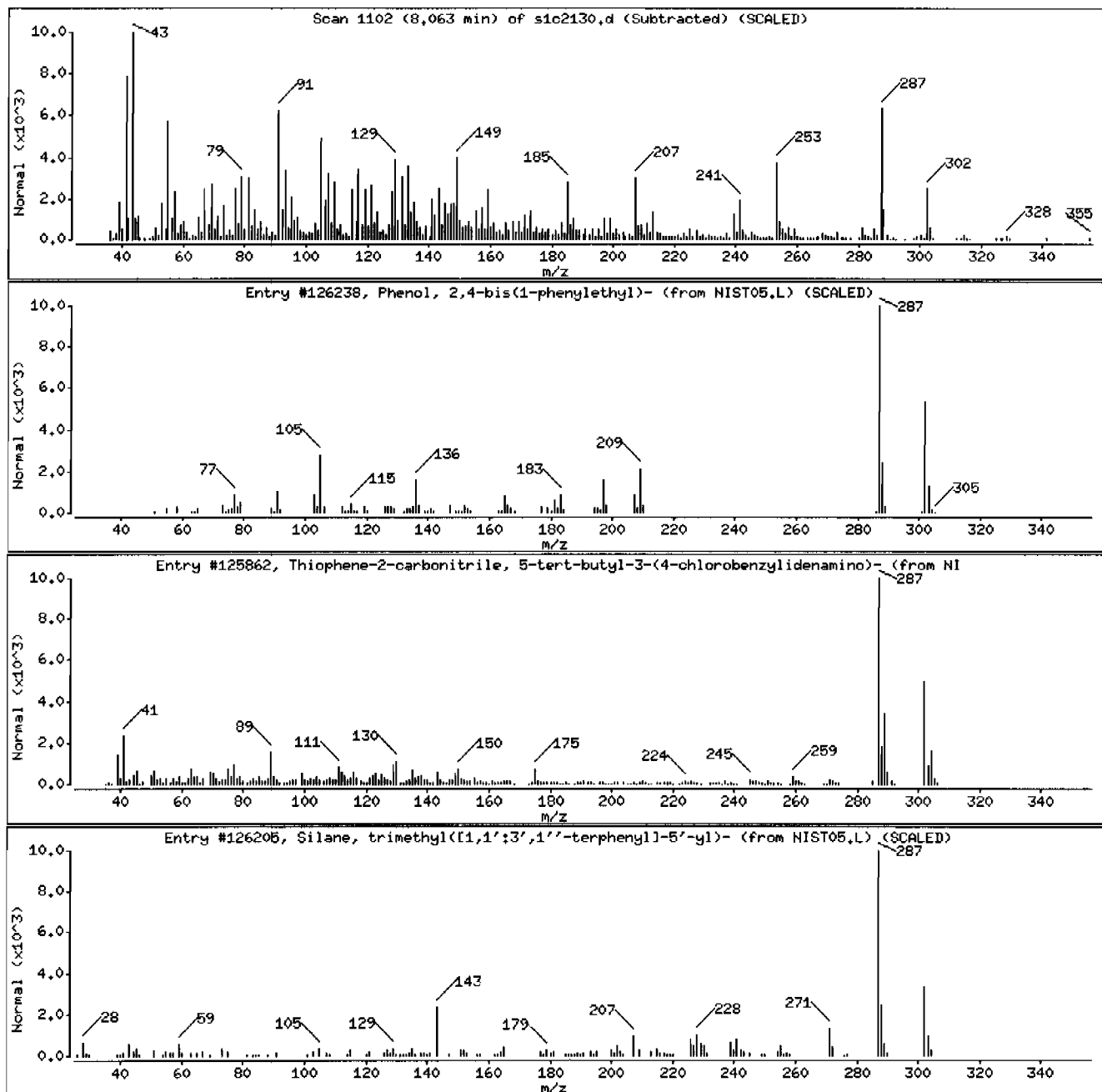
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	50	C22H22O	302
Thiophene-2-carbonitrile, 5-tert-butyl-3	1000268-00-9	NIST05.L	125862	20	C16H15CN2S	302
Silane, trimethyl(1,1,1,3,3,3'-terphenyl	128388-53-4	NIST05.L	126205	18	C21H22Si	302



Date: 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVH111LANL

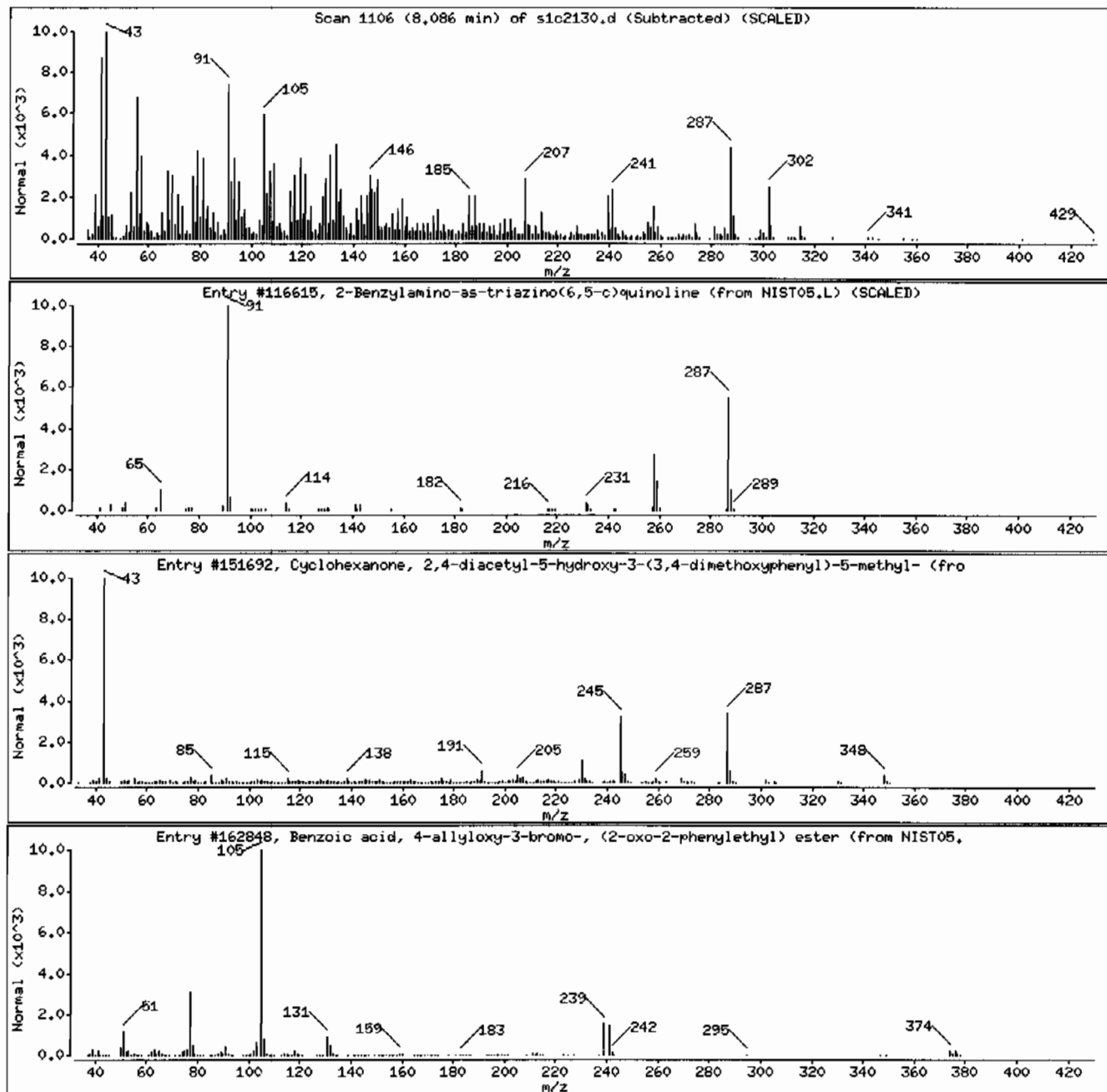
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Benzylamino-as-triazino(6,5-c)quinolin	81547-18-4	NIST05.L	116615	15	C17H13N5	287
Cyclohexanone, 2,4-diacetyl-5-hydroxy-3-	1000260-63-7	NIST05.L	151692	10	C19H24O6	348
Benzoic acid, 4-allyloxy-3-bromo-, (2-ox	284680-03-1	NIST05.L	162848	9	C18H15BrO4	374



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVH111LANL

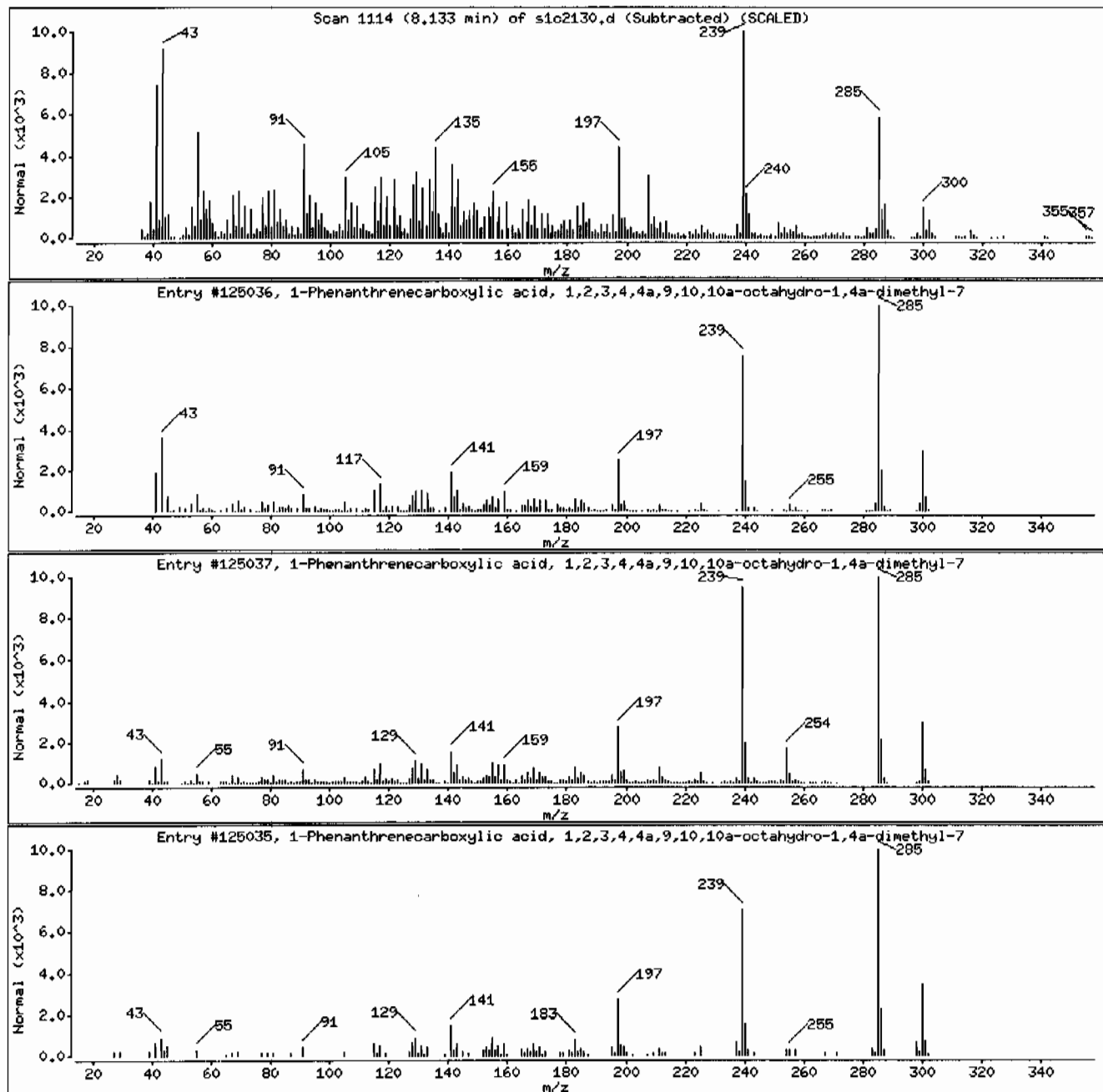
Volume Injected (uL): 0.5

Operator: AMY

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	98	C ₂₀ H ₂₈ O ₂	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	89	C ₂₀ H ₂₈ O ₂	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	53	C ₂₀ H ₂₈ O ₂	300



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVMI1ILANL

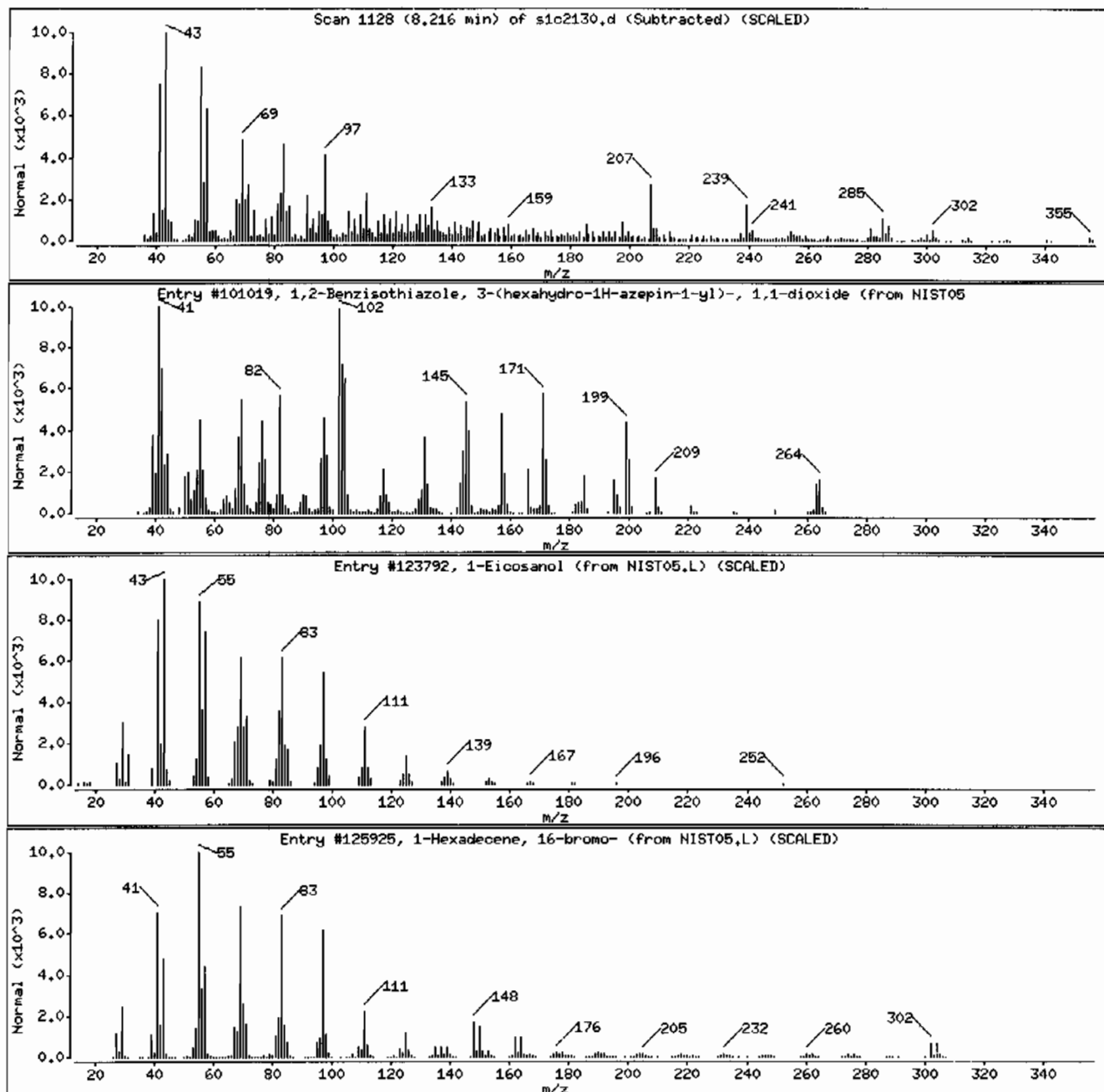
Volume Injected (uL): 0.5

Operator: AMY

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	91	C13H16N2O2S	264
1-Eicosanol	629-96-9	NIST05.L	123792	91	C20H42O	298
1-Hexadecene, 16-bromo-	118625-56-2	NIST05.L	125925	90	C16H31Br	302



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: HSD1.i

Sample Info: I248370020196122811SVH111LANL

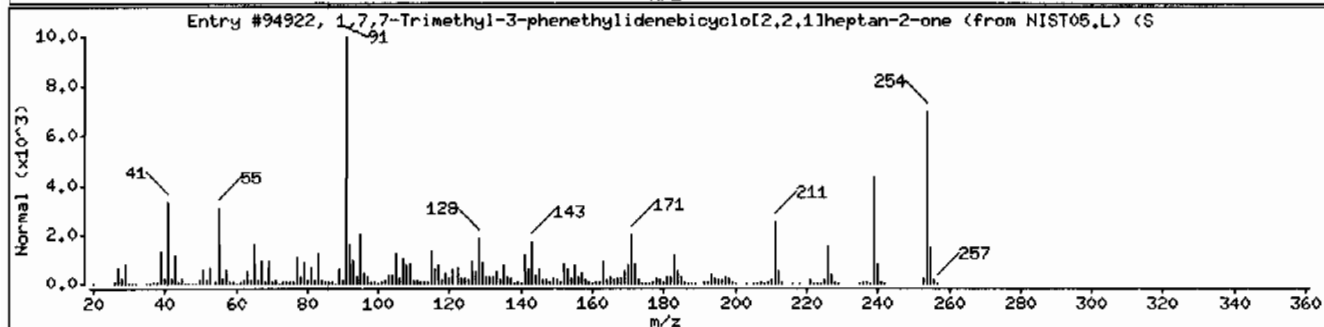
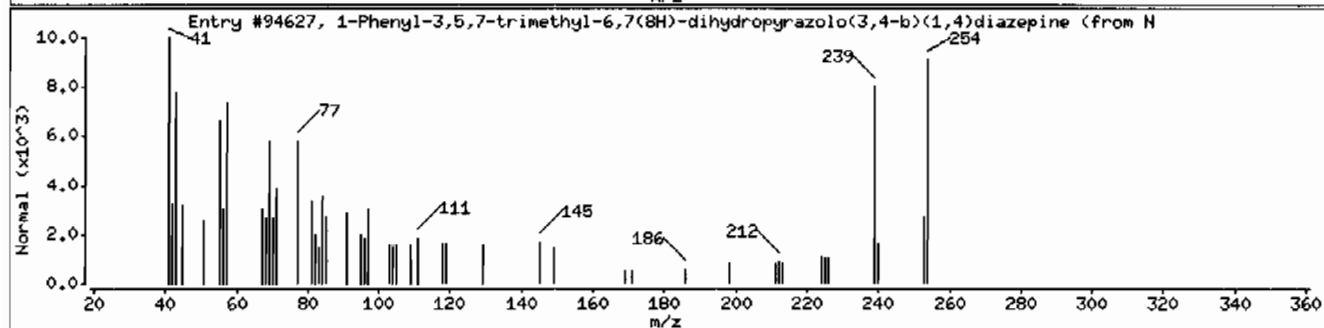
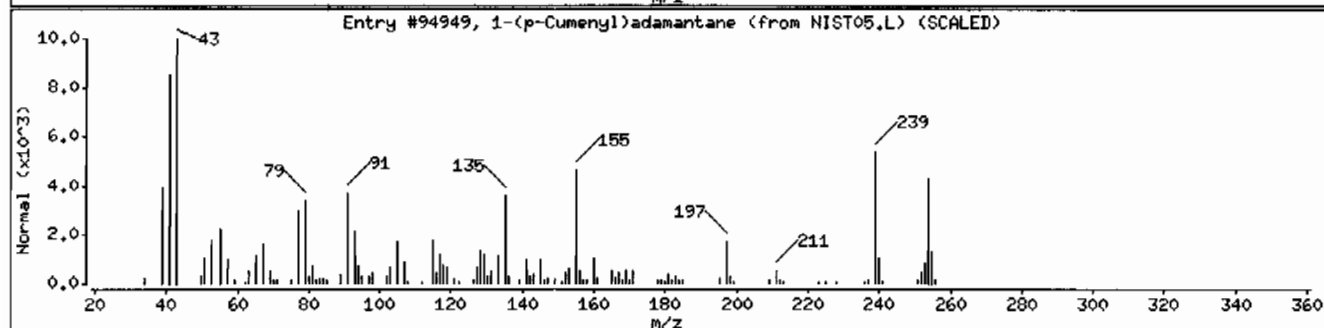
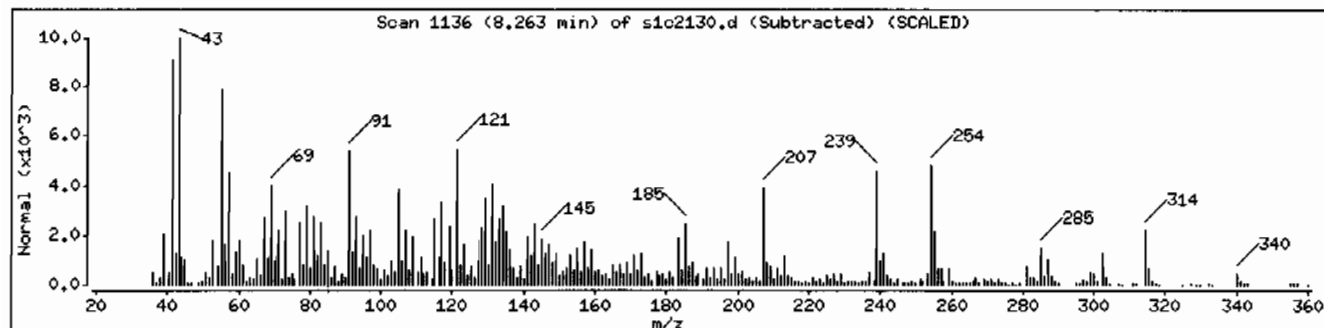
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-(p-Cumenyl)adamantane	51812-98-7	NIST05.L	94949	27	C19H26	254
1-Phenyl-3,5,7-trimethyl-6,7(8H)-dihydro	64899-23-6	NIST05.L	94627	25	C15H18N4	254
1,7,7-Trimethyl-3-phenethylidenebicyclo[	1000210-75-8	NIST05.L	94922	20	C18H22O	254



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVMI11LANL

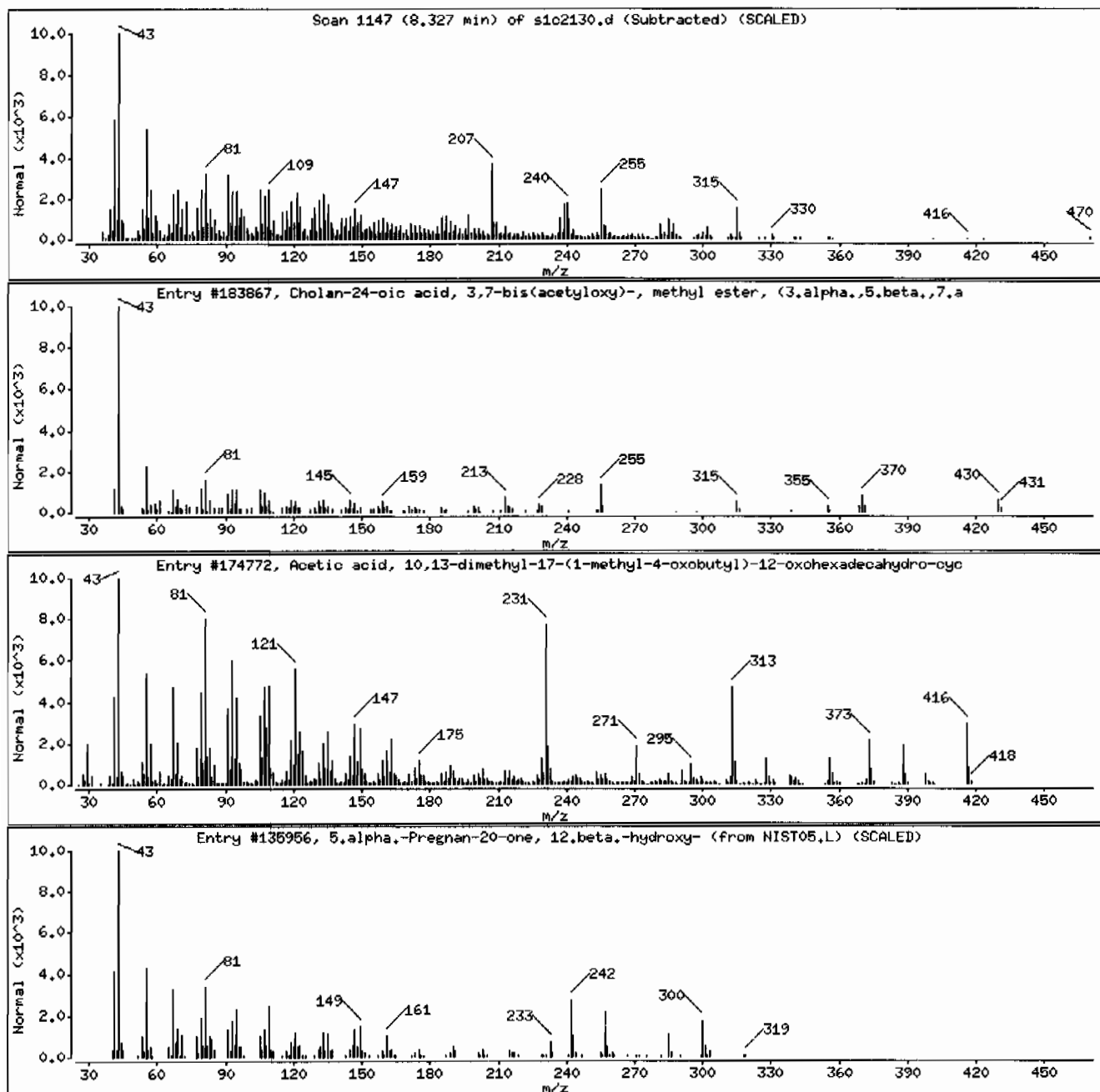
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cholan-24-oic acid, 3,7-bis(acetyloxy)-,	2616-71-9	NIST05.L	183867	38	C29H46O6	490
Acetic acid, 10,13-dimethyl-17-(1-methyl	1000195-24-1	NIST05.L	174772	14	C26H40O4	416
5.alpha.-Pregnan-20-one, 12.beta.-hydrox	5618-22-4	NIST05.L	135956	12	C21H34O2	318



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: I248370020196122811ISVM11ILANL

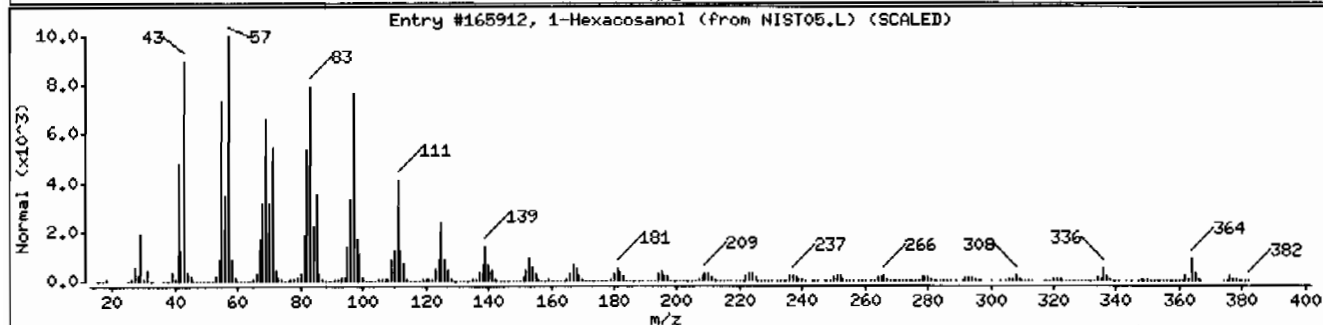
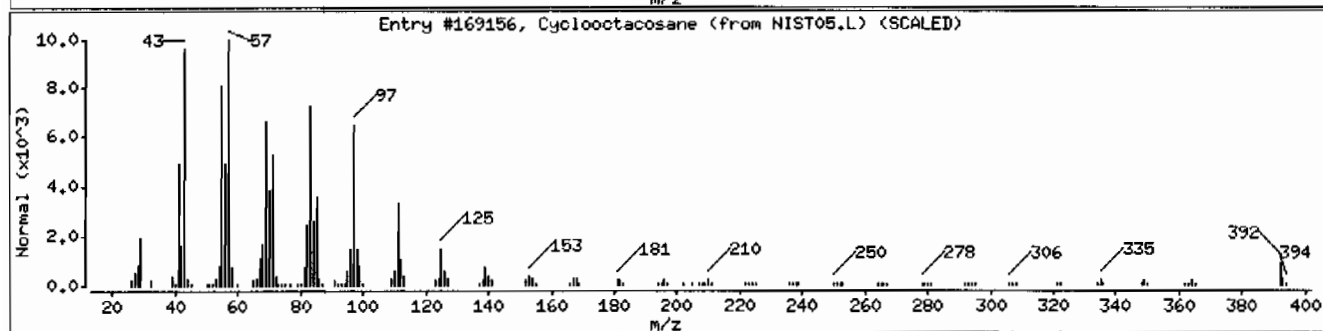
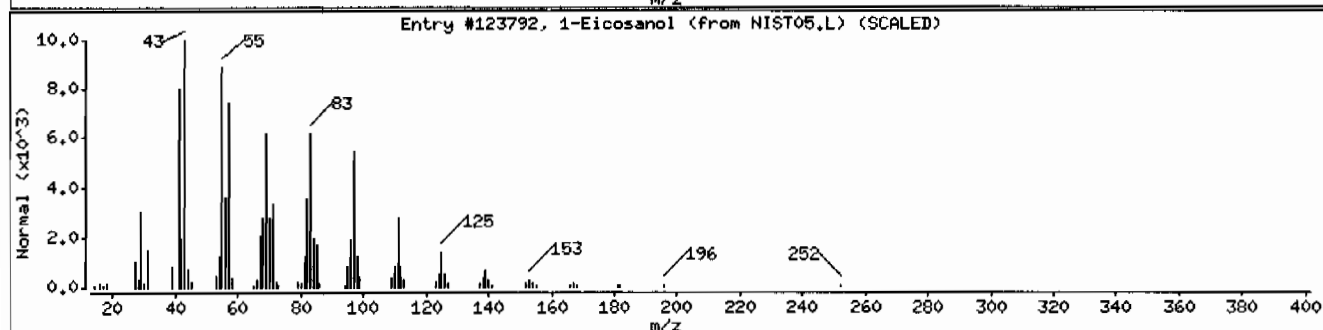
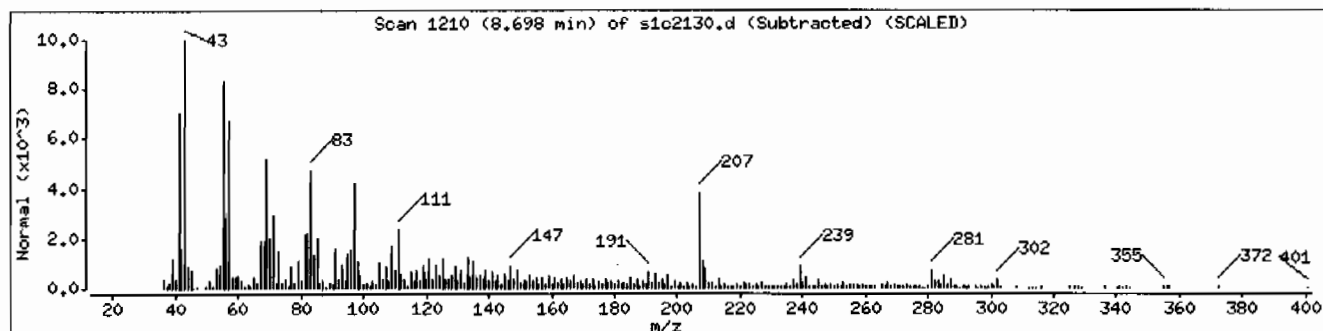
Volume Injected (uL): 0.5

Operator: AMY

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	89	C20H42O	298
Cyclooctacosane	297-24-5	NIST05.L	169156	60	C28H56	392
1-Hexacosanol	506-52-5	NIST05.L	165912	60	C26H54O	382



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: HSD1.i

Sample Info: 1248370020196122811SVMI1ILANL

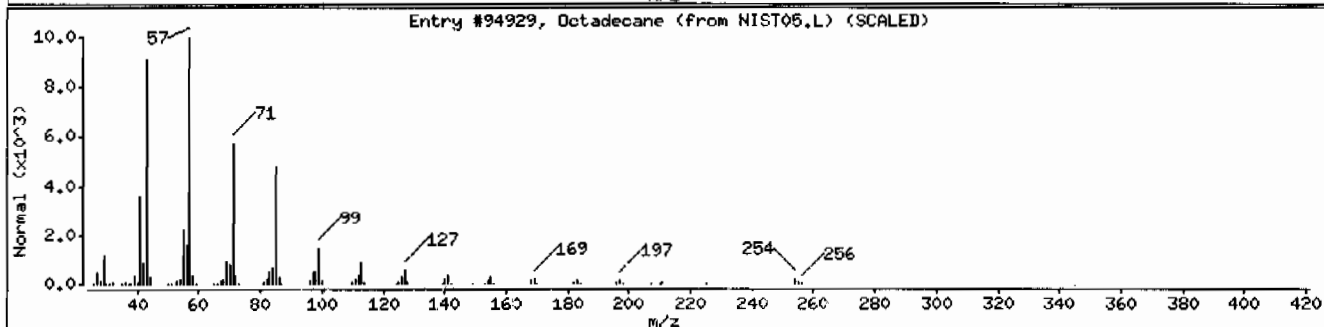
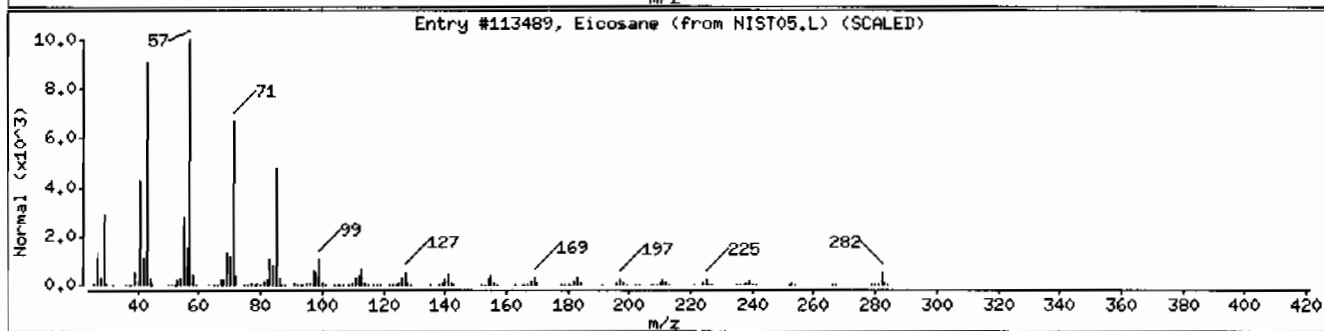
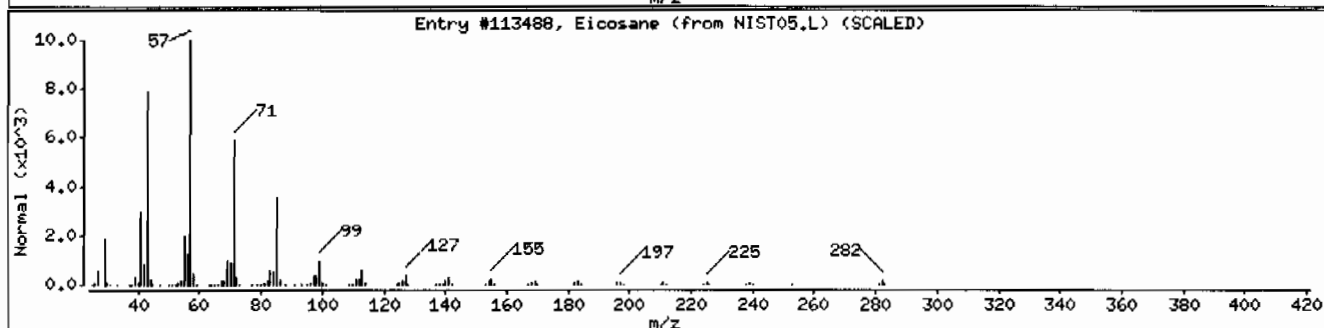
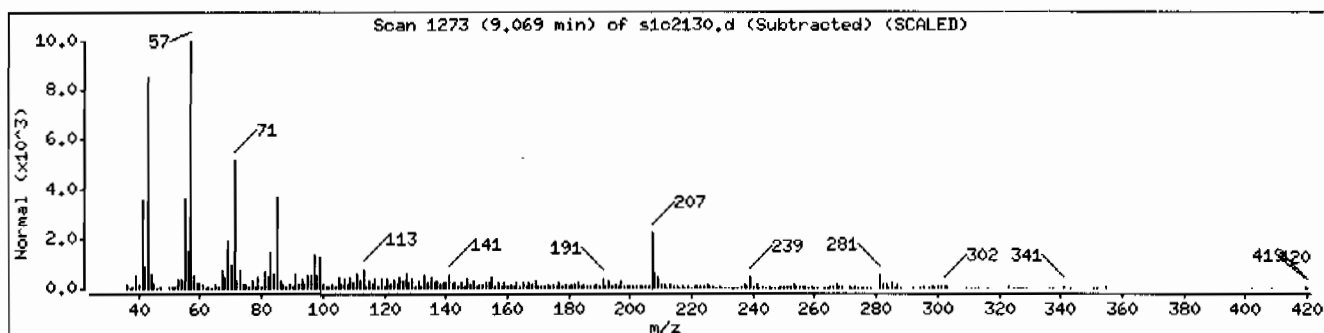
Volume Injected (uL): 0.5

Operator: AMY

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	113488	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	93	C ₂₀ H ₄₂	282
Octadecane	593-45-3	NIST05.L	94929	92	C ₁₈ H ₃₈	254



Date: 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: HSD1.i

Sample Info: 1248370020196122811SVH11ILANL

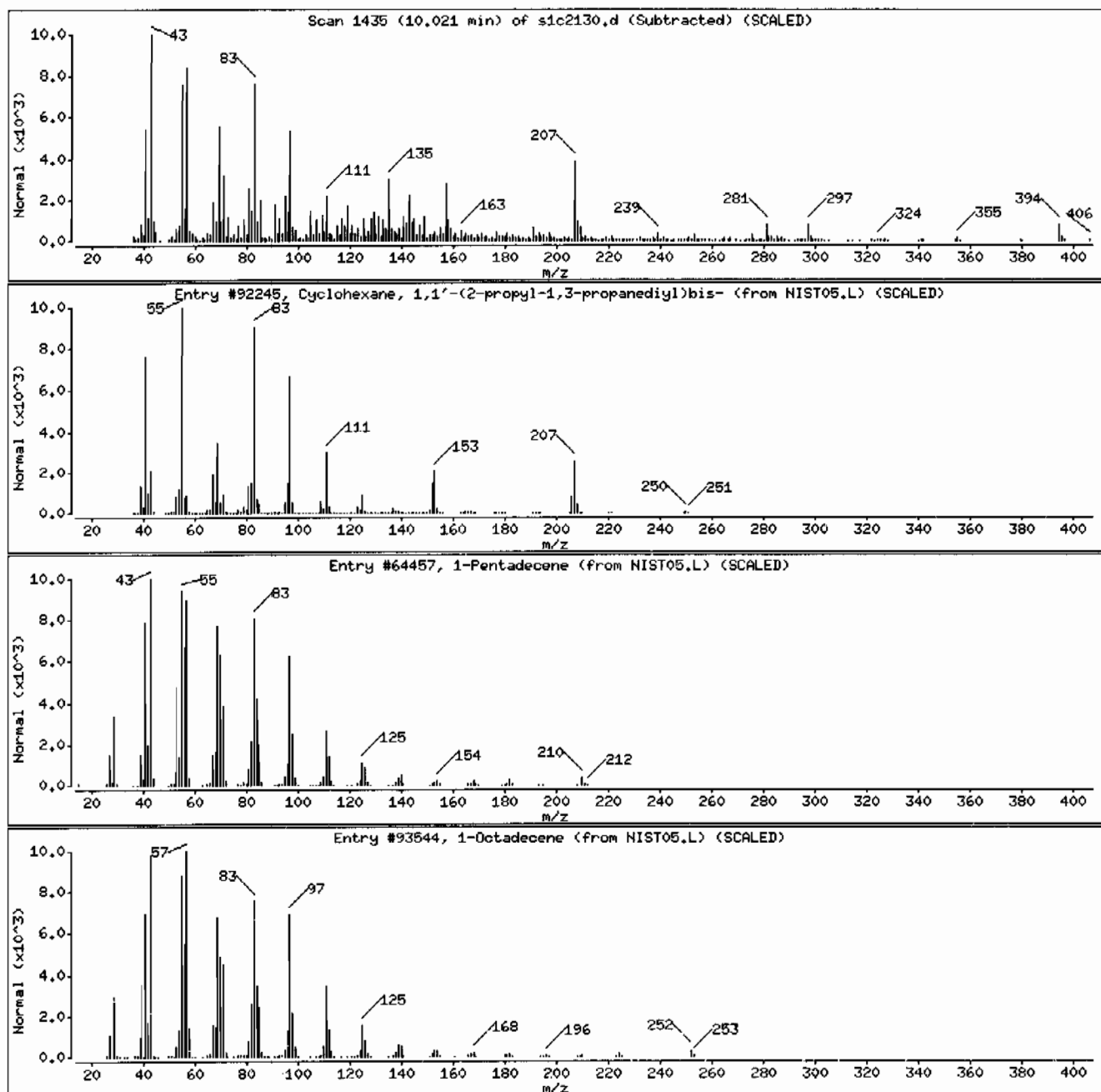
Volume Injected (uL): 0.5

Operator: AMY

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	46	C18H34	250
1-Pentadecene	13360-61-7	NIST05.L	64457	46	C15H30	210
1-Octadecene	112-88-9	NIST05.L	93544	42	C18H36	252



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVMI1ILANL

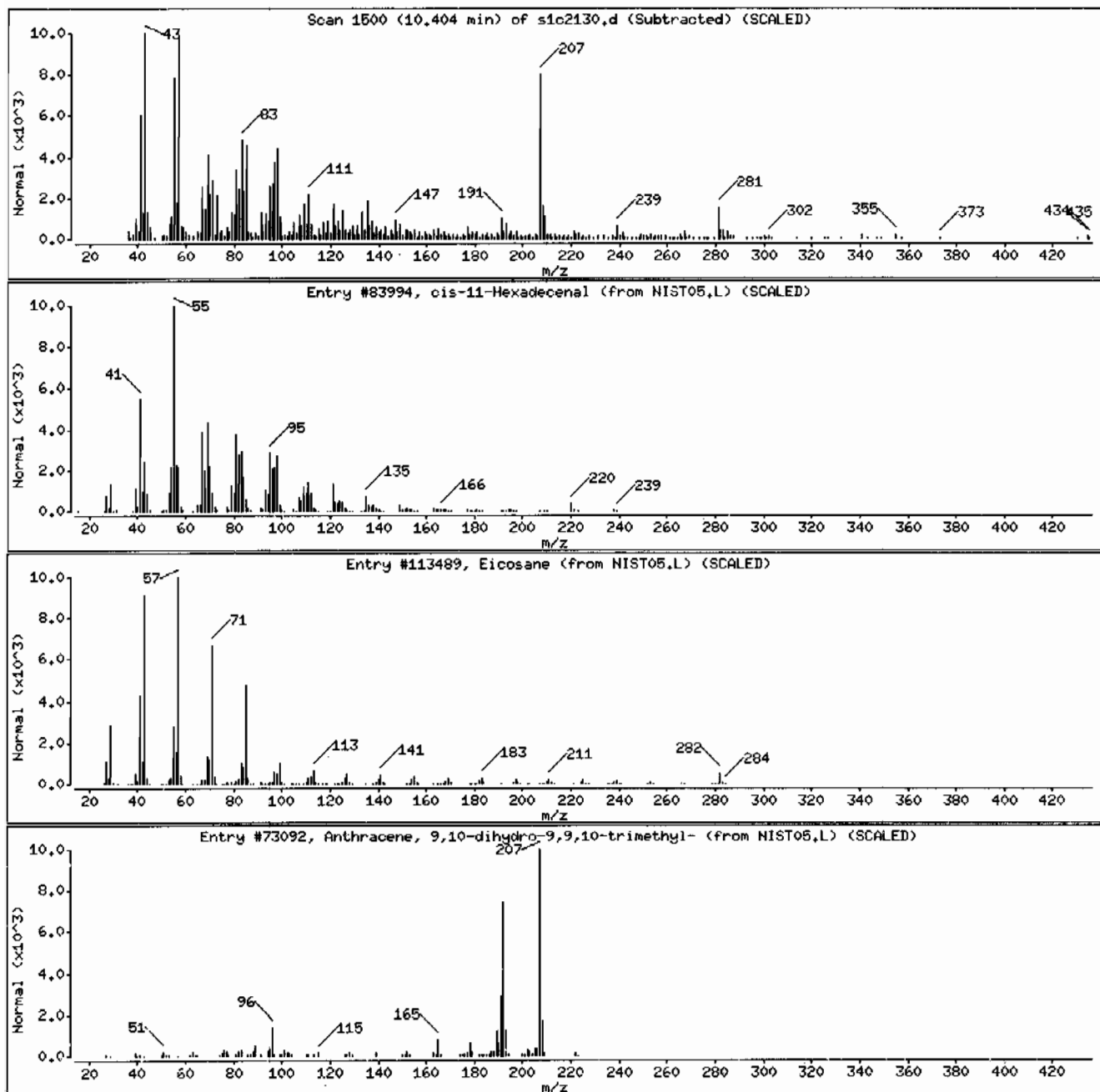
Volume Injected (uL): 0.5

Operator: AHY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
cis-11-Hexadecenal	53939-28-9	NIST05.L	83994	38	C16H30O	238
Eicosane	112-95-8	NIST05.L	113489	25	C20H42	282
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	25	C17H18	222



Date: 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVH11ILANL

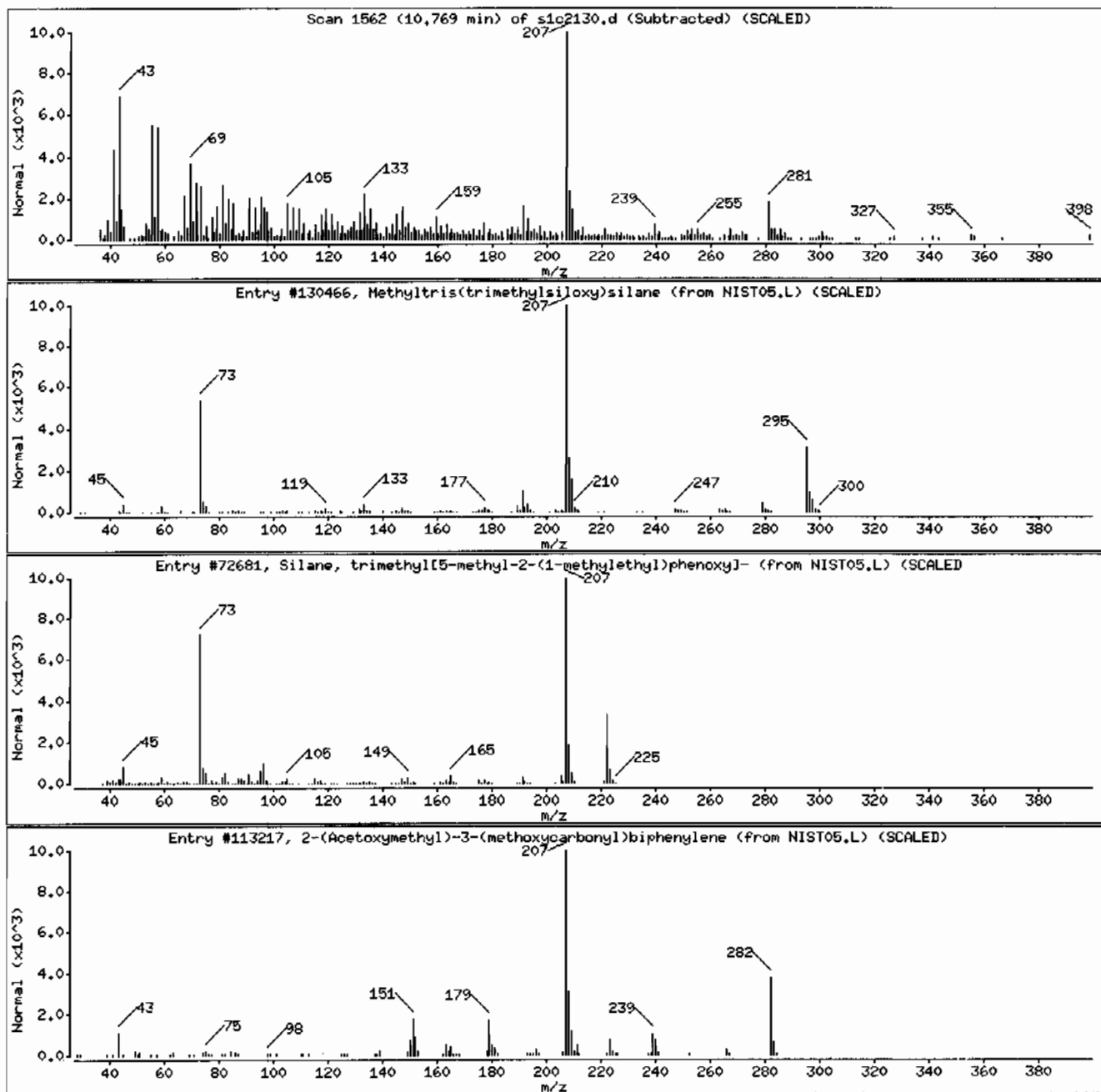
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	53	C10H30O3Si4	310
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72681	52	C13H22OSi	222
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	49	C17H14O4	282



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: HSD1.i

Sample Info: 12483700201961228111SVH111LANL

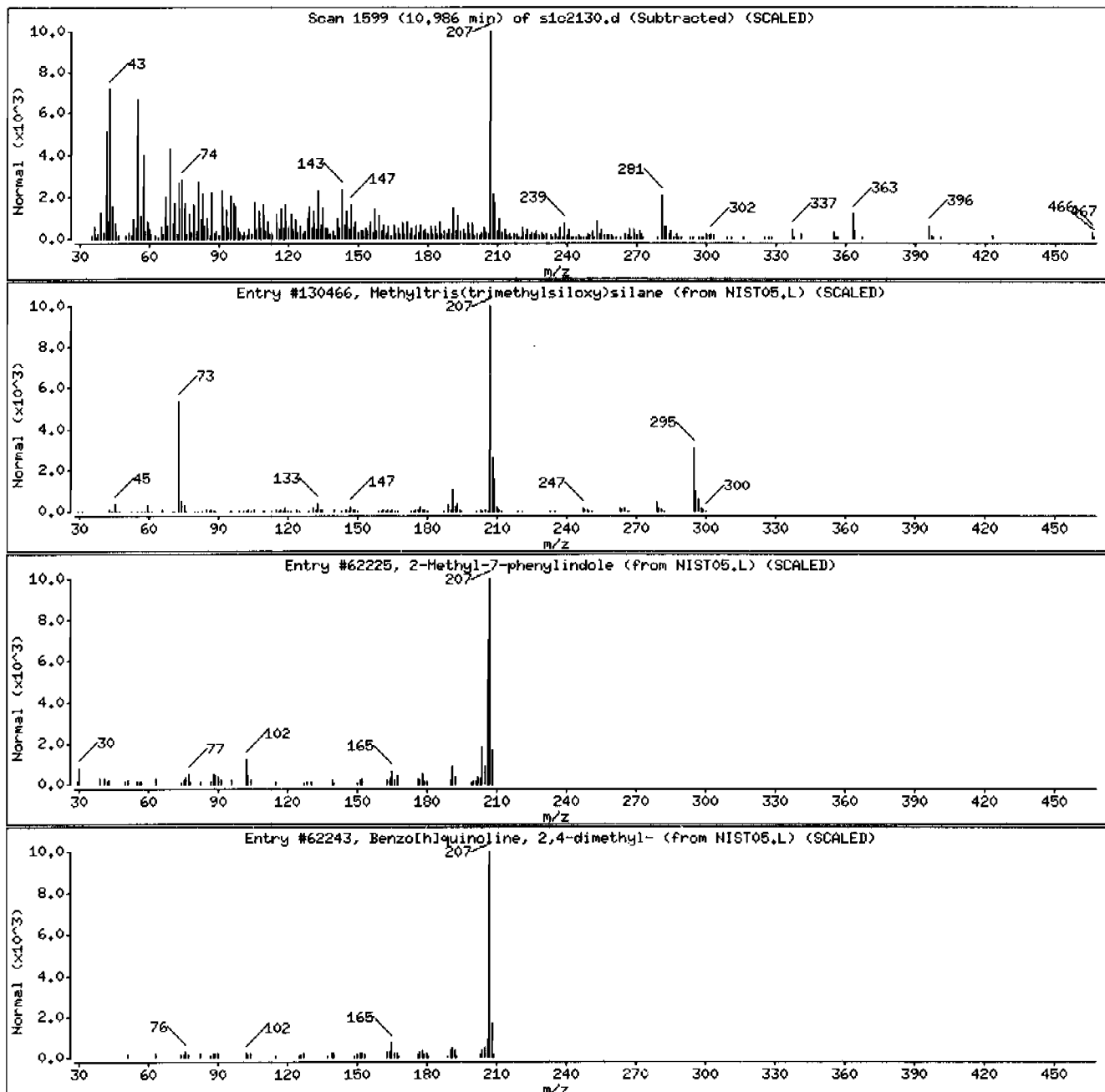
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	38	C10H30O3Si4	310
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	38	C15H13N	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C15H13N	207



Date: 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: 1248370020196122811SVH111LANL

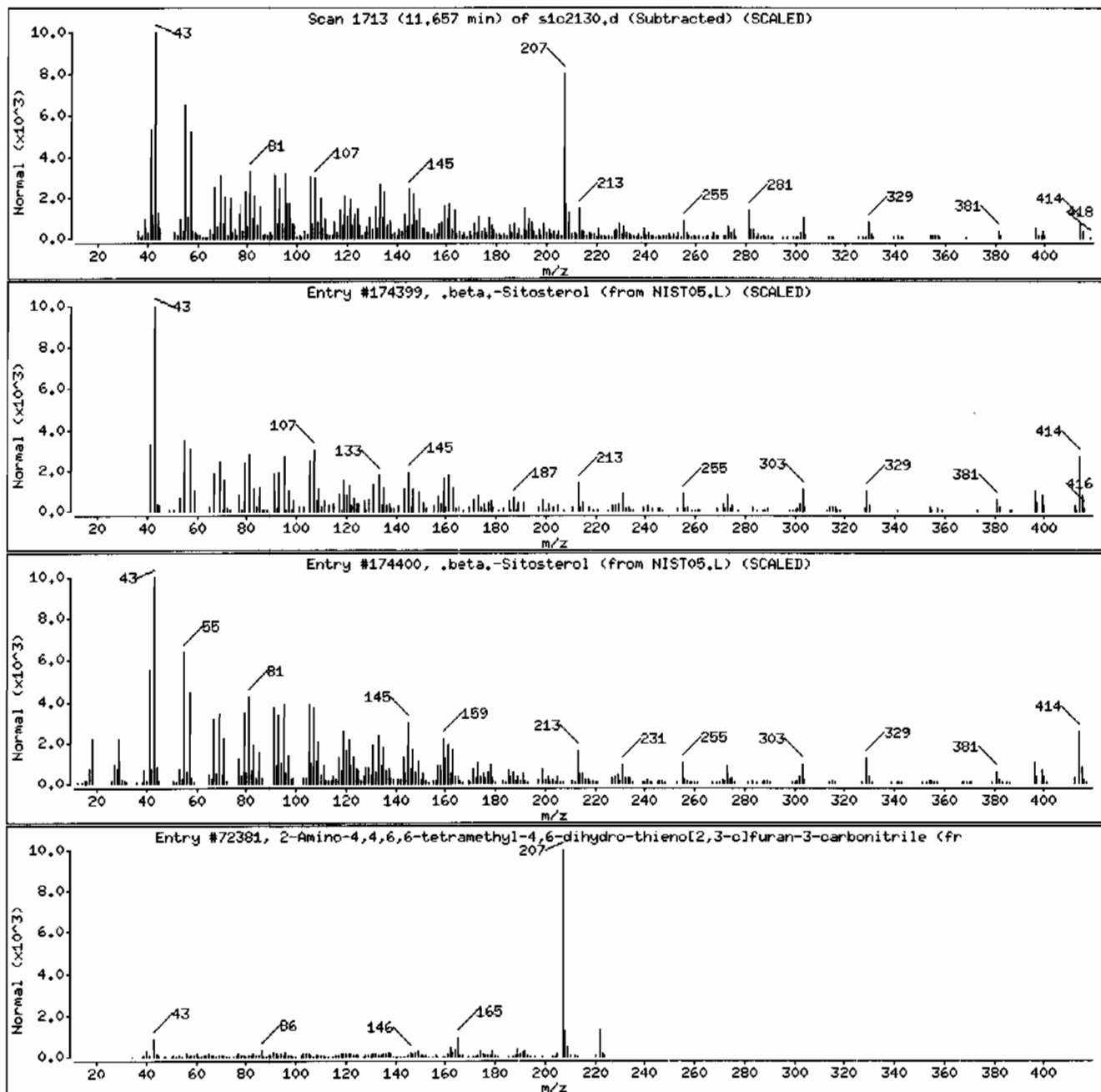
Volume Injected (uL): 0.5

Operator: AMY

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	174399	91	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	91	C29H50O	414
2-Amino-4,4,6,6-tetramethyl-4,6-dihydro-	1000275-36-2	NIST05.L	72381	46	C11H14N2O5	222



Date : 22-MAR-2010 04:03

Client ID: RE36-10-7484

Instrument: MSD1.i

Sample Info: I248370020196122811SVH11LANL

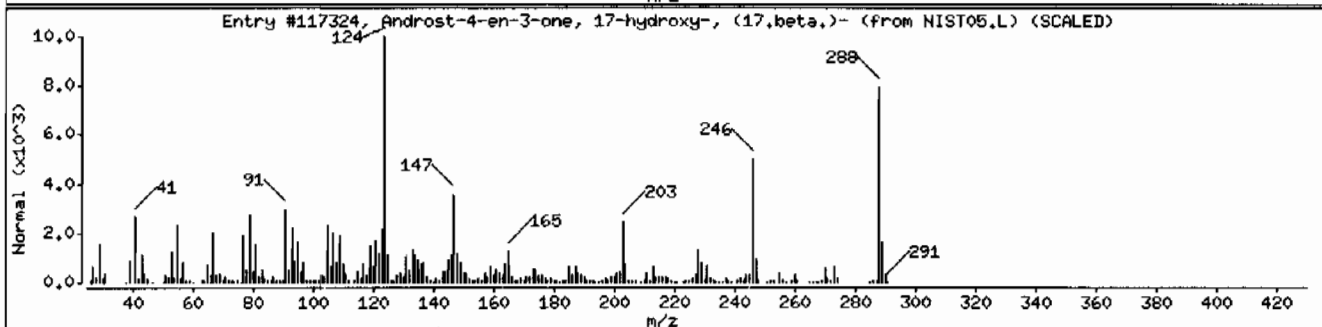
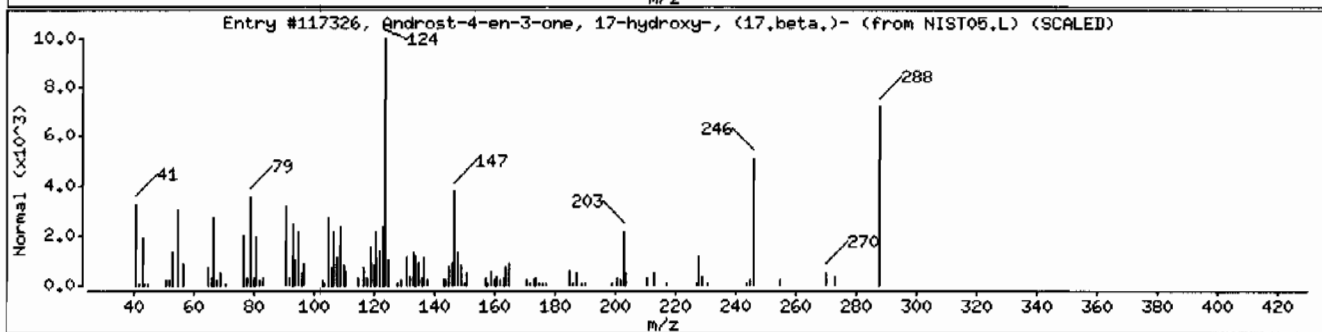
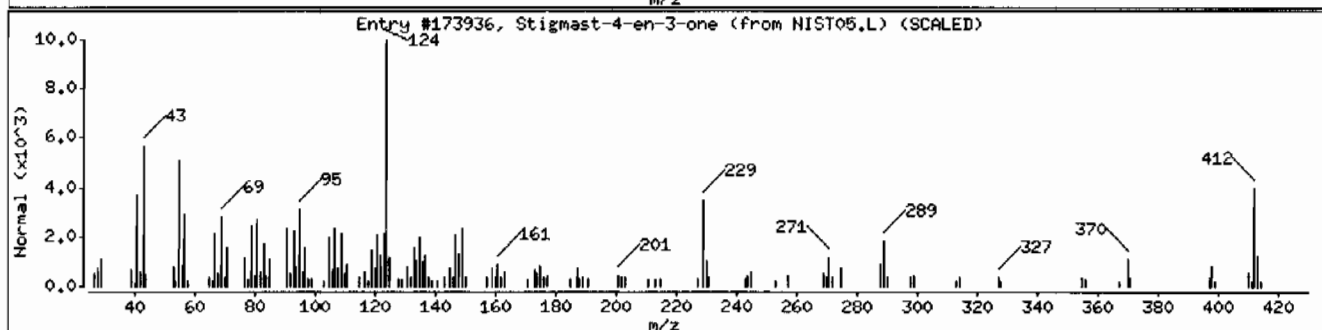
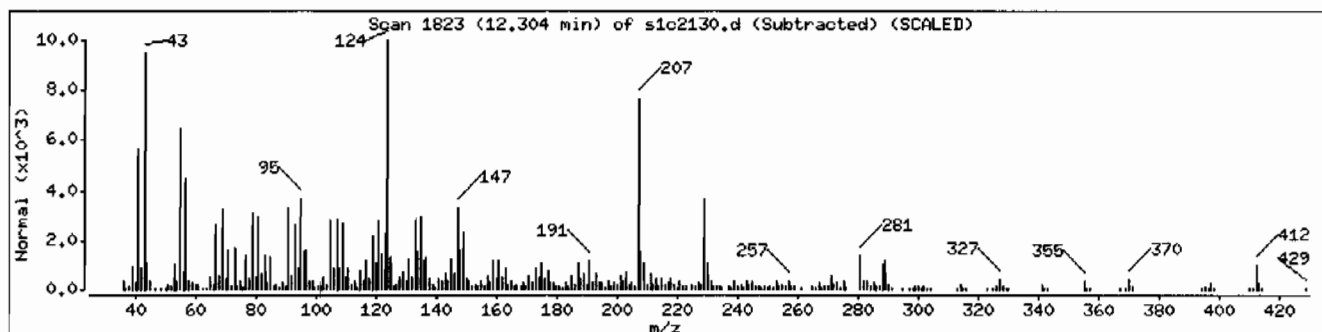
Volume Injected (uL): 0.5

Operator: AMY

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	90	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117326	70	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117324	51	C19H28O2	288



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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370018	Date Received: 03/02/2010 08:50	%Moisture: 26.5
Client ID: RE36-10-7485	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 03:16	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2128.d	Aliquot: 30.09 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	452	ug/kg	90.4	452
108-95-2	Phenol	U	452	ug/kg	90.4	452
95-57-8	2-Chlorophenol	U	452	ug/kg	90.4	452
106-46-7	1,4-Dichlorobenzene	U	452	ug/kg	90.4	452
621-64-7	N-Nitrosodipropylamine	U	452	ug/kg	90.4	452
59-50-7	4-Chloro-3-methylphenol	U	452	ug/kg	90.4	452
83-32-9	Acenaphthene	U	45.2	ug/kg	14.9	45.2
121-14-2	2,4-Dinitrotoluene	U	452	ug/kg	45.2	452
100-02-7	4-Nitrophenol	U	452	ug/kg	149	452
87-86-5	Pentachlorophenol	U	452	ug/kg	113	452
129-00-0	Pyrene	J	16.9	ug/kg	13.6	45.2
110-86-1	Pyridine	U	452	ug/kg	90.4	452
62-53-3	Aniline	U	452	ug/kg	136	452
111-44-4	bis(2-Chloroethyl) ether	U	452	ug/kg	90.4	452
541-73-1	1,3-Dichlorobenzene	U	452	ug/kg	90.4	452
100-51-6	Benzyl alcohol	U	452	ug/kg	136	452
95-50-1	1,2-Dichlorobenzene	U	452	ug/kg	90.4	452
108-60-1	bis(2-Chloroisopropyl)ether	U	452	ug/kg	90.4	452
95-48-7	o-Cresol	U	452	ug/kg	90.4	452
65794-96-9	m,p-Cresols	U	452	ug/kg	136	452
67-72-1	Hexachloroethane	U	452	ug/kg	90.4	452
98-95-3	Nitrobenzene	U	452	ug/kg	90.4	452
78-59-1	Isophorone	U	452	ug/kg	90.4	452
88-75-5	2-Nitrophenol	U	452	ug/kg	90.4	452
105-67-9	2,4-Dimethylphenol	U	452	ug/kg	158	452
111-91-1	bis(2-Chloroethoxy)methane	U	452	ug/kg	90.4	452
120-83-2	2,4-Dichlorophenol	U	452	ug/kg	90.4	452
65-85-0	Benzoic acid	U	904	ug/kg	226	904
91-20-3	Naphthalene	U	45.2	ug/kg	13.6	45.2
106-47-8	4-Chloroaniline	U	452	ug/kg	90.4	452
87-68-3	Hexachlorobutadiene	U	452	ug/kg	90.4	452
91-57-6	2-Methylnaphthalene	U	45.2	ug/kg	9.04	45.2
77-47-4	Hexachlorocyclopentadiene	U	452	ug/kg	90.4	452
88-06-2	2,4,6-Trichlorophenol	U	452	ug/kg	90.4	452
95-95-4	2,4,5-Trichlorophenol	U	452	ug/kg	90.4	452
91-58-7	2-Chloronaphthalene	U	45.2	ug/kg	14.9	45.2
88-74-4	2-Nitroaniline	U	452	ug/kg	90.4	452
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	452	ug/kg	90.4	452

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370018	Date Received: 03/02/2010 08:50	%Moisture: 26.5
Client ID: RE36-10-7485	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 03:16	Inst: MSD1.J	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: slc2128.d	Aliquot: 30.09 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	452	ug/kg	90.4	452
606-20-2	2,6-Dinitrotoluene	U	452	ug/kg	45.2	452
208-96-8	Acenaphthylene	U	45.2	ug/kg	13.6	45.2
51-28-5	2,4-Dinitrophenol	U	904	ug/kg	172	904
132-64-9	Dibenzofuran	U	452	ug/kg	90.4	452
84-66-2	Diethylphthalate	U	452	ug/kg	90.4	452
86-73-7	Fluorene	U	45.2	ug/kg	13.6	45.2
7005-72-3	4-Chlorophenylphenylether	U	452	ug/kg	90.4	452
534-52-1	2-Methyl-4,6-dinitrophenol	U	452	ug/kg	90.4	452
100-01-6	4-Nitroaniline	U	452	ug/kg	136	452
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	452	ug/kg	90.4	452
122-66-7	Azobenzene	U	452	ug/kg	90.4	452
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	452	ug/kg	90.4	452
118-74-1	Hexachlorobenzene	U	452	ug/kg	90.4	452
85-01-8	Phenanthrene	U	45.2	ug/kg	13.6	45.2
120-12-7	Anthracene	U	45.2	ug/kg	9.04	45.2
84-74-2	Di-n-butylphthalate	U	452	ug/kg	90.4	452
206-44-0	Fluoranthene	J	17.0	ug/kg	13.6	45.2
85-68-7	Butylbenzylphthalate	U	452	ug/kg	90.4	452
56-55-3	Benzo(a)anthracene	J	13.9	ug/kg	13.6	45.2
91-94-1	3,3'-Dichlorobenzidine	U	452	ug/kg	136	452
218-01-9	Chrysene	U	45.2	ug/kg	13.6	45.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	452	ug/kg	90.4	452
117-84-0	Di-n-octylphthalate	U	452	ug/kg	90.4	452
205-99-2	Benzo(b)fluoranthene	J	14.5	ug/kg	13.6	45.2
207-08-9	Benzo(k)fluoranthene	U	45.2	ug/kg	13.6	45.2
50-32-8	Benzo(a)pyrene	U	45.2	ug/kg	13.6	45.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	45.2	ug/kg	13.6	45.2
53-70-3	Dibenzo(a,h)anthracene	U	45.2	ug/kg	13.6	45.2
191-24-2	Benzo(ghi)perylene	U	45.2	ug/kg	13.6	45.2
120-82-1	1,2,4-Trichlorobenzene	U	452	ug/kg	90.4	452

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.63	226	ug/kg		J
	Unknown	1.82	289	ug/kg		J

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370018	Date Received: 03/02/2010 08:50	%Moisture: 26.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7485	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 03:16	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s1c2128.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 Aldol Condensate	2.67	461	ug/kg		JA
80-56-8	.alpha.-Pinene	3.19	194	ug/kg	96	NJ
79-92-5	Camphene	3.29	258	ug/kg	98	NJ
1227-93-6	1H-Naphtho[2,1-b]pyran, 3-ethenyldecah	7.23	230	ug/kg	91	NJ
	Unknown	7.32	205	ug/kg		J
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	258	ug/kg	97	NJ
	Unknown	7.47	244	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	8.09	254	ug/kg	89	NJ
	Unknown	8.13	206	ug/kg		J
	Unknown	8.67	224	ug/kg		J
112-95-8	Eicosane	9.06	462	ug/kg	98	NJ
	Unknown	9.76	206	ug/kg		J
	Unknown	10.02	1440	ug/kg		J
	Unknown	10.77	199	ug/kg		J
	Unknown	11.7	438	ug/kg		J
	Unknown	12.3	523	ug/kg		J

Data File: /chem/MSD1.i/s032110.b/slc2128.d
Report Date: 22-Mar-2010 16:20

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GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2128.d
Lab Smp Id: 248370018 Client Smp ID: RE36-10-7485
Inj Date : 22-MAR-2010 03:16
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370018|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	26.47010	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610 (1.000)	478716	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469 (1.000)	1863129	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704 (1.000)	961959	40.0000	
* 67 Phenanthrene-d10	188	6.710	6.710 (1.000)	1696781	40.0000	
* 91 Chrysene-d12	240	8.292	8.292 (1.000)	1257137	40.0000	
* 98 Perylene-d12	264	9.528	9.522 (1.000)	679081	40.0000	
\$ 3 2-Fluorophenol	112	2.834	2.822 (0.785)	674444	54.7124	2470
\$ 5 Phenol-d5	99	3.351	3.346 (0.928)	855747	57.0015	2580
\$ 20 Nitrobenzene-d5	82	3.969	3.975 (0.889)	338120	29.5892	1340
\$ 39 2-Fluorobiphenyl	172	5.204	5.204 (0.912)	707500	26.6308	1200
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251 (1.096)	174058	55.1905	2490
\$ 81 p-Terphenyl-d14	244	7.628	7.622 (0.920)	767181	36.6044	1650

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	7.569	7.569	(0.913)	13350	0.37423	16.9(a)
76 Fluoranthene	202	7.434	7.434	(1.108)	14142	0.37532	17.0(a)
89 Benzo(a)anthracene	228	8.286	8.281	(0.999)	9076	0.30714	13.9(a)
95 Benzo(b)fluoranthene	252	9.133	9.133	(0.959)	5976	0.31999	14.5(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: slc2128.d

Report Date: 03/22/2010 11:59

Lab. ID: 248370018

SampleType: SAMPLE

Injection Date: 22-MAR-2010 03:16

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370018|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	40930	3.35	3.40	80-120	100	()
93	20815	3.39	3.40	233-293	51	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	48032	3.97	3.86	80-120	100	(T)
42	32350	3.97	3.86	48-108	67	(T)

22 Isophorone		CAS#: 78-59-1				
82	339464	3.97	4.14	80-120	100	(T)
138	240	4.16	4.14	0- 49	0	()

41 m-Nitroaniline		CAS#: 99-09-2				
138	895	5.67	5.66	80-120	100	()
92	514	5.67	5.66	71-131	57	(Q)
108	18557	5.70	5.66	0- 40	2071	(Q)

43 Dimethylphthalate		CAS#: 131-11-3				
163	172428	5.70	5.49	80-120	100	(T)
164	961959	5.70	5.49	0- 40	558	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	123094	5.70	5.54	80-120	100	(T)
63	2373	5.70	5.54	50-110	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	123094	5.70	5.83	80-120	100	(T)
89	1980	5.70	5.82	38- 98	2	(QT)
63	2408	5.70	5.82	20- 80	2	(QT)

53 Fluorene		CAS#: 86-73-7				
166	13765	6.25	6.09	80-120	100	(T)
165	13298	6.25	6.09	61-121	97	(T)
167	5344	6.25	6.09	0- 43	39	(T)

56 p-Nitroaniline		CAS#: 100-01-6				
138	438	6.08	6.09	80-120	100	()
108	580	5.98	6.09	29- 89	132	(QT)
92	407	6.06	6.09	14- 74	93	(Q)

69 Anthracene		CAS#: 120-12-7				
178	7345	6.72	6.75	80-120	100	()
179	1097	6.72	6.75	0- 45	15	()
176	1238	6.72	6.75	0- 48	17	()

76 Fluoranthene		CAS#: 206-44-0				
202	14142	7.43	7.43	80-120	100	()
203	2364	7.43	7.43	0- 47	17	()
101	2373	7.43	7.43	0- 45	17	()

79 Pyrene		CAS#: 129-00-0				
202	13350	7.57	7.57	80-120	100	()
200	3242	7.56	7.57	0- 49	24	()
101	2779	7.56	7.56	0- 49	21	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	9076	8.29	8.28	80-120	100	()
226	1767	8.28	8.28	0- 55	19	()
229	3757	8.29	8.28	0- 49	41	()

92 Chrysene		CAS#: 218-01-9				
228	9076	8.29	8.31	80-120	100	()
229	3949	8.29	8.31	0- 49	44	()
226	1657	8.28	8.31	0- 58	18	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	5976	9.13	9.13	80-120	100	()
253	2283	9.13	9.13	0- 52	38	()
125	1294	9.13	9.13	0- 46	22	()

96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	5976	9.13	9.16	80-120	100	()
253	2310	9.13	9.16	0- 51	39	()
125	1294	9.13	9.16	0- 45	22	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2128.d
Lab Smp Id: 248370018 Client Smp ID: RE36-10-7485
Inj Date : 22-MAR-2010 03:16
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370018|961228|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	26.47010	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2931392	40.000
* 67 Phenanthrene-d10	6.710	4222800	40.000
* 91 Chrysene-d12	8.292	3496413	40.000
* 98 Perylene-d12	9.528	1973894	40.000

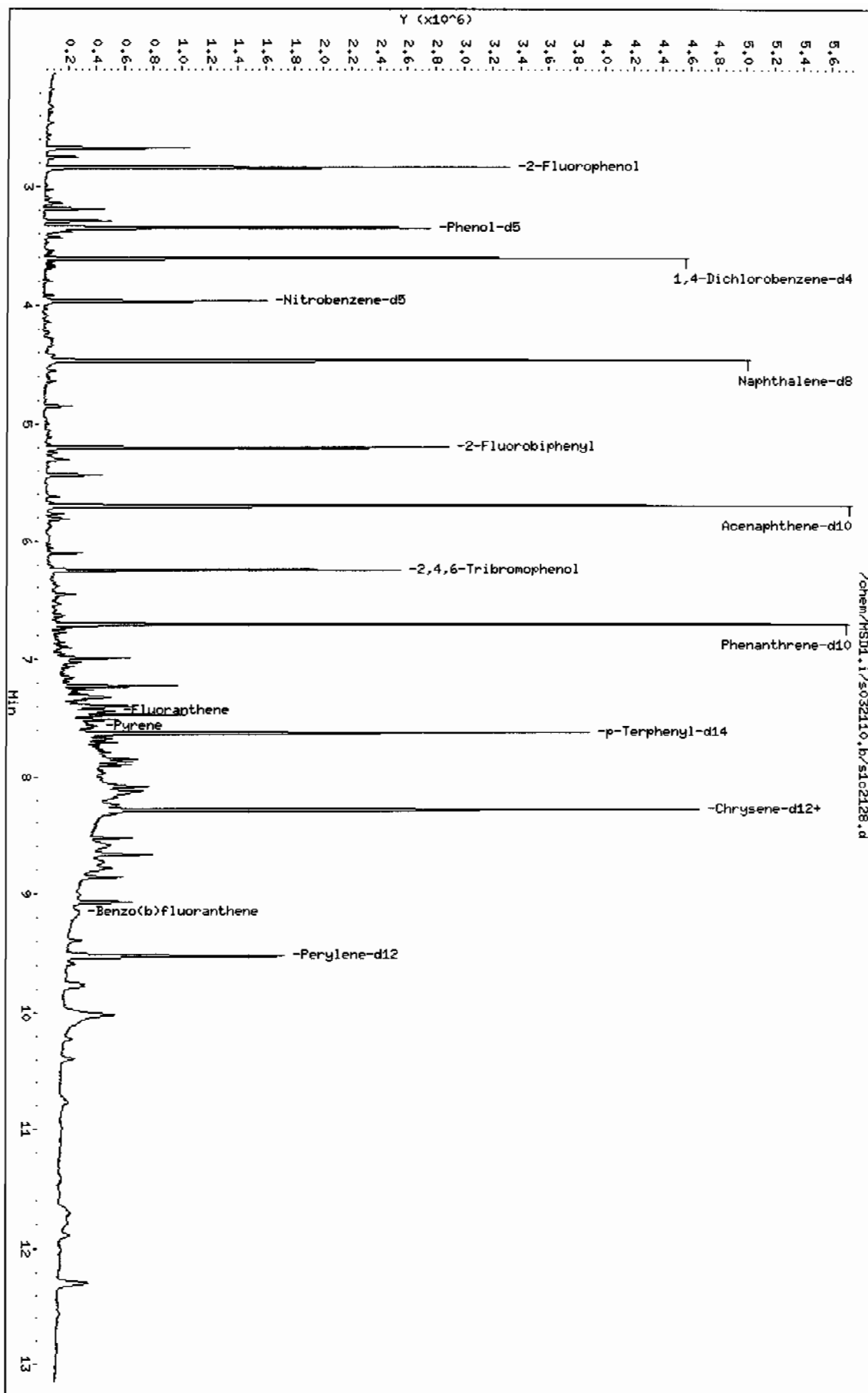
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.634	367063	5.00871859	226	0		0	10
Unknown					CAS #:		
1.822	469027	6.40005954	289	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	746770	10.1899647	460	0		0	10
.alpha.-Pinene					CAS #: 80-56-8		
3.193	314657	4.29361474	194	96	NIST05.L	15178	10
Camphene					CAS #: 79-92-5		
3.293	417711	5.69983038	258	98	NIST05.L	15160	10
1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah					CAS #: 1227-93-6		
7.228	536799	5.08476413	230	91	NIST05.L	118755	67
Unknown					CAS #:		
7.316	478145	4.52917161	205	0		0	67
2-Methyl-2,2-3,13-octadecadienol					CAS #: 1000130-90-5		
7.398	602175	5.70403618	258	97	NIST05.L	112083	67
Unknown					CAS #:		
7.469	570216	5.40130870	244	0		0	67
Octadecane, 1-chloro-					CAS #: 3386-33-2		
8.092	490514	5.61161976	254	89	NIST05.L	117263	91
Unknown					CAS #:		
8.128	397907	4.55217804	206	0		0	91
Unknown					CAS #:		
8.669	433878	4.96368700	224	0		0	91
Eicosane					CAS #: 112-95-8		
9.063	504513	10.2237145	462	98	NIST05.L	113490	98
Unknown					CAS #:		
9.757	224830	4.55605998	206	0		0	98
Unknown					CAS #:		
10.016	1575918	31.9352003	1440	0		0	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
10.769	217419	4.40589488	199	0		0	98
Unknown					CAS #:		
11.704	478709	9.70080954	438	0		0	98
Unknown					CAS #:		
12.298	570757	11.5661153	523	0		0	98

Data File: /chem/HSD1.i/s032110.b/s102128.d
Date : 22-MAR-2010 03:16
Client ID: RE36-10-7485
Sample Info: 12483700181961228111SVH111LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-SMS

Instrument: HSD1.i
Operator: AMY
Column diameter: 0.20



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: I248370018196122811SVMI1ILANL

Volume Injected (uL): 0.5

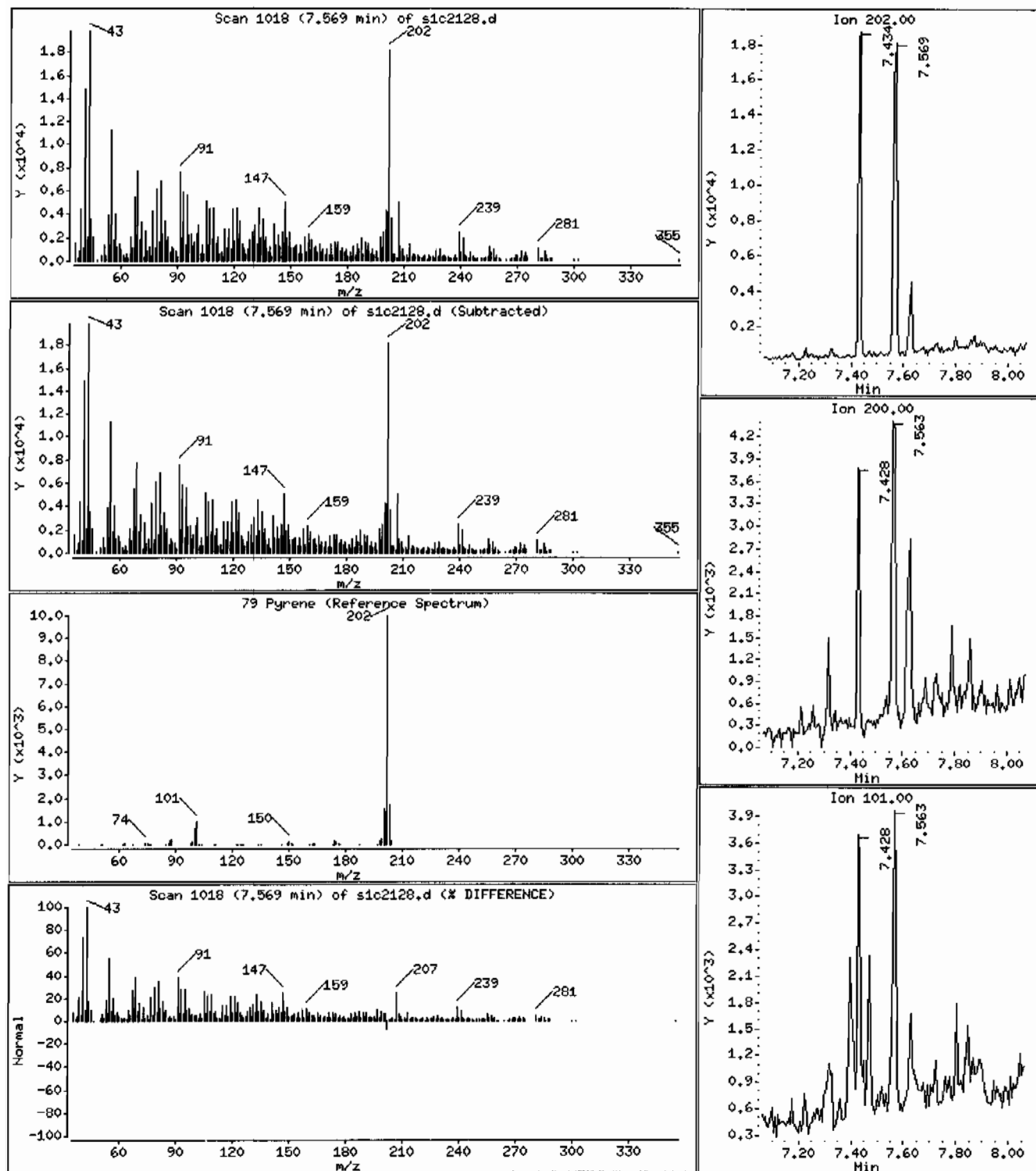
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 16.9 ug/Kg



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 12483700181961228111SVH111LANL

Volume Injected (uL): 0.5

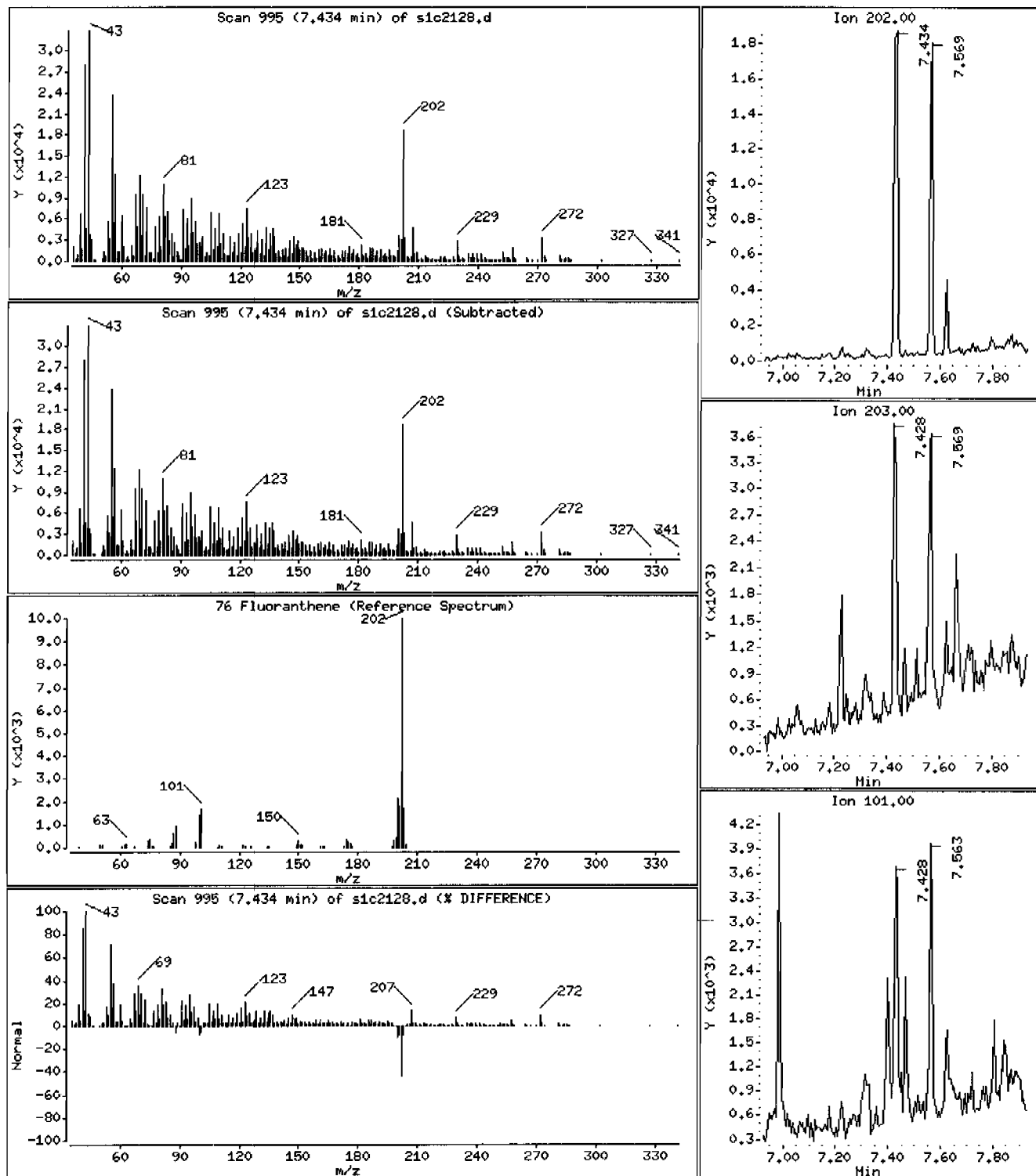
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 17.0 ug/Kg



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: I2483700181961228111SVMI11LANL

Volume Injected (uL): 0.5

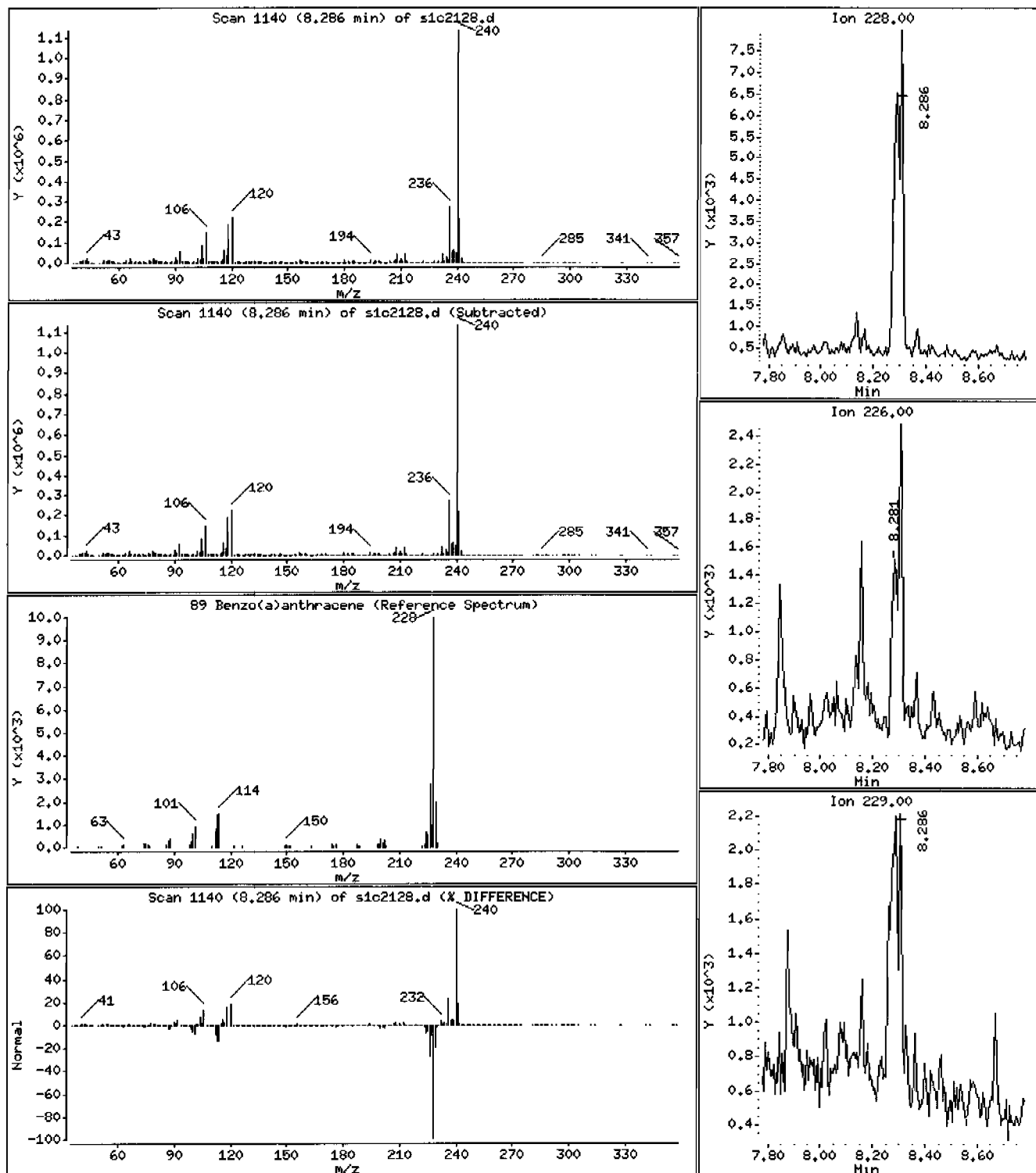
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 13.9 ug/Kg



Date: 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 1248370018196122811/SVM11/LANL

Volume Injected (uL): 0.5

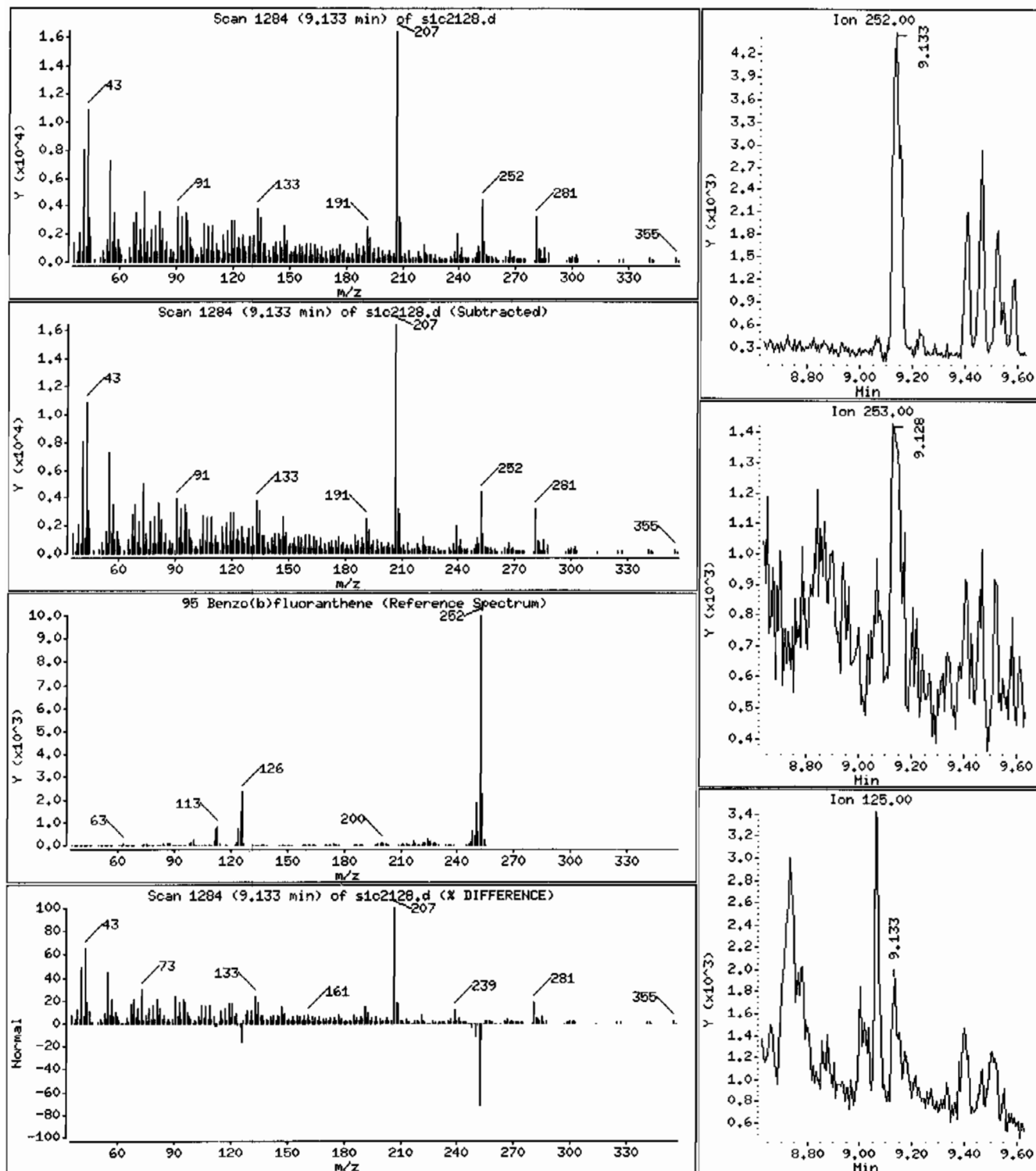
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 14.5 ug/Kg



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: HSD1.i

Sample Info: I2483700181961228111SVMI11LANL

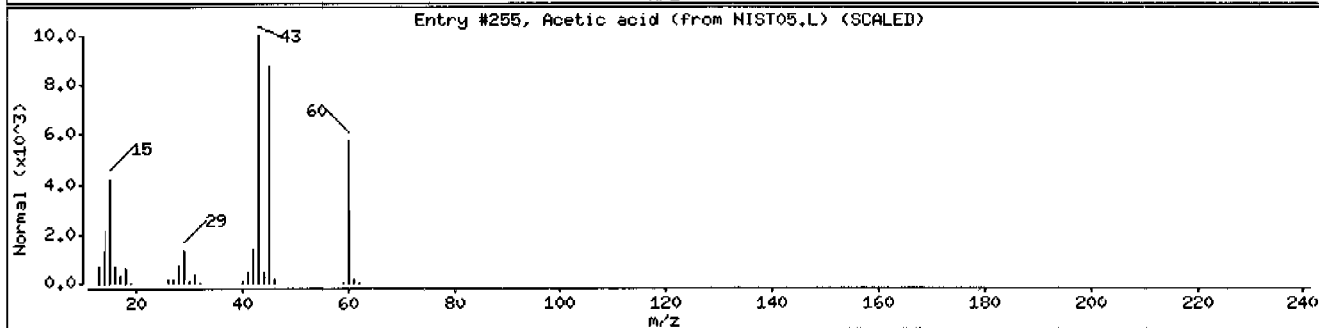
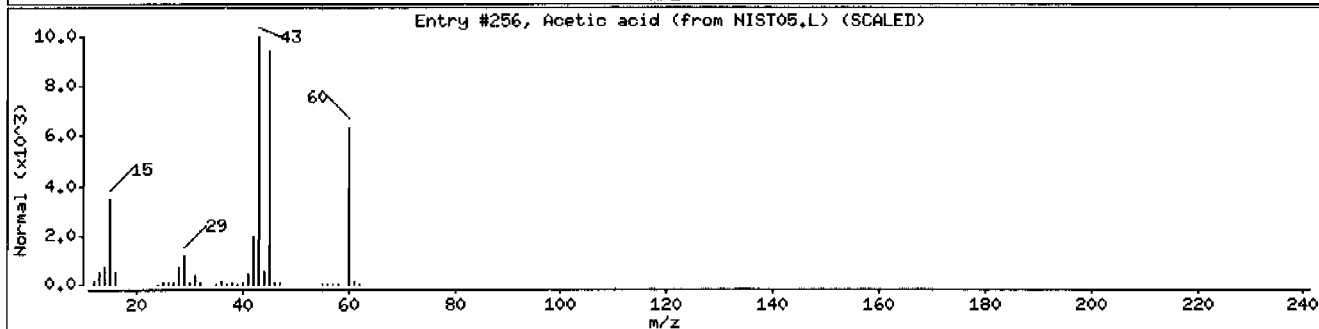
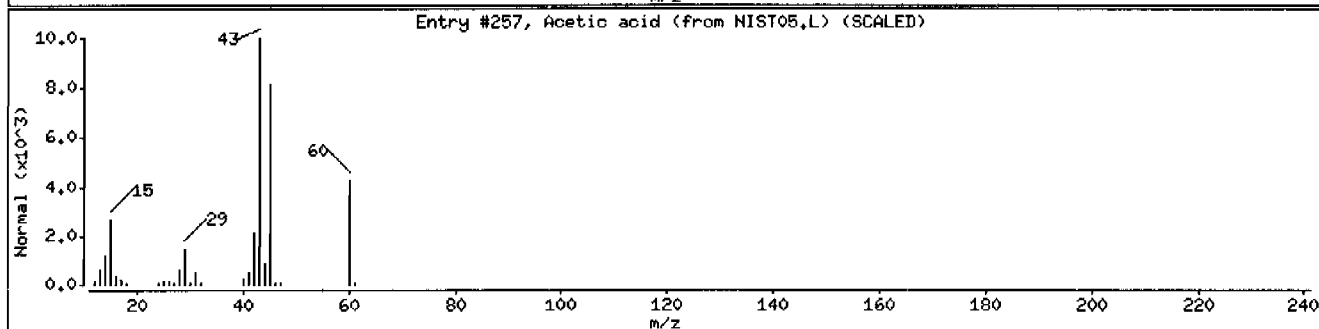
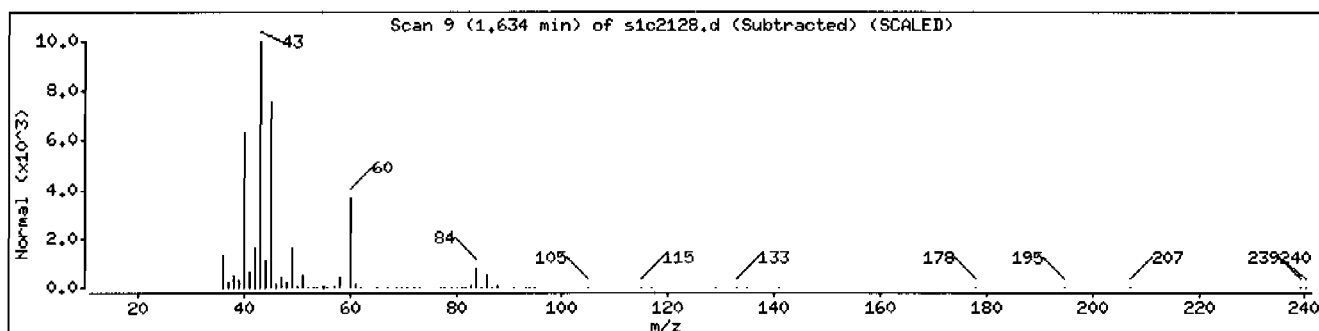
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid	64-19-7	NIST05.L	257	64	C2H4O2	60
Acetic acid	64-19-7	NIST05.L	256	64	C2H4O2	60
Acetic acid	64-19-7	NIST05.L	255	53	C2H4O2	60



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 12483700181961228111SVH111LANL

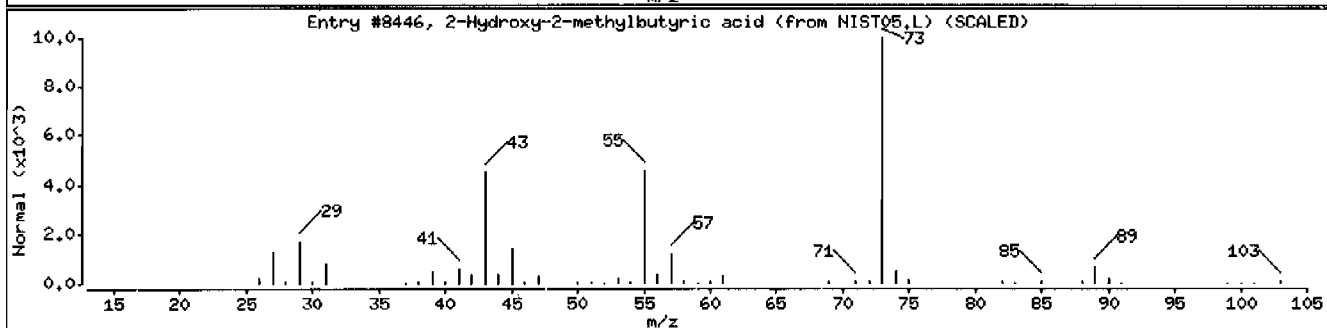
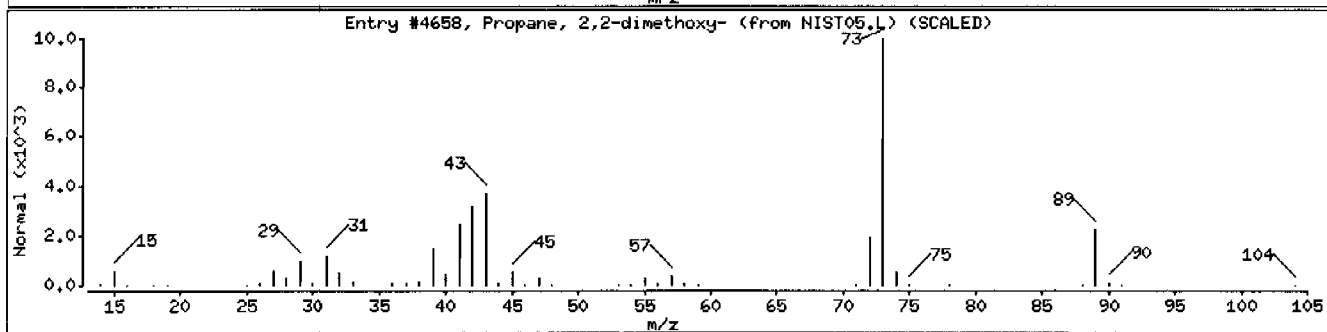
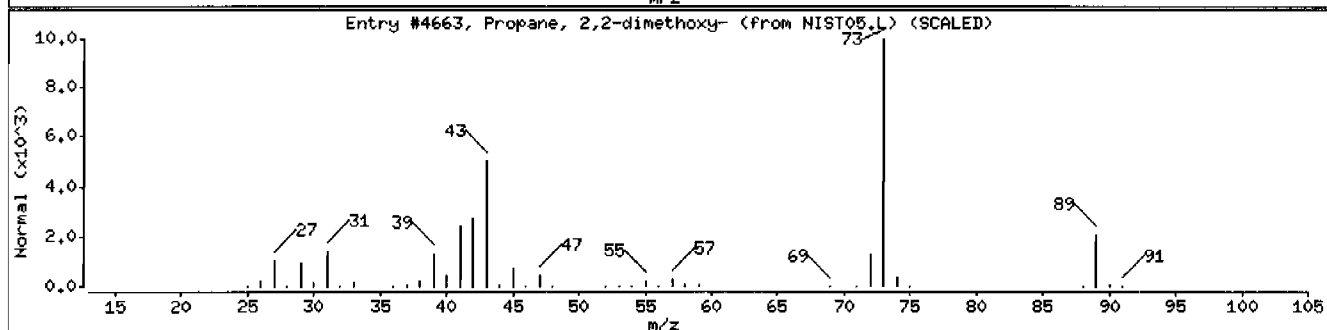
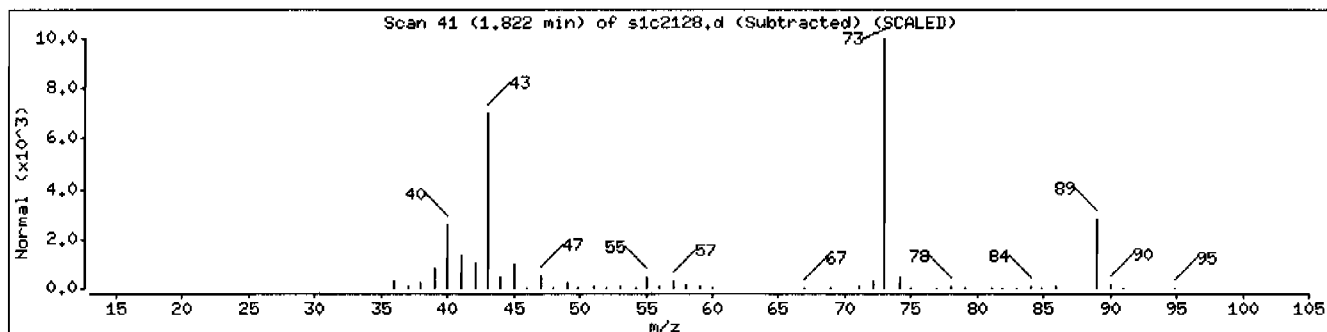
Volume Injected (uL): 0.5

Operator: AMY

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	4658	38	C5H12O2	104
2-Hydroxy-2-methylbutyric acid	3739-30-8	NIST05.L	8446	28	C5H10O3	118



Date: 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 1248370018196122811SVMI11LANL

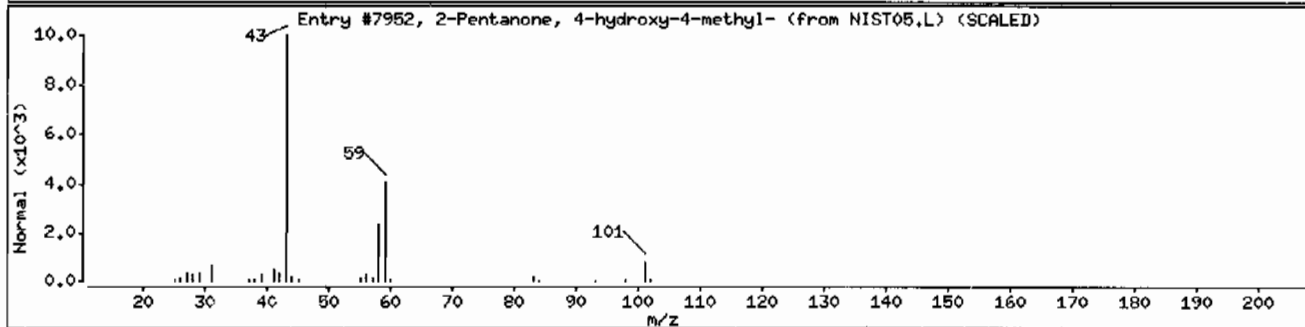
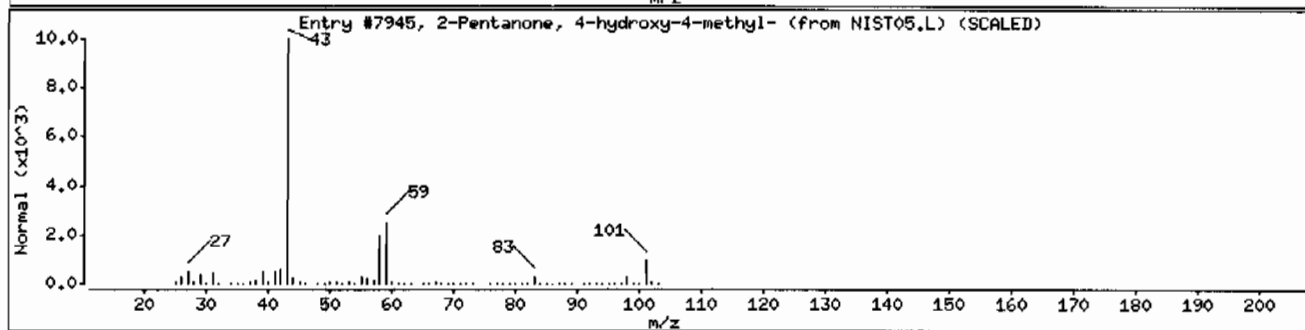
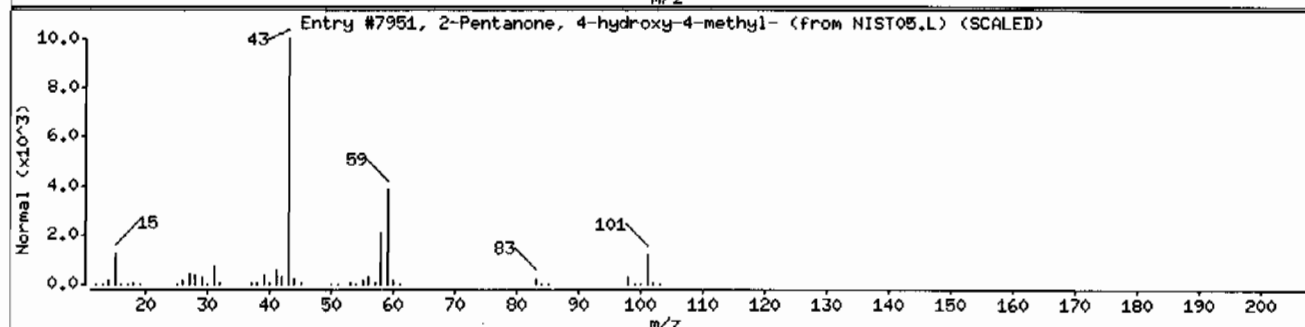
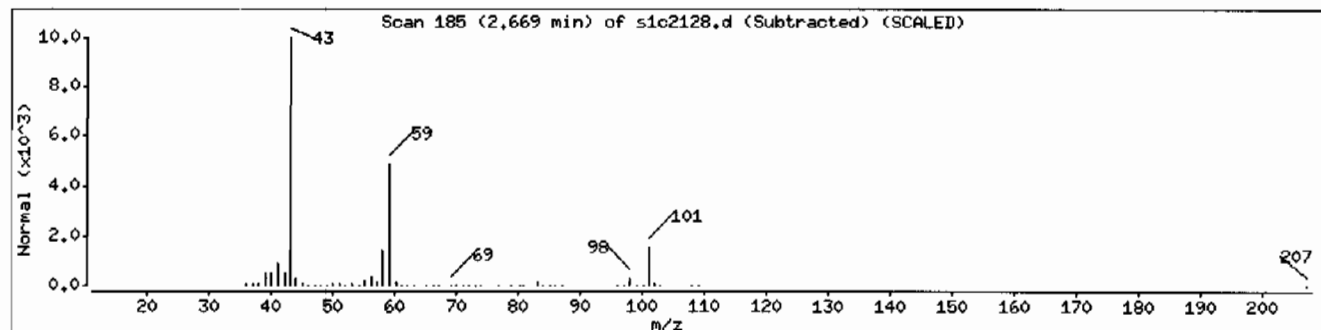
Volume Injected (uL): 0.5

Operator: AMY

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	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 1248370018196122811SVH11ILANL

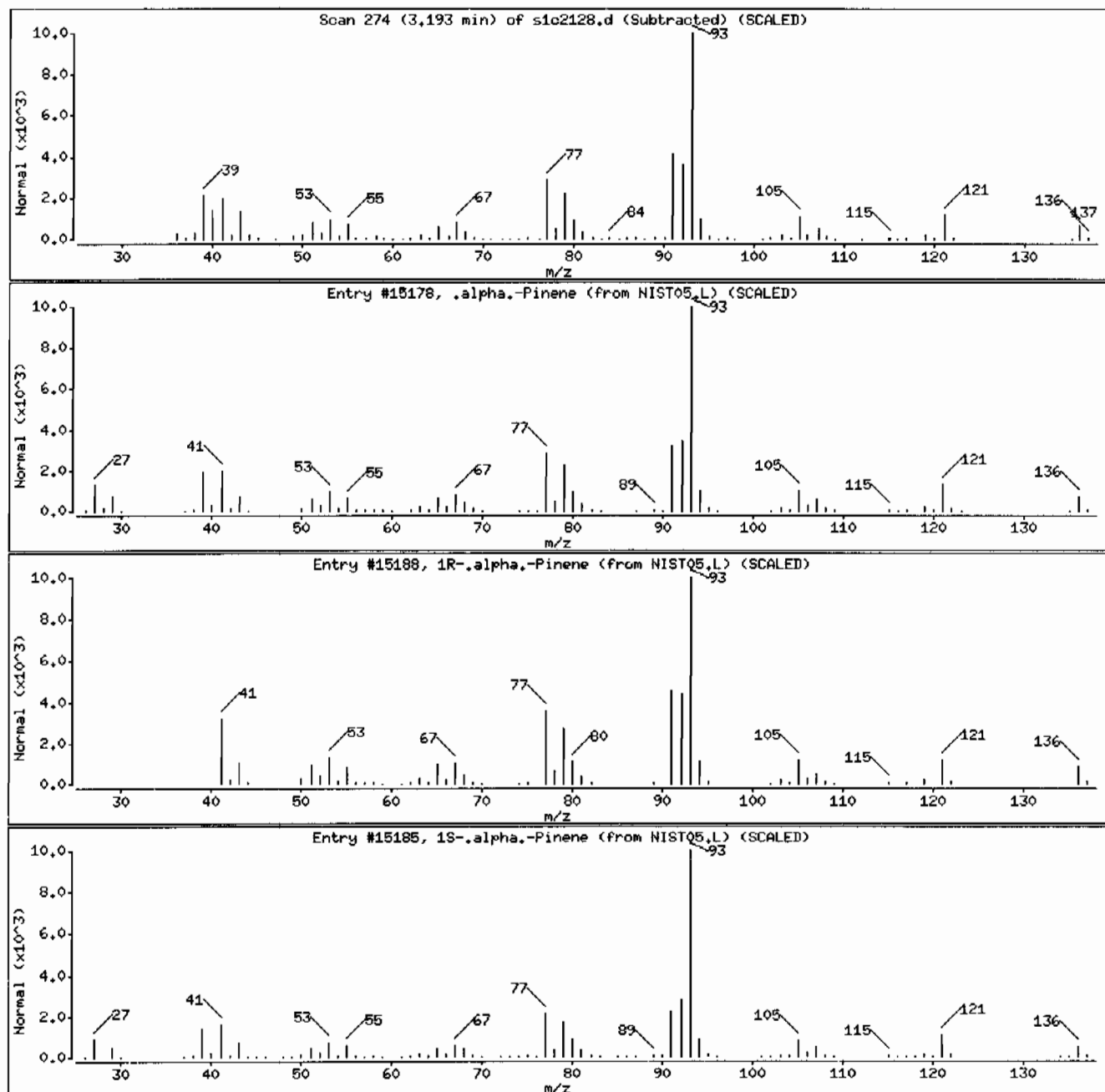
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
,alpha,-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15188	96	C10H16	136
1S-,alpha,-Pinene	7785-26-4	NIST05.L	15185	95	C10H16	136



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: HSD1.i

Sample Info: 12483700181961228111SVH111LANL

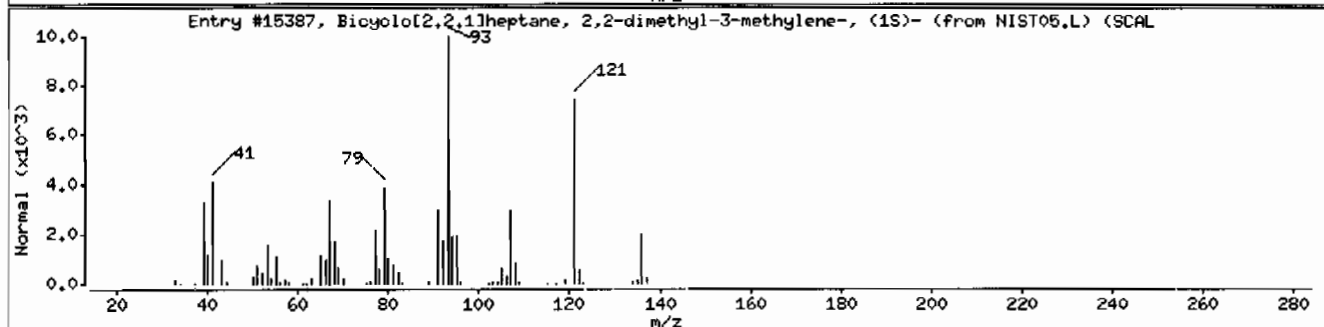
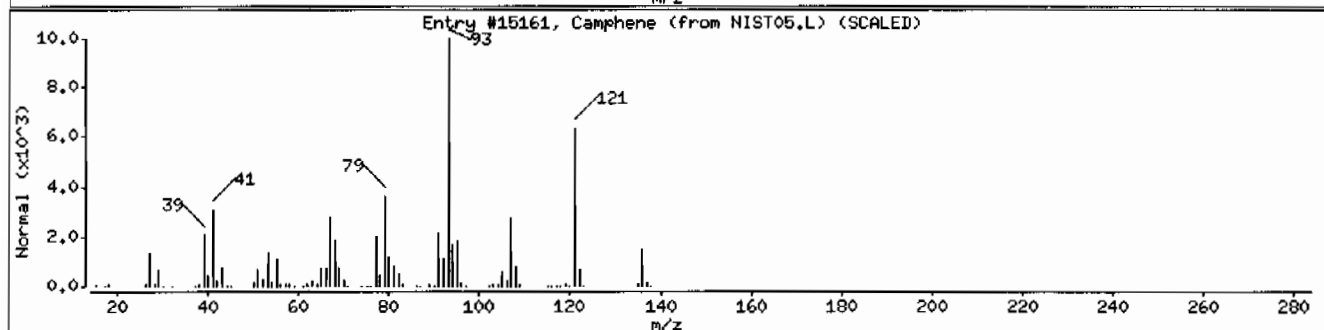
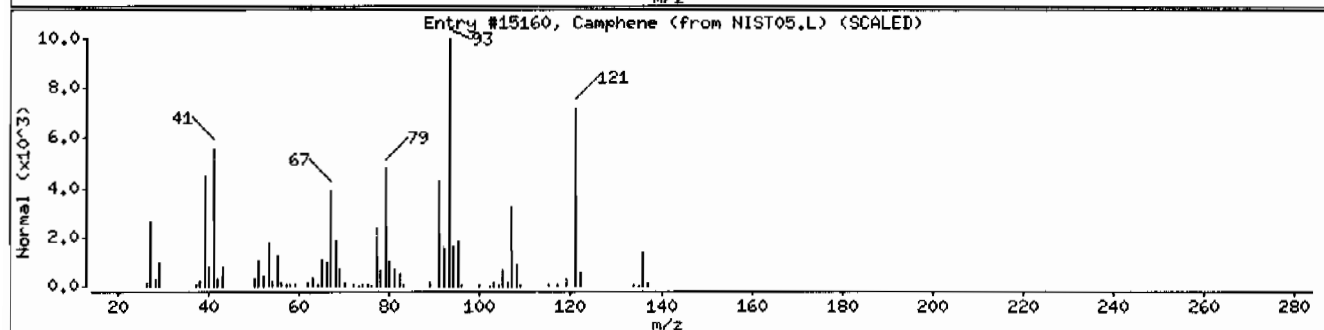
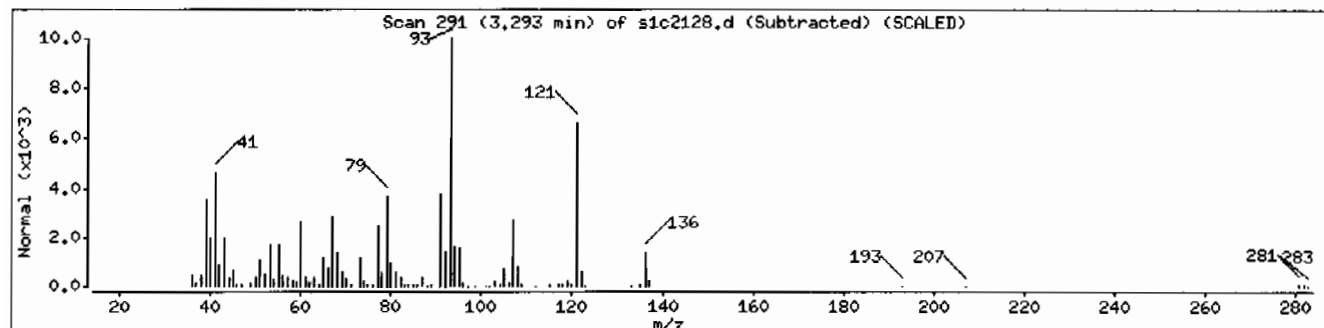
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST05.L	15160	98	C10H16	136
Camphene	79-92-5	NIST05.L	15161	97	C10H16	136
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5794-04-7	NIST05.L	15387	97	C10H16	136



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 1248370018196122811SVMI11LANL

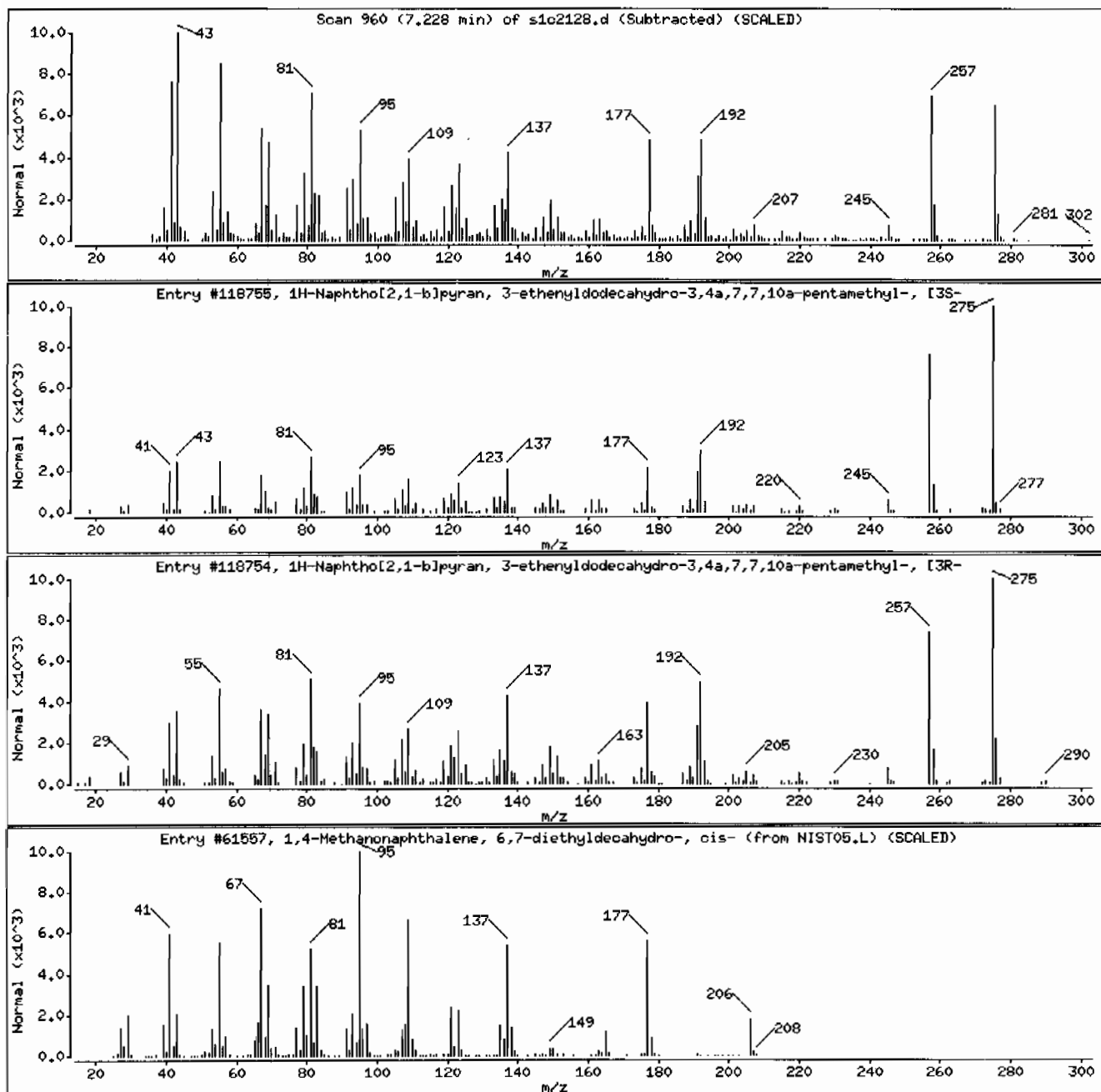
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah	1227-93-6	NIST05.L	118755	91	C20H34O	290
1H-Naphtho[2,1-b]pyran, 3-ethenyldodecah	596-84-9	NIST05.L	118754	87	C20H34O	290
1,4-Methanonaphthalene, 6,7-diethyldodecah	16539-02-9	NIST05.L	61557	27	C15H26	206



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: I248370018196122811ISVM11ILANL

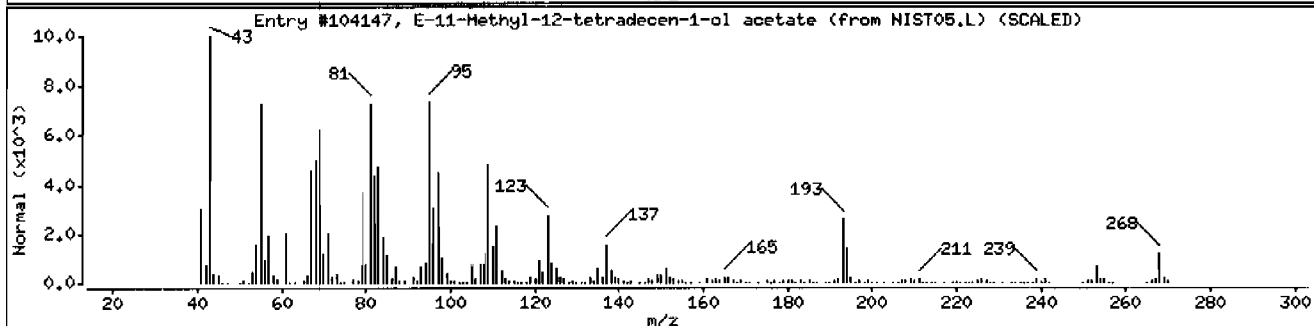
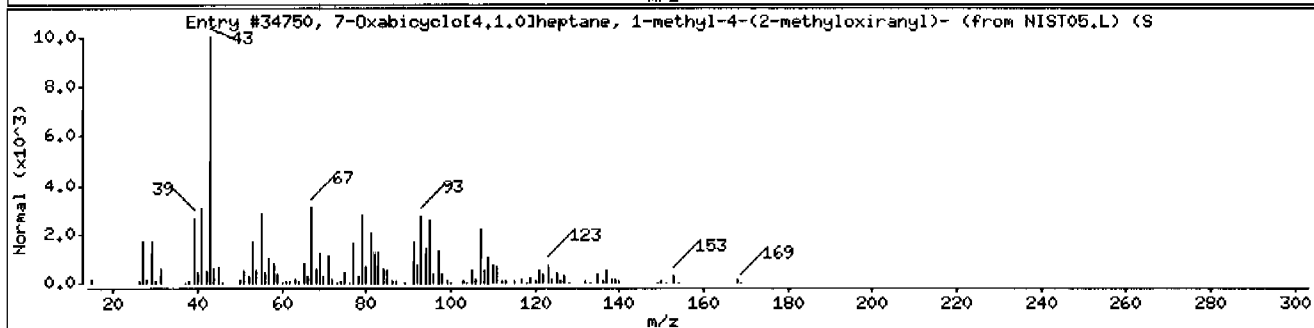
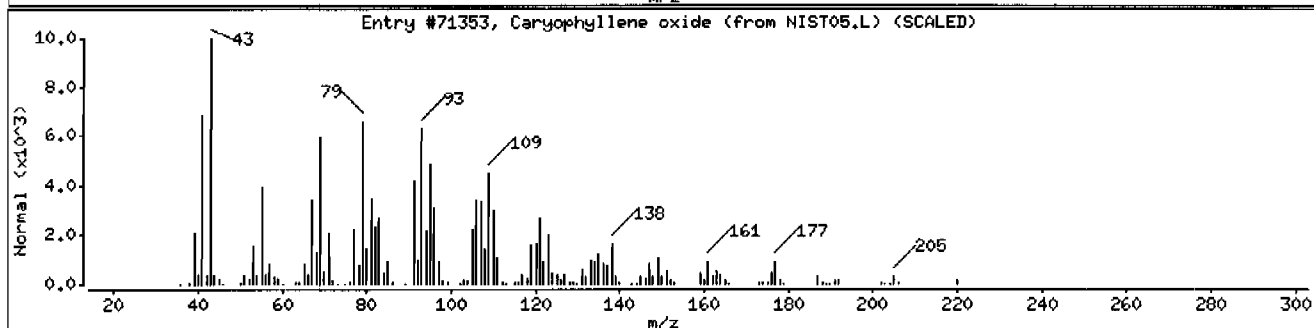
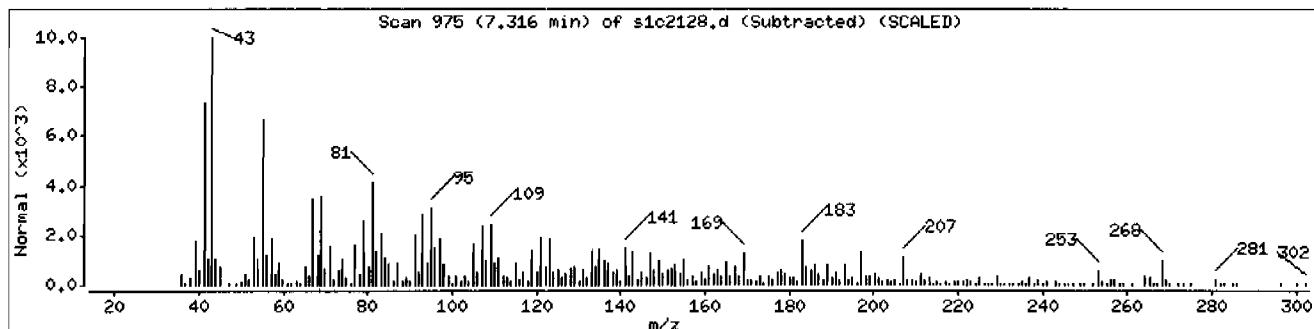
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Caryophyllene oxide	1139-30-6	NIST05.L	71353	46	C15H24O	220
7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(	96-08-2	NIST05.L	34750	46	C10H16O2	168
E-11-Methyl-12-tetradecen-1-ol acetate	1000130-80-7	NIST05.L	104147	46	C17H32O2	268



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 12483700181961228111SVMI11LANL

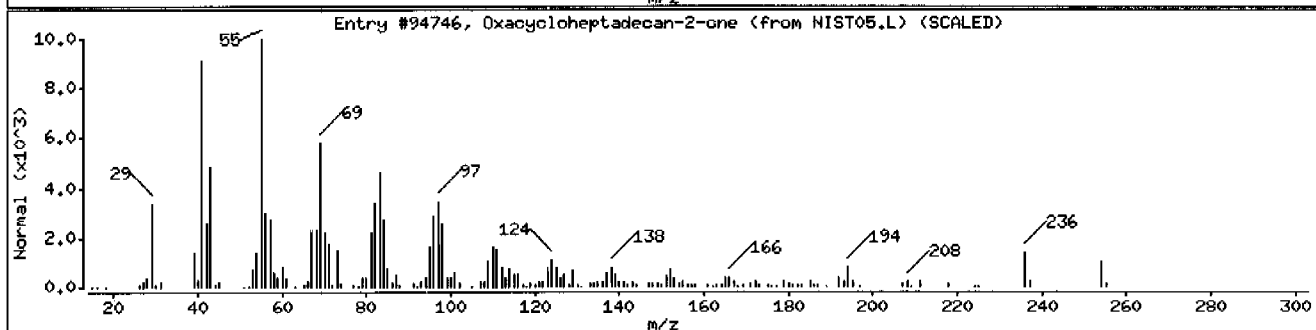
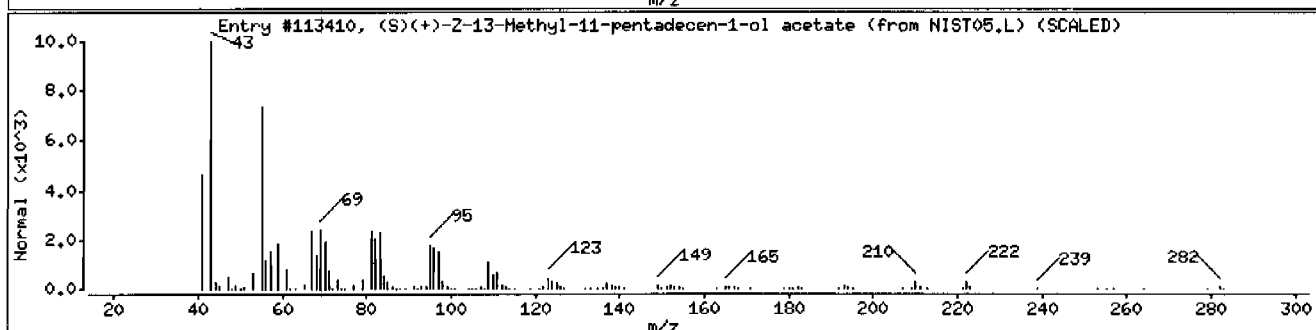
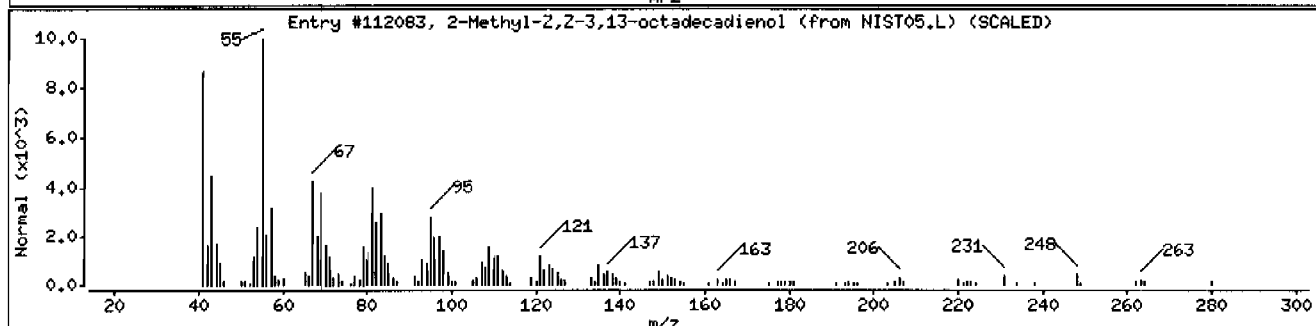
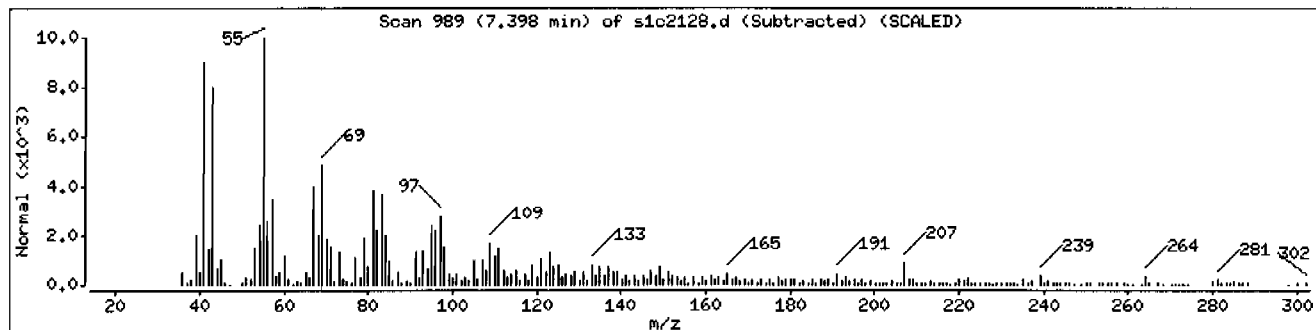
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Methyl-2,2,3,13-octadecadienol	1000130-90-5	NIST05.L	112083	97	C19H36O	280
(S)(+)-2-13-Methyl-11-pentadecen-1-ol ac	1000130-84-8	NIST05.L	113410	89	C18H34O2	282
Oxacycloheptadecan-2-one	109-29-5	NIST05.L	94746	87	C16H30O2	254



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: HSD1.i

Sample Info: I248370018196122811ISVM11ILANL

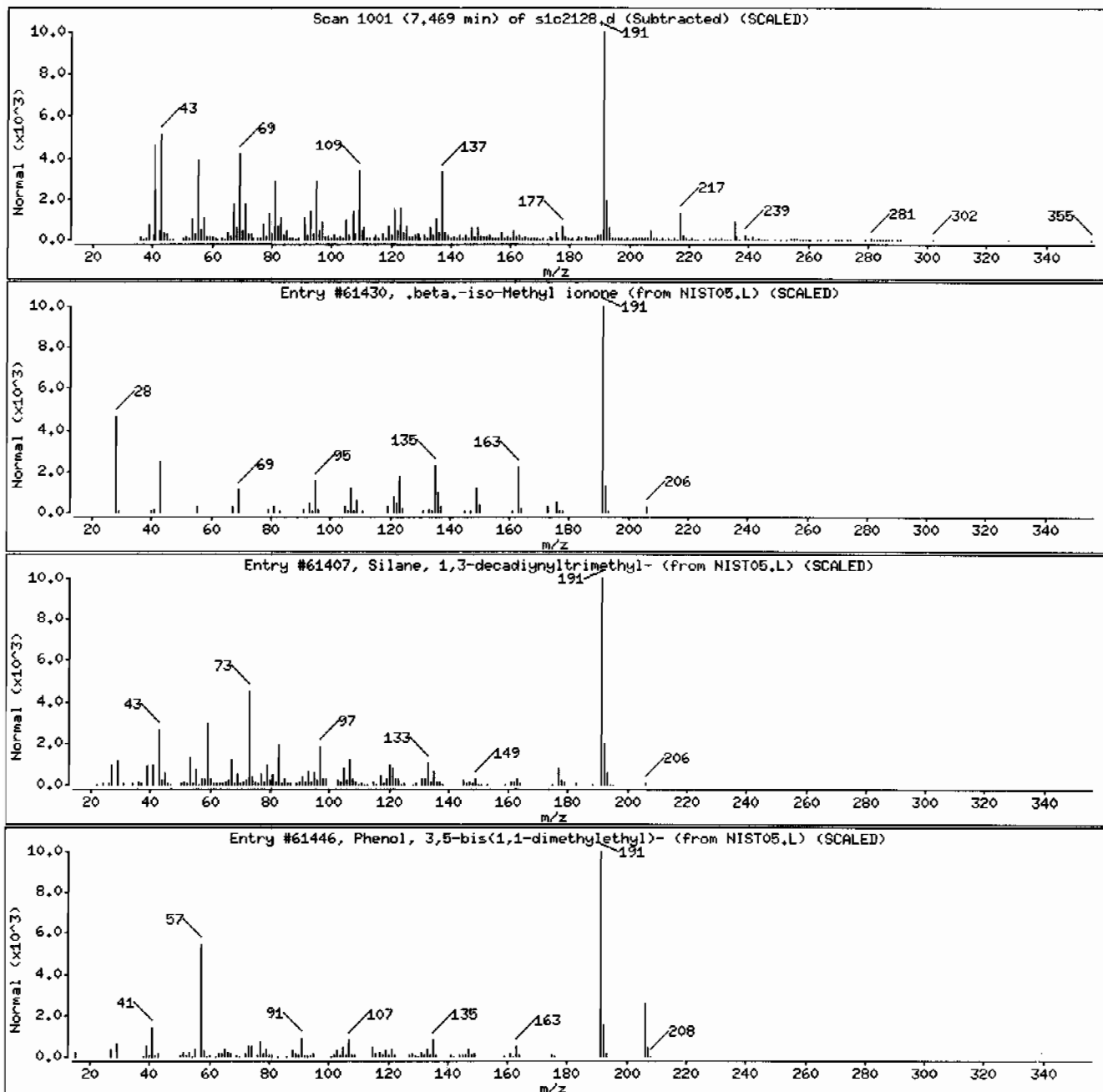
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.beta.-iso-Methyl ionone	1000285-40-2	NIST05.L	61430	50	C14H22O	206
Silane, 1,3-decadiynyltrimethyl-	84751-17-7	NIST05.L	61407	47	C13H22Si	206
Phenol, 3,5-bis(1,1-dimethylethyl)-	1138-52-9	NIST05.L	61446	43	C14H22O	206



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: I248370018196122811SVMI11LANL

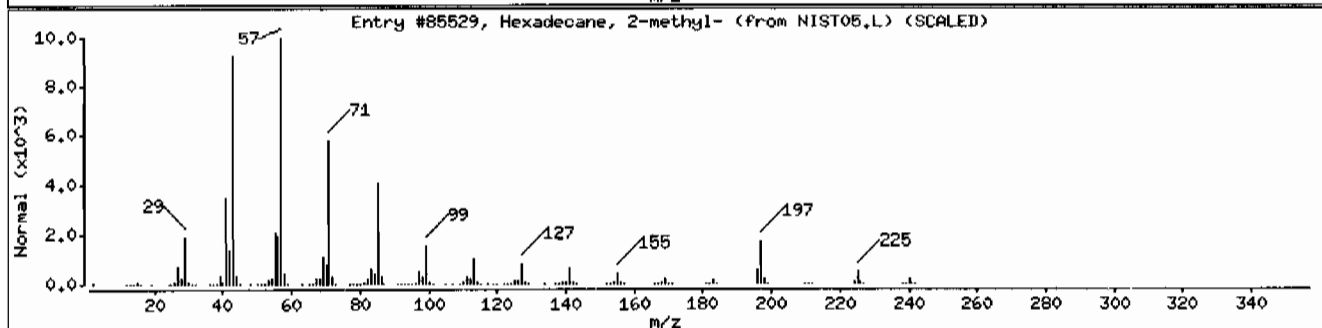
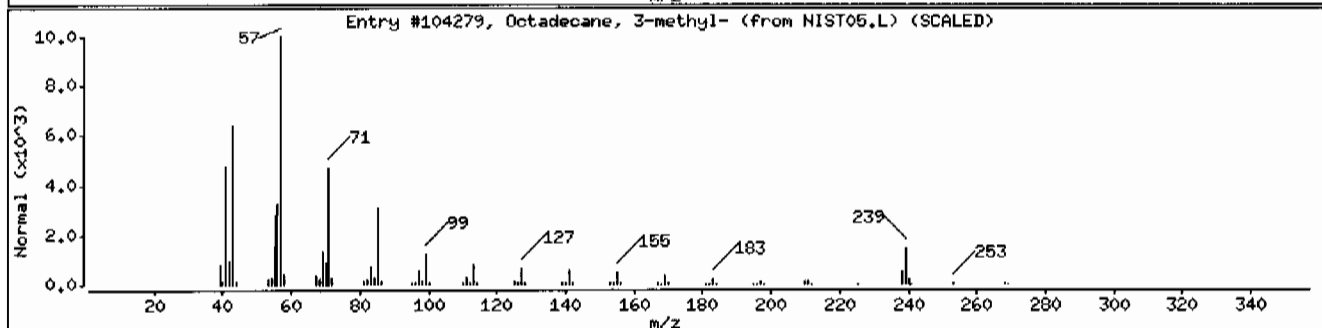
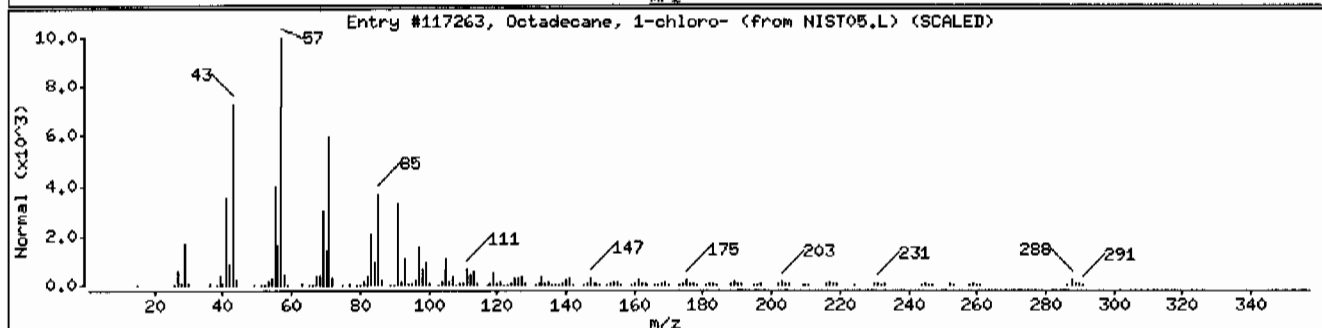
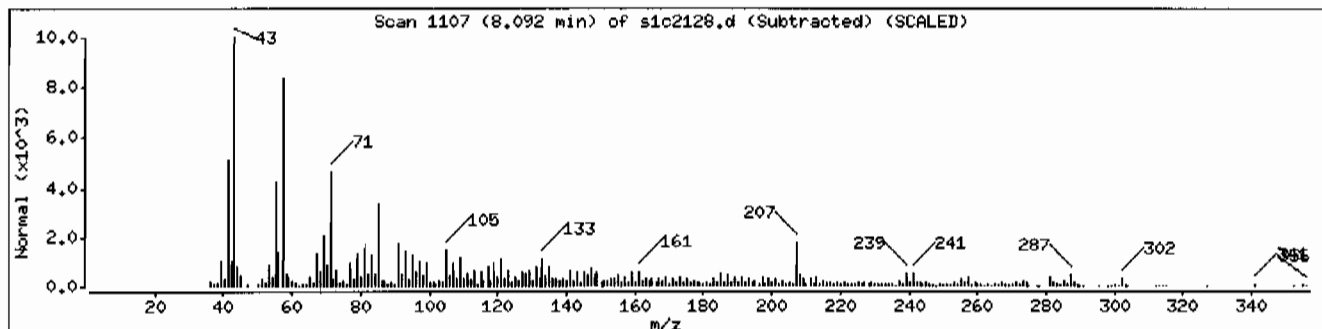
Volume Injected (uL): 0.5

Operator: AMY

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	89	C18H37Cl	288
Octadecane, 3-methyl-	6561-44-0	NIST05.L	104279	62	C19H40	268
Hexadecane, 2-methyl-	1560-92-5	NIST05.L	85529	62	C17H36	240



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 1248370018196122811SVMI1ILANL

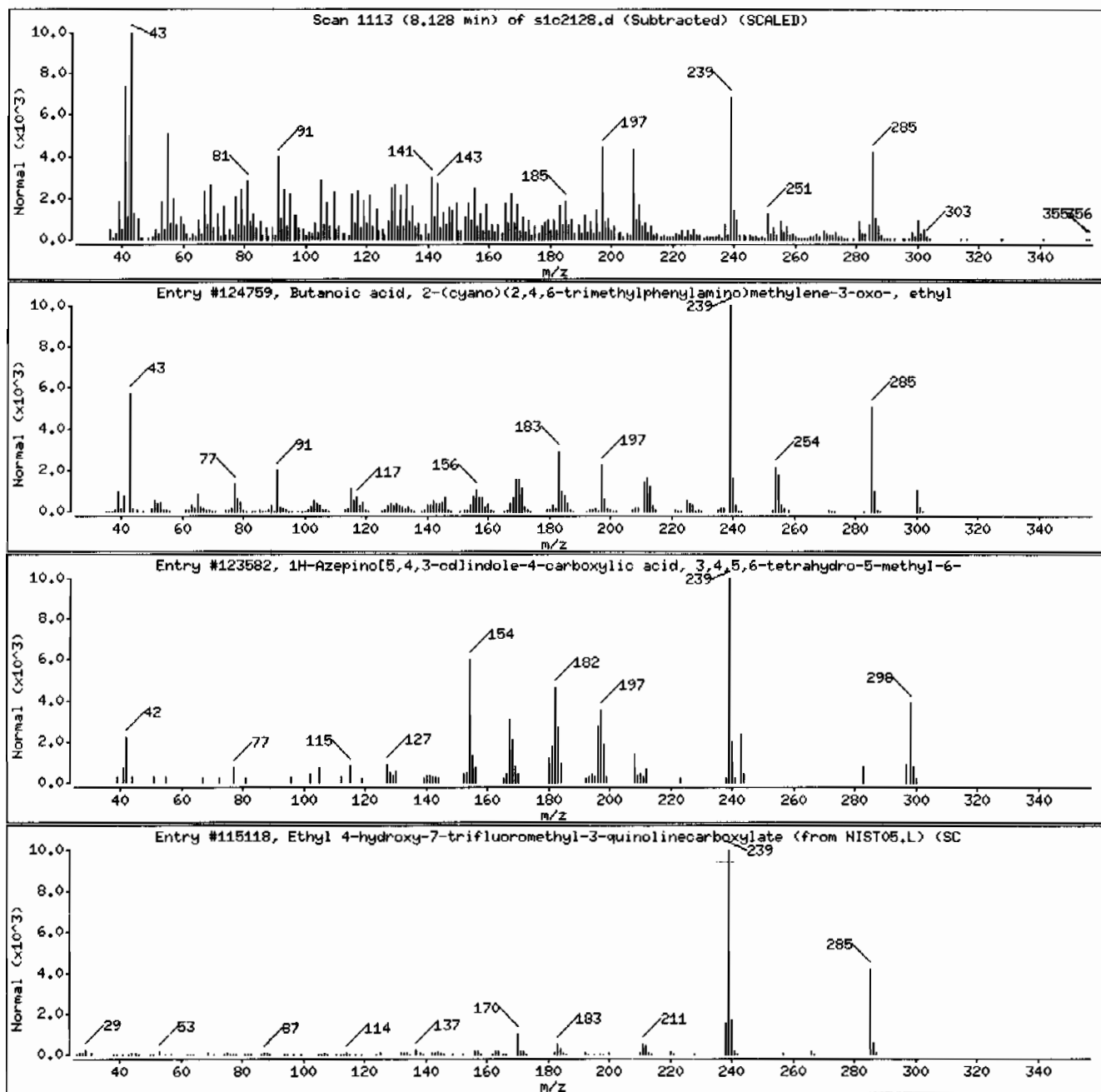
Volume Injected (uL): 0.5

Operator: AMY

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	53	C17H20N2O3	300
1H-Azepino[5,4,3-cd]indole-4-carboxylic	77630-45-6	NIST05.L	123582	52	C18H22N2O2	298
Ethyl 4-hydroxy-7-trifluoromethyl-3-quin	391-02-6	NIST05.L	115118	41	C13H10F3NO3	285



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 1248370018196122811SVH111LANL

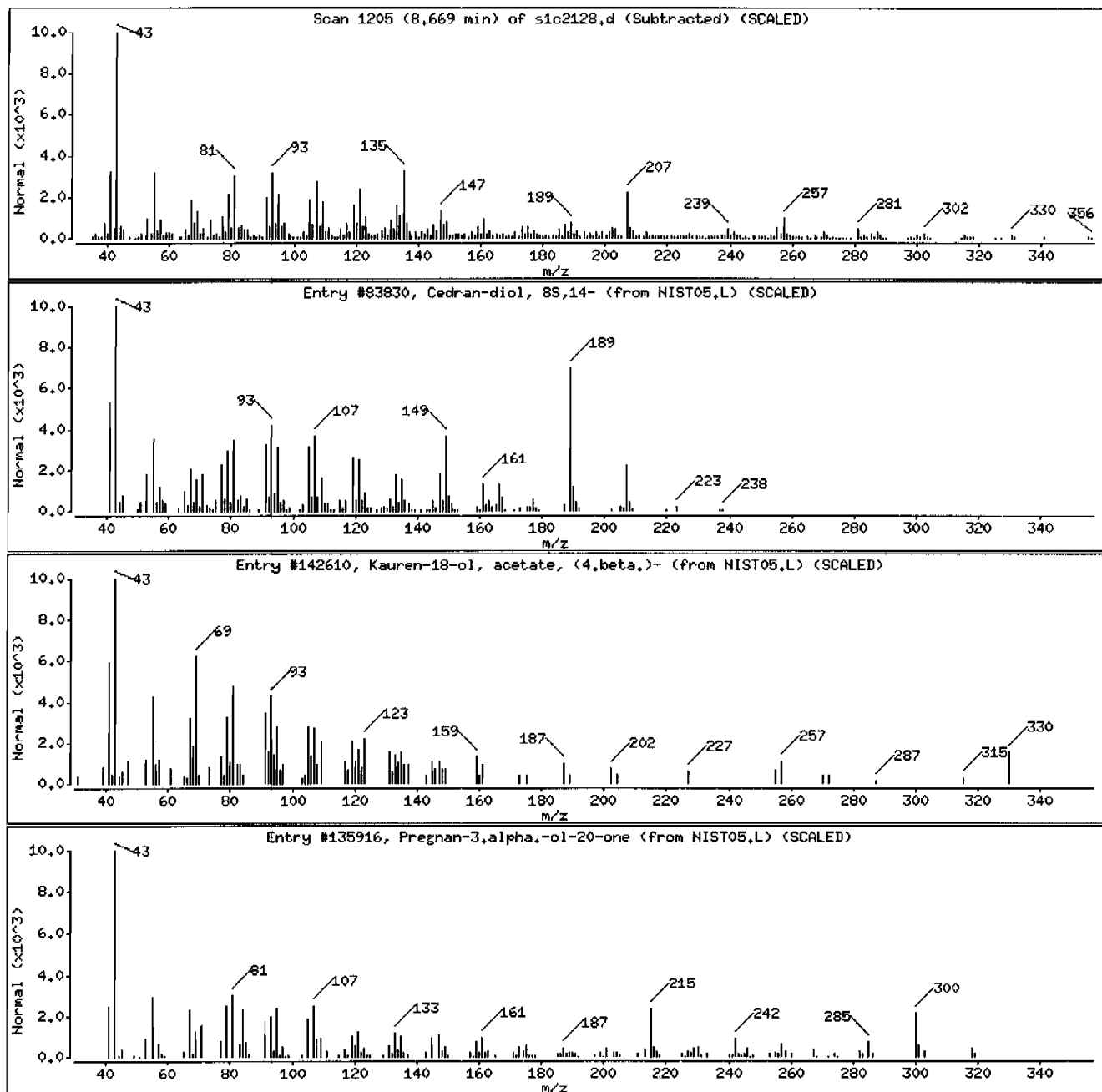
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	50	C15H26O2	238
Kauren-18-ol, acetate, (4,beta.)-	72150-74-4	NIST05.L	142610	38	C22H34O2	330
Pregnan-3,alpha.-ol-20-one	128-20-1	NIST05.L	135916	38	C21H34O2	318



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: HSD1.i

Sample Info: 1248370018196122811SVMI11LANL

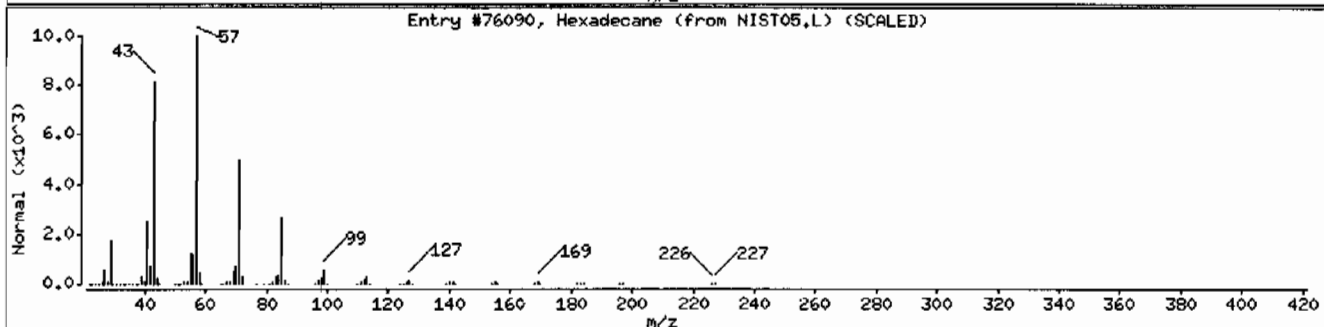
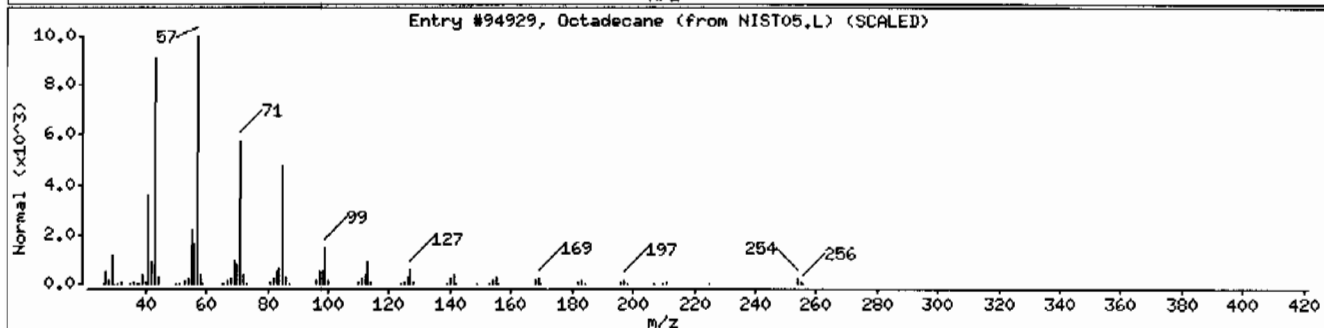
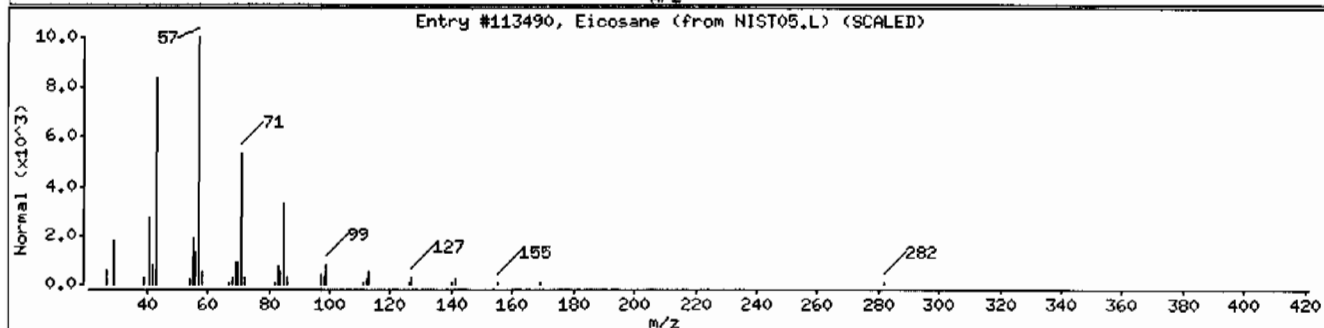
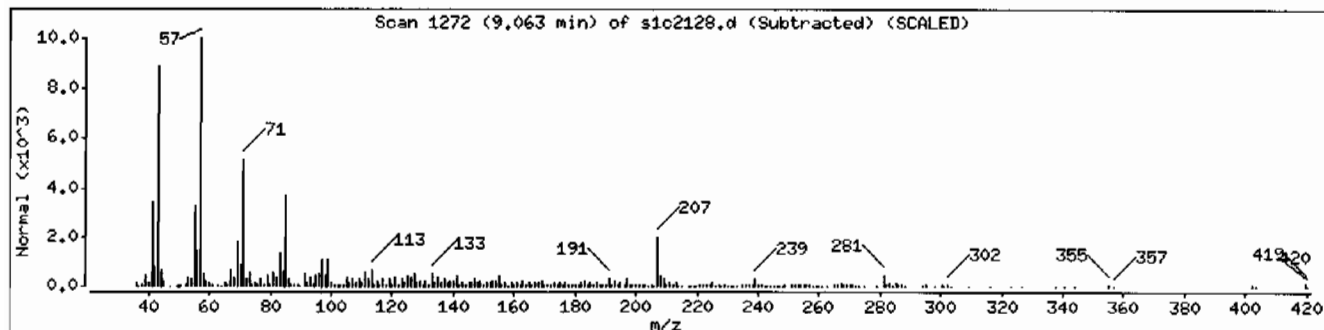
Volume Injected (uL): 0.5

Operator: AMY

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	98	C20H42	282
Octadecane	593-45-3	NIST05.L	94929	93	C18H38	254
Hexadecane	544-76-3	NIST05.L	76090	92	C16H34	226



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 1248370018196122811ISVH111LANL

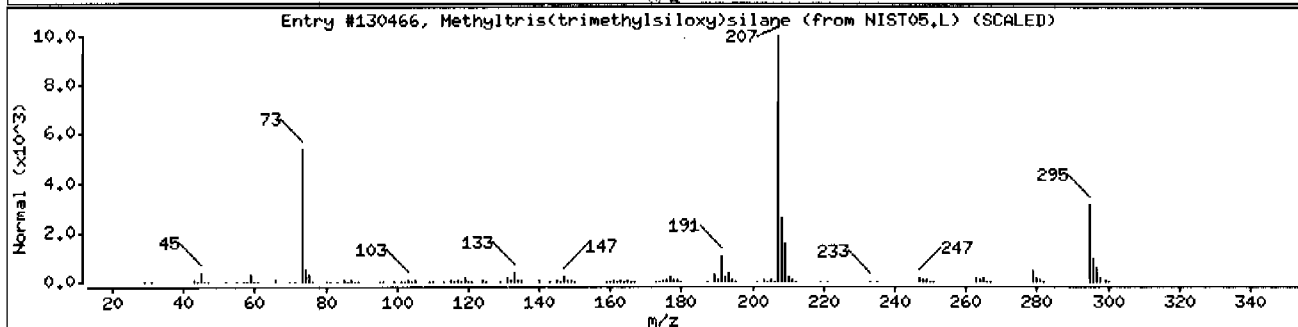
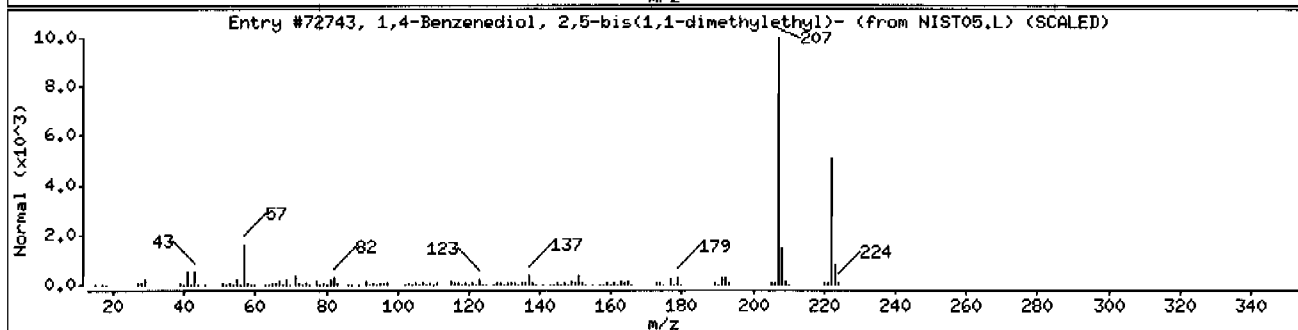
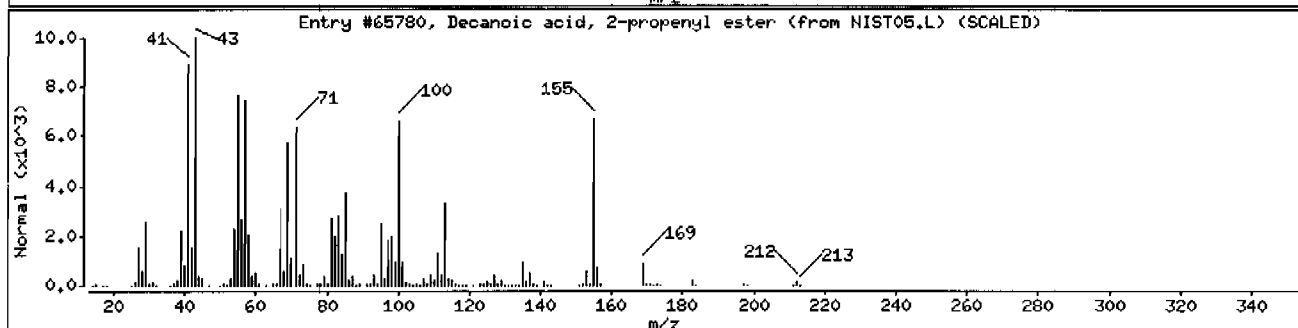
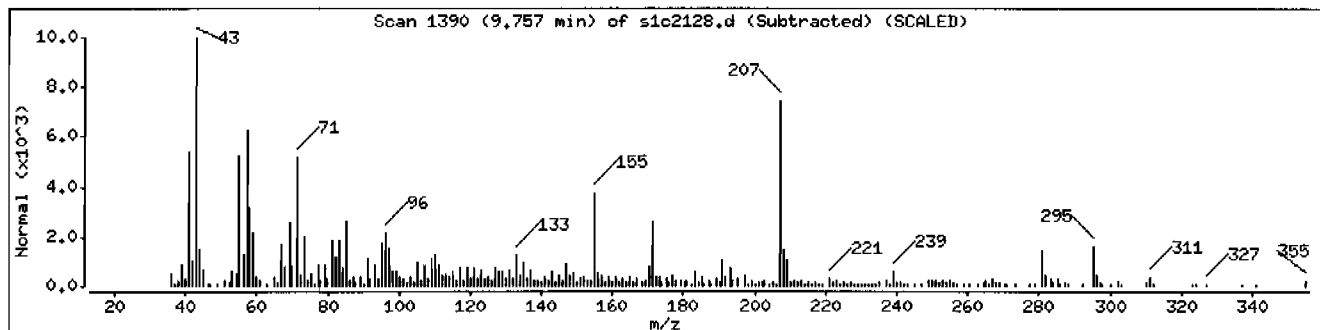
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Decanoic acid, 2-propenyl ester	57856-81-2	NIST05.L	65780	47	C13H24O2	212
1,4-Benzenediol, 2,5-bis(1,1-dimethyleth	88-58-4	NIST05.L	72743	38	C14H22O2	222
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	35	C10H30O3Si4	310



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 1248370018196122811ISVH11ILANL

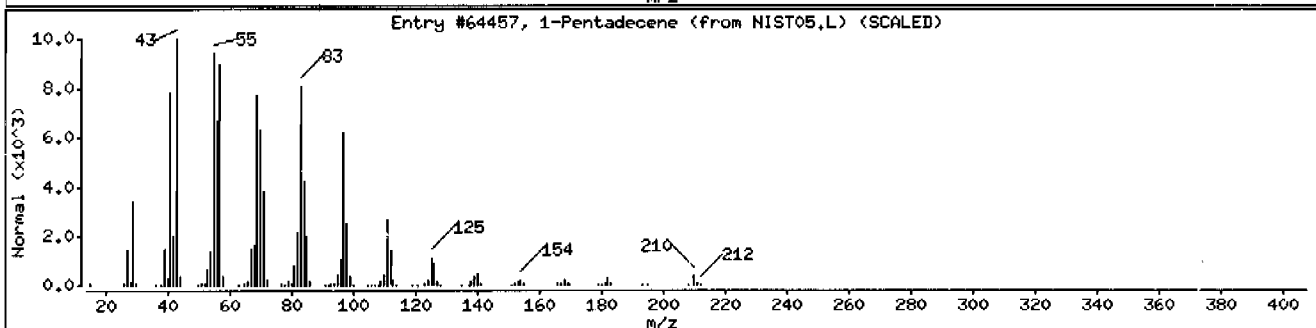
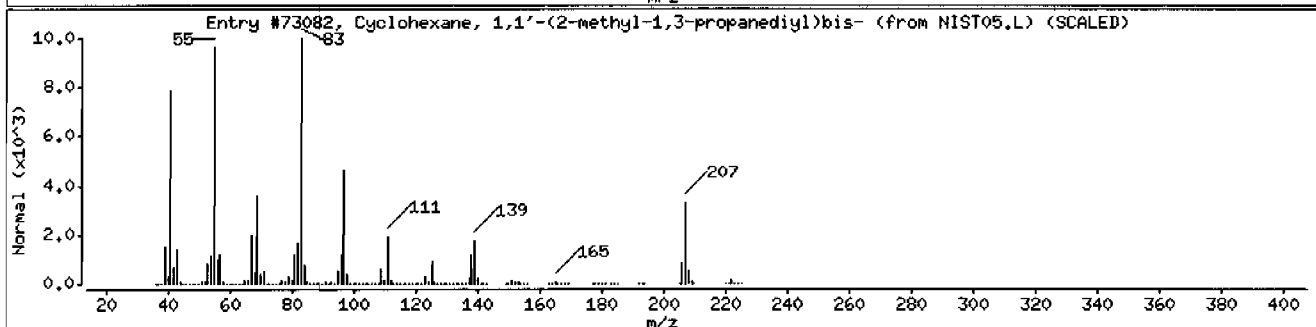
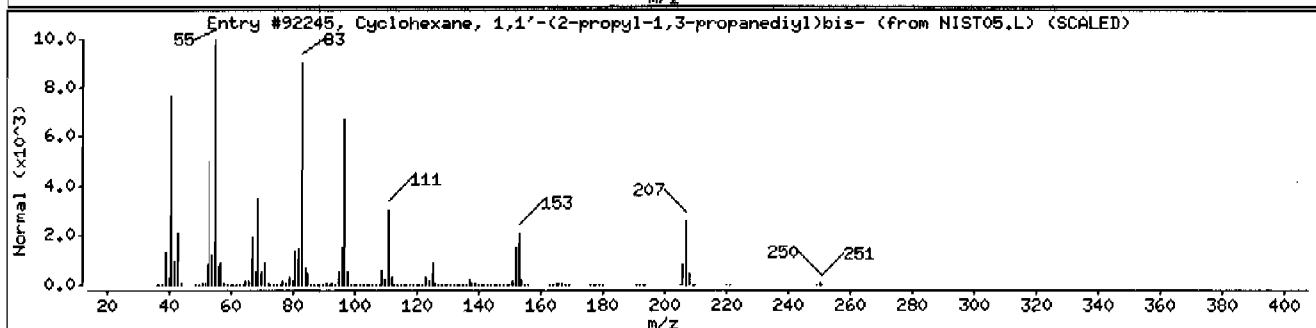
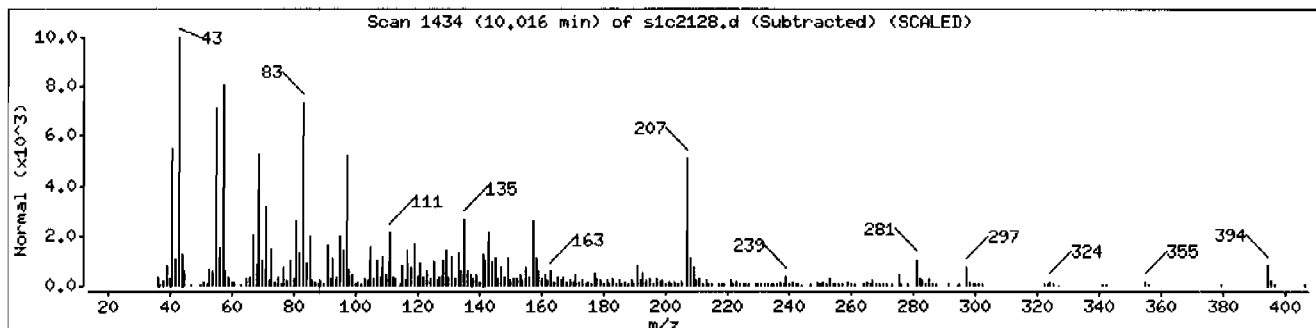
Volume Injected (uL): 0.5

Operator: AMY

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	49	C18H34	250
Cyclohexane, 1,1'-(2-methyl-1,3-propanediol)bis-	2883-08-1	NIST05.L	73082	45	C16H30	222
1-Pentadecene	13360-61-7	NIST05.L	64457	45	C15H30	210



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: HSD1.i

Sample Info: 12483700181961228111SVH111LANL

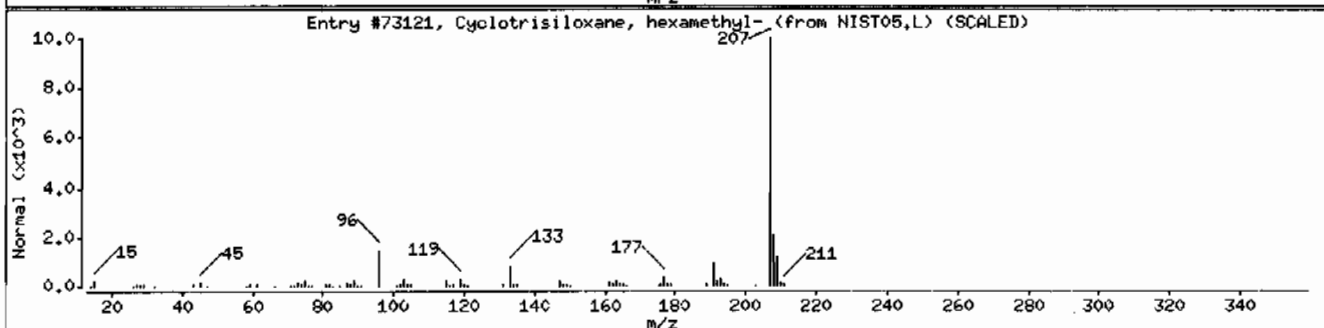
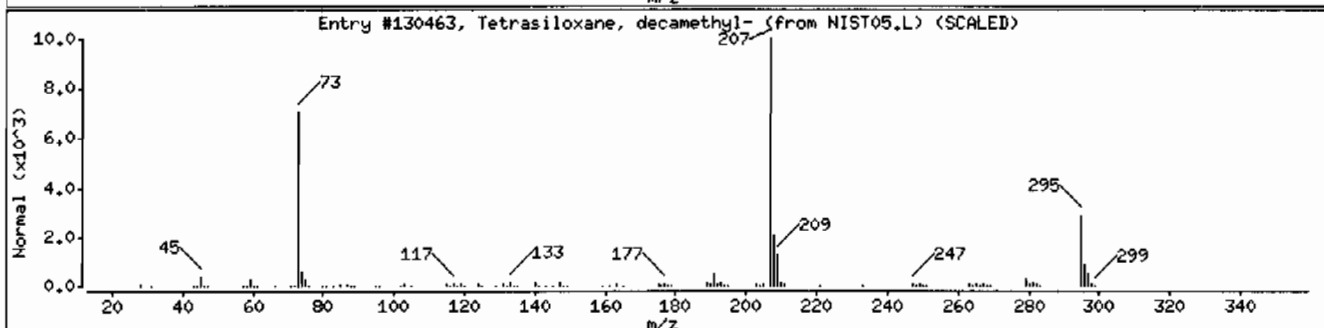
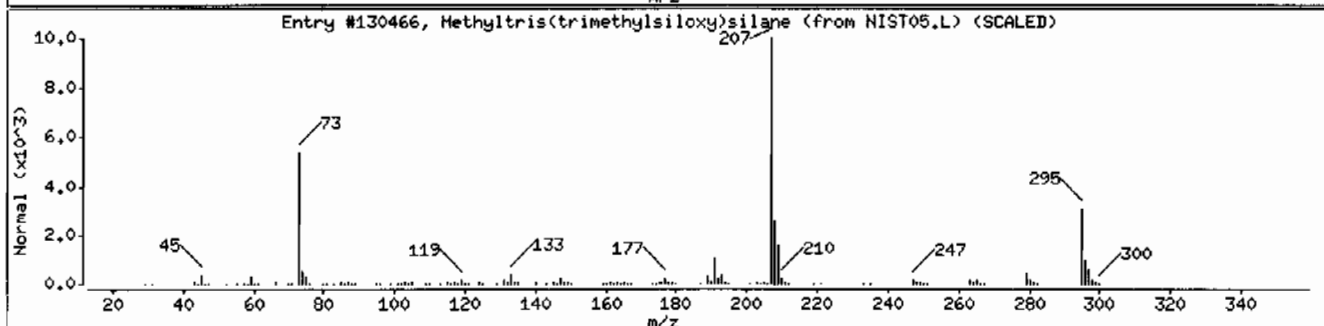
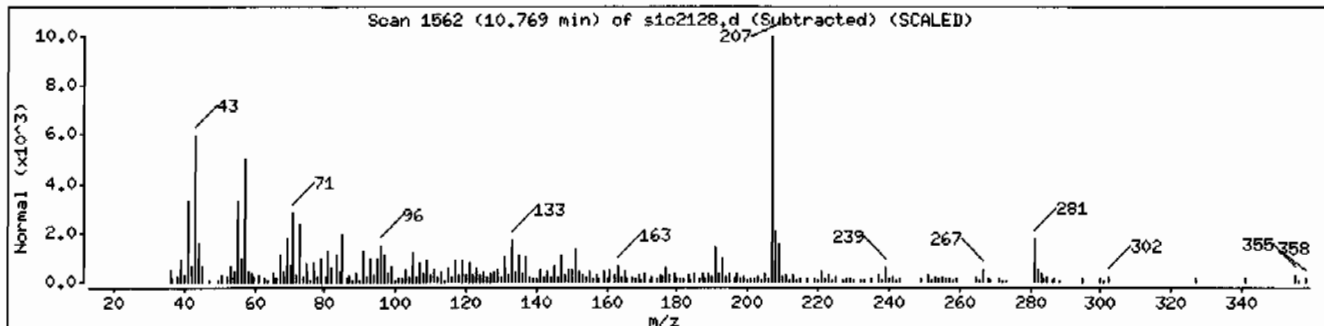
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	59	C10H30O3Si4	310
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130463	53	C10H30O3Si4	310
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	50	C6H18O3Si3	222



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: I248370018196122811SVMI11LANL

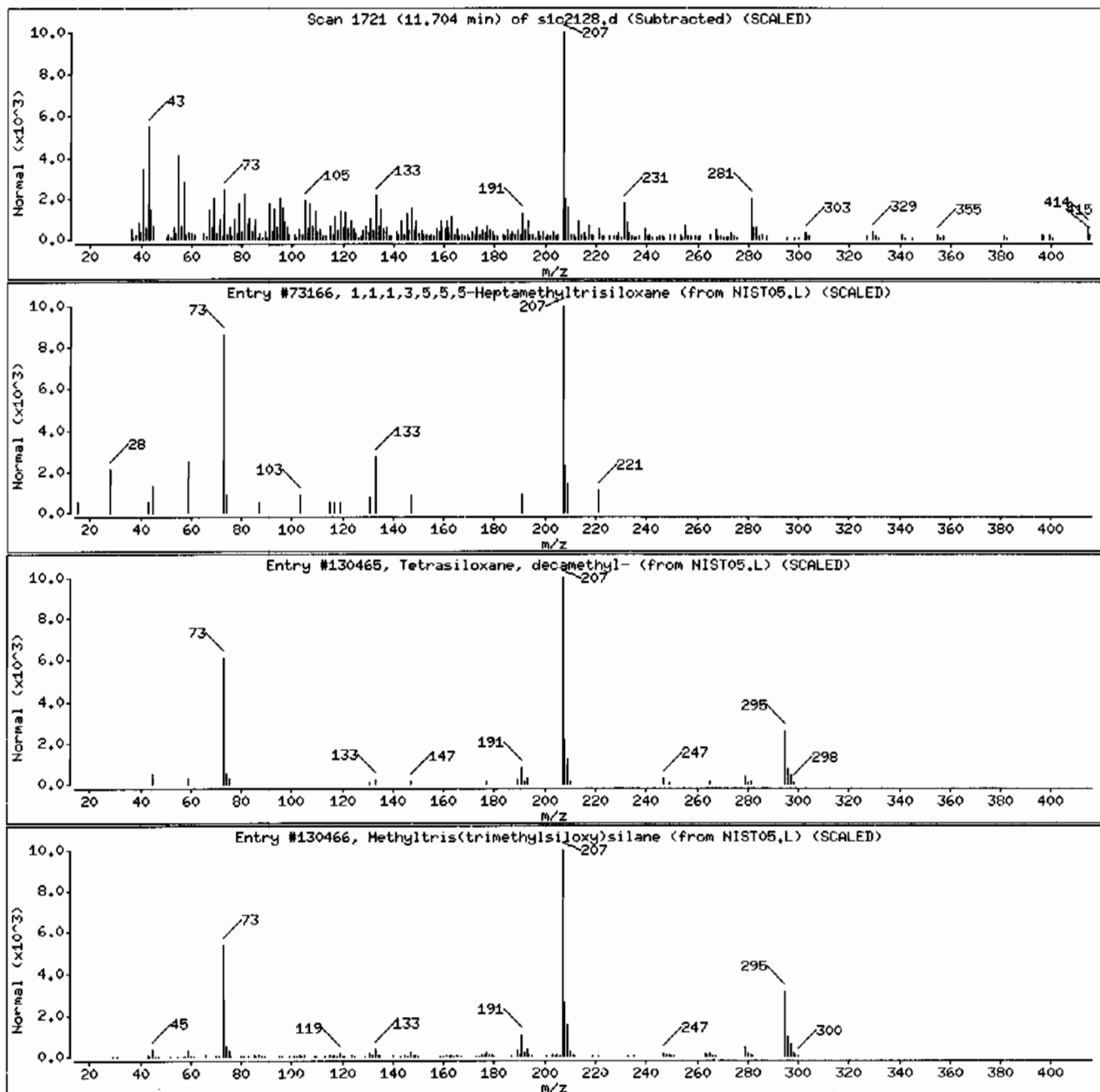
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	53	C7H22O2Si3	222
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	47	C10H30O3Si4	310
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	47	C10H30O3Si4	310



Date : 22-MAR-2010 03:16

Client ID: RE36-10-7485

Instrument: MSD1.i

Sample Info: 12483700181961228111SVH111LANL

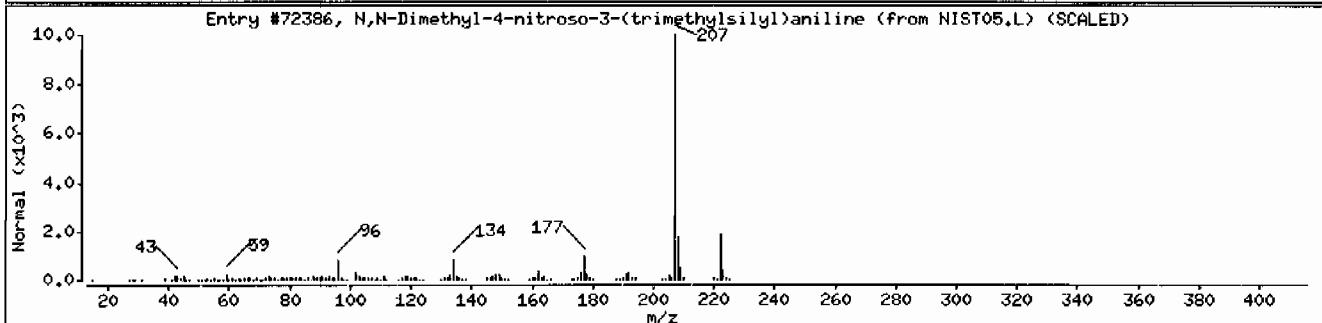
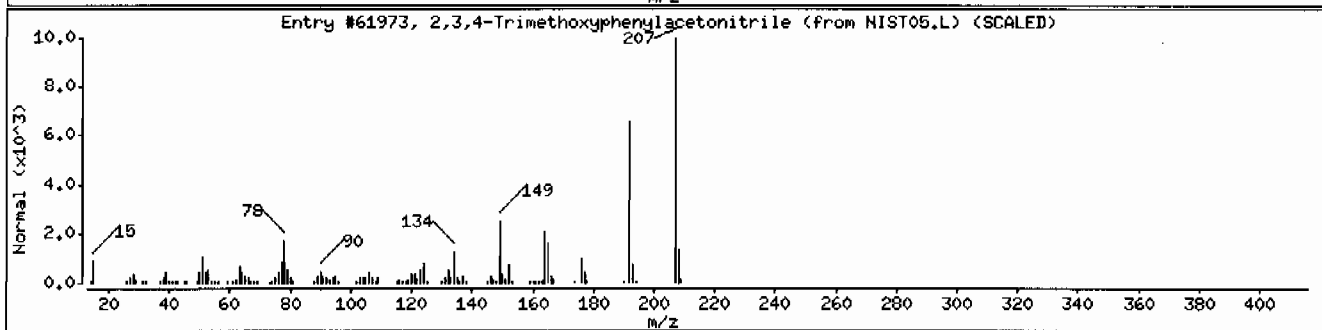
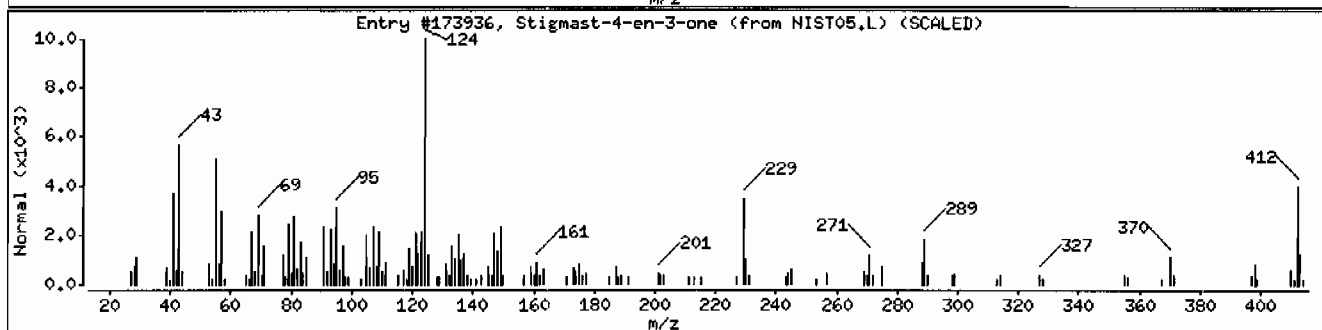
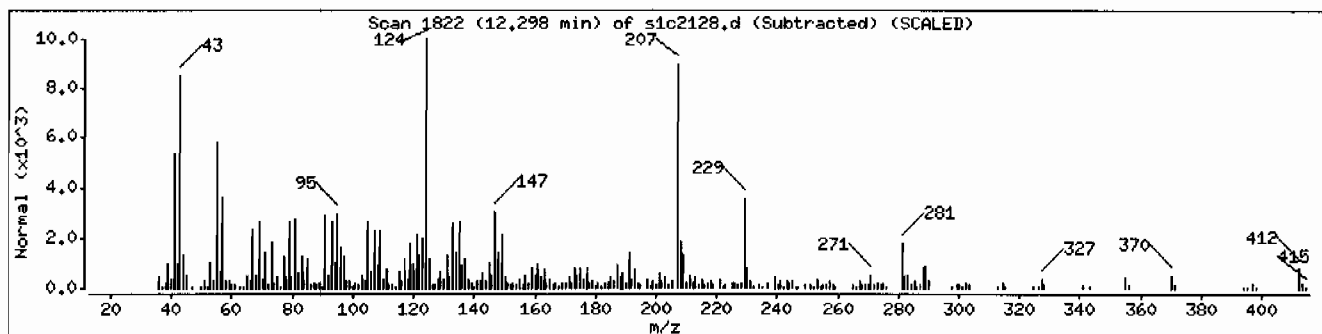
Volume Injected (uL): 0.5

Operator: AMY

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	C29H48O	412
2,3,4-Trimethoxyphenylacetonitrile	68913-85-9	NIST05.L	61973	30	C11H13NO3	207
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	17993-84-9	NIST05.L	72386	22	C11H18N2OSi	222



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

SDG Number: 10-2150
Lab Sample ID: 248370012

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1J
Analyst: AMY
Aliquot: 30.01 g
Column: J&W DB-SMS

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
62-75-9	N-Methyl-N-nitrosomethylamine	U	422	ug/kg	84.5	422
108-95-2	Phenol	U	422	ug/kg	84.5	422
95-57-8	2-Chlorophenol	U	422	ug/kg	84.5	422
106-46-7	1,4-Dichlorobenzene	U	422	ug/kg	84.5	422
621-64-7	N-Nitrosodipropylamine	U	422	ug/kg	84.5	422
59-50-7	4-Chloro-3-methylphenol	U	422	ug/kg	84.5	422
83-32-9	Acenaphthene	U	42.2	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene	U	422	ug/kg	42.2	422
100-02-7	4-Nitrophenol	U	422	ug/kg	139	422
87-86-5	Pentachlorophenol	U	422	ug/kg	106	422
129-00-0	Pyrene	J	20.0	ug/kg	12.7	42.2
110-86-1	Pyridine	U	422	ug/kg	84.5	422
62-53-3	Aniline	U	422	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether	U	422	ug/kg	84.5	422
541-73-1	1,3-Dichlorobenzene	U	422	ug/kg	84.5	422
100-51-6	Benzyl alcohol	U	422	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene	U	422	ug/kg	84.5	422
108-60-1	bis(2-Chloroisopropyl)ether	U	422	ug/kg	84.5	422
95-48-7	o-Cresol	U	422	ug/kg	84.5	422
65794-96-9	m,p-Cresols	U	422	ug/kg	127	422
67-72-1	Hexachloroethane	U	422	ug/kg	84.5	422
98-95-3	Nitrobenzene	U	422	ug/kg	84.5	422
78-59-1	Isophorone	U	422	ug/kg	84.5	422
88-75-5	2-Nitrophenol	U	422	ug/kg	84.5	422
105-67-9	2,4-Dimethylphenol	U	422	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane	U	422	ug/kg	84.5	422
120-83-2	2,4-Dichlorophenol	U	422	ug/kg	84.5	422
65-85-0	Benzoic acid	U	845	ug/kg	211	845
91-20-3	Naphthalene	U	42.2	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline	U	422	ug/kg	84.5	422
87-68-3	Hexachlorobutadiene	U	422	ug/kg	84.5	422
91-57-6	2-Methylnaphthalene	U	42.2	ug/kg	8.45	42.2
77-47-4	Hexachlorocyclopentadiene	U	422	ug/kg	84.5	422
88-06-2	2,4,6-Trichlorophenol	U	422	ug/kg	84.5	422
95-95-4	2,4,5-Trichlorophenol	U	422	ug/kg	84.5	422
91-58-7	2-Chloronaphthalene	U	42.2	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline	U	422	ug/kg	84.5	422
99-09-2	<i>o</i> -Nitroaniline	U	422	ug/kg	84.5	422
	3-Nitroaniline					

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370012	Date Received: 03/02/2010 08:50	%Moisture: 21.1
Client ID: RE36-10-7486	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 00:54	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2122.d	Aliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	422	ug/kg	84.5	422
606-20-2	2,6-Dinitrotoluene	U	422	ug/kg	42.2	422
208-96-8	Accnaphthylene	U	42.2	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol	U	845	ug/kg	160	845
132-64-9	Dibenzofuran	U	422	ug/kg	84.5	422
84-66-2	Diethylphthalate	U	422	ug/kg	84.5	422
86-73-7	Fluorene	U	42.2	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether	U	422	ug/kg	84.5	422
534-52-1	2-Methyl-4,6-dinitrophenol	U	422	ug/kg	84.5	422
100-01-6	4-Nitroaniline	U	422	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	422	ug/kg	84.5	422
122-66-7	Azobenzene	U	422	ug/kg	84.5	422
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	422	ug/kg	84.5	422
118-74-1	Hexachlorobenzene	U	422	ug/kg	84.5	422
85-01-8	Phenanthrene	J	13.0	ug/kg	12.7	42.2
120-12-7	Anthracene	U	42.2	ug/kg	8.45	42.2
84-74-2	Di-n-butylphthalate	U	422	ug/kg	84.5	422
206-44-0	Fluoranthene	J	21.2	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate	U	422	ug/kg	84.5	422
56-55-3	Benzo(a)anthracene	J	14.4	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	U	422	ug/kg	127	422
218-01-9	Chrysene	J	13.0	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	422	ug/kg	84.5	422
117-84-0	Di-n-octylphthalate	U	422	ug/kg	84.5	422
205-99-2	Benzo(b)fluoranthene	J	17.3	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene	U	42.2	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene	U	42.2	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.2	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene	U	42.2	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene	U	42.2	ug/kg	12.7	42.2
120-82-1	1,2,4-Trichlorobenzene	U	422	ug/kg	84.5	422

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.8	507	ug/kg		J
	Unknown Aldol Condensate	2.67	242	ug/kg		JA

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370012	Date Received: 03/02/2010 08:50	%Moisture: 21.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7486	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.1	Dilution: 1
Run Date: 03/22/2010 00:54	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s1c2122.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
7785-70-8	1R-.alpha.-Pinene	3.19	711	ug/kg	97	NJ
79-92-5	Camphene	3.29	236	ug/kg	98	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.57	324	ug/kg	97	NJ
	Unknown	7.32	633	ug/kg		J
1000130-90-5	2-Methyl-Z,Z-3,13-octadecadienol	7.4	268	ug/kg	92	NJ
	Unknown	7.75	292	ug/kg		J
	Unknown	7.85	268	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	7.9	246	ug/kg	98	NJ
	Unknown	8.07	340	ug/kg		J
	Unknown	8.09	800	ug/kg		J
	Unknown	8.14	572	ug/kg		J
	Unknown	8.23	229	ug/kg		J
	Unknown	8.26	183	ug/kg		J
112-95-8	Eicosane	9.07	294	ug/kg	95	NJ
	Unknown	9.4	281	ug/kg		J
	Unknown	9.78	183	ug/kg		J
	Unknown	10.02	1330	ug/kg		J
	Unknown	10.4	182	ug/kg		J
83-46-5	.beta.-Sitosterol	11.67	213	ug/kg	91	NJ
	Unknown	11.79	245	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	12.3	649	ug/kg	92	NJ

Data File: /chem/MSD1.i/s032110.b/slc2122.d
Report Date: 22-Mar-2010 15:49

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2122.d
Lab Smp Id: 248370012 Client Smp ID: RE36-10-7486
Inj Date : 22-MAR-2010 00:54
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370012|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.01000	weight of sample
M	21.09310	% 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	3.610	3.610	(1.000)	460681	40.0000
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1804295	40.0000
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	950833	40.0000
* 67 Phenanthrene-d10	188	6.710	6.710	(1.000)	1648021	40.0000
* 91 Chrysene-d12	240	8.292	8.292	(1.000)	1231094	40.0000
* 98 Perylene-d12	264	9.527	9.522	(1.000)	783914	40.0000
\$ 3 2-Fluorophenol	112	2.834	2.822	(0.785)	769408	64.8596 2740
\$ 5 Phenol-d5	99	3.351	3.346	(0.928)	964091	66.7324 2820
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	385521	34.8374 1470
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	774286	29.4857 1240
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	178967	57.4110 2420
\$ 81 p-Terphenyl-d14	244	7.628	7.622	(0.920)	726485	35.3960 1490

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
79 Pyrene	202	7.569	7.569	(0.913)	16575	0.47446	20.0(a)
68 Phenanthrene	178	6.722	6.722	(1.002)	10933	0.30703	13.0(a)
76 Fluoranthene	202	7.433	7.434	(1.168)	18339	0.50111	21.2(a)
89 Benzo(a)anthracene	228	8.286	8.281	(0.999)	9884	0.34156	14.4(a)
92 Chrysene	228	8.310	8.310	(1.002)	8310	0.30730	13.0(a)
95 Benzo(b)fluoranthene	252	9.133	9.133	(0.959)	8848	0.41042	17.3(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: slc2122.d

Report Date: 03/22/2010 11:57

Lab. ID: 248370012

SampleType: SAMPLE

Injection Date: 22-MAR-2010 00:54

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370012|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	45531	3.35	3.40	80-120	100	()
93	17585	3.39	3.40	233-293	39	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	54348	3.97	3.86	80-120	100	(T)
42	35891	3.97	3.86	48-108	66	(T)

22	Isophorone	CAS#: 78-59-1				
82	388673	3.97	4.14	80-120	100	(T)
138	160	4.16	4.14	0- 49	0	()

40	2-Chloronaphthalene	CAS#: 91-58-7				
162	11106	5.43	5.30	80-120	100	(T)
164	708	5.43	5.30	2- 62	6	(T)
127	1088	5.43	5.30	9- 69	10	(T)

42	o-Nitroaniline	CAS#: 88-74-4				
65	13831	5.43	5.37	80-120	100	(T)
92	16190	5.43	5.37	33- 93	117	(QT)
138	1281	5.43	5.37	80-140	9	(Q)

41	m-Nitroaniline	CAS#: 99-09-2				
138	647	5.67	5.66	80-120	100	()
92	6120	5.70	5.66	71-131	946	(Q)
108	18312	5.70	5.66	0- 40	2830	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
43 Dimethylphthalate				CAS#: 131-11-3		
163	172008	5.70	5.49	80-120	100	(T)
164	950833	5.70	5.49	0- 40	553	(QT)

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	121945	5.70	5.54	80-120	100	(T)
63	2523	5.70	5.54	50-110	2	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	121945	5.70	5.83	80-120	100	(T)
89	1704	5.70	5.82	38- 98	1	(QT)
63	2523	5.70	5.82	20- 80	2	(QT)

53 Fluorene				CAS#: 86-73-7		
166	13941	6.25	6.09	80-120	100	(T)
165	13827	6.25	6.09	61-121	99	(T)
167	4877	6.25	6.09	0- 43	35	(T)

56 p-Nitroaniline				CAS#: 100-01-6		
138	649	6.09	6.09	80-120	100	()
108	2831	6.07	6.09	29- 89	436	(Q)
92	1191	6.06	6.09	14- 74	184	(Q)

68 Phenanthrene				CAS#: 85-01-8		
178	10933	6.72	6.72	80-120	100	()
179	2929	6.72	6.72	0- 45	27	()
176	2131	6.72	6.72	0- 48	19	()

69 Anthracene				CAS#: 120-12-7		
178	10933	6.72	6.75	80-120	100	()
179	2929	6.72	6.75	0- 45	27	()
176	2131	6.72	6.75	0- 48	19	()

76 Fluoranthene				CAS#: 206-44-0		
202	18339	7.43	7.43	80-120	100	()
203	3314	7.43	7.43	0- 47	18	()
101	3289	7.43	7.43	0- 45	18	()

79 Pyrene				CAS#: 129-00-0		
202	16575	7.57	7.57	80-120	100	()
200	3494	7.57	7.57	0- 49	21	()
101	3133	7.56	7.56	0- 49	19	()

89 Benzo(a)anthracene				CAS#: 56-55-3		
228	9884	8.29	8.28	80-120	100	()
226	1763	8.29	8.28	0- 55	18	()
229	4687	8.27	8.28	0- 49	47	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
92 Chrysene		CAS#: 218-01-9				
228	8310	8.31	8.31	80-120	100	()
229	1918	8.31	8.31	0- 49	23	()
226	2658	8.31	8.31	0- 58	32	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	8848	9.13	9.13	80-120	100	()
253	1364	9.13	9.13	0- 52	15	()
125	1085	9.13	9.13	0- 46	12	()

96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	8848	9.13	9.16	80-120	100	()
253	1364	9.13	9.16	0- 51	15	()
125	1085	9.13	9.16	0- 45	12	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/s1c2122.d
 Lab Smp Id: 248370012 Client Smp ID: RE36-10-7486
 Inj Date : 22-MAR-2010 00:54
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370012|961228|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: s1c1620.d
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	30.01000	weight of sample
M	21.09310	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2835089	40.000
* 67 Phenanthrene-d10	6.710	4144371	40.000
* 91 Chrysene-d12	8.292	3456250	40.000
* 98 Perylene-d12	9.527	2259857	40.000

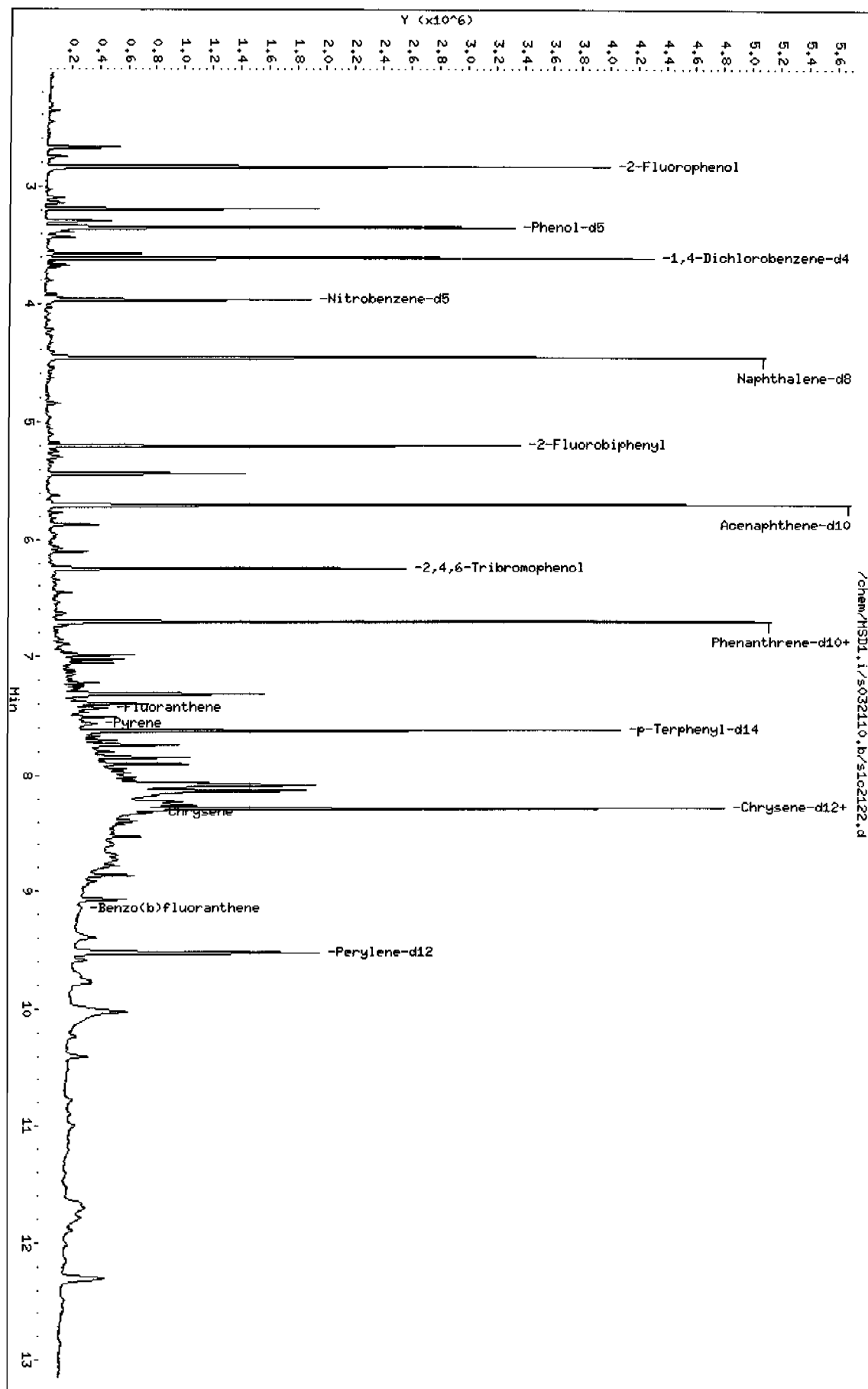
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
1.804	850932	12.0057153	507	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	406943	5.74152393	242	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.193	1193648	16.8410623	711	97	NIST05.L	15188	10
Camphene					CAS #: 79-92-5		
3.293	396124	5.58887655	236	98	NIST05.L	15160	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
3.569	544398	7.68086079	324	97	NIST05.L	15369	10
Unknown					CAS #:		
7.322	1553727	14.9960236	633	0		0	67
2-Methyl-Z,Z-3,13-octadecadienol					CAS #: 1000130-90-5		
7.398	657660	6.34750244	268	92	NIST05.L	112083	67
Unknown					CAS #:		
7.745	597519	6.91523124	292	0		0	91
Unknown					CAS #:		
7.851	548120	6.34351870	268	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
7.904	503313	5.82495966	246	98	NIST05.L	133618	91
Unknown					CAS #:		
8.069	695383	8.04782967	340	0		0	91
Unknown					CAS #:		
8.092	1637882	18.9555935	800	0		0	91
Unknown					CAS #:		
8.139	1169718	13.5374280	572	0		0	91
Unknown					CAS #:		
8.227	469095	5.42894311	229	0		0	91
Unknown					CAS #:		
8.263	375162	4.34184111	183	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Eicosane					CAS #: 112-95-8		
9.069	393340	6.96221890	294	95	NIST05.L	113488	98
Unknown					CAS #:		
9.398	375505	6.64652239	281	0		0	98
Unknown					CAS #:		
9.780	244216	4.32267719	182	0		0	98
Unknown					CAS #:		
10.021	1777005	31.4534090	1330	0		0	98
Unknown					CAS #:		
10.404	244131	4.32117980	182	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
11.674	285624	5.05561679	213	91	NIST05.L	174400	98
Unknown					CAS #:		
11.792	327522	5.79721937	245	0		0	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
12.304	867787	15.3600312	649	92	NIST05.L	173936	98

Data File: /chem/MSD1.i/s032110.b/sic2122.d
 Date : 22-MAR-2010 00:54
 Client ID: REC6-10-7486
 Sample Info: 1248370012196122811SWH11LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SHS

Instrument: MSD1.i
 Operator: AMY
 Column diameter: 0.20



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811SVMI11LANL

Volume Injected (uL): 0.5

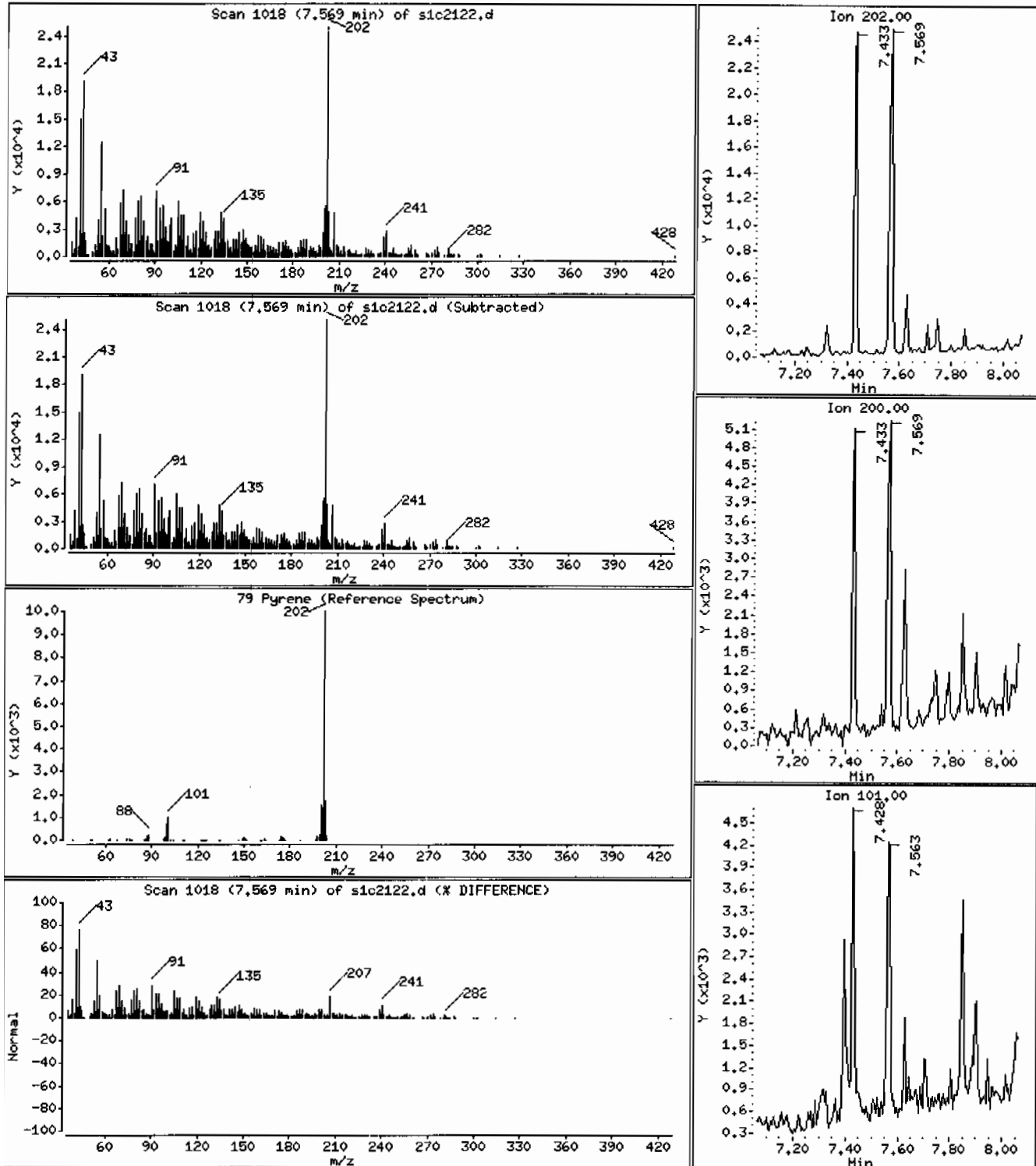
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 20.0 ug/Kg



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 12483700121961228111SVH111LANL

Volume Injected (uL): 0.5

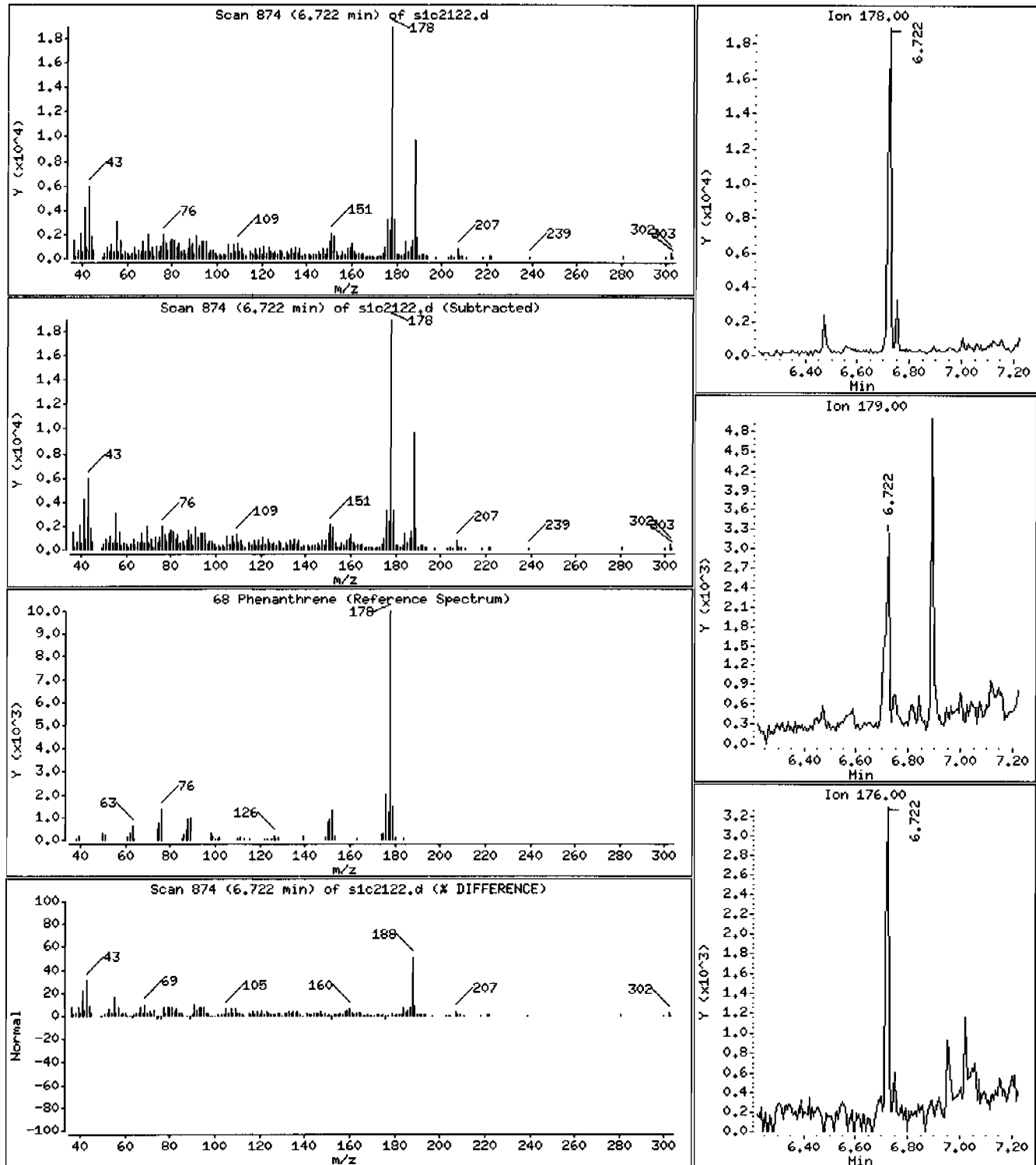
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 13.0 ug/Kg



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811SVH11ILANL

Volume Injected (uL): 0.5

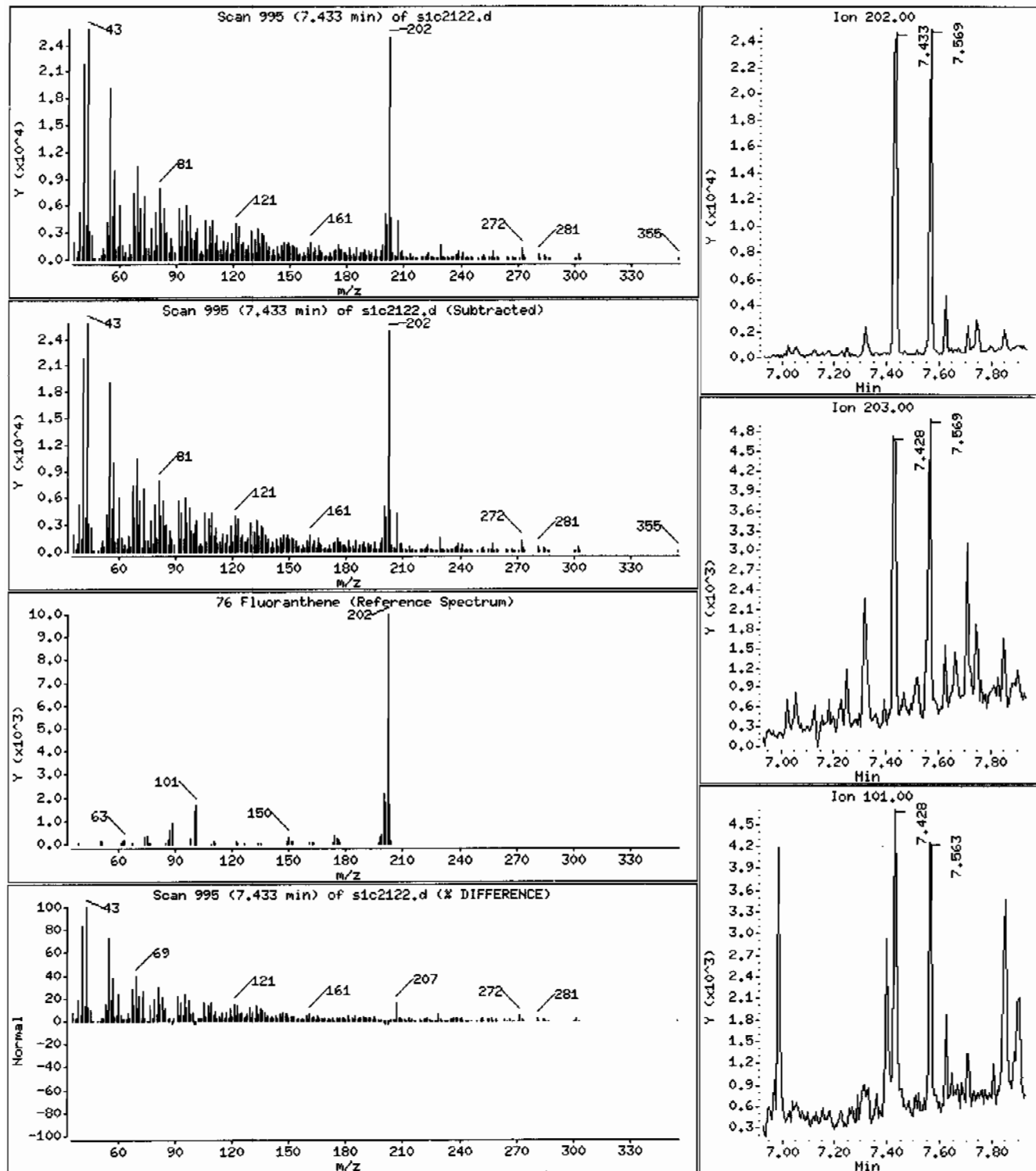
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 21.2 ug/Kg



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811SVH11ILANL

Volume Injected (uL): 0.5

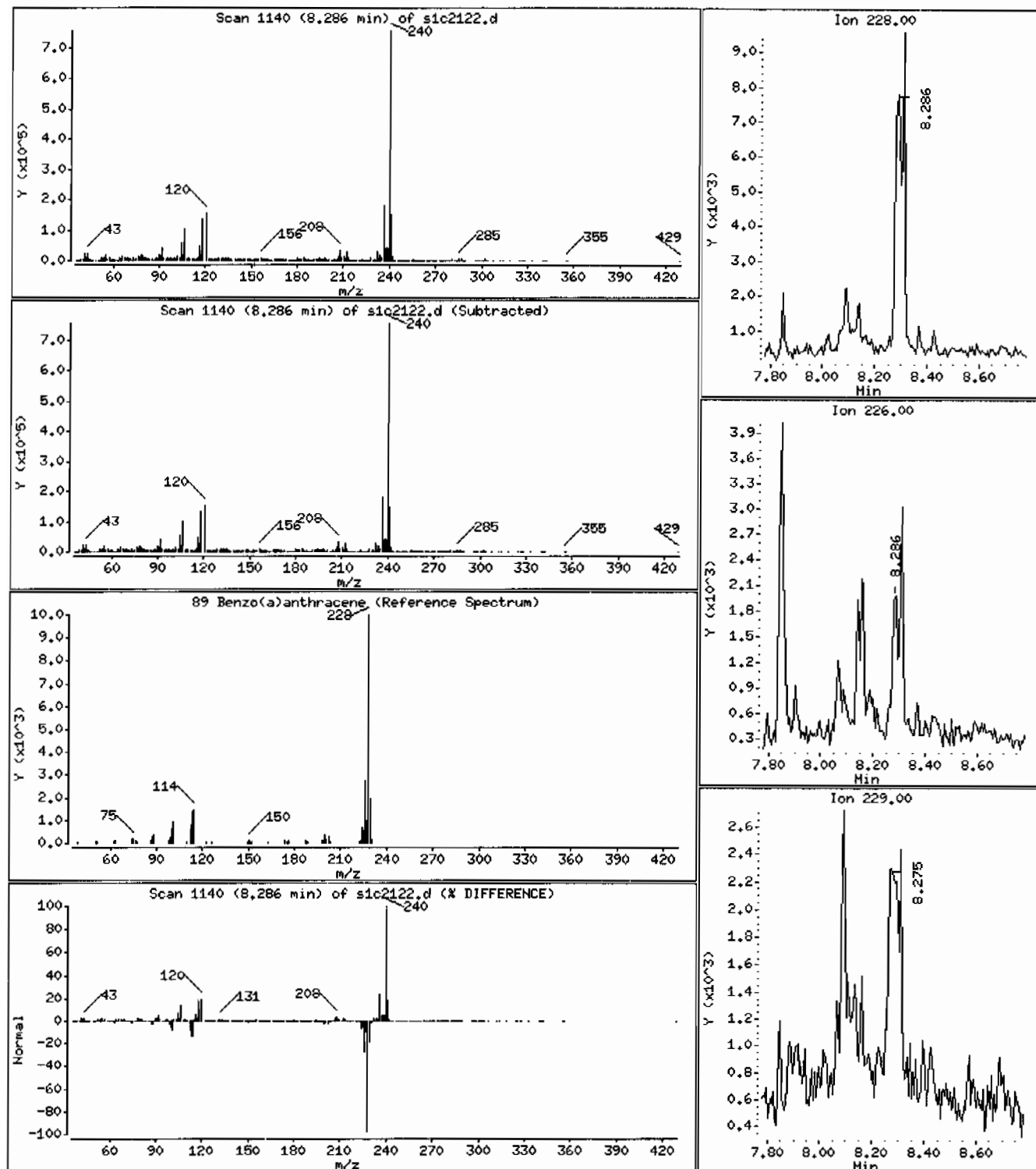
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 14.4 ug/Kg



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 12483700121961228111SVH111LANL

Volume Injected (uL): 0.5

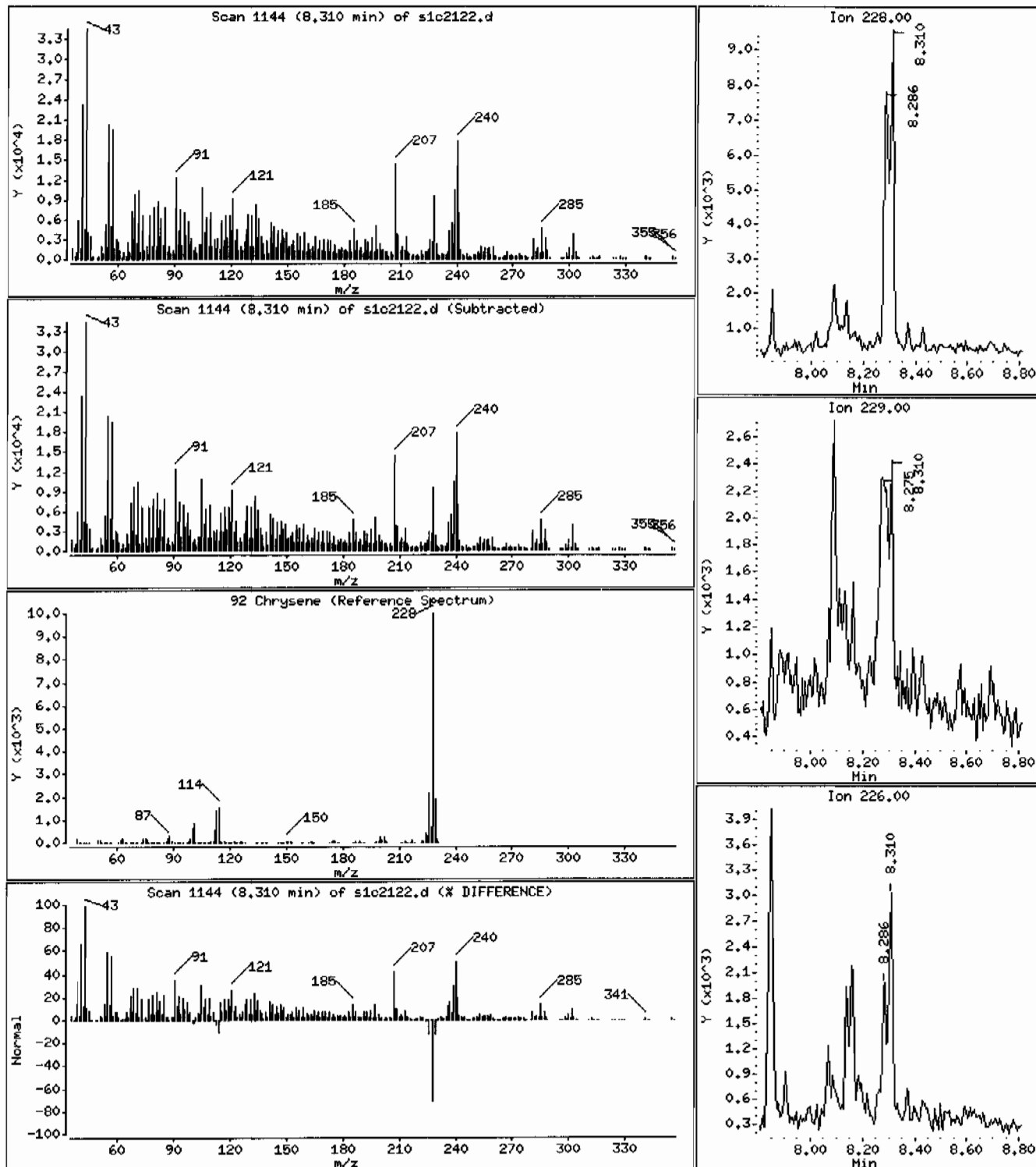
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 13.0 ug/Kg



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811SVH111LANL

Volume Injected (uL): 0.5

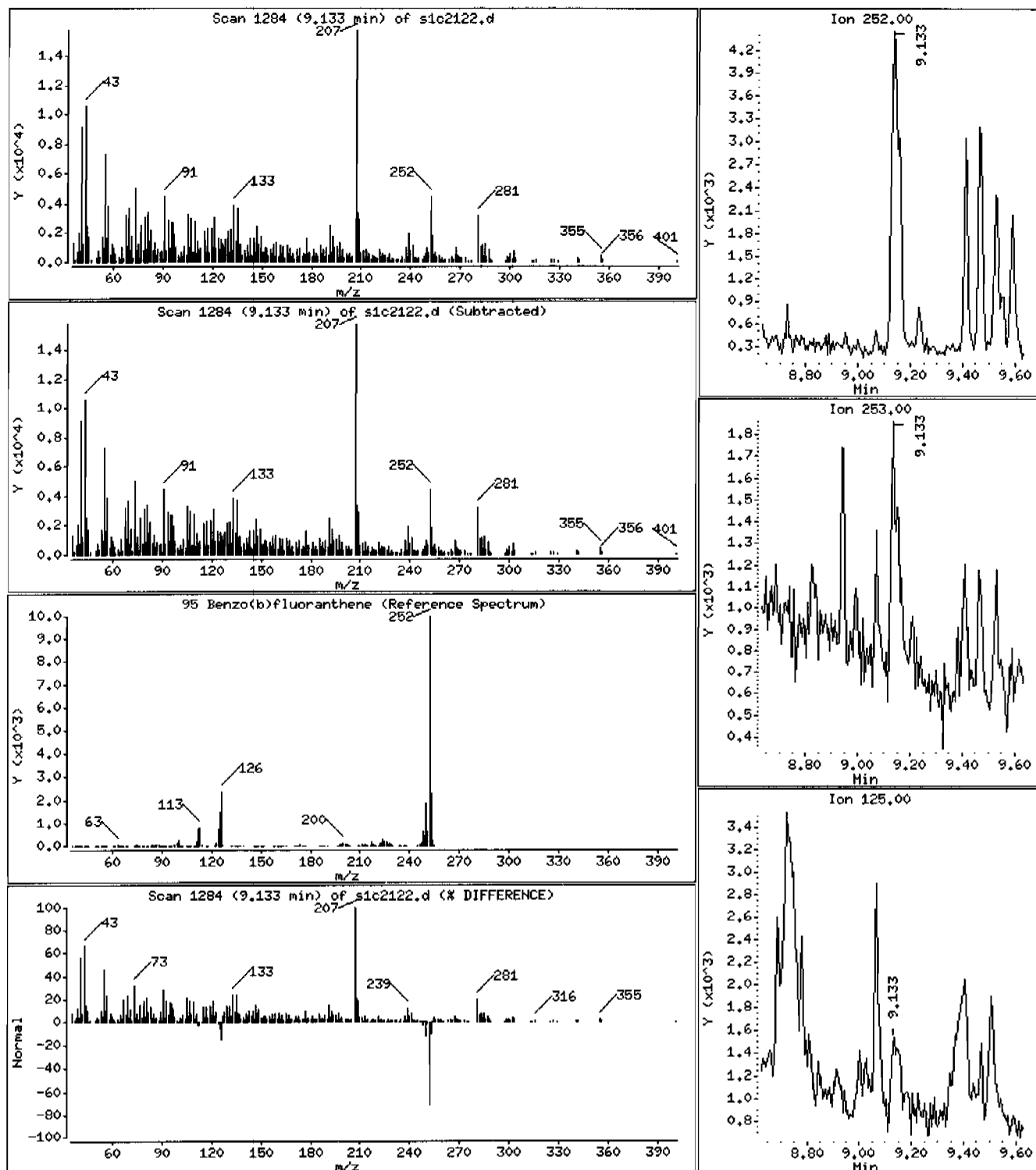
Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 17.3 ug/Kg



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: HSD1.i

Sample Info: 1248370012196122811ISVM11ILANL

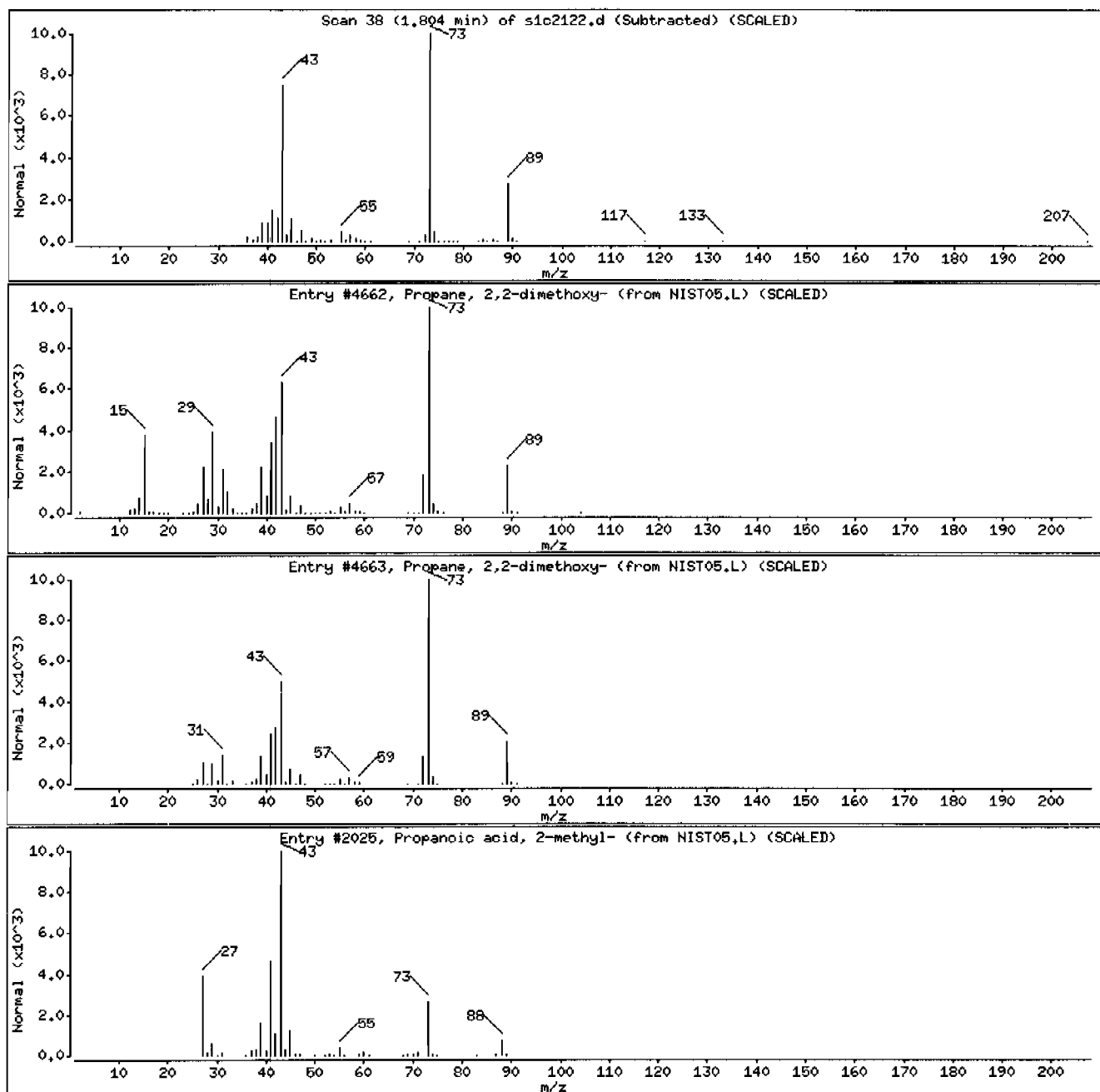
Volume Injected (uL): 0.5

Operator: AMY

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	39	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	36	C5H12O2	104
Propanoic acid, 2-methyl-	79-31-2	NIST05.L	2025	28	C4H8O2	88



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811SVH11ILANL

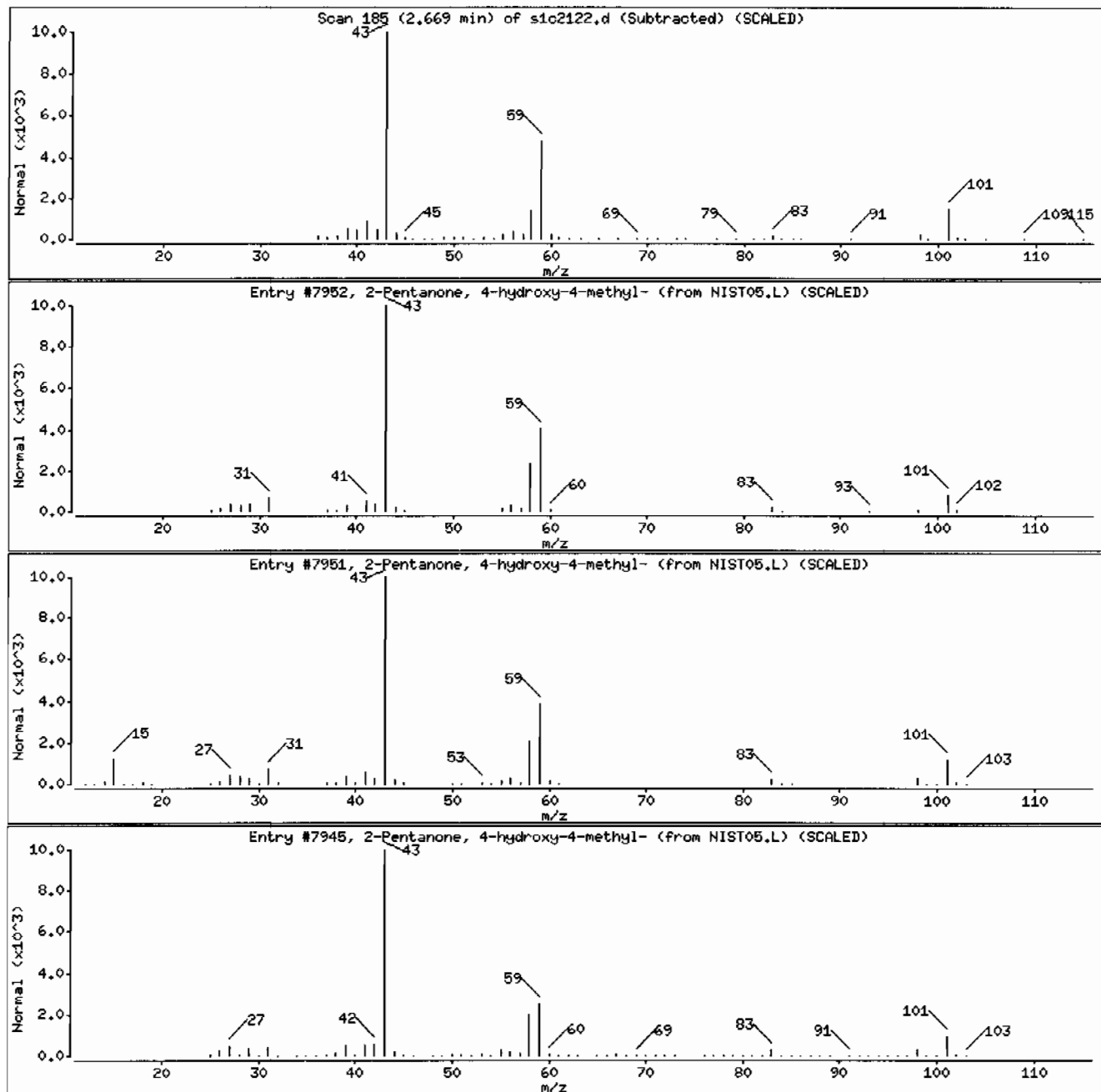
Volume Injected (uL): 0.5

Operator: AMY

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	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: I248370012196122811SVH11ILANL

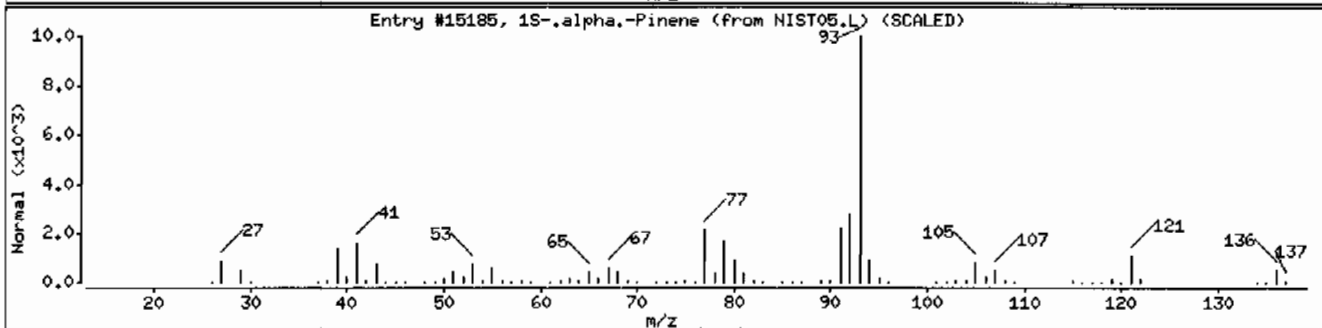
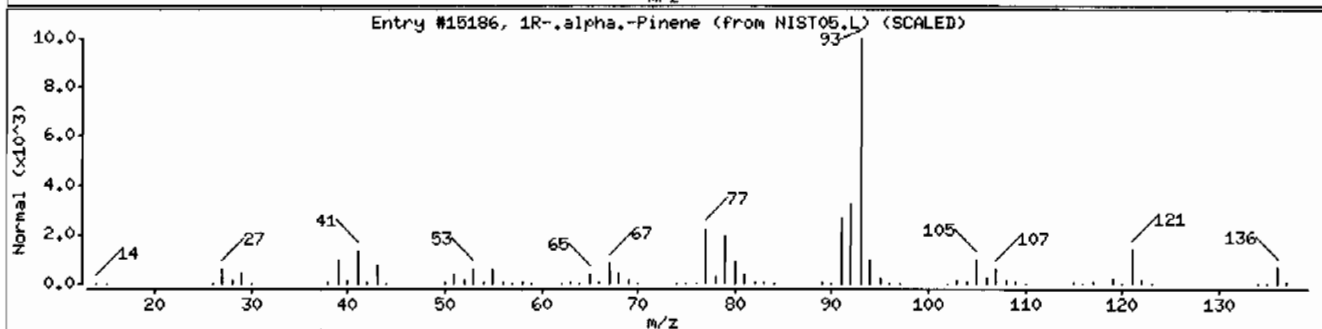
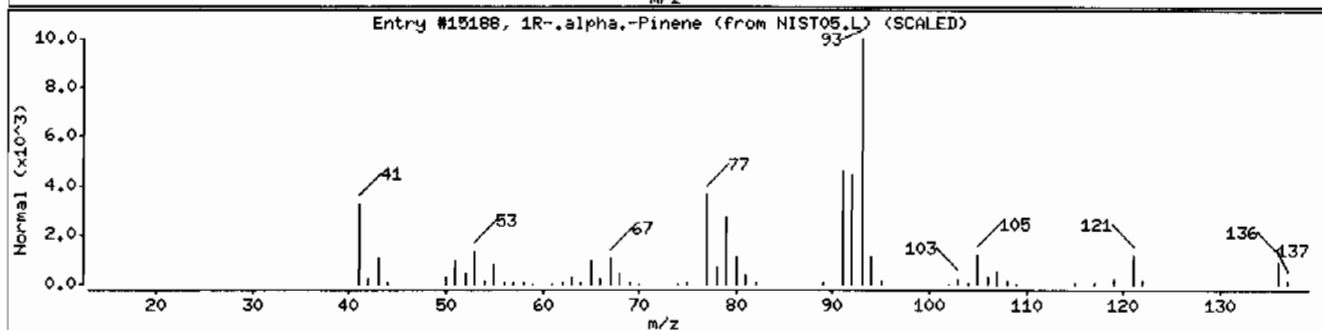
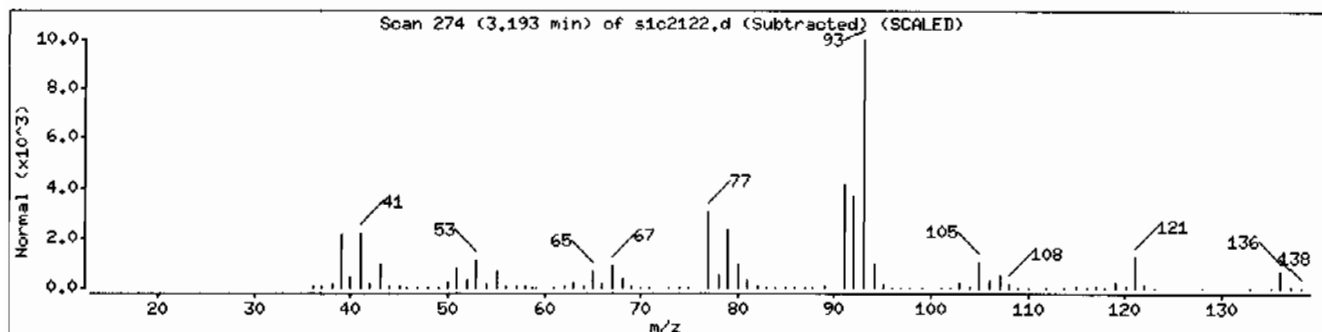
Volume Injected (uL): 0.5

Operator: AMY

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
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
1S-.alpha.-Pinene	7785-26-4	NIST05.L	15185	96	C10H16	136



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811SVH111LANL

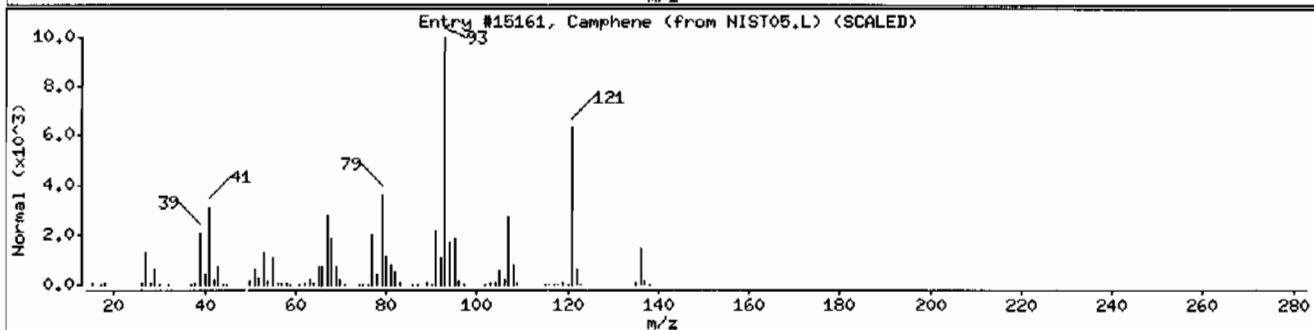
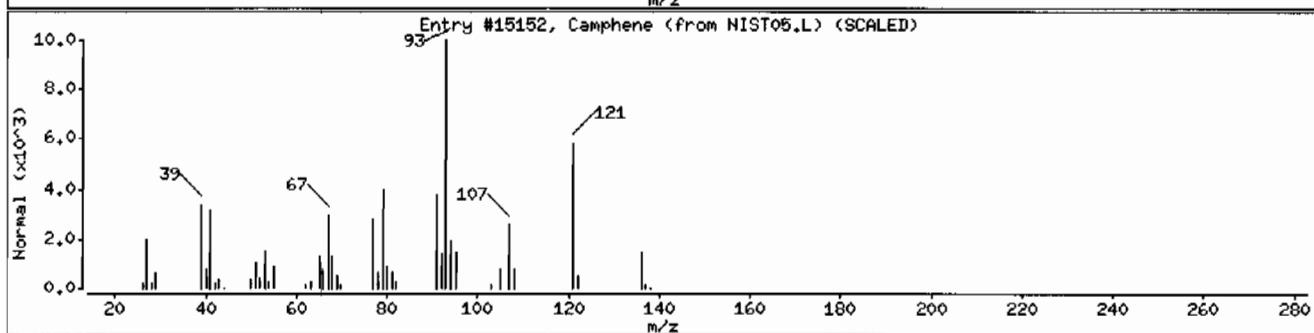
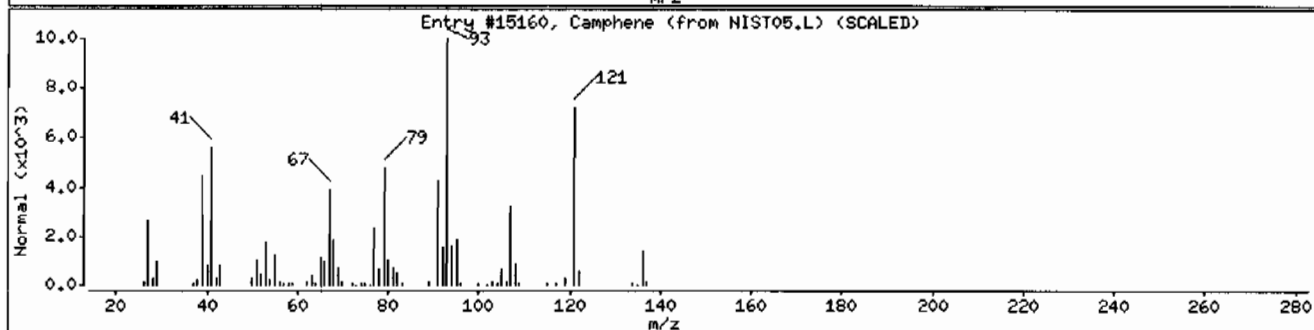
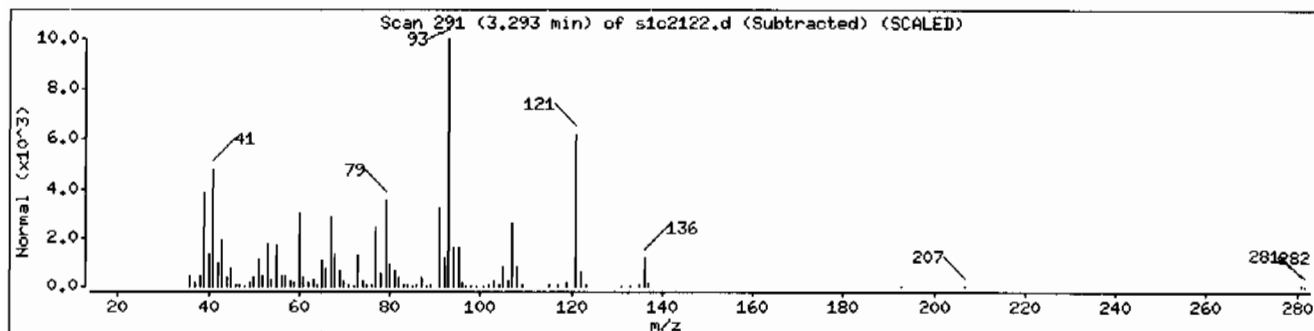
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST05.L	15160	98	C10H16	136
Camphene	79-92-5	NIST05.L	15152	97	C10H16	136
Camphene	79-92-5	NIST05.L	15161	97	C10H16	136



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811SVMI11LANL

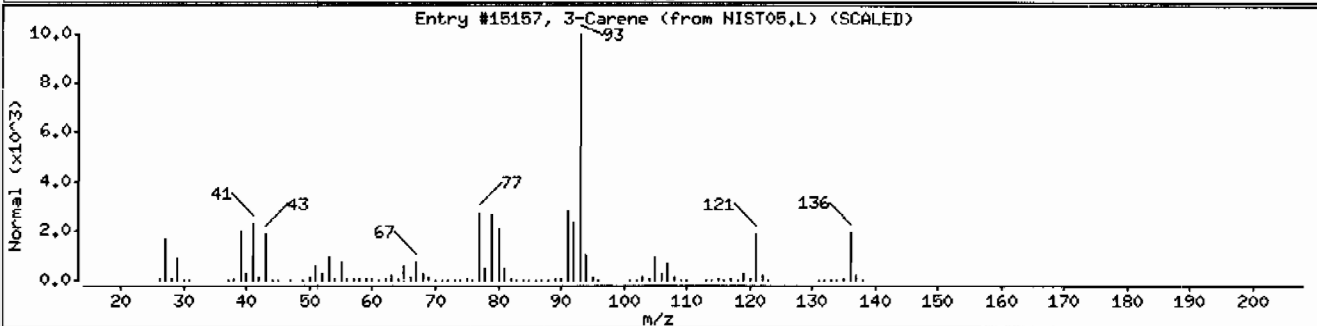
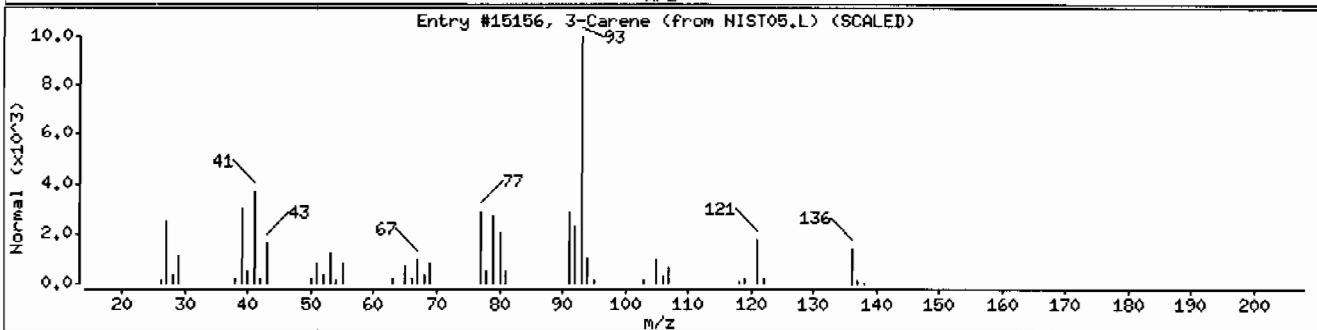
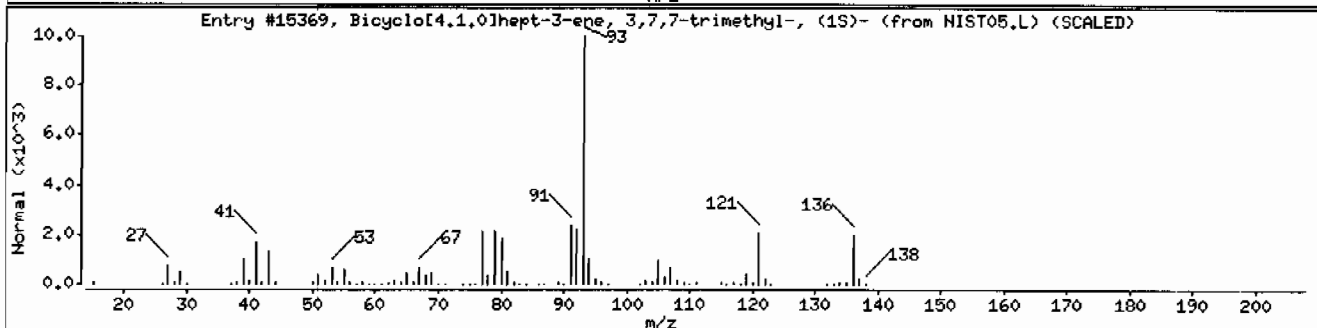
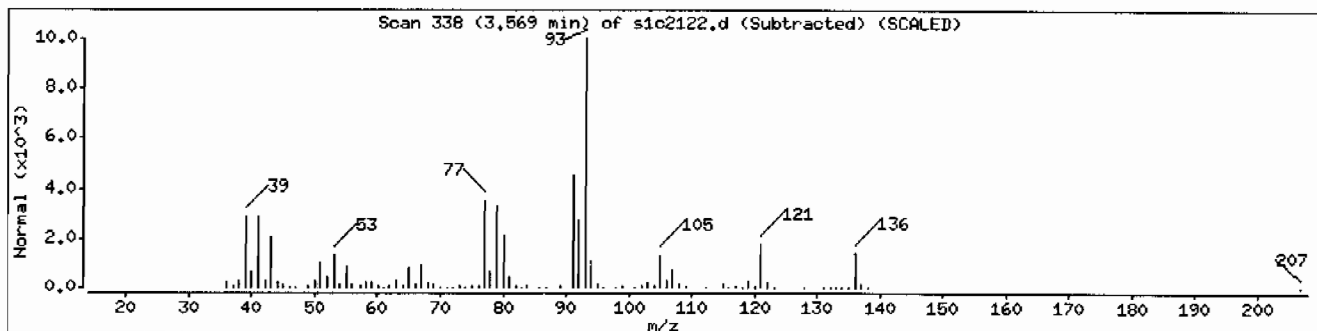
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST05.L	15369	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136



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Client ID: RE36-10-7486

Instrument: HSD1.i

Sample Info: 12483700121961228111SVH111LANL

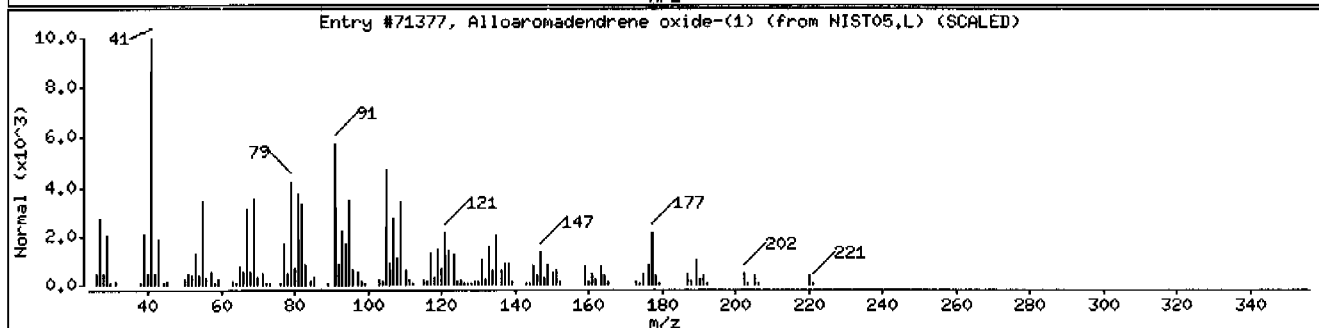
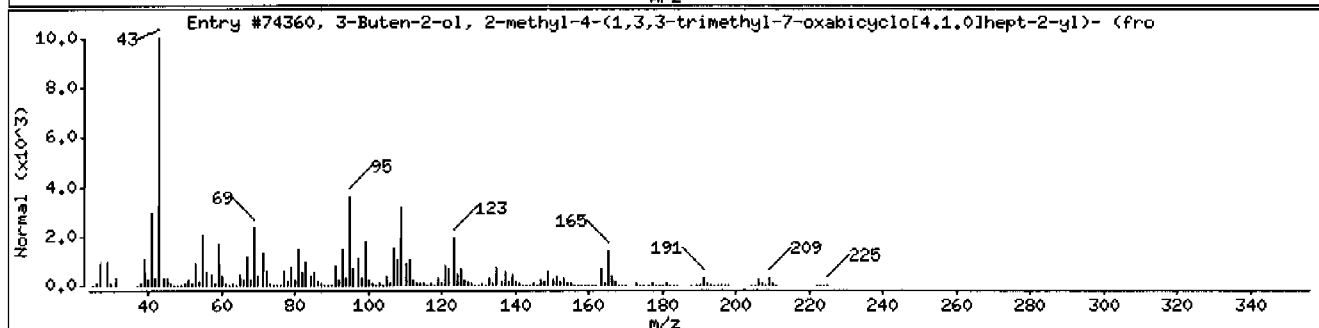
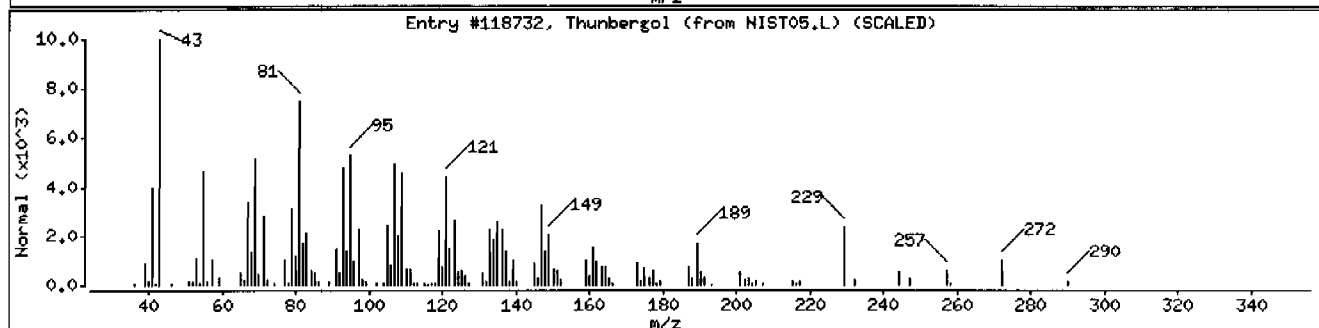
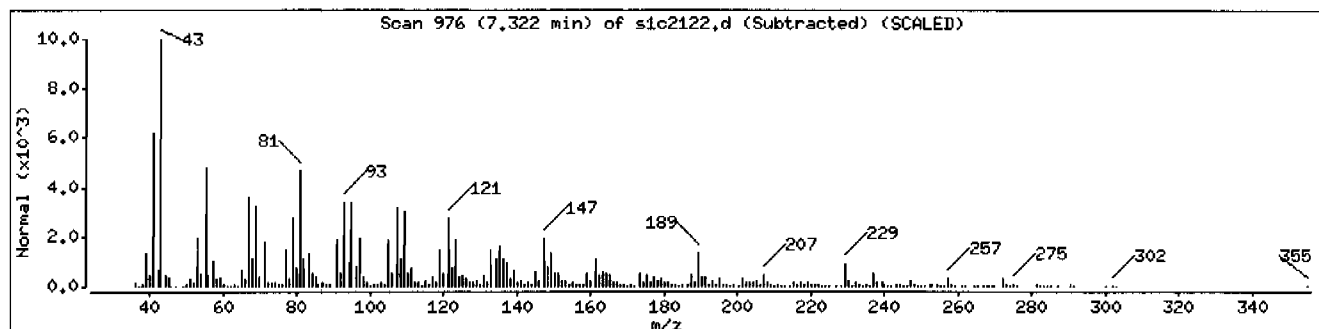
Volume Injected (uL): 0.5

Operator: AMY

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	58	C20H34O	290
3-Buten-2-ol, 2-methyl-4-(1,3,3-trimethy	72294-84-9	NIST05.L	74360	41	C14H24O2	224
Alloaromadendrene oxide-(1)	1000156-12-8	NIST05.L	71377	38	C15H24O	220



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Client ID: RE36-10-7486

Instrument: HSD1.i

Sample Info: I248370012196122811SVH111LANL

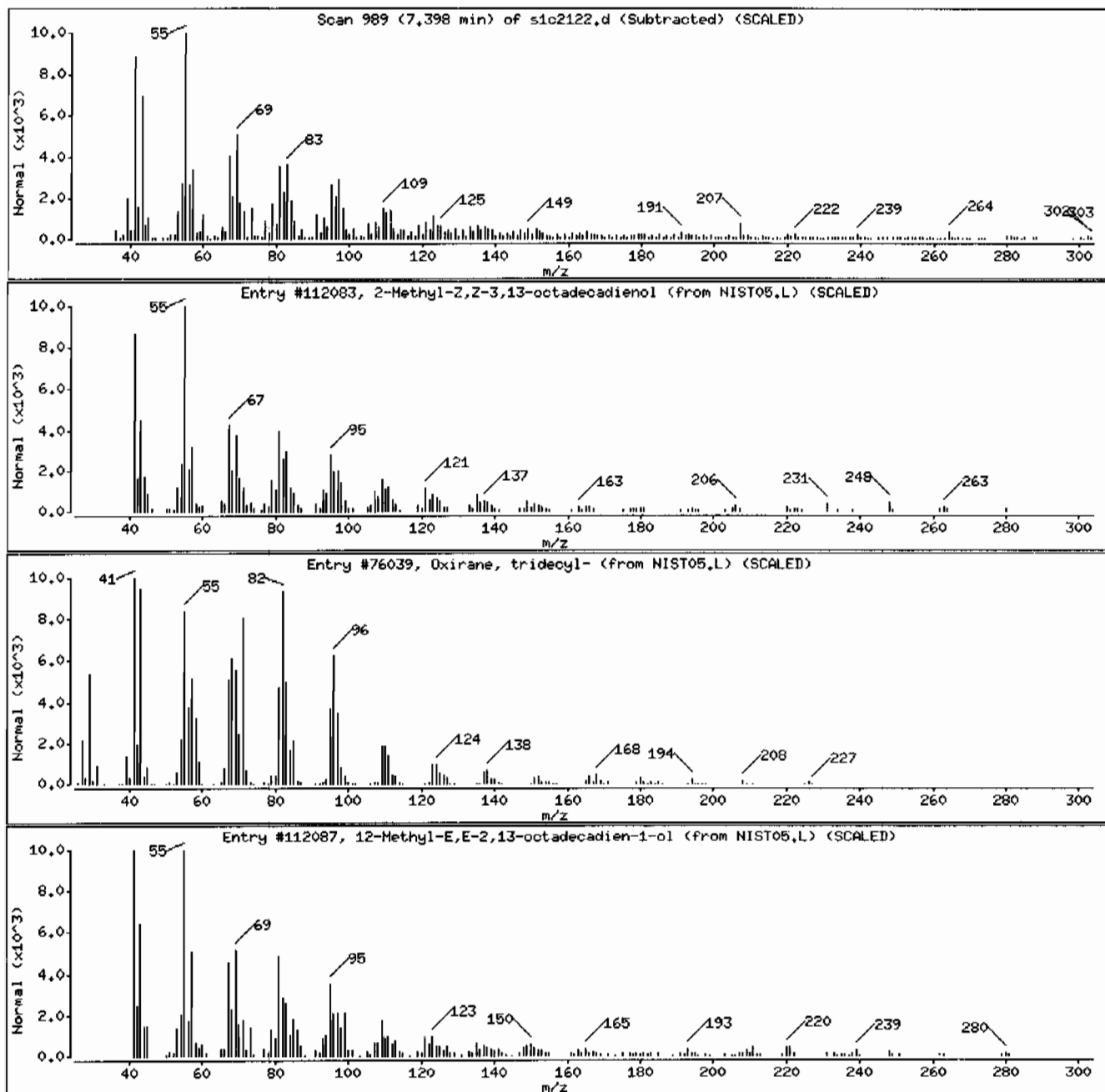
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Methyl-Z,Z-3,13-octadecadienol	1000130-90-5	NIST05.L	112083	92	C19H36O	280
Oxirane, tridecyl-	18633-25-5	NIST05.L	76039	90	C15H30O	226
12-Methyl-E,E-2,13-octadecadien-1-ol	1000130-90-4	NIST05.L	112087	90	C19H36O	280



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Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: I248370012196122811SVMI11LANL

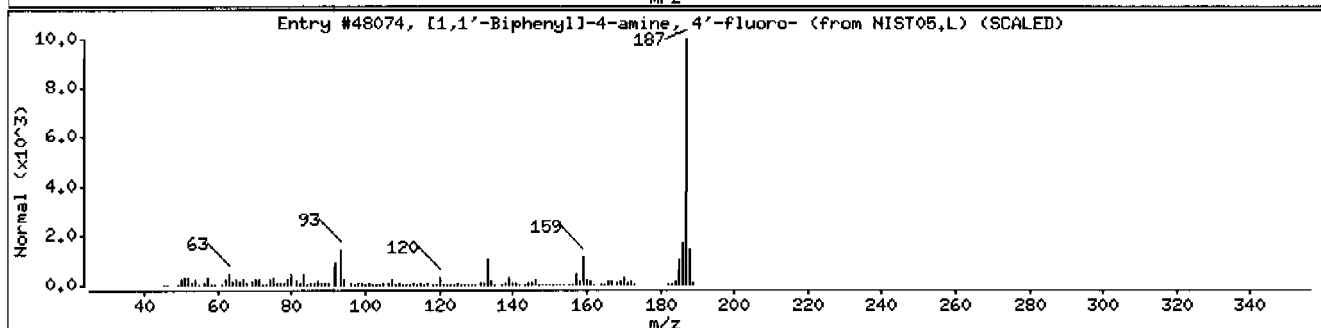
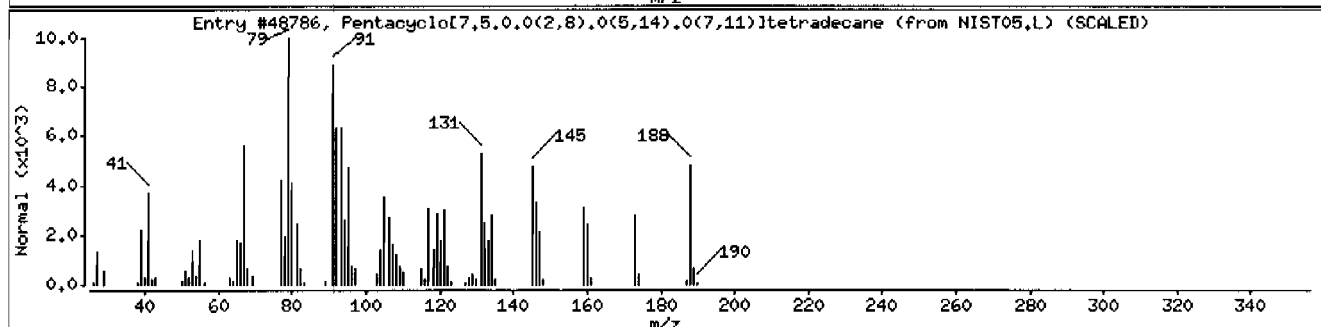
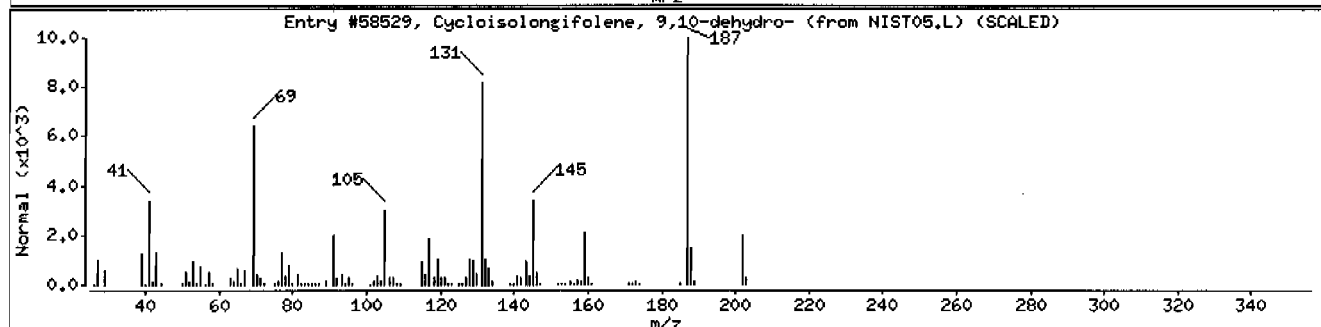
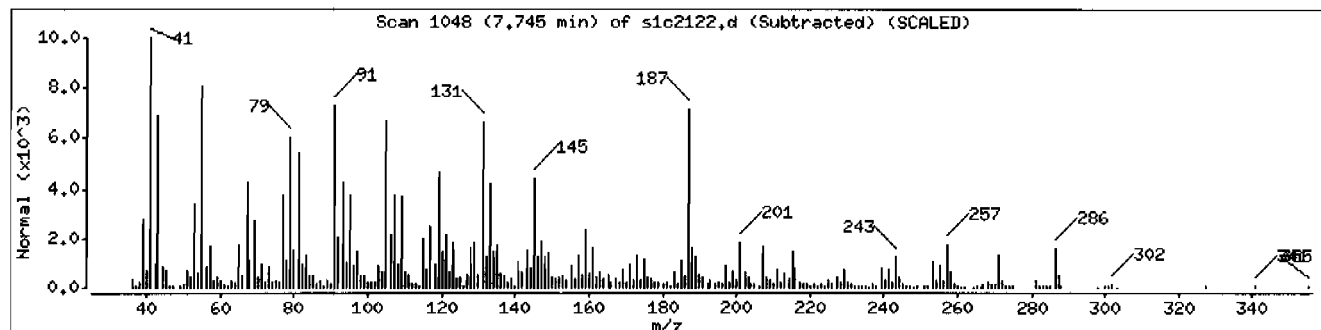
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cycloisolongifolene, 9,10-dehydro-	1000156-81-6	NIST05.L	58529	60	C15H22	202
Pentacyclo[7.5.0.0(2,8).0(5,14).0(7,11)]	79772-15-9	NIST05.L	48786	49	C14H20	188
[1,1'-Biphenyl]-4-amine, 4'-fluoro-	324-93-6	NIST05.L	48074	43	C12H10FN	187



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Client ID: RE36-10-7486

Instrument: HSD1.i

Sample Info: 12483700121961228111SVH111LANL

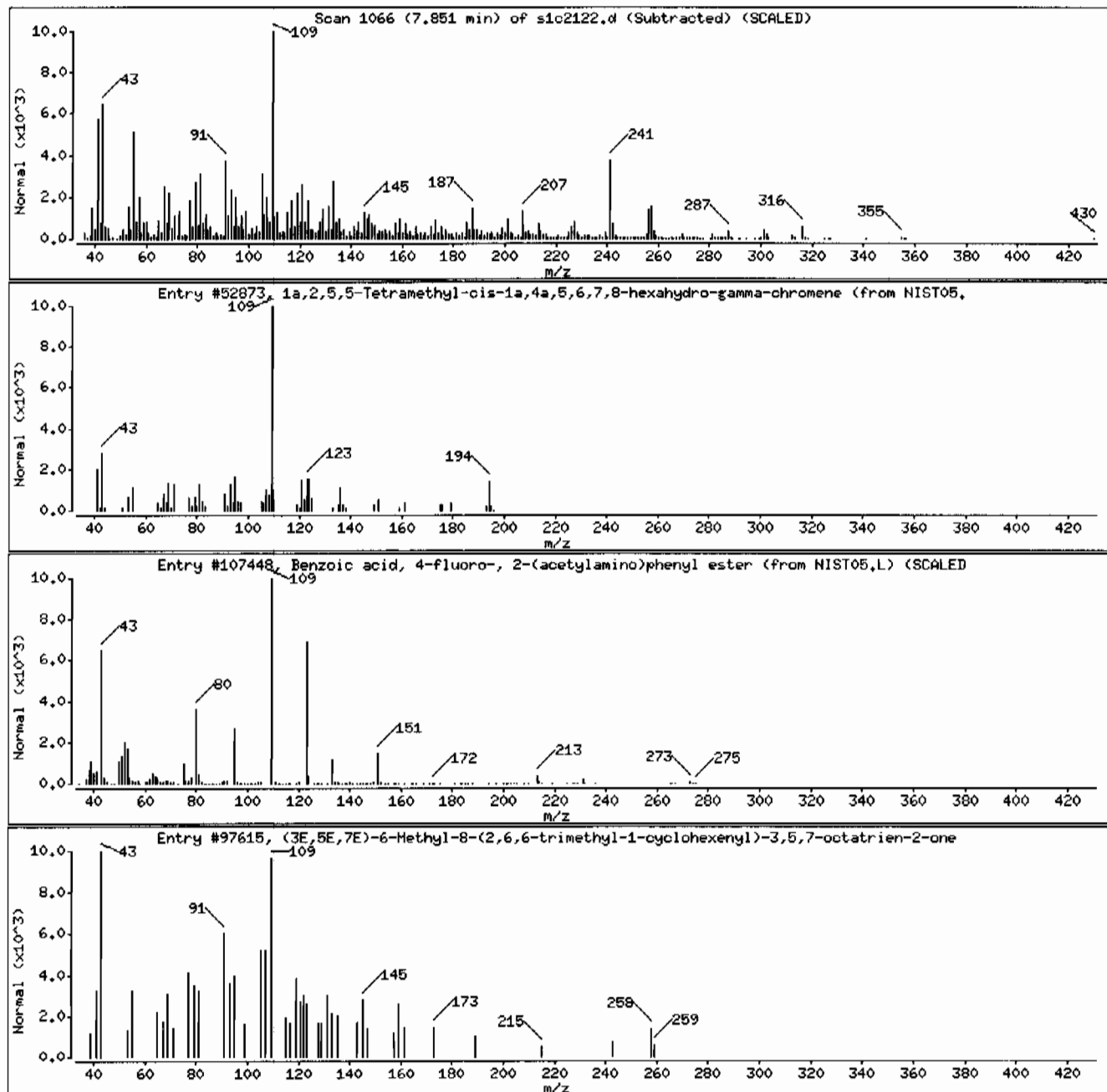
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1a,2,5,5-Tetramethyl-cis-1a,4a,5,6,7,8-h	1000215-77-7	NIST05.L	52873	43	C13H22O	194
Benzoic acid, 4-fluoro-, 2-(acetylamino)	173261-89-7	NIST05.L	107448	38	C15H12FN03	273
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	38	C18H26O	258



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811ISVM11ILANL

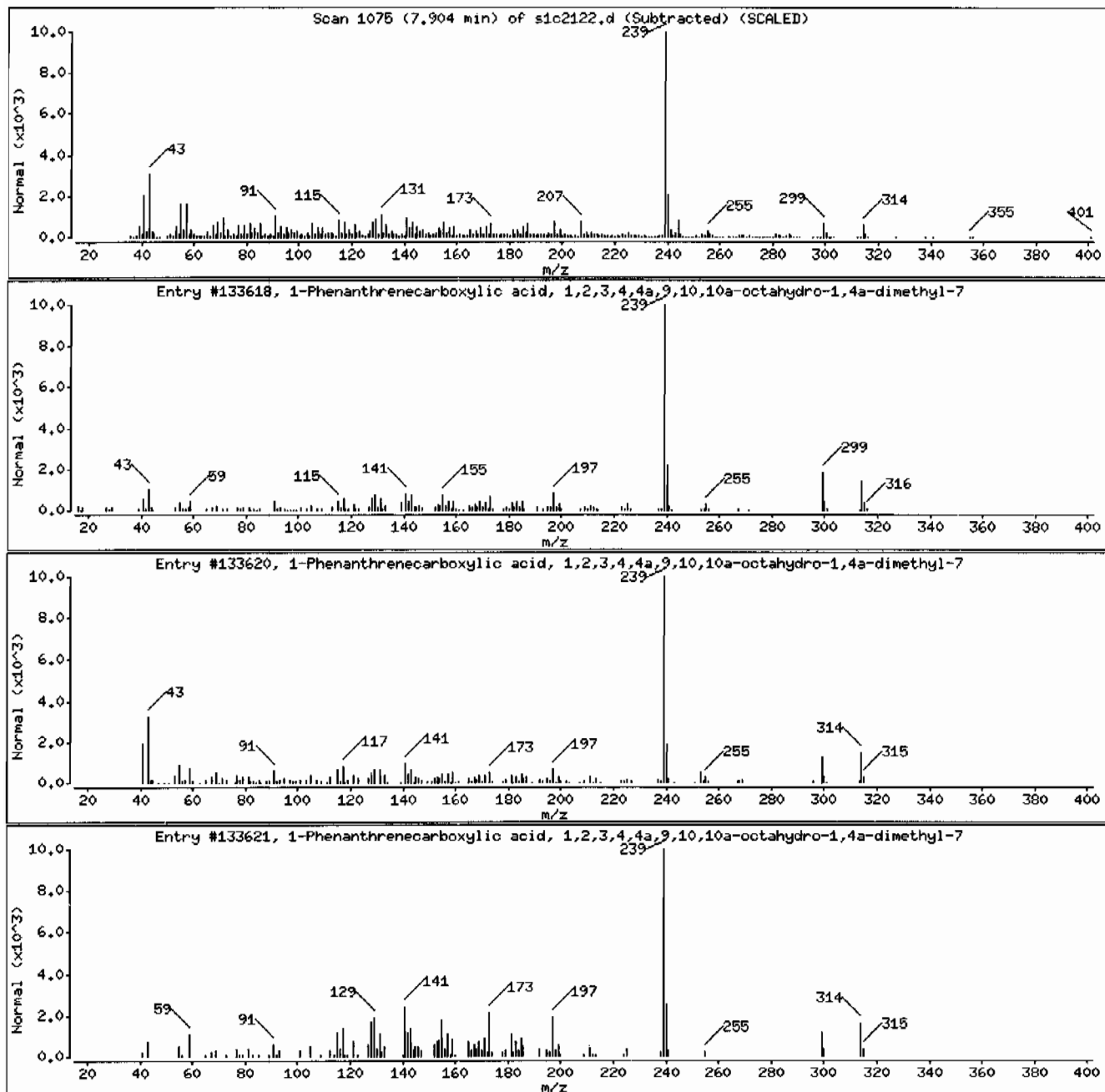
Volume Injected (uL): 0.5

Operator: AMY

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



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811SVH111LANL

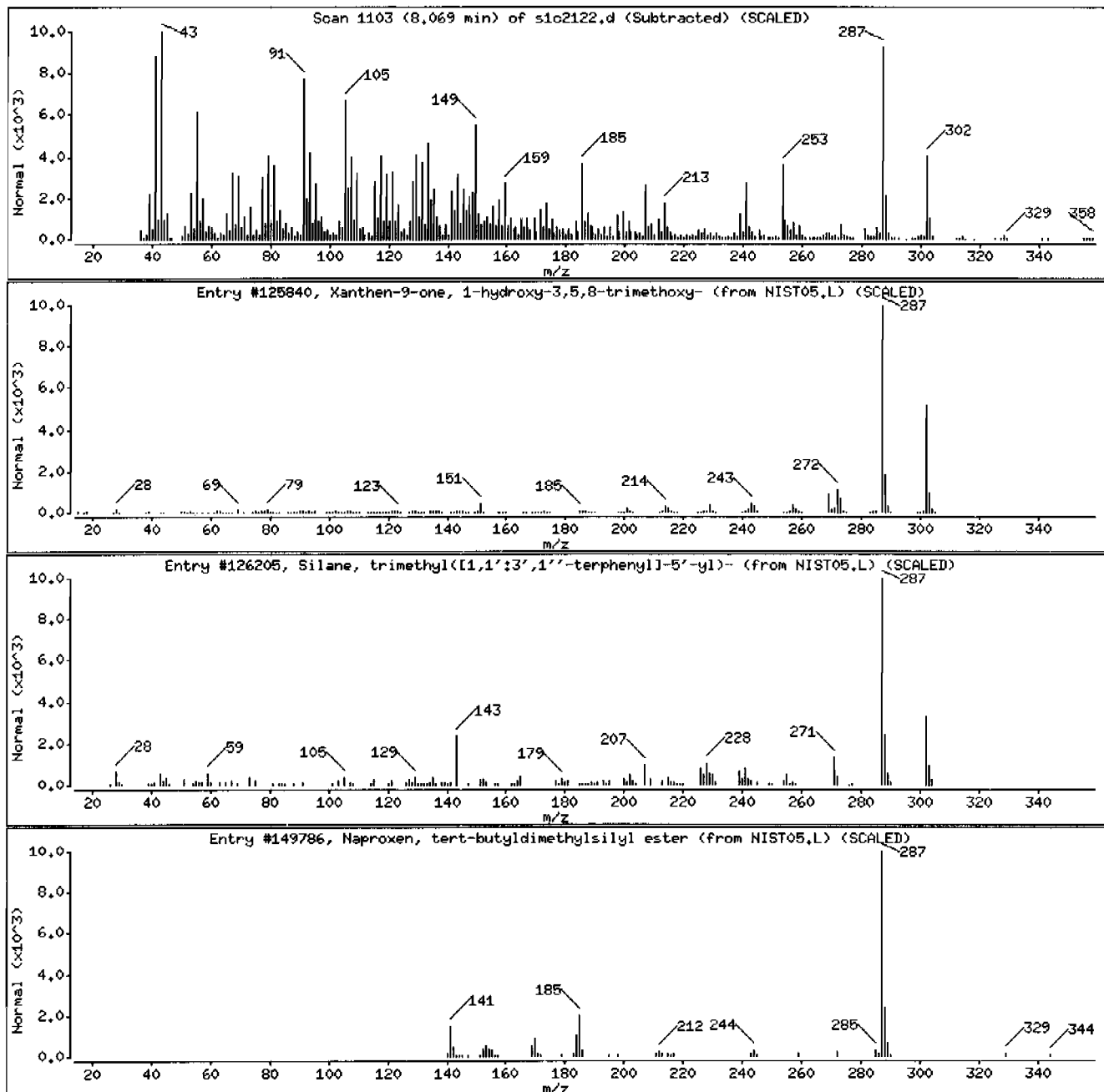
Volume Injected (uL): 0.5

Operator: AMY

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	55	C16H14O6	302
Silane, trimethyl(1,1':3',1''-terphenyl	128388-53-4	NIST05.L	126205	38	C21H22Si	302
Naproxen, tert-butyldimethylsilyl ester	1000314-43-3	NIST05.L	149786	38	C20H28O3Si	344



Date: 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 12483700121961228111SVMI11LANL

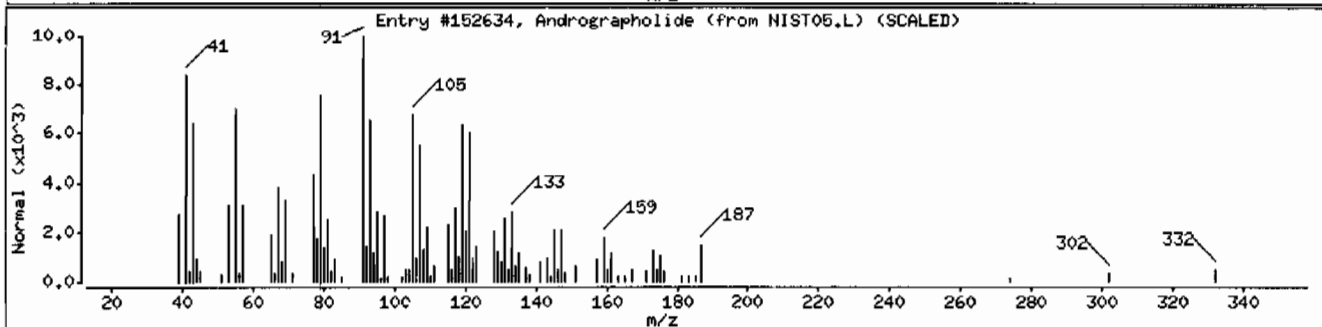
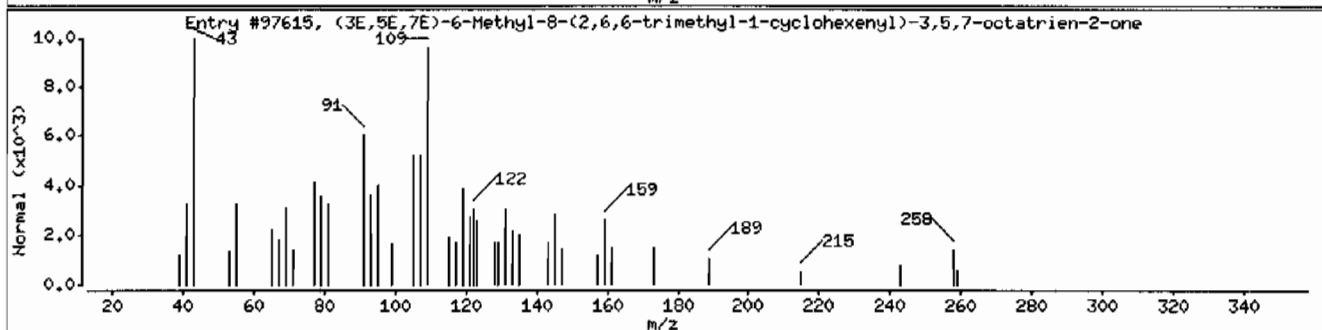
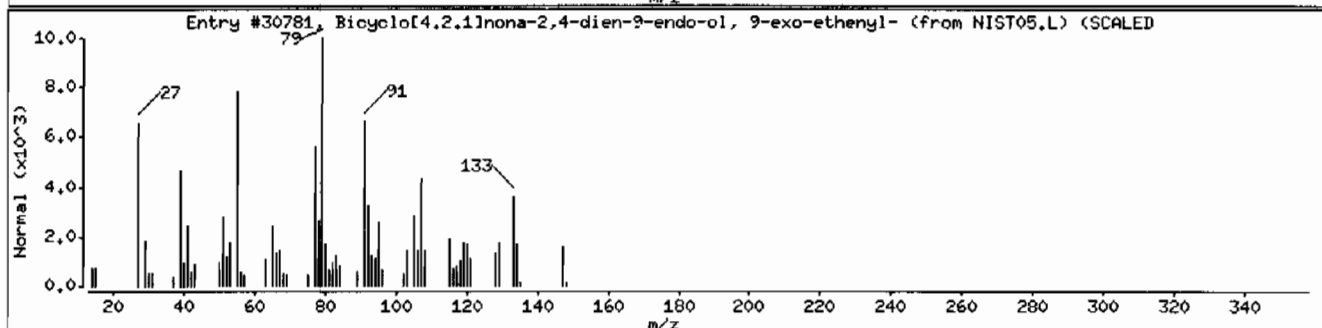
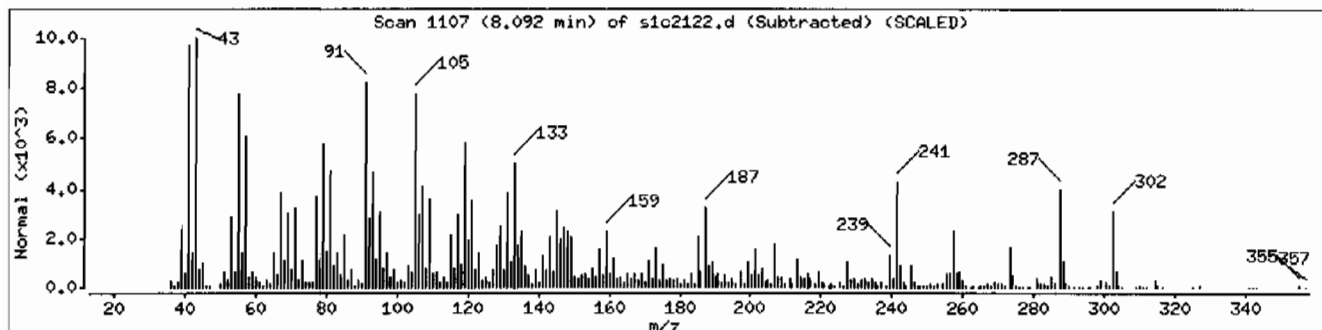
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[4.2.1]nona-2,4-dien-9-endo-ol, 9	138146-02-8	NIST05.L	30781	14	C11H14O	162
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	14	C18H26O	258
Andrographolide	5508-58-7	NIST05.L	152634	12	C20H30O5	350



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: I248370012196122811SVH11ILANL

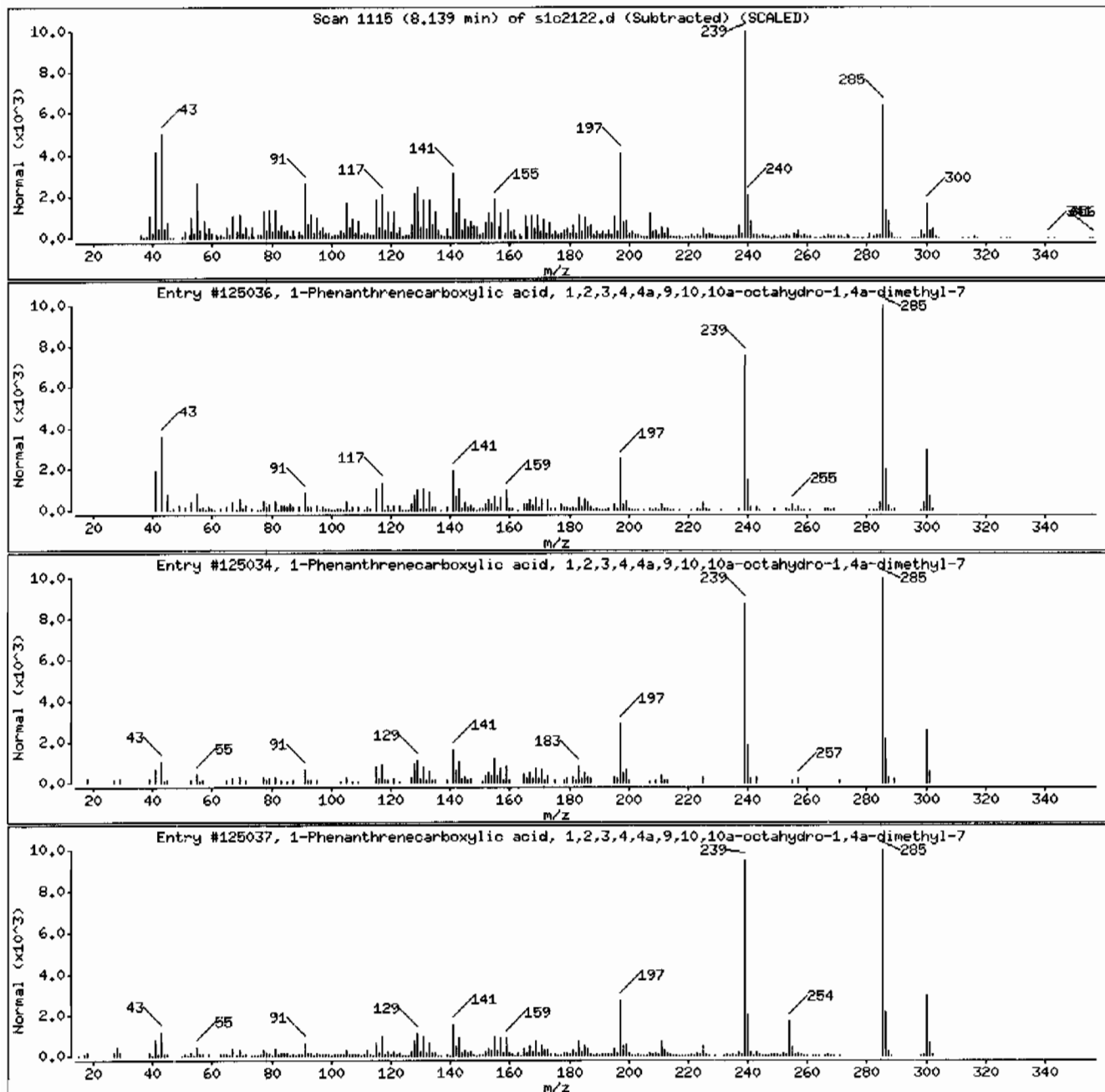
Volume Injected (uL): 0.5

Operator: AMY

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	95	C20H28O2	300
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	125037	93	C20H28O2	300



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: 1248370012196122811SVH111LANL

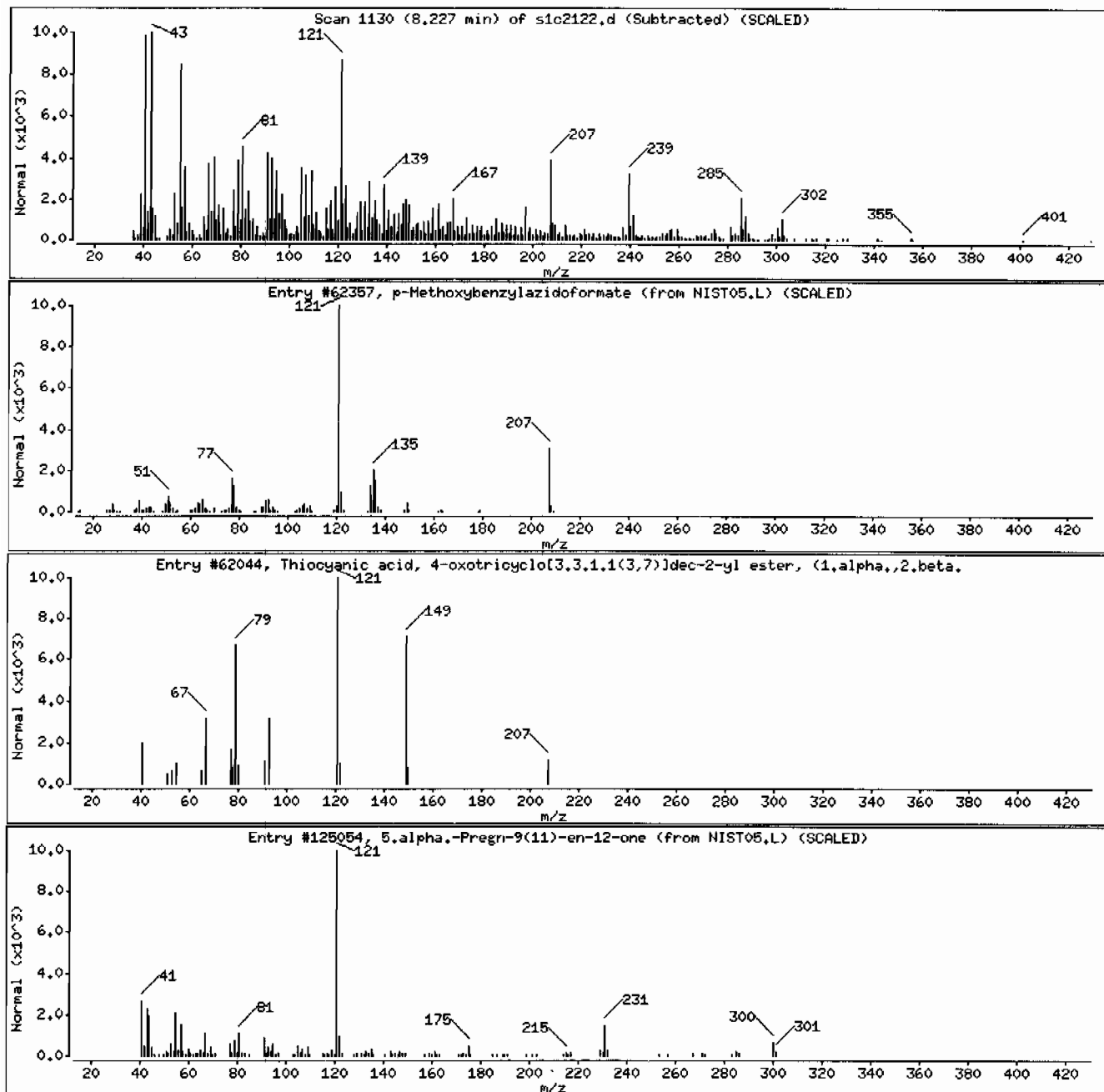
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
p-Methoxybenzylazidoformate	25474-85-5	NIST05.L	62357	38	C9H9N3O3	207
Thiocyanic acid, 4-oxotricyclo[3.3.1.1 ^{3,7}]	56781-89-6	NIST05.L	62044	35	C11H13NOS	207
5.alpha.-Pregn-9(11)-en-12-one	4354-35-2	NIST05.L	125054	35	C21H32O	300



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: I2483700121961228111SVMI11LANL

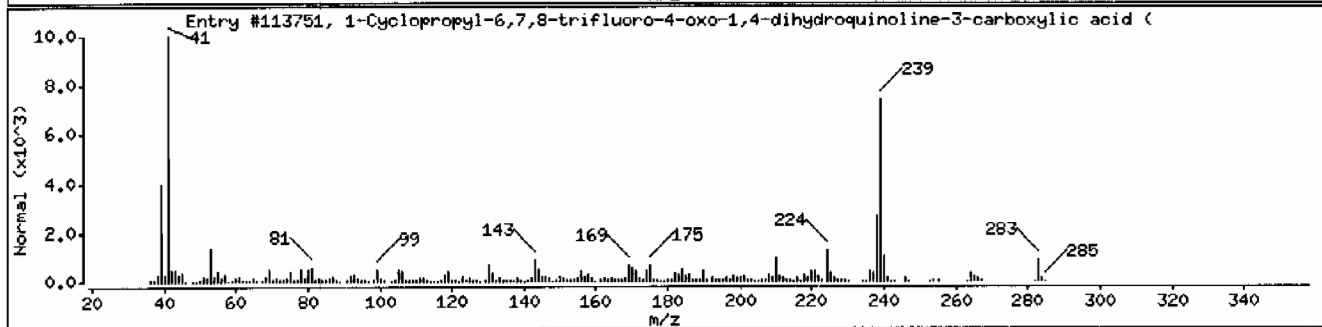
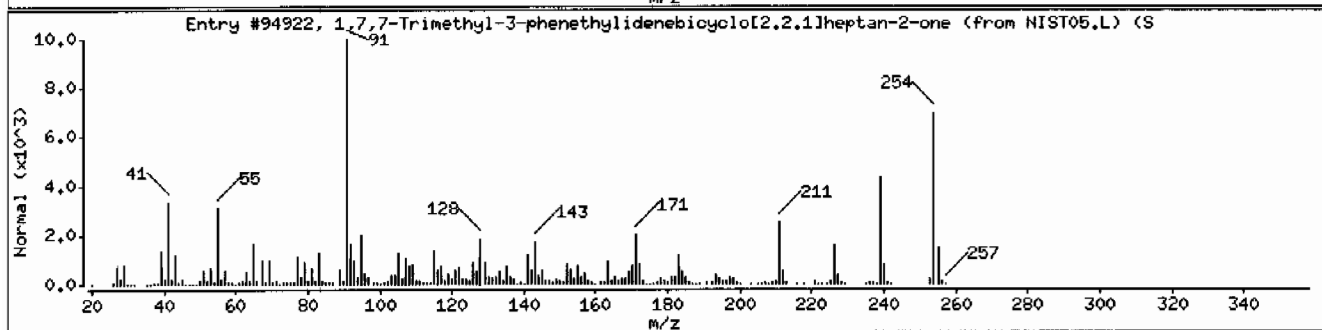
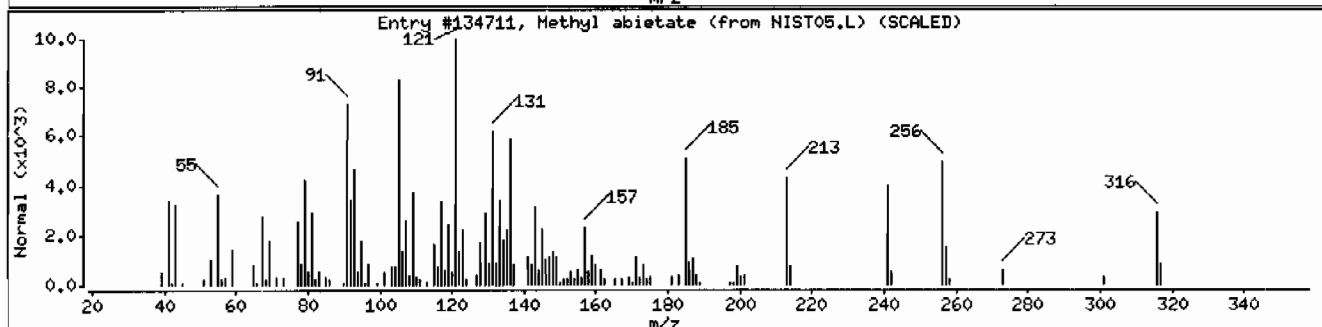
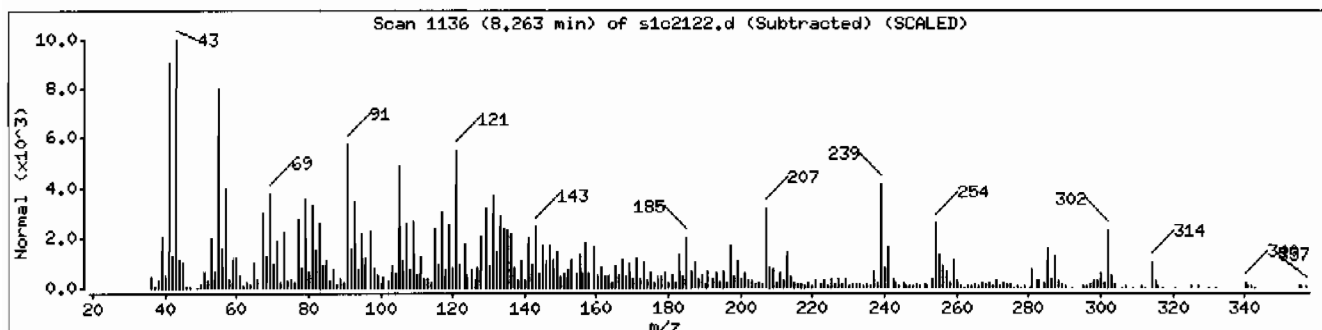
Volume Injected (uL): 0.5

Operator: AMY

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	11	C21H32O2	316
1,7,7-Trimethyl-3-phenethylidenebicyclo[	1000210-75-8	NIST05.L	94922	10	C18H22O	254
1-Cyclopropyl-6,7,8-trifluoro-4-oxo-1,4-	94695-52-0	NIST05.L	113751	10	C13H8F3NO3	283



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: I248370012196122811SVMI1ILANL

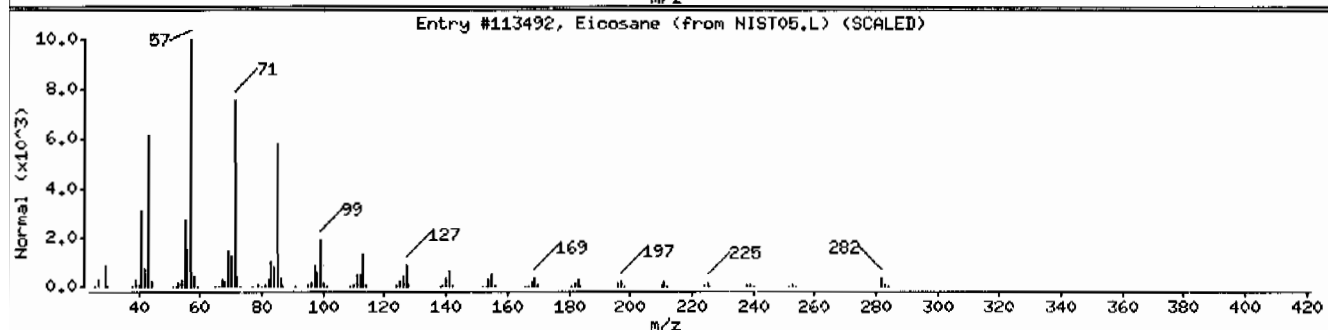
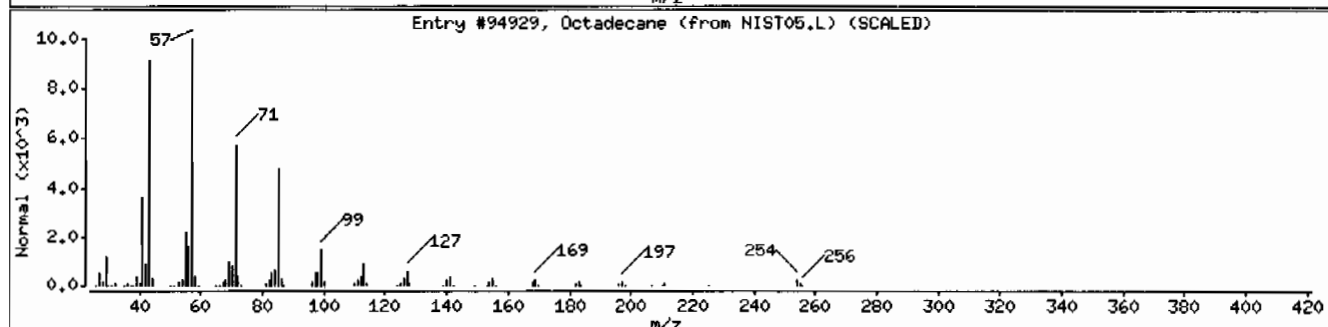
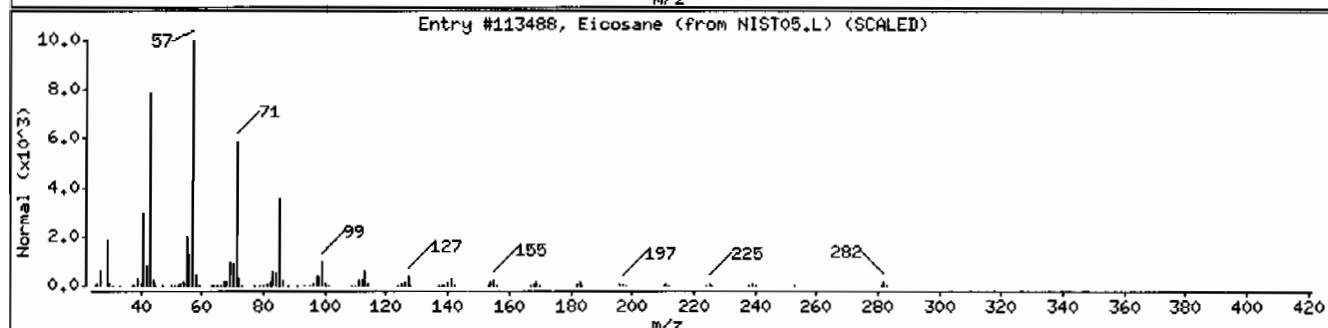
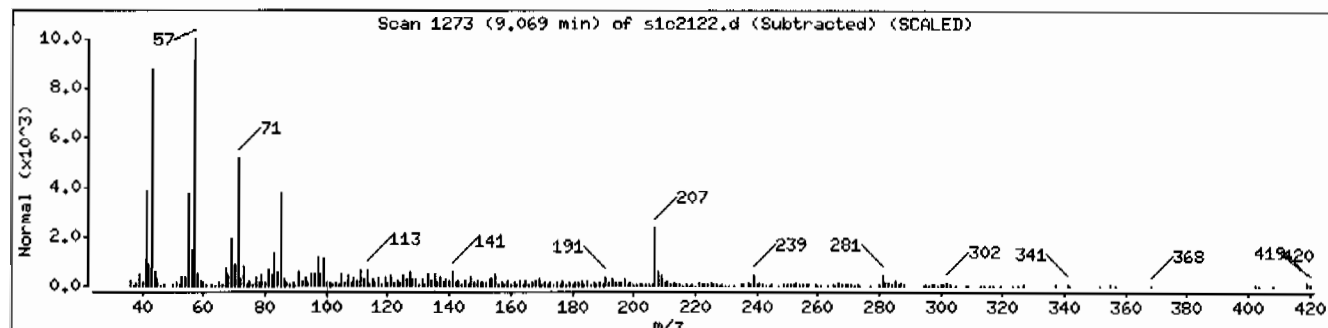
Volume Injected (uL): 0.5

Operator: AMY

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	113488	95	C20H42	282
Octadecane	593-45-3	NIST05.L	94929	92	C18H38	254
Eicosane	112-95-8	NIST05.L	113492	92	C20H42	282



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: HSD1,i

Sample Info: I248370012/961228/11SVH/11LANL

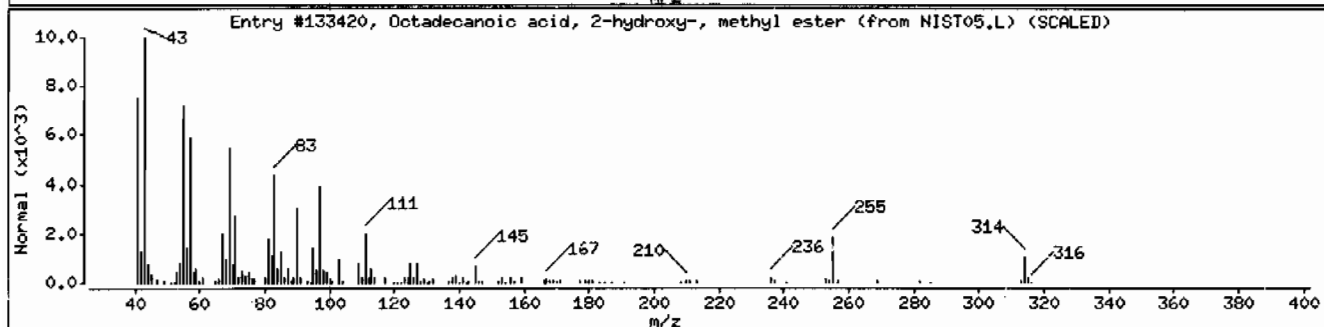
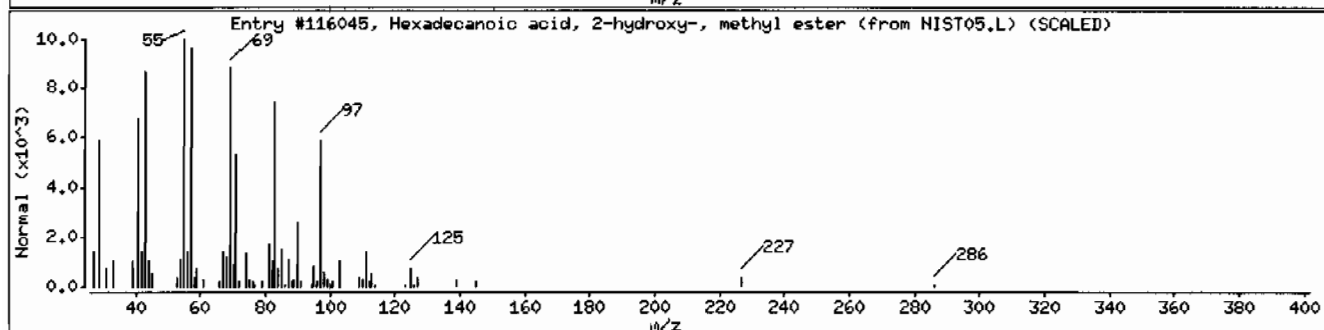
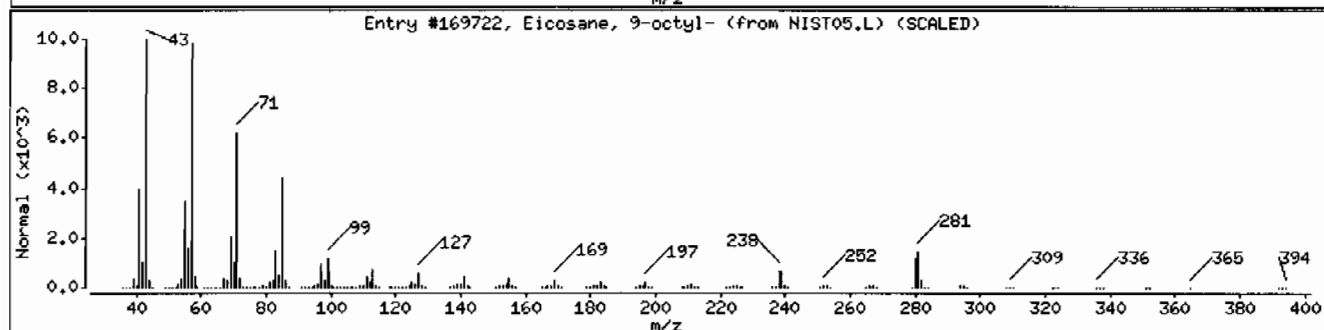
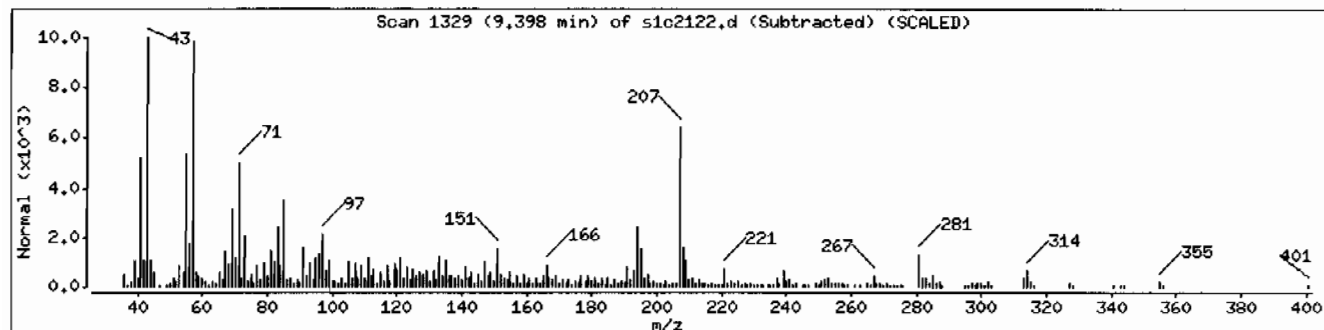
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	30	C28H58	394
Hexadecanoic acid, 2-hydroxy-, methyl es	16742-51-1	NIST05.L	116045	25	C17H34O3	286
Octadecanoic acid, 2-hydroxy-, methyl es	2420-35-1	NIST05.L	133420	25	C19H38O3	314



Date: 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: HSD1.i

Sample Info: 1248370012196122811SVH11LANL

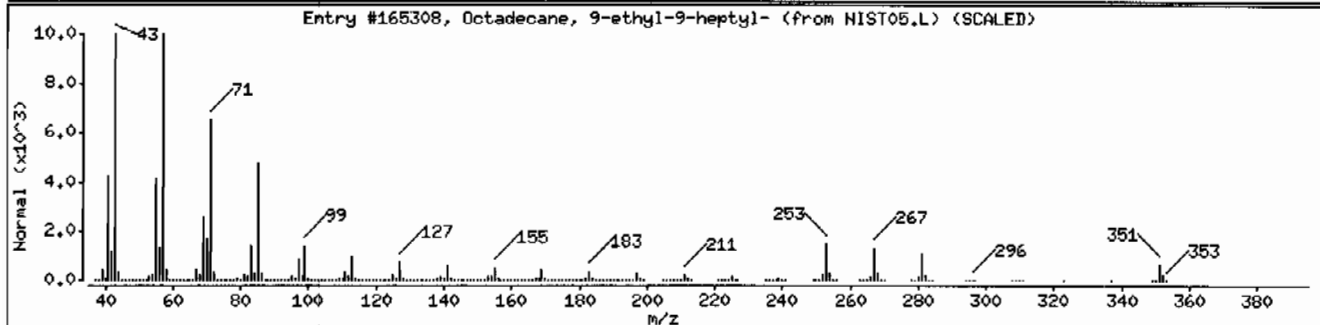
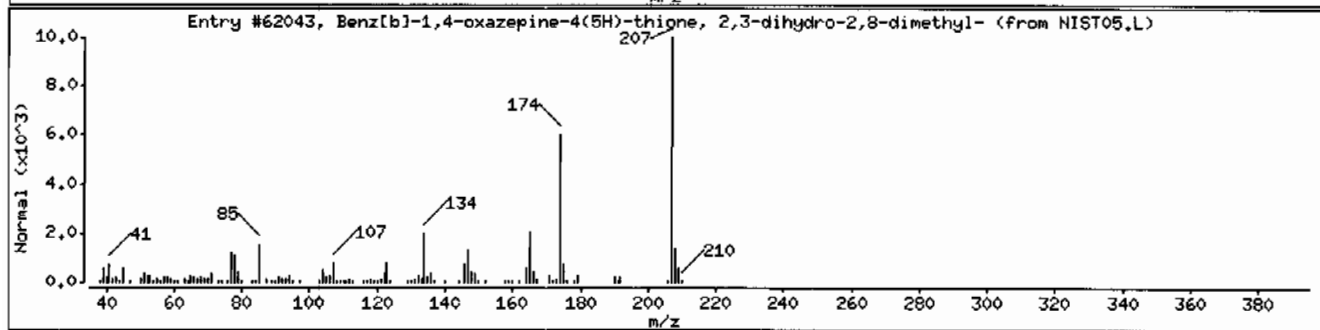
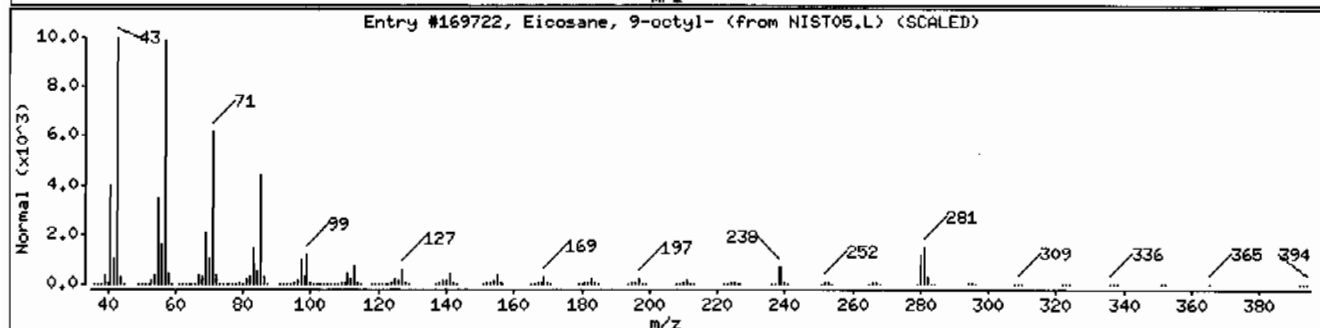
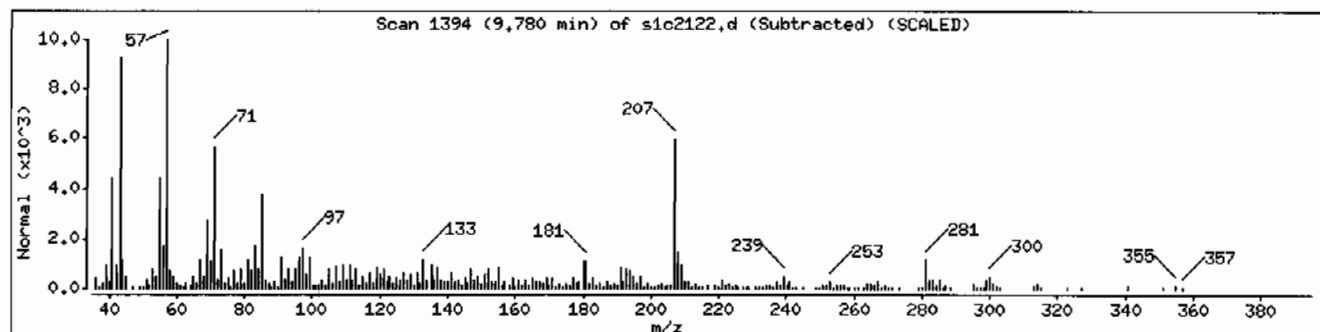
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	46	C28H58	394
Benz[b]-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	38	C11H13NOS	207
Octadecane, 9-ethyl-9-heptyl-	55282-27-4	NIST05.L	165308	35	C27H56	380



Date: 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: HSD1.i

Sample Info: 1248370012196122811SVMI1ILANL

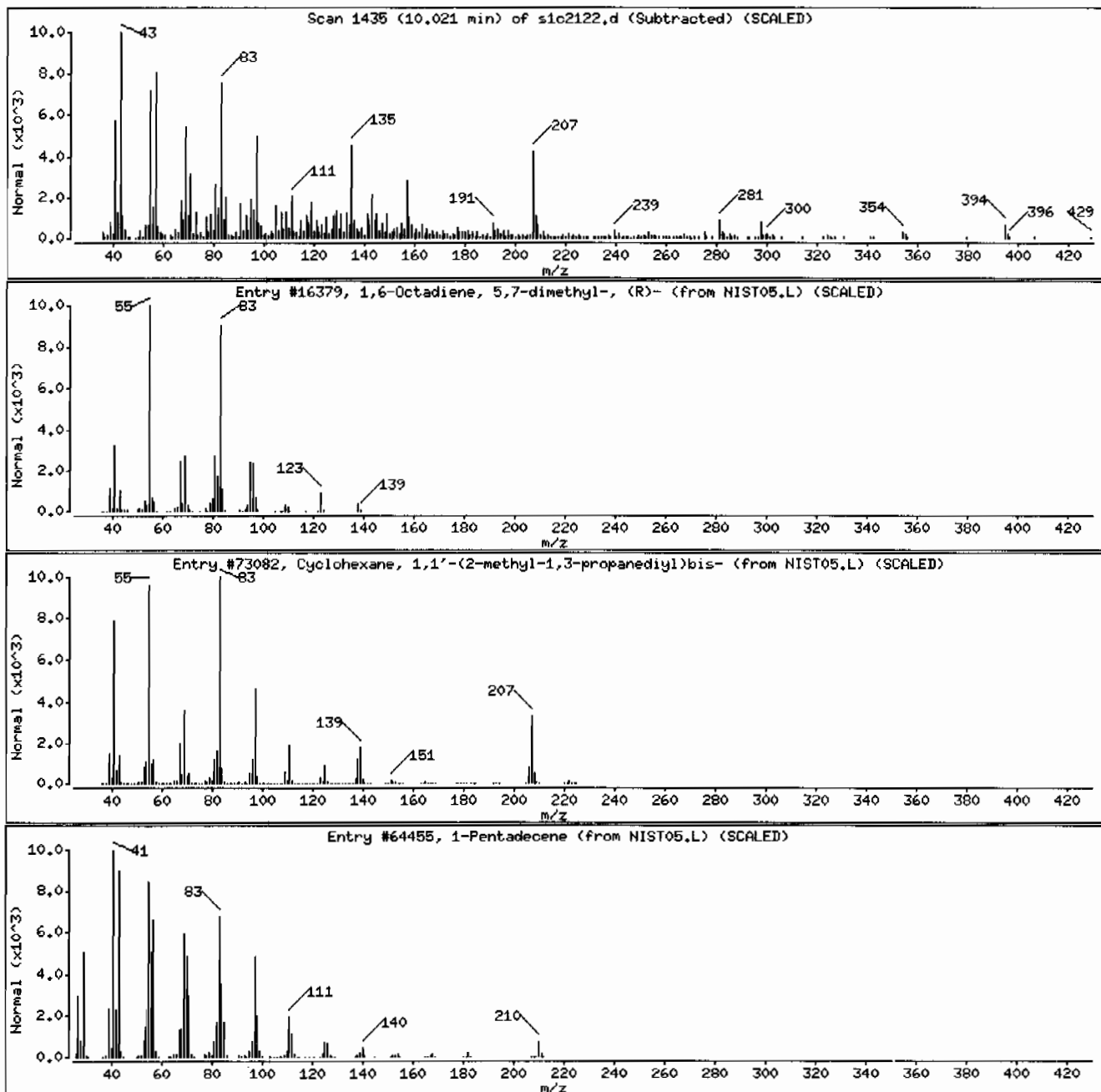
Volume Injected (uL): 0.5

Operator: AMY

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	C10H18	138
Cyclohexane, 1,1'-(2-methyl-1,3-propanediyl)bis-	2883-08-1	NIST05.L	73082	55	C16H30	222
1-Pentadecene	13360-61-7	NIST05.L	64455	46	C15H30	210



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: HSD1.i

Sample Info: I248370012196122811SVMI11LANL

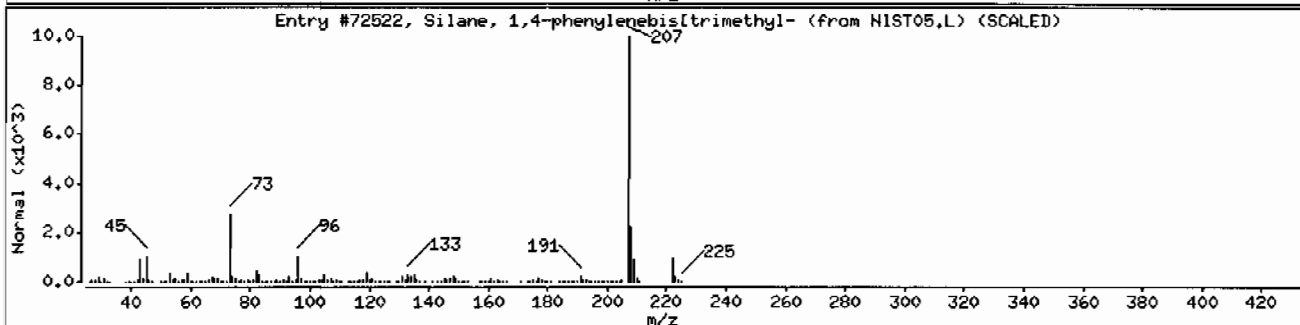
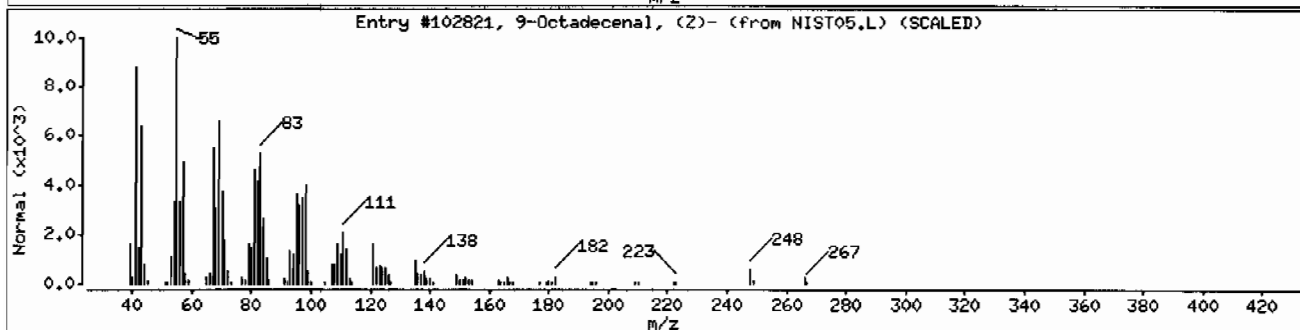
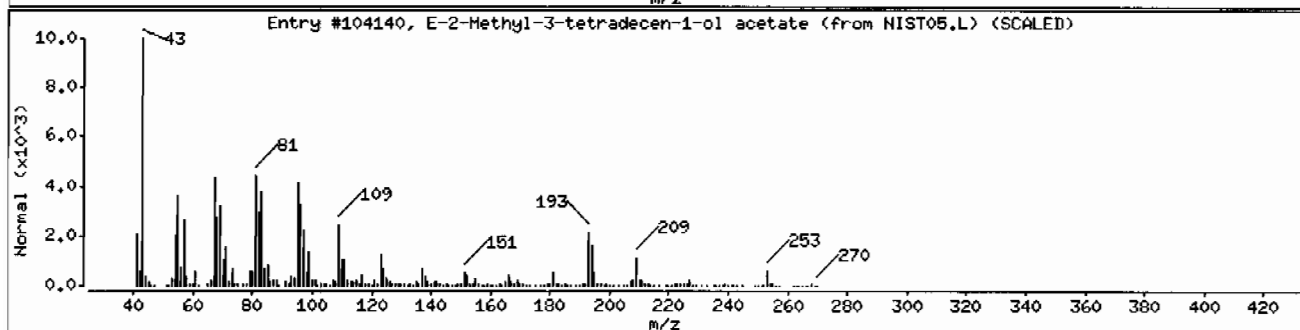
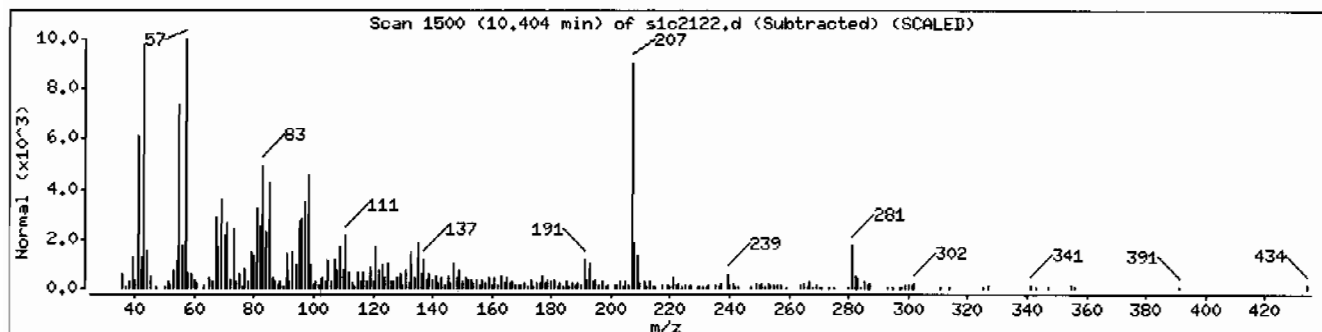
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
E-2-Methyl-3-tetradecen-1-ol acetate	1000130-81-2	NIST05.L	104140	46	C17H32O2	268
9-Octadecenal, (Z)-	2423-10-1	NIST05.L	102821	41	C18H34O	266
Silane, 1,4-phenylenebis(trimethyl)-	13183-70-5	NIST05.L	72522	30	C12H22Si2	222



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: HSD1.i

Sample Info: 1248370012196122811SVMI11LANL

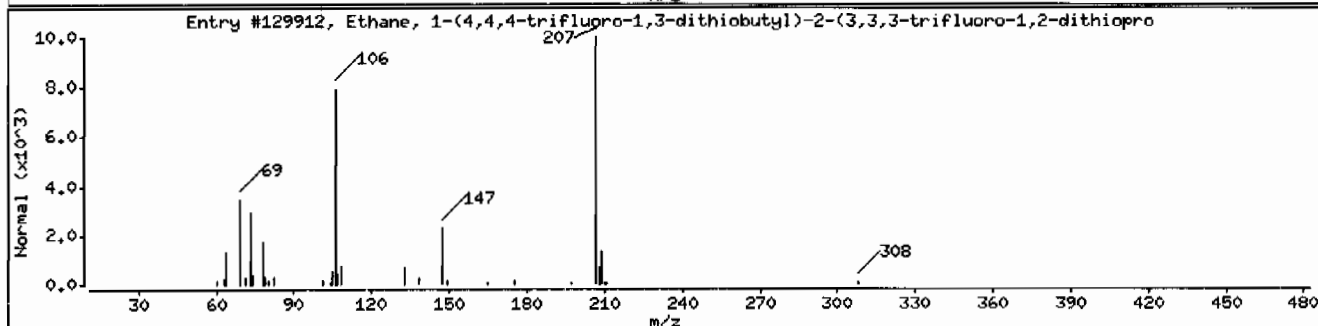
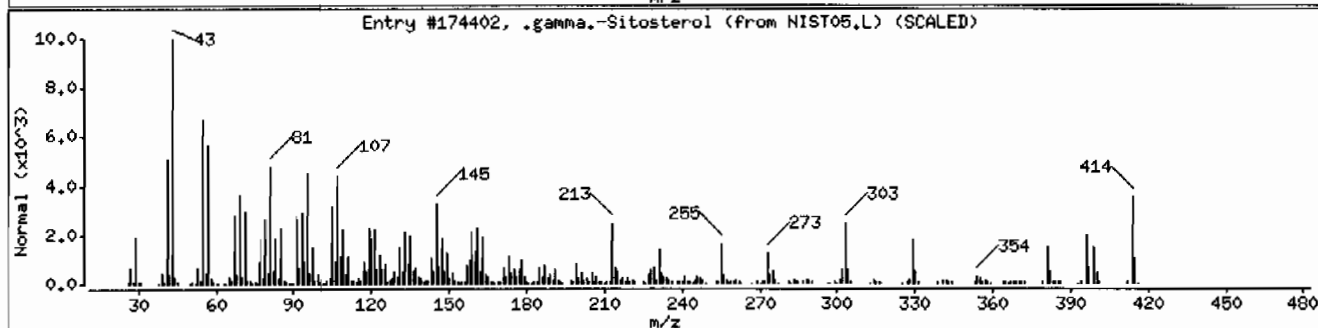
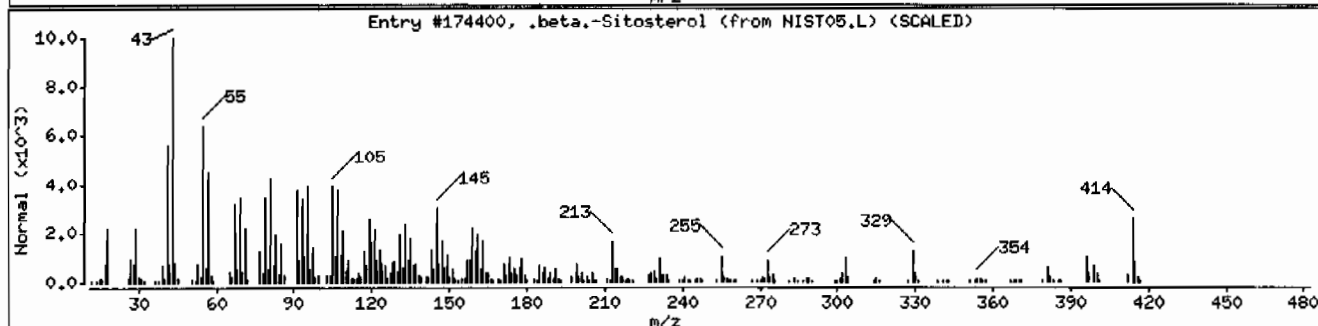
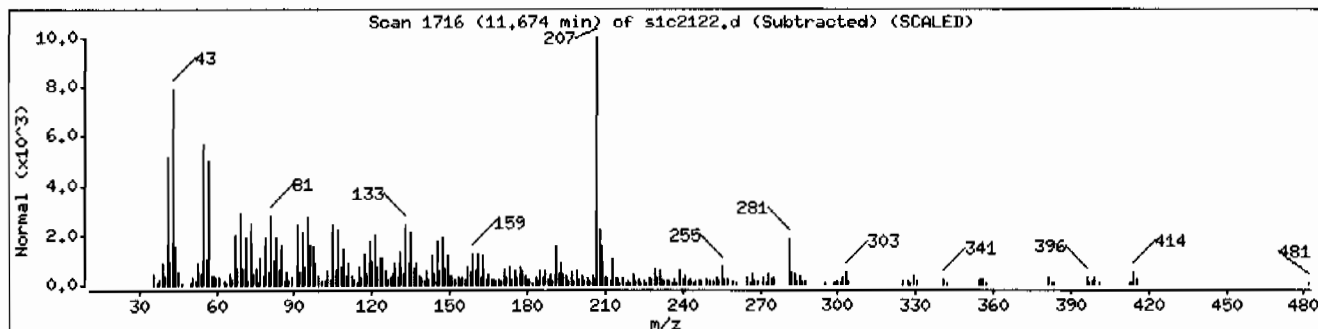
Volume Injected (uL): 0.5

Operator: AMY

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	91	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	91	C29H50O	414
Ethane, 1-(4,4,4-trifluoro-1,3-dithiobut	1000226-87-3	NIST05.L	129912	43	C5H6F6S4	308



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: HSD1.i

Sample Info: 1248370012196122811SVH111LANL

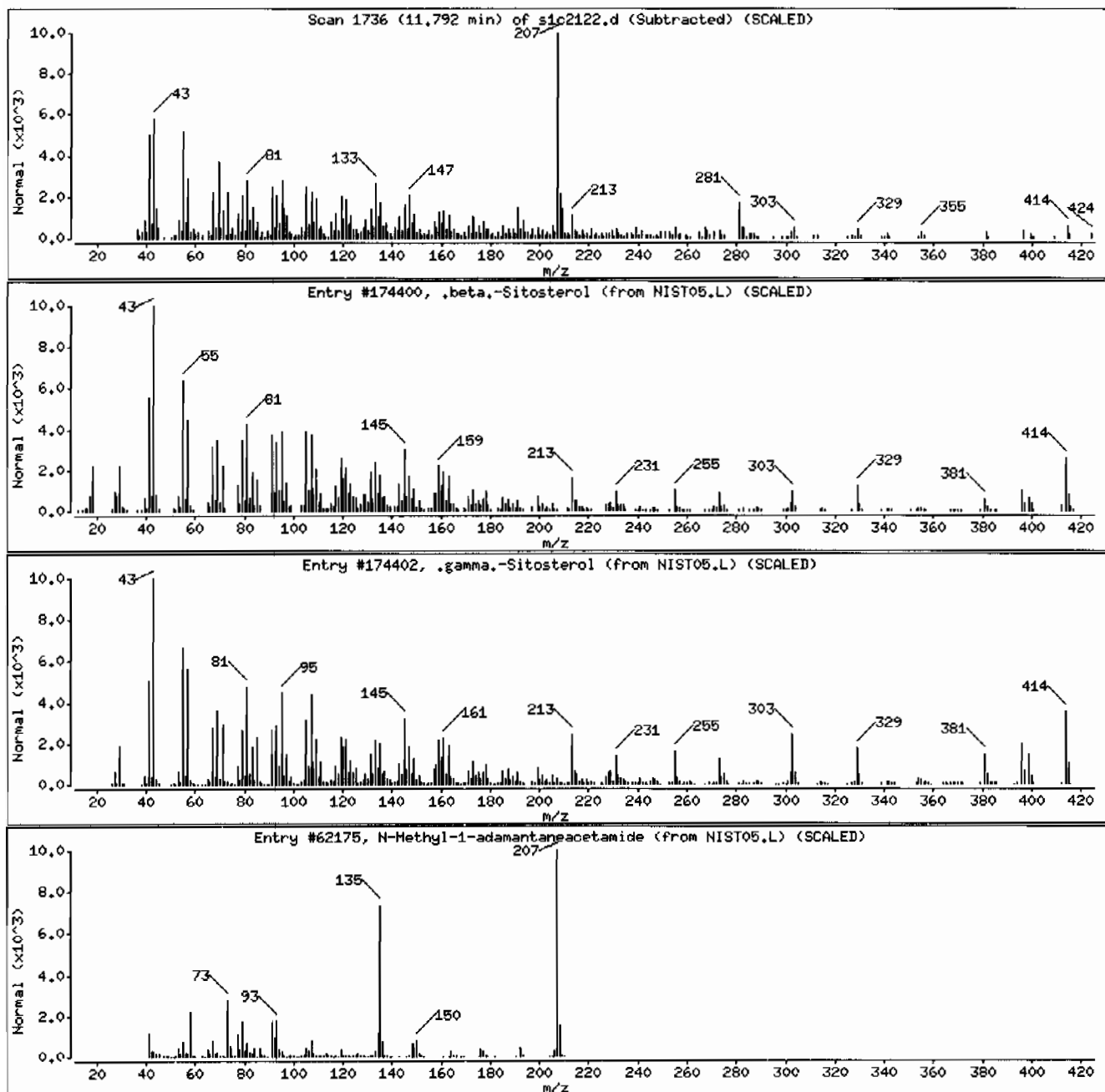
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.beta.-Sitosterol	83-46-5	NIST05.L	174400	91	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	56	C ₂₉ H ₅₀ O	414
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	45	C ₁₃ H ₂₁ NO	207



Date : 22-MAR-2010 00:54

Client ID: RE36-10-7486

Instrument: MSD1.i

Sample Info: I248370012196122811SVH111LANL

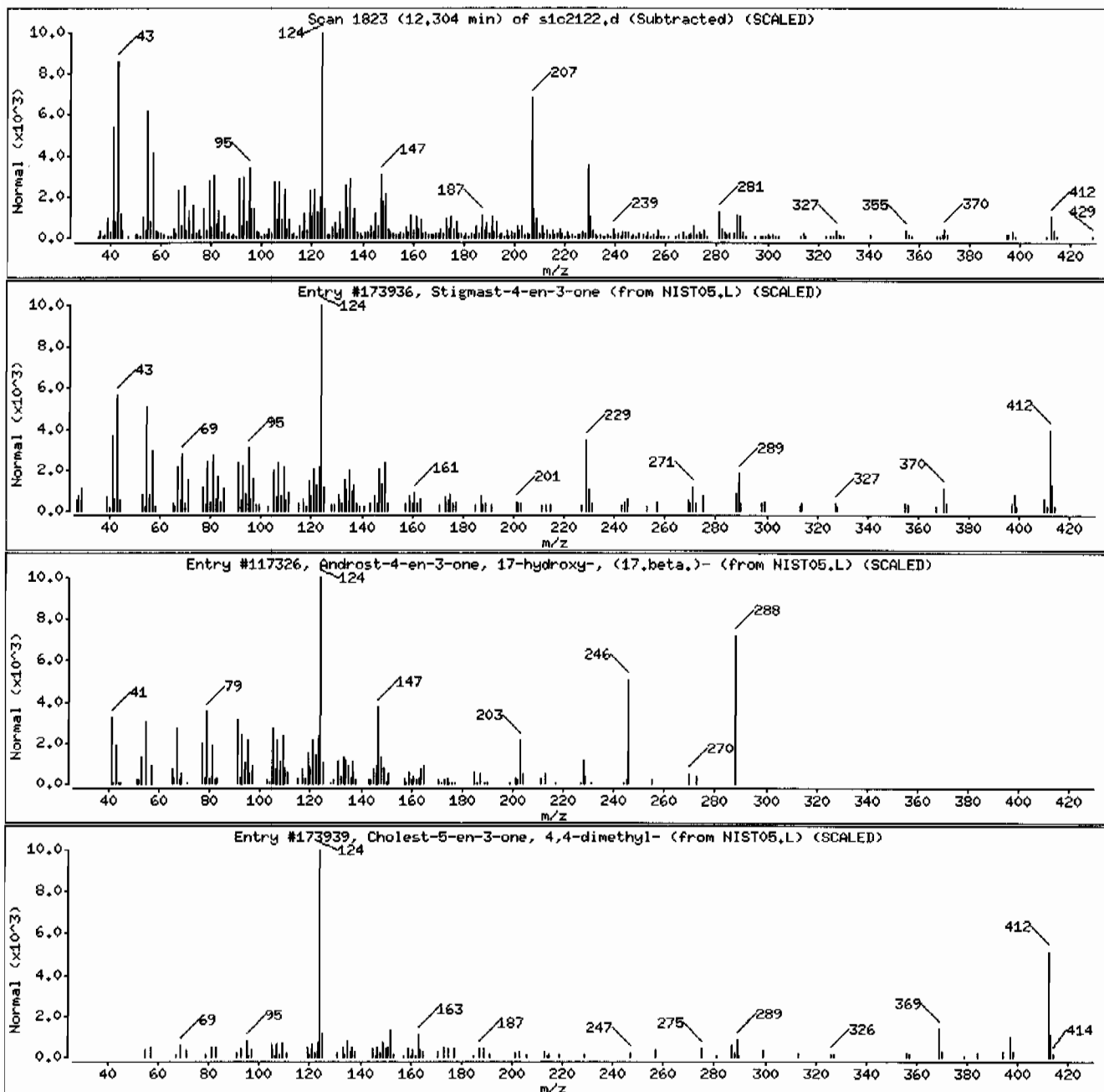
Volume Injected (uL): 0.5

Operator: AMY

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	92	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17 β)	58-22-0	NIST05.L	117326	80	C19H28O2	288
Cholest-5-en-3-one, 4,4-dimethyl-	2220-42-0	NIST05.L	173939	50	C29H48O	412



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

SDG Number: 10-2150
Lab Sample ID: 248370009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.5
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	442	ug/kg	88.3	442
108-95-2	Phenol	U	442	ug/kg	88.3	442
95-57-8	2-Chlorophenol	U	442	ug/kg	88.3	442
106-46-7	1,4-Dichlorobenzene	U	442	ug/kg	88.3	442
621-64-7	N-Nitrosodipropylamine	U	442	ug/kg	88.3	442
59-50-7	4-Chloro-3-methylphenol	U	442	ug/kg	88.3	442
83-32-9	Acenaphthene	U	44.2	ug/kg	14.6	44.2
121-14-2	2,4-Dinitrotoluene	U	442	ug/kg	44.2	442
100-02-7	4-Nitrophenol	U	442	ug/kg	146	442
87-86-5	Pentachlorophenol	U	442	ug/kg	110	442
129-00-0	Pyrene	U	44.2	ug/kg	13.2	44.2
110-86-1	Pyridine	U	442	ug/kg	88.3	442
62-53-3	Aniline	U	442	ug/kg	132	442
111-44-4	bis(2-Chloroethyl) ether	U	442	ug/kg	88.3	442
541-73-1	1,3-Dichlorobenzene	U	442	ug/kg	88.3	442
100-51-6	Benzyl alcohol	U	442	ug/kg	132	442
95-50-1	1,2-Dichlorobenzene	U	442	ug/kg	88.3	442
108-60-1	bis(2-Chloroisopropyl) ether	U	442	ug/kg	88.3	442
95-48-7	o-Cresol	U	442	ug/kg	88.3	442
65794-96-9	m,p-Cresols	U	442	ug/kg	132	442
67-72-1	Hexachloroethane	U	442	ug/kg	88.3	442
98-95-3	Nitrobenzene	U	442	ug/kg	88.3	442
78-59-1	Isophorone	U	442	ug/kg	88.3	442
88-75-5	2-Nitrophenol	U	442	ug/kg	88.3	442
105-67-9	2,4-Dimethylphenol	U	442	ug/kg	155	442
111-91-1	bis(2-Chloroethoxy)methane	U	442	ug/kg	88.3	442
120-83-2	2,4-Dichlorophenol	U	442	ug/kg	88.3	442
65-85-0	Benzoic acid	U	883	ug/kg	221	883
91-20-3	Naphthalene	U	44.2	ug/kg	13.2	44.2
106-47-8	4-Chloroaniline	U	442	ug/kg	88.3	442
87-68-3	Hexachlorobutadiene	U	442	ug/kg	88.3	442
91-57-6	2-Methylnaphthalene	U	44.2	ug/kg	8.83	44.2
77-47-4	Hexachlorocyclopentadiene	U	442	ug/kg	88.3	442
88-06-2	2,4,6-Trichlorophenol	U	442	ug/kg	88.3	442
95-95-4	2,4,5-Trichlorophenol	U	442	ug/kg	88.3	442
91-58-7	2-Chloronaphthalene	U	44.2	ug/kg	14.6	44.2
88-74-4	2-Nitroaniline	U	442	ug/kg	88.3	442
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	442	ug/kg	88.3	442

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

SDG Number: 10-2150
Lab Sample ID: 248370009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1J
Analyst: AMY
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.5
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	442	ug/kg	88.3	442
606-20-2	2,6-Dinitrotoluene	U	442	ug/kg	44.2	442
208-96-8	Acenaphthylene	U	44.2	ug/kg	13.2	44.2
51-28-5	2,4-Dinitrophenol	U	883	ug/kg	168	883
132-64-9	Dibenzofuran	U	442	ug/kg	88.3	442
84-66-2	Diethylphthalate	U	442	ug/kg	88.3	442
86-73-7	Fluorene	U	44.2	ug/kg	13.2	44.2
7005-72-3	4-Chlorophenylphenylether	U	442	ug/kg	88.3	442
534-52-1	2-Methyl-4,6-dinitrophenol	U	442	ug/kg	88.3	442
100-01-6	4-Nitroaniline	U	442	ug/kg	132	442
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	442	ug/kg	88.3	442
122-66-7	Azobenzene	U	442	ug/kg	88.3	442
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	442	ug/kg	88.3	442
118-74-1	Hexachlorobenzene	U	442	ug/kg	88.3	442
85-01-8	Phenanthrene	U	44.2	ug/kg	13.2	44.2
120-12-7	Anthracene	U	44.2	ug/kg	8.83	44.2
84-74-2	Di-n-butylphthalate	U	442	ug/kg	88.3	442
206-44-0	Fluoranthene	U	44.2	ug/kg	13.2	44.2
85-68-7	Butylbenzylphthalate	U	442	ug/kg	88.3	442
56-55-3	Benzo(a)anthracene	U	44.2	ug/kg	13.2	44.2
91-94-1	3,3'-Dichlorobenzidine	U	442	ug/kg	132	442
218-01-9	Chrysene	U	44.2	ug/kg	13.2	44.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	442	ug/kg	88.3	442
117-84-0	Di-n-octylphthalate	U	442	ug/kg	88.3	442
205-99-2	Benzo(b)fluoranthene	U	44.2	ug/kg	13.2	44.2
207-08-9	Benzo(k)fluoranthene	U	44.2	ug/kg	13.2	44.2
50-32-8	Benzo(a)pyrene	U	44.2	ug/kg	13.2	44.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.2	ug/kg	13.2	44.2
53-70-3	Dibenzo(a,h)anthracene	U	44.2	ug/kg	13.2	44.2
191-24-2	Benzo(ghi)perylene	U	44.2	ug/kg	13.2	44.2
120-82-1	1,2,4-Trichlorobenzene	U	442	ug/kg	88.3	442

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	284	ug/kg		J
	Unknown Aldol Condensate	2.67	221	ug/kg		JA

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

SDG Number: 10-2150
Lab Sample ID: 248370009

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 24.5
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		12.29	236	ug/kg		J

Data File: /chem/MSD1.i/s032110.b/slc2119.d
Report Date: 22-Mar-2010 15:20

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2119.d
Lab Smp Id: 248370009 Client Smp ID: RE36-10-7487
Inj Date : 21-MAR-2010 23:44
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370009|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.sub
Target Version: 3.50
Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	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	24.54860	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
	MASS						ON-COLUMN	FINAL
	=====	====	==	=====	=====	=====	(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152		3.610	3.610	(1.000)	468827	40.0000	
* 29 Naphthalene-d8	136		4.463	4.469	(1.000)	1837272	40.0000	
* 46 Acenaphthene-d10	164		5.704	5.704	(1.000)	961190	40.0000	
* 67 Phenanthrene-d10	188		6.704	6.710	(1.000)	1628021	40.0000	
* 91 Chrysene-d12	240		8.286	8.292	(1.000)	1235815	40.0000	
* 98 Perylene-d12	264		9.522	9.522	(1.000)	812012	40.0000	
\$ 3 2-Fluorophenol	112		2.834	2.822	(0.785)	682712	56.5513	2500
\$ 5 Phenol-d5	99		3.346	3.346	(0.927)	860810	58.5482	2580
\$ 20 Nitrobenzene-d5	82		3.969	3.975	(0.889)	364808	32.3740	1430
\$ 39 2-Fluorobiphenyl	172		5.204	5.204	(0.912)	740158	27.8824	1230
\$ 60 2,4,6-Tribromophenol	329		6.251	6.251	(1.096)	164079	52.0679	2300
\$ 81 p-Terphenyl-d14	244		7.622	7.622	(0.920)	703262	34.1336	1510

ION RATIO REPORT

SV REPORT

Data file: slc2119.d

Report Date: 03/22/2010 11:55

Lab. ID: 248370009

SampleType: SAMPLE

Injection Date: 21-MAR-2010 23:44

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370009|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	41261	3.35	3.40	80-120	100	()
93	4038	3.39	3.40	233-293	10	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	51158	3.97	3.86	80-120	100	(T)
42	34998	3.97	3.86	48-108	68	(T)

41	m-Nitroaniline		CAS#: 99-09-2			
138	212	5.70	5.66	80-120	100	()
92	6498	5.70	5.66	71-131	3065	(Q)
108	18558	5.70	5.66	0- 40	8754	(Q)

43	Dimethylphthalate		CAS#: 131-11-3			
163	172782	5.70	5.49	80-120	100	(T)
164	961190	5.70	5.49	0- 40	556	(QT)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	122872	5.70	5.54	80-120	100	(T)
63	2417	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	122872	5.70	5.83	80-120	100	(T)
89	1745	5.70	5.82	38- 98	1	(QT)
63	2417	5.70	5.82	20- 80	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	12502	6.25	6.09	80-120	100	(T)
165	13296	6.25	6.09	61-121	106	(T)
167	4422	6.25	6.09	0- 43	35	(T)

56 p-Nitroaniline		CAS#: 100-01-6				
138	214	6.10	6.09	80-120	100	()
108	435	6.09	6.09	29- 89	202	(Q)
92	267	6.10	6.09	14- 74	124	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/s1c2119.d
 Lab Smp Id: 248370009 Client Smp ID: RE36-10-7487
 Inj Date : 21-MAR-2010 23:44
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370009|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: s1c1620.d
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	30.01000	weight of sample
M	24.54860	% moisture

Cpnd Variable

Local Compound Variable

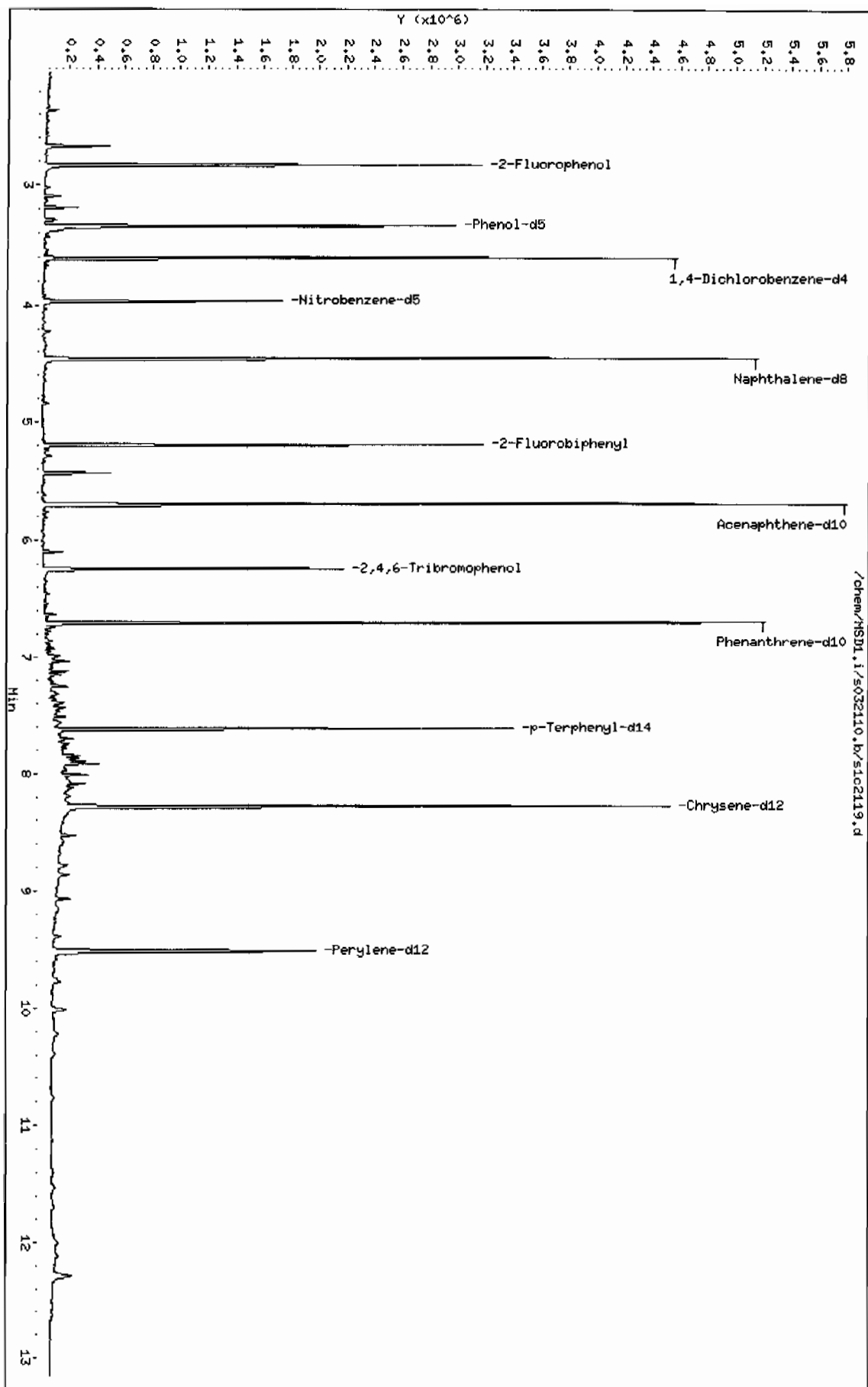
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.610	2887724	40.000
* 98 Perylene-d12	9.522	2340671	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.810	464636	6.43601540	284	0		0	10

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate							
2.669	360566	4.99446044	220	0		0	10
Unknown							
12.292	312563	5.34143222	236	0		0	98

Data File: /chem/MSD1.i/s032110.b/s10c2119.d
Date: 21-Mar-2010 23:44
Client ID: RE36-10-7487
Sample Info: 1248370009196122814|SWH111LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20



Date: 21-MAR-2010 23:44

Client ID: RE36-10-7487

Instrument: HSD1.i

Sample Info: 1248370009196122811SVH11ILANL

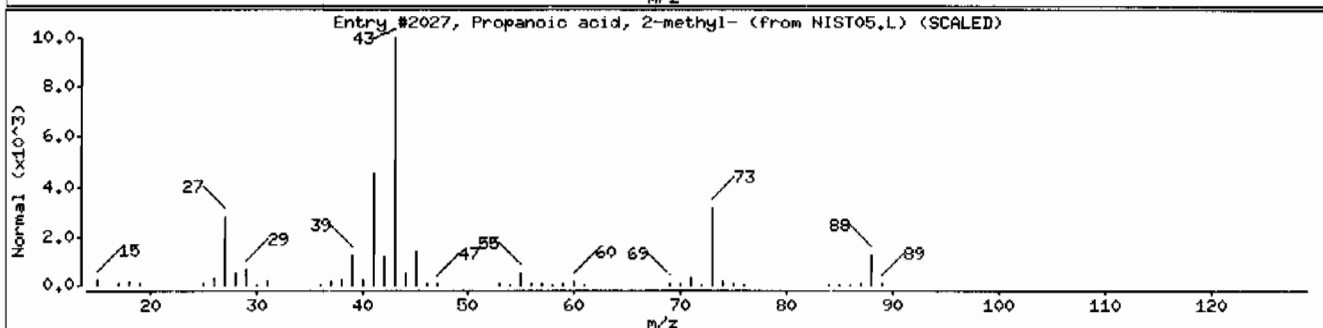
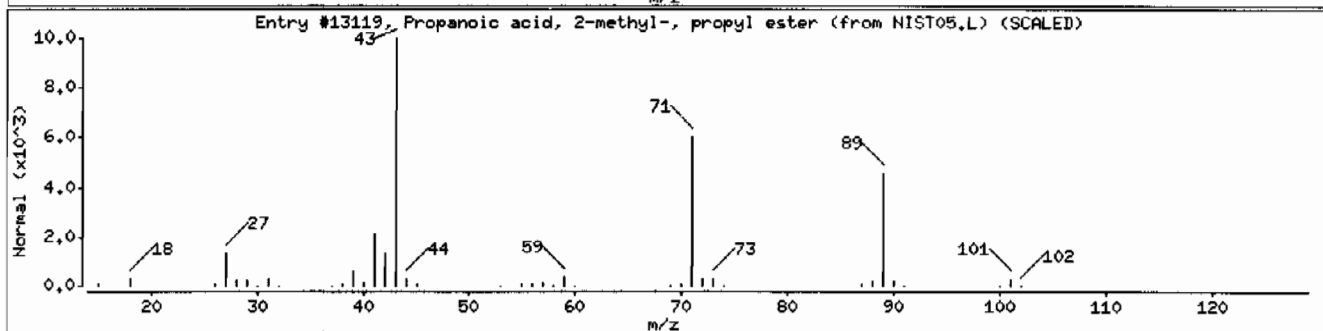
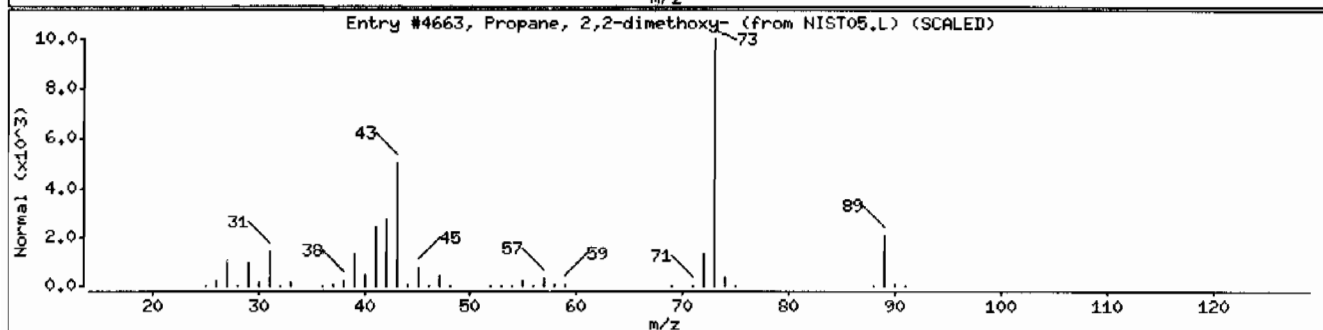
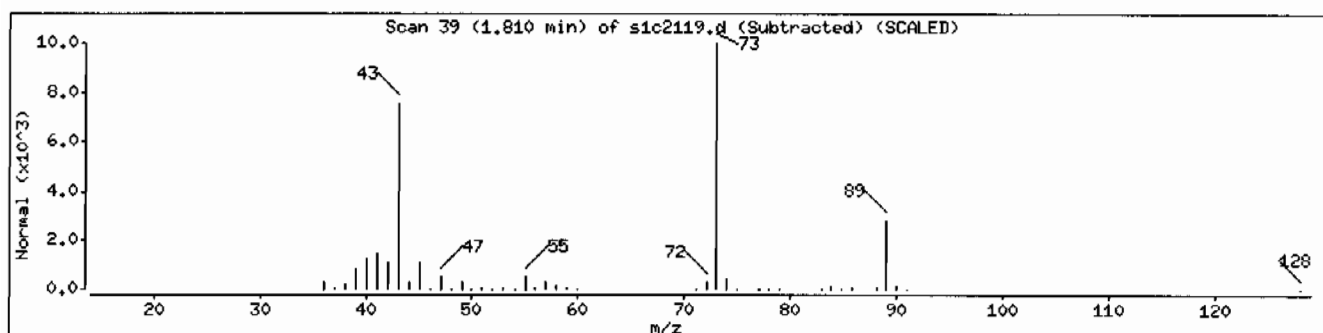
Volume Injected (uL): 0.5

Operator: AMY

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	33	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	25	C7H14O2	130
Propanoic acid, 2-methyl-	79-31-2	NIST05.L	2027	23	C4H8O2	88



Date: 21-MAR-2010 23:44

Client ID: RE36-10-7487

Instrument: MSD1.i

Sample Info: 12483700091961228111SVH111LANL

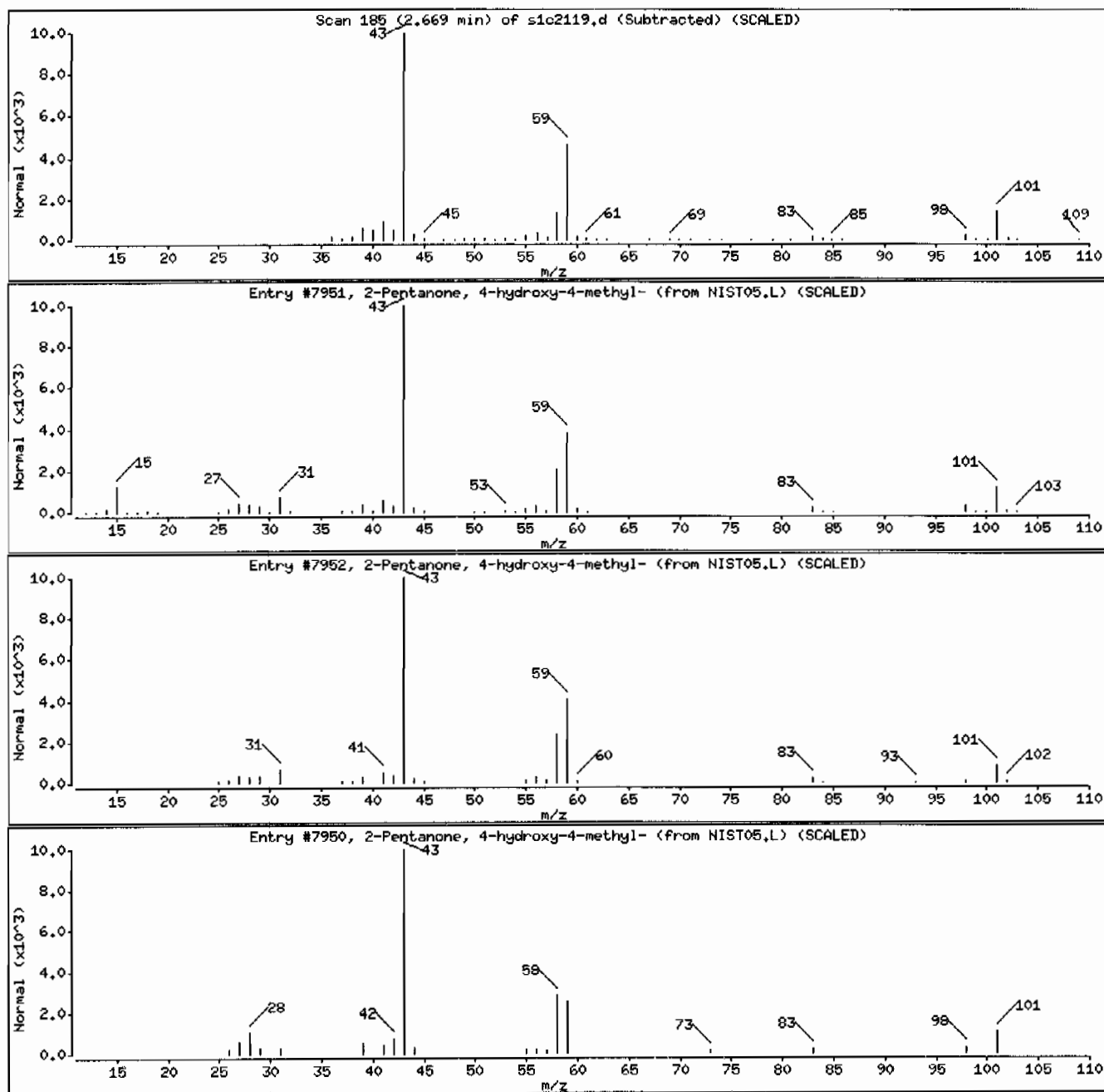
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7950	25	C6H12O2	116



Date : 21-MAR-2010 23:44

Client ID: RE36-10-7487

Instrument: MSD1.i

Sample Info: 1248370009196122811SVH111LANL

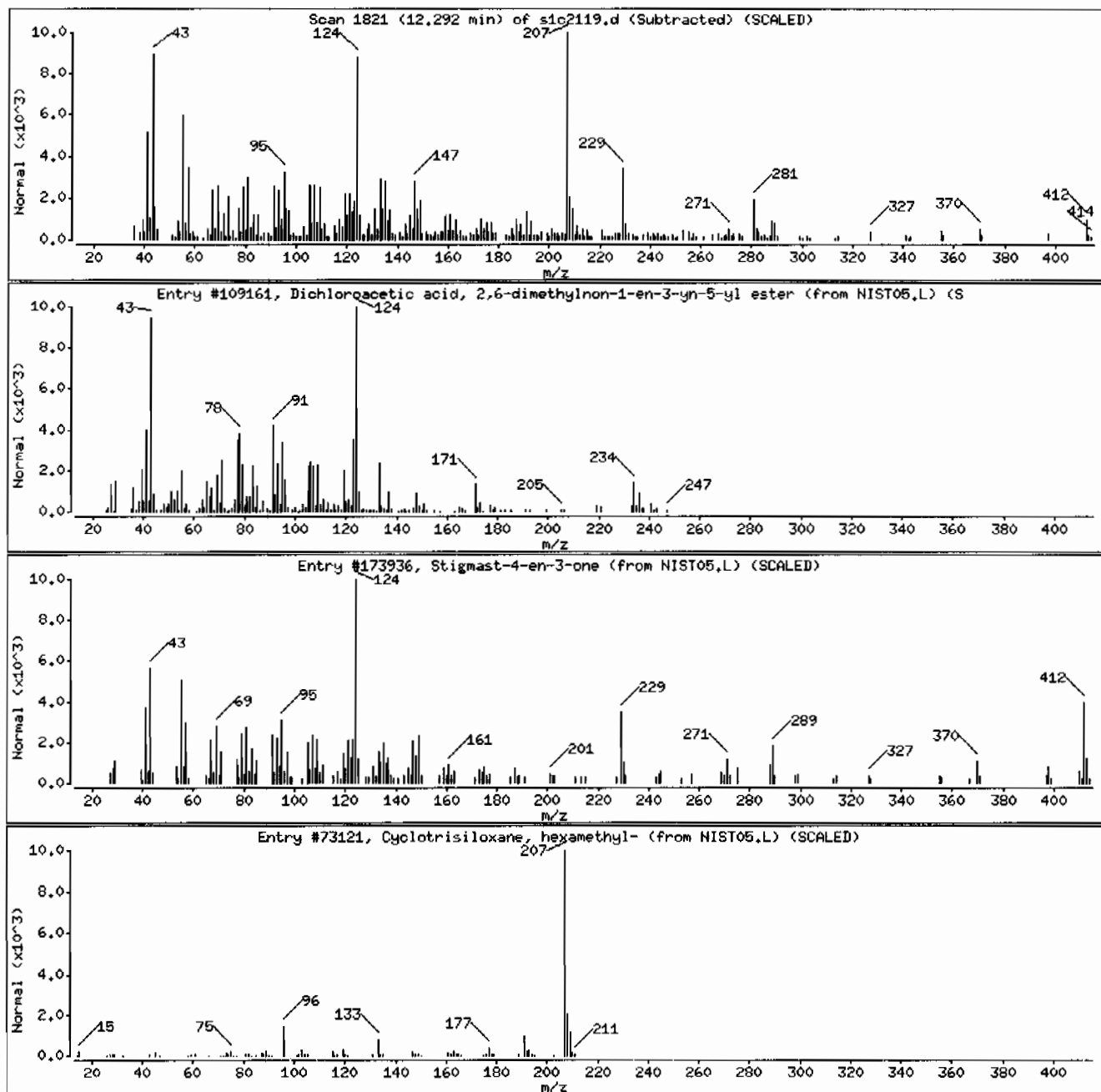
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dichloroacetic acid, 2,6-dimethylnon-1-e	1000299-43-5	NIST05.L	109161	25	C13H18Cl2O2	276
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	25	C29H48O	412
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	22	C6H18O3Si3	222



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

SDG Number:	10-2150	Date Collected:	02/24/2010 12:00	Matrix:	R
Lab Sample ID:	248370019	Date Received:	03/02/2010 08:50	%Moisture:	10
Client ID:	RE36-10-7488	Client:	LANL010	Project:	LANL01004
Batch ID:	961228	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Run Date:	03/22/2010 03:40	Inst:	MSD1.I	Dilution:	1
Prep Date:	03/05/2010 11:30	Analyst:	AMY	Inj. Vol:	.5 uL
Data File:	s1c2129.d	Aliquot:	30.09 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	369	ug/kg	73.9	369
108-95-2	Phenol	U	369	ug/kg	73.9	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.9	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.9	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.9	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.9	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.4	369
129-00-0	Pyrene	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.9	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.9	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.9	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.9	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.9	369
95-48-7	o-Cresol	U	369	ug/kg	73.9	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.9	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.9	369
78-59-1	Isophorone	U	369	ug/kg	73.9	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.9	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.9	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.9	369
65-85-0	Benzoic acid	U	739	ug/kg	185	739
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.9	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.9	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.39	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.9	369
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.9	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.9	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline	U	369	ug/kg	73.9	369
99-09-2	3-Nitroaniline	U	369	ug/kg	73.9	369

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

SDG Number: 10-2150
Lab Sample ID: 248370019

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7488
Batch ID: 961228
Run Date: 03/22/2010 03:40
Prep Date: 03/05/2010 11:30
Data File: slc2129.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	369	ug/kg	73.9	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	369	ug/kg	73.9	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.9	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.9	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.9	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.9	369
122-66-7	Azobenzene	U	369	ug/kg	73.9	369
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.9	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.9	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.39	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.9	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.9	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.9	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.9	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.9	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.82	156	ug/kg		J
	Unknown Aldol Condensate	2.67	380	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370019	Date Received: 03/02/2010 08:50	%Moisture: 10
Client ID: RE36-10-7488	Client: LANL010	Project: LANL01004
Batch ID: 961228	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 03:40	Inst: MSD1.I	Dilution: 1
Prep Date: 03/05/2010 11:30	Analyst: AMY	Inj. Vol: .5 uL
Data File: s1c2129.d	Aliquot: 30.09 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
7785-70-8	1R-.alpha.-Pinene	3.19	307	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.43	196	ug/kg	99	NJ
112-95-8	Eicosane	8.09	152	ug/kg	92	NJ
	Unknown	12.3	186	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/s1c2129.d
Lab Smp Id: 248370019 Client Smp ID: RE36-10-7488
Inj Date : 22-MAR-2010 03:40
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370019|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: s1c1620.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	10.04700	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	467991	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1836404	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	969041	40.0000	
* 67 Phenanthrene-d10	188	6.710	6.710	(1.000)	1706948	40.0000	
* 91 Chrysene-d12	240	8.292	8.292	(1.000)	1241055	40.0000	
* 98 Perylene-d12	264	9.522	9.522	(1.000)	677189	40.0000	
\$ 3 2-Fluorophenol	112	2.834	2.822	(0.785)	811089	67.3052	2490
\$ 5 Phenol-d5	99	3.351	3.346	(0.928)	1030190	70.1938	2590
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	406509	36.0918	1330
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	866795	32.3883	1200
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	202193	63.6431	2350
\$ 81 p-Terphenyl-d14	244	7.628	7.622	(0.920)	936385	45.2566	1670

ION RATIO REPORT

SV REPORT

Data file: slc2129.d

Report Date: 03/22/2010 12:00

Lab. ID: 248370019

SampleType: SAMPLE

Injection Date: 22-MAR-2010 03:40

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370019|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	49429	3.35	3.40	80-120	100	()
93	6991	3.39	3.40	233-293	14	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	57413	3.97	3.86	80-120	100	(T)
42	39461	3.97	3.86	48-108	69	(T)

41	m-Nitroaniline	CAS#: 99-09-2				
138	217	5.70	5.66	80-120	100	()
92	4389	5.70	5.66	71-131	2022	(Q)
108	17453	5.70	5.66	0- 40	8040	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	175330	5.70	5.49	80-120	100	(T)
164	969041	5.70	5.49	0- 40	553	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	125610	5.70	5.54	80-120	100	(T)
63	2145	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	125610	5.70	5.83	80-120	100	(T)
89	1638	5.70	5.82	38- 98	1	(QT)
63	2145	5.70	5.82	20- 80	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene			CAS#: 86-73-7			
166	15975	6.25	6.09	80-120	100	(T)
165	17022	6.25	6.09	61-121	107	(T)
167	5022	6.25	6.09	0- 43	31	(T)

56 p-Nitroaniline			CAS#: 100-01-6			
138	393	6.10	6.09	80-120	100	()
108	220	6.18	6.09	29- 89	56	(T)
92	281	6.09	6.09	14- 74	72	()

61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	15480	6.25	6.40	80-120	100	(T)
141	91680	6.25	6.40	48-108	592	(QT)
250	30341	6.25	6.40	67-127	196	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2129.d
 Lab Smp Id: 248370019 Client Smp ID: RE36-10-7488
 Inj Date : 22-MAR-2010 03:40
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |248370019|961228|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 29
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	10.04700	% moisture

Cpnd Variable

Local Compound Variable

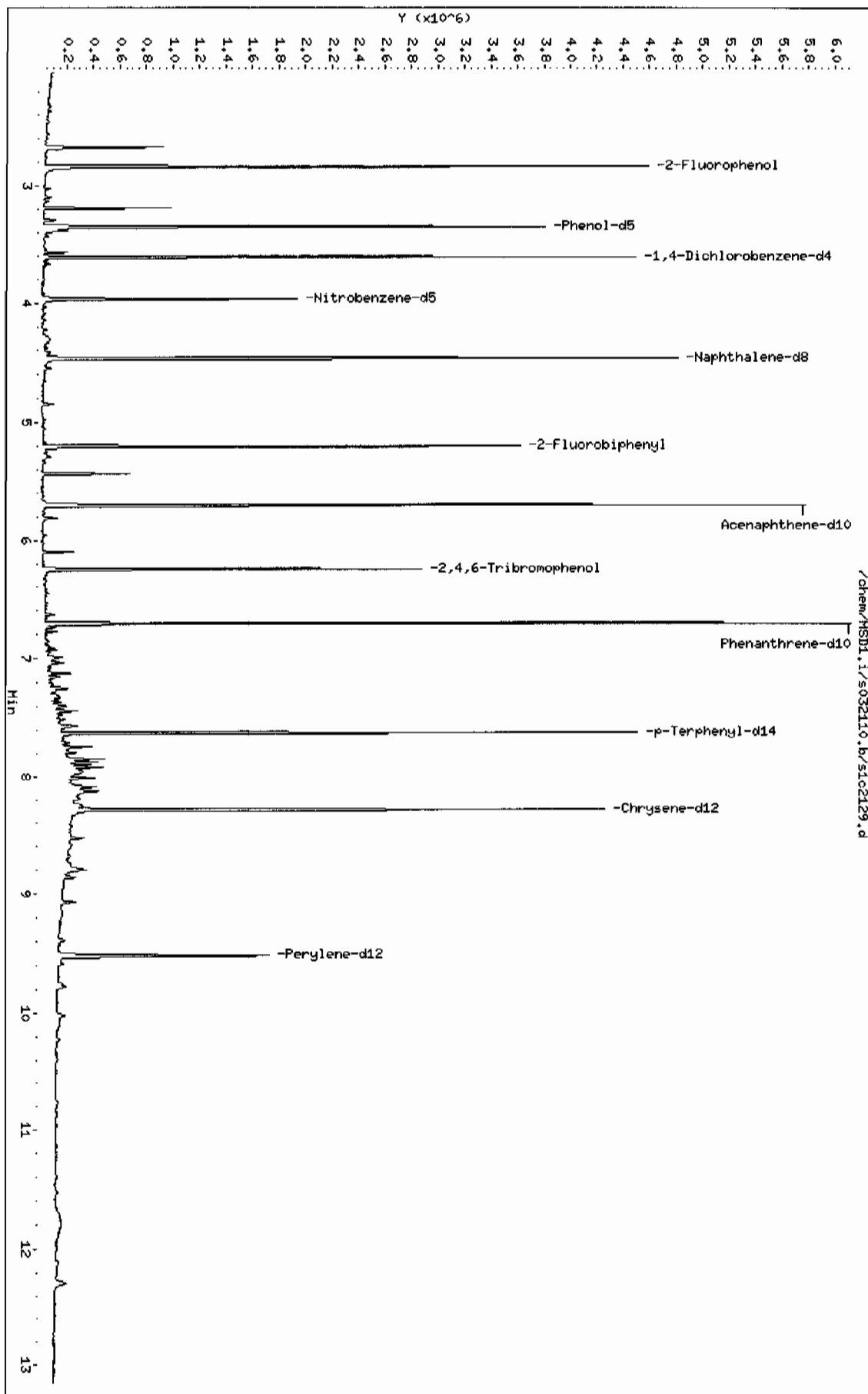
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2874478	40.000
* 46 Acenaphthene-d10	5.704	4160586	40.000
* 91 Chrysene-d12	8.292	3371486	40.000
* 98 Perylene-d12	9.522	1919894	40.000

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 #:		
1.816	303742	4.22674303	156	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	740053	10.2982597	380	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.193	598092	8.32279708	307	97	NIST05.L	15188	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.434	551846	5.30546344	196	99	NIST05.L	60023	46
Eicosane					CAS #: 112-95-8		
8.092	346721	4.11357096	152	92	NIST05.L	113492	91
Unknown					CAS #:		
12.298	241057	5.02230631	186	0		0	98

Data File: /chem/MSD1.i/s032110.b/s1c2129.d
Date : 22-MAR-2010 03:40
Client ID: RES-10-7488
Sample Info: 1248370019196122811SVH11LLANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20



Date : 22-MAR-2010 03:40

Client ID: RE36-10-7488

Instrument: MSD1.i

Sample Info: 1248370019196122811|SVMI1|LANL

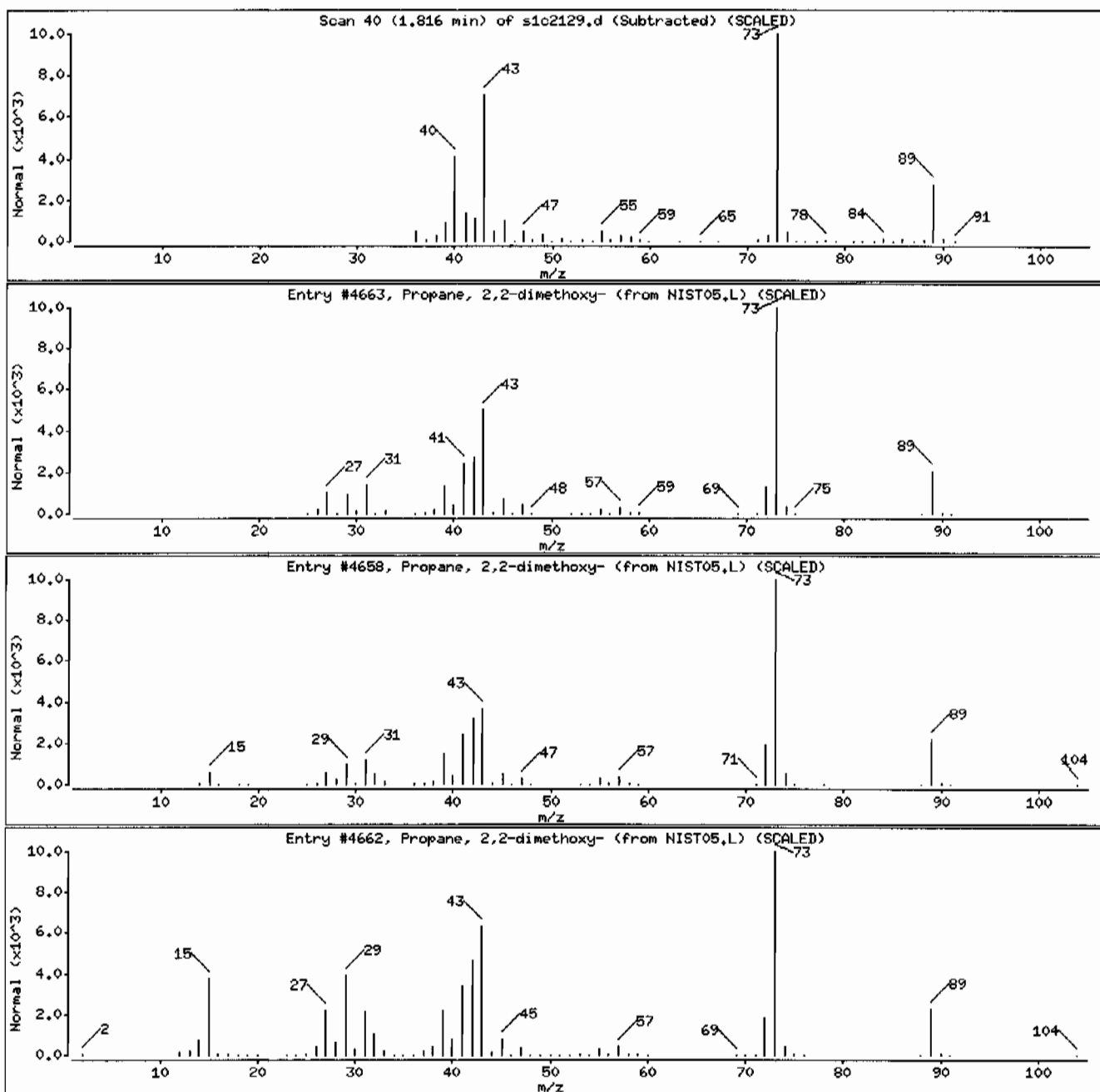
Volume Injected (uL): 0.5

Operator: AMY

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	40	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	33	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	33	C5H12O2	104



Date: 22-MAR-2010 03:40

Client ID: RE36-10-7488

Instrument: MSD1.i

Sample Info: 12483700191961228111SVH111LANL

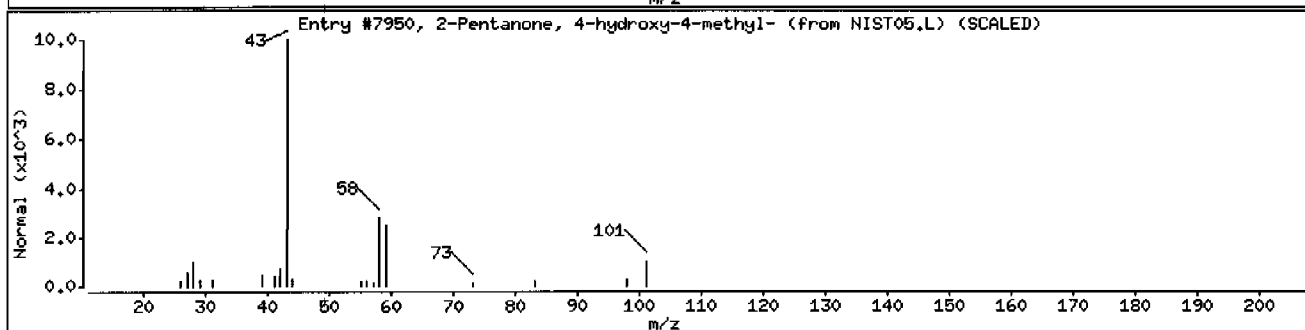
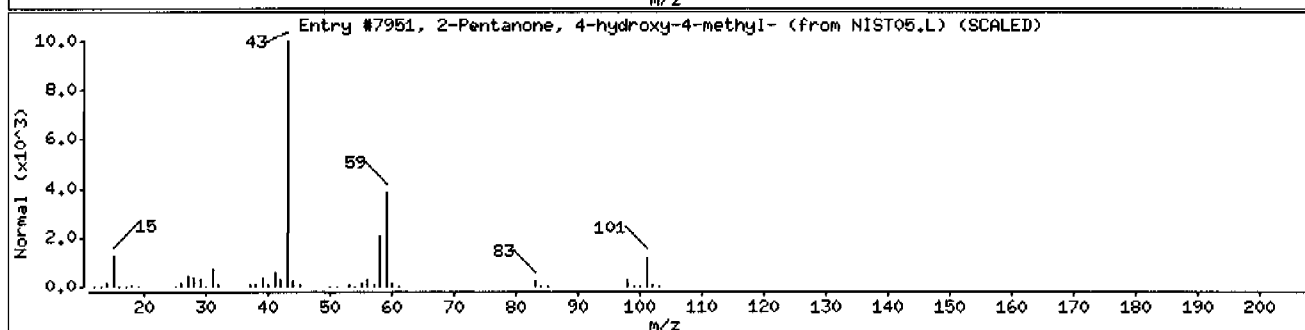
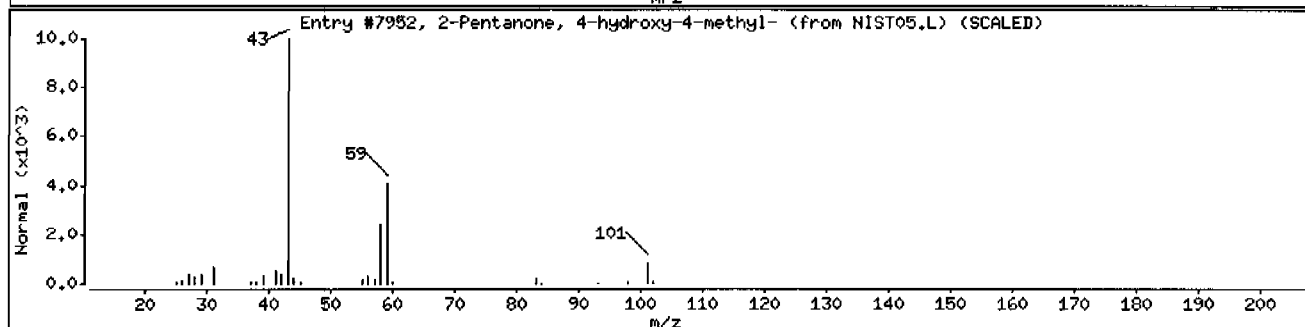
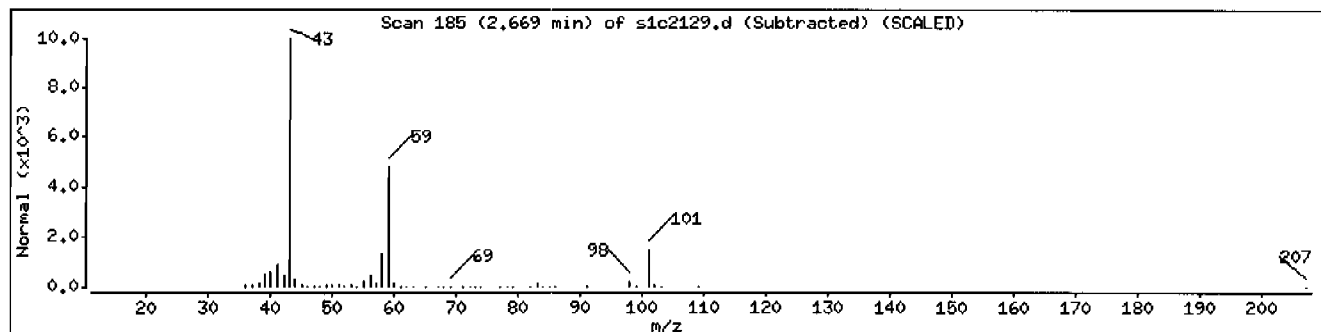
Volume Injected (uL): 0.5

Operator: AMY

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	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7950	25	C6H12O2	116



Date : 22-MAR-2010 03:40

Client ID: RE36-10-7488

Instrument: HSD1.i

Sample Info: 1248370019196122811SVMI11LANL

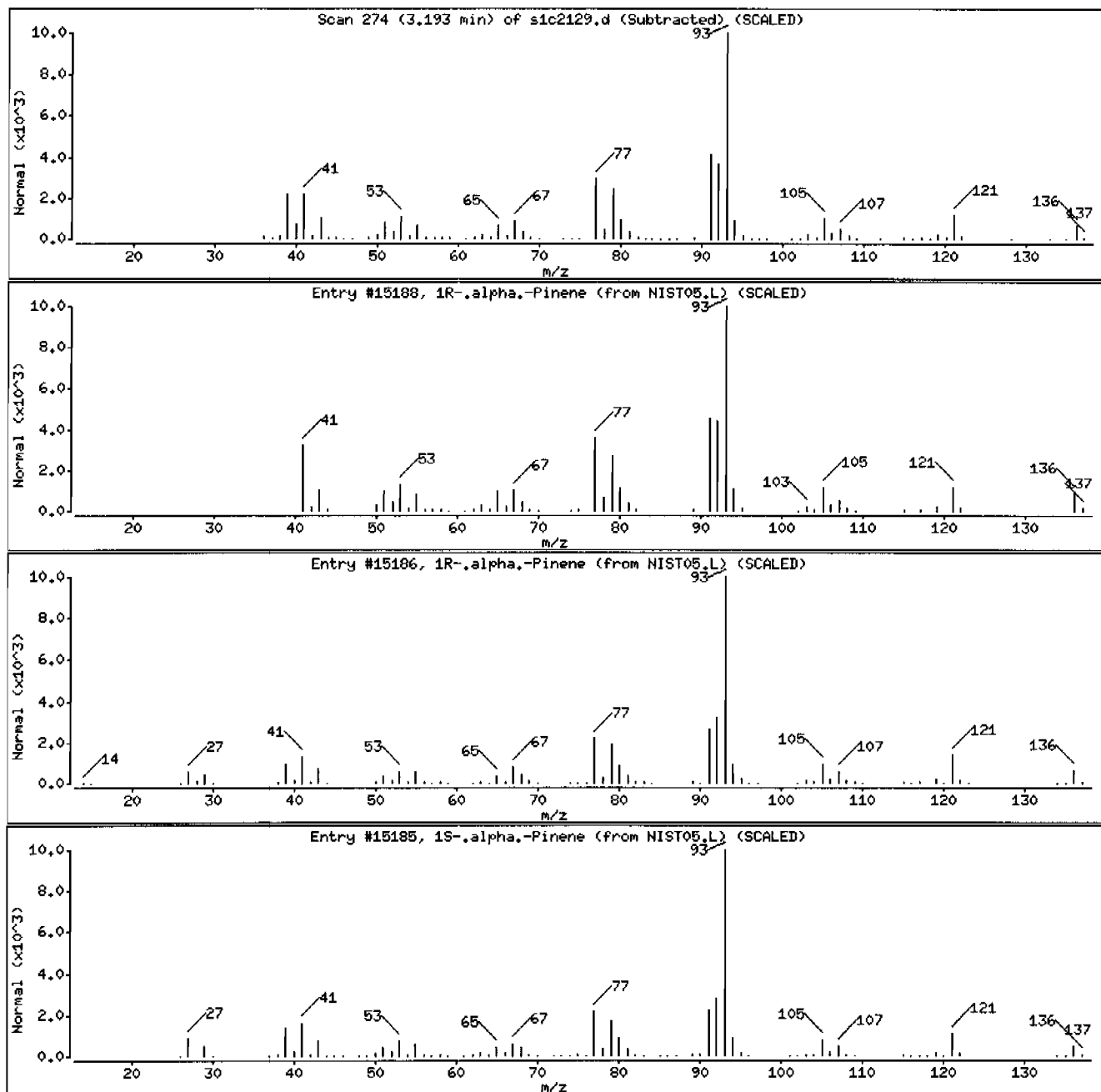
Volume Injected (uL): 0.5

Operator: AMY

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
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
1S-.alpha.-Pinene	7785-26-4	NIST05.L	15185	96	C10H16	136



Date : 22-MAR-2010 03:40

Client ID: RE36-10-7488

Instrument: HSD1.i

Sample Info: 1248370019196122811SVMI1ILANL

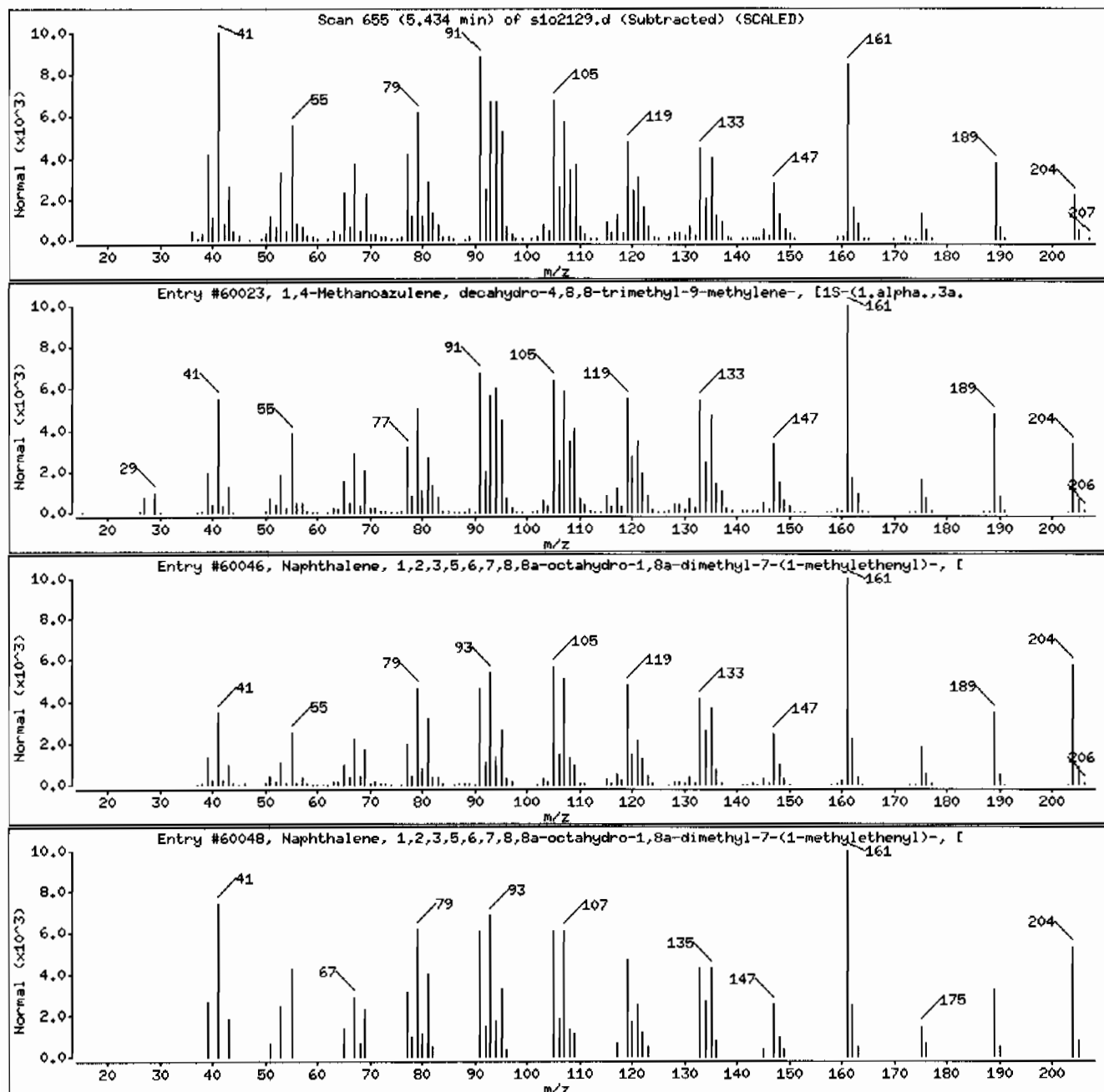
Volume Injected (uL): 0.5

Operator: AMY

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	60046	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60048	95	C15H24	204



Date : 22-MAR-2010 03:40

Client ID: RE36-10-7488

Instrument: MSD1.i

Sample Info: I248370019196122811SVMI11LANL

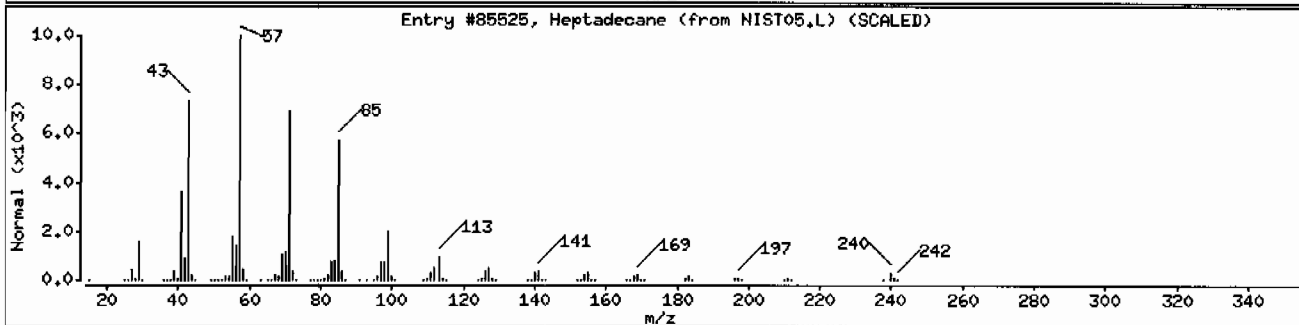
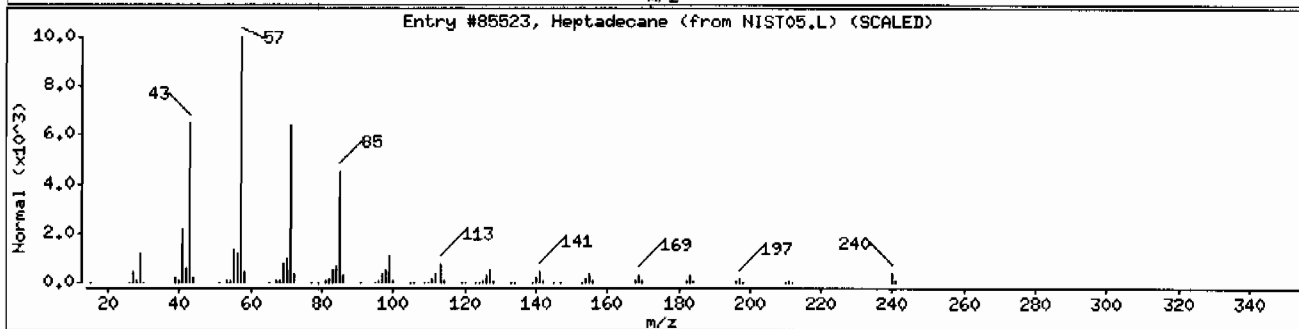
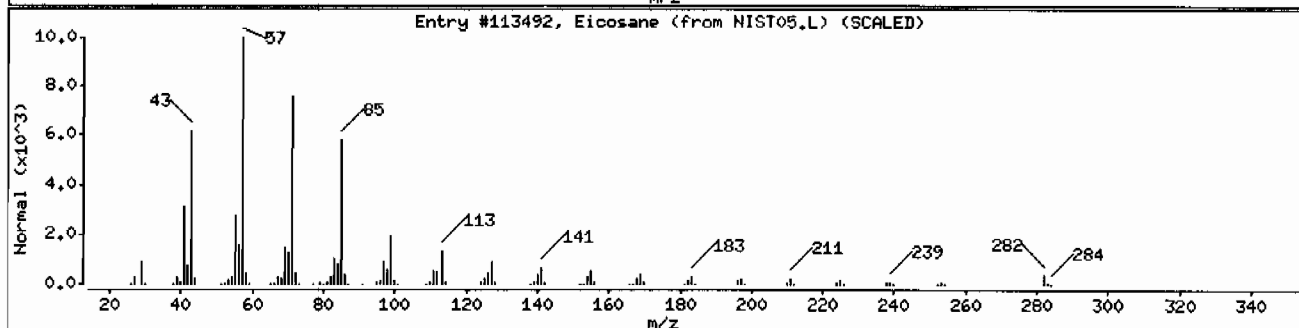
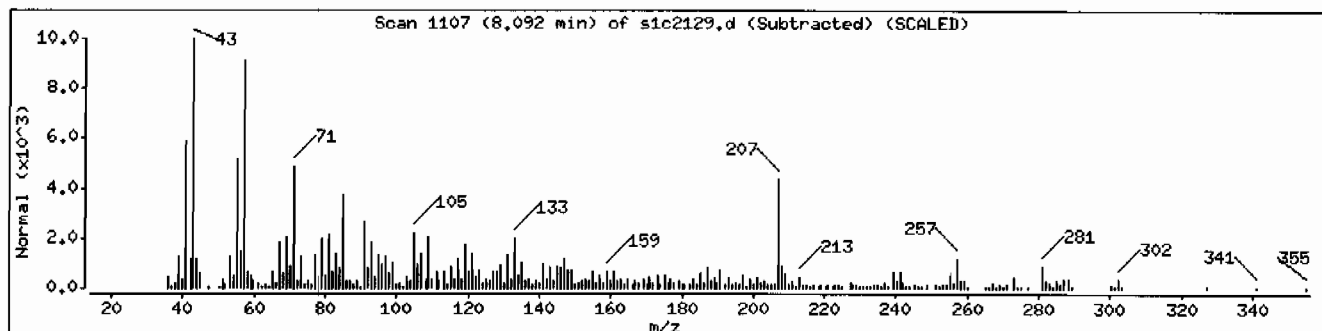
Volume Injected (uL): 0.5

Operator: AMY

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	113492	92	C20H42	282
Heptadecane	629-78-7	NIST05.L	85523	78	C17H36	240
Heptadecane	629-78-7	NIST05.L	85525	74	C17H36	240



Date : 22-MAR-2010 03:40

Client ID: RE36-10-7488

Instrument: MSD1.i

Sample Info: 1248370019196122811SVH11ILANL

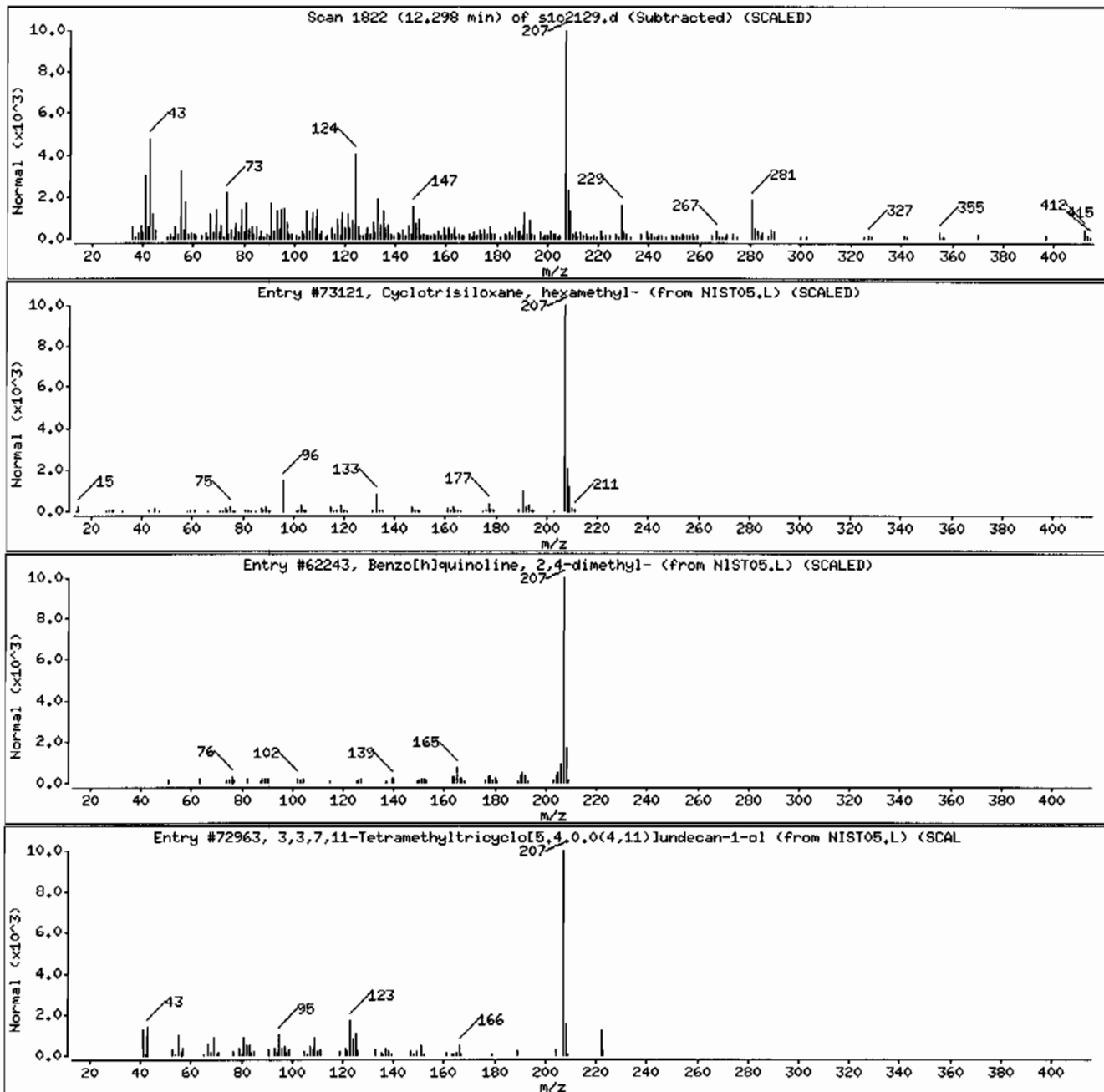
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C ₆ H ₁₈ O ₃ Si ₃	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C ₁₅ H ₁₃ N	207
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1	117591-80-7	NIST05.L	72963	38	C ₁₅ H ₂₆ O	222



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370014	Date Received: 03/02/2010 08:50	%Moisture: 35
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7489	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/22/2010 01:42	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2124.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	513	ug/kg	103	513
108-95-2	Phenol	U	513	ug/kg	103	513
95-57-8	2-Chlorophenol	U	513	ug/kg	103	513
106-46-7	1,4-Dichlorobenzene	U	513	ug/kg	103	513
621-64-7	N-Nitrosodipropylamine	U	513	ug/kg	103	513
59-50-7	4-Chloro-3-methylphenol	U	513	ug/kg	103	513
83-32-9	Acenaphthene	U	51.3	ug/kg	16.9	51.3
121-14-2	2,4-Dinitrotoluene	U	513	ug/kg	51.3	513
100-02-7	4-Nitrophenol	U	513	ug/kg	169	513
87-86-5	Pentachlorophenol	U	513	ug/kg	128	513
129-00-0	Pyrene	U	51.3	ug/kg	15.4	51.3
110-86-1	Pyridine	U	513	ug/kg	103	513
62-53-3	Aniline	U	513	ug/kg	154	513
111-44-4	bis(2-Chloroethyl) ether	U	513	ug/kg	103	513
541-73-1	1,3-Dichlorobenzene	U	513	ug/kg	103	513
100-51-6	Benzyl alcohol	U	513	ug/kg	154	513
95-50-1	1,2-Dichlorobenzene	U	513	ug/kg	103	513
108-60-1	bis(2-Chloroisopropyl)ether	U	513	ug/kg	103	513
95-48-7	o-Cresol	U	513	ug/kg	103	513
65794-96-9	m,p-Cresols	U	513	ug/kg	154	513
67-72-1	Hexachloroethane	U	513	ug/kg	103	513
98-95-3	Nitrobenzene	U	513	ug/kg	103	513
78-59-1	Isophorone	U	513	ug/kg	103	513
88-75-5	2-Nitrophenol	U	513	ug/kg	103	513
105-67-9	2,4-Dimethylphenol	U	513	ug/kg	180	513
111-91-1	bis(2-Chloroethoxy)methane	U	513	ug/kg	103	513
120-83-2	2,4-Dichlorophenol	U	513	ug/kg	103	513
65-85-0	Benzoic acid	U	1030	ug/kg	257	1030
91-20-3	Naphthalene	U	51.3	ug/kg	15.4	51.3
106-47-8	4-Chloroaniline	U	513	ug/kg	103	513
87-68-3	Hexachlorobutadiene	U	513	ug/kg	103	513
91-57-6	2-Methylnaphthalene	U	51.3	ug/kg	10.3	51.3
77-47-4	Hexachlorocyclopentadiene	U	513	ug/kg	103	513
88-06-2	2,4,6-Trichlorophenol	U	513	ug/kg	103	513
95-95-4	2,4,5-Trichlorophenol	U	513	ug/kg	103	513
91-58-7	2-Chloronaphthalene	U	51.3	ug/kg	16.9	51.3
88-74-4	2-Nitroaniline	U	513	ug/kg	103	513
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	513	ug/kg	103	513

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

SDG Number: 10-2150
Lab Sample ID: 248370014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7489
Batch ID: 961228
Run Date: 03/22/2010 01:42
Prep Date: 03/05/2010 11:30
Data File: s1c2124.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	513	ug/kg	103	513
606-20-2	2,6-Dinitrotoluene	U	513	ug/kg	51.3	513
208-96-8	Acenaphthylene	U	51.3	ug/kg	15.4	51.3
51-28-5	2,4-Dinitrophenol	U	1030	ug/kg	195	1030
132-64-9	Dibenzofuran	U	513	ug/kg	103	513
84-66-2	Diethylphthalate	U	513	ug/kg	103	513
86-73-7	Fluorene	U	51.3	ug/kg	15.4	51.3
7005-72-3	4-Chlorophenylphenylether	U	513	ug/kg	103	513
534-52-1	2-Methyl-4,6-dinitrophenol	U	513	ug/kg	103	513
100-01-6	4-Nitroaniline	U	513	ug/kg	154	513
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	513	ug/kg	103	513
122-66-7	Azobenzene	U	513	ug/kg	103	513
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	513	ug/kg	103	513
118-74-1	Hexachlorobenzene	U	513	ug/kg	103	513
85-01-8	Phenanthrene	U	51.3	ug/kg	15.4	51.3
120-12-7	Anthracene	U	51.3	ug/kg	10.3	51.3
84-74-2	Di-n-butylphthalate	U	513	ug/kg	103	513
206-44-0	Fluoranthene	U	51.3	ug/kg	15.4	51.3
85-68-7	Butylbenzylphthalate	U	513	ug/kg	103	513
56-55-3	Benzo(a)anthracene	U	51.3	ug/kg	15.4	51.3
91-94-1	3,3'-Dichlorobenzidine	U	513	ug/kg	154	513
218-01-9	Chrysene	U	51.3	ug/kg	15.4	51.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	513	ug/kg	103	513
117-84-0	Di-n-octylphthalate	U	513	ug/kg	103	513
205-99-2	Benzo(b)fluoranthene	U	51.3	ug/kg	15.4	51.3
207-08-9	Benzo(k)fluoranthene	U	51.3	ug/kg	15.4	51.3
50-32-8	Benzo(a)pyrene	U	51.3	ug/kg	15.4	51.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	51.3	ug/kg	15.4	51.3
53-70-3	Dibenzo(a,h)anthracene	U	51.3	ug/kg	15.4	51.3
191-24-2	Benzo(ghi)perylene	U	51.3	ug/kg	15.4	51.3
120-82-1	1,2,4-Trichlorobenzene	U	513	ug/kg	103	513

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.67	279	ug/kg		JA
638-67-5	Tricosane	7.71	355	ug/kg	97	NJ

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

SDG Number: 10-2150
Lab Sample ID: 248370014

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 35
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7489
Batch ID: 961228
Run Date: 03/22/2010 01:42
Prep Date: 03/05/2010 11:30
Data File: s1c2124.d

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

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
73105-67-6	1-Iodo-2-methylundecane	7.9	415	ug/kg	93	NJ
7225-66-3	Tridecane, 7-hexyl-	8.09	464	ug/kg	95	NJ
593-49-7	Heptacosane	8.53	385	ug/kg	99	NJ
112-95-8	Eicosane	8.78	361	ug/kg	98	NJ
	Unknown	9.06	706	ug/kg		J
	Unknown	9.39	577	ug/kg		J
	Unknown	9.78	647	ug/kg		J
	Unknown	10.23	478	ug/kg		J
	Unknown	10.77	360	ug/kg		J
	Unknown	11.4	243	ug/kg		J

Data File: /chem/MSD1.i/s032110.b/slc2124.d
Report Date: 22-Mar-2010 16:00

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2124.d
Lab Smp Id: 248370014 Client Smp ID: RE36-10-7489
Inj Date : 22-MAR-2010 01:42
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370014|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	35.04770	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.610	3.610	(1.000)	476115	40.0000	
* 29 Naphthalene-d8		136	4.463	4.469	(1.000)	1853061	40.0000	
* 46 Acenaphthene-d10		164	5.704	5.704	(1.000)	968246	40.0000	
* 67 Phenanthrene-d10		188	6.710	6.710	(1.000)	1675611	40.0000	
* 91 Chrysene-d12		240	8.292	8.292	(1.000)	1278903	40.0000	
* 98 Perylene-d12		264	9.522	9.522	(1.000)	759617	40.0000	
\$ 3 2-Fluorophenol		112	2.834	2.822	(0.785)	701210	57.1945	2940
\$ 5 Phenol-d5		99	3.351	3.346	(0.928)	867121	58.0747	2980
\$ 20 Nitrobenzene-d5		82	3.969	3.975	(0.889)	346563	30.4928	1560
\$ 39 2-Fluorobiphenyl		172	5.204	5.204	(0.912)	658179	24.6135	1260
\$ 60 2,4,6-Tribromophenol		329	6.251	6.251	(1.096)	157800	49.7105	2550
\$ 81 p-Terphenyl-d14		244	7.628	7.622	(0.920)	650582	30.5129	1560

ION RATIO REPORT

SV REPORT

Data file: slc2124.d

Report Date: 03/22/2010 11:58

Lab. ID: 248370014

SampleType: SAMPLE

Injection Date: 22-MAR-2010 01:42

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370014|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	41765	3.35	3.40	80-120	100	()
93	2275	3.39	3.40	233-293	5	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	45454	3.97	3.86	80-120	100	(T)
42	33576	3.97	3.86	48-108	74	(T)

41	m-Nitroaniline	CAS#: 99-09-2				
138	141	5.70	5.66	80-120	100	()
92	4574	5.70	5.66	71-131	3231	(Q)
108	17755	5.70	5.66	0- 40	12543	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	174764	5.70	5.49	80-120	100	(T)
164	968246	5.70	5.49	0- 40	554	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	123822	5.70	5.54	80-120	100	(T)
63	2044	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	123822	5.70	5.83	80-120	100	(T)
89	1497	5.70	5.82	38- 98	1	(QT)
63	2044	5.70	5.82	20- 80	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	12604	6.25	6.09	80-120	100	(T)
165	13035	6.25	6.09	61-121	103	(T)
167	4382	6.25	6.09	0- 43	35	(T)

56 p-Nitroaniline		CAS#: 100-01-6				
138	110	6.10	6.09	80-120	100	()
108	444	6.20	6.09	29- 89	401	(QT)
92	2475	6.25	6.09	14- 74	2233	(QT)

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2124.d
Lab Smp Id: 248370014 Client Smp ID: RE36-10-7489
Inj Date : 22-MAR-2010 01:42
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370014|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.00000	weight of sample
M	35.04770	% moisture

Cpnd Variable

Local Compound Variable

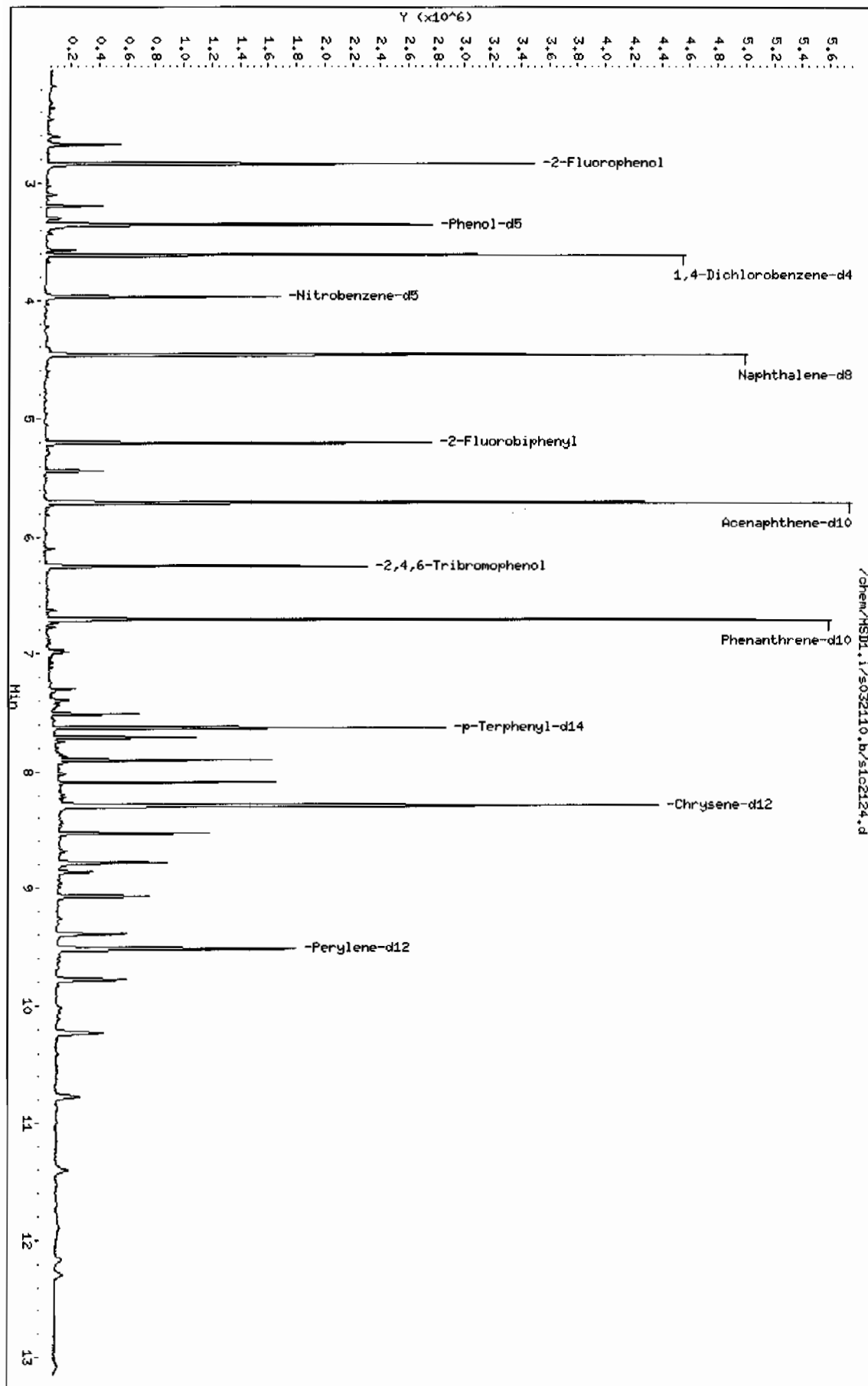
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2917752	40.000
* 91 Chrysene-d12	8.292	4318073	40.000
* 98 Perylene-d12	9.522	2164672	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
----	----	-----	-----	----	-----	-----	-----
Unknown Aldol Condensate					CAS #:		
2.669	396623	5.43738063	279	0		0	10
Tricosane					CAS #: 638-67-5		
7.710	747493	6.92431631	355	97	NIST05.L	139233	91
1-Iodo-2-methylundecane					CAS #: 73105-67-6		
7.898	872983	8.08678338	415	93	NIST05.L	121771	91
Tridecane, 7-hexyl-					CAS #: 7225-66-3		
8.092	976871	9.04913999	464	95	NIST05.L	104273	91
Heptacosane					CAS #: 593-49-7		
8.528	809258	7.49647367	385	99	NIST05.L	165301	91
Eicosane					CAS #: 112-95-8		
8.780	759869	7.03896437	361	98	NIST05.L	113490	91
Unknown					CAS #:		
9.063	744283	13.7532610	706	0		0	98
Unknown					CAS #:		
9.392	608511	11.2443967	577	0		0	98
Unknown					CAS #:		
9.780	682633	12.6140717	647	0		0	98
Unknown					CAS #:		
10.233	504114	9.31529906	478	0		0	98
Unknown					CAS #:		
10.769	379096	7.00514608	360	0		0	98
Unknown					CAS #:		
11.404	256327	4.73654514	243	0		0	98

Data File: /chem/MSD1.i/s032110.b/s102124.d
 Date: 22-MAR-2010 01:42
 Client ID: RE36-10-7489
 Sample Info: 1248370014|9612811SVH11LANK
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD1.i
 Operator: AMY
 Column diameter: 0.20



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: I248370014I96122811ISVM11ILANL

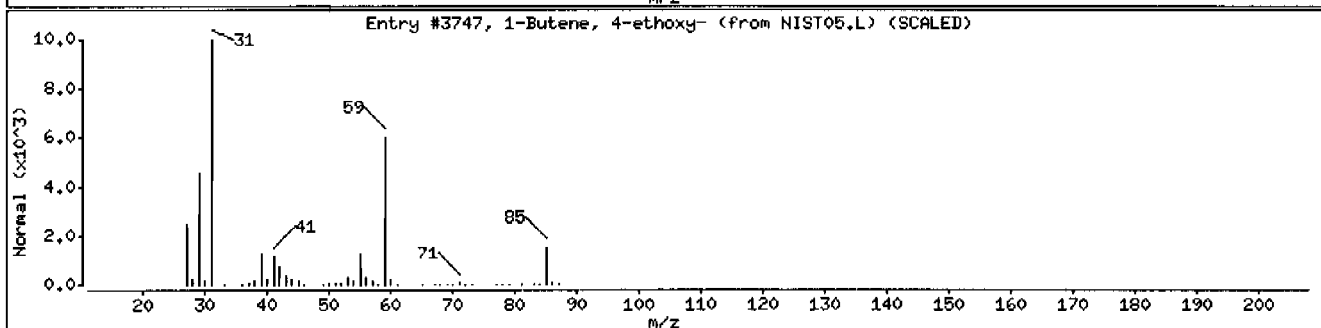
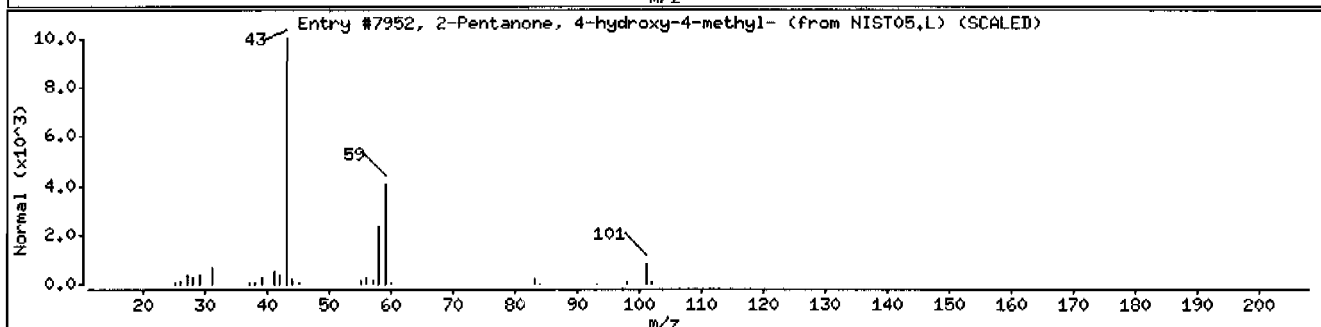
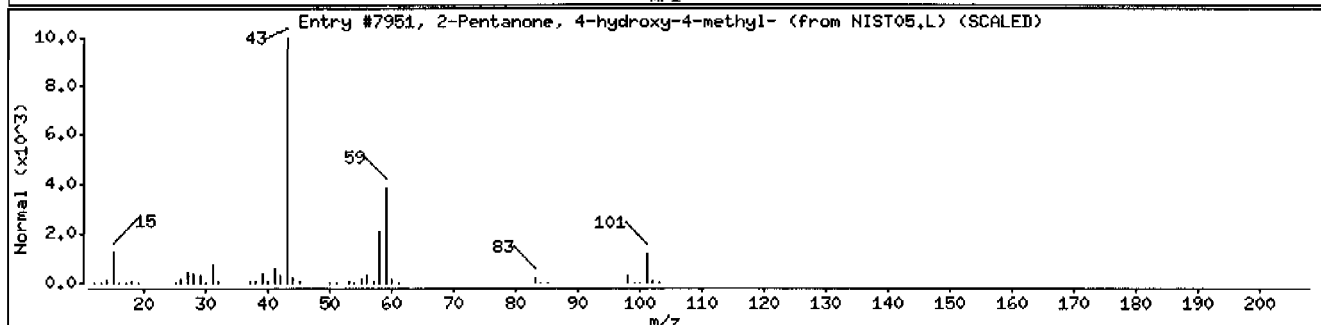
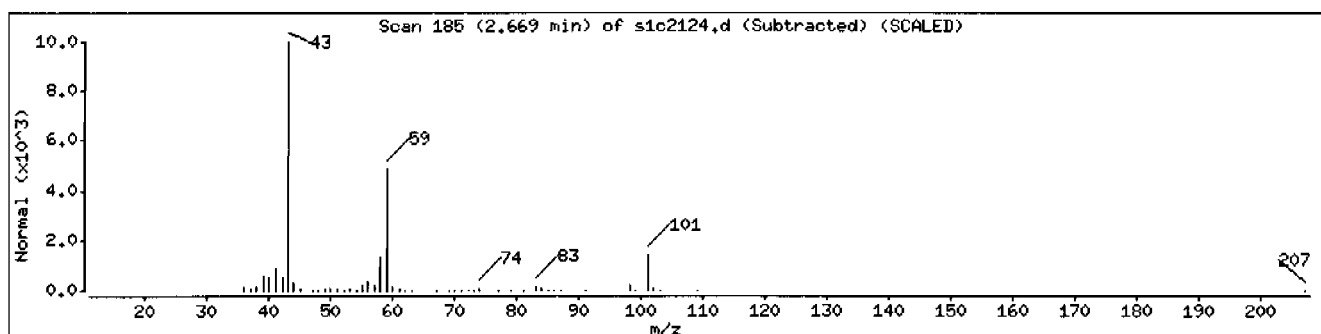
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
1-Butene, 4-ethoxy-	44611-46-3	NIST05.L	3747	23	C6H12O	100



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: I248370014196122811SVMI1ILANL

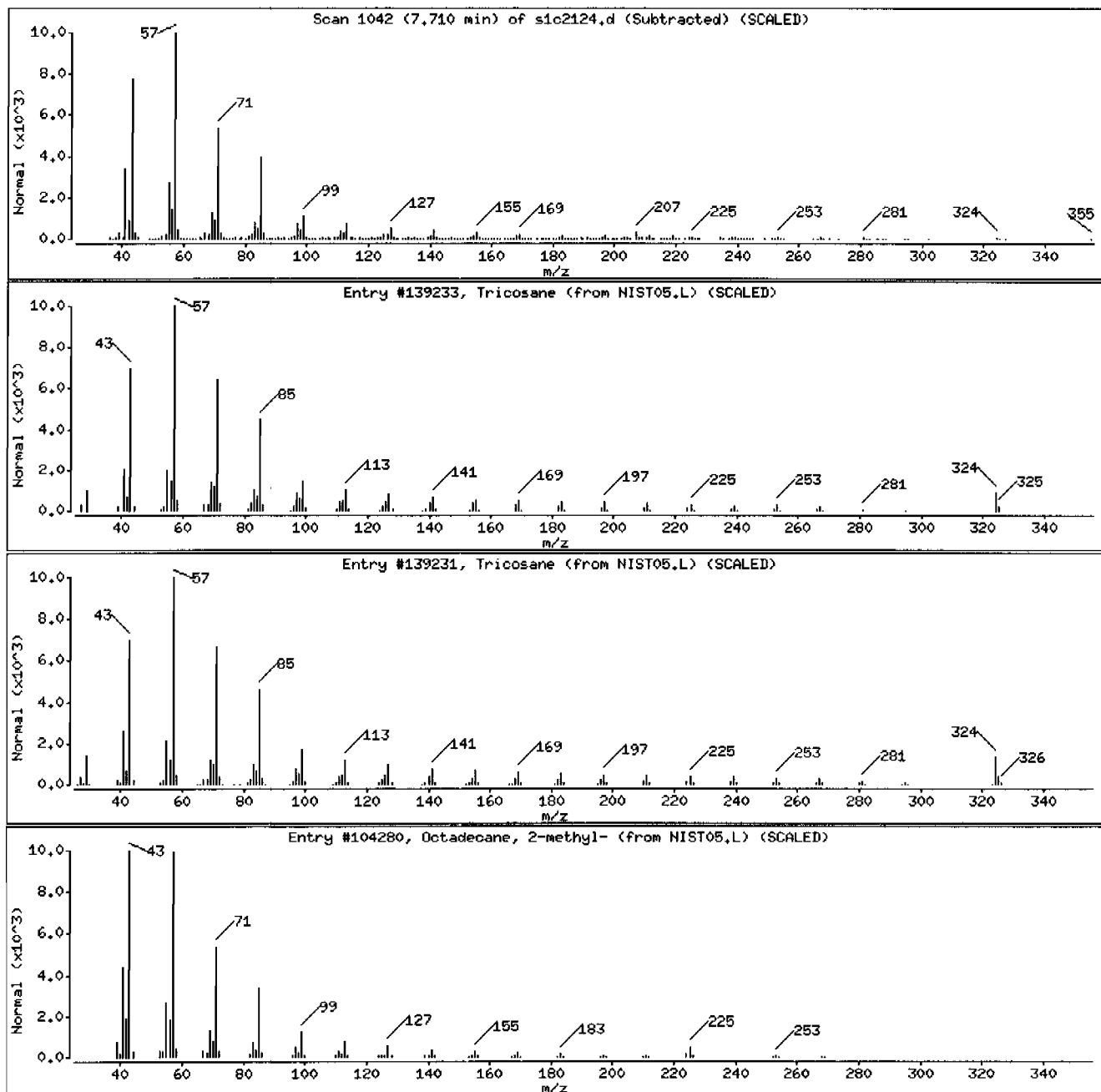
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricosane	638-67-5	NIST05.L	139233	97	C ₂₃ H ₄₈	324
Tricosane	638-67-5	NIST05.L	139231	97	C ₂₃ H ₄₈	324
Octadecane, 2-methyl-	1560-88-9	NIST05.L	104280	93	C ₁₉ H ₄₀	268



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: I248370014196122811ISVM11ILANL

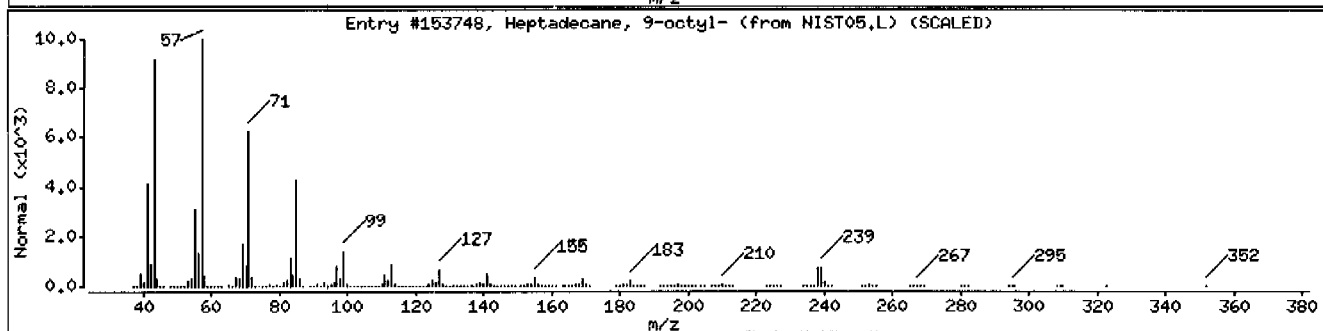
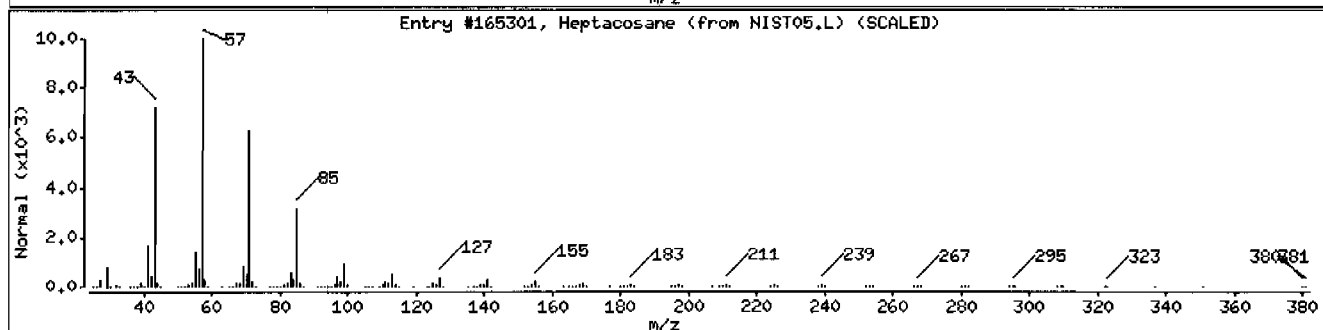
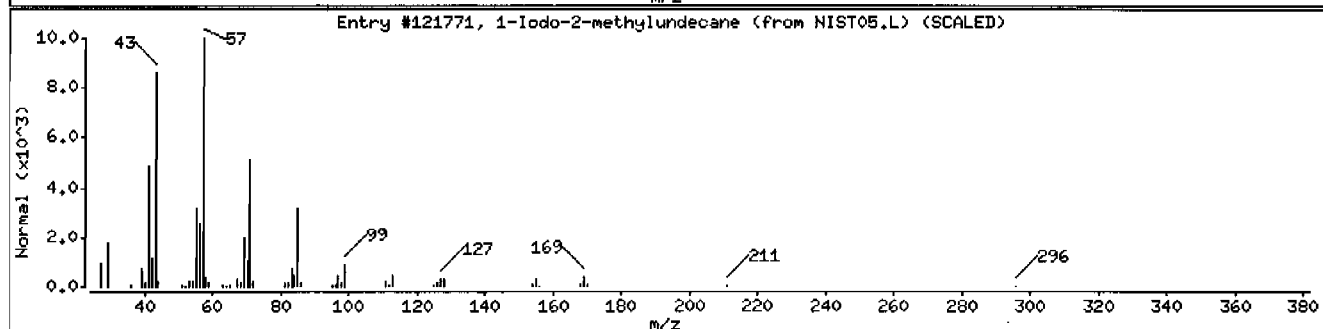
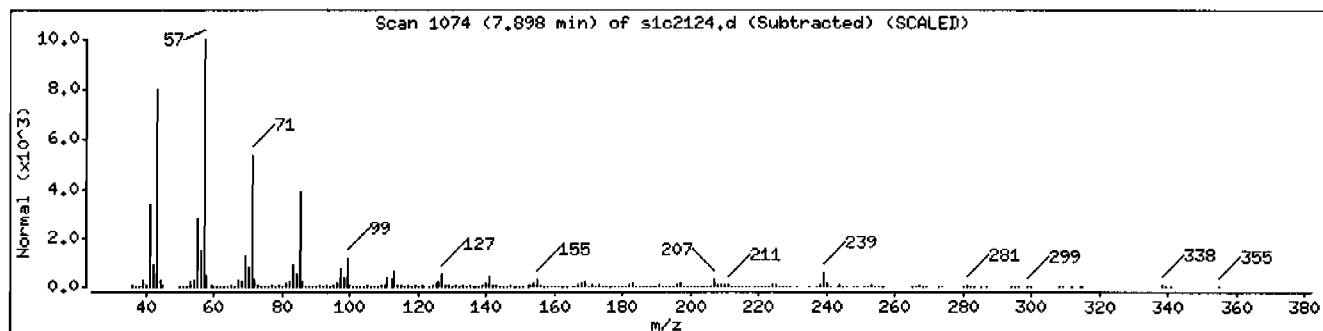
Volume Injected (uL): 0.5

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Iodo-2-methylundecane	73105-67-6	NIST05.L	121771	93	C12H25I	296
Heptacosane	593-49-7	NIST05.L	165301	91	C27H56	380
Heptadecane, 9-octyl-	7225-64-1	NIST05.L	153748	91	C25H52	352



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: 12483700141961228111SVMI11LANL

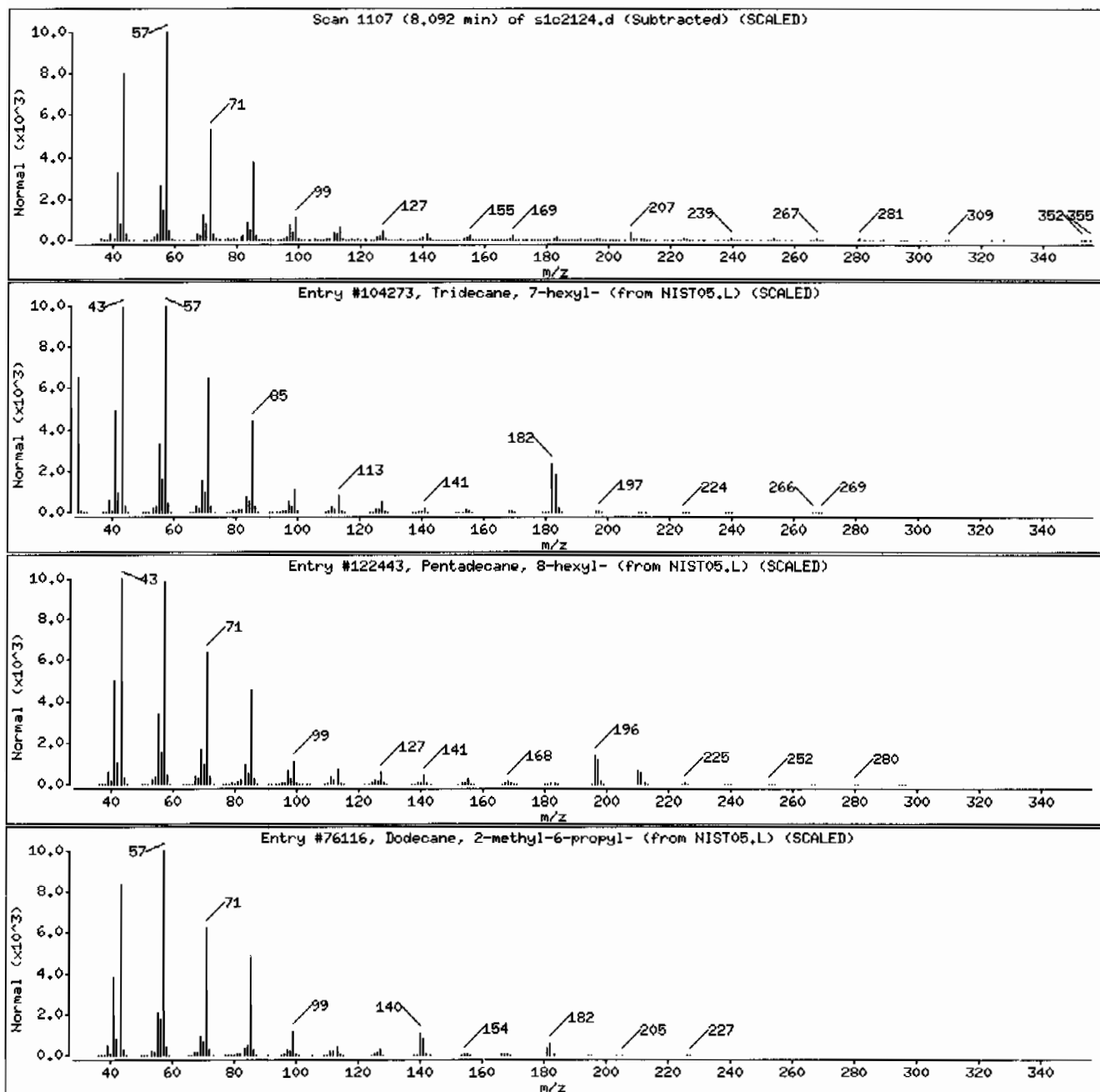
Volume Injected (uL): 0.5

Operator: AMY

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
Pentadecane, 8-hexyl-	13475-75-7	NIST05.L	122443	94	C21H44	296
Dodecane, 2-methyl-6-propyl-	55045-08-4	NIST05.L	76116	93	C16H34	226



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: 1248370014196122811SVH111LANL

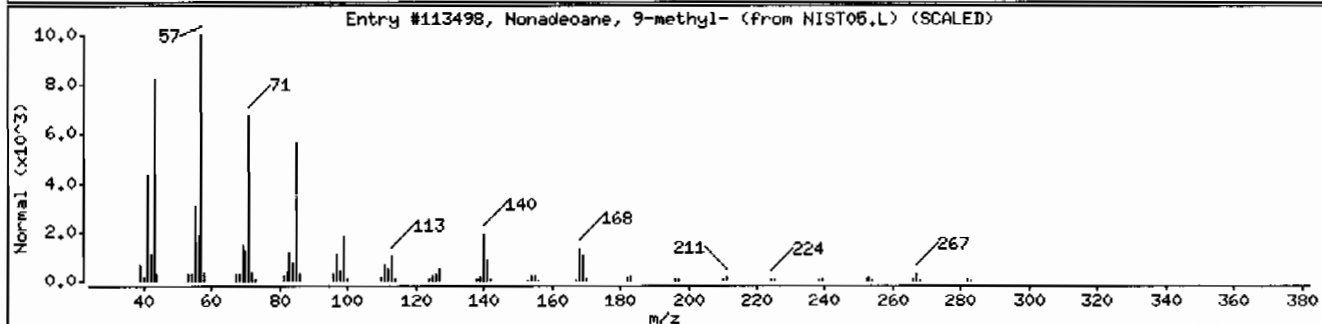
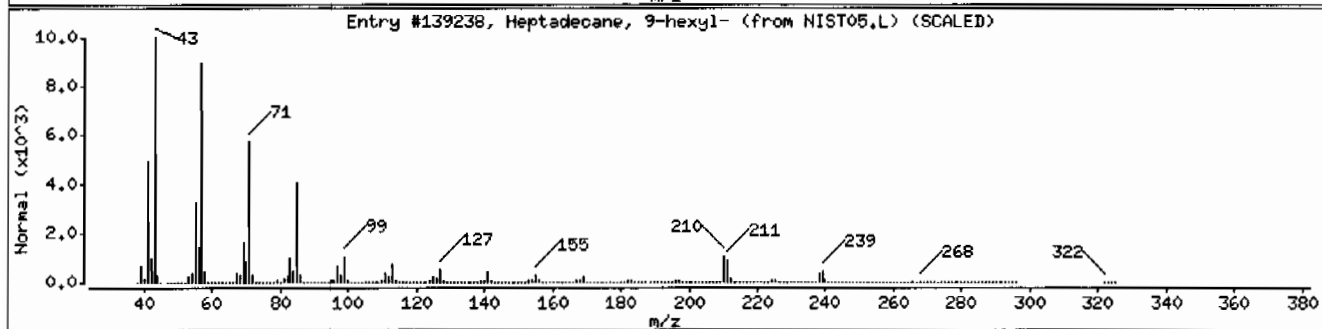
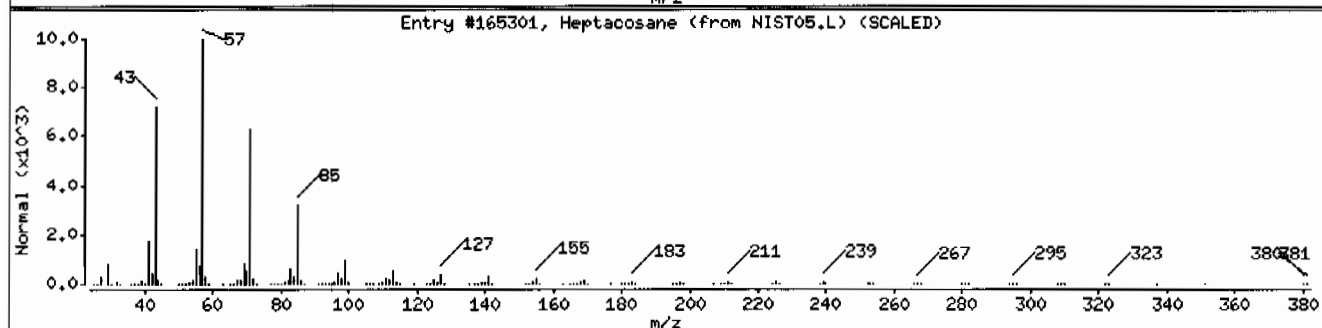
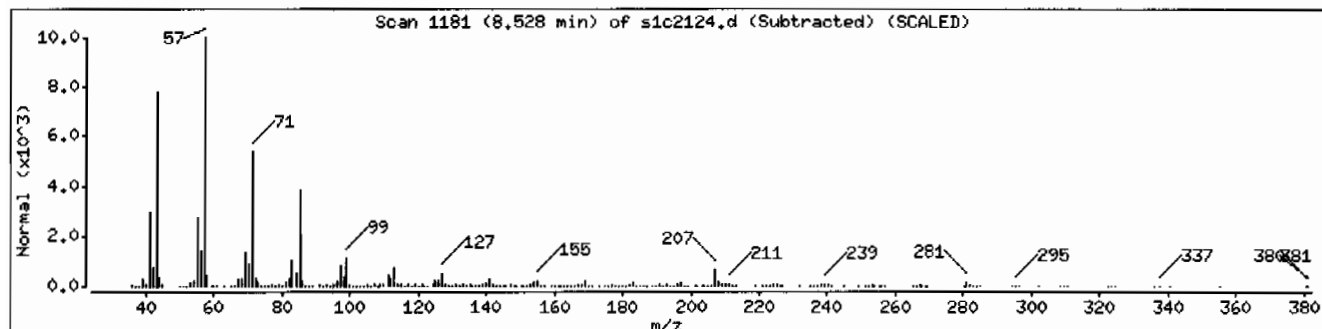
Volume Injected (uL): 0.5

Operator: AMY

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	99	C ₂₇ H ₅₆	380
Heptadecane, 9-hexyl-	55124-79-3	NIST05.L	139238	93	C ₂₃ H ₄₈	324
Nonadecane, 9-methyl-	13287-24-6	NIST05.L	113498	93	C ₂₀ H ₄₂	282



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: 12483700141961228111SVMI11LANL

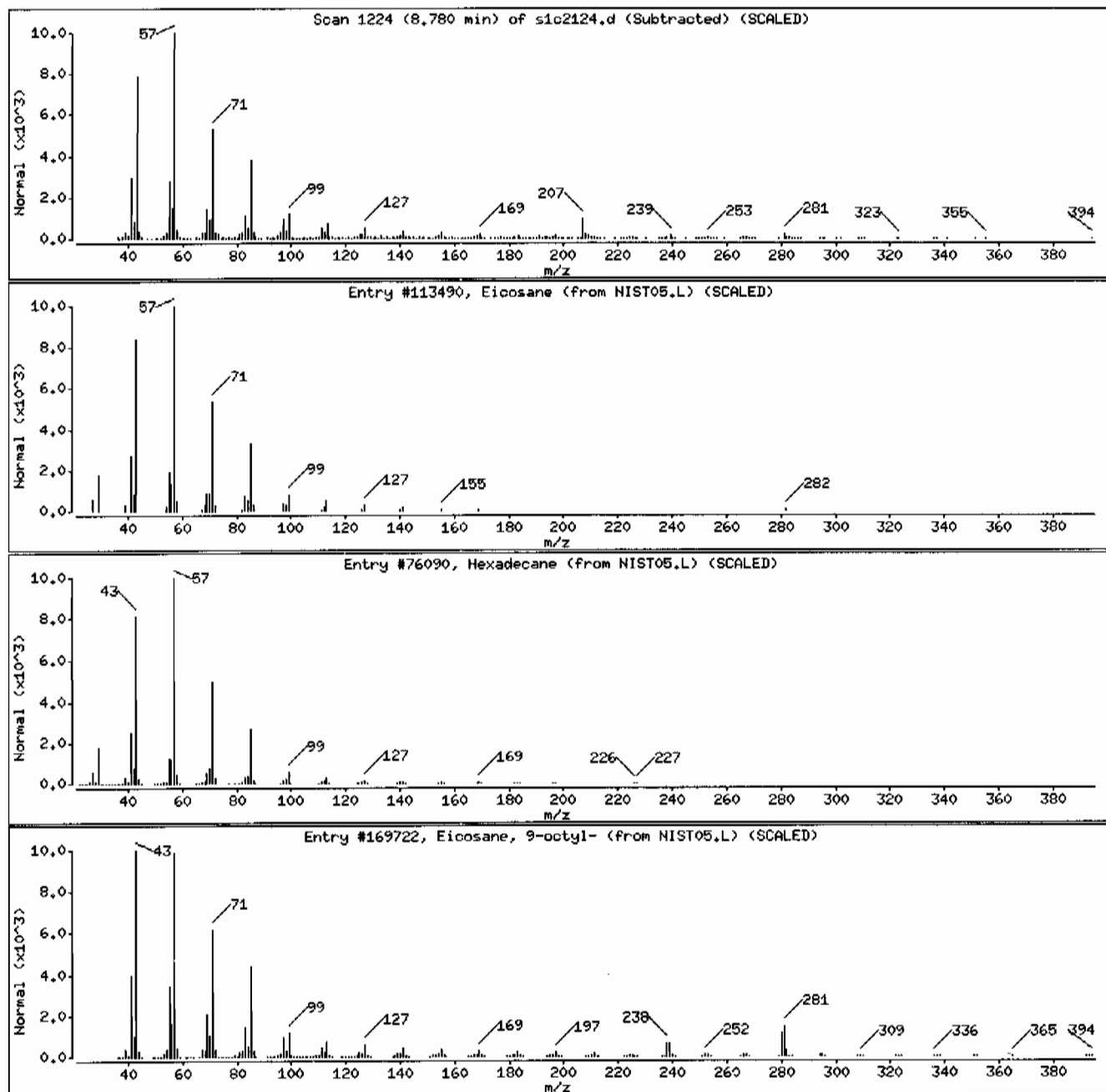
Volume Injected (uL): 0.5

Operator: AMY

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	98	C ₂₀ H ₄₂	282
Hexadecane	544-76-3	NIST05.L	76090	94	C ₁₆ H ₃₄	226
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	93	C ₂₈ H ₅₈	394



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: I248370014196122811SVH111LANL

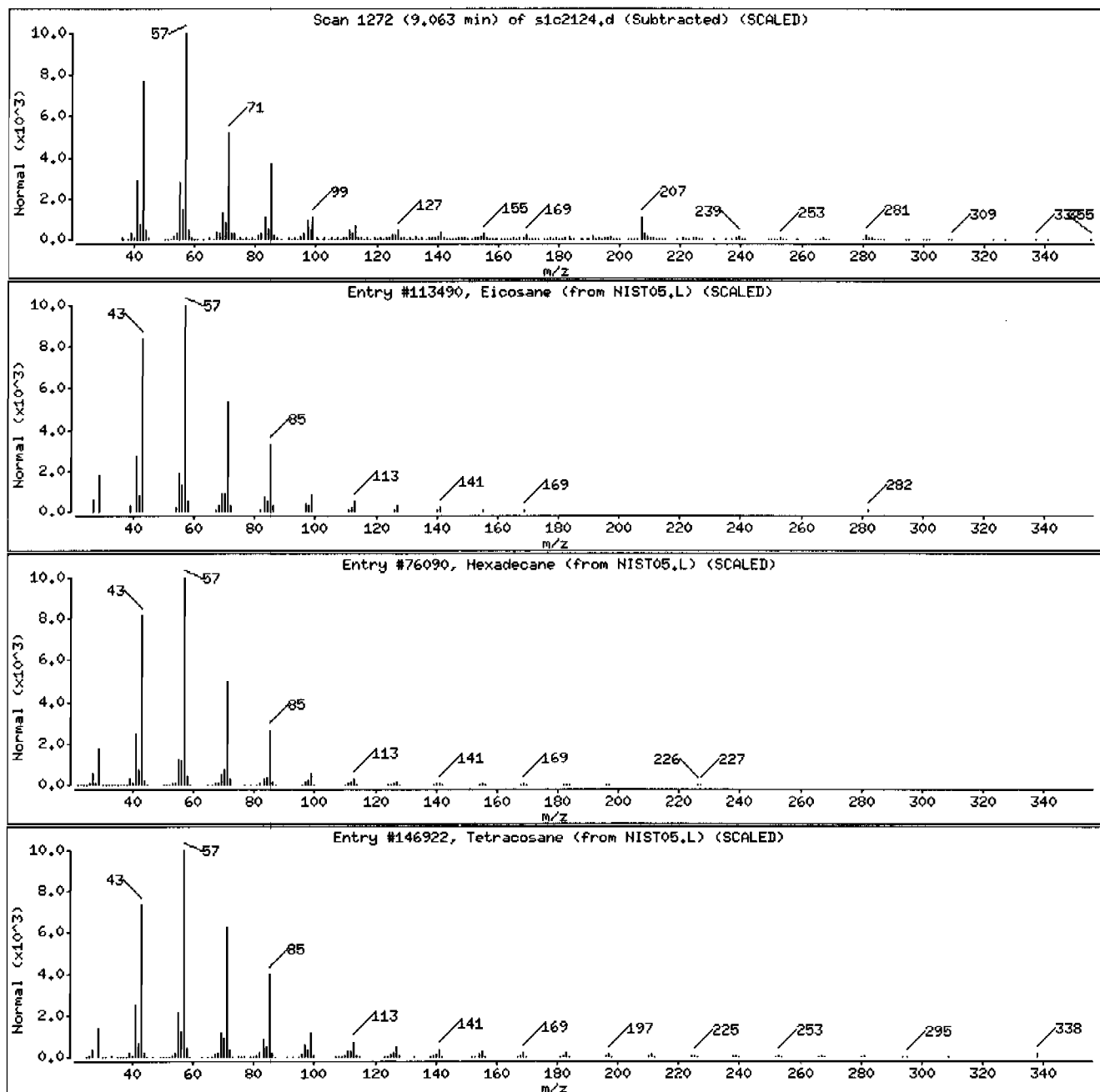
Volume Injected (uL): 0.5

Operator: AMY

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	98	C20H42	282
Hexadecane	544-76-3	NIST05.L	76090	94	C16H34	226
Tetracosane	646-31-1	NIST05.L	146922	87	C24H50	338



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: HSD1.i

Sample Info: I248370014196122811SVH111LANL

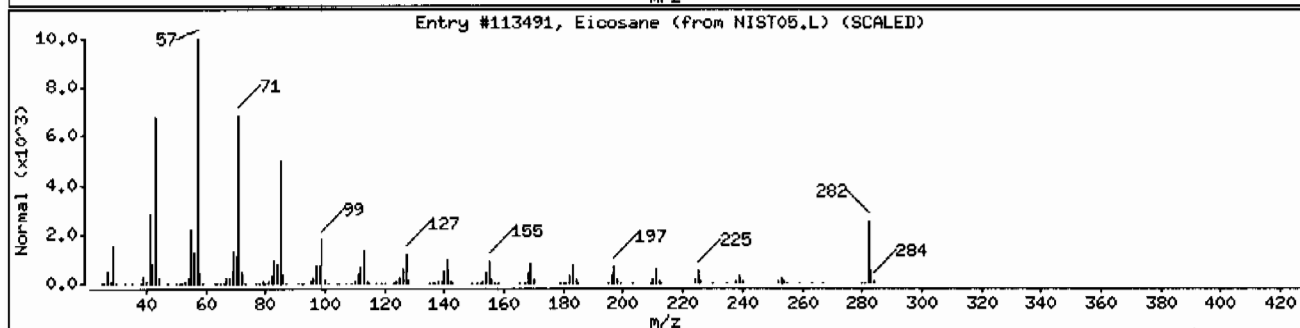
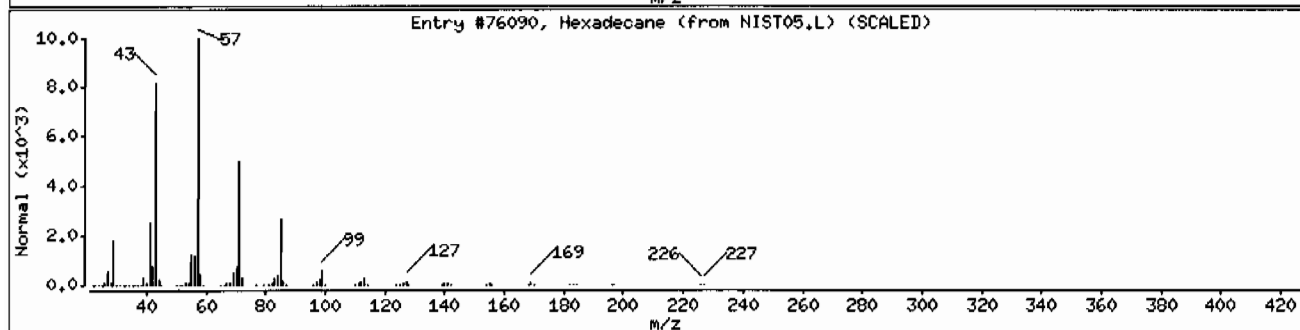
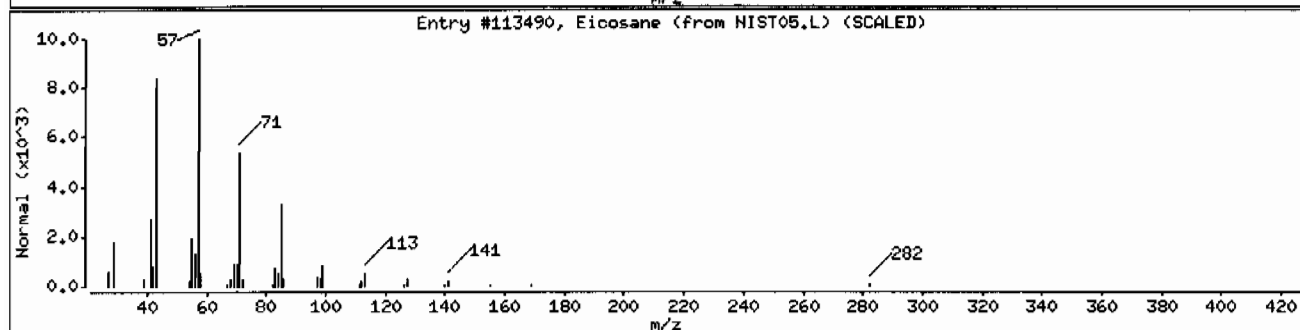
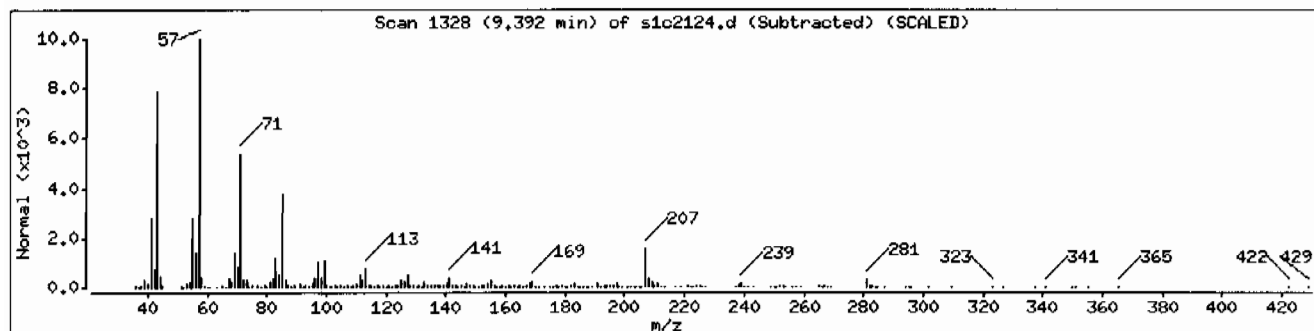
Volume Injected (uL): 0.5

Operator: AMY

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	98	C20H42	282
Hexadecane	544-76-3	NIST05.L	76090	94	C16H34	226
Eicosane	112-95-8	NIST05.L	113491	93	C20H42	282



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: 1248370014196122811SVH111LANL

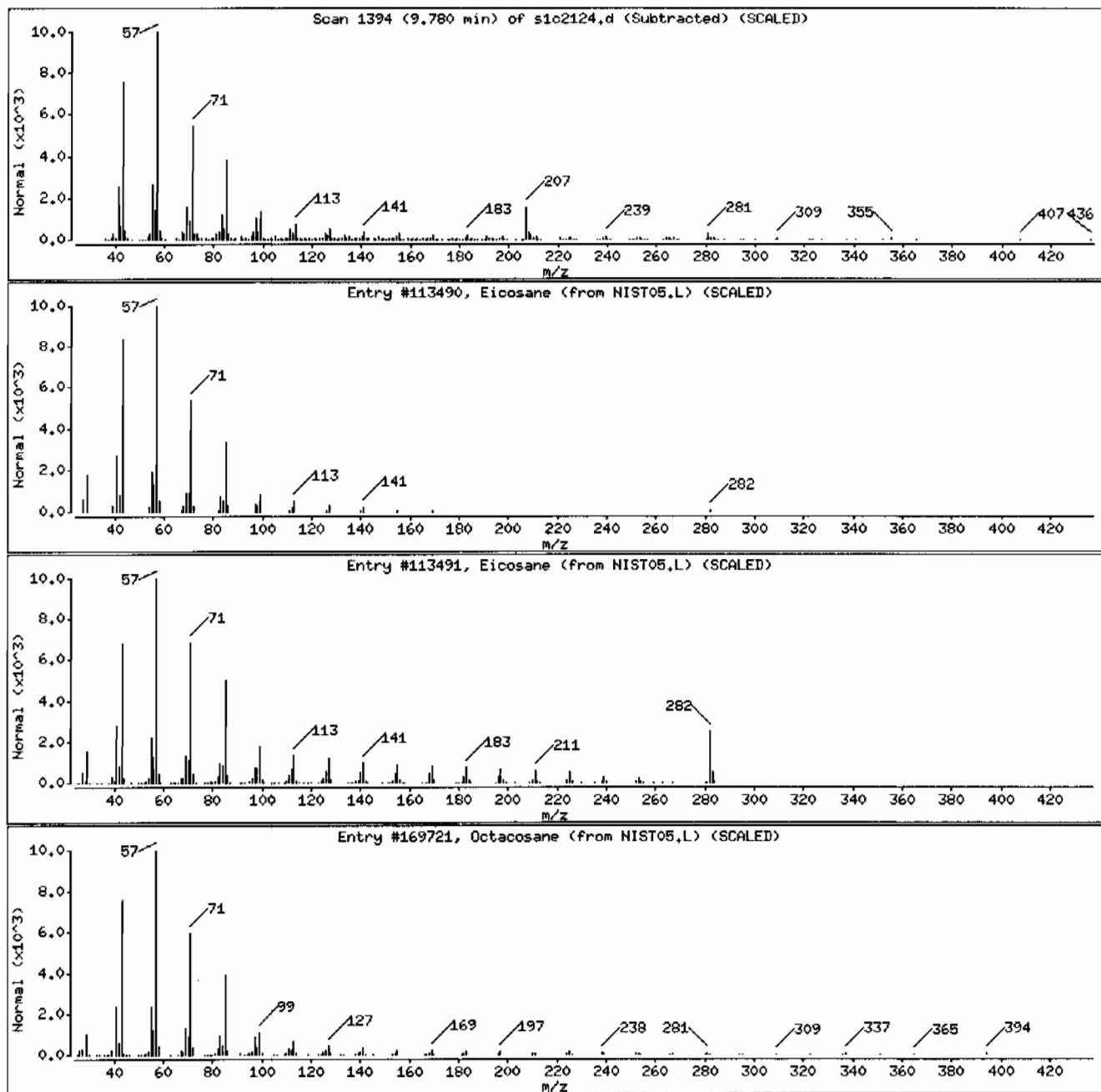
Volume Injected (uL): 0.5

Operator: AMY

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	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113491	93	C20H42	282
Octacosane	630-02-4	NIST05.L	169721	90	C28H58	394



Date: 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: 1248370014196122811SVH111LANL

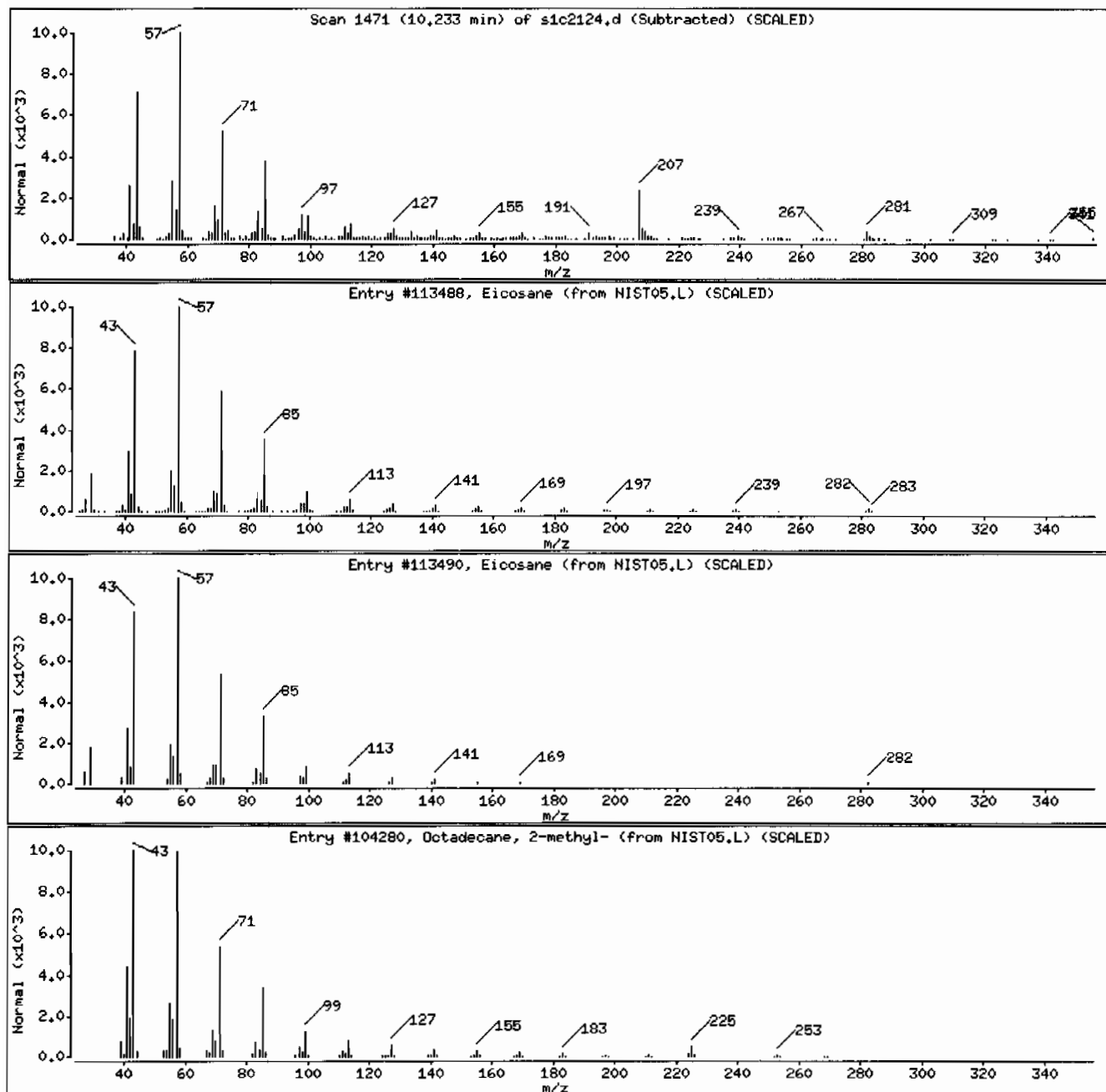
Volume Injected (uL): 0.5

Operator: AMY

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	113488	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113490	91	C20H42	282
Octadecane, 2-methyl-	1560-88-9	NIST05.L	104280	86	C19H40	268



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: 12483700141961228111SVH111LANL

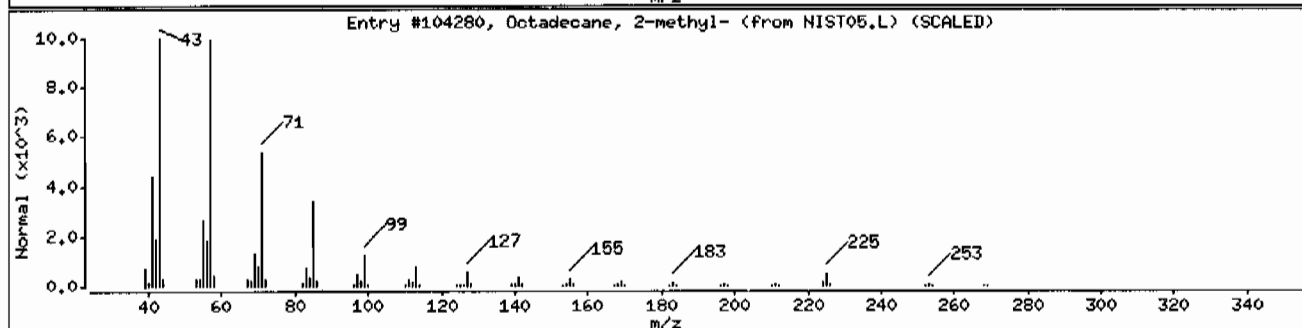
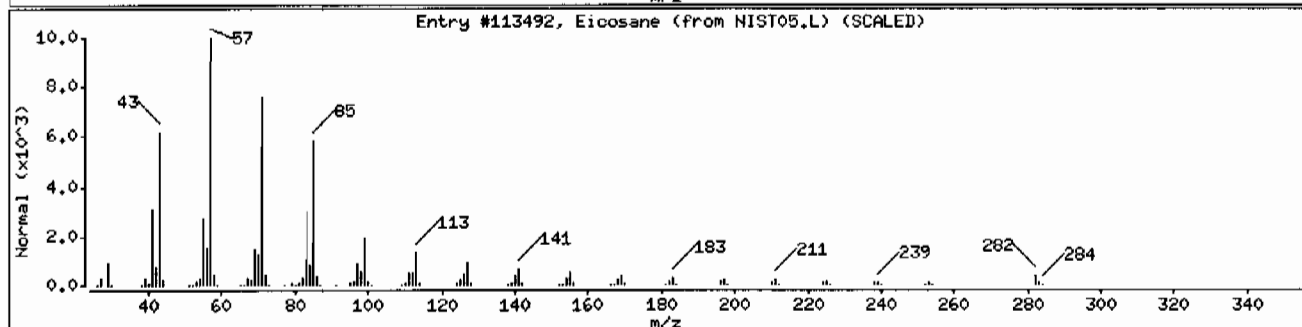
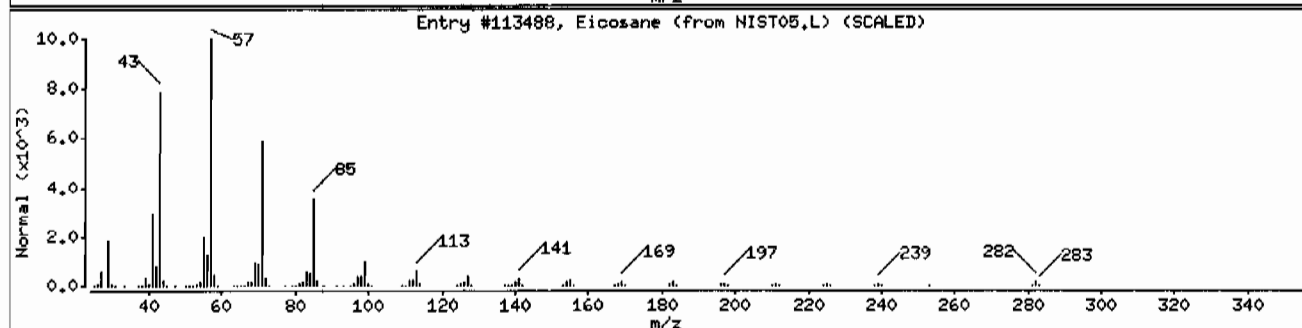
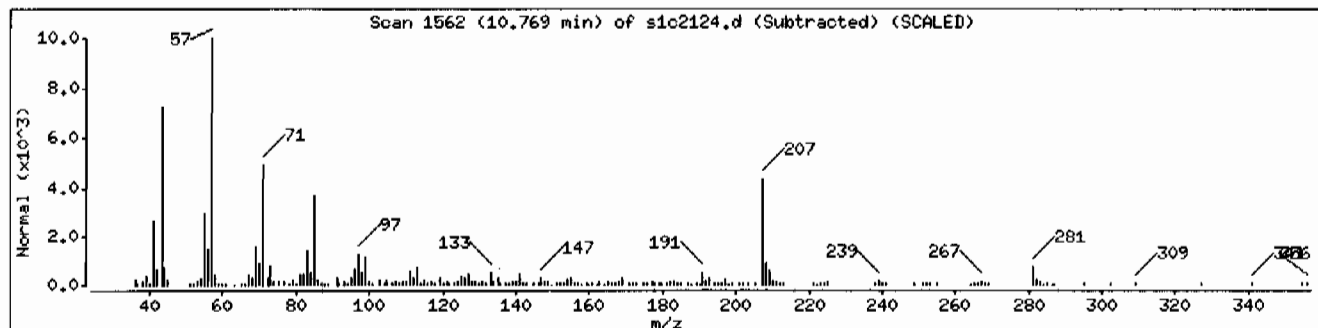
Volume Injected (uL): 0.5

Operator: AMY

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	113488	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282
Octadecane, 2-methyl-	1560-88-9	NIST05.L	104280	78	C19H40	268



Date : 22-MAR-2010 01:42

Client ID: RE36-10-7489

Instrument: MSD1.i

Sample Info: 1248370014196122811SVH11ILANL

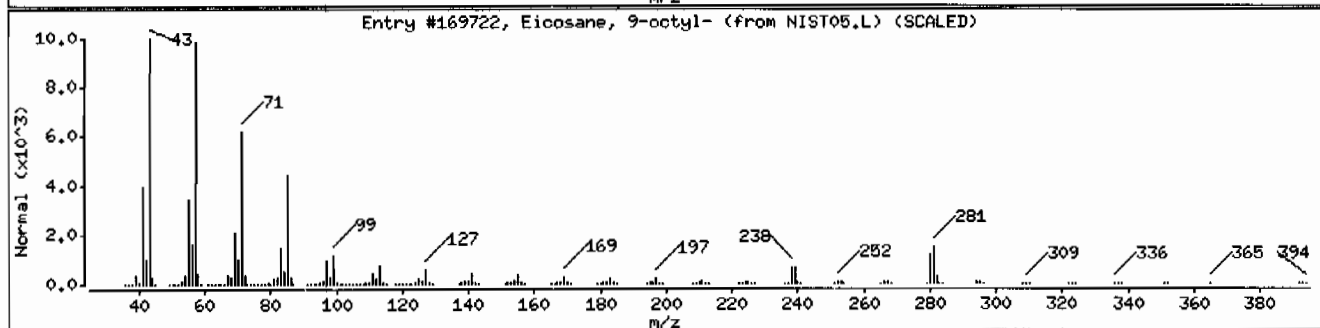
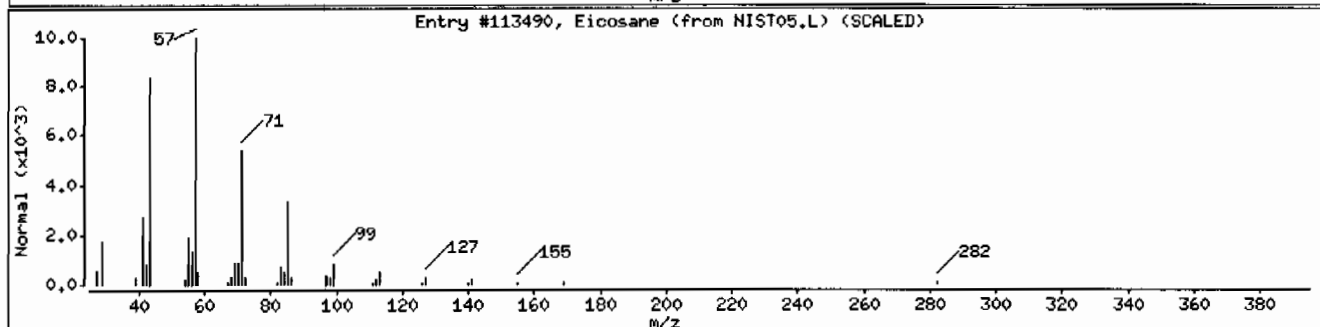
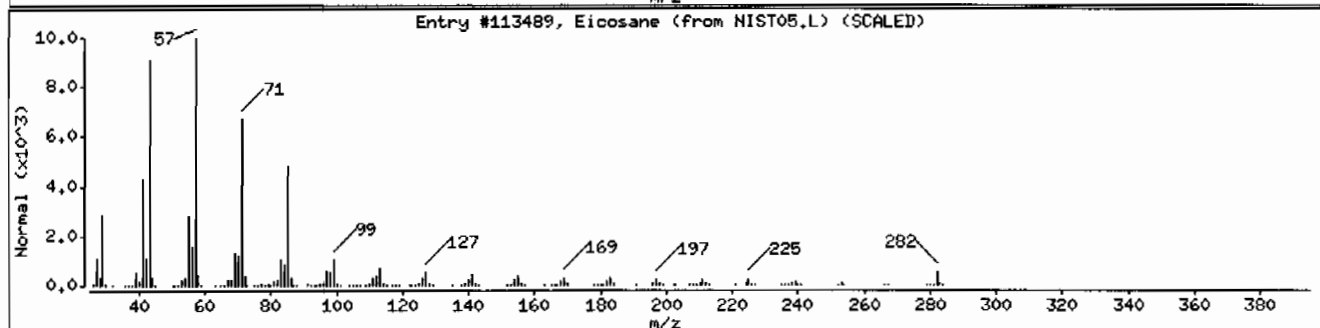
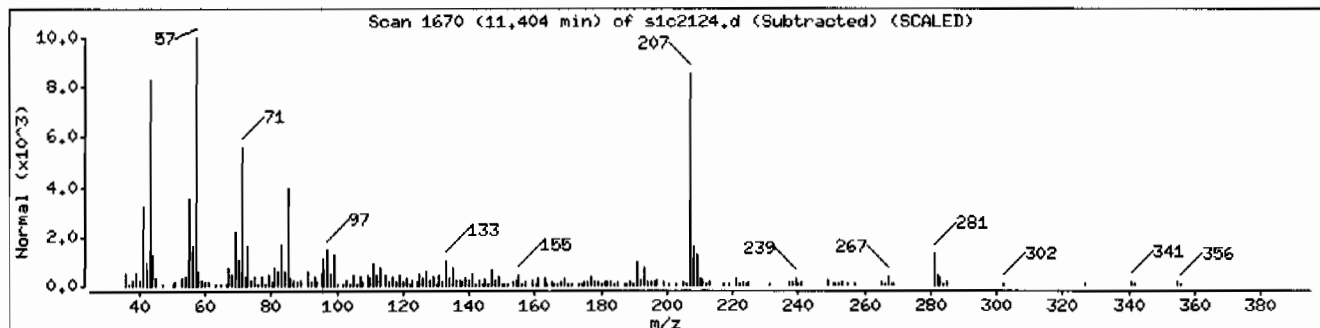
Volume Injected (uL): 0.5

Operator: AMY

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	95	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113490	93	C ₂₀ H ₄₂	282
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	46	C ₂₈ H ₅₈	394



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

SDG Number: 10-2150
Lab Sample ID: 248370008

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 26
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE36-10-7490
Batch ID: 961228
Run Date: 03/21/2010 23:20
Prep Date: 03/05/2010 11:30
Data File: s1c2118.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	449	ug/kg	89.8	449
108-95-2	Phenol	U	449	ug/kg	89.8	449
95-57-8	2-Chlorophenol	U	449	ug/kg	89.8	449
106-46-7	1,4-Dichlorobenzene	U	449	ug/kg	89.8	449
621-64-7	N-Nitrosodipropylamine	U	449	ug/kg	89.8	449
59-50-7	4-Chloro-3-methylphenol	U	449	ug/kg	89.8	449
83-32-9	Acenaphthene	U	44.9	ug/kg	14.8	44.9
121-14-2	2,4-Dinitrotoluene	U	449	ug/kg	44.9	449
100-02-7	4-Nitrophenol	U	449	ug/kg	148	449
87-86-5	Pentachlorophenol	U	449	ug/kg	112	449
129-00-0	Pyrene	U	44.9	ug/kg	13.5	44.9
110-86-1	Pyridine	U	449	ug/kg	89.8	449
62-53-3	Aniline	U	449	ug/kg	135	449
111-44-4	bis(2-Chloroethyl) ether	U	449	ug/kg	89.8	449
541-73-1	1,3-Dichlorobenzene	U	449	ug/kg	89.8	449
100-51-6	Benzyl alcohol	U	449	ug/kg	135	449
95-50-1	1,2-Dichlorobenzene	U	449	ug/kg	89.8	449
108-60-1	bis(2-Chloroisopropyl)ether	U	449	ug/kg	89.8	449
95-48-7	o-Cresol	U	449	ug/kg	89.8	449
65794-96-9	m,p-Cresols	U	449	ug/kg	135	449
67-72-1	Hexachloroethane	U	449	ug/kg	89.8	449
98-95-3	Nitrobenzene	U	449	ug/kg	89.8	449
78-59-1	Isophorone	U	449	ug/kg	89.8	449
88-75-5	2-Nitrophenol	U	449	ug/kg	89.8	449
105-67-9	2,4-Dimethylphenol	U	449	ug/kg	157	449
111-91-1	bis(2-Chloroethoxy)methane	U	449	ug/kg	89.8	449
120-83-2	2,4-Dichlorophenol	U	449	ug/kg	89.8	449
65-85-0	Benzoic acid	U	898	ug/kg	224	898
91-20-3	Naphthalene	U	44.9	ug/kg	13.5	44.9
106-47-8	4-Chloroaniline	U	449	ug/kg	89.8	449
87-68-3	Hexachlorobutadiene	U	449	ug/kg	89.8	449
91-57-6	2-Methylnaphthalene	U	44.9	ug/kg	8.98	44.9
77-47-4	Hexachlorocyclopentadiene	U	449	ug/kg	89.8	449
88-06-2	2,4,6-Trichlorophenol	U	449	ug/kg	89.8	449
95-95-4	2,4,5-Trichlorophenol	U	449	ug/kg	89.8	449
91-58-7	2-Chloronaphthalene	U	44.9	ug/kg	14.8	44.9
88-74-4	2-Nitroaniline	U	449	ug/kg	89.8	449
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	449	ug/kg	89.8	449

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 248370008	Date Received: 03/02/2010 08:50	%Moisture: 26
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-7490	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1J	Dilution: 1
Run Date: 03/21/2010 23:20	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: slc2118.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	449	ug/kg	89.8	449
606-20-2	2,6-Dinitrotoluene	U	449	ug/kg	44.9	449
208-96-8	Acenaphthylene	U	44.9	ug/kg	13.5	44.9
51-28-5	2,4-Dinitrophenol	U	898	ug/kg	171	898
132-64-9	Dibenzofuran	U	449	ug/kg	89.8	449
84-66-2	Diethylphthalate	U	449	ug/kg	89.8	449
86-73-7	Fluorene	U	44.9	ug/kg	13.5	44.9
7005-72-3	4-Chlorophenylphenylether	U	449	ug/kg	89.8	449
534-52-1	2-Methyl-4,6-dinitrophenol	U	449	ug/kg	89.8	449
100-01-6	4-Nitroaniline	U	449	ug/kg	135	449
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	449	ug/kg	89.8	449
122-66-7	Azobenzene	U	449	ug/kg	89.8	449
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	449	ug/kg	89.8	449
118-74-1	Hexachlorobenzene	U	449	ug/kg	89.8	449
85-01-8	Phenanthrene	U	44.9	ug/kg	13.5	44.9
120-12-7	Anthracene	U	44.9	ug/kg	8.98	44.9
84-74-2	Di-n-butylphthalate	U	449	ug/kg	89.8	449
206-44-0	Fluoranthene	U	44.9	ug/kg	13.5	44.9
85-68-7	Butylbenzylphthalate	U	449	ug/kg	89.8	449
56-55-3	Benzo(a)anthracene	U	44.9	ug/kg	13.5	44.9
91-94-1	3,3'-Dichlorobenzidine	U	449	ug/kg	135	449
218-01-9	Chrysene	U	44.9	ug/kg	13.5	44.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	449	ug/kg	89.8	449
117-84-0	Di-n-octylphthalate	U	449	ug/kg	89.8	449
205-99-2	Benzo(b)fluoranthene	U	44.9	ug/kg	13.5	44.9
207-08-9	Benzo(k)fluoranthene	U	44.9	ug/kg	13.5	44.9
50-32-8	Benzo(a)pyrene	U	44.9	ug/kg	13.5	44.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.9	ug/kg	13.5	44.9
53-70-3	Dibenzo(a,h)anthracene	U	44.9	ug/kg	13.5	44.9
191-24-2	Benzo(ghi)perylene	U	44.9	ug/kg	13.5	44.9
120-82-1	1,2,4-Trichlorobenzene	U	449	ug/kg	89.8	449

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.81	234	ug/kg		J
	Unknown Aldol Condensate	2.67	253	ug/kg		JA

Data File: /chem/MSD1.i/s032110.b/slc2118.d
Report Date: 22-Mar-2010 15:18

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2118.d
Lab Smp Id: 248370008 Client Smp ID: RE36-10-7490
Inj Date : 21-MAR-2010 23:20
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370008|961228|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	25.97380	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
	MASS						ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152		3.610	3.610	(1.000)	479229	40.0000	
* 29 Naphthalene-d8	136		4.463	4.469	(1.000)	1880030	40.0000	
* 46 Acenaphthene-d10	164		5.704	5.704	(1.000)	984259	40.0000	
* 67 Phenanthrene-d10	188		6.704	6.710	(1.000)	1769998	40.0000	
* 91 Chrysene-d12	240		8.286	8.292	(1.000)	1437073	40.0000	
* 98 Perylene-d12	264		9.522	9.522	(1.000)	912211	40.0000	
\$ 3 2-Fluorophenol	112		2.834	2.822	(0.785)	681183	55.1999	2480
\$ 5 Phenol-d5	99		3.346	3.346	(0.927)	861099	57.2966	2570
\$ 20 Nitrobenzene-d5	82		3.969	3.975	(0.889)	329900	28.6103	1280
\$ 39 2-Fluorobiphenyl	172		5.204	5.204	(0.912)	520688	19.1550	860
\$ 60 2,4,6-Tribromophenol	329		6.251	6.251	(1.096)	158848	49.2265	2210
\$ 81 p-Terphenyl-d14	244		7.622	7.622	(0.920)	573066	23.9191	1070

ION RATIO REPORT

SV REPORT

Data file: slc2118.d

Report Date: 03/22/2010 11:55

Lab. ID: 248370008

SampleType: SAMPLE

Injection Date: 21-MAR-2010 23:20

Operator: AMY

Instrument: MSD1.i

Sample Info: |248370008|961228|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100310-01|

Comment:

Method used: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2150

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	42107	3.35	3.40	80-120	100	()
93	4062	3.39	3.40	233-293	10	(Q)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	45192	3.97	3.86	80-120	100	(T)
42	31818	3.97	3.86	48-108	70	(T)

41	m-Nitroaniline	CAS#: 99-09-2				
138	235	5.70	5.66	80-120	100	()
92	4790	5.70	5.66	71-131	2038	(Q)
108	17851	5.70	5.66	0- 40	7593	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	176698	5.70	5.49	80-120	100	(T)
164	984259	5.70	5.49	0- 40	557	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	126391	5.70	5.54	80-120	100	(T)
63	1962	5.70	5.54	50-110	2	(QT)

50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	126391	5.70	5.83	80-120	100	(T)
89	1562	5.70	5.82	38- 98	1	(QT)
63	1962	5.70	5.82	20- 80	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	12357	6.25	6.09	80-120	100	(T)
165	12958	6.25	6.09	61-121	105	(T)
167	4464	6.25	6.09	0- 43	36	(T)

56 p-Nitroaniline		CAS#: 100-01-6				
138	127	6.33	6.09	80-120	100	(T)
108	203	6.33	6.09	29- 89	160	(QT)
92	322	6.33	6.09	14- 74	254	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/s1c2118.d
Lab Smp Id: 248370008 Client Smp ID: RE36-10-7490
Inj Date : 21-MAR-2010 23:20
Operator : AMY Inst ID: MSD1.i
Smp Info : |248370008|961228|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: s1c1620.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.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	30.09000	weight of sample
M	25.97380	% moisture

Cpnd Variable

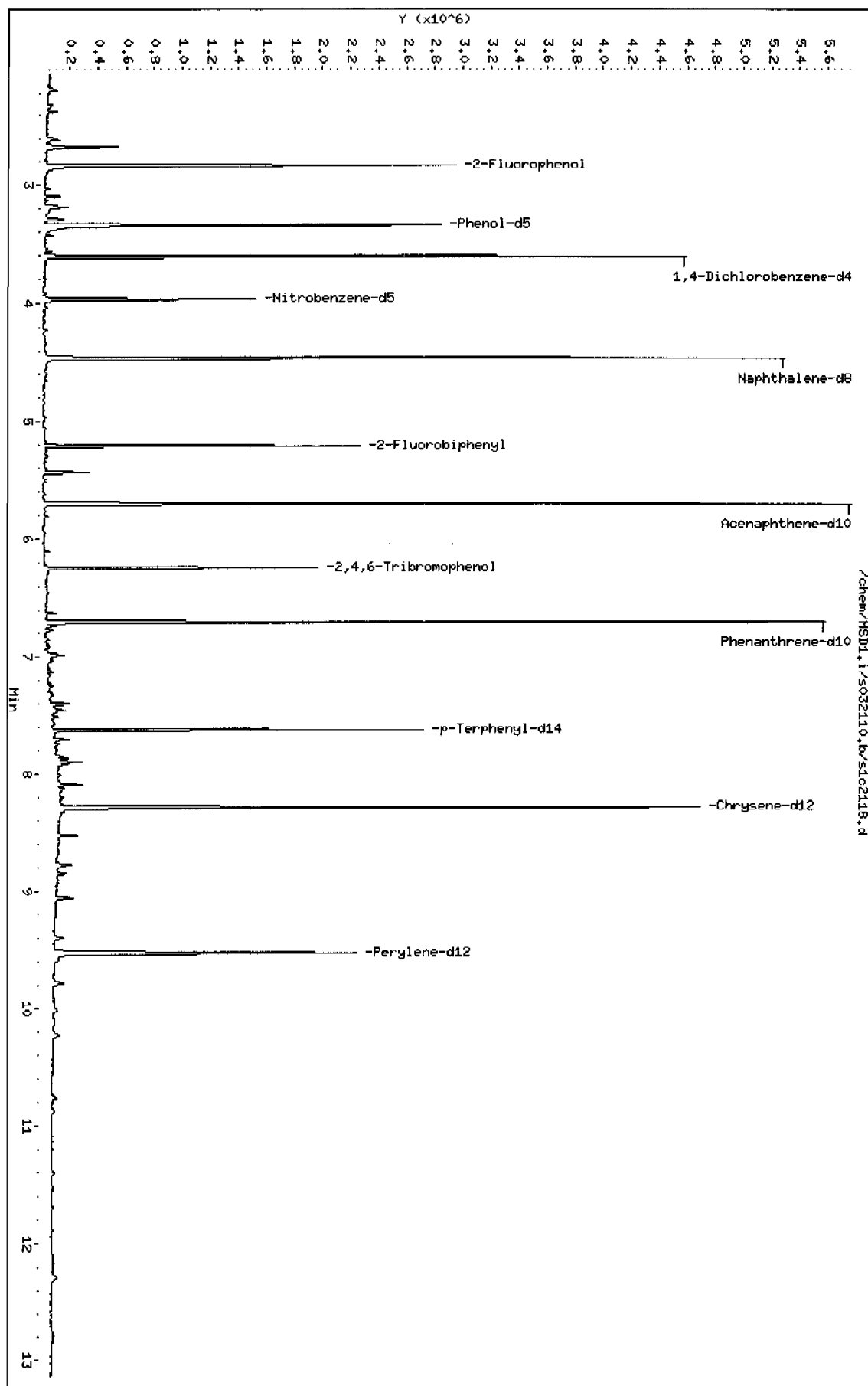
Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2930364	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
1.810	381359	5.20561863	234	0		0	10
Unknown Aldol Condensate					CAS #:		
2.669	413501	5.64436631	253	0		0	10

Data File: /chem/MSD1.i/s032110.b/s1c2118.d
Date: 21-MAR-2010 23:20
Client ID: RE36-10-7490
Sample Info: 1248370008196122811SVH11L1ANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20



Date : 21-MAR-2010 23:20

Client ID: RE36-10-7490

Instrument: MSD1.i

Sample Info: I248370008196122811ISVM11ILANL

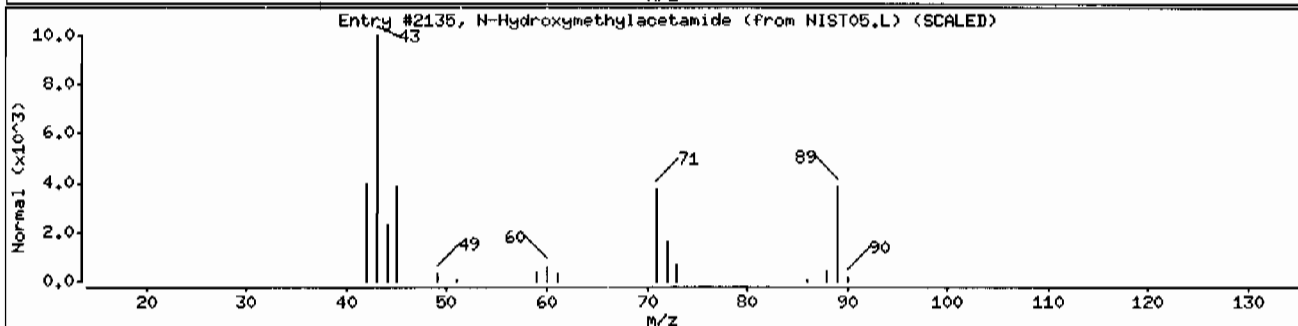
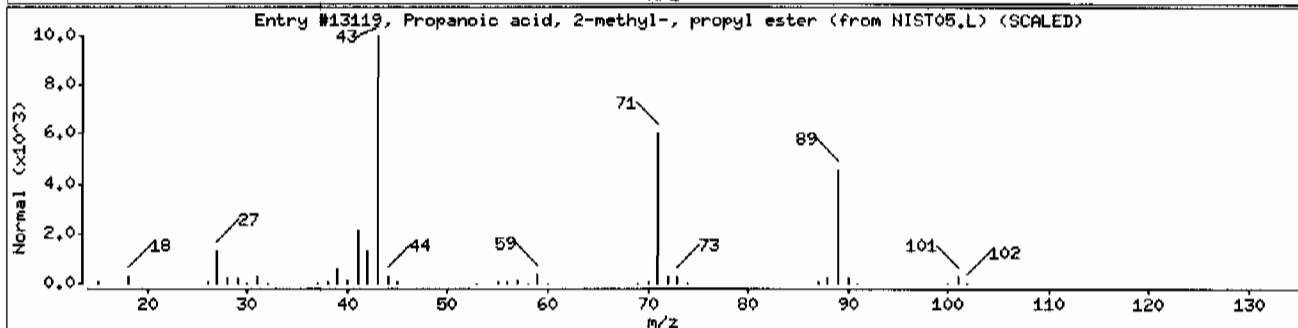
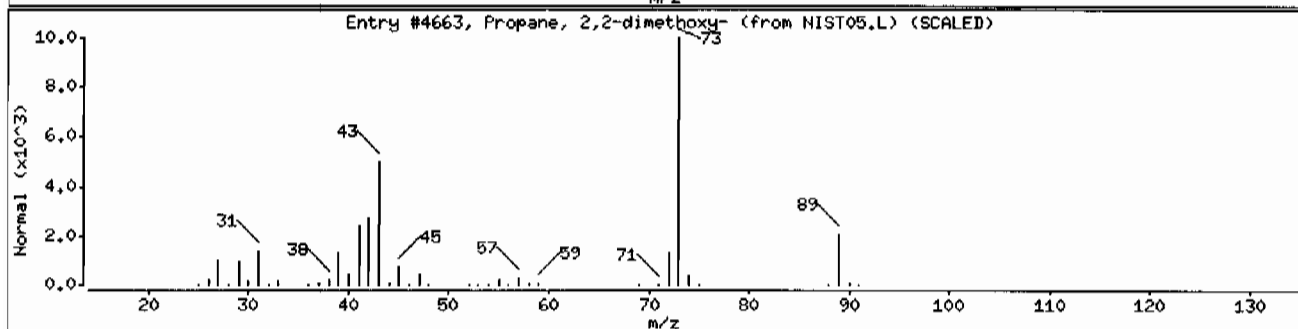
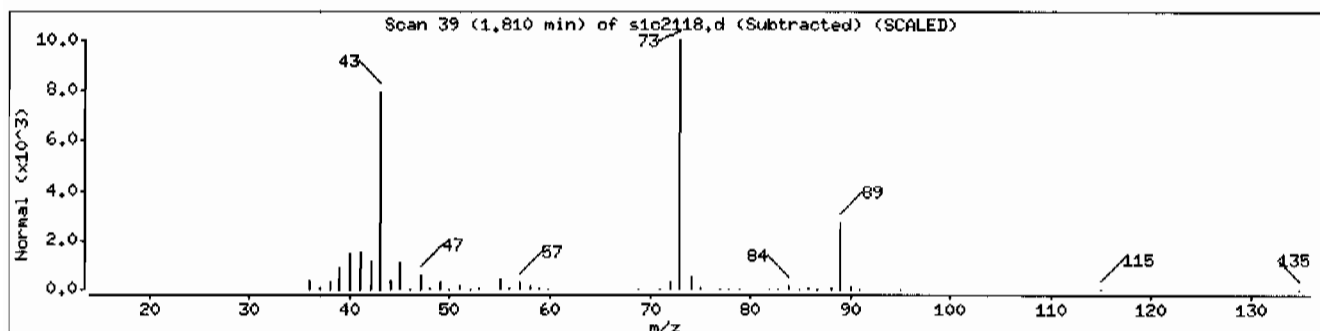
Volume Injected (uL): 0.5

Operator: AMY

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	33	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	25	C7H14O2	130
N-Hydroxymethylacetamide	625-51-4	NIST05.L	2135	23	C3H7NO2	89



Date : 21-MAR-2010 23:20

Client ID: RE36-10-7490

Instrument: MSD1.i

Sample Info: 1248370008196122811SVMI11LANL

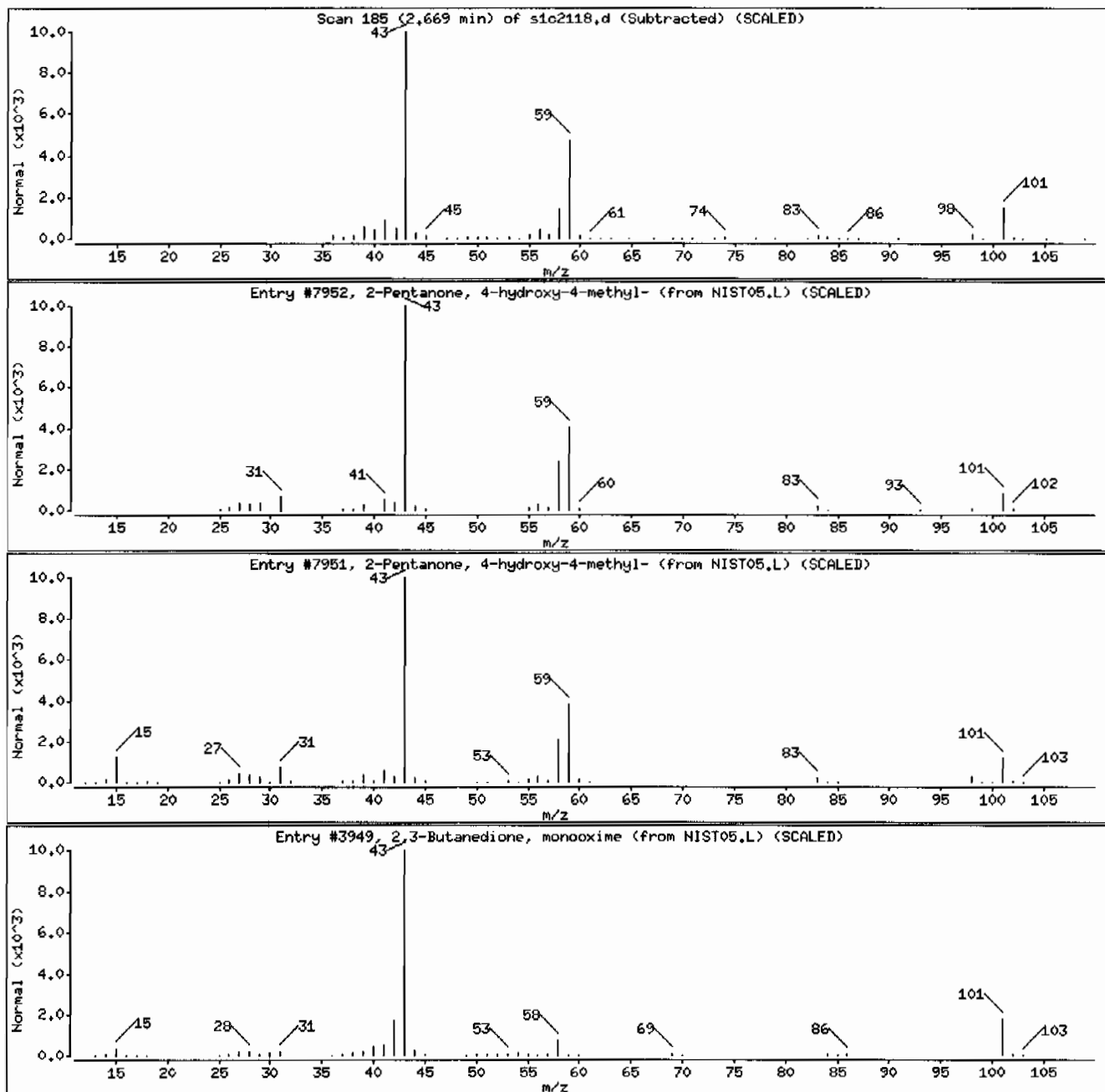
Volume Injected (uL): 0.5

Operator: AMY

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	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101



Standard Data

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX								
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
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								
Hexachlorobutadiene	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
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(j)fluoranthene		10	20	40	50	80	100	120
Dibenzo(a,h)pyrene		10	20	40	50	80	100	120
Dibenzo(a,h)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)pyrene		10	20	40	50	80	100	120
Dibenzo(a,l)pyrene		10	20	40	50	80	100	120
7H-Dibenzo(c,g)carbazole		10	20	40	50	80	10	120

All values are mg/L without the prep factor.

Indicates the calibration verification concentration level used

* Usual calibration levels using SCAN methodology

** This analyte included in this level at special client request.

(0210/Full list)

Report Date: 22-Mar-2010 16:31

Calibration History

Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

Start Cal Date: 15-MAR-2010 17:03

End Cal Date : 17-MAR-2010 02:37

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
15-MAR-2010 17:03	MEGAIICARE	/chem/MSD1.i/s031510a.b/slc1515.d
Cal Level: 2 , Cal Amount: 10.00000		
17-MAR-2010 00:15	nev	/chem/MSD1.i/s031610.b/slc1616.d
16-MAR-2010 21:51	hex	/chem/MSD1.i/s031610.b/slc1610.d
16-MAR-2010 19:03	pest	/chem/MSD1.i/s031610.b/slc1603.d
15-MAR-2010 20:53	ap12	/chem/MSD1.i/s031510a.b/slc1523.d
15-MAR-2010 17:59	MEGAIICARE	/chem/MSD1.i/s031510a.b/slc1517.d
Cal Level: 3 , Cal Amount: 20.00000		
17-MAR-2010 00:39	nev	/chem/MSD1.i/s031610.b/slc1617.d
16-MAR-2010 22:15	hex	/chem/MSD1.i/s031610.b/slc1611.d
16-MAR-2010 19:28	pest	/chem/MSD1.i/s031610.b/slc1604.d
15-MAR-2010 21:17	ap12	/chem/MSD1.i/s031510a.b/slc1524.d
15-MAR-2010 18:28	MEGAIICARE	/chem/MSD1.i/s031510a.b/slc1518.d
Cal Level: 4 , Cal Amount: 40.00000		
17-MAR-2010 01:03	nev	/chem/MSD1.i/s031610.b/slc1618.d
16-MAR-2010 22:40	hex	/chem/MSD1.i/s031610.b/slc1612.d
16-MAR-2010 19:52	pest	/chem/MSD1.i/s031610.b/slc1605.d
15-MAR-2010 21:40	ap12	/chem/MSD1.i/s031510a.b/slc1525.d
15-MAR-2010 17:31	MEGAIICARE	/chem/MSD1.i/s031510a.b/slc1516.d
Cal Level: 5 , Cal Amount: 50.00000		
17-MAR-2010 01:27	nev	/chem/MSD1.i/s031610.b/slc1619.d
16-MAR-2010 23:03	hex	/chem/MSD1.i/s031610.b/slc1613.d
16-MAR-2010 20:16	pest	/chem/MSD1.i/s031610.b/slc1606.d
15-MAR-2010 22:04	ap12	/chem/MSD1.i/s031510a.b/slc1526.d
15-MAR-2010 18:57	MEGAIICARE	/chem/MSD1.i/s031510a.b/slc1519.d
Cal Level: 6 , Cal Amount: 80.00000		
17-MAR-2010 01:50	nev	/chem/MSD1.i/s031610.b/slc1620.d
16-MAR-2010 23:27	hex	/chem/MSD1.i/s031610.b/slc1614.d
16-MAR-2010 20:39	pest	/chem/MSD1.i/s031610.b/slc1607.d
15-MAR-2010 22:27	ap12	/chem/MSD1.i/s031510a.b/slc1527.d
15-MAR-2010 19:26	MEGAIICARE	/chem/MSD1.i/s031510a.b/slc1520.d
Cal Level: 7 , Cal Amount: 100.00000		

17-MAR-2010 02:13	nev	/chem/MSD1.i/s031610.b/s1c1621.d
16-MAR-2010 23:51	hex	/chem/MSD1.i/s031610.b/s1c1615.d
16-MAR-2010 21:03	pest	/chem/MSD1.i/s031610.b/s1c1608.d
15-MAR-2010 22:50	ap12	/chem/MSD1.i/s031510a.b/s1c1528.d
15-MAR-2010 19:55	MEGAIICARE	/chem/MSD1.i/s031510a.b/s1c1521.d

Cal Level: 8 , Cal Amount: 120.00000

17-MAR-2010 02:37	nev	/chem/MSD1.i/s031610.b/s1c1622.d
16-MAR-2010 21:28	pest	/chem/MSD1.i/s031610.b/s1c1609.d
15-MAR-2010 23:14	ap12	/chem/MSD1.i/s031510a.b/s1c1529.d
15-MAR-2010 20:24	MEGAIICARE	/chem/MSD1.i/s031510a.b/s1c1522.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 16:55	MEGAIICARE	/chem/MSD1.i/s032110.b/s1c2102.d
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Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 17:48	nev	/chem/MSD1.i/s032110.b/s1c2104.d
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Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 17:25	ap12	/chem/MSD1.i/s032110.b/s1c2103.d
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Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 18:13	pest	/chem/MSD1.i/s032110.b/s1c2105.d
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GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2010 17:03
 End Cal Date : 17-MAR-2010 02:37
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

Calibration File Names:

Level 1: /chem/MSD1.i/s031510a.b/slc1515.d
 Level 2: /chem/MSD1.i/s031610.b/slc1616.d
 Level 3: /chem/MSD1.i/s031610.b/slc1617.d
 Level 4: /chem/MSD1.i/s031610.b/slc1618.d
 Level 5: /chem/MSD1.i/s031610.b/slc1619.d
 Level 6: /chem/MSD1.i/s031610.b/slc1620.d
 Level 7: /chem/MSD1.i/s031610.b/slc1621.d
 Level 8: /chem/MSD1.i/s031610.b/slc1622.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	++++ 0.64746	0.48131 0.60610	0.55093	0.57608	0.58157	0.60481	AVRG		0.57832		9.04876
2 Pyridine	++++ 0.82504	0.84632 0.92570	0.93658	0.92242	0.81225	0.93849	AVRG				
4 Aniline	++++ 0.58635	0.54420 0.57409	0.56799	0.56510	0.56874	0.56005	AVRG		0.88669		6.33692
209 Benzaldehyde	++++ 0.83171	0.86759 0.80849	0.87971	0.88058	0.86585	0.83648	AVRG		0.56665		2.27765
6 Phenol	++++ 1.36336	1.29398 1.30191	1.34703	1.35133	1.33620	1.30948	AVRG		0.85292		3.23204
							AVRG		1.32904		2.03692

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 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1 m2	%RSD or R^2
7 bis(2-Chloroethyl) ether	++++ 0.93301	0.86870 0.90455	0.89762	0.93750	0.92566	0.91584	AVRG		0.91184	2.62192
8 2-Chlorophenol	++++ 1.13818	1.10578 1.09907	1.14390	1.14227	1.13239	1.10735	AVRG		1.12413	1.71559
203 n-Decane	++++ 1.36005	1.51348 1.29418	1.55612	1.50258	1.42479	1.38387	AVRG		1.43358	6.58986
9 1,3-Dichlorobenzene	++++ 1.24970	1.27497 1.19894	1.30790	1.28451	1.23875	1.22043	AVRG		1.25360	3.03485
11 1,4-Dichlorobenzene	++++ 1.25252	1.28353 1.18863	1.33282	1.29429	1.26258	1.24583	AVRG		1.26574	3.55650
12 Benzyl alcohol	++++ 0.61392	0.52933 0.59420	0.57579	0.60613	0.60166	0.58504	AVRG		0.58515	4.80559
13 1,2-Dichlorobenzene	++++ 1.17196	1.20310 1.12464	1.23454	1.20561	1.18595	1.15496	AVRG		1.18297	3.06630
14 bis(2-Chloroisopropyl) ether	++++ 1.89800	2.00601 1.81476	2.04332	2.00341	1.94439	1.86355	AVRG		1.93906	4.33321
15 o-Cresol	++++ 0.85588	0.88156 0.82207	0.87536	0.85555	0.84949	0.82834	AVRG		0.85261	2.58113

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2010 17:03
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 Integrator : HP RTE
 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 am y01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	++++ 1.1538	1.18052 1.12895	1.19161 1.12895	1.20084 1.12895	1.18098 1.12895	1.16240 1.12895	AVRG AVRG		1.17153		2.08764
17 N-Nitrosodipropylamine	0.62960 0.65547	0.73420 0.65162	0.75918 0.65162	0.74992 0.65162	0.75691 0.65162	0.75710 0.65162	AVRG AVRG		0.71175		7.84783
18 m,p-Cresols	++++ 1.16869	1.06680 1.09451	1.11671 1.09451	1.10321 1.09451	1.09614 1.09451	1.08953 1.09451	AVRG AVRG		1.10508		2.88155
19 Hexachloroethane	++++ 0.48408	0.46679 0.45898	0.49780 0.45898	0.49841 0.45898	0.48367 0.45898	0.47761 0.45898	AVRG AVRG		0.48105		3.06027
21 Nitrobenzene	++++ 0.24370	0.28445 0.23130	0.28425 0.23130	0.27510 0.23130	0.26249 0.23130	0.25339 0.23130	AVRG AVRG		3.26210		7.82293
22 Isophorone	++++ 0.46663	0.51247 0.44451	0.51789 0.44451	0.51616 0.44451	0.49095 0.44451	0.47802 0.44451	AVRG AVRG		0.48952		5.73271
23 2-Nitrophenol	++++ 0.22885	0.13772 0.12698	0.14310 0.12698	0.14080 0.12698	0.13759 0.12698	0.13161 0.12698	AVRG AVRG		0.3523		4.54421
24 2,4-Dimethylphenol	++++ 0.22972	0.25370 0.22058	0.26120 0.22058	0.25278 0.22058	0.24221 0.22058	0.23144 0.22058	AVRG AVRG		0.24166		6.18897
25 bis(2-Chloroethoxy)methane	++++ 0.27986	0.32251 0.26749	0.32278 0.26749	0.31582 0.26749	0.29812 0.26749	0.28926 0.26749	AVRG AVRG		0.29940		7.28569

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 Integrator : HP RTE
 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 am y01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	3RSD or R^2
100	Level 7	120 Level 8									
26 2,4-Dichlorophenol	++++	0.21230	0.21517	0.21170	0.20284	0.19488	AVRG	0.20163			6.07289
0.19174	0.19275										
27 Benzoic acid	++++	++++	0.10588	0.11678	0.12828	0.14941	AVRG		0.13123		13.73773
0.15166	0.13535										
28 1,2,4-Trichlorobenzene	++++	0.27425	0.27115	0.26365	0.24765	0.23306	AVRG		0.24663		9.82642
0.22478	0.21188										
30 Naphthalene	0.93565	0.88535	0.87638	0.84378	0.79155	0.72952	AVRG		0.80225		12.46317
0.70721	0.64855										
204 alpha-Terpineol	++++	0.25055	0.24745	0.24511	0.22871	0.21434	AVRG		0.22672		9.82239
0.20767	0.19325										
31 4-Chloroaniline	++++	0.36850	0.39383	0.40557	0.28121	0.36732	AVRG				
0.35713	0.34387								0.35963		11.25009
189 Caprolactam	++++	0.07102	0.07266	0.06483	0.06266	0.06878	AVRG				
0.06299	0.06698								0.06713		5.79727
32 Hexachlorobutadiene	++++	0.15412	0.15407	0.14923	0.13864	0.13134	AVRG				
0.12715	0.11827								0.13897		10.12939
33 4-Chloro-3-methylphenol	++++	0.22047	0.22621	0.22536	0.20543	0.20769	AVRG				
0.19229	0.19532								0.21040		6.61598

GEL Laboratories LLC
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 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

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
34 2-Methylnaphthalene	0.56372 0.45984	0.55542 0.43246	0.55121	0.53770	0.50774	0.46650	AVRG		0.50932		9.91095
35 1-Methylnaphthalene	0.56082 0.44390	0.54281 0.41799	0.54230	0.53093	0.49657	0.46597	AVRG		0.50016		10.50358
36 Hexachlorocyclopentadiene	++ 0.25610	0.22574 0.23969	0.25617	0.26823	0.27221	0.25304	AVRG		0.25303		6.33373
208 1,1'-Biphenyl	++++ 1.14450	1.26360 1.11135	1.27978	1.23727	1.23785	1.17683	AVRG		1.20731		5.27488
205 2,3-Dichloroaniline	++++ 0.51581	0.53876 0.49471	0.54284	0.54261	0.52433	0.51018	AVRG		0.52418		3.51338
37 2,4,6-Trichlorophenol	++++ 0.29712	0.29134 0.28886	0.30885	0.30643	0.29867	0.28919	AVRG		0.29721		2.71658
38 2,4,5-Trichlorophenol	++++ 0.30453	0.30519 0.28641	0.33304	0.33769	0.33698	0.32356	AVRG		0.31820		6.21690
40 2-Chloronaphthalene	0.98550 0.92529	0.99053 0.89872	1.01566	0.98277	0.94552	0.92134	AVRG		0.95817		4.29147
42 o-Nitroaniline	++++ 0.28650	0.24888 0.28000	0.27748	0.27777	0.28022	0.27333	AVRG		0.27488		4.41359

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INITIAL CALIBRATION DATA

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 Integrator : HP RTE
 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

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
41 m-Nitroaniline	++++ 684808	28007 821624	80600	219453	340348	512860	LINR	0.18134	0.26460		0.99898
43 Dimethylphthalate	++++ 1.09725	1.14003 1.07365	1.16194	1.14175	1.10205	1.07794	AVRG		1.11352		3.08852
44 2,6-Dinitrotoluene	++++ 0.26499	0.25273 0.25359	0.26441	0.26462	0.25689	0.25242	AVRG		0.25852		2.29604
45 Acenaphthylene	1.52722 1.51676	1.57642 1.43231	1.63607	1.60105	1.52856	1.47925	AVRG		1.53720		4.28288
47 Acenaphthene	1.01963 0.94089	1.01169 0.91056	1.02608	1.00468	0.96322	0.93979	AVRG				
48 2,4-Dinitrophenol	++++ 381316	++++ 452254	46048	105894	168875	256090	AVRG		0.97707		4.49269
49 Dibenzofuran	++++ 1.29890	1.35528 1.22495	1.38752	1.35336	1.30876	1.26147	LINR	0.28796	0.15040		0.99203
50 2,4-Dinitrotoluene	++++ 0.32953	0.30395 0.32289	0.32720	0.32686	0.32764	0.31655	AVRG		1.31289		4.35277
51 Diethylphthalate	++++ 1.10123	1.14920 1.03953	1.17067	1.17703	1.10199	1.07083	AVRG		0.32209		2.82172
							AVRG		1.11578		4.64501

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 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

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
52 4-Nitrophenol	++++ 0.19690	0.14092 0.19984	0.17709	0.18373	0.18296	0.18282	AVRG		0.18061		10.70634
53 Fluorene	1.15279 1.06955	1.13424 1.01494	1.17552	1.11825	1.09833	1.04292	AVRG		1.10069		5.01271
54 4-Chlorophenylphenylether	++++ 0.52901	0.56288 0.48602	0.56955	0.56309	0.54739	0.51544	AVRG		0.53905		5.67579
55 2-Methyl-4,6-dinitrophenol	++++ 0.10532	0.06579 0.10450	0.08576	0.09355	0.09827	0.09719	AVRG		0.09291		14.72211
56 p-Nitroaniline	++++ 638067	44466 788664	85988	178203	291032	459551	LINR	0.20815	0.24971		0.99328
133 Diphenylamine	++++ 0.49769	0.53589 0.48739	0.52271	0.52892	0.50868	0.49430	AVRG		0.51080		3.65934
58 1,2-Diphenylhydrazine	++++ 0.58709	0.59750 0.55120	0.61143	0.61936	0.57900	0.56697	AVRG		0.58751		4.11062
59 Tributylphosphate	++++ 1.12250	1.14754 1.11183	1.07503	1.20023	1.18306	1.15601	AVRG		1.14231		3.76162
61 4-Bromophenylphenylether	++++ 0.17658	0.18230 0.17255	0.18729	0.19059	0.17585	0.17909	AVRG		0.18061		3.59651

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 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1 m2	%RSD or R^2
63 Hexachlorobenzene	++++ 0.19090	0.20285 0.18723	0.20502 0.19105	0.20403 0.19105	0.19105 0.19105	0.19037 0.19037	AVRG	0.19601	0.19601	3.87234
207 Atrazine	++++ 0.04026	0.04345 0.03729	0.04700 0.04687	0.04687 0.04368	0.04368 0.04368	0.04033 0.04033	AVRG	0.04270	0.04270	8.45596
65 Pentachlorophenol	++++ 0.10411	0.07661 0.10059	0.09366 0.10433	0.10433 0.10380	0.10380 0.10380	0.10111 0.10111	AVRG	0.09774	0.09774	10.25964
206 n-Octadecane	++++ 0.38801	0.51303 0.36730	0.51675 0.49724	0.49724 0.44977	0.44977 0.44977	0.43575 0.43575	AVRG	0.45255	0.45255	13.22743
68 Phenanthrene	0.92166 0.81082	0.83196 0.78870	0.90660 0.82901	0.90959 0.89896	0.85988 0.86184	0.82303 0.80270	AVRG	0.86428	0.86428	5.91708
69 Anthracene	0.84086 0.83086	0.86290 0.78087	0.91101 0.82901	0.89896 0.82901	0.86184 0.86184	0.80270 0.80270	AVRG	0.84875	0.84875	5.24647
72 Di-n-butylphthalate	++++ 0.99566	1.10170 0.89945	1.13117 0.95506	1.12488 0.94219	1.05162 0.89756	1.02219 0.84861	AVRG	1.04667	1.04667	7.91560
76 Fluoranthene	0.88568 0.85090	0.90229 0.82377	0.95506 0.82377	0.94219 0.82377	0.89756 0.82377	0.84861 0.82377	AVRG	0.88826	0.88826	5.17441
77 Benzidine	++++ 0.40314	0.33087 0.39753	0.31277 0.31277	0.34623 0.34623	0.35175 0.35175	0.35654 0.35654	AVRG	0.35698	0.35698	9.25880

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 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

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							
79 Pyrene	1.05629	1.17081	1.18814	1.25135	1.09633	1.11700			
	1.09129	1.0929				AVRG	1.13506		5.59485
85 Butylbenzylphthalate	++++	0.48587	0.51180	0.53080	0.47419	0.47337			
	0.47670	0.44787				AVRG	0.48580		5.64477
89 Benzo(a)anthracene	0.97891	0.92957	0.96418	0.96061	0.94441	0.91041			
	0.91379	0.92003				AVRG	0.94024		2.73007
90 3,3'-Dichlorobenzidine	++++	0.28285	0.29690	0.30231	0.30189	0.31146			
	0.30625	0.29460				AVRG	0.29661		5.36155
92 Chrysene	0.94574	0.88503	0.91743	0.93219	0.82886	0.83196			
	0.87236	0.81542				AVRG	0.87862		5.70854
93 bis(2-Ethylhexyl)phthalate	0.43832	0.70353	0.70263	0.74405	0.64952	0.65087			
	0.65480	0.59271				AVRG	0.64205		14.66900
94 Di-n-octylphthalate	++++	1.18194	1.33938	1.46820	1.29055	1.30639			
	1.32377	1.28569				AVRG	1.31379		6.47148
95 Benzo(b)fluoranthene	0.91547	0.94451	1.14233	1.15275	1.04632	1.11553			
	1.23361	1.24988				AVRG	1.10005		11.19905
96 Benzo(k)fluoranthene	1.00488	1.15852	1.17217	1.12934	1.04724	0.97081			
	0.95533	0.94587				AVRG	1.04802		8.91358

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 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 am y01291

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
97 Benzo(a)pyrene	0.69158 0.92192	0.84417 0.91098	0.93465 0.93864	0.93864 0.93864	0.89785 0.89785	0.90677 0.90677	AVRG AVRG	0.88082 0.88082			9.29852
99 Indeno(1,2,3-cd)pyrene	0.70465 0.78102	0.75580 0.72823	0.73925 0.73925	0.77833 0.77833	0.75258 0.75258	0.75133 0.75133	AVRG AVRG	0.74890 0.74890			3.36430
100 Dibenzo(a,h)anthracene	0.58557 0.65127	0.61665 0.60885	0.60400 0.60400	0.63131 0.63131	0.62600 0.62600	0.62695 0.62695	AVRG AVRG	0.61883 0.61883			3.20627
101 Benzo(ghi)perylene	0.61886 0.62683	0.62652 0.57810	0.58848 0.58848	0.61465 0.61465	0.60633 0.60633	0.59957 0.59957	AVRG AVRG	0.60742 0.60742			2.92249
102 1,4-Dioxane	++++ 0.32370	0.33625 0.32223	0.33125 0.33125	0.33317 0.33317	0.33267 0.33267	0.33159 0.33159	AVRG AVRG	0.33011 0.33011			1.56671
103 Methyl methacrylate	++++ 0.18526	0.18737 0.18670	0.19375 0.19375	0.19519 0.19519	0.19155 0.19155	0.19092 0.19092	AVRG AVRG	0.19011 0.19011			1.97325
104 Ethyl methacrylate	++++ 0.71086	0.72691 0.71021	0.73265 0.73265	0.73429 0.73429	0.73093 0.73093	0.73460 0.73460	AVRG AVRG	0.72578 0.72578			1.47783
105 2-Picoline	++++ 1.13594	1.15993 1.16959	1.22732 1.22732	1.21134 1.21134	1.16158 1.16158	1.13996 1.13996	AVRG AVRG	1.17224 1.17224			2.95381
106 N-Nitrosomethylethylamine	++++ 0.45176	0.41323 0.45292	0.44270 0.44270	0.45752 0.45752	0.45916 0.45916	0.45596 0.45596	AVRG AVRG	0.44761 0.44761			3.59465

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2010 17:03
 End Cal Date : 17-MAR-2010 02:37
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

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
107 Methyl methanesulfonate	++++ 0.44332	0.44805 0.42292	0.44742 0.42292	0.44444	0.43792	0.42505	AVRG	0.43845	2.37974		
108 N-Nitrosodiethylamine	++++ 0.51154	0.47787 0.48756	0.49716	0.50739	0.51401	0.49785	AVRG	0.49906	2.63168		
109 Ethyl Methanesulfonate	++++ 0.60154	0.57975 0.60035	0.58758	0.60799	0.62114	0.60221	AVRG	0.59722	1.65050		
110 Pentachloroethane	++++ 0.30763	0.31441 0.30109	0.32027	0.32096	0.31590	0.31481	AVRG	0.31358	2.24801		
111 N-Nitrosopyrrolidine	++++ 0.39954	0.48068 0.41996	0.49876	0.52566	0.52798	0.51075	AVRG	0.48048	10.66752		
113 N-Nitrosomorpholine	++++ 0.62254	0.60745 0.57938	0.63246	0.65190	0.63285	0.60689	AVRG	0.61907	3.79814		
114 o-Toluidine	++++ 1.72289	1.60737 1.64344	1.61678	1.65653	1.61059	1.70102	AVRG	1.65123	2.76038		
115 N-Nitrosopiperidine	++++ 0.12740	0.12321 0.12651	0.12601	0.12756	0.12596	0.12593	AVRG	0.12608	2.13874		
116 a,a-Dimethylphenethylamine	++++ 0.79287	0.64272 0.78678	0.73019	0.76676	0.76896	0.78943	AVRG	0.75396	7.09670		

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 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

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
117 Triethylphosphorothioate	++++ 0.11843	0.11831 0.11673	0.12383	0.12606	0.12645	0.12268	AVRG		0.12178		3.24920
118 2,6-Dichlorophenol	++++ 0.20029	0.18896 0.19683	0.19290	0.19690	0.19629	0.19933	AVRG		0.19593		1.97765
119 Hexachloropropene	++++ 0.11188	0.10255 0.10849	0.10472	0.10945	0.11027	0.11133	AVRG		0.10838		3.21898
120 p-Phenylenediamine	++++ 0.25571	0.22040 0.22843	0.24467	0.26814	0.26998	0.23102	AVRG		0.24548		8.05852
121 N-Nitrosodi-n-butylamine	++++ 0.18083	0.16659 0.17280	0.18185	0.18429	0.18241	0.17560	AVRG		0.17777		3.59114
122 Saffrole	++++ 0.18235	0.18915 0.17774	0.18712	0.18535	0.18566	0.18346	AVRG		0.18440		2.00392
123 1,2,4,5-Tetrachlorobenzene	++++ 0.43710	0.46078 0.42145	0.47777	0.45645	0.46288	0.45329	AVRG		0.45282		4.06359
124 Isosafrole	++++ 0.33099	0.33174 0.31950	0.34080	0.33541	0.33569	0.33612	AVRG		0.33289		2.02044
125 1,4-Naphthoquinone	++++ 0.30455	0.30653 0.24989	0.34858	0.34119	0.33884	0.28393	AVRG		0.31050		11.48265

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 Cal Date : 22-Mar-2010 11:38 am y01291

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
126 m-Dinitrobenzene	++++ 0.17950	0.16428 0.17318	0.17750	0.17641	0.17624	0.17562	AVRG		0.17468		2.84237
127 Pentachlorobenzene	++++ 0.39426	0.41357 0.38339	0.41820	0.41192	0.41463	0.39943	AVRG		0.40506		3.19014
128 1-Naphthylamine	++++ 0.94760	0.85053 0.90004	0.87290	0.94059	0.95535	0.93741	AVRG		0.91492		4.46223
129 2-Naphthylamine	++++ 0.96685	0.90857 0.90301	0.93595	0.97839	0.98163	0.98509	AVRG		0.95136		3.69912
130 2,3,4,6-Tetrachlorophenol	++++ 0.29039	0.23414 0.29434	0.25736	0.26969	0.27526	0.27561	AVRG		0.27097		7.54303
131 5-Nitro-o-toluidine	++++ 0.29736	0.25629 0.27843	0.26757	0.27295	0.28243	0.28781	AVRG		0.27755		4.86769
132 Thionazin	++++ 0.15386	0.13222 0.15436	0.14989	0.15624	0.16026	0.15739	AVRG		0.15203		6.12353
134 Sulfotepp	++++ 0.10274	0.09507 0.09988	0.10071	0.10217	0.10904	0.10687	AVRG		0.10235		4.49615
135 Phorate	++++ 0.37281	0.34213 0.36768	0.36781	0.38380	0.39924	0.37859	AVRG		0.37315		4.69895

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 Cal Date : 22-Mar-2010 11:38 amy01291

Compound	1	10	20	40	50	80	Curve	b	Coefficients m.	m2	%RSD or R-2
136 1,3,5-Trinitrobenzene	++++ 0.11719	0.09191 0.10511	0.09969	0.11986	0.12125	0.11182	AVRG		0.10955		10.10200
137 Phenacetin	++++ 0.23277	0.23987 0.23699	0.25244	0.26244	0.25618	0.26446	AVRG		0.24931		5.10991
138 Diallylate	++++ 0.21831	0.22190 0.21589	0.24073	0.24088	0.23577	0.23011	AVRG		0.22908		4.58674
139 Dimethoate	++++ 0.23409	0.17817 0.22866	0.19912	0.22444	0.23150	0.22807	AVRG		0.21772		9.63460
140 4-Aminobiphenyl	++++ 0.56079	0.56389 0.52491	0.53953	0.53363	0.55119	0.57024	AVRG		0.54917		3.08530
141 Pentachloronitrobenzene	++++ 0.05741	0.06618 0.05649	0.07086	0.06822	0.06527	0.06285	AVRG		0.06390		8.38789
142 Pronamide	++++ 0.24306	0.26010 0.22688	0.27782	0.26926	0.26628	0.25163	AVRG		0.25643		6.76864
143 Dinoseb	++++ 739915	42032 883430	109896	241806	362268	554762	AVRG		0.15949		0.99973
144 Disulfoton	++++ 0.28505	0.25987 0.27845	0.27785	0.28049	0.30293	0.28767	AVRG		0.28290		4.64445

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 Cal Date : 22-Mar-2010 11:38 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	120									
	Level 7	Level 8									
145 Methyl parathion	++++ 0.19455	0.14617 0.19503	0.16957 0.19340	0.19340 0.20062	0.20062 0.19984	0.19984	AVRG		0.18560		10.93136
146 4-Nitroquinoline-l-oxide	++++ 0.01685	0.02224 0.01531	0.02139 0.02092	0.02092 0.01927	0.01927 0.01698	0.01698	AVRG		0.01899		13.96783
147 Methapyrilene	++++ 0.40110	0.45025 0.38374	0.46944	0.46090	0.44622	0.41321	AVRG		0.43198		7.52216
148 Isodrin	++++ 0.09275	0.09682 0.08899	0.10352	0.10396	0.09979	0.09798	AVRG		0.09769		5.58440
149 Aramite	++++ 0.03867	0.03608 0.03683	0.03979	0.04171	0.04125	0.04126	AVRG		0.03937		5.73272
150 Kepone	++++ 0.06995	0.06379 0.06610	0.06458	0.07250	0.07099	0.06772	AVRG		0.06795		4.88605
151 p-(Dimethylamino)azobenzene	++++ 0.25982	0.25785 0.25644	0.29219	0.28221	0.28774	0.27254	AVRG		0.27269		5.49543
152 Chlorobenzilate	++++ 0.28610	0.25234 0.28032	0.30086	0.29966	0.29572	0.29175	AVRG		0.28668		5.86548
153 3,3'-Dimethylbenzidine	++++ 0.51154	0.50686 0.49896	0.54666	0.53977	0.51658	0.49689	AVRG		0.51675		3.75626

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Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R-2
154 Famphur	++++ 0.37103	0.34377 0.39016	0.36448 0.39007	0.39007 0.42302	0.42302	0.39437	AVRG		0.38241		6.62802
155 2-Acetylaminofluorene	++++ 0.32396	0.25217 0.32656	0.29018 0.31083	0.31083 0.31317	0.31317	0.33589	AVRG		0.30754		9.24021
157 7,7-Dimethylbenz(a)anthracene	++++ 0.48680	0.45815 0.48614	0.51069 0.51242	0.51242 0.51569	0.51569	0.49445	AVRG		0.49490		4.16926
158 3-Methylcholanthrene	++++ 0.41872	0.36714 0.38268	0.38058 0.40375	0.40375 0.40579	0.40579	0.42147	AVRG		0.39716		5.20030
26 Phthalic anhydride	+++ 416.45	19730 476347	43771	127253	187651	289719	LNLR	0.13758	0.06980		0.99534
173 Carbazole	0.75416	0.55973	0.50398	0.58851	0.63196	0.63155	AVRG		0.62852		12.43724
174 Hexachlorophene	++++ 0.06189	0.67911 0.04471	0.67915 0.06336	0.06157	0.05855	0.06373	AVRG		0.05897		12.24318
179 Dibenzo(a,e)pyrene	++++ 0.30244	0.26190 0.25461	0.22013	0.26336	0.28128	0.29331	AVRG		0.26815		13.25029
185 (2,3-Dibromopropyl)phosphate	++++ ++++	++++ ++++	++++ ++++	++++ ++++	++++ ++++	++++ ++++	AVRG		0.000e+00		0.000e+00

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 Method file : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Cal Date : 22-Mar-2010 11:38 amy01291

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	RS2 or R^2
184 p-Benzoquinone	++++ 0.07767	0.02161 0.08334	0.03352	0.04535	0.04376	0.07385	AVRG		0.05416		44.362571<-
191 Parathion	++++ 0.06844	0.04697 0.06730	0.05833	0.06426	0.06627	0.06793	AVRG		0.06279		12.39061
192 Methoxychlor	++++ 0.57902	0.57551 0.56585	0.60730	0.63679	0.59916	0.58706	AVRG		0.59295		4.03471
210 m-Toluidine	++++ 1.34890	1.30665 1.29557	1.39228	1.19281	1.30686	1.27578	AVRG		1.30269		4.75731
211 p-Toluidine	++++ 1.35310	1.00504 1.42496	1.07656	1.17574	1.16519	1.18358	AVRG		1.19774		12.25762
212 Cis Diallate	++++ 0.21828	0.20688 0.21831	0.23600	0.23149	0.23015	0.22689	AVRG		0.22400		4.48057
213 Trans Diallate	++++ 0.25683	0.26106 0.25399	0.28321	0.28339	0.27738	0.27071	AVRG		0.26951		4.58674
214 1,4-Dinitrobenzene	++++ 0.16251	0.13104 0.16370	0.14815	0.15439	0.15456	0.15507	AVRG		0.15277		7.16324
215 2-Ethoxyethanol	++++ 0.58845	0.53224 0.58827	0.49495	0.60483	0.53175	0.58093	AVRG		0.56020		7.23512

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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					
216 Methylenebis(2-chloroaniline)	++++	0.10419	0.09605	0.09779	0.11898	0.12663					
	++++	++++				AVRG			0.10873		12.39591
229 2,2'-Dichlorobenzil	++++	0.61480	0.59947	0.62746	0.69807	0.65332					
	++++	0.62091				AVRG			0.63567		5.55608
230 4-Chlorothioanisole	++++	0.20853	0.21619	0.22540	0.24716	0.23723					
	++++	0.23418				AVRG			0.22812		6.24742
231 4-Chlorothiophenol	++++	30234	112284	306425	365157	697489					
	++++	1143337				LINR		0.21751	0.19835		0.99869
232 bis(p-Chlorophenyl)sulfone	++++	0.35952	0.33795	0.34086	0.37344	0.34056					
	++++	0.34284				AVRG			0.34920		4.06083
233 bis(p-Chlorophenyl)disulfide	++++	0.14011	0.12134	0.11862	0.13869	0.11855					
	++++	0.11699				AVRG			0.12572		8.5160
234 Diphenyl disulfide	++++	0.20120	0.18976	0.19271	0.20800	0.19332					
	++++	0.18695				AVRG			0.19532		4.01284
235 Diphenyl sulfide	++++	0.74581	0.74229	0.73697	0.79603	0.72939					
	++++	0.71533				AVRG			0.74430		3.70255
236 Phenyl sulfone	++++	0.40759	0.40387	0.39936	0.42996	0.43270					
	++++	0.41933				AVRG			0.41547		3.36680

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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	m1		
237 Hydroxymethyl phthalimide	++++	0.09912	0.07622	0.07991	0.08769	0.07293				
	++++	++++				AVRG		0.08317		12.59097
238 Phthalic acid	++++	0.049	28513	88919	143249	236309				
	++++	402355				LINR	0.26238	0.07086		0.99477
239 Thiophenol	++++	67713	188965	470443	614639	1033285				
	++++	1654650				LINR	0.14815	1.09311		0.99958
240 bis(Chloromethyl)ether	++++	0.71212	0.67839	0.70743	0.74887	0.72004				
	++++	0.68326				AVRG		0.70835		3.63799
241 Octachlorostyrene	++++	0.06765	0.06582	0.06626	0.07146	0.06797				
	++++	0.06723				AVRG		0.06773		2.95458
M 225 Trichlorophenols	++++	0.29826	0.32094	0.32206	0.31782	0.30637				
	0.30083	0.28764				AVRG		0.30770		4.24698
M 226 Tetrachlorophenols	++++	0.23414	0.25736	0.26969	0.27526	0.27561				
	0.29039	0.29434				AVRG		0.27097		7.54303
M 227 Benzo (b,k) fluoranthene	0.96018	1.05151	1.15725	1.1405	1.04678	1.04317				
	1.09447	1.09787				AVRG		1.07403		5.84293
M 228 TTO Sum Semivolatiles	++++	++++	++++	++++	++++	++++				
	++++	++++				AVRG		0.000e+001		0.000e+001

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	120									
	Level 7	Level 8									
\$ 3 2-Fluorophenol	++++ 1.05590	0.98916 1.01510	1.04952	1.03866	1.01258	1.04909	AVRG		1.03001		2.4054
\$ 5 Phenol-d5	++++ 1.28766	1.21023 1.24863	1.26338	1.26104	1.25802	1.25196	AVRG		1.25441		1.85086
\$ 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	++++ 0.23192	0.26549 0.21675	0.26697	0.25893	0.24381	0.23345	AVRG		0.24533		7.80447
\$ 39 2-Fluorobiphenyl	++++ 1.06825	1.15336 1.00732	1.18485	1.15935	1.08955	1.07025	AVRG		1.10470		5.72577
\$ 60 2,4,6-Tribromophenol	++++ 0.13448	0.11966 0.13242	0.13450	0.13464	0.13078	0.13150	AVRG		0.13114		4.03837
\$ 81 p-Terphenyl-d14	++++ 0.63852	0.67586 0.63275	0.69797	0.72034	0.64106	0.66159	AVRG		0.66687		4.96192

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

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 16-MAR-2010 00:06
Lab File ID: slc1531-C.d Init. Cal. Date(s): 15-MAR-2010 15-MAR-2010
Analysis Type: WATER Init. Cal. Times: 17:03 23:14
Lab Sample ID: WBN100309-09.1 Quant Type: ISTD
Method: /chem/MSD1.i/s031510a.b/MSD1-M8270C-031510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.03001	1.02290	1.02290	0.000	-0.69041	60.00000	Averaged
5 Phenol-d5	1.25441	1.20148	1.20148	0.000	-4.22017	60.00000	Averaged
20 Nitrobenzene-d5	0.24533	0.26385	0.26385	0.000	7.54898	60.00000	Averaged
39 2-Fluorobiphenyl	1.10470	1.13321	1.13321	0.000	2.58082	60.00000	Averaged
60 2,4,6-Tribromophenol	0.13114	0.13446	0.13446	0.000	2.53458	60.00000	Averaged
81 p-Terphenyl-d14	0.66687	0.77179	0.77179	0.000	15.73336	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.57832	0.54586	0.54586	0.000	-5.61225	60.00000	Averaged
2 Pyridine	0.88669	0.70919	0.70919	0.000	-20.01842	60.00000	Averaged
4 Aniline	0.56665	0.52337	0.52337	0.000	-7.63644	60.00000	Averaged
6 Phenol	1.32904	1.32788	1.32788	0.001	-0.08757	20.00000	Averaged|ccc
7 bis(2-Chloroethyl) ether	0.91184	0.84454	0.84454	0.000	-7.38071	60.00000	Averaged
8 2-Chlorophenol	1.12413	1.13019	1.13019	0.000	0.53916	60.00000	Averaged
203 n-Decane	1.43358	1.46128	1.46128	0.000	1.93209	60.00000	Averaged
9 1,3-Dichlorobenzene	1.25360	1.26448	1.26448	0.000	0.86787	60.00000	Averaged
11 1,4-Dichlorobenzene	1.26574	1.25702	1.25702	0.001	-0.68916	20.00000	Averaged|ccc
13 1,2-Dichlorobenzene	1.18297	1.18332	1.18332	0.000	0.02990	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.93906	1.88849	1.88849	0.000	-2.60809	60.00000	Averaged
12 Benzyl alcohol	0.58515	0.58561	0.58561	0.000	0.07823	60.00000	Averaged
15 o-Cresol	0.85261	0.82283	0.82283	0.000	-3.49268	60.00000	Averaged
18 m,p-Cresols	1.10508	1.10323	1.10323	0.000	-0.16779	60.00000	Averaged
17 N-Nitrosodipropylamine	0.71175	0.74714	0.74714	0.050	4.97174	60.00000	Averaged|spcc
19 Hexachloroethane	0.48105	0.47727	0.47727	0.000	-0.78517	60.00000	Averaged
21 Nitrobenzene	0.26210	0.25658	0.25658	0.000	-2.10249	60.00000	Averaged
22 Isophorone	0.48952	0.47890	0.47890	0.000	-2.16837	60.00000	Averaged
23 2-Nitrophenol	0.13523	0.14085	0.14085	0.001	4.15139	20.00000	Averaged|ccc
24 2,4-Dimethylphenol	0.24166	0.25005	0.25005	0.000	3.47157	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.29940	0.28107	0.28107	0.000	-6.12482	60.00000	Averaged
26 2,4-Dichlorophenol	0.20163	0.20625	0.20625	0.001	2.29407	20.00000	Averaged|ccc
27 Benzoic acid	0.13123	0.12474	0.12474	0.000	-4.94543	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.24663	0.24666	0.24666	0.000	0.01333	60.00000	Averaged
30 Naphthalene	0.80225	0.78052	0.78052	0.000	-2.70857	60.00000	Averaged
204 alpha-Terpineol	0.22672	0.21458	0.21458	0.000	-5.35543	60.00000	Averaged
31 4-Chloroaniline	0.35963	0.35869	0.35869	0.000	-0.26196	60.00000	Averaged
32 Hexachlorobutadiene	0.13897	0.14357	0.14357	0.001	3.31020	20.00000	Averaged|ccc
33 4-Chloro-3-methylphenol	0.21040	0.22374	0.22374	0.001	6.34099	20.00000	Averaged|ccc
34 2-Methylnaphthalene	0.50932	0.52245	0.52245	0.000	2.57656	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 16-MAR-2010 00:06
Lab File ID: slc1531-C.d Init. Cal. Date(s): 15-MAR-2010 15-MAR-2010
Analysis Type: WATER Init. Cal. Times: 17:03 23:14
Lab Sample ID: WBN100309-09.1 Quant Type: ISTD
Method: /chem/MSD1.i/s031510a.b/MSD1-M8270C-031510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.50016	0.49755	0.49755	0.000	-0.52273	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.25303	0.19467	0.19467	0.050	-23.06155	60.00000	Averaged|spcc
205 2,3-Dichloroaniline	0.52418	0.50577	0.50577	0.000	-3.51182	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.29721	0.29539	0.29539	0.001	-0.61138	20.00000	Averaged|ccc
38 2,4,5-Trichlorophenol	0.31820	0.33668	0.33668	0.000	5.80772	60.00000	Averaged
40 2-Chloronaphthalene	0.95817	0.94646	0.94646	0.000	-1.22152	60.00000	Averaged
42 o-Nitroaniline	0.27488	0.26452	0.26452	0.000	-3.76874	60.00000	Averaged
41 m-Nitroaniline	36.73213	40.00000	0.19500	0.000	-8.16968	60.00000	Linear
43 Dimethylphthalate	1.11352	1.08063	1.08063	0.000	-2.95321	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25852	0.24851	0.24851	0.000	-3.87225	60.00000	Averaged
50 2,4-Dinitrotoluene	0.32209	0.31265	0.31265	0.000	-2.93147	60.00000	Averaged
45 Acenaphthylene	1.53720	1.54799	1.54799	0.000	0.70164	60.00000	Averaged
47 Acenaphthene	0.97707	0.91780	0.91780	0.001	-6.06569	20.00000	Averaged|ccc
48 2,4-Dinitrophenol	37.48260	40.00000	0.09763	0.050	-6.29351	60.00000	Linear|spcc
49 Dibenzofuran	1.31289	1.29719	1.29719	0.000	-1.19596	60.00000	Averaged
51 Diethylphthalate	1.11578	1.09491	1.09491	0.000	-1.87066	60.00000	Averaged
52 4-Nitrophenol	0.18061	0.17000	0.17000	0.050	-5.87640	60.00000	Averaged|spcc
53 Fluorene	1.10069	1.04957	1.04957	0.000	-4.64491	60.00000	Averaged
54 4-Chlorophenylphenylether	0.53905	0.52393	0.52393	0.000	-2.80632	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.09291	0.11435	0.11435	0.000	23.07674	60.00000	Averaged
56 p-Nitroaniline	35.66289	40.00000	0.17066	0.000	-10.84276	60.00000	Linear
133 Diphenylamine	0.51080	0.50164	0.50164	0.001	-1.79347	20.00000	Averaged|ccc
58 1,2-Diphenylhydrazine	0.58751	0.59618	0.59618	0.000	1.47601	60.00000	Averaged
61 4-Bromophenylphenylether	0.18061	0.17379	0.17379	0.000	-3.77567	60.00000	Averaged
63 Hexachlorobenzene	0.19601	0.19605	0.19605	0.000	0.02411	60.00000	Averaged
65 Pentachlorophenol	0.09774	0.10068	0.10068	0.001	3.00467	20.00000	Averaged|ccc
206 n-Octadecane	0.45255	0.47916	0.47916	0.000	5.88003	60.00000	Averaged
68 Phenanthrene	0.86428	0.83654	0.83654	0.000	-3.20979	60.00000	Averaged
69 Anthracene	0.84875	0.81908	0.81908	0.000	-3.49615	60.00000	Averaged
72 Di-n-butylphthalate	1.04667	1.06104	1.06104	0.000	1.37316	60.00000	Averaged
76 Fluoranthene	0.88826	0.88004	0.88004	0.001	-0.92535	20.00000	Averaged|ccc
79 Pyrene	1.13506	1.12192	1.12192	0.000	-1.15795	60.00000	Averaged
85 Butylbenzylphthalate	0.48580	0.52166	0.52166	0.000	7.38189	60.00000	Averaged
89 Benzo(a)anthracene	0.94024	0.87136	0.87136	0.000	-7.32597	60.00000	Averaged
92 Chrysene	0.87862	0.86034	0.86034	0.000	-2.08090	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.64205	0.71657	0.71657	0.000	11.60668	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 16-MAR-2010 00:06
Lab File ID: slc1531-C.d Init. Cal. Date(s): 15-MAR-2010 15-MAR-2010
Analysis Type: WATER Init. Cal. Times: 17:03 23:14
Lab Sample ID: WBN100309-09.1 Quant Type: ISTD
Method: /chem/MSD1.i/s031510a.b/MSD1-M8270C-031510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.31370	1.46537	1.46537	0.001	11.54482	20.00000	Averaged|ccc
95 Benzo(b)fluoranthene	1.10005	1.10472	1.10472	0.000	0.42452	60.00000	Averaged|
96 Benzo(k)fluoranthene	1.04802	1.02616	1.02616	0.000	-2.08628	60.00000	Averaged|
97 Benzo(a)pyrene	0.88082	0.86533	0.86533	0.001	-1.75848	20.00000	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	0.74890	0.69774	0.69774	0.000	-6.83179	60.00000	Averaged|
100 Dibenzo(a,h)anthracene	0.61883	0.56849	0.56849	0.000	-8.13353	60.00000	Averaged|
101 Benzo(ghi)perylene	0.60742	0.55469	0.55469	0.000	-8.67993	60.00000	Averaged|
126 m-Dinitrobenzene	0.17468	0.16956	0.16956	0.000	-2.92632	60.00000	Averaged|
130 2,3,4,6-Tetrachlorophenol	0.27097	0.24966	0.24966	0.000	-7.86483	60.00000	Averaged|
143 Dinoseb	39.78917	40.00000	0.13894	0.000	-0.52707	60.00000	Linear|
173 Carbazole	0.62852	0.63568	0.63568	0.000	1.13969	60.00000	Averaged|
184 p-Benzoquinone	0.05416	0.05435	0.05435	0.000	0.36410	60.00000	Averaged|
192 Methoxychlor	0.59295	0.60790	0.60790	0.000	2.52000	60.00000	Averaged|
211 p-Toluidine	1.19774	1.00121	1.00121	0.000	-16.40798	60.00000	Averaged|
210 m-Toluidine	1.30269	1.02040	1.02040	0.000	-21.66987	60.00000	Averaged|
26 Phthalic anhydride	62.54000	40.00000	0.09952	0.000	56.35001	60.00000	Linear|
179 Dibenzo(a,e)pyrene	0.26815	0.15655	0.15655	0.000	-41.61909	60.00000	Averaged|
214 1,4-Dinitrobenzene	0.15277	0.14752	0.14752	0.000	-3.44172	60.00000	Averaged|
215 2-Ethoxyethanol	0.56020	0.56879	0.56879	0.000	1.53272	60.00000	Averaged|
216 Methylenebis(2-chloroanilin	0.10873	0.12473	0.12473	0.000	14.71987	60.00000	Averaged|
225 Trichlorophenols	0.30770	0.31603	0.31603	0.000	2.70763	60.00000	Averaged|
226 Tetrachlorophenols	0.27097	0.24966	0.24966	0.000	-7.86483	60.00000	Averaged|
227 Benzo(b,k)fluoranthene	1.07403	1.06544	1.06544	0.000	-0.80047	60.00000	Averaged

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Data file : /chem/MSD1.i/s031510a.b/slcl531-C.d
 Lab Smp Id: WBN100309-09.1 Client Smp ID: MEGAICV
 Inj Date : 16-MAR-2010 00:06
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |WBN100309-09.1|040 PPM|1|SVMF|1|MEGAICV
 Misc Info : |MSD8270||WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s031510a.b/MSD1-M8270C-031510.m
 Meth Date : 16-Mar-2010 18:32 amy01291 Quant Type: ISTD
 Cal Date : 15-MAR-2010 23:14 Cal File: slcl529.d
 Als bottle: 18 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: MEGAICARE.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

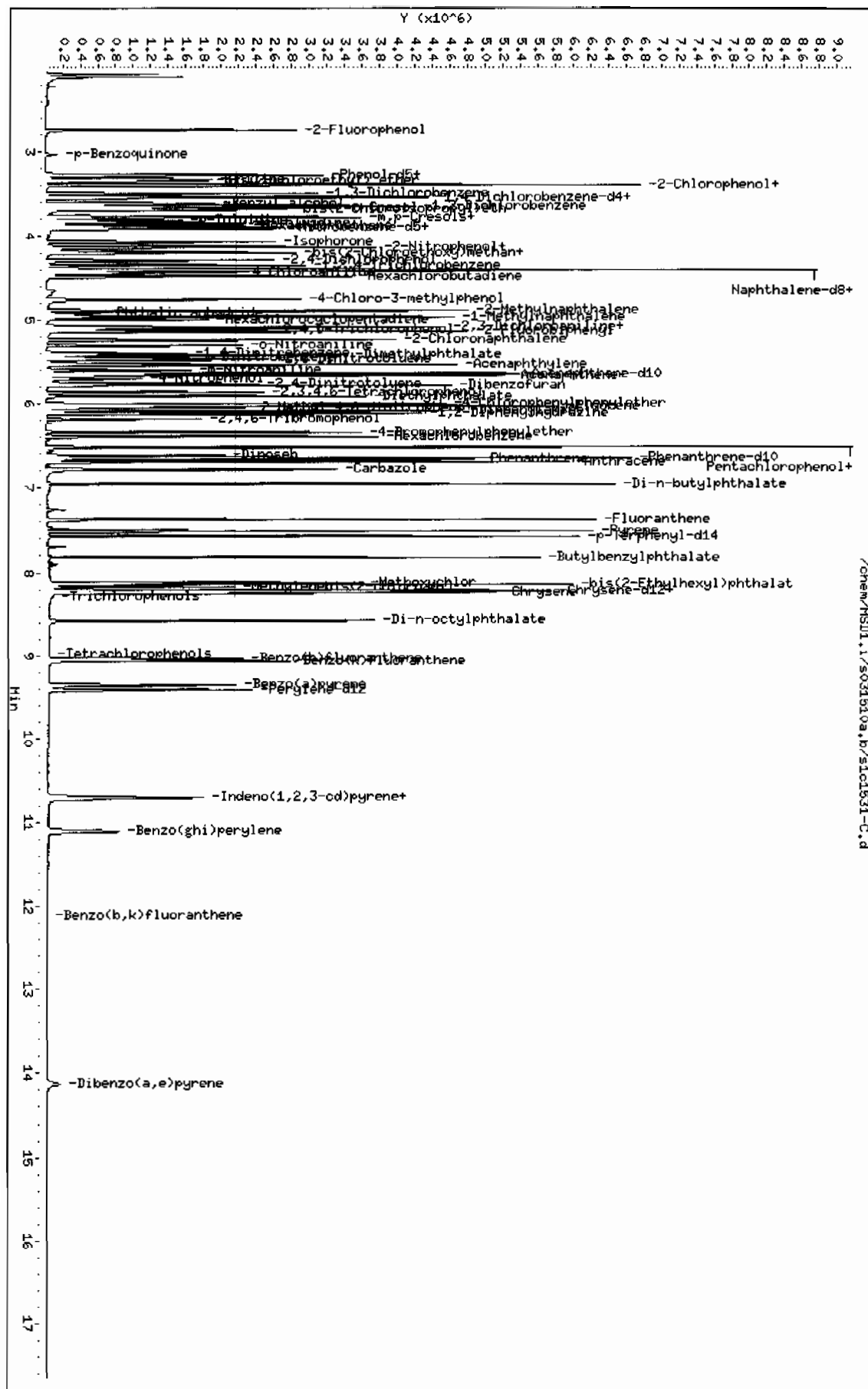
Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4		152	3.540	3.540	(1.000)	549504	40.0000	
* 29 Naphthalene-d8		136	4.398	4.398	(1.000)	2266874	40.0000	
* 46 Acenaphthene-d10		164	5.639	5.639	(1.000)	1149176	40.0000	
* 67 Phenanthrene-d10		188	6.645	6.645	(1.000)	1944808	40.0000	
* 91 Chrysene-d12		240	8.227	8.227	(1.000)	1527388	40.0000	
* 98 Perylene-d12		264	9.422	9.422	(1.000)	1037428	40.0000	
\$ 3 2-Fluorophenol		112	2.751	2.751	(0.777)	562088	40.0000	39.7
\$ 5 Phenol-d5		99	3.281	3.281	(0.927)	660216	40.0000	38.3
\$ 20 Nitrobenzene-d5		82	3.904	3.904	(0.888)	598120	40.0000	43.0
\$ 39 2-Fluorobiphenyl		172	5.139	5.139	(0.911)	1302262	40.0000	41.0
\$ 60 2,4,6-Tribromophenol		329	6.186	6.186	(1.097)	154522	40.0000	41.0
\$ 81 p-Terphenyl-d14		244	7.569	7.569	(0.920)	1178825	40.0000	46.3
1 N-Methyl-N-nitrosomethylamine		74	2.075	2.075	(0.586)	299955	40.0000	37.8

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
2 Pyridine	79	2.104	2.104 (0.595)	389700	40.0000	32.0
4 Aniline	66	3.334	3.334 (0.942)	287596	40.0000	36.9
6 Phenol	94	3.292	3.292 (0.930)	729674	40.0000	40.0
7 bis(2-Chloroethyl) ether	63	3.357	3.357 (0.948)	464078	40.0000	37.0
8 2-Chlorophenol	128	3.410	3.410 (0.963)	621046	40.0000	40.2
203 n-Decane	43	3.398	3.398 (0.960)	802979	40.0000	40.8
9 1,3-Dichlorobenzene	146	3.504	3.504 (0.990)	694836	40.0000	40.3
11 1,4-Dichlorobenzene	146	3.551	3.551 (1.003)	690738	40.0000	39.7
13 1,2-Dichlorobenzene	146	3.651	3.651 (1.032)	650239	40.0000	40.0
14 bis(2-Chloroisopropyl) ether	45	3.692	3.692 (1.043)	1037733	40.0000	39.0
12 Benzyl alcohol	108	3.622	3.622 (1.023)	321795	40.0000	40.0
15 o-Cresol	107	3.675	3.675 (1.038)	452147	40.0000	38.6
18 m,p-Cresols	107	3.781	3.781 (1.068)	606229	40.0000	39.9
17 N-Nitrosodipropylamine	70	3.792	3.792 (1.071)	410554	40.0000	42.0
19 Hexachloroethane	117	3.875	3.875 (1.095)	262262	40.0000	39.7
21 Nitrobenzene	77	3.916	3.916 (0.890)	581645	40.0000	39.2
22 Isophorone	82	4.075	4.075 (0.926)	1085614	40.0000	39.1
23 2-Nitrophenol	139	4.128	4.128 (0.938)	319284	40.0000	41.7
24 2,4-Dimethylphenol	122	4.134	4.134 (0.940)	566834	40.0000	41.4
25 bis(2-Chloroethoxy)methane	93	4.198	4.198 (0.955)	637142	40.0000	37.6
26 2,4-Dichlorophenol	162	4.292	4.292 (0.976)	467547	40.0000	40.9
27 Benzoic acid	105	4.210	4.210 (0.957)	282761	40.0000	38.0
28 1,2,4-Trichlorobenzene	180	4.351	4.351 (0.989)	559154	40.0000	40.0
30 Naphthalene	128	4.410	4.410 (1.003)	1769339	40.0000	38.9
204 alpha-Terpineol	59	4.398	4.398 (1.000)	486432	40.0000	37.8
31 4-Chloroaniline	127	4.434	4.434 (1.008)	813105	40.0000	39.9
32 Hexachlorobutadiene	225	4.481	4.481 (1.019)	325462	40.0000	41.3
33 4-Chloro-3-methylphenol	107	4.757	4.757 (1.082)	507185	40.0000	42.5
34 2-Methylnaphthalene	142	4.886	4.886 (1.111)	1184321	40.0000	41.0
35 1-Methylnaphthalene	142	4.963	4.963 (1.128)	1127876	40.0000	39.8
36 Hexachlorocyclopentadiene	237	4.992	4.992 (0.885)	223715	40.0000	30.8
205 2,3-Dichloroaniline	161	5.086	5.086 (0.902)	581217	40.0000	38.6
37 2,4,6-Trichlorophenol	196	5.081	5.081 (0.901)	339457	40.0000	39.8
38 2,4,5-Trichlorophenol	196	5.110	5.110 (0.906)	386902	40.0000	42.3
40 2-Chloronaphthalene	162	5.239	5.239 (0.929)	1087651	40.0000	39.5
42 o-Nitroaniline	65	5.304	5.304 (0.941)	303984	40.0000	38.5
41 m-Nitroaniline	138	5.598	5.598 (0.993)	224087	40.0000	36.7
43 Dimethylphthalate	163	5.422	5.422 (0.961)	1241836	40.0000	38.8
44 2,6-Dinitrotoluene	165	5.469	5.469 (0.970)	285584	40.0000	38.4
50 2,4-Dinitrotoluene	165	5.757	5.757 (1.021)	359286	40.0000	38.8
45 Acenaphthylene	152	5.539	5.539 (0.982)	1778911	40.0000	40.3
47 Acenaphthene	154	5.663	5.663 (1.004)	1054717	40.0000	37.6
48 2,4-Dinitrophenol	184	5.663	5.663 (1.004)	112191	40.0000	37.5(Q)
49 Dibenzofuran	168	5.781	5.781 (1.025)	1490699	40.0000	39.5
51 Diethylphthalate	149	5.910	5.910 (1.048)	1258244	40.0000	39.2
52 4-Nitrophenol	139	5.704	5.704 (1.011)	195355	40.0000	37.6
53 Fluorene	166	6.022	6.022 (1.068)	1206137	40.0000	38.1

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.004	6.004 (1.065)	602084	40.0000	38.9
55 2-Methyl-4,6-dinitrophenol	198	6.045	6.045 (0.910)	222389	40.0000	49.2
56 p-Nitroaniline	138	6.033	6.033 (1.070)	196118	40.0000	35.7
133 Diphenylamine	169	6.086	6.086 (0.916)	975585	40.0000	39.3
58 1,2-Diphenylhydrazine	77	6.116	6.116 (0.920)	1159455	40.0000	40.6
61 4-Bromophenylphenylether	248	6.339	6.339 (0.954)	337982	40.0000	38.5
63 Hexachlorobenzene	284	6.392	6.392 (0.962)	381287	40.0000	40.0
65 Pentachlorophenol	266	6.516	6.516 (0.981)	195806	40.0000	41.2
206 n-Octadecane	57	6.516	6.516 (0.981)	931872	40.0000	42.4
68 Phenanthrene	178	6.663	6.663 (1.003)	1626907	40.0000	38.7
69 Anthracene	178	6.692	6.692 (1.007)	1592952	40.0000	38.6
72 Di-n-butylphthalate	149	6.957	6.957 (1.047)	2063520	40.0000	40.5
76 Fluoranthene	202	7.375	7.375 (1.110)	1711505	40.0000	39.6
79 Pyrene	202	7.510	7.510 (0.913)	1713608	40.0000	39.5
85 Butylbenzylphthalate	149	7.822	7.822 (0.951)	796781	40.0000	43.0
89 Benzo(a)anthracene	228	8.216	8.216 (0.999)	1330902	40.0000	37.1
92 Chrysene	228	8.245	8.245 (1.002)	1314075	40.0000	39.2
93 bis(2-Ethylhexyl)phthalate	149	8.139	8.139 (0.989)	1094484	40.0000	44.6
94 Di-n-octylphthalate	149	8.580	8.580 (0.911)	1520212	40.0000	44.6
95 Benzo(b)fluoranthene	252	9.045	9.045 (0.960)	1146067	40.0000	40.2
96 Benzo(k)fluoranthene	252	9.069	9.069 (0.963)	1064562	40.0000	39.2
97 Benzo(a)pyrene	252	9.363	9.363 (0.994)	897717	40.0000	39.3
99 Indeno(1,2,3-cd)pyrene	276	10.710	10.710 (1.137)	723851	40.0000	37.3
100 Dibenzo(a,h)anthracene	278	10.710	10.710 (1.137)	589771	40.0000	36.7
101 Benzo(ghi)perylene	276	11.104	11.104 (1.179)	575456	40.0000	36.5
126 m-Dinitrobenzene	168	5.457	5.457 (0.968)	194860	40.0000	38.8
130 2,3,4,6-Tetrachlorophenol	232	5.863	5.863 (1.040)	286902	40.0000	36.8
143 Dinoseb	211	6.616	6.616 (0.996)	270206	40.0000	39.8
173 Carbazole	167	6.780	6.780 (1.020)	1236279	40.0000	40.4
184 p-Benzoquinone	54	3.040	3.040 (0.859)	29868	40.0000	40.1
192 Methoxychlor	227	8.122	8.122 (0.987)	928494	40.0000	41.0
211 p-Toluidine	106	3.822	3.822 (1.080)	550171	40.0000	33.4
210 m-Toluidine	106	3.845	3.845 (1.086)	560714	40.0000	31.3
26 Phthalic anhydride	104	4.928	4.928 (1.120)	225607	40.0000	62.5
179 Dibenzo(a,e)pyrene	302	14.127	14.127 (1.499)	162405	40.0000	23.4
214 1,4-Dinitrobenzene	168	5.398	5.398 (0.957)	169521	40.0000	38.6
215 2-Ethoxyethanol	59	1.928	1.928 (0.545)	312551	40.0000	40.6
216 Methylenebis(2-chloroaniline)	231	8.169	8.169 (0.993)	190517	40.0000	45.9 (Q)
M 225 Trichlorophenols	196			726359	80.0000	82.2
M 226 Tetrachlorophenols	232			286902	40.0000	36.8
M 227 Benzo(b,k)fluoranthene	252			2210629	80.0000	79.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: /chem/MSD1.i/s031510a.b/s101531-C.d
 Date: 16-MAR-2010 00:06
 Client ID: MEGACV
 Sample Info: ILMN100309-09.11040 PPH115WFI1.MEGACV
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

/chem/MSD1.i/s031510a.b/s101531-C.d

Instrument: MSD1.i
 Operator: RHY
 Column diameter: 0.20

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 16-MAR-2010 00:58
Lab File ID: slc1533-C.d Init. Cal. Date(s): 15-MAR-2010 15-MAR-2010
Analysis Type: WATER Init. Cal. Times: 17:03 23:14
Lab Sample ID: WBN100312-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s031510a.b/MSD1-M8270C-031510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.85292	0.68008	0.68008	0.000	-20.26453	60.00000	Averaged
16 Acetophenone	1.17153	1.12950	1.12950	0.000	-3.58768	60.00000	Averaged
189 Caprolactam	0.06713	0.07865	0.07865	0.000	17.16278	60.00000	Averaged
208 1,1'-Biphenyl	1.20731	1.24253	1.24253	0.000	2.91691	60.00000	Averaged
207 Atrazine	0.04270	0.04582	0.04582	0.000	7.30954	60.00000	Averaged
77 Benzidine	0.35698	0.37062	0.37062	0.000	3.82346	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.29661	0.28340	0.28340	0.000	-4.45426	60.00000	Averaged
102 1,4-Dioxane	0.33011	0.39318	0.39318	0.000	19.10465	60.00000	Averaged
103 Methyl methacrylate	0.19011	0.22942	0.22942	0.000	20.67753	60.00000	Averaged
104 Ethyl methacrylate	0.72578	0.86096	0.86096	0.000	18.62534	60.00000	Averaged
105 2-Picoline	1.17224	1.10026	1.10026	0.000	-6.14016	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.44761	0.42428	0.42428	0.000	-5.21062	60.00000	Averaged
107 Methyl methanesulfonate	0.43845	0.44831	0.44831	0.000	2.24962	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49906	0.45859	0.45859	0.000	-8.10798	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59722	0.71040	0.71040	0.000	18.95004	60.00000	Averaged
110 Pentachloroethane	0.31358	0.42274	0.42274	0.000	34.81217	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.48048	0.46459	0.46459	0.000	-3.30543	60.00000	Averaged
113 N-Nitrosomorpholine	0.61907	0.62440	0.62440	0.000	0.86172	60.00000	Averaged
114 o-Toluidine	1.65123	1.50789	1.50789	0.000	-8.68062	60.00000	Averaged
115 N-Nitrosopiperidine	0.12608	0.12465	0.12465	0.000	-1.13856	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.75396	0.72190	0.72190	0.000	-4.25126	60.00000	Averaged
118 2,6-Dichlorophenol	0.19593	0.19899	0.19899	0.000	1.56009	60.00000	Averaged
119 Hexachloropropene	0.10838	0.16507	0.16507	0.000	52.30319	60.00000	Averaged
120 p-Phenylenediamine	0.24548	0.21979	0.21979	0.000	-10.46278	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17777	0.17279	0.17279	0.000	-2.79909	60.00000	Averaged
122 Safrole	0.18440	0.21297	0.21297	0.000	15.49122	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.45282	0.48216	0.48216	0.000	6.48115	60.00000	Averaged
124 Isosafrole	0.33289	0.44131	0.44131	0.000	32.56803	60.00000	Averaged
125 1,4-Naphthoquinone	0.31050	0.31046	0.31046	0.000	-0.01416	60.00000	Averaged
127 Pentachlorobenzene	0.40506	0.41650	0.41650	0.000	2.82553	60.00000	Averaged
128 1-Naphthylamine	0.91492	0.89910	0.89910	0.000	-1.72848	60.00000	Averaged
129 2-Naphthylamine	0.95136	0.96361	0.96361	0.000	1.28847	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27755	0.27172	0.27172	0.000	-2.10010	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.10955	0.14168	0.14168	0.000	29.32993	60.00000	Averaged
137 Phenacetin	0.24931	0.27034	0.27034	0.000	8.43612	60.00000	Averaged
138 Diallate	0.22908	0.21844	0.21844	0.000	-4.64753	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 16-MAR-2010 00:58
Lab File ID: slc1533-C.d Init. Cal. Date(s): 15-MAR-2010 15-MAR-2010
Analysis Type: WATER Init. Cal. Times: 17:03 23:14
Lab Sample ID: WBN100312-08.1 Quant Type: ISTD
Method: /chem/MSD1.i/s031510a.b/MSD1-M8270C-031510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.22400	0.28393	0.28393	0.000	26.75242	60.00000	Averaged
213 Trans Diallate	0.26951	0.25699	0.25699	0.000	-4.64753	60.00000	Averaged
140 4-Aminobiphenyl	0.54917	0.57230	0.57230	0.000	4.21119	60.00000	Averaged
141 Pentachloronitrobenzene	0.06390	0.06712	0.06712	0.000	5.03569	60.00000	Averaged
142 Pronamide	0.25643	0.27212	0.27212	0.000	6.11647	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01899	0.02168	0.02168	0.000	14.16476	60.00000	Averaged
147 Methapyrilene	0.43198	0.39087	0.39087	0.000	-9.51560	60.00000	Averaged
148 Isodrin	0.09769	0.09221	0.09221	0.000	-5.60212	60.00000	Averaged
149 Aramite	0.03937	0.03962	0.03962	0.000	0.63434	60.00000	Averaged
150 Kepone	0.06795	0.06455	0.06455	0.000	-4.99143	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.27269	0.27283	0.27283	0.000	0.05211	60.00000	Averaged
152 Chlorobenzilate	0.28668	0.28881	0.28881	0.000	0.74438	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.51675	0.48602	0.48602	0.000	-5.94807	60.00000	Averaged
155 2-Acetylaminofluorene	0.30754	0.27548	0.27548	0.000	-10.42377	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.49490	0.49248	0.49248	0.000	-0.49024	60.00000	Averaged
158 3-Methylcholanthrene	0.39716	0.41605	0.41605	0.000	4.75488	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD1.i/s031510a.b/slc1533-C.d
Lab Smp Id: WBN100312-08.1 Client Smp ID: APICV
Inj Date : 16-MAR-2010 00:58
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN100312-08.1|40 PPM|1|SVMF|1|APICV
Misc Info : |MSD8270||WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s031510a.b/MSD1-M8270C-031510.m
Meth Date : 16-Mar-2010 18:25 amy01291 Quant Type: ISTD
Cal Date : 15-MAR-2010 23:14 Cal File: slc1529.d
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: apl2.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.540	3.540	(1.000)	570333	40.0000	
* 29 Naphthalene-d8	136	4.392	4.392	(1.000)	2167474	40.0000	
* 46 Acenaphthene-d10	164	5.634	5.634	(1.000)	1148170	40.0000	
* 67 Phenanthrene-d10	188	6.645	6.645	(1.000)	2008546	40.0000	
* 91 Chrysene-d12	240	8.222	8.222	(1.000)	1752326	40.0000	
* 98 Perylene-d12	264	9.416	9.416	(1.000)	1218375	40.0000	
209 Benzaldehyde	77	3.269	3.269	(0.924)	387870	40.0000	31.9
16 Acetophenone	105	3.793	3.793	(1.071)	644189	40.0000	38.6
189 Caprolactam	113	4.687	4.687	(1.067)	170479	40.0000	46.9
208 1,1'-Biphenyl	154	5.216	5.216	(0.926)	1426632	40.0000	41.2
207 Atrazine	173	6.434	6.434	(0.968)	92029	40.0000	42.9
77 Benizidine	184	7.433	7.433	(0.904)	649454	40.0000	41.5
90 3,3'-Dichlorobenzidine	252	8.175	8.175	(0.994)	496602	40.0000	38.2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
102 1,4-Dioxane	88	1.928	1.928	(0.545)	224241	40.0000	47.6
103 Methyl methacrylate	100	1.928	1.928	(0.545)	130843	40.0000	48.3
104 Ethyl methacrylate	69	2.281	2.281	(0.644)	491033	40.0000	47.4
105 2-Picoline	93	2.463	2.463	(0.696)	627514	40.0000	37.5
106 N-Nitrosomethylethylamine	88	2.510	2.510	(0.709)	241983	40.0000	37.9
107 Methyl methanesulfonate	80	2.663	2.663	(0.752)	255686	40.0000	40.9
108 N-Nitrosodiethylamine	102	2.887	2.887	(0.816)	261551	40.0000	36.8
109 Ethyl Methanesulfonate	79	3.051	3.051	(0.862)	405164	40.0000	47.6
110 Pentachloroethane	167	3.369	3.369	(0.952)	241105	40.0000	53.9
111 N-Nitrosopyrrolidine	100	3.787	3.787	(1.070)	264973	40.0000	38.7 (Q)
113 N-Nitrosomorpholine	56	3.810	3.810	(1.076)	356118	40.0000	40.3
114 o-Toluidine	106	3.822	3.822	(1.080)	860002	40.0000	36.5
115 N-Nitrosopiperidine	114	4.016	4.016	(0.914)	270170	40.0000	39.5
116 a,a-Dimethylphenethylamine	58	4.257	4.257	(0.969)	1564710	40.0000	38.3
118 2,6-Dichlorophenol	162	4.445	4.445	(1.012)	431295	40.0000	40.6
119 Hexachloropropene	213	4.469	4.469	(1.017)	357787	40.0000	60.9
120 p-Phenylenediamine	108	4.687	4.687	(1.067)	476398	40.0000	35.8
121 N-Nitrosodi-n-butylamine	84	4.651	4.651	(1.059)	374522	40.0000	38.9 (Q)
122 Safrole	162	4.810	4.810	(1.095)	461610	40.0000	46.2
123 1,2,4,5-Tetrachlorobenzene	216	5.004	5.004	(0.888)	553607	40.0000	42.6
124 Isosafrole	162	5.181	5.181	(0.920)	506697	40.0000	53.0
125 1,4-Naphthoquinone	158	5.357	5.357	(0.951)	356459	40.0000	40.0
127 Pentachlorobenzene	250	5.745	5.745	(1.020)	478217	40.0000	41.1
128 1-Naphthylamine	143	5.834	5.834	(1.035)	1032325	40.0000	39.3
129 2-Naphthylamine	143	5.892	5.892	(1.046)	1106392	40.0000	40.5
131 5-Nitro-o-toluidine	152	6.022	6.022	(1.069)	311981	40.0000	39.2
136 1,3,5-Trinitrobenzene	75	6.251	6.251	(0.941)	284563	40.0000	51.7
137 Phenacetin	108	6.292	6.292	(0.947)	542989	40.0000	43.4 (Q)
138 Diallate	86	6.269	6.269	(0.943)	438742	40.0000	38.1
212 Cis Diallate	86	6.328	6.328	(0.952)	85542	6.00000	7.6
213 Trans Diallate	86	6.269	6.269	(0.943)	438742	34.0000	32.4
140 4-Aminobiphenyl	169	6.510	6.510	(0.980)	1149481	40.0000	41.7
141 Pentachloronitrobenzene	237	6.522	6.522	(0.981)	134805	40.0000	42.0 (Q)
142 Pronamide	173	6.528	6.528	(0.982)	546564	40.0000	42.4
146 4-Nitroquinoline-1-oxide	101	7.122	7.122	(1.072)	43554	40.0000	45.7
147 Methapyrilene	58	7.145	7.145	(1.075)	785090	40.0000	36.2
148 Isodrin	193	7.286	7.286	(1.096)	185218	40.0000	37.8
149 Aramite	185	7.533	7.533	(1.134)	79580	40.0000	40.2
150 Kepone	272	7.898	7.898	(1.189)	129661	40.0000	38.0
151 p-(Dimethylamino)azobenzene	120	7.645	7.645	(0.930)	478086	40.0000	40.0
152 Chlorobenzilate	251	7.663	7.663	(0.932)	506091	40.0000	40.3
153 3,3'-Dimethylbenzidine	212	7.839	7.839	(0.953)	851659	40.0000	37.6
155 2-Acetylaminofluorene	181	7.992	7.992	(0.972)	482731	40.0000	35.8
157 7,12Dimethylbenz(a)anthracene	256	9.022	9.022	(0.958)	600023	40.0000	39.8
158 3-Methylcholanthrene	268	9.704	9.704	(1.031)	506900	40.0000	41.9 (Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.1/s031510a,b/s1c1533-C.d

Date: 16-MAR-2010 00:58

Client ID: APICV

Sample Info: MBN00312-08.1140 PPH111SYMF11.APICV

Volume Injected (uL): 0.5

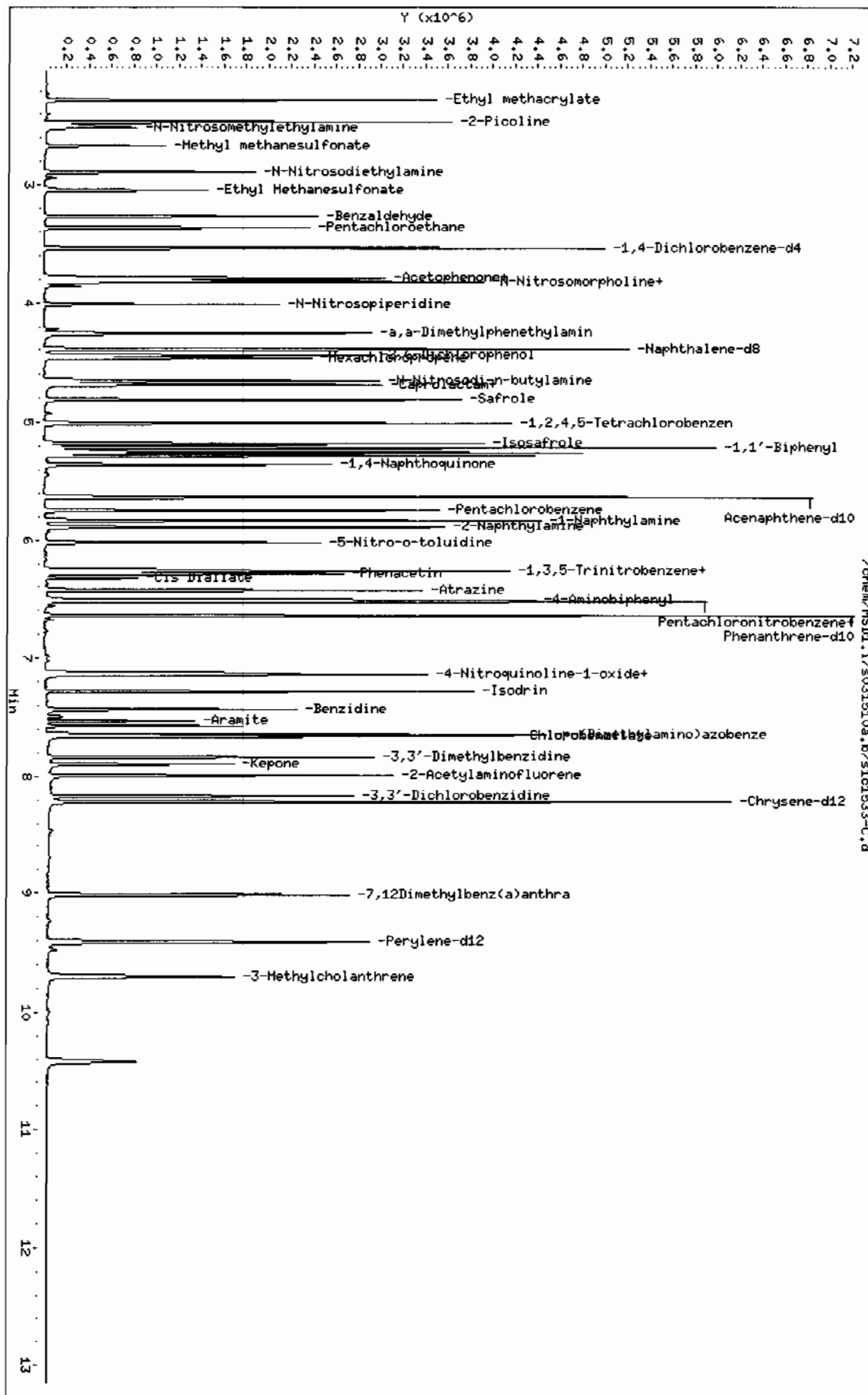
Column phase: J&W DB-5MS

Instrument: MSD1.1

Operator: AMY

Column diameter: 0.20

Page 1



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 21-MAR-2010 16:55
Lab File ID: slc2102.d Init. Cal. Date(s): 15-MAR-2010 17-MAR-2010
Analysis Type: WATER Init. Cal. Times: 17:03 02:37
Lab Sample ID: WBN100309-05.2 Quant Type: ISTD
Method: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

COMPOUND		RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3	2-Fluorophenol	1.03001	1.01412	1.01412	0.000	-1.54248	60.00000	Averaged
5	Phenol-d5	1.25441	1.27524	1.27524	0.000	1.66053	60.00000	Averaged
20	Nitrobenzene-d5	0.24533	0.26018	0.26018	0.000	6.05307	60.00000	Averaged
39	2-Fluorobiphenyl	1.10470	1.11635	1.11635	0.000	1.05417	60.00000	Averaged
60	2,4,6-Tribromophenol	0.13114	0.11652	0.11652	0.000	-11.15008	60.00000	Averaged
81	p-Terphenyl-d14	0.66687	0.65427	0.65427	0.000	-1.89015	60.00000	Averaged
1	N-Methyl-N-nitrosomethylami	0.57832	0.61711	0.61711	0.000	6.70728	60.00000	Averaged
2	Pyridine	0.88669	0.92344	0.92344	0.000	4.14461	60.00000	Averaged
4	Aniline	0.56665	0.60005	0.60005	0.000	5.89452	60.00000	Averaged
6	Phenol	1.32904	1.33123	1.33123	0.001	0.16461	20.00000	Averaged|ccc
7	bis(2-Chloroethyl) ether	0.91184	0.94899	0.94899	0.000	4.07367	60.00000	Averaged
8	2-Chlorophenol	1.12413	1.11746	1.11746	0.000	-0.59396	60.00000	Averaged
203	n-Decane	1.43358	1.59303	1.59303	0.000	11.12266	60.00000	Averaged
9	1,3-Dichlorobenzene	1.25360	1.25891	1.25891	0.000	0.42350	60.00000	Averaged
11	1,4-Dichlorobenzene	1.26574	1.27452	1.27452	0.001	0.69338	20.00000	Averaged|ccc
13	1,2-Dichlorobenzene	1.18297	1.19248	1.19248	0.000	0.80440	60.00000	Averaged
14	bis(2-Chloroisopropyl)ether	1.93906	2.15666	2.15666	0.000	11.22201	60.00000	Averaged
12	Benzyl alcohol	0.58515	0.59531	0.59531	0.000	1.73523	60.00000	Averaged
15	o-Cresol	0.85261	0.83580	0.83580	0.000	-1.97096	60.00000	Averaged
18	m,p-Cresols	1.10508	1.07798	1.07798	0.000	-2.45302	60.00000	Averaged
17	N-Nitrosodipropylamine	0.71175	0.81055	0.81055	0.050	13.88195	60.00000	Averaged|spcc
19	Hexachloroethane	0.48105	0.49967	0.49967	0.000	3.87146	60.00000	Averaged
21	Nitrobenzene	0.26210	0.27570	0.27570	0.000	5.18935	60.00000	Averaged
22	Isophorone	0.48952	0.53083	0.53083	0.000	8.43854	60.00000	Averaged
23	2-Nitrophenol	0.13523	0.14304	0.14304	0.001	5.77329	20.00000	Averaged|ccc
24	2,4-Dimethylphenol	0.24166	0.23279	0.23279	0.000	-3.66940	60.00000	Averaged
25	bis(2-Chloroethoxy)methane	0.29940	0.31286	0.31286	0.000	4.49277	60.00000	Averaged
26	2,4-Dichlorophenol	0.20163	0.20778	0.20778	0.001	3.04980	20.00000	Averaged|ccc
27	Benzoic acid	0.13123	0.14289	0.14289	0.000	8.88789	60.00000	Averaged
28	1,2,4-Trichlorobenzene	0.24663	0.25247	0.25247	0.000	2.36877	60.00000	Averaged
30	Naphthalene	0.80225	0.82674	0.82674	0.000	3.05235	60.00000	Averaged
204	alpha-Terpineol	0.22672	0.25017	0.25017	0.000	10.33979	60.00000	Averaged
31	4-Chloroaniline	0.35963	0.39855	0.39855	0.000	10.82112	60.00000	Averaged
32	Hexachlorobutadiene	0.13897	0.14254	0.14254	0.001	2.56604	20.00000	Averaged|ccc
33	4-Chloro-3-methylphenol	0.21040	0.20909	0.20909	0.001	-0.62115	20.00000	Averaged|ccc
34	2-Methylnaphthalene	0.50932	0.51902	0.51902	0.000	1.90401	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 21-MAR-2010 16:55
Lab File ID: slc2102.d Init. Cal. Date(s): 15-MAR-2010 17-MAR-2010
Analysis Type: WATER Init. Cal. Times: 17:03 02:37
Lab Sample ID: WBN100309-05.2 Quant Type: ISTD
Method: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
35 1-Methylnaphthalene	0.50016	0.51592	0.51592	0.000	3.15006	Averaged
36 Hexachlorocyclopentadiene	0.25303	0.21936	0.21936	0.050	-13.30705	Averaged|spcc
205 2,3-Dichloroaniline	0.52418	0.53943	0.53943	0.000	2.91020	Averaged
37 2,4,6-Trichlorophenol	0.29721	0.30956	0.30956	0.001	4.15444	Averaged|ccc
38 2,4,5-Trichlorophenol	0.31820	0.27067	0.27067	0.000	-14.93800	Averaged
40 2-Chloronaphthalene	0.95817	0.97232	0.97232	0.000	1.47675	Averaged
42 o-Nitroaniline	0.27488	0.30316	0.30316	0.000	10.28847	Averaged
41 m-Nitroaniline	41.31038	40.00000	0.22528	0.000	3.27596	Linear
43 Dimethylphthalate	1.11352	1.13715	1.13715	0.000	2.12269	Averaged
44 2,6-Dinitrotoluene	0.25852	0.26372	0.26372	0.000	2.01022	Averaged
50 2,4-Dinitrotoluene	0.32209	0.32957	0.32957	0.000	2.32240	Averaged
45 Acenaphthylene	1.53720	1.59442	1.59442	0.000	3.72195	Averaged
47 Acenaphthene	0.97707	0.98533	0.98533	0.001	0.84592	Averaged|ccc
48 2,4-Dinitrophenol	40.65746	40.00000	0.10957	0.050	1.64366	Linear|spcc
49 Dibenzofuran	1.31289	1.33896	1.33896	0.000	1.98568	Averaged
51 Diethylphthalate	1.11578	1.16211	1.16211	0.000	4.15191	Averaged
52 4-Nitrophenol	0.18061	0.17803	0.17803	0.050	-1.42896	Averaged|spcc
53 Fluorene	1.10069	1.12617	1.12617	0.000	2.31441	Averaged
54 4-Chlorophenylphenylether	0.53905	0.55674	0.55674	0.000	3.28000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.09291	0.09334	0.09334	0.000	0.46471	Averaged
56 p-Nitroaniline	38.42362	40.00000	0.18789	0.000	-3.94096	Linear
133 Diphenylamine	0.51080	0.51164	0.51164	0.001	0.16556	Averaged|ccc
58 1,2-Diphenylhydrazine	0.58751	0.64100	0.64100	0.000	9.10450	Averaged
61 4-Bromophenylphenylether	0.18061	0.17693	0.17693	0.000	-2.03391	Averaged
63 Hexachlorobenzene	0.19601	0.17881	0.17881	0.000	-8.77413	Averaged
65 Pentachlorophenol	0.09774	0.09592	0.09592	0.001	-1.86555	Averaged|ccc
206 n-Octadecane	0.45255	0.52360	0.52360	0.000	15.70024	Averaged
68 Phenanthrene	0.86428	0.87270	0.87270	0.000	0.97476	Averaged
69 Anthracene	0.84875	0.87009	0.87009	0.000	2.51345	Averaged
72 Di-n-butylphthalate	1.04667	1.14870	1.14870	0.000	9.74854	Averaged
76 Fluoranthene	0.88826	0.91728	0.91728	0.001	3.26679	Averaged|ccc
79 Pyrene	1.13506	1.16432	1.16432	0.000	2.57714	Averaged
85 Butylbenzylphthalate	0.48580	0.55359	0.55359	0.000	13.95481	Averaged
89 Benzo(a)anthracene	0.94024	0.97343	0.97343	0.000	3.52980	Averaged
92 Chrysene	0.87862	0.93747	0.93747	0.000	6.69768	Averaged
93 bis(2-Ethylhexyl)phthalate	0.64205	0.81455	0.81455	0.000	26.86743	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 21-MAR-2010 16:55
Lab File ID: s1c2102.d Init. Cal. Date(s): 15-MAR-2010 17-MAR-2010
Analysis Type: WATER Init. Cal. Times: 17:03 02:37
Lab Sample ID: WBN100309-05.2 Quant Type: ISTD
Method: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.31370	1.49537	1.49537	0.001	13.82855	20.00000	Averaged|ccc
95 Benzo(b)fluoranthene	1.10005	1.09488	1.09488	0.000	-0.47006	60.00000	Averaged|
96 Benzo(k)fluoranthene	1.04802	1.01355	1.01355	0.000	-3.28927	60.00000	Averaged|
97 Benzo(a)pyrene	0.88082	0.90919	0.90919	0.001	3.22083	20.00000	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	0.74890	0.89300	0.89300	0.000	19.24143	60.00000	Averaged|
100 Dibenzo(a,h)anthracene	0.61883	0.71386	0.71386	0.000	15.35725	60.00000	Averaged|
101 Benzo(ghi)perylene	0.60742	0.75051	0.75051	0.000	23.55697	60.00000	Averaged|
126 m-Dinitrobenzene	0.17468	0.17178	0.17178	0.000	-1.65718	60.00000	Averaged|
130 2,3,4,6-Tetrachlorophenol	0.27097	0.25451	0.25451	0.000	-6.07393	60.00000	Averaged|
143 Dinoseb	37.30604	40.00000	0.12904	0.000	-6.73489	60.00000	Linear|
173 Carbazole	0.62852	0.58633	0.58633	0.000	-6.71202	60.00000	Averaged|
184 p-Benzoquinone	0.05416	0.00363	0.00363	0.000	-93.30571	60.00000	Averaged|<-
192 Methoxychlor	0.59295	0.66992	0.66992	0.000	12.97969	60.00000	Averaged|
211 p-Toluidine	1.19774	1.24542	1.24542	0.000	3.98093	60.00000	Averaged|
210 m-Toluidine	1.30269	1.20943	1.20943	0.000	-7.15933	60.00000	Averaged|
26 Phthalic anhydride	45.94951	40.00000	0.07057	0.000	14.87378	60.00000	Linear|
179 Dibenzo(a,e)pyrene	0.26815	0.38578	0.38578	0.000	43.87143	60.00000	Averaged|
214 1,4-Dinitrobenzene	0.15277	0.15629	0.15629	0.000	2.30457	60.00000	Averaged|
215 2-Ethoxyethanol	0.56020	0.49503	0.49503	0.000	-11.63355	60.00000	Averaged|
216 Methylenebis(2-chloroanilin	0.10873	0.10808	0.10808	0.000	-0.59643	60.00000	Averaged|
IM 225 Trichlorophenols	0.30770	0.29011	0.29011	0.000	-5.71737	60.00000	Averaged|
IM 226 Tetrachlorophenols	0.27097	0.25451	0.25451	0.000	-6.07393	60.00000	Averaged|
IM 227 Benzo(b,k)fluoranthene	1.07403	1.05421	1.05421	0.000	-1.84552	60.00000	Averaged|

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2102.d
Lab Smp Id: WBN100309-05.2 Client Smp ID: MEGACVS
Inj Date : 21-MAR-2010 16:55
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN100309-05.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270||WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAICARE.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	452910	40.0000	
* 29 Naphthalene-d8	136	4.469	4.469	(1.000)	1893610	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	949198	40.0000	
* 67 Phenanthrene-d10	188	6.710	6.710	(1.000)	1628892	40.0000	
* 91 Chrysene-d12	240	8.292	8.292	(1.000)	1332589	40.0000	
* 98 Perylene-d12	264	9.522	9.522	(1.000)	1144861	40.0000	
\$ 3 2-Fluorophenol	112	2.822	2.822	(0.782)	459307	40.0000	39.4
\$ 5 Phenol-d5	99	3.346	3.346	(0.927)	577571	40.0000	40.7
\$ 20 Nitrobenzene-d5	82	3.975	3.975	(0.889)	492684	40.0000	42.4
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	1059636	40.0000	40.4
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	110598	40.0000	35.5
\$ 81 p-Terphenyl-d14	244	7.622	7.622	(0.919)	871867	40.0000	39.2
1 N-Methyl-N-nitrosomethylamine	74	2.157	2.157	(0.598)	279496	40.0000	42.7

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
2 Pyridine		79	2.187	2.187	(0.606)	418233	40.0000	41.6
4 Aniline		66	3.404	3.404	(0.943)	271767	40.0000	42.4
6 Phenol		94	3.357	3.357	(0.930)	602927	40.0000	40.1
7 bis(2-Chloroethyl) ether		63	3.422	3.422	(0.948)	429805	40.0000	41.6
8 2-Chlorophenol		128	3.481	3.481	(0.964)	506107	40.0000	39.8
203 n-Decane		43	3.469	3.469	(0.961)	721501	40.0000	44.4
9 1,3-Dichlorobenzene		146	3.581	3.581	(0.992)	570172	40.0000	40.2
11 1,4-Dichlorobenzene		146	3.622	3.622	(1.003)	577243	40.0000	40.3
13 1,2-Dichlorobenzene		146	3.722	3.722	(1.031)	540087	40.0000	40.3
14 bis(2-Chloroisopropyl) ether		45	3.763	3.763	(1.042)	976775	40.0000	44.5
12 Benzyl alcohol		108	3.687	3.687	(1.021)	269620	40.0000	40.7
15 o-Cresol		107	3.740	3.740	(1.036)	378543	40.0000	39.2
18 m,p-Cresols		107	3.846	3.846	(1.065)	488226	40.0000	39.0
17 N-Nitrosodipropylamine		70	3.857	3.857	(1.068)	367108	40.0000	45.6
19 Hexachloroethane		117	3.946	3.946	(1.093)	226306	40.0000	41.5
21 Nitrobenzene		77	3.987	3.987	(0.892)	522061	40.0000	42.1
22 Isophorone		82	4.140	4.140	(0.926)	1005178	40.0000	43.4
23 2-Nitrophenol		139	4.198	4.198	(0.939)	270864	40.0000	42.3
24 2,4-Dimethylphenol		122	4.198	4.198	(0.939)	440821	40.0000	38.5
25 bis(2-Chloroethoxy) methane		93	4.263	4.263	(0.954)	592427	40.0000	41.8
26 2,4-Dichlorophenol		162	4.357	4.357	(0.975)	393446	40.0000	41.2
27 Benzoic acid		105	4.275	4.275	(0.957)	270576	40.0000	43.6
28 1,2,4-Trichlorobenzene		180	4.416	4.416	(0.988)	478084	40.0000	40.9
30 Naphthalene		128	4.481	4.481	(1.003)	1565516	40.0000	41.2
204 alpha-Terpineol		59	4.469	4.469	(1.000)	473720	40.0000	44.1
31 4-Chloroaniline		127	4.504	4.504	(1.008)	754695	40.0000	44.3
32 Hexachlorobutadiene		225	4.551	4.551	(1.018)	269913	40.0000	41.0
33 4-Chloro-3-methylphenol		107	4.822	4.822	(1.079)	395934	40.0000	39.8
34 2-Methylnaphthalene		142	4.957	4.957	(1.109)	982824	40.0000	40.8
35 1-Methylnaphthalene		142	5.028	5.028	(1.125)	976945	40.0000	41.3
36 Hexachlorocyclopentadiene		237	5.063	5.063	(0.888)	208212	40.0000	34.7
205 2,3-Dichloroaniline		161	5.157	5.157	(0.904)	512027	40.0000	41.2
37 2,4,6-Trichlorophenol		196	5.151	5.151	(0.903)	293830	40.0000	41.7
38 2,4,5-Trichlorophenol		196	5.175	5.175	(0.907)	256915	40.0000	34.0
40 2-Chloronaphthalene		162	5.304	5.304	(0.930)	922920	40.0000	40.6
42 o-Nitroaniline		65	5.369	5.369	(0.941)	287763	40.0000	44.1
41 m-Nitroaniline		138	5.663	5.663	(0.993)	213838	40.0000	41.3
43 Dimethylphthalate		163	5.487	5.487	(0.962)	1079383	40.0000	40.8
44 2,6-Dinitrotoluene		165	5.540	5.540	(0.971)	250322	40.0000	40.8
50 2,4-Dinitrotoluene		165	5.828	5.828	(1.022)	312826	40.0000	40.9
45 Acenaphthylene		152	5.610	5.610	(0.984)	1513417	40.0000	41.5
47 Acenaphthene		154	5.728	5.728	(1.004)	935277	40.0000	40.3
48 2,4-Dinitrophenol		184	5.734	5.734	(1.005)	103999	40.0000	40.6(Q)
49 Dibenzofuran		168	5.851	5.851	(1.026)	1270939	40.0000	40.8
51 Diethylphthalate		149	5.975	5.975	(1.047)	1103071	40.0000	41.7
52 4-Nitrophenol		139	5.763	5.763	(1.010)	168984	40.0000	39.4
53 Fluorene		166	6.087	6.087	(1.067)	1068956	40.0000	40.9

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====	=====
54 4-Chlorophenylphenylether		204	6.075	6.075	(1.065)	528452	40.0000	41.3
55 2-Methyl-4,6-dinitrophenol		198	6.110	6.110	(0.911)	152043	40.0000	40.2
56 p-Nitroaniline		138	6.092	6.092	(1.068)	178349	40.0000	38.4
133 Diphenylamine		169	6.151	6.151	(0.917)	833410	40.0000	40.1
58 1,2-Diphenylhydrazine		77	6.181	6.181	(0.921)	1044116	40.0000	43.6
61 4-Bromophenylphenylether		248	6.404	6.404	(0.954)	288204	40.0000	39.2
63 Hexachlorobenzene		284	6.457	6.457	(0.962)	291260	40.0000	36.5
65 Pentachlorophenol		266	6.575	6.575	(0.980)	156245	40.0000	39.2
206 n-Octadecane		57	6.575	6.575	(0.980)	852888	40.0000	46.3
68 Phenanthrene		178	6.722	6.722	(1.002)	1421542	40.0000	40.4
69 Anthracene		178	6.751	6.751	(1.006)	1417276	40.0000	41.0
72 Di-n-butylphthalate		149	7.016	7.016	(1.046)	1871113	40.0000	43.9
76 Fluoranthene		202	7.434	7.434	(1.108)	1494142	40.0000	41.3
79 Pyrene		202	7.569	7.569	(0.913)	1551555	40.0000	41.0
85 Butylbenzylphthalate		149	7.875	7.875	(0.950)	737713	40.0000	45.6
89 Benzo(a)anthracene		228	8.281	8.281	(0.999)	1297180	40.0000	41.4
92 Chrysene		228	8.310	8.310	(1.002)	1249265	40.0000	42.7
93 bis(2-Ethylhexyl)phthalate		149	8.198	8.198	(0.989)	1085466	40.0000	50.7
94 Di-n-octylphthalate		149	8.651	8.651	(0.909)	1711988	40.0000	45.5
95 Benzo(b)fluoranthene		252	9.133	9.133	(0.959)	1253484	40.0000	39.8(H)
96 Benzo(k)fluoranthene		252	9.157	9.157	(0.962)	1160371	40.0000	38.7
97 Benzo(a)pyrene		252	9.463	9.463	(0.994)	1040894	40.0000	41.3
99 Indeno(1,2,3-cd)pyrene		276	10.869	10.869	(1.141)	1022359	40.0000	47.7
100 Dibenzo(a,h)anthracene		278	10.874	10.874	(1.142)	817271	40.0000	46.1
101 Benzo(ghi)perylene		276	11.286	11.286	(1.185)	859227	40.0000	49.4
126 m-Dinitrobenzene		168	5.522	5.522	(0.968)	163055	40.0000	39.3
130 2,3,4,6-Tetrachlorophenol		232	5.928	5.928	(1.039)	241582	40.0000	37.6
143 Dinoseb		211	6.675	6.675	(0.995)	210186	40.0000	37.3
173 Carbazole		167	6.845	6.845	(1.020)	955072	40.0000	37.3
184 p-Benzoquinone		54	2.822	2.822	(0.782)	1642	40.0000	2.7(a)
192 Methoxychlor		227	8.181	8.181	(0.987)	892725	40.0000	45.2
211 p-Toluidine		106	3.893	3.893	(1.078)	564063	40.0000	41.6
210 m-Toluidine		106	3.916	3.916	(1.085)	547762	40.0000	37.1
26 Phthalic anhydride		104	4.998	4.998	(1.118)	133641	40.0000	45.9
179 Dibenzo(a,e)pyrene		302	14.451	14.451	(1.518)	441670	40.0000	57.5
214 1,4-Dinitrobenzene		168	5.463	5.463	(0.958)	148354	40.0000	40.9
215 2-Ethoxyethanol		59	2.010	2.010	(0.557)	224204	40.0000	35.3
216 Methylenebis(2-chloroaniline)		231	8.228	8.228	(0.992)	144027	40.0000	39.8
M 225 Trichlorophenols		196				550745	80.0000	75.4
M 226 Tetrachlorophenols		232				241582	40.0000	37.6
M 227 Benzo(b,k)fluoranthene		252				2413855	80.0000	78.5

QC Flag Legend

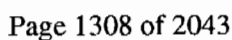
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

QC Flag Legend

H - Operator selected an alternate compound hit.

/chem/MSD1.i/s032210.b/s1c2102.c

Page 1



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 21-MAR-2010 17:25
Lab File ID: slc2103.d Init. Cal. Date(s): 15-MAR-2010 17-MAR-2010
Analysis Type: Init. Cal. Times: 17:03 02:37
Lab Sample ID: WBN100312-03.2 Quant Type: ISTD
Method: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.85292	0.73788	0.73788	0.000	-13.48762	60.00000	Averaged
16 Acetophenone	1.17153	1.18934	1.18934	0.000	1.52008	60.00000	Averaged
189 Caprolactam	0.06713	0.08225	0.08225	0.000	22.51667	60.00000	Averaged
208 1,1'-Biphenyl	1.20731	1.27067	1.27067	0.000	5.24806	60.00000	Averaged
207 Atrazine	0.04270	0.04935	0.04935	0.000	15.58010	60.00000	Averaged
77 Benzidine	0.35698	0.22546	0.22546	0.000	-36.84116	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.29661	0.27880	0.27880	0.000	-6.00293	60.00000	Averaged
102 1,4-Dioxane	0.33011	0.38620	0.38620	0.000	16.99020	60.00000	Averaged
103 Methyl methacrylate	0.19011	0.22173	0.22173	0.000	16.63418	60.00000	Averaged
104 Ethyl methacrylate	0.72578	0.86372	0.86372	0.000	19.00566	60.00000	Averaged
105 2-Picoline	1.17224	1.09391	1.09391	0.000	-6.68208	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.44761	0.43065	0.43065	0.000	-3.78912	60.00000	Averaged
107 Methyl methanesulfonate	0.43845	0.48646	0.48646	0.000	10.95124	60.00000	Averaged
108 N-Nitrosodiethylamine	0.49906	0.46917	0.46917	0.000	-5.98812	60.00000	Averaged
109 Ethyl Methanesulfonate	0.59722	0.74366	0.74366	0.000	24.51866	60.00000	Averaged
110 Pentachloroethane	0.31358	0.42503	0.42503	0.000	35.54187	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.48048	0.49829	0.49829	0.000	3.70871	60.00000	Averaged
113 N-Nitrosomorpholine	0.61907	0.68728	0.68728	0.000	11.01793	60.00000	Averaged
114 o-Toluidine	1.65123	1.61803	1.61803	0.000	-2.01082	60.00000	Averaged
115 N-Nitrosopiperidine	0.12608	0.12729	0.12729	0.000	0.95448	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.75396	0.75097	0.75097	0.000	-0.39620	60.00000	Averaged
118 2,6-Dichlorophenol	0.19593	0.20452	0.20452	0.000	4.38407	60.00000	Averaged
119 Hexachloropropene	0.10838	0.13766	0.13766	0.000	27.01589	60.00000	Averaged
120 p-Phenylenediamine	0.24548	0.23903	0.23903	0.000	-2.62489	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17777	0.18500	0.18500	0.000	4.06859	60.00000	Averaged
122 Safrole	0.18440	0.21383	0.21383	0.000	15.95666	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.45282	0.48662	0.48662	0.000	7.46415	60.00000	Averaged
124 Isosafrole	0.33289	0.44889	0.44889	0.000	34.84460	60.00000	Averaged
125 1,4-Naphthoquinone	0.31050	0.32701	0.32701	0.000	5.31526	60.00000	Averaged
127 Pentachlorobenzene	0.40506	0.39729	0.39729	0.000	-1.91792	60.00000	Averaged
128 1-Naphthylamine	0.91492	0.89044	0.89044	0.000	-2.67529	60.00000	Averaged
129 2-Naphthylamine	0.95136	0.94843	0.94843	0.000	-0.30733	60.00000	Averaged
131 5-Nitro-o-toluidine	0.27755	0.27214	0.27214	0.000	-1.94942	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.10955	0.15003	0.15003	0.000	36.95416	60.00000	Averaged
137 Phenacetin	0.24931	0.27844	0.27844	0.000	11.68392	60.00000	Averaged
138 Diallate	0.22908	0.23463	0.23463	0.000	2.42255	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD1.i Injection Date: 21-MAR-2010 17:25
Lab File ID: s1c2103.d Init. Cal. Date(s): 15-MAR-2010 17-MAR-2010
Analysis Type: Init. Cal. Times: 17:03 02:37
Lab Sample ID: WBN100312-03.2 Quant Type: ISTD
Method: /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
RRF	%D	%DRIFT	%D	%DRIFT		
212 Cis Diallate	0.22400	0.30981	0.30981	0.000	38.30795	60.00000 Averaged
213 Trans Diallate	0.26951	0.27604	0.27604	0.000	2.42255	60.00000 Averaged
140 4-Aminobiphenyl	0.54917	0.50444	0.50444	0.000	-8.14471	60.00000 Averaged
141 Pentachloronitrobenzene	0.06390	0.06813	0.06813	0.000	6.62950	60.00000 Averaged
142 Pronamide	0.25643	0.28555	0.28555	0.000	11.35593	60.00000 Averaged
146 4-Nitroquinoline-1-oxide	0.01899	0.02377	0.02377	0.000	25.16001	60.00000 Averaged
147 Methapyrilene	0.43198	0.44332	0.44332	0.000	2.62457	60.00000 Averaged
148 Isodrin	0.09769	0.09726	0.09726	0.000	-0.43541	60.00000 Averaged
149 Aramite	0.03937	0.04246	0.04246	0.000	7.84591	60.00000 Averaged
150 Kepone	0.06795	0.06791	0.06791	0.000	-0.04762	60.00000 Averaged
151 p-(Dimethylamino)azobenzene	0.27269	0.28609	0.28609	0.000	4.91467	60.00000 Averaged
152 Chlorobenzilate	0.28668	0.30193	0.30193	0.000	5.32158	60.00000 Averaged
153 3,3'-Dimethylbenzidine	0.51675	0.45662	0.45662	0.000	-11.63718	60.00000 Averaged
155 2-Acetylaminofluorene	0.30754	0.31986	0.31986	0.000	4.00778	60.00000 Averaged
157 7,12Dimethylbenz(a)anthracene	0.49490	0.45126	0.45126	0.000	-8.81894	60.00000 Averaged
158 3-Methylcholanthrene	0.39716	0.43069	0.43069	0.000	8.44206	60.00000 Averaged

Data File: /chem/MSD1.i/s032110.b/slc2103.d
Report Date: 22-Mar-2010 11:35

Page 1

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2103.d
Lab Smp Id: WBN100312-03.2 Client Smp ID: APCVS
Inj Date : 21-MAR-2010 17:25
Operator : AMY Inst ID: MSD1.i
Smp Info : |WBN100312-03.2|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270||WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:35 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	431600	40.0000	
* 29 Naphthalene-d8	136	4.463	4.463	(1.000)	1708612	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	910441	40.0000	
* 67 Phenanthrene-d10	188	6.710	6.710	(1.000)	1579370	40.0000	
* 91 Chrysene-d12	240	8.286	8.286	(1.000)	1343299	40.0000	
* 98 Perylene-d12	264	9.522	9.522	(1.000)	1143955	40.0000	
209 Benzaldehyde	77	3.346	3.346	(0.927)	318468	40.0000	34.6
16 Acetophenone	105	3.863	3.863	(1.070)	513317	40.0000	40.6
189 Caprolactam	113	4.751	4.751	(1.065)	140529	40.0000	49.0
208 1,1'-Biphenyl	154	5.287	5.287	(0.927)	1156871	40.0000	42.1
207 Atrazine	173	6.492	6.492	(0.968)	77942	40.0000	46.2
77 Benzidine	184	7.492	7.492	(0.904)	302862	40.0000	25.3
90 3,3'-Dichlorobenzidine	252	8.233	8.233	(0.994)	374515	40.0000	37.6
102 1,4-Dioxane	88	2.010	2.010	(0.557)	166682	40.0000	46.8
103 Methyl methacrylate	100	2.004	2.004	(0.555)	95698	40.0000	46.6
104 Ethyl methacrylate	69	2.357	2.357	(0.653)	372781	40.0000	47.6
105 2-Picoline	93	2.540	2.540	(0.703)	472130	40.0000	37.3
106 N-Nitrosomethylethylamine	88	2.581	2.581	(0.715)	185867	40.0000	38.5
107 Methyl methanesulfonate	80	2.740	2.740	(0.759)	209957	40.0000	44.4
108 N-Nitrosodiethylamine	102	2.957	2.957	(0.819)	202495	40.0000	37.6
109 Ethyl Methanesulfonate	79	3.122	3.122	(0.865)	320962	40.0000	49.8
110 Pentachloroethane	167	3.440	3.440	(0.953)	183444	40.0000	54.2
111 N-Nitrosopyrrolidine	100	3.857	3.857	(1.068)	215064	40.0000	41.5 (Q)
113 N-Nitrosomorpholine	56	3.875	3.875	(1.073)	296629	40.0000	44.4
114 o-Toluidine	106	3.893	3.893	(1.078)	698341	40.0000	39.2
115 N-Nitrosopiperidine	114	4.087	4.087	(0.916)	217483	40.0000	40.4

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	4.328	4.328	(0.970)	1283117	40.0000	39.8
118 2,6-Dichlorophenol	162	4.516	4.516	(1.012)	349442	40.0000	41.8
119 Hexachloropropene	213	4.534	4.534	(1.016)	235214	40.0000	50.8
120 p-Phenylenediamine	108	4.757	4.757	(1.066)	408417	40.0000	39.0
121 N-Nitrosodi-n-butylamine	84	4.722	4.722	(1.058)	316094	40.0000	41.6(Q)
122 Safrole	162	4.881	4.881	(1.094)	365352	40.0000	46.4
123 1,2,4,5-Tetrachlorobenzene	216	5.075	5.075	(0.890)	443035	40.0000	43.0
124 Isosafrole	162	5.251	5.251	(0.921)	408685	40.0000	53.9
125 1,4-Naphthoquinone	158	5.428	5.428	(0.952)	297720	40.0000	42.1
127 Pentachlorobenzene	250	5.816	5.816	(1.020)	361709	40.0000	39.2
128 1-Naphthylamine	143	5.904	5.904	(1.035)	810695	40.0000	38.9
129 2-Naphthylamine	143	5.957	5.957	(1.044)	863491	40.0000	39.9
131 5-Nitro-o-toluidine	152	6.087	6.087	(1.067)	247766	40.0000	39.2
136 1,3,5-Trinitrobenzene	75	6.316	6.316	(0.941)	236950	40.0000	54.8
137 Phenacetin	108	6.351	6.351	(0.947)	439754	40.0000	44.7(Q)
138 Diallate	86	6.328	6.328	(0.943)	370574	40.0000	41.0
212 Cis Diallate	86	6.392	6.392	(0.953)	73396	6.00000	8.3
213 Trans Diallate	86	6.328	6.328	(0.943)	370574	34.0000	34.8
140 4-Aminobiphenyl	169	6.575	6.575	(0.980)	796698	40.0000	36.7
141 Pentachloronitrobenzene	237	6.586	6.586	(0.982)	107609	40.0000	42.6(Q)
142 Pronamide	173	6.586	6.586	(0.982)	450997	40.0000	44.5
146 4-Nitroquinoline-1-oxide	101	7.181	7.181	(1.070)	37546	40.0000	50.1
147 Methapyrilene	58	7.198	7.198	(1.073)	700163	40.0000	41.0
148 Isodrin	193	7.345	7.345	(1.095)	153613	40.0000	39.8
149 Aramite	185	7.586	7.586	(1.131)	67060	40.0000	43.1
150 Kepone	272	7.957	7.957	(1.186)	107261	40.0000	40.0
151 p-(Dimethylamino)azobenzene	120	7.698	7.698	(0.929)	384303	40.0000	42.0
152 Chlorobenzilate	251	7.716	7.716	(0.931)	405586	40.0000	42.1
153 3,3'-Dimethylbenzidine	212	7.892	7.892	(0.952)	613374	40.0000	35.3
155 2-Acetylaminofluorene	181	8.051	8.051	(0.972)	429671	40.0000	41.6
157 7,12Dimethylbenz(a)anthracene	256	9.110	9.110	(0.957)	516220	40.0000	36.5
158 3-Methylcholanthrene	268	9.822	9.822	(1.032)	492690	40.0000	43.4(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD1.i/s032110.b/s102103.d

Date: 21-MAR-2010 17:25

Client ID: APCVS

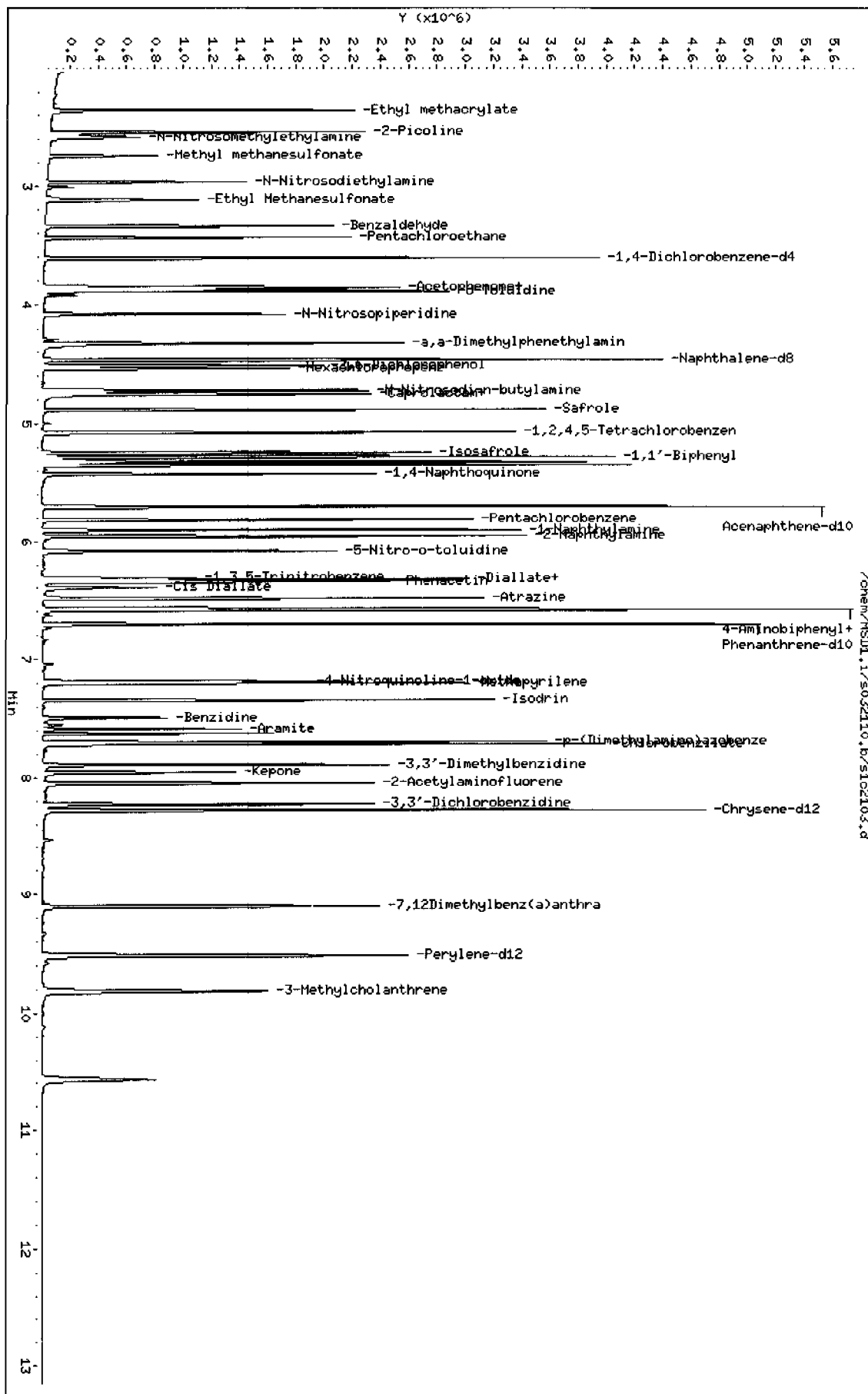
Sample Info: INBN00312-03.2140 PPH115WFI11APCVS

Column phase: J&W DB-SMS

Instrument: MSD1.i

Operator: AMY

Column diameter: 0.20



QC Data

Data File: /chem/MSD1.i/s031510a,b/s1c1513-D.d

Page 1

Date : 15-MAR-2010 16:24

Client ID: DFTPP

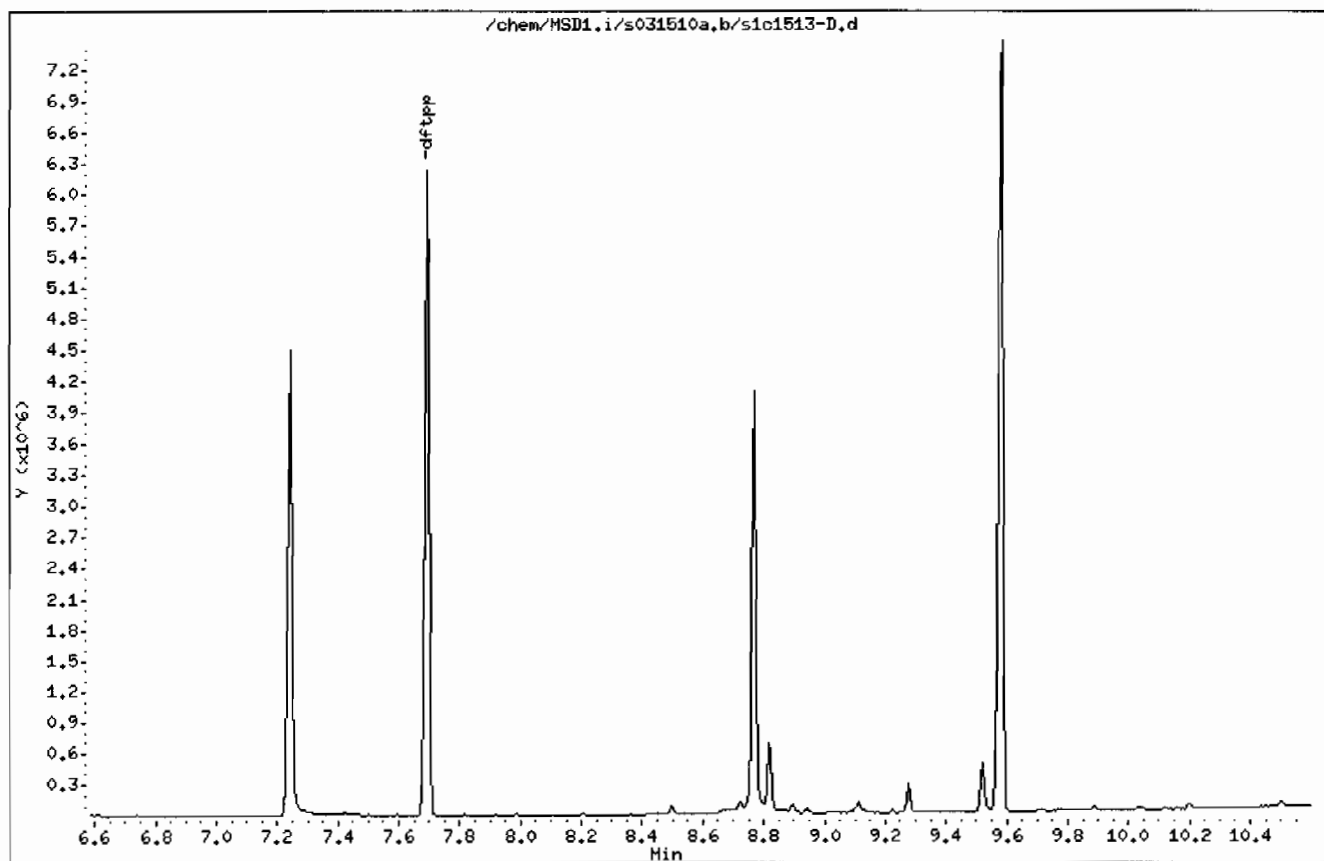
Instrument: MSD1.i

Sample Info: INBN100306-01.2150 PPM11ISVMF111DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20



Date : 15-MAR-2010 16:24

Client ID: DFTPP

Instrument: MSD1.i

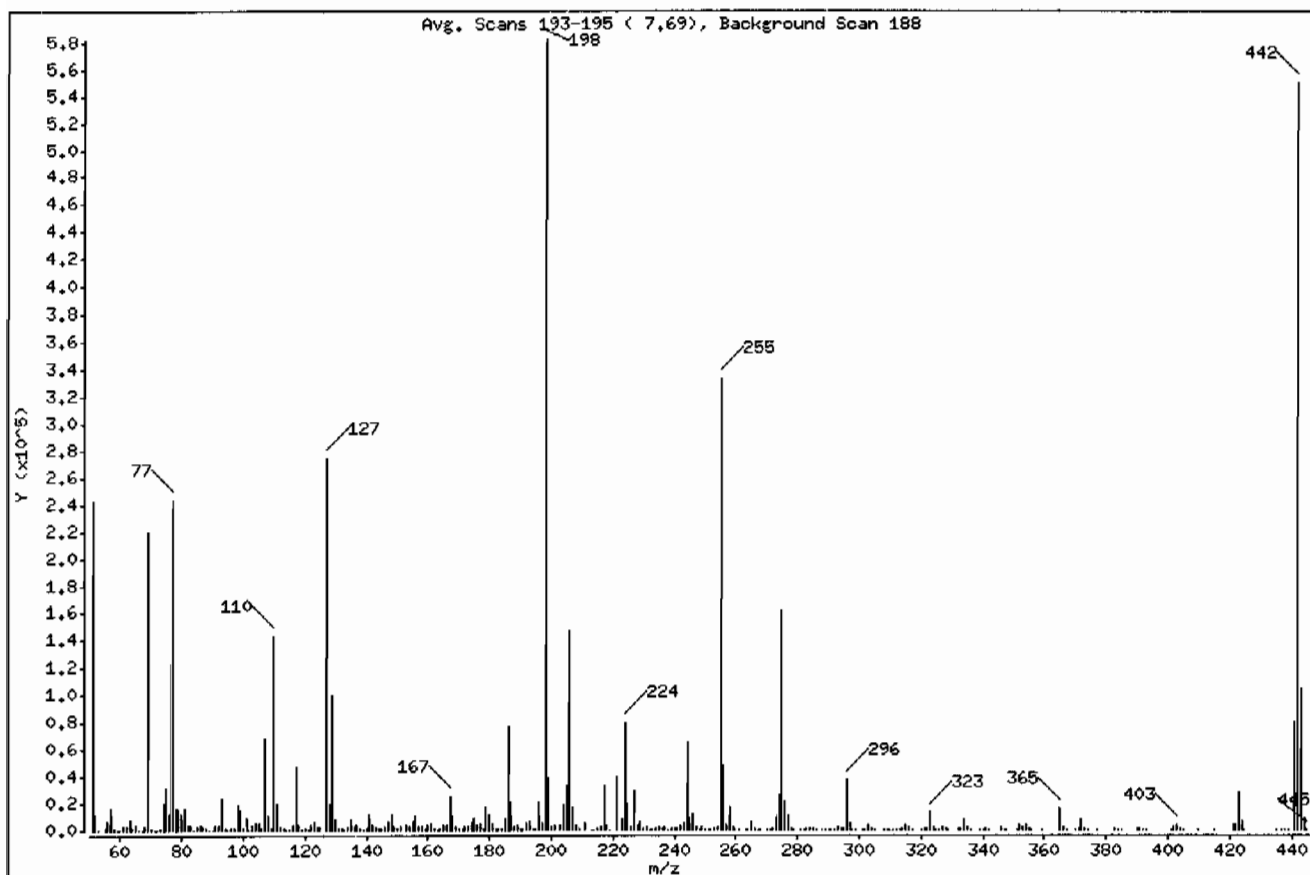
Sample Info: INBN100306-01,2150 PPH11SVMF11DFTPP

Operator: AMY

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	10.00 - 80.00% of mass 198	41.53
68	Less than 2.00% of mass 69	0.51 (1.35)
69	Mass 69 relative abundance	37.65
70	Less than 2.00% of mass 69	0.19 (0.50)
127	10.00 - 80.00% of mass 198	47.13
197	Less than 2.00% of mass 198	0.87
199	5.00 - 9.00% of mass 198	6.62
275	10.00 - 60.00% of mass 198	27.82
365	Greater than 1.00% of mass 198	2.87
441	Less than 24.00% of mass 442	13.73 (14.54)
442	Greater than 50.00% of mass 198	94.43
443	15.00 - 24.00% of mass 442	18.01 (19.07)

Date : 15-MAR-2010 16:24

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBH100306-01.2150 PPH11SVHF11DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1c1513-D.d

Spectrum: Avg. Scans 193-195 (7.69), Background Scan 188

Location of Maximum: 198.00

Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y

| 51.00	241856	| 133.00	233	| 217.00	33440	| 304.00	1315
| 52.00	11973	| 134.00	2979	| 218.00	4340	| 305.00	229
| 53.00	550	| 135.00	7765	| 219.00	552	| 308.00	622
| 55.00	1434	| 136.00	3066	| 221.00	40216	| 309.00	430
| 56.00	7062	| 137.00	4020	| 223.00	8568	| 310.00	399

| 57.00	15923	| 138.00	768	| 224.00	79800	| 311.00	61
| 58.00	764	| 139.00	640	| 225.00	20032	| 312.00	64
| 59.00	319	| 140.00	1357	| 226.00	2076	| 313.00	424
| 60.00	272	| 141.00	12558	| 227.00	29024	| 314.00	1973
| 61.00	2874	| 142.00	4154	| 228.00	4167	| 315.00	3997

| 62.00	3241	| 143.00	2743	| 229.00	6393	| 316.00	2374
| 63.00	8658	| 144.00	712	| 230.00	992	| 317.00	382
| 64.00	1210	| 145.00	768	| 231.00	2774	| 320.00	195
| 65.00	4250	| 146.00	2531	| 232.00	580	| 321.00	1265
| 66.00	387	| 147.00	6077	| 233.00	575	| 322.00	771

| 67.00	409	| 148.00	12137	| 234.00	1864	| 323.00	13849
| 68.00	2960	| 149.00	2536	| 235.00	2265	| 324.00	2561
| 69.00	219264	| 150.00	832	| 236.00	1470	| 325.00	289
| 70.00	1093	| 151.00	2872	| 237.00	2709	| 326.00	323
| 71.00	133	| 153.00	3854	| 238.00	449	| 327.00	2325

| 72.00	179	| 154.00	3086	| 239.00	1254	| 328.00	1194
| 73.00	1688	| 155.00	6466	| 240.00	914	| 329.00	236
| 74.00	20248	| 156.00	10263	| 241.00	1755	| 332.00	829
| 75.00	32520	| 157.00	2602	| 242.00	4114	| 333.00	1241
| 76.00	11845	| 158.00	2440	| 243.00	4729	| 334.00	8459

| 77.00	243136	| 159.00	1768	| 244.00	66136	| 335.00	2502
| 78.00	16271	| 160.00	3741	| 245.00	8903	| 336.00	280
| 79.00	15405	| 161.00	5825	| 246.00	11386	| 339.00	198
| 80.00	11726	| 162.00	1644	| 247.00	2217	| 340.00	170
| 81.00	15993	| 163.00	523	| 248.00	520	| 341.00	1444

| 82.00	3893	| 164.00	805	| 249.00	2394	| 342.00	479
| 83.00	3871	| 165.00	4606	| 250.00	445	| 346.00	2761
| 84.00	493	| 166.00	3872	| 251.00	626	| 347.00	538
| 85.00	2923	| 167.00	24776	| 252.00	581	| 348.00	51
| 86.00	4314	| 168.00	11154	| 253.00	1303	| 351.00	197

Date : 15-MAR-2010 16:24

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBNI00306-01.2150 PPMI1SVMF11IDFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: sic1513-D.d

Spectrum: Avg. Scans 193-195 (7.69), Background Scan 188

Location of Maximum: 198.00

Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	2188	169.00	2168	254.00	2657	352.00	3844
88.00	813	170.00	995	255.00	333376	353.00	2892
89.00	436	171.00	1257	256.00	48232	354.00	4664
90.00	120	172.00	2258	257.00	3755	355.00	903
91.00	3924	173.00	2862	258.00	16736	356.00	63
92.00	4234	174.00	5478	259.00	2653	359.00	420
93.00	23712	175.00	9699	260.00	525	365.00	16680
94.00	1838	176.00	3662	261.00	587	366.00	2565
95.00	558	177.00	5122	263.00	193	367.00	153
96.00	1017	178.00	1461	264.00	610	370.00	387
97.00	719	179.00	18056	265.00	6158	371.00	1044
98.00	18368	180.00	12432	266.00	1260	372.00	7396
99.00	14347	181.00	5882	267.00	85	373.00	1784
100.00	1400	182.00	1044	268.00	175	374.00	207
101.00	9027	183.00	874	270.00	318	377.00	138
102.00	579	184.00	1418	271.00	587	383.00	1767
103.00	3545	185.00	9135	272.00	849	384.00	549
104.00	5824	186.00	78248	273.00	9829	385.00	71
105.00	5163	187.00	21168	274.00	26920	390.00	1009
106.00	1408	188.00	2310	275.00	161984	391.00	772
107.00	67632	189.00	4285	276.00	20992	392.00	564
108.00	11058	190.00	733	277.00	11136	393.00	53
109.00	813	191.00	1865	278.00	1960	401.00	465
110.00	143296	192.00	5338	279.00	441	402.00	2965
111.00	19696	193.00	6535	281.00	109	403.00	4056
112.00	2414	194.00	1550	282.00	293	404.00	1650
113.00	688	195.00	1175	283.00	1412	405.00	243
114.00	227	196.00	20984	284.00	1001	410.00	158
115.00	194	197.00	5045	285.00	1940	415.00	186
116.00	4126	198.00	582336	286.00	378	421.00	3617
117.00	47152	199.00	38536	288.00	143	422.00	3691
118.00	3544	200.00	2810	289.00	457	423.00	27832
119.00	489	201.00	3621	290.00	408	424.00	6215
120.00	946	203.00	3872	291.00	293	425.00	667
121.00	449	204.00	18384	292.00	459	435.00	50

Date : 15-MAR-2010 16:24

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBNI00306-01,2150 PPH11SVMF11DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: sic1513-D.d

Spectrum: Avg. Scans 193-195 (7.69), Background Scan 188

Location of Maximum: 198.00

Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	4605	205.00	32968	293.00	2865	437.00	58
123.00	7129	206.00	147328	294.00	693	438.00	140
124.00	3149	207.00	17968	295.00	842	439.00	571
125.00	3000	208.00	4366	296.00	36816	441.00	79952
127.00	274432	209.00	1412	297.00	5113	442.00	549952
128.00	19888	211.00	5781	298.00	338	443.00	104896
129.00	100192	213.00	385	299.00	59	444.00	9485
130.00	8398	214.00	109	301.00	414	445.00	593
131.00	1681	215.00	1479	302.00	653		
132.00	1065	216.00	2829	303.00	4624		

Data File: /chem/HSD1.i/s031510a,b/s1c1513.d

Page 1

Date : 15-MAR-2010 16:24

Client ID: DFTPP

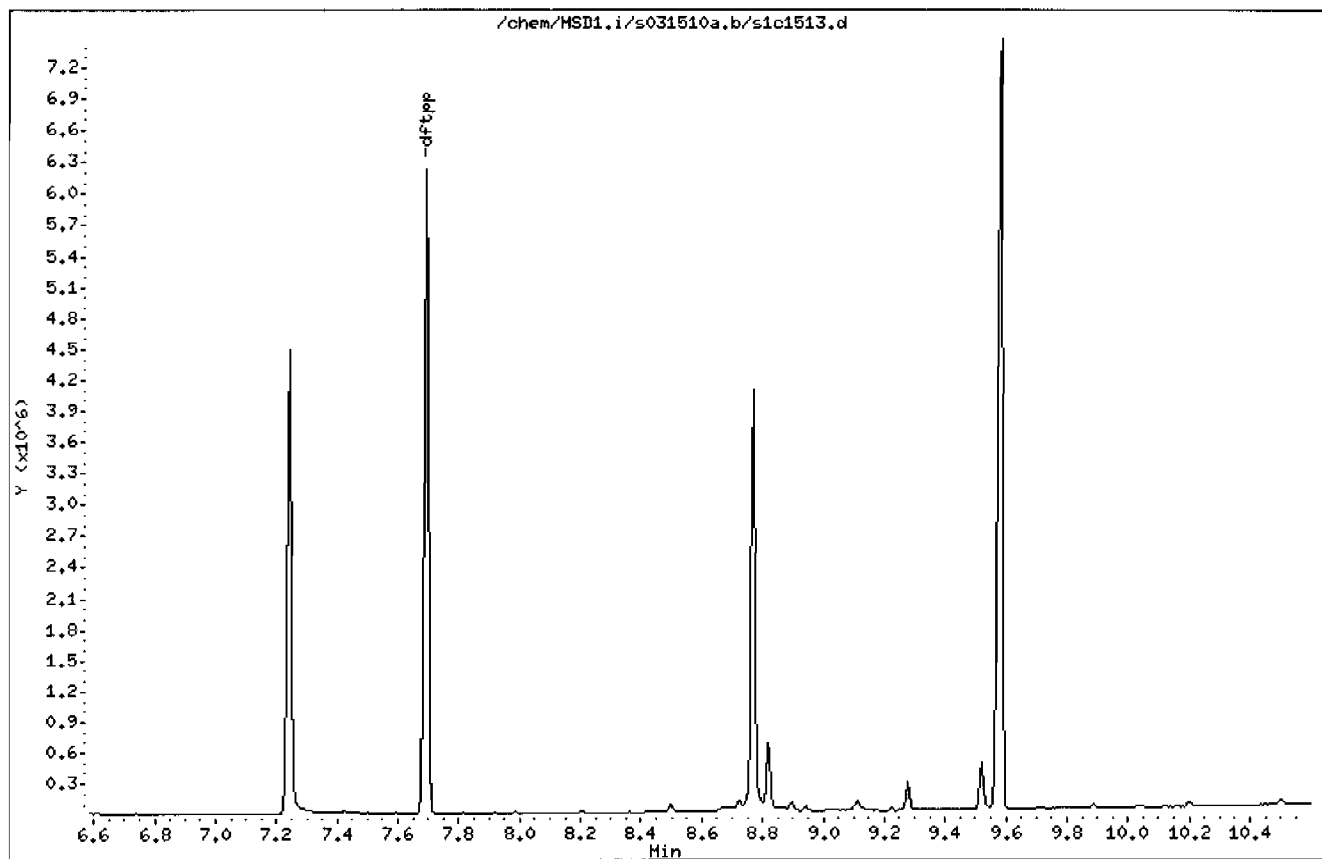
Instrument: MSD1.i

Sample Info: HWB100306-01.2150 PPH11SVMF11/DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20



Date : 15-MAR-2010 16:24

Client ID: DFTPP

Instrument: HSD1.i

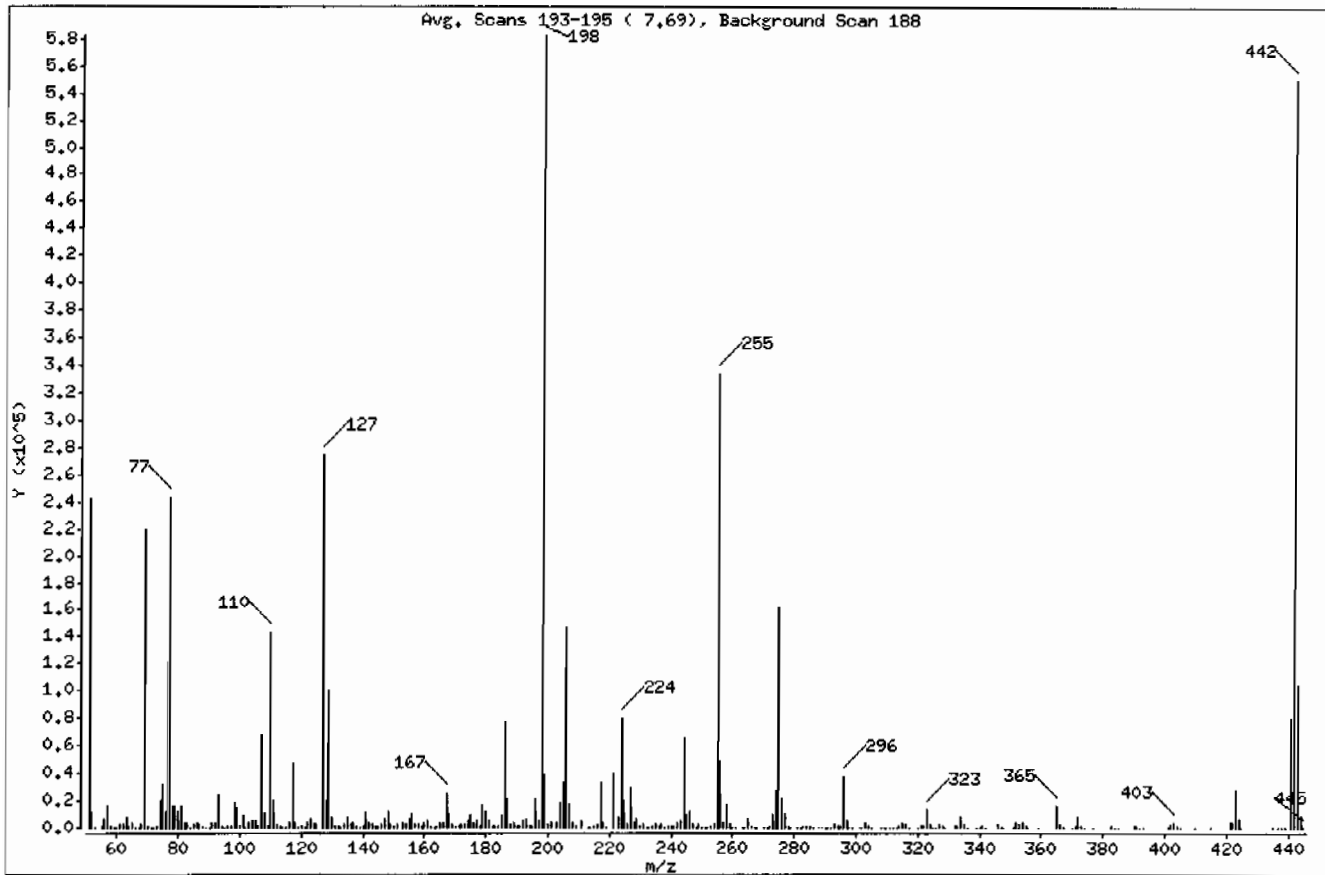
Sample Info: IWBNI00306-01,2150 PPM11SVMF111DFTPP

Operator: AHY

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	41.53
68	Less than 2.00% of mass 69	0.51 (1.35)
69	Mass 69 relative abundance	37.65
70	Less than 2.00% of mass 69	0.19 (0.50)
127	40.00 - 60.00% of mass 198	47.13
197	Less than 1.00% of mass 198	0.87
199	5.00 - 9.00% of mass 198	6.62
275	10.00 - 30.00% of mass 198	27.82
365	Greater than 1.00% of mass 198	2.87
441	Present, but less than mass 443	13.73
442	Greater than 40.00% of mass 198	94.43
443	17.00 - 23.00% of mass 442	18.01 (19.07)

Date : 15-MAR-2010 16:24

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBNI00306-01,2150 PPH11SVHF11DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: sic1513.d

Spectrum: Avg. Scans 193-195 (7.69), Background Scan 188

Location of Maximum: 198.00

Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	241856	133.00	233	217.00	33440	304.00	1315
52.00	11973	134.00	2979	218.00	4340	305.00	229
53.00	550	135.00	7765	219.00	552	308.00	622
55.00	1434	136.00	3066	221.00	40216	309.00	430
56.00	7062	137.00	4020	223.00	8568	310.00	399
57.00	15923	138.00	768	224.00	79800	311.00	61
58.00	764	139.00	640	225.00	20032	312.00	64
59.00	319	140.00	1357	226.00	2076	313.00	424
60.00	272	141.00	12558	227.00	29024	314.00	1973
61.00	2874	142.00	4154	228.00	4167	315.00	3997
62.00	3241	143.00	2743	229.00	6393	316.00	2374
63.00	8658	144.00	712	230.00	992	317.00	382
64.00	1210	145.00	768	231.00	2774	320.00	195
65.00	4250	146.00	2531	232.00	580	321.00	1265
66.00	387	147.00	6077	233.00	575	322.00	771
67.00	409	148.00	12137	234.00	1864	323.00	13849
68.00	2960	149.00	2536	235.00	2265	324.00	2561
69.00	219264	150.00	832	236.00	1470	325.00	289
70.00	1093	151.00	2872	237.00	2709	326.00	323
71.00	133	153.00	3854	238.00	449	327.00	2325
72.00	179	154.00	3086	239.00	1254	328.00	1194
73.00	1688	155.00	6466	240.00	914	329.00	236
74.00	20248	156.00	10263	241.00	1755	332.00	829
75.00	32520	157.00	2602	242.00	4114	333.00	1241
76.00	11845	158.00	2440	243.00	4729	334.00	8459
77.00	243136	159.00	1768	244.00	66136	335.00	2502
78.00	16271	160.00	3741	245.00	8903	336.00	280
79.00	15405	161.00	5825	246.00	11386	339.00	198
80.00	11726	162.00	1644	247.00	2217	340.00	170
81.00	15993	163.00	523	248.00	520	341.00	1444
82.00	3893	164.00	805	249.00	2394	342.00	479
83.00	3871	165.00	4606	250.00	445	346.00	2761
84.00	493	166.00	3872	251.00	626	347.00	538
85.00	2923	167.00	24776	252.00	581	348.00	51
86.00	4314	168.00	11154	253.00	1303	351.00	197

Date : 15-MAR-2010 16:24

Client ID: DFTTP

Instrument: MSD1.i

Sample Info: IMBN100306-01,2150 PPH11SVMF11DFTTP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: sic1513.d

Spectrum: Avg. Scans 193-195 (7.69), Background Scan 188

Location of Maximum: 198.00

Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y

87.00	2188	169.00	2168	254.00	2657	352.00	3844
88.00	813	170.00	995	255.00	333376	353.00	2892
89.00	436	171.00	1257	256.00	48232	354.00	4664
90.00	120	172.00	2258	257.00	3755	355.00	903
91.00	3924	173.00	2862	258.00	16736	356.00	63

92.00	4234	174.00	5478	259.00	2653	359.00	420
93.00	23712	175.00	9699	260.00	525	365.00	16680
94.00	1838	176.00	3662	261.00	587	366.00	2566
95.00	558	177.00	5122	263.00	193	367.00	153
96.00	1017	178.00	1461	264.00	610	370.00	387

97.00	719	179.00	18056	265.00	6158	371.00	1044
98.00	18368	180.00	12432	266.00	1260	372.00	7396
99.00	14347	181.00	5882	267.00	85	373.00	1784
100.00	1400	182.00	1044	268.00	175	374.00	207
101.00	9027	183.00	874	270.00	318	377.00	138

102.00	579	184.00	1418	271.00	587	383.00	1767
103.00	3545	185.00	9135	272.00	849	384.00	549
104.00	5824	186.00	78248	273.00	9829	385.00	71
105.00	5163	187.00	21168	274.00	26920	390.00	1009
106.00	1408	188.00	2310	275.00	161984	391.00	772

107.00	67632	189.00	4285	276.00	20992	392.00	564
108.00	11058	190.00	733	277.00	11136	393.00	53
109.00	813	191.00	1865	278.00	1960	401.00	465
110.00	143296	192.00	5338	279.00	441	402.00	2965
111.00	19696	193.00	6535	281.00	109	403.00	4056

112.00	2414	194.00	1550	282.00	293	404.00	1650
113.00	688	195.00	1175	283.00	1412	405.00	243
114.00	227	196.00	20984	284.00	1001	410.00	158
115.00	194	197.00	5045	285.00	1940	415.00	186
116.00	4126	198.00	582336	286.00	378	421.00	3617

117.00	47152	199.00	38536	288.00	143	422.00	3691
118.00	3544	200.00	2810	289.00	457	423.00	27832
119.00	489	201.00	3621	290.00	408	424.00	6215
120.00	946	203.00	3872	291.00	293	425.00	667
121.00	449	204.00	18384	292.00	459	435.00	50

Date : 15-MAR-2010 16:24

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBH100306-01,2150 PPM11ISVHF11IDFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: sic1513.d
Spectrum: Avg. Scans 193-195 (7.69), Background Scan 188
Location of Maximum: 198.00
Number of points: 318

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	4605	205.00	32968	293.00	2865	437.00	58
123.00	7129	206.00	147328	294.00	693	438.00	140
124.00	3149	207.00	17968	295.00	842	439.00	571
125.00	3000	208.00	4366	296.00	36816	441.00	79952
127.00	274432	209.00	1412	297.00	5113	442.00	549952
128.00	19888	211.00	5781	298.00	338	443.00	104896
129.00	100192	213.00	385	299.00	59	444.00	9485
130.00	8398	214.00	109	301.00	414	445.00	593
131.00	1681	215.00	1479	302.00	653		
132.00	1065	216.00	2829	303.00	4624		

Data File: /chem/MSD1.i/s032110.b/s1c2101.d

Page 1

Date : 21-MAR-2010 16:40

Client ID: DFTPP

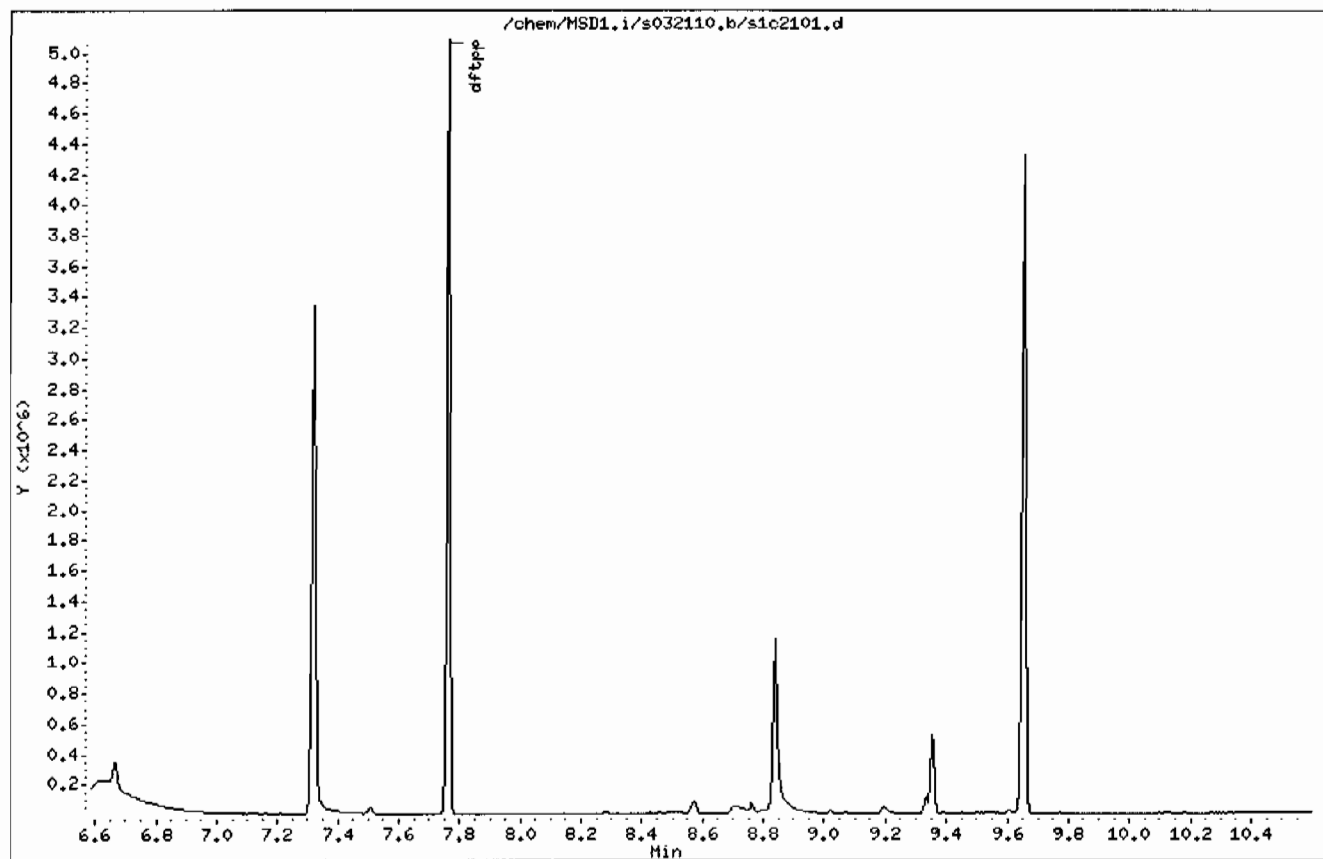
Instrument: MSD1.i

Sample Info: INBN100306-01.2150 PPH11|SVMF11|DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20



Date : 21-MAR-2010 16:40

Client ID: DFTPP

Instrument: MSD1.i

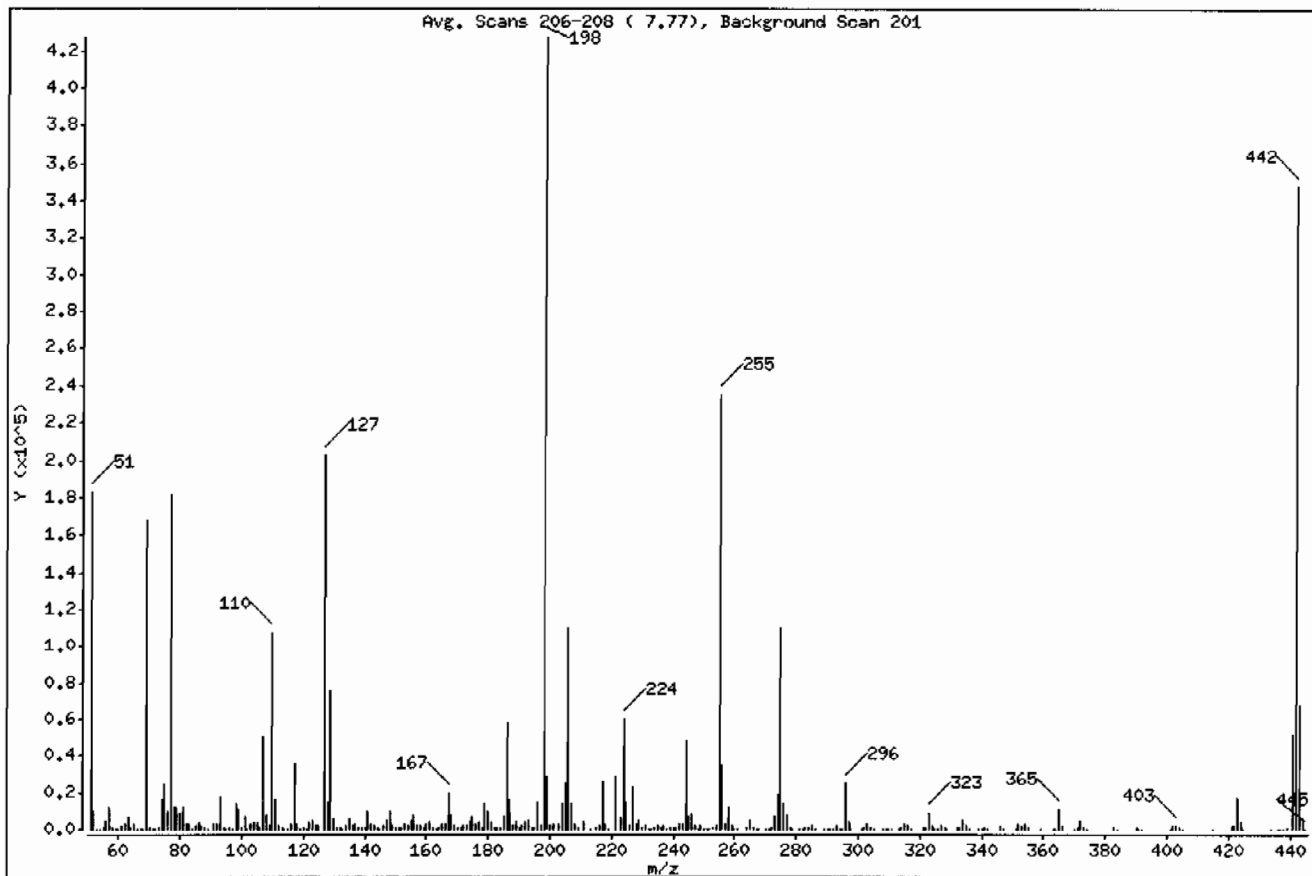
Sample Info: IWBNI00306-01.2150 PPM11SVMF11IDFTPP

Operator: AMY

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	42.67
68	Less than 2.00% of mass 69	0.09 (0.23)
69	Mass 69 relative abundance	39.21
70	Less than 2.00% of mass 69	0.20 (0.51)
127	40.00 - 60.00% of mass 198	47.36
197	Less than 1.00% of mass 198	0.37
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 30.00% of mass 198	25.77
365	Greater than 1.00% of mass 198	2.49
441	Present, but less than mass 443	11.88
442	Greater than 40.00% of mass 198	81.30
443	17.00 - 23.00% of mass 442	15.92 (19.58)

Date : 21-MAR-2010 16:40

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: INBN100306-01.2150 PPH11SVHF11DFTPP

Operator: AMY

Column phase: J&W DB-SMS

Column diameter: 0.20

Data File: slc2101.d

Spectrum: Avg. Scans 206-208 (7.77), Background Scan 201

Location of Maximum: 198.00

Number of points: 309

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	182400	131.00	1200	211.00	4374	301.00	380
52.00	9370	132.00	798	213.00	261	302.00	520
53.00	425	133.00	217	215.00	1252	303.00	3157
54.00	60	134.00	2203	216.00	2148	304.00	973
55.00	952	135.00	6004	217.00	25520	305.00	65
56.00	5322	136.00	2332	218.00	3283	308.00	324
57.00	12073	137.00	2940	219.00	337	309.00	258
58.00	630	138.00	694	221.00	28952	310.00	385
59.00	213	139.00	537	223.00	6095	311.00	51
60.00	221	140.00	1075	224.00	59560	313.00	165
61.00	2200	141.00	9366	225.00	14925	314.00	1193
62.00	2506	142.00	3382	226.00	1528	315.00	2607
63.00	6752	143.00	2050	227.00	22536	316.00	1591
64.00	882	144.00	565	228.00	3326	317.00	323
65.00	3331	145.00	477	229.00	4955	321.00	880
66.00	267	146.00	1814	230.00	652	322.00	504
67.00	211	147.00	4736	231.00	2208	323.00	9138
68.00	385	148.00	9415	232.00	400	324.00	1710
69.00	167616	149.00	2049	233.00	419	325.00	143
70.00	860	150.00	640	234.00	1412	326.00	219
71.00	195	151.00	1447	235.00	1673	327.00	1621
72.00	145	152.00	584	236.00	1106	328.00	850
73.00	1379	153.00	3068	237.00	1876	329.00	147
74.00	15654	154.00	2405	238.00	262	332.00	600
75.00	24768	155.00	4985	239.00	923	333.00	850
76.00	9491	156.00	7952	240.00	727	334.00	5380
77.00	181760	157.00	1842	241.00	1408	335.00	1492
78.00	11846	158.00	1848	242.00	2823	336.00	231
79.00	11835	159.00	1201	243.00	3340	339.00	57
80.00	8944	160.00	2893	244.00	47704	340.00	89
81.00	12109	161.00	4046	245.00	6427	341.00	1041
82.00	2949	162.00	1143	246.00	8239	342.00	280
83.00	2716	163.00	342	247.00	1827	346.00	1522
84.00	321	164.00	669	248.00	384	347.00	358
85.00	2285	165.00	3375	249.00	1711	351.00	221

Date : 21-MAR-2010 16:40

Client ID: DFTPP

Instrument: HSD1.i

Sample Info: INBN100306-01.2150 PPM11SVHF111DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1c2101.d

Spectrum: Avg. Scans 206-208 (7.77), Background Scan 201

Location of Maximum: 198.00

Number of points: 309

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	3629	166.00	2749	250.00	246	352.00	2568
87.00	1743	167.00	19328	251.00	389	353.00	1783
88.00	605	168.00	8073	252.00	419	354.00	2835
89.00	259	169.00	1515	253.00	1078	355.00	587
91.00	2855	170.00	647	254.00	1962	359.00	145
92.00	3259	171.00	1077	255.00	234688	363.00	52
93.00	18016	172.00	1746	256.00	34600	364.00	53
94.00	1303	173.00	2196	257.00	2690	365.00	10631
95.00	407	174.00	4070	258.00	12138	366.00	1556
96.00	936	175.00	7338	259.00	1881	370.00	173
97.00	94	176.00	2554	260.00	363	371.00	663
98.00	14050	177.00	3722	261.00	421	372.00	4462
99.00	10983	178.00	1247	264.00	574	373.00	1243
100.00	1030	179.00	13389	265.00	4724	374.00	131
101.00	6712	180.00	9427	266.00	672	383.00	1172
102.00	427	181.00	4406	267.00	57	384.00	371
103.00	2659	182.00	891	268.00	100	390.00	631
104.00	4394	183.00	510	270.00	332	391.00	440
105.00	4235	184.00	1118	271.00	473	392.00	352
106.00	1000	185.00	7202	272.00	646	401.00	249
107.00	50336	186.00	58312	273.00	7255	402.00	1775
108.00	8205	187.00	15795	274.00	19048	403.00	2457
109.00	1980	188.00	1642	275.00	110176	404.00	868
110.00	106832	189.00	3521	276.00	14054	405.00	140
111.00	15292	190.00	586	277.00	7976	415.00	68
112.00	1808	191.00	1635	278.00	1325	421.00	2157
113.00	598	192.00	4211	279.00	324	422.00	2237
114.00	200	193.00	4838	281.00	69	423.00	16432
115.00	383	194.00	973	282.00	224	424.00	3442
116.00	3116	195.00	862	283.00	1101	425.00	369
117.00	35504	196.00	15175	284.00	713	434.00	52
118.00	2853	197.00	1586	285.00	1488	436.00	117
119.00	437	198.00	427520	286.00	267	437.00	240
120.00	720	199.00	28080	289.00	338	438.00	340
121.00	398	200.00	2206	290.00	348	439.00	522

Date : 21-MAR-2010 16:40

Client ID: DFTPP

Instrument: MSD1.i

Sample Info: IWBNI00306-01,2150 PPH11SVHF111DFTPP

Operator: AMY

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s1c2101.d

Spectrum: Avg. Scans 206-208 (7.77), Background Scan 201

Location of Maximum: 198.00

Number of points: 309

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	3728	201.00	2863	291.00	156	441.00	50792
123.00	5100	203.00	2630	292.00	387	442.00	347584
124.00	2417	204.00	14200	293.00	1905	443.00	68080
125.00	2317	205.00	24896	294.00	468	444.00	6313
127.00	202432	206.00	110024	295.00	286	445.00	341
128.00	14879	207.00	13865	296.00	25008		
129.00	75688	208.00	3353	297.00	3746		
130.00	6195	209.00	1029	298.00	215		

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

SDG Number: 10-2150
Lab Sample ID: 1202061822

Matrix: SOIL

Client Sample: QC for batch 961226
Client ID: MB for batch 961226
Batch ID: 961228
Run Date: 03/21/2010 18:36
Prep Date: 03/05/2010 11:30
Data File: s1c2106.d

Client: LANI.010
Method: SW846 8270C
Inst: MSD1.1
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

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

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150		Matrix: SOIL
Lab Sample ID: 1202061822		
Client Sample: QC for batch 961226	Client: LANI.010	Project: QC
Client ID: MB for batch 961226	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.I	Dilution: 1
Run Date: 03/21/2010 18:36	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2106.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.83	1240	ug/kg		J
	Unknown Aldol Condensate	2.67	246	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2106.d
Lab Smp Id: 1202061822 Client Smp ID: SBLK01
Inj Date : 21-MAR-2010 18:36
Operator : AMY Inst ID: MSD1.i
Smp Info : |1202061822|961228|1|SVM|1|SBLK01
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.sub
Target Version: 3.50
Processing Host: hpc1pl

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.610	3.610	(1.000)	447653	40.0000	
* 29 Naphthalene-d8		136	4.463	4.469	(1.000)	1767129	40.0000	
* 46 Acenaphthene-d10		164	5.704	5.704	(1.000)	931782	40.0000	
* 67 Phenanthrene-d10		188	6.704	6.710	(1.000)	1539732	40.0000	
* 91 Chrysene-d12		240	8.286	8.292	(1.000)	1183054	40.0000	
* 98 Perylene-d12		264	9.522	9.522	(1.000)	991549	40.0000	
\$ 3 2-Fluorophenol		112	2.834	2.822	(0.785)	808884	70.1718	2340
\$ 5 Phenol-d5		99	3.340	3.346	(0.925)	962455	68.5579	2280
\$ 20 Nitrobenzene-d5		82	3.969	3.975	(0.889)	415640	38.3490	1280
\$ 39 2-Fluorobiphenyl		172	5.204	5.204	(0.912)	914864	35.5514	1180
\$ 60 2,4,6-Tribromophenol		329	6.251	6.251	(1.096)	186741	61.1297	2040
\$ 81 p-Terphenyl-d14		244	7.622	7.622	(0.920)	931580	47.2318	1570

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/s1c2106.d
Lab Smp Id: 1202061822 Client Smp ID: SBLK01
Inj Date : 21-MAR-2010 18:36
Operator : AMY Inst ID: MSD1.i
Smp Info : |1202061822|961228|1|SVM|1|SBLK01
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: s1c1620.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.sub
Target Version: 3.50
Processing Host: hpc1p1

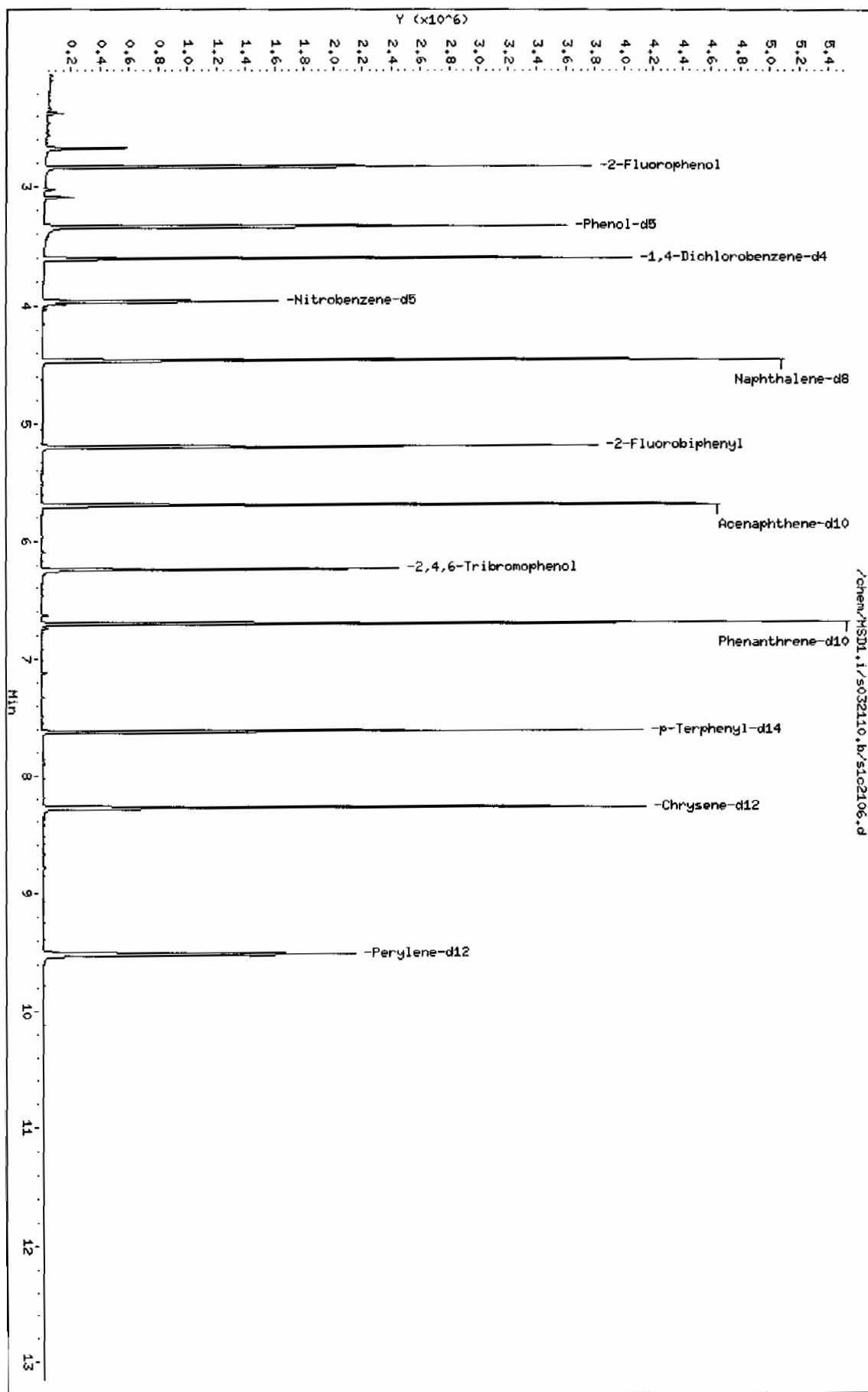
Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

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

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.610	2770558	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
-----	-----	-----	-----	-----	-----	-----	-----
Unknown				CAS #:			
1.834	2570864	37.1169053	1240	0		0	10
Unknown Aldol Condensate				CAS #:			
2.669	510429	7.36933650	246	0		0	10



Data File: /chem/HSD1.i/s032110.b/s1c2106.d
Date : 21-MAR-2010 18:36
Client ID: SBLK01
Sample Info: 14202061822196122811 SWH11 SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-SHS

Instrument: MSD1.i
Operator: AMY
Column diameter: 0.20

Date : 21-MAR-2010 18:36

Client ID: SBLK01

Instrument: MSD1.i

Sample Info: I1202061822I961228I1ISVM11ISBLK01

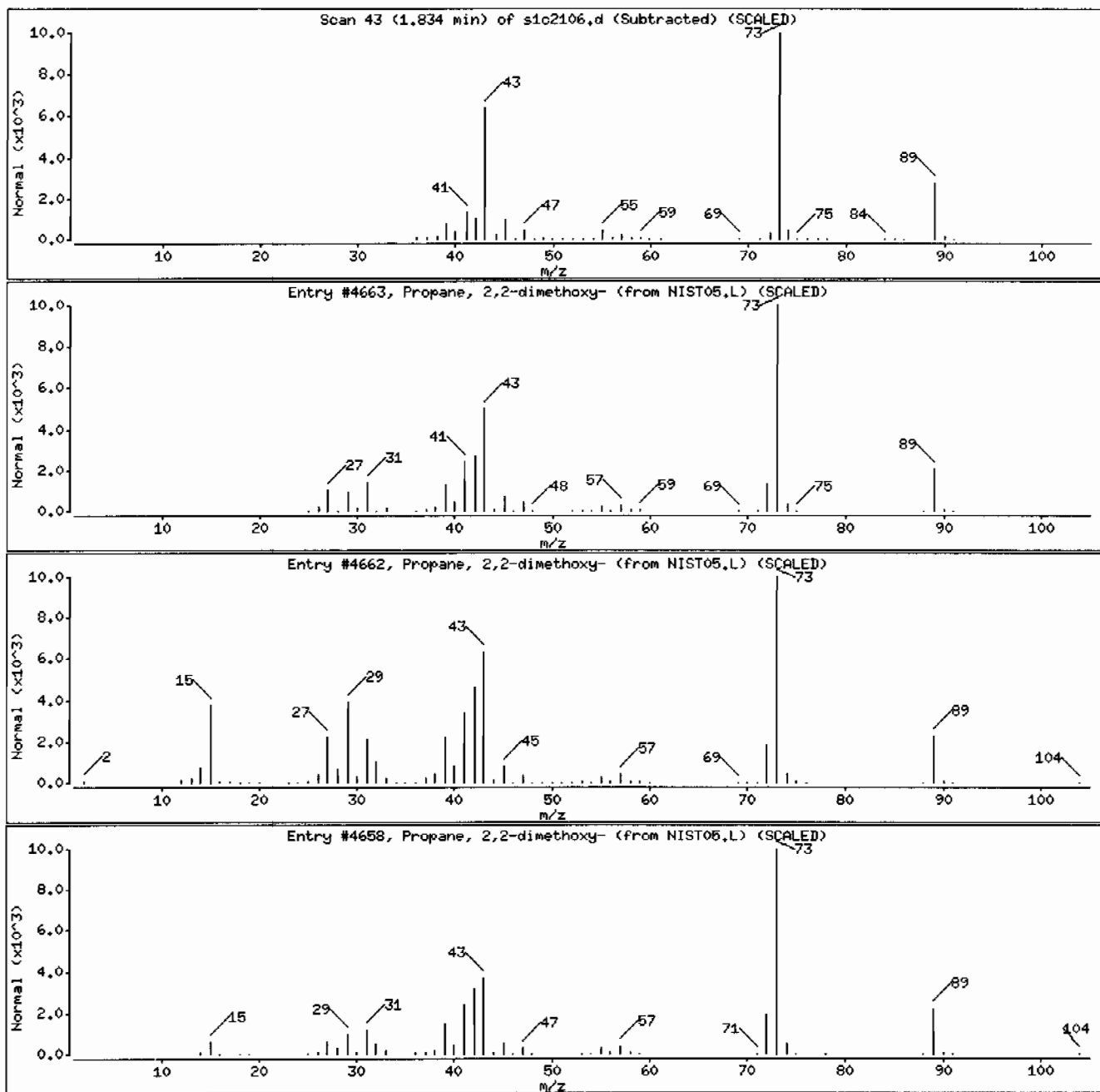
Volume Injected (uL): 0.5

Operator: AMY

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	59	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	38	C5H12O2	104



Date : 21-MAR-2010 18:36

Client ID: SBLK01

Instrument: HSD1.i

Sample Info: I12020618221961228111SVM111SBLK01

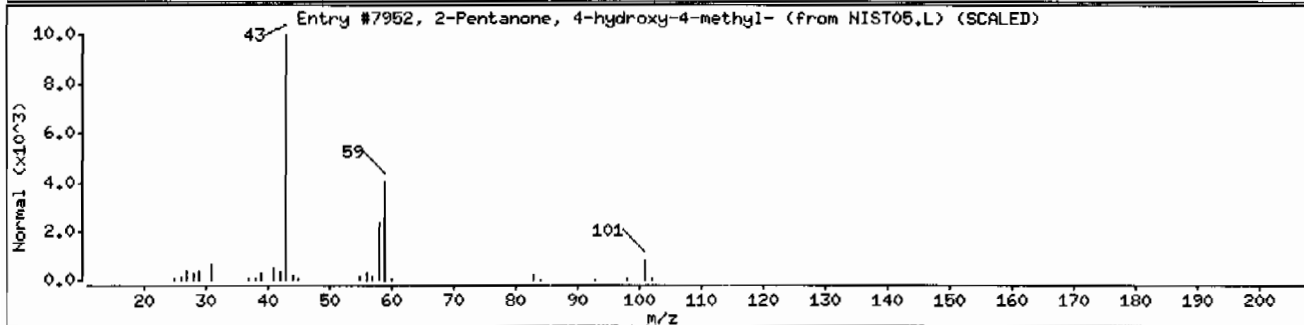
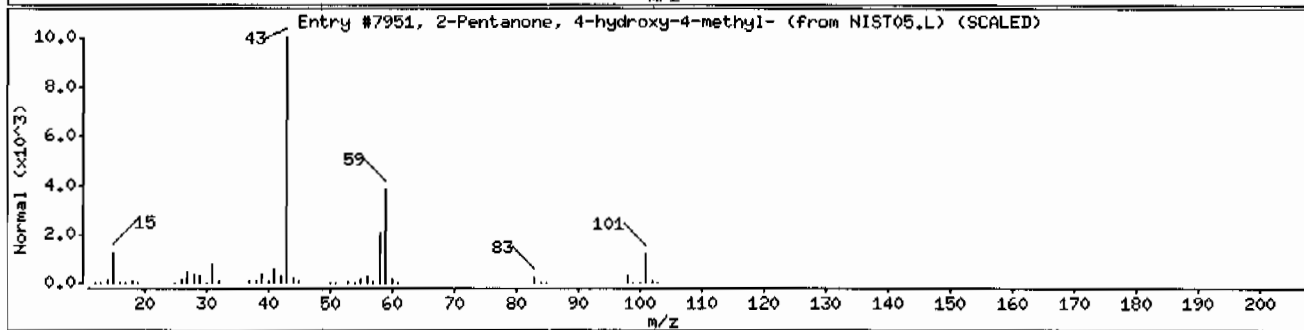
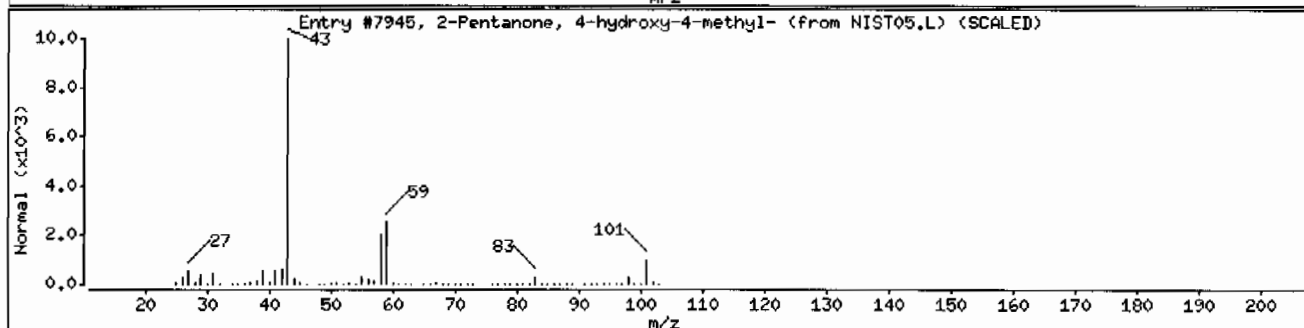
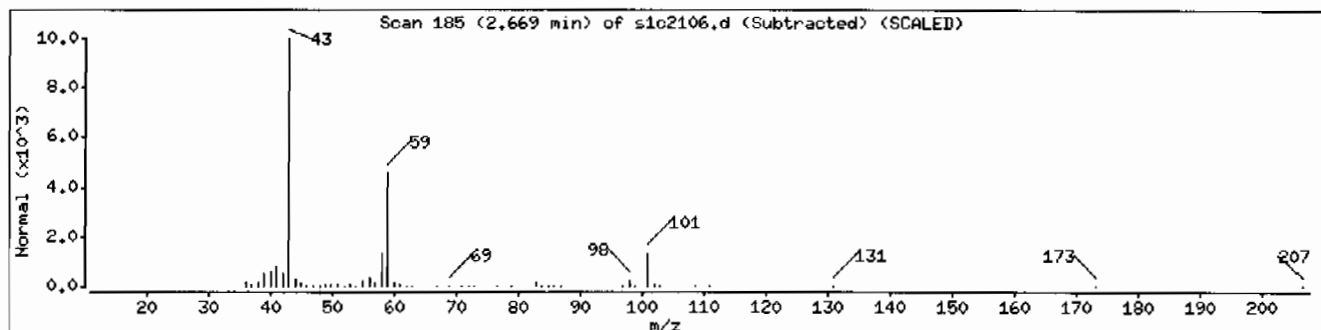
Volume Injected (uL): 0.5

Operator: AMY

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	7945	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



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

SDG Number: 10-2150
Lab Sample ID: 1202061823
Client Sample: QC for batch 961226
Client ID: LCS for batch 961226
Batch ID: 961228
Run Date: 03/21/2010 19:00
Prep Date: 03/05/2010 11:30
Data File: s1c2107.d

Client: LANL.010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
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		1060	ug/kg	66.7	333
108-95-2	Phenol		1260	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1280	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1130	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1570	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1230	ug/kg	66.7	333
83-32-9	Acenaphthene		1270	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1340	ug/kg	33.3	333
100-02-7	4-Nitrophenol		649	ug/kg	110	333
87-86-5	Pentachlorophenol		1050	ug/kg	83.3	333
129-00-0	Pyrene		1260	ug/kg	10.0	33.3
110-86-1	Pyridine		1110	ug/kg	66.7	333
62-53-3	Aniline		802	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1250	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1110	ug/kg	66.7	333
100-51-6	Benzyl alcohol		419	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1170	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1530	ug/kg	66.7	333
95-48-7	o-Cresol		1280	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1530	ug/kg	100	333
67-72-1	Hexachloroethane		1160	ug/kg	66.7	333
98-95-3	Nitrobenzene		1330	ug/kg	66.7	333
78-59-1	Isophorone		1360	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1280	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		600	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1270	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1290	ug/kg	66.7	333
65-85-0	Benzoic acid		3390	ug/kg	167	667
91-20-3	Naphthalene		1220	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		887	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1180	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1290	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1050	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1240	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1280	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1280	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1410	ug/kg	66.7	333
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline		1120	ug/kg	66.7	333

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

SDG Number: 10-2150
Lab Sample ID: 1202061823
Client Sample: QC for batch 961226
Client ID: LCS for batch 961226
Batch ID: 961228
Run Date: 03/21/2010 19:00
Prep Date: 03/05/2010 11:30
Data File: slc2107.d

Client: LANL010
Method: SW846 8270C
Inst: MSD1.I
Analyst: AMY
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: SOIL
Project: QC
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate		1370	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1310	ug/kg	33.3	333
208-96-8	Accnaphthylene		1370	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1150	ug/kg	127	667
132-64-9	Dibenzofuran		1330	ug/kg	66.7	333
84-66-2	Diethylphthalate		1410	ug/kg	66.7	333
86-73-7	Fluorene		1300	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1320	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1110	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1380	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1390	ug/kg	66.7	333
122-66-7	Azobenzene		1520	ug/kg	66.7	333
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1210	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1130	ug/kg	66.7	333
85-01-8	Phenanthrene		1270	ug/kg	10.0	33.3
120-12-7	Anthracene		1290	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1500	ug/kg	66.7	333
206-44-0	Fluoranthene		1320	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1560	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1340	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		992	ug/kg	100	333
218-01-9	Chrysene		1300	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1690	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1500	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1140	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1350	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1290	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1420	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1400	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1470	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1190	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2107.d
 Lab Smp Id: 1202061823 Client Smp ID: SBLK01LCS
 Inj Date : 21-MAR-2010 19:00
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |1202061823|961228|1|SVM|1|SBLK01LCS
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 7 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
								(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152		3.610	3.610	(1.000)		442106	40.0000	
* 29 Naphthalene-d8	136		4.469	4.469	(1.000)		1912471	40.0000	
* 46 Acenaphthene-d10	164		5.704	5.704	(1.000)		926897	40.0000	
* 67 Phenanthrene-d10	188		6.710	6.710	(1.000)		1614730	40.0000	
* 91 Chrysene-d12	240		8.292	8.292	(1.000)		1363873	40.0000	
* 98 Perylene-d12	264		9.527	9.522	(1.000)		1201524	40.0000	
\$ 3 2-Fluorophenol	112		2.834	2.822	(0.785)		899540	79.0154	2630
\$ 5 Phenol-d5	99		3.351	3.346	(0.928)		1062900	76.6628	2560
\$ 20 Nitrobenzene-d5	82		3.975	3.975	(0.889)		478576	40.8002	1360
\$ 39 2-Fluorobiphenyl	172		5.204	5.204	(0.912)		1000764	39.0944	1300
\$ 60 2,4,6-Tribromophenol	329		6.251	6.251	(1.096)		200506	65.9815	2200
\$ 81 p-Terphenyl-d14	244		7.622	7.622	(0.919)		987985	43.4505	1450

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.357	3.357	(0.930)	555765	37.8344	1260
8 2-Chlorophenol	128	3.481	3.481	(0.964)	475450	38.2667	1280
11 1,4-Dichlorobenzene	146	3.622	3.622	(1.003)	474733	33.9342	1130
17 N-Nitrosodipropylamine	70	3.857	3.857	(1.068)	371172	47.1826	1570 (Q)
28 1,2,4-Trichlorobenzene	180	4.416	4.416	(0.988)	420365	35.6489	1190
33 4-Chloro-3-methylphenol	107	4.834	4.822	(1.082)	371881	36.9685	1230
47 Acenaphthene	154	5.728	5.728	(1.004)	862414	38.0907	1270
50 2,4-Dinitrotoluene	165	5.822	5.828	(1.021)	300635	40.2804	1340
52 4-Nitrophenol	139	5.775	5.763	(1.012)	81513	19.4769	649 (Q)
65 Pentachlorophenol	266	6.581	6.575	(0.981)	124667	31.5951	1050
79 Pyrene	202	7.569	7.569	(0.913)	1460670	37.7414	1260
2 Pyridine	79	2.210	2.187	(0.612)	325525	33.2161	1110
4 Aniline	66	3.404	3.404	(0.943)	150646	24.0537	802 (Q)
7 bis(2-Chloroethyl) ether	63	3.422	3.422	(0.948)	377425	37.4495	1250
9 1,3-Dichlorobenzene	146	3.575	3.581	(0.990)	460867	33.2622	1110
12 Benzyl alcohol	108	3.693	3.687	(1.023)	81337	12.5764	419 (R)
13 1,2-Dichlorobenzene	146	3.722	3.722	(1.031)	459089	35.1122	1170
14 bis(2-Chloroisopropyl) ether	45	3.757	3.763	(1.041)	986600	46.0345	1530
15 o-Cresol	107	3.745	3.740	(1.037)	362199	38.4355	1280
18 m,p-Cresols	107	3.845	3.846	(1.065)	560973	45.9283	1530 (Q)
19 Hexachloroethane	117	3.945	3.946	(1.093)	184351	34.6730	1160
21 Nitrobenzene	77	3.987	3.987	(0.892)	500819	39.9657	1330
22 Isophorone	82	4.140	4.140	(0.926)	956460	40.8661	1360
23 2-Nitrophenol	139	4.198	4.198	(0.939)	248767	38.4747	1280
24 2,4-Dimethylphenol	122	4.198	4.198	(0.939)	207944	17.9972	600
25 bis(2-Chloroethoxy)methane	93	4.263	4.263	(0.954)	545633	38.1161	1270
26 2,4-Dichlorophenol	162	4.369	4.357	(0.978)	373836	38.7792	1290
27 Benzoic acid	105	4.298	4.275	(0.962)	637500	101.608	3390
30 Naphthalene	128	4.481	4.481	(1.003)	1398392	36.4573	1220
31 4-Chloroaniline	127	4.504	4.504	(1.008)	457614	26.6137	887
32 Hexachlorobutadiene	225	4.551	4.551	(1.018)	235846	35.4947	1180
34 2-Methylnaphthalene	142	4.957	4.957	(1.109)	944647	38.7919	1290
36 Hexachlorocyclopentadiene	237	5.063	5.063	(0.888)	184822	31.5223	1050
37 2,4,6-Trichlorophenol	196	5.151	5.151	(0.903)	256854	37.2953	1240
38 2,4,5-Trichlorophenol	196	5.181	5.175	(0.908)	282415	38.3018	1280
40 2-Chloronaphthalene	162	5.310	5.304	(0.931)	850856	38.3216	1280
42 o-Nitroaniline	65	5.375	5.369	(0.942)	269136	42.2526	1410
41 m-Nitroaniline	138	5.663	5.663	(0.993)	161082	33.5256	1120
43 Dimethylphthalate	163	5.481	5.487	(0.961)	1058965	41.0406	1370
44 2,6-Dinitrotoluene	165	5.534	5.540	(0.970)	235798	39.3614	1310
45 Acenaphthylene	152	5.604	5.610	(0.982)	1466311	41.1645	1370
48 2,4-Dinitrophenol	184	5.734	5.734	(1.005)	79929	34.4523	1150 (Q)
49 Dibenzofuran	168	5.851	5.851	(1.026)	1217776	40.0283	1330
51 Diethylphthalate	149	5.975	5.975	(1.047)	1094315	42.3244	1410
53 Fluorene	166	6.086	6.087	(1.067)	993955	38.9699	1300
54 4-Chlorophenylphenylether	204	6.075	6.075	(1.065)	496483	39.7467	1320
55 2-Methyl-4,6-dinitrophenol	198	6.110	6.110	(0.911)	125308	33.4103	1110

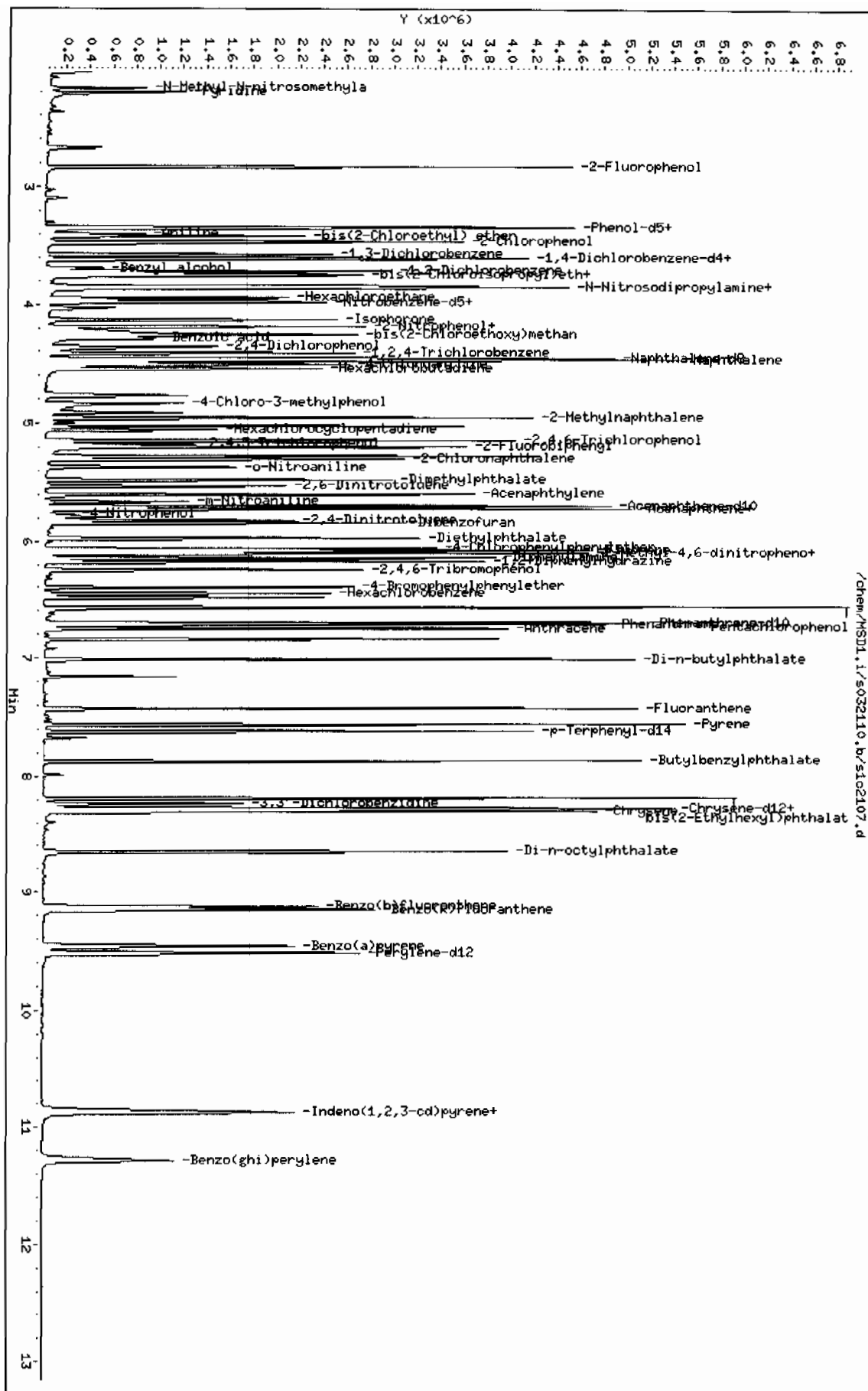
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.098	6.092	(1.069)	191454	41.4126	1380
133 Diphenylamine	169	6.151	6.151	(0.917)	861660	41.7877	1390
58 1,2-Diphenylhydrazine	77	6.181	6.181	(0.921)	1083208	45.6729	1520
61 4-Bromophenylphenylether	248	6.404	6.404	(0.954)	265347	36.3951	1210
63 Hexachlorobenzene	284	6.457	6.457	(0.962)	269107	34.0106	1130
68 Phenanthrene	178	6.722	6.722	(1.002)	1328755	38.0847	1270
69 Anthracene	178	6.757	6.751	(1.007)	1330695	38.8381	1290
72 Di-n-butylphthalate	149	7.016	7.016	(1.046)	1901635	45.0068	1500
76 Fluoranthene	202	7.433	7.434	(1.108)	1421926	39.6550	1320
85 Butylbenzylphthalate	149	7.875	7.875	(0.950)	777424	46.9338	1560
89 Benzo(a)anthracene	228	8.280	8.281	(0.999)	1287127	40.1485	1340
90 3,3'-Dichlorobenzidine	252	8.239	8.233	(0.994)	301050	29.7675	992
92 Chrysene	228	8.310	8.310	(1.002)	1169384	39.0337	1300
93 bis(2-Ethylhexyl)phthalate	149	8.198	8.198	(0.989)	1110468	50.7250	1690
94 Di-n-octylphthalate	149	8.657	8.651	(0.909)	1774087	44.9579	1500
95 Benzo(b)fluoranthene	252	9.133	9.133	(0.959)	1128627	34.1559	1140
96 Benzo(k)fluoranthene	252	9.163	9.157	(0.962)	1270760	40.3666	1340
97 Benzo(a)pyrene	252	9.469	9.463	(0.994)	1021741	38.6173	1290
99 Indeno(1,2,3-cd)pyrene	276	10.874	10.869	(1.141)	959988	42.6747	1420
100 Dibenzo(a,h)anthracene	278	10.880	10.874	(1.142)	779076	41.9120	1400
101 Benzo(ghi)perylene	276	11.292	11.286	(1.185)	802134	43.9629	1460
1 N-Methyl-N-nitrosomethylamine	74	2.175	2.157	(0.602)	202429	31.6693	1060

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD1.i/s032110.b/sic2107.d
 Date: 21-MAR-2010 19:00
 Client ID: SBLK01LCS
 Sample Info: 11202061823196122811/SW111/SBLK01LCS
 Volume Injected (uL): 0.5
 Column Phase: 3M DB-SMS

Instrument: MSD1.i
 Operator: GHY
 Column diameter: 0.20



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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202061824	Date Received: 03/02/2010 08:50	% Moisture: 21
Client Sample: QC for batch 961226	Client: L.A.NL010	Project: QC
Client ID: RE36-10-7417MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.1	Dilution: 1
Run Date: 03/21/2010 21:21	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s1c2113.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		892	ug/kg	84.3	422
108-95-2	Phenol		1090	ug/kg	84.3	422
95-57-8	2-Chlorophenol		1020	ug/kg	84.3	422
106-46-7	1,4-Dichlorobenzene		627	ug/kg	84.3	422
621-64-7	N-Nitrosodipropylamine		1250	ug/kg	84.3	422
59-50-7	4-Chloro-3-methylphenol		1200	ug/kg	84.3	422
83-32-9	Acenaphthene		898	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene		1140	ug/kg	42.2	422
100-02-7	4-Nitrophenol		1140	ug/kg	139	422
87-86-5	Pentachlorophenol		1100	ug/kg	105	422
129-00-0	Pyrene		982	ug/kg	12.6	42.2
110-86-1	Pyridine		913	ug/kg	84.3	422
62-53-3	Aniline		709	ug/kg	126	422
111-44-4	bis(2-Chloroethyl) ether		973	ug/kg	84.3	422
541-73-1	1,3-Dichlorobenzene		595	ug/kg	84.3	422
100-51-6	Benzyl alcohol	U	422	ug/kg	126	422
95-50-1	1,2-Dichlorobenzene		696	ug/kg	84.3	422
108-60-1	bis(2-Chloroisopropyl)ether		1120	ug/kg	84.3	422
95-48-7	o-Cresol		1190	ug/kg	84.3	422
65794-96-9	m,p-Cresols		1390	ug/kg	126	422
67-72-1	Hexachloroethane		542	ug/kg	84.3	422
98-95-3	Nitrobenzene		1100	ug/kg	84.3	422
78-59-1	Isophorone		1130	ug/kg	84.3	422
88-75-5	2-Nitrophenol		1080	ug/kg	84.3	422
105-67-9	2,4-Dimethylphenol		1240	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane		1060	ug/kg	84.3	422
120-83-2	2,4-Dichlorophenol		1100	ug/kg	84.3	422
65-85-0	Benzoic acid		3340	ug/kg	211	843
91-20-3	Naphthalene		896	ug/kg	12.6	42.2
106-47-8	4-Chloroaniline		714	ug/kg	84.3	422
87-68-3	Hexachlorobutadiene		630	ug/kg	84.3	422
91-57-6	2-Methylnaphthalene		945	ug/kg	8.43	42.2
77-47-4	Hexachlorocyclopentadiene		592	ug/kg	84.3	422
88-06-2	2,4,6-Trichlorophenol		1030	ug/kg	84.3	422
95-95-4	2,4,5-Trichlorophenol		1130	ug/kg	84.3	422
91-58-7	2-Chloronaphthalene		911	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline		1190	ug/kg	84.3	422
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1070	ug/kg	84.3	422

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202061824	Date Received: 03/02/2010 08:50	%Moisture: 21
Client Sample: QC for batch 961226	Client: LANL010	Project: QC
Client ID: RE36-10-7417MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1.J	Dilution: 1
Run Date: 03/21/2010 21:21	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s1c2113.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		1170	ug/kg	84.3	422
606-20-2	2,6-Dinitrotoluene		1090	ug/kg	42.2	422
208-96-8	Acenaphthylene		1010	ug/kg	12.6	42.2
51-28-5	2,4-Dinitrophenol		1150	ug/kg	160	843
132-64-9	Dibenzofuran		979	ug/kg	84.3	422
84-66-2	Diethylphthalate		1170	ug/kg	84.3	422
86-73-7	Fluorene		957	ug/kg	12.6	42.2
7005-72-3	4-Chlorophenylphenylether		943	ug/kg	84.3	422
534-52-1	2-Methyl-4,6-dinitrophenol		1070	ug/kg	84.3	422
100-01-6	4-Nitroaniline		1260	ug/kg	126	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1030	ug/kg	84.3	422
122-66-7	Azobenzene		1150	ug/kg	84.3	422
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		892	ug/kg	84.3	422
118-74-1	Hexachlorobenzene		827	ug/kg	84.3	422
85-01-8	Phenanthrene		981	ug/kg	12.6	42.2
120-12-7	Anthracene		1010	ug/kg	8.43	42.2
84-74-2	Di-n-butylphthalate		1100	ug/kg	84.3	422
206-44-0	Fluoranthene		1040	ug/kg	12.6	42.2
85-68-7	Butylbenzylphthalate		1170	ug/kg	84.3	422
56-55-3	Benzo(a)anthracene		971	ug/kg	12.6	42.2
91-94-1	3,3'-Dichlorobenzidine	J	334	ug/kg	126	422
218-01-9	Chrysene		1040	ug/kg	12.6	42.2
117-81-7	bis(2-Ethylhexyl)phthalate		1180	ug/kg	84.3	422
117-84-0	Di-n-octylphthalate		1130	ug/kg	84.3	422
205-99-2	Benzo(b)fluoranthene		954	ug/kg	12.6	42.2
207-08-9	Benzo(k)fluoranthene		958	ug/kg	12.6	42.2
50-32-8	Benzo(a)pyrene		962	ug/kg	12.6	42.2
193-39-5	Indeno(1,2,3-cd)pyrene		932	ug/kg	12.6	42.2
53-70-3	Dibenzo(a,h)anthracene		933	ug/kg	12.6	42.2
191-24-2	Benzo(ghi)perylene		888	ug/kg	12.6	42.2
120-82-1	1,2,4-Trichlorobenzene		787	ug/kg	84.3	422

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2113.d
Lab Smp Id: 1202061824 Client Smp ID: RE36-10-7417MS
Inj Date : 21-MAR-2010 21:21
Operator : AMY Inst ID: MSD1.i
Smp Info : |1202061824|961228|1|SVM|1|MS
Misc Info : |MSD8270_S|WBN100310-01|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2150.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	20.98950	% moisture

Cpnd Variable Local Compound Variable

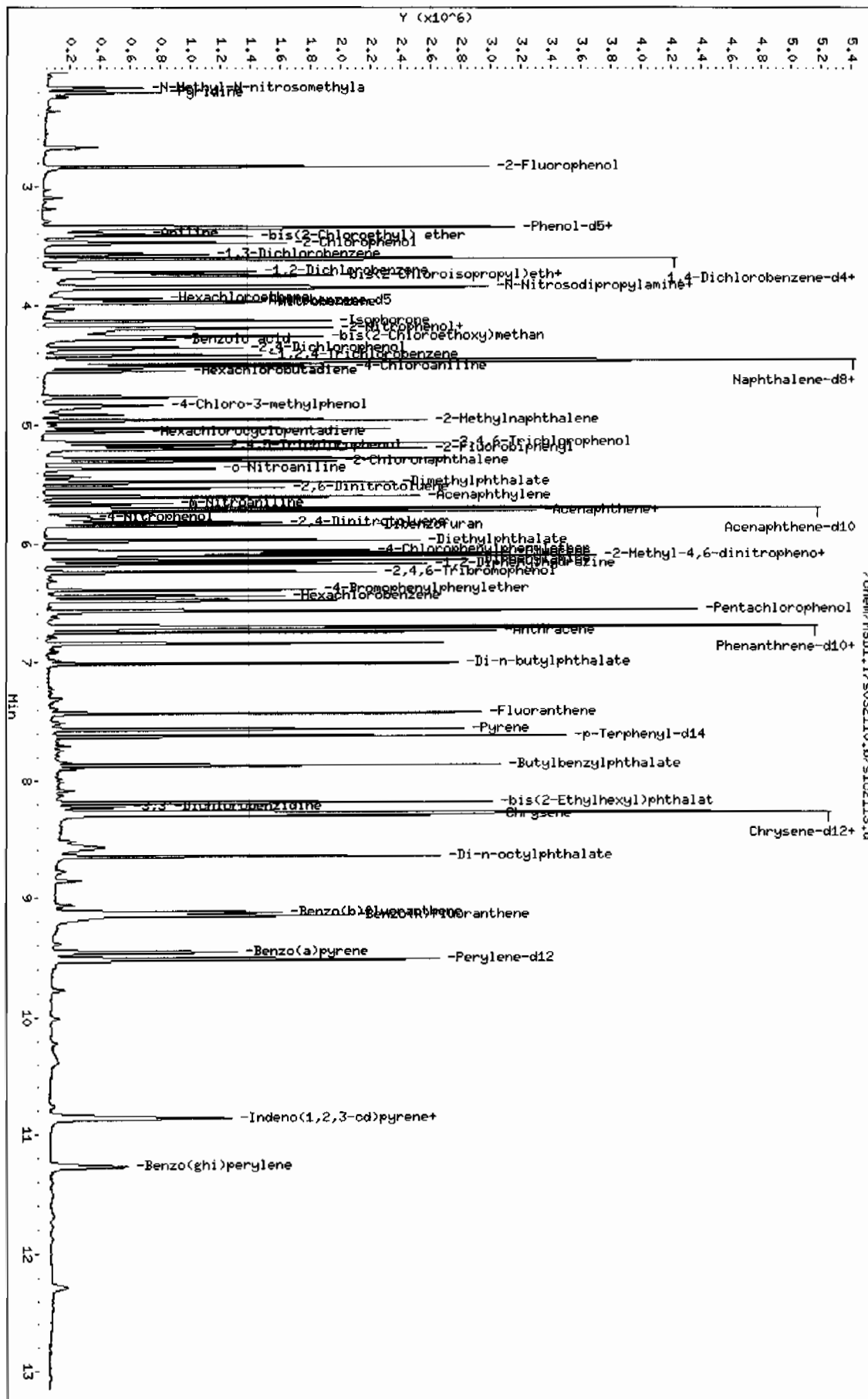
Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
			=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152			3.610	3.610	(1.000)	446660	40.0000	
* 29 Naphthalene-d8	136			4.463	4.469	(1.000)	1863951	40.0000	
* 46 Acenaphthene-d10	164			5.704	5.704	(1.000)	945847	40.0000	
* 67 Phenanthrene-d10	188			6.710	6.710	(1.000)	1656960	40.0000	
* 91 Chrysene-d12	240			8.292	8.292	(1.000)	1411692	40.0000	
* 98 Perylene-d12	264			9.522	9.522	(1.000)	1136214	40.0000	
\$ 3 2-Fluorophenol	112			2.828	2.822	(0.783)	598288	52.0177	2190
\$ 5 Phenol-d5	99			3.351	3.346	(0.928)	788476	56.2899	2370
\$ 20 Nitrobenzene-d5	82			3.969	3.975	(0.889)	313889	27.4566	1160
\$ 39 2-Fluorobiphenyl	172			5.204	5.204	(0.912)	614498	23.5241	992
\$ 60 2,4,6-Tribromophenol	329			6.251	6.251	(1.096)	153191	49.4014	2080
\$ 81 p-Terphenyl-d14	244			7.622	7.622	(0.919)	669961	28.4661	1200

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.357	3.357	(0.930)	384006	25.8751	1090
8 2-Chlorophenol	128	3.481	3.481	(0.964)	303940	24.2133	1020
11 1,4-Dichlorobenzene	146	3.622	3.622	(1.003)	210281	14.8777	627
17 N-Nitrosodipropylamine	70	3.851	3.857	(1.067)	236118	29.7088	1250 (Q)
28 1,2,4-Trichlorobenzene	180	4.416	4.416	(0.989)	214491	18.6633	787
33 4-Chloro-3-methylphenol	107	4.834	4.822	(1.083)	278254	28.3811	1200
47 Acenaphthene	154	5.728	5.728	(1.004)	491927	21.2919	898
50 2,4-Dinitrotoluene	165	5.822	5.828	(1.021)	206457	27.1077	1140
52 4-Nitrophenol	139	5.775	5.763	(1.012)	115410	27.0236	1140
65 Pentachlorophenol	266	6.581	6.575	(0.981)	105644	26.0916	1100
79 Pyrene	202	7.569	7.569	(0.913)	933003	23.2907	982
2 Pyridine	79	2.204	2.187	(0.611)	214297	21.6436	912
4 Aniline	66	3.404	3.404	(0.943)	106388	16.8137	709 (Q)
7 bis(2-Chloroethyl) ether	63	3.422	3.422	(0.948)	234892	23.0692	973
9 1,3-Dichlorobenzene	146	3.575	3.581	(0.990)	197397	14.1015	594
13 1,2-Dichlorobenzene	146	3.722	3.722	(1.031)	218189	16.5175	696
14 bis(2-Chloroisopropyl) ether	45	3.757	3.763	(1.041)	575254	26.5675	1120
15 o-Cresol	107	3.745	3.740	(1.037)	268384	28.1897	1190
18 m,p-Cresols	107	3.840	3.846	(1.064)	407038	32.9855	1390 (Q)
19 Hexachloroethane	117	3.945	3.946	(1.093)	69009	12.8470	542
21 Nitrobenzene	77	3.981	3.987	(0.892)	317389	25.9871	1100
22 Isophorone	82	4.134	4.140	(0.926)	612907	26.8690	1130
23 2-Nitrophenol	139	4.192	4.198	(0.939)	161288	25.5943	1080
24 2,4-Dimethylphenol	122	4.198	4.198	(0.941)	330269	29.3282	1240
25 bis(2-Chloroethoxy)methane	93	4.263	4.263	(0.955)	349437	25.0459	1060
26 2,4-Dichlorophenol	162	4.357	4.357	(0.976)	245346	26.1130	1100
27 Benzoic acid	105	4.287	4.275	(0.960)	484774	79.2767	3340
30 Naphthalene	128	4.481	4.481	(1.004)	794116	21.2422	896
31 4-Chloroaniline	127	4.504	4.504	(1.009)	283854	16.9380	714
32 Hexachlorobutadiene	225	4.551	4.551	(1.020)	96722	14.9355	630
34 2-Methylnaphthalene	142	4.957	4.957	(1.111)	531962	22.4136	945
36 Hexachlorocyclopentadiene	237	5.063	5.063	(0.888)	84038	14.0459	592
37 2,4,6-Trichlorophenol	196	5.151	5.151	(0.903)	172120	24.4911	1030
38 2,4,5-Trichlorophenol	196	5.181	5.175	(0.908)	202099	26.8600	1130
40 2-Chloronaphthalene	162	5.304	5.304	(0.930)	489571	21.6080	911
42 o-Nitroaniline	65	5.369	5.369	(0.941)	183297	28.1998	1190
41 m-Nitroaniline	138	5.663	5.663	(0.993)	113945	25.4653	1070
43 Dimethylphthalate	163	5.481	5.487	(0.961)	727783	27.6404	1160
44 2,6-Dinitrotoluene	165	5.534	5.540	(0.970)	157429	25.7529	1080
45 Acenaphthylene	152	5.604	5.610	(0.982)	872867	24.0135	1010
48 2,4-Dinitrophenol	184	5.734	5.734	(1.005)	55727	27.1877	1150 (Q)
49 Dibenzofuran	168	5.845	5.851	(1.025)	721096	23.2276	979
51 Diethylphthalate	149	5.975	5.975	(1.047)	730566	27.6898	1170
53 Fluorene	166	6.086	6.087	(1.067)	590525	22.6888	956
54 4-Chlorophenylphenylether	204	6.069	6.075	(1.064)	285101	22.3669	943
55 2-Methyl-4,6-dinitrophenol	198	6.110	6.110	(0.911)	97458	25.3224	1070
56 p-Nitroaniline	138	6.098	6.092	(1.069)	127750	29.9611	1260

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====								
133 Diphenylamine		169	6.151	6.151	(0.917)	515866	24.3802	1030
58 1,2-Diphenylhydrazine		77	6.181	6.181	(0.921)	664706	27.3126	1150
61 4-Bromophenylphenylether		248	6.404	6.404	(0.954)	158283	21.1568	892
63 Hexachlorobenzene		284	6.457	6.457	(0.962)	159199	19.6073	827
68 Phenanthrene		178	6.722	6.722	(1.002)	833113	23.2700	981
69 Anthracene		178	6.751	6.751	(1.006)	843408	23.9886	1010
72 Di-n-butylphthalate		149	7.016	7.016	(1.046)	1135797	26.1963	1100
76 Fluoranthene		202	7.433	7.434	(1.108)	904735	24.5884	1040
85 Butylbenzylphthalate		149	7.875	7.875	(0.950)	474059	27.6499	1160
89 Benzo(a)anthracene		228	8.280	8.281	(0.999)	764300	23.0327	971
90 3,3'-Dichlorobenzidine		252	8.233	8.233	(0.993)	82922	7.92150	334 (aR)
92 Chrysene		228	8.304	8.310	(1.001)	761992	24.5735	1040
93 bis(2-Ethylhexyl)phthalate		149	8.198	8.198	(0.989)	634249	27.9905	1180
94 Di-n-octylphthalate		149	8.651	8.651	(0.909)	1001269	26.8321	1130
95 Benzo(b)fluoranthene		252	9.127	9.133	(0.959)	706758	22.6182	954
96 Benzo(k)fluoranthene		252	9.157	9.157	(0.962)	676282	22.7174	958
97 Benzo(a)pyrene		252	9.463	9.463	(0.994)	570812	22.8143	962
99 Indeno(1,2,3-cd)pyrene		276	10.863	10.869	(1.141)	470435	22.1144	932
100 Dibenzo(a,h)anthracene		278	10.863	10.874	(1.141)	389008	22.1304	933
101 Benzo(ghi)perylene		276	11.274	11.286	(1.184)	363275	21.0546	888
1 N-Methyl-N-nitrosomethylamine		74	2.169	2.157	(0.601)	136556	21.1458	892

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.



Data File: /chem/MSD1.i/s032110.b/s102113.d
 Date : 21-MAR-2010 21:21
 Client ID: RE36-10-7417HS
 Sample Info: 112020618241961228111SVH11HS
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD1.i
 Operator: RMV
 Column diameter: 0.20

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202061825	Date Received: 03/02/2010 08:50	%Moisture: 21
Client Sample: QC for batch 961226	Client: LANL010	Project: QC
Client ID: RE36-10-7417MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1J	Dilution: 1
Run Date: 03/21/2010 21:45	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2114.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		1170	ug/kg	84.4	422
108-95-2	Phenol		1380	ug/kg	84.4	422
95-57-8	2-Chlorophenol		1320	ug/kg	84.4	422
106-46-7	1,4-Dichlorobenzene		763	ug/kg	84.4	422
621-64-7	N-Nitrosodipropylamine		1600	ug/kg	84.4	422
59-50-7	4-Chloro-3-methylphenol		1440	ug/kg	84.4	422
83-32-9	Acenaphthene		1140	ug/kg	13.9	42.2
121-14-2	2,4-Dinitrotoluene		1350	ug/kg	42.2	422
100-02-7	4-Nitrophenol		1350	ug/kg	139	422
87-86-5	Pentachlorophenol		1350	ug/kg	105	422
129-00-0	Pyrene		1120	ug/kg	12.7	42.2
110-86-1	Pyridine		1120	ug/kg	84.4	422
62-53-3	Aniline		804	ug/kg	127	422
111-44-4	bis(2-Chloroethyl) ether		1240	ug/kg	84.4	422
541-73-1	1,3-Dichlorobenzene		719	ug/kg	84.4	422
100-51-6	Benzyl alcohol	J	221	ug/kg	127	422
95-50-1	1,2-Dichlorobenzene		858	ug/kg	84.4	422
108-60-1	bis(2-Chloroisopropyl)ether		1410	ug/kg	84.4	422
95-48-7	o-Cresol		1510	ug/kg	84.4	422
65794-96-9	m,p-Cresols		1720	ug/kg	127	422
67-72-1	Hexachloroethane		653	ug/kg	84.4	422
98-95-3	Nitrobenzene		1410	ug/kg	84.4	422
78-59-1	Isophorone		1450	ug/kg	84.4	422
88-75-5	2-Nitrophenol		1380	ug/kg	84.4	422
105-67-9	2,4-Dimethylphenol		1510	ug/kg	148	422
111-91-1	bis(2-Chloroethoxy)methane		1360	ug/kg	84.4	422
120-83-2	2,4-Dichlorophenol		1390	ug/kg	84.4	422
65-85-0	Benzoic acid		4200	ug/kg	211	844
91-20-3	Naphthalene		1120	ug/kg	12.7	42.2
106-47-8	4-Chloroaniline		779	ug/kg	84.4	422
87-68-3	Hexachlorobutadiene		763	ug/kg	84.4	422
91-57-6	2-Methylnaphthalene		1190	ug/kg	8.44	42.2
77-47-4	Hexachlorocyclopentadiene		797	ug/kg	84.4	422
88-06-2	2,4,6-Trichlorophenol		1310	ug/kg	84.4	422
95-95-4	2,4,5-Trichlorophenol		1410	ug/kg	84.4	422
91-58-7	2-Chloronaphthalene		1170	ug/kg	13.9	42.2
88-74-4	2-Nitroaniline		1470	ug/kg	84.4	422
99-09-2	o-Nitroaniline					
	3-Nitroaniline		1150	ug/kg	84.4	422

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

SDG Number: 10-2150	Date Collected: 02/24/2010 12:00	Matrix: R
Lab Sample ID: 1202061825	Date Received: 03/02/2010 08:50	%Moisture: 21
Client Sample: QC for batch 961226	Client: LANL010	Project: QC
Client ID: RE36-10-7417MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 961228	Inst: MSD1J	Dilution: 1
Run Date: 03/21/2010 21:45	Analyst: AMY	Inj. Vol: .5 uL
Prep Date: 03/05/2010 11:30	Aliquot: 30 g	Final Volume: 1 mL
Data File: s1c2114.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		1440	ug/kg	84.4	422
606-20-2	2,6-Dinitrotoluene		1330	ug/kg	42.2	422
208-96-8	Acenaphthylene		1290	ug/kg	12.7	42.2
51-28-5	2,4-Dinitrophenol		1380	ug/kg	160	844
132-64-9	Dibenzofuran		1230	ug/kg	84.4	422
84-66-2	Diethylphthalate		1410	ug/kg	84.4	422
86-73-7	Fluorene		1180	ug/kg	12.7	42.2
7005-72-3	4-Chlorophenylphenylether		1170	ug/kg	84.4	422
534-52-1	2-Methyl-4,6-dinitrophenol		1340	ug/kg	84.4	422
100-01-6	4-Nitroaniline		1470	ug/kg	127	422
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1220	ug/kg	84.4	422
122-66-7	Azobenzene		1380	ug/kg	84.4	422
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1060	ug/kg	84.4	422
118-74-1	Hexachlorobenzene		969	ug/kg	84.4	422
85-01-8	Phenanthrene		1160	ug/kg	12.7	42.2
120-12-7	Anthracene		1170	ug/kg	8.44	42.2
84-74-2	Di-n-butylphthalate		1260	ug/kg	84.4	422
206-44-0	Fluoranthene		1160	ug/kg	12.7	42.2
85-68-7	Butylbenzylphthalate		1310	ug/kg	84.4	422
56-55-3	Benzo(a)anthracene		1090	ug/kg	12.7	42.2
91-94-1	3,3'-Dichlorobenzidine	J	325	ug/kg	127	422
218-01-9	Chrysene		1210	ug/kg	12.7	42.2
117-81-7	bis(2-Ethylhexyl)phthalate		1310	ug/kg	84.4	422
117-84-0	Di-n-octylphthalate		1250	ug/kg	84.4	422
205-99-2	Benzo(b)fluoranthene		1020	ug/kg	12.7	42.2
207-08-9	Benzo(k)fluoranthene		1120	ug/kg	12.7	42.2
50-32-8	Benzo(a)pyrene		1080	ug/kg	12.7	42.2
193-39-5	Indeno(1,2,3-cd)pyrene		1040	ug/kg	12.7	42.2
53-70-3	Dibenzo(a,h)anthracene		1040	ug/kg	12.7	42.2
191-24-2	Benzo(ghi)perylene		990	ug/kg	12.7	42.2
120-82-1	1,2,4-Trichlorobenzene		977	ug/kg	84.4	422

GEL Laboratories LLC

Data file : /chem/MSD1.i/s032110.b/slc2114.d
 Lab Smp Id: 1202061825 Client Smp ID: RE36-10-7417MSD
 Inj Date : 21-MAR-2010 21:45
 Operator : AMY Inst ID: MSD1.i
 Smp Info : |1202061825|961228|1|SVM|1|MSD
 Misc Info : |MSD8270_S|WBN100310-01|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD1.i/s032110.b/MSD1-M8270C-031610.m
 Meth Date : 22-Mar-2010 11:38 amy01291 Quant Type: ISTD
 Cal Date : 17-MAR-2010 01:50 Cal File: slc1620.d
 Als bottle: 14 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-2150.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	20.98950	% moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.610	3.610	(1.000)	446785	40.0000	
* 29 Naphthalene-d8	136	4.463	4.469	(1.000)	1863391	40.0000	
* 46 Acenaphthene-d10	164	5.704	5.704	(1.000)	915905	40.0000	
* 67 Phenanthrene-d10	188	6.710	6.710	(1.000)	1610916	40.0000	
* 91 Chrysene-d12	240	8.292	8.292	(1.000)	1324334	40.0000	
* 98 Perylene-d12	264	9.527	9.522	(1.000)	1064095	40.0000	
\$ 3 2-Fluorophenol	112	2.834	2.822	(0.785)	748650	65.0726	2740
\$ 5 Phenol-d5	99	3.351	3.346	(0.928)	938193	66.9595	2820
\$ 20 Nitrobenzene-d5	82	3.969	3.975	(0.889)	365984	32.0231	1350
\$ 39 2-Fluorobiphenyl	172	5.204	5.204	(0.912)	679233	26.8524	1130
\$ 60 2,4,6-Tribromophenol	329	6.251	6.251	(1.096)	164159	54.6692	2310
\$ 81 p-Terphenyl-d14	244	7.622	7.622	(0.919)	652961	29.5739	1250

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.357	3.357	(0.930)	484700	32.6510	1380
8 2-Chlorophenol	128	3.481	3.481	(0.964)	394147	31.3908	1320
11 1,4-Dichlorobenzene	146	3.622	3.622	(1.003)	255618	18.0804	763
17 N-Nitrosodipropylamine	70	3.851	3.857	(1.067)	302427	38.0412	1600(Q)
28 1,2,4-Trichlorobenzene	180	4.416	4.416	(0.989)	266098	23.1607	977
33 4-Chloro-3-methylphenol	107	4.834	4.822	(1.083)	335642	34.2448	1440
47 Acenaphthene	154	5.728	5.728	(1.004)	603710	26.9844	1140
50 2,4-Dinitrotoluene	165	5.822	5.828	(1.021)	235431	31.9226	1350
52 4-Nitrophenol	139	5.775	5.763	(1.012)	132506	32.0411	1350
65 Pentachlorophenol	266	6.581	6.575	(0.981)	125896	31.9821	1350
79 Pyrene	202	7.569	7.569	(0.913)	994941	26.4752	1120
2 Pyridine	79	2.210	2.187	(0.612)	262942	26.5493	1120
4 Aniline	66	3.398	3.404	(0.941)	120657	19.0636	804(Q)
7 bis(2-Chloroethyl) ether	63	3.422	3.422	(0.948)	299557	29.4119	1240
9 1,3-Dichlorobenzene	146	3.575	3.581	(0.990)	238718	17.0486	719
12 Benzyl alcohol	108	3.687	3.687	(1.021)	34301	5.24817	221(aR)
13 1,2-Dichlorobenzene	146	3.722	3.722	(1.031)	268811	20.3440	858
14 bis(2-Chloroisopropyl) ether	45	3.757	3.763	(1.041)	721806	33.3265	1400
15 o-Cresol	107	3.745	3.740	(1.037)	340590	35.7639	1510
18 m,p-Cresols	107	3.845	3.846	(1.065)	502485	40.7089	1720(Q)
19 Hexachloroethane	117	3.945	3.946	(1.093)	83190	15.4826	653
21 Nitrobenzene	77	3.987	3.987	(0.893)	406726	33.3119	1400
22 Isophorone	82	4.134	4.140	(0.926)	786015	34.4682	1450
23 2-Nitrophenol	139	4.192	4.198	(0.939)	206689	32.8087	1380
24 2,4-Dimethylphenol	122	4.198	4.198	(0.941)	401756	35.6871	1500
25 bis(2-Chloroethoxy)methane	93	4.263	4.263	(0.955)	448975	32.1900	1360
26 2,4-Dichlorophenol	162	4.363	4.357	(0.978)	308813	32.8779	1390
27 Benzoic acid	105	4.298	4.275	(0.963)	608601	99.5566	4200
30 Naphthalene	128	4.481	4.481	(1.004)	995748	26.6438	1120
31 4-Chloroaniline	127	4.481	4.504	(1.004)	309441	18.4704	779
32 Hexachlorobutadiene	225	4.551	4.551	(1.020)	117114	18.0899	763
34 2-Methylnaphthalene	142	4.957	4.957	(1.111)	668429	28.1720	1190
36 Hexachlorocyclopentadiene	237	5.063	5.063	(0.888)	109441	18.8898	797
37 2,4,6-Trichlorophenol	196	5.151	5.151	(0.903)	211043	31.0112	1310
38 2,4,5-Trichlorophenol	196	5.181	5.175	(0.908)	243852	33.4687	1410
40 2-Chloronaphthalene	162	5.310	5.304	(0.931)	607330	27.6818	1170
42 o-Nitroaniline	65	5.375	5.369	(0.942)	219282	34.8390	1470
41 m-Nitroaniline	138	5.663	5.663	(0.993)	120548	27.1506	1140
43 Dimethylphthalate	163	5.481	5.487	(0.961)	868933	34.0800	1440
44 2,6-Dinitrotoluene	165	5.534	5.540	(0.970)	186488	31.5038	1330
45 Acenaphthylene	152	5.604	5.610	(0.982)	1075791	30.5637	1290
48 2,4-Dinitrophenol	184	5.734	5.734	(1.005)	72720	32.6343	1380(Q)
49 Dibenzofuran	168	5.845	5.851	(1.025)	872959	29.0385	1220
51 Diethylphthalate	149	5.975	5.975	(1.047)	853336	33.4003	1410
53 Fluorene	166	6.086	6.087	(1.067)	706448	28.0300	1180
54 4-Chlorophenylphenylether	204	6.069	6.075	(1.064)	342796	27.7723	1170
55 2-Methyl-4,6-dinitrophenol	198	6.110	6.110	(0.911)	118631	31.7049	1340

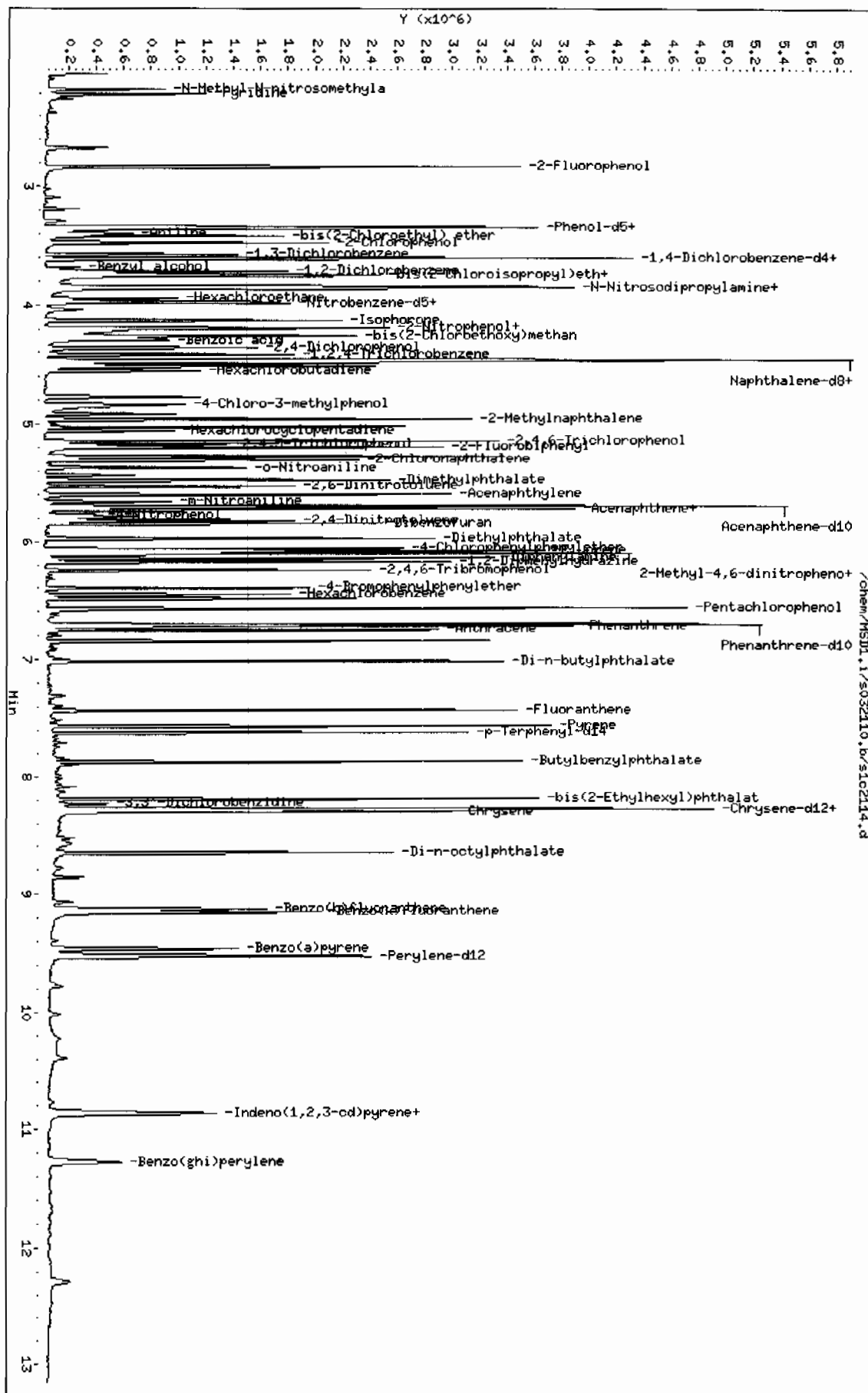
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
56 p-Nitroaniline		138	6.098	6.092	(1.069)	151212	34.7718	1470
133 Diphenylamine		169	6.151	6.151	(0.917)	596048	28.9748	1220
58 1,2-Diphenylhydrazine		77	6.181	6.181	(0.921)	775492	32.7156	1380
61 4-Bromophenylphenylether		248	6.404	6.404	(0.954)	182598	25.1045	1060
63 Hexachlorobenzene		284	6.457	6.457	(0.962)	181298	22.9673	969
68 Phenanthrene		178	6.722	6.722	(1.002)	958074	27.5253	1160
69 Anthracene		178	6.757	6.751	(1.007)	947307	27.7138	1170
72 Di-n-butylphthalate		149	7.016	7.016	(1.046)	1260805	29.9107	1260
76 Fluoranthene		202	7.433	7.434	(1.108)	982973	27.4783	1160
85 Butylbenzylphthalate		149	7.875	7.875	(0.950)	499896	31.0802	1310
89 Benzo(a)anthracene		228	8.280	8.281	(0.999)	802493	25.7789	1090
90 3,3'-Dichlorobenzidine		252	8.239	8.233	(0.994)	75636	7.70216	325 (aR)
92 Chrysene		228	8.310	8.310	(1.002)	835994	28.7384	1210
93 bis(2-Ethylhexyl)phthalate		149	8.198	8.198	(0.989)	658635	30.9840	1310
94 Di-n-octylphthalate		149	8.651	8.651	(0.908)	1032619	29.5476	1250
95 Benzo(b)fluoranthene		252	9.133	9.133	(0.959)	706636	24.1470	1020
96 Benzo(k)fluoranthene		252	9.157	9.157	(0.961)	741889	26.6102	1120
97 Benzo(a)pyrene		252	9.463	9.463	(0.993)	601665	25.6772	1080
99 Indeno(1,2,3-cd)pyrene		276	10.863	10.869	(1.140)	490218	24.6063	1040
100 Dibenzo(a,h)anthracene		278	10.868	10.874	(1.141)	407133	24.7313	1040
101 Benzo(ghi)perylene		276	11.280	11.286	(1.184)	379274	23.4717	990
1 N-Methyl-N-nitrosomethylamine		74	2.175	2.157	(0.602)	178548	27.6406	1170

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD1.i/5032110.b/sic2114.d
 Date: 21-MAR-2010 21:45
 Client ID: RE36-10-7417MSD
 Sample Info: 11202061825196122811.SVN111.MSD
 Volume Injected (uL): 0.5
 Column phase: J&M DB-SHS

Instrument: MSD1.i
 Operator: AMY
 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: 961226 Verified by: _____
 Analyst: Joshua McCartney
 Method: SW846 3550B Lab SOP: GL-OA-E-010 REV# 18
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202061822 MB	05-MAR-2010 11:30:00	30	1	0.03333
1202061823 LCS	05-MAR-2010 11:30:00	30	1	0.03333
248370001	05-MAR-2010 11:30:00	30	1	0.03333
248370002	05-MAR-2010 11:30:00	30.09	1	0.03323
248370003	05-MAR-2010 11:30:00	30.07	1	0.03326
248370004	05-MAR-2010 11:30:00	30	1	0.03333
1202061824 MS (248370004)	05-MAR-2010 11:30:00	30.02	1	0.03331
1202061825 MSD (248370004)	05-MAR-2010 11:30:00	30	1	0.03333
248370005	05-MAR-2010 11:30:00	30	1	0.03333
248370006	05-MAR-2010 11:30:00	30	1	0.03333
248370007	05-MAR-2010 11:30:00	30	1	0.03333
248370008	05-MAR-2010 11:30:00	30.09	1	0.03323
248370009	05-MAR-2010 11:30:00	30.01	1	0.03332
248370010	05-MAR-2010 11:30:00	30	1	0.03333
248370011	05-MAR-2010 11:30:00	30.09	1	0.03323
248370012	05-MAR-2010 11:30:00	30.01	1	0.03332
248370013	05-MAR-2010 11:30:00	30.09	1	0.03323
248370014	05-MAR-2010 11:30:00	30	1	0.03333
248370015	05-MAR-2010 11:30:00	30	1	0.03333
248370016	05-MAR-2010 11:30:00	30.03	1	0.0333
248370017	05-MAR-2010 11:30:00	30.03	1	0.0333
248370018	05-MAR-2010 11:30:00	30.09	1	0.03323
248370019	05-MAR-2010 11:30:00	30.09	1	0.03323
248370020	05-MAR-2010 11:30:00	30	1	0.03333

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
LCS	1202061823	BNA LCS w/o Benzidine 50ppm	UEI00222-14	1	mL	Verified By: RWH
LCS	1202061823	BENZIDINE LCS	UEI00302-22	1	mL	Final Solvent: CH2Cl2
MS	1202061824	BNA LCS w/o Benzidine 50ppm	UEI00222-14	1	mL	
MS	1202061824	BENZIDINE LCS	UEI00302-22	1	mL	
MSD	1202061825	BNA LCS w/o Benzidine 50ppm	UEI00222-14	1	mL	
MSD	1202061825	BENZIDINE LCS	UEI00302-22	1	mL	
SURR	All	BNA for all Surrogate	UEI00222-10	1	mL	
REGNT	All	Methylene Chloride	100301-D	150	mL	
REGNT	All	Acetone	1273739-B1	150	mL	
SOURC	All	SODIUM SULFATE	1274910	30	g	

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD1

DATE: 03/15/2010

METHOD: See raw data

OPERATOR: AMY

REVIEWED BY:

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1202440-D

Multiplier Voltage: 1294 Emv Extr. Injection Volume: 0.5, 1.0 ul

DETPP Solution ID: WBN100306-01.2 Internal Std ID: WBN100310-01

CALIBRATION & QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23

Sequence Number: /chem/MSD1.i/s031510a.b

Data File	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
slc1513.d	AMY	15-MAR-2010 16:24	50 PPM	s031510a	1.0	DETPP	PASSING
slc1514.d	INSTBLK	15-MAR-2010 16:40		all	1.0		
slc1515.d	AMY	15-MAR-2010 17:03	100 PPM	MEGA1ICARE	1.0	MEGA001	ICAL LVL1-PASSING
slc1516.d	AMY	15-MAR-2010 17:31	1040 PPM	MEGA1ICARE	1.0	MEGA040	ICAL LVL4-PASSING
slc1517.d	AMY	15-MAR-2010 17:59	210 PPM	MEGA1ICARE	1.0	MEGA010	ICAL LVL2-PASSING
slc1518.d	AMY	15-MAR-2010 18:28	1020 PPM	MEGA1ICARE	1.0	MEGA020	ICAL LVL3-PASSING
slc1519.d	AMY	15-MAR-2010 18:57	1050 PPM	MEGA1ICARE	1.0	MEGA050	ICAL LVL5-PASSING
slc1520.d	AMY	15-MAR-2010 19:26	1080 PPM	MEGA1ICARE	1.0	MEGA080	ICAL LVL6-PASSING
slc1521.d	AMY	15-MAR-2010 19:55	1100 PPM	MEGA1ICARE	1.0	MEGA100	ICAL LVL7-PASSING
slc1522.d	AMY	15-MAR-2010 20:24	1120 PPM	MEGA1ICARE	1.0	MEGA120	ICAL LVL8-PASSING
slc1523.d	AMY	15-MAR-2010 20:53	113 PPM	lap12	1.0	AP010	ICAL LVL2-PASSING
slc1524.d	AMY	15-MAR-2010 21:17	120 PPM	lap12	1.0	AP020	ICAL LVL3-PASSING
slc1525.d	AMY	15-MAR-2010 21:40	140 PPM	ap12	1.0	AP040	ICAL LVL4-PASSING
slc1526.d	AMY	15-MAR-2010 22:04	150 PPM	ap12	1.0	AP050	ICAL LVL5-PASSING
slc1527.d	AMY	15-MAR-2010 22:27	180 PPM	lap12	1.0	AP080	ICAL LVL6-PASSING
slc1528.d	AMY	15-MAR-2010 22:50	1100 PPM	lap12	1.0	AP100	ICAL LVL7-PASSING
slc1529.d	AMY	15-MAR-2010 23:14	1120 PPM	lap12	1.0	AP120	ICAL LVL8-PASSING
slc1530.d	AMY	15-MAR-2010 23:37	1040 PPM	MEGA1ICARE	1.0	MEGA25CVS	M625CVS-Restek
slc1531.d	AMY	16-MAR-2010 00:06	1040 PPM	MEGA1ICARE	1.0	MEGA040	MEGA1CV-02Si

|slc1532.d	|WBN100312-03.1	|AMY	|16-MAR-2010 03:34	|40 PPM	s031510a	|1.0|AP625CVS	|AP625CVS-Restek	|
|slc1533.d	|WBN100312-08.1	|AMY	|16-MAR-2010 03:58	|40 PPM	ap12	|1.0|APICV	|APICV-Q2S1	|
|slc1534.d	|1202070109	|AMY	|16-MAR-2010 01:21	|964896	249232	|1.0|SBLK01	|REPORT	|
|slc1535.d	|1202070113	|AMY	|16-MAR-2010 01:44	|964896	249232	|1.0|SBLK01LCS	|REPORT	|
|slc1536.d	|1202068412	|AMY	|16-MAR-2010 02:07	|964150	248963	|1.0|SBLK01	|REPORT	|
|slc1537.d	|1202068413	|AMY	|16-MAR-2010 02:30	|964150	248963	|1.0|LCS	|REPORT	|
|slc1538.d	|249232003	|AMY	|16-MAR-2010 02:53	|964896	249232	|1.0|BJCO	|REPORT	|
|slc1539.d	|1202070111	|AMY	|16-MAR-2010 03:16	|964896	249232	|1.0|MS	|REPORT	|
|slc1540.d	|1202070112	|AMY	|16-MAR-2010 03:38	|964896	249232	|1.0|MSD	|REPORT-narrate several spikes fail, not enough sample for RE	|
|slc1541.d	|249232010	|AMY	|16-MAR-2010 04:01	|964896	249232	|1.0|BJCO	|REPORT. RR slc1552-fails. RE-slcl832, confirms within hold.	|
|slc1542.d	|248963001	|AMY	|16-MAR-2010 04:24	|964150	248963	|1.0|SWPC	|REPORT	|
|slc1543.d	|1202068414	|AMY	|16-MAR-2010 04:46	|964150	248963	|1.0|MS	|REPORT	|
|slc1544.d	|1202068415	|AMY	|16-MAR-2010 05:08	|964150	248963	|1.0|MSD	|REPORT	|
|slc1545.d	|249059001	|AMY	|16-MAR-2010 05:31	|964150	249059	|4.0|SONO	|REPORT-several surrogates fail low due to 4X dilution.	|
|slc1546.d	|249175001	|AMY	|16-MAR-2010 05:53	|964150	249175	|1.0|SWPC	|REPORT	|
|slc1547.d	|249175002	|AMY	|16-MAR-2010 06:16	|964150	249175	|1.0|SWPC	|REPORT	|
|slc1548.d	|1202071132	|AMY	|16-MAR-2010 14:37	|965294	248719	|1.0|SBLK01	|DUSE-report original batch 963058, sample slc1239	|
|slc1549.d	|1202071133	|AMY	|16-MAR-2010 15:00	|965294	248719	|1.0|SBLK01LCS	|DUSE-report original batch 963058, sample slc1239	|
|slc1550.d	|1202071134	|AMY	|16-MAR-2010 15:25	|965294	248719	|1.0|SBLK01LCS	|DUSE-report original batch 963058, sample slc1239	|
|slc1551.d	|248719002	|AMY	|16-MAR-2010 15:48	|965294	248719	|1.0|GEEL	|DUSE-report slc1239	|
|slc1552.d	|249232010	|AMY	|16-MAR-2010 16:12	|964896	249232	|1.0|BJCO	|DUSE-acid surrogate failures. Sent for RE (confirm failure)	|

Instrument Batch: /chem/MSD1.i/s031510a.b

Page: 1

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD1

DATE: 03/21/2010

METHOD: See raw data

OPERATOR: AMY

REVIEWED BY:

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1202440-D

Multiplier Voltage: 1294 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN10306-01.2 Internal Std ID: WBN100310-01

CALIBRATION & QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23

Sequence Number: /chem/MSD1.i/s032110.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
slc2101.d	WBN100306-01.2	AMY	121-MAR-2010 16:40	150 PPM	s032110	1.0	DFTPP	PASSING
slc2102.d	WBN100309-05.2	AMY	121-MAR-2010 16:55	40 PPM	s032110	1.0	MEGACVS	PASSING-452910
slc2103.d	WBN100312-03.2	AMY	121-MAR-2010 17:25	40 PPM	s032110	1.0	APCVS	PASSING
slc2104.d	WBN100127-08.1	AMY	121-MAR-2010 17:48	140 PPM	s032110	1.0	NEVCVS	PASSING
slc2105.d	WBN100304-23.3	AMY	121-MAR-2010 18:13	140 PPM	pest	1.0	PESTCVS	PASSING
slc2106.d	1202061822	AMY	121-MAR-2010 18:36	1961228	10-2150	1.0	MB	REPORT
slc2107.d	1202061823	AMY	121-MAR-2010 19:00	1961228	10-2150	1.0	LCS	REPORT
slc2108.d	1202073019	AMY	121-MAR-2010 19:24	1965991	1248785	1.0	LCS	DUSE-RR of s1c2007
slc2109.d	1248370001	AMY	121-MAR-2010 19:47	1961228	10-2150	1.0	LANL	REPORT
slc2110.d	1248370002	AMY	121-MAR-2010 20:12	1961228	10-2150	1.0	LANL	REPORT
slc2111.d	1248370003	AMY	121-MAR-2010 20:34	1961228	10-2150	1.0	LANL	REPORT
slc2112.d	1248370004	AMY	121-MAR-2010 20:58	1961228	10-2150	1.0	LANL	REPORT
slc2113.d	1202061824	AMY	121-MAR-2010 21:21	1961228	10-2150	1.0	MS	REPORT
slc2114.d	1202061825	AMY	121-MAR-2010 21:45	1961228	10-2150	1.0	MSD	REPORT
slc2115.d	1248370005	AMY	121-MAR-2010 22:09	1961228	10-2150	1.0	LANL	REPORT
slc2116.d	1248370006	AMY	121-MAR-2010 22:32	1961228	10-2150	1.0	LANL	REPORT
slc2117.d	1248370007	AMY	121-MAR-2010 22:56	1961228	10-2150	1.0	LANL	REPORT
slc2118.d	1248370008	AMY	121-MAR-2010 23:20	1961228	10-2150	1.0	LANL	REPORT
slc2119.d	1248370009	AMY	121-MAR-2010 23:44	1961228	10-2150	1.0	LANL	REPORT

|slc2120.d	|248370010	|AMY	|22-MAR-2010 00:07	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2121.d	|248370011	|AMY	|22-MAR-2010 00:31	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2122.d	|248370012	|AMY	|22-MAR-2010 00:54	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2123.d	|248370013	|AMY	|22-MAR-2010 01:18	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2124.d	|248370014	|AMY	|22-MAR-2010 01:42	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2125.d	|248370015	|AMY	|22-MAR-2010 02:05	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2126.d	|248370016	|AMY	|22-MAR-2010 02:29	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2127.d	|248370017	|AMY	|22-MAR-2010 02:53	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2128.d	|248370018	|AMY	|22-MAR-2010 03:16	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2129.d	|248370019	|AMY	|22-MAR-2010 03:40	|961228	|10-2150	|1.0|LANL	|REPORT	|
|slc2130.d	|248370020	|AMY	|22-MAR-2010 04:03	|961228	|10-2150	|1.0|LANL	|REPORT	|

DATA EXCEPTION REPORT

Mo. Day Yr. 24-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: SEMIVOA GC/MS	Test / Method: SW846 8270C	Matrix Type: Solid	Client Code: LANL
Batch ID: 961228	Sample Numbers: See Below		
<p>Potentially affected work order(s)(SDG): 248370(10-2150)</p> <p>Application Issues:</p> <p>Failed Recovery for MS/PS</p> <p>Failed RPD for MS/MSD, or PS/PSD</p> <p>Failed Recovery for LCS/LCSD</p> <p>Failed Recovery for MSD/PSD</p>			
<p>Specification and Requirements</p> <p>Exception Description:</p> <p>1. The MS (1202061824) and MSD (1202061825) recovered 3,3'-dichlorobenzidine at 16% and 15%, respectively (limits: 30%-124%) and Benzyl alcohol at 0% and 11%, respectively (limits: 19%-112%).</p> <p>2. The MS/MSD RPD value for Benzyl alcohol was 200% (limit: 30%).</p> <p>3. The LCS (1202061823) recovered Benzyl alcohol at 25% (limits: 27%-108%).</p>		<p>DER Disposition:</p> <p>1. As the MS failures confirmed in the MSD, they were attributed to sample matrix interference and the data were reported.</p> <p>2. The failure was attributed to sample matrix interference and the data were reported.</p> <p>3. The failure represented less than 5% of the requested spike analyte list. That satisfied the clients acceptance criteria and the data were reported.</p>	

Originator's Name:

Lloyd O Fox 24-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 10-2150**

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: 960305

Prep Batch Number: 960303

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
248370001	RE36-10-7415
248370002	RE36-10-7420
248370003	RE36-10-7418
248370004	RE36-10-7417
248370005	RE36-10-7419
248370006	RE36-10-7416
248370007	RE36-10-7478
248370008	RE36-10-7490
248370009	RE36-10-7487
248370010	RE36-10-7483
248370011	RE36-10-7481
248370012	RE36-10-7486
248370013	RE36-10-7477
248370014	RE36-10-7489
248370015	RE36-10-7479
248370016	RE36-10-7482
248370017	RE36-10-7480
248370018	RE36-10-7485
248370019	RE36-10-7488
248370020	RE36-10-7484
1202059808	Method Blank (MB)
1202059809	Laboratory Control Sample (LCS)
1202059810	248370001(RE36-10-7415) Matrix Spike (MS)
1202059811	248370001(RE36-10-7415) Matrix Spike Duplicate (MSD)

10-2150-EXPLCMS

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 36.8%. The recovery limits are 51-112%. Since both the MS and MSD met the DOD QSM marginal exceedance limits of 22-139% for Tetryl, and the samples are greater than two times out of hold, the data are reported. Please see data exception report 818315.

QC Sample Designation

Sample 248370001 (RE36-10-7415) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recovered Tetryl at 24.1%. The recovery limits are 36-124%. Both the MS and MSD met the DOD QSM marginal exceedance limits of 22-139% for Tetryl. The samples are greater than two times out of hold; therefore, the data are reported. Please see data exception report 818315.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recovered Tetryl at 32.8% with recovery limits of 36-124%. Both the MS and MSD met the DOD QSM marginal exceedance limits of 22-139% for Tetryl. The samples are greater than two times out of hold, therefore the data are reported. Please see data exception report 818315.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD for Tetraol was 30.5%. 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 818315.

Internal Standard (ISTD) Acceptance

Sample 1202059811 (RE36-10-7415MSD) 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 initial data are reported. The confirmation raw data are located in the Miscellaneous Section. Please see data exception report 818315.

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 248370019 (RE36-10-7488) failed ISTD acceptance criteria. It was re-analyzed and passed acceptance criteria. The re-analysis is reported.

Sample 1202059811 (RE36-10-7415MSD) 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 initial data are reported. The confirmation raw data are located in the Miscellaneous Section. Please see data exception report 818315.

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.

10-2150-EXPLCMS

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 248370001 (RE36-10-7415) was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recovered TATB at 172% with recovery limits of 29-155%. Since both the LCS and MS met recovery limits for TATB, the noted exception is attributed to vagaries in the extraction process. The samples are greater than two times out of hold, therefore the data are reported. Please see data exception report 818315.

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 818315 was generated for his SDG.

The LCS recovered Tetryl at 36.8%. The recovery limits are 51-112%. Since both the MS and MSD met the DOD QSM marginal exceedance limits of 22-139% for Tetryl, and the samples are greater than two times out of hold, the data are reported.

The MS recovered Tetryl at 24.1%. The MSD recovered Tetryl at 32.8%. The recovery limits are 36-124%. Both the MS and MSD met the DOD QSM marginal exceedance limits of 22-139% for Tetryl. The samples are greater than two times out of hold; therefore, the data are reported.

The MSD recovered TATB at 172% with recovery limits of 29-155%. Since both the LCS and MS met recovery limits for TATB, the noted exception is attributed to vagaries in the extraction process. The samples are greater than two times out of hold, therefore the data are reported.

The MS/MSD RPD for Tetryl was 30.5%. 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 1202059811 (RE36-10-7415MSD) 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 initial 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: Herbert H. Mauer Date: 04/19/10

SAMPLE DATA SUMMARY

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7415

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370001

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412168a

Date Analyzed: 16-APR-10 01:47

Units: ug/kg

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

*Concentration =

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: RE36-10-7415

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370001

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050016.wiff

Date Analyzed: 05-APR-10 16:41

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7420

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412171a

Date Analyzed: 16-APR-10 03:16

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: RE36-10-7420

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050019.wiff

Date Analyzed: 05-APR-10 17:28

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: RE36-10-7418

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370003

Sample Amount 2

Moisture: 18.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412172a

Date Analyzed: 16-APR-10 03:45

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: RE36-10-7418

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370003

Sample Amount 2

Moisture: 18.7

Amount Units g

Date Received: 02-MAR--10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050020.wiff

Date Analyzed: 05-APR-10 17:44

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: RE36-10-7417

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370004

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412173a

Date Analyzed: 16-APR-10 04:15

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7417

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370004

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050021.wiff

Date Analyzed: 05-APR-10 17:59

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: RE36-10-7419

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412174a

Date Analyzed: 16-APR-10 04:44

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7419

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050022.wiff

Date Analyzed: 05-APR-10 18:15

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7416

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370006

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412175a

Date Analyzed: 16-APR-10 05:14

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: RE36-10-7416

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370006

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050023.wiff

Date Analyzed: 05-APR-10 18:31

Units: ug/kg

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

*Concentration =

Instrument Value	X	<u>Concentrated Extract Volume</u> Sample Amount	X	Dilution Factor
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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7478

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370007

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412179a

Date Analyzed: 16-APR-10 07:12

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: RE36-10-7478

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370007

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050027.wiff

Date Analyzed: 05-APR-10 19:34

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: RE36-10-7490

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370008

Sample Amount 2

Moisture: 26.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412180a

Date Analyzed: 16-APR-10 07:41

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: RE36-10-7490

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370008

Sample Amount 2

Moisture: 26.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050028.wiff

Date Analyzed: 05-APR-10 19:49

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7487

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370009

Sample Amount 2

Moisture: 24.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412181a

Date Analyzed: 16-APR-10 08:11

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: RE36-10-7487

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370009

Sample Amount 2

Moisture: 24.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050029.wiff

Date Analyzed: 05-APR-10 20:05

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: RE36-10-7483

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370010

Sample Amount 2

Moisture: 24.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412182a

Date Analyzed: 16-APR-10 08:40

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: RE36-10-7483

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370010

Sample Amount 2

Moisture: 24.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050030.wiff

Date Analyzed: 05-APR-10 20:21

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: RE36-10-7481

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370011

Sample Amount 2

Moisture: 32.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412183a

Date Analyzed: 16-APR-10 09:10

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: RE36-10-7481

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370011

Sample Amount 2

Moisture: 32.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050031.wiff

Date Analyzed: 05-APR-10 20:37

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: RE36-10-7486

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370012

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412184a

Date Analyzed: 16-APR-10 09:39

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: RE36-10-7486

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370012

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050032.wiff

Date Analyzed: 05-APR-10 20:52

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7477

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370013

Sample Amount 2

Moisture: 23.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412185a

Date Analyzed: 16-APR-10 10:09

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: RE36-10-7477

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370013

Sample Amount 2

Moisture: 23.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050033.wiff

Date Analyzed: 05-APR-10 21:08

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: RE36-10-7489

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370014

Sample Amount 2

Moisture: 35.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412186a

Date Analyzed: 16-APR-10 10:38

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: RE36-10-7489

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370014

Sample Amount 2

Moisture: 35.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050034.wiff

Date Analyzed: 05-APR-10 21:24

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: RE36-10-7479

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370015

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412187a

Date Analyzed: 16-APR-10 11:08

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7479

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370015

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050035.wiff

Date Analyzed: 05-APR-10 21:39

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7482

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370016

Sample Amount 2

Moisture: 24.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412188a

Date Analyzed: 16-APR-10 11:37

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: RE36-10-7482

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370016

Sample Amount 2

Moisture: 24.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050036.wiff

Date Analyzed: 05-APR-10 21:55

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7480

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370017

Sample Amount 2

Moisture: 12.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412192a

Date Analyzed: 16-APR-10 13:36

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: RE36-10-7480

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370017

Sample Amount 2

Moisture: 12.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050040.wiff

Date Analyzed: 05-APR-10 22:58

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: RE36-10-7485

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370018

Sample Amount 2

Moisture: 26.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412193a

Date Analyzed: 16-APR-10 14:05

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7485

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370018

Sample Amount 2

Moisture: 26.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050041.wiff

Date Analyzed: 05-APR-10 23:14

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: RE36-10-7488

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370019

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412200a

Date Analyzed: 16-APR-10 17:32

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7488

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370019

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050042.wiff

Date Analyzed: 05-APR-10 23:29

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: RE36-10-7484

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370020

Sample Amount 2

Moisture: 17.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412195a

Date Analyzed: 16-APR-10 15:04

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7484

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370020

Sample Amount 2

Moisture: 17.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050043.wiff

Date Analyzed: 05-APR-10 23:45

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

Quality Control Summary

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

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Date: 14-Apr-2010

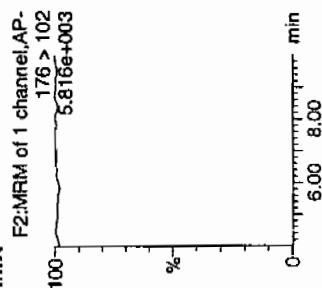
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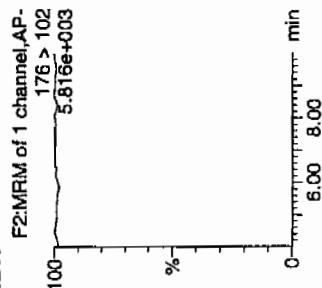
Vial: 1:1,F

4/15/10

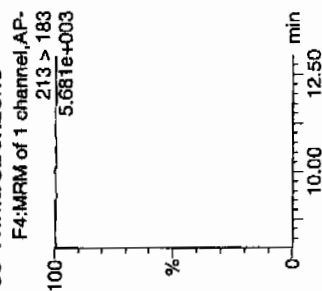
HMX



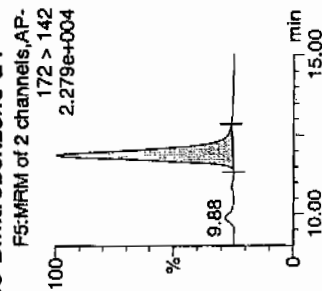
RDX



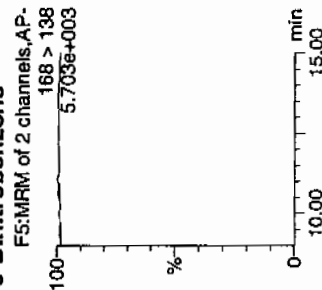
135-Trinitrobenzene



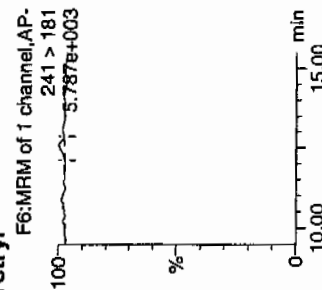
13-Dinitrobenzene-d4



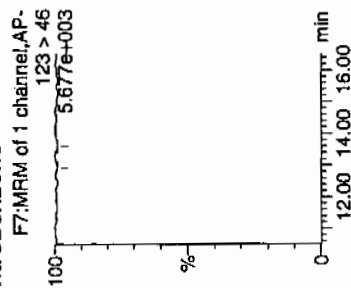
13-Dinitrobenzene



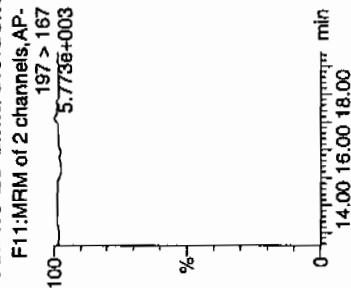
Tetryl



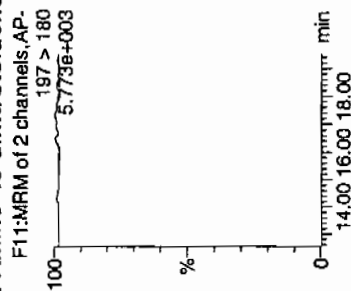
Nitrobenzene



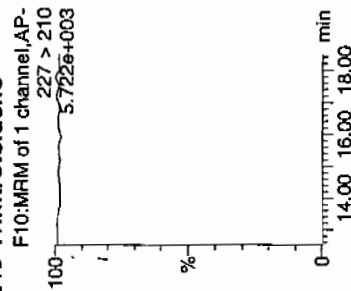
4-Amino-26-dinitrotoluene



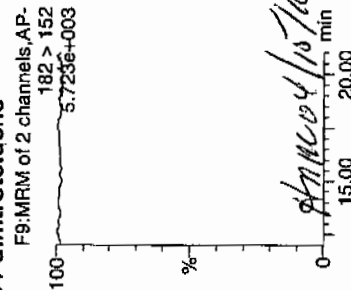
2-Amino-46-dinitrotoluene



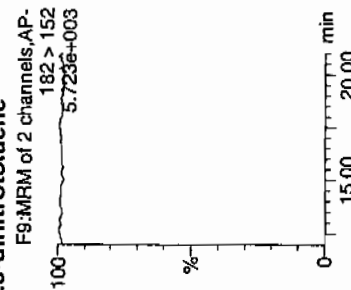
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

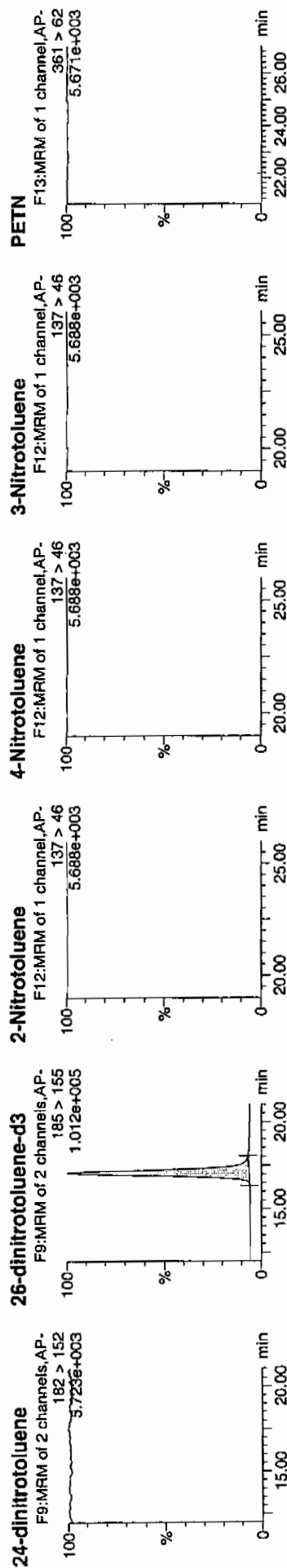


Quantify Sample Report

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



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	SN
XIBLK11	HMX	176 > 102		6505.727	6505.727								
XIBLK11	RDX	176 > 102		6505.727	6505.727								
XIBLK11	135-Trinitrobenzene	213 > 183		6505.727	6505.727								
XIBLK11	13-Dinitrobenzene-d4	172 > 142	11.87	6505.727	6505.727		6505.727	bb	MM- 15-Apr-10	14:30:27	110.6	10.6	555.0
XIBLK11	13-Dinitrobenzene	168 > 138		6505.727	6505.727								
XIBLK11	Tetryl	241 > 181		6505.727	6505.727								
XIBLK11	Nitrobenzene	123 > 46		38462.531	38462.531								
XIBLK11	4-Amino-26-dinitrotoluene	197 > 167		38462.531	38462.531								
XIBLK11	2-Amino-46-dinitrotoluene	197 > 180		38462.531	38462.531								
XIBLK11	246-Trinitrotoluene	227 > 210		38462.531	38462.531								
XIBLK11	34-dinitrotoluene	182 > 152		38462.531	38462.531								
XIBLK11	26-dinitrotoluene	182 > 152		38462.531	38462.531								
XIBLK11	24-dinitrotoluene	182 > 152		38462.531	38462.531								
XIBLK11	26-dinitrotoluene-d3	185 > 155	17.06	38462.531	38462.531		38462.531	bb	MM- 15-Apr-10	14:30:41	103.9	9.9	2944.0
XIBLK11	2-Nitrotoluene	137 > 46		38462.531	38462.531								
XIBLK11	4-Nitrotoluene	137 > 46		38462.531	38462.531								
XIBLK11	3-Nitrotoluene	137 > 46		38462.531	38462.531								
XIBLK11	PETN	361 > 62		38462.531	38462.531								

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

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)
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	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

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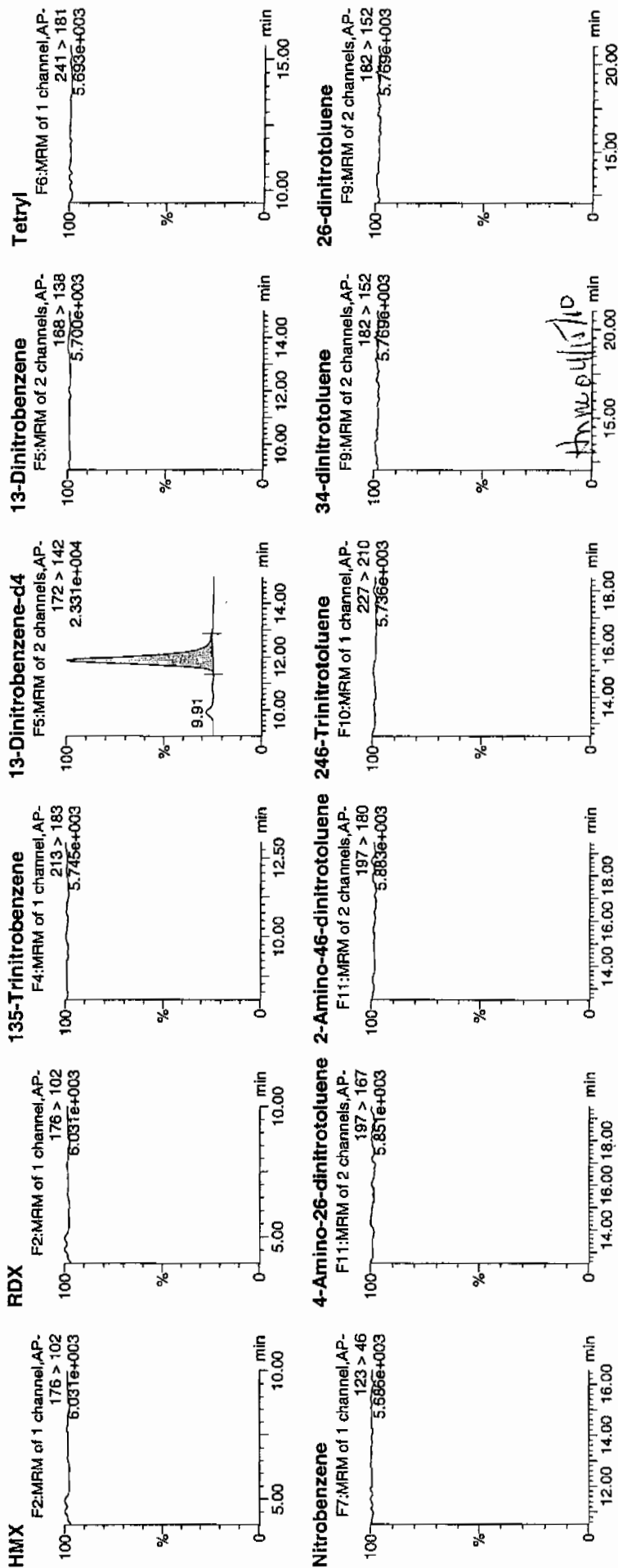
Date: 14-Apr-2010

Time: 09:57:47

ID: XIBLK12

Vial: 1:1,A

11/11/10

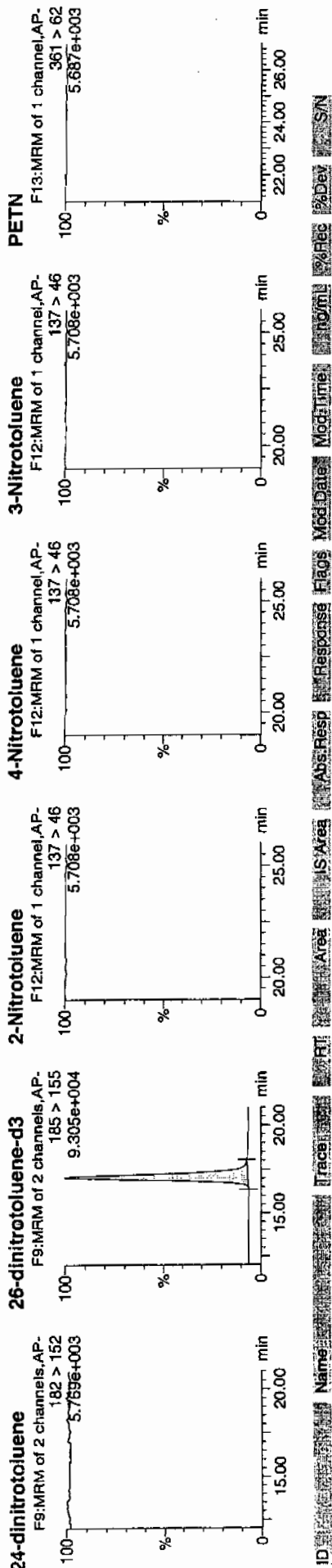


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GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod	Date	%Rec	%Dev	S/N
XIBLK12	HMX	176 > 102		6608.449									
XIBLK12	RDX	176 > 102		6608.449									
XIBLK12	135-Trinitrobenzene	213 > 183		6608.449									
XIBLK12	13-Dinitrobenzene-d4	172 > 142	11.87	6608.449									
XIBLK12	13-Dinitrobenzene	168 > 138		6608.449									
XIBLK12	Tetryl	241 > 181		6608.449									
XIBLK12	Nitrobenzene	123 > 46		6608.449									
XIBLK12	4-Amino-26-dinitrotoluene	197 > 167		35875.754									
XIBLK12	2-Amino-46-dinitrotoluene	197 > 180		35875.754									
XIBLK12	246-Trinitrotoluene	227 > 210		35875.754									
XIBLK12	34-dinitrotoluene	182 > 152		35875.754									
XIBLK12	26-dinitrotoluene	182 > 152		35875.754									
XIBLK12	24-dinitrotoluene	182 > 152		35875.754									
XIBLK12	26-dinitrotoluene-d3	185 > 155	17.05	35875.754									
XIBLK12	2-Nitrotoluene	137 > 46		35875.754									
XIBLK12	4-Nitrotoluene	137 > 46		35875.754									
XIBLK12	3-Nitrotoluene	137 > 46		35875.754									
XIBLK12	PETN	361 > 62		35875.754									
						6608.449	6608.449	bb			561.9082	112.4	12.4
						35875.754	35875.754	bb			512.7572	102.6	2.6
													1347.0

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 14-APR-10 11:55

GEL Data File: EXP0412091a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	597.515
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
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\EXP0412091a

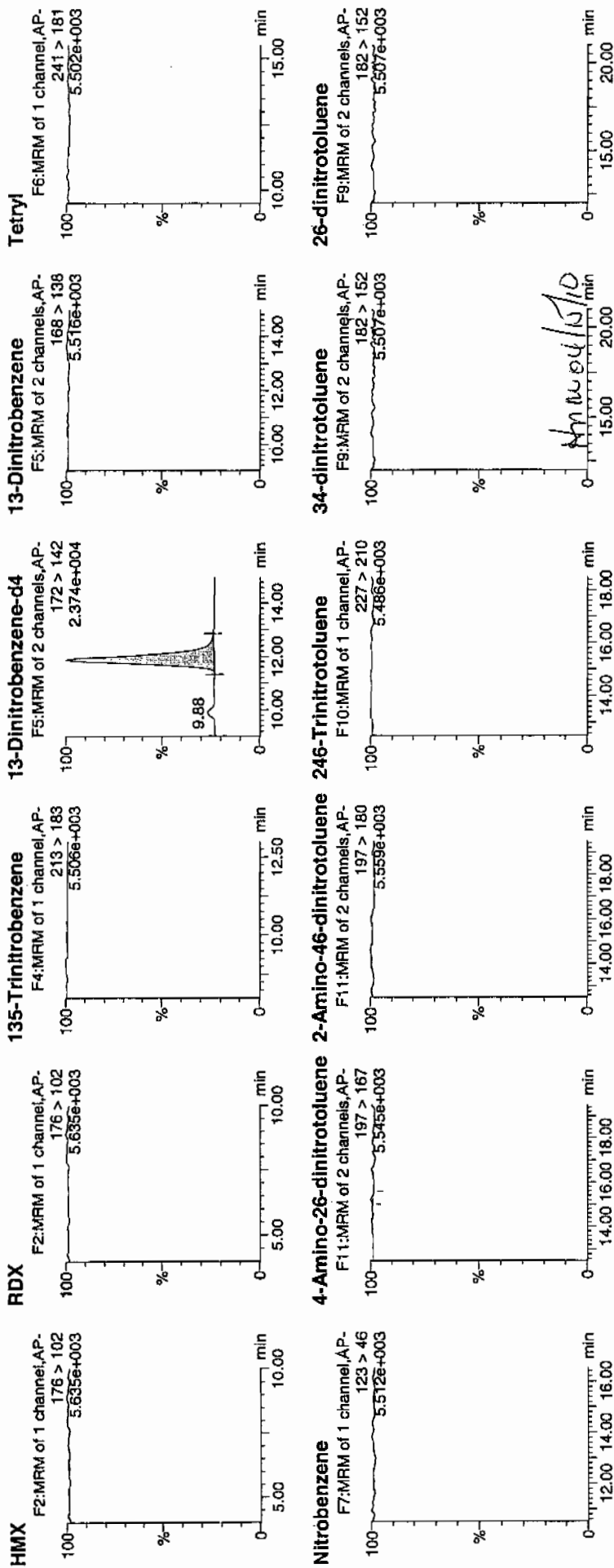
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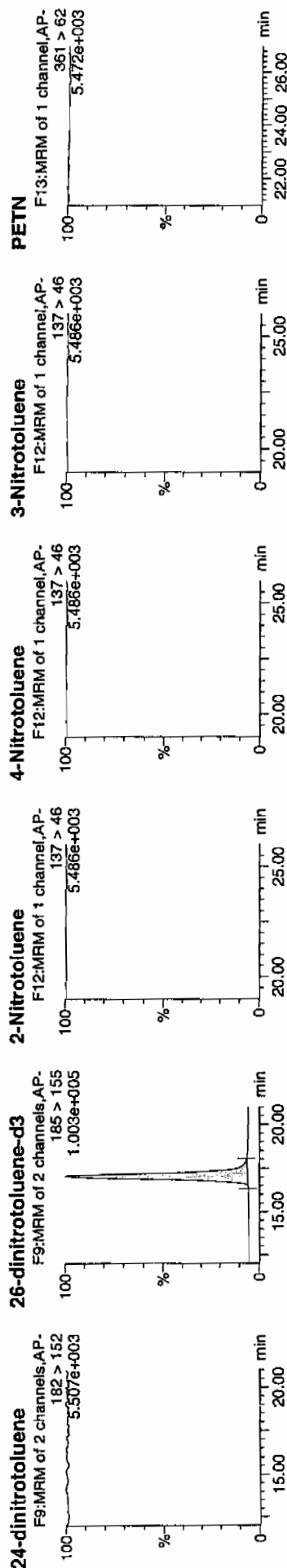
ID: XIBLK13

Vial: 1:1,F

10/11/10
JLS



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): 10-2150

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

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

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Date: 14-Apr-2010

Time: 15:22:16

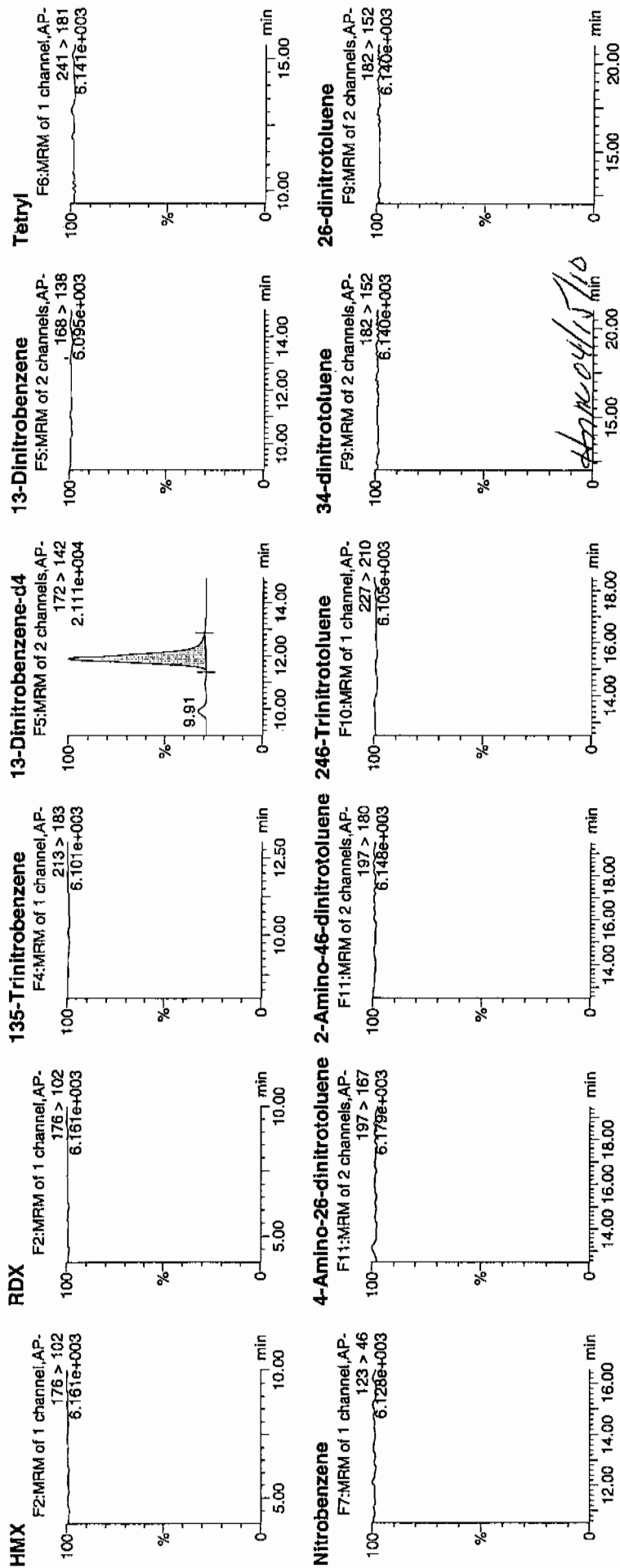
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Vial: 1:1,F

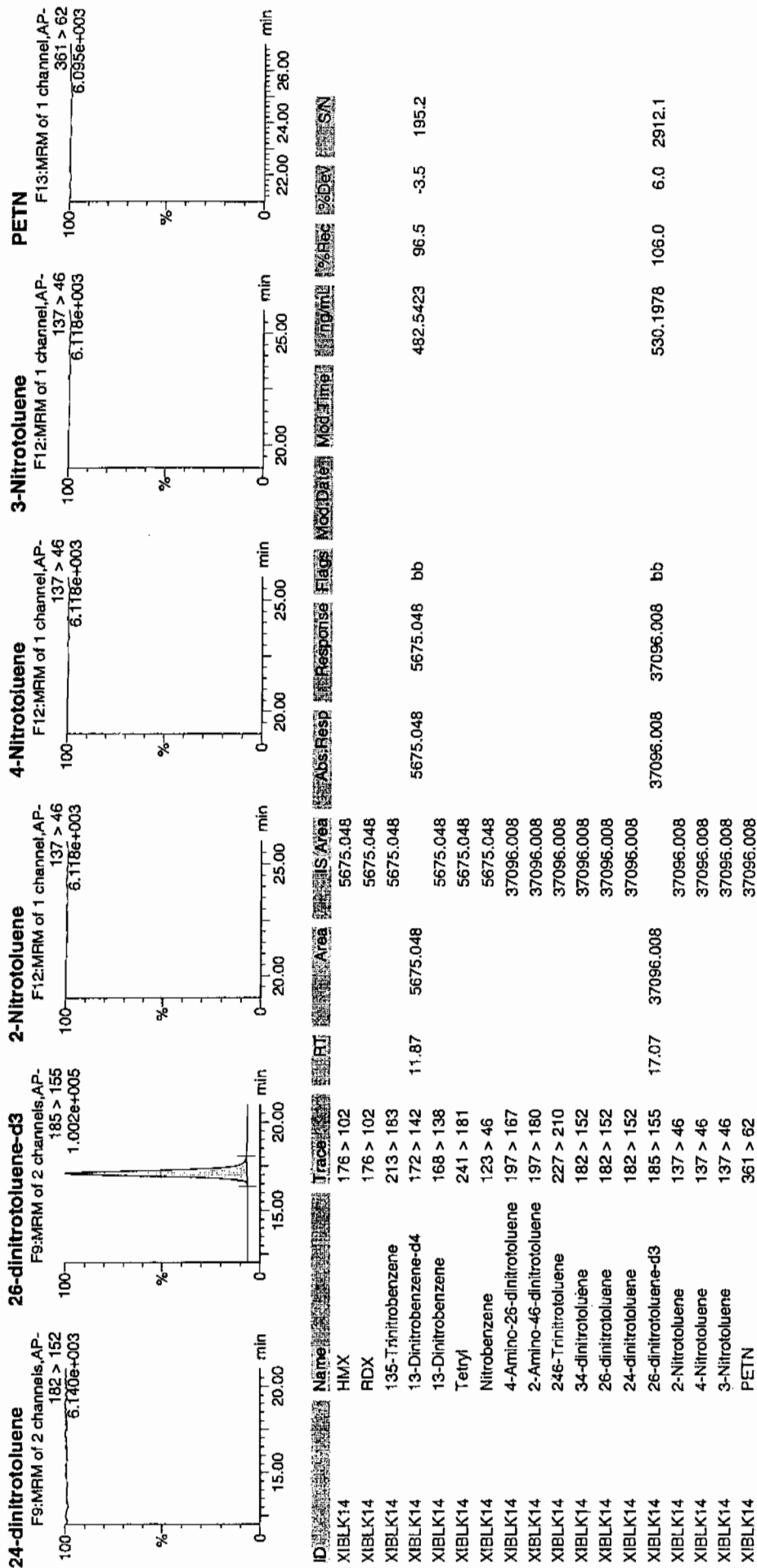
4/15/10
MTP

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

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)
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	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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412100a

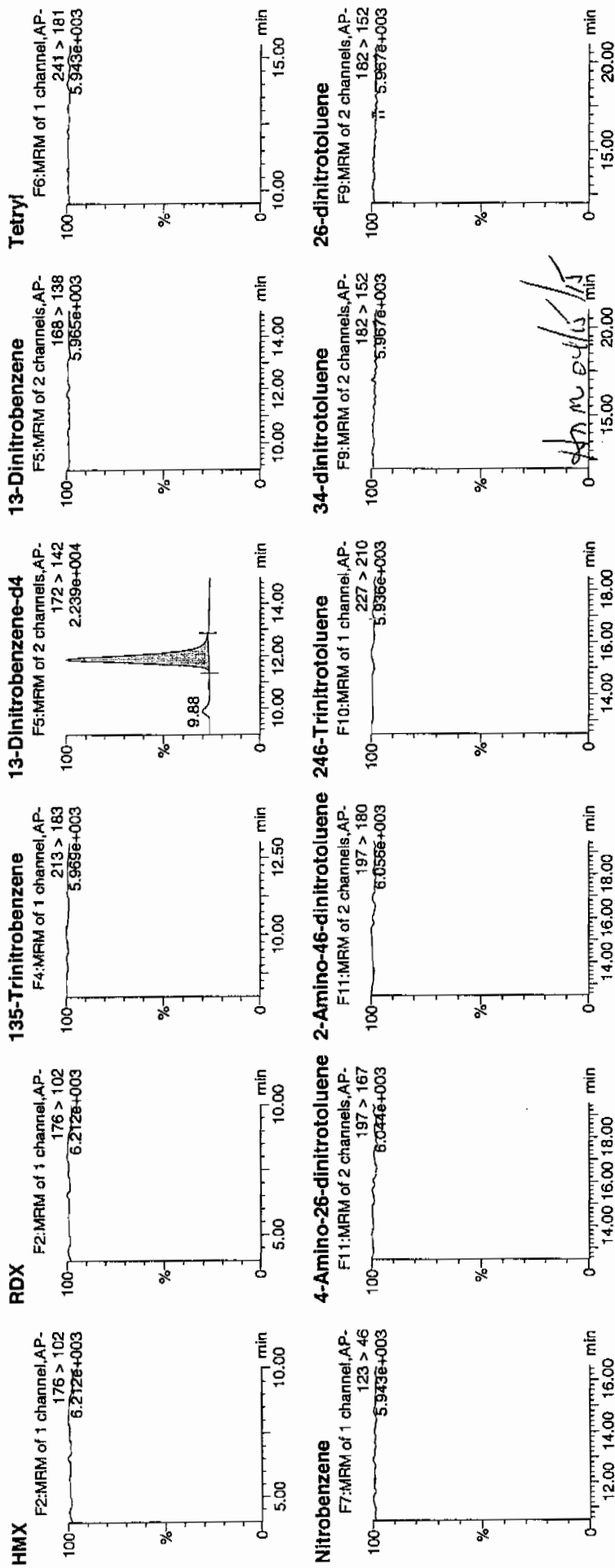
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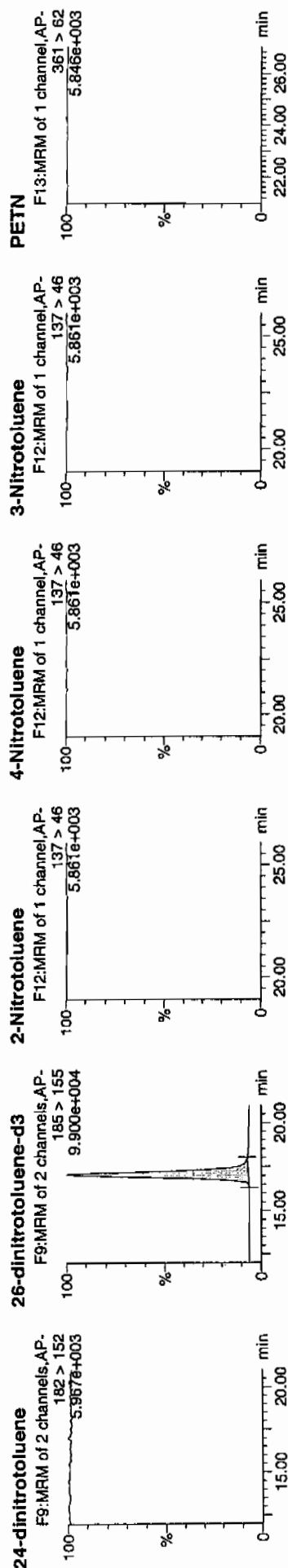
ID: XIBLK15

Vial: 1:1,A

4/15/10



Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID Name RT Area IS Area Abs Resp Response Flags Mod Date Mod Time %Red %Dev %SN

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XIBLK15	RDX	176 > 102	6212.279							
XIBLK15	135-Trinitrobenzene	213 > 183	6212.279							
XIBLK15	13-Dinitrobenzene-d4	172 > 142	6212.279							
XIBLK15	13-Dinitrobenzene	168 > 138	6212.279							
XIBLK15	Tetryl	241 > 181	6212.279							
XIBLK15	Nitrobenzene	123 > 46	6212.279							
XIBLK15	4-Amino-26-dinitrotoluene	197 > 167	38320.402							
XIBLK15	2-Amino-46-dinitrotoluene	197 > 180	38320.402							
XIBLK15	246-Trinitrotoluene	227 > 210	38320.402							
XIBLK15	34-dinitrotoluene	182 > 152	38320.402							
XIBLK15	26-dinitrotoluene	182 > 152	38320.402							
XIBLK15	24-dinitrotoluene	182 > 152	38320.402							
XIBLK15	26-dinitrotoluene-d3	185 > 155	38320.402							
XIBLK15	2-Nitrotoluene	137 > 46	38320.402							
XIBLK15	4-Nitrotoluene	137 > 46	38320.402							
XIBLK15	3-Nitrotoluene	137 > 46	38320.402							
XIBLK15	PETN	361 > 62	38320.402							

MM- 15-Apr-10 14:39:30

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 14-APR-10 21:45

GEL Data File: EXP0412111a

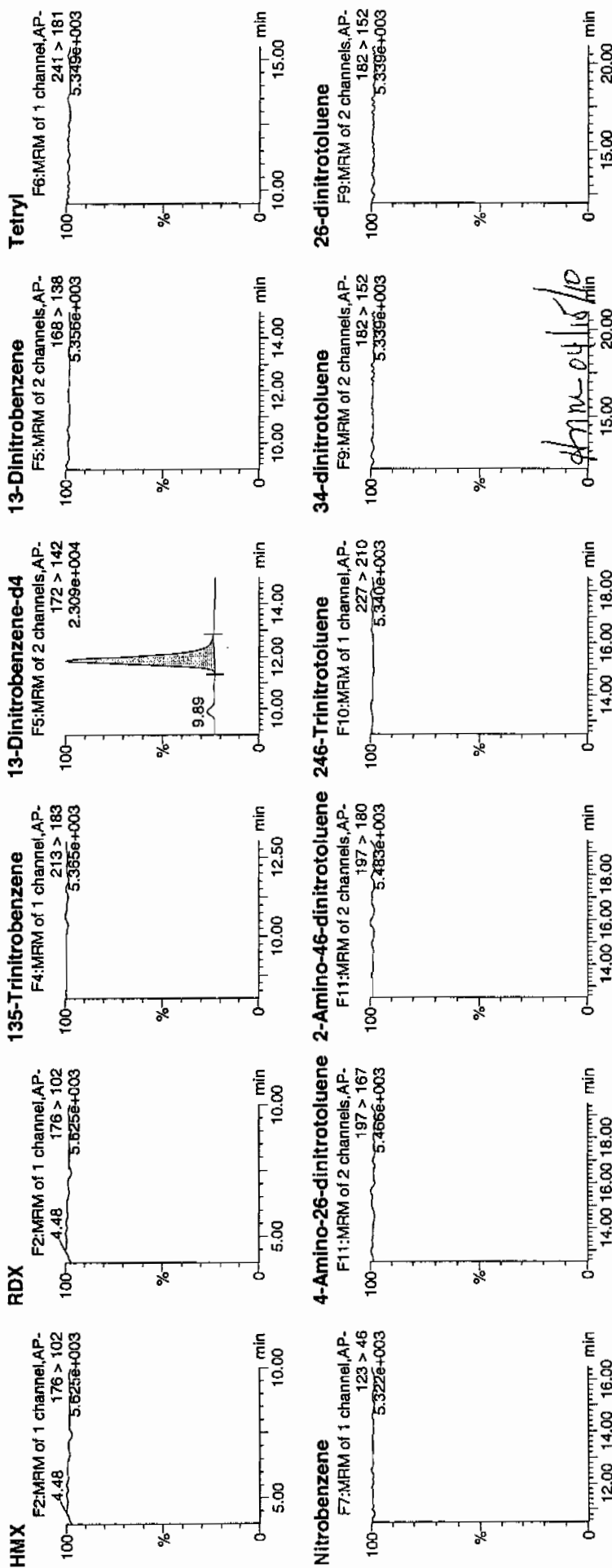
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
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

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The figure displays five MRM chromatograms for PETN, 3-Nitrotoluene, 4-Nitrotoluene, 2-Nitrotoluene, and 2,6-dinitrotoluene-d3, and one for 2,4-dinitrotoluene. Each plot shows relative intensity (%) on the y-axis (0 to 100) versus time (min) on the x-axis (0 to 25.00). The major peak for all compounds is at 5.334e+003 min. The peak for 2,6-dinitrotoluene-d3 is at 1.049e+005 min.

Compound	MRM Channels	Retention Time (min)
PETN	F13:MRM of 1 channel, AP-361 > 62	5.334e+003
3-Nitrotoluene	F12:MRM of 1 channel, AP-137 > 46	5.324e+003
4-Nitrotoluene	F12:MRM of 1 channel, AP-137 > 46	5.324e+003
2-Nitrotoluene	F12:MRM of 1 channel, AP-137 > 46	5.324e+003
2,6-dinitrotoluene-d3	F9:MRM of 2 channels, AP-185 > 155	1.049e+005
2,4-dinitrotoluene	F9:MRM of 2 channels, AP-182 > 152	5.339e+003

[illegible]

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412124a

Date: 15-Apr-2010

Time: 04:09:26

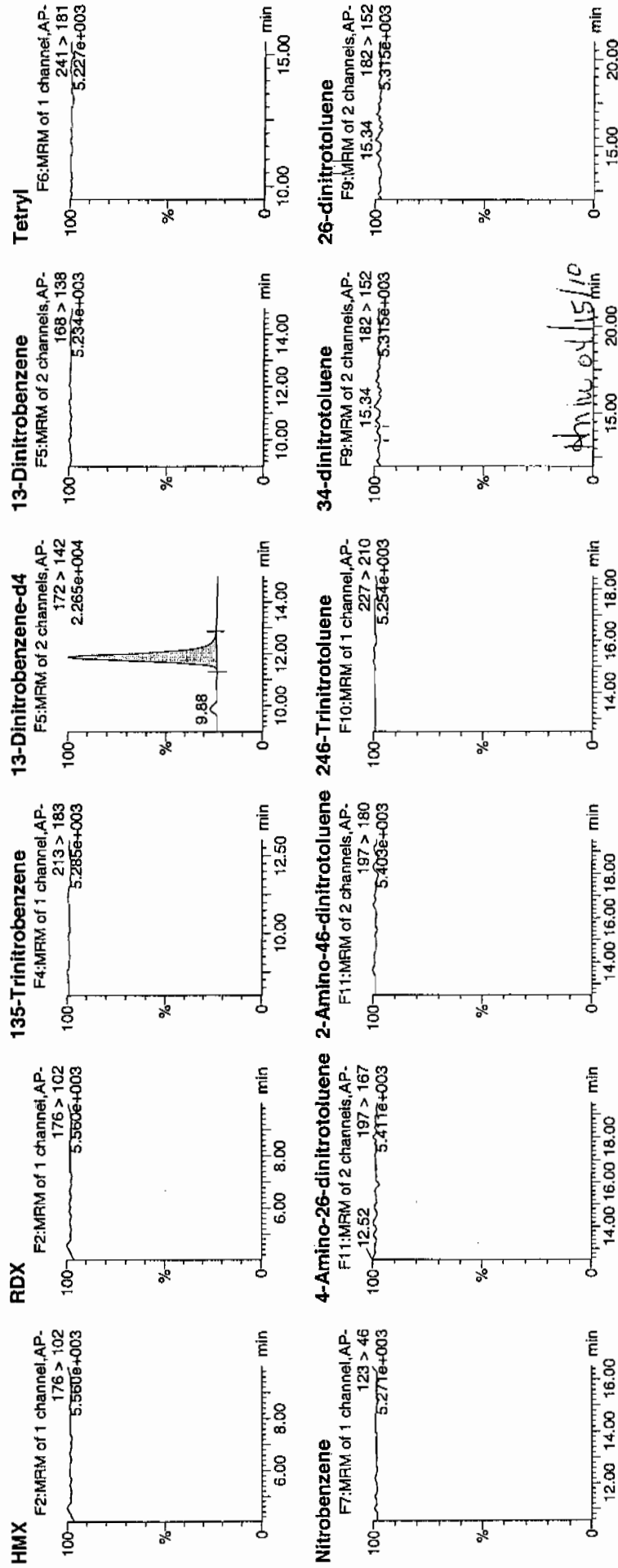
ID: XIBLK17

Vial: 1:1,A

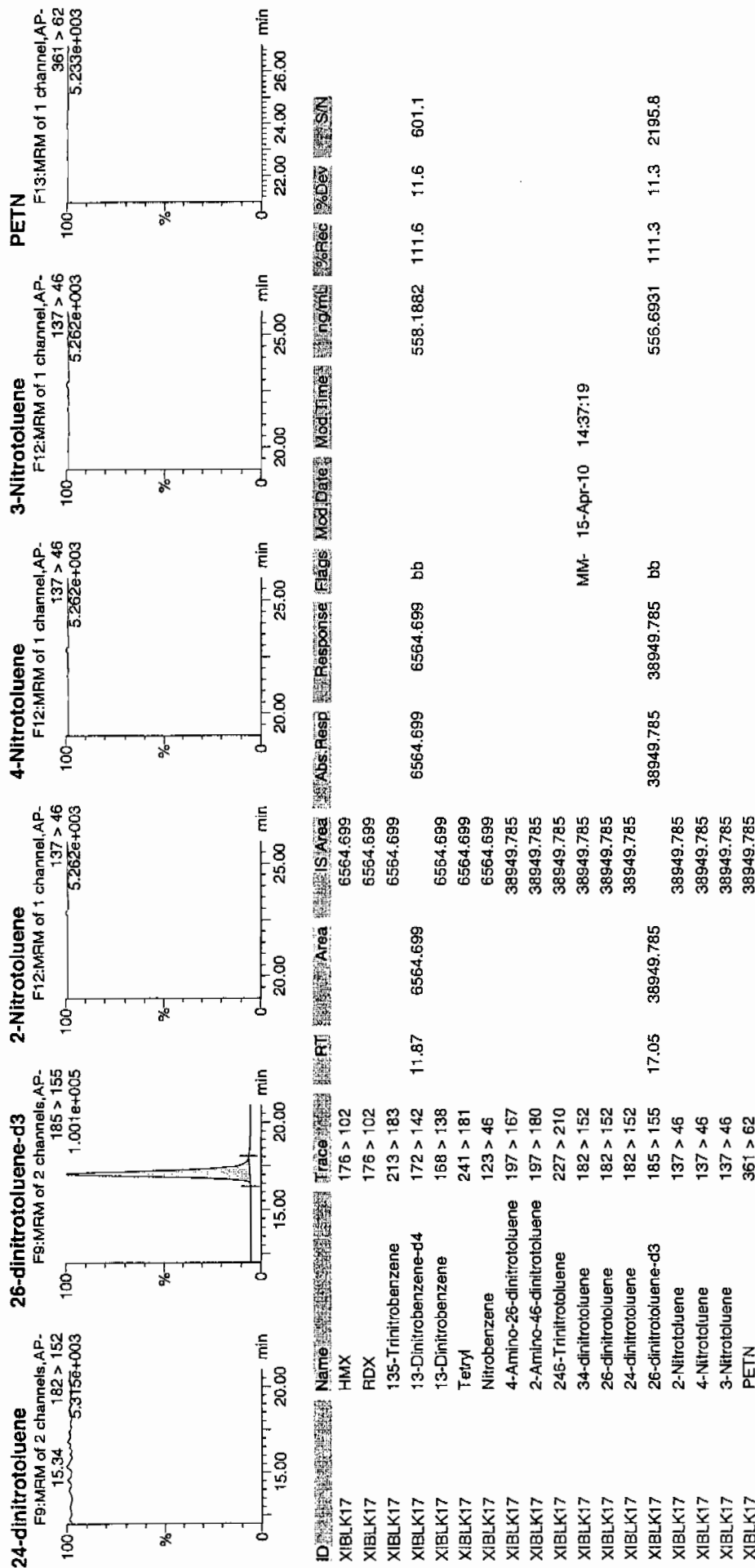
15/4/10
4/15/10

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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): 10-2150

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)
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
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	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\EXP0412136a

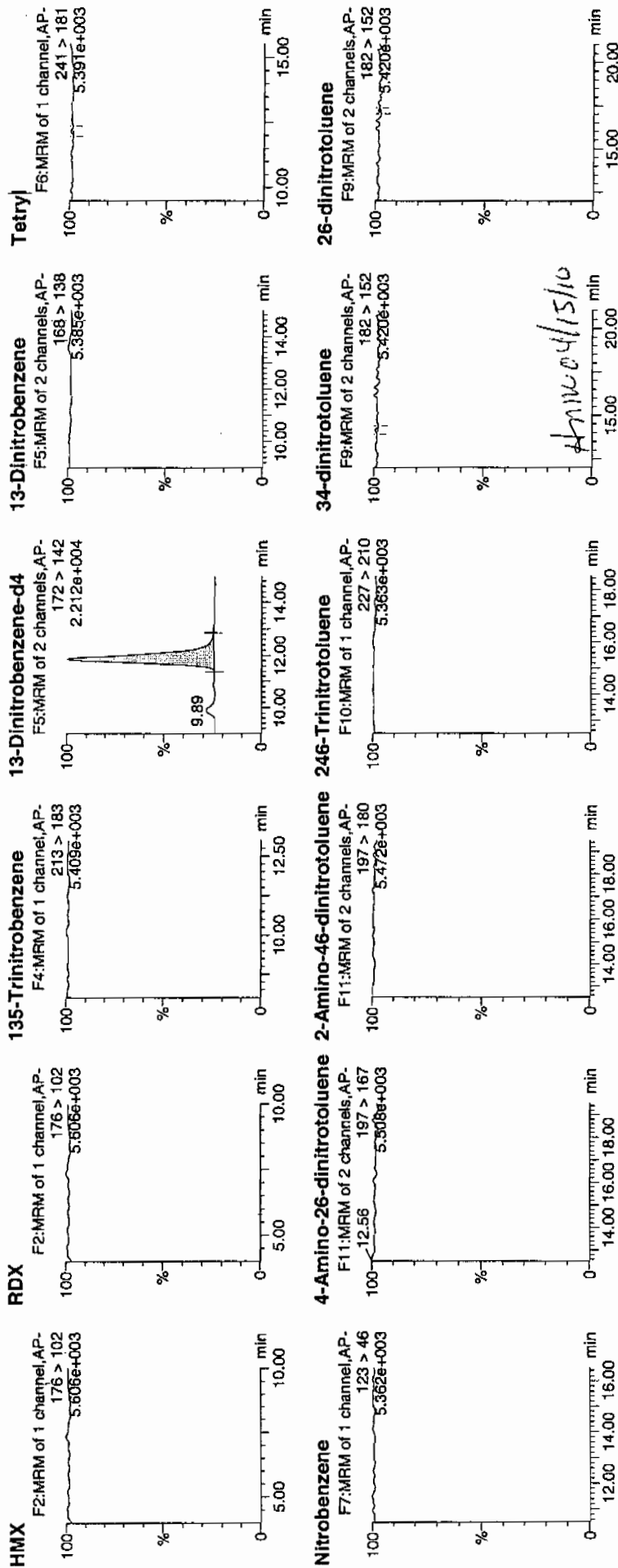
Date: 15-Apr-2010

Time: 10:03:32

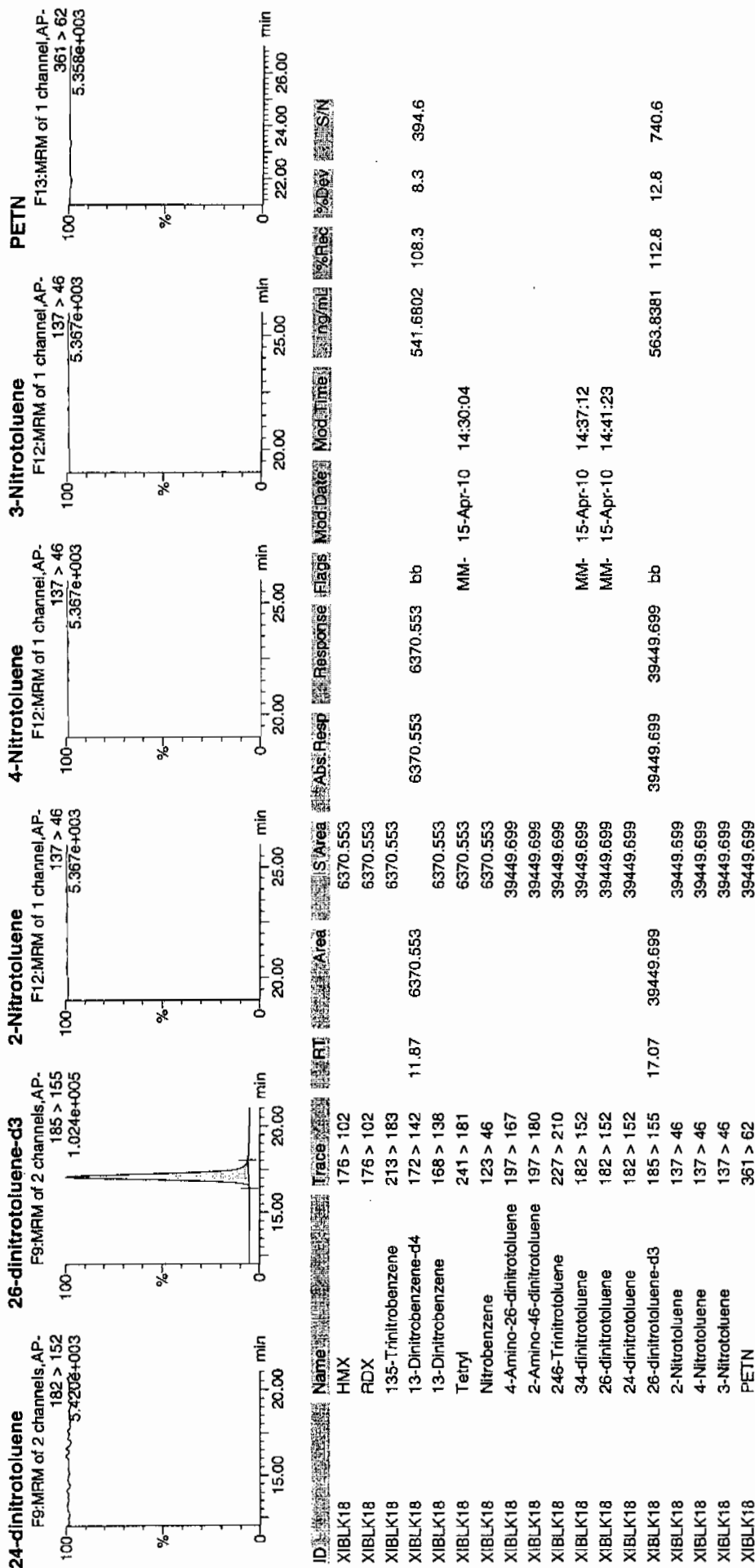
ID: XIBLK18

Vial: 1:1,A

100%
4/15/10



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): 10-2150

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

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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\EXP0412142a

Date: 15-Apr-2010

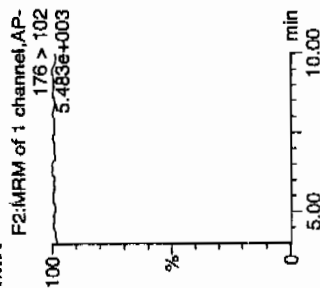
Time: 13:00:42

ID: XIBLK19

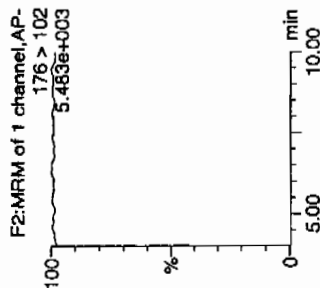
Vial: 1:1,A

10/1/10

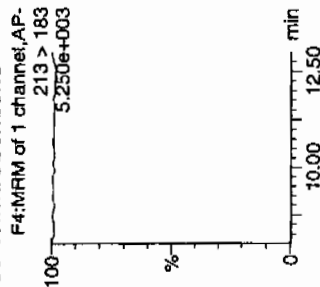
HMX



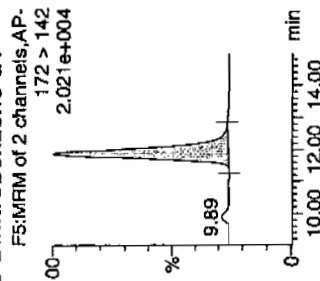
RDX



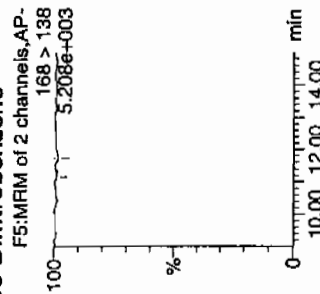
135-Trinitrobenzene



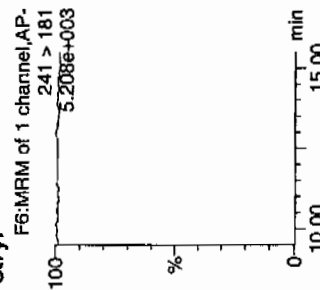
13-Dinitrobenzene-d4



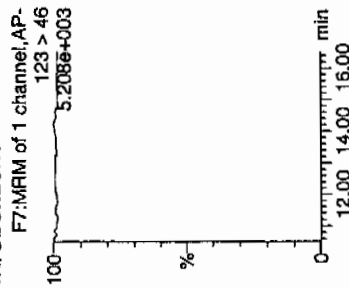
13-Dinitrobenzene



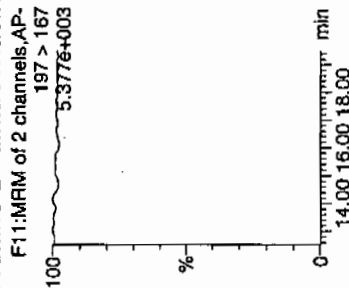
Tetryl



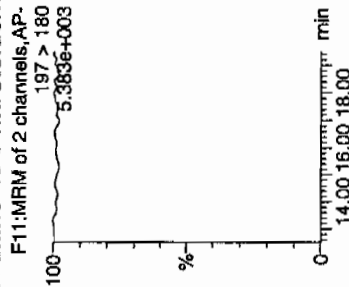
Nitrobenzene



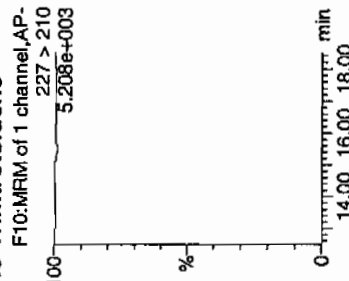
4-Amino-26-dinitrotoluene



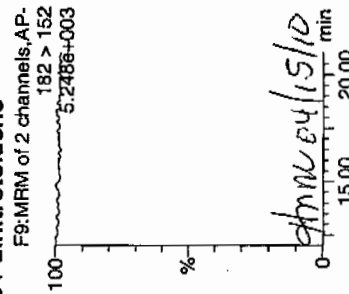
2-Amino-46-dinitrotoluene



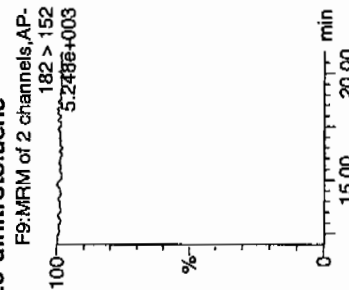
246-Trinitrotoluene



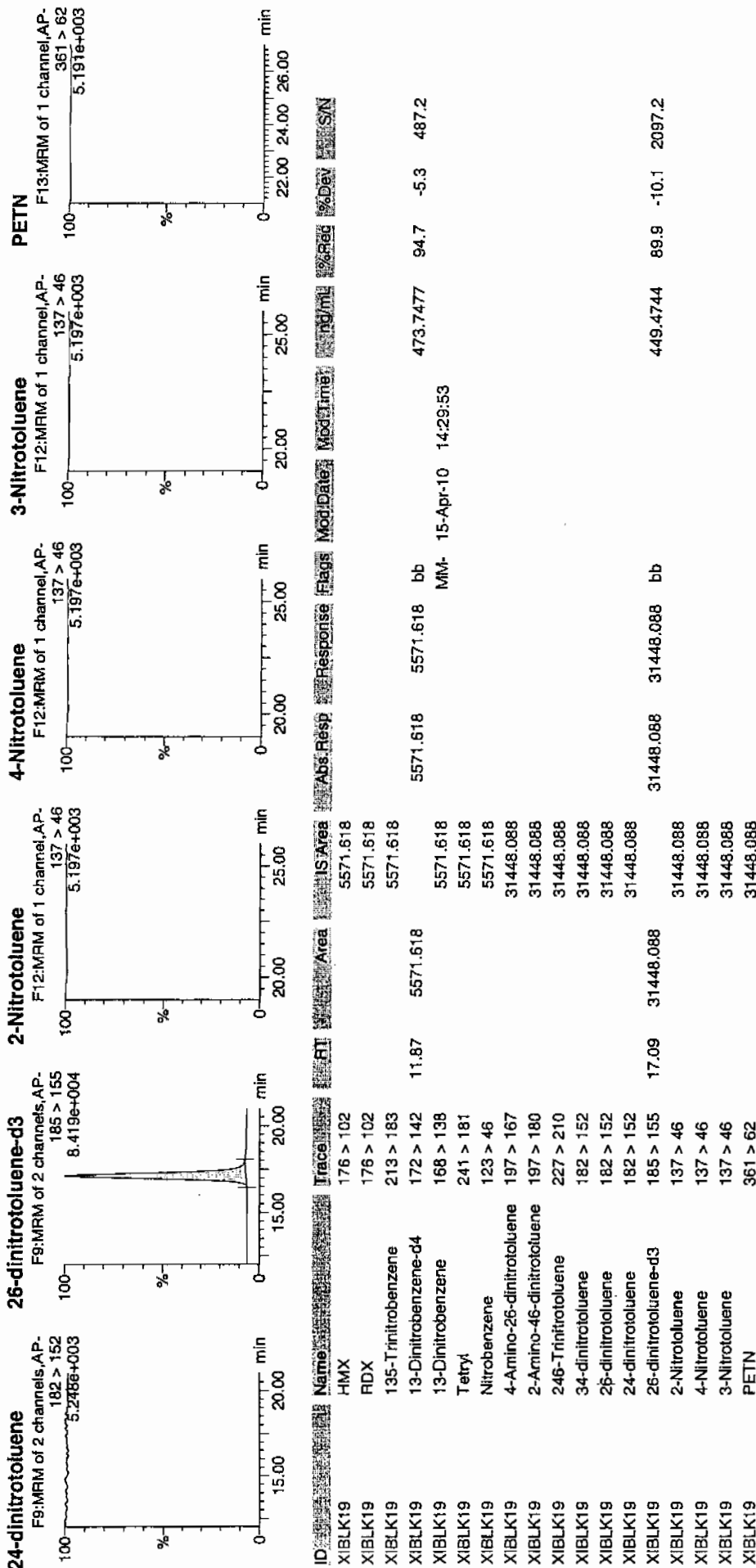
34-dinitrotoluene



26-dinitrotoluene



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): 10-2150

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)
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	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

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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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412155a

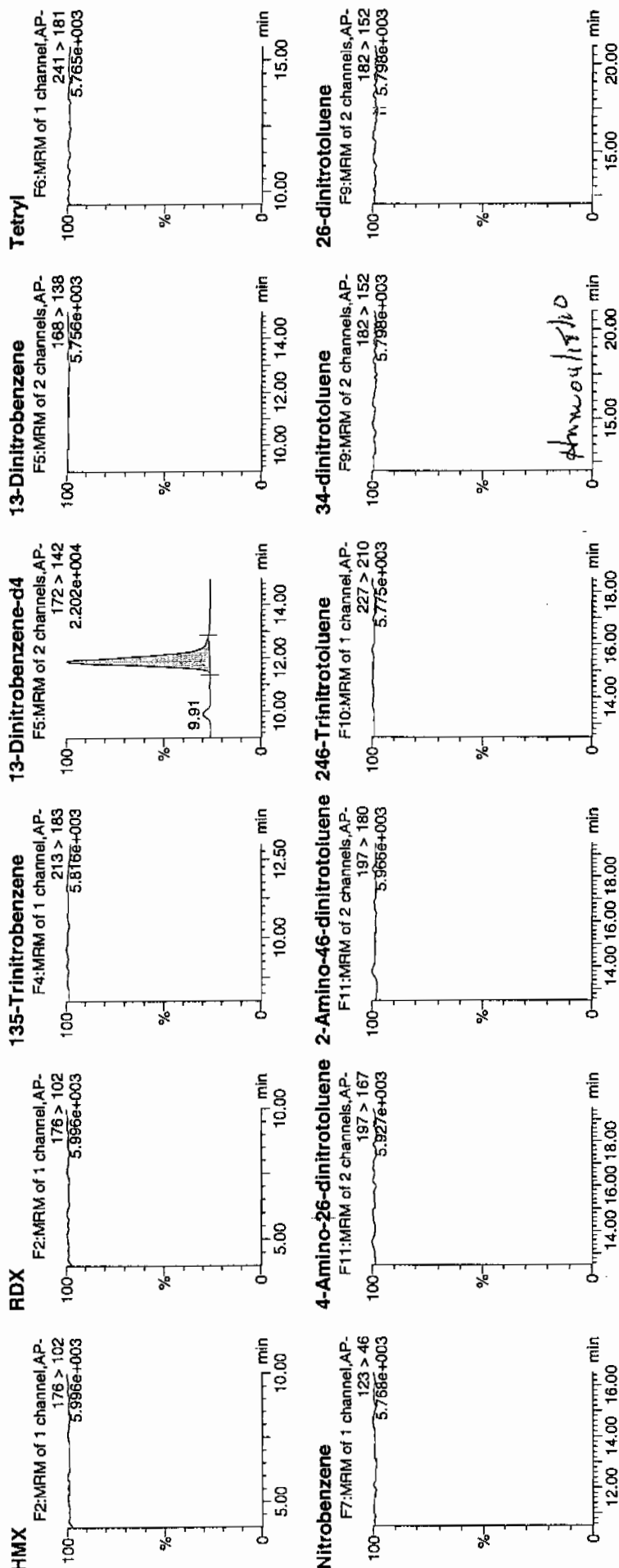
Date: 15-Apr-2010

Time: 19:24:15

ID: XIBLK20

Vial: 1:1,A

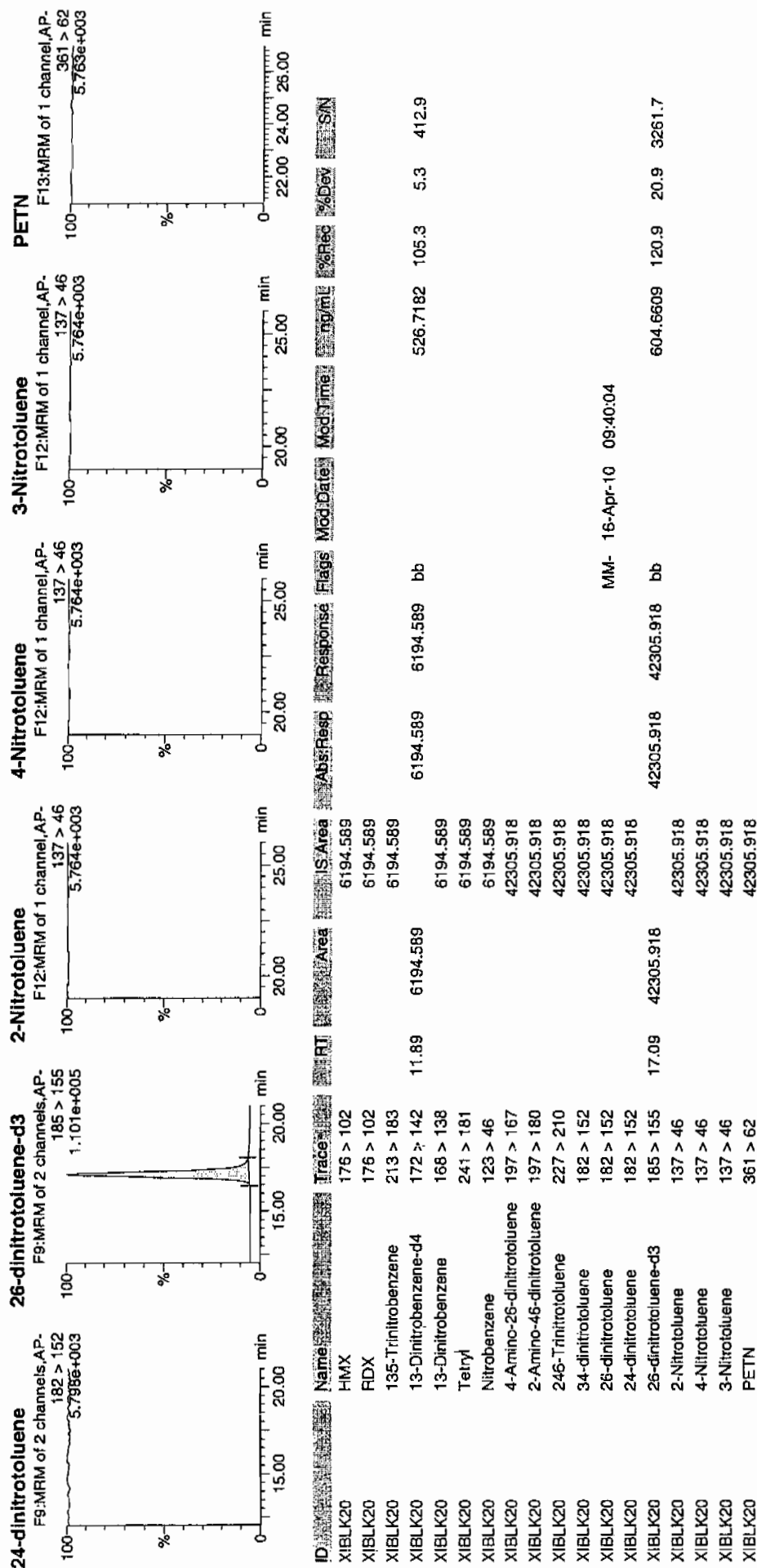
Handwritten: 4/16/10



Printed: Fri Apr 16 09:46:23 2010, Page 24 of 71

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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

Lab Code: GEL

Lab Sample ID: XIBLK21

Analysis Date: 15-APR-10 23:49

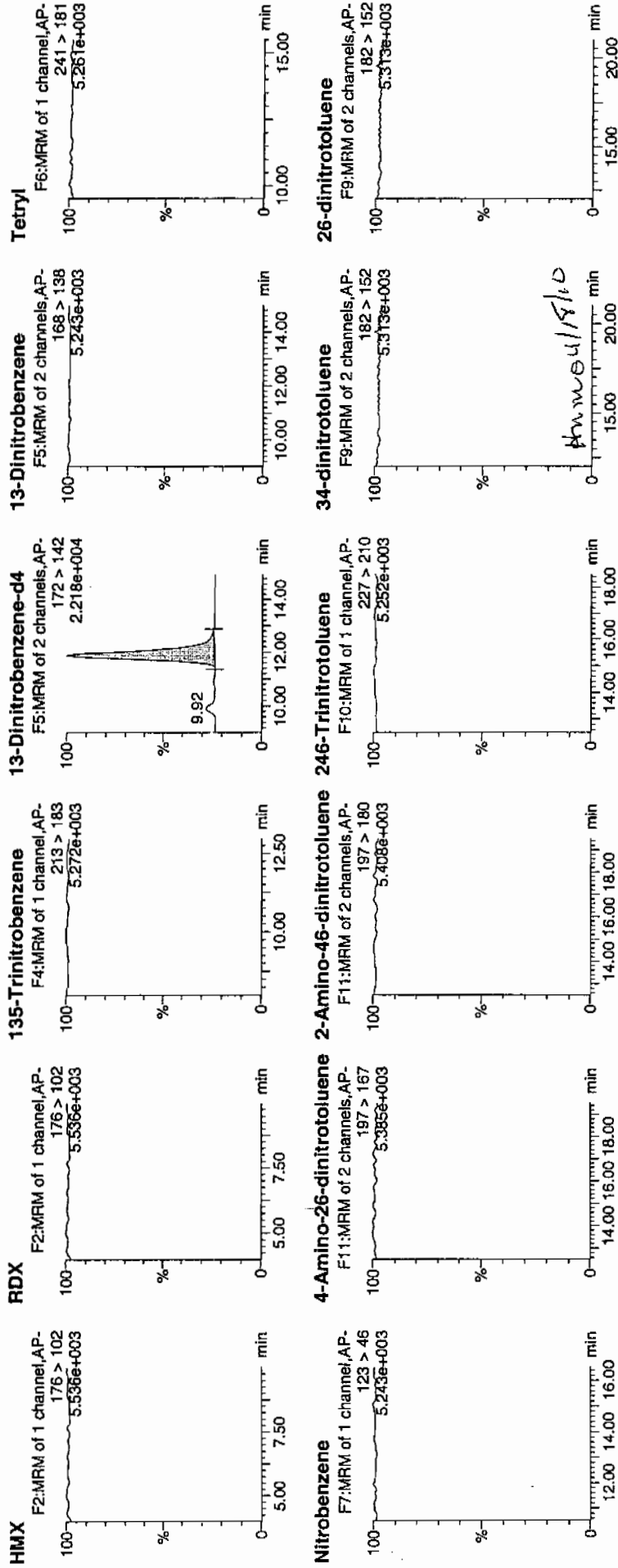
GEL Data File: EXP0412164a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

11/10/00

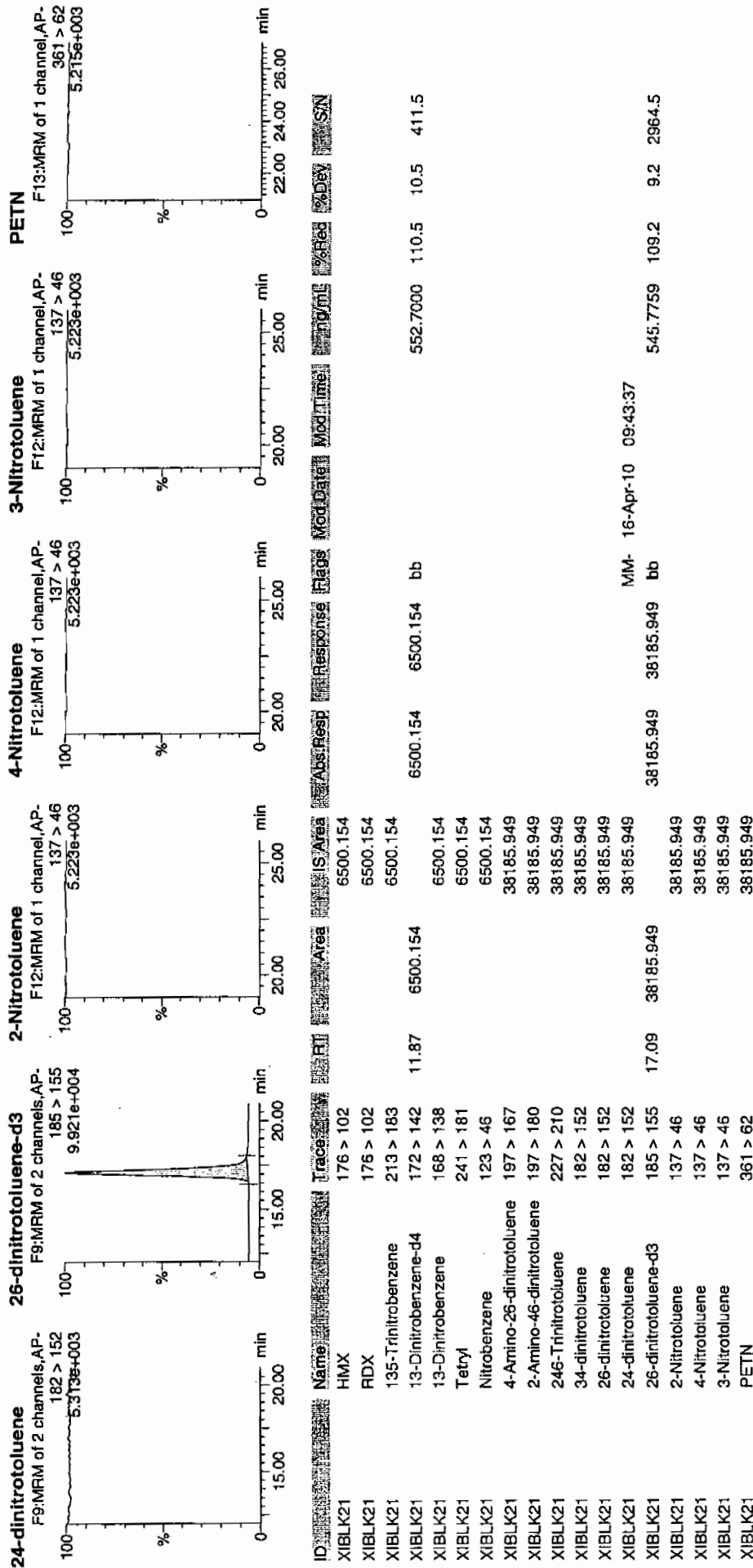


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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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): 10-2150

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412177a

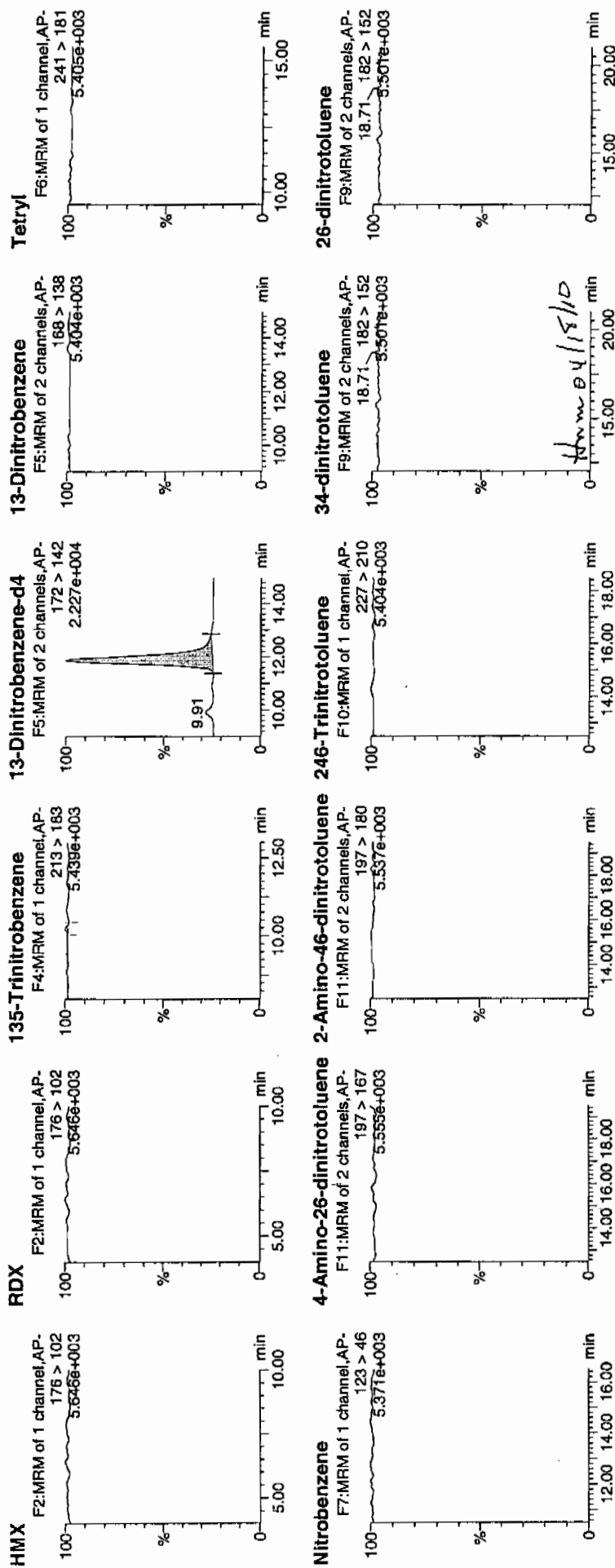
Date: 16-Apr-2010

Time: 06:13:19

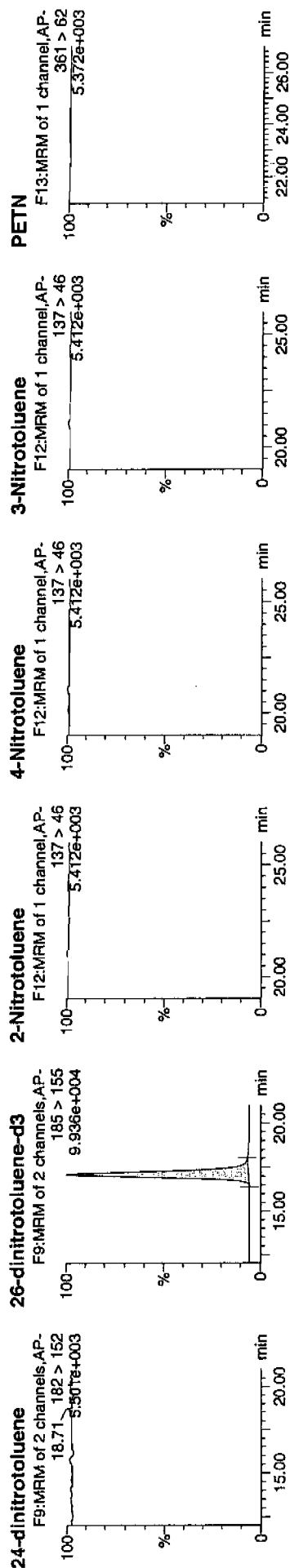
ID: XIBLK22

Vial: 1:1,A

11/16/10
MATT



Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



ID	Name	Trace	RT	Area	Area	StArea	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	normL	%Rec	%Dev	S/N
XIBLK22	HMx	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			6302.765	6302.765	MM-	16-Apr-10	09:36:23		107.2	7.2	702.1
XIBLK22	13-Dinitrobenzene	168 > 138				6302.765			bb			535.9162			
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			37915.594	37915.594	bb			541.9118	108.4	8.4	3115.1
XIBLK22	2-Nitrotoluene	137 > 46				37915.594									
XIBLK22	4-Nitrotoluene	137 > 46				37915.594									
XIBLK22	3-Nitrotoluene	137 > 46				37915.594									
XIBLK22	PIETN	361 > 62				37915.594									

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

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)
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	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

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Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qtd, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0412190a

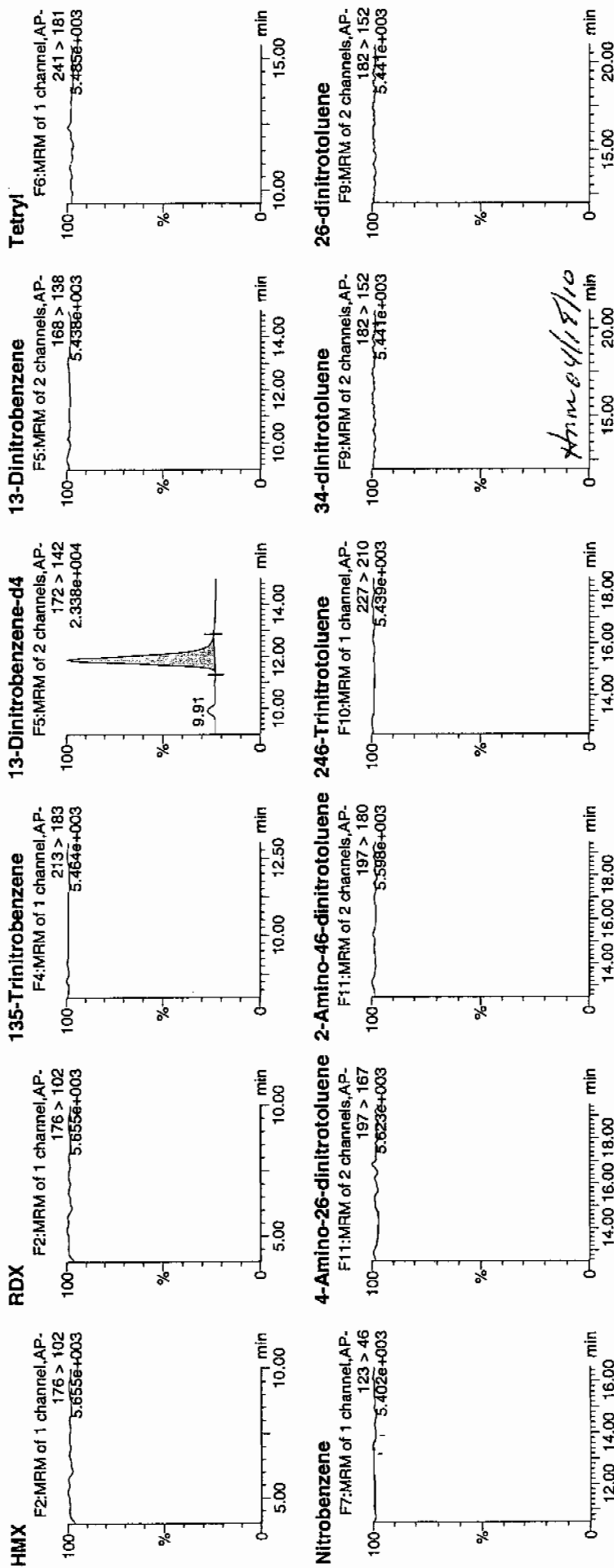
Date: 16-Apr-2010

Time: 12:36:57

ID: XIBLK23

Vial: 1:1,A

11/11/10
11/11/10

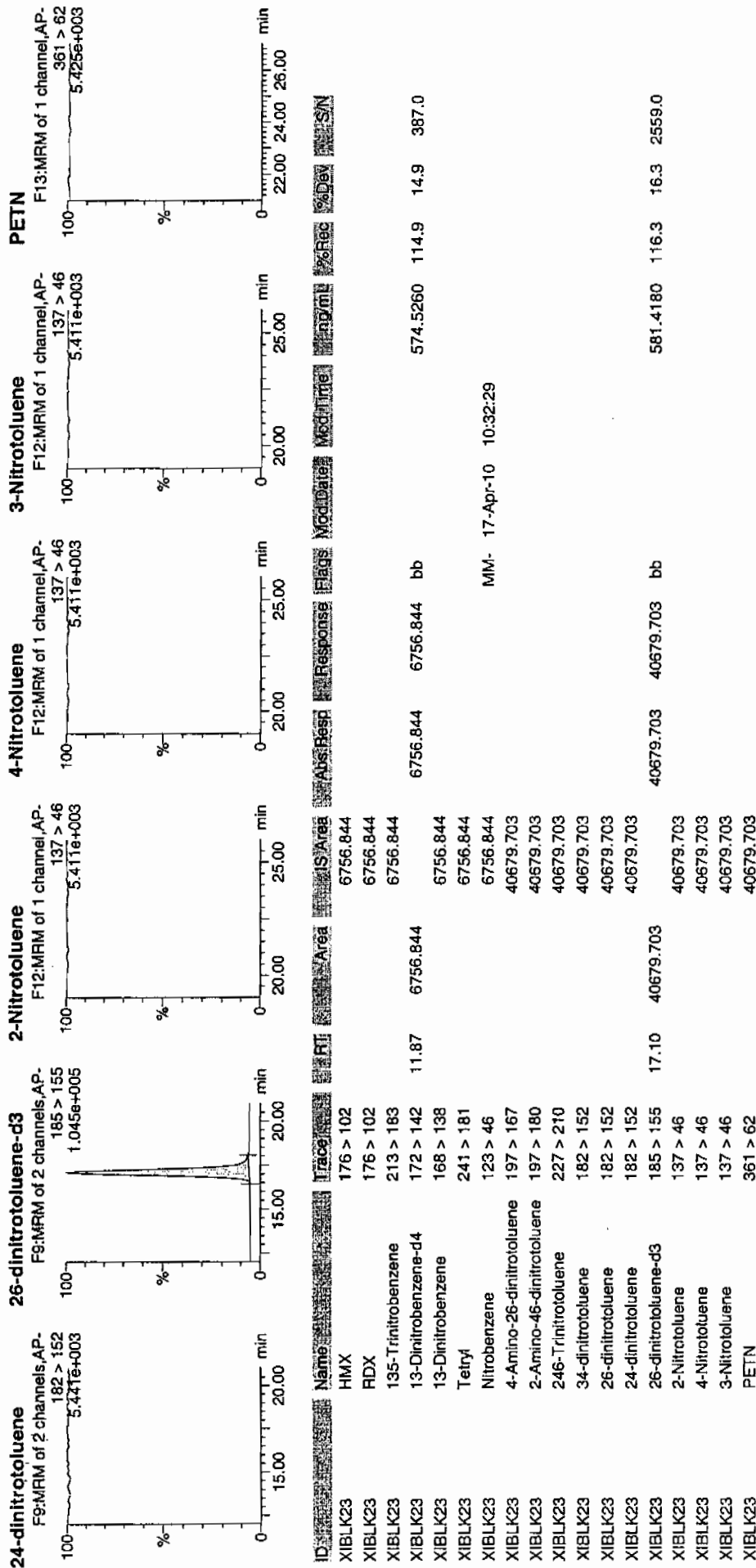


Quantify Sample Report

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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

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)
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
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412202a

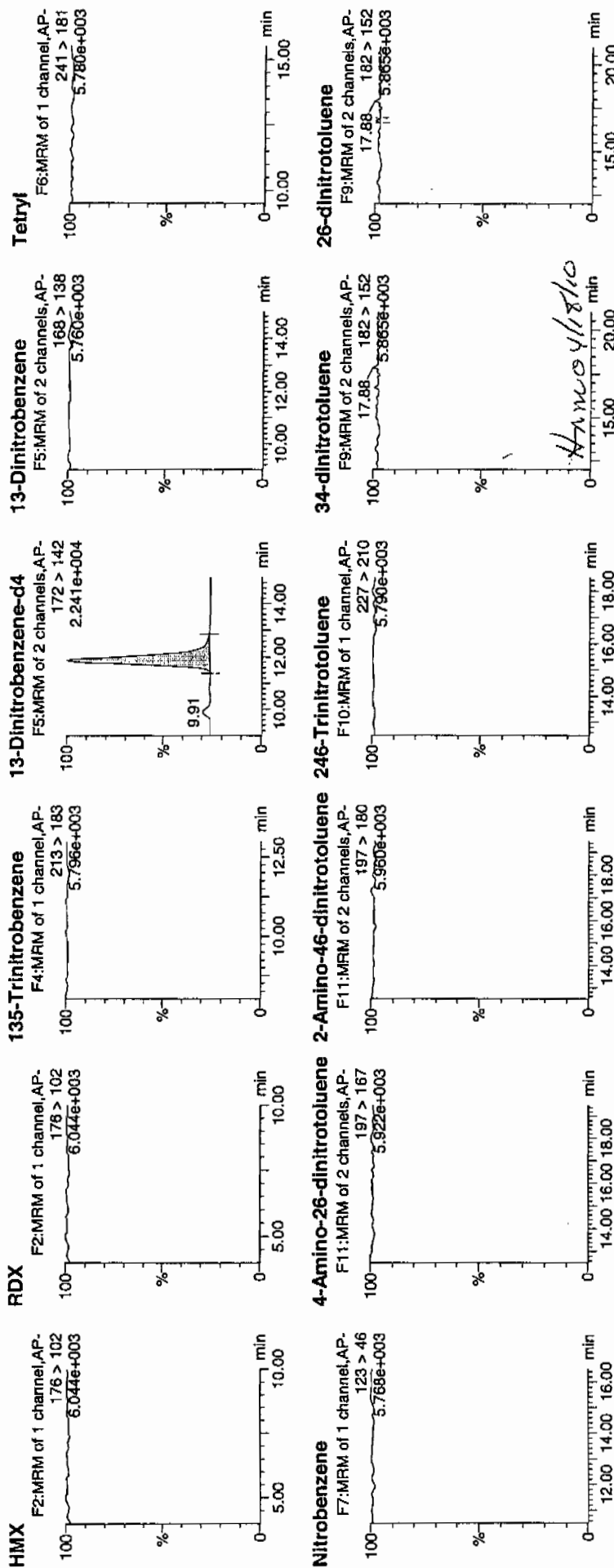
Date: 16-Apr-2010

Time: 18:31:06

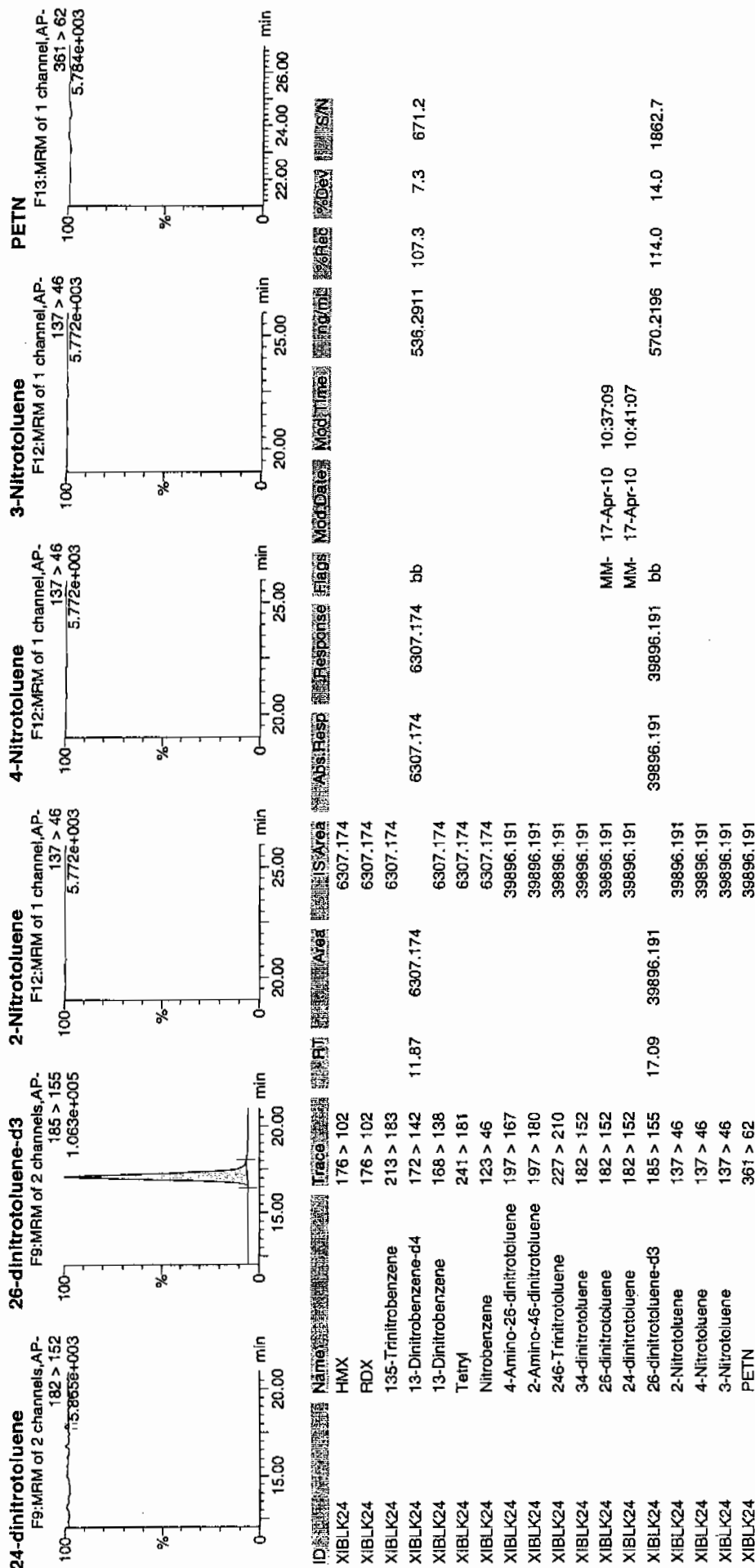
ID: XIBLK24

Vial: 1:1,A

10/1/10
4/1/10



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): 10-2150

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 05-APR-10 15:07

GEL Data File: EXS04050010.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	11.1
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Run 4/7/10

Sample Name: "XIBLK02" Sample ID: "TILER" File: "EXS04050010.wiff"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

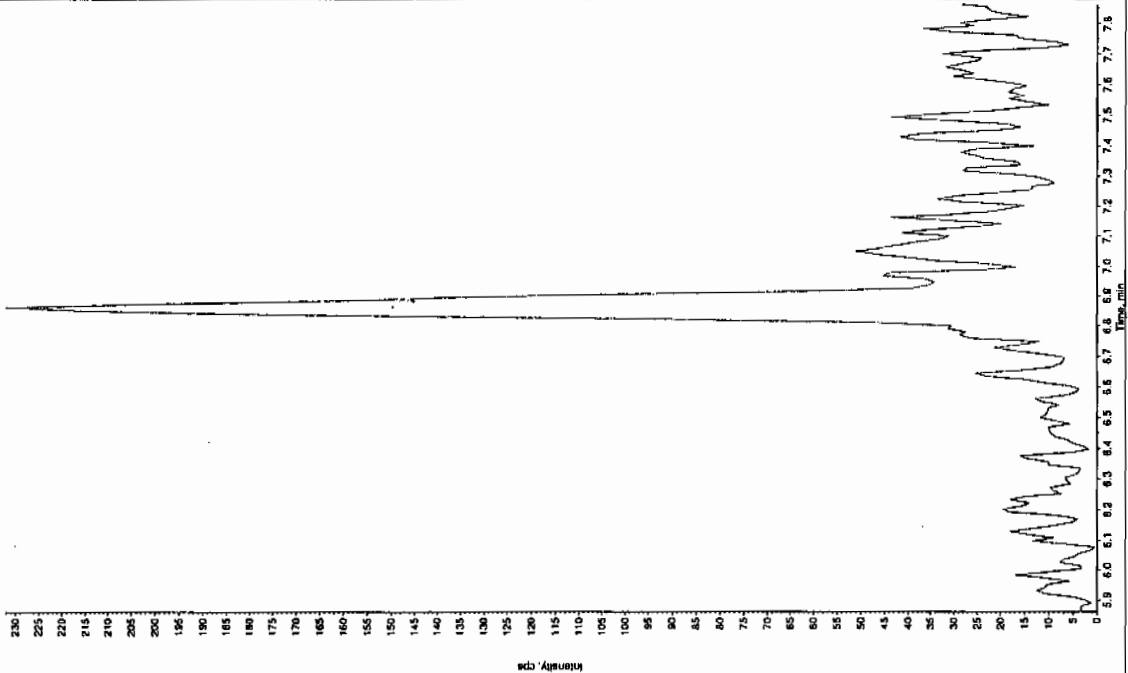
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 4/5/2010

Acq. Time: 3:07:10 PM

Modified: No



Sample Name: "XIBLK02" Sample ID: "TILER" File: "EXS04050010.wiff"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

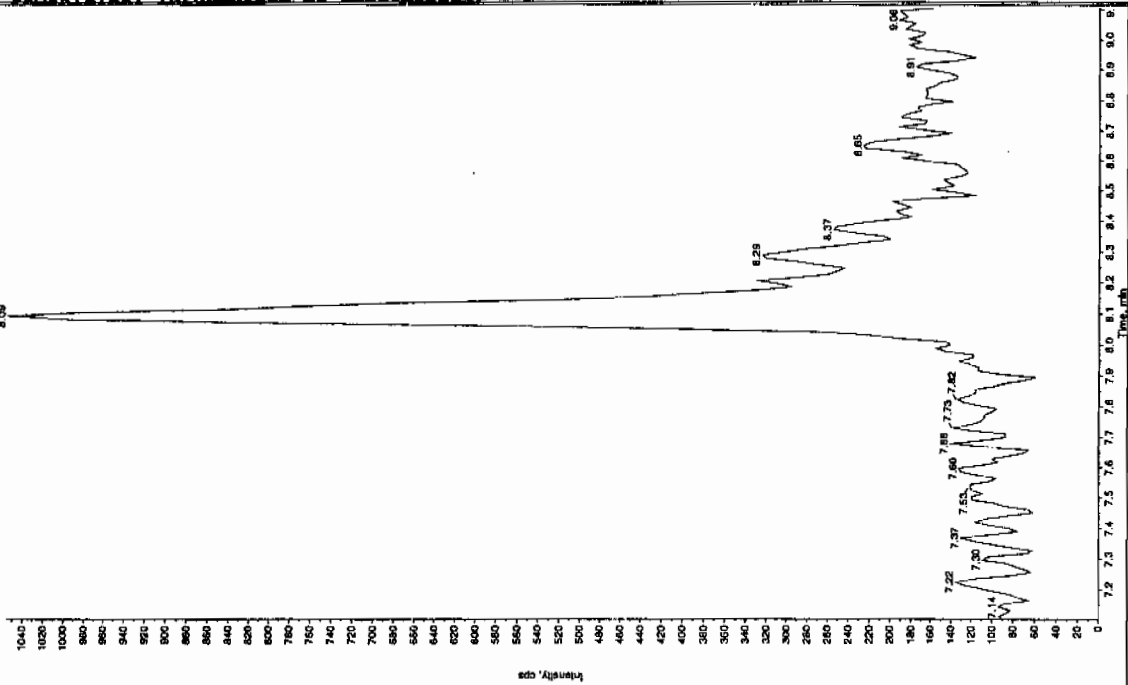
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 4/5/2010

Acq. Time: 3:07:10 PM

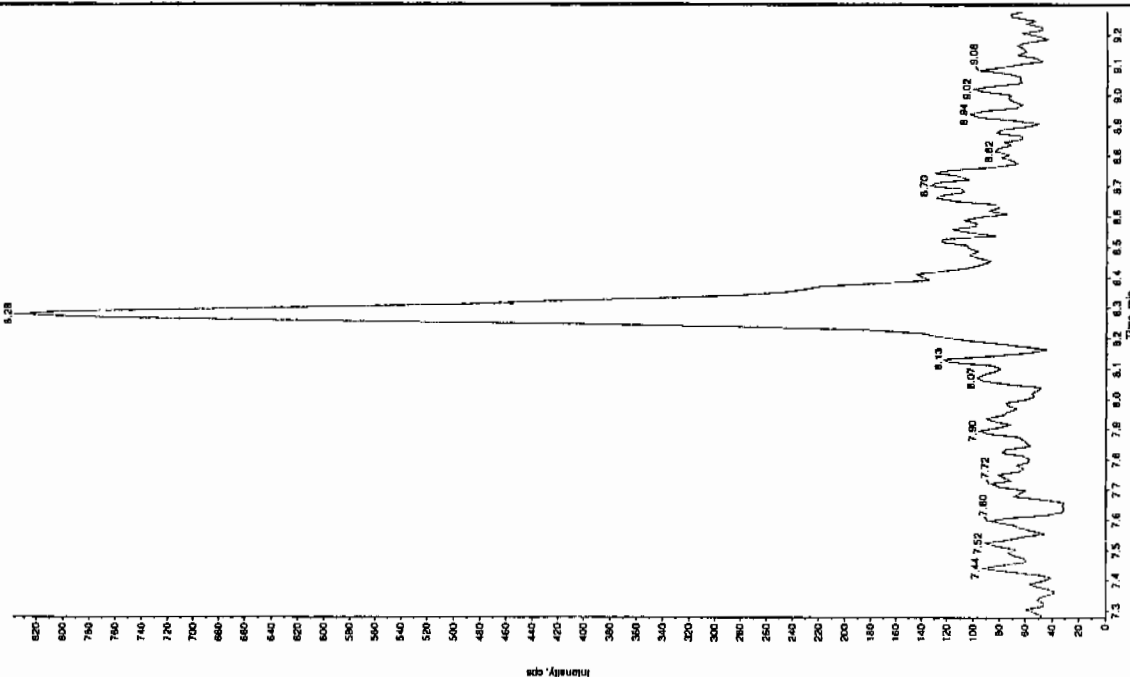
Modified: No



Run 04/08/10

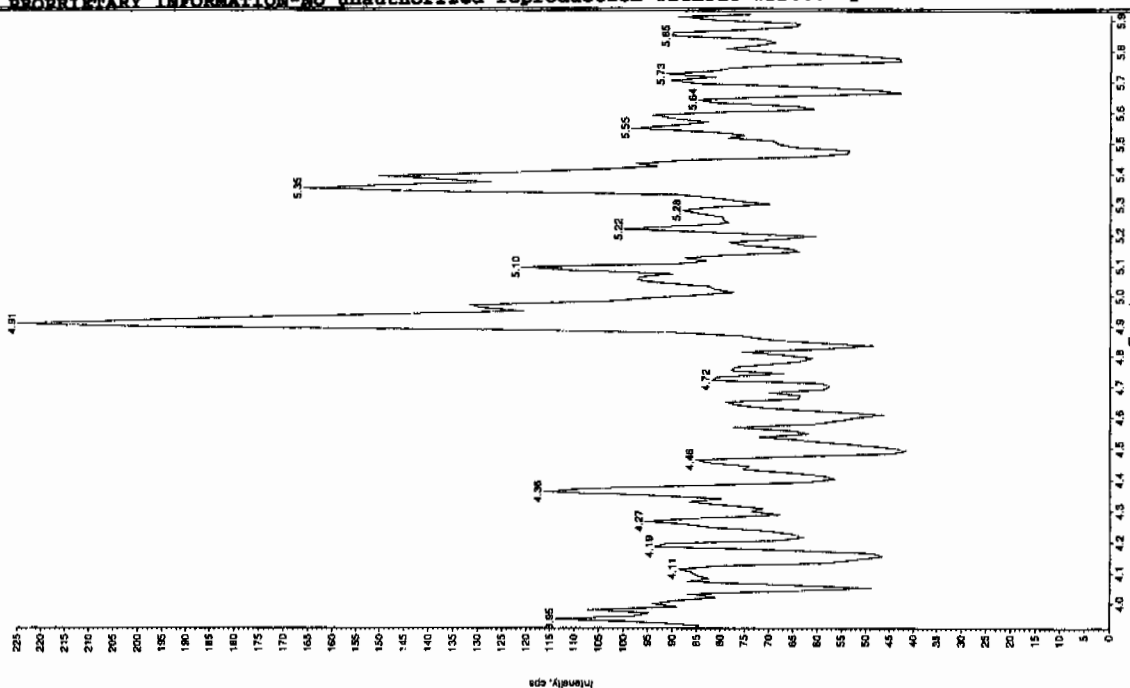
Sample Name: "XIBLK02" Sample ID: "JILER" File: "EXS04050010.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "162.1/151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 3:07:10 PM
 Modified: No



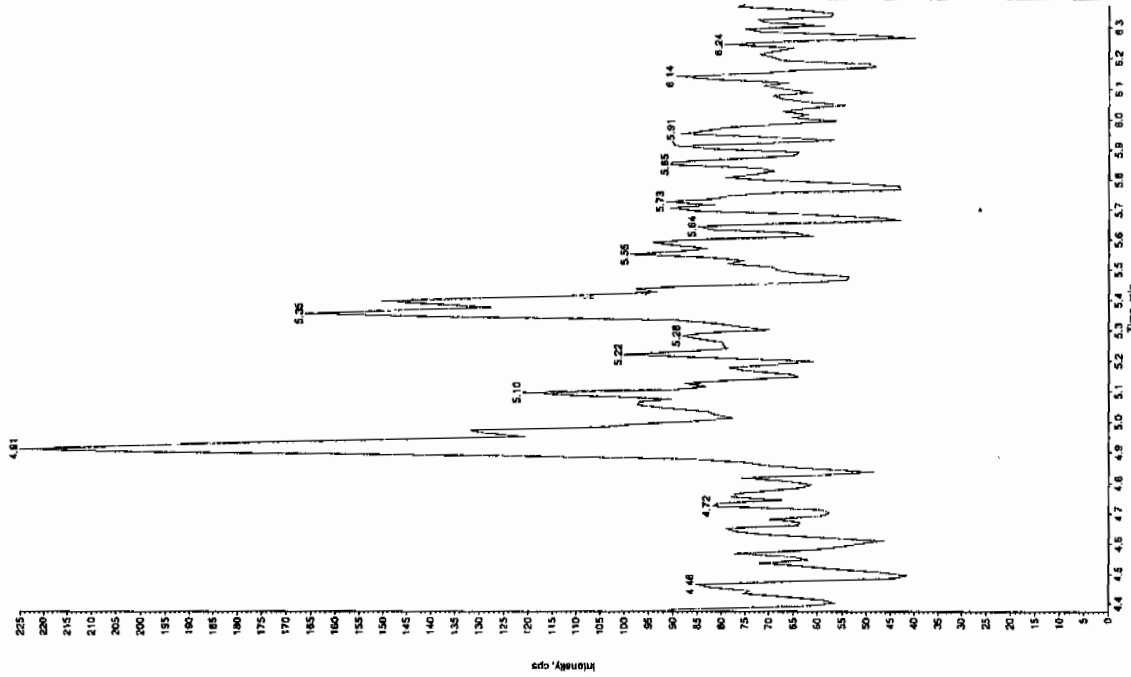
Sample Name: "XIBLK02" Sample ID: "JILER" File: "EXS04050010.wif"
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "166.0/165.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 3:07:10 PM
 Modified: No



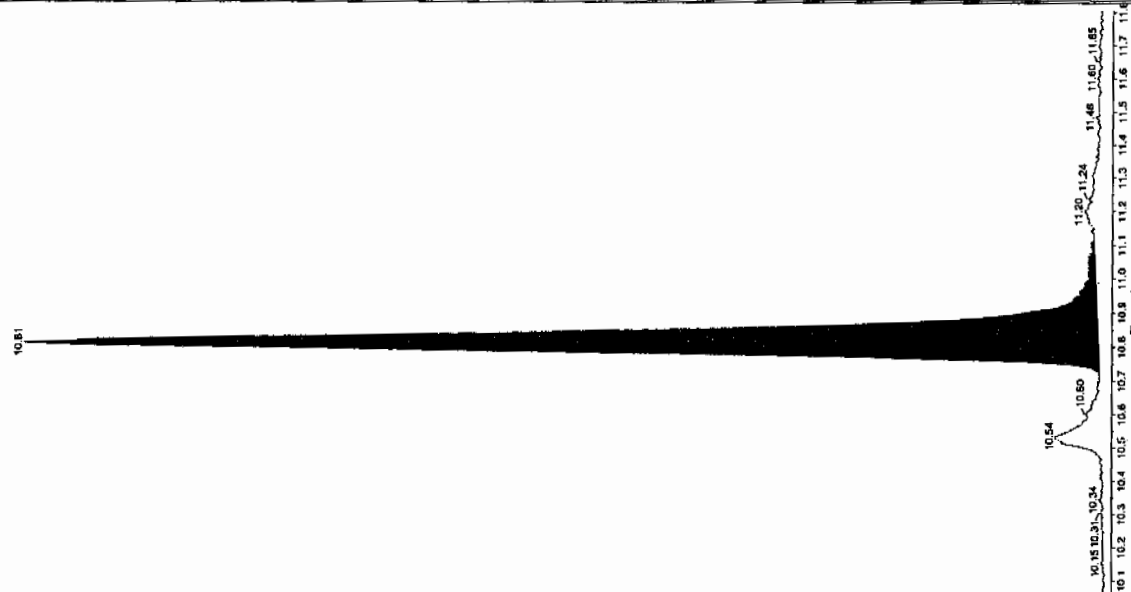
Sample Name: "XBLK02" Sample ID: "TILER" File: "EX04060010.will"
 Peak Name: "24-Dinitro-6-nitrobenzene" Mass(es): "166.0450 amu"
 Comment: "LCMSEXP_B" Association: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 4/5/2010
 Time: 3:07:10 PM
 Method: NO



Sample Name: "XBLK02" Sample ID: "TILER" File: "EX04060010.will"
 Peak Name: "trifluoromethyl phosphate" Mass(es): "369.1910 amu"
 Comment: "LCMSEXP_B" Association: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 11.1 ng/mL
 Date: 4/5/2010
 Time: 3:07:10 PM
 Method: NO



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 05-APR-10 15:38

GEL Data File: EXS04050012.wiff

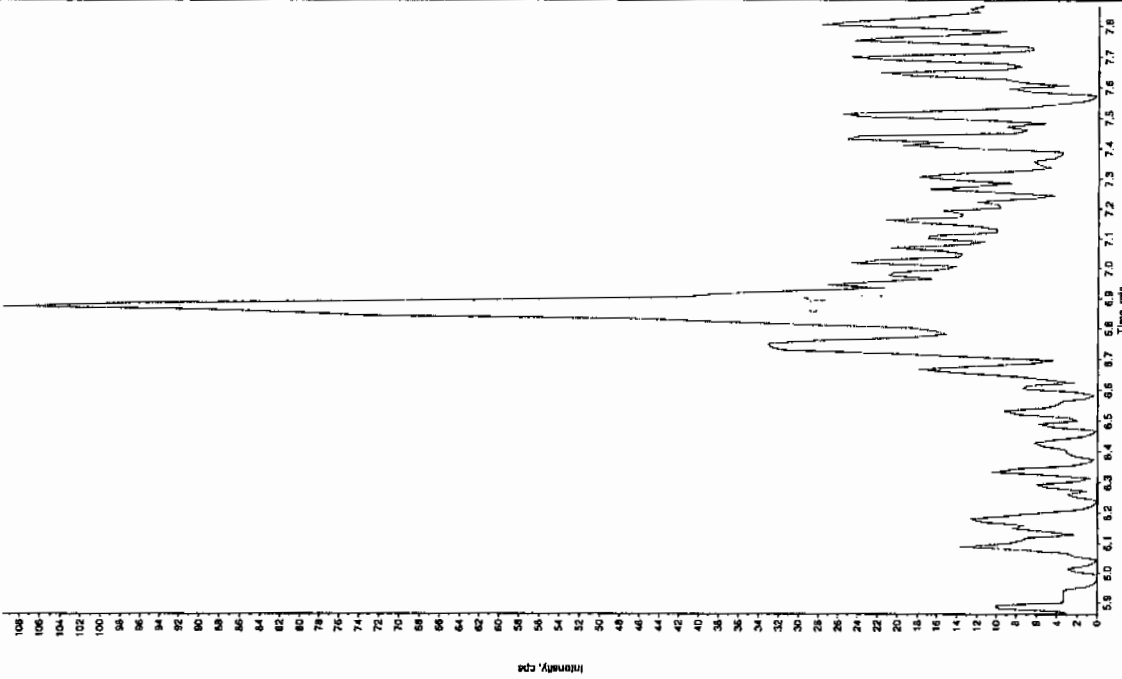
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.92
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

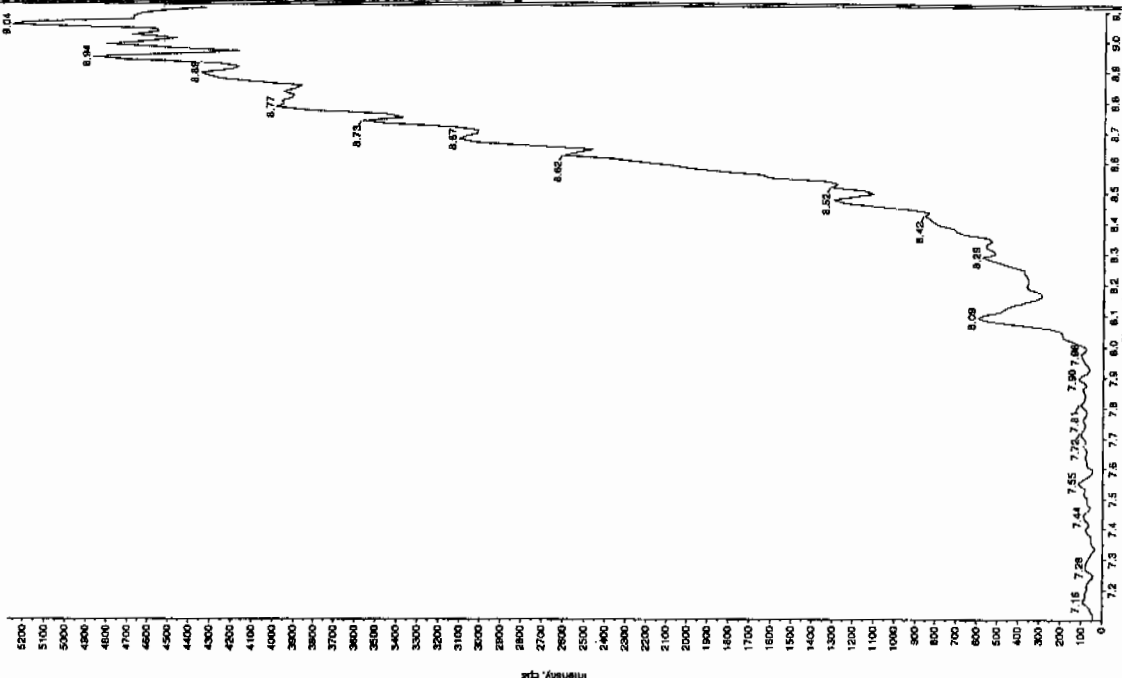
Sample Name: "XIBL003" Sample ID: "1111ER" File: "EXS04050012.will"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 3:38:35 PM
 Modified: No



Sample Name: "XIBL003" Sample ID: "1111ER" File: "EXS04050012.will"
 Peak Name: "35-Dinitrophenol" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

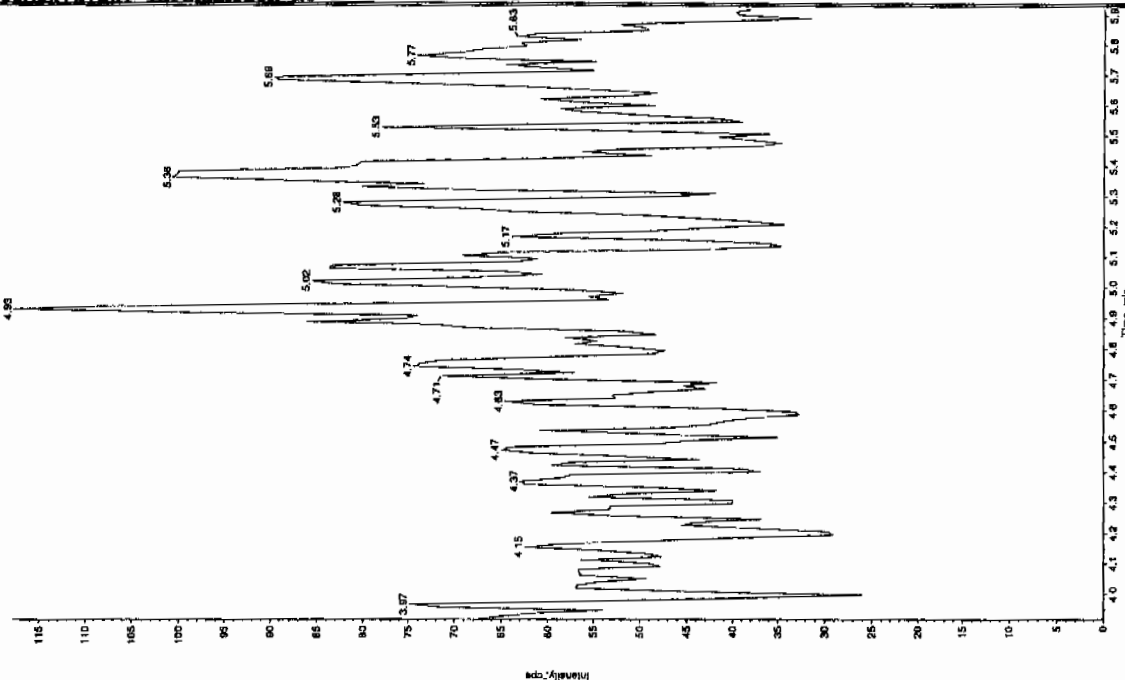
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 3:38:35 PM
 Modified: No



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

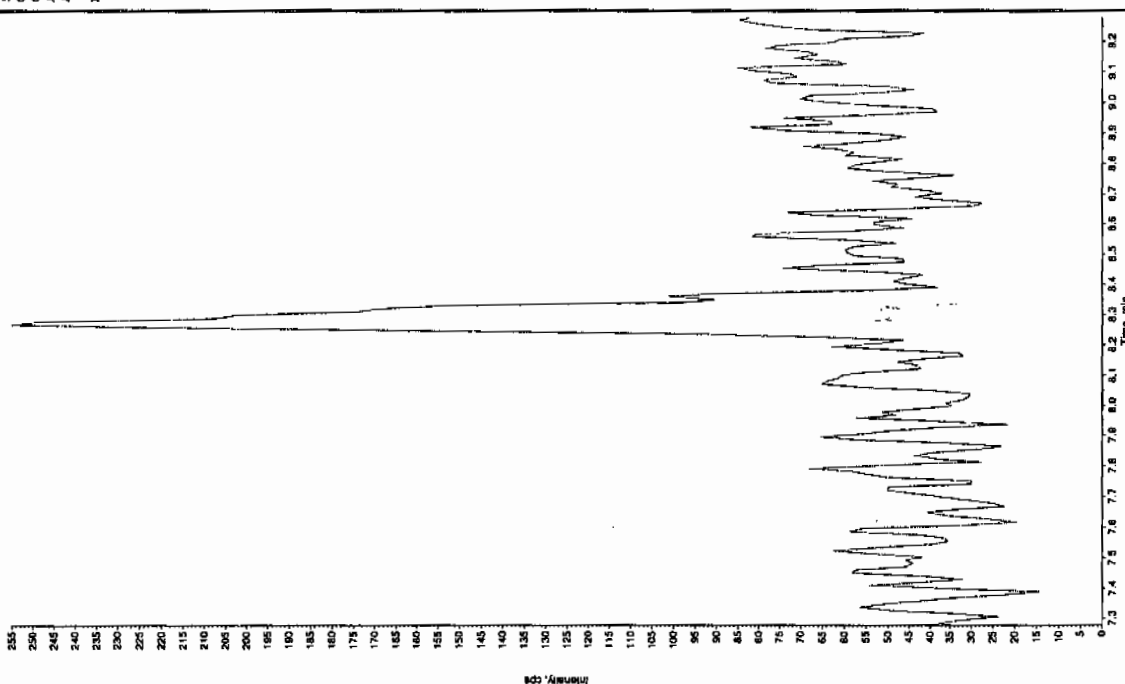
Sample Name: "XBLK03" Sample ID: "11 LER" File: "EXS04050012.wif"
 Peak Name: "26-Dimethoxy-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Concentrated Conc: 0.00
 Date: 4/5/2010
 Acq. Time: 3:38:35 PM
 Modified: No

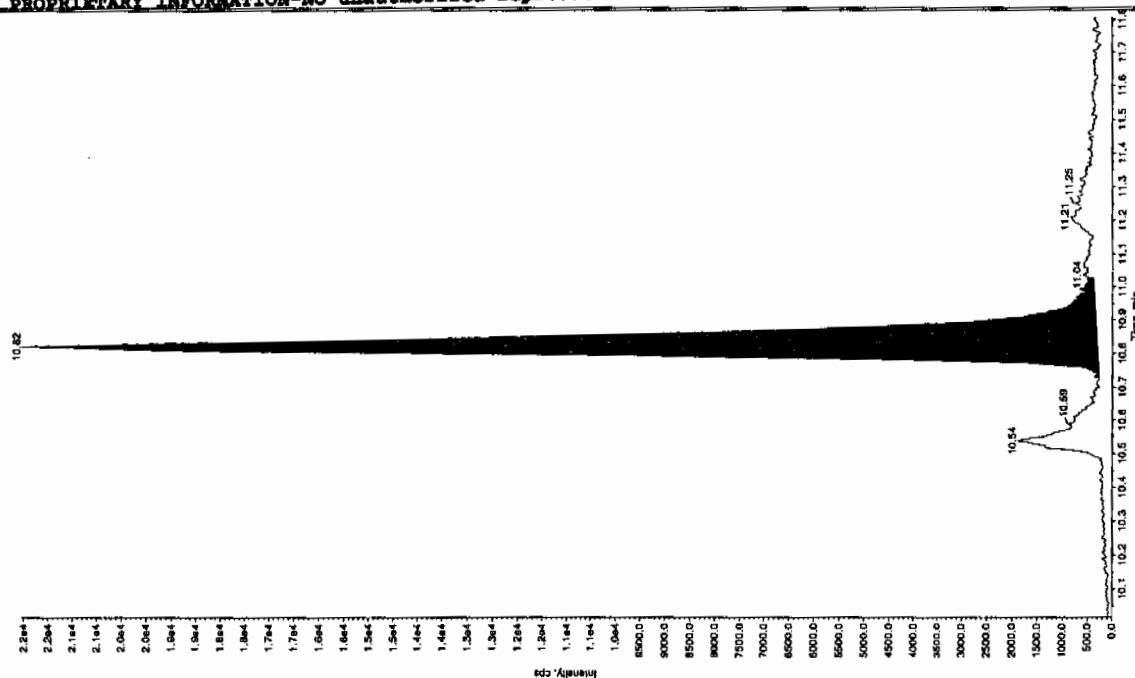


Sample Name: "XBLK03" Sample ID: "11 LER" File: "EXS04050012.wif"
 Peak Name: "34-Dimethoxy-4-nitrofluorene" Mass(es): "182.0751.8 amu"
 Comment: "LCMSEXP_B" Annotation: ""

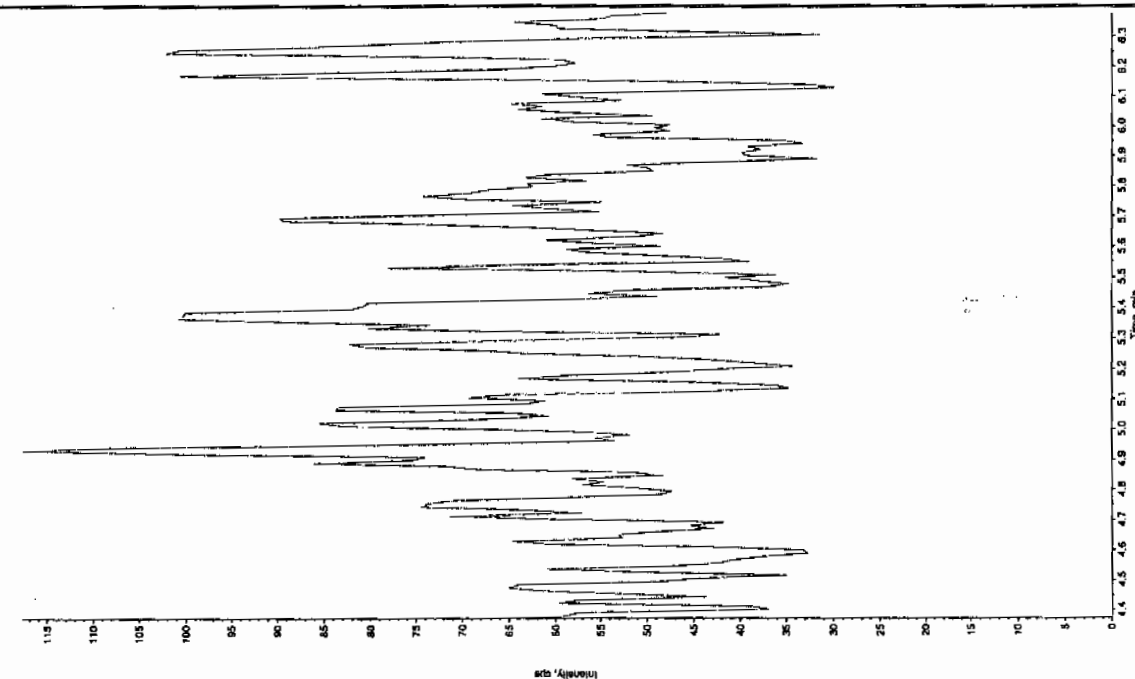
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Concentrated Conc: 0.00
 Date: 4/5/2010
 Acq. Time: 3:38:35 PM
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "XIBLK03" Sample ID: "11ER" File: "EXSD4050012.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
Comment: "LCMSEXP_B" Annotation: ""



Sample Index:	1
Sample type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00
1- Date:	4/5/2010
1- Time:	3:38:35 PM
Calculated:	No

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 05-APR-10 19:02

GEL Data File: EXS04050025.wiff

Instrument ID: LCMSMS

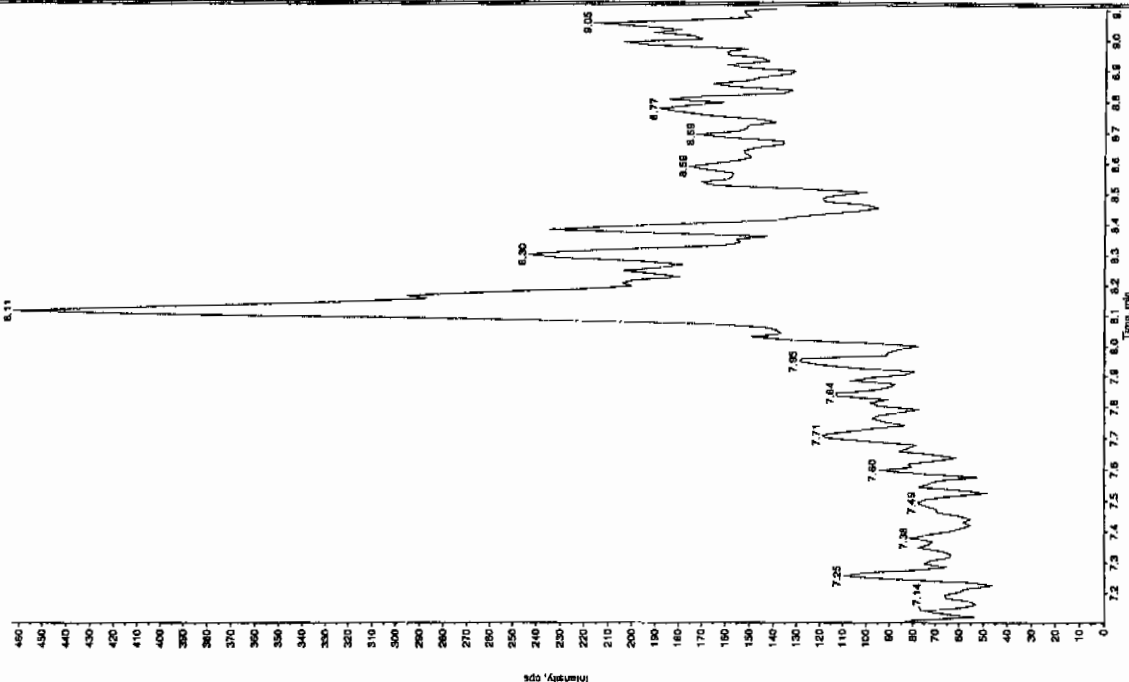
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L.)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.08
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Dec 4/10

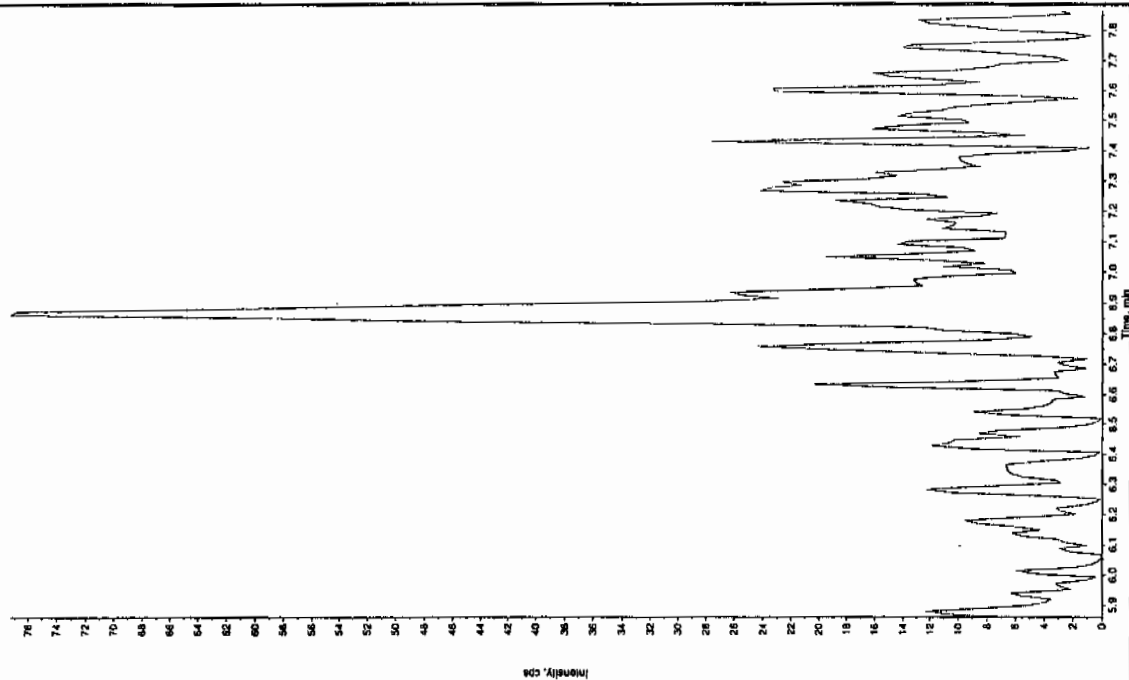
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Sample Name: "XIBL004" Sample ID: "111ER" File: "EXS04050025.wif"
Peak Name: "35-Chloroaniline" Mass(es): "182.0460 amu"
Comment: "LONEXP-B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: M/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/5/2010
Acq. Time: 7:02:45 PM
Modified: No



Ann 04/08/10

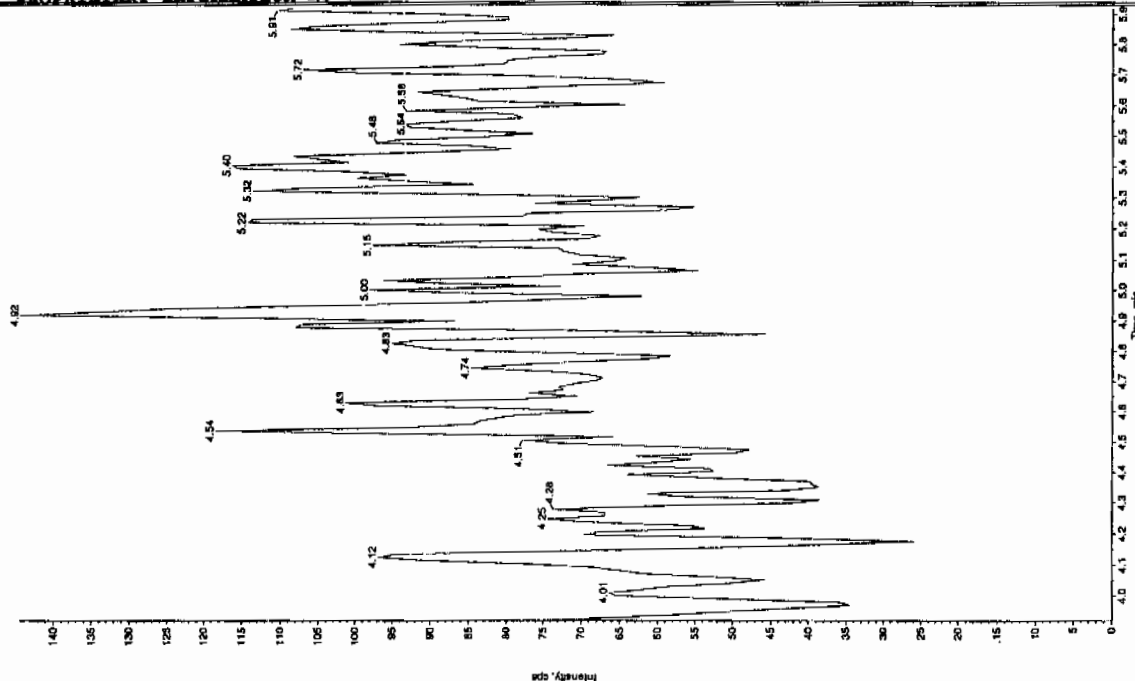
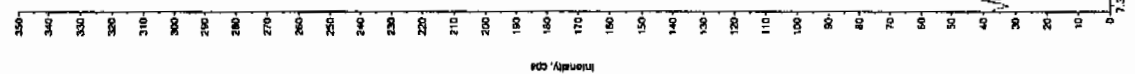
Sample Name: "XIBL004" Sample ID: "111ER" File: "EXS04050025.wif"
Peak Name: "TATB" Mass(es): "257.22049 amu"
Comment: "LONEXP-B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: M/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/5/2010
Acq. Time: 7:02:45 PM
Modified: No

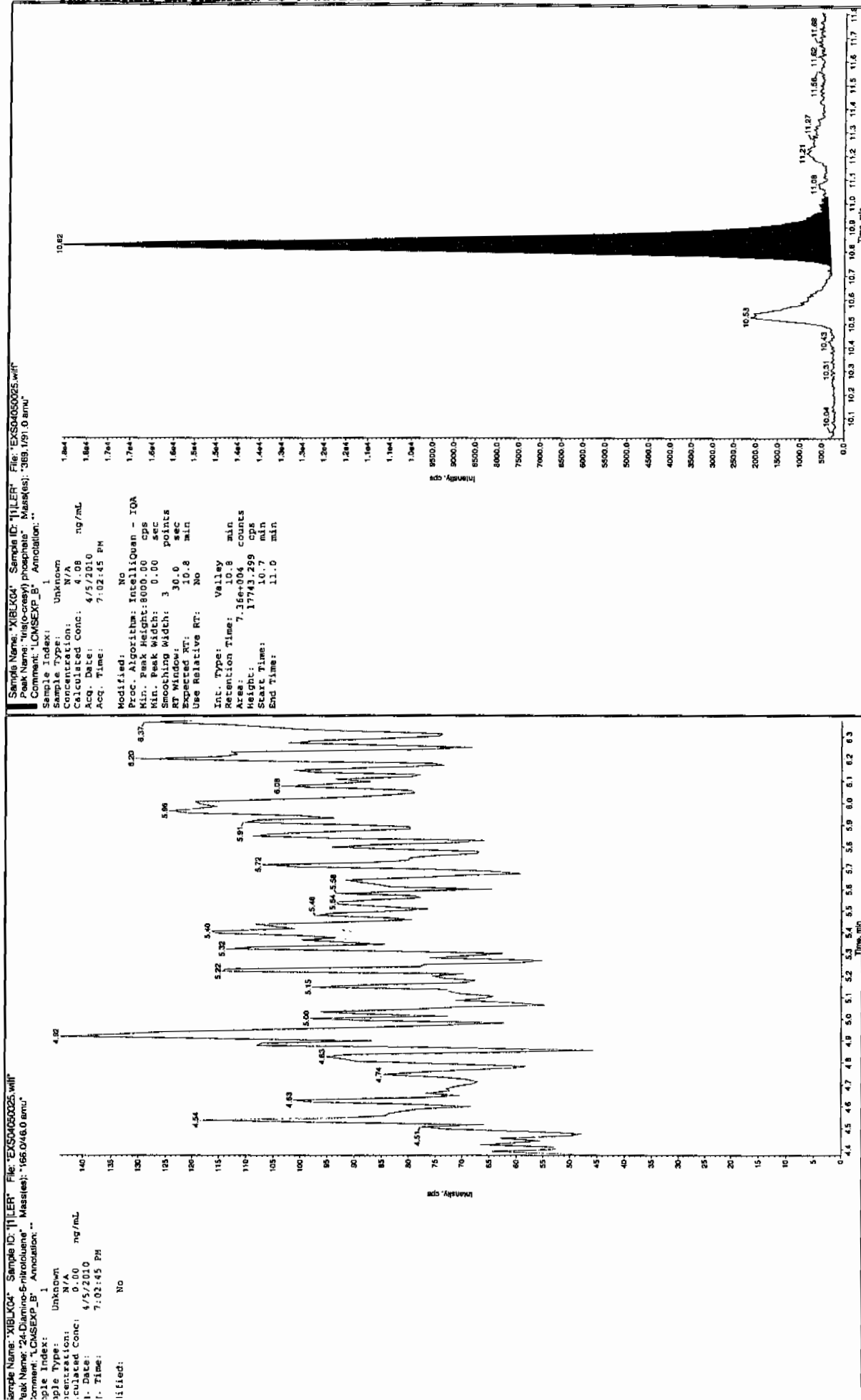


IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK04" Sample ID: "11111" File: "EXS04050025.wif"
 Peak Name: "34-Diethylamine" Mass(es): "182.1715.8 amu"
 Comment: "LCMS-EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 7:02:45 PM
 Modified: No





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 05-APR-10 22:27

GEL Data File: EXS04050038.wiff

Instrument ID: LCMSMS

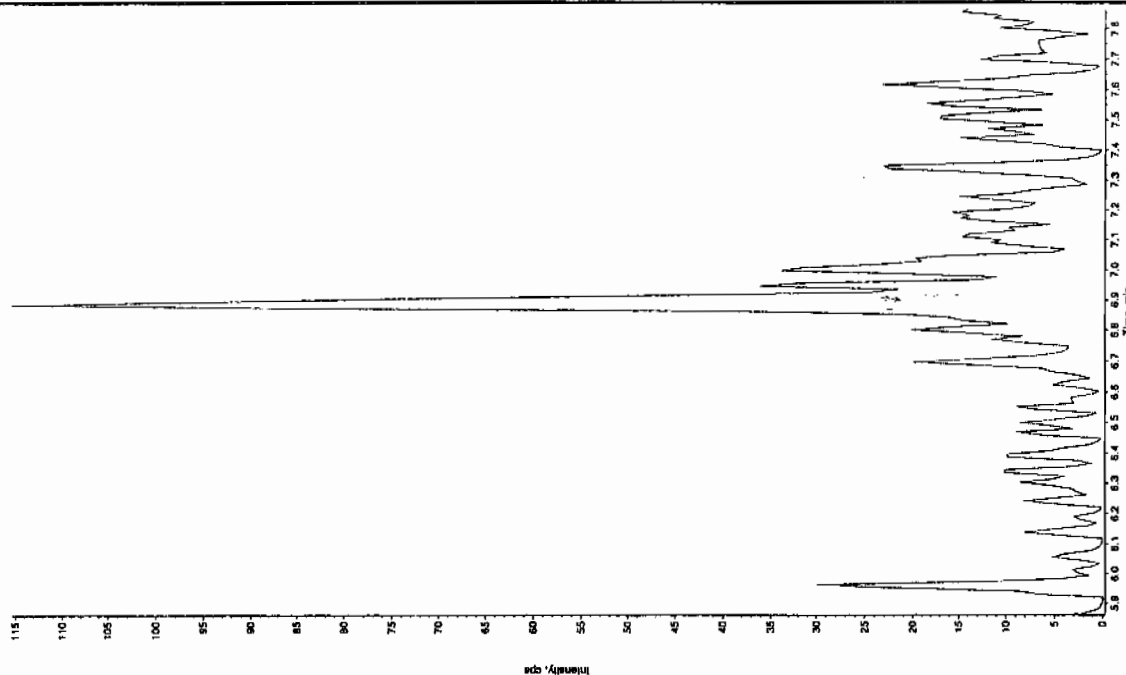
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.57
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 4/10

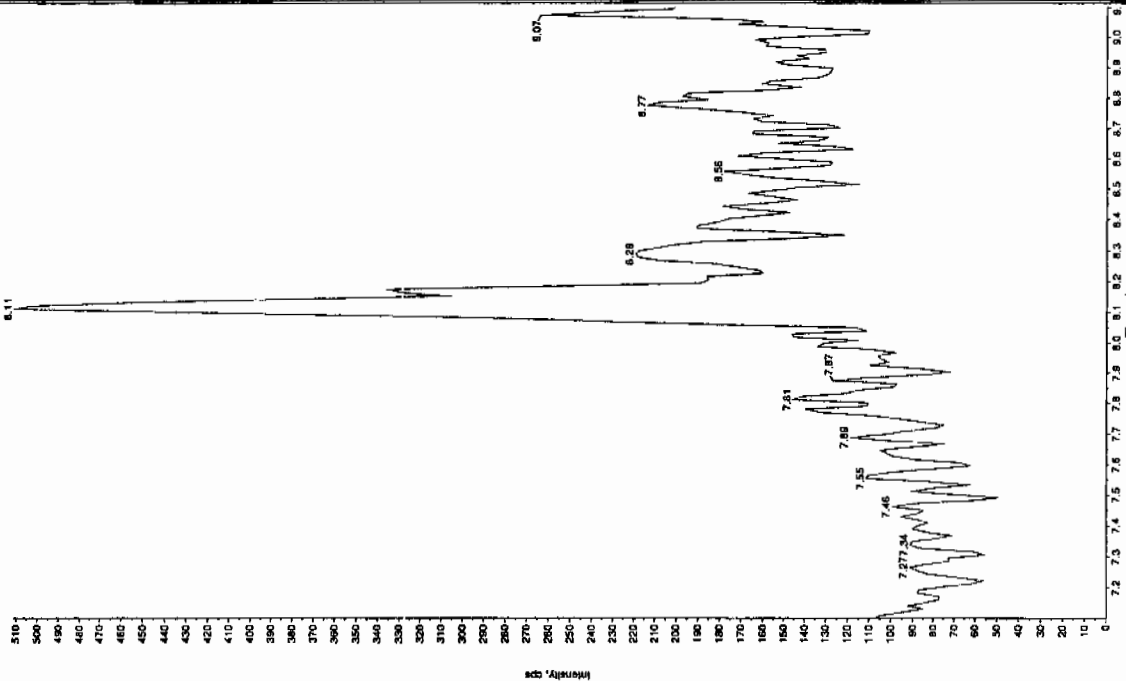
Sample Name: "XBLX05" Sample ID: "11LER" File: "EXS04050038.wif"
 Peak Name: "35-Chlorocinnol" Mass(es): "112.046.0 amu"
 Comment: "LONSEXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Date: 4/5/2010
 Acq. Time: 10:27:02 PM
 Modified: No



Sample Name: "XBLX05" Sample ID: "11LER" File: "EXS04050038.wif"
 Peak Name: "35-Chlorocinnol" Mass(es): "112.046.0 amu"
 Comment: "LONSEXP_B" Annotation: "1"

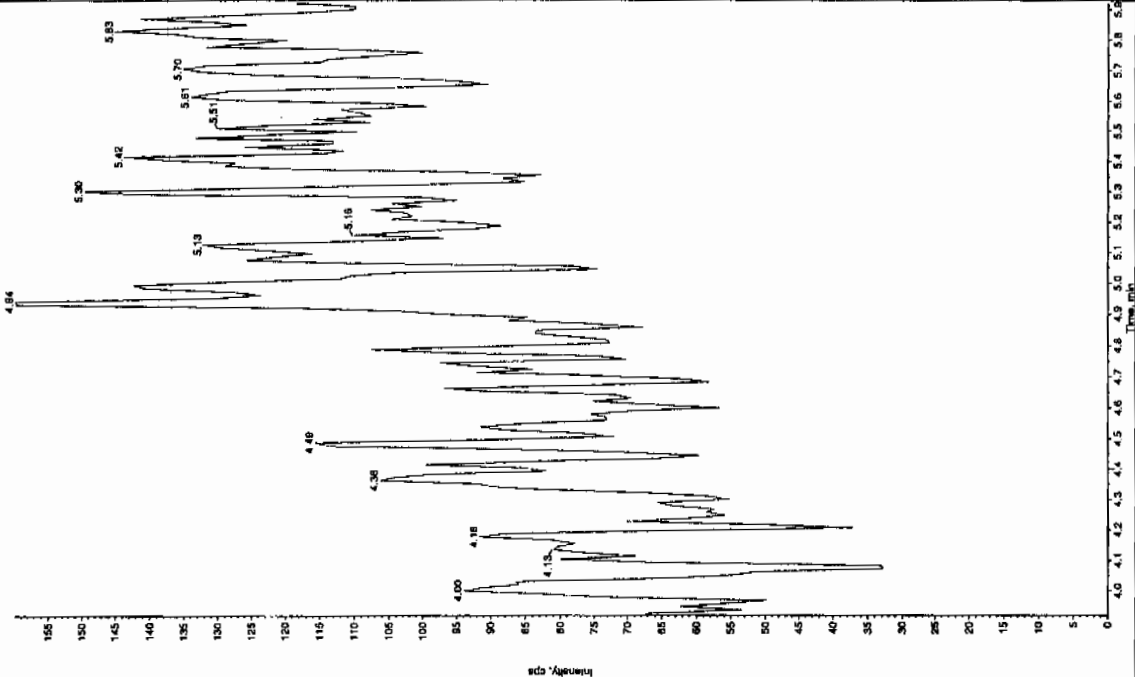
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Date: 4/5/2010
 Acq. Time: 10:27:02 PM
 Modified: No



Jan 04/08/10

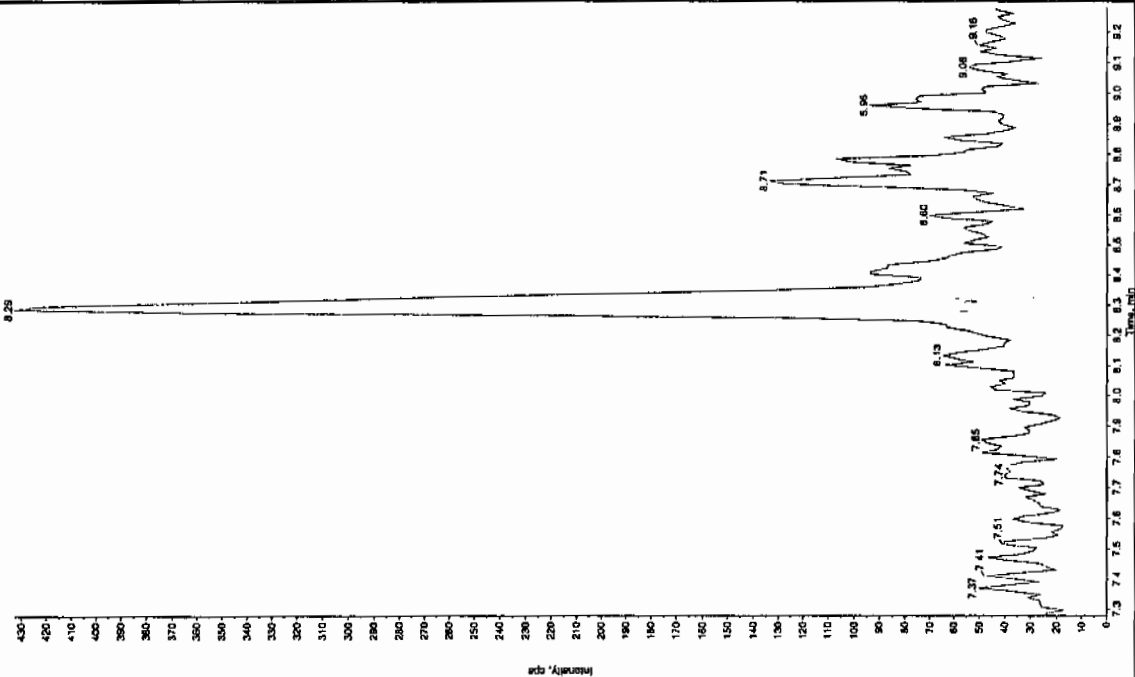
Sample Name: "XBLX05" Sample ID: "111ER" File: "EXS04060038.wif"
 Peak Name: "26-Diethyl-4-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 10.0 ng/mL
 Acq. Date: 4/15/2010
 Acq. Time: 10:27:02 PM
 Modified: No



Sample Name: "XBLX05" Sample ID: "111ER" File: "EXS04060038.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

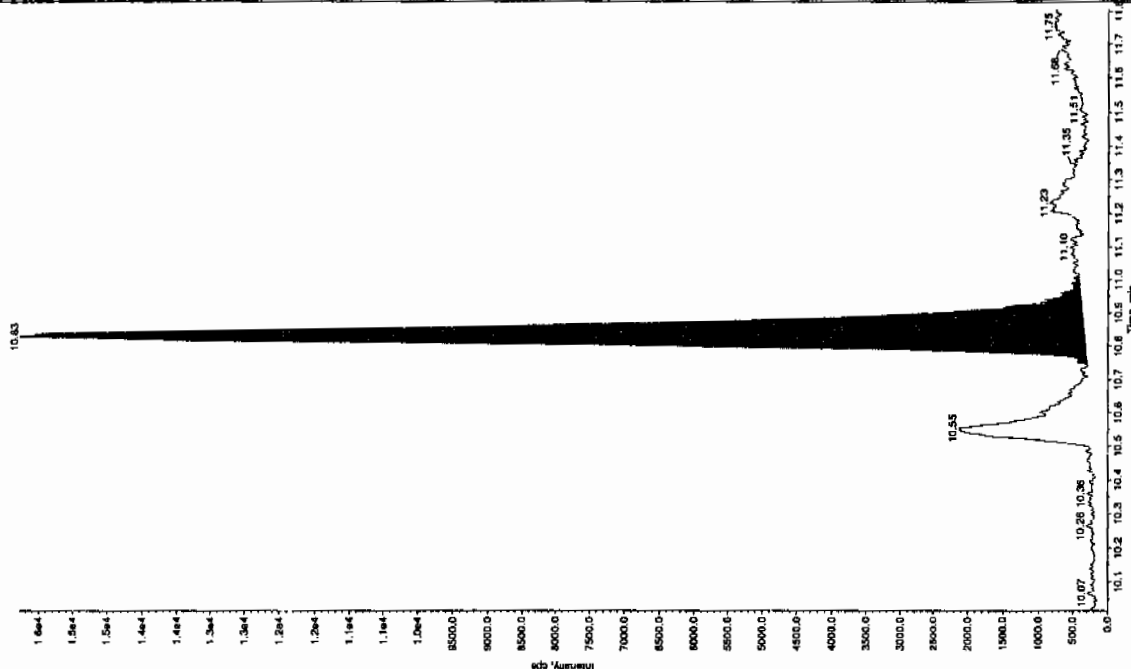
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 10.0 ng/mL
 Acq. Date: 4/15/2010
 Acq. Time: 10:27:02 PM
 Modified: No



Sample Name: "XIBLX05" Sample ID: "111ER" File: "EX504050038.wif"
 Peak Name: "trio-cresyl phosphate" Mass(es): "369.1/91.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 4/5/2010
 Acq. Date: 10/27/02
 Acq. Time: 10:27:02 PM

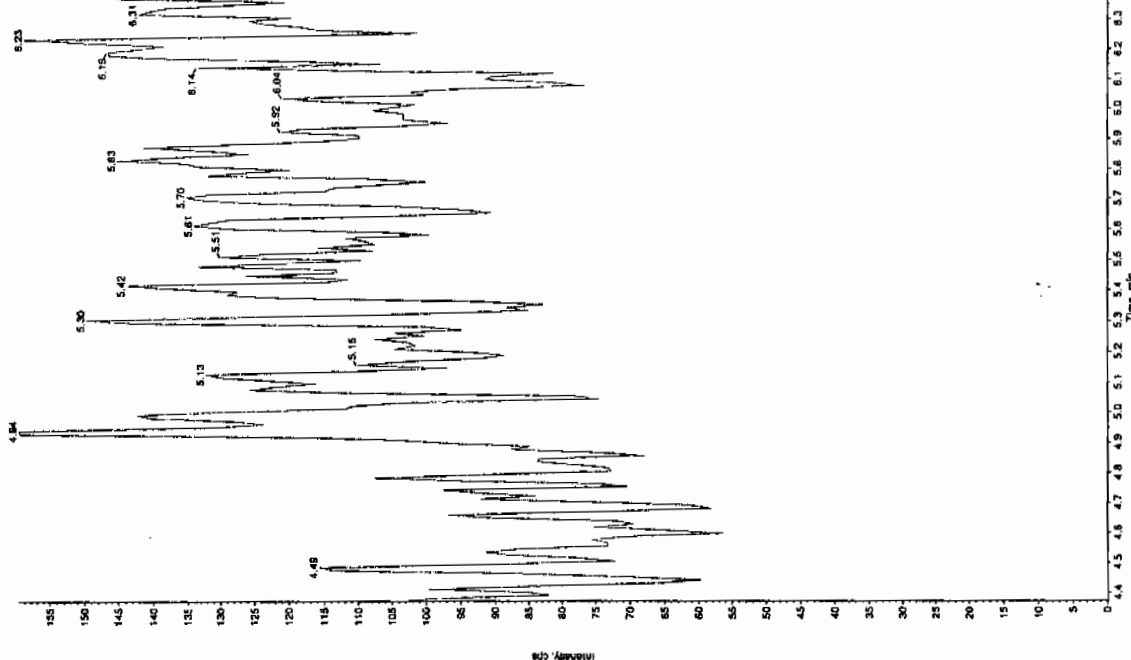
Modified: No
 Proc. Algorithm: IntelliQuan - IDA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 6.43e-004 counts
 Height: 15462.545 cps
 Start Time: 10.7 min
 End Time: 11.0 min



Sample Name: "XIBLX05" Sample ID: "111ER" File: "EX504050038.wif"
 Peak Name: "2,4-Diamino-6-nitrophenol" Mass(es): "166.0/46.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 4/5/2010
 Acq. Date: 10/27/02
 Acq. Time: 10:27:02 PM

Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 06-APR-10 00:01

GEL Data File: EXS04050044.wiff

Instrument ID: LCMSMS

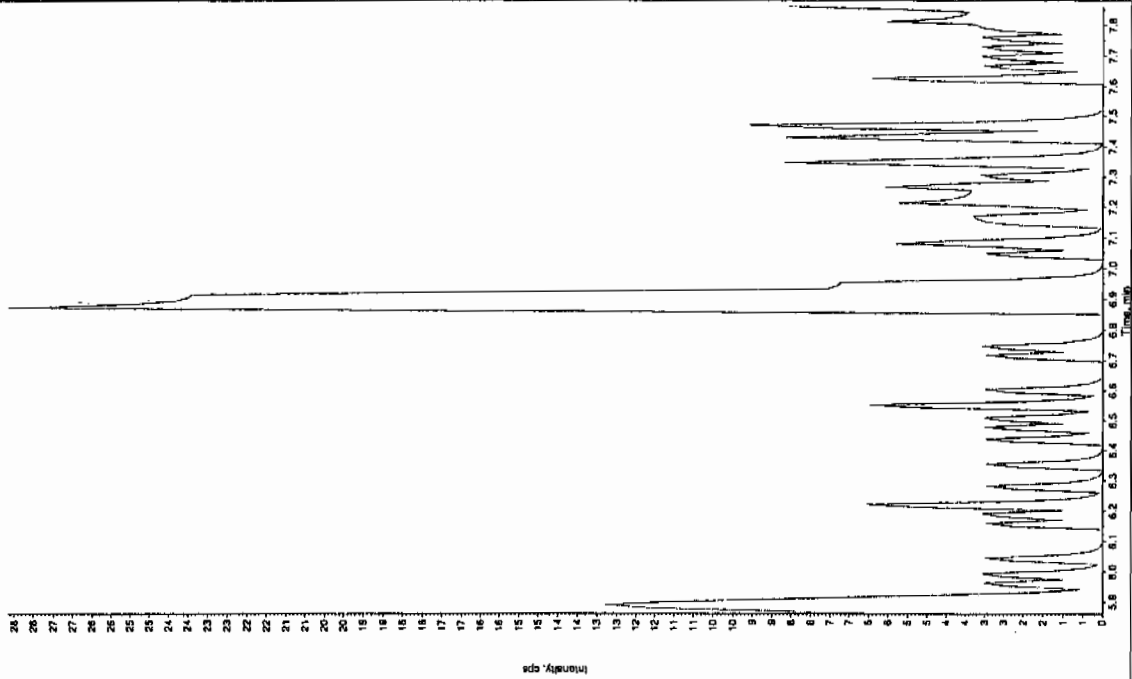
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 4/7/10

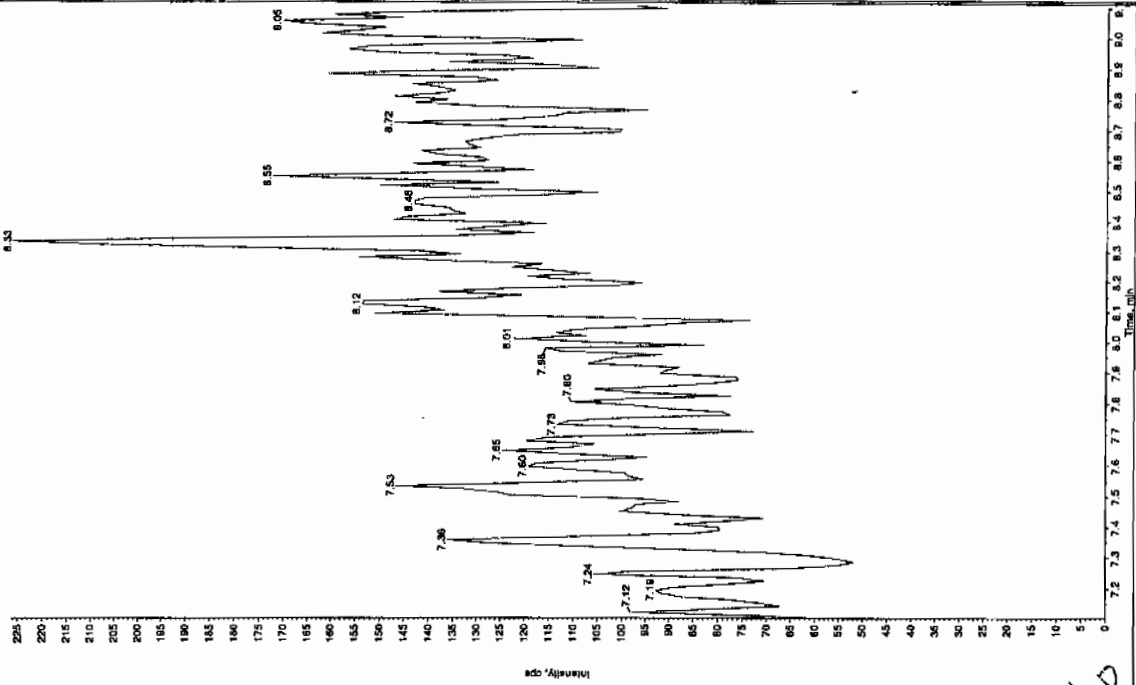
Sample Name: "XIBLX06" Sample ID: "1111ER" File: "EXS0406004.will"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A µg/mL
 Acq. Date: 4/6/2010
 Acq. Time: 12:01:19 AM
 Modified: No



Sample Name: "XIBLX06" Sample ID: "1111ER" File: "EXS0406004.will"
 Peak Name: "35-Dinitroaniline" Mass(es): "192.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

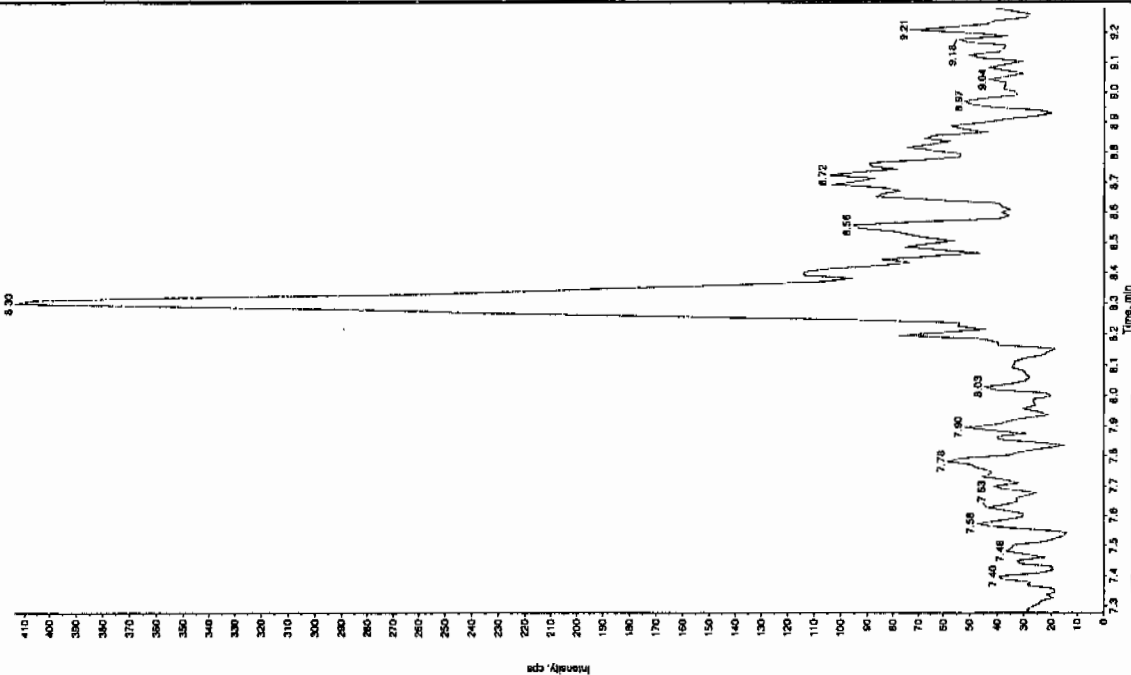
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Acq. Date: 4/6/2010
 Acq. Time: 12:01:19 AM
 Modified: No



Jan 04/08/10

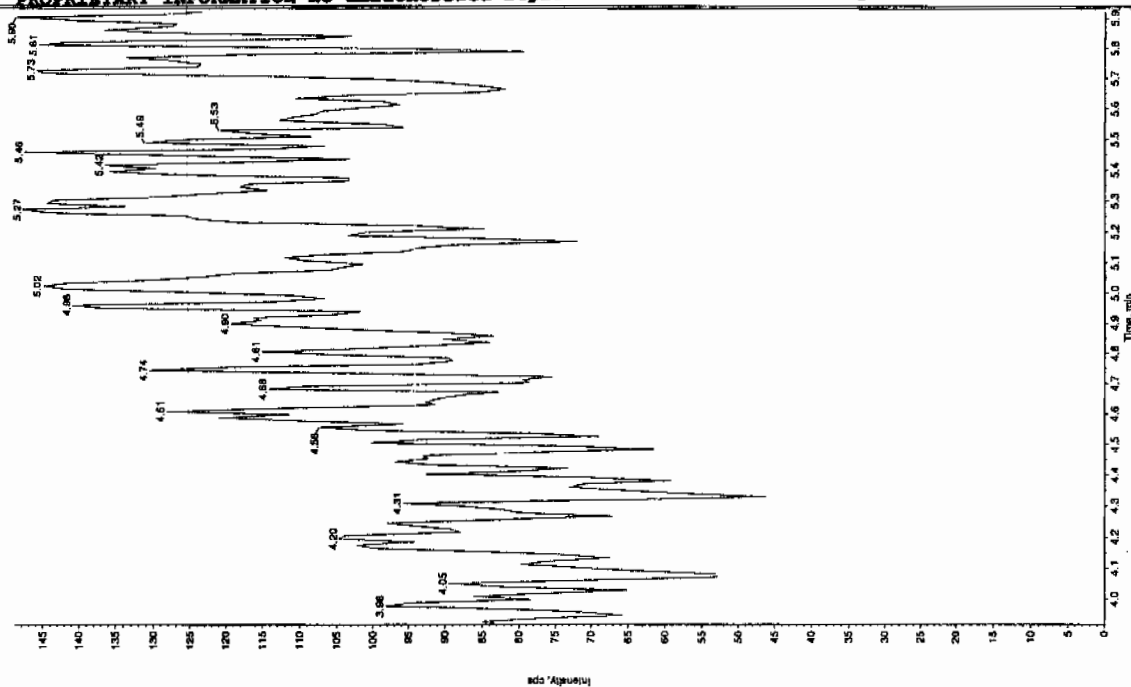
Sample Name: "XIBLK06" Sample ID: "111ER" File: "EXS04050044.wiff"
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/6/2010
Acq. Time: 12:01:19 AM
Modified: NO



Sample Name: "XIBLK06" Sample ID: "111ER" File: "EXS04050044.wiff"
Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.0465.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/6/2010
Acq. Time: 12:01:19 AM
Modified: NO



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2150

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 06-APR-10 01:51

GEL Data File: EXS04050051.wiff

Instrument ID: LCMSMS

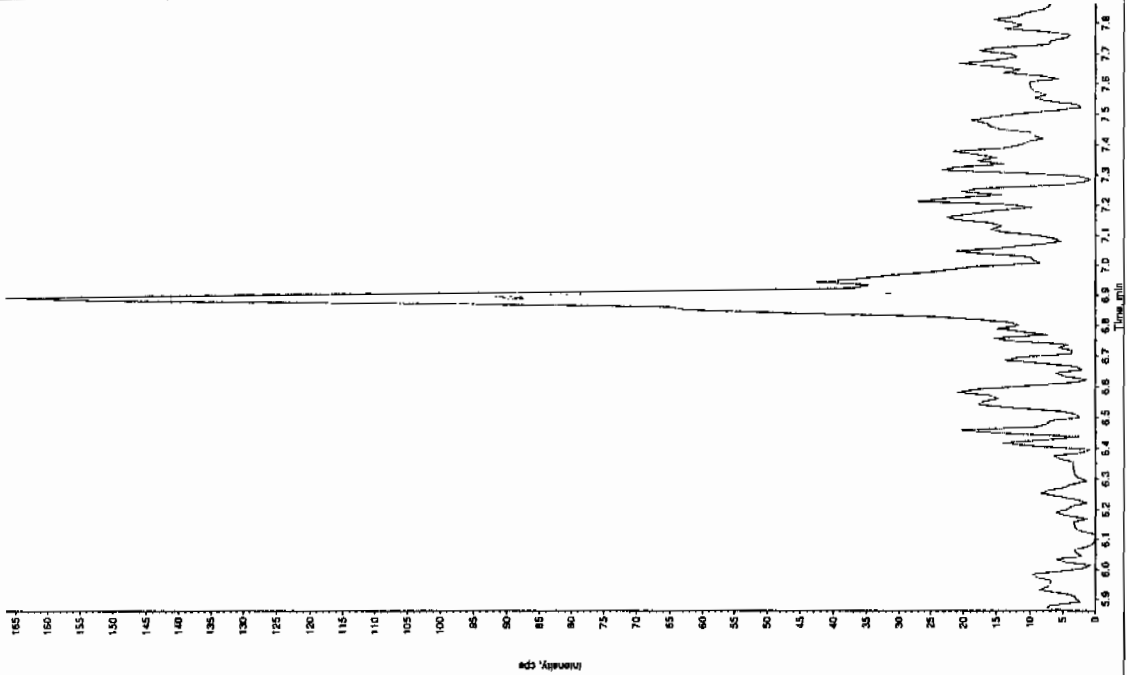
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	5.78
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Scan 4/7/10

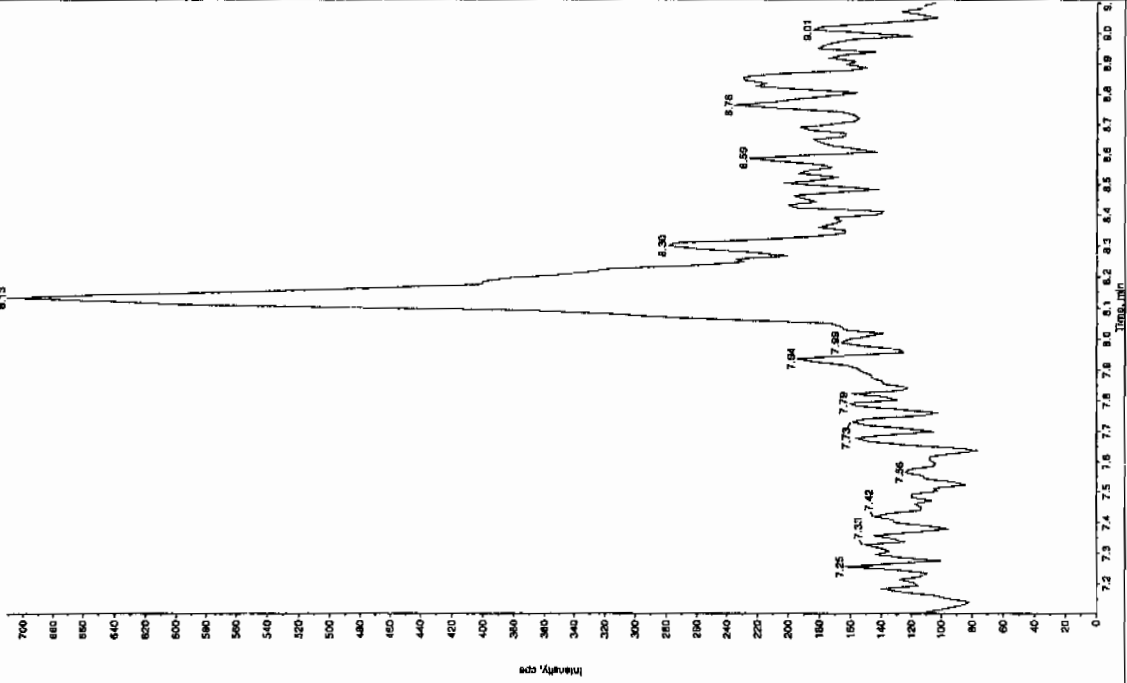
Sample Name: "XIBL K07" Sample ID: "1111 ER" File: "EX04050051.wif"
 Peak Name: "TATB" Mass(es): "257.29204 S amu"
 Comment: "LCMSEXP_B" Annotation: ""

File Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 4/6/2010
 Time: 1:51:17 AM
 Modified: No



Sample Name: "XIBL K07" Sample ID: "1111 ER" File: "EX04050051.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0460 amu"
 Comment: "LCMSEXP_B" Annotation: ""

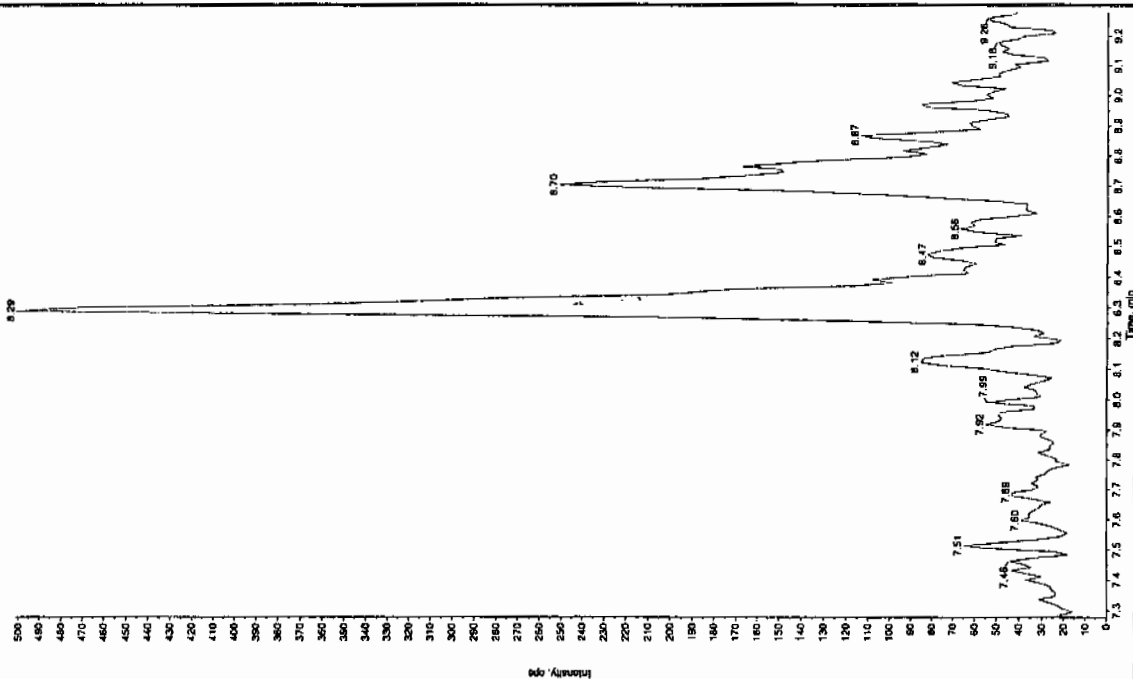
File Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 4/6/2010
 Time: 1:51:17 AM
 Modified: No



Scan 04/08/10

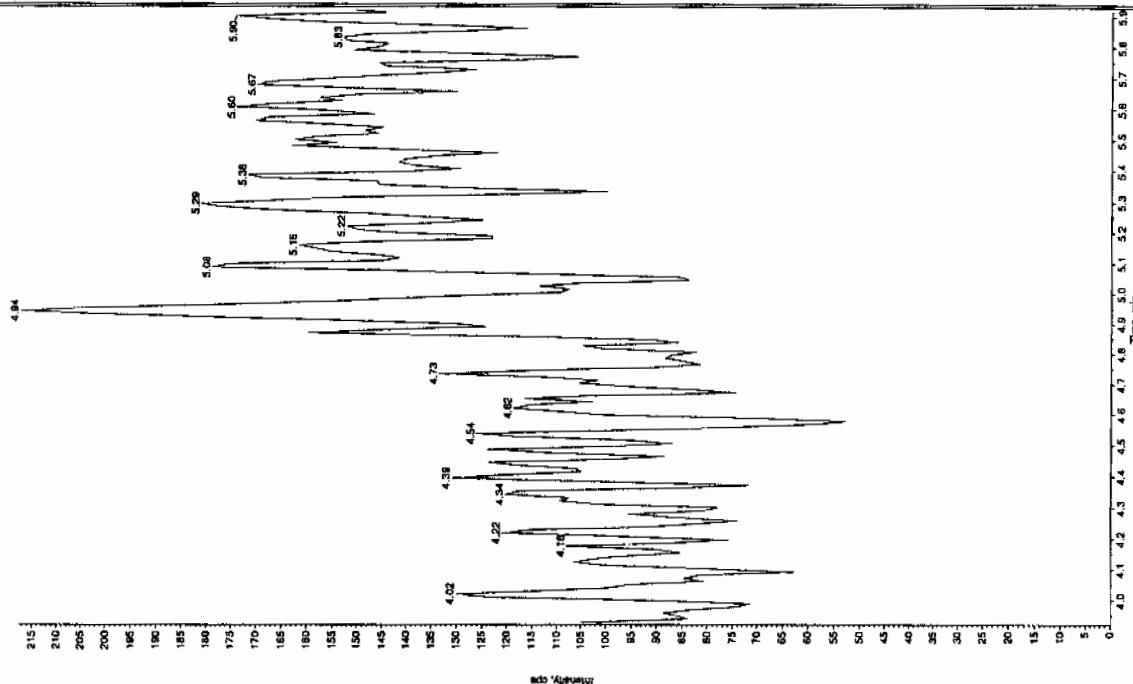
Sample Name: "XBLK07" Sample ID: "1111ER" File: "EXS04050051.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 4/6/2010
 Time: 1:51:17 AM
 Labeled: No



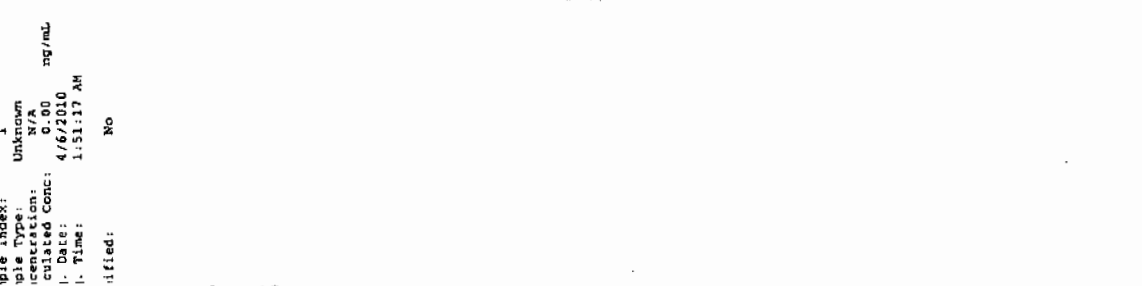
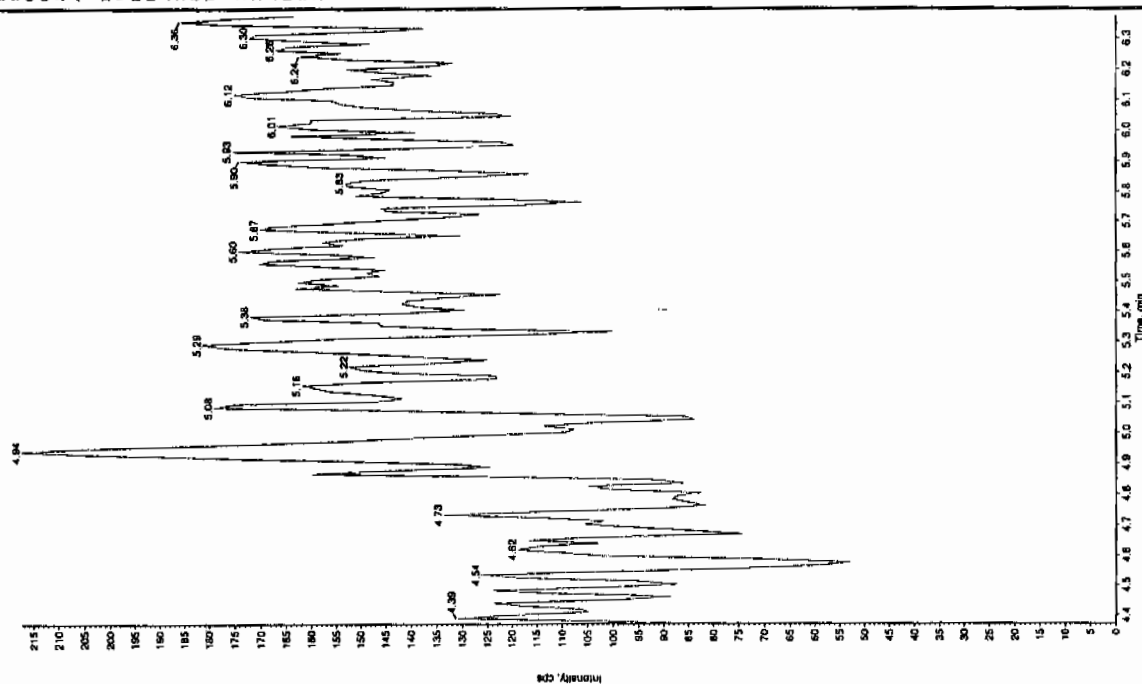
Sample Name: "XBLK07" Sample ID: "1111ER" File: "EXS04050051.wif"
 Peak Name: "26-Dinitrofluorene" Mass(es): "186.0/166.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 4/6/2010
 Time: 1:51:17 AM
 Labeled: No



Sample Name: "XBLK07" Sample ID: "11LER" File: "EXS04050051.wif"
 Peak Name: "2,4-Diamino-6-nitrofluorene" Mass(es): "359.1791.0 amu"
 Comment: "LCMS-EXP_B" Association: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 5.78 ng/mL
 Acq. Date: 4/6/2010
 Acq. Time: 1:51:17 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.6 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 1.04e+005 counts
 Height: 25001.743 cps
 Start Time: 10.7 min
 End Time: 11.0 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

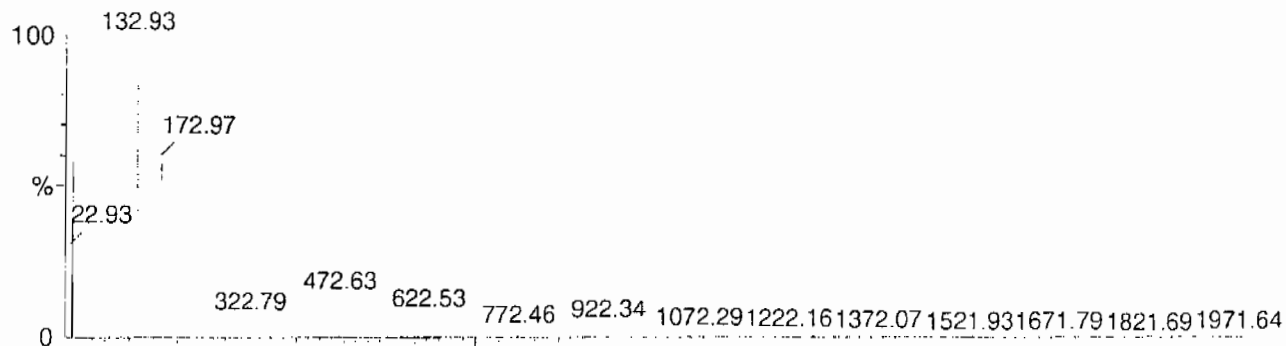
Calibration Report - MS1 Static

Page 1 of 1

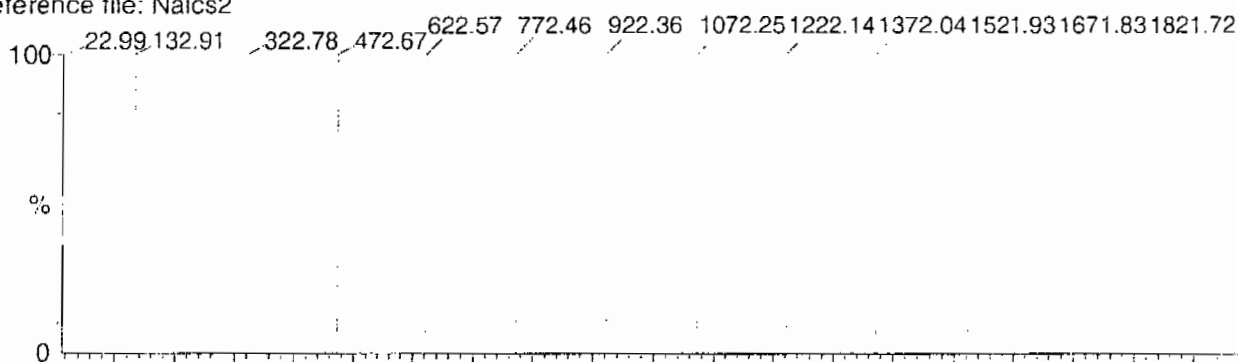
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

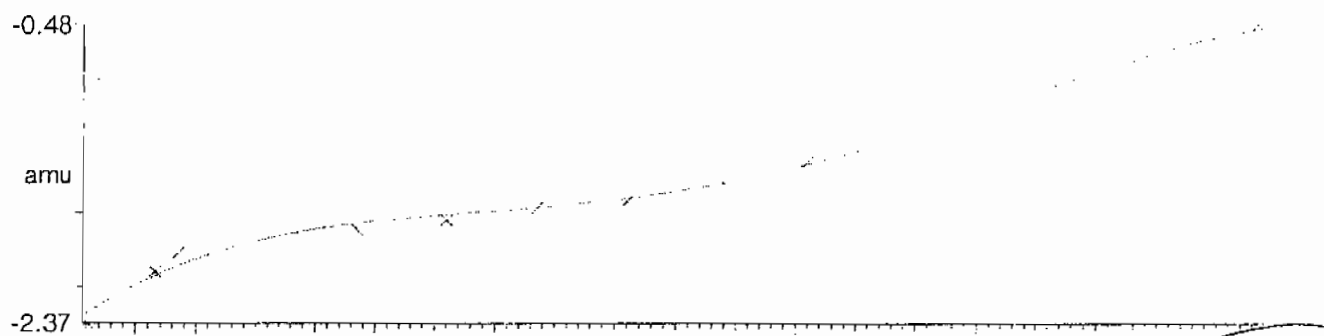
15 matches of 15 tested references



Reference file: Naics2

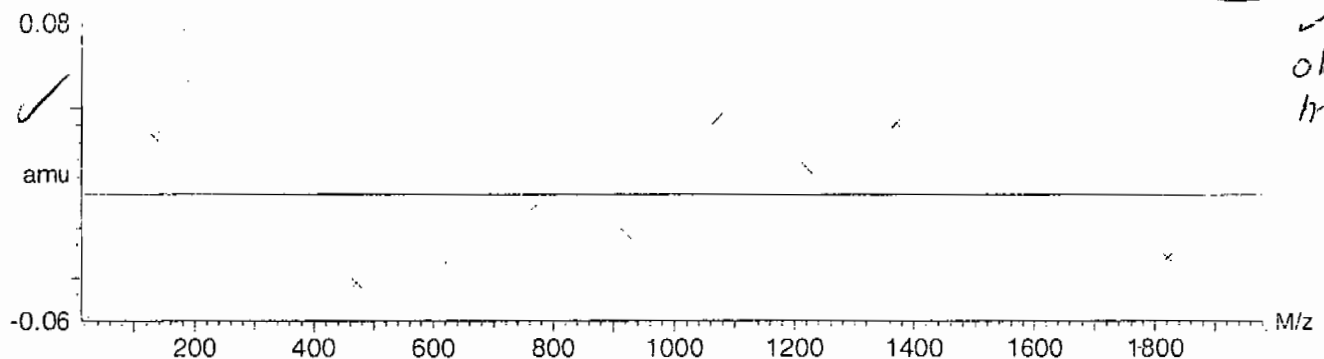


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$



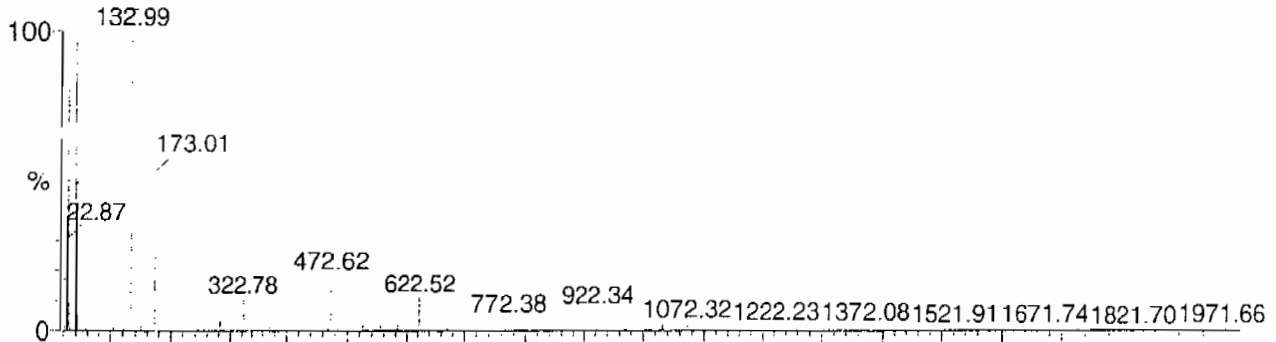
Calibration Report - MS1 Scanning

Page 1 of 1

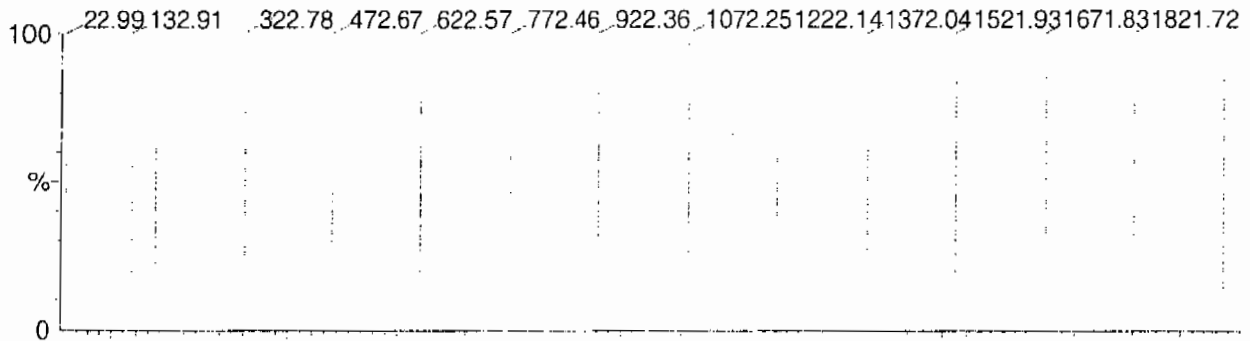
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

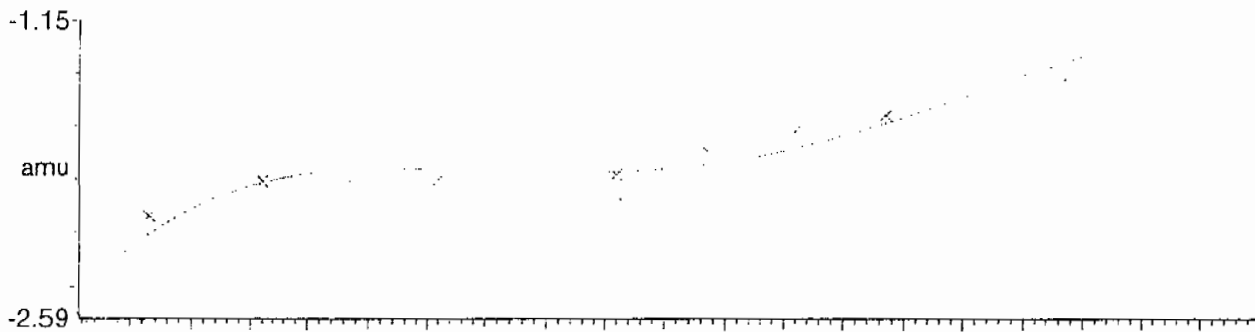
15 matches of 15 tested references:



Reference file: Naics2

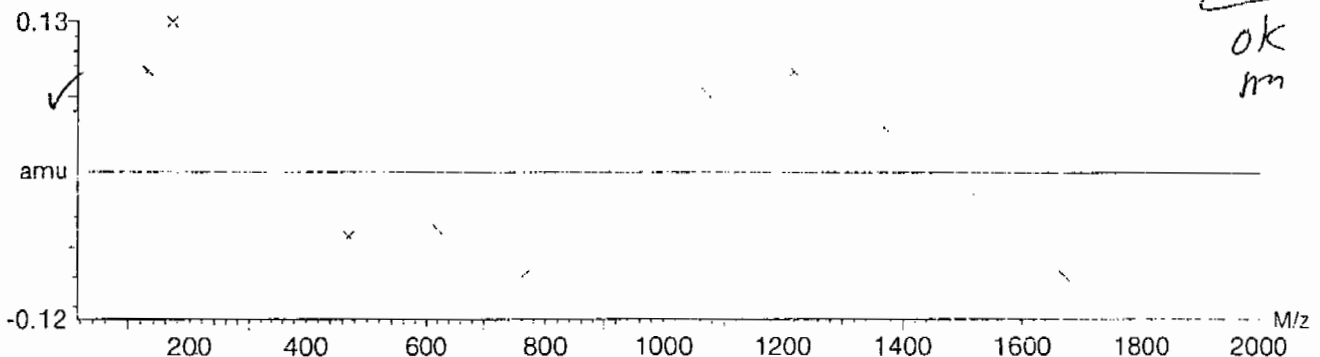


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-5.432715 \times 10^{-9} \pm 0.069858$



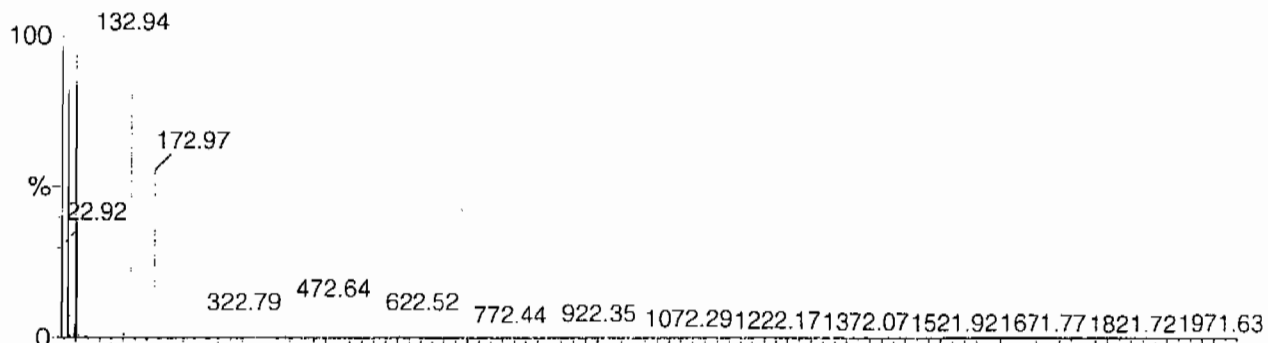
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

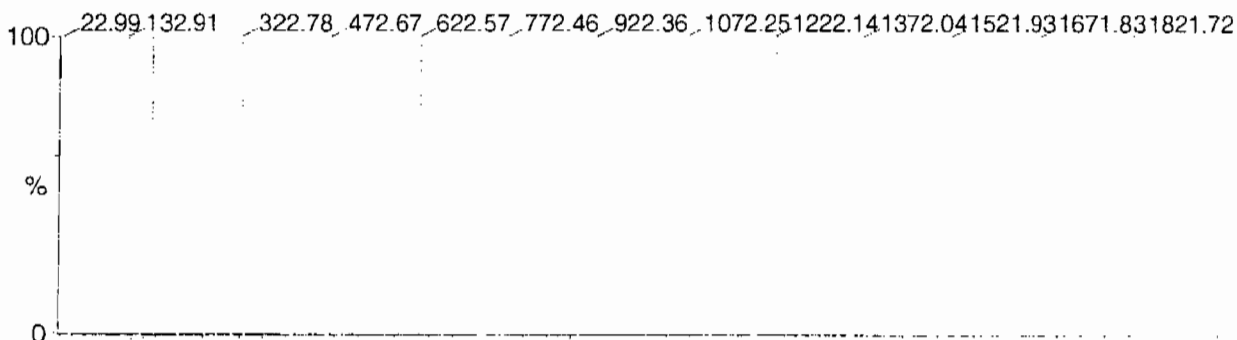
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

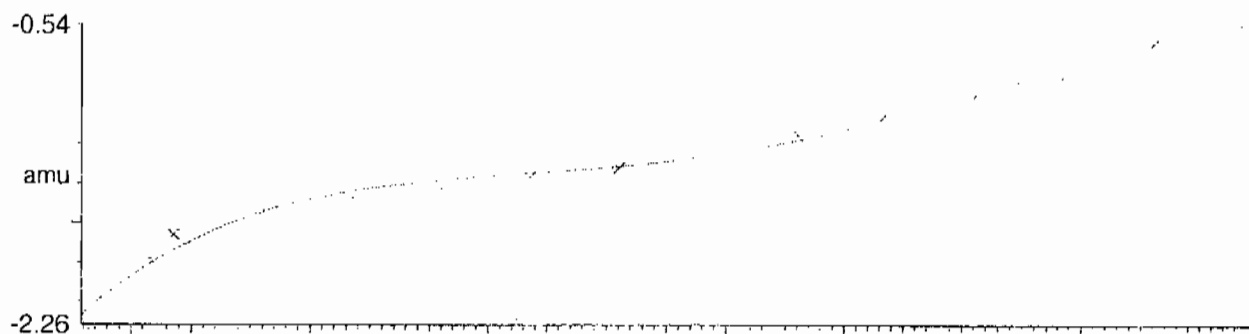
15 matches of 15 tested references



Reference file: Naics2

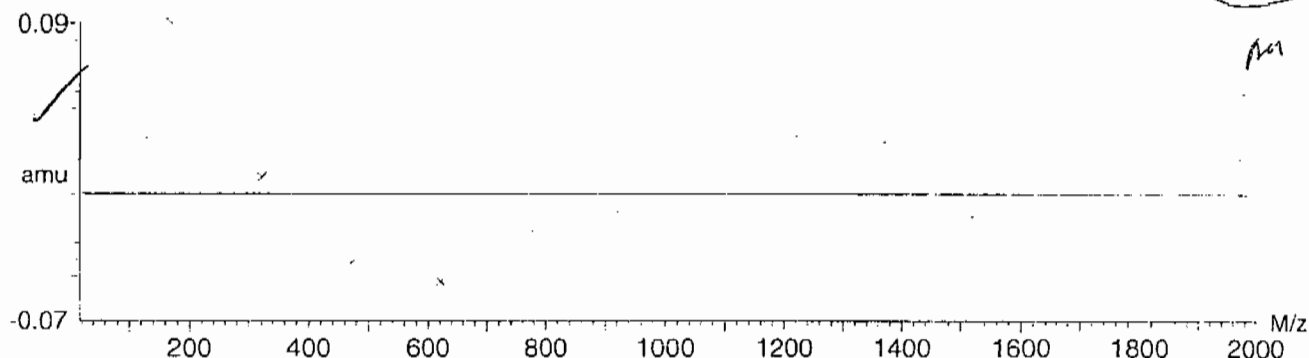


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.486639e-9 \pm 0.040487$



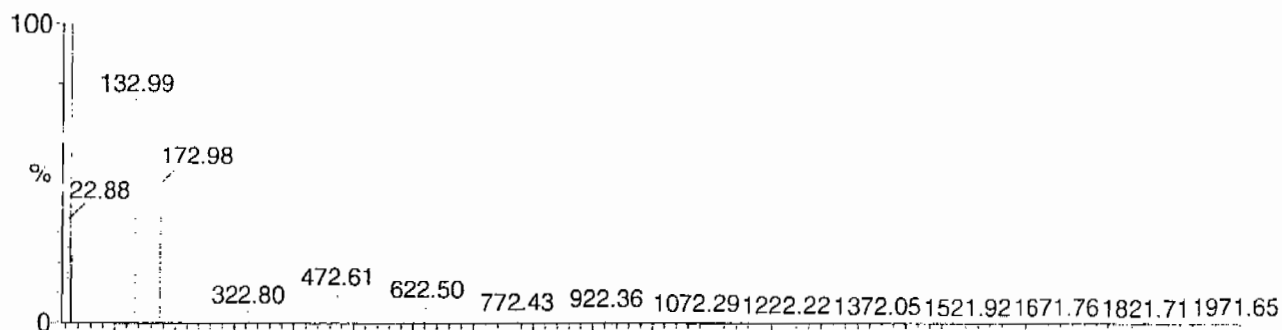
Calibration Report - MS2 Static

Page 1 of 1

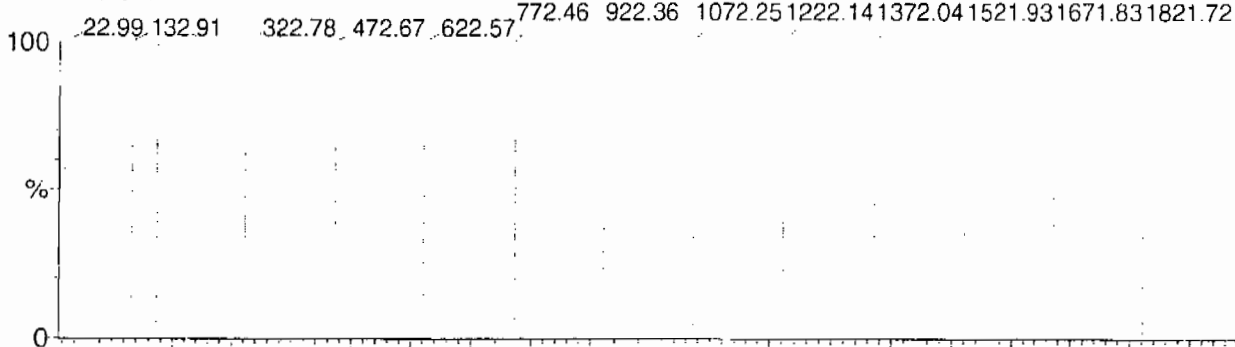
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

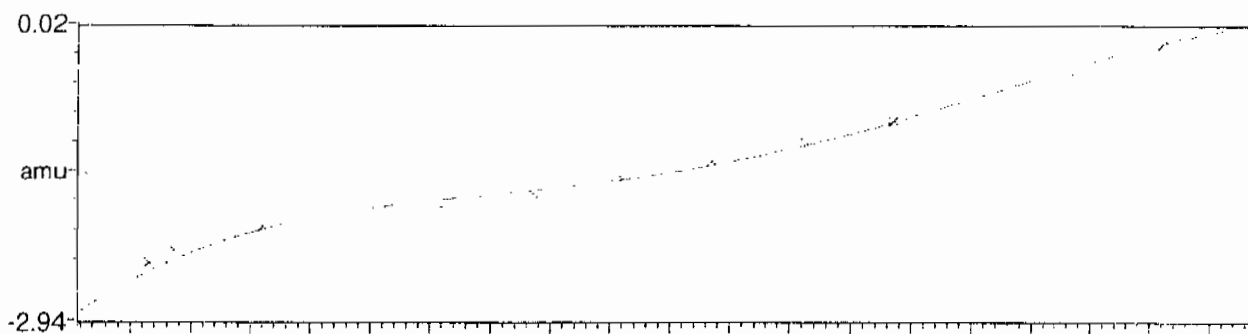
15 matches of 15 tested references



Reference file: Naics2

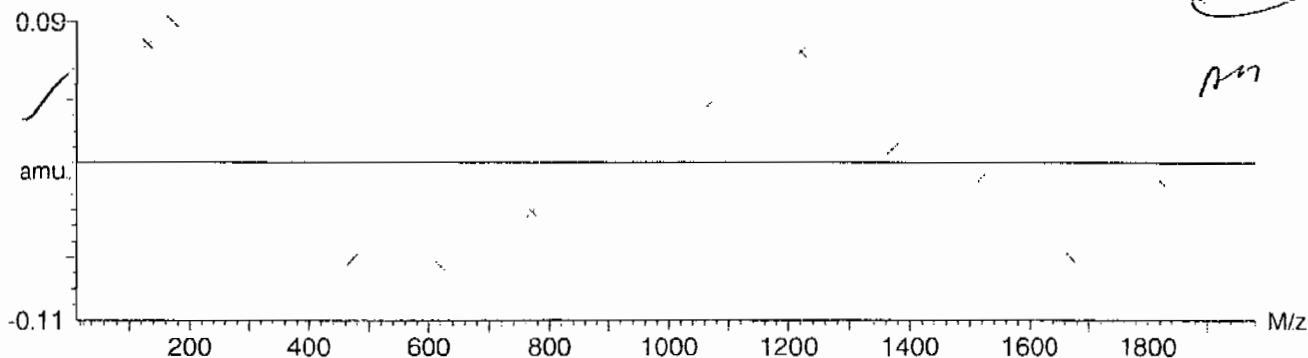


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.048910 \times 10^{-9} \pm 0.057803$



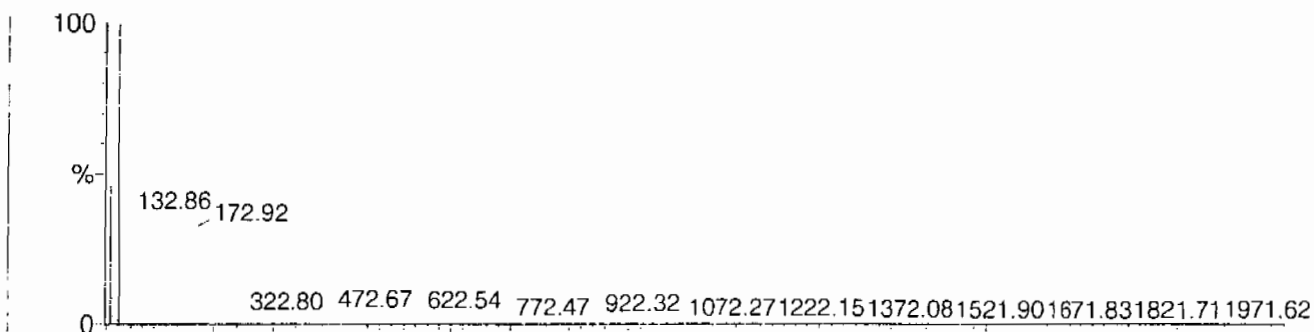
Calibration Report - MS2 Scanning

Page 1 of 1

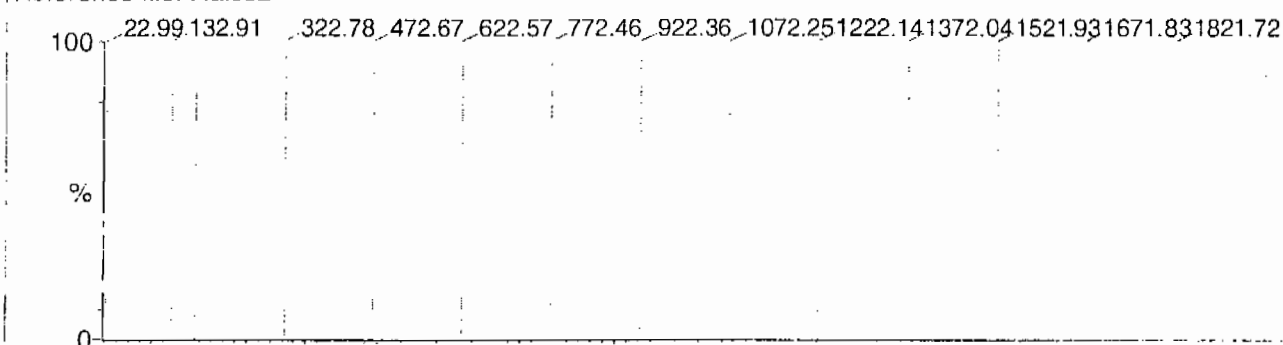
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

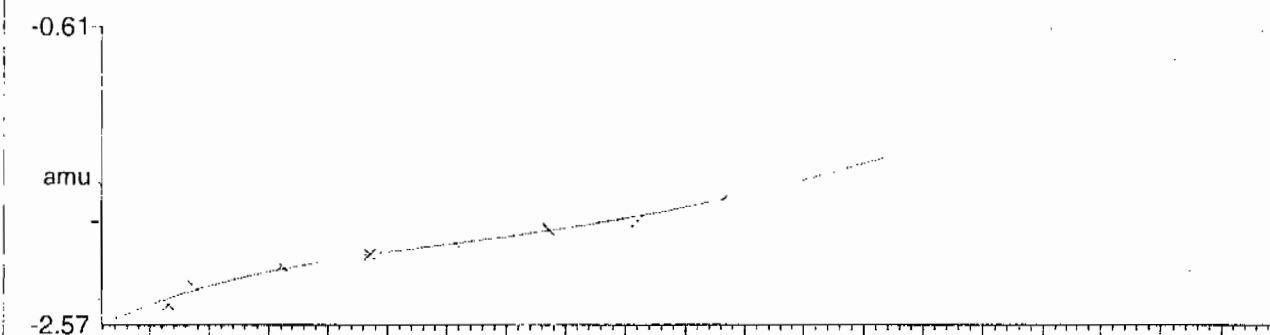
14 matches of 15 tested references



Reference file: Naics2

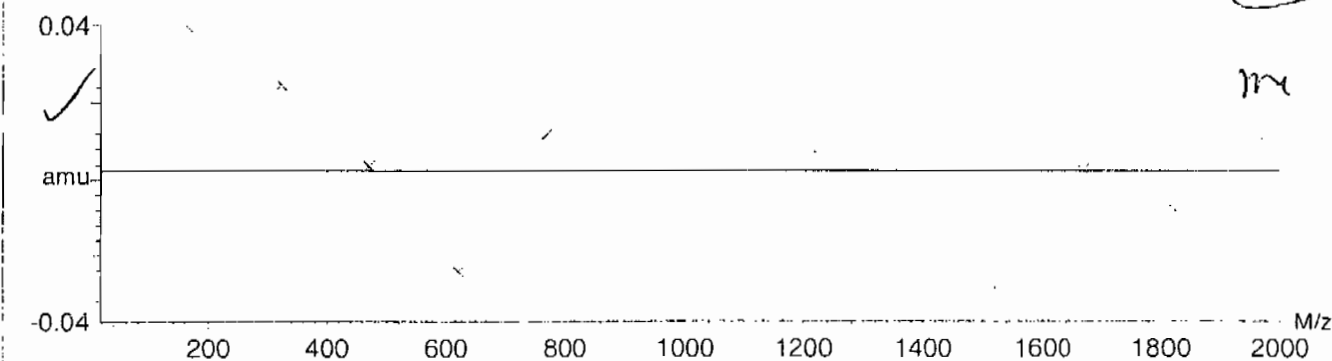


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502e-9 \pm 0.025622$



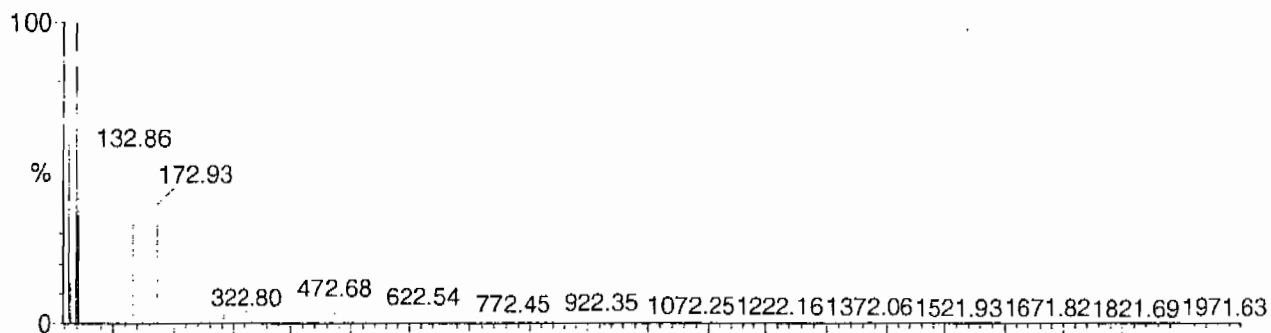
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

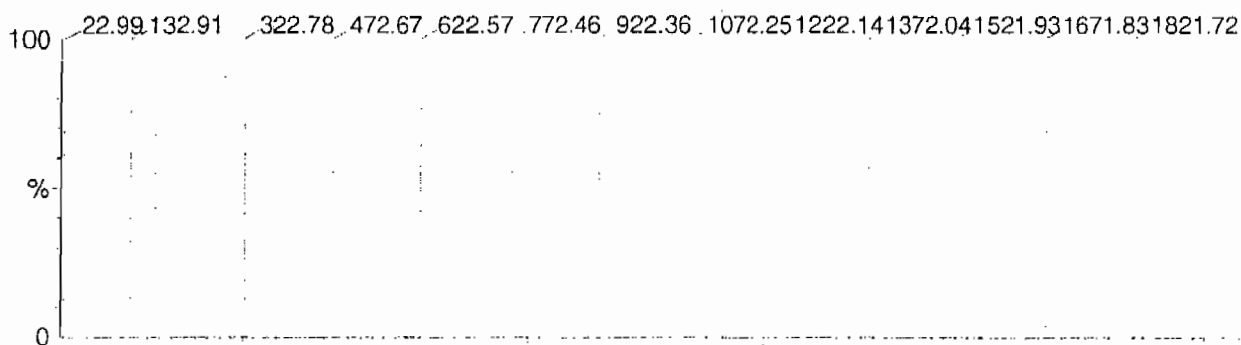
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

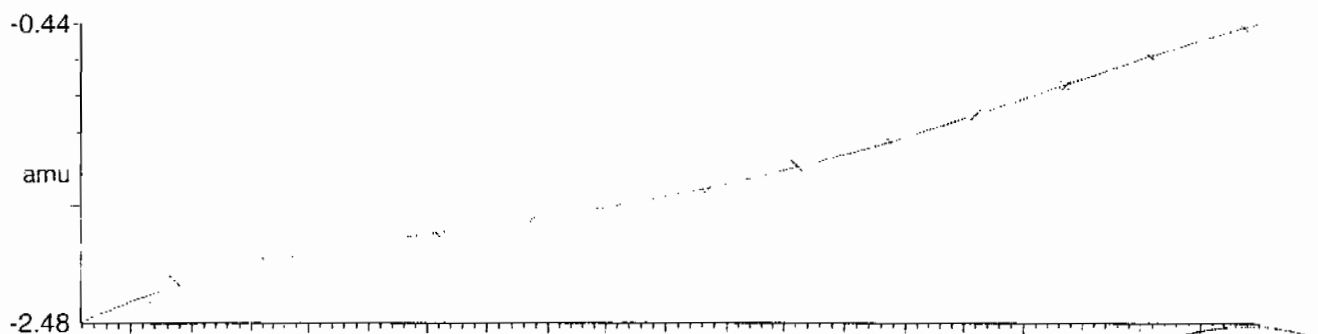
14 matches of 15 tested references



Reference file: Naics2

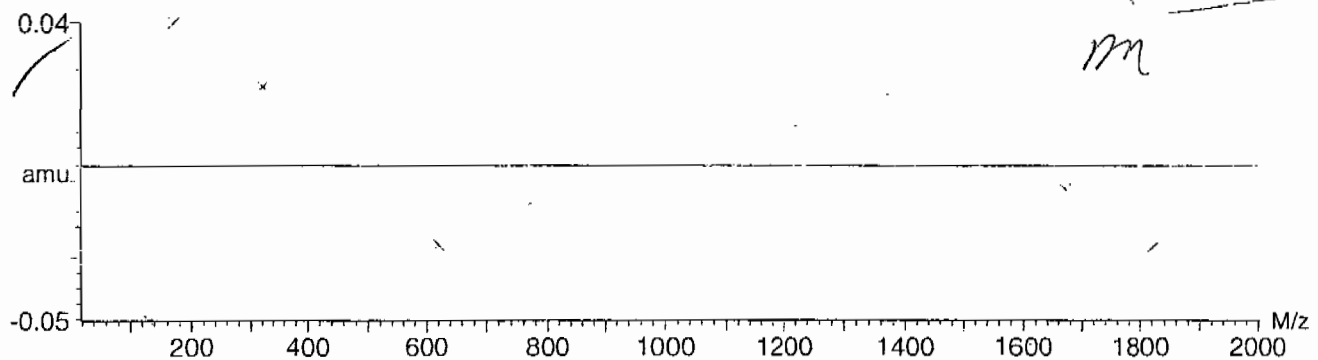


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-6.785350 \times 10^{-9} \pm 0.023134$

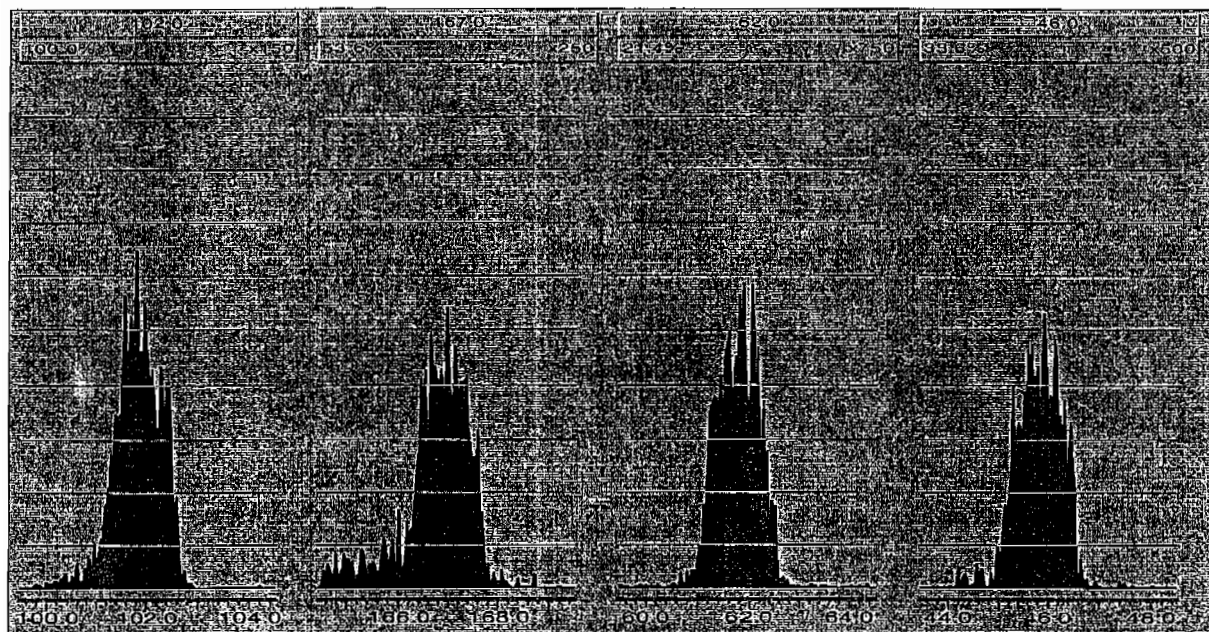


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Mon Apr 12 14:40:37 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

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 960303	16-apr-10 00:48	EXP0412166a	6748.13	11.893	39363.6	17.092
LCS for batch 960303	16-apr-10 01:18	EXP0412167a	6971.18	11.868	39295.3	17.093
RE36-10-7415	16-apr-10 01:47	EXP0412168a	6589.63	11.894	38662.3	17.093
RE36-10-7415(248370001MS)	16-apr-10 02:17	EXP0412169a	6808.57	11.869	40505.6	17.092
RE36-10-7415(248370001MSD)	16-apr-10 02:46	EXP0412170a	7860.29 *	11.871	40064.1	17.092
RE36-10-7420	16-apr-10 03:16	EXP0412171a	6468.64	11.895	37110	17.091
RE36-10-7418	16-apr-10 03:45	EXP0412172a	6868.86	11.892	37240.9	17.104
RE36-10-7417	16-apr-10 04:15	EXP0412173a	6423.69	11.871	43756.2	17.092
RE36-10-7419	16-apr-10 04:44	EXP0412174a	6518	11.868	39122.1	17.093
RE36-10-7416	16-apr-10 05:14	EXP0412175a	6383.19	11.869	38069.9	17.094
RE36-10-7478	16-apr-10 07:12	EXP0412179a	6678.62	11.868	39559.1	17.093
RE36-10-7490	16-apr-10 07:41	EXP0412180a	6397.12	11.894	37202.7	17.094
RE36-10-7487	16-apr-10 08:11	EXP0412181a	6714.99	11.868	37791.4	17.094
RE36-10-7483	16-apr-10 08:40	EXP0412182a	6427.17	11.894	37696.9	17.095
RE36-10-7481	16-apr-10 09:10	EXP0412183a	6177.91	11.869	41017.5	17.092
RE36-10-7486	16-apr-10 09:39	EXP0412184a	6129.28	11.894	39537.5	17.095
RE36-10-7477	16-apr-10 10:09	EXP0412185a	7297.71	11.891	39668.3	17.105
RE36-10-7489	16-apr-10 10:38	EXP0412186a	6452.42	11.872	38236.8	17.094
RE36-10-7479	16-apr-10 11:08	EXP0412187a	6563.77	11.872	37946.5	17.093
RE36-10-7482	16-apr-10 11:37	EXP0412188a	6599.62	11.868	43997.1	17.094
RE36-10-7480	16-apr-10 13:36	EXP0412192a	6238.41	11.868	40046.2	17.094
RE36-10-7485	16-apr-10 14:05	EXP0412193a	6863.24	11.868	42095.7	17.095
RE36-10-7484	16-apr-10 15:04	EXP0412195a	6522	11.868	37971.4	17.094
RE36-10-7488	16-apr-10 17:32	EXP0412200a	6281.44	11.894	37329.7	17.094

IS1 (DNB) = 1,3-Dinitrobenzene-d4

IS2 (DNT) = 2,6-Dinitrotoluene-d2

Area Upper Limit = + 30% of average IS area from multipoint calibration

Area Lower Limit = - 30% of average IS area from multipoint calibration

RT Upper Limit = +0.5 of average multipoint RT

RT Lower Limit = -0.5 of average multipoint RT

High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

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: RE36-10-7415

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370001

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 260303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412168a

Date Analyzed: 16-APR-10 01:47

Units: ug/kg

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

*Concentration =

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\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0412168a

Date: 16-Apr-2010

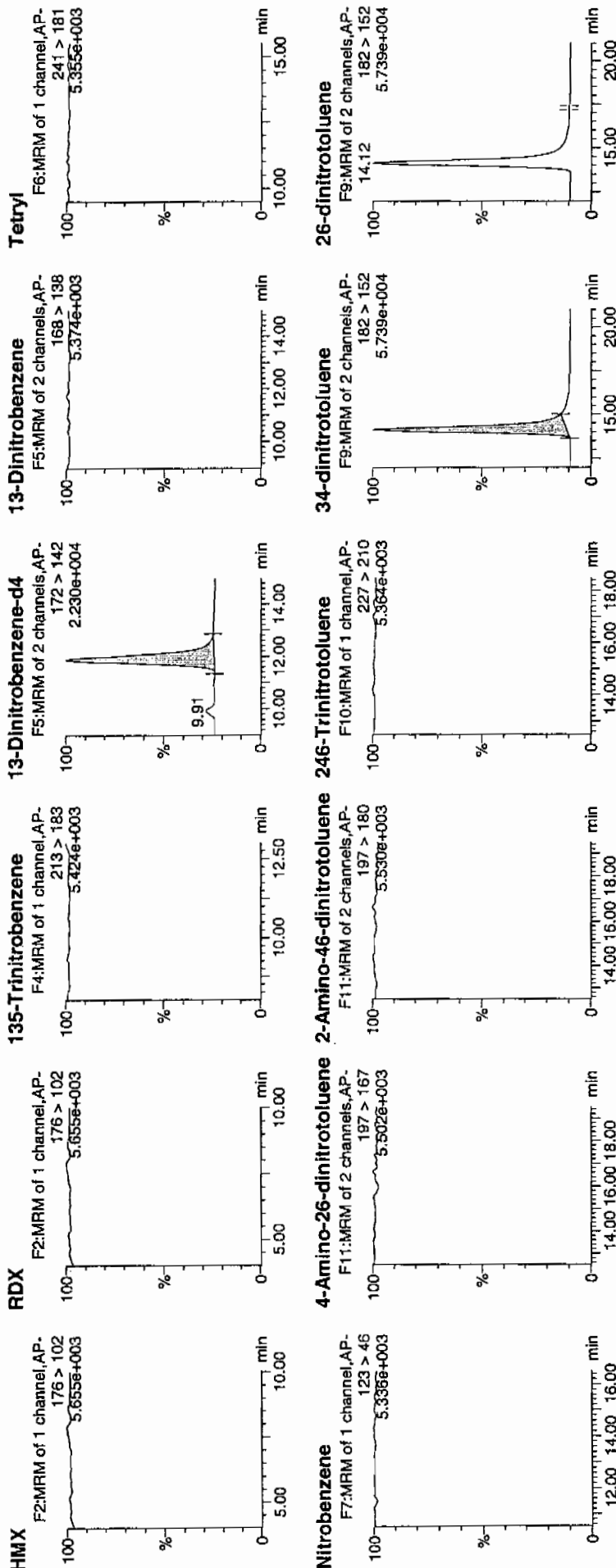
Time: 01:47:50

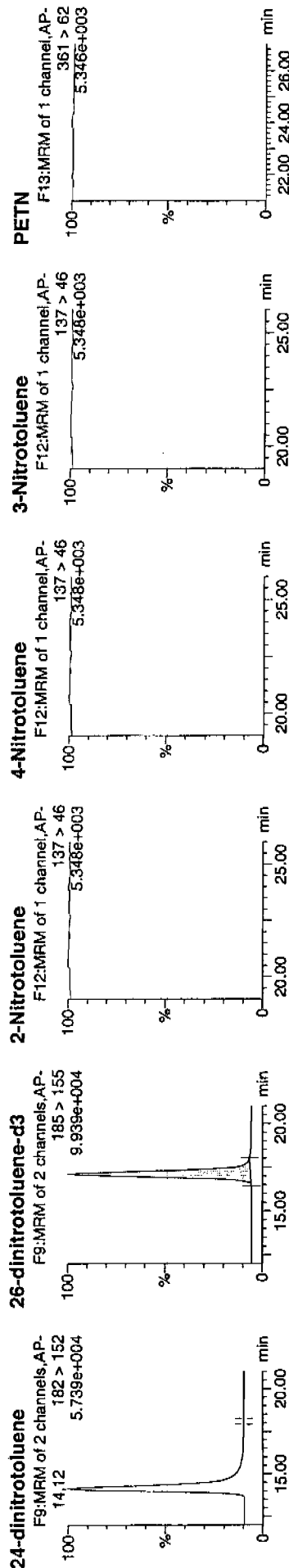
ID: 248370001

Vial: 4;4,C

4/16/10

CAV/900305/8012/21



[illegible]

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7415

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370001

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050016.wiff

Date Analyzed: 05-APR-10 16:41

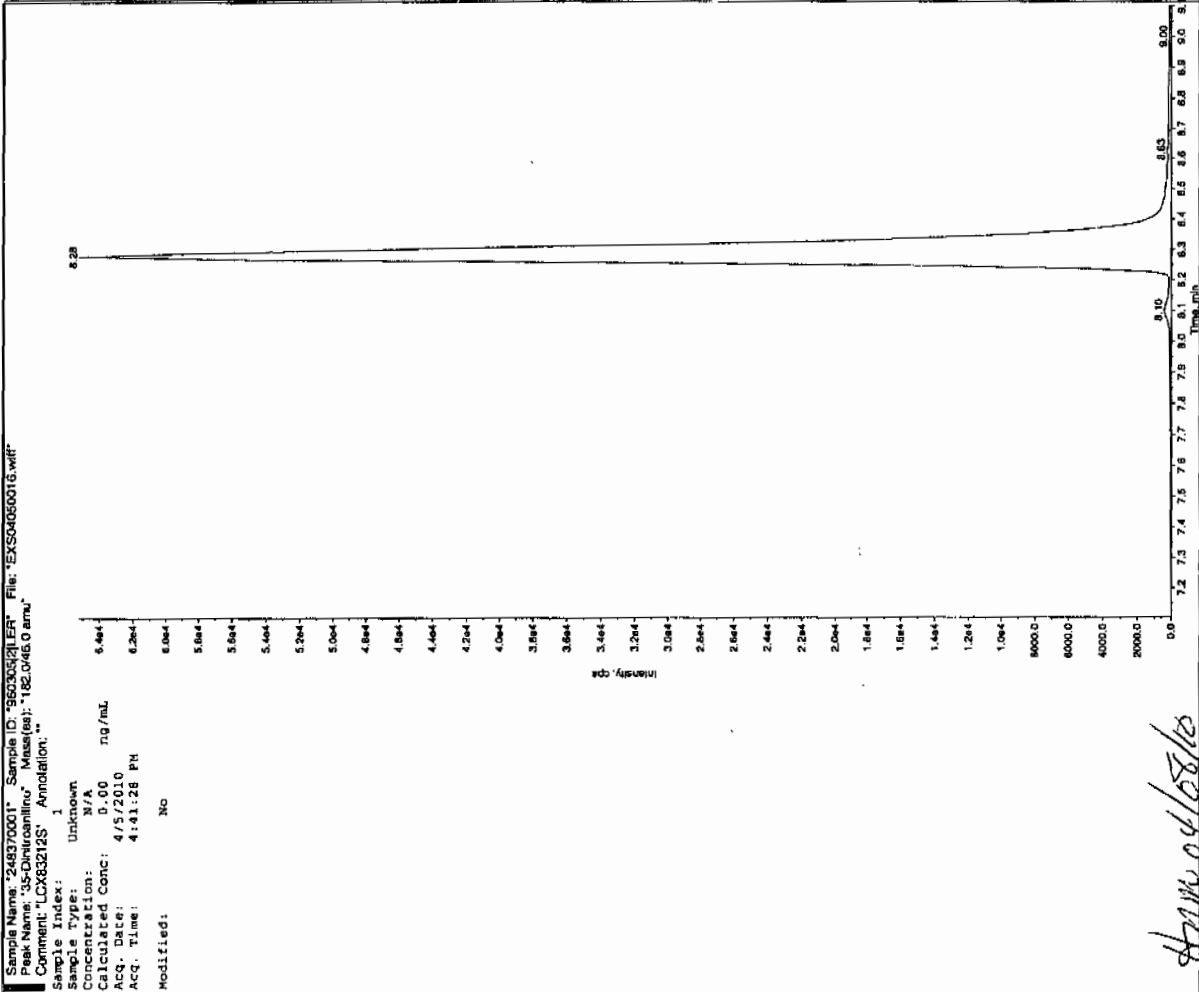
Units: ug/kg

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

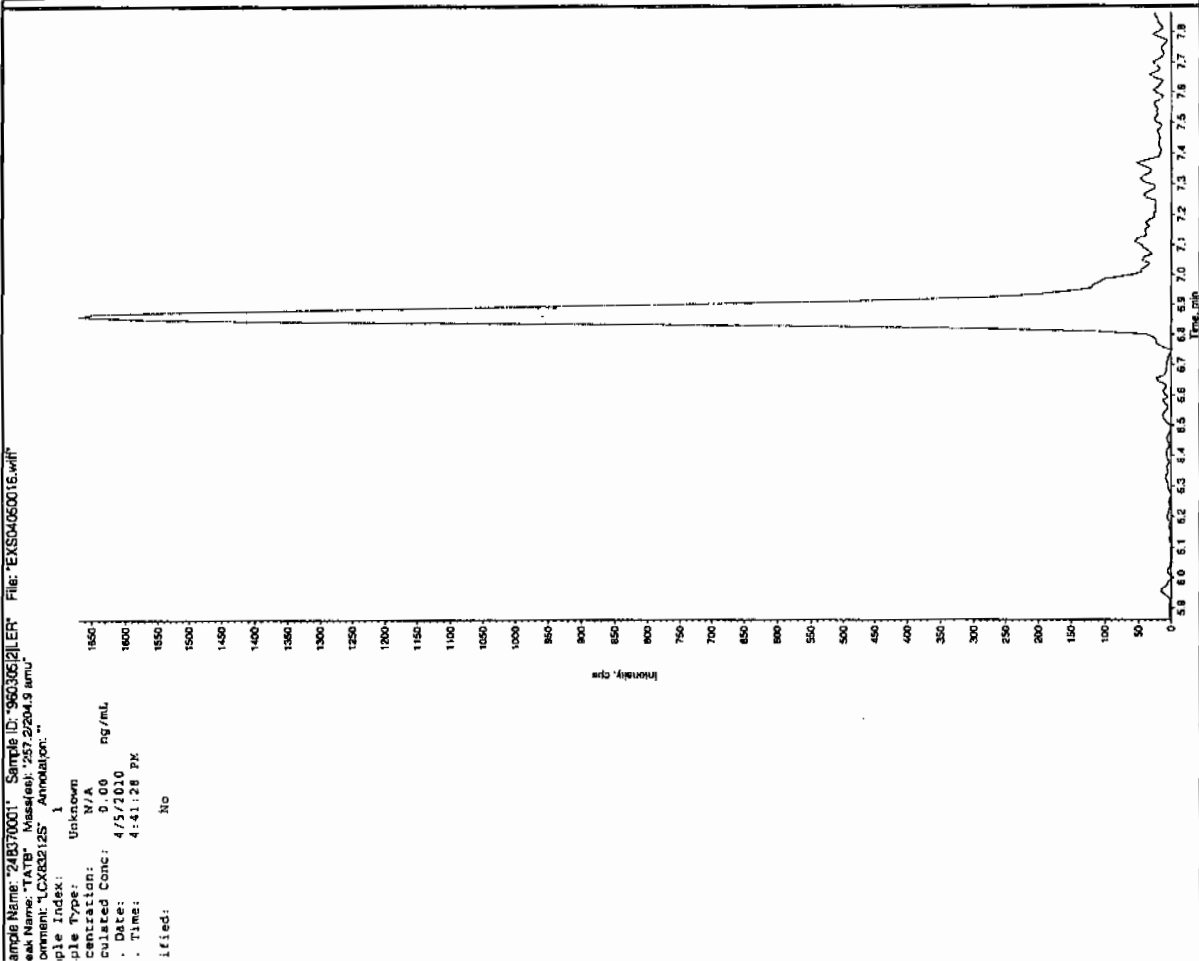
*Concentration =

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

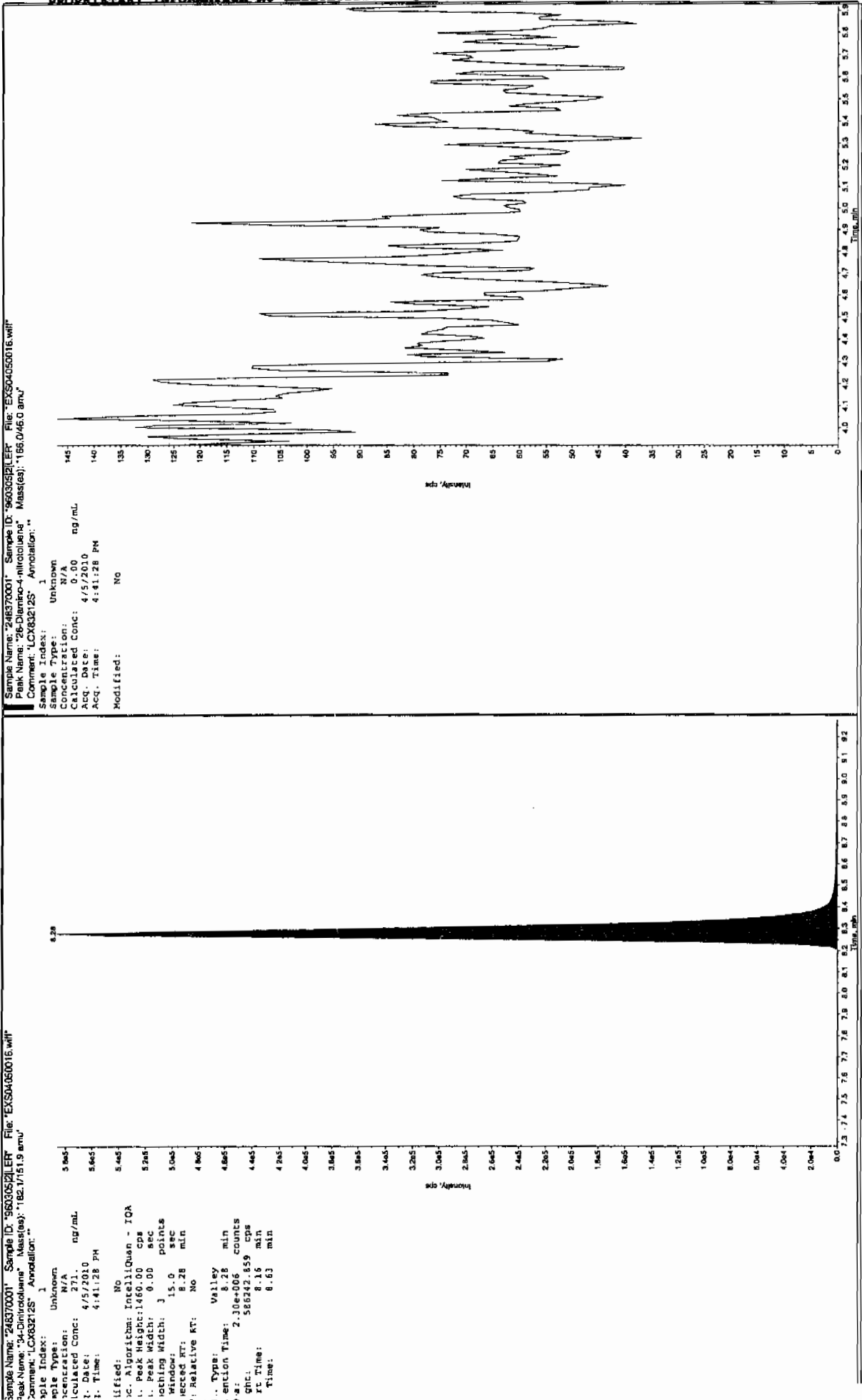
See 4/2/10



4/16/04/08/10

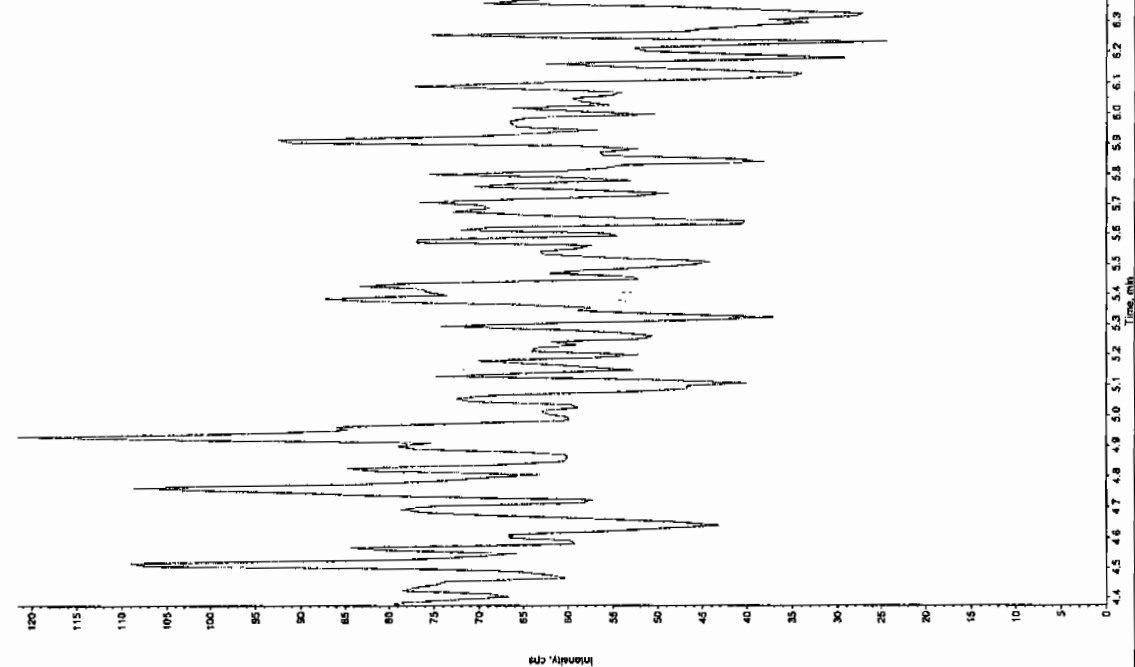


IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



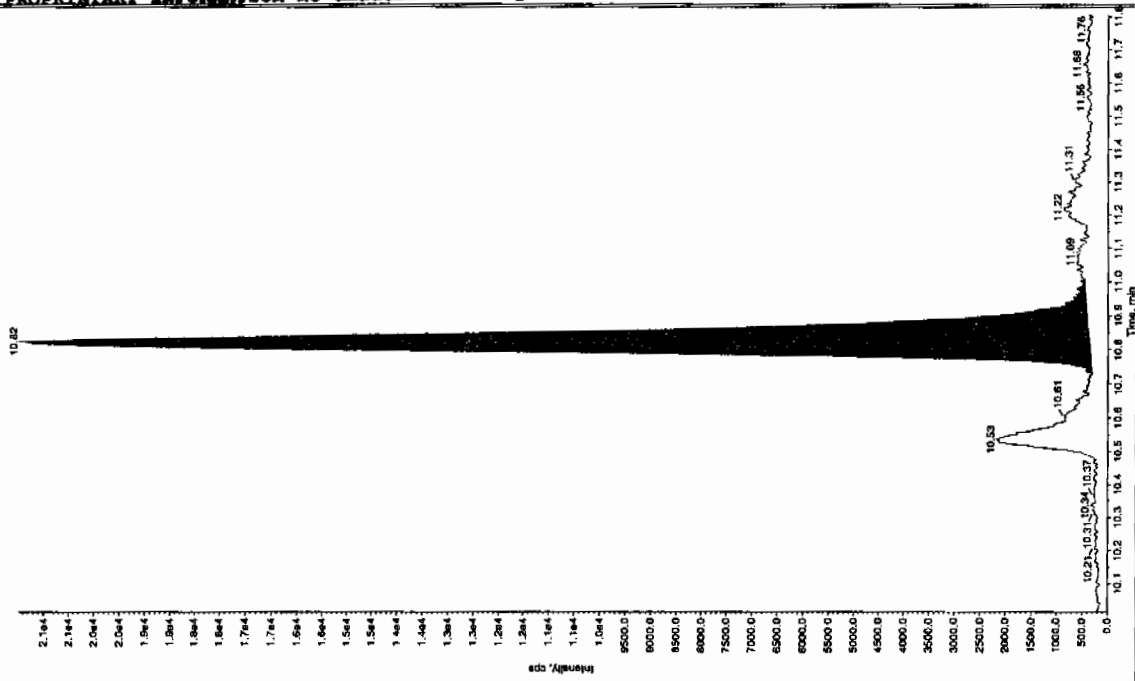
Sample Name: 248370001 Sample ID: 98030521LER File: EXS04050016.wif
 Peak Name: 110.0-ethyl phosphate Mass(es): 389.191.0 amu
 Comment: LCX832125 Annotation:

Sample Index: 1
 Concentration: Unknown
 Calculated Conc: 4.93 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 4:41:28 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 SR Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 8.87e+004 counts
 Height: 21135.227 cps
 Start Time: 10.7 min
 End Time: 11.0 min



Sample Name: 248370001 Sample ID: 98030521LER File: EXS04050016.wif
 Peak Name: 110.0-ethyl phosphate Mass(es): 389.191.0 amu
 Comment: LCX832125 Annotation:

Sample Index: 1
 Concentration: Unknown
 Calculated Conc: 4.93 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 4:41:28 PM
 Modified: No



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7420

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412171a

Date Analyzed: 16-APR-10 03:16

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: Fri Apr 16 09:46:23 2010, Page 55 of 71

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\EXP0412171a

Date: 16-Apr-2010

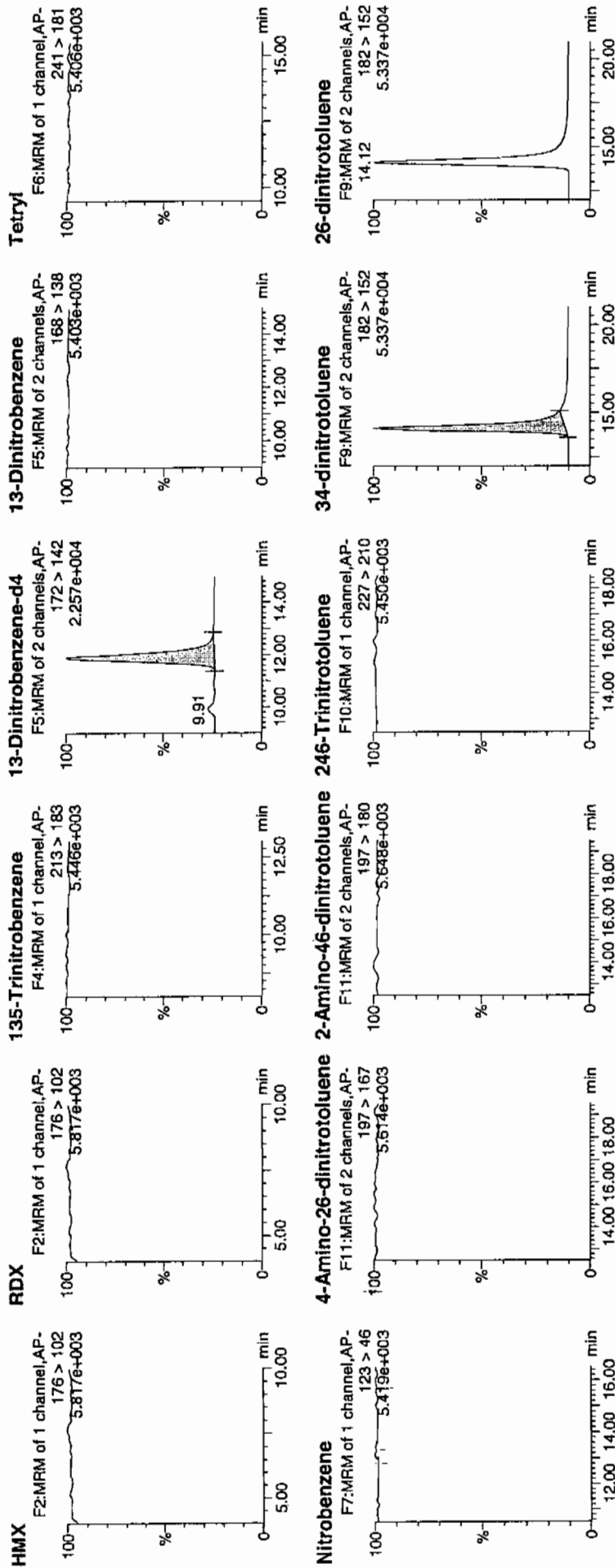
Time: 03:16:19

ID: 248370002

Vial: 4:4,F

4/16/10

Handwritten: 960305 / 21



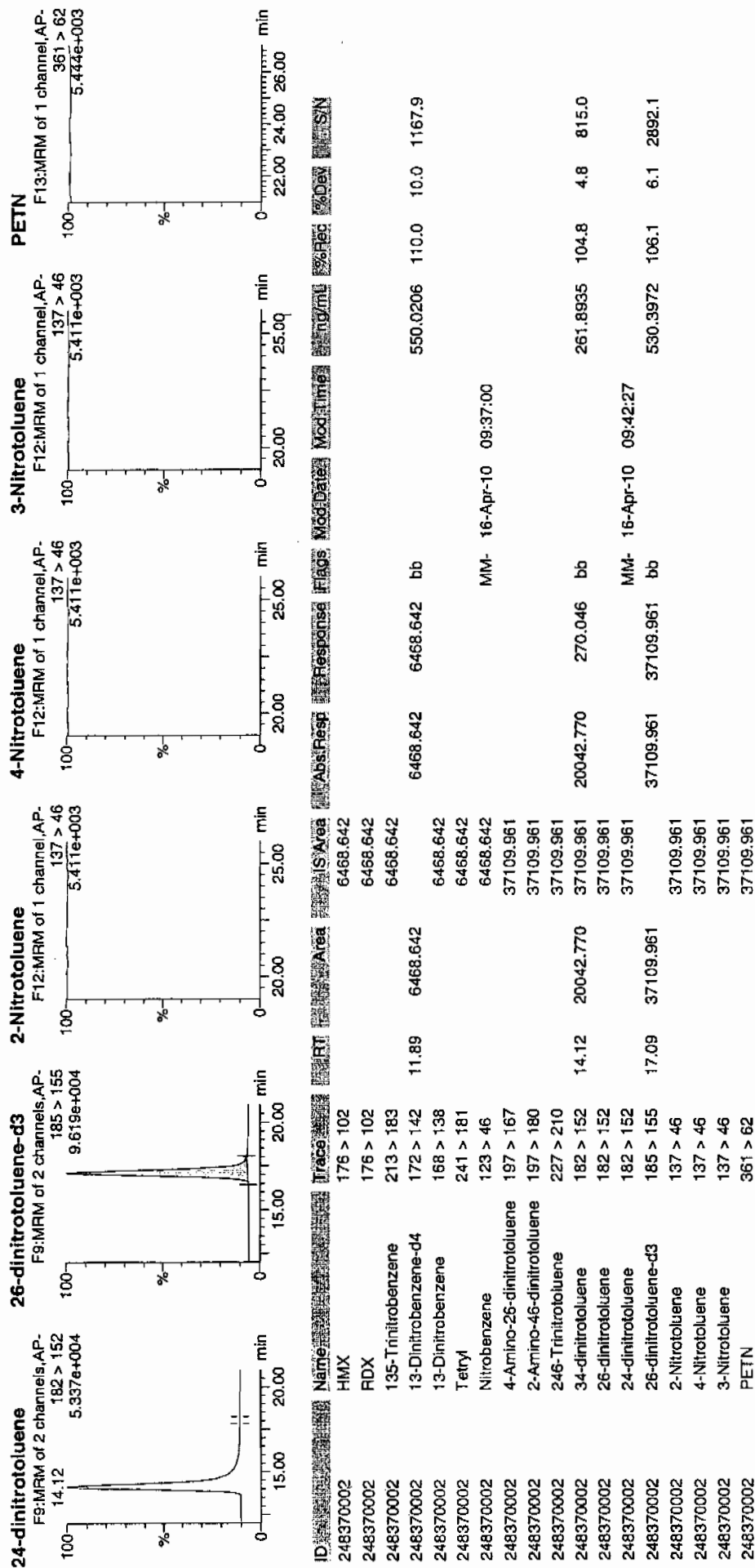
Handwritten: 4/16/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 56 of 71

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qtd, Time: Fri Apr 16 09:45:39 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7420

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050019.wiff

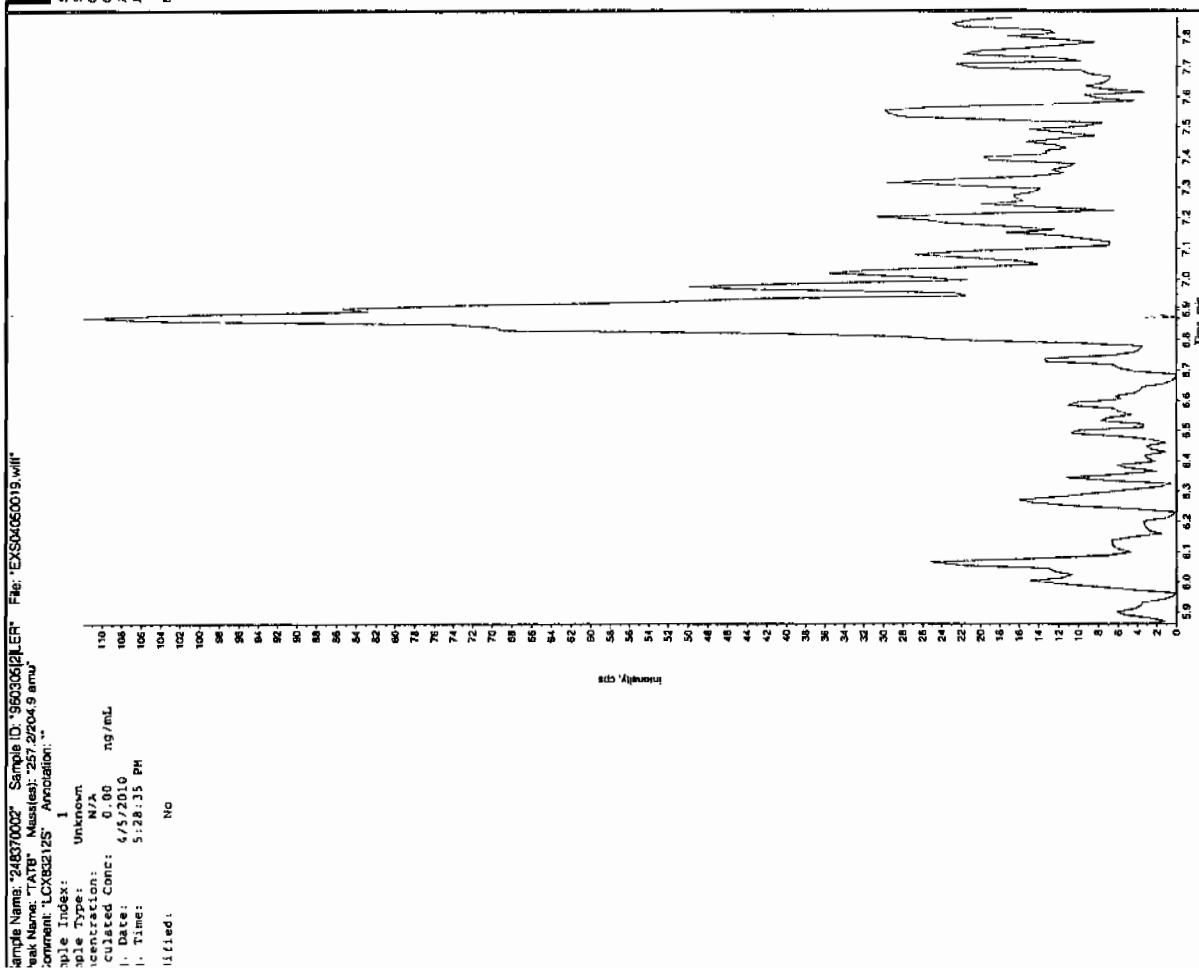
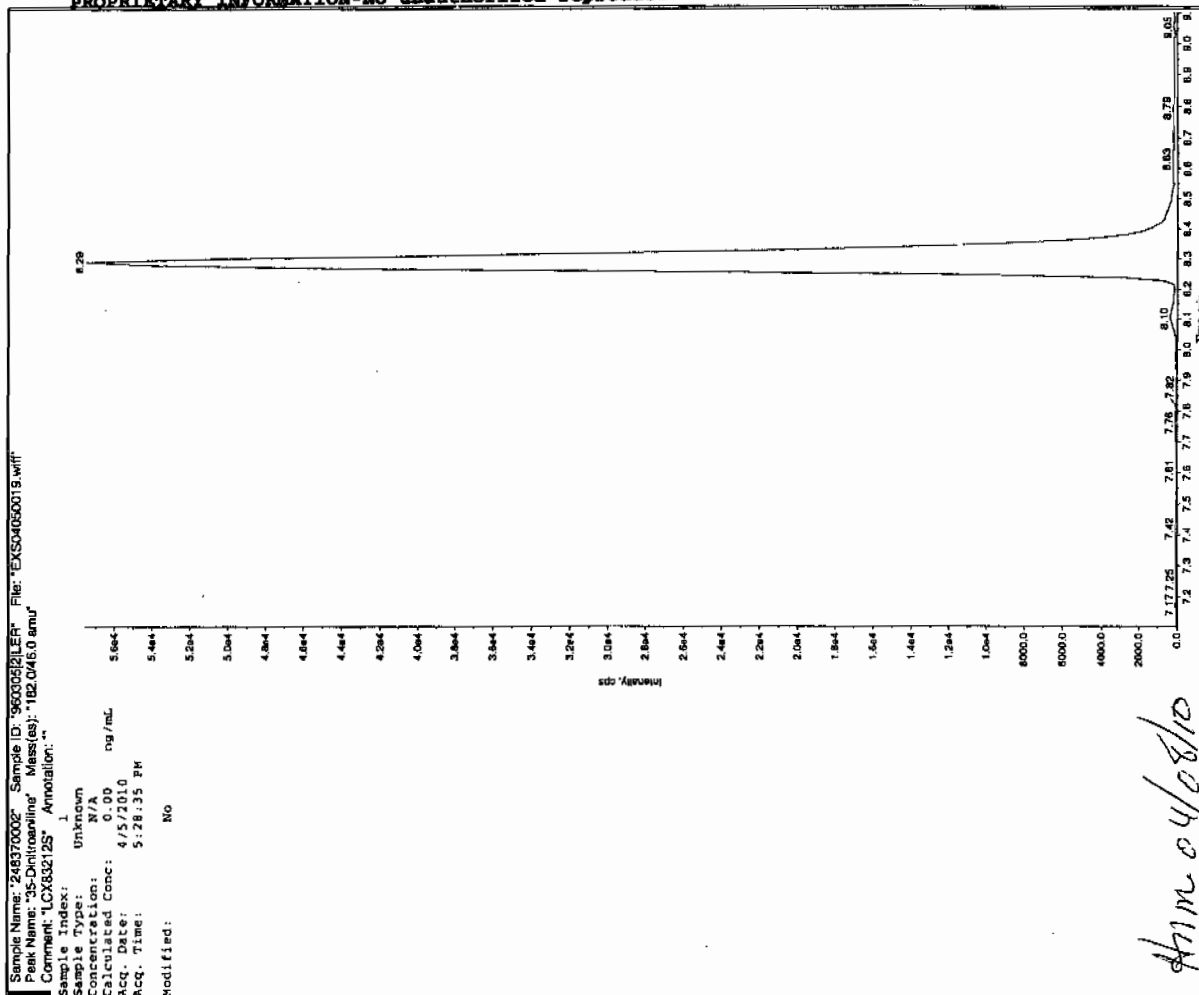
Date Analyzed: 05-APR-10 17:28

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



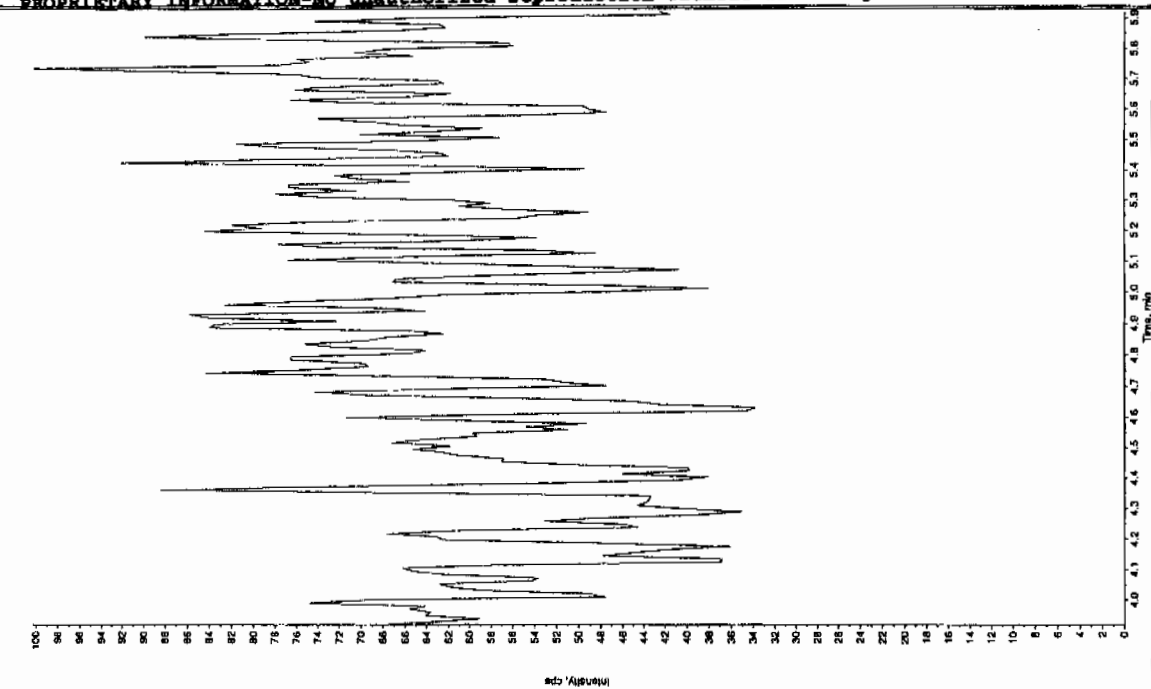
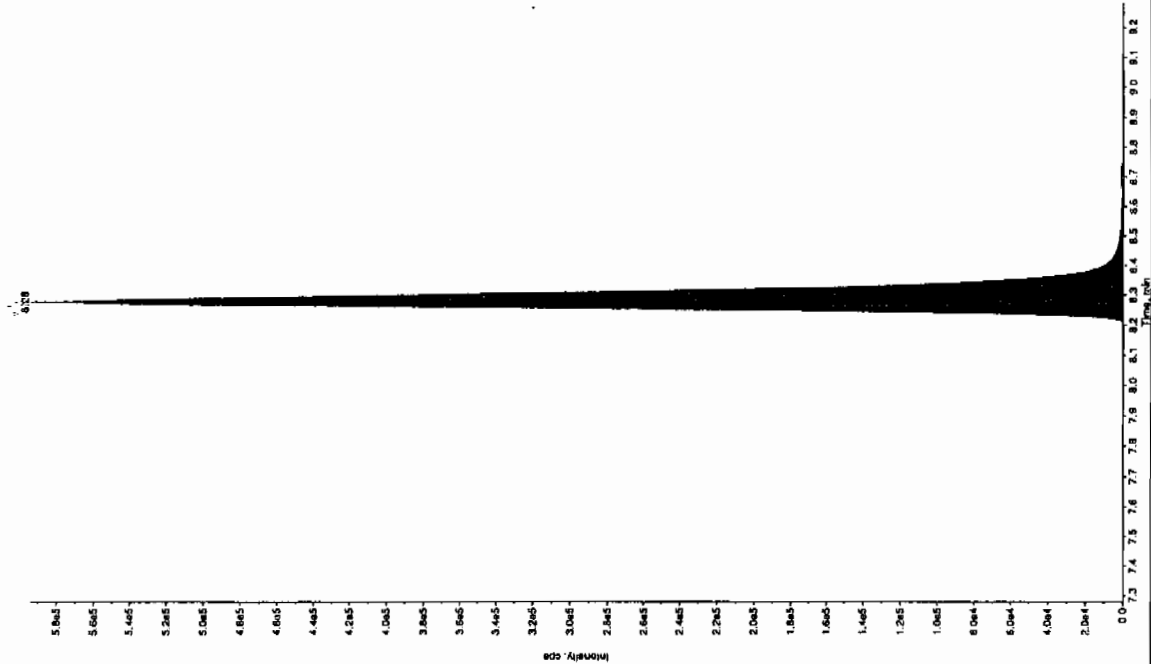
IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

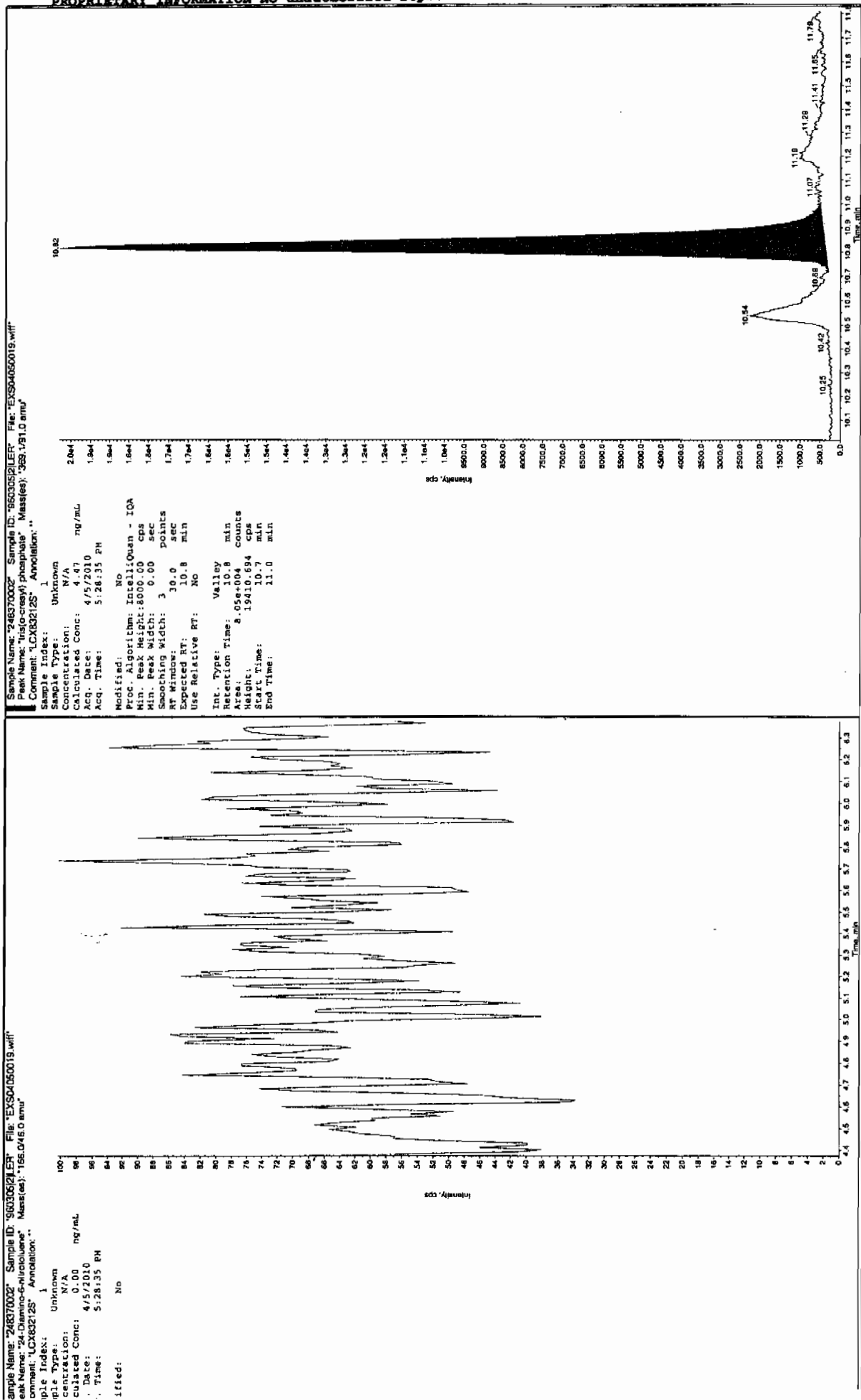
Sample Name: "248370002" Sample ID: "96030821ER" File: "EXS04050019.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 5:28:35 PM
 Modified: No

Acquisition: No
 Algorithm: IntelliQuan - IQA
 Peak Height: 1450.00 cps
 Peak Width: 0.00 sec
 Window: 3 points
 Window: 15.0 sec
 Retention Time: 8.28 min
 Relative RT: No

Valley
 Retention Time: 8.28 min
 Counts: 2.28e+006
 ght: 593512.542 cps
 Ret Time: 8.20 min
 Time: 8.86 min





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7418

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370003

Sample Amount 2

Moisture: 18.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412172a

Date Analyzed: 16-APR-10 03:45

Units: ug/kg

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

*Concentration =

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412172a

Date: 16-Apr-2010

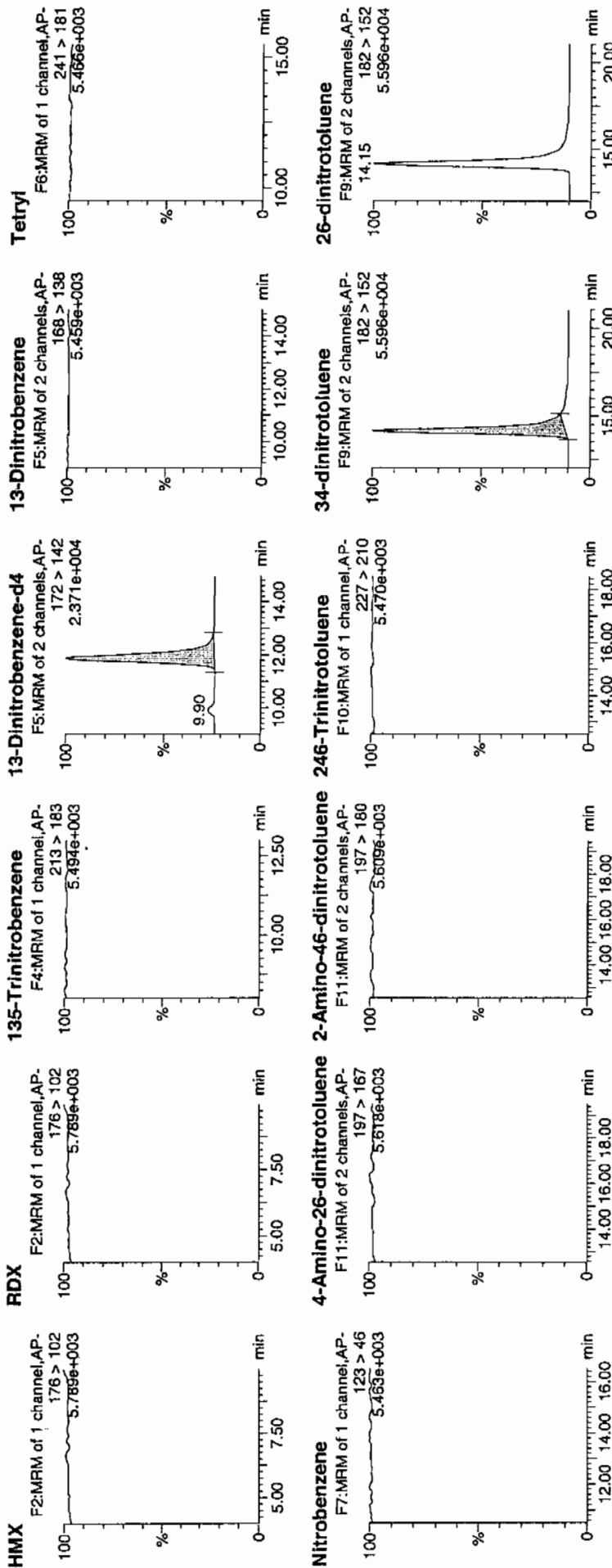
Time: 03:45:47

ID: 248370003

Vial: 4:5,A

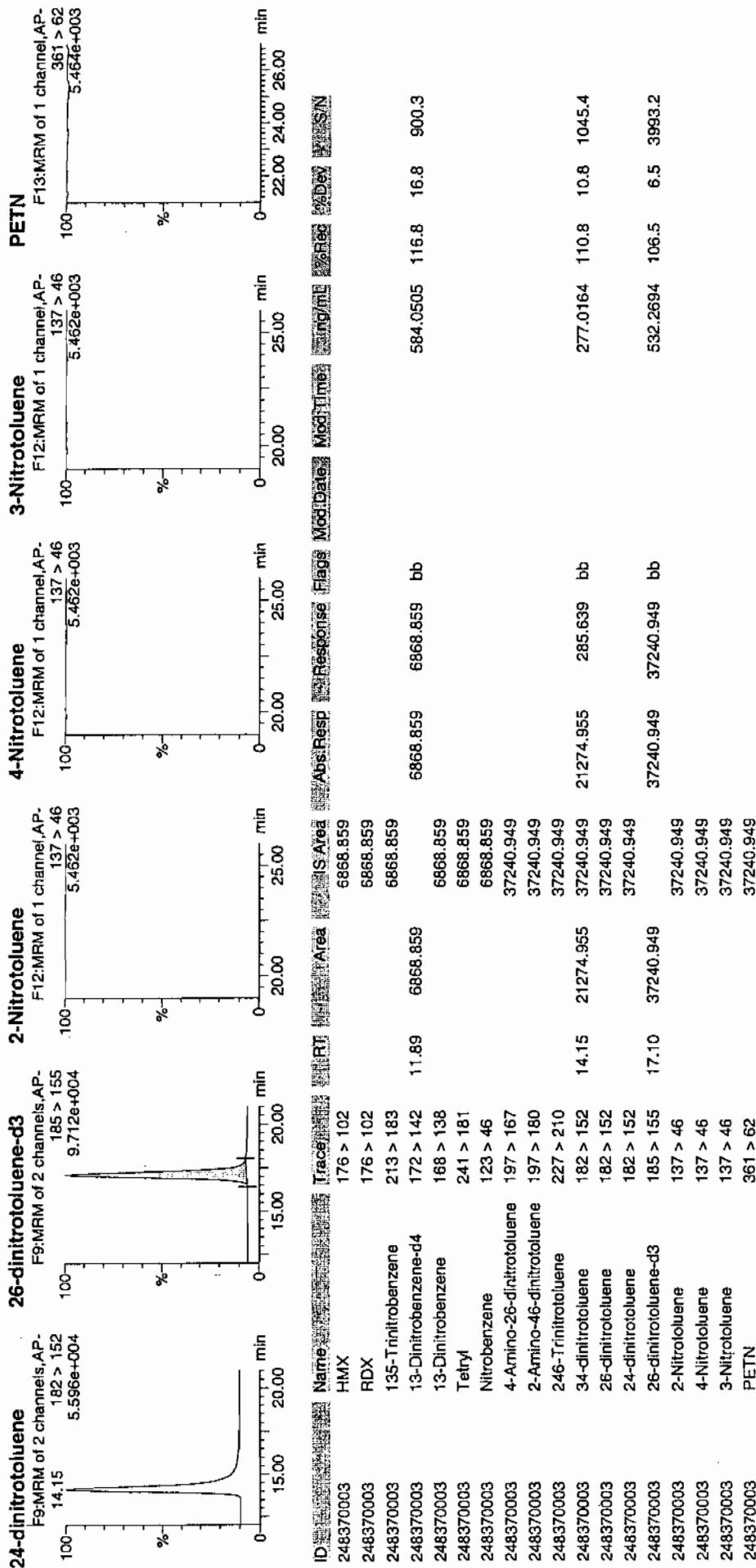
4/16/10

Handwritten: 960305 / 80122 / 21



Handwritten: 4/16/10

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA3.qtd, Time: Fri Apr 16 09:45:39 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7418

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370003

Sample Amount 2

Moisture: 18.7

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050020.wiff

Date Analyzed: 05-APR-10 17:44

Units: ug/kg

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

*Concentration =

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

Jan 4/10

Sample Name: "248370003" Sample ID: "95030521" File: "EX04050020.vnt"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX802125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

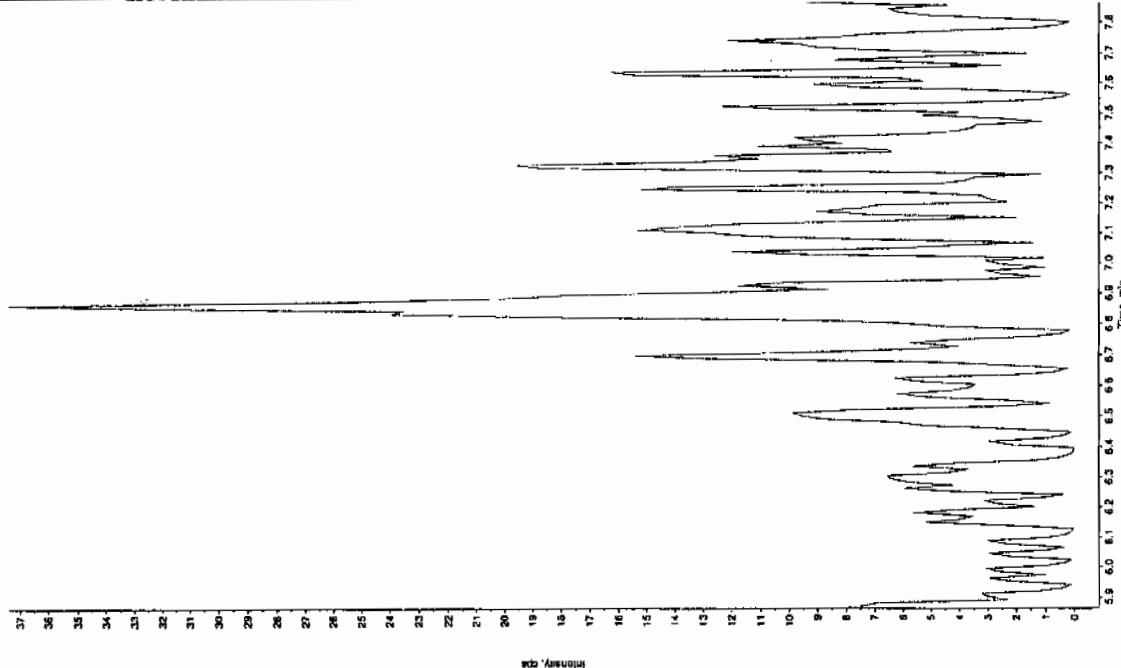
Calculated Conc: 0.00

1. Date: 4/5/2010

2. Time: 5:44:17 PM

3. Time: 5:44:17 PM

Modified: No



Sample Name: "248370003" Sample ID: "95030521" File: "EX04050020.vnt"

Peak Name: "35-Dinitroaniline" Mass(es): "182.045.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

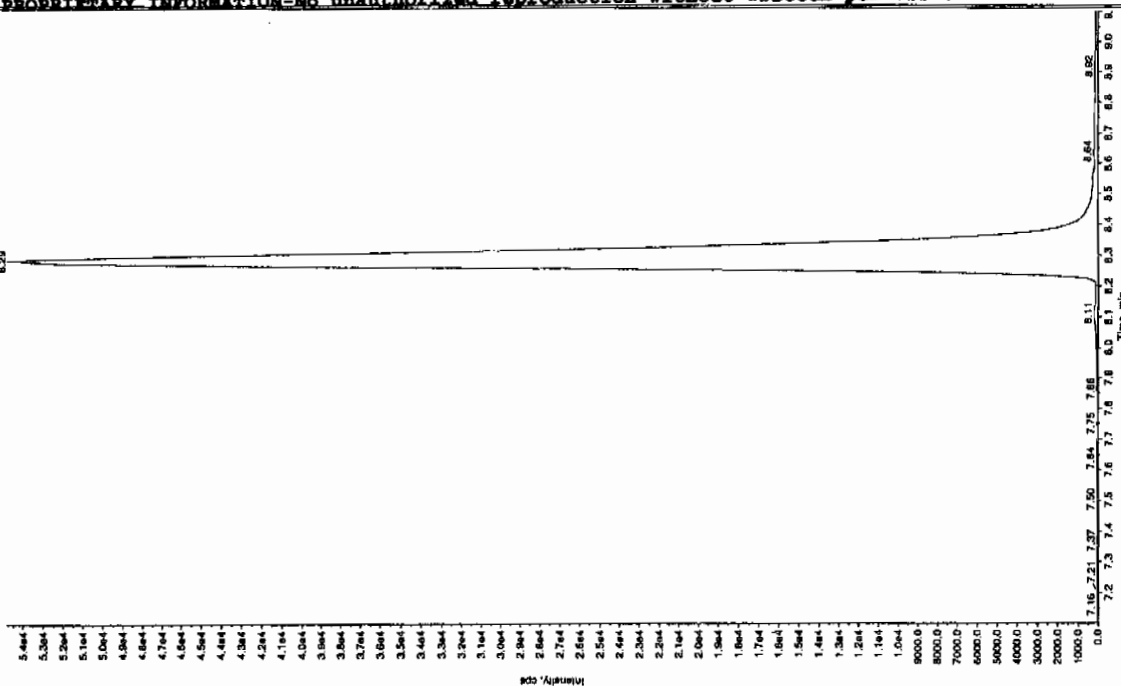
Calculated Conc: 0.00

1. Date: 4/5/2010

2. Time: 5:44:17 PM

3. Time: 5:44:17 PM

Modified: No



4/10/08/10

Sample Name: "248370003" Sample ID: "S60306(2)LER" File: "EXS04050020.wif"

Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 234 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 5:44:17 PM

Modified: No

or. Algorithm: IntelliQuan - IOA

n. Peak Height: 1460.00 cps

n. Peak Width: 0.00 sec

Window Width: 3 points

Window: 15.0 sec

ected RT: 8.28 min

e Relative RT: No

t. Type: Valley

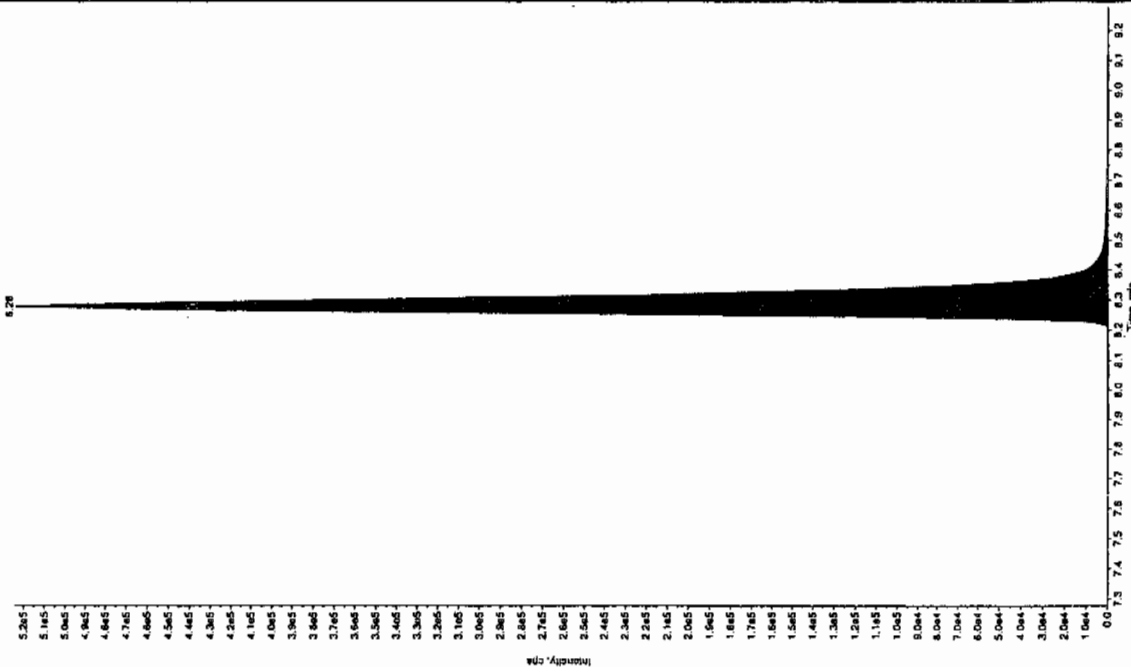
ention Time: 8.28 min

ea: 2.16e+006 counts

ign: 32432073 cps

Time: 8.20 min

d Time: 8.64 min



Sample Name: "248370003" Sample ID: "S60306(2)LER" File: "EXS04050020.wif"

Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.0/46.0 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

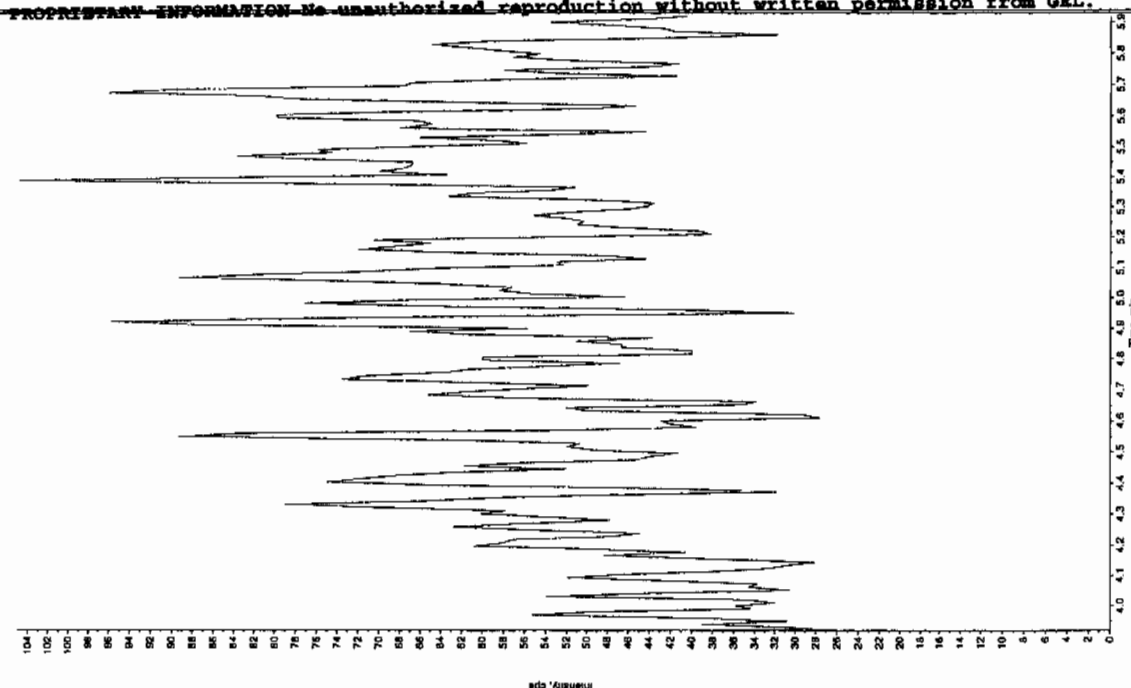
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 5:44:17 PM

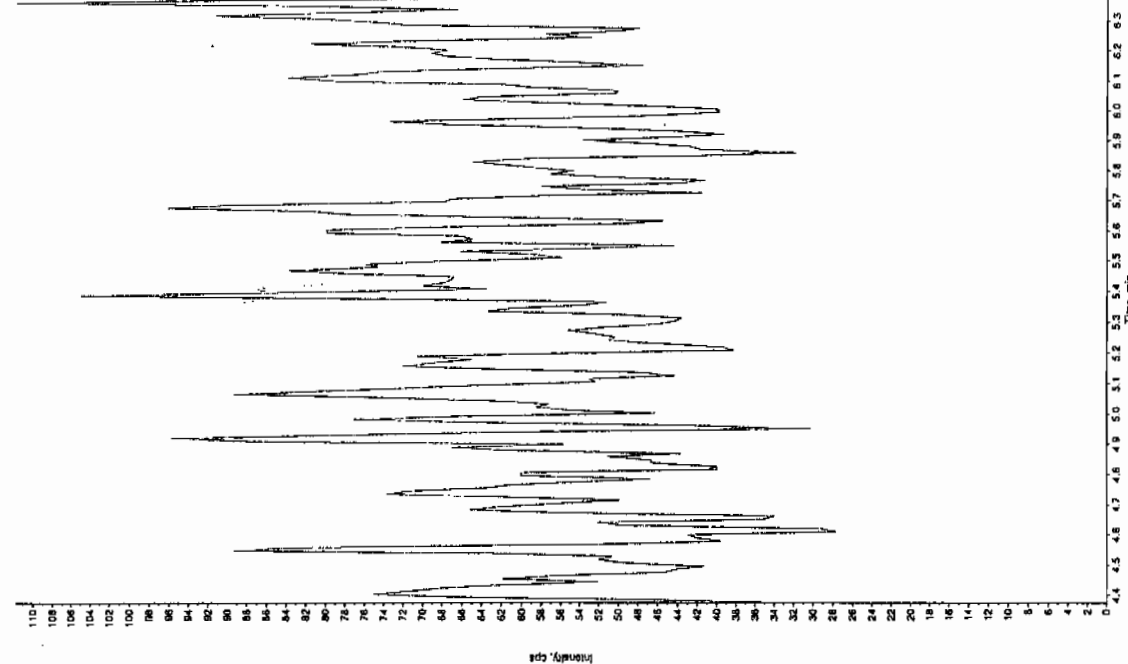
Modified: No



Sample Name: "248370003" Sample ID: "960306121" File: "EXS04050020.wit"
 Peak Name: "24-Diamino-5-pyridouene" Mass(es): "186.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 5:44:17 PM
 Modified: No

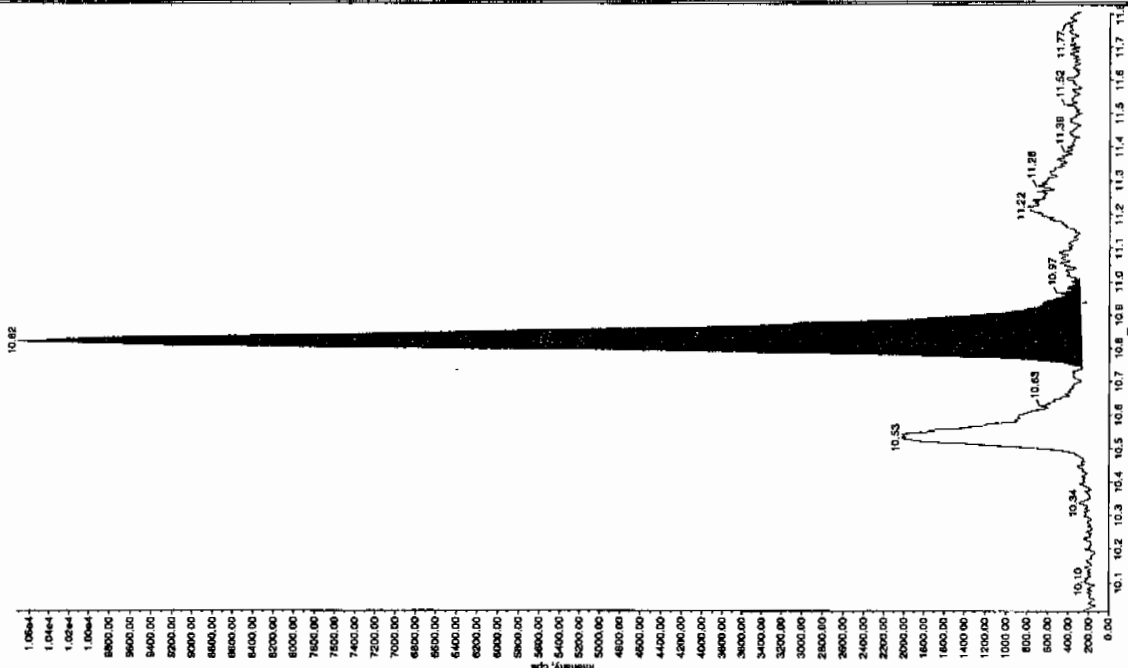
Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 4.35e+004 counts
 Height: 10441.463 cps
 Start Time: 10.7 min
 End Time: 11.0 min



Sample Name: "248370003" Sample ID: "960306121" File: "EXS04050020.wit"
 Peak Name: "bis(2-cyanoethyl) phosphite" Mass(es): "369.191.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 5:44:17 PM
 Modified: No

Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 4.35e+004 counts
 Height: 10441.463 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: RE36-10-7417

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370004

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412173a

Date Analyzed: 16-APR-10 04:15

Units: ug/kg

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

*Concentration =

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

Printed: Fri Apr 16 09:46:23 2010, Page 59 of 71

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\EXP0412173a

Date: 16-Apr-2010

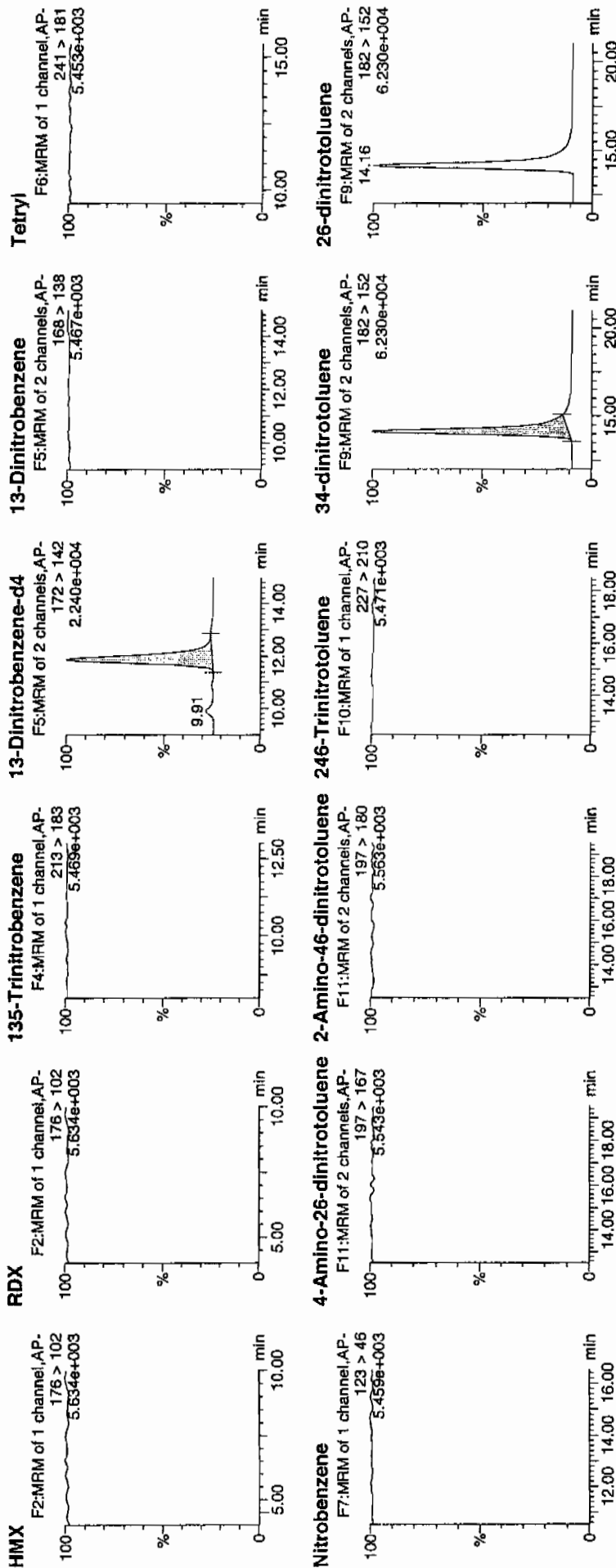
Time: 04:15:18

ID: 248370004

Vial: 4:5,B

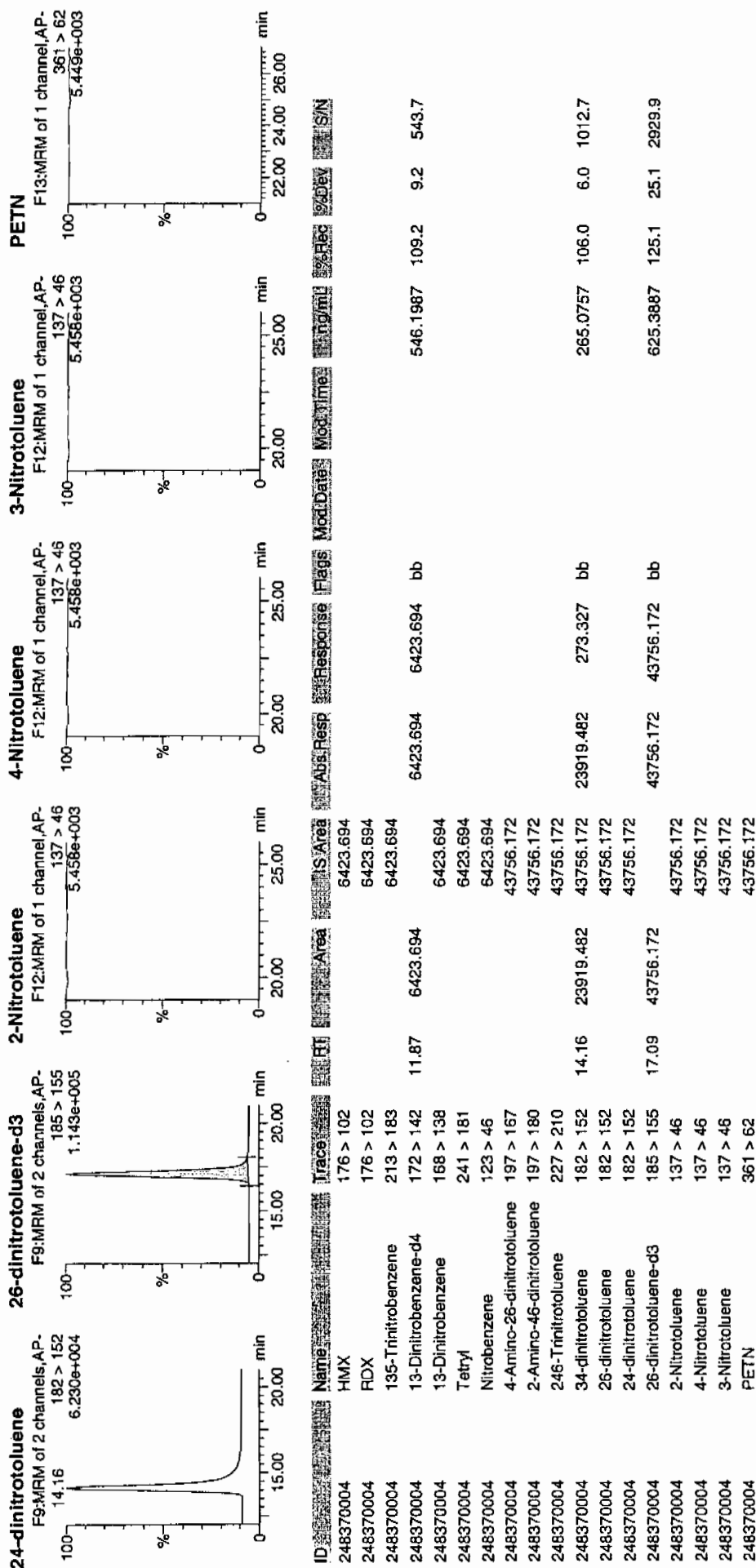
4/16/10

Law 960305 / Souza / 21



4/16/10

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7417

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370004

Sample Amount 2

Moisture: 21.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050021.wiff

Date Analyzed: 05-APR-10 17:59

Units: ug/kg

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

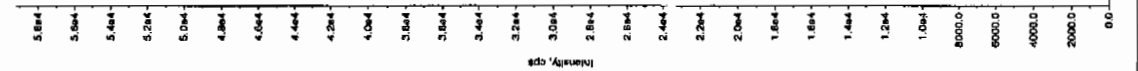
*Concentration =

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

Jan 4/7/10

Sample Name: "248370004" Sample ID: "96030621LER" File: "EXS04050021.wif"
 Peak Name: "3S-Dimethylamine" Mass(es): "182.046.0 amu"
 Comment: "LCX83212S" Annotation: "1"

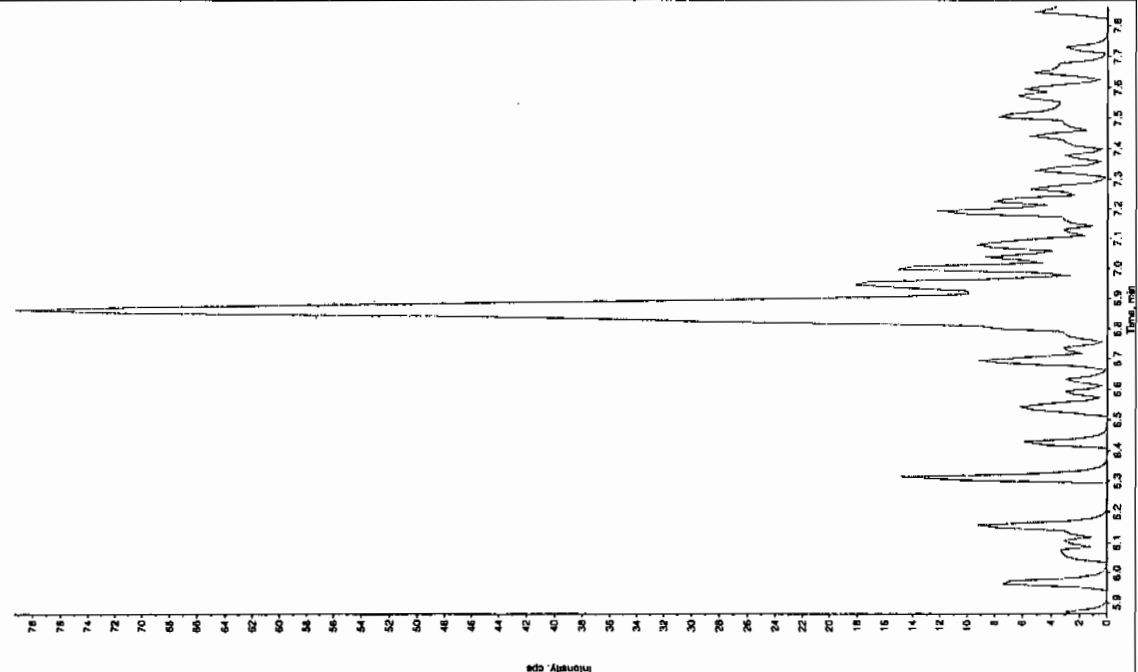
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 5:59:59 PM
 Modified: No



Jan 4/8/10

Sample Name: "248370004" Sample ID: "96030621LER" File: "EXS04050021.wif"
 Peak Name: "TATB" Mass(es): "237.2204.9 amu"
 Comment: "LCX83212S" Annotation: "1"

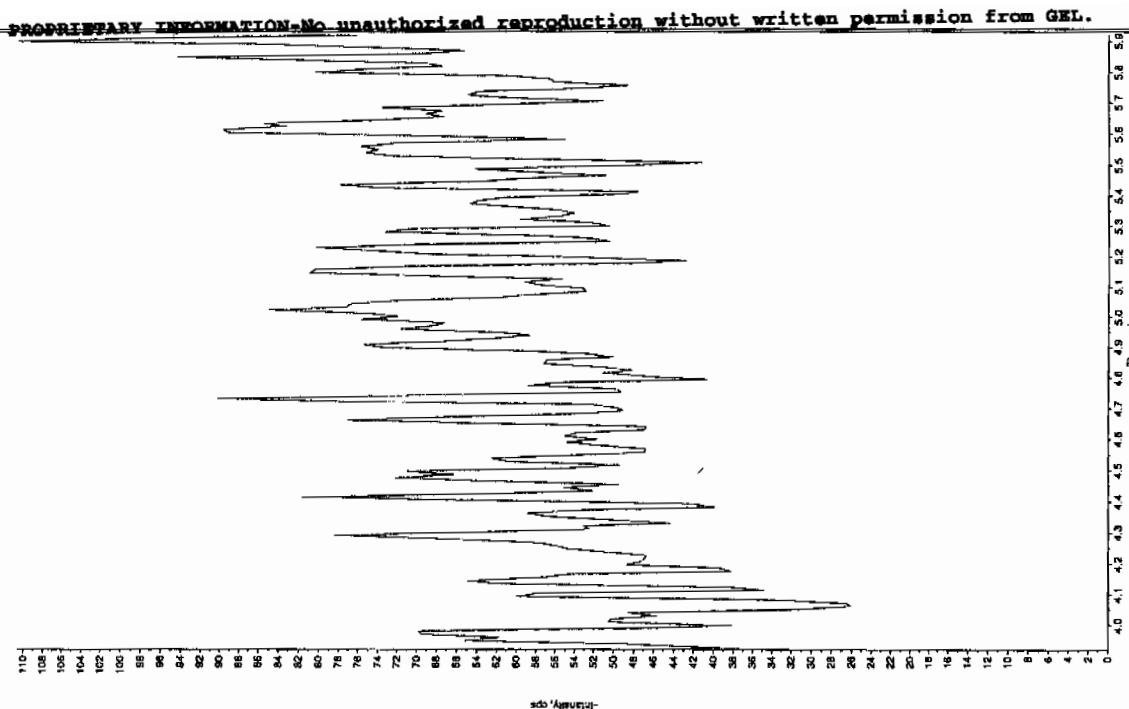
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 5:59:59 PM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

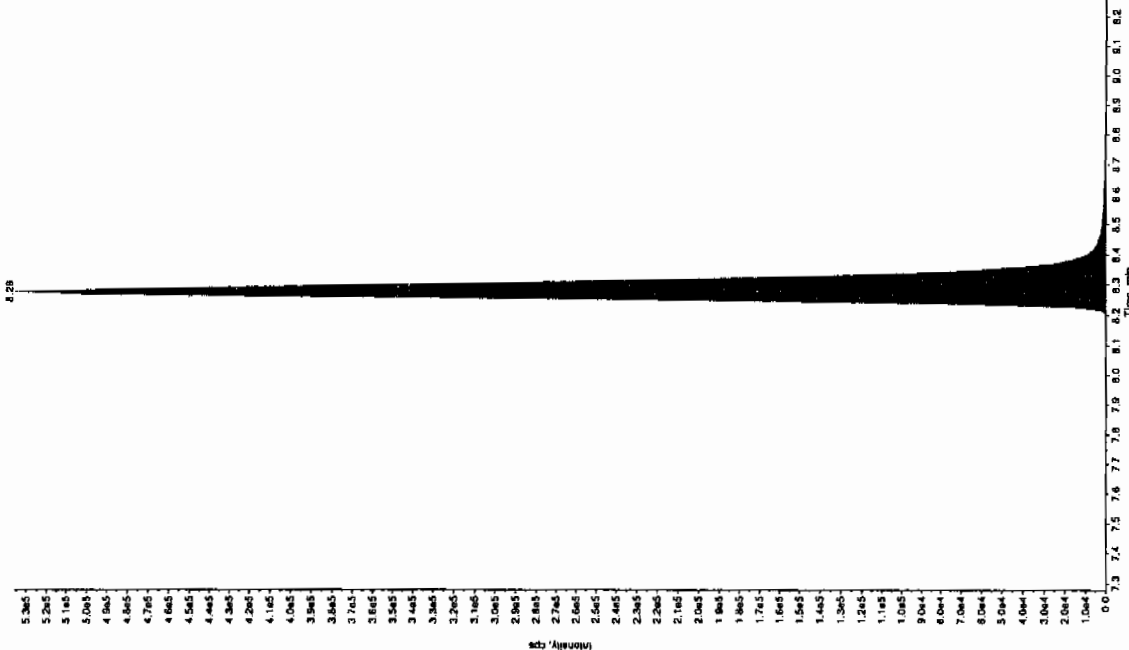
Sample Name: "246370004" Sample ID: "96030521ER" File: "EXSD4050021.wif"
 Peak Name: "25-Diamino-4-nitrofluorene" Mass(es): "166.0460 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Acquired Conc: 4/5/2010
 Acq. Time: 5:59:59 PM
 Modified: No



Sample Name: "246370004" Sample ID: "96030521ER" File: "EXSD4050021.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17159 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 214 ng/mL
 Acquired Conc: 4/5/2010
 Acq. Time: 5:59:59 PM
 Modified: No
 oc. Algorithm: IntelliQuan - IQA
 n. Peak Height: 1560.00 cps
 n. Peak Width: 0.00 sec
 Window: 3 points
 Window: 15.0 sec
 Predicted RT: 8.28 min
 n. Relative RT: No
 Type: Valley
 Retention Time: 8.28 min
 n. counts: 2.16e+006
 n. cps: 535694.031
 n. Time: 8.15 min
 n. Time: 8.81 min

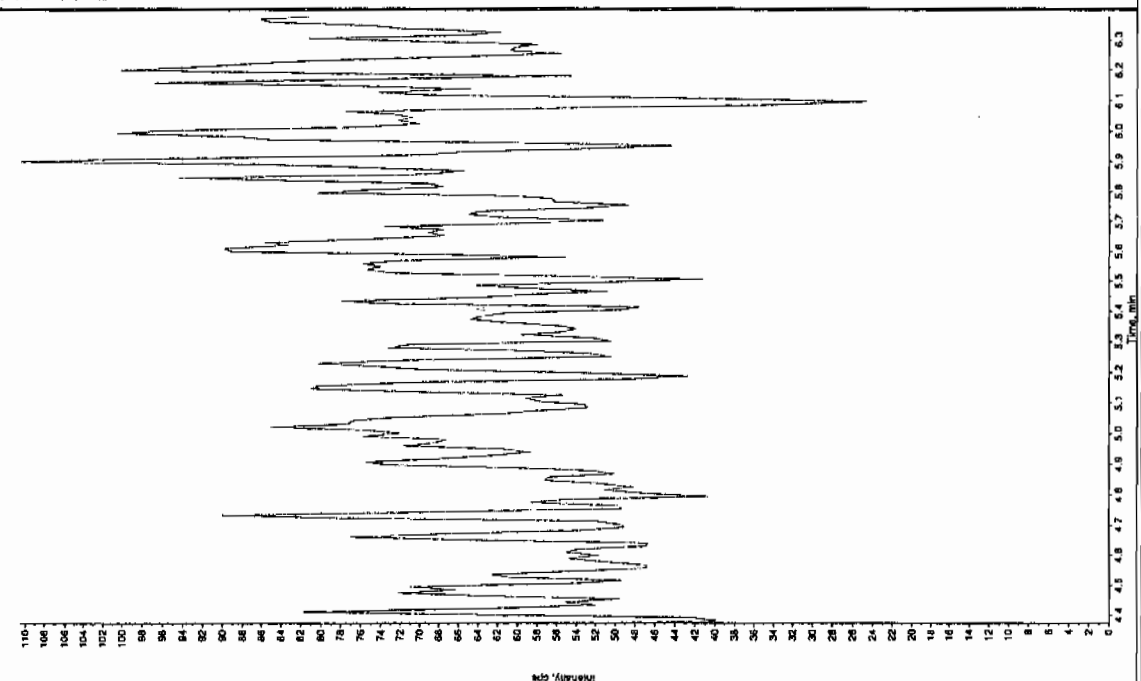
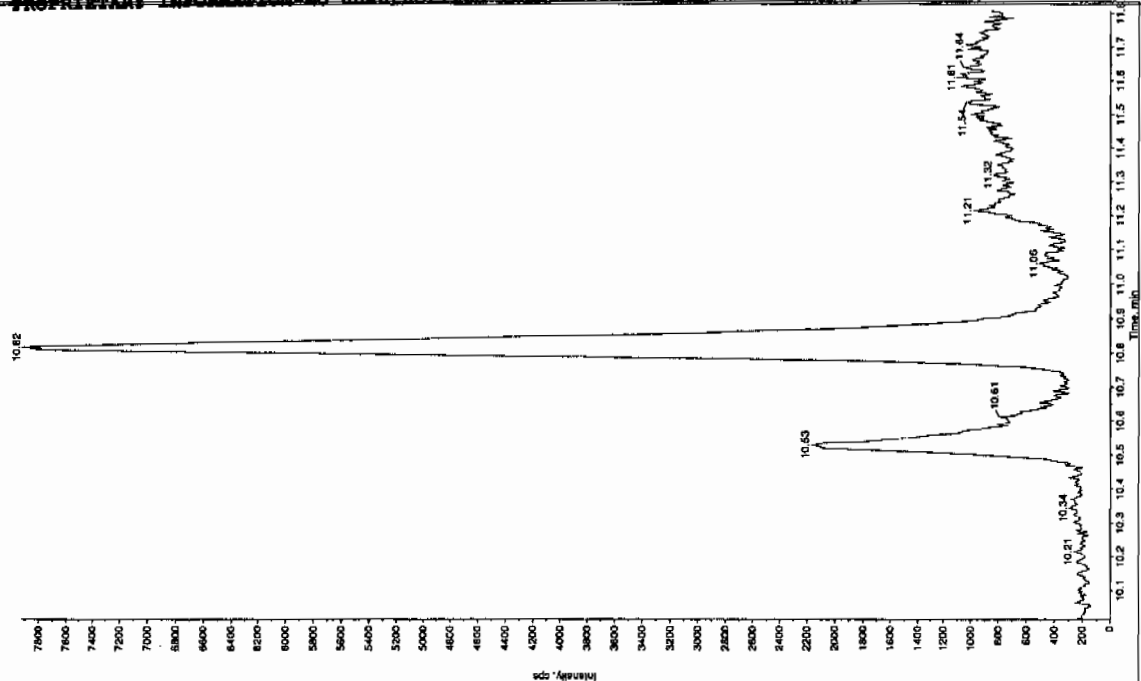


Sample Name: "248370004" Sample ID: "96030521LER" File: "EXS04050021.wit"
 Peak Name: "1,1,1-tris(4-chlorophenyl) phosphite" Mass(es): "389.1/91.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ug/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 5:59:59 PM
 Modified: No

Sample Name: "248370004" Sample ID: "96030521LER" File: "EXS04050021.wit"
 Peak Name: "24-Diamino-6-nitrothiophene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 5:59:59 PM
 Modified: No



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7419

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412174a

Date Analyzed: 16-APR-10 04:44

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412174a

Date: 16-Apr-2010

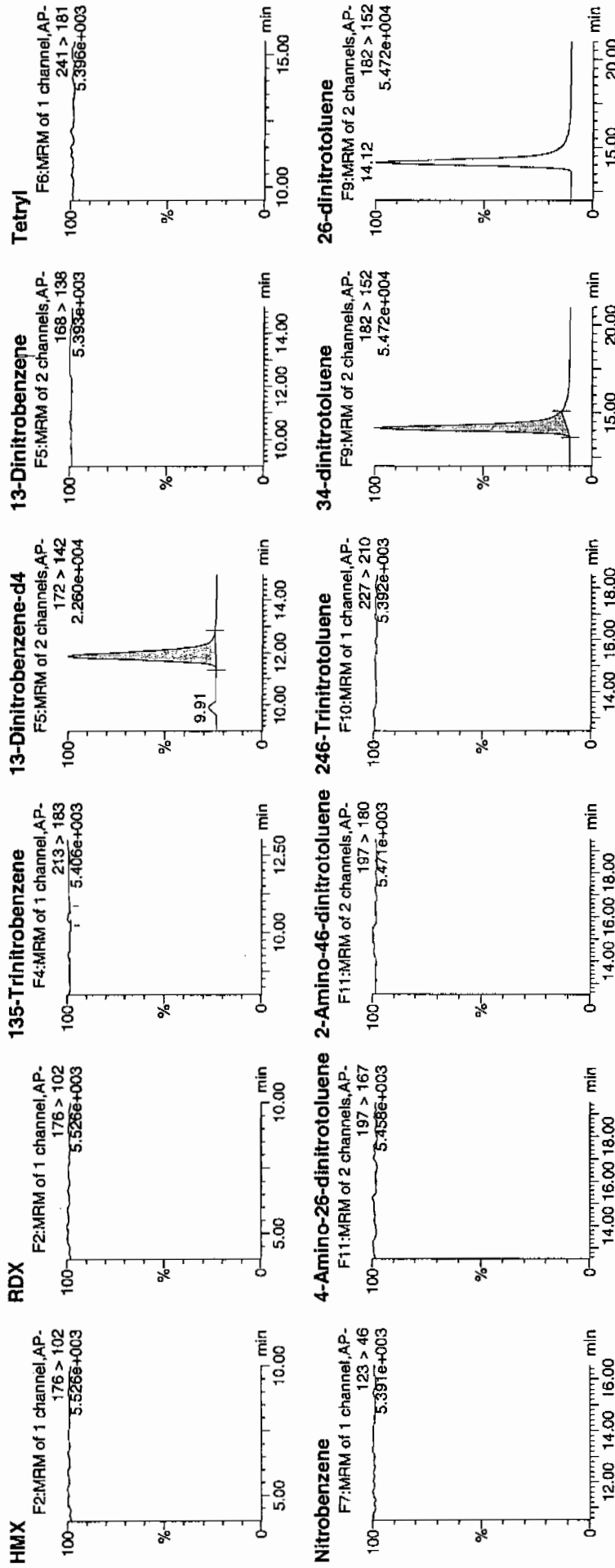
Time: 04:44:48

ID: 248370005

Vial: 4:5,C

Lot# 4/16/10

WAX 960305 | 8025 | 21

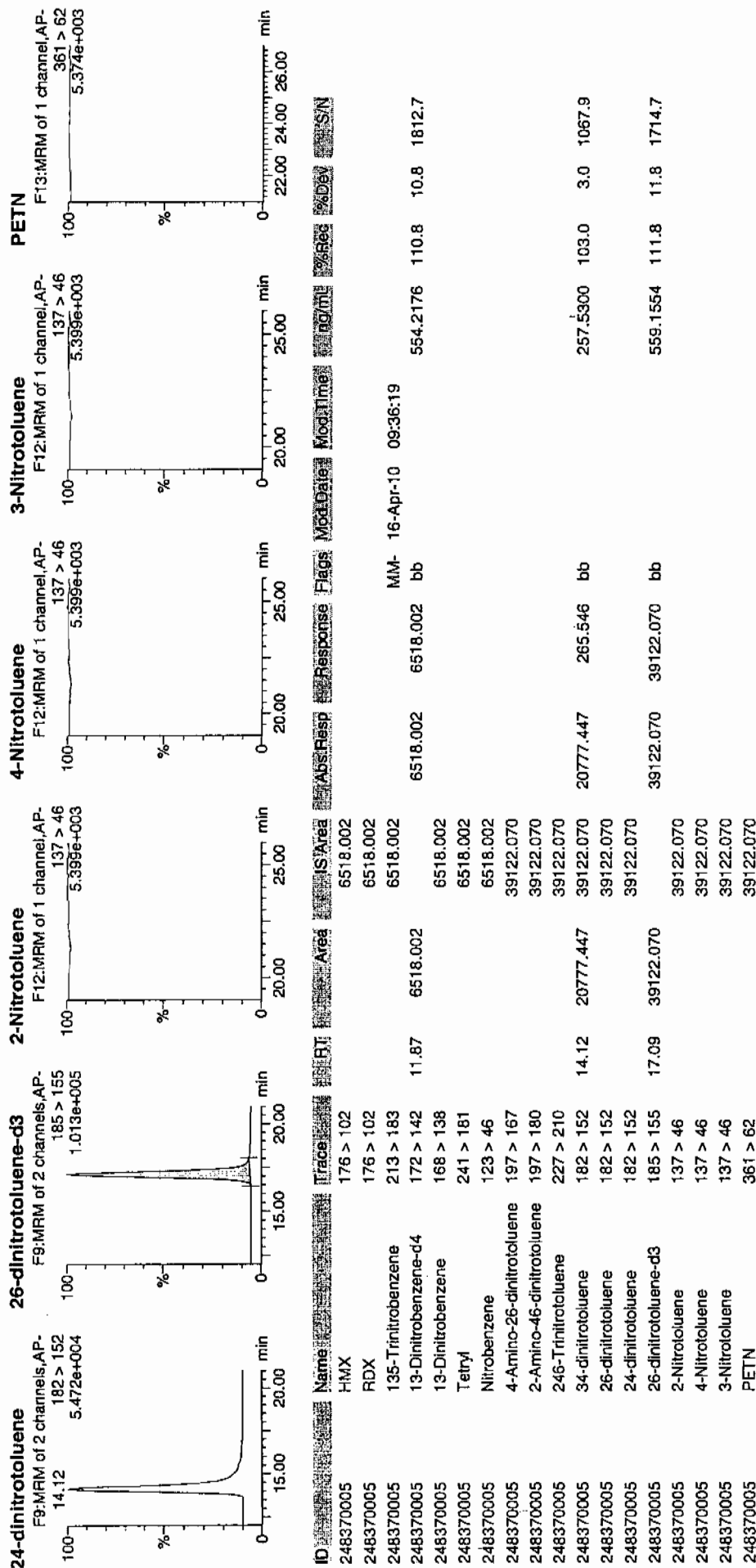


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 62 of 71

Dataset: C:\MASSL\YNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7419

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050022.wiff

Date Analyzed: 05-APR-10 18:15

Units: ug/kg

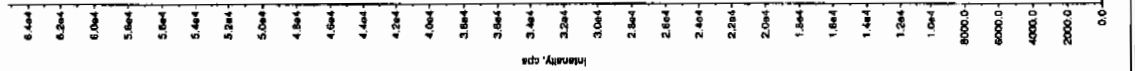
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

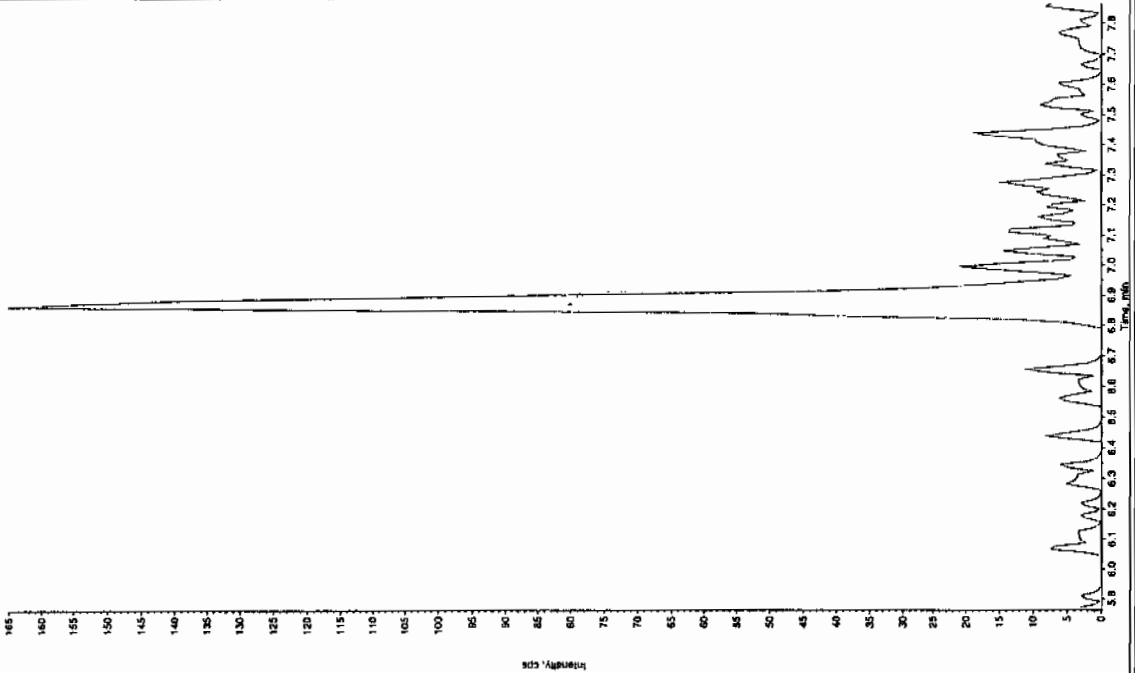
See 4/7/10

Sample Name: "248370005" Sample ID: "960305JLER" File: "EXS04050022.wiff"
 Peak Name: "35-Dinitrobenz" 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: 4/5/2010
 Acq. Time: 6:15:41 PM
 Modified: No



4/10/08/10

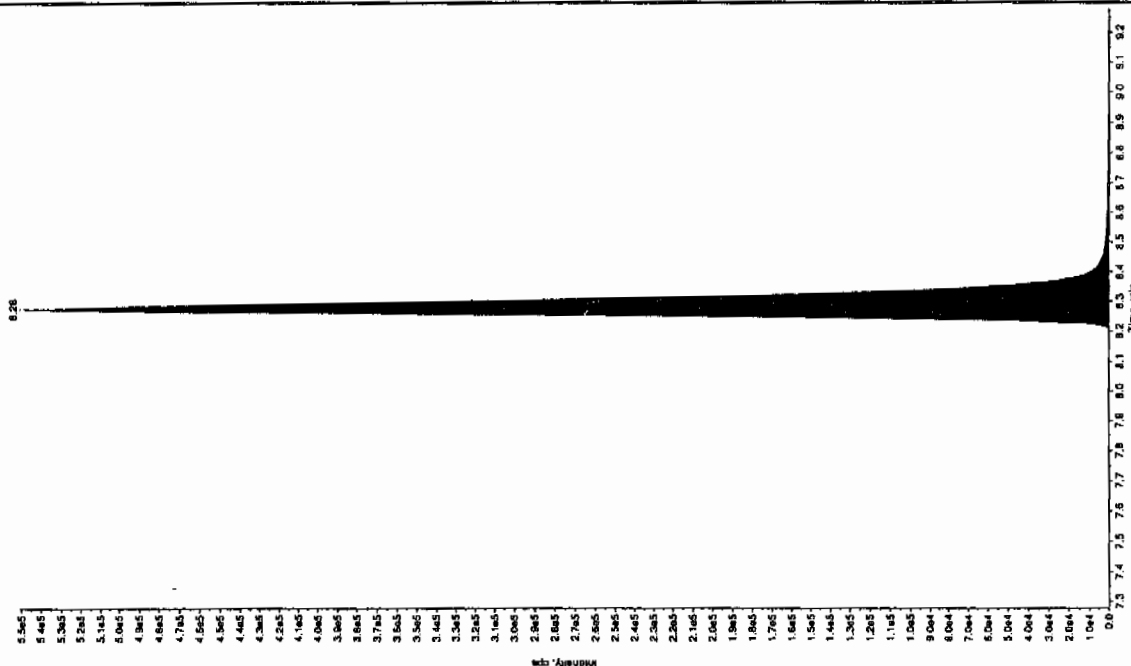
Sample Name: "248370005" Sample ID: "960305JLER" File: "EXS04050022.wiff"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCX832125" Annotation: ""
 Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 6:15:41 PM
 Modified: No



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "248370003" Sample ID: "960305[2]LRF" File: "EXS04050022.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17519 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 4.512010
 Acq. Date: 6/13/41 PM
 Acq. Time: 6:13:41 PM
 Modified: No

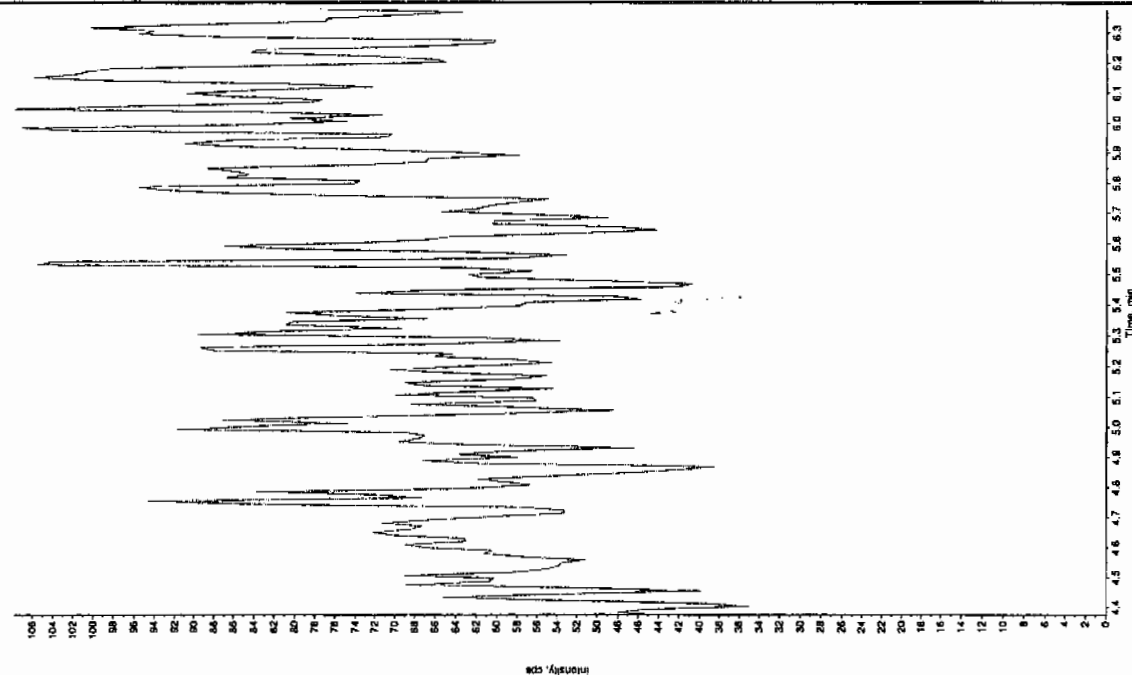


Sample Name: "248370003" Sample ID: "960305[2]LRF" File: "EXS04050022.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17519 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 4.512010
 Acq. Date: 6/13/41 PM
 Acq. Time: 6:13:41 PM
 Modified: No
 Acquisition: InCelliQuan - IQA
 n. Peak Height: 1460.00 cps
 n. Peak Width: 0.00 sec
 Acquiring Width: 3 points
 Window: 15.0 sec
 Expected RT: 8.28 min
 e Relative RT: No
 t. Type: Valley
 Retention Time: 8.28 min
 Area: 2.16e-006 counts
 Height: 550973.389 cps
 Start Time: 8.17 min
 End Time: 8.67 min

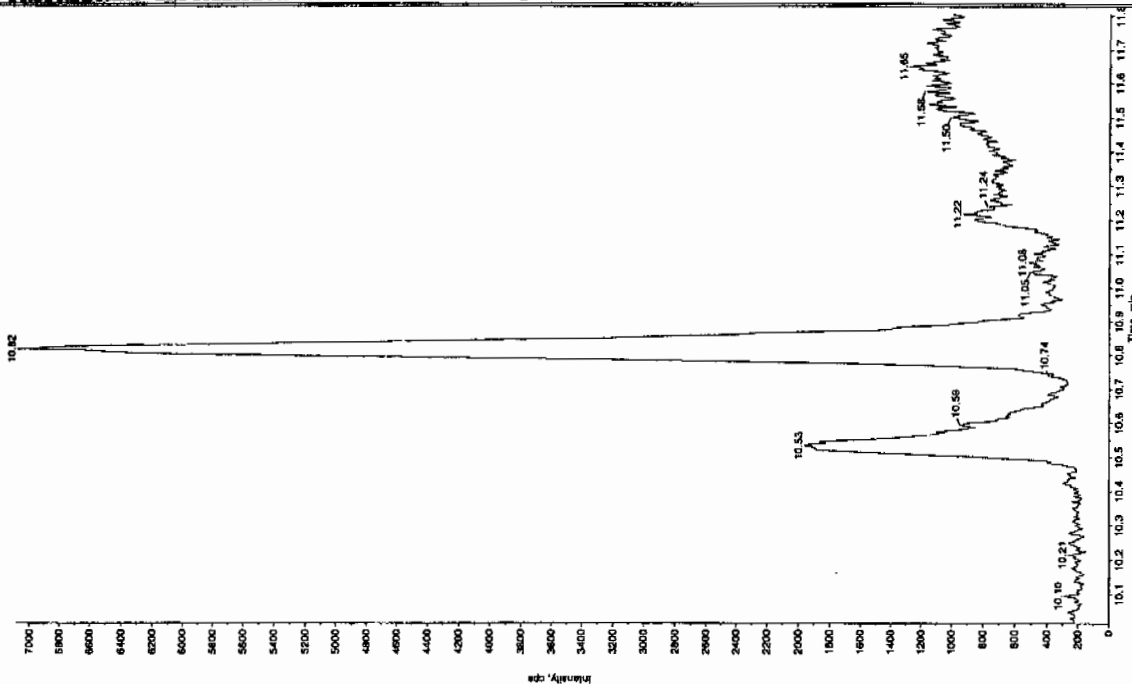
Sample Name: "248370005" Sample ID: "96030621ER" File: "EX504050022.wif"
 Peak Name: "24-Chlorine-6-nitrotoluene" Mass(es): "166.045.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 6:13:41 PM
 Modified: NO



Sample Name: "248370005" Sample ID: "96030621ER" File: "EX504050022.wif"
 Peak Name: "24-Chlorine-6-nitrotoluene" Mass(es): "166.045.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 2
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 6:13:41 PM
 Modified: NO



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7416

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370006

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412175a

Date Analyzed: 16-APR-10 05:14

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0412175a

Date: 16-Apr-2010

Time: 05:14:18

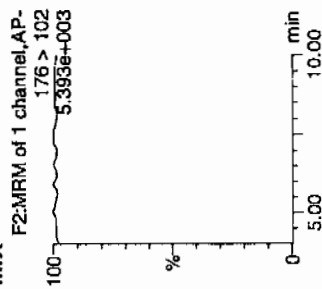
ID: 248370006

Vial: 4:5.D

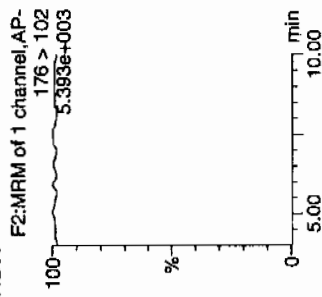
not
4/16/10

960305 | 8022 | 21

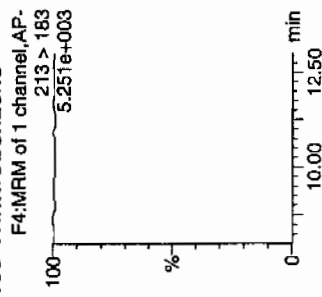
HMX



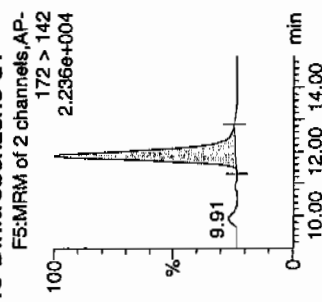
RDX



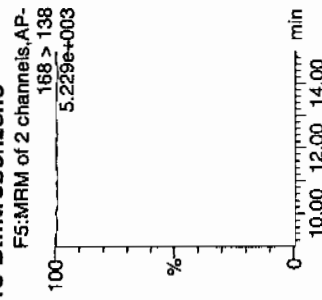
135-Trinitrobenzene



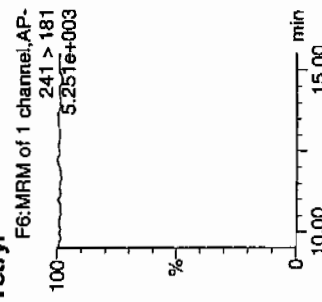
13-Dinitrobenzene-d4



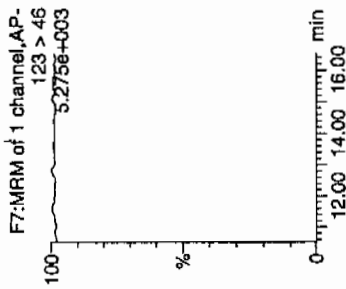
13-Dinitrobenzene



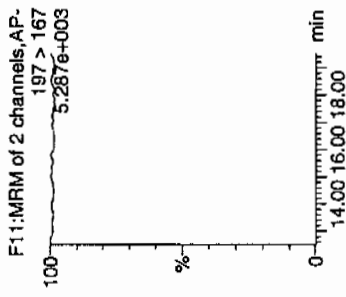
Tetryl



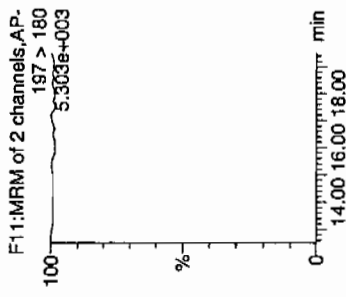
Nitrobenzene



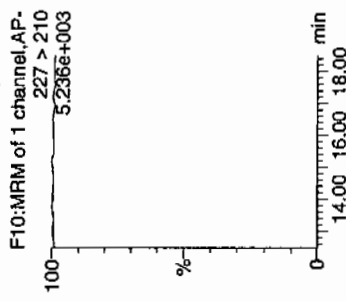
4-Amino-26-dinitrotoluene



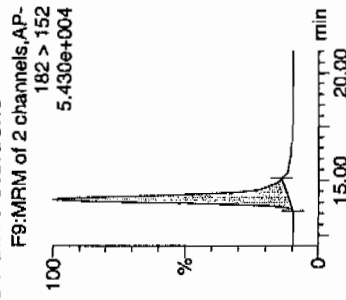
2-Amino-46-dinitrotoluene



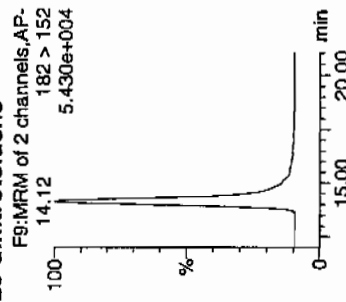
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



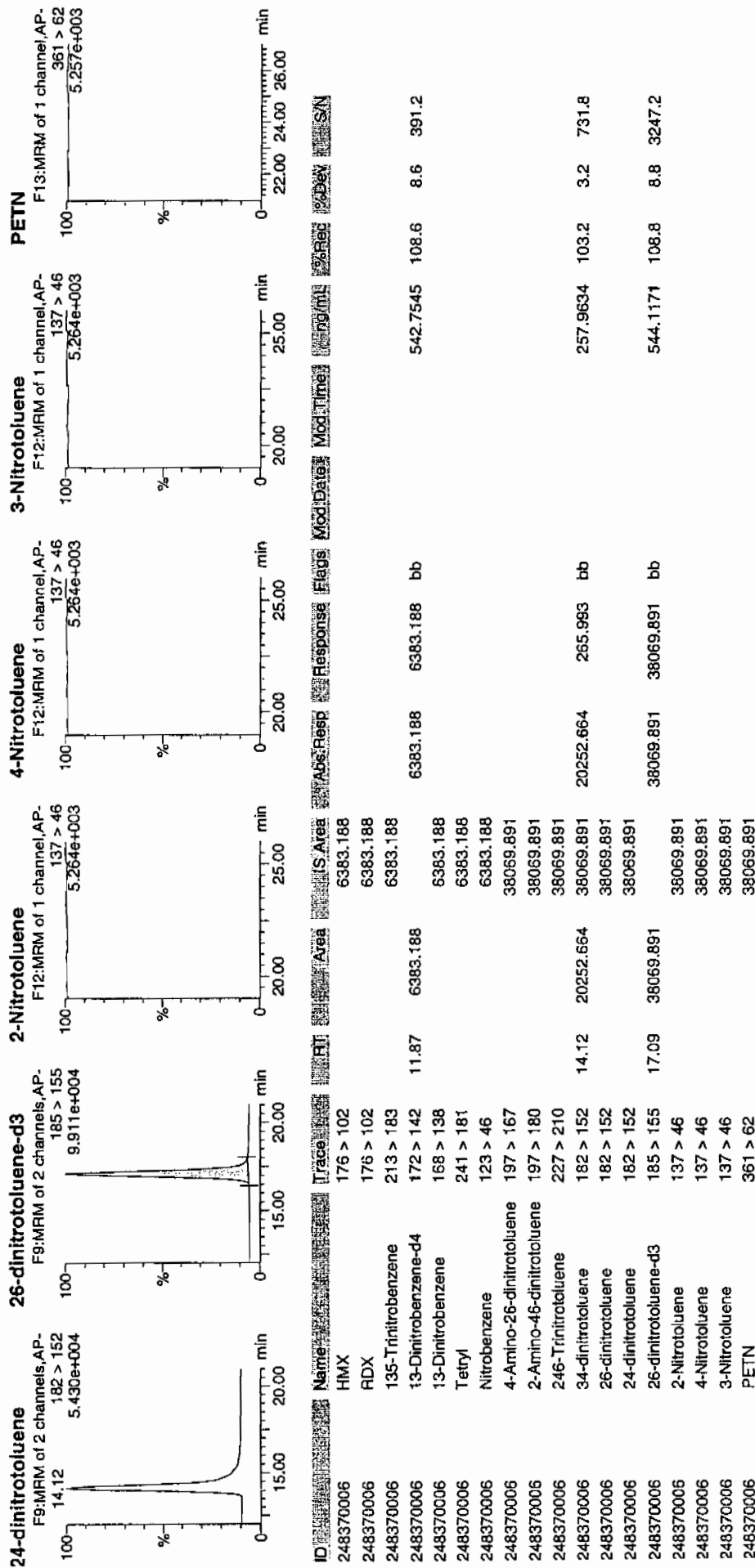
done 4/18/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 64 of 71

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7416

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370006

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050023.wiff

Date Analyzed: 05-APR-10 18:31

Units: ug/kg

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

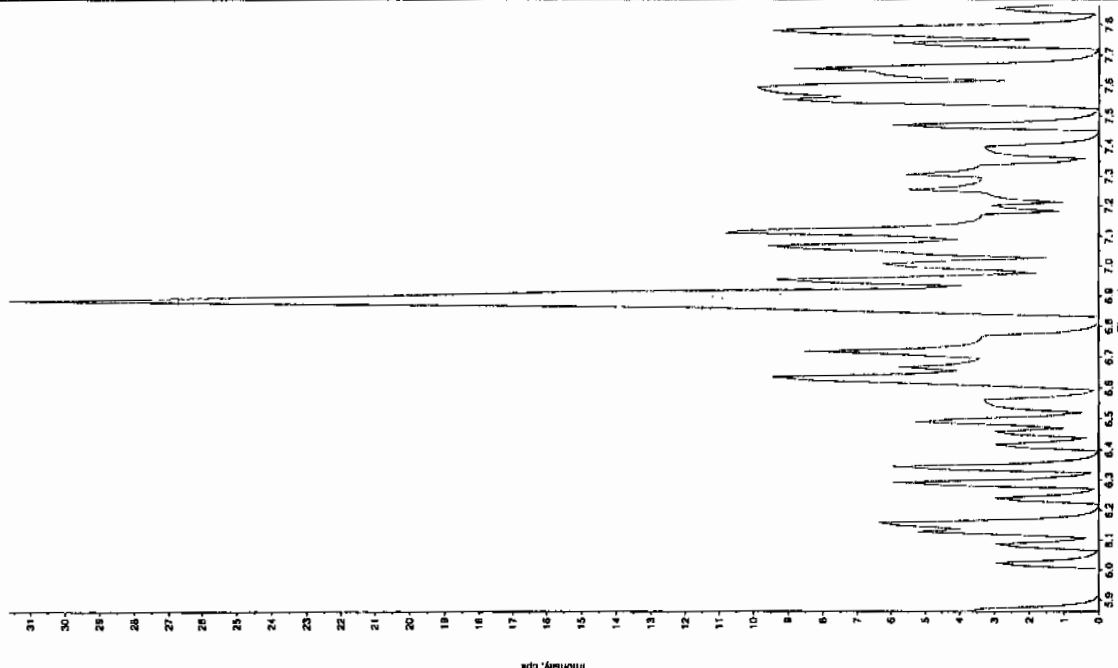
*Concentration =

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

for 4/7/10

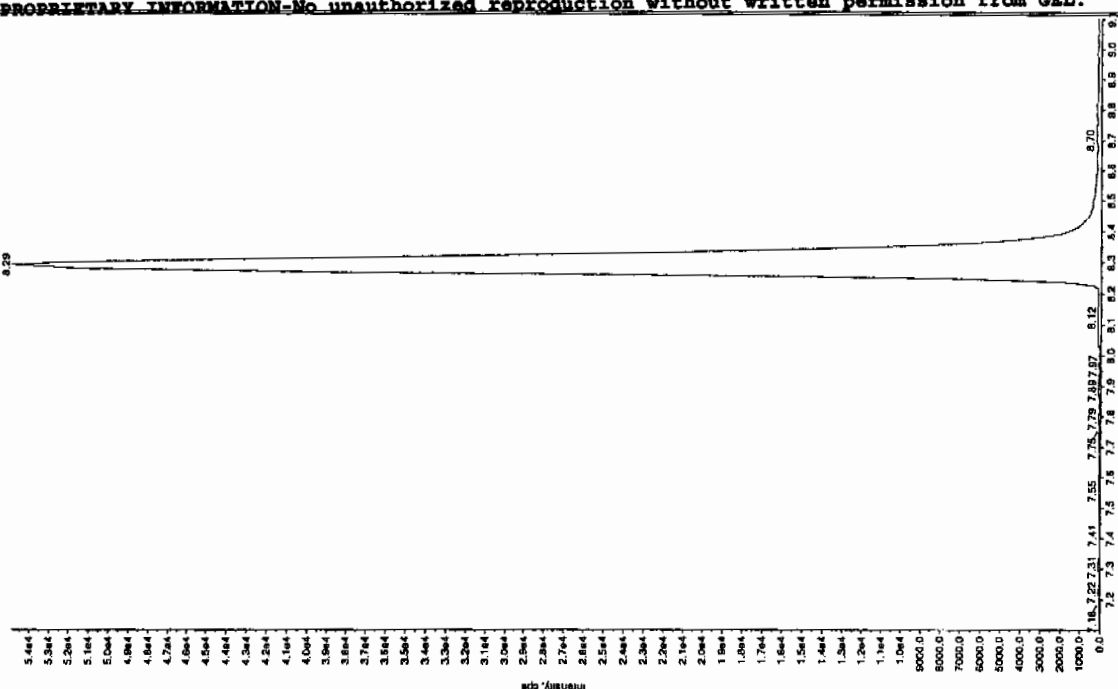
Sample Name: "246370005" Sample ID: "96030521LER" File: "EXS04050023.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 6:31:22 PM
 Acq. Time: 6:31:22 PM
 Modified: No



Sample Name: "246370005" Sample ID: "96030521LER" File: "EXS04050023.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.045.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 6:31:22 PM
 Acq. Time: 6:31:22 PM
 Modified: No

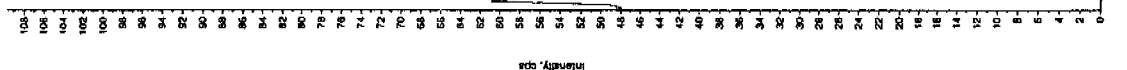


4/8/10

Sample Name: "24370005" Sample ID: "56030521.ER" File: "EXS04050023.wif"
 Peak Name: "25-Diethylamine" Mass(es): "156.0450 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.03 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 6:31:22 PM
 Modified: No

Intensity, cps



Sample Name: "24370005" Sample ID: "56030521.ER" File: "EXS04050023.wif"
 Peak Name: "25-Diethylamine" Mass(es): "156.0450 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 256.
 Acq. Date: 4/5/2010
 Acq. Time: 6:31:22 PM
 Modified: No

Algorithm: IntelliQuan - 10A
 Peak Height: 1460.00 cps
 Peak Width: 0.60 sec
 Retention Width: 15.0 points
 Retention RT: 8.28 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.28 min
 Counts: 2.19e-006 counts
 RT: 557854.065 cps
 RT Time: 8.20 min
 Time: 8.78 min

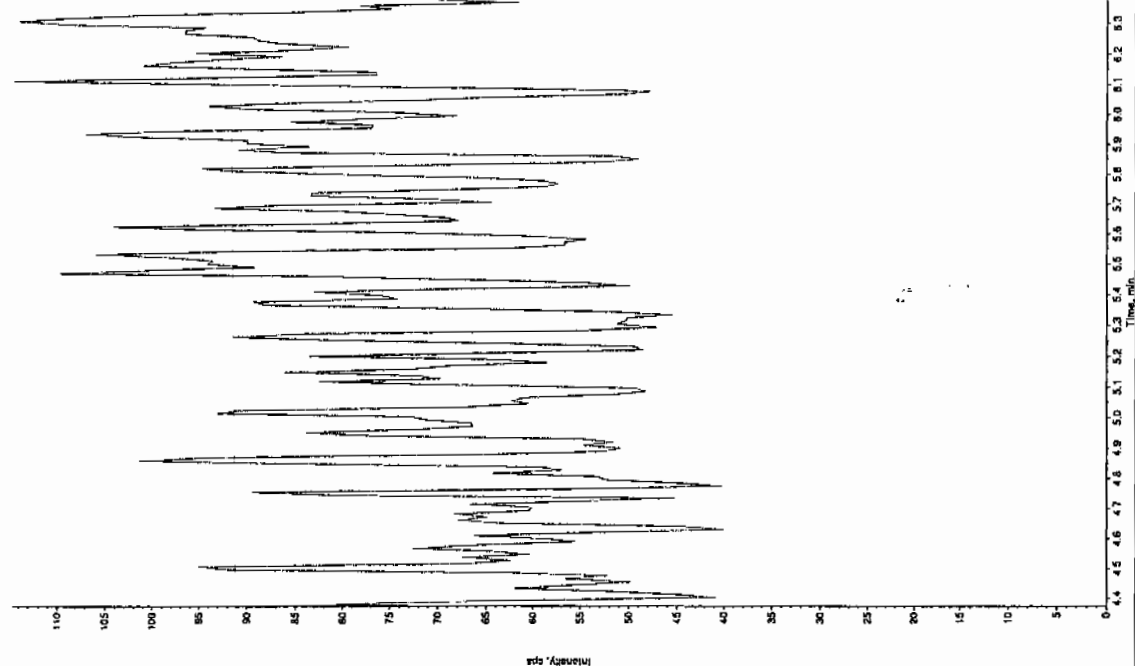
Intensity, cps



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "248370005" Sample ID: "950305121" File: "EX04050023.wi"
 Peak Name: "tris(o-cresyl) phosphite" Mass(es): "359.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 4/5/2010
 Acq. Time: 6:31:22 PM
 Modified: No



Sample Name: "248370005" Sample ID: "950305121" File: "EX04050023.wi"
 Peak Name: "24-Diamino-6-nitroindole" Mass(es): "166.048.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 4/5/2010
 Acq. Time: 6:31:22 PM
 Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7478

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370007

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412179a

Date Analyzed: 16-APR-10 07:12

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

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\041210expa.mdb, Time: Tue Apr 13 09:03:30 2010
Calibration: C:\MASSLYNX\New_Exp.PRO\CurveDB\041210expa.cdb, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412179a

Date: 16-Apr-2010

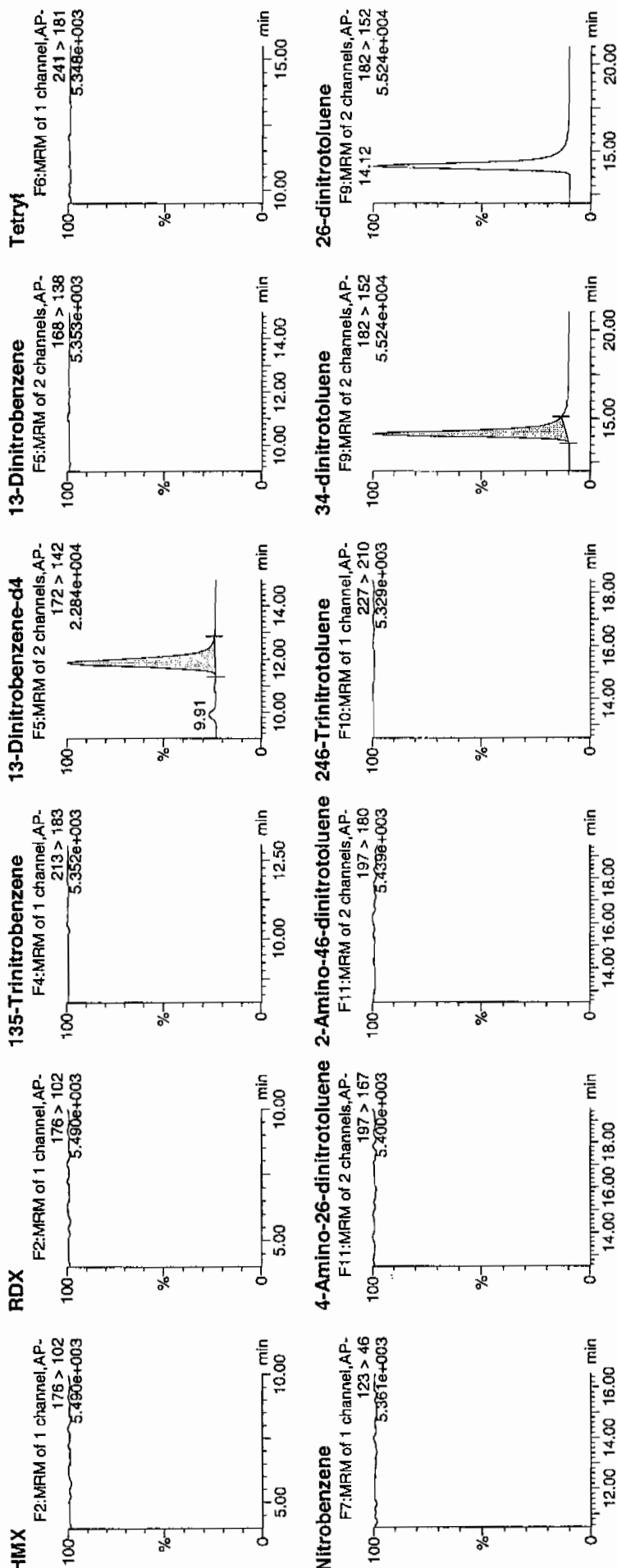
Time: 07:12:17

ID: 248370007

Vial: 4:5,E

4/17/10
4/17/10

LANU-960305/8000/21



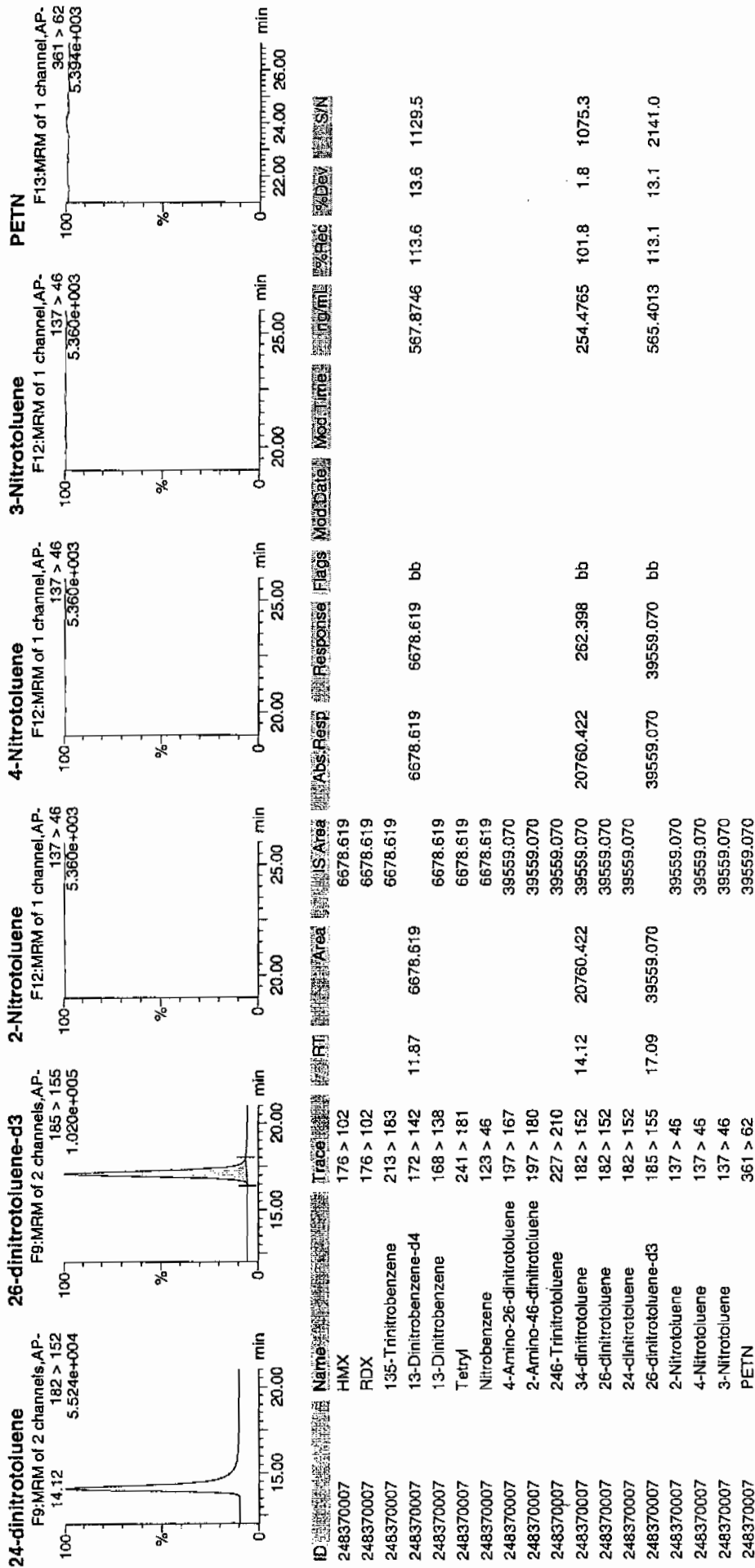
4/17/10
4/17/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 2 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: RE36-10-7478

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370007

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050027.wiff

Date Analyzed: 05-APR-10 19:34

Units: ug/kg

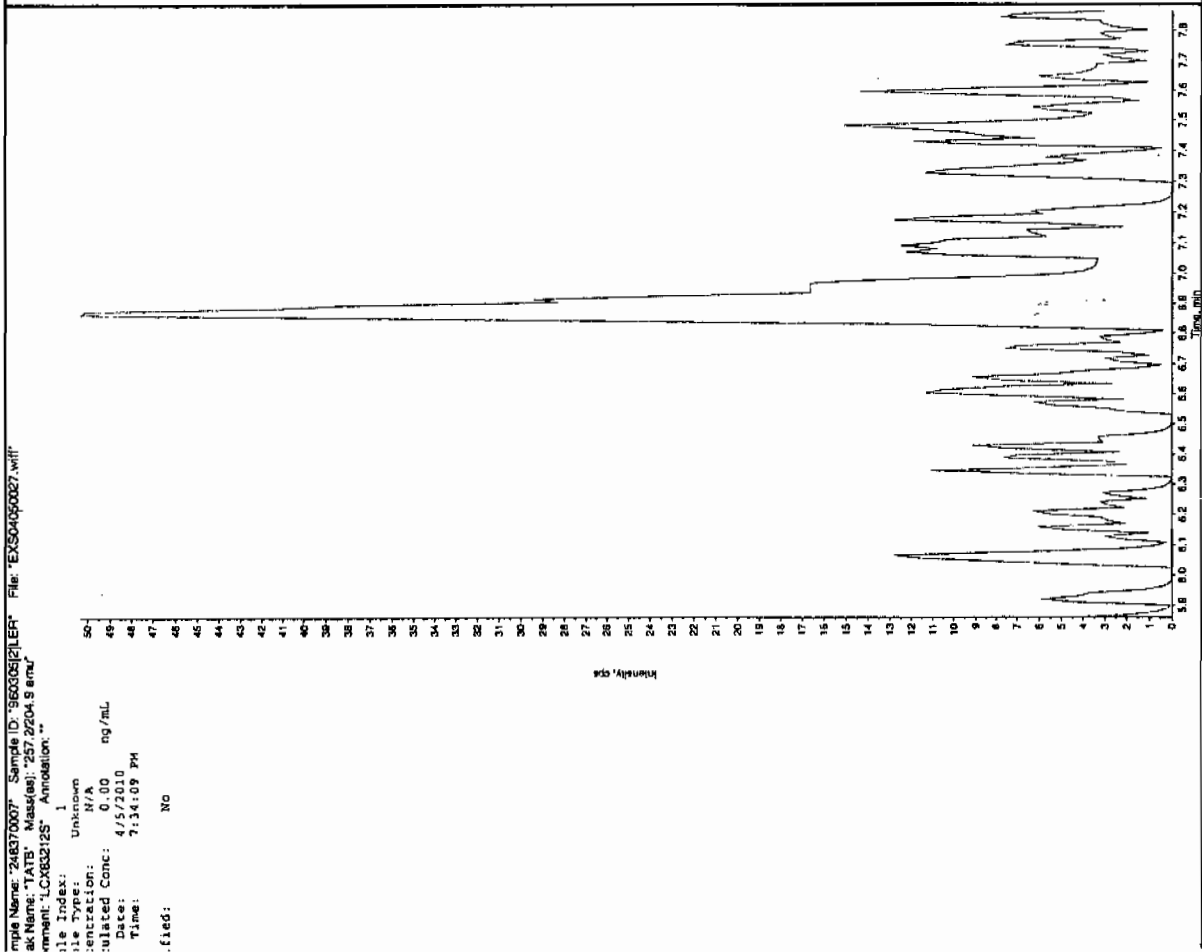
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

San 8/7/10

Sample Name: "248370007" Sample ID: "960305JELER" File: "EXS04050027.wif"
 Peak Name: "35-Dinitroanthra" Mass(es): "162.046.0 amu"
 Comment: "LCX832125" Annotation: "
 Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 7:34:09 PM
 Modified: No

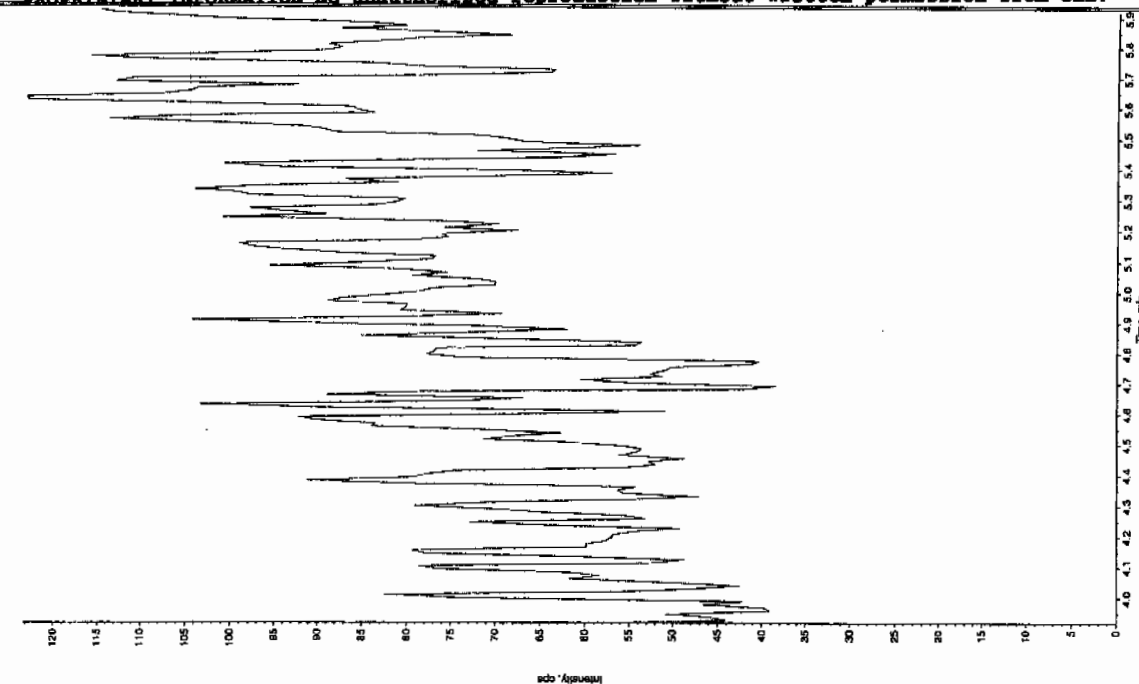


San 04/08/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

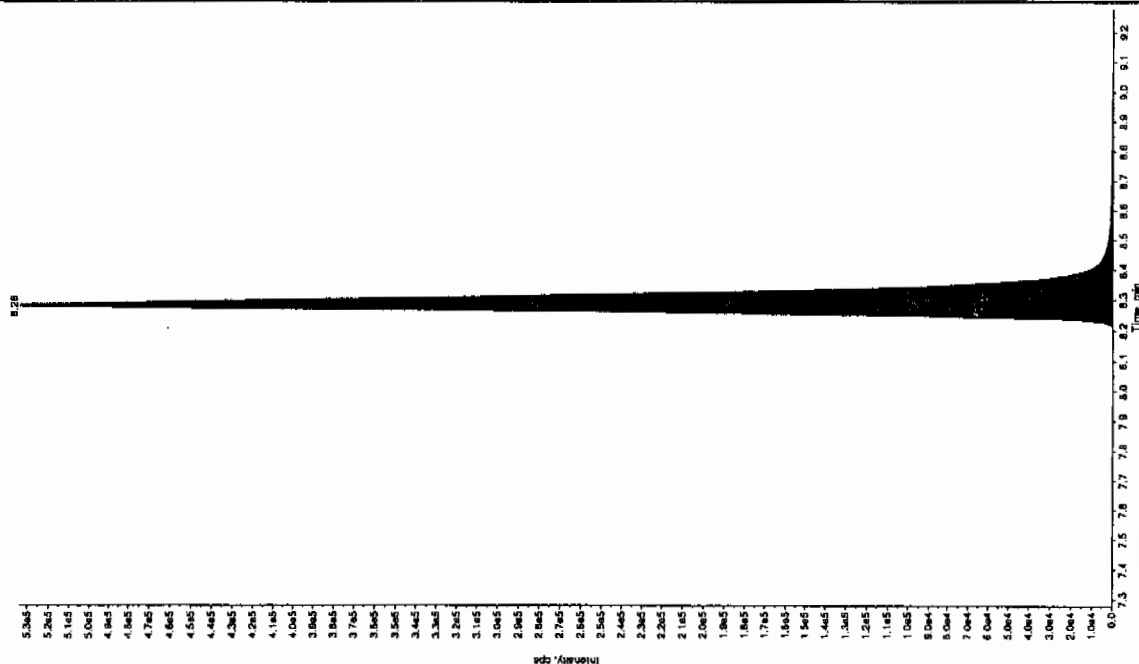
Sample Name: "24837007" Sample ID: "56030521" File: "EXS0406027.wif"
 Peak Name: "24-Dinitrobenzene" Mass(es): "182.1715.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 7:34:09 PM
 Acq. Time: 7:34:09 PM
 Modified: No



Sample Name: "24837007" Sample ID: "56030521" File: "EXS0406027.wif"
 Peak Name: "24-Dinitrobenzene" Mass(es): "182.1715.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 251. ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 7:34:09 PM
 Acq. Time: 7:34:09 PM
 Modified: No
 Algorithm: IntelliQuan - IOA
 1. Peak Height: 160.00 cps
 1. Peak Width: 0.00 sec
 Retention Width: 3.00 points
 Window: 15.0 sec
 Retention RT: 8.28 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.28 min
 Area: 2.14e+006 counts
 ght: 533505.005 cps
 RT Time: 8.19 min
 Time: 8.84 min



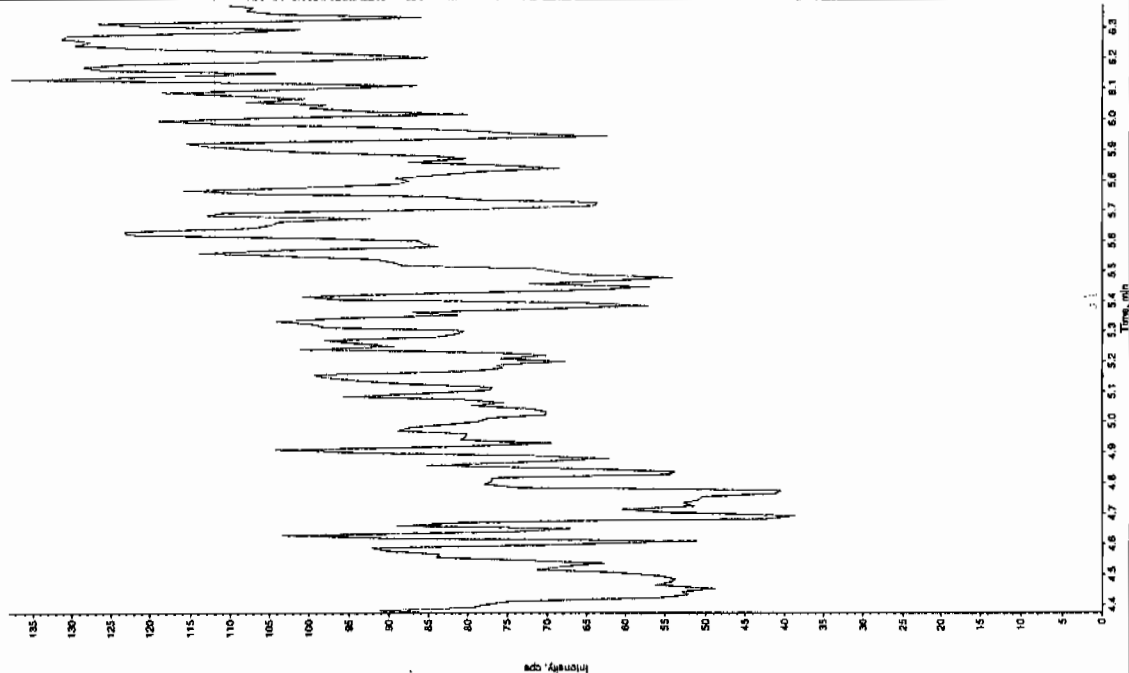
3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "248370007" Sample ID: "96030521ER" File: "EX50450027.wif"
 Peak Name: "24-Dienio-6-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 7:34:09 PM
 Modified: NO

Proc. AlgoriThm: IntelliQuan - ION
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.6 min
 Use Relative RT: NO

Int. Type: Valley
 Retention Time: 10.8 min
 Area: 4.11e+004 counts
 Height: 9948.998 cps
 Start Time: 10.7 min
 End Time: 11.0 min

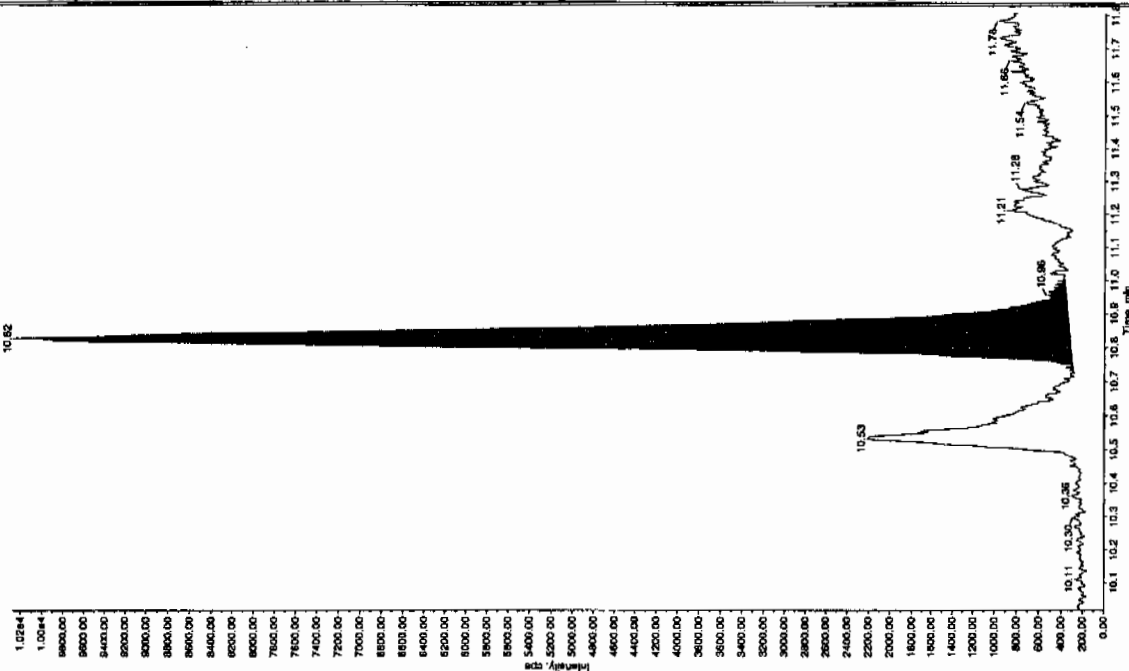


Sample Name: "248370007" Sample ID: "96030521ER" File: "EX50450027.wif"
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 2.26
 Acq. Date: 4/5/2010
 Acq. Time: 7:34:09 PM
 Modified: NO

Proc. AlgoriThm: IntelliQuan - ION
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.6 min
 Use Relative RT: NO

Int. Type: Valley
 Retention Time: 10.8 min
 Area: 4.11e+004 counts
 Height: 9948.998 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: RE36-10-7490

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370008

Sample Amount 2

Moisture: 26.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412180a

Date Analyzed: 16-APR-10 07:41

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qid, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0412180a

Date: 16-Apr-2010

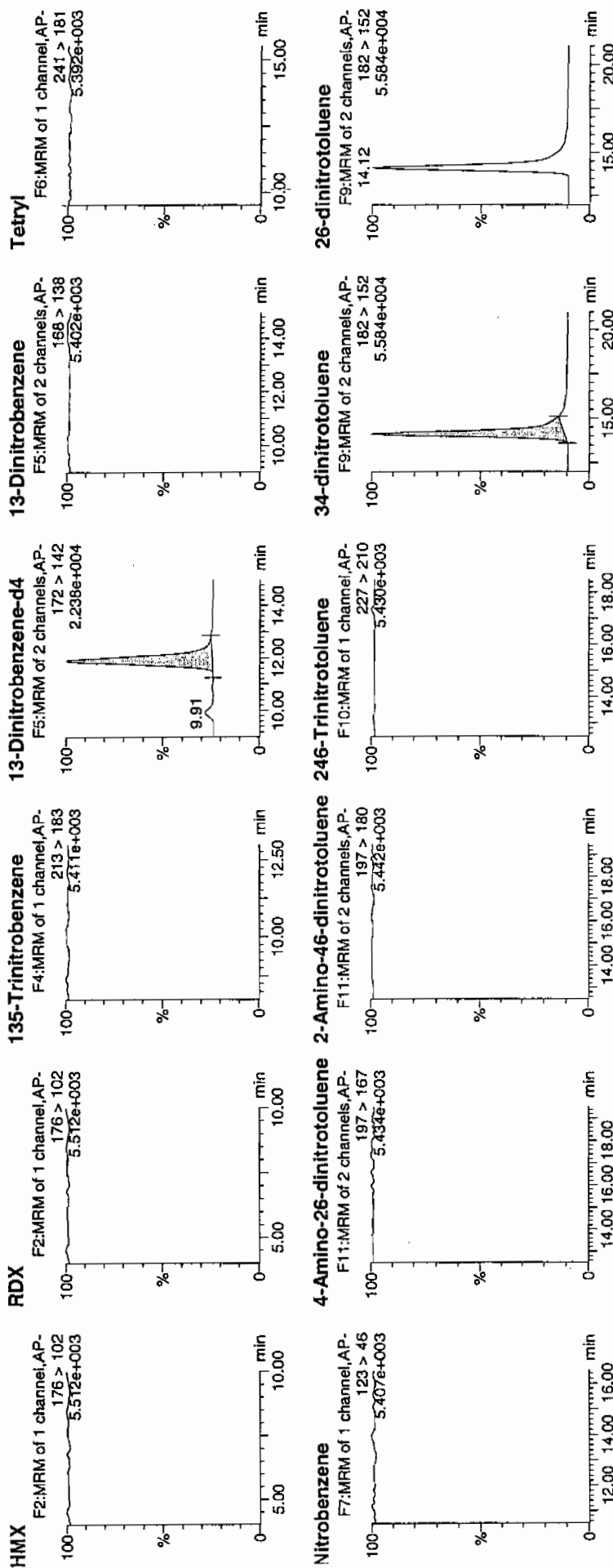
Time: 07:41:53

ID: 248370008

Vial: 4:5,F

4/17/10

LAUL 960305 / 21

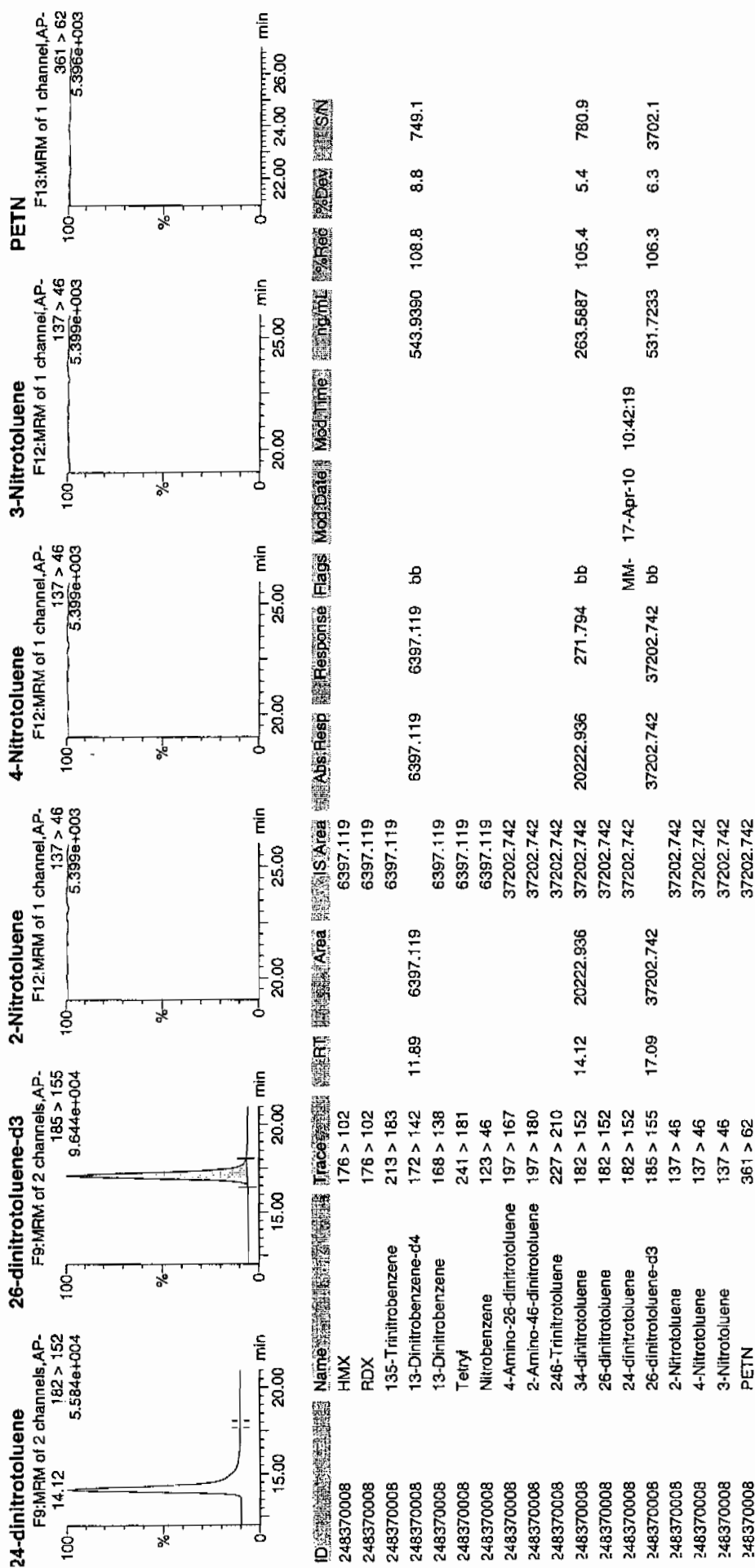


4/17/10

Printed: Sat Apr 17 10:45:10 2010, Page 4 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



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7490

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370008

Sample Amount 2

Moisture: 26.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050028.wiff

Date Analyzed: 05-APR-10 19:49

Units: ug/kg

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

*Concentration =

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

Run 4/10/10

File: EXS0405028.wif

Sample Name: "248370008" Sample ID: "96030521LER" Mass(es): "257.2/204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

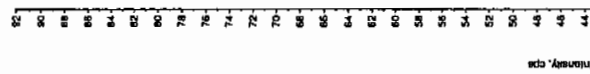
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 7:49:53 PM

Modified: No



File: EXS0405028.wif

Sample Name: "248370008" Sample ID: "96030521LER" Mass(es): "182.0/66.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

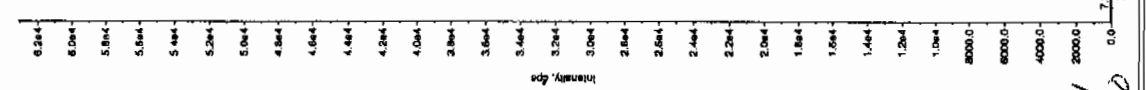
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 7:49:53 PM

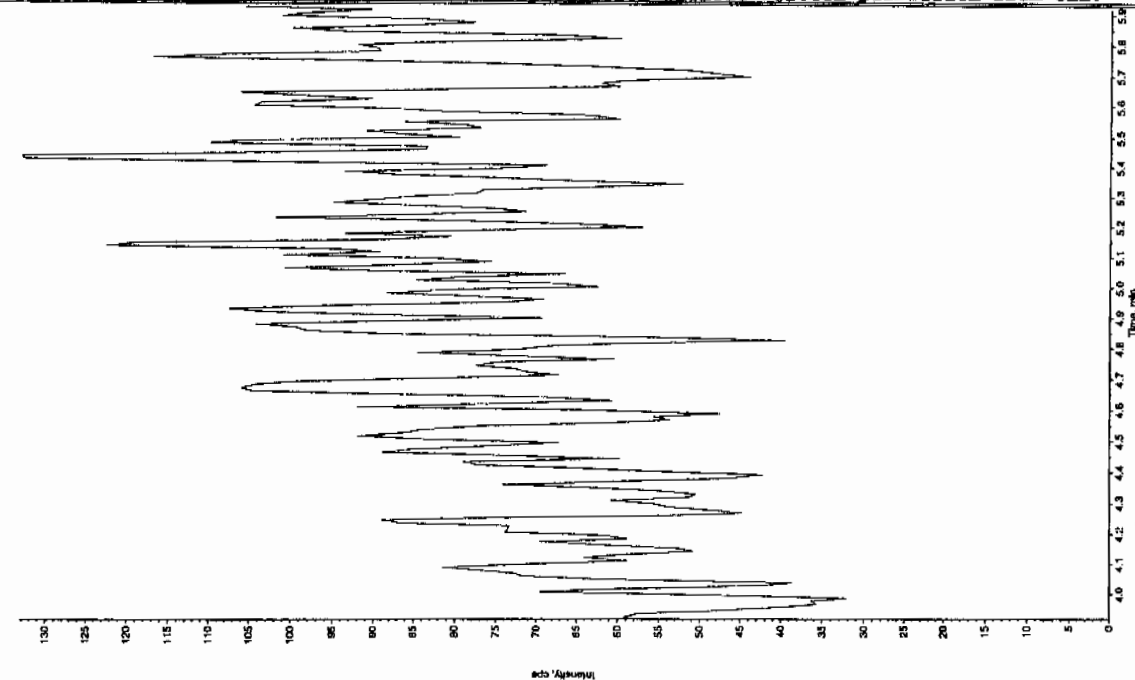
Modified: No



Run 4/10/10

Sample Name: "24877008" Sample ID: "96030501ER" File: "EX0405028.wif"
 Peak Name: "25-Diamino-4-nitrophenol" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 7:49:53 PM
 Acq. Time: 7:49:53 PM
 Modified: No

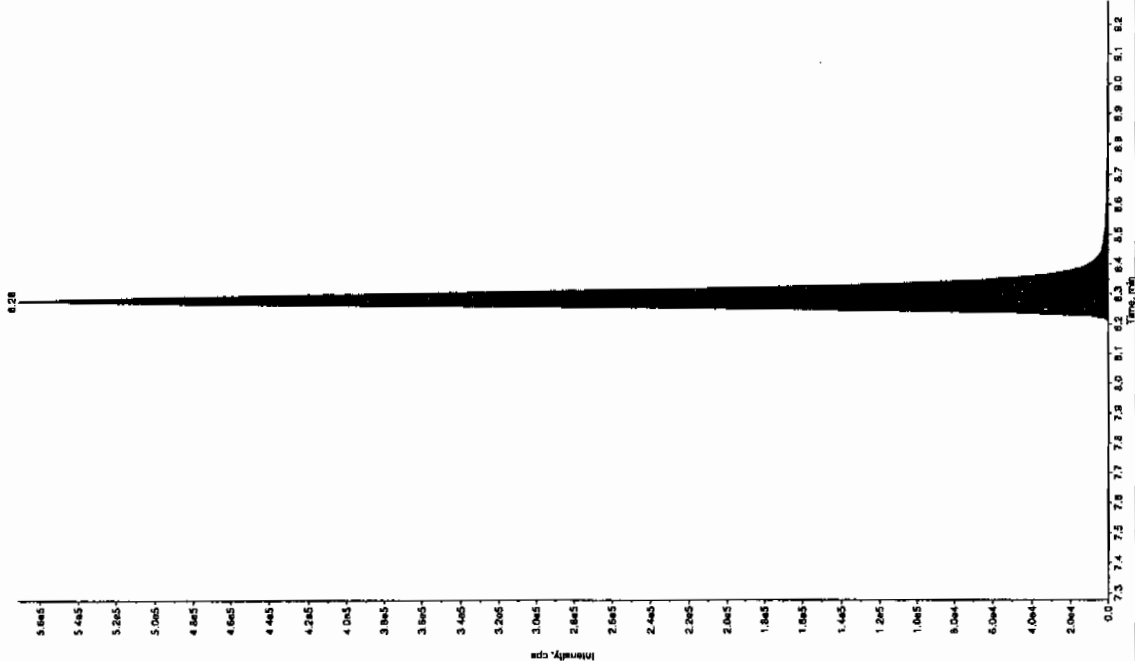


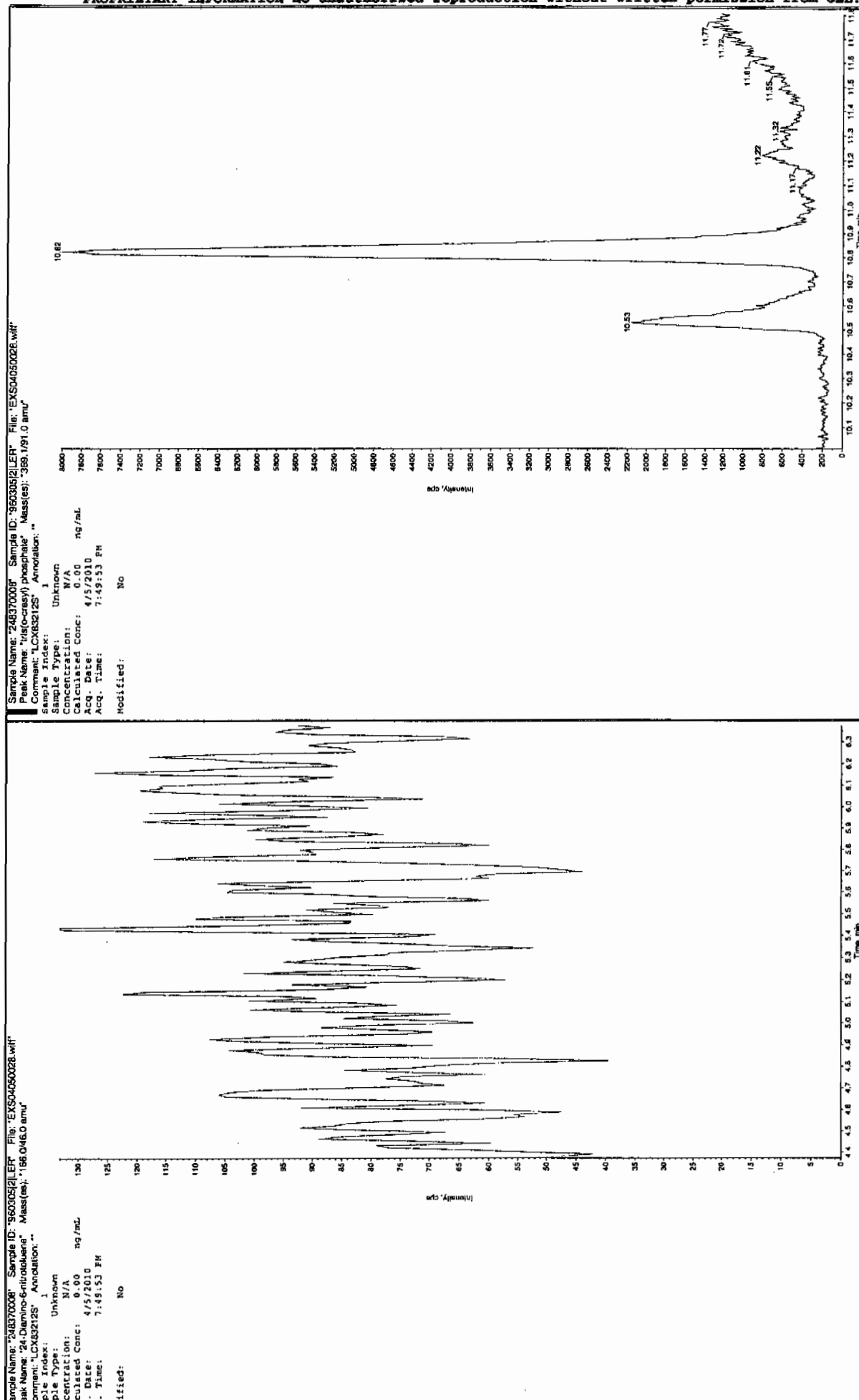
Sample Name: "24877008" Sample ID: "96030501ER" File: "EX0405028.wif"
 Peak Name: "25-Diamino-4-nitrophenol" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 270.00 ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 7:49:53 PM
 Acq. Time: 7:49:53 PM
 Modified: No

Int. Algorithm: IntelliQuan - IQA
 1. Peak Height: 1460.00 cps
 2. Peak Width: 0.00 sec
 3. Peak Width: 3.00 points
 Window: 15.0 sec
 Ret. RT: 8.28 min
 Relative RT: No

Type: Valley
 Retention Time: 8.28 min
 Area: 2.30e+006 counts
 Height: 52453.186 cps
 Ret. Time: 8.20 min
 Elution Time: 8.63 min





3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7487

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370009

Sample Amount 2

Moisture: 24.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412181a

Date Analyzed: 16-APR-10 08:11

Units: ug/kg

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

*Concentration =

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412181a

Date: 16-Apr-2010

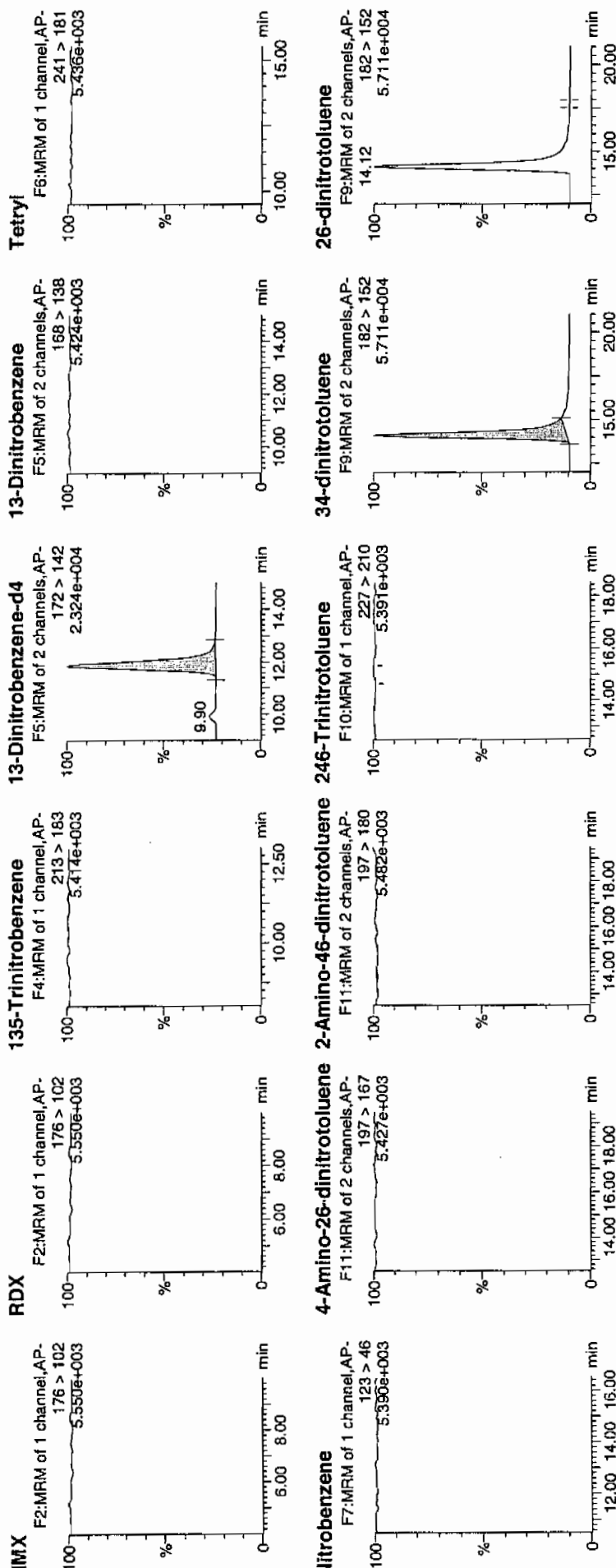
Time: 08:11:22

D: 248370009

File: 4:6,A

4/17/10
4/13/10

1960305 / 8025 / 21



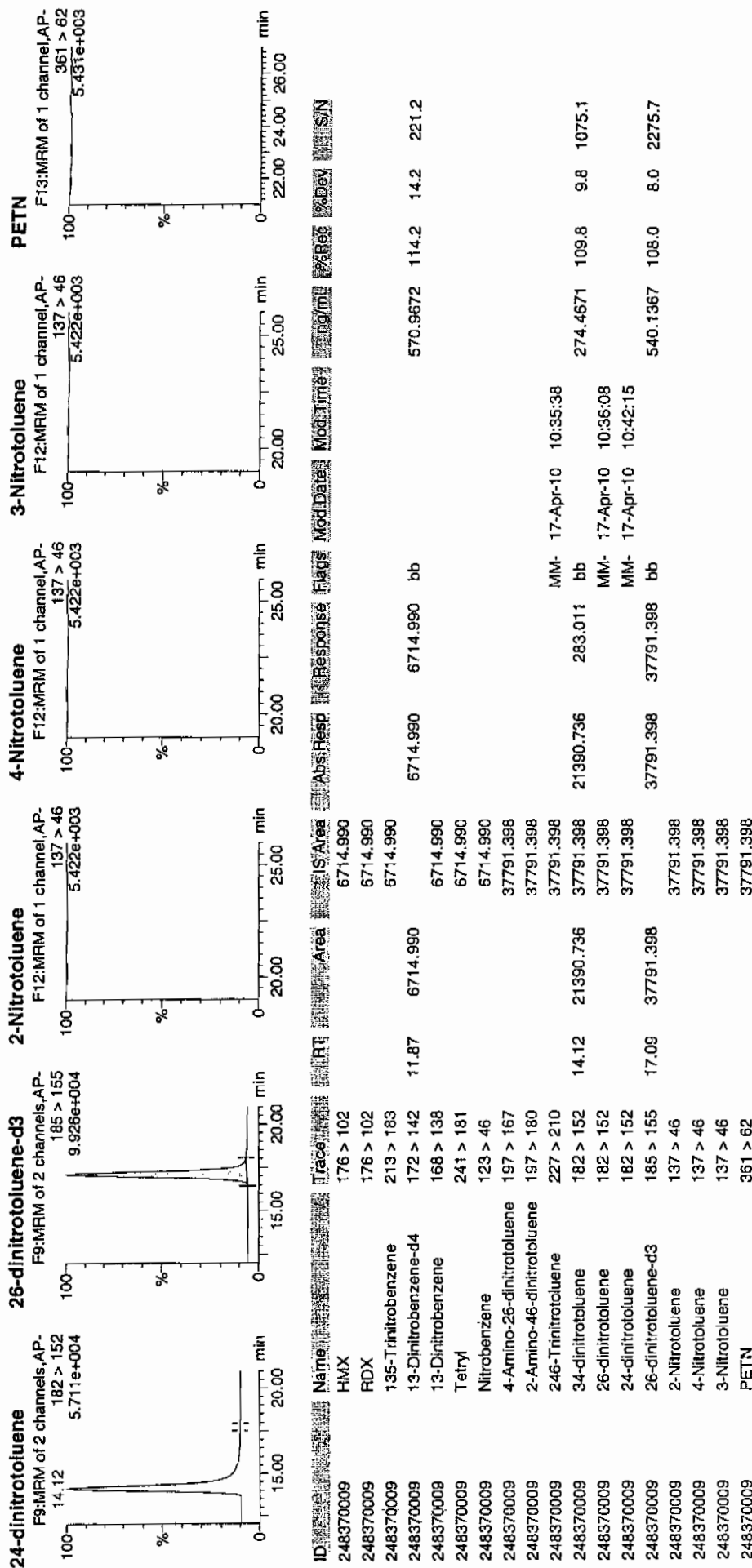
Handwritten signature: 04/16/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 6 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.q.d, Time: Sat Apr 17 10:42:19 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7487

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370009

Sample Amount 2

Moisture: 24.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050029.wiff

Date Analyzed: 05-APR-10 20:05

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

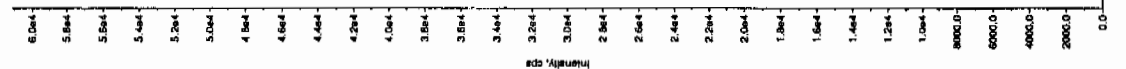
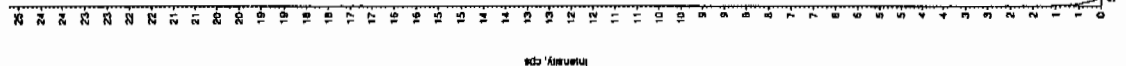
*Concentration =

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

See 4/11/10

Sample Name: "248370009" Sample ID: "96030521ER" File: "EXS04060029.wif"
 Peak Name: "TATB" Mass(es): "237.2204.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 8:05:37 PM
 Modified: No



See 04/08/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "248370009" Sample ID: "96030521LER" File: "EXSO4050029.wht"

Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 276

Acq. Date: 4/5/2010

Acq. Time: 8:05:37 PM

Modified: No

c. Algorithm: IntelliQuan - IQA

Peak Height: 1460.00 cps

Peak Width: 0.00 sec

Charging Width: 3 points

Window: 15.0 sec

Selected RT: 8.28 min

Relative RT: No

Type: Valley

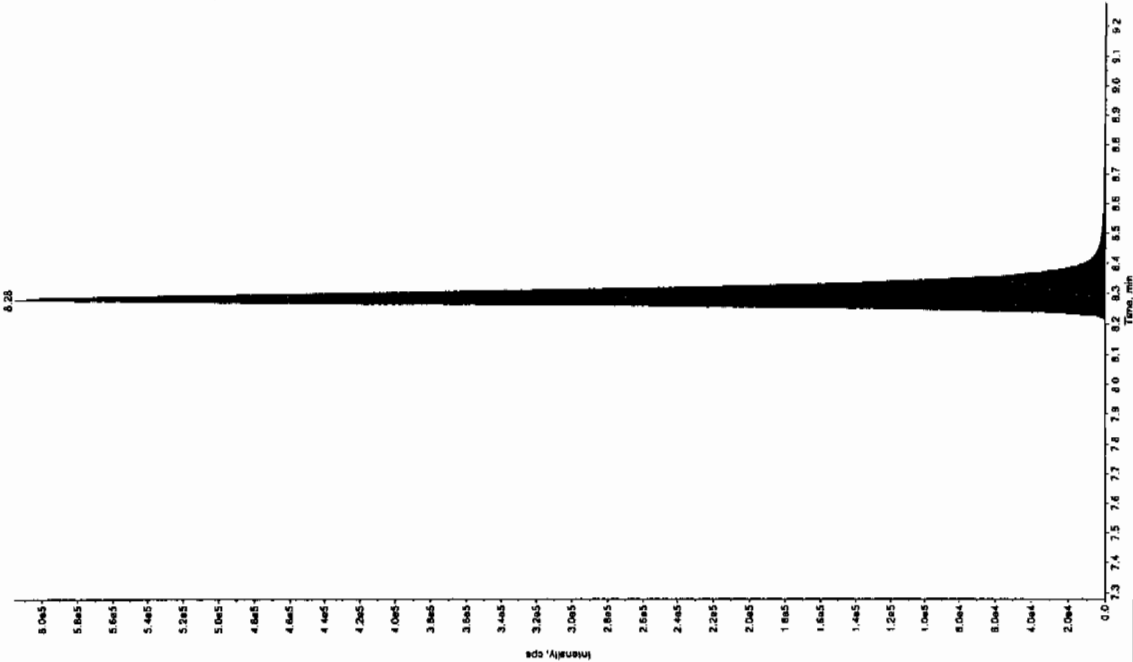
Retention Time: 8.28 min

Area: 2.35e+006 counts

Height: 615812.866 cps

RT Time: 8.28 min

Time: 8.75 min



Sample Name: "248370009" Sample ID: "96030521LER" File: "EXSO4050029.wht"

Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "166.0/166.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

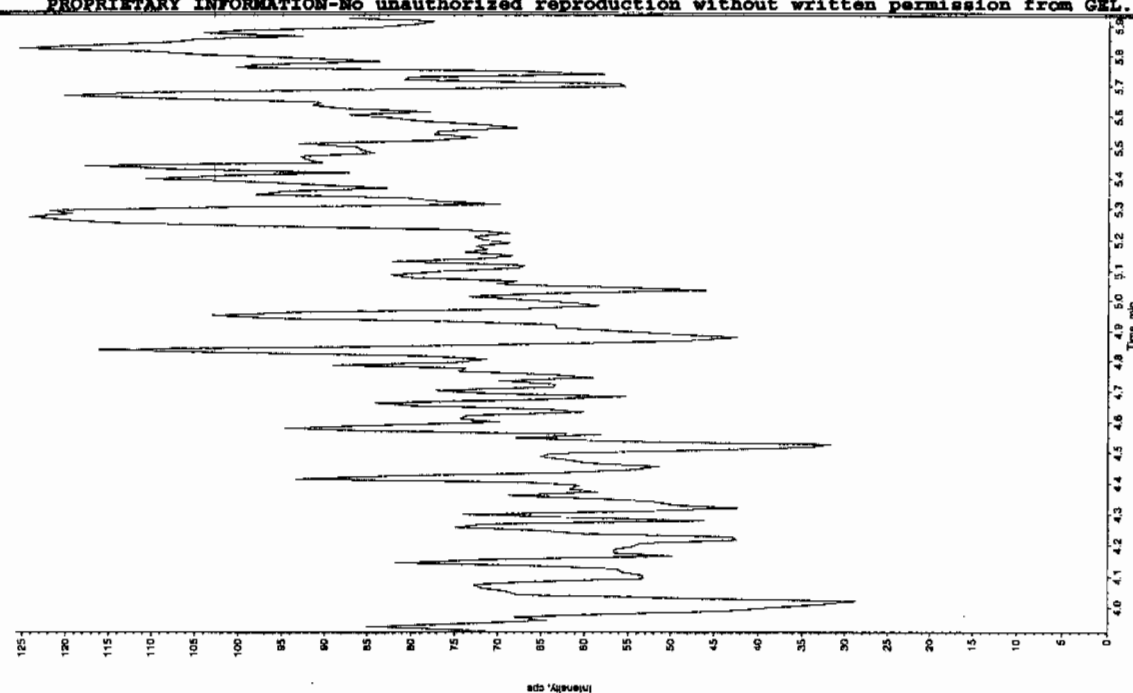
Concentration: N/A ng/mL

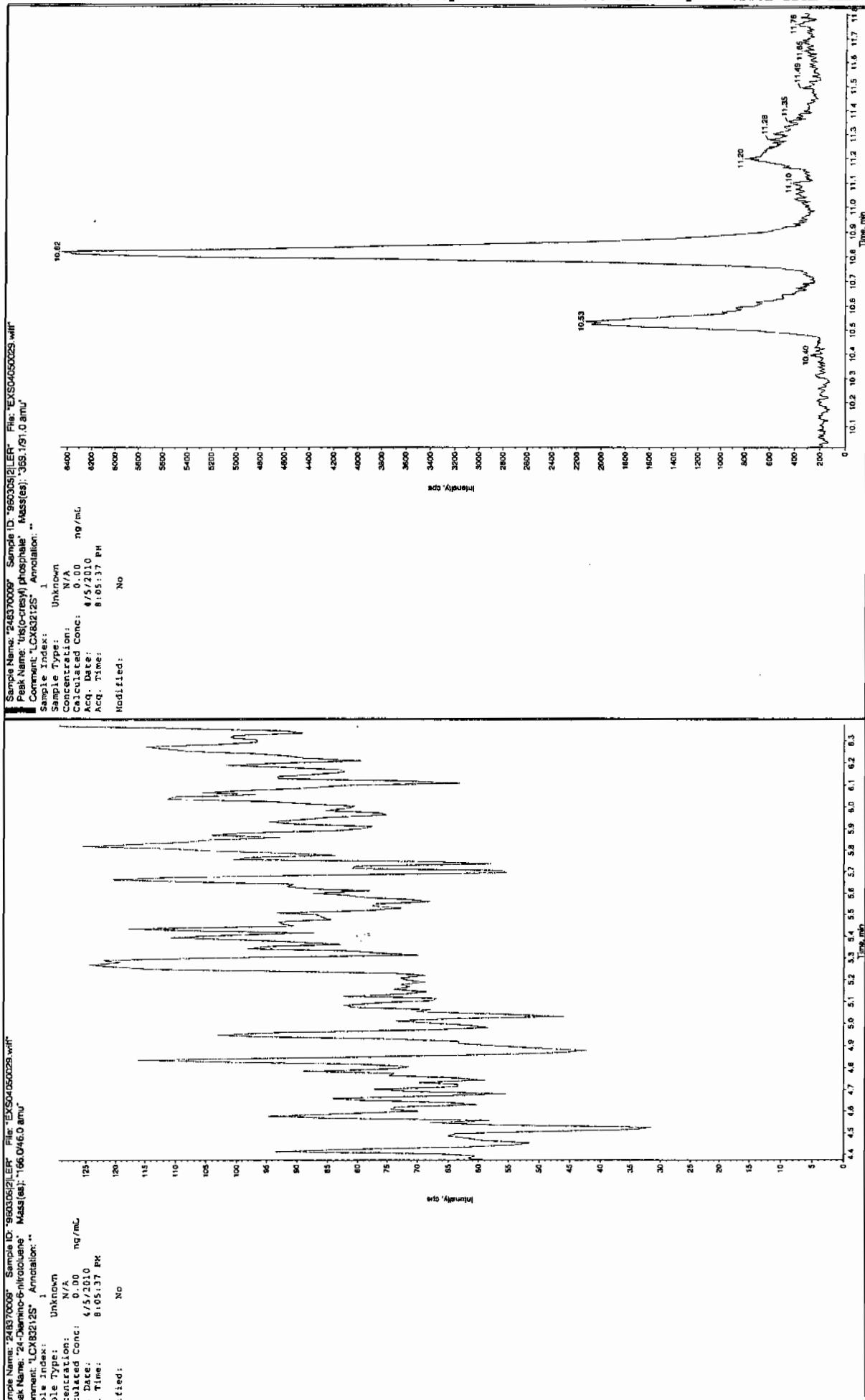
Calculated Conc: 0.00

Acq. Date: 4/5/2010

Acq. Time: 8:05:37 PM

Modified: No





3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7483

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370010

Sample Amount 2

Moisture: 24.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412182a

Date Analyzed: 16-APR-10 08:40

Units: ug/kg

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

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 7 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\EXP0412182a

Date: 16-Apr-2010

Time: 08:40:53

ID: 248370010

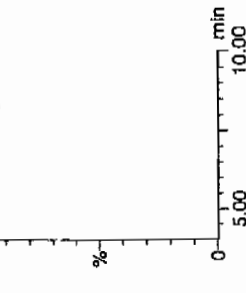
Vial: 4:6,B

100%
4/17/10

100%
4/17/10

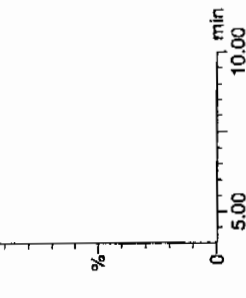
HMX

F2:MRM of 1 channel,AP-
176 > 102
5.410e+003



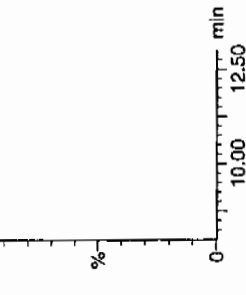
RDX

F2:MRM of 1 channel,AP-
176 > 102
5.410e+003



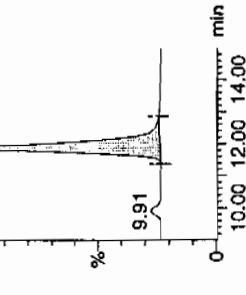
135-Trinitrobenzene

F4:MRM of 1 channel,AP-
213 > 183
5.334e+003



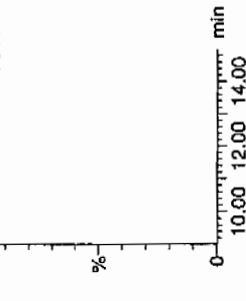
13-Dinitrobenzene-d4

F5:MRM of 2 channels,AP-
172 > 142
2.243e+004



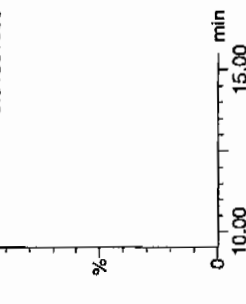
13-Dinitrobenzene

F5:MRM of 2 channels,AP-
168 > 138
5.302e+003



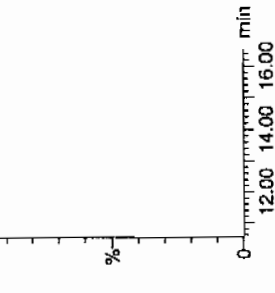
Tetryl

F6:MRM of 1 channel,AP-
241 > 181
5.315e+003



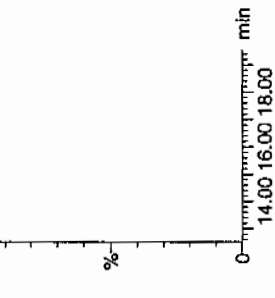
Nitrobenzene

F7:MRM of 1 channel,AP-
123 > 46
5.283e+003



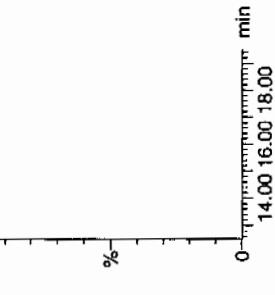
4-Amino-26-dinitrotoluene

F11:MRM of 2 channels,AP-
197 > 167
5.362e+003



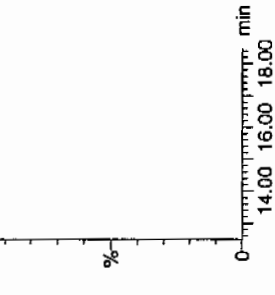
2-Amino-46-dinitrotoluene

F11:MRM of 2 channels,AP-
197 > 180
5.367e+003



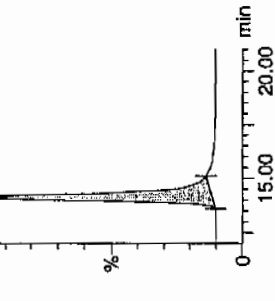
246-Trinitrotoluene

F10:MRM of 1 channel,AP-
227 > 210
5.352e+003



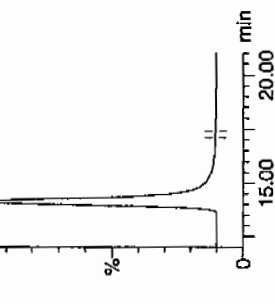
34-dinitrotoluene

F9:MRM of 2 channels,AP-
182 > 152
5.249e+004



26-dinitrotoluene

F9:MRM of 2 channels,AP-
182 > 152
5.249e+004



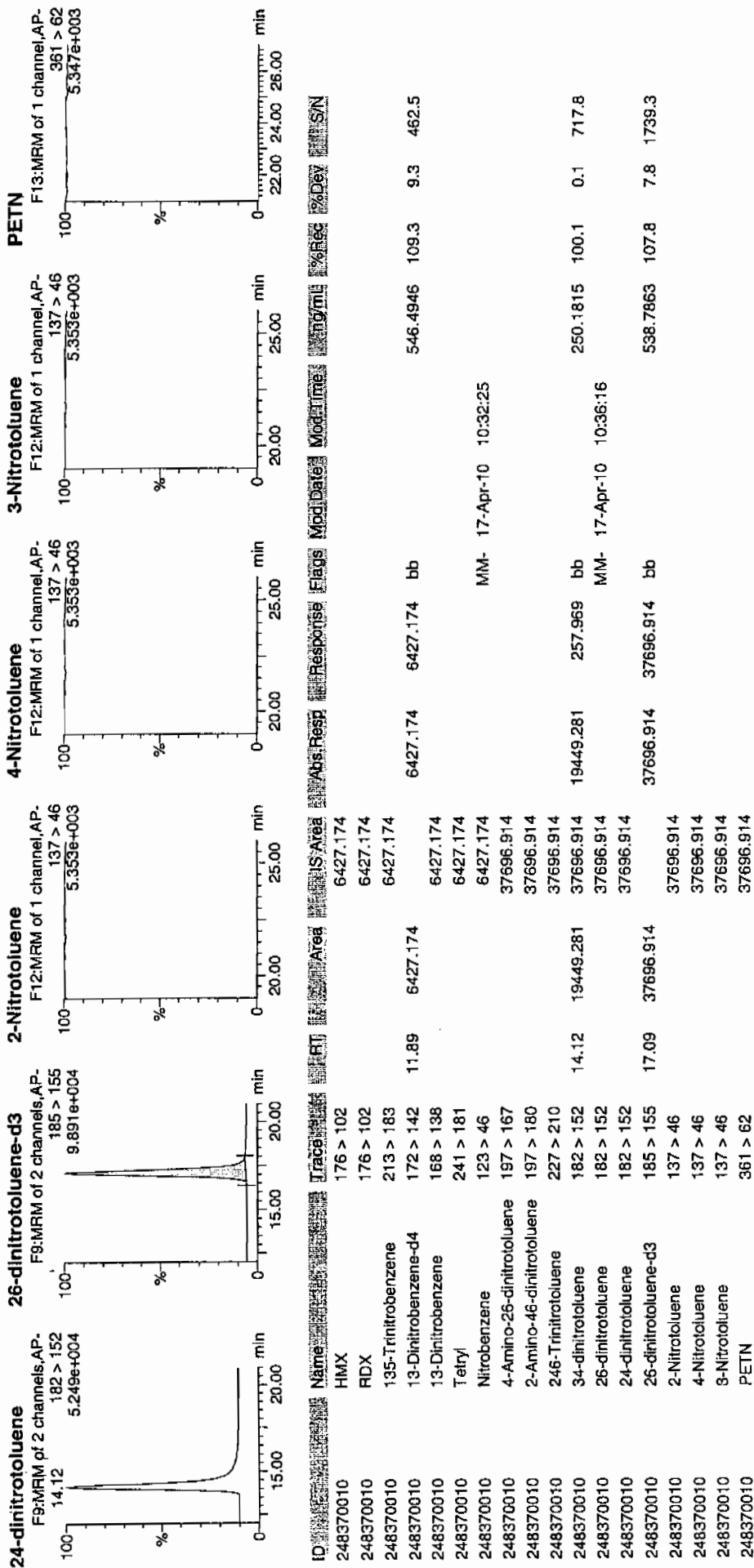
100%
4/17/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 8 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: RE36-10-7483

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370010

Sample Amount 2

Moisture: 24.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050030.wiff

Date Analyzed: 05-APR-10 20:21

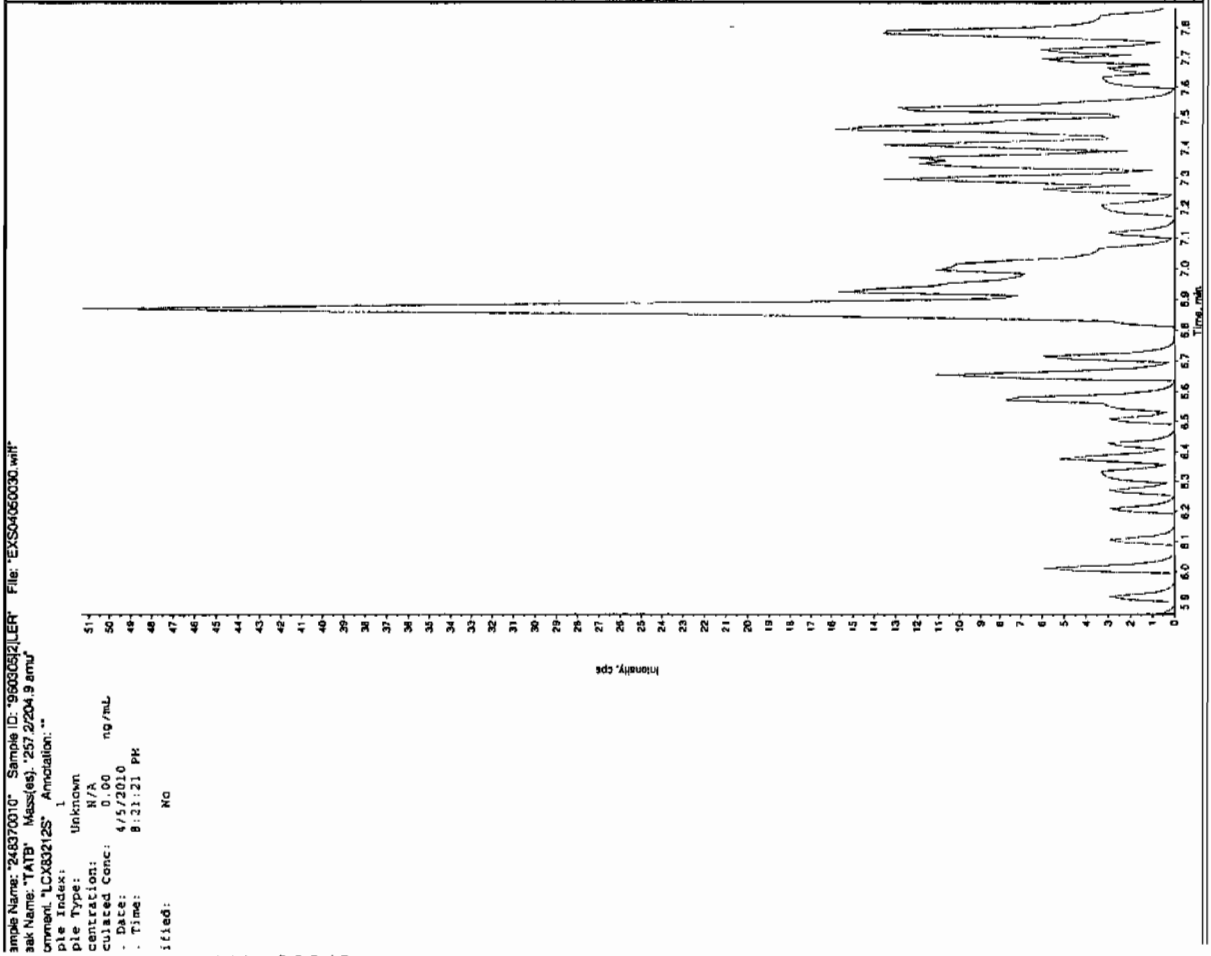
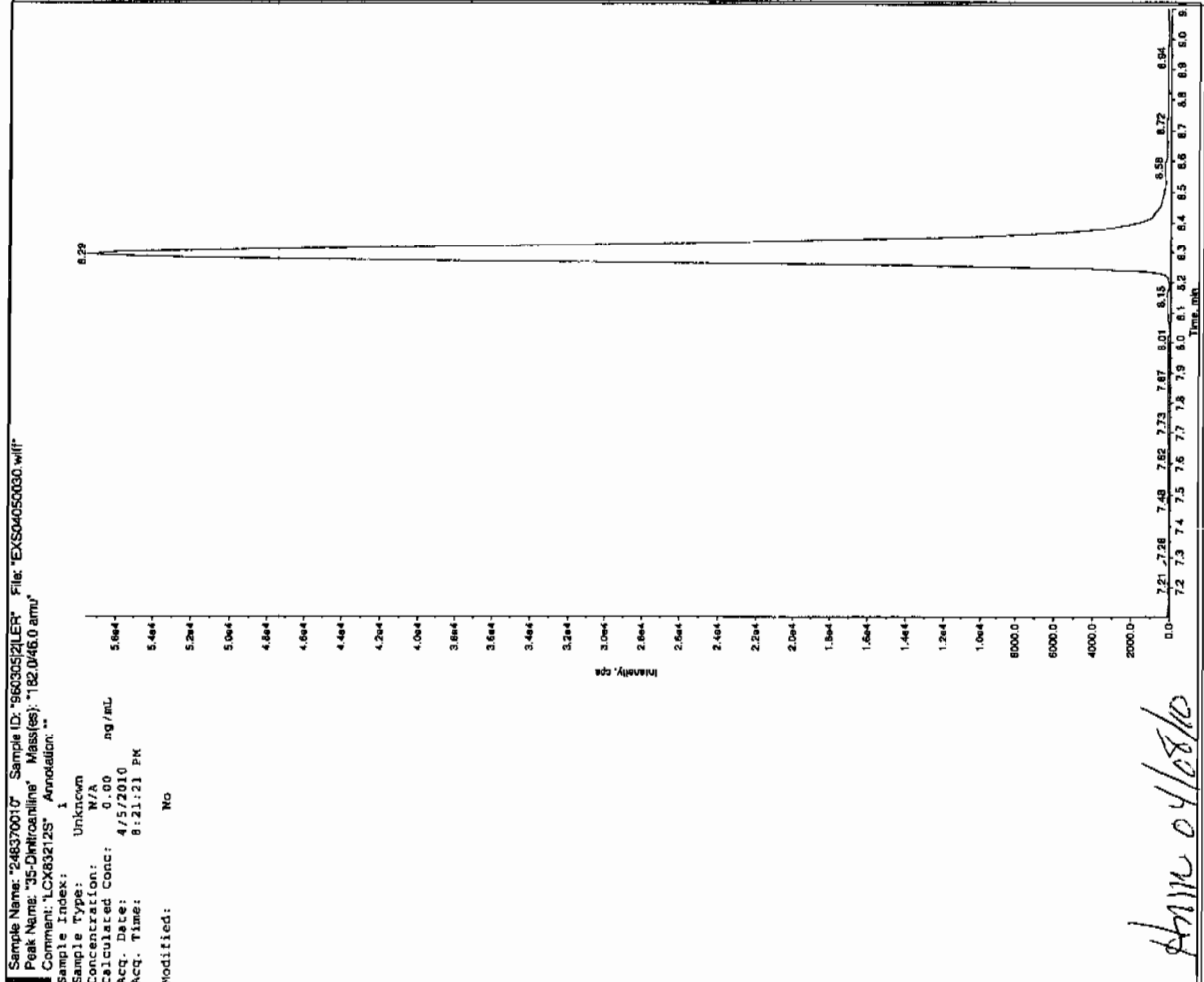
Units: ug/kg

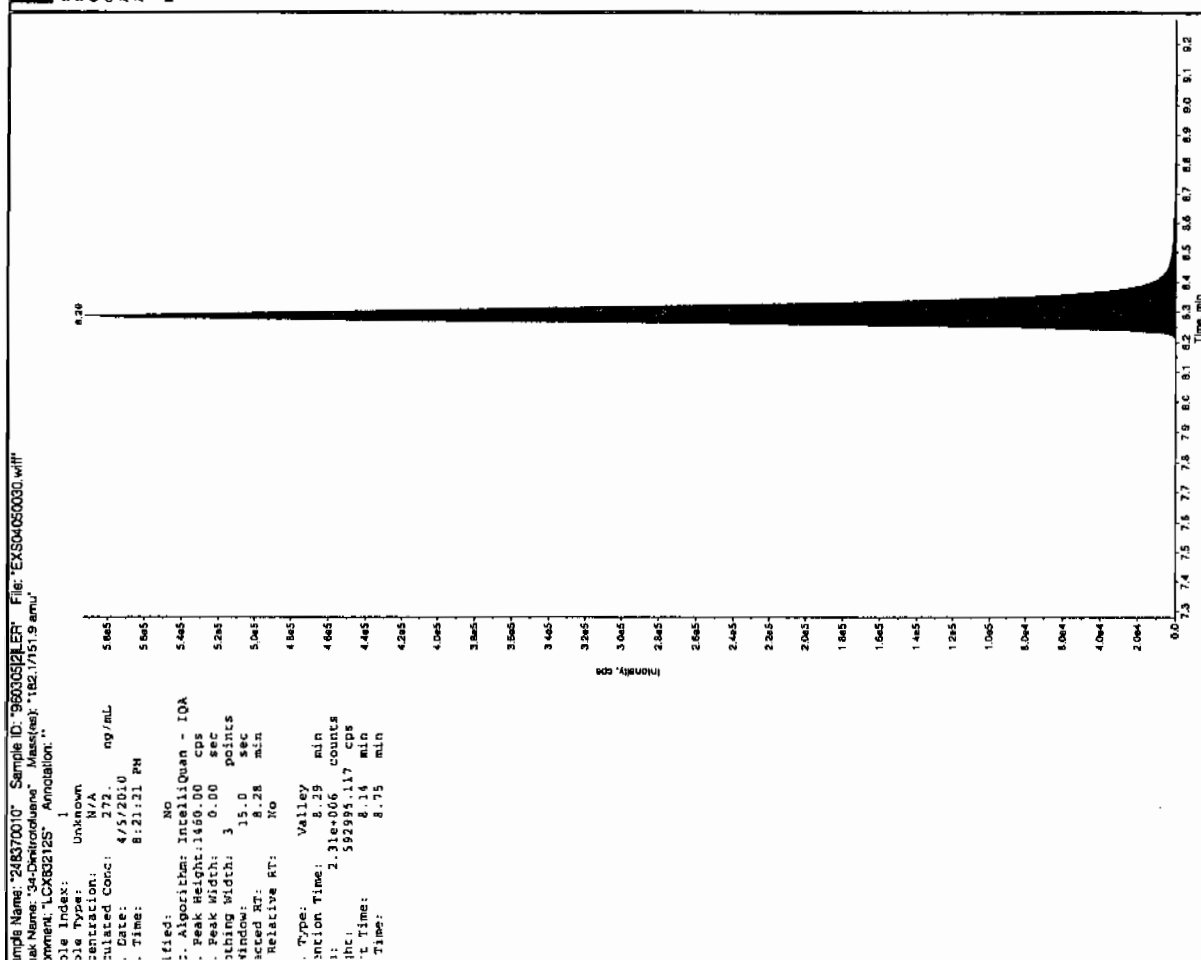
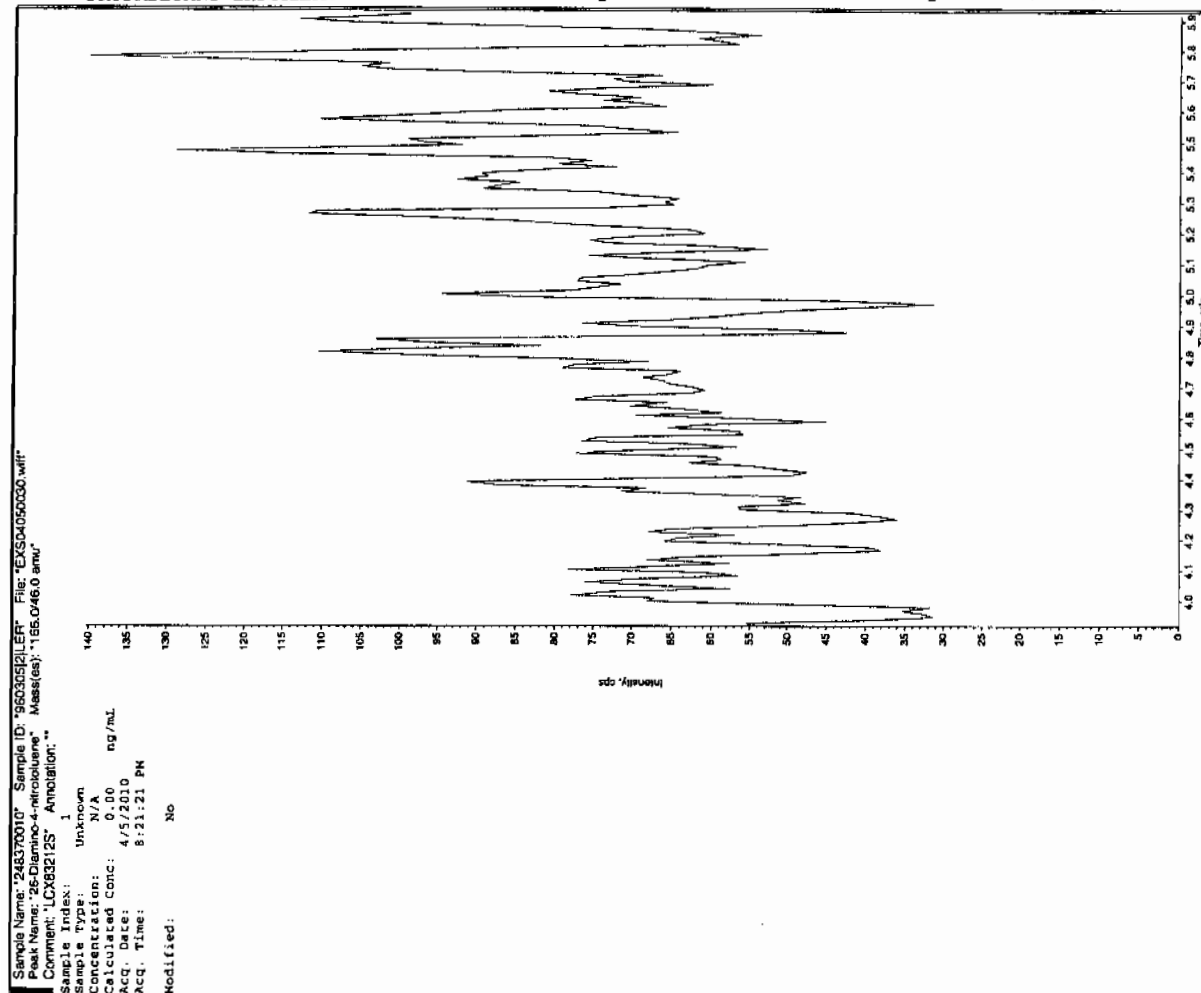
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

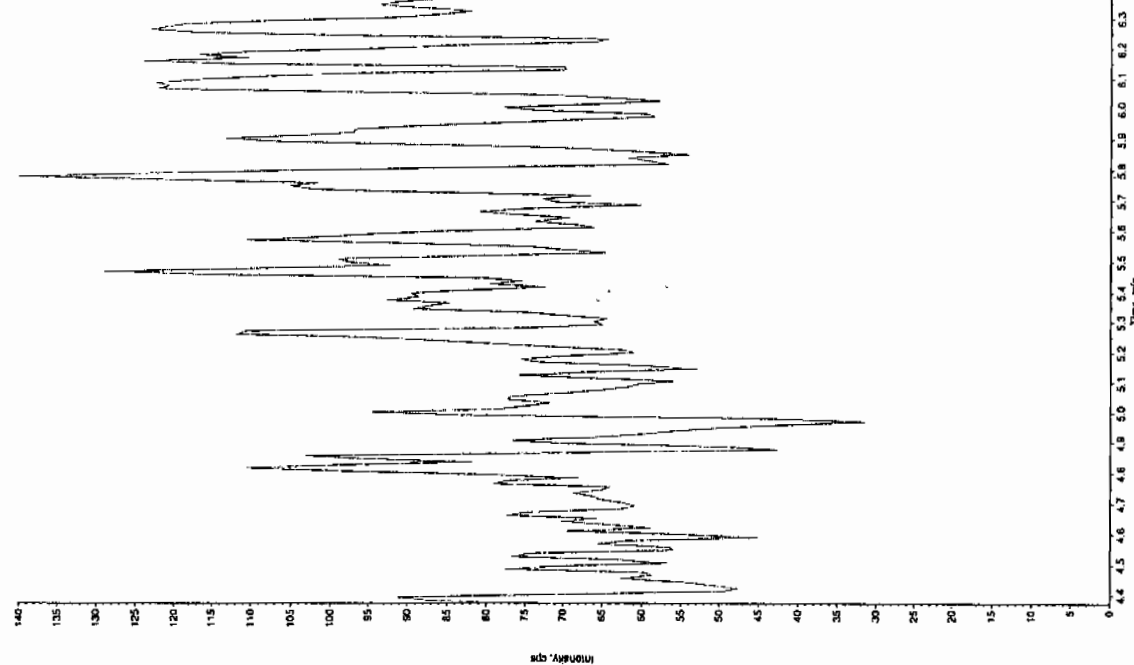
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Clear 4/17/10

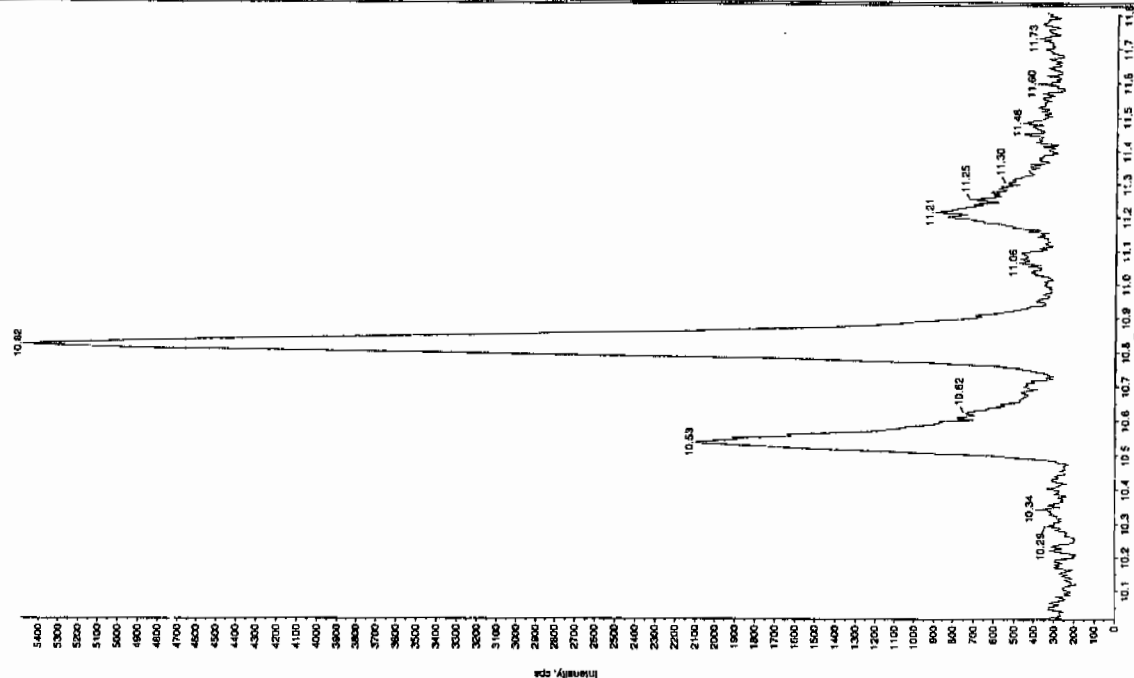




IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "248370010" Sample ID: "96030521LEH" File: "EXS04050030.wif"
Peak Name: "[tri(n-octyl) phosphate]" Mass(es): "369.1/91.0 amu"
Comment: "LC#B3212S" Annotation: ""



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7481

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370011

Sample Amount 2

Moisture: 32.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412183a

Date Analyzed: 16-APR-10 09:10

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\EXP0412183a

Date: 16-Apr-2010

Time: 09:10:24

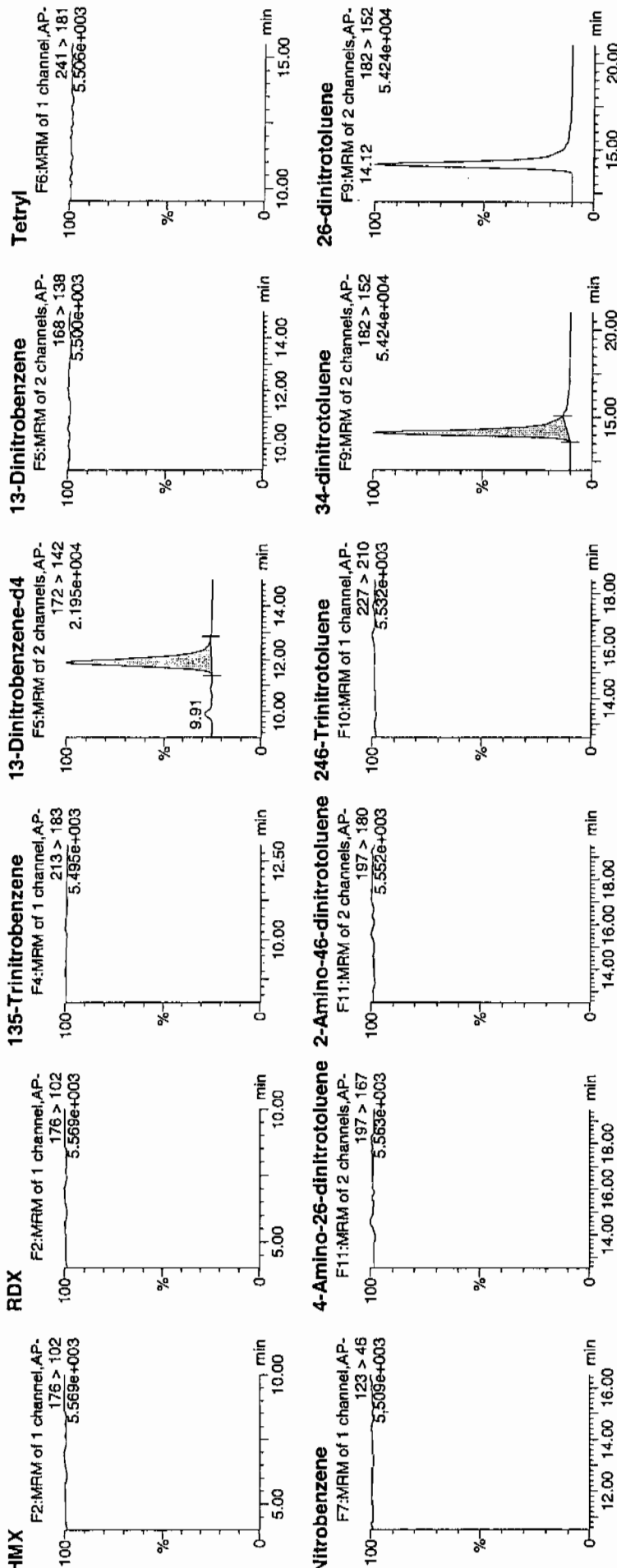
ID: 248370011

Vial: 4:6,C

4/17/10

160305 / 2 /

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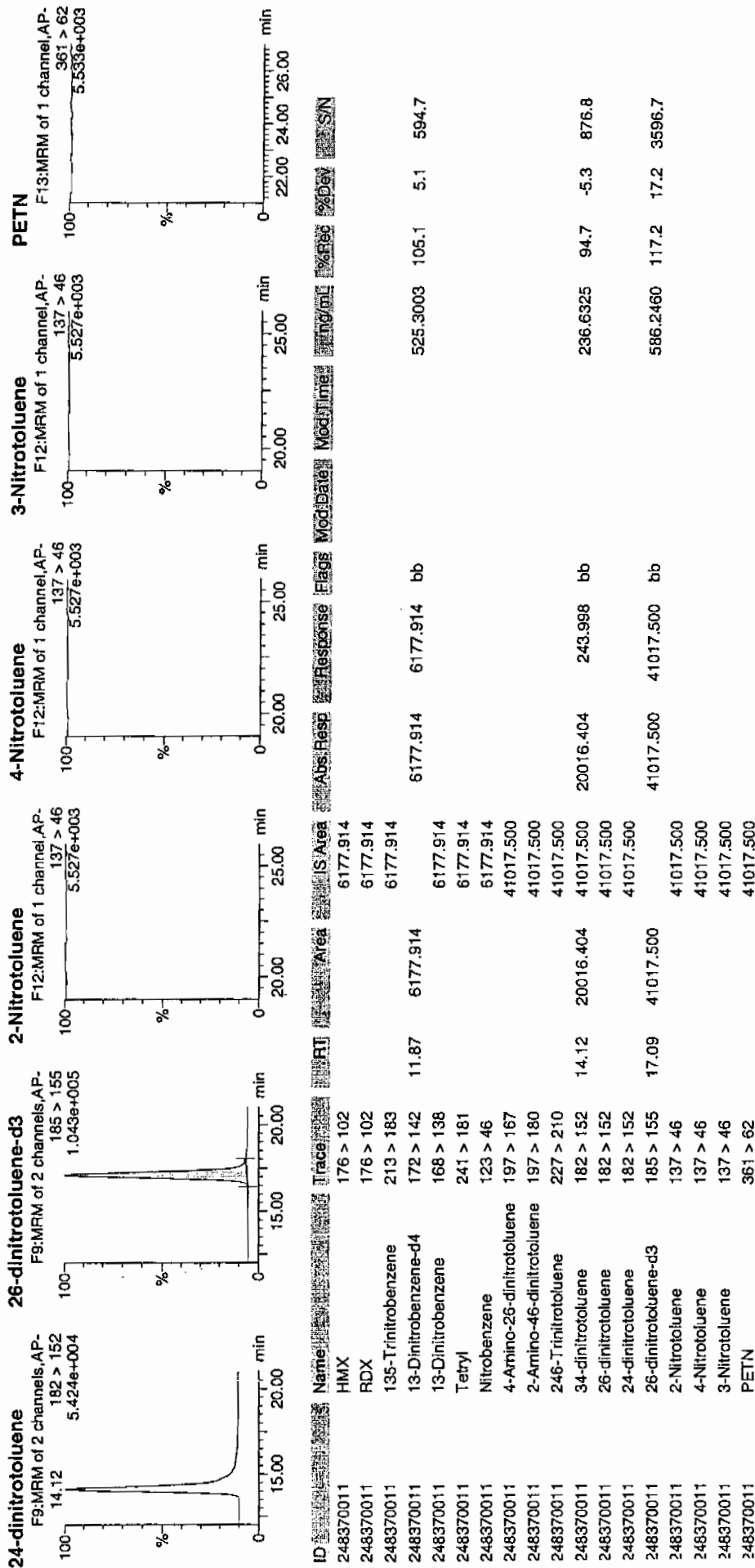
4/17/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 10 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: RE36-10-7481

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370011

Sample Amount 2

Moisture: 32.8

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050031.wiff

Date Analyzed: 05-APR-10 20:37

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

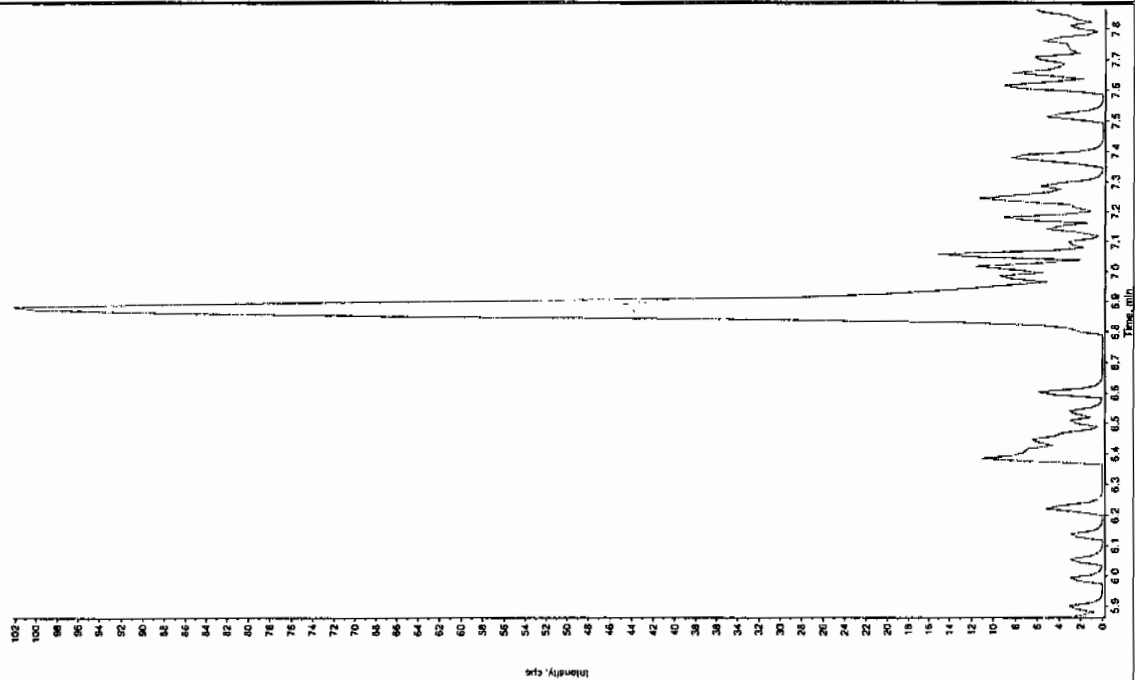
*Concentration =

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

Jan 4/10

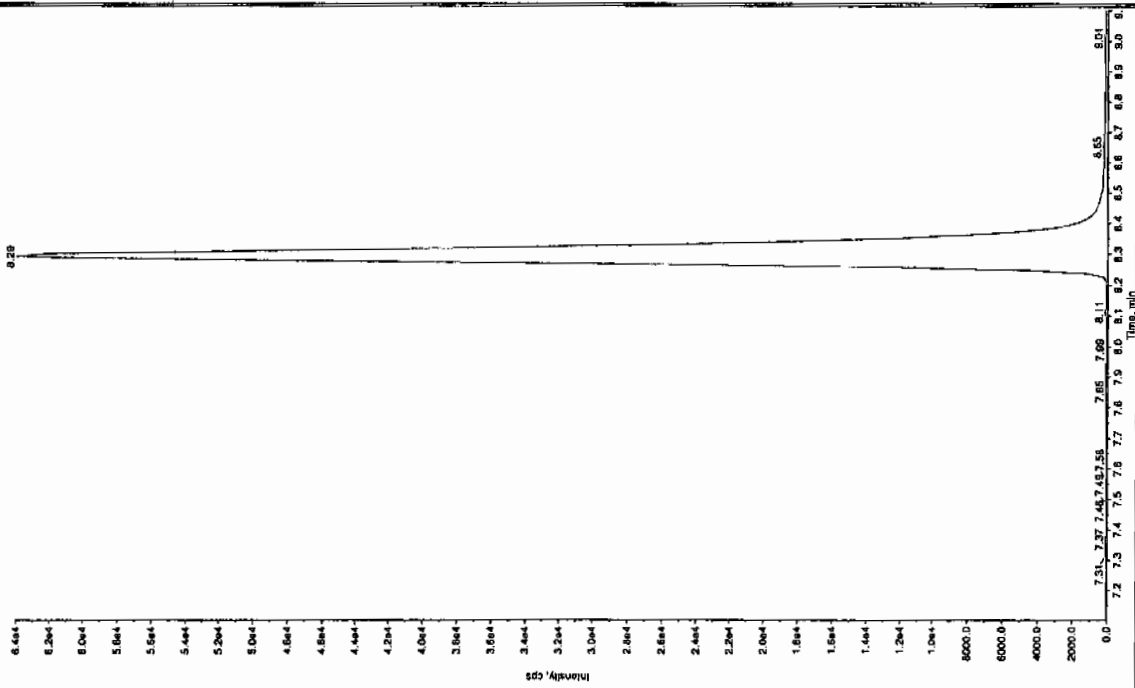
Sample Name: "24637001" Sample ID: "960305" File: "EXS04050031.wif"
 Peak Name: "ATB" Mass(es): 257.2204.8 amu
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 8:37:04 PM
 Acq. Time: 8:37:04 PM
 Modified: No



Sample Name: "24637001" Sample ID: "960305" File: "EXS04050031.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

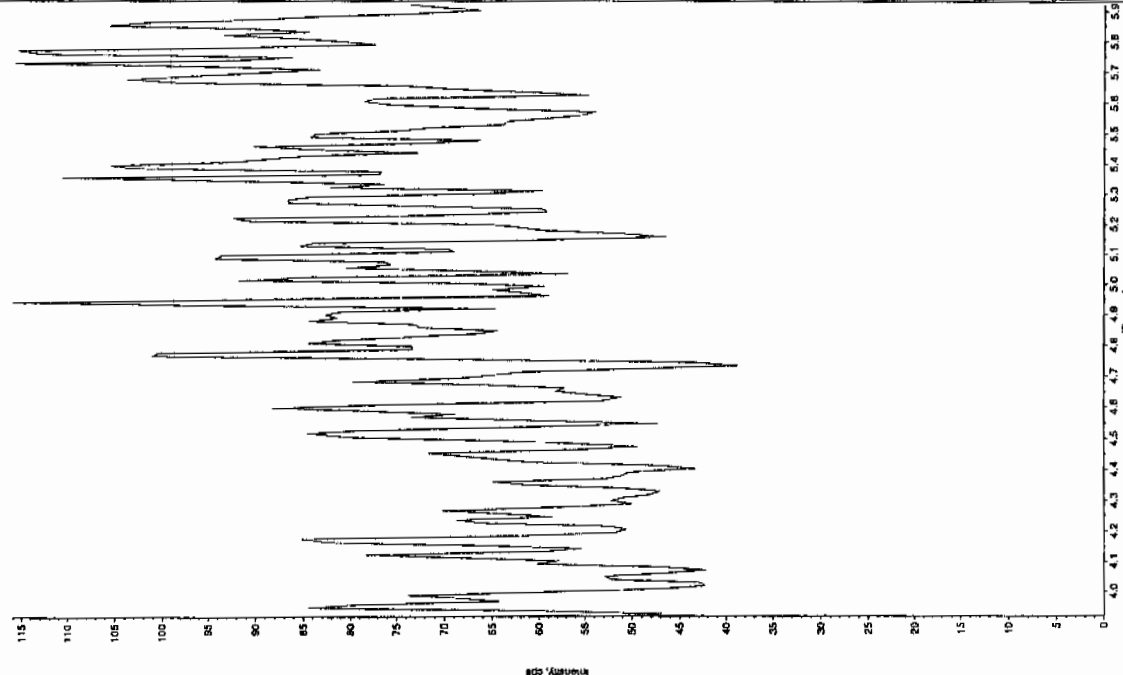
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 8:37:04 PM
 Acq. Time: 8:37:04 PM
 Modified: No



Jan 4/10

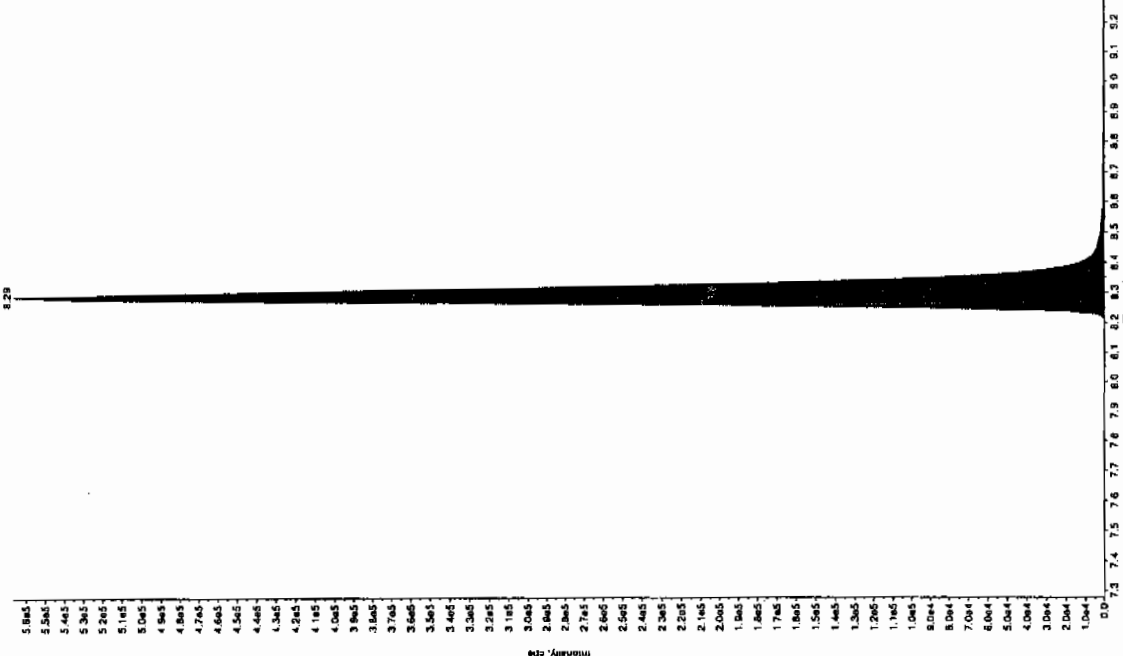
Sample Name: "248370011" Sample ID: "98030521LER" File: "EXS04050031.wif"
 Peak Name: "26-Diethyl-4-nitrophenol" Mass(es): "186.046.0 amu"
 Comment: "LCX832125" Annotation: "--"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 8/3/04 PM
 Acq. Time: 8:37:04 PM
 Modified: No



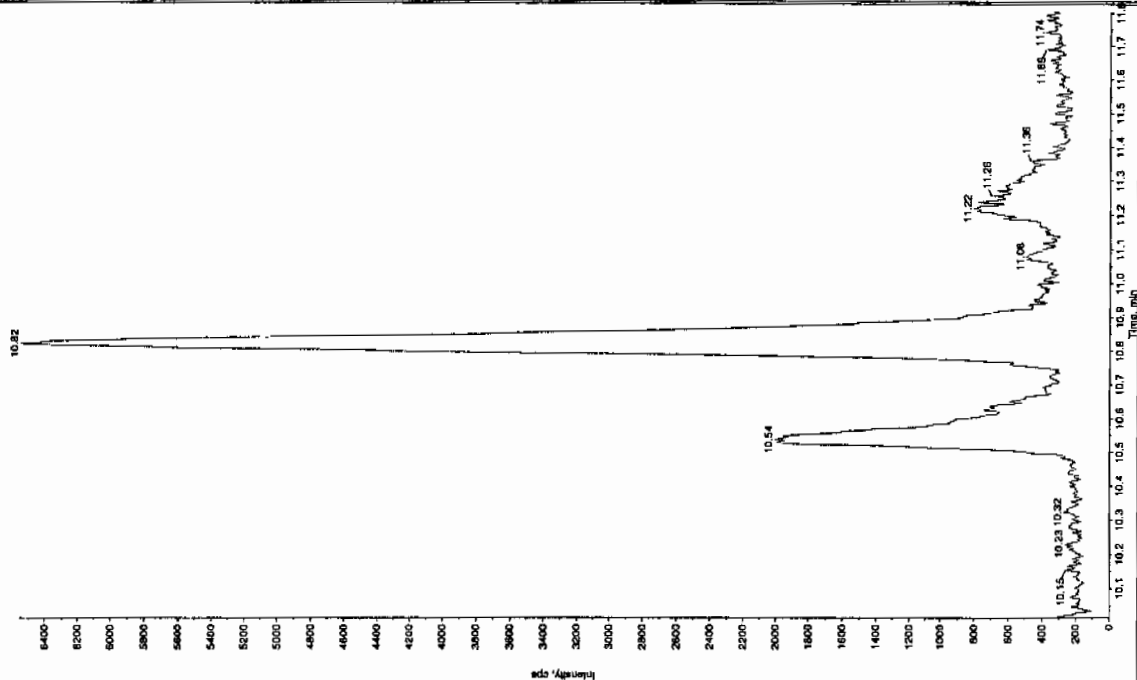
Sample Name: "248370011" Sample ID: "98030521LER" File: "EXS04050031.wif"
 Peak Name: "34-Dinitrophenol" Mass(es): "182.1751.9 amu"
 Comment: "LCX832125" Annotation: "--"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 8/3/04 PM
 Acq. Time: 8:37:04 PM
 Modified: No
 Algorithm: IntelliQuan - IQA
 Peak Height: 1450.00 cps
 Peak Width: 0.00 sec
 Window Width: 3 points
 Window: 15.0 sec
 Selected RT: 8.26 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.29 min
 Counts: 2.27e+006
 Height: 567273.193 cps
 RT Time: 0.12 min
 Time: 8.79 min



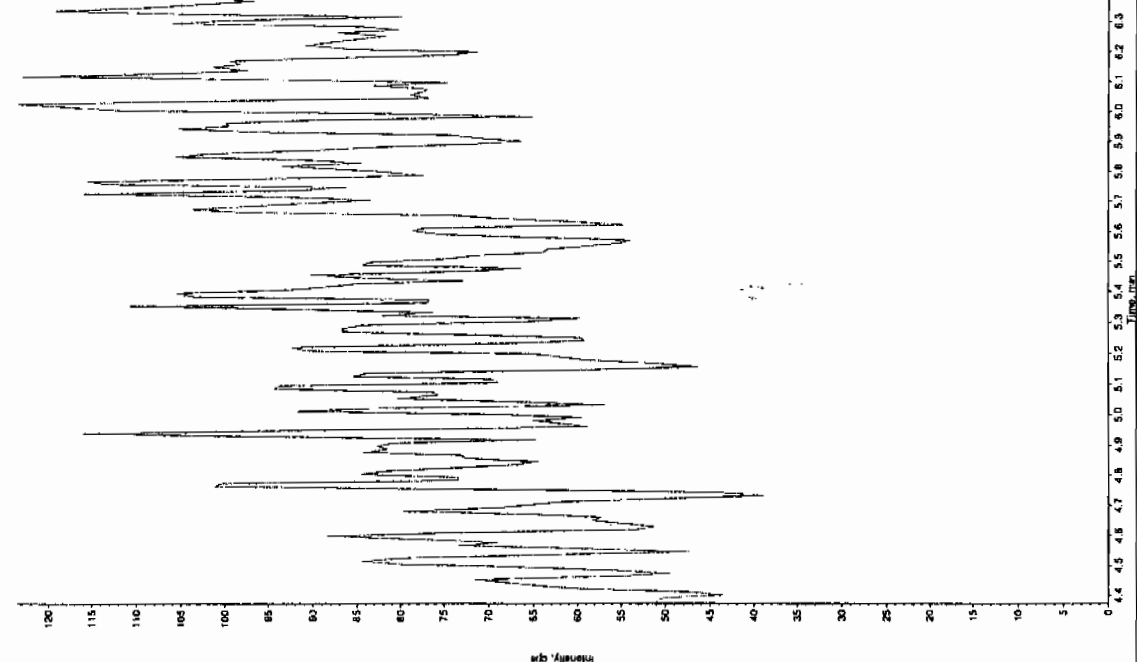
Sample Name: "248370011" Sample ID: "960005JLER" File: "EXS04050031.wif"
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 8:37:04 PM
 Modified: NO



Sample Name: "248370011" Sample ID: "960005JLER" File: "EXS04050031.wif"
 Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 8:37:04 PM
 Modified: NO



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7486

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370012

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412184a

Date Analyzed: 16-APR-10 09:39

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\EXP0412184a

Date: 16-Apr-2010

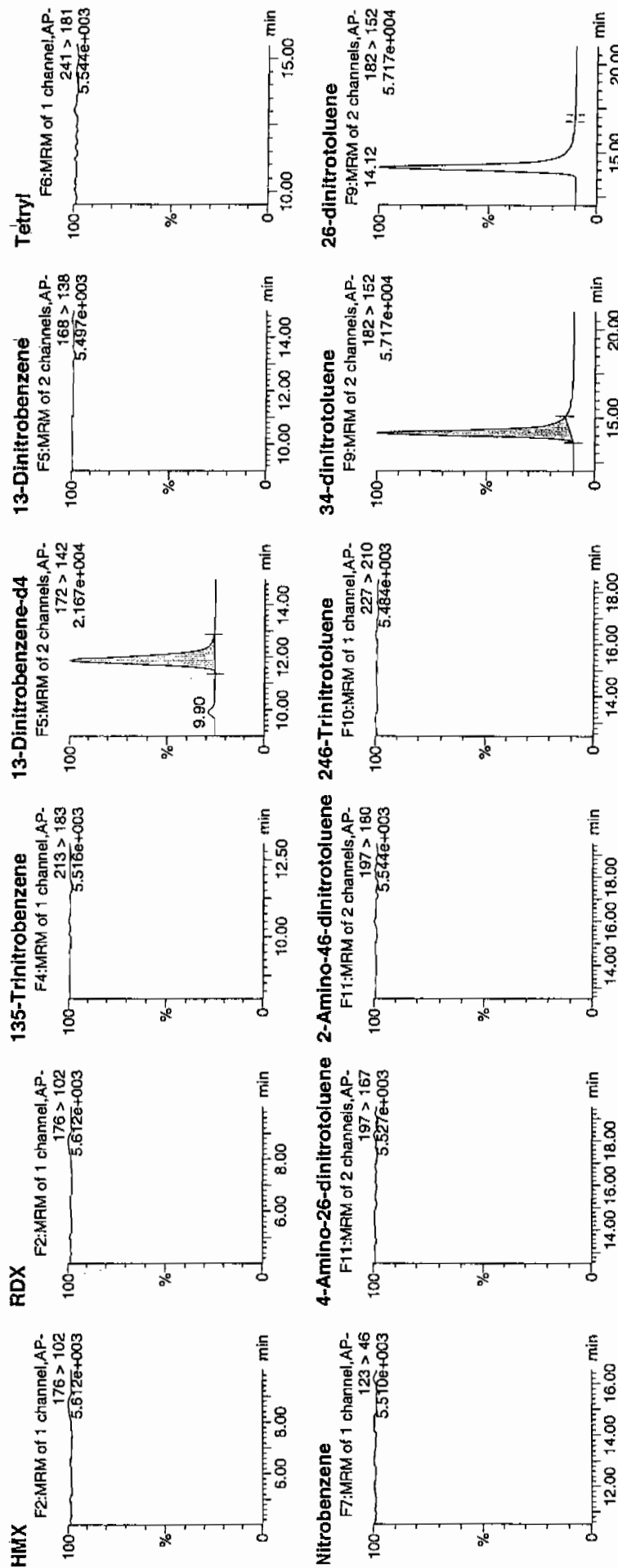
Time: 09:39:54

ID: 248370012

Vial: 4:6,D

4/17/10

WAVE/960305/8022/2/



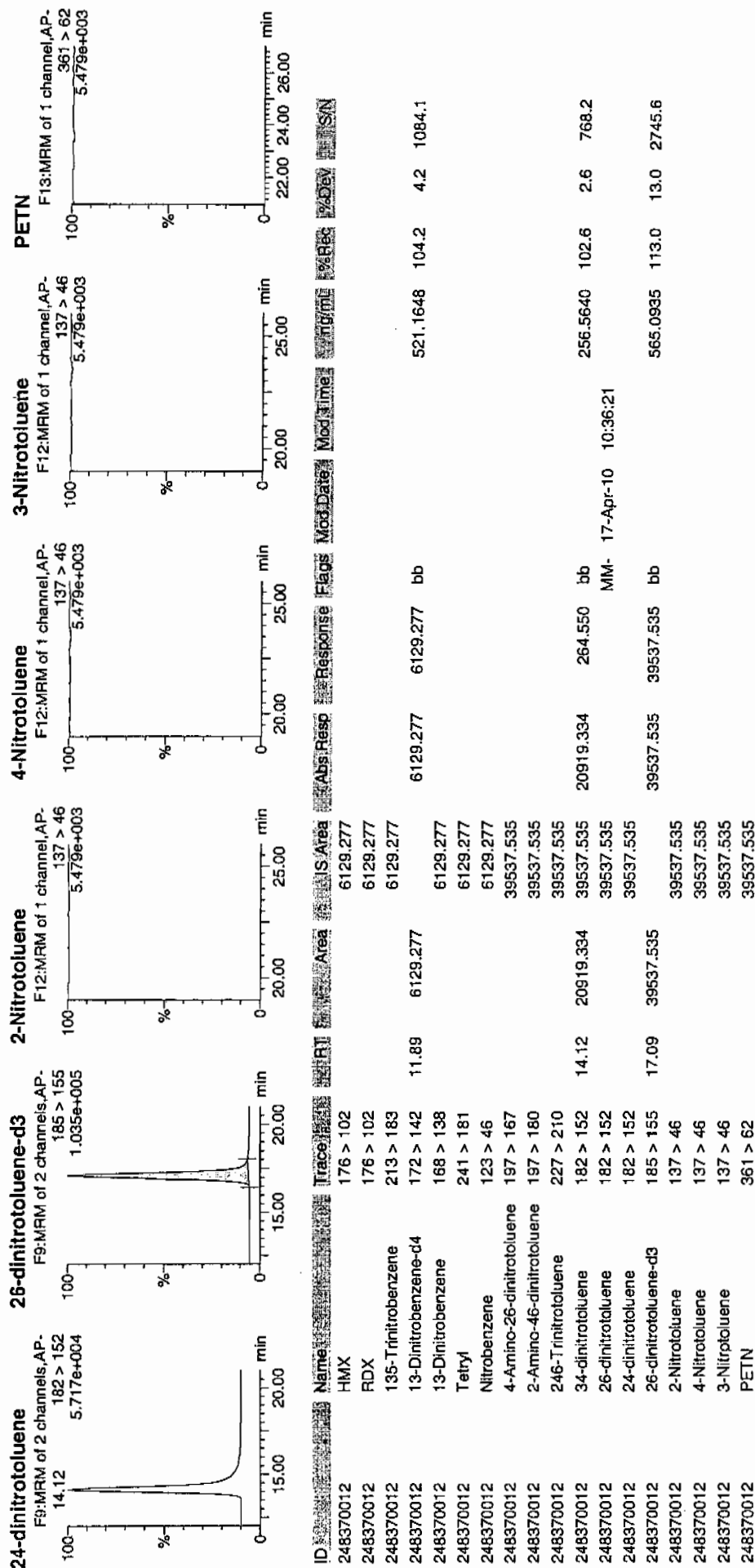
AME 04/18/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 12 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: RE36-10-7486

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370012

Sample Amount 2

Moisture: 21.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050032.wiff

Date Analyzed: 05-APR-10 20:52

Units: ug/kg

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

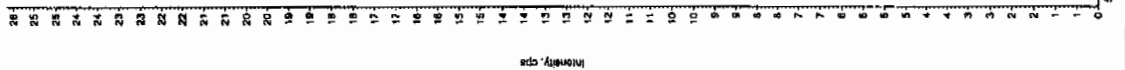
*Concentration =

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

Run 4/17/10

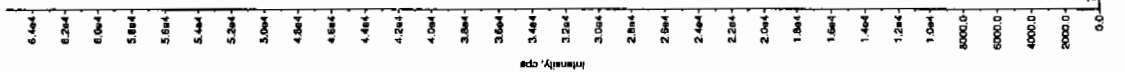
Sample Name: "248370012" Sample ID: "96030521.ER" File: "EX504050032.wif"
 Peak Name: "ATB" Mass(es): "257.2294.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 8:52:46 PM
 Modified: NC



Sample Name: "248370012" Sample ID: "96030521.ER" File: "EX504050032.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

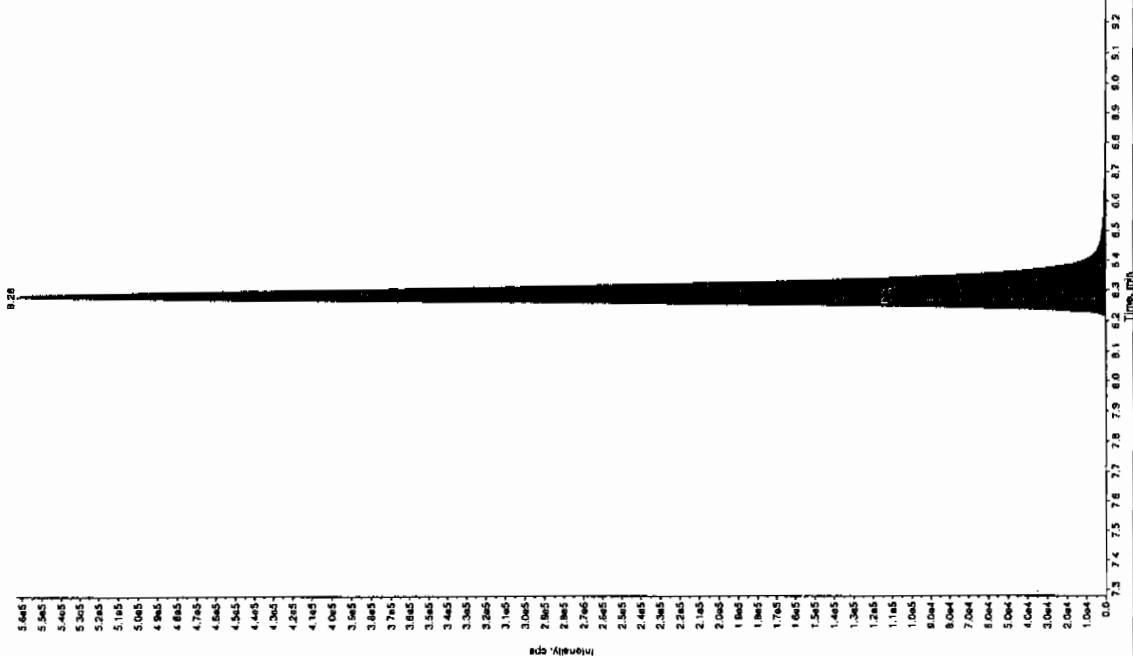
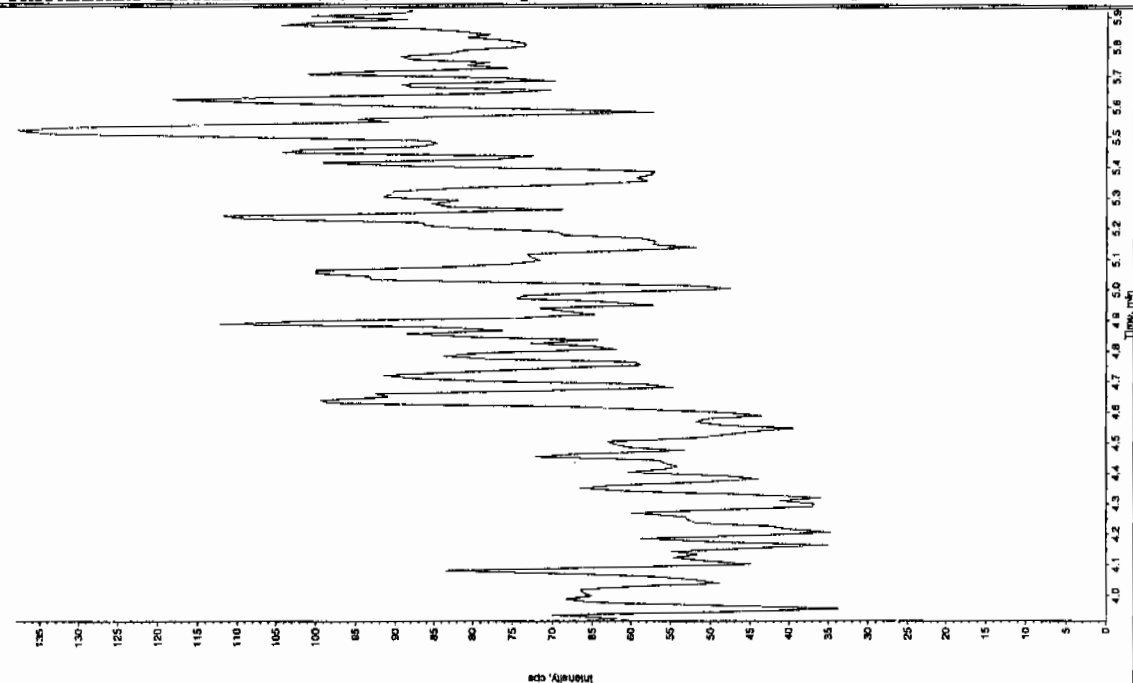
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 8:52:46 PM
 Modified: No

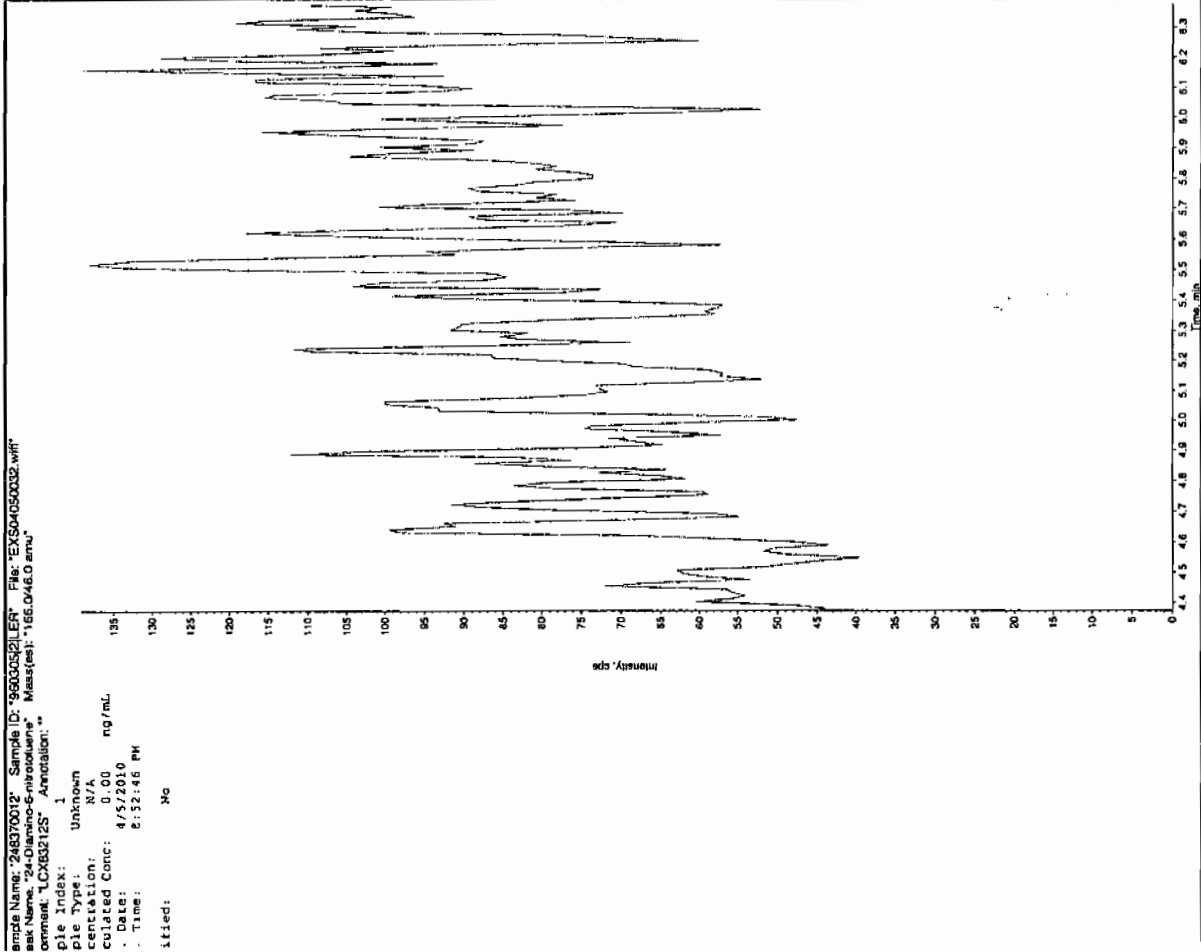
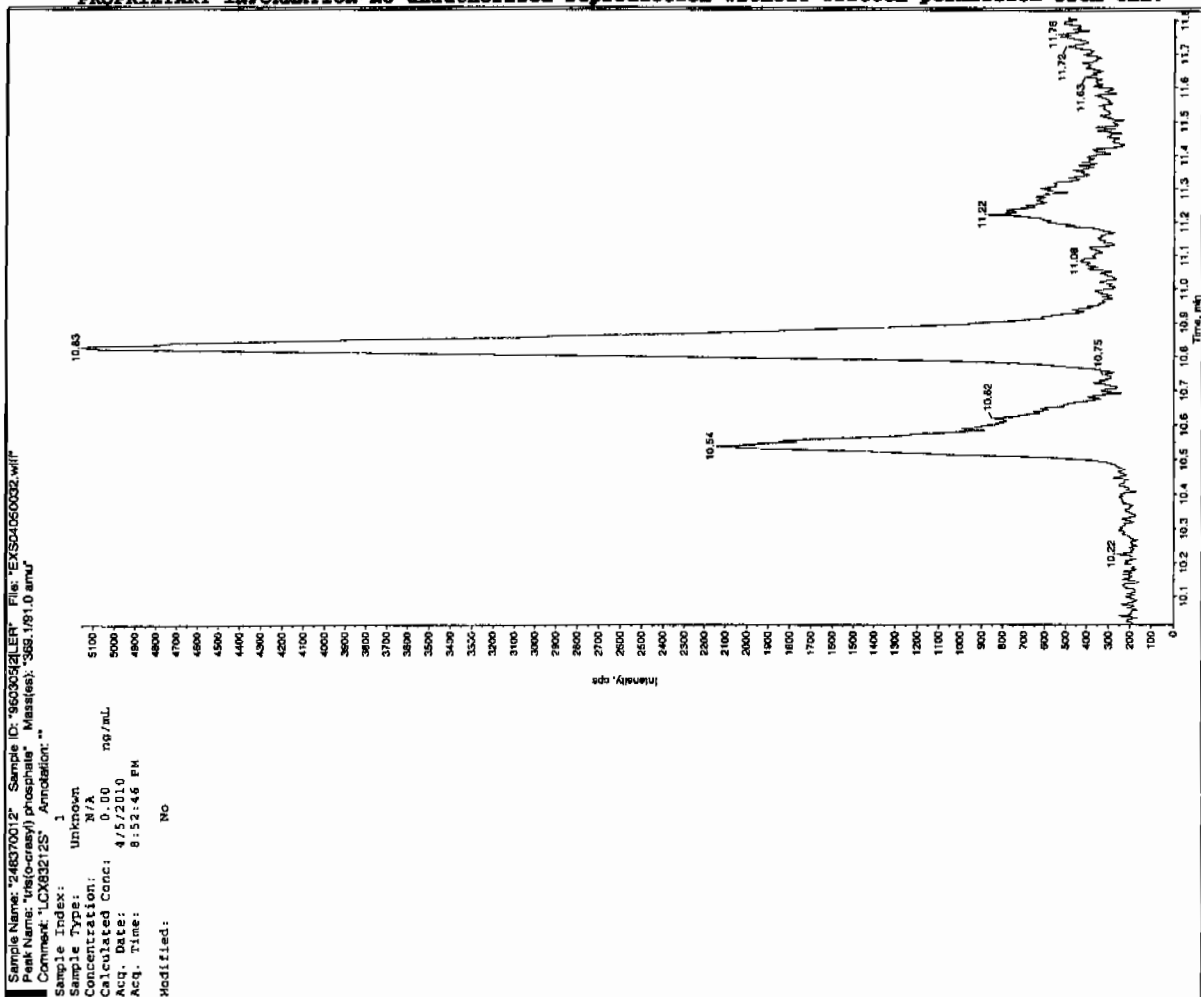


Sample Name: '248370012' Sample ID: '96030512\LER' File: 'EX504060032.wif'
 Peak Name: '34-Dinitrotoluene' Mass(es): '182.1751.9 amu'
 Comment: 'LCX83212S' Annotation: ''

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	4/5/2010
Acq. Time:	8:52:46 PM
Modified:	No

Sample Index:	1	Unknown
Tube Type:		N/A
Concentration:		269.
Conc Unit:		ng/mL
Date:	4/5/2010	
Time:	8:52:46 PM	
Operator:		
Calculated:	NO	
Method:	Algorithm: IntelliQuan - IDA	
Peak Weight:	1460.00	cps
Peak Width:	0.00	sec
Counting Width:	15.0	points
Window:	13.0	sec
Decayed RT:	6.28	min
Relative RT:	NO	
Type:	Valley	
Retention Time:	2.980468	min
Height:	563163	counts
RT Time:	8.16	min
Time:	8.83	min





EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7477

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370013

Sample Amount 2

Moisture: 23.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412185a

Date Analyzed: 16-APR-10 10:09

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

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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\EXP0412185a

Date: 16-Apr-2010

Time: 10:09:24

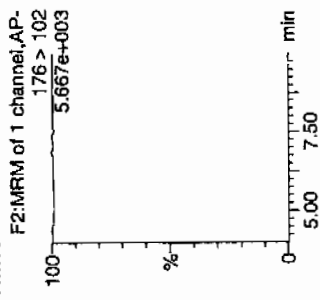
ID: 248370013

Vial: 4:6,E

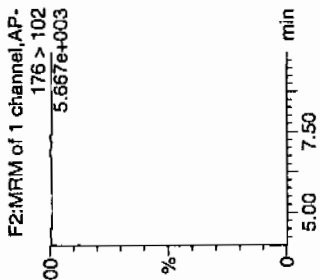
4/17/10

LAUC-960305 / 21

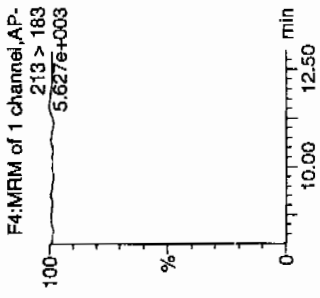
HMx



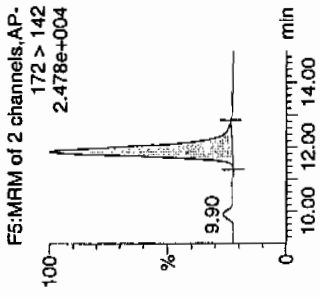
RDX



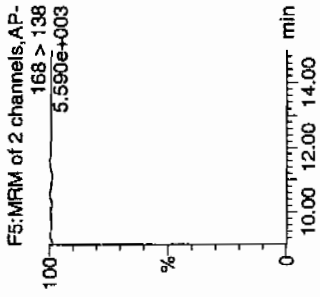
135-Trinitrobenzene



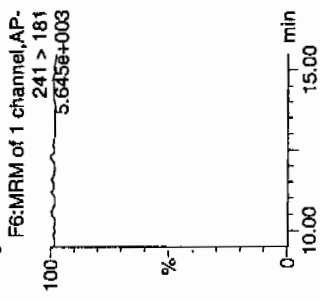
13-Dinitrobenzene-d4



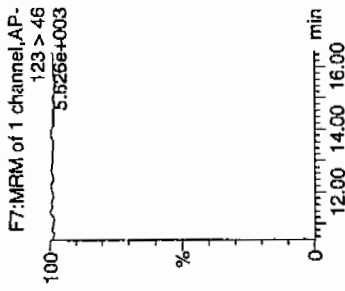
13-Dinitrobenzene



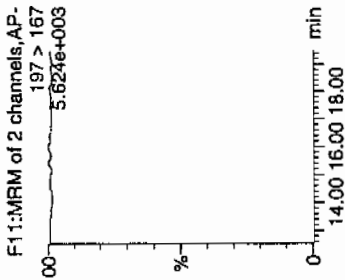
Tetryl



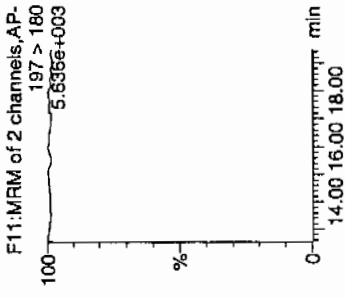
Nitrobenzene



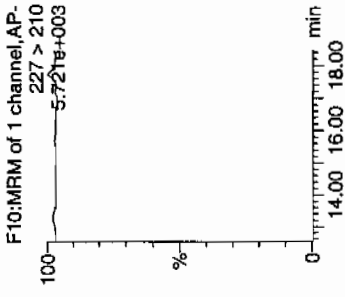
4-Amino-26-dinitrotoluene



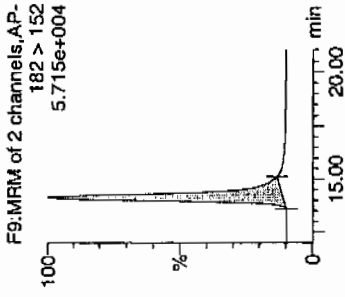
2-Amino-46-dinitrotoluene



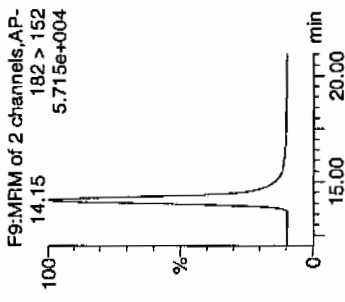
246-Trinitrotoluene



34-dinitrotoluene



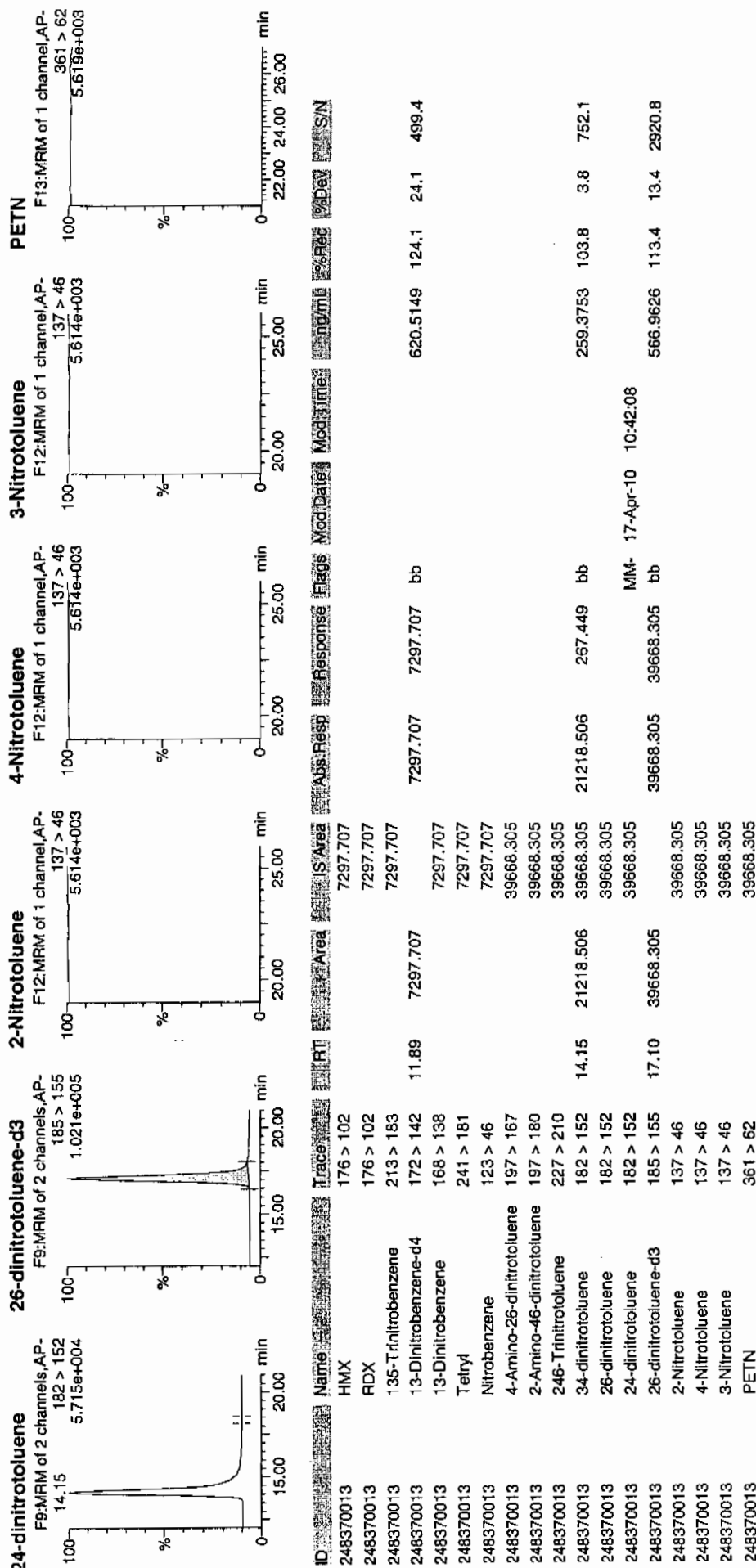
26-dinitrotoluene



Amc 04/18/10

Quantify Sample Report
 3EL Laboratories, LLC / Analyst : Michael A. Penny

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: RE36-10-7477

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370013

Sample Amount 2

Moisture: 23.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050033.wiff

Date Analyzed: 05-APR-10 21:08

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

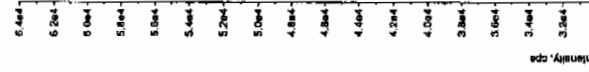
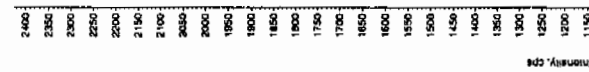
*Concentration =

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

See 4/11/10

Sample Name: "248370013" Sample ID: "950305121ER" File: "EXS04050033.wht"
 Peak Name: "ATB" Mass(es): "257.2204.8 amu"
 Comment: "LCX832125" Annotation: ""

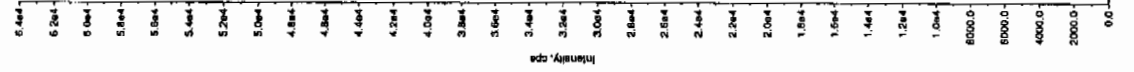
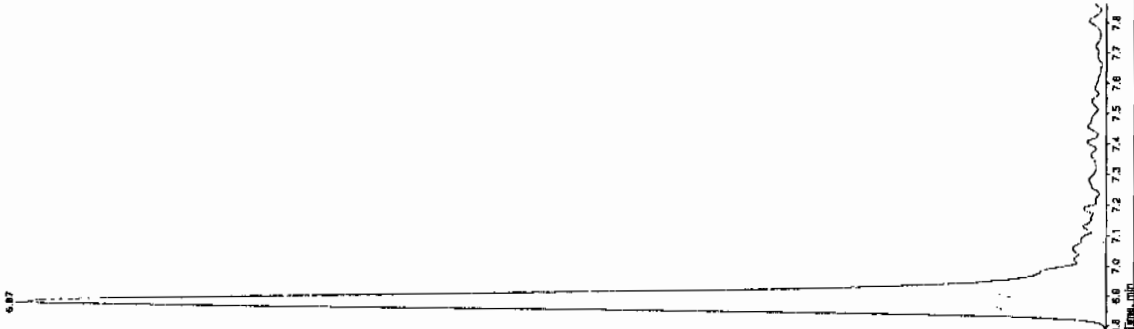
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 9:08:30 PM
 Modified: No



See 04/10/10

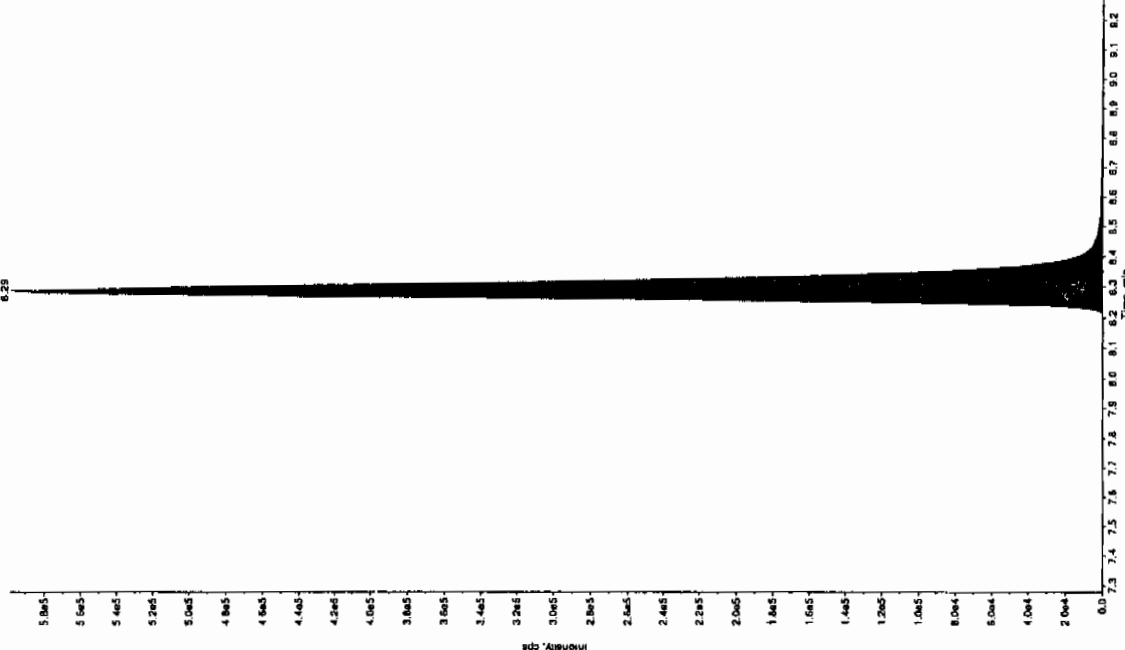
Sample Name: "248370013" Sample ID: "950305121ER" File: "EXS04050033.wht"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0416.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 9:08:30 PM
 Modified: No



Sample Name: "248370013" Sample ID: "960303[2]LER" File: "EXS0405033.wif"
 Peak Name: "25-Dienno-4-nitrofluene" Mass(es): "166.046.0 amu"
 Comment: "LCX632125" Annotation: ""

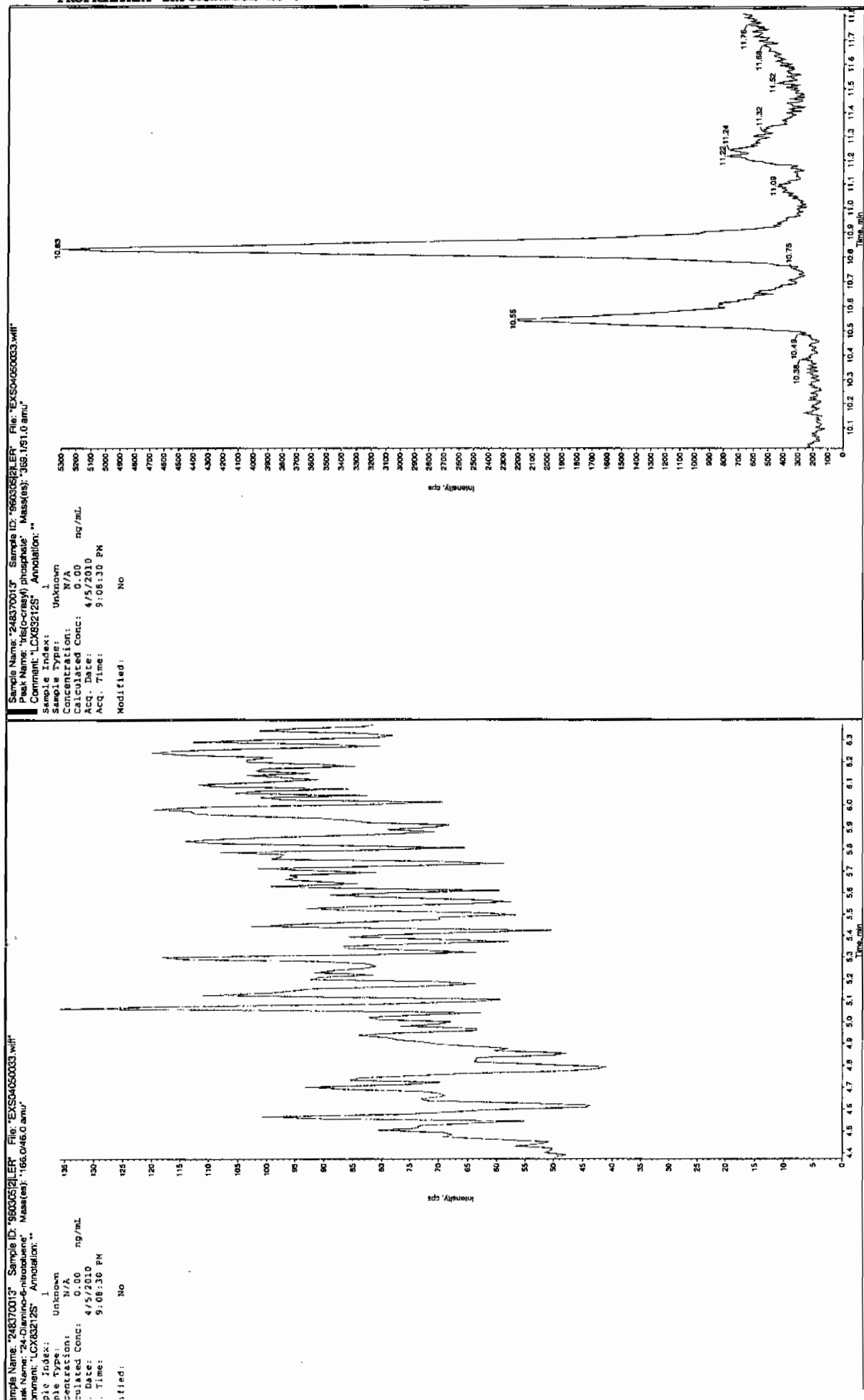
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 9/08/10 PM
 Acq. Time: 9:08:30 PM
 Modified: No



Sample Name: "248370013" Sample ID: "960303[2]LER" File: "EXS0405033.wif"
 Peak Name: "25-Dienno-4-nitrofluene" Mass(es): "166.046.0 amu"
 Comment: "LCX632125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 4/5/2010
 Acq. Date: 9/08/10 PM
 Acq. Time: 9:08:30 PM
 Modified: No
 Peak Name: "25-Dienno-4-nitrofluene" Mass(es): "166.046.0 amu"
 Comment: "LCX632125" Annotation: ""
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Window: 3 points
 Window: 15.0 sec
 Window: 8.28 min
 Window: No
 Window: Valley
 Window: 8.28 min
 Window: 3.44e-006 counts
 Window: 556908.142 cps
 Window: 8.19 min
 Window: 8.82 min

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7489

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370014

Sample Amount 2

Moisture: 35.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412186a

Date Analyzed: 16-APR-10 10:38

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

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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\EXP0412186a

Date: 16-Apr-2010

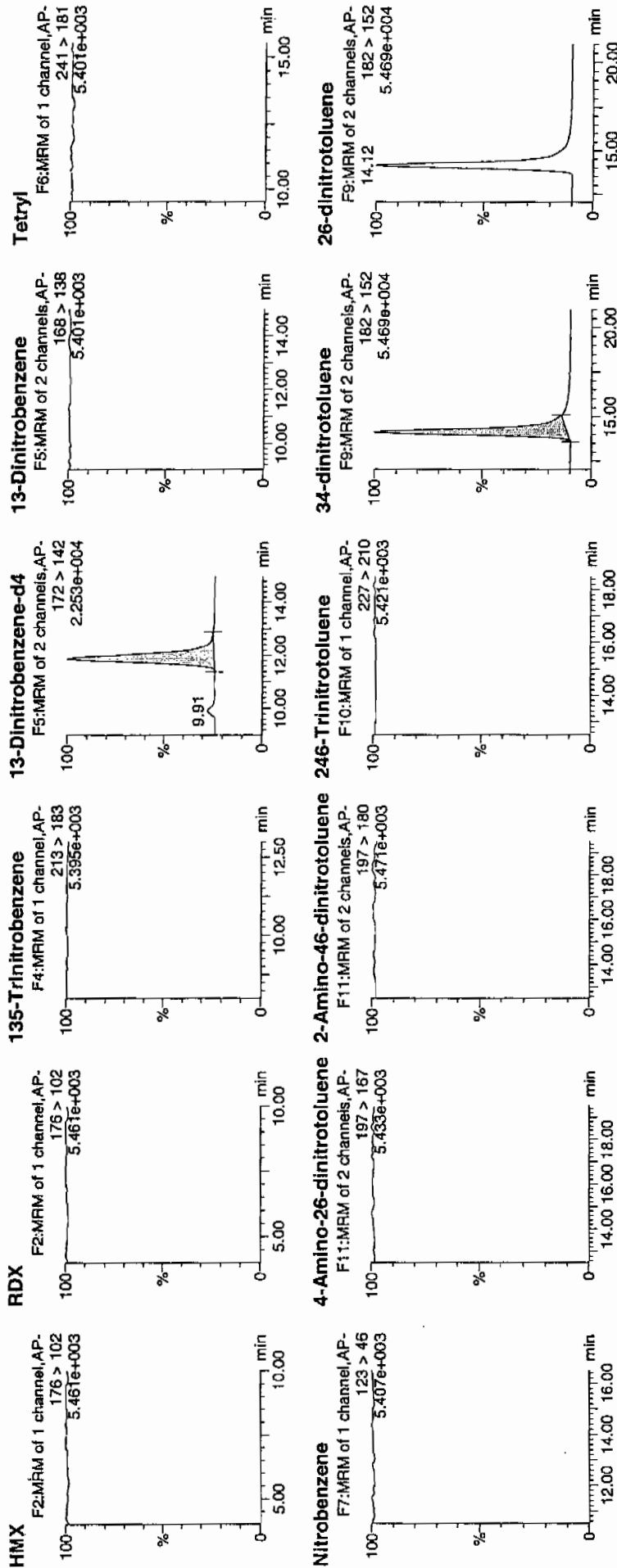
Time: 10:38:54

ID: 248370014

Vial: 4:6,F

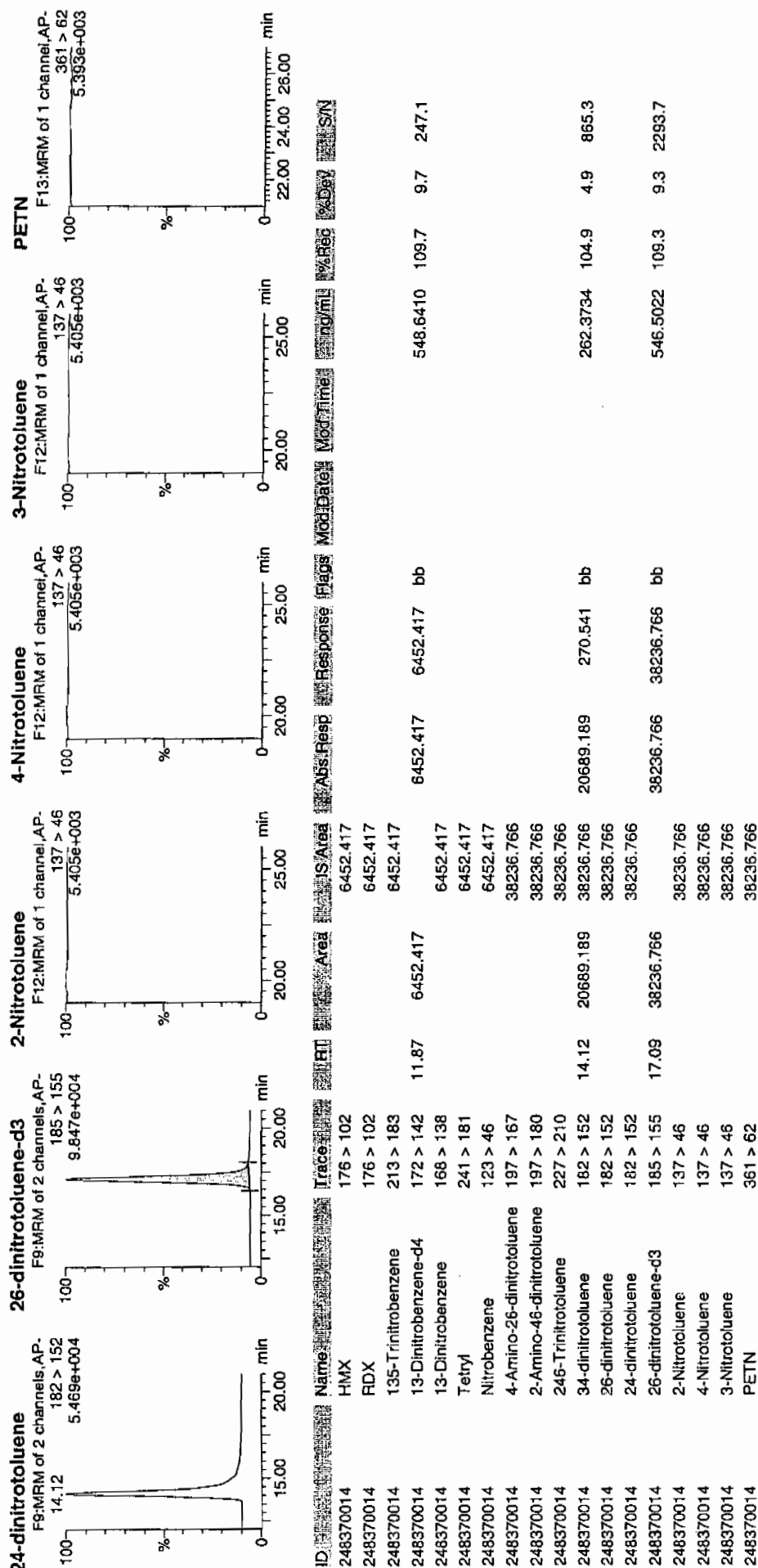
4/17/10
4/17/10

960305 / 21



4/17/10

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: RE36-10-7489

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370014

Sample Amount 2

Moisture: 35.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050034.wiff

Date Analyzed: 05-APR-10 21:24

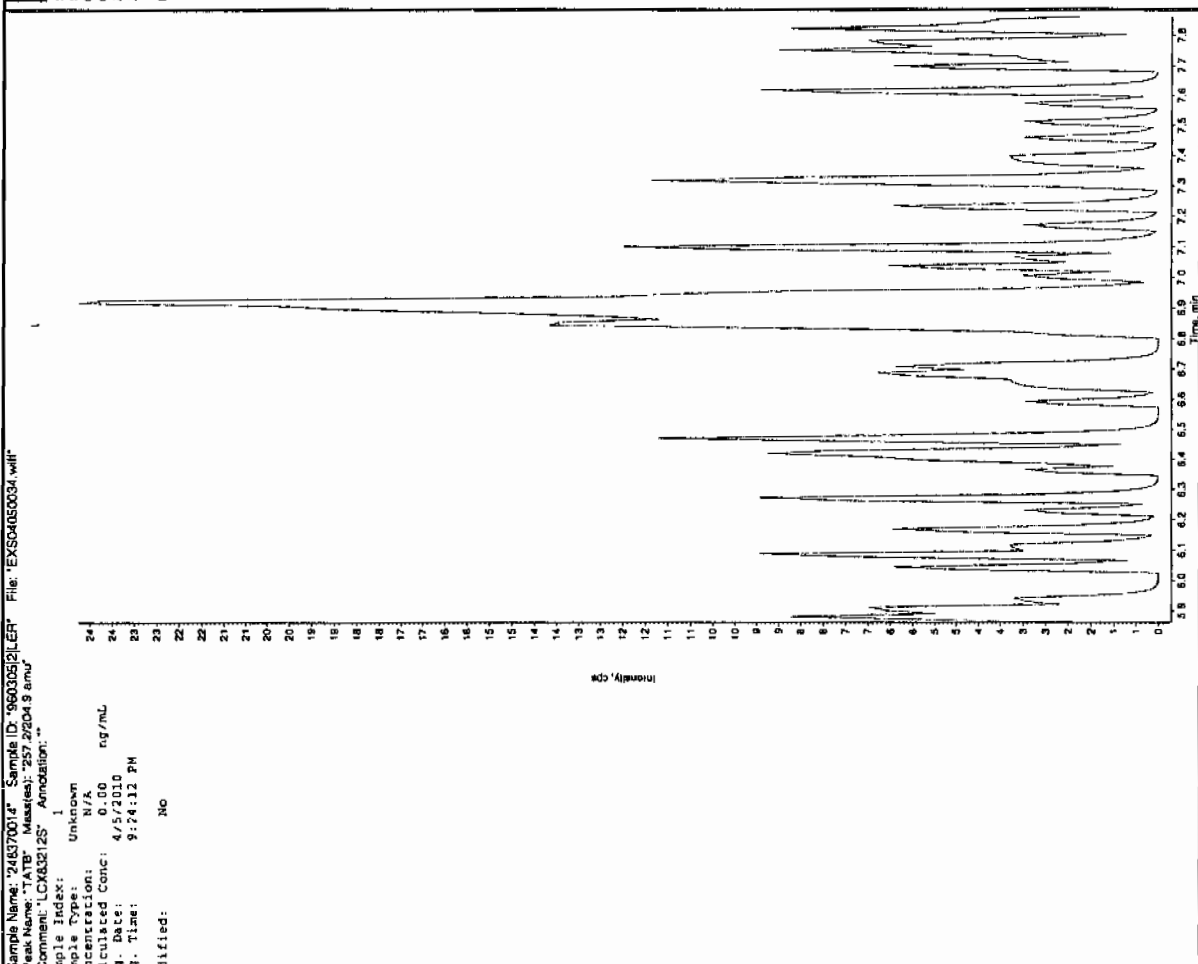
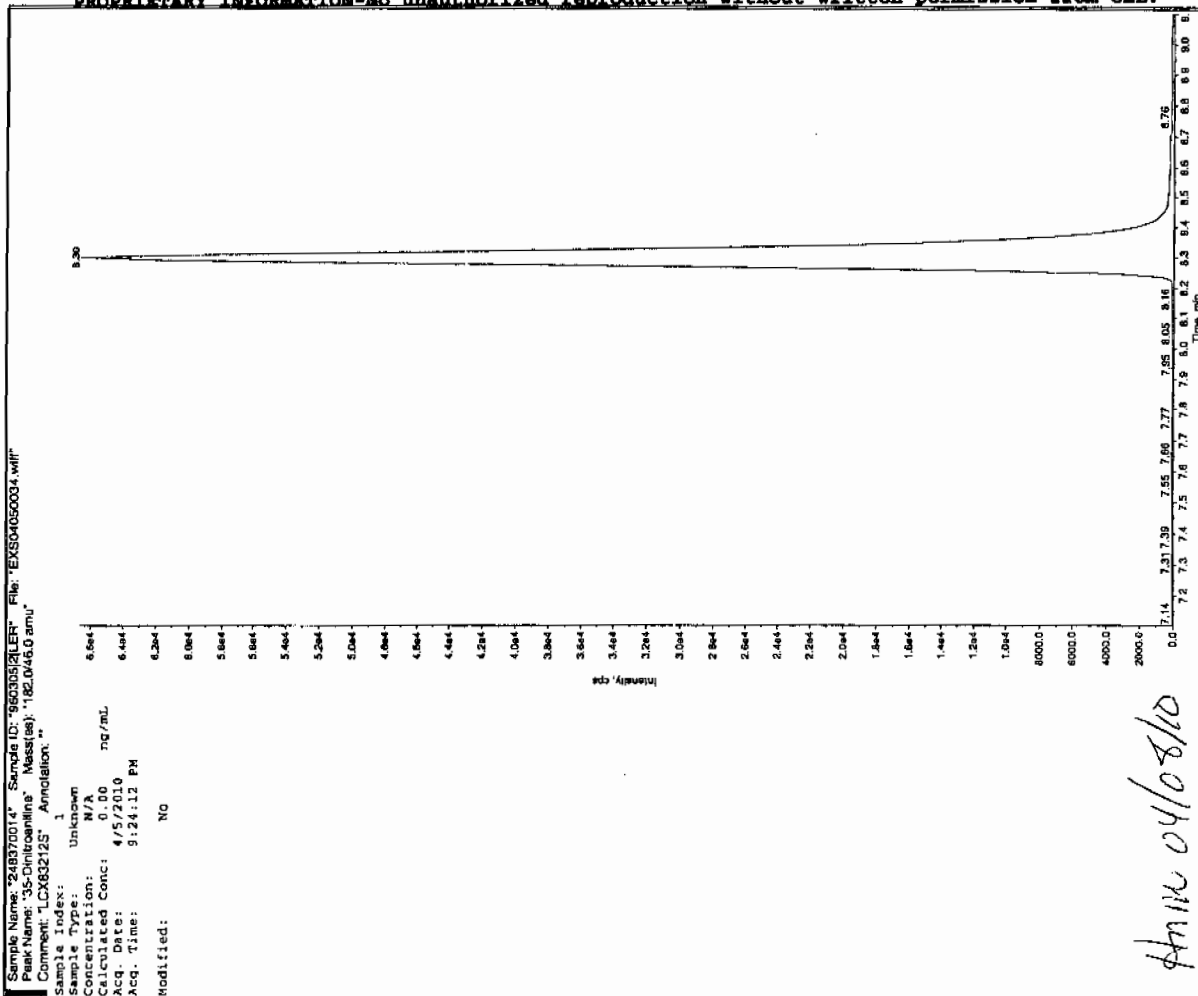
Units: ug/kg

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

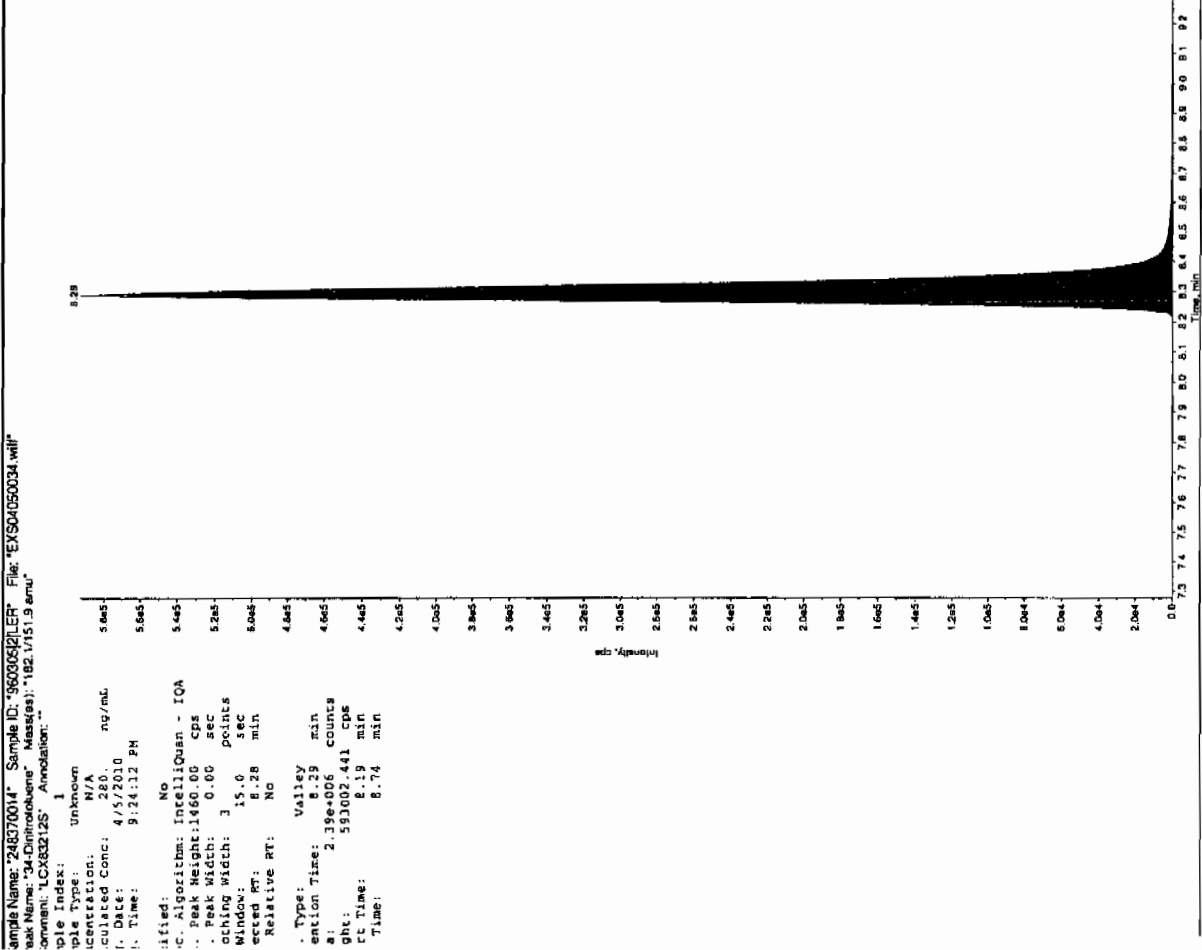
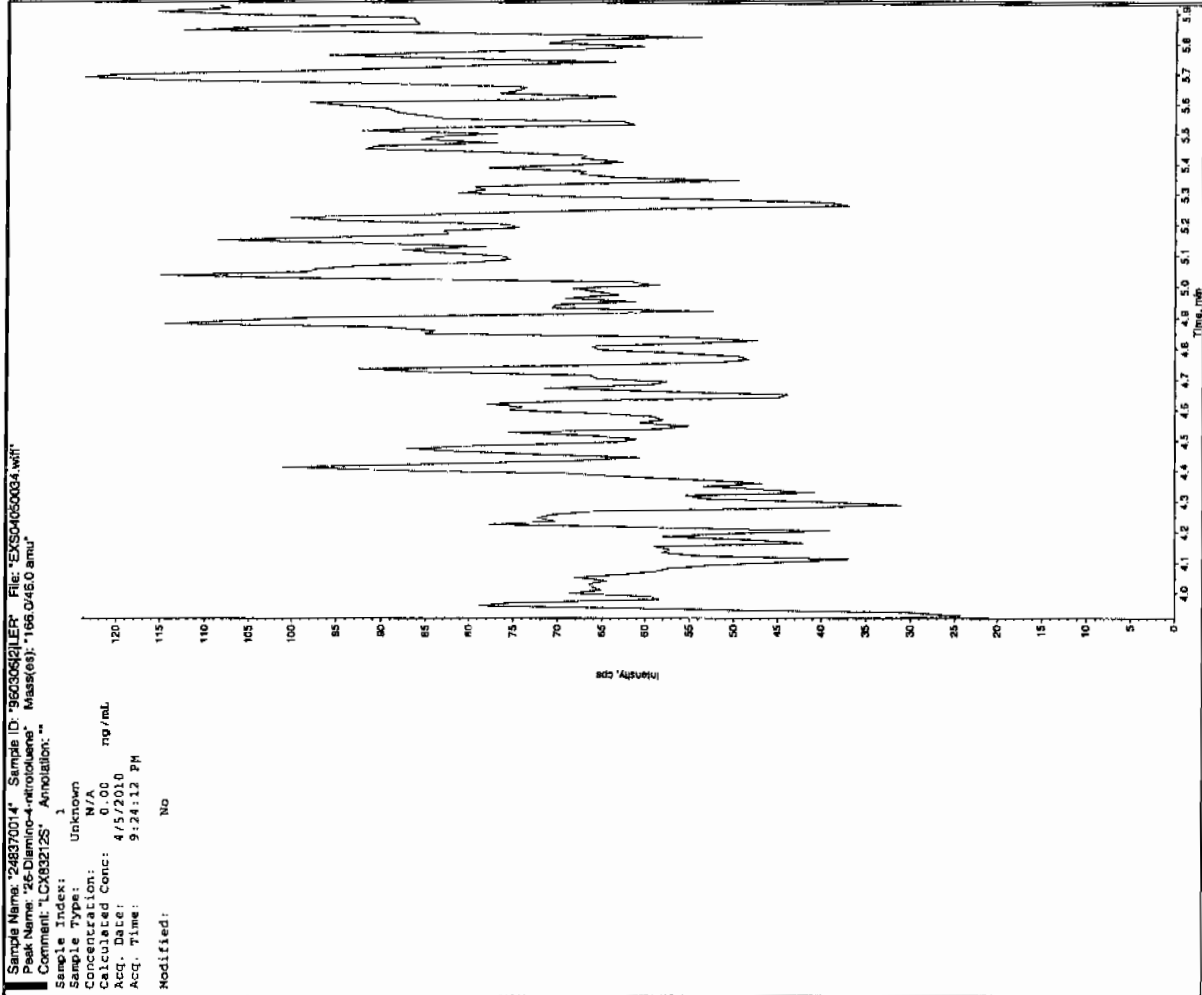
*Concentration =

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

San 4/7/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



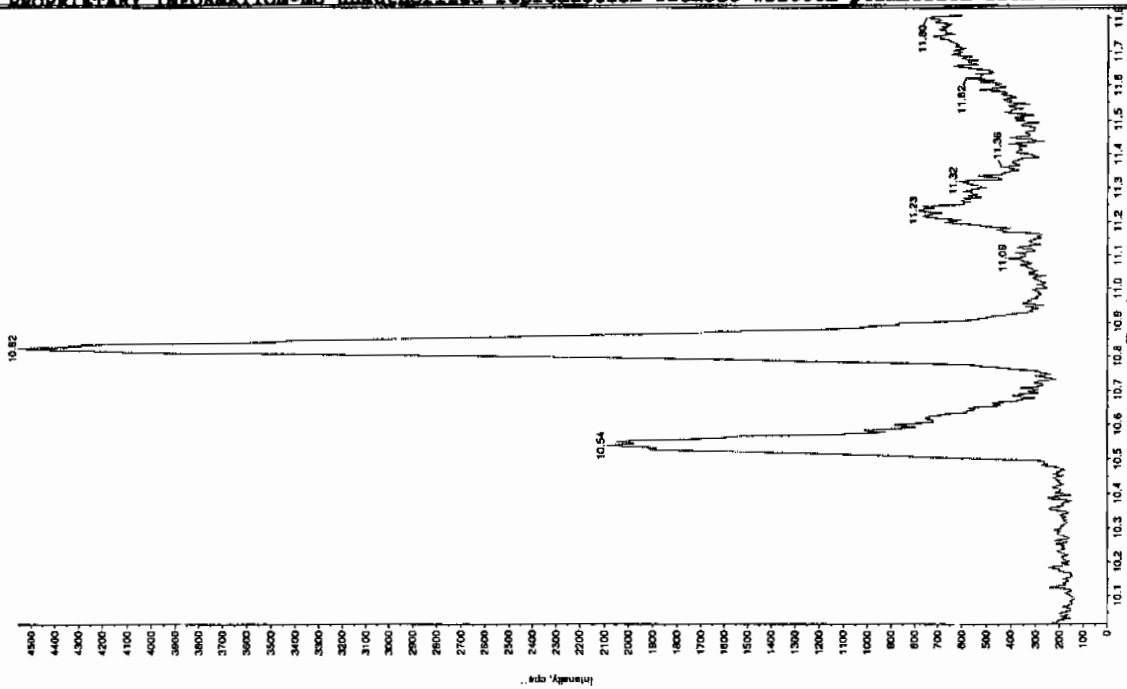
LC SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "248370014" Sample ID: "960305J2LER" File: "EX504050034.wif"

Peak Name: "tris(o-cresyl) phosphite" Mass(es): "369.1/91.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 9:24:12 PM
 Modified: No

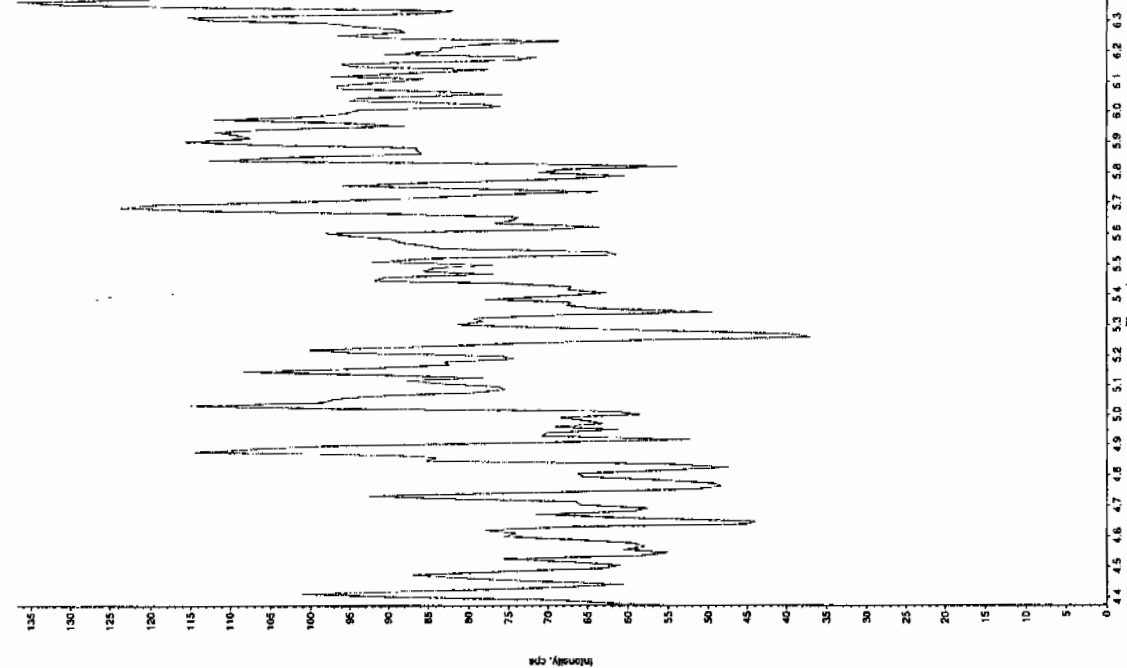


Sample Name: "248370014" Sample ID: "960305J2LER" File: "EX504050034.wif"

Peak Name: "24-Dienyl-6-nitrotoluene" Mass(es): "166.0/46.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 9:24:12 PM
 Modified: No



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7479

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370015

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412187a

Date Analyzed: 16-APR-10 11:08

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412187a

Date: 16-Apr-2010

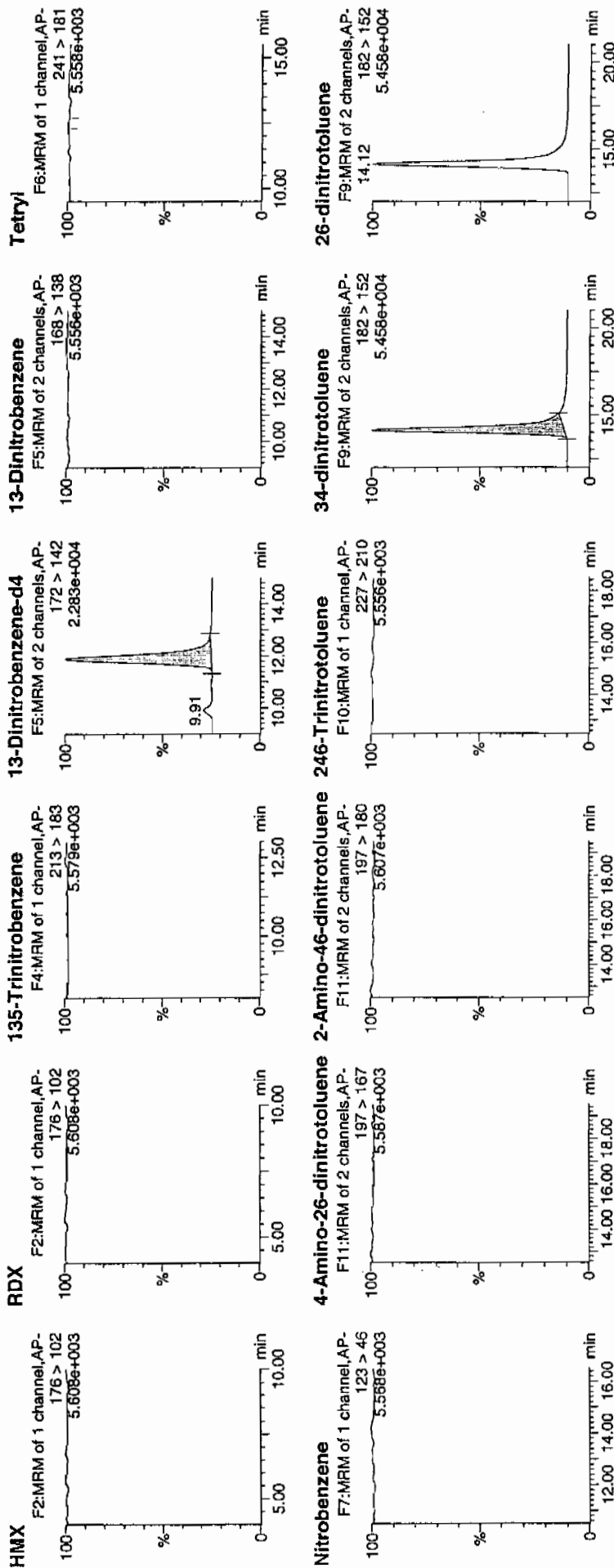
Time: 11:08:23

ID: 248370015

Vial: 4:7,A

not
4/18/10

LANC 960305 / 8022 / 21



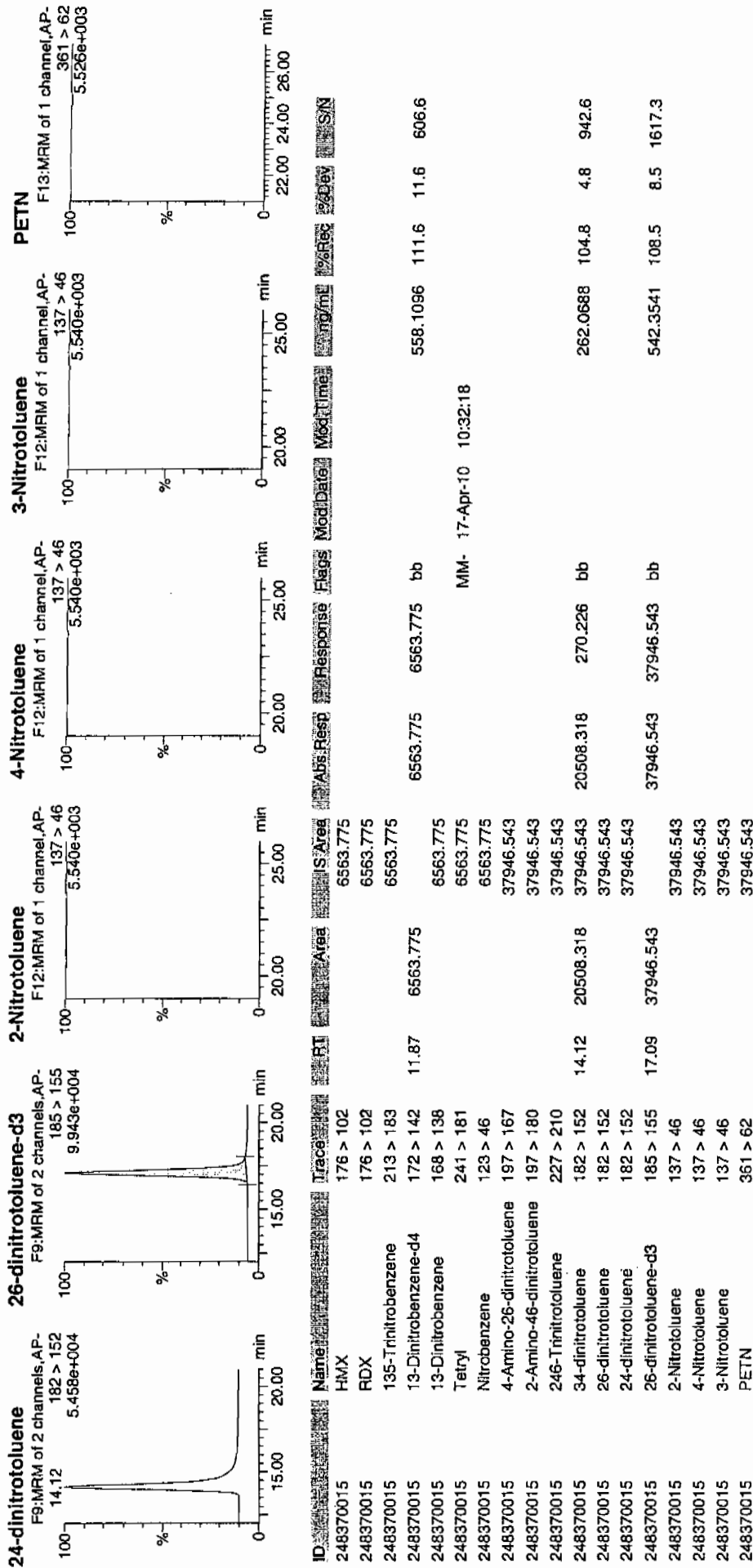
4/18/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 18 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: RE36-10-7479

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370015

Sample Amount 2

Moisture: 27.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050035.wiff

Date Analyzed: 05-APR-10 21:39

Units: ug/kg

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

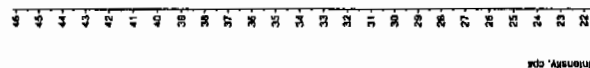
*Concentration =

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

See 4/27/10

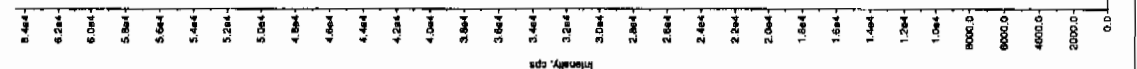
Sample Name: "248370015" Sample ID: "96030521ER" File: "EXS04050035.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A ng/mL
Calculated Conc: 4/5/2010
Acq. Time: 9:39:54 PM
Modified: No



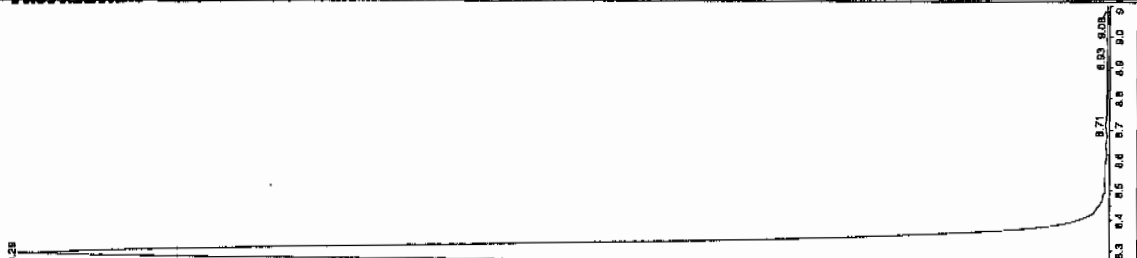
Sample Name: "248370015" Sample ID: "96030521ER" File: "EXS04050035.wiff"
Peak Name: "35-Dinitroethylene" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A ng/mL
Calculated Conc: 4/5/2010
Acq. Time: 9:39:54 PM
Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

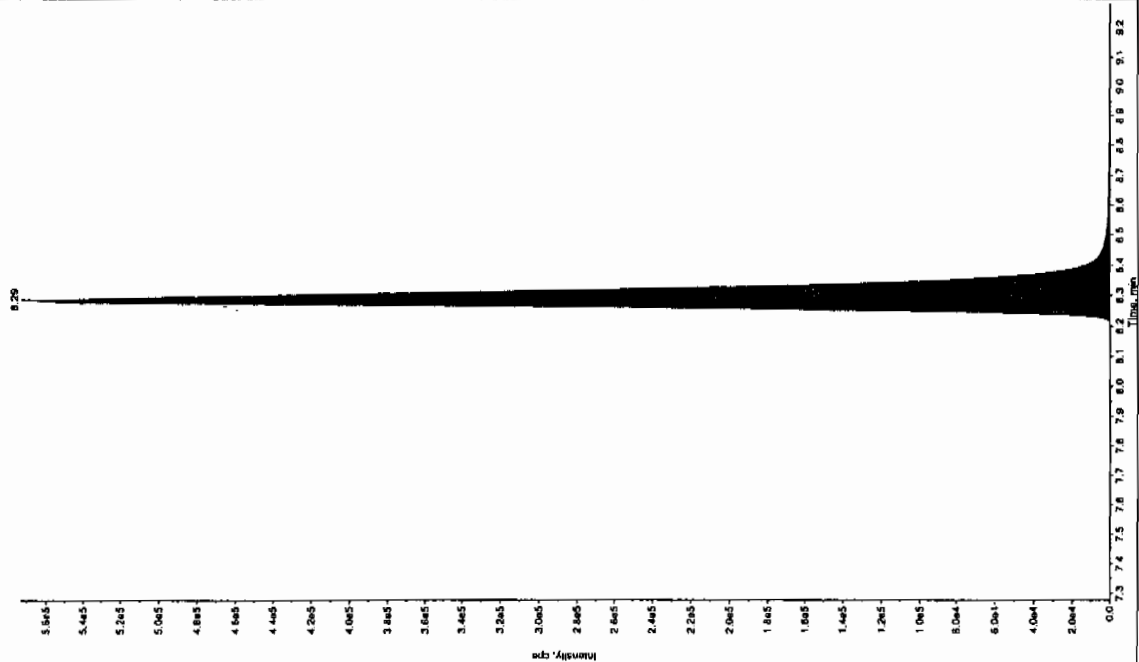
See 4/27/10



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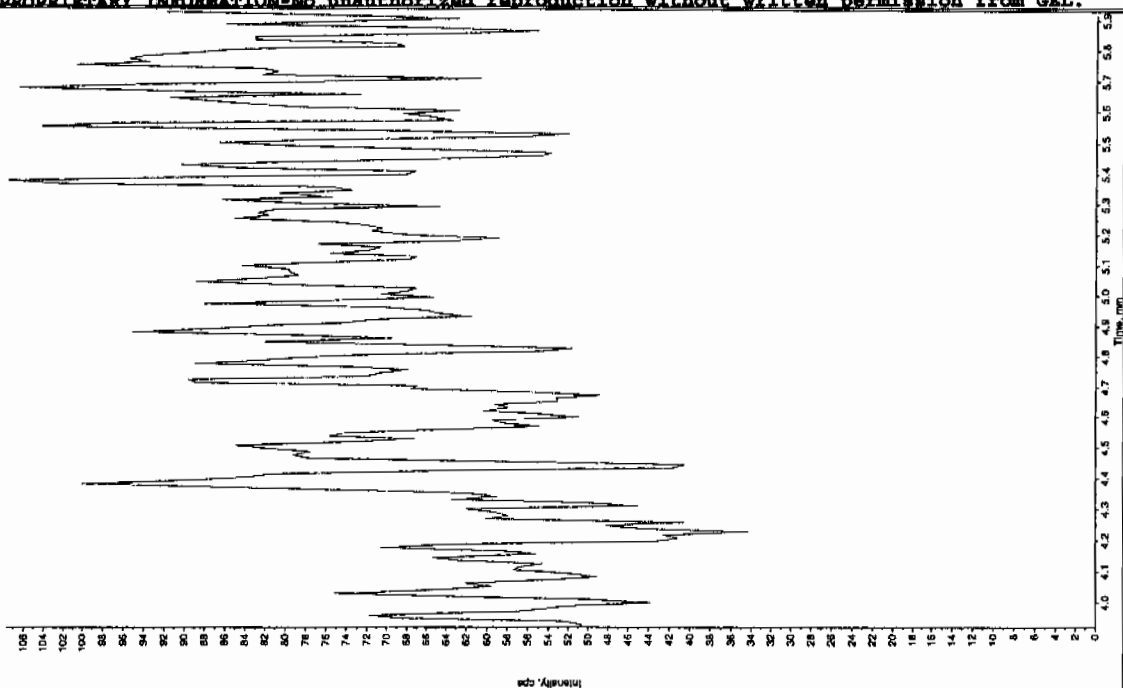
Sample Name: "248370015" Sample ID: "96030521ER" File: "EX04050035.wif"
Peak Name: "24-Dinitrobenzene" Mass(es): "162.1715.9 amu"
Comment: "LCX83212S" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 269 ng/mL
Acq. Date: 4/5/2010
Acq. Time: 9:39:54 PM
Modified: No
Ac. Algorithm: IntelliQuan - IOA
1. Peak Height: 1460.00 cps
1. Peak Width: 0.00 sec
1. Peak Width: 3 points
Window: 15.0 sec
Detected RT: 8.28 min
1. Relative RT: No
1. Type: Valley
Retention Time: 8.29 min
1. Area: 2.29e+006 counts
1. gnc: 571096.558 cps
1. RT Time: 8.15 min
1. Time: 8.76 min



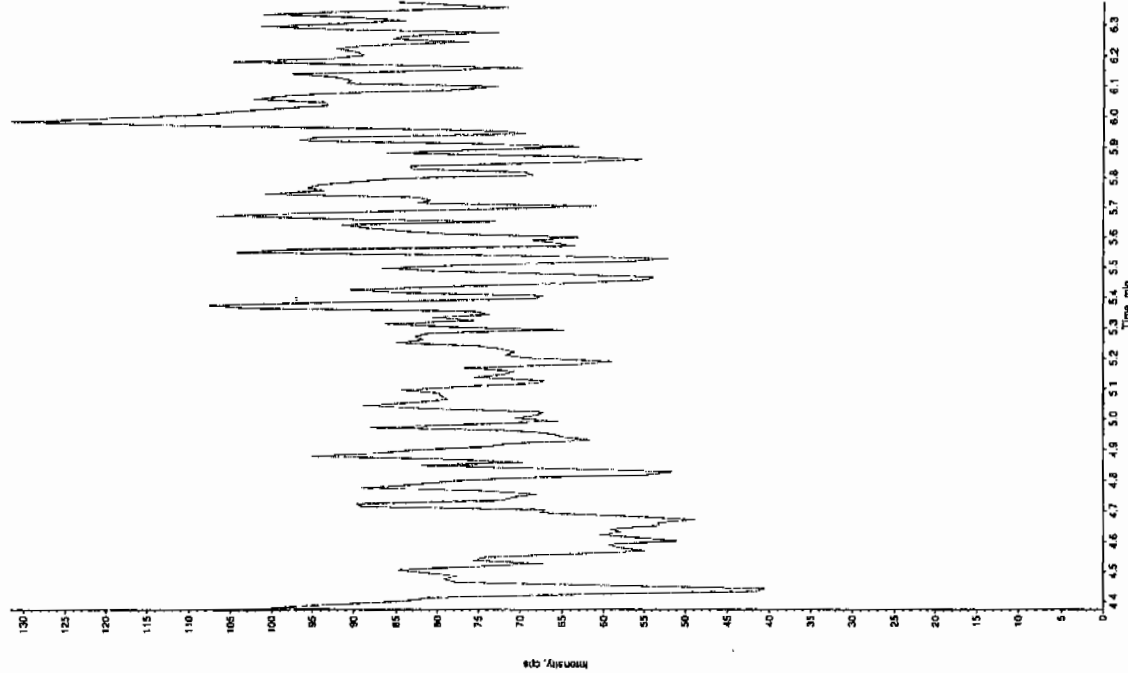
Sample Name: "248370015" Sample ID: "96030521ER" File: "EX04050035.wif"
Peak Name: "26-Dinitro-4-nitrobenzene" Mass(es): "166.046.0 amu"
Comment: "LCX83212S" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 4/5/2010 ng/mL
Acq. Date: 4/5/2010
Acq. Time: 9:39:54 PM
Modified: No



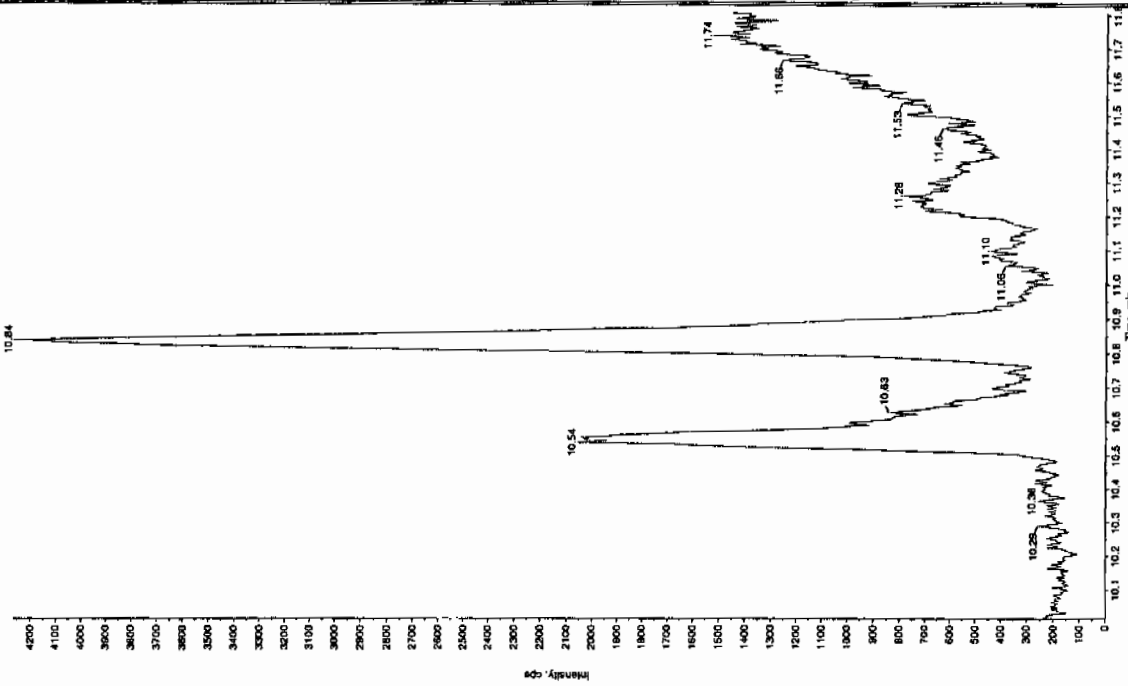
Sample Name: "248370015" Sample ID: "96030521ER" File: "EXS04050035.wif"
 Peak Name: "24-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 1. Date: 4/5/2010
 1. Time: 9:39:54 PM
 1. Time: 9:39:54 PM
 Modified: No



Sample Name: "248370015" Sample ID: "96030521ER" File: "EXS04050035.wif"
 Peak Name: "bis(2-oxo-1-methyl-2-phenylethyl) phosphite" Mass(es): "388.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 1. Date: 4/5/2010
 1. Time: 9:39:54 PM
 1. Time: 9:39:54 PM
 Modified: No



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7482

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370016

Sample Amount 2

Moisture: 24.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412188a

Date Analyzed: 16-APR-10 11:37

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.qtd, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412188a

Date: 16-Apr-2010

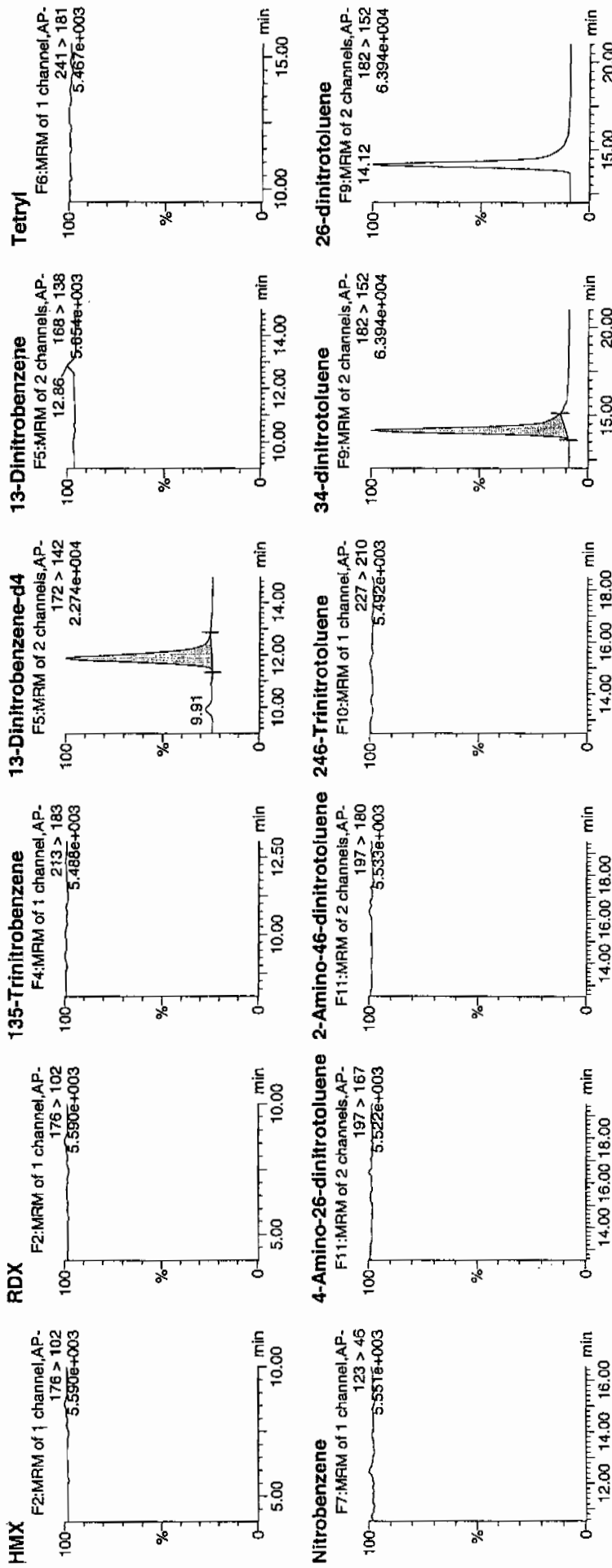
Time: 11:37:53

ID: 248370016

Vial: 4:7,B

12/17/10

121



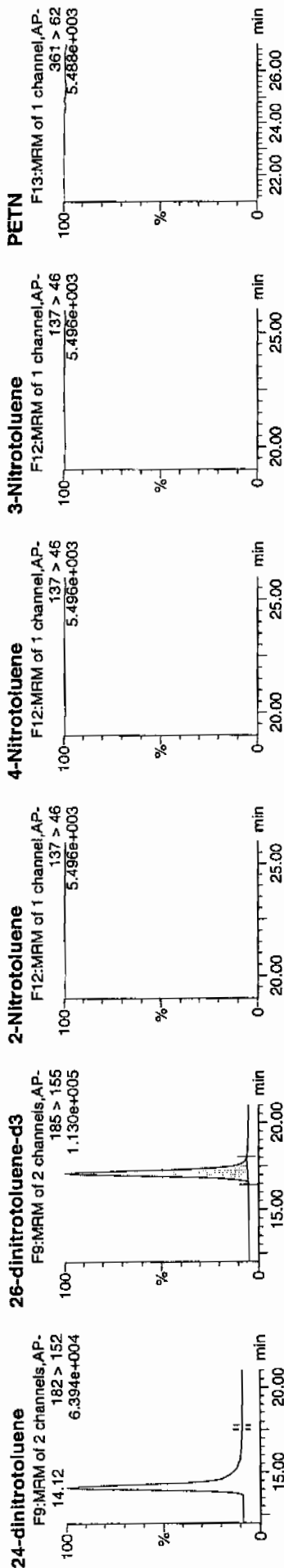
done 04/15/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 20 of 97

Dataset: C:\MASSLYN\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



ID	Name	RT	Area	Area	Abs. Resp	Flags	Mod	Date	Time	Mod	Time	%Dev	%S/N
248370016	HMX	176 > 102	6599.624	6599.624									
248370016	RDX	176 > 102	6599.624	6599.624									
248370016	135-Trinitrobenzene	213 > 183	6599.624	6599.624									
248370016	13-Dinitrobenzene-d4	172 > 142	11.87	6599.624	6599.624	bb							
248370016	13-Dinitrobenzene	168 > 138	6599.624	6599.624									
248370016	Tetryl	241 > 181	6599.624	6599.624									
248370016	Nitrobenzene	123 > 46	6599.624	6599.624									
248370016	4-Amino-26-dinitrotoluene	197 > 167	43997.141	43997.141									
248370016	2-Amino-46-dinitrotoluene	197 > 180	43997.141	43997.141									
248370016	246-Trinitrotoluene	227 > 210	43997.141	43997.141									
248370016	34-dinitrotoluene	182 > 152	14.12	23673.623	23673.623	bb							
248370016	26-dinitrotoluene	182 > 152	43997.141	43997.141									
248370016	24-dinitrotoluene	182 > 152	43997.141	43997.141									
248370016	26-dinitrotoluene-d3	185 > 155	17.09	43997.141	43997.141	MM-	17-Apr-10	10:42:03					
248370016	2-Nitrotoluene	137 > 46	43997.141	43997.141									
248370016	4-Nitrotoluene	137 > 46	43997.141	43997.141									
248370016	3-Nitrotoluene	137 > 46	43997.141	43997.141									
248370016	PETN	361 > 62	43997.141	43997.141									
					6599.624	6599.624	bb						
					23673.623	269.036	bb						
					43997.141	43997.141	bb						
					260.9142	104.4	4.4						
					561.1578	112.2	12.2						
					628.6328	125.8	25.8						
					1369.7								

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7482

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370016

Sample Amount 2

Moisture: 24.3

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050036.wiff

Date Analyzed: 05-APR-10 21:55

Units: ug/kg

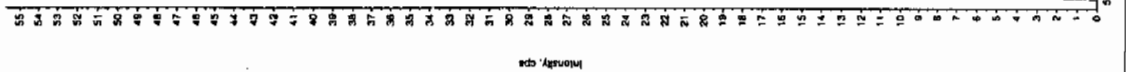
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

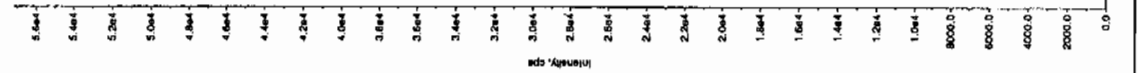
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Scan 4/7/10

Sample Name: "248370016" Sample ID: "960305121ER" File: "EX504050036.wif"
 Peak Name: "YATB" Mass(es): "257.2/204.9 amu"
 Comment: "LCX83212S" Annotation: ""
 Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 9:55:36 PM
 Modified: No



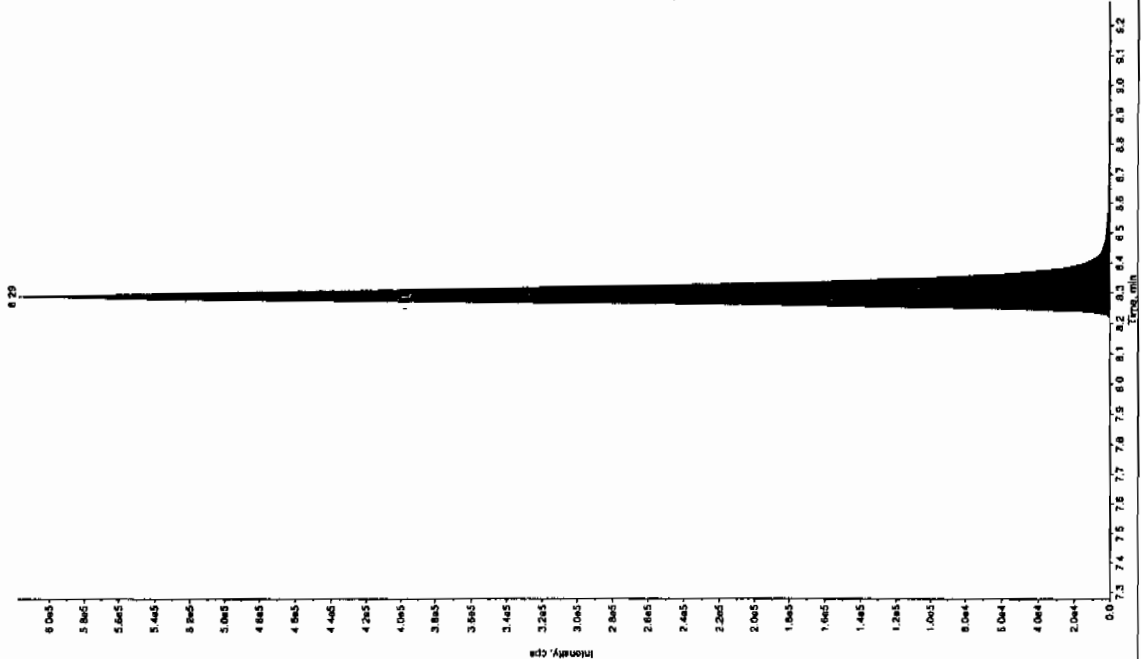
Sample Name: "248370016" Sample ID: "960305121ER" File: "EX504050036.wif"
 Peak Name: "3S-Dinitroaniline" Mass(es): "182.0/165.0 amu"
 Comment: "LCX83212S" Annotation: ""
 Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 9:55:36 PM
 Modified: No



Scan 04/08/10

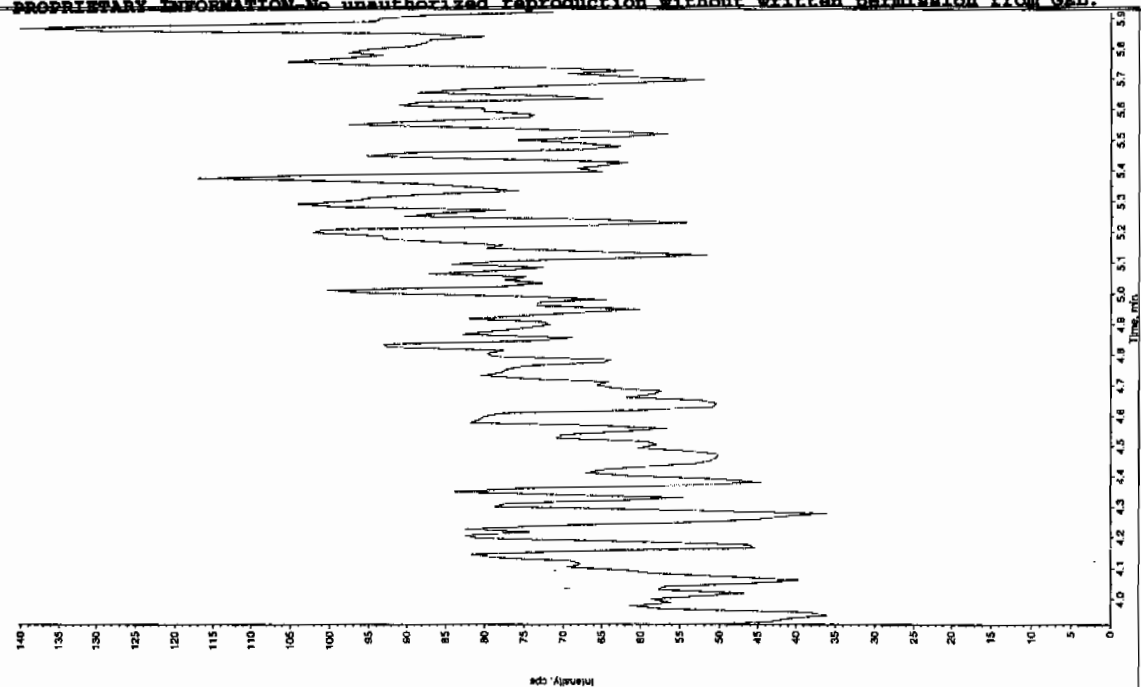
Sample Name: "248370016" Sample ID: "96030521" File: "EXS4050036.wif"
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/181.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 279. ng/mL
Acq. Date: 4/5/2010
Acq. Time: 9:55:36 PM
Modified: No
QC Algorithm: IntelliQuan - IOA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
Window: 15.0 sec
Peak RT: 8.29 min
e Relative RT: No
t. Type: Valley
Retention Time: 8.29 min
Area: 2.37e+006 counts
Height: 618322.571 cps
Start Time: 8.20 min
Stop Time: 8.79 min

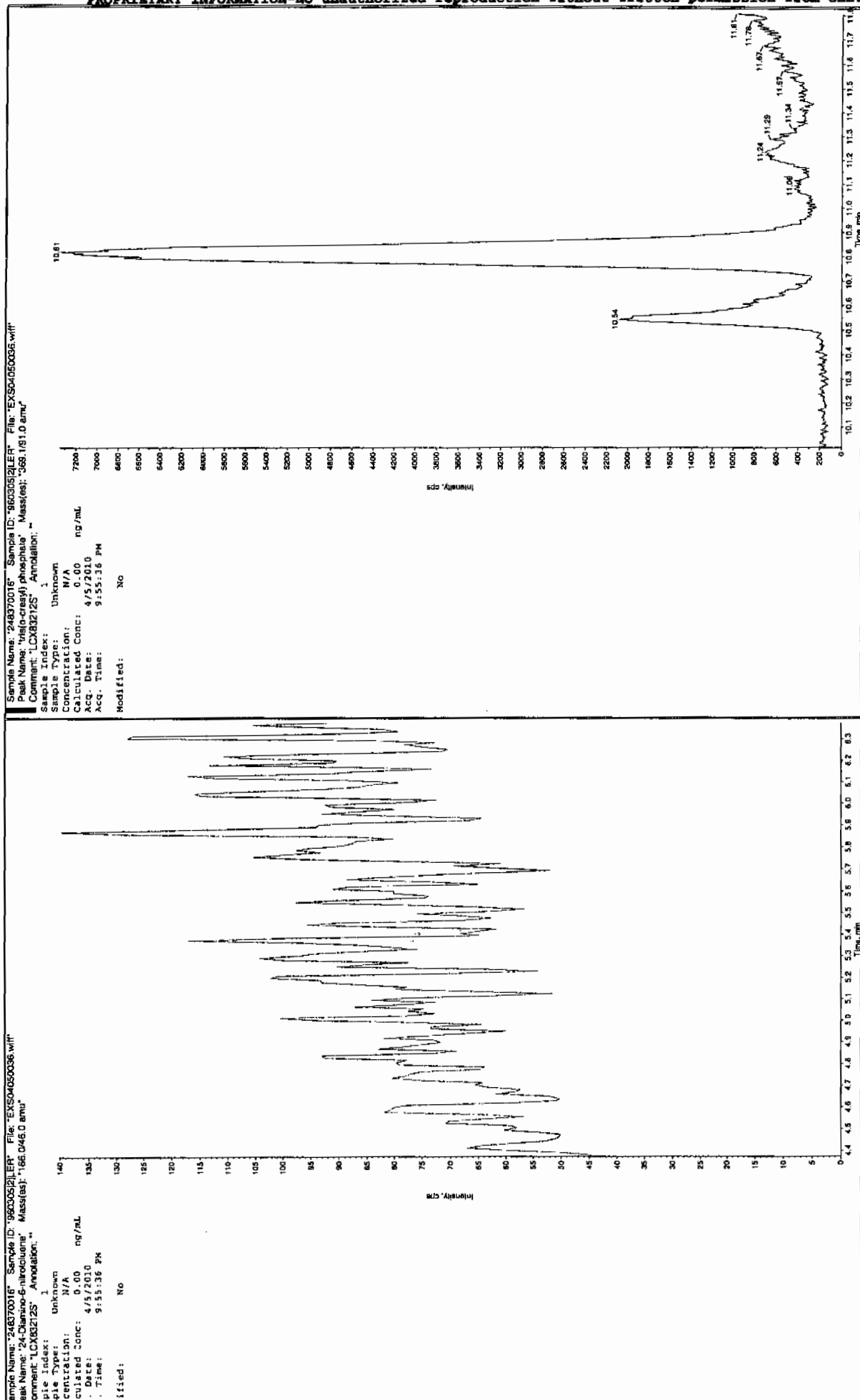


Sample Name: "248370016" Sample ID: "96030521" File: "EXS4050036.wif"
Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.0/165.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/5/2010
Acq. Time: 9:55:36 PM
Modified: No



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EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7480

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370017

Sample Amount 2

Moisture: 12.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412192a

Date Analyzed: 16-APR-10 13:36

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\EXP0412192a

Date: 16-Apr-2010

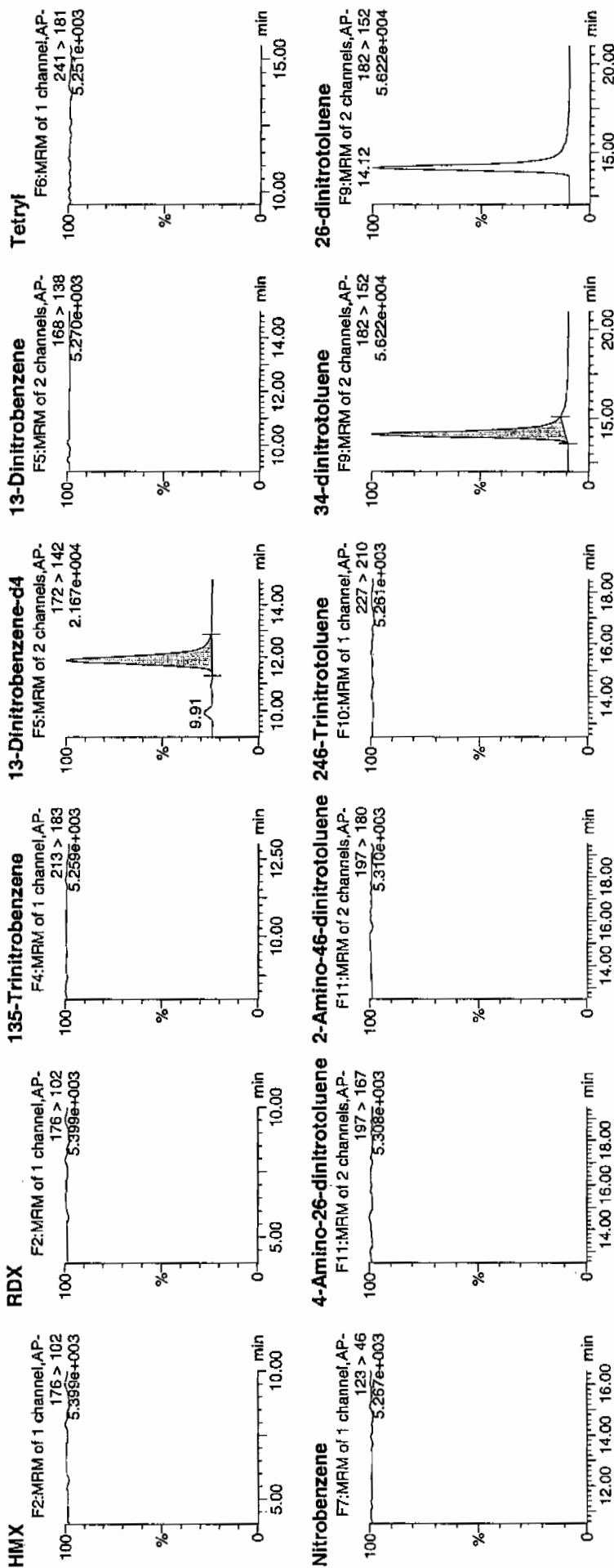
Time: 13:36:02

ID: 248370017

Vial: 4:7,C

4/17/10

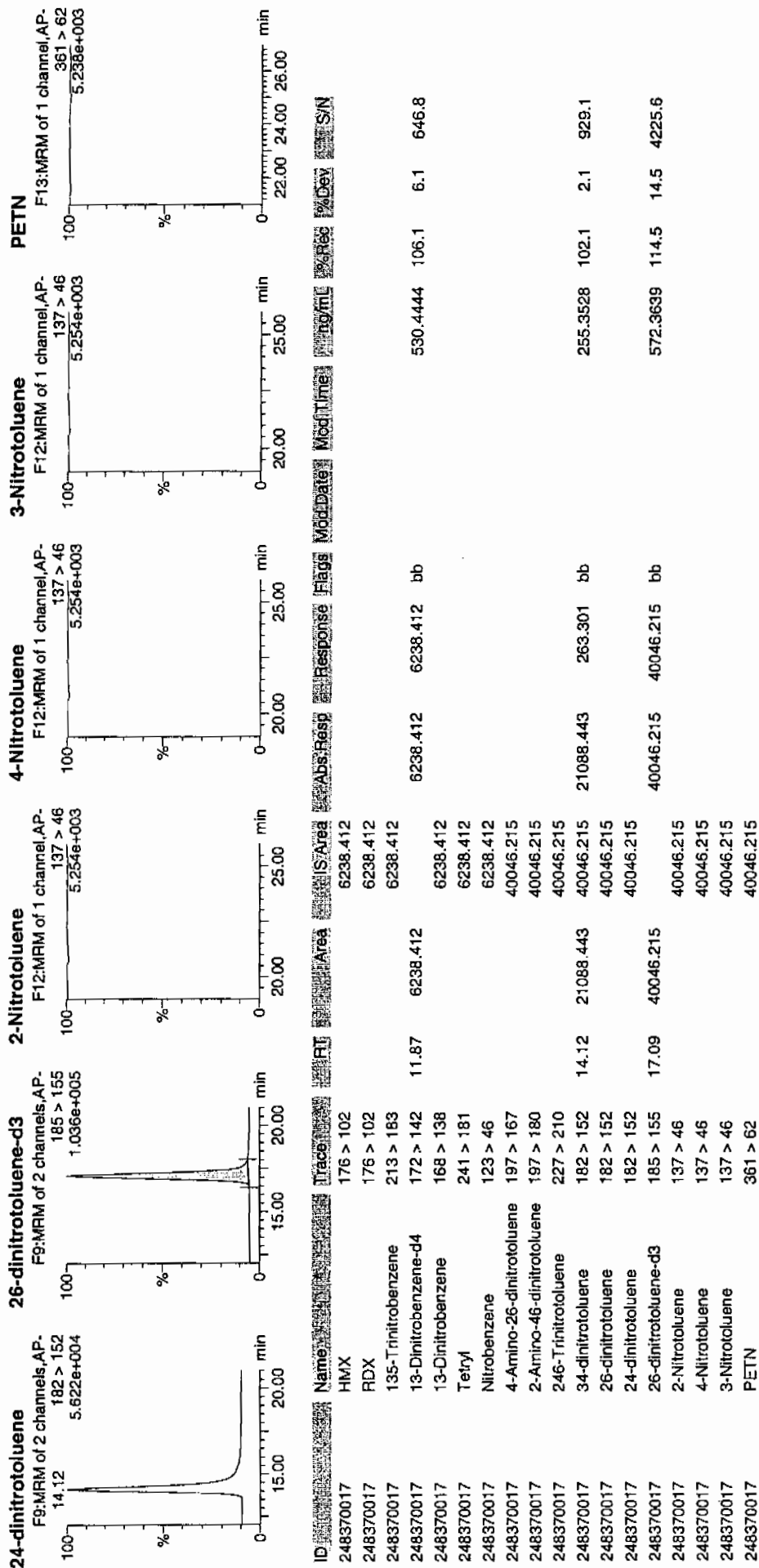
WAV 960305 / SOLID 121



4/17/10

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



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7480

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370017

Sample Amount 2

Moisture: 12.1

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050040.wiff

Date Analyzed: 05-APR-10 22:58

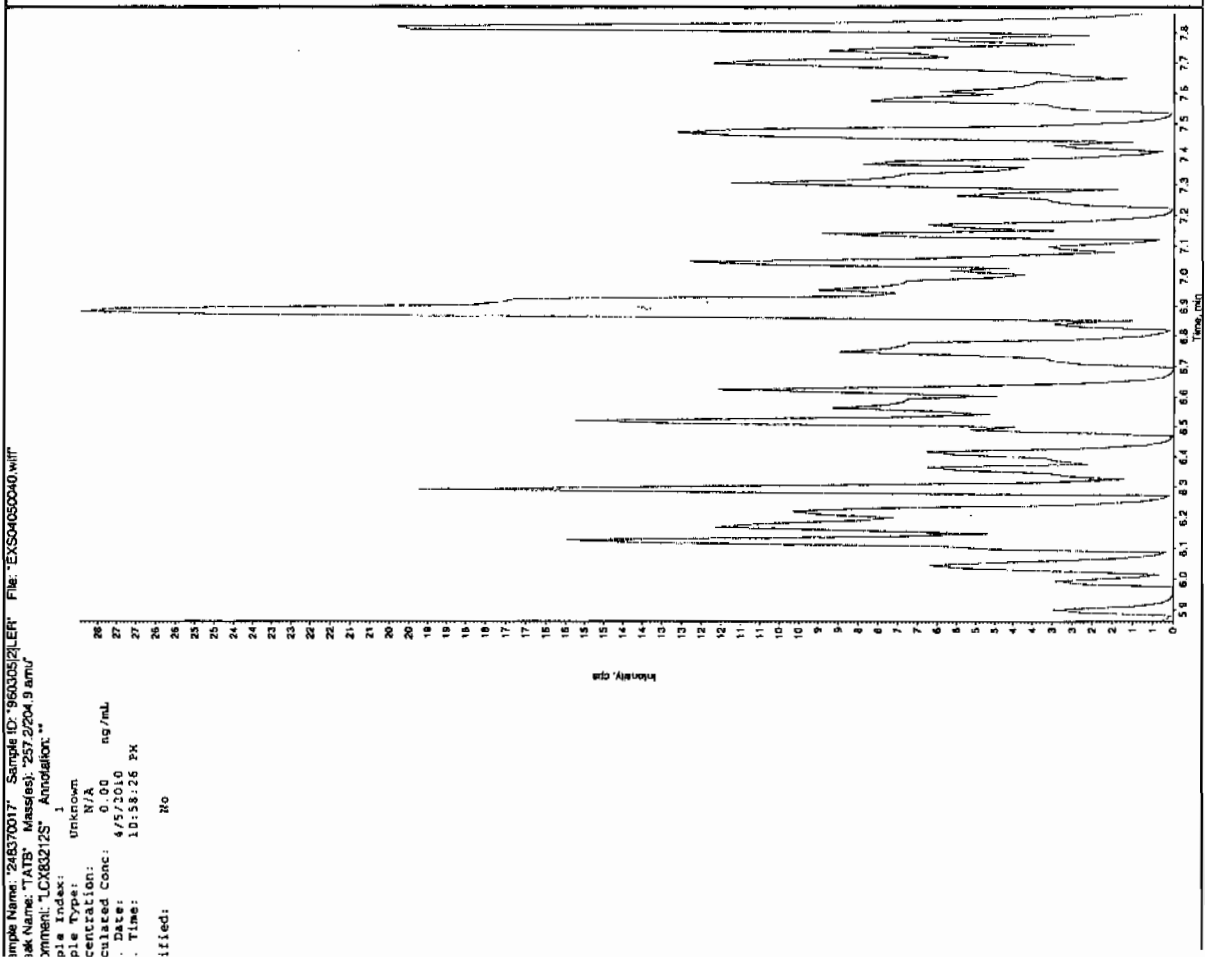
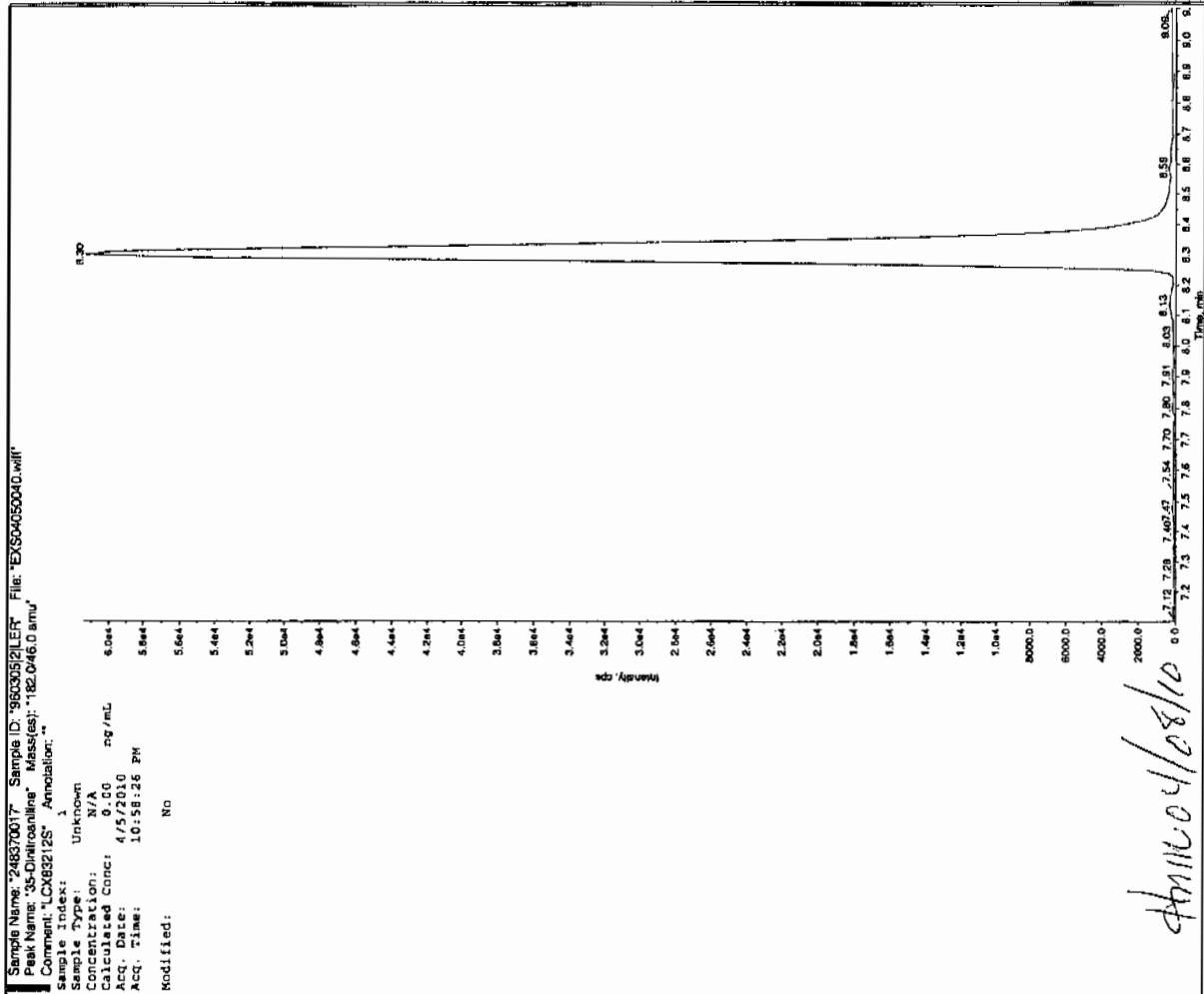
Units: ug/kg

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

*Concentration =

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

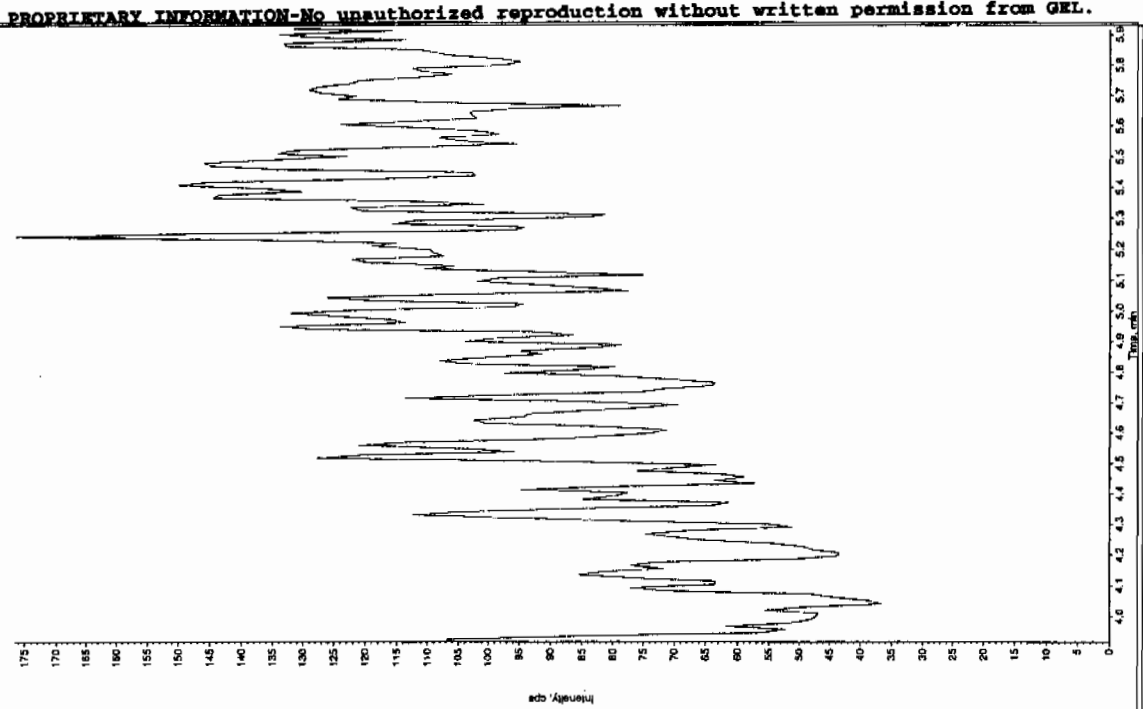
Jan 4/17/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

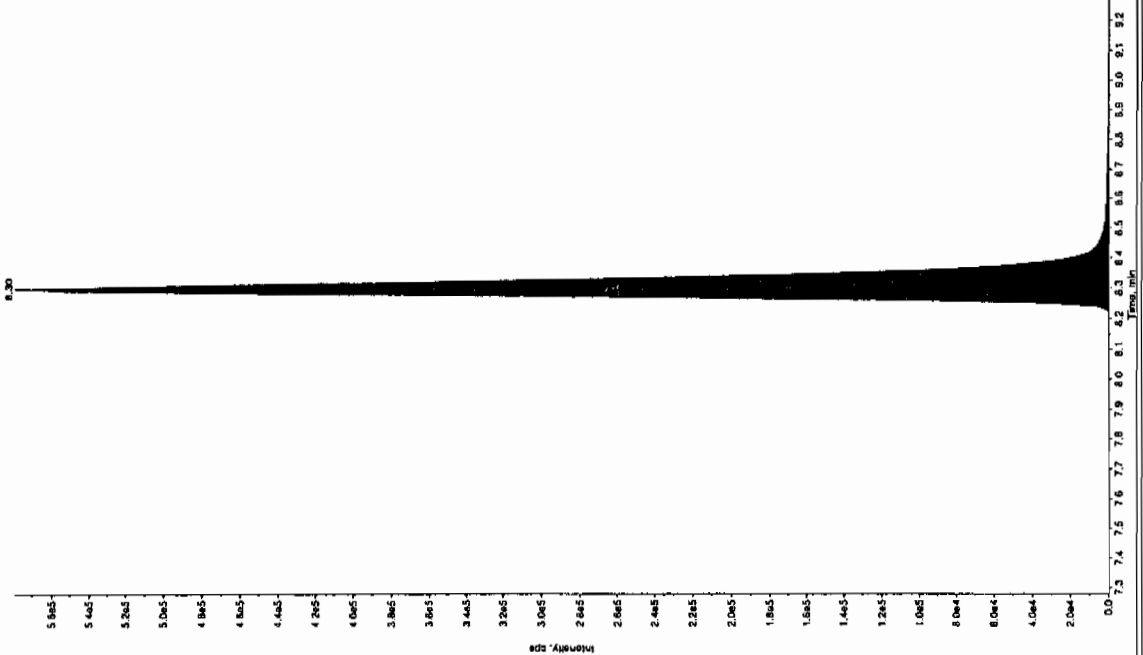
Sample Name: "248370017" Sample ID: "960305[2]LER" File: "EXS04060040.wif"
 Peak Name: "28-Diamino-4-nitrotoluene" Mass(es): "186.046.0 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 10:58:26 PM
 Modified: No



Sample Name: "248370017" Sample ID: "960305[2]LER" File: "EXS04060040.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.151.9 amu"
 Comment: "LCX83212S" Annotation: "

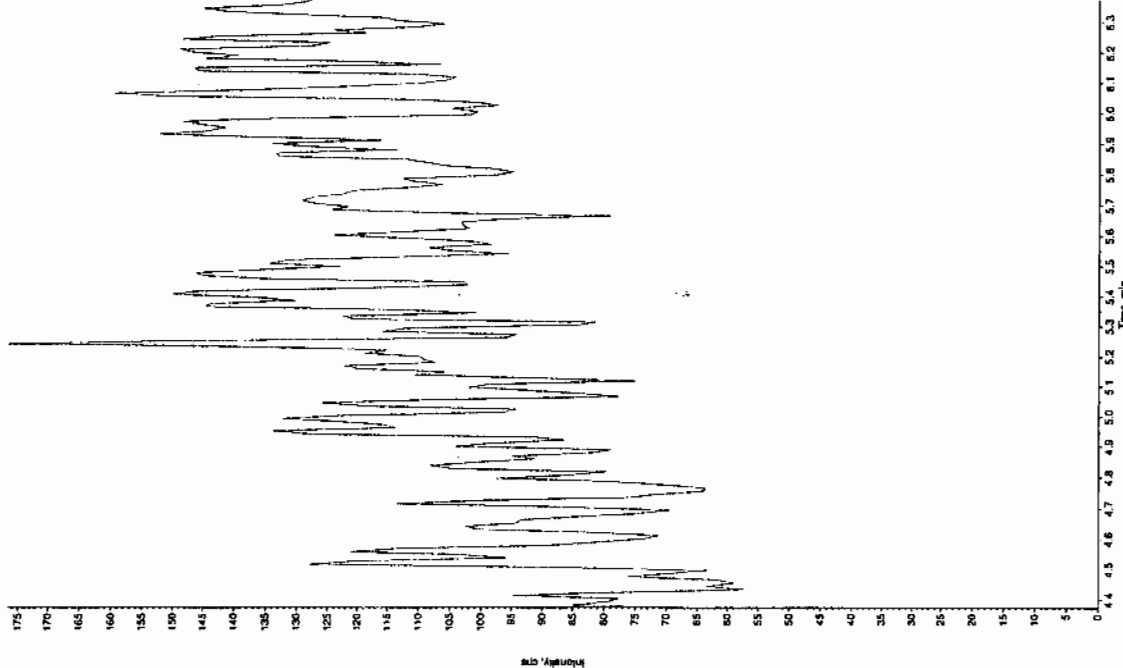
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 276.1 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 10:58:26 PM
 Modified: No
 C. Algorithm: IntelliQuan - ICA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Window: 3 points
 Window: 15.0 sec
 Retention Time: 8.28 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.30 min
 Area: 2.35e+006 counts
 ght: 579223.572 cps
 rc Time: 8.17 min
 Time: 8.61 min



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

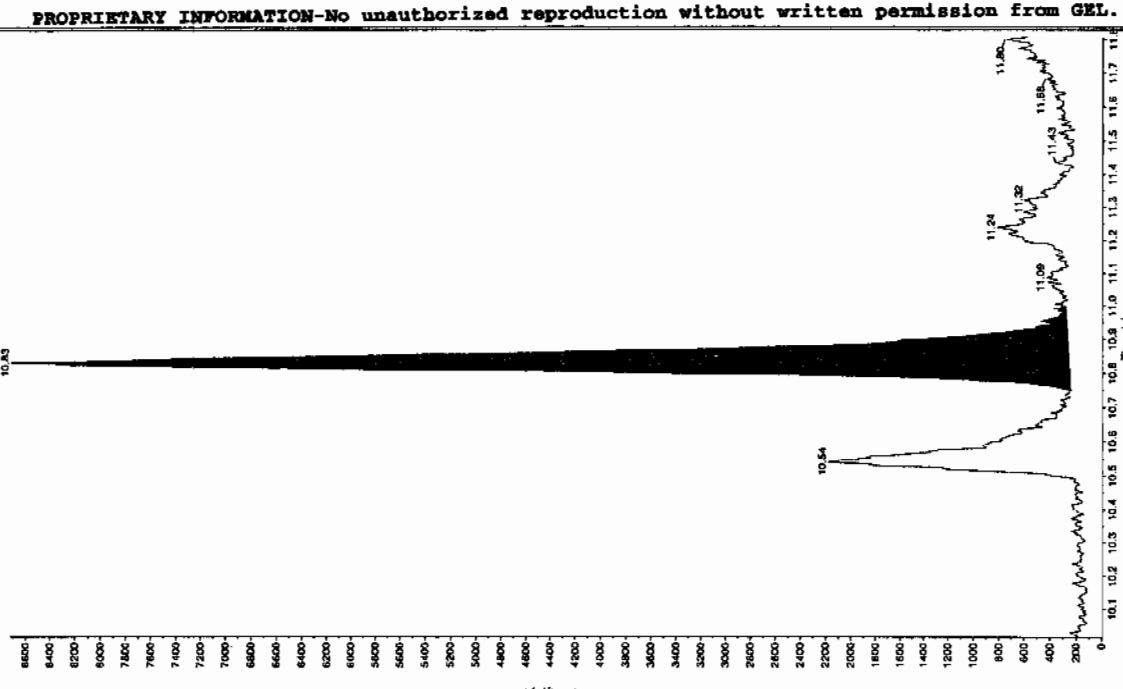
Sample Name: "248370017" Sample ID: "860005211" File: "EX504050040.wif"
 Peak Name: "24-Diamino-6-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Date: 4/5/2010
 Time: 10:58:26 PM
 Modified: No



Sample Name: "248370017" Sample ID: "860005211" File: "EX504050040.wif"
 Peak Name: "10-(O-cresyl) phosphate" Mass(es): "368.1910 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Date: 4/5/2010
 Time: 10:58:26 PM
 Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7485

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370018

Sample Amount 2

Moisture: 26.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412193a

Date Analyzed: 16-APR-10 14:05

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\EXP0412193a

Date: 16-Apr-2010

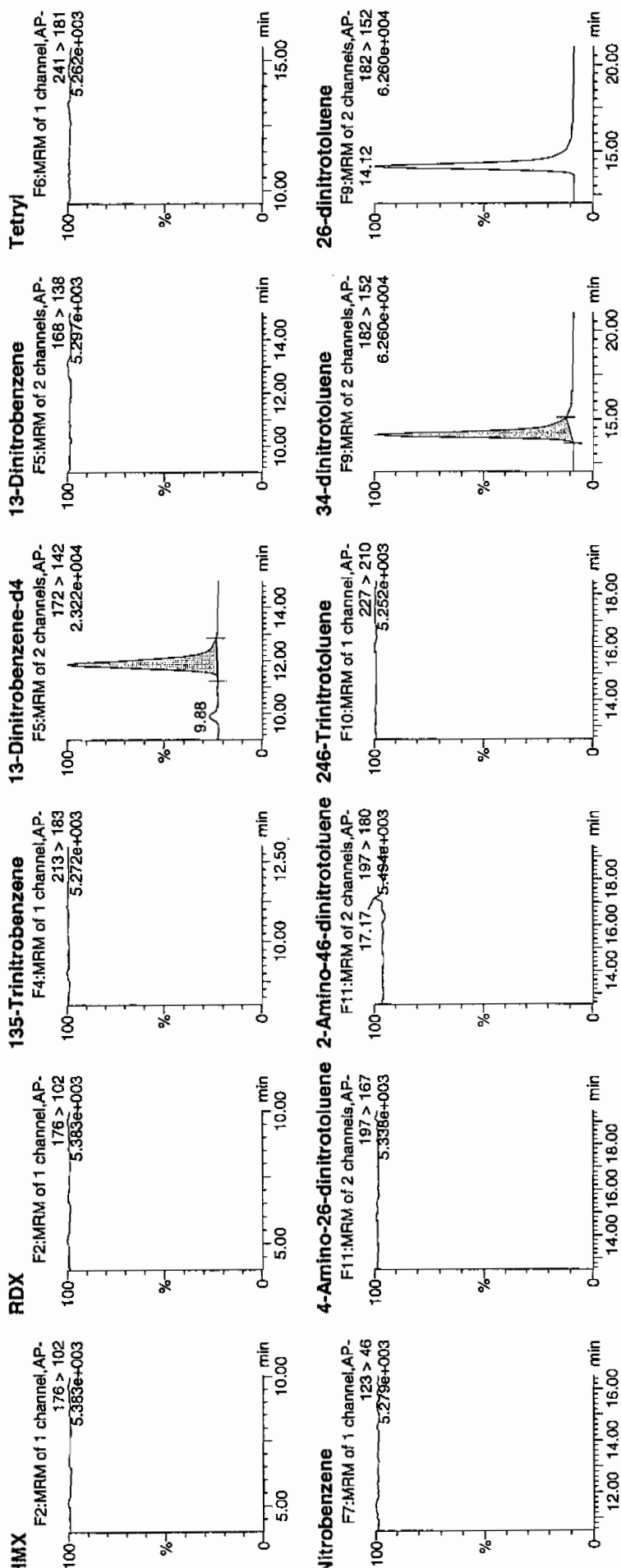
Time: 14:05:39

ID: 248370018

Vial: 4:7,D

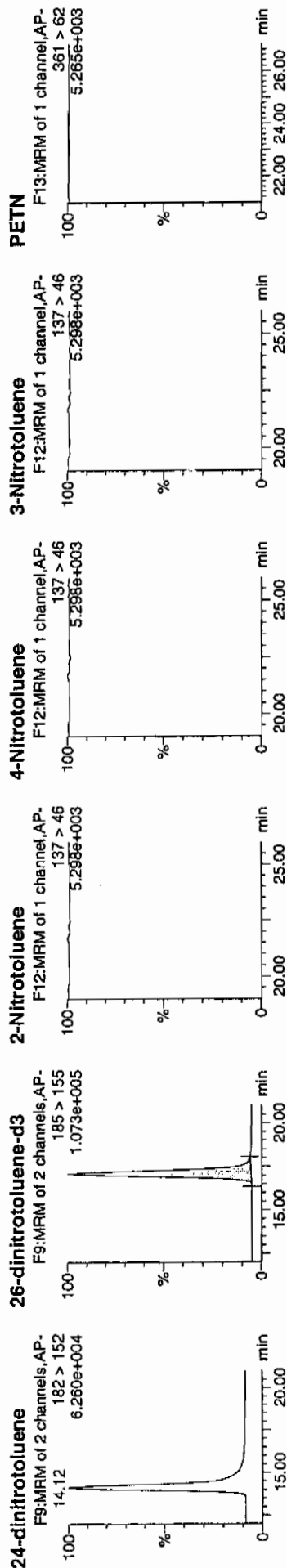
4/17/10

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Ames 4/18/10

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010



ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Flags	Mod:Date	Mod:Time	%Rec	%Dev	S/N
248370018	HMX	176 > 102			6863.240							
248370018	RDX	176 > 102			6863.240							
248370018	135-Trinitrobenzene	213 > 183			6863.240							
248370018	13-Dinitrobenzene-d4	172 > 142	11.87	6863.240		6863.240	bb		583.5727	116.7	16.7	554.9
248370018	13-Dinitrobenzene	168 > 138			6863.240							
248370018	Tetryl	241 > 181			6863.240							
248370018	Nitrobenzene	123 > 46			6863.240							
248370018	4-Amino-26-dinitrotoluene	197 > 167			42095.715							
248370018	2-Amino-46-dinitrotoluene	197 > 180			42095.715							
248370018	246-Trinitrotoluene	227 > 210			42095.715							
248370018	34-dinitrotoluene	182 > 152	14.12	23543.561	42095.715	23543.561	bb		271.2013	108.5	8.5	1377.1
248370018	26-dinitrotoluene	182 > 152			42095.715							
248370018	24-dinitrotoluene	182 > 152			42095.715							
248370018	26-dinitrotoluene-d3	185 > 155	17.10	42095.715	42095.715	42095.715	bb		601.6565	120.3	20.3	2323.1
248370018	2-Nitrotoluene	137 > 46			42095.715							
248370018	4-Nitrotoluene	137 > 46			42095.715							
248370018	3-Nitrotoluene	137 > 46			42095.715							
248370018	PETN	361 > 62			42095.715							

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7485

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370018

Sample Amount 2

Moisture: 26.5

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050041.wiff

Date Analyzed: 05-APR-10 23:14

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

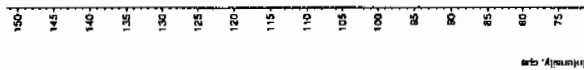
*Concentration =

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

Ren 4/17/10

Sample Name: "248370018" Sample ID: "960306121.ER" File: "EXS04050041.wif"
Peak Name: "1A1B" Mass(es): 237.2204.9 amu
Comment: "LCX83212S" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/5/2010
Acq. Time: 11:14:10 PM
Modified: No



Sample Name: "248370018" Sample ID: "960306121.ER" File: "EXS04050041.wif"
Peak Name: "35-Dinitroaniline" Mass(es): 182.048.0 amu
Comment: "LCX83212S" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/5/2010
Acq. Time: 11:14:10 PM
Modified: No



Amc 04/08/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: '248370018' Sample ID: '980305121ER' File: 'EX804050041.wif'

Peak Name: '34-Dinitrochloride' Mass(es): '182.1131.9 amu'

Comment: 'LCX83212S' Annotation: ''

Sample Index: 1

Sample Type: Unknown

Concentration: 212 ng/mL

Concentration: 4/5/2010

Date: 11:14:10 PM

Time: 11:14:10 PM

Method: NO

Algorithm: IntelliQuan - ICA

Peak Height: 1460.00 cps

Peak Width: 0.00 sec

Working Width: 3 points

Window: 15.0 sec

Acquired RT: 6.28 min

Relative RT: NO

Type: Valley

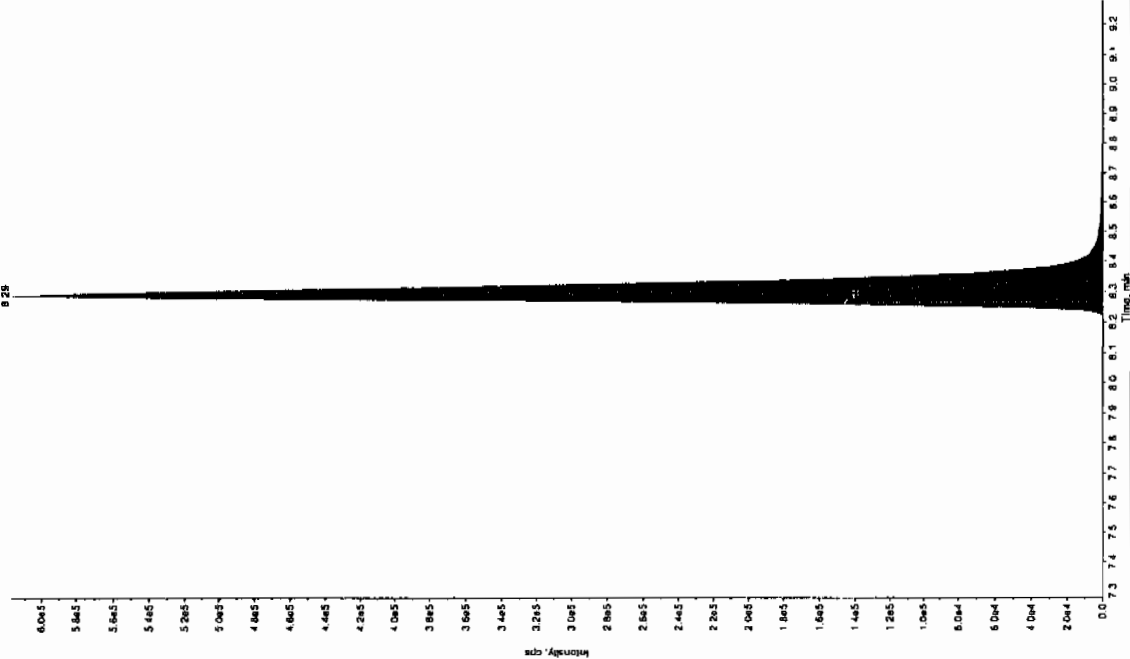
Retention Time: 6.29 min

Area: 2.40e+006 counts

Height: 6175.7106 cps

Width: 6.21 min

Time: 6.22 min



Sample Name: '248370018' Sample ID: '980305121ER' File: 'EX804050041.wif'

Peak Name: '25-Dinitrochloride' Mass(es): '186.046.0 amu'

Comment: 'LCX83212S' Annotation: ''

Sample Index: 1

Sample Type: Unknown

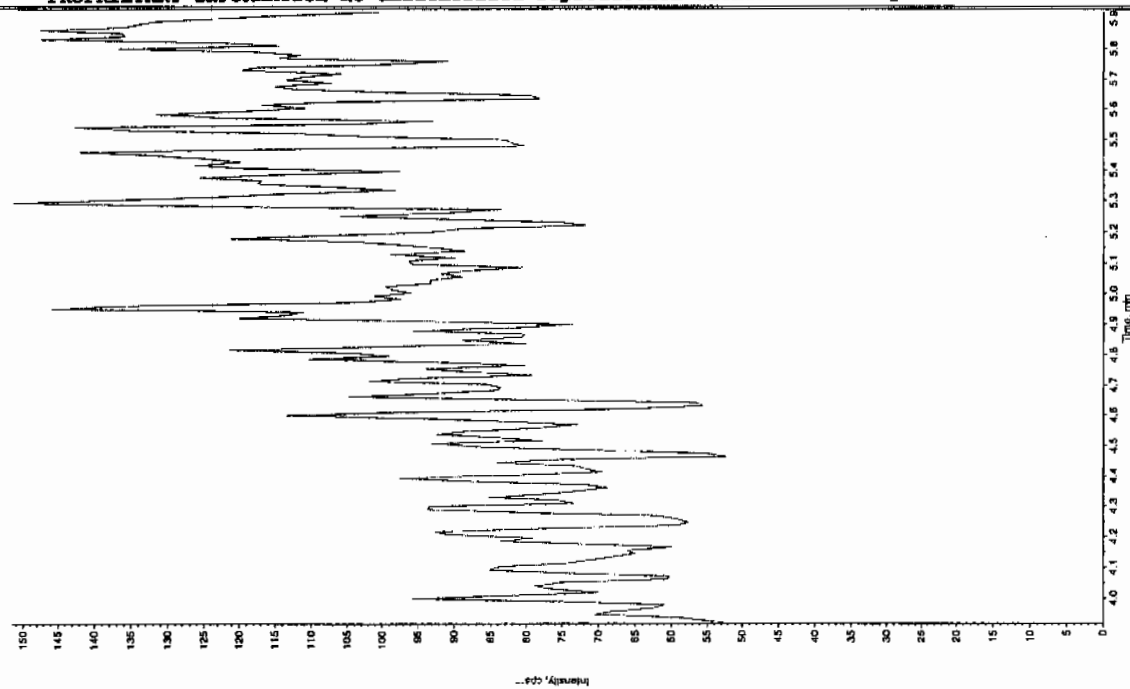
Concentration: 0.00 ng/mL

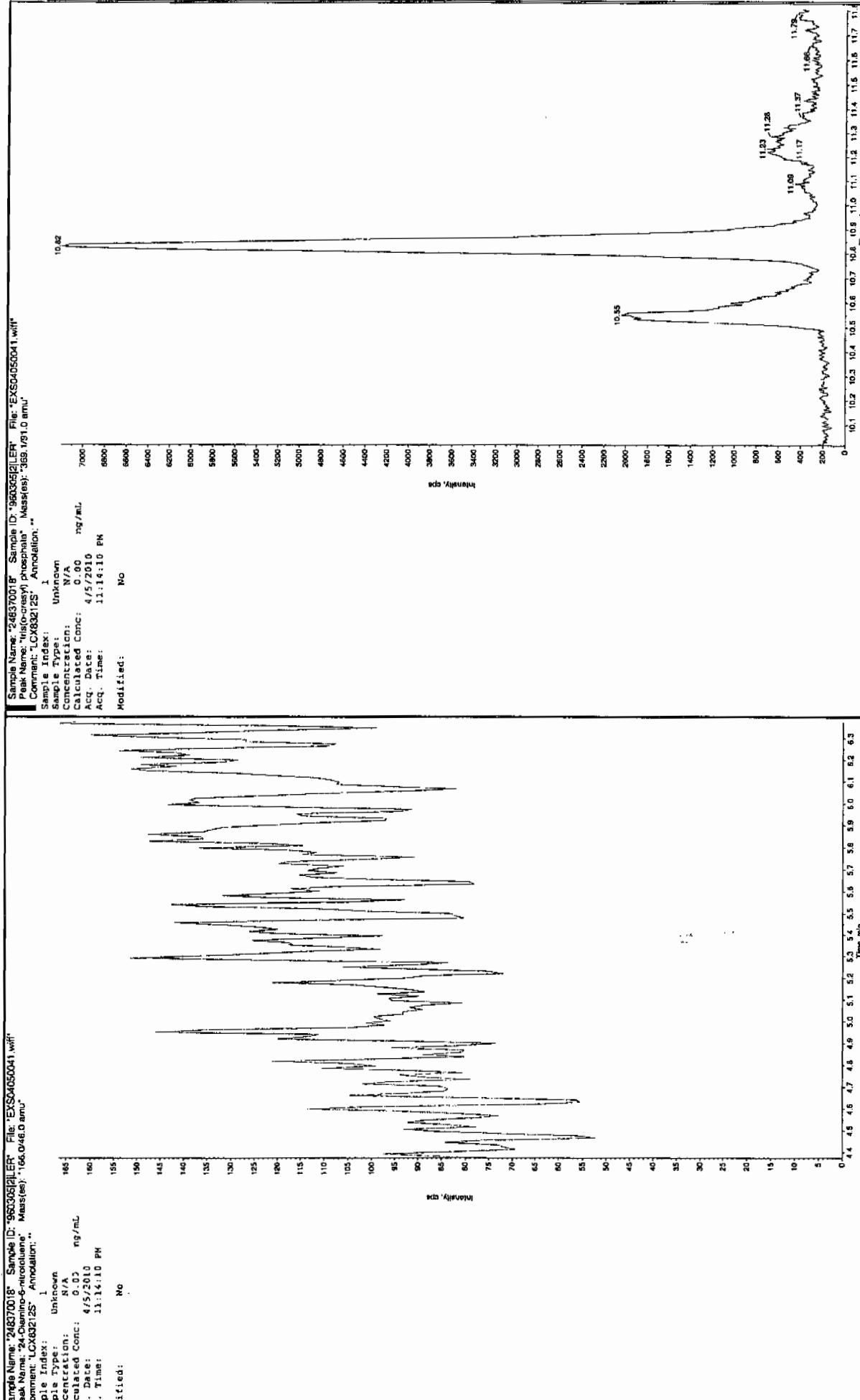
Concentration: 4/5/2010

Date: 11:14:10 PM

Time: 11:14:10 PM

Method: NO





1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7488

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370019

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412200a

Date Analyzed: 16-APR-10 17:32

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 43 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\EXP0412200a

Date: 16-Apr-2010

Time: 17:32:05

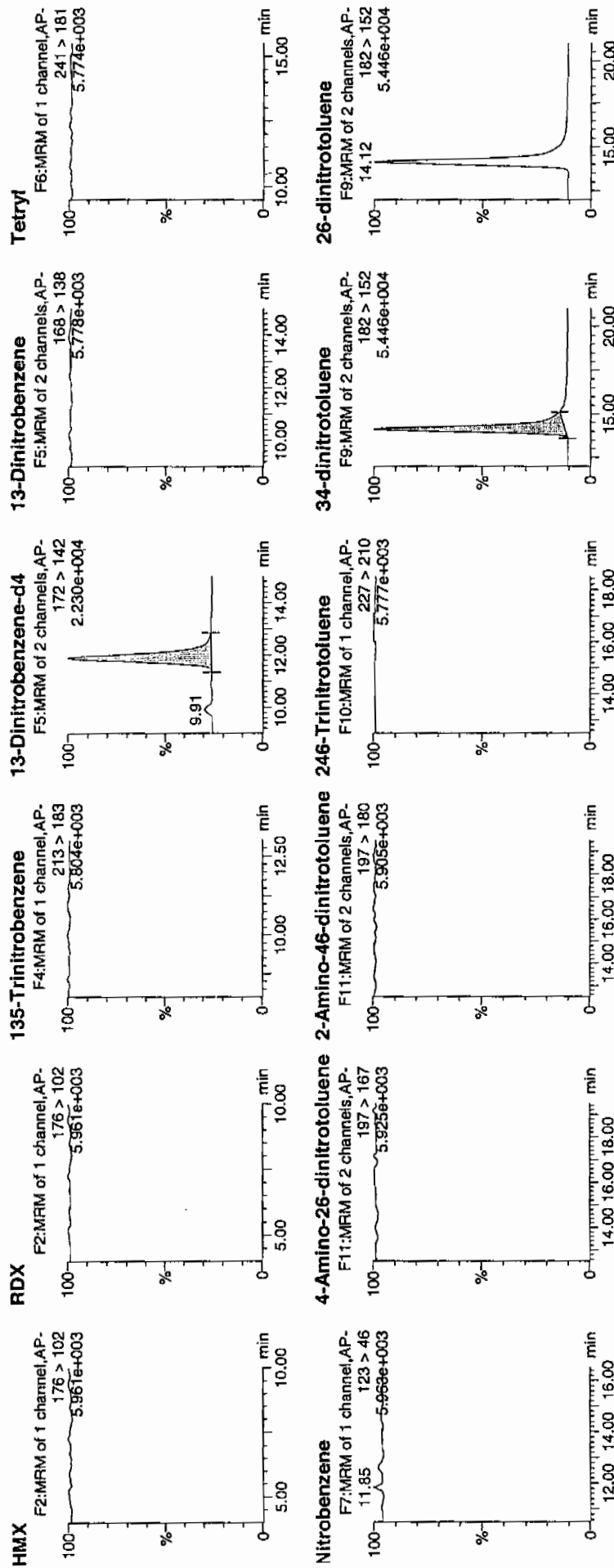
ID: 248370019

Vial: 4:7,E

100%
4/16/10

160305 / 21
160305 / 21

Page 1614 of 2043

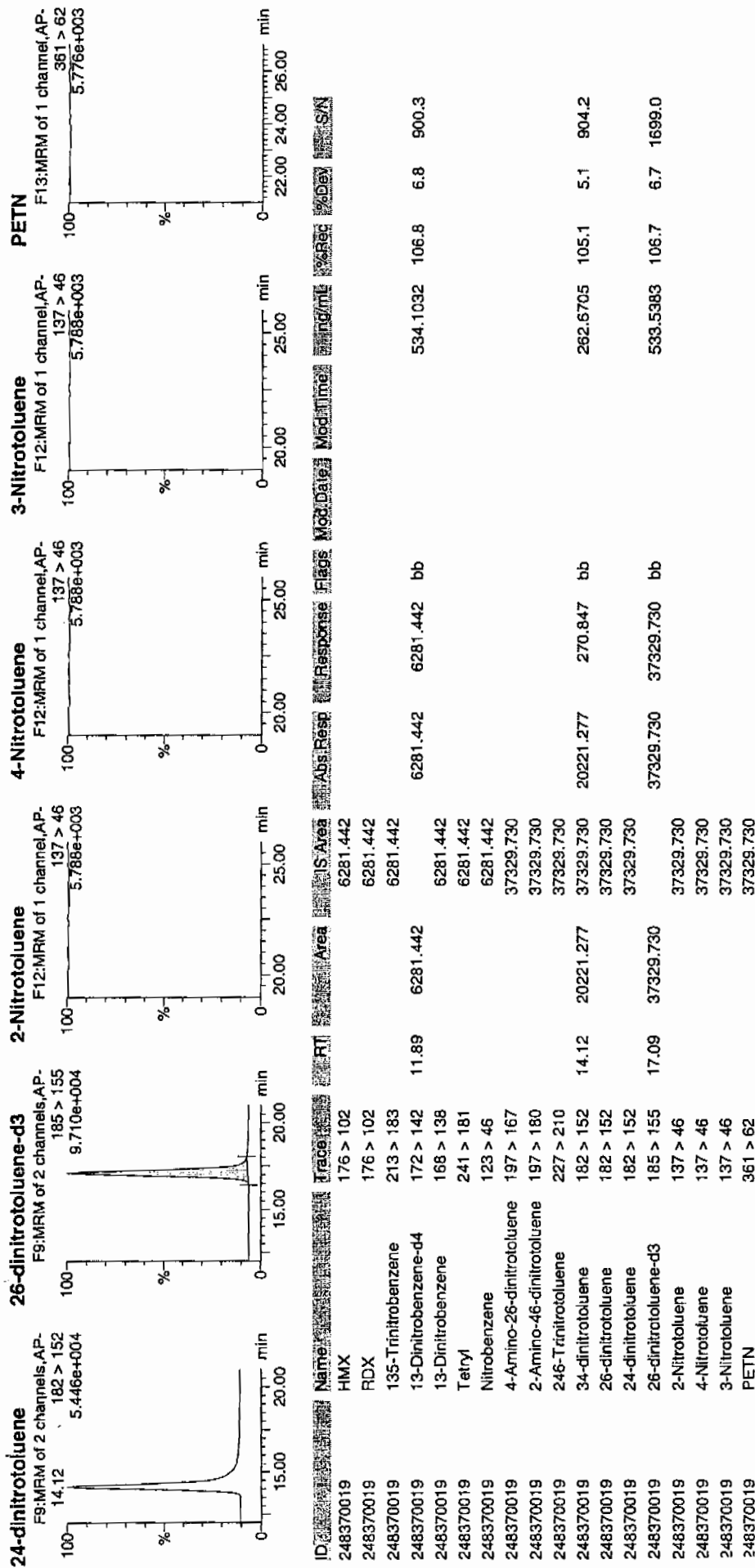


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 44 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: RE36-10-7488

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370019

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050042.wiff

Date Analyzed: 05-APR-10 23:29

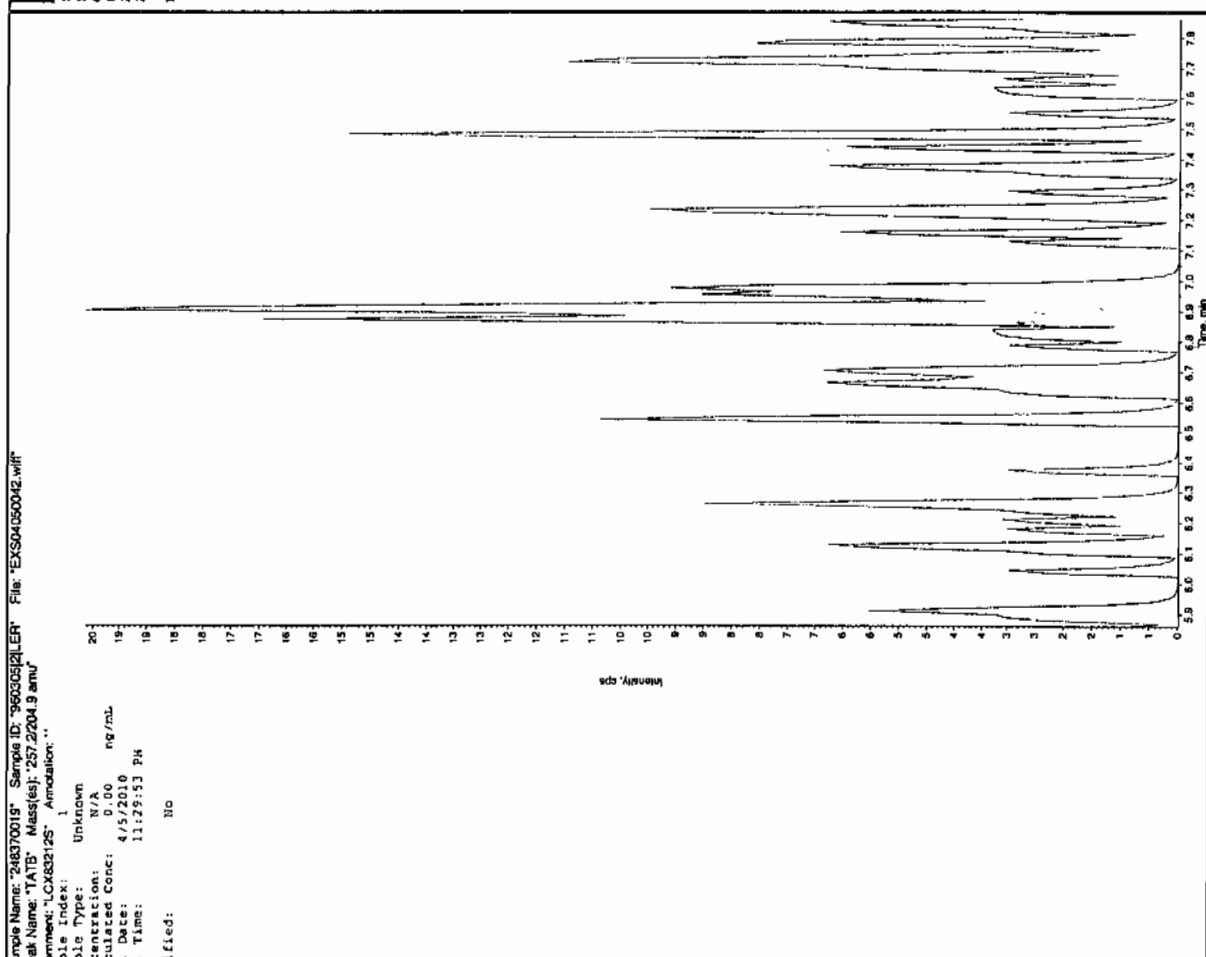
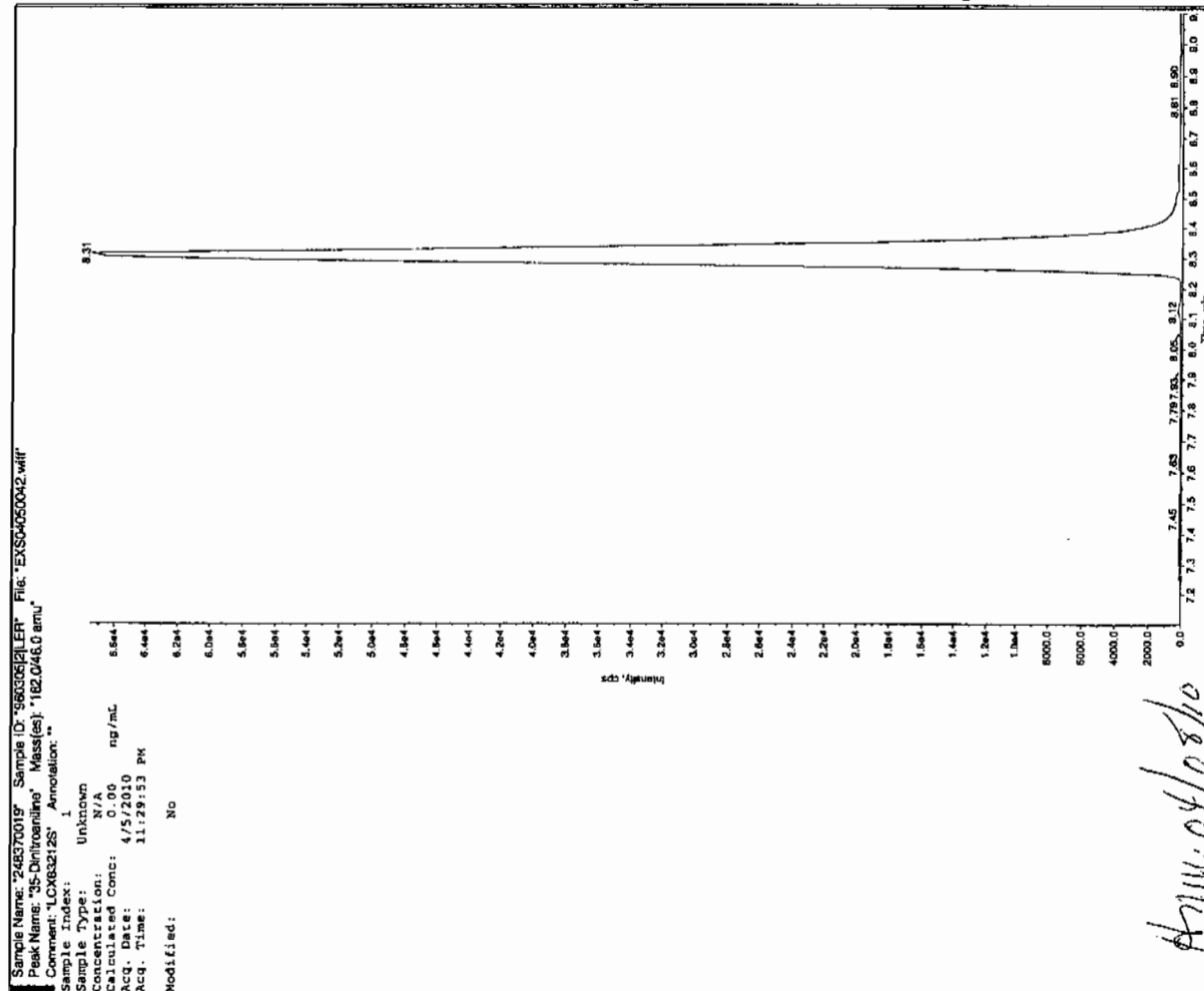
Units: ug/kg

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

OK 4/7/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "248370019" Sample ID: "96030521ER" File: "EX504050042.wif"

Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: 293.0 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 11:29:53 PM

Modified: No

File: "EX504050042.wif"

Peak Name: "34-Dinitrotoluene"

Mass(es): "182.1/151.9 amu"

Comment: "LCX83212S"

Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: 293.0 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 11:29:53 PM

Modified: No

File: "EX504050042.wif"

Peak Name: "34-Dinitrotoluene"

Mass(es): "182.1/151.9 amu"

Comment: "LCX83212S"

Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: 293.0 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 11:29:53 PM

Modified: No

File: "EX504050042.wif"

Peak Name: "34-Dinitrotoluene"

Mass(es): "182.1/151.9 amu"

Comment: "LCX83212S"

Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: 293.0 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 11:29:53 PM

Modified: No

File: "EX504050042.wif"

Sample Name: "248370019" Sample ID: "96030521ER" File: "EX504050042.wif"

Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 11:29:53 PM

Modified: No

File: "EX504050042.wif"

Peak Name: "26-Diamino-4-nitrotoluene"

Mass(es): "166.0/46.0 amu"

Comment: "LCX83212S"

Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 11:29:53 PM

Modified: No

File: "EX504050042.wif"

Peak Name: "26-Diamino-4-nitrotoluene"

Mass(es): "166.0/46.0 amu"

Comment: "LCX83212S"

Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 11:29:53 PM

Modified: No

File: "EX504050042.wif"

Peak Name: "26-Diamino-4-nitrotoluene"

Mass(es): "166.0/46.0 amu"

Comment: "LCX83212S"

Annotation: ""

Sample Index: 1

Sample Type: Unknown

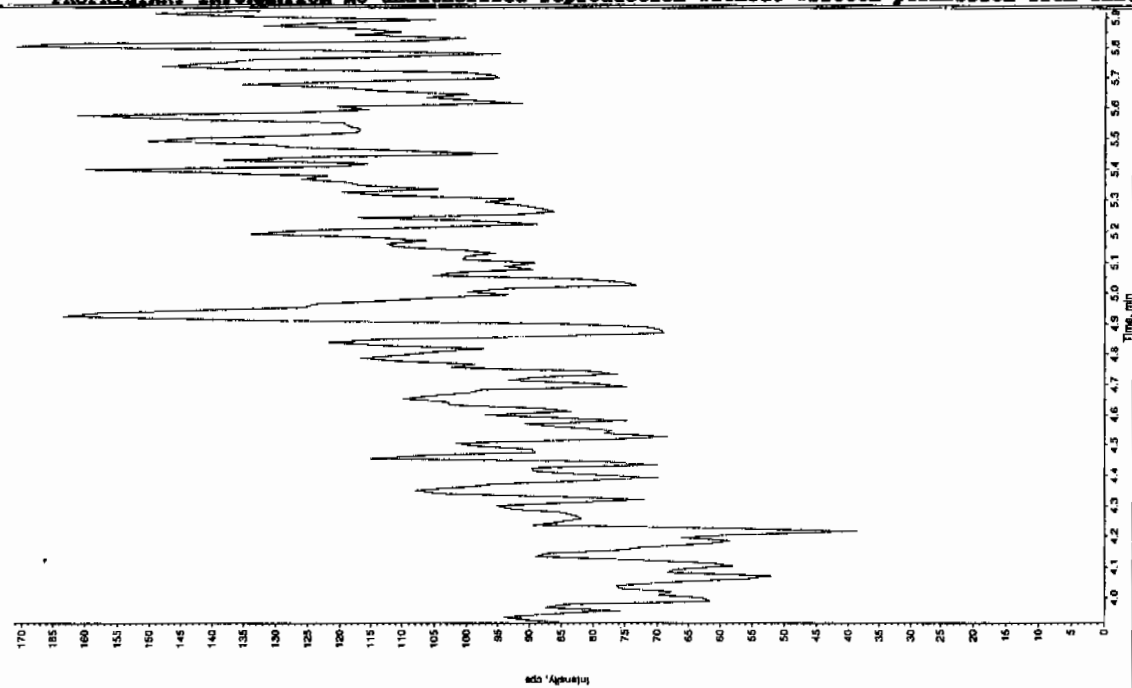
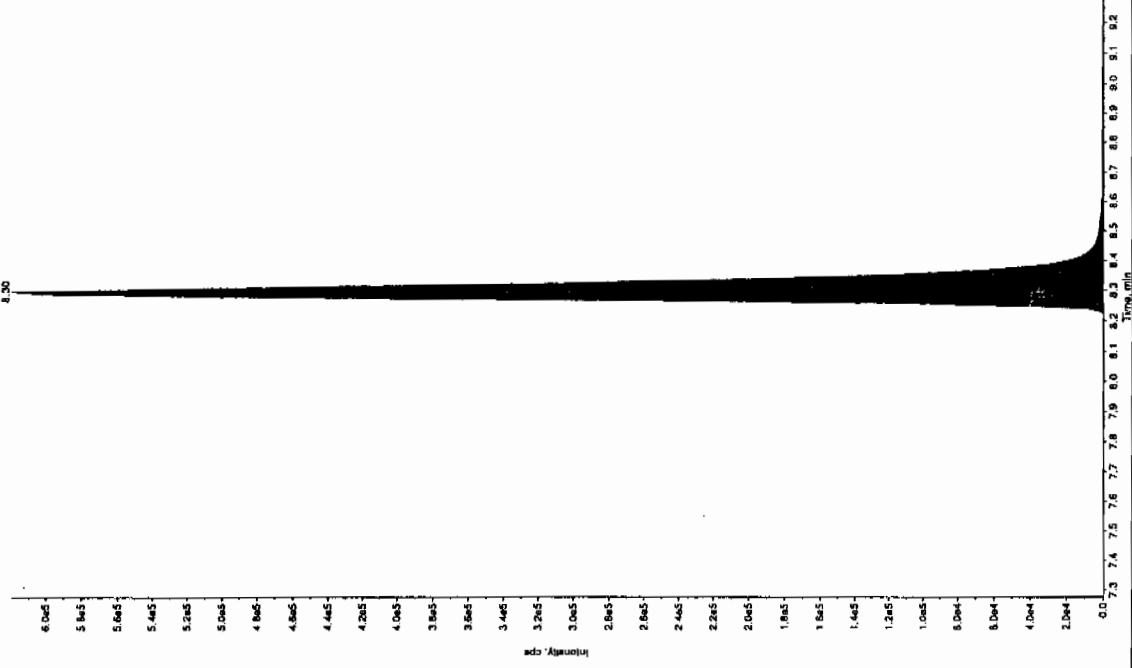
Concentration: 0.00 ng/mL

Acq. Date: 4/5/2010

Acq. Time: 11:29:53 PM

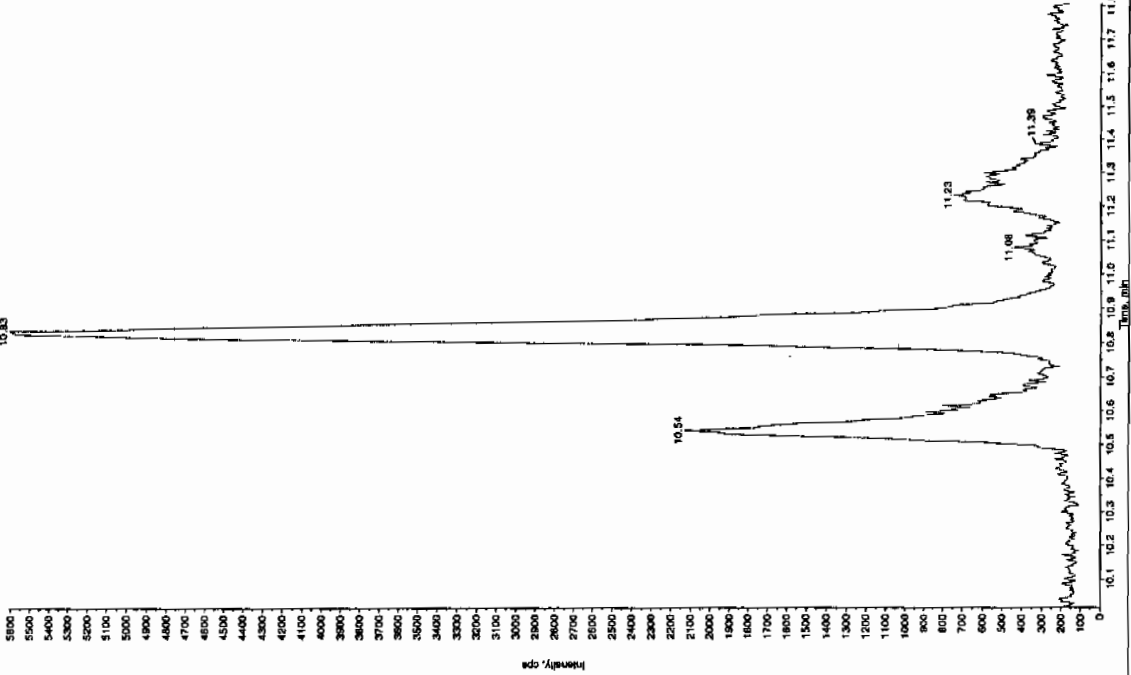
Modified: No

File: "EX504050042.wif"



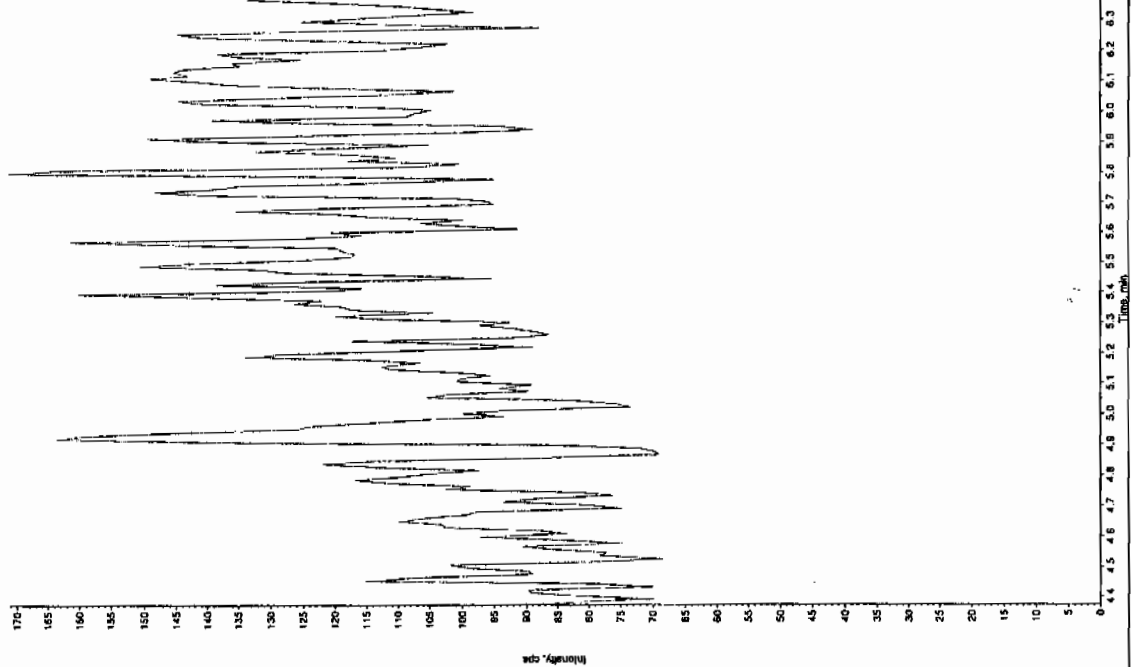
Sample Name: "248370019" Sample ID: "960305121ER" File: "EXS04050042.will"
 Peak Name: "tri(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 11:29:53 PM
 Modified: No



Sample Name: "248370019" Sample ID: "960305121ER" File: "EXS04050042.will"
 Peak Name: "24-Diamino-5-nitrofluorene" Mass(es): "166.0/46.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 4/5/2010
 Acq. Time: 11:29:53 PM
 Modified: No



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7484

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370020

Sample Amount 2

Moisture: 17.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412195a

Date Analyzed: 16-APR-10 15:04

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 33 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\EXP0412195a

Date: 16-Apr-2010

Time: 15:04:39

ID: 248370020

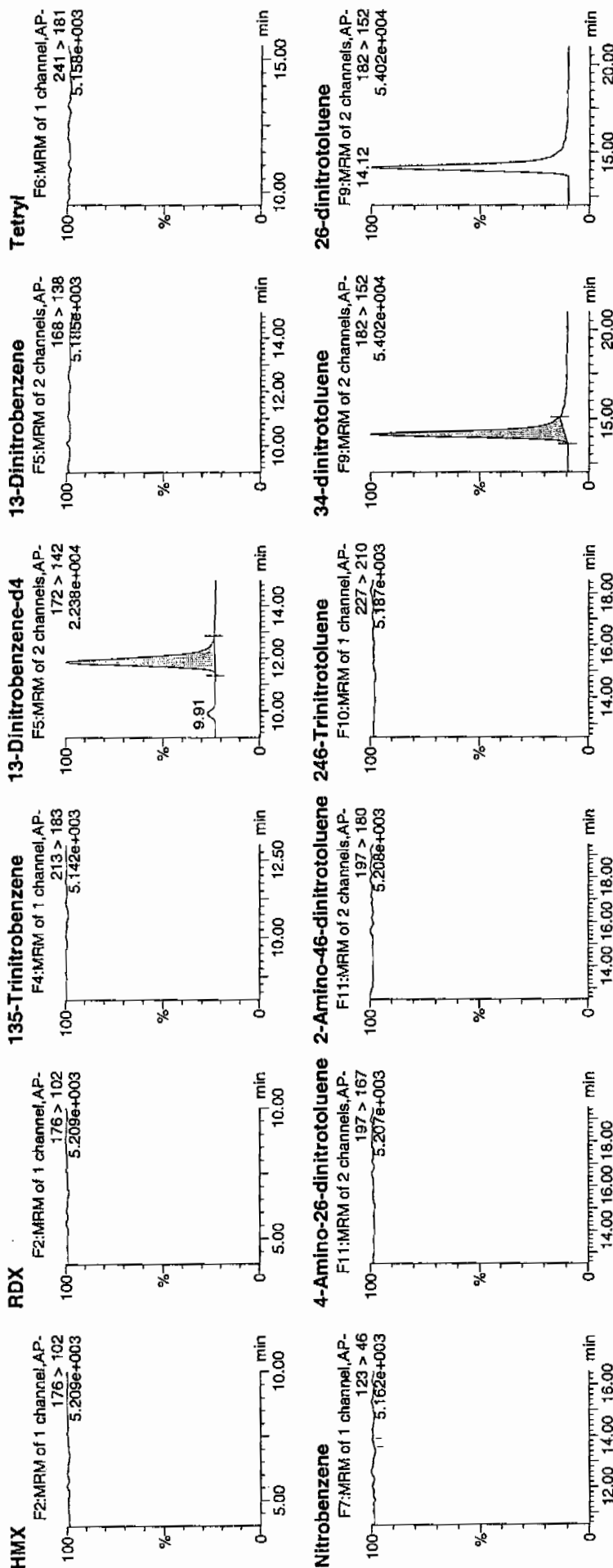
Vial: 4:7,F

not
4/17/10

LAU 960305 / 8022 / 21

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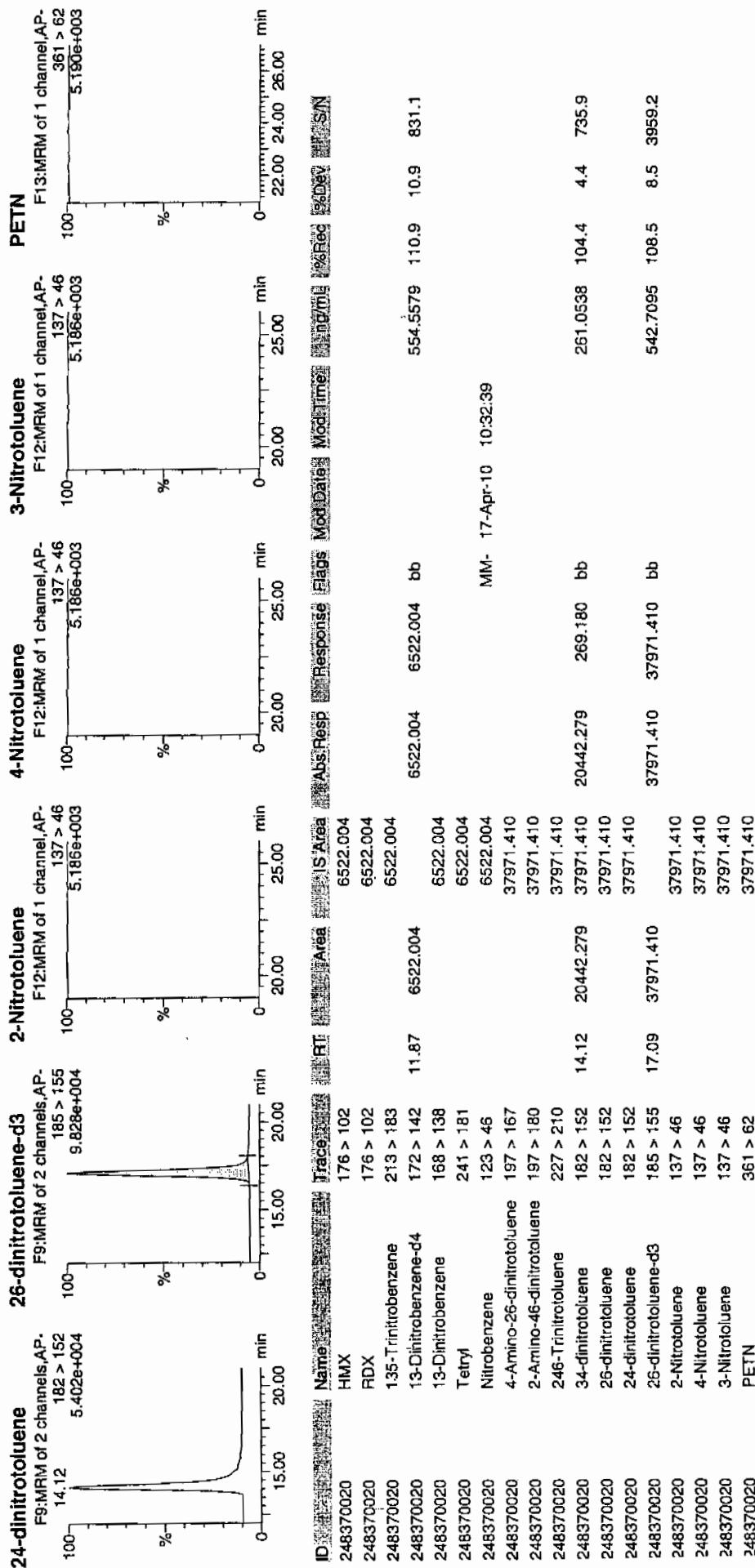
not
4/17/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 34 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: RE36-10-7484

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 248370020

Sample Amount 2

Moisture: 17.4

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050043.wiff

Date Analyzed: 05-APR-10 23:45

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

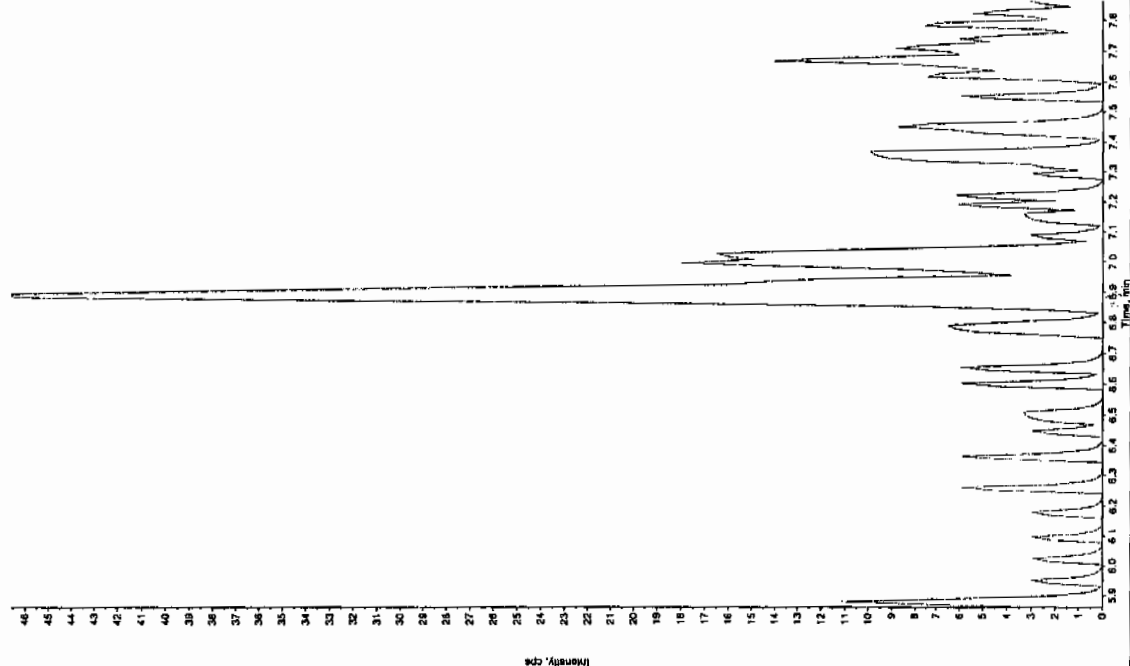
See 4/7/10

Sample Name: "248370020" Sample ID: "950305101ER" File: "EXS04050043.will"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 11:43:36 PM
 Modified: No

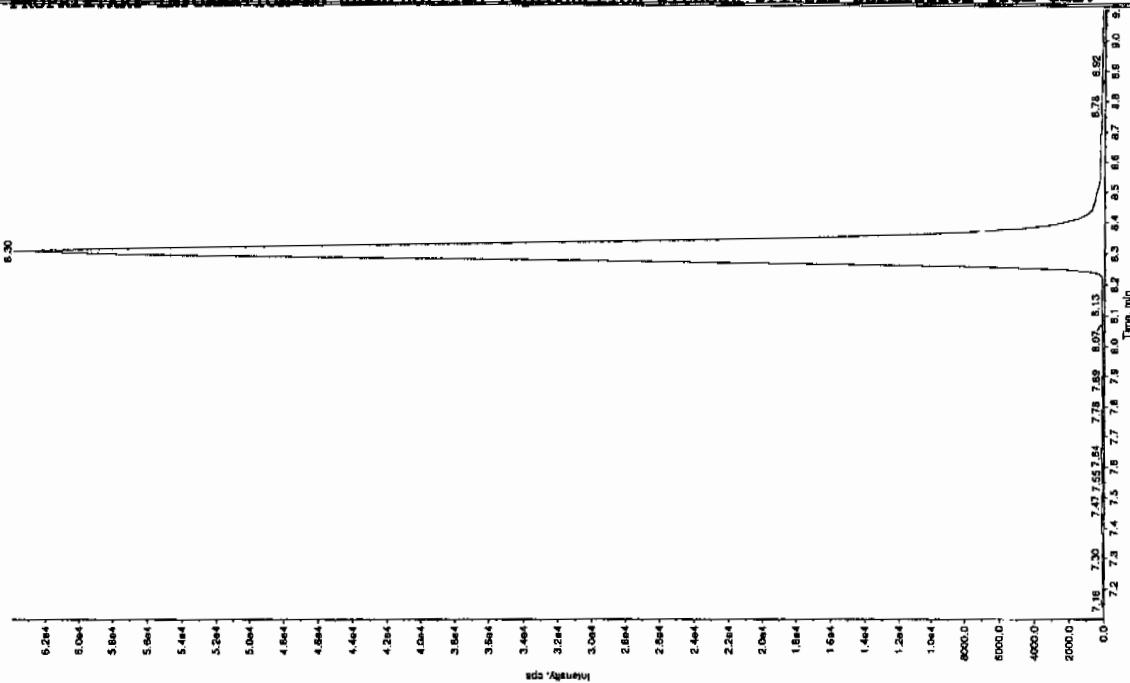


Sample Name: "248370020" Sample ID: "950305101ER" File: "EXS04050043.will"

Peak Name: "35-Dinitrobenzine" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation: ""

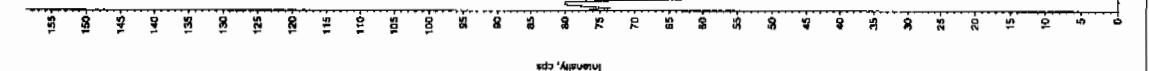
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 11:45:16 PM
 Modified: No



4/11/10 04/08/10

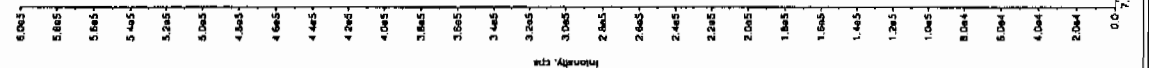
Sample Name: "248370020" Sample ID: "960305043.will"
 Peak Name: "34-Dinitrofluorene" Mass(es): "186.046.0 amu"
 Comment: "CX83212S" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 11:45:36 PM
 Modified: No



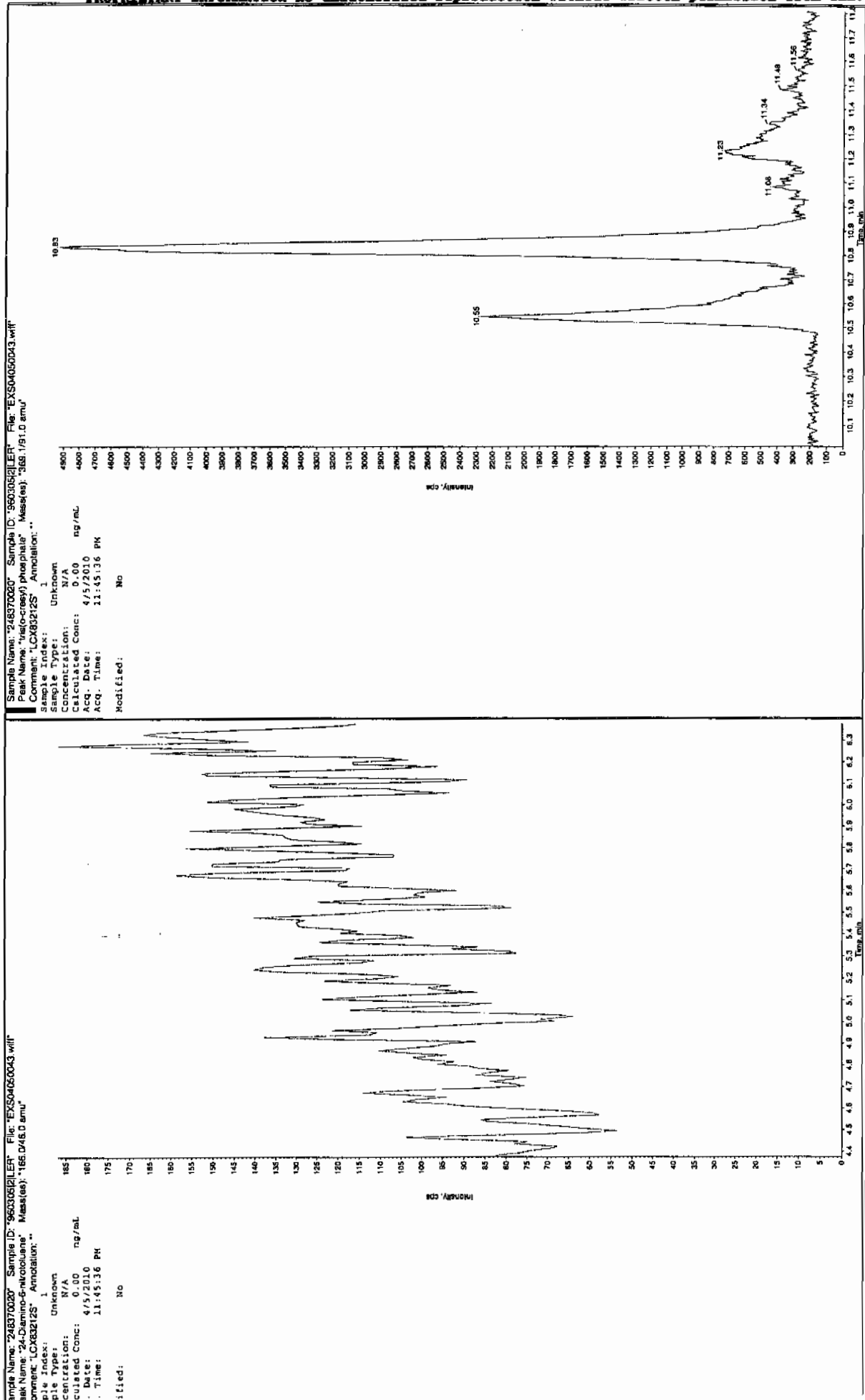
Sample Name: "248370020" Sample ID: "960305043.will"
 Peak Name: "34-Dinitrofluorene" Mass(es): "186.046.0 amu"
 Comment: "CX83212S" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 11:45:36 PM
 Modified: No



Algorithm: IntelliQuan - IOA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Retention Time: 8.17 min
 Relative RT: 8.28 min
 Type: Valley
 Retention Time: 8.30 min
 Counts: 2.38e+006 counts
 S/N: 600005.127 cps
 Acquisition Time: 8.17 min
 Total Time: 8.84 min

3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

STANDARDS DATA

SW846 8321A Modified-Explosives
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
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

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2150

Lab Code: GEL

Run Date: 05-APR-10,12-APR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Parname	1	2	3	4	5	6	Ave RF	RSD	Q
Calibration Level:	EXP0412003a	EXP0412004a	EXP0412005a	EXP0412006a	EXP0412007a	EXP0412008a			
Data File:									
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: 10-2150

Lab Code: GEL

Run Date: 05-APR-10 12-APR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Data File:	EXP0412003a	EXP0412004a	EXP0412005a	EXP0412006a	EXP0412007a	EXP0412008a					
Paraname:											
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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

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

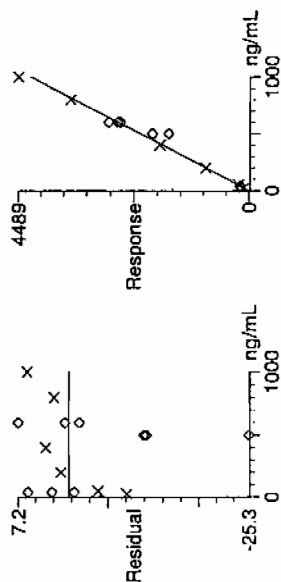
Compound name: HMX

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



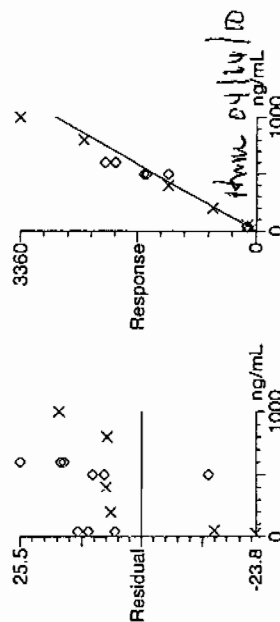
Compound name: RDX

Response Factor: 2.8622

RRF SD: 0.454164, % Relative SD: 15.8676

Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

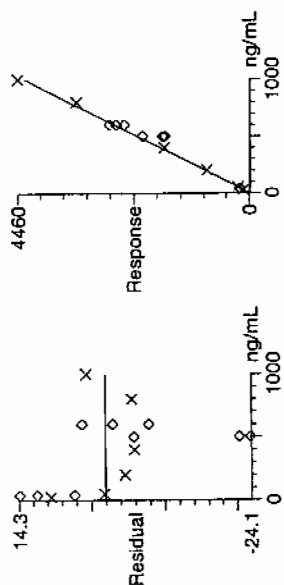
Curve type: RF



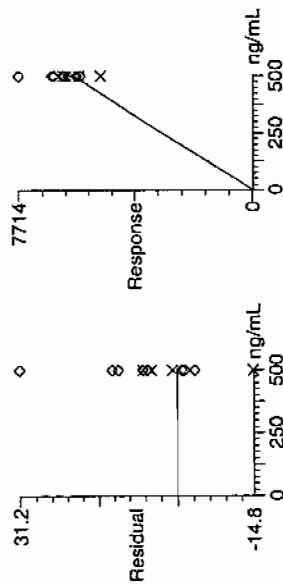
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA.qtd, 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

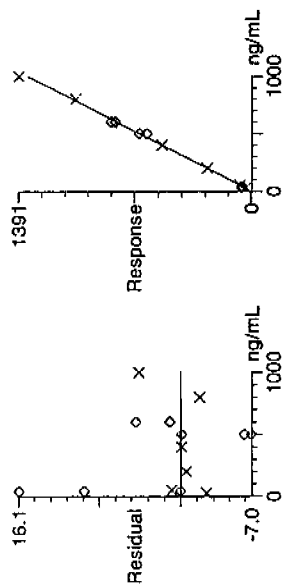


Compound name: 13-Dinitrobenzene-d4
Response Factor: 11.7607
RRF SD: 0.940441, % Relative SD: 7.99645
Response type: External Std, Area
Curve type: RF

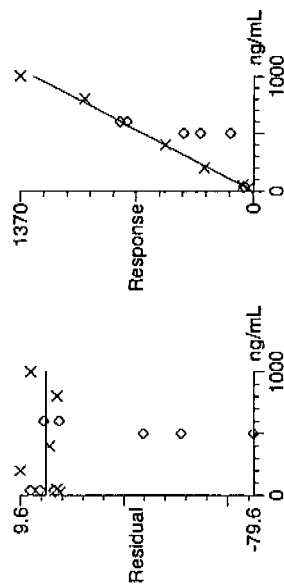


Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

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: Tetraol
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



Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

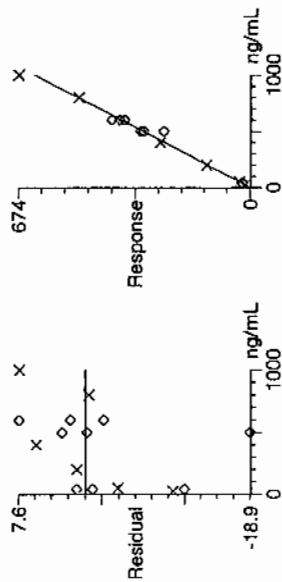
Compound name: Nitrobenzene

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



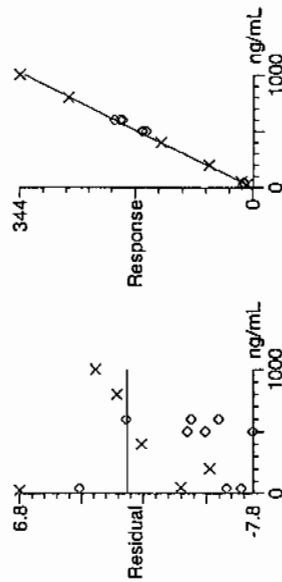
Compound name: 4-Amino-26-dinitrotoluene

Response Factor: 0.337763

RRF SD: 0.014254, % Relative SD: 4.22013

Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)

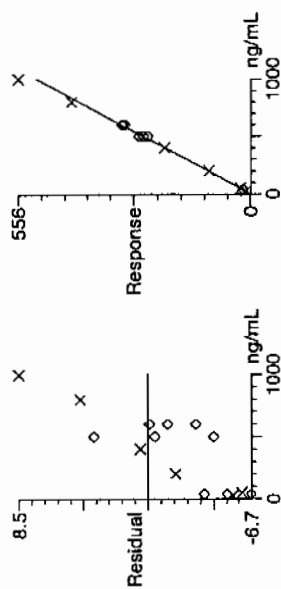
Curve type: RF



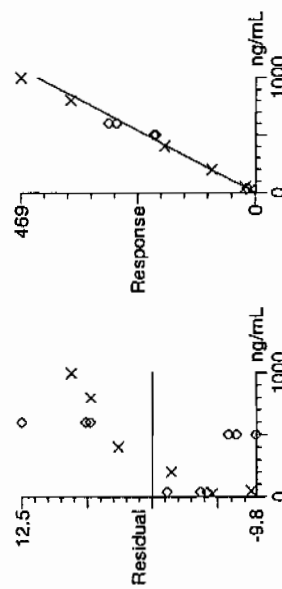
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 2-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



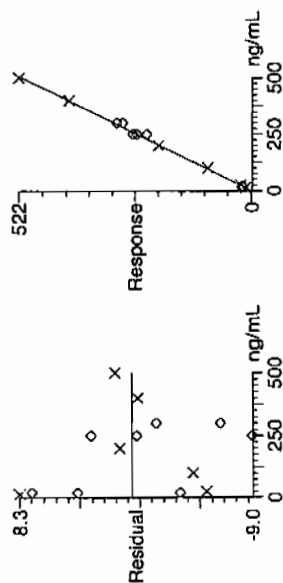
Compound name: 246-Trinitrotoluene
Response Factor: 0.435033
RRF SD: 0.0293746, % Relative SD: 6.75226
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



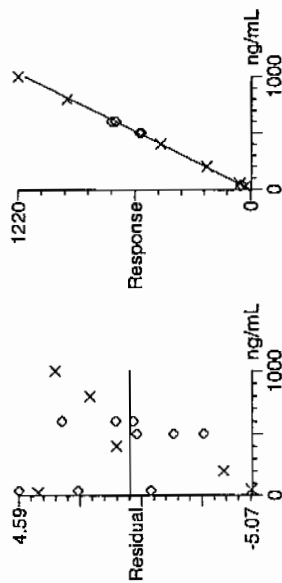
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

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



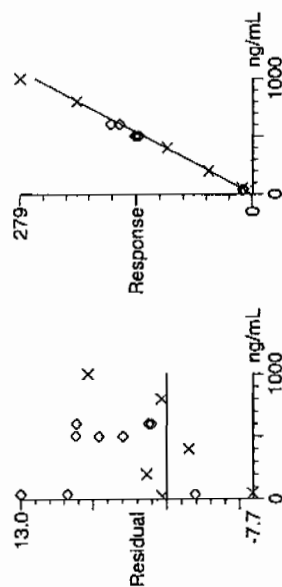
Compound name: 26-dinitrotoluene
Response Factor: 1.18354
RRF SD: 0.0435946, % Relative SD: 3.68342
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



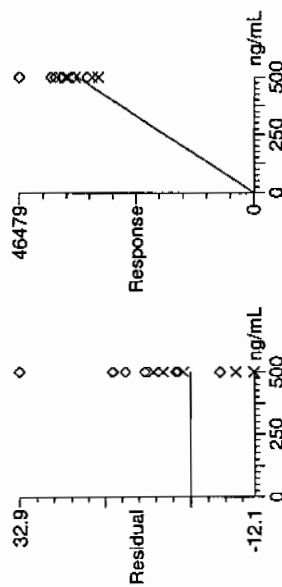
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

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



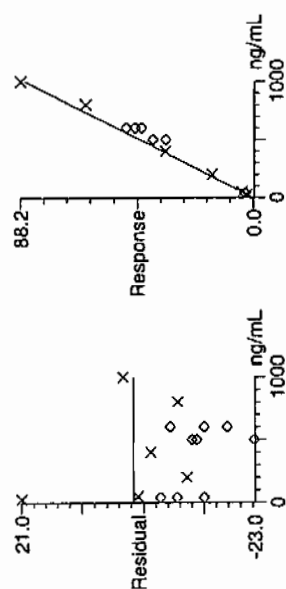
Compound name: 26-dinitrotoluene-d3
Response Factor: 69.9664
RRF SD: 5.81467, % Relative SD: 8.31066
Response type: External Std, Area
Curve type: RF



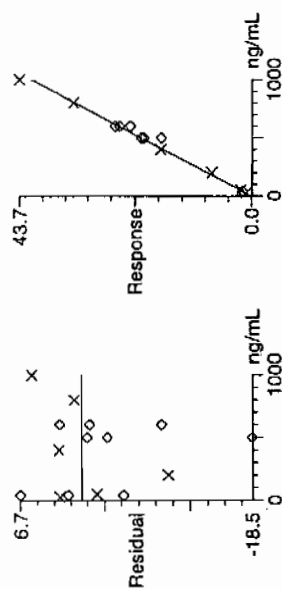
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

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



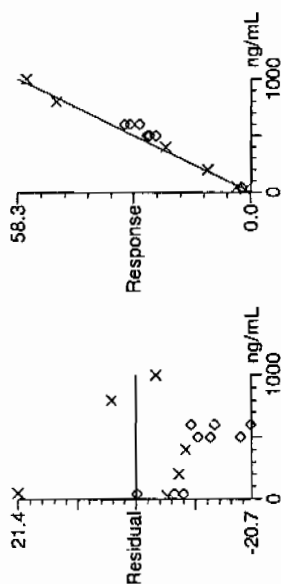
Compound name: 4-Nitrotoluene
Response Factor: 0.0414794
RRF SD: 0.00215463, % Relative SD: 5.19445
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



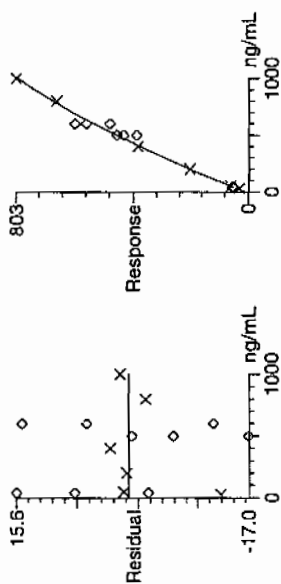
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

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: $-0.000220026 \cdot x^2 + 1.0065 \cdot x + 9.6373$
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): 10-2150

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

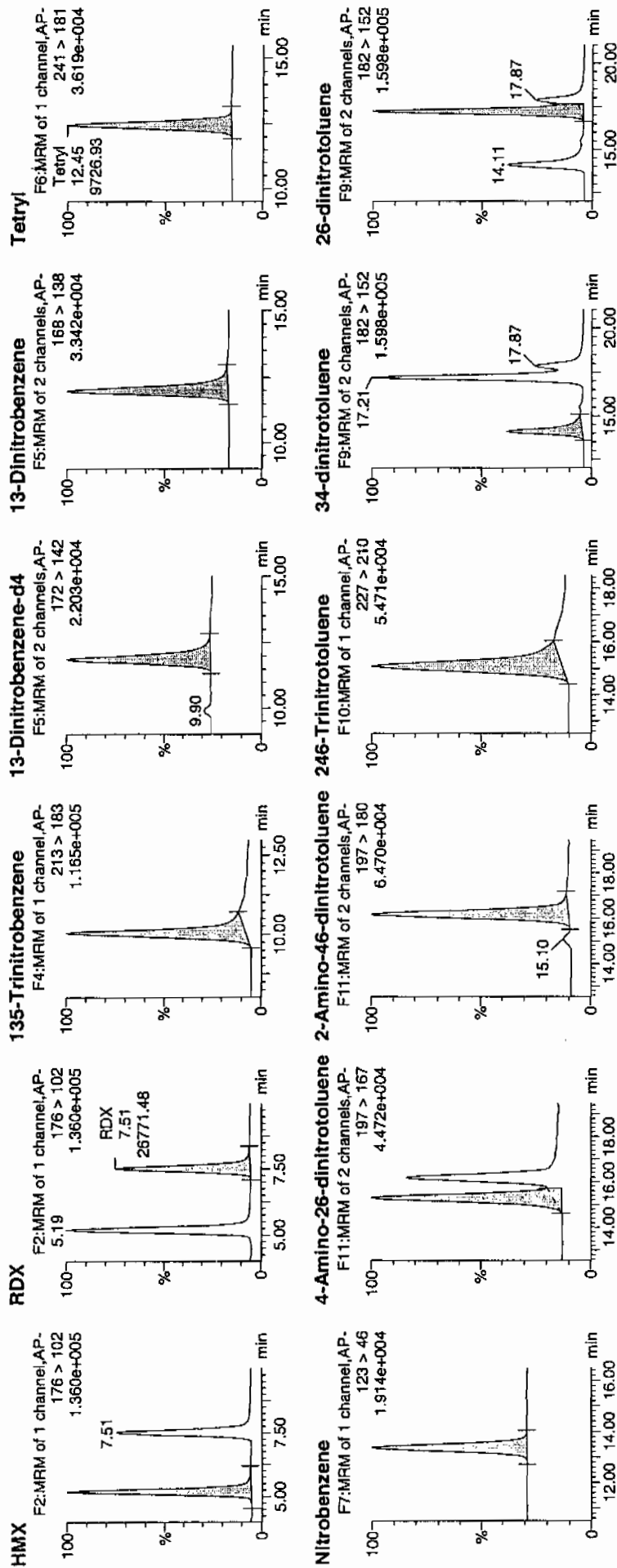
Date: 12-Apr-2010

Time: 20:06:00

ID: WXX100412-07ICV

Vial: 1:1,B

4/13/10



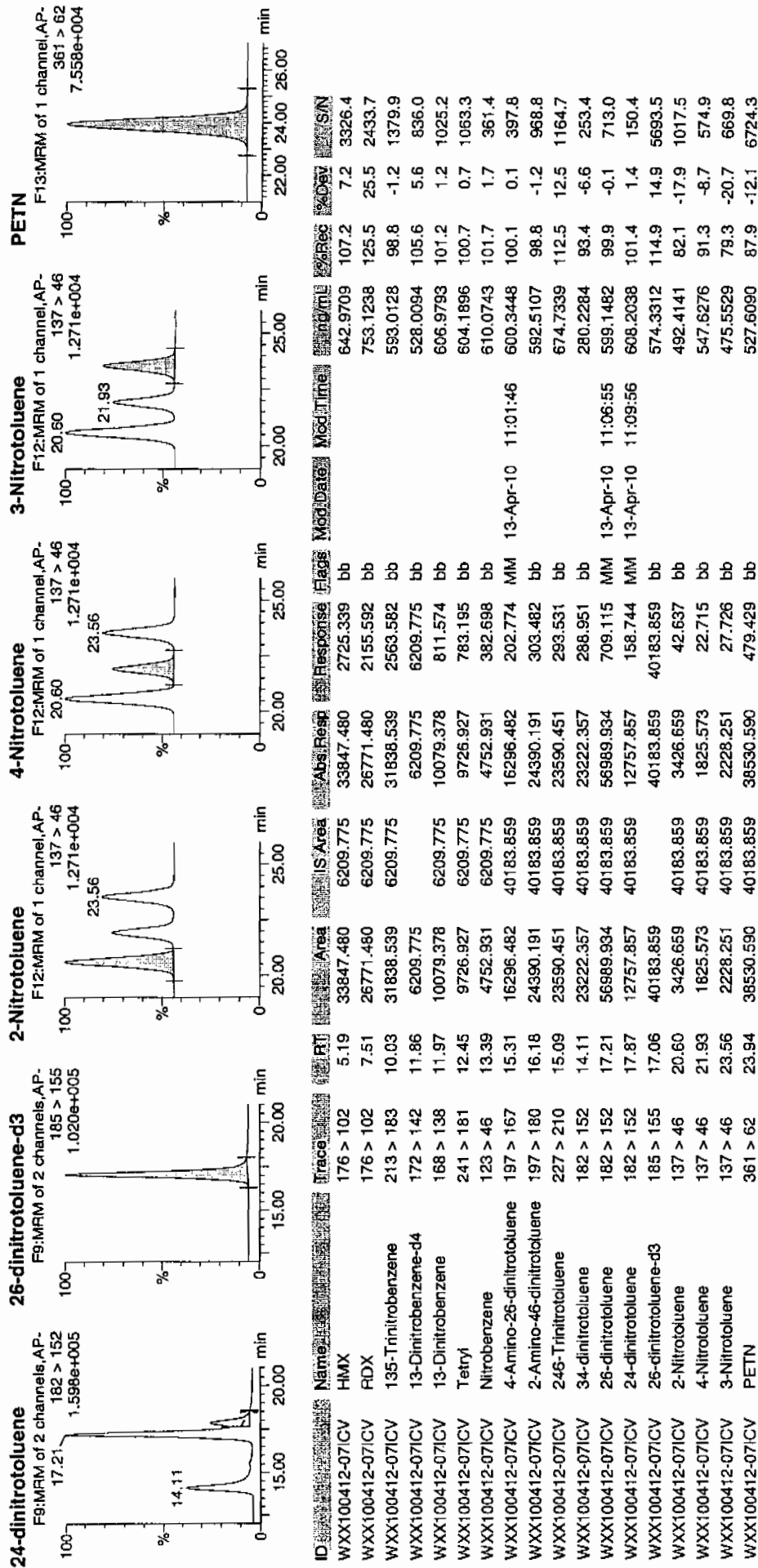
4/13/10

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\PRO\041210expA.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

*NTT
+1360*

Total 1581.8

Average 98.9

Amc 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: 10-2150

Lab Code: GEL

Run Date: 05-APR-10.12-APR-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC.J-Sphere ODS-H8Q

Calibration Type: Average RF

Calibration Level:	19	20	21	22	23	24	25	Ave RF	RSD	Q
Data File:	EXS04050003.w	EXS04050004.w	EXS04050005.w	EXS04050006.w	EXS04050007.w	EXS04050008.w	EXS04050009.w			
Parname										
tris(o-cresyl) phosphate	20900	20400	18800	18100	17100	17000	13900	18028.571	13	

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: 10-2150

Lab Code: GEL

Run Date: 05-APR-10.12-APR-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC I-Sphere ODS-H8Q

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS04050003.wif	EXS04050004.wif	EXS04050005.wif	EXS04050006.wif	EXS04050007.wif	EXS04050008.wif	EXS04050009.wif					
Paraname:												
2,4-Diamino-6-nitrotoluene	107000	194000	514000	984000	1450000	2300000	3930000	-53800	2320	-159	.9969	
2,6-Diamino-4-nitrotoluene	135000	256000	636000	1310000	1840000	3070000	4880000	-99700	3190	-339	.9946	
3,4-Dinitrotoluene	217000	415000	947000	1910000	2920000	4200000	7540000	-91400	9310	-166	.9988	
3,5-Dinitroaniline	375000	679000	1590000	3210000	4580000	6550000	10500000	-89200	7310	-1.01	.9987	
TATB	35600	73300	184000	399000	594000	809000	1570000	-12100	830	-0.19	.9999	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

040510ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.21e+004			
a1	830			
a2	-0.0188			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-8.92e+004			
a1	7.31e+003			
a2	-1.01			
Correlation coefficient 0.9987				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-9.14e+004			
a1	9.31e+003			
a2	-1.66			
Correlation coefficient 0.9988				
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	-9.97e+004			
a1	3.19e+003			
a2	-0.339			
Correlation coefficient 0.9946				
Use Area				

Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

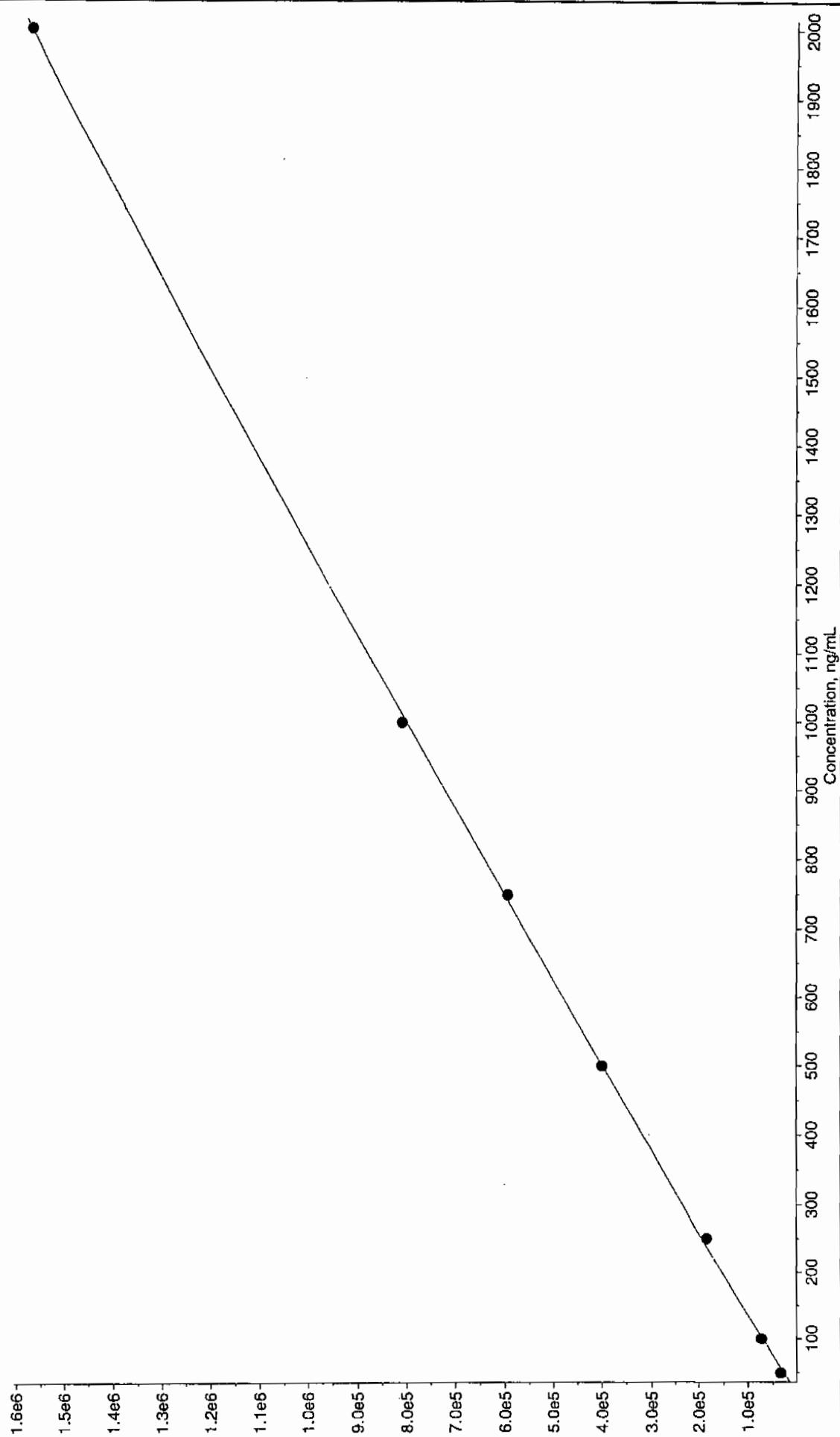
Handwritten: New 4/17/10

Handwritten: Hnm 4/08/10

040510ICAL

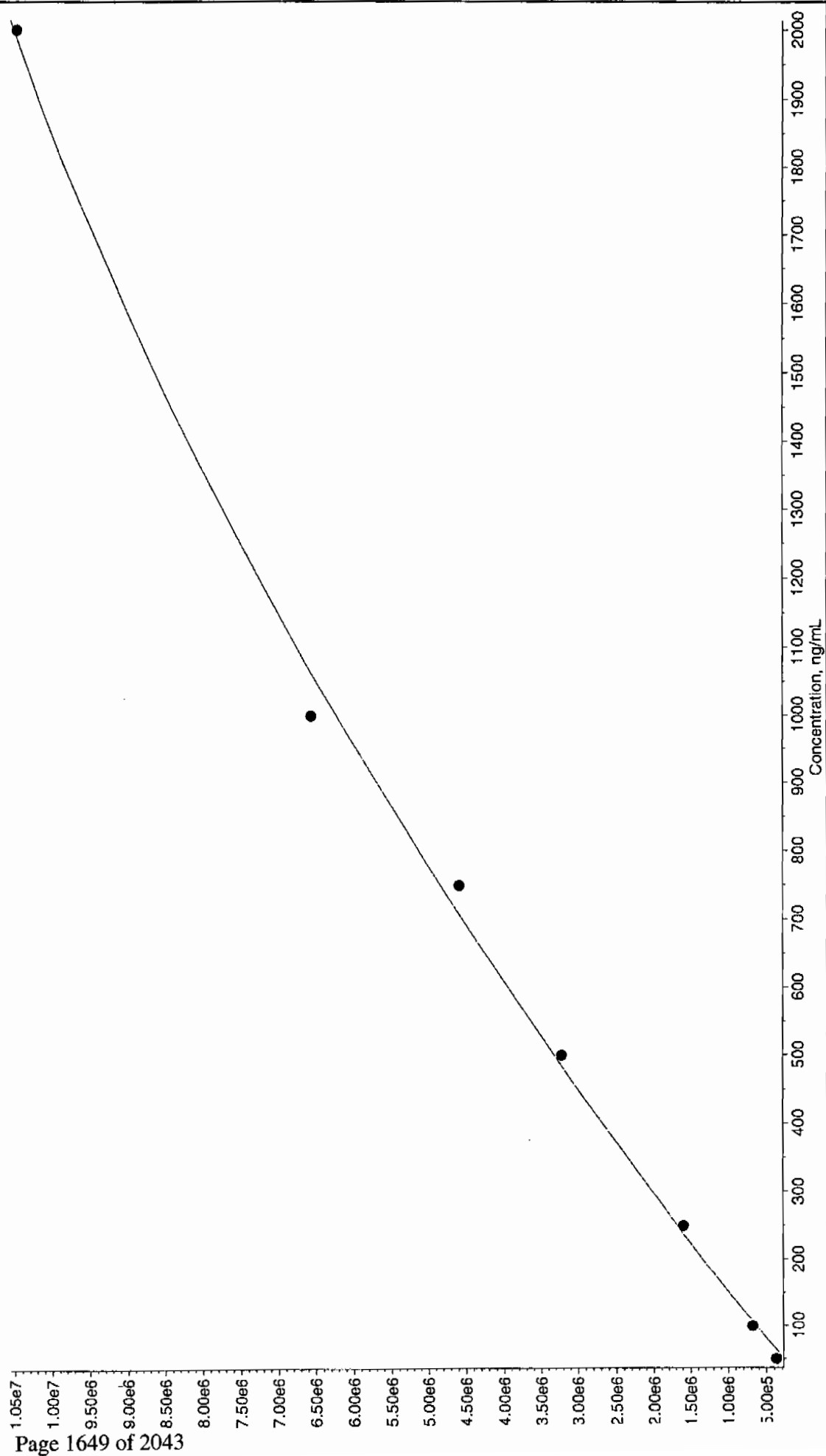
Fit	Quadratic	weighting	None	Iterate No
a0	-5.38e+004			
a1	2.32e+003			
a2	-0.159			
Correlation coefficient 0.9969				
Use Area				
Peak Name: tris(o-cresyl) phosphate				
No Internal Standard				
Q1/Q3 Masses: 369.15/91.00 amu				
Fit	Mean Response Factor	Weighting	None	Iterate No
Factor	1.8e+004			
Standard deviation	2.35e+003			
%RSD	13			
Use Area				

040510.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = -0.0188 x^2 + 830 x + -1.21e+004$ ($r = 0.9999$)



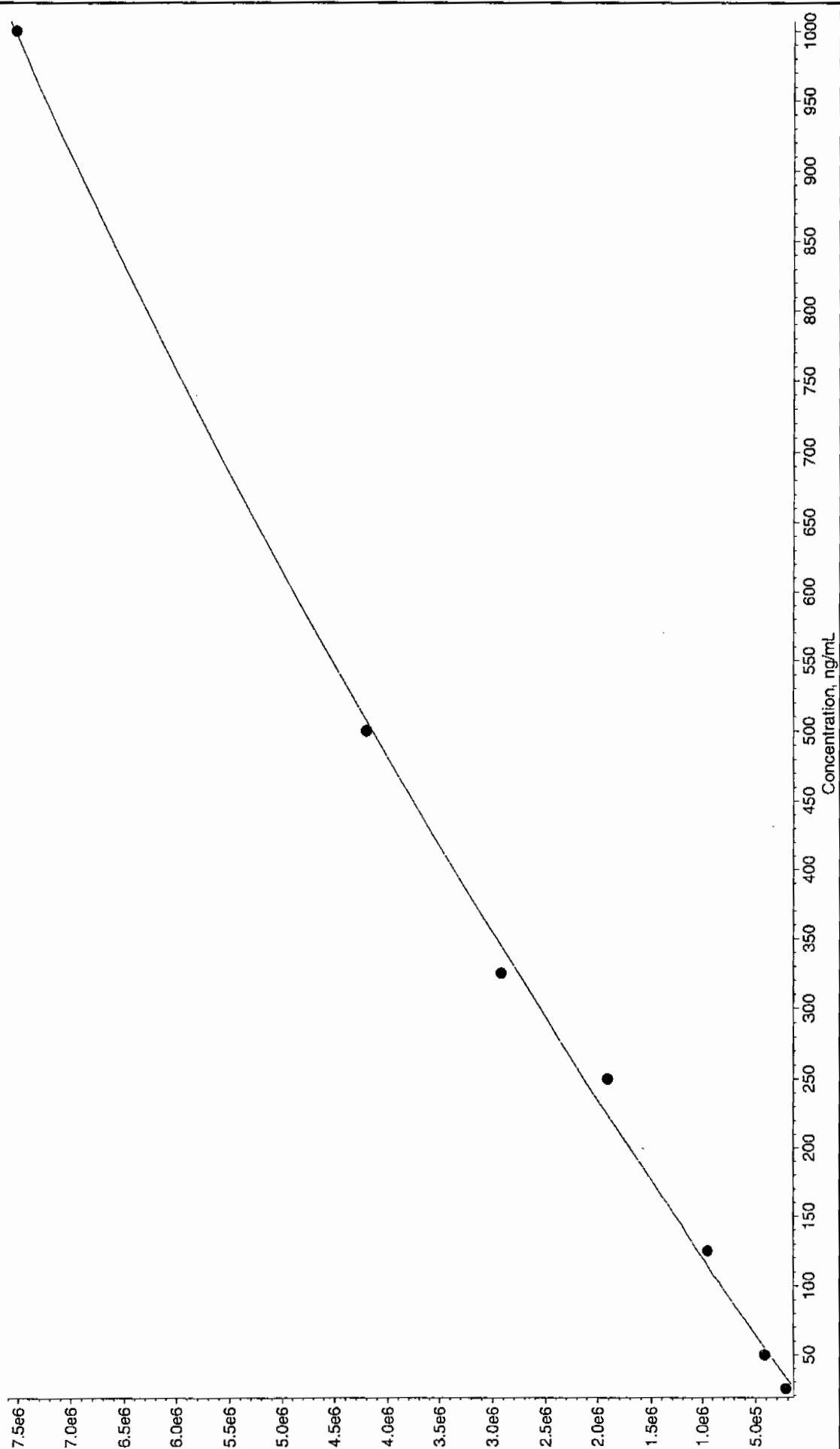
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

040510.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -1.01 \times 10^{-7} x^2 + 7.31 \times 10^{-3} x + -8.92 \times 10^4$ ($r = 0.9987$)



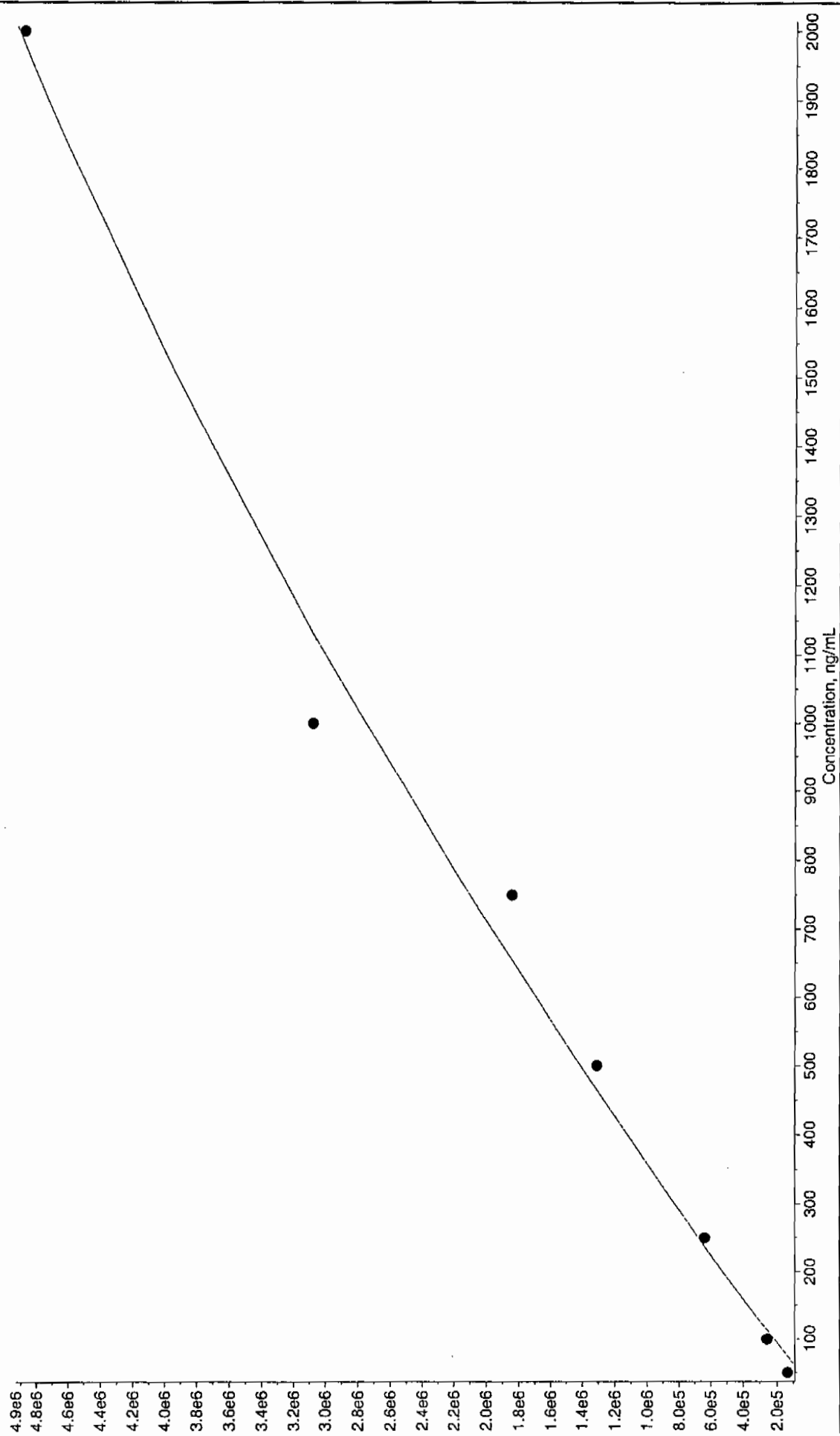
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

040510.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -1.66 x^2 + 9.31e+003 x + -9.14e+004$ ($r = 0.9988$)



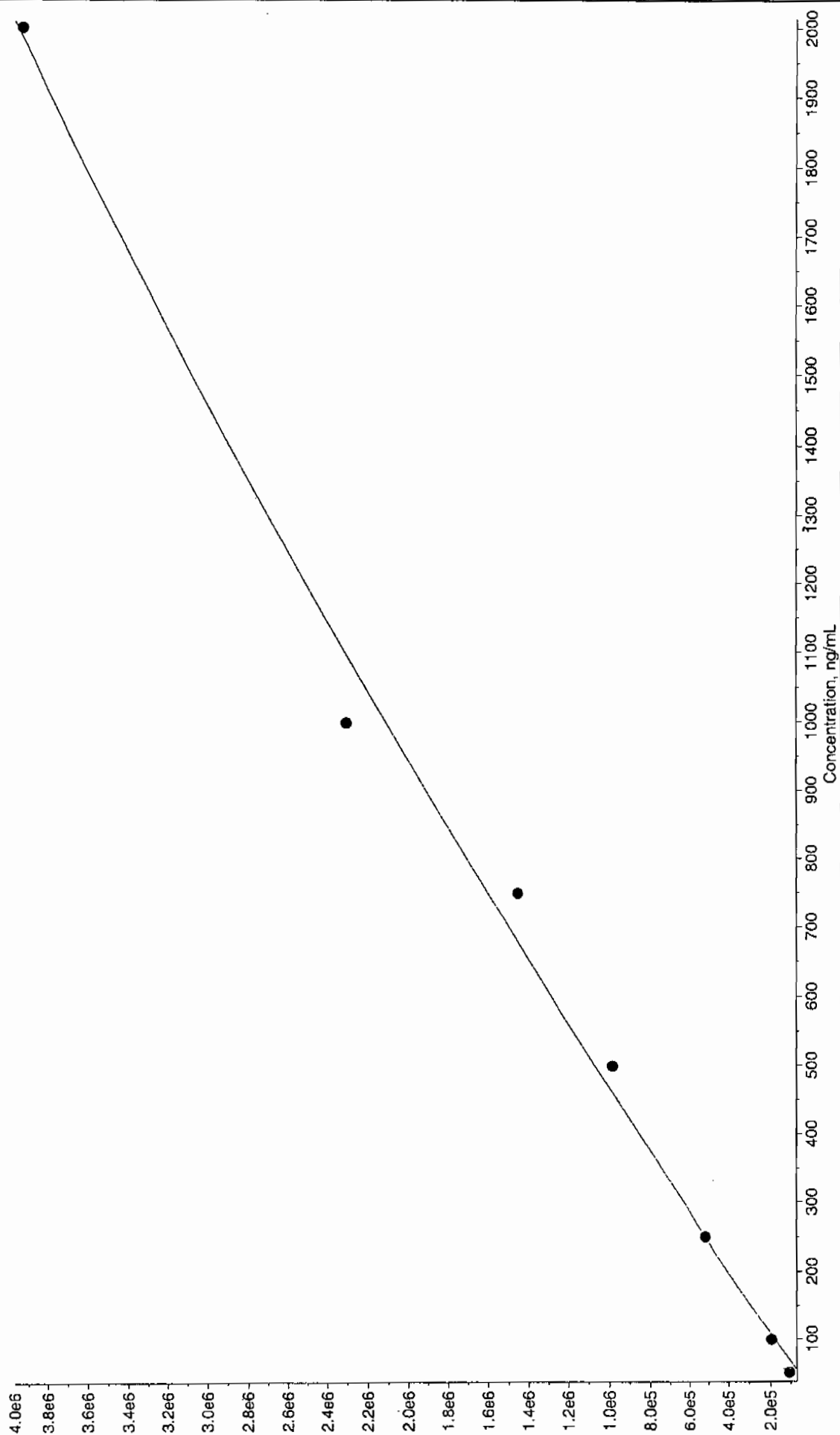
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

040510.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.339 x^2 + 3.19e+003 x + -9.97e+004$ ($r = 0.9946$)



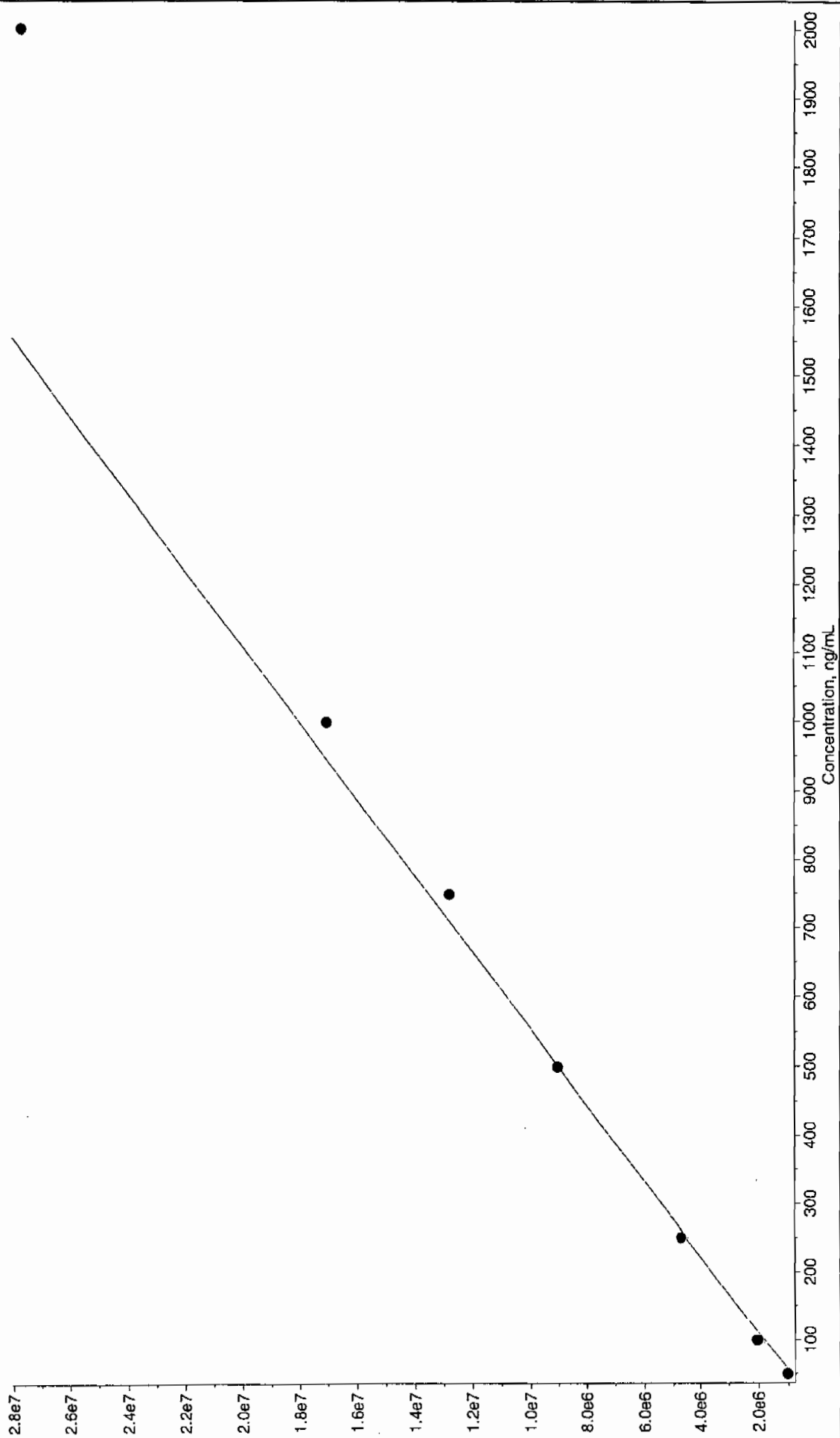
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

040510.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.159 x^2 + 2.32e+003 x + -5.38e+004$ ($r = 0.9969$)



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

040510.rdb (tris(o-cresyl) phosphate): "Mean Response Factor" Regression ("No" weighting): $y = 1.8e+004 \times (\text{std. dev.} = 2.35e+003)$



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS04050011.wiff

Analysis Date: 05-APR-10 15:22

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	461	92	
2,6-Diamino-4-nitrotoluene	500	436	87	
3,4-Dinitrotoluene	250	235	94	
3,5-Dinitroaniline	500	445	89	
TATB	500	483	97	
tris(o-cresyl) phosphate	500	502	100	

Recovery Limits:

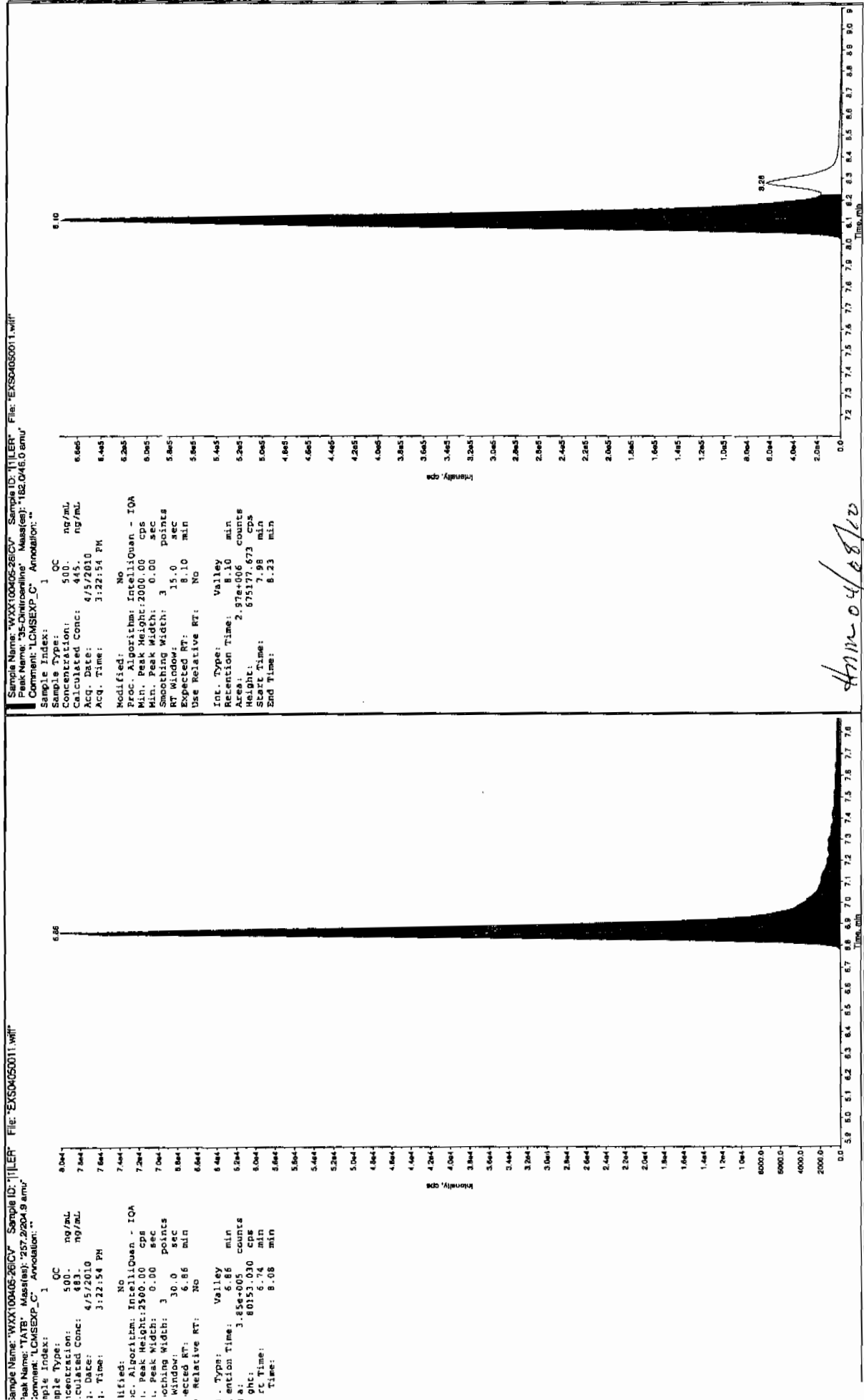
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

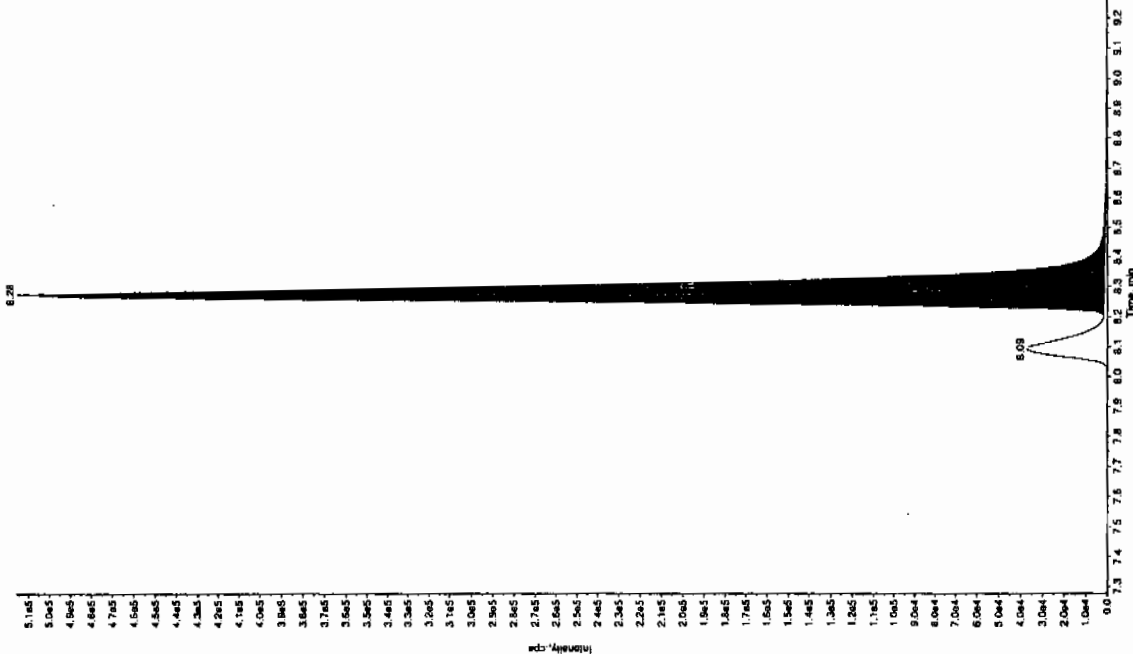
Run 4/7/10



Amn 04/28/10

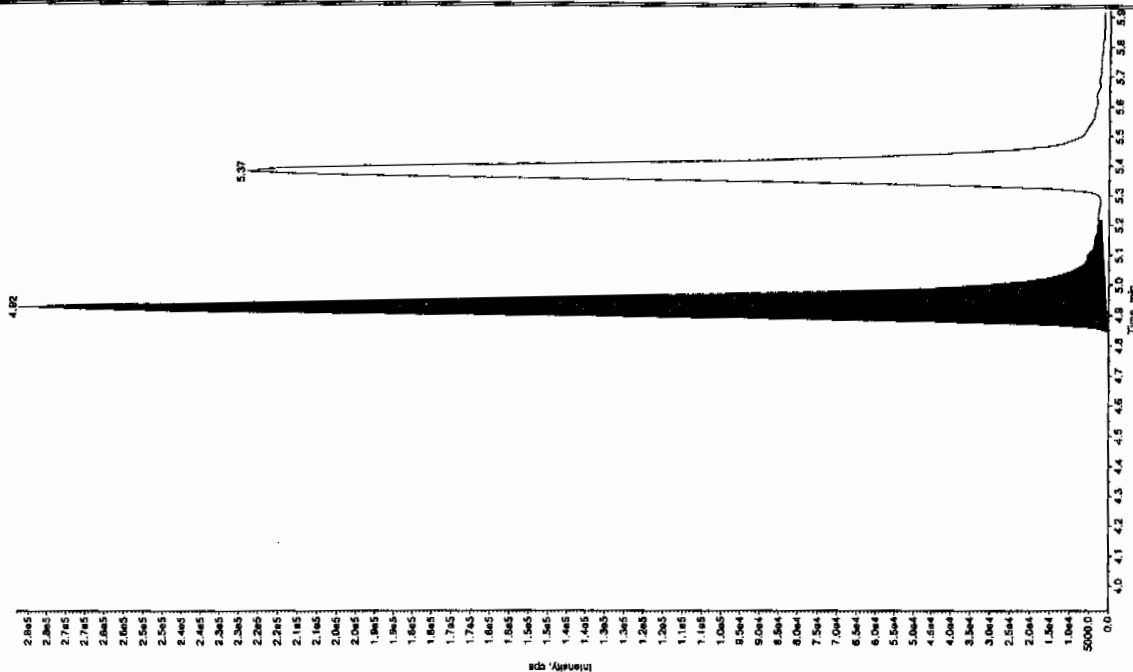
Sample Name: "WXX10405-280V" Sample ID: "111ER" File: "EXS04050011.wif"
 Peak Name: "34-Dinitrochlorobenzene" Mass(es): "182.1/151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

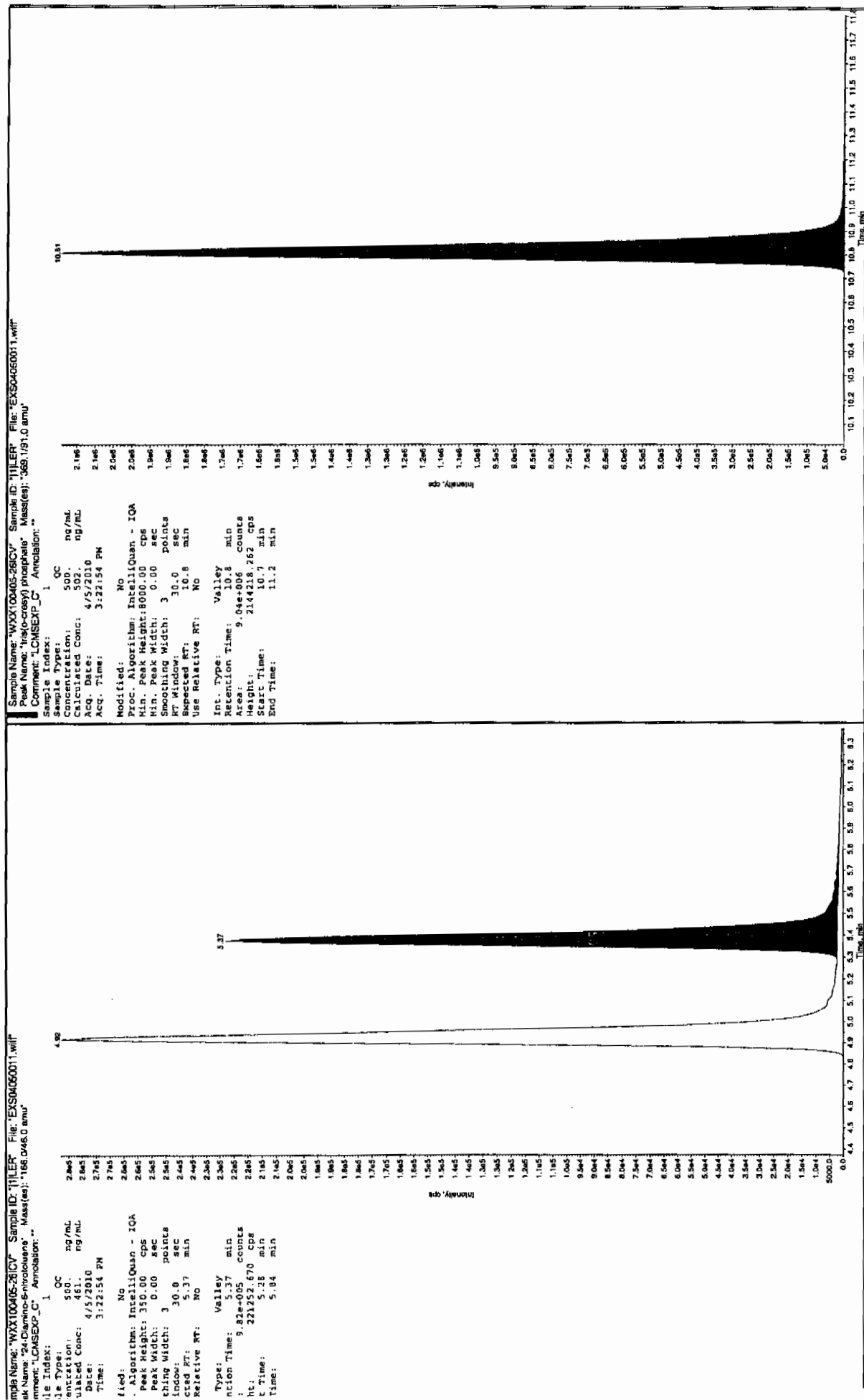
Sample Index: 1
 Sample Type: OC
 Concentration: 250. ng/mL
 Calculated Conc: 235. ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 3:22:54 PM
 Method: No
 Proc. Algorithm: IntelliQuan - TOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 Window: 15.0 sec
 Expected RT: 8.28 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.28 min
 Area: 2.00e+006 counts
 Height: 514956.970 cps
 Start Time: 8.21 min
 End Time: 8.64 min



Sample Name: "WXX10405-280V" Sample ID: "111ER" File: "EXS04050011.wif"
 Peak Name: "26-Diamine-4-nitrochlorobenzene" Mass(es): "166.0/146.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: OC
 Concentration: 500. ng/mL
 Calculated Conc: 436. ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 3:22:54 PM
 Method: No
 Proc. Algorithm: IntelliQuan - TOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 Window: 30.0 sec
 Expected RT: 4.92 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 4.92 min
 Area: 1.21e+006 counts
 Height: 282532.837 cps
 Start Time: 4.84 min
 End Time: 5.22 min





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412012a

Analysis Date: 12-APR-10 21:04

LCMSMS ID: 903

Column ID: Phenomenex Ultra carb 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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 23 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qid, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412012a

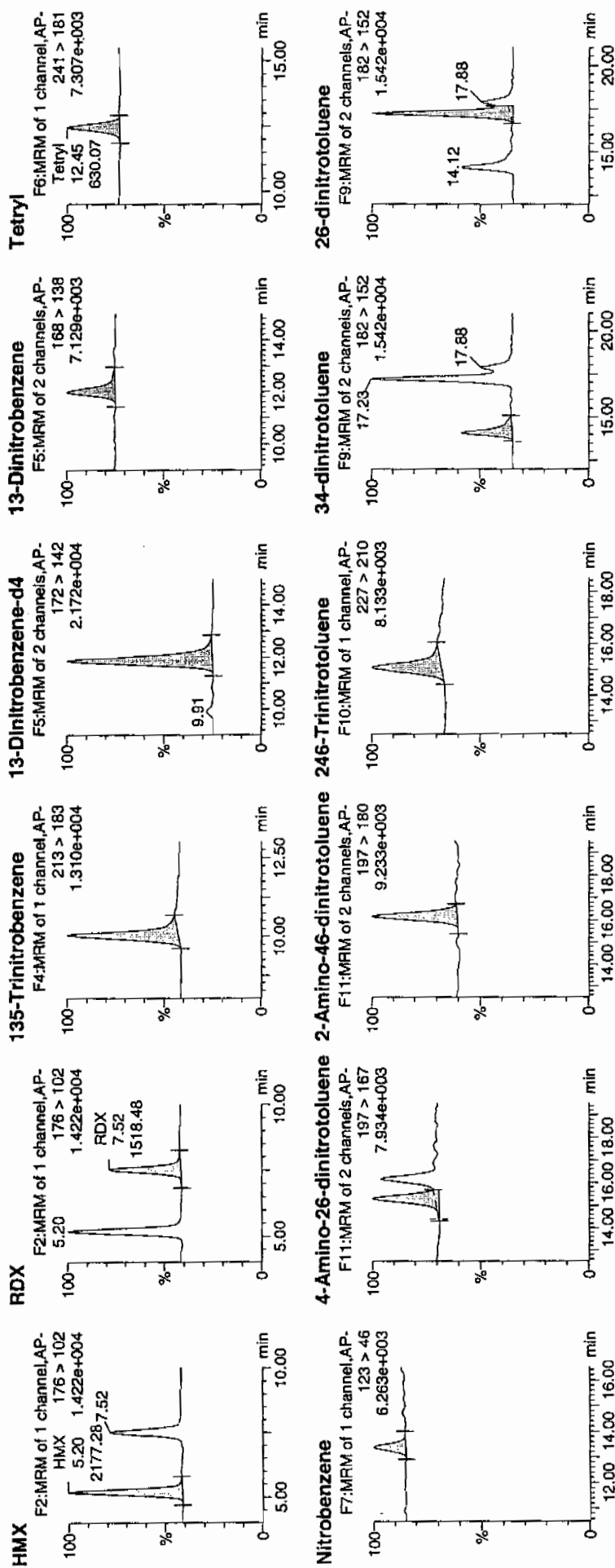
Date: 12-Apr-2010

Time: 21:04:58

ID: WXX100412-08CRI

Vial: 1:1,C

4/13/10



4/14/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 24 of 77

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

24-dinitrotoluene

F9:MRM of 2 channels,AP-

182 > 152

1.542e+004

17.23

14.12

100

%

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

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min

20.00

15.00

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min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

26-dinitrotoluene-d3

F9:MRM of 2 channels,AP-

185 > 155

9.620e+004

17.23

14.12

100

%

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

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15.00

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min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

min

20.00

15.00

0

2-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46

5.835e+003

23.58

20.61

100

%

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

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min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

4-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46

5.835e+003

20.61

20.61

100

%

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

3-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46

5.835e+003

20.61

20.61

100

%

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

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20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

0

PETN

F13:MRM of 1 channel,AP-

361 > 52

1.254e+004

23.95

3684.29

100

%

min

25.00

20.00

0

min

25.00

20.00

0

min

25.00

20.00

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

*mtf
4/13/10*

Total 1588.0

Amc 04/14/10

Average 99.3

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): 10-2150

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

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0412023a

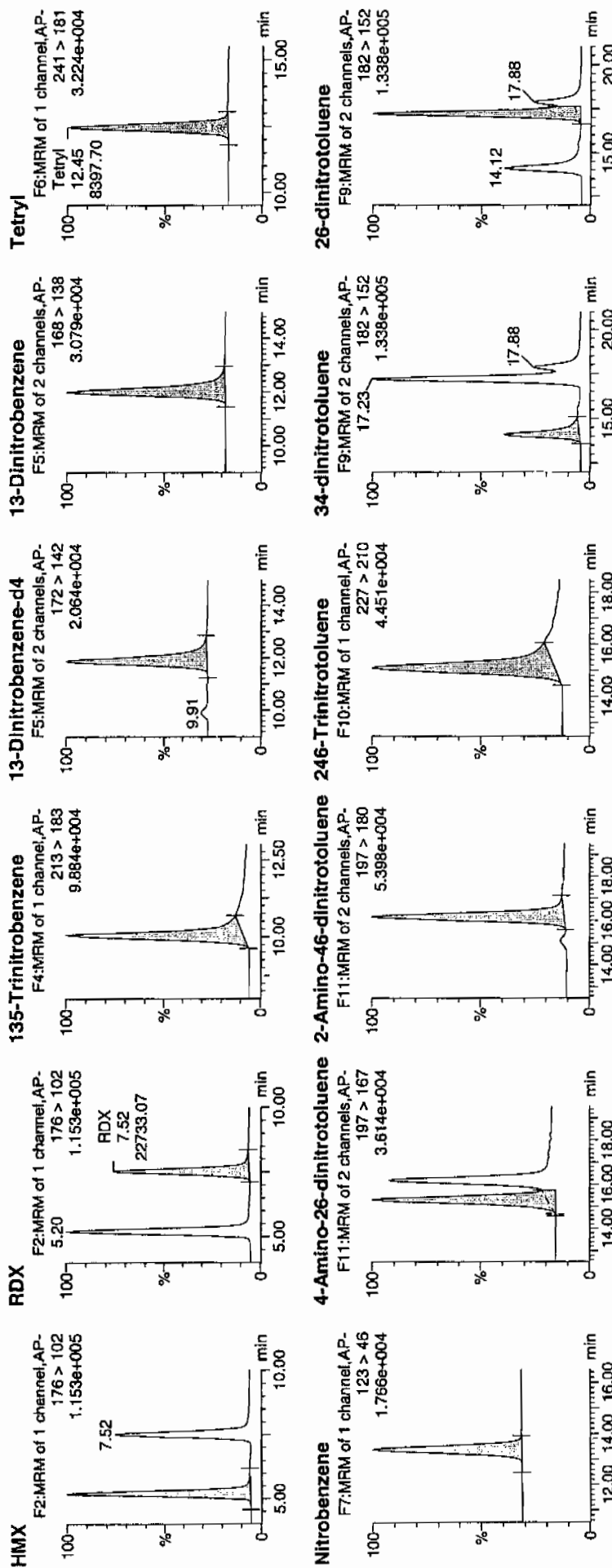
Date: 13-Apr-2010

Time: 02:29:16

ID: WXX100412-07CCV

Vial: 1:1,B

4/13/10



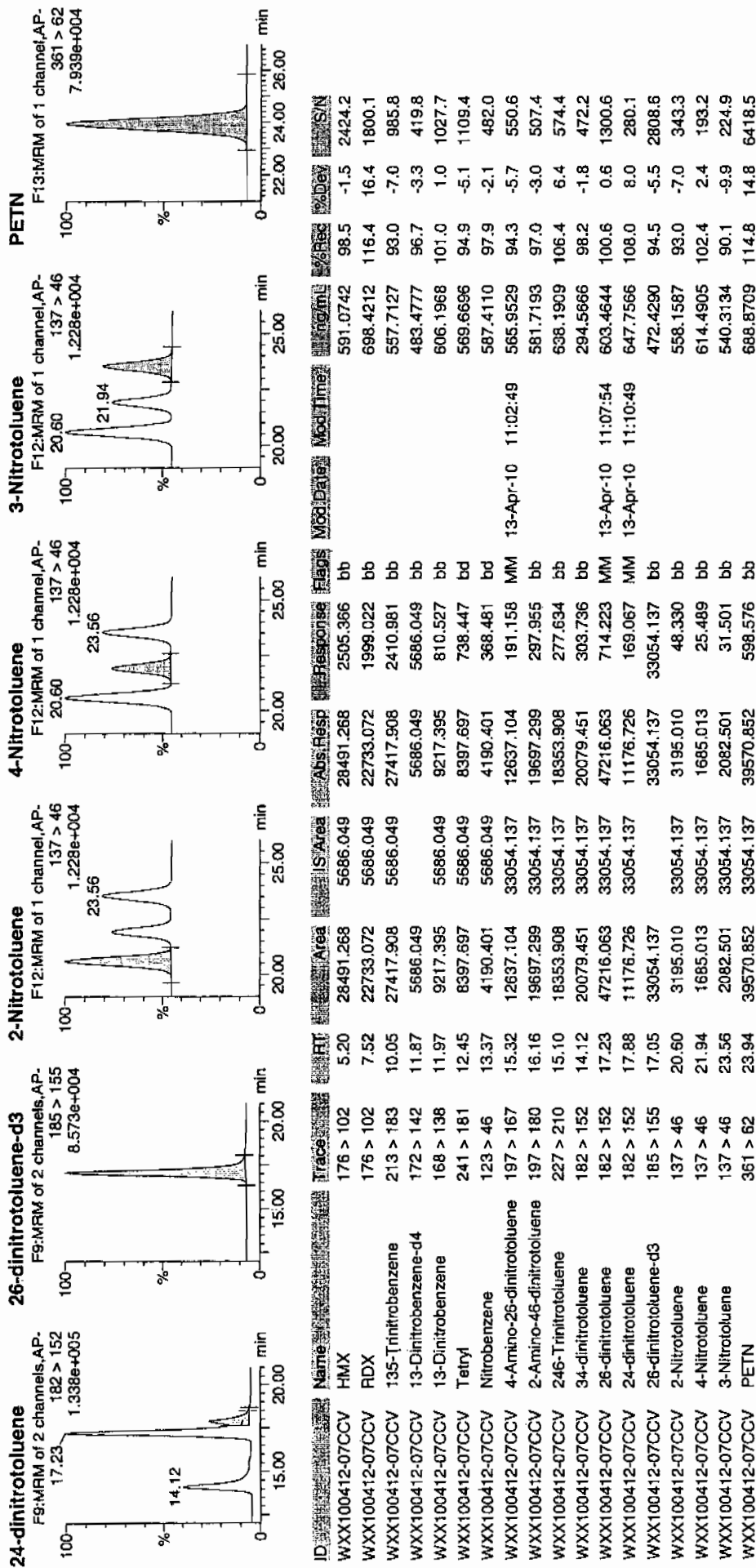
4/13/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 46 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



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

Handwritten:
 4/13/10

Total 1606.5

Average 100.4

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): 10-2150

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

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\EXP0412025a

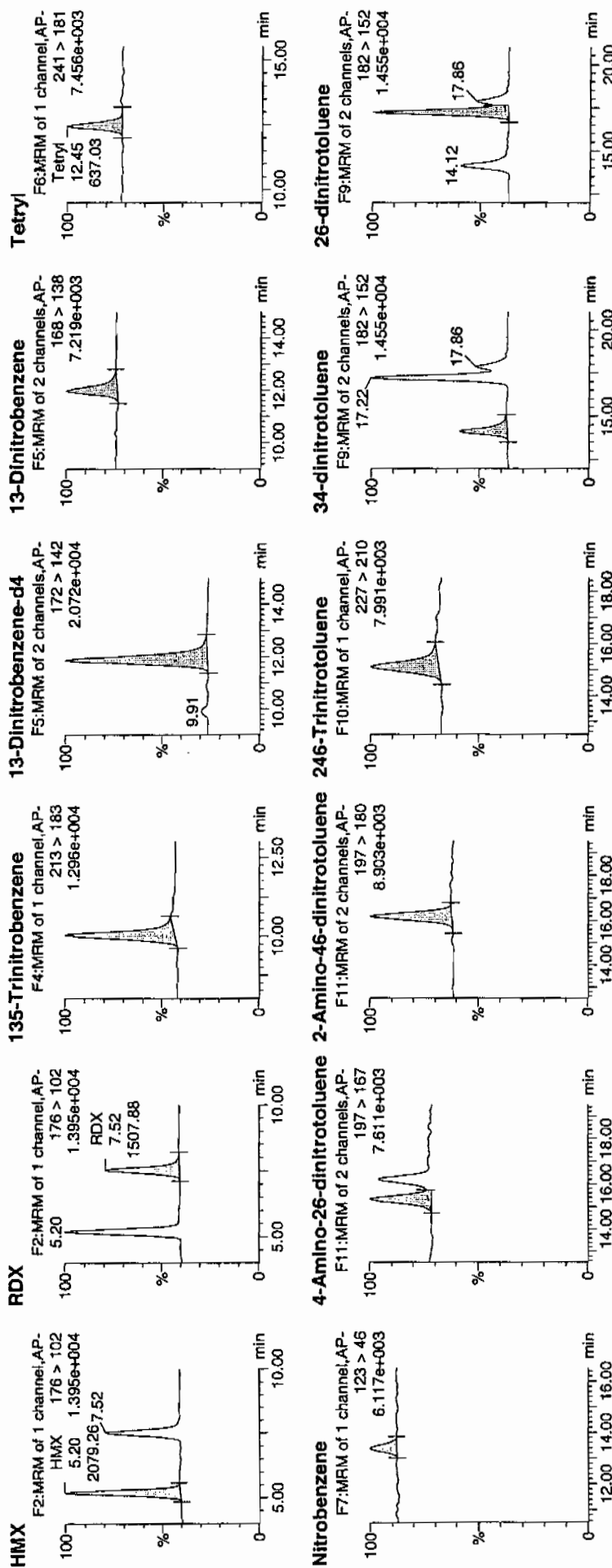
Date: 13-Apr-2010

Time: 03:28:21

ID: WXX100412-08CRI

Vial: 1:1,C

μg
41360



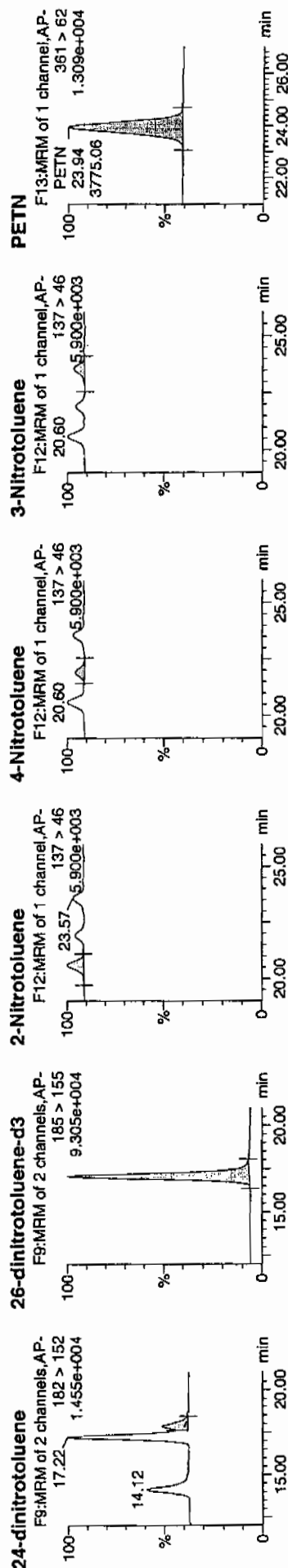
HMW 841410

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Apr 13 11:14:26 2010, Page 50 of 77

Dataset: C:\MASSLYNX\New_Exp\PROX041210expA.qld, Time: Tue Apr 13 11:12:22 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Area	Rec	Conv	S/N
WXX100412-08CRI	HMX	176 > 102	5.20	2079.264	5797.090	2079.264	179.337	bb			42.3097	105.8	5.8	348.3
WXX100412-08CRI	RDX	176 > 102	7.52	1507.880	5797.090	1507.880	130.055	bb			45.4388	113.6	13.6	225.5
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2231.265	5797.090	2231.265	192.447	bb			44.5172	111.3	11.3	130.5
WXX100412-08CRI	13-Dinitrobenzene	172 > 142	11.87	5797.090		5797.090	5797.090	bb			492.9193	98.6	-1.4	771.9
WXX100412-08CRI	Tetryl	168 > 138	11.97	719.725	5797.090	719.725	62.076	bb			46.4272	116.1	16.1	67.2
WXX100412-08CRI	Nitrobenzene	241 > 181	12.45	637.032	5797.090	637.032	54.944	bb			42.3862	106.0	6.0	45.1
WXX100412-08CRI	4-Amino-26-dinitrotoluene	123 > 46	13.41	258.161	5797.090	258.161	22.266	bb			35.4959	88.7	-11.3	32.0
WXX100412-08CRI	2-Amino-46-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
WXX100412-08CRI	246-Trinitrotoluene	197 > 180	16.19	1374.488	35963.441	1374.488	19.110	bb			37.3089	93.3	-6.7	102.4
WXX100412-08CRI	34-dinitrotoluene	227 > 210	15.10	1233.959	35963.441	1233.959	17.156	bb			39.4355	98.6	-1.4	52.3
WXX100412-08CRI	26-dinitrotoluene	182 > 152	14.12	1430.000	35963.441	1430.000	19.881	bb			19.2811	96.4	-3.6	68.9
WXX100412-08CRI	24-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
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	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
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.60	236.329	35963.441	236.329	3.286	bb			514.0105	102.8	2.8	1763.8
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.92	127.371	35963.441	127.371	1.771	bb			37.9461	94.9	-5.1	26.8
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.57	167.459	35963.441	167.459	2.328	bb			42.6921	106.7	6.7	14.4
WXX100412-08CRI	PETN	361 > 62	23.94	3775.057	35963.441	3775.057	52.485	bb			39.9332	99.8	-0.2	17.3
											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

HMM 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): 10-2150

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412036a

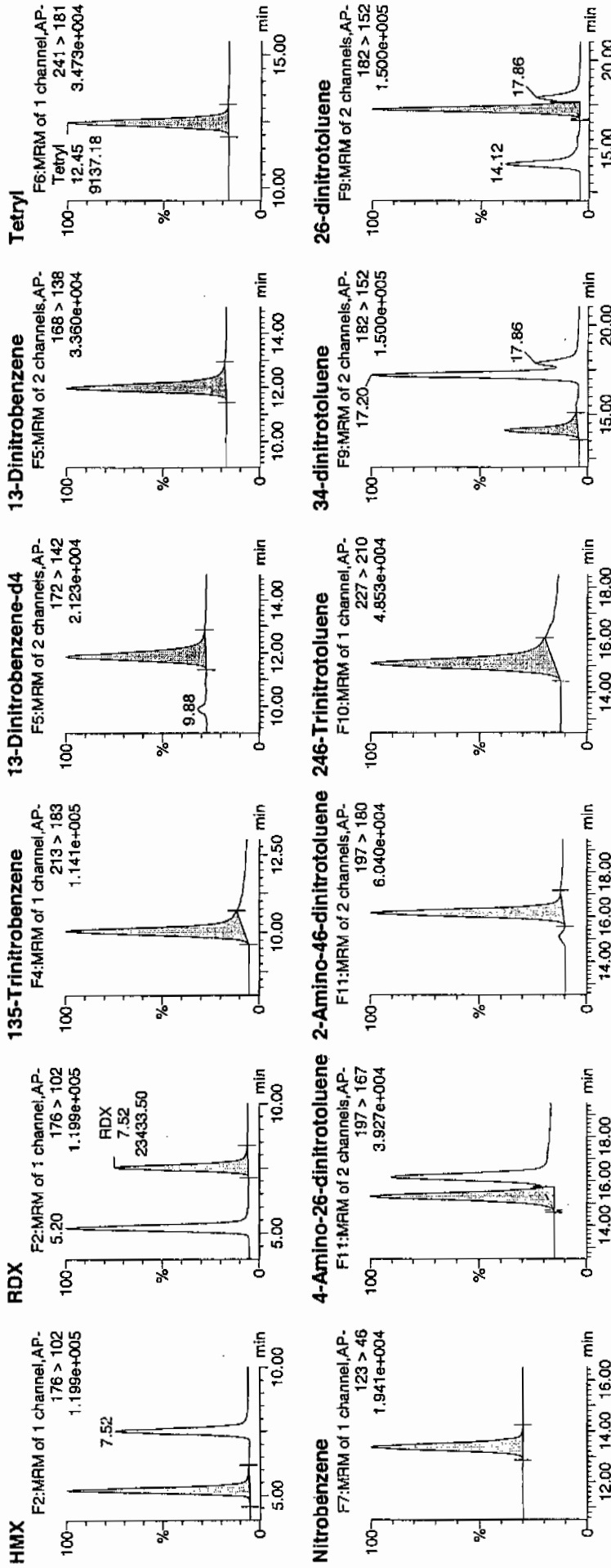
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Time: 08:52:42

ID: WXX100408-07CCV

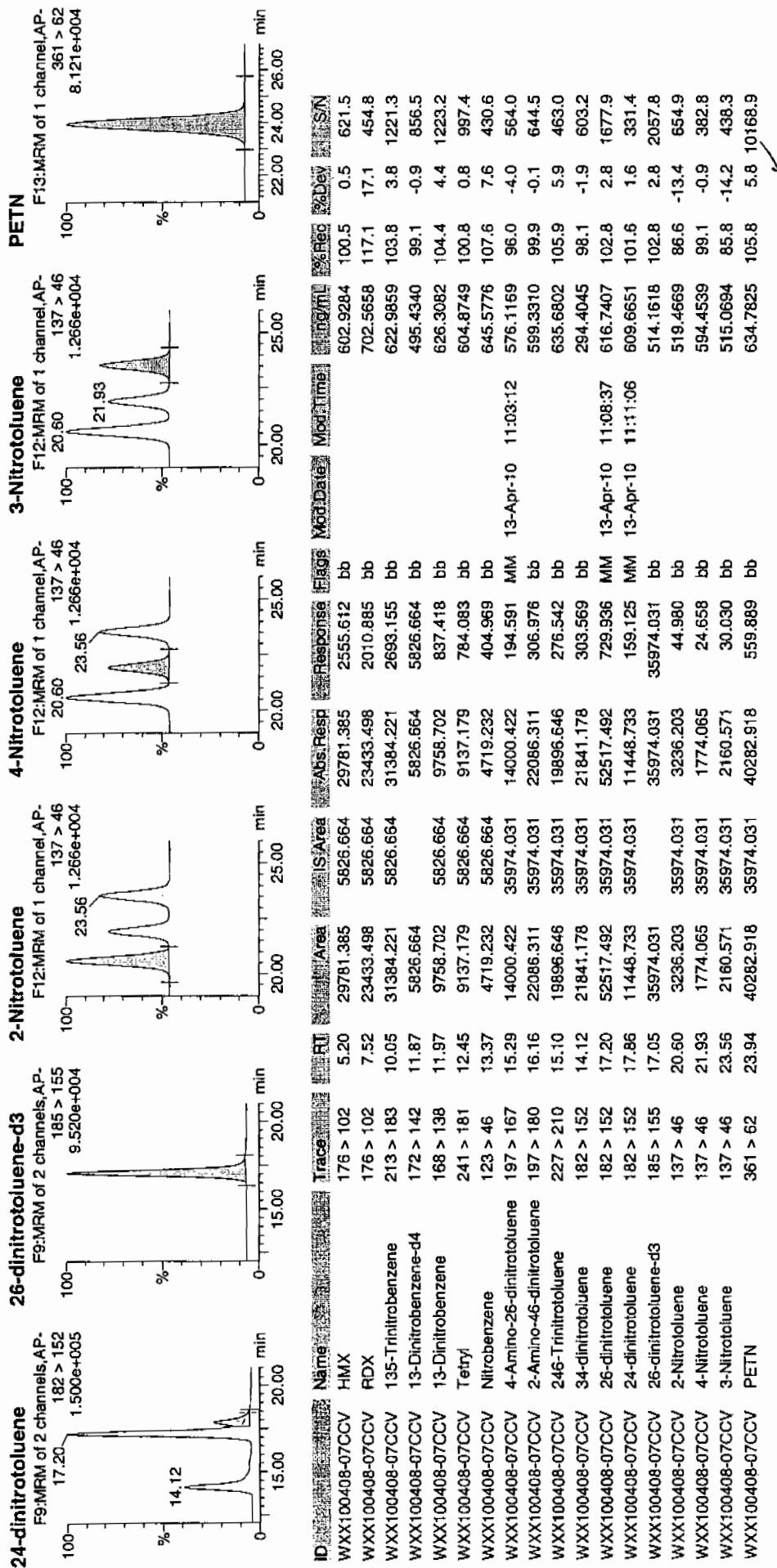
Vial: 1:1,B

11/13/10



Hmw 04/14/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



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

Handwritten: 4/13/10

Total 1615.8

Average 101.0

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): 10-2150

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

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\EXP0412038a

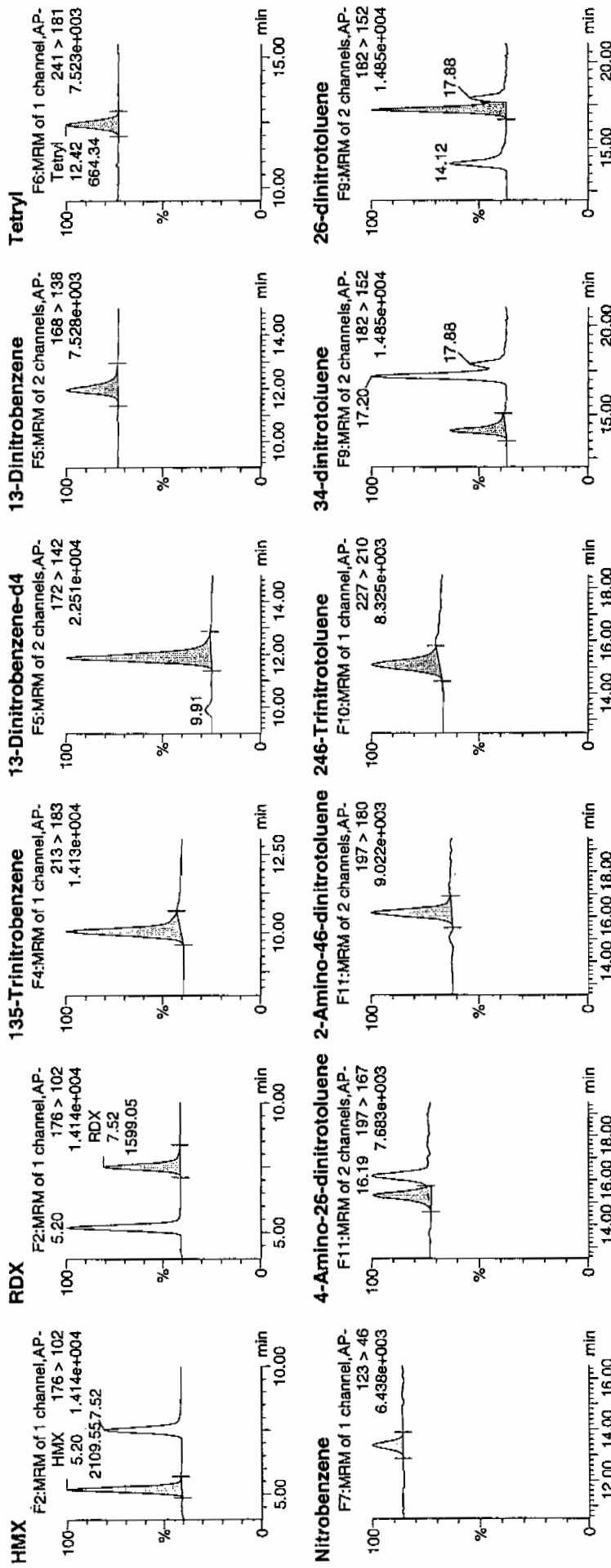
Date: 13-Apr-2010

Time: 09:51:47

ID: WXX100408-08CRI

Vial: 1:1,C

10/13/10
4/13/10



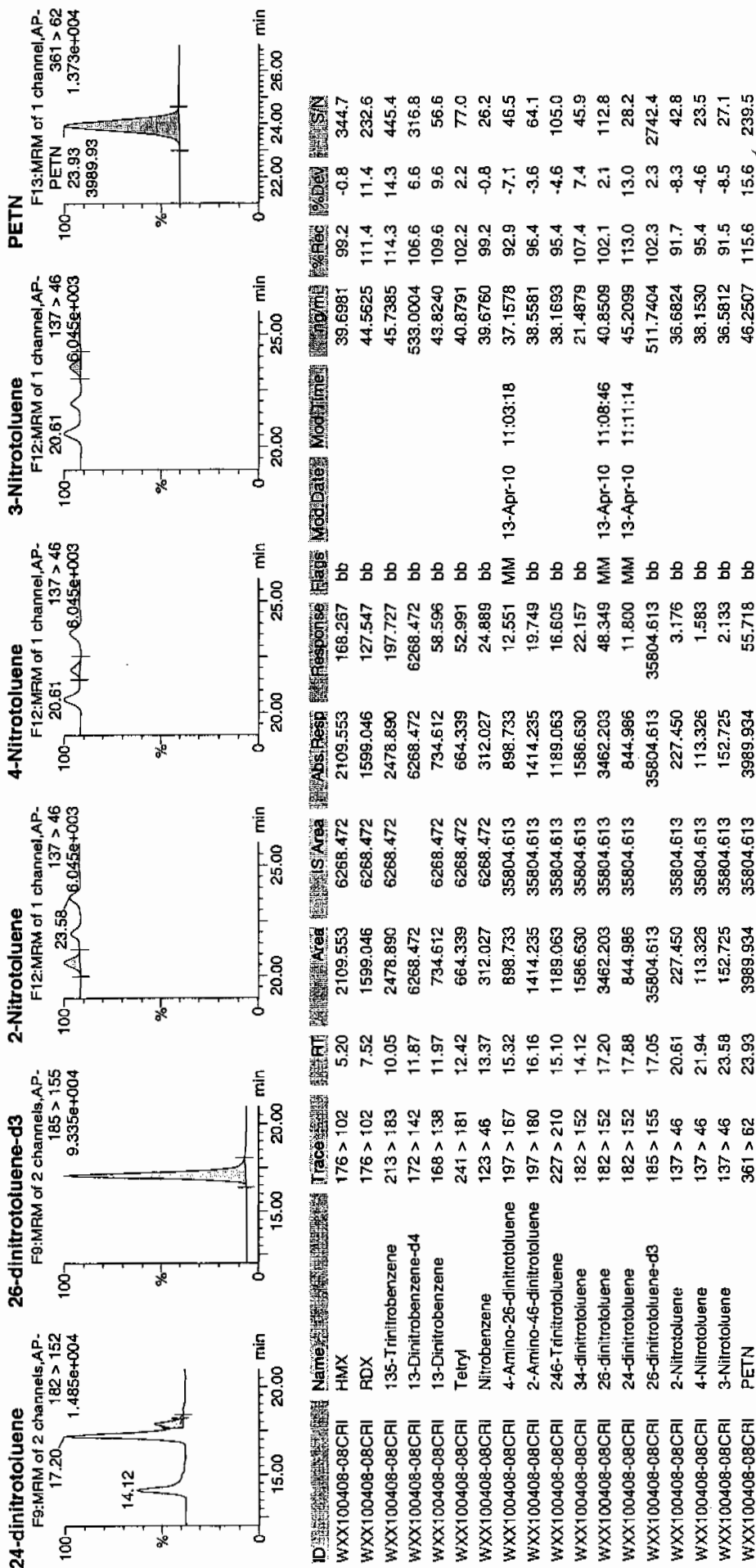
10/13/10
4/13/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Printed: Tue Apr 13 11:14:26 2010, Page 76 of 77



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

*MTT
4/13/10*

Total 1637.3

Average 102.3

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): 10-2150

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 21 of 75

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412049a

Date: 13-Apr-2010

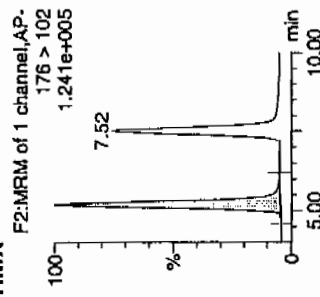
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ID: WXX100412-07CCV

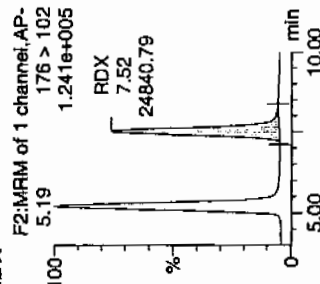
Vial: 1:1,B

WXX
4/14/10

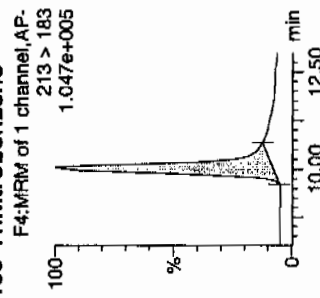
HMX



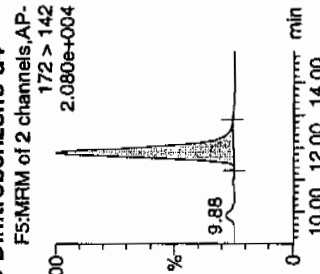
RDX



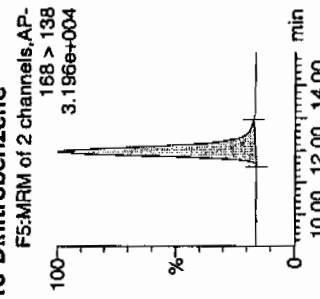
135-Trinitrobenzene



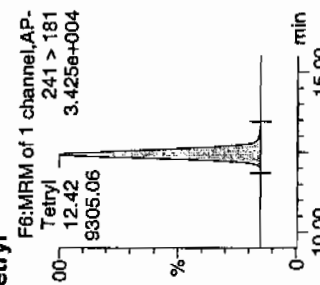
13-Dinitrobenzene-d4



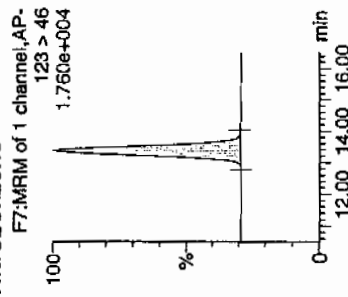
13-Dinitrobenzene



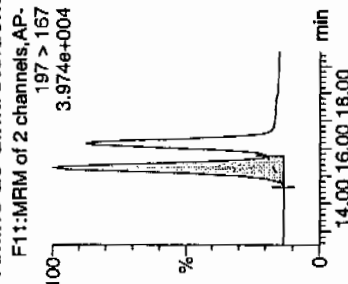
Tetryl



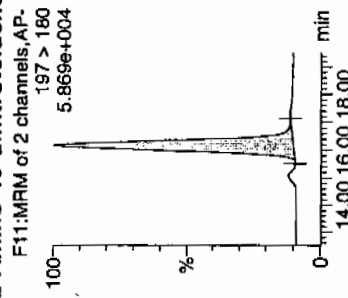
Nitrobenzene



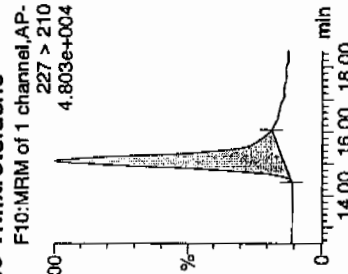
4-Amino-26-dinitrotoluene



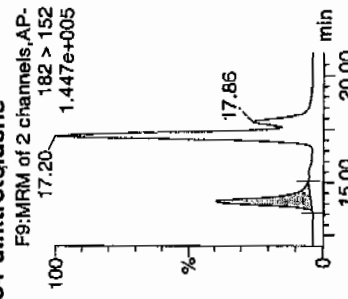
2-Amino-46-dinitrotoluene



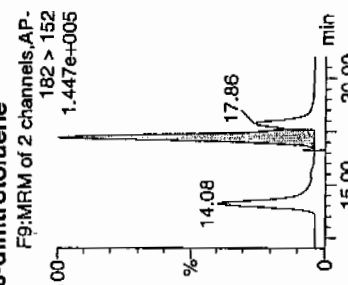
246-Trinitrotoluene



34-dinitrotoluene

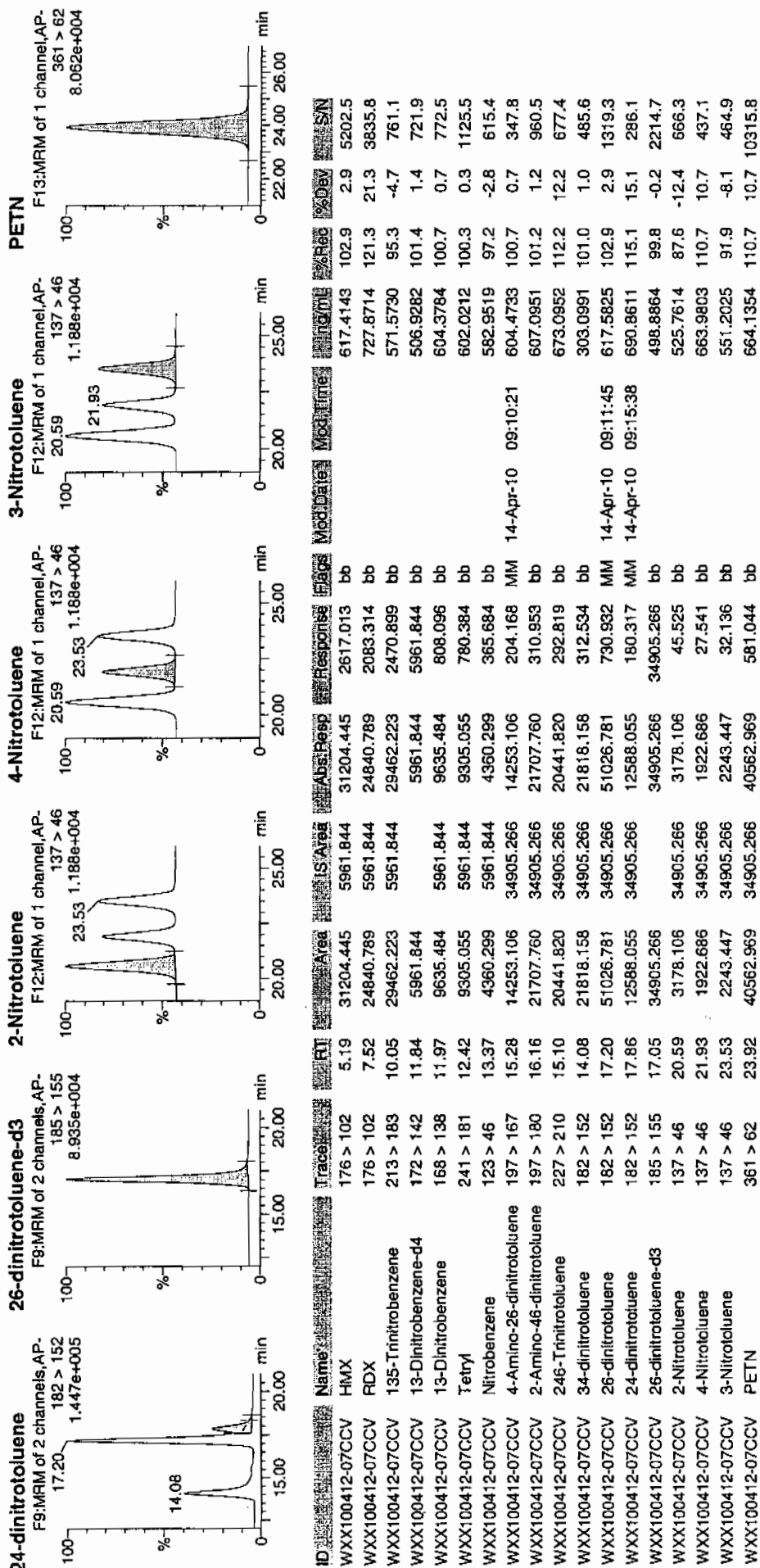


26-dinitrotoluene



Time 4/14/10

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



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

*NOT
4/14/10*

Total 1651.7

Average 103.2

ARM 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): 10-2150

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412051a

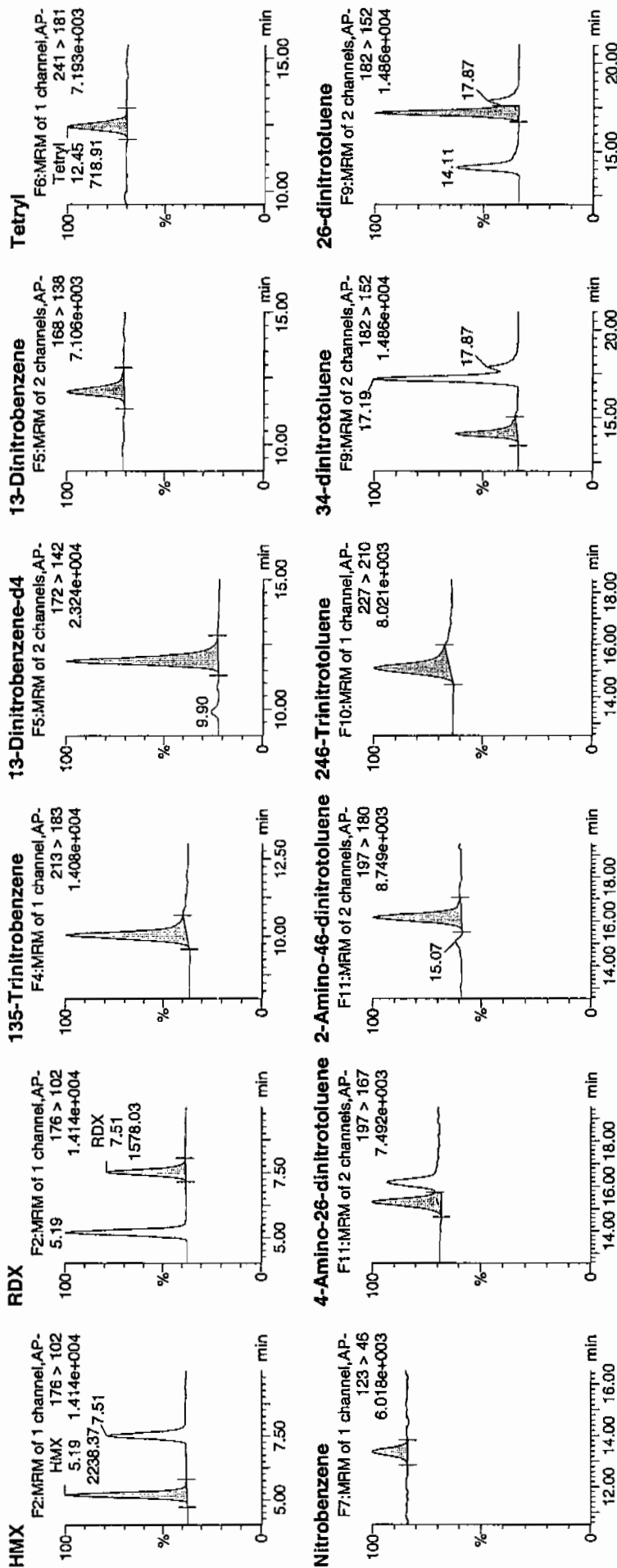
Date: 13-Apr-2010

Time: 16:15:40

ID: WXX100412-08CRI

Vial: 1:1,C

4/14/10
MMP



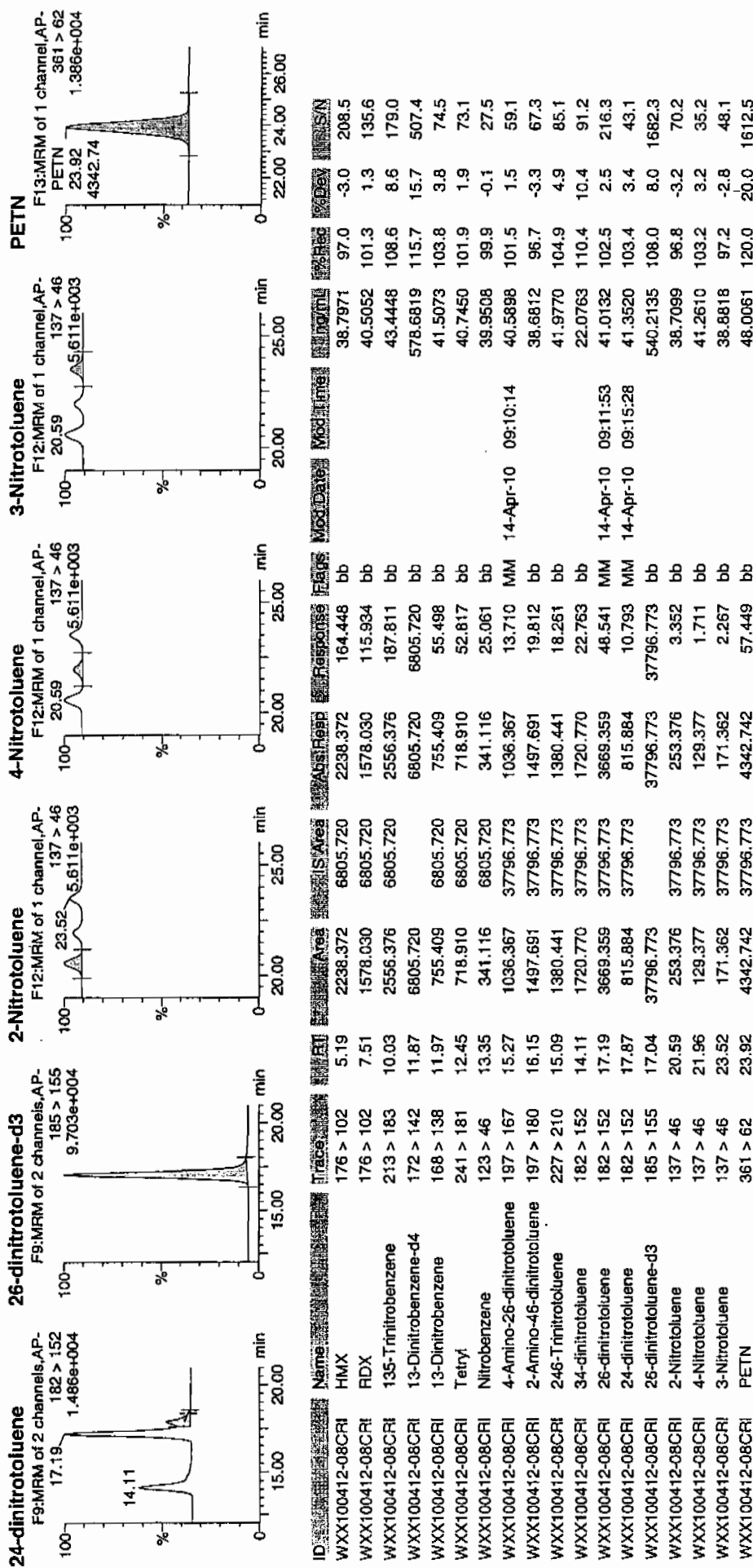
4/14/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Apr 14 09:18:04 2010, Page 26 of 75

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



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

*Not
4/14/10*

Total 1649.1

HM 04/14/10

Average 103.1

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): 10-2150

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

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0412060a

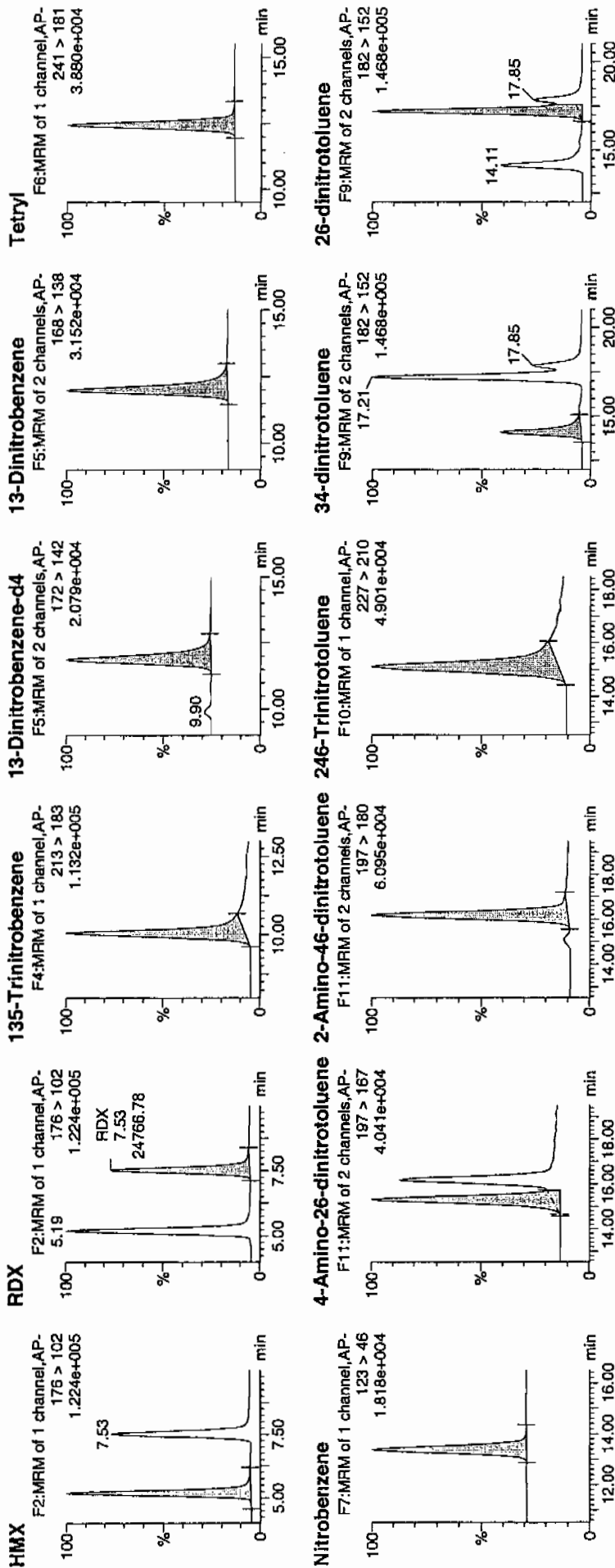
Date: 13-Apr-2010

Time: 20:41:14

ID: WXX100412-07CCV

Vial: 1:1,B

11/11/10
41/11/10



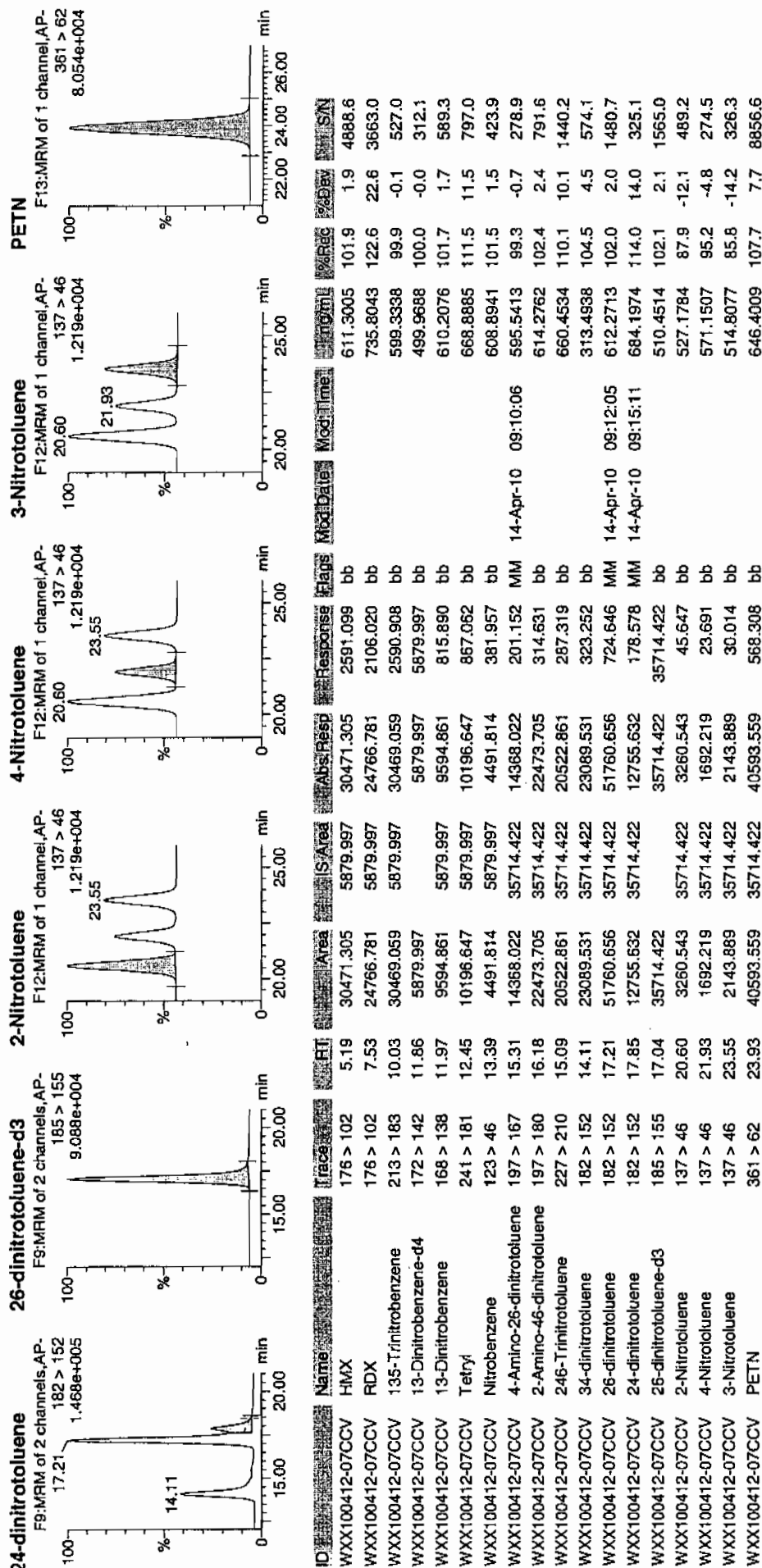
11/11/10
41/11/10

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.qtd, 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

4/14/10

Total 1648.0

Average 103.0

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): 10-2150

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

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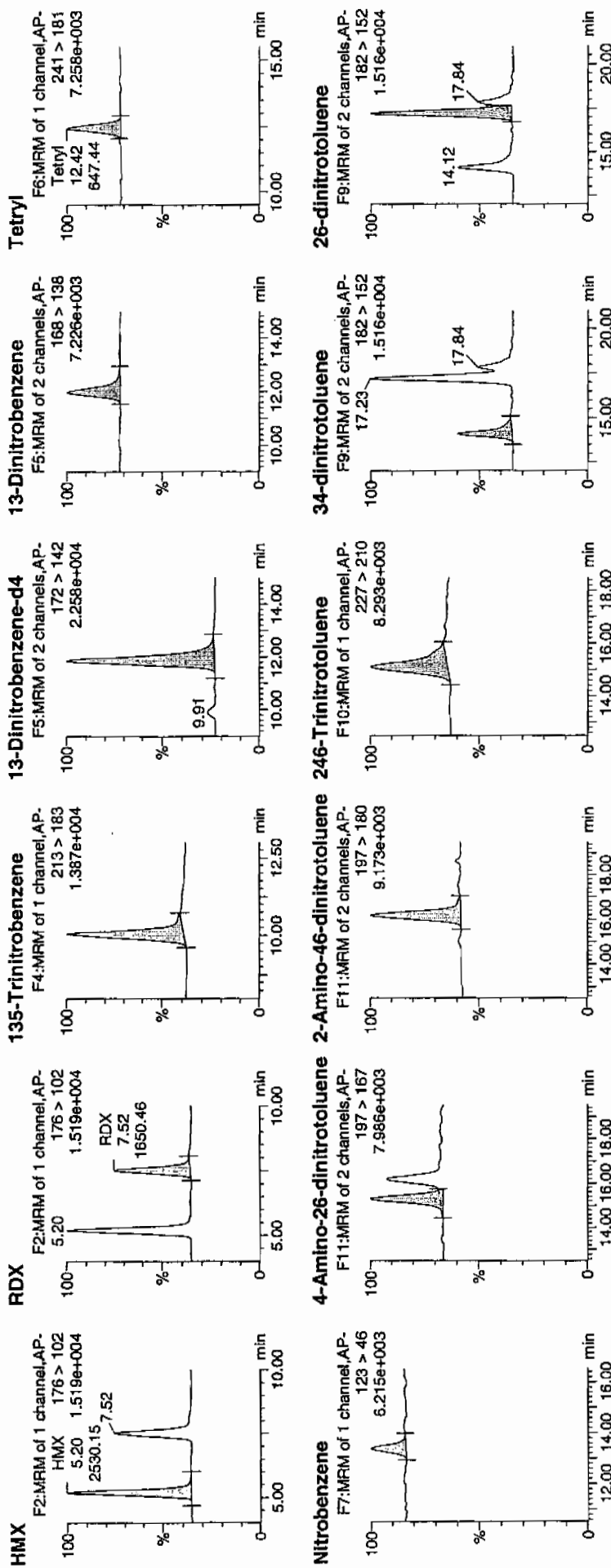
Date: 13-Apr-2010

Time: 21:40:18

ID: WXX100412-08CRI

Vial: 1:1,C

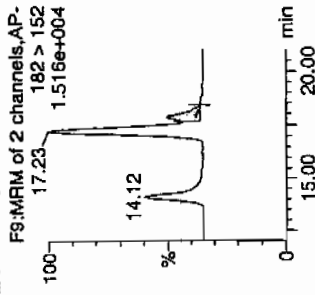
177
4/14/10



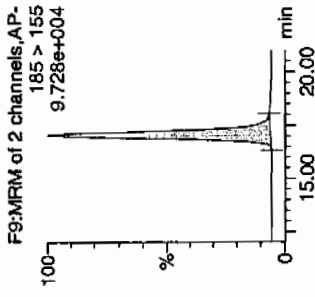
4/14/10

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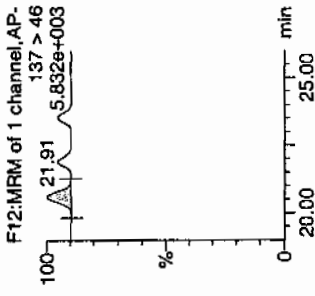
24-dinitrotoluene



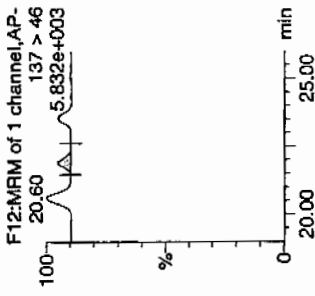
26-dinitrotoluene-d3



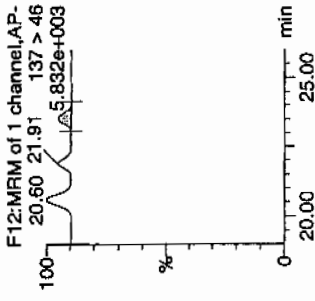
2-Nitrotoluene



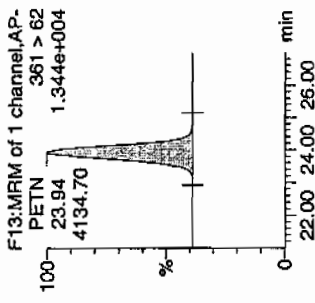
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Inp/mL	% Rec	% Dev	ISN
WXX100412-08CRI	HMX	176 > 102	5.20	2530.148	6551.026	2530.148	193.111	bb			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			44.0579	110.2	10.2	102.3
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	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 > 157	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	169.3
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	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	1.683	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

*WNT
4/14/10*

Total 1683.5

Average 105.2

done 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): 10-2150

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

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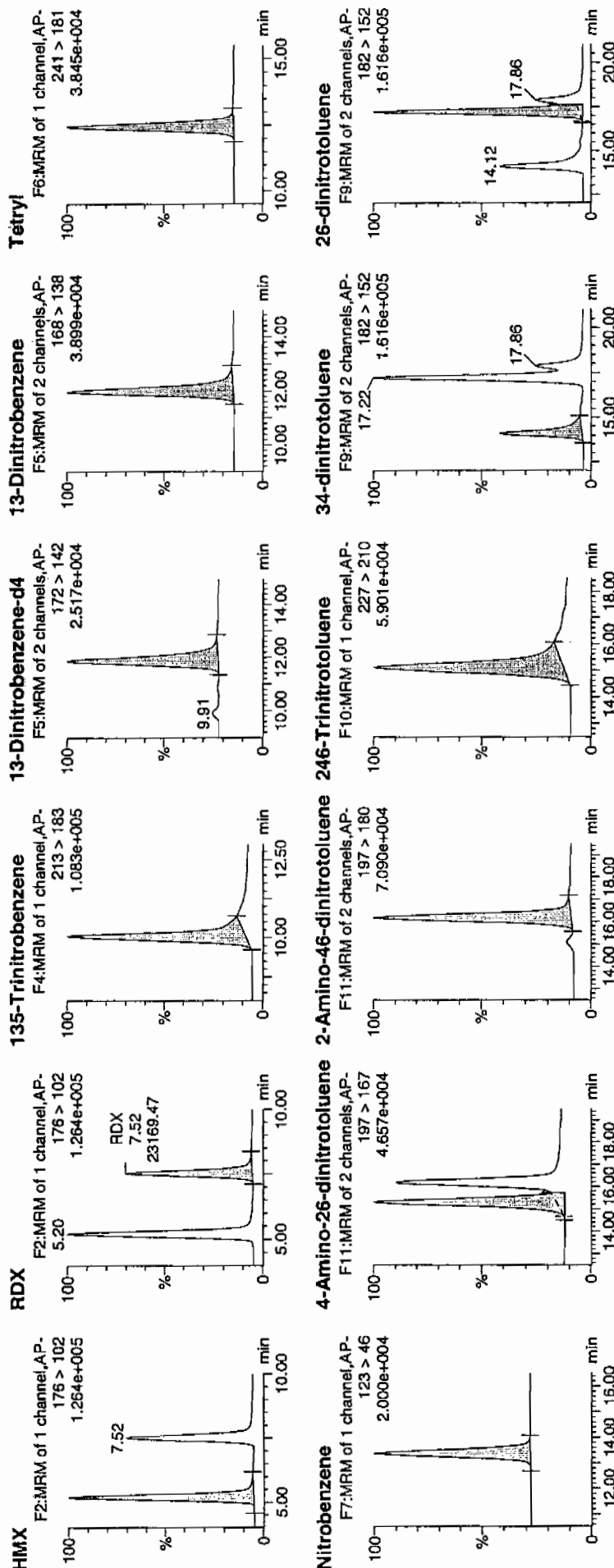
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ID: WXX100412-07CCV

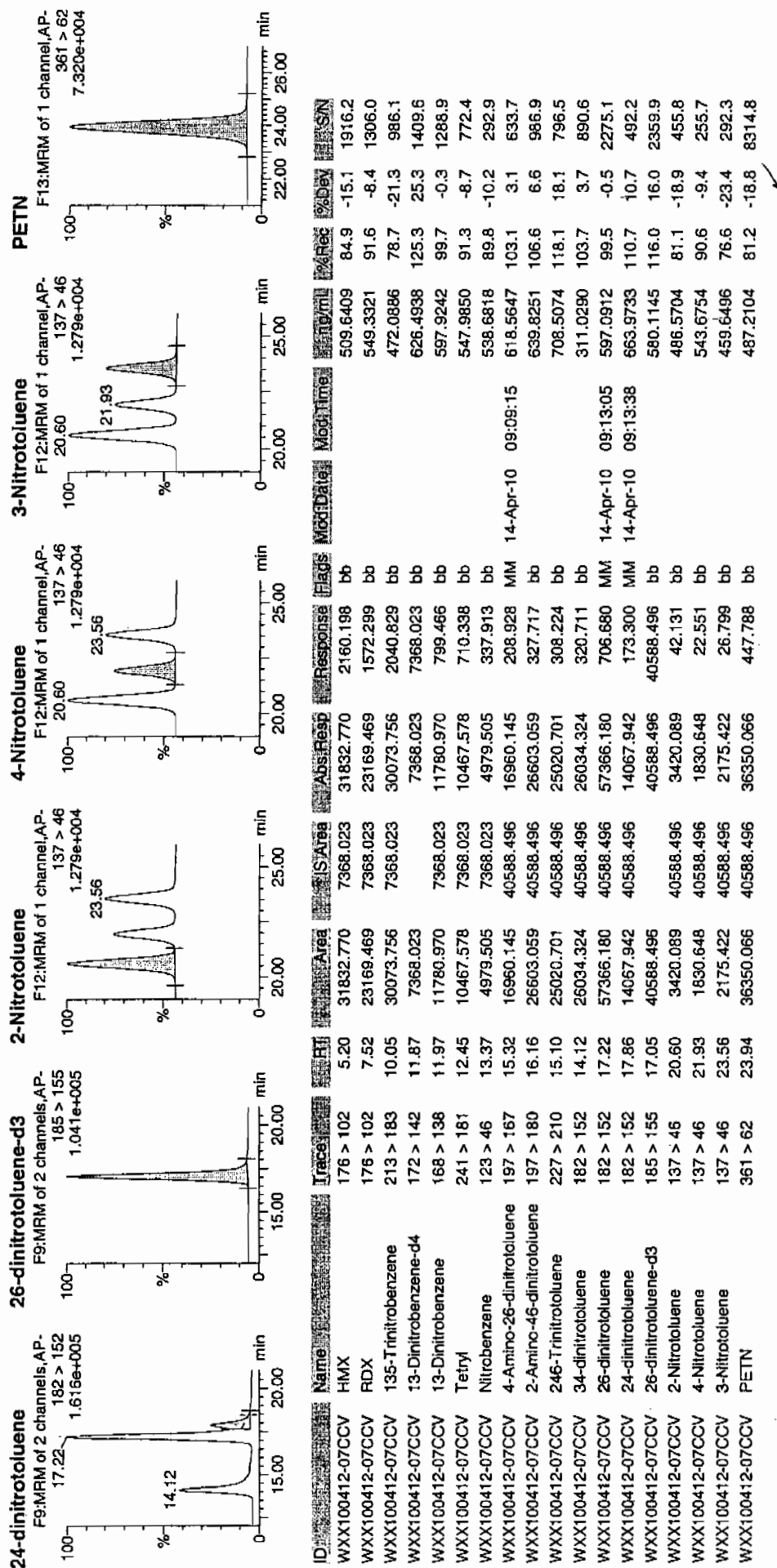
Vial: 1:1,B

WXX
4/14/10



WXX
4/14/10

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



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

Handwritten: 4/14/10

Total 1507.2

Handwritten: 4/14/10

Average 94.2

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): 10-2150

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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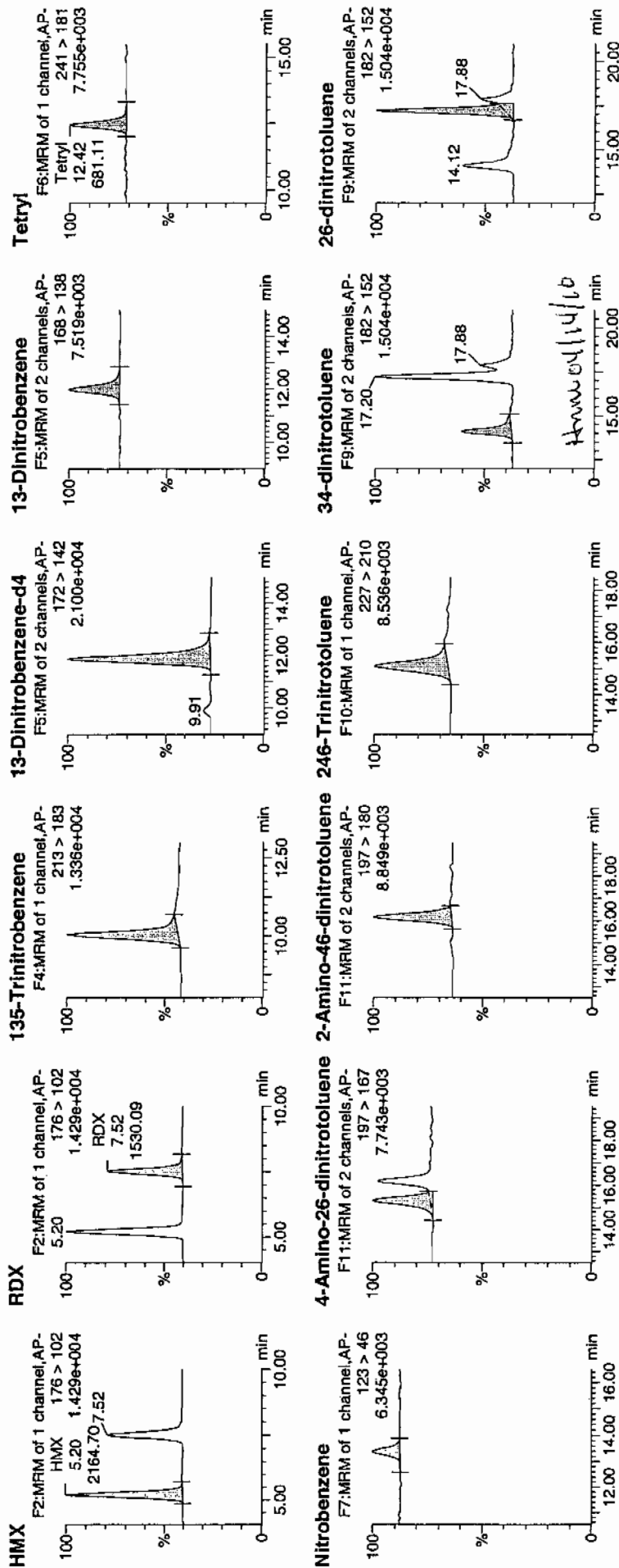
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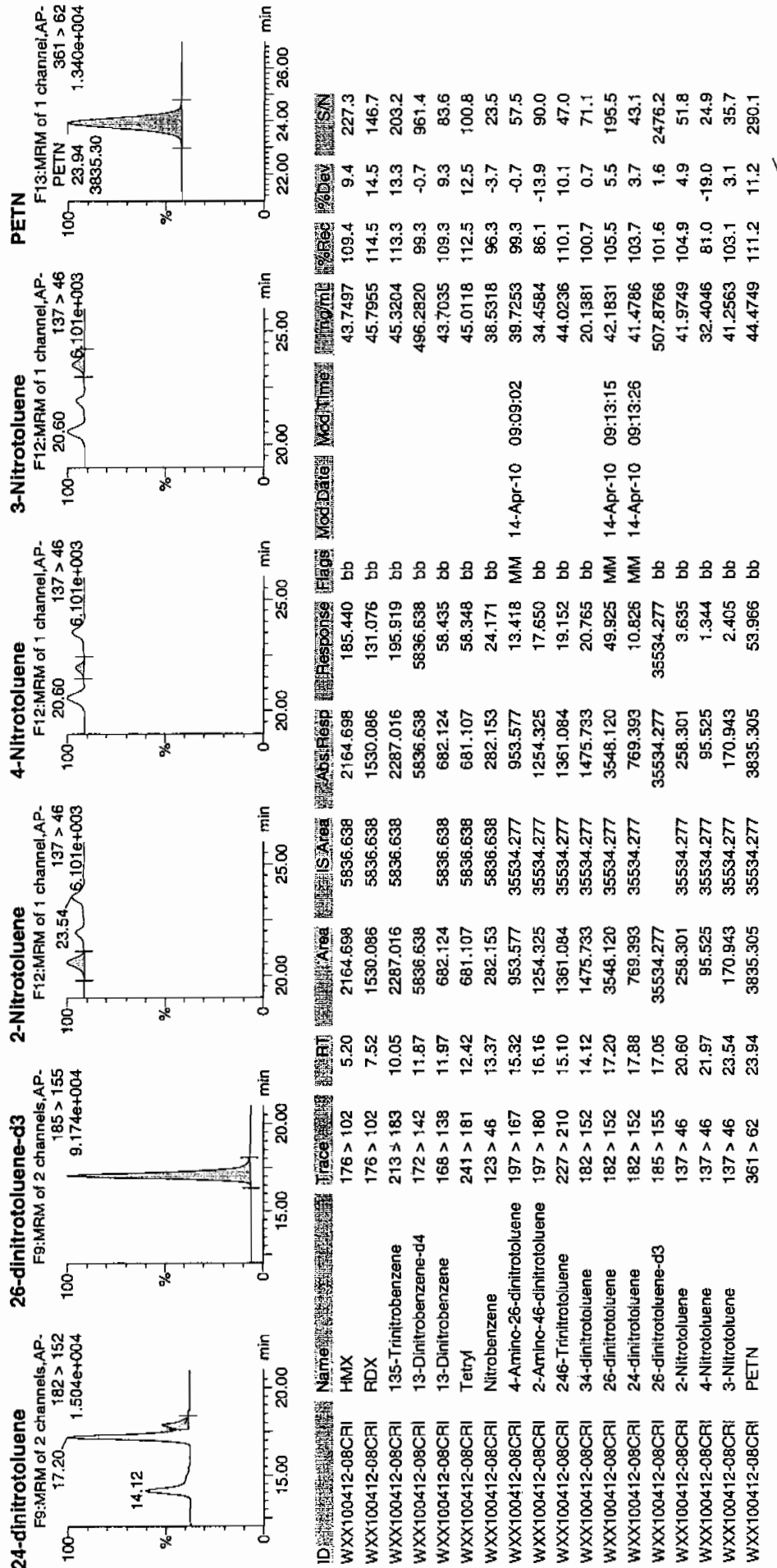
ID: WXX100412-08CRI

Vial: 1:1,C

10/14/10
 11/14/10



Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



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

THINK 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): 10-2150

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.qtd, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412086a

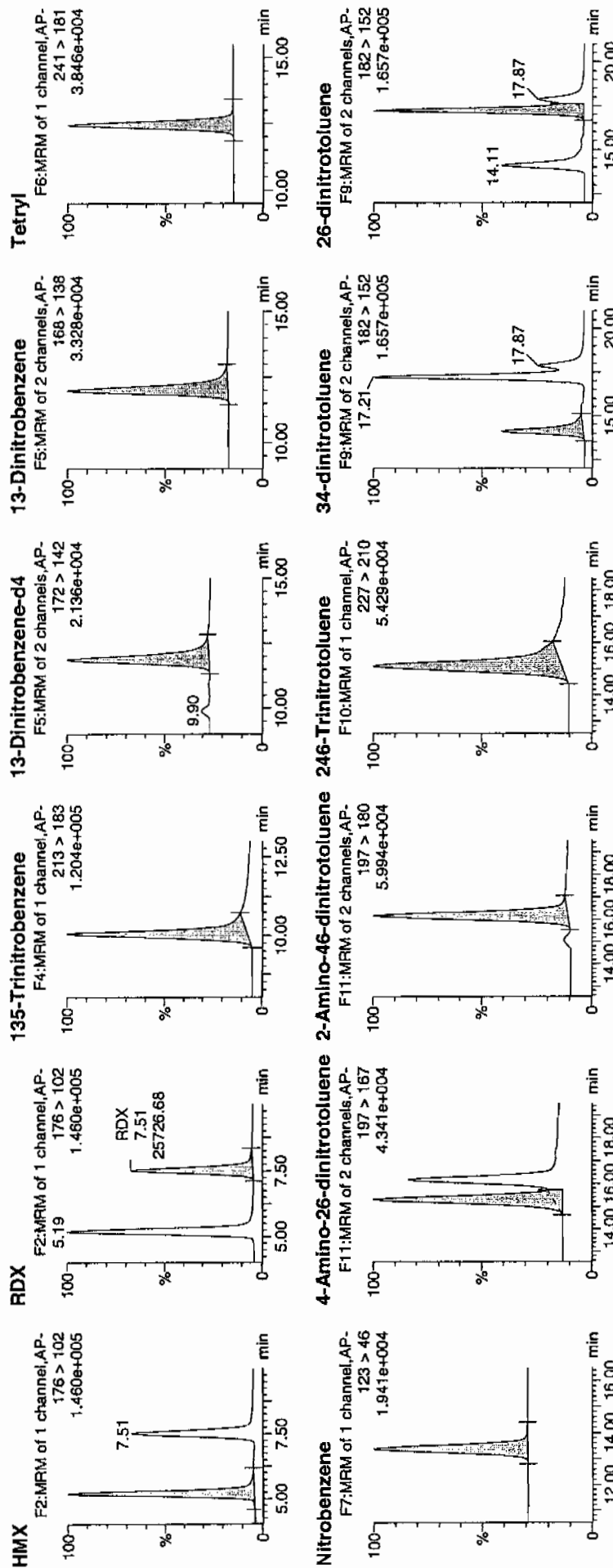
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ID: WXX100412-07CCV

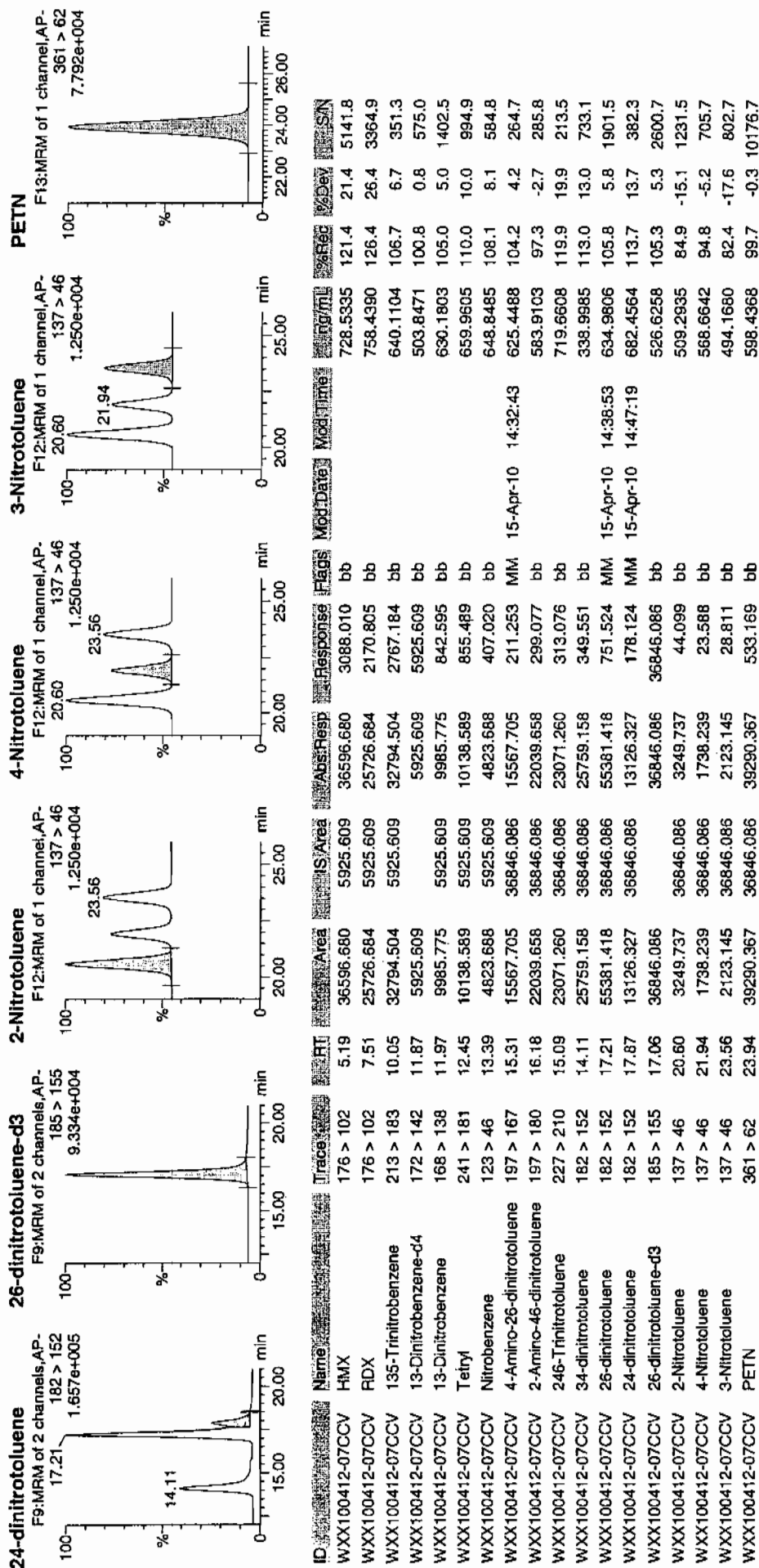
Vial: 1:1,B

WAT
4/15/10



WAT
4/15/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/14/10
 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

MTT
4/15/10

Total 1693.3

Average 105.8

HTMC 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): 10-2150

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 25 of 137

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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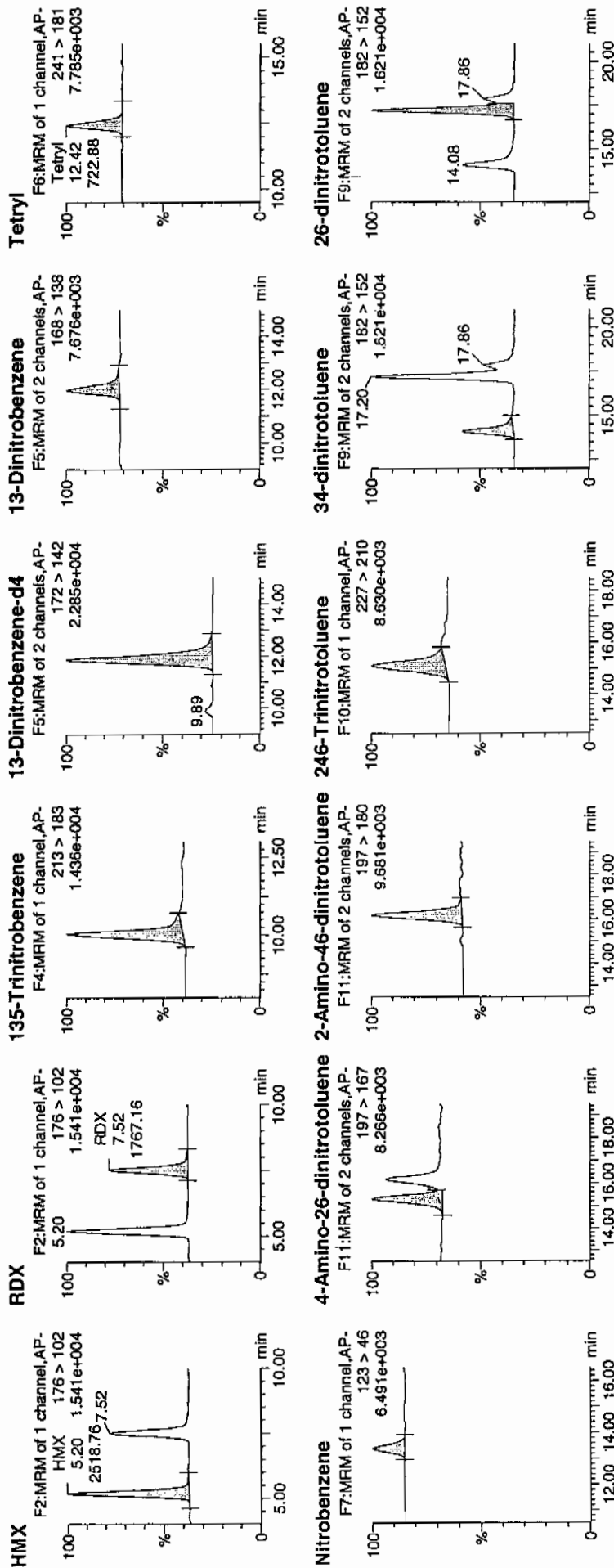
Date: 14-Apr-2010

Time: 10:27:15

ID: WXX100412-08CRI

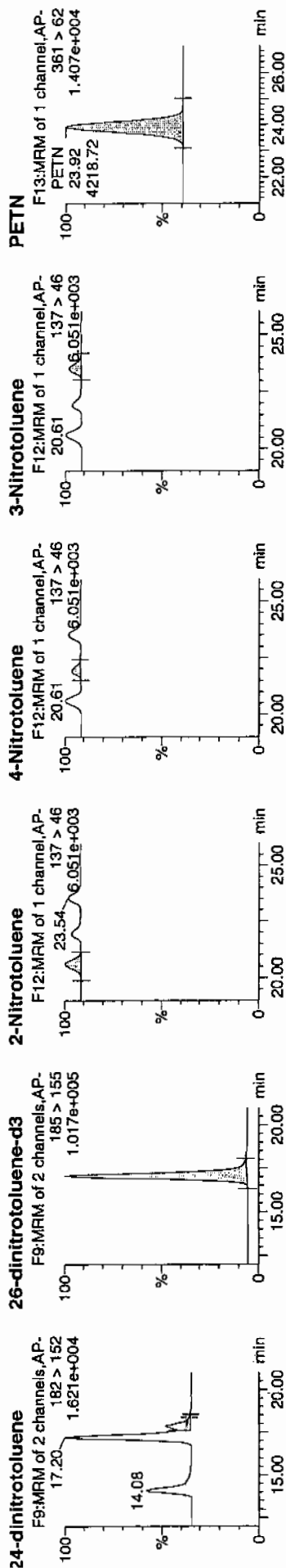
Vial: 1:1,C

u/p
4/15/10



u/p
4/15/10

Dataset: C:\MASSLYNX\New_Exp_PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	IS Area	AUS Reso	Response	Flags	Mod Date	Mod Time	Area	Dev	SN
WXX100412-08CRI	HMX	176 > 102	5.20	2518.764	6608.135	2518.764	190.581	bb			44.9624	112.4	12.4
WXX100412-08CRI	RDX	176 > 102	7.52	1767.162	6608.135	1767.162	133.711	bb			46.7162	116.8	16.8
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2588.661	6608.135	2588.661	195.869	bb			45.3089	113.3	13.3
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6608.135	6608.135	6608.135	6608.135	bb			561.8815	112.4	12.4
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	775.124	6608.135	775.124	58.649	bb			43.8640	109.7	9.7
WXX100412-08CRI	Tetryl	241 > 181	12.42	722.880	6608.135	722.880	54.696	bb			42.1950	105.5	5.5
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	342.945	6608.135	342.945	25.949	bb			41.3659	103.4	3.4
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
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
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1356.600	39469.445	1356.600	17.185	bb			39.5038	98.8	-1.2
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.08	1595.757	39469.445	1595.757	20.215	bb			19.6048	98.0	-2.0
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
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
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	39469.445	39469.445	39469.445	39469.445	bb			564.1203	112.8	12.8
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.61	248.237	39469.445	248.237	3.145	bb			36.3176	90.8	-9.2
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.93	114.557	39469.445	114.557	1.451	bb			34.9863	87.5	-12.5
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.54	181.611	39469.445	181.611	2.301	bb			39.4609	98.7	-1.3
WXX100412-08CRI	PETN	361 > 62	23.92	4218.715	39469.445	4218.715	53.443	bb			43.9446	109.9	9.9

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

*Left
4/15/10*

Total 1664.5

Average 104.0

Home 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): 10-2150

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412099a

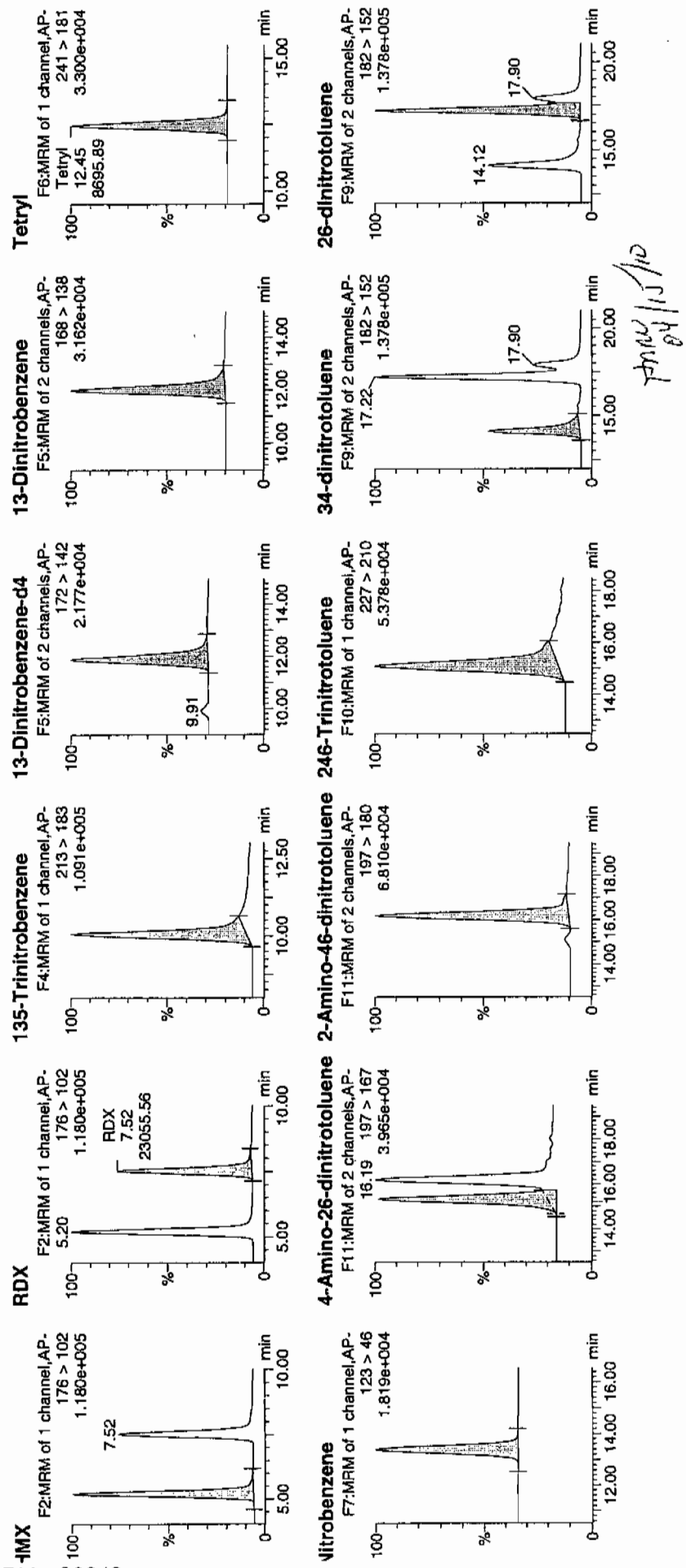
Date: 14-Apr-2010

Time: 15:51:48

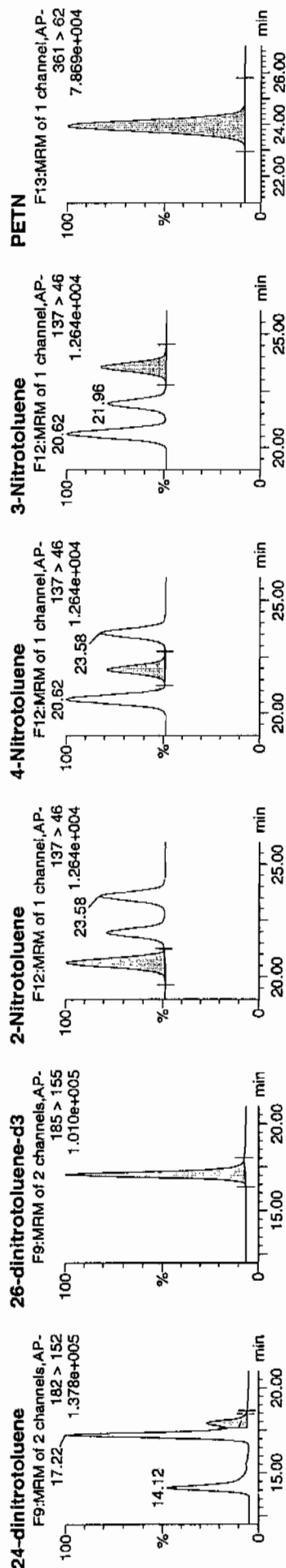
D: WXX100412-07CCV

/Ial: 1:1,B

10/1/10
10/1/10



Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Conc	% Rec	% Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.20	29129.906	5781.517	29129.906	2519.227	bb			584.3443	99.1	-0.9	3427.6
WXX100412-07CCV	RDX	176 > 102	7.52	23055.561	5781.517	23055.561	1993.902	bb			696.6325	116.1	16.1	2523.6
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	29348.527	5781.517	29348.527	2538.134	bb			587.1260	97.9	-2.1	1074.2
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5781.517		5781.517	5781.517	bb			491.5952	98.3	-1.7	444.6
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	12.00	9120.854	5781.517	9120.854	788.794	bb			589.9426	98.3	-1.7	565.8
WXX100412-07CCV	Tetryl	241 > 181	12.45	8695.887	5781.517	8695.887	752.042	bb			580.1570	96.7	-3.3	395.8
WXX100412-07CCV	Nitrobenzene	123 > 46	13.41	4245.711	5781.517	4245.711	367.180	bb			585.3366	97.6	-2.4	461.0
WXX100412-07CCV	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
WXX100412-07CCV	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
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	22049.445	37565.328	22049.445	293.481	bb			674.6187	112.4	12.4	708.4
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.12	24181.838	37565.328	24181.838	321.864	bb			312.1473	104.0	4.0	291.1
WXX100412-07CCV	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
WXX100412-07CCV	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
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	37565.328		37565.328	37565.328	bb			536.9056	107.4	7.4	2208.7
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.62	3080.883	37565.328	3080.883	41.007	bb			473.5865	78.9	-21.1	632.2
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.96	1674.595	37565.328	1674.595	22.289	bb			537.3538	89.6	-10.4	366.5
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.58	1994.627	37565.328	1994.627	26.549	bb			455.3662	75.9	-24.1	410.8
WXX100412-07CCV	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

*1157
4/15/10*

Total 1563.0

HPM 04/15/10

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): 10-2150

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412101a

Date: 14-Apr-2010

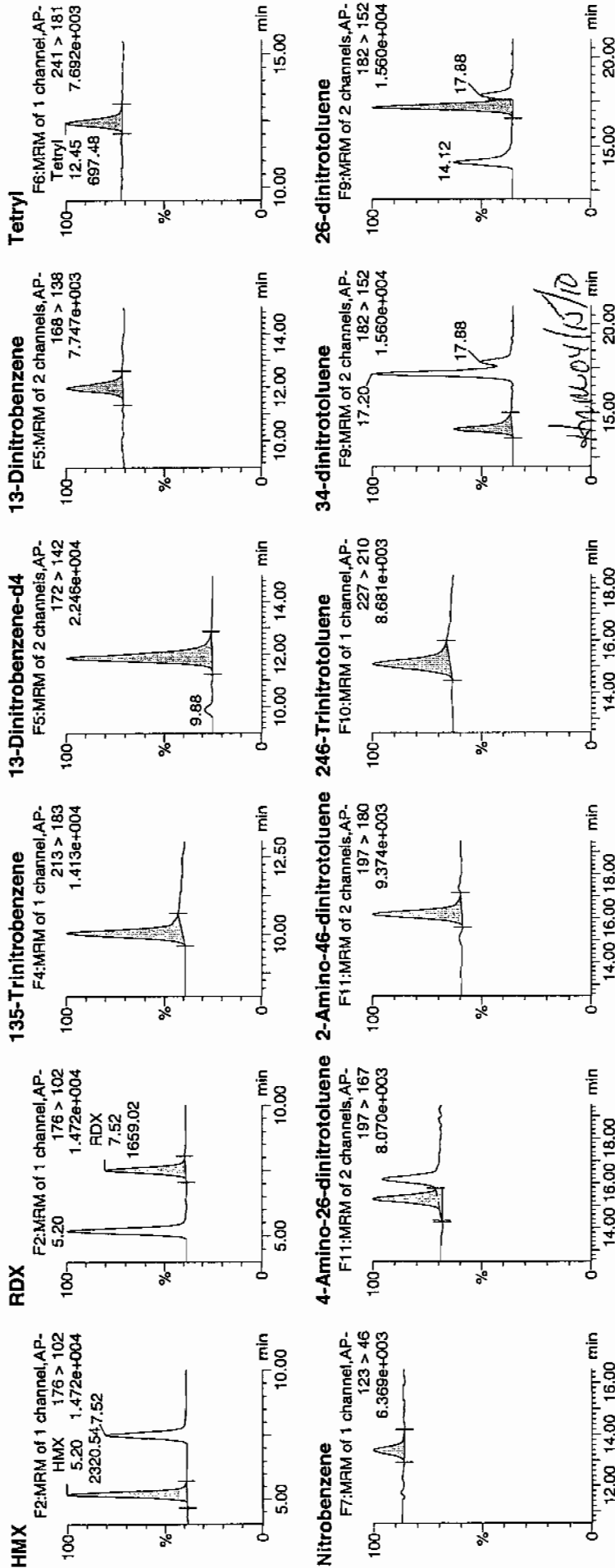
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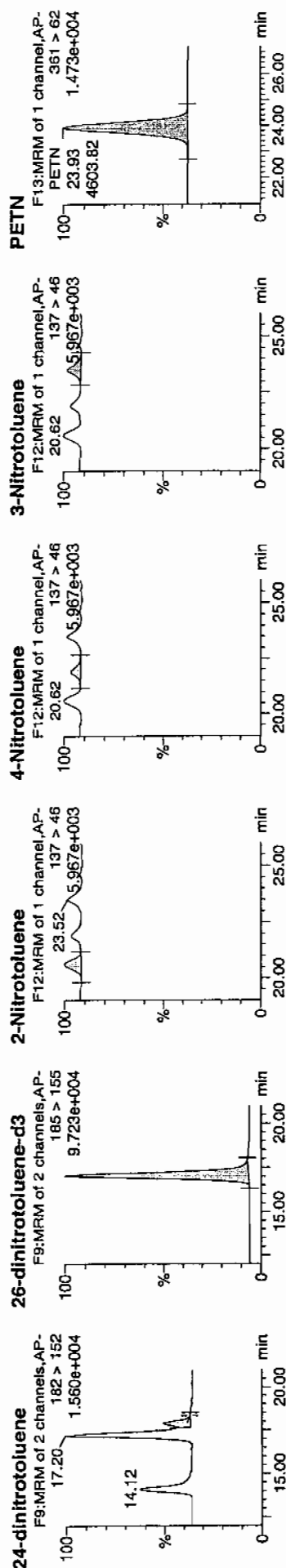
ID: WXX100412-08CRI

Vial: 1:1,C

10/15/10
MJP

Page 1715 of 2043





Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	From	% Rec	% Dev	S/N
HMX	176 > 102	5.20	2920.539	6386.701	2320.539	181.670	bb			42.8601	107.2	7.2	262.8
RDX	176 > 102	7.52	1659.023	6386.701	1659.023	129.881	bb			45.3780	113.4	13.4	175.9
135-Trinitrobenzene	213 > 183	10.05	2484.099	6386.701	2484.099	194.474	bb			44.9862	112.5	12.5	388.0
13-Dinitrobenzene-d4	172 > 142	11.87	6386.701		6386.701	6386.701	bb			543.0532	108.6	8.6	950.1
13-Dinitrobenzene	168 > 138	11.97	733.119	6386.701	733.119	57.394	bb			42.9254	107.3	7.3	81.3
Tetryl	241 > 181	12.45	697.482	6386.701	697.482	54.604	bb			42.1240	105.3	5.3	76.5
Nitrobenzene	123 > 46	13.37	329.159	6386.701	329.159	25.769	bb			41.0796	102.7	2.7	40.2
4-Amino-26-dinitrotoluene	197 > 167	15.29	1115.476	37768.832	1115.476	14.767	MM	15-Apr-10	14:33:30	43.7205	109.3	9.3	61.9
2-Amino-46-dinitrotoluene	197 > 180	16.19	1620.452	37768.832	1620.452	21.452	bb			41.8928	104.7	4.7	197.1
246-Trinitrotoluene	227 > 210	15.10	1420.421	37768.832	1420.421	18.804	bb			43.2246	108.1	8.1	88.1
34-dinitrotoluene	182 > 152	14.12	1726.544	37768.832	1726.544	22.857	bb			22.1667	110.8	10.8	80.9
26-dinitrotoluene	182 > 152	17.20	3732.682	37768.832	3732.682	49.415	MM	15-Apr-10	14:39:39	41.7518	104.4	4.4	193.1
24-dinitrotoluene	182 > 152	17.88	834.260	37768.832	834.260	11.044	MM	15-Apr-10	14:46:19	42.3147	105.8	5.8	43.0
26-dinitrotoluene-d3	185 > 155	17.05	37768.832		37768.832	37768.832	bb			539.8142	108.0	8.0	2120.5
2-Nitrotoluene	137 > 46	20.62	250.264	37768.832	250.264	3.313	bb			38.2627	95.7	-4.3	37.0
4-Nitrotoluene	137 > 46	21.91	137.262	37768.832	137.262	1.817	bb			43.8061	109.5	9.5	21.5
3-Nitrotoluene	137 > 46	23.52	193.866	37768.832	193.866	2.566	bb			44.0204	110.1	10.1	29.9
PETN	361 > 62	23.93	4603.820	37768.832	4603.820	60.947	bb			51.5596	128.9	28.9	1430.7

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

MTT
4/14/10

Total 1735.7

Average 108.5

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): 10-2150

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

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

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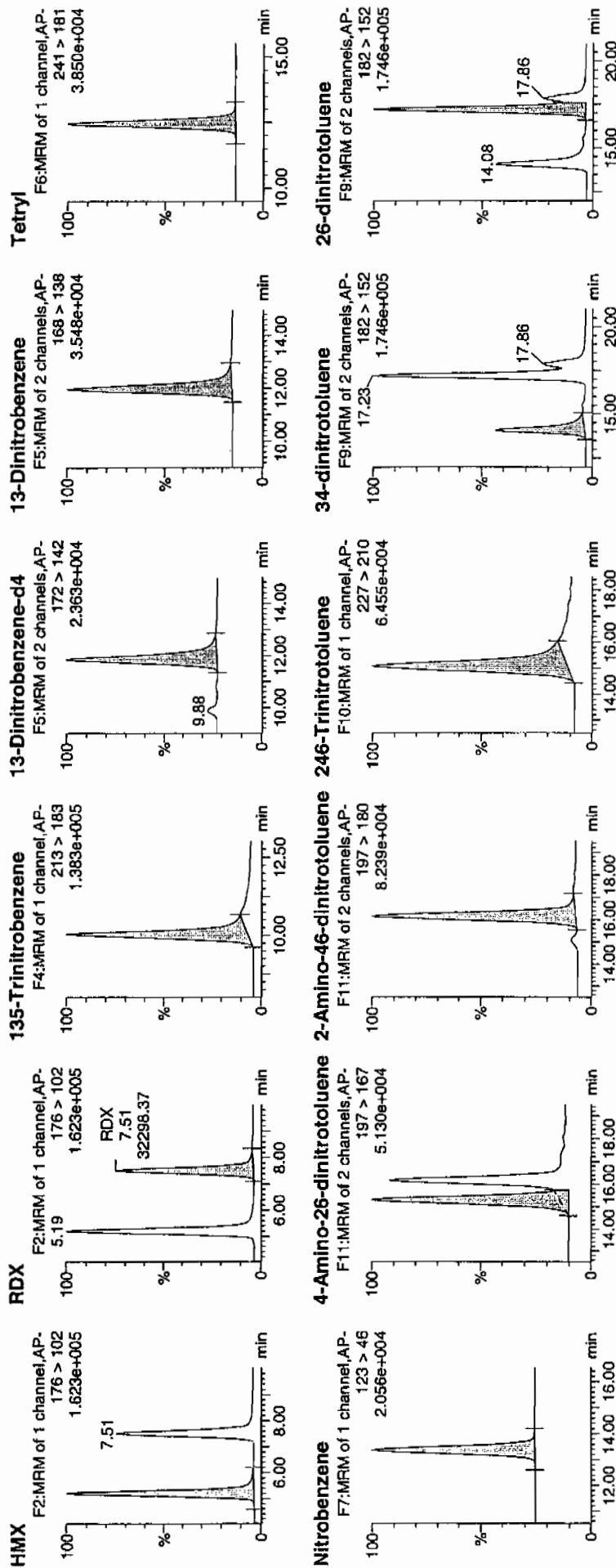
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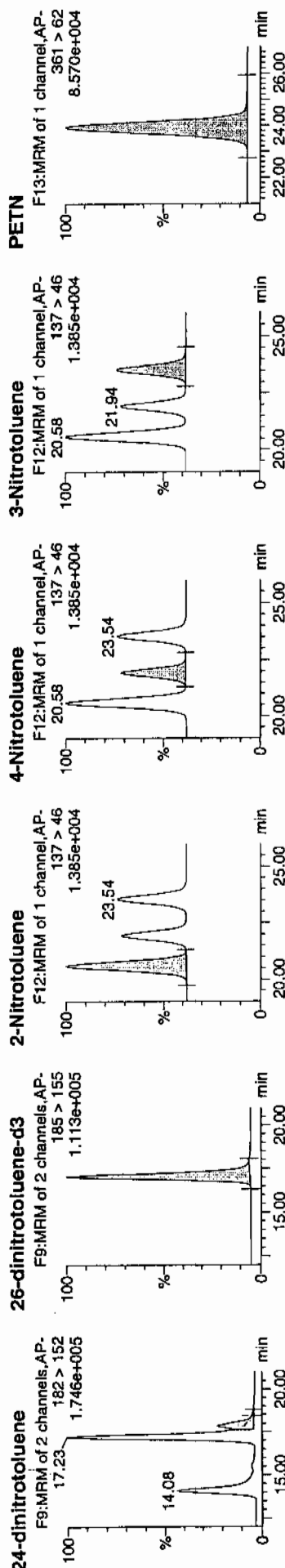
ID: WXX100412-07CCV

Vial: 1:1,B

WXX
4/15/10



Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	S:Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Mod:User	%Rec	%Dev	S/N	
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	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		616.0661	102.7	2.7	1469.8
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	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				550.8840	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

Handwritten signature

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): 10-2150

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

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412112a

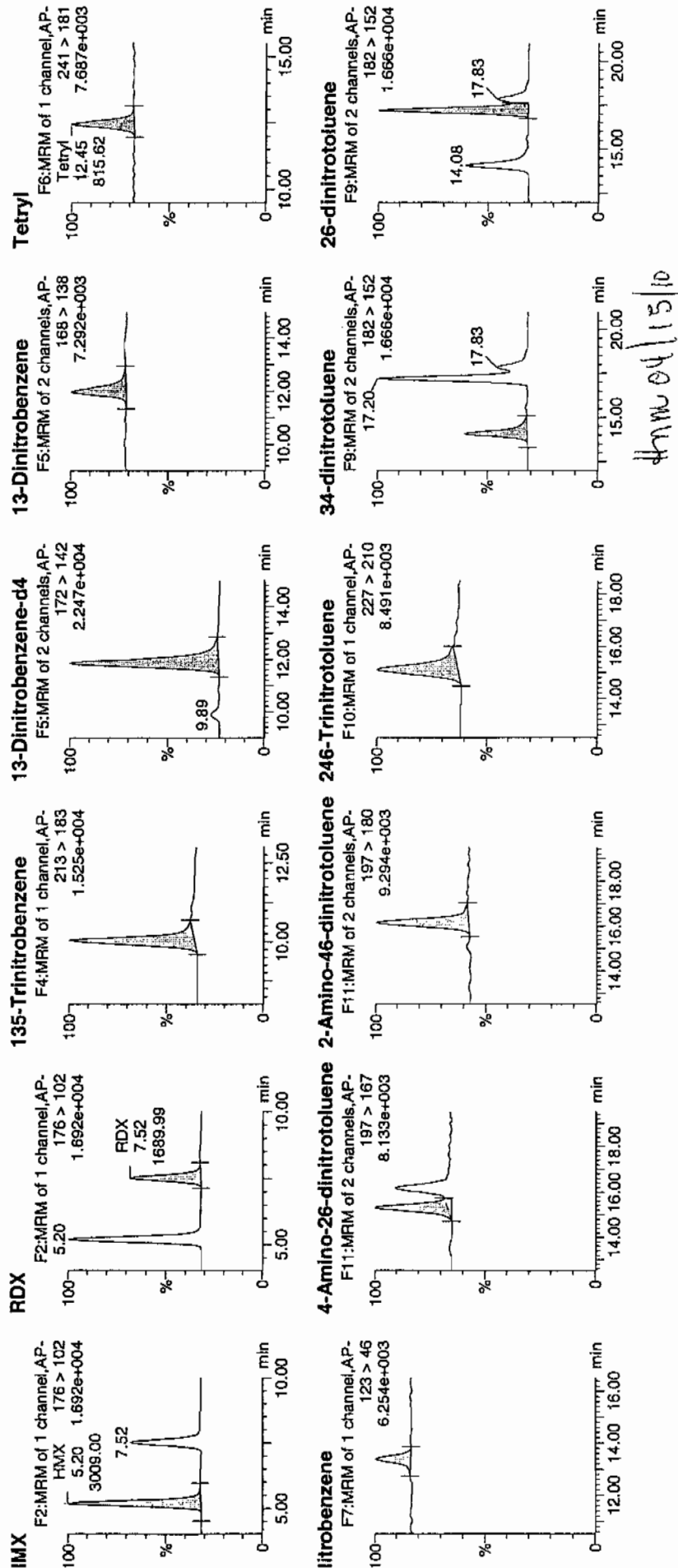
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Time: 22:15:20

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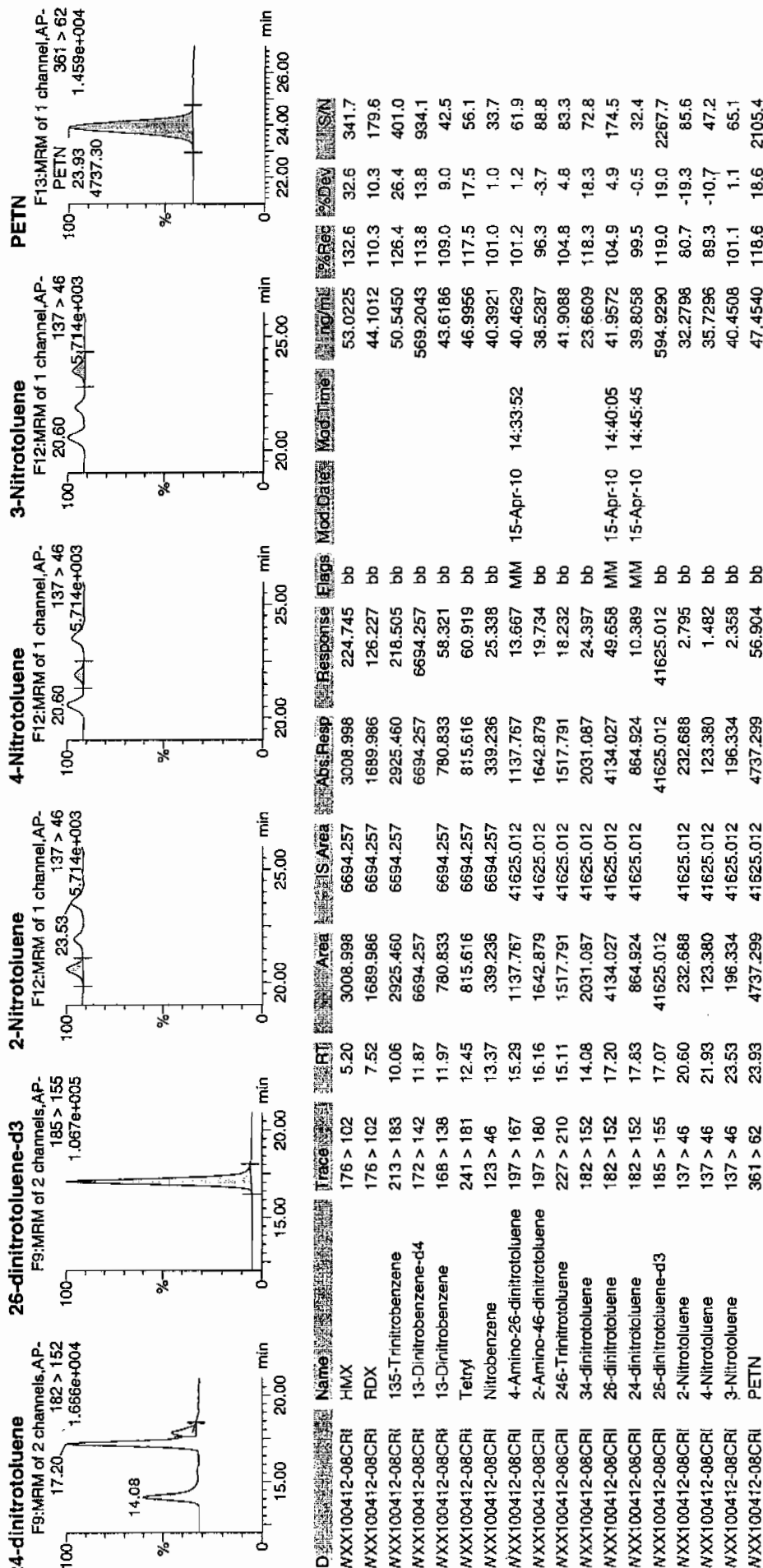


Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 74 of 137

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



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

118.7-04/15/10

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): 10-2150

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

Quantify Sample Report
 JEL 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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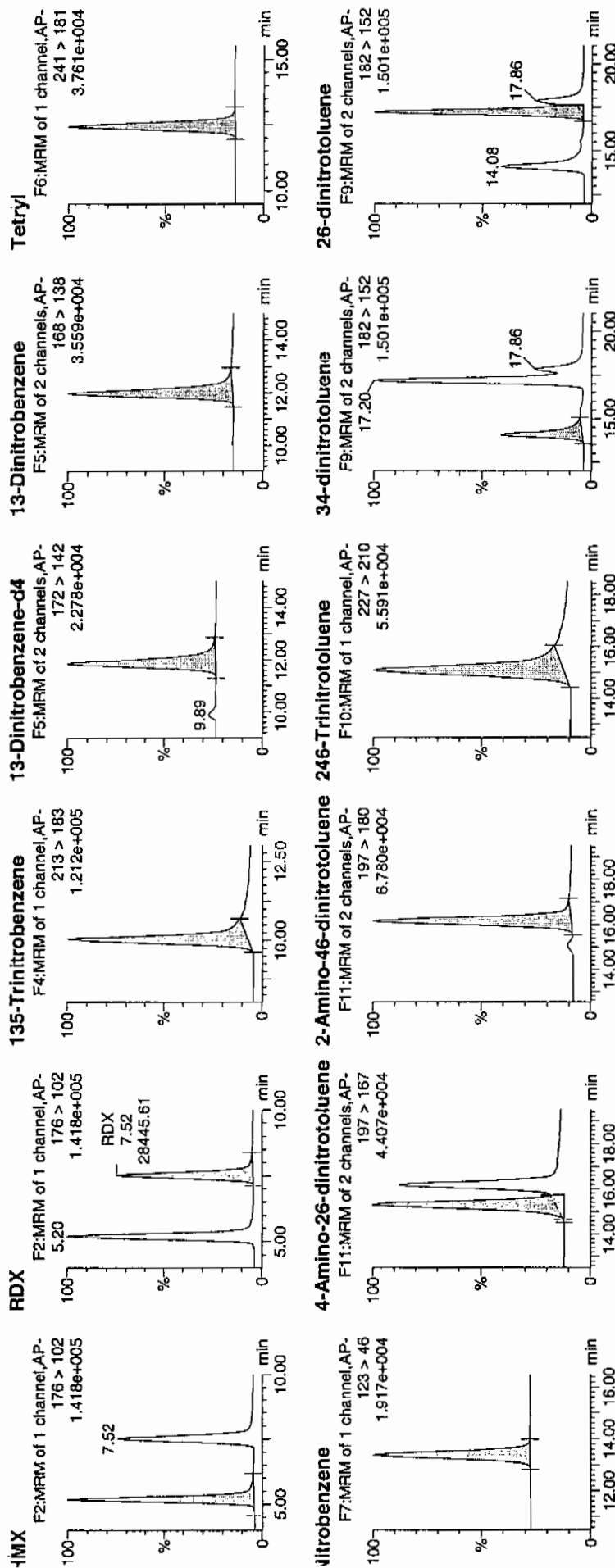
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WXX
 4/15/10



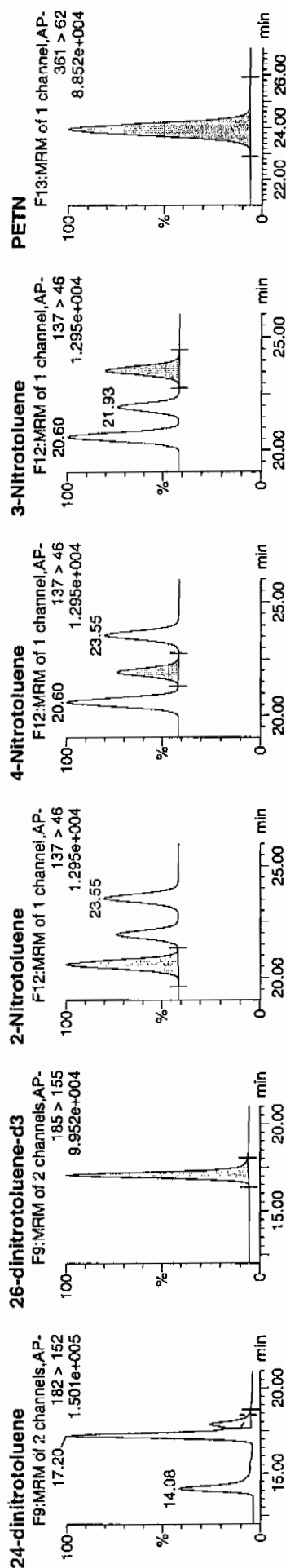
4/15/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 96 of 137

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	S:Area	AbsResp	Response	Flags	Mod:Date	Mod:Time	ng/ml	%Rec	%Dev	SN
WXX100412-07CCV	HMX	176 > 102	5.20	35992.820	6472.872	35992.820	2780.282	bb			655.9333	109.3	9.3	3380.9
WXX100412-07CCV	RDX	176 > 102	7.52	28445.609	6472.872	28445.609	2197.294	bb			767.6939	127.9	27.9	2474.7
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.06	34027.965	6472.872	34027.965	2628.506	bb			608.0311	101.3	1.3	3034.3
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	6472.872		6472.872	6472.872	bb			550.3802	110.1	10.1	356.3
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	10742.213	6472.872	10742.213	829.787	bb			620.6014	103.4	3.4	296.8
WXX100412-07CCV	Tetryl	241 > 181	12.42	10242.596	6472.872	10242.596	791.194	bb			610.3605	101.7	1.7	1573.3
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	4763.748	6472.872	4763.748	367.978	bb			586.6092	97.8	-2.2	548.2
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.29	16071.117	38618.398	16071.117	208.076	MM	15-Apr-10	14:34:50	616.0421	102.7	2.7	468.5
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	25385.605	38618.398	25385.605	328.672	bb			641.6909	106.9	6.9	1303.9
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.11	23809.799	38618.398	23809.799	308.270	bb			708.6134	118.1	18.1	277.7
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.08	23910.871	38618.398	23910.871	309.579	bb			300.2332	100.1	0.1	640.0
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.20	53638.844	38618.398	53638.844	694.473	MM	15-Apr-10	14:40:58	586.7767	97.8	-2.2	1649.4
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.86	13413.259	38618.398	13413.259	173.664	MM	15-Apr-10	14:44:33	665.3698	110.9	10.9	364.2
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	38618.398		38618.398	38618.398	bb			551.9567	110.4	10.4	2701.3
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.60	3598.152	38618.398	3598.152	46.586	bb			538.0176	89.7	-10.3	539.8
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.93	1870.867	38618.398	1870.867	24.222	bb			583.9645	97.3	-2.7	298.8
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.55	2364.213	38618.398	2364.213	30.610	bb			525.0234	87.5	-12.5	359.4
WXX100412-07CCV	PETN	361 > 62	23.93	45593.688	38618.398	45593.688	590.310	bb			677.1618	112.9	12.9	12434.1

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: 104.1

Total 1665.3

Average 104.1

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): 10-2150

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

3EL 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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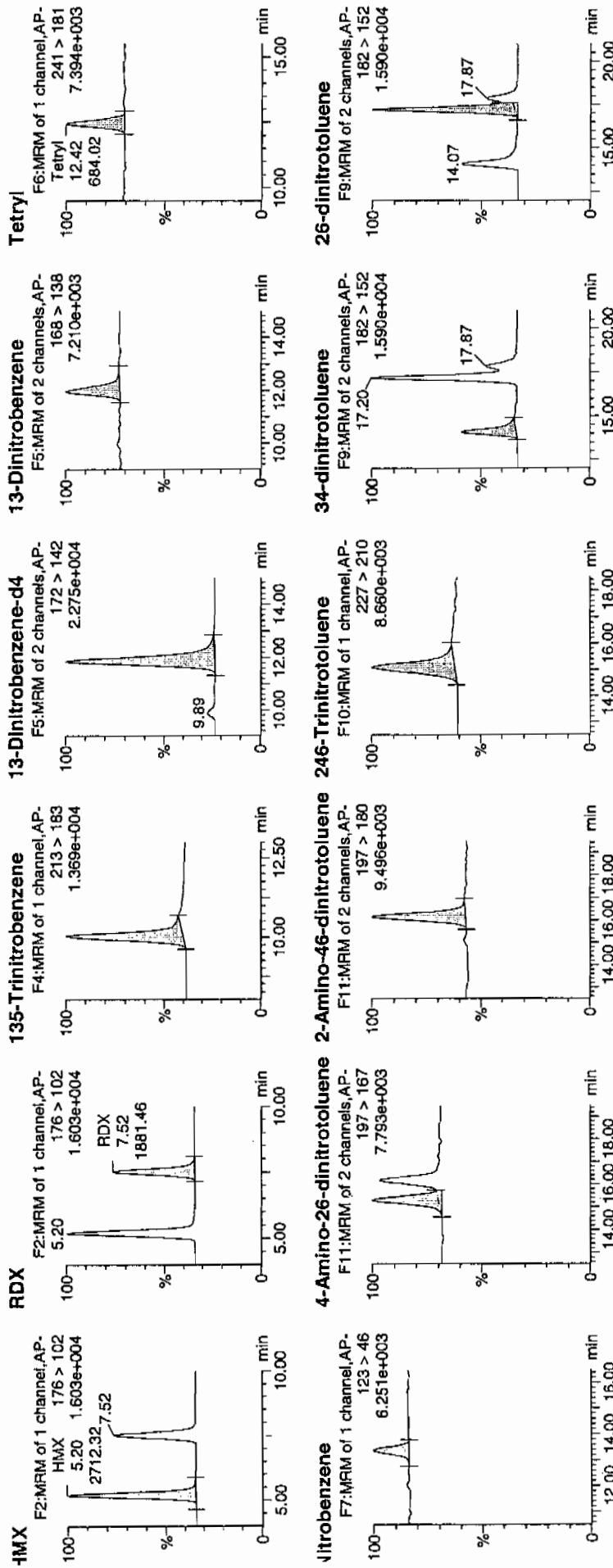
Date: 15-Apr-2010

Time: 04:38:55

D: WXX100412-08CRI

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AP
11/15/10



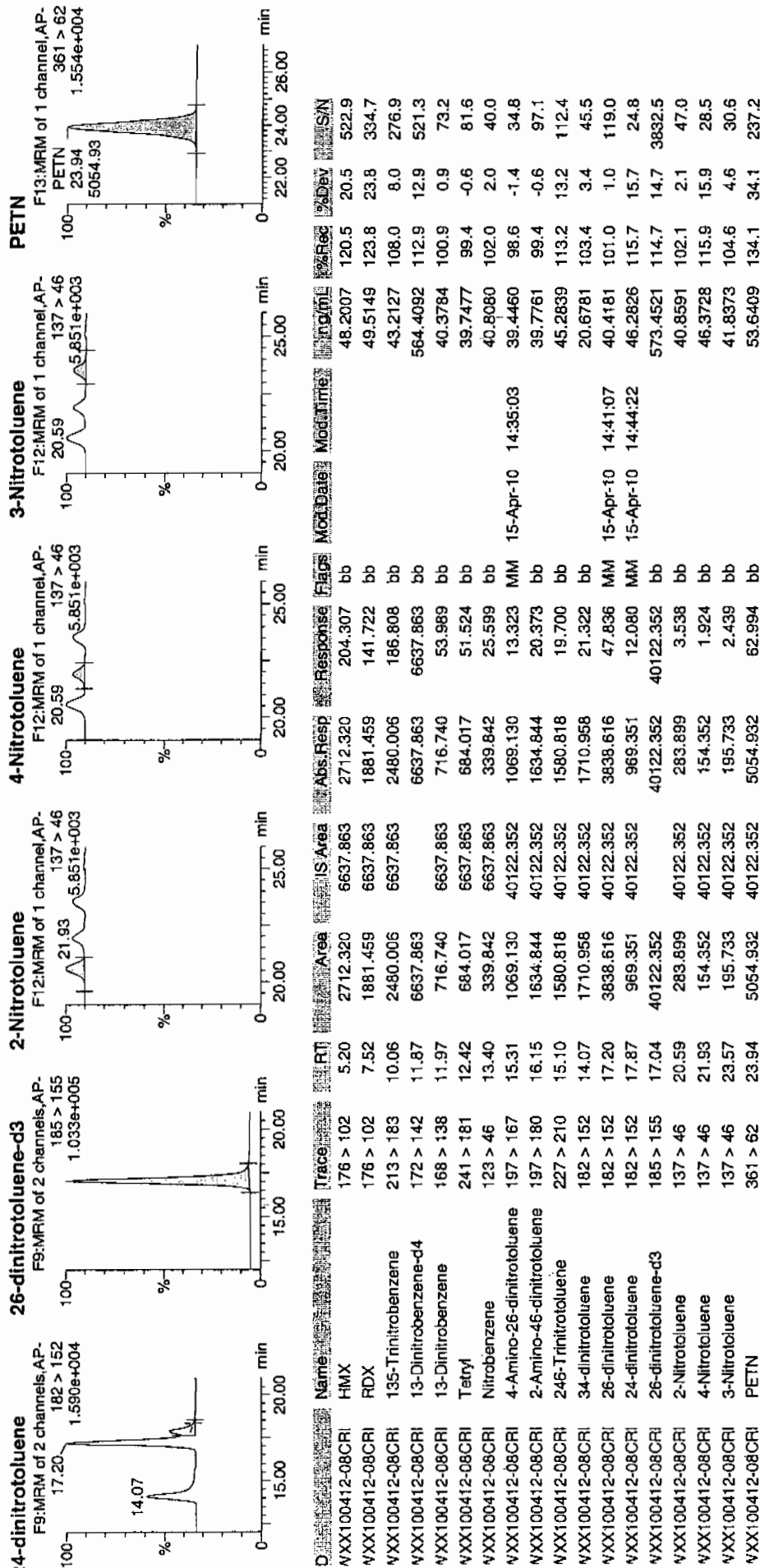
AP
11/15/10

Quantify Sample Report

iEL 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.qtd, Time: Thu Apr 15 14:49:38 2010



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

4/15/10

Total 1742.6

Average 108.9

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): 10-2150

Lab Code: GEL

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

Quantify Sample Report iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412135a

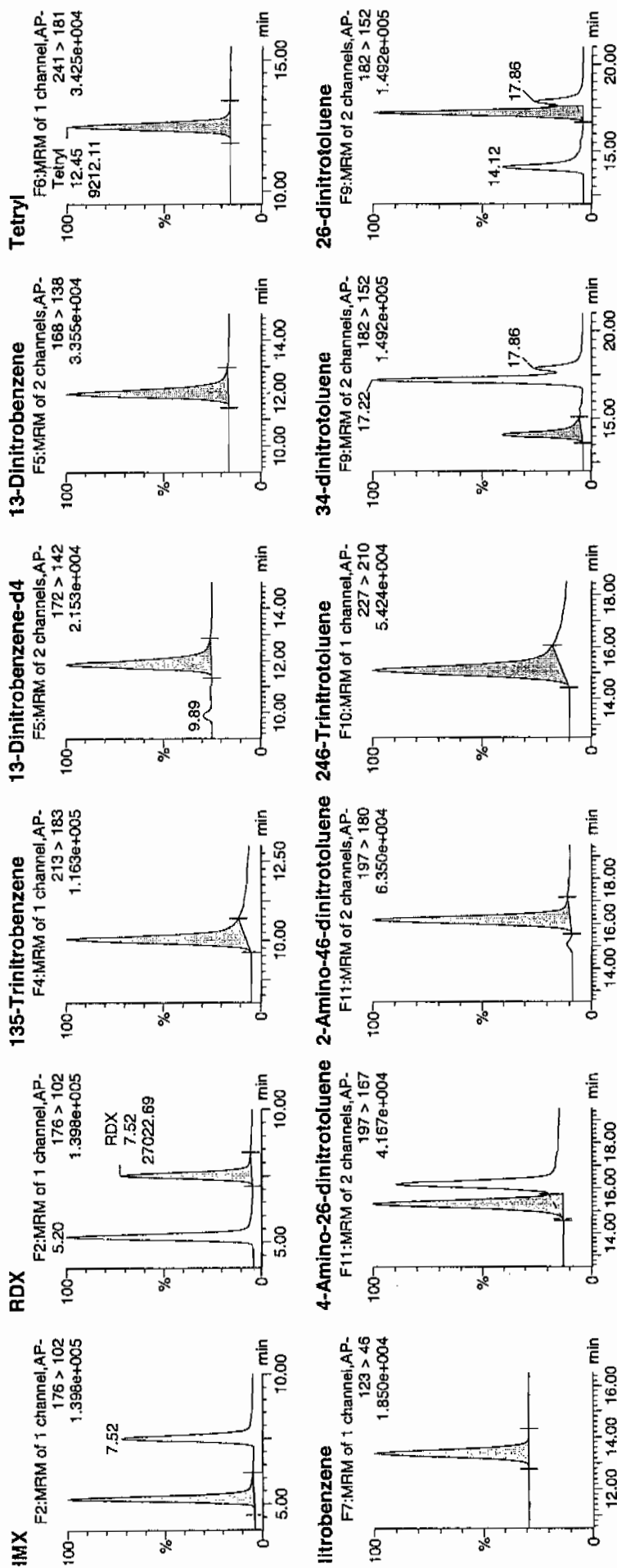
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Time: 09:33:59

D: WXX100412-07CCV

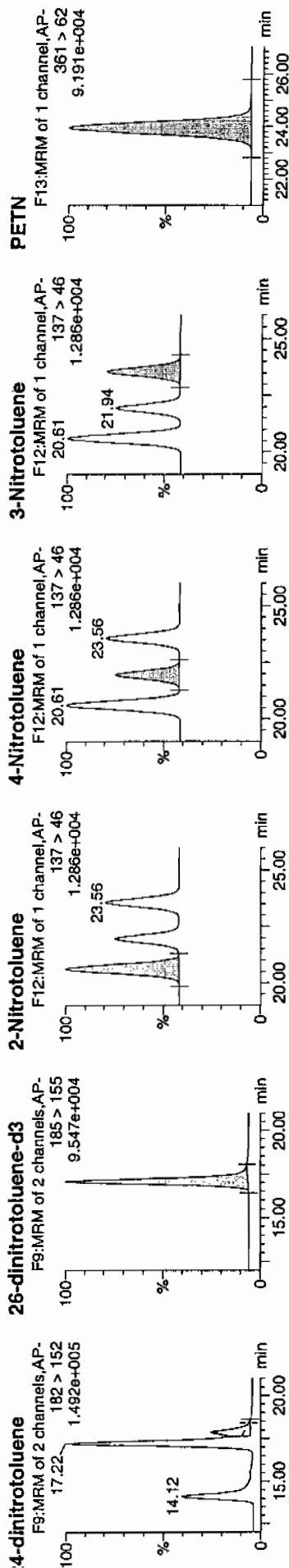
Vial: 1:1,B

Handwritten: 11/15/10



Handwritten: 11/15/10

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Conc (ng/ml)	% Rec	% Dev	SN
NXX100412-07CCV HMX	176 > 102	5.20	35561.566	6121.390	35561.566	2904.697	bb			685.2857	114.2	14.2	2306.0
NXX100412-07CCV RDX	176 > 102	7.52	27022.688	6121.390	27022.688	2207.235	bb			771.1669	128.5	28.5	1629.3
NXX100412-07CCV 135-Trinitrobenzene	213 > 183	10.05	32627.703	6121.390	32627.703	2665.057	bb			616.4861	102.7	2.7	662.1
NXX100412-07CCV 13-Dinitrobenzene	172 > 142	11.87	6121.390		6121.390	6121.390	bb			520.4942	104.1	4.1	470.8
NXX100412-07CCV Tetra	168 > 138	11.97	10089.047	6121.390	10089.047	824.081	bb			616.3340	102.7	2.7	789.1
NXX100412-07CCV Nitrobenzene	241 > 181	12.45	9212.110	6121.390	9212.110	752.452	bb			580.4736	96.7	-3.3	1211.9
NXX100412-07CCV Nitrobenzene	123 > 46	13.37	4599.666	6121.390	4599.666	375.704	bb			598.9262	99.8	-0.2	515.2
NXX100412-07CCV 4-Amino-26-dinitrotoluene	197 > 167	15.32	15152.262	36754.547	15152.262	206.128	MM	15-Apr-10	14:35:19	610.2741	101.7	1.7	565.2
NXX100412-07CCV 2-Amino-46-dinitrotoluene	197 > 180	16.16	23684.473	36754.547	23684.473	322.198	bb			629.0502	104.8	4.8	1009.4
NXX100412-07CCV 246-Trinitrotoluene	227 > 210	15.11	23013.285	36754.547	23013.285	313.067	bb			719.6402	119.9	19.9	2356.1
NXX100412-07CCV 34-dinitrotoluene	182 > 152	14.12	22595.447	36754.547	22595.447	307.383	bb			288.1037	99.4	-0.6	643.9
NXX100412-07CCV 26-dinitrotoluene	182 > 152	17.22	52587.668	36754.547	52587.668	715.390	MM	15-Apr-10	14:41:19	604.4503	100.7	0.7	1707.0
NXX100412-07CCV 24-dinitrotoluene	182 > 152	17.86	12410.844	36754.547	12410.844	168.834	MM	15-Apr-10	14:44:09	646.8644	107.8	7.8	367.8
NXX100412-07CCV 26-dinitrotoluene-d3	185 > 155	17.05	36754.547	36754.547	36754.547	36754.547	bb			525.3174	105.1	5.1	1487.8
NXX100412-07CCV 2-Nitrotoluene	137 > 46	20.61	3560.446	36754.547	3560.446	48.435	bb			559.3770	93.2	-6.8	220.2
NXX100412-07CCV 4-Nitrotoluene	137 > 46	21.94	1848.077	36754.547	1848.077	25.141	bb			606.1034	101.0	1.0	123.0
NXX100412-07CCV 3-Nitrotoluene	137 > 46	23.56	2258.185	36754.547	2258.185	30.720	bb			526.9080	87.8	-12.2	140.5
NXX100412-07CCV PETN	361 > 62	23.95	47413.527	36754.547	47413.527	645.002	bb			756.2985	126.0	26.0	11220.6

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

WXX 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): 10-2150

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
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Filename: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412137a

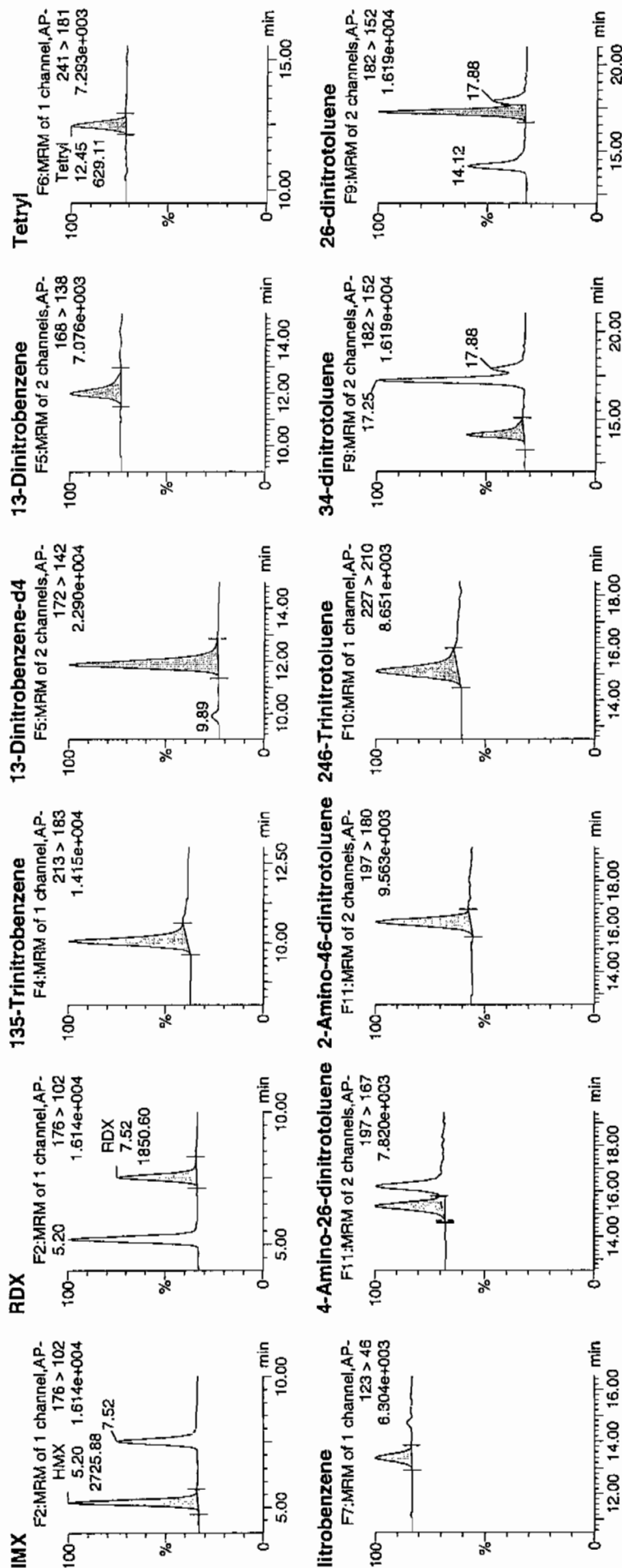
Plate: 15-Apr-2010

Time: 10:33:01

File: WXX100412-08CRI

Label: 1:1,C

AP
-11/10



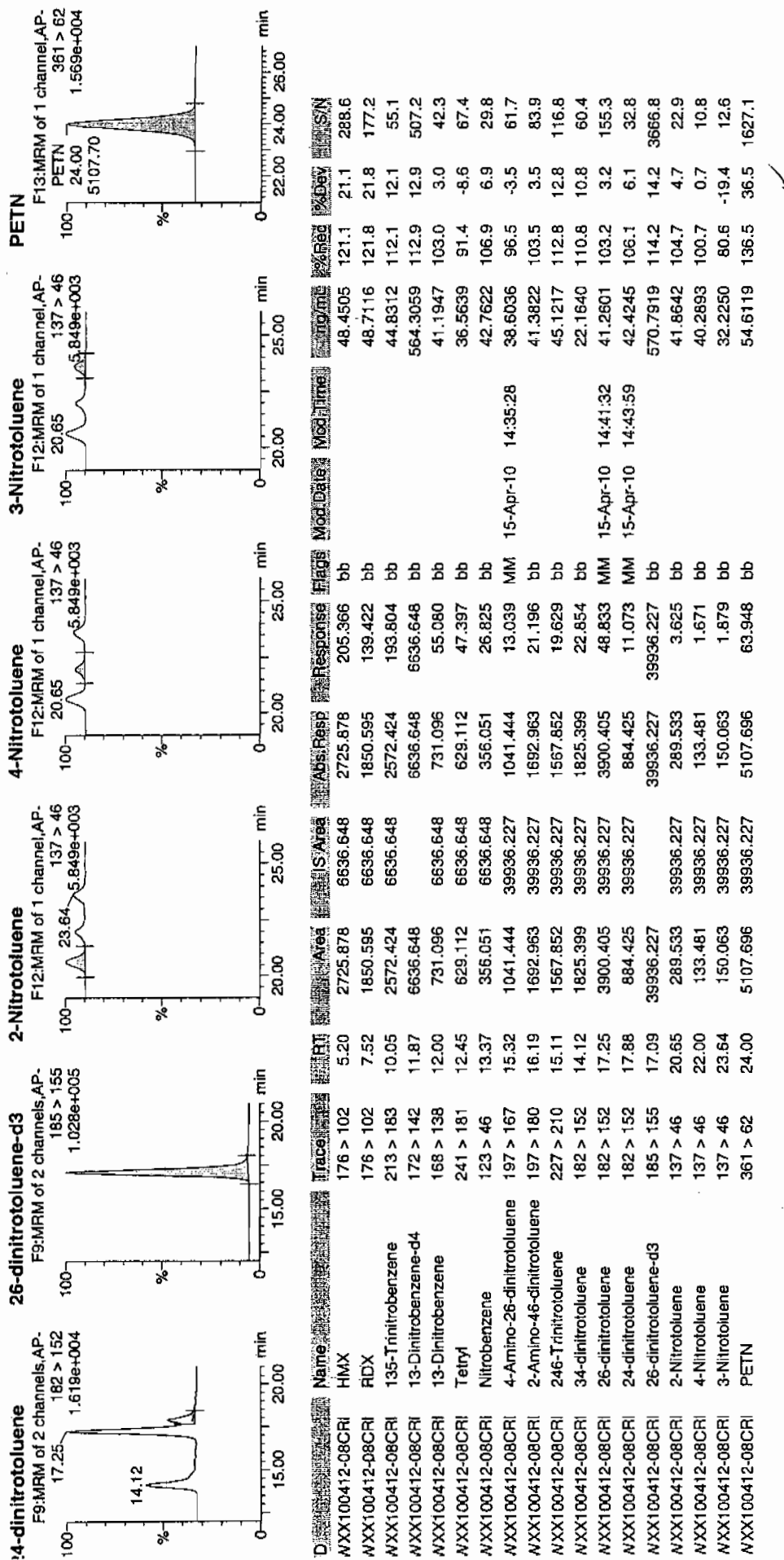
AP
04/15/10

Quantify Sample Report

SEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 124 of 137

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



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

*with
4/15/10*

Total 1711.7

Average 107.0

WXX-0412-10

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): 10-2150

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

SEL 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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412141a

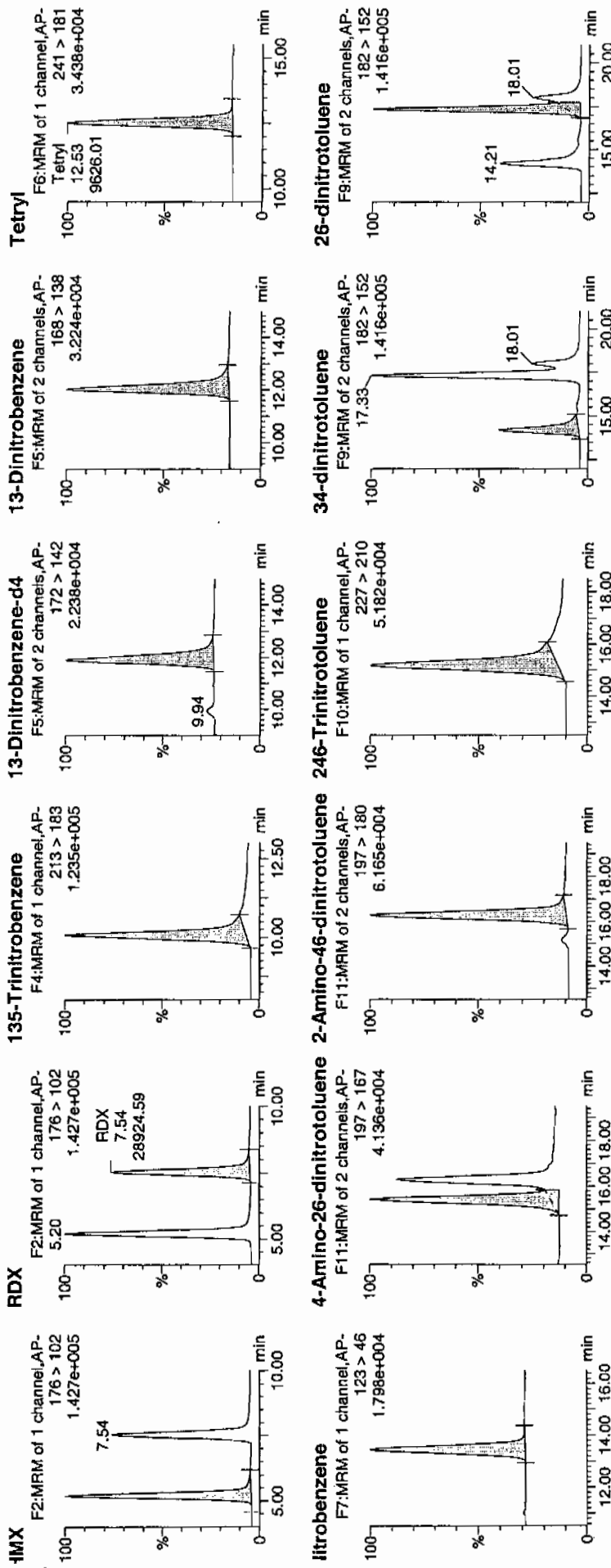
Date: 15-Apr-2010

Time: 12:31:08

ID: WXX100415-07CCV

Fial: 1:1,B

WAT
4/15/10



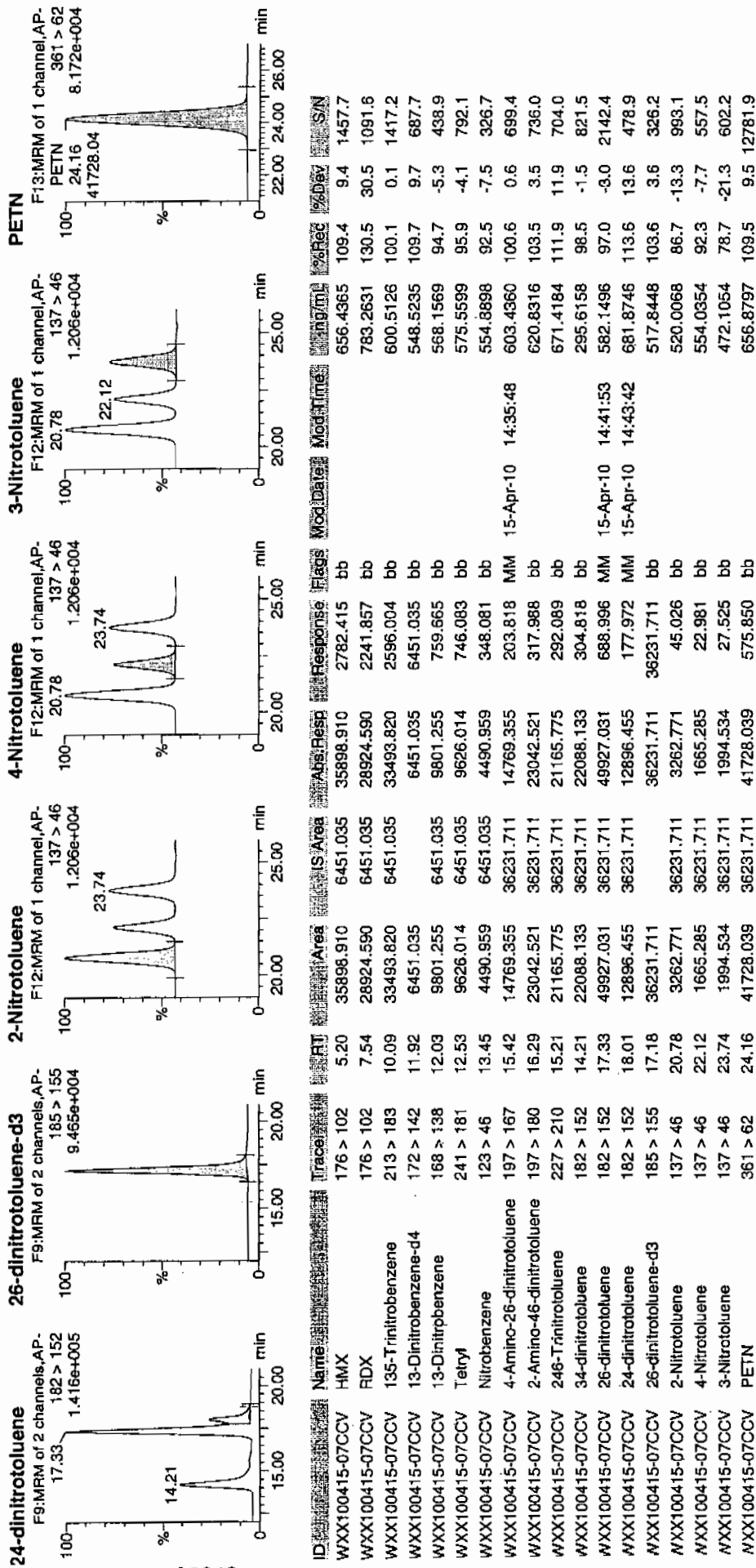
4/15/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Apr 15 14:53:43 2010, Page 132 of 137

Dataset: C:\MASSLYN\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

Handwritten: 4/15/10

Total 1615.4

Average 101.0

Handwritten: 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): 10-2150

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412143a

Analysis Date: 15-APR-10 13:30

LCMSMS ID: 903

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
SEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Sample Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0412143a

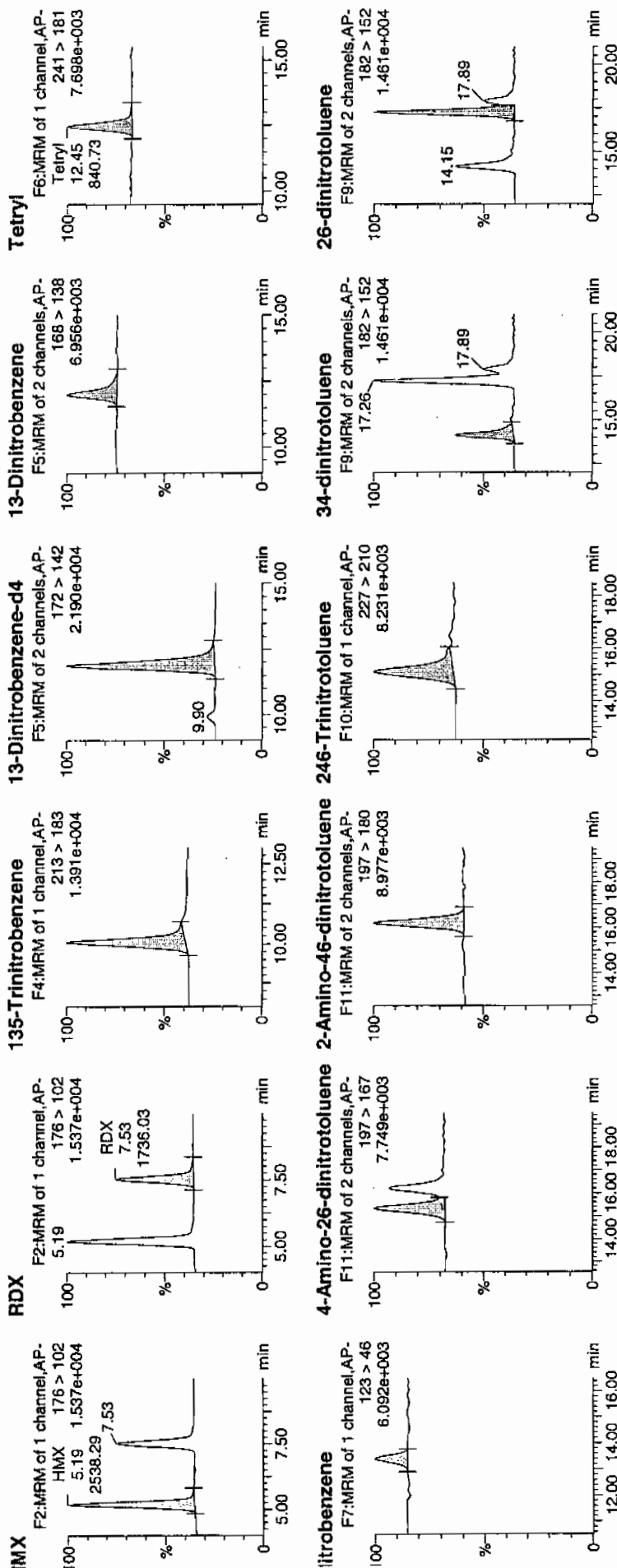
Date: 15-Apr-2010

Time: 13:30:11

File: WXX100415-08CRI

Ratio: 1:1,C

MTT
4/15/10



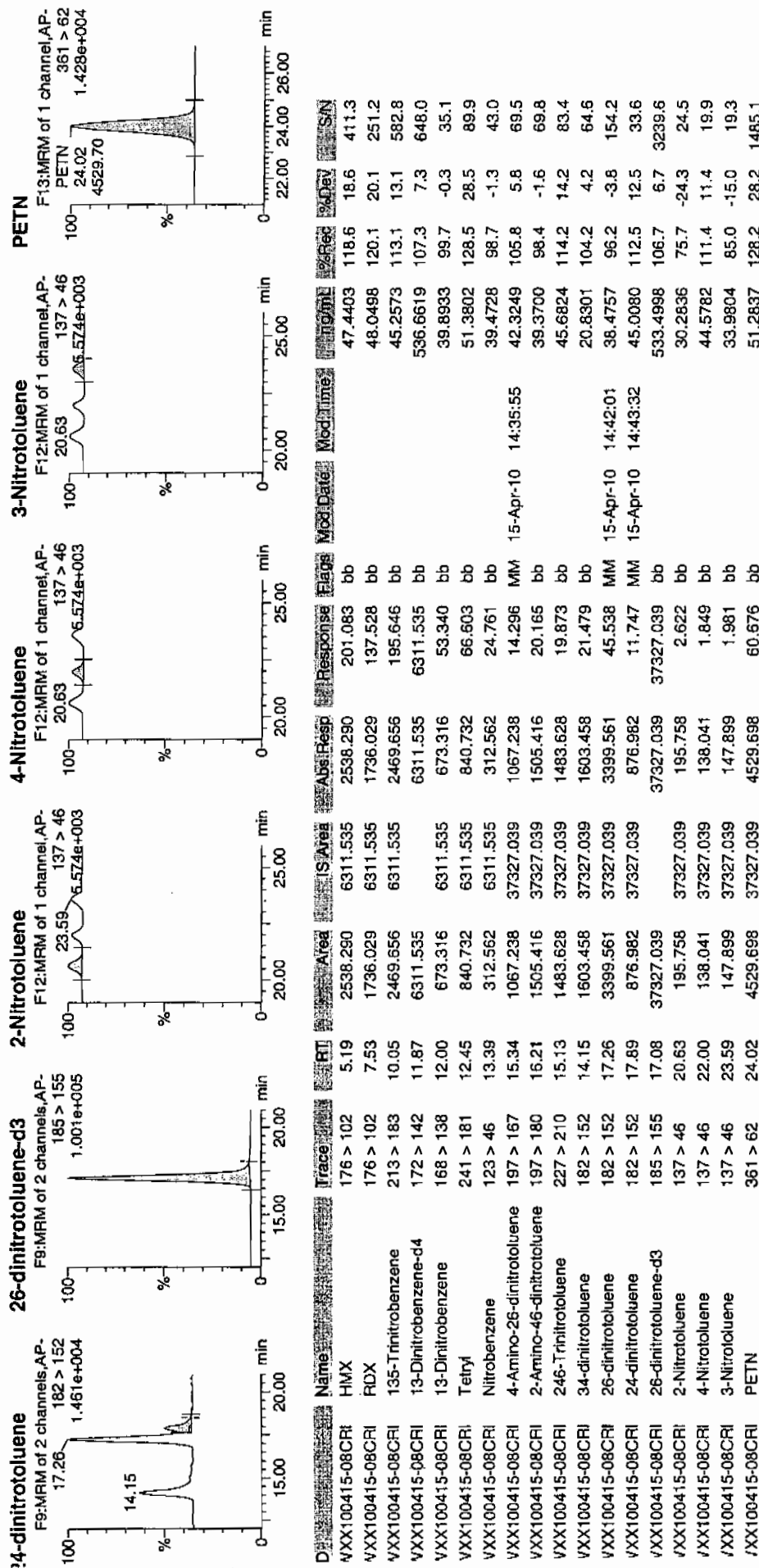
for new 4/15/10

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\PRO1041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



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

*not
4/15/10*

Total 1710.3

Average 106.9

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): 10-2150

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
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412154a

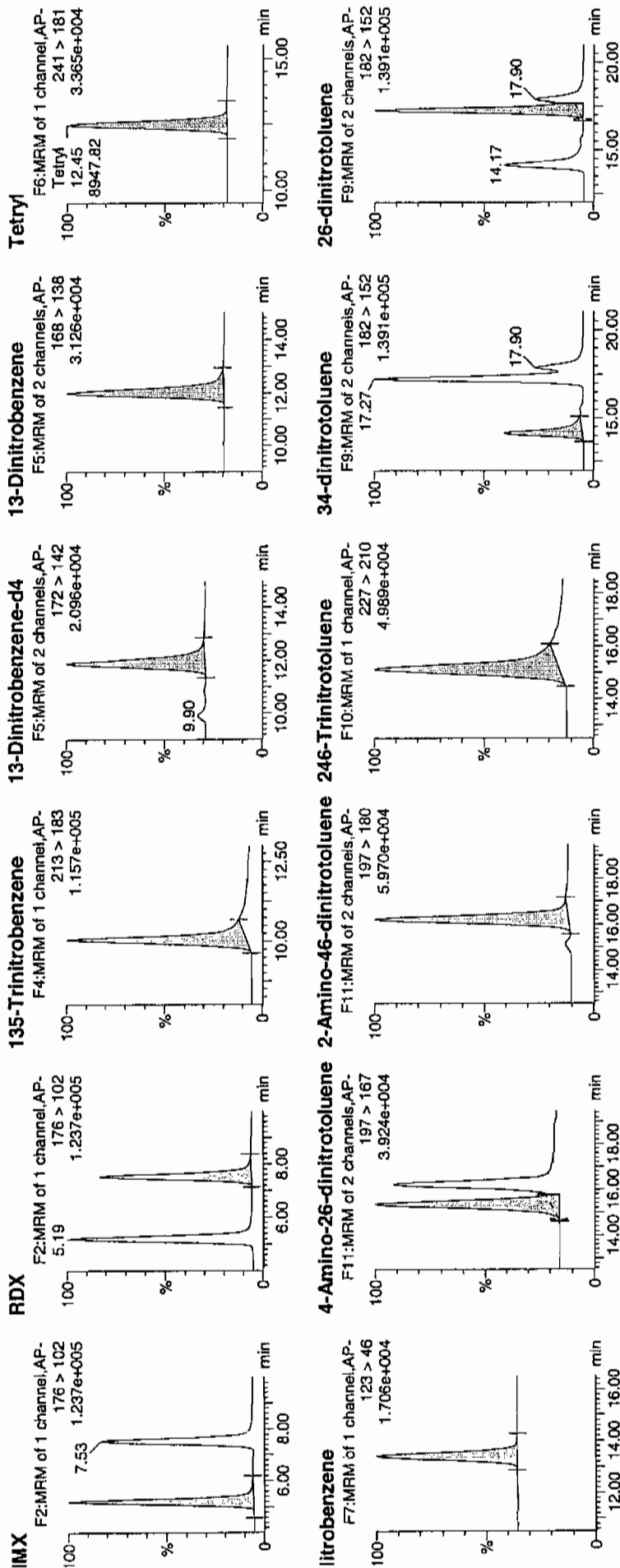
Date: 15-Apr-2010

Time: 18:54:43

File: WXX100415-07CCV

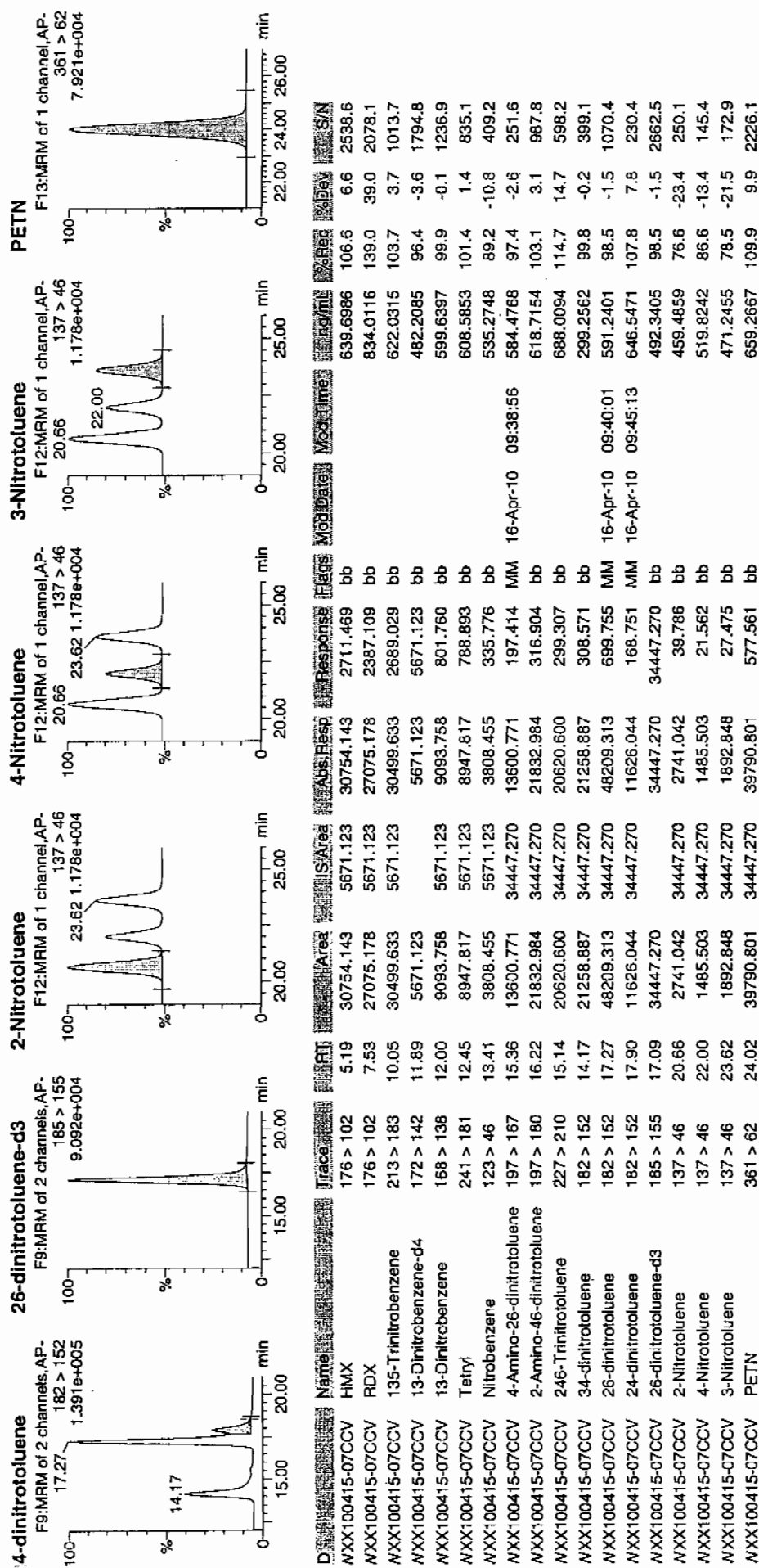
Label: 1;1,B

4/16/10



4/16/10

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

done 04/15/10

Average 100.8

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): 10-2150

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
 JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qtd, Time: Fri Apr 16 09:45:39 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412156a

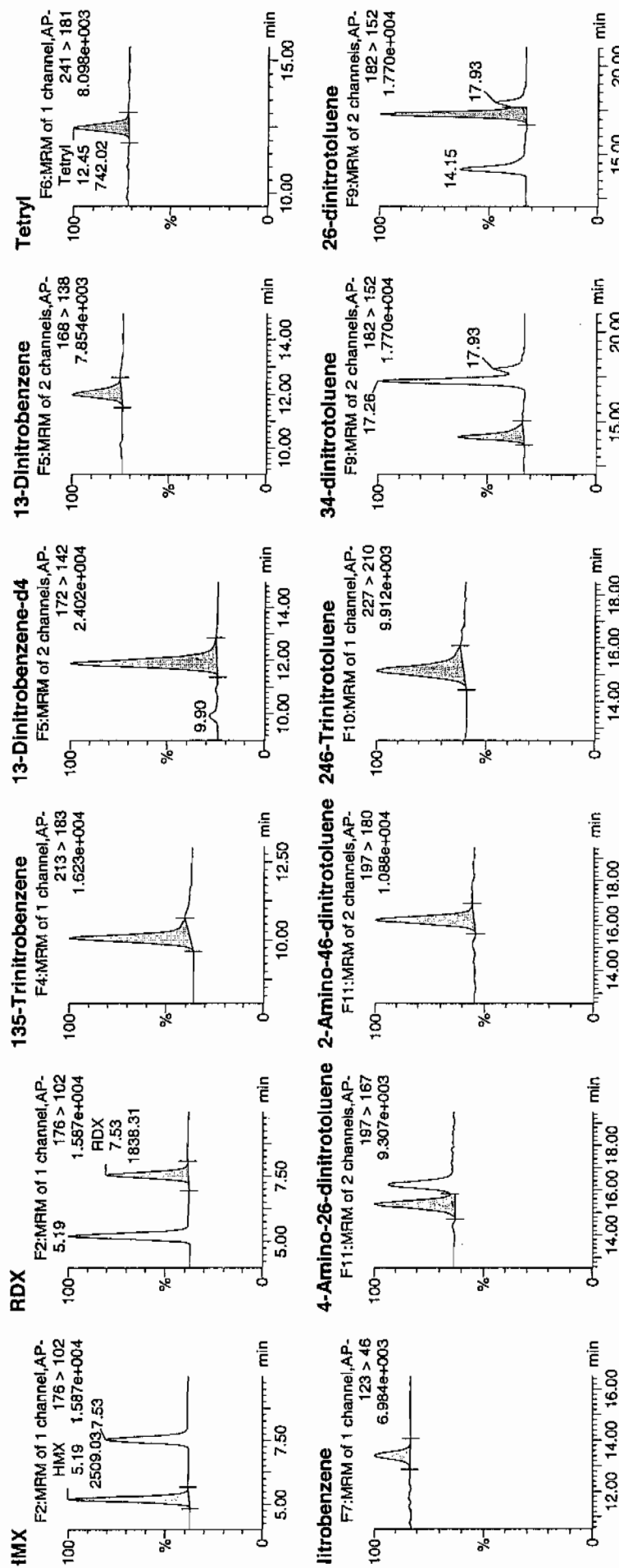
Date: 15-Apr-2010

Time: 19:53:44

D: WXX100415-08CRI

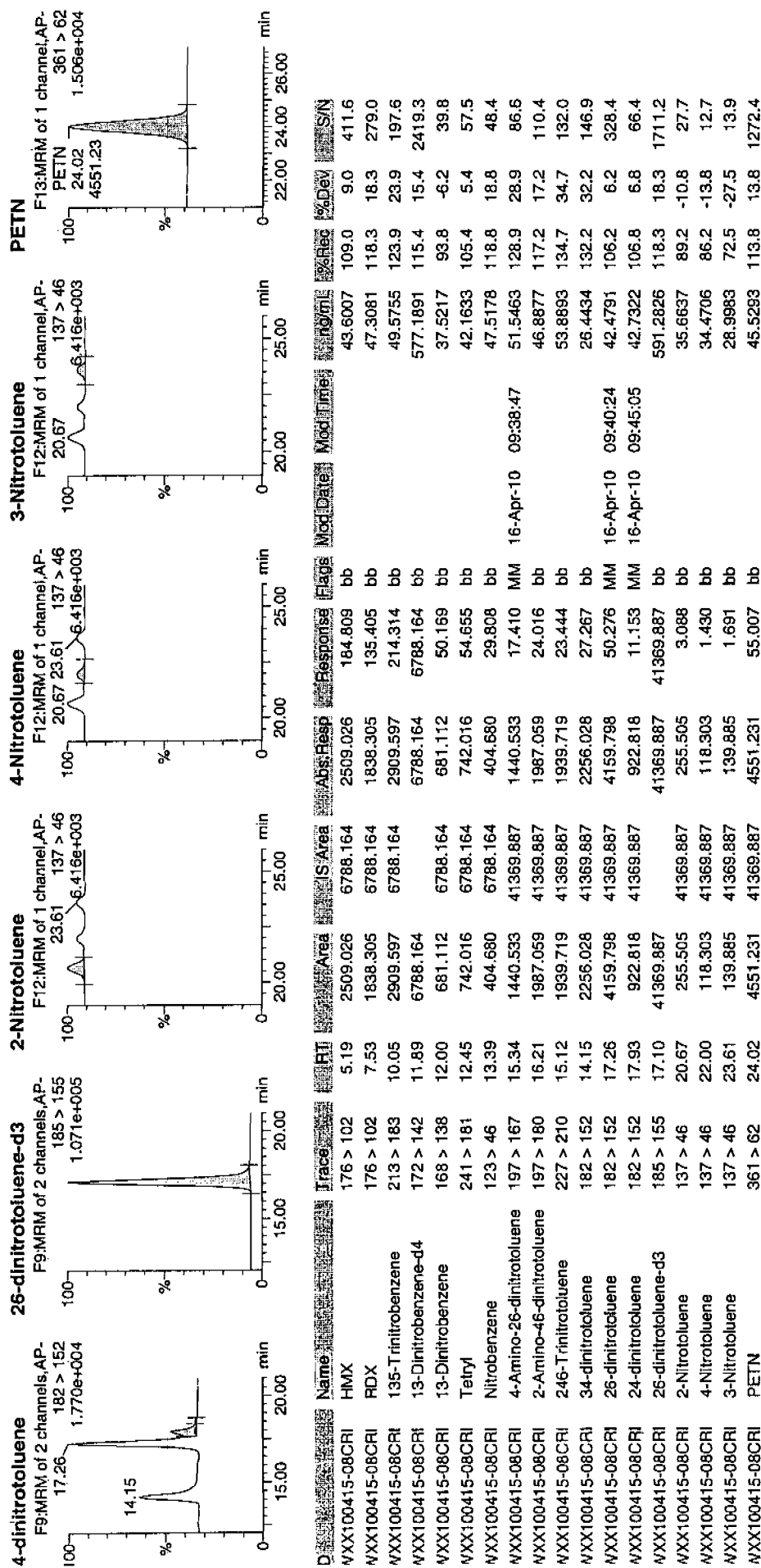
File: 1:1,C

WXX
 4/16/10



sum 4/16/10

latast: 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

Handwritten: 4/16/10

Total 1756.9

Average 109.8

Handwritten: 4/18/10

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): 10-2150

Lab Code: GEI

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

EL 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

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412163a

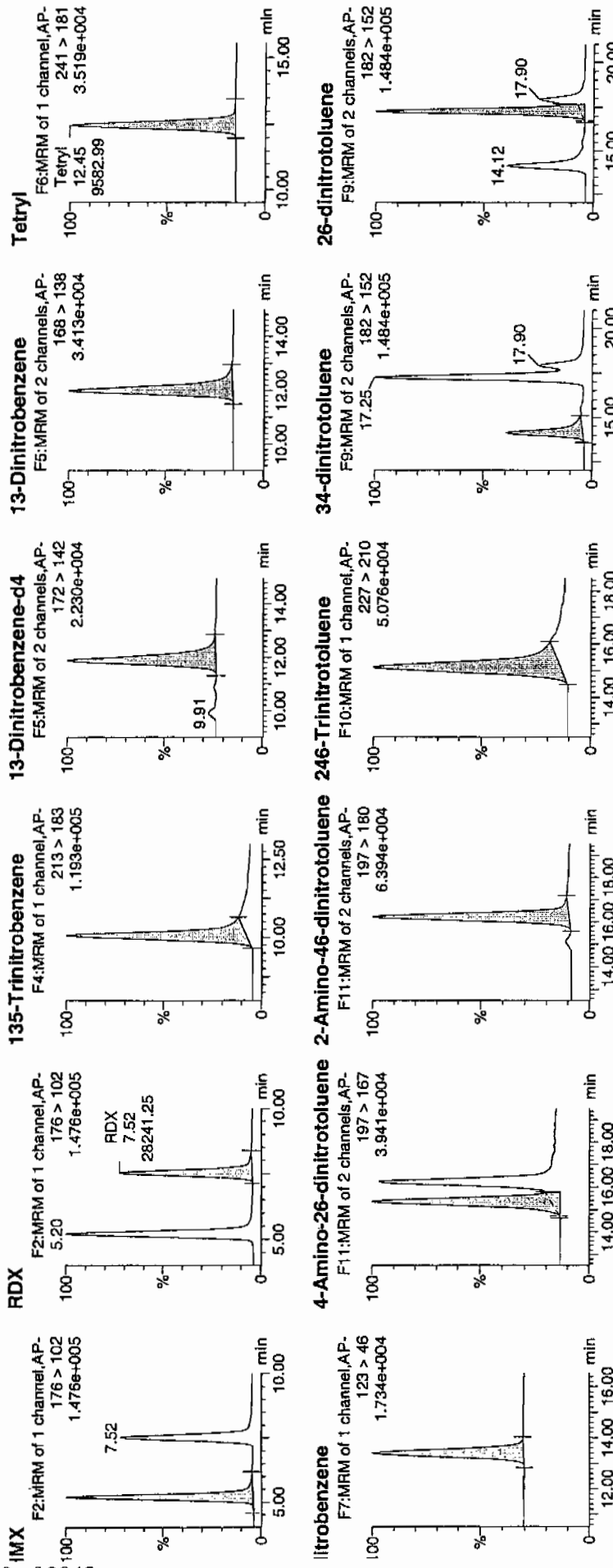
Date: 15-Apr-2010

Time: 23:20:11

D: WXX100415-07CCV

Ratio: 1:1,B

4/16/10
MJP



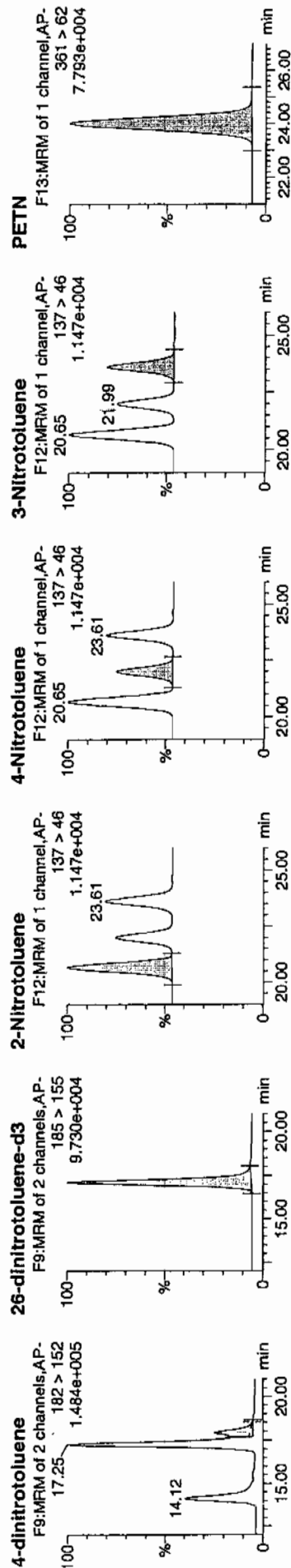
4/16/10
MJP

Quantify Sample Report

iEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 40 of 71

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



D	Name	RT	Area	S-Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc./mL	%Rec	%Dev	S/N
VXX100415-07CCV	HMX	176 > 102	5.20	37424.590	6509.360	37424.590	2874.675	bb		678.2028	113.0	13.0	3190.2
VXX100415-07CCV	RDX	176 > 102	7.52	28241.246	6509.360	28241.246	2169.280	bb		757.9061	126.3	26.3	2261.4
VXX100415-07CCV	135-Trinitrobenzene	213 > 183	10.05	32626.014	6509.360	32626.014	2506.085	bb		579.7123	96.6	-3.4	3236.6
VXX100415-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	6509.360		6509.360	6509.360	bb		553.4828	110.7	10.7	1125.0
VXX100415-07CCV	13-Dinitrobenzene	168 > 138	12.00	10389.396		10389.396	796.489	bb		595.7049	99.3	-0.7	1060.4
VXX100415-07CCV	Tetryl	241 > 181	12.45	9582.994		9582.994	736.093	bb		567.8536	94.6	-5.4	804.1
VXX100415-07CCV	Nitrobenzene	123 > 46	13.41	4171.525		4171.525	320.425	bb		510.8032	85.1	-14.9	263.1
VXX100415-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.36	14247.576		14247.576	190.115	MM	16-Apr-10 09:38:18	562.8656	93.8	-6.2	397.6
VXX100415-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.23	23452.070		23452.070	312.937	bb		610.9688	101.8	1.8	403.7
VXX100415-07CCV	246-Trinitrotoluene	227 > 210	15.14	21231.031		21231.031	283.300	bb		651.2146	108.5	8.5	1074.3
VXX100415-07CCV	34-dinitrotoluene	182 > 152	14.12	22640.807		22640.807	302.111	bb		292.9912	97.7	-2.3	397.3
VXX100415-07CCV	26-dinitrotoluene	182 > 152	17.25	51926.609		51926.609	692.891	MM	16-Apr-10 09:40:53	585.4406	97.6	-2.4	1075.6
VXX100415-07CCV	24-dinitrotoluene	182 > 152	17.90	11718.446		11718.446	156.367	MM	16-Apr-10 09:43:58	599.0985	99.8	-0.2	220.5
VXX100415-07CCV	26-dinitrotoluene-d3	185 > 155	17.09	37470.961		37470.961	37470.961	bb		535.5568	107.1	7.1	1125.8
VXX100415-07CCV	2-Nitrotoluene	137 > 46	20.65	2957.955		2957.955	39.470	bb		455.8353	76.0	-24.0	478.2
VXX100415-07CCV	4-Nitrotoluene	137 > 46	21.99	1501.030		1501.030	20.029	bb		482.8723	80.5	-19.5	259.6
VXX100415-07CCV	3-Nitrotoluene	137 > 46	23.61	1860.172		1860.172	24.822	bb		425.7401	71.0	-29.0	306.5
VXX100415-07CCV	PETN	361 > 62	24.01	40064.965		40064.965	534.614	bb		600.3819	100.1	0.1	1208.3

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

*not
4/16/10*

Total 1541.7

Ann 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): 10-2150

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

Quantify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412165a

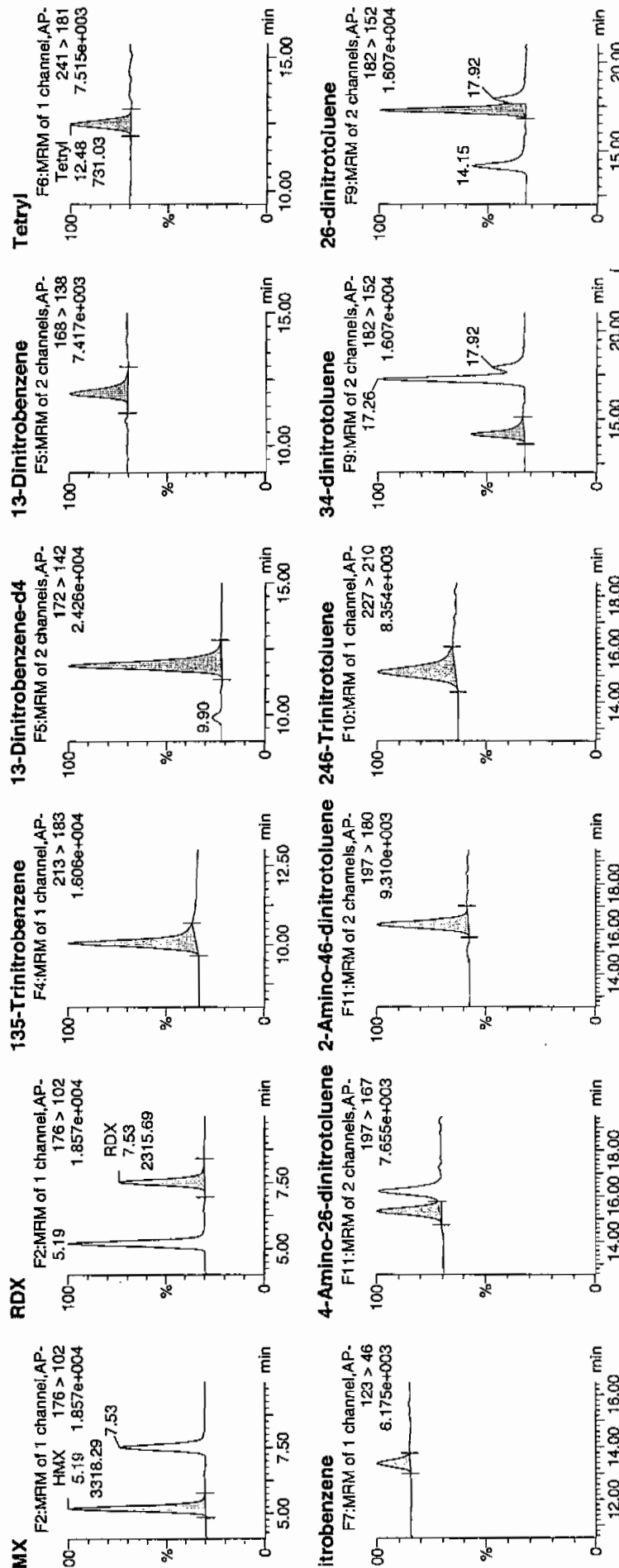
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Time: 00:19:13

File: WXX100415-08CRI

Ratio: 1:1,C

*WXX
1/10/10*



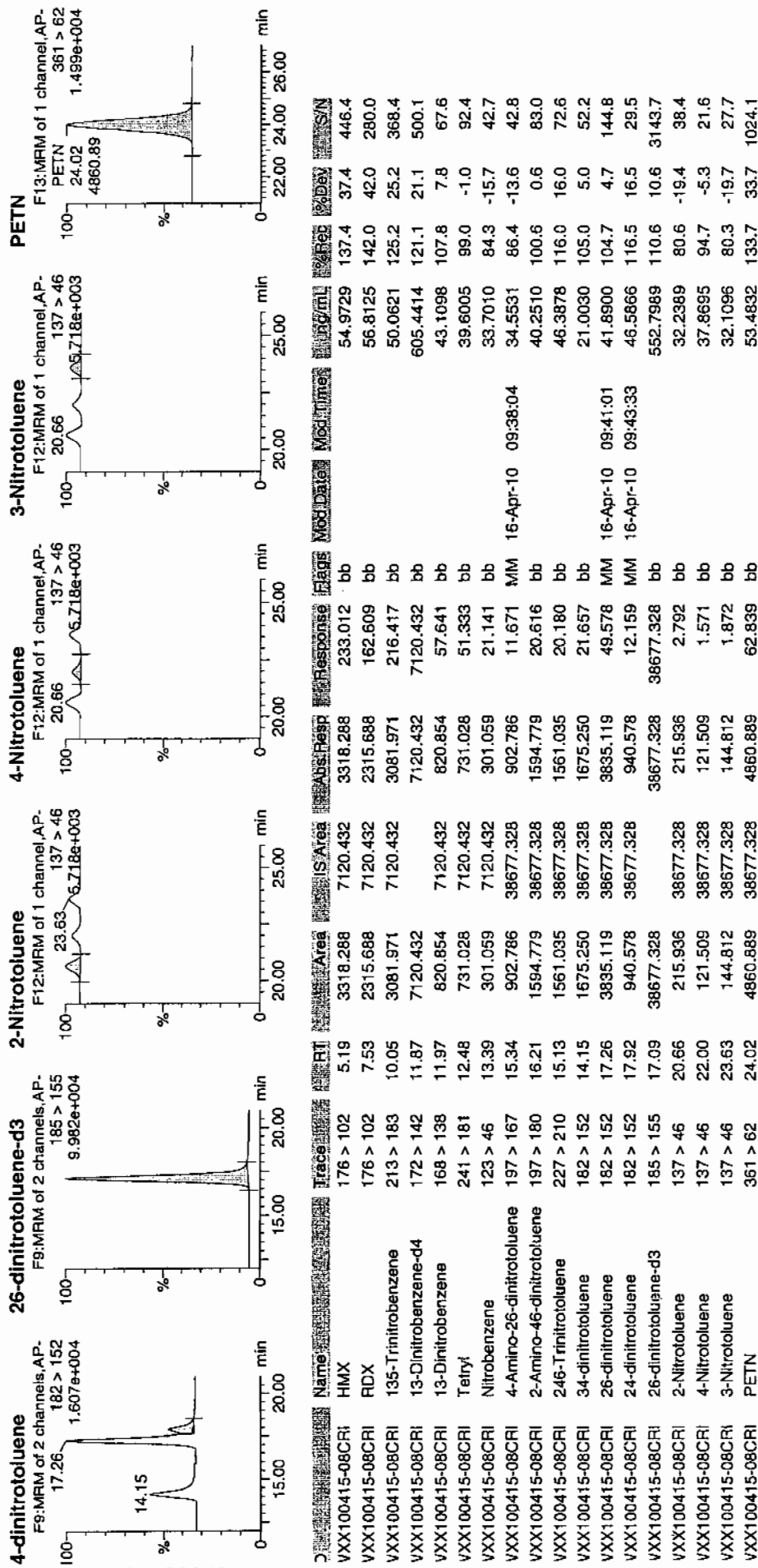
4/16/10

Quantify Sample Report

iEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 44 of 71

Dataset: C:\MASSLYN\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



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

Handwritten: 4/16/10

Total 1714.2

Average 107.1

Handwritten: 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): 10-2150

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

uantify Sample Report
 iEL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412176a

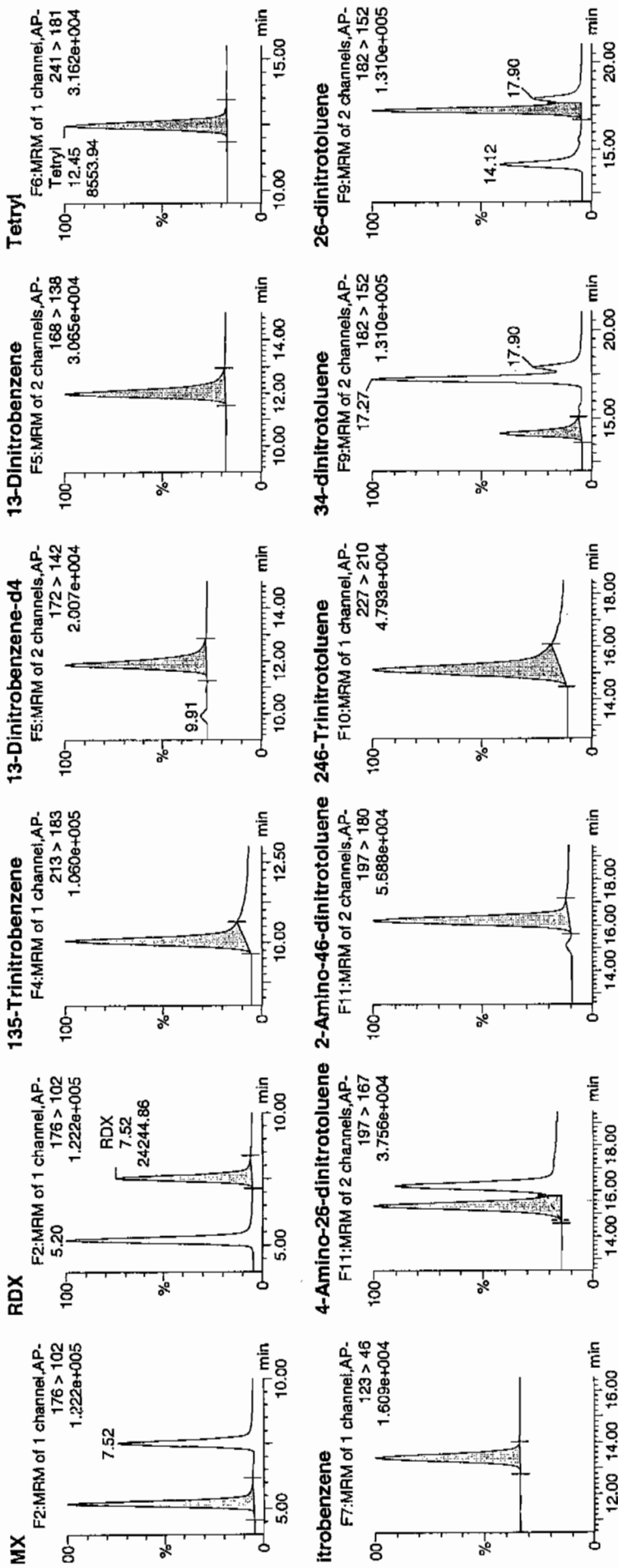
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ime: 05:43:47

); WXX100415-07CCV

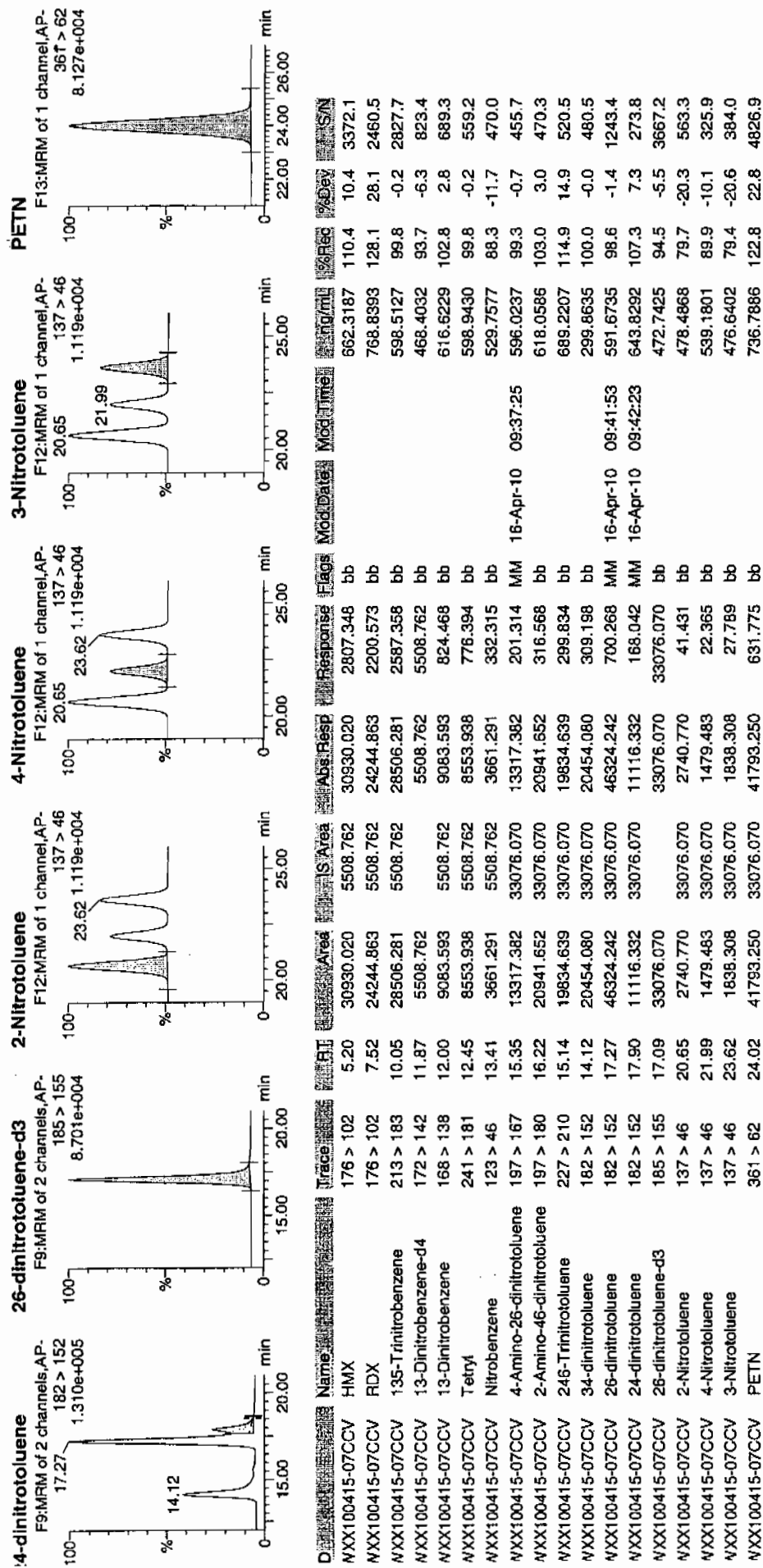
ial: 1:1,B

11/11/10
 11/11/10



Handwritten signature: *Handwritten signature*

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 04/16/10
 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

Total 1624.1

Average 101.5

Handwritten: 4/16/10

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): 10-2150

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:

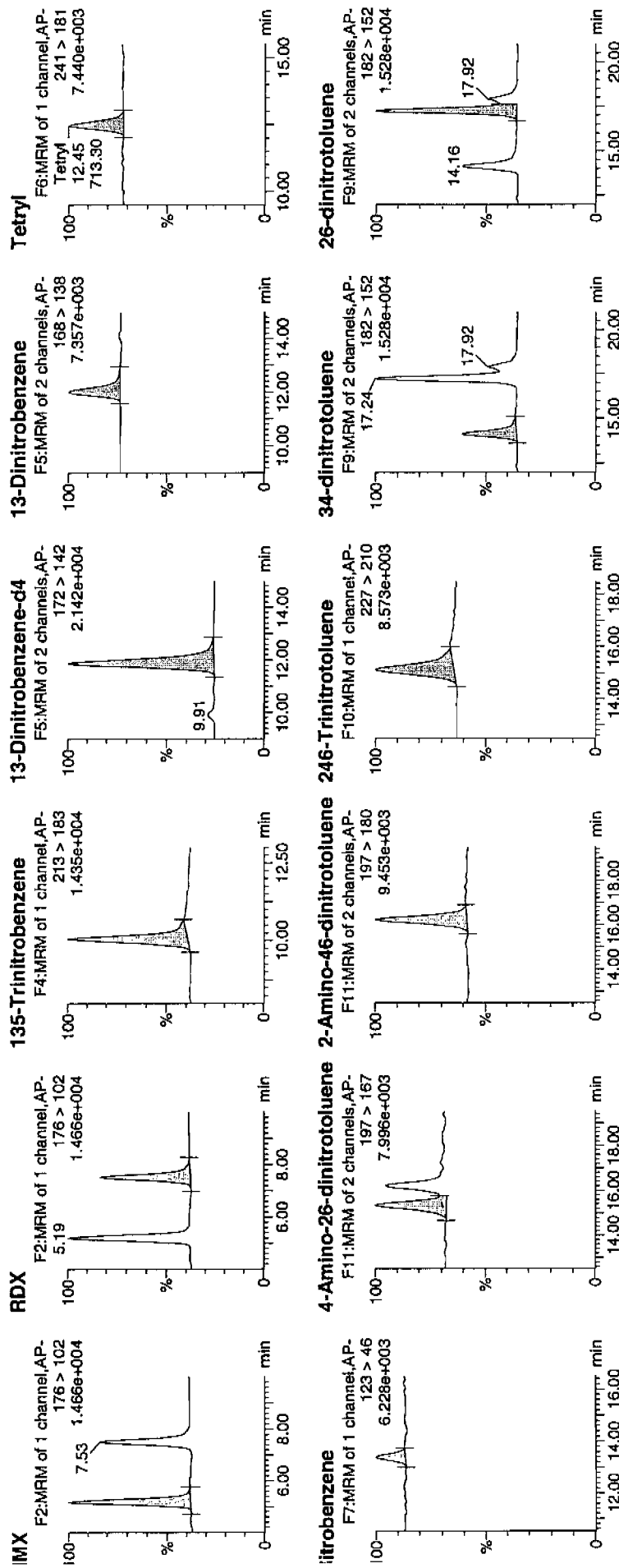
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

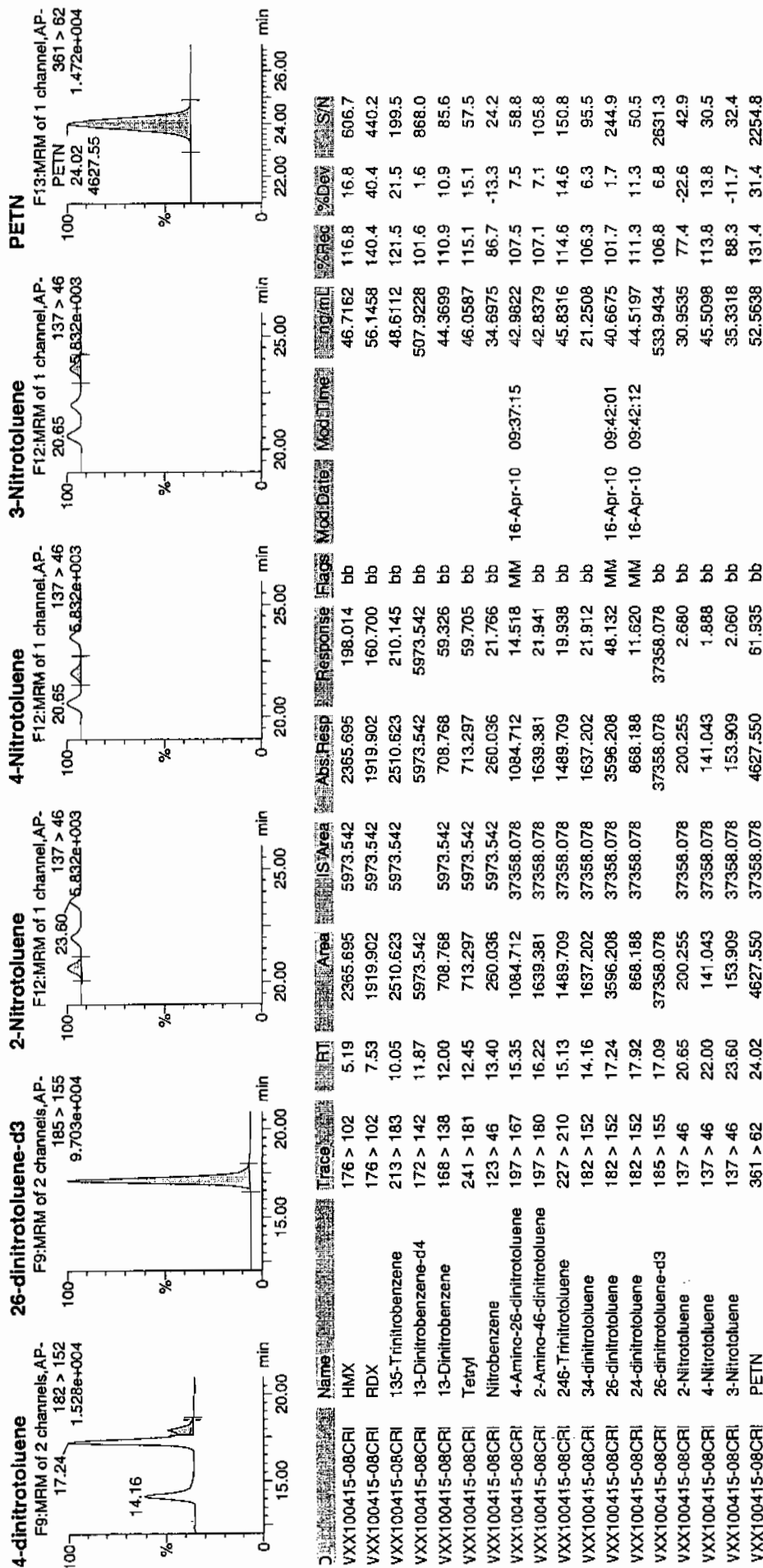
* Value outside of Recovery Limits

10/10/10
 10/10/10



from 0.18/1.0

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 04/16/10
 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

*MTT
4/16/10*

Total 1750.8

Time 04/18/10

Average 109.4

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): 10-2150

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
 3EL 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\EXP0412189a

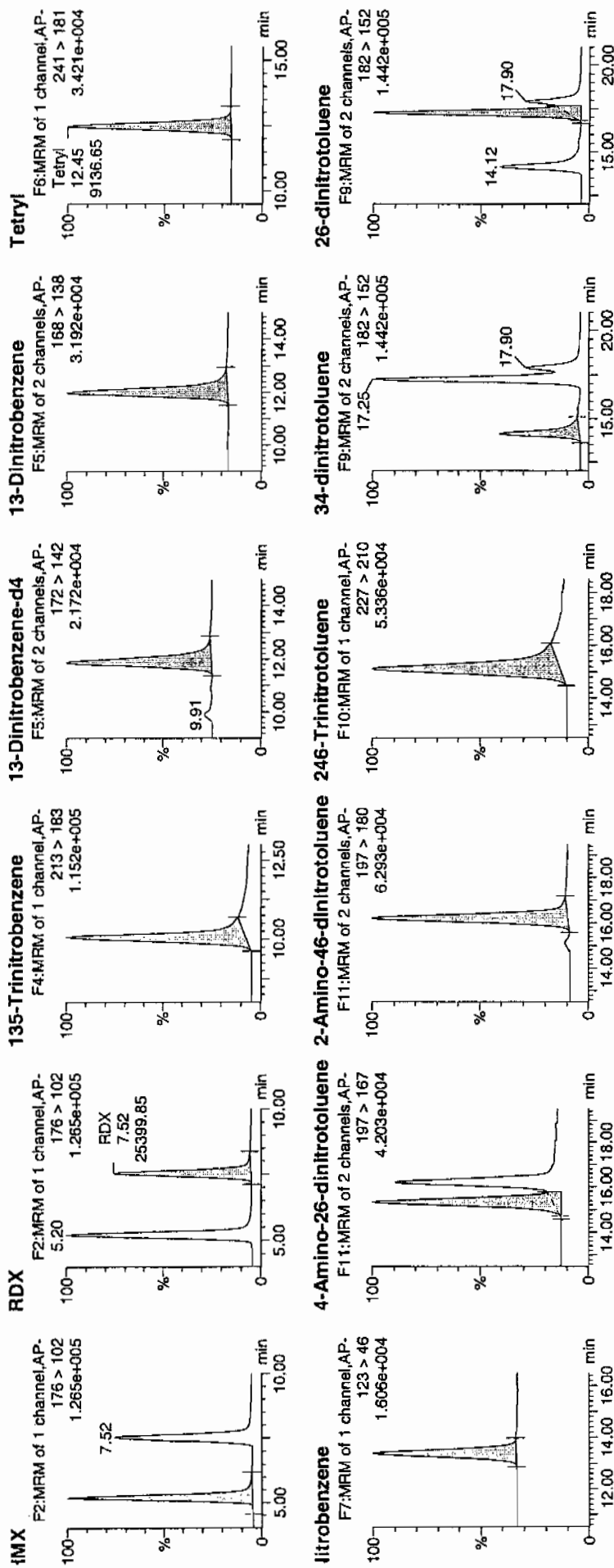
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Time: 12:07:25

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File: 1:1,B

4/17/10



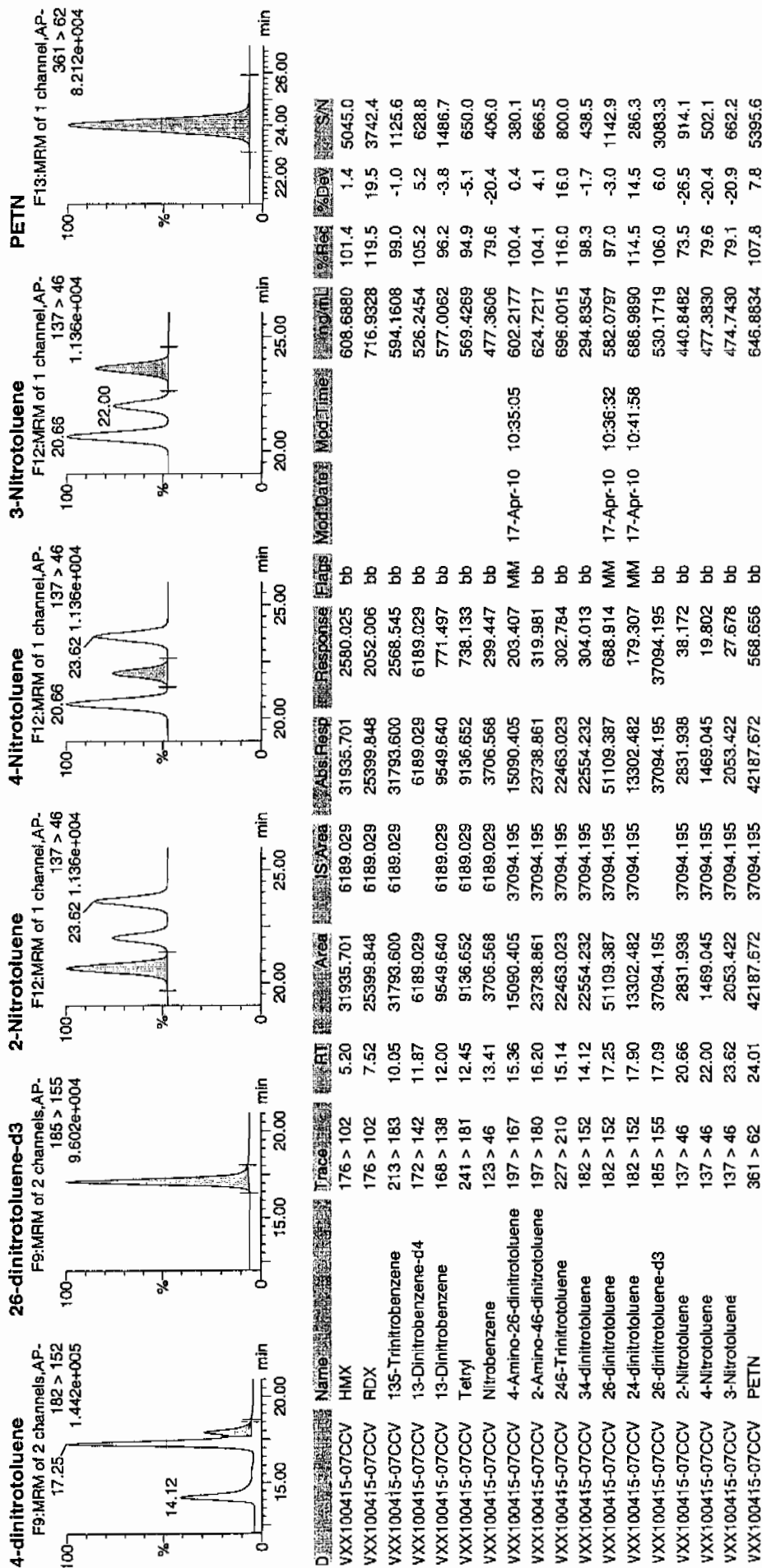
4/17/10

Quantify Sample Report

iEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 22 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qid, 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

Total 1560.9

Average 97.6

Ham 04/16/10

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): 10-2150

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Filename: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412191a

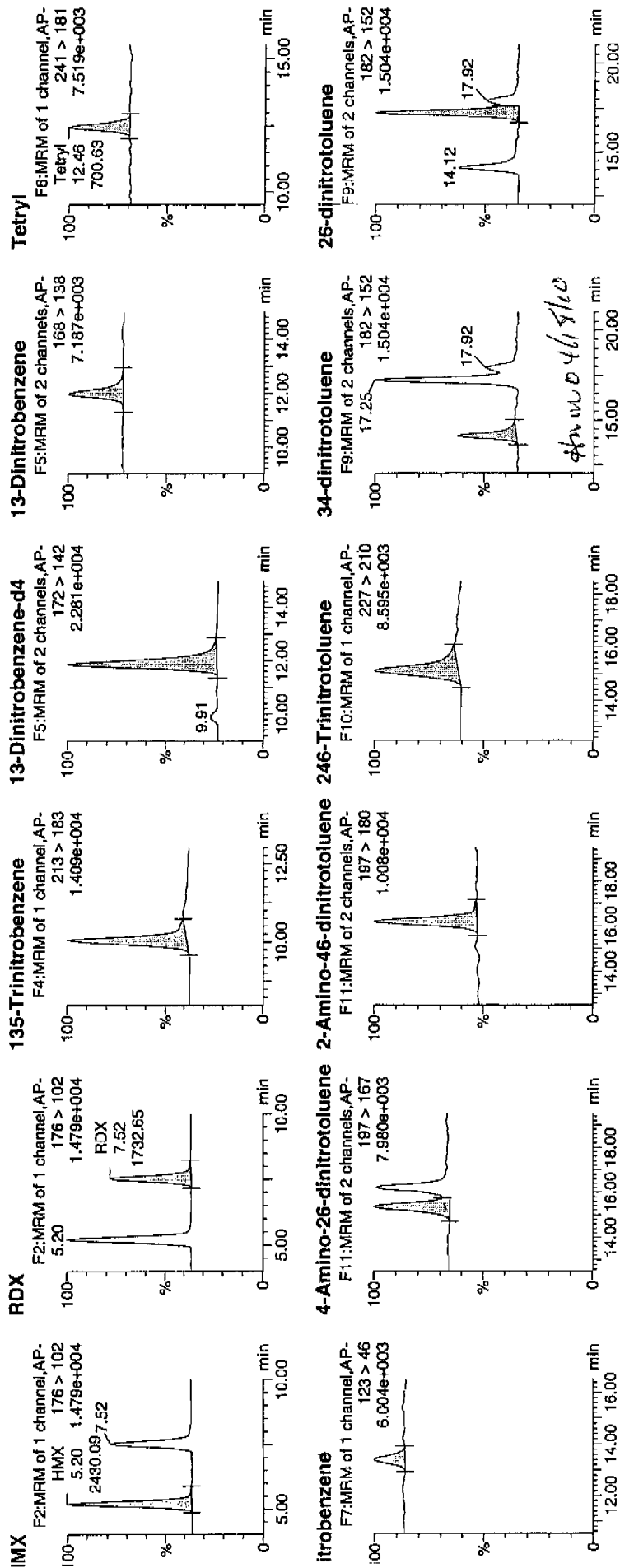
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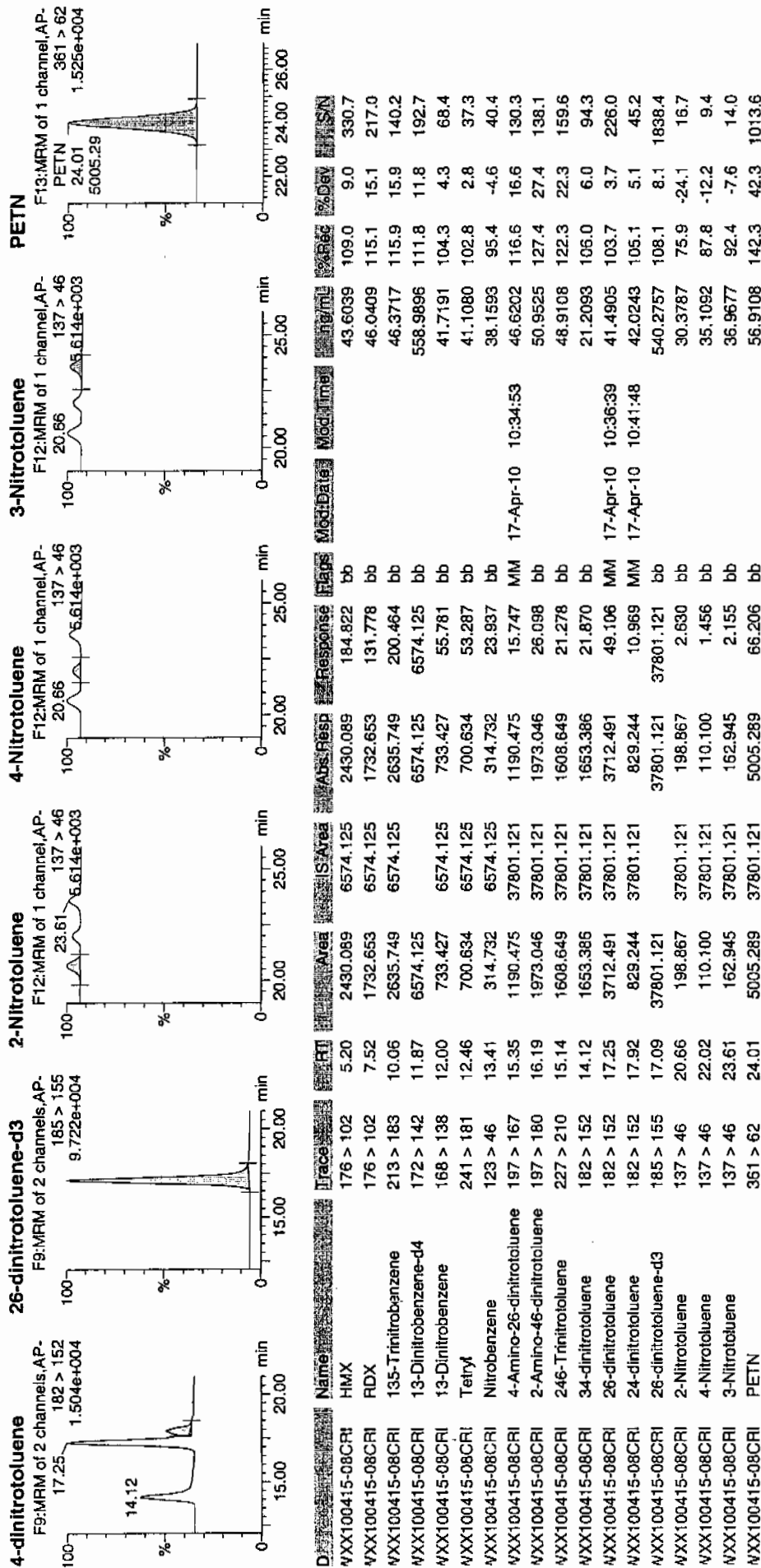
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Label: 1:1,C

WXX
4/17/10



Dataset: C:\MASSLYN\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

Total 1722.0

Average 107.6

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

4/17/10

4/17/10

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412201a

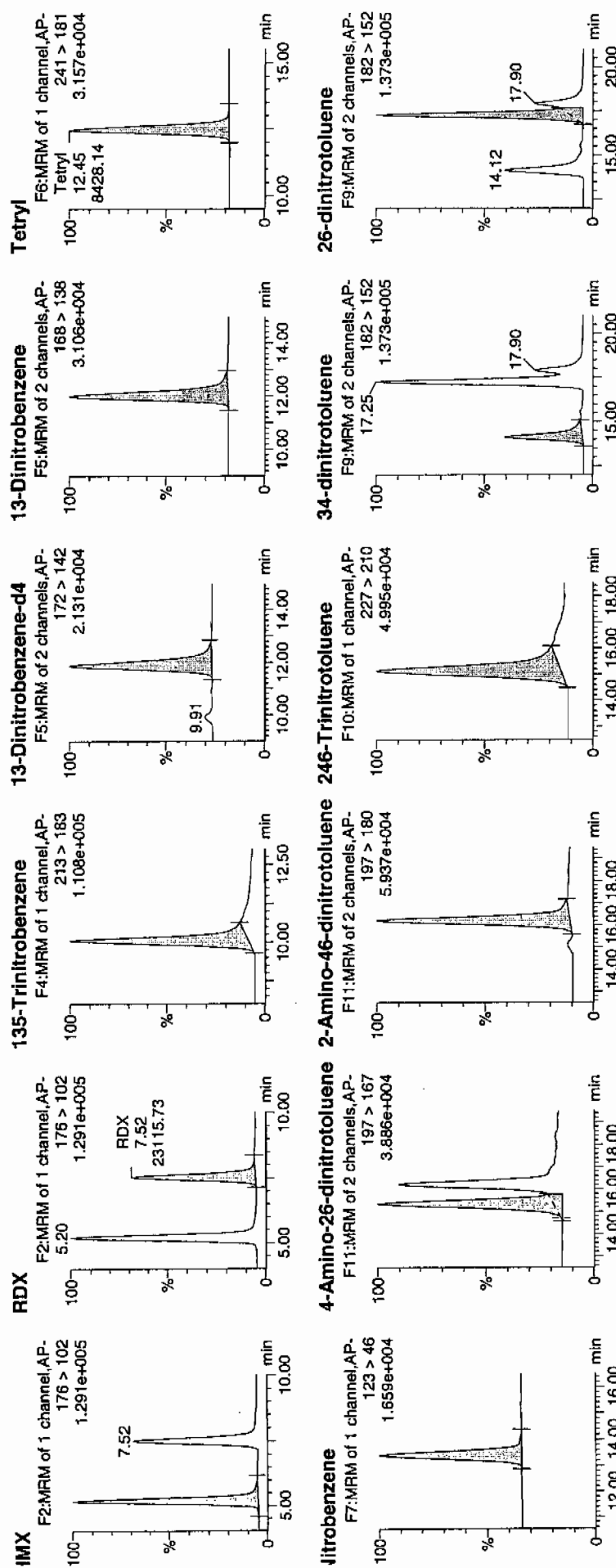
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Vial: 1:1, B

4/17/10
 MJP



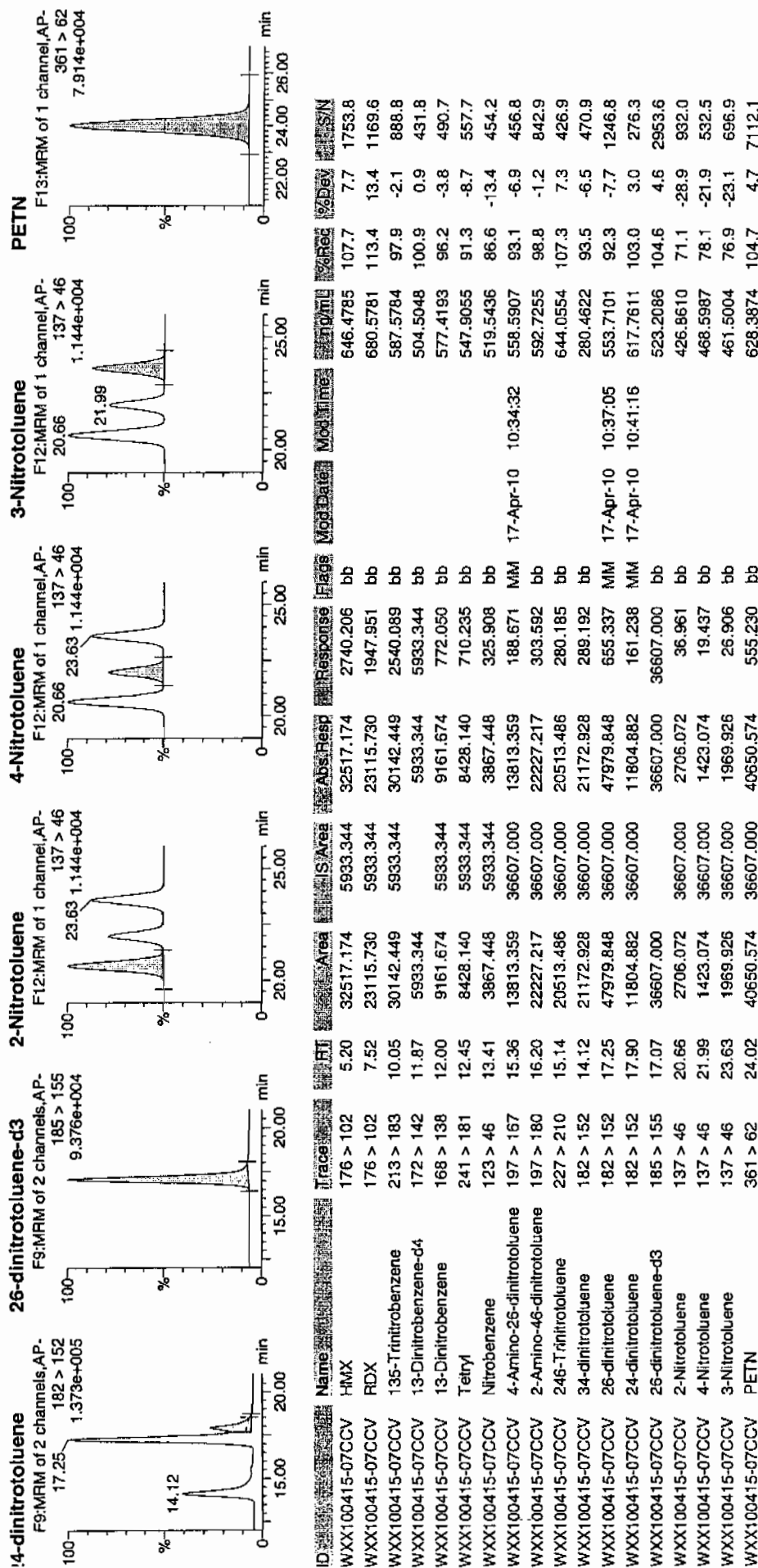
4/18/10
 JMW

Quantify Sample Report

EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Apr 17 10:45:10 2010, Page 46 of 97

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: 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

Average 94.5

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

MTT
 4/17/10

Done 04/18/10

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

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
 iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qid, Time: Sat Apr 17 10:42:19 2010

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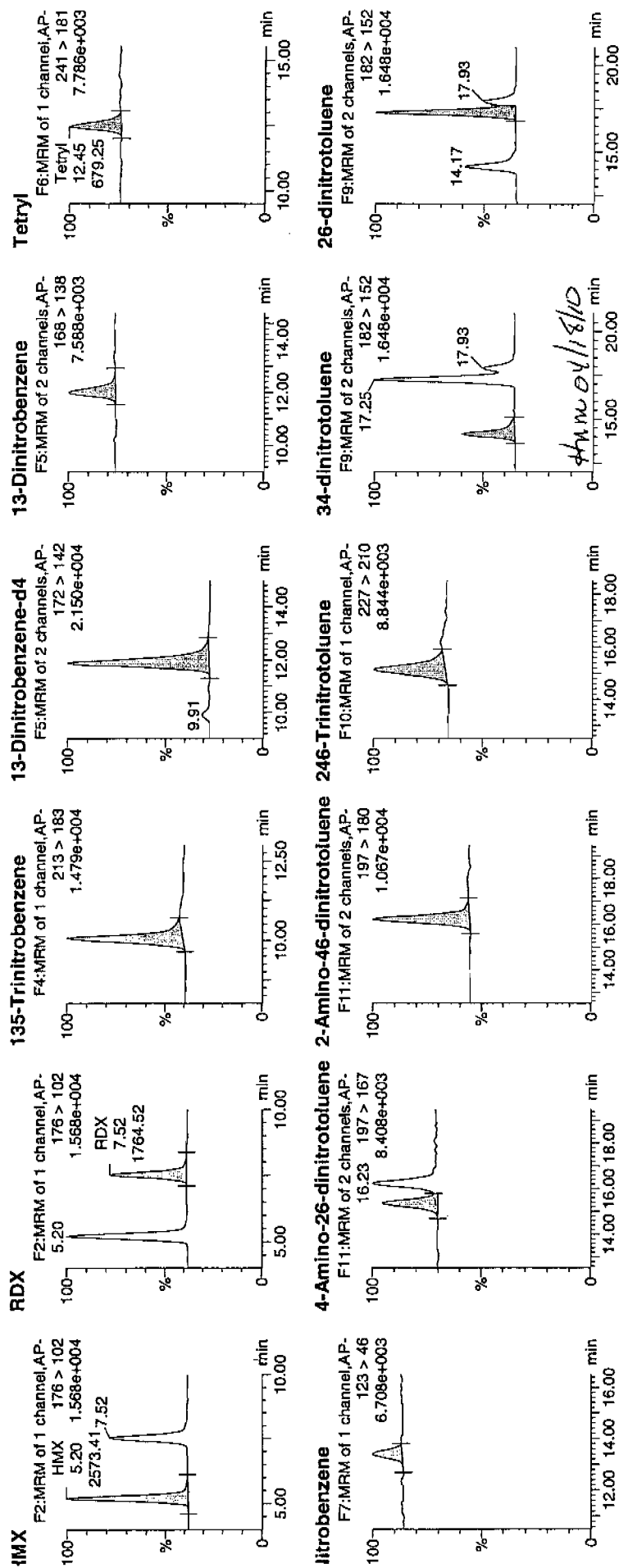
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MR
 4/17/10

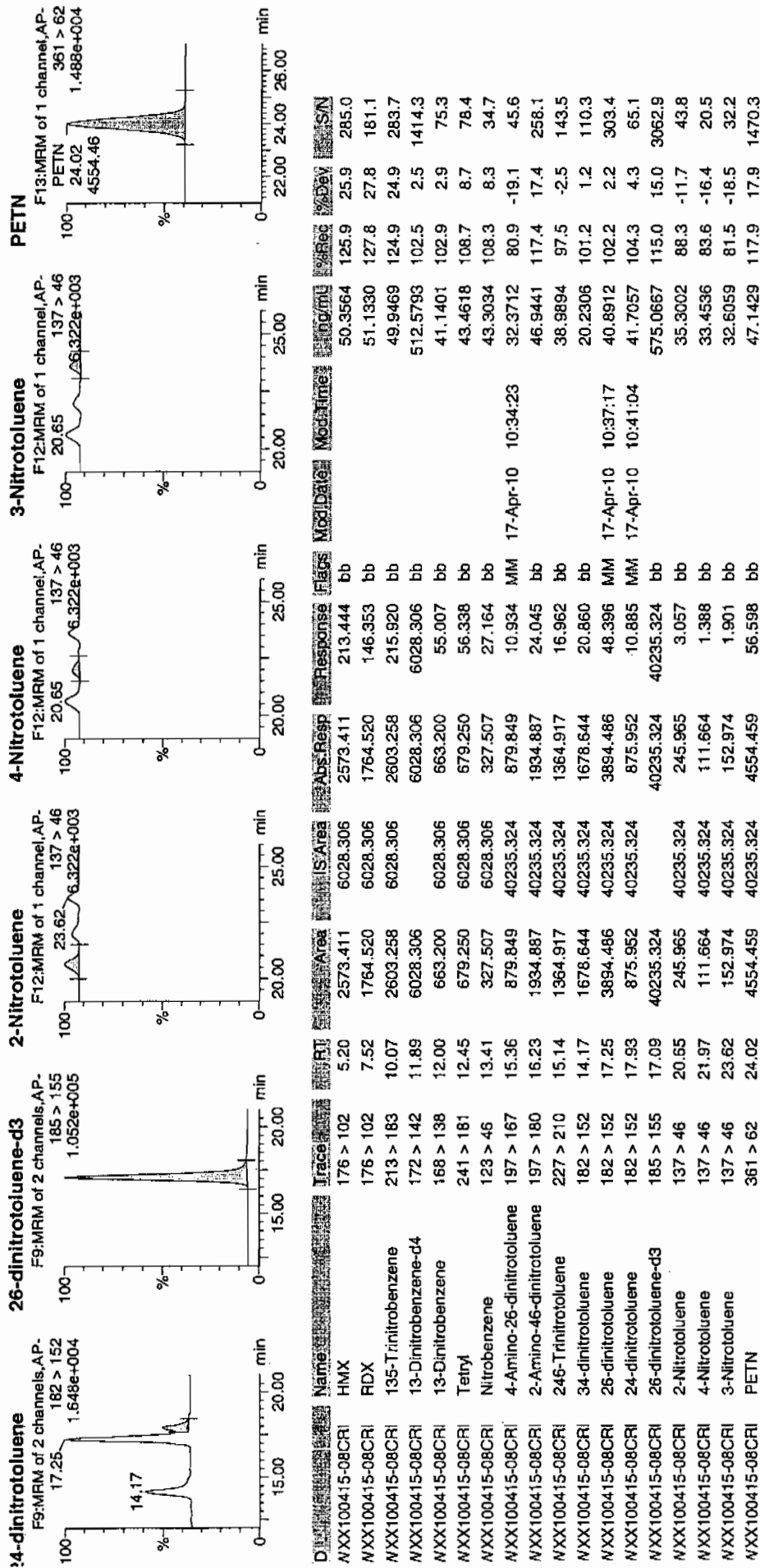


Quantify Sample Report

SEL 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



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

Handwritten:
 100%
 4/19/10

Total 1673.3

Average 104.6

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): 10-2150

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04050013.wiff

Analysis Date: 05-APR-10 15:54

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	121	121	
2,6-Diamino-4-nitrotoluene	100	128	128	
3,4-Dinitrotoluene	50	58.4	117	
3,5-Dinitroaniline	100	118	118	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	116	116	

Recovery Limits:

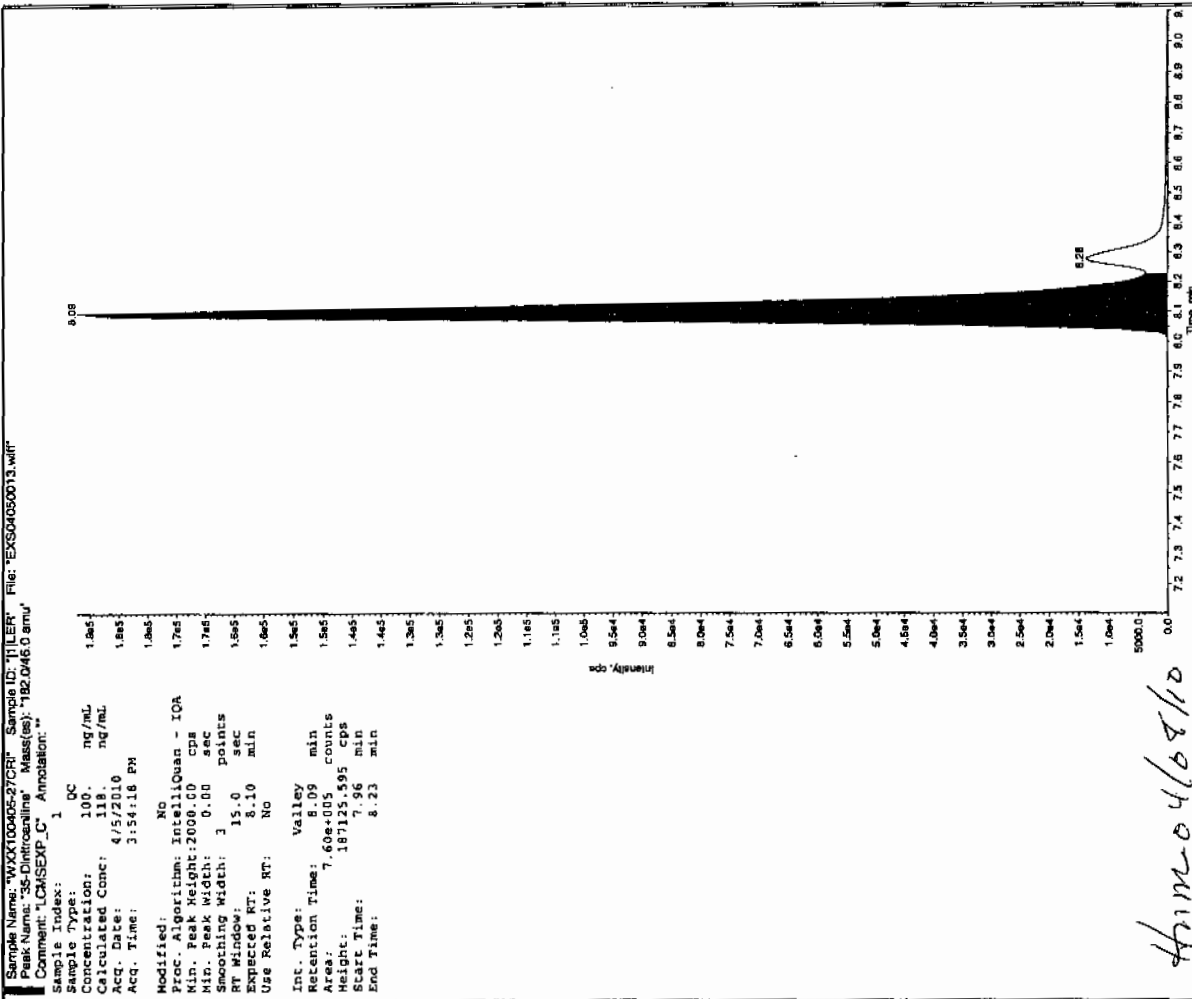
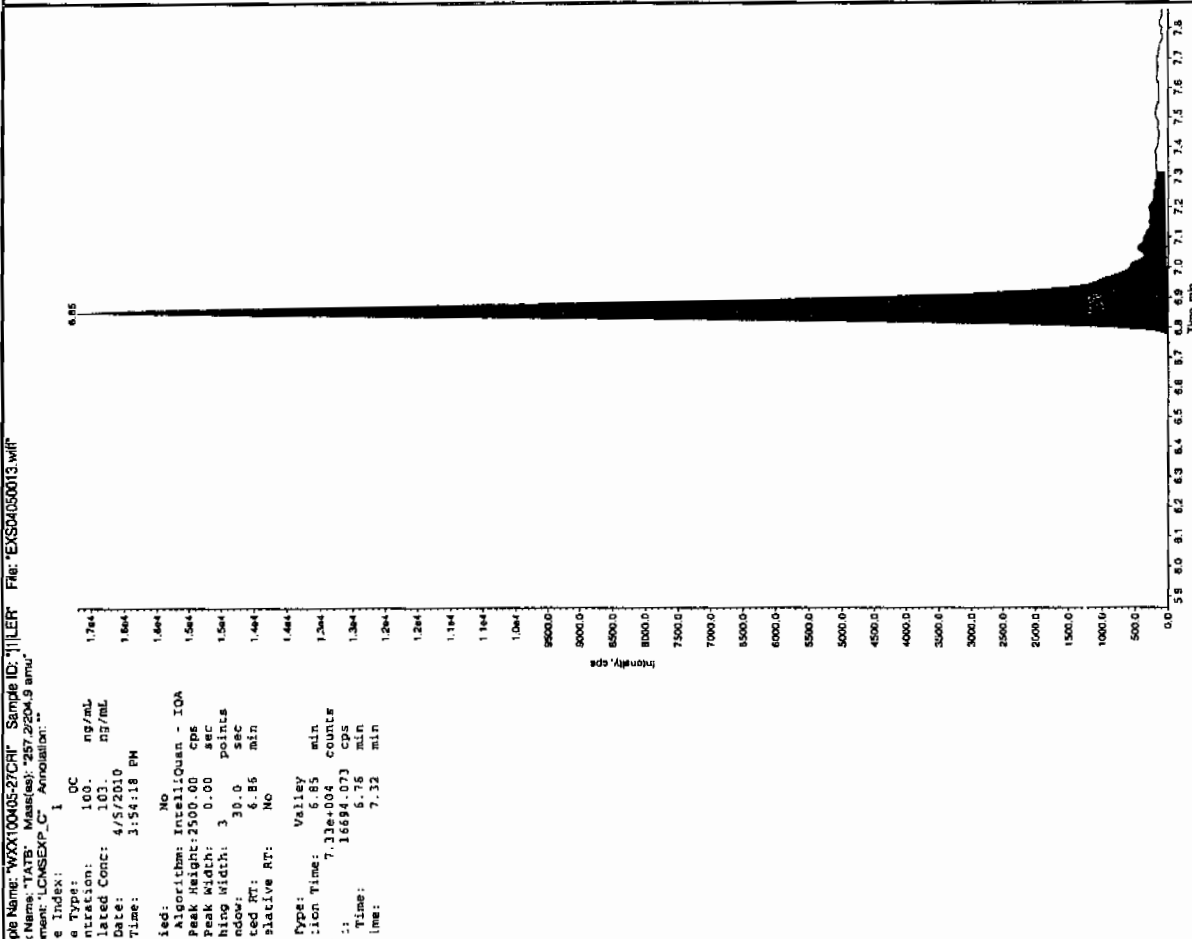
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

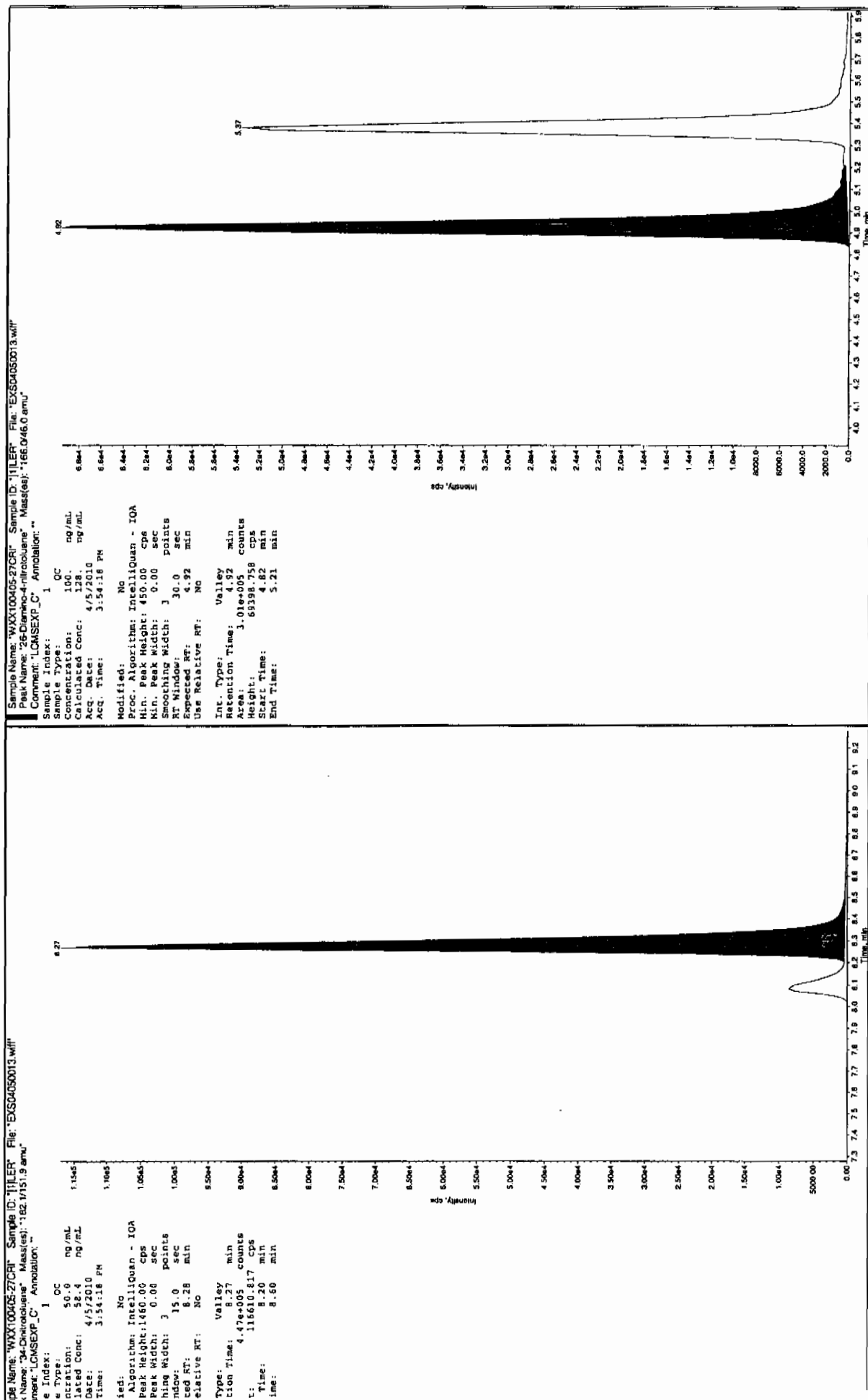
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

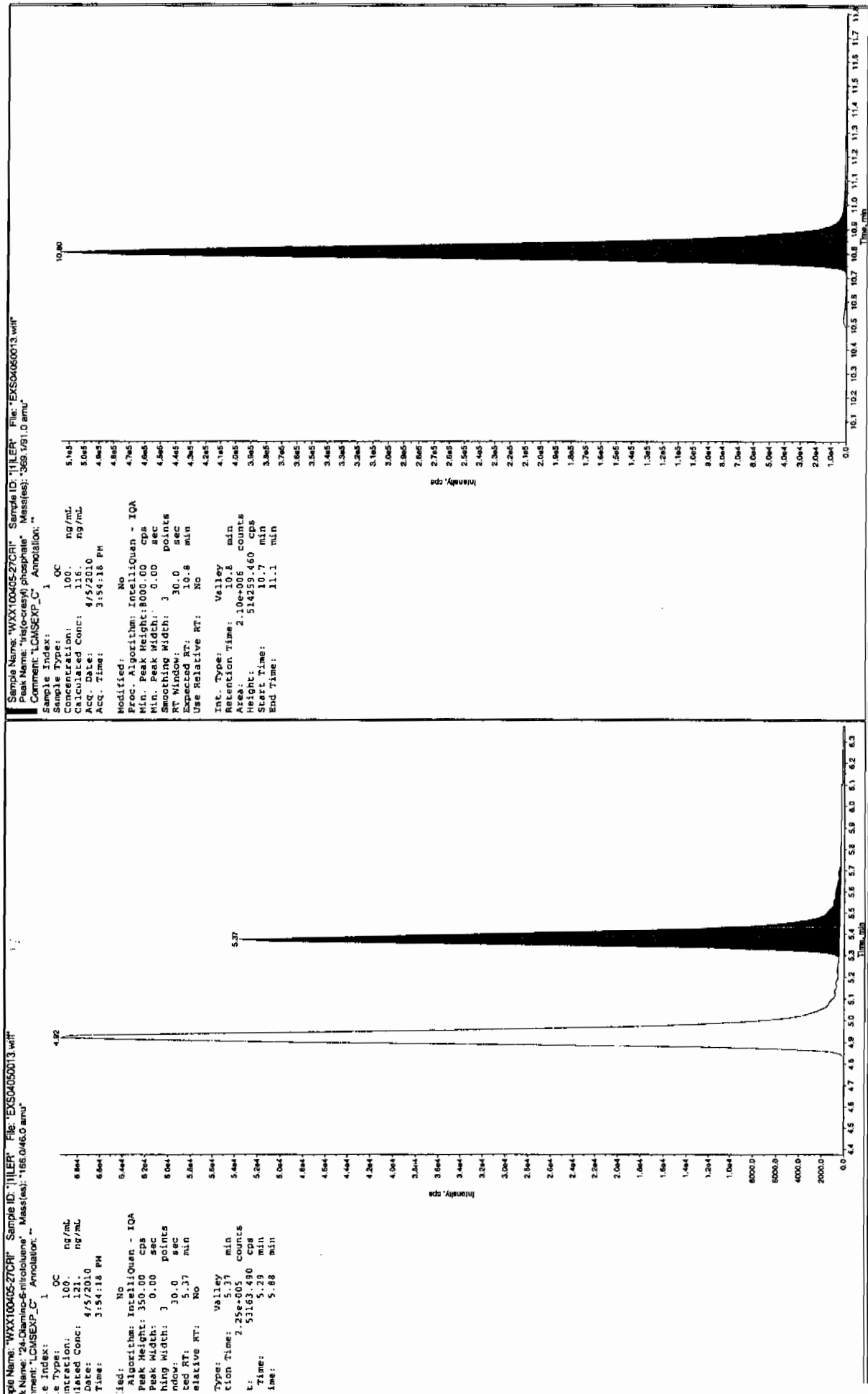
See 4/17/10



4/10/10



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04050024.wiff

Analysis Date: 05-APR-10 18:47

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	458	92	
2,6-Diamino-4-nitrotoluene	500	468	94	
3,4-Dinitrotoluene	250	233	93	
3,5-Dinitroaniline	500	503	101	
TATB	500	470	94	
tris(o-cresyl) phosphate	500	487	97	

Recovery Limits:

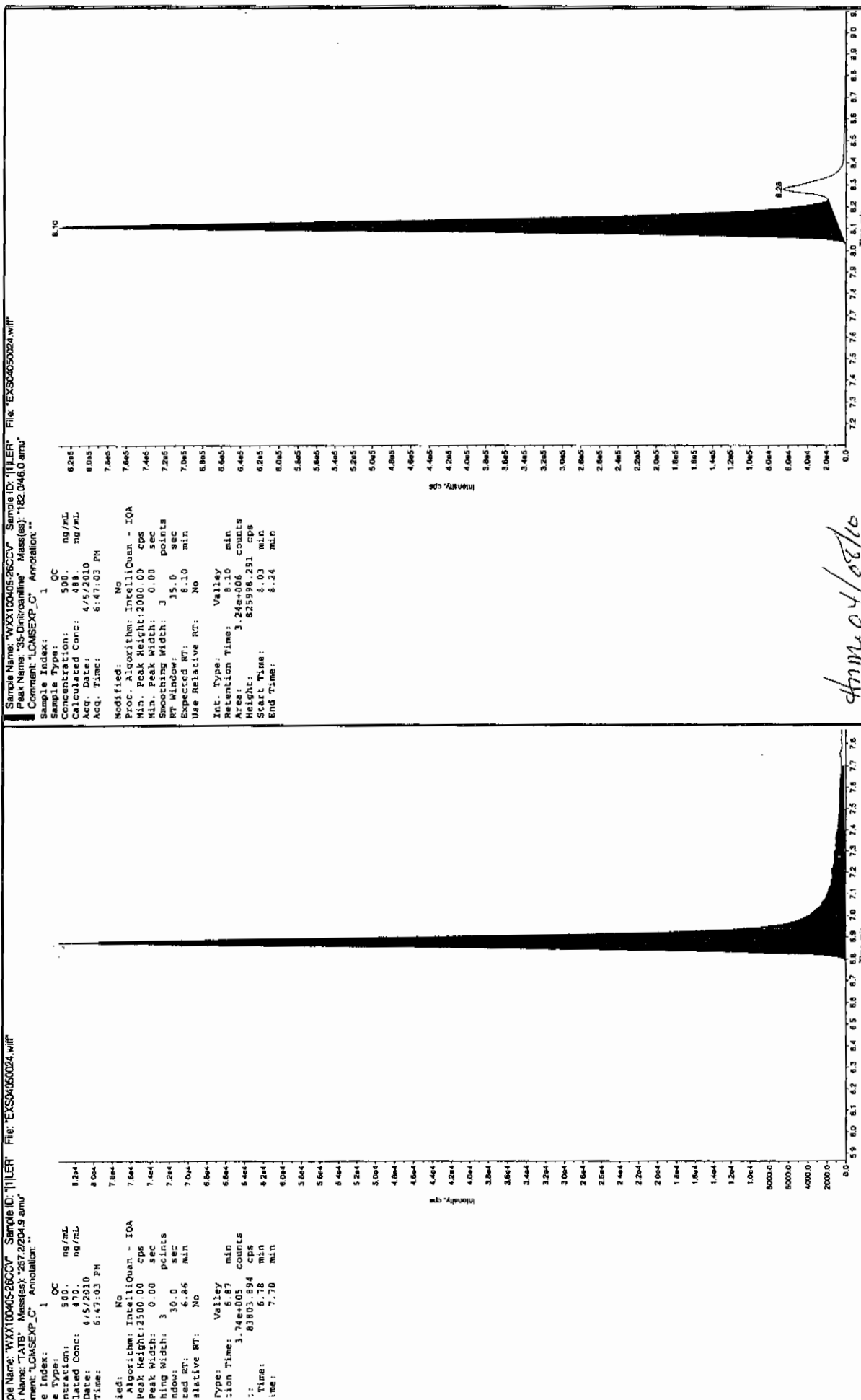
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Dec 4/11/10



Sample Name: "WXX100405-260CV" Sample ID: "111ER" File: "EXS04050024.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 489. ng/mL

Acq. Date: 4/5/2010

Acq. Time: 6:47:03 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoother Width: 3 points

RT Window: 35.0 sec

Expected RT: 8.10 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 8.10 min

Area: 3.24e+006 counts

Height: 82598.291 cps

Start Time: 8.03 min

End Time: 8.24 min

File Name: "WXX100405-260CV" Sample ID: "111ER" File: "EXS04050024.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 470. ng/mL

Acq. Date: 4/5/2010

Acq. Time: 6:47:03 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoother Width: 3 points

RT Window: 30.0 sec

Expected RT: 6.86 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 6.87 min

Area: 3.74e+005 counts

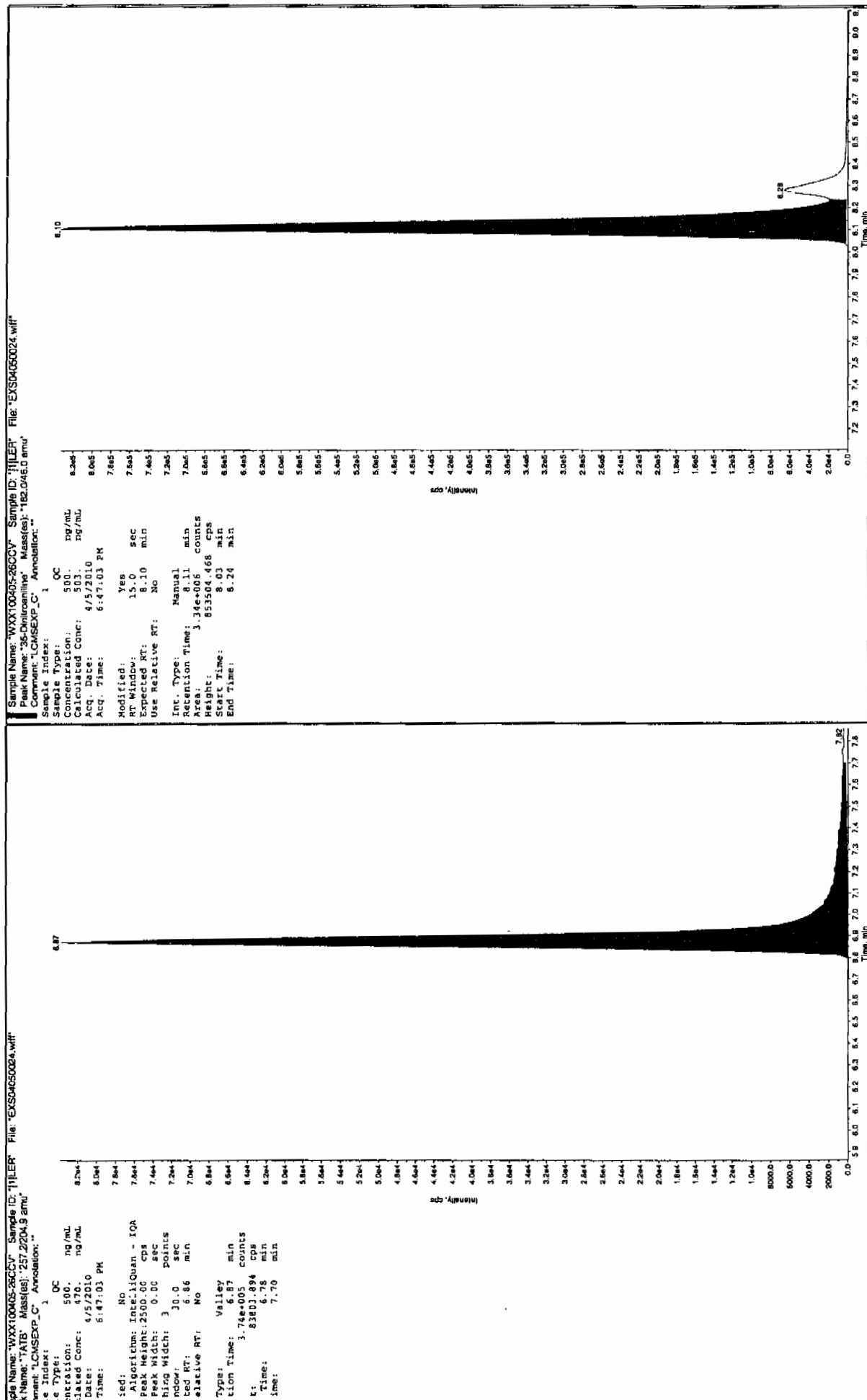
Height: 83803.894 cps

Start Time: 6.78 min

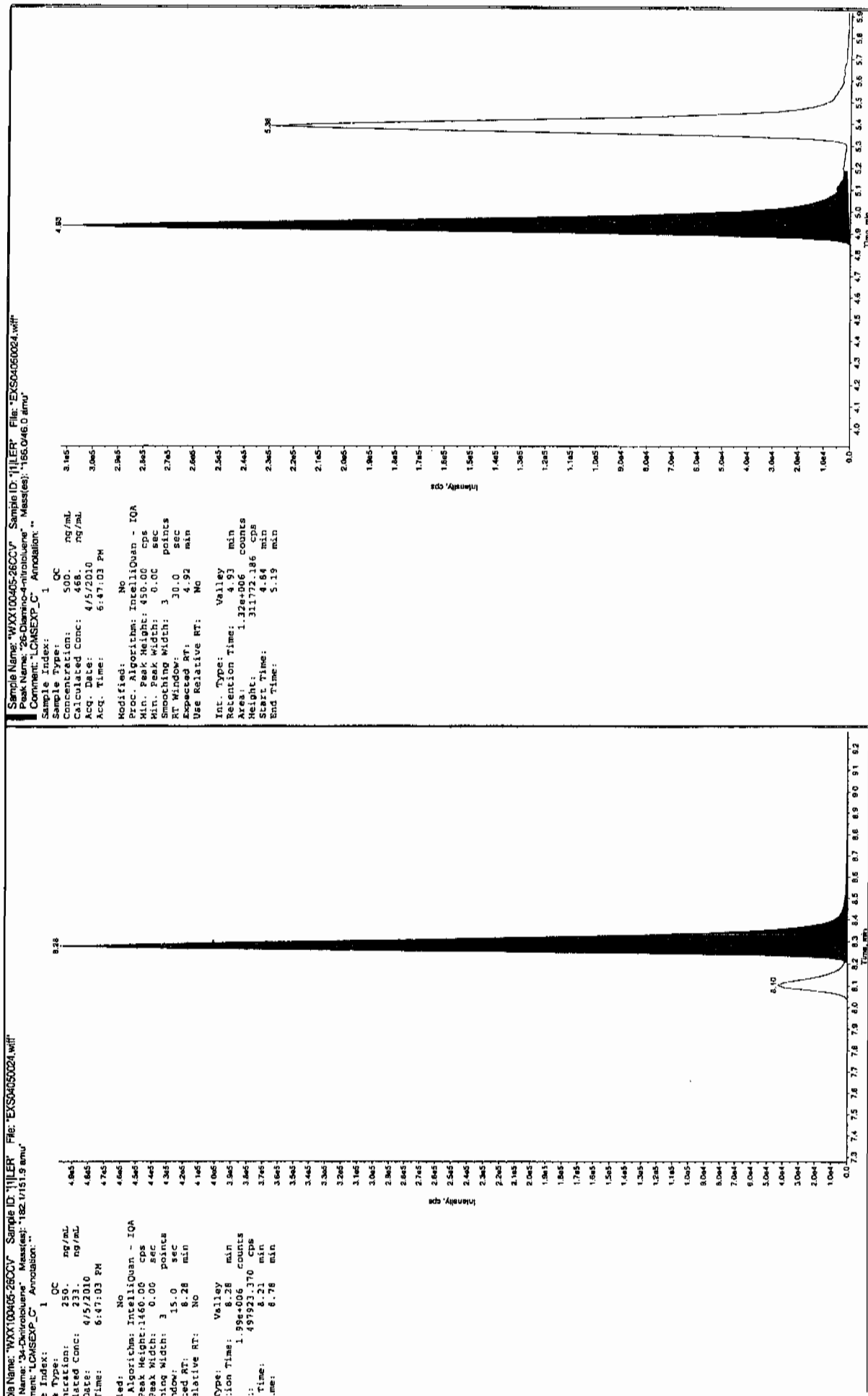
End Time: 7.70 min

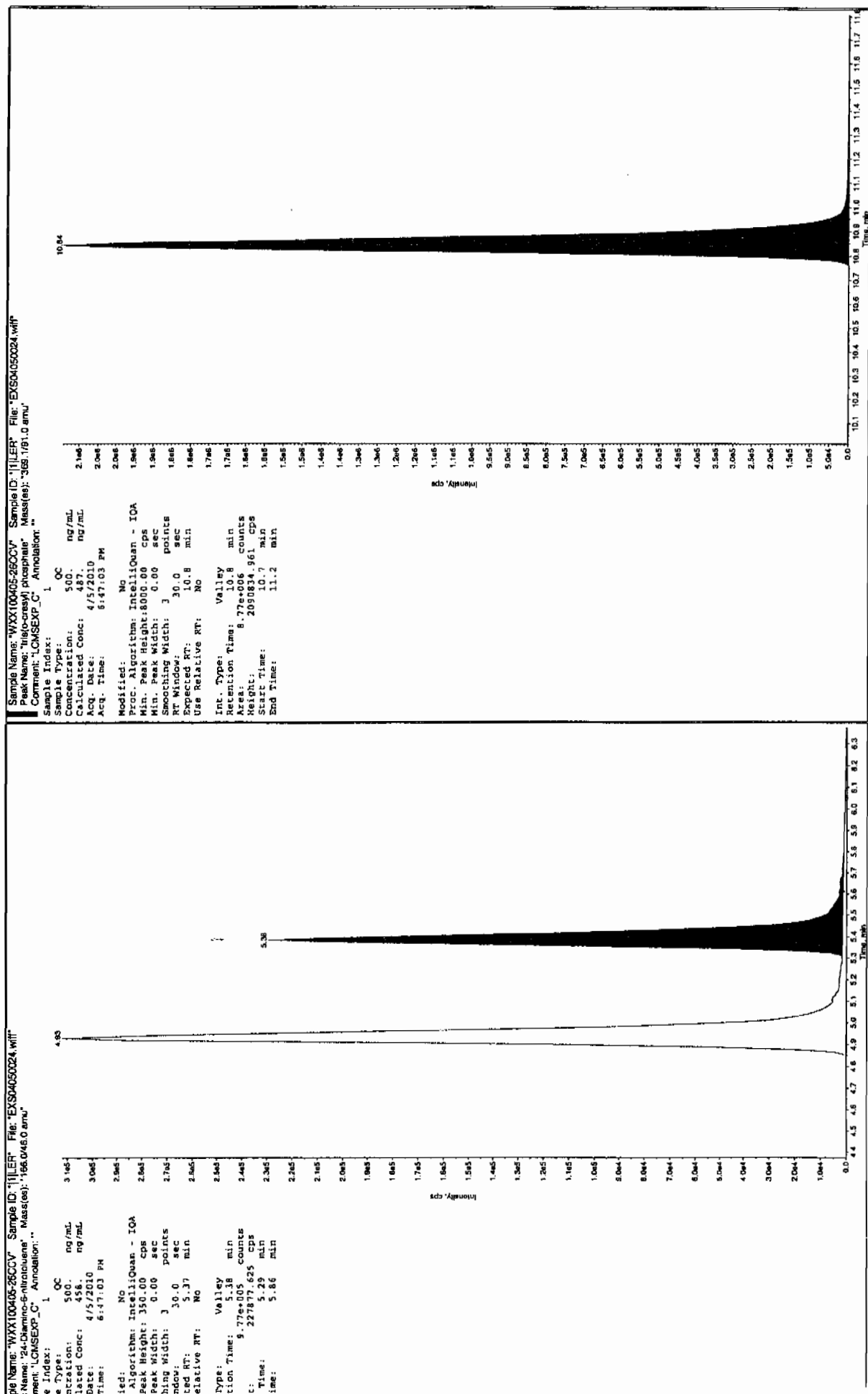
4/11/10

after scan 4/7/10



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04050026.wiff

Analysis Date: 05-APR-10 19:18

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	116	116	
2,6-Diamino-4-nitrotoluene	100	114	114	
3,4-Dinitrotoluene	50	54.3	109	
3,5-Dinitroaniline	100	109	109	
TATB	100	101	101	
tris(o-cresyl) phosphate	100	112	112	

Recovery Limits:

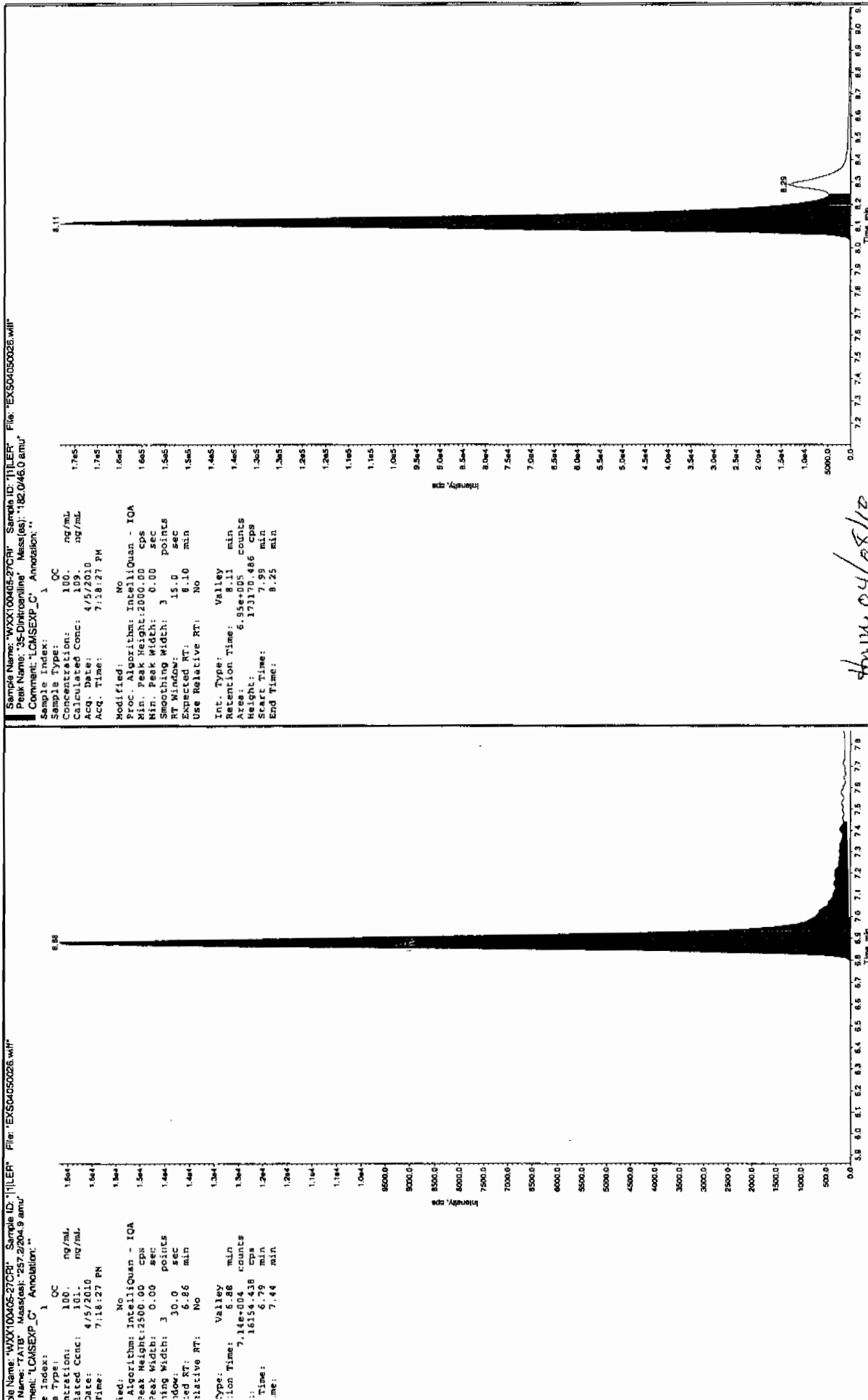
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

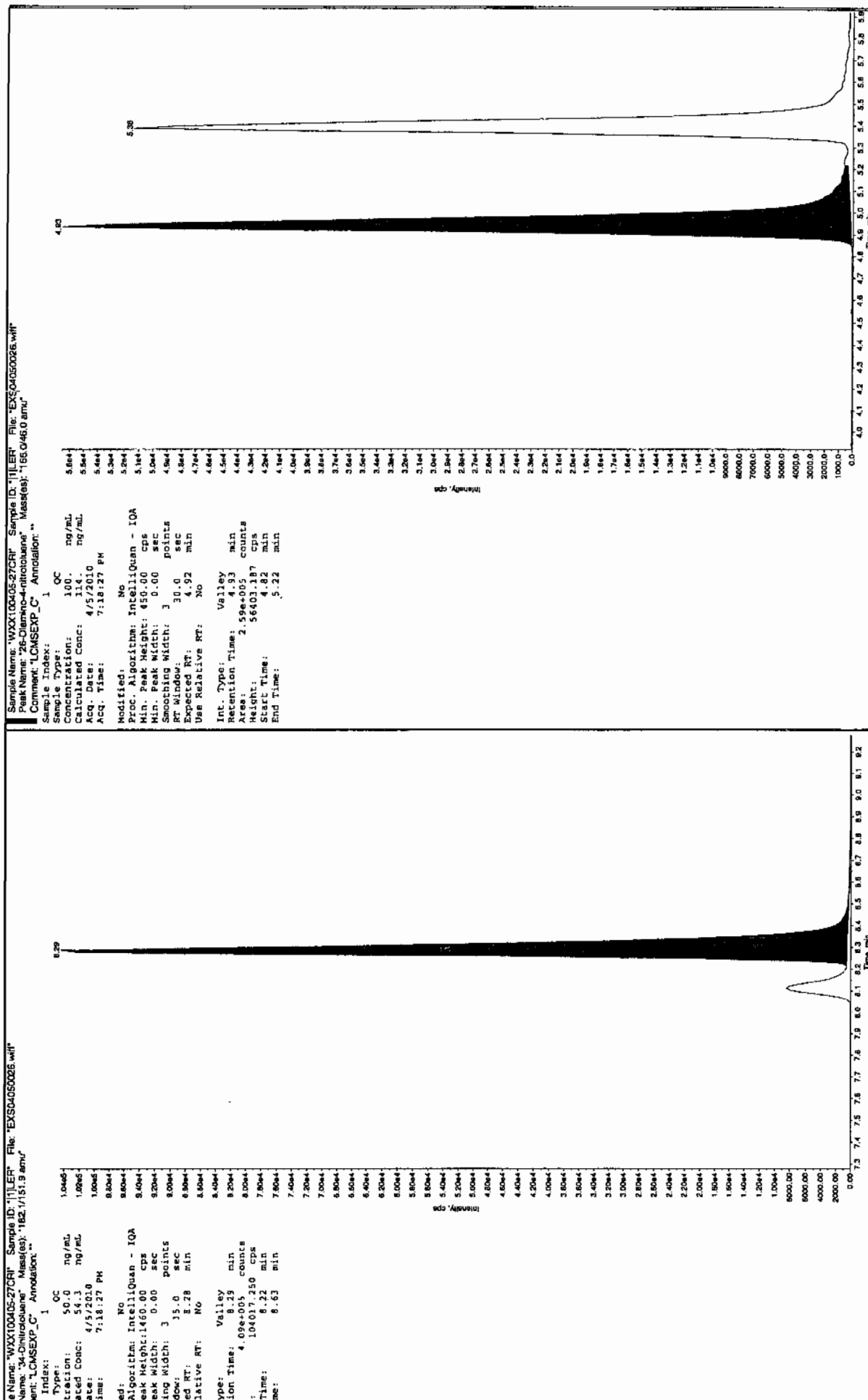
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

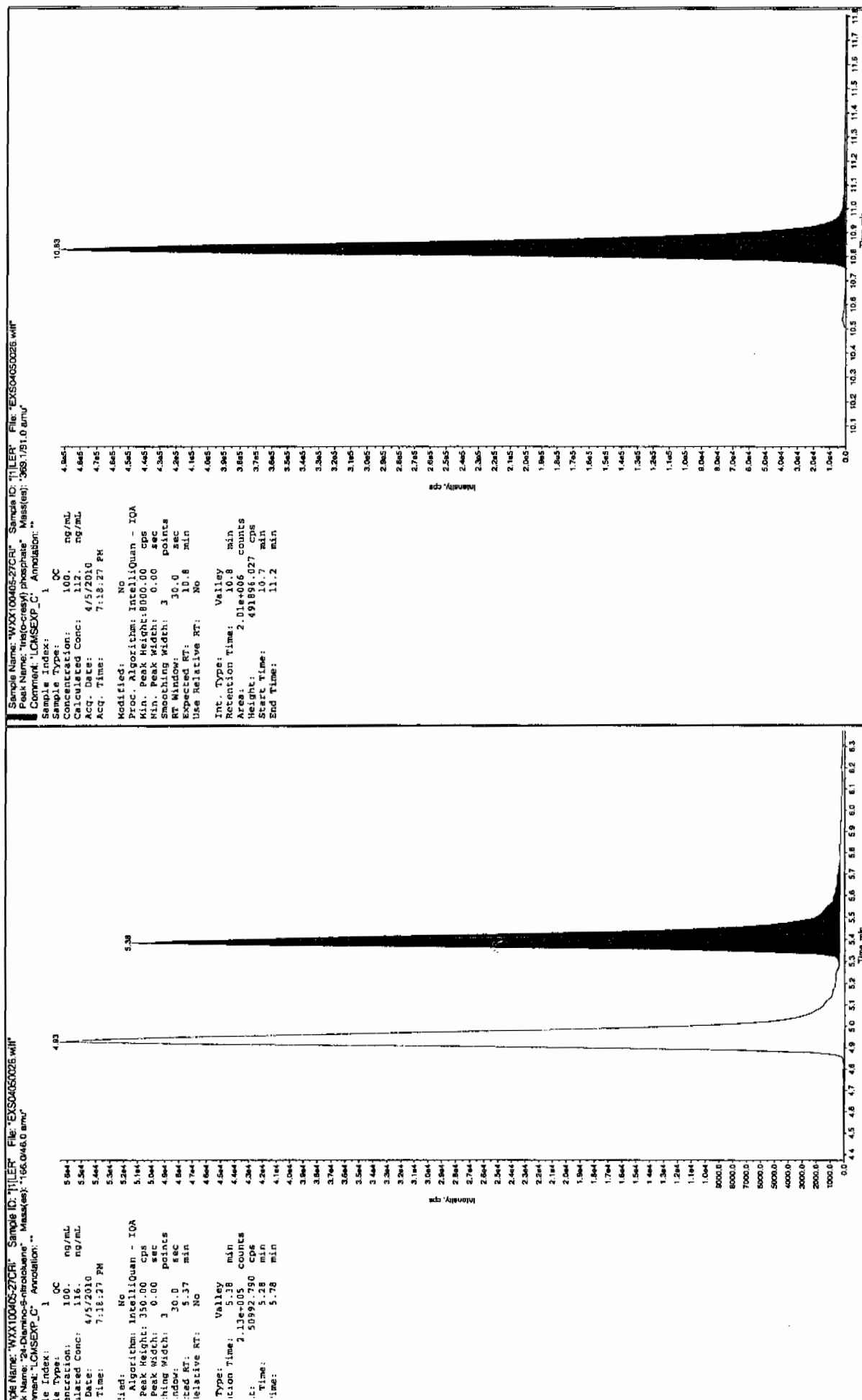
Scan 417110



Time 04/28/10



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04050037.wiff

Analysis Date: 05-APR-10 22:11

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	545	109	
2,6-Diamino-4-nitrotoluene	500	513	103	
3,4-Dinitrotoluene	250	238	95	
3,5-Dinitroaniline	500	533	107	
TATB	500	511	102	
tris(o-cresyl) phosphate	500	496	99	

Recovery Limits:

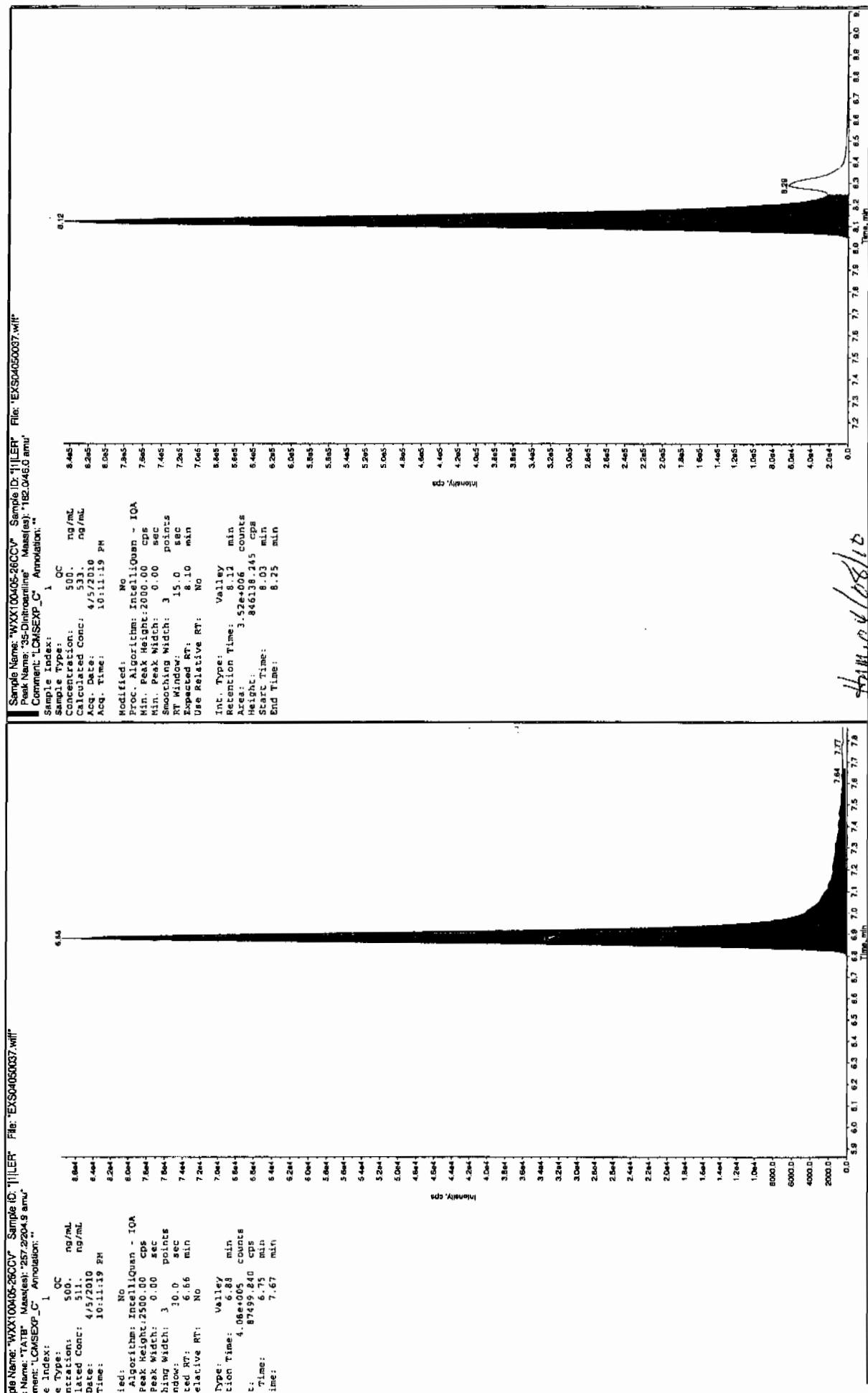
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

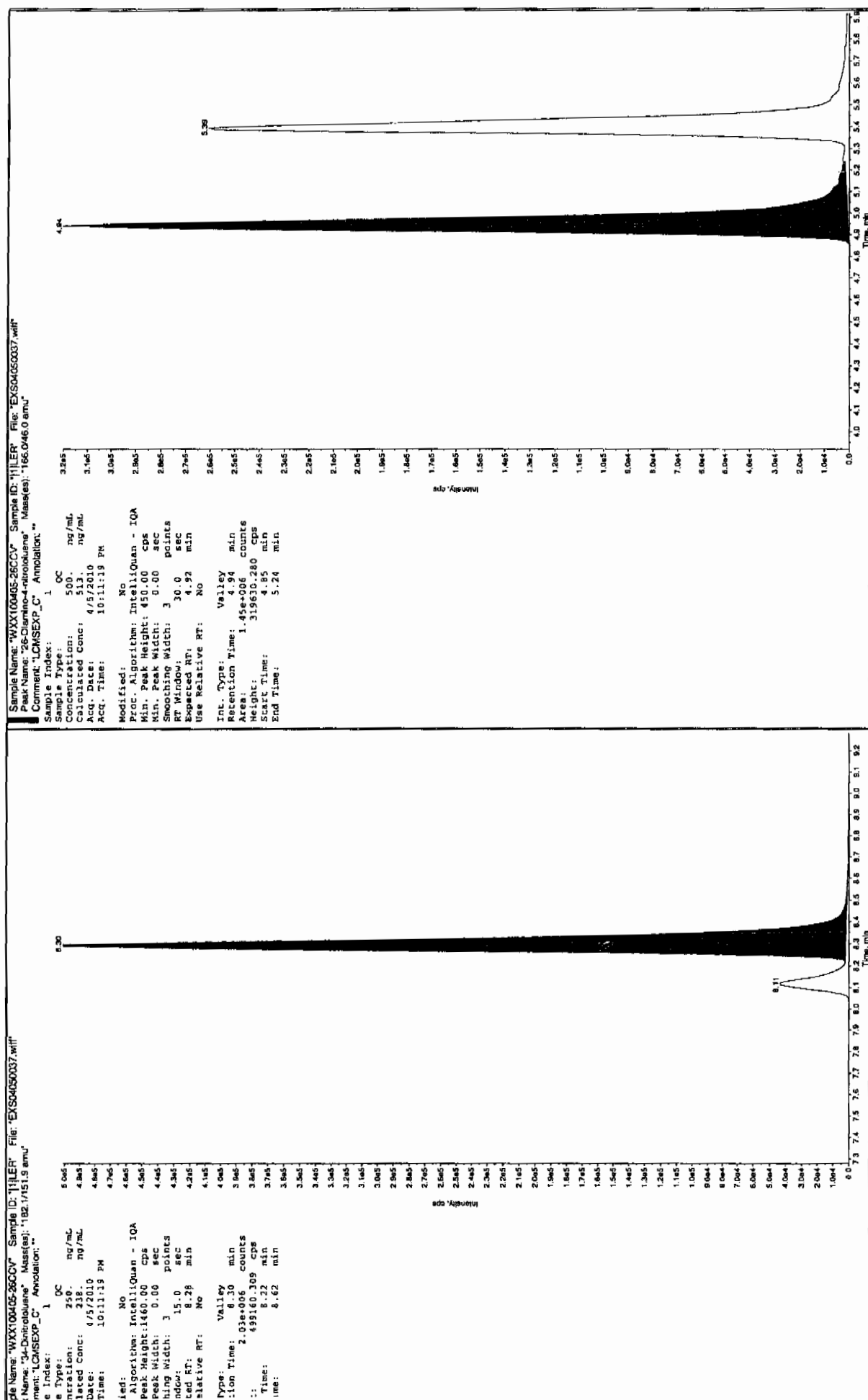
Column used to flag Recovery outside of Limits

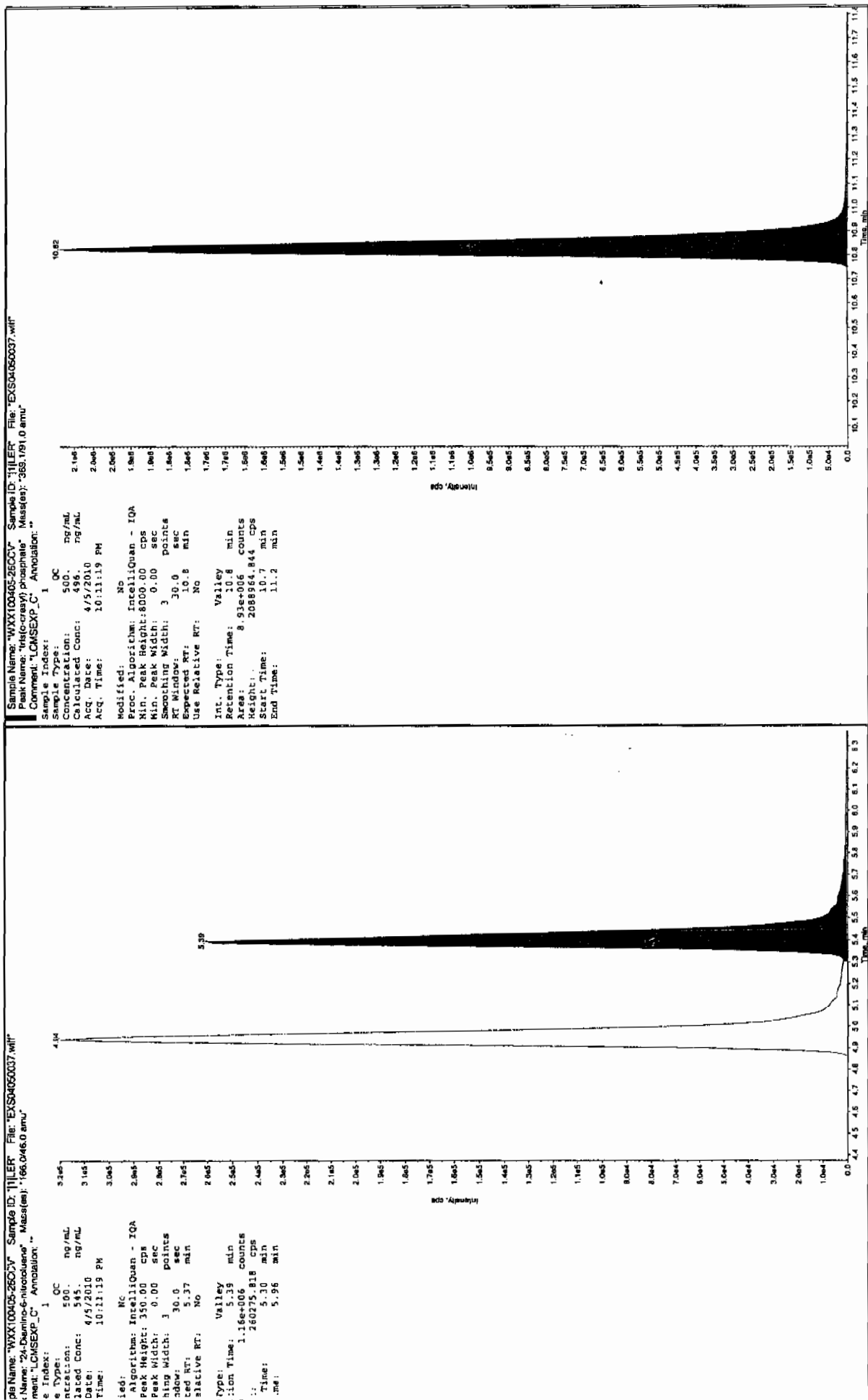
* Value outside of Recovery Limits

Scan 41710



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





Sample Name: "WXX100405-26037" Sample ID: "111ER" File: "EX04050037.wif"
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "368.151 0 amu"
 Comment: "LCMSEXP_C" Annotation: ""
 Sample Index: 1 QC
 Concentration: 500 ng/mL
 Calculated Conc: 496 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 10:11:19 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: 10.8 min
 Peak Height: 8.93e+06 counts
 Mass(es): 2088964.844 cps
 Start Time: 10.7 min
 End Time: 11.2 min

Sample Name: "WXX100405-26037" Sample ID: "111ER" File: "EX04050037.wif"
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "368.151 0 amu"
 Comment: "LCMSEXP_C" Annotation: ""
 Sample Index: 1 QC
 Concentration: 500 ng/mL
 Calculated Conc: 545 ng/mL
 Acq. Date: 4/5/2010
 Acq. Time: 10:11:19 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.37 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.39 min
 Peak Height: 1.16e+06 counts
 Mass(es): 280775.818 cps
 Start Time: 5.30 min
 End Time: 5.96 min

SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04050039.wiff

Analysis Date: 05-APR-10 22:42

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	137	137	
2,6-Diamino-4-nitrotoluene	100	129	129	
3,4-Dinitrotoluene	50	55.5	111	
3,5-Dinitroaniline	100	122	122	
TATB	100	108	108	
tris(o-cresyl) phosphate	100	113	113	

Recovery Limits:

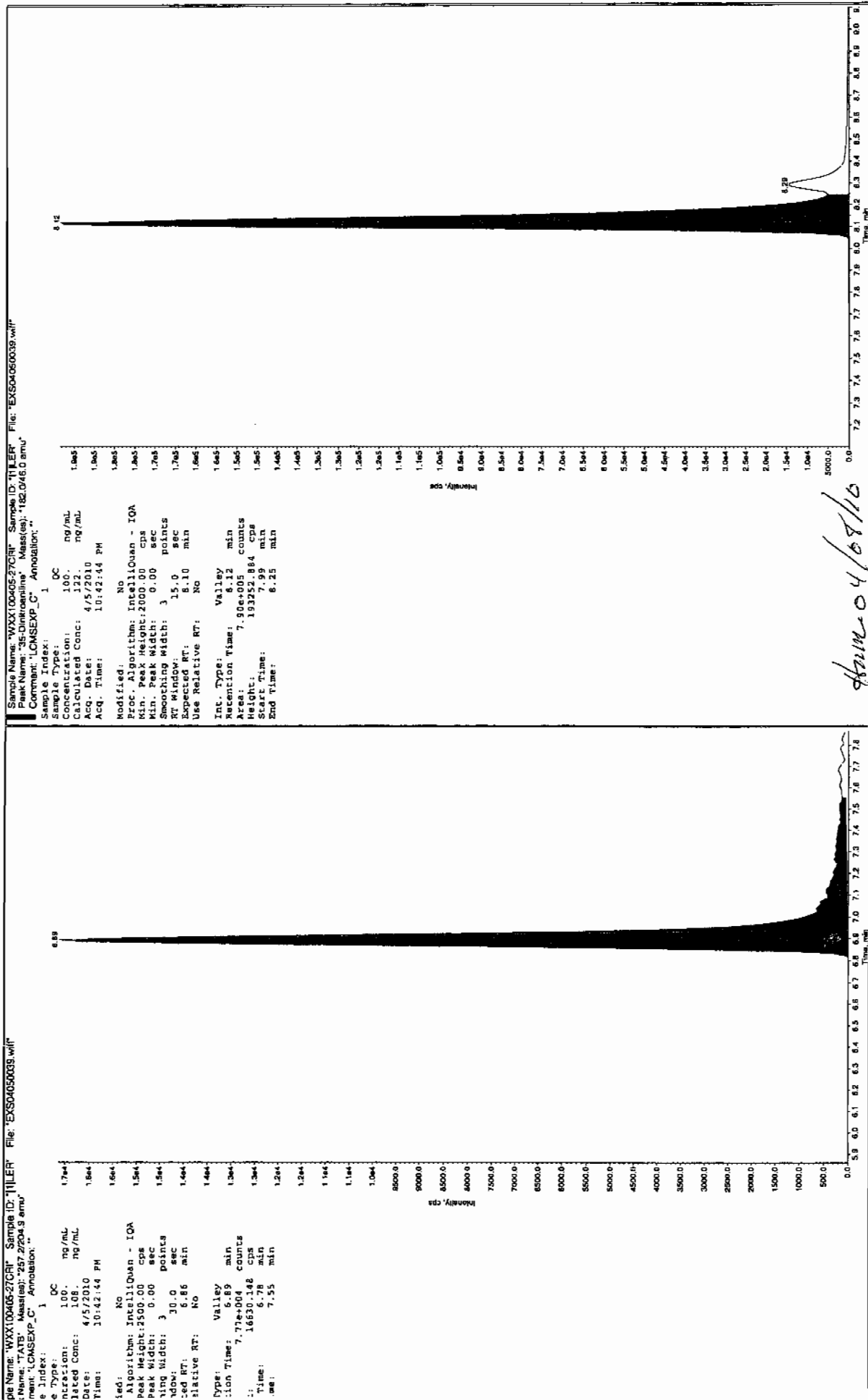
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

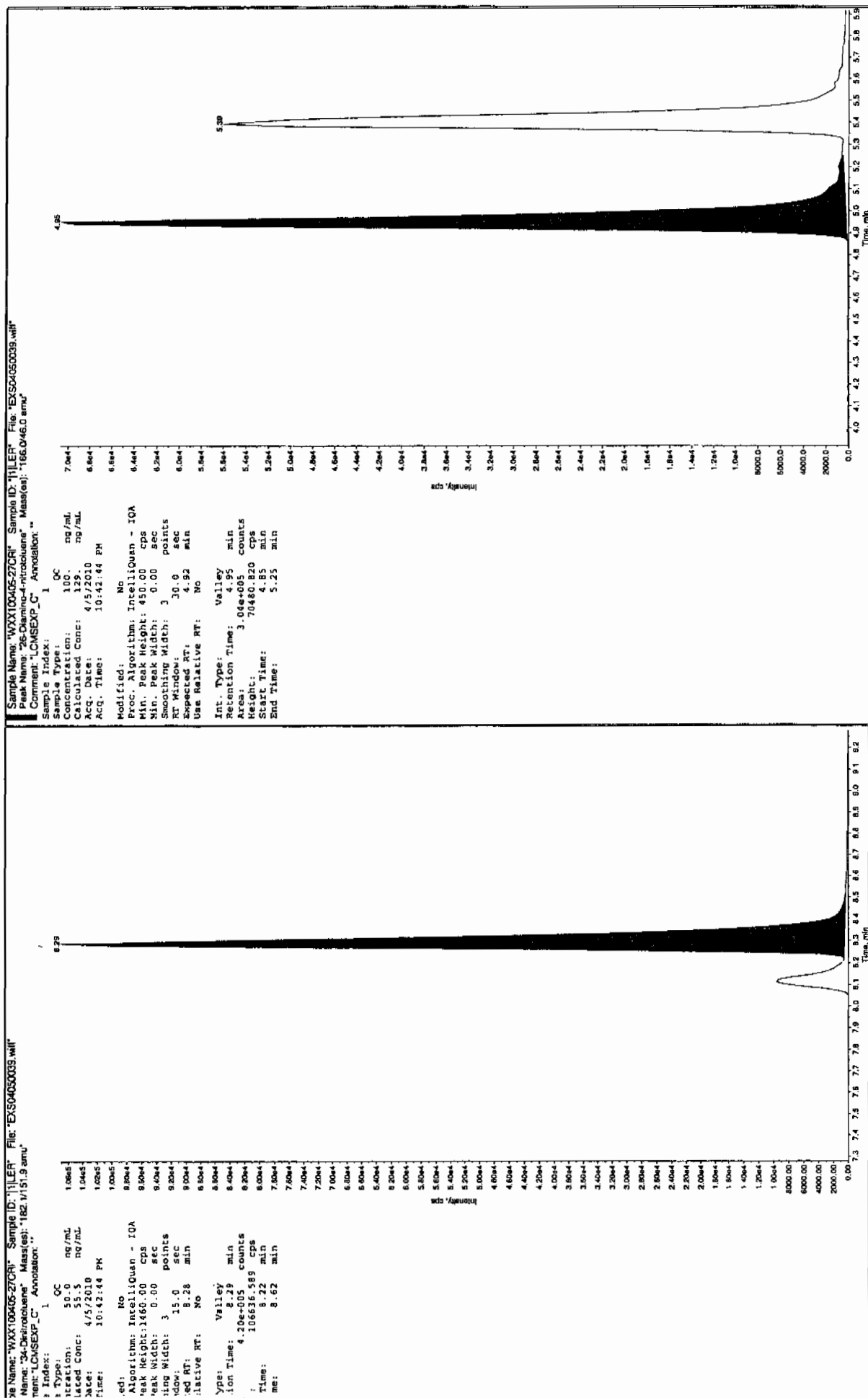
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

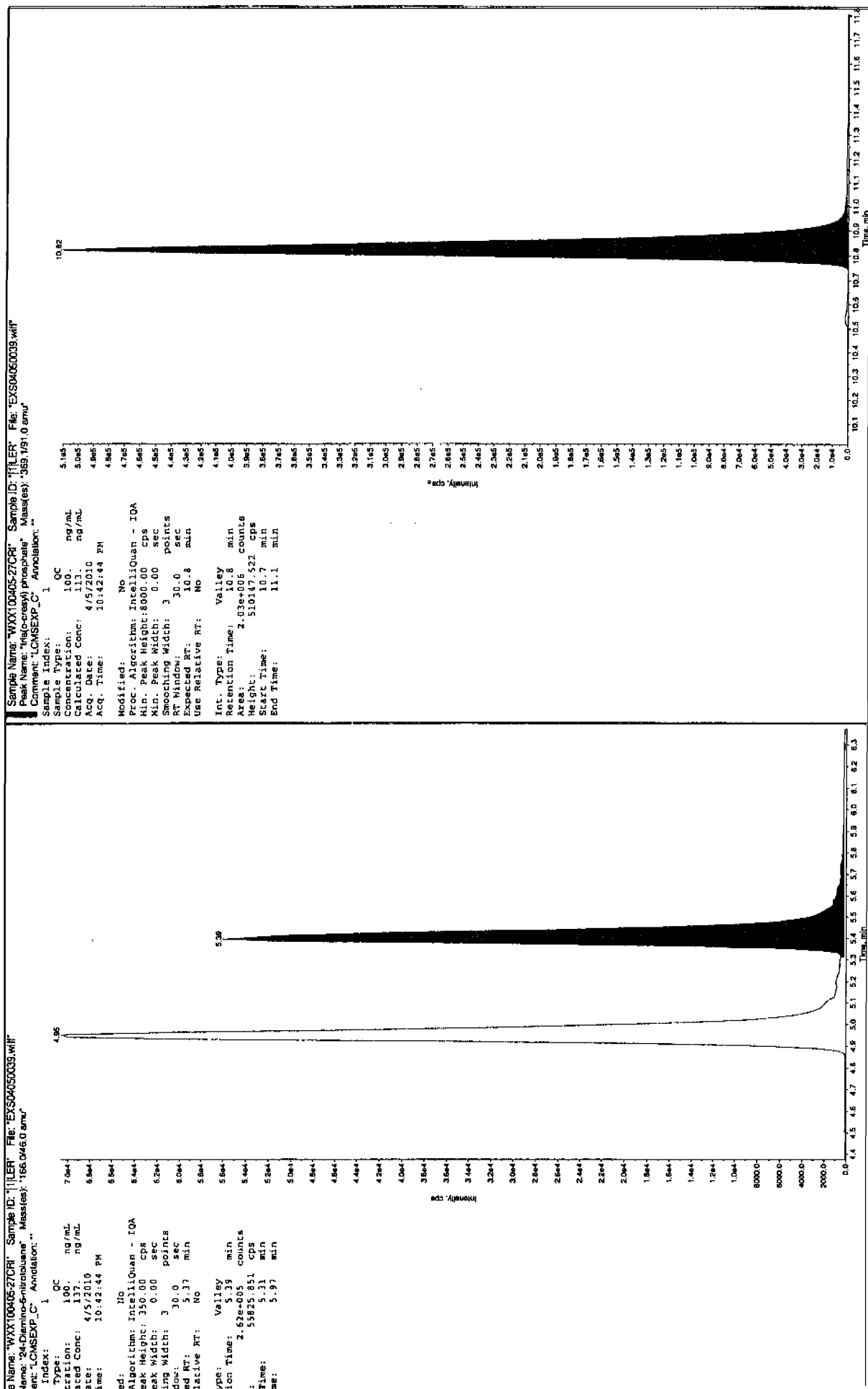
Dec 4/7/10



Hum 04/08/10



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04050050.wiff

Analysis Date: 06-APR-10 01:35

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	615	123	
2,6-Diamino-4-nitrotoluene	500	532	106	
3,4-Dinitrotoluene	250	248	99	
3,5-Dinitroaniline	500	555	111	
TATB	500	515	103	
tris(o-cresyl) phosphate	500	498	100	

Recovery Limits:

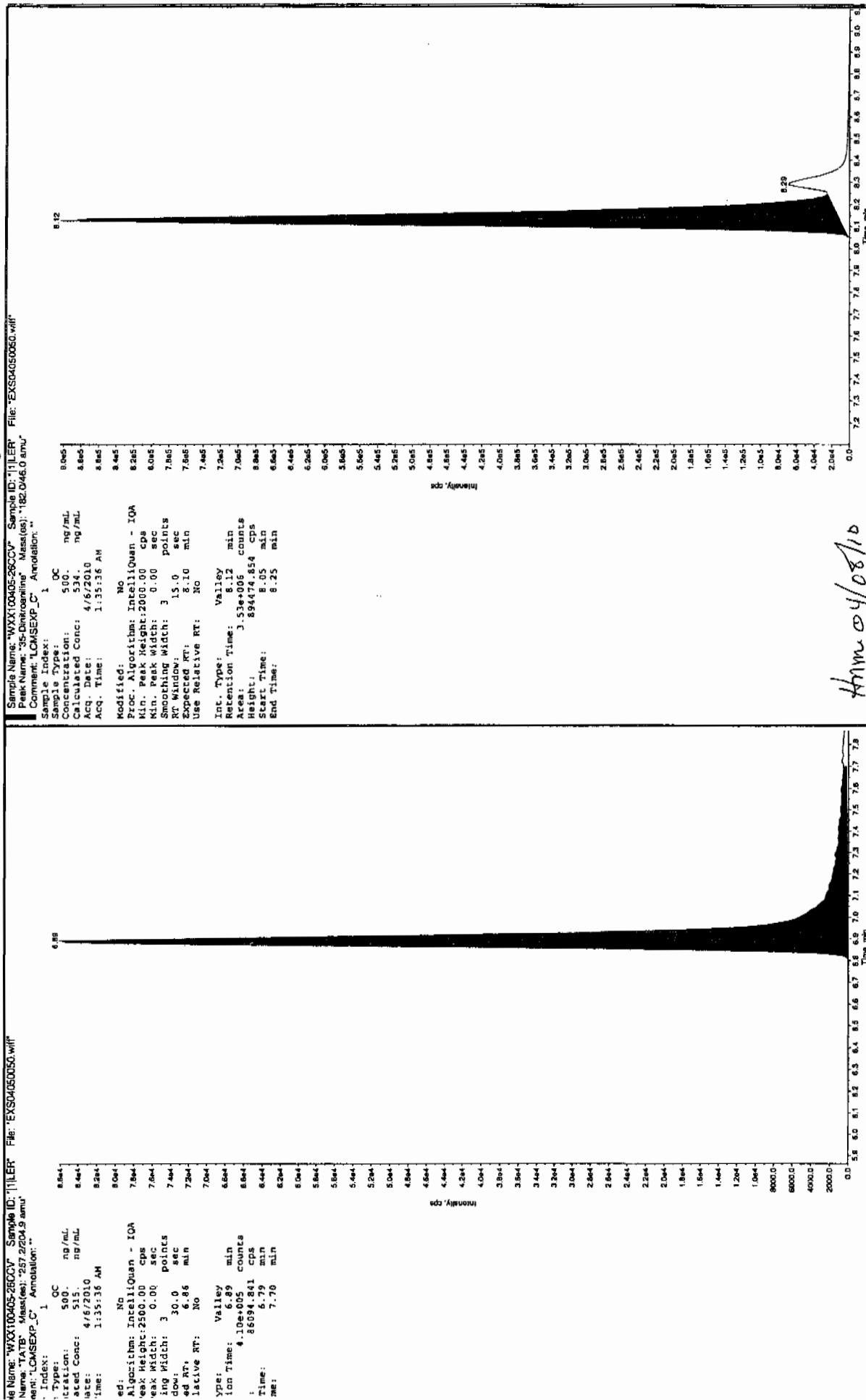
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

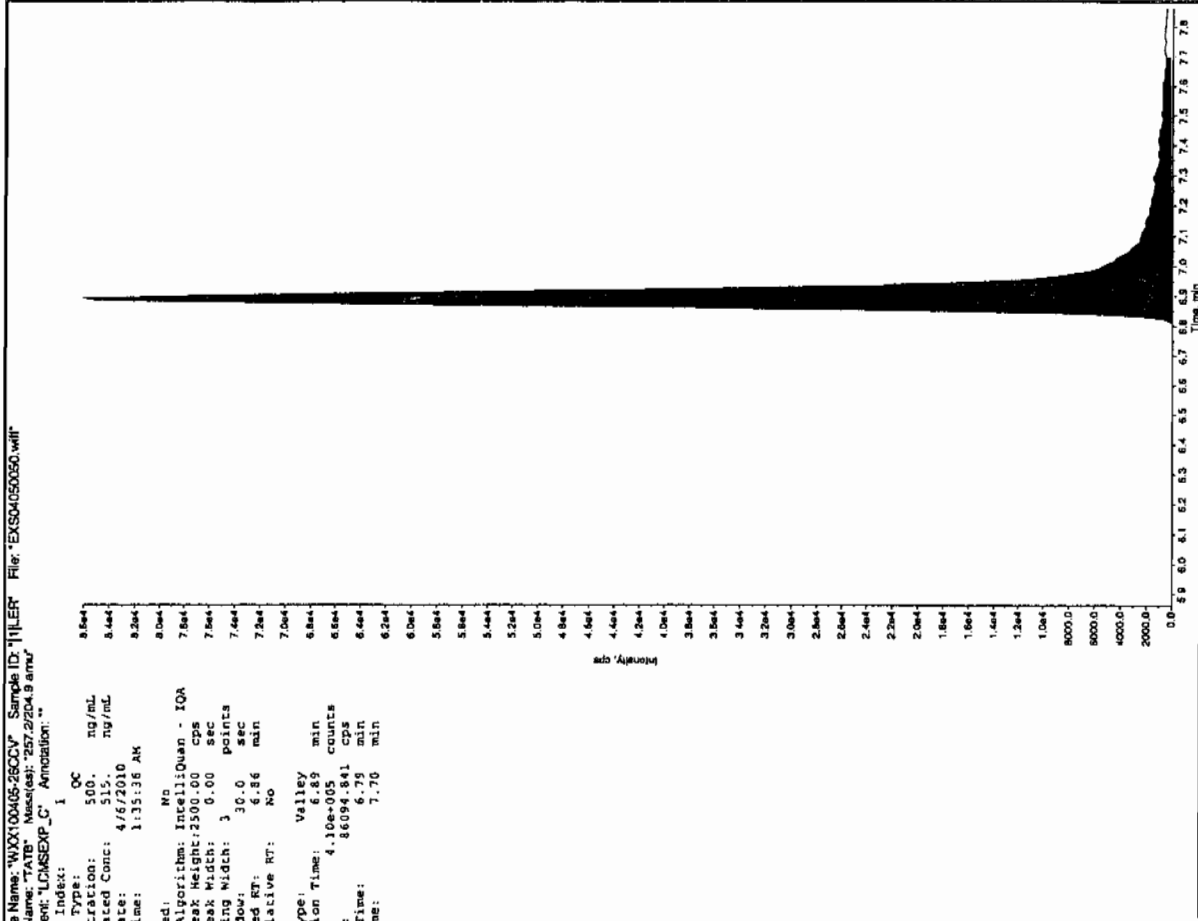
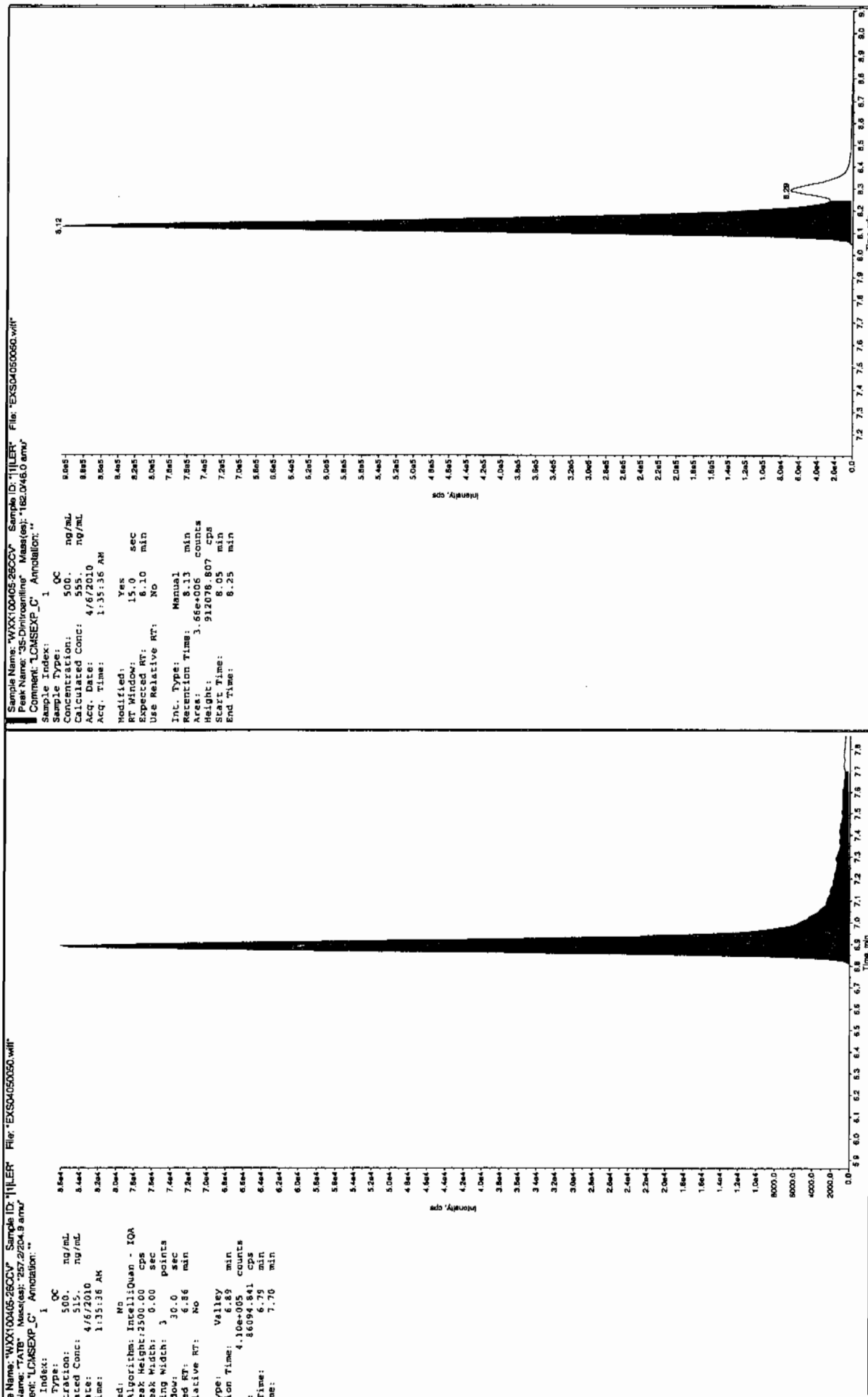
Before Jan 4/7/10



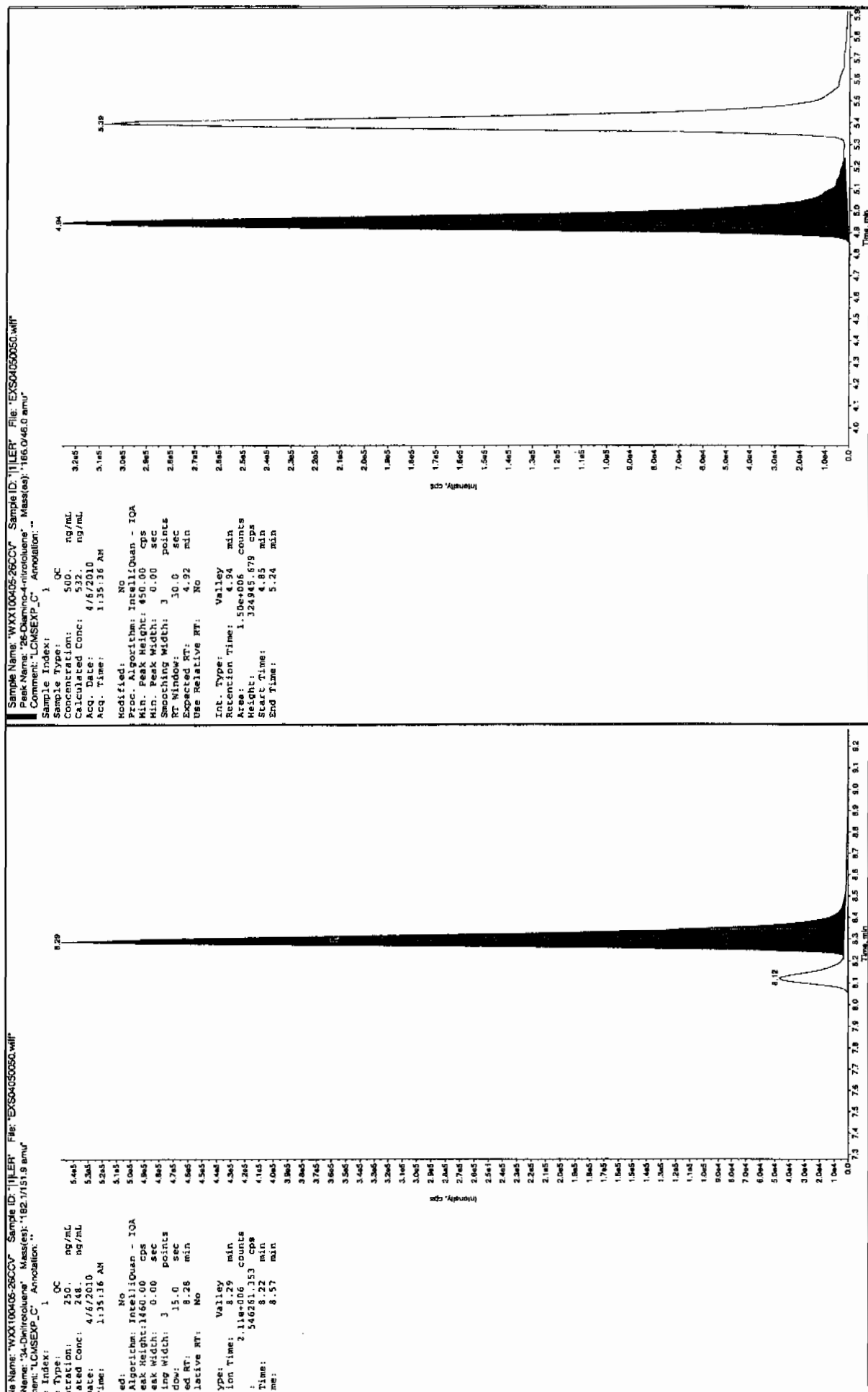
4/10/08/10

SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

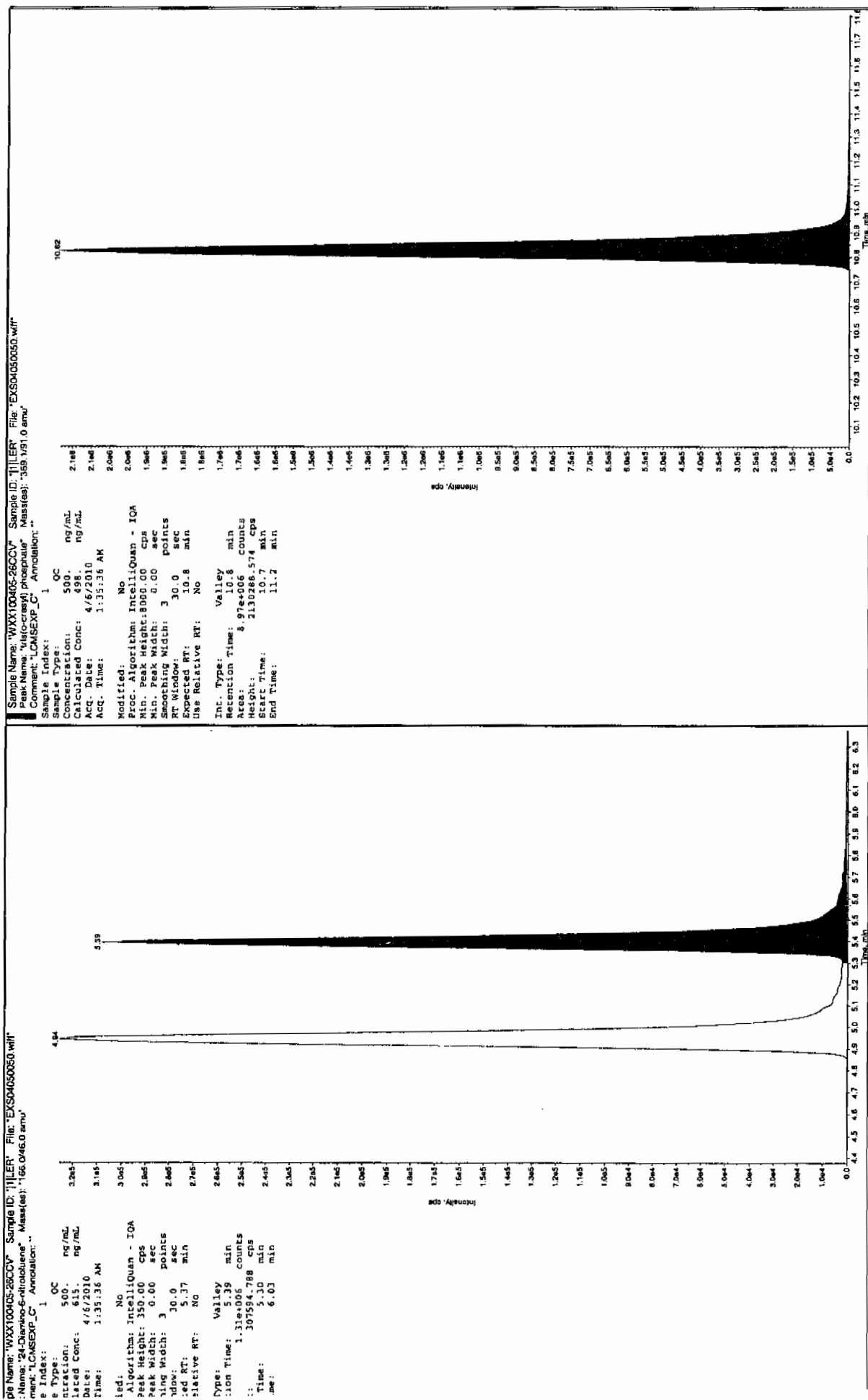
after Jan 4/11



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2150

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04050052.wiff

Analysis Date: 06-APR-10 02:06

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	129	129	
2,6-Diamino-4-nitrotoluene	100	130	130	
3,4-Dinitrotoluene	50	57.7	115	
3,5-Dinitroaniline	100	125	125	
TATB	100	110	110	
tris(o-cresyl) phosphate	100	113	113	

Recovery Limits:

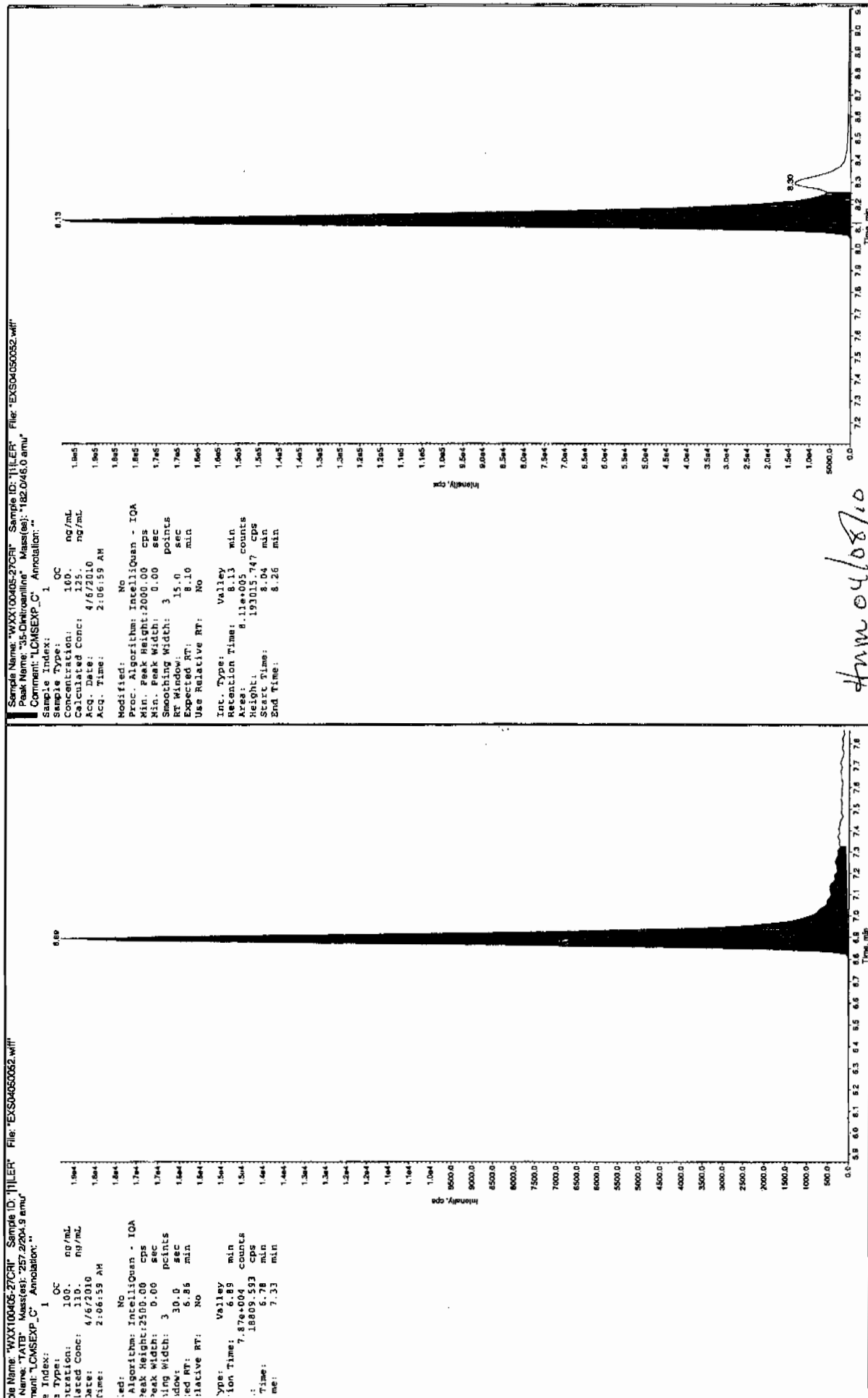
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

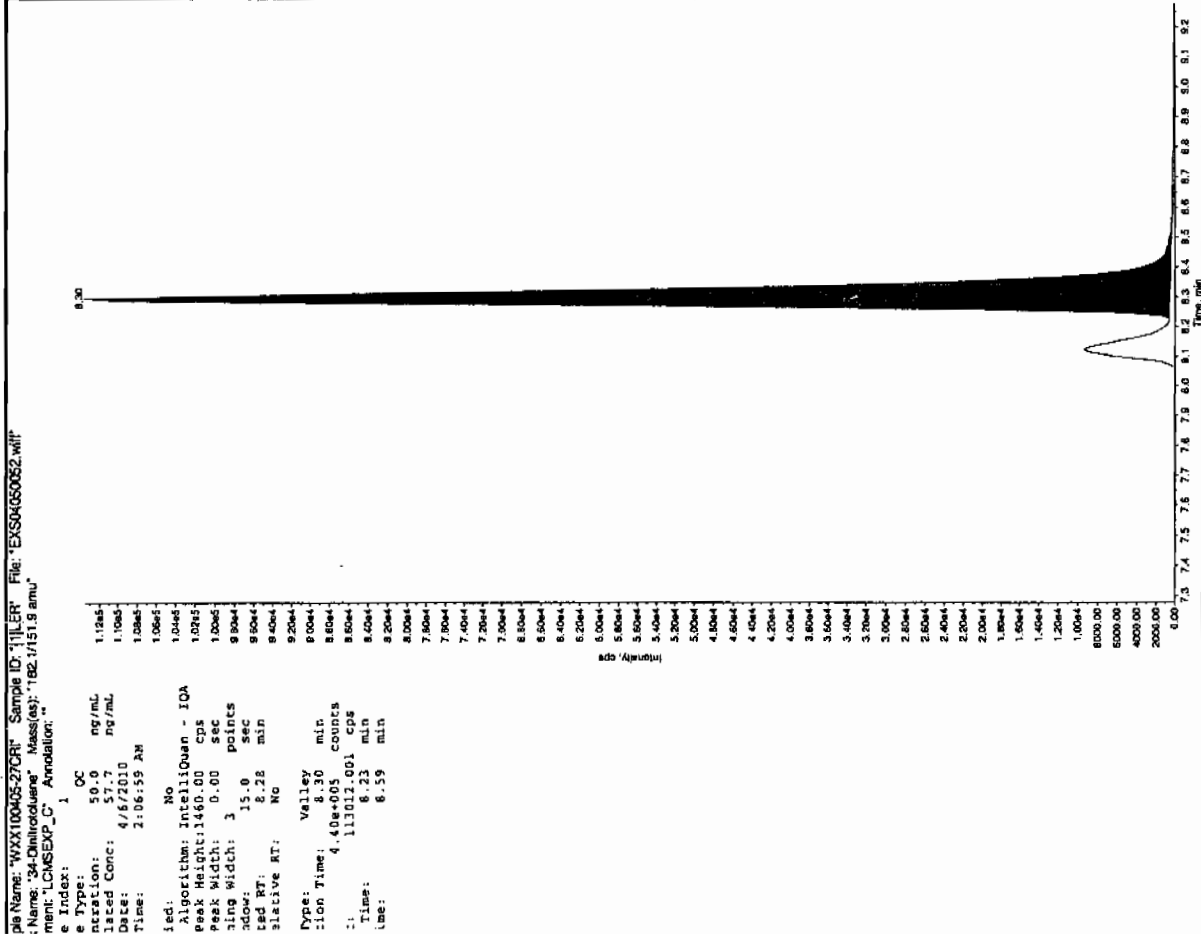
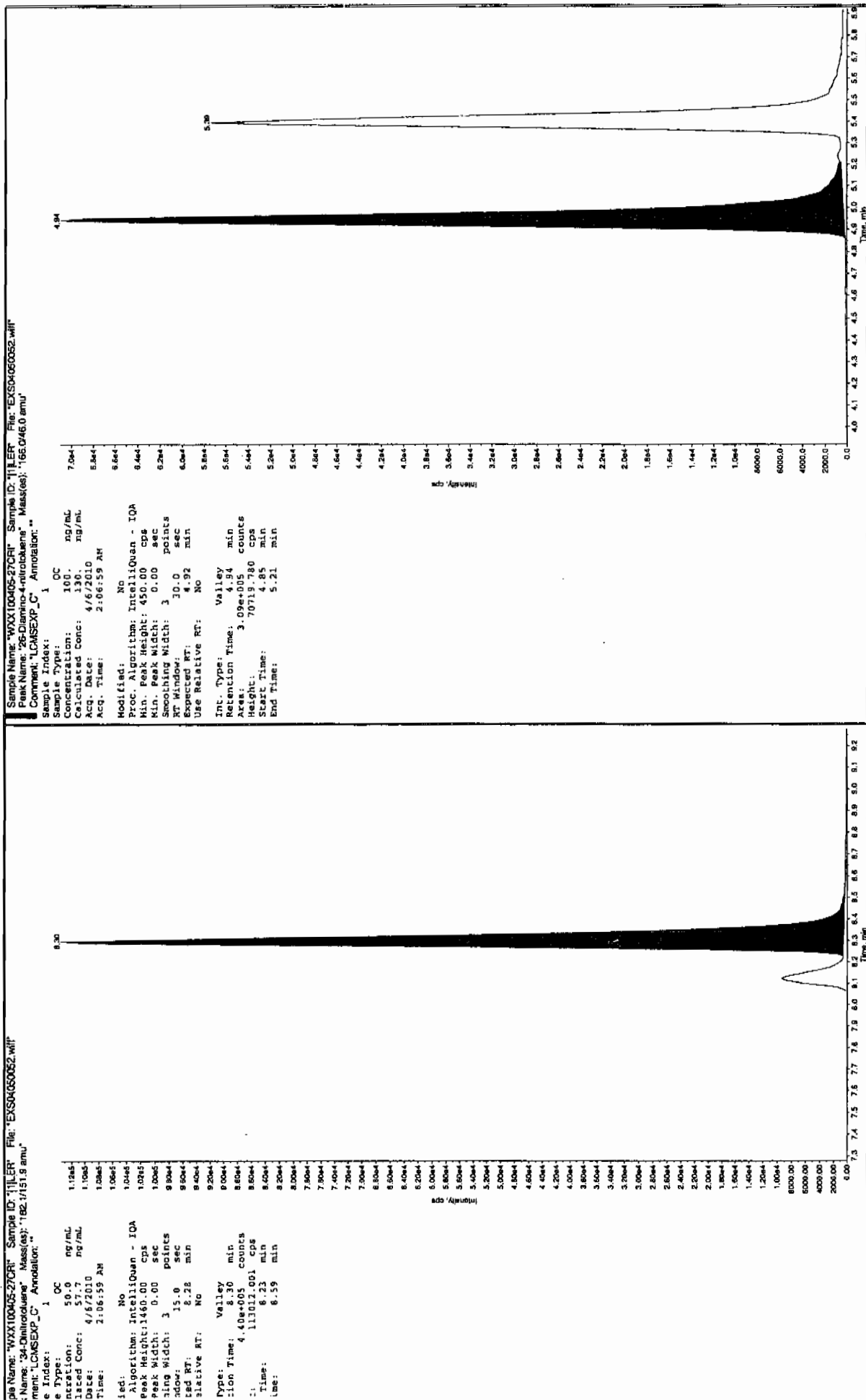
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

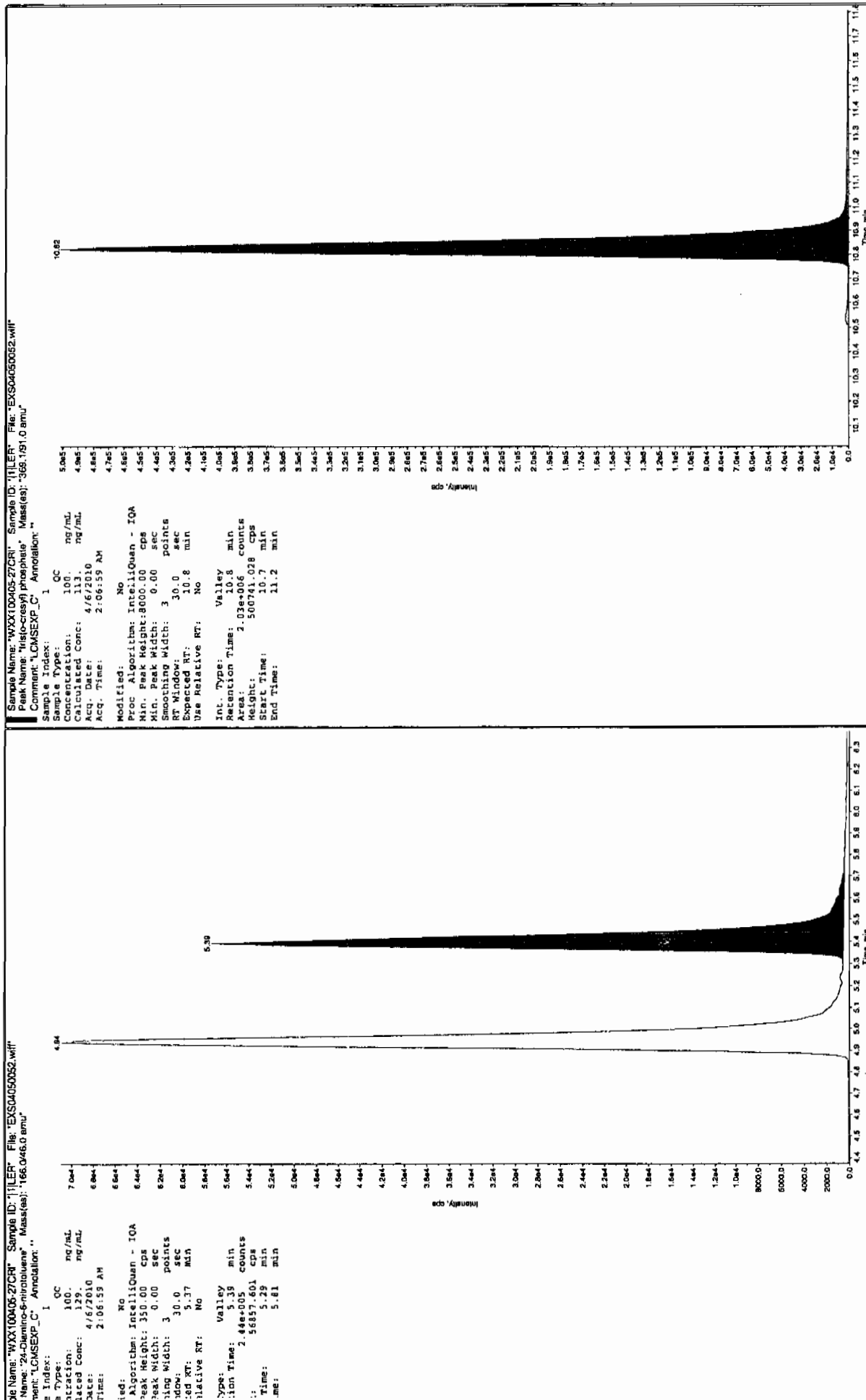
Scan 4/11/10



4/11/10



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 960303

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 1202059808

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412166a

Date Analyzed: 16-APR-10 00:48

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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itaset: C:\MASSLYNX\New_Exp_PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010

ime: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0412166a

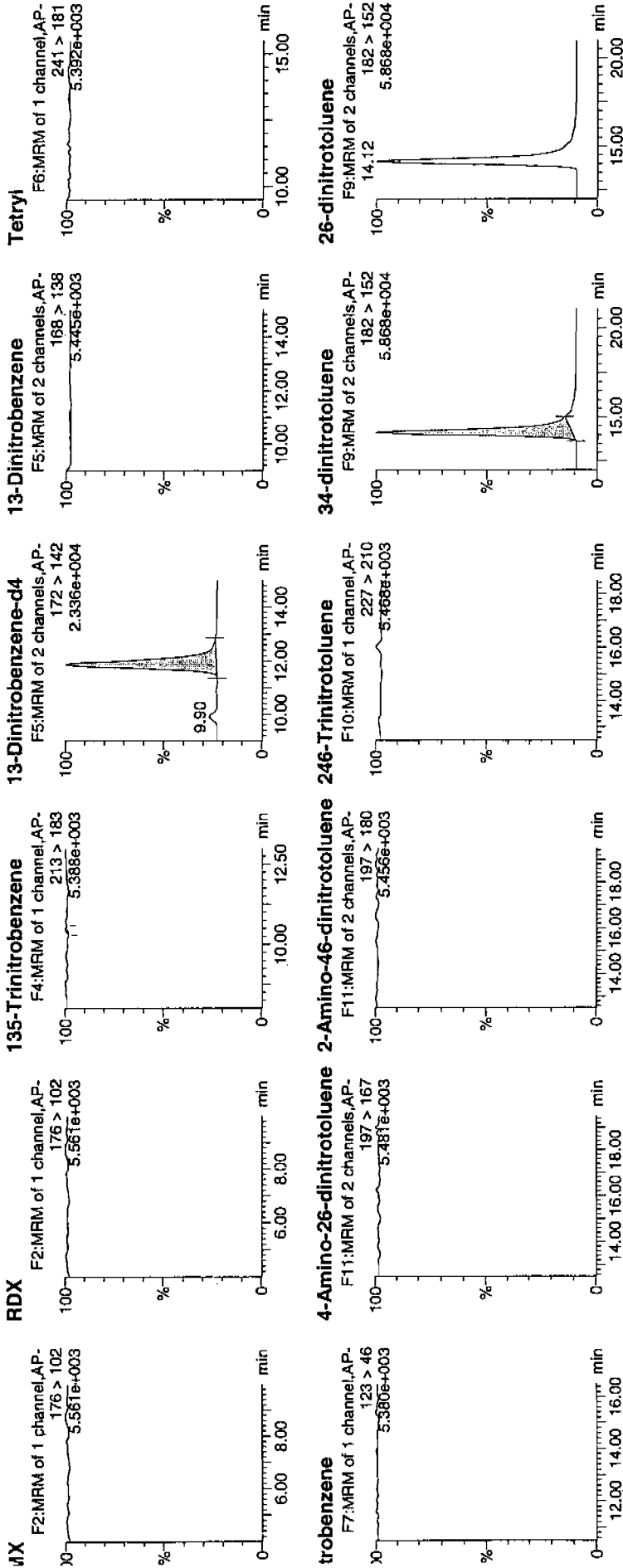
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me: 00:48:42

al: 4:4,A

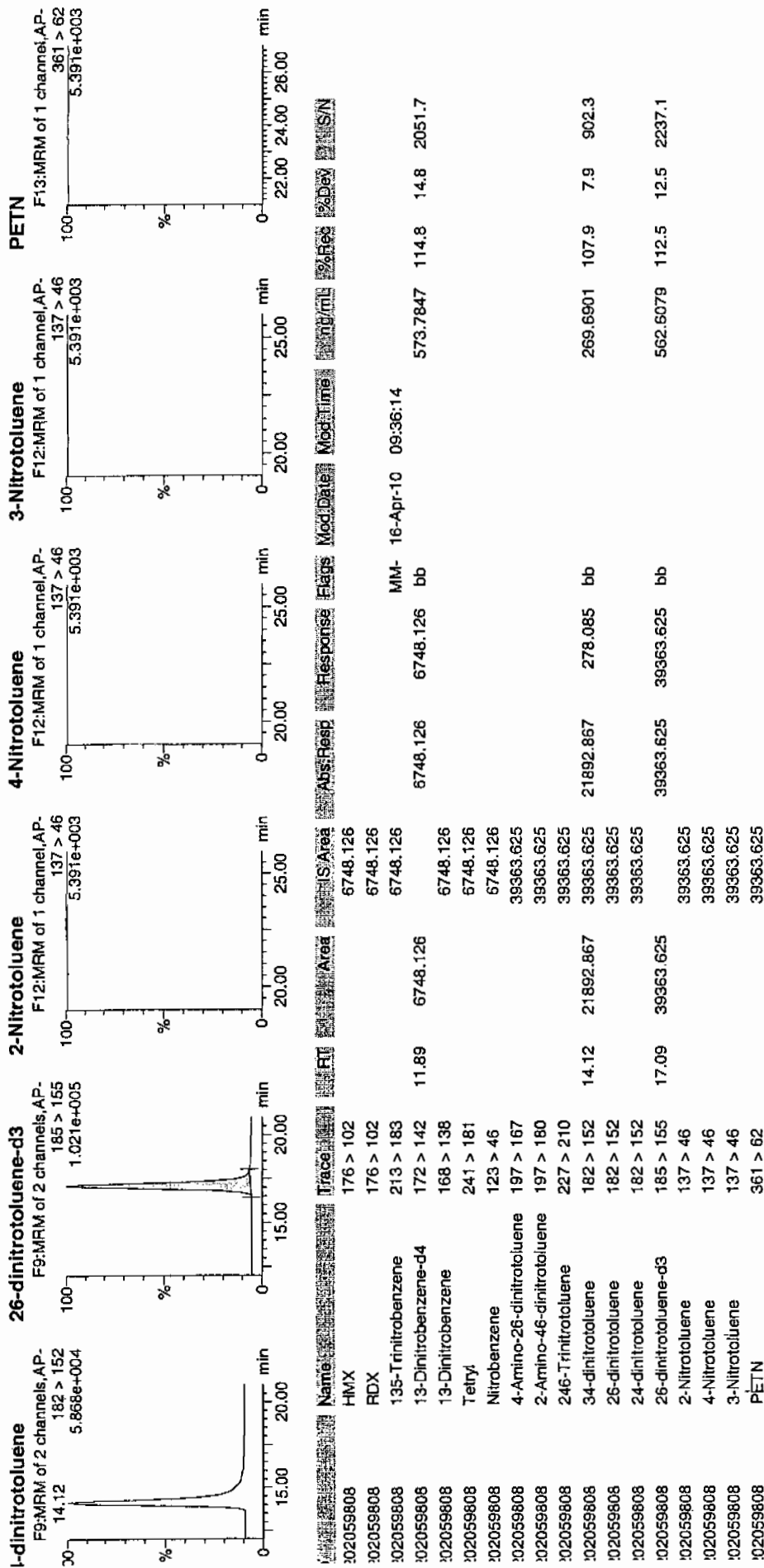
4077
4/16/10

W3 | 2 |



4077
4/16/10

Dataset: C:\MASSLYNX\New_Exp\PRO\041210expA3.qld, Time: Fri Apr 16 09:45:39 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 960303

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 1202059808

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050014.wiff

Date Analyzed: 05-APR-10 16:09

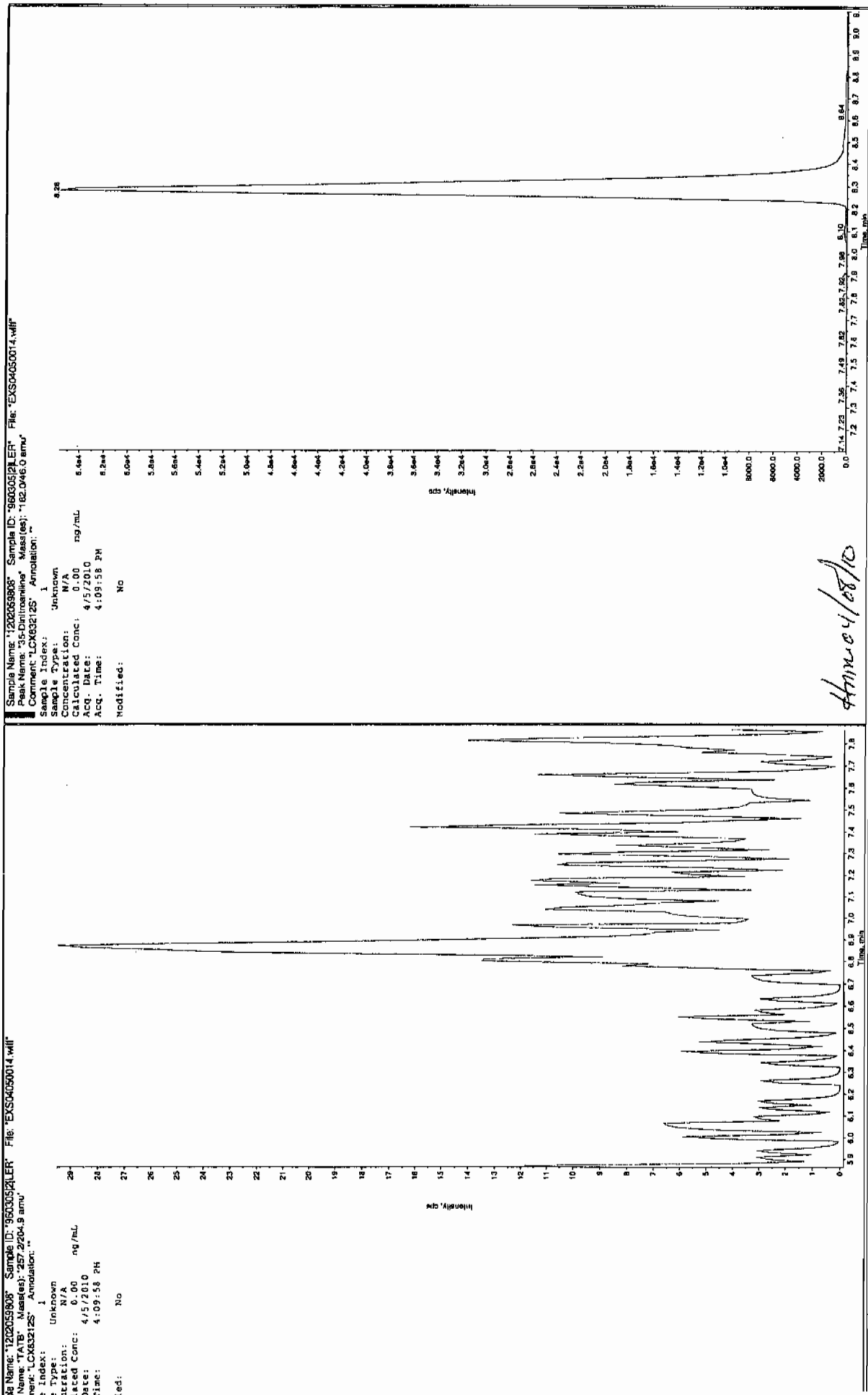
Units: ug/kg

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

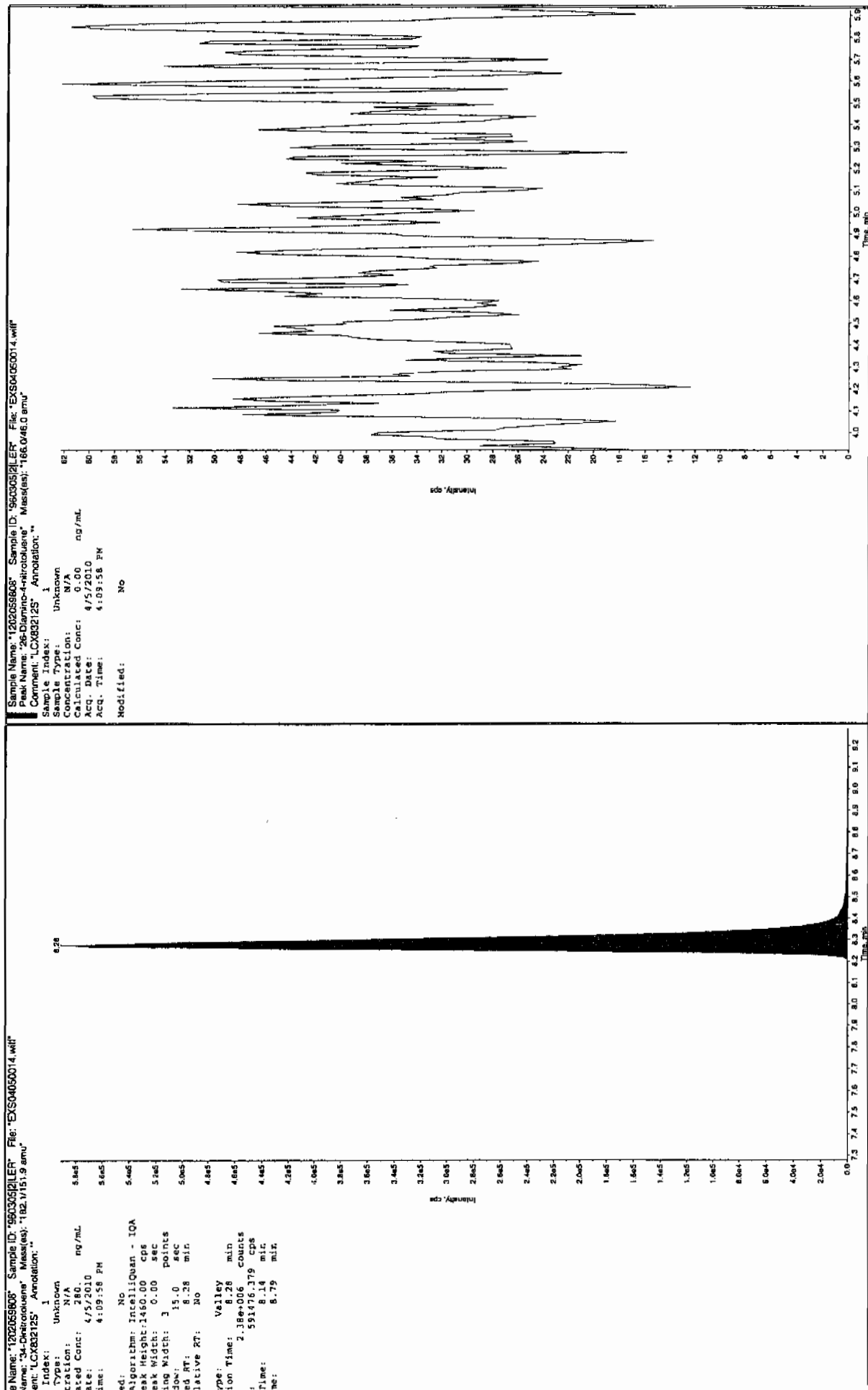
*Concentration =

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

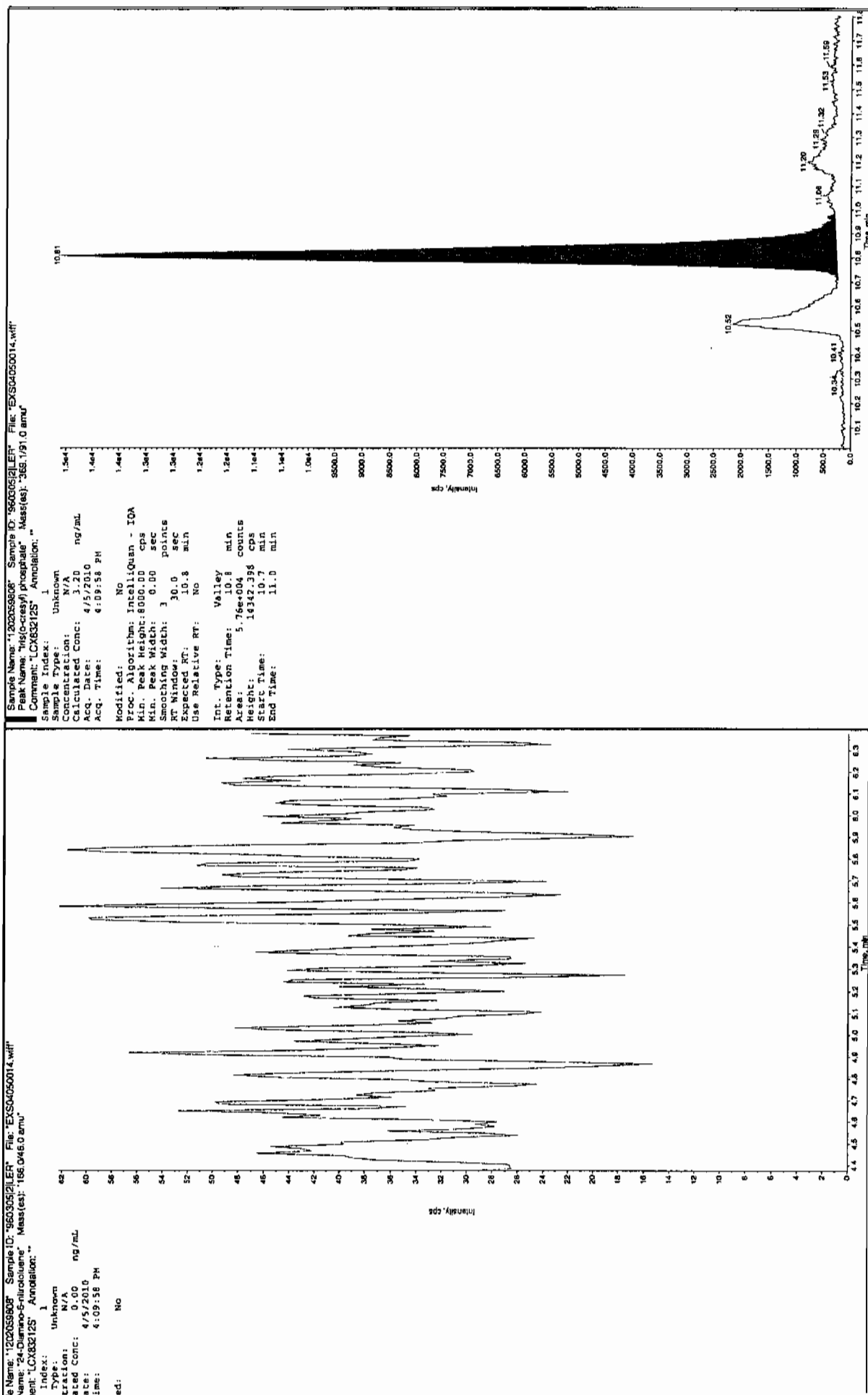
See 41710



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 960303

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 1202059809

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412167a

Date Analyzed: 16-APR-10 01:18

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5230	
121-14-2	2,4-Dinitrotoluene	5470	
121-82-4	RDX	5910	
19406-51-0	4-Amino-2,6-dinitrotoluene	4980	
2691-41-0	HMX	4870	
35572-78-2	2-Amino-4,6-dinitrotoluene	5470	
479-45-8	Tetryl	1840	
606-20-2	2,6-Dinitrotoluene	4860	
78-11-5	PETN	5490	
88-72-2	o-Nitrotoluene	3830	
98-95-3	Nitrobenzene	4100	
99-08-1	m-Nitrotoluene	4080	
99-35-4	1,3,5-Trinitrobenzene	4060	
99-65-0	m-Dinitrobenzene	4800	
99-99-0	p-Nitrotoluene	4120	

*Concentration =

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

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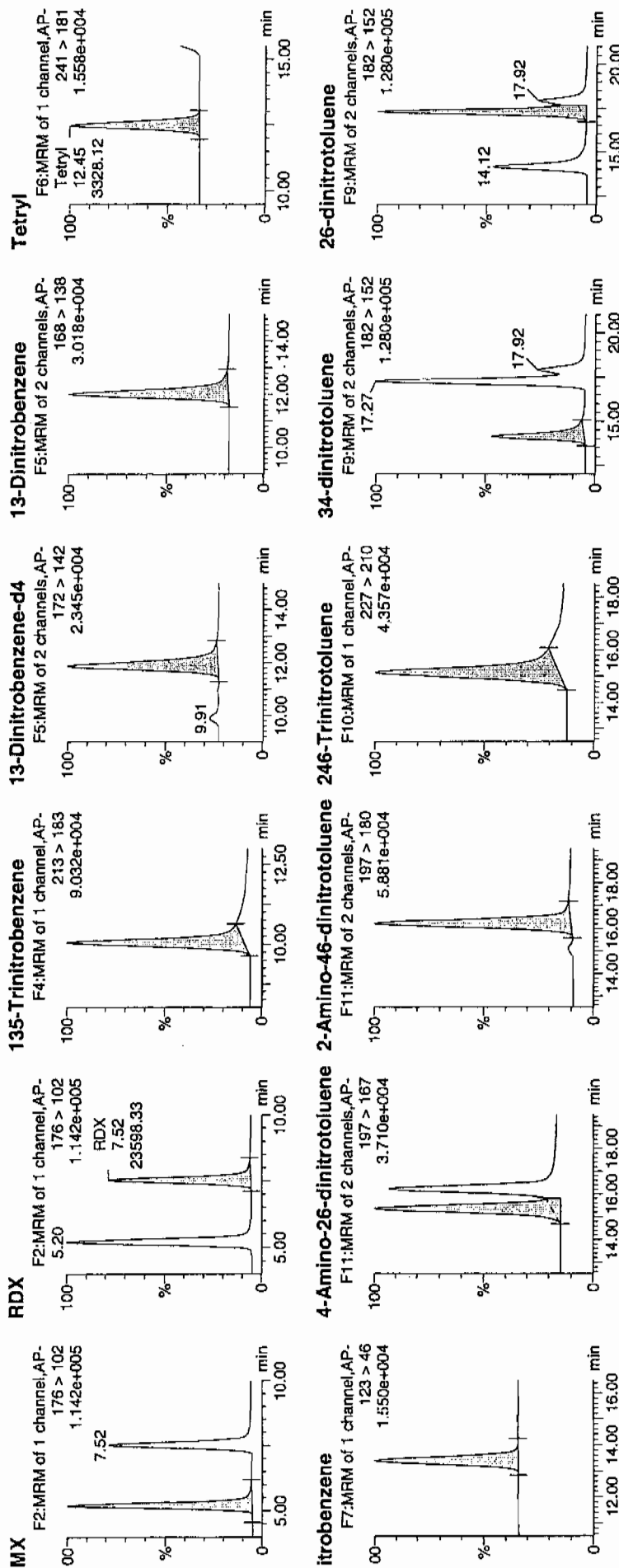
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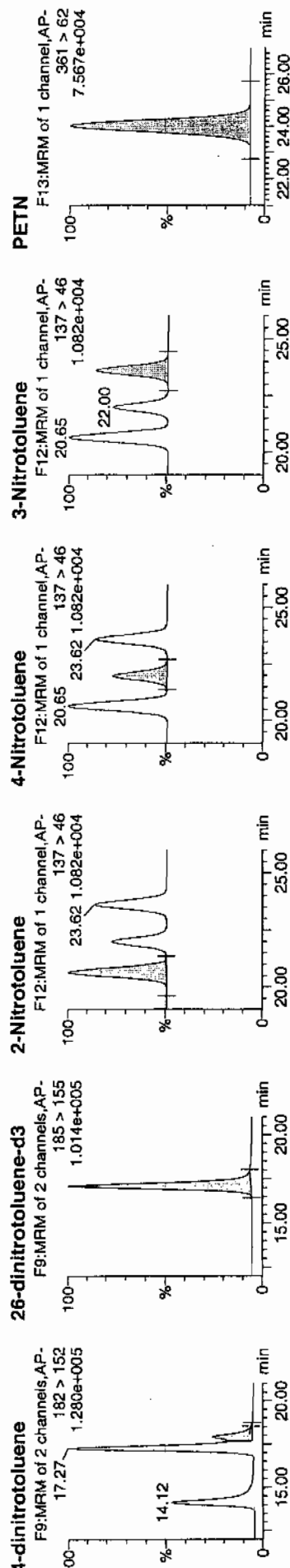
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Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	% Recd	% Dev	SN
202059809	HMx	176 > 102	5.20	28753.768	6971.176	28753.768	2082.333	bb		486.5523	97.3	-2.7	2314.4
202059809	RDX	176 > 102	7.52	23598.330	6971.176	23598.330	1692.564	bb		591.3507	118.3	18.3	1777.1
202059809	135-Trinitrobenzene	213 > 183	10.05	24492.182	6971.176	24492.182	1756.675	bb		406.3575	81.3	-18.7	2496.9
202059809	13-Dinitrobenzene-d4	172 > 142	11.87	6971.176		6971.176	6971.176	bb		592.7504	118.6	18.6	654.6
202059809	13-Dinitrobenzene	168 > 138	12.00	8946.170	6971.176	8946.170	641.654	bb		479.8960	96.0	-4.0	1270.9
202059809	Tetryl	241 > 181	12.45	3328.119	6971.176	3328.119	238.706	bb		184.1477	36.8	-63.2	352.3
202059809	Nitrobenzene	123 > 46	13.41	3583.894	6971.176	3583.894	257.051	bb		409.7757	82.0	-18.0	410.2
202059809	4-Amino-26-dinitrotoluene	197 > 167	15.36	13228.481	39295.250	13228.481	168.322	MM	16-Apr-10	09:37:56	99.7	-0.3	433.2
202059809	2-Amino-46-dinitrotoluene	197 > 180	16.22	22010.475	39295.250	22010.475	280.065	bb		546.7918	109.4	9.4	918.0
202059809	246-Trinitrotoluene	227 > 210	15.14	17865.781	39295.250	17865.781	227.327	bb		522.5524	104.5	4.5	1721.7
202059809	34-dinitrotoluene	182 > 152	14.12	23041.322	39295.250	23041.322	293.182	bb		284.3314	113.7	13.7	664.7
202059809	26-dinitrotoluene	182 > 152	17.27	45160.141	39295.250	45160.141	574.626	MM	16-Apr-10	09:41:16	97.1	-2.9	1499.2
202059809	24-dinitrotoluene	182 > 152	17.92	11213.585	39295.250	11213.585	142.684	MM	16-Apr-10	09:43:25	109.3	9.3	325.1
202059809	26-dinitrotoluene-d3	185 > 155	17.09	39295.250		39295.250	39295.250	bb		561.6306	112.3	12.3	3292.8
202059809	2-Nitrotoluene	137 > 46	20.65	2605.467	39295.250	2605.467	33.152	bb		382.8748	76.6	-23.4	612.2
202059809	4-Nitrotoluene	137 > 46	22.00	1342.220	39295.250	1342.220	17.079	bb		411.7384	82.3	-17.7	332.8
202059809	3-Nitrotoluene	137 > 46	23.62	1867.732	39295.250	1867.732	23.765	bb		407.6250	81.5	-18.5	438.4
202059809	PETN	361 > 62	24.03	38954.102	39295.250	38954.102	495.659	bb		548.6961	109.7	9.7	4979.7

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 960303

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 1202059809

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050015.wiff

Date Analyzed: 05-APR-10 16:25

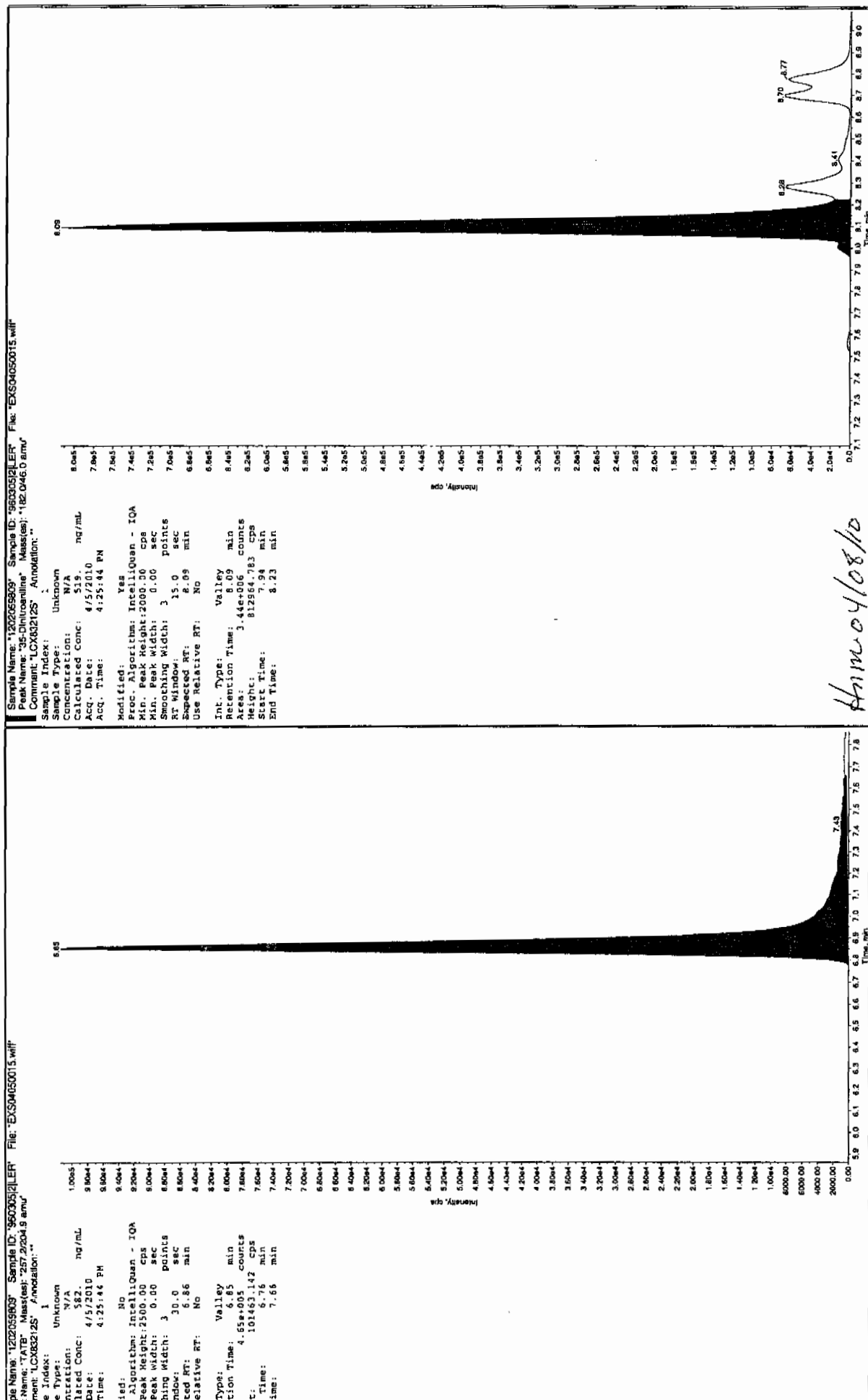
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5820	
59229-75-3	2,6-Diamino-4-nitrotoluene	4610	
618-87-1	3,5-Dinitroaniline	5190	
6629-29-4	2,4-Diamino-6-nitrotoluene	4840	
78-30-8	tris(o-cresyl) phosphate	5150	

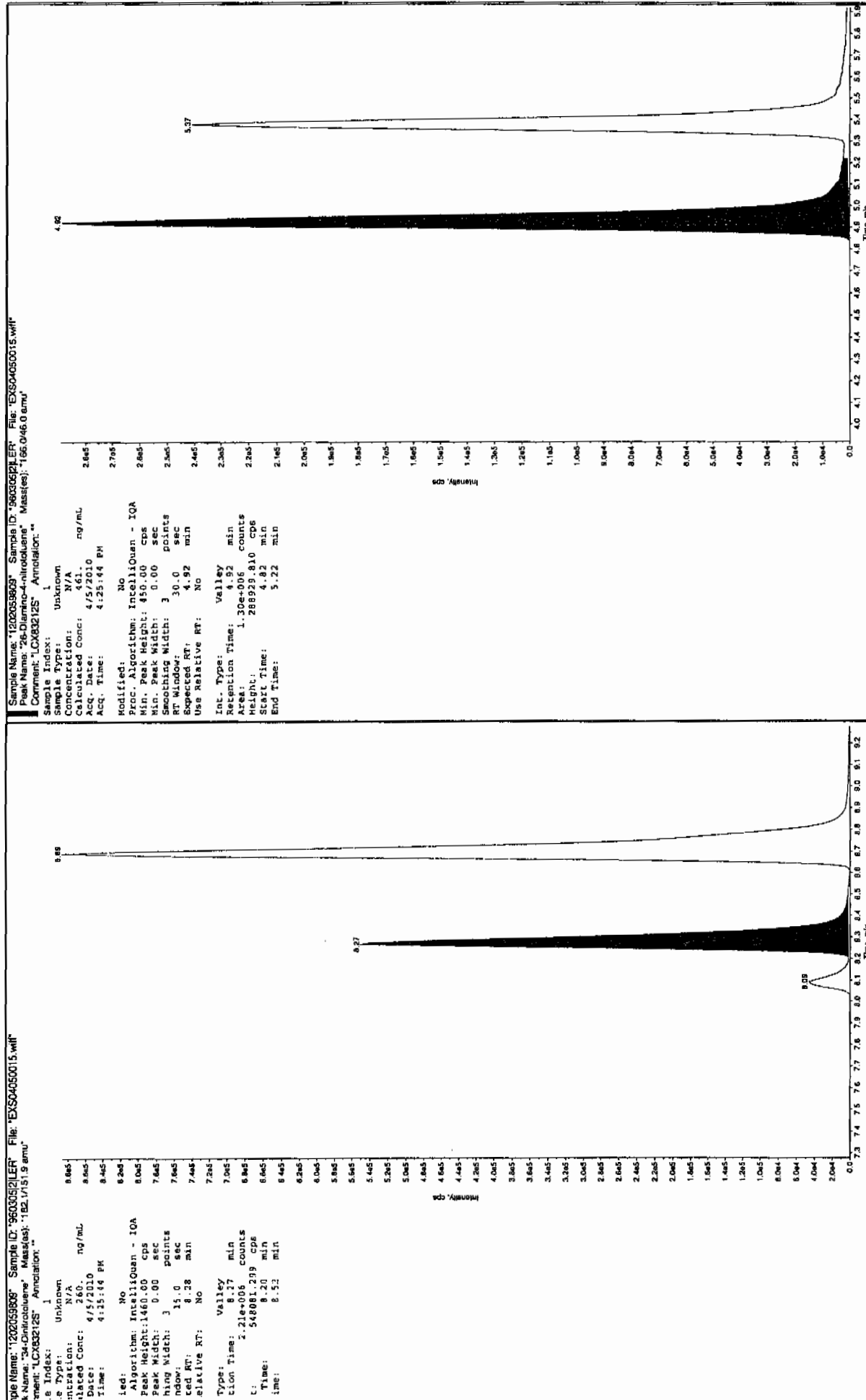
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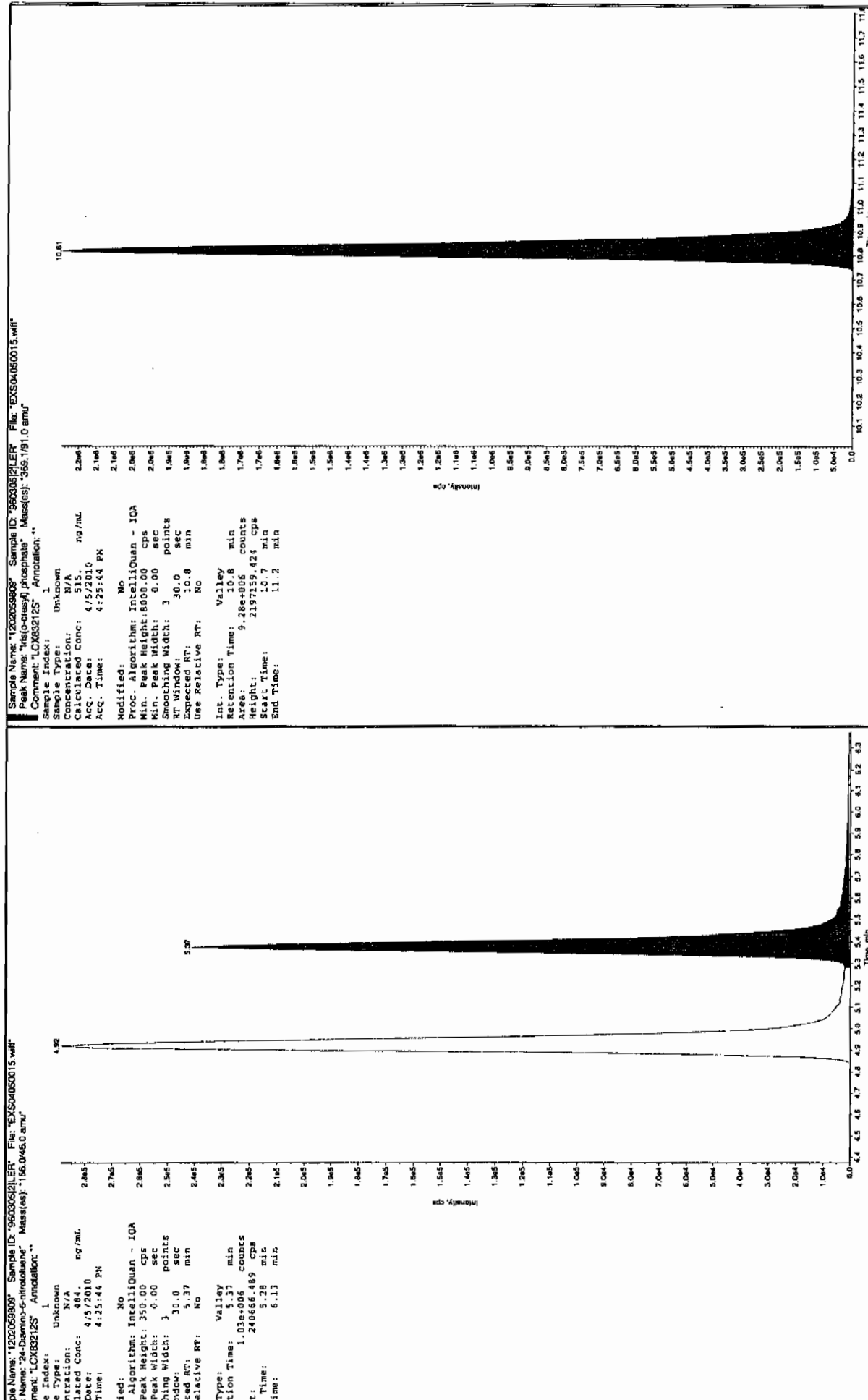
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Amw 4/8/10



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7415(248370001MS)

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 1202059810

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412169a

Date Analyzed: 16-APR-10 02:17

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5070	
121-14-2	2,4-Dinitrotoluene	5140	
121-82-4	RDX	5680	
19406-51-0	4-Amino-2,6-dinitrotoluene	4750	
2691-41-0	HMX	4990	
35572-78-2	2-Amino-4,6-dinitrotoluene	4980	
479-45-8	Tetryl	1210	
606-20-2	2,6-Dinitrotoluene	4820	
78-11-5	PETN	5240	
88-72-2	o-Nitrotoluene	4160	
98-95-3	Nitrobenzene	4370	
99-08-1	m-Nitrotoluene	4020	
99-35-4	1,3,5-Trinitrobenzene	4310	
99-65-0	m-Dinitrobenzene	4870	
99-99-0	p-Nitrotoluene	4710	

*Concentration =

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

uantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

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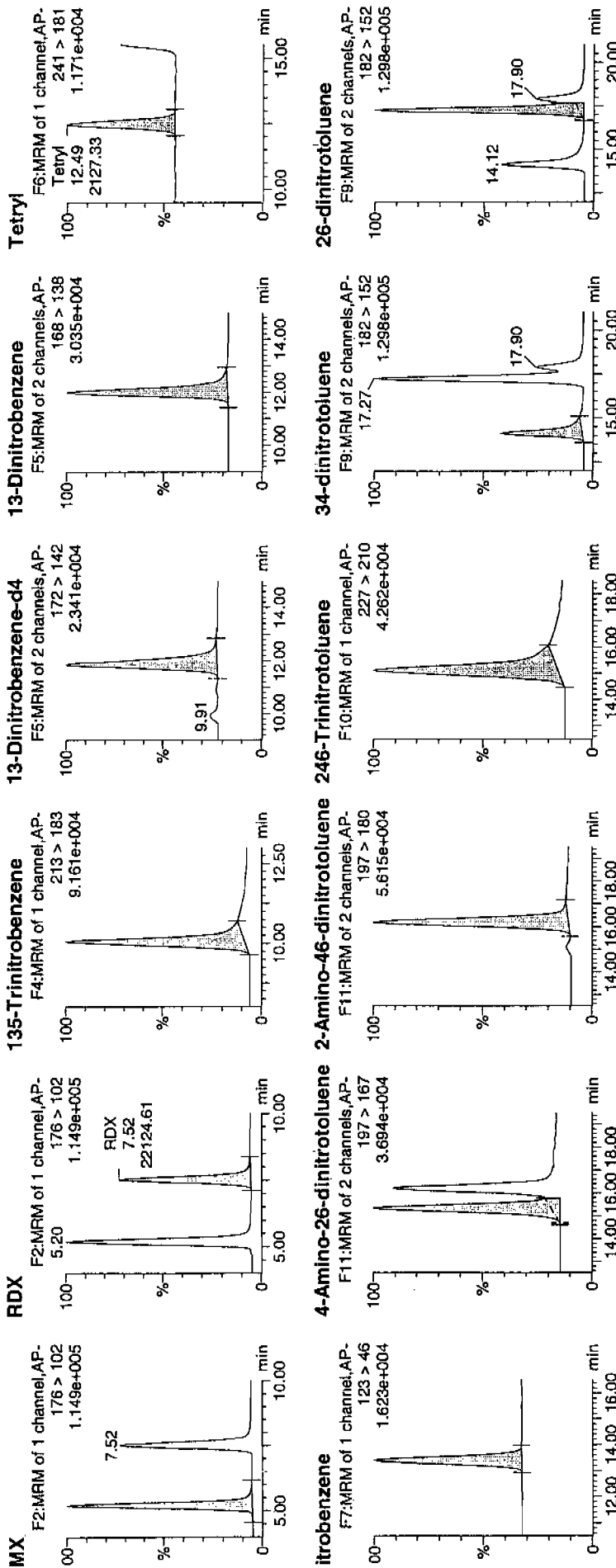
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LAU 960305 / 248370001ms / 2 /

Page 1836 of 2043



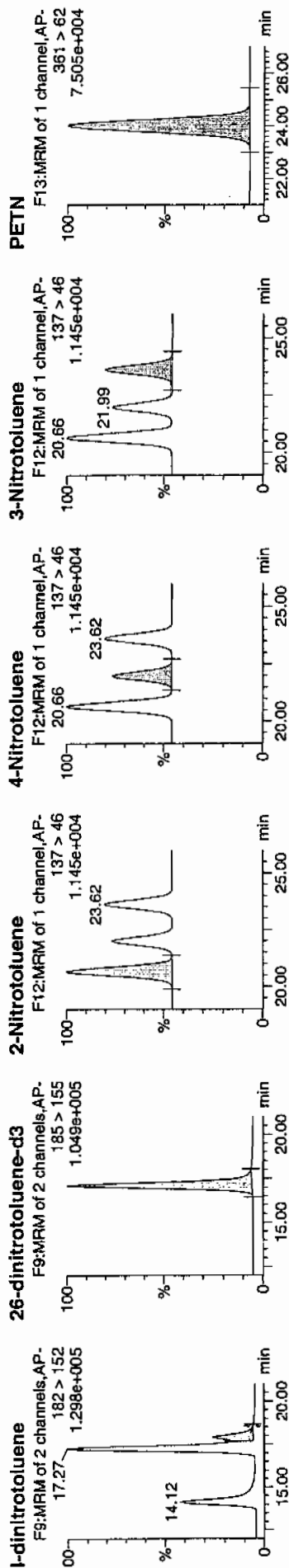
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EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Apr 16 09:46:23 2010, Page 52 of 71

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Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	% Rec	% Dev	SN
02059810	HMx	176 > 102	28784.791	6808.570	28784.791	2113.865	bb			498.7099	99.7	-0.3	2016.9
02059810	RDX	176 > 102	22124.611	6808.570	22124.611	1624.762	bb			567.6617	113.5	13.5	1424.1
02059810	135-Trinitrobenzene	213 > 183	25373.307	6808.570	25373.307	1863.336	bb			431.0305	86.2	-13.8	1189.2
02059810	13-Dinitrobenzene-d4	172 > 142	6808.570	6808.570	6808.570	6808.570	bb			578.9242	115.8	15.8	516.3
02059810	13-Dinitrobenzene	168 > 138	8863.213	6808.570	8863.213	650.887	bb			486.8008	97.4	-2.6	806.3
02059810	Tetryl	241 > 181	2127.328	6808.570	2127.328	156.224	bb			120.5180	24.1	-75.9	202.9
02059810	Nitrobenzene	123 > 46	3733.963	6808.570	3733.963	274.211	bb			437.1306	87.4	-12.6	330.0
02059810	4-Amino-26-dinitrotoluene	197 > 167	12986.218	40505.617	12986.218	160.301	MM	16-Apr-10	09:37:44	474.5981	94.9	-5.1	270.8
02059810	2-Amino-46-dinitrotoluene	197 > 180	20672.854	40505.617	20672.854	255.185	bb			498.2162	99.6	-0.4	426.3
02059810	246-Trinitrotoluene	227 > 210	17869.393	40505.617	17869.393	220.579	bb			507.0403	101.4	1.4	555.2
02059810	34-dinitrotoluene	182 > 152	20503.311	40505.617	20503.311	253.092	bb			245.4518	98.2	-1.8	636.9
02059810	26-dinitrotoluene	182 > 152	46224.305	40505.617	46224.305	570.591	MM	16-Apr-10	09:41:30	482.1064	96.4	-3.6	1630.4
02059810	24-dinitrotoluene	182 > 152	10864.603	40505.617	10864.603	134.112	MM	16-Apr-10	09:42:57	513.8326	102.8	2.8	349.1
02059810	26-dinitrotoluene-d3	185 > 155	40505.617	40505.617	40505.617	40505.617	bb			578.9299	115.8	15.8	3694.8
02059810	2-Nitrotoluene	137 > 46	2920.343	40505.617	2920.343	36.049	bb			416.3225	83.3	-16.7	825.5
02059810	4-Nitrotoluene	137 > 46	1581.041	40505.617	1581.041	19.516	bb			470.5065	94.1	-5.9	470.0
02059810	3-Nitrotoluene	137 > 46	1898.037	40505.617	1898.037	23.429	bb			401.8609	80.4	-19.6	530.8
02059810	PETN	361 > 62	38629.113	40505.617	38629.113	476.836	bb			524.2646	104.9	4.9	4763.2

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7415(248370001MS)

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 1202059810

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050017.wiff

Date Analyzed: 05-APR-10 16:57

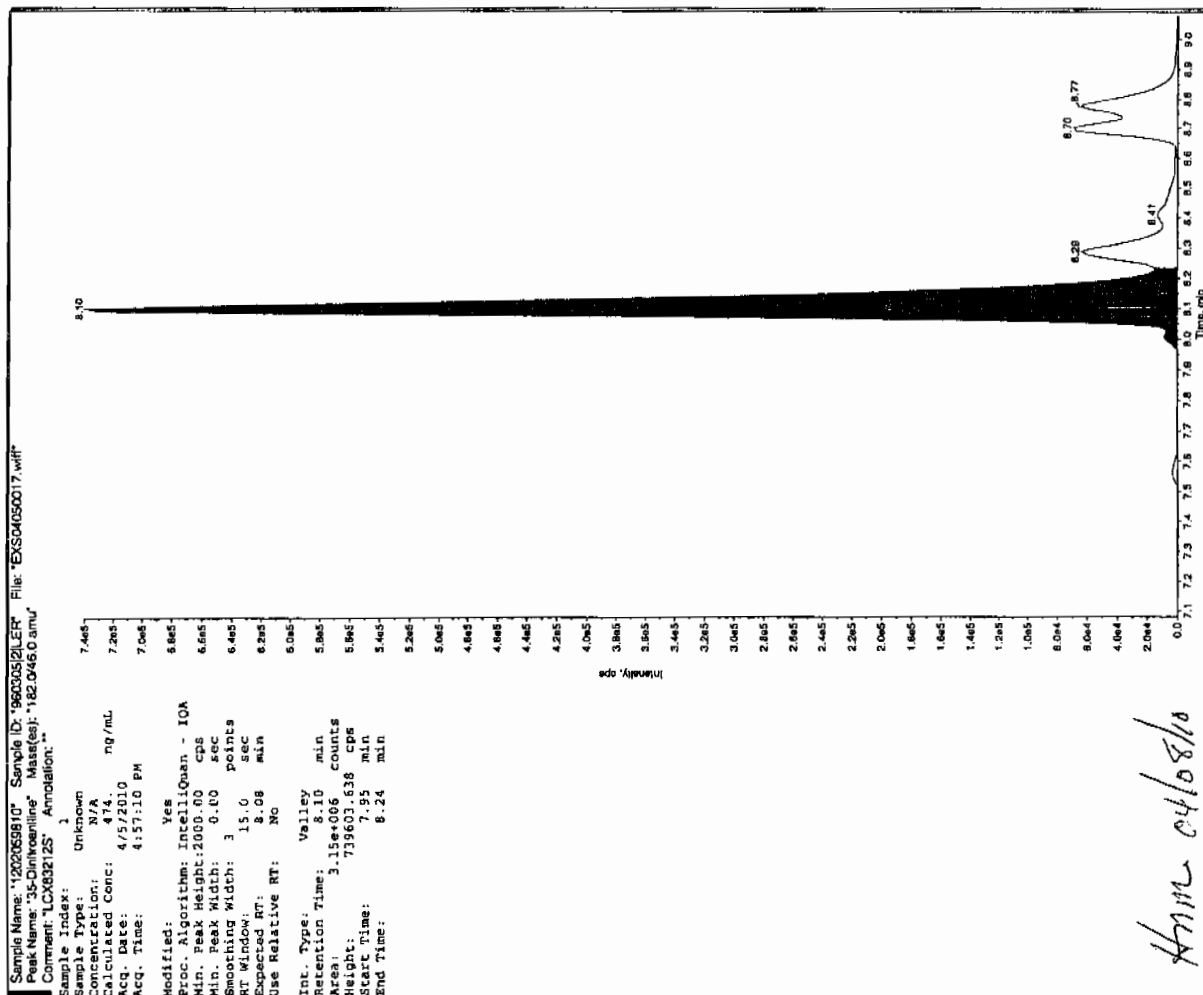
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7690	
59229-75-3	2,6-Diamino-4-nitrotoluene	3750	
618-87-1	3,5-Dinitroaniline	4740	
6629-29-4	2,4-Diamino-6-nitrotoluene	2770	
78-30-8	tris(o-cresyl) phosphate	5060	

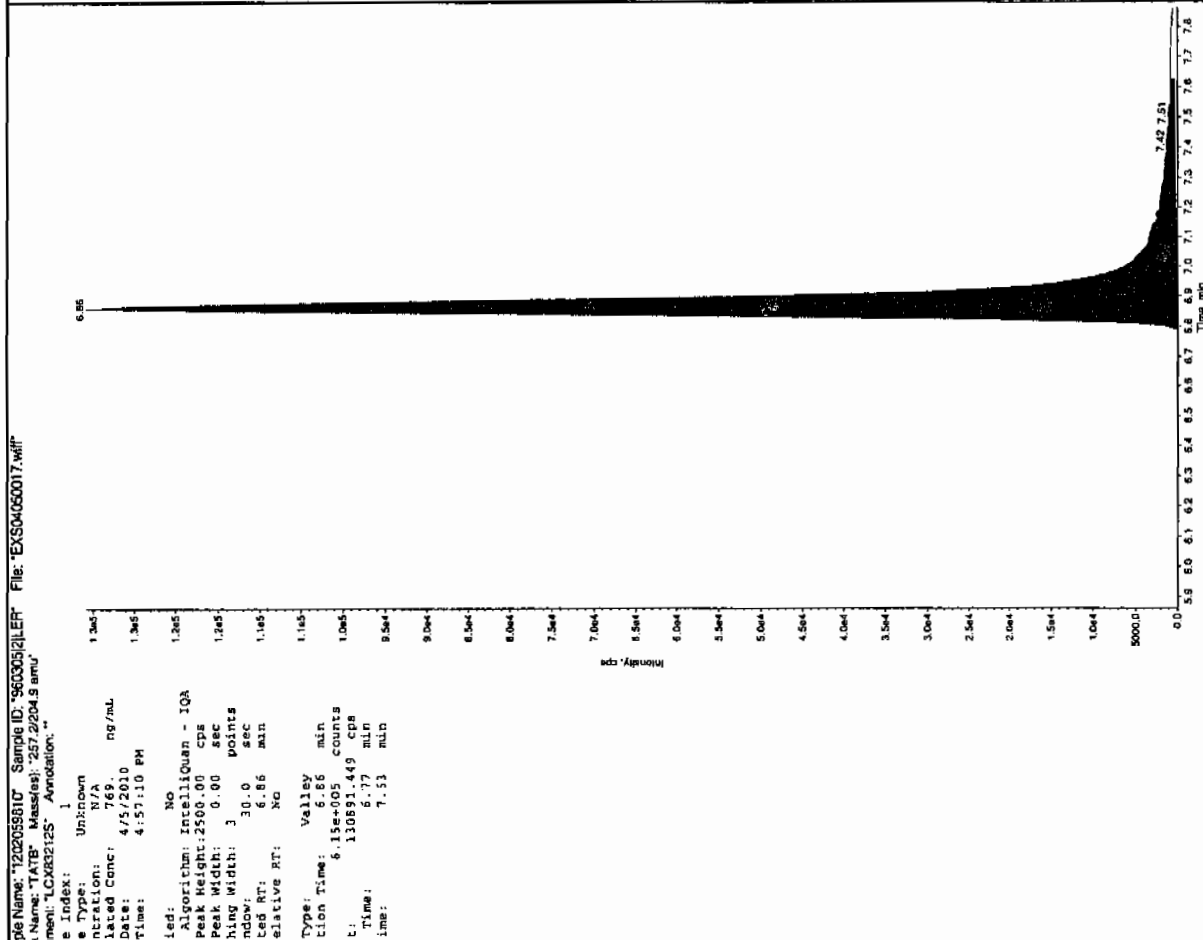
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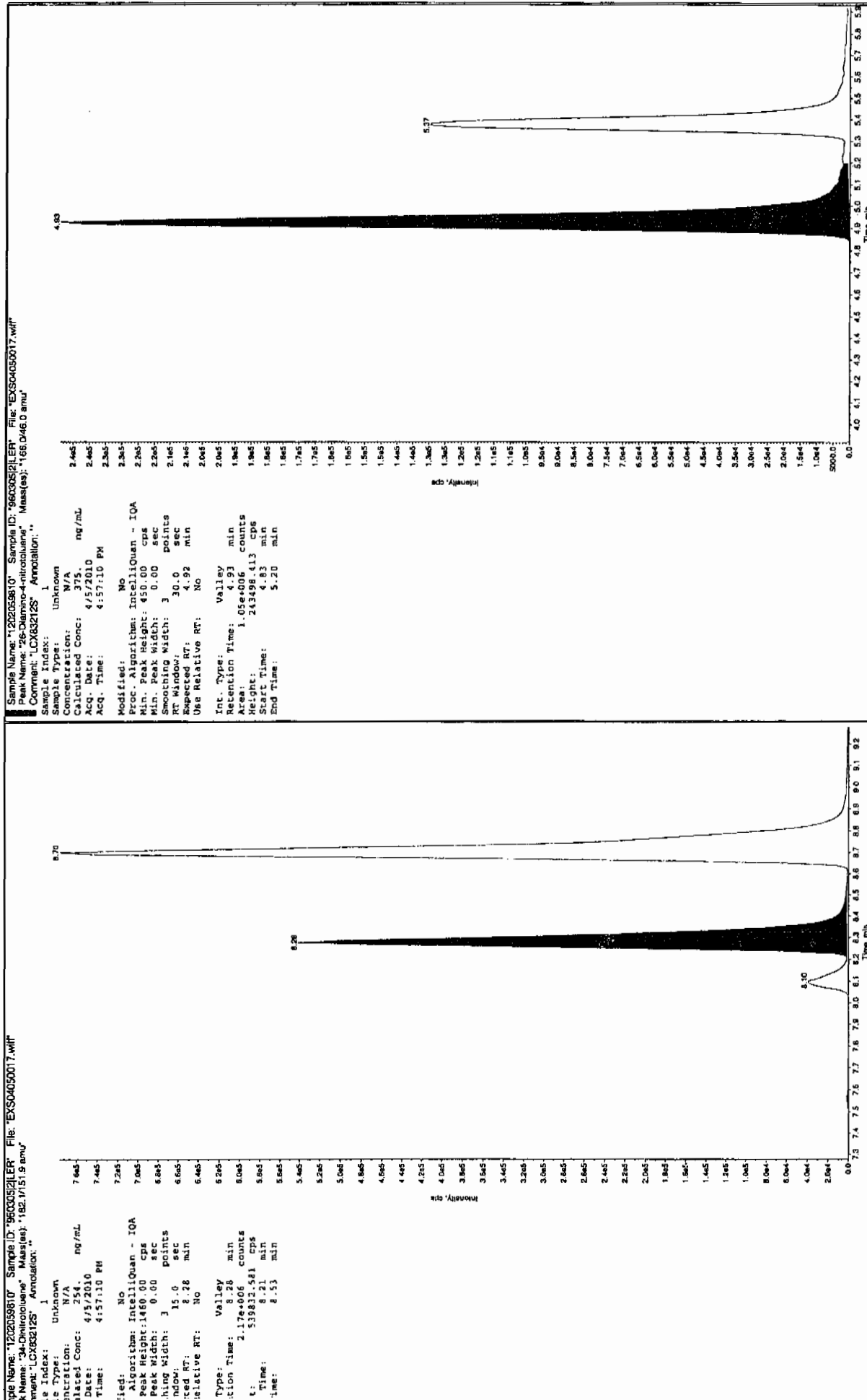
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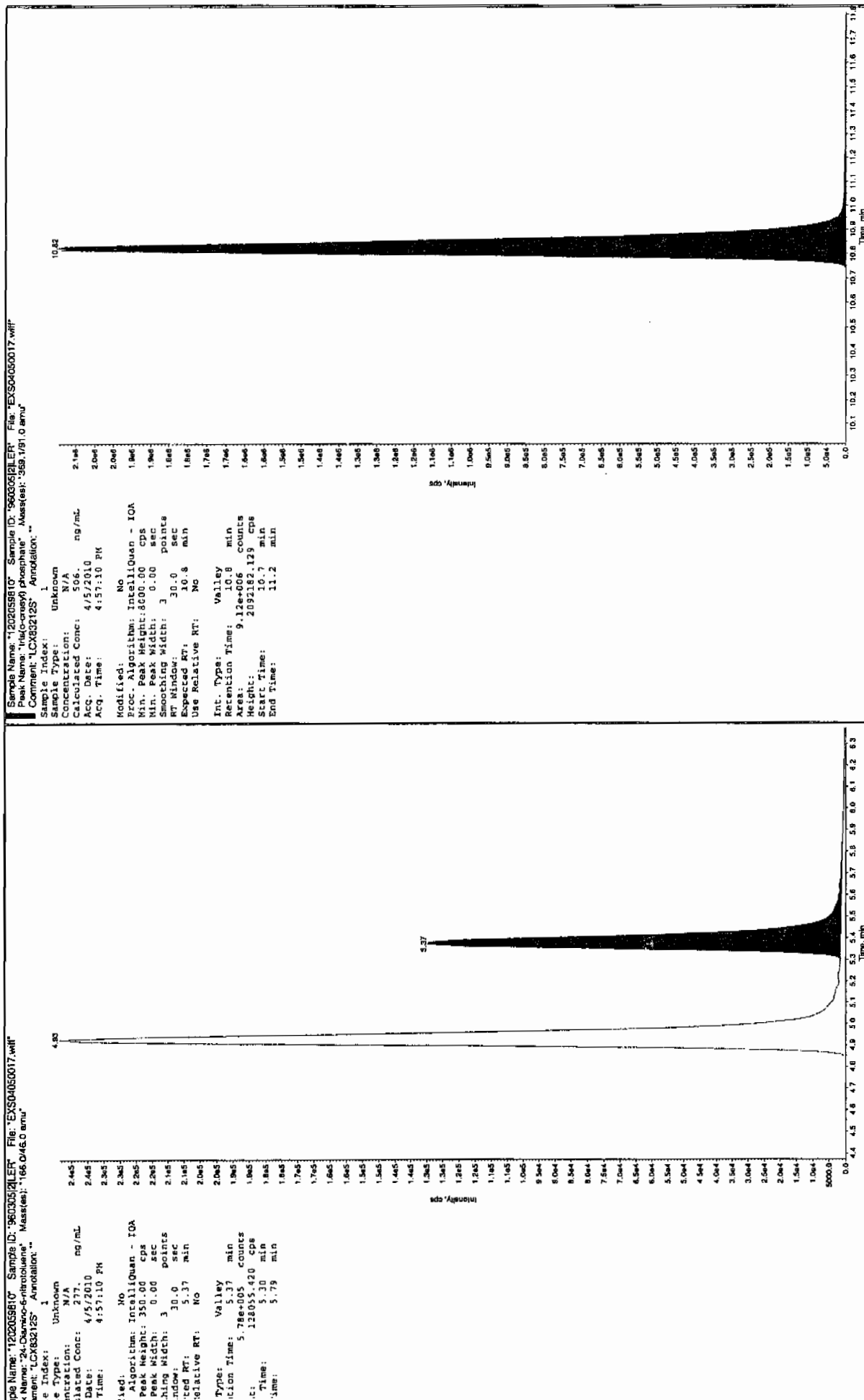


ARM 04/08/10



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7415(248370001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 1202059811

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412170a

Date Analyzed: 16-APR-10 02:46

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4930	
121-14-2	2,4-Dinitrotoluene	5580	
121-82-4	RDX	4980	
19406-51-0	4-Amino-2,6-dinitrotoluene	4580	
2691-41-0	HMX	4080	
35572-78-2	2-Amino-4,6-dinitrotoluene	4910	
479-45-8	Tetryl	1640	
606-20-2	2,6-Dinitrotoluene	4750	
78-11-5	PETN	5490	
88-72-2	o-Nitrotoluene	3820	
98-95-3	Nitrobenzene	3590	
99-08-1	m-Nitrotoluene	3930	
99-35-4	1,3,5-Trinitrobenzene	4040	
99-65-0	m-Dinitrobenzene	4740	
99-99-0	p-Nitrotoluene	4060	

*Concentration =

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

uantify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

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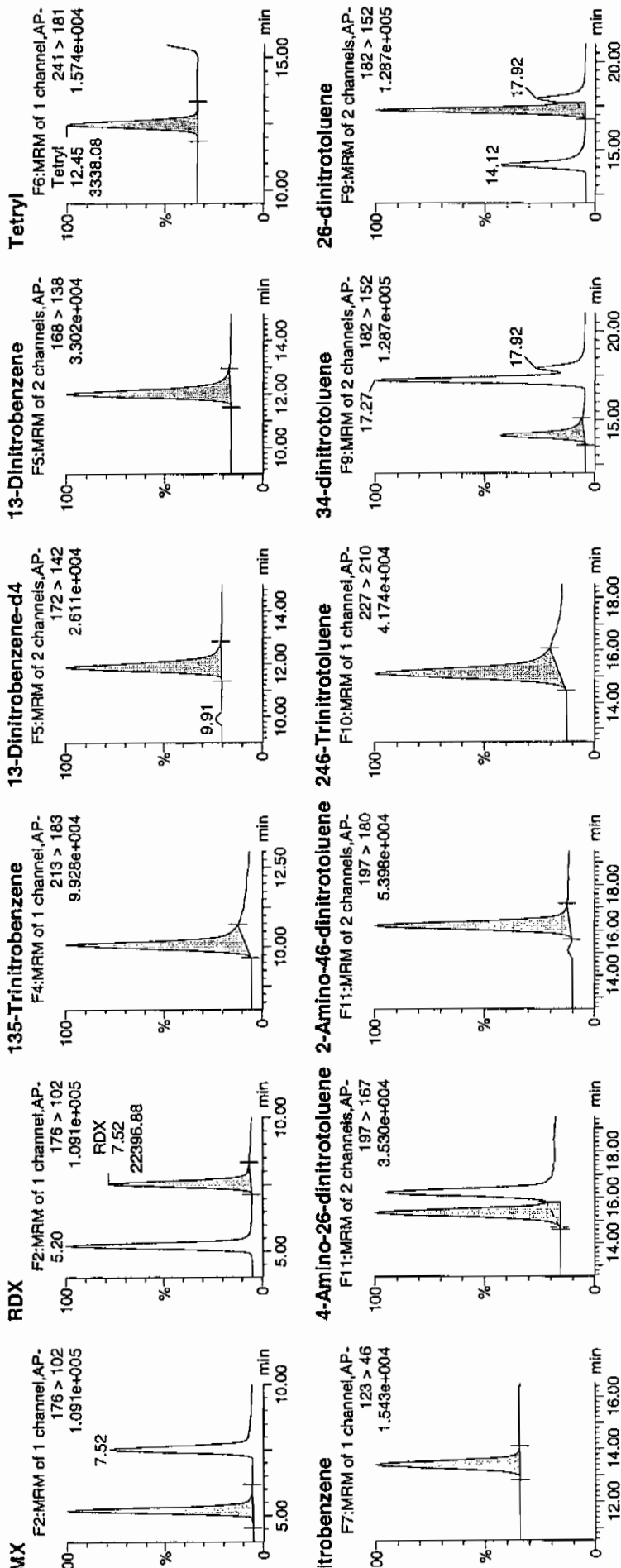
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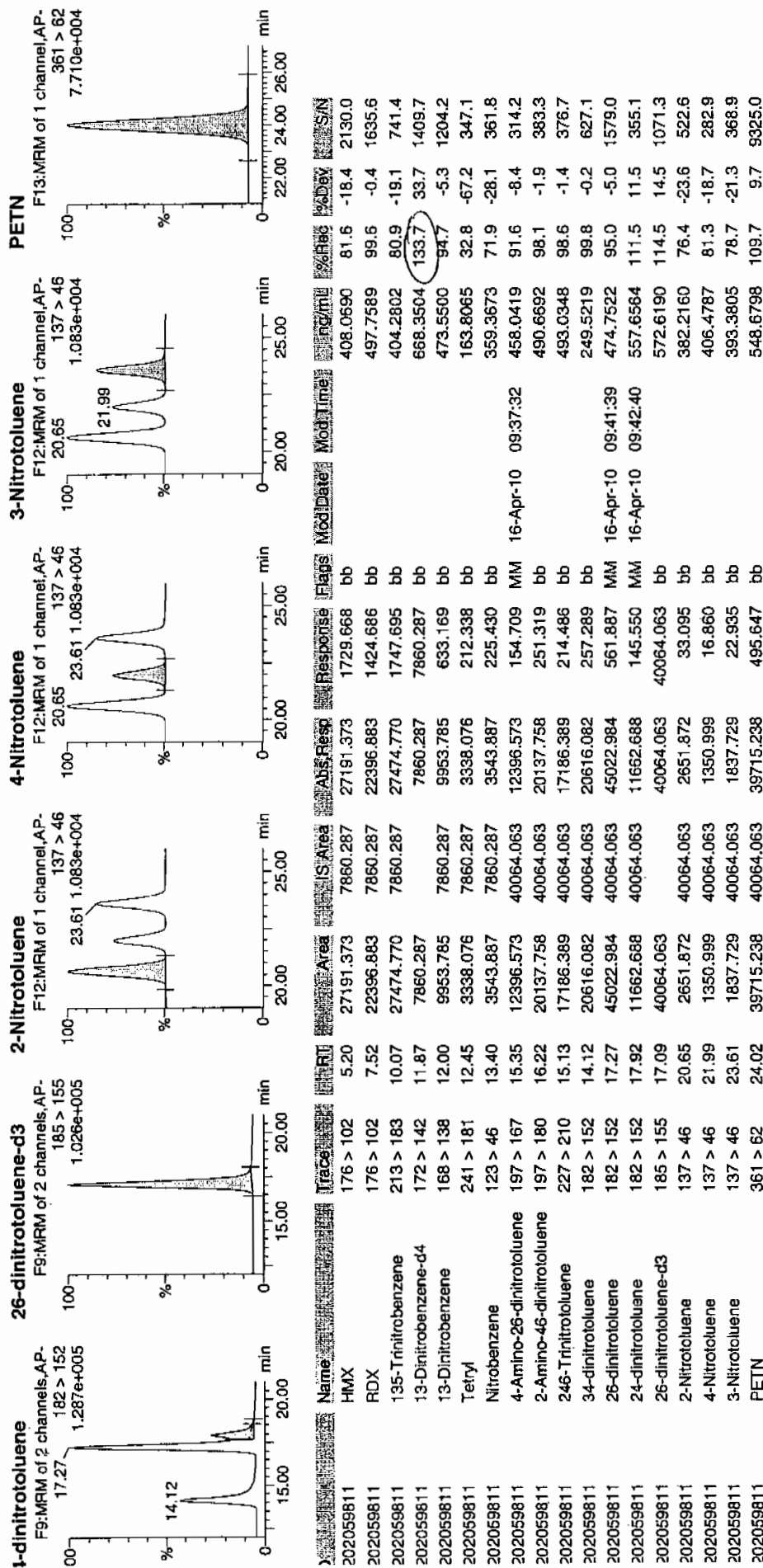
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uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-7415(248370001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-2150

Matrix: SOIL

GEL Sample ID: 1202059811

Sample Amount 2

Moisture: 41.6

Amount Units g

Date Received: 02-MAR-10

Extraction Type Sonication

Extraction Batch ID: 960303

Concentrated Extract Volume (mL) 10

Date Extracted: 09-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04050018.wiff

Date Analyzed: 05-APR-10 17:12

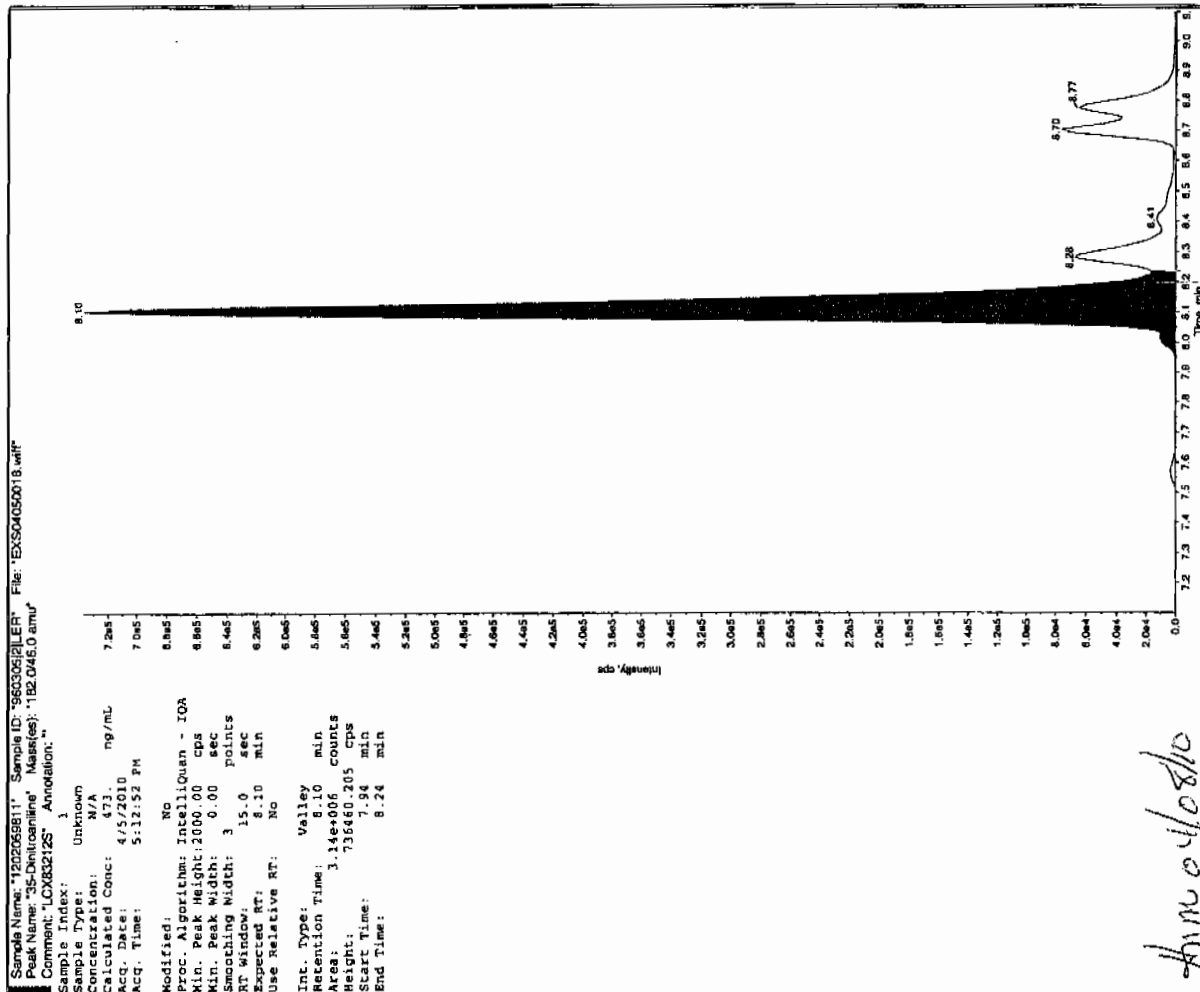
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	8610	
59229-75-3	2,6-Diamino-4-nitrotoluene	3610	
618-87-1	3,5-Dinitroaniline	4730	
6629-29-4	2,4-Diamino-6-nitrotoluene	2920	
78-30-8	tris(o-cresyl) phosphate	5030	

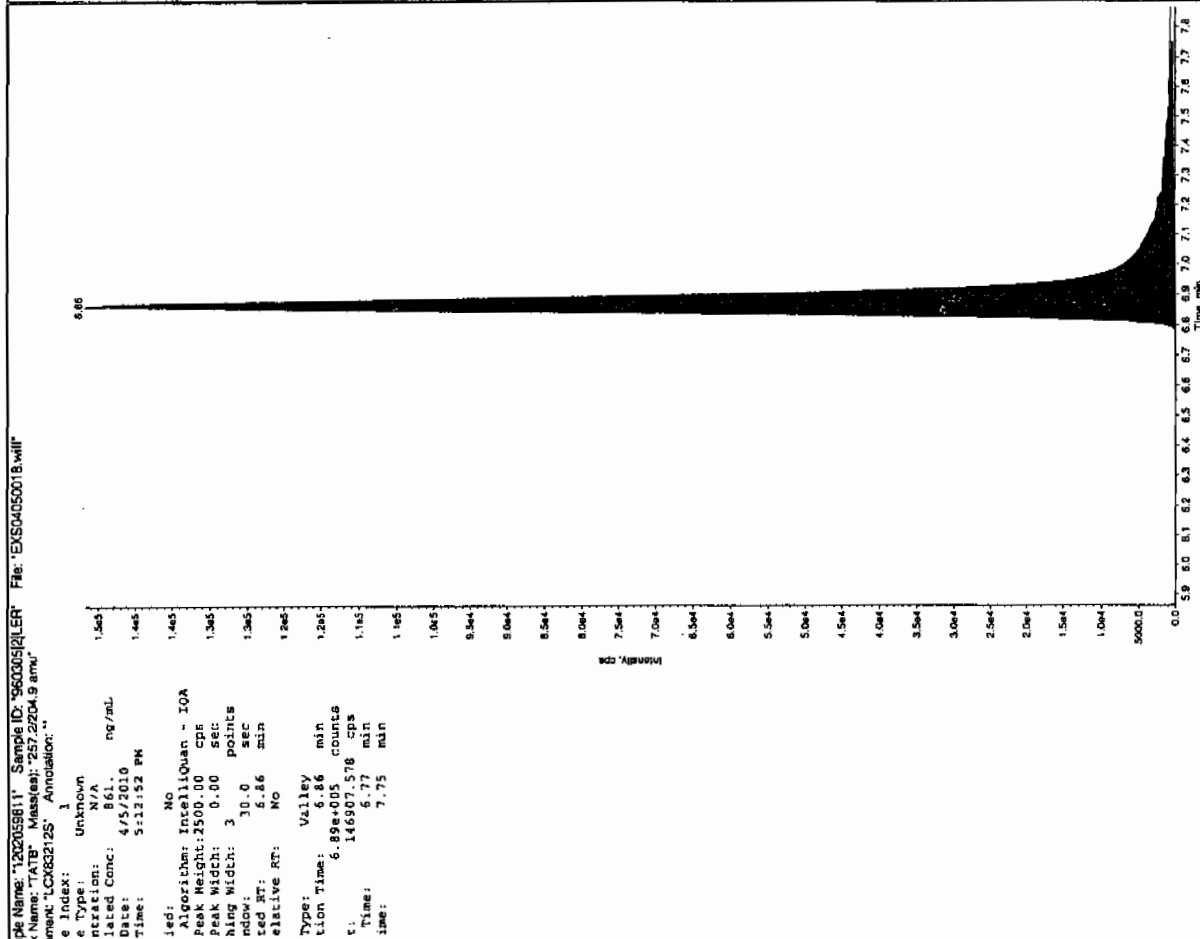
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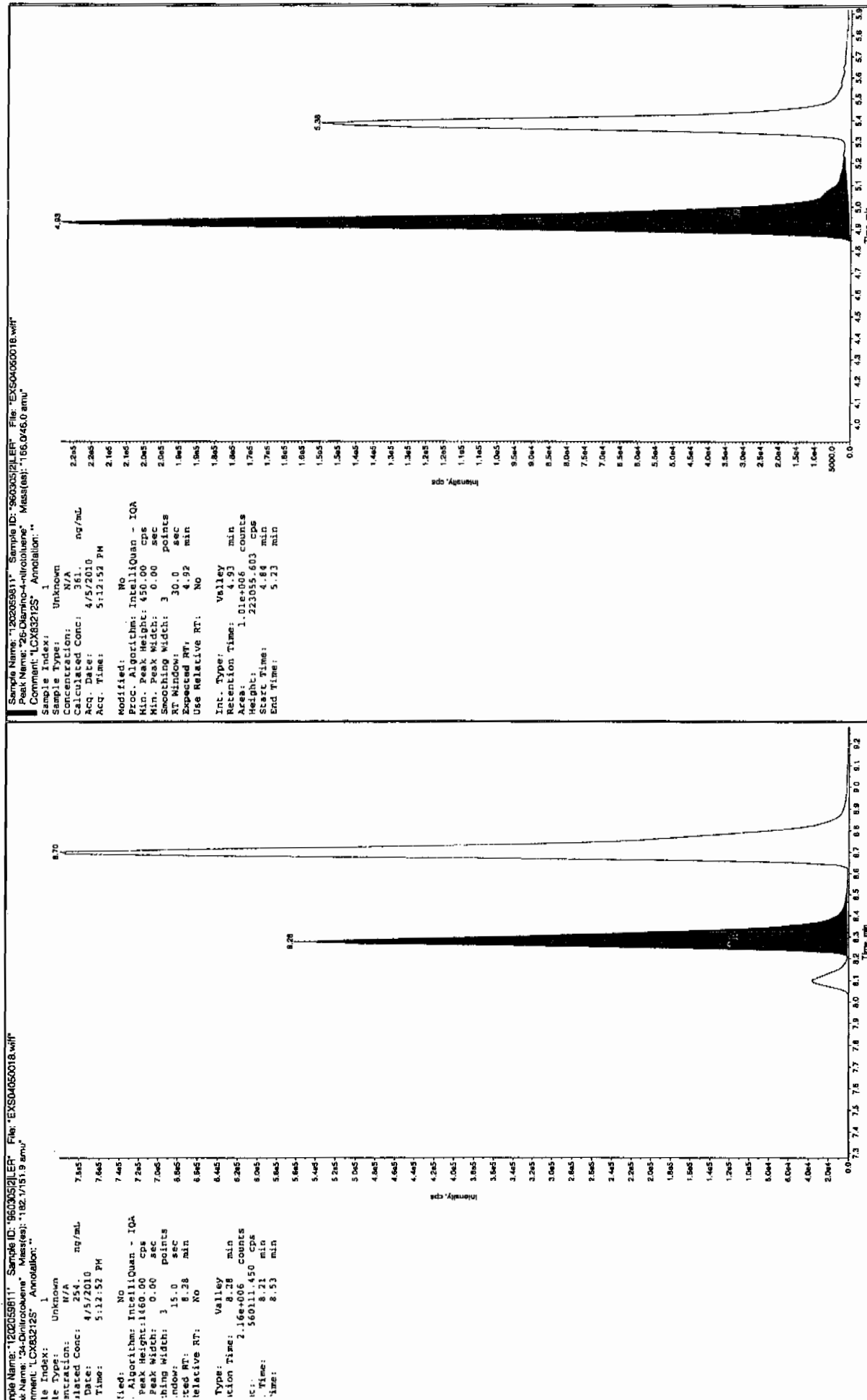
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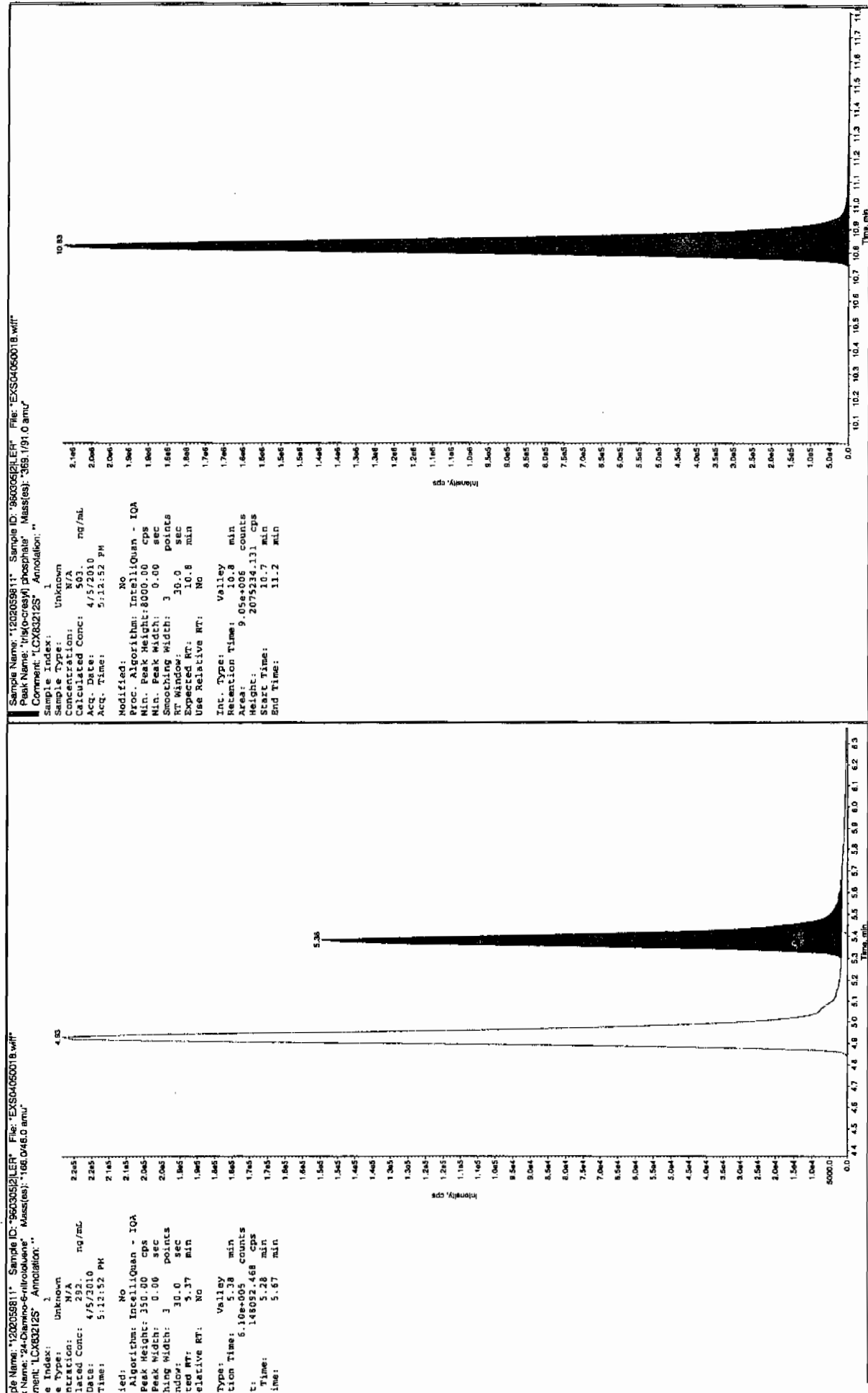


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, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





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: 960303 Verified by: _____

Analyst: Sirena White Lab SOP: GL-OA-E-033 REV# 17

Method: SW846 8330 PREP Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)	
1202059808 MB	09-MAR-2010 16:49:00	2	10	5	
1202059809 LCS	09-MAR-2010 16:49:00	2	10	5	
248370001	09-MAR-2010 16:49:00	2	10	5	
1202059810 MS (248370001)	09-MAR-2010 16:49:00	2	10	5	
1202059811 MSD (248370001)	09-MAR-2010 16:49:00	2	10	5	
248370002	09-MAR-2010 16:49:00	2	10	5	
248370003	09-MAR-2010 16:49:00	2	10	5	
248370004	09-MAR-2010 16:49:00	2	10	5	
248370005	09-MAR-2010 16:49:00	2	10	5	
248370006	09-MAR-2010 16:49:00	2	10	5	
248370007	09-MAR-2010 16:49:00	2	10	5	
248370008	09-MAR-2010 16:49:00	2	10	5	
248370009	09-MAR-2010 16:49:00	2	10	5	
248370010	09-MAR-2010 16:49:00	2	10	5	
248370011	09-MAR-2010 16:49:00	2	10	5	
248370012	09-MAR-2010 16:49:00	2	10	5	
248370013	09-MAR-2010 16:49:00	2	10	5	
248370014	09-MAR-2010 16:49:00	2	10	5	
248370015	09-MAR-2010 16:49:00	2	10	5	
248370016	09-MAR-2010 16:49:00	2	10	5	
248370017	09-MAR-2010 16:49:00	2	10	5	
248370018	09-MAR-2010 16:49:00	2	10	5	
248370019	09-MAR-2010 16:49:00	2	10	5	
248370020	09-MAR-2010 16:49:00	2	10	5	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202059809	8321 Explosives LCS	DXC100225-03	.1	mL	Final Solvent: ACN
LCS	1202059809	8321 LANL Explosives Mix 10mg/L	UXX100223-02.02	1	mL	
MS	1202059810	8321 Explosives LCS	DXC100225-03	.1	mL	
MS	1202059810	8321 LANL Explosives Mix 10mg/L	UXX100223-02.02	1	mL	
MSD	1202059811	8321 Explosives LCS	DXC100225-03	.1	mL	
MSD	1202059811	8321 LANL Explosives Mix 10mg/L	UXX100223-02.02	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Surrogate) 100ppm	DXP100304-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #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: *Amr*
 Date: *04/18/10*
 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

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	USE	S
EXP0412212a	248373005	MAP	4/16/10 23:26	960307	10-2154	2	LANL	DUSE-RA	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	960307	10-2154	1	LANL	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-RA	S
EXP0412224a	WXXCCV	MAP	4/17/10 5:20			1		USE	C
EXP0412225a	XIBLK26	MAP	4/17/10 5:49			1		USE	B
EXP0412226a	WXXCRI	MAP	4/17/10 6:19			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 04/05/10
 Extr. Injection Volume: 10uL
 Sequence Number: 040510exs
 Initial Calibration Date: 040510

Method: 8321A-Modified

Int. Std.: N/A

Mobile Phase Lot#:1268566, 1268568

Standard-Samp Reagent Lot# :1292884, 1284736

Reviewed By: *thm*
 Date: *04/08/10*
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100405-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS04050001.wiff	XIBLK01	LER	4/5/2010 12:43			1		USE	B
EXS04050002.wiff	XIBLK01	LER	4/5/2010 12:59			1		USE	B
EXS04050003.wiff	WXXICAL-19	LER	4/5/2010 13:15			1		USE	I
EXS04050004.wiff	WXXICAL-20	LER	4/5/2010 13:30			1		USE	I
EXS04050005.wiff	WXXICAL-21	LER	4/5/2010 13:46			1		USE	I
EXS04050006.wiff	WXXICAL-22	LER	4/5/2010 14:02			1		USE	I
EXS04050007.wiff	WXXICAL-23	LER	4/5/2010 14:18			1		USE	I
EXS04050008.wiff	WXXICAL-24	LER	4/5/2010 14:33			1		USE	I
EXS04050009.wiff	WXXICAL-25	LER	4/5/2010 14:51			1		USE	I
EXS04050010.wiff	XIBLK02	LER	4/5/2010 15:07			1		USE	B
EXS04050011.wiff	WXXICV	LER	4/5/2010 15:22			1		USE	C
EXS04050012.wiff	XIBLK03	LER	4/5/2010 15:38			1		USE	B
EXS04050013.wiff	WXXCRI	LER	4/5/2010 15:54			1		USE	C
EXS04050014.wiff	1202059808	LER	4/5/2010 16:09	960305	10-2150	2	LANL	USE	S
EXS04050015.wiff	1202059809	LER	4/5/2010 16:25	960305	10-2150	2	LANL	USE	S
EXS04050016.wiff	248370001	LER	4/5/2010 16:41	960305	10-2150	2	LANL	USE	S
EXS04050017.wiff	1202059810	LER	4/5/2010 16:57	960305	10-2150	2	LANL	USE	S
EXS04050018.wiff	1202059811	LER	4/5/2010 17:12	960305	10-2150	2	LANL	USE	S
EXS04050019.wiff	248370002	LER	4/5/2010 17:28	960305	10-2150	2	LANL	USE	S
EXS04050020.wiff	248370003	LER	4/5/2010 17:44	960305	10-2150	2	LANL	USE	S
EXS04050021.wiff	248370004	LER	4/5/2010 17:59	960305	10-2150	2	LANL	USE	S
EXS04050022.wiff	248370005	LER	4/5/2010 18:15	960305	10-2150	2	LANL	USE	S
EXS04050023.wiff	248370006	LER	4/5/2010 18:31	960305	10-2150	2	LANL	USE	S
EXS04050024.wiff	WXXCCV	LER	4/5/2010 18:47	960305	10-2150	1		USE	C
EXS04050025.wiff	XIBLK04	LER	4/5/2010 19:02			1		USE	B
EXS04050026.wiff	WXXCRI	LER	4/5/2010 19:18			1		USE	C
EXS04050027.wiff	248370007	LER	4/5/2010 19:34	960305	10-2150	2	LANL	USE	S
EXS04050028.wiff	248370008	LER	4/5/2010 19:49	960305	10-2150	2	LANL	USE	S
EXS04050029.wiff	248370009	LER	4/5/2010 20:05	960305	10-2150	2	LANL	USE	S
EXS04050030.wiff	248370010	LER	4/5/2010 20:21	960305	10-2150	2	LANL	USE	S

EXS04050031.wiff	248370011	LER	4/5/2010 20:37	960305	10-2150	2	LANL	USE	S
EXS04050032.wiff	248370012	LER	4/5/2010 20:52	960305	10-2150	2	LANL	USE	S
EXS04050033.wiff	248370013	LER	4/5/2010 21:08	960305	10-2150	2	LANL	USE	S
EXS04050034.wiff	248370014	LER	4/5/2010 21:24	960305	10-2150	2	LANL	USE	S
EXS04050035.wiff	248370015	LER	4/5/2010 21:39	960305	10-2150	2	LANL	USE	S
EXS04050036.wiff	248370016	LER	4/5/2010 21:55	960305	10-2150	2	LANL	USE	S
EXS04050037.wiff	WXCCV	LER	4/5/2010 22:11			1		USE	C
EXS04050038.wiff	XIBLK05	LER	4/5/2010 22:27			1		USE	B
EXS04050039.wiff	WXCCRI	LER	4/5/2010 22:42			1		USE	C
EXS04050040.wiff	248370017	LER	4/5/2010 22:58	960305	10-2150	2	LANL	USE	S
EXS04050041.wiff	248370018	LER	4/5/2010 23:14	960305	10-2150	2	LANL	USE	S
EXS04050042.wiff	248370019	LER	4/5/2010 23:29	960305	10-2150	2	LANL	USE	S
EXS04050043.wiff	248370020	LER	4/5/2010 23:45	960305	10-2150	2	LANL	USE	S
EXS04050044.wiff	XIBLK06	LER	4/6/2010 0:01			1		USE	B
EXS04050045.wiff	1202064670	LER	4/6/2010 0:17	962462	VARIOUS	2	LANL	USE	S
EXS04050046.wiff	1202064671	LER	4/6/2010 0:32	962462	VARIOUS	2	LANL	USE	S
EXS04050047.wiff	248790001	LER	4/6/2010 0:48	962462	10-2286-1	2	LANL	USE	S
EXS04050048.wiff	1202064672	LER	4/6/2010 1:04	962462	10-2286-1	2	LANL	USE	S
EXS04050049.wiff	1202064673	LER	4/6/2010 1:19	962462	10-2286-1	2	LANL	USE	S
EXS04050050.wiff	WXCCV	LER	4/6/2010 1:35			1		USE	C
EXS04050051.wiff	XIBLK07	LER	4/6/2010 1:51			1		USE	B
EXS04050052.wiff	WXCCRI	LER	4/6/2010 2:06			1		USE	C
EXS04050053.wiff	248790002	LER	4/6/2010 2:22	962462	10-2286-1	2	LANL	USE	S
EXS04050054.wiff	248790003	LER	4/6/2010 2:38	962462	10-2286-1	2	LANL	USE	S
EXS04050055.wiff	248790004	LER	4/6/2010 2:54	962462	10-2286-1	2	LANL	USE	S
EXS04050056.wiff	248794002	LER	4/6/2010 3:09	962462	10-2288	2	LANL	USE	S
EXS04050057.wiff	248794003	LER	4/6/2010 3:25	962462	10-2288	2	LANL	USE	S
EXS04050058.wiff	248794004	LER	4/6/2010 3:41	962462	10-2288	2	LANL	USE	S
EXS04050059.wiff	248794005	LER	4/6/2010 3:57	962462	10-2288	2	LANL	USE	S
EXS04050060.wiff	248794006	LER	4/6/2010 4:12	962462	10-2288	2	LANL	USE	S
EXS04050061.wiff	248794007	LER	4/6/2010 4:28	962462	10-2288	2	LANL	USE	S
EXS04050062.wiff	248794008	LER	4/6/2010 4:44	962462	10-2288	2	LANL	USE	S
EXS04050063.wiff	WXCCV	LER	4/6/2010 4:59			1		USE	C
EXS04050064.wiff	XIBLK08	LER	4/6/2010 5:15			1		USE	B
EXS04050065.wiff	WXCCRI	LER	4/6/2010 5:31			1		USE	C
EXS04050066.wiff	248794009	LER	4/6/2010 5:47	962462	10-2288	2	LANL	USE	S
EXS04050067.wiff	248794010	LER	4/6/2010 6:02	962462	10-2288	2	LANL	USE	S

EXS04050068.wiff	248794011	LER	4/6/2010 6:18	962462	10-2288	2	LANL	USE	S
EXS04050069.wiff	248794012	LER	4/6/2010 6:34	962462	10-2288	2	LANL	USE	S
EXS04050070.wiff	248794013	LER	4/6/2010 6:49	962462	10-2288	2	LANL	USE	S
EXS04050071.wiff	WXXCCV	LER	4/6/2010 7:05			1		USE	C
EXS04050072.wiff	XIBLK09	LER	4/6/2010 7:21			1		USE	B
EXS04050073.wiff	WXXCRI	LER	4/6/2010 7:37			1		USE	C
EXS04050074.wiff	1202055078	LER	4/6/2010 7:52	958282	VARIOUS	2	LANL	USE	S
EXS04050075.wiff	1202055079	LER	4/6/2010 8:08	958282	VARIOUS	2	LANL	USE	S
EXS04050076.wiff	248017003	LER	4/6/2010 8:24	958282	10-2039	2	LANL	USE	S
EXS04050077.wiff	1202055080	LER	4/6/2010 8:39	958282	10-2039	2	LANL	USE	S
EXS04050078.wiff	1202055081	LER	4/6/2010 8:55	958282	10-2039	2	LANL	USE	S
EXS04050079.wiff	248042002	LER	4/6/2010 9:11	958282	10-2057	2	LANL	USE	S
EXS04050080.wiff	248042008	LER	4/6/2010 9:26	958282	10-2057	2	LANL	USE	S
EXS04050081.wiff	248042010	LER	4/6/2010 9:42	958282	10-2057	2	LANL	USE	S
EXS04050082.wiff	248047003	LER	4/6/2010 9:58	958282	10-2045	2	LANL	USE	S
EXS04050083.wiff	248047007	LER	4/6/2010 10:14	958282	10-2045	2	LANL	USE	S
EXS04050084.wiff	WXXCCV	LER	4/6/2010 10:29			1		USE	C
EXS04050085.wiff	XIBLK10	LER	4/6/2010 10:45			1		USE	B
EXS04050086.wiff	WXXCRI	LER	4/6/2010 11:01			1		USE	C
EXS04050087.wiff	1202057500	LER	4/6/2010 11:16	959338	VARIOUS	2	LANL	USE	S
EXS04050088.wiff	1202057501	LER	4/6/2010 11:32	959338	VARIOUS	2	LANL	USE	S
EXS04050089.wiff	248244001	LER	4/6/2010 11:48	959338	10-2137	2	LANL	USE	S
EXS04050090.wiff	248244002	LER	4/6/2010 12:04	959338	10-2137	2	LANL	USE	S
EXS04050091.wiff	248244003	LER	4/6/2010 12:19	959338	10-2137	2	LANL	USE	S
EXS04050092.wiff	248244004	LER	4/6/2010 12:35	959338	10-2137	2	LANL	USE	S
EXS04050093.wiff	248244005	LER	4/6/2010 12:51	959338	10-2137	2	LANL	USE	S
EXS04050094.wiff	248244006	LER	4/6/2010 13:06	959338	10-2137	2	LANL	USE	S
EXS04050095.wiff	248244007	LER	4/6/2010 13:22	959338	10-2137	2	LANL	USE	S
EXS04050096.wiff	248244008	LER	4/6/2010 13:38	959338	10-2137	2	LANL	USE	S
EXS04050097.wiff	WXXCCV	LER	4/6/2010 13:53			1		USE	C
EXS04050098.wiff	XIBLK11	LER	4/6/2010 14:09			1		USE	B
EXS04050099.wiff	WXXCRI	LER	4/6/2010 14:25			1		USE	C
EXS04050100.wiff	248249001	LER	4/6/2010 14:41	959338	10-2140	2	LANL	USE	S
EXS04050101.wiff	1202057502	LER	4/6/2010 14:56	959338	10-2140	2	LANL	USE	S
EXS04050102.wiff	1202057503	LER	4/6/2010 15:12	959338	10-2140	2	LANL	USE	S
EXS04050103.wiff	248249002	LER	4/6/2010 15:28	959338	10-2140	2	LANL	USE	S
EXS04050104.wiff	248249003	LER	4/6/2010 15:43	959338	10-2140	2	LANL	USE	S

EXS04050105.wiff	248249004	LER	4/6/2010 15:59	959338	10-2140	2	LANL	USE	S
EXS04050106.wiff	WXCCV	LER	4/6/2010 16:15			1		USE	C
EXS04050107.wiff	XIBLK12	LER	4/6/2010 16:30			1		USE	B
EXS04050108.wiff	WXXCRI	LER	4/6/2010 16:46			1		USE	C

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA4.qld, Time: Sat Apr 17 10:42:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412199a

Date: 16-Apr-2010

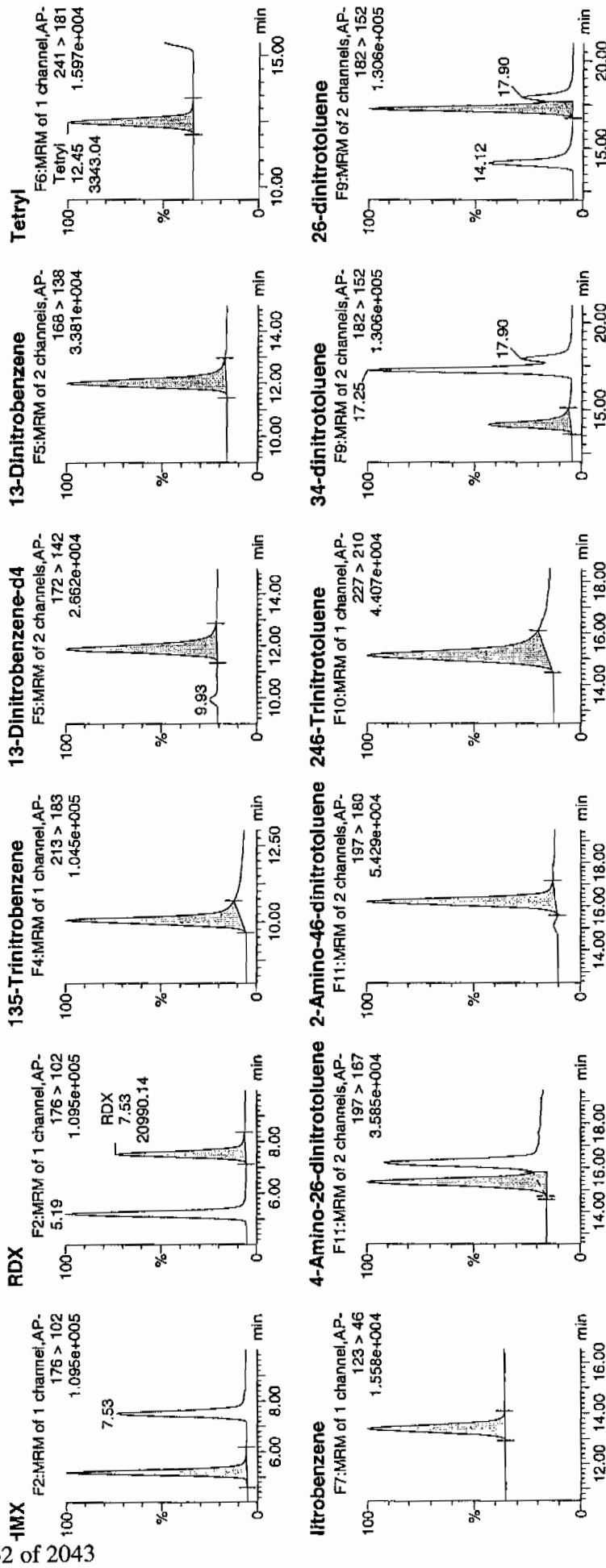
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ID: 1202059811

Vial: 4;4,E

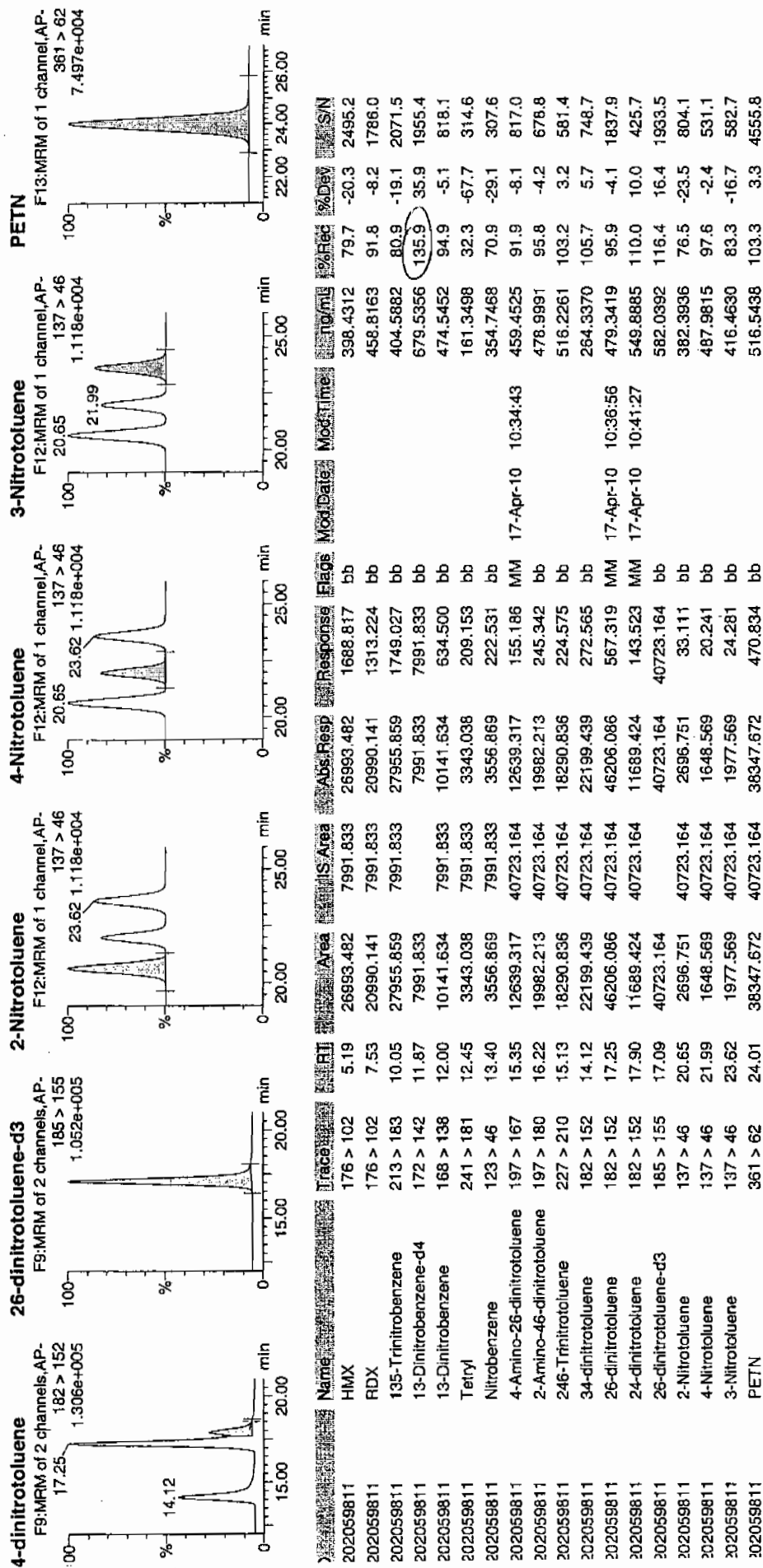
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CONCENTRATION 24121709

LAU 960305 / 248370001 MSD / 21



4/18/10

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GEL Laboratories LLC
Form GEL-DER

DER Report No.: 818315

Revision No.: 1

DATA EXCEPTION REPORT

Mo. Day Yr. 17-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: 960305	Sample Numbers: See Below		
<p>Potentially affected work order(s)(SDG): 248370(10-2150)</p> <p>Application Issues:</p> <p>Other</p> <p>Failed Recovery for MSD/PSD</p> <p>Failed Recovery for LCS/LCSD</p> <p>Failed Recovery for MS/PS</p> <p>Failed RPD for MS/MSD, or PS/PSD</p>			
<p>Specification and Requirements</p> <p>Exception Description:</p> <p>1. The LCS (1202059809) did not meet spike recovery limits for Tetryl at 36.8%. The recovery limits are 51-112%.</p> <p>2. The MS (1202059810) did not meet spike recovery limits for Tetryl at 24.1%. The recovery limits are 36-124%.</p> <p>3. The MSD (1202059811) did not meet spike recovery limits for Tetryl at 32.8% with recovery limits of 36-124% and TATB at 172% with recovery limits of 29-155%.</p> <p>4. The MS/MSD pair (1202059810/11) did not meet RPD acceptance limits for Tetryl at 30.5%. The acceptance limits are 0-30%.</p> <p>5. The internal standard responses were outside of the acceptance criteria in the following sample: 1202059811(MSD). Please see the Form 8 in the data package for the exact recoveries.</p>		<p>DER Disposition:</p> <p>1. Since both the MS and MSD met the DOD QSM marginal exceedance limits of 22-139% for Tetryl, and the samples are greater than two times out of hold, the data are reported with the appropriate DER. The discrepancy is noted in the case narrative.</p> <p>2. & 3. Both the MS and MSD met the DOD QSM marginal exceedance limits of 22-139% for Tetryl. Since both the LCS and MS met recovery limits for TATB, the noted exception is attributed to vagaries in the extraction process. The samples are greater than two times out of hold; therefore, the data are reported with the appropriate DER. The discrepancies are noted in the case narrative.</p> <p>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.</p> <p>5. The sample was re-analyzed and similar recoveries were observed. The initial 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.</p>	

Originator's Name:

Michael Penny

17-APR-10

Data Validator/Group Leader:

Herbert Maier

18-APR-10

GC
SEMIVOLATILE
PCB
ANALYSIS

**PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2150**

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 965975
Prep Batch Number: 965974

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
248370001	RE36-10-7415
248370002	RE36-10-7420
248370003	RE36-10-7418
248370004	RE36-10-7417
248370005	RE36-10-7419
248370006	RE36-10-7416
1202072978	Method Blank (MB)
1202072979	Laboratory Control Sample (LCS)
1202072980	248506001(RE36-10-7407) Matrix Spike (MS)
1202072981	248506001(RE36-10-7407) 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 (#10-2193) 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

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic

signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

Data exception report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

Manual Integration

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VII's will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

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: Jimmi Cas

Date: 3/29/10

Roadmap for LANL 10-2150 PCB

This roadmap was analyzed by yip00818 on 03-19-2010, 09:57.

This roadmap was packaged by yml on 03-29-2010, 07:28.

This roadmap was validated by jim01140 on 03-29-2010, 11:38.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/04864801.d	248370001	sample	18-MAR-2010	14:48	10-2150.sub	RE36-10-7415	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/04964901.d	248370002	sample	18-MAR-2010	15:01	10-2150.sub	RE36-10-7420	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/05065001.d	248370003	sample	18-MAR-2010	15:13	10-2150.sub	RE36-10-7418	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/05165101.d	248370004	sample	18-MAR-2010	15:26	10-2150.sub	RE36-10-7417	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/05265201.d	248370005	sample	18-MAR-2010	15:39	10-2150.sub	RE36-10-7419	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/05365301.d	248370006	sample	18-MAR-2010	15:51	10-2150.sub	RE36-10-7416	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/04864801.d	248370001	sample	18-MAR-2010	14:48	10-2150.sub	RE36-10-7415	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/04964901.d	248370002	sample	18-MAR-2010	15:01	10-2150.sub	RE36-10-7420	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/05065001.d	248370003	sample	18-MAR-2010	15:13	10-2150.sub	RE36-10-7418	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/05165101.d	248370004	sample	18-MAR-2010	15:26	10-2150.sub	RE36-10-7417	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/05265201.d	248370005	sample	18-MAR-2010	15:39	10-2150.sub	RE36-10-7419	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/05365301.d	248370006	sample	18-MAR-2010	15:51	10-2150.sub	RE36-10-7416	1.00000	965975	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/03763701-1.d	1202072978	mb	18-MAR-2010	12:38	10-2150.sub	PBLK01	1.00000	965975	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/03863801-1.d	1202072979	lcs	18-MAR-2010	12:48	10-2150.sub	PBLK01LCS	1.00000	965975	<input type="text"/>

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/03763701-1.d	1202072978	mb	18-MAR-2010	12:38	10-2150.sub	PBLK01	1.00000	965975	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd1a.i/031810.b/03863801-1.d	1202072979	lcs	18-MAR-2010	12:48	10-2150.sub	PBLK01LCS	1.00000	965975	<input type="text"/>

SAMPLE DATA SUMMARY

PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-2150
Lab Sample ID: 248370001Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YSJ
Aliquot: 30.02 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 41.6
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOWClient ID: RE36-10-7415
Batch ID: 965975
Run Date: 03/18/2010 14:48
Prep Date: 03/17/2010 11:22
Data File: 048f4801.d
048b4801.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	5.71	ug/kg	1.90	5.71	1
11104-28-2	Aroclor-1221	U	5.71	ug/kg	1.90	5.71	1
11141-16-5	Aroclor-1232	U	5.71	ug/kg	1.90	5.71	1
53469-21-9	Aroclor-1242	U	5.71	ug/kg	1.90	5.71	1
12672-29-6	Aroclor-1248	U	5.71	ug/kg	1.90	5.71	1
11097-69-1	Aroclor-1254	J	5.40	ug/kg	1.90	5.71	2
11096-82-5	Aroclor-1260	U	5.71	ug/kg	1.90	5.71	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370006

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECDIA.I
Analyst: YS1
Aliquot: 30 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

Client ID: RE36-10-7416
Batch ID: 965975
Run Date: 03/18/2010 15:51
Prep Date: 03/17/2010 11:22
Data File: 053f5301.d
 053b5301.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.76	ug/kg	1.25	3.76	1
11104-28-2	Aroclor-1221	U	3.76	ug/kg	1.25	3.76	1
11141-16-5	Aroclor-1232	U	3.76	ug/kg	1.25	3.76	1
53469-21-9	Aroclor-1242	U	3.76	ug/kg	1.25	3.76	1
12672-29-6	Aroclor-1248	U	3.76	ug/kg	1.25	3.76	1
11097-69-1	Aroclor-1254	U	3.76	ug/kg	1.25	3.76	1
11096-82-5	Aroclor-1260	U	3.76	ug/kg	1.25	3.76	1

PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-2150
Lab Sample ID: 248370004Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.09 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOWClient ID: RE36-10-7417
Batch ID: 965975
Run Date: 03/18/2010 15:26
Prep Date: 03/17/2010 11:22
Data File: 051f5101.d
051b5101.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.21	ug/kg	1.40	4.21	1
11104-28-2	Aroclor-1221	U	4.21	ug/kg	1.40	4.21	1
11141-16-5	Aroclor-1232	U	4.21	ug/kg	1.40	4.21	1
53469-21-9	Aroclor-1242	U	4.21	ug/kg	1.40	4.21	1
12672-29-6	Aroclor-1248	U	4.21	ug/kg	1.40	4.21	1
11097-69-1	Aroclor-1254		4.30	ug/kg	1.40	4.21	1
11096-82-5	Aroclor-1260	U	4.21	ug/kg	1.40	4.21	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370003

Client ID: RE36-10-7418
Batch ID: 965975
Run Date: 03/18/2010 15:13
Prep Date: 03/17/2010 11:22
Data File: 050f5001.d
050b5001.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: 30.03 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 18.7
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.10	ug/kg	1.36	4.10	1
11104-28-2	Aroclor-1221	U	4.10	ug/kg	1.36	4.10	1
11141-16-5	Aroclor-1232	U	4.10	ug/kg	1.36	4.10	1
53469-21-9	Aroclor-1242	U	4.10	ug/kg	1.36	4.10	1
12672-29-6	Aroclor-1248	U	4.10	ug/kg	1.36	4.10	1
11097-69-1	Aroclor-1254	U	4.10	ug/kg	1.36	4.10	1
11096-82-5	Aroclor-1260	U	4.10	ug/kg	1.36	4.10	1

PCB

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Certificate of Analysis

Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370005

Date Collected: 02/24/2010 12:00
Date Received: 03/02/2010 08:50

Matrix: R
%Moisture: 16.9

Client ID: RE36-10-7419

Client: LANL010

Project: LANL01004

Batch ID: 965975

Method: SW846 8082

SOP Ref: GL-OA-E-040

Run Date: 03/18/2010 15:39

Inst: ECD1A.I

Dilution: 1

Prep Date: 03/17/2010 11:22

Analyst: YS1

Inj. Vol: 1 uL

Data File: 052f5201.d

Aliquot: 30.05 g

Final Volume: 1 mL

Column: 1 CLP1

Level: LOW

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.01	ug/kg	1.33	4.01	1
11104-28-2	Aroclor-1221	U	4.01	ug/kg	1.33	4.01	1
11141-16-5	Aroclor-1232	U	4.01	ug/kg	1.33	4.01	1
53469-21-9	Aroclor-1242	U	4.01	ug/kg	1.33	4.01	1
12672-29-6	Aroclor-1248	U	4.01	ug/kg	1.33	4.01	1
11097-69-1	Aroclor-1254	P	4.80	ug/kg	1.33	4.01	1
11096-82-5	Aroclor-1260	U	4.01	ug/kg	1.33	4.01	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370002

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

Matrix: R
%Moisture: 8.7
Project: LANL01004
SOP Ref: G1-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	3.65	ug/kg	1.22	3.65	1
11104-28-2	Aroclor-1221	U	3.65	ug/kg	1.22	3.65	1
11141-16-5	Aroclor-1232	U	3.65	ug/kg	1.22	3.65	1
53469-21-9	Aroclor-1242	U	3.65	ug/kg	1.22	3.65	1
12672-29-6	Aroclor-1248	U	3.65	ug/kg	1.22	3.65	1
11097-69-1	Aroclor-1254	U	3.65	ug/kg	1.22	3.65	1
11096-82-5	Aroclor-1260	U	3.65	ug/kg	1.22	3.65	1

QUALITY CONTROL SUMMARY

PCB
Surrogate Recovery Report

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SDG Number: 10-2150

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1202072978	MB for batch 965974	74	74	68	78
1202072979	LCS for batch 965974	77	77	81	80
248370001	RE36-10-7415	52	51	47	50
248370002	RE36-10-7420	56	56	63	61
248370003	RE36-10-7418	52	52	45	56
248370004	RE36-10-7417	44	43	46	48
248370005	RE36-10-7419	52	51	52	52
248370006	RE36-10-7416	59	60	58	63

Surrogate

4CMX = 4cmx

DCB = Decachlorobiphenyl

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Acceptance Limits

(32%-120%)

(30%-116%)

PCB

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2150

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 965974

Matrix: SOIL

Lab Sample ID:1202072979

Instrument: ECD1A.I

Analysis Date: 03/18/2010 12:48

Dilution: 1

Analyst: YS1

Prep Batch II 965974

Inj. Vol: 1 uL

Batch ID: 965975

CAS No	Paramname	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	23.4	70	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	26.4	79	45-118

PCB

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-2193

Sample Type: Matrix Spike

Client ID: RE36-10-7407MS

Matrix: R

Lab Sample ID: 1202072980

%Moisture: 22.9

Instrument: ECD1A.1

Analysis Date: 03/18/2010 17:07

Dilution: 1

Analyst: YS1

Prep Batch ID: 965974

Inj. Vol: 1 uL

Batch ID: 965975

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	43.2	0.00 U	21.5	50	23-119
11096-82-5	MS Aroclor-1260	43.2	13.0	33.6	48	28-124

PCB

Page 2 of 2

**Quality Control Summary
Spike Recovery Report**

SDG Number: 10-2193

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-7407MSD

Matrix: R

Lab Sample ID:1202072981

%Moisture: 22.9

Instrument: ECD1A.I

Analysis Date: 03/18/2010 17:20

Dilution: 1

Analyst: YS1

Prep Batch ID: 965974

Inj. Vol: 1 uL

Batch ID: 965975

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	43.2	0.00	U	20.6	48	23-119	4	0-28
11096-82-5	MSD Aroclor-1260	43.2	13.0		34.7	50	28-124	3	0-30

Method Blank Summary

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SDG Number:	10-2150	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 965974	Instrument ID:	ECD1A.I_2	Data File:	037b3701-1.d
Lab Sample ID:	1202072978		ECD1A.I_1		037f3701-1.d
Column:	CLP2	Prep Date:	03/17/2010 11:22	Analyzed:	03/18/10 12:38
	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 965974	1202072979	038f3801-1.d 038b3801-1.d	03/18/10	1248
02 RE36-10-7415	248370001	048f4801.d 048b4801.d	03/18/10	1448
03 RE36-10-7420	248370002	049f4901.d 049b4901.d	03/18/10	1501
04 RE36-10-7418	248370003	050f5001.d 050b5001.d	03/18/10	1513
05 RE36-10-7417	248370004	051f5101.d 051b5101.d	03/18/10	1526
06 RE36-10-7419	248370005	052f5201.d 052b5201.d	03/18/10	1539
07 RE36-10-7416	248370006	053f5301.d 053b5301.d	03/18/10	1551

SAMPLE DATA

PCB

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Certificate of Analysis

Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370001

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50

Matrix: R
 %Moisture: 41.6

Client ID: RE36-10-7415
 Batch ID: 965975

Client: LANL010
 Method: SW846 8082
 Inst: ECD1A.I

Project: LANL01004
 SOP Ref: GL-OA-E-040
 Dilution: 1

Run Date: 03/18/2010 14:48

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 03/17/2010 11:22

Aliquot: 30.02 g

Final Volume: 1 mL

Data File: 048f4801.d
 048b4801.d

Column: 1 CLP1
 2 CLP2

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	5.71	ug/kg	1.90	5.71	1
11104-28-2	Aroclor-1221	U	5.71	ug/kg	1.90	5.71	1
11141-16-5	Aroclor-1232	U	5.71	ug/kg	1.90	5.71	1
53469-21-9	Aroclor-1242	U	5.71	ug/kg	1.90	5.71	1
12672-29-6	Aroclor-1248	U	5.71	ug/kg	1.90	5.71	1
11097-69-1	Aroclor-1254	J	5.40	ug/kg	1.90	5.71	2
11096-82-5	Aroclor-1260	U	5.71	ug/kg	1.90	5.71	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/048f4801.d
Lab Smp Id: 248370001 Client Smp ID: RE36-10-7415
Inj Date : 18-MAR-2010 14:48
Operator : YS1 Inst ID: ecdla.i
Smp Info : |248370001|1|
Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7415|||
Comment :
Method : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 19-Mar-2010 06:23 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 48
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.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	41.62960	% 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	1.910	0.002	40362087 103.619	5.9	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.217	5.215	0.002	28000568 94.3001	5.4	80.00- 120.00	100.00

6 Aroclor-1254				CAS #: 11097-69-1		
3.208	3.207	0.001	1231122 92.8311	5.3	80.00- 120.00	100.00(a)
3.363	3.362	0.001	1025699 57.5159	3.3	112.77- 152.77	83.31
3.596	3.596	0.000	1793703 80.1788	4.6	151.79- 191.79	145.70
3.758	3.758	0.000	1174496 71.2245	4.1	105.45- 145.45	95.40

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)						
3.867	3.867	0.000	1365942	85.5617	4.9 106.56- 146.56	110.95
Average of Peak Concentrations =				4.4		

QC Flag Legend

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

Data File: /chem/eod1a.i/031810.b/048f4801.d

Date: 18-MAR-2010 14:48

Client ID: RE36-10-7415

Sample Info: 124837000111

Volume Injected (uL): 1.0

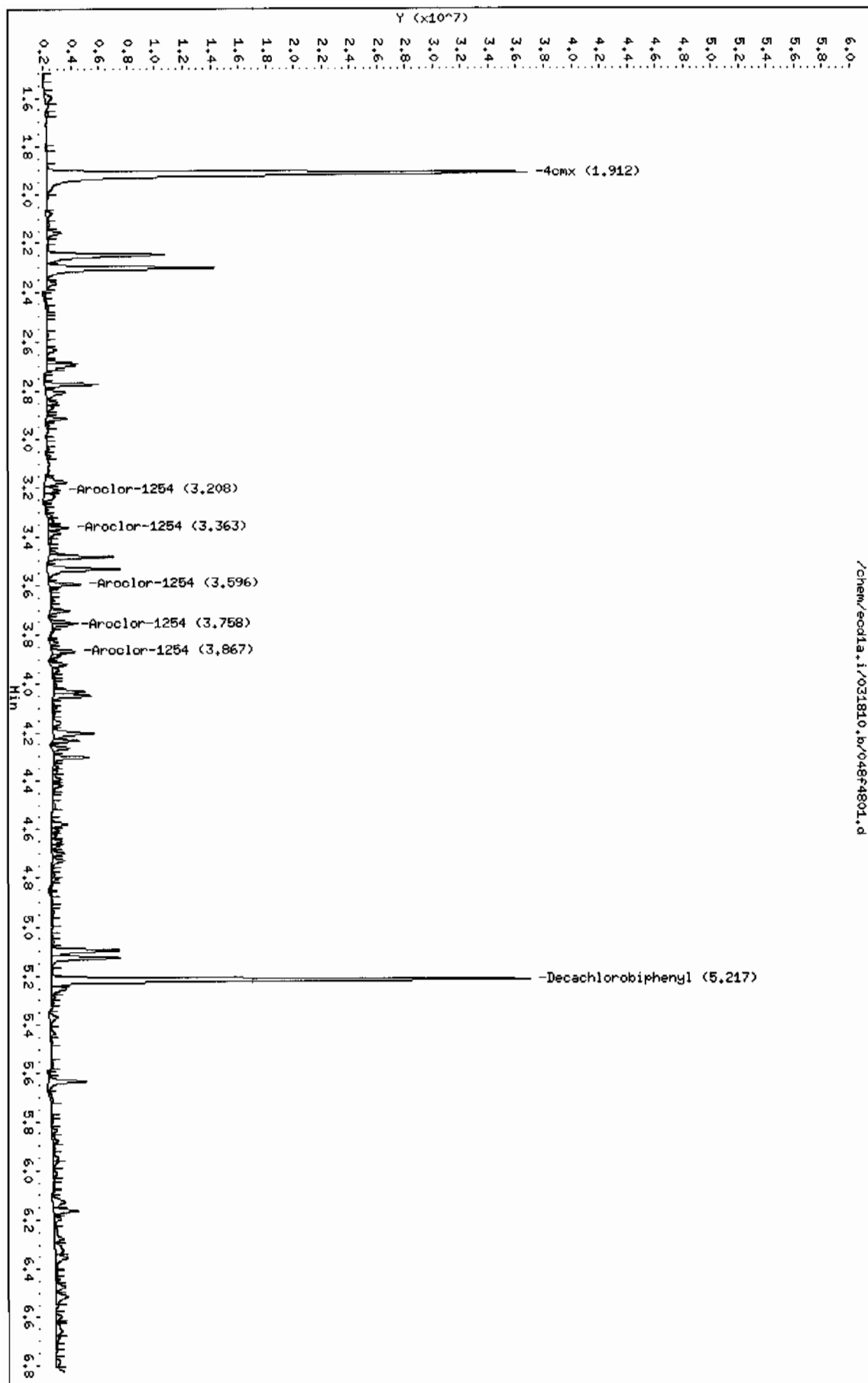
Column phase: CLP1

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Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdla.i/031810.b/048b4801.d
Report Date: 19-Mar-2010 06:24

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/048b4801.d
Lab Smp Id: 248370001 Client Smp ID: RE36-10-7415
Inj Date : 18-MAR-2010 14:48
Operator : YS1 Inst ID: ecdla.i
Smp Info : |248370001|1|
Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7415|||
Comment :
Method : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m
Meth Date : 19-Mar-2010 06:22 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 48
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.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	30.02000	Weight of sample extracted (g)
M	41.62960	% 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	2.269	0.002	26879123 102.462	5.8	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.912	5.912	0.000	18820517 100.551	5.7	80.00- 120.00	100.00
6 Aroclor-1254 CAS #: 11097-69-1						
3.375	3.373	0.002	424441 70.4909	4.0	80.00- 120.00	100.00(a)
3.796	3.795	0.001	1360968 125.785	7.2	161.66- 201.66	320.65
3.912	3.912	0.000	1240313 103.934	5.9	179.37- 219.37	292.22
4.187	4.187	0.000	1477242 89.8468	5.1	258.64- 298.64	348.04

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)						
4.324	4.324	0.000	990300	81.7382	4.7 186.15- 226.15	233.32
Average of Peak Concentrations =				5.4		

QC Flag Legend

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

Data File: /chem/ecdl1a.i/031810.b/048b4801.d

Date: 18-MAR-2010 14:48

Client ID: RE36-10-7415

Sample Info: 124837000111

Volume Injected (uL): 1.0

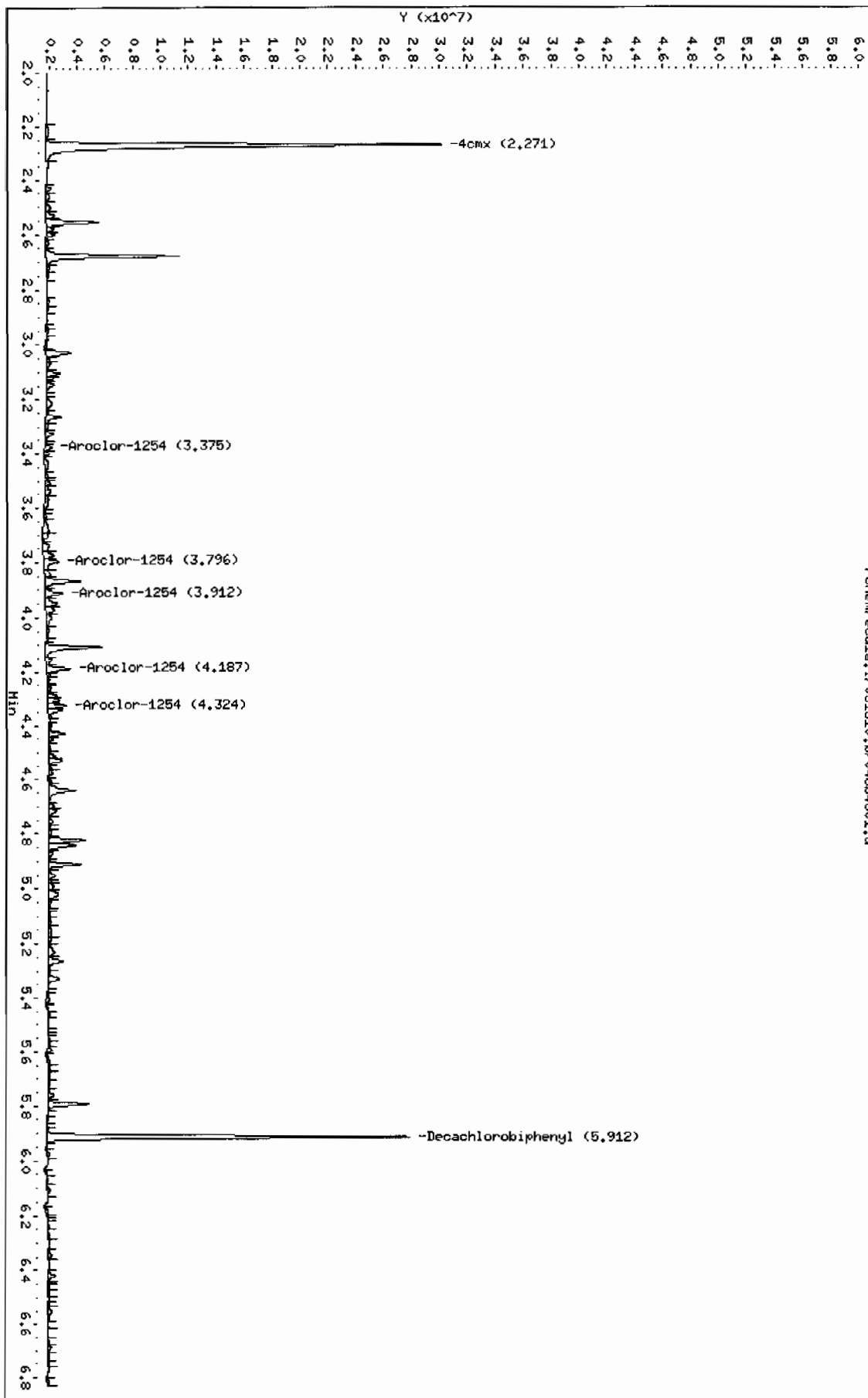
Column phase: CLP2

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1a.i/031810.b/048b4801.d



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370006

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 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.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.76	ug/kg	1.25	3.76	1
11104-28-2	Aroclor-1221	U	3.76	ug/kg	1.25	3.76	1
11141-16-5	Aroclor-1232	U	3.76	ug/kg	1.25	3.76	1
53469-21-9	Aroclor-1242	U	3.76	ug/kg	1.25	3.76	1
12672-29-6	Aroclor-1248	U	3.76	ug/kg	1.25	3.76	1
11097-69-1	Aroclor-1254	U	3.76	ug/kg	1.25	3.76	1
11096-82-5	Aroclor-1260	U	3.76	ug/kg	1.25	3.76	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/053f5301.d
Lab Smp Id: 248370006 Client Smp ID: RE36-10-7416
Inj Date : 18-MAR-2010 15:51
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248370006|1|
Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7416|||
Comment :
Method : /chem/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 19-Mar-2010 06:23 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 53
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.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	11.30770	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
11.910	1.910	0.000	46282608	118.819	4.5 80.00- 120.00	100.00

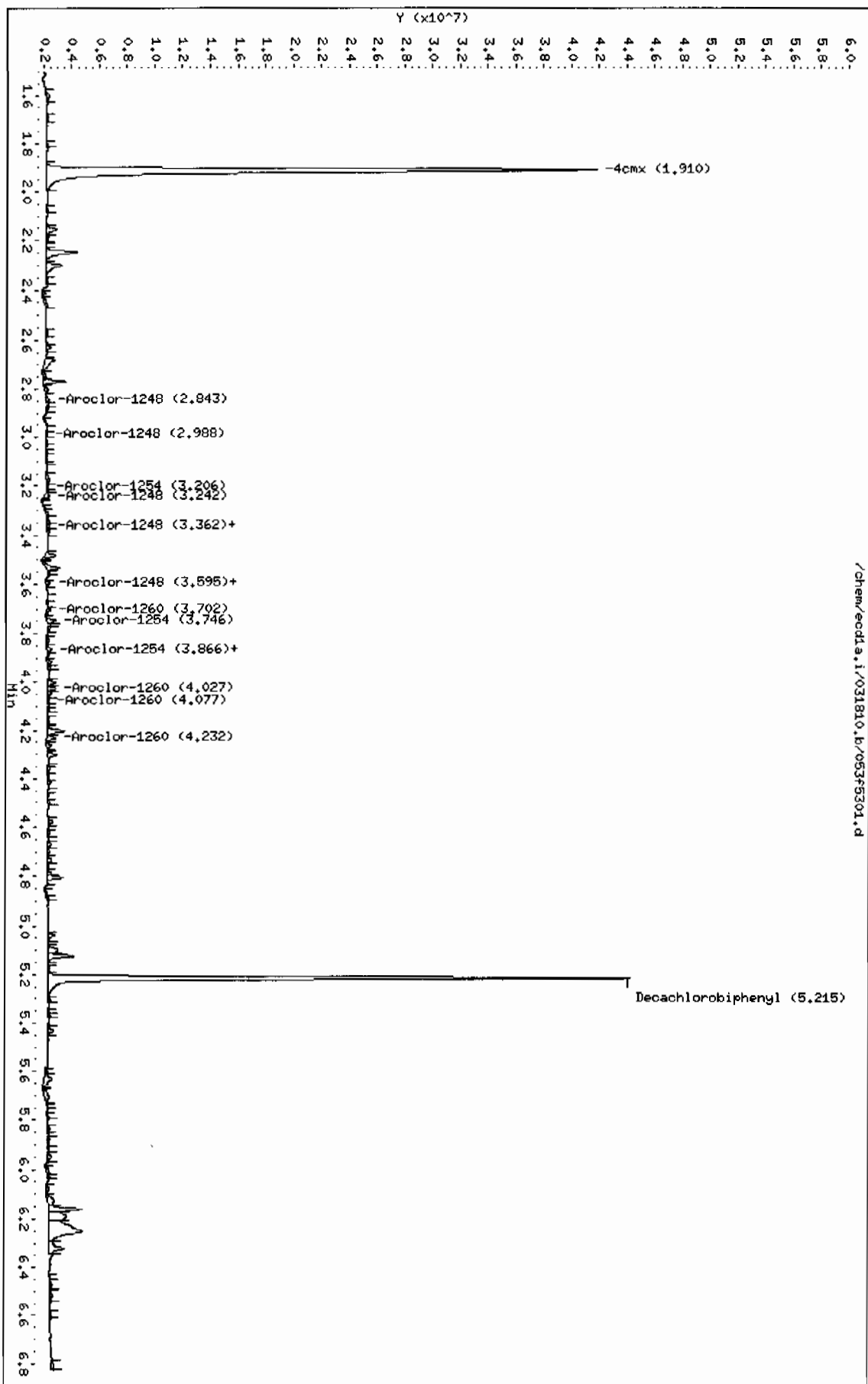
12.5215	5.215	0.000	34417901	115.912	4.4 80.00- 120.00	100.00

\$ 11 4cmx CAS #: 877-09-8

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3

Data File: /chem/ecdda.i/031810.b/053f5301.d
Date: 18-MAR-2010 15:51
Client ID: RE36-10-7416
Sample Info: 1248370006121
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/031810.b/053b5301.d

Lab Smp Id: 248370006

Client Smp ID: RE36-10-7416

Inj Date : 18-MAR-2010 15:51

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |248370006|1|

Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7416|

Comment :

Method : /chem/ecd1a.i/031810.b/ECD1-B-8082-031110b.m

Meth Date : 19-Mar-2010 06:22 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 53

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2150.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	11.30770	% Moisture

Cpnd Variable

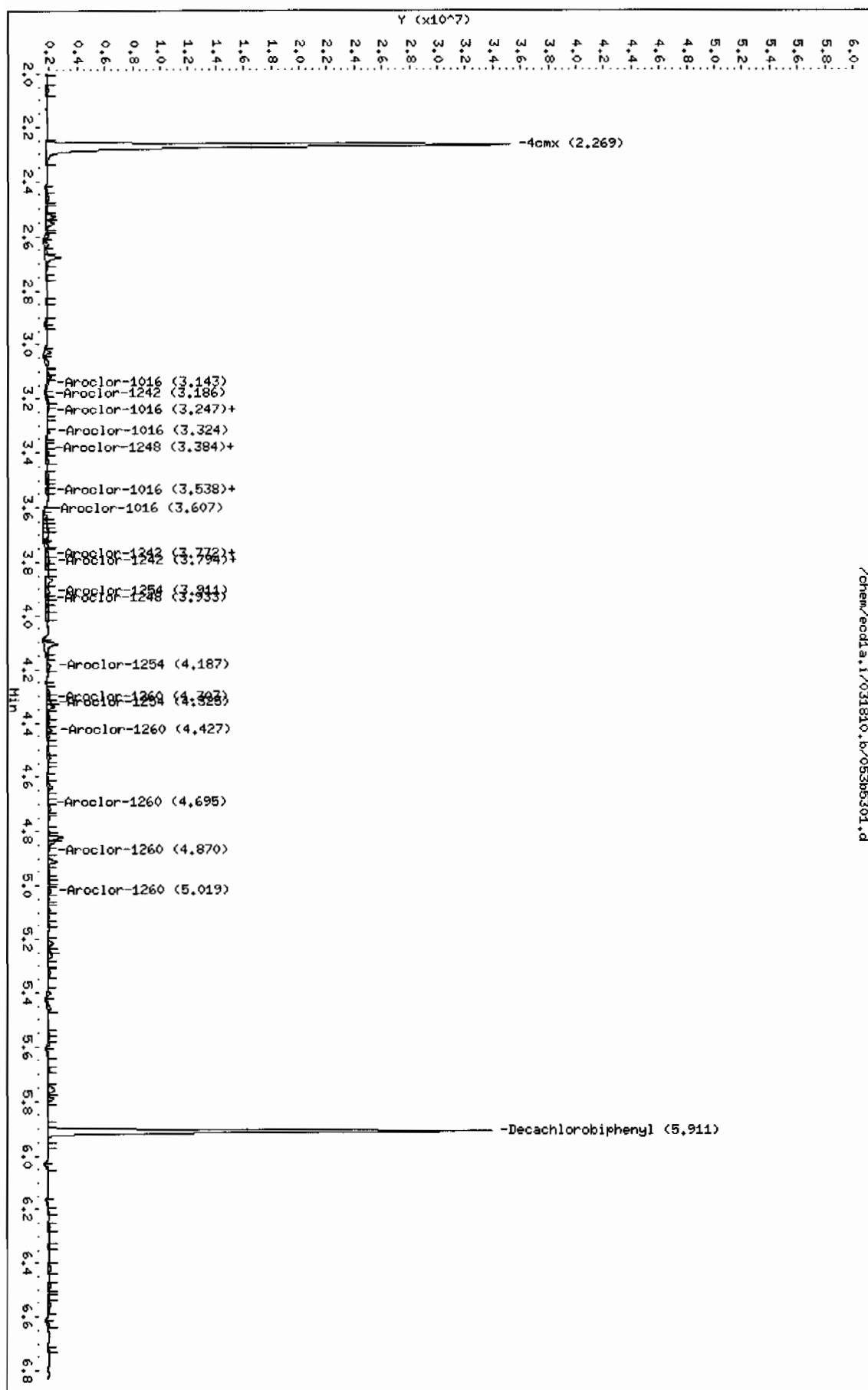
Local Compound Variable

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	-----	-----	=====	-----	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
2.269	2.269	0.000	31382272	119.628	4.5	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.911	5.912	-0.001	23416548	125.106	4.7	80.00- 120.00	100.00

Data File: /chem/ecdt.a.i/031810.b/053b5301.d
 Date: 18-MAR-2010 15:51
 Client ID: RE36-10-7416
 Sample Info: 1248370006111
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: ecdt.a.i
 Operator: YSI
 Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370004

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: 30.09 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 21
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.21	ug/kg	1.40	4.21	1
11104-28-2	Aroclor-1221	U	4.21	ug/kg	1.40	4.21	1
11141-16-5	Aroclor-1232	U	4.21	ug/kg	1.40	4.21	1
53469-21-9	Aroclor-1242	U	4.21	ug/kg	1.40	4.21	1
12672-29-6	Aroclor-1248	U	4.21	ug/kg	1.40	4.21	1
11097-69-1	Aroclor-1254		4.30	ug/kg	1.40	4.21	1
11096-82-5	Aroclor-1260	U	4.21	ug/kg	1.40	4.21	1

Data File: /chem/ecdl1a.i/031810.b/051f5101.d
Report Date: 19-Mar-2010 07:54

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/051f5101.d
Lab Smp Id: 248370004 Client Smp ID: RE36-10-7417
Inj Date : 18-MAR-2010 15:26
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248370004|1|
Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7417|||
Comment :
Method : /chem/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 19-Mar-2010 06:23 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 51
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.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	30.09000	Weight of sample extracted (g)
M	20.98950	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE (ug/L)	(ug/Kg)	=====	=====
CAS #: 877-09-8						
1.910	1.910	0.000	34082067 87.4969	3.7	80.00- 120.00	100.00
CAS #: 2051-24-3						
5.214	5.215	-0.001	27287543 91.8988	3.9	80.00- 120.00	100.00
CAS #: 11097-69-1						
3.205	3.207	-0.002	1082150 81.5981	3.4	80.00- 120.00	100.00(M)
3.360	3.362	-0.002	1543422 86.5472	3.6	112.77- 152.77	142.63
3.594	3.596	-0.002	1727222 77.2070	3.2	151.79- 191.79	159.61
3.757	3.758	-0.001	1930027 117.042	4.9	105.45- 145.45	178.35

Data File: /chem/ecdl1a.i/031810.b/051f5101.d
Report Date: 19-Mar-2010 07:54

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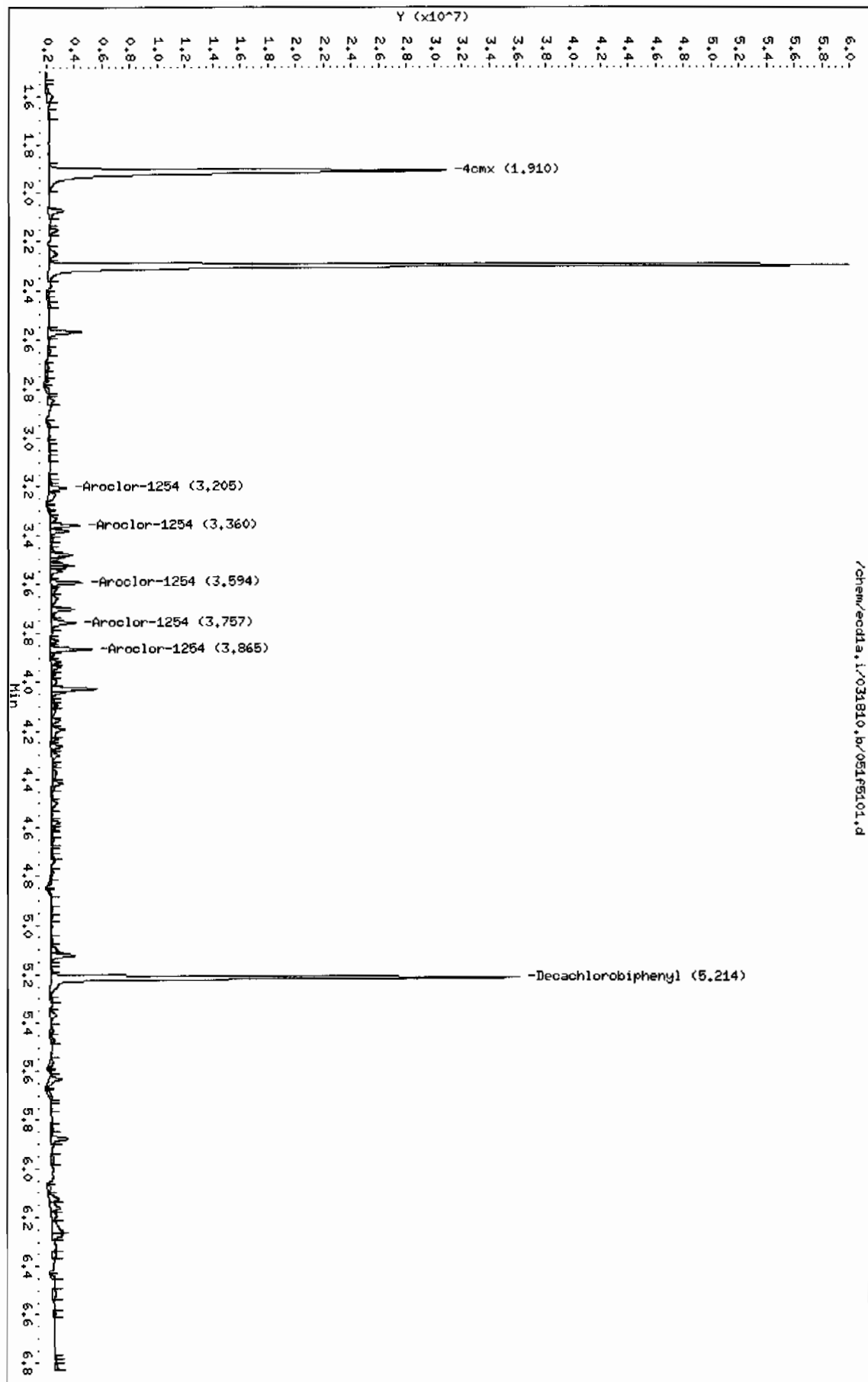
CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254 (continued)							
3.865	3.867	-0.002	2463797	154.331	6.5 106.56- 146.56	244.82	
Average of Peak Concentrations =				4.3			

QC Flag Legend

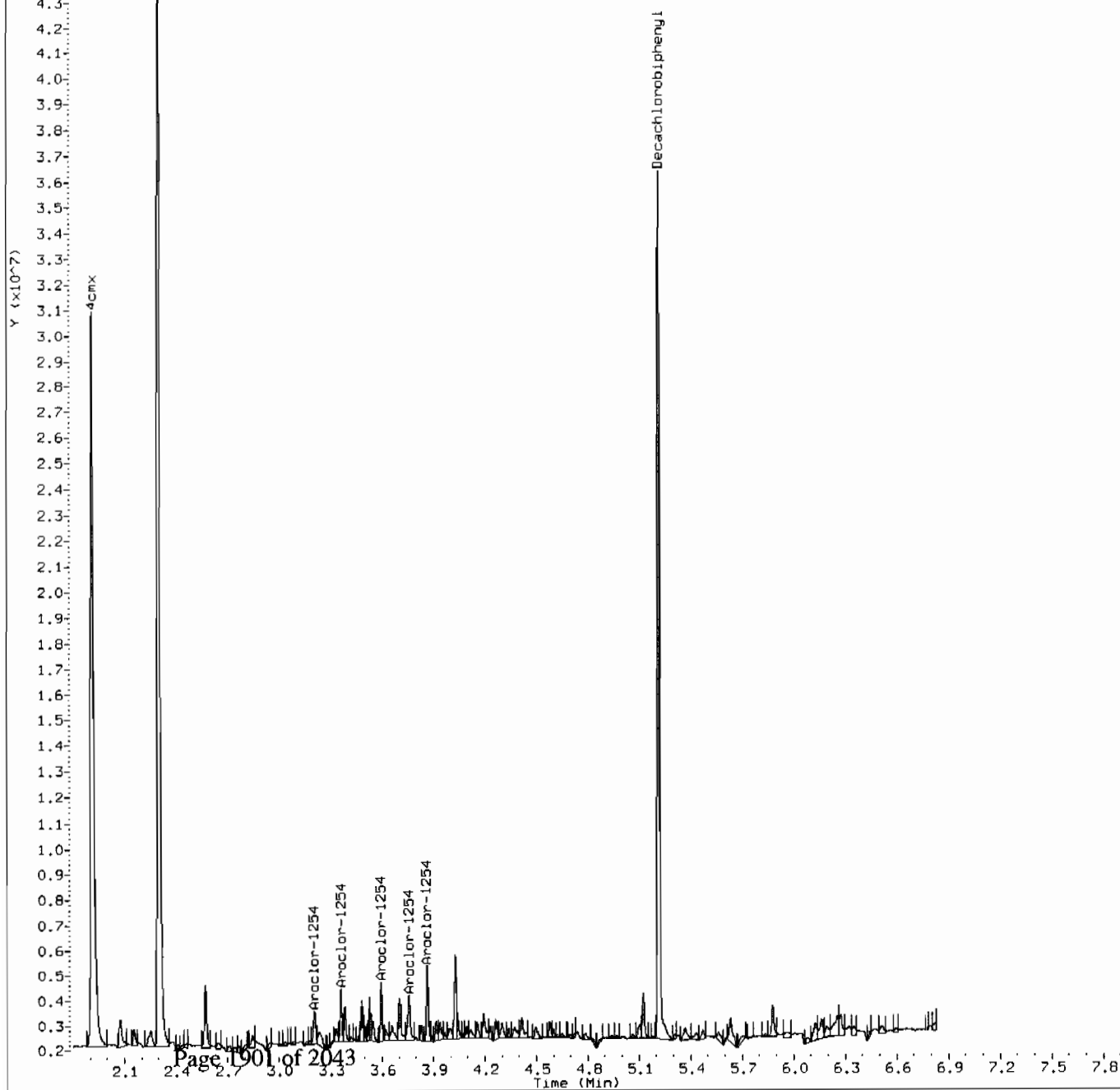
M - Compound response manually integrated.

Data File: /chem/ecodla.i/031810.b/051f5101.d
Date: 18-MAR-2010 15:26
Client ID: RES6-10-7417
Sample Info: 124837000411
Volume Injected (uL): 1.0
Column phase: CLP1

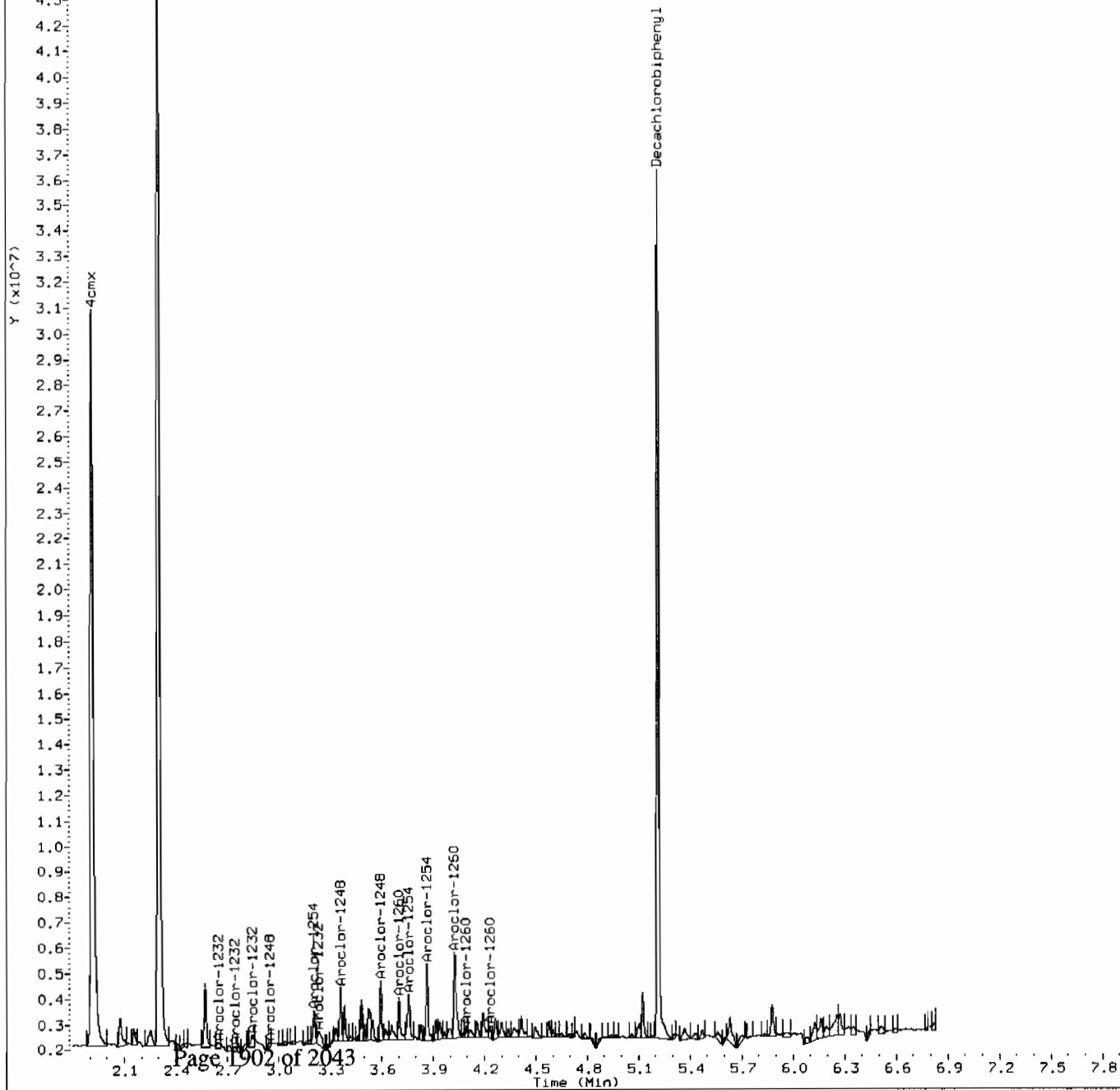
Instrument: ecodla.i
Operator: YSI
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/031810.b/051f5101.d
Operator: YS1
Injection Date: 18-MAR-2010 15:26
Instrument: ecd1a.i
Client Sample ID: RE36-10-7417



Comment: Before manual integration
Data File: /chem/ecdla.i/031810.b/orig-051f5101.d
Operator: YSl
Injection Date: 18-MAR-2010 15:26
Instrument: ecdla.i
Client Sample ID: RE36-10-7417



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/051b5101.d
Lab Smp Id: 248370004 Client Smp ID: RE36-10-7417
Inj Date : 18-MAR-2010 15:26
Operator : YS1 Inst ID: ecdla.i
Smp Info : |248370004|1|
Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7417|||
Comment :
Method : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m
Meth Date : 19-Mar-2010 06:22 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 5l
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	20.98950	% 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				
2.269	2.269	0.000	22778676	86.8313	3.6 80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3				
5.910	5.912	-0.002	17926071	95.7725	4.0 80.00-	120.00	100.00	

6 Aroclor-1254				CAS #: 11097-69-1				
3.374	3.373	0.001	313746	52.1067	2.2 80.00-	120.00	100.00 (a)	
3.794	3.795	-0.001	869179	80.3323	3.4 161.66-	201.66	277.03	
3.911	3.912	-0.001	1261515	105.711	4.4 179.37-	219.37	402.08	
4.186	4.187	-0.001	1339351	81.4602	3.4 258.64-	298.64	426.89	

				CONCENTRATIONS			
				ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
---	-----	-----	-----	-----	-----	-----	-----
6 Aroclor-1254 (continued)							
4.323	4.324	-0.001	891534	73.5861	3.1	186.15- 226.15	284.16
Average of Peak Concentrations =					3.3		

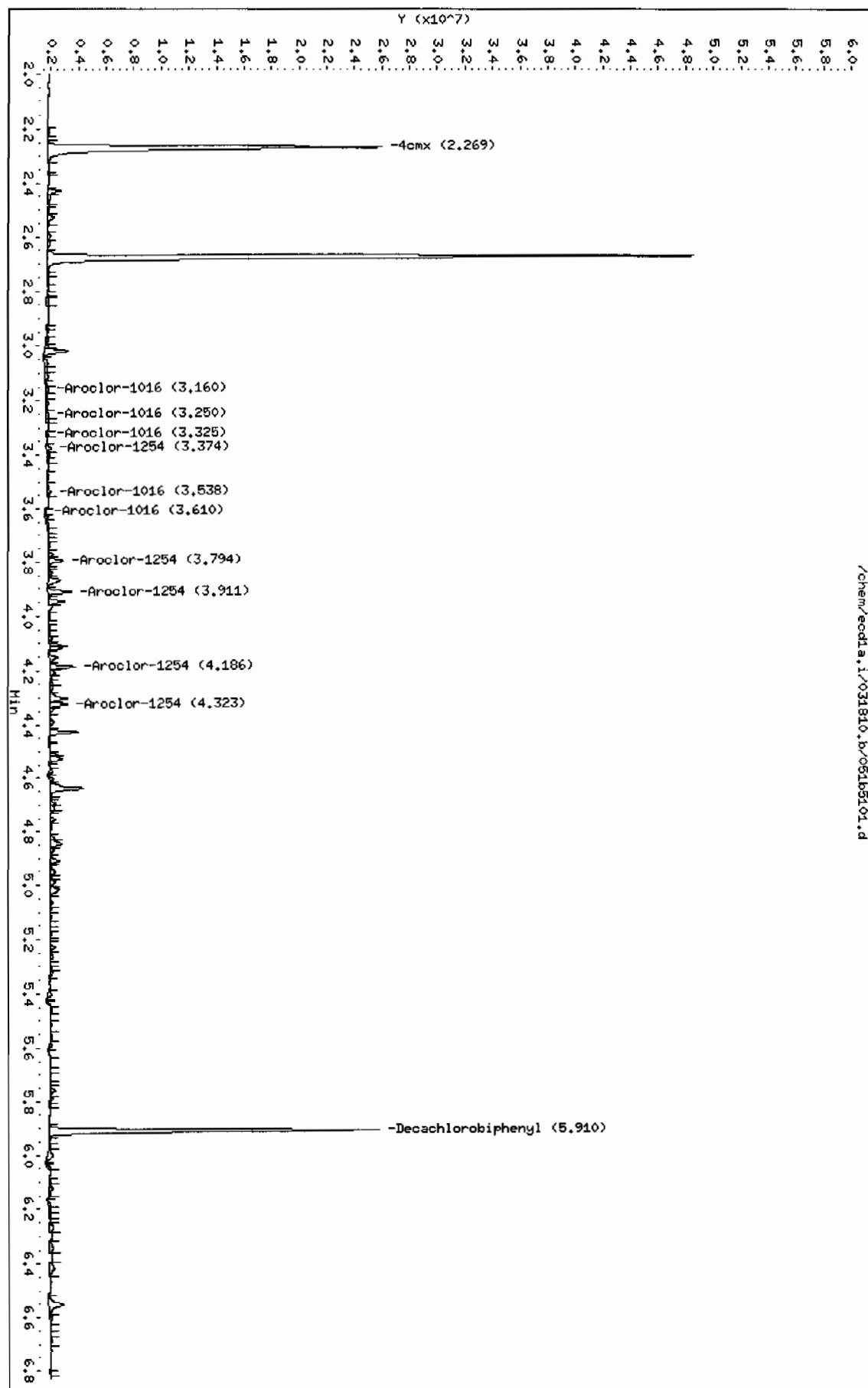
QC Flag Legend

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

Data File: /chem/ecdl.a.i/031810.b/051b5101.d
 Date : 18-MAR-2010 15:26
 Client ID: RE36-10-7417
 Sample Info: 124837000411
 Volume Injected (ul): 1.0
 Column phase: CLP2

Instrument: ecdl.a.i
 Operator: YSA
 Column diameter: 0.25

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PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
Lab Sample ID: 248370003

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: 30.03 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 18.7
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.10	ug/kg	1.36	4.10	1
11104-28-2	Aroclor-1221	U	4.10	ug/kg	1.36	4.10	1
11141-16-5	Aroclor-1232	U	4.10	ug/kg	1.36	4.10	1
53469-21-9	Aroclor-1242	U	4.10	ug/kg	1.36	4.10	1
12672-29-6	Aroclor-1248	U	4.10	ug/kg	1.36	4.10	1
11097-69-1	Aroclor-1254	U	4.10	ug/kg	1.36	4.10	1
11096-82-5	Aroclor-1260	U	4.10	ug/kg	1.36	4.10	1

Data File: /chem/ecdl1a.i/031810.b/050f5001.d
Report Date: 19-Mar-2010 07:53

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/050f5001.d
Lab Smp Id: 248370003 Client Smp ID: RE36-10-7418
Inj Date : 18-MAR-2010 15:13
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248370003|1|
Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7418|||
Comment :
Method : /chem/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 19-Mar-2010 06:23 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.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	30.03000	Weight of sample extracted (g)
M	18.70600	% 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	
1.912	1.910	0.002	40571397 104.157	4.3	80.00- 120.00	100.00	

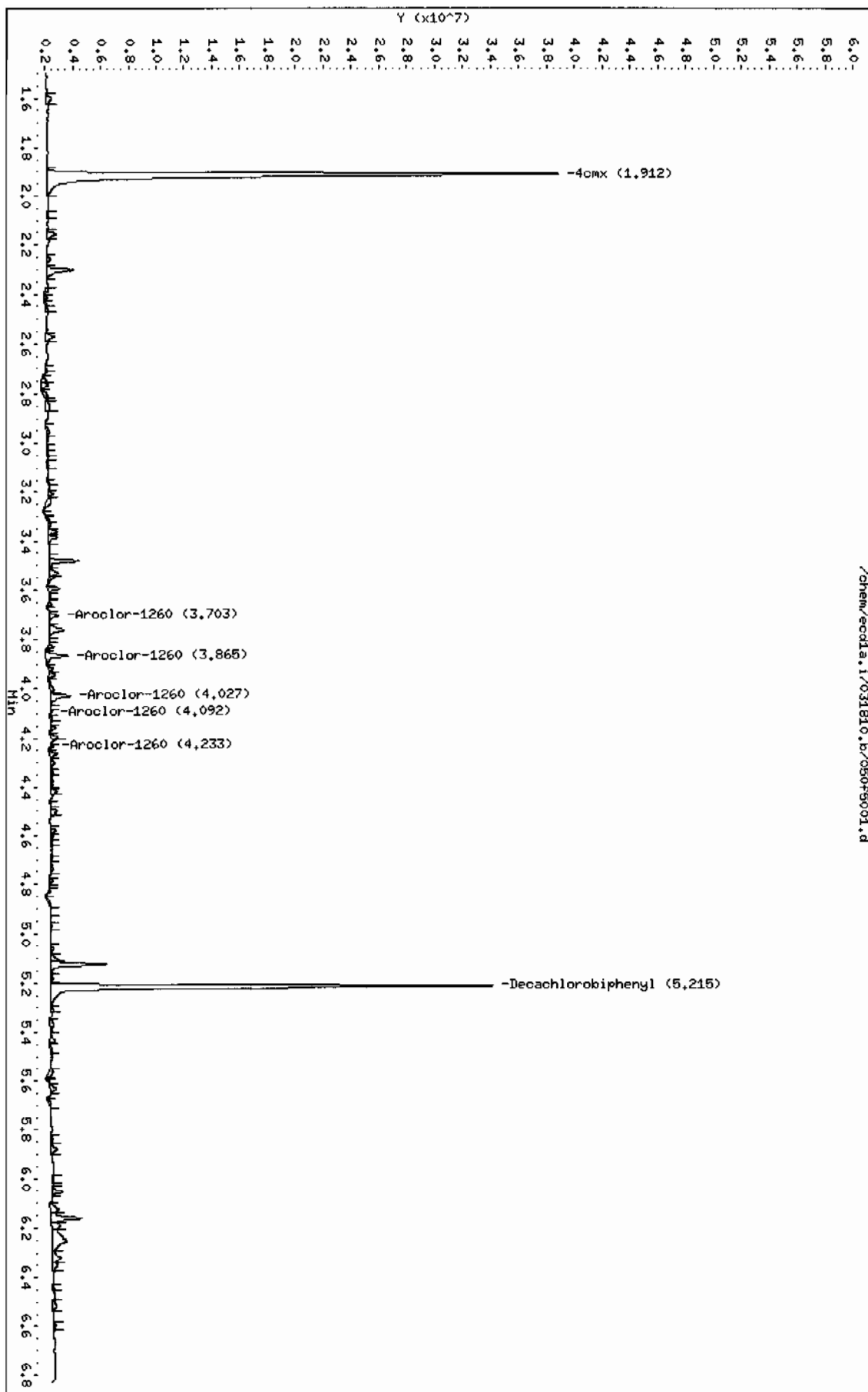
\$ 12 Decachlorobiphenyl						CAS #: 2051-24-3	
5.215	5.215	0.000	26555628 89.4339	3.7	80.00- 120.00	100.00	

Data File: /chem/ecdl1a.i/031810.b/050f5001.d
Date: 18-MAR-2010 15:13
Client ID: RE36-10-7418
Sample Info: 124837000311
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdl1a.i
Operator: YSL
Column diameter: 0.25

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/chem/ecdl1a.i/031810.b/050f5001.d



Data File: /chem/ecdla.i/031810.b/050b5001.d
Report Date: 19-Mar-2010 07:53

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/031810.b/050b5001.d
Lab Smp Id: 248370003 Client Smp ID: RE36-10-7418
Inj Date : 18-MAR-2010 15:13
Operator : YS1 Inst ID: ecdla.i
Smp Info : |248370003|1|
Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7418|||
Comment :
Method : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m
Meth Date : 19-Mar-2010 06:22 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	18.70600	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	

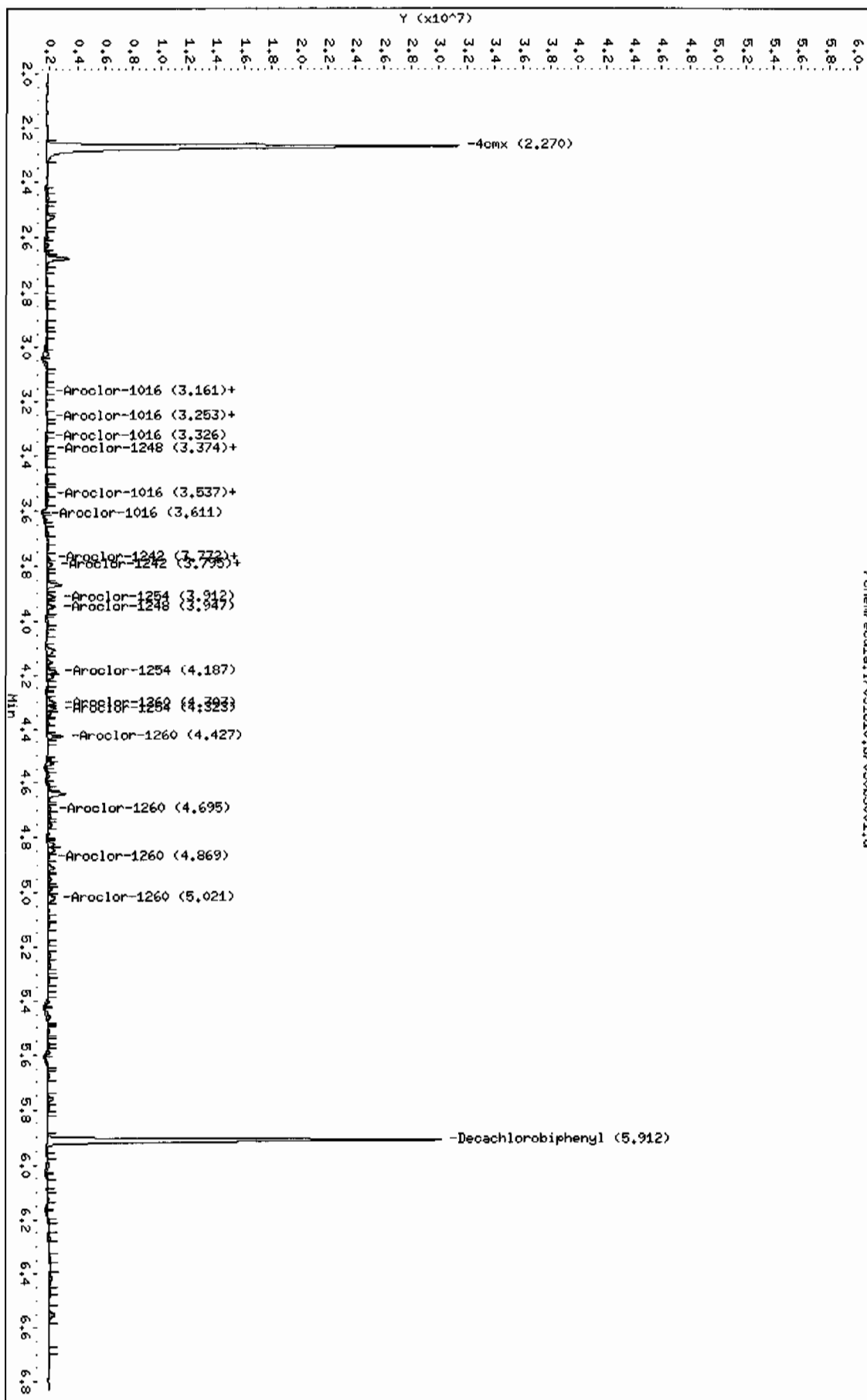
\$ 11 4cmx					CAS #: 877-09-8		
2.270	2.269	0.001	27372340 104.342	4.3	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.912	5.912	0.000	20785155 111.048	4.5	80.00- 120.00	100.00	

Data File: /chem/ecdl.a.i/031810.b/05065001.d
Date: 18-MAR-2010 15:13
Client ID: RE36-10-7418
Sample Info: 1248370003111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdl.a.i
Operator: YSL
Column diameter: 0.25

/chem/ecdl.a.i/031810.b/05065001.d



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150
 Lab Sample ID: 248370005

Date Collected: 02/24/2010 12:00
 Date Received: 03/02/2010 08:50
 Client: LANL010
 Method: SW846 8082
 Inst: ECD1A.1
 Analyst: YS1
 Aliquot: 30.05 g
 Column: 1 CLP1
 2 CLP2

Matrix: R
 %Moisture: 16.9
 Project: LANL01004
 SOP Ref: GL-OA-E-040
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 1 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.01	ug/kg	1.33	4.01	1
11104-28-2	Aroclor-1221	U	4.01	ug/kg	1.33	4.01	1
11141-16-5	Aroclor-1232	U	4.01	ug/kg	1.33	4.01	1
53469-21-9	Aroclor-1242	U	4.01	ug/kg	1.33	4.01	1
12672-29-6	Aroclor-1248	U	4.01	ug/kg	1.33	4.01	1
11097-69-1	Aroclor-1254	P	4.80	ug/kg	1.33	4.01	1
11096-82-5	Aroclor-1260	U	4.01	ug/kg	1.33	4.01	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/031810.b/052f5201.d
Lab Smp Id: 248370005 Client Smp ID: RE36-10-7419
Inj Date : 18-MAR-2010 15:39
Operator : YSl Inst ID: ecd1a.i
Smp Info : |248370005|1|
Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7419|||
Comment :
Method : /chem/ecd1a.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 19-Mar-2010 06:23 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 52
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	16.94620	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
			RESPONSE (ug/L)	(ug/Kg)		
\$ 11 4cmx					CAS #: 877-09-8	
1.912	1.910	0.002	40356524 103.605	4.2	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.214	5.215	-0.001	30902492 104.073	4.2	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1	
3.206	3.207	-0.001	726410 54.7740	2.2	80.00- 120.00	100.00 (M)
3.361	3.362	-0.001	1151153 64.5507	2.6	112.77- 152.77	158.47
3.594	3.596	-0.002	1946315 87.0005	3.5	151.79- 191.79	267.94
3.755	3.758	-0.003	2846385 172.612	6.9	105.45- 145.45	391.84

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)							
3.865	3.867	-0.002	3571377	223.709	9.0	106.56- 146.56	491.65
Average of Peak Concentrations =					4.8		

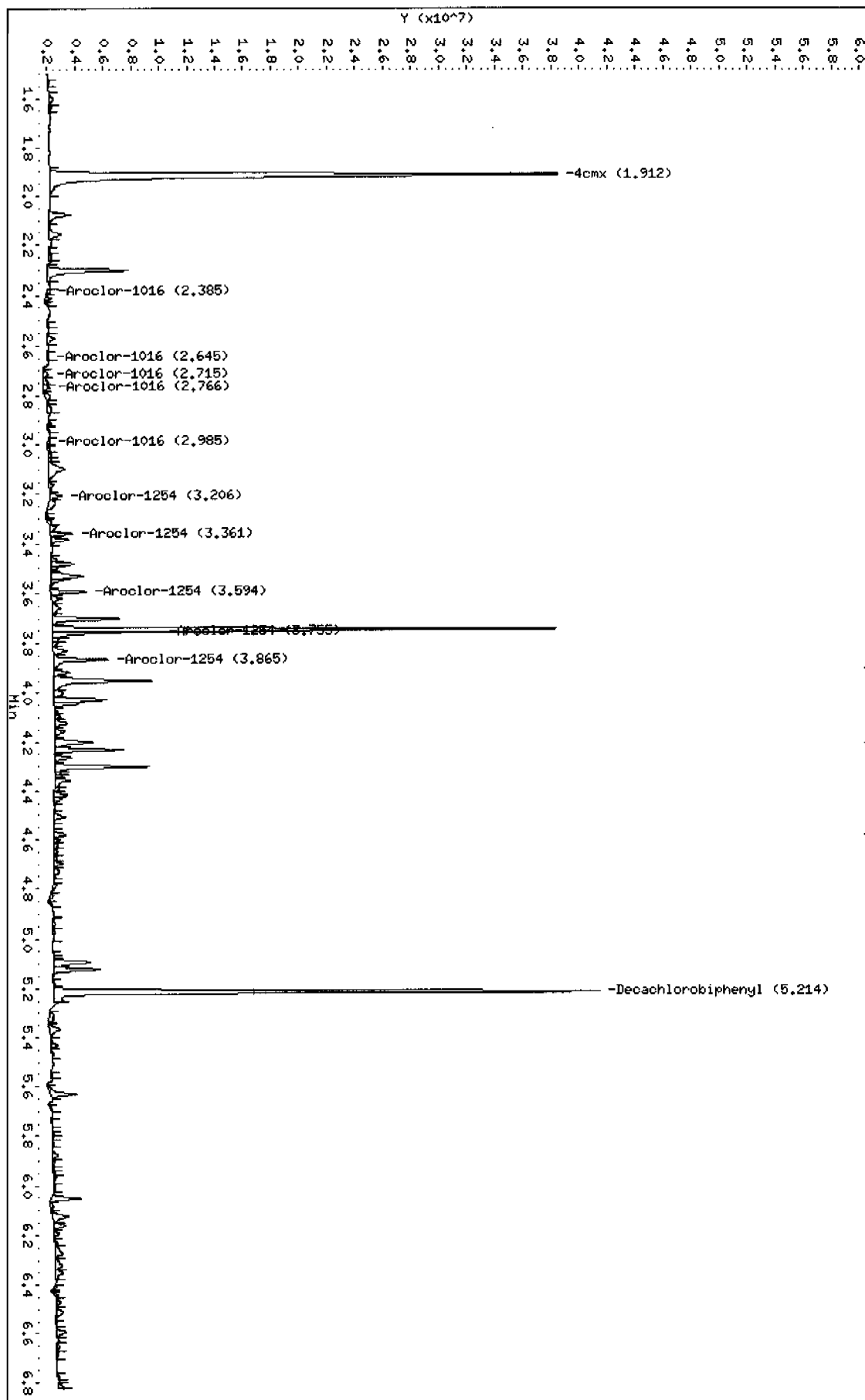
QC Flag Legend

M - Compound response manually integrated.

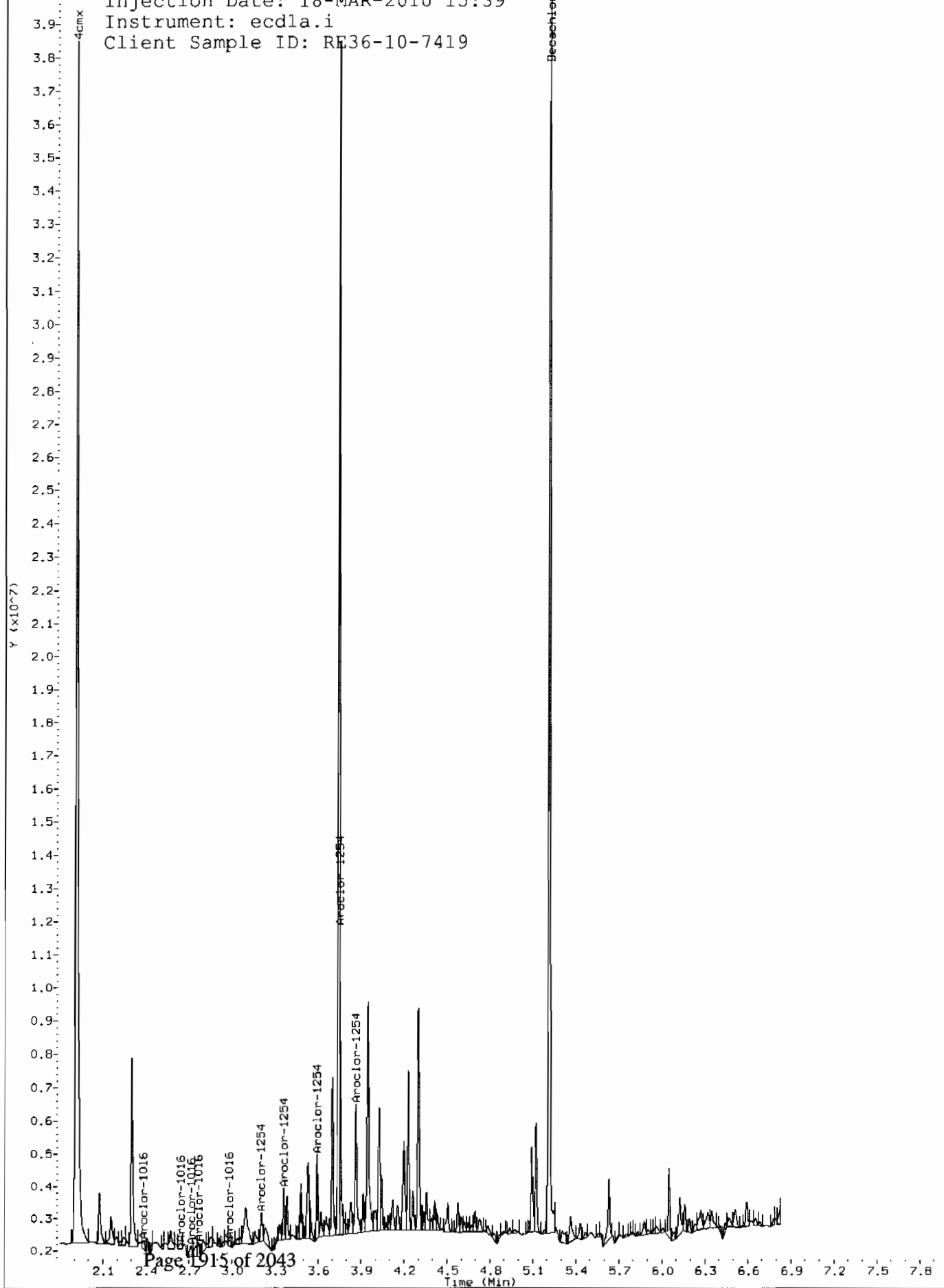
Data File: /chem/eod1a.i/031810.b/052f5201.d
Date: 18-MAR-2010 15:39
Client ID: RE36-10-7419
Sample Info: 124837000511
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eod1a.i
Operator: YSI
Column diameter: 0.25

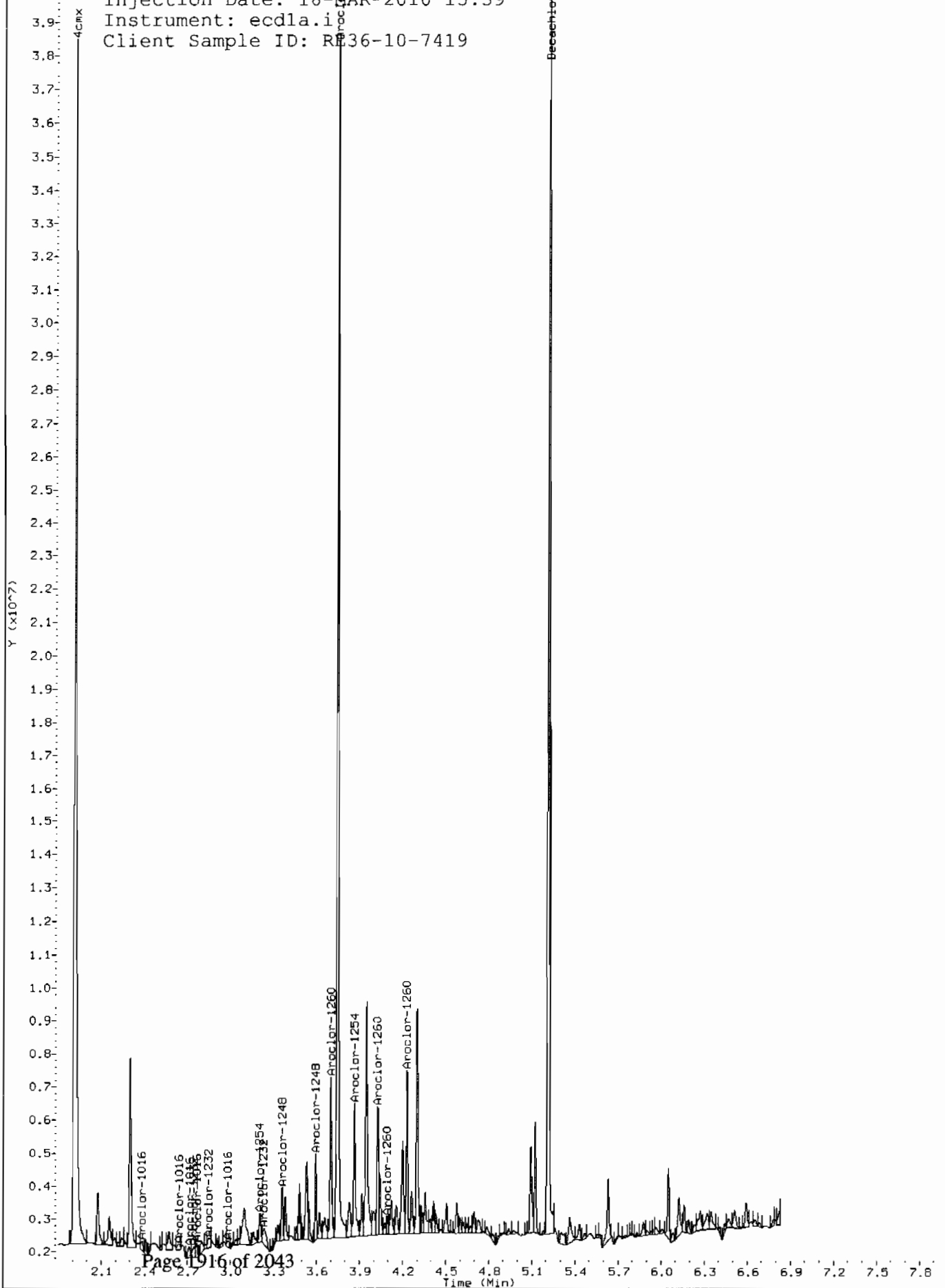
/chem/eod1a.i/031810.b/052f5201.d



4.1—
4.0—
3.9—



Beachfront Property



RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Client Smp ID: RE36-10-7419

Inst ID: ecd1a.i

Method : /chem/ecd1a.i/031810.b/ECD1-B-8082-031110b.m

Cal File: 036b3601.d

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2150.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	16.94620	% 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				
2.270	2.269	0.001	26861749	102.396	4.1	80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3				
5.910	5.912	-0.002	19480855	104.079	4.2	80.00-	120.00	100.00	

6 Aroclor-1254					CAS #: 11097-69-1				
3.372	3.373	-0.001	159084	26.4206	1.0	80.00-	120.00	100.00 (a)	
3.795	3.795	0.000	705926	65.2440	2.6	161.66-	201.66	443.74	
3.911	3.912	-0.001	1042860	87.3884	3.5	179.37-	219.37	655.54	
4.186	4.187	-0.001	1760772	107.091	4.3	258.64-	298.64	1106.82	

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE RATIO
==	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)						
4.322	4.324	-0.002	924978	76.3466	3.0	186.15- 226.15 581.44
Average of Peak Concentrations =					2.9	

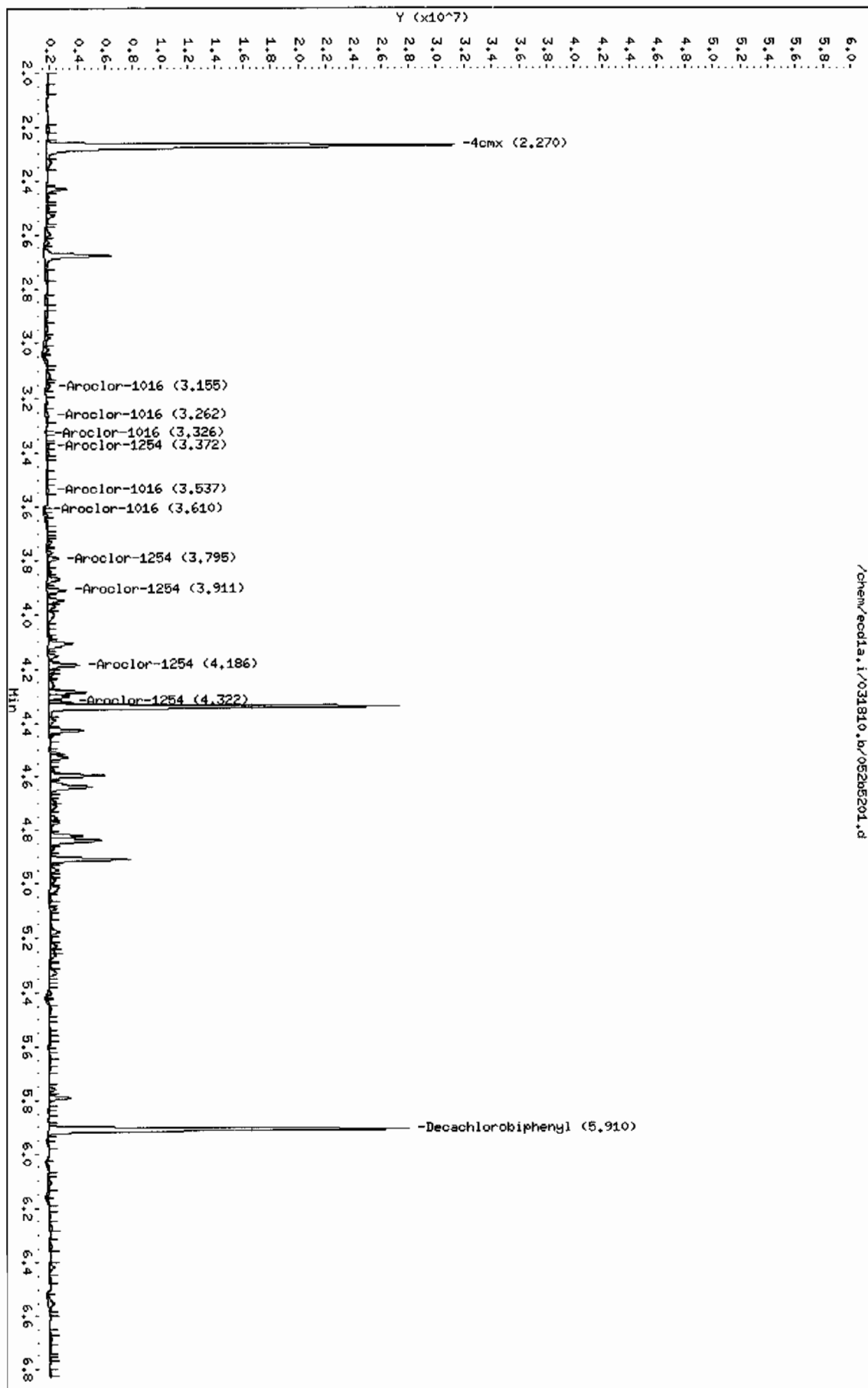
QC Flag Legend

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

Data File: /chem/eod1a.i/031810.b/052b5201.d
Date: 18-MAR-2010 15:39
Client ID: RE36-10-7419
Sample Info: 124637000511
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: eod1a.i
Operator: YSL
Column diameter: 0.25

/chem/eod1a.i/031810.b/052b5201.d



PCB

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Certificate of Analysis

Sample Summary

SDG Number: 10-2150

Lab Sample ID: 248370002

Client ID: RE36-10-7420

Batch ID: 965975

Run Date: 03/18/2010 15:01

Prep Date: 03/17/2010 11:22

Data File: 049f4901.d

049b4901.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: 8.7

Project: LANL01004

SOP Ref: GI-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.65	ug/kg	1.22	3.65	1
11104-28-2	Aroclor-1221	U	3.65	ug/kg	1.22	3.65	1
11141-16-5	Aroclor-1232	U	3.65	ug/kg	1.22	3.65	1
53469-21-9	Aroclor-1242	U	3.65	ug/kg	1.22	3.65	1
12672-29-6	Aroclor-1248	U	3.65	ug/kg	1.22	3.65	1
11097-69-1	Aroclor-1254	U	3.65	ug/kg	1.22	3.65	1
11096-82-5	Aroclor-1260	U	3.65	ug/kg	1.22	3.65	1

Data File: /chem/ecdl1a.i/031810.b/049f4901.d
Report Date: 19-Mar-2010 06:25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/049f4901.d
Lab Smp Id: 248370002 Client Smp ID: RE36-10-7420
Inj Date : 18-MAR-2010 15:01
Operator : YSl Inst ID: ecd1a.i
Smp Info : |248370002|1|
Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7420|||
Comment :
Method : /chem/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 19-Mar-2010 06:23 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 49
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	8.73510	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8							
1.912	1.910	0.002	43414112 111.455	4.1	80.00-	120.00	100.00
CAS #: 2051-24-3							
5.216	5.215	0.001	37164030 125.161	4.6	80.00-	120.00	100.00

Data File: /chem/eodla.i/031810.b/049f4901.d

Date: 18-MAR-2010 15:01

Client ID: RE36-10-7420

Sample Info: 1248370002111

Volume Injected (uL): 1.0

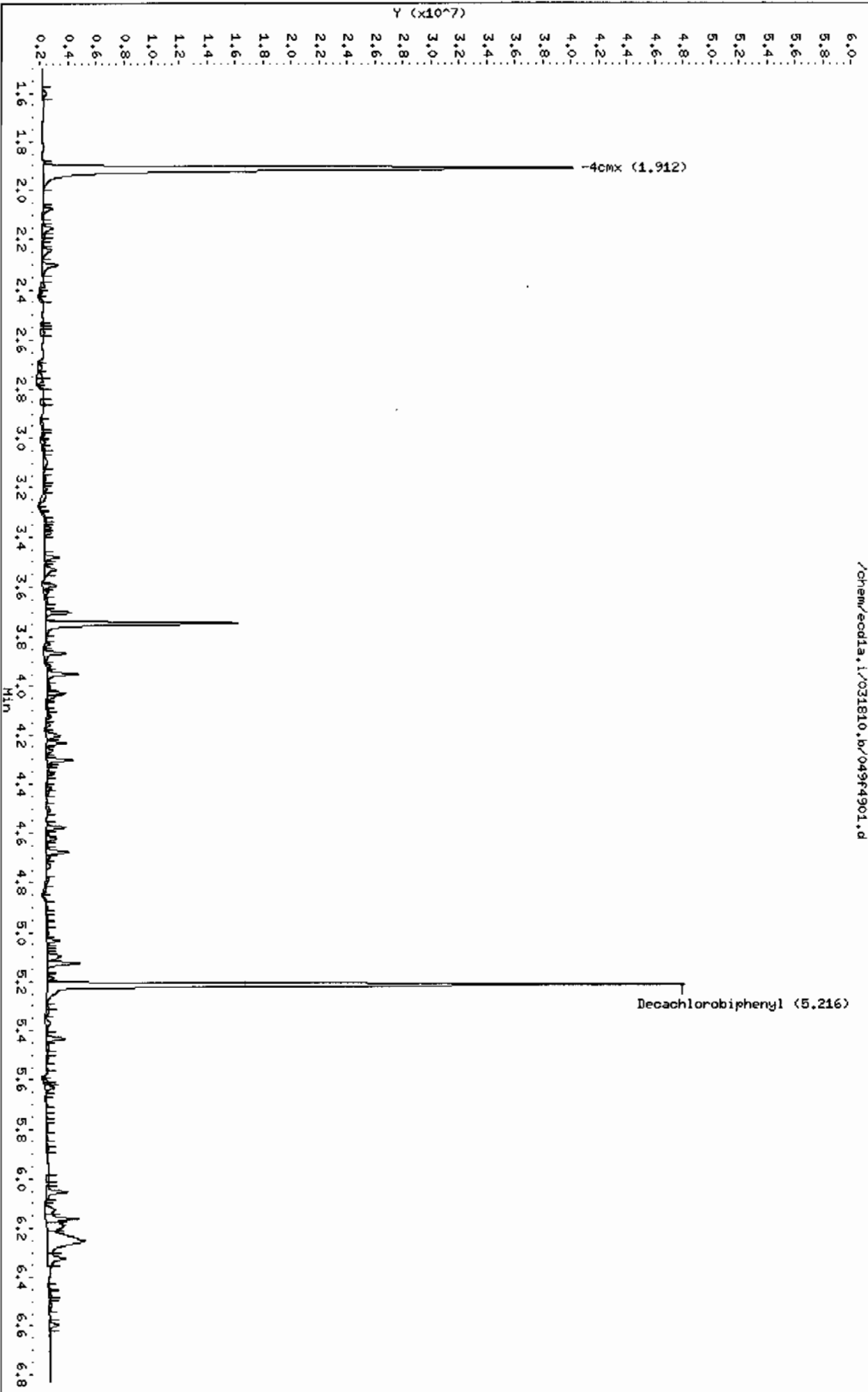
Column phase: CLP1

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Instrument: eodla.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdla.i/031810.b/049b4901.d
Report Date: 19-Mar-2010 06:25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/049b4901.d

Lab Smp Id: 248370002

Client Smp ID: RE36-10-7420

Inj Date : 18-MAR-2010 15:01

Operator : YS1

Inst ID: ecdla.i

Smp Info : |248370002|1|

Misc Info : |ECD82P_1S|965975|SVA|LANL|SOIL|RE36-10-7420|

Comment :

Method : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m

Meth Date : 19-Mar-2010 06:22 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 49

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2150.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	30.01000	Weight of sample extracted (g)
M	8.73510	% 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							
2.270	2.269	0.001	29218718	111.380	4.1 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl							
CAS #: 2051-24-3							
5.912	5.912	0.000	22930544	122.510	4.5 80.00- 120.00	100.00	

Data File: /chem/eod1a.i/031810.b/049b4901.d

Date : 18-MAR-2010 15:01

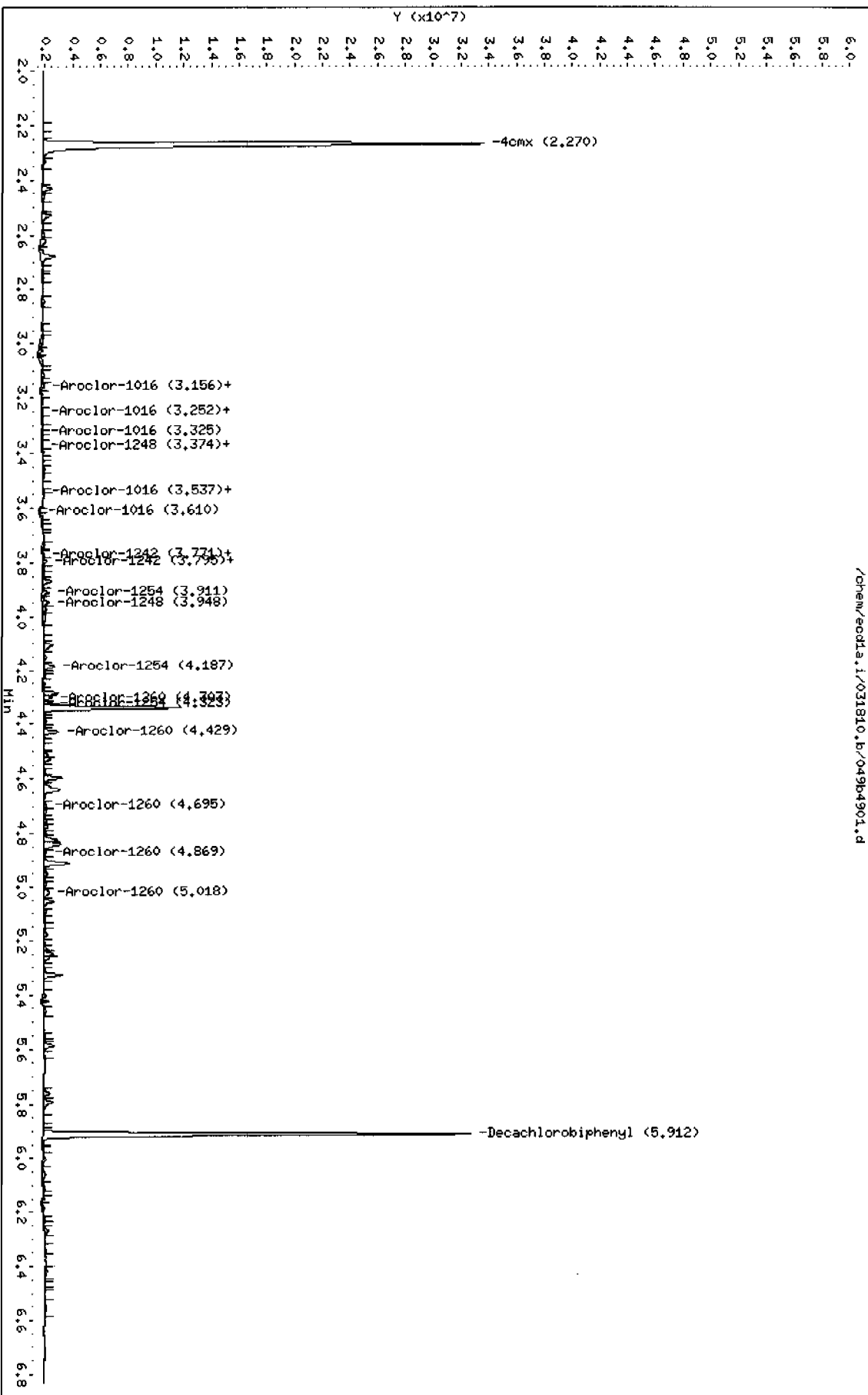
Client ID: RE36-10-7420

Sample Info: 1248370002111

Volume Injected (uL): 1.0

Column phase: CLP2

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STANDARDS DATA

Report Date: 19-Mar-2010 09:18

Calibration History

Method : /chem/ecdl1a.i/031810.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/ecdl1a.i/022210.b/032f3201.d
11-MAR-2010 19:40	AR1248	/chem/ecdl1a.i/031110b.b/029f2901.d
11-MAR-2010 18:37	AR1242	/chem/ecdl1a.i/031110b.b/023f2301.d
11-MAR-2010 17:34	AR1254	/chem/ecdl1a.i/031110b.b/017f1701.d
11-MAR-2010 16:31	AR1660	/chem/ecdl1a.i/031110b.b/011f1101.d
Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecdl1a.i/022210.b/033f3301.d
11-MAR-2010 19:51	AR1248	/chem/ecdl1a.i/031110b.b/030f3001.d
11-MAR-2010 18:48	AR1242	/chem/ecdl1a.i/031110b.b/024f2401.d
11-MAR-2010 17:45	AR1254	/chem/ecdl1a.i/031110b.b/018f1801.d
11-MAR-2010 16:41	AR1660	/chem/ecdl1a.i/031110b.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecdl1a.i/022210.b/034f3401.d
11-MAR-2010 20:01	AR1248	/chem/ecdl1a.i/031110b.b/031f3101.d
11-MAR-2010 18:58	AR1242	/chem/ecdl1a.i/031110b.b/025f2501.d
11-MAR-2010 17:55	AR1254	/chem/ecdl1a.i/031110b.b/019f1901.d
11-MAR-2010 16:52	AR1660	/chem/ecdl1a.i/031110b.b/013f1301.d
Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecdl1a.i/022210.b/035f3501.d
11-MAR-2010 20:12	AR1248	/chem/ecdl1a.i/031110b.b/032f3201.d
11-MAR-2010 19:09	AR1242	/chem/ecdl1a.i/031110b.b/026f2601.d
11-MAR-2010 18:06	AR1254	/chem/ecdl1a.i/031110b.b/020f2001.d
11-MAR-2010 17:02	AR1660	/chem/ecdl1a.i/031110b.b/014f1401.d
11-MAR-2010 16:10	AR1262	/chem/ecdl1a.i/031110b.b/009f0901.d
11-MAR-2010 15:59	AR1221	/chem/ecdl1a.i/031110b.b/008f0801.d
11-MAR-2010 15:49	AR1232	/chem/ecdl1a.i/031110b.b/007f0701.d
11-MAR-2010 16:21	DDTANALOGSTD	/chem/ecdl1a.i/031110b.b/010f1001.d
Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecdl1a.i/022210.b/036f3601.d
11-MAR-2010 20:22	AR1248	/chem/ecdl1a.i/031110b.b/033f3301.d
11-MAR-2010 19:19	AR1242	/chem/ecdl1a.i/031110b.b/027f2701.d
11-MAR-2010 18:16	AR1254	/chem/ecdl1a.i/031110b.b/021f2101.d
11-MAR-2010 17:13	AR1660	/chem/ecdl1a.i/031110b.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 17:57 |AR1660	|/chem/ecdl1a.i/031810.b/063f6301.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 16:29 |AR1660	|/chem/ecdl1a.i/031810.b/056f5601.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 14:27 |AR1660	|/chem/ecdl1a.i/031810.b/046f4601.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 12:06 |AR1660	|/chem/ecdl1a.i/031810.b/034f3401.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 10:06 |AR1660	|/chem/ecdl1a.i/031810.b/023f2301.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 09:56 |AR1660	|/chem/ecdl1a.i/031810.b/022f2201.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 07:26 |AR1262	|/chem/ecdl1a.i/031810.b/009f0901.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 07:16 |AR1221	|/chem/ecdl1a.i/031810.b/008f0801.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 07:05 |AR1232	|/chem/ecdl1a.i/031810.b/007f0701.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 06:55 |AR1268	|/chem/ecdl1a.i/031810.b/006f0601.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 06:44 |AR1248	|/chem/ecdl1a.i/031810.b/005f0501.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 06:35 |AR1242	|/chem/ecdl1a.i/031810.b/004f0401.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 06:25 |AR1254	|/chem/ecdl1a.i/031810.b/003f0301.d	|
+-----+-----+-----+-----+-----+		
| Ccal Level: 4 , Ccal Amount: 1000		|
+=====+		
|18-MAR-2010 06:14 |AR1660	|/chem/ecdl1a.i/031810.b/002f0201.d	|
+-----+-----+-----+-----+-----+		

Report Date: 19-Mar-2010 09:18

Calibration History

Method : /chem/ecd1a.i/031810.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	
18-MAR-2010 17:57 |AR1660	|/chem/ecdla.i/031810.b/063b6301.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 16:29 |AR1660	|/chem/ecdla.i/031810.b/056b5601.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 14:27 |AR1660	|/chem/ecdla.i/031810.b/046b4601.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 12:06 |AR1660	|/chem/ecdla.i/031810.b/034b3401.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 10:06 |AR1660	|/chem/ecdla.i/031810.b/023b2301.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 09:56 |AR1660	|/chem/ecdla.i/031810.b/022b2201.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 07:26 |AR1262	|/chem/ecdla.i/031810.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 07:16 |AR1221	|/chem/ecdla.i/031810.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 07:05 |AR1232	|/chem/ecdla.i/031810.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 06:55 |AR1268	|/chem/ecdla.i/031810.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 06:44 |AR1248	|/chem/ecdla.i/031810.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 06:35 |AR1242	|/chem/ecdla.i/031810.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 06:25 |AR1254	|/chem/ecdla.i/031810.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000	
18-MAR-2010 06:14 |AR1660	|/chem/ecdla.i/031810.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m
Quant Method : ESTD Target Version : 3.50
Last Update : 19-Mar-2010 06:23 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	2.364	2.334-2.394	1.518e+04
	2.649	2.619-2.679	1.894e+04
	2.730	2.700-2.760	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	2.025	1.995-2.055	4.466e+03
	2.117	2.087-2.147	2.447e+03
	2.143	2.113-2.173	1.083e+04
3 Aroclor-1232	2.364	2.334-2.394	6.667e+03
	2.652	2.622-2.682	8.344e+03
	2.732	2.702-2.762	5.531e+03
	2.846	2.816-2.876	2.649e+03
4 Aroclor-1242	3.233	3.203-3.263	3.555e+03
	2.364	2.334-2.394	1.233e+04
	2.651	2.621-2.681	1.490e+04
	2.769	2.739-2.799	5.896e+03
	2.979	2.949-3.009	7.735e+03
	3.233	3.203-3.263	7.285e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/031810.b/ECD1-F-8082-031110b.m

Compound	RT	RT Window	RF
5 Aroclor-1248	2.844	2.814-2.874	1.000e+04
	2.977	2.947-3.007	1.314e+04
	3.230	3.200-3.260	1.430e+04
	3.361	3.331-3.391	1.190e+04
	3.594	3.564-3.624	8.005e+03
6 Aroclor-1254	3.207	3.177-3.237	1.326e+04
	3.362	3.332-3.392	1.783e+04
	3.596	3.566-3.626	2.237e+04
	3.758	3.728-3.788	1.649e+04
	3.867	3.837-3.897	1.596e+04
7 Aroclor-1260	3.704	3.674-3.734	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
	4.239	4.209-4.269	1.681e+04
8 Aroclor-1262	3.706	3.676-3.736	1.423e+04
	3.868	3.838-3.898	1.874e+04
	4.098	4.068-4.128	2.315e+04
	4.240	4.210-4.270	2.110e+04
	4.420	4.390-4.450	4.350e+04
9 Aroclor-1268	4.604	4.574-4.634	4.848e+04
	4.627	4.597-4.657	5.448e+04
	4.739	4.709-4.769	3.862e+04
	4.942	4.912-4.972	1.635e+04
	5.107	5.077-5.137	1.121e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.910	1.880-1.940	3.895e+05
\$ 12 Decachlorobiphenyl	5.215	5.185-5.245	2.969e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 19-Mar-2010 08:33 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	3.164	3.134-3.194	1.258e+04
	3.247	3.217-3.277	8.634e+03
	3.310	3.280-3.340	5.287e+03
	3.537	3.507-3.567	6.893e+03
	3.613	3.583-3.643	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	2.467	2.437-2.497	3.250e+03
	2.561	2.531-2.591	2.084e+03
	2.601	2.571-2.631	7.320e+03
3 Aroclor-1232	2.868	2.838-2.898	5.054e+03
	3.165	3.135-3.195	5.712e+03
	3.248	3.218-3.278	3.888e+03
	3.539	3.509-3.569	2.840e+03
4 Aroclor-1242	3.773	3.743-3.803	2.821e+03
	3.165	3.135-3.195	1.014e+04
	3.248	3.218-3.278	7.097e+03
	3.539	3.509-3.569	5.514e+03
	3.772	3.742-3.802	5.722e+03
	3.800	3.770-3.830	6.370e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.373	3.343-3.403	7.604e+03
	3.537	3.507-3.567	9.470e+03
	3.770	3.740-3.800	1.093e+04
	3.798	3.768-3.828	1.216e+04
	3.935	3.905-3.965	1.181e+04
6 Aroclor-1254	3.373	3.343-3.403	6.021e+03
	3.795	3.765-3.825	1.082e+04
	3.912	3.882-3.942	1.193e+04
	4.187	4.157-4.217	1.644e+04
	4.324	4.294-4.354	1.212e+04
7 Aroclor-1260	4.304	4.274-4.334	1.308e+04
	4.428	4.398-4.458	1.555e+04
	4.694	4.664-4.724	1.190e+04
	4.867	4.837-4.897	1.229e+04
	5.014	4.984-5.044	2.639e+04
8 Aroclor-1262	4.430	4.400-4.460	1.160e+04
	4.695	4.665-4.725	1.620e+04
	4.869	4.839-4.899	1.484e+04
	5.015	4.985-5.045	2.937e+04
	5.229	5.199-5.259	2.065e+04
9 Aroclor-1268	5.227	5.197-5.257	3.730e+04
	5.254	5.224-5.284	3.492e+04
	5.404	5.374-5.434	2.658e+04
	5.569	5.539-5.599	1.223e+04
	5.761	5.731-5.791	7.433e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.269	2.239-2.299	2.623e+05
\$ 12 Decachlorobiphenyl	5.912	5.882-5.942	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/031810.b/ECD1-F-8082-031110b.m
Cal Date : 19-Mar-2010 06:23 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

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)	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/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m
 Cal Date : 19-Mar-2010 06:23 yip00818
 Curve Type : Average

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5		
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/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m
 Cal Date : 19-Mar-2010 08:33 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdl1a.i/022210.b/032b3201.d
 Level 2: /chem/ecdl1a.i/022210.b/033b3301.d
 Level 3: /chem/ecdl1a.i/022210.b/034b3401.d
 Level 4: /chem/ecdl1a.i/022210.b/035b3501.d
 Level 5: /chem/ecdl1a.i/022210.b/036b3601.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	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/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m
 Cal Date : 19-Mar-2010 08:33 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
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.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 0614
 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	13512.342	0.01	-11.0	15.0
(2)	18935.774	17115.806	0.01	-9.6	15.0
(3)	12442.153	10726.435	0.01	-13.8	15.0
(4)	7348.319	6413.032	0.01	-12.7	15.0
(5)	9517.775	8193.745	0.01	-13.9	15.0
Aroclor-1260	18330.091	17403.857	0.01	-5.0	15.0
(2)	26889.831	25246.031	0.01	-6.1	15.0
(3)	28315.304	27095.635	0.01	-4.3	15.0
(4)	16157.873	15357.501	0.01	-5.0	15.0
(5)	16812.669	15943.133	0.01	-5.2	15.0
4cmx	389523.02	381169.67	0.01	-2.1	15.0
Decachlorobiphenyl	296930.38	279013.41	0.01	-6.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 0614
 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	11336.193	0.01	-9.9	15.0
(2)	8634.207	7586.539	0.01	-12.1	15.0
(3)	5286.637	4629.167	0.01	-12.4	15.0
(4)	6892.719	6156.542	0.01	-10.7	15.0
(5)	6422.564	5743.732	0.01	-10.6	15.0
Aroclor-1260	13080.231	12460.543	0.01	-4.7	15.0
(2)	15549.023	15159.960	0.01	-2.5	15.0
(3)	11896.069	11434.090	0.01	-3.9	15.0
(4)	12289.216	11836.954	0.01	-3.7	15.0
(5)	26394.638	26031.601	0.01	-1.4	15.0
4cmx	262332.66	256539.22	0.01	-2.2	15.0
Decachlorobiphenyl	187173.38	179833.66	0.01	-3.9	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.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 0625
 Lab File ID: 003F0301 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1734 1816
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1254	13261.954	11932.817	0.01	-10.0	15.0
(2)	17833.306	15842.727	0.01	-11.2	15.0
(3)	22371.301	20499.788	0.01	-8.4	15.0
(4)	16490.050	14969.715	0.01	-9.2	15.0
(5)	15964.418	15102.637	0.01	-5.4	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.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 0625
 Lab File ID: 003B0301 Init. Calib. Date(s): 03/11/10 03/11/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1734 1816
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	6021.217	5489.904	0.01	-8.8	15.0
(2)	10819.790	9973.216	0.01	-7.8	15.0
(3)	11933.626	10945.026	0.01	-8.3	15.0
(4)	16441.788	15296.916	0.01	-7.0	15.0
(5)	12115.517	11317.381	0.01	-6.6	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.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 1206
 Lab File ID: 034F3401 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	13785.629	0.01	-9.2	15.0
(2)	18935.774	17556.565	0.01	-7.3	15.0
(3)	12442.153	11041.696	0.01	-11.2	15.0
(4)	7348.319	6614.881	0.01	-10.0	15.0
(5)	9517.775	8395.851	0.01	-11.8	15.0
Aroclor-1260	18330.091	17996.959	0.01	-1.8	15.0
(2)	26889.831	26327.910	0.01	-2.1	15.0
(3)	28315.304	28291.436	0.01	-0.1	15.0
(4)	16157.873	15897.006	0.01	-1.6	15.0
(5)	16812.669	16661.537	0.01	-0.9	15.0
4cmx	389523.02	388964.92	0.01	-0.1	15.0
Decachlorobiphenyl	296930.38	288822.68	0.01	-2.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 1206
 Lab File ID: 034B3401 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	11898.540	0.01	-5.4	15.0
(2)	8634.207	7762.391	0.01	-10.1	15.0
(3)	5286.637	4804.772	0.01	-9.1	15.0
(4)	6892.719	6300.972	0.01	-8.6	15.0
(5)	6422.564	5918.951	0.01	-7.8	15.0
Aroclor-1260	13080.231	12768.876	0.01	-2.4	15.0
(2)	15549.023	15469.126	0.01	-0.5	15.0
(3)	11896.069	11683.491	0.01	-1.8	15.0
(4)	12289.216	12152.140	0.01	-1.1	15.0
(5)	26394.638	26846.098	0.01	1.7	15.0
4cmx	262332.66	262136.70	0.01	-0.1	15.0
Decachlorobiphenyl	187173.38	182820.13	0.01	-2.3	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.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 1427
 Lab File ID: 046F4601 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	13968.120	0.01	-8.0	15.0
(2)	18935.774	17940.971	0.01	-5.2	15.0
(3)	12442.153	11218.586	0.01	-9.8	15.0
(4)	7348.319	6729.493	0.01	-8.4	15.0
(5)	9517.775	8554.521	0.01	-10.1	15.0
Aroclor-1260	18330.091	18321.700	0.01	-0.0	15.0
(2)	26889.831	26879.373	0.01	-0.0	15.0
(3)	28315.304	28782.010	0.01	1.6	15.0
(4)	16157.873	16236.255	0.01	0.5	15.0
(5)	16812.669	16861.765	0.01	0.3	15.0
4cmx	389523.02	394882.21	0.01	1.4	15.0
Decachlorobiphenyl	296930.38	295634.98	0.01	-0.4	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.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 1427
 Lab File ID: 046B4601 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	11940.760	0.01	-5.1	15.0
(2)	8634.207	7844.233	0.01	-9.1	15.0
(3)	5286.637	4871.425	0.01	-7.8	15.0
(4)	6892.719	6412.708	0.01	-7.0	15.0
(5)	6422.564	5925.084	0.01	-7.7	15.0
Aroclor-1260	13080.231	12921.264	0.01	-1.2	15.0
(2)	15549.023	15764.108	0.01	1.4	15.0
(3)	11896.069	11847.441	0.01	-0.4	15.0
(4)	12289.216	12291.761	0.01	0.0	15.0
(5)	26394.638	27187.092	0.01	3.0	15.0
4cmx	262332.66	264432.34	0.01	0.8	15.0
Decachlorobiphenyl	187173.38	185590.60	0.01	-0.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 1629
 Lab File ID: 056F5601 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	13710.960	0.01	-9.6	15.0
(2)	18935.774	17568.417	0.01	-7.2	15.0
(3)	12442.153	11334.753	0.01	-8.9	15.0
(4)	7348.319	6854.311	0.01	-6.7	15.0
(5)	9517.775	8756.137	0.01	-8.0	15.0
Aroclor-1260	18330.091	18460.079	0.01	0.7	15.0
(2)	26889.831	27124.900	0.01	0.9	15.0
(3)	28315.304	28928.920	0.01	2.2	15.0
(4)	16157.873	16361.434	0.01	1.2	15.0
(5)	16812.669	16859.797	0.01	0.3	15.0
4cmx	389523.02	397647.32	0.01	2.1	15.0
Decachlorobiphenyl	296930.38	278394.07	0.01	-6.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2150
 Instrument ID: ECD1A Calibration Date: 03/18/10 Time: 1629
 Lab File ID: 056B5601 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	12232.759	0.01	-2.8	15.0
(2)	8634.207	7862.456	0.01	-8.9	15.0
(3)	5286.637	4872.811	0.01	-7.8	15.0
(4)	6892.719	6384.983	0.01	-7.4	15.0
(5)	6422.564	6027.512	0.01	-6.2	15.0
Aroclor-1260	13080.231	12771.408	0.01	-2.4	15.0
(2)	15549.023	15513.097	0.01	-0.2	15.0
(3)	11896.069	11656.132	0.01	-2.0	15.0
(4)	12289.216	12110.697	0.01	-1.4	15.0
(5)	26394.638	26724.302	0.01	1.2	15.0
=====	=====	=====	=====	=====	=====
4cmx	262332.66	265395.06	0.01	1.2	15.0
Decachlorobiphenyl	187173.38	179181.68	0.01	-4.3	15.0

FORM VII PEST

Data File: /chem/ecdl1a.i/031810.b/002f0201.d
 Report Date: 18-Mar-2010 14:11

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/002f0201.d
 Lab Smp Id: WAR100222-60 01 Client Smp ID: AR166001
 Inj Date : 18-MAR-2010 06:14
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |WAR100222-60 01
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m
 Meth Date : 18-Mar-2010 12:22 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

AMOUNTS						
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
1.910	1.910	0.000	38116967 100.000	97.8	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.215	5.215	0.000	27901341 100.000	94.0	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.364	2.364	0.000	13512342 1000.00	890	80.00- 120.00	100.00
2.649	2.649	0.000	17115806 1000.00	904	107.35- 147.35	126.67
2.730	2.730	0.000	10726435 1000.00	862	60.10- 100.10	79.38
2.768	2.768	0.000	6413032 1000.00	873	27.98- 67.98	47.46
2.978	2.978	0.000	8193745 1000.00	861	40.90- 80.90	60.64
Average of Peak Amounts =				878		

7 Aroclor-1260				CAS #: 11096-82-5		
3.704	3.704	0.000	17403857 1000.00	949	80.00- 120.00	100.00
3.866	3.866	0.000	25246031 1000.00	939	126.29- 166.29	145.06
4.028	4.028	0.000	27095635 1000.00	957	137.20- 177.20	155.69
4.096	4.096	0.000	15357501 1000.00	950	68.33- 108.33	88.24
4.239	4.239	0.000	15943133 1000.00	948	72.58- 112.58	91.61
Average of Peak Amounts =				949		

Data File: /chem/eod1a.i/031810.b/002f0201.d

Date: 18-MAR-2010 06:14

Client ID: AR166001

Sample Info: 1MAR100222-60 01

Page 1

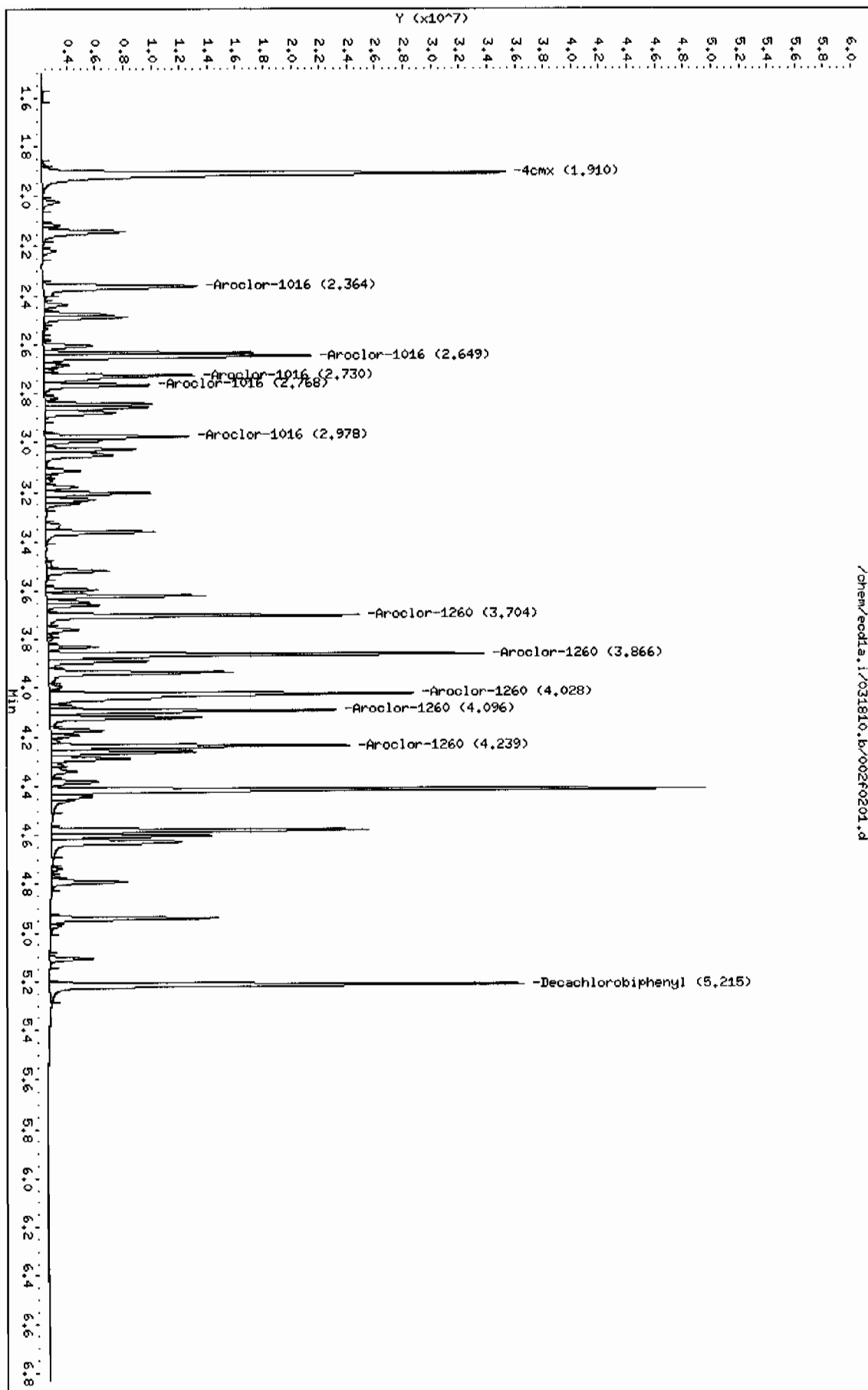
Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25

Column phase: CLP1

/chem/eod1a.i/031810.b/002f0201.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/002b0201.d

Lab Smp Id: WAR100222-60 01

Client Smp ID: AR166001

Inj Date : 18-MAR-2010 06:14

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100222-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m

Meth Date : 18-Mar-2010 12:22 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

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8						
\$ 11 4cmx						
2.269	2.269	0.000	25653922 100.000	97.8	80.00- 120.00	100.00

CAS #: 2051-24-3						
\$ 12 Decachlorobiphenyl						
5.912	5.912	0.000	17983366 100.000	96.1	80.00- 120.00	100.00

CAS #: 12674-11-2						
1 Aroclor-1016						
3.164	3.164	0.000	11336193 1000.00	901	80.00- 120.00	100.00(M)
3.247	3.247	0.000	7586539 1000.00	879	45.24- 85.24	66.92
3.310	3.310	0.000	4629167 1000.00	876	20.38- 60.38	40.84
3.537	3.537	0.000	6156542 1000.00	893	32.96- 72.96	54.31
3.613	3.613	0.000	5743732 1000.00	894	29.75- 69.75	50.67
Average of Peak Amounts =				889		

CAS #: 11096-82-5						
7 Aroclor-1260						
4.304	4.304	0.000	12460543 1000.00	953	80.00- 120.00	100.00
4.428	4.428	0.000	15159960 1000.00	975	101.15- 141.15	121.66
4.694	4.694	0.000	11434090 1000.00	961	71.50- 111.50	91.76
4.867	4.867	0.000	11836954 1000.00	963	75.17- 115.17	95.00
5.014	5.014	0.000	26031601 1000.00	986	190.25- 230.25	208.91
Average of Peak Amounts =				968		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/031810.b/002b0201.d

Date: 18-MAR-2010 06:14

Client ID: AR166001

Sample Info: 1MAR100222-60 01

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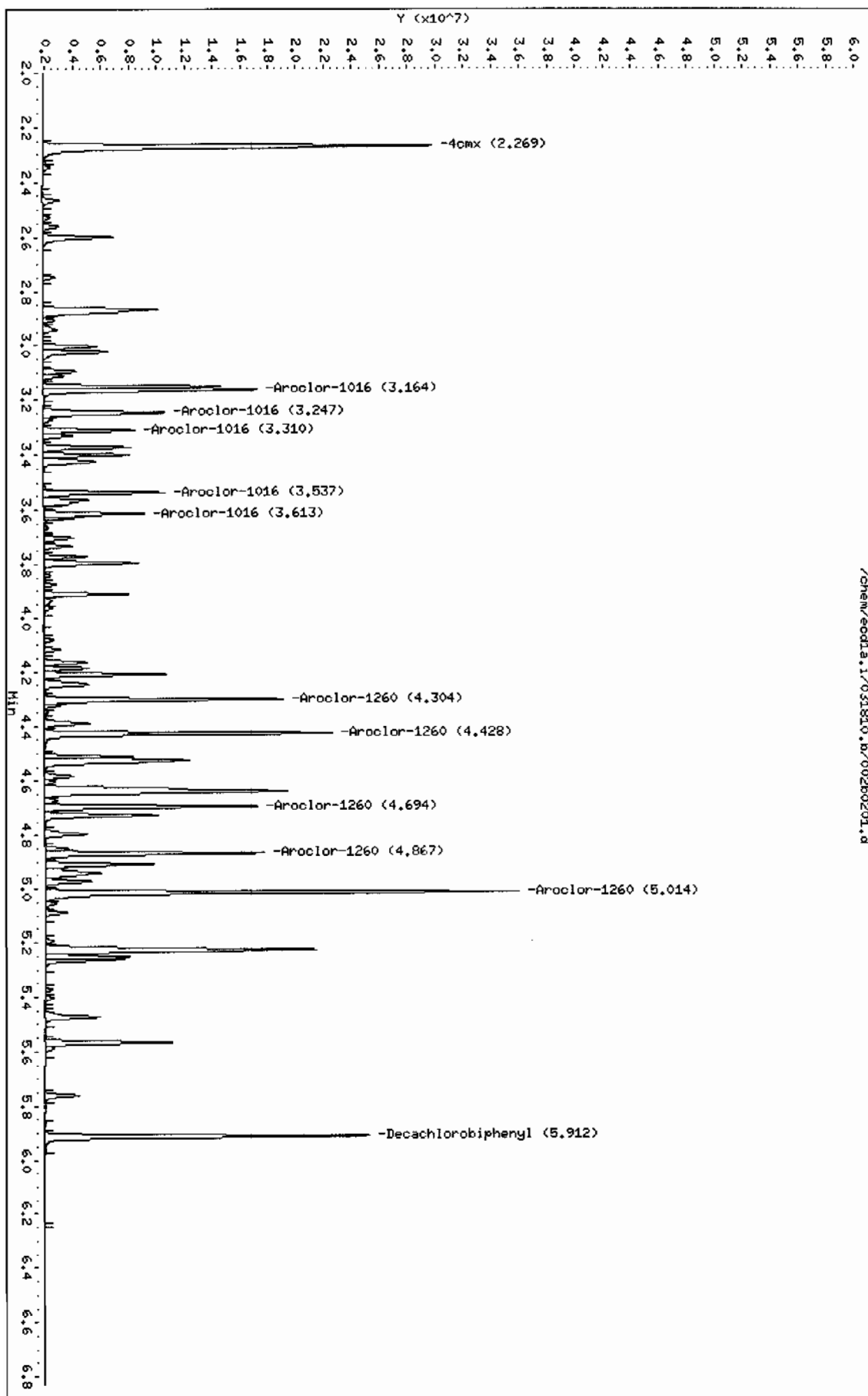
Column phase: CLP2

Instrument: eodla.i

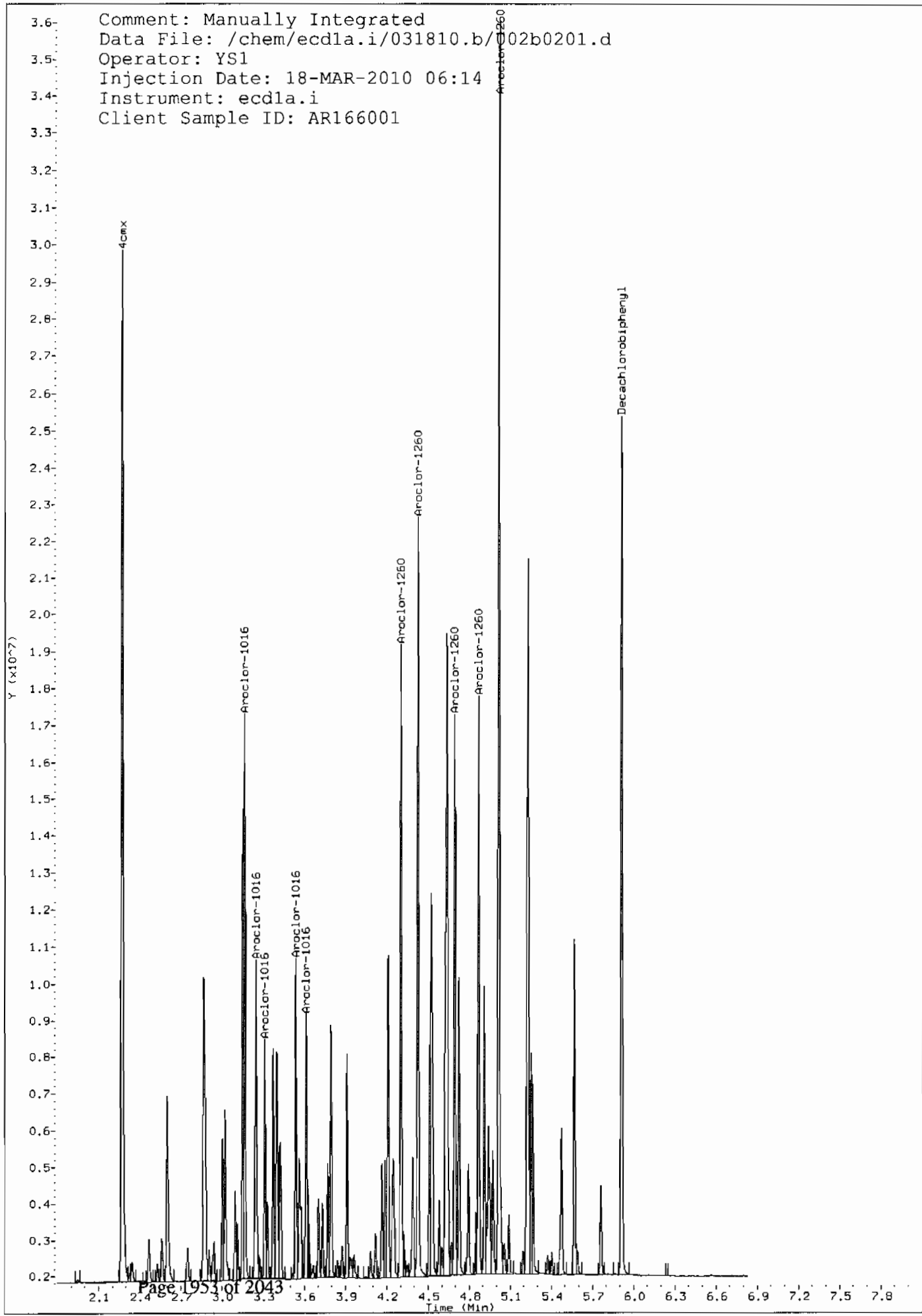
Operator: YSI

Column diameter: 0.25

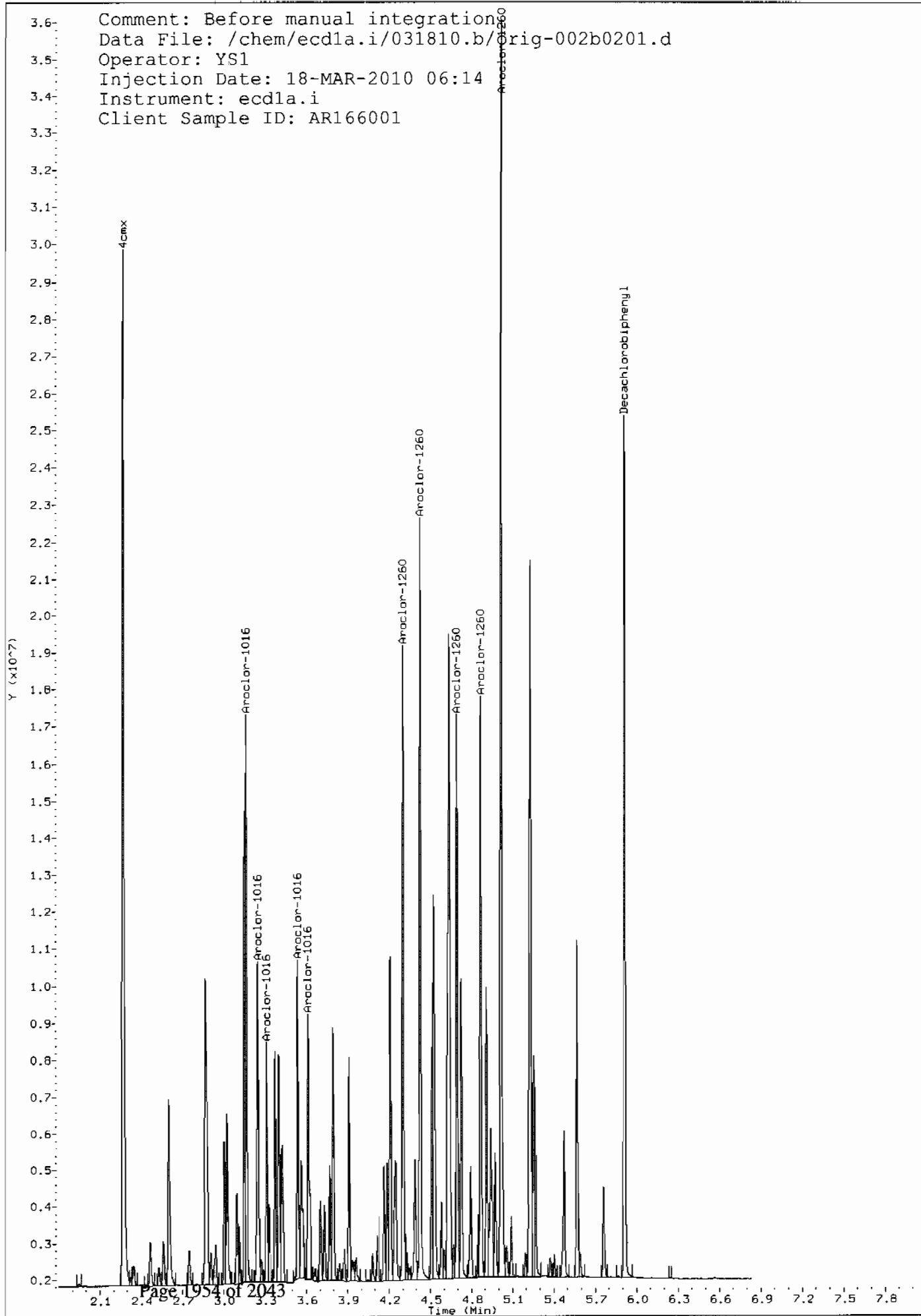
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Comment: Manually Integrated
Data File: /chem/ecdl1a.i/031810.b/02b0201.d
Operator: YS1
Injection Date: 18-MAR-2010 06:14
Instrument: ecdl1a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdl1a.i/031810.b/Orig-002b0201.d
Operator: YS1
Injection Date: 18-MAR-2010 06:14
Instrument: ecd1a.i
Client Sample ID: AR166001



Data File: /chem/ecdla.i/031810.b/003f0301.d
Report Date: 18-Mar-2010 14:11

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/003f0301.d
Lab Smp Id: WAR100219-54 Client Smp ID: AR125401
Inj Date : 18-MAR-2010 06:25
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100219-54
Misc Info :
Comment :
Method : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 18-Mar-2010 12:22 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

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3.207	3.207	0.000	11932817	1000.00	900 80.00- 120.00	100.00
3.362	3.362	0.000	15842727	1000.00	888 112.77- 152.77	132.77
3.596	3.596	0.000	20499788	1000.00	916 151.79- 191.79	171.79
3.758	3.758	0.000	14969715	1000.00	908 105.45- 145.45	125.45
3.867	3.867	0.000	15102637	1000.00	946 106.56- 146.56	126.56
Average of Peak Amounts =				912		

Data File: /chem/ecdl.a.i/031810.b/003f0301.d

Date : 18-MAR-2010 06:25

Client ID: AR125401

Sample Info: 1MAR100219-54

Column Phase: CLP1

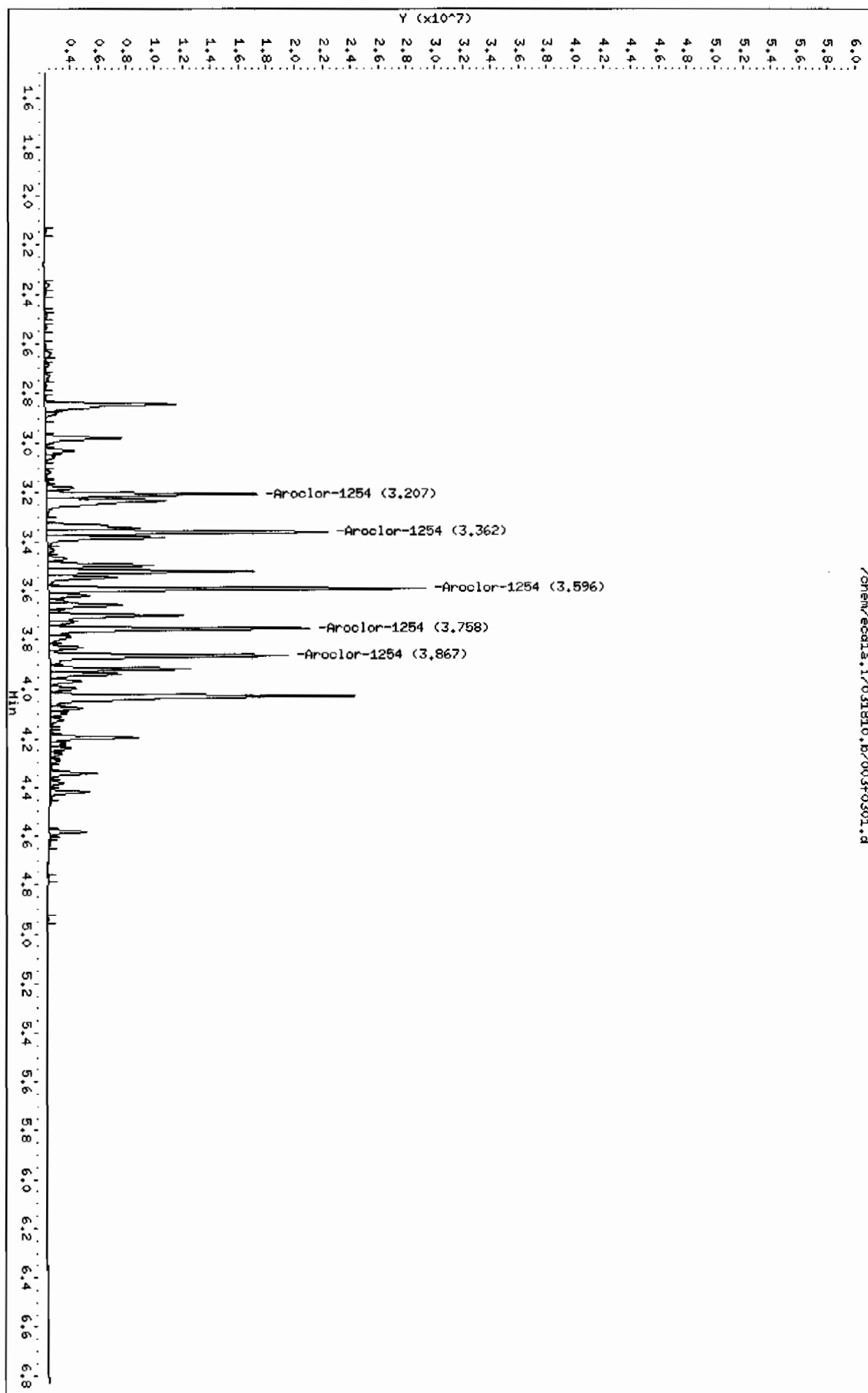
Page 1

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl.a.i/031810.b/003f0301.d



Data File: /chem/ecdla.i/031810.b/003b0301.d
Report Date: 18-Mar-2010 14:11

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/003b0301.d

Lab Smp Id: WAR100219-54 Client Smp ID: AR125401

Inj Date : 18-MAR-2010 06:25

Operator : YS1 Inst ID: ecdla.i

Smp Info : |WAR100219-54

Misc Info :

Comment :

Method : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m

Meth Date : 18-Mar-2010 12:22 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

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			
3.373	3.373	0.000	5489904	1000.00	912 80.00- 120.00	100.00
3.795	3.795	0.000	9973216	1000.00	922 161.66- 201.66	181.66
3.912	3.912	0.000	10945026	1000.00	917 179.37- 219.37	199.37
4.187	4.187	0.000	15296916	1000.00	930 258.64- 298.64	278.64
4.324	4.324	0.000	11317381	1000.00	934 186.15- 226.15	206.15

Average of Peak Amounts = 923

Data File: /chem/ecda.i/031810.b/003b0301.d

Date: 18-Mar-2010 06:25

Client ID: AR125401

Sample Info: 14R100219-54

Column phase: CLP2

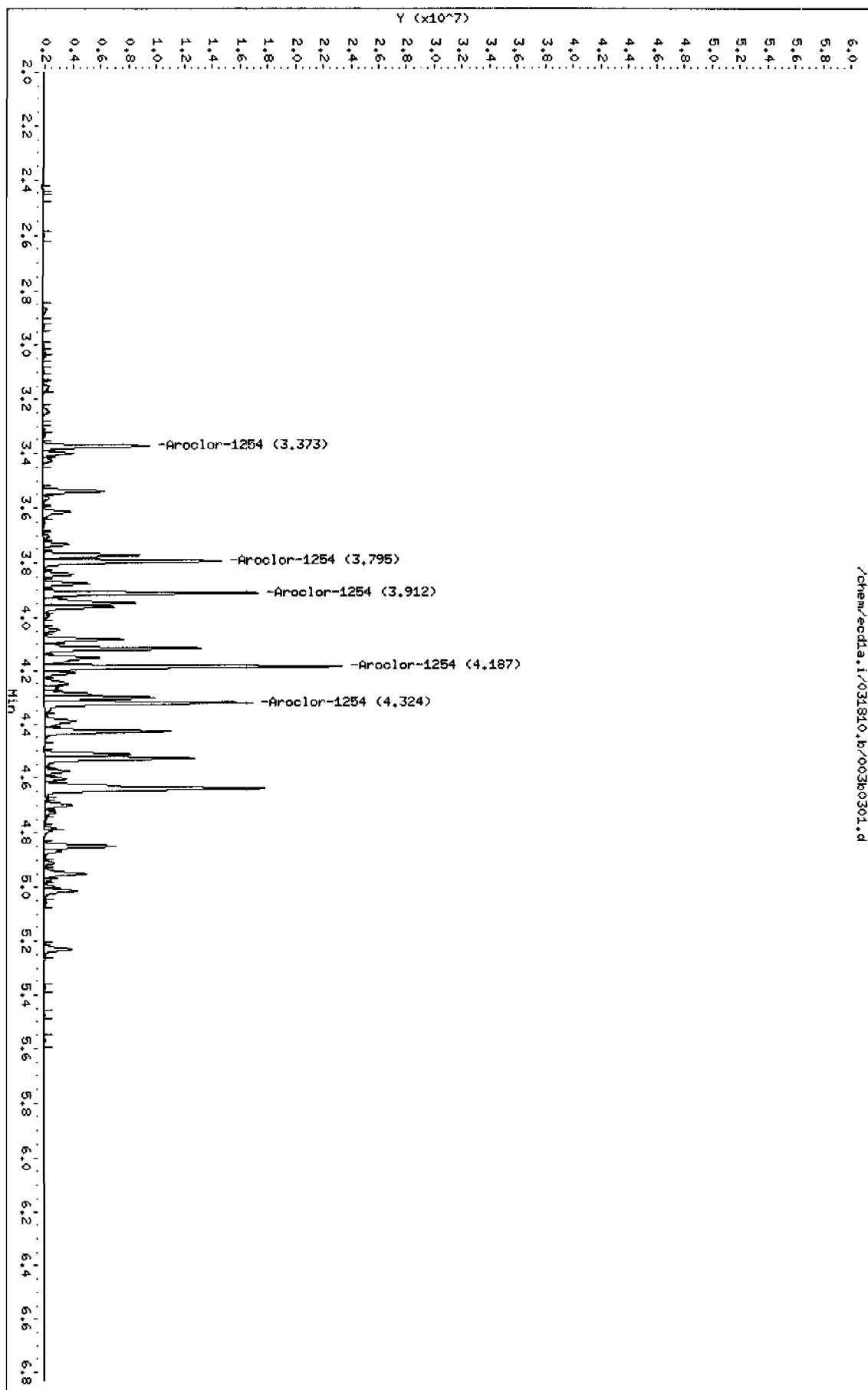
Page 1

Instrument: ecda.i

Operator: YSL

Column diameter: 0.25

/chem/ecda.i/031810.b/003b0301.d



Data File: /chem/ecdla.i/031810.b/004f0401.d
Report Date: 18-Mar-2010 14:11

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/004f0401.d

Lab Smp Id: WAR100219-42

Client Smp ID: AR124201

Inj Date : 18-MAR-2010 06:35

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100219-42

Misc Info :

Comment :

Method : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m

Meth Date : 18-Mar-2010 12:22 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

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT	ON-COL	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====

4 Aroclor-1242

CAS #: 53469-21-9

2.364	2.364	0.000	11920767	1000.00	967	80.00-	120.00	100.00
2.651	2.651	0.000	14540837	1000.00	976	101.98-	141.98	121.98
2.769	2.769	0.000	5552894	1000.00	942	26.58-	66.58	46.58
2.979	2.979	0.000	7106906	1000.00	919	39.62-	79.62	59.62
3.233	3.233	0.000	6467001	1000.00	888	34.25-	74.25	54.25

Average of Peak Amounts =

938

Data File: /chem/ecdl.a.i/031810.b/0040401.d

Date: 18-MAR-2010 06:35

Client ID: AR124201

Sample Info: 11MAR100219-42

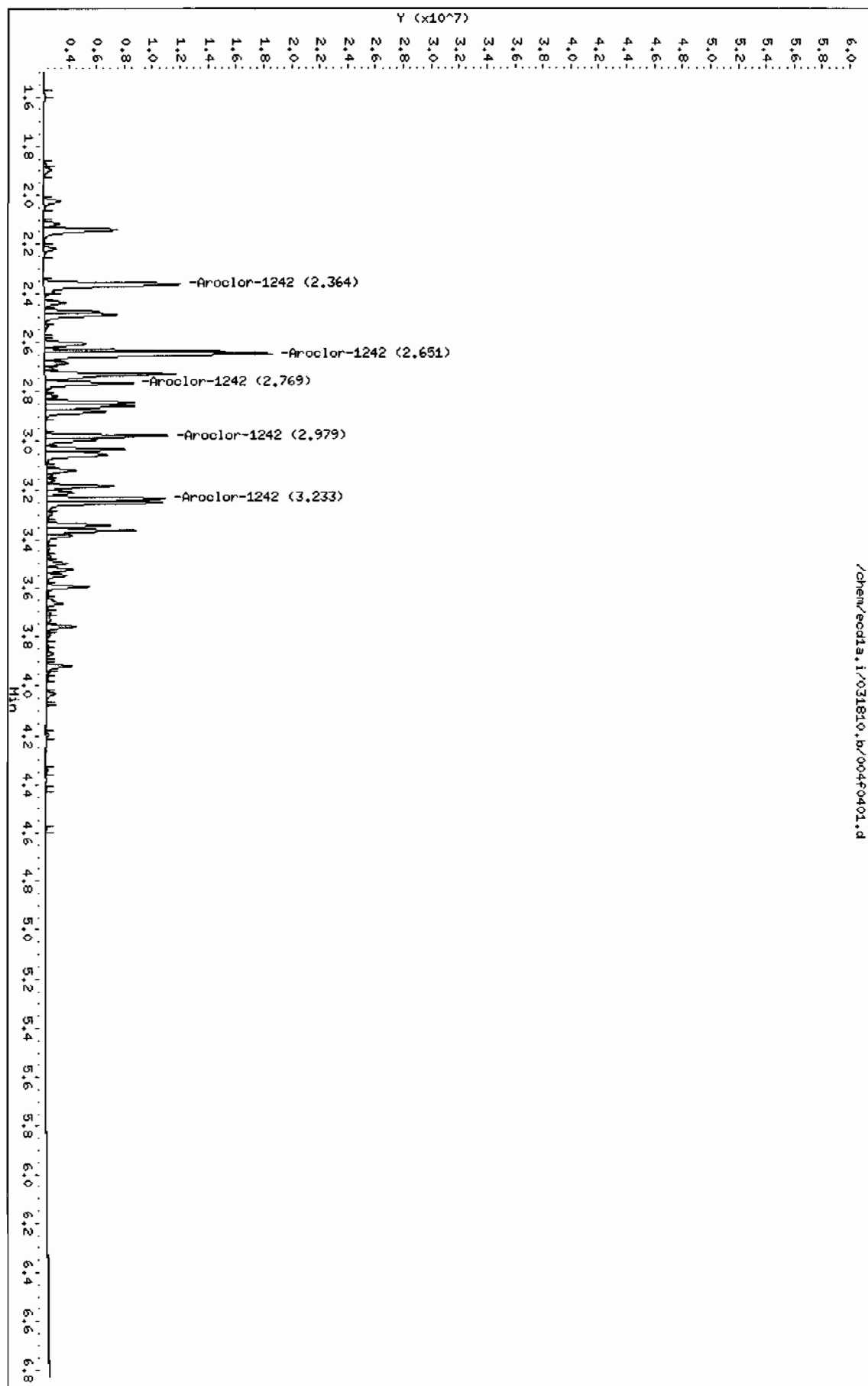
Column phase: CLP1

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl.a.i/031810.b/0040401.d



Data File: /chem/ecdl1a.i/031810.b/004b0401.d
Report Date: 18-Mar-2010 14:11

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/004b0401.d
Lab Smp Id: WAR100219-42 Client Smp ID: AR124201
Inj Date : 18-MAR-2010 06:35
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-42
Misc Info :
Comment :
Method : /chem/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m
Meth Date : 18-Mar-2010 12:22 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

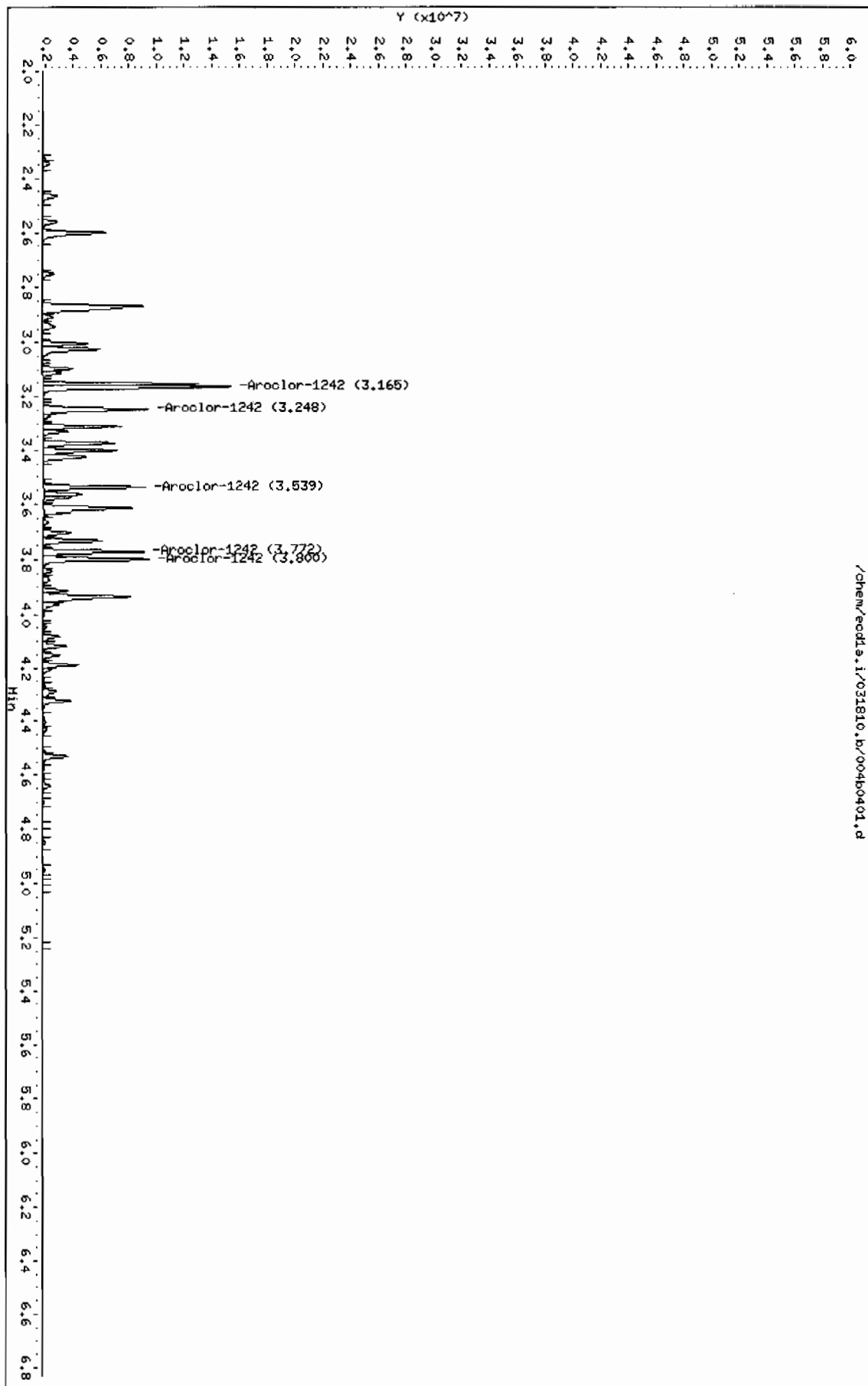
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
4 Aroclor-1242			CAS #: 53469-21-9			
3.165	3.165	0.000	9762582 1000.00	963	80.00- 120.00	100.00
3.248	3.248	0.000	6622513 1000.00	933	47.84- 87.84	67.84
3.539	3.539	0.000	5178556 1000.00	939	33.04- 73.04	53.04
3.772	3.772	0.000	5319536 1000.00	930	34.49- 74.49	54.49
3.800	3.800	0.000	6061023 1000.00	952	42.08- 82.08	62.08
Average of Peak Amounts =			943			

Data File: /chem/eodla.i/031810.b/004b0401.d
Date: 18-MAR-2010 06:35
Client ID: AR124201
Sample Info: 1MAR100219-42

Column Phase: CLP2

Instrument: eodla.i
Operator: YS1
Column diameter: 0.25



Data File: /chem/ecdl1a.i/031810.b/005f0501.d
Report Date: 18-Mar-2010 14:11

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/005f0501.d
Lab Smp Id: WAR100223-48 Client Smp ID: AR124801
Inj Date : 18-MAR-2010 06:44
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100223-48
Misc Info :
Comment :
Method : /chem/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 18-Mar-2010 12:22 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

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.844	2.844	0.000	10178605 1000.00	1020	80.00- 120.00	100.00
2.977	2.977	0.000	13383754 1000.00	1020	111.49- 151.49	131.49
3.230	3.230	0.000	14096562 1000.00	986	118.49- 158.49	138.49
3.361	3.361	0.000	11446960 1000.00	962	92.46- 132.46	112.46
3.594	3.594	0.000	7515193 1000.00	939	53.83- 93.83	73.83
Average of Peak Amounts =				985		

Data File: /chem/ecdl1.i/031810.b/005f0501.d

Date: 18-MAR-2010 06:44

Client ID: KR124801

Sample Info: 1MAR100223-48

Page 1

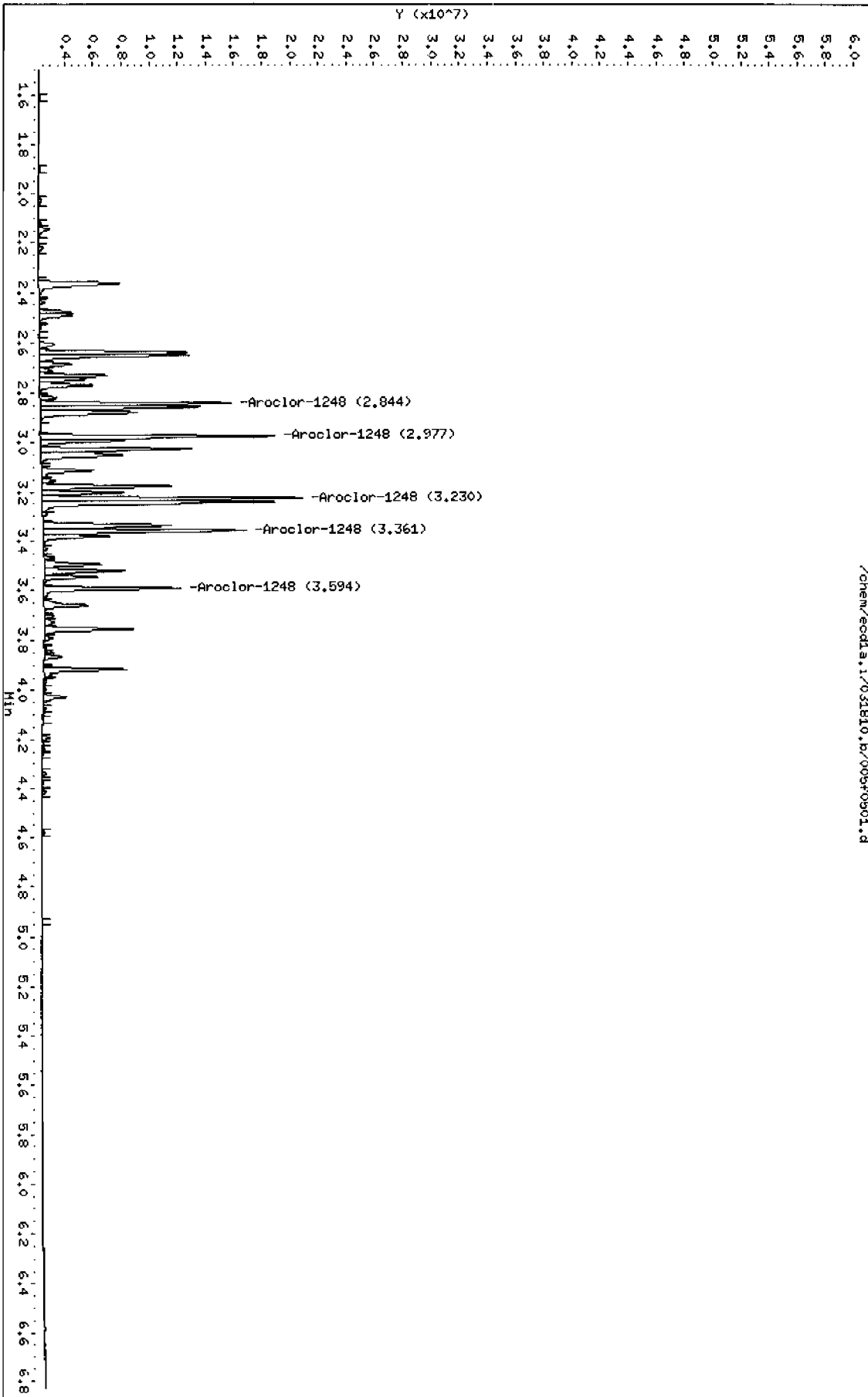
Instrument: ecdl1.i

Operator: YSI

Column diameter: 0.25

Column phase: CLP1

/chem/ecdl1.i/031810.b/005f0501.d



Data File: /chem/ecdl1a.i/031810.b/005b0501.d
Report Date: 18-Mar-2010 14:11

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/005b0501.d

Lab Smp Id: WAR100223-48

Client Smp ID: AR124801

Inj Date : 18-MAR-2010 06:44

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100223-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m

Meth Date : 18-Mar-2010 12:22 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

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3.373	3.373	0.000	7529346 1000.00	990 80.00-	120.00	100.00
3.537	3.537	0.000	9431544 1000.00	996 105.26-	145.26	125.26
3.770	3.770	0.000	10816931 1000.00	990 123.66-	163.66	143.66
3.798	3.798	0.000	12133001 1000.00	998 141.14-	181.14	161.14
3.935	3.935	0.000	11603989 1000.00	982 134.12-	174.12	154.12

Average of Peak Amounts =

991

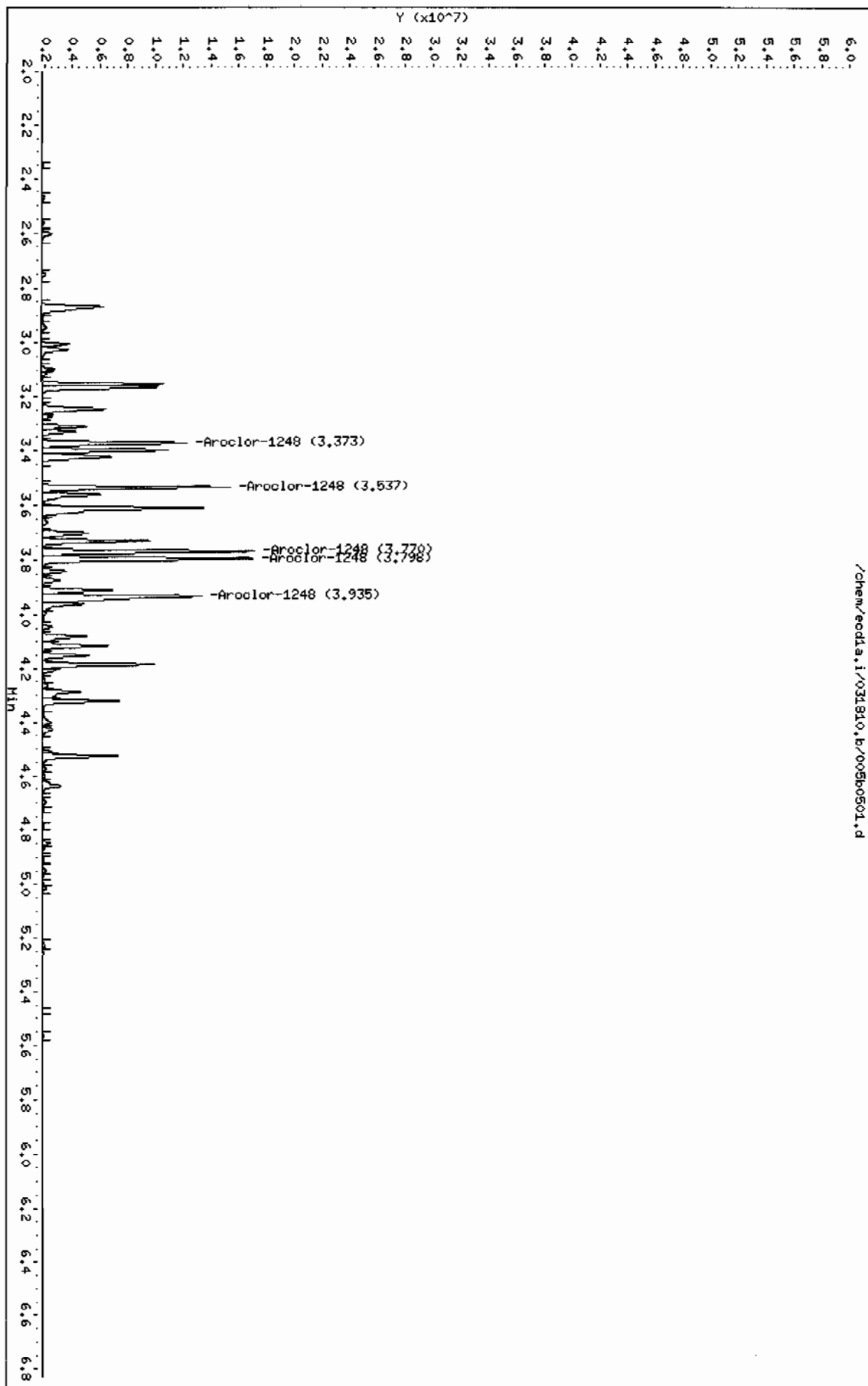
Data File: /chem/ecdda.i/031810.b/005b0501.d
Date: 18-MAR-2010 06:44
Client ID: AR124801
Sample Info: 1MAR100223-48

Page 1

Column phase: CLP2

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25

/chem/ecdda.i/031810.b/005b0501.d



Data File: /chem/ecdla.i/031810.b/007f0701.d
Report Date: 18-Mar-2010 14:11

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/007f0701.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 18-MAR-2010 07:05

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m

Meth Date : 18-Mar-2010 12:22 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

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.364	2.364	0.000	6701360	1000.00	1000 80.00- 120.00	100.00
2.652	2.652	0.000	8441569	1000.00	1010 105.97- 145.97	125.97
2.732	2.732	0.000	5455123	1000.00	986 61.40- 101.40	81.40
2.846	2.846	0.000	2638462	1000.00	996 19.37- 59.37	39.37
3.233	3.233	0.000	3450458	1000.00	970 31.49- 71.49	51.49
Average of Peak Amounts *				994		

Data File: /chem/ecdda,i/031810,b/007f0701,d

Date: 18-MAR-2010 07:05

Client ID: RR123201

Sample Info: 1MAR100104-32

Column phase: CLP1

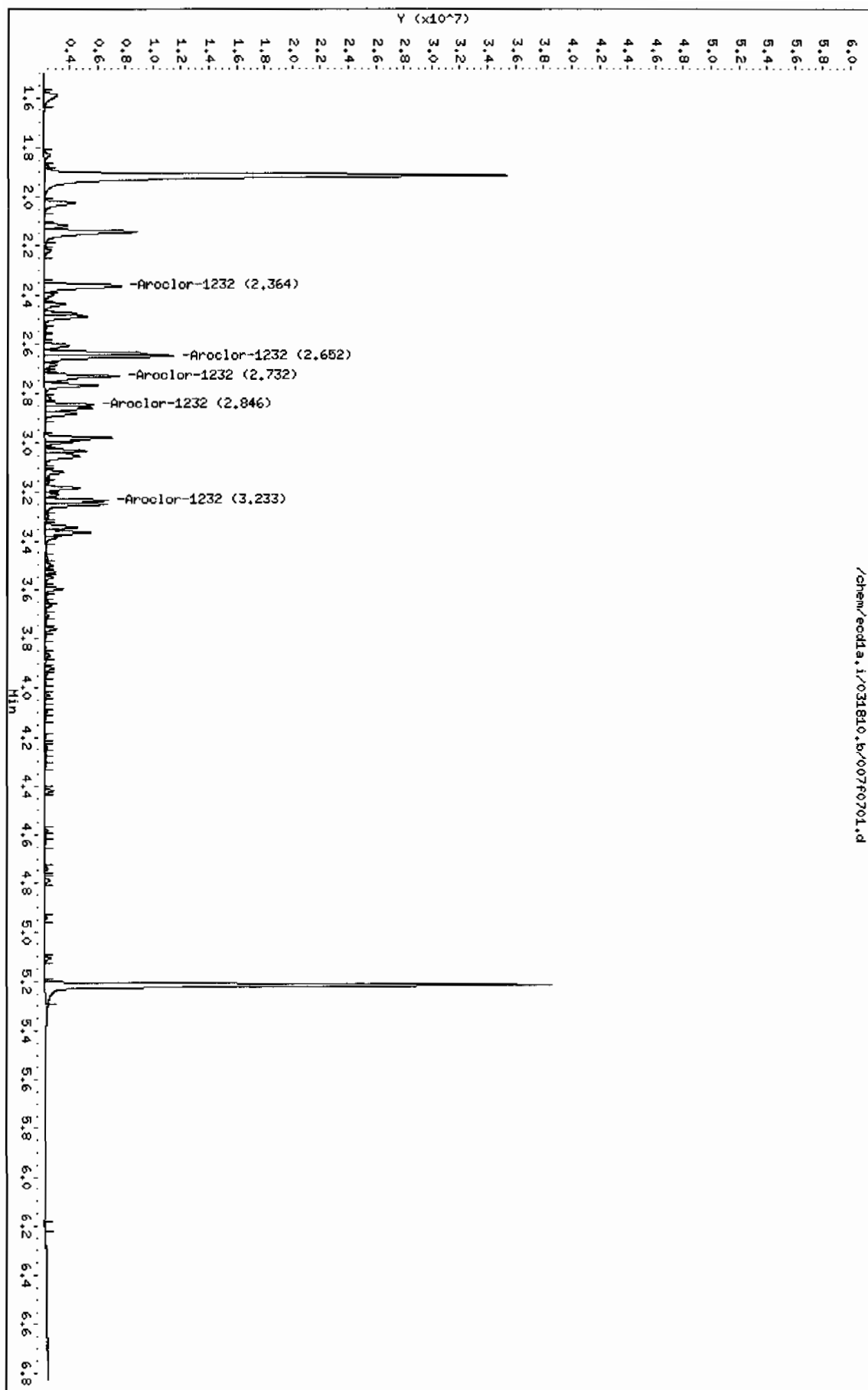
Page 1

Instrument: ecdda,i

Operator: YS1

Column diameter: 0.25

/chem/ecdda,i/031810,b/007f0701,d



Data File: /chem/ecd1a.i/031810.b/007b0701.d
Report Date: 18-Mar-2010 14:11

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/031810.b/007b0701.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 18-MAR-2010 07:05

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecd1a.i/031810.b/ECD1-B-8082-031110b.m

Meth Date : 18-Mar-2010 12:22 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

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.868	2.868	0.000	5202376 1000.00	1030	80.00- 120.00	100.00
3.165	3.165	0.000	5974501 1000.00	1040	94.84- 134.84	114.84
3.248	3.248	0.000	4003118 1000.00	1030	56.95- 96.95	76.95
3.539	3.539	0.000	2966601 1000.00	1040	37.02- 77.02	57.02
3.773	3.773	0.000	2906106 1000.00	1030	35.86- 75.86	55.86

Average of Peak Amounts = 1.04e+03

Data File: /chem/ecdl1.i/031810.b/00760701.d

Date: 18-MAR-2010 07:05

Client ID: AR123201

Sample Info: 1MAR100104-32

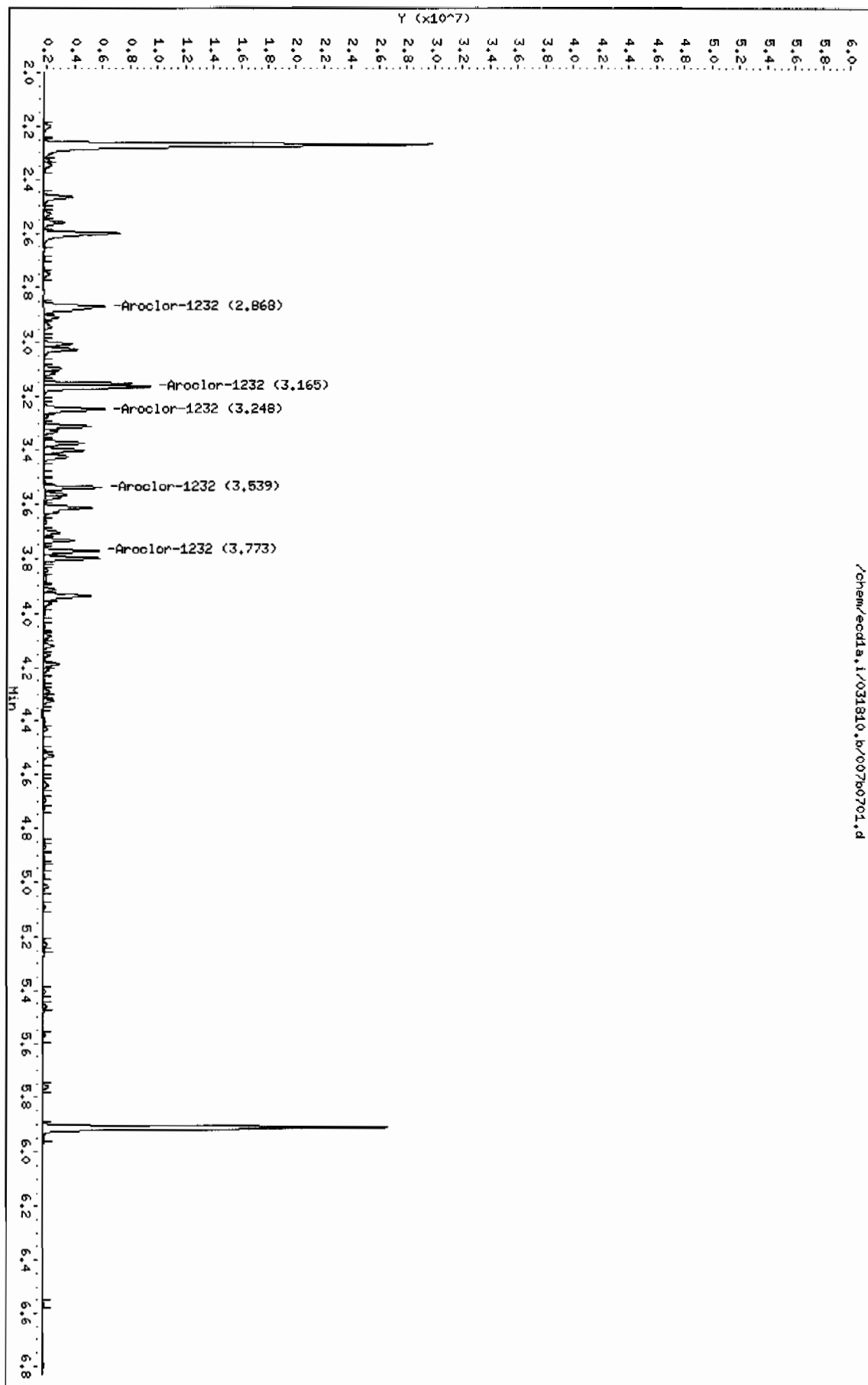
Column phase: CLP2

Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1.i/031810.b/00760701.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/008f0801.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 18-MAR-2010 07:16

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m

Meth Date : 18-Mar-2010 12:22 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

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

2 Aroclor-1221

CAS #: 11104-28-2

2.025	2.025	0.000	4611135	1000.00	1030 80.00- 120.00	100.00
2.117	2.117	0.000	2516821	1000.00	1030 34.58- 74.58	54.58
2.143	2.143	0.000	11196636	1000.00	1030 222.82- 262.82	242.82

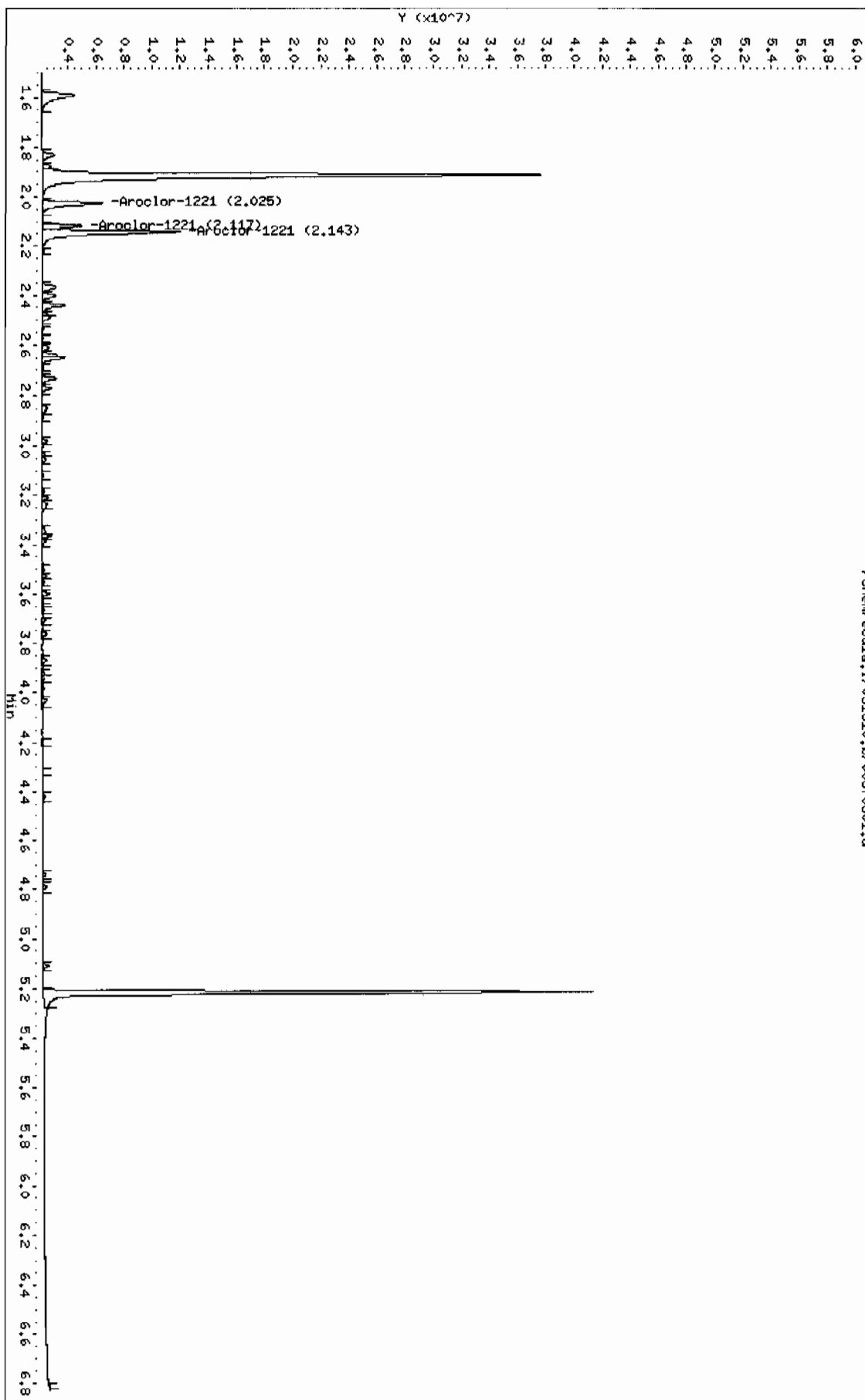
Average of Peak Amounts = 1.03e+03

Data File: /chem/eod1a.i/031810.b/008f0801.d
Date : 18-MAR-2010 07:16
Client ID: AR122101
Sample Info: 1MAR100104-21

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Instrument: eod1a.i
Operator: YSL
Column diameter: 0.25
Column phase: CLP1

/chem/eod1a.i/031810.b/008f0801.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/008b0801.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 18-MAR-2010 07:16
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m
Meth Date : 18-Mar-2010 12:22 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

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.467	2.467	0.000	3400096 1000.00	1050	80.00- 120.00	100.00
2.561	2.561	0.000	2199302 1000.00	1060	44.68- 84.68	64.68
2.601	2.601	0.000	7577788 1000.00	1040	202.87- 242.87	222.87
Average of Peak Amounts -			1.05e+03			

Data File: /chem/ecdl1.i/031810.b/0080801.d

Date: 18-MAR-2010 07:16

Client ID: AR122101

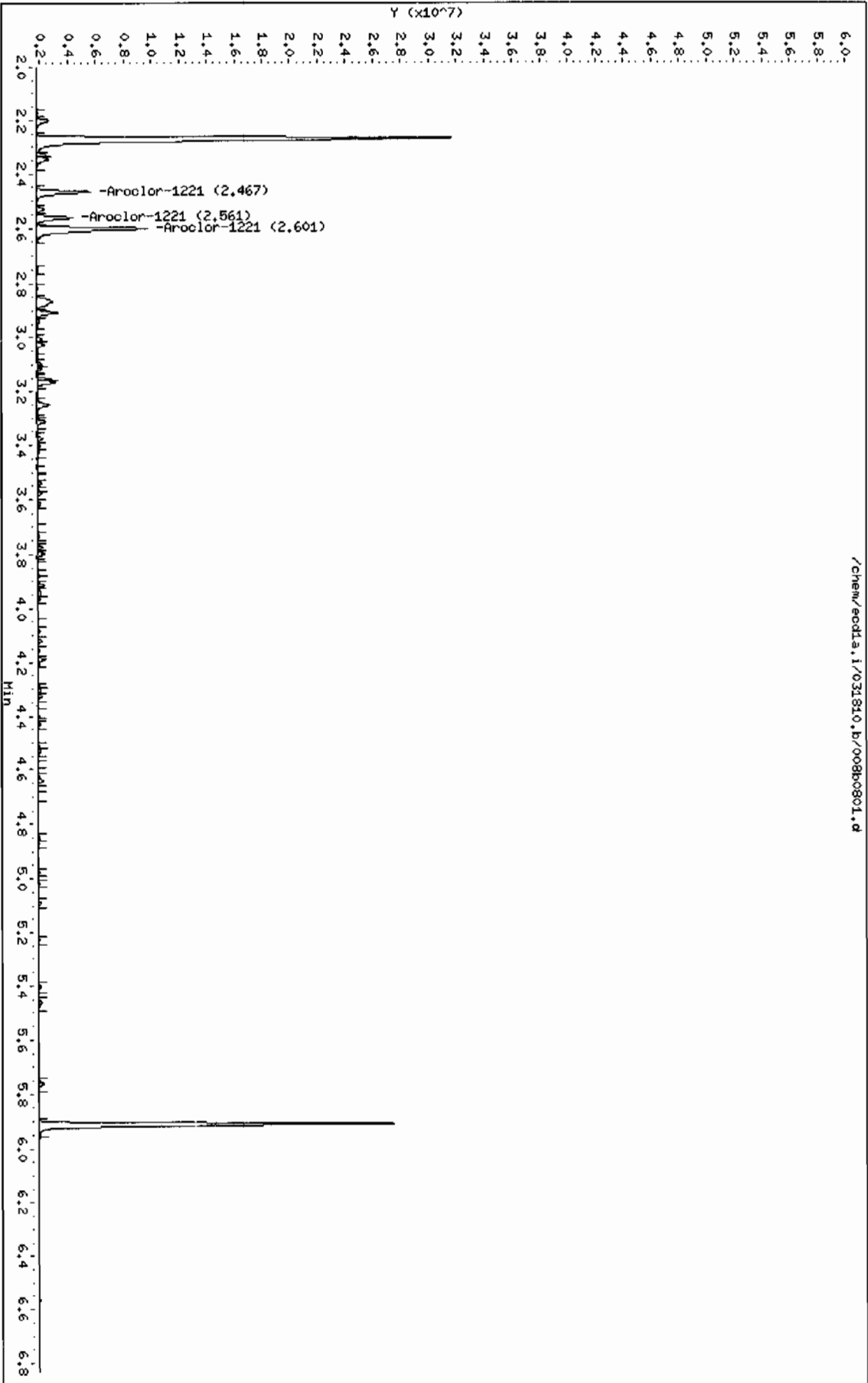
Sample Info: 11MR100104-21

Column phase: CLP2

Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdl1a.i/031810.b/034f3401.d
Report Date: 18-Mar-2010 12:22

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/034f3401.d

Lab Smp Id: WAR100222-60 04

Client Smp ID: AR166004

Inj Date : 18-MAR-2010 12:06

Operator : YS1

Inst ID: ecdl1a.i

Smp Info : |WAR100222-60 04

Misc Info :

Comment :

Method : /chem/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m

Meth Date : 18-Mar-2010 12:22 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d

Als bottle: 34

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1pl1

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	1.910	0.001	38896492	100.000	99.8	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.216	5.215	0.001	28882268	100.000	97.3	80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2		
2.364	2.364	0.000	13785629	1000.00	908	80.00- 120.00	100.00
2.650	2.649	0.001	17556565	1000.00	927	107.35- 147.35	127.35
2.730	2.730	0.000	11041696	1000.00	887	60.10- 100.10	80.10
2.768	2.768	0.000	6614881	1000.00	900	27.98- 67.98	47.98
2.978	2.978	0.000	8395851	1000.00	882	40.90- 80.90	60.90
Average of Peak Amounts =					901		

7 Aroclor-1260					CAS #: 11096-82-5		
3.704	3.704	0.000	17996959	1000.00	982	80.00- 120.00	100.00
3.866	3.866	0.000	26327910	1000.00	979	126.29- 166.29	146.29
4.029	4.028	0.001	28291436	1000.00	999	137.20- 177.20	157.20
4.096	4.096	0.000	15897006	1000.00	984	68.33- 108.33	88.33
4.239	4.239	0.000	16661537	1000.00	991	72.58- 112.58	92.58
Average of Peak Amounts =					987		

Data File: /chem/eod1a.i/031810.b/034f3401.d

Date: 18-MAR-2010 12:06

Client ID: AR166004

Sample Info: IMA100222-60 04

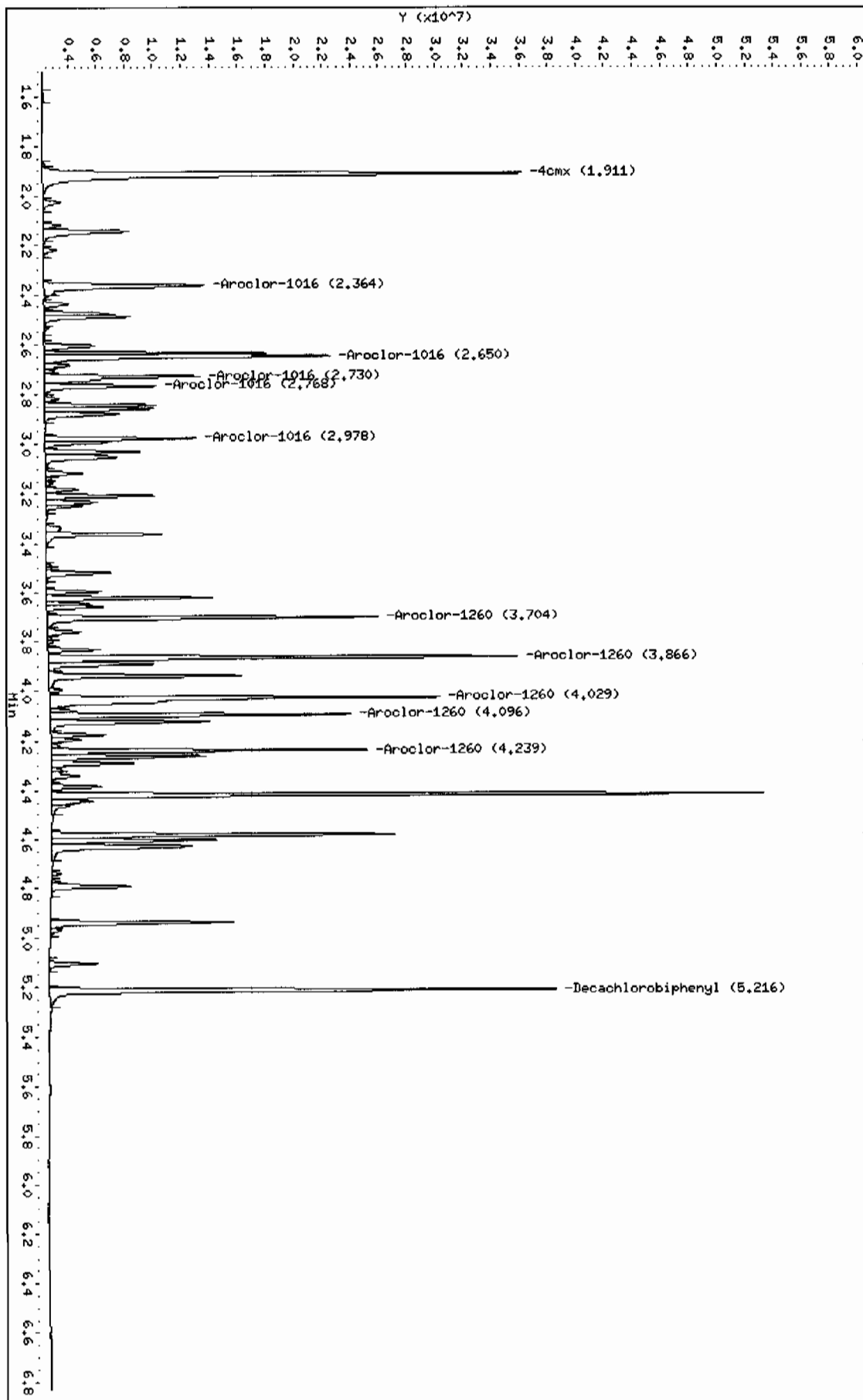
Column phase: CLP1

Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25

/chem/eod1a.i/031810.b/034f3401.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/034b3401.d
 Lab Smp Id: WAR100222-60 04 Client Smp ID: AR166004
 Inj Date : 18-MAR-2010 12:06
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |WAR100222-60 04
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m
 Meth Date : 18-Mar-2010 12:22 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 34 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			
2.269	2.269	0.000	26213670	100.000	99.9	80.00-	120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.912	5.912	0.000	18282013	100.000	97.7	80.00-	120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2			
3.164	3.164	0.000	11898540	1000.00	945	80.00-	120.00	100.00(M)
3.247	3.247	0.000	7762391	1000.00	899	45.24-	85.24	65.24
3.311	3.310	0.001	4804772	1000.00	909	20.38-	60.38	40.38
3.539	3.537	0.002	6300972	1000.00	914	32.96-	72.96	52.96
3.614	3.613	0.001	5918951	1000.00	922	29.75-	69.75	49.75
Average of Peak Amounts =					918			

7 Aroclor-1260					CAS #: 11096-82-5			
4.304	4.304	0.000	12768876	1000.00	976	80.00-	120.00	100.00
4.429	4.428	0.001	15469126	1000.00	995	101.15-	141.15	121.15
4.694	4.694	0.000	11683491	1000.00	982	71.50-	111.50	91.50
4.868	4.867	0.001	12152140	1000.00	989	75.17-	115.17	95.17
5.014	5.014	0.000	26846098	1000.00	1020	190.25-	230.25	210.25
Average of Peak Amounts =					992			

Data File: /chem/ecdl1a.i/031810.b/034b3401.d
Report Date: 18-Mar-2010 12:22

Page 2

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/031810.b/034b3401.d

Date: 18-MAR-2010 12:06

Client ID: AR166004

Sample Info: MAR100222-60 04

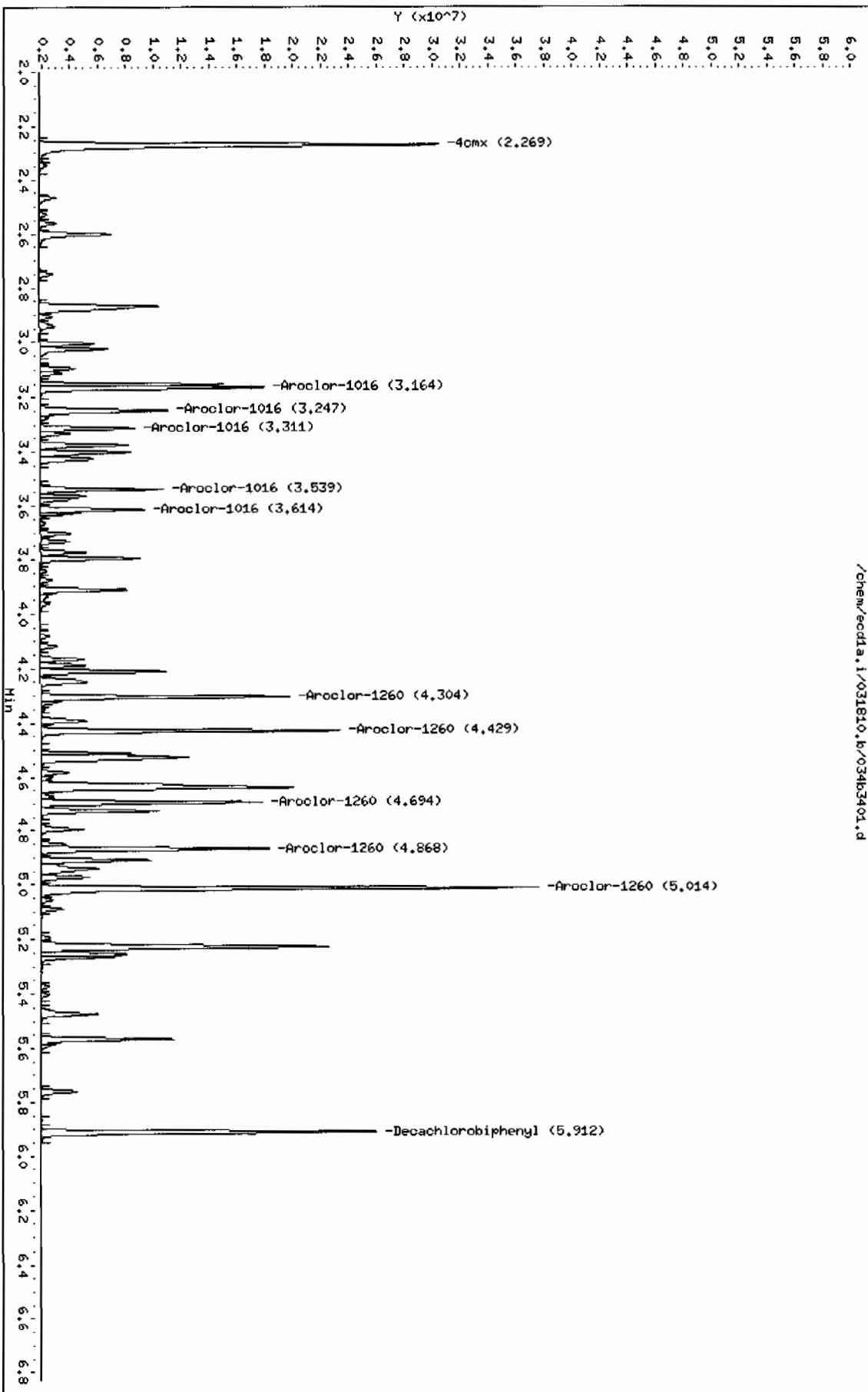
Page 1

Column phase: CLP2

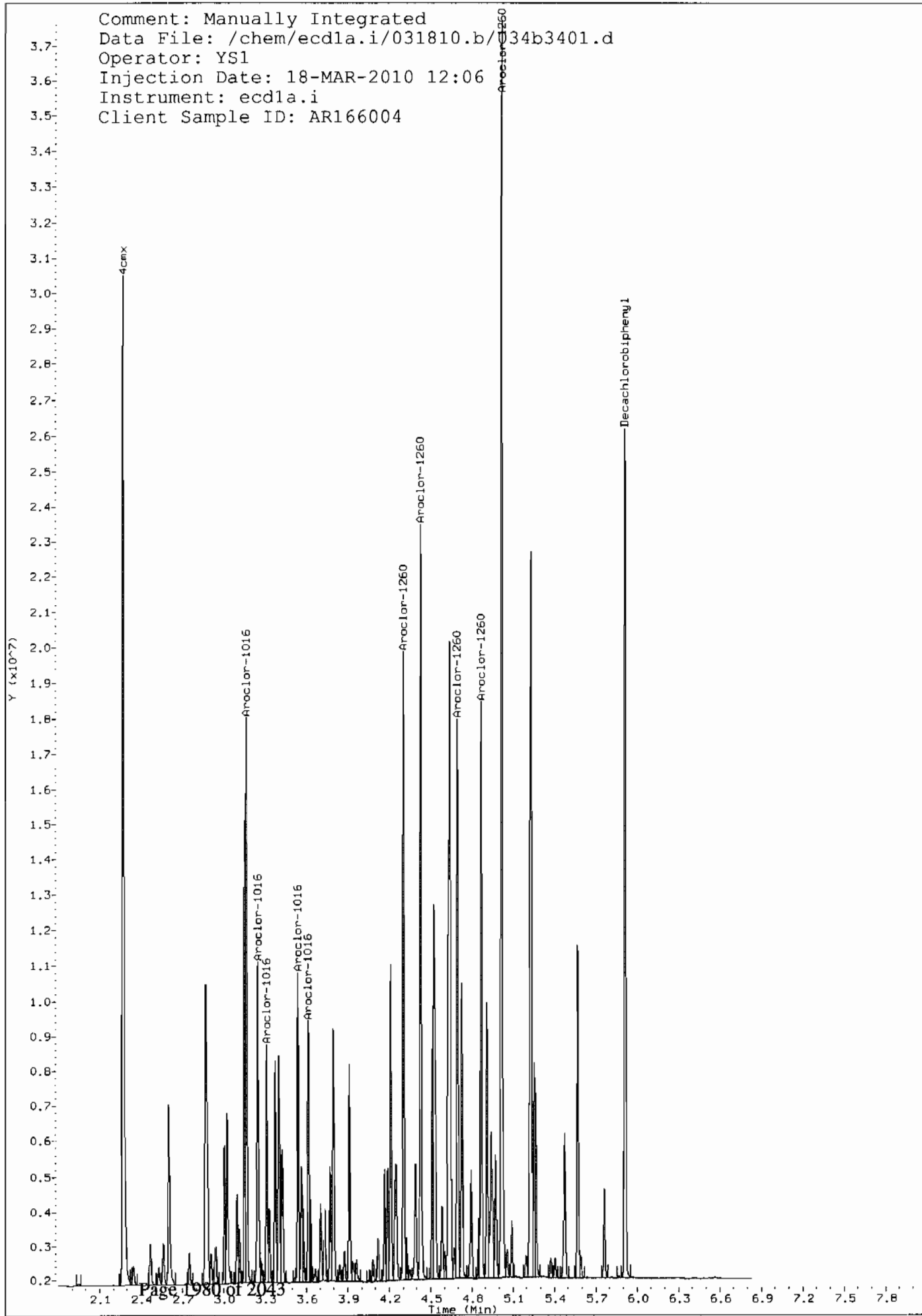
Instrument: eod1a.i

Operator: YSL

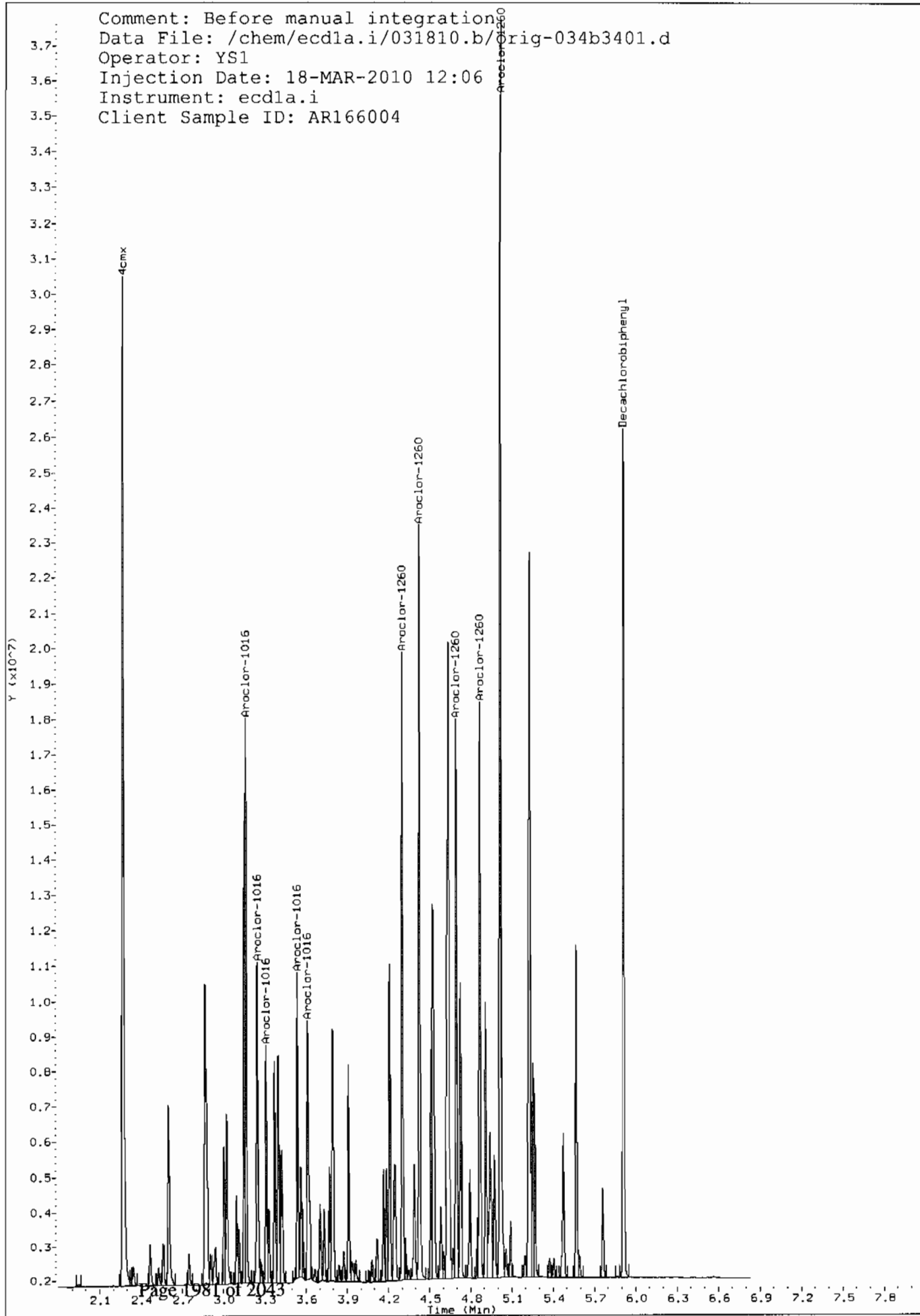
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/031810.b/334b3401.d
Operator: YS1
Injection Date: 18-MAR-2010 12:06
Instrument: ecd1a.i
Client Sample ID: AR166004



Comment: Before manual integration
Data File: /chem/ecdl1a.i/031810.b/Orig-034b3401.d
Operator: YS1
Injection Date: 18-MAR-2010 12:06
Instrument: ecd1a.i
Client Sample ID: AR166004



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/046f4601.d

Lab Smp Id: WAR100222-60 05

Client Smp ID: AR166005

Inj Date : 18-MAR-2010 14:27

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100222-60 05

Misc Info :

Comment :

Method : /chem/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m

Meth Date : 18-Mar-2010 14:49 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 46

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT	ON-COL	RESPONSE (ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
1.912	1.910	0.002	39488221	100.000	101	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.215	5.215	0.000	29563498	100.000	99.6	80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2		
2.365	2.364	0.001	13968120	1000.00	920	80.00- 120.00	100.00
2.650	2.649	0.001	17940970	1000.00	947	108.44- 148.44	128.44
2.730	2.730	0.000	11218586	1000.00	902	60.32- 100.32	80.32
2.768	2.768	0.000	6729493	1000.00	916	28.18- 68.18	48.18
2.978	2.978	0.000	8554521	1000.00	899	41.24- 81.24	61.24
Average of Peak Amounts =					917		

7 Aroclor-1260					CAS #: 11096-82-5		
3.703	3.704	-0.001	18321700	1000.00	1000	80.00- 120.00	100.00
3.866	3.866	0.000	26879372	1000.00	1000	126.71- 166.71	146.71
4.028	4.028	0.000	28782010	1000.00	1020	137.09- 177.09	157.09
4.096	4.096	0.000	16236254	1000.00	1000	68.62- 108.62	88.62
4.239	4.239	0.000	16861765	1000.00	1000	72.03- 112.03	92.03
Average of Peak Amounts =					1e+03		

Data File: /chem/ecdia.i/031810.b/046f4601.d

Date: 18-MAR-2010 14:27

Client ID: AR166005

Sample Info: IMR100222-60 05

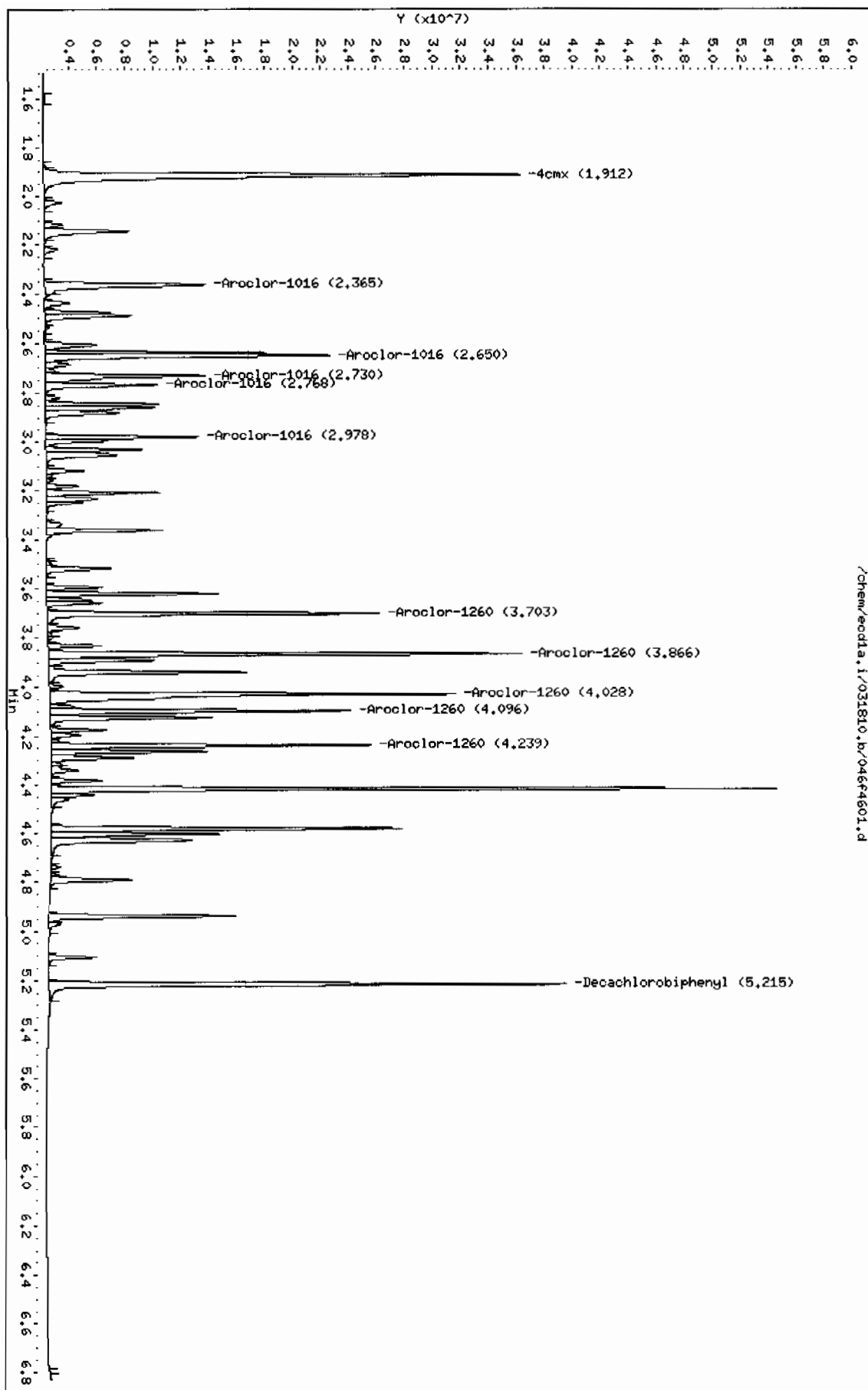
Column phase: CLP1

Instrument: ecdia.i

Operator: YSI

Column diameter: 0.25

/chem/ecdia.i/031810.b/046f4601.d



Data File: /chem/ecdl1a.i/031810.b/046b4601.d
Report Date: 18-Mar-2010 14:50

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/046b4601.d

Lab Smp Id: WAR100222-60 05

Client Smp ID: AR166005

Inj Date : 18-MAR-2010 14:27

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100222-60 05

Misc Info :

Comment :

Method : /chem/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m

Meth Date : 18-Mar-2010 14:49 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 46

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====

\$ 11 4cmx					CAS #: 877-09-8			
2.270	2.269	0.001	26443234	100.000	101	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.911	5.912	-0.001	18559060	100.000	99.2	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
3.164	3.164	0.000	11940760	1000.00	949	80.00- 120.00	100.00 (M)	
3.247	3.247	0.000	7844233	1000.00	908	45.69- 85.69	65.69	
3.310	3.310	0.000	4871425	1000.00	921	20.80- 60.80	40.80	
3.538	3.537	0.001	6412708	1000.00	930	31.43- 71.43	53.70	
3.614	3.613	0.001	5925083	1000.00	922	38.24- 78.24	60.27	
Average of Peak Amounts =					926			

7 Aroclor-1260					CAS #: 11096-82-5			
4.304	4.304	0.000	12921264	1000.00	988	80.00- 120.00	100.00	
4.428	4.428	0.000	15764108	1000.00	1010	102.00- 142.00	122.00	
4.694	4.694	0.000	11847441	1000.00	996	71.69- 111.69	91.69	
4.867	4.867	0.000	12291761	1000.00	1000	75.13- 115.13	95.13	
5.014	5.014	0.000	27187092	1000.00	1030	190.41- 230.41	210.41	
Average of Peak Amounts =					1.01e+03			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdia.i/031810.b/046b4601.d

Date: 18-MAR-2010 14:27

Client ID: AR166005

Sample Info: MAR100222-60 05

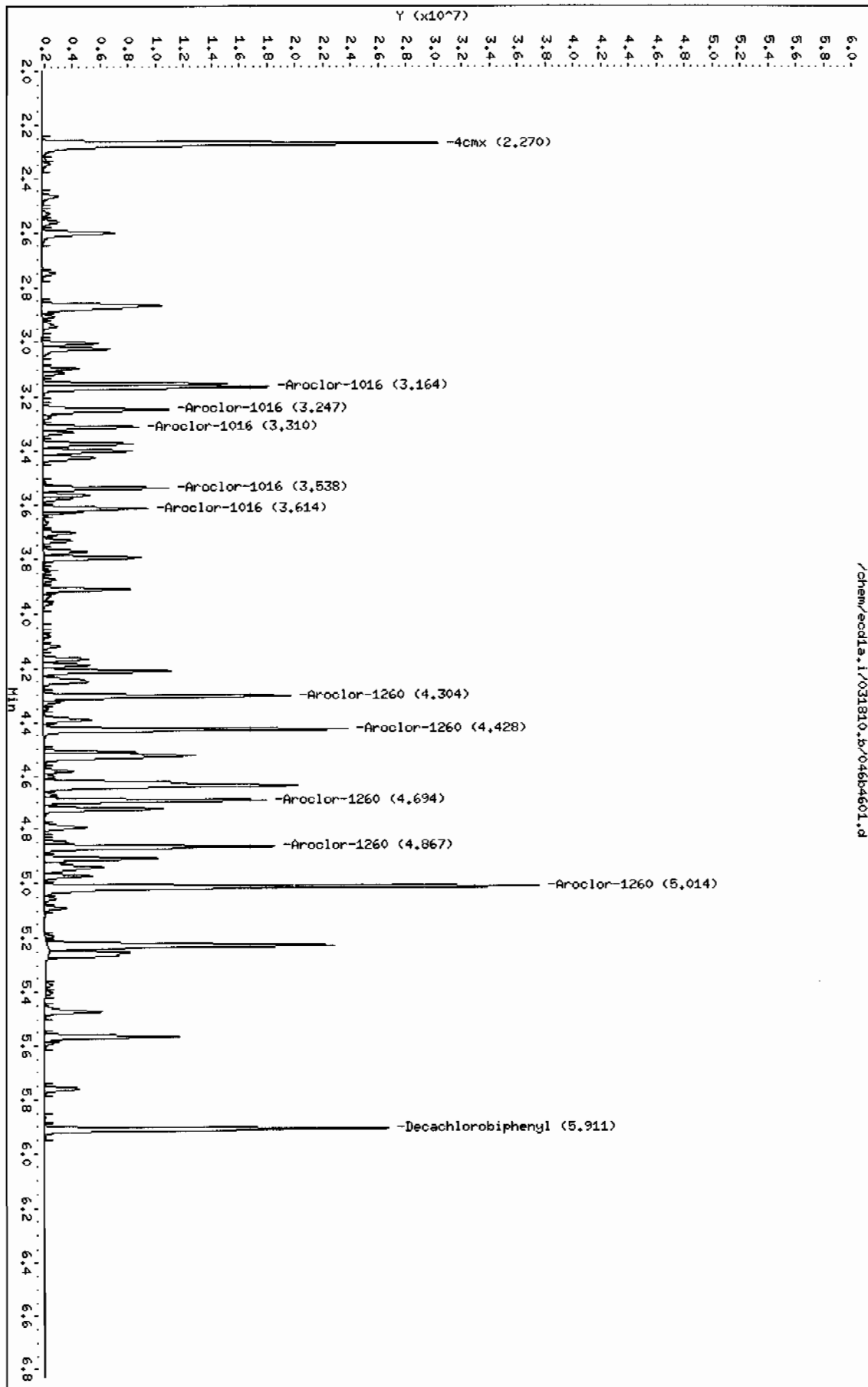
Column Phase: CLP2

Instrument: ecdia.i

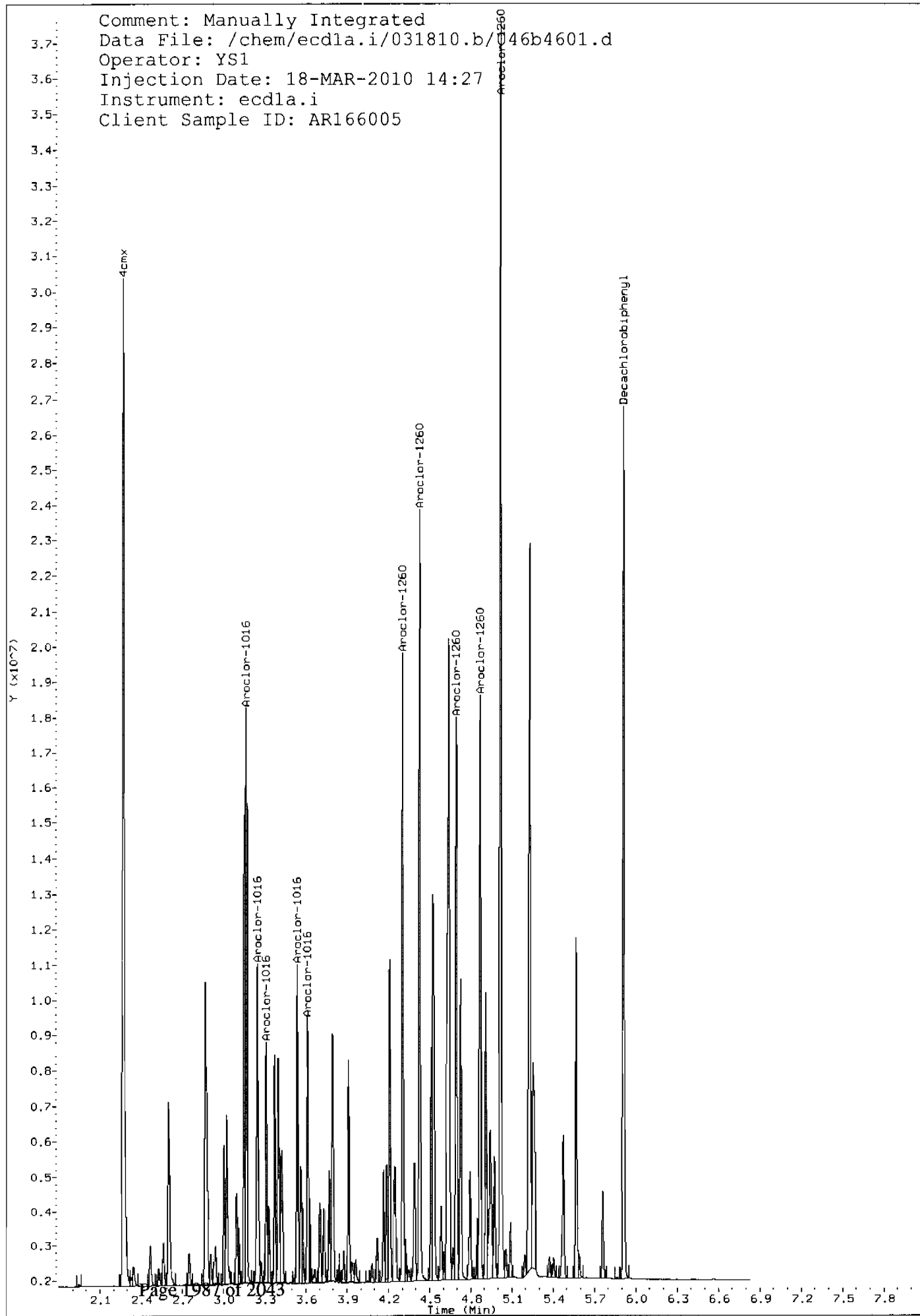
Operator: YSL

Column diameter: 0.25

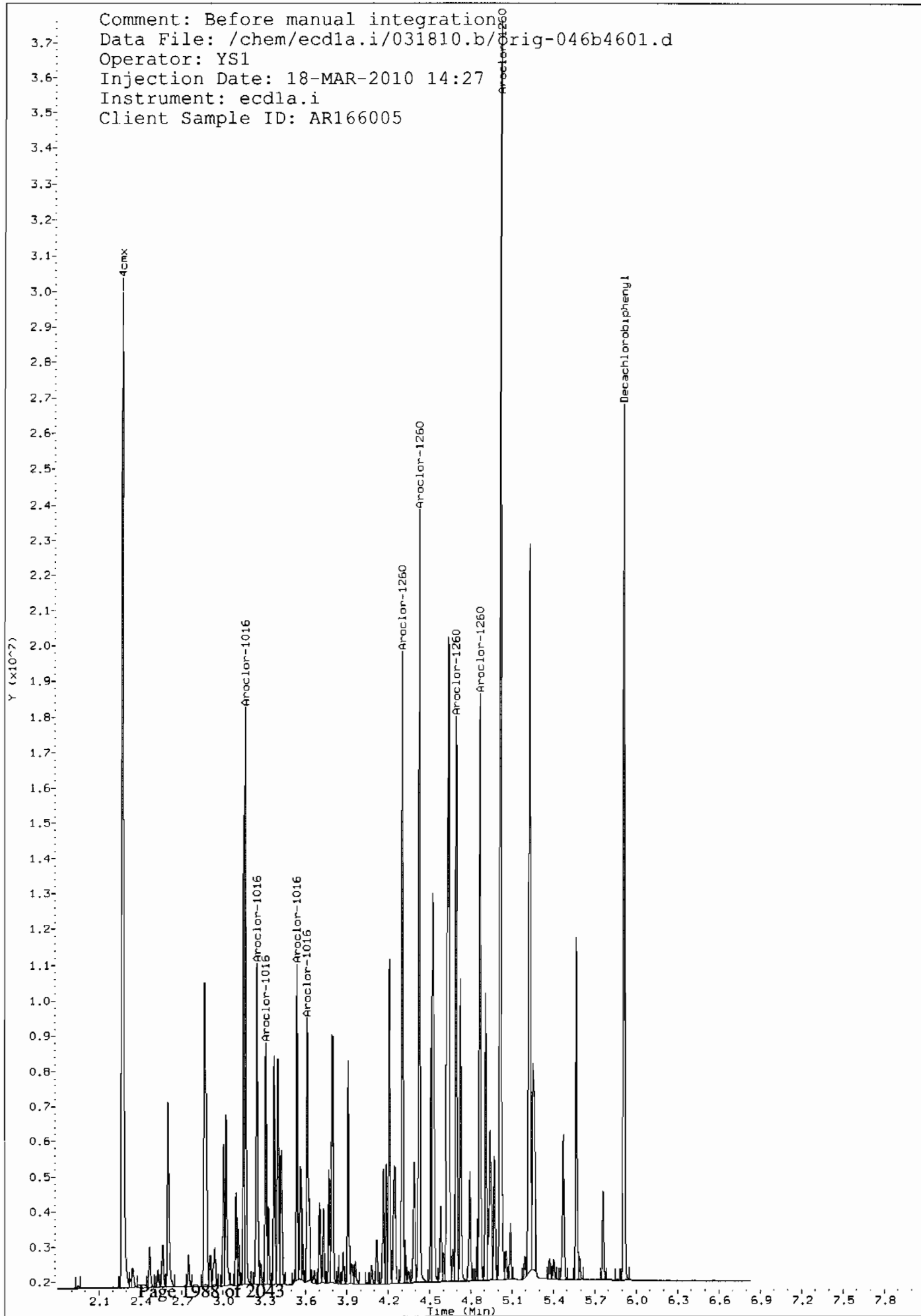
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Comment: Manually Integrated
Data File: /chem/ecdl1a.i/031810.b/46b4601.d
Operator: YS1
Injection Date: 18-MAR-2010 14:27
Instrument: ecd1a.i
Client Sample ID: AR166005



Comment: Before manual integration
Data File: /chem/ecdl1a.i/031810.b/Orig-046b4601.d
Operator: YS1
Injection Date: 18-MAR-2010 14:27
Instrument: ecd1a.i
Client Sample ID: AR166005



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/056f5601.d

Lab Smp Id: WAR100222-60 06

Client Smp ID: AR166006

Inj Date : 18-MAR-2010 16:29

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100222-60 06

Misc Info :

Comment :

Method : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m

Meth Date : 19-Mar-2010 06:21 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 56

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1pl

AMOUNTS

				CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)		TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8				
1.912	1.910	0.002	39764732	100.000	102	80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3				
5.215	5.215	0.000	27839407	100.000	93.8	80.00-	120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2				
2.364	2.364	0.000	13710960	1000.00	903	80.00-	120.00	100.00	
2.650	2.649	0.001	17568416	1000.00	928	108.13-	148.13	128.13	
2.730	2.730	0.000	11334752	1000.00	911	62.67-	102.67	82.67	
2.768	2.768	0.000	6854310	1000.00	933	29.99-	69.99	49.99	
2.978	2.978	0.000	8756136	1000.00	920	43.86-	83.86	63.86	
Average of Peak Amounts =					919				

7 Aroclor-1260					CAS #: 11096-82-5				
3.703	3.704	-0.001	18460079	1000.00	1010	80.00-	120.00	100.00	
3.866	3.866	0.000	27124900	1000.00	1010	126.94-	166.94	146.94	
4.028	4.028	0.000	28928920	1000.00	1020	136.71-	176.71	156.71	
4.096	4.096	0.000	16361434	1000.00	1010	68.63-	108.63	88.63	
4.238	4.239	-0.001	16859797	1000.00	1000	71.33-	111.33	91.33	
Average of Peak Amounts =					1.01e+03				

Data File: /chem/eod1a.i/031810.b/056f5601.d

Date: 18-MAR-2010 16:29

Client ID: AR16006

Sample Info: IWR100222-60 06

Column phase: CLP1

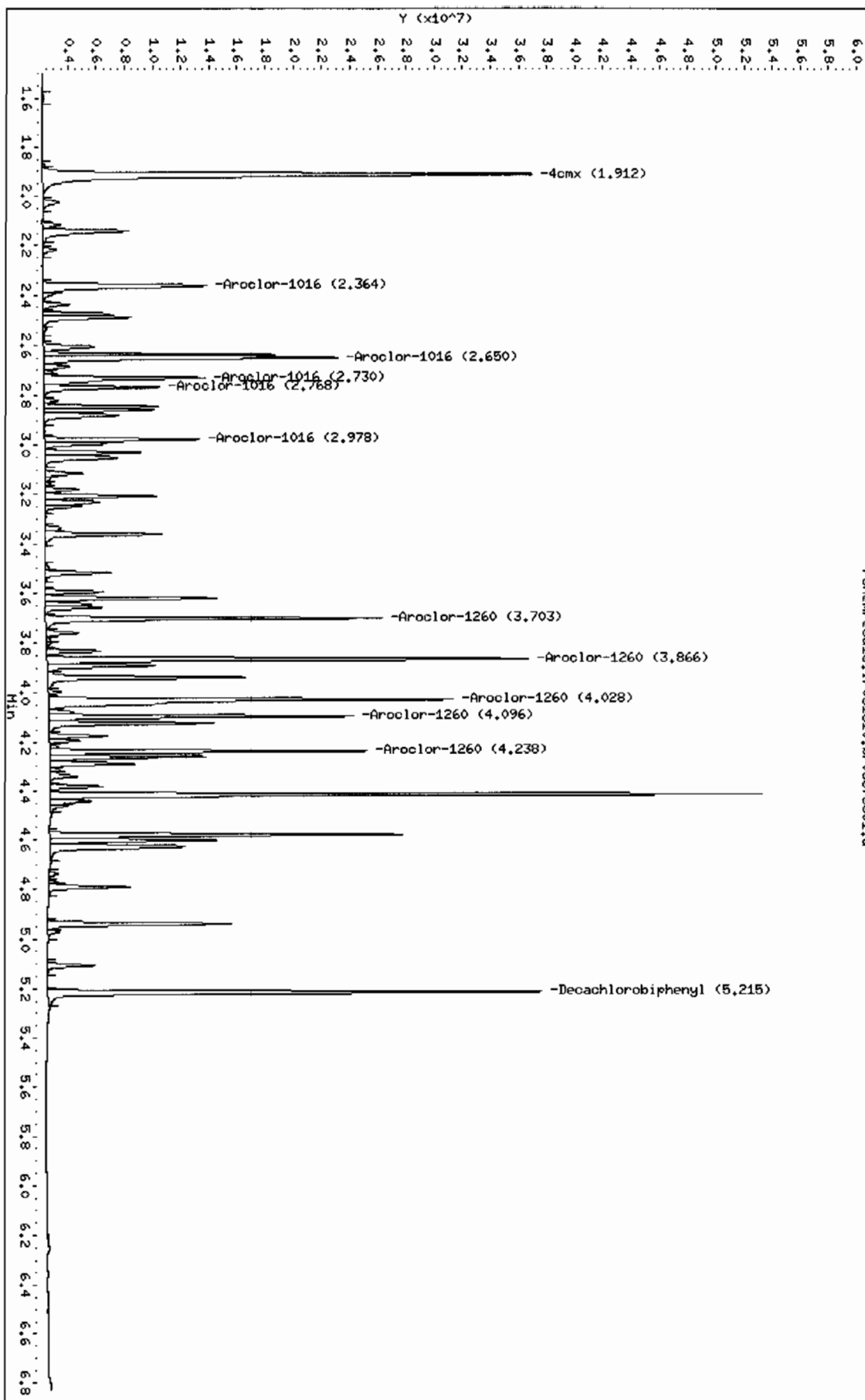
Page 1

Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25

/chem/eod1a.i/031810.b/056f5601.d



Data File: /chem/ecdl1a.i/031810.b/056b5601.d
Report Date: 19-Mar-2010 08:34

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/056b5601.d

Lab Smp Id: WAR100222-60 06

Client Smp ID: AR166006

Inj Date : 18-MAR-2010 16:29

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100222-60 06

Misc Info :

Comment :

Method : /chem/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m

Meth Date : 19-Mar-2010 08:33 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 56

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		
2.269	2.269	0.000	26539506 100.000	101	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.911	5.912	-0.001	17918168 100.000	95.7	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2		
3.164	3.164	0.000	12232759 1000.00	972	80.00- 120.00	100.00 (M)	
3.247	3.247	0.000	7862456 1000.00	911	44.27- 84.27	64.27	
3.311	3.310	0.001	4872811 1000.00	922	19.83- 59.83	39.83	
3.538	3.537	0.001	6384983 1000.00	926	30.31- 70.31	52.20	
3.613	3.613	0.000	6027511 1000.00	938	36.61- 76.61	58.40	
Average of Peak Amounts =				934			

7 Aroclor-1260					CAS #: 11096-82-5		
4.303	4.304	-0.001	12771408 1000.00	976	80.00- 120.00	100.00	
4.428	4.428	0.000	15513097 1000.00	998	101.47- 141.47	121.47	
4.694	4.694	0.000	11656132 1000.00	980	71.27- 111.27	91.27	
4.867	4.867	0.000	12110697 1000.00	985	74.83- 114.83	94.83	
5.014	5.014	0.000	26724302 1000.00	1010	189.25- 229.25	209.25	
Average of Peak Amounts =				990			

Data File: /chem/ecdl1a.i/031810.b/056b5601.d
Report Date: 19-Mar-2010 08:34

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QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/031810.b/056b5601.d

Date: 18-Mar-2010 16:29

Client ID: ARL66006

Sample Info: 1MAR100222-60 06

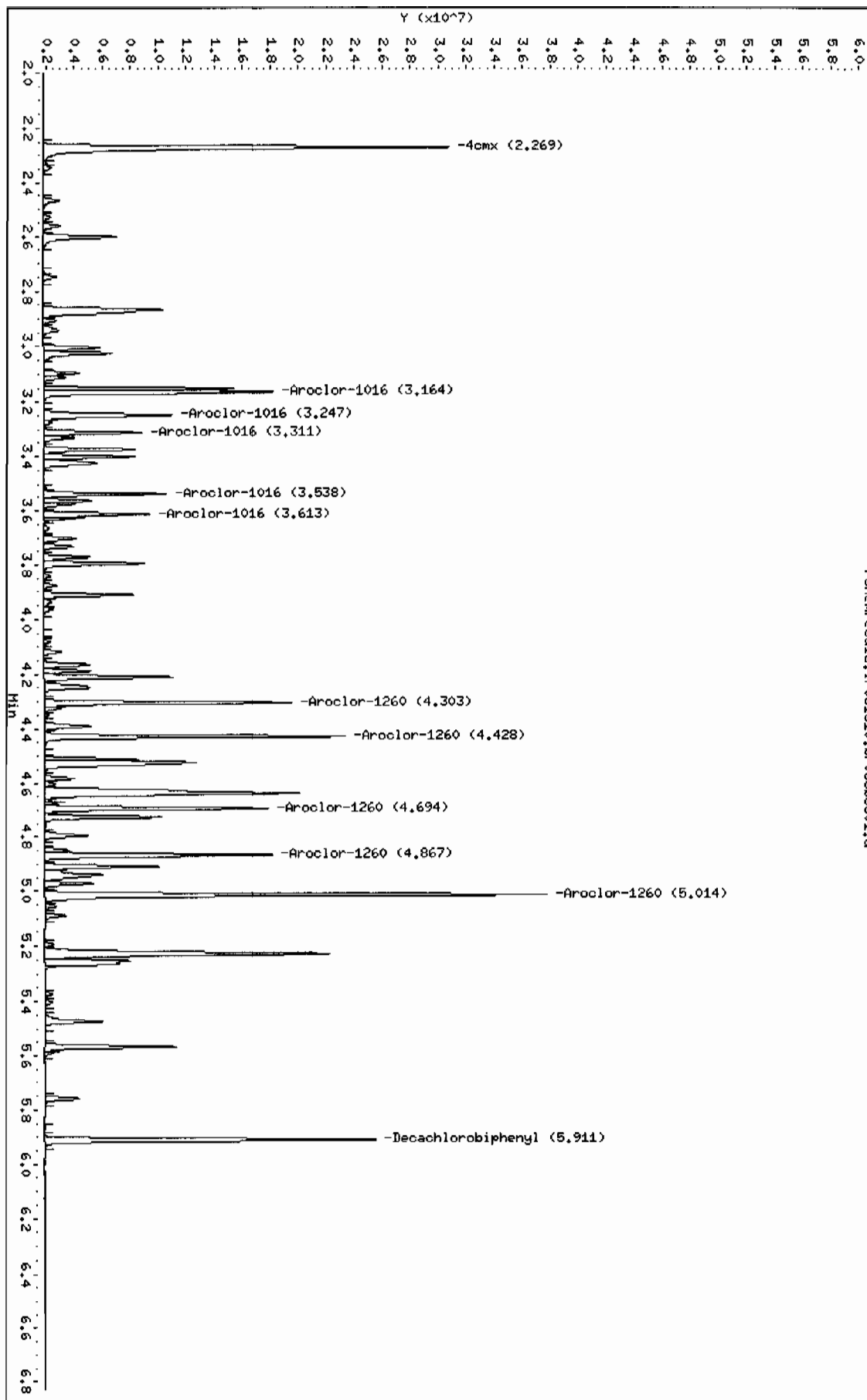
Column phase: CLP2

Instrument: eod1a.i

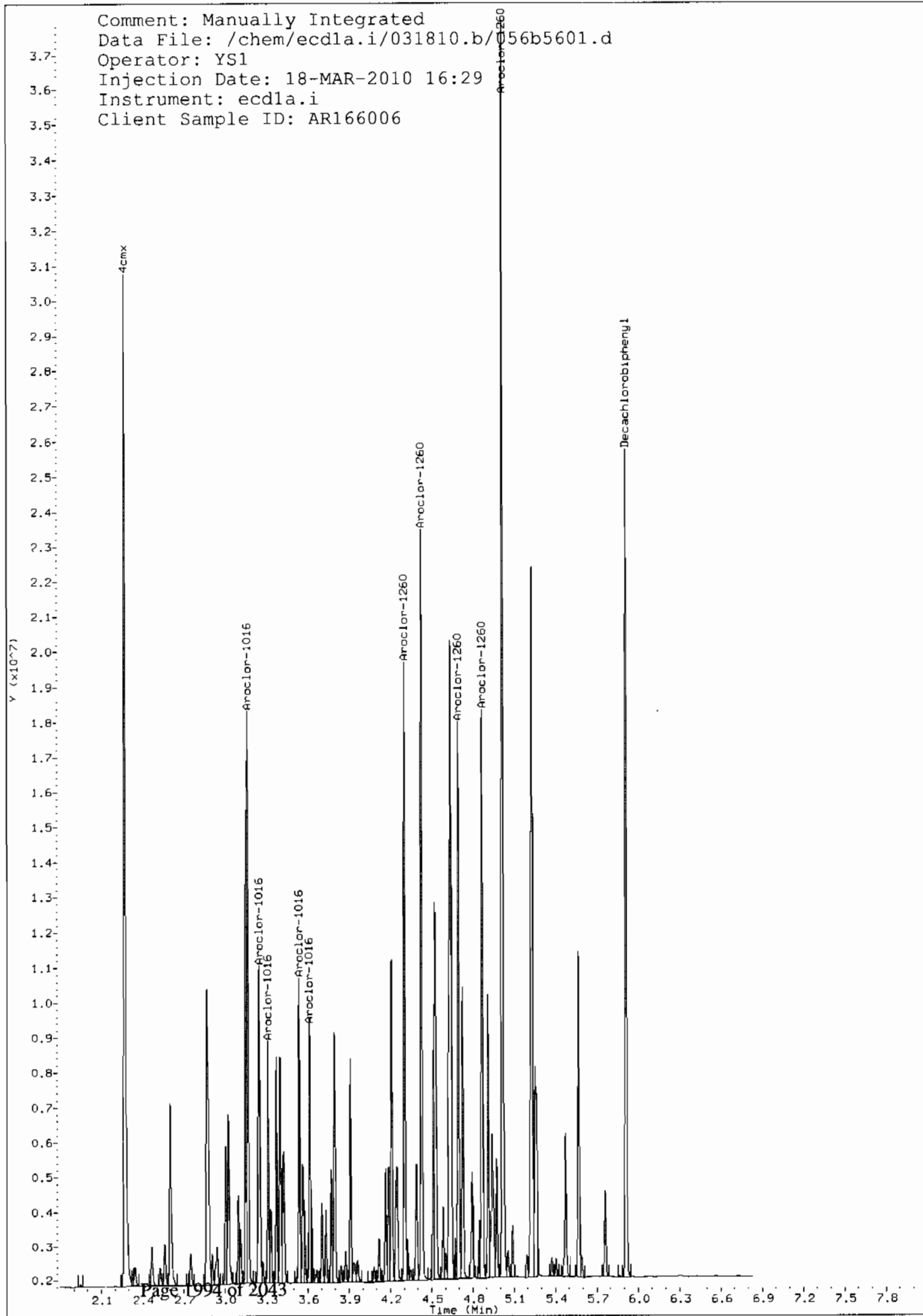
Operator: YSL

Column diameter: 0.25

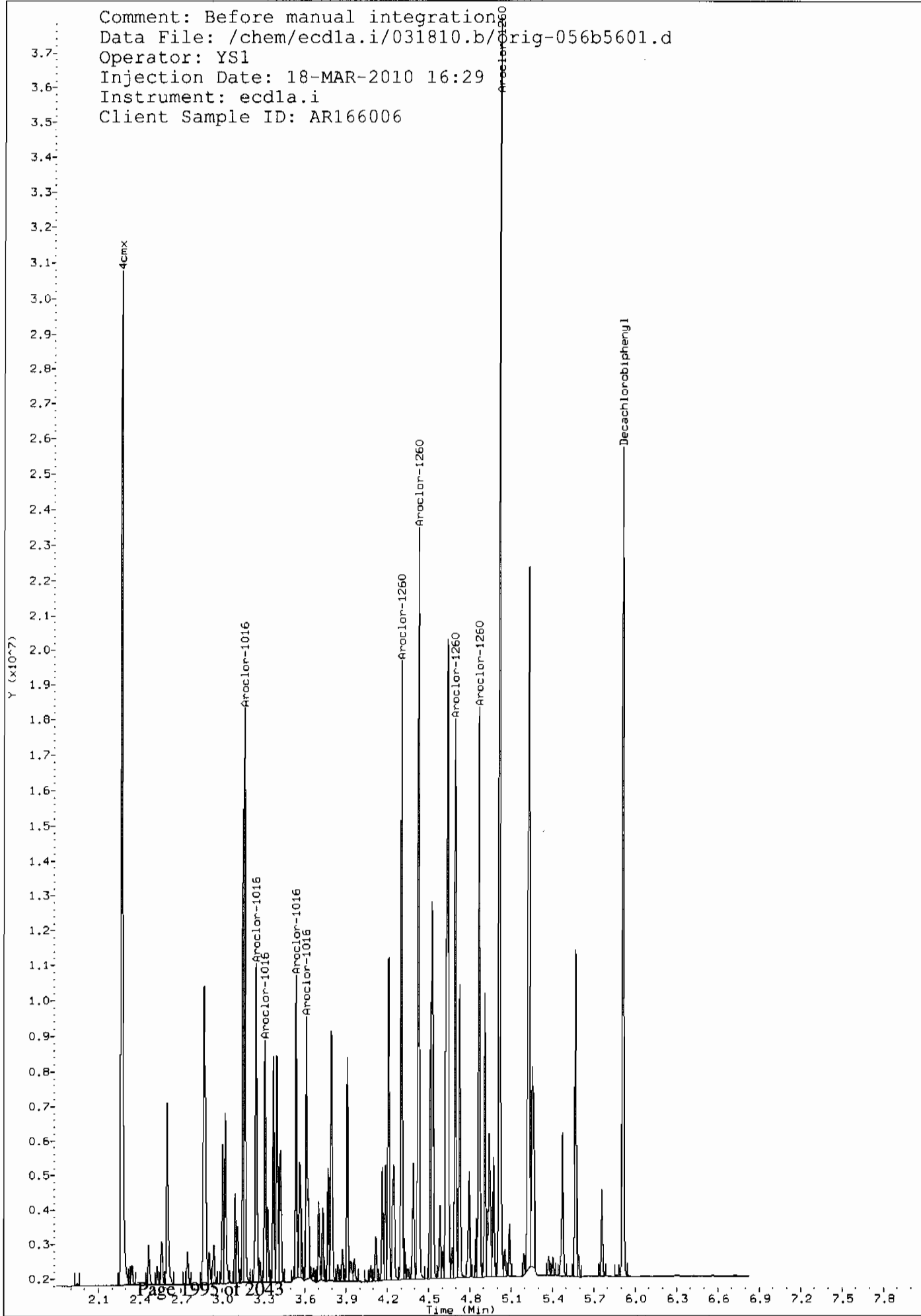
/chem/eod1a.i/031810.b/056b5601.d



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/031810.b/56b5601.d
Operator: YS1
Injection Date: 18-MAR-2010 16:29
Instrument: ecd1a.i
Client Sample ID: AR166006



Comment: Before manual integration
Data File: /chem/ecdla.i/031810.b/Orig-056b5601.d
Operator: YS1
Injection Date: 18-MAR-2010 16:29
Instrument: ecdla.i
Client Sample ID: AR166006



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.: 10-2150

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	03/11/10	1446	
02	ZZZZZ	ZZZZZ	03/11/10	1456	
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	
12	AR166002	WAR100311-02	03/11/10	1641	
13	AR166003	WAR100311-03	03/11/10	1652	
14	AR166004	WAR100311-04	03/11/10	1702	
15	AR166005	IAR100311-01	03/11/10	1713	
16	AR166001	WAR100222-60	03/11/10	1724	
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.: 10-2150
 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.: 10-2150

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	SI RT #	DCB RT #
01	PIBLK01	WAR100219-99	03/11/10	1446	
02	ZZZZZ	ZZZZZ	03/11/10	1456	
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	
12	AR166002	WAR100311-02	03/11/10	1641	
13	AR166003	WAR100311-03	03/11/10	1652	
14	AR166004	WAR100311-04	03/11/10	1702	
15	AR166005	IAR100311-01	03/11/10	1713	
16	AR166001	WAR100222-60	03/11/10	1724	
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.: 10-2150

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.: 10-2150

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	03/18/10	0604	
02	AR166001	WAR100222-60	03/18/10	0614	
03	AR125401	WAR100219-54	03/18/10	0625	
04	AR124201	WAR100219-42	03/18/10	0635	
05	AR124801	WAR100223-48	03/18/10	0644	
06	AR126801	WAR100107-68	03/18/10	0655	
07	AR123201	WAR100104-32	03/18/10	0705	
08	AR122101	WAR100104-21	03/18/10	0716	
09	AR126201	WAR100104-62	03/18/10	0726	
10	DDTANALOGSTD	WAR091219-DD	03/18/10	0737	
11	PIBLK02	WAR100219-99	03/18/10	0747	
12	ZZZZZ	ZZZZZ	03/18/10	0758	
13	ZZZZZ	ZZZZZ	03/18/10	0810	
14	ZZZZZ	ZZZZZ	03/18/10	0823	
15	ZZZZZ	ZZZZZ	03/18/10	0836	
16	ZZZZZ	ZZZZZ	03/18/10	0848	
17	ZZZZZ	ZZZZZ	03/18/10	0859	
18	ZZZZZ	ZZZZZ	03/18/10	0909	
19	ZZZZZ	ZZZZZ	03/18/10	0920	
20	ZZZZZ	ZZZZZ	03/18/10	0931	
21	ZZZZZ	ZZZZZ	03/18/10	0943	
22	AR166002	WAR100222-60	03/18/10	0956	
23	AR166003	WAR100222-60	03/18/10	1006	
24	ZZZZZ	ZZZZZ	03/18/10	1017	
25	ZZZZZ	ZZZZZ	03/18/10	1027	
26	ZZZZZ	ZZZZZ	03/18/10	1038	
27	ZZZZZ	ZZZZZ	03/18/10	1048	
28	ZZZZZ	ZZZZZ	03/18/10	1059	
29	ZZZZZ	ZZZZZ	03/18/10	1109	
30	ZZZZZ	ZZZZZ	03/18/10	1120	
31	ZZZZZ	ZZZZZ	03/18/10	1130	
32	ZZZZZ	ZZZZZ	03/18/10	1141	

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.: 10-2150

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	03/18/10	1154	1.91	5.22	
02	AR166004	WAR100222-60	03/18/10	1206	5.22	
03	PIBLK03	WAR100219-99	03/18/10	1217	5.22	
04	ZZZZZ	03/18/10	1227	1.91	5.22	
05	PBLK01	1202072978	03/18/10	1238	5.22	
06	PBLK01LCS	1202072979	03/18/10	1248	5.22	
07	ZZZZZ	03/18/10	1259	1.91	5.22	
08	ZZZZZ	03/18/10	1311	1.91	5.22	
09	ZZZZZ	03/18/10	1324	1.91	5.21	
10	ZZZZZ	03/18/10	1337	1.91	5.22	
11	ZZZZZ	03/18/10	1349	1.91	5.22	
12	ZZZZZ	03/18/10	1402	1.91	5.21	
13	ZZZZZ	03/18/10	1415	1.91	5.22	
14	AR166005	WAR100222-60	03/18/10	1427	5.22	
15	PIBLK04	WAR100219-99	03/18/10	1438	5.22	
16	RE36-10-7415	248370001	03/18/10	1448	5.22	
17	RE36-10-7420	248370002	03/18/10	1501	5.22	
18	RE36-10-7418	248370003	03/18/10	1513	5.21	
19	RE36-10-7417	248370004	03/18/10	1526	5.21	
20	RE36-10-7419	248370005	03/18/10	1539	5.21	
21	RE36-10-7416	248370006	03/18/10	1551	5.21	
22	ZZZZZ	03/18/10	1604	1.91	5.21	
23	ZZZZZ	03/18/10	1616	1.91	5.21	
24	AR166006	WAR100222-60	03/18/10	1629	5.22	
25	PIBLK05	WAR100219-99	03/18/10	1642	5.21	
26	ZZZZZ	03/18/10	1654	1.91	5.21	
27	ZZZZZ	03/18/10	1707	1.91	5.21	
28	ZZZZZ	03/18/10	1720	1.91	5.21	
29	ZZZZZ	03/18/10	1732	1.91	5.21	
30	ZZZZZ	03/18/10	1745	1.91	5.22	
31	AR166007	WAR100222-60	03/18/10	1757	5.22	
32	AR166006	WAR100219-99	03/18/10	1810	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.: 10-2150

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	03/18/10	0604	
02	AR166001	WAR100222-60	03/18/10	0614	
03	AR125401	WAR100219-54	03/18/10	0625	
04	AR124201	WAR100219-42	03/18/10	0635	
05	AR124801	WAR100223-48	03/18/10	0644	
06	AR126801	WAR100107-68	03/18/10	0655	
07	AR123201	WAR100104-32	03/18/10	0705	
08	AR122101	WAR100104-21	03/18/10	0716	
09	AR126201	WAR100104-62	03/18/10	0726	
10	DDTANALOGSTD	WAR091219-DD	03/18/10	0737	
11	PIBLK02	WAR100219-99	03/18/10	0747	
12	ZZZZZ	ZZZZZ	03/18/10	0758	
13	ZZZZZ	ZZZZZ	03/18/10	0810	
14	ZZZZZ	ZZZZZ	03/18/10	0823	
15	ZZZZZ	ZZZZZ	03/18/10	0836	
16	ZZZZZ	ZZZZZ	03/18/10	0848	
17	ZZZZZ	ZZZZZ	03/18/10	0859	
18	ZZZZZ	ZZZZZ	03/18/10	0909	
19	ZZZZZ	ZZZZZ	03/18/10	0920	
20	ZZZZZ	ZZZZZ	03/18/10	0931	
21	ZZZZZ	ZZZZZ	03/18/10	0943	
22	AR166002	WAR100222-60	03/18/10	0956	
23	AR166003	WAR100222-60	03/18/10	1006	
24	ZZZZZ	ZZZZZ	03/18/10	1017	
25	ZZZZZ	ZZZZZ	03/18/10	1027	
26	ZZZZZ	ZZZZZ	03/18/10	1038	
27	ZZZZZ	ZZZZZ	03/18/10	1048	
28	ZZZZZ	ZZZZZ	03/18/10	1059	
29	ZZZZZ	ZZZZZ	03/18/10	1109	
30	ZZZZZ	ZZZZZ	03/18/10	1120	
31	ZZZZZ	ZZZZZ	03/18/10	1130	
32	ZZZZZ	ZZZZZ	03/18/10	1141	

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.: 10-2150

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	03/18/10	1154	2.27	5.91	
02	AR166004	WAR100222-60	03/18/10	1206	5.91	
03	PIBLK03	WAR100219-99	03/18/10	1217	5.91	
04	ZZZZZ	03/18/10	1227	2.27	5.91	
05	PBLK01	1202072978	03/18/10	1238	5.91	
06	PBLK01LCS	1202072979	03/18/10	1248	5.91	
07	ZZZZZ	03/18/10	1259	2.27	5.91	
08	ZZZZZ	03/18/10	1311	2.27	5.91	
09	ZZZZZ	03/18/10	1324	2.27	5.91	
10	ZZZZZ	03/18/10	1337	2.27	5.91	
11	ZZZZZ	03/18/10	1349	2.27	5.91	
12	ZZZZZ	03/18/10	1402	2.27	5.91	
13	ZZZZZ	03/18/10	1415	2.27	5.91	
14	AR166005	WAR100222-60	03/18/10	1427	5.91	
15	PIBLK04	WAR100219-99	03/18/10	1438	5.91	
16	RE36-10-7415	248370001	03/18/10	1448	5.91	
17	RE36-10-7420	248370002	03/18/10	1501	5.91	
18	RE36-10-7418	248370003	03/18/10	1513	5.91	
19	RE36-10-7417	248370004	03/18/10	1526	5.91	
20	RE36-10-7419	248370005	03/18/10	1539	5.91	
21	RE36-10-7416	248370006	03/18/10	1551	5.91	
22	ZZZZZ	03/18/10	1604	2.27	5.91	
23	ZZZZZ	03/18/10	1616	2.27	5.91	
24	AR166006	WAR100222-60	03/18/10	1629	5.91	
25	PIBLK05	WAR100219-99	03/18/10	1642	5.91	
26	ZZZZZ	03/18/10	1654	2.27	5.91	
27	ZZZZZ	03/18/10	1707	2.27	5.91	
28	ZZZZZ	03/18/10	1720	2.27	5.91	
29	ZZZZZ	03/18/10	1732	2.27	5.91	
30	ZZZZZ	03/18/10	1745	2.27	5.91	
31	AR166007	WAR100222-60	03/18/10	1757	5.91	
32	PIBLK06	WAR100219-99	03/18/10	1810	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: 10-2150

Client ID: LCS for batch 965974

Lab Sample ID: 1202072979

Data File: 038f3801.d

Data File: 038b3801.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 18-MAR-10 12:48

Analyzed: 18-MAR-10 12:48

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							1.28
Column 1	1	2.36	2.33 - 2.39	23.5		ug/kg	
	2	2.65	2.62 - 2.68	23.1		ug/kg	
	3	2.73	2.7 - 2.76	22.8		ug/kg	
	4	2.77	2.74 - 2.8	23		ug/kg	
	5	2.98	2.95 - 3.01	23.2		ug/kg	
					23.1		
Column 2	1	3.17	3.13 - 3.19	23.6		ug/kg	
	2	3.25	3.22 - 3.28	23.5		ug/kg	
	3	3.31	3.28 - 3.34	22.9		ug/kg	
	4	3.54	3.51 - 3.57	23.7		ug/kg	
	5	3.61	3.58 - 3.64	23.4		ug/kg	
					23.4		
Aroclor-1260							.866
Column 1	1	3.71	3.67 - 3.73	25.8		ug/kg	
	2	3.87	3.84 - 3.9	26		ug/kg	
	3	4.03	4 - 4.06	26.4		ug/kg	
	4	4.1	4.07 - 4.13	26.3		ug/kg	
	5	4.24	4.21 - 4.27	26.3		ug/kg	
					26.1		
Column 2	1	4.31	4.27 - 4.33	25.4		ug/kg	
	2	4.43	4.4 - 4.46	26.2		ug/kg	
	3	4.7	4.66 - 4.72	26.2		ug/kg	
	4	4.87	4.84 - 4.9	26.4		ug/kg	
	5	5.02	4.98 - 5.04	27.6		ug/kg	
					26.4		

Identification Summary

Page 1 of 1

SDG Number: 10-2150

Client ID: RE36-10-7415

Lab Sample ID: 248370001

Data File: 048f4801.d

Data File: 048b4801.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 18-MAR-10 14:48

Analyzed: 18-MAR-10 14:48

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							19.7
Column 1	1	3.21	3.18 - 3.24	5.3		ug/kg	
	2	3.36	3.33 - 3.39	3.28		ug/kg	
	3	3.6	3.57 - 3.63	4.58		ug/kg	
	4	3.76	3.73 - 3.79	4.06		ug/kg	
	5	3.87	3.84 - 3.9	4.88		ug/kg	
					4.42		
Column 2	1	3.37	3.34 - 3.4	4.02		ug/kg	
	2	3.8	3.76 - 3.82	7.18		ug/kg	
	3	3.91	3.88 - 3.94	5.93		ug/kg	
	4	4.19	4.16 - 4.22	5.13		ug/kg	
	5	4.32	4.29 - 4.35	4.66		ug/kg	
					5.38		

Identification Summary

Page 1 of 1

SDG Number: 10-2150

Client ID: RE36-10-7417

Lab Sample ID: 248370004

Data File: 051f5101.d

Data File: 051b5101.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 18-MAR-10 15:26

Analyzed: 18-MAR-10 15:26

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							27.2
Column 1	1	3.21	3.18 – 3.24	3.43		ug/kg	
	2	3.36	3.33 – 3.39	3.64		ug/kg	
	3	3.59	3.57 – 3.63	3.25		ug/kg	
	4	3.76	3.73 – 3.79	4.92		ug/kg	
	5	3.86	3.84 – 3.9	6.49		ug/kg	
					4.35		
Column 2	1	3.37	3.34 – 3.4	2.19		ug/kg	
	2	3.79	3.76 – 3.82	3.38		ug/kg	
	3	3.91	3.88 – 3.94	4.45		ug/kg	
	4	4.19	4.16 – 4.22	3.43		ug/kg	
	5	4.32	4.29 – 4.35	3.09		ug/kg	
					3.31		

Identification Summary

Page 1 of 1

SDG Number: 10-2150

Client ID: RE36-10-7419

Lab Sample ID: 248370005

Data File: 052f5201.d

Data File: 052b5201.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 18-MAR-10 15:39

Analyzed: 18-MAR-10 15:39

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							49.8
Column 1	1	3.21	3.18 - 3.24	2.19		ug/kg	
	2	3.36	3.33 - 3.39	2.59		ug/kg	
	3	3.59	3.57 - 3.63	3.49		ug/kg	
	4	3.75	3.73 - 3.79	6.92		ug/kg	
	5	3.86	3.84 - 3.9	8.96		ug/kg	
					4.83		
Column 2	1	3.37	3.34 - 3.4	1.06		ug/kg	
	2	3.79	3.76 - 3.82	2.61		ug/kg	
	3	3.91	3.88 - 3.94	3.5		ug/kg	
	4	4.19	4.16 - 4.22	4.29		ug/kg	
	5	4.32	4.29 - 4.35	3.06		ug/kg	
					2.91		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-2150		Matrix: SOIL
Lab Sample ID: 1202072978		
Client Sample: QC for batch 965974	Client: LANL010	Project: QC
Client ID: MB for batch 965974	Method: SW846 8082	SOP Ref: GL-OA-E-040
Batch ID: 965975	Inst: ECD1A.I	Dilution: 1
Run Date: 03/18/2010 12:38	Analyst: YS1	Inj. Vol: 1 uL
Prep Date: 03/17/2010 11:22	Aliquot: 30 g	Final Volume: 1 mL
Data File: 037f3701-L.d	Column: 1 CLP1	Level: LOW
	2 CLP2	

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/037f3701-1.d

Lab Smp Id: 1202072978

Client Smp ID: PBLK01

Inj Date : 18-MAR-2010 12:38

Operator : YS1

Inst ID: ecdla.i

Smp Info : |1202072978|1|

Misc Info : |ECD82P_1S|965975|SVA|QC A|SOIL|MB|||

Comment :

Method : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m

Meth Date : 18-Mar-2010 12:22 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 37

QC Sample: BLANK

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2150.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

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx							CAS #: 877-09-8	
1.912	1.910	0.002	57707675	148.150	4.9	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl							CAS #: 2051-24-3	
5.218	5.215	0.003	40090437	135.016	4.5	80.00- 120.00	100.00	

Data File: /chem/ecdl1.i/031810.b/037f3701-1.d

Date: 18-Mar-2010 12:38

Client ID: PBLK01

Sample Info: 1120207297811

Volume Injected (uL): 1.0

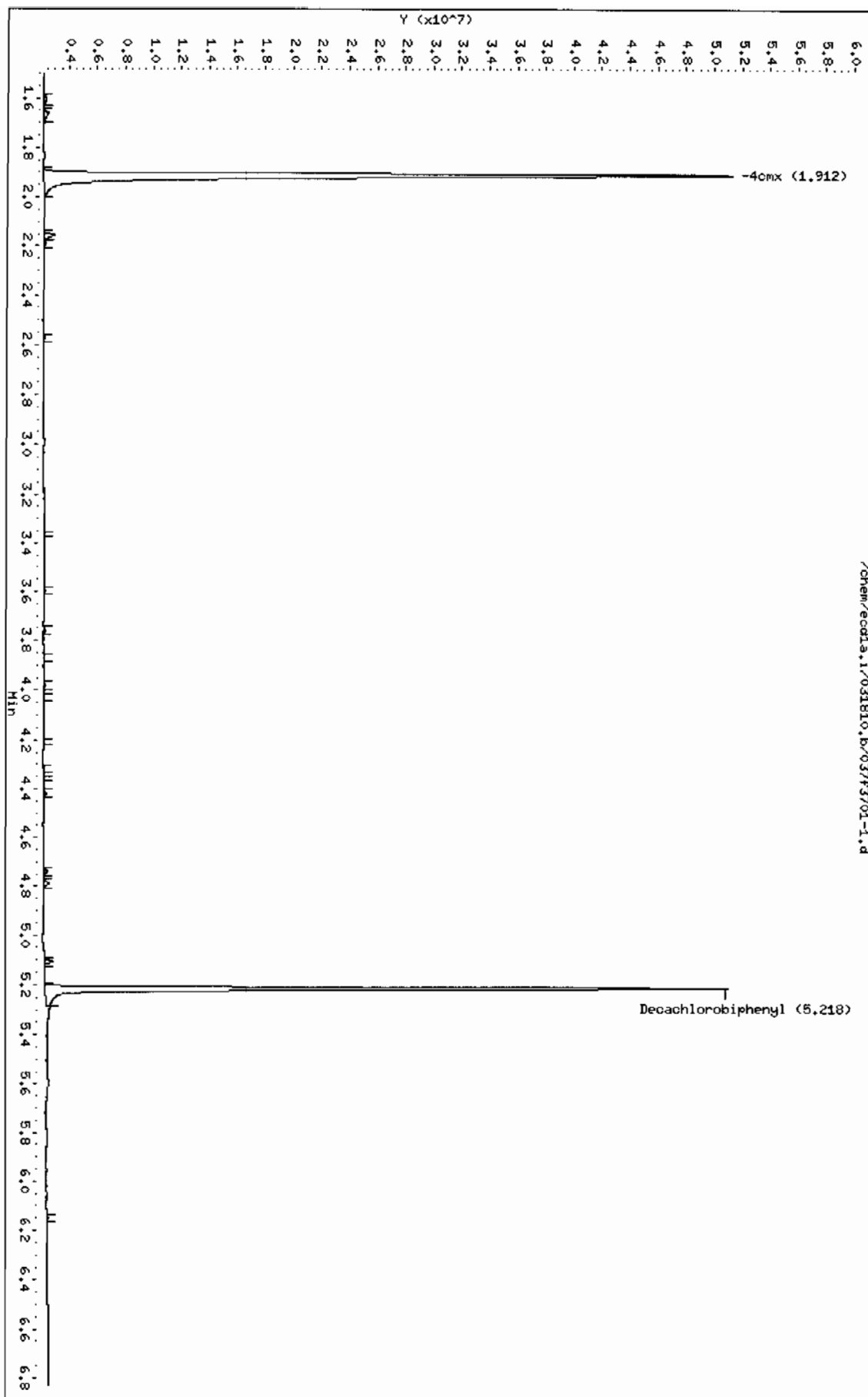
Column phase: CLP1

Instrument: ecdl1.i

Operator: YS1

Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/031810.b/037b3701-1.d
Report Date: 18-Mar-2010 14:37

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/037b3701-1.d
Lab Smp Id: 1202072978 Client Smp ID: PBLK01
Inj Date : 18-MAR-2010 12:38
Operator : YSl Inst ID: ecd1a.i
Smp Info : |1202072978|1|
Misc Info : |ECD82P_1S|965975|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m
Meth Date : 18-Mar-2010 12:22 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 37 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
		ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
---	---	---	-----	-----	-----	-----	
\$ 11 4cmx					CAS #: 877-09-8		
2.270	2.269	0.001	38897489	148.275	4.9 80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.912	5.912	0.000	29115254	155.552	5.2 80.00- 120.00	100.00	

Data File: /chem/ecdl1.i/031810.b/037b3701-1.d

Date: 18-MAR-2010 12:38

Client ID: PBLK01

Sample Info: 1120207297811

Volume Injected (uL): 1.0

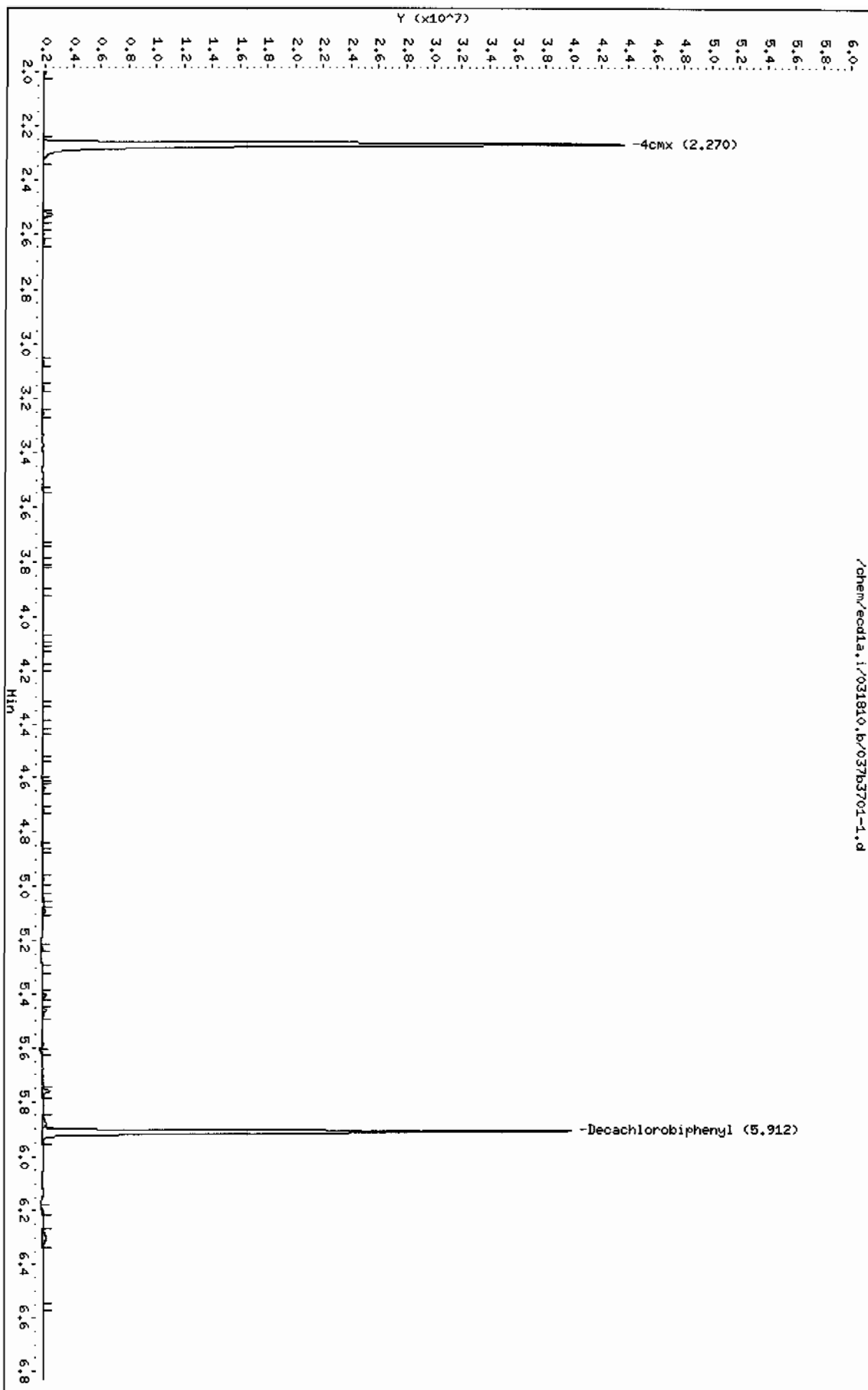
Column phase: CLP2

Page 1

Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-2150

Matrix: SOIL

Lab Sample ID: 1202072979

Client Sample: QC for batch 965974

Client: LANL010

Project: QC

Client ID: LCS for batch 965974

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 965975

Inst: ECD1A.I

Dilution: 1

Run Date: 03/18/2010 12:48

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 03/17/2010 11:22

Aliquot: 30 g

Final Volume: 1 mL

Data File: 038f3801-1.d

Column: 1 CLP1

Level: LOW

038b3801-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		23.4	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		26.4	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/038f3801-1.d
Lab Smp Id: 1202072979 Client Smp ID: PBLK01LCS
Inj Date : 18-MAR-2010 12:48
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202072979|1|
Misc Info : |ECD82P_1S|965975|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 18-Mar-2010 12:22 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 38 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2150.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

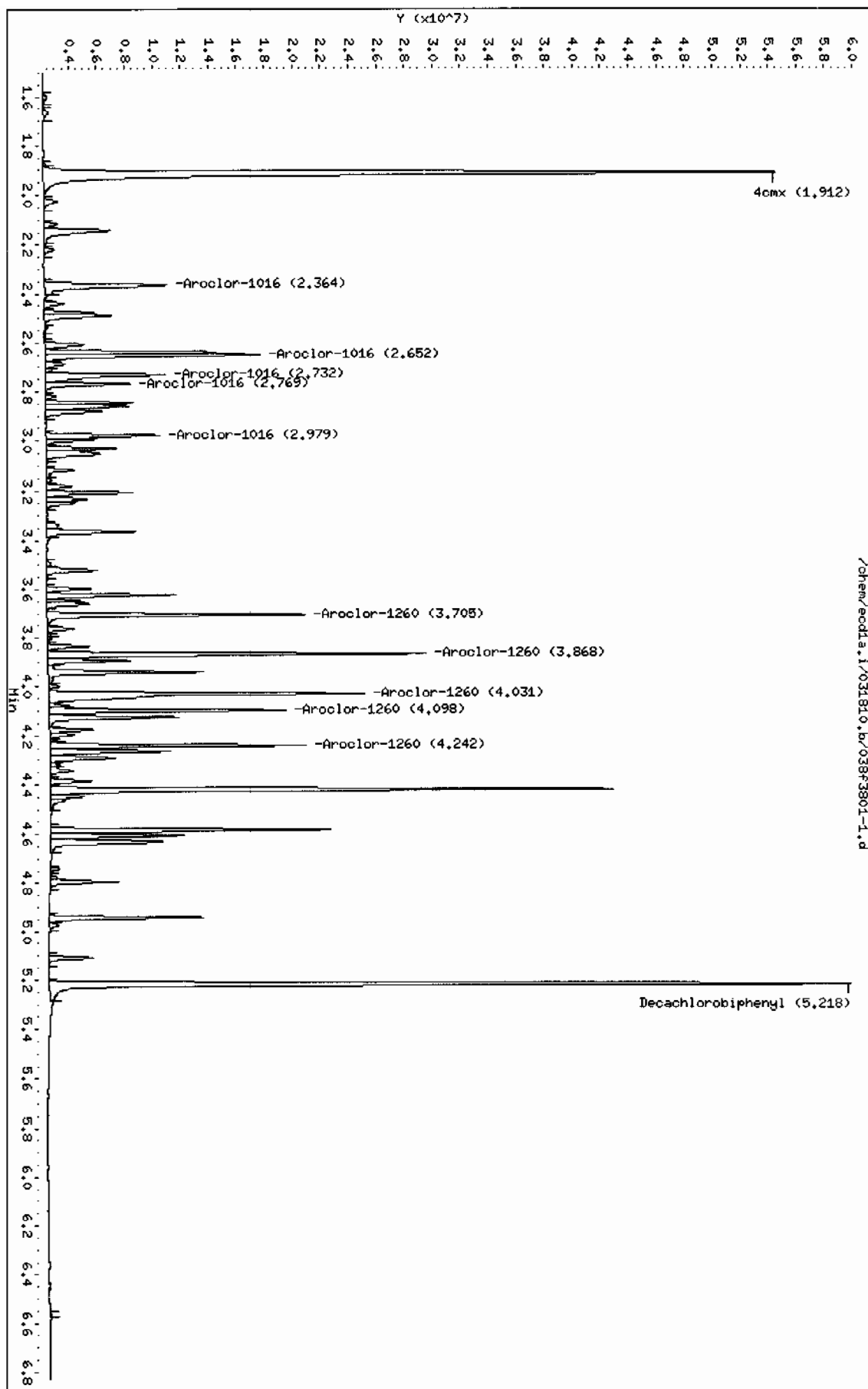
CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
CAS #: 877-09-8							
1.912	1.910	0.002	60350567	154.935	5.2 80.00- 120.00	100.00	
CAS #: 2051-24-3							
5.218	5.215	0.003	48369533	162.899	5.4 80.00- 120.00	100.00	
CAS #: 12674-11-2							
2.364	2.364	0.000	10684070	703.974	23.5 80.00- 120.00	100.00	
2.652	2.649	0.003	13142409	694.052	23.1 107.35- 147.35	123.01	
2.732	2.730	0.002	8510347	683.993	22.8 60.10- 100.10	79.65	
2.769	2.768	0.001	5060260	688.628	23.0 27.98- 67.98	47.36	

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	6625929	696.164	23.2	40.90-	80.90	62.02
Average of Peak Concentrations =					23.1			

7 Aroclor-1260					CAS #: 11096-82-5			
3.705	3.704	0.001	14162568	772.640	25.8	80.00-	120.00	100.00
3.868	3.866	0.002	20952312	779.191	26.0	126.29-	166.29	147.94
4.031	4.028	0.003	22387361	790.645	26.4	137.20-	177.20	158.07
4.098	4.096	0.002	12761720	789.814	26.3	68.33-	108.33	90.11
4.242	4.239	0.003	13266492	789.077	26.3	72.58-	112.58	93.67
Average of Peak Concentrations =					26.2			

Data File: /chem/ecdl.a.i/031810.b/038f3801-1.d
Date: 18-MAR-2010 12:48
Client ID: PBLK01LCS
Sample Info: 1120207297911
Volume Injected (uL): 1.0
Column Phase: CLP1

Instrument: ecdl.a.i
Operator: YSI
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/038b3801-1.d
 Lab Smp Id: 1202072979 Client Smp ID: PBLK01LCS
 Inj Date : 18-MAR-2010 12:48
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202072979|1|
 Misc Info : |ECD82P_1S|965975|SVA|QC A|SOIL|LCS|1|1|
 Comment :
 Method : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m
 Meth Date : 18-Mar-2010 12:22 yip00818 Quant Type: ESTD
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
 Als bottle: 38 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-2150.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO		
---	-----	-----	-----	-----	-----	-----		
\$ 11 4cmx					CAS #: 877-09-8			
2.269	2.269	0.000	40510290	154.423	5.1	80.00-	120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.913	5.912	0.001	30049798	160.545	5.4	80.00-	120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2			
3.165	3.164	0.001	8894113	706.725	23.6	80.00-	120.00	100.00 (M)
3.248	3.247	0.001	6077162	703.847	23.5	45.24-	85.24	68.33
3.312	3.310	0.002	3634095	687.411	22.9	20.38-	60.38	40.86
3.538	3.537	0.001	4898177	710.631	23.7	32.96-	72.96	55.07

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====		=====	
1 Aroclor-1016 (continued)									
3.614	3.613	0.001	4514991	702.989	23.4	29.75-	69.75	50.76	
Average of Peak Concentrations =					23.4				

7 Aroclor-1260					CAS #: 11096-82-5				
4.305	4.304	0.001	9984719	763.344	25.4	80.00-	120.00	100.00	
4.430	4.428	0.002	12244830	787.498	26.2	101.15-	141.15	122.64	
4.696	4.694	0.002	9340753	785.197	26.2	71.50-	111.50	93.55	
4.869	4.867	0.002	9738392	792.434	26.4	75.17-	115.17	97.53	
5.017	5.014	0.003	21828020	826.987	27.6	190.25-	230.25	218.61	
Average of Peak Concentrations =					26.4				

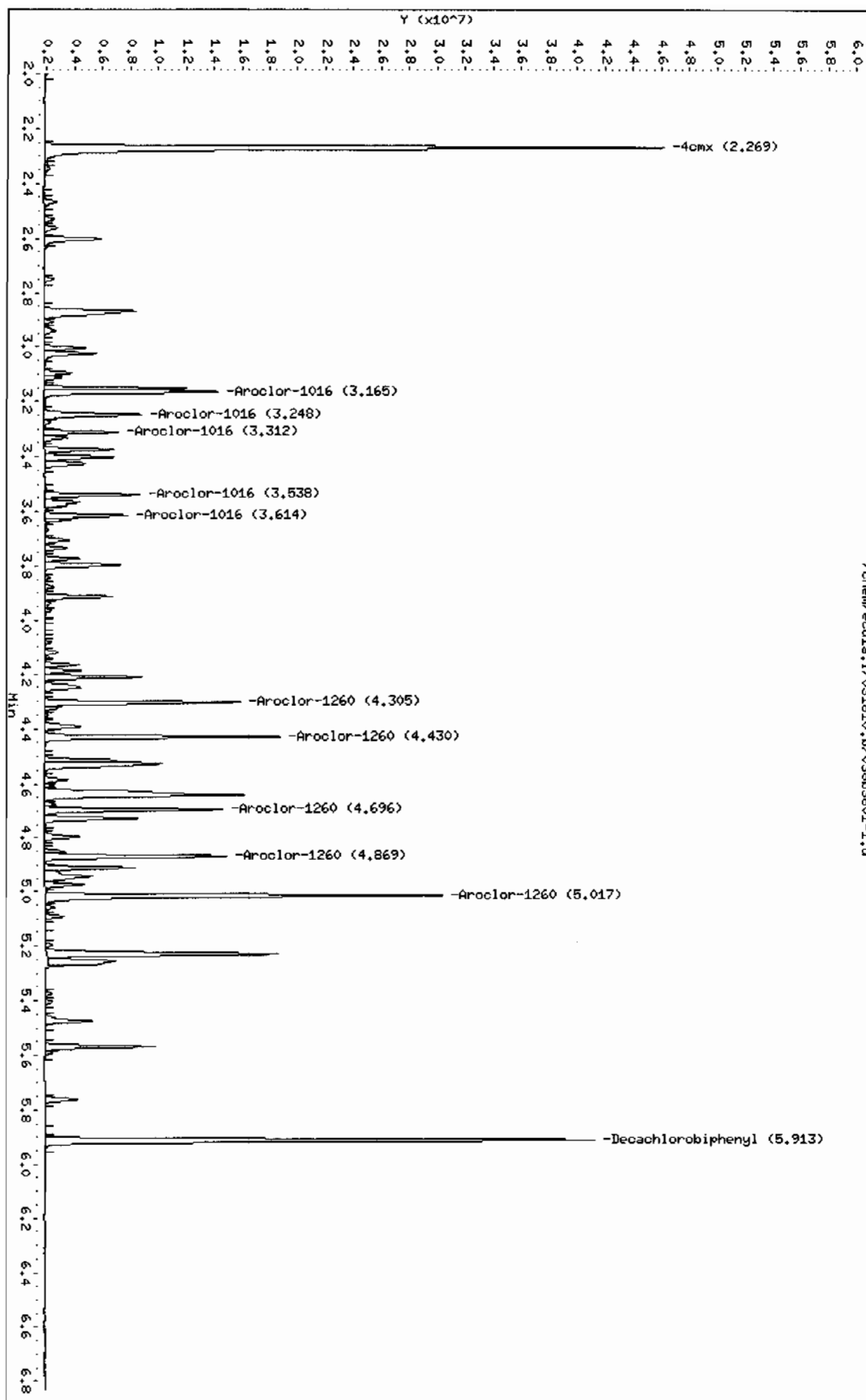
QC Flag Legend

M - Compound response manually integrated.

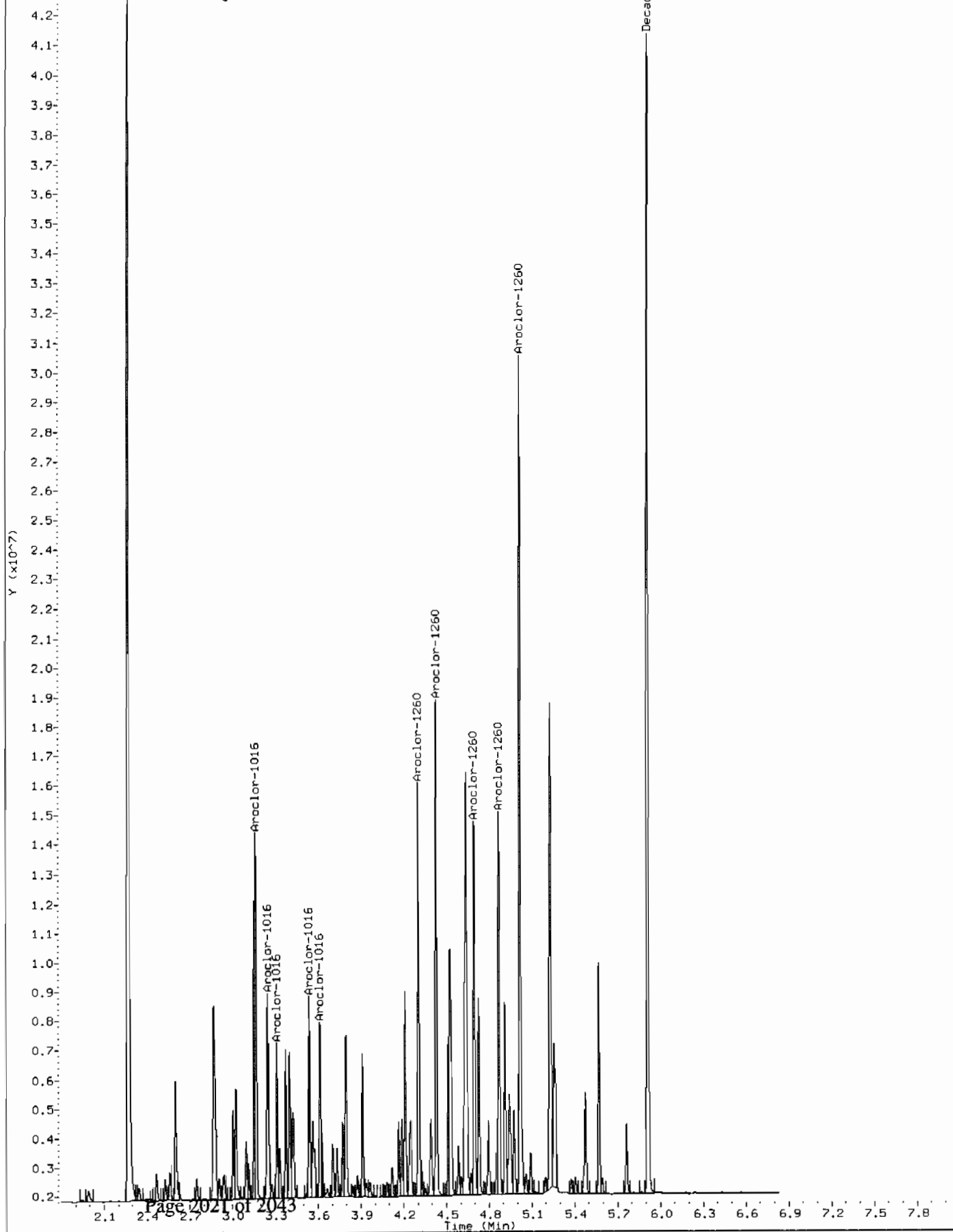
Data File: /chem/ecda.i/031810.b/03863801-1.d
Date: 18-MAR-2010 12:48
Client ID: PELKOILCS
Sample Info: 1120207297911
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecda.i
Operator: YSL
Column diameter: 0.25

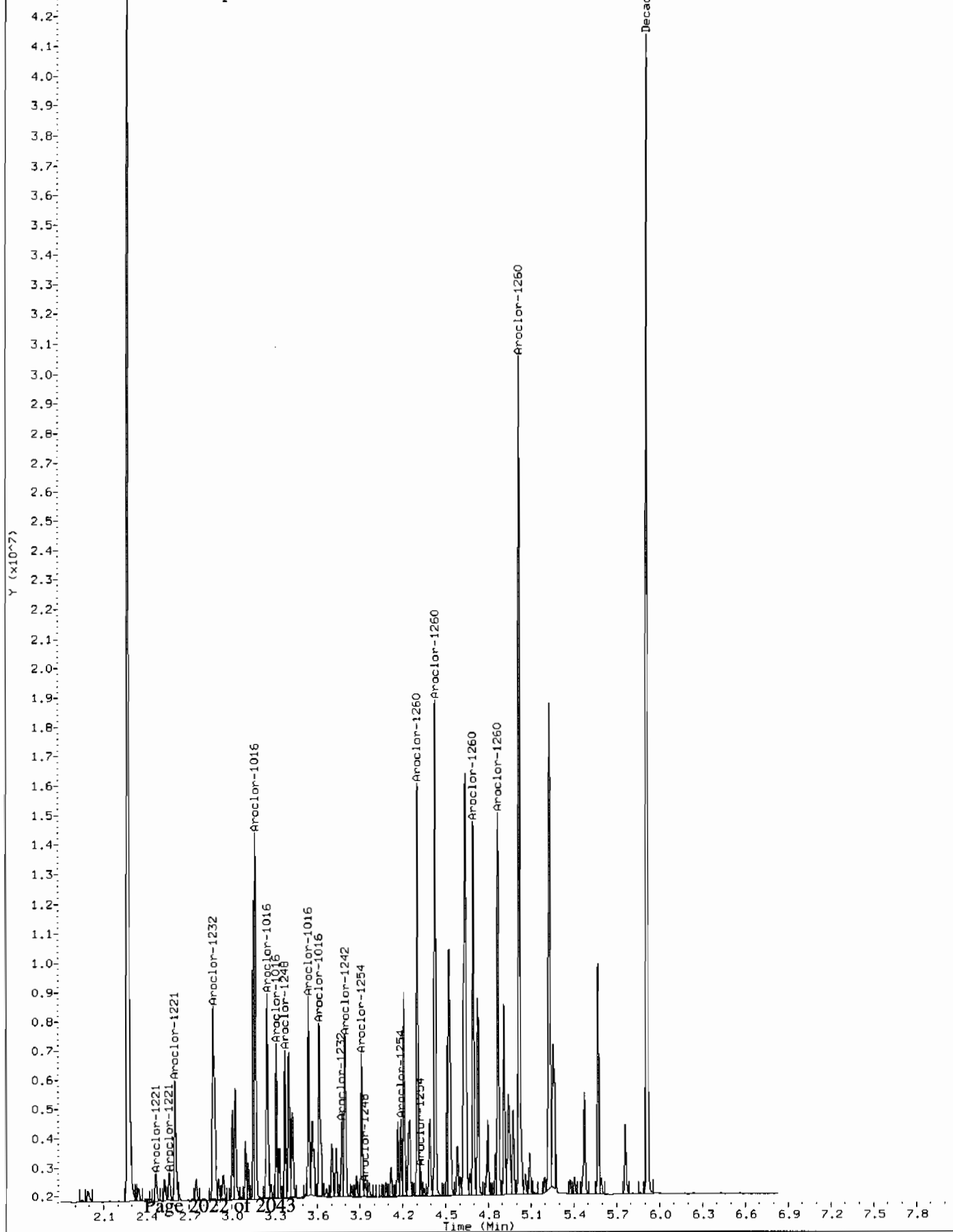
/chem/ecda.i/031810.b/03863801-1.d



Comment: Manually Integrated
Data File: /chem/ecdla.i/031810.b/038b3801-1.1
Operator: YS1
Injection Date: 18-MAR-2010 12:48
Instrument: ecdla.i
Client Sample ID: PBLK01LCS



Comment: Before manual integration
Data File: /chem/ecdla.i/031810.b/orig-038b38d1-1.d
Operator: YS1
Injection Date: 18-MAR-2010 12:48
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: YSI 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
1001f0101.d	WAR100219-99 01	YSI	11-MAR-2010 14:46		031110b	1.0I		CLEAN
1002f0201.d	WAR100222-60 01	YSI	11-MAR-2010 14:56		031110b	1.0I		DUSE RE-ICAL
1003f0301.d	WAR100219-54	YSI	11-MAR-2010 15:07		031110b	1.0I		DUSE RE-ICAL
1004f0401.d	WAR100219-42	YSI	11-MAR-2010 15:17		031110b	1.0I		DUSE RE-ICAL
1005f0501.d	WAR100223-48	YSI	11-MAR-2010 15:28		031110b	1.0I		DUSE RE-ICAL
1006f0601.d	WAR100107-68	YSI	11-MAR-2010 15:38		031110b	1.0I		PASSED ON BOTH COLUMNS
1007f0701.d	WAR100104-32	YSI	11-MAR-2010 15:49		031110b	1.0I		PATTERN ONLY
1008f0801.d	WAR100104-21	YSI	11-MAR-2010 15:59		031110b	1.0I		PATTERN ONLY
1009f0901.d	WAR100104-62	YSI	11-MAR-2010 16:10		031110b	1.0I		PATTERN ONLY
1010f1001.d	WAR091219-DCT	YSI	11-MAR-2010 16:21		031110b	1.0I		DDT ANALOG STANDARD
1011f1101.d	WAR100311-01	YSI	11-MAR-2010 16:31		031110b	1.0I		ARI660 I-CAL LEVEL 1
1012f1201.d	WAR100311-02	YSI	11-MAR-2010 16:41		031110b	1.0I		ARI660 I-CAL LEVEL 2
1013f1301.d	WAR100311-03	YSI	11-MAR-2010 16:52		031110b	1.0I		ARI660 I-CAL LEVEL 3
1014f1401.d	WAR100311-04	YSI	11-MAR-2010 17:02		031110b	1.0I		ARI660 I-CAL LEVEL 4
1015f1501.d	WAR100311-01	YSI	11-MAR-2010 17:13		031110b	1.0I		ARI660 I-CAL LEVEL 5

Instrument Batch: /chem/ecd1a.i/031110b.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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056f1601.d	WAR100222-60 01	YS1	11-MAR-2010 17:24	1031110b	1.01	PASSED ON BOTH COLUMNS
017f1701.d	WAR100311-05	YS1	11-MAR-2010 17:34	1031110b	1.01	ARI254 I-CAL LEVEL 1
018f1801.d	WAR100311-06	YS1	11-MAR-2010 17:45	1031110b	1.01	ARI254 I-CAL LEVEL 2
019f1901.d	WAR100311-07	YS1	11-MAR-2010 17:55	1031110b	1.01	ARI254 I-CAL LEVEL 3
020f2001.d	WAR100311-08	YS1	11-MAR-2010 18:06	1031110b	1.01	ARI254 I-CAL LEVEL 4
021f2101.d	WAR100219-02	YS1	11-MAR-2010 18:16	1031110b	1.01	ARI254 I-CAL LEVEL 5
022f2201.d	WAR100219-54	YS1	11-MAR-2010 18:27	1031110b	1.01	PASSED ON BOTH COLUMNS
023f2301.d	WAR100311-09	YS1	11-MAR-2010 18:37	1031110b	1.01	ARI242 I-CAL LEVEL 1
024f2401.d	WAR100311-10	YS1	11-MAR-2010 18:48	1031110b	1.01	ARI242 I-CAL LEVEL 2
025f2501.d	WAR100311-11	YS1	11-MAR-2010 18:58	1031110b	1.01	ARI242 I-CAL LEVEL 3
026f2601.d	WAR100311-12	YS1	11-MAR-2010 19:09	1031110b	1.01	ARI242 I-CAL LEVEL 4
027f2701.d	WAR100219-01	YS1	11-MAR-2010 19:19	1031110b	1.01	ARI242 I-CAL LEVEL 5
028f2801.d	WAR100219-42	YS1	11-MAR-2010 19:30	1031110b	1.01	PASSED ON BOTH COLUMNS
029f2901.d	WAR100311-13	YS1	11-MAR-2010 19:40	1031110b	1.01	ARI248 I-CAL LEVEL 1
030f3001.d	WAR100311-14	YS1	11-MAR-2010 19:51	1031110b	1.01	ARI248 I-CAL LEVEL 2
031f3101.d	WAR100311-15	YS1	11-MAR-2010 20:01	1031110b	1.01	ARI248 I-CAL LEVEL 3
032f3201.d	WAR100311-16	YS1	11-MAR-2010 20:12	1031110b	1.01	ARI248 I-CAL LEVEL 4
033f3301.d	WAR100211-01	YS1	11-MAR-2010 20:22	1031110b	1.01	ARI248 I-CAL LEVEL 5
034f3401.d	WAR100223-48	YS1	11-MAR-2010 20:33	1031110b	1.01	PASSED ON BOTH COLUMNS
035f3501.d	WAR100219-99 02	YS1	11-MAR-2010 20:44	1031110b	1.01	CLEAN

Instrument Batch: /chem/ecdl1a.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	1963869	1246954	1.01MB		DUSE CONFIRMATION FOR THE SAMPLES HAD HIT
037f3701.d	1202067744	YS1	11-MAR-2010 21:05	1963869	1246954	1.01LCS		DUSE CONFIRMATION FOR THE SAMPLES HAD HIT
038f3801.d	1246954003	YS1	11-MAR-2010 21:15	1963869	1246954	1.01BBES		DUSE CONFIRMATION FOR THE SAMPLES HAD HIT
039f3901.d	1202067745	YS1	11-MAR-2010 21:26	1963869	1246954	1.01IMS		DUSE CONFIRMATION FOR THE SAMPLES HAD HIT
040f4001.d	1202067746	YS1	11-MAR-2010 21:36	1963869	1246954	1.01MSD		DUSE CONFIRMATION FOR THE SAMPLES HAD HIT

041f4101.d	| 246954006	| YS1	| 11-MAR-2010 21:47	| 963869	| 246954	| 1.0|BBES	| DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
042f4201.d	| 246954007	| YS1	| 11-MAR-2010 21:57	| 963869	| 246954	| 1.0|BBES	| DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
043f4301.d	| 246954009	| YS1	| 11-MAR-2010 22:08	| 963869	| 246954	| 1.0|BBES	| DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
044f4401.d	| 246954012	| YS1	| 11-MAR-2010 22:18	| 963869	| 246954	| 1.0|BBES	| DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
045f4501.d	| 246954014	| YS1	| 11-MAR-2010 22:29	| 963869	| 246954	| 1.0|BBES	| DOSE CON FIRMATION FOR THE SAMPLES HAD HIT
046f4601.d	| MAR100222-60 02	| YS1	| 11-MAR-2010 22:39	|	| 031110b	| 1.0|	| PASSED ON BOTH COLUMNS
046f4901.d	| MAR100222-60 03	| YS1	| 11-MAR-2010 23:11	|	| 031110b	| 1.0|	| CLEAN
047f4701.d	| MAR100219-99 03	| YS1	| 11-MAR-2010 22:50	|	| 031210	| 1.0|	|
047f5001.d	| MAR100219-99 04	| YS1	| 11-MAR-2010 23:21	|	| 031110b	| 1.0|	|
048f4801.d	| WE100311-07SCR	| YS1	| 11-MAR-2010 23:00	|	| 031110b	| 1.0|	| CCS CSREEN FOR PREP

Instrument Batch: /chem/ecdl1a.i/031110b.b

Page: 3

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 03/19/2010 METHOD: ECD1-F-8082-031110b.m OPERATOR:YS1 REVIEWED BY: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 DATE: _____

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/031810.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	118-MAR-2010 06:04		031810	1.01	CLEAN	
002f0201.d	WAR100222-60 01	YS1	118-MAR-2010 06:14		031810	1.01	PASSED ON BOTH COLUMNS	
003f0301.d	WAR100219-54	YS1	118-MAR-2010 06:25		031810	1.01	PASSED ON BOTH COLUMNS	
004f0401.d	WAR100219-42	YS1	118-MAR-2010 06:35		031810	1.01	PASSED ON BOTH COLUMNS	
005f0501.d	WAR100223-48	YS1	118-MAR-2010 06:44		031810	1.01	PASSED ON BOTH COLUMNS	
006f0601.d	WAR100107-68	YS1	118-MAR-2010 06:55		031810	1.01	PASSED ON BOTH COLUMNS	
007f0701.d	WAR100104-32	YS1	118-MAR-2010 07:05		031810	1.01	PATTERN ONLY	
008f0801.d	WAR100104-21	YS1	118-MAR-2010 07:16		031810	1.01	PATTERN ONLY	
009f0901.d	WAR100104-62	YS1	118-MAR-2010 07:26		031810	1.01	PATTERN ONLY	
010f1001.d	WAR091219-DDT	YS1	118-MAR-2010 07:37		031810	1.01	DDT ANALOG STANDARD	
011f1101.d	WAR100219-99 02	YS1	118-MAR-2010 07:47		031810	1.01	CLEAN	
012f1201.d	249169012	YS1	118-MAR-2010 07:58	965431	249169	2.01	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
013f1301.d	249169013	YS1	118-MAR-2010 08:10	965431	249169	2.01	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
014f1401.d	249169014	YS1	118-MAR-2010 08:23	965431	249169	2.01	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
015f1501.d	249169015	YS1	118-MAR-2010 08:36	965431	249169	2.01	CDMF	UPLOAD BOTH COLUMNS, USE FRONT

Instrument Batch: /chem/ecd1a.i/031810.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
-----------	-------------------	---------	---------------------	-------	-----	----------	--------	----------

1016f1601.d	1202072839	YS1	18-MAR-2010 08:48	965922	249169	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1017f1701.d	1202072840	YS1	18-MAR-2010 08:59	965922	249169	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1018f1801.d	1249169001	YS1	18-MAR-2010 09:09	965922	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1019f1901.d	1249169002	YS1	18-MAR-2010 09:20	965922	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1020f2001.d	1249169003	YS1	18-MAR-2010 09:31	965922	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1021f2101.d	1249169004	YS1	18-MAR-2010 09:43	965922	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1022f2201.d	18MAR100222-60 02	YS1	18-MAR-2010 09:56		031810	1.0		PASSED ON BOTH COLUMNS
1023f2301.d	18MAR100222-60 03	YS1	18-MAR-2010 10:06		031810	1.0		PASSED ON BOTH COLUMNS
1024f2401.d	1249169005	YS1	18-MAR-2010 10:17	965922	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1025f2501.d	1202072841	YS1	18-MAR-2010 10:27	965922	249169	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1026f2601.d	1202072842	YS1	18-MAR-2010 10:38	965922	249169	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1027f2701.d	1249169006	YS1	18-MAR-2010 10:48		249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1028f2801.d	1249169007	YS1	18-MAR-2010 10:59	965922	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1029f2901.d	1202072843	YS1	18-MAR-2010 11:09	965922	249169	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1030f3001.d	1202072844	YS1	18-MAR-2010 11:20	965922	249169	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1031f3101.d	1249169008	YS1	18-MAR-2010 11:30	965922	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1032f3201.d	1249169009	YS1	18-MAR-2010 11:41	965922	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1033f3301.d	1249169010	YS1	18-MAR-2010 11:54	965922	249169	1.0	CDMF	UPLOAD BOTH COLUMNS, USE FRONT
1034f3401.d	18MAR100222-60 04	YS1	18-MAR-2010 12:06		031810	1.0		PASSED ON BOTH COLUMNS
1035f3501.d	18MAR100219-99 03	YS1	18-MAR-2010 12:17		031810	1.0		CLEAN

Instrument Batch: /chem/ecdl1a.i/031810.b

Data File	GEZ Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	148161003	YS1	18-MAR-2010 12:27		031810	1.0		LANL 248161003 MORE SULFUR CLEANED. NO HIT.
1037f3701.d	1202072978	YS1	18-MAR-2010 12:38	965975	10-2145	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1038f3801.d	1202072979	YS1	18-MAR-2010 12:48	965975	10-2145	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1039f3901.d	1248255001	YS1	18-MAR-2010 12:59	965975	10-2145	10.0	LANL	UPLOAC BOTH COLUMNS, USE HIGHER
1040f4001.d	1248255002	YS1	18-MAR-2010 13:11	965975	10-2145	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	248255003	YS1	18-MAR-2010 13:24	965975	10-2145	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	248255004	YS1	18-MAR-2010 13:37	965975	10-2145	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	248255005	YS1	18-MAR-2010 13:49	965975	10-2145	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	248255006	YS1	18-MAR-2010 14:02	965975	10-2145	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	248255007	YS1	18-MAR-2010 14:15	965975	10-2145	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1800222-60 05	YS1	18-MAR-2010 14:27		031810	1.0		PASSED ON BOTH COLUMNS
047f4701.d	1800219-99 04	YS1	18-MAR-2010 14:38		031810	1.0		CLEAN
048f4801.d	248370001	YS1	18-MAR-2010 14:48	965975	10-2150	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	248370002	YS1	18-MAR-2010 15:01	965975	10-2150	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	248370003	YS1	18-MAR-2010 15:13	965975	10-2150	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	248370004	YS1	18-MAR-2010 15:26	965975	10-2150	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	248370005	YS1	18-MAR-2010 15:39	965975	10-2150	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	248370006	YS1	18-MAR-2010 15:51	965975	10-2150	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	248422001	YS1	18-MAR-2010 16:04	965975	10-2166	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	248422002	YS1	18-MAR-2010 16:16	965975	10-2166	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl1a.i/031810.b

056f5601.d	1800222-60 06	YS1	18-MAR-2010 16:29		031810	1.0		PASSED ON BOTH COLUMNS
057f5701.d	1800219-99 05	YS1	18-MAR-2010 16:42		031810	1.0		CLEAN
058f5801.d	248506001	YS1	18-MAR-2010 16:54	965975	10-2193	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	1202072980	YS1	18-MAR-2010 17:07	965975	10-2193	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	1202072981	YS1	18-MAR-2010 17:20	965975	10-2193	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	248506002	YS1	18-MAR-2010 17:32	965975	10-2193	1.0	LANL	RE SURROGATE LOW
062f6201.d	248506003	YS1	18-MAR-2010 17:45	965975	10-2193	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	1800222-60 07	YS1	18-MAR-2010 17:57		031810	1.0		PASSED ON BOTH COLUMNS
064f6401.d	1800219-99 06	YS1	18-MAR-2010 18:10		031810	1.0		CLEAN

1065f6501.d new alumina :VS1 18-MAR-2010 18:23 1 031810 1 1.01 INEW ALUMINA SCREEN GOOD

Instrument Batch: /chem/ecdl1a.i/031810.b

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Data File: /chem/ecdl1a.i/031810.b/059b5901.d
Report Date: 19-Mar-2010 08:47

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/031810.b/059b5901.d
Lab Smp Id: 1202072980 Client Smp ID: RE36-10-7407MS
Inj Date : 18-MAR-2010 17:07
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202072980|1|
Misc Info : |ECD82P_1S|965975|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecdl1a.i/031810.b/ECD1-B-8082-031110b.m
Meth Date : 19-Mar-2010 08:33 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 59 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2193.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	22.85850	% 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							
2.270	2.269	0.001	27733700	105.720	4.6 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.911	5.912	-0.001	19786938	105.714	4.6 80.00- 120.00	100.00	

1 Aroclor-1016 CAS #: 12674-11-2							
3.163	3.164	-0.001	6550733	520.520	22.5 80.00- 120.00	100.00 (M)	
3.247	3.247	0.000	4769624	552.410	23.9 44.27- 84.27	72.81	
3.310	3.310	0.000	2912954	551.003	23.8 19.83- 59.83	44.47	
3.537	3.537	0.000	4236853	614.685	26.6 32.20- 72.20	64.68	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====		=====	
1 Aroclor-1016 (continued)									
3.612	3.613	-0.001	2515815	391.715	16.9	29.27-	69.27	38.41	
Average of Peak Concentrations =					22.7				

6 Aroclor-1254					CAS #: 11097-69-1				
3.372	3.373	-0.001	3008619	499.670	21.6	80.00-	120.00	100.00 (M)	
3.794	3.795	-0.001	5694512	526.305	22.7	161.66-	201.66	189.27	
3.911	3.912	-0.001	6388158	535.307	23.1	179.37-	219.37	212.33	
4.187	4.187	0.000	6986361	424.915	18.4	258.64-	298.64	232.21	
4.322	4.324	-0.002	4732619	390.625	16.9	186.15-	226.15	157.30	
Average of Peak Concentrations =					20.5				

7 Aroclor-1260					CAS #: 11096-82-5				
4.302	4.304	-0.002	12660917	967.943	41.8	80.00-	120.00	100.00 (M)	
4.427	4.428	-0.001	14088744	906.085	39.1	101.47-	141.47	112.88	
4.693	4.694	-0.001	8983382	755.156	32.6	71.27-	111.27	70.95	
4.867	4.867	0.000	8287178	674.346	29.1	74.83-	114.83	65.45	
5.014	5.014	0.000	18399098	697.077	30.1	189.25-	229.25	145.32	
Average of Peak Concentrations =					34.5				

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecda.i/031810.b/059b5901.d

Date: 18-MAR-2010 17:07

Client ID: RES6-10-7407MS

Sample Info: 1120207296011

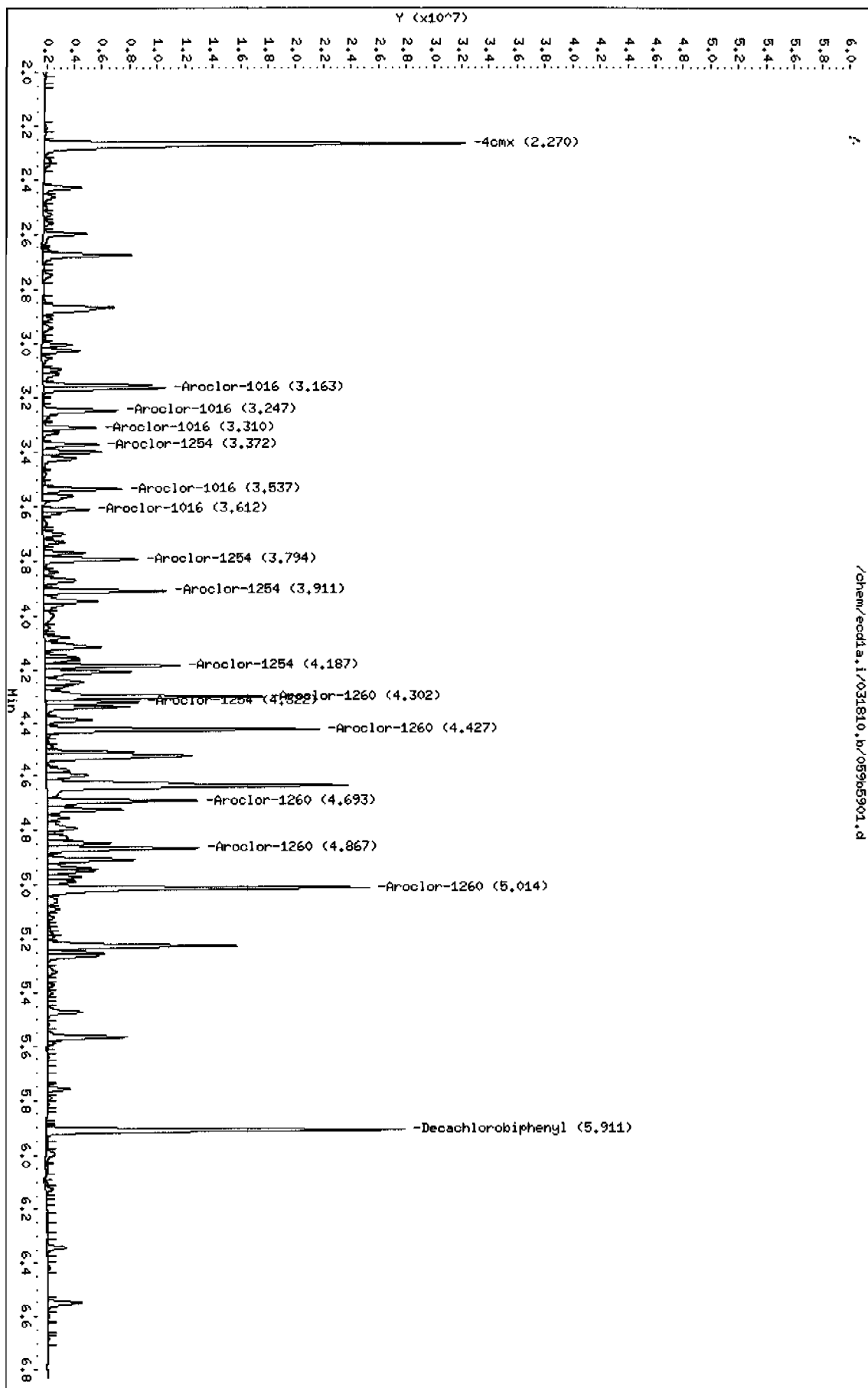
Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecda.i

Operator: YSI

Column diameter: 0.25



Data File: /chem/ecdla.i/031810.b/059f5901.d
Report Date: 19-Mar-2010 08:48

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/059f5901.d
Lab Smp Id: 1202072980 Client Smp ID: RE36-10-7407MS
Inj Date : 18-MAR-2010 17:07
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202072980|1|
Misc Info : |ECD82P_1S|965975|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecdla.i/031810.b/ECD1-F-8082-031110b.m
Meth Date : 19-Mar-2010 06:23 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 59 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2193.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	22.85850	% 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	1.910	0.002	41720515	107.107	4.6 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.214	5.215	-0.001	30341725	102.185	4.4 80.00- 120.00	100.00

1 Aroclor-1016 CAS #: 12674-11-2						
2.364	2.364	0.000	8866845	584.237	25.2 80.00- 120.00	100.00(M)
2.651	2.649	0.002	10171924	537.180	23.2 110.13- 150.13	114.72
2.731	2.730	0.001	5290488	425.207	18.4 60.11- 100.11	59.67
2.768	2.768	0.000	3213667	437.334	18.9 28.30- 68.30	36.24

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====		=====	
1 Aroclor-1016 (continued)									
2.977	2.978	-0.001	4813798	505.769	21.8	41.76-	81.76	54.29	
Average of Peak Concentrations =					21.5				

6 Aroclor-1254					CAS #: 11097-69-1				
3.206	3.207	-0.001	6280318	473.559	20.4	80.00-	120.00	100.00 (M)	
3.361	3.362	-0.001	8971304	503.065	21.7	112.77-	152.77	142.85	
3.594	3.596	-0.002	8933553	399.331	17.2	151.79-	191.79	142.25	
3.756	3.758	-0.002	8040647	487.606	21.1	105.45-	145.45	128.03	
3.865	3.867	-0.002	24771437	1551.67	67.0	106.56-	146.56	394.43	
Average of Peak Concentrations =					29.5				

7 Aroclor-1260					CAS #: 11096-82-5				
3.702	3.704	-0.002	16158304	881.518	38.1	80.00-	120.00	100.00 (M)	
3.865	3.866	-0.001	24771437	921.220	39.8	126.99-	166.99	153.30	
4.027	4.028	-0.001	25135802	887.711	38.3	134.29-	174.29	155.56	
4.095	4.096	-0.001	10546720	652.730	28.2	68.76-	108.76	65.27	
4.237	4.239	-0.002	9236645	549.386	23.7	72.09-	112.09	57.16	
Average of Peak Concentrations =					33.6				

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/031810.b/059f5901.d

Date: 18-MAR-2010 17:07

Client ID: RE36-10-7407HS

Sample Info: 11202072980111

Volume Injected (uL): 1.0

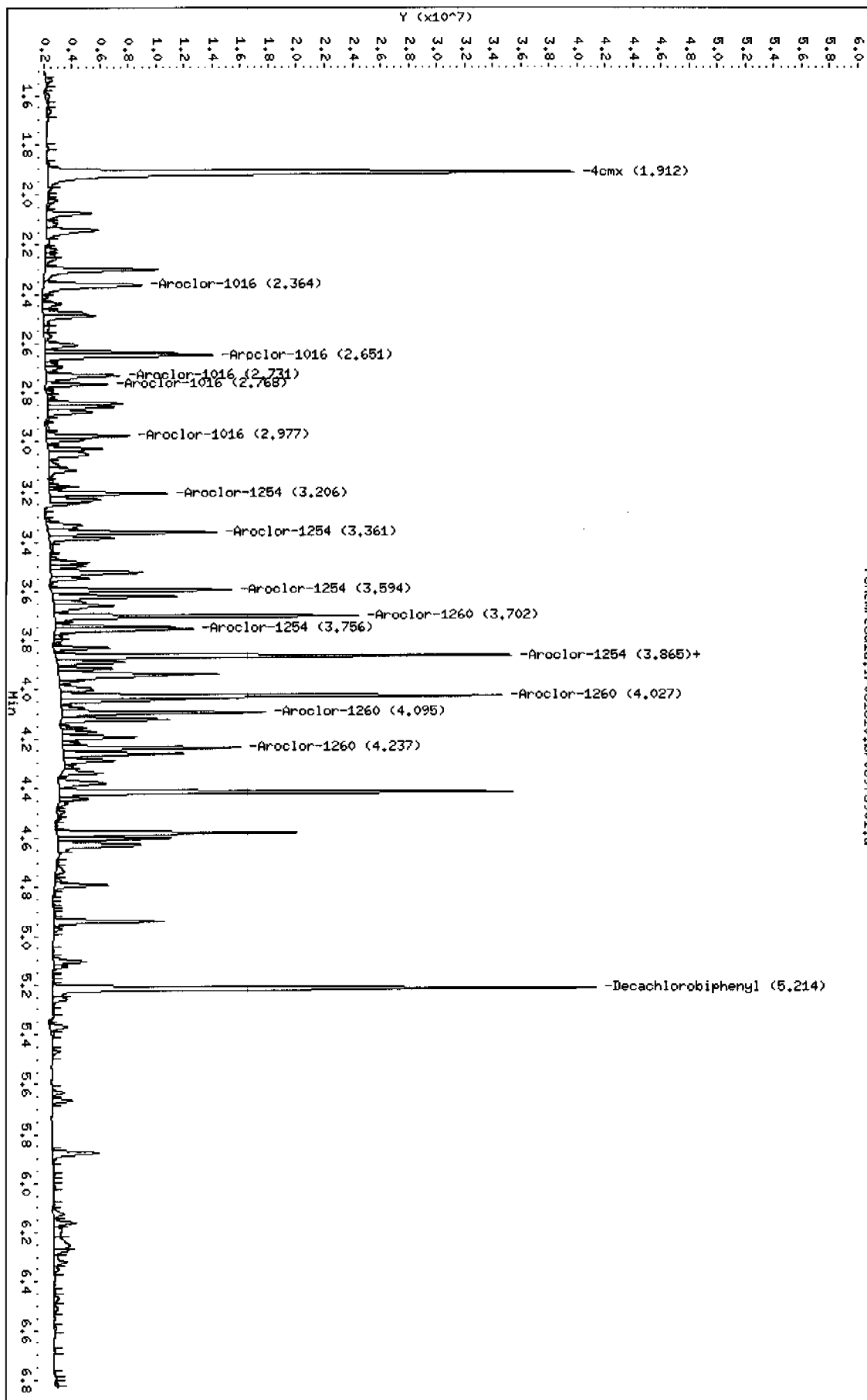
Column phase: CLP1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

/chem/eodla.i/031810.b/059f5901.d



Data File: /chem/ecdla.i/031810.b/060b6001.d
Report Date: 19-Mar-2010 08:53

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/031810.b/060b6001.d
Lab Smp Id: 1202072981 Client Smp ID: RE36-10-7407MSD
Inj Date : 18-MAR-2010 17:20
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202072981|1|
Misc Info : |ECD82P_1S|965975|SVA|QC A|SOIL|MSD|
Comment :
Method : /chem/ecdla.i/031810.b/ECD1-B-8082-031110b.m
Meth Date : 19-Mar-2010 08:33 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 60 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2193.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	22.85850	% 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		
2.269	2.269	0.000	26827719	102.266	4.4 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.911	5.912	-0.001	19332900	103.289	4.5 80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2		
3.164	3.164	0.000	6158452	489.349	21.1 80.00- 120.00	100.00 (M)	
3.248	3.247	0.001	4364483	505.487	21.8 44.27- 84.27	70.87	
3.311	3.310	0.001	2898834	548.332	23.7 19.83- 59.83	47.07	
3.537	3.537	0.000	4033277	585.150	25.3 32.20- 72.20	65.49	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.613	3.613	0.000	2547909	396.712	17.1	29.27-	69.27	41.37
Average of Peak Concentrations =					21.8			

6 Aroclor-1254					CAS #: 11097-69-1			
3.373	3.373	0.000	2790786	463.492	20.0	80.00-	120.00	100.00 (M)
3.795	3.795	0.000	5575761	515.330	22.3	161.66-	201.66	199.79
3.911	3.912	-0.001	6422334	538.171	23.2	179.37-	219.37	230.13
4.187	4.187	0.000	7010962	426.411	18.4	258.64-	298.64	251.22
4.323	4.324	-0.001	5121462	422.719	18.3	186.15-	226.15	183.51
Average of Peak Concentrations =					20.4			

7 Aroclor-1260					CAS #: 11096-82-5			
4.303	4.304	-0.001	12179013	931.101	40.2	80.00-	120.00	100.00 (M)
4.427	4.428	-0.001	14186563	912.376	39.4	101.47-	141.47	116.48
4.693	4.694	-0.001	8884211	746.819	32.3	71.27-	111.27	72.95
4.867	4.867	0.000	7894727	642.411	27.8	74.83-	114.83	64.82
5.014	5.014	0.000	18196295	689.394	29.8	189.25-	229.25	149.41
Average of Peak Concentrations =					33.9			

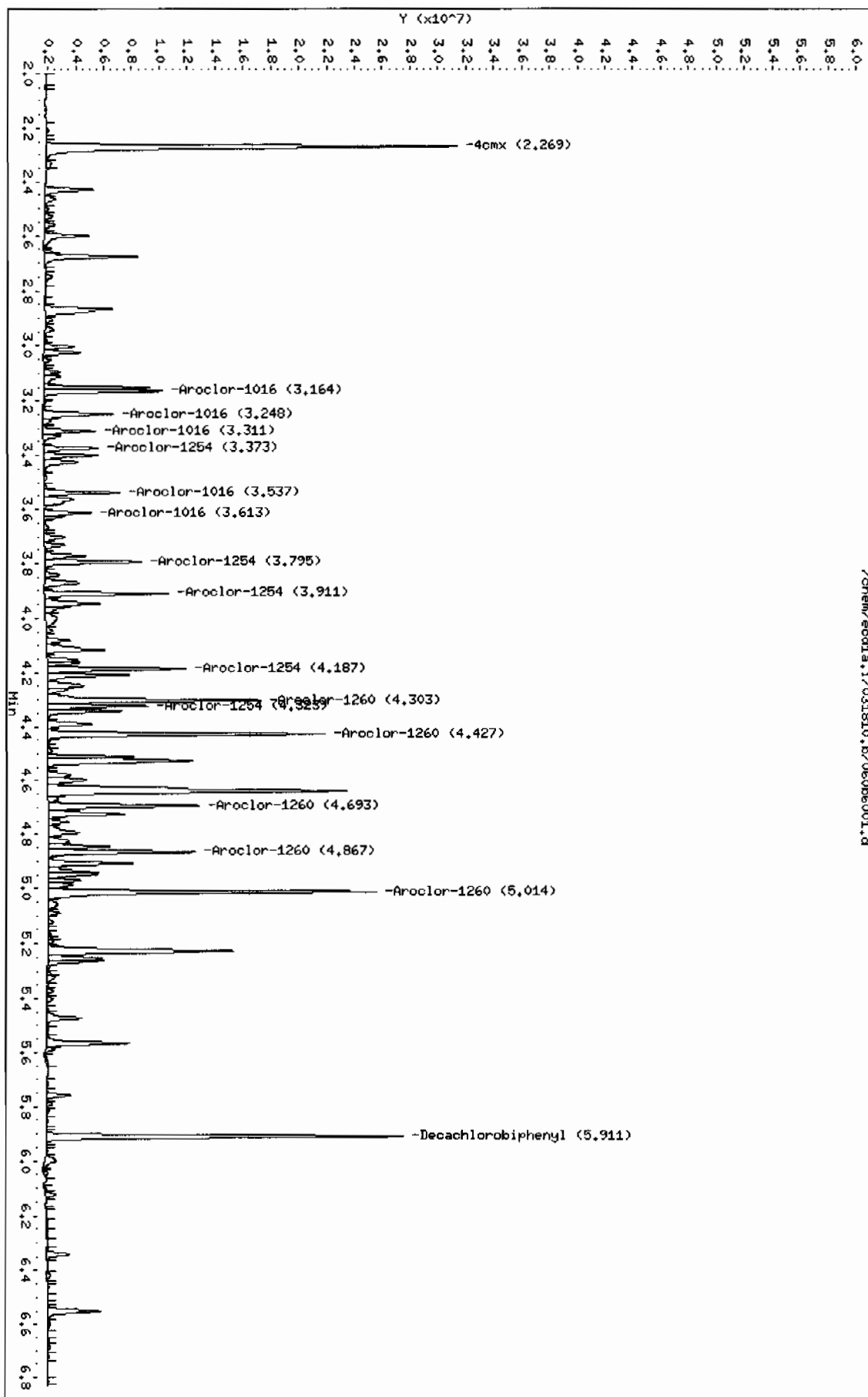
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/031810.b/0606001.d
Date: 18-Mar-2010 17:20
Client ID: RE36-10-7407HSD
Sample Info: 1120207298111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: eod1a.i
Operator: YSL
Column diameter: 0.25

/chem/eod1a.i/031810.b/0606001.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/031810.b/060f6001.d

Lab Smp Id: 1202072981

Client Smp ID: RE36-10-7407MSD

Inj Date : 18-MAR-2010 17:20

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |1202072981|1|

Misc Info : |ECD82P_1S|965975|SVA|QC A|SOIL|MSD|

Comment :

Method : /chem/ecdl1a.i/031810.b/ECD1-F-8082-031110b.m

Meth Date : 19-Mar-2010 06:23 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 60

QC Sample: MSD

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2193.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	22.85850	% 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	1.910	0.002	40366303	103.630	4.5 80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.215	5.215	0.000	26257063	88.4283	3.8 80.00-	120.00	100.00	

I Aroclor-1016					CAS #: 12674-11-2			
2.364	2.364	0.000	8220544	541.652	23.4 80.00-	120.00	100.00 (M)	
2.650	2.649	0.001	9951216	525.525	22.7 110.13-	150.13	121.05	
2.731	2.730	0.001	5453424	438.302	18.9 60.11-	100.11	66.34	
2.768	2.768	0.000	3004755	408.904	17.7 28.30-	68.30	36.55	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
2.978	2.978	0.000	4436921	466.172	20.1	41.76-	81.76	53.97
Average of Peak Concentrations =					20.6			

6 Aroclor-1254					CAS #: 11097-69-1			
3.207	3.207	0.000	6233156	470.003	20.3	80.00-	120.00	100.00 (M)
3.362	3.362	0.000	9229595	517.548	22.4	112.77-	152.77	148.07
3.595	3.596	-0.001	9197356	411.123	17.8	151.79-	191.79	147.56
3.757	3.758	-0.001	13312402	807.299	34.9	105.45-	145.45	213.57
3.865	3.867	-0.002	25354857	1588.21	68.6	106.56-	146.56	406.77
Average of Peak Concentrations =					32.8			

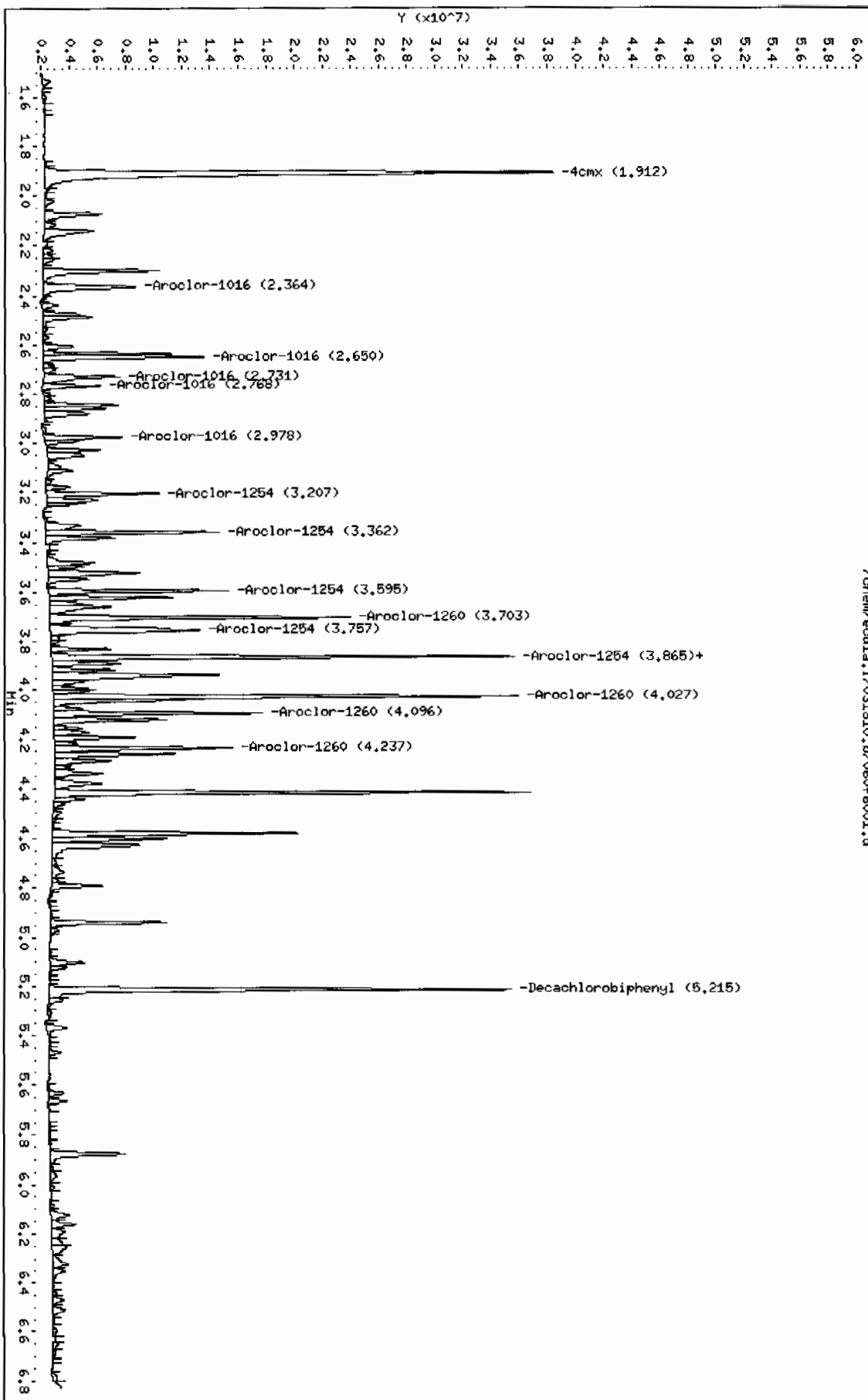
7 Aroclor-1260					CAS #: 11096-82-5			
3.703	3.704	-0.001	16335629	891.192	38.5	80.00-	120.00	100.00 (M)
3.865	3.866	-0.001	25354857	942.916	40.7	126.99-	166.99	155.21
4.027	4.028	-0.001	26563362	938.127	40.5	134.29-	174.29	162.61
4.096	4.096	0.000	11194632	692.828	29.9	68.76-	108.76	68.53
4.237	4.239	-0.002	9345012	555.832	24.0	72.09-	112.09	57.21
Average of Peak Concentrations =					34.7			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/031810.b/060f6001.d
Date : 18-MAR-2010 17:20
Client ID: REC6-10-7407MSD
Sample Info: 1120207298111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdl1a.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: 96S974
Analyst: Robin Hunt
Method: SW846 3550B

Verified by: _____

Lab SOP: GL-OA-E-010 REV# 18
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202072978 MB	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
1202072979 LCS	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248255001	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248255002	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248255003	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248255004	17-MAR-2010 11:22:00	30.02	H2SO4/KMn	1	8	1	0.0331	
248255005	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248255006	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248255007	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248370001	17-MAR-2010 11:22:00	30.02	H2SO4/KMn	1	8	1	0.0331	
248370002	17-MAR-2010 11:22:00	30.01	H2SO4/KMn	1	8	1	0.0332	
248370003	17-MAR-2010 11:22:00	30.03	H2SO4/KMn	1	8	1	0.033	
248370004	17-MAR-2010 11:22:00	30.09	H2SO4/KMn	1	8	1	0.0323	
248370005	17-MAR-2010 11:22:00	30.05	H2SO4/KMn	1	8	1	0.0328	
248370006	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248422001	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248422002	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248506001	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
1202072980 MS (248506001)	17-MAR-2010 11:22:00	30.01	H2SO4/KMn	1	8	1	0.0332	
1202072981 MSD (248506001)	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248506002	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	
248506003	17-MAR-2010 11:22:00	30	H2SO4/KMn	1	8	1	0.0333	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202072979	PCB Laboratory Control	WE100311-07	1	mL	Clean up Date: 03/17/2010
MS	1202072980	PCB Laboratory Control	WE100311-07	1	mL	Clean up Initials: RWH
MSD	1202072981	PCB Laboratory Control	WE100311-07	1	mL	Verified By: JAM
SURR All		PEST LOW LEVEL SURROGATE 200 UGL	UEL00302-16	1	mL	Final Solvent: Hexane
REGNT All		1:1 sulfuric acid	1260695a	5	mL	Clean Up SOP: GL-OA-E-037
REGNT All		Acetone	1273739-B1	150	mL	
REGNT All		Hexane	1279341-B2	150	mL	
REGNT All		5% Potassium Permanganate	B1275177-F	5	mL	
SOURC All		SODIUM SULFATE	1274910	30	g	